



RIVIAN AUTOMOTIVE, LLC

**Application for Certification - Part 1
(UPDATE)
2023 Model Year**

**EPA Manufacturer Code: RIV
Test Group: PRIVT00.0194**

**Durability Group: N.A.
Evaporative Family: N.A.**

Test Group Description:

Battery Electric Vehicle

Applicable Standards:

U.S. EPA: Tier 3 Bin 0 MDPV

CA: ZEV MDV

R1T 21 in, R1T 20 in, R1T 22 in

R1S 21 in, R1S 20 in, R1S 22 in

Carlines Covered:

R1T 20 in All-Terrain

R1S 20 in All-Terrain

Document Date:

02/01/2023

For Questions, Contact:
S. Zaker, SepZaker@rivian.com



14600 Myford Rd
Irvine CA, 92606

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
Environmental Protection Agency
2000 Traverwood, Ann Arbor, MI 48105

Subject: MY 2023 Rivian Medium Duty Passenger Vehicle Initial Application for issuance of Certificate of Conformity for Test Group PRVT00.0194.

Rivian believes that all vehicles within this test group comply with all applicable regulations within Code of Federal Regulations Title 40 Parts 85, 86, 600, and California Code of Regulations Title 13.

Vehicle Category:	Medium Duty Passenger Vehicle (8532 lbs. GVW)
Test Group:	PRVT00.0194
Evaporative Family:	N/A
Federal Standard:	Tier 3 Bin 0
California Standard:	ZEV

Test Group Description:

1 - Rivian R1
9 - 9 Module Battery
4 - 4 AC motors

Vehicles Covered by this certificate:

Rivian R1T 21in
Rivian R1S 21in
Rivian R1T 20in
Rivian R1S 20in
Rivian R1T 22in
Rivian R1S 22in
Rivian R1T 20in All-Terrain
Rivian R1S 20in All-Terrain

Your early review and issuance of the certificate will be greatly appreciated. If you have any questions, please email me at sepzaker@Rivian.com or my phone number available on CDX.

Sepehr Zakeresfahani
Sr. Manager, Range, Wireless & Material Compliance





14600 Myford Rd
Irvine CA, 92606

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
Environmental Protection Agency
2000 Traverwood, Ann Arbor, MI 48105
Subject: MY 2023 Rivian Medium Duty Passenger Vehicle OBD letter for issuance of Certificate of Conformity for Test Group PRIVT00.0194.

Rivian is a manufacturer of Battery Electric Vehicle, including R1T and R1S. Battery Electric Vehicles are exempt from OBD II requirements.

Vehicle Category:	Medium Duty Passenger Vehicle (8532 lbs. GVW)
Test Group:	PRIVT00.0194
Evaporative Family:	N/A
Federal Standard:	Tier 3 Bin 0
California Standard:	ZEV

Test Group Description:

1 - Rivian R1
9 - 9 Module Battery
4 - 4 AC motors

Vehicles Covered by this certificate:

Rivian R1T 21in
Rivian R1S 21in
Rivian R1T 20in
Rivian R1S 20in
Rivian R1T 22in
Rivian R1S 22in
Rivian R1T 20in All-Terrain
Rivian R1S 20in All-Terrain

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14600 Myford Rd
Irvine CA, 92606

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
Environmental Protection Agency
2000 Traverwood, Ann Arbor, MI 48105

Subject: MY 2023 Rivian Medium Duty Passenger Vehicle Durability letter for issuance of Certificate of Conformity for Test Group PRIVT00.0194.

Rivian is a manufacturer of Battery Electric Vehicle, including R1T and R1S. Battery Electric Vehicles (no tailpipe emissions) are exempt from emissions equipment durability requirements.

Vehicle Category:	Medium Duty Passenger Vehicle (8532 lbs. GVW)
Test Group:	PRIVT00.0194
Evaporative Family:	N/A
Federal Standard:	Tier 3 Bin 0
California Standard:	ZEV

Test Group Description:

1 - Rivian R1
9 - 9 Module Battery
4 - 4 AC motors

Vehicles Covered by this certificate:

Rivian R1T 21in
Rivian R1S 21in
Rivian R1T 20in
Rivian R1S 20in
Rivian R1T 22in
Rivian R1S 22in
Rivian R1T 20in All-Terrain
Rivian R1S 20in All-Terrain

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Sepehr Zakeresfahani
Sr. Manager, Range, Wireless & Material Compliance





14600 Myford Rd
Irvine CA, 92606

Mr. Steven Hada
Emissions Certification and Compliance Division (ECCD)
Air Resources Board Laboratory
9528 Telstar Avenue, El Monte, CA 91731

Subject: MY 2023 Rivian Medium-Duty Vehicles Initial Application for issuance of an Executive Order for Test Group PRIVT00.0194.

Rivian believes that all vehicles within this test group comply with all applicable regulations within Code of Federal Regulations Title 40 Parts 85, 86, 600, and California Code of Regulations Title 13.

Vehicle Category:	Medium Duty Passenger Vehicle (8532 lbs. GVW)
Test Group:	PRIVT00.0194
Evaporative Family:	N/A
Federal Standard:	Tier 3 Bin 0
California Standard:	ZEV

Test Group Description:

1 - Rivian R1
9 - 9 Module Battery
4 - 4 AC motors

Vehicles Covered and to be included by this Executive Order:

Rivian R1T 21in
Rivian R1S 21in
Rivian R1T 20in
Rivian R1S 20in
Rivian R1T 22in
Rivian R1S 22in
Rivian R1T 20in All-Terrain
Rivian R1S 20in All-Terrain

Your early review and issuance of the certificate will be greatly appreciated. If you have any questions, please email me at sepzaker@Rivian.com or my phone number available on DMS.

Sepehr Zakeresfahani
Sr. Manager, Range, Wireless & Material Compliance



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01.00.00 Communications

01.01.00 Mailing Information

Rivian Automotive, LLC
13250 N Haggerty Rd
Plymouth MI, 48170
Attention: Sepehr Zakeresfahani

01.01.01 Certification Information

Rivian Automotive, LLC
13250 N Haggerty Rd
Plymouth MI, 48170

01.01.02 Responsible official

Primary Contact:
Sepehr Zakeresfahani, Sr. Manager, Range, Wireless & Material Compliance
SepZaker@rivian.com

02.00.00 Confidential Information

02.01.00 Statement of confidentiality

02.02.00 Test vehicle selection

02.03.00 Projected California annual model-year sales

03.00.00 Facilities, equipment, and test procedures

03.01.00 (Reserved)

03.02.00 Battery pre-conditioning procedures (if necessary)

03.03.00 Configurations and Sub configurations

03.04.00 Test Procedures

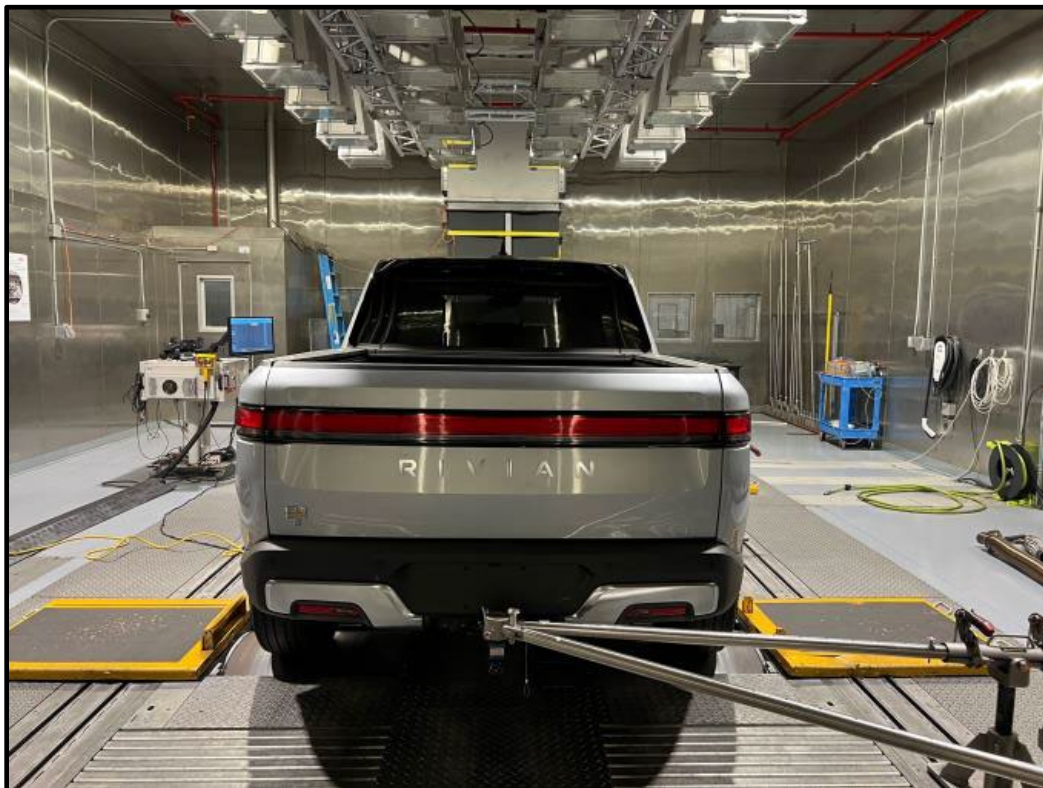
03.04.01 Range Test Procedures

03.04.02 Description of Coastdown

03.05.00 Special Test Instructions

Vehicle Setup:

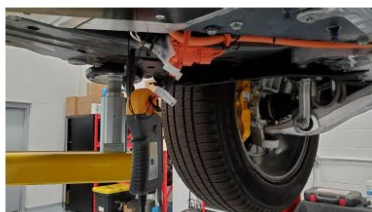
Bleyer rigid bar fixation system. Front bar fixed to the front tow hook, and rear bar fixed to the tow hitch receiver.



Instrumentation:

Battery voltage and current measurement were taken using a HBM Gen4TB power analyzer and Hioki CT684X-05 and current clamps.

- Clamps installed to minimize number of measured current channels.
- Current clamp sizes determined by maximum combined circuit current.



DC/AC Converter & PTC Heater – 200A



Front Drive Unit – 500A



Rear Drive Unit – 500A



Power Analyzer



DC/DC Converter, AC Compressor & On-Board Charger – 200A

AC Level 2 240 V/ 48 A (11.5 kW) charger was used for charging.

03.05.00 Statement of Compliance

Every vehicle which is covered by this application conforms to US EPA Federal Tier 3 Bin 0 regulations applicable to new Medium Duty Passenger Vehicles and state of California ZEV regulations applicable to new Medium-Duty Vehicles for the 2023 Model Year.

04.00.00 (Reserved)

05.00.00 (Reserved)

06.00.00 Maintenance

06.01.00 Test vehicle scheduled maintenance

06.02.00 Recommended customer maintenance schedule

Rivian Service is our proactive and personal approach to vehicle care, centered around the lives of our owners. Through remote diagnostics, a large fleet of mobile service vans staffed with Rivian Technicians, a network of service centers, and a flexible loaner program. Our approach to vehicle care requires very little from you. Rivian maintenance intervals are determined by onboard prognostics. Vehicle and environment sensors measure or model the remaining life of maintenance items. Owners are informed when maintenance is approaching or due by scheduling necessary maintenance items only.

Our fleet of mobile service vans can perform most vehicle care needs at your home, place of work, or wherever your vehicle might be. In many instances, you don't even have to be present, so you can carry on with your day. Mobile service is available for all Rivian owners anywhere in the US and Canada. As we expand into other markets, our suite of Rivian vehicle care capabilities, including mobile service, will continue to be a key component of our strategy.

Time till repair (year)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Miles to repair equivalent	12.5K	25K	37.5K	50K	62.5K	75K	87.5K	90K	102.5K	115K
R1T Maintenance Schedule										
Multi-point inspection	X	X	X	X	X	X	X	X	X	X
Drive unit & gearbox fluid lubricant									X	

06.03.00 Lubricants and heater fuels, if any

Transmission Oil:

BOT 350 M3 transmission fluid for dry electric drive units.

Test	Method	Units	
SAE Grade		-	75W
Density @ 15C, Relative	ASTM D1298	g/ml	0.852
Appearance Visual		-	clear
Viscosity, Kinematic 100°C	ASTM D445	mm²/s	6.3
Viscosity, Kinematic 40°C	ASTM D445	mm²/s	32
Viscosity Index		-	154
Viscosity, Brookfield @ -40°C	ASTM D2983	mPa.s (cP)	10000
Pour Point	ASTM D97	°C	-51
Flash Point, COC	ASTM D92	°C	226

Coolant: L228

Performance of L288 According to ASTM D3306

Table 1 – ASTM D3306 Results

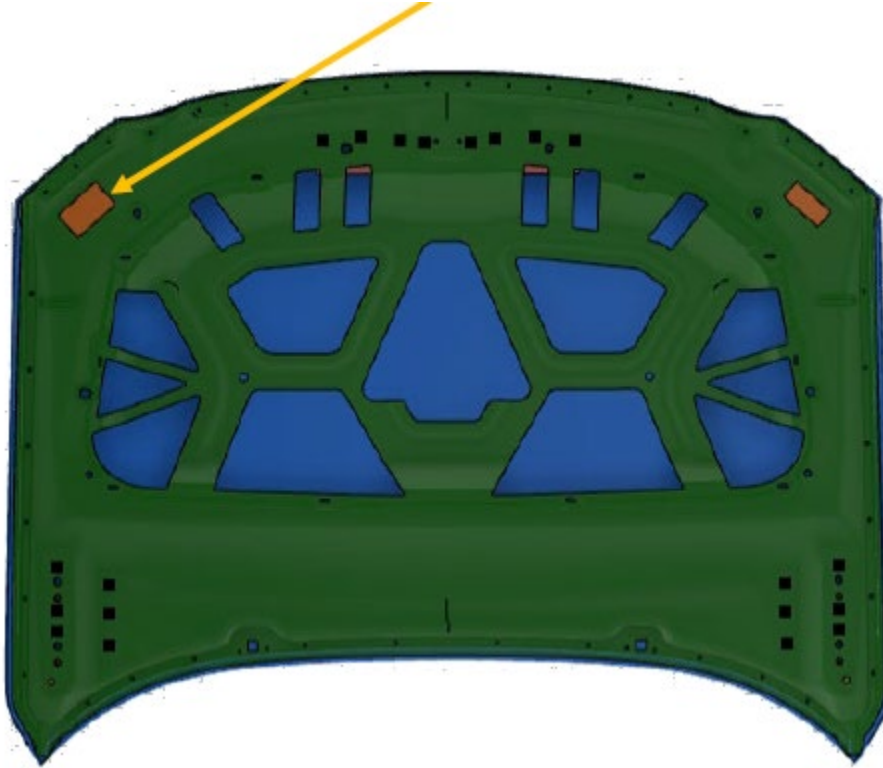
Item			ASTM D3306 Type I	CCI L288
Color			Distinctive	Yellow
Relative Density 15.5/15.5°C			1.110 ~ 1.145	1.128
Freezing Point °C	50 vol% in DI water		-36.4 max.	-37
Boiling Point °C	50 vol% in DI water		108 min.	109
Ash content	mass%		5 max.	1.7
pH	50 vol% in DI water		7.5 ~ 11.0	7.6
Chloride	µ g/g		25 max.	<25
Water	mass%		5 max.	3.8
Reserve Alkalinity	mL		Report	8.0
Effect on Automotive Finish			No Effect	Pass
Corrosion in Glassware	Weight Loss ⁽¹⁾ mg/Specimen	Copper	10 max.	0.2
		Solder	30 max.	4.3
		Brass	10 max.	1.9
		Steel	10 max.	0.7
		Cast Iron	10 max.	1.4
		Aluminum	30 max.	+0.2
Simulated Service Test	Weight Loss ⁽¹⁾ mg/Specimen	Copper	20 max.	0.7
		Solder	60 max.	6.9
		Brass	20 max.	5.9
		Steel	20 max.	0.2
		Cast Iron	20 max.	3.3
		Aluminum	60 max.	0.1
Corrosion of Cast Aluminum Alloys at Heat-Rejecting Surfaces mg/cm ² /week			1.0 max.	0.1
Foaming	Volume mL	150 max.	20	
	Break Time s	5 max.	3	
Cavitation-Erosion Rating for pitting, cavitation, and erosion of the water pump			8 min.	9

Note (1): A plus sign designates weight gain.

07.00.00 Vehicle Emission Control Information (VECI) and Environmental

07.01.00 VECI Label locations

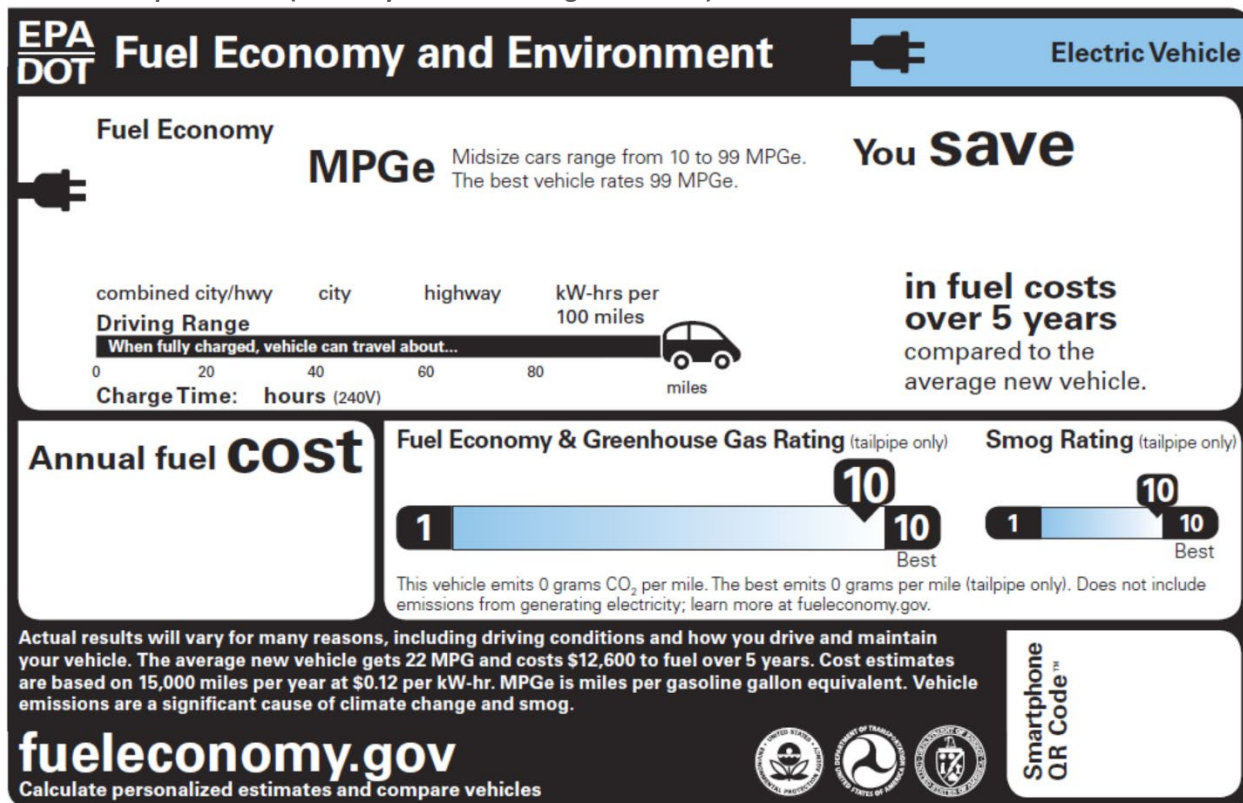
Under-hood, passenger-side, near front of the vehicle.



07.02.00 Sample VECI labels



07.03.00 Sample EP label (Formerly called the Smog Index label)



07.04.00 Statement of compliance

Every vehicle which is covered by this application conforms to US EPA Federal Tier 3 Bin 0 regulations applicable to new Medium Duty Passenger Vehicles and state of California ZEV regulations applicable to new Medium-Duty Vehicles for the 2023 Model Year.

08.00.00 General technical description

08.01.00 Description of Propulsion System

See 08.01.01 through 08.01.06.

08.01.01 Description of Vehicle Architecture

08.01.02 Description of Drive Unit Architecture

08.01.03 Description of Motor(s)

08.01.04 Description of Gearbox(s)

08.01.05 Description of Inverter(s)

08.01.06 Description of Drivetrain(s)

08.03.00 Description of Batteries

08.03.01 Battery charging capacity

Battery pack nominal capacity is 360 Ah based on a constant current C/5 discharge rate.

08.03.02 Self-discharge information

Rivian estimates the average self-discharge rate of the battery is likely less than 4% per month.

08.03.03 Description of thermal management system

The thermal management system for the high voltage battery is a liquid coolant system. A pump circulates coolant thru the battery and a refrigerant-cooled chiller to extract heat and lower the temperature of the battery. In cold weather, an in-line heating element is used to heat the coolant to raise the temperature of the battery.

08.03.04 Definition of end-of-life

The battery warranty for in vehicle use is 8 years or 175k miles, whichever occurs first. See section 08.03.05 for information on reuse strategy.

08.03.05 Description of battery disposal plan

Safe battery removal and discharge by Rivian service is recommended. Rivian service will determine which battery components meet standards for reuse. Rivian prioritizes the remanufacture of battery components into equivalent vehicle parts, and then consumption in 2nd life applications. For components which do not meet the necessary standards, Rivian approved partners will transport, break down, and recycle all materials used within the battery.

Rivian is pursuing UL 1973 certification of vehicle battery modules to enable their reuse for 2nd life grid storage applications. Rivian also plans to develop a process to evaluate the suitability of modules from field returned packs for reuse for grid storage applications in line with UL 1974 (Standard for Evaluation for Repurposing Batteries).

If a facility other than one approved by Rivian intends to dispose of the HV Battery or components, the vehicle owner and/or facility assume the responsibility to comply with any local or federal standards that may apply. A certificate from the recycler should be obtained as proof that the materials were properly and legally disposed of.

08.04.00 Description of Controller/Inverter

See Section 08.01.05

08.05.00 Description of Transmission

See Section 08.01.04

08.06.00 Description of climate control system

- Rivian's climate control is a Dual Zone system with Automatic Temperature control.
- HVAC predominantly includes Defrost mode, Panel mode, and Floor mode (or any combination of these three).
- The vehicle could be remotely conditioned to a comfortable climate setpoint using a Mobile Application.
- The system consists of four electronically controlled face vent to direct airflow around passengers.
- The recirculation door is independently controlled by the passengers.
- Auto humidity control.
- Auto/manual blower fan control.
- The system is equipped with Air Conditioning and PTC heater to provide adequate heating and cooling for individual zones.

08.06.01 Electric Heat Pump

N/A

08.06.02 (Reserved)

08.06.03 Climate control system logic

HVAC software has multiple modes which can be selected based on user preference:

- In Manual Mode, the user has complete control on blower speed, temperature, and airflow distribution to face or feet. Recirculation of air is also manually controlled by the user.
- In Auto mode, the software provides adequate heating and cooling requests to control the breathing temperature of both driver and passenger to the requested setpoint. In this mode, the airflow distribution and the blower speeds are automatically selected to maintain the desired temperature from the screen. The software estimates the breathing temperature of individual passenger based on airflow through ducts, In-Cabin sensors, external ambient temperature sensors, and solar load sensors. Recirculation of air inside the cabin is automatically selected based on humidity level inside the cabin.
- Additionally, defrost or demist mode is provided to the user for a clear view while driving. During defog mode, the software supplies conditioned air towards the windshield based on the dew point calculation. If the desired mode is Defrost, the PTC (Positive Temperature Coefficient) heater blows hot air towards the windshield to clear frost.

08.06.04 (Reserved)

08.07.00 Description of Regenerative Braking System

The regenerative braking system can use up to all 4 electric propulsion motors to convert the vehicles kinetic energy to electrical energy which is stored in the vehicles high voltage battery.

08.07.01 Control logic

The regenerative control logic uses two main inputs, acceleration pedal position and vehicle speed to determine a desired regenerative braking torque. The requested braking torque is then distributed between the front and rear axles based on the vehicle state, axle disconnect status, and calculated normal force on each axle. The regenerative torque is limited when the vehicle experiences low wheel traction events (e.g. ice or snow).

08.07.02 Percentage of braking performed on road by each axle

The percentage of braking performed on road by each axle is constantly changing and redistributing. It is based on the driver demanded torque and has been optimized for vehicle dynamics and range attributes.

08.07.03 Overlap of friction brakes and regenerative braking

One pedal driving is the default, in this mode, fully releasing the pedal yields the maximum regen level. And about halfway through the pedal travel is the neutral point, where regen is limited. As the driver manually increases primary service brake pressure and friction braking torque, the vehicle regen level will proportionally ramp down to 0 Nm based on the driver braking pressure. The ramp profile is affected by many factors, such as those described in 08.07.01. When autohold is active and the vehicle approaches standstill, the braking torque will blend from motors to friction brakes.

08.08.00 Description of charger

The Rivian R1T and R1S is capable of conductive charging using Electric Vehicle Supply Equipment (EVSE) off-board chargers for the following charge methods:

- AC Level 1 Charging at 120 V / 12 A
- AC Level 2 Charging at 240 V / 48 A
- DC Fast Charging at up to 210 kW

For Level 1 and Level 2 charging, the vehicle is equipped with an On-Board Charger that will convert the single-phase alternating current from the EVSE into DC current.

The vehicle is equipped with a SAE J1772 Type 1 Combo CCS inlet, located at the front left corner of the vehicle and covered by a charge port door.

08.08.01 Proper recharging procedures

Detailed instructions can be found in the owner's guide.

- Put the vehicle in park (P).
- Open the charge port door, located at the front left corner of the vehicle.
- Plug the charger connector from the Electric Vehicle Supply Equipment (EVSE) into the vehicle's charge inlet, so that the connector is fully seated and latched.
- Follow any instructions provided by the EVSE to begin the charging session.
- When the charging session is complete, it is indicated by the vehicle's center touchscreen and by an indicator light at the vehicle's charge inlet.
- Stop the charge via the vehicle touchscreen or button at the charge port, or follow any instructions provided by the EVSE to end the charging session.
- Remove the charger connector and close the charge port door.

Charging starts automatically. There may be a short delay if the battery requires heating or cooling.

NOTE: When the vehicle is plugged in but not actively charging, it draws energy from the charger instead of using the battery.

The charge port light color indicates the charging status:

- White (solid), Ready.
- White (pulsing), Starting to charge.
- Green (pulsing), Charging.
- Green (solid), Charge Complete.
- Blue (solid), Charge Scheduled.
- Red (solid), Error.
- Red (pulsing), Error.

Select 100%, 85%, or 70% to set a charging limit based on your range needs.

- Daily, requires less time to charge and maximizes battery efficiency.
- Extended, allows you to travel farther on one charge.
- Trip, maximizes range and requires more time to charge.

To stop the charging session:

- Select Stop Charge from Energy menu.
- Unplug the charge cable and return the plug to the charger.
- Store the cable neatly to prevent a tripping hazard.

To turn on a charge schedule:

Set up a schedule to charge at home when electricity costs are less or to stagger charging times between multiple vehicles.

- Select Charge Schedule from the Energy menu.
- Select days to schedule.
- Select times to start and stop charging.
- To disable the charge schedule, select Off.

08.08.02 Power requirements necessary to recharge vehicle

The Rivian R1T and R1S complies with industry standard SAE J1772 for AC Level 1 (120 VAC) and AC Level 2 (240 VAC) charging.

AC Level 1 charging requires a conventional 110-120 Volt AC grounded outlet capable of the rating of the EVSE to be used. A portable EVSE cordset that is capable of AC Level 1 charging is included with the vehicle.

AC Level 2 charging requires a 220-240 Volt AC outlet capable of the rating of the EVSE to be used. A portable EVSE cordset that is capable of AC Level 2 charging is included with the vehicle.

08.09.00 Accessories which draw energy from the batteries

Energy from the high voltage battery is used to power the electric heater and electric air conditioning. Energy is drawn by an on-board DC-DC converter that converts the high voltage to 14 Volts DC to maintain the low voltage battery system and power 12 Volt systems. Energy is also drawn by an on-board DC-AC converter to provide AC power to NEMA 15-5 outlets located in the vehicle.

08.10.00 Other unique features (e.g. solar panels)

N/A

08.11.00 Description of warning system(s) for maintenance / malfunction

The Rivian vehicles communicate maintenance and malfunction needs to the driver through easy to read timely notifications. If issues occur, the notification system uses a combination of telltales, texts, and visuals to explain the situation. Our notifications are simple to understand, communicate when the vehicle needs service, and alerts the customer if an issue arises. The customer leaves the experience feeling confident knowing the system explains the proper actions to take. Any notifications that appears in the driver's instrument cluster retire to the center display so the driver can recall still relevant notifications at a later time.

The Rivian R1T and R1S provides warning telltale lights on the driver's display for minor and major defects. A message and an audible tone may also be provided for some major defects. Detailed descriptions of the warnings can be found in the Owner's Guide.

08.11.01 Cut off terminal voltages for prevention of battery damage

Battery management control system is programmed to prevent a state of under-voltage or over-voltage per the voltage limits defined by Rivian. Contactor opens and DTCs are set when voltage of the 9 module 135 kWh battery is below 216 V or above 459 V.

09.00.00 (Reserved)

10.00.00 (Reserved)

11.00.00 Starting and shifting schedules

12.00.00 (Reserved)

13.00.00 (Reserved)

14.00.00 (Reserved)

15.00.00 (Reserved)

16.00.00 (Reserved)

17.00.00 California requirements

17.01.00 Statement of compliance

Every vehicle which is covered by this application conforms to US EPA Federal Tier 3 Bin 0 regulations applicable to new Medium Duty Passenger Vehicles and state of California ZEV regulations applicable to new Medium-Duty Vehicles for the 2023 Model Year.

17.01.01 General statement

Rivian confirms that the production vehicles covered by this application will be substantially the same as the vehicles tested for the purposes of this application.

17.01.02 Drivability statement

N/A

17.02.00 Supplemental Data and Certification Review Sheets

See attached.

17.03.00 (Reserved)**17.04.00 Credits****17.04.01 Description of multi-manufacturer arrangements**

N/A

17.04.02 Credit calculation

17.05.00 Vehicle Safety

The Rivian architecture comprises a body attached to a skateboard frame structure. The primary structure encompasses engineered crush zones used to, in case of a crash, absorb the crash energy. The “safety cage” comprises of body pillars, side impact bars, floor sills and roof rails (working with other structural elements) and with an advanced optimized restraint system to help properly restrain and protect occupants.

17.05.01 All information for safe operation of vehicle

See sections 03.04.00, 03.05.00, and 11.00.00.

17.05.02 Information on safe handling of battery system

The high voltage battery is to be serviced and handled only by technicians authorized by Rivian.

17.05.03 Description of emergency procedures

Emergency procedures are described in the Owner’s Guide. Please refer to the Owner’s Guide for details. Emergency procedures for first responders are described in the Emergency Response Guide provided for this vehicle.

17.06.00 (Reserved)

Test Results:

R1S0396 20in All-Terrain All-Purpose Mode:

MCT							
UDDS		Date: 1/7/2023		Ref: R170			
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2797.21 Wh	7.437 mi	376.12	94.03	8.24	2.66	89.60
2	2651.54 Wh	7.450 mi	355.91	88.98	116.04	2.81	94.69
3	2577.80 Wh	7.424 mi	347.23	86.81	113.21	2.88	97.06
4	2552.77 Wh	7.428 mi	343.67	85.92	112.05	2.91	98.06
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	4090.68 Wh	10.244 mi	399.32	199.66		2.50	84.39
2	3924.66 Wh	10.253 mi	382.78	191.39		2.61	88.04
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	92111.16 Wh	196.090 mi	469.74			2.13	71.74
2	16953.80 Wh	36.548 mi	463.88			2.16	72.65
MCT Recharge						Ref: R171	
MCT Energy		127659.62 Wh					
Charge Energy		146773.93 Wh					
Efficiency & Range							
City		Highway			Combined		
365.23 mi		326.45 mi			347.78 mi		
350 Wh/mi		391 Wh/mi			367 Wh/mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
243.45 miles							
Adjusted Range - Rivian 0.7563 Adjustment Factor							
263.03 miles							

R1S0396 20in All-Terrain Conserve Mode:

MCT							
UDDS		Date: 1/6/2023		Ref: R164			
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2497.25 Wh	7.445 mi	335.43	83.86	6.58	2.98	100.47
2	2422.20 Wh	7.458 mi	324.78	81.19	106.14	3.08	103.76
3	2413.77 Wh	7.523 mi	320.85	80.21	104.85	3.12	105.03
4	2395.20 Wh	7.489 mi	319.83	79.96	104.52	3.13	105.37
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3533.85 Wh	10.250 mi	344.77	172.38		2.90	97.75
2	3523.54 Wh	10.289 mi	342.46	171.23		2.92	98.41
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	92639.51 Wh	221.230 mi	418.75			2.39	80.48
2	17857.33 Wh	41.014 mi	435.40			2.30	77.40
MCT Recharge				Ref: R165			
MCT Energy		127282.65 Wh					
Charge Energy		146476.25 Wh					
Efficiency & Range							
City		Highway			Combined		
395.18 mi		370.43 mi			384.04 mi		
322 Wh/mi		344 Wh/mi			331 Wh/mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
268.83 miles							
Adjusted Range - Rivian 0.7425 Adjustment Factor							
285.14 miles							

R1T2301 21in All-Purpose Mode:

MCT							
UDDS		Date:		11/17/2022		Ref: R157	
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2430.10 Wh	7.456 mi	325.91	81.48	6.13	3.07	103.40
2	2290.25 Wh	7.443 mi	307.69	76.92	100.63	3.25	109.53
3	2169.55 Wh	7.432 mi	291.91	72.98	95.48	3.43	115.45
4	2158.01 Wh	7.428 mi	290.53	72.63	95.02	3.44	116.00
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3510.89 Wh	10.260 mi	342.19	171.09		2.92	98.48
2	3338.39 Wh	10.238 mi	326.09	163.04		3.07	103.35
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	93152.55 Wh	227.376 mi	409.69			2.44	82.26
2	20246.64 Wh	50.255 mi	402.88			2.48	83.65
MCT Recharge						Ref: R158	
MCT Energy		129296.37 Wh					
Charge Energy		150596.00 Wh					
Efficiency & Range							
City		Highway			Combined		
434.96 mi		386.95 mi			413.36 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
289.35 miles							
Adjusted Range - Rivian 0.7457 Adjustment Factor							
308.26 miles							

R1T2301 21in Conserve Mode:

MCT							
UDDS		Date: 11/7/2022		Ref:		R150	
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2113.89 Wh	7.439 mi	284.16	71.04	4.62	3.52	118.59
2	2024.15 Wh	7.453 mi	271.59	67.90	89.06	3.68	124.08
3	1955.52 Wh	7.441 mi	262.80	65.70	86.18	3.81	128.23
4	1965.43 Wh	7.446 mi	263.96	65.99	86.56	3.79	127.67
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2987.75 Wh	10.252 mi	291.43	145.72		3.43	115.64
2	2911.94 Wh	10.264 mi	283.70	141.85		3.52	118.79
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	95297.16 Wh	269.446 mi	353.68			2.83	95.28
2	20848.20 Wh	59.635 mi	349.60			2.86	96.40
MCT Recharge				Ref: R151			
MCT Energy		130104.03 Wh					
Charge Energy		150145.00 Wh					
Efficiency & Range							
City		Highway			Combined		
488.36 mi		452.43 mi			472.19 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
330.53 miles							
Adjusted Range - Rivian 0.7367 Adjustment Factor							
347.84 miles							

R1T3804 21in All-Purpose Mode:

MCT							
UDDS		Date: 9/28/2022				Ref: R108	
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2169.32 Wh	7.506 mi	289.01	72.25	4.91	3.46	116.61
2	2035.41 Wh	7.496 mi	271.52	67.88	88.97	3.68	124.11
3	1988.58 Wh	7.461 mi	266.54	66.63	87.33	3.75	126.44
4	1986.20 Wh	7.470 mi	265.89	66.47	87.12	3.76	126.75
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3305.34 Wh	10.269 mi	321.86	160.93		3.11	104.70
2	3208.29 Wh	10.251 mi	312.98	156.49		3.20	107.67
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	94020.21 Wh	236.677 mi	397.25			2.52	84.83
2	18859.35 Wh	48.246 mi	390.90			2.56	86.21
MCT Recharge				Ref: R110			
MCT Energy		127572.70 Wh					
Charge Energy		148673.00 Wh					
Efficiency & Range							
City		Highway			Combined		
475.41 mi		401.90 mi			442.33 mi		
Adjusted Range - Standard 0.7 Ajustment Factor							
309.63 miles							
Adjusted Range - Rivian 0.7157 Adjustment Factor							
316.60 miles							

R1T3804 21in Conserve Mode:

MCT							
UDDS		Date: 9/27/2022				Ref: R080	
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2019.78 Wh	7.458 mi	270.83	67.71	4.30	3.69	124.43
2	1963.84 Wh	7.465 mi	263.07	65.77	86.30	3.80	128.10
3	1843.49 Wh	7.433 mi	248.00	62.00	81.35	4.03	135.89
4	1841.49 Wh	7.433 mi	247.73	61.93	81.27	4.04	136.04
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2951.80 Wh	10.254 mi	287.87	143.94		3.47	117.07
2	2811.49 Wh	10.243 mi	274.49	137.24		3.64	122.77
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	93811.81 Wh	265.514 mi	353.32			2.83	95.38
2	20020.77 Wh	57.903 mi	345.76			2.89	97.47
MCT Recharge				Ref: R111			
MCT Energy		127264.48 Wh					
Charge Energy		148097.00 Wh					
Efficiency & Range							
City		Highway			Combined		
502.59 mi		452.61 mi			480.10 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
336.07 miles							
Adjusted Range - Rivian 0.7254 Adjustment Factor							
348.27 miles							

R1S 21in All-Purpose Mode:

MCT							
UDDS		Date: 10/7/2022				Ref:	R073
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2401.42 Wh	7.439 mi	322.81	80.70	5.99	3.10	104.39
2	2283.30 Wh	7.445 mi	306.68	76.67	100.33	3.26	109.89
3	2161.85 Wh	7.443 mi	290.44	72.61	95.02	3.44	116.03
4	2172.75 Wh	7.458 mi	291.34	72.84	95.31	3.43	115.67
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3608.21 Wh	10.241 mi	352.32	176.16		2.84	95.65
2	3441.75 Wh	10.261 mi	335.41	167.70		2.98	100.47
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	93742.85 Wh	219.647 mi	426.79			2.34	78.96
2	19664.17 Wh	46.766 mi	420.48			2.38	80.15
MCT Recharge						Ref:	R121
MCT Energy		129476.30 Wh					
Charge Energy		151361.00 Wh					
Efficiency & Range							
City		Highway			Combined		
436.46 mi		376.54 mi			409.50 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
286.65 miles							

R1S 21in Conserve Mode:

MCT							
UDDS		Date: 10/6/2022				Ref: R113	
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2050.49 Wh	7.443 mi	275.48	68.87	4.38	3.63	122.33
2	1956.73 Wh	7.447 mi	262.77	65.69	86.20	3.81	128.25
3	1924.49 Wh	7.443 mi	258.57	64.64	84.82	3.87	130.33
4	1920.32 Wh	7.459 mi	257.45	64.36	84.45	3.88	130.90
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2986.60 Wh	10.248 mi	291.44	145.72		3.43	115.63
2	2920.71 Wh	10.252 mi	284.89	142.45		3.51	118.29
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	93363.93 Wh	259.869 mi	359.27			2.78	93.80
2	21838.48 Wh	61.355 mi	355.94			2.81	94.68
MCT Recharge						Ref: R114	
MCT Energy		128961.76 Wh					
Charge Energy		150644.00 Wh					
Efficiency & Range							
City		Highway			Combined		
496.29 mi		447.53 mi			474.35 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
332.04 miles							

R1S 22in All-Purpose Mode:

MCT							
UDDS		Date:	9/9/2022			Ref:	R088
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2470.54 Wh	7.448 mi	331.70	82.93	6.40	3.01	101.60
2	2324.96 Wh	7.448 mi	312.16	78.04	102.05	3.20	107.96
3	2250.85 Wh	7.447 mi	302.25	75.56	98.81	3.31	111.50
4	2248.04 Wh	7.463 mi	301.22	75.31	98.47	3.32	111.88
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3739.63 Wh	10.258 mi	364.55	182.27		2.74	92.44
2	3614.91 Wh	10.245 mi	352.86	176.43		2.83	95.50
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	91198.29 Wh	206.009 mi	442.69			2.26	76.13
2	20253.00 Wh	46.403 mi	436.46			2.29	77.21
MCT Recharge						Ref:	R092
MCT Energy		128100.21 Wh					
Charge Energy		148343.55 Wh					
Efficiency & Range							
City		Highway			Combined		
419.01 mi		357.12 mi			391.16 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
273.81 miles							

R1S 22in Conserve Mode:

MCT							
UDDS		Date: 9/7/2022				Ref:	R085
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2149.36 Wh	7.410 mi	290.04	72.51	4.85	3.45	116.19
2	2058.93 Wh	7.437 mi	276.84	69.21	90.74	3.61	121.73
3	2074.37 Wh	7.489 mi	276.97	69.24	90.78	3.61	121.67
4	2032.19 Wh	7.463 mi	272.31	68.08	89.25	3.67	123.75
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3211.91 Wh	10.251 mi	313.33	156.67		3.19	107.55
2	3169.38 Wh	10.264 mi	308.79	154.40		3.24	109.14
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	93100.26 Wh	237.519 mi	391.97			2.55	85.98
2	20698.93 Wh	53.639 mi	385.89			2.59	87.33
MCT Recharge				Ref: R086			
MCT Energy		128495.33 Wh					
Charge Energy		148348.00 Wh					
Efficiency & Range							
City		Highway			Combined		
466.20 mi		413.08 mi			442.30 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
309.61 miles							

R1S 20in All-Purpose Mode:

MCT							
UDDS		Date:	9/15/2022			Ref:	R094
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2644.02 Wh	7.432 mi	355.76	88.94	7.34	2.81	94.73
2	2452.91 Wh	7.439 mi	329.74	82.43	107.64	3.03	102.20
3	2354.22 Wh	7.447 mi	316.13	79.03	103.20	3.16	106.60
4	2362.06 Wh	7.460 mi	316.63	79.16	103.37	3.16	106.43
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3936.52 Wh	10.254 mi	383.88	191.94		2.60	87.79
2	3768.48 Wh	10.245 mi	367.83	183.91		2.72	91.62
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	90875.85 Wh	198.417 mi	458.00			2.18	73.58
2	19739.20 Wh	43.459 mi	454.20			2.20	74.20
MCT Recharge				Ref: R095			
MCT Energy		128133.26 Wh					
Charge Energy		149954.00 Wh					
Efficiency & Range							
City		Highway			Combined		
398.48 mi		340.91 mi			372.58 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
260.80 miles							
Adjusted Range - Rivian 0.7387 Adjustment Factor							
275.21 miles							

R1S 20in Conserve Mode:

MCT							
UDDS		Date: 9/13/2022				Ref: R090	
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	2326.79 Wh	7.467 mi	311.61	77.90	5.63	3.21	108.15
2	2190.39 Wh	7.466 mi	293.38	73.35	96.03	3.41	114.87
3	2117.45 Wh	7.414 mi	285.60	71.40	93.48	3.50	118.00
4	2133.68 Wh	7.419 mi	287.60	71.90	94.13	3.48	117.18
HFEDS							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	3392.84 Wh	10.248 mi	331.07	165.54		3.02	101.79
2	3330.09 Wh	10.240 mi	325.20	162.60		3.07	103.63
CSC							
Cycle	Energy	Distance	Wh/mi	Euwgt	Ewgt	mi/kWh	MPGe
1	92111.37 Wh	226.324 mi	406.99			2.46	82.80
2	21080.41 Wh	51.845 mi	406.60			2.46	82.88
MCT Recharge				Ref: R091			
MCT Energy		128683.02 Wh					
Charge Energy		149943.10 Wh					
Efficiency & Range							
City		Highway			Combined		
444.85 mi		392.16 mi			421.14 mi		
Adjusted Range - Standard 0.7 Adjustment Factor							
294.80 miles							
Adjusted Range - Rivian 0.7167 Adjustment Factor							
301.82 miles							

Certification Summary Information Report

Manufacturer	Rivian Automotive LLC	Manufacturer Code	RIV
Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	02/01/2023 10:24:06 PM
Model Year	2023		

Test Group Information

CSI Type	Update for Correction	Running Change Reference Number	--
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Electric Motor

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Electricity	--	--

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	Yes
Fuel Cell Indicator	No	EPA Vehicle Class	MDPV
Federal Clean Fuel Vehicle	Yes	Federal Clean Fuel Vehicle Standard	ZEV
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	--
Durability Group Name	PRIVR0000194	Durability Group Equivalency Factor	1
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	12/15/2022	CAP2000 Conditional Certificate?	N/A
Independent Commercial Importer?	--	Alternative Fuel Converter Certificate?	--
SFTP Federal Composite Compliance Identifier	Not Applicable	SFTP Tier 2 Composite CO Option	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	PRIVT00.0194
Test Group OBD Compliance Level	Full - no deficiencies	Number of Test Group OBD Deficiencies	0
OBD Deficiencies Comments	OBD COMPLIANCE IS NOT APPLICABLE TO ZEV. PARAMETERS ARE PLACEHOLDERS TO ALLOW DATASET SUBMISSION.		
Mfr Test Group Comments	ALL-PURPOSE AND CONSERVE DURABILITY IS NOT APPLICABLE TO ZEV. PARAMETERS ARE PLACEHOLDERS TO ALLOW DATASET SUBMISSION.		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group		PRIVT00.0194		Evaporative/Refueling Family		--	
Models Covered by this Certificate							
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Rivian Automotive LLC	1 - Rivian	720 - R1T 20in	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	547 - R1S 20in All-Terrain	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	721 - R1T 21in	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	721 - R1T 21in	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	520 - R1S 20in	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	522 - R1S 22in	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	722 - R1T 22in	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	521 - R1S 21in	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	547 - R1S 20in All-Terrain	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	522 - R1S 22in	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	720 - R1T 20in	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	747 - R1T 20in All-Terrain	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	747 - R1T 20in All-Terrain	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	722 - R1T 22in	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	520 - R1S 20in	Federal	All Wheel Drive	Automatic	1	No
Rivian Automotive LLC	1 - Rivian	521 - R1S 21in	Federal	All Wheel Drive	Automatic	1	No
Engine Description							
Hybrid Type		--	Hybrid Description		--		
Engine Type		--	Mfr Engine Description		--		
Engine Block Arrangement		--	Mfr Engine Block Arrangement Description		--		
Camless Valvetrain Indicator		--	Oil Viscosity/Classification				
Number of Cylinders/Rotors		--	Mechanically Variable Compression Ratio Indicator		--		

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
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After Treatment Device(s) (ATD)
Mfr After Treatment Device (ATD) Comments --
Direct Ozone Reduction (DOR) Device --
Mfr Emission Control Device Comments --

Official Test Numbers

Test Group Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Electricity	--	--	--	--	--	--	--	--	--	--

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Electricity	--	--	--

Official Charge Depleting Test Numbers

Test Group Fuel	UDDS	Highway
Electricity	PRIV10077319	PRIV10077320
Electricity	PRIV10077381	PRIV10077382
Electricity	PRIV10077400	PRIV10077401
Electricity	PRIV10078649	PRIV10078651
Electricity	PRIV10077317	PRIV10077318
Electricity	PRIV10077398	PRIV10077399
Electricity	PRIV10078648	PRIV10078650
Electricity	PRIV10077374	PRIV10077377
Electricity	PRIV10077367	PRIV10077368
Electricity	PRIV10077384	PRIV10077385

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if Other	--
Battery Type	Lithium Ion	Number of Battery Packs	1
Total Voltage of Battery Packs	400	Battery Energy Capacity	360
Battery Specific Energy	169	Battery Charger Type	Both
Number of Capacitors	--	Capacitor Rating (In Farads)	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Both	Driver Controlled Regenerative Braking	Yes
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	4		
Motor/Generator Type 1	AC Induction	Rated Motor/Generator Power	162
Motor/Generator Type 2	AC Induction	Rated Motor/Generator Power	163
Motor/Generator Type 3	AC Induction	Rated Motor/Generator Power	163
Motor/Generator Type 4	AC Induction	Rated Motor/Generator Power	162
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	Usable H2 Fill Capacity (kg)	--
Mfr Hybrid Electric/ Electric Vehicle Comments	ALL-PURPOSE AND CONSERVE		

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	R1S0054R20AP / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2023								
Vehicle Model									
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1S 20in						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Electric Motor</td><td>Electricity</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity		
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes						
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	Yes								
Odometer Correction -- Initial	1	Odometer Correction Factor	1						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	132X2110X2OS	Rated Horsepower	872						
Displacement (liters)	99.999								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric						
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	Part-time 4-Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	6904	Equivalent Test Weight (pounds)	7000						
GVWR (lbs)	--	N/V Ratio	999.9						
Axle Ratio	9.99								
Transmission Type	Automatic	# of Transmission Gears	1						
Transmission Lockup	No	Creep Gear	No						

Certification Summary Information Report

Test Group	PRIVT00.0194			Evaporative/Refueling Family			--
Dynamometer Coefficients:							
Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	63.11	0.2806	0.03086	-5.27	-0.0653	0.02988	
Cold CO	69.42	0.3087	0.03395	-18.28	-0.1658	0.03324	
US06	63.11	0.2806	0.03086	-5.27	-0.0653	0.02988	
Emission Control Device Comments	Battery Electric Vehicle						
Manufacturer Test Vehicle Comments	All-Purpose drive mode configuration N/V Ratio and Axle Ratio entered above are placeholders Actual Values: N/V Ratio: 128.75, Axle Ratio: 12.6:1						

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077376	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/21/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7243	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.94	--
DT-EER (Drive Trace Energy Economy Rating)	-0.88	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.24	--
MFR FE (Manufacturer Fuel Economy)	33.81	99.6746525
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 379.58 Wh/mi, Cycle 2: 316.90 Wh/mi, Cycle 3: 359.43 Wh/mi, Cycle 4: 300.83 Wh/mi.

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077378	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/21/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7243	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-3.54	--
DT-EER (Drive Trace Energy Economy Rating)	-0.39	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-4.51	--
MFR FE (Manufacturer Fuel Economy)	37.32	90.3001072
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 373.24 Wh/mi

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077379	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/20/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7219	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.96	--
DT-EER (Drive Trace Energy Economy Rating)	0.41	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.84	--
MFR FE (Manufacturer Fuel Economy)	48.85	68.986694
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1 (City1): 454.01 Wh/mi, Cycle 2 (HWY): 493.53 Wh/mi, Cycle 3 (City2): 514.47 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077380	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/20/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7235	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.78	--
DT-EER (Drive Trace Energy Economy Rating)	0.93	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.17	--
MFR FE (Manufacturer Fuel Economy)	37.22	90.542719
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 372.19 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077374	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/15/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	6745	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	149.95																		
Charge Depleting Range (Calculated miles)	398.48	Charge Depleting Range (Actual miles)	398.48																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	398.48																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>-0.14</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.03</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-0.01</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>31.61</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	-0.14	3	Drive Trace Energy Economy Rating	0.03	4	Drive Trace Inertia Work Ratio Rating	-0.01	5	Manufacturer Fuel Economy	31.61
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	-0.14																			
3	Drive Trace Energy Economy Rating	0.03																			
4	Drive Trace Inertia Work Ratio Rating	-0.01																			
5	Manufacturer Fuel Economy	31.61																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-2.39																			
8	Drive Trace Energy Economy Rating	-1.74																			
9	Drive Trace Inertia Work Ratio Rating	-3.64																			
10	Manufacturer Fuel Economy	32.97																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--									
	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result									
	11	Carbon-Related Exhaust Emissions	0									
	12	Drive Trace Absolute Speed Change Rating	-1.32									
	13	Drive Trace Energy Economy Rating	-0.55									
	14	Drive Trace Inertia Work Ratio Rating	-1.73									
	15	Manufacturer Fuel Economy	31.66									
	Charge Depleting Bag/Phase											
	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result									
	16	Carbon-Related Exhaust Emissions	0									
	17	Drive Trace Absolute Speed Change Rating	-0.94									
	18	Drive Trace Energy Economy Rating	-0.33									
	19	Drive Trace Inertia Work Ratio Rating	-1.33									
	20	Manufacturer Fuel Economy	35.58									
	Manufacturer Test Comments											
R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 355.76 Wh/mi, Cycle 2: 329.74 Wh/mi, Cycle 3: 316.13 Wh/mi, Cycle 4: 316.63 Wh/mi. MCT Energy: 128133.26 Wh												
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077377	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/15/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	6745	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	149.95																		
Charge Depleting Range (Calculated miles)	340.91	Charge Depleting Range (Actual miles)	340.91																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	340.91																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	-1.13																			
3	Drive Trace Energy Economy Rating	-0.36																			
4	Drive Trace Inertia Work Ratio Rating	-1.71																			
5	Manufacturer Fuel Economy	38.39																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-1.46																			
8	Drive Trace Energy Economy Rating	-0.15																			
9	Drive Trace Inertia Work Ratio Rating	-1.87																			
10	Manufacturer Fuel Economy	36.78																			
Manufacturer Test Comments	R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 383.88 Wh/mi, Cycle 2: 367.83 Wh/mi. MCT Energy: 128133.26 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077383	Test Procedure	86 - Charge Depleting 20 Degree F FTP																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/28/2022	Fuel	N/A																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	N/A	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	7528	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	149.95																		
Charge Depleting Range (Calculated miles)	111.79	Charge Depleting Range (Actual miles)	111.79																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	111.79																				
Number of Charge Depleting Bags/Phases Conducted	3	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.25</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.34</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.63</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>74.24</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	1.25	3	Drive Trace Energy Economy Rating	0.34	4	Drive Trace Inertia Work Ratio Rating	1.63	5	Manufacturer Fuel Economy	74.24
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	1.25																			
3	Drive Trace Energy Economy Rating	0.34																			
4	Drive Trace Inertia Work Ratio Rating	1.63																			
5	Manufacturer Fuel Economy	74.24																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-0.02																			
8	Drive Trace Energy Economy Rating	-0.16																			
9	Drive Trace Inertia Work Ratio Rating	-0.16																			
10	Manufacturer Fuel Economy	53.75																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>-0.07</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>-0.07</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>-0.22</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>46.94</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	-0.07	13	Drive Trace Energy Economy Rating	-0.07	14	Drive Trace Inertia Work Ratio Rating	-0.22	15	Manufacturer Fuel Economy	46.94
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	-0.07																			
13	Drive Trace Energy Economy Rating	-0.07																			
14	Drive Trace Inertia Work Ratio Rating	-0.22																			
15	Manufacturer Fuel Economy	46.94																			
Manufacturer Test Comments	R1S - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 742.40 Wh/mi, Cycle 3: 537.49 Wh/mi, CD: 469.372 Wh/mi.																				

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	R1S0054R20C / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2023								
Vehicle Model									
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1S 20in						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> </thead> <tbody> <tr> <td>1</td><td>Electric Motor</td><td>Electricity</td></tr> </tbody> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity		
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes						
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	Yes								
Odometer Correction -- Initial	1	Odometer Correction Factor	1						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	132X2110X2OS	Rated Horsepower	872						
Displacement (liters)	99.999								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric						
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	Part-time 4-Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	6904	Equivalent Test Weight (pounds)	7000						
GVWR (lbs)	--	N/V Ratio	999.9						
Axle Ratio	9.99								
Transmission Type	Automatic	# of Transmission Gears	1						
Transmission Lockup	No	Creep Gear	No						

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	64.11	0.0519	0.03015	-7.66	0.0958	0.02611	18.9
Cold CO	70.52	0.0571	0.03317	-9.29	-0.2457	0.03118	N/A
US06	64.11	0.0519	0.03015	-7.66	0.0958	0.02611	N/A

Emission Control Device Comments	Battery Electric Vehicle
Manufacturer Test Vehicle Comments	Conserve drive mode configuration N/V Ratio and Axle Ratio entered above are placeholders Actual Values: N/V Ratio: 128.75, Axle Ratio: 12.6:1

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077369	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/17/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7165	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.8	--
DT-EER (Drive Trace Energy Economy Rating)	0.3	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.09	--
MFR FE (Manufacturer Fuel Economy)	30.91	109.0262051
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires. Cycle 1: 346.79 Wh/mi, Cycle 2: 283.23 Wh/mi, Cycle 3: 329.02 Wh/mi, Cycle 4: 281.36 Wh/mi.

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077371	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/17/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7165	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.15	--
DT-EER (Drive Trace Energy Economy Rating)	0.25	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.09	--
MFR FE (Manufacturer Fuel Economy)	33.72	99.940688
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires. Cycle 1: 337.20 Wh/mi

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077372	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/16/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7142	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.74	--
DT-EER (Drive Trace Energy Economy Rating)	-0.31	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.46	--
MFR FE (Manufacturer Fuel Economy)	44.89	75.0723992
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires. Cycle 1 (City1): 426.14 Wh/mi, Cycle 2 (HWY): 443.62 Wh/mi, Cycle 3 (City2): 574.10 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077373	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/17/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7158	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.34	--
DT-EER (Drive Trace Energy Economy Rating)	-0.28	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.25	--
MFR FE (Manufacturer Fuel Economy)	34.9	96.5616046
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires. Cycle 1: 348.95 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077367	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/13/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	6120	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	149.94																		
Charge Depleting Range (Calculated miles)	444.85	Charge Depleting Range (Actual miles)	444.85																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	444.85																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	-1.19																			
3	Drive Trace Energy Economy Rating	-1.03																			
4	Drive Trace Inertia Work Ratio Rating	-1.91																			
5	Manufacturer Fuel Economy	29.34																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-0.63																			
8	Drive Trace Energy Economy Rating	-0.32																			
9	Drive Trace Inertia Work Ratio Rating	-0.62																			
10	Manufacturer Fuel Economy	31.16																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	-1.09																			
13	Drive Trace Energy Economy Rating	-0.225																			
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<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>16</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>17</td><td>Drive Trace Absolute Speed Change Rating</td><td>0.05</td></tr><tr><td>18</td><td>Drive Trace Energy Economy Rating</td><td>0.245</td></tr><tr><td>19</td><td>Drive Trace Inertia Work Ratio Rating</td><td>0.4</td></tr><tr><td>20</td><td>Manufacturer Fuel Economy</td><td>28.76</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	16	Carbon-Related Exhaust Emissions	0	17	Drive Trace Absolute Speed Change Rating	0.05	18	Drive Trace Energy Economy Rating	0.245	19	Drive Trace Inertia Work Ratio Rating	0.4	20	Manufacturer Fuel Economy	28.76
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
16	Carbon-Related Exhaust Emissions	0																			
17	Drive Trace Absolute Speed Change Rating	0.05																			
18	Drive Trace Energy Economy Rating	0.245																			
19	Drive Trace Inertia Work Ratio Rating	0.4																			
20	Manufacturer Fuel Economy	28.76																			
Manufacturer Test Comments																					
R1S - Drive Mode: Conserve with 20" Tires. Cycle 1: 311.61 Wh/mi, Cycle 2: 293.38 Wh/mi, Cycle 3: 285.60 Wh/mi, Cycle 4: 287.60 Wh/mi. MCT Energy: 128683.02 Wh																					
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077368	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/13/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	6120	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	149.94																		
Charge Depleting Range (Calculated miles)	392.16	Charge Depleting Range (Actual miles)	392.16																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	392.16																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>-4.5</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>-0.56</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-5.6</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>33.11</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	-4.5	3	Drive Trace Energy Economy Rating	-0.56	4	Drive Trace Inertia Work Ratio Rating	-5.6	5	Manufacturer Fuel Economy	33.11
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	-4.5																			
3	Drive Trace Energy Economy Rating	-0.56																			
4	Drive Trace Inertia Work Ratio Rating	-5.6																			
5	Manufacturer Fuel Economy	33.11																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-2.02																			
8	Drive Trace Energy Economy Rating	-0.15																			
9	Drive Trace Inertia Work Ratio Rating	-2.68																			
10	Manufacturer Fuel Economy	32.52																			
Manufacturer Test Comments	R1S - Drive Mode: Conserve with 20" Tires. Cycle 1: 331.07 Wh/mi, Cycle 2: 325.20 Wh/mi. MCT Energy: 128683.02 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077375	Test Procedure	86 - Charge Depleting 20 Degree F FTP																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/26/2022	Fuel	N/A																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	N/A	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	7408	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	149.94																		
Charge Depleting Range (Calculated miles)	111.95	Charge Depleting Range (Actual miles)	111.95																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	111.95																				
Number of Charge Depleting Bags/Phases Conducted	3	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.68</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.47</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>2.87</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>67.9</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	1.68	3	Drive Trace Energy Economy Rating	0.47	4	Drive Trace Inertia Work Ratio Rating	2.87	5	Manufacturer Fuel Economy	67.9
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	1.68																			
3	Drive Trace Energy Economy Rating	0.47																			
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5	Manufacturer Fuel Economy	67.9																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.27																			
8	Drive Trace Energy Economy Rating	0.66																			
9	Drive Trace Inertia Work Ratio Rating	2.04																			
10	Manufacturer Fuel Economy	51.95																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>1.59</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>0.73</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>2.07</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>45.45</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	1.59	13	Drive Trace Energy Economy Rating	0.73	14	Drive Trace Inertia Work Ratio Rating	2.07	15	Manufacturer Fuel Economy	45.45
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	1.59																			
13	Drive Trace Energy Economy Rating	0.73																			
14	Drive Trace Inertia Work Ratio Rating	2.07																			
15	Manufacturer Fuel Economy	45.45																			
Manufacturer Test Comments	R1S - Drive Mode: Conserve with 20" Tires. Cycle 1: 679.00 Wh/mi, Cycle 3: 519.47 Wh/mi, CD: 454.465 Wh/mi.																				

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
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Emission Data Vehicle Information

Vehicle ID / Configuration	R1S0054R21AP / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--
Original Test Vehicle Model Year	2023		

Vehicle Model

Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1S 21in
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Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
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Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Electric Motor	Electricity

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes
Fuel Cell Indicator	No	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	Battery(s)		
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	1	Odometer Correction Factor	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	132X2110X2OS	Rated Horsepower	872
Displacement (liters)	99.999		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	Part-time 4-Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	6843	Equivalent Test Weight (pounds)	7000
GVWR (lbs)	--	N/V Ratio	999.9
Axle Ratio	9.99		
Transmission Type	Automatic	# of Transmission Gears	1
Transmission Lockup	No	Creep Gear	No

Dynamometer Coefficients:

Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	57.58	0.1422	0.03083	0.14	-0.0239	0.02896	18.9
US06	57.58	0.1422	0.03083	0.14	-0.0239	0.02896	N/A

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Emission Control Device Comments	Battery Electric Vehicle		
Manufacturer Test Vehicle Comments	All-Purpose drive mode configuration N/V Ratio: 128.75, Axle Ratio: 12.6:1, data entered is a placeholder		

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077398	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	10/07/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	9378	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	151.36																		
Charge Depleting Range (Calculated miles)	436.46	Charge Depleting Range (Actual miles)	436.46																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	436.46																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	0.47																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
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Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
16	Carbon-Related Exhaust Emissions	0																			
17	Drive Trace Absolute Speed Change Rating	0.88																			
18	Drive Trace Energy Economy Rating	0.47																			
19	Drive Trace Inertia Work Ratio Rating	1.66																			
20	Manufacturer Fuel Economy	29.13																			
Manufacturer Test Comments																					
R1S - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 322.81 Wh/mi, Cycle 2: 306.68 Wh/mi, Cycle 3: 290.44 Wh/mi, Cycle 4: 291.34 Wh/mi. MCT Energy: 129476.30 Wh																					
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077399	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	10/07/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	9378	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	151.36																		
Charge Depleting Range (Calculated miles)	376.54	Charge Depleting Range (Actual miles)	376.54																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	376.54																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.1																			
8	Drive Trace Energy Economy Rating	-0.23																			
9	Drive Trace Inertia Work Ratio Rating	1.55																			
10	Manufacturer Fuel Economy	35.23																			
Manufacturer Test Comments	R1S - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 352.32 Wh/mi, Cycle 2: 335.41 Wh/mi. MCT Energy: 129476.30 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																														
Emission Data Vehicle Information																																	
Vehicle ID / Configuration	R1S0054R21C / 0	Manufacturer Vehicle Configuration Number	0																														
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--																														
Original Test Vehicle Model Year	2023																																
Vehicle Model																																	
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1S 21in																														
Leak Family Details																																	
Leak Family Identifier	--	Leak Family Name	--																														
Drive Sources and Fuel System Details																																	
	<table border="1"> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> <tr> <td>1</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity																										
Drive Source and Fuel#	Drive Source	Fuel																															
1	Electric Motor	Electricity																															
Hybrid Indicator	No																																
Multiple Fuel Storage	--	Multiple Fuel Combustion	--																														
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes																														
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--																														
Off-board charge Capable Indicator	Yes																																
Odometer Correction -- Initial	1	Odometer Correction Factor	1																														
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles																																
Odometer Correction Units	Miles																																
Engine Code	132X2110X2OS	Rated Horsepower	872																														
Displacement (liters)	99.999																																
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric																														
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--																														
Charge Air Cooler Type	--	Drive Mode While Testing	Part-time 4-Wheel Drive																														
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)																														
Curb Weight (lbs)	6843	Equivalent Test Weight (pounds)	7000																														
GVWR (lbs)	--	N/V Ratio	999.9																														
Axle Ratio	9.99																																
Transmission Type	Automatic	# of Transmission Gears	1																														
Transmission Lockup	No	Creep Gear	No																														
Dynamometer Coefficients:																																	
	<table border="1"> <thead> <tr> <th colspan="3">Target Coefficients</th> <th colspan="3">Set Coefficients</th> <th rowspan="2">EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</th> </tr> <tr> <th>Coefficient Category</th> <th>A (lbf)</th> <th>B (lbf/mph)</th> <th>C (lbf/mph**2)</th> <th>A (lbf)</th> <th>B (lbf/mph)</th> <th>C (lbf/mph**2)</th> </tr> </thead> <tbody> <tr> <td>City/Highway/Evap</td> <td>54.76</td> <td>0.0623</td> <td>0.0264</td> <td>-5.23</td> <td>0.2694</td> <td>0.02135</td> <td>16.5</td> </tr> <tr> <td>US06</td> <td>54.76</td> <td>0.0623</td> <td>0.0264</td> <td>-5.23</td> <td>0.2694</td> <td>0.02135</td> <td>N/A</td> </tr> </tbody> </table>			Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients	Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	City/Highway/Evap	54.76	0.0623	0.0264	-5.23	0.2694	0.02135	16.5	US06	54.76	0.0623	0.0264	-5.23	0.2694	0.02135	N/A
Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients																											
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)		C (lbf/mph**2)																										
City/Highway/Evap	54.76	0.0623	0.0264	-5.23	0.2694	0.02135	16.5																										
US06	54.76	0.0623	0.0264	-5.23	0.2694	0.02135	N/A																										

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Emission Control Device Comments	Battery Electric Vehicle		
Manufacturer Test Vehicle Comments	Conserve drive mode configuration N/V Ratio: 128.75, Axle Ratio: 12.6:1, data entered is a placeholder		

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077400	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	10/06/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	9006	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	150.64																		
Charge Depleting Range (Calculated miles)	496.29	Charge Depleting Range (Actual miles)	496.29																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	496.29																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>0.96</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.87</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.16</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>25.86</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	0.96	3	Drive Trace Energy Economy Rating	0.87	4	Drive Trace Inertia Work Ratio Rating	1.16	5	Manufacturer Fuel Economy	25.86
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	0.96																			
3	Drive Trace Energy Economy Rating	0.87																			
4	Drive Trace Inertia Work Ratio Rating	1.16																			
5	Manufacturer Fuel Economy	25.86																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.13																			
8	Drive Trace Energy Economy Rating	0.64																			
9	Drive Trace Inertia Work Ratio Rating	1.43																			
10	Manufacturer Fuel Economy	27.55																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--									
	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result									
	11	Carbon-Related Exhaust Emissions	0									
	12	Drive Trace Absolute Speed Change Rating	0.69									
	13	Drive Trace Energy Economy Rating	0.44									
	14	Drive Trace Inertia Work Ratio Rating	0.99									
	15	Manufacturer Fuel Economy	25.75									
	Charge Depleting Bag/Phase											
	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result									
	16	Carbon-Related Exhaust Emissions	0									
	17	Drive Trace Absolute Speed Change Rating	1.37									
	18	Drive Trace Energy Economy Rating	0.55									
	19	Drive Trace Inertia Work Ratio Rating	2.22									
	20	Manufacturer Fuel Economy	26.28									
Manufacturer Test Comments		R1S - Drive Mode: Conserve with 21" Tires. Cycle 1: 275.48 Wh/mi, Cycle 2: 262.77 Wh/mi, Cycle 3: 258.57 Wh/mi, Cycle 4: 257.45 Wh/mi. MCT Energy: 128961.76 Wh										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077401	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	10/06/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	9006	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	150.64																		
Charge Depleting Range (Calculated miles)	447.53	Charge Depleting Range (Actual miles)	447.53																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	447.53																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>3.21</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.59</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>4.22</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>35.93</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	3.21	3	Drive Trace Energy Economy Rating	0.59	4	Drive Trace Inertia Work Ratio Rating	4.22	5	Manufacturer Fuel Economy	35.93
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	3.21																			
3	Drive Trace Energy Economy Rating	0.59																			
4	Drive Trace Inertia Work Ratio Rating	4.22																			
5	Manufacturer Fuel Economy	35.93																			
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>7</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.73</td> </tr> <tr> <td>8</td> <td>Drive Trace Energy Economy Rating</td> <td>0.23</td> </tr> <tr> <td>9</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.95</td> </tr> <tr> <td>10</td> <td>Manufacturer Fuel Economy</td> <td>35.59</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	6	Carbon-Related Exhaust Emissions	0	7	Drive Trace Absolute Speed Change Rating	1.73	8	Drive Trace Energy Economy Rating	0.23	9	Drive Trace Inertia Work Ratio Rating	1.95	10	Manufacturer Fuel Economy	35.59
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.73																			
8	Drive Trace Energy Economy Rating	0.23																			
9	Drive Trace Inertia Work Ratio Rating	1.95																			
10	Manufacturer Fuel Economy	35.59																			
Manufacturer Test Comments	R1S - Drive Mode: Conserve with 21" Tires. Cycle 1: 291.44 Wh/mi, Cycle 2: 284.89 Wh/mi. MCT Energy: 128961.76 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

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Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Emission Control Device Comments	Battery Electric Vehicle		
Manufacturer Test Vehicle Comments	All-Purpose drive mode configuration N/V Ratio and Axle Ratio entered above are placeholders Actual Values: N/V Ratio: 128.75, Axle Ratio: 12.6:1		

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077381	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/09/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	5482	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.34																		
Charge Depleting Range (Calculated miles)	419.01	Charge Depleting Range (Actual miles)	419.01																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	419.01																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
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4	Drive Trace Inertia Work Ratio Rating	-3.45																			
5	Manufacturer Fuel Economy	33.17																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-1.44																			
8	Drive Trace Energy Economy Rating	-1.05																			
9	Drive Trace Inertia Work Ratio Rating	-2.31																			
10	Manufacturer Fuel Economy	30.22																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>-1.36</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>-1.2</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>-2.35</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>30.12</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	-1.36	13	Drive Trace Energy Economy Rating	-1.2	14	Drive Trace Inertia Work Ratio Rating	-2.35	15	Manufacturer Fuel Economy	30.12
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	-1.36																			
13	Drive Trace Energy Economy Rating	-1.2																			
14	Drive Trace Inertia Work Ratio Rating	-2.35																			
15	Manufacturer Fuel Economy	30.12																			
Charge Depleting Bag/Phase																					
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>16</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>17</td><td>Drive Trace Absolute Speed Change Rating</td><td>-1.66</td></tr><tr><td>18</td><td>Drive Trace Energy Economy Rating</td><td>-1.37</td></tr><tr><td>19</td><td>Drive Trace Inertia Work Ratio Rating</td><td>-2.67</td></tr><tr><td>20</td><td>Manufacturer Fuel Economy</td><td>31.22</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	16	Carbon-Related Exhaust Emissions	0	17	Drive Trace Absolute Speed Change Rating	-1.66	18	Drive Trace Energy Economy Rating	-1.37	19	Drive Trace Inertia Work Ratio Rating	-2.67	20	Manufacturer Fuel Economy	31.22
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
16	Carbon-Related Exhaust Emissions	0																			
17	Drive Trace Absolute Speed Change Rating	-1.66																			
18	Drive Trace Energy Economy Rating	-1.37																			
19	Drive Trace Inertia Work Ratio Rating	-2.67																			
20	Manufacturer Fuel Economy	31.22																			
Manufacturer Test Comments																					
R1S - Drive Mode: All-Purpose with 22" Tires. Cycle 1: 331.70 Wh/mi, Cycle 2: 312.16 Wh/mi, Cycle 3: 302.25 Wh/mi, Cycle 4: 301.22 Wh/mi. MCT Energy: 128100.21 Wh																					
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077382	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/09/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	5482	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.34																		
Charge Depleting Range (Calculated miles)	357.12	Charge Depleting Range (Actual miles)	357.12																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	357.12																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
	<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr> </thead> <tbody> <tr> <td>1</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr> <tr> <td>2</td><td>Drive Trace Absolute Speed Change Rating</td><td>-2.83</td></tr> <tr> <td>3</td><td>Drive Trace Energy Economy Rating</td><td>-0.22</td></tr> <tr> <td>4</td><td>Drive Trace Inertia Work Ratio Rating</td><td>-3.69</td></tr> <tr> <td>5</td><td>Manufacturer Fuel Economy</td><td>35.29</td></tr> </tbody> </table>	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	-2.83	3	Drive Trace Energy Economy Rating	-0.22	4	Drive Trace Inertia Work Ratio Rating	-3.69	5	Manufacturer Fuel Economy	35.29		
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	-2.83																			
3	Drive Trace Energy Economy Rating	-0.22																			
4	Drive Trace Inertia Work Ratio Rating	-3.69																			
5	Manufacturer Fuel Economy	35.29																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-2.91																			
8	Drive Trace Energy Economy Rating	-0.16																			
9	Drive Trace Inertia Work Ratio Rating	-3.62																			
10	Manufacturer Fuel Economy	36.45																			
Manufacturer Test Comments	R1S - Drive Mode: All-Purpose with 22" Tires. Cycle 1: 364.55 Wh/mi, Cycle 2: 352.86 Wh/mi. MCT Energy: 128100.21 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

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Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077384	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/07/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4824	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.35																		
Charge Depleting Range (Calculated miles)	466.2	Charge Depleting Range (Actual miles)	466.2																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	466.2																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>0.73</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>1.46</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>2.18</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>27.7</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	0.73	3	Drive Trace Energy Economy Rating	1.46	4	Drive Trace Inertia Work Ratio Rating	2.18	5	Manufacturer Fuel Economy	27.7
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	0.73																			
3	Drive Trace Energy Economy Rating	1.46																			
4	Drive Trace Inertia Work Ratio Rating	2.18																			
5	Manufacturer Fuel Economy	27.7																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-0.85																			
8	Drive Trace Energy Economy Rating	-0.63																			
9	Drive Trace Inertia Work Ratio Rating	-1.18																			
10	Manufacturer Fuel Economy	27.23																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group		PRIVT00.0194		Evaporative/Refueling Family		--	

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077385	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/07/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4824	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.35																		
Charge Depleting Range (Calculated miles)	413.08	Charge Depleting Range (Actual miles)	413.08																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	413.08																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	-1.28																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	-3.5																			
8	Drive Trace Energy Economy Rating	-1.11																			
9	Drive Trace Inertia Work Ratio Rating	-4.28																			
10	Manufacturer Fuel Economy	31.33																			
Manufacturer Test Comments	R1S - Drive Mode: Conserve with 22" Tires. Cycle 1: 313.33 Wh/mi, Cycle 2: 308.79 Wh/mi. MCT Energy: 128495.33 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	R1S0396R20 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2023								
Vehicle Model									
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1S 20in All-Terrain						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Electric Motor</td><td>Electricity</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity		
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes						
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	Yes								
Odometer Correction -- Initial	1	Odometer Correction Factor	1						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	132X2110X2OS	Rated Horsepower	872						
Displacement (liters)	99.999								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric						
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	7090	Equivalent Test Weight (pounds)	7500						
GVWR (lbs)	--	N/V Ratio	999.9						
Axle Ratio	9.99								
Transmission Type	Automatic	# of Transmission Gears	1						
Transmission Lockup	No	Creep Gear	No						

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	63.33	0.2947	0.02718	-8.55	0.3029	0.02322	19.5
Cold CO	69.66	0.3242	0.0229	-18.59	0.13	0.02655	N/A
US06	63.33	0.2947	0.02718	-8.55	0.3029	0.02322	N/A

Emission Control Device Comments	Battery Electric Vehicle
Manufacturer Test Vehicle Comments	Conserve drive mode configuration N/V Ratio and Axle Ratio entered above are placeholders Actual Values: N/V Ratio: 128.75, Axle Ratio: 12.6:1

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078661	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/13/2023	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4754	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.32	--
DT-EER (Drive Trace Energy Economy Rating)	-0.33	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.47	--
MFR FE (Manufacturer Fuel Economy)	33.34	101.079784
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires All Terrain. Cycle 1: 366.77 Wh/mi, Cycle 2: 310.73 Wh/mi, Cycle 3: 349.51 Wh/mi, Cycle 4: 306.62 Wh/mi.

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078660	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/13/2023	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4754	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.5	--
DT-EER (Drive Trace Energy Economy Rating)	-0.35	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.98	--
MFR FE (Manufacturer Fuel Economy)	34.83	96.7556704
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires All-Terrain. Cycle 1: 348.27 Wh/mi

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078658	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/13/2023	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4779	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-5.71	--
DT-EER (Drive Trace Energy Economy Rating)	-2.74	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-11.12	--
MFR FE (Manufacturer Fuel Economy)	47.67	70.694357
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires All-Terrain. Cycle 1 (City1): 446.59 Wh/mi, Cycle 2 (HWY): 447.25 Wh/mi, Cycle 3 (City2): 663.26 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078657	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/13/2023	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4796	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.4	--
DT-EER (Drive Trace Energy Economy Rating)	-1.18	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.28	--
MFR FE (Manufacturer Fuel Economy)	37.32	90.3001072
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S - Drive Mode: Conserve with 20" Tires All-Terrain. Cycle 1: 373.22 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10078649	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	01/06/2023	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4105	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	146.48																		
Charge Depleting Range (Calculated miles)	395.18	Charge Depleting Range (Actual miles)	395.18																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	395.18																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.16</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.995</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.78</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>31.98</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	1.16	3	Drive Trace Energy Economy Rating	0.995	4	Drive Trace Inertia Work Ratio Rating	1.78	5	Manufacturer Fuel Economy	31.98
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	1.16																			
3	Drive Trace Energy Economy Rating	0.995																			
4	Drive Trace Inertia Work Ratio Rating	1.78																			
5	Manufacturer Fuel Economy	31.98																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.06																			
8	Drive Trace Energy Economy Rating	1.34																			
9	Drive Trace Inertia Work Ratio Rating	1.62																			
10	Manufacturer Fuel Economy	33.54																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>0.57</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>0.19</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>0.77</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>32.48</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	0.57	13	Drive Trace Energy Economy Rating	0.19	14	Drive Trace Inertia Work Ratio Rating	0.77	15	Manufacturer Fuel Economy	32.48
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	0.57																			
13	Drive Trace Energy Economy Rating	0.19																			
14	Drive Trace Inertia Work Ratio Rating	0.77																			
15	Manufacturer Fuel Economy	32.48																			
Charge Depleting Bag/Phase																					
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>16</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>17</td><td>Drive Trace Absolute Speed Change Rating</td><td>1.3</td></tr><tr><td>18</td><td>Drive Trace Energy Economy Rating</td><td>0.47</td></tr><tr><td>19</td><td>Drive Trace Inertia Work Ratio Rating</td><td>1.89</td></tr><tr><td>20</td><td>Manufacturer Fuel Economy</td><td>32.09</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	16	Carbon-Related Exhaust Emissions	0	17	Drive Trace Absolute Speed Change Rating	1.3	18	Drive Trace Energy Economy Rating	0.47	19	Drive Trace Inertia Work Ratio Rating	1.89	20	Manufacturer Fuel Economy	32.09
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
16	Carbon-Related Exhaust Emissions	0																			
17	Drive Trace Absolute Speed Change Rating	1.3																			
18	Drive Trace Energy Economy Rating	0.47																			
19	Drive Trace Inertia Work Ratio Rating	1.89																			
20	Manufacturer Fuel Economy	32.09																			
Manufacturer Test Comments																					
R1S - Drive Mode: Conserve with 20" Tires All-Terrain. Cycle 1: 335.43 Wh/mi, Cycle 2: 324.78 Wh/mi, Cycle 3: 320.85 Wh/mi, Cycle 4: 319.83 Wh/mi. MCT Energy: 127282.65 Wh																					
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10078651	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	01/06/2023	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4105	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	146.48																		
Charge Depleting Range (Calculated miles)	370.43	Charge Depleting Range (Actual miles)	370.43																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	370.43																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	1.39																			
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5	Manufacturer Fuel Economy	34.48																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.19																			
8	Drive Trace Energy Economy Rating	0.22																			
9	Drive Trace Inertia Work Ratio Rating	1.48																			
10	Manufacturer Fuel Economy	34.25																			
Manufacturer Test Comments	R1S - Drive Mode: Conserve with 20" Tires All-Terrain. Cycle 1: 344.77 Wh/mi, Cycle 2: 342.46 Wh/mi. MCT Energy: 127282.65 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10078654	Test Procedure	86 - Charge Depleting 20 Degree F FTP																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	01/17/2023	Fuel	N/A																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	N/A	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4839	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	146.48																		
Charge Depleting Range (Calculated miles)	111.626	Charge Depleting Range (Actual miles)	111.626																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	111.626																				
Number of Charge Depleting Bags/Phases Conducted	3	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.08</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>0.03</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.24</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>67.9</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	1.08	3	Drive Trace Energy Economy Rating	0.03	4	Drive Trace Inertia Work Ratio Rating	1.24	5	Manufacturer Fuel Economy	67.9
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
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3	Drive Trace Energy Economy Rating	0.03																			
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5	Manufacturer Fuel Economy	67.9																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	0.37																			
8	Drive Trace Energy Economy Rating	0.05																			
9	Drive Trace Inertia Work Ratio Rating	0.47																			
10	Manufacturer Fuel Economy	45.45																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	0.65																			
13	Drive Trace Energy Economy Rating	0.66																			
14	Drive Trace Inertia Work Ratio Rating	0.93																			
15	Manufacturer Fuel Economy	51.95																			
Manufacturer Test Comments	R1S - Drive Mode: Conserve with 20" Tires All-Terrain. Cycle 1: 706.62 Wh/mi, Cycle 3: 528.58 Wh/mi, CD: 479.69 Wh/mi.																				

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	R1S0396R20 / 1	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2023								
Vehicle Model									
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1S 20in All-Terrain						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> </thead> <tbody> <tr> <td>1</td><td>Electric Motor</td><td>Electricity</td></tr> </tbody> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity		
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes						
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	Yes								
Odometer Correction -- Initial	1	Odometer Correction Factor	1						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	132X2110X2OS	Rated Horsepower	872						
Displacement (liters)	99.999								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric						
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	7061	Equivalent Test Weight (pounds)	7500						
GVWR (lbs)	--	N/V Ratio	999.9						
Axle Ratio	9.99								
Transmission Type	Automatic	# of Transmission Gears	1						
Transmission Lockup	No	Creep Gear	No						

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	64.32	0.517	0.02808	-9.91	0.2315	0.02653	21.4
Cold CO	70.75	0.5687	0.03089	-16.2	-0.0407	0.03079	N/A
US06	64.32	0.517	0.02808	-9.91	0.2315	0.02653	N/A

Emission Control Device Comments	Battery Electric Vehicle
Manufacturer Test Vehicle Comments	All-Purpose drive mode configuration N/V Ratio and Axle Ratio entered above are placeholders Actual Values: N/V Ratio: 128.75, Axle Ratio: 12.6:1

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078652	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/20/2023	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5063	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.14	--
DT-EER (Drive Trace Energy Economy Rating)	-0.4	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.08	--
MFR FE (Manufacturer Fuel Economy)	35.51	94.9028443
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 397.31 Wh/mi, Cycle 2: 331.05 Wh/mi, Cycle 3: 376.31 Wh/mi, Cycle 4: 320.25 Wh/mi.

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078653	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/20/2023	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5063	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.76	--
DT-EER (Drive Trace Energy Economy Rating)	-0.4	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.22	--
MFR FE (Manufacturer Fuel Economy)	38.54	87.4416191
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 385.38 Wh/mi

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078655	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/20/2023	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5089	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.02	--
DT-EER (Drive Trace Energy Economy Rating)	-0.88	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-5.64	--
MFR FE (Manufacturer Fuel Economy)	49.11	68.621462
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1 (City1): 461.01 Wh/mi, Cycle 2 (HWY): 491.92 Wh/mi, Cycle 3 (City2): 558.13 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10078656	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	01/20/2023	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5105	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.09	--
DT-EER (Drive Trace Energy Economy Rating)	-0.37	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.05	--
MFR FE (Manufacturer Fuel Economy)	41.1	81.9951338
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 411.00 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10078648	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	01/07/2023	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4418	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	146.77																		
Charge Depleting Range (Calculated miles)	365.23	Charge Depleting Range (Actual miles)	365.23																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	365.23																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>2</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>0.07</td> </tr> <tr> <td>3</td> <td>Drive Trace Energy Economy Rating</td> <td>-0.43</td> </tr> <tr> <td>4</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>0.17</td> </tr> <tr> <td>5</td> <td>Manufacturer Fuel Economy</td> <td>35.59</td> </tr> </tbody> </table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	1	Carbon-Related Exhaust Emissions	0	2	Drive Trace Absolute Speed Change Rating	0.07	3	Drive Trace Energy Economy Rating	-0.43	4	Drive Trace Inertia Work Ratio Rating	0.17	5	Manufacturer Fuel Economy	35.59
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	0.07																			
3	Drive Trace Energy Economy Rating	-0.43																			
4	Drive Trace Inertia Work Ratio Rating	0.17																			
5	Manufacturer Fuel Economy	35.59																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	0.17																			
8	Drive Trace Energy Economy Rating	-0.23																			
9	Drive Trace Inertia Work Ratio Rating	-0.15																			
10	Manufacturer Fuel Economy	37.61																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>0.35</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>0.17</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>0.21</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>34.72</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	0.35	13	Drive Trace Energy Economy Rating	0.17	14	Drive Trace Inertia Work Ratio Rating	0.21	15	Manufacturer Fuel Economy	34.72
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	0.35																			
13	Drive Trace Energy Economy Rating	0.17																			
14	Drive Trace Inertia Work Ratio Rating	0.21																			
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<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>16</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>17</td><td>Drive Trace Absolute Speed Change Rating</td><td>0.13</td></tr><tr><td>18</td><td>Drive Trace Energy Economy Rating</td><td>0.07</td></tr><tr><td>19</td><td>Drive Trace Inertia Work Ratio Rating</td><td>0.16</td></tr><tr><td>20</td><td>Manufacturer Fuel Economy</td><td>34.37</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	16	Carbon-Related Exhaust Emissions	0	17	Drive Trace Absolute Speed Change Rating	0.13	18	Drive Trace Energy Economy Rating	0.07	19	Drive Trace Inertia Work Ratio Rating	0.16	20	Manufacturer Fuel Economy	34.37
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
16	Carbon-Related Exhaust Emissions	0																			
17	Drive Trace Absolute Speed Change Rating	0.13																			
18	Drive Trace Energy Economy Rating	0.07																			
19	Drive Trace Inertia Work Ratio Rating	0.16																			
20	Manufacturer Fuel Economy	34.37																			
Manufacturer Test Comments																					
R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 376.12 Wh/mi, Cycle 2: 355.91 Wh/mi, Cycle 3: 347.23 Wh/mi, Cycle 4: 343.67 Wh/mi. MCT Energy: 127659.62 Wh																					
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10078650	Test Procedure	84 - Charge Depleting Highway																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	01/07/2023	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4418	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	146.77																		
Charge Depleting Range (Calculated miles)	326.45	Charge Depleting Range (Actual miles)	326.45																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	326.45																				
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	1.03																			
8	Drive Trace Energy Economy Rating	-0.04																			
9	Drive Trace Inertia Work Ratio Rating	1.52																			
10	Manufacturer Fuel Economy	39.93																			
Manufacturer Test Comments	R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 399.32 Wh/mi, Cycle 2: 382.78 Wh/mi. MCT Energy: 127659.62 Wh																				

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10078659	Test Procedure	86 - Charge Depleting 20 Degree F FTP																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	01/19/2023	Fuel	N/A																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	N/A	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4951	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	146.77																		
Charge Depleting Range (Calculated miles)	111.74	Charge Depleting Range (Actual miles)	111.74																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	111.74																				
Number of Charge Depleting Bags/Phases Conducted	3	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	0.65																			
3	Drive Trace Energy Economy Rating	0.02																			
4	Drive Trace Inertia Work Ratio Rating	0.79																			
5	Manufacturer Fuel Economy	77.49																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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7	Drive Trace Absolute Speed Change Rating	0.1																			
8	Drive Trace Energy Economy Rating	-0.08																			
9	Drive Trace Inertia Work Ratio Rating	0.17																			
10	Manufacturer Fuel Economy	55.04																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	1.14																			
13	Drive Trace Energy Economy Rating	0.37																			
14	Drive Trace Inertia Work Ratio Rating	1.47																			
15	Manufacturer Fuel Economy	59.74																			
Manufacturer Test Comments	R1S All-Terrain - Drive Mode: All-Purpose with 20" Tires. Cycle 1: 774.85 Wh/mi, Cycle 3: 597.42 Wh/mi, CD: 550.37 Wh/mi.																				

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--					
Emission Data Vehicle Information								
Vehicle ID / Configuration	R1T3804R21AP / 0	Manufacturer Vehicle Configuration Number	0					
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--					
Original Test Vehicle Model Year	2023							
Vehicle Model								
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1T 21					
Leak Family Details								
Leak Family Identifier	--	Leak Family Name	--					
Drive Sources and Fuel System Details								
	<table border="1"> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> <tr> <td>1</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity	
Drive Source and Fuel#	Drive Source	Fuel						
1	Electric Motor	Electricity						
Hybrid Indicator	No	Multiple Fuel Combustion	--					
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes					
Fuel Cell Indicator	No	Rechargeable Energy Storage System, if 'Other'	--					
Rechargeable Energy Storage System	Battery(s)							
Off-board charge Capable Indicator	Yes	Odometer Correction Factor	1					
Odometer Correction -- Initial	1							
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles							
Odometer Correction Units	Miles							
Engine Code	132X2110X2OS	Rated Horsepower	872					
Displacement (liters)	99.999	Air Aspiration Method, if 'Other'	Electric					
Air Aspiration Method	Naturally Aspirated	Air Aspiration Device Configuration	--					
Number of Air Aspiration Devices	--	Drive Mode While Testing	All Wheel Drive					
Charge Air Cooler Type	--	Aged Emission Components	4,000 (mi)					
Shift Indicator Light Usage	Not equipped	Equivalent Test Weight (pounds)	7000					
Curb Weight (lbs)	6916	N/V Ratio	999.9					
GVWR (lbs)	--							
Axle Ratio	9.99	# of Transmission Gears	1					
Transmission Type	Automatic	Creep Gear	No					
Transmission Lockup	No							

Certification Summary Information Report

Test Group	PRIVT00.0194			Evaporative/Refueling Family			--
Dynamometer Coefficients:							
Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	56.36	0.2295	0.02774	-13.97	0.1958	0.02521	18.3
Cold CO	62	0.2525	0.03051	-14.52	-0.2968	0.03138	N/A
US06	56.36	0.2295	0.02774	-13.97	0.1958	0.02521	N/A
Emission Control Device Comments	Battery Electric Vehicle						
Manufacturer Test Vehicle Comments	AWD - All-Purpose drive mode configuration N/V Ratio: 128.75, Axle Ratio: 12.6:1, data entered is a placeholder						

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077321	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/11/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3595	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.6	--
DT-EER (Drive Trace Energy Economy Rating)	-1.01	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.72	--
MFR FE (Manufacturer Fuel Economy)	28.54	118.0798879
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 322.21 Wh/mi, Cycle 2: 260.28 Wh/mi, Cycle 3: 306.04 Wh/mi, Cycle 4: 252.70 Wh/mi.

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077322	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/11/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3595	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.75	--
DT-EER (Drive Trace Energy Economy Rating)	-0.65	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.24	--
MFR FE (Manufacturer Fuel Economy)	32.14	104.8537648
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 321.28 Wh/mi

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077326	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/11/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3620	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-4.28	--
DT-EER (Drive Trace Energy Economy Rating)	-2.17	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-9.28	--
MFR FE (Manufacturer Fuel Economy)	41.68	80.8541267
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1 (City1): 384.71 Wh/mi, Cycle 2 (HWY): 420.34 Wh/mi, Cycle 3 (City2): 456.45 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077328	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/12/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3636	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.26	--
DT-EER (Drive Trace Energy Economy Rating)	-1.37	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.23	--
MFR FE (Manufacturer Fuel Economy)	34.85	96.7001435
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 348.54 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077317	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/28/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4678	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.67																		
Charge Depleting Range (Calculated miles)	475.41	Charge Depleting Range (Actual miles)	475.41																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	475.41																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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5	Manufacturer Fuel Economy	28.9																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	-1.52																			
13	Drive Trace Energy Economy Rating	-1.46																			
14	Drive Trace Inertia Work Ratio Rating	-1.875																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
16	Carbon-Related Exhaust Emissions	0																			
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18	Drive Trace Energy Economy Rating	0.52																			
19	Drive Trace Inertia Work Ratio Rating	1.115																			
20	Manufacturer Fuel Economy	26.65																			
Manufacturer Test Comments																					
R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 289.01 Wh/mi, Cycle 2: 271.52 Wh/mi, Cycle 3: 266.54 Wh/mi, Cycle 4: 265.89 Wh/mi. MCT Energy: 127572.7 Wh																					
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--									

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																	
Test #	PRIV10077318	Test Procedure	84 - Charge Depleting Highway																	
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																	
Test Date	09/28/2022	Fuel	Electricity																	
Fuel Batch ID	--	Fuel Calibration Number	--																	
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																	
Verify Test Lab ID	FEV Michigan																			
E10 Evaporative Test Measurement Method	--																			
Test Start Odometer Reading	4678	Odometer Units	M																	
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																	
State of Charge Delta	Yes																			
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																	
PHEV/EV Charge Depleting Test Information																				
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.67																	
Charge Depleting Range (Calculated miles)	401.9	Charge Depleting Range (Actual miles)	401.9																	
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																	
Equivalent All Electric Range (miles)	401.9																			
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																	
Charge Depleting Bag/Phase																				
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																		
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																		
6	Carbon-Related Exhaust Emissions	0																		
7	Drive Trace Absolute Speed Change Rating	-0.27																		
8	Drive Trace Energy Economy Rating	0.53																		
9	Drive Trace Inertia Work Ratio Rating	-0.54																		
10	Manufacturer Fuel Economy	32.19																		
Manufacturer Test Comments	R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 321.86 Wh/mi, Cycle 2: 312.98 Wh/mi. MCT Energy: 127572.7 Wh																			

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077331	Test Procedure	86 - Charge Depleting 20 Degree F FTP																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/15/2022	Fuel	N/A																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	N/A	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	3683	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.67																		
Charge Depleting Range (Calculated miles)	111.65	Charge Depleting Range (Actual miles)	111.65																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	111.65																				
Number of Charge Depleting Bags/Phases Conducted	3	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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8	Drive Trace Energy Economy Rating	-0.13																			
9	Drive Trace Inertia Work Ratio Rating	0.04																			
10	Manufacturer Fuel Economy	44.39																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>0.5</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>-0.17</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>0.27</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>52.03</td></tr></table>				Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	0.5	13	Drive Trace Energy Economy Rating	-0.17	14	Drive Trace Inertia Work Ratio Rating	0.27	15	Manufacturer Fuel Economy	52.03
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
11	Carbon-Related Exhaust Emissions	0																			
12	Drive Trace Absolute Speed Change Rating	0.5																			
13	Drive Trace Energy Economy Rating	-0.17																			
14	Drive Trace Inertia Work Ratio Rating	0.27																			
15	Manufacturer Fuel Economy	52.03																			
Manufacturer Test Comments	R1T - Drive Mode: All-Purpose with 21" Tires. Cycle 1: 695.37 Wh/mi, Cycle 3: 520.30 Wh/mi, CD: 443.92 Wh/mi																				

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--					
Emission Data Vehicle Information								
Vehicle ID / Configuration	R1T3804R21C / 0	Manufacturer Vehicle Configuration Number	0					
Original Test Group Name	PRIVT00.0194	Original Evaporative/Refueling Family	--					
Original Test Vehicle Model Year	2023							
Vehicle Model								
Represented Test Vehicle Make	Rivian	Represented Test Vehicle Model	R1T 21					
Leak Family Details								
Leak Family Identifier	--	Leak Family Name	--					
Drive Sources and Fuel System Details								
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </tbody> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity	
Drive Source and Fuel#	Drive Source	Fuel						
1	Electric Motor	Electricity						
Hybrid Indicator	No							
Multiple Fuel Storage	--	Multiple Fuel Combustion	--					
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes					
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--					
Off-board charge Capable Indicator	Yes							
Odometer Correction -- Initial	1	Odometer Correction Factor	1					
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles							
Odometer Correction Units	Miles							
Engine Code	132X2110X2OS	Rated Horsepower	872					
Displacement (liters)	99.999							
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	Electric					
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--					
Charge Air Cooler Type	--	Drive Mode While Testing	Part-time 4-Wheel Drive					
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)					
Curb Weight (lbs)	6916	Equivalent Test Weight (pounds)	7000					
GVWR (lbs)	--	N/V Ratio	999.9					
Axle Ratio	9.99							
Transmission Type	Automatic	# of Transmission Gears	1					
Transmission Lockup	No	Creep Gear	No					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	48.14	0.2372	0.02461	-10.16	0.3177	0.02092	16.2
Cold CO	52.95	0.2609	0.02707	-13.38	0.0726	0.02454	N/A
US06	48.14	0.2372	0.02461	-10.16	0.3177	0.02092	N/A

Emission Control Device Comments	Battery Electric Vehicle
Manufacturer Test Vehicle Comments	N/V Ratio and Axle Ratio entered above are placeholders Actual values: N/V Ratio: 128.75, Axle Ratio: 12.6:1 Conserve drive mode configuration

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077325	Test Procedure	2 - CVS 75 and later (w/o can. load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/10/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3553	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.79	--
DT-EER (Drive Trace Energy Economy Rating)	-0.74	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.06	--
MFR FE (Manufacturer Fuel Economy)	25.7	131.1284047
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: Conserve with 21" Tires. Cycle 1: 285.36 Wh/mi, Cycle 2: 233.51 Wh/mi, Cycle 3: 275.96 Wh/mi, Cycle 4: 233.06 Wh/mi.

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family					--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077327	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/10/2022	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3553	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.64	--
DT-EER (Drive Trace Energy Economy Rating)	-0.32	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.9	--
MFR FE (Manufacturer Fuel Economy)	28.21	119.461184
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	0
Optional Carbon-Related Exhaust Emissions	0	0

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: Conserve with 21" Tires. Cycle 1: 282.10 Wh/mi

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CO	0.0	--	--	--	0	--	0	0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077329	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/10/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3579	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-4.02	--
DT-EER (Drive Trace Energy Economy Rating)	-2.5	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-8.15	--
MFR FE (Manufacturer Fuel Economy)	37.96	88.7776607
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: Conserve with 21" Tires. Cycle 1 (City1): 359.75 Wh/mi, Cycle 2 (HWY): 374.53 Wh/mi, Cycle 3 (City2): 494.80 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--
Test #	PRIV10077330	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	09/12/2022	Fuel	N/A
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	FEV Michigan		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3636	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.34	--
DT-EER (Drive Trace Energy Economy Rating)	-0.28	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.25	--
MFR FE (Manufacturer Fuel Economy)	29.41	114.5868752
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	--
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	0	--

Manufacturer Test Comments

R1T - Drive Mode: Conserve with 21" Tires. Cycle 1: 294.06 Wh/mi

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077319	Test Procedure	81 - Charge Depleting UDDS																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/27/2022	Fuel	Electricity																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	4303	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.1																		
Charge Depleting Range (Calculated miles)	502.59	Charge Depleting Range (Actual miles)	502.59																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	502.59																				
Number of Charge Depleting Bags/Phases Conducted	4	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
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3	Drive Trace Energy Economy Rating	1.27																			
4	Drive Trace Inertia Work Ratio Rating	2.75																			
5	Manufacturer Fuel Economy	26.31																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
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9	Drive Trace Inertia Work Ratio Rating	0.59																			
10	Manufacturer Fuel Economy	24.8																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group		PRIVT00.0194		Evaporative/Refueling Family		--						
		Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result								
		11	Carbon-Related Exhaust Emissions	0								
		12	Drive Trace Absolute Speed Change Rating	1.44								
		13	Drive Trace Energy Economy Rating	0.63								
		14	Drive Trace Inertia Work Ratio Rating	1.81								
		15	Manufacturer Fuel Economy	27.08								
Charge Depleting Bag/Phase												
		Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result								
		16	Carbon-Related Exhaust Emissions	0								
		17	Drive Trace Absolute Speed Change Rating	1.39								
		18	Drive Trace Energy Economy Rating	1.08								
		19	Drive Trace Inertia Work Ratio Rating	1.71								
		20	Manufacturer Fuel Economy	24.77								
Manufacturer Test Comments												
R1T - Drive Mode: Conserve with 21" Tires. Cycle 1: 270.83 Wh/mi, Cycle 2: 263.07 Wh/mi, Cycle 3: 248.00 Wh/mi, Cycle 4: 247.73 Wh/mi. MCT Energy: 127264.5 Wh												
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																	
Test #	PRIV10077320	Test Procedure	84 - Charge Depleting Highway																	
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																	
Test Date	09/27/2022	Fuel	Electricity																	
Fuel Batch ID	--	Fuel Calibration Number	--																	
Vehicle Class	MDPV (Federal Tier 2, GVWR 8501-10000)	DF Type	EPA Assigned																	
Verify Test Lab ID	FEV Michigan																			
E10 Evaporative Test Measurement Method	--																			
Test Start Odometer Reading	4303	Odometer Units	M																	
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																	
State of Charge Delta	Yes																			
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																	
PHEV/EV Charge Depleting Test Information																				
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.1																	
Charge Depleting Range (Calculated miles)	452.61	Charge Depleting Range (Actual miles)	452.61																	
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																	
Equivalent All Electric Range (miles)	452.61																			
Number of Charge Depleting Bags/Phases Conducted	2	Transition Bag/Phase Number	--																	
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	<table border="1"> <thead> <tr> <th>Charge Depleting Bag/Phase #</th> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>7</td> <td>Drive Trace Absolute Speed Change Rating</td> <td>2.24</td> </tr> <tr> <td>8</td> <td>Drive Trace Energy Economy Rating</td> <td>0.69</td> </tr> <tr> <td>9</td> <td>Drive Trace Inertia Work Ratio Rating</td> <td>3.15</td> </tr> <tr> <td>10</td> <td>Manufacturer Fuel Economy</td> <td>27.45</td> </tr> </tbody> </table>	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	6	Carbon-Related Exhaust Emissions	0	7	Drive Trace Absolute Speed Change Rating	2.24	8	Drive Trace Energy Economy Rating	0.69	9	Drive Trace Inertia Work Ratio Rating	3.15	10	Manufacturer Fuel Economy	27.45	
Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																		
6	Carbon-Related Exhaust Emissions	0																		
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8	Drive Trace Energy Economy Rating	0.69																		
9	Drive Trace Inertia Work Ratio Rating	3.15																		
10	Manufacturer Fuel Economy	27.45																		
Manufacturer Test Comments	R1T - Drive Mode: Conserve with 21" Tires. Cycle 1: 287.87 Wh/mi, Cycle 2: 274.49 Wh/mi. MCT Energy: 127264.5 Wh																			

Certification Summary Information Report

Test Group		PRIVT00.0194				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
Test #	PRIV10077332	Test Procedure	86 - Charge Depleting 20 Degree F FTP																		
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity																		
Test Date	09/17/2022	Fuel	N/A																		
Fuel Batch ID	--	Fuel Calibration Number	--																		
Vehicle Class	N/A	DF Type	EPA Assigned																		
Verify Test Lab ID	FEV Michigan																				
E10 Evaporative Test Measurement Method	--																				
Test Start Odometer Reading	3807	Odometer Units	M																		
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																		
State of Charge Delta	Yes																				
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes																		
PHEV/EV Charge Depleting Test Information																					
Recharge Event Voltage	240	Recharge Event Energy (kiloWatt-hours)	148.1																		
Charge Depleting Range (Calculated miles)	111.73	Charge Depleting Range (Actual miles)	111.73																		
All Electric Range Unadjusted (miles)	--	Derived 5-Cycle Coefficient Model Year	--																		
Equivalent All Electric Range (miles)	111.73																				
Number of Charge Depleting Bags/Phases Conducted	3	Transition Bag/Phase Number	--																		
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
1	Carbon-Related Exhaust Emissions	0																			
2	Drive Trace Absolute Speed Change Rating	0.64																			
3	Drive Trace Energy Economy Rating	0.3																			
4	Drive Trace Inertia Work Ratio Rating	0.96																			
5	Manufacturer Fuel Economy	43.84																			
Charge Depleting Bag/Phase																					
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Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																			
6	Carbon-Related Exhaust Emissions	0																			
7	Drive Trace Absolute Speed Change Rating	0.53																			
8	Drive Trace Energy Economy Rating	0.05																			
9	Drive Trace Inertia Work Ratio Rating	0.58																			
10	Manufacturer Fuel Economy	49.43																			
Charge Depleting Bag/Phase																					

Certification Summary Information Report

Test Group	PRIVT00.0194	Evaporative/Refueling Family	--																		
	<table><tr><th>Charge Depleting Bag/Phase #</th><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>11</td><td>Carbon-Related Exhaust Emissions</td><td>0</td></tr><tr><td>12</td><td>Drive Trace Absolute Speed Change Rating</td><td>1.41</td></tr><tr><td>13</td><td>Drive Trace Energy Economy Rating</td><td>0.84</td></tr><tr><td>14</td><td>Drive Trace Inertia Work Ratio Rating</td><td>1.38</td></tr><tr><td>15</td><td>Manufacturer Fuel Economy</td><td>66.14</td></tr></table>	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result	11	Carbon-Related Exhaust Emissions	0	12	Drive Trace Absolute Speed Change Rating	1.41	13	Drive Trace Energy Economy Rating	0.84	14	Drive Trace Inertia Work Ratio Rating	1.38	15	Manufacturer Fuel Economy	66.14		
	Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result																		
	11	Carbon-Related Exhaust Emissions	0																		
	12	Drive Trace Absolute Speed Change Rating	1.41																		
	13	Drive Trace Energy Economy Rating	0.84																		
	14	Drive Trace Inertia Work Ratio Rating	1.38																		
	15	Manufacturer Fuel Economy	66.14																		
Manufacturer Test Comments	R1T - Drive Mode: Conserve with 21" Tires. Cycle 1: 661.43 Wh/mi, Cycle 3: 494.35 Wh/mi, CD: Wh/mi, Cycle 4: 438.41 Wh/mi.																				
Fuel Properties																					

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family			--	
Consolidated List of Standards									
Exhaust Standards									
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			California ZEV	
Fuel		Electricity			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CO	--	--	--	--	--	--	0	0
120,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			California ZEV	
Fuel		Electricity			Test Procedure			CVS 75 and later (w/o can. load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CO	--	--	--	--	--	--	0	0
120,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			California ZEV	
Fuel		Electricity			Test Procedure			Charge Depleting 20 Degree F FTP	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CO	--	--	--	--	--	--	0	0
120,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			Federal Tier 3 Bin 0	
Fuel		Electricity			Test Procedure			Charge Depleting UDDS	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family			--	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			Federal Tier 3 Bin 0	
Fuel		Electricity			Test Procedure			Charge Depleting 20 Degree F FTP	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			California ZEV	
Fuel		Electricity			Test Procedure			Charge Depleting Highway	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CO	--	--	--	--	--	--	0	0
120,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			Federal Tier 3 Bin 0	
Fuel		Electricity			Test Procedure			CVS 75 and later (w/o can. load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			Federal Tier 3 Bin 0	
Fuel		Electricity			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Certification Summary Information Report

Test Group		PRIVT00.0194			Evaporative/Refueling Family			--	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			California ZEV	
Fuel		Electricity			Test Procedure			Charge Depleting UDDS	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CO	--	--	--	--	--	--	0	0
120,000 miles	CREE	--	--	--	--	--	--	0	0
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		MDPV (Federal Tier 2, GVWR 8501-10000)			Standard Level			Federal Tier 3 Bin 0	
Fuel		Electricity			Test Procedure			Charge Depleting Highway	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Certification Summary Information Report

Test Group		PRIVT00.0194	Evaporative/Refueling Family		--
Glossary					
Useful Life					
4	4,000 miles		120	120,000 miles	
50	50,000 miles		150	150,000 miles	
100	100,000 miles				
Emission Name					
HC-TOTAL	Total Hydrocarbon		METHANOL	CH3OH - Methanol	
CO	Carbon Monoxide		N2O	Nitrous Oxide	
CO2	Carbon dioxide		SPITBACK	Spitback Hydrocarbon in grams	
CREE	Carbon-Related Exhaust Emissions		AMP-HRS	Integrated Amp-hours	
OPT-CREE	Optional Carbon-Related Exhaust Emissions		START-SOC	System Start State of Charge Watt-hours	
NOX	Nitrogen Oxide		END-SOC	System End State of Charge Watt-hours	
PM	Particulate Matter		ACT-DISTANCE	Actual Distance Driven (miles)	
PM-COMP	SFTP Composite Particulate Matter		AS-VOLT	Average System Voltage	
HC-NM	Non-methane Hydrocarbon		CO2 BAG 1	Bag 1 Carbon Dioxide	
OMHCE	Organic material Hydrocarbon Equivalent		CO2 BAG 2	Bag 2 Carbon Dioxide	
OMNMHCE	Organic material non-methane HC equivalent		CO2 BAG 3	Bag 3 Carbon Dioxide	
NMOG	Non-methane organic gases		CO2 BAG 4	Bag 4 Carbon Dioxide	
HCHO	Formaldehyde		NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides	
H3C2HO	Acetaldehyde		NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides	
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03		DT-IWRR	Drive Trace Inertia Work Ratio Rating	
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides		DT-ASCR	Drive Trace Absolute Speed Change Rating	
CO-COMP	SFTP Composite Carbon Monoxide		DT-EER	Drive Trace Energy Economy Rating	
ETHANOL	C2H5OH - Ethanol		COMB-CREE	Combined Carbon-Related Exhaust Emissions	
FE BAG 1	Bag 1 Fuel Economy		COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions	
FE BAG 2	Bag 2 Fuel Economy		HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only	
FE BAG 3	Bag 3 Fuel Economy		METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only	
FE BAG 4	Bag 4 Fuel Economy		N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only	
MFR FE	Manufacturer Fuel Economy		LEAK-DIA	Effective Leak Diameter (inches)	
HC	Hydrocarbon for Running Loss and ORVR		LEAK-GAS CAP	Gas Cap Leakage (cc/min)	
METHANE	CH4 - Methane		CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only	
Certification Region					
CA	California + CAA Section 177 states		FA	Federal	
Exhaust Emission Standard Level					
B1	Federal Tier 2 Bin 1		L3ULEV340	California LEV-III ULEV340	
B2	Federal Tier 2 Bin 2		L3ULEV250	California LEV-III ULEV250	
B3	Federal Tier 2 Bin 3		L3ULEV200	California LEV-III ULEV200	
B4	Federal Tier 2 Bin 4		L3SULEV170	California LEV-III SULEV170	
B5	Federal Tier 2 Bin 5		L3SULEV150	California LEV-III SULEV150	

Certification Summary Information Report

Test Group		PRIVT00.0194	Evaporative/Refueling Family		--
B6	Federal Tier 2 Bin 6		L3LEV630	California LEV-III LEV630	
B7	Federal Tier 2 Bin 7		L3ULEV570	California LEV-III ULEV570	
B8	Federal Tier 2 Bin 8		L3ULEV400	California LEV-III ULEV400	
B9	Federal Tier 2 Bin 9		L3ULEV270	California LEV-III ULEV270	
B10	Federal Tier 2 Bin 10		L3SULEV230	California LEV-III SULEV230	
B11	Federal Tier 2 Bin 11		L3SULEV200	California LEV-III SULEV200	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		T3B160	Federal Tier 3 Bin 160	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		T3B125	Federal Tier 3 Bin 125	
L2	California LEV-II LEV		T3B110	Federal Tier 3 Transitional Bin 110	
L2OP	California LEV-II LEV Optional		T3B85	Federal Tier 3 Transitional Bin 85	
U2	California LEV-II ULEV		T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover	
S2	California LEV-II SULEV		T3B70	Federal Tier 3 Bin 70	
ZEV	California ZEV		T3B50	Federal Tier 3 Bin 50	
OT	Other		T3B30	Federal Tier 3 Bin 30	
T1	Federal Tier 1		T3B20	Federal Tier 3 Bin 20	
PZEV	California PZEV		T3B0	Federal Tier 3 Bin 0	
L2LEV160	California LEV-II LEV160		HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395	
L2ULEV125	California LEV-II ULEV125		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
L2SULEV30	California LEV-II SULEV30		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
L2LEV395	California LEV-II LEV395		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
L2ULEV340	California LEV-II ULEV340		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
L2LEV630	California LEV-II LEV630		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
L2ULEV570	California LEV-II ULEV570		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
L3LEV160	California LEV-III LEV160		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
L3ULEV125	California LEV-III ULEV125		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
L3ULEV70	California LEV-III ULEV70		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
L3ULEV50	California LEV-III ULEV50		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
L3SULEV30	California LEV-III SULEV30		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
L3SULEV20	California LEV-III SULEV20		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
L3LEV395	California LEV-III LEV395		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
Transmission Type Code					
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual		
A	Automatic	OT	Other		
AM	Automated Manual	SA	Semi-Automatic		
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)		
Drive System Code					
4	4-Wheel Drive	P	Part-time 4-Wheel Drive		
F	2-Wheel Drive, Front	A	All Wheel Drive		
R	2-Wheel Drive, Rear				

Certification Summary Information Report

Test Group		PRIVT00.0194	Evaporative/Refueling Family		--
Additional Terms and Acronyms					
AFC	Alternative Fuel Converter		ICI	Independent Commercial Importer	
CSI	Certificate Summary Information		ORVR	Onboard Refueling Vapor Recovery	
DF	Deterioration Factor		SIL	Shift Indicator Light	
Evap	Evaporation, Evaporative		Trans	Transmission	

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 1 of 22023 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194Vehicle Class(es): PC____, LDT1 (0-3750 lbs. LVW)____, LDT2 ($\geq$ 3,751 lbs. LVW)____,
MDV6 (8,500-10,000 lbs. GVW) X, MDV7 (10,001-14,000 lbs. GVW)____ZEV Type: NEV____, ZEV XNo. of ZEV Credits per vehicle: 4Fuel Type: Electro-chemical Battery X, Fuel Cell____, Capacitor____, Other (specify)____

Battery Type(s): Lead Acid____ Nickel Cadmium____ SBLA____ Sodium Sulfur____

Sodium Nickel Chloride____ Nickel Metal Hydride____ Lithium Metal Disulfide____

Zinc Air____ Zinc Bromine____ Lithium Polymer____, Lithium Ion X,

Other (specify): _____

Total Battery Weight (kg.): 796 Total Battery Volume (liters): 562No. of batteries or modules per vehicle: 1 Total Battery Voltage: 400Charger(s): On-board X Off-board X Conductive X Inductive____.Drive Motors(s): AC Induction X DC Brush____. DC Brushless____

Switched Reluctance____ Other (specify): _____.

No. of Drive Motors 4 Rated motor power 162 kW @ 6000 RPM Fronts
163 kW @ 5000 RPM Rears Max rpm: 18000.Drive: FWD____ RWD____ 4WD-FT____ 4WD-PT XRegenerative Braking: No____ Yes X FW____ RW____ AW X.Driver Controlled Regen Braking: Yes X No____ Coast Regen Braking: Yes X No____.Air Conditioning: Yes X No____, Fuel Fired Heater:¹ Yes____ No X

Vehicle Make & Models (If coded, see attachments)	Trans type M5, A4 (If applicable)	GVWR	Curb Weight	ETW or Test Weight	DPA / RLHP or Dyno Coeff. a=, b=, c=
Make: Rivian Model: R1T 21in	Automatic	8532 lbs	6870 lbs	7000 lbs	Conserve: A: 48.14 lbs B: 0.2372 lbs/mph C: 0.02461 lbs/mph ² All-Purpose: A: 56.36 lbs B: 0.2295 lbs/mph C: 0.02774 lbs/mph ²

Date Issued:

Revisions:

12/01/2022¹ Fuel fired heaters are not allowed in pure ZEVs for model year 2009 and subsequently.

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 2 of 22023 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194

Range Test Results							
Vehicle ID	Trans	(check one) ____TW <u>X</u> ETW	(check one) ____DPA ____RLHP Or dyno coeff.	City Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
R1T2301R21	AT	7000	Conserve: A: -8.96 lbs B: 0.4238 lbs/mph C: 0.01950 lbs/mph2 All-Purpose: A: 2.36 lbs B: -0.1363 lbs/mph C: 0.02762 lbs/mph2	Conserve: 488.36 All-Purpose: 434.96	307.45 346.23	266.41 297.26	266.41 297.26
				Hwy. Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
				Conserve: 452.43 All-Purpose: 386.95	331.86 389.18	287.57 334.14	287.57 334.14

Battery Test Results: Pass Specific Energy: Wh/kg 169Remarks: NoneDate Issued: 12/01/2022

Revisions:

----- **ARB USE ONLY** -----

Application:

Processed By: _____ Date: _____ Reviewed by: _____ Date: _____

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 1 of 22023 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194Vehicle Class(es): PC____, LDT1 (0-3750 lbs. LVW)____, LDT2 ($\geq$ 3,751 lbs. LVW)____,
MDV6 (8,500-10,000 lbs. GVW) X, MDV7 (10,001-14,000 lbs. GVW)____ZEV Type: NEV____, ZEV XNo. of ZEV Credits per vehicle: 4Fuel Type: Electro-chemical Battery X, Fuel Cell____, Capacitor____, Other (specify)____

Battery Type(s): Lead Acid____ Nickel Cadmium____ SBLA____ Sodium Sulfur____

Sodium Nickel Chloride____ Nickel Metal Hydride____ Lithium Metal Disulfide____

Zinc Air____ Zinc Bromine____ Lithium Polymer____, Lithium Ion X,

Other (specify): _____

Total Battery Weight (kg.): 796 Total Battery Volume (liters): 562No. of batteries or modules per vehicle: 1 Total Battery Voltage: 400Charger(s): On-board X Off-board X Conductive X Inductive____.Drive Motors(s): AC Induction X DC Brush____. DC Brushless____

Switched Reluctance____ Other (specify): _____.

No. of Drive Motors 4 Rated motor power 162 kW @ 6000 RPM Fronts
163 kW @ 5000 RPM Rears Max rpm: 18000.Drive: FWD____ RWD____ 4WD-FT____ 4WD-PT XRegenerative Braking: No____ Yes X FW____ RW____ AW X.Driver Controlled Regen Braking: Yes X No____ Coast Regen Braking: Yes X No____.Air Conditioning: Yes X No____, Fuel Fired Heater:¹ Yes____ No X

Vehicle Make & Models (If coded, see attachments)	Trans type M5, A4 (If applicable)	GVWR	Curb Weight	ETW or Test Weight	DPA / RLHP or Dyno Coeff. a=, b=, c=
Make: Rivian Model: R1S 21in	Automatic	8532 lbs	6843 lbs	7000 lbs	Conserve: A: 54.76 lbs B: 0.0623 lbs/mph C: 0.02640 lbs/mph ² All-Purpose: A: 57.58 lbs B: 0.1422 lbs/mph C: 0.03083 lbs/mph ²

Date Issued:

Revisions:

10/20/2022¹ Fuel fired heaters are not allowed in pure ZEVs for model year 2009 and subsequently.

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 2 of 22023 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194

Range Test Results							
Vehicle ID	Trans	(check one) ____TW <u> X </u> ETW	(check one) ____DPA ____RLHP Or dyno coeff.	City Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
R1S0054R21	AT	7000	Conserve: A: -5.23 lbs B: 0.2694 lbs/mph C: 0.02135 lbs/mph2 All-Purpose: A: 0.14 lbs B: -0.0239 lbs/mph C: 0.02896 lbs/mph2	Conserve: 496.29 All-Purpose: 436.46	303.54 346.79	259.85 296.65	259.85 296.65
				Hwy. Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
				Conserve: 447.53 All-Purpose: 376.54	336.62 401.98	288.17 343.86	288.17 343.86

Battery Test Results: Pass Specific Energy: Wh/kg 169Remarks: NoneDate Issued: 10/20/2022

Revisions:

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Application:

Processed By: _____ Date: _____ Reviewed by: _____ Date: _____

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 1 of 22023 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194Vehicle Class(es): PC____, LDT1 (0-3750 lbs. LVW)____, LDT2 ($\geq$ 3,751 lbs. LVW)____,
MDV6 (8,500-10,000 lbs. GVW) X, MDV7 (10,001-14,000 lbs. GVW)____ZEV Type: NEV____, ZEV XNo. of ZEV Credits per vehicle: 4Fuel Type: Electro-chemical Battery X, Fuel Cell____, Capacitor____, Other (specify)____

Battery Type(s): Lead Acid____ Nickel Cadmium____ SBLA____ Sodium Sulfur____

Sodium Nickel Chloride____ Nickel Metal Hydride____ Lithium Metal Disulfide____

Zinc Air____ Zinc Bromine____ Lithium Polymer____, Lithium Ion X,

Other (specify): _____

Total Battery Weight (kg.): 796 Total Battery Volume (liters): 562No. of batteries or modules per vehicle: 1 Total Battery Voltage: 400Charger(s): On-board X Off-board X Conductive X Inductive____.Drive Motors(s): AC Induction X DC Brush____. DC Brushless____

Switched Reluctance____ Other (specify): _____.

No. of Drive Motors 4 Rated motor power 162 kW @ 6000 RPM Fronts
163 kW @ 5000 RPM Rears Max rpm: 18000.Drive: FWD____ RWD____ 4WD-FT____ 4WD-PT XRegenerative Braking: No____ Yes X FW____ RW____ AW X.Driver Controlled Regen Braking: Yes X No____ Coast Regen Braking: Yes X No____.Air Conditioning: Yes X No____, Fuel Fired Heater:¹ Yes____ No X

Vehicle Make & Models (If coded, see attachments)	Trans type M5, A4 (If applicable)	GVWR	Curb Weight	ETW or Test Weight	DPA / RLHP or Dyno Coeff. a=, b=, c=
Make: Rivian Model: R1T 20in R1S 20in	Automatic	8532 lbs	6904 lbs 6877 lbs	7000 lbs	Conserve: A: 64.11 lbs B: 0.0519 lbs/mph C: 0.03015 lbs/mph ² All-Purpose: A: 63.11 lbs B: 0.2806 lbs/mph C: 0.03086 lbs/mph ²

Date Issued:

Revisions:

10/20/2022¹ Fuel fired heaters are not allowed in pure ZEVs for model year 2009 and subsequently.

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 2 of 22023 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194

Range Test Results							
Vehicle ID	Trans	(check one) ____TW <u>X</u> ETW	(check one) ____DPA ____RLHP Or dyno coeff.	City Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
R1S0054R20	AT	7000	Conserve: A: -7.66 lbs B: 0.0958 lbs/mph C: 0.02611 lbs/mph ² All-Purpose: A: -5.27 lbs B: -0.0653 lbs/mph C: 0.02988 lbs/mph ²	Conserve: 444.85	337.06	289.27	289.27
				All-Purpose: 398.48	376.31	321.55	321.55
				Hwy. Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
				Conserve: 392.16	382.35	328.14	328.14
				All-Purpose: 340.90	439.88	375.87	375.87

Battery Test Results: Pass Specific Energy: Wh/kg 169Remarks: NoneDate Issued: 10/20/2022

Revisions:

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Suggested ZEV Application Format for Certification

E.O.#. _____ Page 1 of 22023 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194Vehicle Class(es): PC____, LDT1 (0-3750 lbs. LVW)____, LDT2 ($\geq$ 3,751 lbs. LVW)____,
MDV6 (8,500-10,000 lbs. GVW) X, MDV7 (10,001-14,000 lbs. GVW)____ZEV Type: NEV____, ZEV XNo. of ZEV Credits per vehicle: 4Fuel Type: Electro-chemical Battery X, Fuel Cell____, Capacitor____, Other (specify)____

Battery Type(s): Lead Acid____ Nickel Cadmium____ SBLA____ Sodium Sulfur____

Sodium Nickel Chloride____ Nickel Metal Hydride____ Lithium Metal Disulfide____

Zinc Air____ Zinc Bromine____ Lithium Polymer____, Lithium Ion X,

Other (specify): _____

Total Battery Weight (kg.): 796 Total Battery Volume (liters): 562No. of batteries or modules per vehicle: 1 Total Battery Voltage: 400Charger(s): On-board X Off-board X Conductive X Inductive____.Drive Motors(s): AC Induction X DC Brush____. DC Brushless____

Switched Reluctance____ Other (specify): _____.

No. of Drive Motors 4 Rated motor power 162 kW @ 6000 RPM Fronts
163 kW @ 5000 RPM Rears Max rpm: 18000.Drive: FWD____ RWD____ 4WD-FT____ 4WD-PT XRegenerative Braking: No____ Yes X FW____ RW____ AW X.Driver Controlled Regen Braking: Yes X No____ Coast Regen Braking: Yes X No____.Air Conditioning: Yes X No____, Fuel Fired Heater:¹ Yes____ No X

Vehicle Make & Models (If coded, see attachments)	Trans type M5, A4 (If applicable)	GVWR	Curb Weight	ETW or Test Weight	DPA / RLHP or Dyno Coeff. a=, b=, c=
Make: Rivian Model: R1T 22in R1S 22in	Automatic	8532 lbs	6883 lbs 6856 lbs	7000 lbs	Conserve: A: 64.11 lbs B: 0.0519 lbs/mph C: 0.03015 lbs/mph ² All-Purpose: A: 61.59 lbs B: 0.2581 lbs/mph C: 0.02979 lbs/mph ²

Date Issued:

10/20/2022

Revisions:

¹ Fuel fired heaters are not allowed in pure ZEVs for model year 2009 and subsequently.

Suggested ZEV Application Format for Certification

E.O.#. _____ Page 2 of 22023 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194

Range Test Results							
Vehicle ID	Trans	(check one) ____TW <u>X</u> ETW	(check one) ____DPA ____RLHP Or dyno coeff.	City Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
R1S0054R22	AT	7000	Conserve: A: -7.66 lbs B: 0.0958 lbs/mph C: 0.02611 lbs/mph ² All-Purpose: A: -3.30 lbs B: 0.0455 lbs/mph C: 0.02895 lbs/mph ²	Conserve: 466.19	318.21	275.63	275.63
				All-Purpose: 419.01	354.03	305.72	305.72
				Hwy. Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
				Conserve: 413.09	359.11	311.06	311.06
				All-Purpose: 357.12	415.39	358.70	358.70

Battery Test Results: Pass Specific Energy: Wh/kg 169Remarks: NoneDate Issued: 10/20/2022

Revisions:

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Suggested ZEV Application Format for Certification

E.O.#. _____ Page 1 of 22023 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194Vehicle Class(es): PC____, LDT1 (0-3750 lbs. LVW)____, LDT2 ($\geq$ 3,751 lbs. LVW)____,
MDV6 (8,500-10,000 lbs. GVW) X, MDV7 (10,001-14,000 lbs. GVW)____ZEV Type: NEV____, ZEV XNo. of ZEV Credits per vehicle: 4Fuel Type: Electro-chemical Battery X, Fuel Cell____, Capacitor____, Other (specify)____

Battery Type(s): Lead Acid____ Nickel Cadmium____ SBLA____ Sodium Sulfur____

Sodium Nickel Chloride____ Nickel Metal Hydride____ Lithium Metal Disulfide____

Zinc Air____ Zinc Bromine____ Lithium Polymer____, Lithium Ion X,

Other (specify): _____

Total Battery Weight (kg.): 796 Total Battery Volume (liters): 562No. of batteries or modules per vehicle: 1 Total Battery Voltage: 400Charger(s): On-board X Off-board X Conductive X Inductive____.Drive Motors(s): AC Induction X DC Brush____. DC Brushless____

Switched Reluctance____ Other (specify): _____.

No. of Drive Motors 4 Rated motor power 163 kW @ 5000 RPM Fronts
163 kW @ 5000 RPM Rears Max rpm: 18000.Drive: FWD____ RWD____ 4WD-FT____ 4WD-PT XRegenerative Braking: No____ Yes X FW____ RW____ AW X.Driver Controlled Regen Braking: Yes X No____ Coast Regen Braking: Yes X No____.Air Conditioning: Yes X No____, Fuel Fired Heater:¹ Yes____ No X

Vehicle Make & Models (If coded, see attachments)	Trans type M5, A4 (If applicable)	GVWR	Curb Weight	ETW or Test Weight	DPA / RLHP or Dyno Coeff. a=, b=, c=
Make: Rivian Model: R1T 20in All-Terrain R1S 20in All-Terrain	Automatic	8532 lbs	7061 lbs 7090 lbs	7500 lbs	Conserve: A: 63.33 lbs B: 0.2947 lbs/mph C: 0.02718 lbs/mph ² All-Purpose: A: 64.32 lbs B: 0.5170 lbs/mph C: 0.02808 lbs/mph ²

Date Issued:

Revisions:

02/01/2023¹ Fuel fired heaters are not allowed in pure ZEVs for model year 2009 and subsequently.

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E.O.#. _____ Page 2 of 22023 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET
ZEV-PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLESManufacturer: Rivian Automotive, LLC Test Group: PRIVT00.0194

Range Test Results							
Vehicle ID	Trans	(check one) ____TW <u>X</u> ETW	(check one) ____DPA ____RLHP Or dyno coeff.	City Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
R1S0396R20	AT	7500	Conserve: A: -8.55 lbs B: 0.3029 lbs/mph C: 0.02322 lbs/mph ² All-Purpose: A: -9.91 lbs B: 0.2315 lbs/mph C: 0.02653 lbs/mph ²	Conserve: 395.18 All-Purpose: 365.23	370.66 401.87	322.09 349.53	322.09 349.53
				Hwy. Range	System AC (Wh/mi)	System DC (Wh/mi)	Vehicle DC (Wh/mi)
				Conserve: 370.43 All-Purpose: 326.45	395.43 449.60	343.61 391.05	343.61 391.05

Battery Test Results: Pass Specific Energy: Wh/kg 169Remarks: NoneDate Issued: 02/01/2023

Revisions:

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Processed By: _____ Date: _____ Reviewed by: _____ Date: _____