

# PORSCHE

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**Application for Certification:** Initial Part 1  
**Model Year:** 2024  
**Durability Group:** RPRXEEVNNEMT  
**Test Group:** RPRXT00.0EMT  
**Evaporative/Refueling Family(ies):** Not Applicable  
**Certification Summary Information Report Number(s):** CSI-RPRXT00.0EMT  
**Durability Group Description:** Chemistry: Lithium-Ion  
Capacity: 153 Amp-hours  
Battery Manufacturer: DFS Dräxlmaier  
**Test Group Description:** Battery Electric Vehicle  
**Applicable Standards:** EPA Exhaust: Tier 3 Bin Zero  
CARB Exhaust: ZEV

**Carlines Covered:**

Macan Turbo Electric	Macan 4 Electric
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**Vehicles Tested:** See Section 6

**EPA Response Requested By:** May 8, 2024

**Special Instructions:** Range/Energy: New

**For Questions Contact:** Peter Khamphouvong -- (770) 290-3068  
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# PORSCHE

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## Section 1~Correspondence and Communications

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Mr. Michael Scott -- address as above

## Section 2~Durability Group Description

**Durability Group Name:** RPRXEEVNNEMT

**Combustion Cycle:** Dedicated Electric

**Engine Type:** Electric Motor

**Fuel Used:** Power Grid Electricity

Porsche expects equivalent durability characteristics for all models of this test group.

## Section 3~Evaporative / Refueling Family Description

### **Evaporative/Refueling Families**

Battery Electric Vehicles. There is no combustion engine, no fuel cell, no fuel-fired heater, and no evaporative system.

## Section 4~Durability Procedure Description

### **Exhaust / Evaporative Deterioration**

These are Battery Electric Vehicles. There is no combustion engine, no fuel cell, no fuel-fired heater, and no evaporative system.

## Section 5~Test Group Description

<b>Durability Group Name:</b>	RPRXEEVNNEMT
<b>Test Group Name:</b>	RPRXT00.0EMT
<b>Certification Summary Information Reports:</b>	CSI-RPRXT00.0EMT
<b>Electric Motor Type:</b>	AC Permanent Magnet, Synchronous
<b>Electric Motor Size (HP):</b>	See Section 12 (maximum system power: 576)
<b>Electric Motor Capacity Front/Rear (A):</b>	600/600
<b>Electric Motor Voltage:</b>	800
<b>Battery Type:</b>	Li-Ion
<b>Battery Capacity (A-h):</b>	See Section 12 (maximum capacity: 153)
<b>Battery Voltage (minimum to maximum):</b>	240 - 916
<b>Vehicle Classes:</b>	LDT (Light Duty Truck)
<b>NLEV Participation:</b>	No
<b>Emissions Standards Class:</b>	Federal: Tier 3 Bin Zero California: ZEV
<b>Applicable Emissions Standards:</b>	Please refer to the Certification Summary Information Report in Section 7

## Section 6~Test Vehicle Description

### 6.01>> Test Vehicles

	Test Vehicle ID	Model Type / Configuration	Vehicle / Config Purpose
<b>Certification Test Vehicles:</b>	FE-XABT-24-0	Macan Turbo Electric	Range / Energy
	FE-XABT-24-1	Macan Turbo Electric	
	FE-XABT-24-2	Macan Turbo Electric	
	FE-XABT-24-3	Macan Turbo Electric	
	FE-XAB-24-0	Macan 4 Electric	
	FE-XAB-24-1	Macan 4 Electric	
	FE-XAB-24-2	Macan 4 Electric	

Note: In this test group every model type is a test configuration. See Section 12 for vehicle specifications.

*Note: blank cells or tables are intentionally blank*



## Section 6~Test Vehicle Description

### 6.02>> Test Parameters, Instructions

Carlines		Macan Electric	
<b>Engine Starting Procedures</b>		1) With key fob inside car, close the doors 2) Do not press ignition button (left side of steering column) 3) Deactivate Park Distance Control, A/C system, and Center Display 4) Leave all other selectable modes in default 5) Depress brake pedal 6) Set gear selector to Position "D" 7) "READY" will appear on cluster, above speed indicator 8) Driving can commence 9) At conclusion of drive cycle, set gear selector to "P" 10) Exit vehicle, making sure key fob stays at least 10 feet from vehicle	
<b>Transmission Shift Schedules, Mode</b>	<b>Transmission</b> <b>1st to 2nd</b> <b>2nd to 3rd</b> <b>3rd to 4th</b> <b>4th to 5th</b> <b>5th to 6th</b> <b>6th to 7th</b> <b>7th to 8th</b> <b>SS II.D.</b>	A1 N/A N/A N/A N/A N/A N/A N/A FTP – FTA; HWFE - HWA	
	<b>Transmission Mode</b>	Transmission cannot be shifted manually; leave driving mode in default (no "Sport" or "Sport +")	
<b>Selectable modes</b>	<b>Other (Sport, Wet, etc.)</b>	All selectable modes to be left in default positions.	
<b>Other</b>	<b>Cooling fan</b>	One road-speed fan, centered upright, front of vehicle	
	<b>Body apertures</b>	Leave all apertures closed	
	<b>Drive Mode</b>	All models are AWD, requiring AWD dynamometer	
	<b>Test lab considerations</b>	Porsche can supply instructions separately for E-Brake, Dyno Mode, and Soak Area	

*Note: blank cells or tables are intentionally blank*

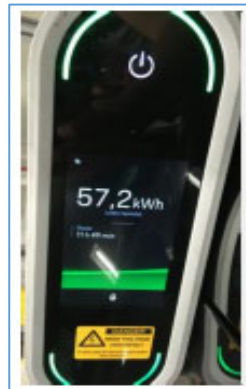
## Section 6~Test Vehicle Description

### 6.02.02>< Battery Charge Procedures

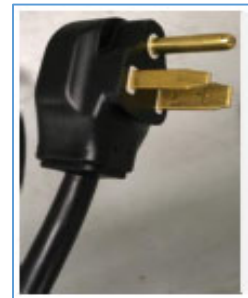
<b>Vehicle Charging Procedures</b>	<ol style="list-style-type: none"> <li>1) Mobile Charger (standard retail equipment) is supplied with test vehicle(s)</li> <li>2) Charger input is 208-240V AC, NEMA 14-50 plug (also 110V, NEMA 5-15)</li> <li>3) Use vehicle left or right side charging port; ports accessible by "press to open" action **</li> <li>4) Mobile Charger Connect has touch-screen display; used to monitor charge energy, charging time, and status</li> <li>5) While charging, lock the car with the fob and place fob at least 10 feet from the vehicle</li> <li>6) At end Charger displays "Charging Finished", or "Ladevorgang geschlossen" in German version</li> <li>7) Charge energy and charge status also appear on the center console display</li> <li>8) Reverse order to complete charging sequence</li> </ol>
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"Mobile Charger Connect"



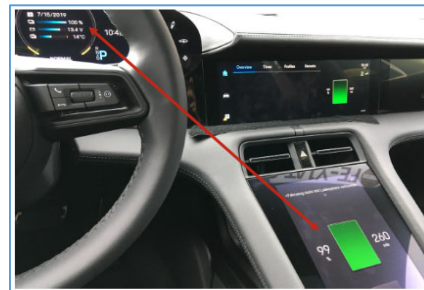
Mobile Charger Connect -- display / touch screen



NEMA 14-50 plug



Charger socket access on vehicle



Use center console display for greatest accuracy \*

\*\* Optionally, if so equipped, charge door is opened with a hand wave under the door.

\* State-of-Charge (SOC) is calculated using the integral of current sensor output and calibrated with cell voltage sensors.

Note: "Mobile Charger Plus" (not shown) may also be supplied. Same as Connect but with simple LEDs, no touch screen.

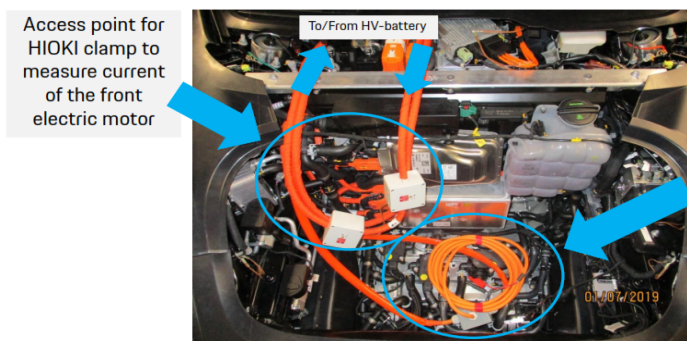
Note: optional "19.2 kW On-Board Charger" may accompany production vehicles; instructions for this charger can be supplied.

## Section 6~Test Vehicle Description

### 6.02.03>< Voltage / Current Measurement Procedures

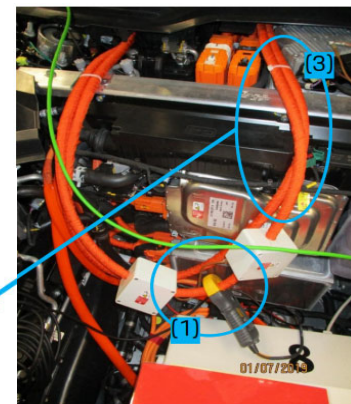
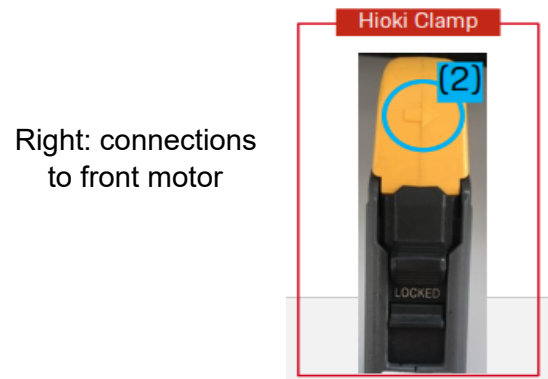
Note: These instructions apply to certification vehicles only. Voltage and current analysis on production vehicles can only be accomplished via control unit communications.

- 1) Extended motor / battery leads are provided on test vehicle
- 2) Front and rear leads provided on two-motor vehicles
- 3) "Banana plug" connections for voltage are provided
- 4) One current clamp extension may be required ("Hioki" brand instrument shown in pictures)
- 5) Current clamp must be positioned between the two isolation boxes [1]
- 6) Arrow [2] on current clamp must agree with arrow drawn on the high voltage cable [3]
- 7) 800 volt system: USE EXTREME CAUTION



Left: access to cables under floor of front luggage compartment

Extended cable (via splitter) to measure voltage



## Section 6~Test Vehicle Description

### 6.02.04>< Description of the Climate Control System



#### Overview:

1. Models are equipped with a cabin climate control system.
2. Climate control systems use R1234yf refrigerant.
3. If the high-voltage battery charge is less than 10%, A/C functions will first be restricted, then turned off, automatically.
4. Interior cooling switches off automatically and cannot be turned on at temperatures below 36 F (2 C).
5. The system has an "ECO" mode that switches off rear air conditioning and reduces the interior comfort level in favor of increased range, and limits other air conditioning functions in order to optimize energy consumption.
6. Cabin pre-heating and pre-cooling is possible, if the high voltage battery is charged 25% or higher, and the vehicle is switched off.
7. Porsche does NOT offer a fuel-fired heater for any of its products.

#### Operation:

1. Switching off the vehicle's climate control system:

##### Central display

▶  ▶ Climate  ▶ Ventilation ▶ OFF  
The OFF display appears on the center console control unit and the touch display in the rear, the fresh air supply is interrupted and air conditioning is switched off.

2. Selecting ECO mode:

##### Central display

▶  ▶ Climate  ▶ Ventilation ▶ ECO

## Section 6~Test Vehicle Description

### **6.02.05>< BEV Proper and Safe Operation**

Porsche supplies the following four pages of safety recommendations, warnings, and special precautions for rescue personnel such as tow truck operators and first responders. These pages are available via Porsche-operated websites.

Additionally, safe handling and shop personnel protection procedures are detailed in existing Porsche technician training documentation. This documentation can be supplied upon request.

## Section 6~Test Vehicle Description

### 6.03>> Dynamometer Parameters

Vehicle ID	Model Name	Trans	ETW [lbf]	Single Roll Coefficients (target)		
				A [lbf]	B [lbf/mph]	C [lbf/mph <sup>2</sup> ]
FE-XABT-24-0	Macan Turbo Electric	A1	6000	48.918	0.17909	0.024385
FE-XABT-24-1	Macan Turbo Electric	A1	6000	41.769	0.20441	0.021514
FE-XABT-24-2	Macan Turbo Electric	A1	6000	41.769	0.20441	0.021514
FE-XABT-24-3	Macan Turbo Electric	A1	6000	39.117	0.20441	0.020460
FE-XAB-24-0	Macan 4 Electric	A1	5500	41.073	0.35420	0.022184
FE-XAB-24-1	Macan 4 Electric	A1	5500	35.070	0.24819	0.021206
FE-XAB-24-2	Macan 4 Electric	A1	5500	33.429	0.24819	0.020146

Vehicle ID	Model Name	Trans	ETW [lbf]	Single Roll Coefficients (set)		
				A [lbf]	B [lbf/mph]	C [lbf/mph <sup>2</sup> ]
FE-XABT-24-0	Macan Turbo Electric	A1	6000	-3.664	0.27876	0.020536
FE-XABT-24-1	Macan Turbo Electric	A1	6000	-7.302	0.10865	0.019273
FE-XABT-24-2	Macan Turbo Electric	A1	6000	-3.233	0.01122	0.020158
FE-XABT-24-3	Macan Turbo Electric	A1	6000	-9.476	0.08517	0.018230
FE-XAB-24-0	Macan 4 Electric	A1	5500	-2.509	0.15080	0.021904
FE-XAB-24-1	Macan 4 Electric	A1	5500	-8.014	0.03035	0.021043
FE-XAB-24-2	Macan 4 Electric	A1	5500	-6.310	0.03477	0.019948

Note: Porsche's RLHP measurement and calculation methods are available upon request.

Note: blank cells or tables are intentionally blank.

## Section 6~Test Vehicle Description

### **6.04>> Evaporative Parameters**

These are Battery Electric Vehicles. There is no combustion engine, no fuel-fired heater, and no fuel cell, and therefore no evaporative emissions control system.

## Section 7~Test Results

### 7.01>> Exhaust / Evaporative Standards

**Exhaust Emissions Standards:** Federal: Tier 3 Bin Zero California: ZEV

**Evaporative Standards:** Federal: N/A California: N/A

### Certification Tests:

#### **Energy / Range Data:**

<u>Model / Type</u>	<u>UDDS (City) Test</u>	<u>HWFET (Highway) Test</u>
Macan 4 Electric	RPRX10084867	RPRX10084875
Macan 4 Electric	RPRX10084868	RPRX10084876
Macan 4 Electric	RPRX10084869	RPRX10084877
Macan 4 Electric	RPRX10084874	RPRX10084878
Macan Turbo Electric	RPRX10084838	RPRX10084841
Macan Turbo Electric	RPRX10084839	RPRX10084842
Macan Turbo Electric	RPRX10085860	RPRX10085861



## Section 7~Test Results

Model Year: 2024

### 7.02>> GHG and Testing Compliance

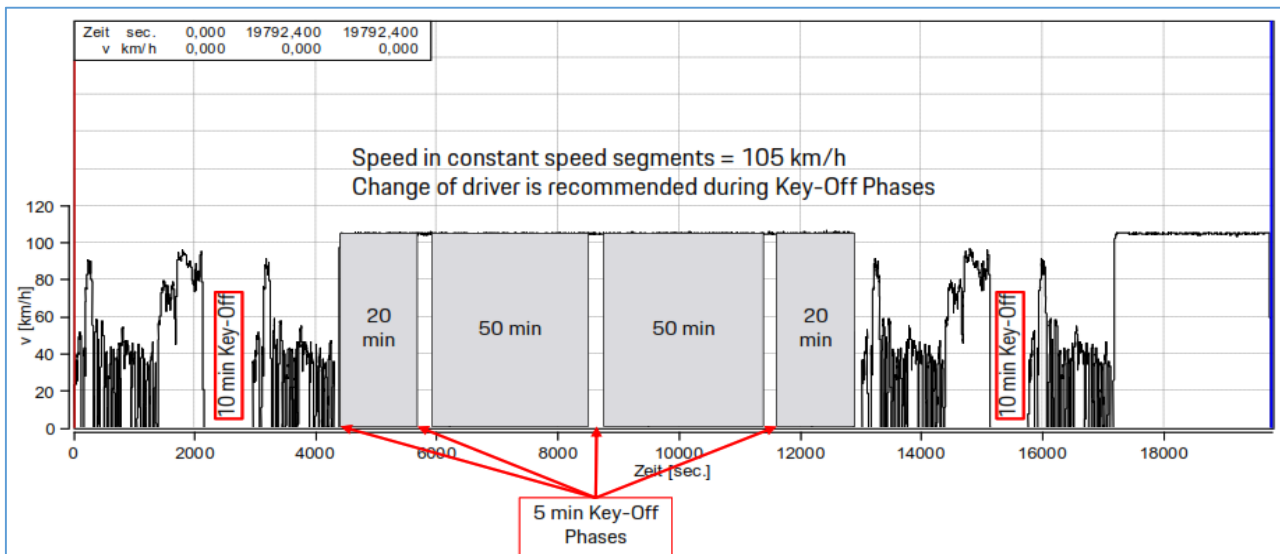
**GHG in-use standards:** Please refer to the VW Group's final GHG Report for this Model Year.

**Start-Stop:** Models in this test group are all BEVs; Auto Start-Stop does not apply.

**N<sub>2</sub>O and CH<sub>4</sub>:** Models in this test group are all BEVs. Porsche has elected to comply with N<sub>2</sub>O and CH<sub>4</sub> standards for all test groups of this model year.

**Test cycles:** Porsche chose the Multi-Cycle Test (MCT), following SAE J1234, 2017 version. This means that the constant-speed portions were run at 90 kph (55 mph). The total test sequence is represented by the chart below, except that the constant speed was 90 instead of 105.

For the California highway portion, Porsche used the "Highway All-Electric Range Test for Battery Electric Vehicles" per California Code of Regulations (CCR) title 13, section 1962.2 (F) 3.2.1. Therefore, the range and energy consumption values shown in Section 17.08 combine this California-only cycle and the UDDS portions of the MCT.



SAE J1634: "...The CSC may be broken into distinct sub-phases of at least 5 min (unless the test termination criteria are met before this time) and no longer than 60 minutes. A 5-30 min key-off soak must be performed between each CSC sub-phase."

## **Section 7-Test Results**

### **7.03>> CSI Report**

The Certification Summary Information (CSI) report begins on the following page.

## Certification Summary Information Report

<b>Manufacturer</b>	Porsche AG	<b>Manufacturer Code</b>	PRX
<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Certificate Number</b>	--	<b>CARB Executive Order #</b>	--
<b>Certificate Issue Date</b>	--	<b>Certificate Revision Date</b>	--
<b>Certificate Effective Date</b>	--	<b>Conditional Certificate</b>	--
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	05/01/2024 03:20:19 PM
<b>Model Year</b>	2024		

<b>Test Group Information</b>			
<b>CSI Type</b>	Update for Correction	<b>Running Change Reference Number</b>	--
<b>GHG Exempt Status</b>	Not Exempt		
<b>Drive Sources and Fuel(s)</b>			
<b>Drive Source #1:</b>	Electric Motor		
	<b>Fuel</b>	<b>Basic Fuel Metering System</b>	<b>Lean Burn Strategy Indicator</b>
	Electricity	--	--

<b>Hybrid Indicator</b>	No		
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes
<b>Multiple Fuel Combustion</b>	--	<b>Off-board Charge Capable Indicator</b>	Yes
<b>Fuel Cell Indicator</b>	No	<b>EPA Vehicle Class</b>	LDT4
<b>Federal Clean Fuel Vehicle</b>	Yes	<b>Federal Clean Fuel Vehicle Standard</b>	ZEV
<b>Federal Clean Fuel Vehicle ILEV</b>	No	<b>California Partial Zero Emissions Vehicle Indicator</b>	--
<b>Durability Group Name</b>	RPRXEEVNNEMT	<b>Durability Group Equivalency Factor</b>	1.0
<b>Reduced Fee Test Group</b>	No	<b>Certification Region Code(s)</b>	FA, CA
<b>Complies with HD GHG 2b/3 regulations?</b>	No		
<b>Introduction into Commerce Date</b>	--	<b>CAP2000 Conditional Certificate?</b>	N/A
<b>Independent Commercial Importer?</b>	--	<b>Alternative Fuel Converter Certificate?</b>	--
<b>SFTP Federal Composite Compliance Identifier</b>	Not Applicable	<b>SFTP Tier 2 Composite CO Option</b>	No
<b>SFTP LEV-III Composite Compliance Indicator</b>	No		
<b>OBD Compliance Type</b>	CARB	<b>OBD Demonstration Vehicle Test Group</b>	RPRXT0.00EMT
<b>Test Group OBD Compliance Level</b>	Full - no deficiencies	<b>Number of Test Group OBD Deficiencies</b>	0
<b>OBD Deficiencies Comments</b>	--		
<b>Mfr Test Group Comments</b>	Macan 4 Electric and Macan Turbo Electric models; All-Wheel-Drive Battery Electric Only. Sales are CBI.		
<b>Mfr Exhaust / Evap Standards Comments</b>	--		

### Certification Summary Information Report

<b>Test Group</b>		RPRXT00.0EMT			<b>Evaporative/Refueling Family</b>			--		
<b>Models Covered by this Certificate</b>										
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup			
Porsche AG	1 - Porsche	341 - Macan Turbo Electric	Federal	All Wheel Drive	Automatic	1	No			
Porsche AG	1 - Porsche	330 - Macan 4 Electric	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No			
Porsche AG	1 - Porsche	330 - Macan 4 Electric	Federal	All Wheel Drive	Automatic	1	No			
Porsche AG	1 - Porsche	341 - Macan Turbo Electric	California + CAA Section 177 states	All Wheel Drive	Automatic	1	No			
<b>Engine Description</b>										
<b>Hybrid Type</b>				<b>Hybrid Description</b>			--			
<b>Engine Type</b>				<b>Mfr Engine Description</b>			--			
<b>Engine Block Arrangement</b>				<b>Mfr Engine Block Arrangement Description</b>			--			
<b>Camless Valvetrain Indicator</b>				<b>Oil Viscosity/Classification</b>			--			
<b>Number of Cylinders/Rotors</b>				<b>Mechanically Variable Compression Ratio Indicator</b>			--			
<b>After Treatment Device(s) (ATD)</b>										
<b>Mfr After Treatment Device (ATD) Comments</b>				--						
<b>Direct Ozone Reduction (DOR) Device</b>				--						
<b>Mfr Emission Control Device Comments</b>				--						
<b>Official Test Numbers</b>										
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	--	--	--	--	--	--	--	--	--	--
<b>SFTP LEV-III Official Test Numbers</b>										
Test Group Fuel	FTP	US06	SC03							
Electricity	--	--	--							

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Official Charge Depleting Test Numbers</b>			
<b>Test Group Fuel</b>	<b>UDDS</b>	<b>Highway</b>	
Electricity	RPRX10084868	RPRX10084876	
Electricity	RPRX10084869	RPRX10084877	
Electricity	RPRX10084838	RPRX10084841	
Electricity	RPRX10084839	RPRX10084842	
Electricity	RPRX10084867	RPRX10084875	
Electricity	RPRX10084874	RPRX10084878	
Electricity	RPRX10085860	RPRX10085861	
<b>Hybrid Electric Vehicle And Fuel Cell Information</b>			
<b>Rechargeable Energy Storage System</b>	Battery(s)	<b>Rechargeable Energy Storage System, if Other</b>	--
<b>Battery Type</b>	Lithium Ion	<b>Number of Battery Packs</b>	1
<b>Total Voltage of Battery Packs</b>	916	<b>Battery Energy Capacity</b>	153
<b>Battery Specific Energy</b>	161	<b>Battery Charger Type</b>	Off-Board
<b>Number of Capacitors</b>	--	<b>Capacitor Rating (In Farads)</b>	--
<b>Mfr Capacitor Comments</b>	--		
<b>Hydraulic System Description</b>	--		
<b>Regenerative Braking Type</b>	Electrical Regen Brake		
<b>Regenerative Braking Source</b>	Both	<b>Driver Controlled Regenerative Braking</b>	No
<b>Mfr Regenerative Braking Description</b>	--		
<b>Drive Motor(s)/Generator(s)</b>	3		
<b>Motor/Generator Type 1</b>	AC, Perm Magnet, Synchronous	<b>Rated Motor/Generator Power</b>	280
<b>Motor/Generator Type 2</b>	AC, Perm Magnet, Synchronous	<b>Rated Motor/Generator Power</b>	495
<b>Motor/Generator Type 3</b>	AC, Perm Magnet, Synchronous	<b>Rated Motor/Generator Power</b>	175
<b>Mfr Fuel Cell Description</b>	--		
<b>Fuel Cell On-Board H2 Storage Capacity (kg)</b>	--	<b>Usable H2 Fill Capacity (kg)</b>	--
<b>Mfr Hybrid Electric/ Electric Vehicle Comments</b>	Total battery voltage can vary from 240 to 916; Driver can select if regenerative braking occurs only with brake pedal, or both pedal and coasting (Sport mode)		

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Emission Data Vehicle Information**

Vehicle ID / Configuration	FE-XAB-24 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	RPRXV00.0EMT	Original Evaporative/Refueling Family	--
Original Test Vehicle Model Year	2024		
<b>Vehicle Model</b>			
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Macan 4 electric

**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 Factor	1
Odometer Correction -- Initial	0	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles	
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles	Rated Horsepower	382
Engine Code	EBZ-ECE	Air Aspiration Method, if 'Other'	
Displacement (liters)	0.001	Air Aspiration Device Configuration	--
Air Aspiration Method	Naturally Aspirated	Drive Mode While Testing	All Wheel Drive
Number of Air Aspiration Devices	--	Aged Emission Components	4,000 (mi)
Charge Air Cooler Type	N/A	Equivalent Test Weight (pounds)	5500
Shift Indicator Light Usage	Not equipped	N/V Ratio	112.4
Curb Weight (lbs)	5377	# of Transmission Gears	1
GVWR (lbs)	6437	Creeper Gear	No
Axle Ratio	3.07		
Transmission Type	Automatic		
Transmission Lockup	No		

**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	41.073	0.3542	0.022184	-2.509	0.1508	0.021904	15.2

Emission Control Device Comments      BEV

### Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Manufacturer Test Vehicle Comments</b>	Macan 4 electric; Porsche Internal Name SEP429, FEDV1		

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084838</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/07/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2079	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	106.1
<b>Charge Depleting Range (Calculated miles)</b>	433.9	<b>Charge Depleting Range (Actual miles)</b>	433.9
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	433.9
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	29.87
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	1.707
Drive Trace Energy Economy Rating	-0.118
Drive Trace Inertia Work Ratio Rating	6.6607
Integrated DC KW-HRS	6.74
Manufacturer Fuel Economy	137.9
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0



### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan 4; BEV; vehicle ID SEP429, FEDV1; UDDS / MCT; Porsche Test Number 23057103 DC energy consumption UDDS1 = 249.4 Wh/mi; UDDS2 = 224.9 Wh/mi; UDDS3 = 212.6 Wh/mi; UDDS4 = 215.7 Wh/mi; UDDS weighted = 218.3 Wh/mi; UDDS1 DC discharge energy = 1,859.2 Wh; MCT UBE energy = 94,733.9 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084841</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/07/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2079	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	106.1
<b>Charge Depleting Range (Calculated miles)</b>	360.61	<b>Charge Depleting Range (Actual miles)</b>	360.61
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	360.61
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	20.53
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	1.707
Drive Trace Energy Economy Rating	-0.118
Drive Trace Inertia Work Ratio Rating	6.6607
Integrated DC KW-HRS	5.393
Manufacturer Fuel Economy	114.6
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan 4; BEV; vehicle ID SEP429, FEDV1; HWY / MCT; Porsche Test Number 23057103 DC energy consumption HWFE1 = 268.5 Wh/mi; HWFE2 = 256.9 Wh/mi; HWFE average = 262.7 Wh/mi

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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	FE-XAB-24 / 1	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	RPRXV00.0EMT	<b>Original Evaporative/Refueling Family</b>	--						
<b>Original Test Vehicle Model Year</b>	2024								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	Porsche	<b>Represented Test Vehicle Model</b>	Macan 4 electric						
<b>Leak Family Details</b>									
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--						
<b>Drive Sources and Fuel System Details</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 33%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">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							
<b>Hybrid Indicator</b>	No	<b>Multiple Fuel Combustion</b>	--						
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes						
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System, if 'Other'</b>	--						
<b>Rechargeable Energy Storage System</b>	Battery(s)								
<b>Off-board charge Capable Indicator</b>	Yes	<b>Odometer Correction Factor</b>	1						
<b>Odometer Correction -- Initial</b>	0	<b>Odometer Correction Sign</b> + = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles							
<b>Odometer Correction Units</b>	Miles								
<b>Engine Code</b>	EBZ-ECE	<b>Rated Horsepower</b>	382						
<b>Displacement (liters)</b>	0.001	<b>Air Aspiration Method, if 'Other'</b>							
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Device Configuration</b>	--						
<b>Number of Air Aspiration Devices</b>	--	<b>Drive Mode While Testing</b>	All Wheel Drive						
<b>Charge Air Cooler Type</b>	N/A	<b>Aged Emission Components</b>	4,000 (mi)						
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Equivalent Test Weight (pounds)</b>	5500						
<b>Curb Weight (lbs)</b>	5379	<b>N/V Ratio</b>	112.4						
<b>GVWR (lbs)</b>	6437								
<b>Axle Ratio</b>	3.07	<b># of Transmission Gears</b>	1						
<b>Transmission Type</b>	Automatic	<b>Creeper Gear</b>	No						
<b>Transmission Lockup</b>	No								
<b>Dynamometer Coefficients:</b>									
<b>Target Coefficients</b>			<b>Set Coefficients</b>						
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>						
<b>City/Highway/Evap</b>	35.07	0.24819	0.021206						
			<b>A (lbf)</b>						
			-8.014						
			<b>B (lbf/mph)</b>						
			0.03035						
			<b>C (lbf/mph**2)</b>						
			0.021043						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			13.4						
<b>Emission Control Device Comments</b>	BEV								

### Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Manufacturer Test Vehicle Comments</b>	Macan 4 electric; Porsche Internal Name SEP429, FEDV2		

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084839</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/12/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2416	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.6
<b>Charge Depleting Range (Calculated miles)</b>	469.9	<b>Charge Depleting Range (Actual miles)</b>	469.9
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	469.9
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	29.9
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	3.193
Drive Trace Energy Economy Rating	-0.181
Drive Trace Inertia Work Ratio Rating	10.4585
Integrated DC KW-HRS	6.171
Manufacturer Fuel Economy	150
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan 4; BEV; vehicle ID SEP429, FEDV2; UDDS / MCT; Porsche Test Number 23057116 DC energy consumption UDDS1 = 226.7 Wh/mi; UDDS2 = 207.2 Wh/mi; UDDS3 = 194.5 Wh/mi; UDDS4 = 197.1 Wh/mi; UDDS weighted = 200.1 Wh/mi; UDDS1 DC discharge energy = 1,694.6 Wh; MCT UBE energy = 94,022.2 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Test #</b>	<b>RPRX10084842</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/12/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2416	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>PHEV/EV Charge Depleting Test Information</b>			
<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.6
<b>Charge Depleting Range (Calculated miles)</b>	396.2	<b>Charge Depleting Range (Actual miles)</b>	396.2
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	396.2
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--
<b>Charge Depleting Bag/Phase #1</b>			
<b>Test Result/Emission Name</b>		<b>Unrounded Test Result</b>	
Actual Distance Driven (miles)		20.53	
Bag 1 Carbon Dioxide		0	
CH4 - Methane		0	
Carbon Monoxide		0	
Carbon dioxide		0	
Carbon-Related Exhaust Emissions		0	
Drive Trace Absolute Speed Change Rating		3.193	
Drive Trace Energy Economy Rating		-0.181	
Drive Trace Inertia Work Ratio Rating		10.4585	
Integrated DC KW-HRS		4.872	
Manufacturer Fuel Economy		126.4	
Nitrogen Oxide		0	
Non-methane Hydrocarbon		0	
Non-methane organic gases		0	
Non-methane organic gases plus Nitrogen Oxides		999.999	
Total Hydrocarbon		0	



### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan 4; BEV; vehicle ID SEP429, FEDV2; HWY / MCT; Porsche Test Number 23057116 DC energy consumption HWFE1 = 244.3 Wh/mi; HWFE2 = 230.4 Wh/mi; HWFE average = 237.3 Wh/mi

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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	FE-XAB-24 / 2	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	RPRXV00.0EMT	<b>Original Evaporative/Refueling Family</b>	--						
<b>Original Test Vehicle Model Year</b>	2024								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	Porsche	<b>Represented Test Vehicle Model</b>	Macan 4 electric						
<b>Leak Family Details</b>									
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--						
<b>Drive Sources and Fuel System Details</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 33%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">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							
<b>Hybrid Indicator</b>	No	<b>Multiple Fuel Combustion</b>	--						
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes						
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System, if 'Other'</b>	--						
<b>Rechargeable Energy Storage System</b>	Battery(s)								
<b>Off-board charge Capable Indicator</b>	Yes	<b>Odometer Correction Factor</b>	1						
<b>Odometer Correction -- Initial</b>	0								
<b>Odometer Correction Sign</b>	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
<b>Odometer Correction Units</b>	Miles								
<b>Engine Code</b>	EBZ-ECE	<b>Rated Horsepower</b>	382						
<b>Displacement (liters)</b>	0.001	<b>Air Aspiration Method, if 'Other'</b>							
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Device Configuration</b>	--						
<b>Number of Air Aspiration Devices</b>	--	<b>Drive Mode While Testing</b>	All Wheel Drive						
<b>Charge Air Cooler Type</b>	N/A	<b>Aged Emission Components</b>	4,000 (mi)						
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Equivalent Test Weight (pounds)</b>	5500						
<b>Curb Weight (lbs)</b>	5362	<b>N/V Ratio</b>	112.4						
<b>GVWR (lbs)</b>	6437								
<b>Axle Ratio</b>	3.07	<b># of Transmission Gears</b>	1						
<b>Transmission Type</b>	Automatic	<b>Creeper Gear</b>	No						
<b>Transmission Lockup</b>	No								
<b>Dynamometer Coefficients:</b>									
<b>Target Coefficients</b>			<b>Set Coefficients</b>						
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>						
<b>City/Highway/Evap</b>	33.429	0.24819	0.020146						
	-6.31	0.03477	0.019948						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			12.8						
<b>Emission Control Device Comments</b>									
BEV									

### Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Manufacturer Test Vehicle Comments</b>	Macan 4 electric; Porsche Internal Name SEP429, FEDV3		

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10085860</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	04/09/2024	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche Cars North America		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3993	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	242	<b>Recharge Event Energy (kiloWatt-hours)</b>	103.548
<b>Charge Depleting Range (Calculated miles)</b>	498.79	<b>Charge Depleting Range (Actual miles)</b>	498.79
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	499.3
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	29.92
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.39075
Drive Trace Energy Economy Rating	-2.856
Drive Trace Inertia Work Ratio Rating	-0.8375
Integrated DC KW-HRS	5.80905
Manufacturer Fuel Economy	162.36
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Confirmatory Test Data for Macan 4; BEV; vehicle ID SEP429, FEDV3; UDDS / MCT; NVFEL Test Record D329\_202404090645\_00714 DC energy consumption UDDS1 = 224.66 Wh/mi; UDDS2 = 187.75 Wh/mi; UDDS3 = 181.84 Wh/mi; UDDS4 = 182.42 Wh/mi; UDDS weighted = 184.74 Wh/mi; UDDS1 DC discharge energy = 1,678.24 Wh; MCT UBE energy = 92,147.67 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10085861</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	04/09/2024	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche Cars North America		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3993	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	242	<b>Recharge Event Energy (kiloWatt-hours)</b>	103.548
<b>Charge Depleting Range (Calculated miles)</b>	411.36	<b>Charge Depleting Range (Actual miles)</b>	411.36
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	411.36
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	20.52
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.0935
Drive Trace Energy Economy Rating	-1.969
Drive Trace Inertia Work Ratio Rating	-0.09
Integrated DC KW-HRS	4.59668
Manufacturer Fuel Economy	133.9
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Confirmatory Test Data for Macan 4; BEV; vehicle ID SEP429, FEDV3; HWY / MCT; NVFEL Test Record D329\_202404090645\_00714 DC energy consumption HWFE1 = 230.11 Wh/mi; HWFE2 = 217.91 Wh/mi; HWFE average = 224.01 Wh/mi

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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	FE-XABT-24 / 0	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	RPRXV00.0EMT	<b>Original Evaporative/Refueling Family</b>	--						
<b>Original Test Vehicle Model Year</b>	2024								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	Porsche	<b>Represented Test Vehicle Model</b>	Macan Turbo electric						
<b>Leak Family Details</b>									
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--						
<b>Drive Sources and Fuel System Details</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 33%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">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							
<b>Hybrid Indicator</b>	No	<b>Multiple Fuel Combustion</b>	--						
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes						
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System, if 'Other'</b>	--						
<b>Rechargeable Energy Storage System</b>	Battery(s)								
<b>Off-board charge Capable Indicator</b>	Yes	<b>Odometer Correction Factor</b>	1						
<b>Odometer Correction -- Initial</b>	0	<b>Odometer Correction Sign</b> + = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles							
<b>Odometer Correction Units</b>	Miles								
<b>Engine Code</b>	EBZ-ECM	<b>Rated Horsepower</b>	576						
<b>Displacement (liters)</b>	0.001	<b>Air Aspiration Method, if 'Other'</b>							
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Device Configuration</b>	--						
<b>Number of Air Aspiration Devices</b>	--	<b>Drive Mode While Testing</b>	All Wheel Drive						
<b>Charge Air Cooler Type</b>	N/A	<b>Aged Emission Components</b>	4,000 (mi)						
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Equivalent Test Weight (pounds)</b>	6000						
<b>Curb Weight (lbs)</b>	5494	<b>N/V Ratio</b>	103.4						
<b>GVWR (lbs)</b>	6504								
<b>Axle Ratio</b>	3.32	<b># of Transmission Gears</b>	1						
<b>Transmission Type</b>	Automatic	<b>Creeper Gear</b>	No						
<b>Transmission Lockup</b>	No								
<b>Dynamometer Coefficients:</b>									
<b>Target Coefficients</b>			<b>Set Coefficients</b>						
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>						
<b>City/Highway/Evap</b>	48.918	0.17909	0.024385						
	-3.664	0.27876	0.020536						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			15.8						
<b>Emission Control Device Comments</b> BEV									



### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Manufacturer Test Vehicle Comments</b>	Macan Turbo electric; Porsche Internal Name SEP958, FEDV1		

## Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084867</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/01/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3289	<b>Odometer Units</b>	K
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.5
<b>Charge Depleting Range (Calculated miles)</b>	409	<b>Charge Depleting Range (Actual miles)</b>	409
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	409
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

<b>Test Result/Emission Name</b>	<b>Unrounded Test Result</b>
Actual Distance Driven (miles)	29.83
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.956
Drive Trace Energy Economy Rating	-0.319
Drive Trace Inertia Work Ratio Rating	3.8789
Integrated DC KW-HRS	7.077
Manufacturer Fuel Economy	130.7
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV1; UDDS / MCT; Porsche Test Number 23057179 DC energy consumption UDDS1 = 256.9 Wh/mi; UDDS2 = 237.2 Wh/mi; UDDS3 = 227.1 Wh/mi; UDDS4 = 227.7 Wh/mi; UDDS weighted = 231.2 Wh/mi; UDDS1 DC discharge energy = 1,920.6 Wh; MCT UBE energy = 94,570.6 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084875</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/01/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3289	<b>Odometer Units</b>	K
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.5
<b>Charge Depleting Range (Calculated miles)</b>	340.7	<b>Charge Depleting Range (Actual miles)</b>	340.7
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	340.7
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	20.51
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.956
Drive Trace Energy Economy Rating	-0.319
Drive Trace Inertia Work Ratio Rating	3.8789
Integrated DC KW-HRS	5.694
Manufacturer Fuel Economy	108.9
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV1; HWY / MCT; Porsche Test Number 23057179 DC energy consumption HWFE1 = 284.1 Wh/mi; HWFE2 = 271.1 Wh/mi; HWFEaverage = 277.6 Wh/mi

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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	FE-XABT-24 / 1	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	RPRXV00.0EMT	<b>Original Evaporative/Refueling Family</b>	--						
<b>Original Test Vehicle Model Year</b>	2024								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	Porsche	<b>Represented Test Vehicle Model</b>	Macan Turbo electric						
<b>Leak Family Details</b>									
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--						
<b>Drive Sources and Fuel System Details</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 34%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">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							
<b>Hybrid Indicator</b>	No	<b>Multiple Fuel Combustion</b>	--						
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes						
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System, if 'Other'</b>	--						
<b>Rechargeable Energy Storage System</b>	Battery(s)								
<b>Off-board charge Capable Indicator</b>	Yes	<b>Odometer Correction Factor</b>	1						
<b>Odometer Correction -- Initial</b>	0								
<b>Odometer Correction Sign</b>	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
<b>Odometer Correction Units</b>	Miles								
<b>Engine Code</b>	EBZ-ECM	<b>Rated Horsepower</b>	576						
<b>Displacement (liters)</b>	0.001	<b>Air Aspiration Method, if 'Other'</b>							
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Device Configuration</b>	--						
<b>Number of Air Aspiration Devices</b>	--	<b>Drive Mode While Testing</b>	All Wheel Drive						
<b>Charge Air Cooler Type</b>	N/A	<b>Aged Emission Components</b>	4,000 (mi)						
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Equivalent Test Weight (pounds)</b>	6000						
<b>Curb Weight (lbs)</b>	5459	<b>N/V Ratio</b>	103.4						
<b>GVWR (lbs)</b>	6504								
<b>Axle Ratio</b>	3.32	<b># of Transmission Gears</b>	1						
<b>Transmission Type</b>	Automatic	<b>Creeper Gear</b>	No						
<b>Transmission Lockup</b>	No								
<b>Dynamometer Coefficients:</b>									
<b>Target Coefficients</b>			<b>Set Coefficients</b>						
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>						
<b>City/Highway/Evap</b>	41.769	0.20441	0.021514						
			<b>A (lbf)</b>						
			-7.302						
			<b>B (lbf/mph)</b>						
			0.10865						
			<b>C (lbf/mph**2)</b>						
			0.019273						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			14.1						
<b>Emission Control Device Comments</b>	BEV								

### Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Manufacturer Test Vehicle Comments</b>	Macan Turbo electric; Porsche Internal Name SEP958, FEDV2, RLHP: 14.1		

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Test #</b>	<b>RPRX10084868</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/07/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3873	<b>Odometer Units</b>	K
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>PHEV/EV Charge Depleting Test Information</b>			
<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.3
<b>Charge Depleting Range (Calculated miles)</b>	452.9	<b>Charge Depleting Range (Actual miles)</b>	452.9
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	452.9
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--
<b>Charge Depleting Bag/Phase #1</b>			
<b>Test Result/Emission Name</b>		<b>Unrounded Test Result</b>	
Actual Distance Driven (miles)		29.87	
Bag 1 Carbon Dioxide		0	
CH4 - Methane		0	
Carbon Monoxide		0	
Carbon dioxide		0	
Carbon-Related Exhaust Emissions		0	
Drive Trace Absolute Speed Change Rating		0.861	
Drive Trace Energy Economy Rating		-0.294	
Drive Trace Inertia Work Ratio Rating		4.3494	
Integrated DC KW-HRS		6.448	
Manufacturer Fuel Economy		144.9	
Nitrogen Oxide		0	
Non-methane Hydrocarbon		0	
Non-methane organic gases		0	
Non-methane organic gases plus Nitrogen Oxides		999.999	
Total Hydrocarbon		0	



### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV2 Test 1; UDDS / MCT; Porsche Test Number 23057189 DC energy consumption UDDS1 = 240.6 Wh/mi; UDDS2 = 215.4 Wh/mi; UDDS3 = 203.5 Wh/mi; UDDS4 = 204.0 Wh/mi; UDDS weighted = 208.3 Wh/mi; UDDS1 DC discharge energy = 1,794.0 Wh; MCT UBE energy = 94,313.5 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084876</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/07/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3873	<b>Odometer Units</b>	K
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.3
<b>Charge Depleting Range (Calculated miles)</b>	388.2	<b>Charge Depleting Range (Actual miles)</b>	388.2
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	388.2
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	20.52
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.861
Drive Trace Energy Economy Rating	-0.294
Drive Trace Inertia Work Ratio Rating	4.3494
Integrated DC KW-HRS	4.984
Manufacturer Fuel Economy	124.2
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV2 Test 1; HWY / MCT; Porsche Test Number 23057189 DC energy consumption HWFE1 = 251.0 Wh/mi; HWFE2 = 234.9 Wh/mi; HWFEaverage = 242.9 Wh/mi

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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--						
<b>Emission Data Vehicle Information</b>									
<b>Vehicle ID / Configuration</b>	FE-XABT-24 / 2	<b>Manufacturer Vehicle Configuration Number</b>	0						
<b>Original Test Group Name</b>	RPRXV00.0EMT	<b>Original Evaporative/Refueling Family</b>	--						
<b>Original Test Vehicle Model Year</b>	2024								
<b>Vehicle Model</b>									
<b>Represented Test Vehicle Make</b>	Porsche	<b>Represented Test Vehicle Model</b>	Macan Turbo electric						
<b>Leak Family Details</b>									
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--						
<b>Drive Sources and Fuel System Details</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 33%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">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							
<b>Hybrid Indicator</b>	No	<b>Multiple Fuel Combustion</b>	--						
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes						
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System, if 'Other'</b>	--						
<b>Rechargeable Energy Storage System</b>	Battery(s)								
<b>Off-board charge Capable Indicator</b>	Yes	<b>Odometer Correction Factor</b>	1						
<b>Odometer Correction -- Initial</b>	0								
<b>Odometer Correction Sign</b>	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
<b>Odometer Correction Units</b>	Miles								
<b>Engine Code</b>	EBZ-ECM	<b>Rated Horsepower</b>	576						
<b>Displacement (liters)</b>	0.001	<b>Air Aspiration Method, if 'Other'</b>							
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Device Configuration</b>	--						
<b>Number of Air Aspiration Devices</b>	--	<b>Drive Mode While Testing</b>	All Wheel Drive						
<b>Charge Air Cooler Type</b>	N/A	<b>Aged Emission Components</b>	4,000 (mi)						
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Equivalent Test Weight (pounds)</b>	6000						
<b>Curb Weight (lbs)</b>	5459	<b>N/V Ratio</b>	103.4						
<b>GVWR (lbs)</b>	6504								
<b>Axle Ratio</b>	3.32	<b># of Transmission Gears</b>	1						
<b>Transmission Type</b>	Automatic	<b>Creeper Gear</b>	No						
<b>Transmission Lockup</b>	No								
<b>Dynamometer Coefficients:</b>									
<b>Target Coefficients</b>			<b>Set Coefficients</b>						
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>						
<b>City/Highway/Evap</b>	41.769	0.20441	0.021514						
			<b>A (lbf)</b>						
			-3.233						
			<b>B (lbf/mph)</b>						
			0.01122						
			<b>C (lbf/mph**2)</b>						
			0.020158						
			<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>						
			14.1						
<b>Emission Control Device Comments</b>	BEV								

### Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Manufacturer Test Vehicle Comments</b>	Macan Turbo electric; Porsche Internal Name SEP958, FEDV2 (TEST 2), RLHP: 14.1,		

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Test #</b>	<b>RPRX10084869</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	01/12/2024	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	286	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>PHEV/EV Charge Depleting Test Information</b>			
<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.4
<b>Charge Depleting Range (Calculated miles)</b>	458.3	<b>Charge Depleting Range (Actual miles)</b>	458.3
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	458.3
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--
<b>Charge Depleting Bag/Phase #1</b>			
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	29.88		
Bag 1 Carbon Dioxide	0		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	1.723		
Drive Trace Energy Economy Rating	-0.324		
Drive Trace Inertia Work Ratio Rating	6.1777		
Integrated DC KW-HRS	6.349		
Manufacturer Fuel Economy	146.6		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
Total Hydrocarbon	0		

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV2 Test 2; UDDS / MCT; Porsche Test Number 23061614 DC energy consumption UDDS1 = 234.4 Wh/mi; UDDS2 = 214.1 Wh/mi; UDDS3 = 199.4 Wh/mi; UDDS4 = 201.9 Wh/mi; UDDS weighted = 205.7 Wh/mi; UDDS1 DC discharge energy = 1,749.7 Wh; MCT UBE energy = 94,266.5 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Test #</b>	<b>RPRX10084877</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	01/12/2024	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	286	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>PHEV/EV Charge Depleting Test Information</b>			
<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.4
<b>Charge Depleting Range (Calculated miles)</b>	391.1	<b>Charge Depleting Range (Actual miles)</b>	391.1
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	391.1
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--
<b>Charge Depleting Bag/Phase #1</b>			
<b>Test Result/Emission Name</b>		<b>Unrounded Test Result</b>	
Actual Distance Driven (miles)		20.5	
Bag 1 Carbon Dioxide		0	
CH4 - Methane		0	
Carbon Monoxide		0	
Carbon dioxide		0	
Carbon-Related Exhaust Emissions		0	
Drive Trace Absolute Speed Change Rating		1.723	
Drive Trace Energy Economy Rating		-0.324	
Drive Trace Inertia Work Ratio Rating		6.1777	
Integrated DC KW-HRS		4.941	
Manufacturer Fuel Economy		125.1	
Nitrogen Oxide		0	
Non-methane Hydrocarbon		0	
Non-methane organic gases		0	
Non-methane organic gases plus Nitrogen Oxides		999.999	
Total Hydrocarbon		0	



### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV2 Test 2; UDDS / MCT; Porsche Test Number 23061614 DC energy consumption HWFE1 = 251.8 Wh/mi; HWFE2 = 230.3 Wh/mi;HWFEaverage = 241.0 Wh/mi

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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--				
<b>Emission Data Vehicle Information</b>							
<b>Vehicle ID / Configuration</b>	FE-XABT-24 / 3	<b>Manufacturer Vehicle Configuration Number</b>	0				
<b>Original Test Group Name</b>	RPRXV00.0EMT	<b>Original Evaporative/Refueling Family</b>	--				
<b>Original Test Vehicle Model Year</b>	2024						
<b>Vehicle Model</b>							
<b>Represented Test Vehicle Make</b>	Porsche	<b>Represented Test Vehicle Model</b>	Macan Turbo Electric				
<b>Leak Family Details</b>							
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--				
<b>Drive Sources and Fuel System Details</b>							
	<b>Drive Source and Fuel#</b>	<b>Drive Source</b>	<b>Fuel</b>				
	1	Electric Motor	Electricity				
<b>Hybrid Indicator</b>	No						
<b>Multiple Fuel Storage</b>	--	<b>Multiple Fuel Combustion</b>	--				
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System Indicator</b>	Yes				
<b>Rechargeable Energy Storage System</b>	Battery(s)	<b>Rechargeable Energy Storage System, if 'Other'</b>	--				
<b>Off-board charge Capable Indicator</b>	Yes						
<b>Odometer Correction -- Initial</b>	0	<b>Odometer Correction Factor</b>	1				
<b>Odometer Correction Sign</b>	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles						
<b>Odometer Correction Units</b>	Miles						
<b>Engine Code</b>	EBZ-ECM	<b>Rated Horsepower</b>	576				
<b>Displacement (liters)</b>	0.001						
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Method, if 'Other'</b>					
<b>Number of Air Aspiration Devices</b>	--	<b>Air Aspiration Device Configuration</b>	--				
<b>Charge Air Cooler Type</b>	N/A	<b>Drive Mode While Testing</b>	All Wheel Drive				
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Aged Emission Components</b>	4,000 (mi)				
<b>Curb Weight (lbs)</b>	5450	<b>Equivalent Test Weight (pounds)</b>	6000				
<b>GVWR (lbs)</b>	6504	<b>N/V Ratio</b>	103.4				
<b>Axle Ratio</b>	3.32						
<b>Transmission Type</b>	Automatic	<b># of Transmission Gears</b>	1				
<b>Transmission Lockup</b>	No	<b>Creeper Gear</b>	No				
<b>Dynamometer Coefficients:</b>							
	<b>Target Coefficients</b>			<b>Set Coefficients</b>			
<b>Coefficient Category</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>	<b>A (lbf)</b>	<b>B (lbf/mph)</b>	<b>C (lbf/mph**2)</b>	<b>EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</b>
<b>City/Highway/Evap</b>	39.117	0.20441	0.02046	-9.476	0.08517	0.01823	13.4
<b>Emission Control Device Comments</b>	BEV						

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Manufacturer Test Vehicle Comments</b>	Macan Turbo Electric; Porsche Internal Name SEP958, FEDV3		

## Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084874</b>	<b>Test Procedure</b>	<b>81 - Charge Depleting UDDS</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/11/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4408	<b>Odometer Units</b>	K
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.9
<b>Charge Depleting Range (Calculated miles)</b>	480.6	<b>Charge Depleting Range (Actual miles)</b>	480.6
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	480.6
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

<b>Test Result/Emission Name</b>	<b>Unrounded Test Result</b>
Actual Distance Driven (miles)	29.76
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	1.434
Drive Trace Energy Economy Rating	-0.29
Drive Trace Inertia Work Ratio Rating	5.6825
Integrated DC KW-HRS	6.126
Manufacturer Fuel Economy	153
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

### Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
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**Manufacturer Test Comments**

Macan Turbo; BEV; vehicle ID SEP958, FEDV3; UDDS / MCT; Porsche Test Number 23057205 DC energy consumption UDDS1 = 234.0 Wh/mi; UDDS2 = 206.0 Wh/mi; UDDS3 = 190.8 Wh/mi; UDDS4 = 192.7 Wh/mi; UDDS weighted = 197.2 Wh/mi; UDDS1 DC discharge energy = 1,741.1 Wh; MCT UBE energy = 94,764.7 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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass

## Certification Summary Information Report

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>	--
<b>Test #</b>	<b>RPRX10084878</b>	<b>Test Procedure</b>	<b>84 - Charge Depleting Highway</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	62 - Electricity
<b>Test Date</b>	12/11/2023	<b>Fuel</b>	Electricity
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--
<b>Vehicle Class</b>	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Porsche AG, Labs and Engineering		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4408	<b>Odometer Units</b>	K
<b>4WD Test Dyno</b>	Yes	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**PHEV/EV Charge Depleting Test Information**

<b>Recharge Event Voltage</b>	240	<b>Recharge Event Energy (kiloWatt-hours)</b>	105.9
<b>Charge Depleting Range (Calculated miles)</b>	418.5	<b>Charge Depleting Range (Actual miles)</b>	418.5
<b>Charge Depleting Range Highway (Calculated miles)</b>	--	<b>Derived 5-Cycle Coefficient Model Year</b>	--
<b>All Electric Range Unadjusted (miles)</b>	--	<b>Equivalent All Electric Range (miles)</b>	418.5
<b>Number of Charge Depleting Bags/Phases Conducted</b>	1	<b>Transition Bag/Phase Number</b>	--

**Charge Depleting Bag/Phase #1**

<b>Test Result/Emission Name</b>	<b>Unrounded Test Result</b>
Actual Distance Driven (miles)	20.53
Bag 1 Carbon Dioxide	0
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	1.434
Drive Trace Energy Economy Rating	-0.29
Drive Trace Inertia Work Ratio Rating	5.6825
Integrated DC KW-HRS	4.648
Manufacturer Fuel Economy	133.2
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0

## Certification Summary Information Report

Test Group		RPRXT00.0EMT		Evaporative/Refueling Family				--				
<b>Manufacturer Test Comments</b>		Macan Turbo; BEV; vehicle ID SEP958, FEDV3; UDDS / MCT; Porsche Test Number 23057205 DC energy consumption HWFE1 = 235.1 Wh/mi; HWFE2 = 217.8 Wh/mi; HWFEaverage = 226.4 Wh/mi										
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	120,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	--	1	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
CA	120,000 miles	California ZEV	CREE	0	--	--	--	--	1	0	--	--
CA	150,000 miles	California ZEV	CO	0.00	--	--	--	--	1	0.0	0.0	Pass
<b>Fuel Properties</b>												

### Certification Summary Information Report

<b>Test Group</b>		RPRXT00.0EMT			Evaporative/Refueling Family			--		
<b>Consolidated List of Standards</b>										
<b>Exhaust Standards</b>										
<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			California ZEV		
<b>Fuel</b>		Electricity			<b>Test Procedure</b>			Charge Depleting Highway		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
120,000 miles	CREE	--	--	--	--	--	1	--	0.0	
150,000 miles	CO	--	--	--	--	--	1	--	0.0	
<b>Exhaust Standards</b>										
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 0		
<b>Fuel</b>		Electricity			<b>Test Procedure</b>			Charge Depleting Highway		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
120,000 miles	CREE	--	--	--	--	--	1	--	0.0	
150,000 miles	CO	--	--	--	--	--	1	--	0.0	
<b>Exhaust Standards</b>										
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 0		
<b>Fuel</b>		Electricity			<b>Test Procedure</b>			Federal fuel 2-day exhaust (w/can load)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	1	--	0.0	



### Certification Summary Information Report

<b>Test Group</b>		RPRXT00.0EMT			<b>Evaporative/Refueling Family</b>			--		
<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			California ZEV		
<b>Fuel</b>		Electricity			<b>Test Procedure</b>			Charge Depleting UDDS		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
120,000 miles	CREE	--	--	--	--	--	1	--	0.0	
150,000 miles	CO	--	--	--	--	--	1	--	0.0	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 0		
<b>Fuel</b>		Electricity			<b>Test Procedure</b>			Charge Depleting UDDS		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
120,000 miles	CREE	--	--	--	--	--	1	--	0.0	
150,000 miles	CO	--	--	--	--	--	1	--	0.0	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			California ZEV		
<b>Fuel</b>		Electricity			<b>Test Procedure</b>			Federal fuel 2-day exhaust (w/can load)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	1	--	0.0	

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
<b>Glossary</b>			
<b>Useful Life</b>			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
<b>Emission Name</b>			
HC-TOTAL	Total Hydrocarbon	N2O	Nitrous Oxide
CO	Carbon Monoxide	SPITBACK	Spitback Hydrocarbon in grams
CO2	Carbon dioxide	AMP-HRS	Integrated Amp-hours
CREE	Carbon-Related Exhaust Emissions	START-SOC	System Start State of Charge Watt-hours
OPT-CREE	Optional Carbon-Related Exhaust Emissions	END-SOC	System End State of Charge Watt-hours
NOX	Nitrogen Oxide	ACT-DISTANCE	Actual Distance Driven (miles)
PM	Particulate Matter	AS-VOLT	Average System Voltage
PM-COMP	SFTP Composite Particulate Matter	CO2 BAG 1	Bag 1 Carbon Dioxide
HC-NM	Non-methane Hydrocarbon	CO2 BAG 2	Bag 2 Carbon Dioxide
OMHCE	Organic material Hydrocarbon Equivalent	CO2 BAG 3	Bag 3 Carbon Dioxide
OMNMHCE	Organic material non-methane HC equivalent	CO2 BAG 4	Bag 4 Carbon Dioxide
NMOG	Non-methane organic gases	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
HCHO	Formaldehyde	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
H3C2HO	Acetaldehyde	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	DT-ASCR	Drive Trace Absolute Speed Change Rating
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	DT-EER	Drive Trace Energy Economy Rating
CO-COMP	SFTP Composite Carbon Monoxide	COMB-CREE	Combined Carbon-Related Exhaust Emissions
ETHANOL	C2H5OH - Ethanol	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
FE BAG 1	Bag 1 Fuel Economy	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
FE BAG 2	Bag 2 Fuel Economy	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
FE BAG 3	Bag 3 Fuel Economy	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
FE BAG 4	Bag 4 Fuel Economy	LEAK-DIA	Effective Leak Diameter (inches)
MFR FE	Manufacturer Fuel Economy	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
HC	Hydrocarbon for Running Loss and ORVR	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
METHANE	CH4 - Methane	KW-HRS	Integrated DC KW-HRS
METHANOL	CH3OH - Methanol		
<b>Certification Region</b>			
CA	California + CAA Section 177 states	FA	Federal
<b>Exhaust Emission Standard Level</b>			
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

## Certification Summary Information Report

Test Group	RPRXT00.0EMT	Evaporative/Refueling Family	--
B5	Federal Tier 2 Bin 5	L3SULEV150	California LEV-III SULEV150
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
<b>Transmission Type Code</b>			
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)
<b>Drive System Code</b>			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive

**Certification Summary Information Report**

<b>Test Group</b>	RPRXT00.0EMT	<b>Evaporative/Refueling Family</b>		--
R	2-Wheel Drive, Rear			
<b>Additional Terms and Acronyms</b>				
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	

## Section 8~Manufacturer Statements

### 8.01>> Emission Testing Waiver Statements

<b>General Statement</b>	All Porsche Battery-Electric vehicles will conform with the emissions standards for which data is not being provided, as allowed under 40 CFR 86.1829-01.
<b>Electric vehicle emissions</b>	According to 40 CFR 86.1829-15(f), which states that tailpipe emissions of regulated pollutants from vehicles powered solely by electricity are deemed to be zero, and based on relevant engineering evaluations, we state as the manufacturer that all electric vehicles included in this application comply with the requirements given in 40 CFR Part 86.

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## **Section 8~Manufacturer Statements**

### **8.02>> Manufacturer Attestations**

<b>GHG Compliance</b>	As part of the Volkswagen Group of America, Porsche is not subject to GHG compliance as an independent entity. GHG compliance is managed at the Group level by VWGoA.
<b>Tier 3 / LEV-III Fleet Averages and Phase-Ins</b>	As part of the Volkswagen Group of America, Porsche is not subject to these requirements as an independent entity. Tier 3 and LEV-III compliance is managed at the Group level by VWGoA.
<b>California ASM and Inspection / Maintenance Standards</b>	In accordance with ARB MAC#99-05, Porsche hereby certifies that, based upon its engineering evaluation, vehicles of this test group comply with ASM and I/M standards.
<b>Other</b>	Porsche attests that all vehicles in this test group are battery-electric vehicles, without fuel-fired heaters. See Section 8.01.

## Section 9~OBD Description

### 9.01>> OBD System Description

Not Applicable. OBD not required for Battery-Electric vehicles.

## **Section 10~Description of Alternate-Fueled Vehicles**

Porsche builds only gasoline (ICE), gasoline-electric hybrid, and battery electric vehicles.



## **Section 11~AECD Description**

Battery Electric Vehicle: No Auxiliary Emissions Control Devices

## Section 12~Test Parameters and Description of Vehicles Covered by Certificate

### 12.01>> Vehicle Description and Parameters; All Vehicles

<b>Sales Area</b>	50 State
<b>Catalysts</b>	Not Applicable
<b>EGR Type</b>	Not Applicable
<b>Air Pump Type</b>	Not Applicable
<b>Starting Procedure</b>	See Section 6.02
<b>Cooling Fan</b>	
<b>Shift Indicator Light</b>	Not Applicable
<b>EGR Type</b>	Not Applicable
<b>Air Pump Type</b>	Not Applicable
<b>Drive Accuracy Per 1068.425</b>	Yes
<b>Fuel Temperature Profile</b>	Not Applicable
<b>Shift Schedules</b>	Not Applicable

## Section 12~Test Parameters and Description of Vehicles Covered by Certificate

### 12.01.01>> Vehicle Description Details

Model Name		Macan Turbo Electric	Macan Turbo Electric	Macan Turbo Electric	Macan Turbo Electric
Carline		341	341	341	341
Vehicle Classification		LDT4	LDT4	LDT4	LDT4
Transmission		A1	A1	A1	A1
Engine Code		EBZ-ECM	EBZ-ECM	EBZ-ECM	EBZ-ECM
Number of Drive E-Motors		2	2	2	2
Total E-Motor Power (HP)		576	576	576	576
E-Motor Power type		AC Permanent Magnet, Synchronous	AC Permanent Magnet, Synchronous	AC Permanent Magnet, Synchronous	AC Permanent Magnet, Synchronous
Battery Type		Li-Ion	Li-Ion	Li-Ion	Li-Ion
Recharge Voltage (Volts)		110 to 800	110 to 800	110 to 800	110 to 800
Number of Battery Cells		180	180	180	180
Number of Battery Packs (modules)		12	12	12	12
Number of Cells per Module		15	15	15	15
Battery Energy Capacity (A-h)		153	153	153	153
Battery System Voltage Range		400 - 800	400 - 800	400 - 800	400 - 800
Battery Specific Energy (W-hr/kg)		160.9	160.9	160.9	160.9
Battery System Weight (kg)		569.75	569.75	569.75	569.75
Drive Type		AWD	AWD	AWD	AWD
ETW [Lbf]		6000	6000	6000	6000
Curb Weight		5494	5494	5459	5450
Gross Vehicle Weight		6504	6504	6504	6504
Axle Ratio		3.32	3.32	3.32	3.32
N/V Ratio Fr Axle					
N/V Ratio Rr Axle		103.4	103.4	103.4	103.4
Tire Sizes	Front	255/40 R22	255/40 R22	255/40 R22	255/40 R22
	Rear	295/35 R22	295/35 R22	295/35 R22	295/35 R22
RLHP		15.8	15.8	14.1	13.4
Single Roll Coefficients (target)	A [lbf]	48.918	48.918	41.769	39.117
	B [lbf/mph]	0.17909	0.17909	0.20441	0.20441
	C [lbf/mph <sup>2</sup> ]	0.024385	0.024385	0.021514	0.020460

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## Section 12~Test Parameters and Description of Vehicles Covered by Certificate

### 12.01.02>> Vehicle Description Details, Continued

<b>Model Name</b>		Macan 4 Electric	Macan 4 Electric	Macan 4 Electric	
<b>Carline</b>		330	330	330	
<b>Vehicle Classification</b>		LDT4	LDT4	LDT4	
<b>Transmission</b>		A1	A1	A1	
<b>Engine Code</b>		EBZ-ECE	EBZ-ECE	EBZ-ECE	
<b>Number of Drive E-Motors</b>		2	2	2	
<b>Total E-Motor Power (HP)</b>		382	382	382	
<b>E-Motor Power type</b>		AC Permanent Magnet, Synchronous	AC Permanent Magnet, Synchronous	AC Permanent Magnet, Synchronous	
<b>Battery Type</b>		Li-Ion	Li-Ion	Li-Ion	
<b>Recharge Voltage (Volts)</b>		110 to 800	110 to 800	110 to 800	
<b>Number of Battery Cells</b>		180	180	180	
<b>Number of Battery Packs (modules)</b>		12	12	12	
<b>Number of Cells per Module</b>		15	15	15	
<b>Battery Energy Capacity (A-h)</b>		153	153	153	
<b>Battery System Voltage Range</b>		400 - 800	400 - 800	400 - 800	
<b>Battery Specific Energy (W-hr/kg)</b>		160.7	160.7	160.7	
<b>Battery System Weight (kg)</b>		569.75	569.75	569.75	
<b>Drive Type</b>		AWD	AWD	AWD	
<b>ETW [Lbf]</b>		5500	5500	5500	
<b>Curb Weight</b>		5377	5379	5362	
<b>Gross Vehicle Weight</b>		6437	6437	6437	
<b>Axle Ratio</b>		3.07	3.07	3.07	
<b>N/V Ratio Fr Axle</b>					
<b>N/V Ratio Rr Axle</b>		112.4	112.4	112.4	
<b>Tire Sizes</b>	<b>Front</b>	235/55 R20	235/55 R20	235/55 R20	
	<b>Rear</b>	285/45 R20	285/45 R20	285/45 R20	
<b>RLHP</b>		15.2	13.4	12.8	
<b>Single Roll Coefficients (target)</b>	<b>A (lbf)</b>	41.073	35.070	33.429	
	<b>B [lbf/mph]</b>	0.35420	0.24819	0.24819	
	<b>C [lbf/mph<sup>2</sup>]</b>	0.022184	0.021206	0.020146	

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## **Section 12~Test Parameters and Description of Vehicles Covered by Certificate**

### **12.02>> Regenerative Braking**

Overall description of Porsche regenerative (recuperative) braking system

- 1) Every deceleration  $\leq 0.3$  g is by regenerative braking.
- 2) Under default settings there is no regenerative braking when both brake and accelerator pedals are released. Porsche refers to this as "coasting".
- 3) If the driver selects Sport mode, there is regenerative braking instead of coasting when the accelerator pedal is released.
- 4) Optional regenerative functionality via Sport mode defaults to "Off" at key cycle.
- 5) Low frequency of friction brake actuation prompted implementation of two additional functions:
- 6) Function 1 is a "wearing-in" of brakes when new, and following brake service.
- 7) Function 1 occurs after delivery and brake service for 300 km to 600 km.
- 8) Function 1 is initially activated by dealership at time of delivery to customer.
- 9) Function 2 is a "brake refresh" after parking or extended vehicle storage.
- 10) Function 2 occurs after parking over 6 hours; dissipates 500 kJ of energy (e.g., 52 to 25 mph).

## Section 13~Projected Sales

### 13.01>> Sales / Phase-ins

Confidential. See Section 16 in CBI version.

*Note: blank cells or tables are intentionally blank.*

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## Section 14~Request for Certification

### 14.01>> Statement of Compliance

Porsche states that any element of design, system, or emission control device installed on or incorporated in Porsche's new motor vehicles or new motor vehicle engines for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of Porsche's information and belief, cause the emission into the ambient air of pollutants in the operation of its motor vehicles or motor vehicle engines which cause or contribute to an unreasonable risk to public health or welfare except as specifically permitted by the standards prescribed under section 202 of the Clean Air Act. Porsche further states that any element of design, system, or emission control device installed or incorporated in Porsche's new motor vehicles or motor vehicle engines for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of Porsche's information and belief, cause or contribute to an unreasonable risk to public safety.

The term pollutants means:

- a. Diesel particulates
- b. Nickel
- c. MMT combustion products
- d. Ammonia
- e. Sulfates
- f. Hydrogen sulfide
- g. Hydrogen cyanide
- h. Ruthenium combustion products
- i. Nitrosamines,

or any other pollutant, which Porsche has identified, which can reasonably be expected to be emitted from these vehicles.

All vehicles have been tested in accordance with good engineering practice to ascertain that such test vehicles meet the requirements of this section for the useful life of the vehicle.

The test vehicles with respect to which data are submitted are in all materials respects as described in the application for certification, have been tested in accordance with the applicable test procedures utilizing the fuels and equipment described in the application for certification, they meet the requirements of such tests, and on the basis of such tests, they conform to the requirements of the regulations in 40CFR, Part 86, Subpart A.

Signed and dated by:



May 1, 2024

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Michael Scott – Porsche Cars North America, Inc.

## Section 15~Other Information

### 15.01>> Fee Filing Form

Appears on the following page.



# US EPA Fee Form

[Help and EPA Instructions](#)

\* Required Field

## General Information

Date: 02/16/2024

Process Code \*

Submit New Fee Filing Form

Manufacturer Code \*

PRX

Manufacturer Name \*

Porsche Cars North America

Contact Name \*

Peter Khamphouvong

Contact Email Address \*

peter.khamphouvong@porsche.us

Contact Phone \*

6787091264

Calendar Year complete application submitted to EPA \*

2024

**PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2024, through December 31, 2024. The applicable fee is determined by the calendar year in which the complete certification application is received, not the model year.**

Engine Family / Evaporative Family / Test Group \*

RPRXT00.0EMT

## Certificate Request Type (Industry Sector Code)

### Certificate Request Type \*

- On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V)
- On-Highway HDE Dyno Cert (Federal) (E, H)
- On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V)
- On-Highway Motorcycle (C)
- On-Highway HDV Evap (F)
- On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V)
- On-Highway HDE Dyno Cert (California-Only) (E, H)
- Nonroad CI (L)
- Nonroad SI (B, S)
- Locomotive (G, K)
- All Nonroad Recreational, excluding Marine engines (X, Y)
- All Marine (Including IMO) (M, N, W)
- Component Certification for Evaporative Emissions (P)

### IMO Name (Required for dual US/IMO Marine Only)

### ICI VIN Number (Required for ICIs Only)

### Do you qualify for a Reduced Fee? \*

## Payment Information

### Amount Owed

### Payment Type \*

## Comments

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 12/31/2022

The public reporting and recordkeeping burden for this collection of information is estimated to average 12 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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## Section 16~Confidential Information

None.