WUHAN LOTUS CARS CO., LTD.

APPLICATION FOR CERTIFICATION – PART I

Model Year:	2026
Test Group:	TWHNV00.0LEB
Durability Group:	TWHNEEVNNLEB
Evaporative Family:	Not Applicable
Durability Group Description:	Electric Vehicle / BEV / ZEV
Test Group Description:	Electric Vehicle / BEV / ZEV
	Different test groups based on battery and Electric motor configuration
Applicable Standards:	FEDERAL Tier 3 BIN 0
	CALIFORNIA ZEV
Carlines Covered:	ELETRE S Long range,
	ELETRE S Performance
Vehicles Tested:	GIC_C10_6100,
	GIC_C10_6119

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Table of Contents:

Section 01	Correspondence and Communication
Section 02	Durability Group Description
Section 03	Evaporative / Refueling Family Description
Section 04	Durability Procedure Description
Section 05	Test Group Description
Section 06	Test Vehicle Description
Section 07	Test Results
Section 08	Manufacturer Statements
Section 09	OBD System Description
Section 10	Description of Alternate-fueled Vehicles
Section 11	AECD Description
Section 12	Description of vehicles covered by certificate and test parameters
Section 13	Projected Sales
Section 14	Request for Certificate
Section 15	Other Information
Section 16	Confidential Information

01. Correspondence and Communication

Refer to Section 16.01 of this Test Group Application.

02. Durability Group Description

Durability Group Name:	TWHNEEVNNLEB
Combustion Cycle:	Electric
Engine Type:	Electric Motor
Fuel Used:	Power Grid Electricity

03. Evaporative / Refueling Family Description

Not applicable. Battery Electric Vehicles.

04. Durability Procedure Description

Not applicable. Battery Electric Vehicles.

05. Test Group Description

Durability Group Name:	TWHNEEVNNLEB
Test Group Name:	TWHNV00.0LEB
Electric Motor Type:	Front: AC, 3 Phase, Synchrony, With Permanent Magnets Rear: AC, 3 Phase, Synchrony, With Permanent Magnets
Electric Motor Size:	Total: 603 HP
Battery Type:	Lithium-ion Battery
Battery Capacity:	158 Ah
Battery rated voltage:	708 V
Vehicle Class	LDV
Federal Emissions Standards Class	Tier 3 BIN 0
California Emissions Standards Class	LEVIII ZEV

06. Test Vehicle Description

06.01. Test Vehicles

Vehicle ID	VIN	Model	Purpose	Tests Performed
GIC_C10_6100	#1024	ELETRE S Long Range	Range/Energy	5-Cycle
GIC_C10_6119	#1069	ELETRE S Performance	Range/Energy	5-Cycle

06.02. Test Parameters, Instruction

Engine Start Operation

1) After using the effective key to unlock the car and opening the doors, the instrument cluster and the Center Stack Display (CSD will light up, and the car will automatically power on.
2) If the driver is using the card key to unlock and enter the car, you need to place the card key in the wireless charging induction area. If the brake pedal is depressed and the gear is shifted to R or D position, the car starts in the driving mode.
3) After the driver enters the vehicle with the key fob/digital key, the vehicle starts by pressing the brake pedal. If the gear is shifted to R or D position, the car is in driving mode.
4) When the vehicle is in drivable mode, the READY indicator on instrument cluster will be illuminated.
5) After the vehicle reaches the READY state, you can put the card key in a different location in the vehicle if the phone's wireless charging function is required.
6) At conclusion of the driving cycle, set gear selector to P.
7) If you have closed all doors (including the bonnet and the tailgate) and are about to leave the car with the key, you can power off the car in the following ways:
   - Lock the car with the key.
   - If the driver door is not opened within 5 minutes, the car will automatically turn off the power.

Transmission Shift Operation

- Flick the gear lever to switch to different gears, while the corresponding gear information is displayed on the instrument cluster.
- Reverse (R): When the vehicle is parked, press the brake pedal, long toggle the gear lever forward and release it, and switch gears to R.
- Neutral (N): When the gear is in D or R, the lever is flicked forward or backwards shortly and the gear switches to N.
- Drive (D): When the vehicle is parked, press the brake pedal, long toggle the gear lever backwards and release it, and switch gears to D.
- Park (P): After the vehicle is parked, press the P button, the gear switches to P gear, and the electronic parking brake is automatically activated.

Selectable mode

All selectable modes to be left in default positions.

Cooling fan

One road-speed fan, centered upright, front of vehicle.

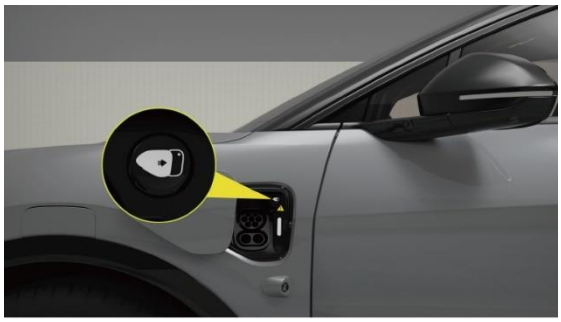
Drive mode:

All models are AWD.

06.03. Battery Charge Procedures

The charging port is located at the front left side of the vehicle, and the charging port cover can be opened or closed in the following ways:

a) Unlock the vehicle with a valid key, press the outside of the charging port cover, and the cover will open automatically; press the cover closing button or lock the vehicle, and the cover will be closed automatically.



b) Click the icon in the CSD, select the integrated charging port cover switch to automatically open or close the cover.

During the charging, the charging status of the car can be known through the following indication:

- Instrument cluster
- Centre Stack Display (CSD)
- Mobile APP
- Charging port indicator

The colors legend is described below:

- White (always on): Indicates that the indicator lamp is illuminated automatically when the charging port cover is opened.
- Green (flash): The charging is normal within a period of time after the charging plug is connected.
- Green: The charge is complete and lasts for 2 minutes.
- Orange (always on): Indicates that the battery preheating function is activated.
- Red: Failure occurred for 2 min during charging.

Charging with charging pile:

- Remove the charging plug from the charging pile, and insert it into the integrated charging port properly, at which point the electronic lock will be enabled automatically.
- Operate according to instructions on the charging pile to start charging the car.

06.04. Voltage and Current Measurement Procedures

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

How to Install the current clamps in HVB and LVB system

The vehicle is prepared to fit the clamps avoiding the insulate shield current measurement effect.

Total of 4 x Current clamps must be installed: 2 x HVB (front and rear battery outlet) and 2 x LVB outlet.

A HVB disconnect procedure is recommended after lifting the vehicle with a 2-post lift to better access to HVB output cables from the battery, especially in the rear side.

a) Open front bonnet and rear trunk and cheat both latches.
b) Open windows and lock the vehicle.
c) Disconnect HVB service plug located in front engine bay.
d) Leave the vehicle 5 minutes asleep.
e) Disconnect 12V Lithium battery located in rear trunk.
f) Disconnect 12V Lead battery located in rear trunk.
g) Verify there is no Voltage through the HVB instrumented cable located in the front engine bay.
h) Install 2 x clamps for LVB. Exact locations are marked on rear trunk and detailed below.

i) Install 2 x clamps for HVB (front and rear outlet). In case of Zeus e-motor rear configuration, 2 x HVB connectors must be removed before fitting the current clamp.

How to acquire the voltage

The vehicle is prepared with voltage banana plugs to be connected to Hioki power analyzer.

The HVB banana plugs are located inside a sealed bag in the front engine bay.

The LVB banana plugs are located inside a sealed bag under passenger seat footage.

06.05. Description of the Climate Control System

The automatic four-zone A/C control system is automatically controlled according to the pre-set temperature in the vehicle, and the temperature, air volume and air direction of the left front, right front, left rear and right rear climate area in the vehicle can be adjusted separately according to the ambient temperature, interior temperature, sunshine, air quality and window fog.

When setting the climate of individual zone manually, the climate of other zones can still be in auto mode.

The air conditioning compressor not only provides cooling for the passenger compartment, but also cools the battery. Therefore, in hot weather, even if the air conditioning is turned off, the compressor may still be working, which is a normal phenomenon. This is to maintain the battery in an optimal temperature range to ensure longer service life and optimal performance.

Climate control systems use R1234yf refrigerant.

Front climate control interface settings

ION switch: click to turn on or off the negative oxygen ion function of the A/C.

Streaming mirror defrosting/defogging switch: click to turn on or off the exterior rear view mirror display defrost/defog function.

A/C switch: click to turn on or off the A/C refrigeration system. In auto mode, the A/C mode is on by default.

A/C MAX switch: after this switch is turned on by clicking, the A/C temperature will be automatically adjusted to the lowest and the A/C air volume will be adjusted to the maximum.

Front windscreen defrost/defog switch: click on or off the maximum defrost/defogging function to quickly remove ice or fog from the front windscreen and side windows.

Four-zone sync switch: after the four-zone sync is activated by clicking, the temperature, air volume, blowing mode and auto mode in the vehicle can be adjusted synchronously from the driver side; after this feature is deactivated, each area can be can be adjusted separately. This function needs to be manually activated again every time the vehicle is started.

Rear windscreen and outside mirror defrost/defogging switches: click to turn on or off the defrost/defogging functions of rear windscreen and outside mirrors.

Internal circulation switch: click to activate the internal circulation of air in the vehicle.

External circulation switch: click to activate the external circulation of air in the vehicle.

Automatic circulation mode: when the A/C is turned to Auto mode, the internal/external circulation will be automatically activated.

ECO switch: click to turn on or off the economic operation mode of the A/C.

Window blowing mode: air flow blows front windscreen and front side window.

Face blowing mode: when the air outlet is opened, the air flow blows out from the centre and side air outlets, blowing the side faces of the driver and front passenger.

Foot blowing mode: air flow blows to the side feet of the driver and front passenger.

Click "-" or "+" switch on both sides of the fan to adjust the air volume at the corresponding side respectively. Adjust the air volume to reduce or increase by 1 gear, the higher the value, the greater the air volume.

Turn on auto mode and the air volume will be automatically adjusted.

Front A/C system switch: click to turn the front A/C system on or off.

Air quality system: click to view the working status of the air quality system.

Rear climate control interface settings

There is a rear A/C control panel on the center armrest of the rear seat. Some models have a rear A/C control panel in the rear seat center armrest.

Face blowing mode: when the air outlets are opened, the air flow blows out from the centre and side air outlets, blowing the faces of the rear passengers.

Feet blowing mode: air flow blows towards the feet of the rear passengers.

Auto mode: after clicking it on, the A/C system automatically controls the temperature, air volume and air direction according to the temperature you set in the vehicle, and maintains the temperature in the vehicle at the temperature value you set.

Click "-" or "+" switch on both sides of the fan to adjust the air volume at the corresponding side respectively. Adjust the air volume to reduce or increase by 1 gear, the higher the value, the greater the air volume.

Turn on auto mode and the air volume will be automatically adjusted.

Rear A/C system switch: click to turn the rear A/C system on or off.

06.06. BEV Proper and Safe Operation

ELETRE is driven by high voltage batteries, which may result in worse conditions such as high voltage electricity leakage, damage to battery pack, leakage of chemical liquid, etc. in the event of serious collisions. Therefore, the emergency rescue personnel should wear appropriate protective equipment to ensure personal safety when rescuing on the vehicle.

LOTUS supplies safety recommendations and special precautions and warnings for rescue personnel such as towing method, emergency rescue procedures, release method of high-voltage system, wading rescue and rescue of vehicle or fire. This detailed documentation can be found in the vehicle handbook.

06.07. Dynamometer Parameters

Vehicle	ETW	Target			Setting		
		A [lbf]	B [lbf/mph]	C [lbf/mph^2]	A [lbf]	B [lbf/mph]	C [lbf/mph^2]
GIC_C10_6100	6000	52.74	0.4334	0.0165	-7.83	0.1610	0.0177
GIC_C10_6119	6000	49.19	0.1899	0.0210	-8.08	-0.0412	0.0213

07. Test Results

07.01. Exhaust & Evaporative Standards

	Federal	California
Exhaust Emissions Standards	Tier 3 Bin 0	ZEV
Evaporative Standards	N.A.	N.A.

07.02. Certification tests and Test procedures

LOTUS chose the 5-cycle test procedures according to SAE J1634-2017, Appendix B, Option 2, for fuel economy labeling. The following certification tests IDs are detailed below for Range, Energy consumption and adjustment factor determination.

5-Cycle based Range & Energy Consumption	**ELETRE S Long Range GIC_C10_6100#1024**	**ELETRE S Performance GIC_C10_6119#1069**
MCT	SWHN10086726	SWHN10086727
UDDS	SWHN10086784	SWHN10086785
HW	SWHN10086805	SWHN10086806
US06	SWHN10086817	SWHN10086818
SC03	SWHN10086821	SWHN10086822
COLD UDDS 20F	SWHN10086825	SWHN10086826

For 5-Cycle Range and Energy Consumption results, please refer to 16.03 of this Test Group Application.

Certification Summary Information Report

Manufacturer	Wuhan Lotus Cars Co., Ltd	**Manufacturer Code**	WHN
Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--
Certificate Number	--	**CARB Executive Order #**	--
Certificate Issue Date	--	**Certificate Revision Date**	--
Certificate Effective Date	--	**Conditional Certificate**	--
CSI Revision #	--	**CSI Submission/Revision Date**	02/02/2026 02:53:05 AM
Model Year	2026		

Test Group Information

CSI Type	New	**Running Change Reference Number**	--
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Electric Motor

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Rechargeable Energy Storage System Indicator**	Yes
Multiple Fuel Combustion	--	**Off-board Charge Capable Indicator**	Yes
Fuel Cell Indicator	No	**EPA Vehicle Class**	LDV
Federal Clean Fuel Vehicle	Yes	**Federal Clean Fuel Vehicle Standard**	ZEV
Federal Clean Fuel Vehicle ILEV	No	**California Partial Zero Emissions Vehicle Indicator**	--
Durability Group Name	TWHNEEVNNLEB	**Durability Group Equivalency Factor**	1
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	**CAP2000 Conditional Certificate?**	N/A
Independent Commercial Importer?	--	**Alternative Fuel Converter Certificate?**	--
SFTP Federal Composite Compliance Identifier	Not Applicable	**SFTP Tier 2 Composite CO Option**	--
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	**OBD Demonstration Vehicle Test Group**	TWHNV00.0LEB
Test Group OBD Compliance Level	Full - no deficiencies	**Number of Test Group OBD Deficiencies**	0
OBD Deficiencies Comments	--		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Models Covered by this Certificate

Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Wuhan Lotus Cars Co., Ltd	1 - Wuhan Lotus Cars	804 - ELETRE S Performance	California + CAA Section 177 states	4-Wheel Drive	Automatic	1	No
Wuhan Lotus Cars Co., Ltd	1 - Wuhan Lotus Cars	803 - ELETRE S Long Range	California + CAA Section 177 states	4-Wheel Drive	Automatic	1	No
Wuhan Lotus Cars Co., Ltd	1 - Wuhan Lotus Cars	804 - ELETRE S Performance	Federal	4-Wheel Drive	Automatic	1	No
Wuhan Lotus Cars Co., Ltd	1 - Wuhan Lotus Cars	803 - ELETRE S Long Range	Federal	4-Wheel Drive	Automatic	1	No

Engine Description

Hybrid Type	--	**Hybrid Description**	--
Engine Type	--	**Mfr Engine Description**	--
Engine Block Arrangement	--	**Mfr Engine Block Arrangement Description**	--
Camless Valvetrain Indicator	--	**Oil Viscosity/Classification**	
Number of Cylinders/Rotors	--	**Mechanically Variable Compression Ratio Indicator**	--

After Treatment Device(s) (ATD)

Mfr After Treatment Device (ATD) Comments	--
Direct Ozone Reduction (DOR) Device	--
Mfr Emission Control Device Comments	--

Official Test Numbers

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

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Hybrid Electric Vehicle And Fuel Cell Information

Rechargable Energy Storage System	Battery(s)	**Rechargable Energy Storage System, if Other**	--
Battery Type	Lithium Ion	**Number of Battery Packs**	1
Total Voltage of Battery Packs	708	**Battery Energy Capacity**	158
Battery Specific Energy	168	**Battery Charger Type**	On-Board
Number of Capacitors	--	**Capacitor Rating (In Farads)**	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Both	**Driver Controlled Regenerative Braking**	Yes
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	2		
Motor/Generator Type 1	AC 3ph permanent magnet rear	**Rated Motor/Generator Power**	450
Motor/Generator Type 2	AC 3ph permanent magnet front	**Rated Motor/Generator Power**	225
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	**Usable H2 Fill Capacity (kg)**	--
Mfr Hybrid Electric/ Electric Vehicle Comments	--		

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Emission Data Vehicle Information

Vehicle ID / Configuration	GIC_C10_6100 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	SWHNV00.0LEB	**Original Evaporative/Refueling Family**	--
Original Test Vehicle Model Year	2025		

Vehicle Model

Represented Test Vehicle Make	Lotus	**Represented Test Vehicle Model**	ELETRE S Long Range

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	Yes	**Rechargeable Energy Storage System Indicator**	Yes
Rechargeable Energy Storage System	Battery(s)	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	0	**Odometer Correction Factor**	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Kilometers		
Engine Code	LEB	**Rated Horsepower**	603
Displacement (liters)	0.001		
Air Aspiration Method	Naturally Aspirated	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	--	**Air Aspiration Device Configuration**	--
Charge Air Cooler Type	--	**Drive Mode While Testing**	All Wheel Drive
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	5600	**Equivalent Test Weight (pounds)**	6000
GVWR (lbs)	--	**N/V Ratio**	9.2
Axle Ratio	1		
Transmission Type	Automatic	**# of Transmission Gears**	1
Transmission Lockup	No	**Creeper Gear**	No

Certification Summary Information Report

Test Group	TWHNV00.0LEB	Evaporative/Refueling Family	--

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	52.74	0.4334	0.0165	-7.83	0.161	0.0177	15.4
Cold CO	58.01	0.4768	0.0181	-21.28	-0.3285	0.0222	N/A
US06	52.74	0.4334	0.0165	-7.83	0.161	0.0177	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments This is 2025 ELETRE S Long Range; Front Motor Power - 225kW (EDS1 motor); Rear Motor Power - 225kW (EDS1 motor) Number of transmission gears on front motor EDS1: 1 Number of transmission gears on rear motor ESS1: 1 N/V ratio on front motor EDS1: 9.187 N/V ratio on rear motor EDS1: 9.187

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086784**	**Test Procedure**	**2 - CVS 75 and later (w/o can. load)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	04/05/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9539	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	14.885	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	28.92	116.5456432
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption Phase1 = 310.8 Wh/mi; Phase2 = 278.4 Wh/mi; Phase3 = 297.1 Wh/mi; Phase4 = 274.8 Wh/mi Drive trace indicators Ph1 ASCR (%) = -0.473; EER (%) = -0.635; IWR (%) = -0.070 Ph2 ASCR (%) = -1.081; EER (%) = -0.860; IWR (%) = -2.044 Ph3 ASCR (%) = -3.795; EER (%) = -2.326; IWR (%) = -5.076 Ph4 ASCR (%) = -0.877; EER (%) = -0.954; IWR (%) = -1.761

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--

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

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086805**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	04/05/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9539	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	10.253	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.52	--
DT-EER (Drive Trace Energy Economy Rating)	0.215	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.089	--
MFR FE (Manufacturer Fuel Economy)	28.51	118.2216766
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption = 285.1 Wh/mi

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--

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

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086817**	**Test Procedure**	**90 - US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	04/05/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9539	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	7.985	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	35.7	94.4117647
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption Phase 1 (Highway) = 390.2 Wh/mi; Phase 2 (City) = 347.6 Wh/mi Drive trace indicators Ph city ASCR (%) = -0.981; EER (%) = 0.451; IWR (%) = 0.439 Ph hw ASCR (%) = -10.112; EER (%) = -3.797; IWR (%) = -13.567

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086821**	**Test Procedure**	**95 - SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/23/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	10124	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	3.36	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-7.851	--
DT-EER (Drive Trace Energy Economy Rating)	-5.35	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-11.216	--
MFR FE (Manufacturer Fuel Economy)	40.23	83.7807606
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption = 402.3 Wh/mi

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086726**	**Test Procedure**	**77 - Multi-Cycle Test (MCT)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	03/27/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	8671	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	230	**Recharge Event Energy (kiloWatt-hours)**	128.444
Charge Depleting Range (Calculated miles)	405.214	**Charge Depleting Range (Actual miles)**	405.214
Charge Depleting Range Highway (Calculated miles)	390.533	**Derived 5-Cycle Coefficient Model Year**	--
All Electric Range Unadjusted (miles)	--	**Equivalent All Electric Range (miles)**	405.214
Number of Charge Depleting Bags/Phases Conducted	8	**Transition Bag/Phase Number**	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.438
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.044
Drive Trace Energy Economy Rating	-0.081
Drive Trace Inertia Work Ratio Rating	0.021
Integrated DC KW-HRS	2.1717
Manufacturer Fuel Economy	29.2

Charge Depleting Bag/Phase #2

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.246
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	4.39
Drive Trace Energy Economy Rating	0.077
Drive Trace Inertia Work Ratio Rating	5.397
Integrated DC KW-HRS	2.9747
Manufacturer Fuel Economy	29.02

Charge Depleting Bag/Phase #3

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.432
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.654
Drive Trace Energy Economy Rating	0.076
Drive Trace Inertia Work Ratio Rating	1.267
Integrated DC KW-HRS	2.1144
Manufacturer Fuel Economy	28.45

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	261.443
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0.232
Drive Trace Inertia Work Ratio Rating	0
Integrated DC KW-HRS	89.142
Manufacturer Fuel Economy	34.09

Charge Depleting Bag/Phase #5

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.506
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-2.374
Drive Trace Energy Economy Rating	-1.626
Drive Trace Inertia Work Ratio Rating	-3.203
Integrated DC KW-HRS	1.9854
Manufacturer Fuel Economy	26.45

Charge Depleting Bag/Phase #6

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.284
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	4.767
Drive Trace Energy Economy Rating	0.281
Drive Trace Inertia Work Ratio Rating	6.254
Integrated DC KW-HRS	2.8678
Manufacturer Fuel Economy	27.89

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.519
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-3.644
Drive Trace Energy Economy Rating	-3.586
Drive Trace Inertia Work Ratio Rating	-4.936
Integrated DC KW-HRS	2.0514
Manufacturer Fuel Economy	27.28

Charge Depleting Bag/Phase #8

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	23.854
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	62.564
Drive Trace Energy Economy Rating	-1.135
Drive Trace Inertia Work Ratio Rating	43.833
Integrated DC KW-HRS	7.8279
Manufacturer Fuel Economy	32.81

Manufacturer Test Comments MCT UBE energy = 111.143 kWh Due to the system only allows metrics between -99.99 to 99.99, '0' are input in the test results. The charge depleting bag/phase #4 real data metrics are: DT-ASCR = 289.46 DT-IWRR = 579.445

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086825**	**Test Procedure**	**86 - Charge Depleting 20 Degree F FTP**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	04/04/2024	**Fuel**	N/A
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	N/A	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9515	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	230	**Recharge Event Energy (kiloWatt-hours)**	128.444
Charge Depleting Range (Calculated miles)	14.9	**Charge Depleting Range (Actual miles)**	14.9
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	--
All Electric Range Unadjusted (miles)	--	**Equivalent All Electric Range (miles)**	14.9
Number of Charge Depleting Bags/Phases Conducted	4	**Transition Bag/Phase Number**	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.58
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	2.65
Drive Trace Energy Economy Rating	0.557
Drive Trace Inertia Work Ratio Rating	3.267
Integrated DC KW-HRS	2.2679
Manufacturer Fuel Economy	63.34

Charge Depleting Bag/Phase #2

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.843
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	3.168
Drive Trace Energy Economy Rating	1.979
Drive Trace Inertia Work Ratio Rating	4.818
Integrated DC KW-HRS	1.9653
Manufacturer Fuel Economy	51.14

Charge Depleting Bag/Phase #3

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.587
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	2.092
Drive Trace Energy Economy Rating	0.534
Drive Trace Inertia Work Ratio Rating	3.337
Integrated DC KW-HRS	1.7915
Manufacturer Fuel Economy	49.05

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.845
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	2.064
Drive Trace Energy Economy Rating	1.276
Drive Trace Inertia Work Ratio Rating	2.836
Integrated DC KW-HRS	1.6788
Manufacturer Fuel Economy	43.65

Manufacturer Test Comments 2xUDDS 20F test +MY25 requirement. DC energy consumption Phase 1 = 633.4 Wh/mi; Phase 2 = 511.4 Wh/mi; Phase 3 = 490.5 Wh/mi; Phase 4 = 436.5 Wh/mi

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Emission Data Vehicle Information

Vehicle ID / Configuration	GIC_C10_6119 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	SWHNV00.0LEB	**Original Evaporative/Refueling Family**	--
Original Test Vehicle Model Year	2025		

Vehicle Model

Represented Test Vehicle Make	Lotus	**Represented Test Vehicle Model**	ELETRE S Performance

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	Yes	**Rechargeable Energy Storage System Indicator**	Yes
Rechargeable Energy Storage System	Battery(s)	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	0	**Odometer Correction Factor**	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Kilometers		
Engine Code	LEB	**Rated Horsepower**	603
Displacement (liters)	0.001		
Air Aspiration Method	Naturally Aspirated	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	--	**Air Aspiration Device Configuration**	--
Charge Air Cooler Type	--	**Drive Mode While Testing**	All Wheel Drive
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	5666	**Equivalent Test Weight (pounds)**	6000
GVWR (lbs)	--	**N/V Ratio**	9.2
Axle Ratio	1		
Transmission Type	Automatic	**# of Transmission Gears**	1
Transmission Lockup	No	**Creeper Gear**	No

Certification Summary Information Report

Test Group	TWHNV00.0LEB	Evaporative/Refueling Family	--

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	49.19	0.1899	0.021	-8.08	-0.0412	0.0213	14.8
Cold CO	54.11	0.2091	0.0231	-28.57	-0.3137	0.024	N/A
US06	49.19	0.1899	0.021	-7.96	0.0127	0.0206	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments This is 2025 ELETRE S Performance; Front Motor Power - 225kW (EDS1 motor); Rear Motor Power - 225kW (EDS1 motor) Number of transmission gears on front motor EDS1: 1 Number of transmission gears on rear motor ESS1: 1 N/V ratio on front motor EDS1: 9.187 N/V ratio on rear motor EDS1: 9.187

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086785**	**Test Procedure**	**2 - CVS 75 and later (w/o can. load)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/23/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7829	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	14.953	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	29.22	115.349076
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption Phase1 = 308.0 Wh/mi; Phase2 = 282.2 Wh/mi; Phase3 = 301.0 Wh/mi; Phase4 = 280.5 Wh/mi Drive trace indicators Ph1 ASCR (%) = -0.765; EER (%) = -1.277; IWR (%) = -0.274 Ph2 ASCR (%) = 0.947; EER (%) = 0.073; IWR (%) = 1.171 Ph3 ASCR (%) = -0.279; EER (%) = -0.559; IWR (%) = -0.101 Ph4 ASCR (%) = 0.782; EER (%) = 0.220; IWR (%) = 0.641

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--

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

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086806**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/23/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7829	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	10.263	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	4.241	--
DT-EER (Drive Trace Energy Economy Rating)	-0.135	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	5.117	--
MFR FE (Manufacturer Fuel Economy)	28.78	117.1125782
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption = 287.8 Wh/mi

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--

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

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086818**	**Test Procedure**	**90 - US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/23/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7829	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	8.011	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	37.32	90.3135048
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption Phase 1 (Highway) = 419.7 Wh/mi; Phase 2 (City) = 360.0 Wh/mi Drive trace indicators Ph city ASCR (%) = 0.347; EER (%) = 1.071; IWR (%) = 0.971 Ph hw ASCR (%) = -7.072; EER (%) = -3.000; IWR (%) = -9.107

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086822**	**Test Procedure**	**95 - SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/17/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7763	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (kilowatt-hour per 100 miles)
ACT-DISTANCE (Actual Distance Driven (miles))	3.573	--
METHANE (CH4 - Methane)	0	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.033	--
DT-EER (Drive Trace Energy Economy Rating)	0.087	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.754	--
MFR FE (Manufacturer Fuel Economy)	46.97	71.7585693
NOX (Nitrogen Oxide)	0	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--

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

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

Manufacturer Test Comments DC energy consumption = 469.7 Wh/mi

Certification Summary Information Report

Test Group TWHNV00.0LEB **Evaporative/Refueling Family** --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0.0	--	--	--	0	--	0	0	Pass

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086727**	**Test Procedure**	**77 - Multi-Cycle Test (MCT)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/10/2024	**Fuel**	Electricity
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	6841	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	230	**Recharge Event Energy (kiloWatt-hours)**	130.721
Charge Depleting Range (Calculated miles)	405.538	**Charge Depleting Range (Actual miles)**	405.538
Charge Depleting Range Highway (Calculated miles)	395.039	**Derived 5-Cycle Coefficient Model Year**	--
All Electric Range Unadjusted (miles)	--	**Equivalent All Electric Range (miles)**	405.538
Number of Charge Depleting Bags/Phases Conducted	8	**Transition Bag/Phase Number**	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.475
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.962
Drive Trace Energy Economy Rating	-0.919
Drive Trace Inertia Work Ratio Rating	1.415
Integrated DC KW-HRS	2.2192
Manufacturer Fuel Economy	29.69

Charge Depleting Bag/Phase #2

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.265
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	9.644
Drive Trace Energy Economy Rating	0.543
Drive Trace Inertia Work Ratio Rating	12.945
Integrated DC KW-HRS	2.956
Manufacturer Fuel Economy	28.78

Charge Depleting Bag/Phase #3

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.469
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.843
Drive Trace Energy Economy Rating	-1.607
Drive Trace Inertia Work Ratio Rating	-1.651
Integrated DC KW-HRS	2.1587
Manufacturer Fuel Economy	28.9

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	259.953
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0.35
Drive Trace Inertia Work Ratio Rating	0
Integrated DC KW-HRS	90.5851
Manufacturer Fuel Economy	34.85

Charge Depleting Bag/Phase #5

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.475
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.375
Drive Trace Energy Economy Rating	-1.031
Drive Trace Inertia Work Ratio Rating	-0.806
Integrated DC KW-HRS	1.9916
Manufacturer Fuel Economy	26.64

Charge Depleting Bag/Phase #6

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.284
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.495
Drive Trace Energy Economy Rating	5.692
Drive Trace Inertia Work Ratio Rating	7.43
Integrated DC KW-HRS	2.8864
Manufacturer Fuel Economy	28.07

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.456
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.485
Drive Trace Energy Economy Rating	-1.007
Drive Trace Inertia Work Ratio Rating	-0.814
Integrated DC KW-HRS	2.0447
Manufacturer Fuel Economy	27.42

Charge Depleting Bag/Phase #8

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	21.717
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	45.331
Drive Trace Energy Economy Rating	-0.628
Drive Trace Inertia Work Ratio Rating	18.03
Integrated DC KW-HRS	7.4773
Manufacturer Fuel Economy	34.43

Manufacturer Test Comments MCT UBE energy = 112.319 kWh Due to the system only allows metrics between -99.99 to 99.99, '0' are input in the test results. The charge depleting bag/phase #4 real data metrics are: DT-ASCR = 218.000 DT-IWRR = 436.847

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test #	**SWHN10086826**	**Test Procedure**	**86 - Charge Depleting 20 Degree F FTP**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	62 - Electricity
Test Date	05/14/2024	**Fuel**	N/A
Fuel Batch ID	--	**Fuel Calibration Number**	--
Vehicle Class	N/A	**DF Type**	Mfr. Assigned
Verify Test Lab ID	Applus IDIADA Automotive Technology		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7516	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	230	**Recharge Event Energy (kiloWatt-hours)**	130.721
Charge Depleting Range (Calculated miles)	14.9	**Charge Depleting Range (Actual miles)**	14.9
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	--
All Electric Range Unadjusted (miles)	--	**Equivalent All Electric Range (miles)**	14.9
Number of Charge Depleting Bags/Phases Conducted	4	**Transition Bag/Phase Number**	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.555
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	4.281
Drive Trace Energy Economy Rating	2.45
Drive Trace Inertia Work Ratio Rating	5.268
Integrated DC KW-HRS	2.0611
Manufacturer Fuel Economy	57.97

Charge Depleting Bag/Phase #2

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.797
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.816
Drive Trace Energy Economy Rating	1.011
Drive Trace Inertia Work Ratio Rating	0.786
Integrated DC KW-HRS	1.8122
Manufacturer Fuel Economy	47.73

Charge Depleting Bag/Phase #3

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.561
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.552
Drive Trace Energy Economy Rating	-0.146
Drive Trace Inertia Work Ratio Rating	1.175
Integrated DC KW-HRS	1.4414
Manufacturer Fuel Economy	40.47

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.811
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	2.218
Drive Trace Energy Economy Rating	2.764
Drive Trace Inertia Work Ratio Rating	3.071
Integrated DC KW-HRS	1.5128
Manufacturer Fuel Economy	39.69

Manufacturer Test Comments 2xUDDS 20F test +MY25 requirement. DC energy consumption Phase 1 = 579.7 Wh/mi; Phase 2 = 477.3 Wh/mi; Phase 3 = 404.7 Wh/mi; Phase 4 = 396.9 Wh/mi

Fuel Properties

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	CVS 75 and later (w/o can. load)

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	US06

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	Charge Depleting 20 Degree F FTP

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	Multi-Cycle Test (MCT)

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	SC03

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0	0
150,000 miles	CO	--	--	--	--	--	--	0	0

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California ZEV
Fuel	Electricity	**Test Procedure**	Charge Depleting 20 Degree F FTP

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 0
Fuel	Electricity	**Test Procedure**	HWFE

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0
150,000 miles	CREE	--	--	--	--	--	--	0	0

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--

Glossary

Useful Life

4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		

Emission Name

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

Certification Region

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--
CA	California + CAA Section 177 states	FA	Federal
Exhaust Emission Standard Level			
B1	Federal Tier 2 Bin 1	T3B160	Federal Tier 3 Bin 160
B2	Federal Tier 2 Bin 2	T3B125	Federal Tier 3 Bin 125
B3	Federal Tier 2 Bin 3	T3B110	Federal Tier 3 Transitional Bin 110
B4	Federal Tier 2 Bin 4	T3B85	Federal Tier 3 Transitional Bin 85
B5	Federal Tier 2 Bin 5	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
B6	Federal Tier 2 Bin 6	T3B70	Federal Tier 3 Bin 70
B7	Federal Tier 2 Bin 7	T3B50	Federal Tier 3 Bin 50
B8	Federal Tier 2 Bin 8	T3B30	Federal Tier 3 Bin 30
B9	Federal Tier 2 Bin 9	T3B20	Federal Tier 3 Bin 20
B10	Federal Tier 2 Bin 10	T3B0	Federal Tier 3 Bin 0
B11	Federal Tier 2 Bin 11	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2	California LEV-II LEV	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2OP	California LEV-II LEV Optional	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
U2	California LEV-II ULEV	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
S2	California LEV-II SULEV	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
ZEV	California ZEV	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
OT	Other	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
T1	Federal Tier 1	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
PZEV	California PZEV	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L2LEV160	California LEV-II LEV160	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L2ULEV125	California LEV-II ULEV125	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L2SULEV30	California LEV-II SULEV30	HDV3B0	Federal Tier 3 HD Class 3 Bin 0
L2LEV395	California LEV-II LEV395	L4SULEV100	California LEV-IV SULEV100
L2ULEV340	California LEV-II ULEV340	L4SULEV125	California LEV-IV SULEV125
L2LEV630	California LEV-II LEV630	L4SULEV15	California LEV-IV SULEV15
L2ULEV570	California LEV-II ULEV570	L4SULEV150	California LEV-IV SULEV150
L3LEV160	California LEV-III LEV160	L4SULEV170	California LEV-IV SULEV170
L3ULEV125	California LEV-III ULEV125	L4SULEV175	California LEV-IV SULEV175
L3ULEV70	California LEV-III ULEV70	L4SULEV20	California LEV-IV SULEV20
L3ULEV50	California LEV-III ULEV50	L4SULEV200	California LEV-IV SULEV200
L3SULEV30	California LEV-III SULEV30	L4SULEV230	California LEV-IV SULEV230
L3SULEV20	California LEV-III SULEV20	L4SULEV25	California LEV-IV SULEV25
L3LEV395	California LEV-III LEV395	L4SULEV30	California LEV-IV SULEV30
L3ULEV340	California LEV-III ULEV340	L4SULEV75	California LEV-IV SULEV75
L3ULEV250	California LEV-III ULEV250	L4SULEV85	California LEV-IV SULEV85
L3ULEV200	California LEV-III ULEV200	L4ULEV125	California LEV-IV ULEV125

Certification Summary Information Report

Test Group	TWHNV00.0LEB	**Evaporative/Refueling Family**	--
L3SULEV170	California LEV-III SULEV170	L4ULEV200	California LEV-IV ULEV200
L3SULEV150	California LEV-III SULEV150	L4ULEV250	California LEV-IV ULEV250
L3LEV630	California LEV-III LEV630	L4ULEV270	California LEV-IV ULEV270
L3ULEV570	California LEV-III ULEV570	L4ULEV40	California LEV-IV ULEV40
L3ULEV400	California LEV-III ULEV400	L4ULEV400	California LEV-IV ULEV400
L3ULEV270	California LEV-III ULEV270	L4ULEV50	California LEV-IV ULEV50
L3SULEV230	California LEV-III SULEV230	L4ULEV60	California LEV-IV ULEV60
L3SULEV200	California LEV-III SULEV200	L4ULEV70	California LEV-IV ULEV70

Transmission Type Code			
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual
A	Automatic	OT	Other
AM	Automated Manual	SA	Semi-Automatic
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)

Drive System Code			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		

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

08. Manufacturer Statement (Emission Testing Waiver)

Not Applicable. Not required for Battery Electric Vehicles.

09. OBD System Description

Not Applicable. Not required for Battery Electric Vehicles.

10. Description of Alternate-fueled Vehicles

Wuhan Lotus Co. Ltd. produces Battery Electric Vehicles.

11. AECD Description

Battery Electric Vehicle: No Auxiliary Emissions Control Devices

12. Description of vehicles covered by certificate and test parameters

List of Certified Vehicles

Durability Group	TWHNEEVNNLEB		
Test Group	TWHNV00.0LEB		
Emission Control	NA (BEV)		
Exhaust	NA (BEV)		
Evaporative	NA (BEV)		
Model	ELETRE S Long Range	ELETRE S Performance	
Carline	803	804	
Vehicle Class	LDV	LDV	LDV
Vehicle ID Tested	GIC_C10_6100	GIC_C10_6119	N.A.
ETW	6000	6000	6000
Curb Weight [lbs]	5600	5666	N.A.
Engine Code	LEB		
Drive type	AWD	AWD	AWD
Tire Size	Front: 275/40 R22 Rear: 315/35 R22	Front: 275/40 R22 Rear: 315/35 R22	Front: 275/35 R23 Rear: 315/30 R23
Axle Ratio	Front-1, Rear-1	Front-1, Rear-1	Front-1, Rear-1
N/V Ratio	Front-9.187 Rear-9.187	Front-9.187 Rear-9.187	Front-9.187 Rear-9.187
RLHP@50mph	15.41	14.83	14.64
Target RL A [lbf]	52.74	49.19	47.78
Target B [lbf/mph]	0.4334	0.1899	0.1899
Target C [lbf/mph^2]	0.0165	0.0210	0.0210

*Test vehicles are selected on worst case

Transmission

	ELETRE S Long Range ELETRE S Performance
Transmission Type	AT
Number of Transmission gears	Front: 1, Rear: 1

Battery details

Battery Type	Lithium-ion
Total Weight (kg)	665
Rated Voltage (V)	708
Rated Capacity (Ah)	158
Energy Density (Wh/kg)	168

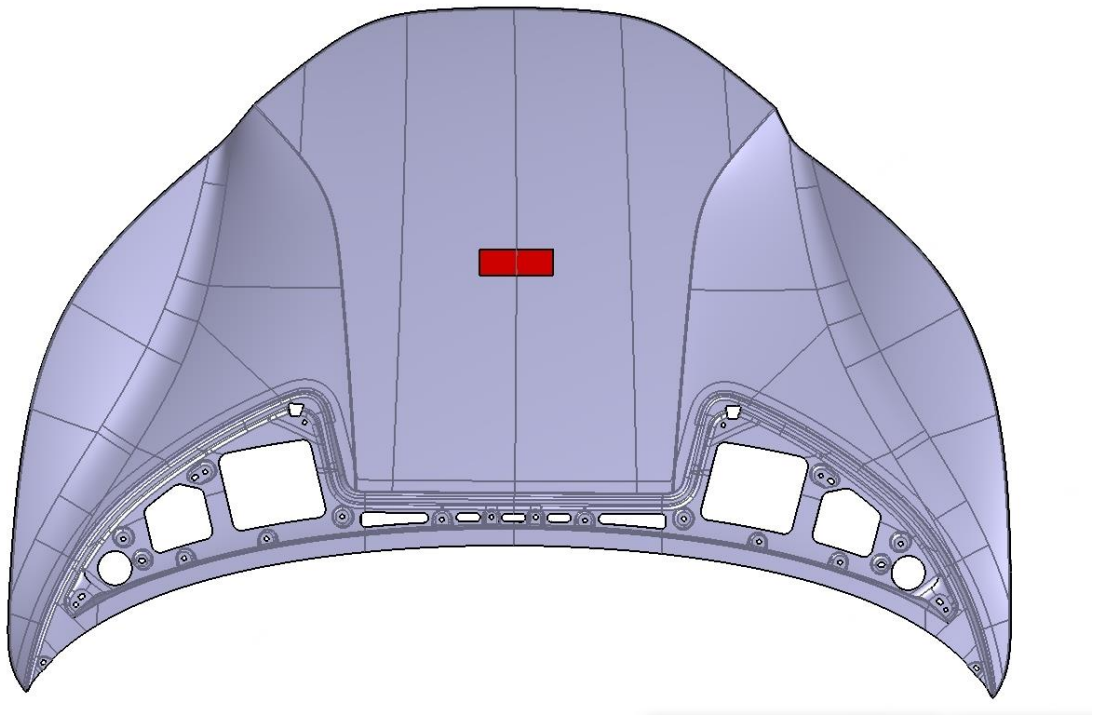
Driving electric motor details

Engine Code	LEB
Front axle	
Front motor type	TZ230XS225
Working principle	AC, 3 Phases, Permanent magnet
Rated Speed (rpm)	17,000
Peak Power (kW)	225
Pear Torque (N.m)	355
Rear axle	
Rear motor type	TZ230XS225
Working principle	AC, 3 Phases, Permanent magnet
Rated Speed (rpm)	17,000
Peak Power (kW)	225
Peak Torque (N.m)	355

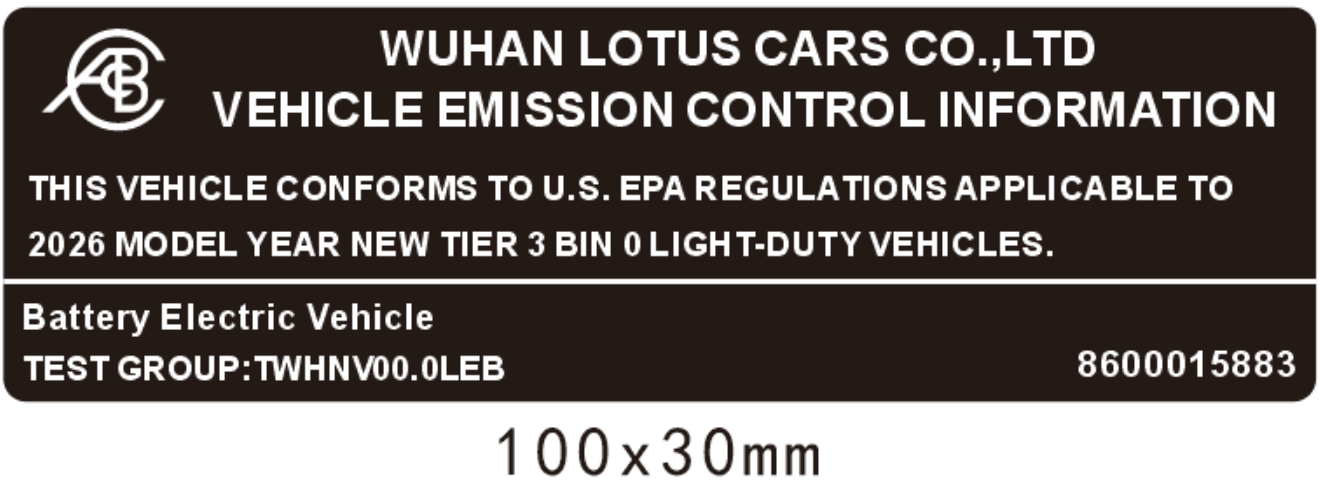
VEHICLE EMISSION CONTROL INFORMATION LABEL

Label size: 130mm*45mm

Label location: Inside of the hood



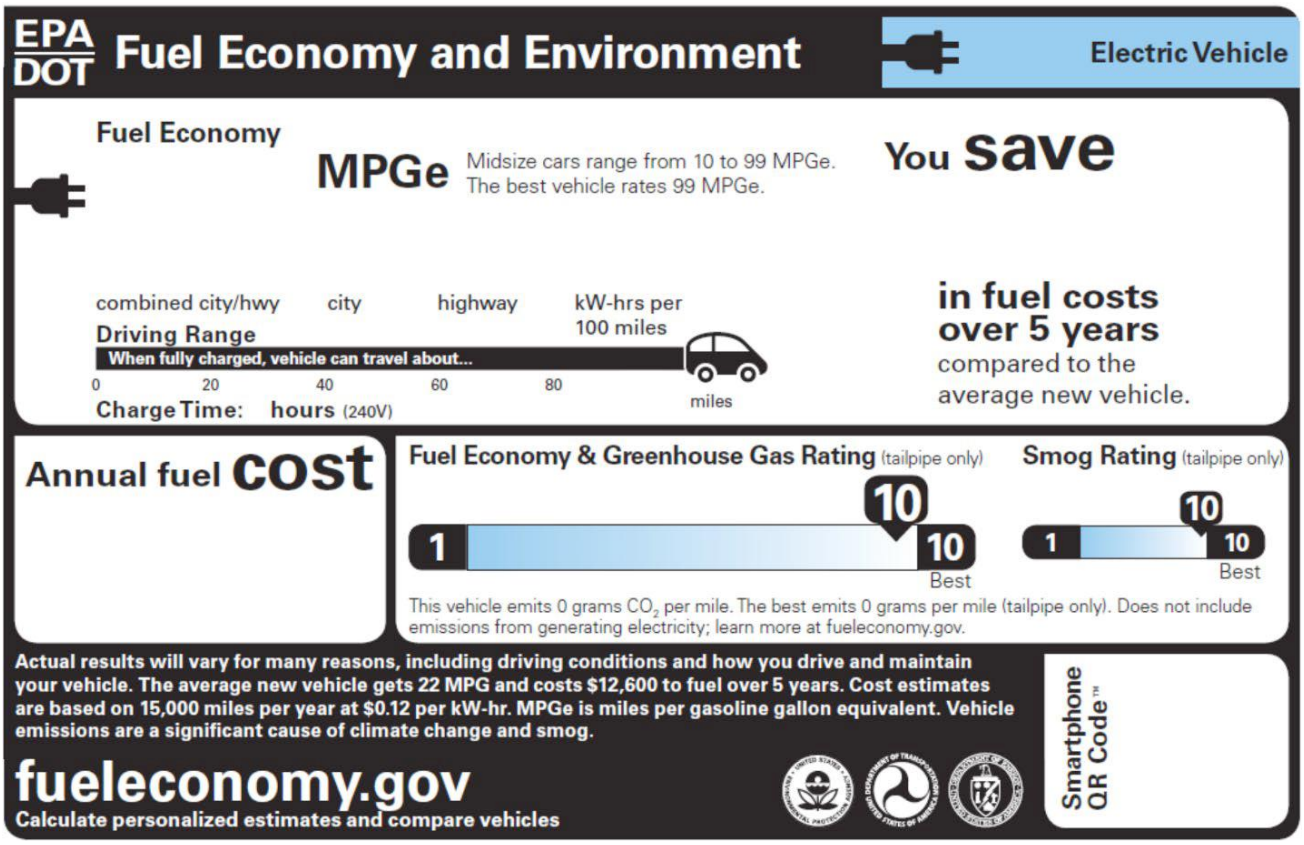
Label Sample:



100x30mm

Issued: 202602

Fuel Economy Label



Issued: 202602

13. Projected Sales

Refer to Section 16 of this Test Group Application

14. Request for Certificate

Mr. David Wright

Light-Duty Vehicle Compliance Branch

Implementation, Analysis, and Compliance Division

U.S.Environmental Proiection Agency

2000 Traverwcod Drve

Ann Arbor, Michigan 48105

Subject: Request for issuance of a new Certificate of Conformity-Initial application

Dear Mr. David

Wuhan Lotus Cars Co., Ltd. (Lotus) herewith submits an application for Certification for 2026MY light-duty vehicles (LDV's) in test group **TWHNV00.0LEB** which comprises of all Zero Emission Vehicles

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

Please do not hesitate to contact me if you have any questions regarding this submission.

Sincerely yours,

Wuhan Lotus Cars Co.. Ltd.

Ms Han FANG

Senior Director- Vehicle Homologation

15. Other Information

15.01. Revision Index

Section No.	Date:	Comments:	RC Number
Part I			
All	02/2026	Initial application	
Part II			
All	02/2026	Initial application	

15.02. Running Change

Model Year: 2026

Test Group: TWHNV00.0LEB

Model: ELETRE S Long Range, ELETRE S Performance

RC number	Description of change	Date

15.03. Fee Filling Form

Please refer to the following page.

US EPA Fee Form

Help and EPA Instructions

* Required Field

General Information

Date: 02/05/2026

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

WHN

Manufacturer Name *

Wuhan Lotus Cars Co., Ltd.

Contact Name *

Ray Wang

Contact Email Address *

yiqun.wang7@geely.com

Contact Phone *

008613930348533

Calendar Year complete application submitted to EPA *

2026

PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2026, through December 31, 2026. 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 *

TWHNV00.0LEB

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? *

No

Payment Information

Amount Owed

$32,317.00

Payment Type *

Offline Wire

Comments

MY2026 LOTUS Cars Test Group - ELETRE S

EPA Form Number 3520-29
OMB Control No. 2060-0545
Approval expires 7/31/2027
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.

16. Confidential Information

N/A