



Application for Certification
Part 1

2027 ModelYear

Durability Group: VCRXHHGNNF03
Evaporative Family: VCRXR0108FEJ

Test Group: VCRXT01.6551
Hybrid

Four Stroke, Otto Cycle, Gasoline Fueled, Direct FI

Ceramic Monolith Pt, Pd, Rh Close Coupled Catalyst

1.6 Liter Inline-4
LDT2

Applicable Standards:
50 State - Tier 4i BIN 30

Vehicles Covered:
Jeep Cherokee, AWD

Vehicle(s) Run:
VID 1 config., Vehicle ID L5KMJ5201 (Exh.)
VID 2 config., Vehicle ID L5KMJ5753 (Evap)

For Questions, Avinash Manivannan 248.934.7024 Gary J. Arvan 248.221.9461
All testing completed – Unconditional Cert request



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Section 1 Correspondence and Communication

For questions dealing with the Part I application for this Test Group contact:

<u>Name</u>	Gary J. Arvan	Avinash Manivannan
<u>Title</u>	Director	Certification Engineer
<u>Responsibility</u>	Vehicle Safety & Environmental Homologation Programs	Application Submission
<u>Phone</u>	248.221.9461	248.934.7024
<u>E-mail</u>	gary.arvan@stellantis.com	avinaschander.manivannan@stellantis.com
<u>Fax</u>	248.576.7928	248.576.7928

For a complete listing of all Correspondence and Communication Information for FCA US LLC, please see:
"Common Section Book - Section 1 Correspondence and Communication"



Section 2 **Durability Group Description**

Durability Group Name: VCRXHHGNNF03

For a complete description of the Durability Group Description please see:
"Common Section Book - Section 2. Durability Group Description"



Section 3 Evaporative/Refueling Family Description

Evaporative/Refueling Family Name(s): VCRXR0108FEJ

For a complete description of the Evaporative/Refueling Family Description please see:
"Common Section Book - Section 3. Evaporative/Refueling Family Description "

For ORVR Agency Review Sign Off please see:
"Common Section Book - Section 16. Agency Approvals"



Section 4 Durability Procedure Description

Durability Group: VCRXHHGNNF03

Durability Provision Statement:

Based on FCA US LLC 's good engineering judgement, all the vehicles described in this Application for Certification comply with all applicable intermediate and full useful life standards.

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Aged Components were used.

Indicate whether additive or multiplicative DF's were used.

N/A

List all DF's calculated at both full and intermediate useful life

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)

And applicable standards (test results and vehicle description).

CARB - Reference Cert Review Sheet

Evaporative/Refueling Family:

VCRXR0108FEJ

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Yes - Bench Aging

Indicate whether additive or multiplicative DF's were used.

Additive

List all DF's calculated at both full and intermediate useful life

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)

And applicable standards (test results and vehicle description).

CARB - Reference Cert Review Sheet



Section 5 Test Group Description

Test Group Name:	VCRXT01.6551
Engine displacements covered:	1.6L
Arrangement and number of cylinders:	Inline-4
Vehicle class(es) covered:	LDT2
Emission standards class:	BIN 30
AB71 Qualified Vehicles:	No

Certification Summary Information Report

Manufacturer	FCA US LLC	Manufacturer Code	CRX
Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	06/22/2026 03:16:11 PM
Model Year	2027		

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ						
Test Group Information									
CSI Type	Update for Correction	Running Change Reference Number	--						
GHG Exempt Status	Not Exempt								
Drive Sources and Fuel(s)									
Drive Source #1:	Combustion Engine								
	<table border="1"> <tr> <th>Fuel</th><th>Basic Fuel Metering System</th><th>Lean Burn Strategy Indicator</th></tr> <tr> <td>Gasoline</td><td>Multipoint/sequential fuel injection</td><td>No</td></tr> </table>	Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator	Gasoline	Multipoint/sequential fuel injection	No		
Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator							
Gasoline	Multipoint/sequential fuel injection	No							
Drive Source #2:	Electric Motor								
	<table border="1"> <tr> <th>Fuel</th><th>Basic Fuel Metering System</th><th>Lean Burn Strategy Indicator</th></tr> <tr> <td>Electricity</td><td>--</td><td>No</td></tr> </table>	Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator	Electricity	--	No		
Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator							
Electricity	--	No							
Hybrid Indicator	Yes								
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes						
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	No						
Fuel Cell Indicator	No	EPA Vehicle Class	LDT2						
Federal Clean Fuel Vehicle	Yes	Federal Clean Fuel Vehicle Standard	LEV						
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No						
Durability Group Name	VCRXHHGNF03	Durability Group Equivalency Factor	1.0						
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	Tier 3	SFTP Tier 2 Composite CO Option	No						
SFTP LEV-III Composite Compliance Indicator	Yes								
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VCRXT01.6551						
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	4						
OBD Deficiencies Comments	1. SAE J1979-2 implementation 2. Adaptive cruise control and parallel park systems default action 3. Evaporative leak detection, purge flow, and high flow purge monitors Mode \$06 reporting 4. Vehicle operation tracking lifetime counters implementation								
Mfr Test Group Comments	T4iBIN30 E10 - City Litmus Value: 31.6; City Litmus Threshold: 30.7; Hwy Litmus Value: 29.7; Hwy Litmus Threshold: 29.1 This test group is being certified to Tier 4 Interim standards. FCA US LCC agrees to meet the Tier 4i BIN 30 standards and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group VCRXT01.6551								
Mfr Exhaust / Evap Standards Comments	--								

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	05/08/2026 10:01:47 AM				
Integrated ORVR?	Yes	Fuel(s)	Electricity, Gasoline				
Multiple Fuel Storage	Fuels Stored Separately						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	Plastic				
Fill Pipe Seal Type	Liquid seal						
Air Intake System Vapor Storage Device?	No	Air Intake System Vapor Storage Device Description	--				
Fuel System Vapor Storage Canister?	No	Other Vapor Storage	--				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	113	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	0				
Mfr Evaporative/Refueling Family Comments	--						
Leak Family Details							
Leak Family Indicator	Yes						
Canister Bleed Test Indicator	No	Applicability of Evaporative Canister Bleed Test	--				
Evaporative Canister Bleed Test Comments	--						
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--				
CARB Fuel Only (Rig) Test Comments	--						
Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description				
VCRXR0108FEJ-LF1	50 State	0.02	--				
Models Covered by this Certificate							
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
FCA US LLC	5 - Jeep	530 - Cherokee AWD	Federal	All Wheel Drive	Continuously Variable	1	No
FCA US LLC	5 - Jeep	530 - Cherokee AWD	California + CAA Section 177 states	All Wheel Drive	Continuously Variable	1	No
Engine Description							
Hybrid Type	IC Engine/Electric Motor			Hybrid Description	--		
Engine Type	4-Stroke Spark Ignition			Mfr Engine Description	--		
Engine Block Arrangement	Inline			Mfr Engine Block Arrangement Description	--		
Camless Valvetrain Indicator	No			Oil Viscosity/Classification	0W-20		
Number of Cylinders/Rotors	4			Mechanically Variable Compression Ratio Indicator	N		

Certification Summary Information Report

Test Group		VCRXT01.6551		Evaporative/Refueling Family		VCRXR0108FEJ					
After Treatment Device(s) (ATD)											
ATD Number		ATD Type		ATD Precious Metal		Substrate Material		Substrate Construction			
1		Three-way catalyst		Platinum + Palladium + Rhodium		Ceramic		Monolith			
2		Three-way catalyst		Platinum + Rhodium		Ceramic		Monolith			
Mfr After Treatment Device (ATD) Comments		THREE WAY CATALYST									
Direct Ozone Reduction (DOR) Device		Not Equipped									
Mfr Emission Control Device Comments		--									
Engine Configuration Number 1											
Engine Displacement (liters)		1.6		Engine Rated Horsepower		170					
Number of Inlet Valves Per Cylinder		2		Number of Exhaust Valves Per Cylinder		2					
Air Aspiration Method		Turbocharged		Number of Air Aspiration Devices		1					
Air Aspiration Device Configuration		Single		Charge Air Cooler Type		Liquid					
Air Aspiration Drive Method(s)		Electric									
Cylinder Deactivation		No									
Cylinder Deactivation Description		--									
Variable Valve Timing		Yes									
Variable Valve Timing System Description		Electrohydraulic Cam Phasors									
Variable Valve Lift?		No									
Variable Valve Lift System Description		--									
Number of Knock Sensors		1		Number of Air/Fuel Sensors		2					
Air/Fuel Sensor # 1 Type		Heated oxygen		Air/Fuel Sensor # 1 Description		--					
Air/Fuel Sensor # 2 Type		Heated oxygen		Air/Fuel Sensor # 2 Description		--					
Mfr Air/Fuel Sensor Comments		--									
Exhaust Gas Recirculation		No		Cooled Exhaust Gas Recirculation		--					
EGR Type		--		Exhaust Gas Recirculation Description if 'Other'		--					
Closed Loop Air Injection System		No									
Air Injection Type		Not Applicable		Air Injection Type if 'Other'		--					
Mfr Engine Configuration 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
Gasoline	TCRX10092452	TCRX10092454	TCRX10092278	TCRX10092279	TCRX10092453	31.4	30.9	29.7	29.2	1.0	
Electricity	--	--	--	--	--	--	--	--	--	--	

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
SFTP LEV-III Official Test Numbers			
Test Group Fuel	FTP	US06	SC03
Gasoline	TCRX10092452	TCRX10092454	TCRX10092278
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if Other	--
Battery Type	Lithium Ion	Number of Battery Packs	1
Total Voltage of Battery Packs	304	Battery Energy Capacity	51.00
Battery Specific Energy	16.0	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	No
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	2		
Motor/Generator Type 1	DC Permanent Magnet, brushless	Rated Motor/Generator Power	117
Motor/Generator Type 2	DC Permanent Magnet, brushless	Rated Motor/Generator Power	134
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	Usable H2 Fill Capacity (kg)	--
Mfr Hybrid Electric/ Electric Vehicle Comments	Capacitor specifications - Battery side 315uF, Inverter side 1115uF		

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
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Emission Data Vehicle Information

Vehicle ID / Configuration	L5KMJ5201 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	TCRXT01.6550	Original Evaporative/Refueling Family	TCRXR0108FEJ
Original Test Vehicle Model Year	2026		

Vehicle Model

Represented Test Vehicle Make	Jeep	Represented Test Vehicle Model	Cherokee AWD
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Leak Family Details

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

Drive Source and Fuel#	Drive Source	Fuel
1	Electric Motor	Electricity
2	Combustion Engine	Gasoline

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
Odometer Correction -- Initial	0	Odometer Correction Factor	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	AA-1000	Rated Horsepower	170
Displacement (liters)	1.6		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single
Charge Air Cooler Type	Liquid	Drive Mode While Testing	All Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	4298	Equivalent Test Weight (pounds)	4500
GVWR (lbs)	5300	N/V Ratio	50.5
Axle Ratio	4.16		
Transmission Type	Continuously Variable	# of Transmission Gears	1
Transmission Lockup	No	Creep Gear	No

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family		VCRXR0108FEJ	
Dynamometer Coefficients:								
Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients	
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)		
City/Highway/Evap	36.78	0.1864	0.02702	-3.61	0.3892	0.01959	15.2	
Cold CO	40.46	0.205	0.02972	-14.08	0.3709	0.02169	N/A	
US06	36.78	0.1864	0.02702	-3.61	0.3892	0.01959	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		callout: 26DA-T01.6550-1						

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092276	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/25/2025	Fuel	Gasoline
Fuel Batch ID	11438	Fuel Calibration Number	1
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5302	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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 (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	237.44	--
FE BAG 1 (Bag 1 Fuel Economy)	37.53	37.53
CO2 BAG 2 (Bag 2 Carbon Dioxide)	237.44	--
FE BAG 2 (Bag 2 Fuel Economy)	37.53	37.53
CO2 BAG 3 (Bag 3 Carbon Dioxide)	200.5	--
FE BAG 3 (Bag 3 Fuel Economy)	44.43	44.43
CO2 BAG 4 (Bag 4 Carbon Dioxide)	200.5	--
FE BAG 4 (Bag 4 Fuel Economy)	44.43	44.43
METHANE (CH4 - Methane)	0.004009	--
CO (Carbon Monoxide)	0.0461	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.1774	--
DT-EER (Drive Trace Energy Economy Rating)	0.3598	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.5291	--
MFR FE (Manufacturer Fuel Economy)	41.2	41.2
NOX (Nitrogen Oxide)	0.010731	--
N2O (Nitrous Oxide)	0.000333	--
HC-NM (Non-methane Hydrocarbon)	0.00625	--
NMOG (Non-methane organic gases)	0.0065	--
HC-TOTAL (Total Hydrocarbon)	0.009782	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	216	216

Certification Summary Information Report

Test Group		VCRXT01.6551				Evaporative/Refueling Family				VCRXR0108FEJ		
				Test Result Name		Unrounded Test Result			Verify Calculated CO2			
				Carbon dioxide		216.385681			--			
Manufacturer Test Comments				26DA-T01.6550-1 city 150k Auto ESSon WLTP E0; Corrected CO2/FE for NEC; Bag1=Bag2=UDDS1, Bag3=Bag4=UDDS2; NECFRtot=0.06%; NECFR1=-0.01%; NECFR2=0.29%;								
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 30	CREE	216	--	--	--	0	1	216	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	METHANE	0.0040	--	--	--	0	1	0.004	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	N2O	0.0003	--	--	--	0	1	0.000	0.010	Pass
CA	150,000 miles	Other	METHANE	0.0040	--	--	--	0	1	0.004	0.030	Pass
CA	150,000 miles	Other	N2O	0.0003	--	--	--	0	1	0.000	0.010	Pass
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	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092279	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	08/29/2025	Fuel	Gasoline
Fuel Batch ID	11425	Fuel Calibration Number	1
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5444	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ																																																																											
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>395.77</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.827661</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>21.78</td><td>21.78</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.021029</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.1958</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>248.57</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>34.87</td><td>34.87</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.004347</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0.0004</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>275.84</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.034591</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>31.43</td><td>31.43</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.002744</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.00736</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.180791</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.7695</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>0.1652</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.9035</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>30.2</td><td>30.2</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.014691</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.03707</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0407</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	395.77	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.827661	--	FE BAG 1 (Bag 1 Fuel Economy)	21.78	21.78	CH4 BAG 1 (Bag 1 Methane)	0.021029	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.1958	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	248.57	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--	FE BAG 2 (Bag 2 Fuel Economy)	34.87	34.87	CH4 BAG 2 (Bag 2 Methane)	0.004347	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0004	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	275.84	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.034591	--	FE BAG 3 (Bag 3 Fuel Economy)	31.43	31.43	CH4 BAG 3 (Bag 3 Methane)	0.002744	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	METHANE (CH4 - Methane)	0.00736	--	CO (Carbon Monoxide)	0.180791	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.7695	--	DT-EER (Drive Trace Energy Economy Rating)	0.1652	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.9035	--	MFR FE (Manufacturer Fuel Economy)	30.2	30.2	NOX (Nitrogen Oxide)	0.014691	--	HC-NM (Non-methane Hydrocarbon)	0.03707	--	NMOG (Non-methane organic gases)	0.0407	--		
	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																																																											
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	395.77	--																																																																											
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.827661	--																																																																											
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	CH4 BAG 1 (Bag 1 Methane)	0.021029	--																																																																											
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.1958	--																																																																											
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	248.57	--																																																																											
	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--																																																																											
	FE BAG 2 (Bag 2 Fuel Economy)	34.87	34.87																																																																											
	CH4 BAG 2 (Bag 2 Methane)	0.004347	--																																																																											
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0004	--																																																																											
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	275.84	--																																																																											
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.034591	--																																																																											
	FE BAG 3 (Bag 3 Fuel Economy)	31.43	31.43																																																																											
	CH4 BAG 3 (Bag 3 Methane)	0.002744	--																																																																											
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--																																																																											
	METHANE (CH4 - Methane)	0.00736	--																																																																											
	CO (Carbon Monoxide)	0.180791	--																																																																											
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.7695	--																																																																											
	DT-EER (Drive Trace Energy Economy Rating)	0.1652	--																																																																											
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.9035	--																																																																											
	MFR FE (Manufacturer Fuel Economy)	30.2	30.2																																																																											
	NOX (Nitrogen Oxide)	0.014691	--																																																																											
	HC-NM (Non-methane Hydrocarbon)	0.03707	--																																																																											
	NMOG (Non-methane organic gases)	0.0407	--																																																																											
		<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CREE/OPT-CREE</th></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>287</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	287	--																																																																						
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE																																																																												
Carbon-Related Exhaust Emissions	287	--																																																																												
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CO2</th></tr><tr><td>Carbon dioxide</td><td>286.5196541</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	286.5196541	--																																																																							
Test Result Name	Unrounded Test Result	Verify Calculated CO2																																																																												
Carbon dioxide	286.5196541	--																																																																												
Manufacturer Test Comments	26DA-T01.6550-1 city rerun 150k Auto ESSon WLTP CCO; Corrected CO2/FE for NEC; NECFR=-0.07%																																																																													

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family					VCRXR0108FEJ		
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	50,000 miles	Federal Tier 3 Bin 30	CO	0.18	--	--	--	0	1	0.2	12.5	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	HC-NM	0.04	--	--	--	0	1	0.0	0.3	Pass
CA	50,000 miles	Other	CO	0.18	--	--	--	0	1	0.2	12.5	Pass

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092452	Test Procedure	25 - California fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	51 - CARB LEV4 E10 Regular Gasoline
Test Date	10/10/2025	Fuel	Gasoline
Fuel Batch ID	48154	Fuel Calibration Number	1
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CPG		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5614	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	246.3026123	--	
CO BAG 1 (Bag 1 Carbon Monoxide)	0.2358461	--	
FE BAG 1 (Bag 1 Fuel Economy)	41.0074771	41.0074771	
CH4 BAG 1 (Bag 1 Methane)	0.0079999	--	
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0340612	--	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	178.399765	--	
CO BAG 2 (Bag 2 Carbon Monoxide)	0	--	
FE BAG 2 (Bag 2 Fuel Economy)	41.0074771	41.0074771	
CH4 BAG 2 (Bag 2 Methane)	0.0043861	--	
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0000551	--	
CO2 BAG 3 (Bag 3 Carbon Dioxide)	221.8638611	--	
CO BAG 3 (Bag 3 Carbon Monoxide)	0	--	
FE BAG 3 (Bag 3 Fuel Economy)	44.0549993	44.0549993	
CH4 BAG 3 (Bag 3 Methane)	0.0023128	--	
NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	
CO2 BAG 4 (Bag 4 Carbon Dioxide)	175.8236084	--	
CO BAG 4 (Bag 4 Carbon Monoxide)	0	--	
FE BAG 4 (Bag 4 Fuel Economy)	44.0549993	44.0549993	
CH4 BAG 4 (Bag 4 Methane)	0.0033611	--	
NMOG BAG 4 (Bag 4 Non-methane organic gases)	0.0002022	--	
METHANE (CH4 - Methane)	0.0042652	--	
CO (Carbon Monoxide)	0.0490254	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.1424495	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.6393883	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.8333827	--	
MFR FE (Manufacturer Fuel Economy)	42.6907733	42.6907733	
NOX (Nitrogen Oxide)	0.0056659	--	
N2O (Nitrous Oxide)	0.000569	--	
HC-NM (Non-methane Hydrocarbon)	0.0065028	--	
NMOG (Non-methane organic gases)	0.0071378	--	
PM (Particulate Matter)	0.0002145	--	
HC-TOTAL (Total Hydrocarbon)	0.0106492	--	

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family				VCRXR0108FEJ			
		Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE						
		Carbon-Related Exhaust Emissions		9999.9999999		204						
		Test Result Name		Unrounded Test Result		Verify Calculated CO2						
		Carbon dioxide		203.6917114		--						
Manufacturer Test Comments		NEC Corrected Results from test# TCRX91006627. FE BAGS and MFR FE are NEC Corrected. All other values are raw/uncorrected for NEC. NEC Corrected CO2=204. NEC Corrected CREE=204.Bag1FE=Bag2FE=UDDS1; Bag3FE=Bag4FE=UDDS2										
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 30	CO	0.05	--	--	--	0	1	0.0	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	0.04	--	--	--	0	1	0.0	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CREE	204	--	--	--	0	1	204	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	METHANE	0.0043	--	--	--	0	1	0.004	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	N2O	0.0006	--	--	--	0	1	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0071	--	--	--	0	1	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0128	--	--	--	--	--	0.013	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.0072	--	--	--	0	1	0.007	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0057	--	--	--	0	1	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0002	--	--	--	0	1	0.000	0.003	Pass
CA	150,000 miles	Other	CO	0.05	--	--	--	0	1	0.0	1.0	Pass
CA	150,000 miles	Other	CO-COMP	0.04	--	--	--	0	1	0.0	4.2	Pass
CA	150,000 miles	Other	METHANE	0.0043	--	--	--	0	1	0.004	0.030	Pass
CA	150,000 miles	Other	N2O	0.0006	--	--	--	0	1	0.001	0.010	Pass
CA	150,000 miles	Other	NMOG	0.0071	--	--	--	0	1	0.007	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0128	--	--	--	--	--	0.013	0.030	Pass
CA	150,000 miles	Other	NMOG+NOX-COMP	0.0072	--	--	--	0	1	0.007	0.030	Pass
CA	150,000 miles	Other	NOX	0.0057	--	--	--	0	1	0.006	999.999	Pass
CA	150,000 miles	Other	PM	0.0002	--	--	--	0	1	0.000	0.003	Pass

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	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092277	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/25/2025	Fuel	Gasoline
Fuel Batch ID	11438	Fuel Calibration Number	1
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5317	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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 (miles per gallon)
METHANE (CH4 - Methane)	0.000882	--
CO (Carbon Monoxide)	0.002856	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.1343	--
DT-EER (Drive Trace Energy Economy Rating)	-0.132	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.6308	--
MFR FE (Manufacturer Fuel Economy)	45.4	45.4
NOX (Nitrogen Oxide)	0.000647	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.000768	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	197	197

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	196.7608584	--

Manufacturer Test Comments

26DA-T01.6550-1 hwy 150k Auto ESSon WLTP E0; Corrected CO2/FE for NEC; NECFR=0.13%

Certification Summary Information Report

Test Group		VCRXT01.6551				Evaporative/Refueling Family				VCRXR0108FEJ		
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 30	CREE	197	--	--	--	0	1	197	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0000	--	--	--	0	1	0.000	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0006	--	--	--	--	--	0.001	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0006	--	--	--	0	1	0.001	999.999	Pass
CA	150,000 miles	Other	NMOG	0.0000	--	--	--	0	1	0.000	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0006	--	--	--	--	--	0.001	0.030	Pass
CA	150,000 miles	Other	NOX	0.0006	--	--	--	0	1	0.001	999.999	Pass

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	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ																																				
Test #	TCRX10092453	Test Procedure	3 - HWFE																																				
Exhaust Test # for this Evap Test	--	Test Fuel Type	51 - CARB LEV4 E10 Regular Gasoline																																				
Test Date	10/03/2025	Fuel	Gasoline																																				
Fuel Batch ID	48154	Fuel Calibration Number	1																																				
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined																																				
Verify Test Lab ID	CPG																																						
E10 Evaporative Test Measurement Method	--																																						
Test Start Odometer Reading	5565	Odometer Units	M																																				
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																																				
State of Charge Delta	Yes																																						
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes																																				
Test Results																																							
<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated FE Equivalent Value (miles per gallon)</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0003934</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.0151731</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>4.0482097</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>0.497482</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>4.844358</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>43.8797229</td><td>43.8797229</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0000942</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0007105</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0007318</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0010916</td><td>--</td></tr></table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	METHANE (CH4 - Methane)	0.0003934	--	CO (Carbon Monoxide)	0.0151731	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	4.0482097	--	DT-EER (Drive Trace Energy Economy Rating)	0.497482	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.844358	--	MFR FE (Manufacturer Fuel Economy)	43.8797229	43.8797229	NOX (Nitrogen Oxide)	0	--	N2O (Nitrous Oxide)	0.0000942	--	HC-NM (Non-methane Hydrocarbon)	0.0007105	--	NMOG (Non-methane organic gases)	0.0007318	--	HC-TOTAL (Total Hydrocarbon)	0.0010916	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																					
METHANE (CH4 - Methane)	0.0003934	--																																					
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<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated CREE/OPT-CREE</td></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>9999.9999999</td><td>199</td></tr></table>				Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	9999.9999999	199																														
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE																																					
Carbon-Related Exhaust Emissions	9999.9999999	199																																					
<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated CO2</td></tr><tr><td>Carbon dioxide</td><td>199.2100983</td><td>--</td></tr></table>				Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	199.2100983	--																														
Test Result Name	Unrounded Test Result	Verify Calculated CO2																																					
Carbon dioxide	199.2100983	--																																					
Manufacturer Test Comments	NEC Corrected Results from test# TCRX91006623. MFR FE is NEC Corrected. All other values are raw/uncorrected for NEC. NEC Corrected CO2=199. NEC Corrected CREE=199.																																						

Certification Summary Information Report

Test Group		VCRXT01.6551				Evaporative/Refueling Family				VCRXR0108FEJ		
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 30	CREE	199	--	--	--	0	1	199	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0007	--	--	--	0	1	0.001	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0007	--	--	--	--	--	0.001	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0000	--	--	--	0	1	0.000	999.999	Pass
CA	150,000 miles	Other	NMOG	0.0007	--	--	--	0	1	0.001	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0007	--	--	--	--	--	0.001	0.030	Pass
CA	150,000 miles	Other	NOX	0.0000	--	--	--	0	1	0.000	999.999	Pass

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	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092454	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	51 - CARB LEV4 E10 Regular Gasoline
Test Date	10/03/2025	Fuel	Gasoline
Fuel Batch ID	48154	Fuel Calibration Number	1
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CPG		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5590	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ																																																																							
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>391.2050476</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.2651175</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>25.2794485</td><td>25.2794485</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0061282</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0063937</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>260.2089233</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>31.7568501</td><td>31.7568501</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.000519</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0.0008969</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0017563</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.0584821</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>-0.4000627</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-1.2162824</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>-0.7083208</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>30.0450106</td><td>30.0450106</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.002991</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0007927</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.002048</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0021095</td><td>--</td></tr><tr><td>PM (Particulate Matter)</td><td>0.0003201</td><td>--</td></tr><tr><td>HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)</td><td>0.005039</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0037493</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	391.2050476	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.2651175	--	FE BAG 1 (Bag 1 Fuel Economy)	25.2794485	25.2794485	CH4 BAG 1 (Bag 1 Methane)	0.0061282	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0063937	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	260.2089233	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--	FE BAG 2 (Bag 2 Fuel Economy)	31.7568501	31.7568501	CH4 BAG 2 (Bag 2 Methane)	0.000519	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0008969	--	METHANE (CH4 - Methane)	0.0017563	--	CO (Carbon Monoxide)	0.0584821	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.4000627	--	DT-EER (Drive Trace Energy Economy Rating)	-1.2162824	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.7083208	--	MFR FE (Manufacturer Fuel Economy)	30.0450106	30.0450106	NOX (Nitrogen Oxide)	0.002991	--	N2O (Nitrous Oxide)	0.0007927	--	HC-NM (Non-methane Hydrocarbon)	0.002048	--	NMOG (Non-methane organic gases)	0.0021095	--	PM (Particulate Matter)	0.0003201	--	HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.005039	--	HC-TOTAL (Total Hydrocarbon)	0.0037493	--	
	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																																																							
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	391.2050476	--																																																																							
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.2651175	--																																																																							
	FE BAG 1 (Bag 1 Fuel Economy)	25.2794485	25.2794485																																																																							
	CH4 BAG 1 (Bag 1 Methane)	0.0061282	--																																																																							
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0063937	--																																																																							
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	260.2089233	--																																																																							
	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--																																																																							
	FE BAG 2 (Bag 2 Fuel Economy)	31.7568501	31.7568501																																																																							
	CH4 BAG 2 (Bag 2 Methane)	0.000519	--																																																																							
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0008969	--																																																																							
	METHANE (CH4 - Methane)	0.0017563	--																																																																							
	CO (Carbon Monoxide)	0.0584821	--																																																																							
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.4000627	--																																																																							
	DT-EER (Drive Trace Energy Economy Rating)	-1.2162824	--																																																																							
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.7083208	--																																																																							
	MFR FE (Manufacturer Fuel Economy)	30.0450106	30.0450106																																																																							
	NOX (Nitrogen Oxide)	0.002991	--																																																																							
	N2O (Nitrous Oxide)	0.0007927	--																																																																							
	HC-NM (Non-methane Hydrocarbon)	0.002048	--																																																																							
	NMOG (Non-methane organic gases)	0.0021095	--																																																																							
	PM (Particulate Matter)	0.0003201	--																																																																							
	HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.005039	--																																																																							
	HC-TOTAL (Total Hydrocarbon)	0.0037493	--																																																																							

Certification Summary Information Report

Test Group		VCRXT01.6551				Evaporative/Refueling Family				VCRXR0108FEJ		
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 30	CO	0.06	--	--	--	0	1	0.1	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0021	--	--	--	0	1	0.002	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0030	--	--	--	0	1	0.003	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0003	--	--	--	0	1	0.000	0.006	Pass
CA	150,000 miles	Other	CO	0.06	--	--	--	0	1	0.1	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0021	--	--	--	0	1	0.002	999.999	Pass
CA	150,000 miles	Other	NOX	0.0030	--	--	--	0	1	0.003	999.999	Pass
CA	150,000 miles	Other	PM	0.0003	--	--	--	0	1	0.000	0.006	Pass

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092278	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	51 - CARB LEV4 E10 Regular Gasoline
Test Date	08/27/2025	Fuel	Gasoline
Fuel Batch ID	11439	Fuel Calibration Number	1
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5361	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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 (miles per gallon)
METHANE (CH4 - Methane)	0.003838	--
CO (Carbon Monoxide)	0.005185	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.221	--
DT-EER (Drive Trace Energy Economy Rating)	-1.091	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.868	--
MFR FE (Manufacturer Fuel Economy)	30.3	30.3
NOX (Nitrogen Oxide)	0.003636	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.002954	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	286	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	287.9313407	--

Manufacturer Test Comments

26DA-T01.6550-1 sc03 rerun 150k Auto ESSon WLTP LEV IV cE10; Corrected CO2/FE for NEC; NECFR=-0.31%

Certification Summary Information Report

Test Group		VCRXT01.6551				Evaporative/Refueling Family				VCRXR0108FEJ		
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 30	CO	0.01	--	--	--	0	1	0.0	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0000	--	--	--	0	1	0.000	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0036	--	--	--	0	1	0.004	999.999	Pass
CA	150,000 miles	Other	CO	0.01	--	--	--	0	1	0.0	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0000	--	--	--	0	1	0.000	999.999	Pass
CA	150,000 miles	Other	NOX	0.0036	--	--	--	0	1	0.004	999.999	Pass

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
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Emission Data Vehicle Information

Vehicle ID / Configuration	L5KMJ5753 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	TCRXT01.6550	Original Evaporative/Refueling Family	TCRXR0108FEJ
Original Test Vehicle Model Year	2026		

Vehicle Model

Represented Test Vehicle Make	Jeep	Represented Test Vehicle Model	Cherokee AWD
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Leak Family Details

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

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline
2	Electric Motor	Electricity

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
Odometer Correction -- Initial	0	Odometer Correction Factor	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	AA-1000	Rated Horsepower	170
Displacement (liters)	1.6		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single
Charge Air Cooler Type	Liquid	Drive Mode While Testing	All Wheel Drive
Shift Indicator Light Usage	Equipped, not shifted by SIL	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	4298	Equivalent Test Weight (pounds)	4500
GVWR (lbs)	5300	N/V Ratio	50.5
Axle Ratio	4.16		
Transmission Type	Continuously Variable	# of Transmission Gears	1
Transmission Lockup	No	Creep Gear	No

Dynamometer Coefficients:

Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	36.78	0.1864	0.02702	-2.17	0.3322	0.0193	15.2

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ						
Emission Control Device Comments	--								
Manufacturer Test Vehicle Comments	callout: 26EV-T01.6550-1								
Test #	TCRX10092293	Test Procedure	23 - 2-day evap						
Exhaust Test # for this Evap Test	TCRX10092287	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	08/22/2025	Fuel	Gasoline						
Fuel Batch ID	11406	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	CTC								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	3982	Odometer Units	M						
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	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.15282</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.15282	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.15282	--							
Manufacturer Test Comments									
Callout: 26EV-T01.6550-1; Cert 2-Day/Evap (E10) Hot_Soak_HC_(g) = 0.0288, Diurnal (g) = 0.1127; 2DayTotal = (0.0288+0.1127)*1.08 = 0.15282(g)									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.1528	0.0090	0.162	0.400	Pass	
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.1528	0.0090	0.162	0.400	Pass	

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Test #	TCRX10092328	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	TCRX10092326	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/26/2025	Fuel	Gasoline
Fuel Batch ID	11406	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4304	Odometer Units	M
4WD Test Dyno	No	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	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.1563192	--

Manufacturer Test Comments

Callout: 26EV-T01.6550-1; Cert 3-Day/Evap (E10) Hot_Soak_HC_(g) = 0.02823, Diurnal (g) = 0.11651; 3DayTotal = (0.02823+0.11651)*1.08 = 0.1563192 (g)

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.1563	0.0057	0.162	0.400	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.1563	0.0057	0.162	0.400	Pass

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ						
Test #	TCRX10092292	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	TCRX10092296	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	08/16/2025	Fuel	Gasoline						
Fuel Batch ID	11406	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	CTC								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	3934	Odometer Units	M						
4WD Test Dyno	No	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	No						
Test Results									
	<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated FE Equivalent Value</td></tr><tr><td>HC (Hydrocarbon for Running Loss and ORVR)</td><td>0.00864</td><td>--</td></tr></table>			Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC (Hydrocarbon for Running Loss and ORVR)	0.00864	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC (Hydrocarbon for Running Loss and ORVR)	0.00864	--							
Manufacturer Test Comments	Callout: 26EV-T01.6550-1; Cert ORVR(E10) ORVR = 0.008 *1.08 = 0.00864 g/gallons								
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC	0.009	0.000	0.01	0.20	Pass	
CA	150,000 miles	Other	HC	0.009	0.000	0.01	0.20	Pass	

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ						
Test #	TCRX10092327	Test Procedure	32 - Federal Fuel Running Loss						
Exhaust Test # for this Evap Test	TCRX10092326	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	09/26/2025	Fuel	Gasoline						
Fuel Batch ID	11406	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	CTC								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	4287	Odometer Units	M						
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	No						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.0005227</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0005227	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0005227	--							
Manufacturer Test Comments									
Callout: 26EV-T01.6550-1; Cert Evap RL test(E10) RL=(0.000484* 1.08)=0.0005227									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.001	0.000	0.00	0.05	Pass	
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.001	0.000	0.00	0.05	Pass	

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Fuel Properties			
Fuel Batch ID	48154	Fuel Calibration Number	1
Test Fuel Type	51 - CARB LEV4 E10 Regular Gasoline	Fuel Batch Calibration Date	07/23/2025
Fuel Batch Calibration Effective Date	07/23/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17888
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.491	Fuel Carbon Mass Fraction (E10)	0.829
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--
Fuel Batch ID	11439	Fuel Calibration Number	1
Test Fuel Type	51 - CARB LEV4 E10 Regular Gasoline	Fuel Batch Calibration Date	08/24/2025
Fuel Batch Calibration Effective Date	08/24/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.828	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.752
Fuel Ethanol Volume Percent (%)	9.6	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.475	Fuel Carbon Mass Fraction (E10)	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	Weight Fraction CO2	--
Fuel Batch ID	11425	Fuel Calibration Number	1
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	Fuel Batch Calibration Date	07/09/2025
Fuel Batch Calibration Effective Date	07/09/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.827	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	0
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.741
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.445	Fuel Carbon Mass Fraction (E10)	0.827
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	Weight Fraction CO2	--
Fuel Batch ID	11406	Fuel Calibration Number	1
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	04/23/2025
Fuel Batch Calibration Effective Date	04/23/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.828	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--

Certification Summary Information Report

Test Group	VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.749
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.375	Fuel Carbon Mass Fraction (E10)	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	Weight Fraction CO2	--
Fuel Batch ID	11438	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	08/24/2025
Fuel Batch Calibration Effective Date	08/24/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.866	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.744
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18465
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.866	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family			VCRXR0108FEJ		
Consolidated List of Standards										
Exhaust Standards										
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Other		
Fuel		Gasoline			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	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	
Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Federal Tier 3 Bin 30		
Fuel		Gasoline			Test Procedure			California fuel 2-day exhaust (w/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	--	--	--	--	--	1	0	1.0	
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.2	
150,000 miles	CREE	--	--	--	--	--	1	0	999	
150,000 miles	HCHO	--	--	--	--	--	1	0	0.004	
150,000 miles	METHANE	--	--	--	--	--	1	0	0.030	
150,000 miles	N2O	--	--	--	--	--	1	0	0.010	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.030	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	0.003	

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family			VCRXR0108FEJ	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Other	
Fuel		Gasoline			Test Procedure			California fuel 2-day exhaust (w/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	--	--	--	--	--	1	0	1.0
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.2
150,000 miles	HCHO	--	--	--	--	--	1	0	0.004
150,000 miles	METHANE	--	--	--	--	--	1	0	0.030
150,000 miles	N2O	--	--	--	--	--	1	0	0.010
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.030
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.003

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Other	
Fuel		Gasoline			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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.006

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family			VCRXR0108FEJ	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			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	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.006

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			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	CREE	--	--	--	--	--	1	0	999
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	1	0	12.5
150,000 miles	HC-NM	--	--	--	--	--	1	0	0.3

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family			VCRXR0108FEJ	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Other	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/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	METHANE	--	--	--	--	--	1	0	0.030
150,000 miles	N2O	--	--	--	--	--	1	0	0.010
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/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	CREE	--	--	--	--	--	1	0	999
150,000 miles	METHANE	--	--	--	--	--	1	0	0.030
150,000 miles	N2O	--	--	--	--	--	1	0	0.010
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Other	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	1	0	12.5

Certification Summary Information Report

Test Group		VCRXT01.6551			Evaporative/Refueling Family			VCRXR0108FEJ	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Other	
Fuel		Gasoline			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
150,000 miles	CO	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			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
150,000 miles	CO	--	--	--	--	--	1	0	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

Evaporative/Refueling Standards

Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--		0.05	0.000	

Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	150,000 miles	HC	--		0.20	0.000	

Certification Summary Information Report

Test Group		VCRXT01.6551		Evaporative/Refueling Family		VCRXR0108FEJ	
Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.400	0.0057		
Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.400	0.0057		
Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.400	0.0090		
Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000		
Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.400	0.0090		
Evaporative/Refueling Family		VCRXR0108FEJ		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC	--	0.20	0.000		

Certification Summary Information Report

Test Group		VCRXT01.6551	Evaporative/Refueling Family	VCRXR0108FEJ
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	COMB-CREE	Combined Carbon-Related Exhaust Emissions	
CO	Carbon Monoxide	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions	
CO2	Carbon dioxide	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only	
CREE	Carbon-Related Exhaust Emissions	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only	
OPT-CREE	Optional Carbon-Related Exhaust Emissions	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only	
NOX	Nitrogen Oxide	LEAK-DIA	Effective Leak Diameter (inches)	
PM	Particulate Matter	LEAK-GAS CAP	Gas Cap Leakage (cc/min)	
PM-COMP	SFTP Composite Particulate Matter	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only	
HC-NM	Non-methane Hydrocarbon	KW-HRS	Integrated DC KW-HRS	
OMHCE	Organic material Hydrocarbon Equivalent	CH4 BAG 1	Bag 1 Methane	
OMNMHCE	Organic material non-methane HC equivalent	CH4 BAG 2	Bag 2 Methane	
NMOG	Non-methane organic gases	CH4 BAG 3	Bag 3 Methane	
HCHO	Formaldehyde	CH4 BAG 4	Bag 4 Methane	
H3C2HO	Acetaldehyde	CO BAG 1	Bag 1 Carbon Monoxide	
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO BAG 2	Bag 2 Carbon Monoxide	
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO BAG 3	Bag 3 Carbon Monoxide	
CO-COMP	SFTP Composite Carbon Monoxide	CO BAG 4	Bag 4 Carbon Monoxide	
ETHANOL	C2H5OH - Ethanol	NMOG BAG 1	Bag 1 Non-methane organic gases	
FE BAG 1	Bag 1 Fuel Economy	NMOG BAG 2	Bag 2 Non-methane organic gases	
FE BAG 2	Bag 2 Fuel Economy	NMOG BAG 3	Bag 3 Non-methane organic gases	
FE BAG 3	Bag 3 Fuel Economy	NMOG BAG 4	Bag 4 Non-methane organic gases	
FE BAG 4	Bag 4 Fuel Economy	ACT-DISTANCE BAG 1	Bag 1 Actual Distance	
MFR FE	Manufacturer Fuel Economy	ACT-DISTANCE BAG 2	Bag 2 Actual Distance	
HC	Hydrocarbon for Running Loss and ORVR	ACT-DISTANCE BAG 3	Bag 3 Actual Distance	
METHANE	CH4 - Methane	ACT-DISTANCE BAG 4	Bag 4 Actual Distance	
METHANOL	CH3OH - Methanol	HC-TOTAL BAG 1	Bag 1 Total Hydrocarbon	
N2O	Nitrous Oxide	HC-TOTAL BAG 2	Bag 2 Total Hydrocarbon	
SPITBACK	Spitback Hydrocarbon in grams	HC-TOTAL BAG 3	Bag 3 Total Hydrocarbon	
AMP-HRS	Integrated Amp-hours	HC-TOTAL BAG 4	Bag 4 Total Hydrocarbon	
START-SOC	System Start State of Charge Watt-hours	WATT-HRS BAG 1	Bag 1 Watt Hours	
END-SOC	System End State of Charge Watt-hours	WATT-HRS BAG 2	Bag 2 Watt Hours	

Certification Summary Information Report

Test Group		VCRXT01.6551	Evaporative/Refueling Family		VCRXR0108FEJ
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
Certification Region					
CA	California + CAA Section 177 states		FA	Federal	
Exhaust Emission Standard Level					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

Certification Summary Information Report

Test Group		VCRXT01.6551	Evaporative/Refueling Family		VCRXR0108FEJ
L2ULEV340	California LEV-II ULEV340		L4SULEV85	California LEV-IV SULEV85	
L2LEV630	California LEV-II LEV630		L4ULEV125	California LEV-IV ULEV125	
L2ULEV570	California LEV-II ULEV570		L4ULEV200	California LEV-IV ULEV200	
L3LEV160	California LEV-III LEV160		L4ULEV250	California LEV-IV ULEV250	
L3ULEV125	California LEV-III ULEV125		L4ULEV270	California LEV-IV ULEV270	
L3ULEV70	California LEV-III ULEV70		L4ULEV40	California LEV-IV ULEV40	
L3ULEV50	California LEV-III ULEV50		L4ULEV400	California LEV-IV ULEV400	
L3SULEV30	California LEV-III SULEV30		L4ULEV50	California LEV-IV ULEV50	
L3SULEV20	California LEV-III SULEV20		L4ULEV60	California LEV-IV ULEV60	
L3LEV395	California LEV-III LEV395		L4ULEV70	California LEV-IV ULEV70	
L3ULEV340	California LEV-III ULEV340		T4B170	Federal Tier 4 MDV Bin 170	
L3ULEV250	California LEV-III ULEV250		T4B150	Federal Tier 4 MDV Bin 150	
L3ULEV200	California LEV-III ULEV200		T4B125	Federal Tier 4 MDV Bin 125	
L3SULEV170	California LEV-III SULEV170		T4B100	Federal Tier 4 MDV Bin 100	
L3SULEV150	California LEV-III SULEV150		T4B85	Federal Tier 4 MDV Bin 85	
L3LEV630	California LEV-III LEV630		T4B75	Federal Tier 4 MDV Bin 75	
L3ULEV570	California LEV-III ULEV570		T4B70	Federal Tier 4 Bin 70	
L3ULEV400	California LEV-III ULEV400		T4B65	Federal Tier 4 Bin 65	
L3ULEV270	California LEV-III ULEV270		T4B60	Federal Tier 4 Bin 60	
L3SULEV230	California LEV-III SULEV230		T4B55	Federal Tier 4 Bin 55	
L3SULEV200	California LEV-III SULEV200		T4B50	Federal Tier 4 Bin 50	
T3B160	Federal Tier 3 Bin 160		T4B45	Federal Tier 4 Bin 45	
T3B125	Federal Tier 3 Bin 125		T4B40	Federal Tier 4 Bin 40	
T3B110	Federal Tier 3 Transitional Bin 110		T4B35	Federal Tier 4 Bin 35	
T3B85	Federal Tier 3 Transitional Bin 85		T4B30	Federal Tier 4 Bin 30	
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover		T4B25	Federal Tier 4 Bin 25	
T3B70	Federal Tier 3 Bin 70		T4B20	Federal Tier 4 Bin 20	
T3B50	Federal Tier 3 Bin 50		T4B15	Federal Tier 4 Bin 15	
T3B30	Federal Tier 3 Bin 30		T4B10	Federal Tier 4 Bin 10	
T3B20	Federal Tier 3 Bin 20		T4B5	Federal Tier 4 Bin 5	
T3B0	Federal Tier 3 Bin 0		T4B0	Federal Tier 4 Bin 0	
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395				
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		

Certification Summary Information Report

Test Group		VCRXT01.6551	Evaporative/Refueling Family		VCRXR0108FEJ
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	



Section 8 Emission Testing Waiver Statements and Attestations

Below is a list clearly identifying the standards applicable to this Test Group for which emission testing was not performed. All FCA US LLC applicable vehicles will conform with the emission standards which emission data is not being provided, as allowed under 40 CFR 86.1829-01 or 86.1810-01.

HCHO

For the remaining list of attestations please see:

"Common Section Book - Section 14. Request for Certification "



Section 9 OBD Description

FCA US LLC considers this information proprietary and confidential. The description contains engineering detail that would allow competitors to gain insight into FCA US LLC OBD system. The OBD system descriptions for all Test Groups are on file with the US EPA and California Air Resources Board.

OBD Agency Approvals are loaded into EV-CIS and E-FILE for each test group.

OBD Demonstration Compliance Statement: This Test Group meets the full intent of both the Clean Air Act as amended in 1990, section 202(m), and the applicable federal OBD regulations contained in 40 CFR §86.005-74 and 40 CFR §86.1806-01, including a reference to those provisions pertaining to deficiencies in the limited instances where an OBD II system that complies with 1968.2 does not comply with all the requirements of section 1968.1.



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

Not Applicable to this Test Group

Test Group - VCRXT01.6551

EPA COMP CODE	AA-1000
E10:Powertrain Control Module	
E11:Transmission Control Module	
E19:Electronic Brake Boost Control Module	
E1I:Power Inverter Module (Hardware)	
E1V:EVCU Electric Vehicle Control Unit (Software)	
E4A:Battery Chiller	
E98:Battery Pack Assembly	
F01:Fuel Tank	
F15:Fuel Tank Filler Tube	
F18:Fuel Pump - High Pressure	
F36:Fuel Filler Receptacle	
F40:Throttle Body	
F50:Fuel Injector	
F59:Fuel Pressure Sensor	
F70:Evap. Canister Assembly	
H10:Catalytic Converter	
I05:Spark Plug	

EPA COMP CODE	AA-1000
I10:Ignition Coil	
L01:Heated Oxygen Sensor	
L12:Accelerator Pedal Position Sensor	
L15:Camshaft Position Sensor	
L16:Crankshaft Position Sensor	
L20:Knock Sensor	
L25:Vehicle Speed Sensor	
L28:ABS Speed Sensor	
M07:Oil Temperature Sensor	
M10:Ambient Temperature Sensor	
M15:Engine Coolant Temperature Sensor	
N17:Crankshaft Target Wheel	
N30:Turbocharger	
N31:Charge Air Cooler	
N50:Engine Thermostat	
N94:Evaporative System Purge Solenoid to Engine Hose	
N95:Evaporative System Purge Valve to Intake Manifold Hose	
T03:HEV Transmission	
V63:Evap. Can. Purge Solenoid	
V71:Crankcase Pressure Sensor	

EPA COMP CODE	AA-1000
Z01:VECI Label	

Section11-100 Engine Parts List

FCA US LLC

Test Group :VCRXT01.6551

Durability Group: VCRXHHGNNF02 Standard Fed: Bin30 Cal: N/A

Trans. Code	Sales Code	Transfer Case Sales Code/Drive Code	No. of Gears	Over Drive Gear Ratio	Drive Gear Ratio	Engine Sales Code	Torque Code	Torque Size	Conv Clutch Control Type Calib/Special Features
AV	DGM	DK2 / 4F				EJN	N/A		Electronically shifted data on file

Section12-200 Transmission

FCA US LLC

VCRXT01.6551

Durability Group:
VCRXHHGNNF02

Standard Fed: Bin30 Cal: N/A

Asterisk (*) Indicates Manufacturer has elected to certify at this higher test weight class as allowed by CFR 86.1831-01

Engine Code AA-1000

Eng Displ: 1.6L (EJN)

Evap Family - Evap Code: VCRXR0108FEJ-13.7

Model	Carline Name	Model Qualifiers	Opt	Trans. / Tr.Case	Torq. Conv./ Catalyst Identifier	GVW	LVW TWC Drive Curb	ALVW TWC Drive Curb	Axle / OTGR	N/V	Tire	Tire Mfr.	Tire Constr.Cd.	Elec Dyno Q.C.	Elec Dyno RLHP	Dyno Coeff 70A	Dyno Coeff 70 B	Dyno Coeff 70C	Dyno Coeff 20A	Dyno Coeff 20B	Dyno Coeff 20C
KMJA74	Jeep: Cherokee AWD			AV - 4WD DGM / DK2-4F		5350	4500 1789 4238		4.16	0	225/60R18 TMY	TZN	SJKMA3A	20.44	13.6	25.92000	0.26880	0.02518	28.51000	0.29570	0.02770
									4.16	0	225/65R17 TRF	TZN	SJKMC4E	18.93	14.7	33.53000	0.18650	0.02702	36.88000	0.20520	0.02972
									4.16	0	225/60R18 TWS	TZN	SJKMB3B	18.62	15.0	36.34000	0.16750	0.02700	39.97000	0.18420	0.02970
									4.16	0	235/50R20XL TLC	TZP	22N4034	18.38	15.2	36.78000	0.18640	0.02702	40.46000	0.20500	0.02972

Section12-300 Vehicle

FCA US LLC

Test Group: VCRXT01.6551 - Engine Code Index

Durability Group:
VCRXHHGNNF02

Standard : Bin30 / NA

Vehicle Class: LDT2 (LVW 3751-5750, GVW 0-6000) / N/A

Engine Code: AA-1000 - 1.6L Turbo GDI KM HEV ESS AWD

Engine Code	RC/FF #	Date	Engine	Carline	Price Class	Trans. Configuration	GVW Min.	GVW Max.	Test Wt. Min.	Test Wt. Max	Drive Code	Sales Areas
AA-1000	Original		1.6L/EJN	KM		AV/ AV Continuously Variable AV - Automatic Variable Gear Ratios	5350	5350	4500	4500	4WD	NAS

Test Group: VCRXT01.6551 - No Engine Code Changes

Durability Group: VCRXHHGNNF02 Standard Fed: Bin30 Cal: N/A

RC/FF #	Submission Date	Description
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No Results Found

Section12-500 Engine Code Index



Section 12 Vehicle Parameters

Valves per cylinder Engine
1.6 Liters - 4

Test Parameters

SIL usage: All - None

Cooling fan configuration: Models
All - One fan center front (See Section 12 - 601)

Additional Cooling: Models
All - None

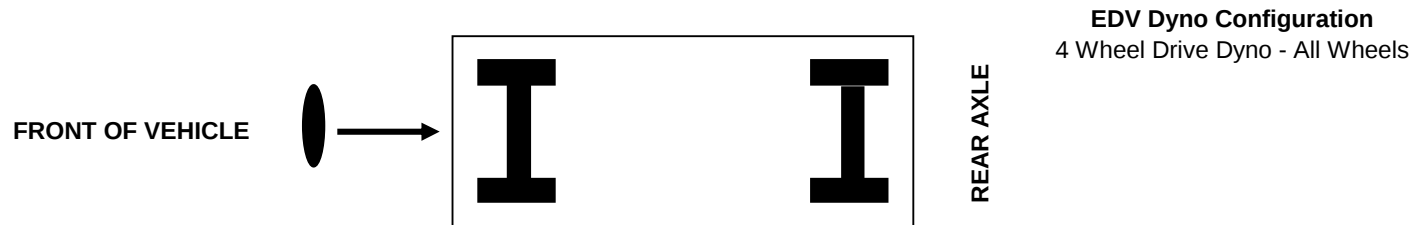
Evaporative Testing Parameters: Model
All Vehicles - 113 grams

Fuel temperature Profile: Models
All Vehicles - eKM_HEV

Special Test Procedure: Models
All - none

FAN POSITION DIAGRAM

All vehicles in Test Group



Test Type	Fan Type	Fan Position	Hood Position
EPA75. HWFE US06 CCO	Road Speed Fan (RSF) (meeting requirements of 40CFR1066.105(c)(2) – speed and uniformity requirements	Position RSF horizontally 12" from front of vehicle, centered in front of vehicle. Position RSF vertically so centerline of fan is centered with vehicle grill.	CLOSED
SC03	Road Speed Fan (meeting requirements of 40CFR1066.105(c)(5) – 45 m3/s at 60 mph)	24-36 inches from bumper/front of vehicle (facility dependent)	CLOSED

June 18, 2026

Mr. Joel Dalton
Certification and Compliance Division
U.S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, Michigan 48105

Dear Mr. Dalton:

Re: 2027 Model Year LDT Certificate of Conformity Request

FCA US LLC requests a 2027 MY Certificate of Conformity for the 1.6L Hybrid Interim Tier 4 Federal and 50 State test group VCRXT01.6551 with evaporative family: VCRXR0108FEJ. This test group is being certified to Tier 4i BIN 30 standards. FCA US LLC agrees to meet the Tier 4i BIN 30 standards, and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group VCRXT01.6551. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. FCA US LLC also elects to follow GHG path 86.1818(f)(1). The FTP emission standards for this LDT test group are as follows:

<u>Emission Standards</u>		<u>City/Hwy</u> <u>NMOG+NOx</u>	<u>CO</u>	<u>HCHO</u>	<u>PM</u>	
Tier 4i BIN 30	150K	0.030	1.0	0.004	0.003	
<u>Evaporative Standards</u>		<u>3-Day</u>	<u>2-Day</u>	<u>R/L</u>	<u>ORVR</u>	<u>Canister Bleed</u>
VCRXR0108FEJ	150K	0.400	0.400	0.05	0.2	0.02

Initial combined CREE for VCRXT01.6551 test group is = 201.7

The models in this test group are as follows:

Division / Model
Jeep Cherokee, AWD

If there are any questions regarding this submission, please contact Avinash Manivannan at 248.934.7024 or Gary J. Arvan at 248.221.9461.

Sincerely,
FCA US LLC



Gary J. Arvan, Director
Vehicle Safety & Environmental Homologation Programs
gja/acm

VCRXT01.6551 Part 1 Section 14 - 001 (2027)



June 18, 2026

Ms. Robin U. Lang, Chief
Emissions Certification and Compliance Division
Air Resources Board
4001 Iowa Ave,
Riverside, CA 92507

Dear Ms. Lang:

Re: 2027 Model Year LDT Executive Order Request

FCA US LLC requests a 2027 MY Executive Order for the 1.6L Hybrid 50 State test group VCRXT01.6551 with evaporative family: VCRXR0108FEJ. This test group is being certified according to an alternate certification path provided in MAC ECCD-2025-08. FCA requests an EO based on the EPA Interim Tier 4 requirements as reflected in the enclosed EPA Certificates of Conformity and EPA Certification Summary Information.

FCA US LLC agrees to meet the Tier 4i BIN 30 emission standards and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group VCRXT01.6551. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. FCA US LLC also elects to follow GHG path 86.1818(f)(1). The FTP emission standards for this LDT test group are as follows:

<u>Emission Standards</u>		<u>City/Hwy</u> <u>NMOG+NOx</u>	<u>CO</u>	<u>HCHO</u>	<u>PM</u>		
Tier 4i BIN 30	150K	0.030	1.0	0.004	0.003		
<u>Evaporative Standards</u>		<u>3-Day</u>	<u>2-Day</u>	<u>R/L</u>	<u>ORVR</u>	<u>Canister Bleed</u>	
VCRXR0108FEJ	150K	0.400	0.400	0.05	0.2	0.02	

Initial combined CREE for VCRXT01.6551 test group is = 201.7

FCA also completed an E-CERT submission for this test group at the direction of CARB. CARB's E-CERT system requires the selection of a California emission standard at the time of submission. FCA selected the LEV III standard for this reason only and not as an acknowledgement of CARB's authority to require compliance with the underlying standards.

If there are any questions regarding this submission, please contact Avinash Manivannan at 248.934.7024 or Gary J. Arvan at 248.221.9461.

Sincerely,

FCA US LLC

Gary J. Arvan, Director
Vehicle Safety & Environmental Homologation Programs

c: J. Nguyen
gja/acm

US EPA Fee Form

[Help and EPA Instructions](#)

* Required Field

General Information

Date: 03/25/2026

Process Code *

Request Fee Refund

Manufacturer Code *

CRX

Manufacturer Name *

FCA US LLC

Contact Name *

Pamela Barylski

Contact Email Address *

pamela.barylski@stellantis.com

Contact Phone *

8102798571

Engine Family / Evaporative Family / Test Group *

VCRXV03.0570

Original Payment Information

Payment Date *

11/24/2025



Amount Paid *

\$131,756.00

Check#/Wire/ACH/Pay.gov Tracking Number *

251121C72979233

Reason for Refund

Reason For Refund *

- ☐ This family failed to receive an EPA certificate (no certificate issued)
- ☐ Manufacturer withdraws request for certification and no certificate will be issued
- ☒ Overpayment
- ☐ No production
- ☐ Other (Explain in comments box below)

Amount of Refund Requested *

\$622.00

Refund Method *

Transfer

Engine Family/Test Group to Apply the Refund to *

VCRXT01.6551

Comments

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.

The content of this document may contain Sensitive But Unclassified (SBU) data and/or Controlled Unclassified Information (CUI).

CARB USE ONLY	
Invoice Name	MSF250940
Invoice Date	Mar 16, 2026

COMPANY INFORMATION	
Company Name	FCA US LLC
Address	800 Chrysler Drive
City	Auburn Hills
State	MI
Zip	48326
Country	United States
Contact Name	Gary Arvan
Contact Telephone Number	248-221-9461
Contact Email	gary.arvan@stellantis.com
CARB Customer Number	CCAM000028

APPLICATION INFORMATION						
Payment Row Number	Product Description or File Name	Model Year/Calendar Year	Unique Application Identifier: Test Group, Engine Family, Trailer Family, Vehicle Family, ZEP Family, if applicable (ID listed in payment row must match the unique identifier given to the certification application)	Category Type	Fee Type	Amount
1	CBI_VCRXT02.0574_APPIPT	Model Year 2027	VCRXT02.0574	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
2	CBI_VCRXT01.6551_APPIPT	Model Year 2027	VCRXT01.6551	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
3	CBI_VCRXT01.6550_APPIPT	Model Year 2027	VCRXT01.6550	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
4	CBI_VCRXJ01.6571_APPIPT	Model Year 2027	VCRXJ01.6571	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
Total Due						\$ 201,236.00

I, Gary Arvan (Mar 16, 2026 11:25:26 EDT), attest that any information provided is true, accurate, and complete.
(Responsible Party Signature Here)

PAM BARYLSKI

From: noreply@salesforce.com on behalf of California Air <mscertfees@arb.ca.gov>
Sent: Monday, April 13, 2026 11:18 AM
To: PAM BARYLSKI
Subject: [EXTERNAL]MS Fee Payment Confirmation for Invoice MSF250940
Attachments: MSF250940 - signed.pdf

EXTERNAL: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Gary Arvan

Attached is documentation for your MS Fee payment for Invoice Name MSF250940. Please include a copy of this invoice and email with each application that is listed when submitting your application to the applicable MS Fee program.

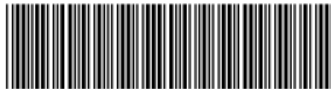
1. Payment ID – 25RA0369
2. Date of Payment – 4/9/2026
3. Payment Status - Paid





2027 50-State (NAS) KM

Test Group: VCRXT01.6551

FCA US LLC		VEHICLE EMISSION CONTROL INFORMATION	
GROUP: VCRXT01.6551 EVAP: VCRXR0108FEJ	NO ADJUSTMENTS NEEDED CAC / DFI HO2S / TC TWC / WR-HO2S	CONFORMS TO REGULATIONS: 2027 MY ENGINE: 1.6L	
		68775 170AA	
			
U.S. EPA: T4I B30 LDT OBD: CA OBD II FUEL: GASOLINE			
CA: N/A OBD: N/A FUEL: N/A THIS VEHICLE CONFORMS TO FEDERAL REGULATIONS AND IS CERTIFIED FOR SALE IN CALIFORNIA			

VECI label is located on the vehicle per 40 CFR 86.1807-01.

VCRXT01.6551 Part 1 Section 15 - 100 (2027)