

## Certification Summary Information Report

<b>Manufacturer</b>	Mazda Motor Corporation	<b>Manufacturer Code</b>	TKX
<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
<b>Certificate Number</b>	TTKXT02.5CDJ-012	<b>CARB Executive Order #</b>	--
<b>Certificate Issue Date</b>	11/07/2025	<b>Certificate Revision Date</b>	--
<b>Certificate Effective Date</b>	11/07/2025	<b>Conditional Certificate</b>	No
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	09/07/2025 07:49:06 PM
<b>Model Year</b>	2026		

**Test Group Information**

<b>CSI Type</b>	New	<b>Running Change Reference Number</b>	--
<b>GHG Exempt Status</b>	Not Exempt		

**Drive Sources and Fuel(s)**

**Drive Source #1:** Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Spark Ignition Direct fuel injection	No

<b>Hybrid Indicator</b>	No		
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	--
<b>Multiple Fuel Combustion</b>	--	<b>Off-board Charge Capable Indicator</b>	--
<b>Fuel Cell Indicator</b>	--	<b>EPA Vehicle Class</b>	LDT2
<b>Federal Clean Fuel Vehicle</b>	No	<b>Federal Clean Fuel Vehicle Standard</b>	--
<b>Federal Clean Fuel Vehicle ILEV</b>	--	<b>California Partial Zero Emissions Vehicle Indicator</b>	No
<b>Durability Group Name</b>	TTKXGPGNNVB7	<b>Durability Group Equivalency Factor</b>	1.0
<b>Reduced Fee Test Group</b>	No	<b>Certification Region Code(s)</b>	FA, CA
<b>Complies with HD GHG 2b/3 regulations?</b>	No		
<b>Introduction into Commerce Date</b>	03/01/2026	<b>CAP2000 Conditional Certificate?</b>	No
<b>Independent Commercial Importer?</b>	No	<b>Alternative Fuel Converter Certificate?</b>	No
<b>SFTP Federal Composite Compliance Identifier</b>	Tier 3	<b>SFTP Tier 2 Composite CO Option</b>	--
<b>SFTP LEV-III Composite Compliance Indicator</b>	No		
<b>OBD Compliance Type</b>	CARB	<b>OBD Demonstration Vehicle Test Group</b>	TTKXT02.5CDJ
<b>Test Group OBD Compliance Level</b>	Full - no deficiencies	<b>Number of Test Group OBD Deficiencies</b>	0
<b>OBD Deficiencies Comments</b>	2026MY MAZDA CX-5 2.5L w/o cylinder deactivation selected as OBD demonstration vehicle is indicated.		
<b>Mfr Test Group Comments</b>	Durability group equivalency factor = ABC/SRC. Federal SFTP Composite NMOG+NOx Certification Levels The test group has individual DFs for FTP/SC03 and US06. Composite values are not calculated correctly in the EV-CIS since only the FTP DFs are applied for the calculation. The correct values are as follows: NMOG+NOx Composite: 0.018		
<b>Mfr Exhaust / Evap Standards Comments</b>	--		

## Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ				
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	07/21/2025 02:55:54 AM				
<b>Integrated ORVR?</b>	Yes	<b>Fuel(s)</b>	Gasoline				
<b>Multiple Fuel Storage</b>	--						
<b>Bladder Fuel Tank?</b>	No						
<b>Fuel Tank Material</b>	Metal	<b>Fuel Tank Material Description</b>	Steel				
<b>Fill Pipe Seal Type</b>	Liquid seal						
<b>Air Intake System Vapor Storage Device?</b>	Yes	<b>Air Intake System Vapor Storage Device Description</b>	Carbon HC trap in air induction system, HC absorber				
<b>Fuel System Vapor Storage Canister?</b>	Yes	<b>Other Vapor Storage</b>	--				
<b>Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)</b>	117	<b>Number of Primary Canisters</b>	1				
<b>Number of Bleed Canisters</b>	0	<b>Bleed Canister Total Working Capacity (grams)</b>	--				
<b>Mfr Evaporative/Refueling Family Comments</b>	--						
<b>Leak Family Details</b>							
<b>Leak Family Indicator</b>	No						
<b>Canister Bleed Test Indicator</b>	Yes	<b>Applicability of Evaporative Canister Bleed Test</b>	50 State				
<b>Evaporative Canister Bleed Test Comments</b>	--						
<b>CARB Fuel Only (Rig) Test Indicator</b>	No	<b>Applicability of CARB Fuel Only (Rig) Test</b>	--				
<b>CARB Fuel Only (Rig) Test Comments</b>	--						
<b>Models Covered by this Certificate</b>							
<b>Carline Manufacturer</b>	<b>Division</b>	<b>Carline</b>	<b>Certification Region Code(s)</b>	<b>Drive System</b>	<b>Trans - Type</b>	<b>- # of Gears</b>	<b>Trans - Lockup</b>
Mazda Motor Corporation	1 - MAZDA	56 - CX-5 4WD	California + CAA Section 177 states	4-Wheel Drive	Semi-Automatic	6	Yes
Mazda Motor Corporation	1 - MAZDA	56 - CX-5 4WD	Federal	4-Wheel Drive	Semi-Automatic	6	Yes
<b>Engine Description</b>							
<b>Hybrid Type</b>	--			<b>Hybrid Description</b>	--		
<b>Engine Type</b>	4-Stroke Spark Ignition			<b>Mfr Engine Description</b>	--		
<b>Engine Block Arrangement</b>	Inline			<b>Mfr Engine Block Arrangement Description</b>	--		
<b>Camless Valvetrain Indicator</b>	No			<b>Oil Viscosity/Classification</b>	GF-6 0W-20		
<b>Number of Cylinders/Rotors</b>	4			<b>Mechanically Variable Compression Ratio Indicator</b>	N		

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ								
<b>After Treatment Device(s) (ATD)</b>											
<b>ATD Number</b>	<b>ATD Type</b>	<b>ATD Precious Metal</b>	<b>Substrate Material</b>								
1	Three-way catalyst	Palladium + Rhodium	Ceramic								
2	Three-way catalyst	Palladium + Rhodium	Ceramic								
<b>Mfr After Treatment Device (ATD) Comments</b>											
--											
<b>Direct Ozone Reduction (DOR) Device</b>											
Not Equipped											
<b>Mfr Emission Control Device Comments</b>											
--											
<b>Engine Configuration Number 1</b>											
<b>Engine Displacement (liters)</b>	2.5	<b>Engine Rated Horsepower</b>	187								
<b>Number of Inlet Valves Per Cylinder</b>	2	<b>Number of Exhaust Valves Per Cylinder</b>	2								
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Number of Air Aspiration Devices</b>	--								
<b>Air Aspiration Device Configuration</b>	--	<b>Charge Air Cooler Type</b>	N/A								
<b>Air Aspiration Drive Method(s)</b>	--										
<b>Cylinder Deactivation</b>	No										
<b>Cylinder Deactivation Description</b>	--										
<b>Variable Valve Timing</b>	Yes										
<b>Variable Valve Timing System Description</b>	This technology optimizes the valve timing by using computer control to continuously switch the intake and exhaust valve opening/closing timing according to driving conditions.										
<b>Variable Valve Lift?</b>	No										
<b>Variable Valve Lift System Description</b>	--										
<b>Number of Knock Sensors</b>	1	<b>Number of Air/Fuel Sensors</b>	2								
<b>Air/Fuel Sensor # 1 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 1 Description</b>	--								
<b>Air/Fuel Sensor # 2 Type</b>	Heated air fuel	<b>Air/Fuel Sensor # 2 Description</b>	--								
<b>Mfr Air/Fuel Sensor Comments</b>	--										
<b>Exhaust Gas Recirculation</b>	Yes	<b>Cooled Exhaust Gas Recirculation</b>	No								
<b>EGR Type</b>	Variable Valve Timing Control	<b>Exhaust Gas Recirculation Description if 'Other'</b>	--								
<b>Closed Loop Air Injection System</b>	No										
<b>Air Injection Type</b>	Not Applicable	<b>Air Injection Type if 'Other'</b>	--								
<b>Mfr Engine Configuration Comments</b>	--										
<b>Official Test Numbers</b>											
<b>Test Group</b>	<b>Fuel</b>	<b>FTP</b>	<b>US06</b>	<b>SC03</b>	<b>Cold CO</b>	<b>Highway</b>	<b>EPA City Litmus Value</b>	<b>EPA City Litmus Threshold</b>	<b>EPA Highway Litmus Value</b>	<b>EPA Highway Litmus Threshold</b>	<b>CREE Weighting Factor</b>
Gasoline	TTKX10092142	TTKX10092141	TTKX10092137	TTKX10092132	TTKX10092131	21.7	20.3	26.8	25.1	--	

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ						
<b>Emission Data Vehicle Information</b>									
Vehicle ID / Configuration	6EBPYUG8-031 / 2	Manufacturer Vehicle Configuration Number	2						
Original Test Group Name	TTKXT02.5CDJ	Original Evaporative/Refueling Family	TTKXR0117GCQ						
Original Test Vehicle Model Year	2026								
<b>Vehicle Model</b>									
Represented Test Vehicle Make	MAZDA	Represented Test Vehicle Model	MAZDA CX-5						
<b>Leak Family Details</b>									
Leak Family Identifier	--	Leak Family Name	--						
<b>Drive Sources and Fuel System Details</b>									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>			Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
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	6PYUGCAA	Rated Horsepower	187						
Displacement (liters)	2.5								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Front						
Shift Indicator Light Usage	Equipped, not shifted by SIL	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	3856	Equivalent Test Weight (pounds)	4250						
GVWR (lbs)	4914	N/V Ratio	33.3						
Axle Ratio	4.62								
Transmission Type	Automatic	# of Transmission Gears	6						
Transmission Lockup	Yes	Creeper Gear	No						

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Test Group		TTKXT02.5CDJ			Evaporative/Refueling Family			TTKXR0117GCQ
<b>Dynamometer Coefficients:</b>								
		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	33.422	0.16021	0.023498	15.225	0.09895	0.022343	13.4	
Cold CO	37.136	0.17801	0.026108	14.765	0.03433	0.024597	N/A	
US06	33.422	0.16021	0.023498	15.225	0.09895	0.022343	N/A	
Emission Control Device Comments	--							
Manufacturer Test Vehicle Comments	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM							

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092132</b>	<b>Test Procedure</b>	<b>11 - Cold CO</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	28 - Cold CO E10 Regular Gasoline (Tier 3)
<b>Test Date</b>	08/01/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2506CX	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2621	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	421.815	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.91063	--
	FE BAG 1 (Bag 1 Fuel Economy)	20.6254	20.6254
	CH4 BAG 1 (Bag 1 Methane)	0.0258129	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.1620373	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	374.686	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.00829	--
	FE BAG 2 (Bag 2 Fuel Economy)	23.3191	23.3191
	CH4 BAG 2 (Bag 2 Methane)	0.0004404	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	306.979	--
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.00167	--
	FE BAG 3 (Bag 3 Fuel Economy)	28.4849	28.4849
	CH4 BAG 3 (Bag 3 Methane)	0.0017168	--
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.0000214	--
	METHANE (CH4 - Methane)	0.0060498	--
	CO (Carbon Monoxide)	0.1935	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.9207648	--
	DT-EER (Drive Trace Energy Economy Rating)	0.1276698	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.6630619	--
	MFR FE (Manufacturer Fuel Economy)	23.8663	23.8663
	NOX (Nitrogen Oxide)	0.0074125	--
	N2O (Nitrous Oxide)	0.0001376	--
	HC-NM (Non-methane Hydrocarbon)	0.030571	--
	NMOG (Non-methane organic gases)	0.033591	--
	HC-TOTAL (Total Hydrocarbon)	0.03634	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	365.863	--
<b>Manufacturer Test Comments</b>	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM		

### Certification Summary Information Report

Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
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	0.19	--	--	--	0.04	--	0.2	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	HC-NM	0.03	--	--	--	0	--	0	0.3	Pass
CA	50,000 miles	California LEV-IV SULEV30	CO	0.19	--	--	--	0.04	--	0.2	12.5	Pass
CA	120,000 miles	California LEV-IV SULEV30	HC-NM	0.03	--	--	--	0	--	0	0.3	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092133</b>	<b>Test Procedure</b>	<b>49 - Quick-Driveway (QD)</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/18/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2438	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	333.688	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.40022	--
	FE BAG 1 (Bag 1 Fuel Economy)	26.2682	26.2682
	CH4 BAG 1 (Bag 1 Methane)	0.0059031	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0446836	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	342.322	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.01686	--
	FE BAG 2 (Bag 2 Fuel Economy)	25.7115	25.7115
	CH4 BAG 2 (Bag 2 Methane)	0.000332	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	286.788	--
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.02398	--
	FE BAG 3 (Bag 3 Fuel Economy)	30.6379	30.6379
	CH4 BAG 3 (Bag 3 Methane)	0.0012796	--
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--
	METHANE (CH4 - Methane)	0.001748	--
	CO (Carbon Monoxide)	0.09834	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.2241632	--
	DT-EER (Drive Trace Energy Economy Rating)	-0.111997	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.2885602	--
	MFR FE (Manufacturer Fuel Economy)	27.0431	27.0431
	NOX (Nitrogen Oxide)	0.0072309	--
	N2O (Nitrous Oxide)	0.0002104	--
	HC-NM (Non-methane Hydrocarbon)	0.0084499	--
	NMOG (Non-methane organic gases)	0.009269	--
	HC-TOTAL (Total Hydrocarbon)	0.009923	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	325.274	--
<b>Manufacturer Test Comments</b>	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM		

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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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
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0093	--	--	--	0.0046	--	0.014	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0165	--	--	--	--	--	0.026	0.042	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0072	--	--	--	0.0044	--	0.012	99.999	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092134</b>	<b>Test Procedure</b>	<b>59 - Partial Soak (PS) - 3 to 12 hour</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/16/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2401	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	307.574	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.17298	--
	FE BAG 1 (Bag 1 Fuel Economy)	28.5185	28.5185
	CH4 BAG 1 (Bag 1 Methane)	0.005195	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0277627	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	342.322	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.01686	--
	FE BAG 2 (Bag 2 Fuel Economy)	25.7115	25.7115
	CH4 BAG 2 (Bag 2 Methane)	0.000332	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	286.788	--
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.02398	--
	FE BAG 3 (Bag 3 Fuel Economy)	30.6379	30.6379
	CH4 BAG 3 (Bag 3 Methane)	0.0012796	--
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--
	METHANE (CH4 - Methane)	0.0016007	--
	CO (Carbon Monoxide)	0.05119	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.9207637	--
	DT-EER (Drive Trace Energy Economy Rating)	-0.4043681	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.6643447	--
	MFR FE (Manufacturer Fuel Economy)	27.4729	27.4729
	NOX (Nitrogen Oxide)	0.0065965	--
	N2O (Nitrous Oxide)	0.0002249	--
	HC-NM (Non-methane Hydrocarbon)	0.0052478	--
	NMOG (Non-methane organic gases)	0.0057565	--
	HC-TOTAL (Total Hydrocarbon)	0.00658	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	319.86	--
<b>Manufacturer Test Comments</b>	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM		

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Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
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
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0058	--	--	--	0.0045	--	0.01	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0124	--	--	--	--	--	0.021	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0066	--	--	--	0.0044	--	0.011	99.999	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092135</b>	<b>Test Procedure</b>	<b>58 - Partial Soak (PS) - 40 minute</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/16/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2397	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	298.834	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.0256	--
	FE BAG 1 (Bag 1 Fuel Economy)	29.404	29.404
	CH4 BAG 1 (Bag 1 Methane)	0.0036404	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0072386	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	342.322	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.01686	--
	FE BAG 2 (Bag 2 Fuel Economy)	25.7115	25.7115
	CH4 BAG 2 (Bag 2 Methane)	0.000332	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	286.788	--
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.02398	--
	FE BAG 3 (Bag 3 Fuel Economy)	30.6379	30.6379
	CH4 BAG 3 (Bag 3 Methane)	0.0012796	--
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--
	METHANE (CH4 - Methane)	0.0012787	--
	CO (Carbon Monoxide)	0.02063	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.017852	--
	DT-EER (Drive Trace Energy Economy Rating)	-0.2526938	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.8376877	--
	MFR FE (Manufacturer Fuel Economy)	27.651	27.651
	NOX (Nitrogen Oxide)	0.0060549	--
	N2O (Nitrous Oxide)	0.0001619	--
	HC-NM (Non-methane Hydrocarbon)	0.0013689	--
	NMOG (Non-methane organic gases)	0.0015016	--
	HC-TOTAL (Total Hydrocarbon)	0.002397	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	318.044	--
<b>Manufacturer Test Comments</b>	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM		

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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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
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0015	--	--	--	0.0022	--	0.004	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0076	--	--	--	--	--	0.013	0.023	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0061	--	--	--	0.003	--	0.009	99.999	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092136</b>	<b>Test Procedure</b>	<b>57 - Partial Soak (PS) - 10 minute</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/16/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2393	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	291.886	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.00474	--
	FE BAG 1 (Bag 1 Fuel Economy)	30.1166	30.1166
	CH4 BAG 1 (Bag 1 Methane)	0.0013151	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	342.322	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.01686	--
	FE BAG 2 (Bag 2 Fuel Economy)	25.7115	25.7115
	CH4 BAG 2 (Bag 2 Methane)	0.000332	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	286.788	--
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.02398	--
	FE BAG 3 (Bag 3 Fuel Economy)	30.6379	30.6379
	CH4 BAG 3 (Bag 3 Methane)	0.0012796	--
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--
	METHANE (CH4 - Methane)	0.0007962	--
	CO (Carbon Monoxide)	0.0163	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.093775	--
	DT-EER (Drive Trace Energy Economy Rating)	-0.3251493	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.0398274	--
	MFR FE (Manufacturer Fuel Economy)	27.7388	27.7388
	NOX (Nitrogen Oxide)	0.0063405	--
	N2O (Nitrous Oxide)	0.000066	--
	HC-NM (Non-methane Hydrocarbon)	0	--
	NMOG (Non-methane organic gases)	0	--
	HC-TOTAL (Total Hydrocarbon)	0.000535	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	316.608	--
<b>Manufacturer Test Comments</b>	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM		

## Certification Summary Information Report

Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
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
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0	--	--	--	0.0005	--	0	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0063	--	--	--	--	--	0.009	0.015	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0063	--	--	--	0.0025	--	0.009	99.999	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092142</b>	<b>Test Procedure</b>	<b>25 - California fuel 2-day exhaust (w/can load)</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/16/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2382	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	341.476	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.62406	--
	FE BAG 1 (Bag 1 Fuel Economy)	25.7086	25.7086
	CH4 BAG 1 (Bag 1 Methane)	0.0056948	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0257174	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	342.322	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.01686	--
	FE BAG 2 (Bag 2 Fuel Economy)	25.7115	25.7115
	CH4 BAG 2 (Bag 2 Methane)	0.000332	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	286.788	--
	CO BAG 3 (Bag 3 Carbon Monoxide)	0.02398	--
	FE BAG 3 (Bag 3 Fuel Economy)	30.6379	30.6379
	CH4 BAG 3 (Bag 3 Methane)	0.0012796	--
	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--
	METHANE (CH4 - Methane)	0.0017045	--
	CO (Carbon Monoxide)	0.14473	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.0823804	--
	DT-EER (Drive Trace Energy Economy Rating)	-0.3171316	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.9119958	--
	MFR FE (Manufacturer Fuel Economy)	26.8736	26.8736
	NOX (Nitrogen Oxide)	0.0065874	--
	N2O (Nitrous Oxide)	0.0000689	--
	HC-NM (Non-methane Hydrocarbon)	0.0048619	--
	NMOG (Non-methane organic gases)	0.0053332	--
	PM (Particulate Matter)	0.0000518	--
	HC-TOTAL (Total Hydrocarbon)	0.006294	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CREE/OPT-CREE</b>
	Carbon-Related Exhaust Emissions	327.2373269	327
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	326.889	--

## Manufacturer Test Comments

26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM

## Certification Summary Information Report

Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 30	CREE	327	--	--	--	0	--	327	--	--
Fed	120,000 miles	Federal Tier 3 Bin 30	METHANE	0.0017	--	--	--	0.003	--	0.005	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	N2O	0.0001	--	--	--	0.0004	--	0	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.14	--	--	--	0.13	--	0.3	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	0.23	--	--	--	0.1	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0053	--	--	--	0.0046	--	0.01	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0119	--	--	--	--	--	0.021	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.021	--	--	--	0	--	0.021	0.040	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0066	--	--	--	0.0044	--	0.011	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0001	--	--	--	0	--	0	0.003	Pass
CA	150,000 miles	California LEV-IV SULEV30	CO	0.14	--	--	--	0.13	--	0.3	1.0	Pass
CA	150,000 miles	California LEV-IV SULEV30	METHANE	0.0017	--	--	--	0.003	--	0.005	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	N2O	0.0001	--	--	--	0.0004	--	0	0.010	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0053	--	--	--	0.0046	--	0.01	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0119	--	--	--	--	--	0.021	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0066	--	--	--	0.0044	--	0.011	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	PM	0.0001	--	--	--	0	--	0	0.001	Pass

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

## Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092131</b>	<b>Test Procedure</b>	<b>3 - HWFE</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/18/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2442	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0001648	--
CO (Carbon Monoxide)	0.03013	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.8382801	--
DT-EER (Drive Trace Energy Economy Rating)	0.089665	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.7058622	--
MFR FE (Manufacturer Fuel Economy)	37.2558	37.2558
NOX (Nitrogen Oxide)	0.0023186	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	236.0472798	236

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	236.024	--

## Manufacturer Test Comments

26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM

## Certification Summary Information Report

Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 30	CREE	236	--	--	--	0	--	236	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0	--	1.03	--	0.0046	--	0.005	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0023	--	1.03	--	--	--	0.011	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0023	--	--	--	0.0044	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0	--	1.03	--	0.0046	--	0.005	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0023	--	1.03	--	--	--	0.011	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0023	--	--	--	0.0044	--	0.007	99.999	Pass

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

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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<b>Test #</b>	<b>TTKX10092128</b>	<b>Test Procedure</b>	<b>38 - CA fuel 3-day evap.</b>
<b>Exhaust Test # for this Evap Test</b>	TTKX10092126	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	08/21/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2521L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	2703	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.2598602	--

**Manufacturer Test Comments**

26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 3Day-Evap EM

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	0.2599	0	0.26	0.4	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2599	0	0.26	0.4	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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<b>Test #</b>	<b>TTKX10092129</b>	<b>Test Procedure</b>	<b>37 - California Fuel Running Loss</b>
<b>Exhaust Test # for this Evap Test</b>	TTKX10092126	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	08/21/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2521L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	2686	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.0002182	--

**Manufacturer Test Comments**

26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 Running Loss EM

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	0	0	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0	0	0	0.01	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092139</b>	<b>Test Procedure</b>	<b>24 - Federal fuel refueling test (ORVR)</b>
<b>Exhaust Test # for this Evap Test</b>	TTKX10092125	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	08/08/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2501T3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2668	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC (Hydrocarbon for Running Loss and ORVR)	0.0029712	--

**Manufacturer Test Comments**

26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 ORVR EM

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	0.003	0.009	0.01	0.2	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC	0.003	0.009	0.01	0.2	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092141</b>	<b>Test Procedure</b>	<b>90 - US06</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/16/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2404	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes
<b>Test Results</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated FE Equivalent Value (miles per gallon)</b>
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	503.62	--
	CO BAG 1 (Bag 1 Carbon Monoxide)	0.11708	--
	FE BAG 1 (Bag 1 Fuel Economy)	17.4412	17.4412
	CH4 BAG 1 (Bag 1 Methane)	0.0022624	--
	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.007323	--
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	304.516	--
	CO BAG 2 (Bag 2 Carbon Monoxide)	0.13282	--
	FE BAG 2 (Bag 2 Fuel Economy)	28.8125	28.8125
	CH4 BAG 2 (Bag 2 Methane)	0.0013458	--
	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0038068	--
	METHANE (CH4 - Methane)	0.0015484	--
	CO (Carbon Monoxide)	0.12934	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.0672761	--
	DT-EER (Drive Trace Energy Economy Rating)	-0.1204446	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.3202333	--
	MFR FE (Manufacturer Fuel Economy)	25.1819	25.1819
	NOX (Nitrogen Oxide)	0.0133667	--
	N2O (Nitrous Oxide)	0.000075	--
	HC-NM (Non-methane Hydrocarbon)	0.0044501	--
	NMOG (Non-methane organic gases)	0.0045836	--
	PM (Particulate Matter)	0.0007655	--
	HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0178168	--
	HC-TOTAL (Total Hydrocarbon)	0.005917	--
	<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
	Carbon dioxide	348.507	--
<b>Manufacturer Test Comments</b>	26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM		

## Certification Summary Information Report

Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
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	PM	0.0008	--	--	--	0.0001	--	0.001	0.006	Pass
CA	150,000 miles	California LEV-IV SULEV30	CO	0.13	--	--	--	0.03	--	0.2	9.6	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0046	--	1.03	--	0	--	0.005	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.018	--	1.03	--	--	--	0.018	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0134	--	--	--	0	--	0.013	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	PM	0.0008	--	--	--	0.0001	--	0.001	0.006	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
<b>Test #</b>	<b>TTKX10092137</b>	<b>Test Procedure</b>	<b>95 - SC03</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline
<b>Test Date</b>	07/17/2025	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2520L4	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Mazda Miyoshi Test Lab		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	2424	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>METHANE (CH4 - Methane)</b>	0.0015844	--
<b>CO (Carbon Monoxide)</b>	0.05411	--
<b>DT-ASCR (Drive Trace Absolute Speed Change Rating)</b>	0.4072106	--
<b>DT-EER (Drive Trace Energy Economy Rating)</b>	-0.0194044	--
<b>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</b>	1.1160363	--
<b>MFR FE (Manufacturer Fuel Economy)</b>	24.022	24.022
<b>NOX (Nitrogen Oxide)</b>	0.0070265	--
<b>N2O (Nitrous Oxide)</b>	0.0000809	--
<b>HC-NM (Non-methane Hydrocarbon)</b>	0.0005272	--
<b>NMOG (Non-methane organic gases)</b>	0.000543	--
<b>HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)</b>	0.0075537	--
<b>HC-TOTAL (Total Hydrocarbon)</b>	0.002095	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
<b>Carbon dioxide</b>	366.354	--

**Manufacturer Test Comments**

26MY MAZDA CX-5 2.5L w/o cylinder deactivation 4WD ETW 4250 S6 225/55 R19 2 EM

## Certification Summary Information Report

Test Group		TTKXT02.5CDJ				Evaporative/Refueling Family				TTKXR0117GCQ		
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
CA	150,000 miles	California LEV-IV SULEV30	CO	0.05	--	--	--	0.13	--	0.2	1.0	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0005	--	1.03	--	0.0046	--	0.005	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0075	--	1.03	--	--	--	0.016	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.007	--	--	--	0.0044	--	0.011	99.999	Pass

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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**Emission Data Vehicle Information**

Vehicle ID / Configuration	7EFPYS1-032 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	HTKXT02.5FNM	Original Evaporative/Refueling Family	HTKXR0117GCQ
Original Test Vehicle Model Year	2017		

**Vehicle Model**

Represented Test Vehicle Make	MAZDA	Represented Test Vehicle Model	CX-5
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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

Hybrid Indicator	No		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.993
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	7PYSFAM	Rated Horsepower	187
Displacement (liters)	2.5		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Front
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	3527	Equivalent Test Weight (pounds)	3875
GVWR (lbs)	4515	N/V Ratio	31.5
Axle Ratio	4.33		
Transmission Type	Automatic	# of Transmission Gears	6
Transmission Lockup	Yes	Creeper Gear	No

**Dynamometer Coefficients:**

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	29.645	0.25247	0.023253	6.182	0.23639	0.021997	13.4
US06	29.645	0.25247	0.023253	6.182	0.23639	0.021997	N/A

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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**Emission Control Device Comments** --  
**Manufacturer Test Vehicle Comments** 17MY CX-5 2.5L 2WD ETW 3875 S6 P225/65 R17 0 Federal FE

<b>Test #</b>	<b>HTKX10045490</b>	<b>Test Procedure</b>	<b>65 - Evap Canister Bleed Test</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	08/08/2016	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	1607G3	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	MAHLE		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4000	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 86 (+/- 2 mph, +/- 1 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL (Total Hydrocarbon)	0.0141	--

**Manufacturer Test Comments** 17MY CX-5 2.5L 2WD P225/65 R17 LEV3 SULEV30 BETP EM

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	0.0141	0	0.014	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL	0.0141	0	0.014	0.02	Pass

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Fuel Properties</b>			
<b>Fuel Batch ID</b>	<b>2506CX</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	28 - Cold CO E10 Regular Gasoline (Tier 3)	<b>Fuel Batch Calibration Date</b>	09/02/2021
<b>Fuel Batch Calibration Effective Date</b>	06/16/2025	<b>Fuel Batch Calibration Ineffective Date</b>	12/15/2025
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.744
<b>Fuel Ethanol Volume Percent (%)</b>	9.7	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17828
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	41.441	<b>Fuel Carbon Mass Fraction (E10)</b>	0.827
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.827	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>2520L4</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	03/27/2024
<b>Fuel Batch Calibration Effective Date</b>	07/01/2025	<b>Fuel Batch Calibration Ineffective Date</b>	01/31/2026
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.752
<b>Fuel Ethanol Volume Percent (%)</b>	9.4	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17830
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	41.446	<b>Fuel Carbon Mass Fraction (E10)</b>	0.83
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.83	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>2521L4</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	51 - CARB LEV4 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	03/27/2024
<b>Fuel Batch Calibration Effective Date</b>	08/20/2025	<b>Fuel Batch Calibration Ineffective Date</b>	02/19/2026
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.752
<b>Fuel Ethanol Volume Percent (%)</b>	9.4	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17830
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	41.446	<b>Fuel Carbon Mass Fraction (E10)</b>	0.83
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.83	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>1607G3</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	04/04/2016
<b>Fuel Batch Calibration Effective Date</b>	08/08/2016	<b>Fuel Batch Calibration Ineffective Date</b>	02/07/2017
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.742
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17850
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825	Weight Fraction CO2	--
<b>Fuel Batch ID</b>	<b>2501T3</b>	<b>Fuel Calibration Number</b>	<b>1</b>
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	11/29/2019
Fuel Batch Calibration Effective Date	08/05/2025	Fuel Batch Calibration Ineffective Date	02/04/2026
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.751
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17816
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.413	Fuel Carbon Mass Fraction (E10)	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	Weight Fraction CO2	--

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ
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#### Consolidated List of Standards

**Exhaust Standards**

<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Both
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>Standard Level</b>	California LEV-IV SULEV30
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	Partial Soak (PS) - 40 minute

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	--	--	--	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.023
150,000 miles	NOX	--	--	--	--	--	--	0.003	99.999

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Both
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>Standard Level</b>	Federal Tier 3 Bin 30
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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
120,000 miles	CREE	--	--	--	--	--	--	0	999.9999
120,000 miles	METHANE	--	--	--	--	--	--	0.003	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0004	0.010
150,000 miles	CO	--	--	--	--	--	--	0.13	1.0
150,000 miles	CO-COMP	--	--	--	--	--	--	0.1	4.2
150,000 miles	NMOG	--	--	--	--	--	--	0.0046	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	0	0.040
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

### Certification Summary Information Report

<b>Test Group</b>		TTKXT02.5CDJ			<b>Evaporative/Refueling Family</b>			TTKXR0117GCQ		
<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			In-Use		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			US06		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	--	0.03	9.6	
150,000 miles	NMOG	--	--	1.03	--	--	--	0	99.999	
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.036	
150,000 miles	NOX	--	--	--	--	--	--	0	99.999	
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.006	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Cold CO		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
50,000 miles	CO	--	--	--	--	--	--	0.04	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0	0.3	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Partial Soak (PS) - 3 to 12 hour		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	NMOG	--	--	--	--	--	--	0.0045	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999	

### Certification Summary Information Report

<b>Test Group</b>		TTKXT02.5CDJ			<b>Evaporative/Refueling Family</b>			TTKXR0117GCQ		
<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Partial Soak (PS) - 10 minute		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	NMOG	--	--	--	--	--	--	0.0005	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.015	
150,000 miles	NOX	--	--	--	--	--	--	0.0025	99.999	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			In-Use		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			California fuel 2-day exhaust (w/can load)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	--	0.13	1.0	
150,000 miles	METHANE	--	--	--	--	--	--	0.003	0.030	
150,000 miles	N2O	--	--	--	--	--	--	0.0004	0.010	
150,000 miles	NMOG	--	--	--	--	--	--	0.0046	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999	
150,000 miles	PM	--	--	--	--	--	--	0	0.002	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Cold CO		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
50,000 miles	CO	--	--	--	--	--	--	0.04	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0	0.3	

### Certification Summary Information Report

<b>Test Group</b>		TTKXT02.5CDJ			<b>Evaporative/Refueling Family</b>			TTKXR0117GCQ		
<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			In-Use		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Quick-Driveway (QD)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	NMOG	--	--	--	--	--	--	0.0046	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050	
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			California fuel 2-day exhaust (w/can load)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	--	0.13	1.0	
150,000 miles	METHANE	--	--	--	--	--	--	0.003	0.030	
150,000 miles	N2O	--	--	--	--	--	--	0.0004	0.010	
150,000 miles	NMOG	--	--	--	--	--	--	0.0046	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999	
150,000 miles	PM	--	--	--	--	--	--	0	0.001	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			US06		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	--	0.03	9.6	
150,000 miles	NMOG	--	--	1.03	--	--	--	0	99.999	
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0	99.999	
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.006	

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ			<b>Evaporative/Refueling Family</b>			TTKXR0117GCQ		
<b>Cert Region</b>	California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>	Gasoline			<b>Test Procedure</b>			SC03		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	CO	--	--	--	--	--	--	0.13	1.0
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0046	99.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999

<b>Cert Region</b>	California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>	Gasoline			<b>Test Procedure</b>			Quick-Driveway (QD)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	NMOG	--	--	--	--	--	--	0.0046	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.042
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999

<b>Cert Region</b>	Federal			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<b>Fuel</b>	Gasoline			<b>Test Procedure</b>			US06		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.006

### Certification Summary Information Report

<b>Test Group</b>		TTKXT02.5CDJ			<b>Evaporative/Refueling Family</b>			TTKXR0117GCQ		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			HWFE		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
120,000 miles	CREE	--	--	--	--	--	--	0	999.9999	
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0046	99.999	
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Both		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV SULEV30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			HWFE		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0046	99.999	
150,000 miles	NMOG+NOX	--	--	1.03	--	--	--	0	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999	

**Evaporative/Refueling Standards**

<b>Evaporative/Refueling Family</b>		TTKXR0117GCQ			<b>Cert Region</b>			California + CAA Section 177 states		
<b>Cert/In-Use Code</b>		Both			<b>Standard Level</b>			California LEV-IV Zero Evap (Option 2)		
<b>Test Procedure</b>		California Fuel Running Loss								
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>					
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.01	0					

<b>Evaporative/Refueling Family</b>		TTKXR0117GCQ			<b>Cert Region</b>			Federal		
<b>Cert/In-Use Code</b>		Both			<b>Standard Level</b>			Federal Tier 3 Evap		
<b>Test Procedure</b>		Evap Canister Bleed Test								
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>					
Gasoline	150,000 miles	HC-TOTAL	--	0.020	0					

### Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ		
<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ	<b>Cert Region</b>	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC	--	0.20	0.009
<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ	<b>Cert Region</b>	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<b>Test Procedure</b>	CA fuel 3-day evap.				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.400	0
<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ	<b>Cert Region</b>	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<b>Test Procedure</b>	Evap Canister Bleed Test				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL	--	0.020	0
<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ	<b>Cert Region</b>	Federal Federal Tier 3 Evap		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC	--	0.20	0.009
<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ	<b>Cert Region</b>	Federal Federal Tier 3 Evap		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>			
<b>Test Procedure</b>	California Fuel Running Loss				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0

## Certification Summary Information Report

<b>Test Group</b>	TTKXT02.5CDJ	<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ		
<b>Evaporative/Refueling Family</b>	TTKXR0117GCQ	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Both	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	CA fuel 3-day evap.				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.400	0

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family	TTKXR0117GCQ
<b>Glossary</b>			
<b>Useful Life</b>			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
<b>Emission Name</b>			
HC-TOTAL	Total Hydrocarbon	AS-VOLT	Average System Voltage
CO	Carbon Monoxide	CO2 BAG 1	Bag 1 Carbon Dioxide
CO2	Carbon dioxide	CO2 BAG 2	Bag 2 Carbon Dioxide
CREE	Carbon-Related Exhaust Emissions	CO2 BAG 3	Bag 3 Carbon Dioxide
OPT-CREE	Optional Carbon-Related Exhaust Emissions	CO2 BAG 4	Bag 4 Carbon Dioxide
NOX	Nitrogen Oxide	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
PM	Particulate Matter	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
PM-COMP	SFTP Composite Particulate Matter	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM	Non-methane Hydrocarbon	DT-ASCR	Drive Trace Absolute Speed Change Rating
OMHCE	Organic material Hydrocarbon Equivalent	DT-EER	Drive Trace Energy Economy Rating
OMNMHCE	Organic material non-methane HC equivalent	COMB-CREE	Combined Carbon-Related Exhaust Emissions
NMOG	Non-methane organic gases	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
HCHO	Formaldehyde	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
H3C2HO	Acetaldehyde	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	LEAK-DIA	Effective Leak Diameter (inches)
CO-COMP	SFTP Composite Carbon Monoxide	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
ETHANOL	C2H5OH - Ethanol	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
FE BAG 1	Bag 1 Fuel Economy	KW-HRS	Integrated DC KW-HRS
FE BAG 2	Bag 2 Fuel Economy	CH4 BAG 1	Bag 1 Methane
FE BAG 3	Bag 3 Fuel Economy	CH4 BAG 2	Bag 2 Methane
FE BAG 4	Bag 4 Fuel Economy	CH4 BAG 3	Bag 3 Methane
MFR FE	Manufacturer Fuel Economy	CH4 BAG 4	Bag 4 Methane
HC	Hydrocarbon for Running Loss and ORVR	CO BAG 1	Bag 1 Carbon Monoxide
METHANE	CH4 - Methane	CO BAG 2	Bag 2 Carbon Monoxide
METHANOL	CH3OH - Methanol	CO BAG 3	Bag 3 Carbon Monoxide
N2O	Nitrous Oxide	CO BAG 4	Bag 4 Carbon Monoxide
SPITBACK	Spitback Hydrocarbon in grams	NMOG BAG 1	Bag 1 Non-methane organic gases
AMP-HRS	Integrated Amp-hours	NMOG BAG 2	Bag 2 Non-methane organic gases
START-SOC	System Start State of Charge Watt-hours	NMOG BAG 3	Bag 3 Non-methane organic gases
END-SOC	System End State of Charge Watt-hours	NMOG BAG 4	Bag 4 Non-methane organic gases
ACT-DISTANCE	Actual Distance Driven (miles)		
<b>Certification Region</b>			

## Certification Summary Information Report

Test Group	TTKXT02.5CDJ	Evaporative/Refueling Family		TTKXR0117GCQ
CA	California + CAA Section 177 states	FA	Federal	
<b>Exhaust Emission Standard Level</b>				
B1	Federal Tier 2 Bin 1	T3B160	Federal Tier 3 Bin 160	
B2	Federal Tier 2 Bin 2	T3B125	Federal Tier 3 Bin 125	
B3	Federal Tier 2 Bin 3	T3B110	Federal Tier 3 Transitional Bin 110	
B4	Federal Tier 2 Bin 4	T3B85	Federal Tier 3 Transitional Bin 85	
B5	Federal Tier 2 Bin 5	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover	
B6	Federal Tier 2 Bin 6	T3B70	Federal Tier 3 Bin 70	
B7	Federal Tier 2 Bin 7	T3B50	Federal Tier 3 Bin 50	
B8	Federal Tier 2 Bin 8	T3B30	Federal Tier 3 Bin 30	
B9	Federal Tier 2 Bin 9	T3B20	Federal Tier 3 Bin 20	
B10	Federal Tier 2 Bin 10	T3B0	Federal Tier 3 Bin 0	
B11	Federal Tier 2 Bin 11	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
L2	California LEV-II LEV	HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
L2OP	California LEV-II LEV Optional	HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
U2	California LEV-II ULEV	HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
S2	California LEV-II SULEV	HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
ZEV	California ZEV	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
OT	Other	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
T1	Federal Tier 1	HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
PZEV	California PZEV	HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
L2LEV160	California LEV-II LEV160	HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
L2ULEV125	California LEV-II ULEV125	HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
L2SULEV30	California LEV-II SULEV30	HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2LEV395	California LEV-II LEV395	L4SULEV100	California LEV-IV SULEV100	
L2ULEV340	California LEV-II ULEV340	L4SULEV125	California LEV-IV SULEV125	
L2LEV630	California LEV-II LEV630	L4SULEV15	California LEV-IV SULEV15	
L2ULEV570	California LEV-II ULEV570	L4SULEV150	California LEV-IV SULEV150	
L3LEV160	California LEV-III LEV160	L4SULEV170	California LEV-IV SULEV170	
L3ULEV125	California LEV-III ULEV125	L4SULEV175	California LEV-IV SULEV175	
L3ULEV70	California LEV-III ULEV70	L4SULEV20	California LEV-IV SULEV20	
L3ULEV50	California LEV-III ULEV50	L4SULEV200	California LEV-IV SULEV200	
L3SULEV30	California LEV-III SULEV30	L4SULEV230	California LEV-IV SULEV230	
L3SULEV20	California LEV-III SULEV20	L4SULEV25	California LEV-IV SULEV25	
L3LEV395	California LEV-III LEV395	L4SULEV30	California LEV-IV SULEV30	
L3ULEV340	California LEV-III ULEV340	L4SULEV75	California LEV-IV SULEV75	
L3ULEV250	California LEV-III ULEV250	L4SULEV85	California LEV-IV SULEV85	
L3ULEV200	California LEV-III ULEV200	L4ULEV125	California LEV-IV ULEV125	

## Certification Summary Information Report

Test Group		TTKXT02.5CDJ	Evaporative/Refueling Family		TTKXR0117GCQ
L3SULEV170	California LEV-III SULEV170		L4ULEV200	California LEV-IV ULEV200	
L3SULEV150	California LEV-III SULEV150		L4ULEV250	California LEV-IV ULEV250	
L3LEV630	California LEV-III LEV630		L4ULEV270	California LEV-IV ULEV270	
L3ULEV570	California LEV-III ULEV570		L4ULEV40	California LEV-IV ULEV40	
L3ULEV400	California LEV-III ULEV400		L4ULEV400	California LEV-IV ULEV400	
L3ULEV270	California LEV-III ULEV270		L4ULEV50	California LEV-IV ULEV50	
L3SULEV230	California LEV-III SULEV230		L4ULEV60	California LEV-IV ULEV60	
L3SULEV200	California LEV-III SULEV200		L4ULEV70	California LEV-IV ULEV70	
<b>Transmission Type Code</b>					
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)		M	Manual	
A	Automatic		OT	Other	
AM	Automated Manual		SA	Semi-Automatic	
CVT	Continuously Variable		SCV	Selectable Continuously Variable (e.g. CVT with paddles)	
<b>Drive System Code</b>					
4	4-Wheel Drive		P	Part-time 4-Wheel Drive	
F	2-Wheel Drive, Front		A	All Wheel Drive	
R	2-Wheel Drive, Rear				
<b>Additional Terms and Acronyms</b>					
AFC	Alternative Fuel Converter		ICI	Independent Commercial Importer	
CSI	Certificate Summary Information		ORVR	Onboard Refueling Vapor Recovery	
DF	Deterioration Factor		SIL	Shift Indicator Light	
Evap	Evaporation, Evaporative		Trans	Transmission	