

Certification Summary Information Report

Manufacturer	Hyundai Motor Company	Manufacturer Code	HYX
Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Certificate Number	VHYXT00.0402-009	CARB Executive Order #	--
Certificate Issue Date	03/06/2026	Certificate Revision Date	--
Certificate Effective Date	03/06/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	01/26/2026 08:56:53 PM
Model Year	2027		

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	Yes
Fuel Cell Indicator	No	EPA Vehicle Class	LDT4
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	--	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VHYXEEENN402	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	05/01/2026	CAP2000 Conditional Certificate?	No
Independent Commercial Importer?	No	Alternative Fuel Converter Certificate?	No
SFTP Federal Composite Compliance Identifier	Not Applicable	SFTP Tier 2 Composite CO Option	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VHYXT00.0402
Test Group OBD Compliance Level	Full - no deficiencies	Number of Test Group OBD Deficiencies	0
OBD Deficiencies Comments	Battery Electric Vehicle is exempted from OBD compliance.		
Mfr Test Group Comments	This vehicle complies with the Tier4 Bin 0 emission standards for the 2027 model year.		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
-------------------	--------------	-------------------------------------	----

Models Covered by this Certificate

Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Hyundai Motor Company	1 - HYUNDAI MOTOR COMPANY	360 - Ioniq 9 RWD	Federal	2-Wheel Drive, Rear	Automatic	1	No
Hyundai Motor Company	1 - HYUNDAI MOTOR COMPANY	360 - Ioniq 9 RWD	California + CAA Section 177 states	2-Wheel Drive, Rear	Automatic	1	No

Engine Description

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

After Treatment Device(s) (ATD)

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

Official Test Numbers

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

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if Other	--
Battery Type	Lithium Ion	Number of Battery Packs	1
Total Voltage of Battery Packs	610	Battery Energy Capacity	180.9
Battery Specific Energy	176.4	Battery Charger Type	Both
Number of Capacitors	--	Capacitor Rating (In Farads)	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Rear Wheels	Driver Controlled Regenerative Braking	Yes
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	1		
Motor/Generator Type 1	PMSM	Rated Motor/Generator Power	160
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	Usable H2 Fill Capacity (kg)	--
Mfr Hybrid Electric/ Electric Vehicle Comments	PMSM : Permanent Magnet Synchronous Motor		

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	ME1-AU5ESER120R / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	THYXV00.0402	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2026								
Vehicle Model									
Represented Test Vehicle Make	Hyundai	Represented Test Vehicle Model	Ioniq 9 RWD						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 34%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">Electricity</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes						
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	Yes								
Odometer Correction -- Initial	0	Odometer Correction Factor	0.9973						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	EM16	Rated Horsepower	215						
Displacement (liters)	0.001								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5507	Equivalent Test Weight (pounds)	6000						
GVWR (lbs)	6900	N/V Ratio	146.7						
Axle Ratio	4.68								
Transmission Type	Automatic	# of Transmission Gears	1						
Transmission Lockup	No	Creeper Gear	No						
Dynamometer Coefficients:									
Target Coefficients			Set Coefficients						
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)						
City/Highway/Evap	32.786	0.30509	0.022655						
			A (lbf)						
			10.994						
			B (lbf/mph)						
			0.20427						
			C (lbf/mph**2)						
			0.022088						
			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients						
			14						
Emission Control Device Comments	--								

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Manufacturer Test Vehicle Comments	Ioniq 9 Long range RWD 19in.		

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Test #	THYX10087866	Test Procedure	77 - Multi-Cycle Test (MCT)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	08/28/2024	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	2189	Odometer Units	M
4WD Test Dyno	No	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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	220	Recharge Event Energy (kiloWatt-hours)	121.119
Charge Depleting Range (Calculated miles)	554.878	Charge Depleting Range (Actual miles)	554.878
Charge Depleting Range Highway (Calculated miles)	439.251	Derived 5-Cycle Coefficient Model Year	--
All Electric Range Unadjusted (miles)	--	Equivalent All Electric Range (miles)	554.878
Number of Charge Depleting Bags/Phases Conducted	8	Transition Bag/Phase Number	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.442
Carbon Monoxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.88
Drive Trace Energy Economy Rating	-1.96
Drive Trace Inertia Work Ratio Rating	-1.75
Integrated DC KW-HRS	1.5315
Manufacturer Fuel Economy	20.579186

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--																		
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>10.255</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.19</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.46</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.47</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>2.54533</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>24.820351</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	10.255	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	1.19	Drive Trace Energy Economy Rating	-0.46	Drive Trace Inertia Work Ratio Rating	1.47	Integrated DC KW-HRS	2.54533	Manufacturer Fuel Economy	24.820351
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	10.255																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	1.19																				
Drive Trace Energy Economy Rating	-0.46																				
Drive Trace Inertia Work Ratio Rating	1.47																				
Integrated DC KW-HRS	2.54533																				
Manufacturer Fuel Economy	24.820351																				
Charge Depleting Bag/Phase #3																					
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.444</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-1.84</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-1.85</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-1.62</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.47356</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>19.795217</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.444	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-1.84	Drive Trace Energy Economy Rating	-1.85	Drive Trace Inertia Work Ratio Rating	-1.62	Integrated DC KW-HRS	1.47356	Manufacturer Fuel Economy	19.795217
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	7.444																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	-1.84																				
Drive Trace Energy Economy Rating	-1.85																				
Drive Trace Inertia Work Ratio Rating	-1.62																				
Integrated DC KW-HRS	1.47356																				
Manufacturer Fuel Economy	19.795217																				
Charge Depleting Bag/Phase #4																					
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>271.935</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>0</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>0</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>0</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>88.00627</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>32.362981</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	271.935	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	0	Drive Trace Energy Economy Rating	0	Drive Trace Inertia Work Ratio Rating	0	Integrated DC KW-HRS	88.00627	Manufacturer Fuel Economy	32.362981
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	271.935																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	0																				
Drive Trace Energy Economy Rating	0																				
Drive Trace Inertia Work Ratio Rating	0																				
Integrated DC KW-HRS	88.00627																				
Manufacturer Fuel Economy	32.362981																				
Charge Depleting Bag/Phase #5																					

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
-------------------	--------------	------------------------------	----

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.444
Carbon Monoxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.84
Drive Trace Energy Economy Rating	-1.81
Drive Trace Inertia Work Ratio Rating	-1.53
Integrated DC KW-HRS	1.43748
Manufacturer Fuel Economy	19.310531

Charge Depleting Bag/Phase #6

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.255
Carbon Monoxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	1.19
Drive Trace Energy Economy Rating	-0.45
Drive Trace Inertia Work Ratio Rating	1.46
Integrated DC KW-HRS	2.52268
Manufacturer Fuel Economy	24.599519

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.446
Carbon Monoxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.91
Drive Trace Energy Economy Rating	-1.83
Drive Trace Inertia Work Ratio Rating	-1.57
Integrated DC KW-HRS	1.45442
Manufacturer Fuel Economy	19.532959

Charge Depleting Bag/Phase #8

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	29.45		
Carbon Monoxide	0		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	12.42		
Drive Trace Energy Economy Rating	-0.38		
Drive Trace Inertia Work Ratio Rating	37.47		
Integrated DC KW-HRS	9.56734		
Manufacturer Fuel Economy	32.486733		
Manufacturer Test Comments	Ioniq 9 RWD 19in MCT Data over '99.99' have been set as '0' due to technical restrictions, but have actually obtained the following results: -> Charge Depleting Bag / Phase #4 DT-ASCR = 105.91, DT-IWRR = 211.82 TYPO of MFR FE phase #5 was corrected from 1.9310531 to 19.310531		

Certification Summary Information Report

Test Group		VHYXT00.0402				Evaporative/Refueling Family					--	
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
-------------------	--------------	-------------------------------------	----

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--						
Emission Data Vehicle Information									
Vehicle ID / Configuration	ME1-KU5ESER061R / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	THYXV00.0402	Original Evaporative/Refueling Family	--						
Original Test Vehicle Model Year	2026								
Vehicle Model									
Represented Test Vehicle Make	Hyundai	Represented Test Vehicle Model	Ioniq 9 RWD						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Drive Source and Fuel#</th> <th style="width: 33%;">Drive Source</th> <th style="width: 33%;">Fuel</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Electric Motor</td> <td style="text-align: center;">Electricity</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel							
1	Electric Motor	Electricity							
Hybrid Indicator	No	Multiple Fuel Combustion	--						
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes						
Fuel Cell Indicator	No	Rechargeable Energy Storage System, if 'Other'	--						
Rechargeable Energy Storage System	Battery(s)								
Off-board charge Capable Indicator	Yes	Odometer Correction Factor	0.9977						
Odometer Correction -- Initial	0								
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	EM16	Rated Horsepower	215						
Displacement (liters)	0.001								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5516	Equivalent Test Weight (pounds)	6000						
GVWR (lbs)	6900	N/V Ratio	146.7						
Axle Ratio	4.68								
Transmission Type	Automatic	# of Transmission Gears	1						
Transmission Lockup	No	Creeper Gear	No						
Dynamometer Coefficients:									
Target Coefficients			Set Coefficients						
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)						
City/Highway/Evap	32.786	0.30509	0.022655						
	4.848	0.36228	0.020421						
			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients						
			14						
Emission Control Device Comments	--								

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Manufacturer Test Vehicle Comments	Only for CANADA market (Ioniq 9 Long range RWD 19in) Set Coefficients was corrected.		

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Test #	THYX10088300	Test Procedure	77 - Multi-Cycle Test (MCT)
Exhaust Test # for this Evap Test	--	Test Fuel Type	62 - Electricity
Test Date	10/18/2024	Fuel	Electricity
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	2111	Odometer Units	M
4WD Test Dyno	No	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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	220	Recharge Event Energy (kiloWatt-hours)	121.119
Charge Depleting Range (Calculated miles)	557.073	Charge Depleting Range (Actual miles)	557.073
Charge Depleting Range Highway (Calculated miles)	448.333	Derived 5-Cycle Coefficient Model Year	--
All Electric Range Unadjusted (miles)	--	Equivalent All Electric Range (miles)	557.073
Number of Charge Depleting Bags/Phases Conducted	8	Transition Bag/Phase Number	--

Charge Depleting Bag/Phase #1

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.445
Carbon Monoxide	0
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-2.03
Drive Trace Energy Economy Rating	-2.12
Drive Trace Inertia Work Ratio Rating	-2.13
Integrated DC KW-HRS	1.5777
Manufacturer Fuel Economy	21.1914

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--																		
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>10.254</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>1.01</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.43</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>1.19</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>2.57254</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>25.0882</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	10.254	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	1.01	Drive Trace Energy Economy Rating	-0.43	Drive Trace Inertia Work Ratio Rating	1.19	Integrated DC KW-HRS	2.57254	Manufacturer Fuel Economy	25.0882
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	10.254																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	1.01																				
Drive Trace Energy Economy Rating	-0.43																				
Drive Trace Inertia Work Ratio Rating	1.19																				
Integrated DC KW-HRS	2.57254																				
Manufacturer Fuel Economy	25.0882																				
Charge Depleting Bag/Phase #3																					
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.445</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-2.02</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-2</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-1.95</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.50145</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>20.1672</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.445	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-2.02	Drive Trace Energy Economy Rating	-2	Drive Trace Inertia Work Ratio Rating	-1.95	Integrated DC KW-HRS	1.50145	Manufacturer Fuel Economy	20.1672
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	7.445																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	-2.02																				
Drive Trace Energy Economy Rating	-2																				
Drive Trace Inertia Work Ratio Rating	-1.95																				
Integrated DC KW-HRS	1.50145																				
Manufacturer Fuel Economy	20.1672																				
Charge Depleting Bag/Phase #4																					
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>286.921</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>99.99</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.02</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>99.99</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>92.52083</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>32.2461</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	286.921	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	99.99	Drive Trace Energy Economy Rating	-0.02	Drive Trace Inertia Work Ratio Rating	99.99	Integrated DC KW-HRS	92.52083	Manufacturer Fuel Economy	32.2461
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	286.921																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	99.99																				
Drive Trace Energy Economy Rating	-0.02																				
Drive Trace Inertia Work Ratio Rating	99.99																				
Integrated DC KW-HRS	92.52083																				
Manufacturer Fuel Economy	32.2461																				
Charge Depleting Bag/Phase #5																					

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--																		
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.445</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-1.96</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-2.09</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>-2.11</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.47892</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>19.8646</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.445	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-1.96	Drive Trace Energy Economy Rating	-2.09	Drive Trace Inertia Work Ratio Rating	-2.11	Integrated DC KW-HRS	1.47892	Manufacturer Fuel Economy	19.8646
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	7.445																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	-1.96																				
Drive Trace Energy Economy Rating	-2.09																				
Drive Trace Inertia Work Ratio Rating	-2.11																				
Integrated DC KW-HRS	1.47892																				
Manufacturer Fuel Economy	19.8646																				
Charge Depleting Bag/Phase #6																					
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>10.254</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>0.33</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-0.47</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>0.51</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>2.51922</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>24.5682</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	10.254	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	0.33	Drive Trace Energy Economy Rating	-0.47	Drive Trace Inertia Work Ratio Rating	0.51	Integrated DC KW-HRS	2.51922	Manufacturer Fuel Economy	24.5682
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	10.254																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	0.33																				
Drive Trace Energy Economy Rating	-0.47																				
Drive Trace Inertia Work Ratio Rating	0.51																				
Integrated DC KW-HRS	2.51922																				
Manufacturer Fuel Economy	24.5682																				
Charge Depleting Bag/Phase #7																					
<table border="1"> <thead> <tr> <th>Test Result/Emission Name</th> <th>Unrounded Test Result</th> </tr> </thead> <tbody> <tr> <td>Actual Distance Driven (miles)</td> <td>7.444</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0</td> </tr> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>0</td> </tr> <tr> <td>Drive Trace Absolute Speed Change Rating</td> <td>-2.2</td> </tr> <tr> <td>Drive Trace Energy Economy Rating</td> <td>-2.03</td> </tr> <tr> <td>Drive Trace Inertia Work Ratio Rating</td> <td>0.61</td> </tr> <tr> <td>Integrated DC KW-HRS</td> <td>1.47847</td> </tr> <tr> <td>Manufacturer Fuel Economy</td> <td>19.8612</td> </tr> </tbody> </table>				Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.444	Carbon Monoxide	0	Carbon-Related Exhaust Emissions	0	Drive Trace Absolute Speed Change Rating	-2.2	Drive Trace Energy Economy Rating	-2.03	Drive Trace Inertia Work Ratio Rating	0.61	Integrated DC KW-HRS	1.47847	Manufacturer Fuel Economy	19.8612
Test Result/Emission Name	Unrounded Test Result																				
Actual Distance Driven (miles)	7.444																				
Carbon Monoxide	0																				
Carbon-Related Exhaust Emissions	0																				
Drive Trace Absolute Speed Change Rating	-2.2																				
Drive Trace Energy Economy Rating	-2.03																				
Drive Trace Inertia Work Ratio Rating	0.61																				
Integrated DC KW-HRS	1.47847																				
Manufacturer Fuel Economy	19.8612																				
Charge Depleting Bag/Phase #8																					

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	23.768	
	Carbon Monoxide	0	
	Carbon-Related Exhaust Emissions	0	
	Drive Trace Absolute Speed Change Rating	16.12	
	Drive Trace Energy Economy Rating	-0.41	
	Drive Trace Inertia Work Ratio Rating	32.24	
	Integrated DC KW-HRS	7.66378	
	Manufacturer Fuel Economy	32.2441	
Manufacturer Test Comments	This test results only for CANADA market vehicle of Ioniq 9 RWD. Data over '99.99' have been set as '99.99' due to technical restrictions, but have actually obtained the following results: -> Charge Depleting Bag / Phase #4 DT-ASCR = 199.10, DT-IWRR = 398.20		

Certification Summary Information Report

Test Group		VHYXT00.0402				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CO	0	--	--	--	0	--	0	0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
Fed	150,000 miles	Federal Tier 3 Bin 0	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CO	0	--	--	--	0	--	0	0	Pass
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group		VHYXT00.0402				Evaporative/Refueling Family				--		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--
CA	150,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Fuel Properties

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
-------------------	--------------	-------------------------------------	----

Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 0
Fuel	Electricity	Test Procedure	Multi-Cycle Test (MCT)

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

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	California ZEV
Fuel	Electricity	Test Procedure	Multi-Cycle Test (MCT)

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

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	California ZEV
Fuel	Electricity	Test Procedure	CVS 75 and later (w/o can. load)

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

Certification Summary Information Report

Test Group		VHYXT00.0402			Evaporative/Refueling Family			--	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 0	
Fuel		Electricity			Test Procedure			CVS 75 and later (w/o can. load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	0

Certification Summary Information Report

Test Group	VHYXT00.0402	Evaporative/Refueling Family	--
Glossary			
Useful Life			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
Emission Name			
HC-TOTAL	Total Hydrocarbon	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		VHYXT00.0402	Evaporative/Refueling Family		--
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	VHYXT00.0402	Evaporative/Refueling Family	--
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	VHYXT00.0402	Evaporative/Refueling Family		--
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	