Application For Certification
Part1
Individual application for 2016 Model Year

Durability Group		: GNSXEEVNN100
Evaporative / Refueling Family		: N.A.
Test Group		: GNSXV0000LLB
Test Group Description		: BEV (Battery Electric Vehicle)
		LDV (Fed) / PC (Cal)
Applicable Standard		: Tier2 Bin1, CFV ZEV ILEV(Fed) / LEV-II ZEV(Cal)
Vehicles Covered		: NISSAN LEAF (50 States)
Vehicles Run	(Mfr)	: KME401-00 (UDDS TN:GNSX10034856)
		: KME401-00 (HWY TN:GNSX10034857)
	(EPA)	: KME401-00 (UDDS TN:GNSX10035635)
		: KME401-00 (HWY TN:GNSX10035636)
Issue Date		: June 9, 2015
Response Requested By		: July 21, 2015
For Questions, Contact		: Satoshi Watanabe Telephone No. 248-488-4654

NISSAN MOTOR CO., LTD

Revision on this page :

Part1
TABLE OF CONTENTS

Section	Title	Application	
		General	Individual
1	Correspondence and Communications	X	
2	Durability Group Description	X	
3	Evaporative/Refueling Family	X	
4	Durability Procedure Description	X	
5	Test Group Description		X
6	Test Vehicle Description		X
7	Test Results		X
8	Emission Testing Waiver Statement and Other Statement	X	
9	OBD System Description	X	X
10	Description of Alternate-fueled Vehicles		X
11	AECD Description		
	(1) Parameter and Device	X	
	(2) General Relation between Sensed Parameters and Controlled Parameters		X
12	Description of Vehicles Covered by Certificate and Test Parameters		
	(1) Starting	X	
	(2) Shift Schedules	X	
	(3) List of Certified Vehicles		X
	(4) Test Parameter		X
13	Projected Sales	X	
14	Request for Certification		X
15	Other Information		
	(1) Fee Filing Form		X
16	Confidential Information		
	(1) OBD System Description (related to Sec 9 in Part 1)	X	X
	(2) Catalyst Information (related to Sec 2 in Part 1)	X	
	(3) Durability Procedures (related to Sec 4 in Part 1)	X	
	(4) Projected Sales (related to Sec 13 in Part 1) and Applicable Standard	X	
	(5) Phase-in Plan (related to Sec 13 in Part 1)	X	
	(6) Catalyst Code Identification (related to Sec 3 in Part 2)	X	
	(7) Projected Fleet Average NMOG and VEC Calculation (Cal)	X	
	(7) Projected Fleet Average NMOG + NOx and VEC Calculation (Cal)	X	
	(9) Projected Fleet Average Cold NMHC Calculation (50 states)	X	
	(10) AECD Description (related to Sec 11 in Part 1)		
	(1) Parameter and Device	X	
	(2) General Relation between Sensed Parameters and Controlled Parameters		X
	(11) Description of Alternate-fueled Vehicles (related to Sec 10 in Part 1)		X
	(12) Description of Electric Vehicles		
	(1) Battery Information (related to Sec 12(3) in Part 1)		X
	(2) Certification Summary Information (related to Sec 7 in Part 1)		X
17	California ARB Information		
	(1) Supplemental Data Sheet and Certification Review Sheet		X
	(2) Vehicle Information Sheet (related to Sec 6 in Part 1)		X
	(3) Fill Pipe Specification		X
	(4) "Vehicle Emission Control Information" Label Sample		X
	(5) ZEV credit Information		X

5. Test Group Description

Test Group Name	Fuel	Sales area	Vehicle Class	Emission St'd Class
GNSXV0000LLB	Electricity	50S	LDV (Fed) / PC (Cal)	Tier2 Bin1/ CFV ZEV, ILEV(Fed) LEV-II ZEV(Cal)

6. Test Vehicle Description

Vehicle Class	Model Covered	Engine Code	Motor Model	Transmission	ETW (lbs)	GVWR (lbs)	Axle Ratio	Tire	
								Size	Maker
LDV (Fed) / PC (Cal)	LEAF	EVAA4	EM57	Auto (Fixed single Speed)	3750	4328	8.193	P215/50R17	MICHELIN

7. Test Results

Test Loc.	Test Number	Mode	Sales Area	Official Test (marked by X)	Certification Level
Mfr	GNSX10034856	UDDS All-Electric Range Test	50 states		Refer to the Certification Summary Information Report
Mfr	GNSX10034857	Hwy All-Electric Range Test	50 states		
EPA	GNSX10035635	UDDS All-Electric Range Test	50 states	X	
EPA	GNSX10035636	Hwy All-Electric Range Test	50 states	X	

Certification Summary Information Report

Manufacturer	Nissan Motor Co., Ltd.	**Manufacturer Code**	NSX
Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A
Certificate Number	N/A	**CARB Executive Order #**	N/A
Certificate Issue Date	N/A	**Certificate Revision Date**	N/A
Certificate Effective Date	N/A	**Conditional Certificate**	--
CSI Revision #	N/A	**CSI Submission/Revision Date**	04/24/2015
Model Year	2016		

Test Group Information

CSI Type	New	**Running Change Reference Number**	N/A
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Electric Motor

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Rechargeable Energy Storage System Indicator**	Yes
Multiple Fuel Combustion	--	**Off-board Charge Capable Indicator**	Yes
Fuel Cell Indicator	No	**EPA Vehicle Class**	LDV
Federal Clean Fuel Vehicle	Yes	**Federal Clean Fuel Vehicle Standard**	ZEV
Federal Clean Fuel Vehicle ILEV	Yes	**California Partial Zero Emissions Vehicle Indicator**	No
Durability Group Name	GNSXEEVNN100	**Durability Group Equivalency Factor**	5.0
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	**CAP2000 Conditional Certificate?**	N/A
Independent Commercial Importer?	--	**Alternative Fuel Converter Certificate?**	--
SFTP Federal Composite Compliance Identifier	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**	GNSXV03.0GHA
Mfr Test Group Comments	Durability Group Equivalency Factor is not available because this vehicle is BEV.(5.0 is a dummy)		
Mfr Exhaust / Evap Standards Comments	--		

Models Covered by this Certificate

Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Nissan Motor Co., Ltd.	1 - NISSAN	25 - LEAF	Federal	2-Wheel Drive, Front	Automatic	1	Yes
Nissan Motor Co., Ltd.	1 - NISSAN	25 - LEAF	California + CAA Section 177 states	2-Wheel Drive, Front	Automatic	1	Yes

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A

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	--		

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	--	--	--	--	--	N/A	N/A	--	N/A	N/A

Official Charge Depleting Test Numbers

Test Group Fuel	UDDS	Highway
Electricity	GNSX10035635	GNSX10035636

Hybrid Electric Vehicle And Fuel Cell Information

Rechargable Energy Storage System	Battery(s)	**Rechargable Energy Storage System, if Other**	--
Battery Type	Lithium Ion	**Number of Battery Packs**	1
Total Voltage of Battery Packs	360	**Battery Energy Capacity**	83
Battery Specific Energy	102	**Battery Charger Type**	On-Board
Number of Capacitors	N/A		
Capacitor Rating (In Farads)	--	**Mfr Capacitor Comments**	--
Hydraulic System Description			
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Front Wheels	**Driver Controlled Regenerative Braking**	No
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	1		
Motor/Generator Type 1	DC Permanent Magnet, brushless	**Rated Motor/Generator Power**	80
Mfr Fuel Cell Description			
Fuel Cell On-Board H2 Storage Capacity (kg)	--	**Usable H2 Fill Capacity (kg)**	--
Mfr Hybrid Electric/ Electric Vehicle Comments			

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A

Emission Data Vehicle Information

Vehicle ID / Configuration KME401 / 0

Vehicle Model

Represented Test Vehicle Make	NISSAN	**Represented Test Vehicle Model**	NISSAN LEAF SV

Leak Family Details

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

Drive Sources and Fuel System Details

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

Hybrid Indicator	N		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	N	**Rechargeable Energy Storage System Indicator**	Y
Rechargeable Energy Storage System	Battery(s)	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	Y		
Transmission Type	Auto(Fixed Single Speed)	**# of Transmission Gears**	1
Engine Code	EVAA2	**Axle Ratio**	8.19
Displacement (liters)	99.999	**Rated Horsepower**	107
Equivalent Test Weight (pounds)	3750	**Air Aspiration Method**	Naturally Aspirated
Drive Mode While Testing	2-Wheel Drive, Front	**SIL Usage**	Not eqipped
Aged Emission Components	4,000 (mi)		

Dynamometer Coefficients:

	Target Coefficients			Set Coefficients			
Coefficient Category	**A (lbf)**	**B (lbf/mph)**	**C (lbf/mph**2)**	**A (lbf)**	**B (lbf/mph)**	**C (lbf/mph**2)**	**EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients**
City/Highway/Evap	29.92	0.076	0.02195	14.18	-0.1031	0.02154	11.8

Manufacturer Test Vehicle Comments --

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A

Test #	**GNSX10035635**	**Test Procedure**	**81 - Charge Depleting UDDS**
Exhaust Test # for this Evap Test	N/A	**Test Fuel Type**	62 - Electricity
Test Date	03/11/2015	**Fuel**	Electricity
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Determined
Verify Test Lab ID	NISSAN MOTOR CO., LTD.		
E10 Evaporative Test Measurement Method	--		

PHEV/EV TEST INFO

Recharge Event Voltage	240	**Recharge Event Energy (kiloWatt-hours)**	31.7807
Charge Depleting Range (Calculated miles)	166.41	**Charge Depleting Range (Actual miles)**	166.41
Equivalent All Electric Range	166.41		
Number of Charge Depleting Bags/Phases Conducted	1		

Charge Depleting Bag/Phase

Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result
1	Actual Distance Driven (miles)	166.41
1	Average System Voltage	0
1	CH4 - Methane	0
1	Carbon Monoxide	0
1	Carbon-Related Exhaust Emissions	0
1	Drive Trace Absolute Speed Change Rating	99.99
1	Drive Trace Energy Economy Rating	99.99
1	Drive Trace Inertia Work Ratio Rating	99.99
1	Integrated Amp-hours	0
1	Manufacturer Fuel Economy	176.5
1	Nitrous Oxide	0
1	Non-methane Hydrocarbon	0
1	Non-methane organic gas (California)	999.999
1	Optional Carbon-Related Exhaust Emissions	0
1	System End State of Charge Watt-hours	0
1	System Start State of Charge Watt-hours	0

Manufacturer Test Comments

This is official EPA confirmatory test results inputted by manufacturer on behalf of EPA. Test Lab ID is entered as a dummy. AC Energy(kWh/100mile):19.0978 , Net Vehicle DC energy consumption [DC Wh/mile]:166, Charge Time[sec]:20733, Total distance (mile):166.410 Test procedure used MCT(SAE J1634 Oct.2012).

Certification Summary Information Report

Test Group GNSXV0000LLB **Evaporative/Refueling Family** N/A

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 2 Bin 1	CREE	0	--	--	--	0	--	0	--	--
Fed	120,000 miles	Federal Tier 2 Bin 1	OPT-CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A

Test #	**GNSX10035636**	**Test Procedure**	**84 - Charge Depleting Highway**
Exhaust Test # for this Evap Test	N/A	**Test Fuel Type**	62 - Electricity
Test Date	03/11/2015	**Fuel**	Electricity
Vehicle Class	LDV/Passenger Car	**DF Type**	Mfr. Determined
Verify Test Lab ID	NISSAN MOTOR CO., LTD.		
E10 Evaporative Test Measurement Method	--		

PHEV/EV TEST INFO

Recharge Event Voltage	240	**Recharge Event Energy (kiloWatt-hours)**	31.7807
Charge Depleting Range (Calculated miles)	136.408	**Charge Depleting Range (Actual miles)**	136.408
Equivalent All Electric Range	136.408		
Number of Charge Depleting Bags/Phases Conducted	1		

Charge Depleting Bag/Phase

Charge Depleting Bag/Phase #	Test Result/Emission Name	Unrounded Test Result
1	Actual Distance Driven (miles)	136.408
1	Average System Voltage	0
1	CH4 - Methane	0
1	Carbon Monoxide	0
1	Carbon-Related Exhaust Emissions	0
1	Drive Trace Absolute Speed Change Rating	99.99
1	Drive Trace Energy Economy Rating	99.99
1	Drive Trace Inertia Work Ratio Rating	99.99
1	Integrated Amp-hours	0
1	Manufacturer Fuel Economy	144.7
1	Nitrous Oxide	0
1	Non-methane Hydrocarbon	0
1	Non-methane organic gas (California)	999.999
1	Optional Carbon-Related Exhaust Emissions	0
1	System End State of Charge Watt-hours	0
1	System Start State of Charge Watt-hours	0

Manufacturer Test Comments

This is official EPA confirmatory test results inputted by manufacturer on behalf of EPA. Test Lab ID is entered as a dummy. AC Energy(kWh/100mile):23.2983, Net Vehicle DC energy consumption [DC Wh/mile]:202, Charge Time[sec]:20733, Total distance (mile):136.408 Test procedure used MCT(SAE J1634 Oct.2012).

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 2 Bin 1	CREE	0	--	--	--	0	--	0	--	--
CA	120,000 miles	California ZEV	CREE	0	--	--	--	0	--	0	--	--

Certification Summary Information Report

Test Group	GNSXV0000LLB	Evaporative/Refueling Family	N/A

Consolidated List of Standards

Exhaust Standards

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

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0	0.0

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

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0	0.0

Cert Region Federal
Vehicle Class LDV/Passenger Car
Fuel Electricity
Cert/In-Use Code Cert
Standard Level Federal Tier 2 Bin 1
Test Procedure Charge Depleting Highway

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0	0.0

Cert Region Federal
Vehicle Class LDV/Passenger Car
Fuel Electricity
Cert/In-Use Code Cert
Standard Level Federal Tier 2 Bin 1
Test Procedure California fuel 3-day exhaust

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	CO	--	--	--	--	--	--	--	0.0

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A
Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 2 Bin 1
Fuel	Electricity	**Test Procedure**	Charge Depleting UDDS

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0	0.0
120,000 miles	OPT-CREE	--	--	--	--	--	--	0	0.0

Certification Summary Information Report

Test Group	GNSXV0000LLB	Evaporative/Refueling Family	N/A

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

Certification Region

CA	California + CAA Section 177 states	FA	Federal

Exhaust Emission Standard Level

B1	Federal Tier 2 Bin 1	L3ULEV340	California LEV-III ULEV340
B2	Federal Tier 2 Bin 2	L3ULEV250	California LEV-III ULEV250
B3	Federal Tier 2 Bin 3	L3ULEV200	California LEV-III ULEV200
B4	Federal Tier 2 Bin 4	L3SULEV170	California LEV-III SULEV170
B5	Federal Tier 2 Bin 5	L3SULEV150	California LEV-III SULEV150

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A
B6	Federal Tier 2 Bin 6	L3LEV630	California LEV-III LEV630
B7	Federal Tier 2 Bin 7	L3ULEV570	California LEV-III ULEV570
B8	Federal Tier 2 Bin 8	L3ULEV400	California LEV-III ULEV400
B9	Federal Tier 2 Bin 9	L3ULEV270	California LEV-III ULEV270
B10	Federal Tier 2 Bin 10	L3SULEV230	California LEV-III SULEV230
B11	Federal Tier 2 Bin 11	L3SULEV200	California LEV-III SULEV200
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	T3B160	Federal Tier 3 Bin 160
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	T3B125	Federal Tier 3 Bin 125
L2	California LEV-II LEV	T3B110	Federal Tier 3 Transitional Bin 110
L2OP	California LEV-II LEV Optional	T3B85	Federal Tier 3 Transitional Bin 85
U2	California LEV-II ULEV	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
S2	California LEV-II SULEV	T3B70	Federal Tier 3 Bin 70
ZEV	California ZEV	T3B50	Federal Tier 3 Bin 50
OT	Other	T3B30	Federal Tier 3 Bin 30
T1	Federal Tier 1	T3B20	Federal Tier 3 Bin 20
PZEV	California PZEV	T3B0	Federal Tier 3 Bin 0
L2LEV160	California LEV-II LEV160	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
L2ULEV125	California LEV-II ULEV125	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
L2SULEV30	California LEV-II SULEV30	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2LEV395	California LEV-II LEV395	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2ULEV340	California LEV-II ULEV340	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
L2LEV630	California LEV-II LEV630	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
L2ULEV570	California LEV-II ULEV570	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
L3LEV160	California LEV-III LEV160	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
L3ULEV125	California LEV-III ULEV125	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
L3ULEV70	California LEV-III ULEV70	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
L3ULEV50	California LEV-III ULEV50	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L3SULEV30	California LEV-III SULEV30	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L3SULEV20	California LEV-III SULEV20	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L3LEV395	California LEV-III LEV395	HDV3B0	Federal Tier 3 HD Class 3 Bin 0

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

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

Certification Summary Information Report

Test Group	GNSXV0000LLB	**Evaporative/Refueling Family**	N/A

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

9. OBD System Description

Refer to the confidential section

10. Description of Alternate-fueled Vehicles

Refer to the confidential section

11. AECD Description

(2) General Relation between Sensed Parameters and Controlled Parameters

Refer to the confidential section

12. Description of Vehicles Covered by Certificate and Test Parameter

(3) List of Certified Vehicles

Durability Group : GNSXEEVNN100
Test Group : GNSXV0000LLB

[Vehicle Identification]

Carline	Trim Line	Trans./OD	Engine Code	Fuel	ETW (lbs)	Sales Area	SIL	Battery Capacity(kWh)	Vehicle Class
LEAF	SL SV	Auto (Fixed single Speed)	EVAA4	Electricity	3750	50S	N.A.	30	LDV (Fed) PC (Cal)

[Propulsion system]

-Motor

Model	Type	Rated Power (kW)	Rated Torque (Nm)	Maximum Speed (rpm)	Number of Motor per vehicle	Drive type
EM57	DCPM	80 @3008-10000rpm	254 @0-3008rpm	10500	1	2-wheel Drive, front

-Traction Inverter

Type	Modulation
DC/AC 3phase	PWM

-Battery

Refer to the confidential section. Sec16(12)-1

-Regenerative Braking

Type	Braking Source	Driver controlled Regen Braking
Electrical Regen. Brake	Front Wheels	None

-Standard Charger (Level 1)

Type	Input Voltage(V)
Conductive On-board	120-240V (<30A, AC50/60Hz)

[Other system]

-Climate control system

The climate control system equipped with electric motor-driven compressor/ Heat-Pump + Air PTC heater system
The system uses HFC134a refrigerant and operates on 12volts DC/ 345 volts AC.
The vehicle are also equipped with a "pre-conditioning" system that turns on air conditioning system before passengers enter the car.
The vehicle is not equipped with a fuel-fired heating system.

12. Description of Vehicles Covered by Certificate and Test Parameter

(4) Test Parameter

Durability Group : GNSXEEVNN100
Test Group : GNSXV0000LLB

Carline	Trim Line	Trans.	ETW (lbs)	Tire Size	Tire Maker	Axle Ratio	N/V Ratio	TRLHP	Coastdown Time (sec.)	Single Roll Dyno Terms A	Single Roll Dyno Terms B	Single Roll Dyno Terms C	Shift Schedule ID City	Shift Schedule ID Hwy	FTTP	Cooling Fan Config	Special Test Proc
LEAF	SL	Auto	3750	P215/50R17	MICHELIN	8.193	114.7	11.8	19.65	29.92	0.0760	0.02195	FTA	HWA	N.A.	*1	*2, *3
	SV	(Fixed single Speed)	3750	P215/50R17	MICHELIN	8.193	114.7	11.8	19.65	29.92	0.0760	0.02195	FTA	HWA		*1	*2, *3

*1: One centered front fan, in down position.
*2: Set in maintenance mode. Refer to SEC12(1)
*3: If EV system starts, "READY" lamp in the meter illuminate, push the VDC CANCEL SWITCH within 10 seconds always.

12. Description of Vehicles Covered by Certificate and Test Parameter

(4) Test Parameter
Testing Related Information

-Charging procedure

1) Push the start button twice without brake pedal on to weak up the vehicle system
2) Move the shift lever to the "P" position.
3) Push the start button once to shut off the vehicle system.
4) To open the charge port access door, push the release switch.
5) Remove the charge connector from holster. All of the indicator display lamps come on and then go off.
6) Fully insert the charge connector into the charge port. When the charge connector is set correctly, vehicle answer one beep.
7) Charging begins automatically. The "CHG" indicator display comes on.
8) When the batteries are fully charged; the indicator display SOC meter lamps all come on and the "CHG" lamp goes off.
9) Remove the charge coupler from the charge port. Make sure to firmly secure the charge coupler in its holster.
10) Close the charge port access door on vehicle.

-Load setting for dyno procedure

1) With no depressing the brake pedal, push the “START” switch twice. The vehicle is set in “IGN-ON” condition, not "Ready"condition.
2) Shift into “N” position with depressing the brake.
3) Start the Load Set
4) When the load set is finished, push the "START" switch once to shut off vehicle system

-Safe handling of battery system Information

When working on high voltage cable, wear antistatic boots and insulated gloves. And remove the Shut Down switch.
If high voltage battery is damaged, there is a risk of short circuit to vehicle body due to leakage of electrolyte, and it is necessary to beware of electric shock.
When damaged, the battery may emit white fumes (vaporized electrolyte) due to short circuit.

> If this happens, cool the battery with hose streams.
> Since electrolyte is flammable, fire sources are prohibited.
> Electrolyte liquid and vapor are not toxic, but must not be directly inhaled in large quantities.

12. Description of Vehicles Covered by Certificate and Test Parameter

(4) Test Parameter
Testing Related Information

-System Warning Device Information

This EV has 3 indicating devices for warnings specific to EV.

"FAIL" as warning device for the existence of a vehicle malfunction, and the impossibility of vehicle running .
"CAUTION" as warning device for the existence of a vehicle malfunction and the possibility of vehicle running .
"FAIL" and "CAUTION" are same indicator behavior. The difference is run or not.
"SLOW DOWN" which is marked with the figure of TURTLE as warning device for the lowering of acceleration performance.

TYPE		FAIL	CAUTION	SLOW DOWN
Symbol				
	Traveling	IMPOSSIBLE	POSSIBLE	POSSIBLE
	Repair	Required	Required	Not-required
	Acceleration performance	Impossible to run	Depend upon condition	SLOW DOWN
	User's responsibility	Repair	Repair	Charging or Cooling the Vehicle

-Emergency procedures

When an accident happens:

> Stop the car to the safe place.

> Turn key off

> Rescue injured persons if there any.

> Please call emergency (911).

> Please call the LEAF customer support center of Nissan.

14. Request for Certification

Request for Certificate to ARB

Test Group	: GNSXV0000LLB
Exhaust emission control system number	: 1 of 1
Evaporative/Refueling Family	: N.A.
Carline	: LEAF

Nissan Motor Co., Ltd requests that ARB issue a 2016 model year certificate of conformity for the above specified test group and evaporative/refueling family combination more fully described in this application. This combination complies with the following applicable emission standard:

Federal	: X
California & 177 States	: X

This combination complies with all applicable regulations contained within 40 CFR Part86, the application is current as of this date.
The exhaust and evaporative/refueling emission test results support this request for certificate.

Kazuhiro Murata
Manager
Regulation and Homologation Department

14. Request for Certification

Request for Certificate to EPA

Test Group	: GNSXV0000LLB
Exhaust emission control system number	: 1 of 1
Evaporative/Refueling Family	: N.A.
Carline	: LEAF

Nissan Motor Co., Ltd requests that EPA issue a 2016 model year certificate of conformity for the above specified test group and evaporative/refueling family combination more fully described in this application. This combination complies with the following applicable emission standard:

Federal	: X
California & 177 States	: X

This combination complies with all applicable regulations contained within 40 CFR Part86, the application is current as of this date.
The exhaust and evaporative/refueling emission test results support this request for certificate.

Kazuhiro Murata
Manager
Regulation and Homologation Department

15. Other Information

(1) Fee Filing Form

Refer to the attached Fee Filing Form

U.S. Environmental Protection Agency
Motor Vehicle and Engine Compliance Program
On-Highway Fee Filing Form
For Certification Applications Received In Calendar Year 2015

Manufacturer Name NISSAN MOTOR CO., LTD

Address 560-2, Okatsukoku

City/State/Zip Code/Country Atsugi - city / Kanagawa - pre. / 243-0192 / Japan

On-Highway Certification Request Type (check one)

- [x] LDV/LDT/MDPV/HDV (Chassis cert) FEDERAL ($26,741)
- [ ] LDV/LDT/MDPV/HDV (Chassis cert) CAL-ONLY ($14,193)
- [ ] HDE (Engine Dyno cert) FEDERAL ($47,664)
- [ ] HDV EVAP-ONLY ($563)
- [ ] HDE CALIF-ONLY ($563)
- [ ] MOTORCYCLE ($1,852)
- [ ] LD/MDPV/HDV ICI ($76,399)

EPA standard family or test group: GNSXV0000LLB

Amount paid (U.S. Funds Only): $ 26,741.00

Enter the check number, or the statement "WIRE" or "ACH": WIRE

Reduced Fee Section (40 CFR §1027.120)
Reduced fee calculation (minimum initial payment $750): Total number of vehicles/units covered: ___
Aggregate retail sales price of the vehicles/units: $ _____ **x 1% = $** _____
Check box if an Independent Commercial Importer: ☐ **List the VIN of imported vehicles/engines below:**

Company Representative: Kazuhiro Murata Signature: [signature]

Title: Manager Phone/Fax: +81-50-3789-0143 / 81-46-270-1599 Date: 02/10/2015

E-mail Address: k-murata@mail.nissan.co.jp

Submission of payments and forms:
(1) Online: **Forms** may be found and submitted with or without **payments** online at www.Pay.gov.
(2) By mail: For check payments only, send **checks** and this **form** to:

Environmental Protection Agency
Motor Vehicle and Engine Compliance Program
P.O. Box 979032
St. Louis, MO 63197-9000

(3) Transmit offline Wire **payments** to the New York Federal Reserve Bank. (See Instructions, p.2)
(4) Transmit offline ACH **payments** to the Federal Reserve Bank of Cleveland. (Instructions, p.2)
(5) **Forms** not submitted under (1) and (2) above can be sent as email attachments to Fees@epa.gov.
Forms and payments sent in ways other than the above may be delayed or ineffective. See the Instructions for sending checks and forms by private mail service (e.g., Federal Express).