

# TEST REPORT



**DT&C Co., Ltd.**

42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042  
Tel : 031-321-2664, Fax : 031-321-1664

1. Report No. : DREFCC1905-0158
2. Client / Applicant
  - Name : LG Electronics USA, Inc.
  - Address : 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
3. Use of Report : FCC Certification of Conformity Marking
4. Product Name / Model Name : Mobile Phone / LM-V450VM
5. Test Standard : ANSI C 63.4 : 2014  
FCC Part 15 Subpart B  
(Other Class B digital devices & peripherals)
6. Date of Test : Mar. 03. 2019 ~ Mar. 18. 2019
7. Testing Environment : Temperature (19 ~ 22) °C , Humidity (41 ~ 44) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : JooHo Kim  (Signature)	Name : DaeHwa Eun  (Signature)

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.

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**May. 13. 2019**

**DT&C Co., Ltd.**

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)

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## 1. General Remarks

This report contains the result of tests performed by :

**DT&C Co., Ltd.**

42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042

<http://www.dtnet.net>

Tel: +82-31-321-2664 Fax: +82-31-321-1664

## 2. Test Laboratory

DT&C Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Remark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
	South Africa	SABS	0006	ISO/IEC 17025
	Ghana	NCA	NCA agreement 23 <sup>rd</sup> , Oct, 2018	-
Site Filing	USA	FCC	KR0034 101842 678747, 596748, 804488, 165783	Accredited  2.948 Listed
	Canada	IC	5740A-3 5740A-4	Registered
	Japan	VCCI	C-1427 R-3385, R-4076, R-4180, R-4496, T-1442, G-10338, G-754, G-10815, G-20051	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 089112 0006 Rev.00	ISO/IEC 17025
	Russia	RMRS	17.10189.296	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

### 3. General Information of EUT

Applicant	LG Electronics USA, Inc. 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
Product Name	Mobile Phone
Model Name	LM-V450VM
Add Model Name	LMV450VM, V450VM
Software Version	None
Hardware Version	None
RF Module	None
FCC ID	ZNFV450VM
Rated Power	DC 3.85 V
Remarks	None

		No.	Manufacturer	P/N	
		Ear-Mic	1	CRESYN	EAB63728251
2	BUJEON		EAB63728252		
Accessory	USB data Cable	No.	Manufacturer	P/N	
		1	Ningbo	EAD64746103	
	Travel Adaptor	No.	Manufacturer	Model No.	S/N
		1	Aohai	MCS-H06WA	AA850162457

**Related Submittal(s) / Grant(s)**  
**Original submittal only**

## 4. EUT Operations and Test Configurations

### 4.1 Principle of Configuration Selection

#### Emission :

The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use. For each testing mode different configurations were used, Refer to the individual tests.

### 4.2 EUT Operation Mode

No.	Mode	Description
1	REAR CAMERA & FM RADIO	EUT is receiving FM radio while shooting video with rear camera.
2	FRONT CAMERA & MP3	EUT is playing MP3 PLAY while recording video with the front camera.
3	IDLE	EUT is awaiting for communication.

Note. The worst case emissions are reported. (Mode 1)

### 4.3 Test Configuration Mode

No.	Mode	Description
1	Charging	The EUT is connected to the Travel Adaptor and is charging.

### 4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	WIRELESS CHARGER	SAMSUNG	EP-PN920	RF7HA0CG0XFCIS

\*Abbreviations:  
 AE - Auxiliary/Associated Equipment, or  
 SIM - Simulator

#### 4.5 EUT In/Output Port

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
USB	I/O	0.8	Non-Shield	Plastic	EUT
*Abbreviations: AC = AC Power Port                      DC = DC Power Port                      N/E = Non-Electrical I/O = Signal Input or Output Port TP = Telecommunication Ports					

#### 4.6 Test Voltage and Frequency

Case	Voltage (V)	Frequency (Hz)	Phases	Remarks
1	AC 120	60 Hz	Single	None

## 5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4 : 2014	C
Radiated Disturbance	ANSI C63.4 : 2014	C
C=Comply   N/C=Not Comply   N/T=Not Tested   N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dB $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
15.43569	L1	40.35	Quasi - Peak	60.00	19.65

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB $\mu$ V/m]	Detector	Limit [dB $\mu$ V/m]	Margin [dB]
39951.150	H	49.63	Cispr - Average	54.00	4.37

## 6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2019-03-18	22	43	-
Radiated Disturbance	2019-03-03	22	41	-
	2019-03-08	20	44	
	2019-03-13	19	41	
	2019-03-16	19	42	

## 7. Test Results : Emission

### 7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage		Result	
<p><b>Method:</b> The AMN placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN. The measuring port of the LISN for EUT was connected to spectrum analyzer. Using conducted emission test software, the emissions were scanned with peak detector mode. After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and CISPR Average detector. For (0.15 ~ 30) MHz frequency range, Quasi-Peak detector with 10 kHz RBW and 30 kHz VBW was used. By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.</p>			<b>Comply</b>	
<b>Fully configured sample scanned over the following frequency range</b>	<b>Frequency range on each side of line</b>			<b>Measurement Point</b>
	<b>150 kHz to 30 MHz</b>			<b>Mains</b>
	<b>EUT mode</b>			<b>1</b>
<b>(Refer to clauses 4)</b>		<b>EUT Operation mode</b>	<b>1</b>	
<b>Limits – Class A</b>				
<b>Frequency (MHz)</b>	<b>Limit dB<math>\mu</math>V</b>			
	<b>Quasi-Peak</b>	<b>Average</b>		
0.15 to 0.50	79	66		
0.50 to 30	73	60		
<b>Limits – Class B</b>				
<b>Frequency (MHz)</b>	<b>Limit dB<math>\mu</math>V</b>			
	<b>Quasi-Peak</b>	<b>Average</b>		
0.15 to 0.50	66 to 56	56 to 46		
0.50 to 5	56	46		
5 to 30	60	50		

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-C VER. 2.00.0171	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESR7	ROHDE & SCHWARZ	101109	2018.10.29	2019.10.29
LISN	ENV216	ROHDE & SCHWARZ	101979	2018.12.06	2019.12.06
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2018.09.05	2019.09.05

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

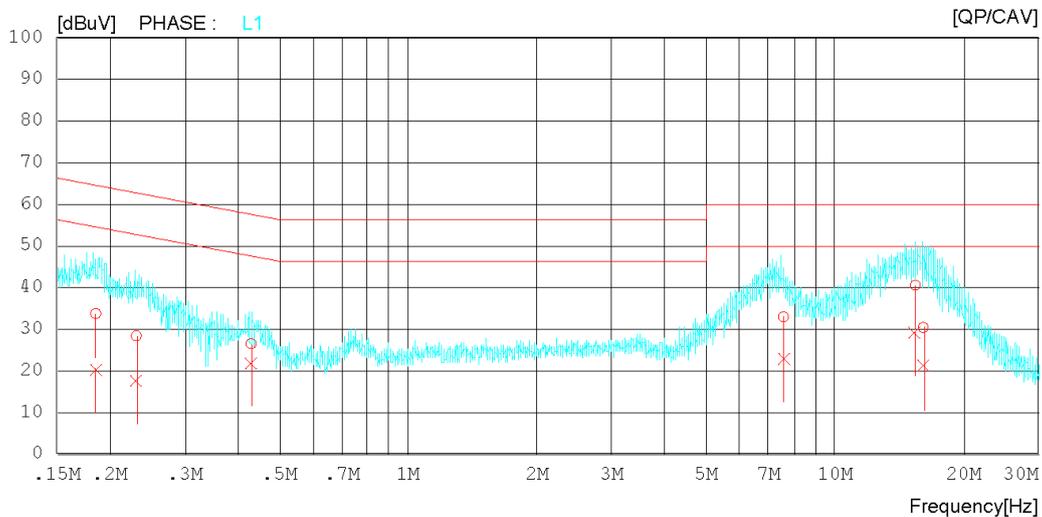
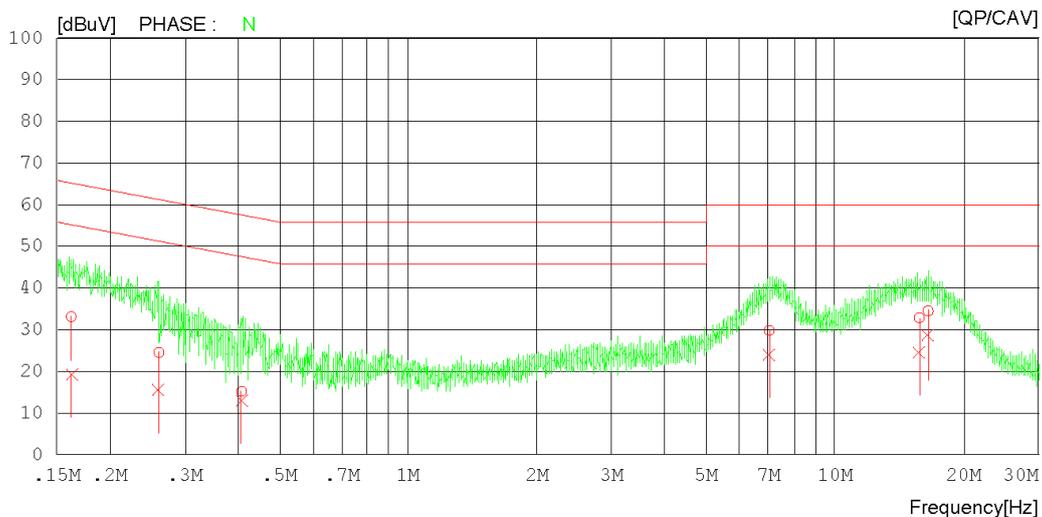
## Results of Conducted Emission

DT&C  
Date 2019-03-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi/Atm 22 °C 43 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESYN

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&C  
Date 2019-03-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi/Atm 22 'C 43 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESYN

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.16216	13.15	-0.47	19.99	33.14	19.52	65.35	55.35	32.21	35.83	N
2	0.26062	4.79	-4.01	19.79	24.58	15.78	61.41	51.41	36.83	35.63	N
3	0.40710	-4.84	-6.92	20.03	15.19	13.11	57.71	47.71	42.52	34.60	N
4	7.02191	9.65	3.99	20.23	29.88	24.22	60.00	50.00	30.12	25.78	N
5	15.77591	11.81	3.46	21.05	32.86	24.51	60.00	50.00	27.14	25.49	N
6	16.56159	13.53	7.71	21.03	34.56	28.74	60.00	50.00	25.44	21.26	N
7	0.18527	13.58	0.26	20.03	33.61	20.29	64.25	54.25	30.64	33.96	L1
8	0.23050	8.32	-2.44	19.88	28.20	17.44	62.43	52.43	34.23	34.99	L1
9	0.42850	6.28	1.76	20.03	26.31	21.79	57.28	47.28	30.97	25.49	L1
10	7.57991	12.49	2.54	20.31	32.80	22.85	60.00	50.00	27.20	27.15	L1
11	15.43569	19.29	8.03	21.06	40.35	29.09	60.00	50.00	19.65	20.91	L1
12	16.11596	9.22	-0.12	21.04	30.26	20.92	60.00	50.00	29.74	29.08	L1

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

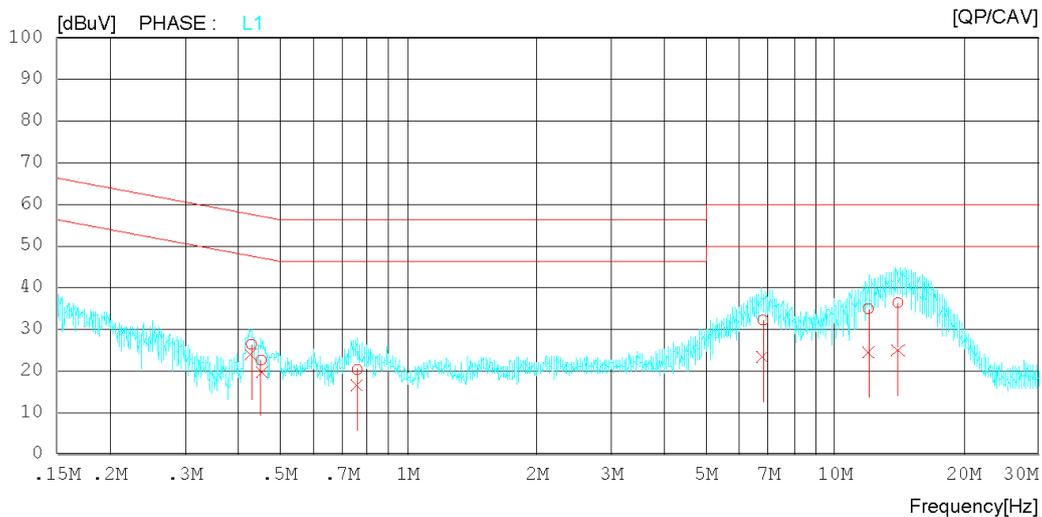
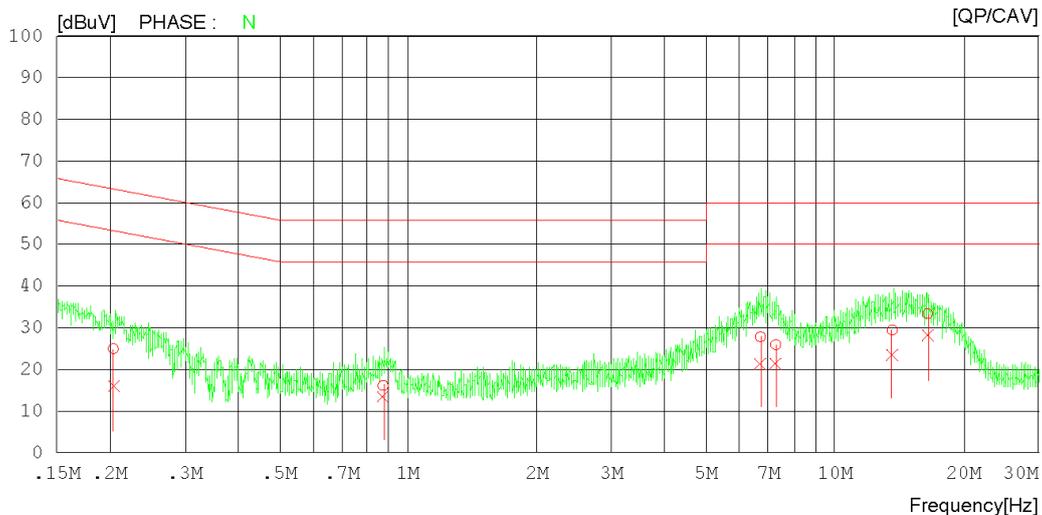
## Results of Conducted Emission

 DT&C  
 Date 2019-03-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi/Atm 22 'C 43 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&C  
Date 2019-03-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi/Atm 22 'C 43 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.20350	5.01	-4.16	20.02	25.03	15.86	63.47	53.47	38.44	37.61	N
2	0.87379	-3.76	-6.23	19.95	16.19	13.72	56.00	46.00	39.81	32.28	N
3	6.69987	7.63	1.16	20.20	27.83	21.36	60.00	50.00	32.17	28.64	N
4	7.27769	5.71	1.16	20.27	25.98	21.43	60.00	50.00	34.02	28.57	N
5	13.63072	8.54	2.69	20.96	29.50	23.65	60.00	50.00	30.50	26.35	N
6	16.50232	12.39	7.00	21.03	33.42	28.03	60.00	50.00	26.58	21.97	N
7	0.42890	6.17	3.69	20.03	26.20	23.72	57.27	47.27	31.07	23.55	L1
8	0.45271	2.41	-0.26	20.03	22.44	19.77	56.83	46.83	34.39	27.06	L1
9	0.75950	0.13	-3.86	20.02	20.15	16.16	56.00	46.00	35.85	29.84	L1
10	6.79268	11.78	2.98	20.21	31.99	23.19	60.00	50.00	28.01	26.81	L1
11	11.97193	13.92	3.26	20.82	34.74	24.08	60.00	50.00	25.26	25.92	L1
12	14.04683	15.22	3.76	20.99	36.21	24.75	60.00	50.00	23.79	25.25	L1

### Calculation

N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBμV) : Reading Value(dBμV) + C.FACTOR(dB)
Margin(dB) : Limit(dBμV) - Result(dBμV)

## 7.2 Radiated Disturbance

ANSI C63.4	Radiated disturbance 30 MHz – 40 GHz			Result
Method: Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 or 3 meter below 1GHz and 3 meter above 1GHz. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable. For final measurement below 1 GHz frequency range, Quasi-Peak detector with (RBW = 120 kHz Bandwidth) was used. For final measurement above 1 GHz frequency range, Peak detector with (RBW = 1 MHz Bandwidth) and CISPR Average detector with (RBW = 1 MHz Bandwidth) were used.				Comply
EUT mode (Refer to clauses 4)	Test configuration mode		1	
	EUT Operation mode		1	
<b>Radiated Disturbance below 1 000 MHz</b>				
Frequency range (MHz)	Quasi-peak limit dB $\mu$ V/m			
	Class A (10 m distance)		Class B (3 m distance)	
30 to 88	39.1		40	
88 to 216	43.5		43.5	
216 to 960	46.4		46	
960 to 1 000	49.5		54	
According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22 shown.				
Frequency range (MHz)	Quasi-peak limit dB $\mu$ V/m			
	Class A (10 m distance)		Class B (10 m distance)	
30 to 230	40		30	
230 to 1 000	47		37	
<b>Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m</b>				
Frequency range (GHz)	Peak limit dB $\mu$ V/m		Average limit dB $\mu$ V/m	
	Class A	Class B	Class A	Class B
1 to 40	80	74	60	54
<b>The test frequency range of Radiated Disturbance measurements are listed below.</b>				
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)			Upper frequency of measurement range (MHz)	
Below 108			1 000	
108 – 500			2 000	
500 – 1 000			5 000	
Above 1 000			5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower	

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-R VER. 2.00.0177	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100469	2018.06.28	2019.06.28
TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
6DB ATTENUATOR	8491B	HP	18403	2018.10.22	2020.10.22
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2019.02.18	2020.02.18
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
PRE AMPLIFIER	8449B	H.P	3008A00887	2018.08.31	2019.08.31
HORN ANTENNA WITH PREAMPLIFIER	EM-6969	ELECTRO-METRICS	156	2019.02.13	2021.02.13
	MLA-0618-B03-34	TSJ	1785642	2019.01.02	2020.01.02
PREAMPLIFIER	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2018.11.09	2019.11.09
HORN ANTENNA WITH PREAMPLIFIER	3116C	ETS-LINDGREN	00213177	2017.12.05	2019.12.05
BAND REJECT FILTER	WRCGV12-2375-2400-2 484-2505-50SS-PB	WAINWRIGHT INSTRUMENTS GMBH	1	2019.02.27	2020.02.27
(NOTE : THE MEASUREMENT ANTENNAS WERE CALIBRATED IN ACCORDANCE TO THE REQUIREMENTS OF C63.5-2017.)					

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

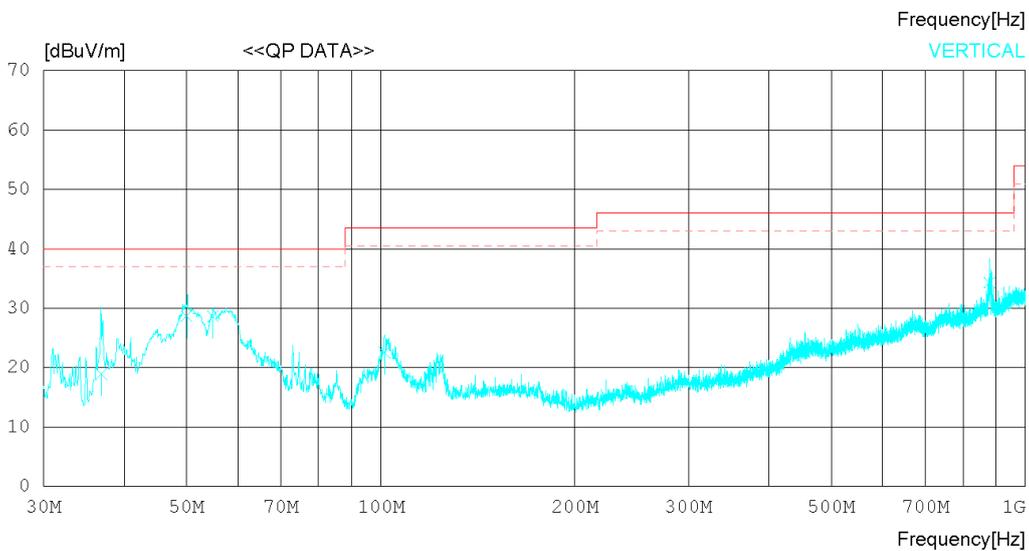
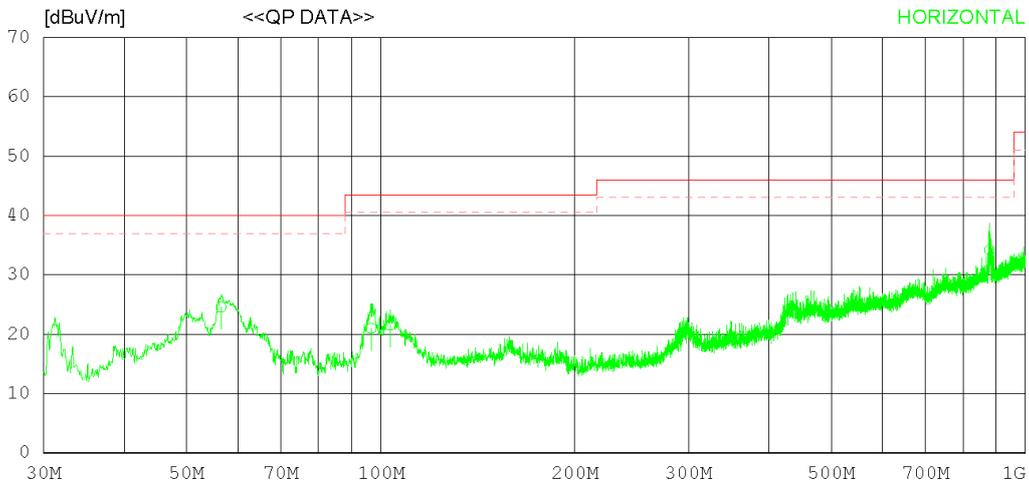
## RADIATED EMISSION

Date 2019-03-03

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRE SYN

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB



## RADIATED EMISSION

Date 2019-03-03

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESEYN

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	56.536	30.50	17.70	2.16	25.79	24.57	40.00	15.43	400	80
2	96.666	29.60	14.53	2.57	25.71	20.99	43.50	22.51	200	165
3	103.417	28.90	15.68	2.64	25.70	21.52	43.50	21.98	315	310
4	879.926	24.50	29.10	6.32	25.80	34.12	46.00	11.88	400	3
----- Vertical -----										
5	36.864	26.70	16.09	1.93	25.81	18.91	40.00	21.09	100	275
6	50.020	34.10	18.30	2.10	25.80	28.70	40.00	11.30	120	66
7	54.918	33.30	18.97	2.15	25.79	28.63	40.00	11.37	115	109
8	101.377	30.20	15.45	2.61	25.70	22.56	43.50	20.94	100	50
9	879.025	24.70	29.11	6.31	25.80	34.32	46.00	11.68	200	189

Radiated disturbance at (1 ~ 6) GHz _ Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

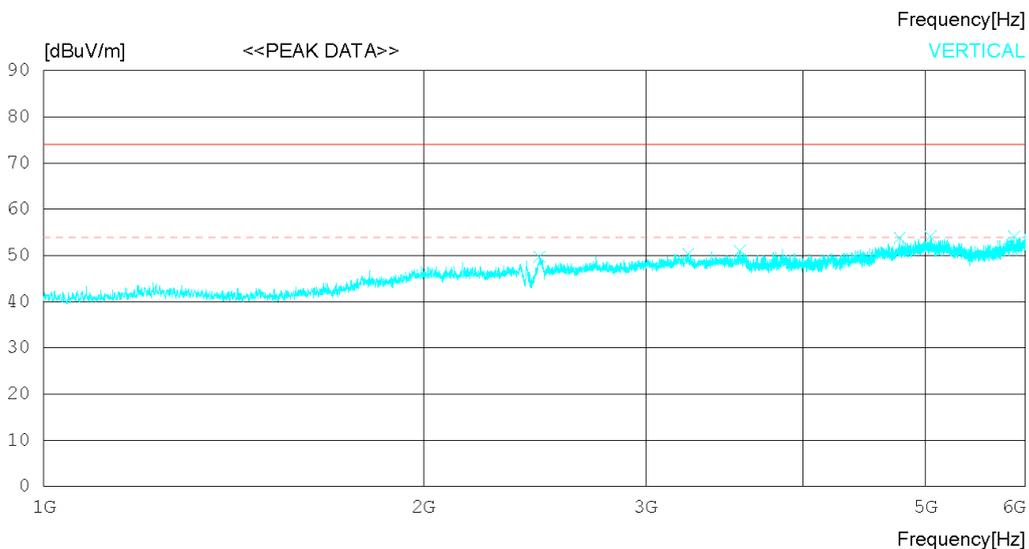
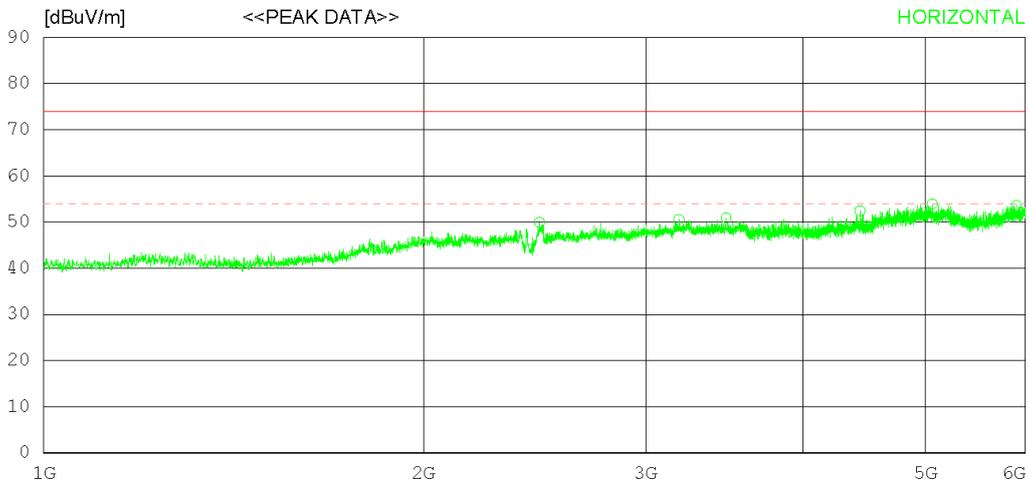
## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESEYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	2471.250	45.30	32.19	7.26	34.83	49.92	74.0	24.08	400	324
2	3187.500	43.80	33.15	8.34	34.75	50.54	74.0	23.46	400	0
3	3474.375	44.10	32.80	8.63	34.60	50.93	74.0	23.07	400	352
4	4436.250	42.60	33.87	10.44	34.47	52.44	74.0	21.56	400	0
5	5061.250	43.00	34.18	11.34	34.65	53.87	74.0	20.13	400	248
6	5900.625	41.50	35.00	11.81	34.75	53.56	74.0	20.44	100	358
----- Vertical -----										
7	2471.250	45.10	32.19	7.26	34.83	49.72	74.0	24.28	100	289
8	3242.500	43.70	33.03	8.40	34.72	50.41	74.0	23.59	400	338
9	3563.750	43.80	33.07	8.72	34.56	51.03	74.0	22.97	100	307
10	4771.250	43.40	34.00	11.01	34.57	53.84	74.0	20.16	100	199
11	5046.250	43.20	34.19	11.35	34.65	54.09	74.0	19.91	400	358
12	5878.125	42.10	34.96	11.81	34.75	54.12	74.0	19.88	400	0

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

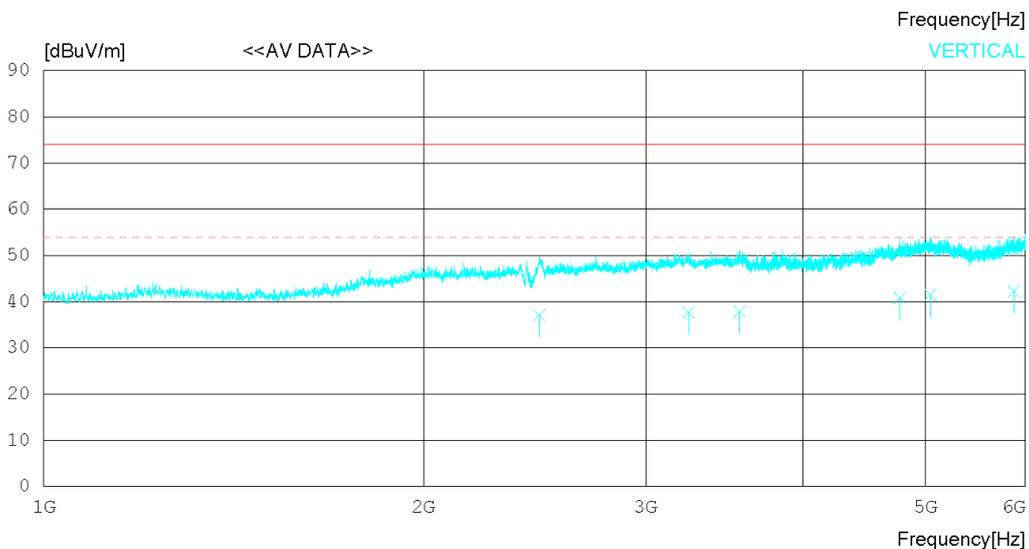
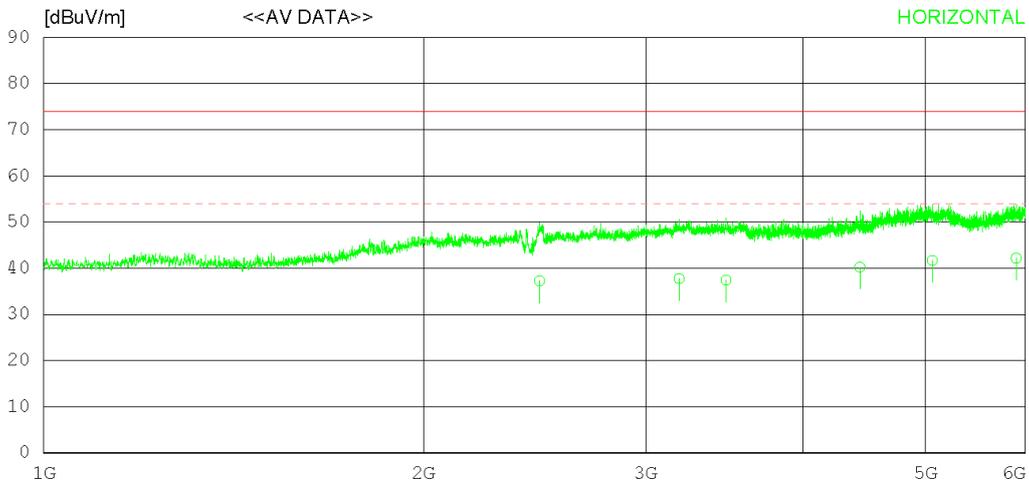
## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRE SYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	2472.209	32.60	32.19	7.26	34.83	37.22	54.00	16.78	400	175
2	3188.601	31.00	33.15	8.34	34.75	37.74	54.00	16.26	400	352
3	3473.910	30.60	32.80	8.63	34.60	37.43	54.00	16.57	400	330
4	4434.106	30.40	33.87	10.44	34.47	40.24	54.00	13.76	400	145
5	5062.296	30.80	34.18	11.35	34.65	41.68	54.00	12.32	400	96
6	5899.612	30.10	35.00	11.81	34.75	42.16	54.00	11.84	100	24
----- Vertical -----										
7	2470.419	32.50	32.18	7.26	34.83	37.11	54.00	16.89	100	165
8	3244.341	31.00	33.02	8.41	34.72	37.71	54.00	16.29	400	177
9	3562.052	30.70	33.04	8.72	34.56	37.90	54.00	16.10	100	263
10	4773.332	30.30	34.00	11.01	34.57	40.74	54.00	13.26	100	289
11	5045.406	30.60	34.19	11.34	34.65	41.48	54.00	12.52	400	63
12	5878.520	30.20	34.96	11.81	34.75	42.22	54.00	11.78	400	1

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

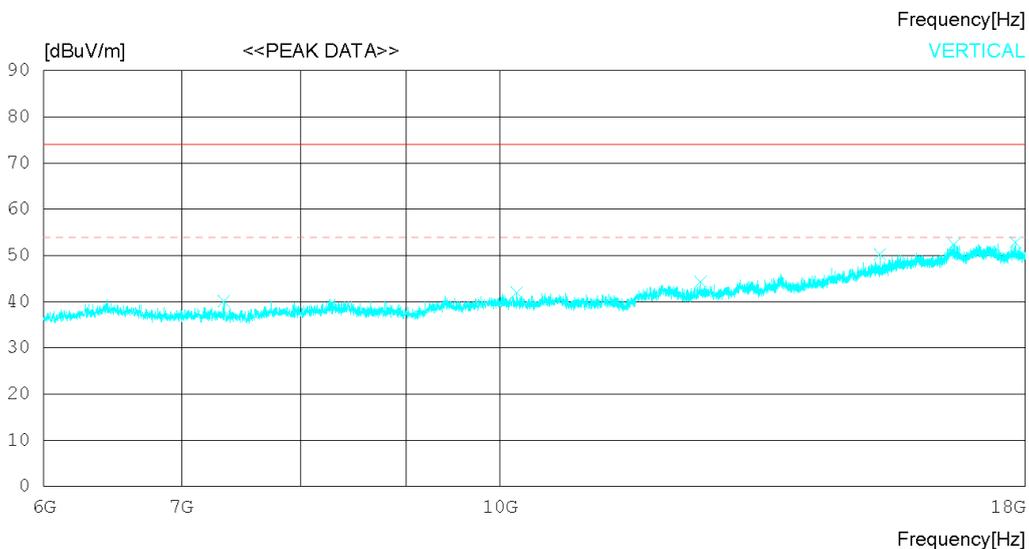
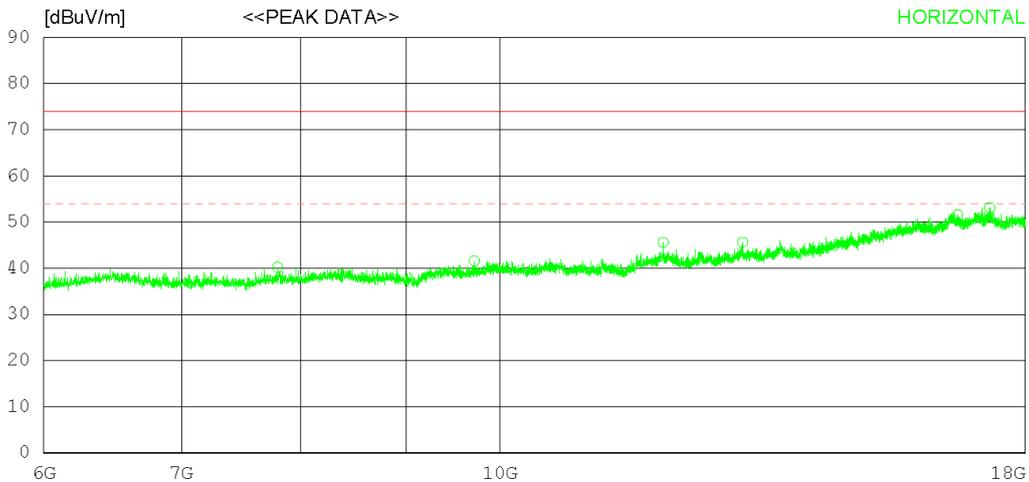
## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESEYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRE SYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	7794.000	34.40	31.33	12.60	38.12	40.21	74.0	33.79	400	0
2	9714.000	33.60	32.42	14.21	38.67	41.56	74.0	32.44	299	110
3	12000.000	34.10	33.46	15.68	37.66	45.58	74.0	28.42	100	358
4	13116.000	33.60	33.59	16.57	38.13	45.63	74.0	28.37	299	358
5	16680.000	31.80	37.19	19.57	36.97	51.59	74.0	22.41	100	293
6	17296.500	33.40	37.78	19.46	37.51	53.13	74.0	20.87	100	289
----- Vertical -----										
7	7341.000	35.60	31.40	11.68	38.51	40.17	74.0	33.83	100	198
8	10185.000	33.00	32.52	14.45	37.99	41.98	74.0	32.02	300	0
9	12514.500	33.40	33.51	15.98	38.54	44.35	74.0	29.65	300	0
10	15294.000	33.20	35.74	18.26	37.00	50.20	74.0	23.8	300	0
11	16618.500	32.20	37.12	19.98	36.92	52.38	74.0	21.62	200	11
12	17805.000	33.10	38.17	19.71	38.10	52.88	74.0	21.12	300	0

Radiated disturbance at (6 ~ 18) GHz _ Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

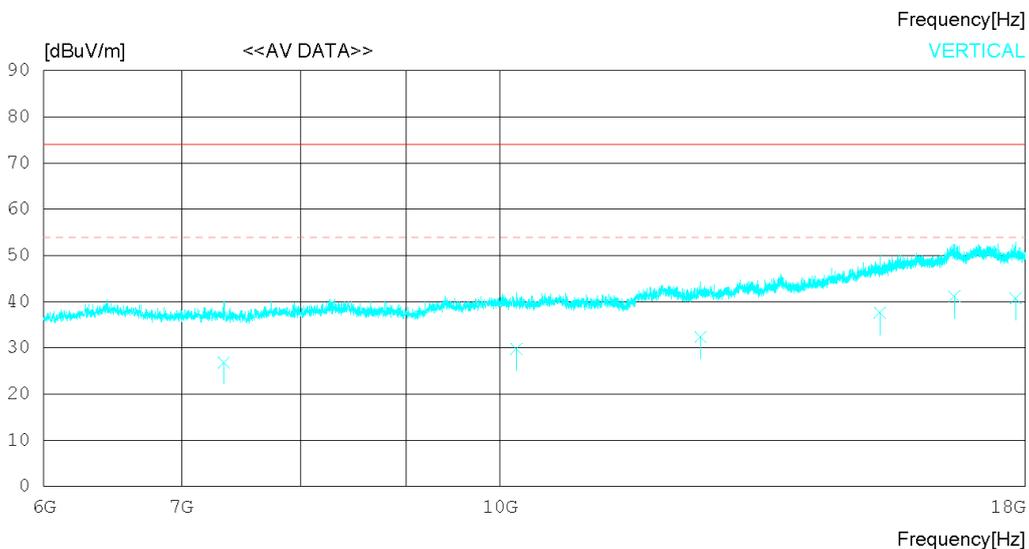
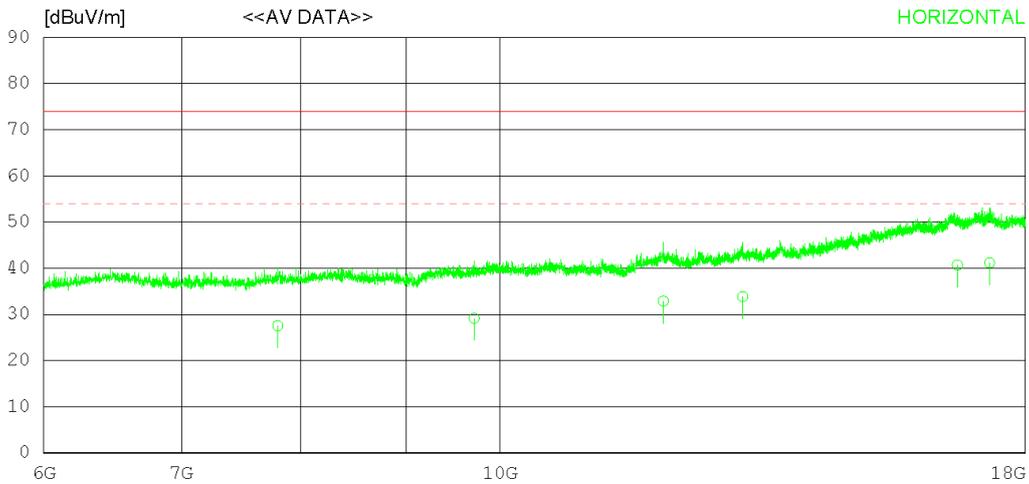
## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRE SYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	7794.906	21.70	31.33	12.60	38.12	27.51	54.00	26.49	400	36
2	9712.136	21.20	32.42	14.21	38.67	29.16	54.00	24.84	299	110
3	12001.730	21.40	33.46	15.68	37.66	32.88	54.00	21.12	100	315
4	13116.780	21.80	33.59	16.57	38.13	33.83	54.00	20.17	299	14
5	16680.130	20.90	37.19	19.57	36.97	40.69	54.00	13.31	100	154
6	17294.820	21.40	37.78	19.46	37.51	41.13	54.00	12.87	100	287
----- Vertical -----										
7	7341.159	22.30	31.40	11.68	38.51	26.87	54.00	27.13	100	15
8	10184.880	20.80	32.52	14.45	37.99	29.78	54.00	24.22	300	137
9	12514.870	21.40	33.51	15.98	38.54	32.35	54.00	21.65	300	96
10	15293.670	20.60	35.73	18.26	37.00	37.59	54.00	16.41	300	274
11	16617.990	20.90	37.12	19.98	36.92	41.08	54.00	12.92	200	1
12	17804.490	21.00	38.17	19.70	38.10	40.77	54.00	13.23	300	105

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

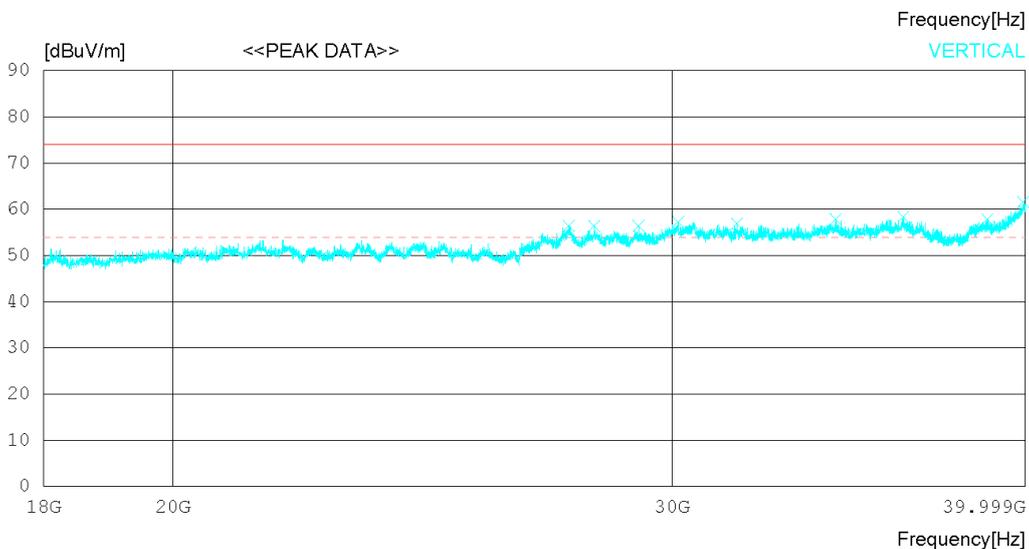
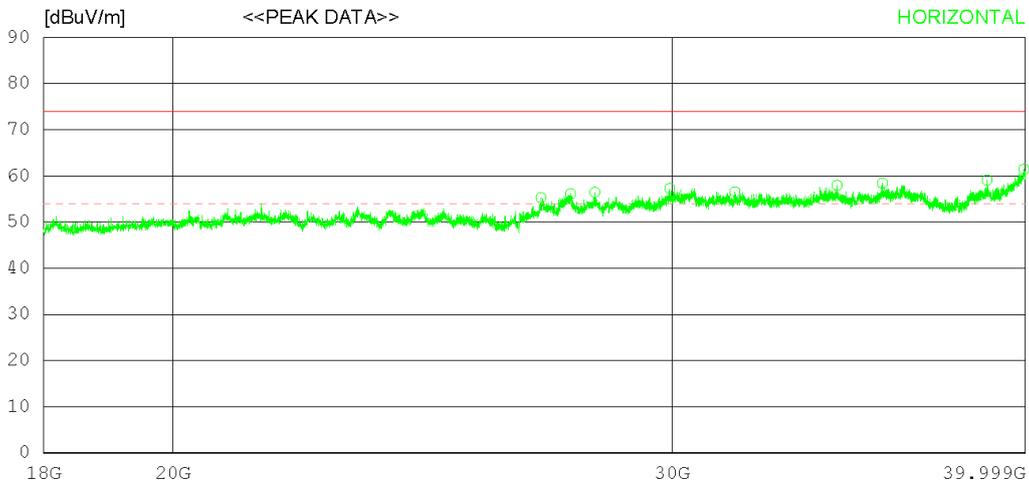
## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESEYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	26970.50041.90	46.85	20.65	54.13	55.27	74.0	18.73	299	358	
2	27630.50042.10	46.82	21.23	54.01	56.14	74.0	17.86	199	0	
3	28177.75042.00	46.90	21.46	53.92	56.44	74.0	17.56	299	358	
4	29951.50041.10	48.10	21.69	53.61	57.28	74.0	16.72	299	302	
5	31582.25040.40	47.67	22.09	53.60	56.56	74.0	17.44	199	358	
6	34315.75041.20	48.35	22.80	54.42	57.93	74.0	16.07	199	135	
7	35600.00041.50	48.65	22.69	54.48	58.36	74.0	15.64	400	0	
8	38773.50041.50	47.77	23.10	53.30	59.07	74.0	14.93	199	0	
9	39953.25041.20	48.68	24.08	52.53	61.43	74.0	12.57	199	0	
----- Vertical -----										
10	27586.50042.40	46.82	21.22	54.02	56.42	74.0	17.58	100	353	
11	28161.25042.00	46.89	21.43	53.92	56.40	74.0	17.6	100	183	
12	29198.00040.80	47.55	21.80	53.74	56.41	74.0	17.59	100	123	
13	30155.00041.10	48.04	21.76	53.60	57.30	74.0	16.7	100	0	
14	31634.50040.70	47.68	22.14	53.60	56.92	74.0	17.08	400	359	
15	34280.00041.10	48.32	22.85	54.41	57.86	74.0	16.14	100	0	
16	36218.75041.60	48.24	22.98	54.42	58.40	74.0	15.6	400	359	
17	38779.00040.30	47.78	23.11	53.29	57.90	74.0	16.1	400	307	
18	39925.75041.50	48.66	24.03	52.55	61.64	74.0	12.36	400	1	

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728251

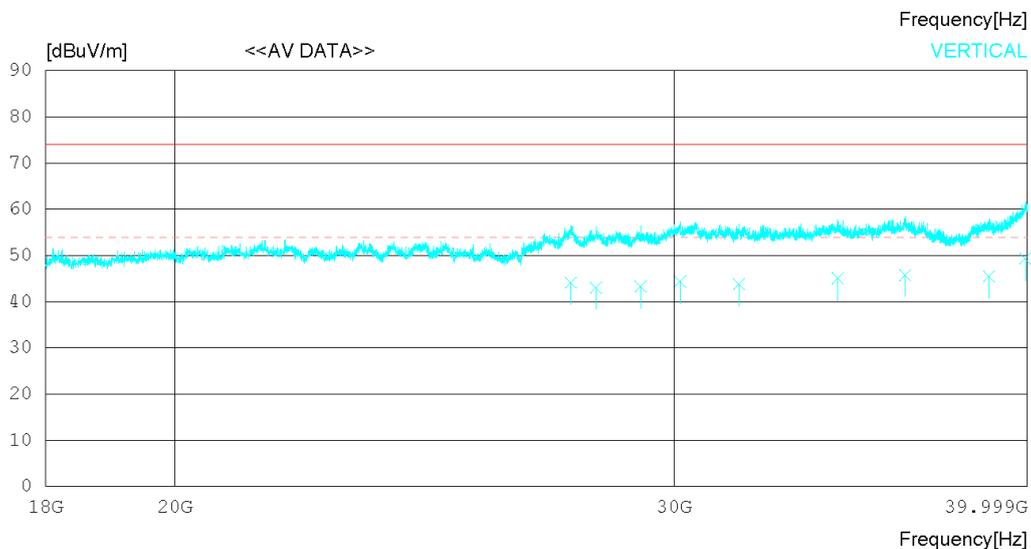
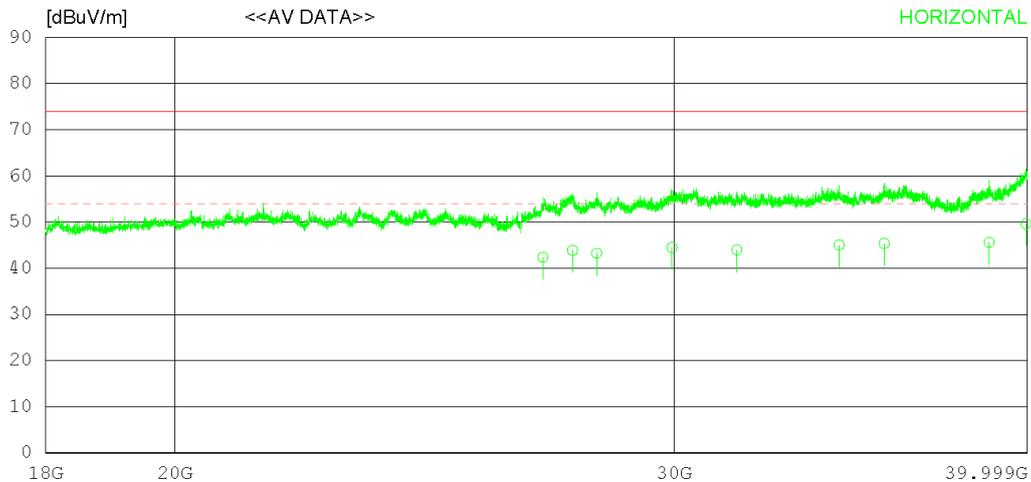
## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRESEYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19°C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_CRE SYN

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	26971.11029.00	46.85	20.65	54.13	42.37	54.00	11.63	299	357	
2	27629.14029.80	46.82	21.23	54.01	43.84	54.00	10.16	199	10	
3	28176.83028.80	46.90	21.46	53.92	43.24	54.00	10.76	299	311	
4	29953.18028.30	48.11	21.69	53.61	44.49	54.00	9.51	299	234	
5	31581.55027.80	47.67	22.09	53.60	43.96	54.00	10.04	199	267	
6	34314.64028.30	48.35	22.80	54.42	45.03	54.00	8.97	199	182	
7	35599.52028.50	48.65	22.69	54.48	45.36	54.00	8.64	400	70	
8	38774.68028.00	47.77	23.10	53.30	45.57	54.00	8.43	199	3	
9	39951.15029.40	48.68	24.08	52.53	49.63	54.00	4.37	199	154	
----- Vertical -----										
10	27588.49030.10	46.82	21.22	54.02	44.12	54.00	9.88	100	312	
11	28158.71028.70	46.89	21.42	53.92	43.09	54.00	10.91	100	347	
12	29199.52027.70	47.55	21.80	53.74	43.31	54.00	10.69	100	163	
13	30153.38028.20	48.04	21.76	53.60	44.40	54.00	9.60	100	178	
14	31634.67027.60	47.68	22.14	53.60	43.82	54.00	10.18	400	181	
15	34279.04028.30	48.32	22.85	54.41	45.06	54.00	8.94	100	35	
16	36215.84029.00	48.24	22.98	54.42	45.80	54.00	8.20	400	1	
17	38778.05027.90	47.78	23.11	53.29	45.50	54.00	8.50	400	358	
18	39926.97029.20	48.66	24.04	52.55	49.35	54.00	4.65	400	22	

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

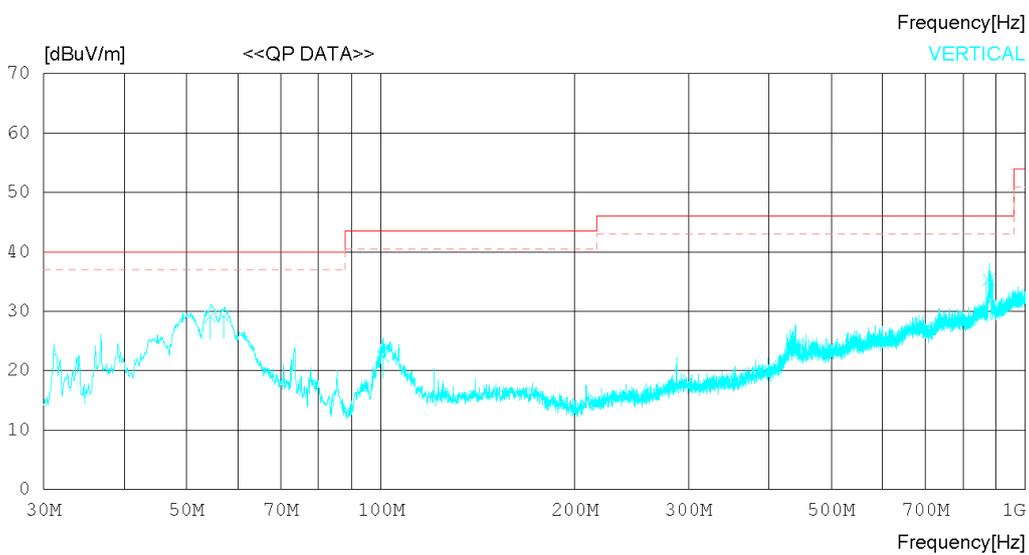
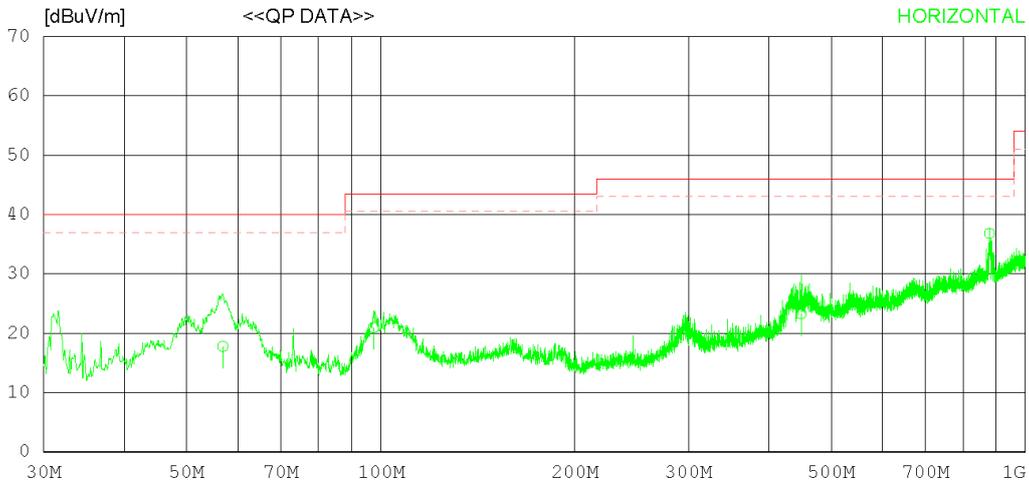
## RADIATED EMISSION

Date 2019-03-03

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB



## RADIATED EMISSION

Date 2019-03-03

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	56.881	23.70	17.70	2.17	25.79	17.78	40.00	22.22	300	43
2	97.518	29.30	14.76	2.58	25.70	20.94	43.50	22.56	320	259
3	448.606	21.30	22.99	4.62	25.64	23.27	46.00	22.73	217	217
4	879.322	27.20	29.11	6.31	25.80	36.82	46.00	9.18	400	0
----- Vertical -----										
5	54.440	33.90	18.78	2.15	25.79	29.04	40.00	10.96	130	123
6	57.132	35.10	17.74	2.17	25.79	29.22	40.00	10.78	100	99
7	100.758	30.10	15.38	2.61	25.70	22.39	43.50	21.11	100	154
8	878.851	25.70	29.11	6.31	25.80	35.32	46.00	10.68	300	223

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

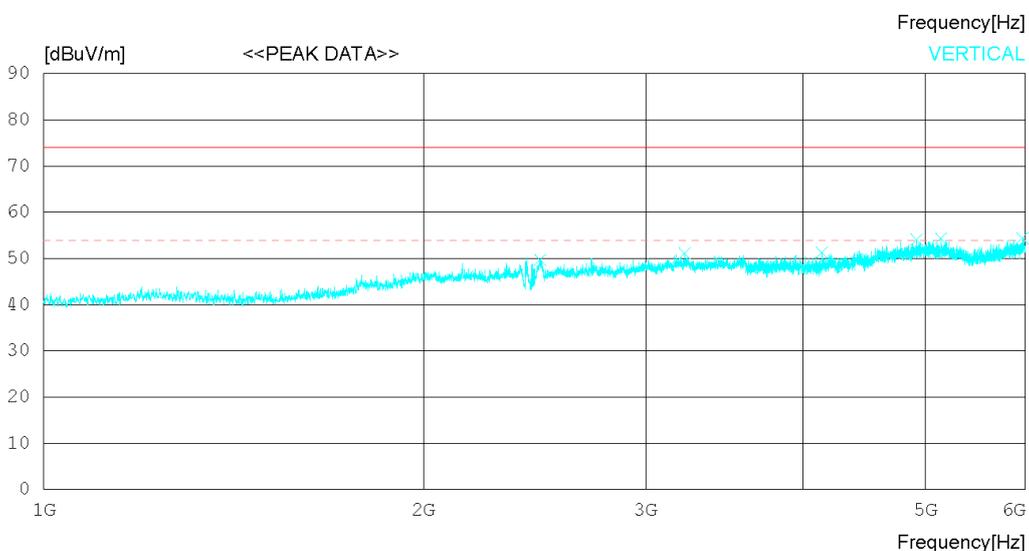
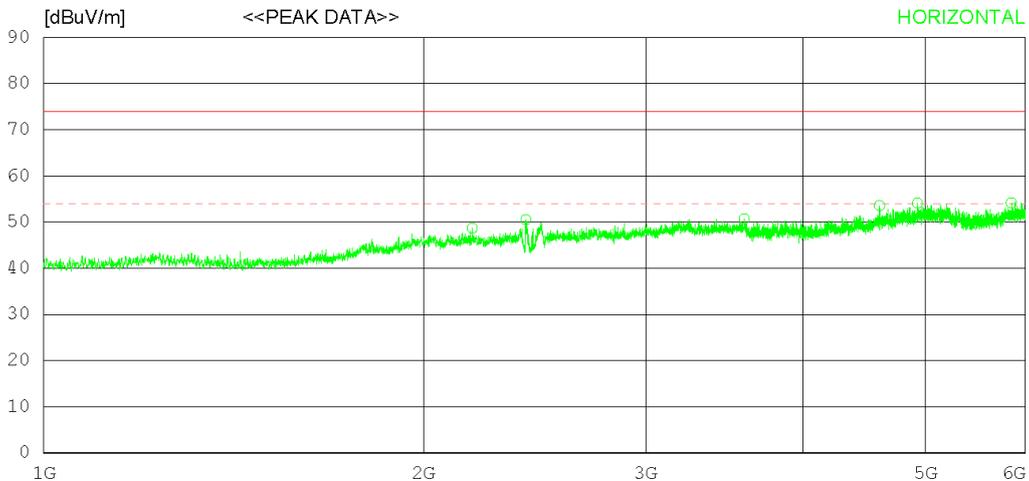
## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	2186.250	44.80	31.70	6.97	34.82	48.65	74.0	25.35	400	194
2	2410.625	46.30	31.86	7.20	34.83	50.53	74.0	23.47	400	358
3	3591.875	43.10	33.40	8.75	34.54	50.71	74.0	23.29	100	229
4	4596.875	43.30	33.99	10.77	34.52	53.54	74.0	20.46	400	358
5	4927.500	43.30	34.16	11.26	34.62	54.10	74.0	19.9	400	313
6	5847.500	42.20	34.89	11.79	34.74	54.14	74.0	19.86	100	66
----- Vertical -----										
7	2474.375	45.10	32.20	7.26	34.83	49.73	74.0	24.27	400	141
8	3221.875	44.40	33.11	8.39	34.73	51.17	74.0	22.83	199	358
9	4140.000	42.70	33.20	9.77	34.38	51.29	74.0	22.71	400	11
10	4920.000	43.40	34.14	11.25	34.62	54.17	74.0	19.83	100	240
11	5145.625	43.50	34.19	11.32	34.66	54.35	74.0	19.65	100	5
12	5969.375	42.30	35.10	11.82	34.76	54.46	74.0	19.54	400	176

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

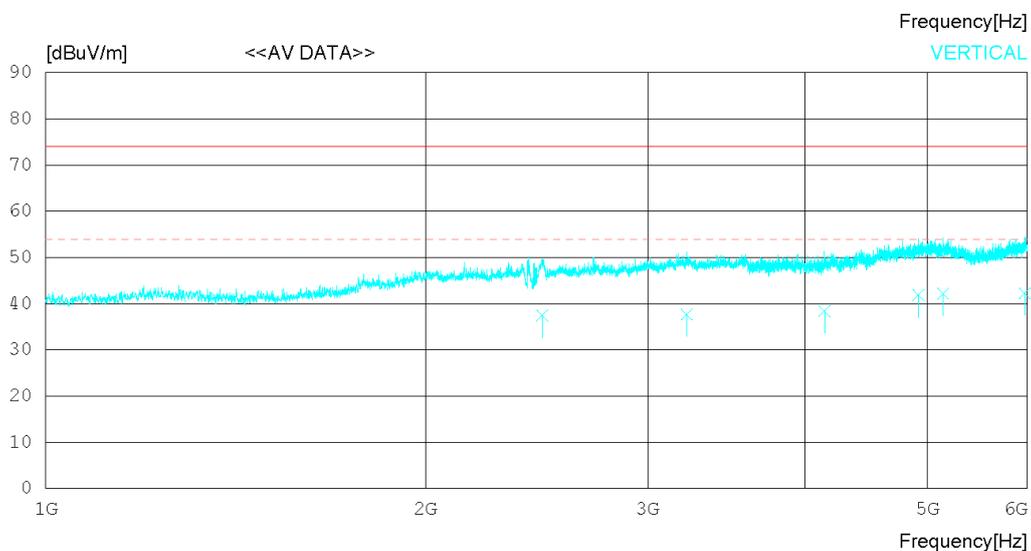
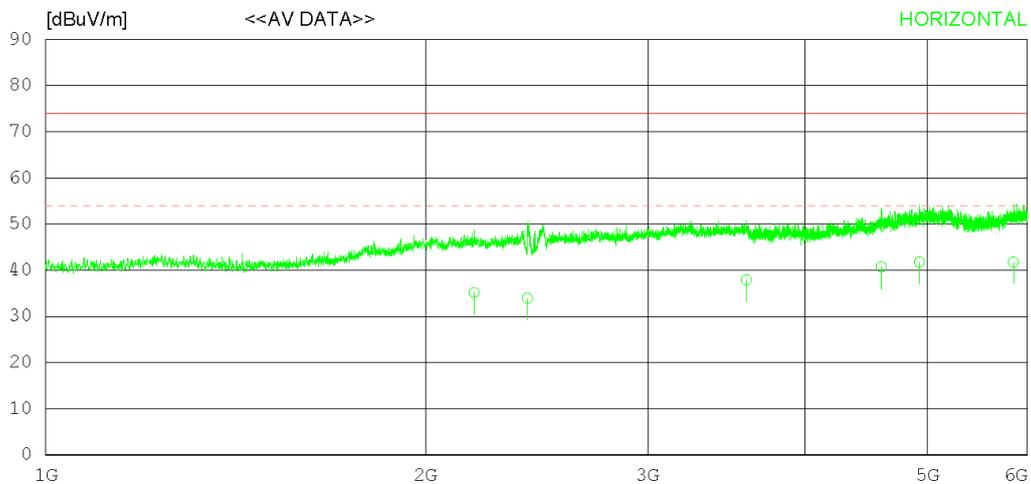
## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2019-03-16

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 42 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	2185.324	31.30	31.70	6.97	34.82	35.15	54.00	18.85	400	165
2	2409.356	29.70	31.86	7.20	34.83	33.93	54.00	20.07	400	127
3	3591.681	30.30	33.40	8.75	34.54	37.91	54.00	16.09	100	88
4	4593.770	30.50	33.99	10.75	34.52	40.72	54.00	13.28	400	1
5	4925.579	31.00	34.15	11.26	34.62	41.79	54.00	12.21	400	356
6	5847.291	29.80	34.89	11.80	34.74	41.75	54.00	12.25	100	358
----- Vertical -----										
7	2474.857	32.80	32.20	7.26	34.83	37.43	54.00	16.57	400	12
8	3223.444	30.90	33.11	8.39	34.73	37.67	54.00	16.33	199	312
9	4142.108	29.80	33.20	9.77	34.38	38.39	54.00	15.61	400	130
10	4917.781	31.10	34.14	11.24	34.62	41.86	54.00	12.14	100	156
11	5144.775	31.30	34.19	11.32	34.66	42.15	54.00	11.85	100	71
12	5968.095	30.10	35.10	11.82	34.76	42.26	54.00	11.74	400	185

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

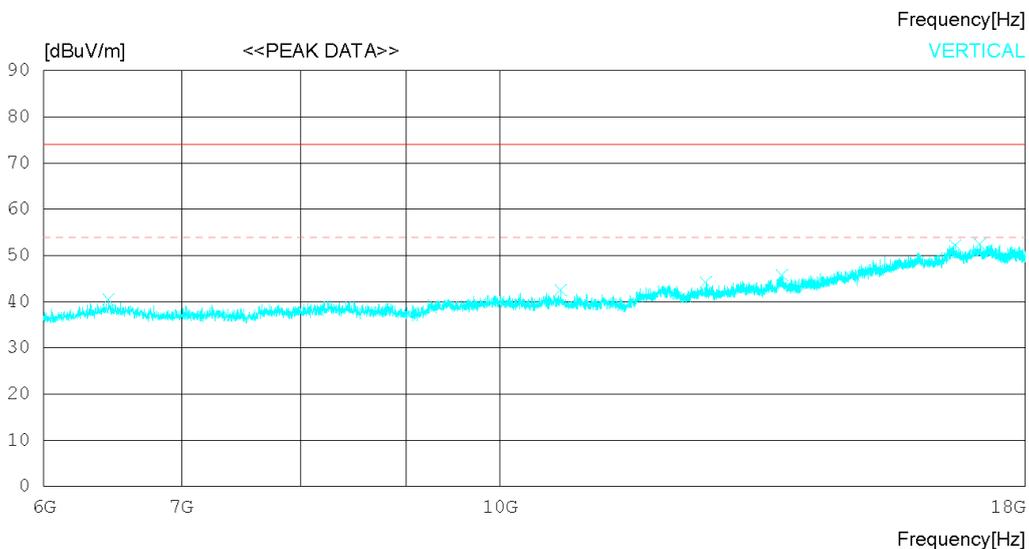
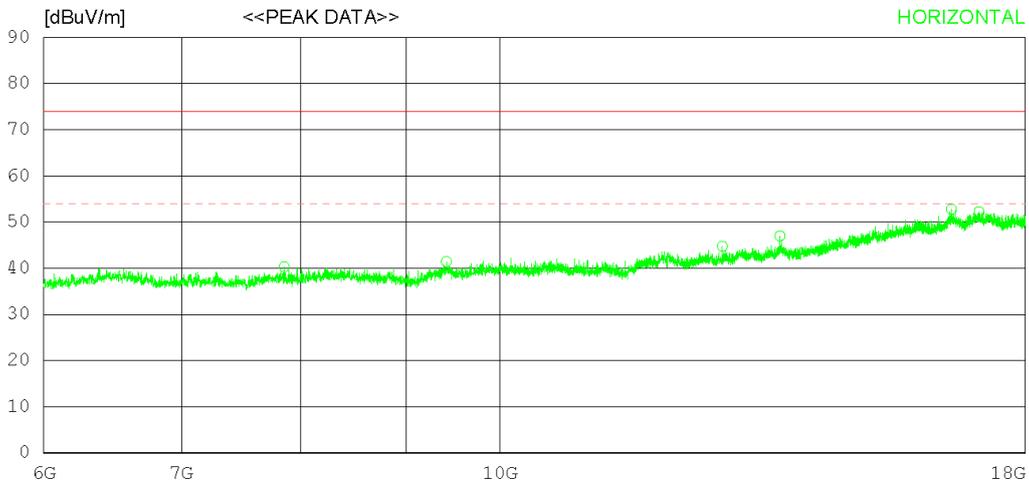
## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	7854.000	34.50	31.32	12.52	38.06	40.28	74.0	33.72	200	351
2	9415.500	34.10	32.29	14.21	39.18	41.42	74.0	32.58	400	358
3	12822.000	33.00	33.53	16.54	38.35	44.72	74.0	29.28	200	169
4	13677.000	33.70	33.79	17.25	37.74	47.00	74.0	27	200	221
5	16570.500	32.60	37.06	19.96	36.87	52.75	74.0	21.25	400	299
6	17089.500	32.20	37.62	19.75	37.34	52.23	74.0	21.77	100	0
----- Vertical -----										
7	6450.000	36.30	31.60	11.20	38.59	40.51	74.0	33.49	199	206
8	10701.000	33.50	32.45	14.69	38.12	42.52	74.0	31.48	299	358
9	12586.500	33.20	33.51	15.95	38.50	44.16	74.0	29.84	199	0
10	13707.000	32.50	33.80	17.23	37.73	45.80	74.0	28.2	199	0
11	16641.000	32.20	37.14	19.83	36.94	52.23	74.0	21.77	100	202
12	17104.500	32.50	37.63	19.67	37.35	52.45	74.0	21.55	299	358

Radiated disturbance at (6 ~ 18) GHz _ Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

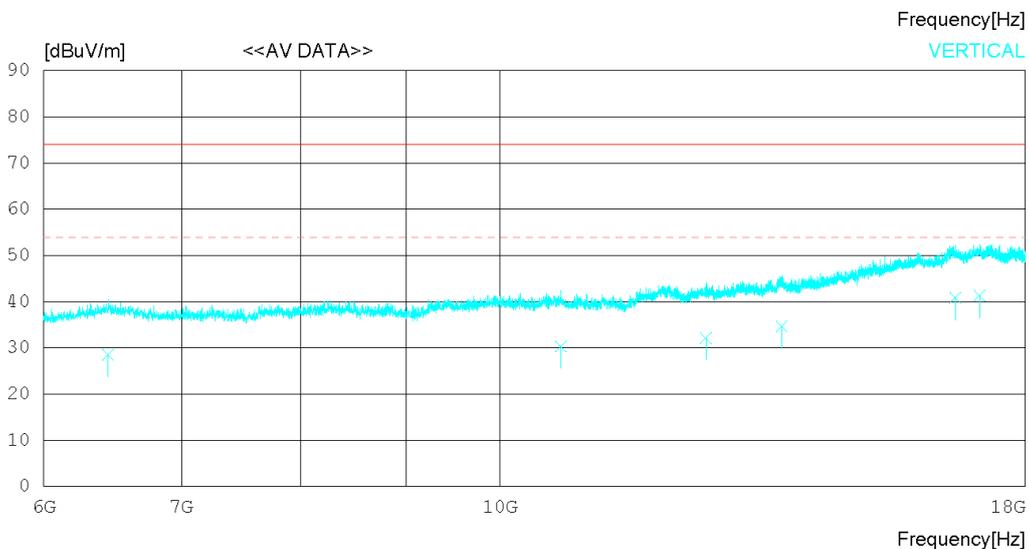
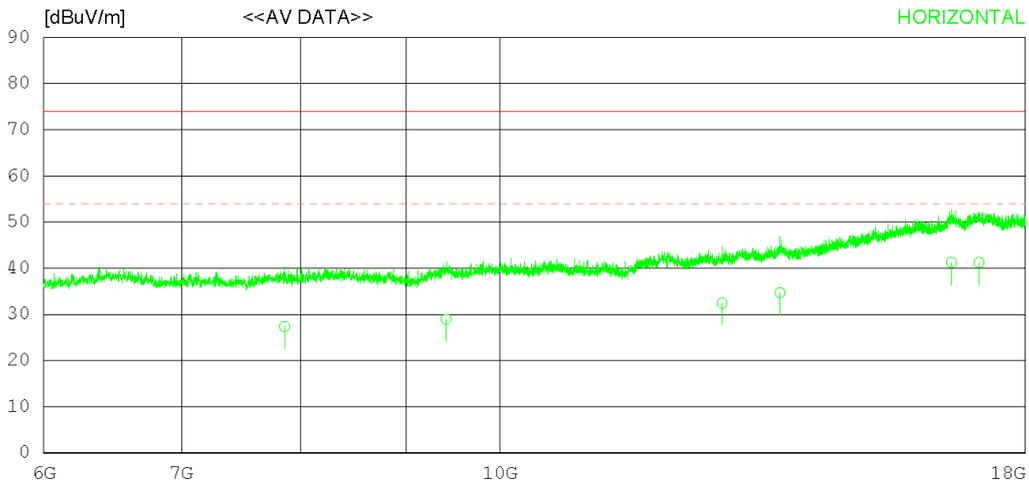
## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2019-03-08

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	7855.200	21.60	31.32	12.52	38.05	27.39	54.00	26.61	200	327
2	9413.251	21.60	32.29	14.21	39.18	28.92	54.00	25.08	400	90
3	12820.730	20.70	33.53	16.54	38.35	32.42	54.00	21.58	200	152
4	13678.460	21.40	33.79	17.25	37.74	34.70	54.00	19.30	200	149
5	16568.950	21.10	37.06	19.95	36.87	41.24	54.00	12.76	400	220
6	17090.850	21.20	37.62	19.75	37.34	41.23	54.00	12.77	100	76
----- Vertical -----										
7	6448.246	24.30	31.60	11.19	38.59	28.50	54.00	25.50	199	126
8	10702.750	21.30	32.45	14.69	38.12	30.32	54.00	23.68	299	353
9	12587.080	21.20	33.51	15.95	38.50	32.16	54.00	21.84	199	61
10	13706.010	21.40	33.80	17.23	37.73	34.70	54.00	19.30	199	8
11	16641.670	20.80	37.15	19.83	36.94	40.84	54.00	13.16	100	193
12	17101.960	21.30	37.63	19.69	37.35	41.27	54.00	12.73	299	304

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

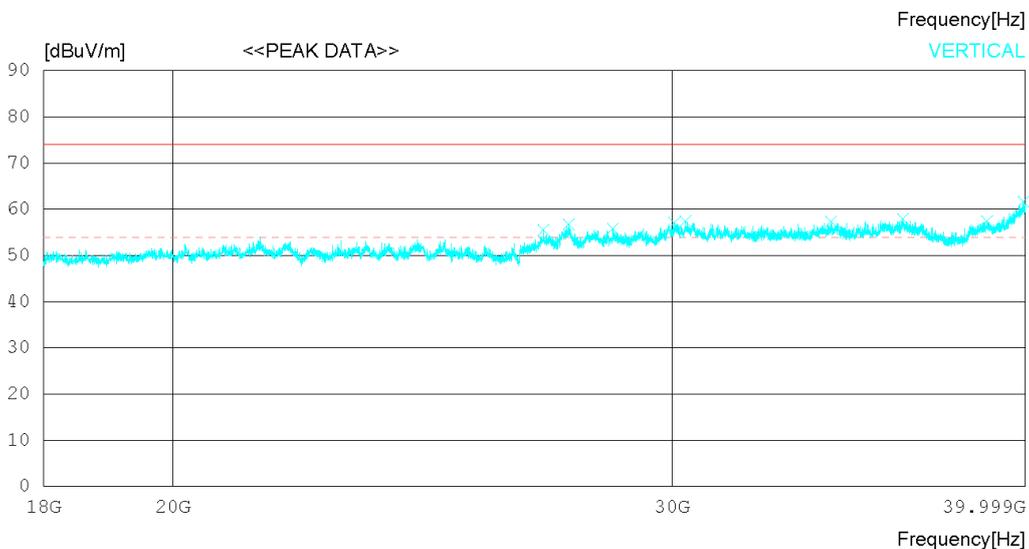
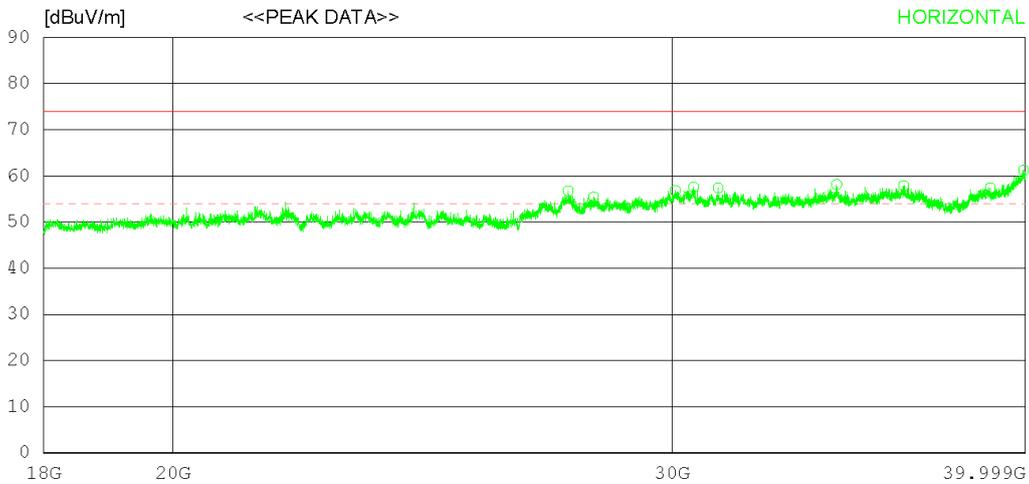
## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)



## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Average)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	27578.25042.70	46.82	21.23	54.02	56.73	74.0	17.27	100	0	
2	28150.25041.00	46.88	21.41	53.92	55.37	74.0	18.63	300	0	
3	30086.25040.60	48.09	21.73	53.60	56.82	74.0	17.18	300	0	
4	30537.25041.40	47.81	21.92	53.60	57.53	74.0	16.47	300	309	
5	31153.25041.40	47.56	21.97	53.60	57.33	74.0	16.67	300	0	
6	34307.50041.40	48.34	22.81	54.42	58.13	74.0	15.87	200	358	
7	36227.00041.10	48.23	22.98	54.42	57.89	74.0	16.11	100	235	
8	38869.75039.70	47.88	23.04	53.23	57.39	74.0	16.61	400	358	
9	39939.50041.00	48.67	24.06	52.54	61.19	74.0	12.81	100	0	
----- Vertical -----										
10	27033.75042.10	46.86	20.69	54.12	55.53	74.0	18.47	299	42	
11	27592.00042.70	46.82	21.22	54.02	56.72	74.0	17.28	100	352	
12	28595.75040.60	47.15	21.96	53.85	55.86	74.0	18.14	199	293	
13	30067.00040.90	48.10	21.72	53.60	57.12	74.0	16.88	400	189	
14	30333.75041.30	47.93	21.83	53.60	57.46	74.0	16.54	199	0	
15	34153.50040.50	48.22	22.99	54.41	57.30	74.0	16.7	299	359	
16	36199.50041.10	48.26	22.97	54.43	57.90	74.0	16.1	100	358	
17	38770.75039.80	47.77	23.10	53.30	57.37	74.0	16.63	299	245	
18	39939.50041.50	48.67	24.06	52.54	61.69	74.0	12.31	100	358	

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	MCS-H06WA	Ear-Mic	EAB63728252

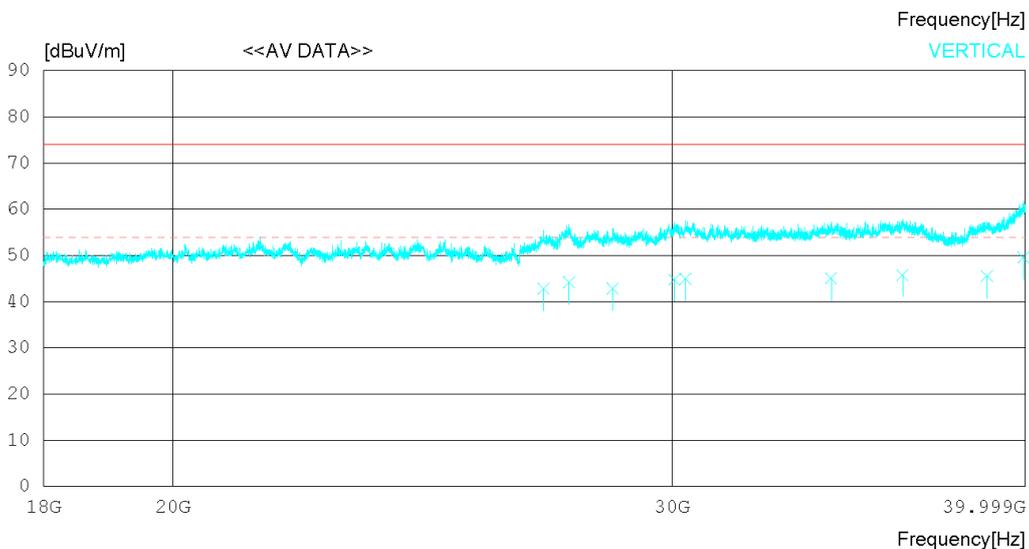
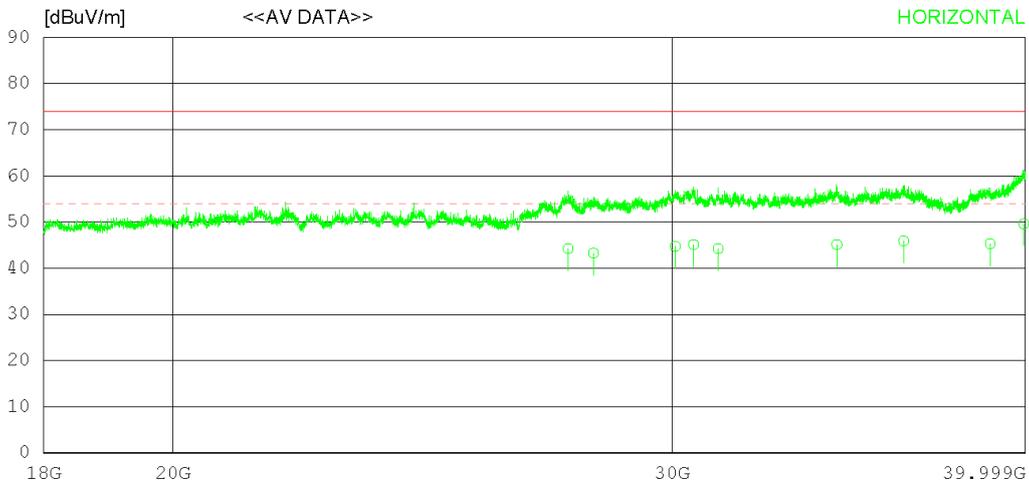
## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)



## RADIATED EMISSION

Date 2019-03-13

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19°C 41 % R.H.  
 Test Condition REAR CAMERA & FM RADIO

Memo MCS-H06WA\_BUJEON

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)  
 FCC Part15 Subpart.B Class B (3m) - GHz(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	27578.21030.20	46.82	21.23	54.02	44.23	54.00	9.77	100	70	
2	28148.08028.90	46.88	21.41	53.92	43.27	54.00	10.73	300	181	
3	30086.70028.50	48.09	21.73	53.60	44.72	54.00	9.28	300	246	
4	30537.45029.00	47.81	21.92	53.60	45.13	54.00	8.87	300	154	
5	31153.71028.30	47.56	21.97	53.60	44.23	54.00	9.77	300	19	
6	34308.97028.40	48.34	22.81	54.42	45.13	54.00	8.87	200	336	
7	36225.51029.10	48.23	22.98	54.42	45.89	54.00	8.11	100	42	
8	38867.76027.60	47.88	23.05	53.24	45.29	54.00	8.71	400	150	
9	39941.20029.40	48.67	24.06	52.54	49.59	54.00	4.41	100	1	
----- Vertical -----										
10	27033.16029.40	46.86	20.69	54.12	42.83	54.00	11.17	299	13	
11	27591.78030.20	46.82	21.22	54.02	44.22	54.00	9.78	100	324	
12	28594.13027.60	47.15	21.96	53.85	42.86	54.00	11.14	199	289	
13	30068.33028.60	48.10	21.72	53.60	44.82	54.00	9.18	400	172	
14	30334.77028.80	47.93	21.83	53.60	44.96	54.00	9.04	199	258	
15	34151.78028.20	48.21	23.00	54.41	45.00	54.00	9.00	299	156	
16	36197.45029.00	48.26	22.97	54.43	45.80	54.00	8.20	100	354	
17	38770.01028.00	47.77	23.10	53.30	45.57	54.00	8.43	299	110	
18	39940.60029.40	48.67	24.06	52.54	49.59	54.00	4.41	100	1	

### Calculation

N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBμV) : Reading Value(dBμV) + C.FACTOR(dB)
Margin(dB) : Limit(dBμV) - Result(dBμV)

## 8. Revision History

Date	Description	Revised By	Reviewed By
May. 13. 2019	Initial report	JooHo Kim	DaeHwa Eun

-End of test report-