

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. : DREFCC2006-0163
2. Client / Applicant
 - Name : LG Electronics Inc.
 - Address : 111 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
3. Use of Report : Grant of Certification
4. Product Name / Model Name : Mobile Phone / LM-Q730BAW
(FCC ID : ZNFQ730BAW)
5. Test Standard : ANSI C 63.4 : 2014
FCC Part 15 Subpart B
(Other Class B digital devices & peripherals)
6. Date of Test : Jun. 13. 2020 ~ Jun. 14. 2020
7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing
8. Testing Environment : Temperature (23 ~ 26) °C , Humidity (42 ~ 44) % R.H.
9. Test Result : Refer to the attached Test Result

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

Affirmation	Tested by	Reviewed by
	Name : JunSeo Park 	Name : KyoungHwan Bae 

Jun. 19. 2020

DT&C Co., Ltd.

Not abided by KS Q ISO / IEC 17025 and KOLAS accreditation.

If this report is required to confirmation of authenticity, please contact to report@dtnc.net

CONTENTS

1. General Remarks	3
2. Test Laboratory.....	3
3. General Information of EUT.....	4
4. EUT Operations and Test Configurations	5
4.1 Principle of Configuration Selection	5
4.2 EUT Operation Mode	5
4.3 Test Configuration Mode.....	5
4.4 Supported Equipment	6
4.5 EUT In/Output Port	6
4.6 Test Voltage and Frequency	6
5. Test Summary	7
6. Test Environment.....	7
7. Test Results : Emission.....	8
7.1 Conducted Disturbance	8
7.2 Radiated Disturbance	11
8. Revision History.....	27

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 rd , 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-14076, R-4180, R-4496, T-1442, G-10338, G-10754, 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 Inc. 111 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Manufacturer	LG Electronics Inc. 111 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Product Name	Mobile Phone
Model Name	LM-Q730BAW
Add Model Name	LM-Q730HA, LMQ730BAW, LMQ730HA, Q730BAW, Q730HA
Rated Power	DC 3.87 V
FCC ID	ZNFQ730BAW
Remarks	None

* Accessory

Equipment	No.	Manufacturer	Model Name	Product Number
Earphone	1	CRESYN	EMB-LGE53	EAB63728251
Cable	1	Ningbo	LG0174	EAD64746101
Dual Screen	1	LG Electronics	Dual Screen	LM-G905N

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	DATA COMMUNICAITON	The EUT is reading, writing, internal storage

4.3 Test Configuration Mode

No.	Mode	Description
1	DATA COMMUNICAITON	EUT was connected PC by USB cable C type and continuously operated

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	PC	DELL INC	DCN3	J51ZBBX
AE	PRINTER	Bixolon	SRP-770	N/A
AE	SSD	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	KEYBOARD	DELL INC	KB212-B	N/A
AE	MOUSE	LG	XM-1300	N/A
AE	LED MONITOR	DELL	P2417Hb	N/A
AE	Headset	DONGGUANENMEY	SHS-150V/W	N/A
AE	USIM CARD	N/A	N/A	N/A
AE	MICRO SD CARD	SANDISK	N/A	N/A
*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
AUX	I/O	1.5	Non shield	Plastic	EUT
USB	I/O	1.5	Shield	Plastic	EUT
USB(EUT)	I/O	1.1	Non shield	Plastic	PC
USB(MOUSE)	I/O	1.8	Non shield	Plastic	
USB(KEYBOARD)	I/O	1.8	Non shield	Plastic	
USB(SSD)	I/O	1.0	Non shield	Plastic	
VGA(MONITOR)	I/O	1.8	shield	Plastic	
AUX(EAR MIC)	I/O	1.8	Non shield	Plastic	
AC IN(POWER)	AC	1.8	Non shield	Plastic	
RS232(Printer)	I/O	1.7	Non shield	Plastic	Monitor
Parallel(Printer)	I/O	1.9	Non shield	Plastic	
AC IN	AC	1.6	Non shield	Plastic	
*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	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		

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.73781	L	34.48	Cispr - Average	46.00	11.52

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB μ V/m]	Detector	Limit [dB μ V/m]	Margin [dB]
17037.720	H	46.40	Cispr - Average	54.00	7.60

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2020-06-14	23	44	-
Radiated Disturbance	2020-06-13 2020-06-14	23 26	44 42	-

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage		Result	
<u>Method:</u> 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.			Comply	
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point		
	150 kHz to 30 MHz	Mains		
EUT mode (Refer to clauses 4)	Test configuration mode	1		
	EUT Operation mode	1		
Limits – Class A				
Frequency (MHz)	Limit dBµV			
	Quasi-Peak	Average		
0.15 to 0.50	79	66		
0.50 to 30	73	60		
Limits – Class B				
Frequency (MHz)	Limit dBµV			
	Quasi-Peak	Average		
0.15 to 0.50	66 to 56	56 to 46		
0.50 to 5	56	46		
5 to 30	60	50		

Measurement uncertainty

Expended uncertainty U (95 %, Confidence level, $k = 2$)	3.6 dB
The measurement uncertainties were calculated in accordance with requirements of ANSI C 63.4-2014.	

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-C VER. 2.00.0170	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESU	ROHDE&SCHWARZ	100538	2020.01.20	2021.01.20
PULSE LIMITER	ESH3-Z2	ROHDE&SCHWARZ	101333	2019.09.17	2020.09.17
LISN	NSLK 8128 RC	SCHWARZBECK	8128 RC-387	2019.11.04	2020.11.04
LISN	KNW-407	KYORITSU	8-317-8	2019.12.22	2020.12.22

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

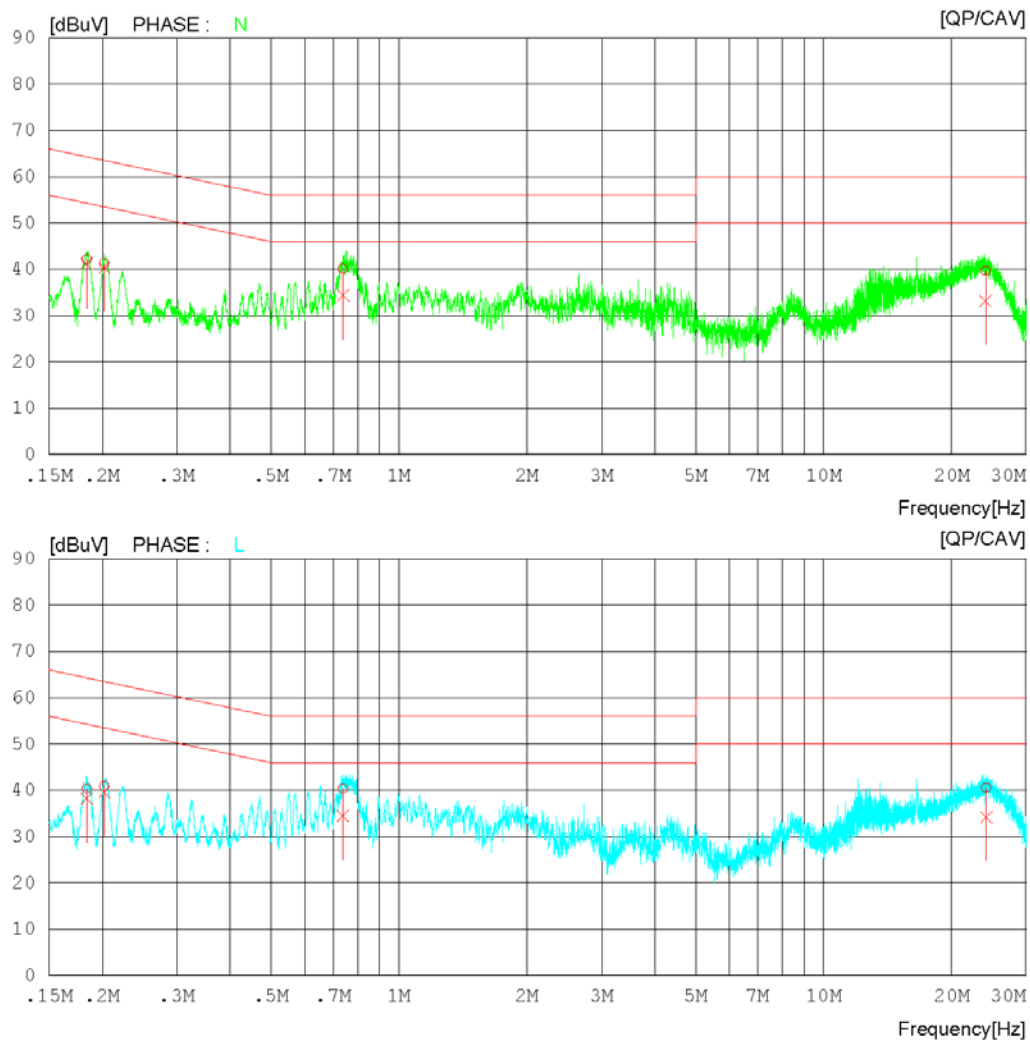
Results of Conducted Emission

DTNC

Date 2020-06-14

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 44 % R.H.
Test Condition Data communication

LIMIT : FCC Part15 Subpart.B Class B.QP
FCC Part15 Subpart.B Class B.AV



Results of Conducted Emission

DTNC

Date 2020-06-14

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 44 % R.H.
Test Condition Data communication

LIMIT : FCC Part15 Subpart.B Class B.QP
FCC Part15 Subpart.B Class B.AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP	CAV		QP	CAV	QP	CAV	QP	CAV	
		[dBuV]	[dBuV]		[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.18420	32.13	31.13	10.07	42.20	41.20	64.29	54.29	22.09	13.09	N
2	0.20250	31.12	30.29	10.08	41.20	40.37	63.51	53.51	22.31	13.14	N
3	0.73843	29.97	24.26	10.11	40.08	34.37	56.00	46.00	15.92	11.63	N
4	24.03874	29.07	22.57	10.61	39.68	33.18	60.00	50.00	20.32	16.82	N
5	0.18410	30.27	28.17	10.07	40.34	38.24	64.30	54.30	23.96	16.06	L
6	0.20250	30.80	29.50	10.08	40.88	39.58	63.51	53.51	22.63	13.93	L
7	0.73781	30.17	24.37	10.11	40.28	34.48	56.00	46.00	15.72	11.52	L
8	24.15573	29.97	23.67	10.51	40.48	34.18	60.00	50.00	19.52	15.82	L

Calculation

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

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	
Radiated Disturbance below 1 000 MHz				
Frequency range (MHz)	Quasi-peak limit dBµV/m			
	Class A		Class B	
	3 m distance	10 m distance	3 m distance	
30 to 88	49.1	39.1	40	
88 to 216	53.5	43.5	43.5	
216 to 960	56.4	46.4	46	
960 to 1 000	59.5	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 dBµV/m			
	Class A (10 m distance)		Class B (10 m distance)	
30 to 230	40		30	
230 to 1 000	47		37	
Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m				
Frequency range (GHz)	Peak limit dBµV/m		Average limit dBµV/m	
	Class A	Class B	Class A	Class B
1 to 40	80	74	60	54
The test frequency range of Radiated Disturbance measurements are listed below.				
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 th harmonic of the highest frequency or 40 GHz, whichever is lower	
Measurement uncertainty				
Expended uncertainty <i>U</i> (95 %, Confidence level, <i>k</i> = 2)			6.88 dB, (30 ~ 1 000) MHz 6.52 dB, (1 GHz Above)	
The measurement uncertainties were calculated in accordance with requirements of ANSI C 63.4-2014.				

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	ESU40	ROHDE&SCHWARZ	100525	2019.12.20	2020.12.20
TRILOG BROADBAND TEST-ANTENNA WITH 6DB ATT	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
	8491B	HP	18403	2018.10.22	2020.10.22
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2020.02.13	2021.02.13
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2020.03.26	2021.03.26
PRE AMPLIFIER	8449B	H.P	3008A00887	2019.08.26	2020.08.26
HORN ANTENNA WITH PREAMPLIFIER	EM-6969	ELECTRO-METRICS	156	2019.02.13	2021.02.13
	MLA-0618-B03-34	TSJ	1785642	2019.12.31	2020.12.31
HORN ANTENNA WITH PREAMPLIFIER	SAS-574	A.H.SYSTEMS INC.	155	2019.07.03	2021.07.03
	MLA-1840-J02-45	TSJ	16966-10728	2019.06.27	2020.06.27
(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

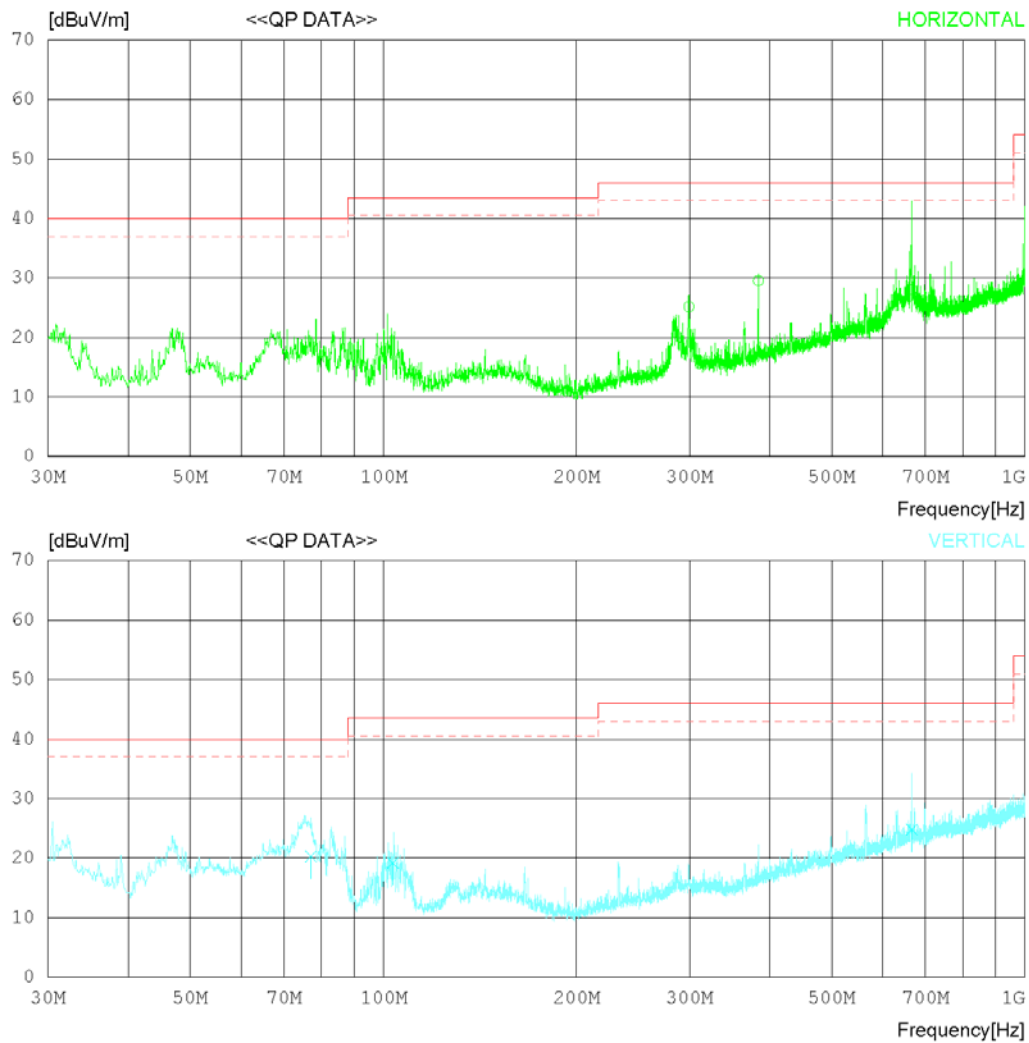
RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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



RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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	299.398	29.68	19.50	2.53	26.56	25.15	46.00	20.85	106	306
2	383.998	32.52	21.12	2.31	26.42	29.53	46.00	16.47	104	234
3	666.668	24.02	27.37	2.85	26.22	28.02	46.00	17.98	111	348
----- Vertical -----										
4	77.110	30.41	15.37	1.27	26.74	20.31	40.00	19.69	113	222
5	103.351	28.92	15.67	1.43	26.83	19.19	43.50	24.31	121	305
6	666.668	20.84	27.37	2.85	26.22	24.84	46.00	21.16	185	333

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

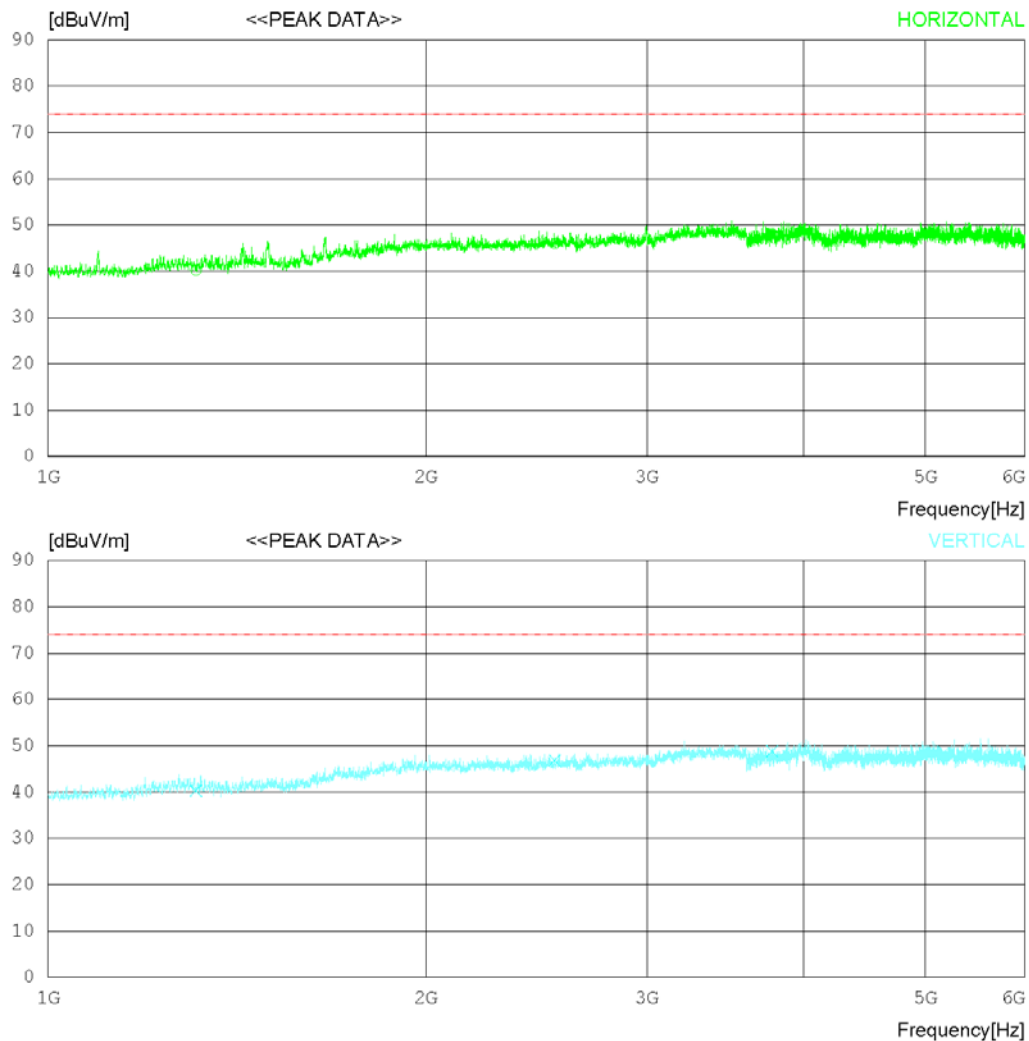
RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 44 % R.H.
Test Condition DATA COMMUNICATIOM

Memo

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



RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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

No	Freq	Reading	Ant.Fac	Loss	Gain	Site.Fac	Result	Limit	Margin	Pola	Height	Angle
1	1311.875	41.2	29.13	5.19	35.31	0	40.21	74	33.79	Hori	131	58
2	2533.125	41.1	32.2	7.28	34.65	0	45.93	74	28.07	Hori	305	1
3	3775	39.5	33.4	8.99	33.85	0	48.04	74	25.96	Hori	305	1
4	1311.875	41.3	29.13	5.19	35.31	0	40.31	74	33.69	Vert	223	259
5	2533.125	42	32.2	7.28	34.65	0	46.83	74	27.17	Vert	225	157
6	3775	40.2	33.4	8.99	33.85	0	48.74	74	25.26	Vert	133	358

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

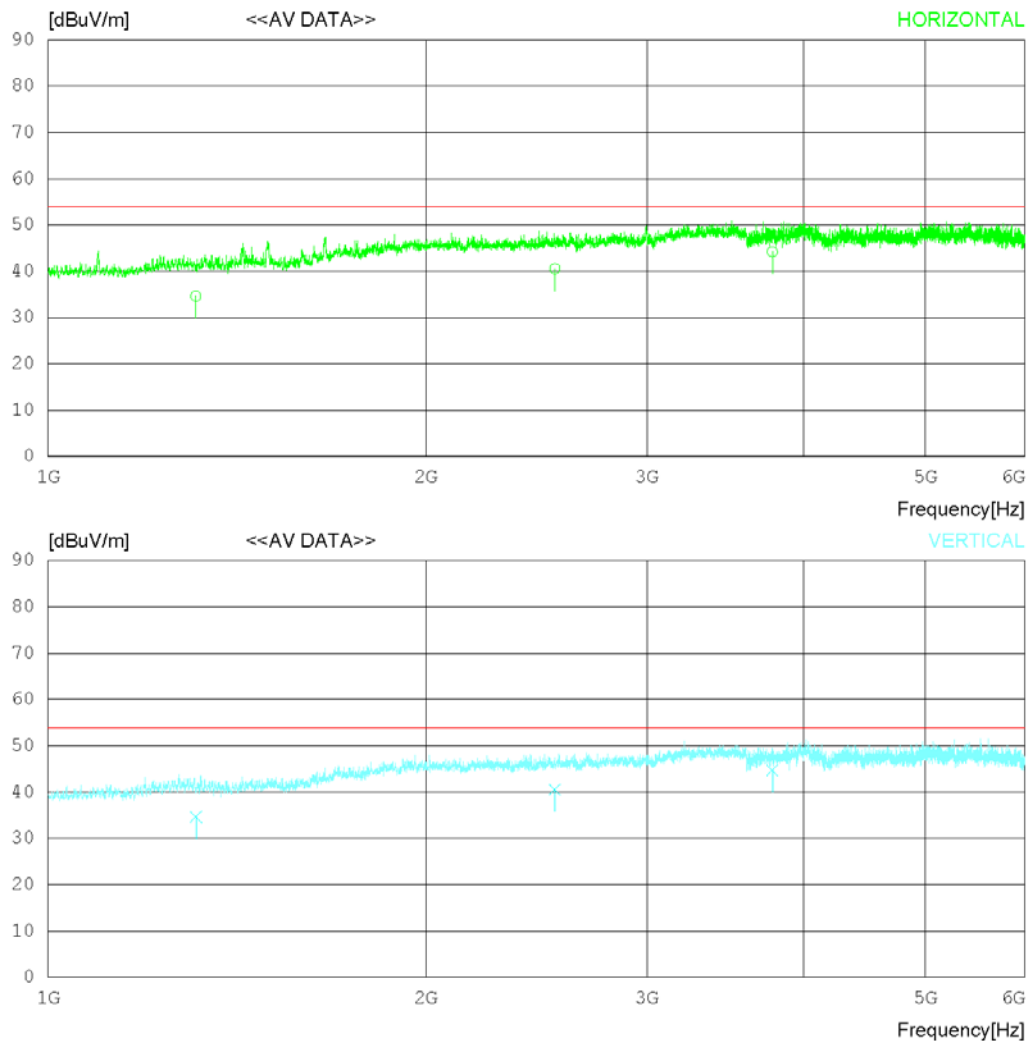
RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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



RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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

No	Freq	Reading	Ant.Fac	Loss	Gain	Site.Fac	Result	Limit	Margin	Pola	Height	Angle
1	1311.164	35.63	29.14	5.18	35.31	0	34.64	54	19.36	Hori	121	58
2	1311.811	35.67	29.13	5.19	35.31	0	34.68	54	19.32	Vert	121	120
3	2533.51	35.72	32.2	7.28	34.65	0	40.55	54	13.45	Hori	305	78
4	2533.162	35.72	32.2	7.28	34.65	0	40.55	54	13.45	Vert	353	230
5	3775.622	35.66	33.4	8.99	33.85	0	44.2	54	9.8	Hori	112	305
6	3775.42	36.12	33.4	8.99	33.85	0	44.66	54	9.34	Vert	121	113

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

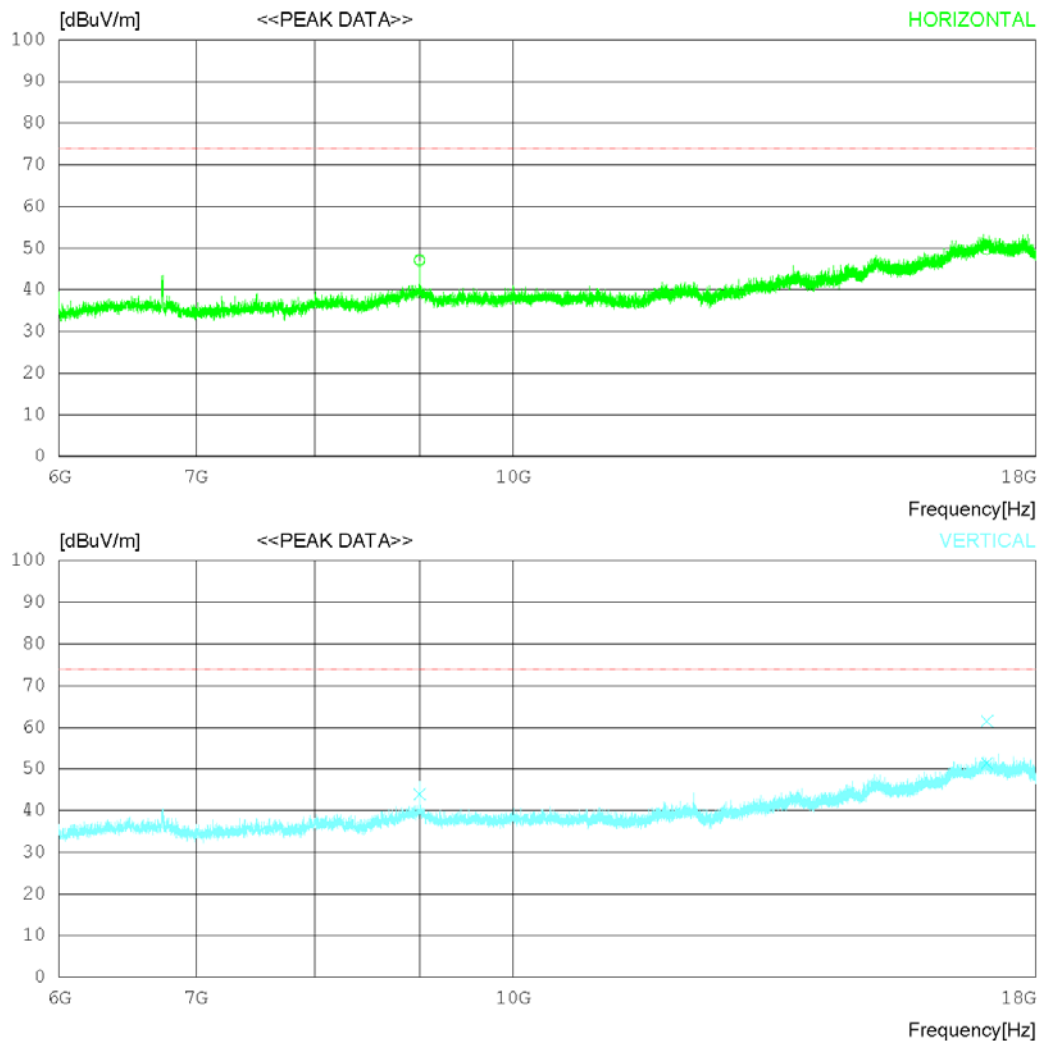
RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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



RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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

No	Freq	Reading	Ant.Fac	Loss	Gain	Site.Fac	Result	Limit	Margin	Pola	Height	Angle
1	9000	36.8	32.1	15.54	37.5	0	46.94	74	27.06	Hori	322	130
2	9000.053	37.1	32.1	15.54	37.5	0	47.24	74	26.76	Hori	246	78
3	17037	25	37.58	23.52	36.44	0	49.66	74	24.34	Hori	305	351
4	9000.065	33.8	32.1	15.54	37.5	0	43.94	74	30.06	Vert	221	113
5	17037	26.8	37.58	23.52	36.44	0	51.46	74	22.54	Vert	325	293
6	17037.41	36.8	37.58	23.52	36.44	0	61.46	74	12.54	Vert	113	255

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

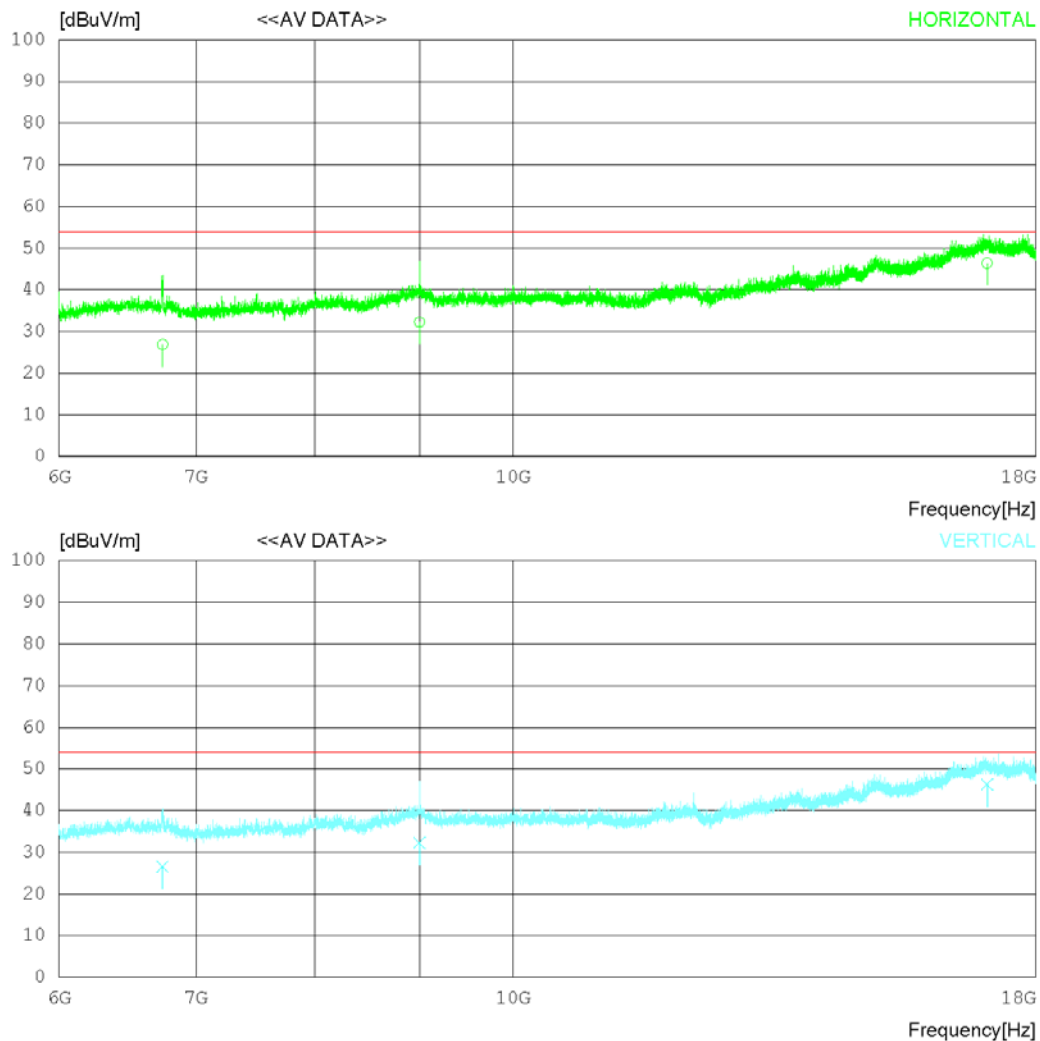
RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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



RADIATED EMISSION

Date 2020-06-13

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 23 °C 44 % R.H.
Test Condition DATA COMMUNICATION

Memo

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

No	Freq	Reading	Ant.Fac	Loss	Gain	Site.Fac	Result	Limit	Margin	Pola	Height	Angle
1	6741.412	21.62	31.52	12.43	38.7	0	26.87	54	27.13	Hori	131	0
2	6741.012	21.35	31.52	12.43	38.7	0	26.6	54	27.4	Vert	177	120
3	9000.044	22.12	32.1	15.54	37.5	0	32.26	54	21.74	Hori	350	240
4	9000.065	22.12	32.1	15.54	37.5	0	32.26	54	21.74	Vert	243	223
5	17037.72	21.76	37.58	23.51	36.45	0	46.4	54	7.6	Hori	112	351
6	17037.42	21.63	37.58	23.52	36.44	0	46.29	54	7.71	Vert	113	350

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

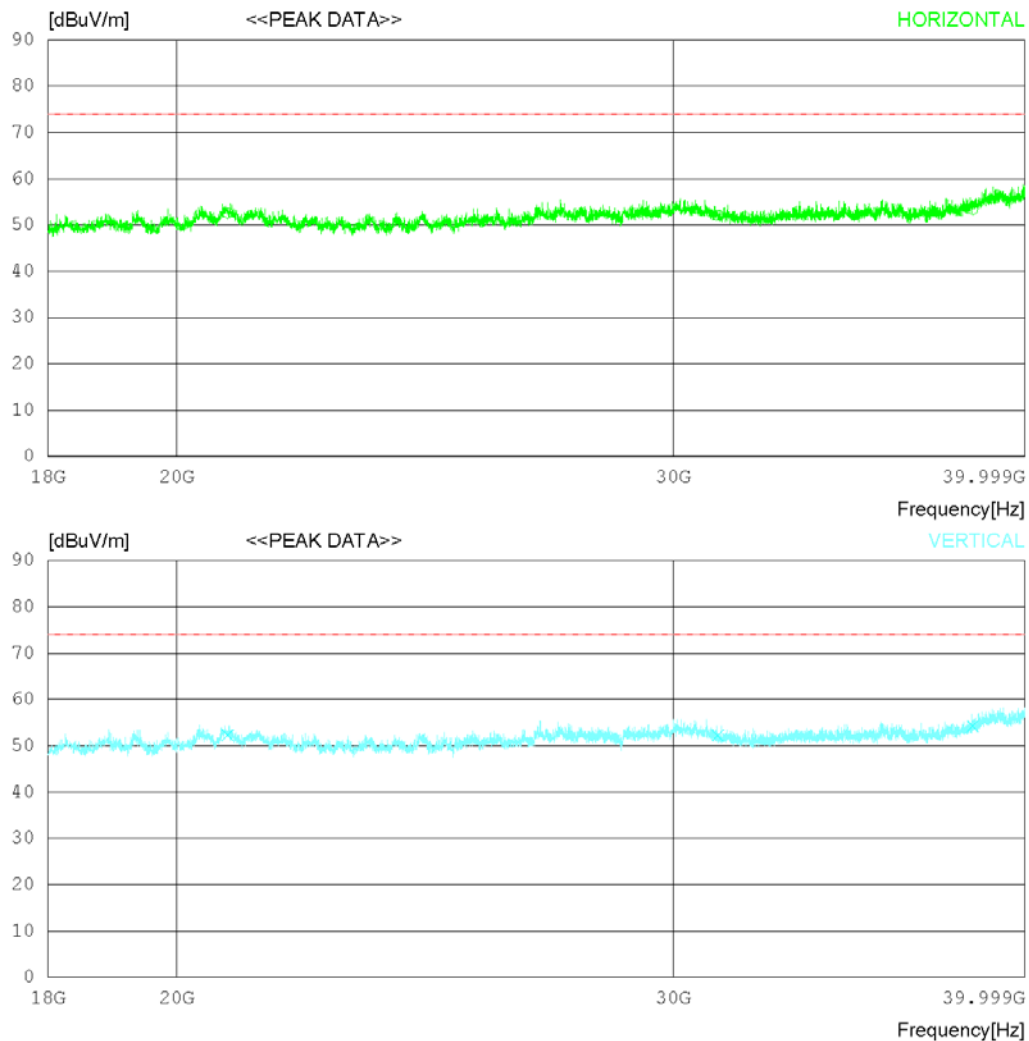
RADIATED EMISSION

Date 2020-06-14

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 26 °C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo

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



RADIATED EMISSION

Date 2020-06-14

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 26 °C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo

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

No	Freq	Reading	Ant.Fac	Loss	Gain	Site.Fac	Result	Limit	Margin	Pola	Height	Angle
1	20851.75	40.1	45.6	20.23	53.38	0	52.55	74	21.45	Hori	120	110
2	31123	34.8	47.14	22.44	52.26	0	52.12	74	21.88	Hori	307	0
3	38330.75	34.1	46.6	24.98	52.28	0	53.4	74	20.6	Hori	222	315
4	20851.75	39.8	45.6	20.23	53.38	0	52.25	74	21.75	Vert	223	358
5	31123	34.9	47.14	22.44	52.26	0	52.22	74	21.78	Vert	120	288
6	38330.75	35	46.6	24.98	52.28	0	54.3	74	19.7	Vert	305	358

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

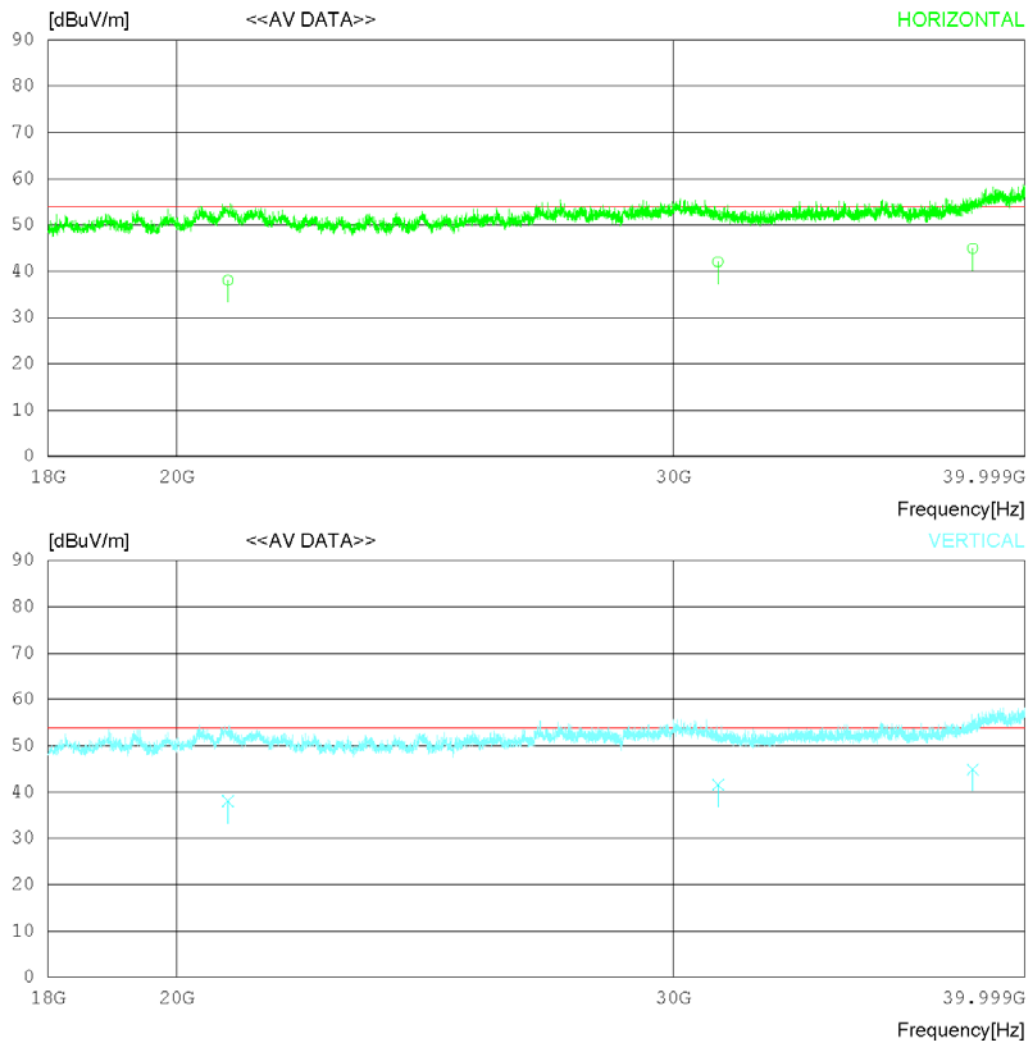
RADIATED EMISSION

Date 2020-06-14

Order No. DTNC2005-04380
Power Supply 120 V 60 Hz
Temp/Humi 26 °C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo

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



RADIATED EMISSION

Date 2020-06-14

Order No.	DTNC2005-04380
Power Supply	120 V 60 Hz
Temp/Humi	26 °C 42 % R.H.
Test Condition	DATA COMMUNICATION

Memo

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

No	Freq	Reading	Ant.Fac	Loss	Gain	Site.Fac	Result	Limit	Margin	Pola	Height	Angle
1	20851.12	25.62	45.6	20.23	53.38	0	38.07	54	15.93	Hori	233	78
2	20851.12	25.62	45.6	20.23	53.38	0	38.07	54	15.93	Vert	232	122
3	31123.06	24.75	47.14	22.44	52.26	0	42.07	54	11.93	Hori	131	113
4	31123.42	24.25	47.14	22.44	52.26	0	41.57	54	12.43	Vert	111	305
5	38330.11	25.66	46.6	24.98	52.28	0	44.96	54	9.04	Hori	224	231
6	38330.11	25.66	46.6	24.98	52.28	0	44.96	54	9.04	Vert	305	113

Calculation

Result(dBuV/m) : Reading Value(dBuV) + Cable loss(dB) - Pre amplifier gain(dB) + Ant. Factor(dB)
Margin : Limit(dBuV/m) - Result(dBuV/m)

8. Revision History

Date	Description	Revised By	Reviewed By
Jun. 19. 2020	Initial report	JunSeo Park	KyoungHwan Bae

-End of test report-