



# 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. : DREFCC1808-0246
2. Client / Applicant
  - Name : LG Electronics USA, Inc.
  - Address : 1000 Sylvan Ave. Englewood Cliffs, New Jersey, United States 07632
3. Use of Report : Grant of Certification
4. Product Name / Model Name : Mobile phone / SS1805
5. Test Standard : ANSI C 63.4 : 2014  
FCC Part 15 Subpart B  
(Class B personal computers and peripherals)
6. Date of Test : Jul. 25. 2018 ~ Jul. 26. 2018
7. Testing Environment : Temperature (22 ~ 25) °C , Humidity (47 ~ 57) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : YongKi Kim 	Name : HyungJun Kim 

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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**Aug. 07. 2018**

**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.dtn.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
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-1364, R-3385, R-4076, R-4180, R-4496 T-1442, G-10338, G-754, G-10815	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 17 11 89112 005	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 Ave. Englewood Cliffs, New Jersey, United States 07632
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Ave. Englewood Cliffs, New Jersey, United States 07632
Factory	LG Electronics USA, Inc. 1000 Sylvan Ave. Englewood Cliffs, New Jersey, United States 07632
Product Name	Mobile phone
Model Name	SS1805
Add Model Name	None
FCC ID	ZNFSS1805
Rated Power	DC 3.85 V
Remarks	None

**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	PC LINK	The EUT is reading, writing, and erasing internal storage

### 4.3 Test Configuration Mode

No.	Mode	Description
1	'READ' & 'WRITE' & 'DELETE'	EUT was connected PC by USB cable and continuously operated

### 4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	KEYBOARD	DELL	KB212-B	DOC
AE	MOUSE	LG	SM-9023	DOC
AE	LCD MONITOR	DELL	UP2414Qt	DOC
AE	PC	DELL	DCNE	DOC
AE	SSD 3.0	SAMSUNG	MU-PT250B	DOC
AE	PRINTER	Bixolon	SRP-770	DOC
AE	Headset	SAMSUNG	SHS-150V/M	DOC

#### \*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 OUT	I/O	1.7	Shield	Plastic	KEYBOARD	
USB OUT	I/O	1.7	Shield	Plastic	MOUSE	
POWER IN	AC	1.8	Non Shield	Plastic	LCD MONITOR	
DSUB OUT	I/O	1.8	Shield	Plastic		
POWER IN	AC	1.8	Non Shield	Plastic	PC	
DSUB IN	I/O	1.8	Shield	Plastic		
PARALLEL IN	I/O	2.0	Shield	Plastic		
SERIAL IN	I/O	1.9	Shield	Plastic		
USB IN	I/O	1.7	Shield	Plastic		
USB IN	I/O	1.7	Shield	Plastic		
USB IN	I/O	1.0	Shield	Plastic		
STEREO IN/OUT	I/O	2.0	Non Shield	Plastic		
USB OUT	I/O	1.0	Shield	Plastic		SSD 3.0
POWER IN	DC	1.8	Non Shield	Plastic		PRINTER
PARALLEL OUT	I/O	2.0	Shield	Plastic		
SERIAL OUT	I/O	1.9	Shield	Plastic		
STEREO IN/OUT	I/O	2.0	Non Shield	Plastic	Headset	
AUX	I/O	1.8	Non Shield	Plastic	EUT	
USB IN	DC	1.6	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]
0.20435	L1	39.86	CAV	53.43	13.57

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB $\mu$ V/m]	Detector	Limit [dB $\mu$ V/m]	Margin [dB]
749.354	V	42.04	QP	46.00	3.96

## 6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2018-07-26	22	47	-
Radiated Disturbance	2018-07-25	25	56	
	2018-07-25	25	57	

## 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>	
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	
<b>Limits – Class A</b>			
Frequency (MHz)	Limit dB $\mu$ V		
	Quasi-Peak	Average	
0.15 to 0.50	79	66	
0.50 to 30	73	60	
<b>Limits – Class B</b>			
Frequency (MHz)	Limit dB $\mu$ V		
	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, $k = 2$ )	2.36 dB

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	2017.11.16	2018.11.16
TWO-LINE V-NETWORK	ENV216	ROHDE & SCHWARZ	101979	2017.12.18	2018.12.18
LISN	LISN1600	TTI	197204	2018.06.07	2019.06.07
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2017.09.07	2018.09.07
50 OHM TERMINATOR	CT-01	TME	N/A	2017.12.26	2018.12.26



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

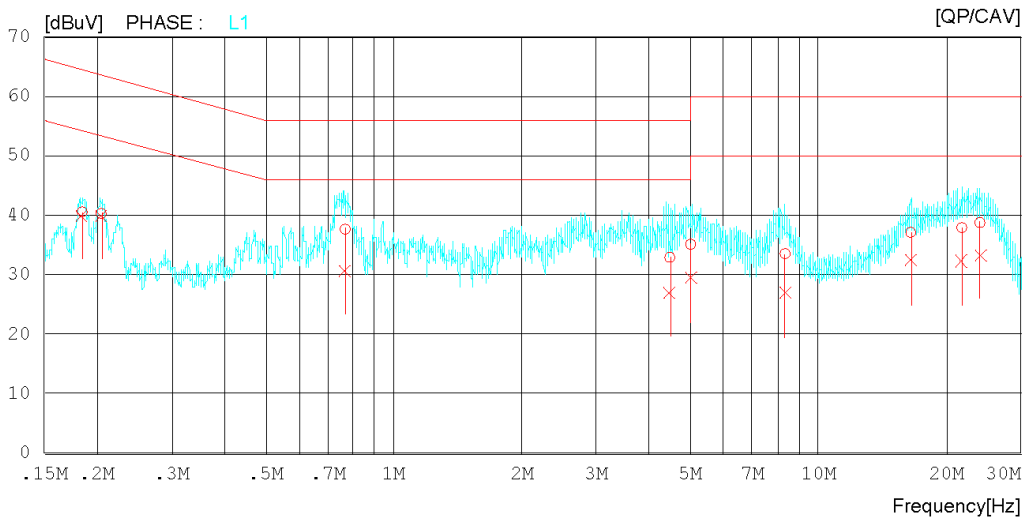
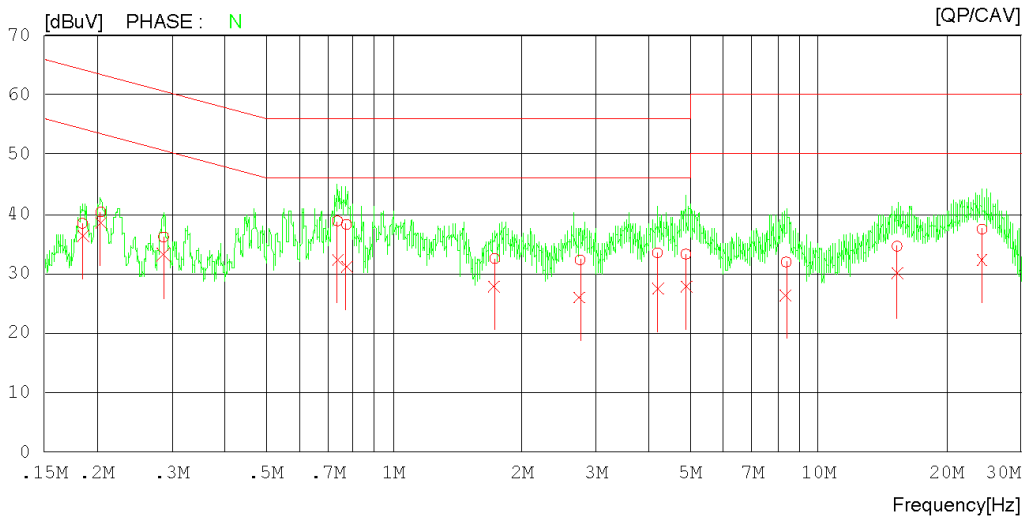
## Results of Conducted Emission

DT&C

Date 2018-07-26

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 22 'C 47 % R.H.  
 Test Condition

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV



## Results of Conducted Emission

DT&amp;C

Date 2018-07-26

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi/Atm 22 'C 47 % R.H.  
 Test Condition

LIMIT : CISPR22\_B QP  
 CISPR22\_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	0.18476	18.45	16.46	19.99	38.44	36.45	64.27	54.27	25.83	17.82	N
2	0.20425	20.36	18.63	20.02	40.38	38.65	63.44	53.44	23.06	14.79	N
3	0.28697	16.27	13.28	19.91	36.18	33.19	60.61	50.61	24.43	17.42	N
4	0.73752	18.75	12.19	20.11	38.86	32.30	56.00	46.00	17.14	13.70	N
5	0.77350	18.20	11.15	20.08	38.28	31.23	56.00	46.00	17.72	14.77	N
6	1.72906	12.56	7.90	19.97	32.53	27.87	56.00	46.00	23.47	18.13	N
7	2.74878	12.24	5.98	20.05	32.29	26.03	56.00	46.00	23.71	19.97	N
8	4.18045	13.32	7.34	20.16	33.48	27.50	56.00	46.00	22.52	18.50	N
9	4.87789	13.11	7.71	20.20	33.31	27.91	56.00	46.00	22.69	18.09	N
10	8.39908	11.33	5.89	20.62	31.95	26.51	60.00	50.00	28.05	23.49	N
11	15.32454	13.45	8.77	21.17	34.62	29.94	60.00	50.00	25.38	20.06	N
12	24.29676	16.77	11.62	20.74	37.51	32.36	60.00	50.00	22.49	17.64	N
13	0.18450	20.49	19.96	20.04	40.53	40.00	64.28	54.28	23.75	14.28	L1
14	0.20435	20.25	19.84	20.02	40.27	39.86	63.43	53.43	23.16	13.57	L1
15	0.76850	17.44	10.47	20.18	37.62	30.65	56.00	46.00	18.38	15.35	L1
16	4.46734	12.61	6.72	20.27	32.88	26.99	56.00	46.00	23.12	19.01	L1
17	5.00282	14.79	9.09	20.31	35.10	29.40	60.00	50.00	24.90	20.60	L1
18	8.35489	12.79	6.11	20.71	33.50	26.82	60.00	50.00	26.50	23.18	L1
19	16.50818	15.94	11.18	21.16	37.10	32.34	60.00	50.00	22.90	17.66	L1
20	21.77745	16.92	11.32	20.95	37.87	32.27	60.00	50.00	22.13	17.73	L1
21	24.03786	17.95	12.51	20.77	38.72	33.28	60.00	50.00	21.28	16.72	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 –18 GHz			Result
Method: Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 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 as below.				
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	
<b>Measurement uncertainty</b>				
Expanded uncertainty $U$ (95 %, Confidence level, $k = 2$ )			4.16 dB, (30 ~ 1 000) MHz 3.74 dB, (1 ~ 6) GHz	

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	100538	2018.01.29	2019.01.29
TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2017.04.21	2019.04.21
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2018.02.19	2019.02.19
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
HORN ANTENNA WITH PREAMPLIFIER	EM-6969/ MLA-0618-B03-34	ELECTRO-METRICS/ TSJ	156/ 1785642	2017.02.10	2019.02.10
PREAMPLIFIER	8449B	AGILENT TECHNOLOGIES	3008A01590	2018.02.20	2019.02.20
(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

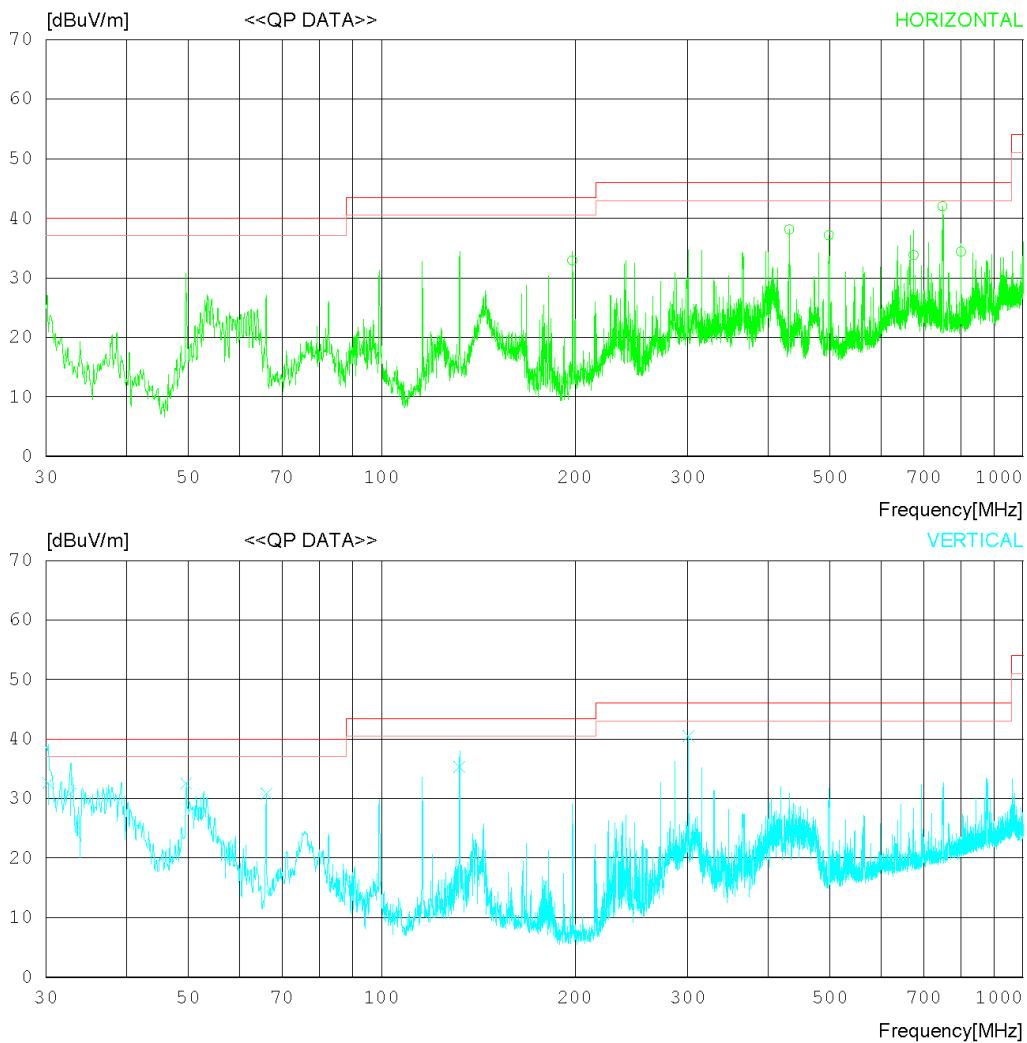
## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi 25 °C 56 % R.H.  
 Test Condition PC Link

Memo

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



## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi 25 °C 56 % R.H.  
 Test Condition PC Link

**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	198.384	46.20	9.86	2.33	25.52	32.87	43.50	10.63	100	73
2	432.003	43.20	16.76	3.53	25.41	38.08	46.00	7.92	200	56
3	497.457	40.90	17.77	3.85	25.39	37.13	46.00	8.87	100	203
4	674.415	33.70	20.74	4.53	25.24	33.73	46.00	12.27	200	127
5	749.354	40.40	22.09	4.90	25.35	42.04	46.00	3.96	200	21
6	800.109	32.20	22.50	5.09	25.40	34.39	46.00	11.61	200	0
----- Vertical -----										
7	30.244	47.90	9.35	0.84	25.47	32.62	40.00	7.38	300	130
8	32.701	46.20	9.21	0.86	25.48	30.79	40.00	9.21	100	127
9	49.600	45.10	11.86	1.10	25.51	32.55	40.00	7.45	100	247
10	66.141	44.10	10.97	1.31	25.52	30.86	40.00	9.14	100	236
11	132.269	46.80	12.28	1.86	25.57	35.37	43.50	8.13	200	172
12	300.685	49.70	13.41	2.84	25.48	40.47	46.00	5.53	200	350

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

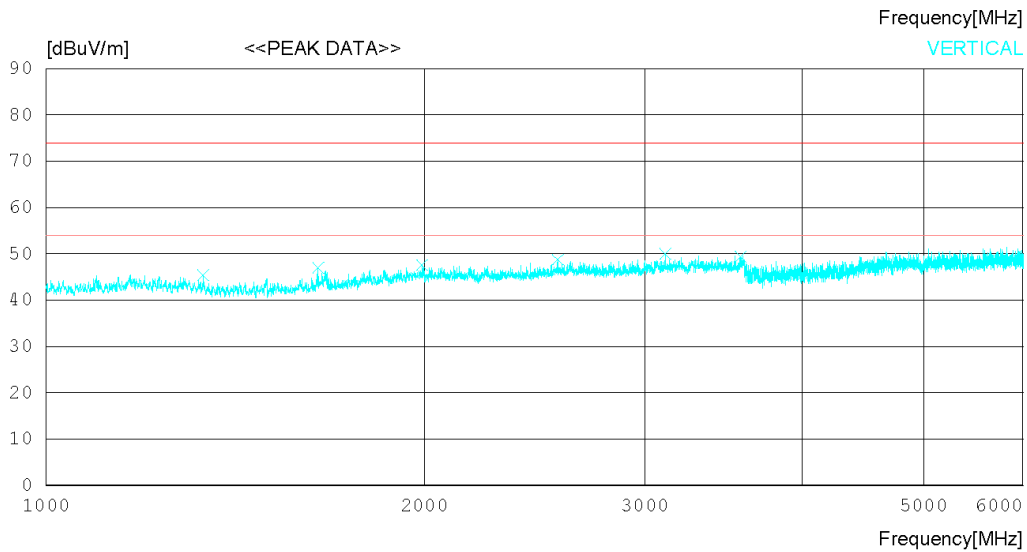
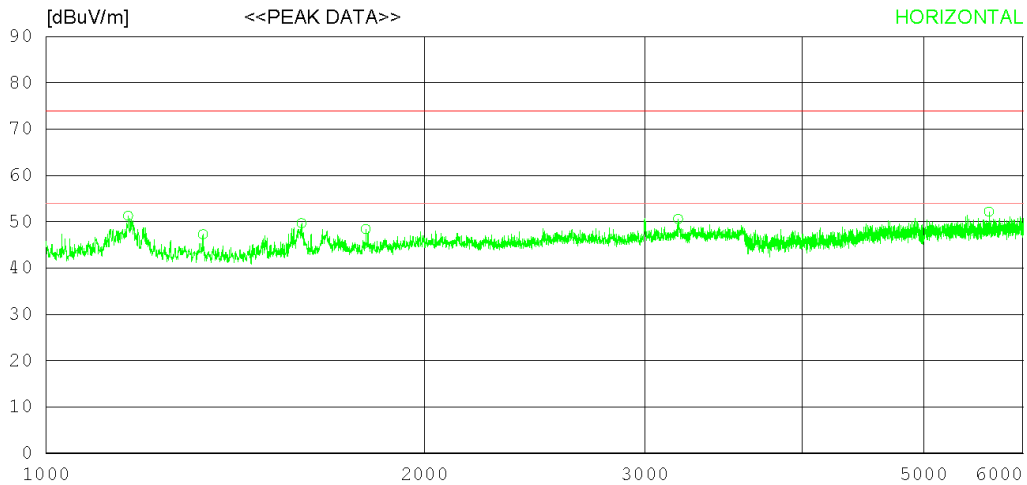
## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 V 60 Hz  
 Temp/Humi 25 °C 56 % R.H.  
 Test Condition

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 V 60 Hz  
 Temp/Humi 25 °C 56 % R.H.  
 Test Condition

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

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	1162.500	51.40	28.28	3.71	32.17	51.22	74.0	22.78	100	1
2	1333.125	47.30	28.27	3.91	32.24	47.24	74.0	26.76	100	1
3	1596.875	49.30	28.38	4.37	32.35	49.70	74.0	24.3	100	1
4	1797.500	46.10	30.36	4.37	32.43	48.40	74.0	25.6	100	1
5	3185.625	44.30	33.14	5.77	32.60	50.61	74.0	23.39	100	1
6	5635.625	42.30	34.60	7.90	32.67	52.13	74.0	21.87	100	1
----- Vertical -----										
7	1333.125	45.40	28.27	3.91	32.24	45.34	74.0	28.66	100	314
8	1646.875	46.10	28.87	4.37	32.37	46.97	74.0	27.03	100	146
9	1991.875	43.80	31.58	4.72	32.52	47.58	74.0	26.42	100	2
10	2555.625	43.60	32.51	5.16	32.55	48.72	74.0	25.28	100	358
11	3111.875	43.90	32.92	5.79	32.59	50.02	74.0	23.98	100	239
12	3572.500	42.50	33.17	6.29	32.63	49.33	74.0	24.67	100	273



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

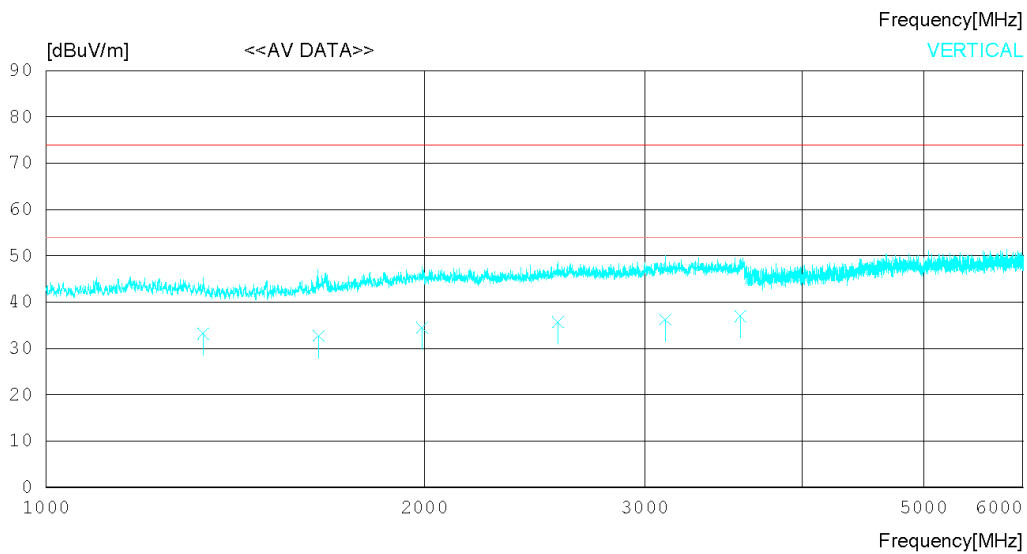
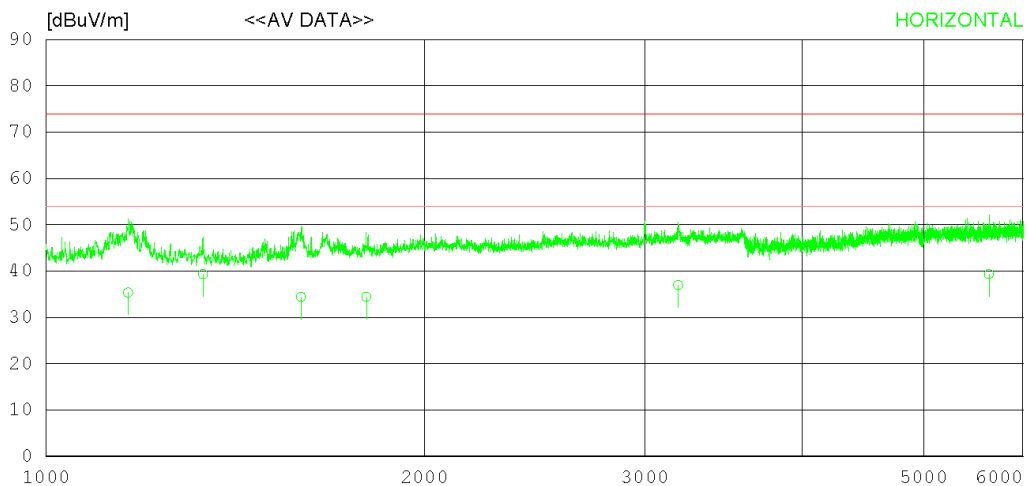
## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 V 60 Hz  
 Temp/Humi 25 °C 56 % R.H.  
 Test Condition

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 V 60 Hz  
 Temp/Humi 25 °C 56 % R.H.  
 Test Condition

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart.B Class B (3m) - 18G(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	1162.499	35.50	28.27	3.71	32.17	35.31	54.00	18.69	400	1
2	1333.322	39.40	28.27	3.91	32.24	39.34	54.00	14.66	200	353
3	1596.108	34.00	28.38	4.37	32.35	34.40	54.00	19.60	100	358
4	1798.302	32.10	30.37	4.37	32.44	34.40	54.00	19.60	300	20
5	3186.288	30.60	33.15	5.77	32.60	36.92	54.00	17.08	100	48
6	5634.651	29.50	34.60	7.90	32.67	39.33	54.00	14.67	100	230
----- Vertical -----										
7	1333.334	33.30	28.27	3.91	32.24	33.24	54.00	20.76	200	162
8	1647.727	31.80	28.88	4.37	32.37	32.68	54.00	21.32	200	146
9	1992.022	30.70	31.58	4.72	32.52	34.48	54.00	19.52	100	62
10	2555.400	30.60	32.51	5.16	32.55	35.72	54.00	18.28	100	358
11	3111.417	30.10	32.92	5.79	32.59	36.22	54.00	17.78	300	239
12	3571.741	30.10	33.16	6.29	32.63	36.92	54.00	17.08	100	273

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

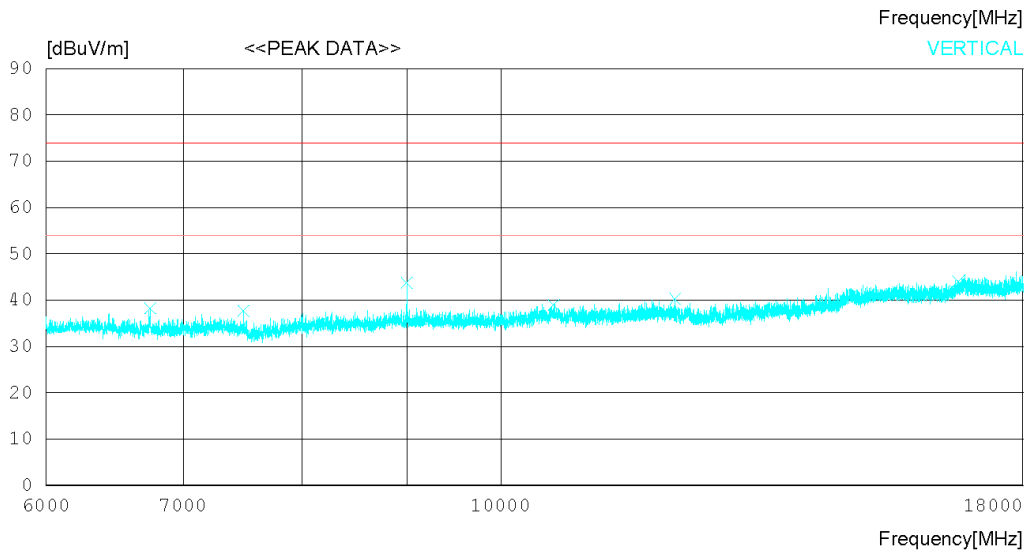
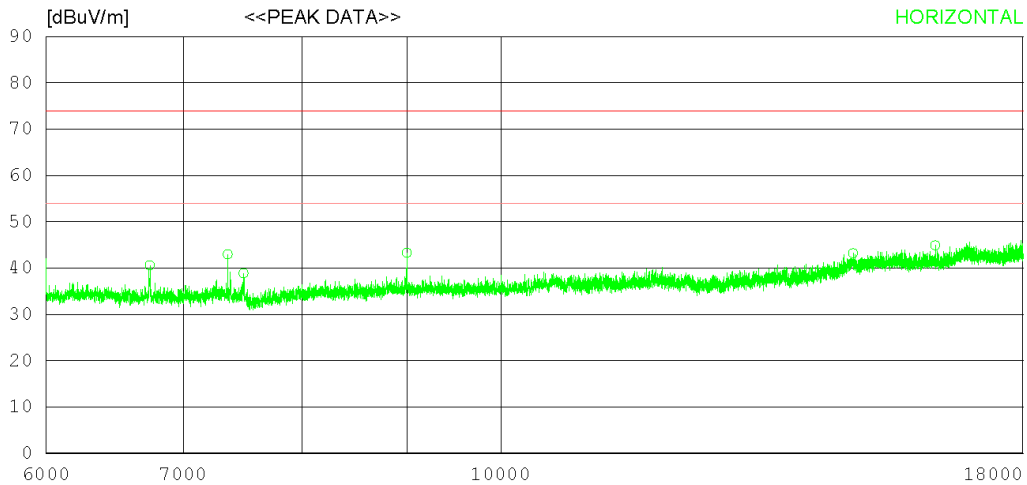
## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi 25 °C 57 % R.H.  
 Test Condition

Model Name

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



\* The measurement is performed above 18 GHz up to 30 GHz and not found emissions above 18 GHz.

## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi 25 °C 57 % R.H.  
 Test Condition

Model Name

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

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	6743.250	40.10	31.40	7.88	38.77	40.61	74.0	33.39	100	1
2	7359.750	41.80	31.37	8.29	38.48	42.98	74.0	31.02	100	1
3	7492.500	37.90	31.37	8.36	38.80	38.83	74.0	35.17	100	1
4	8999.250	39.70	31.82	9.41	37.64	43.29	74.0	30.71	100	18
5	14866.500	30.90	35.17	14.20	37.03	43.24	74.0	30.76	100	34
6	16305.000	30.40	36.68	14.29	36.45	44.92	74.0	29.08	100	238
----- Vertical -----										
7	6744.000	37.70	31.40	7.88	38.77	38.21	74.0	35.79	100	1
8	7488.000	36.70	31.37	8.36	38.78	37.65	74.0	36.35	100	159
9	9000.000	40.20	31.82	9.41	37.64	43.79	74.0	30.21	100	1
10	10616.250	32.80	32.51	11.34	37.71	38.94	74.0	35.06	100	50
11	12168.750	33.90	33.32	11.44	38.41	40.25	74.0	33.75	100	358
12	16733.250	28.20	37.14	14.84	36.23	43.95	74.0	30.05	100	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

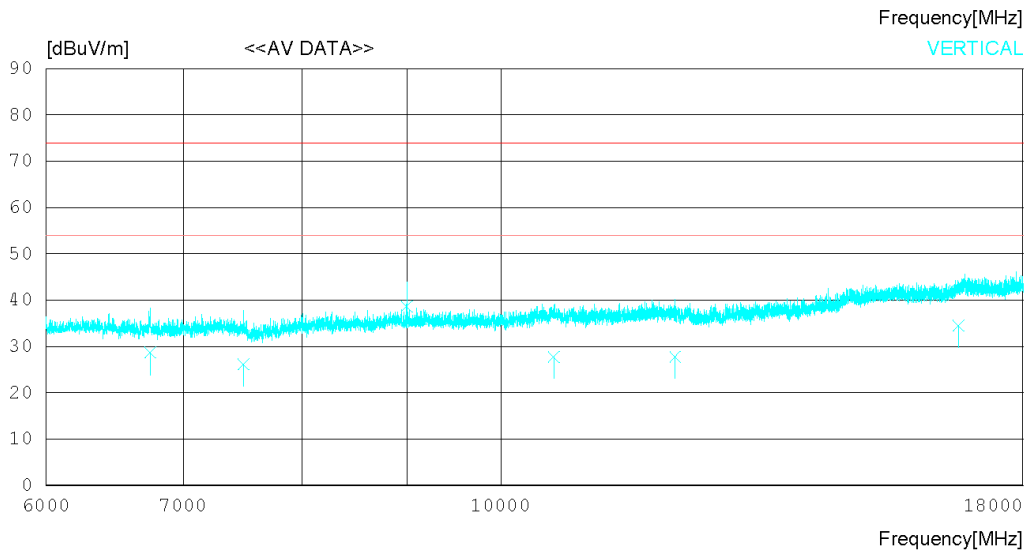
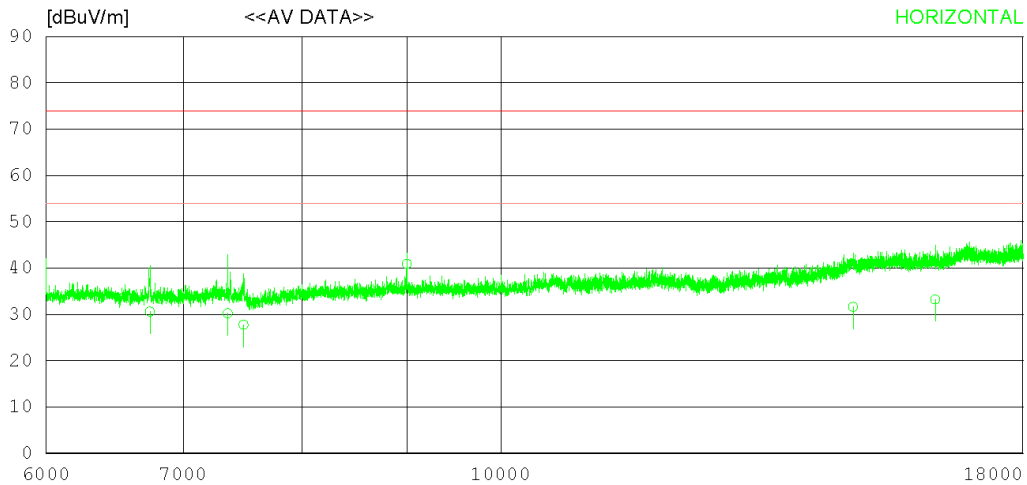
## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi 25 °C 57 % R.H.  
 Test Condition

Model Name

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



\* The measurement is performed above 18 GHz up to 30 GHz and not found emissions above 18 GHz.

## RADIATED EMISSION

Date 2018-07-25

Order No. DTNC1807-05330  
 Power Supply 120 VAC 60 Hz  
 Temp/Humi 25 °C 57 % R.H.  
 Test Condition

Model Name

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart.B Class B (3m) - 18G(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	6742.250	30.10	31.40	7.88	38.77	30.61	54.00	23.39	300	1
2	7359.876	29.10	31.37	8.29	38.48	30.28	54.00	23.72	100	34
3	7492.364	26.80	31.37	8.36	38.79	27.74	54.00	26.26	200	10
4	8999.250	37.30	31.82	9.41	37.64	40.89	54.00	13.11	100	151
5	14865.500	19.30	35.16	14.20	37.04	31.62	54.00	22.38	100	34
6	16306.000	18.70	36.68	14.29	36.44	33.23	54.00	20.77	100	238
----- Vertical -----										
7	6744.000	28.10	31.40	7.88	38.77	28.61	54.00	25.39	100	7
8	7489.000	25.20	31.37	8.36	38.79	26.14	54.00	27.86	100	12
9	9000.000	35.10	31.82	9.41	37.64	38.69	54.00	15.31	100	118
10	10616.250	21.60	32.51	11.34	37.71	27.74	54.00	26.26	200	50
11	12168.350	21.40	33.32	11.44	38.41	27.75	54.00	26.25	100	175
12	16733.920	18.70	37.14	14.84	36.23	34.45	54.00	19.55	100	358

### 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
Aug. 07. 2018	Initial report	YongKi Kim	HyungJun Kim

-End of test report-