TEST REPORT

Dt&C

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	el : 031-32	1-2664, Fax : 031-321-16	64	
1. Report	1. Report No. : DREFCC1811-0309						
2. Client /	Applican	t					
• Nam	e : LG Ele	ectronics USA, In	IC.				
• Addr	ess : 1000) Sylvan Ave. Er	nglewood Cliffs NJ	07632 L	Inited States		
3. Use of	Report : 0	Grant of Certifica	ition				
4. Produc	t Name /	Model Name : M	lobile Phone / LM-	V405EB	W		
5. Test St	tandard :	ANSI C 63.4	: 2014				
		FCC Part 15	Subpart B				
		(Class B per	sonal computers a	and perip	herals)		
6. Date of	f Test : No	ov. 10. 2018 ~ No	ov. 11. 2018				
7. Testing	, Environn	nent : Temperatu	ure (20 ~ 21) °C ,	Humidity	(45 ~ 46) % R.H.		
8. Test Re	esult : Ref	fer to the attache	ed Test Result				
	Tested by	,	,	Reviewe	d by		
Affirmation	Name :	ChanGeun Lee	(unature)	Name :	HyungJun Kim	(Sternature)	
The tes	st results p	resented in this te	st report are limited	only to the	e sample supplied by a	pplicant and	
TI			est report is inhibite		a second s		
I his test re	eport snall i	not be reproduced	except in full, without	out the wri	tten approval of DT&C	CO., LIG.	
			N. 01 0				
	Nov. 21. 2018						
	DT&C Co., Ltd.						

If this report is required to confirmation of authenticity, please contact to 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.dtnc.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
Accreditation	South Africa	SABS	0006	ISO/IEC 17025
	USA	FCC	KR0034 101842 678747, 596748, 804488, 165783	Accredited 2.948 Listed
	Canada	IC	5740A-3 5740A-4	Registered
Site Filing	Japan	VCCI	C-1427 R-1364, R-3385, R-4076, R-4180, R-4496, T-1442, G-10338, G-754, G-10815	Registered
	Korea	KC	KR0034	Designation
Certification	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 NJ 07632 United States			
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632 United States			
Factory	LG Electronics USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632 United States			
Product Name	Mobile Phone			
Model Name	LM-V405EBW			
Add Model Name	del Name LMV405EBW, V405EBW, LM-V405EAW, LMV405EAW, V405EAW, LM-V405EB, LMV405EB, LMV405EB, LM-V405EA, LMV405EA, V405EA			
FCC ID	ZNFV405EBW			
Rated Power	DC 3.85 V			
Remarks	Earphone 1. Manufacturer : CRESYN 2. S/N : EAB63728251 USB Cable 1. Manufacturer : NINGBO 2. S/N : EAD64746101			

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
F	1	'READ' & 'WRITE' & 'DELETE'	The EUT is reading, writing, and erasing internal storage

4.3 Test Configuration Mode

No.	Mode	Description
1	PC LINK	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

Nomo	Turnet	Cable	Cable	Cable	Domostro
Name	Type*	Max. >3 m	Shielded	Back shell	Remarks
USB	I/O	1.7	Shield	Plastic	KEYBOARD
USB	I/O	1.7	Shield	Plastic	MOUSE
POWER IN	AC	1.8	Non Shield	Plastic	
DSUB OUT	I/O	1.8	Shield	Plastic	LCD MONITOR
POWER IN	AC	1.8	Non Shield	Plastic	
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	I/O	1.7	Shield	Plastic	PC
USB	I/O	1.7	Shield	Plastic	
USB	I/O	1.0	Shield	Plastic	
STEREO IN/OUT	I/O	2.0	Non Shield	Plastic	
USB	I/O	1.0	Shield	Plastic	SSD 3.0
POWER IN	DC	1.8	Non Shield	Plastic	
PARALLEL OUT	I/O	2.0	Shield	Plastic	PRINTER
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	I/O	1.0	Non Shield	Plastic	EUT
*Abbreviations: AC = AC Power Por I/O = Signal Input or TP = Telecommunic	Output Port	DC = DC Power	Port	N/E = Non-Electri	ical

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	С
Radiated Disturbance	ANSI C63.4 : 2014	С
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 [dBµV]	Detector	Limit [dBµV]	Margin [dB]
0.20311	L1	49.33	CAV	53.48	4.15

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
53.280	V	35.39	QP	40.00	4.61

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2018-11-11	21	46	101.5
Radiated Disturbance	2018-11-10 2018-11-11	20 21	45 46	-

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4	Ma	Mains terminal disturbance voltage					
reference other uni power w voltage n port of th test softw frequenc performir CISPR A kHz RBV	e plane. This distance w its of the EUT and assi- as connected to the sy- neasurements on mains ne LISN for EUT was co- vare, the emissions were y range, suspected emi- ng final measurement, to verage detector. For (0. V and 30 kHz VBW was	he boundary of the unit under te vas between the closest points of ociated equipment were at leas ystem through Artificial Mains I is lines were made at the output onnected to spectrum analyzer. e scanned with peak detector me issions were selected to perform he receiver was used which ha 15 ~ 30) MHz frequency range, is used. By varying the configura d to maximize the emission.	of the AMN st 0,8 m fro Network (A of the AMN . Using con ode. After s n final mea as Quasi-Pe Quasi-Peak	and the EUT. All om the AMN. All MN). Conducted I. The measuring iducted emission canning over the surement. When eak detector and a detector with 10	Comply		
	d sample scanned ov	Frequency range on each si	de of line	Measure	ment Point		
er the followi	er the following frequency range 150 kHz to 30 MHz M						
EL	EUT mode Test configuration mode						
(Refer to clauses 4) EUT Operation mode					1		
		Limits – Class A					
Frequency (MH	z)	Limit	dBµV				
	-/	Quasi-Peak		Average			
0.15 to 0.50		79		66			
0.50 to 30		73		60			
		Limits – Class B					
Frequency (MH	z)	Limit	dBµV				
	-)	Quasi-Peak		Average			
0.15 to 0.50		66 to 56					
0.50 to 5		56		46			
5 to 30		60		50			

Measurement uncertainty	
Expended uncertainty U	2.36 dB
(95 %, Confidence level, $k = 2$)	

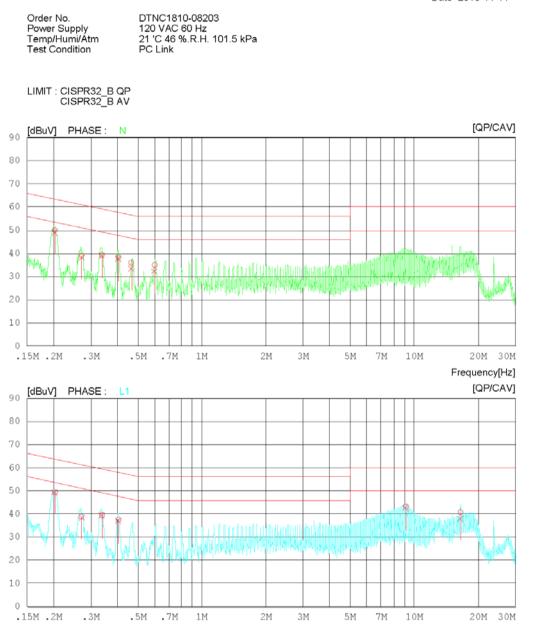
Measurement Instrument							
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due		
MEASUREMENT SOFTWARE	EMI-C VER. 2.00.0171	TSJ	N/A	N/A	N/A		
EMI TEST RECEIVER	ESR7	ROHDE&SCHWARZ	101109	2018.10.29	2019.10.29		
TWO-LINE V-NETWORK	ENV216	ROHDE&SCHWARZ	101979	2017.12.18	2018.12.18		
TRANSIENT 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		

Results of Conducted Emission

DT&C Date 2018-11-11



Frequency[Hz]



Results of Conducted Emission

DT&C Date 2018-11-11

Order No.	DTNC1810-08203
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	21 'C 46 %.R.H. 101.5 kPa
Test Condition	PC Link

LIMIT : CISPR32_B QP CISPR32_B AV

NC	FREQ [MHz]	READING QP CAV [dBuV] [dBuV]	C.FACTOR [dB]	RESULT QP CAV [dBuV] [dBuV]	LIMIT QP CAV [dBuV] [dBuV]	MARGIN QP CAV [dBuV][dBuV]	PHASE
1	0.20289	30.02 29.00	20.12	50.14 49.12	63.49 53.49	13.35 4.37	N
2	0.27059	19.09 18.44	19.90	38.99 38.34	61.10 51.10	22.11 12.76	N
3	0.33819	19.35 19.08	20.01	39.36 39.09	59.25 49.25	19.89 10.16	Ν
4	0.40450	18.31 17.60	20.03	38.34 37.63	57.76 47.76	19.42 10.13	N
5	0.46450	15.95 13.53	20.03	35.98 33.56	56.61 46.61	20.63 13.05	N
6	0.59950	14.89 12.17	20.08	34.97 32.25	56.00 46.00	21.03 13.75	N
7	0.20311	29.25 29.21	20.12	49.37 49.33	63.48 53.48	14.11 4.15	L1
8	0.27072	18.90 18.51	19.94	38.84 38.45	61.10 51.10	22.26 12.65	L1
9	0.33850	19.36 19.21	20.11	39.47 39.32	59.24 49.24	19.77 9.92	L1
10	0.40450	17.40 16.74	20.13	37.53 36.87	57.76 47.76	20.23 10.89	L1
11	9.14164	22.45 21.87	20.73	43.18 42.60	60.00 50.00	16.82 7.40	L1
12	16.50392	19.66 16.87	21.13	40.79 38.00	60.00 50.00	19.21 12.00	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 distur	bance 30 M	Hz –18	GHz		Result	
or 3 meter be the receive au measuremen height from 1 where applica (RBW = 120	elow 1GHz and 3 ntenna located a nts were then per to 4 m. All freque able. For final me kHz Bandwidth) (RBW = 1 MHz	nents were performed a meter above 1GHz. ² at various heights in he formed by rotating the tencies were investiga easurement below 1 C was used. For final m Bandwidth) and CISP	The EUT was prizontal and e EUT 360° and ated in both ho GHz frequency easurement a	rotated 3 vertical po nd adjusti orizontal a y range, 0 above 1 0	060° about its azimut olarities. Final ing the receive anten and vertical antenna Quasi-Peak detector GHz frequency range	th with nna polarity, with	Comply	
EUT mo	ode	Test configu	ration mode		1			
(Refer to cla	uses 4)	EUT Opera	tion mode		1			
		Radiated Disturba	ance below 1	1 000 MH	z			
Frequency	range		Quas	si-peak li	mit dBµV/m			
(MHz))	Class A (10	m distance)		Class B (3 n	n distano	ce)	
30 to 8	8	39	.1		40	0		
88 to 21	16	43	.5		43	.5		
216 to 9	60	46	.4		46	6		
		49.5 54						
960 to 1 (000	49	.5		54	4		
According to 15.109(comply with the stand CISPR), Pub. 22 sho	g), as an alterna dards contained own.	49 tive to the radiated en in Third Edition of the	nission limit sł International	Special C	ve, digital devices m Committee on Radio	nay be sh		
according to 15.109(omply with the stand CISPR), Pub. 22 sho Frequency	g), as an alterna dards contained own. range	tive to the radiated en in Third Edition of the	nission limit sł International Quas	Special C	ve, digital devices m Committee on Radio mit dBµV/m	nay be sho Interferer	nce	
according to 15.109(omply with the stand CISPR), Pub. 22 sho Frequency (MHz)	g), as an alterna dards contained own. range	tive to the radiated en in Third Edition of the Class A (10 n	nission limit sł International Quas m distance)	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 r	nay be sho Interferer m distan	nce	
According to 15.109(g omply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23	g), as an alterna dards contained own. range) 30	tive to the radiated en in Third Edition of the Class A (10 n 4(nission limit sh International Quas m distance)	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 n 30	nay be sho Interferer m distan 0	nce	
According to 15.109(comply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (g), as an alterna dards contained own. range) 30 000	tive to the radiated en in Third Edition of the Class A (10 n 4(4)	nission limit sh International Quas m distance)	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 n 30 37	may be sho Interferer m distan 0 7	nce	
According to 15.109(comply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (Ra	g), as an alterna dards contained own. range) 30 000 adiated Disturb	tive to the radiated en in Third Edition of the Class A (10 n 4(4) ance for above 1 00	nission limit sh International Quas m distance)) 7 0 MHz at a n	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 n 30 37 nent distance of 3 n	may be sho Interferer m distan 0 7 m	ce)	
According to 15.109(g omply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (Ra Frequency	g), as an alterna dards contained own. range) 30 000 adiated Disturb range	tive to the radiated en in Third Edition of the Class A (10 n 4(4)	nission limit sh International Quas m distance)) 7 0 MHz at a n	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 n 30 37	m distan 0 7 m hit dBµV/	ce)	
According to 15.109(g omply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (Ra	g), as an alterna dards contained own. range) 30 000 adiated Disturb range	tive to the radiated en in Third Edition of the Class A (10 n 4(47) ance for above 1 00 Peak limit	nission limit sh International Quas m distance)) 7 0 MHz at a n dBµV/m	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 n 30 37 nent distance of 3 n Average lim	m distan 0 7 m hit dBµV/	ce)	
According to 15.109(g omply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (Ra Frequency (GHz) 1 to 40	g), as an alternational dards contained own. range) 30 000 adiated Disturb range) 0	tive to the radiated en in Third Edition of the Class A (10 m 40 47 ance for above 1 00 Peak limit Class A 80	nission limit sh International Quas m distance) 0 7 0 MHz at a n c dBµV/m Class E 74	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 m 30 37 nent distance of 3 m Average lim Class A 60	m distan 0 7 m nit dBµV/ Cla	ce) m m ass B	
According to 15.109(gomply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (230 to 1 (Ra Frequency (GHz) 1 to 40 The Highest frequ	g), as an alternation dards contained own. range) 30 000 adiated Disturb range) 0 test frequency uency generate	tive to the radiated en in Third Edition of the Class A (10 n 4(4) ance for above 1 00 Peak limit Class A	nission limit sh International Quas m distance) 0 7 0 MHz at a n 0 MHz at a n class E 74 visturbance n vice	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 m 30 37 nent distance of 3 m Average lim Class A 60	m distan 0 7 m nit dBµV/ Cla	ce) m ass B 54	
According to 15.109(gomply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (230 to 1 (Ra Frequency (GHz) 1 to 40 The Highest frequ	g), as an alternational dards contained own. range) 30 000 adiated Disturb range) 0 test frequency uency generate the device open Below 1	tive to the radiated en in Third Edition of the Class A (10 m 40 47 ance for above 1 00 Peak limit Class A 80 range of Radiated D d or used in the dev rates or tunes (MHz 08	nission limit sh International Quas m distance) 0 7 0 MHz at a n 0 MHz at a n class E 74 visturbance n vice	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 m 30 37 nent distance of 3 m Average lim Class A 60 nents are listed bel frequency of meas	m distan 0 7 m nit dBµV/ Cla	ce) m ass B 54	
According to 15.109(g omply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (230 to 1 (Ra Frequency (GHz) 1 to 40 The Highest frequ	g), as an alternation dards contained own. range) 30 000 adiated Disturb range) 0 test frequency Lency generate the device oper Below 1 108 – 5	tive to the radiated en in Third Edition of the Class A (10 n 40 41 ance for above 1 00 Peak limit Class A 80 range of Radiated D d or used in the dev rates or tunes (MHz 08 00	nission limit sh International Quas m distance) 0 7 0 MHz at a n 0 MHz at a n class E 74 visturbance n vice	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 m 30 37 nent distance of 3 m Average lim Class A 60 nents are listed bel frequency of meas (MHz) 1 000 2 000	m distan 0 7 m nit dBµV/ Cla	ce) m ass B 54	
According to 15.109(g omply with the stand CISPR), Pub. 22 sho Frequency (MHz) 30 to 23 230 to 1 (230 to 1 (Ra Frequency (GHz) 1 to 40 The Highest frequ	g), as an alternation dards contained own. range 30 30 000 adiated Disturb range 30 contest frequency Lency generate the device open Below 1	tive to the radiated en in Third Edition of the Class A (10 n 40 41 ance for above 1 00 Peak limit Class A 80 range of Radiated D d or used in the dev rates or tunes (MHz 08 00	nission limit sh International Quas m distance) 0 7 0 MHz at a n 0 MHz at a n 1 0 MHz at a n 1 7 0 MHz at a n 1 7 0 MHz at a n 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Special C	ve, digital devices m Committee on Radio mit dBµV/m Class B (10 m 30 37 nent distance of 3 m Average lim Class A 60 nents are listed bel frequency of meas (MHz) 1 000	m distan 0 7 m nit dBµV/ Cla low. suremen	ce) m ass B 54 t range	

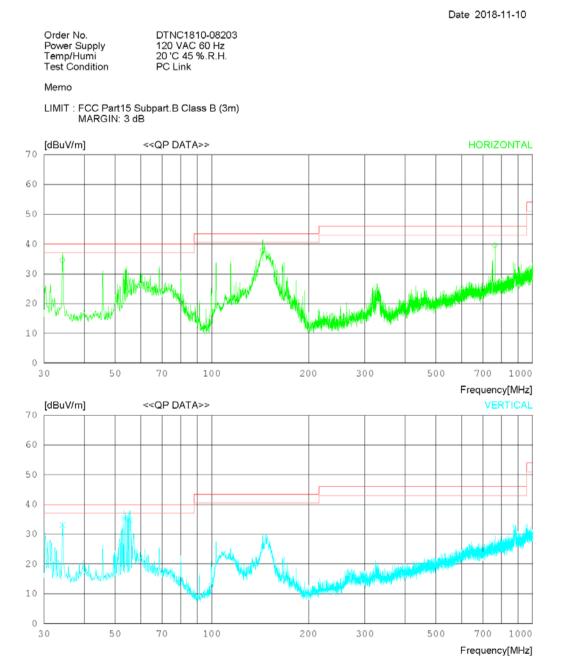
Expended uncertainty U	4.16 dB, (30 ~ 1 000) MHz
(95 %, Confidence level, $k = 2$)	3.74 dB, (1 ~ 6) GHz



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	100469	2018.06.28	2019.06.28	
BILOG ANTENNA	VULB9160	SCHWARZBECK	9160-3363	2018.09.17	2020.09.17	
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	2018.01.02	2019.01.02	
PREAMPLIFIER	8449B	AGILENT TECHNOLOGIES	3008A01590	2018.02.20	2019.02.20	
HORN ANTENNA WITH PREAMPLIFIER	3116C / JS44-18004000-35-8P	ETS-LINDGREN / L3 NARDA-MITEQ	00213177 / 2046884	2018.11.09	2019.11.09	
	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884			



Radiated disturbance at (30 ~ 1000) MHz _Measurement data						
Test configuration mode 1 EUT Operation mode 1						
Test voltage (V)	Test voltage (V) 120 Test Frequency (Hz) 60					





Date 2018-11-10

Order No.	DTNC1810-08203
Power Supply	120 VAC 60 Hz
Temp/Humi	20 'C 45 %.R.H.
Test Condition	PC Link

Memo

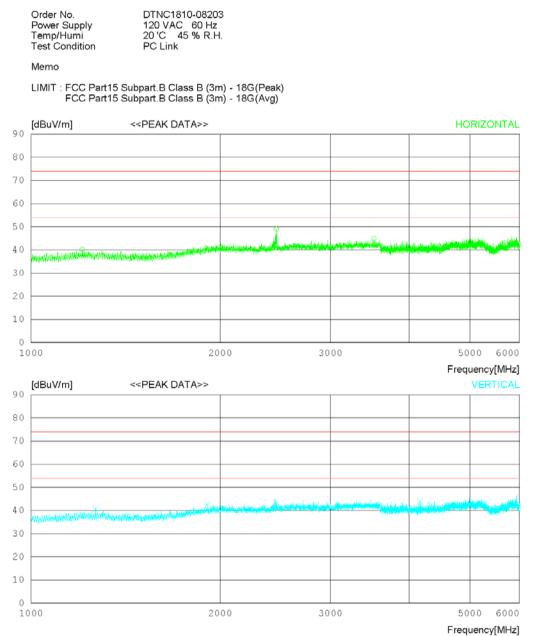
LIMIT : FCC Part15 Subpart.B Class B (3m) MARGIN: 3 dB

Nc	. FREQ	READING		LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	tal								
1 2 3	34.244 143.973 762.756	39.20 43.20 32.50	19.92 18.32 27.53	0.88 1.94 4.96	25.48 25.58 25.36	34.52 37.88 39.63	40.00 43.50 46.00	5.48 5.62 6.37	400 375 240	330 290 285
	Vertical	1								
4 5 б	34.244 53.280 55.584	37.80 39.50 39.10	19.92 20.26 20.02	0.88 1.14 1.16	25.48 25.51 25.51	33.12 35.39 34.77	$\begin{array}{c} 40.00\\ 40.00\\ 40.00\end{array}$	6.88 4.61 5.23	100 100 100	270 330 266



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				

Date 2018-11-10





Date 2018-11-10

Temp/Humi	DTNC1810-08203 120 VAC 60 Hz 20 'C 45 % R.H. PC Link
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Memo

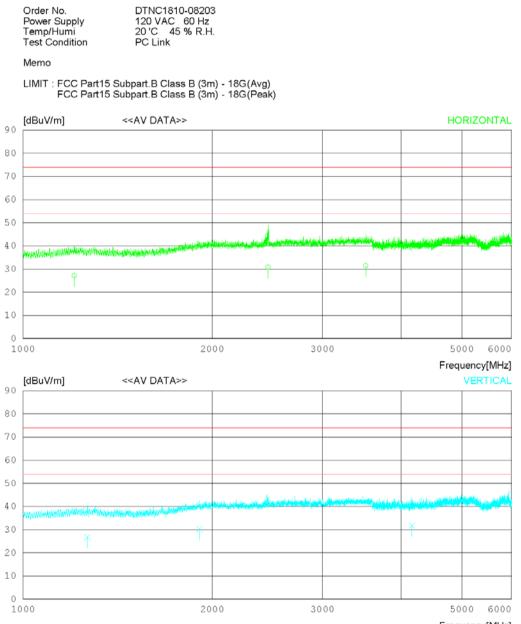
LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Peak) FCC Part15 Subpart B Class B (3m) - 18G(Avg)

No.	. FREQ	READING PEAK	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m	1] [dB]	[cm]	[DEG]
	Horizont	al								
1 2 3	2457.50	5 45.402 0 49.903 0 44.203	2.13	1.63 1.81 2.42	35.64 34.83 34.58	40.18 49.01 44.88	74.0 74.0 74.0	33.82 24.99 29.12	200 100 100	358 211 358
	Vertical	L								
4 5 б	1910.00	5 45.702 0 44.503 0 42.403	1.18	1.85	35.58 34.91 34.39	40.57 42.62 43.88	74.0 74.0 74.0	33.43 31.38 30.12	100 100 100	55 0 182



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				

Date 2018-11-10



Frequency[MHz]



Date 2018-11-10

Temp/Humi	DTNC1810-08203 120 VAC 60 Hz 20 'C 45 % R.H. PC Link
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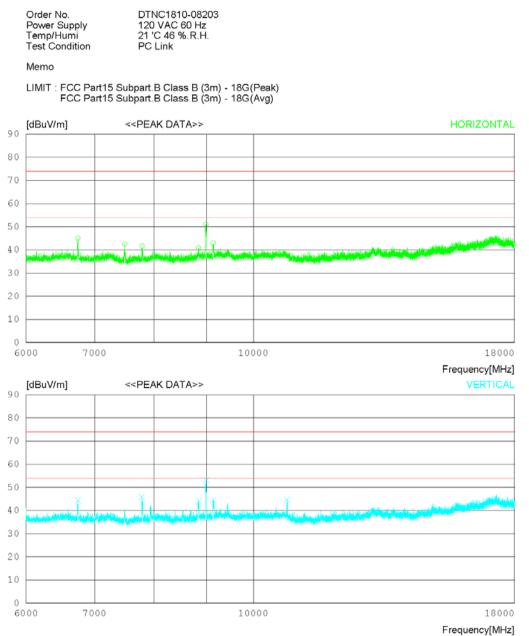
LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Avg) FCC Part15 Subpart B Class B (3m) - 18G(Peak)

No	. FREQ	READING CAV	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
	Horizont	al								
2	1205.955 2455.980 3515.345	31.70	28.79 32.12 32.83	1.63 1.81 2.42	35.64 34.83 34.58	27.18 30.80 31.47	54.00 54.00 54.00	26.82 23.20 22.53	230 100 100	355 230 358
	Vertical									
5	1266.125 1910.990 4162.642	32.10	28.73 31.19 33.23	1.72 1.85 2.64	35.58 34.91 34.39	26.77 30.23 31.68	54.00 54.00 54.00	27.23 23.77 22.32	100 100 100	76 0 210



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				

Date 2018-11-11



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



Date 2018-11-11

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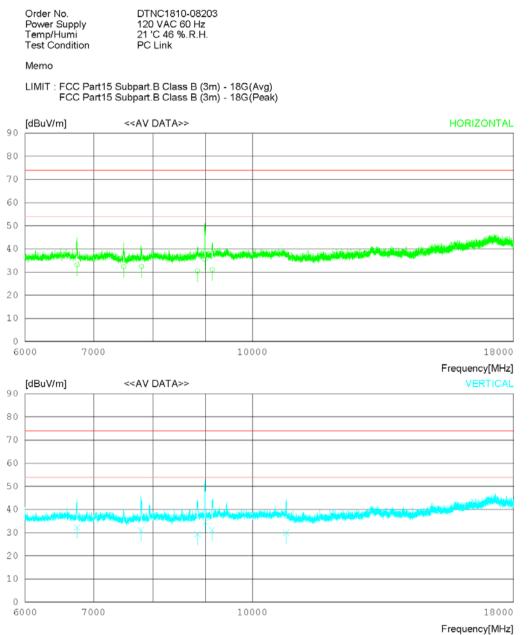
LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak) FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

No	. FREQ		ANT LOSS ACTOR	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]		[dB] [dB]	[dB]	[dBuV/m]	[dBuV/r	n] [dB]	[cm]	[DEG]
	Horizon	tal							
1 2 3 4 5 6	7493.25 7792.50 8844.00 8988.75	00 41.00 31. 00 38.00 31. 00 36.70 31. 00 34.50 31. 00 44.50 31. 00 36.20 31. 1	37 11.90 36 11.84 75 12.32 81 12.34	38.77 38.80 38.29 37.70 37.64 37.72	45.07 42.47 41.61 40.87 51.01 42.95	74.0 74.0 74.0 74.0 74.0 74.0 74.0	28.93 31.53 32.39 33.13 22.99 31.05	100 100 100 200 100	358 240 358 358 358 358 358
7 8 9 10 11 12	7783.50 8845.50 8997.75 9135.75	0 37.7031. 0 46.7031.	36 11.85 75 12.32 82 12.34 88 12.57	38.77 38.33 37.70 37.64 37.72 37.76	44.37 45.98 44.07 53.22 44.43 44.71	74.0 74.0 74.0 74.0 74.0 74.0 74.0	29.63 28.02 29.93 20.78 29.57 29.29	100 100 200 100 100 100	358 7 147 358 358 358



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				

Date 2018-11-11



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



Date 2018-11-11

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

Nc	. FREQ	READING CAV	ANT FACTOI	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m] [dB]	[cm]	[DEG]
	Horizont	al								
1 2 3 4 5 6	6745.171 7494.170 7793.390 8843.650 8989.640 9140.821	27.80 27.50 24.10 28.90	31.40 31.37 31.36 31.75 31.82 31.89	11.44 11.90 11.83 12.32 12.34 12.58	38.77 38.80 38.29 37.70 37.64 37.72	33.17 32.27 32.40 30.47 35.42 31.05	54.00 54.00 54.00 54.00 54.00 54.00	20.83 21.73 21.60 23.53 18.58 22.95	100 100 135 100 190 100	350 220 357 0 352 358
	Vertical	L								
7 8 9 10 11 12	6745.300 7784.245 8844.930 8998.370 9134.150 10788.75	26.20 23.00 28.10 24.40	31.40 31.36 31.75 31.82 31.88 32.57	11.44 11.85 12.32 12.34 12.57 12.40	38.77 38.32 37.70 37.64 37.72 37.76	32.27 31.09 29.37 34.62 31.13 30.01	54.00 54.00 54.00 54.00 54.00 54.00	21.73 22.91 24.63 19.38 22.87 23.99	100 100 188 100 100 100	355 0 180 357 348 350

Calculation

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



8. Revision History

Date	Description	Revised By	Reviewed By
Nov. 21. 2018	Initial report	ChanGeun Lee	HyungJun Kim

-End of test report-