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 : DREFCC1708-0208

2. Customer

   • Name : T.I.T ENG CO., Ltd.

   • Address : 7th FL., SHINDO BLDG. 10 GARAK-DONG, SONGPA-GU SEOUL, KOREA 138-160

3. Use of Report : FCC Declaration of Conformity Marking

4. Product Name / Test Model Name : CARD LAMINATOR / NL200H

5. Test Method Used : ANSI C 63.4:2014
   FCC Part 15 Subpart B
   (Class B personal computers and peripherals)

6. Date of Test : 2017-07-25 ~ 2017-07-31

7. Testing Environment : Temperature (24 ~ 25) °C , Humidity (42 ~ 48) % R.H.

8. Test Result : Refer to the attached Test Result

Affirmation	Tested by Name : MinChul Kim (Signature)	Technical Manager Name : HyunSuk Ko (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.
This test report shall not be reproduced except in full, without the written approval of DT&C Co., Ltd.

2017. 08. 11.

DT&C Co., Ltd.

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

CONTENTS

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	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	KR0034 101842 678747, 596748, 804488, 165783	Accredited 2.948 Listed
	Canada	IC	5740A-1 5740A-2	Registered
	Japan	VCCI	C-1427 R-1364, R-3385, R-4076, R-4180, T-1442, G-10338, G-754, G-815	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 17 01 89112 004	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

Product Name	CARD LAMINATOR
Test Model Name	NL200H
Basic Model Name	NL200
Add Model Name	NL200U, NL200L, NL200H, L201-D, L201-S, DNALAM2, DNALAM, Jupiter * Additional models are the same as the basic model, including schematic, PCB layout and electronic components.
Serial No	None
Type of Sample Tested	Pre-Production
Supplied Power for Test	120 V 60 Hz
Operating Frequency	72 MHz (Max)
Applicant	T.I.T ENG CO., Ltd. 7th FL., SHINDO BLDG. 10 GARAK-DONG, SONGPA-GU SEOUL, KOREA 138-160
Manufacturer	T.I.T ENG CO., Ltd. 7th FL., SHINDO BLDG. 10 GARAK-DONG, SONGPA-GU SEOUL, KOREA 138-160
Factory	T.I.T ENG CO., Ltd. B-303, Keumkang Penterium IT Tower, 215, Galmachi-ro, Jungwon-gu, Seongnam-Si, Gyeonggi-do, Korea

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

4. Test Summary

4.1 Applied standards and test results

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.

4.2 Test environment and conditions

Test Items	Test date (YYYY-MM-DD)	Temp (℃)	Humidity (% R.H.)
Conducted Disturbance	2017-07-28	24	42
Radiated Disturbance	2017-07-25 2017-07-31	25 24	48 47

5. Test Set-up and operation mode

5.1 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.

5.2 Test Operation Mode

- USB Mode : The EUT is a continuous coating of cards using a dedicated program via USB cable.
- Serial Mode : The EUT is a continuous coating of cards using a dedicated program via serial cable.

5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE			Backshell	FCC ID
				Connect type	Length (m)	Shield		
NOTE PC	HSTNN-Q95C	5CD6256M2X	HP INC	DC, USB, Serial	1.3	Non-Shield	Plastic	-
NOTE PC ADAPTER	HSTNN-CA40	N/A	CHICONY POWER	AC	1.4	Non-Shield	Plastic	-

NOTE
- See “APPENDIX 2 Photographs” for actual system test setup

6. Test Results : Emission

6.1 Conducted Disturbance

6.1.1 Measurement Procedure

In the range of 0.15 MHz to 30 MHz, the conducted disturbance was measured and set-up was made accordance with **ANSI C63.4.**

If the EUT is table top equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 0.4 m from the conducting wall of the shielded room.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.

Connect the EUT's power source lines to the appropriate power mains / peripherals through the LISN. All the other peripherals are connected to the 2nd LISN, if any.

Unused measuring port of the LISN was resistively terminated by 50 ohm terminator.

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 Average detector.

By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.

For further description of the configuration refer to the picture of the test set-up.

6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

(2)

Frequency range (MHz)	Limits dB(μV)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50
Note 1 The lower limit shall apply at the transition frequencies. Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Note) 1. Emission Level = Reading Value + Correction Factor.

2. Correction Factor = Cable Loss + Insertion Loss of LISN

3. Margin = Limit - Emission level

Test Result

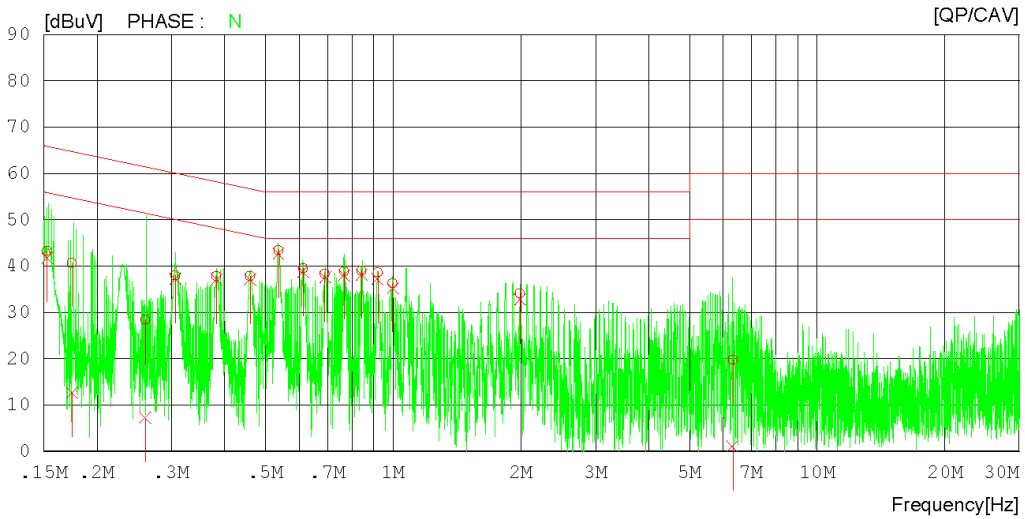
< Mains ports _ USB Mode >

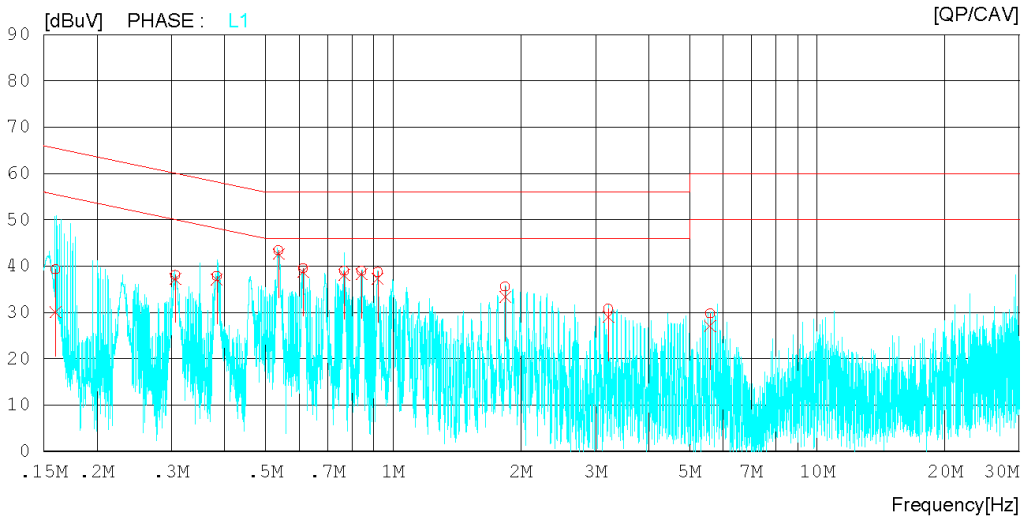
Results of Conducted Emission

DT&C
Date 2017-07-28

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi/Atm	24 'C 42 % R.H.
Test Condition	USB

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C
Date 2017-07-28

Order No. DTNC1707-05318
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition USB

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15272	43.11	41.52	0.22	43.33	41.74	65.85	55.85	22.52	14.11	N
2	0.17455	40.52	12.47	0.21	40.73	12.68	64.74	54.74	24.01	42.06	N
3	0.26008	28.17	6.99	0.21	28.38	7.20	61.43	51.43	33.05	44.23	N
4	0.30625	37.80	37.02	0.20	38.00	37.22	60.07	50.07	22.07	12.85	N
5	0.38323	37.63	36.88	0.21	37.84	37.09	58.21	48.21	20.37	11.12	N
6	0.46000	37.65	36.87	0.22	37.87	37.09	56.69	46.69	18.82	9.60	N
7	0.53616	43.17	42.44	0.22	43.39	42.66	56.00	46.00	12.61	3.34	N
8	0.61310	39.34	38.59	0.22	39.56	38.81	56.00	46.00	16.44	7.19	N
9	0.69000	38.05	37.32	0.23	38.28	37.55	56.00	46.00	17.72	8.45	N
10	0.76659	38.65	37.78	0.23	38.88	38.01	56.00	46.00	17.12	7.99	N
11	0.84270	38.75	37.95	0.24	38.99	38.19	56.00	46.00	17.01	7.81	N
12	0.91950	38.39	37.02	0.24	38.63	37.26	56.00	46.00	17.37	8.74	N
13	0.99740	35.97	34.99	0.26	36.23	35.25	56.00	46.00	19.77	10.75	N
14	1.99020	33.79	32.51	0.30	34.09	32.81	56.00	46.00	21.91	13.19	N
15	6.31920	19.26	0.58	0.51	19.77	1.09	60.00	50.00	40.23	48.91	N
16	0.15990	39.07	29.80	0.18	39.25	29.98	65.47	55.47	26.22	25.49	L1
17	0.30641	37.80	37.04	0.19	37.99	37.23	60.07	50.07	22.08	12.84	L1
18	0.38341	37.62	36.87	0.20	37.82	37.07	58.21	48.21	20.39	11.14	L1
19	0.53671	43.13	42.39	0.20	43.33	42.59	56.00	46.00	12.67	3.41	L1
20	0.61323	39.34	38.58	0.21	39.55	38.79	56.00	46.00	16.45	7.21	L1
21	0.76624	38.72	37.87	0.22	38.94	38.09	56.00	46.00	17.06	7.91	L1
22	0.84307	38.74	37.93	0.23	38.97	38.16	56.00	46.00	17.03	7.84	L1
23	0.91907	38.46	37.06	0.23	38.69	37.29	56.00	46.00	17.31	8.71	L1
24	1.83820	35.25	33.00	0.29	35.54	33.29	56.00	46.00	20.46	12.71	L1
25	1.83820	35.27	33.01	0.29	35.56	33.30	56.00	46.00	20.44	12.70	L1
26	3.21820	30.38	28.66	0.36	30.74	29.02	56.00	46.00	25.26	16.98	L1
27	5.59360	29.20	26.61	0.49	29.69	27.10	60.00	50.00	30.31	22.90	L1

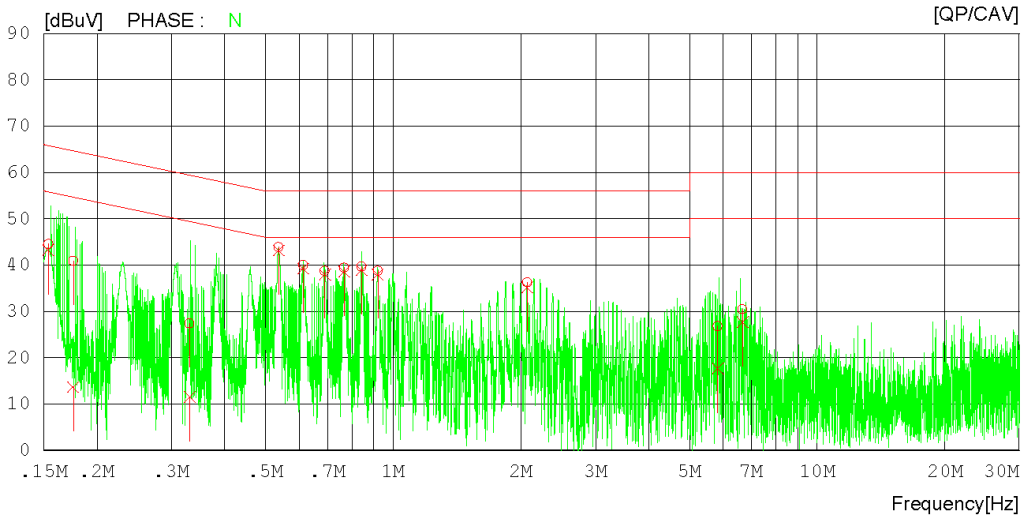
< Mains ports _ Serial Mode >

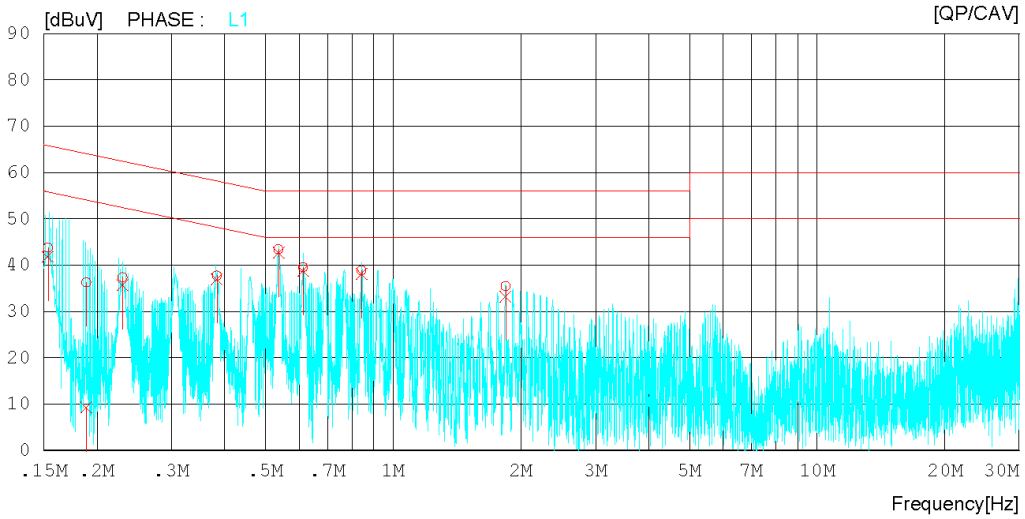
Results of Conducted Emission

DT&C
Date 2017-07-28

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi/Atm	24 'C 42 % R.H.
Test Condition	SERIAL

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C
Date 2017-07-28

Order No. DTNC1707-05318
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition SERIAL

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15379	44.39	43.03	0.22	44.61	43.25	65.79	55.79	21.18	12.54	N
2	0.17585	40.70	13.44	0.21	40.91	13.65	64.68	54.68	23.77	41.03	N
3	0.33091	27.19	11.27	0.21	27.40	11.48	59.43	49.43	32.03	37.95	N
4	0.53661	43.67	42.97	0.22	43.89	43.19	56.00	46.00	12.11	2.81	N
5	0.61318	39.74	39.00	0.22	39.96	39.22	56.00	46.00	16.04	6.78	N
6	0.68976	38.49	37.77	0.23	38.72	38.00	56.00	46.00	17.28	8.00	N
7	0.76646	39.17	38.32	0.23	39.40	38.55	56.00	46.00	16.60	7.45	N
8	0.84236	39.41	38.63	0.24	39.65	38.87	56.00	46.00	16.35	7.13	N
9	0.91952	38.54	37.77	0.24	38.78	38.01	56.00	46.00	17.22	7.99	N
10	2.06760	35.97	34.87	0.30	36.27	35.17	56.00	46.00	19.73	10.83	N
11	2.06820	35.98	34.86	0.30	36.28	35.16	56.00	46.00	19.72	10.84	N
12	5.82880	26.38	17.16	0.49	26.87	17.65	60.00	50.00	33.13	32.35	N
13	6.66320	29.90	27.17	0.53	30.43	27.70	60.00	50.00	29.57	22.30	N
14	0.15330	43.53	41.59	0.18	43.71	41.77	65.82	55.82	22.11	14.05	L1
15	0.18895	36.04	9.02	0.17	36.21	9.19	64.08	54.08	27.87	44.89	L1
16	0.23006	37.21	35.51	0.18	37.39	35.69	62.45	52.45	25.06	16.76	L1
17	0.38358	37.47	36.76	0.20	37.67	36.96	58.20	48.20	20.53	11.24	L1
18	0.53653	43.12	42.41	0.20	43.32	42.61	56.00	46.00	12.68	3.39	L1
19	0.61312	39.29	38.57	0.21	39.50	38.78	56.00	46.00	16.50	7.22	L1
20	0.84205	38.64	37.84	0.23	38.87	38.07	56.00	46.00	17.13	7.93	L1
21	1.83880	35.12	32.93	0.29	35.41	33.22	56.00	46.00	20.59	12.78	L1

6.2 Radiated Disturbance

6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4.**

If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 3 m or 10 m away from the interference receiving antenna in the **10 m semi-anechoic chamber.**

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.

Rotate the EUT from (0 - 360)° and position the receiving antenna at heights from (1 - 4) m above the reference ground plane continuously to determine associated with higher emission levels and record them.

The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.

For below 1 GHz frequency range, Quasi-Peak detector with 120 kHz RBW was used.

Also Peak and Average detector with 1 MHz RBW were used for above 1 GHz frequency range.

For further description of the configuration refer to the picture of the test set-up.

6.2.2 Limit for Radiated Disturbance

- 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	5th harmonic of the highest frequency or 40 GHz, whichever is lower

(1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (3 m distance)
	Quasi-peak (dBμV/m)	Quasi-peak (dBμV/m)
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
Note 1 The lower limit shall apply at the transition frequency. Note 2 Additional provisions may be required for cases where interference occurs. Note 3 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(CISPR), Pub. 22 shown as below.		
Frequency range (MHz)	**Class A Equipment (10 m distance)**	**Class B Equipment (10 m distance)**
	Quasi-peak (dBμV/m)	**Quasi-peak (dBμV/m)**
30 to 230	40	30
230 to 1 000	47	37

(2) Limits for Radiated Emission above 1 000MHz at a measuring distance of 3 m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 to 40	80	60	74	54

Note) 1. Emission Level = Reading Value + loss - gain + Ant Factor
2. Margin = Limit - Emission level
3. loss = Cable loss, gain = Amp gain, Ant Factor = Antenna Factor

Test Result

< 30 MHz ~ 1 GHz _ USB Mode >

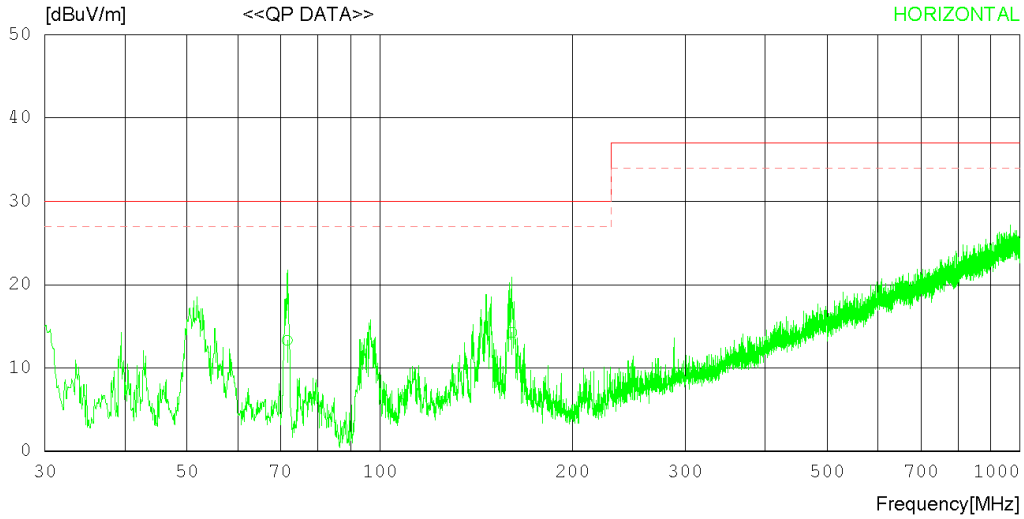
RADIATED EMISSION

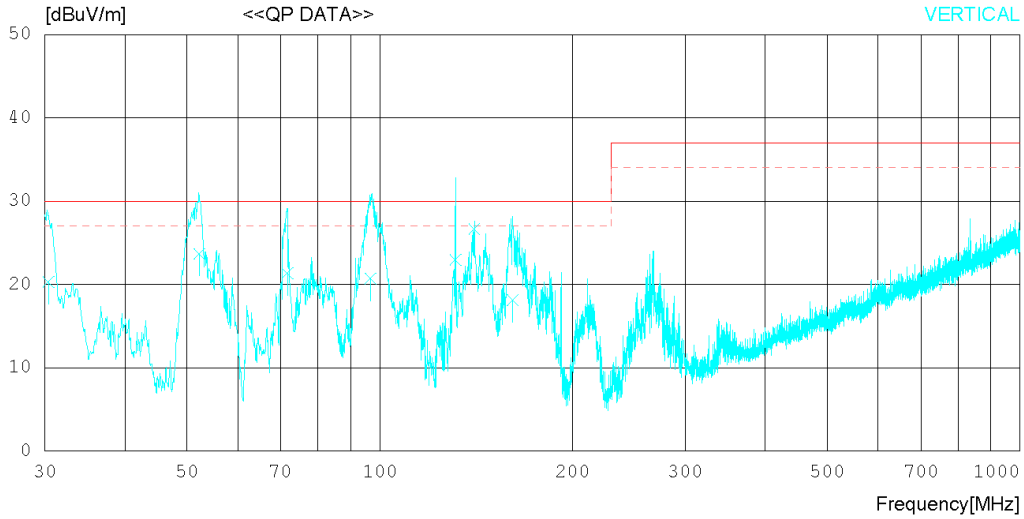
Date 2017-07-31

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	24 'C 47 % R.H.
Test Condition	USB

Memo

LIMIT : CISPR Pub.32 Class B (10m)
MARGIN: 3 dB





RADIATED EMISSION

Date 2017-07-31

Order No. DTNC1707-05318
Power Supply 120 V 60 Hz
Temp/Humi 24 'C 47 % R.H.
Test Condition USB

Memo

LIMIT : CISPR Pub.32 Class B (10m)
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	71.710	31.54	10.16	2.00	30.40	13.30	30.00	16.70	201	230
2	160.947	28.25	13.06	3.08	30.16	14.23	30.00	15.77	201	54
----- Vertical ------										
3	30.364	38.24	11.31	1.27	30.53	20.29	30.00	9.71	201	217
4	52.310	40.09	12.35	1.67	30.44	23.67	30.00	6.33	100	1
5	71.710	39.57	10.16	2.00	30.40	21.33	30.00	8.67	201	358
6	96.687	40.13	8.60	2.33	30.35	20.71	30.00	9.29	301	1
7	131.242	38.19	12.20	2.80	30.25	22.94	30.00	7.06	201	358
8	140.457	41.09	12.83	2.92	30.22	26.62	30.00	3.38	100	9
9	161.311	32.14	13.05	3.09	30.16	18.12	30.00	11.88	100	1

< (1 ~ 6) GHz _ Peak _ USB Mode >

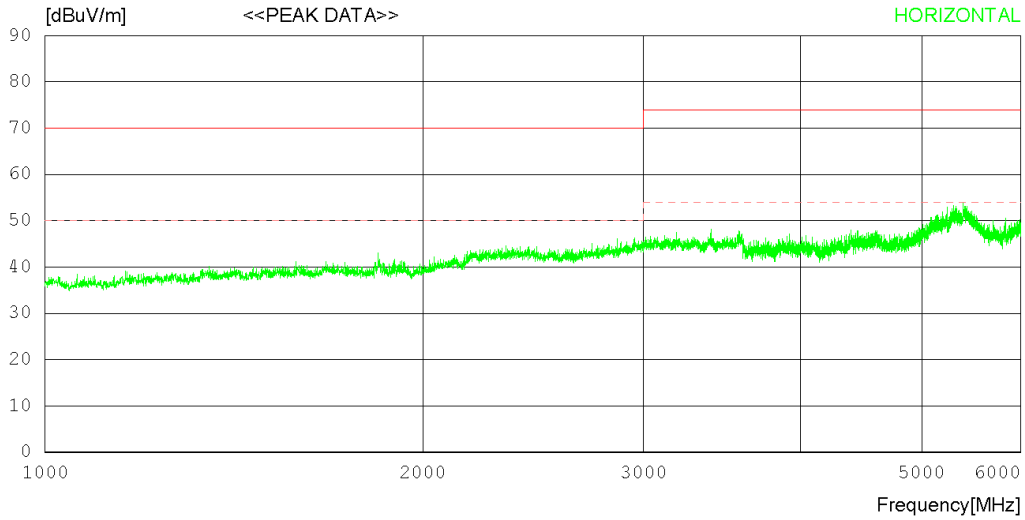
RADIATED EMISSION

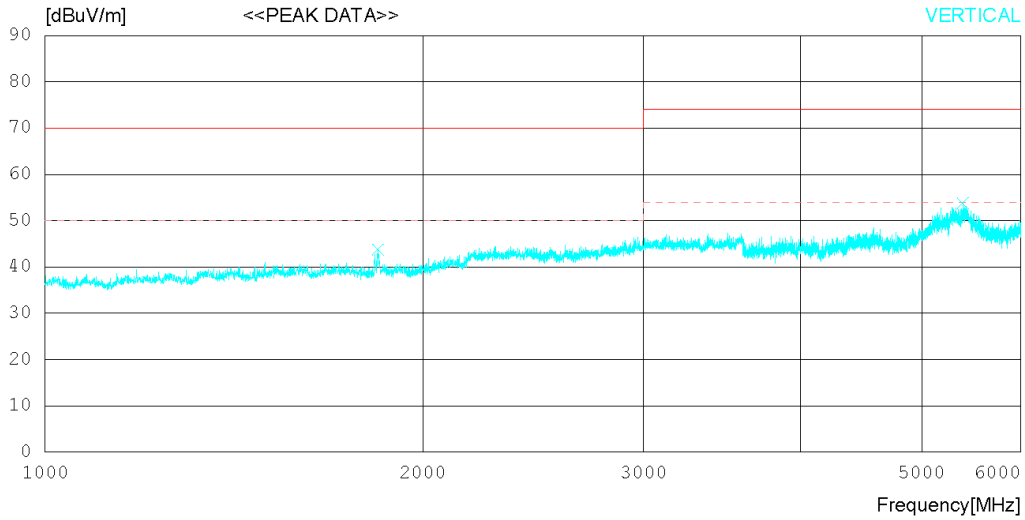
Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	USB

Memo

LIMIT : 32_1~6GHz_PEAK LIMIT
32_1~6GHz_AV LIMIT





RADIATED EMISSION

Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	USB

Memo

LIMIT : 32_1~6GHz_PEAK LIMIT
32_1~6GHz_AV LIMIT

No.	FREQ	READING PEAK	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Vertical ------										
1	1841.875	50.20	25.16	7.39	38.99	43.76	70.0	26.24	100	326
2	5391.875	43.10	35.94	12.08	37.37	53.75	74.0	20.25	100	1

< (1 ~ 6) GHz _ Average _ USB Mode >

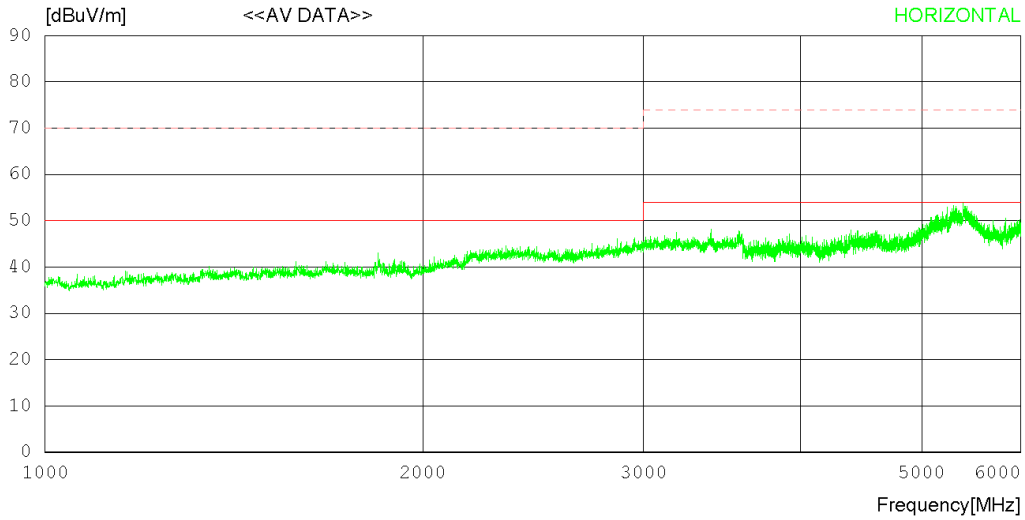
RADIATED EMISSION

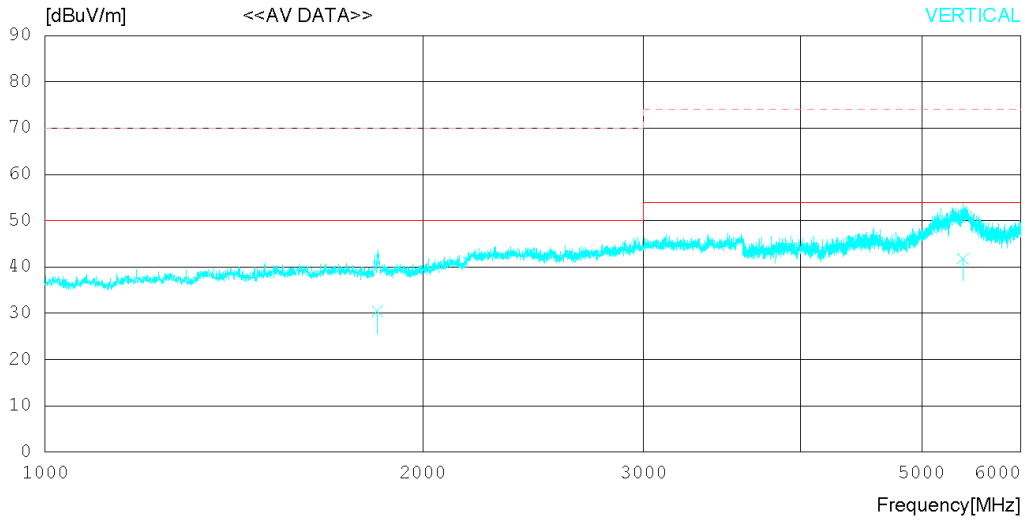
Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	USB

Memo

LIMIT : 32_1~6GHz_AV LIMIT
32_1~6GHz_PEAK LIMIT





RADIATED EMISSION

Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	USB

Memo

LIMIT : 32_1~6GHz_AV LIMIT
32_1~6GHz_PEAK LIMIT

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]
----- Vertical ------										
1	1841.209	36.90	25.16	7.39	38.99	30.46	50.00	19.54	100	272
2	5391.250	31.10	35.94	12.08	37.37	41.75	54.00	12.25	100	345

< 30 MHz ~ 1 GHz _ Serial Mode >

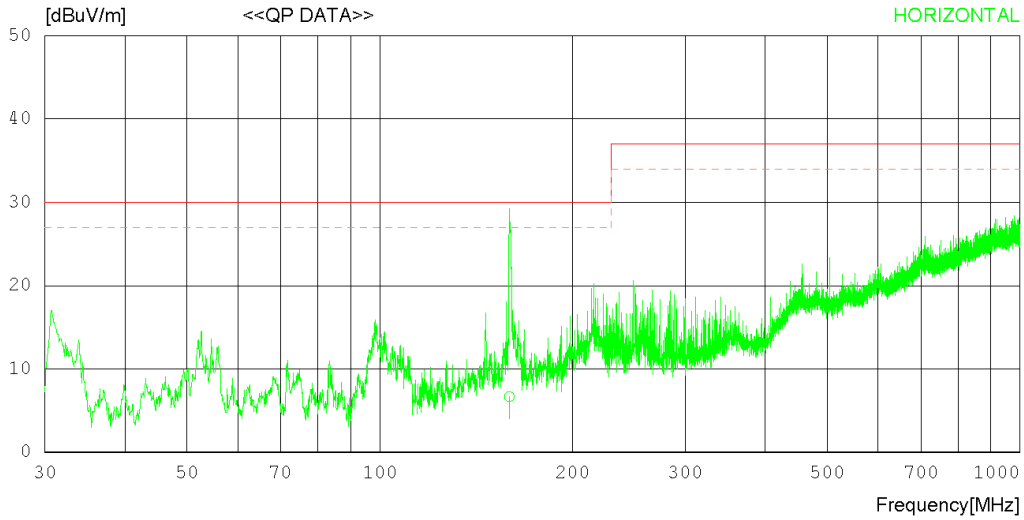
RADIATED EMISSION

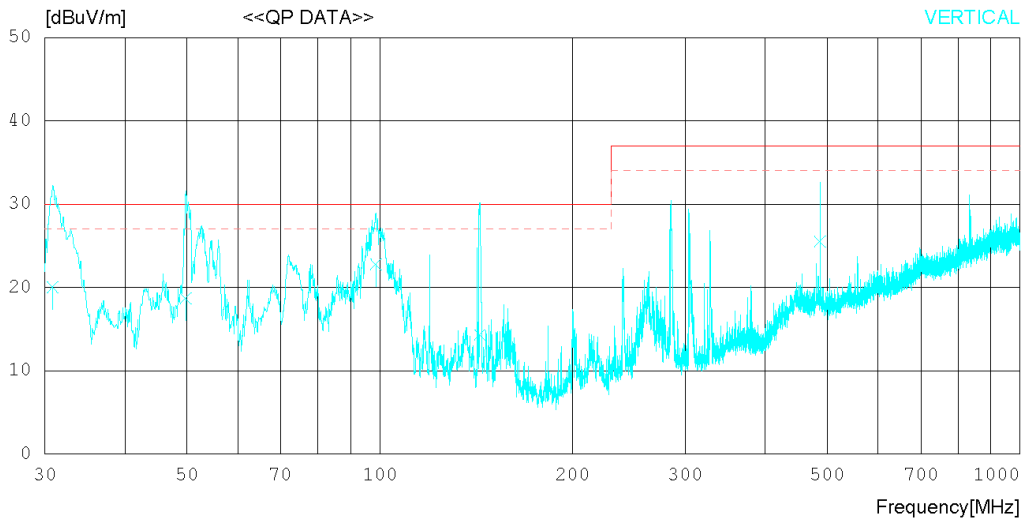
Date 2017-07-31

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	24 'C 47 % R.H.
Test Condition	SERIAL

Memo

LIMIT : CISPR Pub.32 Class B (10m)
MARGIN: 3 dB





RADIATED EMISSION

Date 2017-07-31

Order No. DTNC1707-05318
Power Supply 120 V 60 Hz
Temp/Humi 24 'C 47 % R.H.
Test Condition SERIAL

Memo

LIMIT : CISPR Pub.32 Class B (10m)
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	159.371	20.59	12.78	3.45	30.17	6.65	30.00	23.35	100	358
----- Vertical ------										
2	30.849	38.34	10.51	1.70	30.53	20.02	30.00	9.98	100	76
3	49.764	34.25	11.95	2.93	30.44	18.69	30.00	11.31	100	0
4	98.627	40.90	8.85	3.36	30.34	22.77	30.00	7.23	100	185
5	143.245	28.11	12.54	3.85	30.21	14.29	30.00	15.71	301	254
6	486.857	31.74	17.78	5.68	29.71	25.49	37.00	11.51	400	0

< (1 ~ 6) GHz _ Peak _ Serial Mode >

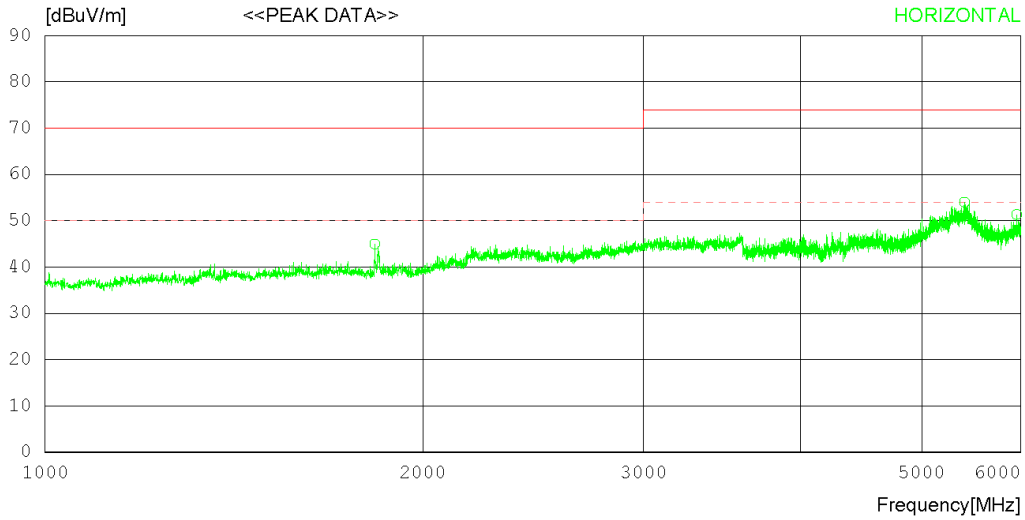
RADIATED EMISSION

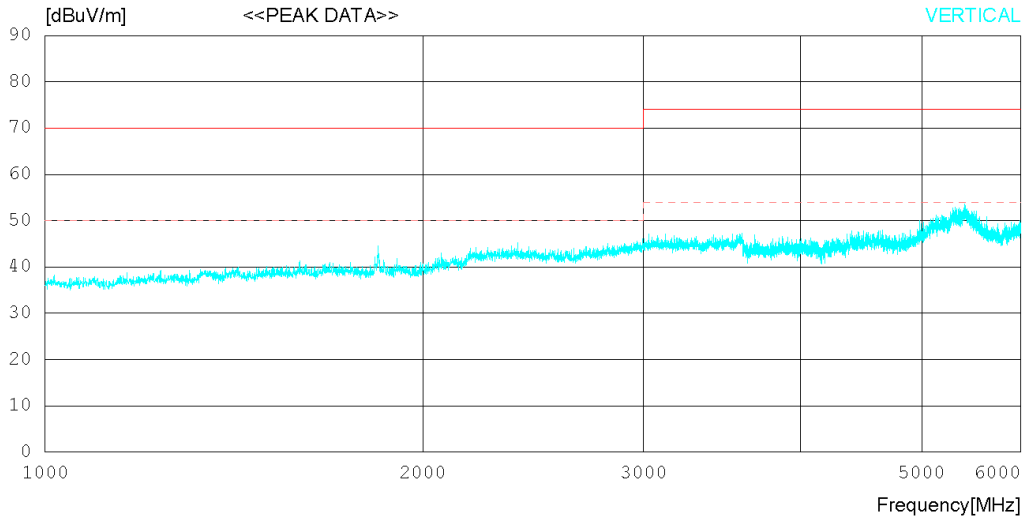
Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	SERIAL

Memo

LIMIT : 32_1~6GHz_PEAK LIMIT
32_1~6GHz_AV LIMIT





RADIATED EMISSION

Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	SERIAL

Memo

LIMIT : 32_1~6GHz_PEAK LIMIT
32_1~6GHz_AV LIMIT

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	1831.875	51.40	25.17	7.37	39.00	44.94	70.0	25.06	100	0
2	5410.000	43.40	35.86	12.10	37.36	54.00	74.0	20	100	0
3	5953.125	44.30	31.77	12.92	37.64	51.35	74.0	22.65	100	0

< (1 ~ 6) GHz _ Average _ Serial Mode >

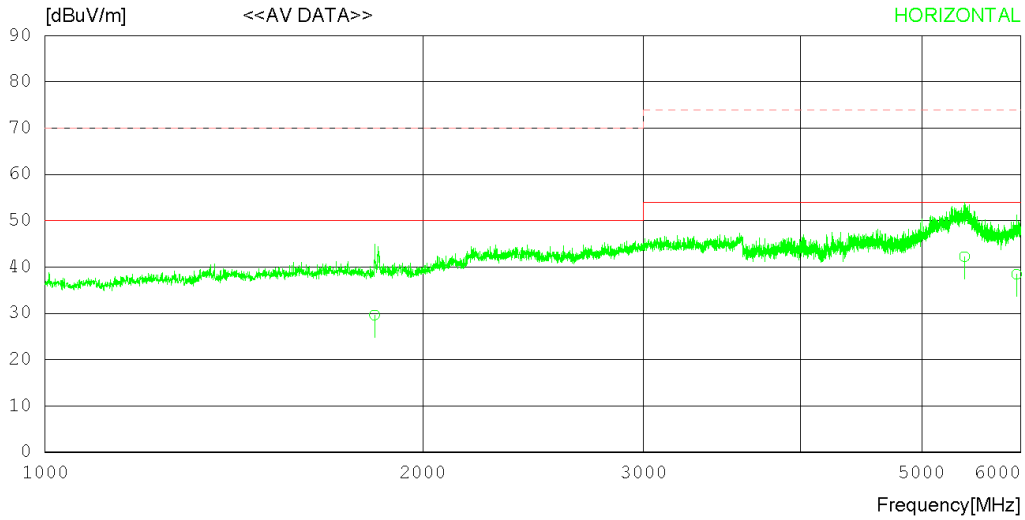
RADIATED EMISSION

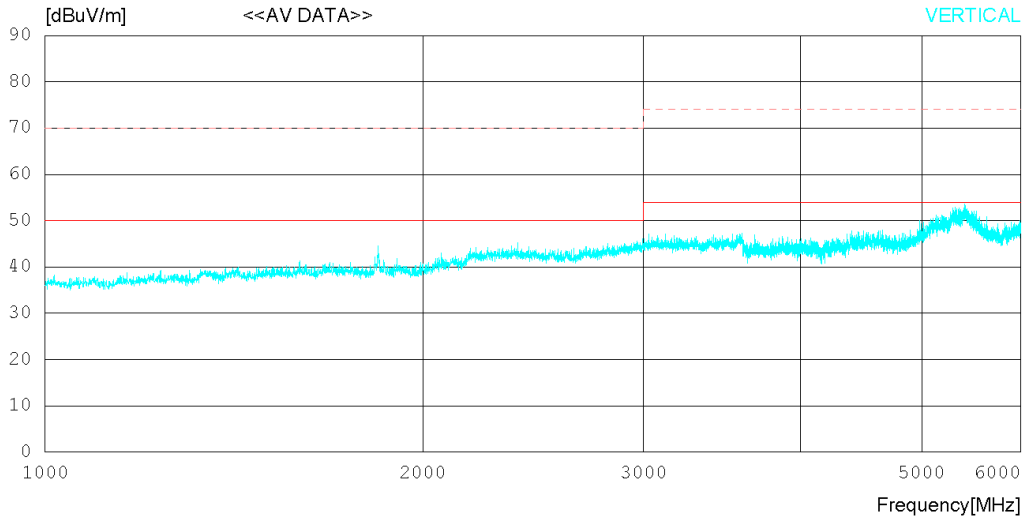
Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	SERIAL

Memo

LIMIT : 32_1~6GHz_AV LIMIT
32_1~6GHz_PEAK LIMIT





RADIATED EMISSION

Date 2017-07-25

Order No.	DTNC1707-05318
Power Supply	120 V 60 Hz
Temp/Humi	25 'C 48 % R.H.
Test Condition	SERIAL

Memo

LIMIT : 32_1~6GHz_AV LIMIT
32_1~6GHz_PEAK LIMIT

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	1831.129	36.10	25.17	7.37	39.00	29.64	50.00	20.36	100	204
2	5410.069	31.60	35.86	12.10	37.36	42.20	54.00	11.80	100	199
3	5953.036	31.40	31.77	12.92	37.64	38.45	54.00	15.55	100	178

Appendix 1

List of Test and Measurement Instruments

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment is identified by the Test Laboratory.

1. Conducted Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒	MEASUREMENT SOFTWARE	EMI-C VER. 2.00.0143	TSJ	N/A	N/A	N/A
☒	EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2017.02.16	2018.02.16
☒	ARTIFICIAL MAINS NETWORK	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2016.09.08	2017.09.08
☒	HIGH PASS FILTER	KFL-007D	KYORITSU	8-2259-4	N/A	N/A
☒	LISN	LISN1600	TTI	197204	2017.06.07	2018.06.07

2. Radiated Disturbance

Name of Instrument		Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
☒	MEASUREMENT SOFTWARE	EMI-R VER. 2.00.0121	TSJ	N/A	N/A	N/A
☒	EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2016.12.23	2017.12.23
☒	TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3363	2016.08.05	2018.08.05
☒	HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2016.05.13	2018.05.13
☒	AMPLIFIER	MLA-10K01-B01-27	TSJ	1760253	2017.05.12	2018.05.12
☒	PRE AMPLIFIER	8449B	AGILENT	3008A01590	2017.02.20	2018.02.20

Appendix 2

Photographs of the Test Configurations

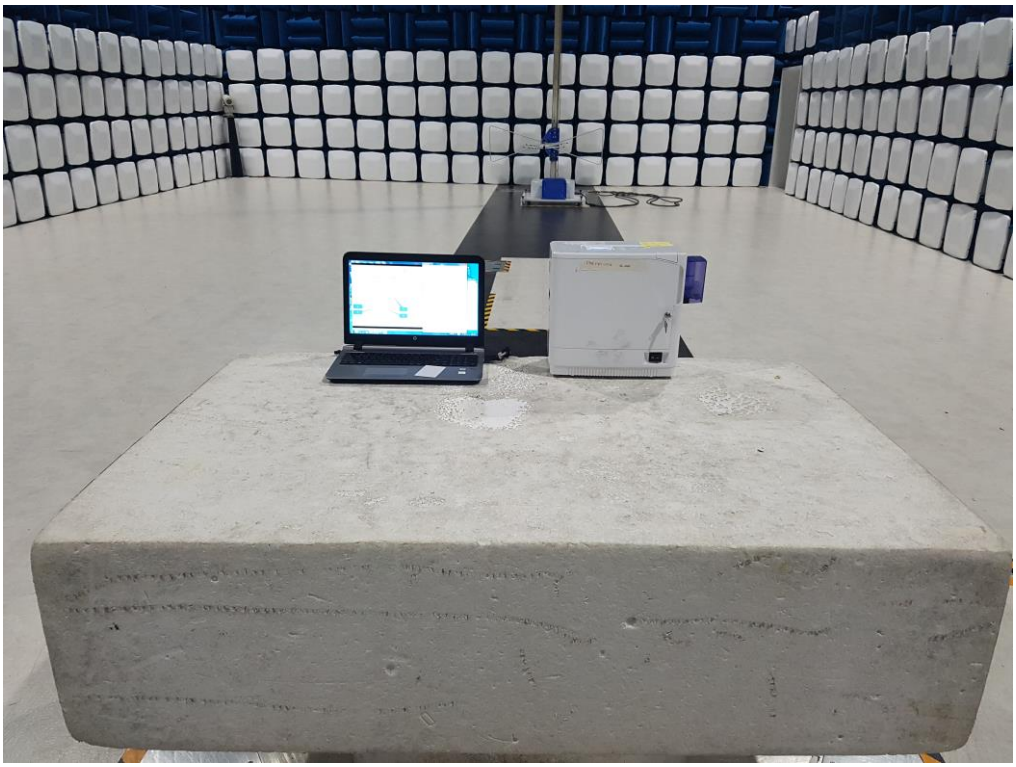
1. Conducted Disturbance

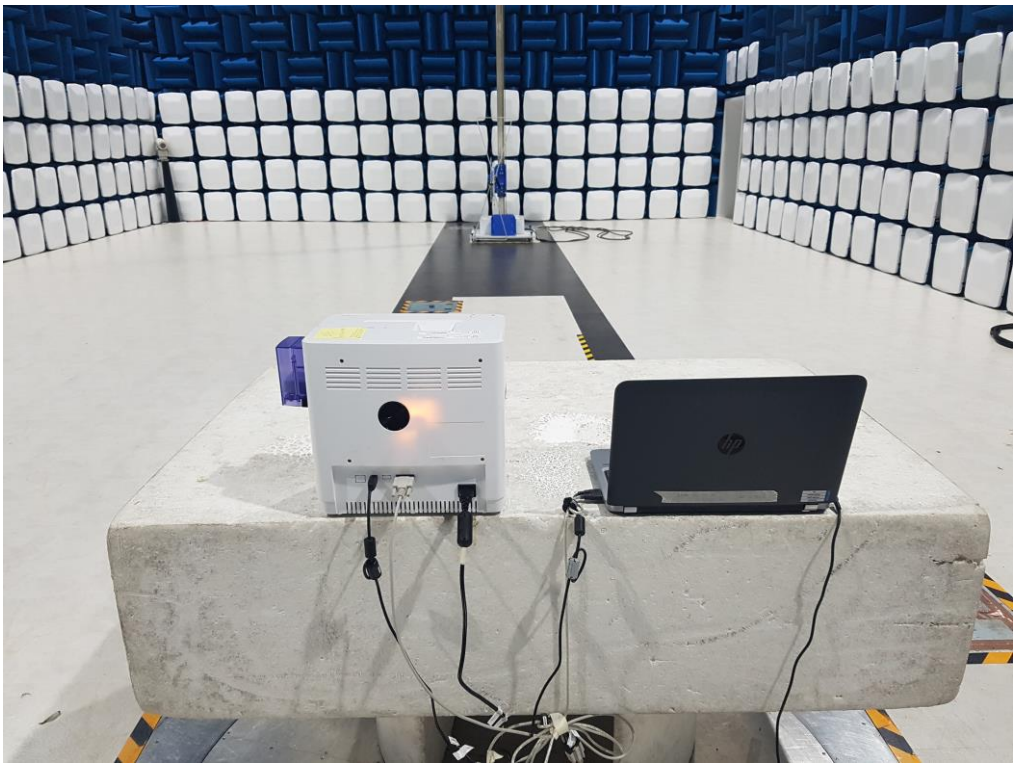
2. Radiated Disturbance

A2-1. Conducted Disturbance

A2-2. Radiated Disturbance

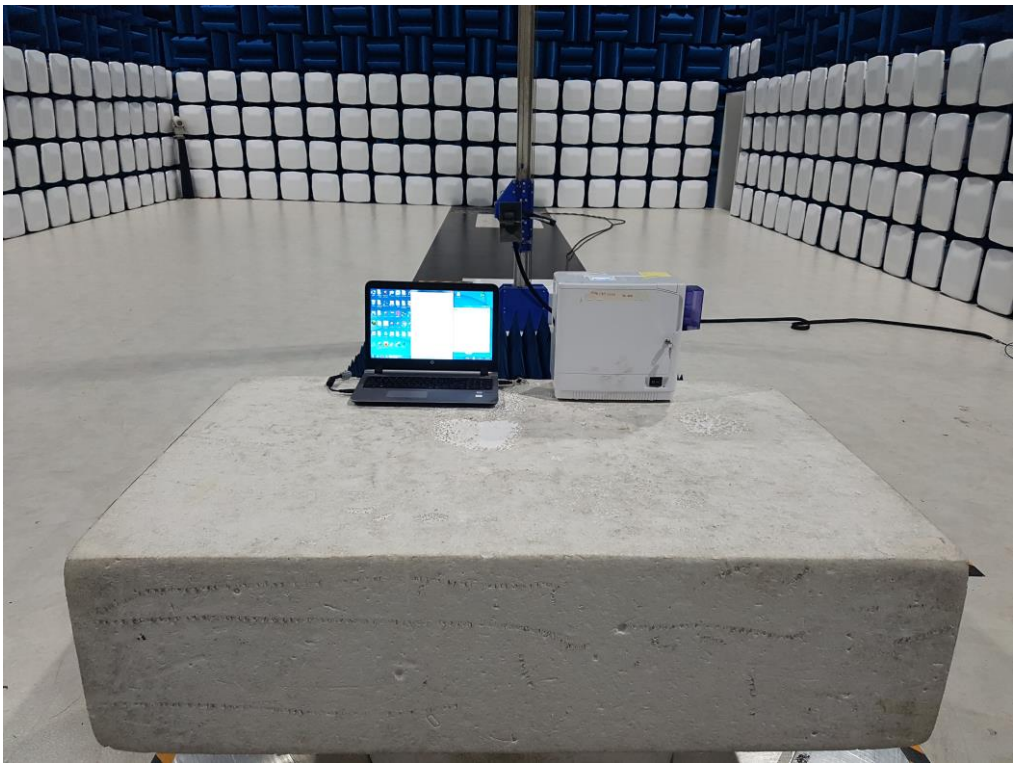
< 30 MHz ~ 1 GHz >

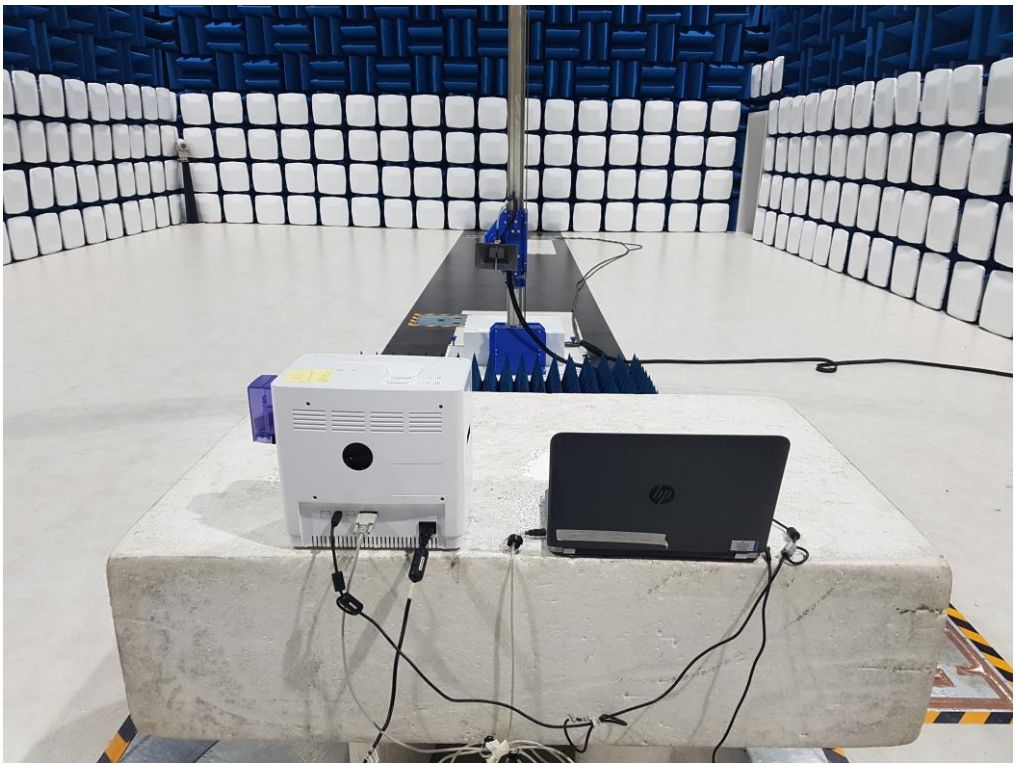




A2-2. Radiated Disturbance

< (1 ~ 6) GHz >





Appendix 3

Photographs of EUT

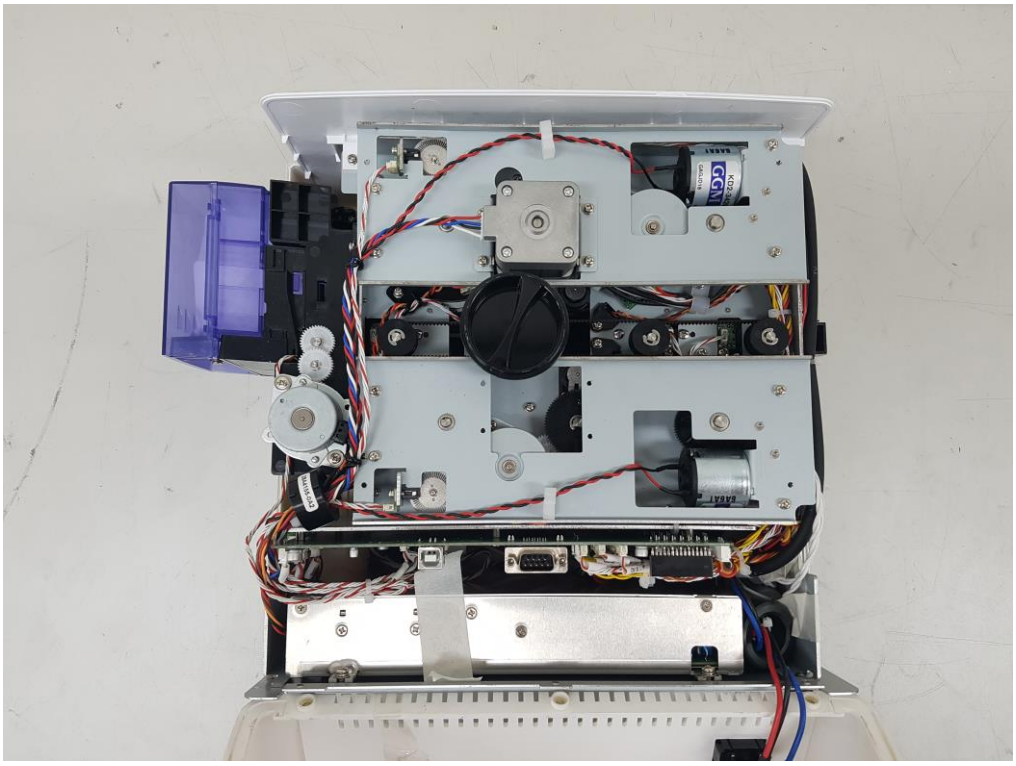
A3. EUT

1. Front View of Product

2. Rear View of Product

A3. EUT

3. Inside View of Product



Appendix 4

Report Revision History

Revision Date	Description	Revised By	Revision Reviewed By
None	Original	N/A	N/A