

TEST REPORT

Applicant : MAX CO., LTD.
Address : 1848 Kawai, Tamamura-machi, Sawa-gun, Gunma 370-1117 Japan

Products : Desktop Sign and Label Maker
Model No. : CPM-200GU
Serial No. : 16201106L
FCC ID : Not Applicable

Test Standard : FCC Rules and Regulations Title 47 CFR Part 15

Test Results : **Passed**

Date of Test : March 9 ~ 22 , 2016



A handwritten signature in black ink, appearing to read 'K. Shibata'.

Kousei Shibata
Manager
Japan Quality Assurance Organization
KITA-KANSAI Testing Center
SAITO EMC Branch
7-3-10, Saito-asagi, Ibaraki-shi, Osaka 567-0085, Japan

-
- The measurement values stated in Test Report was made with traceable to National Institute of Advanced Industrial Science and Technology (AIST) of Japan and National Institute of Information and Communications Technology (NICT) of Japan.
 - The applicable standard, testing condition and testing method which were used for the tests are based on the request of the applicant.
 - The test results presented in this report relate only to the offered test sample.
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 - This test report shall not be reproduced except in full without the written approval of JQA.
 - VLAC does not approve, certify or warrant the product by this test report.

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DEFINITIONS FOR ABBREVIATION AND SYMBOLS USED IN THIS TEST REPORT

EUT : Equipment Under Test

AE : Associated Equipment

N/A : Not Applicable

N/T : Not Tested

EMC : Electromagnetic Compatibility

EMI : Electromagnetic Interference

EMS : Electromagnetic Susceptibility

☒ - indicates that the listed condition, standard or equipment is applicable for this report.

☐ - indicates that the listed condition, standard or equipment is not applicable for this report.

1 Description of the Equipment Under Test

1. Manufacturer : MAX CO., LTD.
1848 Kawai, Tamamura-machi, Sawa-gun, Gunma 370-1117 Japan
2. Products : Desktop Sign and Label Maker
3. Model No. : CPM-200GU
4. Serial No. : 16201106L
5. Product Type : Mass Production
6. Date of Manufacture : February, 2016
7. Power Rating : 100-240VAC 50/60Hz
8. EUT Grounding : Grounded at the plug end of the power line
9. Type of Device : Class A Digital Device
10. EUT Authorization : Verification
11. EUT Highest Frequency : 256MHz
Used/Generated
12. Received Date of EUT : March 9, 2016
13. Responsible Party of Test Item (Product)

Signatory

Responsible Party :

Contact Person :

2 Summary of Test Results

Applied Standard : FCC Rules and Regulations Title 47 CFR Part 15 – Radio Frequency Devices
Subpart B – Unintentional Radiators

The EUT described in clause 1 was tested according to the applied standard shown above.

Details of the test configuration is shown in clause 6.

The conclusion for the test items of which are required by the applied standard is indicated under the test result.

- ☒ - The test result was **passed** for the test requirements of the applied standard.
- ☐ - The test result was **failed** for the test requirements of the applied standard.
- ☐ - The test result was **not judged** the test requirements of the applied standard.

In the approval of test results,

- Determining compliance with the limits in this report was based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- No deviations were employed from the applied standard.
- No modifications were conducted by JQA to achieve compliance to the limitations.

Reviewed by:



Yasuhisa Sakai
Manager
JQA KITA-KANSAI Testing Center
SAITO EMC Branch

Tested by:



Takeshi Choda
Assistant Manager
JQA KITA-KANSAI Testing Center
SAITO EMC Branch

3 Test Procedure

The tests documented in this report were performed in accordance with ANSI C63.4-2009 and FCC Part 15 Subpart B §15.107 and §15.109.

4 Test Location

Japan Quality Assurance Organization (JQA)

KITA-KANSAI Testing Center

7-7, Ishimaru, 1-chome, Minoh-shi, Osaka, 562-0027, Japan

SAITO EMC Branch

7-3-10, Saito-asagi, Ibaraki-shi, Osaka 567-0085, Japan

5 Recognition of Test Laboratory

JQA KITA-KANSAI Testing Center SAITO EMC Branch is accredited under ISO/IEC 17025 by following accreditation bodies and the test facility is registered by the following bodies.

VLAC Accreditation No. : VLAC-001-2 (Expiry date : March 30, 2016)

VCCI Registration No. : A-0002 (Expiry date : March 30, 2016)

BSMI Registration No. : SL2-IS-E-6006, SL2-IN-E-6006, SL2-R1/R2-E-6006, SL2-A1-E-6006
(Expiry date : September 14, 2016)

IC Registration No. : 2079E-3, 2079E-4 (Expiry date : July 16, 2017)

Accredited as conformity assessment body for Japan electrical appliances and material law by METI.
(Expiry date : February 22, 2019)

6 Description of Test Setup

6.1 Test Configuration

The equipment under test (EUT) consists of :

	Item	Manufacturer	Model No.	Serial No.	FCC ID
A	Desktop Sign and Label Maker	MAX CO., LTD.	CPM-200GU	16201106L	2AH2G-CP M-200GU

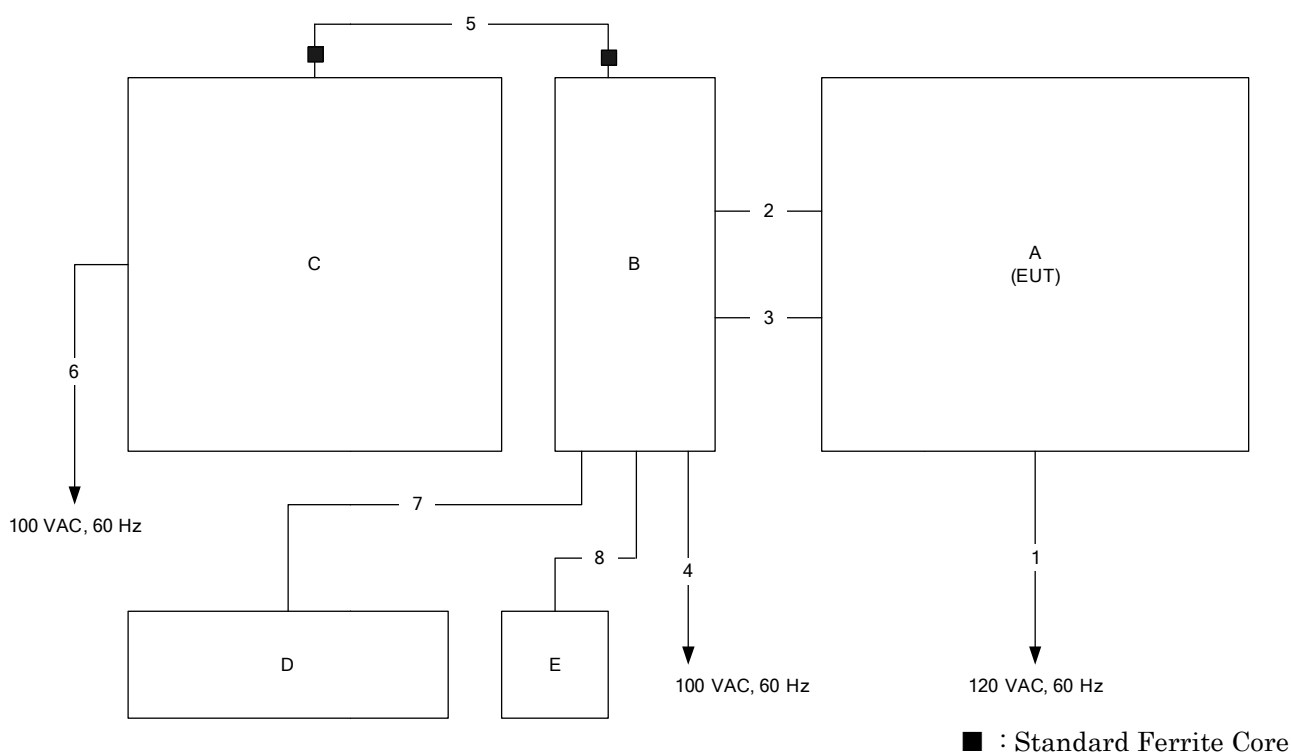
The auxiliary equipment used for testing :

	Item	Manufacturer	Model No.	Serial No.	FCC ID
B	Personal Computer	HP Compaq	HP6200P	JPA224LDJP	DoC
C	LCD Monitor	HP Compaq	LE1711	3CQ205BH1K	DoC
D	Keyboard	HP Compaq	KB-0316	BAUF00VB2N08Z	DoC
E	Mouse	HP Compaq	M-U0031-O	FCGLF0DCW2QIF5	DoC

Type of Cable:

No.	Description	Identification (Manu. etc.)	Connector Shielded	Cable Shielded	Ferrite Core	Length (m)
1	AC Power Cable (3Pin)	-	No	No	No	1.8
2	USB Cable	-	Yes	Yes	No	1.8
3	LAN Cable	-	No	No	No	1.8
4	AC Power Cable (3Pin)	-	No	No	No	1.8
5	RGB Monitor Cable	-	Yes	Yes	Yes	1.8
6	AC Power Cable (3Pin)	-	No	No	No	1.8
7	Keyboard Cable	-	Yes	Yes	No	1.8
8	USB Cable	-	Yes	Yes	No	1.8

6.2 Test Arrangement (Drawings)



6.3 Operating Condition

Power Supply Voltage : 120VAC 60Hz

Operation Mode : USB Print Mode
LAN Print Mode

7 Test Requirements

7.1 AC Powerline Conducted Emission

For the requirements, ☒ - Applicable [☒ - Tested. ☐ - Not tested by applicant request.]
☐ - Not Applicable

7.1.1 Test Results

For the standard, ☒ - Passed ☐ - Failed ☐ - Not judged

Min. Limit Margin (Quasi-Peak) 29.8 dB at 0.177 MHz

Uncertainty of Measurement Results ± 2.6 dB(2σ)

Remarks : LAN Print mode

7.1.2 Test Instruments

Shielded Room S2				
Type	Model	Serial No. (ID)	Manufacturer	Cal. Due
Test Receiver	ESCS 30	835418/005 (A-1)	Rohde & Schwarz	2016/04/01
Spectrum Analyzer	FSL3	100229 (A-40)	Rohde & Schwarz	2016/04/25
Test Receiver	ESCI	100453 (A-42)	Rohde & Schwarz	2016/12/09
AMN (main)	KNW-407FR	8-2019-1 (D-103)	Kyoritsu	2016/10/15
AMN (sub)	KNW-408	8-1402-2 (D-78)	Kyoritsu	2016/11/12
Terminator	65 BNC-50-0-1	--- (H-21)	HUBER+SUHNER	2016/10/15
RF Cable	RG223/U	--- (H-7)	HUBER+SUHNER	2016/11/19

NOTE : The calibration interval of the above test instruments is 12 months.

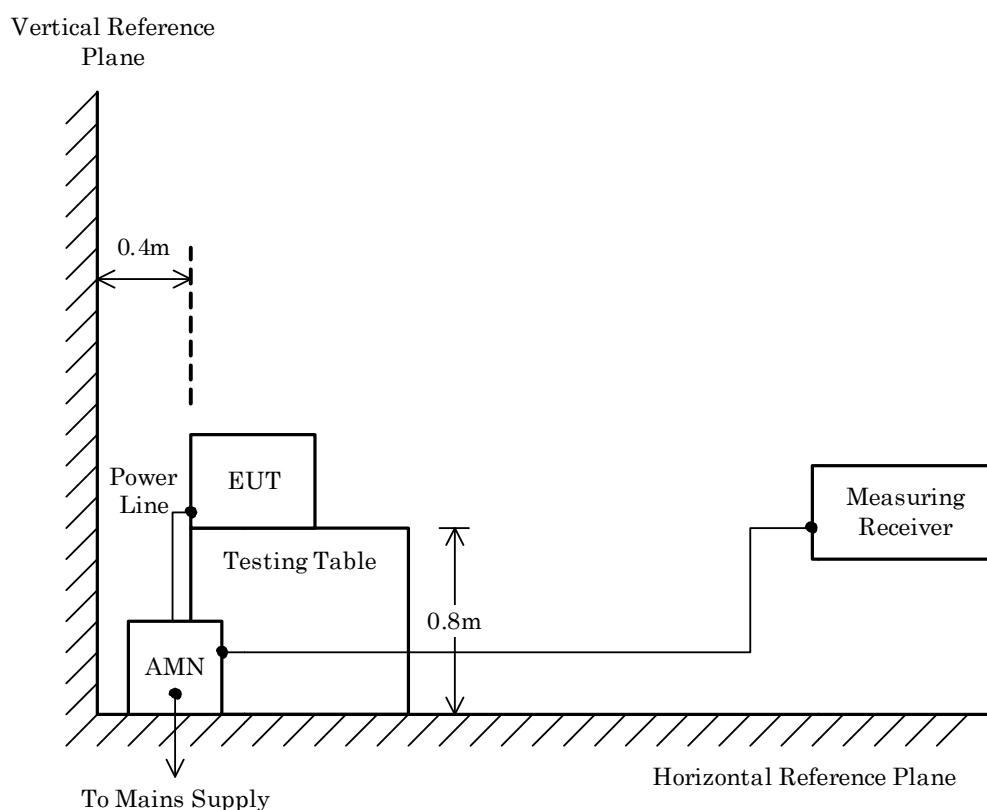
7.1.3 Test Method and Test Setup (Diagrammatic illustration)

The preliminary tests were performed using the scan mode of test receiver or spectrum analyzer to observe the emissions characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.

This configurations was used for final tests.

(Reference divisional instruction No. G703649)



NOTE

AMN : Artificial Mains Network

7.1.4 Test Data

Test voltage : 120VAC 60Hz

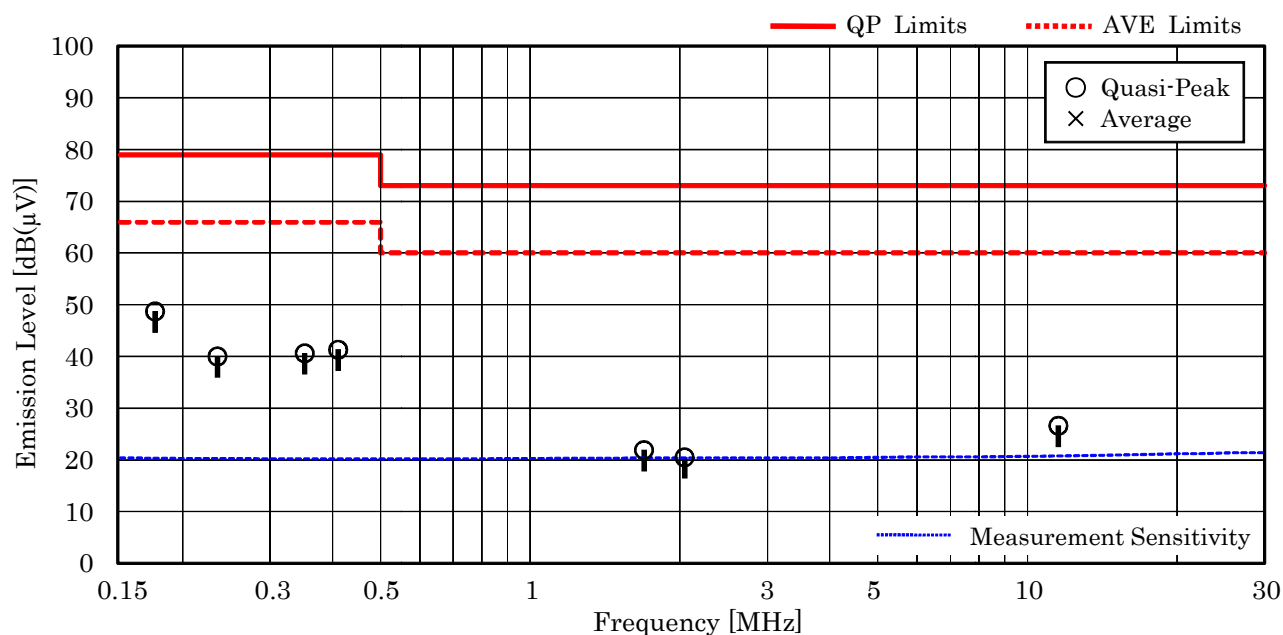
Test condition : USB Print mode

Measured phase : L1

Test Date: March 11, 2016

Temp.: 21 °C, Humi.: 32 %

Frequency [MHz]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV)]		Results [dB(μV)]		Margin [dB]		Remarks
		QP	AVE	QP	AVE	QP	AVE	QP	AVE	
0.176	10.3	38.4	--	79.0	66.0	48.7	--	+30.3	--	-
0.235	10.2	29.8	--	79.0	66.0	40.0	--	+39.0	--	-
0.352	10.2	30.4	--	79.0	66.0	40.6	--	+38.4	--	-
0.411	10.2	31.1	--	79.0	66.0	41.3	--	+37.7	--	-
1.694	10.3	11.6	--	73.0	60.0	21.9	--	+51.1	--	-
2.044	10.4	10.1	--	73.0	60.0	20.5	--	+52.5	--	-
11.546	10.8	15.8	--	73.0	60.0	26.6	--	+46.4	--	-



NOTES

1. The spectrum was checked from 150 kHz to 30 MHz.
2. The correction factor includes the AMN insertion loss and the cable loss.
3. The symbol of "<" means "or less".
4. The symbol of ">" means "more than".
5. The symbol of "--" means "not applicable".
6. Calculated result at 0.176 MHz, as the worst point shown on underline:
Correction Factor + Meter Reading (QP) = 10.3 + 38.4 = 48.7 dB(μV)
7. QP : Quasi-Peak Detector / AVE : Average Detector
8. Test receiver setting(s) : CISPR QP 9 kHz / Average 9 kHz

Test voltage : 120VAC 60Hz

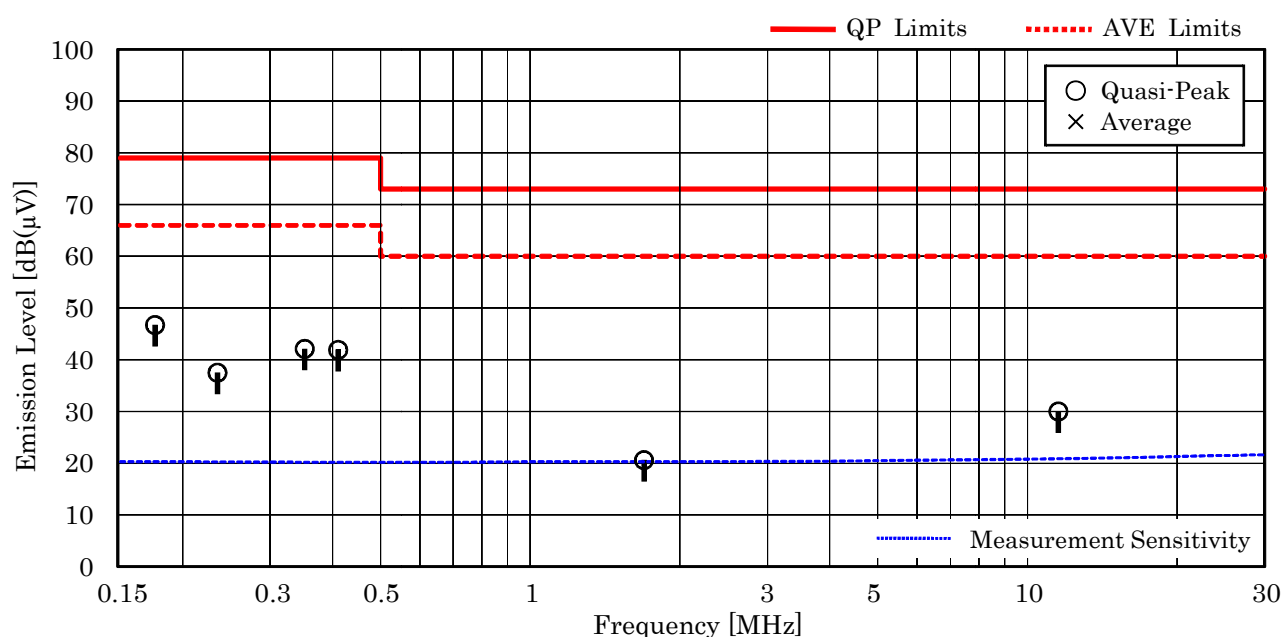
Test condition : USB Print mode

Measured phase : L2

Test Date: March 11, 2016

Temp.: 21 °C, Humi.: 32 %

Frequency [MHz]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV)]		Results [dB(μV)]		Margin [dB]		Remarks
		QP	AVE	QP	AVE	QP	AVE	QP	AVE	
0.176	10.3	36.4	--	79.0	66.0	46.7	--	+32.3	--	-
0.235	10.2	27.3	--	79.0	66.0	37.5	--	+41.5	--	-
0.352	10.2	31.9	--	79.0	66.0	42.1	--	+36.9	--	-
0.411	10.2	31.7	--	79.0	66.0	41.9	--	+37.1	--	-
1.694	10.3	10.3	--	73.0	60.0	20.6	--	+52.4	--	-
2.044	10.3	< 10.0	--	73.0	60.0	< 20.3	--	> +52.7	--	-
11.546	10.8	19.2	--	73.0	60.0	30.0	--	+43.0	--	-



NOTES

1. The spectrum was checked from 150 kHz to 30 MHz.
2. The correction factor includes the AMN insertion loss and the cable loss.
3. The symbol of "<" means "or less".
4. The symbol of ">" means "more than".
5. The symbol of "--" means "not applicable".
6. Calculated result at 0.176 MHz, as the worst point shown on underline:
Correction Factor + Meter Reading (QP) = 10.3 + 36.4 = 46.7 dB(μV)
7. QP : Quasi-Peak Detector / AVE : Average Detector
8. Test receiver setting(s) : CISPR QP 9 kHz / Average 9 kHz

Test voltage : 120VAC 60Hz

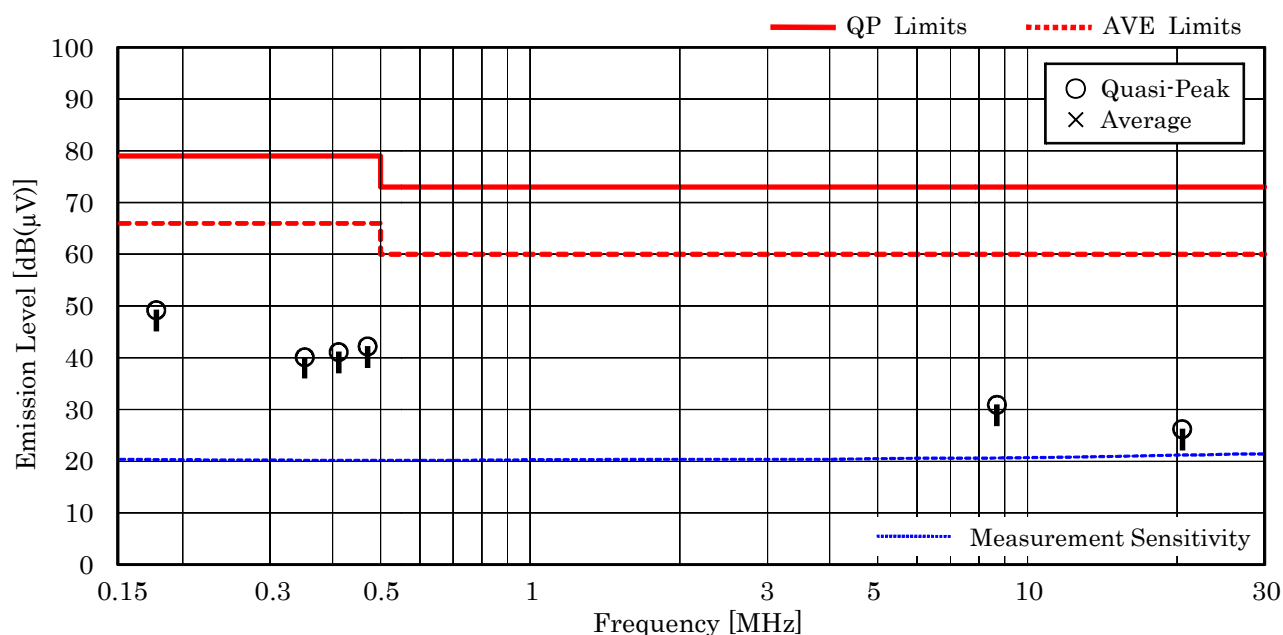
Test condition : LAN Print mode

Measured phase : L1

Test Date: 2016/312

Temp.: 18 °C, Humi.: 27 %

Frequency [MHz]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV)]		Results [dB(μV)]		Margin [dB]		Remarks
		QP	AVE	QP	AVE	QP	AVE	QP	AVE	
0.177	10.3	38.9	--	79.0	66.0	49.2	--	+29.8	--	-
0.352	10.2	29.9	--	79.0	66.0	40.1	--	+38.9	--	-
0.412	10.2	30.9	--	79.0	66.0	41.1	--	+37.9	--	-
0.471	10.2	32.0	--	79.0	66.0	42.2	--	+36.8	--	-
8.685	10.7	20.2	--	73.0	60.0	30.9	--	+42.1	--	-
20.480	11.2	15.0	--	73.0	60.0	26.2	--	+46.8	--	-



NOTES

1. The spectrum was checked from 150 kHz to 30 MHz.
2. The correction factor includes the AMN insertion loss and the cable loss.
3. The symbol of "<" means "or less".
4. The symbol of ">" means "more than".
5. The symbol of "--" means "not applicable".
6. Calculated result at 0.177 MHz, as the worst point shown on underline:
Correction Factor + Meter Reading (QP) = 10.3 + 38.9 = 49.2 dB(μV)
7. QP : Quasi-Peak Detector / AVE : Average Detector
8. Test receiver setting(s) : CISPR QP 9 kHz / Average 9 kHz

Test voltage : 120VAC 60Hz

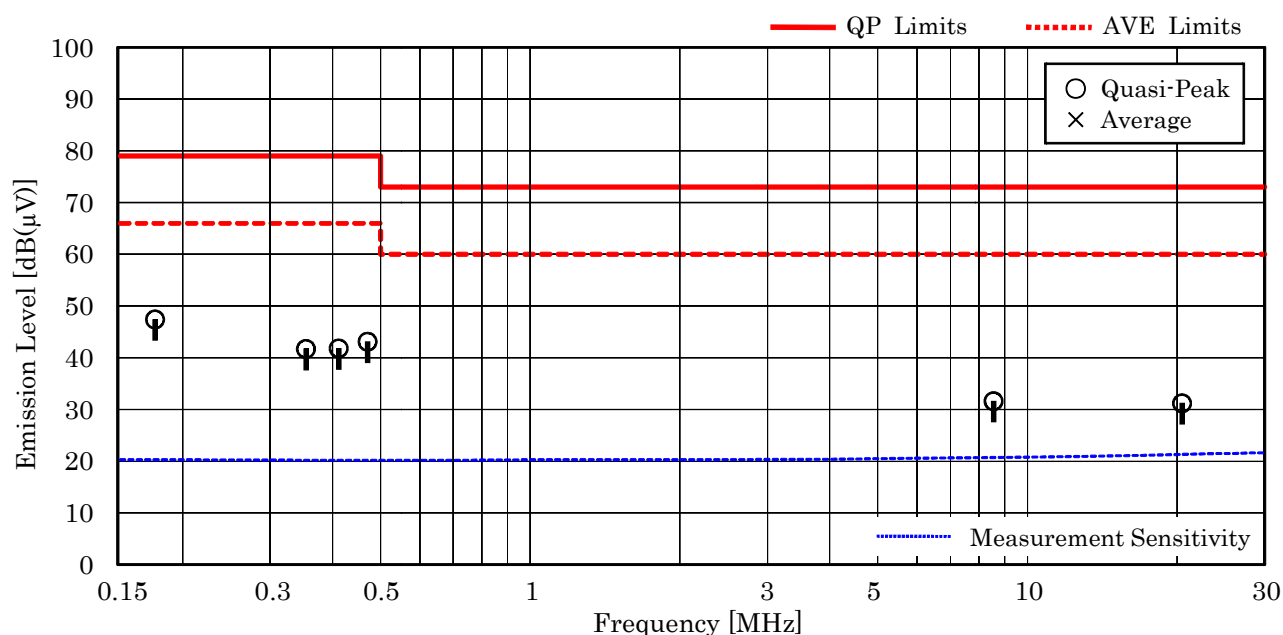
Test condition : LAN Print mode

Measured phase : L2

Test Date: 2016/312

Temp.: 18 °C, Humi.: 27 %

Frequency [MHz]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV)]		Results [dB(μV)]		Margin [dB]		Remarks
		QP	AVE	QP	AVE	QP	AVE	QP	AVE	
0.176	10.3	37.1	--	79.0	66.0	47.4	--	+31.6	--	-
0.354	10.2	31.5	--	79.0	66.0	41.7	--	+37.3	--	-
0.412	10.2	31.6	--	79.0	66.0	41.8	--	+37.2	--	-
0.471	10.2	32.9	--	79.0	66.0	43.1	--	+35.9	--	-
8.552	10.7	20.9	--	73.0	60.0	31.6	--	+41.4	--	-
20.473	11.3	19.9	--	73.0	60.0	31.2	--	+41.8	--	-



NOTES

1. The spectrum was checked from 150 kHz to 30 MHz.
2. The correction factor includes the AMN insertion loss and the cable loss.
3. The symbol of "<" means "or less".
4. The symbol of ">" means "more than".
5. The symbol of "--" means "not applicable".
6. Calculated result at 0.176 MHz, as the worst point shown on underline:
 Correction Factor + Meter Reading (QP) = 10.3 + 37.1 = 47.4 dB(μV)
7. QP : Quasi-Peak Detector / AVE : Average Detector
8. Test receiver setting(s) : CISPR QP 9 kHz / Average 9 kHz

7.1.5 Test Setup (Photographs)



– Front View –



– Side View –

Photograph present configuration with maximum emission

7.2 Radiated Emission 30 MHz – 1000 MHz

For the requirements, ☒ - Applicable [☒ - Tested. ☐ - Not tested by applicant request.]
☐ - Not Applicable

7.2.1 Test Results

For the standard, ☒ - Passed ☐ - Failed ☐ - Not judged

Min. Limit Margin (Quasi-Peak) 18.4 dB at 30.24 MHz

Uncertainty of Measurement Results
30 MHz – 200 MHz ± 4.2 dB(2σ)
200 MHz – 1000 MHz ± 3.7 dB(2σ)

Test Distance 10.0 m

Remarks : LAN Print mode (Vertical)

7.2.2 Test Instruments

Anechoic Chamber A1				
Type	Model	Serial No. (ID)	Manufacturer	Cal. Due
Test Receiver	ESCI 7	100811 (A-8)	Rohde & Schwarz	2017/01/11
Pre-Amplifier	310N	304572 (A-16)	SONOMA	2016/04/15
Hybrid Antenna	CBL6111D	30644 (C-71)	TESEQ	2016/11/26
RF Cable	S 10162 B-11 etc.	--- (H-3)	HUBER+SUHNER	2016/04/15

NOTE : The calibration interval of the above test instruments is 12 months.

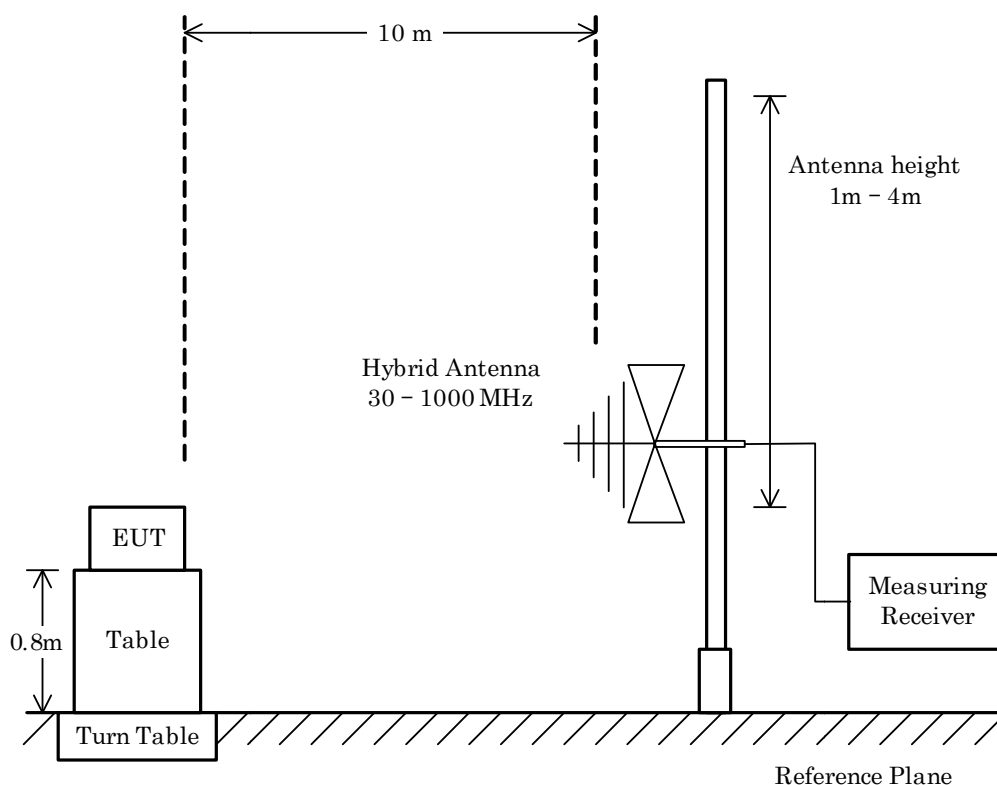
7.2.3 Test Method and Test Setup (Diagrammatic illustration)

The preliminary tests were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.

This configurations was used for the final tests.

(Reference divisional instruction No. G70364B)



7.2.4 Test Data

Test voltage : 120VAC 60Hz

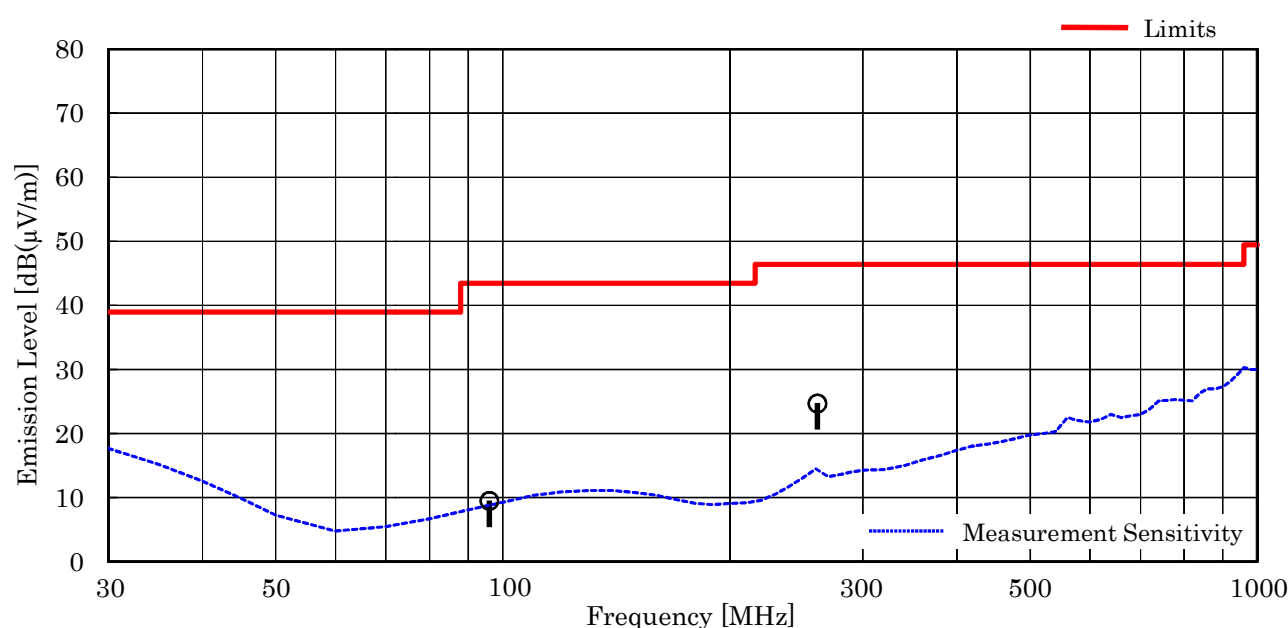
Test Date: March 22, 2016

Test condition : USB Print mode

Temp.: 20 °C, Humi: 51 %

Antenna pole : Horizontal

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]	Limits [dB(μV/m)]	Results [dB(μV/m)]	Margin [dB]	Remarks
31.00	18.7	-28.5	< 27.0	39.0	< 17.2	> +21.8	-
38.13	14.9	-28.3	< 27.0	39.0	< 13.6	> +25.4	-
96.02	9.5	-27.6	27.6	43.5	9.5	+34.0	-
177.47	9.0	-26.9	< 27.0	43.5	< 9.1	> +34.4	-
261.27	13.8	-26.3	37.2	46.4	24.7	+21.7	-
285.28	12.9	-26.1	< 27.0	46.4	< 13.8	> +32.6	-

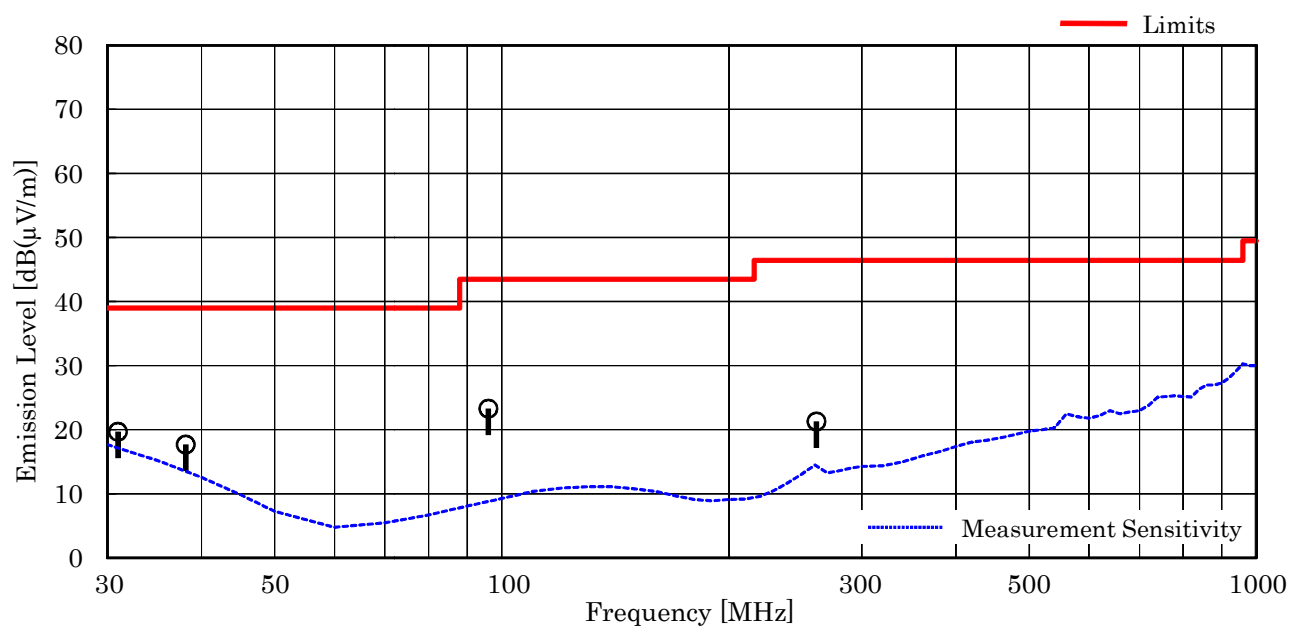


NOTES

1. Test Distance : 10 m
2. The spectrum was checked from 30 MHz to 1000 MHz.
3. The correction factor is composed of cable loss, pad attenuation and/or amplifier gain.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. Calculated result at 261.27 MHz, as the worst point shown on underline:
 Antenna Factor + Coorection Factor + Meter Reading = 13.8 + (-26.3) + 37.2 = 24.7 dB(μV/m)
 Antenna Height : 333 cm, Turntable Angle : 30 °
7. Test receiver setting(s) : CISPR QP 120 kHz [QP : Quasi-Peak]

Test voltage : 120VAC 60HzTest condition : USB Print ModeAntenna pole : VerticalTest Date: March 22, 2016Temp.: 20 °C, Humi: 51 %

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]	Limits [dB(μV/m)]	Results [dB(μV/m)]	Margin [dB]	Remarks
31.00	18.7	-28.5	29.5	39.0	19.7	+19.3	-
38.13	14.9	-28.3	31.1	39.0	17.7	+21.3	-
96.02	9.5	-27.6	41.4	43.5	23.3	+20.2	-
177.47	9.0	-26.9	< 27.0	43.5	< 9.1	> +34.4	-
261.27	13.8	-26.3	33.8	46.4	21.3	+25.1	-
285.28	12.9	-26.1	< 27.0	46.4	< 13.8	> +32.6	-



NOTES

1. Test Distance : 10 m
2. The spectrum was checked from 30 MHz to 1000 MHz.
3. The correction factor is composed of cable loss, pad attenuation and/or amplifier gain.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. Calculated result at 31.00 MHz, as the worst point shown on underline:
Antenna Factor + Coorection Factor + Meter Reading = 18.7 + (-28.5) + 29.5 = 19.7 dB(μV/m)
Antenna Height : 276 cm, Turntable Angle : 0 °
7. Test receiver setting(s) : CISPR QP 120 kHz [QP : Quasi-Peak]

Test voltage : 120VAC 60Hz

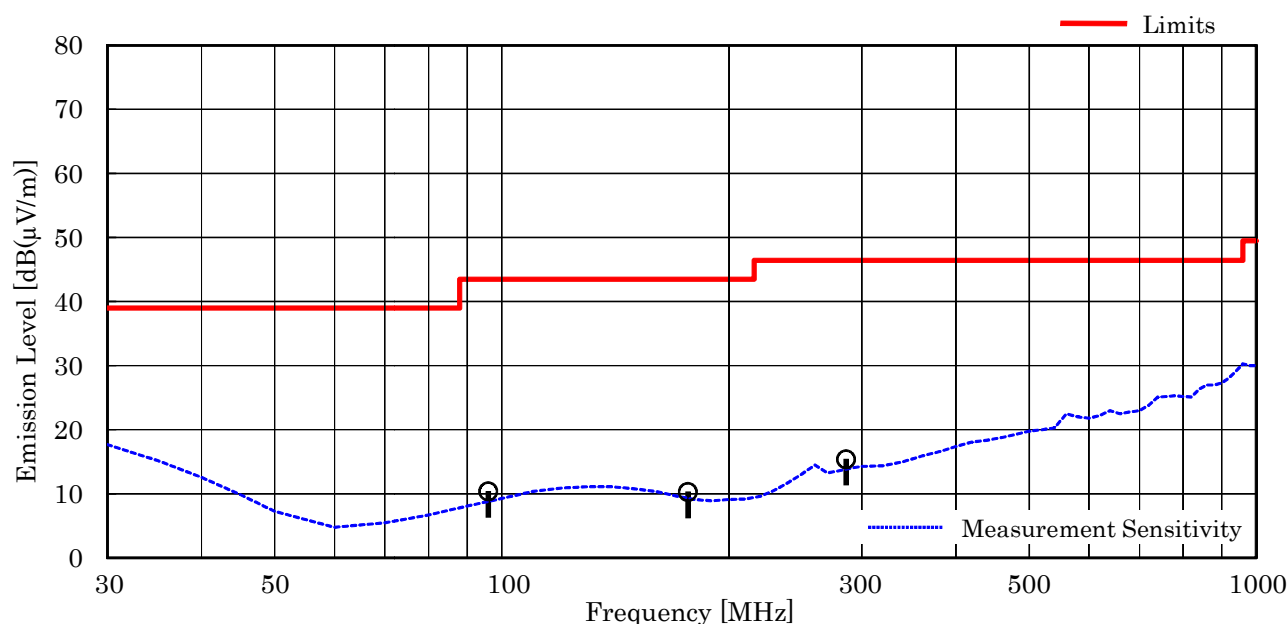
Test Date: March 22, 2016

Test condition : LAN Print Mode

Temp.: 20 °C, Humi: 51 %

Antenna pole : Horizontal

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]	Limits [dB(μV/m)]	Results [dB(μV/m)]	Margin [dB]	Remarks
30.24	19.1	-28.5	< 27.0	39.0	< 17.6	> +21.4	-
38.14	14.9	-28.3	< 27.0	39.0	< 13.6	> +25.4	-
95.97	9.5	-27.6	28.5	43.5	10.4	+33.1	-
176.45	9.1	-26.9	28.1	43.5	10.3	+33.2	-
276.92	12.6	-26.1	< 27.0	46.4	< 13.5	> +32.9	-
285.92	13.0	-26.1	28.5	46.4	15.4	+31.0	-



NOTES

1. Test Distance : 10 m
2. The spectrum was checked from 30 MHz to 1000 MHz.
3. The correction factor is composed of cable loss, pad attenuation and/or amplifier gain.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. Calculated result at 30.24 MHz, as the worst point shown on underline:

$$\text{Antenna Factor} + \text{Coorection Factor} + \text{Meter Reading} = 19.1 + (-28.5) + <27.0 = <17.6 \text{ dB}(\mu\text{V/m})$$
 Antenna Height : 400 cm, Turntable Angle : 0 °
7. Test receiver setting(s) : CISPR QP 120 kHz [QP : Quasi-Peak]

Test voltage : 120VAC 60Hz

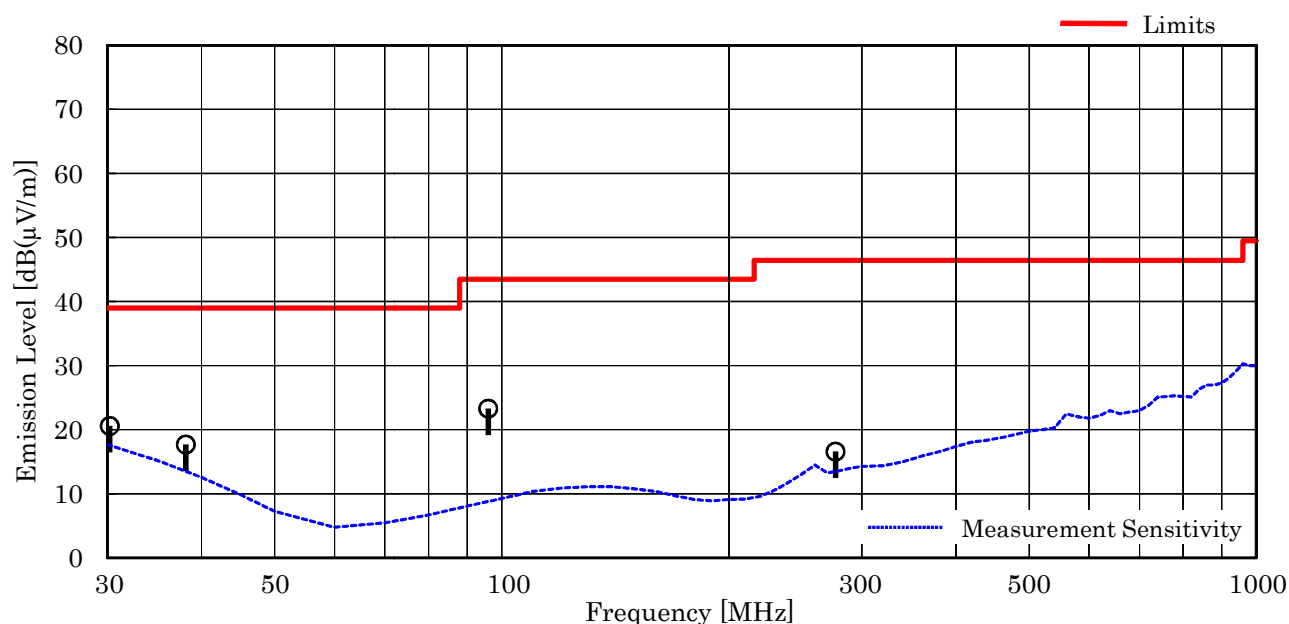
Test condition : LAN Print Mode

Antenna pole : Vertical

Test Date: March 22, 2016

Temp.: 20 °C, Humi: 51 %

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]	Limits [dB(μV/m)]	Results [dB(μV/m)]	Margin [dB]	Remarks
30.24	19.1	-28.5	30.0	39.0	20.6	+18.4	-
38.14	14.9	-28.3	31.1	39.0	17.7	+21.3	-
95.97	9.5	-27.6	41.4	43.5	23.3	+20.2	-
176.45	9.1	-26.9	< 27.0	43.5	< 9.2	> +34.3	-
276.92	12.6	-26.1	30.1	46.4	16.6	+29.8	-
285.92	13.0	-26.1	< 27.0	46.4	< 13.9	> +32.5	-



NOTES

1. Test Distance : 10 m
2. The spectrum was checked from 30 MHz to 1000 MHz.
3. The correction factor is composed of cable loss, pad attenuation and/or amplifier gain.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. Calculated result at 30.24 MHz, as the worst point shown on underline:

$$\text{Antenna Factor} + \text{Coorection Factor} + \text{Meter Reading} = 19.1 + (-28.5) + 30.0 = 20.6 \text{ dB}(\mu\text{V/m})$$
 Antenna Height : 223 cm, Turntable Angle : 0 °
7. Test receiver setting(s) : CISPR QP 120 kHz [QP : Quasi-Peak]

7.2.5 Test Setup (Photographs)

– Front View –



– Rear View –

Photograph present configuration with maximum emission

7.3 Radiated Emission 1 GHz – 2 GHz

For the requirements, ☒ - Applicable [☒ - Tested. ☐ - Not tested by applicant request.]
☐ - Not Applicable

7.3.1 Test Results

For the standard, ☒ - Passed ☐ - Failed ☐ - Not judged

Min. Limit Margin (Average) 15.7 dB at 3761.3 MHz

Uncertainty of Measurement Results 1 GHz – 6 GHz ± 4.7 dB(2 σ)

Test Distance 3.0 m

Remarks : LAN Print mode (Horizontal)

7.3.2 Test Instruments

Anechoic Chamber A2				
Type	Model	Serial No. (ID)	Manufacturer	Cal. Due
Test Receiver	ESU 26	100170 (A-6)	Rohde & Schwarz	2016/04/25
Pre-Amplifier	TPA0108-40	1008 (A-38)	TOYO	2016/04/15
Double-Ridge Guide Horn Antenna	3117	00126730 (C-73)	ETS LINDGREN	2016/11/18
RF Cable	S 10162 B-11 etc.	--- (H-4)	HUBER+SUHNER	2016/04/15

NOTE : The calibration interval of the above test instruments is 12 months.

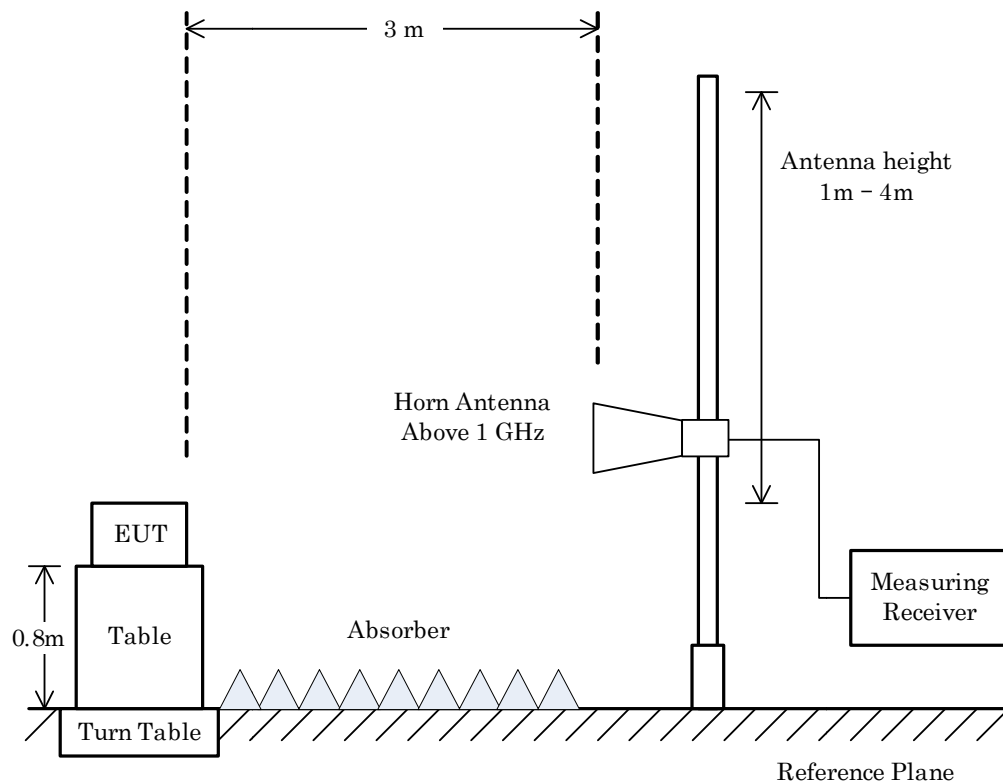
7.3.3 Test Method and Test Setup (Diagrammatic illustration)

The preliminary tests were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.

This configurations was used for the final tests.

(Reference divisional instruction No. G70364C)



7.3.4 Test Data

Test voltage : 120VAC 60Hz

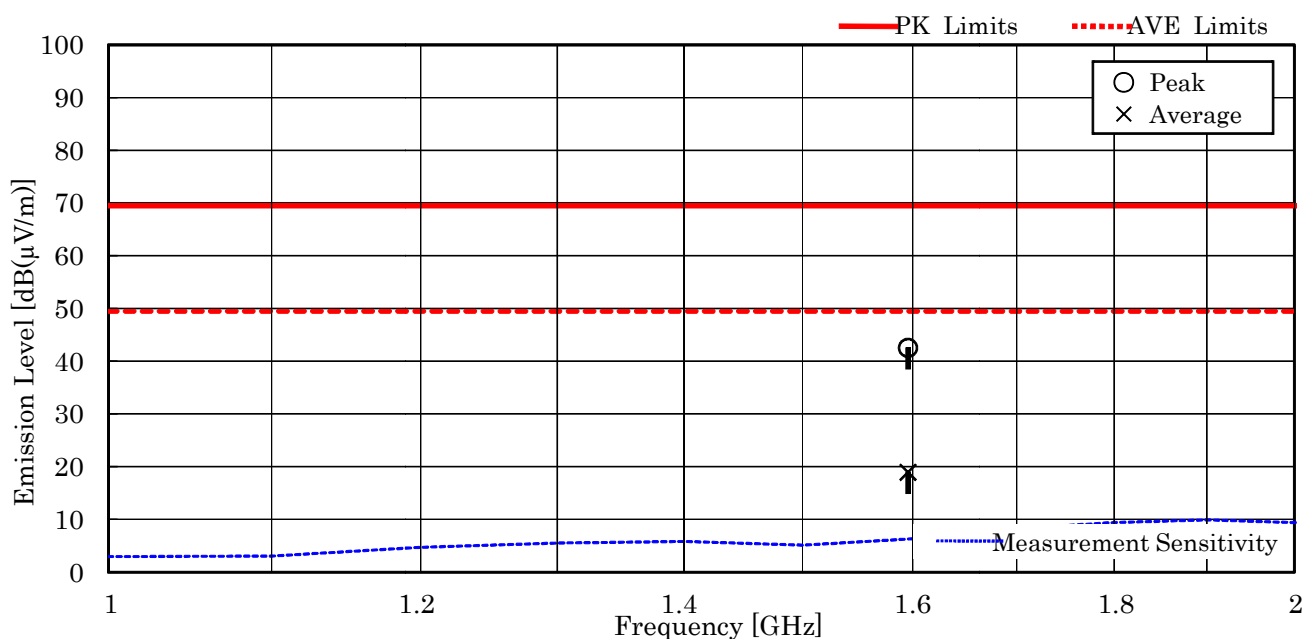
Test Date: March 11, 2016

Test condition : USB Print mode

Temp.: 21 °C, Humi: 37 %

Antenna pole : Horizontal

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]		Results [dB(μV/m)]		Margin [dB]		Remarks
			PK	AVE	PK	AVE	PK	AVE	PK	AVE	
1595.6	28.1	-51.8	66.2	42.6	69.5	49.5	42.5	18.9	+27.0	+30.6	-

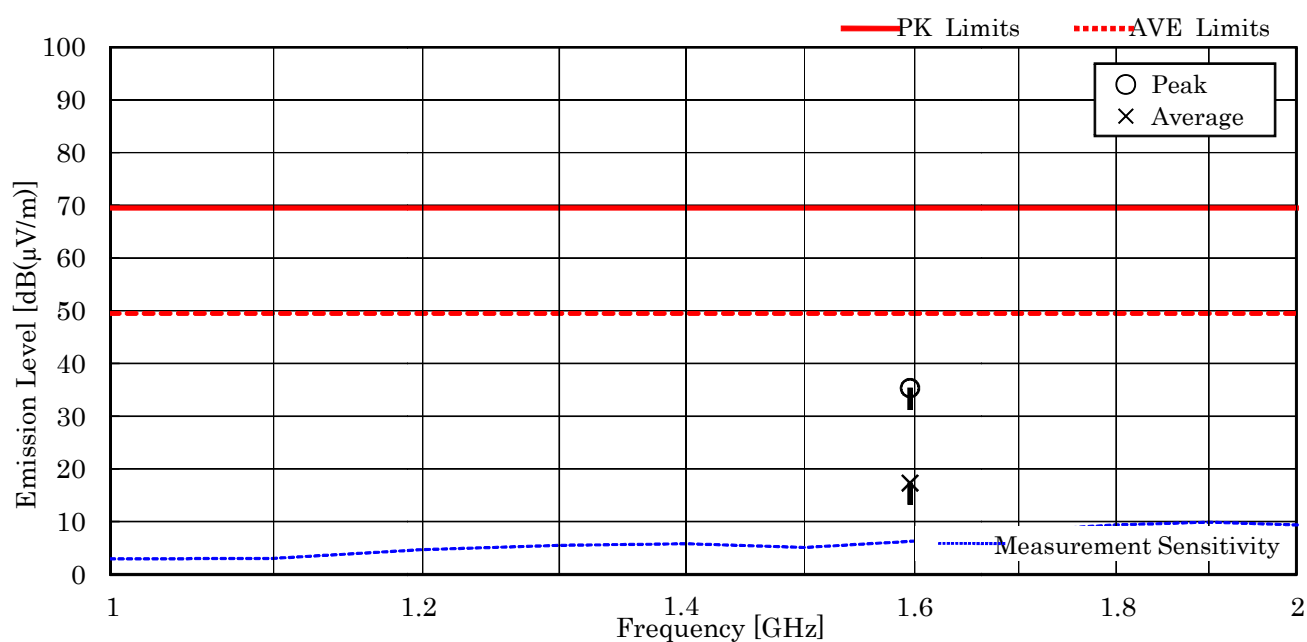


NOTES

1. Test Distance : 3 m (Regulate Distance : 10 m)
2. The spectrum was checked from 1 GHz to 2 GHz.
3. The correction factor is composed of cable loss, pad attenuation, amplifier gain and/or distance conversion.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. The symbol of "--" means "not applicable".
7. Calculated result at 1595.6 MHz, as the worst point shown on underline:
 Antenna Factor + Correction Factor + Meter Reading (PK) = 28.1 + (-51.8) + 66.2 = 42.5 dB(μV/m)
 Antenna Height : 100 cm, Turntable Angle : 320 °
8. PK : Peak Detector / AVE : Average Detector
9. Test receiver setting(s) : Peak 1 MHz / Average 1 MHz

Test voltage : 120VAC 60HzTest Date: March 11, 2016Test condition : USB Print modeTemp.: 21 °C, Humi: 37 %Antenna pole : Vertical

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]		Results [dB(μV/m)]		Margin [dB]		Remarks
			PK	AVE	PK	AVE	PK	AVE	PK	AVE	
1595.6	28.1	-51.8	59.0	41.0	69.5	49.5	35.3	17.3	+34.2	+32.2	-



NOTES

1. Test Distance : 3 m (Regulate Distance : 10 m)
2. The spectrum was checked from 1 GHz to 2 GHz.
3. The correction factor is composed of cable loss, pad attenuation, amplifier gain and/or distance conversion.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. The symbol of "--" means "not applicable".
7. Calculated result at 1595.6 MHz, as the worst point shown on underline:
 $\text{Antenna Factor} + \text{Correction Factor} + \text{Meter Reading (AVE)} = 28.1 + (-51.8) + 41.0 = 17.3 \text{ dB}(\mu\text{V/m})$
 Antenna Height : 100 cm, Turntable Angle : 175 °
8. PK : Peak Detector / AVE : Average Detector
9. Test receiver setting(s) : Peak 1 MHz / Average 1 MHz

Test voltage : 120VAC 60Hz

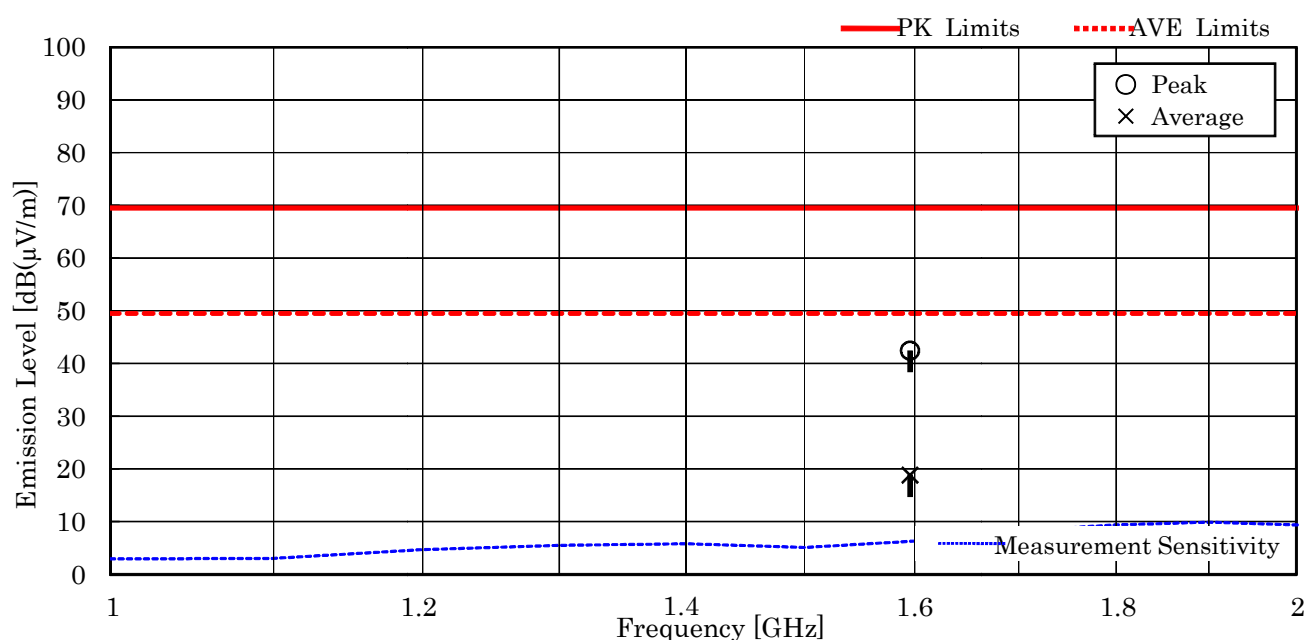
Test Date: March 11, 2016

Test condition : LAN Print mode

Temp.: 21 °C, Humi: 37 %

Antenna pole : Horizontal

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]		Results [dB(μV/m)]		Margin [dB]		Remarks
			PK	AVE	PK	AVE	PK	AVE	PK	AVE	
1595.6	28.1	-51.8	66.1	42.5	69.5	49.5	42.4	18.8	+27.1	+30.7	-



NOTES

1. Test Distance : 3 m (Regulate Distance : 10 m)
2. The spectrum was checked from 1 GHz to 2 GHz.
3. The correction factor is composed of cable loss, pad attenuation, amplifier gain and/or distance conversion.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. The symbol of "--" means "not applicable".
7. Calculated result at 1595.6 MHz, as the worst point shown on underline:

$$\text{Antenna Factor} + \text{Correction Factor} + \text{Meter Reading (PK)} = 28.1 + (-51.8) + 66.1 = 42.4 \text{ dB}(\mu\text{V/m})$$
 Antenna Height : 100 cm, Turntable Angle : 323 °
8. PK : Peak Detector / AVE : Average Detector
9. Test receiver setting(s) : Peak 1 MHz / Average 1 MHz

Test voltage : 120VAC 60Hz

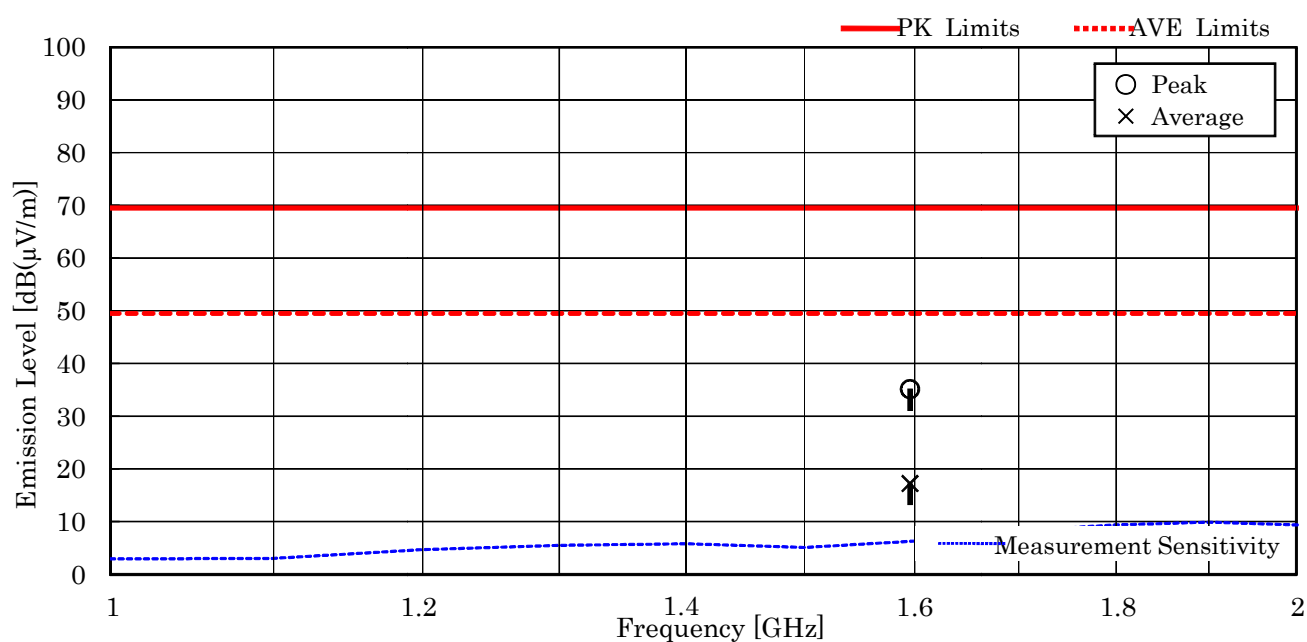
Test Date: March 11, 2016

Test condition : LAN Print mode

Temp.: 21 °C, Humi: 37 %

Antenna pole : Vertical

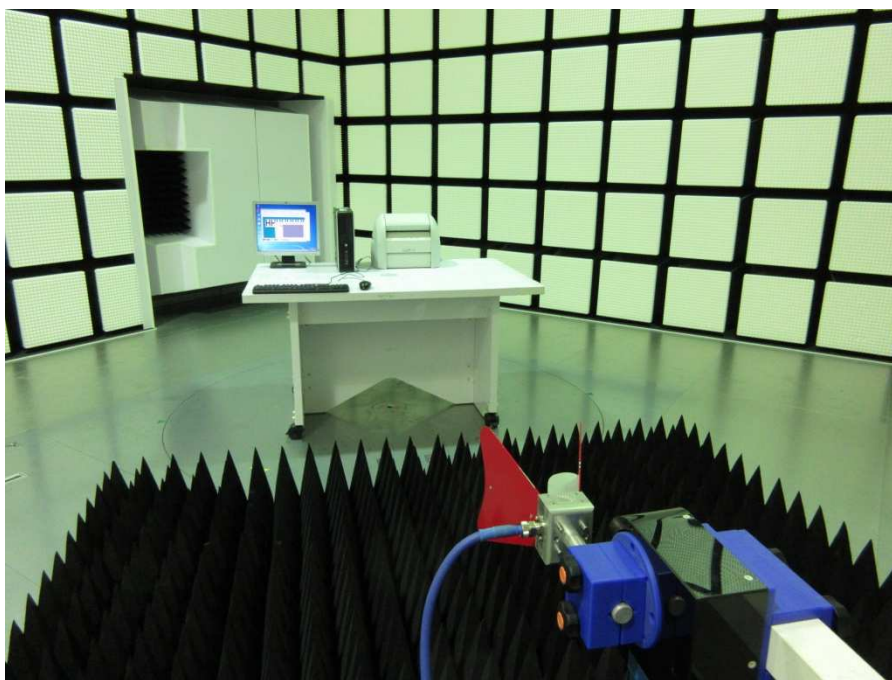
Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]		Results [dB(μV/m)]		Margin [dB]		Remarks
			PK	AVE	PK	AVE	PK	AVE	PK	AVE	
1595.6	28.1	-51.8	58.8	40.9	69.5	49.5	35.1	17.2	+34.4	+32.3	-



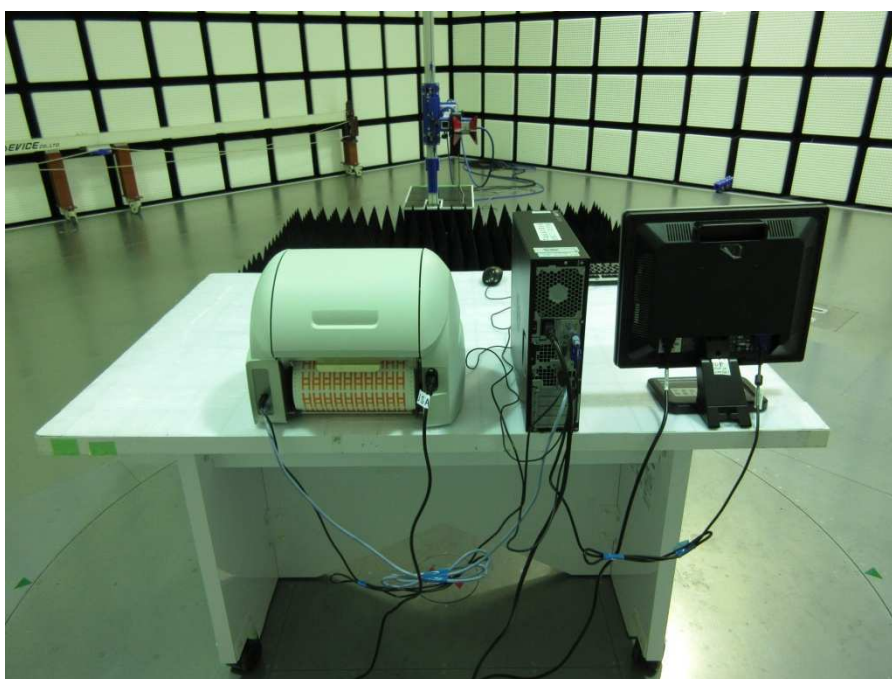
NOTES

- Test Distance : 3 m (Regulate Distance : 10 m)
- The spectrum was checked from 1 GHz to 2 GHz.
- The correction factor is composed of cable loss, pad attenuation, amplifier gain and/or distance conversion.
- The symbol of "<" means "or less".
- The symbol of ">" means "more than".
- The symbol of "--" means "not applicable".
- Calculated result at 1595.6 MHz, as the worst point shown on underline:
 $\text{Antenna Factor} + \text{Correction Factor} + \text{Meter Reading (AVE)} = 28.1 + (-51.8) + 40.9 = 17.2 \text{ dB}(\mu\text{V/m})$
 Antenna Height : 100 cm, Turntable Angle : 172 °
- PK : Peak Detector / AVE : Average Detector
- Test receiver setting(s) : Peak 1 MHz / Average 1 MHz

7.3.5 Test Setup (Photographs)



– Front View –



– Rear View –

Photograph present configuration with maximum emission