JQA File No. : KL80140073
Issue Date : July 15, 2014

TEST REPORT

Applicant	:	Sharp Corporation, CS & Env. Promotion Div. Quality Compliance Dept.
Address	:	22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Products	:	Household Microwave Oven
Model No.	:	R-830BK
Serial No.	:	00002
FCC ID	:	APYDMR0176
Test Standard	:	CFR 47 FCC Rules and Regulations Part 18
Test Results	:	**Passed**
Date of Test	:	May 28~July 9, 2014

ilac-MRA VLAC Lab Accreditation VLAC-001-2

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.
- The contents of this test report cannot be used for the purposes, such as advertisement for consumers.
- 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.

TABLE OF CONTENTS

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	:	Sharp Appliances (Thailand) Ltd. 64 Moo 5, Tambol Bangsamuk, Amphur Bangpakong Chachoengsao, Province, Thailand
2.	Products	:	Household Microwave Oven
3.	Model No.	:	R-830BK
4.	Serial No.	:	00002
5.	Type of Magnetron	:	2M303H(L) by TOSHIBA
6.	Product Type	:	Prototype
7.	Date of Manufacture	:	May, 2014
8.	Power Rating	:	120VAC 60Hz, 13.8A
9.	Rated RF Power Output	:	900 W
10.	EUT Grounding	:	Grounded at the plug end of the power line
11.	Category	:	Any type unless otherwise specified (miscellaneous)
		:	Consumer device
12.	EUT Authorization	:	Certification
13.	Operating Frequency	:	2450 MHz (ISM frequency)
14.	Upper Frequency of Measurement	:	25.0 GHz
15.	Received Date of EUT	:	May 28, 2014

2 Summary of Test Results

Applied Standard : CFR 47 FCC Rules and Regulations Part 18
Industrial, Scientific, and Medical Equipment

☒ - 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:

Shigeru Kinoshita
Deputy Manager
JQA KITA-KANSAI Testing Center
SAITO EMC Branch

Tested by:

Akio Hosoda
Advisor
JQA KITA-KANSAI Testing Center
SAITO EMC Branch

3 Test Procedure

The tests documented in this report were performed in accordance with MP-5.
FCC/OET MP-5(1986)
FCC Methods of Measurements of Radio Noise Emissions from Industrial Scientific, and Medical equipment

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, 2014)
VCCI Registration No.	:	A-0002 (Expiry date : March 30, 2014)
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 20, 2014)

Accredited as conformity assessment body for Japan electrical appliances and material law by METI. (Expiry date : February 22, 2016)

6 Details of the Equipment Under Test

6.1 Operating Condition

Power Supply Voltage : 120VAC 60Hz

Operation Mode

The EUT is tested with the dummy load located in the center of the oven.
The load consists of a quantity of tap water in a beaker, which is as follows.

Power output measurement	: 1000 ml
ISM frequency measurement	: 1000 ml
Conducted powerline measurement	: 1000 ml
Radiated emission measurement	: 700 ml

For measurement of radiation on 2nd and 3rd harmonic, two loads, one of 700 ml and the other of 300 ml, of water are used. Each load is tested both with the beaker located in the center of the oven and with it in the right front corner.

Clock Frequency

Magnetron	: 2450 MHz
LSI	: 4 MHz

6.2 Test Configuration

The equipment under test (EUT) consists of :

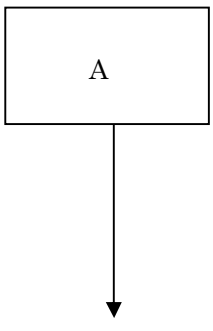
	Item	Manufacturer	Model No.	Serial No.	FCC ID
A	Household Microwave Oven	Sharp Appliances (Thailand) Ltd.	R-830BK	00002	APYDMR0176

The auxiliary equipment used for testing :
None

Type of Cable:

No.	Description	Identification (Manu. etc.)	Connector Shielded	Cable Shielded	Ferrite Core	Length (m)
1	AC Power Cable	--	--	No	No	1.05

6.3 Test Arrangement (Drawings)



7 Details of the Test Item

7.1 Power Output

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

Power Output (calorimetric method)			777.4	watts
Field Strength Limit	31.2	µV/m at	300	meters
Field Strength Limit	29.9	dB(µV/m) at	300	meters
AC Power Input			1601.0	watts

Remarks : Field strength may not exceed 10 µV/m at 1600 meters.

7.1.1 Test Site and Instruments

7.1.1.1 Test Site

KITA-KANSAI Testing Center

7.1.1.2 Test Instruments

Type	Model	Manufacturer	ID No.	Last Cal.	Interval
Digital Power Meter	253321	YOKOGAWA	08011090	2014/4	1 Year
Stopwatch	SIII-5000	SEIKO	Q47097350	2014/3	1 Year
Thermometer	245506	YOKOGAWA	Q47097361	2014/4	1 Year

7.1.2 Test Procedure

The power output is measured by the calorimetric method, computing from the observed temperature rise of the load over a period of time. The measured value of power output is used to determine the allowable out-of-band field strength.

7.1.3 Test Data

Test Date: June 17, 2014
Temp.: 23 °C, Humi: 59 %

The power output was measured by the calorimetric method, computing the power output from the observed temperature rise of the load over a period of time.

Rated RF Power: 900W
Load(water): 1000ml
Time: 47sec $T = \frac{4.2 \times Load(ml) \times 10}{RFPower}$

	t_1(before test)		t_2(after test)	$t_2 - t_1$	RF Power**
1st	9.5℃	→	18.1℃	8.6℃	
Average				8.60℃	768.5W
2nd	9.5℃	→	18.3℃	8.8℃	
Average				8.80℃	786.4W
3rd	9.8℃	→	18.4℃	8.6℃	
Average				8.60℃	768.5W
4th	9.0℃	→	17.9℃	8.9℃	
Average				8.90℃	795.3W
5th	9.0℃	→	17.6℃	8.6℃	
Average				8.60℃	768.5W

$$**RFPower = \frac{4.2 \times Load(ml) \times (t_2 - t_1)}{T}$$

Results of Average RF Power: 777.4W

The limit of the radiated emission at 300m : $25\sqrt{777.4/500}$[μV/m]=31.2[μV/m]
$25\sqrt{777.4/500}$[μV/m]=29.9[dB(μV/m)]

The AC power input to the oven is measured to determine if the oven is operating in accordance with the manufacturer's specifications.

Rated Power Supply:AC120V, 60Hz, 13.8A
Measured Input Power :AC120V,60Hz,14.148A, 1601W

7.2 ISM Frequency

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

For the limits, ☒ **- Passed** ☐ **- Failed** ☐ **- Not judged**

7.2.1 Test Site and Instruments

7.2.1.1 Test Site

KITA-KANSAI Testing Center SAITO EMC Branch

☐ - Anechoic chamber A1
☐ - Measurement room M1
☐ - Measurement room M3
☐ - Shielded room S1
☐ - KITA-KANSAI Shielded room
☒ - Anechoic chamber A2
☐ - Measurement room M2
☐ - Shielded room S2
☐ - KITA-KANSAI Anechoic chamber

7.2.1.2 Test Instruments

Type	Model	Manufacturer	ID No.	Last Cal.	Interval
Test Receiver	ESU 26	Rohde & Schwarz	A-6	2014/5	1 Year
Horn Antenna	91889-2	EATON	C-41-2	2014/6	1 Year
Attenuator	2-10	Weinschel	D-79	2013/11	1 Year
RF Cable	SUCOFLEX104	SUHNER	C-67	2014/1	1 Year

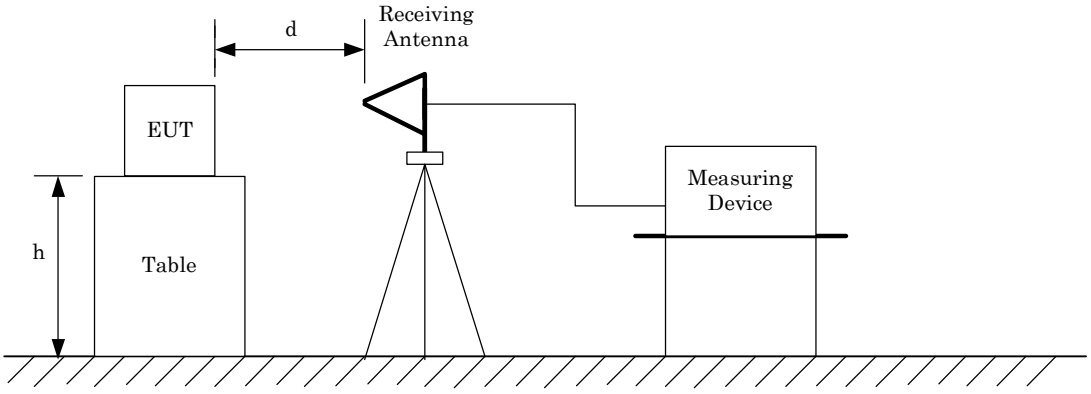
7.2.2 Test Procedure

For the EUT was operated with a fundamental frequency in one of the designated band listed in International Telecommunication Union for use as ISM frequencies, the frequency was checked with measuring equipment.

The variation of frequency with time, starting with the EUT and load at the room temperature and continuing until the load quantity has been reduced by evaporation to approximately 20 % of the original quantity. This test is made with nominal rated ac supply voltage.

The variation of frequency for line voltage variation from 80 % to 125 % of nominal rated voltage, starting from the EUT warm from at least 10 minutes use, with the load at room temperature at the beginning of the test.

– Side View –



NOTE h : Arbitrary height
d : Arbitrary distance

7.2.3 Test Data

Test Date : July 9, 2014
Temp. : 26°C Humi. :65%

The maximum frequency deviation was measured at -26dB with respect to the maximum level.

Maximum Frequency Deviation[MHz]		Voltage Variations	Remarks
Lower Frequency	Upper Frequency		
2432.9	2474.4	96.0V(80%)	A
2410.6	2477.5	120.0V(100%)	A
2411.6	2473.8	150.0V(125%)	A

The results were within 2450MHz±50MHz.

Remarks

	Detector Function	RES B.W.	V.B.W.	Sweep Time	Span
A	Peak	100 kHz	100 kHz	AUTO	200 MHz

7.3 AC Powerline Conducted Emission

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

For the limits, ☒ - **Passed** ☐ - **Failed** ☐ - **Not judged**

7.3.1 Worst Point and Measurement Uncertainty

Min. Limit Margin (Quasi-Peak) 11.4 dB at 0.24 MHz

Uncertainty of Measurement Results +/-2.7 dB(2σ)

Remarks : _____

7.3.2 Test Site and Instruments

7.3.2.1 Test Site

KITA-KANSAI Testing Center SAITO EMC Branch

☒ - Anechoic chamber A1
☐ - Measurement room M1
☐ - Measurement room M2
☐ - Measurement room M3
☐ - Shielded room S1
☒ - Shielded room S2
☐ - KITA-KANSAI Shielded room
☐ - KITA-KANSAI Anechoic chamber

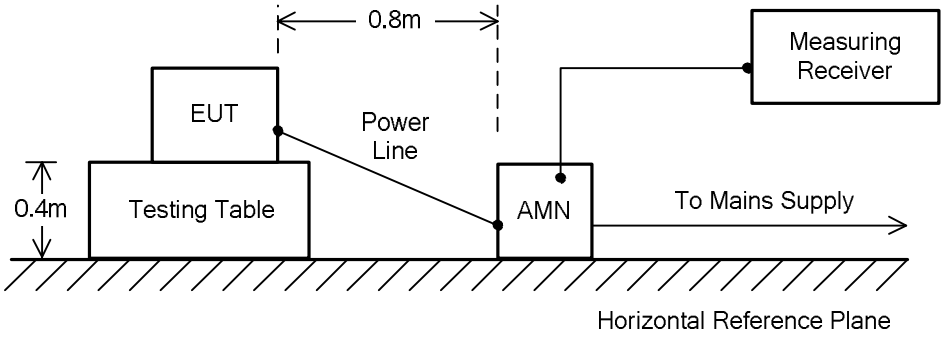
7.3.2.2 Test Instruments

Type	Model	Manufacturer	ID No.	Last Cal.	Interval
Test Receiver	ESCI	Rohde & Schwarz	A-42	2013/11	1 Year
AMN (main)	KNW-407FR	Kyoritsu	D-103	2013/10	1 Year
RF Cable	RG223/U	SUHNER	H-9	2013/7	1 Year

7.3.3 Test Procedure

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)

– Side View –



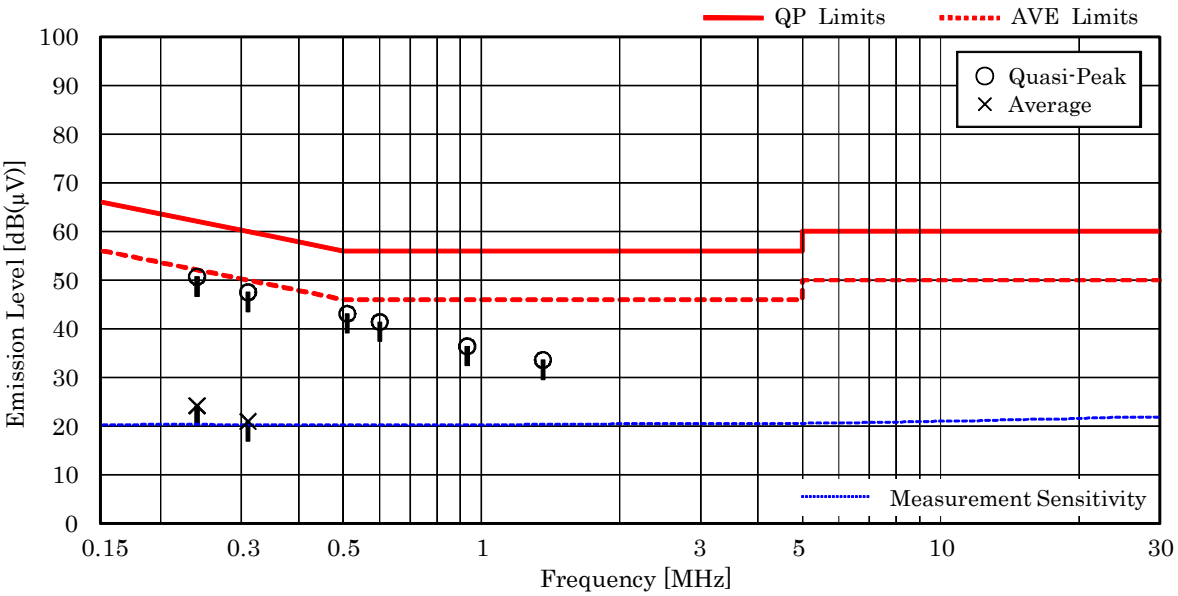
NOTE
AMN : Artificial Mains Network

Typical Arrangement

7.3.4 Test Data

Test Date: May 28, 2014
Temp.: 26 °C, Humi.: 39 %

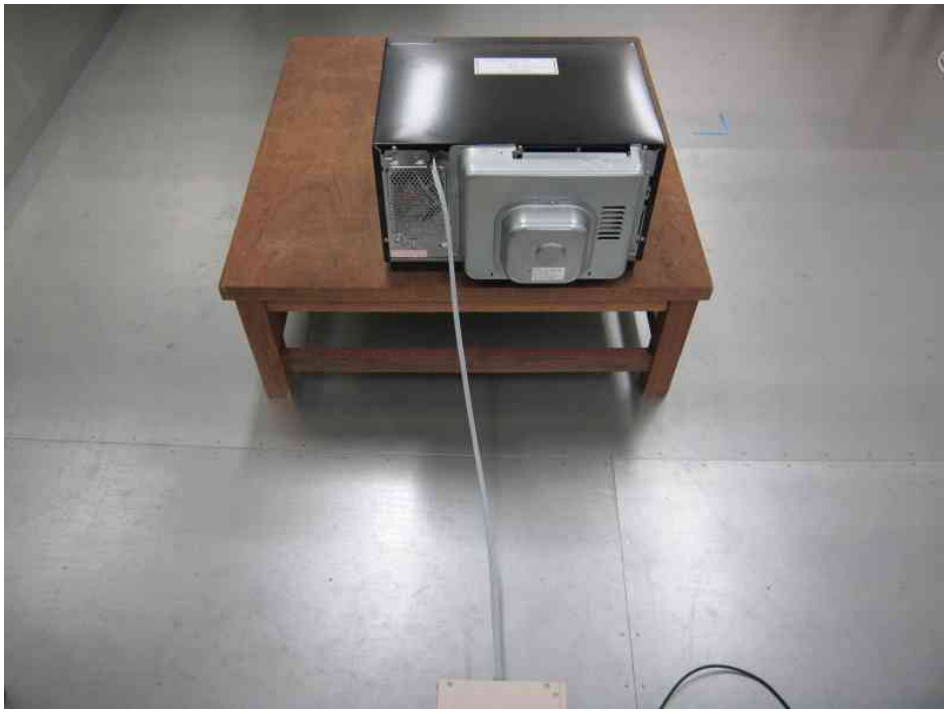
Frequency [MHz]	Corr. Factor [dB]	Meter Readings [dB(μV)] VA QP	VA AVE	VB QP	VB AVE	Limits [dB(μV)] QP	Limits [dB(μV)] AVE	Results [dB(μV)] QP	Results [dB(μV)] AVE	Margin [dB]	Remarks
0.24	10.3	40.4	13.9	33.8	--	62.1	52.1	50.7	24.2	+11.4	-
0.31	10.3	35.9	--	37.2	10.7	60.0	50.0	47.5	21.0	+12.5	-
0.51	10.3	32.8	< 10.0	32.7	< 10.0	56.0	46.0	43.1	< 20.3	+12.9	-
0.60	10.3	31.1	--	21.9	--	56.0	46.0	41.4	--	+14.6	-
0.93	10.3	25.0	--	26.1	--	56.0	46.0	36.4	--	+19.6	-
1.36	10.3	10.0	--	23.3	--	56.0	46.0	33.6	--	+22.4	-



NOTES
1. The spectrum was checked from 0.15 MHz 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 0.24 MHz, as the worst point shown on underline:
   Correction Factor + Meter Reading = 10.3 + 40.4 = 50.7 dB(μV)
7. QP : Quasi-Peak Detector / AVE : Average Detector
8. Test receiver setting(s) : CISPR QP 9 kHz / Average 9 kHz

7.3.5 Test Setup (Photographs)

AC Powerline Conducted Emission



–Rear View–

–Side View –

Photograph present configuration with maximum emission

7.4 Radiated Emission (9kHz-30MHz)

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

For the limits, ☒ - **Passed** ☐ - **Failed** ☐ - **Not judged**

7.4.1 Worst Point and Measurement Uncertainty

Min. Limit Margin (Average) 12.9 dB at 0.014 MHz

Uncertainty of Measurement Results 0.009 MHz – 30 MHz +/- 2.0 dB(2σ)

Test Distance 10 m

Remarks :

7.4.2 Test Site and Instruments

7.4.2.1 Test Site

KITA-KANSAI Testing Center SAITO EMC Branch

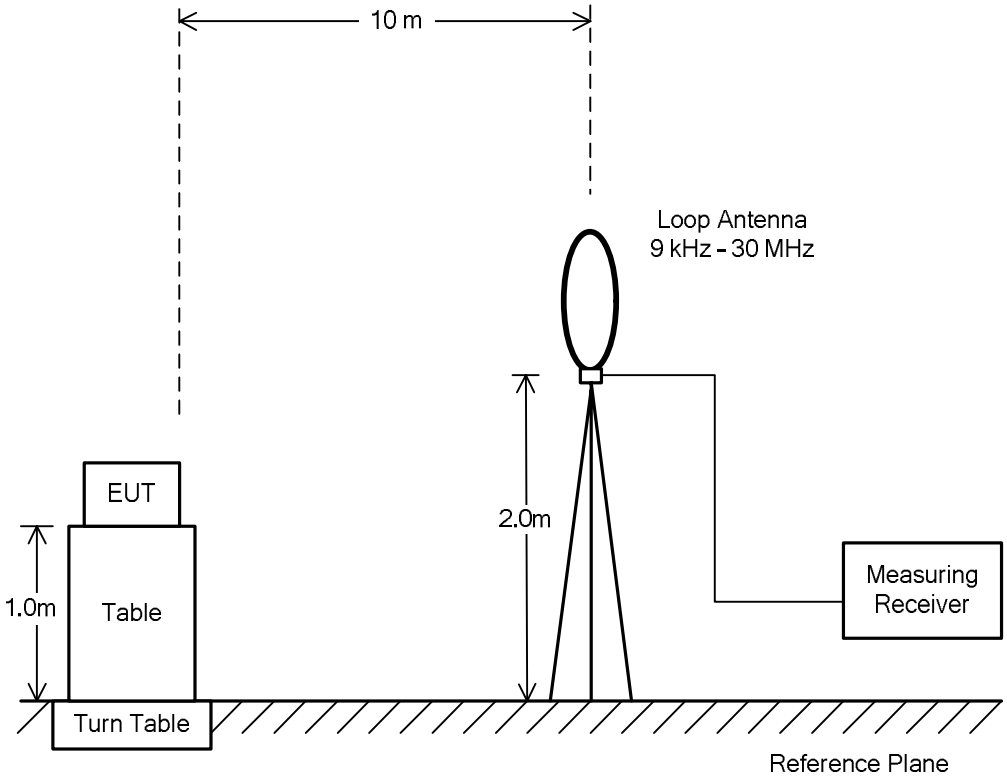
☒ - Anechoic chamber A1 ☐ - Anechoic chamber A2

7.4.2.2 Test Instruments

Type	Model	Manufacturer	ID No.	Last Cal.	Interval
Test Receiver	ESCI 7	Rohde & Schwarz	A-8	2014/1	1 Year
Loop Antenna	HFH2-Z2	Rohde & Schwarz	C-3	2013/8	1 Year
RF Cable	S 10162 B-11 etc.	SUHNER	H-3	2014/4	1 Year
RF Cable	RG213/U	SUHNER	H-29	2013/8	1 Year

7.4.3 Test Method and Test Setup (Diagrammatic illustration)

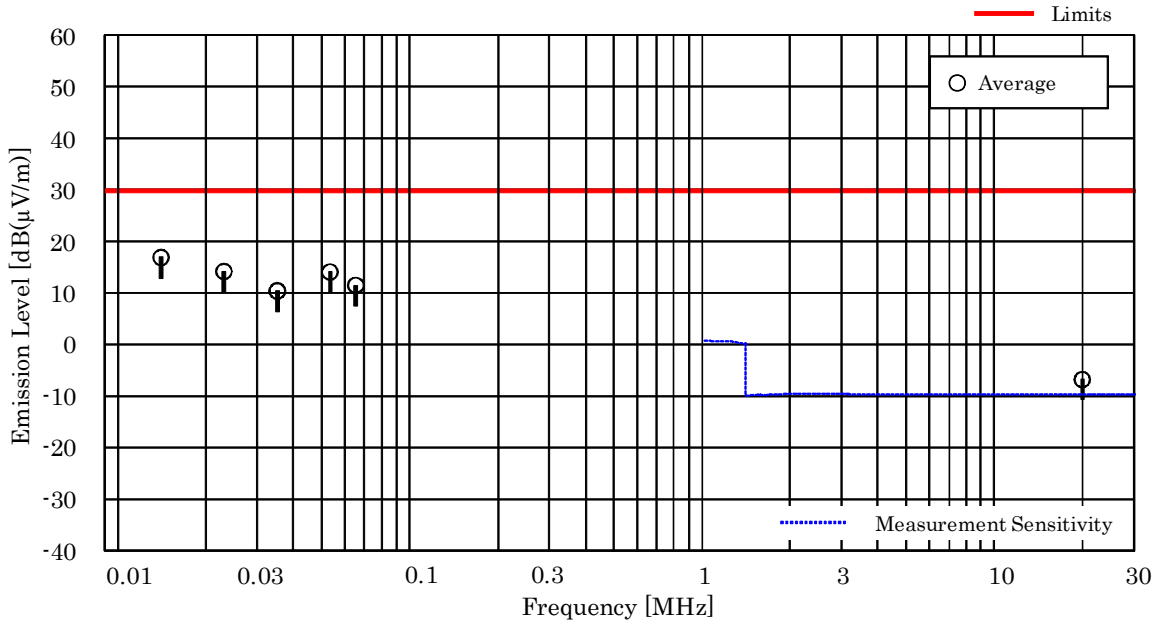
The preliminary tests were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.
The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.
This configurations was used for the final tests.
(Reference divisional instruction No. G70364B)



7.4.4 Test Data

Test Date: June 3, 2014
Temp.: 26 °C, Humi: 47 %

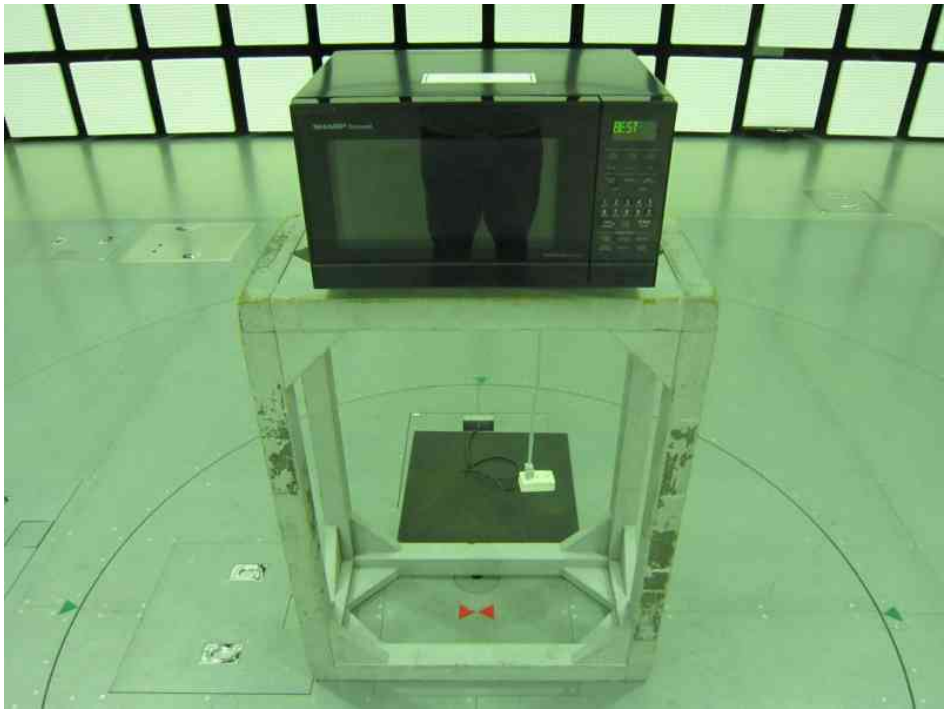
Frequency [MHz]	Correction Factor [dB(1/m)]	Meter Readings at 10 m [dB(μV)]	Limits at 300 m [dB(μV/m)]	Results at 300 m [dB(μV/m)]	Margin [dB]	Remarks
0.014	20.3	26.2	29.9	17.0	+12.9	-
0.023	20.2	23.6	29.9	14.3	+15.6	-
0.035	20.2	19.8	29.9	10.5	+19.4	-
0.053	20.1	23.6	29.9	14.2	+15.7	-
0.065	20.1	21.0	29.9	11.6	+18.3	-
1.00	19.8	< 0.0	29.9	< - 9.7	> +39.6	-
5.00	19.8	< 0.0	29.9	< - 9.7	> +39.6	-
10.00	19.6	< 0.0	29.9	< - 9.9	> +39.8	-
19.92	20.1	2.7	29.9	- 6.7	+36.6	-
30.00	20.8	< 0.0	29.9	< - 8.7	> +38.6	-



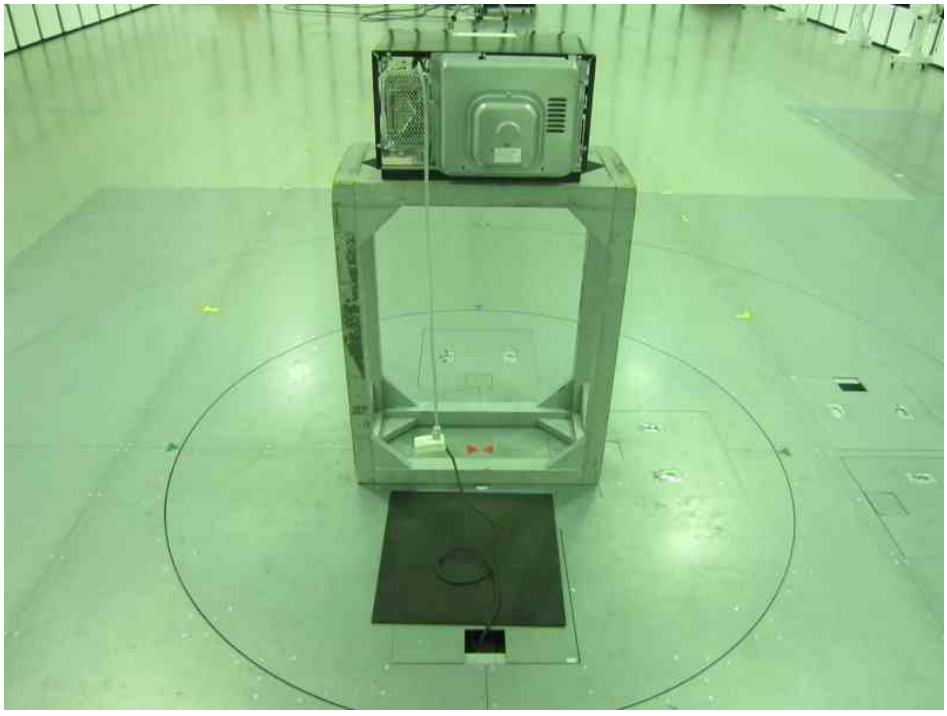
NOTES
1. Test Distance : 10 m (Specified Distance : 300 m)
2. The spectrum was checked from 9 kHz to 30 MHz.
3. The correction factor includes the antenna factor and the cable loss.
4. The symbol of "<" means "or less".
5. The symbol of ">" means "more than".
6. Calculated result at 0.01 MHz, as the worst point shown on underline:
   Correction Factor + Meter Reading = 20.3 + 26.2 = 46.5 dB(μV/m)
   Result at 300 m = -29.5 + 46.5 = 17.0 dB(μV/m) = 7.0 μV/m (Conversion Factor : 20dB/decade)
7. Test receiver setting(s) : Average 200 Hz (9 kHz - 150 kHz) / Average 9 kHz (150 kHz - 30 MHz)

7.4.5 Test Setup (Photographs)

Radiated Emission (9kHz – 30MHz)



– Front View –



– Rear View –

Photograph present configuration with maximum emission

7.5 Radiated Emission (30 MHz – 1000 MHz)

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

For the limits, ☒ - **Passed** ☐ - **Failed** ☐ - **Not judged**

7.5.1 Worst Point and Measurement Uncertainty

Min. Limit Margin (Average) >30.6 dB at 875.0 MHz

Uncertainty of Measurement Results 30 MHz – 200 MHz +/-4.7 dB(2σ)
200 MHz – 1000 MHz +/-4.2 dB(2σ)

Test Distance 10 m

Remarks : _____

7.5.2 Test Site and Test Instruments

7.5.2.1 Test Site

KITA-KANSAI Testing Center SAITO EMC Branch

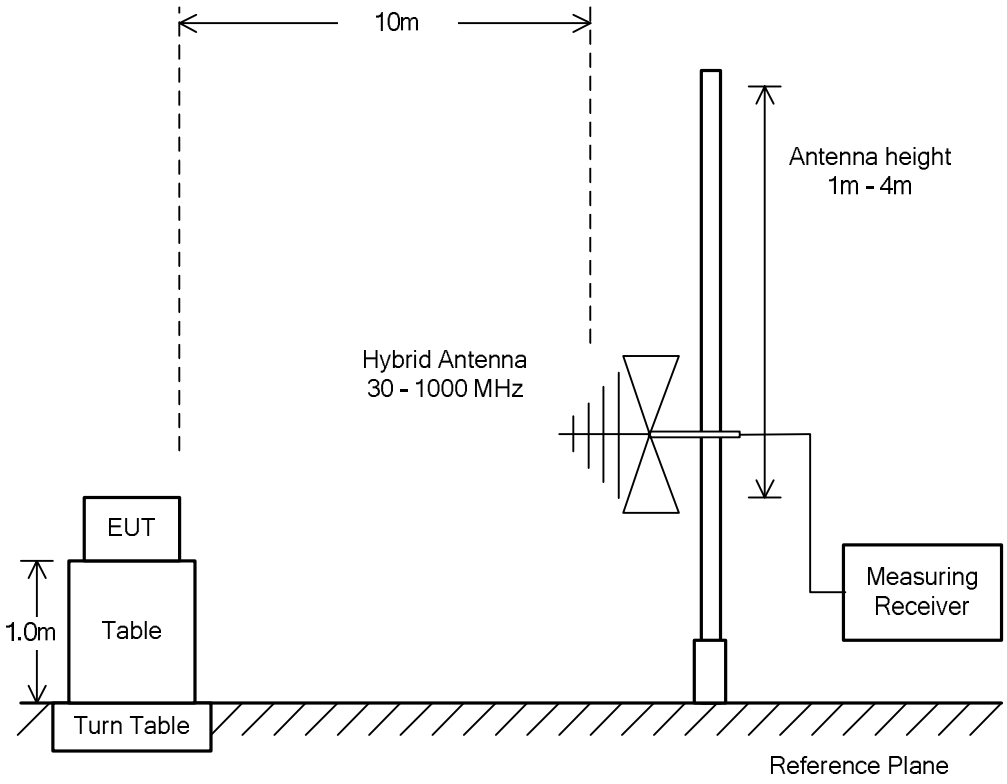
☒ - Anechoic chamber A1 ☐ - Anechoic chamber A2

7.5.2.2 Test Instruments

Type	Model	Manufacturer	ID No.	Last Cal.	Interval
Test Receiver	ESCI 7	Rohde & Schwarz	A-8	2014/1	1 Year
Pre-Amplifier	310N	SONOMA	A-16	2014/4	1 Year
Hybrid Antenna	CBL6111D	TESEQ	C-71	2013/11	1 Year
RF Cable	S 10162 B-11 etc.	SUHNER	H-3	2014/4	1 Year
Site Attenuation	--	----	H-14	2014/1	1 Year

7.5.3 Test Method and Test Setup (Diagrammatic illustration)

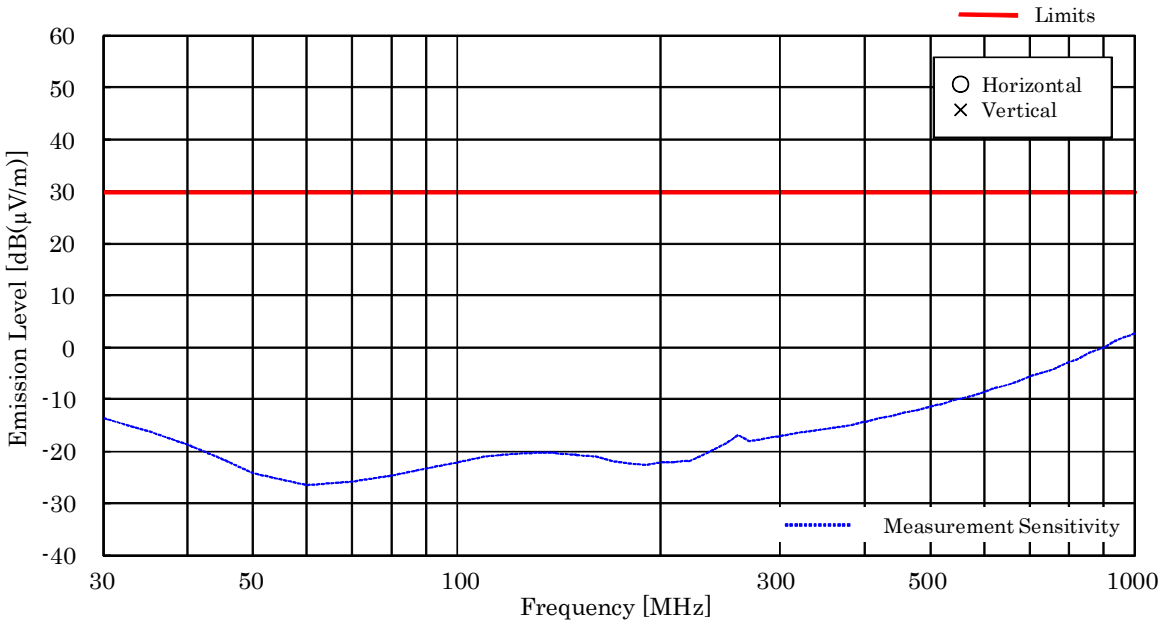
The preliminary tests were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.
The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.
This configurations was used for the final tests.
(Reference divisional instruction No. G70364B)



7.5.4 Test Data

Test Date: June 3, 2014
Temp.: 26 °C, Humi: 47 %

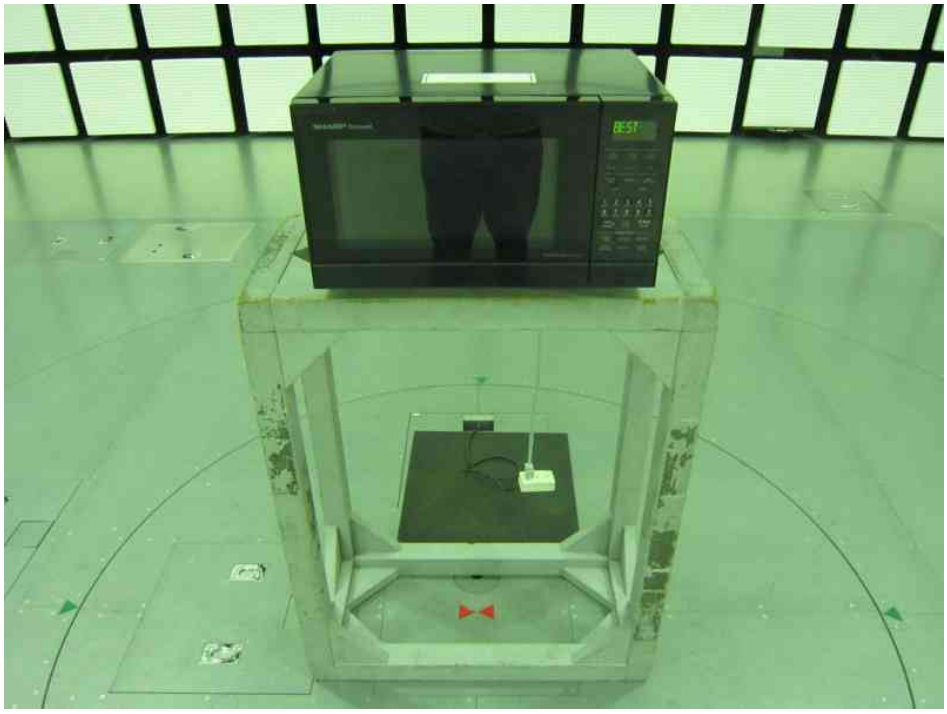
Frequency [MHz]	Antenna Factor [dB(1/m)]	Cable Loss [dB]	Meter Readings at 10 m [dB(μV)] Hori.	Vert.	Limits at 300 m [dB(μV/m)]	Results at 300 m [dB(μV/m)] Hori.	Vert.	Margin [dB]	Remarks
173.5	9.4	-26.9	< 25.0	< 25.0	29.9	< -22.0	< -22.0	> +51.9	-
248.3	12.1	-26.2	< 25.0	< 25.0	29.9	< -18.6	< -18.6	> +48.5	-
354.9	14.1	-25.2	< 25.0	< 25.0	29.9	< -15.6	< -15.6	> +45.5	-
356.0	14.2	-25.2	< 25.0	< 25.0	29.9	< -15.5	< -15.5	> +45.4	-
854.0	23.9	-20.7	< 25.0	< 25.0	29.9	< - 1.3	< - 1.3	> +31.2	-
875.0	24.3	-20.5	< 25.0	< 25.0	29.9	< - 0.7	< - 0.7	> +30.6	-



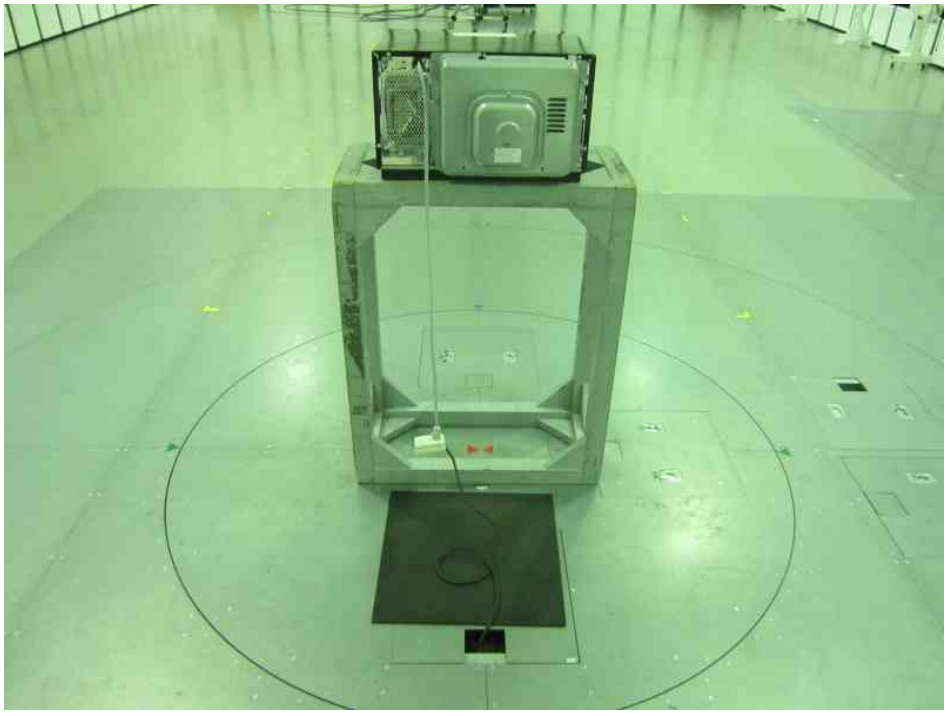
NOTES
1. Test Distance : 10 m (Specified Distance : 300 m)
2. The spectrum was checked from 30 MHz to 1000 MHz.
3. The symbol of "<" means "or less".
4. The symbol of ">" means "more than".
5. Calculated result at 875.0 MHz, as the worst point shown on underline:
   Antenna Factor + Cable Loss + Meter Reading = 24.3 + -20.5 + <25.0 = <28.8 dB(μV/m)
   Result at 300 m = -29.5 + <28.8 = <-0.7 dB(μV/m) = <0.9 μV/m (Conversion Factor : 20dB/decade)
6. Test receiver setting(s) : Average 120 kHz

7.5.5 Test Setup (Photographs)

Radiated Emission (30MHz – 1000MHz)



– Front View –



– Rear View –

Photograph present configuration with maximum emission

7.6 Radiated Emission (Above 1GHz)

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

For the limits, ☒ - **Passed** ☐ - **Failed** ☐ - **Not judged**

7.6.1 Worst Point and Measurement Uncertainty

Min. Limit Margin (Average) 3.7 dB at 7370.3 MHz

Uncertainty of Measurement Results
1 GHz – 6 GHz +/-4.6 dB(2σ)
6 GHz – 18 GHz +/-5.2 dB(2σ)
18 GHz – 40 GHz +/-5.4 dB(2σ)

Test Distance 3.0 m

Remarks : The measurement result is within the range of measurement uncertainty.

7.6.2 Test Site and Instruments

7.6.2.1 Test Site

KITA-KANSAI Testing Center SAITO EMC Branch

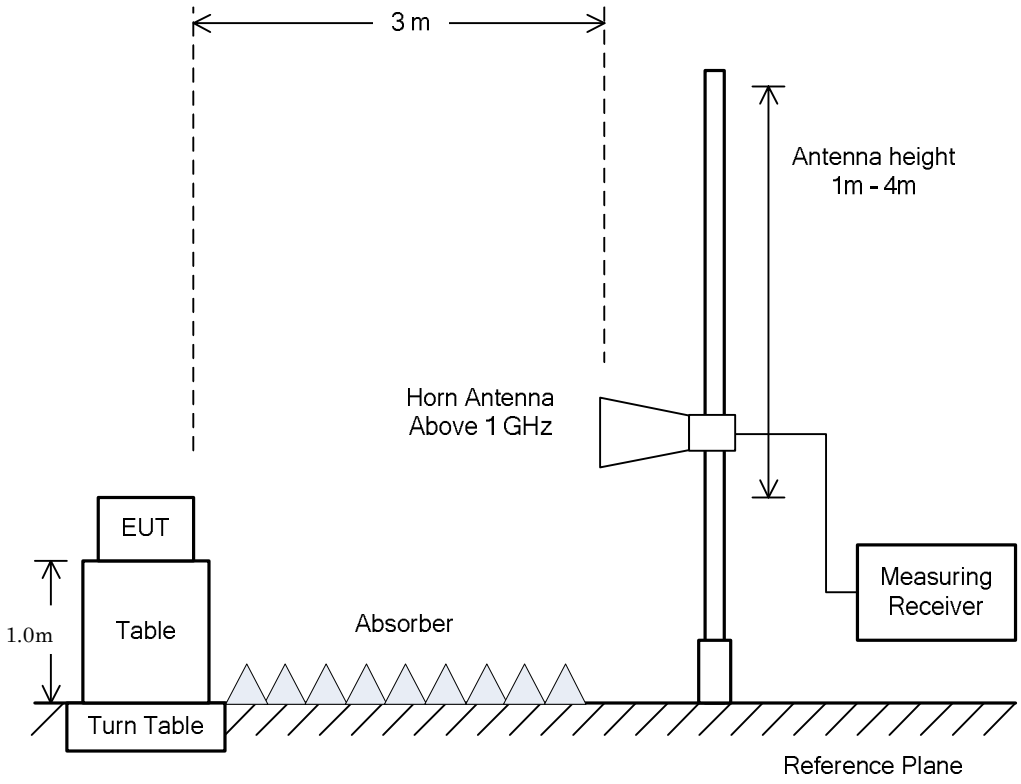
☐ - Anechoic chamber A1 ☒ - Anechoic chamber A2

7.6.2.2 Test Instruments

Type	Model	Manufacturer	ID No.	Last Cal.	Interval
Test Receiver	ESU 26	Rohde & Schwarz	A-6	2014/5	1 Year
Pre-Amplifier	RP2640G-ERZ	EMCS	A-54	2014/3	1 Year
Horn Antenna	91888-2	EATON	C-41-1	2014/6	1 Year
Horn Antenna	91889-2	EATON	C-41-2	2014/6	1 Year
Horn Antenna	3160-05	EMCO	C-56	2014/6	1 Year
Horn Antenna	3160-06	EMCO	C-57	2014/6	1 Year
Horn Antenna	3160-07	EMCO	C-58	2014/6	1 Year
Horn Antenna	3160-08	EMCO	C-59	2014/6	1 Year
Horn Antenna	3160-09	EMCO	C-48	2014/7	1 Year
Attenuator	2-10	Weinschel	D-79	2013/11	1 Year
RF Cable	SUCOFLEX104	SUHNER	C-67	2014/1	1 Year
RF Cable	SUCOFLEX102EA	SUHNER	C-69	2014/2	1 Year

7.6.3 Test Method and Test Setup (Diagrammatic illustration)

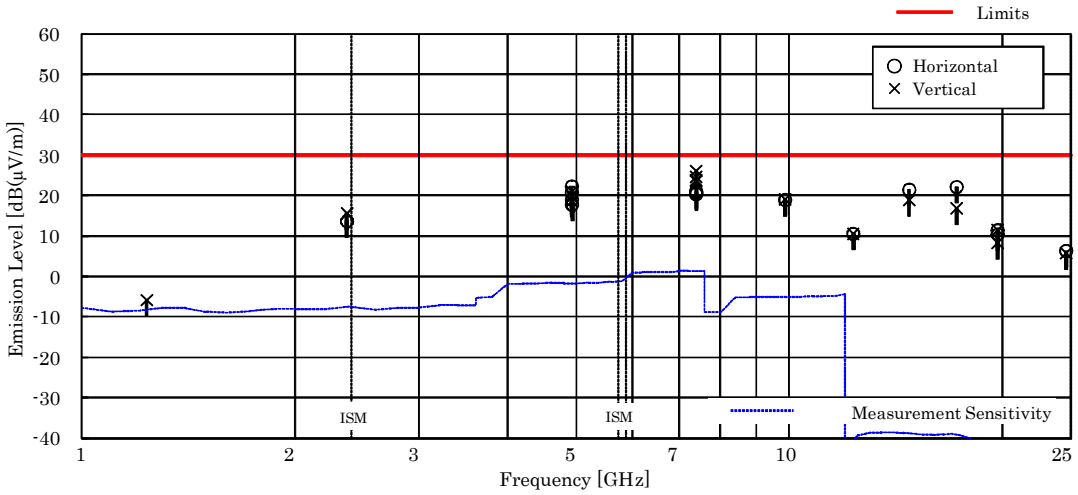
The preliminary tests were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.
The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions.
This configurations was used for the final tests.
(Reference divisional instruction No. G70364C)



7.6.4 Test Data

Test Date: July 4, 2014
Temp.: 24 °C, Humi: 51 %

Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Conversion Factor [dB]	Meter Readings at 3 m [dB(μV)] Hori.	Vert.	Limits at 300 m [dB(μV/m)]	Results at at 300 m [dB(μV/m)] Hori.	Vert.	Margin [dB]	Load Condition (ml) Center	Right Front Corner
1231.6	21.1	0.6	-40.0	< 10.0	12.5	29.9	< -8.3	-5.8	> +35.7	700.0	None
2364.8	21.5	10.7	-40.0	21.5	23.5	29.9	13.7	15.7	+14.2	700.0	None
2510.0	20.9	10.7	-40.0	< 15.0	< 15.0	29.9	< 6.6	< 6.6	> +23.3	700.0	None
4920.1	27.3	11.0	-40.0	22.5	20.4	29.9	20.8	18.7	+ 9.1	None	700.0
4920.9	27.3	11.0	-40.0	20.8	22.7	29.9	19.1	21.0	+ 8.9	300.0	None
4921.5	27.3	11.0	-40.0	24.0	21.8	29.9	22.3	20.1	+ 7.6	None	300.0
4923.1	27.3	11.0	-40.0	19.5	21.5	29.9	17.8	19.8	+10.1	700.0	None
7370.3	29.8	11.4	-40.0	19.6	25.0	29.9	20.8	26.2	+ 3.7	None	300.0
7371.1	29.8	11.4	-40.0	19.2	23.5	29.9	20.4	24.7	+ 5.2	None	700.0
7375.8	29.8	11.4	-40.0	19.9	22.7	29.9	21.1	23.9	+ 6.0	300.0	None
7378.0	29.8	11.4	-40.0	19.5	22.4	29.9	20.7	23.6	+ 6.3	700.0	None
9856.9	33.4	1.6	-40.0	24.0	24.2	29.9	19.0	19.2	+10.7	700.0	None
12303.0	33.4	1.8	-40.0	15.4	15.4	29.9	10.6	10.6	+19.3	700.0	None
14766.3	37.1	1.9	-40.0	22.5	20.0	29.9	21.5	19.0	+ 8.4	700.0	None
17233.0	37.7	2.2	-40.0	22.3	17.0	29.9	22.2	16.9	+ 7.7	700.0	None
19693.1	- 6.1	3.5	-40.0	54.1	54.1	29.9	11.5	11.5	+18.4	700.0	None
19698.2	- 6.1	3.5	-40.0	53.1	51.0	29.9	10.5	8.4	+19.4	700.0	None
24609.6	- 7.1	3.9	-40.0	49.6	49.0	29.9	6.4	5.8	+23.5	700.0	None

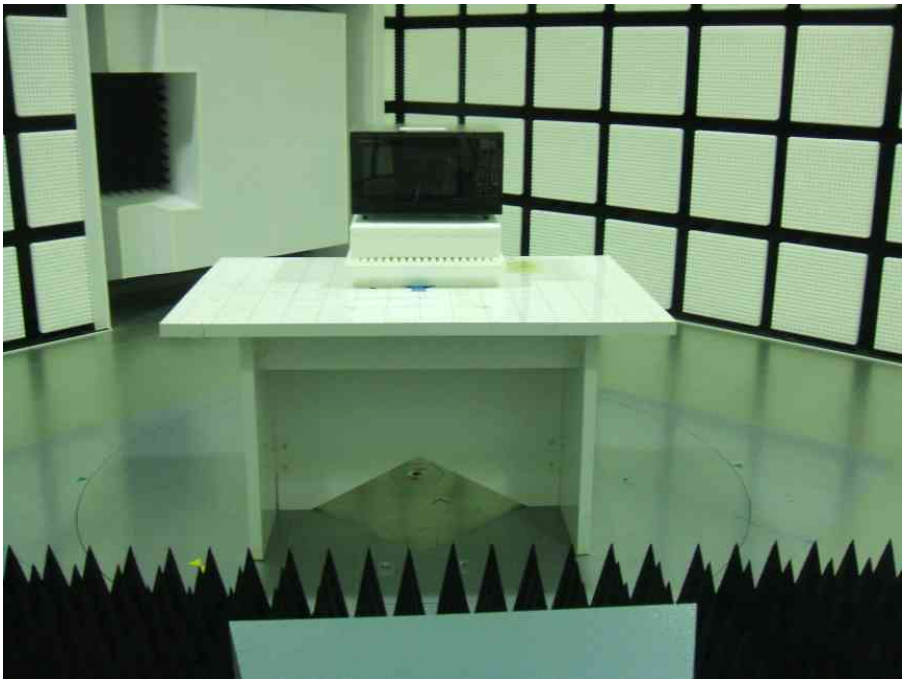


NOTES
1. Test Distance : 3 m (Specified Distance : 300 m)
2. The spectrum was checked from 1.0 GHz to 25 GHz (10th harmonic of the operating frequency).
3. The correction factor is shown as follows:
   Cable Loss + 10dB Pad Attenuator [dB] (1.0 - 7.6GHz)
   Cable Loss [dB] (7.6 - 25.0GHz)
4. In the antenna factor(18GHz-40GHz), the Pre-Amplifier Gain is included.
5. The symbol of "<" means "or less".
6. The symbol of ">" means "more than".
7. The symbol of ">" means "No measurement".
8. Calculated result at 7370.3 MHz, as the worst point shown on underline:
   Antenna Factor + Correction Factor + Meter Reading = 29.8 + 11.4 + 25.0 = 66.2dB(uV/m)
   Result at 300 m = -40.0 + 66.2 = 26.2 dB(μV/m) = 20.4 μV/m (Conversion Factor : 20dB/decade)

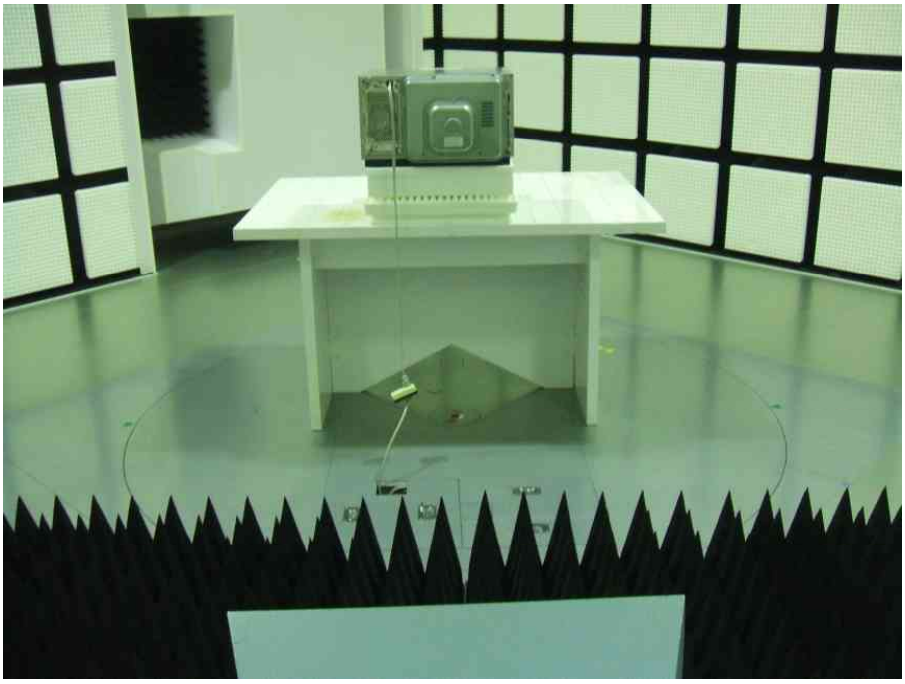
8. Spectrum analyzer setting(s) :
   Resolution Bandwidth = 1 MHz, Video Bandwidth = 10 Hz, Sweep Time = AUTO

7.6.5 Test Setup (Photographs)

Radiated Emission (Above 1GHz)



－Front View－



－Rear View－

Photograph present configuration with maximum emission