FCC Part15, Subpart B

TEST REPORT

For

BJ Xmas village w/ turning train & Music

MODEL NUMBER: DF63872

REPORT NUMBER: 4789498407-1

ISSUE DATE: May 26, 2020

Prepared for

CTM International Giftware Inc.
11420 Albert Hudon, Montreal, Quebec, Canada H1G 3J6

Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	05/26/2020	Initial Issue	

Summary of Test Results				
Standard	**Test Item**	**Limit**	**Result**	**Remark**
FCC Part15, Subpart B ANSI C63.4-2014	Conducted Disturbance	Class B	PASS	**NOTE (2)**
	Radiated Disturbance below 1 GHz	Class B	PASS	
	Radiated Disturbance above 1 GHz	Class B	N/A	**NOTE (1) NOTE (3)**

Note:
(1) “N/A” denotes test is not applicable in this test report.
(2) This test is only applicable for devices which can be charged or powered by AC power cable.
(3) If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.
(4) This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
(5) The measurement result for the sample received is <Pass> according to < FCC Part15, Subpart B > when <Accuracy Method> decision rule is applied.

CONTENTS

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	CTM International Giftware Inc.
Address:	11420 Albert Hudon, Montreal, Quebec, Canada H1G 3J6

Manufacturer Information

Company Name:	Chang Tai Zong Hua Arts & Crafts Co., Ltd.
Address:	Gu Nong Farm, Yintang Industrial Area, Changtai District, Zhangzhou, Fujian,China

EUT Information

EUT Name:	BJ Xmas village w/ turning train & Music
Model:	DF63872
Serial Model:	246053
Model Difference:	Only the model name is different
Brand:	/
Sample Received Date:	May 22, 2020
Sample Status:	Normal
Sample ID:	3081929
Date of Tested:	May 22, 2020

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC Part15, Subpart B	PASS

Prepared By:

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Approved By:

Stephen Guo
Laboratory Manager

2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC Part15 Subpart & ANSI C63.4-2014.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Recognized No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules **IC (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320. **VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Measurement Frequency Range	K	U(dB)
Conducted emissions from the AC mains power ports	0.009MHz ~ 0.15MHz	2	4.00
Conducted emissions from the AC mains power ports	0.15MHz ~ 30MHz	2	3.62
Radiated emissions	30MHz ~ 1GHz	2	4.00
Radiated emissions	1GHz ~ 18GHz	2	5.78
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.			

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name	BJ Xmas village w/ turning train & Music		
Model	DF63872		
Series Model	246053		
Model Difference	Only the model name is different		
Power Supply	Power Adapter	Input	AC110-240V, 50/60Hz, 0.18A
		Output	DC 6.0V, 1200mA
	Battery	/	

5.2. TEST MODE

Test Mode	Description
Mode 1	Running (Music Playing, Train moving and lighting)

5.3. EUT ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	Power Supply	/	YH-0601200	Input: AC 100~240V, 50/60Hz, 0.18A Output: DC 6.0V, 1200mA

5.4. SUPPORT UNITS FOR SYSTEM TEST

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Specification	Series No.	Note
/	/	/	/	/	/	

The following cables were used to form a representative test configuration during the tests.

Item	Type of cable	Shielded Type	Ferrite Core	Length
/	/	/	/	/

6. MEASURING EQUIPMENT AND SOFTWARE USED

Conducted Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
EMI Test Receiver	R&S	ESR3	101961	Dec. 10, 2018	Dec. 10, 2019
Two-Line V-Network	R&S	ENV216	101983	Dec. 10, 2018	Dec. 10, 2019
Software					
Description			Manufacturer	Name	Version
Test Software for Conducted Emissions			Farad	EZ-EMC	Ver. UL-3A1
Radiated Emissions					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Dec. 10, 2018	Dec. 10, 2019
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Sept. 17, 2018	Sept. 17, 2021
Preamplifier	HP	8447D	2944A09099	Dec. 10, 2018	Dec. 10, 2019
Software					
Description			Manufacturer	Name	Version
Test Software for Radiated Emissions			Farad	EZ-EMC	Ver. UL-3A1

7. EMISSION TEST

7.1. CONDUCTED EMISSIONS MEASUREMENT

LIMITS

CFR 47 FCC Part15 Subpart B				
FREQUENCY (MHz)	Class A (dBμV)		Class B (dBμV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46*
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

TEST PROCEDURE

1. The testing follows the guidelines in ANSI C63.4-2014.

2. The EUT was placed on the top of a rotating table 0.8 meters above the horizontal ground plane and being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

3. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

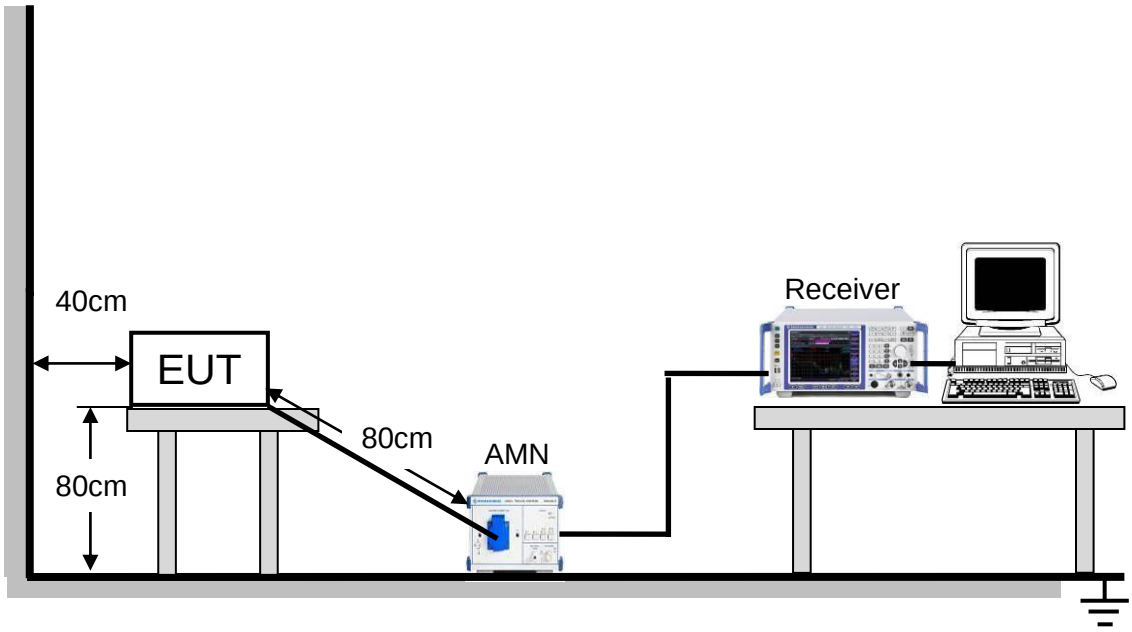
4. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

5. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.

6. LISN at least 80 cm from nearest part of EUT chassis.

7. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

TEST SETUP



For the actual test configuration, please refer to Appendix I: Photographs of Test Configuration.

TEST ENVIRONMENT

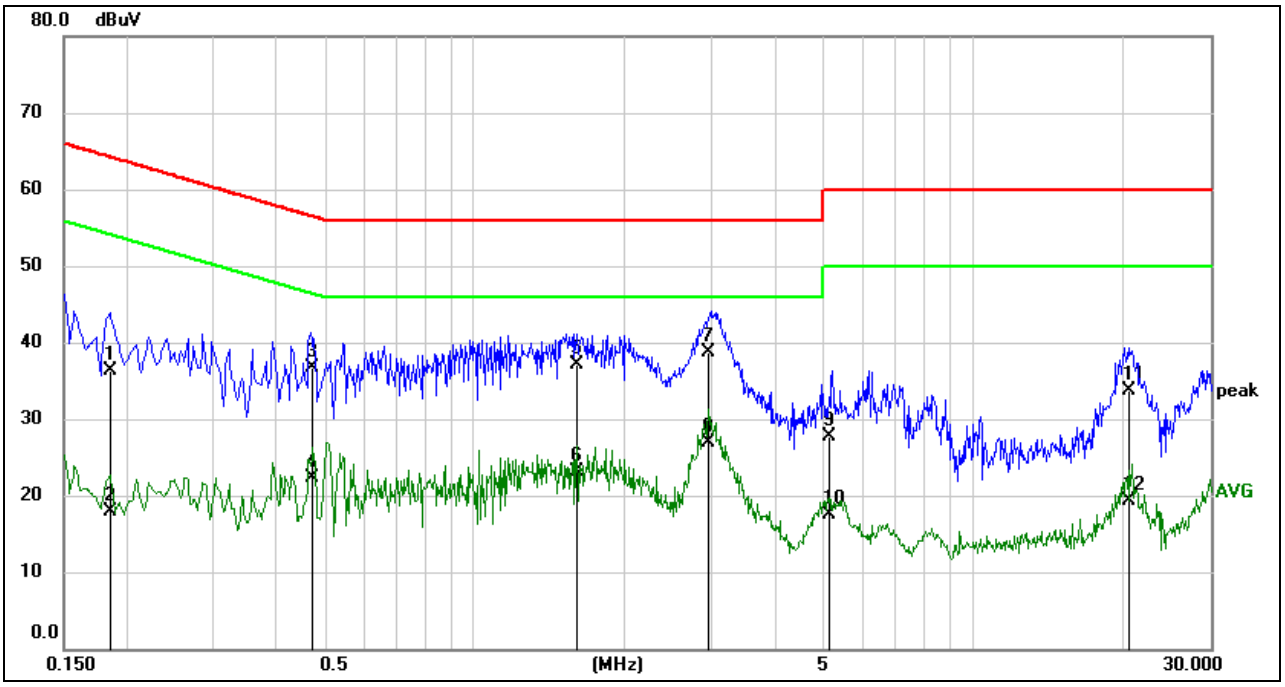
Temperature	27°C	Relative Humidity	59%
Atmosphere Pressure	101kPa		

TEST MODE

Pre-test Mode:	Mode 1
Final Test Mode:	Mode 1

TEST RESULTS

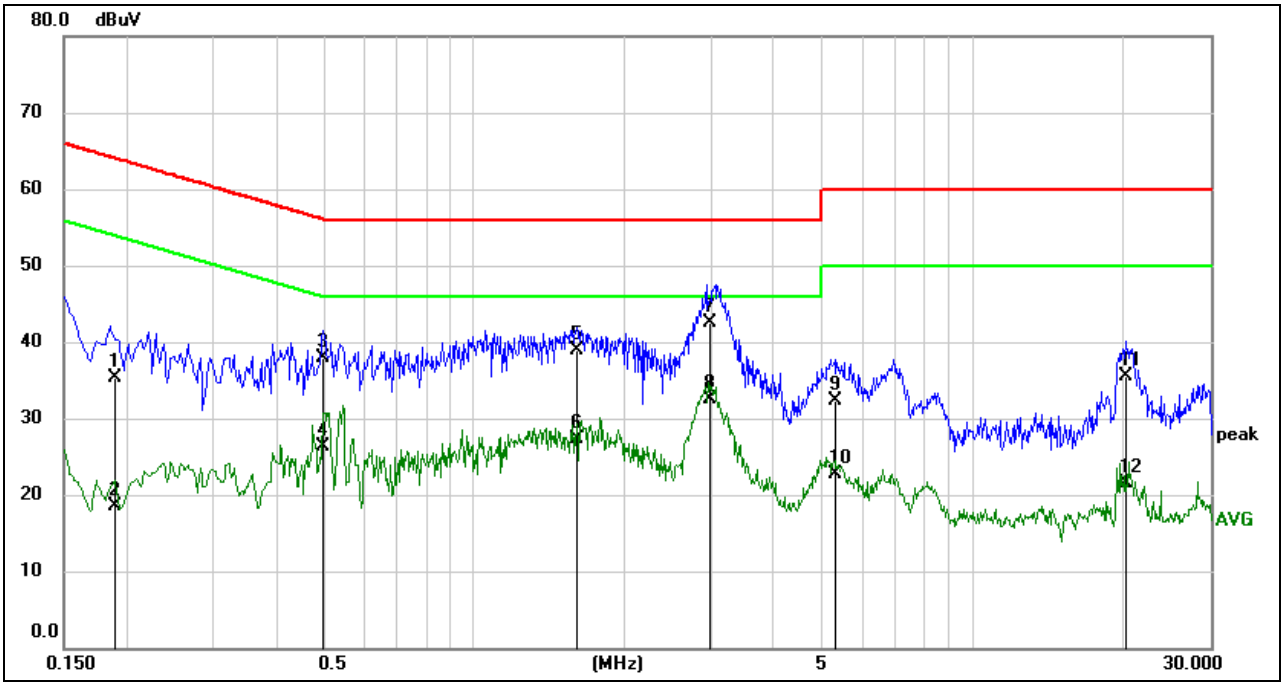
Conducted Emissions			
Test Mode:	Mode 1	Phase:	Line
Test Voltage	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1862	26.62	9.60	36.22	64.20	-27.98	QP
2	0.1862	8.24	9.60	17.84	54.20	-36.36	AVG
3	0.4717	27.20	9.60	36.80	56.48	-19.68	QP
4	0.4717	12.66	9.60	22.26	46.48	-24.22	AVG
5	1.6041	27.53	9.62	37.15	56.00	-18.85	QP
6	1.6041	13.42	9.62	23.04	46.00	-22.96	AVG
7	2.9572	29.10	9.64	38.74	56.00	-17.26	QP
8	2.9572	17.21	9.64	26.85	46.00	-19.15	AVG
9	5.1551	18.02	9.67	27.69	60.00	-32.31	QP
10	5.1551	7.84	9.67	17.51	50.00	-32.49	AVG
11	20.5973	23.60	10.10	33.70	60.00	-26.30	QP
12	20.5973	9.14	10.10	19.24	50.00	-30.76	AVG

Note: 1. Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)
2. Margin = Result - Limit

Conducted Emissions			
Test Mode:	Mode 1	Phase:	Neutral
Test Voltage	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1901	25.79	9.60	35.39	64.03	-28.64	QP
2	0.1901	8.92	9.60	18.52	54.03	-35.51	AVG
3	0.4975	28.37	9.60	37.97	56.04	-18.07	QP
4	0.4975	16.76	9.60	26.36	46.04	-19.68	AVG
5	1.6032	29.38	9.62	39.00	56.00	-17.00	QP
6	1.6032	17.66	9.62	27.28	46.00	-18.72	AVG
7	2.9673	32.84	9.65	42.49	56.00	-13.51	QP
8	2.9673	22.85	9.65	32.50	46.00	-13.50	AVG
9	5.2531	22.73	9.67	32.40	60.00	-27.60	QP
10	5.2531	13.06	9.67	22.73	50.00	-27.27	AVG
11	20.2943	25.34	10.24	35.58	60.00	-24.42	QP
12	20.2943	11.20	10.24	21.44	50.00	-28.56	AVG

Note: 1. Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)
2. Margin = Result - Limit

7.2. RADIATED EMISSIONS MEASUREMENT

LIMITS

Below 1 GHz

CFR 47 FCC Part15 Subpart B			
Frequency (MHz)	Class A		Class B
	Field strength (uV/m) (at 10m)	Field strength (dBuV/m) (at 3m)	Field strength (dBuV/m) (at 3m)
30 - 88	90	49.5	40
88 - 216	150	53.9	43.5
216 - 960	210	56.9	46
Above 960	300	60	54

Above 1 GHz

CFR 47 FCC Part15 Subpart B						
Frequency (MHz)	Class A				Class B	
	(dBuV/m) (at 3m)		(dBuV/m) (at 10m)		(dBuV/m) (at 3m)	
	Peak	Average	Peak	Average	Peak	Average
Above 1000	80	60	69.5	49.5	74	54

Test Frequency Range of Radiated Disturbance Measurement

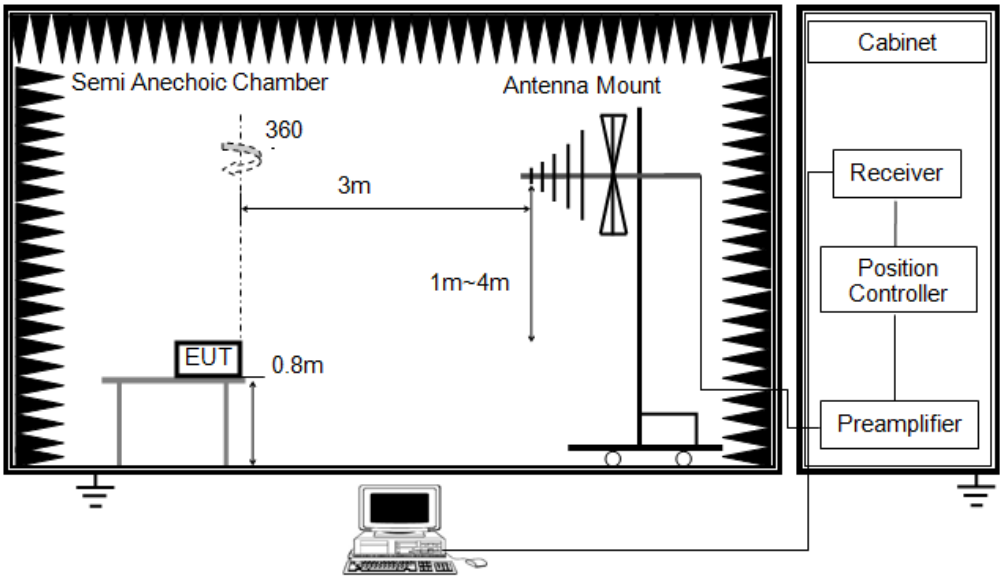
Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:

(1) The limit for radiated test was performed according to FCC Part 15, Subpart B;
(2) The tighter limit applies at the band edges;
(3) Emission level (dBuV/m) = 20log Emission level (uV/m),
3m Emission level = 10m Emission level + 20log(10m/3m);

TEST SETUP AND PROCEDURE

Below 1G and above 30MHz



The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak and QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.4-2014.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp was used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80cm above ground.

4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

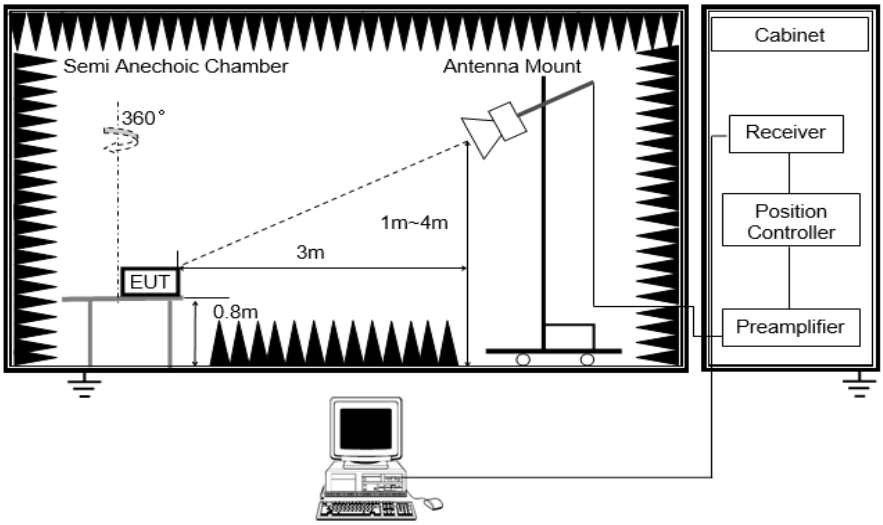
5. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

6. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.

7. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

8. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

Above 1G



The setting of the spectrum analyser

RBW	1M
VBW	3M
Sweep	Auto
Detector	Peak: Peak AVG: RMS
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.4-2014.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80cm above ground.

4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

5. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

6. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.

7. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

8. For measurement above 1GHz, the peak emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the peak limit specified in Section 15.109. If peak result complies with average limit, average result is deemed to comply with average limit.

9. The average emission measurement will be measured by the RMS detector and must comply with the average limit specified in Section 15.109.

TEST ENVIRONMENT

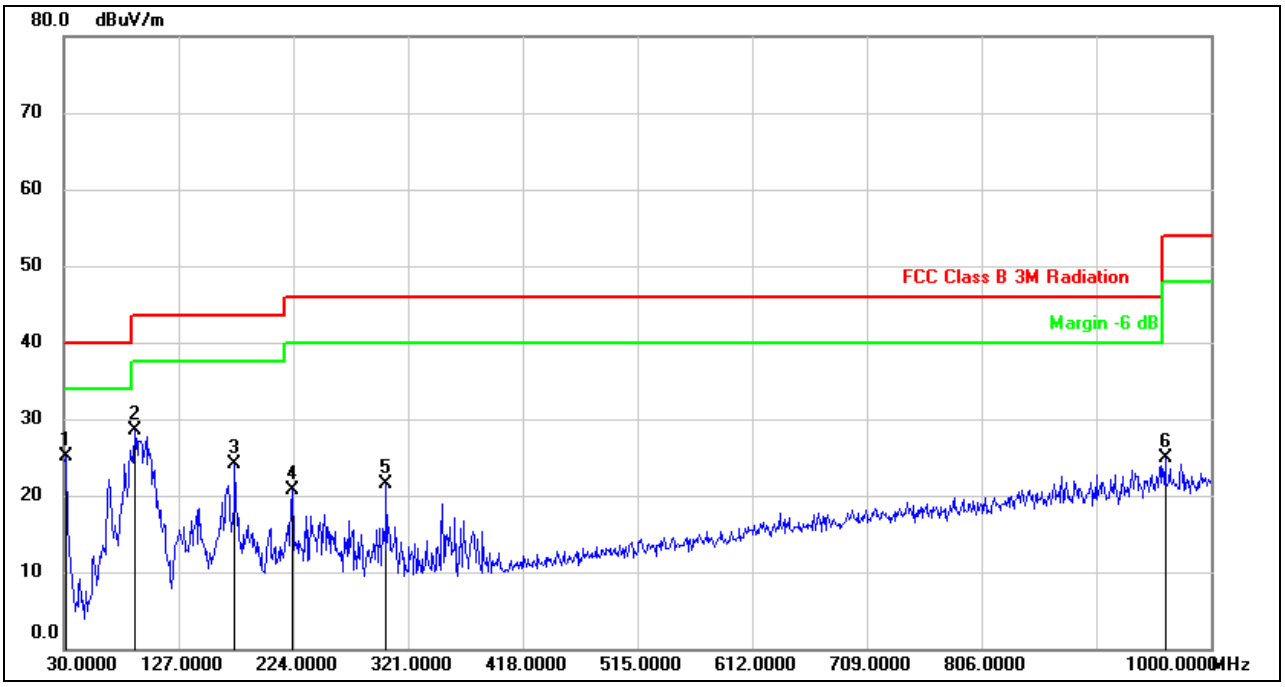
Radiated Emissions - Below 1 GHz		Radiated Emissions - Above 1 GHz	
Temperature:	24°C	Temperature:	N/A
Humidity:	63%	Humidity:	N/A
Atmosphere Pressure	101kPa	Atmosphere Pressure	N/A

TEST MODE

Radiated Emissions - Below 1 GHz		Radiated Emissions - Above 1 GHz	
Pre-test Mode:	Mode 1	Pre-test Mode:	N/A
Final Test Mode:	Mode 1	Final Test Mode:	N/A

TEST RESULTS

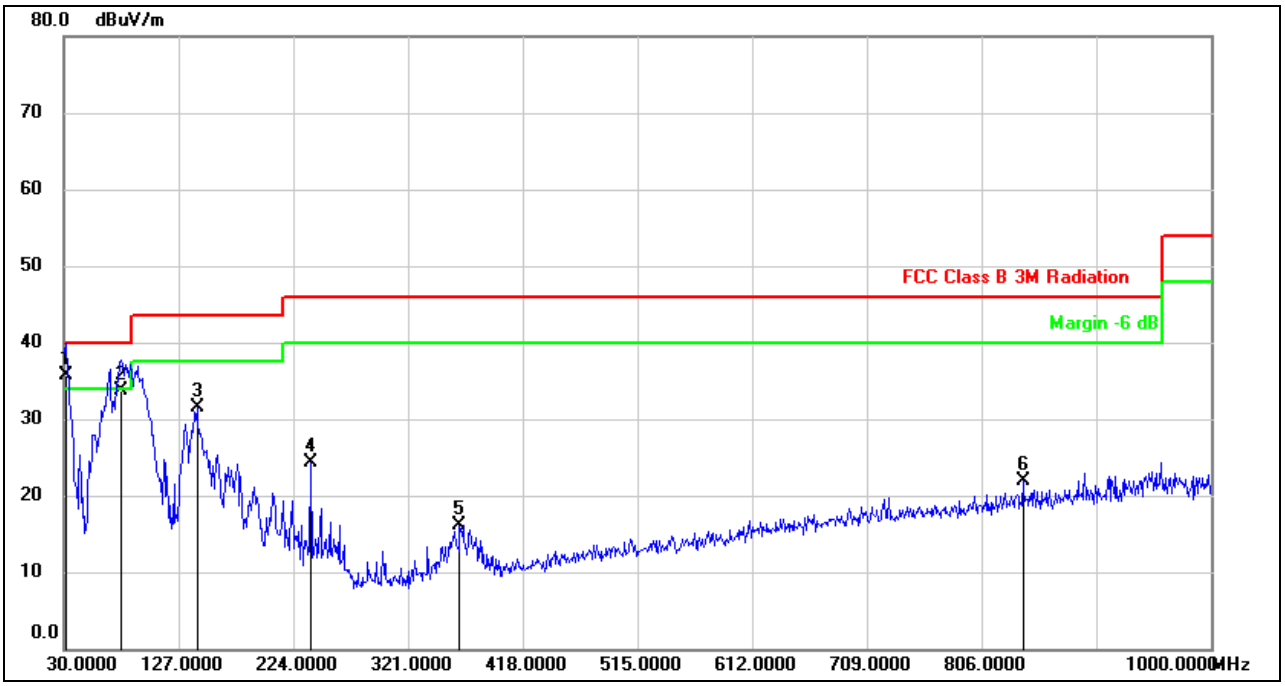
Radiated Emissions – Below 1GHz			
Measurement Method	Radiated	Polar:	Horizontal
Test Mode:	Mode 1	Test Voltage:	AC 120V/60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	31.9400	42.20	-17.05	25.15	40.00	-14.85	QP
2	90.1400	49.59	-21.01	28.58	43.50	-14.92	QP
3	174.5300	40.90	-16.86	24.04	43.50	-19.46	QP
4	223.0300	38.46	-17.83	20.63	46.00	-25.37	QP
5	302.5700	35.92	-14.34	21.58	46.00	-24.42	QP
6	961.2000	28.46	-3.50	24.96	54.00	-29.04	QP

Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
2. Margin = Result - Limit

Radiated Emissions – Below 1GHz			
Measurement Method	Radiated	Polar:	Vertical
Test Mode:	Mode 1	Test Voltage:	AC 120V/60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	31.9400	52.76	-17.05	35.71	40.00	-4.29	QP
2	78.5000	54.24	-20.46	33.78	40.00	-6.22	QP
3	142.5200	50.25	-18.80	31.45	43.50	-12.05	QP
4	238.5500	41.43	-17.15	24.28	46.00	-21.72	QP
5	364.6500	29.36	-13.30	16.06	46.00	-29.94	QP
6	840.9200	26.71	-4.85	21.86	46.00	-24.14	QP

Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
2. Margin = Result - Limit

END OF REPORT