FCC Radio Test Report

FCC ID: 2APRB-WNVR-WNIP2

Original Grant

Report No.	:	TB-FCC175702
Applicant	:	Guangzhou Juan Intelligent Tech Joint Stock Co.,Ltd
Equipment Under Test (EUT)		
EUT Name	:	Wireless Network Video Recorder
Model No.	:	WNVR-WNIP2-V2
Series Model No.	:	WNIP2-4L1, CL-2WNP1-2L, CL-2WNP1-4L, CL-2WNP1-8L, WNIP21L-2-B, WNIP21L-4-B, WNIP21L-8-B, WNVR-WNIP2, WNVR-WNIP2-1-V2, WNVR-WNIP2-V3, WNVR-WNIP2-1-V3
Sample ID	:	TBBJ-20200911-06-1#&TBBJ-20200911-06-2#
Brand Name	:	NIGHT OWL
Receipt Date	:	2020-09-14
Test Date	:	2020-09-15 to 2020-10-23
Issue Date	:	2020-10-23
Standards	:	FCC Part 15, Subpart C 15.247
Test Method	:	ANSI C63.10: 2013
Conclusions	:	**PASS** In the configuration tested, the EUT complied with the standards specified above, The EUT technically complies with the FCC and IC requirements
Test/Witness Engineer	:	Jack Deng
Engineer Supervisor	:	Ivan Su
Authorized Signatory	:	Ray Lai

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

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Contents

Revision History

Report No.	Version	Description	Issued Date
TB-FCC172675	Rev.01	Initial issue of report	2020-05-22
TB-FCC175702	Rev.02	FCC ID Change II	2020-09-21

1. General Information about EUT

1.1 Client Information

Applicant	:	Guangzhou Juan Intelligent Tech Joint Stock Co.,Ltd
Address	:	No.2 Plant ,West of Shanxi country , Dashi street, Panyu District, Guangzhou City, China
Manufacturer	:	Guangzhou Juan Intelligent Tech Joint Stock Co.,Ltd
Address	:	No.2 Plant ,West of Shanxi country , Dashi street, Panyu District, Guangzhou City, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Wireless Network Video Recorder	
Models No.	:	WNVR-WNIP2-V2, WNIP2-4L1, CL-2WNP1-2L, CL-2WNP1-4L, CL-2WNP1-8L, WNIP21L-2-B, WNIP21L-4-B, WNIP21L-8-B, WNVR-WNIP2, WNVR-WNIP2-1-V2, WNVR-WNIP2-V3, WNVR-WNIP2-1-V3	
Model Different	:	All these model product are identical the same, for commercial use with different model number.	
Product Description	:	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
		Number of Channel:	802.11b/g/n(HT20):11 channels **see note(3)** 802.11n(HT40): 7 channels **see note(3)**
		Antenna Gain:	Please see Note(4)
		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64QAM)
		Bit Rate of Transmitter:	Using 20MHz bandwidth, data rate up to 173.3 Mbps Using 40MHz bandwidth, data rate up to 400 Mbps
Power Rating	:	Adapter(CS-1202000): Input: AC 100-240V, 50/60Hz, 1.5A Output: DC 12V, 2A	
Software Version	:	WNVR-WNIP2_20200905, WNVR-WNIP2-1-V2_20201014	
Hardware Version	:	Hi3536D_V198, SSR621Q_V102	

Note:

(1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 v05r02 and KDB 662911 D01 Multiple Transmitter Output v02r01.

(2) For a more detailed features description, please refer to the User's Manual.

(3) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	**2412**	05	2432	09	2452
02	2417	**06**	**2437**	10	2457
03	2422	07	2442	**11**	**2462**
04	2427	08	2447		
Note: CH 01~CH 11 for 802.11b/g/n(HT20) **CH 03~CH 09 for 802.11n(HT40)**					

(4) Antenna information

Mode	TX Antenna (s)	Remark
802.11b	2	ANT. A+ ANT. B
802.11g	2	ANT. A+ ANT. B
802.11n(HT20)	2	ANT. A+ ANT. B
802.11n(HT40)	2	ANT. A+ ANT. B

Antenna	Brand	Type	Antenna Gain(dBi)
ANT. A	N/A	External Ant	5.0
ANT. B	N/A	External Ant	5.0

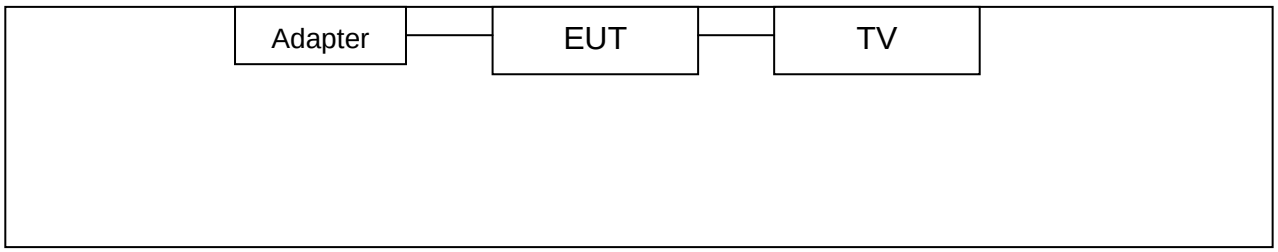
Note:

For MIMO mode: Directional Gain=ANT. Gain+10*LOG(N_{ANT}) =8.01dBi

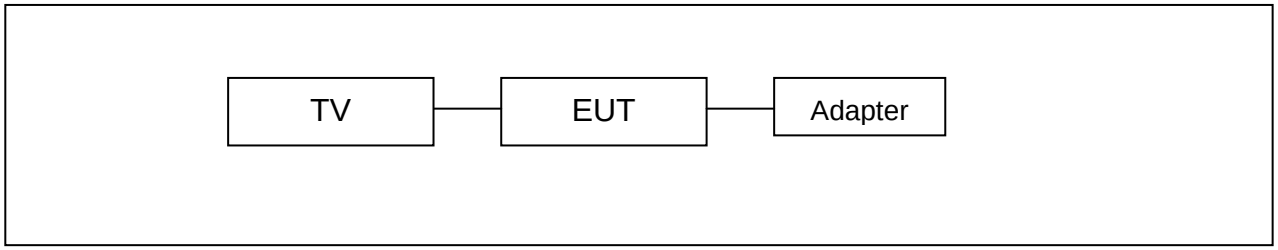
2.4G working with 802.11b/g/n(HT20/HT40) has MIMO mode.

1.3 Block Diagram Showing the Configuration of System Tested

Conducted Test



Radiated Test



1.4 Description of Support Units

Name	Model	S/N	Manufacturer	Used "√"
TV	/	/	/	√
Adapter	CS-1202000			√

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test	
Final Test Mode	**Description**
Mode 1	Charging with TX B Mode
For Radiated and RF Conducted Test	
Final Test Mode	**Description**
Mode 2	TX Mode B Mode Channel 01/06/11
Mode 3	TX Mode G Mode Channel 01/06/11
Mode 4	TX Mode N(HT20) Mode Channel 01/06/11
Mode 5	TX Mode N(HT40) Mode Channel 03/06/09
Note : (1)The adapter and antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.	

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.
According to ANSI C63.10 standards, the measurements are performed at the highest, Middle, lowest available channels, and the worst case data rate as follows:
802.11b Mode: CCK (1 Mbps)
802.11g Mode: OFDM (6 Mbps)
802.11n (HT20) Mode: MCS 0 (6.5 Mbps)
802.11n (HT40) Mode: MCS 0 (30 Mbps)

(2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a Mobile device; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel & Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

	Test Software: Xshell			
	Test Mode: Continuously transmitting			
Mode	**Data Rate**	**Channel**	**Parameters**	
			ANT. A	**ANT. B**
802.11b	CCK/ 1Mbps	01	43	23
	CCK/ 1Mbps	06	44	23
	CCK/ 1Mbps	11	45	25
			Parameters	
			ANT. A	**ANT. B**
802.11g	OFDM/ 6Mbps	01	46	27
	OFDM/ 6Mbps	06	46	27
	OFDM/ 6Mbps	11	46	27
802.11n(20)	MCS 0	01	46	27
	MCS 0	06	46	27
	MCS 0	11	48	27
802.11n(40)	MCS 0	03	46	25
	MCS 0	06	46	25
	MCS 0	09	46	25
Note:(1) The report only showed the worst case.				

1.7 Measurement Uncertainty

The reported uncertainty of measurement y ± U，where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2，providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	±3.50 dB ±3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB

1.8 Test Facility

The testing was performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at:1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China.
At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025：2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A.

2. Test Summary

FCC Part 15 Subpart C(15.247)				
Standard Section FCC	Test Item	Test Sample(s)	Judgment	Remark
15.203	Antenna Requirement	N/A	N/A	Note 3
15.207	Conducted Emission	TBBJ-20200911-06-1# TBBJ-20200911-06-2#	PASS	N/A
15.205	Restricted Bands	N/A	N/A	Note 3
15.247(a)(2)	6dB Bandwidth	N/A	N/A	Note 3
15.247(b)	Peak Output Power	N/A	N/A	Note 3
15.247(e)	Power Spectral Density	N/A	N/A	Note 3
15.247(d)	Band Edge	N/A	N/A	Note 3
15.247(d)&15.209	Transmitter Radiated Spurious Emission	TBBJ-20200911-06-1# TBBJ-20200911-06-2#	PASS	N/A

Note:(1) "/" for no requirement for this test item.
(2)N/A is an abbreviation for Not Applicable.
(3) the test data please refer to the original report TB-FCC172675.
(4) the EUT has two type of main PCB with same of RF module and antenna.

3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0

4. Test Equipment

Conducted Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 06, 2020	Jul. 05, 2021
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 06, 2020	Jul. 05, 2021
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 06, 2020	Jul. 05, 2021
LISN	Rohde & Schwarz	ENV216	101131	Jul. 06, 2020	Jul. 05, 2021
Radiation Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 06, 2020	Jul. 05, 2021
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2021
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Mar.01, 2020	Feb. 28, 2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 06, 2020	Jul. 05, 2021
Pre-amplifier	Sonoma	310N	185903	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	HP	8449B	3008A00849	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Mar.01, 2020	Feb. 28, 2021
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.01, 2020	Feb. 28, 2021
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted Emission					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 06, 2020	Jul. 05, 2021
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Jul. 06, 2020	Jul. 05, 2021
Vector Signal Generator	Agilent	N5182A	MY50141294	Mar.01, 2020	Feb. 28, 2021
Analog Signal Generator	Agilent	N5181A	MY50141953	Mar.01, 2020	Feb. 28, 2021
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Mar.01, 2020	Feb. 28, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Jul. 06, 2020	Jul. 05, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Mar.01, 2020	Feb. 28, 2021
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Mar.01, 2020	Feb. 28, 2021

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1Test Standard

FCC Part 15.207

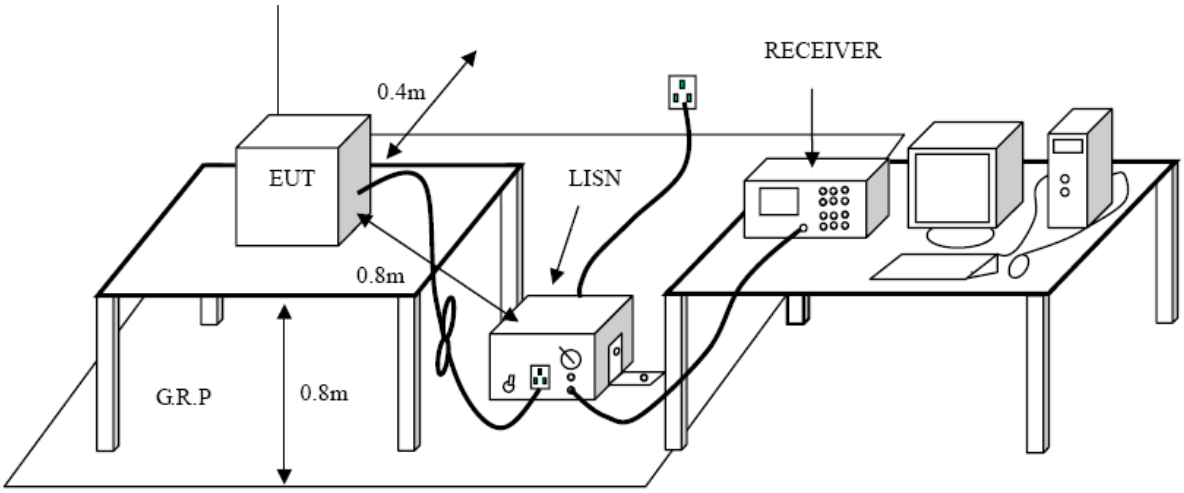
5.1.2 Test Limit

Conducted Emission Test Limit

Frequency	Maximum RF Line Voltage (dBμV)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:
(1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequencies.
(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

5.2 Test Setup



5.3 Test Procedure

(1) The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

(2) 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.

(3)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.

(4)LISN at least 80 cm from nearest part of EUT chassis.

(5)The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A.

6. Radiated Emission Test

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.209

6.1.2 Test Limit

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

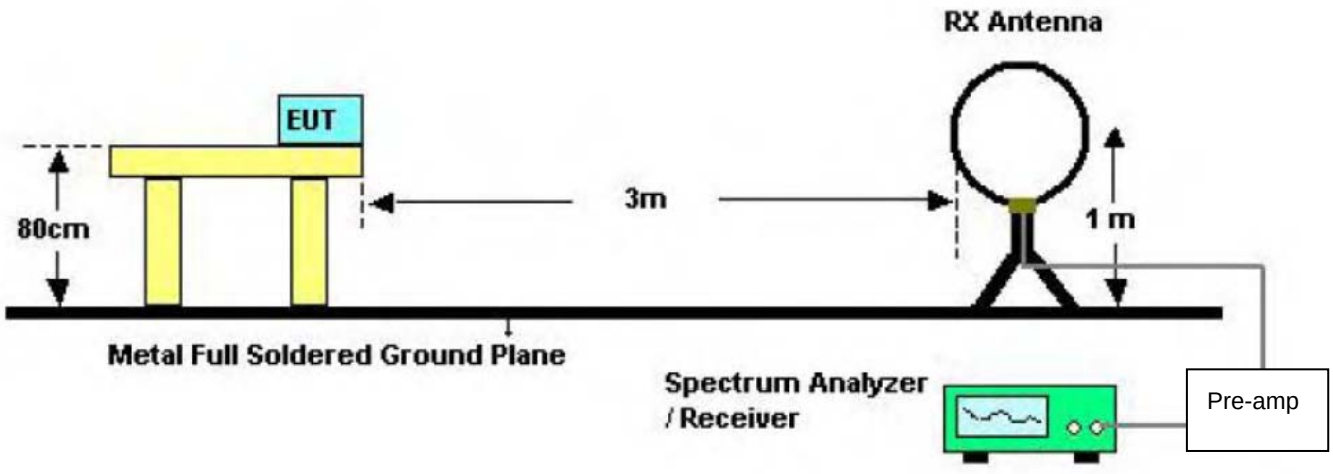
Frequency (MHz)	Distance of 3m (dBuV/m)	
	Peak	Average
Above 1000	74	54

Note:

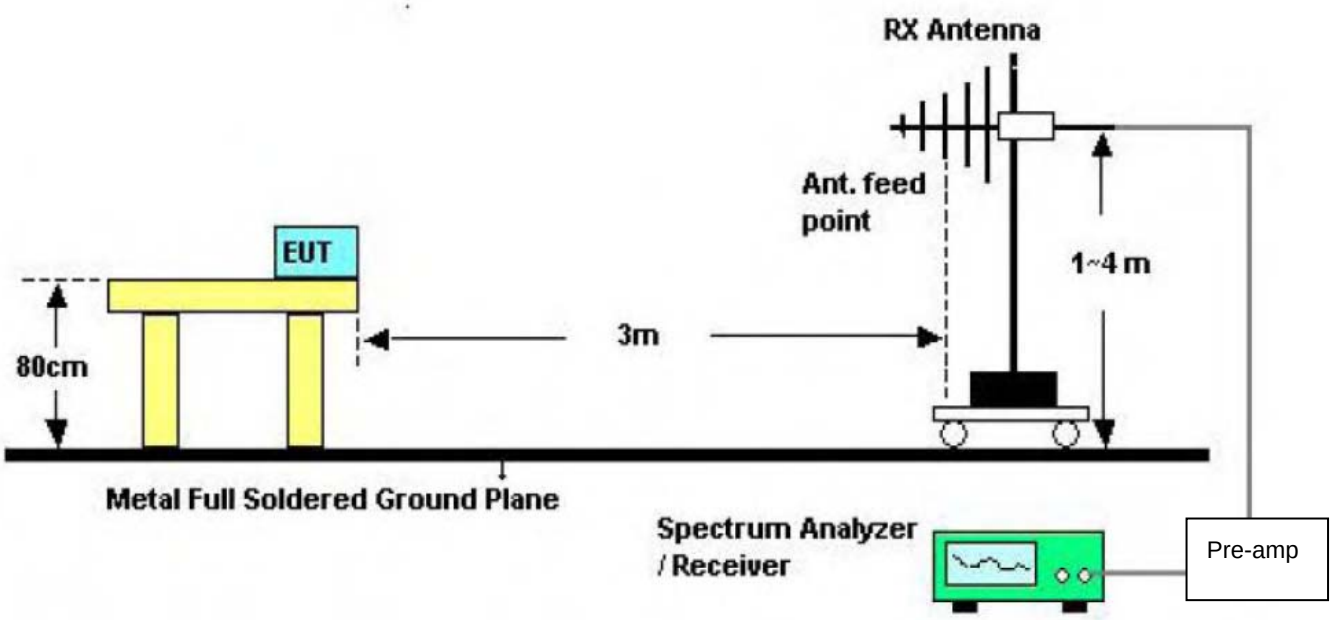
(1) The tighter limit applies at the band edges.

(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

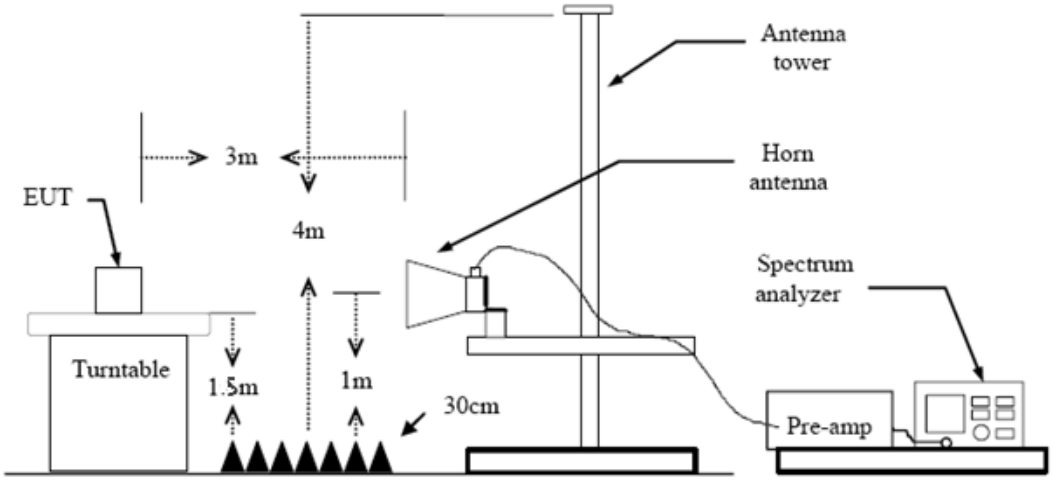
6.2 Test Setup



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

6.3 Test Procedure

(1) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

(2) Measurements at frequency Below 1GHz. The EUT was placed on a rotating 0.8m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

(4) 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.

(5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

(6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.

(7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

(8) For the actual test configuration, please see the test setup photo.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.6 Test Data

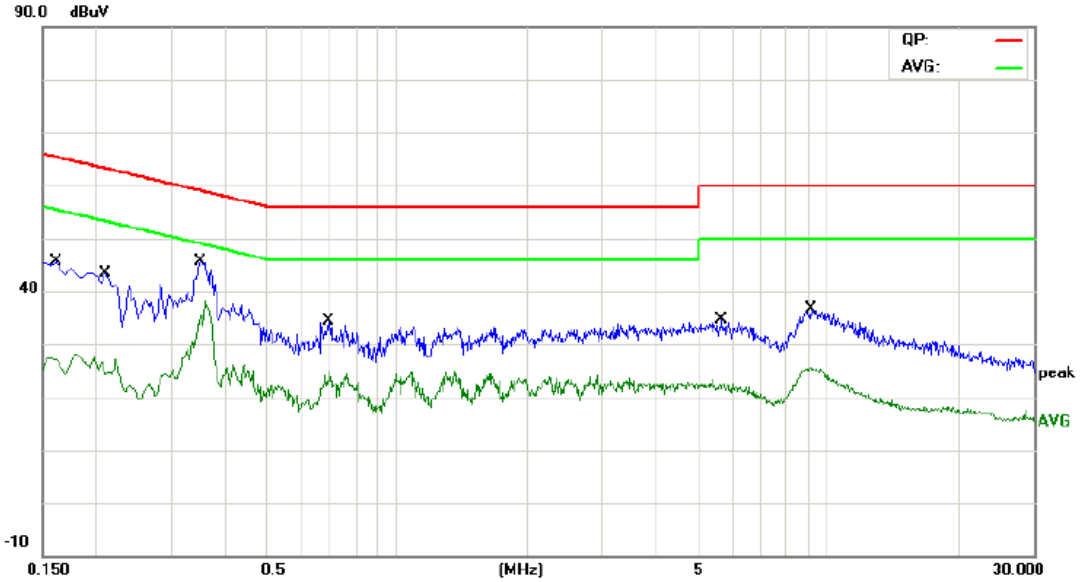
Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Please refer to the Attachment B.

Attachment A-- Conducted Emission Test Data

Remark: All channels have been tested and Shows only the worst channels.

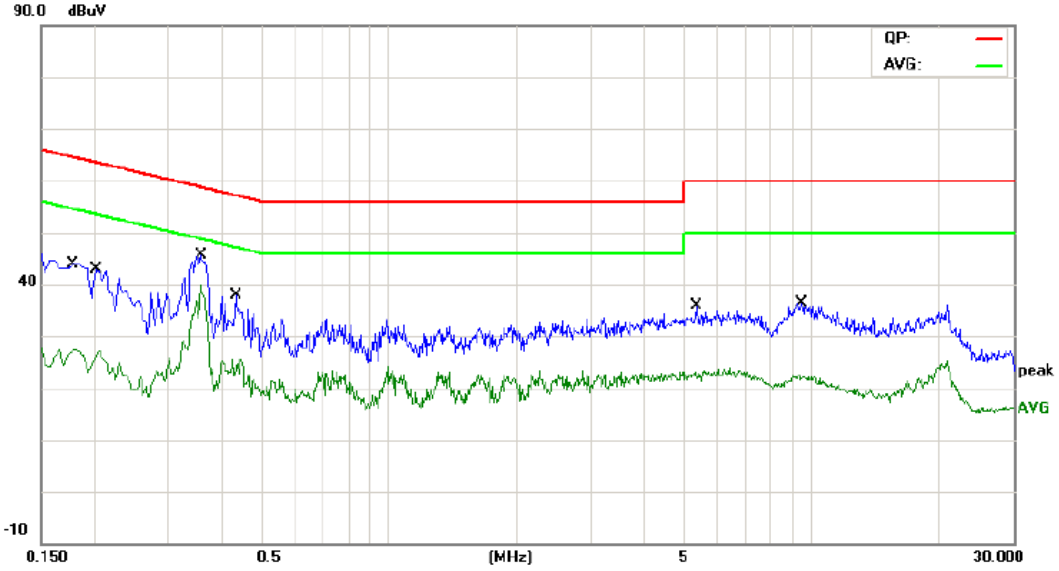
Temperature:	23.5℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	Mode 1(main PCB 1)		
Remark:	Only worst case is reported		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1620	31.62	9.80	41.42	65.36	-23.94	QP
2		0.1620	15.13	9.80	24.93	55.36	-30.43	AVG
3		0.2100	28.31	9.80	38.11	63.20	-25.09	QP
4		0.2100	14.19	9.80	23.99	53.20	-29.21	AVG
5		0.3500	32.75	9.80	42.55	58.96	-16.41	QP
6	*	0.3500	25.61	9.80	35.41	48.96	-13.55	AVG
7		0.6900	19.62	9.80	29.42	56.00	-26.58	QP
8		0.6900	13.00	9.80	22.80	46.00	-23.20	AVG
9		5.6779	17.81	9.83	27.64	60.00	-32.36	QP
10		5.6779	11.02	9.83	20.85	50.00	-29.15	AVG
11		9.1419	21.36	9.90	31.26	60.00	-28.74	QP
12		9.1419	15.22	9.90	25.12	50.00	-24.88	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

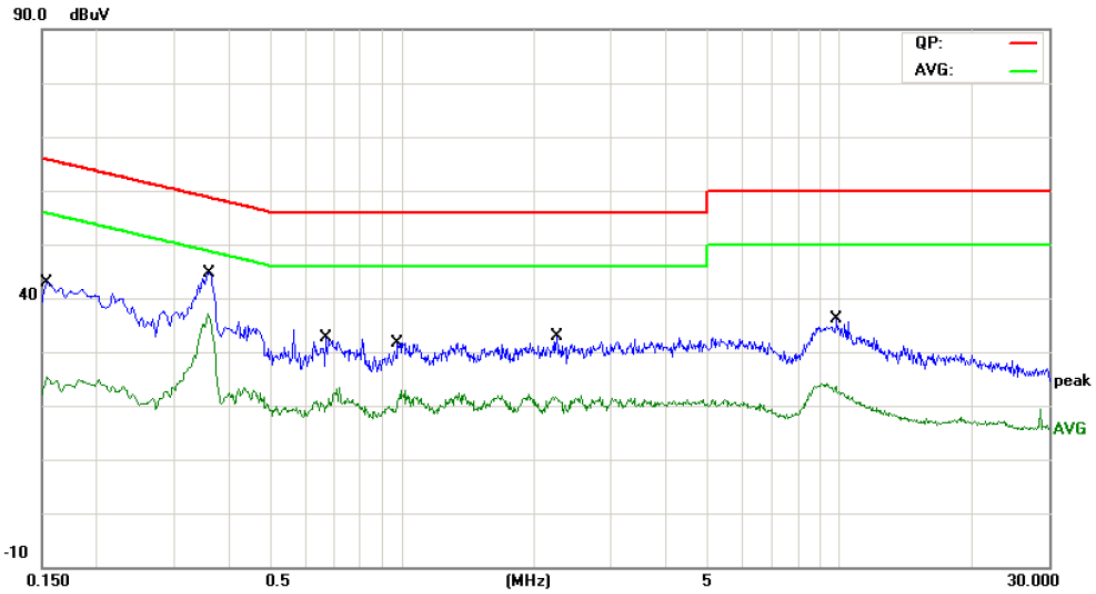
Temperature:	23.5℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1(main PCB 1)		
Remark:	Only worst case is reported		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1780	30.09	9.80	39.89	64.57	-24.68	QP
2		0.1780	14.80	9.80	24.60	54.57	-29.97	AVG
3		0.2029	29.30	9.80	39.10	63.49	-24.39	QP
4		0.2029	16.02	9.80	25.82	53.49	-27.67	AVG
5		0.3580	33.51	9.80	43.31	58.77	-15.46	QP
6	*	0.3580	26.18	9.80	35.98	48.77	-12.79	AVG
7		0.4340	21.84	9.80	31.64	57.18	-25.54	QP
8		0.4340	13.19	9.80	22.99	47.18	-24.19	AVG
9		5.3500	18.30	9.82	28.12	60.00	-31.88	QP
10		5.3500	11.64	9.82	21.46	50.00	-28.54	AVG
11		9.4700	19.88	9.90	29.78	60.00	-30.22	QP
12		9.4700	11.26	9.90	21.16	50.00	-28.84	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

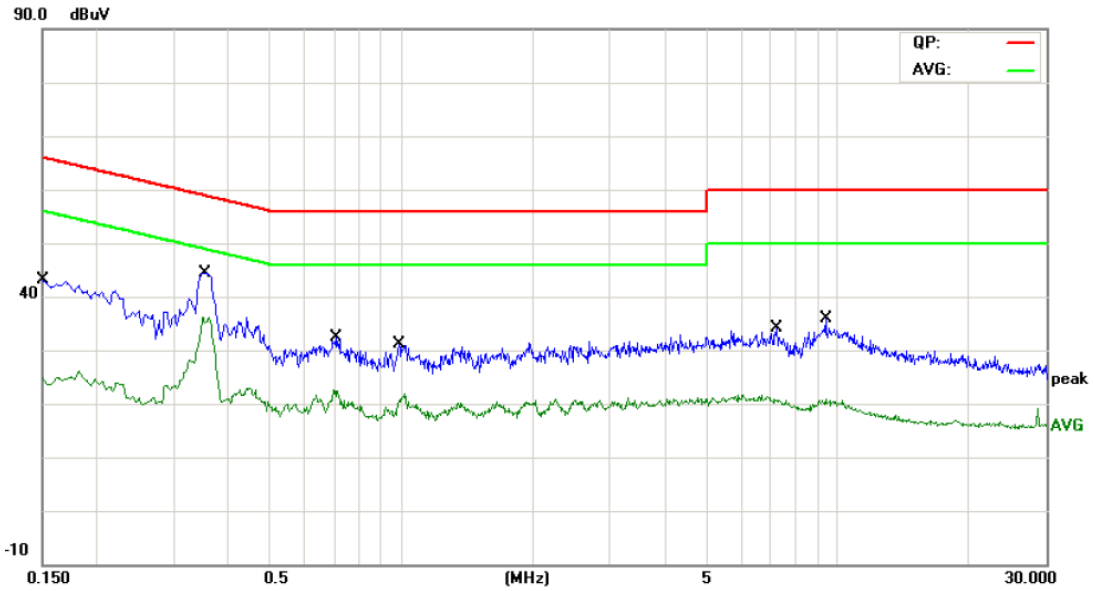
Temperature:	23.5℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	Mode 1(main PCB 2)		
Remark:	Only worst case is reported		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1539	29.17	9.70	38.87	65.78	-26.91	QP
2		0.1539	13.49	9.70	23.19	55.78	-32.59	AVG
3		0.3620	31.23	9.70	40.93	58.68	-17.75	QP
4	*	0.3620	25.79	9.70	35.49	48.68	-13.19	AVG
5		0.6700	14.55	9.70	24.25	56.00	-31.75	QP
6		0.6700	8.79	9.70	18.49	46.00	-27.51	AVG
7		0.9780	16.08	9.79	25.87	56.00	-30.13	QP
8		0.9780	10.03	9.79	19.82	46.00	-26.18	AVG
9		2.2500	15.78	9.75	25.53	56.00	-30.47	QP
10		2.2500	11.13	9.75	20.88	46.00	-25.12	AVG
11		9.8380	18.73	9.80	28.53	60.00	-31.47	QP
12		9.8380	12.25	9.80	22.05	50.00	-27.95	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Temperature:	23.5℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1(main PCB 2)		
Remark:	Only worst case is reported		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1500	29.07	9.80	38.87	65.99	-27.12	QP
2		0.1500	13.04	9.80	22.84	55.99	-33.15	AVG
3		0.3540	31.49	9.80	41.29	58.87	-17.58	QP
4	*	0.3540	25.31	9.80	35.11	48.87	-13.76	AVG
5		0.7100	16.98	9.80	26.78	56.00	-29.22	QP
6		0.7100	11.74	9.80	21.54	46.00	-24.46	AVG
7		0.9860	15.58	9.80	25.38	56.00	-30.62	QP
8		0.9860	9.51	9.80	19.31	46.00	-26.69	AVG
9		7.2140	15.73	9.90	25.63	60.00	-34.37	QP
10		7.2140	10.14	9.90	20.04	50.00	-29.96	AVG
11		9.3660	17.46	9.90	27.36	60.00	-32.64	QP
12		9.3660	9.69	9.90	19.59	50.00	-30.41	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Attachment B-- Radiated Emission Test Data

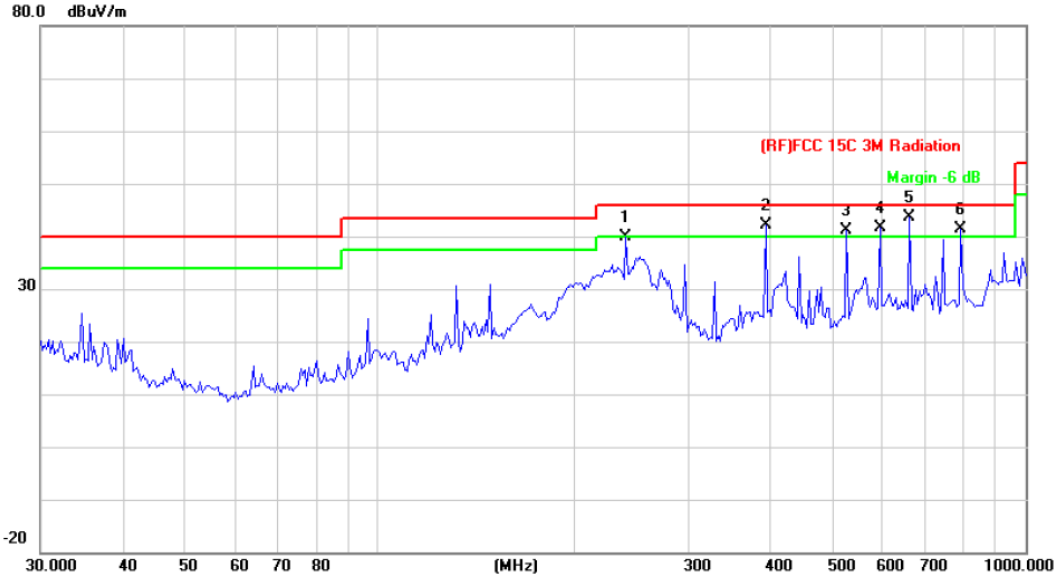
9KHz~150KHz

From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

30MHz~1GHz

Temperature:	23.5℃	**Relative Humidity:**	40%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz (main PCB 1)		
Remark:	Only worst case is reported.		

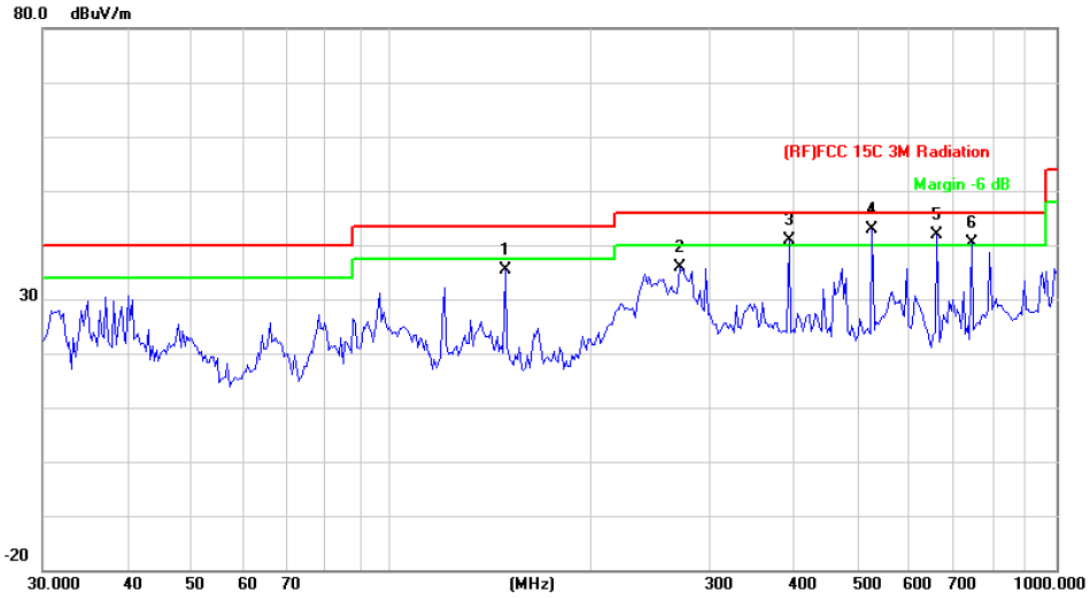


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		240.8303	57.54	-17.72	39.82	46.00	-6.18	QP
2	!	396.2414	54.60	-12.48	42.12	46.00	-3.88	QP
3	!	528.2458	50.82	-9.60	41.22	46.00	-4.78	QP
4	!	595.1327	50.05	-8.37	41.68	46.00	-4.32	QP
5	*	661.1504	51.25	-7.70	43.55	46.00	-2.45	QP
6	!	793.3958	47.11	-5.78	41.33	46.00	-4.67	QP

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Temperature:	23.5℃	**Relative Humidity:**	40%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz (main PCB 1)		
Remark:	Only worst case is reported.		

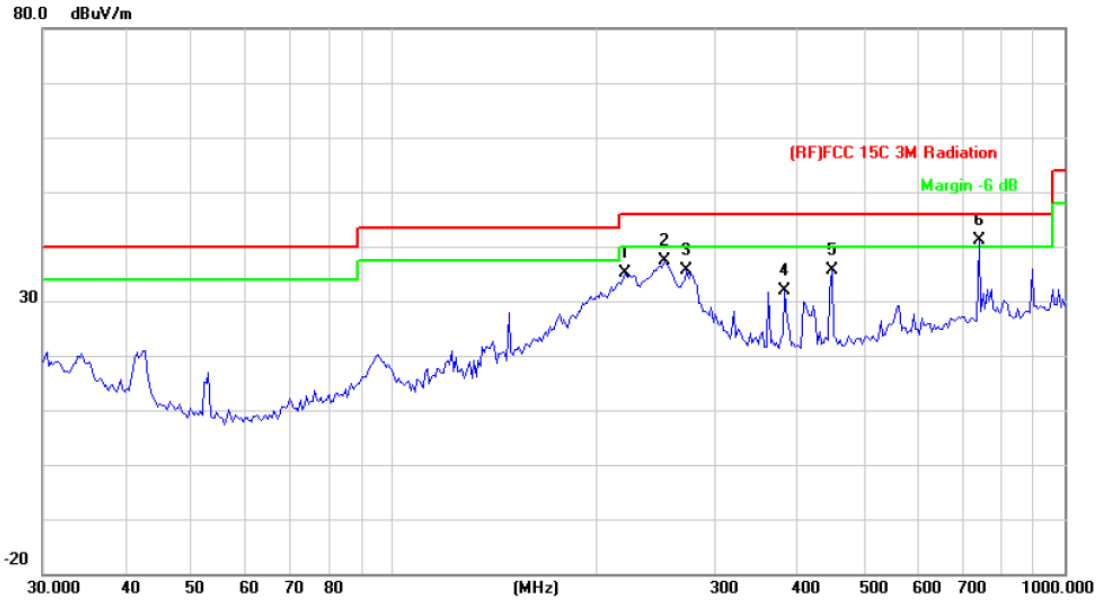


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		148.4410	56.86	-21.51	35.35	43.50	-8.15	QP
2		271.3245	52.74	-16.82	35.92	46.00	-10.08	QP
3	!	396.2414	53.45	-12.48	40.97	46.00	-5.03	QP
4	*	528.2458	52.43	-9.60	42.83	46.00	-3.17	QP
5	!	661.1504	49.49	-7.70	41.79	46.00	-4.21	QP
6	!	744.8660	47.06	-6.62	40.44	46.00	-5.56	QP

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Temperature:	23.5℃	**Relative Humidity:**	40%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz (main PCB 2)		
Remark:	Only worst case is reported.		

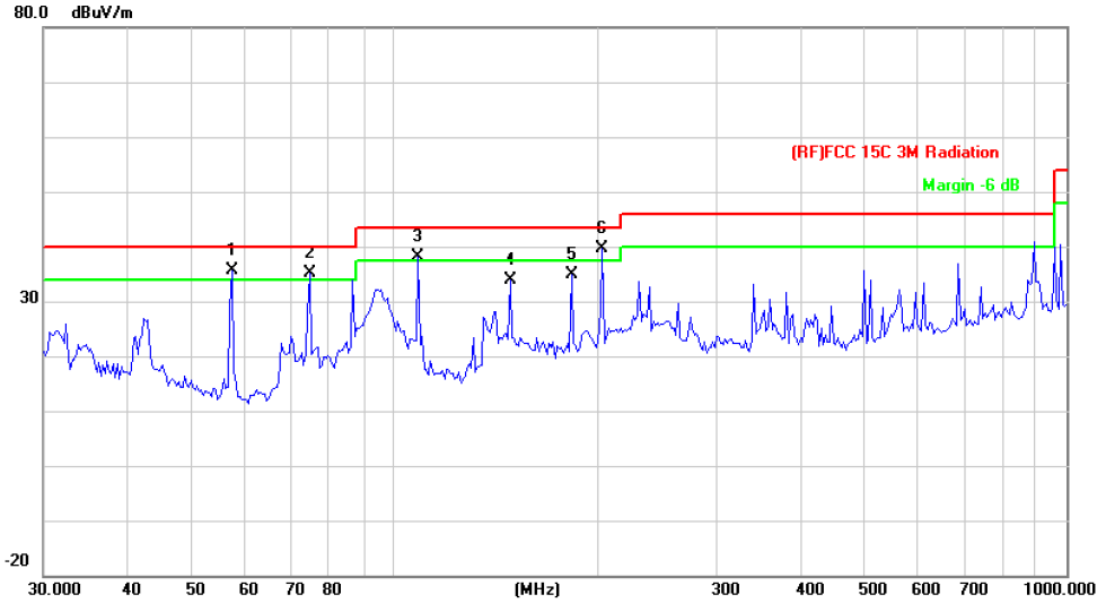


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		221.3921	53.97	-18.78	35.19	46.00	-10.81	QP
2		252.9482	54.48	-17.16	37.32	46.00	-8.68	QP
3		273.2341	52.42	-16.79	35.63	46.00	-10.37	QP
4		382.5879	45.06	-13.12	31.94	46.00	-14.06	QP
5		449.5558	47.53	-11.94	35.59	46.00	-10.41	QP
6	*	744.8661	47.76	-6.62	41.14	46.00	-4.86	QP

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Temperature:	23.5℃	**Relative Humidity:**	40%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz (main PCB 2)		
Remark:	Only worst case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	!	57.1914	59.62	-23.88	35.74	40.00	-4.26	QP
2	!	74.6568	58.13	-22.96	35.17	40.00	-4.83	QP
3	!	108.2667	60.44	-22.24	38.20	43.50	-5.30	QP
4		148.4410	55.29	-21.51	33.78	43.50	-9.72	QP
5		183.2005	54.84	-20.01	34.83	43.50	-8.67	QP
6	*	203.5227	59.31	-19.76	39.55	43.50	-3.95	QP

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

-----END OF REPORT-----