



CFR 47 FCC PART 15 SUBPART C ISED RSS-247 ISSUE 2 (DTS)

TEST REPORT

For

MARVEL VS. CAPCOM 2 WITH RISER ARCADE1UP

MODEL NUMBER: MRC-A-207310

REPORT NUMBER: 4790465146.1-2-RF-3

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Prepared for

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	July 20, 2022	Initial Issue	



Summary of Test Results

Summary of Test Results							
Test Item	Clause	Limit/Requirement	Result				
Antenna Requirement	N/A	FCC Part 15.203/15.247 (c) RSS-GEN Clause 6.8	Pass				
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2	FCC Part 15.207 RSS-GEN Clause 8.8	Complianc e				
Conducted Output Power	ANSI C63.10-2013, Clause 11.9.1.3	FCC Part 15.247 (b)(3) RSS-247 Clause 5.4 (d)	Pass				
6dB Bandwidth and 99% Occupied Bandwidth	ANSI C63.10-2013, Clause 11.8.1	FCC Part 15.247 (a)(2) RSS-247 Clause 5.2 (a) ISED RSS-Gen Clause 6.7	Pass				
Power Spectral Density	ANSI C63.10-2013, Clause 11.10.2	FCC Part 15.247 (e) RSS-247 Clause 5.2 (b)	Pass				
Conducted Band edge and spurious emission	ANSI C63.10-2013, Clause 11.11	FCC Part 15.247(d) RSS-247 Clause 5.5	Pass				
Radiated Band edge and Spurious Emission	ANSI C63.10-2013, Clause 11.12 & Clause 11.13	FCC Part 15.247 (d) FCC Part 15.205/15.209 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Pass				
Duty Cycle	ANSI C63.10-2013, Clause 11.6	None; for reporting purposes only.	Pass				

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C> <ISED RSS-247 ISSUE 2 (DTS)> when <Accuracy Method> decision rule is applied.



CONTENTS

1.	. ATTESTATION OF TEST RESULTS	6
2.	. TEST METHODOLOGY	7
3.	. FACILITIES AND ACCREDITATION	7
4.	. CALIBRATION AND UNCERTAINTY	8
4	4.1. MEASURING INSTRUMENT CALIBRATION	8
4	4.2. MEASUREMENT UNCERTAINTY	8
5.	. EQUIPMENT UNDER TEST	9
5	5.1. DESCRIPTION OF EUT	9
5	5.2. CHANNEL LIST	9
5	5.3. MAXIMUM AVERAGE EIRP	9
5	5.4. TEST CHANNEL CONFIGURATION	10
5	5.5. THE WORSE CASE POWER SETTING PARAMETER	10
5	5.6. DESCRIPTION OF AVAILABLE ANTENNAS	11
5	5.7. SUPPORT UNITS FOR SYSTEM TEST	12
5	5.8. SETUP DIAGRAM	12
6.	. MEASURING EQUIPMENT AND SOFTWARE USED	13
7.		
••		16
7	. ANTENNA PORT TEST RESULTS	 16 16
7	ANTENNA PORT TEST RESULTS 7.1. CONDUCTED OUTPUT POWER	 16 16 17
7777	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH	 16 16 17 19
7777	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY	16 16 17 19 20
7777	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLE	16 16 17 19 20 22
7 7 7 7 7 8.	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLE	16 17 19 20 22 23
7 7 7 7 8.	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLERADIATED TEST RESULTS	16 17 19 20 22 23 30
7 7 7 7 7 7 8. 8.	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLERADIATED TEST RESULTS8.1.RESTRICTED BANDEDGE	16 17 20 22 22 23 30 30
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLERADIATED TEST RESULTS8.1.RESTRICTED BANDEDGE8.2.SPURIOUS EMISSIONS(1 GHZ~3 GHZ)	16 17 19 20 22 22
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLERADIATED TEST RESULTS8.1.RESTRICTED BANDEDGE8.2.SPURIOUS EMISSIONS(1 GHZ~3 GHZ)8.3.SPURIOUS EMISSIONS(3 GHZ~18 GHZ)	16 17 19 20 22 22 23 30 42 48 72
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLERADIATED TEST RESULTS8.1.RESTRICTED BANDEDGE8.2.SPURIOUS EMISSIONS(1 GHZ~3 GHZ)8.3.SPURIOUS EMISSIONS(3 GHZ~18 GHZ)8.4.SPURIOUS EMISSIONS(9 KHZ~30 MHZ)	16 17 19 20 22 23 30 42 48 72 75
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION.7.5.DUTY CYCLERADIATED TEST RESULTS8.1.RESTRICTED BANDEDGE8.2.SPURIOUS EMISSIONS(1 GHZ~3 GHZ)8.3.SPURIOUS EMISSIONS(3 GHZ~18 GHZ)8.4.SPURIOUS EMISSIONS(9 KHZ~30 MHZ)8.5.SPURIOUS EMISSIONS(18 GHZ~26 GHZ)8.6.SPURIOUS EMISSIONS(30 MHZ~1 GHZ)	16 17 19 20 22 22 23 30 42 48 72 75 77
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ANTENNA PORT TEST RESULTS7.1.CONDUCTED OUTPUT POWER7.2.6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH7.3.POWER SPECTRAL DENSITY7.4.CONDUCTED BAND EDGE AND SPURIOUS EMISSION7.5.DUTY CYCLERADIATED TEST RESULTS8.1.RESTRICTED BANDEDGE8.2.SPURIOUS EMISSIONS(1 GHZ~3 GHZ)8.3.SPURIOUS EMISSIONS(3 GHZ~18 GHZ)8.4.SPURIOUS EMISSIONS(9 KHZ~30 MHZ)8.5.SPURIOUS EMISSIONS(18 GHZ~26 GHZ)8.6.SPURIOUS EMISSIONS(30 MHZ~1 GHZ)ANTENNA REQUIREMENT	16 17 19 20 22 23 30 42 48 72 75 77 79

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<i>11.1.</i> 11.1.1. 11.1.2.	APPENDIX A: DTS BANDWIDTH Test Result Test Graphs	83
<i>11.2.</i> 11.2.1. 11.2.2.	APPENDIX B: OCCUPIED CHANNEL BANDWIDTH Test Result Test Graphs	
<i>11.3.</i> 11.3.1.	APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER Test Result	
<i>11.4.</i> 11.4.1. 11.4.2.	APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY Test Result Test Graphs	94
<i>11.5</i> . 11.5.1. 11.5.2.	APPENDIX E: BAND EDGE MEASUREMENTS Test Result Test Graphs	
<i>11.6.</i> 11.6.1. 11.6.2.	APPENDIX F: CONDUCTED SPURIOUS EMISSION Test Result Test Graphs	
<i>11.7.</i> 11.7.1. 11.7.2.	APPENDIX G: DUTY CYCLE Test Result Test Graphs	



1. ATTESTATION OF TEST RESULTS

Applicant Information

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Unit 05 and unit 06, 6th Floor, Greenfield Tower Concordia Plaza, 1 Science Museum Road, TST East, Hong Kong
347 Fifth Avenue Suite 1402-199, New York NY 10018 United States Of America (Excluding The States Of Alaska)
MARVEL VS. CAPCOM 2 WITH RISER ARCADE1UP
MRC-A-207310
June 29, 2022
Normal
5101630

June 30, 2022 to July 20, 2022

APPLICABLE STANDARDS

STANDARD

TEST RESULTS

CFR 47 FCC PART 15 SUBPART C ISED RSS-247 ISSUE 2 (DTS)

Pass

Prepared By:

Date of Tested:

Kebo Zhang Senior Project Engineer

Checked By: Denny Gran

Denny Huang Senior Project Engineer

Approved By:

Stephen Guo Laboratory Manager



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 558074 D01 15.247 Meas Guidance v05r02, 414788 D01 Radiated Test Site v01r01, CFR 47 FCC Part 2, CFR 47 FCC Part 15, ANSI C63.10-2013, ISED RSS-247 Issue 2 and ISED RSS-GEN Issue 5.

3. FACILITIES AND ACCREDITATION

	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 Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject
Accreditation Certificate	Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. 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

Note1:

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.

Note2:

The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note3:

For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.



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:

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

MHz ~ 0.15 MHz	2	4.00
MHz ~ 30 MHz	2	3.62
Hz ~ 30MHz	2	2.20
MHz ~ 1 GHz	2	3.16
Hz ~ 18 GHz	2	5.64
	MHz ~ 30 MHz Hz ~ 30MHz MHz ~ 1 GHz Hz ~ 18 GHz	MHz ~ 30 MHz 2 Hz ~ 30MHz 2 MHz ~ 1 GHz 2

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	MARVEL VS. CAPCOM 2 WITH RISER ARCADE1UP
Model	MRC-A-207310
Power Supply	AC 120 V, 60 Hz

Frequency Band:	2400 MHz to 2483.5 MHz
Frequency Range:	2412 MHz to 2462 MHz
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Number of Channels:	IEEE 802.11b/g/n-HT20: 11 IEEE 802.11n-HT40: 7

5.2. CHANNEL LIST

Channel List for 802.11b/g/n (20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/

Channel List for 802.11n (40 MHz)							
ChannelFrequency (MHz)Frequency (MHz)Frequency (MHz)Frequency (MHz)Frequency (MHz)Frequency (MHz)Frequency (MHz)							Frequency (MHz)
3	2422	5	2432	7	2442	9	2452
4	2427	6	2437	8	2447	/	/

5.3. MAXIMUM AVERAGE EIRP

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)	Maximum AVG EIRP (dBm)
b	2412 ~ 2462	1-11[11]	7.33	12.37
g	2412 ~ 2462	1-11[11]	6.59	11.63
n HT20	2412 ~ 2462	1-11[11]	6.97	12.01
n HT40	2422 ~ 2452	3-9[7]	7.51	12.55

IEEE Std. 802.11	Test Channel Number	Frequency
b	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
g	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT20	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT40	CH 3(Low Channel), CH 6(MID Channel), CH 9(High Channel)	2422 MHz, 2437 MHz, 2452 MHz

5.4. TEST CHANNEL CONFIGURATION

5.5. THE WORSE CASE POWER SETTING PARAMETER

The W	The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Softw	/are			SS	COM			
	Transmit			Test C	Channel			
Modulation Mode	Antenna	1	NCB: 20MHz			ICB: 40MHz		
Wiode	Number	CH 1	CH 6	CH 11	CH 3	CH 6	CH 9	
802.11b	1	38	37	36				
802.11g	1	Default	48	46] /			
802.11n HT20	1	Default 46						
802.11n HT40	1	/	/	/	Default	Default	48	

WORST-CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.5.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps 802.11g mode: 6 Mbps 802.11n HT20 mode: MCS0 802.11n HT40 mode: MCS0

The measured additional path loss was included in any path loss calculations for all RF cable used during tested.

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)	Cable loss(dBi)	Final Gain(dBi)
1	2412-2462	monopole	6.46	-1.42	5.04

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	⊠1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	⊠1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	⊠1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT40	⊠1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.

Note: The value of the antenna gain was declared by customer.



5.7. SUPPORT UNITS FOR SYSTEM TEST

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	Laptop	ThinkPad	T460S	SL10K24796 JS
2	UART	/	/	/

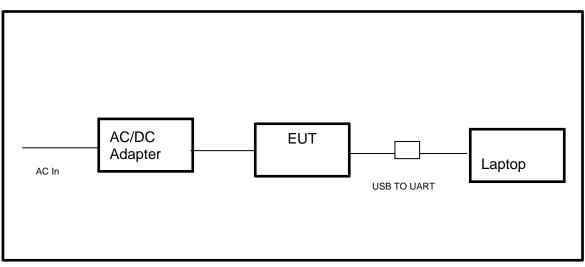
I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	/	/	1.0	/

ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
1	AC/DC Adapter	Royal-Etech International Limited	BI36L-120300-I-LED	Input: 100-240 V~, 50/60 Hz 1.2 A Output: DC 12V, 3A, 36 W

5.8. SETUP DIAGRAM



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6. MEASURING EQUIPMENT AND SOFTWARE USED

R&S TS 8997 Test System									
Equipment		Manufacturer Model N		No.	Serial No.	Last C	Cal.	Due. Date	
Power sensor, Power M	leter	R&S	6	OSP1	20	100921	Apr.02,2	2022	Apr.01,2023
Vector Signal Generat	tor	R&S	6	SMBV1	00A	261637	Oct.30, 2	2021	Oct.29, 2022
Signal Generator		R&S	6	SMB10	00A	178553	Oct.30, 2	2021	Oct.29, 2022
Signal Analyzer		R&S	5	FSV4	10	101118	Oct.30, 2	2021	Oct.29, 2022
				Softwar	е				
Description		1	Manul	acturer		Nam	e		Version
For R&S TS 8997 Test	Syste	m Ro	hde 8	Schwa	z	EMC	32		10.60.10
Tonsend RF Test System									
Equipment	Manu	ufacturer	Мо	del No.	Serial No.		Last Cal.		Due. Date
Wideband Radio Communication Tester	F	R&S	CN	W500		155523	Oct.30, 2021		Oct.29, 2022
Wireless Connectivity Tester	F	R&S	CN	W270	120	1.0002N75- 102	Sep.29,	2021	Sep.28, 2022
PXA Signal Analyzer	Ke	ysight	NS	030A	ΜY	′55410512	Oct.30,	2021	Oct.29, 2022
MXG Vector Signal Generator	Ke	ysight	N5	182B	MΥ	′56200284	Oct.30,	2021	Oct.29, 2022
MXG Vector Signal Generator	Ke	ysight	N5	5172B	MΥ	′56200301	Oct.30,	2021	Oct.29, 2022
DC power supply	Ke	ysight	E3	642A	ΜY	′55159130	Oct.30,	2021	Oct.29, 2022
Temperature & Humidity Chamber				30-CC-2		2088	Nov.20,	2020	Nov.19,2022
				Softwar	е				
Description	1	Manufact	urer	Name Ve			Version		
Tonsend SRD Test Syst	tem	Tonser	nd	JS1′	120-3	3 RF Test S	ystem	2	.6.77.0518

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	Conducted Emissions									
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date					
EMI Test Receiver	R&S	ESR3	101961	Oct.30, 2021	Oct.29, 2022					
Two-Line V- Network	R&S	ENV216	101983	Oct.30, 2021	Oct.29, 2022					
Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Oct.30, 2021	Oct.29, 2022					
		So	ftware							
	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.	Due Date					
MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.30, 2021	Oct.29, 2022					
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130959	Aug.02, 2021	Aug.01, 2024					
Preamplifier	HP	8447D	2944A09099	Oct.30, 2021	Oct.29, 2022					
EMI Measurement Receiver	R&S	ESR26	101377	Oct.30, 2021	Oct.29, 2022					
Horn Antenna	TDK	HRN-0118	130940	July 20, 2021	July 19, 2024					
Preamplifier	TDK	PA-02-0118	TRS-305- 00067	Oct.30, 2021	Oct.29, 2022					
Horn Antenna	Schwarzbeck	BBHA9170	697	July 20, 2021	July 19, 2024					
Preamplifier	TDK	PA-02-2	TRS-307- 00003	Oct.31, 2021	Oct.30, 2022					
Preamplifier	TDK	PA-02-3	TRS-308- 00002	Oct.31, 2021	Oct.30, 2022					
Loop antenna	Schwarzbeck	1519B	00008	Dec.14, 2021	Dec.13, 2024					
Preamplifier	TDK	PA-02-001- 3000	TRS-302- 00050	Oct.31, 2021	Oct.30, 2022					
Preamplifier	Mini-Circuits	ZX60-83LN- S+	SUP01201941	Oct.31, 2021	Oct.30, 2022					
High Pass Filter	Wi	WHKX10- 2700-3000- 18000-40SS	23	Oct.31, 2021	Oct.30, 2022					
Highpass Filter	Wainwright	WHKX10- 5850-6500- 1800-40SS	4	Oct.31, 2021	Oct.30, 2022					
Band Reject Filter	Wainwright	WRCJV12- 5695-5725- 5850-5880- 40SS	4	Oct.31, 2021	Oct.30, 2022					
Band Reject Filter	Wainwright	WRCJV20- 5120-5150-	2	Oct.31, 2021	Oct.30, 2022					

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					r
		5350-5380-			
		60SS			
		WRCJV20-			
Band Reject	Wainwright	5440-5470-	1	Oct.31, 2021	Oct.30, 2022
Filter	wannwingin	5725-5755-	I	001.01, 2021	001.00, 2022
		60SS			
		WRCJV8-			
Band Reject	Wainwright	2350-2400-	4	Oct.31, 2021	Oct.30, 2022
Filter	wannwingin	2483.5-		000.01, 2021	001.00, 2022
		2533.5-40SS			
		WRCD5-			
Band Reject		1879-			
Filter	Wainwright	1879.85-	1	Oct.31, 2021	Oct.30, 2022
		1880.15-			
		1881-40SS			
		WHJ10-882-			
Notch Filter	Wainwright	980-7000-	1	Oct.31, 2021	Oct.30, 2022
		40SS			
		So	ftware		
	Description		Manufacturer	Name	Version
Test Software	for Radiated E	missions	Farad	EZ-EMC	Ver. UL-3A1

Other Instrument									
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date				
Temperature humidity probe	OMEGA	ITHX-SD-5	18470007	Nov. 4, 2021	Nov. 3, 2022				
Barometer	Yiyi	Baro	N/A	Nov. 15, 2021	Nov. 14, 2022				



7. ANTENNA PORT TEST RESULTS

7.1. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3) ISED RSS-247 5.4 (d)	AVG Conduct Output Power	1 watt or 30 dBm	2400-2483.5

TEST PROCEDURE

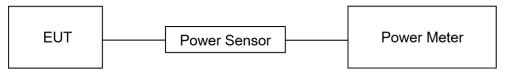
Refer to ANSI C63.10-2013 clause 11.9.2.3.1.

Connect the EUT to a low loss RF cable from the antenna port to the power sensor (video bandwidth is greater than the occupied bandwidth).

Measure peak emission level, the indicated level is the average output power, after any corrections for external attenuators and cables.

The test result in dBm by adding [10 log (1 / D)], where D is the duty cycle.

TEST SETUP



TEST ENVIRONMENT

Temperature	26.1 ℃	Relative Humidity	63%
Atmosphere Pressure	101.2kPa	Test Voltage	AC 120 V, 60 Hz

TEST RESULTS

Please refer to section "Test Data" - Appendix C



7.2. 6DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2) ISED RSS-247 5.2 (a)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99 % Occupied Bandwidth	For reporting purposes only.	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

Connect the EUT to the s	pectrum analyser and	use the following settings:
	pool and analy oor and	

Center Frequency	The center frequency of the channel under test
Frequency Span	For 6 dB Bandwidth: Enough to capture all products of the modulation carrier emission For 99 % Occupied Bandwidth: Between 1.5 times and 5.0 times the OBW
Detector	Peak
RBW	For 6 dB Bandwidth: 100 kHz For 99 % Occupied Bandwidth: 1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth: ≥3 × RBW For 99 % Occupied Bandwidth: ≥3 × RBW
Trace	Max hold
Sweep	Auto couple

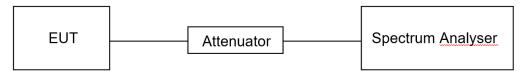
a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

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TEST SETUP



TEST ENVIRONMENT

Temperature	26.1 ℃	Relative Humidity	63%
Atmosphere Pressure	101.2kPa	Test Voltage	AC 120 V, 60 Hz

TEST RESULTS

Please refer to section "Test Data" - Appendix A&B



7.3. POWER SPECTRAL DENSITY

<u>LIMITS</u>

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.10.5.

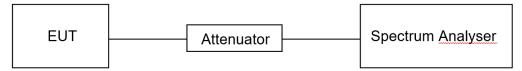
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	power averaging (rms) or sample detector
RBW	$3 \text{ kHz} \le \text{RBW} \le 100 \text{ kHz}$
VBW	≥3 × RBW
Span	1.5 x OBW bandwidth
Trace	Average
Sweep time	Auto couple

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



TEST ENVIRONMENT

Temperature	26.1 ℃	Relative Humidity	63%
Atmosphere Pressure	101.2kPa	Test Voltage	AC 120 V, 60 Hz

TEST RESULTS

Please refer to section "Test Data" - Appendix D



7.4. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 2		
Section Test Item Limit		
CFR 47 FCC §15.247 (d) ISED RSS-247 5.5	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.11 and 11.13.

Connect the EUT to the spectrum analyser and use the following settings for reference level measurement:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.

Change the settings for emission level measurement:

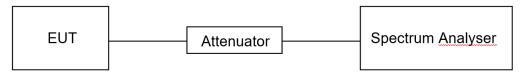
5030	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
measurement points	≥span/RBW
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.

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TEST SETUP



TEST ENVIRONMENT

Temperature	26.1 ℃	Relative Humidity	63%
Atmosphere Pressure	101.2kPa	Test Voltage	AC 120 V, 60 Hz

TEST RESULTS

Please refer to section "Test Data" - Appendix E&F



7.5. DUTY CYCLE

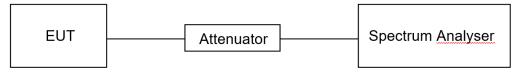
<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.6 Zero – Span Spectrum Analyzer method.

TEST SETUP



TEST ENVIRONMENT

Temperature	26.1 ℃	Relative Humidity	63%
Atmosphere Pressure	101.2kPa	Test Voltage	AC 120 V, 60 Hz

TEST RESULTS

Please refer to section "Test Data" - Appendix G



8. RADIATED TEST RESULTS

LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209.

Please refer to ISED RSS-GEN Clause 8.9 and Clause 8.10.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Stren (dBuV/m)	•
		Quasi-	Peak
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
	300	74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz			
Frequency (MHz) Field strength (microvolts/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	

ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz			
Frequency Magnetic field strength (H-Field) (µA/m) Measurement distance (m)			
9 - 490 kHz ^{Note 1}	6.37/F (F in kHz)	300	
490 - 1705 kHz	63.7/F (F in kHz)	30	
1.705 - 30 MHz	0.08	30	

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.



ISED Restricted bands please refer to ISED RSS-GEN Clause 8.10

MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	158.7 - 158.9	10.6 - 12.7
3.020 - 3.028	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 18.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1648.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3280 - 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138		

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. ²Above 38.6c

TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.

2. The EUT was arranged to its worst case and then 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, Face-on and Face-off polarizations of the antenna are set to make the measurement.

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

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, 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 and average detector mode remeasured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω . For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold



1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.

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 80 cm above ground.

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

5. For measurement below 1 GHz, 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. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Above 1G

The setting of the spectrum analyser

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.6.

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 1.5 m above ground.

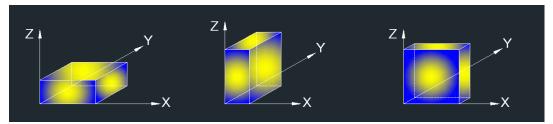
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.



X axis, Y axis, Z axis positions:



Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

For Band edge note:

1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.5.

6. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7. Horizontal and Vertical have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission 1GHz-3GHz note:

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.5.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

8. All modes and channels have been tested, only the worst data was recorded in the

report.

For Radiate Spurious emission 3GHz-18GHz note:

Note: 1. Peak Result = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.5.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.

7. Proper operation of the transmitter prior to adding the filter to the measurement chain.

For Radiate Spurious emission 9kHz-30MHz note:

1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

8. All modes and channels have been tested, only the worst data was recorded in the report.

For Radiate Spurious emission 18GHz-26GHz note:

1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

8. All modes and channels have been tested, only the worst data was recorded in the

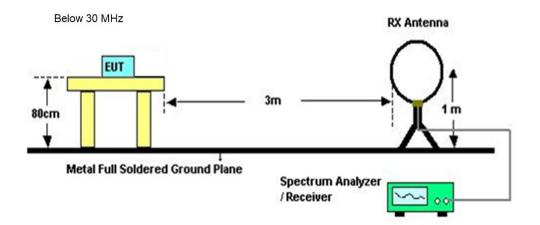
report.

For Radiate Spurious emission 30MHz-1GHz note:

- 1. Result Level = Read Level + Correct Factor.
- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

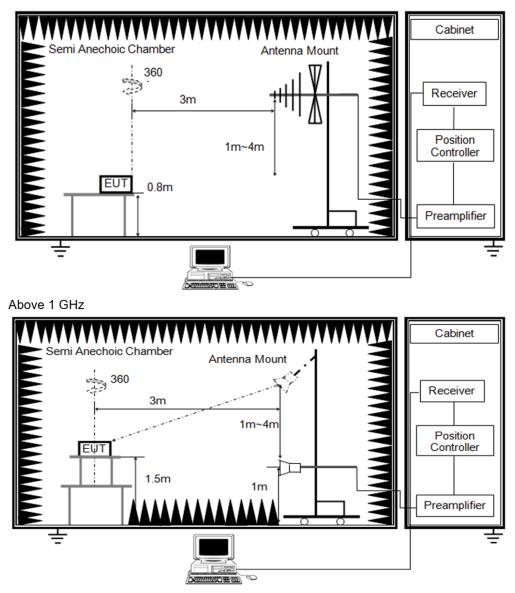
8. All modes and channels have been tested, only the worst data was recorded in the report.

TEST SETUP





Below 1 GHz and above 30 MHz



TEST ENVIRONMENT

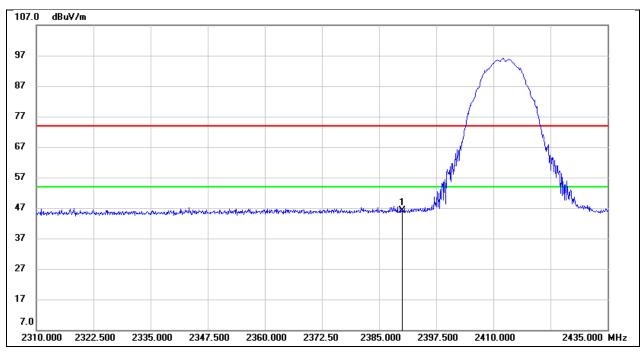
Temperature	26.3 ℃	Relative Humidity	62%
Atmosphere Pressure	101kPa	Test Voltage	AC 120 V, 60 Hz

TEST RESULTS



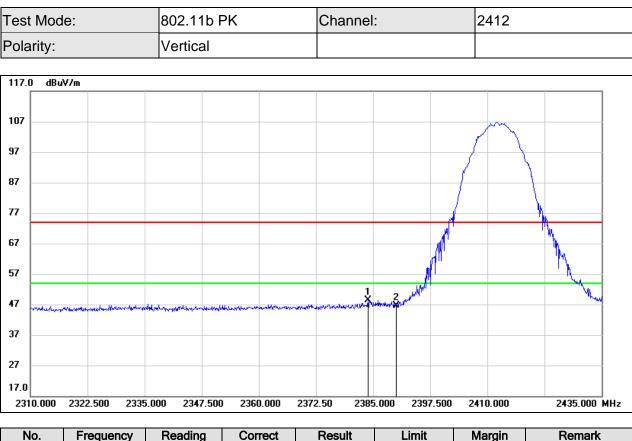
8.1. RESTRICTED BANDEDGE

Test Mode:	802.11b PK	Channel:	2412
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000	13.89	32.16	46.05	74.00	-27.95	peak

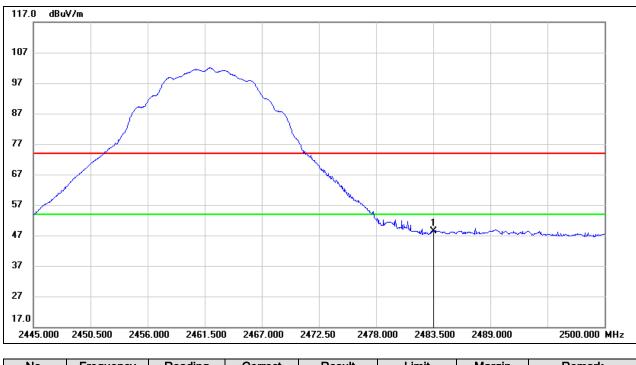




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2383.875	16.36	32.14	48.50	74.00	-25.50	peak
2	2390.000	14.55	32.16	46.71	74.00	-27.29	peak

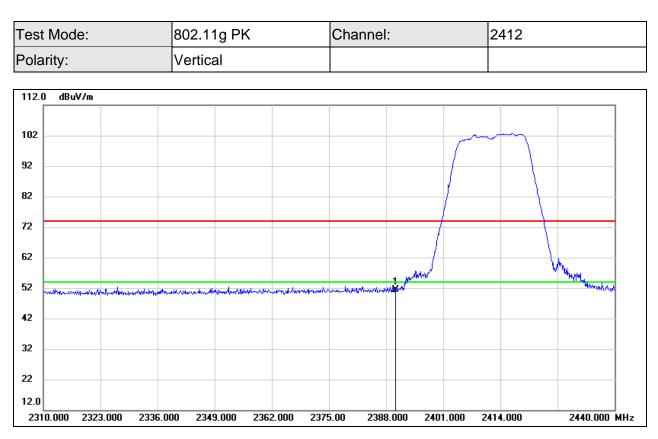


Test Mode:	802.11b PK	Channel:	2462
Polarity:	Vertical		



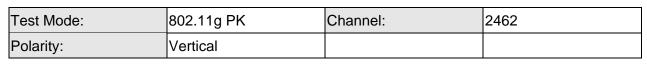
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	15.97	32.44	48.41	74.00	-25.59	peak

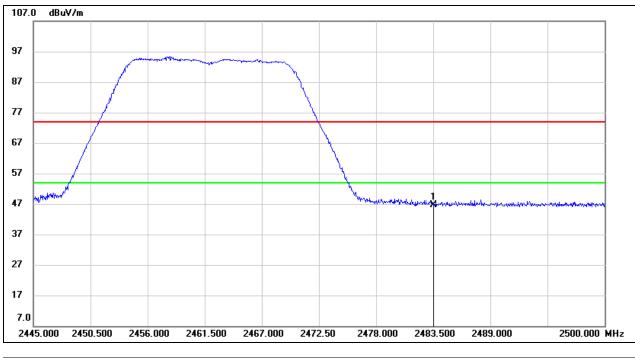




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000	19.25	32.16	51.41	74.00	-22.59	peak



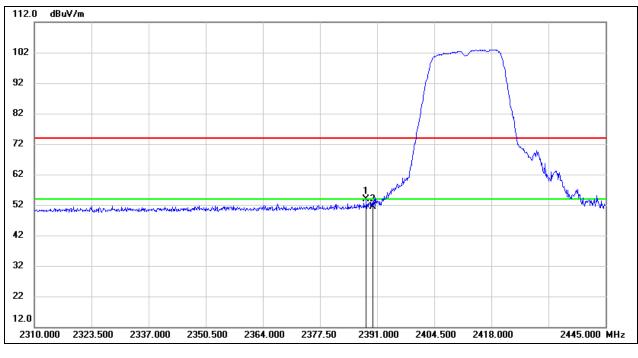




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	14.09	32.44	46.53	74.00	-27.47	peak



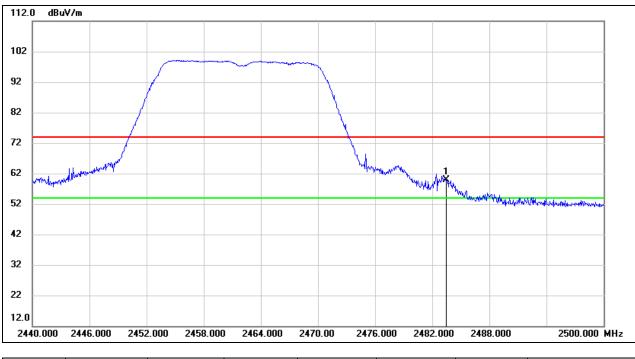
Test Mode:	802.11n HT20 PK	Channel:	2412
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2388.435	21.61	32.16	53.77	74.00	-20.23	peak
2	2390.000	19.19	32.16	51.35	74.00	-22.65	peak



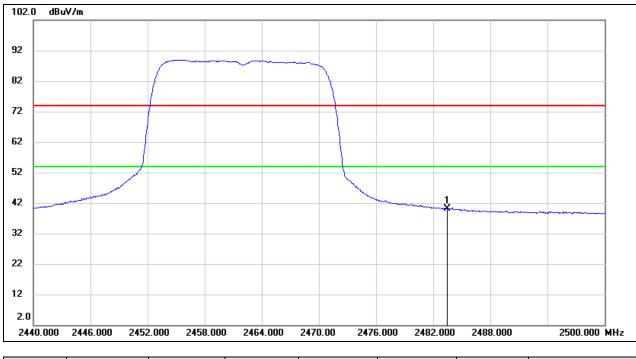
Test Mode:	802.11n HT20 PK	Channel:	2462
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	27.52	32.44	59.96	74.00	-14.04	peak



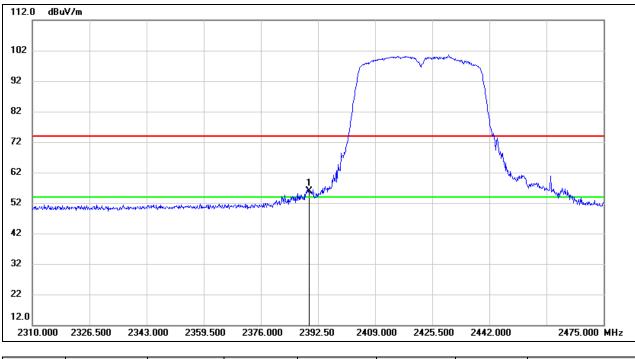
Test Mode:	802.11n HT20 AV	Channel:	2462
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	7.70	32.44	40.14	54.00	-13.86	AVG



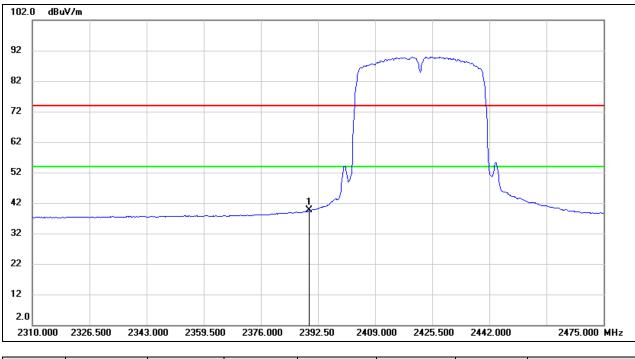
Test Mode:	802.11n HT40 PK	Channel:	2422
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000	23.79	32.16	55.95	74.00	-18.05	peak



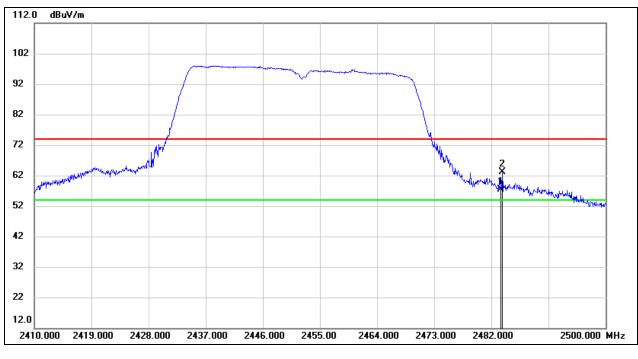
Test Mode:	802.11n HT40 AV	Channel:	2422
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2390.000	7.37	32.16	39.53	54.00	-14.47	AVG



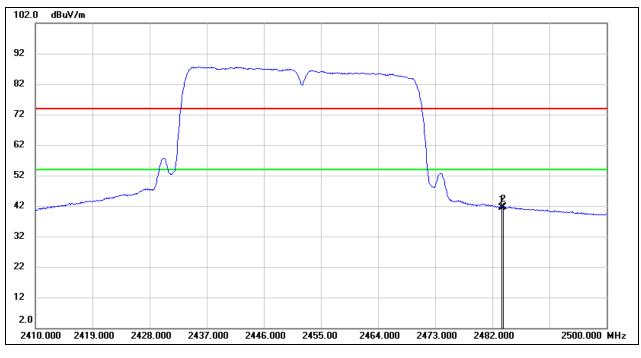
Test Mode:	802.11n HT40 PK	Channel:	2452
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	24.89	32.44	57.33	74.00	-16.67	peak
2	2483.710	30.72	32.44	63.16	74.00	-10.84	peak



Test Mode:	802.11n HT40 AV	Channel:	2452
Polarity:	Vertical		

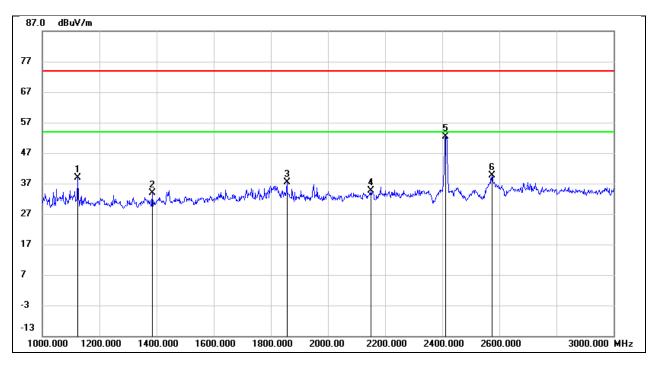


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	9.02	32.44	41.46	54.00	-12.54	AVG
2	2483.710	9.14	32.44	41.58	54.00	-12.42	AVG



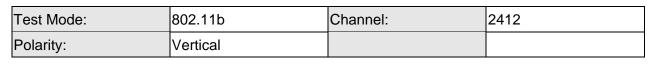
8.2. SPURIOUS EMISSIONS(1 GHZ~3 GHZ)

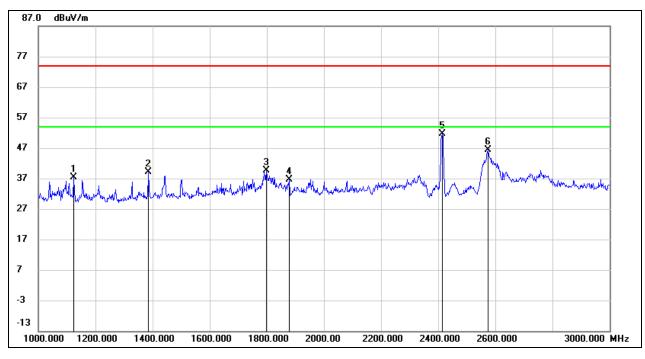
Test Mode:	802.11b	Channel:	2412
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1124.000	53.30	-14.43	38.87	74.00	-35.13	peak
2	1384.000	47.11	-13.11	34.00	74.00	-40.00	peak
3	1856.000	48.87	-11.45	37.42	74.00	-36.58	peak
4	2150.000	44.78	-10.19	34.59	74.00	-39.41	peak
5	2412.000	61.11	-8.78	52.33	74.00	-21.67	peak
6	2574.000	47.68	-8.12	39.56	74.00	-34.44	peak

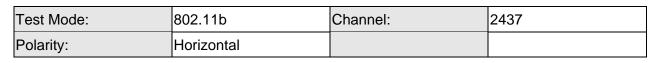


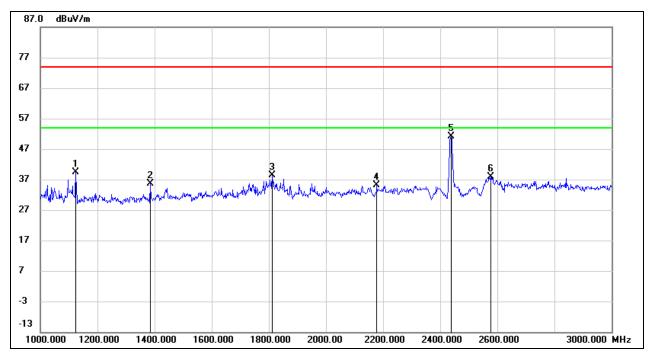




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1124.000	51.82	-14.43	37.39	74.00	-36.61	peak
2	1386.000	52.16	-13.11	39.05	74.00	-34.95	peak
3	1798.000	51.13	-11.61	39.52	74.00	-34.48	peak
4	1878.000	48.04	-11.37	36.67	74.00	-37.33	peak
5	2414.000	60.45	-8.77	51.68	74.00	-22.32	peak
6	2574.000	54.44	-8.12	46.32	74.00	-27.68	peak

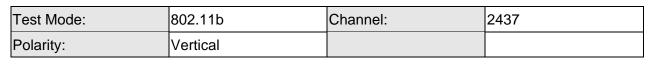


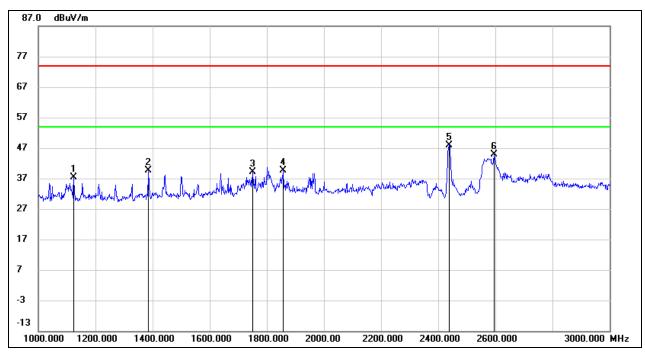




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1124.000	53.73	-14.43	39.30	74.00	-34.70	peak
2	1384.000	48.68	-13.11	35.57	74.00	-38.43	peak
3	1812.000	50.00	-11.57	38.43	74.00	-35.57	peak
4	2178.000	45.25	-10.05	35.20	74.00	-38.80	peak
5	2437.000	59.79	-8.64	51.15	74.00	-22.85	peak
6	2576.000	46.03	-8.11	37.92	74.00	-36.08	peak

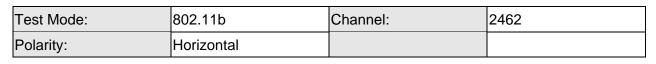


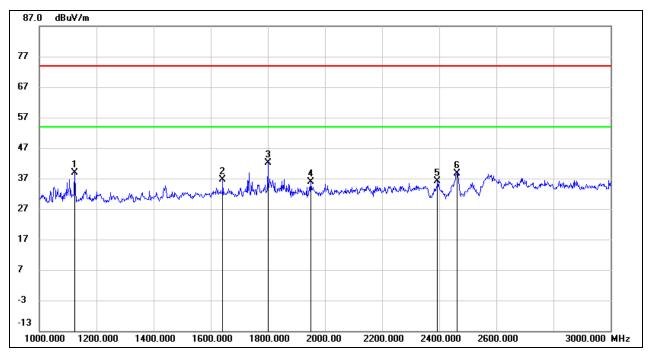




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1124.000	51.78	-14.43	37.35	74.00	-36.65	peak
2	1386.000	52.72	-13.11	39.61	74.00	-34.39	peak
3	1750.000	50.87	-11.77	39.10	74.00	-34.90	peak
4	1858.000	51.02	-11.43	39.59	74.00	-34.41	peak
5	2437.000	56.49	-8.64	47.85	74.00	-26.15	peak
6	2596.000	52.96	-8.06	44.90	74.00	-29.10	peak

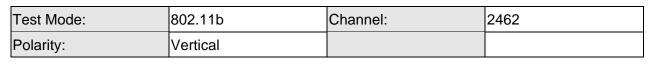


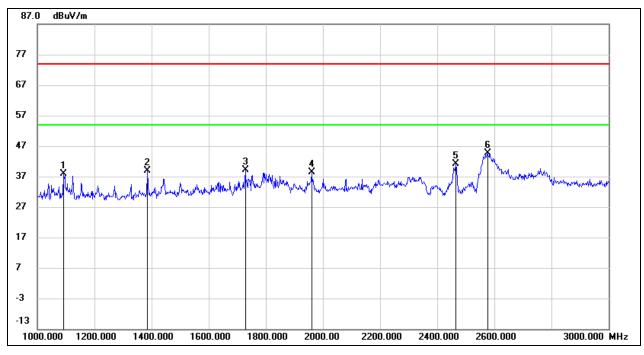




No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1124.000	53.37	-14.43	38.94	74.00	-35.06	peak
2	1642.000	48.66	-12.10	36.56	74.00	-37.44	peak
3	1800.000	53.66	-11.61	42.05	74.00	-31.95	peak
4	1950.000	47.11	-11.15	35.96	74.00	-38.04	peak
5	2394.000	44.92	-8.88	36.04	74.00	-37.96	peak
6	2462.000	47.15	-8.52	38.63	74.00	-35.37	peak





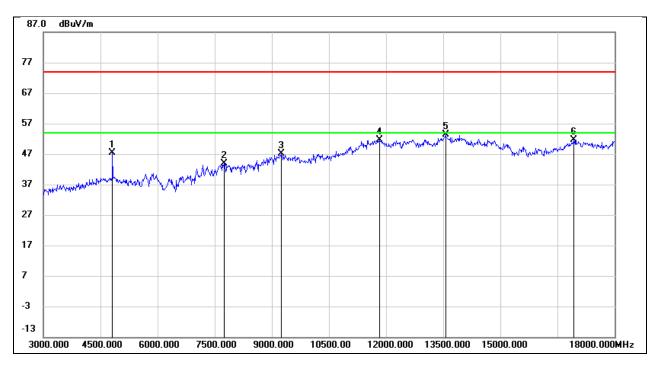


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1092.000	52.37	-14.60	37.77	74.00	-36.23	peak
2	1386.000	51.94	-13.11	38.83	74.00	-35.17	peak
3	1728.000	51.05	-11.83	39.22	74.00	-34.78	peak
4	1960.000	49.62	-11.13	38.49	74.00	-35.51	peak
5	2466.000	49.73	-8.49	41.24	74.00	-32.76	peak
6	2576.000	52.70	-8.11	44.59	74.00	-29.41	peak



8.3. SPURIOUS EMISSIONS(3 GHZ~18 GHZ)

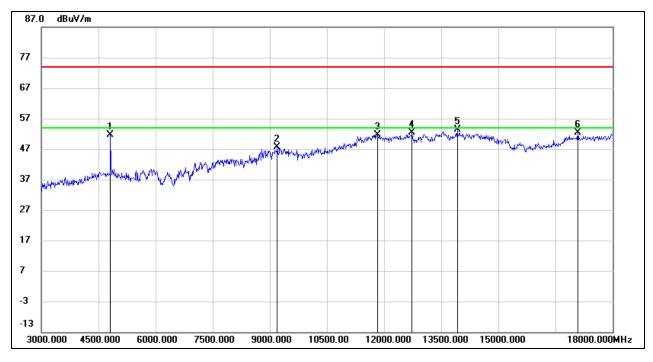
Test Mode:	802.11b	Channel:	2412
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	48.31	-0.82	47.49	74.00	-26.51	peak
2	7755.000	38.31	5.69	44.00	74.00	-30.00	peak
3	9240.000	37.28	9.84	47.12	74.00	-26.88	peak
4	11835.000	35.04	16.53	51.57	74.00	-22.43	peak
5	13560.000	33.50	19.96	53.46	74.00	-20.54	peak
6	16935.000	32.18	19.50	51.68	74.00	-22.32	peak



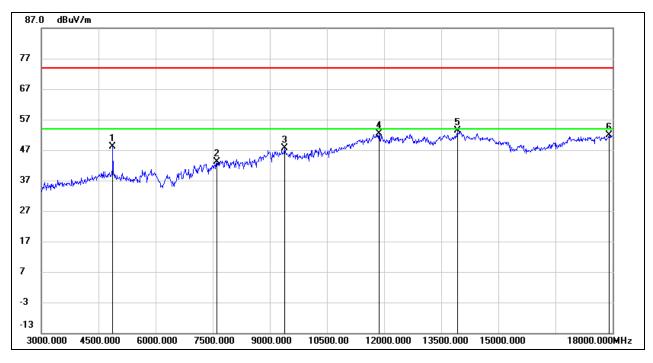
Test Mode:	802.11b	Channel:	2412
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	52.42	-0.82	51.60	74.00	-22.40	peak
2	9195.000	37.74	9.80	47.54	74.00	-26.46	peak
3	11820.000	35.09	16.49	51.58	74.00	-22.42	peak
4	12735.000	34.96	17.37	52.33	74.00	-21.67	peak
5	13920.000	32.41	20.87	53.28	74.00	-20.72	peak
6	17085.000	32.29	20.05	52.34	74.00	-21.66	peak



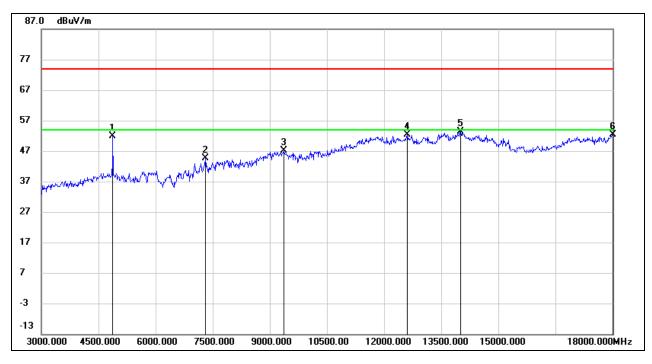
Test Mode:	802.11b	Channel:	2437
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4875.000	48.59	-0.58	48.01	74.00	-25.99	peak
2	7605.000	37.36	5.65	43.01	74.00	-30.99	peak
3	9390.000	37.62	9.98	47.60	74.00	-26.40	peak
4	11865.000	35.89	16.61	52.50	74.00	-21.50	peak
5	13920.000	32.47	20.87	53.34	74.00	-20.66	peak
6	17910.000	27.90	24.08	51.98	74.00	-22.02	peak



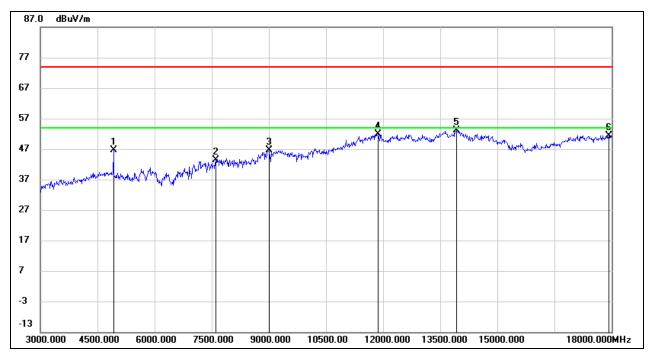
Test Mode:	802.11b	Channel:	2437
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4875.000	52.40	-0.58	51.82	74.00	-22.18	peak
2	7305.000	38.83	5.71	44.54	74.00	-29.46	peak
3	9360.000	37.24	9.96	47.20	74.00	-26.80	peak
4	12615.000	35.14	17.18	52.32	74.00	-21.68	peak
5	14010.000	32.39	21.05	53.44	74.00	-20.56	peak
6	18000.000	27.77	24.62	52.39	74.00	-21.61	peak



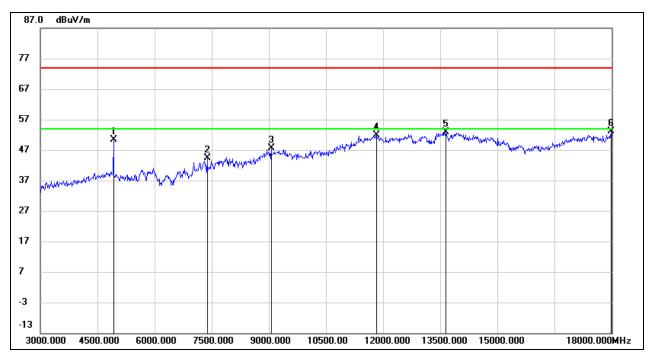
Test Mode:	802.11b	Channel:	2462
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4920.000	47.14	-0.41	46.73	74.00	-27.27	peak
2	7605.000	37.62	5.65	43.27	74.00	-30.73	peak
3	9000.000	37.07	9.61	46.68	74.00	-27.32	peak
4	11865.000	35.33	16.61	51.94	74.00	-22.06	peak
5	13920.000	32.21	20.87	53.08	74.00	-20.92	peak
6	17925.000	27.32	24.17	51.49	74.00	-22.51	peak



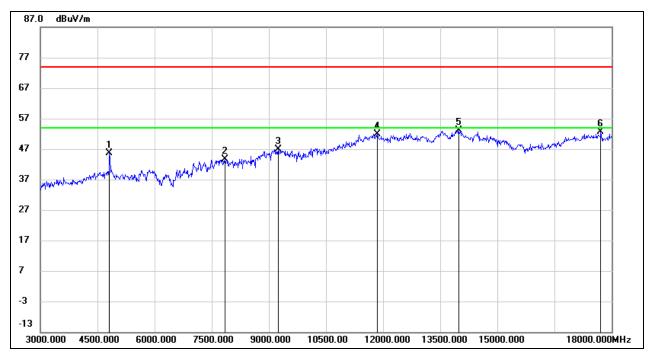
Test Mode:	802.11b	Channel:	2462
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4920.000	50.75	-0.41	50.34	74.00	-23.66	peak
2	7380.000	38.70	5.67	44.37	74.00	-29.63	peak
3	9060.000	37.90	9.67	47.57	74.00	-26.43	peak
4	11820.000	35.43	16.49	51.92	74.00	-22.08	peak
5	13650.000	32.60	20.18	52.78	74.00	-21.22	peak
6	17985.000	28.55	24.53	53.08	74.00	-20.92	peak



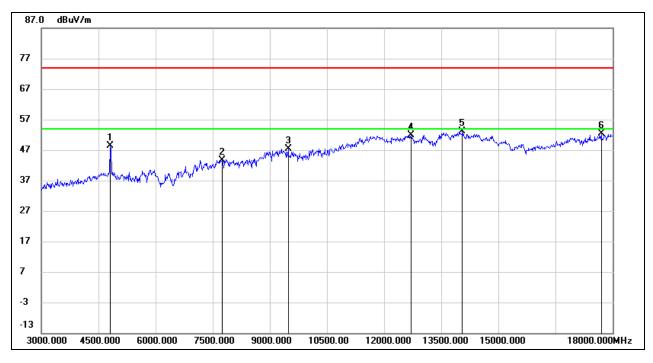
Test Mode:	802.11g	Channel:	2412
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	46.33	-0.82	45.51	74.00	-28.49	peak
2	7845.000	37.92	5.73	43.65	74.00	-30.35	peak
3	9240.000	37.03	9.84	46.87	74.00	-27.13	peak
4	11850.000	35.34	16.58	51.92	74.00	-22.08	peak
5	13980.000	32.15	21.03	53.18	74.00	-20.82	peak
6	17715.000	29.75	22.89	52.64	74.00	-21.36	peak



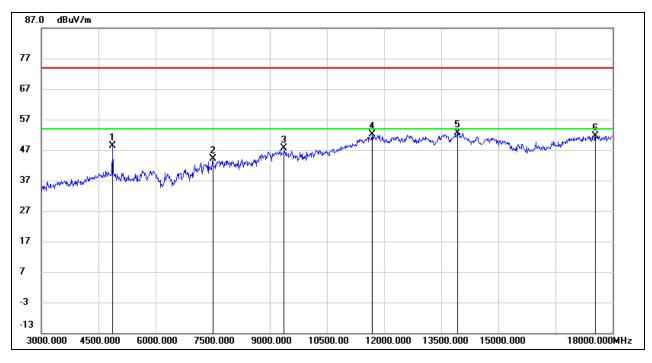
Test Mode:	802.11g	Channel:	2412
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4800.000	49.25	-0.88	48.37	74.00	-25.63	peak
2	7755.000	38.04	5.69	43.73	74.00	-30.27	peak
3	9480.000	37.26	10.07	47.33	74.00	-26.67	peak
4	12705.000	34.47	17.33	51.80	74.00	-22.20	peak
5	14055.000	32.36	20.85	53.21	74.00	-20.79	peak
6	17700.000	29.48	22.80	52.28	74.00	-21.72	peak



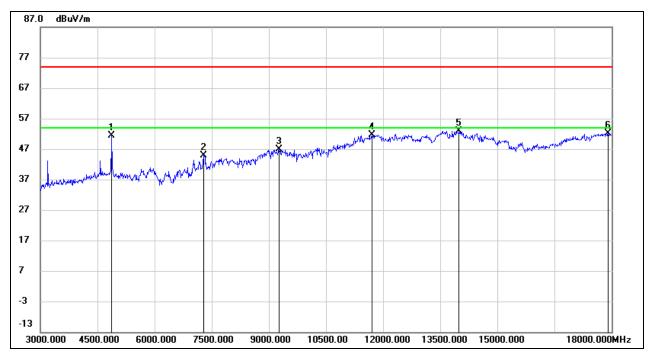
Test Mode:	802.11g	Channel:	2437
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4875.000	48.89	-0.58	48.31	74.00	-25.69	peak
2	7500.000	38.59	5.62	44.21	74.00	-29.79	peak
3	9375.000	37.64	9.98	47.62	74.00	-26.38	peak
4	11685.000	35.98	16.10	52.08	74.00	-21.92	peak
5	13920.000	31.76	20.87	52.63	74.00	-21.37	peak
6	17550.000	29.73	21.90	51.63	74.00	-22.37	peak



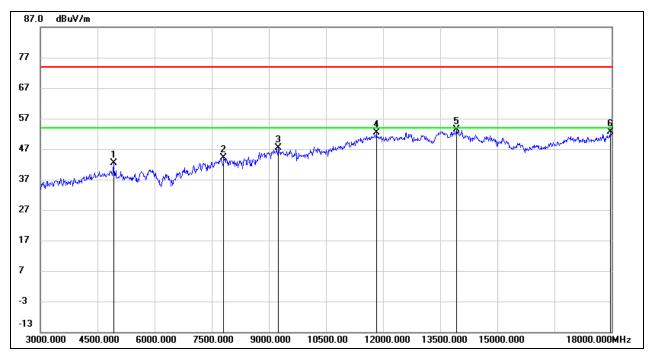
Test Mode:	802.11g	Channel:	2437
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4875.000	52.08	-0.58	51.50	74.00	-22.50	peak
2	7290.000	39.07	5.71	44.78	74.00	-29.22	peak
3	9270.000	36.98	9.87	46.85	74.00	-27.15	peak
4	11700.000	35.56	16.15	51.71	74.00	-22.29	peak
5	13995.000	31.90	21.07	52.97	74.00	-21.03	peak
6	17910.000	28.13	24.08	52.21	74.00	-21.79	peak



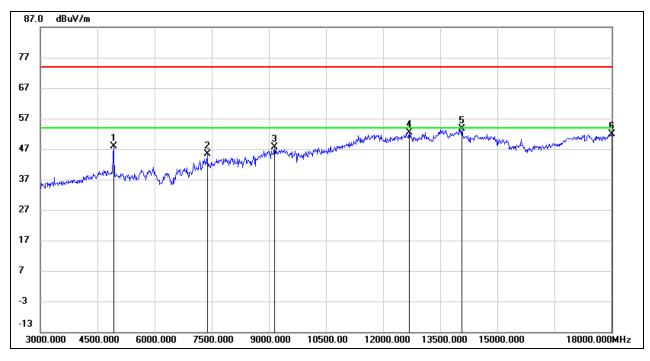
Test Mode:	802.11g	Channel:	2462
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4920.000	42.81	-0.41	42.40	74.00	-31.60	peak
2	7815.000	38.36	5.72	44.08	74.00	-29.92	peak
3	9255.000	37.55	9.86	47.41	74.00	-26.59	peak
4	11820.000	35.80	16.49	52.29	74.00	-21.71	peak
5	13935.000	32.40	20.91	53.31	74.00	-20.69	peak
6	17970.000	28.20	24.44	52.64	74.00	-21.36	peak



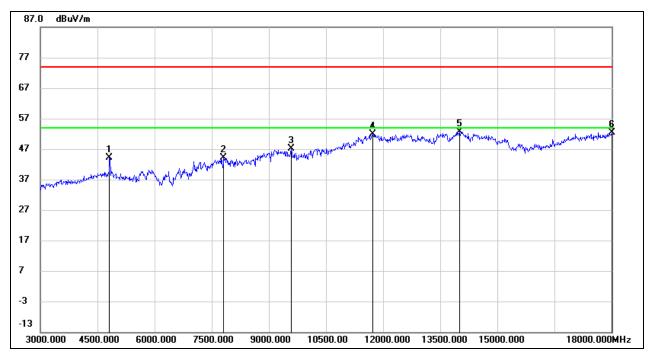
Test Mode:	802.11g	Channel:	2462
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4920.000	48.24	-0.41	47.83	74.00	-26.17	peak
2	7380.000	39.60	5.67	45.27	74.00	-28.73	peak
3	9150.000	37.86	9.75	47.61	74.00	-26.39	peak
4	12690.000	34.98	17.29	52.27	74.00	-21.73	peak
5	14070.000	32.79	20.79	53.58	74.00	-20.42	peak
6	18000.000	27.33	24.62	51.95	74.00	-22.05	peak



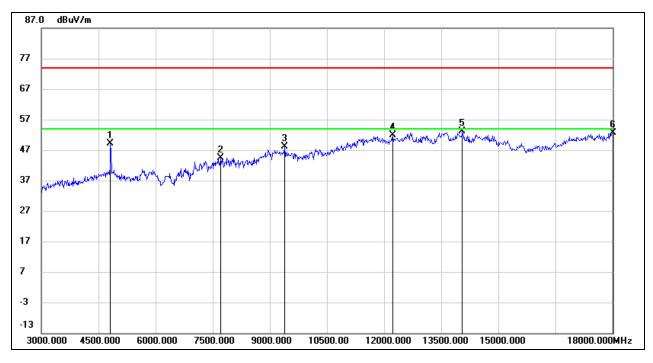
Test Mode:	802.11n HT20	Channel:	2412
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	45.00	-0.82	44.18	74.00	-29.82	peak
2	7815.000	38.44	5.72	44.16	74.00	-29.84	peak
3	9585.000	36.80	10.26	47.06	74.00	-26.94	peak
4	11730.000	35.77	16.23	52.00	74.00	-22.00	peak
5	14010.000	31.64	21.05	52.69	74.00	-21.31	peak
6	18000.000	27.78	24.62	52.40	74.00	-21.60	peak



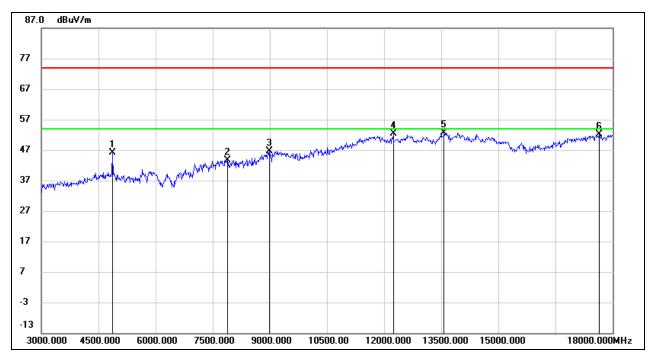
Test Mode:	802.11n HT20	Channel:	2412
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4815.000	49.88	-0.82	49.06	74.00	-24.94	peak
2	7710.000	38.71	5.69	44.40	74.00	-29.60	peak
3	9390.000	38.26	9.98	48.24	74.00	-25.76	peak
4	12225.000	34.87	16.98	51.85	74.00	-22.15	peak
5	14055.000	32.25	20.85	53.10	74.00	-20.90	peak
6	18000.000	27.97	24.62	52.59	74.00	-21.41	peak



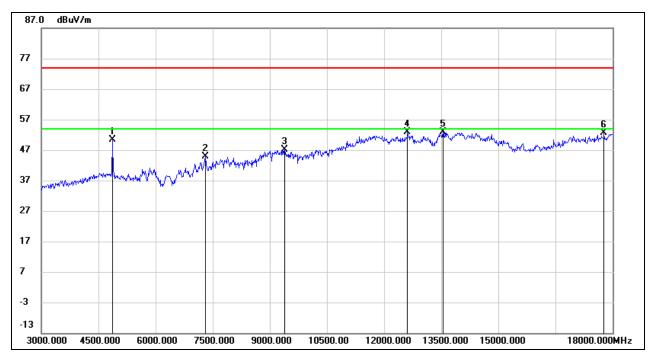
Test Mode:	802.11n HT20	Channel:	2437
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4860.000	46.80	-0.65	46.15	74.00	-27.85	peak
2	7890.000	37.79	5.73	43.52	74.00	-30.48	peak
3	8985.000	37.16	9.51	46.67	74.00	-27.33	peak
4	12240.000	35.36	17.00	52.36	74.00	-21.64	peak
5	13575.000	32.63	19.99	52.62	74.00	-21.38	peak
6	17655.000	29.59	22.52	52.11	74.00	-21.89	peak



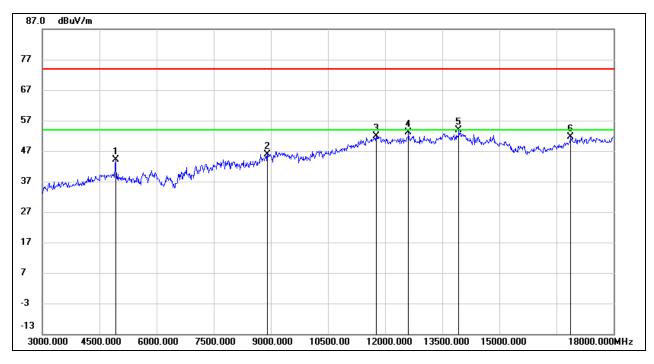
Test Mode:	802.11n HT20	Channel:	2437
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4860.000	51.03	-0.65	50.38	74.00	-23.62	peak
2	7305.000	39.14	5.71	44.85	74.00	-29.15	peak
3	9390.000	37.04	9.98	47.02	74.00	-26.98	peak
4	12615.000	35.71	17.18	52.89	74.00	-21.11	peak
5	13545.000	32.88	19.91	52.79	74.00	-21.21	peak
6	17775.000	29.33	23.25	52.58	74.00	-21.42	peak



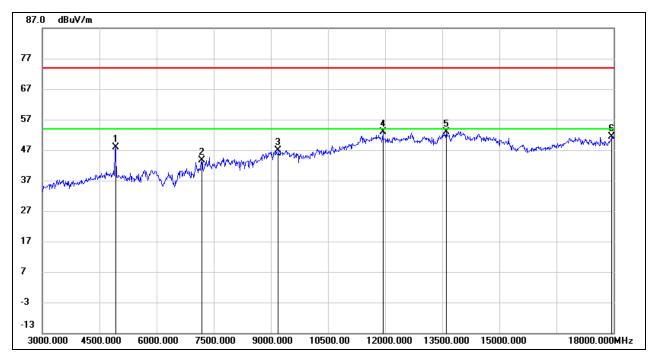
Test Mode:	802.11n HT20	Channel:	2462
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4920.000	44.59	-0.41	44.18	74.00	-29.82	peak
2	8910.000	36.79	9.05	45.84	74.00	-28.16	peak
3	11760.000	35.44	16.32	51.76	74.00	-22.24	peak
4	12615.000	35.94	17.18	53.12	74.00	-20.88	peak
5	13935.000	32.88	20.91	53.79	74.00	-20.21	peak
6	16875.000	32.39	19.29	51.68	74.00	-22.32	peak



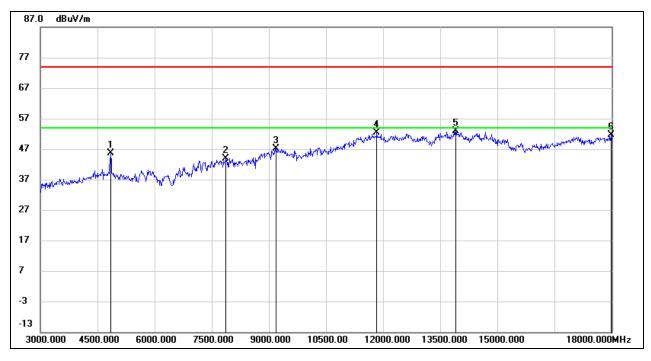
Test Mode:	802.11n HT20	Channel:	2462
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4920.000	48.35	-0.41	47.94	74.00	-26.06	peak
2	7185.000	37.86	5.75	43.61	74.00	-30.39	peak
3	9195.000	37.13	9.80	46.93	74.00	-27.07	peak
4	11940.000	36.13	16.83	52.96	74.00	-21.04	peak
5	13605.000	32.81	20.07	52.88	74.00	-21.12	peak
6	17940.000	27.20	24.26	51.46	74.00	-22.54	peak



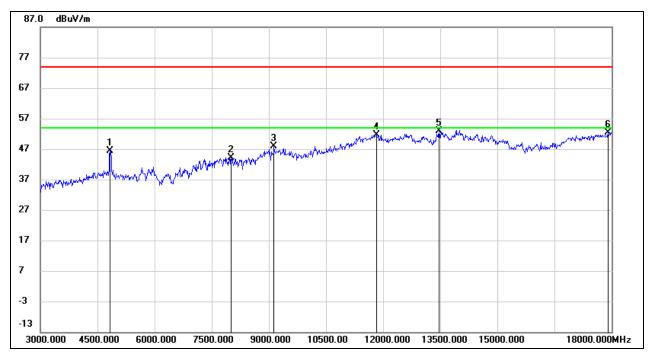
Test Mode:	802.11n HT40	Channel:	2422
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4845.000	46.32	-0.71	45.61	74.00	-28.39	peak
2	7875.000	38.16	5.72	43.88	74.00	-30.12	peak
3	9195.000	37.33	9.80	47.13	74.00	-26.87	peak
4	11835.000	35.80	16.53	52.33	74.00	-21.67	peak
5	13905.000	32.10	20.84	52.94	74.00	-21.06	peak
6	17985.000	27.03	24.53	51.56	74.00	-22.44	peak



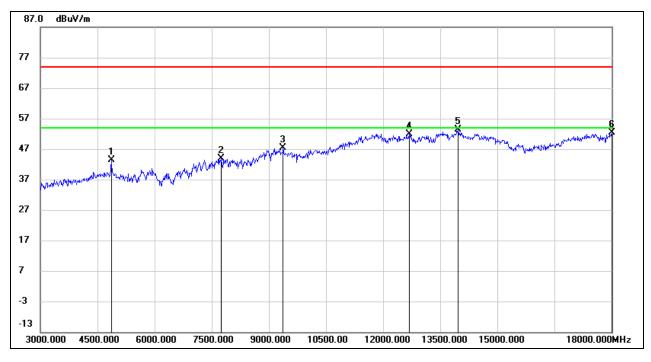
Test Mode:	802.11n HT40	Channel:	2422
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4830.000	47.24	-0.76	46.48	74.00	-27.52	peak
2	8010.000	38.44	5.79	44.23	74.00	-29.77	peak
3	9135.000	38.21	9.75	47.96	74.00	-26.04	peak
4	11820.000	35.24	16.49	51.73	74.00	-22.27	peak
5	13470.000	33.32	19.68	53.00	74.00	-21.00	peak
6	17910.000	28.27	24.08	52.35	74.00	-21.65	peak



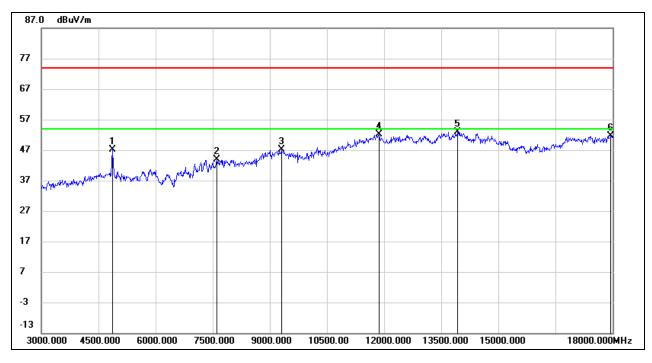
Test Mode:	802.11n HT40	Channel:	2437
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4860.000	44.07	-0.65	43.42	74.00	-30.58	peak
2	7755.000	38.29	5.69	43.98	74.00	-30.02	peak
3	9375.000	37.32	9.98	47.30	74.00	-26.70	peak
4	12690.000	34.64	17.29	51.93	74.00	-22.07	peak
5	13965.000	32.32	20.99	53.31	74.00	-20.69	peak
6	18000.000	27.81	24.62	52.43	74.00	-21.57	peak



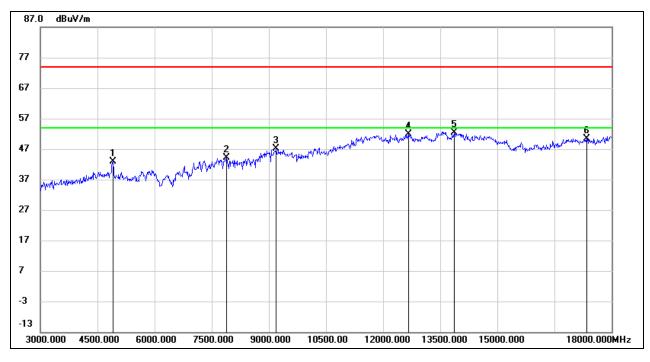
Test Mode:	802.11n HT40	Channel:	2437
Polarity:	Vertical		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4860.000	47.74	-0.65	47.09	74.00	-26.91	peak
2	7605.000	38.15	5.65	43.80	74.00	-30.20	peak
3	9300.000	37.22	9.90	47.12	74.00	-26.88	peak
4	11865.000	35.44	16.61	52.05	74.00	-21.95	peak
5	13920.000	31.97	20.87	52.84	74.00	-21.16	peak
6	17955.000	27.25	24.34	51.59	74.00	-22.41	peak



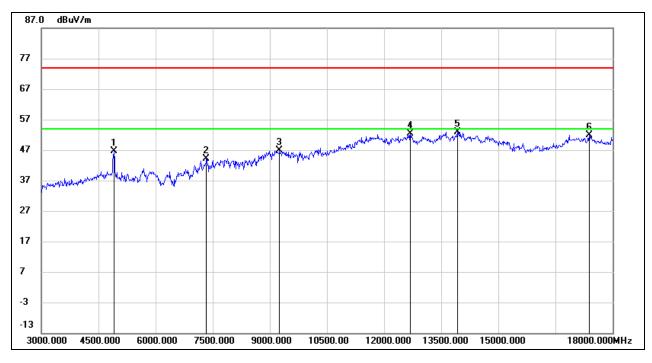
Test Mode:	802.11n HT40	Channel:	2452
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4905.000	43.32	-0.47	42.85	74.00	-31.15	peak
2	7890.000	38.35	5.73	44.08	74.00	-29.92	peak
3	9195.000	37.26	9.80	47.06	74.00	-26.94	peak
4	12660.000	34.53	17.24	51.77	74.00	-22.23	peak
5	13860.000	31.75	20.73	52.48	74.00	-21.52	peak
6	17340.000	29.49	21.00	50.49	74.00	-23.51	peak



Test Mode:	802.11n HT40	Channel:	2452
Polarity:	Vertical		

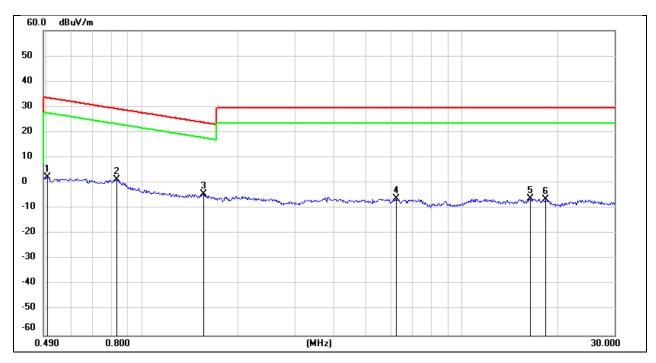


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4905.000	47.12	-0.47	46.65	74.00	-27.35	peak
2	7335.000	38.38	5.69	44.07	74.00	-29.93	peak
3	9255.000	36.94	9.86	46.80	74.00	-27.20	peak
4	12690.000	35.19	17.29	52.48	74.00	-21.52	peak
5	13920.000	32.00	20.87	52.87	74.00	-21.13	peak
6	17385.000	30.60	21.16	51.76	74.00	-22.24	peak



8.4. SPURIOUS EMISSIONS(9 KHZ~30 MHZ)

Test Mode:	802.11b	Channel:	2412
Polarity.	FACE ON TO THE EUT		

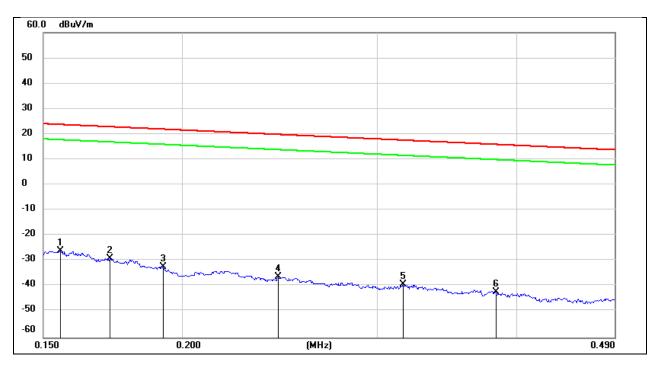


No.	Frequency	Reading	Correct	FCC	FCC Limit	ISED	ISED	Margin	Remark
				Result		Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.5039	64.43	-62.07	2.36	33.56	-49.14	-17.94	-31.20	peak
2	0.8296	63.44	-62.17	1.27	29.23	-50.23	-22.27	-27.96	peak
3	1.5564	57.68	-62.02	-4.34	23.76	-55.84	-27.74	-28.10	peak
4	6.2445	55.13	-61.32	-6.19	29.54	-57.69	-21.96	-35.73	peak
5	16.3959	54.67	-60.96	-6.29	29.54	-57.79	-21.96	-35.83	peak
6	18.2545	54.43	-60.90	-6.47	29.54	-57.97	-21.96	-36.01	peak

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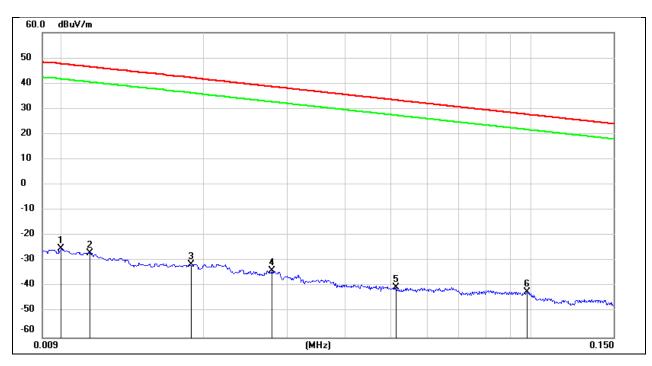
Test Mode:	802.11b	Channel:	2412
Polarity.	FACE ON TO THE EUT		



No.	Frequency	Reading	Correct	FCC	FCC Limit	ISED	ISED	Margin	Remark
				Result		Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1554	75.77	-101.65	-25.88	23.77	-77.38	-27.73	-49.65	peak
2	0.1720	72.69	-101.67	-28.98	22.90	-80.48	-28.60	-51.88	peak
3	0.1925	69.46	-101.70	-32.24	21.92	-83.74	-29.58	-54.16	peak
4	0.2442	65.53	-101.79	-36.26	19.85	-87.76	-31.65	-56.11	peak
5	0.3163	62.70	-101.87	-39.17	17.60	-90.67	-33.90	-56.77	peak
6	0.3830	59.70	-101.94	-42.24	15.94	-93.74	-35.56	-58.18	peak



Test Mode:	802.11b	Channel:	2412
Polarity.	FACE ON TO THE EUT		

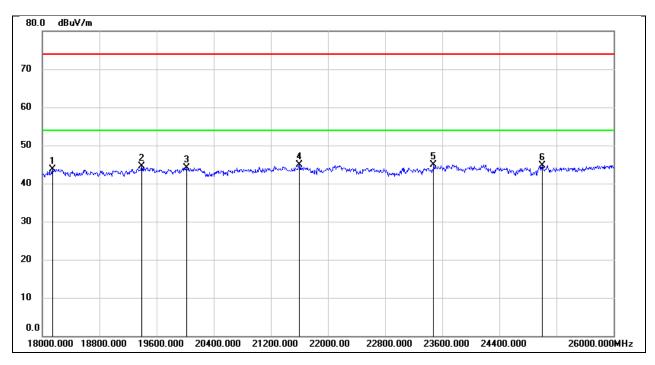


No.	Frequency	Reading	Correct	FCC	FCC Limit	ISED	ISED	Margin	Remark
				Result		Result			
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0100	76.22	-101.40	-25.18	47.60	-76.68	-3.90	-72.78	peak
2	0.0114	74.50	-101.40	-26.90	46.46	-78.40	-5.04	-73.36	peak
3	0.0188	70.14	-101.35	-31.21	42.12	-82.71	-9.38	-73.33	peak
4	0.0279	67.67	-101.38	-33.71	38.69	-85.21	-12.81	-72.40	peak
5	0.0514	61.18	-101.48	-40.30	33.38	-91.80	-18.12	-73.68	peak
6	0.0981	59.77	-101.78	-42.01	27.77	-93.51	-23.73	-69.78	peak



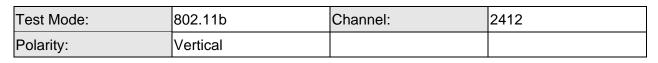
8.5. SPURIOUS EMISSIONS(18 GHZ~26 GHZ)

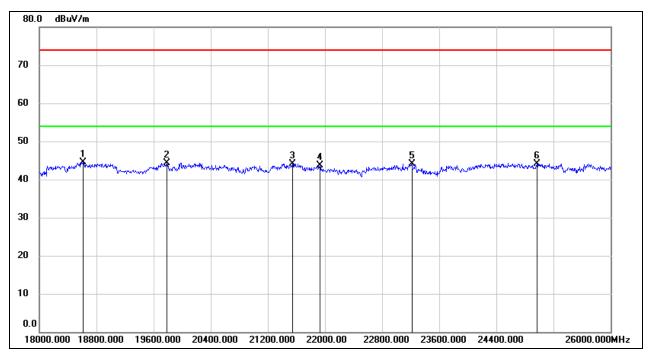
Test Mode:	802.11b	Channel:	2412
Polarity:	Horizontal		



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18144.000	49.27	-5.48	43.79	74.00	-30.21	peak
2	19392.000	50.12	-5.57	44.55	74.00	-29.45	peak
3	20016.000	49.56	-5.47	44.09	74.00	-29.91	peak
4	21600.000	49.52	-4.54	44.98	74.00	-29.02	peak
5	23480.000	48.04	-3.16	44.88	74.00	-29.12	peak
6	25000.000	46.86	-2.10	44.76	74.00	-29.24	peak



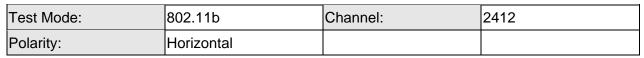


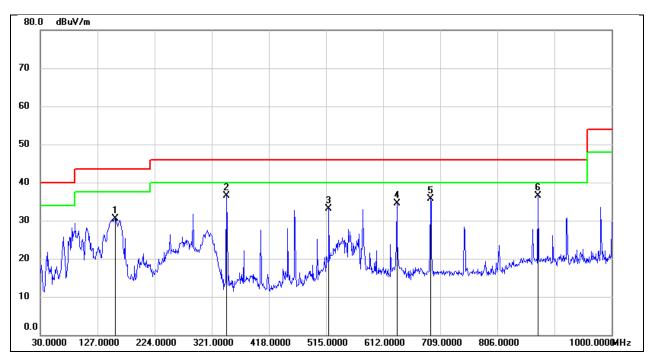


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18616.000	49.89	-5.34	44.55	74.00	-29.45	peak
2	19784.000	49.57	-5.28	44.29	74.00	-29.71	peak
3	21544.000	48.76	-4.63	44.13	74.00	-29.87	peak
4	21928.000	48.05	-4.43	43.62	74.00	-30.38	peak
5	23216.000	47.51	-3.38	44.13	74.00	-29.87	peak
6	24968.000	46.26	-2.14	44.12	74.00	-29.88	peak



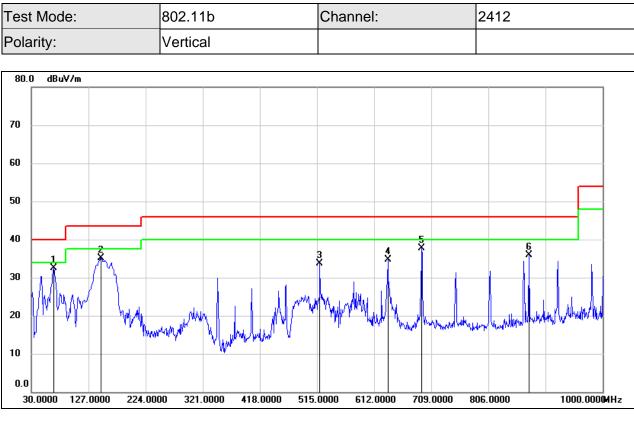
8.6. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	157.0700	48.49	-17.92	30.57	43.50	-12.93	QP
2	346.2200	50.78	-14.37	36.41	46.00	-9.59	QP
3	519.8500	44.26	-11.09	33.17	46.00	-12.83	QP
4	635.2800	43.65	-9.09	34.56	46.00	-11.44	QP
5	692.5100	44.09	-8.33	35.76	46.00	-10.24	QP
6	874.8700	42.10	-5.64	36.46	46.00	-9.54	QP





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	67.8300	53.06	-20.55	32.51	40.00	-7.49	QP
2	148.3400	53.52	-18.36	35.16	43.50	-8.34	QP
3	519.8500	44.71	-11.09	33.62	46.00	-12.38	QP
4	635.2800	43.75	-9.09	34.66	46.00	-11.34	QP
5	692.5100	46.01	-8.33	37.68	46.00	-8.32	QP
6	874.8700	41.48	-5.64	35.84	46.00	-10.16	QP



9. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Compliance.



10. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

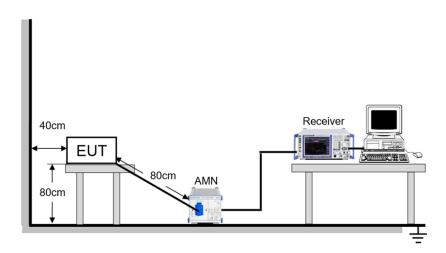
FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST PROCEDURE

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



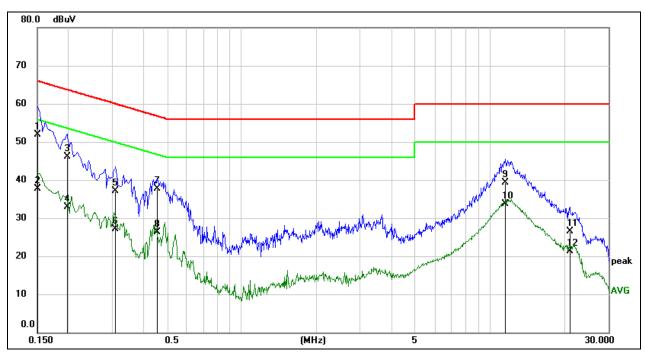
TEST ENVIRONMENT

Temperature	23.5 ℃	Relative Humidity	68.2%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V, 60 Hz



TEST RESULTS

Test Mode:	GFSK	Channel:	2402
Line:	Line		



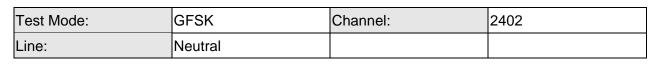
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1500	42.27	9.59	51.86	66.00	-14.14	QP
2	0.1500	28.08	9.59	37.67	56.00	-18.33	AVG
3	0.1980	36.54	9.59	46.13	63.69	-17.56	QP
4	0.1980	23.23	9.59	32.82	53.69	-20.87	AVG
5	0.3100	27.58	9.48	37.06	59.97	-22.91	QP
6	0.3100	17.54	9.48	27.02	49.97	-22.95	AVG
7	0.4580	28.37	9.34	37.71	56.73	-19.02	QP
8	0.4580	16.98	9.34	26.32	46.73	-20.41	AVG
9	11.5260	29.49	9.75	39.24	60.00	-20.76	QP
10	11.5260	23.89	9.75	33.64	50.00	-16.36	AVG
11	20.9260	16.67	9.74	26.41	60.00	-33.59	QP
12	20.9260	11.60	9.74	21.34	50.00	-28.66	AVG

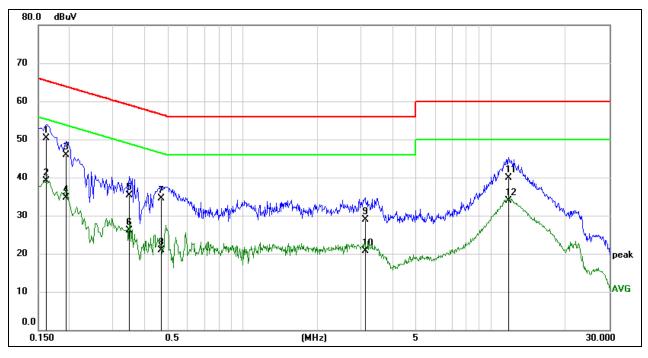
Note:

- 1. Result = Reading + Correct Factor.
- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
- 4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1620	40.73	9.51	50.24	65.36	-15.12	QP
2	0.1620	29.62	9.51	39.13	55.36	-16.23	AVG
3	0.1940	36.24	9.58	45.82	63.86	-18.04	QP
4	0.1940	25.05	9.58	34.63	53.86	-19.23	AVG
5	0.3500	25.70	9.54	35.24	58.96	-23.72	QP
6	0.3500	16.60	9.54	26.14	48.96	-22.82	AVG
7	0.4700	25.06	9.51	34.57	56.51	-21.94	QP
8	0.4700	11.31	9.51	20.82	46.51	-25.69	AVG
9	3.1140	19.21	9.62	28.83	56.00	-27.17	QP
10	3.1140	11.11	9.62	20.73	46.00	-25.27	AVG
11	11.7980	30.28	9.65	39.93	60.00	-20.07	QP
12	11.7980	24.26	9.65	33.91	50.00	-16.09	AVG

Note:

- 1. Result = Reading + Correct Factor.
- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
- 4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.



11. TEST DATA

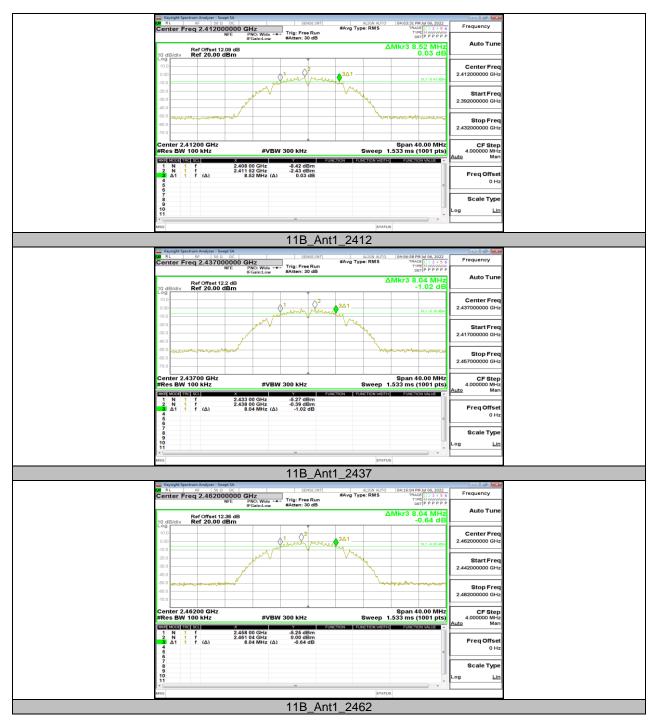
11.1. APPENDIX A: DTS BANDWIDTH

11.1.1. Test Result

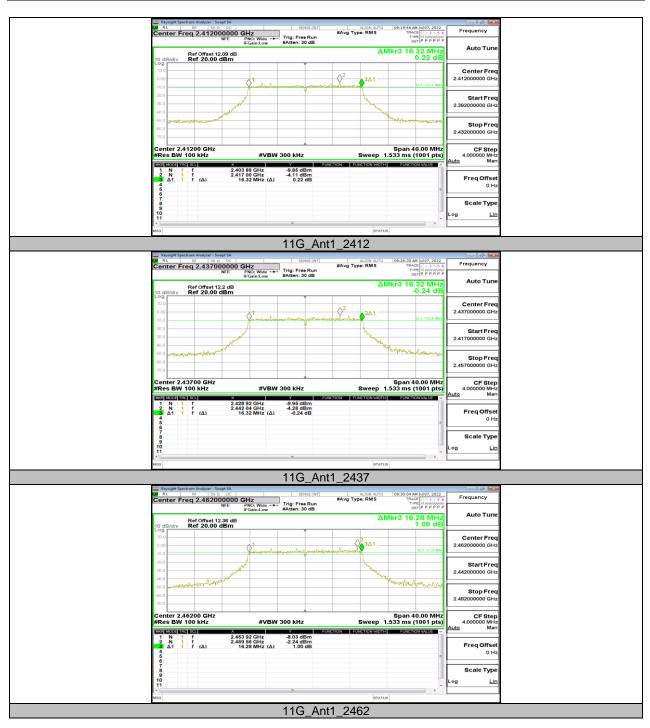
Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		2412	8.520	2408.000	2416.520	0.5	PASS
11B	Ant1	2437	8.040	2433.000	2441.040	0.5	PASS
		2462	8.040	2458.000	2466.040	0.5	PASS
	Ant1	2412	16.320	2403.880	2420.200	0.5	PASS
11G		2437	16.320	2428.920	2445.240	0.5	PASS
		2462	16.280	2453.920	2470.200	0.5	PASS
	Ant1	2412	17.160	2403.640	2420.800	0.5	PASS
11N20SISO		2437	17.280	2428.520	2445.800	0.5	PASS
		2462	17.560	2453.280	2470.840	0.5	PASS
	Ant1	2422	35.680	2404.480	2440.160	0.5	PASS
11N40SISO		2437	35.680	2419.480	2455.160	0.5	PASS
		2452	35.840	2434.320	2470.160	0.5	PASS



11.1.2. Test Graphs















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Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
		2412	13.332	2405.386	2418.718	PASS
11B	Ant1	2437	13.346	2430.367	2443.713	PASS
		2462	13.378	2455.415	2468.793	PASS
	Ant1	2412	16.930	2403.643	2420.573	PASS
11G		2437	17.006	2428.599	2445.605	PASS
		2462	17.006	2453.585	2470.591	PASS
	Ant1	2412	18.018	2403.087	2421.105	PASS
11N20SISO		2437	18.015	2428.069	2446.084	PASS
		2462	18.081	2453.070	2471.151	PASS
11N40SISO	Ant1	2422	36.211	2404.072	2440.283	PASS
		2437	36.249	2419.028	2455.277	PASS
		2452	36.244	2434.030	2470.274	PASS

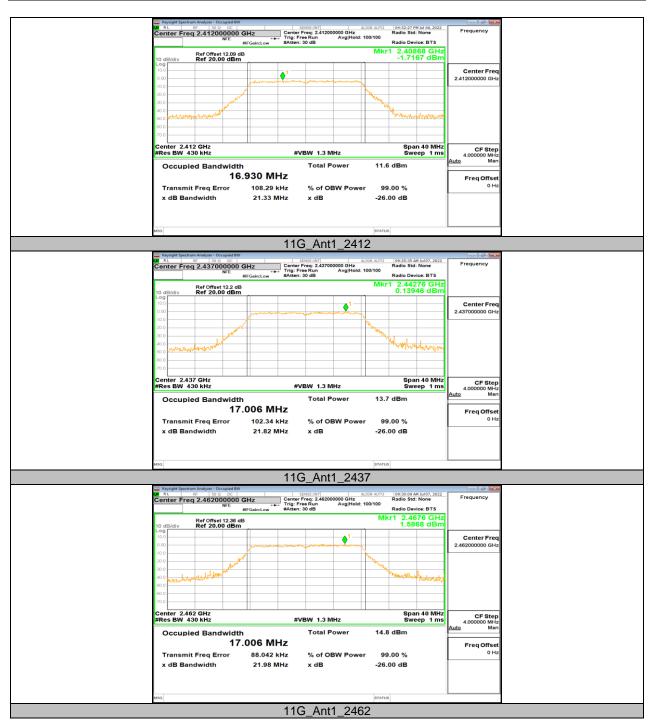
11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH 11.2.1. Test Result



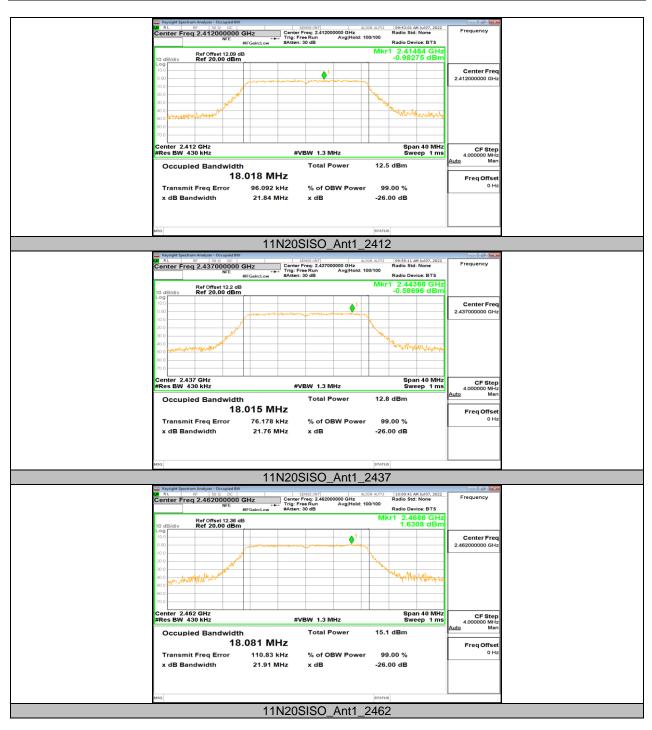
11.2.2. Test Graphs















11.3. APPENDIX C: MAXIMUM CONDUCTED OUTPUT POWER 11.3.1. Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
	Ant1	2412	6.33	≤30.00	PASS
11B		2437	6.51	≤30.00	PASS
		2462	7.33	≤30.00	PASS
	Ant1	2412	5.64	≤30.00	PASS
11G		2437	6.39	≤30.00	PASS
		2462	6.59	≤30.00	PASS
	Ant1	2412	6.50	≤30.00	PASS
11N20SISO		2437	6.97	≤30.00	PASS
		2462	6.50	≤30.00	PASS
	Ant1	2422	7.17	≤30.00	PASS
11N40SISO		2437	7.10	≤30.00	PASS
		2452	7.51	≤30.00	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.

11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY 11.4.1. Test Result

Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
	Ant1	2412	-23.53	≤8.00	PASS
11B		2437	-24.36	≤8.00	PASS
		2462	-23.96	≤8.00	PASS
	Ant1	2412	-20.13	≤8.00	PASS
11G		2437	-25.67	≤8.00	PASS
		2462	-26.56	≤8.00	PASS
	Ant1	2412	-26.11	≤8.00	PASS
11N20SISO		2437	-22.61	≤8.00	PASS
		2462	-26.77	≤8.00	PASS
	Ant1	2422	-24.19	≤8.00	PASS
11N40SISO		2437	-22.86	≤8.00	PASS
		2452	-27.55	≤8.00	PASS

Note: The Duty Cycle Factor (refer to section 7.1) is compensated in the graph.