

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBHQZ-WTW-P26080408-3
FCC ID: 2AQ68-R1061
Product: Streaming Player
Brand: Roku
Model No.: 3830X2
Received Date: 2026/8/17
Test Date: 2026/8/28 ~ 2026/9/8
Issued Date: 2026/10/2

Applicant: Hon Lin Technology Co., Ltd
Address: 11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.
Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City 244, Taiwan
Test Location(1): No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan
Test Location(2): No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 333, Taiwan

FCC Registration / 281270 / TW0032 for Test Location(1)

Designation Number: 788550 / TW0003 for Test Location(2)

Approved by:  , **Date:** 2026/10/2
Jeremy Lin / Project Engineer

This test report consists of 107 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.

Prepared by : Gina Liu / Specialist



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Table of Contents

Release Control Record	4
1 Certificate.....	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Supplementary Information	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Antenna Description of EUT	8
3.3 Channel List.....	9
3.4 Test Mode Applicability and Tested Channel Detail.....	10
3.5 Duty Cycle of Test Signal.....	11
3.6 Test Program Used and Operation Descriptions	12
3.7 Connection Diagram of EUT and Peripheral Devices	12
3.8 Configuration of Peripheral Devices and Cable Connections	12
4 Test Instruments	13
4.1 26 dB Bandwidth	13
4.2 RF Output Power.....	13
4.3 Power Spectral Density	13
4.4 6 dB Bandwidth	13
4.5 Occupied Bandwidth.....	13
4.6 AC Power Conducted Emissions	14
4.7 Unwanted Emissions below 1 GHz	15
4.8 Unwanted Emissions above 1 GHz.....	16
5 Limits of Test Items.....	17
5.1 26 dB Bandwidth	17
5.2 RF Output Power.....	17
5.3 Power Spectral Density	17
5.4 6 dB Bandwidth	17
5.5 Occupied Bandwidth.....	17
5.6 AC Power Conducted Emissions	18
5.7 Unwanted Emissions below 1 GHz	18
5.8 Unwanted Emissions above 1 GHz.....	19
6 Test Arrangements.....	20
6.1 26 dB Bandwidth	20
6.1.1 Test Setup	20
6.1.2 Test Procedure.....	20
6.2 RF Output Power.....	21
6.2.1 Test Setup	21
6.2.2 Test Procedure.....	21
6.3 Power Spectral Density	22
6.3.1 Test Setup	22
6.3.2 Test Procedure.....	22
6.4 6 dB Bandwidth	23
6.4.1 Test Setup	23
6.4.2 Test Procedure.....	23
6.5 Occupied Bandwidth.....	23
6.5.1 Test Setup	23
6.5.2 Test Procedure.....	23
6.6 AC Power Conducted Emissions	24
6.6.1 Test Setup	24
6.6.2 Test Procedure.....	24
6.7 Unwanted Emissions below 1 GHz	25
6.7.1 Test Setup	25
6.7.2 Test Procedure.....	26

6.8	Unwanted Emissions above 1 GHz.....	27
6.8.1	Test Setup	27
6.8.2	Test Procedure	27
7	Test Results of Test Item	28
7.1	26 dB Bandwidth	28
7.2	RF Output Power.....	32
7.3	Power Spectral Density	36
7.4	6 dB Bandwidth	40
7.5	Occupied Bandwidth.....	42
7.6	AC Power Conducted Emissions	46
7.7	Unwanted Emissions below 1 GHz	48
7.8	Unwanted Emissions above 1 GHz.....	50
8	Pictures of Test Arrangements	106
9	Information of the Testing Laboratories	107

Release Control Record

Issue No.	Description	Date Issued
RFBHQZ-WTW-P26080408-3	Original release.	2026/10/2

1 Certificate

Product: Streaming Player

Brand: Roku

Test Model: 3830X2

Sample Status: Engineering sample

Applicant: Hon Lin Technology Co., Ltd

Test Date: 2026/8/28 ~ 2026/9/8

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

Measurement procedure: ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024
KDB 789033 D02 General UNII Test Procedure New Rules v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	Pass	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -15.33 dB at 0.48573 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -7.0 dB at 85.29 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.3 dB at 5150.00 MHz and 5725.00 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

Notes:

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- The "Dynamic Frequency Selection measurement" was recorded in DFS test report.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
26 dB Bandwidth	-	206.5 Hz
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	3.23 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Streaming Player
Brand	Roku
Test Model	3830X2
Status of EUT	Engineering sample
Power Supply Rating	5Vdc
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	OFDM
Transfer Rate	Up to 150 Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.26 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20):25 802.11n (HT40):12
Partial RU Mode	Not support
Channel Puncturing	Not support
Output Power	5.18 GHz ~ 5.24 GHz: 150.661 mW (21.78 dBm) 5.26 GHz ~ 5.32 GHz: 140.605 mW (21.48 dBm) 5.5 GHz ~ 5.72 GHz: 140.605 mW (21.48 dBm) 5.745 GHz ~ 5.825 GHz: 143.219 mW (21.56 dBm)
EUT Category	Client device

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
Voice Remote	Roku	RC-BR1	FCC ID: TC2-R1052
USB to Type C Cable	Roku	N/A	Signal Line: 1.5M, Shielded, without core

2. There are Bluetooth and WLAN (2.4 GHz & 5 GHz) technology used for the EUT.

3. Simultaneously transmission combination.

Combination	Technology	
1	WLAN (2.4GHz)	Bluetooth
2	WLAN (5GHz)	Bluetooth

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range (GHz)	Antenna Type	Connector Type
1	TDK	ANT162442DT-2200A1	-2.9	2.4 ~ 2.4835	PCB	none(like solder)
			1.8	5.15 ~ 5.85		
2	TDK	ANT162442DT-2001A2	0.4	2.4 ~ 2.4835	PCB	none(like solder)
			4.6	5.15 ~ 5.85		

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a SISO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	1Tx Diversity	1Rx
802.11n (HT20)	1Tx Diversity	1Rx
802.11n (HT40)	1Tx Diversity	1Rx

3.3 Channel List

FOR 5180 ~ 5320 MHz

8 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency	Channel	Frequency
36	5180 MHz	52	5260 MHz
40	5200 MHz	56	5280 MHz
44	5220 MHz	60	5300 MHz
48	5240 MHz	64	5320 MHz

4 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	54	5270 MHz
46	5230 MHz	62	5310 MHz

FOR 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

FOR 5745 ~ 5825 MHz:

5 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency	Channel	Frequency
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: Y-axis 2. For 1Tx diversity configuration the worst chain is: Chain 2

Following channel(s) was (were) selected for the final test as listed below:

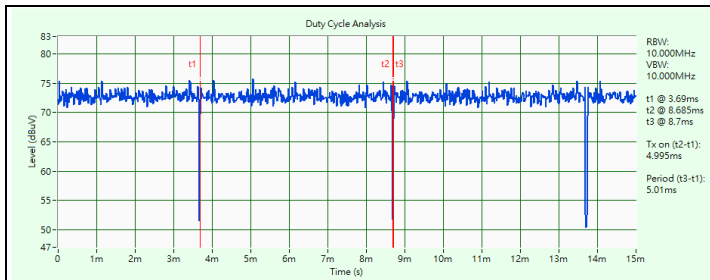
Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	802.11a	1Tx Diversity	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11n (HT20)	1Tx Diversity	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11n (HT40)	1Tx Diversity	54, 62, 102, 110, 134, 142	BPSK	MCS0
RF Output Power	802.11a	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	1Tx Diversity	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
Power Spectral Density	802.11a	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	1Tx Diversity	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
6 dB Bandwidth	802.11a	1Tx Diversity	144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	1Tx Diversity	144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	1Tx Diversity	142, 151, 159	BPSK	MCS0
Occupied Bandwidth	802.11a	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	1Tx Diversity	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
AC Power Conducted Emissions	802.11a	1Tx Diversity	40	BPSK	6Mb/s
Unwanted Emissions below 1 GHz	802.11a	1Tx Diversity	40	BPSK	6Mb/s
Unwanted Emissions above 1 GHz	802.11a	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11n (HT20)	1Tx Diversity	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11n (HT40)	1Tx Diversity	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0

3.5 Duty Cycle of Test Signal

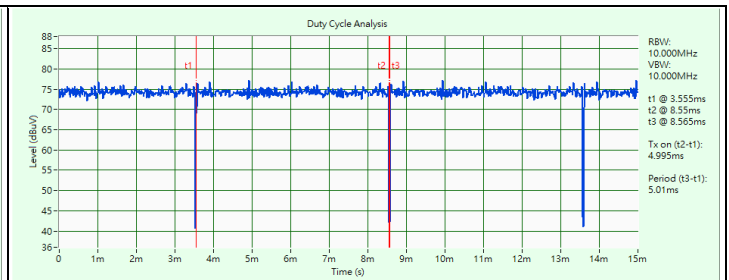
802.11a: Duty cycle = 4.995 ms / 5.01 ms x 100% = 99.7%

802.11n (HT20): Duty cycle = 4.995 ms / 5.01 ms x 100% = 99.7%

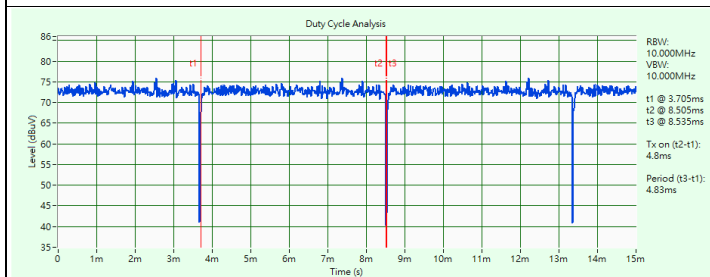
802.11n (HT40): Duty cycle = 4.8 ms / 4.83 ms x 100% = 99.4%



802.11a



802.11n (HT20)

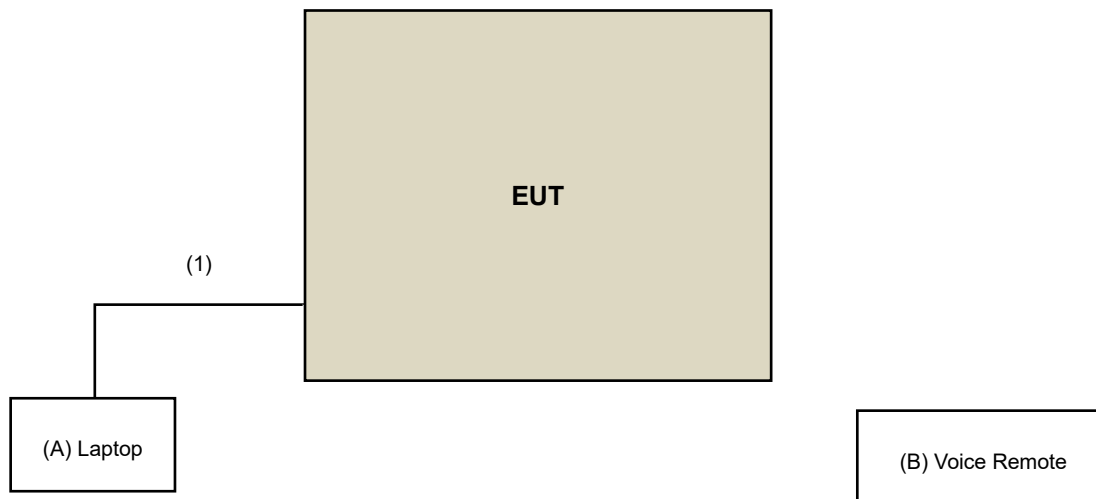


802.11n (HT40)

3.6 Test Program Used and Operation Descriptions

Controlling software Tera Term Version 4.83 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



Under Table

3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	L14	PF22QWN1	NA	Provided by Lab
B	Voice Remote	Roku	RC-BR1	NA	TC2-R1052	Accessory of EUT

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	USB to Type C Cable	1	1.5	YES	0	Accessory of EUT

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2026/5/21	2027/5/20
Signal & Spectrum Analyzer R&S	FSV3044	101505	2026/6/15	2027/6/14
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/9/8

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2026/5/21	2027/5/20
Peak Power Analyzer Keysight	8990B	MY51000485	2026/1/23	2027/1/22
Signal & Spectrum Analyzer R&S	FSV3044	101505	2026/6/15	2027/6/14
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
USB Power Sensor Anritsu	MA24408A	12994	2025/12/5	2026/12/4
Wideband Power Sensor Keysight	N1923A	MY58020002	2026/1/26	2027/1/25
		MY58140009	2026/1/26	2027/1/25

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/9/8

4.3 Power Spectral Density

Refer to section 4.1 to get the tested date and information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get the tested date and information of the instruments.

4.6 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	E1-011279	04	2025/12/4	2026/12/3
	E1-011280	05	2025/12/4	2026/12/3
	E1-011311	09	2025/12/4	2026/12/3
DC LISN Schwarzbeck	NNBM 8126G	8126G-069	2025/11/3	2026/11/2
Diode Pulse Limiter Schwarzbeck	VTSD 9561 F-N	01445	2026/4/18	2027/4/17
EMI Test Receiver R&S	ESCI	100613	2025/11/27	2026/11/26
Extension Power Line EMCI	EMCI-EXP-EU-US	023	2026/3/6	2027/3/5
LISN R&S	ENV216	101826	2026/3/6	2027/3/5
	ESH3-Z5	100311	2026/8/25	2027/8/24
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2026/1/3	2027/1/2
Software BVADT	BVADT_Conc_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2026/8/24	2027/8/23

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2026/9/2

4.7 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFA-515BSN	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-1214	2025/9/18	2026/9/17
MXE EMI Receiver Keysight	N9038B	MY60180019	2026/1/14	2027/1/13
Preamplifier EMCI	EMC330N	980798	2026/1/13	2027/1/12
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201248	2026/1/13	2027/1/12
	EMCCFD400-NM-NM-3000	201249	2026/1/13	2027/1/12
	EMCCFD400-NM-NM-9000	201251(with PAD)	2026/1/13	2027/1/12
Signal & Spectrum Analyzer R&S	FSV3044	101504	2026/6/29	2027/6/28
Software BV ADT	ADT_Radiated_ V7.7.1.1.1	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208676	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 9(Wenming).
2. Tested Date: 2026/9/2

4.8 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFA-515BSN	N/A	N/A	N/A
Horn Antenna RFSPIN	DRH18-E	210104A18E	2025/11/9	2026/11/8
Horn Antenna Schwarzbeck	BBHA 9170	9170-1049	2025/11/9	2026/11/8
MXE EMI Receiver Keysight	N9038B	MY60180019	2026/1/14	2027/1/13
Preamplifier Agilent	83017A	MY39501357	2026/6/10	2027/6/9
Preamplifier EMCI	EMC184045SE	980788	2026/1/13	2027/1/12
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2026/1/13	2027/1/12
		201255	2026/1/13	2027/1/12
	EMC101G-KM-KM-5000	201261	2026/1/13	2027/1/12
	EMC104-SM-SM-1000	210103	2026/1/13	2027/1/12
	EMC104-SM-SM-3000	201241	2026/1/13	2027/1/12
	EMC104-SM-SM-9000	201244	2026/1/13	2027/1/12
Signal & Spectrum Analyzer R&S	FSV3044	101504	2026/6/29	2027/6/28
Software BV ADT	ADT_Radiated_ V7.7.1.1.1	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208676	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 9(Wenming).
2. Tested Date: 2026/8/28 ~ 2026/9/1

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Points	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Client devices	250mW (24 dBm)

Operation Band	Limit
U-NII-2A	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

5.3 Power Spectral Density

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	17 dBm/MHz
	Fixed point-to-point Access Points	
	Indoor Access Point	
	Client devices	11 dBm/MHz

Operation Band	Limit
U-NII-2A	11 dBm/MHz
U-NII-2C	11 dBm/MHz
U-NII-3	30 dBm/500 kHz

5.4 6 dB Bandwidth

Within the 5.725-5.850 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.5 Occupied Bandwidth

The results are for reference only.

5.6 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.7 Unwanted Emissions below 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (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
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.8 Unwanted Emissions above 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v02r01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)

For transmitters operating in the 5.15-5.25 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.25-5.35 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.47-5.725 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(3)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK: 105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK: 122.2 (dBμV/m) ^{*4}

^{*1} beyond 75 MHz or more above of the band edge.

^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

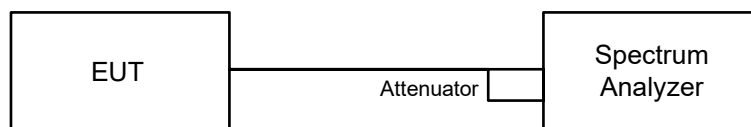
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup



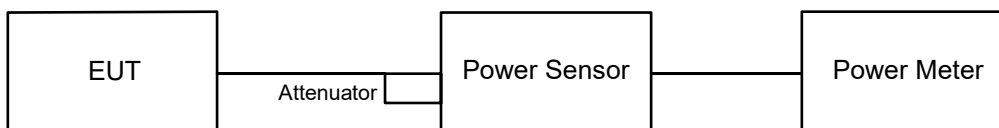
Note: The correction factor has already been compensated by the instrument.

6.1.2 Test Procedure

- a. Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- b. Set the VBW > RBW.
- c. Detector = peak.
- d. Trace mode = max-hold.
- e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

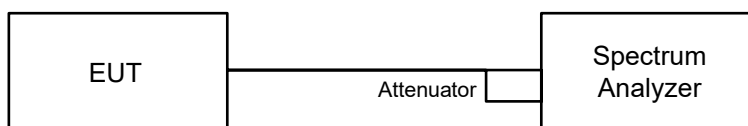
6.2 RF Output Power

6.2.1 Test Setup



Note: The correction factor has already been compensated by the instrument.

For channel straddling:



Note: The correction factor has already been compensated by the instrument.

6.2.2 Test Procedure

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

For channel straddling:

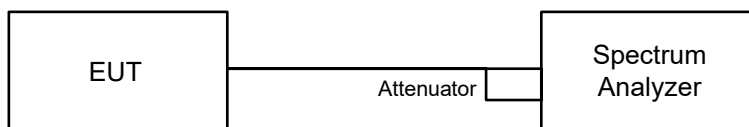
Method SA-1

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS.
- Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging (rms) mode.
- Compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band-power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.
- Record the max value.

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the 99% OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 99% OBW of the spectrum.

6.3 Power Spectral Density

6.3.1 Test Setup



Note: The correction factor has already been compensated by the instrument.

6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS.
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value

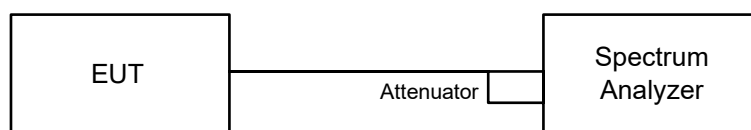
For specified measurement bandwidth 500 kHz:

Method SA-1

- Set span to encompass the entire 99% OBW of the signal
- Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS.
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $\text{BWCF} = 10\log(500 \text{ kHz}/300 \text{ kHz})$.
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value.

6.4 6 dB Bandwidth

6.4.1 Test Setup



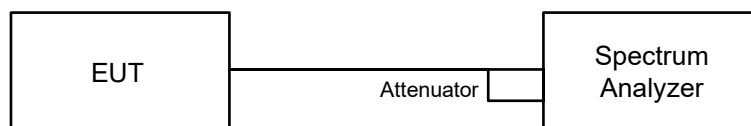
Note: The correction factor has already been compensated by the instrument.

6.4.2 Test Procedure

- Set RBW = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Trace mode = max-hold.
- Sweep = No faster than coupled (auto) time.
- Allow the trace to stabilize.
- 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.

6.5 Occupied Bandwidth

6.5.1 Test Setup



Note: The correction factor has already been compensated by the instrument.

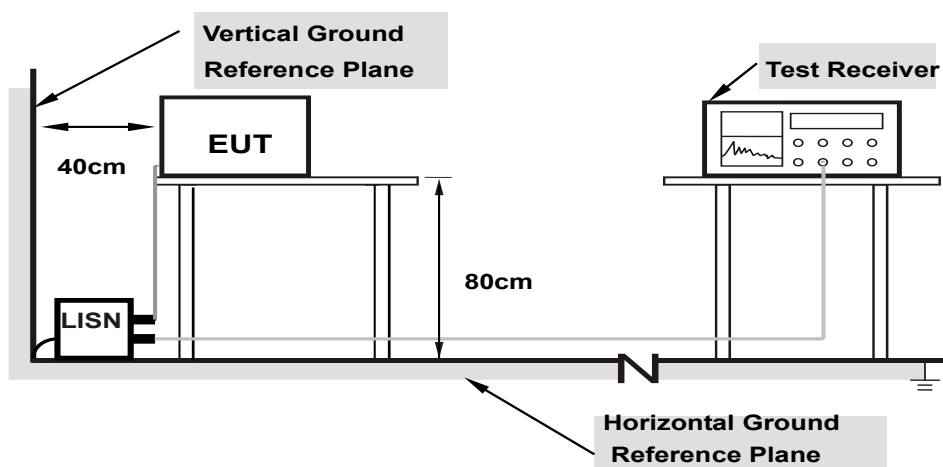
6.5.2 Test Procedure

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, without going below the values in section 6.9.1 of ANSI C63.10a-2024 and video bandwidth (VBW) shall be at least three times RBW, unless otherwise specified by the applicable requirement.
- Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level.
- Step a) through step c) might require iteration to adjust within the specified range.
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

6.6 AC Power Conducted Emissions

6.6.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.6.2 Test Procedure

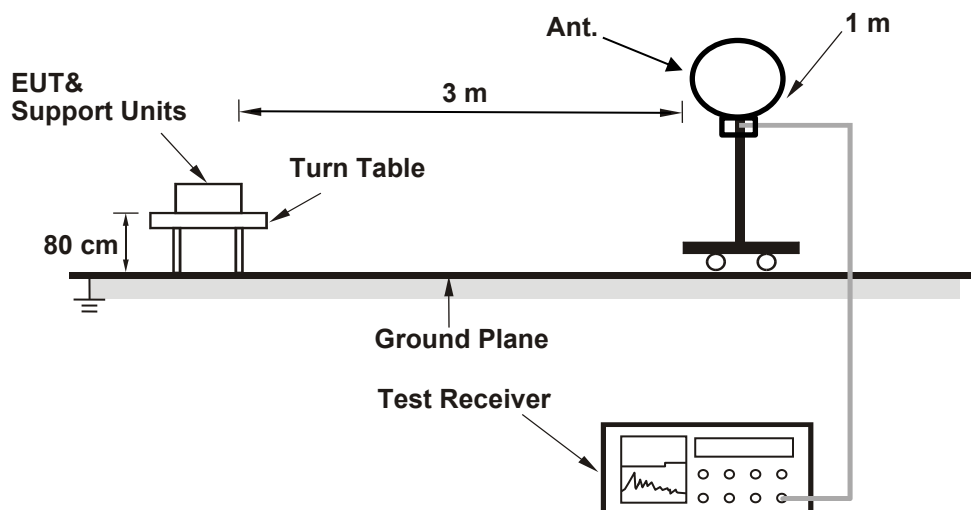
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

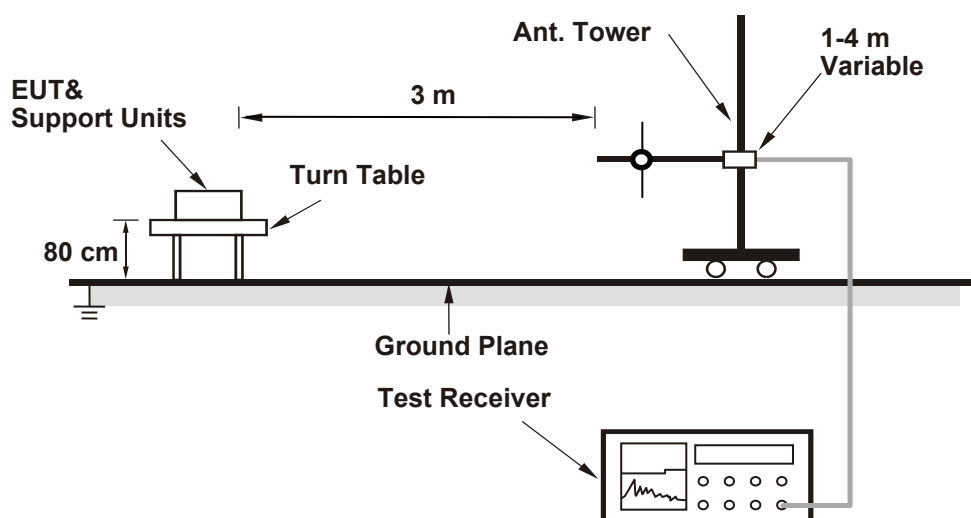
6.7 Unwanted Emissions below 1 GHz

6.7.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode (however, peak detector measurements may be used to determine compliance with QP requirements), except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

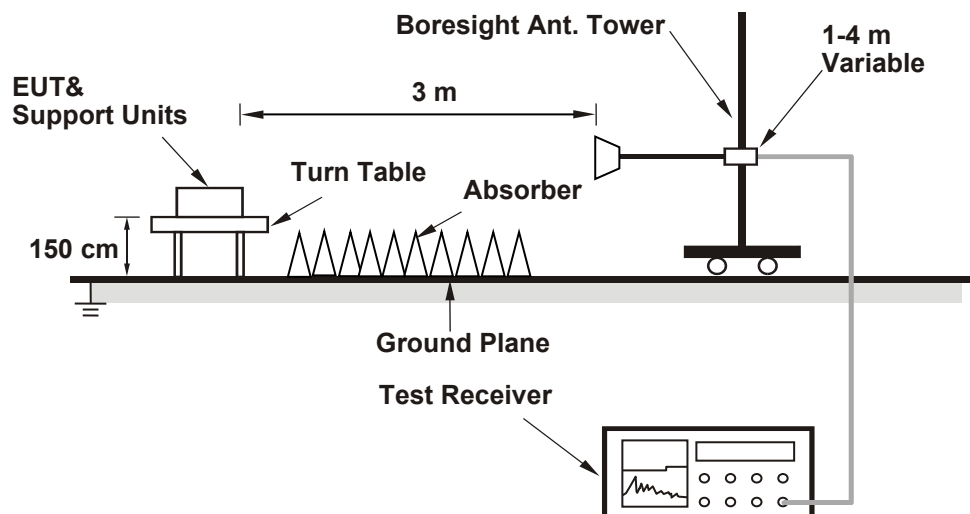
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-peak(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz (however, peak detector measurements may be used to determine compliance with QP requirements).
2. All modes of operation were investigated and the worst-case emissions are reported.

6.8 Unwanted Emissions above 1 GHz

6.8.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.8.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 26 dB Bandwidth

Environmental Conditions:	25°C, 60% RH	Tested By:	Wayne Lin
---------------------------	--------------	------------	-----------

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	42.45
60	5300	41.04
64	5320	23.45
100	5500	22.77
116	5580	43.02
140	5700	21.27
144 (U-NII-2C)	5720	26.49
144 (U-NII-3)	5720	16.5

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	42.45	27.27	>	24
60	5300	41.04	27.13	>	24
64	5320	23.45	24.7	>	24
100	5500	22.77	24.57	>	24
116	5580	43.02	27.33	>	24
140	5700	21.27	24.27	>	24
144 (U-NII-2C)	5720	26.49	25.23	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11n (HT20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	44.75
60	5300	43.89
64	5320	22.03
100	5500	22.14
116	5580	43.98
140	5700	21.99
144 (U-NII-2C)	5720	27.42
144 (U-NII-3)	5720	16.57

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	44.75	27.5	>	24
60	5300	43.89	27.42	>	24
64	5320	22.03	24.43	>	24
100	5500	22.14	24.45	>	24
116	5580	43.98	27.43	>	24
140	5700	21.99	24.42	>	24
144 (U-NII-2C)	5720	27.42	25.38	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

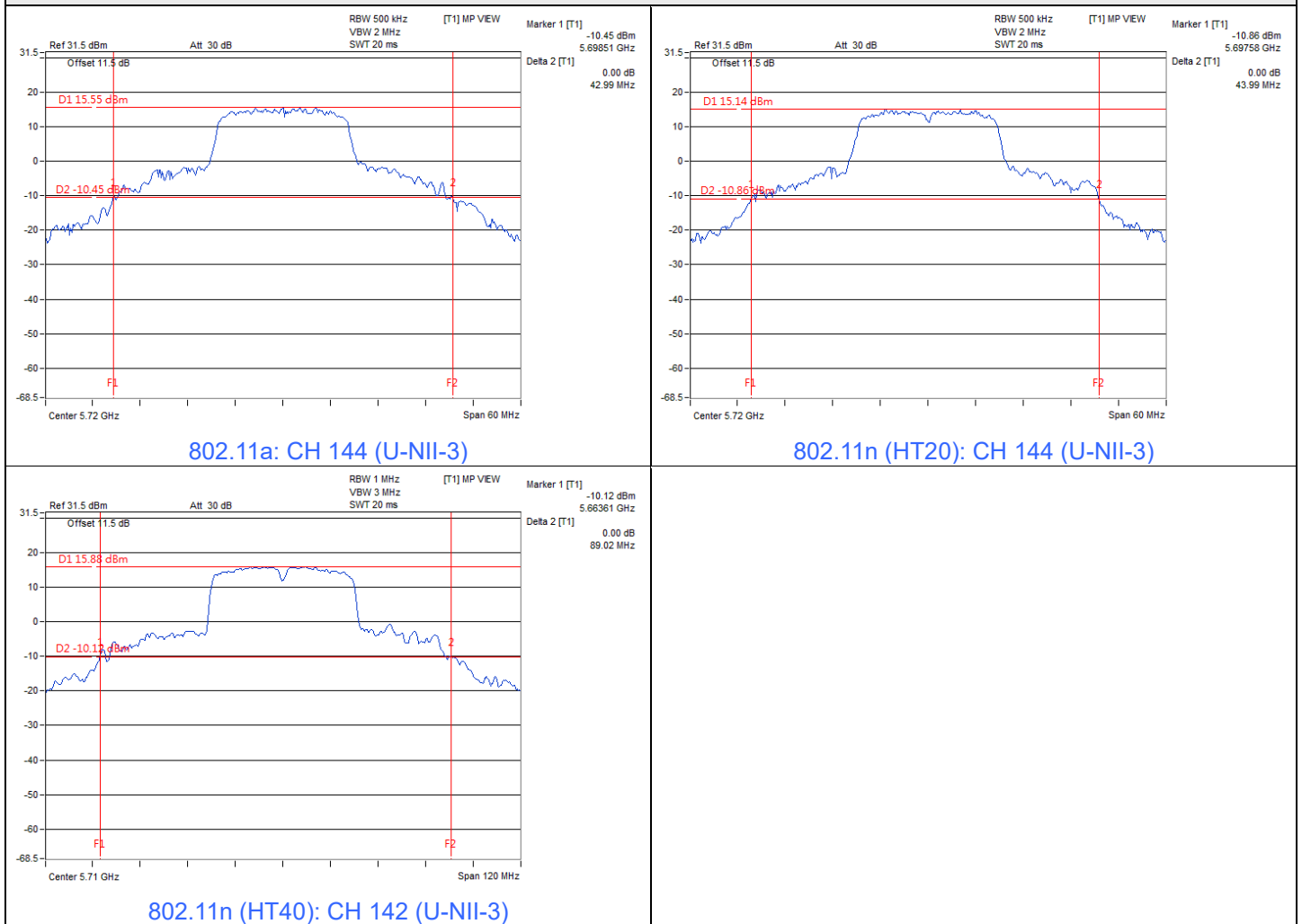
802.11n (HT40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
54	5270	82.76
62	5310	39.05
102	5510	39.07
110	5550	90.21
134	5670	39.07
142 (U-NII-2C)	5710	61.39
142 (U-NII-3)	5710	27.63

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	82.76	30.17	>	24
62	5310	39.05	26.91	>	24
102	5510	39.07	26.91	>	24
110	5550	90.21	30.55	>	24
134	5670	39.07	26.91	>	24
142 (U-NII-2C)	5710	61.39	28.88	>	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Spectrum Plot of Minimum Value



Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

7.2 RF Output Power

Environmental Conditions:	25°C, 60% RH	Tested By:	Wayne Lin
---------------------------	--------------	------------	-----------

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	53.088	17.25	24	Pass
40	5200	150.661	21.78	24	Pass
48	5240	100.231	20.01	24	Pass
52	5260	139.637	21.45	24	Pass
60	5300	115.345	20.62	24	Pass
64	5320	46.132	16.64	24	Pass
100	5500	43.351	16.37	24	Pass
116	5580	135.519	21.32	24	Pass
140	5700	35.075	15.45	24	Pass
*144 (U-NII-2C)	5720	99.083	19.96	24	Pass
*144 (U-NII-3)	5720	27.416	14.38	30	Pass
149	5745	135.519	21.32	30	Pass
157	5785	130.918	21.17	30	Pass
165	5825	133.352	21.25	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- For U-NII-1, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	52.966	17.24	24	Pass
40	5200	150.314	21.77	24	Pass
48	5240	89.536	19.52	24	Pass
52	5260	140.605	21.48	24	Pass
60	5300	115.08	20.61	24	Pass
64	5320	45.92	16.62	24	Pass
100	5500	43.351	16.37	24	Pass
116	5580	138.357	21.41	24	Pass
140	5700	35.318	15.48	24	Pass
*144 (U-NII-2C)	5720	104.713	20.20	24	Pass
*144 (U-NII-3)	5720	29.309	14.67	30	Pass
149	5745	136.458	21.35	30	Pass
157	5785	132.13	21.21	30	Pass
165	5825	133.968	21.27	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- For U-NII-1, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

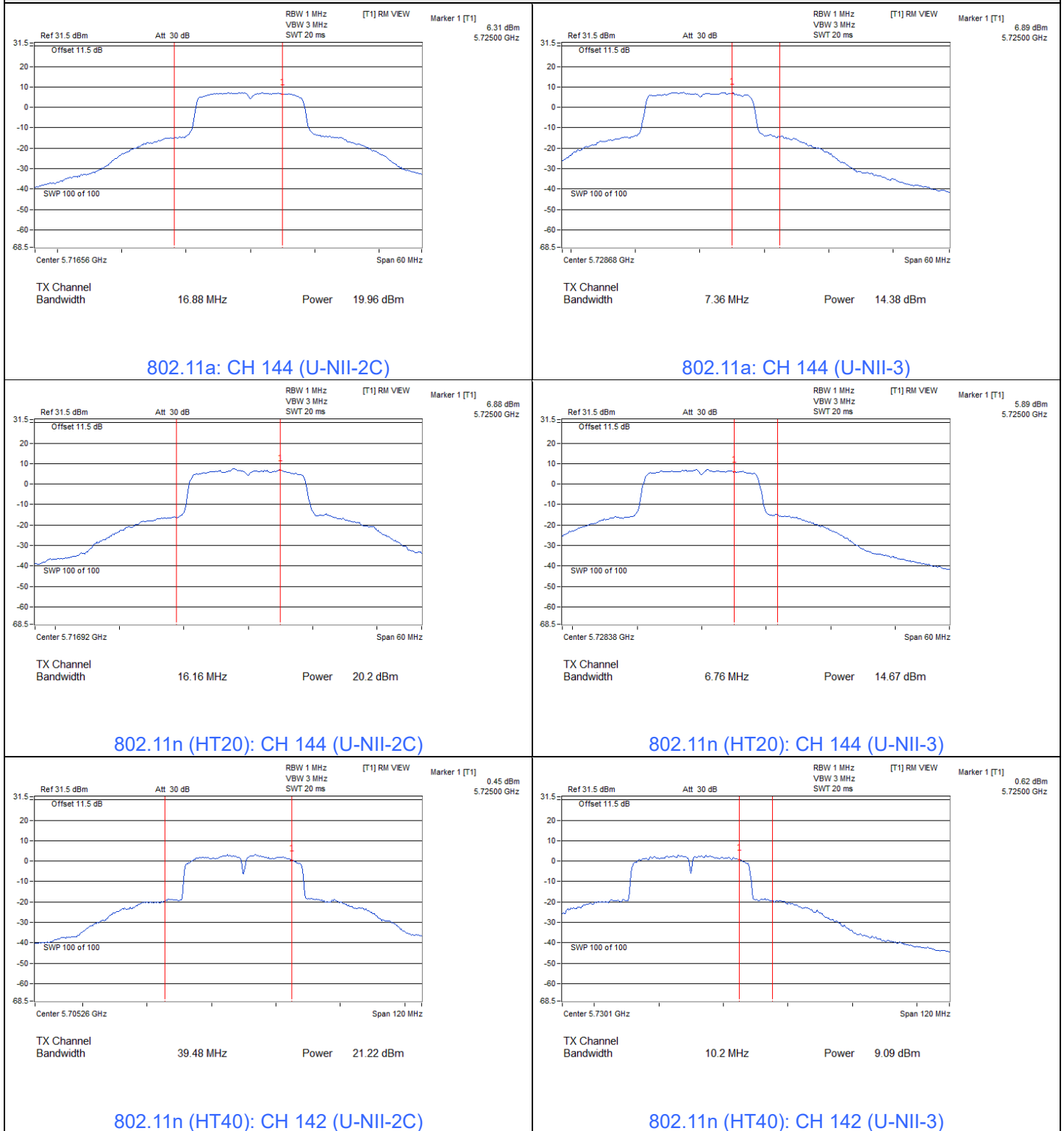
802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
38	5190	25.527	14.07	24	Pass
46	5230	105.196	20.22	24	Pass
54	5270	93.541	19.71	24	Pass
62	5310	24.099	13.82	24	Pass
102	5510	25.235	14.02	24	Pass
110	5550	140.605	21.48	24	Pass
134	5670	40.458	16.07	24	Pass
*142 (U-NII-2C)	5710	132.434	21.22	24	Pass
*142 (U-NII-3)	5710	8.11	9.09	30	Pass
151	5755	143.219	21.56	30	Pass
159	5795	136.773	21.36	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- For U-NII-1, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

Spectrum Plot for channel straddling



7.3 Power Spectral Density

Environmental Conditions:	25°C, 60% RH	Tested By:	Wayne Lin
---------------------------	--------------	------------	-----------

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	4.57	11	Pass
40	5200	8.82	11	Pass
48	5240	7.21	11	Pass
52	5260	8.79	11	Pass
60	5300	7.60	11	Pass
64	5320	3.94	11	Pass
100	5500	3.37	11	Pass
116	5580	8.43	11	Pass
140	5700	2.79	11	Pass
144 (U-NII-2C)	5720	8.48	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	4.03	11	Pass
40	5200	8.65	11	Pass
48	5240	6.28	11	Pass
52	5260	8.17	11	Pass
60	5300	7.38	11	Pass
64	5320	3.30	11	Pass
100	5500	3.36	11	Pass
116	5580	7.91	11	Pass
140	5700	2.48	11	Pass
144 (U-NII-2C)	5720	8.11	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	-1.96	11	Pass
46	5230	4.14	11	Pass
54	5270	3.50	11	Pass
62	5310	-2.19	11	Pass
102	5510	-2.06	11	Pass
110	5550	5.04	11	Pass
134	5670	-0.10	11	Pass
142 (U-NII-2C)	5710	5.47	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-1.06	1.16	30	Pass
149	5745	-0.24	1.98	30	Pass
157	5785	-0.36	1.86	30	Pass
165	5825	-0.3	1.92	30	Pass

Note: For U-NII-3, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	-1.31	0.91	30	Pass
149	5745	-0.49	1.73	30	Pass
157	5785	-0.77	1.45	30	Pass
165	5825	-0.45	1.77	30	Pass

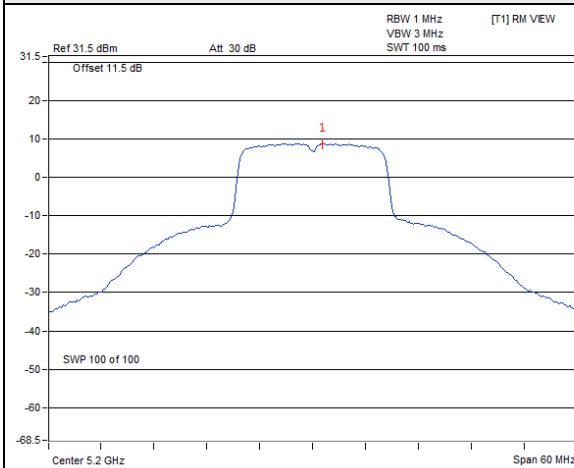
Note: For U-NII-3, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.

802.11n (HT40)

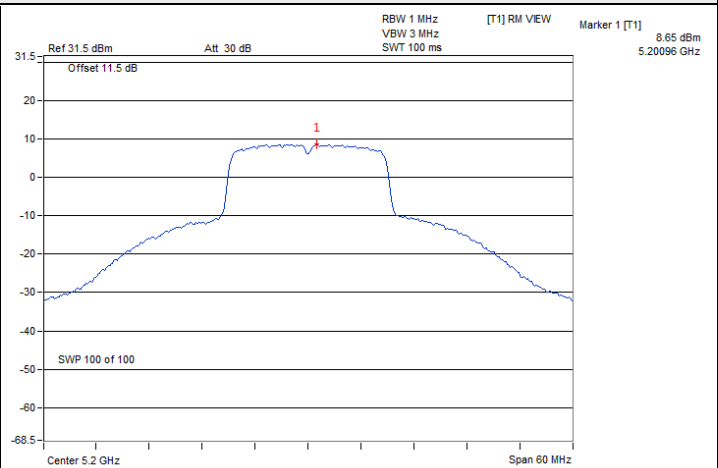
Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
142 (U-NII-3)	5710	-6.62	-4.40	30	Pass
151	5755	-4.67	-2.45	30	Pass
159	5795	-5.05	-2.83	30	Pass

Note: For U-NII-3, the antenna gain is 4.6 dBi $\leq$ 6 dBi, so the power density limit shall not be reduced.

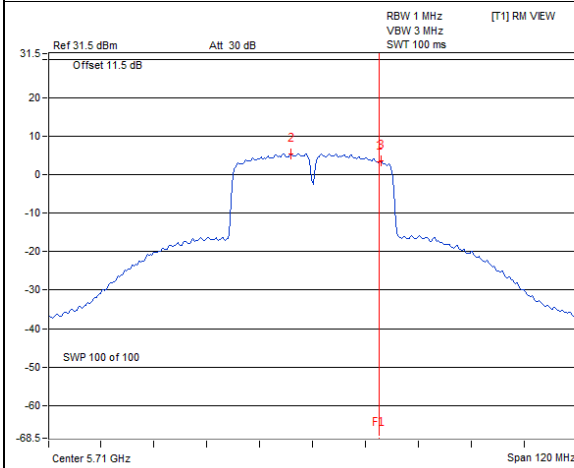
Spectrum Plot of Maximum Value



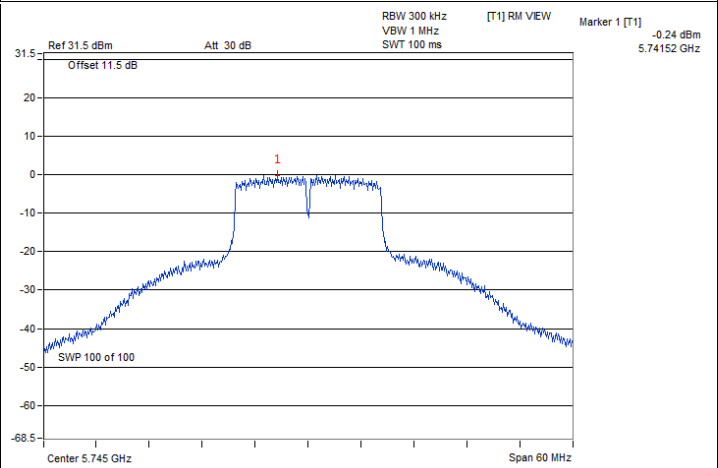
802.11a: CH 40



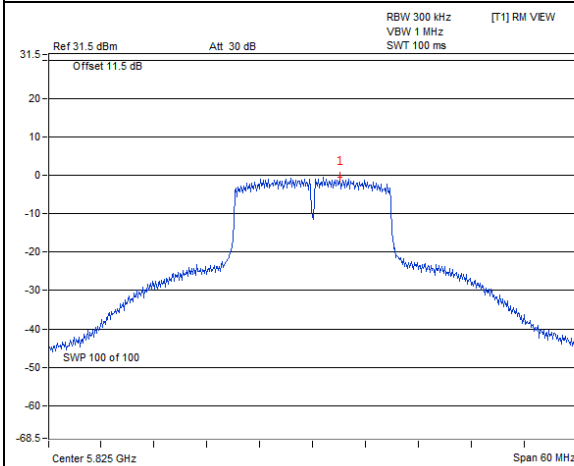
802.11n (HT20): CH 40



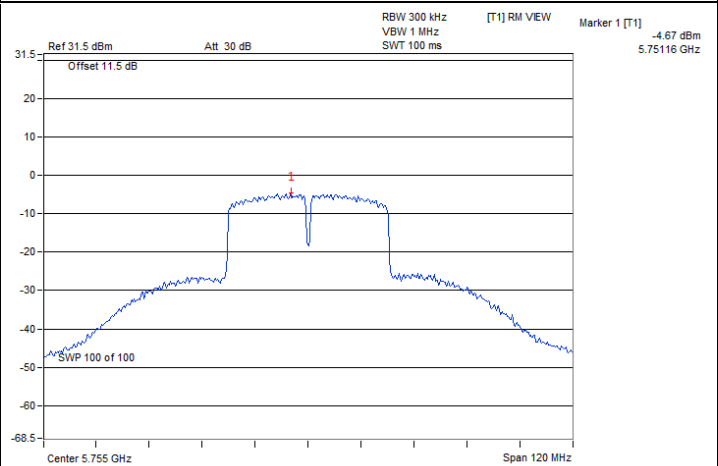
802.11n (HT40): CH 142 (U-NII-2C)



802.11a: CH 149



802.11n (HT20): CH 165



802.11n (HT40): CH 151

7.4 6 dB Bandwidth

Environmental Conditions:	25°C, 60% RH	Tested By:	Wayne Lin
---------------------------	--------------	------------	-----------

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.01	0.5	Pass
149	5745	16.1	0.5	Pass
157	5785	16.3	0.5	Pass
165	5825	16.09	0.5	Pass

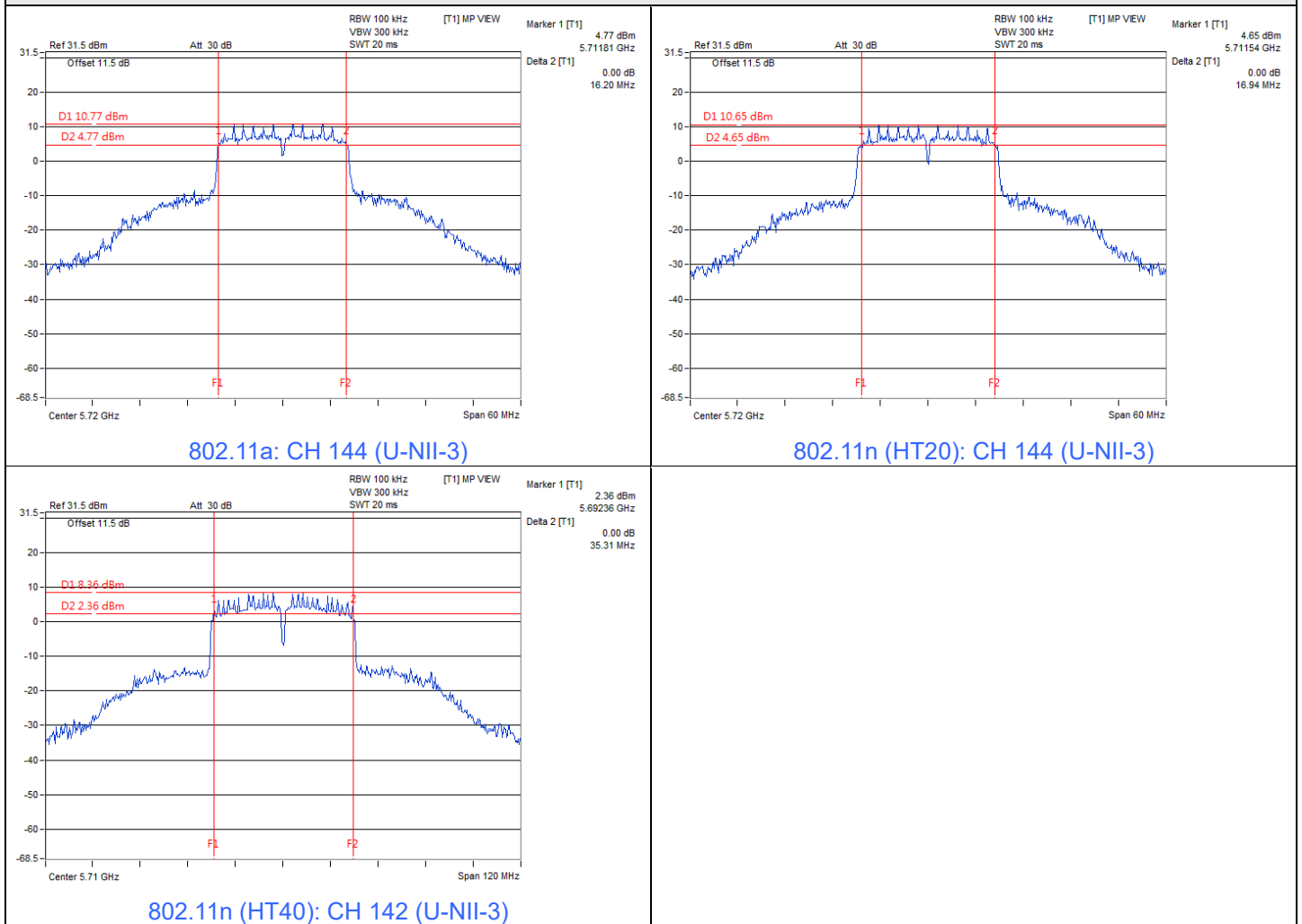
802.11n (HT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	3.48	0.5	Pass
149	5745	17.08	0.5	Pass
157	5785	16.92	0.5	Pass
165	5825	16.56	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
142 (U-NII-3)	5710	2.67	0.5	Pass
151	5755	35.35	0.5	Pass
159	5795	35.4	0.5	Pass

Spectrum Plot of Minimum Value



Note: For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

7.5 Occupied Bandwidth

Environmental Conditions:	25°C, 60% RH	Tested By:	Wayne Lin
---------------------------	--------------	------------	-----------

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.8
40	5200	25.56
48	5240	18.24
52	5260	24
60	5300	20.4
64	5320	16.68
100	5500	16.68
116	5580	24.72
140	5700	16.68
144 (U-NII-2C)	5720	16.88
144 (U-NII-3)	5720	7.36
149	5745	24.42
157	5785	23.94
165	5825	23.52

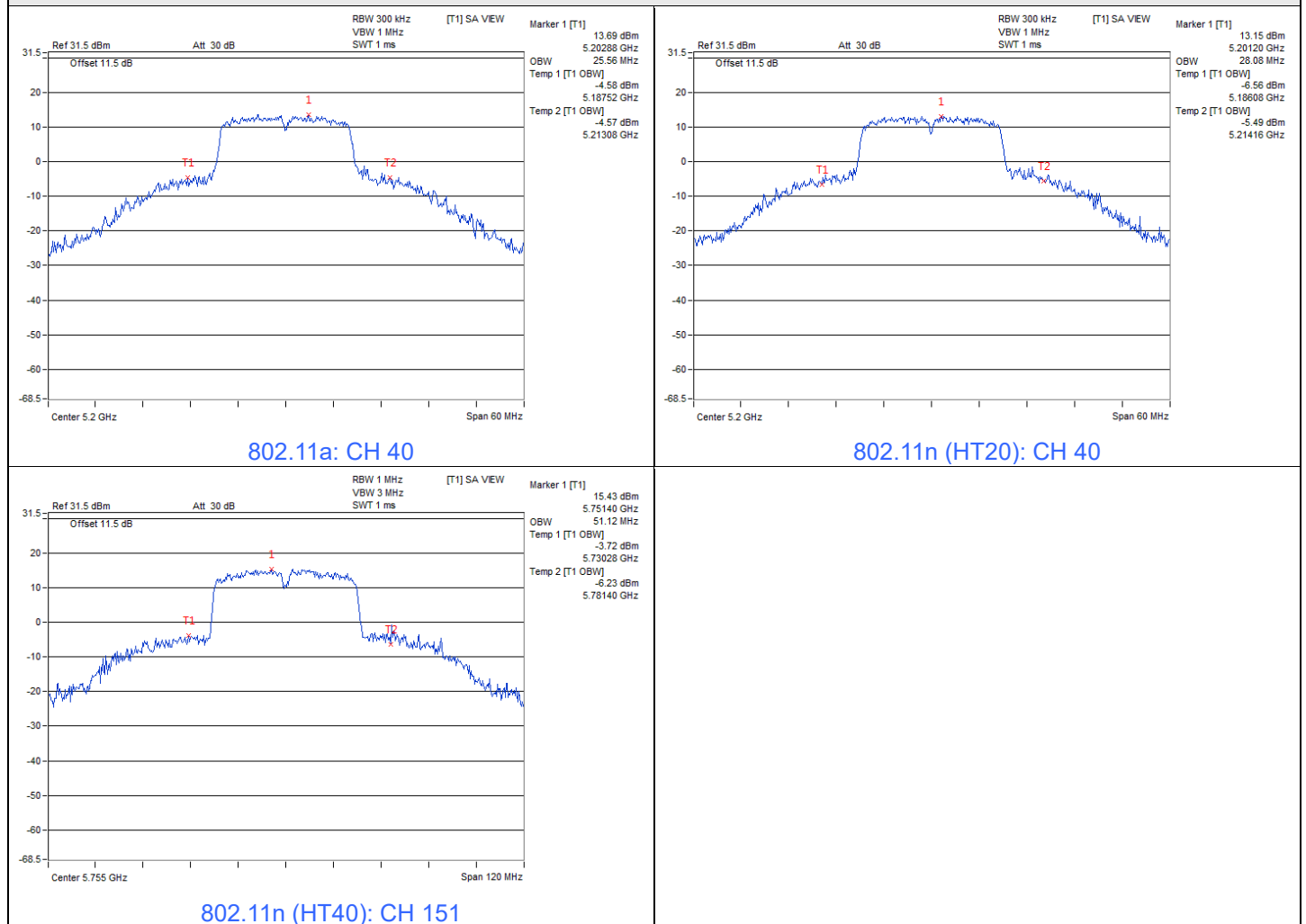
802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.88
40	5200	28.08
48	5240	18.84
52	5260	26.4
60	5300	22.68
64	5320	17.88
100	5500	17.88
116	5580	24.12
140	5700	17.88
144 (U-NII-2C)	5720	16.16
144 (U-NII-3)	5720	6.76
149	5745	23.52
157	5785	22.08
165	5825	23.46

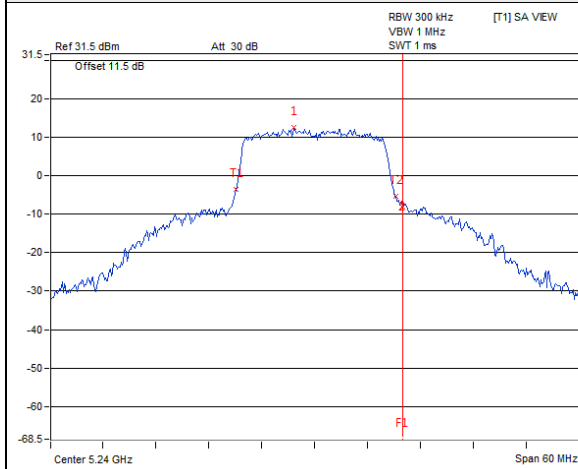
802.11n (HT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	35.76
46	5230	37.68
54	5270	37.2
62	5310	36
102	5510	36
110	5550	48.72
134	5670	36.24
142 (U-NII-2C)	5710	39.48
142 (U-NII-3)	5710	10.2
151	5755	51.12
159	5795	49.44

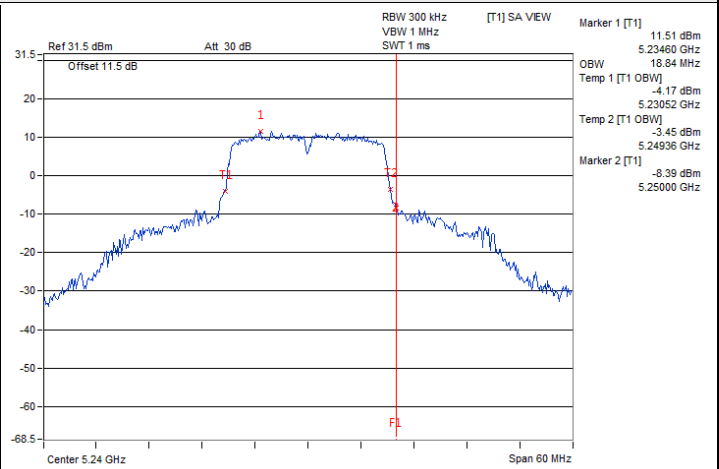
Spectrum Plot of Maximum Value



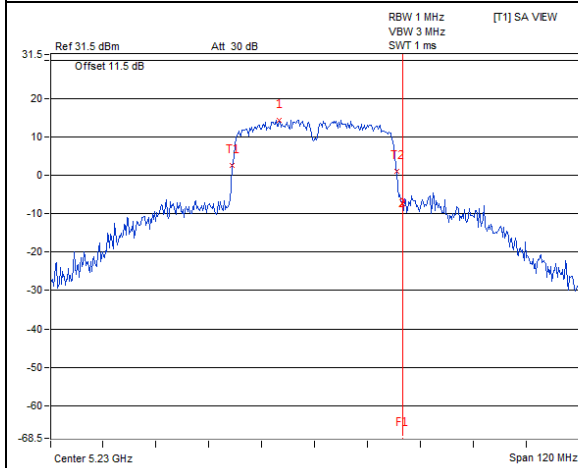
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



802.11a: CH 48

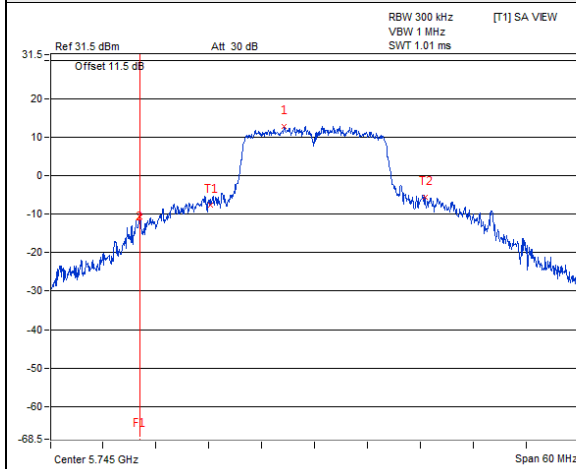


802.11n (HT20): CH 48

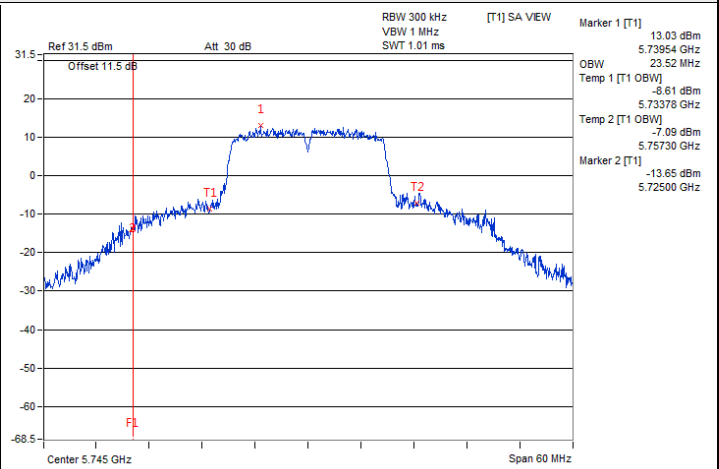


802.11n (HT40): CH 46

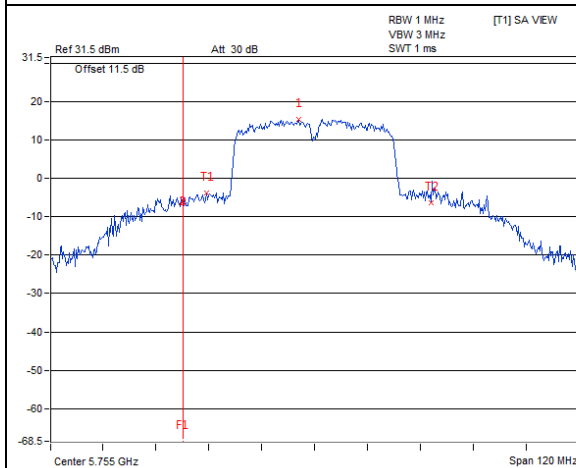
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



802.11a: CH 149



802.11n (HT20): CH 149



802.11n (HT40): CH 151

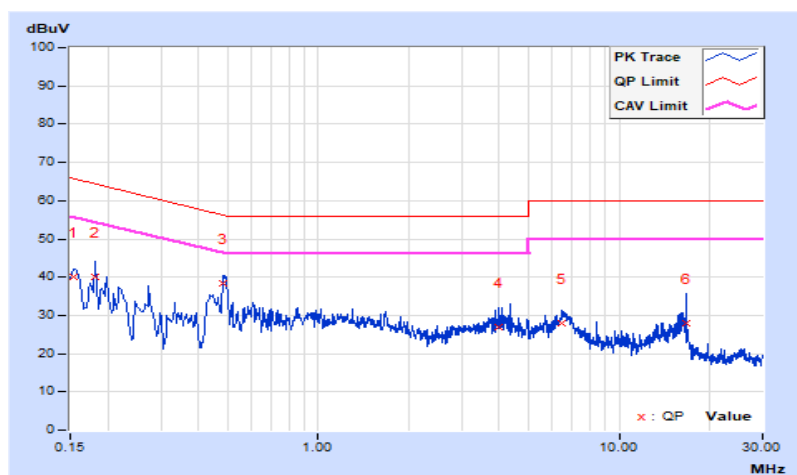
7.6 AC Power Conducted Emissions

RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Greg Lin		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.78	30.22	23.81	40.00	33.59	65.78	55.78	-25.78	-22.19
2	0.18200	9.77	30.17	20.37	39.94	30.14	64.39	54.39	-24.45	-24.25
3	0.48573	9.78	28.54	21.13	38.32	30.91	56.24	46.24	-17.92	-15.33
4	3.97800	9.91	16.87	10.81	26.78	20.72	56.00	46.00	-29.22	-25.28
5	6.45800	9.93	17.97	13.14	27.90	23.07	60.00	50.00	-32.10	-26.93
6	16.77400	10.06	18.01	9.07	28.07	19.13	60.00	50.00	-31.93	-30.87

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

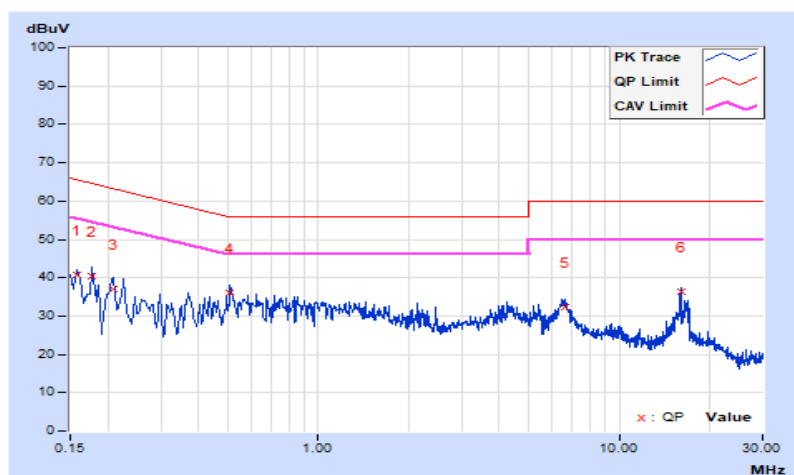


RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Greg Lin		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	9.79	30.93	21.20	40.72	30.99	65.57	55.57	-24.85	-24.58
2	0.17800	9.77	30.56	20.08	40.33	29.85	64.58	54.58	-24.25	-24.73
3	0.20850	9.76	27.40	18.27	37.16	28.03	63.26	53.26	-26.10	-25.23
4	0.51000	9.79	26.30	19.09	36.09	28.88	56.00	46.00	-19.91	-17.12
5	6.63000	9.97	22.37	14.71	32.34	24.68	60.00	50.00	-27.66	-25.32
6	16.03400	10.18	26.30	19.50	36.48	29.68	60.00	50.00	-23.52	-20.32

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



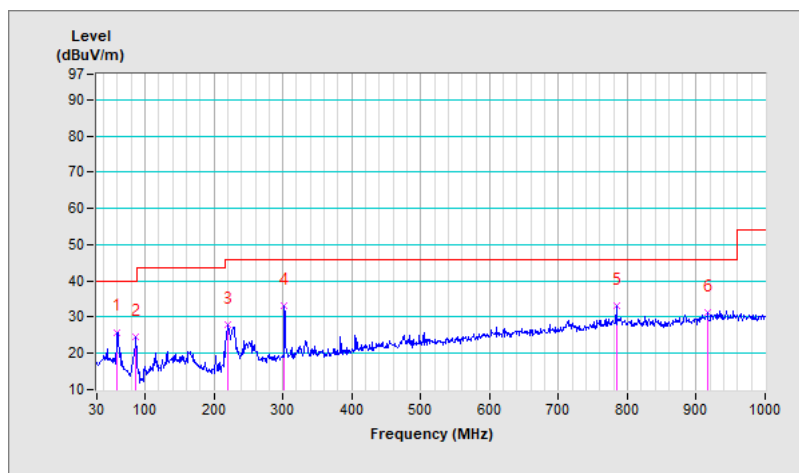
7.7 Unwanted Emissions below 1 GHz

RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Evan Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	59.10	25.9 QP	40.0	-14.1	1.50 H	184	39.5	-13.6
2	86.26	24.5 QP	40.0	-15.5	1.01 H	244	43.5	-19.0
3	220.12	28.0 QP	46.0	-18.0	1.50 H	252	44.3	-16.3
4	302.57	33.1 QP	46.0	-12.9	1.01 H	196	45.2	-12.1
5	783.69	33.2 QP	46.0	-12.8	1.50 H	236	35.3	-2.1
6	916.58	31.2 QP	46.0	-14.8	1.50 H	340	31.4	-0.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

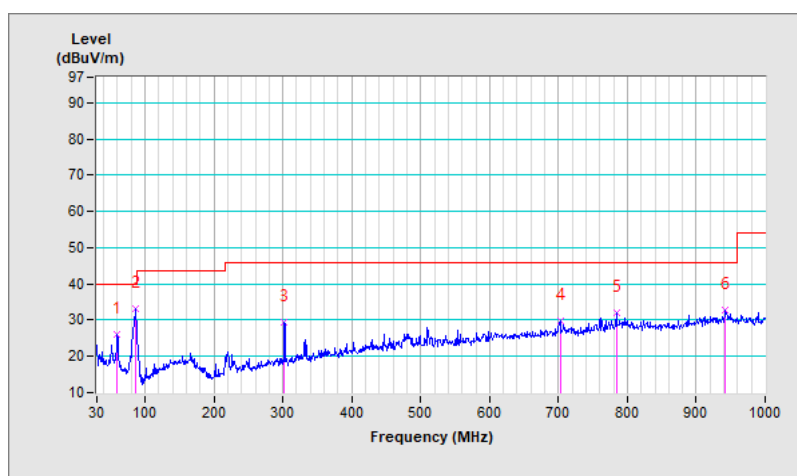


RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Evan Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	59.10	26.0 QP	40.0	-14.0	1.00 V	255	39.6	-13.6
2	85.29	33.0 QP	40.0	-7.0	1.49 V	131	51.8	-18.8
3	302.57	29.6 QP	46.0	-16.4	1.49 V	154	41.7	-12.1
4	702.21	29.8 QP	46.0	-16.2	1.00 V	14	33.5	-3.7
5	783.69	32.2 QP	46.0	-13.8	1.00 V	3	34.3	-2.1
6	941.80	32.7 QP	46.0	-13.3	1.49 V	228	32.6	0.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.8 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.4 PK	74.0	-10.6	2.84 H	300	58.8	4.6
2	5150.00	48.7 AV	54.0	-5.3	2.84 H	300	44.1	4.6
3	*5180.00	110.3 PK			2.84 H	300	68.4	41.9
4	*5180.00	101.9 AV			2.84 H	300	60.0	41.9
5	#10360.00	55.2 PK	68.2	-13.0	1.95 H	315	44.5	10.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.9 PK	74.0	-6.1	3.13 V	266	63.3	4.6
2	5150.00	53.4 AV	54.0	-0.6	3.13 V	266	48.8	4.6
3	*5180.00	113.9 PK			3.13 V	266	72.0	41.9
4	*5180.00	105.1 AV			3.13 V	266	63.2	41.9
5	#10360.00	55.7 PK	68.2	-12.5	2.22 V	195	45.0	10.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	116.1 PK			2.86 H	244	74.3	41.8
2	*5200.00	107.8 AV			2.86 H	244	66.0	41.8
3	#10400.00	55.6 PK	68.2	-12.6	1.88 H	312	45.0	10.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	117.5 PK			3.11 V	286	75.7	41.8
2	*5200.00	109.2 AV			3.11 V	286	67.4	41.8
3	#10400.00	56.1 PK	68.2	-12.1	2.25 V	192	45.5	10.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	116.1 PK			2.84 H	245	74.4	41.7
2	*5240.00	107.7 AV			2.84 H	245	66.0	41.7
3	5350.00	54.0 PK	74.0	-20.0	2.84 H	245	50.0	4.0
4	5350.00	44.0 AV	54.0	-10.0	2.84 H	245	40.0	4.0
5	#10480.00	56.4 PK	68.2	-11.8	1.95 H	315	45.0	11.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	117.4 PK			3.12 V	289	75.7	41.7
2	*5240.00	109.0 AV			3.12 V	289	67.3	41.7
3	5350.00	54.8 PK	74.0	-19.2	3.12 V	286	50.8	4.0
4	5350.00	44.6 AV	54.0	-9.4	3.12 V	286	40.6	4.0
5	#10480.00	56.8 PK	68.2	-11.4	2.27 V	188	45.4	11.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.7 PK	74.0	-19.3	2.86 H	244	50.1	4.6
2	5150.00	44.7 AV	54.0	-9.3	2.86 H	244	40.1	4.6
3	*5260.00	116.0 PK			2.86 H	244	74.3	41.7
4	*5260.00	108.2 AV			2.86 H	244	66.5	41.7
5	#10520.00	55.6 PK	68.2	-12.6	1.90 H	311	44.0	11.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.9 PK	74.0	-18.1	2.89 V	277	51.3	4.6
2	5150.00	45.2 AV	54.0	-8.8	2.89 V	277	40.6	4.6
3	*5260.00	118.8 PK			2.89 V	277	77.1	41.7
4	*5260.00	110.4 AV			2.89 V	277	68.7	41.7
5	#10520.00	56.0 PK	68.2	-12.2	2.23 V	192	44.4	11.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.5 PK			2.86 H	242	73.8	41.7
2	*5300.00	107.5 AV			2.86 H	242	65.8	41.7
3	5350.00	64.3 PK	74.0	-9.7	2.86 H	242	60.3	4.0
4	5350.00	52.7 AV	54.0	-1.3	2.86 H	242	48.7	4.0
5	10600.00	55.8 PK	74.0	-18.2	1.85 H	312	44.0	11.8
6	10600.00	46.8 AV	54.0	-7.2	1.85 H	312	35.0	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	117.7 PK			2.90 V	271	76.0	41.7
2	*5300.00	109.6 AV			2.90 V	271	67.9	41.7
3	5350.00	64.8 PK	74.0	-9.2	2.90 V	271	60.8	4.0
4	5350.00	53.2 AV	54.0	-0.8	2.90 V	271	49.2	4.0
5	10600.00	56.3 PK	74.0	-17.7	2.23 V	195	44.5	11.8
6	10600.00	47.0 AV	54.0	-7.0	2.23 V	195	35.2	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	111.0 PK			2.82 H	246	69.4	41.6
2	*5320.00	103.4 AV			2.82 H	246	61.8	41.6
3	5350.00	65.7 PK	74.0	-8.3	2.82 H	246	61.7	4.0
4	5350.00	51.7 AV	54.0	-2.3	2.82 H	246	47.7	4.0
5	10640.00	56.1 PK	74.0	-17.9	1.95 H	316	44.0	12.1
6	10640.00	46.9 AV	54.0	-7.1	1.95 H	316	34.8	12.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	113.2 PK			3.00 V	273	71.6	41.6
2	*5320.00	105.5 AV			3.00 V	273	63.9	41.6
3	5350.00	66.2 PK	74.0	-7.8	3.00 V	273	62.2	4.0
4	5350.00	53.2 AV	54.0	-0.8	3.00 V	273	49.2	4.0
5	10640.00	56.3 PK	74.0	-17.7	2.31 V	187	44.2	12.1
6	10640.00	47.1 AV	54.0	-6.9	2.31 V	187	35.0	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.4 PK	74.0	-15.6	2.83 H	243	54.7	3.7
2	5460.00	47.0 AV	54.0	-7.0	2.83 H	243	43.3	3.7
3	#5470.00	64.4 PK	68.2	-3.8	2.83 H	243	60.7	3.7
4	*5500.00	109.0 PK			2.83 H	243	67.7	41.3
5	*5500.00	100.5 AV			2.83 H	243	59.2	41.3
6	11000.00	59.4 PK	74.0	-14.6	1.90 H	310	47.6	11.8
7	11000.00	48.7 AV	54.0	-5.3	1.90 H	310	36.9	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.8 PK	74.0	-15.2	2.63 V	272	55.1	3.7
2	5460.00	47.3 AV	54.0	-6.7	2.63 V	272	43.6	3.7
3	#5470.00	67.3 PK	68.2	-0.9	2.63 V	272	63.6	3.7
4	*5500.00	111.5 PK			2.63 V	272	70.2	41.3
5	*5500.00	102.8 AV			2.63 V	272	61.5	41.3
6	11000.00	59.9 PK	74.0	-14.1	2.38 V	188	48.1	11.8
7	11000.00	49.0 AV	54.0	-5.0	2.38 V	188	37.2	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	115.5 PK			2.81 H	239	73.9	41.6
2	*5580.00	107.4 AV			2.81 H	239	65.8	41.6
3	11160.00	60.8 PK	74.0	-13.2	1.87 H	305	48.5	12.3
4	11160.00	50.9 AV	54.0	-3.1	1.87 H	305	38.6	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	118.1 PK			2.48 V	275	76.5	41.6
2	*5580.00	109.7 AV			2.48 V	275	68.1	41.6
3	11160.00	61.2 PK	74.0	-12.8	2.35 V	185	48.9	12.3
4	11160.00	51.2 AV	54.0	-2.8	2.35 V	185	38.9	12.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	108.4 PK			2.88 H	242	66.3	42.1
2	*5700.00	99.6 AV			2.88 H	242	57.5	42.1
3	#5725.00	65.2 PK	68.2	-3.0	2.88 H	242	60.8	4.4
4	11400.00	58.8 PK	74.0	-15.2	1.80 H	309	46.6	12.2
5	11400.00	48.5 AV	54.0	-5.5	1.80 H	309	36.3	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	110.4 PK			2.35 V	275	68.3	42.1
2	*5700.00	101.5 AV			2.35 V	275	59.4	42.1
3	#5725.00	67.8 PK	68.2	-0.4	2.35 V	275	63.4	4.4
4	11400.00	59.3 PK	74.0	-14.7	1.28 V	177	47.1	12.2
5	11400.00	48.8 AV	54.0	-5.2	1.28 V	177	36.6	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.2 PK	68.2	-10.0	2.88 H	240	54.5	3.7
2	*5720.00	115.9 PK			2.88 H	240	73.8	42.1
3	*5720.00	107.9 AV			2.88 H	240	65.8	42.1
4	#5850.00	58.3 PK	68.2	-9.9	2.88 H	240	54.0	4.3
5	11440.00	60.3 PK	74.0	-13.7	1.82 H	313	48.1	12.2
6	11440.00	49.3 AV	54.0	-4.7	1.82 H	313	37.1	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.7 PK	68.2	-9.5	2.70 V	279	55.0	3.7
2	*5720.00	117.4 PK			2.70 V	279	75.3	42.1
3	*5720.00	109.5 AV			2.70 V	279	67.4	42.1
4	#5850.00	58.5 PK	68.2	-9.7	2.70 V	279	54.2	4.3
5	11440.00	60.7 PK	74.0	-13.3	2.35 V	190	48.5	12.2
6	11440.00	49.7 AV	54.0	-4.3	2.35 V	190	37.5	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	114.7 PK			2.94 H	239	72.6	42.1
2	*5745.00	107.3 AV			2.94 H	239	65.2	42.1
3	11490.00	61.0 PK	74.0	-13.0	1.69 H	359	48.7	12.3
4	11490.00	50.6 AV	54.0	-3.4	1.69 H	359	38.3	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	116.7 PK			2.67 V	281	74.6	42.1
2	*5745.00	108.5 AV			2.67 V	281	66.4	42.1
3	11490.00	61.6 PK	74.0	-12.4	1.87 V	269	49.3	12.3
4	11490.00	51.5 AV	54.0	-2.5	1.87 V	269	39.2	12.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	114.9 PK			2.81 H	240	72.7	42.2
2	*5785.00	107.2 AV			2.81 H	240	65.0	42.2
3	11570.00	60.4 PK	74.0	-13.6	1.65 H	355	48.2	12.2
4	11570.00	50.2 AV	54.0	-3.8	1.65 H	355	38.0	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	117.0 PK			2.69 V	277	74.8	42.2
2	*5785.00	109.1 AV			2.69 V	277	66.9	42.2
3	11570.00	61.2 PK	74.0	-12.8	1.85 V	264	49.0	12.2
4	11570.00	51.2 AV	54.0	-2.8	1.85 V	264	39.0	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	115.6 PK			2.94 H	239	73.5	42.1
2	*5825.00	107.1 AV			2.94 H	239	65.0	42.1
3	11650.00	61.9 PK	74.0	-12.1	1.62 H	357	50.0	11.9
4	11650.00	51.2 AV	54.0	-2.8	1.62 H	357	39.3	11.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	117.3 PK			2.77 V	276	75.2	42.1
2	*5825.00	109.0 AV			2.77 V	276	66.9	42.1
3	11650.00	62.4 PK	74.0	-11.6	1.79 V	270	50.5	11.9
4	11650.00	52.1 AV	54.0	-1.9	1.79 V	270	40.2	11.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	69.1 PK	74.0	-4.9	2.97 H	244	64.5	4.6
2	5150.00	53.0 AV	54.0	-1.0	2.97 H	244	48.4	4.6
3	*5180.00	111.1 PK			2.97 H	244	69.2	41.9
4	*5180.00	103.3 AV			2.97 H	244	61.4	41.9
5	#10360.00	55.2 PK	68.2	-13.0	1.88 H	318	44.5	10.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.7 PK	74.0	-3.3	3.23 V	275	66.1	4.6
2	5150.00	53.7 AV	54.0	-0.3	3.23 V	275	49.1	4.6
3	*5180.00	113.0 PK			3.23 V	275	71.1	41.9
4	*5180.00	105.3 AV			3.23 V	275	63.4	41.9
5	#10360.00	55.5 PK	68.2	-12.7	2.25 V	193	44.8	10.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	114.0 PK			2.99 H	244	72.2	41.8
2	*5200.00	106.8 AV			2.99 H	244	65.0	41.8
3	#10400.00	55.6 PK	68.2	-12.6	1.85 H	315	45.0	10.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	117.4 PK			3.05 V	275	75.6	41.8
2	*5200.00	109.7 AV			3.05 V	275	67.9	41.8
3	#10400.00	56.1 PK	68.2	-12.1	2.22 V	198	45.5	10.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 48 : 5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	115.3 PK			2.83 H	246	73.6	41.7
2	*5240.00	107.6 AV			2.83 H	246	65.9	41.7
3	5350.00	55.0 PK	74.0	-19.0	2.83 H	246	51.0	4.0
4	5350.00	45.2 AV	54.0	-8.8	2.83 H	246	41.2	4.0
5	#10480.00	56.4 PK	68.2	-11.8	1.95 H	318	45.0	11.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	117.1 PK			3.04 V	267	75.4	41.7
2	*5240.00	109.3 AV			3.04 V	267	67.6	41.7
3	5350.00	55.8 PK	74.0	-18.2	3.04 V	267	51.8	4.0
4	5350.00	45.5 AV	54.0	-8.5	3.04 V	267	41.5	4.0
5	#10480.00	56.7 PK	68.2	-11.5	2.22 V	185	45.3	11.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	53.7 PK	74.0	-20.3	2.78 H	246	49.1	4.6
2	5150.00	44.5 AV	54.0	-9.5	2.78 H	246	39.9	4.6
3	*5260.00	115.7 PK			2.78 H	246	74.0	41.7
4	*5260.00	107.7 AV			2.78 H	246	66.0	41.7
5	#10520.00	55.8 PK	68.2	-12.4	1.85 H	313	44.2	11.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.0 PK	74.0	-19.0	3.09 V	267	50.4	4.6
2	5150.00	44.9 AV	54.0	-9.1	3.09 V	267	40.3	4.6
3	*5260.00	117.2 PK			3.09 V	267	75.5	41.7
4	*5260.00	109.4 AV			3.09 V	267	67.7	41.7
5	#10520.00	56.0 PK	68.2	-12.2	2.30 V	190	44.4	11.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	114.7 PK			2.83 H	242	73.0	41.7
2	*5300.00	107.0 AV			2.83 H	242	65.3	41.7
3	5350.00	64.0 PK	74.0	-10.0	2.83 H	242	60.0	4.0
4	5350.00	52.5 AV	54.0	-1.5	2.83 H	242	48.5	4.0
5	10600.00	55.8 PK	74.0	-18.2	1.95 H	318	44.0	11.8
6	10600.00	46.8 AV	54.0	-7.2	1.95 H	318	35.0	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	117.0 PK			2.94 V	275	75.3	41.7
2	*5300.00	109.1 AV			2.94 V	275	67.4	41.7
3	5350.00	66.4 PK	74.0	-7.6	2.94 V	275	62.4	4.0
4	5350.00	53.5 AV	54.0	-0.5	2.94 V	275	49.5	4.0
5	10600.00	56.3 PK	74.0	-17.7	2.22 V	193	44.5	11.8
6	10600.00	47.1 AV	54.0	-6.9	2.22 V	193	35.3	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	110.5 PK			2.79 H	242	68.9	41.6
2	*5320.00	102.7 AV			2.79 H	242	61.1	41.6
3	5350.00	64.7 PK	74.0	-9.3	2.79 H	242	60.7	4.0
4	5350.00	50.9 AV	54.0	-3.1	2.79 H	242	46.9	4.0
5	10640.00	56.1 PK	74.0	-17.9	1.88 H	312	44.0	12.1
6	10640.00	46.9 AV	54.0	-7.1	1.88 H	312	34.8	12.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	112.8 PK			2.86 V	269	71.2	41.6
2	*5320.00	105.1 AV			2.86 V	269	63.5	41.6
3	5350.00	67.5 PK	74.0	-6.5	2.86 V	269	63.5	4.0
4	5350.00	53.6 AV	54.0	-0.4	2.86 V	269	49.6	4.0
5	10640.00	56.3 PK	74.0	-17.7	2.26 V	185	44.2	12.1
6	10640.00	47.2 AV	54.0	-6.8	2.26 V	185	35.1	12.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.5 PK	74.0	-15.5	2.83 H	243	54.8	3.7
2	5460.00	47.1 AV	54.0	-6.9	2.83 H	243	43.4	3.7
3	#5470.00	64.6 PK	68.2	-3.6	2.83 H	243	60.9	3.7
4	*5500.00	107.9 PK			2.83 H	243	66.6	41.3
5	*5500.00	100.2 AV			2.83 H	243	58.9	41.3
6	11000.00	59.5 PK	74.0	-14.5	1.87 H	306	47.7	11.8
7	11000.00	48.8 AV	54.0	-5.2	1.87 H	306	37.0	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.9 PK	74.0	-15.1	2.63 V	280	55.2	3.7
2	5460.00	47.5 AV	54.0	-6.5	2.63 V	280	43.8	3.7
3	#5470.00	66.9 PK	68.2	-1.3	2.63 V	280	63.2	3.7
4	*5500.00	109.8 PK			2.63 V	280	68.5	41.3
5	*5500.00	102.4 AV			2.63 V	280	61.1	41.3
6	11000.00	60.0 PK	74.0	-14.0	2.36 V	187	48.2	11.8
7	11000.00	49.1 AV	54.0	-4.9	2.36 V	187	37.3	11.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	115.7 PK			2.77 H	242	74.1	41.6
2	*5580.00	107.7 AV			2.77 H	242	66.1	41.6
3	11160.00	60.6 PK	74.0	-13.4	1.85 H	306	48.3	12.3
4	11160.00	50.8 AV	54.0	-3.2	1.85 H	306	38.5	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	117.6 PK			2.55 V	273	76.0	41.6
2	*5580.00	109.6 AV			2.55 V	273	68.0	41.6
3	11160.00	61.1 PK	74.0	-12.9	2.38 V	188	48.8	12.3
4	11160.00	51.1 AV	54.0	-2.9	2.38 V	188	38.8	12.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	107.2 PK			2.91 H	238	65.1	42.1
2	*5700.00	99.0 AV			2.91 H	238	56.9	42.1
3	#5725.00	66.7 PK	68.2	-1.5	2.91 H	238	62.3	4.4
4	11400.00	58.7 PK	74.0	-15.3	1.75 H	305	46.5	12.2
5	11400.00	48.5 AV	54.0	-5.5	1.75 H	305	36.3	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	109.6 PK			2.34 V	274	67.5	42.1
2	*5700.00	101.6 AV			2.34 V	274	59.5	42.1
3	#5725.00	67.9 PK	68.2	-0.3	2.34 V	274	63.5	4.4
4	11400.00	59.2 PK	74.0	-14.8	1.25 V	175	47.0	12.2
5	11400.00	48.7 AV	54.0	-5.3	1.25 V	175	36.5	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	57.9 PK	68.2	-10.3	2.91 H	239	54.2	3.7
2	*5720.00	115.0 PK			2.91 H	239	72.9	42.1
3	*5720.00	107.3 AV			2.91 H	239	65.2	42.1
4	#5850.00	58.5 PK	68.2	-9.7	2.91 H	239	54.2	4.3
5	11440.00	60.2 PK	74.0	-13.8	1.85 H	318	48.0	12.2
6	11440.00	49.2 AV	54.0	-4.8	1.85 H	318	37.0	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.2 PK	68.2	-10.0	2.75 V	280	54.5	3.7
2	*5720.00	116.7 PK			2.75 V	280	74.6	42.1
3	*5720.00	108.9 AV			2.75 V	280	66.8	42.1
4	#5850.00	58.9 PK	68.2	-9.3	2.75 V	280	54.6	4.3
5	11440.00	60.5 PK	74.0	-13.5	2.30 V	189	48.3	12.2
6	11440.00	49.5 AV	54.0	-4.5	2.30 V	189	37.3	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	114.6 PK			2.89 H	239	72.5	42.1
2	*5745.00	107.2 AV			2.89 H	239	65.1	42.1
3	11490.00	60.9 PK	74.0	-13.1	1.68 H	357	48.6	12.3
4	11490.00	50.5 AV	54.0	-3.5	1.68 H	357	38.2	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	116.1 PK			2.67 V	279	74.0	42.1
2	*5745.00	108.5 AV			2.67 V	279	66.4	42.1
3	11490.00	61.5 PK	74.0	-12.5	1.90 V	267	49.2	12.3
4	11490.00	51.3 AV	54.0	-2.7	1.90 V	267	39.0	12.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	115.2 PK			2.87 H	239	73.0	42.2
2	*5785.00	107.4 AV			2.87 H	239	65.2	42.2
3	11570.00	60.7 PK	74.0	-13.3	1.67 H	353	48.5	12.2
4	11570.00	50.5 AV	54.0	-3.5	1.67 H	353	38.3	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	116.2 PK			2.68 V	280	74.0	42.2
2	*5785.00	108.5 AV			2.68 V	280	66.3	42.2
3	11570.00	61.4 PK	74.0	-12.6	1.87 V	265	49.2	12.2
4	11570.00	51.3 AV	54.0	-2.7	1.87 V	265	39.1	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	115.0 PK			2.80 H	240	72.9	42.1
2	*5825.00	106.9 AV			2.80 H	240	64.8	42.1
3	11650.00	61.1 PK	74.0	-12.9	1.65 H	352	49.2	11.9
4	11650.00	50.8 AV	54.0	-3.2	1.65 H	352	38.9	11.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	116.6 PK			2.63 V	279	74.5	42.1
2	*5825.00	108.3 AV			2.63 V	279	66.2	42.1
3	11650.00	61.9 PK	74.0	-12.1	1.80 V	27	50.0	11.9
4	11650.00	51.9 AV	54.0	-2.1	1.80 V	27	40.0	11.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT40)	Channel	CH 38 : 5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.7 PK	74.0	-8.3	2.95 H	245	61.1	4.6
2	5150.00	53.4 AV	54.0	-0.6	2.95 H	245	48.8	4.6
3	*5190.00	105.2 PK			2.95 H	245	63.3	41.9
4	*5190.00	96.9 AV			2.95 H	245	55.0	41.9
5	#10380.00	54.6 PK	68.2	-13.6	1.88 H	318	44.0	10.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.0 PK	74.0	-8.0	3.14 V	274	61.4	4.6
2	5150.00	53.7 AV	54.0	-0.3	3.14 V	274	49.1	4.6
3	*5190.00	107.3 PK			3.14 V	274	65.4	41.9
4	*5190.00	99.2 AV			3.14 V	274	57.3	41.9
5	#10380.00	54.8 PK	68.2	-13.4	2.22 V	199	44.2	10.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT40)	Channel	CH 46 : 5230 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.2 PK	74.0	-8.8	2.95 H	241	60.6	4.6
2	5150.00	51.7 AV	54.0	-2.3	2.95 H	241	47.1	4.6
3	*5230.00	112.4 PK			2.95 H	241	70.6	41.8
4	*5230.00	103.9 AV			2.95 H	241	62.1	41.8
5	5350.00	59.2 PK	74.0	-14.8	2.95 H	241	55.2	4.0
6	5350.00	46.7 AV	54.0	-7.3	2.95 H	241	42.7	4.0
7	#10460.00	55.1 PK	68.2	-13.1	1.87 H	312	44.0	11.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.2 PK	74.0	-6.8	2.91 V	279	62.6	4.6
2	5150.00	53.7 AV	54.0	-0.3	2.91 V	279	49.1	4.6
3	*5230.00	113.9 PK			2.91 V	279	72.1	41.8
4	*5230.00	106.3 AV			2.91 V	279	64.5	41.8
5	5350.00	59.8 PK	74.0	-14.2	2.91 V	279	55.8	4.0
6	5350.00	47.0 AV	54.0	-7.0	2.91 V	279	43.0	4.0
7	#10460.00	55.6 PK	68.2	-12.6	2.30 V	192	44.5	11.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT40)	Channel	CH 54 : 5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.7 PK	74.0	-18.3	2.87 H	243	51.1	4.6
2	5150.00	44.7 AV	54.0	-9.3	2.87 H	243	40.1	4.6
3	*5270.00	110.7 PK			2.87 H	243	69.0	41.7
4	*5270.00	103.2 AV			2.87 H	243	61.5	41.7
5	5350.00	64.8 PK	74.0	-9.2	2.87 H	243	60.8	4.0
6	5350.00	50.9 AV	54.0	-3.1	2.87 H	243	46.9	4.0
7	#10540.00	55.7 PK	68.2	-12.5	1.88 H	315	44.0	11.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	56.7 PK	74.0	-17.3	2.89 V	288	52.1	4.6
2	5150.00	45.7 AV	54.0	-8.3	2.89 V	288	41.1	4.6
3	*5270.00	113.3 PK			2.89 V	288	71.6	41.7
4	*5270.00	105.0 AV			2.89 V	288	63.3	41.7
5	5350.00	67.0 PK	74.0	-7.0	2.89 V	288	63.0	4.0
6	5350.00	53.6 AV	54.0	-0.4	2.89 V	288	49.6	4.0
7	#10540.00	56.0 PK	68.2	-12.2	2.31 V	188	44.3	11.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT40)	Channel	CH 62 : 5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	105.2 PK			2.84 H	243	63.6	41.6
2	*5310.00	97.0 AV			2.84 H	243	55.4	41.6
3	5350.00	68.0 PK	74.0	-6.0	2.84 H	243	64.0	4.0
4	5350.00	51.5 AV	54.0	-2.5	2.84 H	243	47.5	4.0
5	10620.00	55.5 PK	74.0	-18.5	1.92 H	312	43.5	12.0
6	10620.00	46.5 AV	54.0	-7.5	1.92 H	312	34.5	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	107.7 PK			3.02 V	277	66.1	41.6
2	*5310.00	99.6 AV			3.02 V	277	58.0	41.6
3	5350.00	68.5 PK	74.0	-5.5	3.02 V	277	64.5	4.0
4	5350.00	53.2 AV	54.0	-0.8	3.02 V	277	49.2	4.0
5	10620.00	56.0 PK	74.0	-18.0	2.35 V	182	44.0	12.0
6	10620.00	46.8 AV	54.0	-7.2	2.35 V	182	34.8	12.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT40)	Channel	CH 102 : 5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.5 PK	74.0	-15.5	2.82 H	238	54.8	3.7
2	5460.00	48.6 AV	54.0	-5.4	2.82 H	238	44.9	3.7
3	#5470.00	64.8 PK	68.2	-3.4	2.82 H	238	61.1	3.7
4	*5510.00	102.8 PK			2.82 H	238	61.5	41.3
5	*5510.00	94.6 AV			2.82 H	238	53.3	41.3
6	11020.00	59.5 PK	74.0	-14.5	1.82 H	302	47.5	12.0
7	11020.00	48.9 AV	54.0	-5.1	1.82 H	302	36.9	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.5 PK	74.0	-14.5	2.62 V	272	55.8	3.7
2	5460.00	49.4 AV	54.0	-4.6	2.62 V	272	45.7	3.7
3	#5470.00	66.7 PK	68.2	-1.5	2.62 V	272	63.0	3.7
4	*5510.00	105.2 PK			2.62 V	272	63.9	41.3
5	*5510.00	96.5 AV			2.62 V	272	55.2	41.3
6	11020.00	60.1 PK	74.0	-13.9	2.33 V	185	48.1	12.0
7	11020.00	49.2 AV	54.0	-4.8	2.33 V	185	37.2	12.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT40)	Channel	CH 110 : 5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	113.1 PK			2.83 H	241	71.9	41.2
2	*5550.00	104.8 AV			2.83 H	241	63.6	41.2
3	11100.00	60.7 PK	74.0	-13.3	1.81 H	305	48.3	12.4
4	11100.00	50.8 AV	54.0	-3.2	1.81 H	305	38.4	12.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	115.0 PK			2.62 V	270	73.8	41.2
2	*5550.00	106.5 AV			2.62 V	270	65.3	41.2
3	11100.00	61.1 PK	74.0	-12.9	2.31 V	183	48.7	12.4
4	11100.00	51.1 AV	54.0	-2.9	2.31 V	183	38.7	12.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT40)	Channel	CH 134 : 5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	106.0 PK			2.83 H	238	63.9	42.1
2	*5670.00	97.4 AV			2.83 H	238	55.3	42.1
3	#5725.00	62.0 PK	68.2	-6.2	2.83 H	238	57.6	4.4
4	11340.00	58.6 PK	74.0	-15.4	1.00 H	302	46.4	12.2
5	11340.00	48.3 AV	54.0	-5.7	1.00 H	302	36.1	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	108.0 PK			2.68 V	266	65.9	42.1
2	*5670.00	99.7 AV			2.68 V	266	57.6	42.1
3	#5725.00	67.4 PK	68.2	-0.8	2.68 V	266	63.0	4.4
4	11340.00	59.0 PK	74.0	-15.0	1.21 V	171	46.8	12.2
5	11340.00	48.6 AV	54.0	-5.4	1.21 V	171	36.4	12.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT40)	Channel	CH 142 : 5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	58.7 PK	68.2	-9.5	2.82 H	239	55.0	3.7
2	*5710.00	112.3 PK			2.82 H	239	70.2	42.1
3	*5710.00	104.0 AV			2.82 H	239	61.9	42.1
4	#5850.00	59.6 PK	68.2	-8.6	2.82 H	239	55.3	4.3
5	11420.00	60.3 PK	74.0	-13.7	1.90 H	311	48.0	12.3
6	11420.00	49.1 AV	54.0	-4.9	1.90 H	311	36.8	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	59.4 PK	68.2	-8.8	2.88 V	267	55.7	3.7
2	*5710.00	113.2 PK			2.88 V	267	71.1	42.1
3	*5710.00	105.7 AV			2.88 V	267	63.6	42.1
4	#5850.00	60.1 PK	68.2	-8.1	2.88 V	267	55.8	4.3
5	11420.00	60.5 PK	74.0	-13.5	2.22 V	190	48.2	12.3
6	11420.00	49.5 AV	54.0	-4.5	2.22 V	190	37.2	12.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	802.11n (HT40)	Channel	CH 151 : 5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5755.00	112.1 PK			2.95 H	239	70.0	42.1
2	*5755.00	103.9 AV			2.95 H	239	61.8	42.1
3	11510.00	59.8 PK	74.0	-14.2	1.65 H	352	47.5	12.3
4	11510.00	49.8 AV	54.0	-4.2	1.65 H	352	37.5	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5755.00	113.8 PK			2.74 V	277	71.7	42.1
2	*5755.00	105.3 AV			2.74 V	277	63.2	42.1
3	11510.00	60.3 PK	74.0	-13.7	1.87 V	269	48.0	12.3
4	11510.00	50.5 AV	54.0	-3.5	1.87 V	269	38.2	12.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11n (HT40)	Channel	CH 159 : 5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5795.00	111.9 PK			2.81 H	237	69.7	42.2
2	*5795.00	103.9 AV			2.81 H	237	61.7	42.2
3	11590.00	59.8 PK	74.0	-14.2	1.62 H	353	47.6	12.2
4	11590.00	49.8 AV	54.0	-4.2	1.62 H	353	37.6	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5795.00	113.0 PK			2.78 V	278	70.8	42.2
2	*5795.00	105.0 AV			2.78 V	278	62.8	42.2
3	11590.00	60.2 PK	74.0	-13.8	1.90 V	270	48.0	12.2
4	11590.00	50.3 AV	54.0	-3.7	1.90 V	270	38.1	12.2

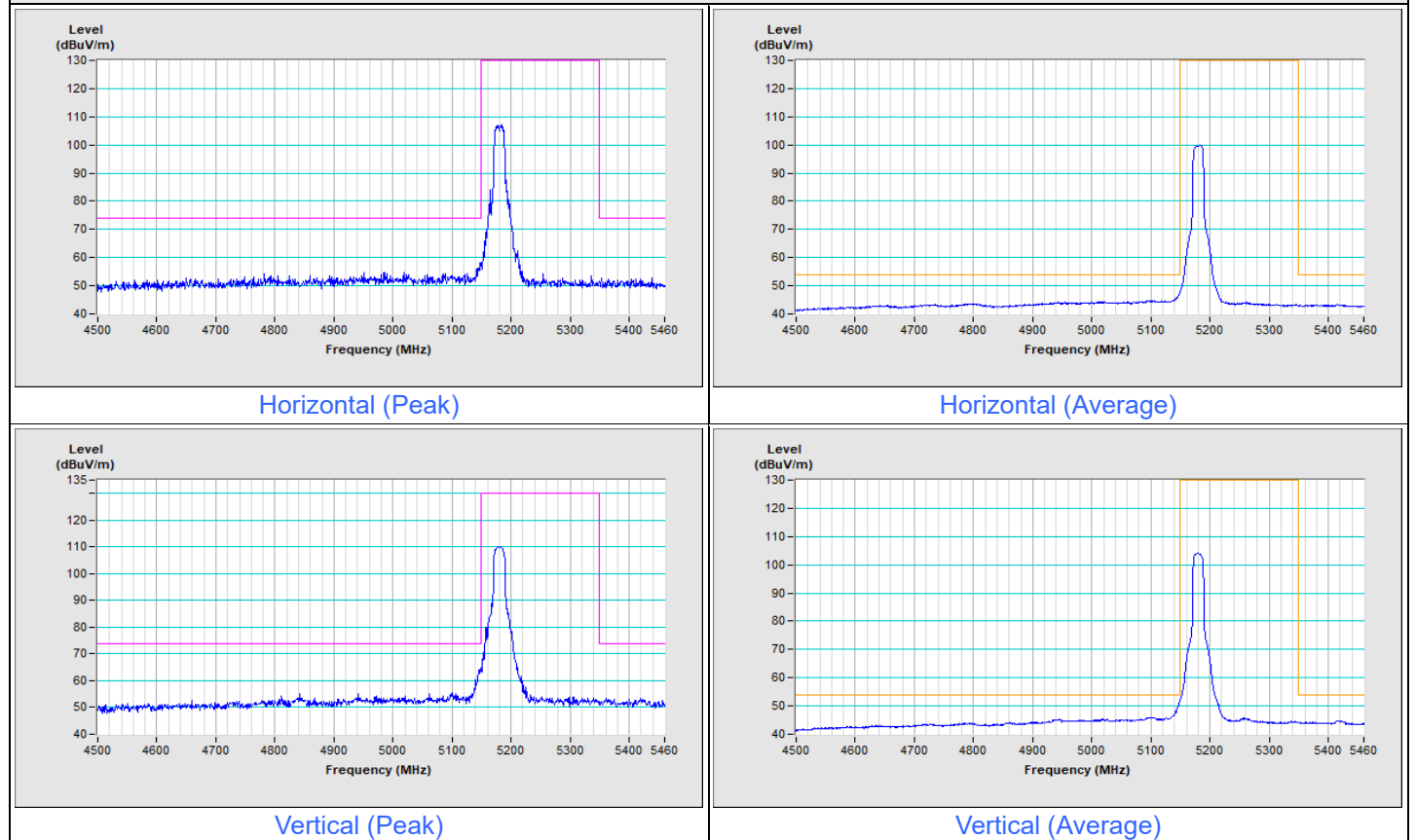
Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

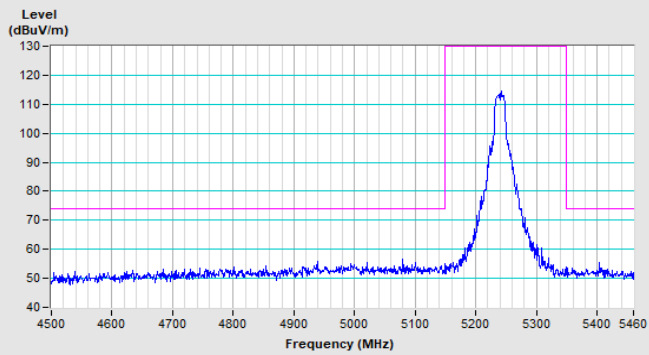
Plot of Band Edge

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	--------------------	-------------------------------	--

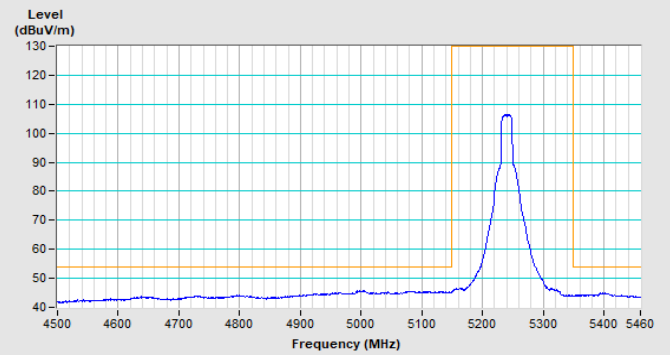
802.11a Channel 36



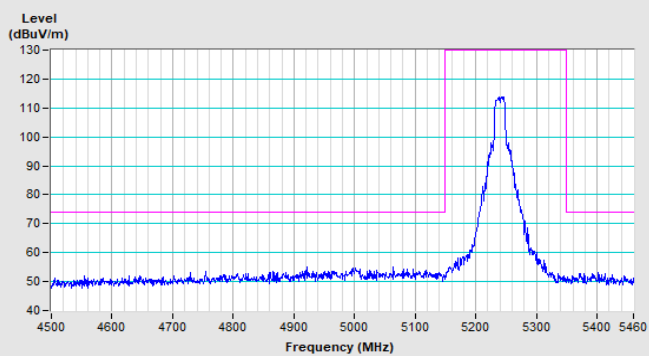
802.11a Channel 48



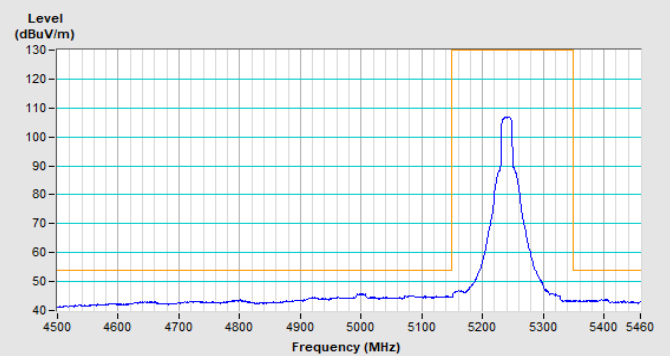
Horizontal (Peak)



Horizontal (Average)

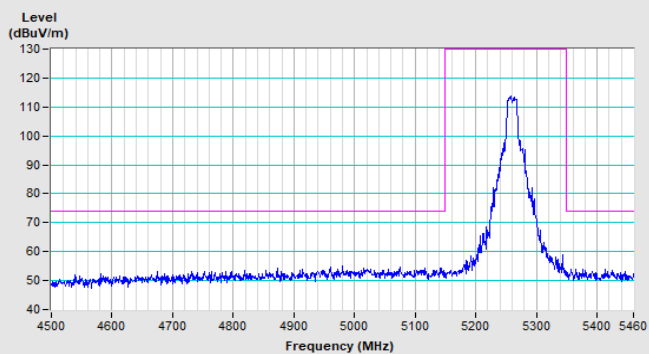


Vertical (Peak)

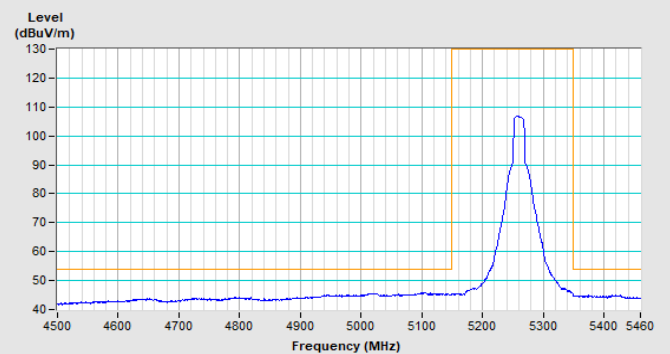


Vertical (Average)

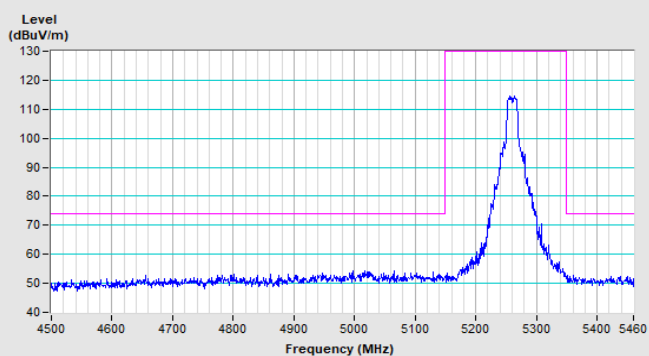
802.11a Channel 52



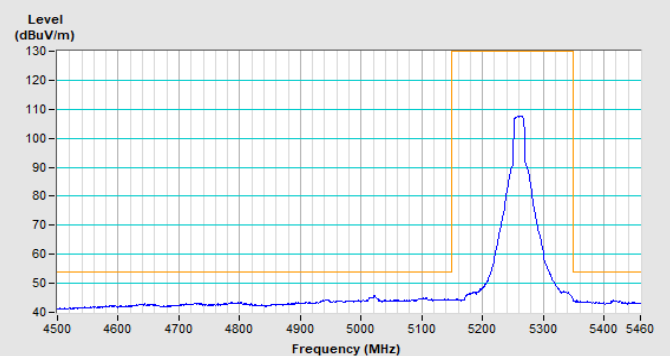
Horizontal (Peak)



Horizontal (Average)

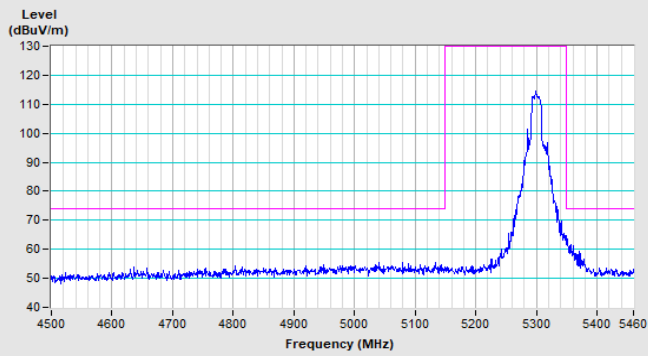


Vertical (Peak)

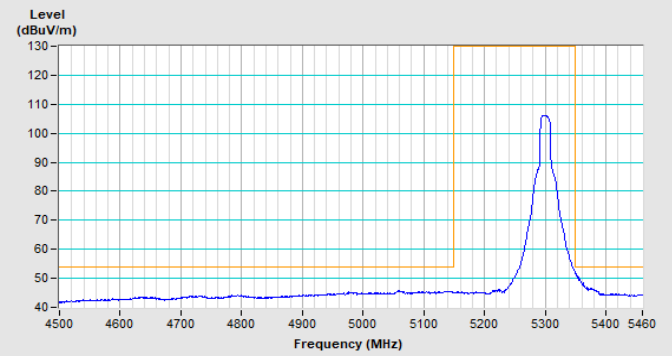


Vertical (Average)

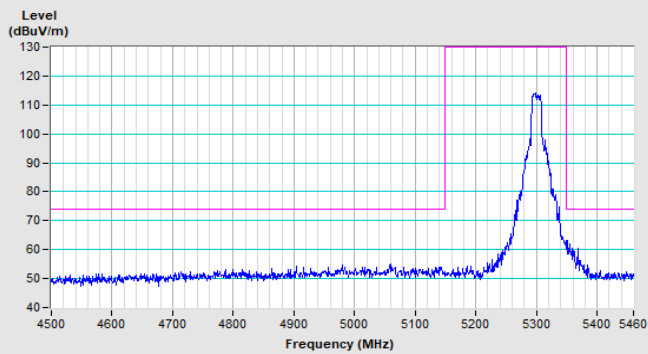
802.11a Channel 60



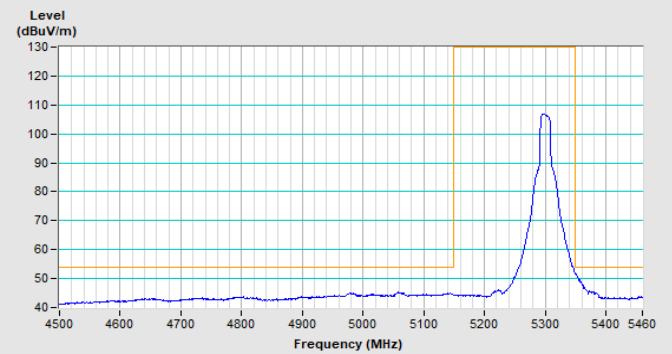
Horizontal (Peak)



Horizontal (Average)

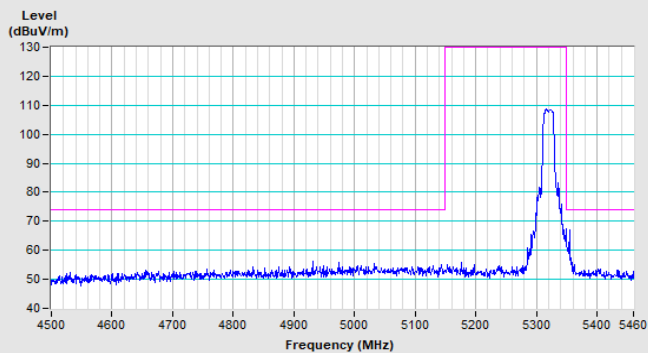


Vertical (Peak)

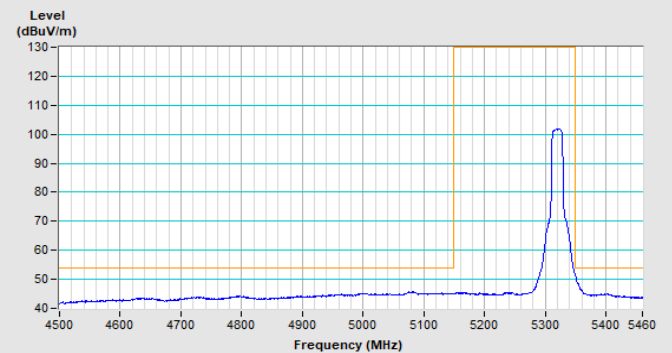


Vertical (Average)

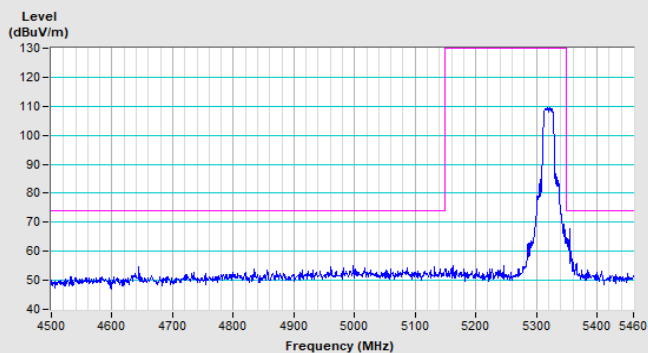
802.11a Channel 64



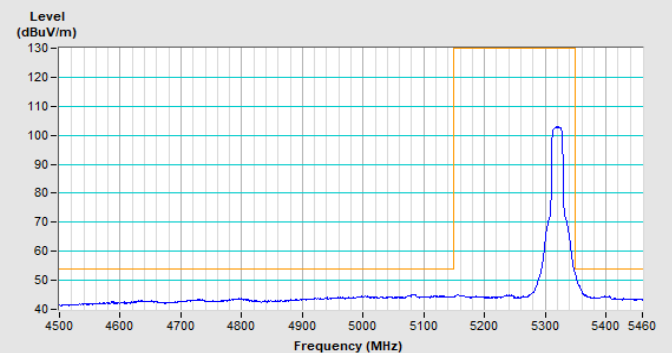
Horizontal (Peak)



Horizontal (Average)



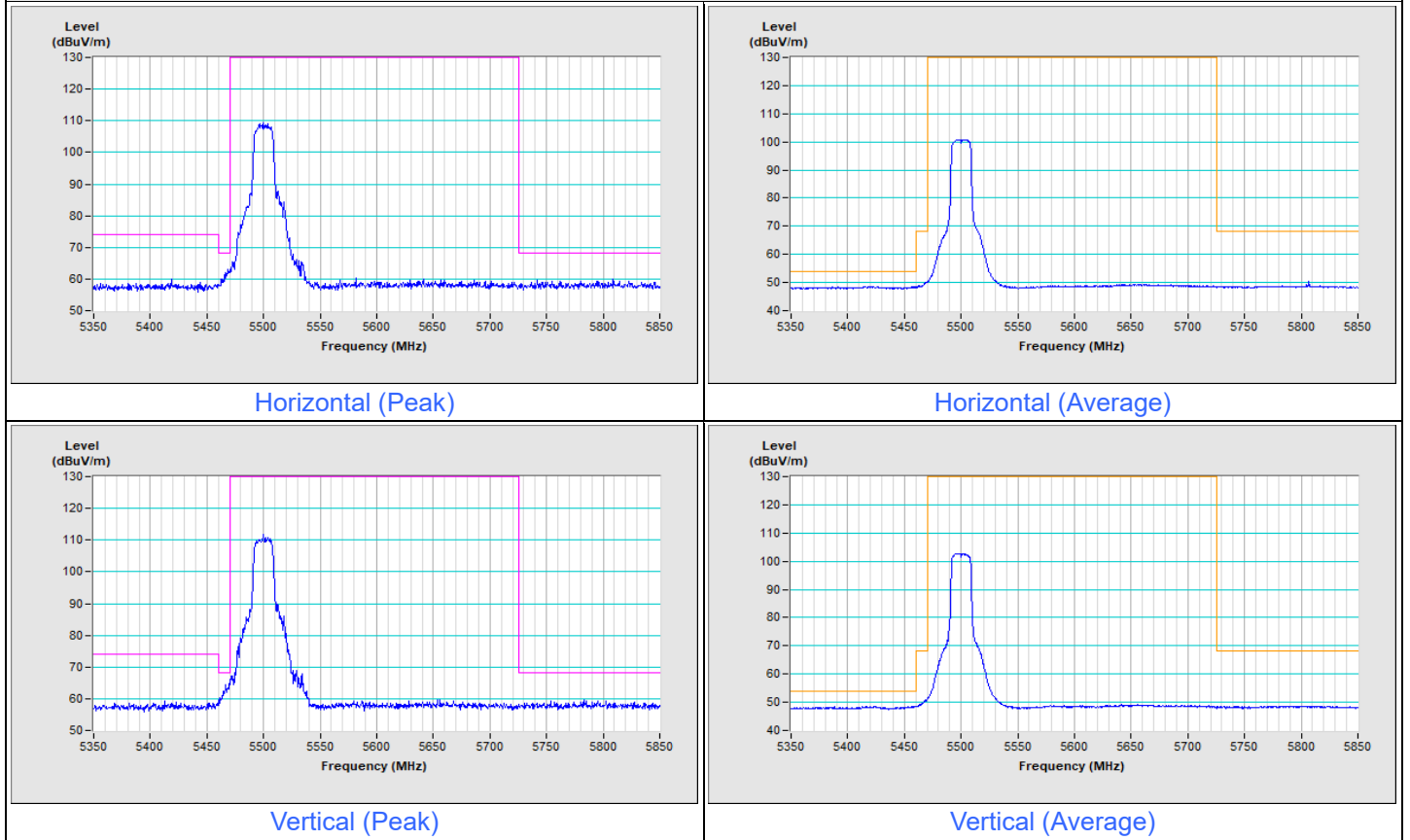
Vertical (Peak)



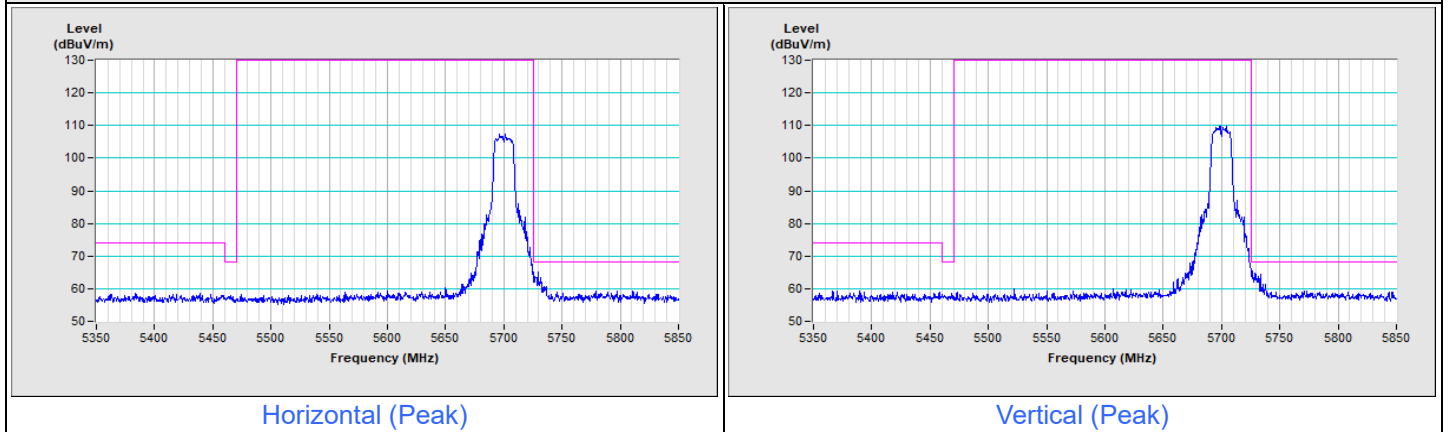
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	---------------------	-------------------------------	--

802.11a Channel 100

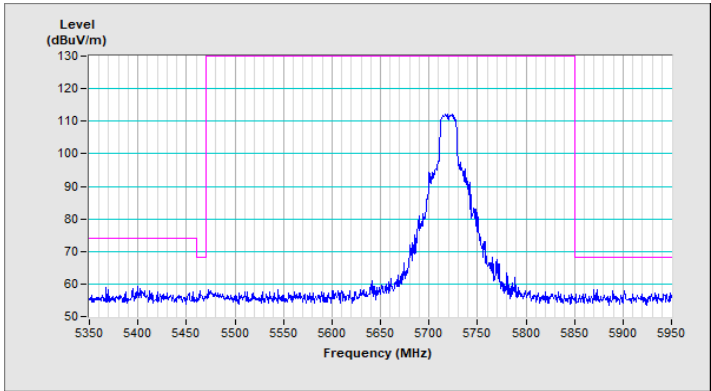


802.11a Channel 140

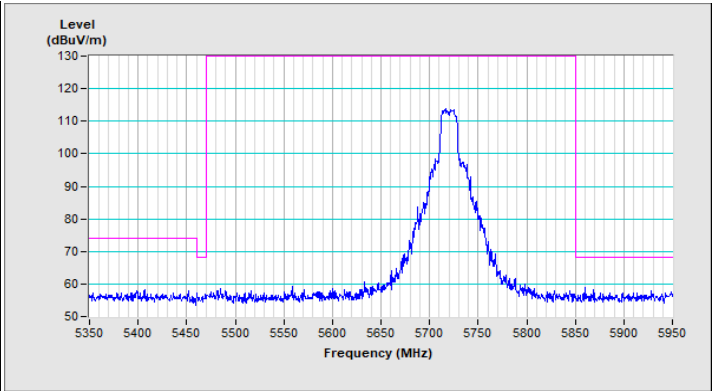


Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	---------------------	-------------------------------	----------------------------------

802.11a Channel 144



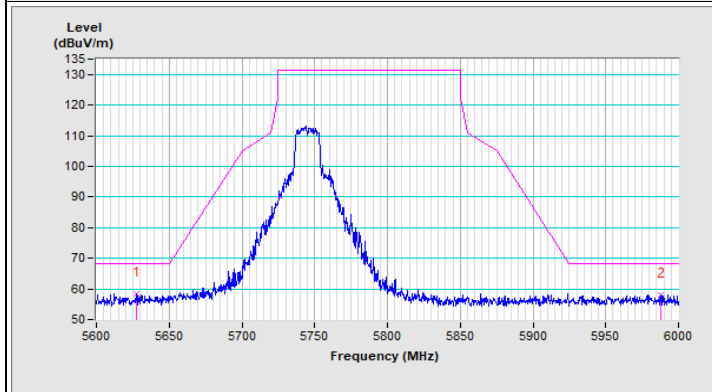
Horizontal (Peak)



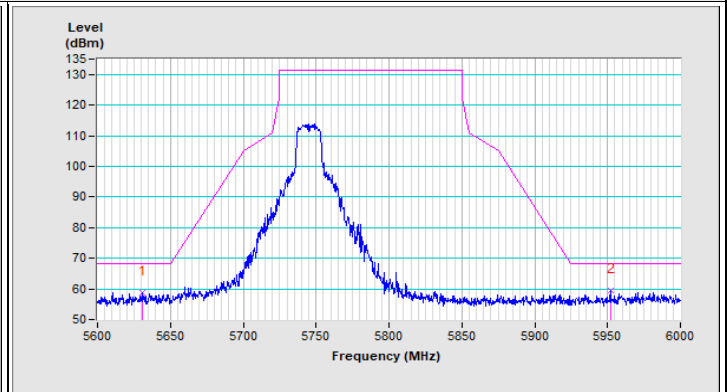
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	-----------------	-------------------------------	----------------------------------

802.11a Channel 149

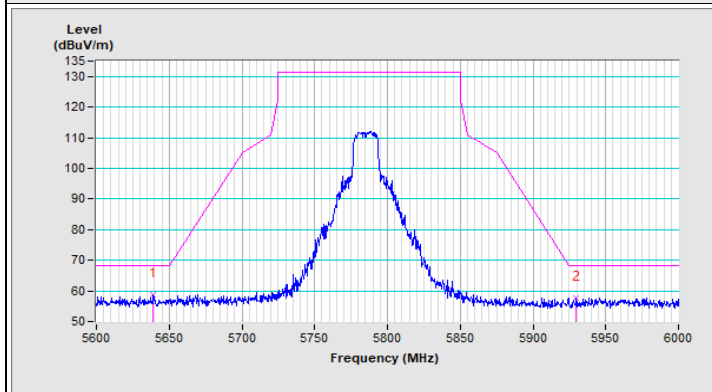


Horizontal (Peak)

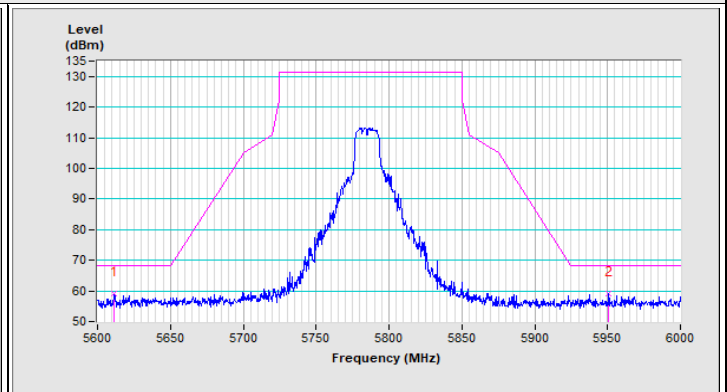


Vertical (Peak)

802.11a Channel 157

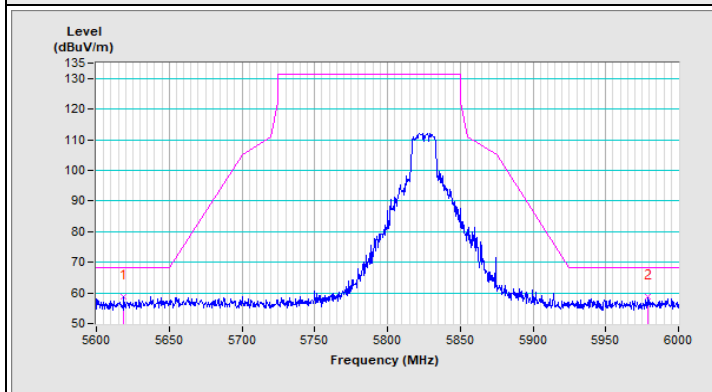


Horizontal (Peak)

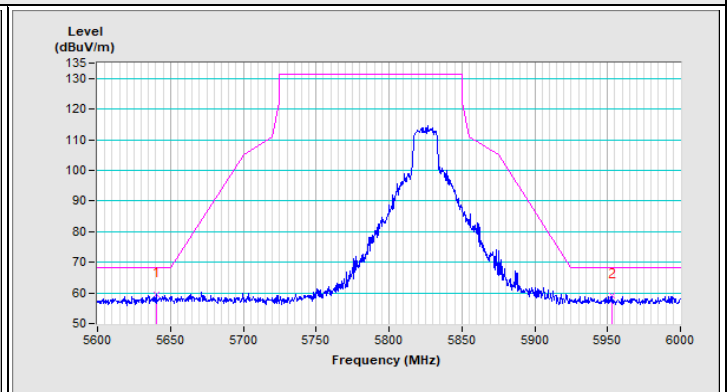


Vertical (Peak)

802.11a Channel 165

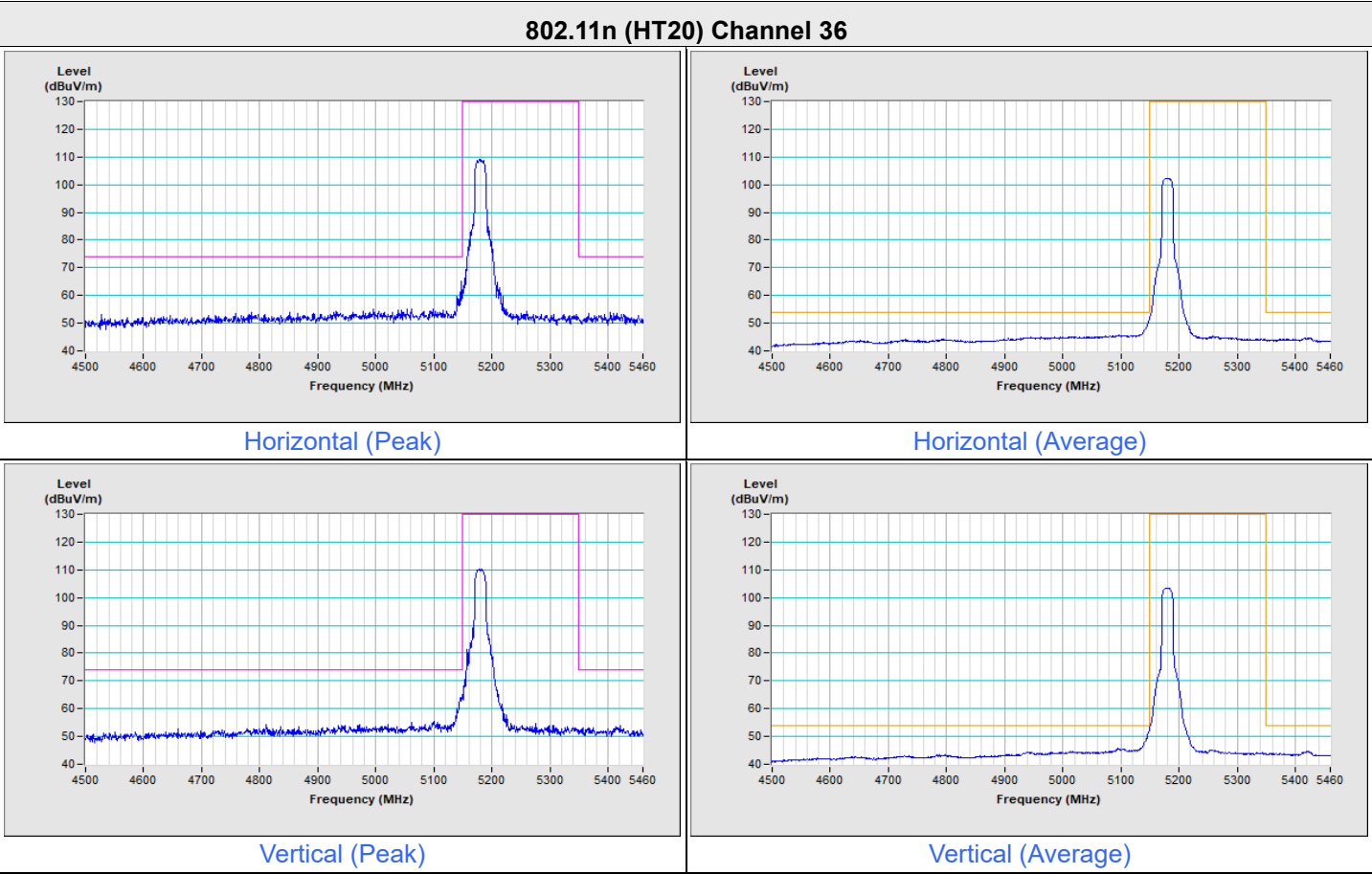


Horizontal (Peak)

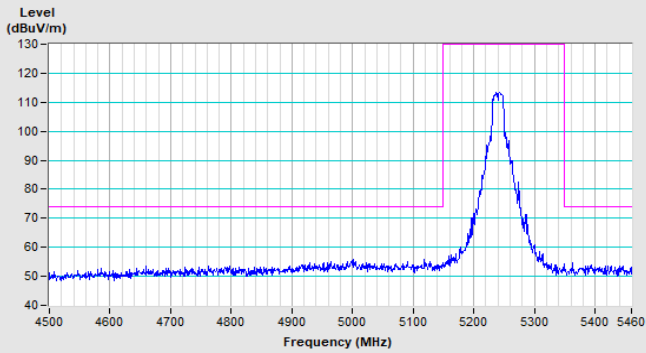


Vertical (Peak)

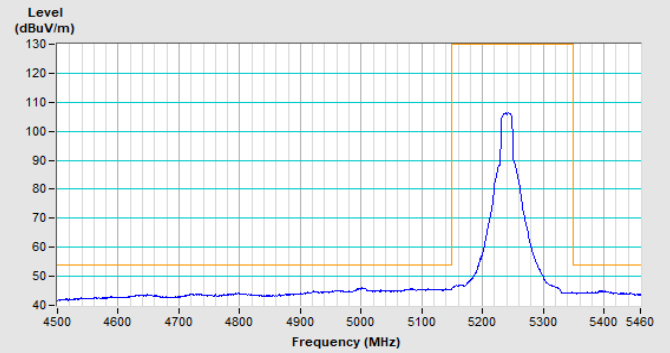
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	--------------------	-------------------------------	--



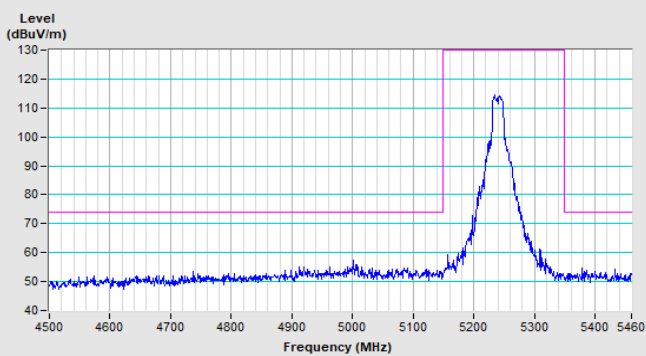
802.11n (HT20) Channel 48



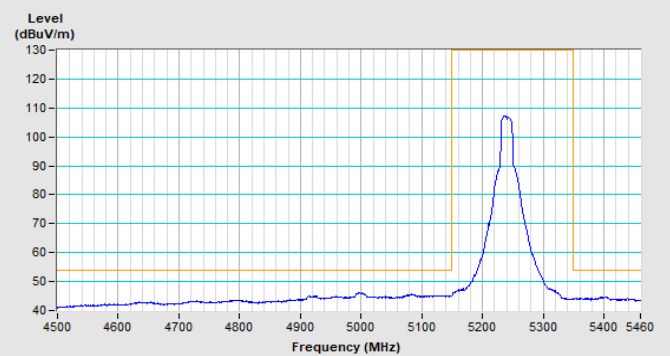
Horizontal (Peak)



Horizontal (Average)

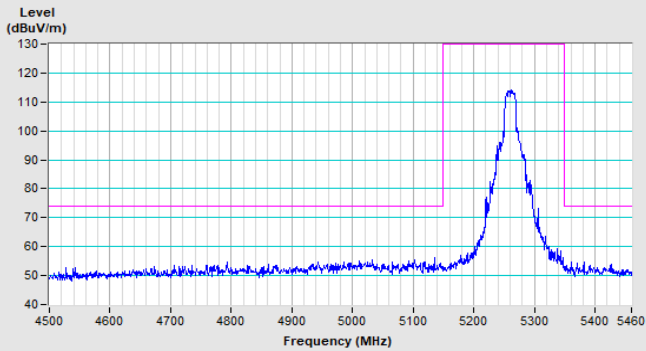


Vertical (Peak)

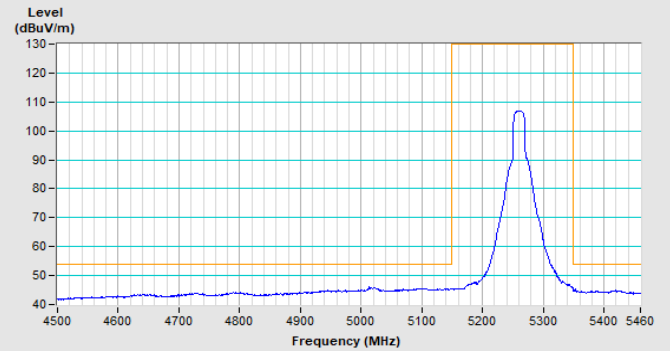


Vertical (Average)

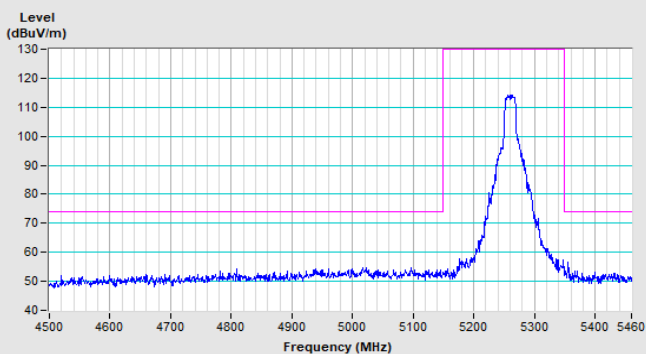
802.11n (HT20) Channel 52



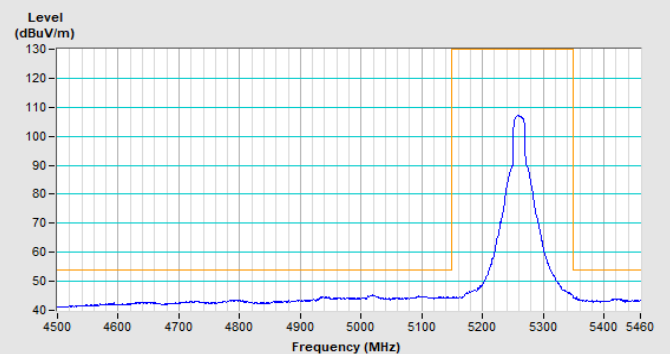
Horizontal (Peak)



Horizontal (Average)

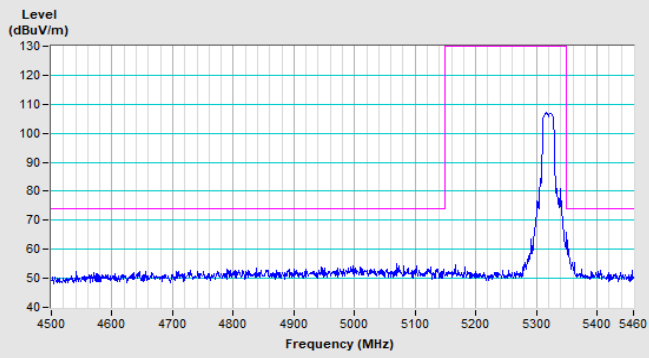


Vertical (Peak)

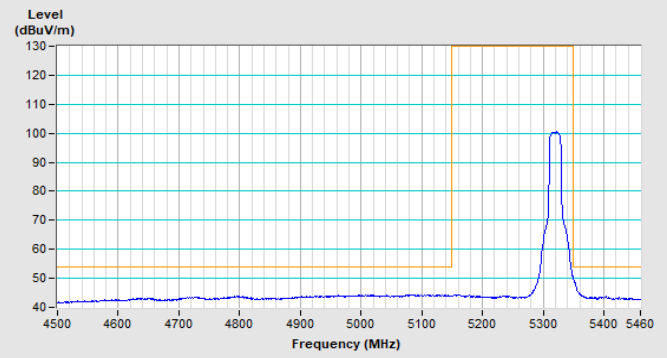


Vertical (Average)

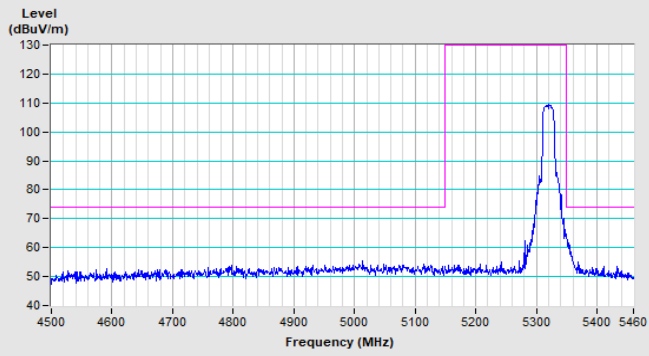
802.11n (HT20) Channel 64



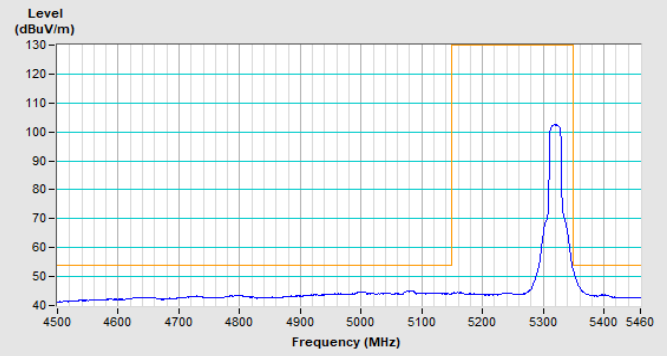
Horizontal (Peak)



Horizontal (Average)



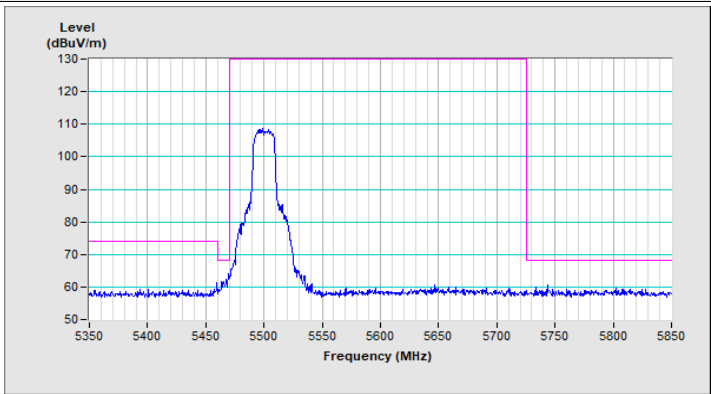
Vertical (Peak)



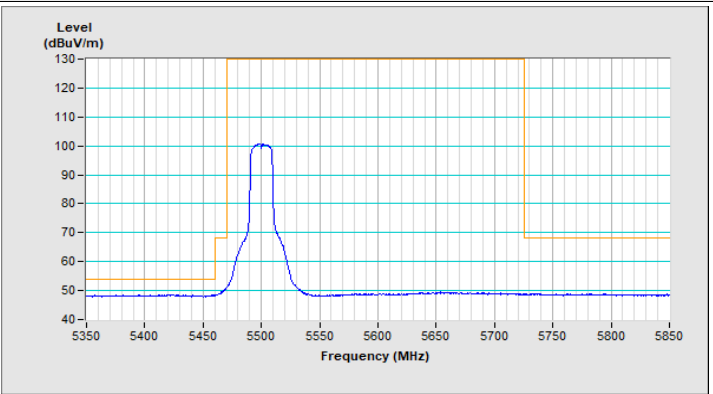
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	---------------------	-------------------------------	--

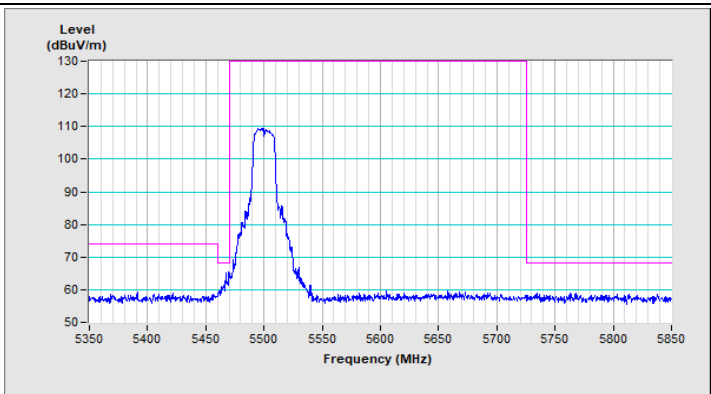
802.11n (HT20) Channel 100



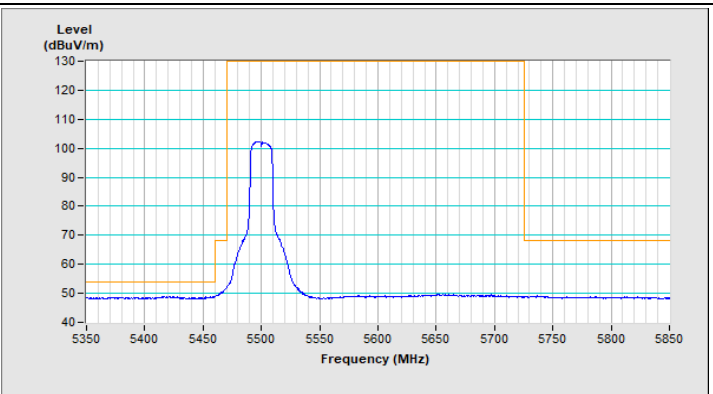
Horizontal (Peak)



Horizontal (Average)

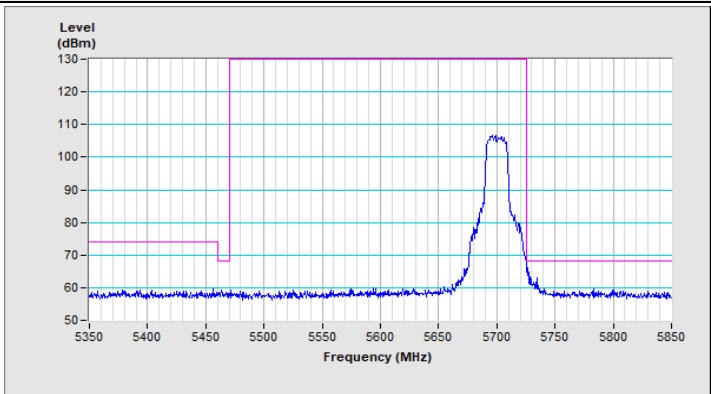


Vertical (Peak)

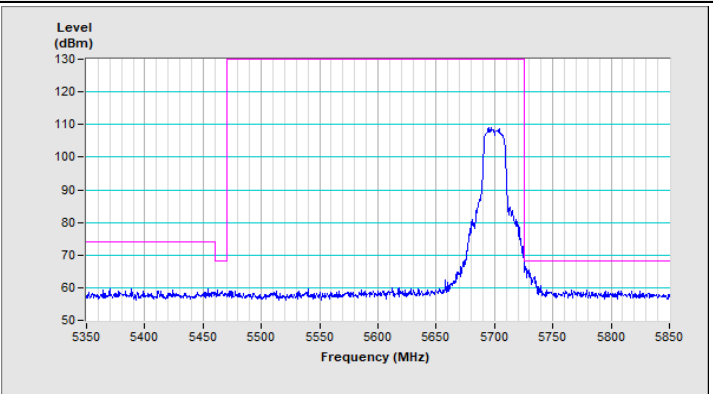


Vertical (Average)

802.11n (HT20) Channel 140

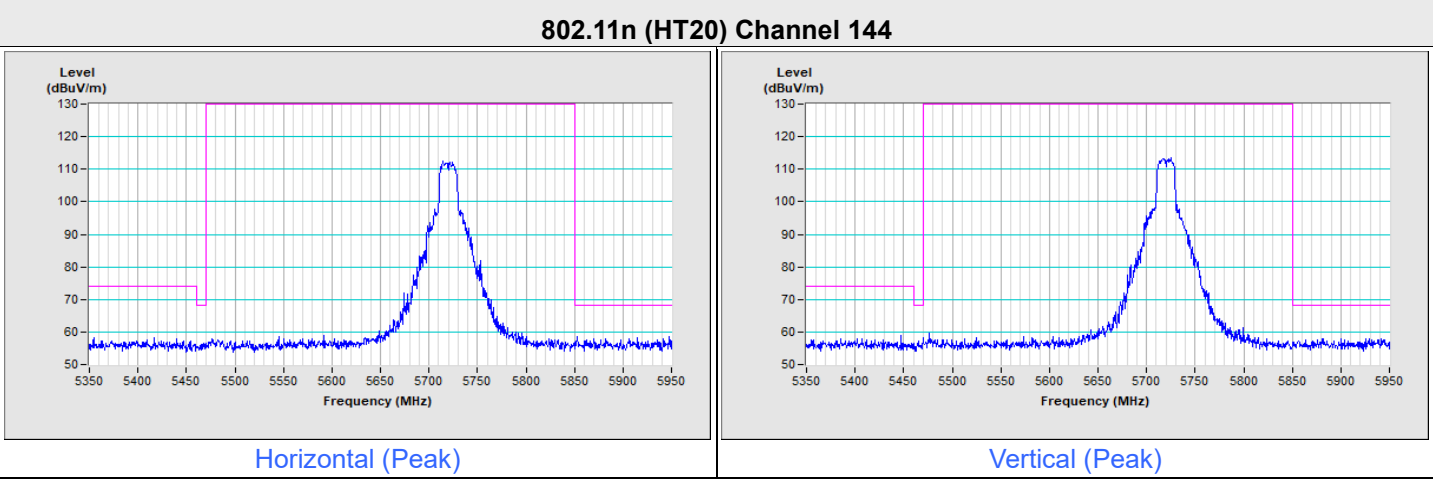


Horizontal (Peak)



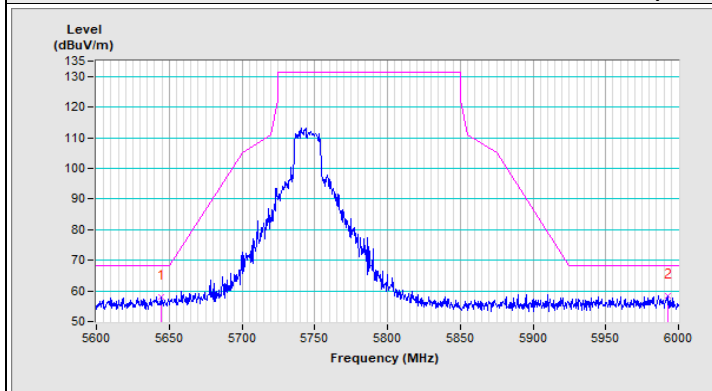
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	---------------------	-------------------------------	----------------------------------

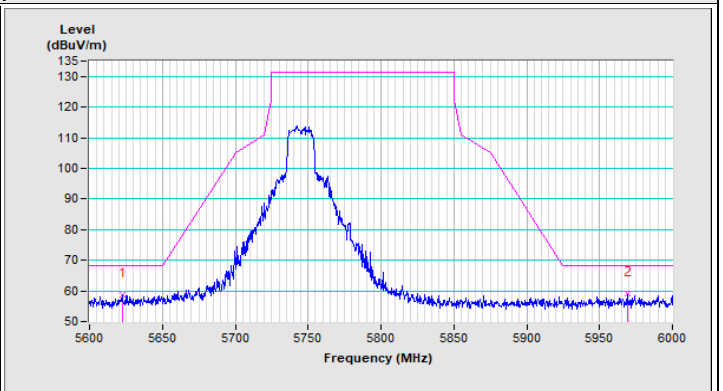


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	-----------------	-------------------------------	----------------------------------

802.11n (HT20) Channel 149

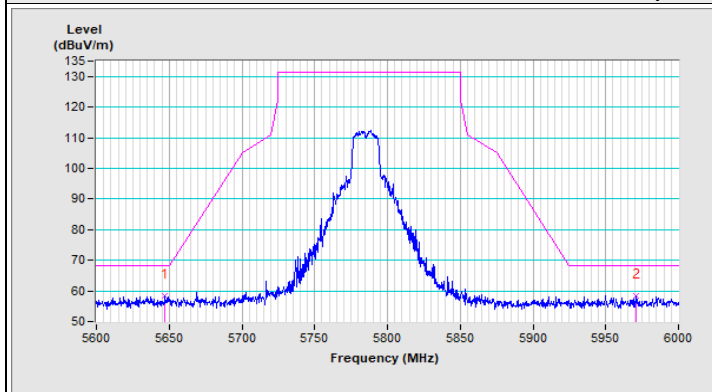


Horizontal (Peak)

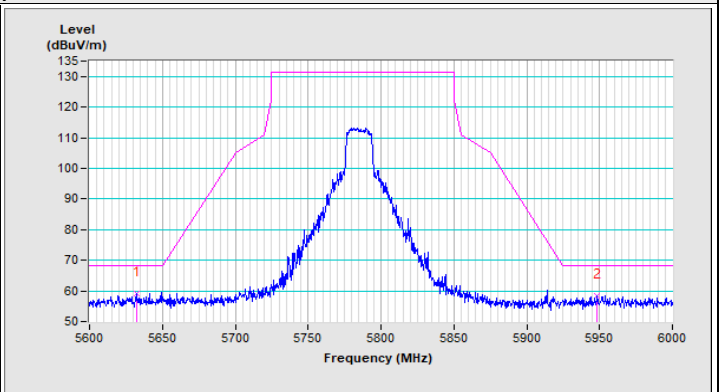


Vertical (Peak)

802.11n (HT20) Channel 157

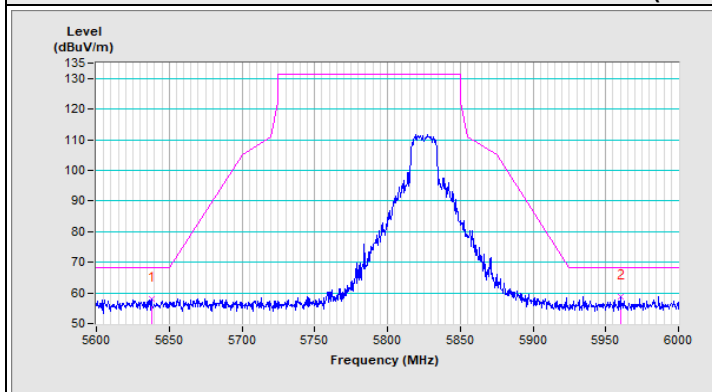


Horizontal (Peak)

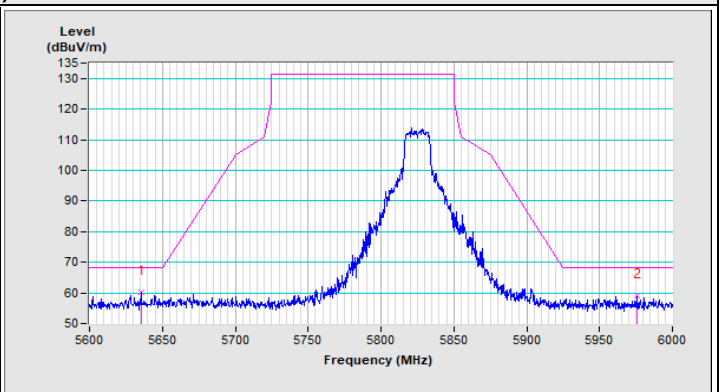


Vertical (Peak)

802.11n (HT20) Channel 165

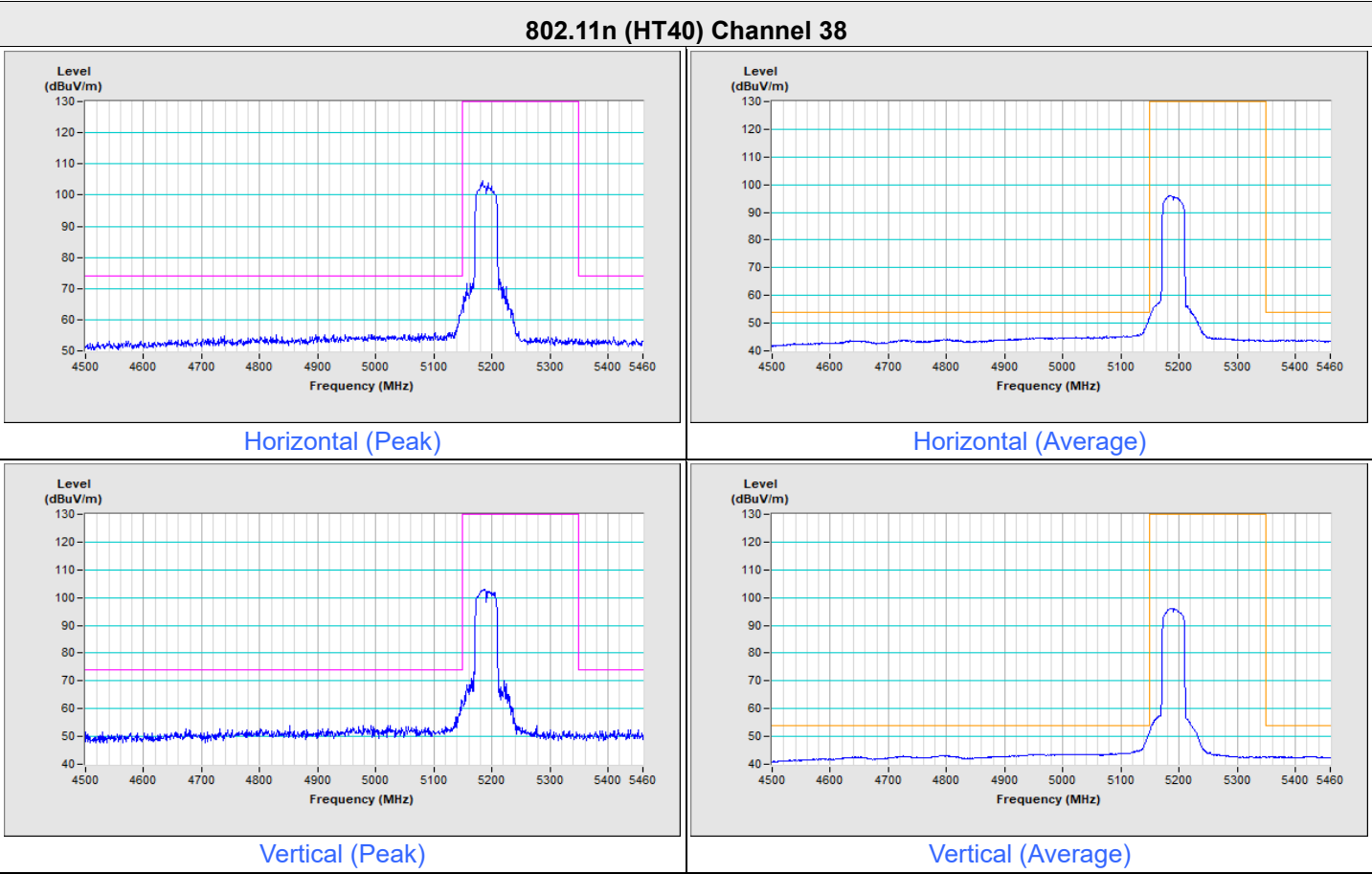


Horizontal (Peak)

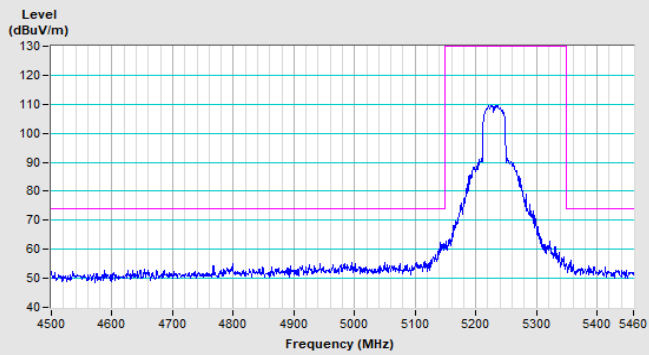


Vertical (Peak)

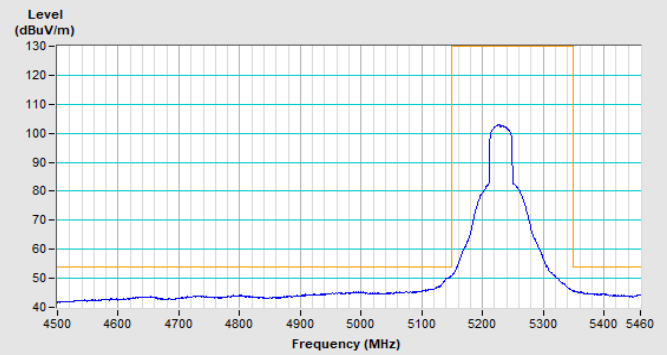
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	--------------------	-------------------------------	--



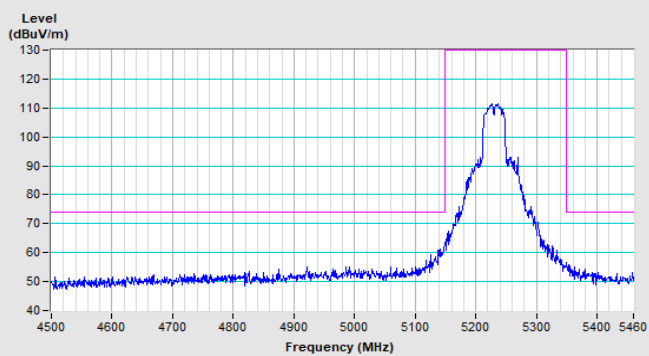
802.11n (HT40) Channel 46



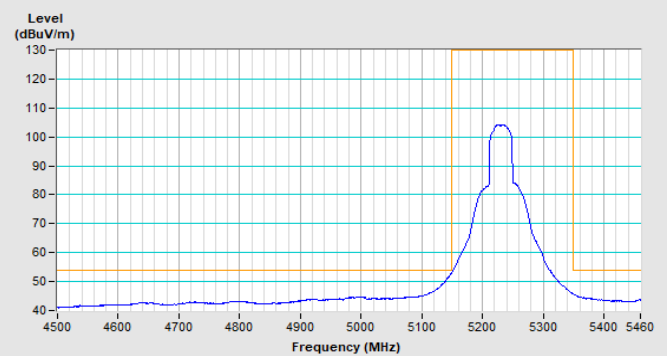
Horizontal (Peak)



Horizontal (Average)

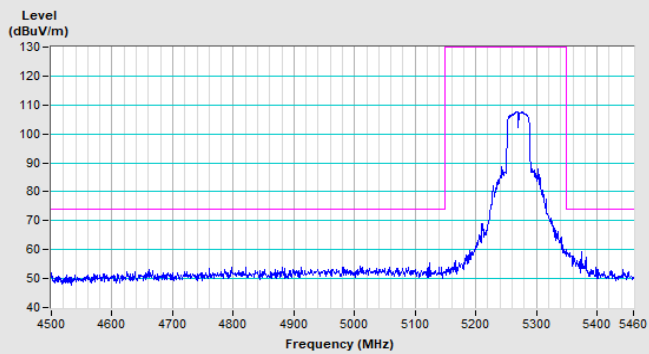


Vertical (Peak)

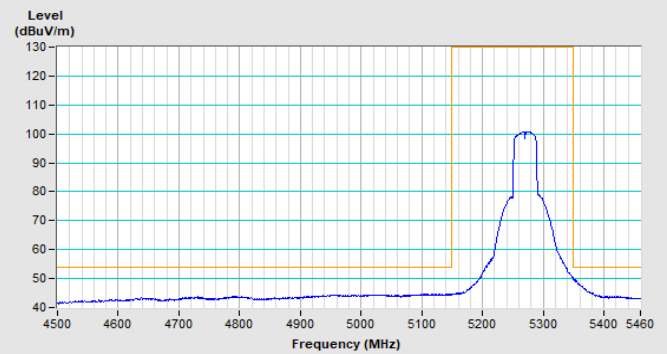


Vertical (Average)

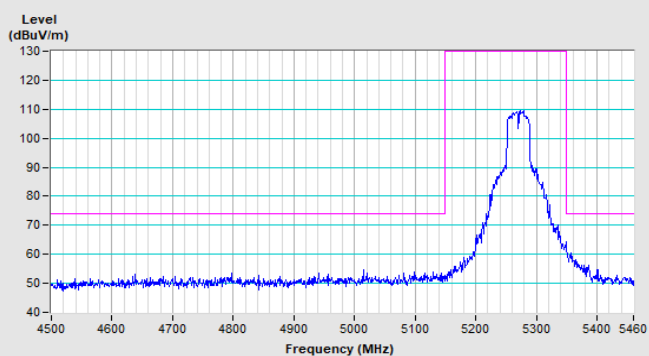
802.11n (HT40) Channel 54



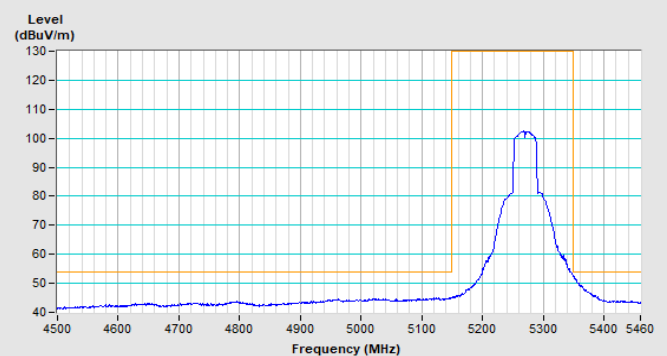
Horizontal (Peak)



Horizontal (Average)

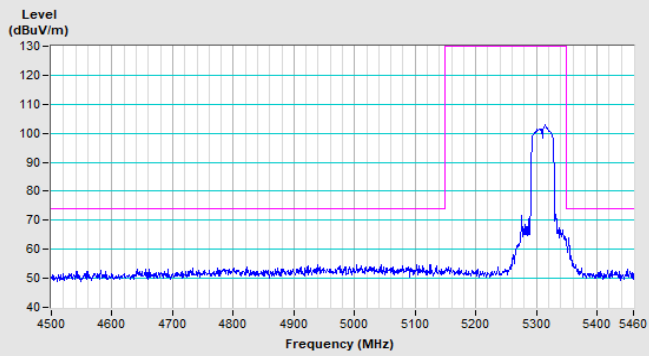


Vertical (Peak)

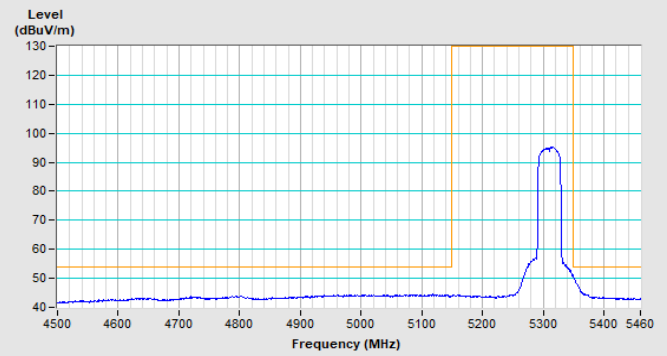


Vertical (Average)

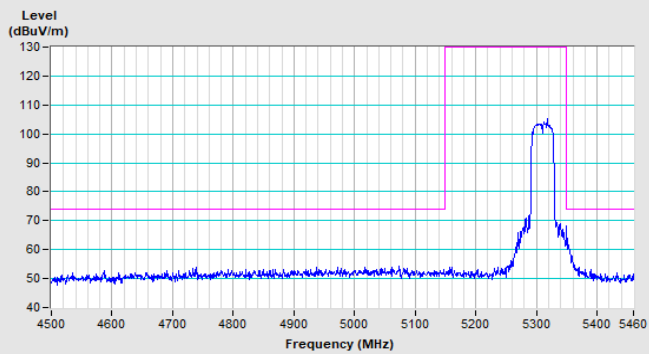
802.11n (HT40) Channel 62



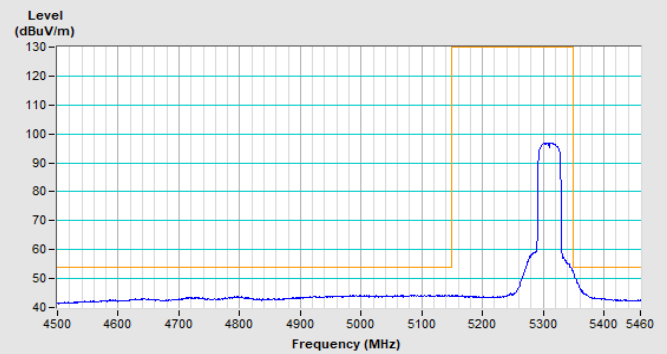
Horizontal (Peak)



Horizontal (Average)



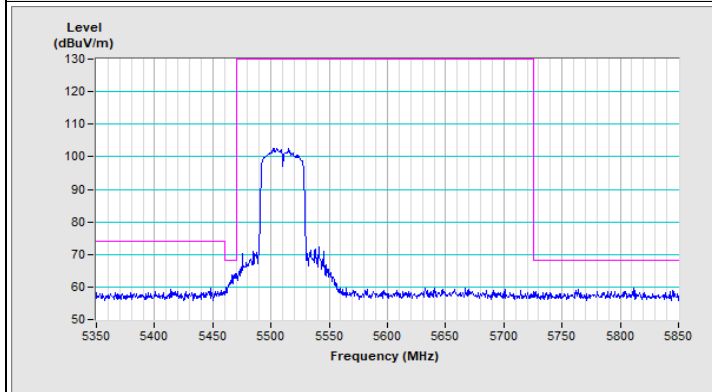
Vertical (Peak)



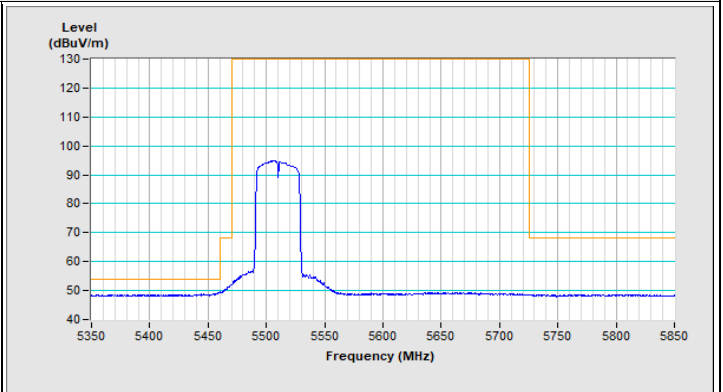
Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	---------------------	-------------------------------	--

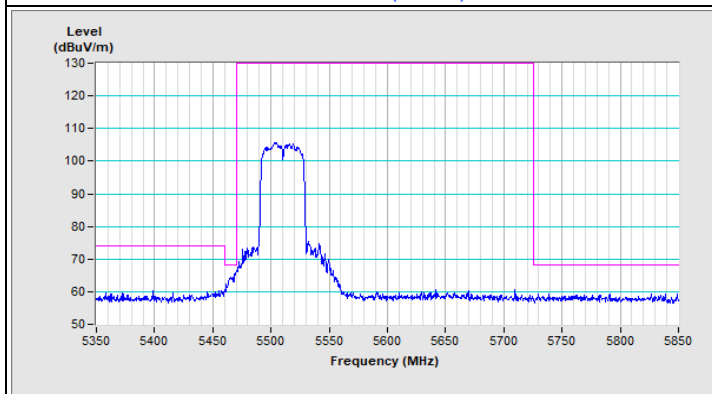
802.11n (HT40) Channel 102



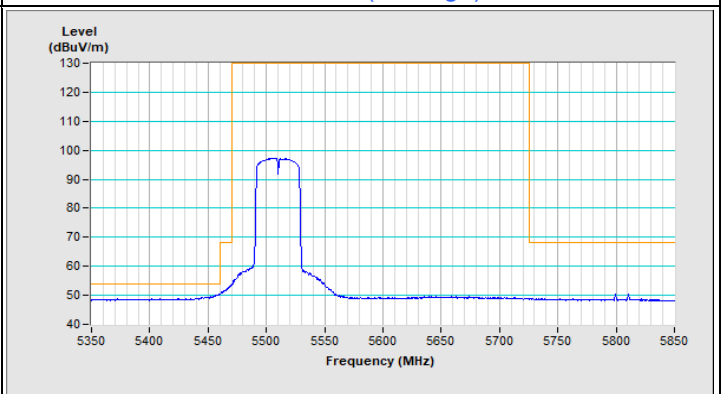
Horizontal (Peak)



Horizontal (Average)

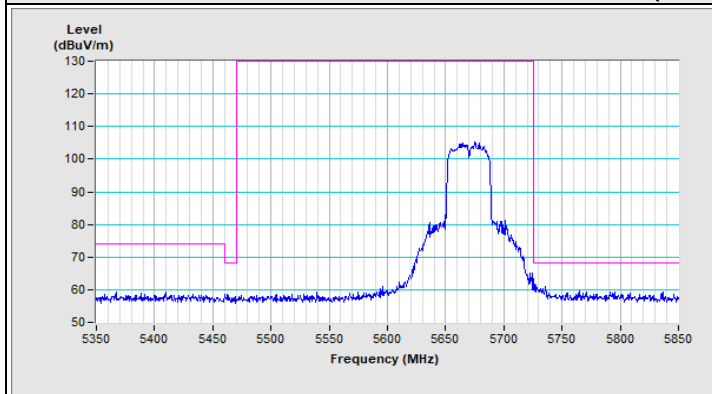


Vertical (Peak)

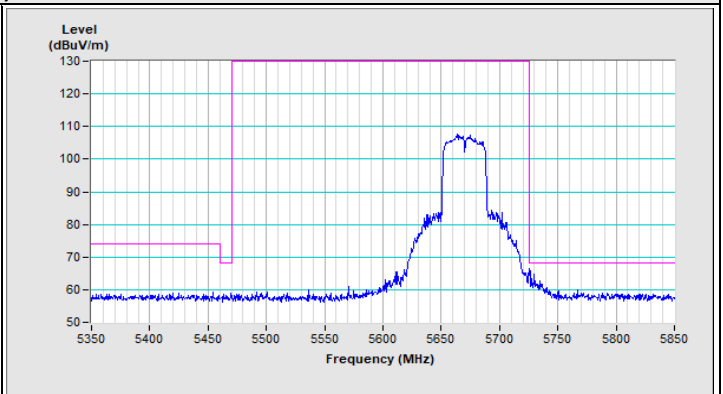


Vertical (Average)

802.11n (HT40) Channel 134



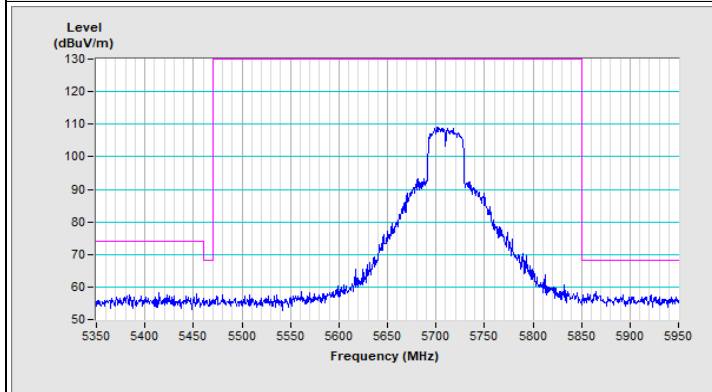
Horizontal (Peak)



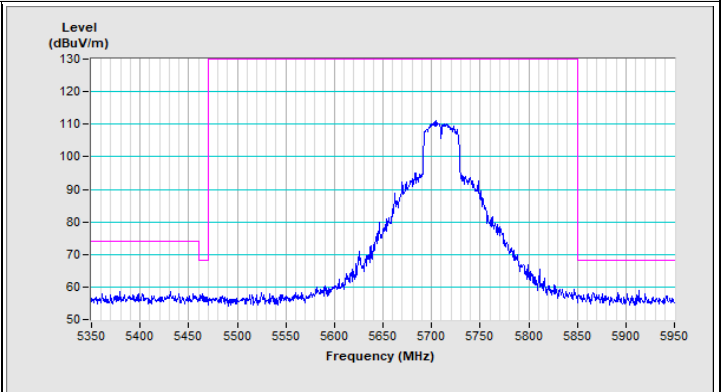
Vertical (Peak)

Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	---------------------	-------------------------------	----------------------------------

802.11n (HT40) Channel 142



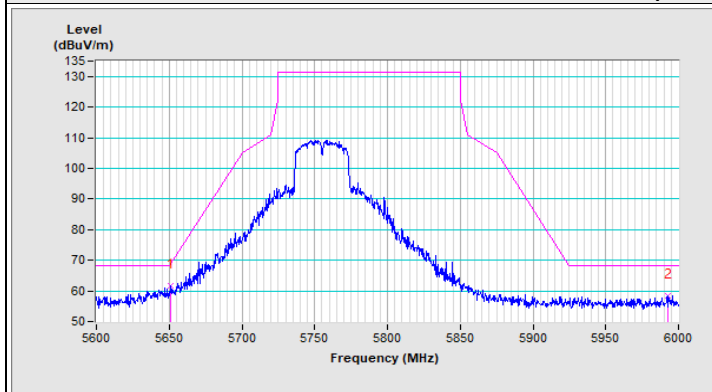
Horizontal (Peak)



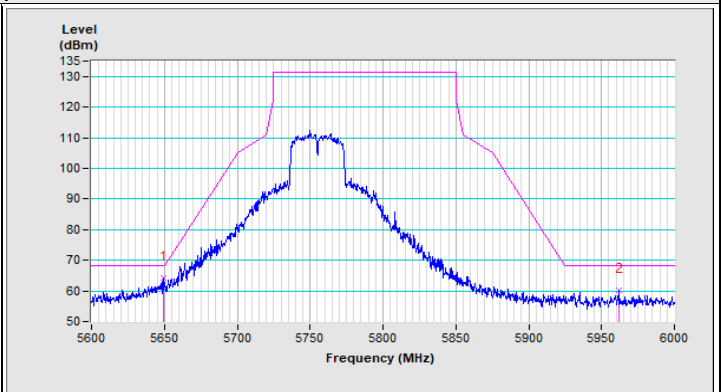
Vertical (Peak)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	-----------------	-------------------------------	----------------------------------

802.11n (HT40) Channel 151

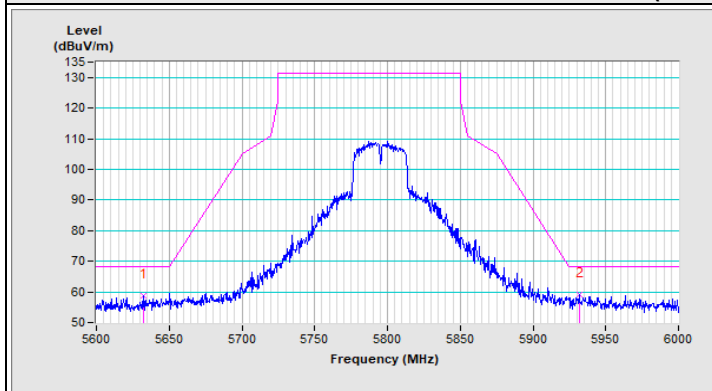


Horizontal (Peak)

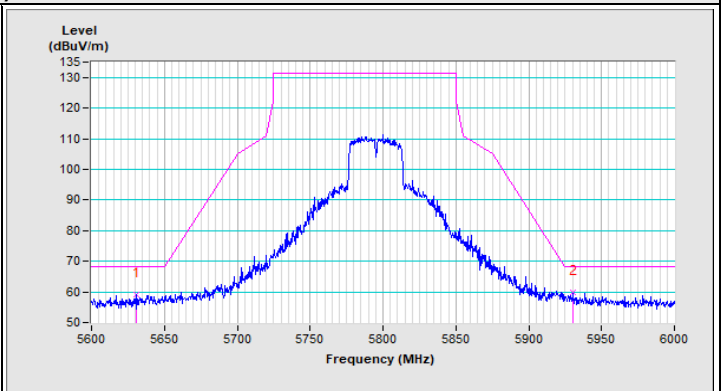


Vertical (Peak)

802.11n (HT40) Channel 159



Horizontal (Peak)

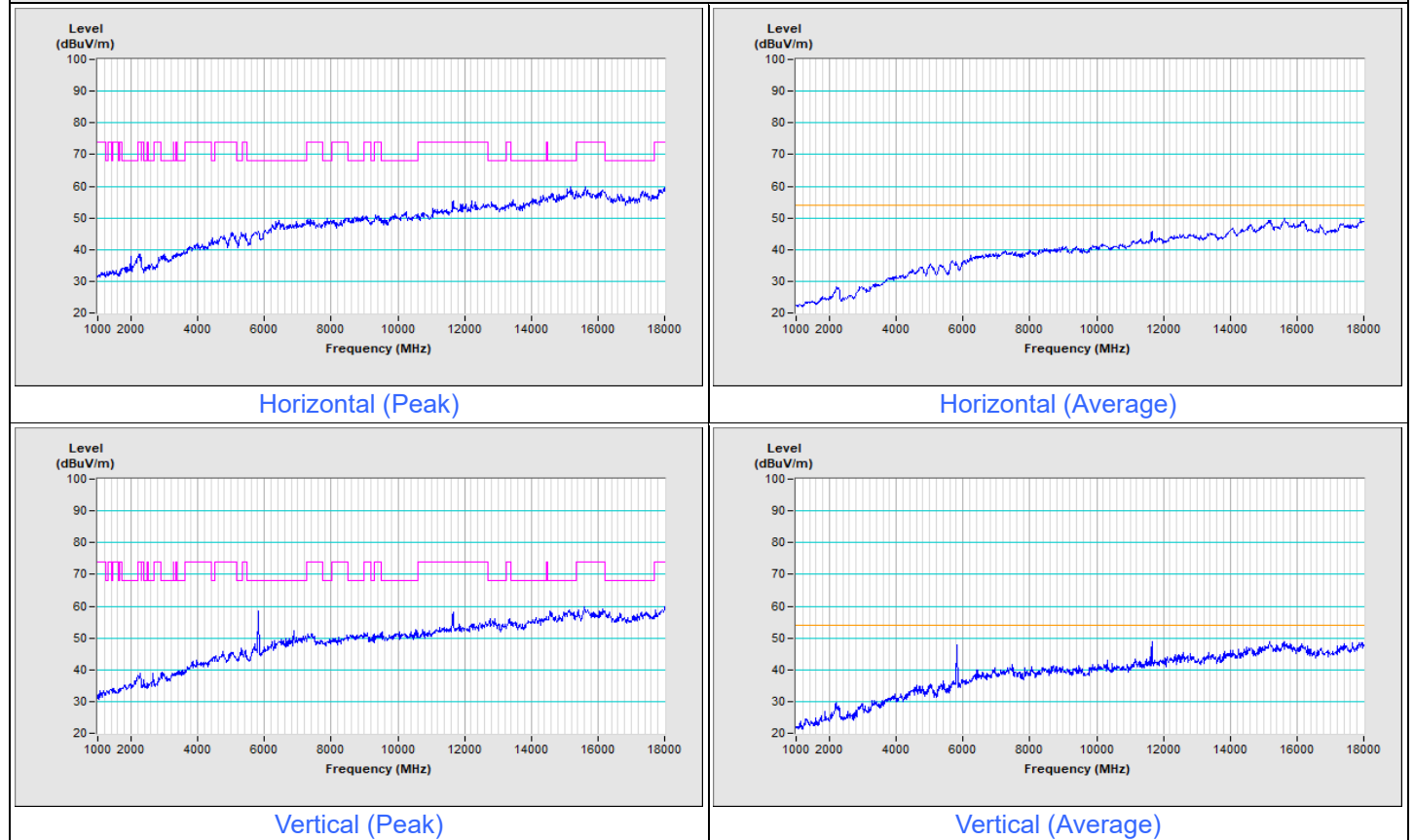


Vertical (Peak)

Plot of Other Emission

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	----------------	-------------------------------	--

802.11a Channel 165

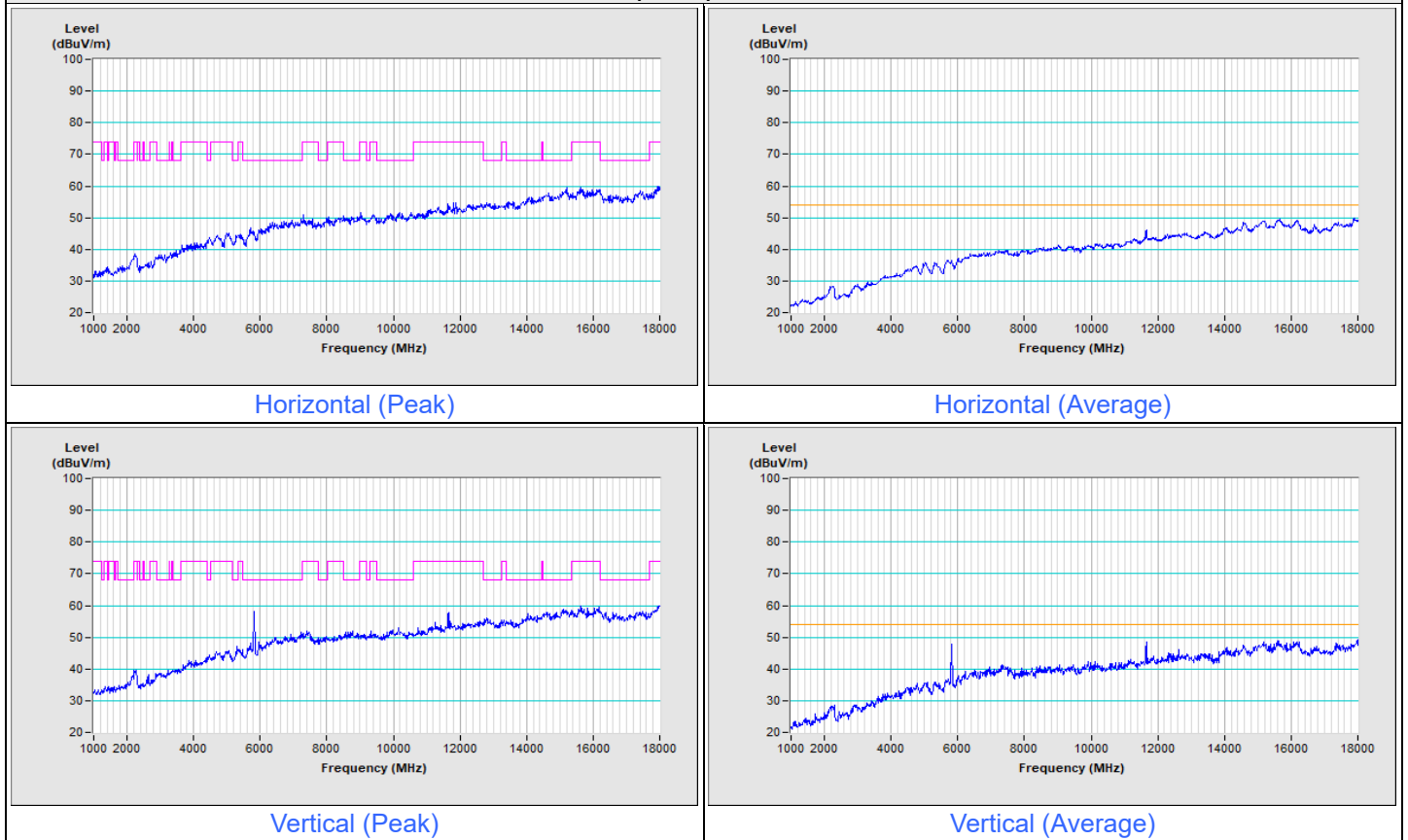


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	----------------	-------------------------------	--

802.11n (HT20) Channel 165

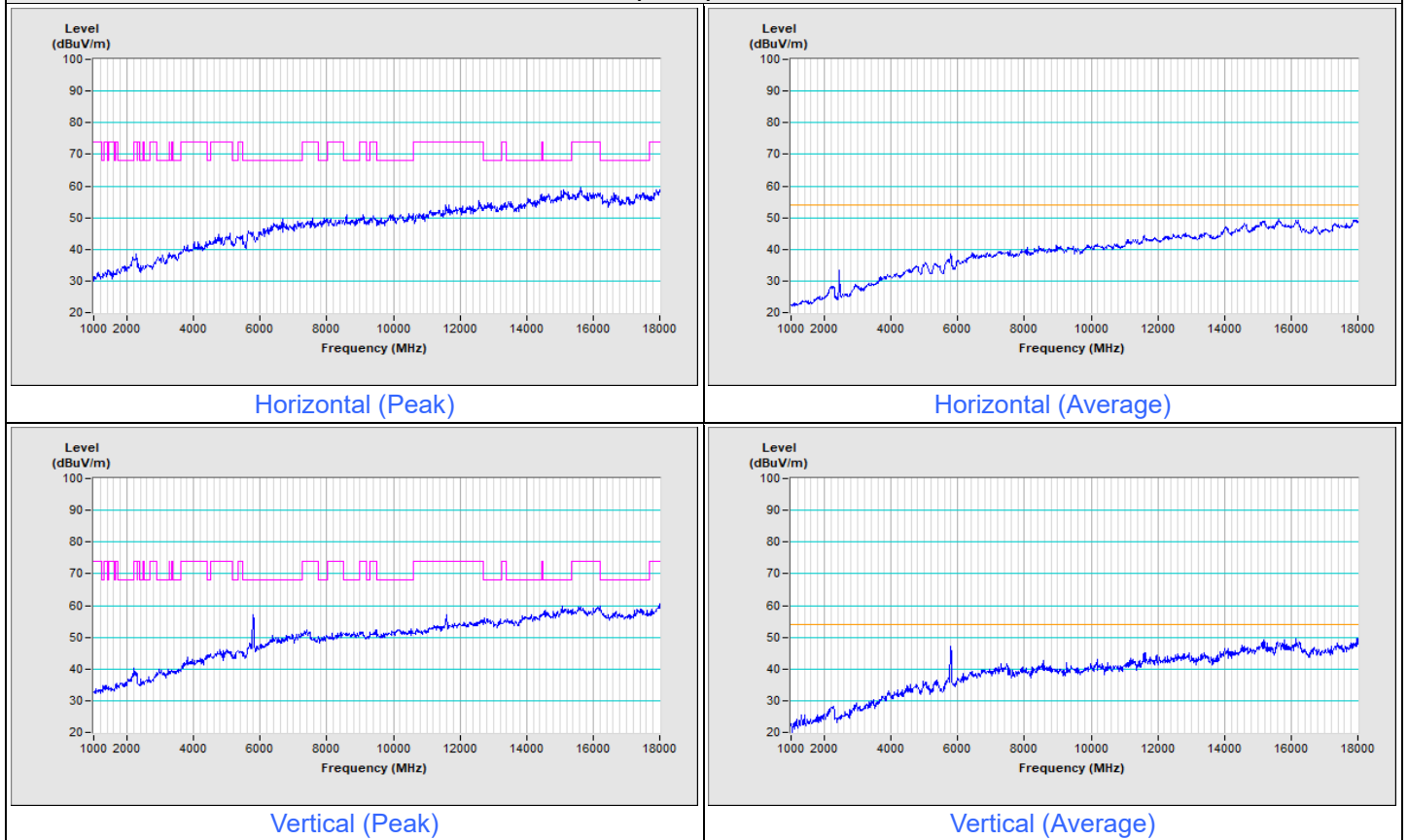


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
-----------------	----------------	-------------------------------	--

802.11n (HT40) Channel 151



Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab

Tel: 886-(0)2-26052180

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-(0)3-6668565 (SIP)

Tel: 886-(0)3-5120595 (WD)

Hwa Ya EMC/RF/Safety/SAR Lab & Wenming EMC/RF Lab

Tel: 886-(0)3-3183232

Email: service.adt@bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

The address and road map of all our labs can be found in our web site also.

--- END ---