

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBFLF-WTW-P23030358-1
FCC ID: MSQ-APAX6R00
Product: AX3000 Dual Band PoE Access Point
Brand: ASUS
Model No.: EBA63
Received Date: 2023/9/26
Test Date: 2023/10/19 ~ 2023/12/14
Issued Date: 2024/1/17
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories
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FCC Registration / 788550 / TW0003
Designation Number: 427177 / TW0011

Approved by: Jeremy Lin, **Date:** 2024/1/17
Jeremy Lin / Project Engineer

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Prepared by : Polly Chien / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBFLF-WTW-P23030358-1	Original release.	2024/1/17

1 Certificate

Product: AX3000 Dual Band PoE Access Point
Brand: ASUS
Test Model: EBA63
Sample Status: Engineering sample
Applicant: ASUSTeK COMPUTER INC.
Test Date: 2023/10/19 ~ 2023/12/14
Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure: ANSI C63.10-2013
KDB 789033 D02 General UNII Test Procedure New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output 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(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -11.05 dB at 0.39219 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -8.3 dB at 61.11 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 -1.0 dB at 5150.00, 5350.00, 5460.00 and 5725.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is IPEX not a standard connector.

Notes:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. 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	2.88 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.02 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.01 dB
	18 GHz ~ 40 GHz	1.15 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	AX3000 Dual Band PoE Access Point
Brand	ASUS
Test Model	EBA63
Status of EUT	Engineering sample
Power Supply Rating	12Vdc from adapter 54Vdc from POE
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax HE mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 2401.9 Mbps
Operating Frequency	5180 ~ 5320 MHz, 5500 ~ 5720 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5320 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 8 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 4 802.11ac (VHT80), 802.11ax (HE80): 2 802.11ac (VHT160), 802.11ax (HE160): 1 5500 ~ 5720 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 12 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3 802.11ac (VHT160), 802.11ax (HE160): 1 5745 ~ 5825 MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1
Output Power	5180 ~ 5250 MHz : 496.747 mW (26.96 dBm) 5250 ~ 5320 MHz : 242.737 mW (23.85 dBm) 5500 ~ 5720 MHz : 248.391 mW (23.95 dBm) 5745 ~ 5825 MHz : 552.1 mW (27.42 dBm)
EUT Category	Indoor Access Point

Note:

1. The EUT uses following accessories.

AC Adapter 1		
Brand	Model	Specification
DING FU TECHNOLOGY CO., LTD.	KA1801A-1201500US	AC Input : 100-240 Vac, 50/60Hz, 0.55A DC Output : 12Vdc, 1.5A DC Output Cable : 1.47M non-shielding cable with 0 core
AC Adapter 2		
Brand	Model	Specification
DING FU TECHNOLOGY CO., LTD.	F18L10-120150SPAU	AC Input : 100-240 Vac, 50/60Hz, 0.6A DC Output : 12Vdc, 1.5A, 18W DC Output Cable : 1.48M non-shielding cable with 0 core
RJ-45 Cable		
Brand	Model	Specification
AOC Electronics Co., Ltd.	CON-C-460	Signal Line : 1.5M non-shielding cable with 0 core

2. The following POE is for support unit only.

POE (Provided by Lab)		
Brand	Model	Specification
EnGenius	EPA5006GAT	AC Input: 100-240 Vac, 0.8A, 50-60Hz DC Output: 54Vdc, 0.6A

*After the pretesting adapters and POE, the adapter 2 is found to be the worst case test mode and therefore had been chosen for final test.

- There are WLAN (2.4 GHz & 5 GHz) technology used for the EUT.
- The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

ANT. No.	Antenna Type	Connector	Frequency Range	Gain (dBi)
1	Monopole	ipex(MHF)	2.4~2.4835GHz	3.6
3	Monopole	ipex(MHF)	2.4~2.4835GHz	3.3
2	Monopole	ipex(MHF)	5.15~5.25GHz	3.8
	Monopole	ipex(MHF)	5.25~5.35GHz	3.6
	Monopole	ipex(MHF)	5.47~5.725GHz	4.0
	Monopole	ipex(MHF)	5.725~5.85GHz	4.2
4	Monopole	ipex(MHF)	5.15~5.25GHz	4.5
	Monopole	ipex(MHF)	5.25~5.35GHz	4.5
	Monopole	ipex(MHF)	5.47~5.725GHz	4.7
	Monopole	ipex(MHF)	5.725~5.85GHz	4.8

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

2. The EUT incorporates a MIMO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
802.11ac (VHT20)	2TX	2RX
802.11ac (VHT40)	2TX	2RX
802.11ac (VHT80)	2TX	2RX
802.11ac (VHT160)	2TX	2RX
802.11ax (HE20)	2TX	2RX
802.11ax (HE40)	2TX	2RX
802.11ax (HE80)	2TX	2RX
802.11ax (HE160)	2TX	2RX

Note:

- All of modulation mode support beamforming function except 802.11a modulation mode.
- The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
- The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz, 160 MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) therefore the manufacturer will control the power for 802.11n/ac mode is the same as the 802.11ax or more lower than it and investigated worst case to representative mode in test report.

3.3 Channel List

For 5180 ~ 5320 MHz

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) and 802.11ax (HE20):

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

4 channels are provided for 802.11n (HT40), 802.11ac (VHT40) and 802.11ax (HE40):

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

2 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
42	5210MHz	58	5290MHz

1 channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
50	5250MHz

For 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) and 802.11ax (HE20):

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), 802.11ac (VHT40) and 802.11ax (HE40):

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

3 channels are provided for 802.11ac (VHT80) and 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz
122	5610 MHz		

1 channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
114	5570MHz

For 5745 ~ 5825 MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) and 802.11ax (HE20):

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), 802.11ac (VHT40) and 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80) and 802.11ax (HE80):

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. 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). 2. Pre-scan ac adapter and POE
Worst Case:	1. X-axis/ Z-axis Worst Condition: X-axis 2. Worst Condition: adapter mode

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	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
RF Output Power	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD & Beamforming	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD & Beamforming	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD & Beamforming	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD & Beamforming	50, 114	BPSK	MCS0
Power Spectral Density	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
6 dB Bandwidth	802.11a	CDD	144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	138, 155	BPSK	MCS0
Occupied Bandwidth	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Frequency Stability	802.11a	CDD	36	unmodulated	-
AC Power Conducted Emissions	802.11ax (HE20)	CDD	165	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11ax (HE20)	CDD	165	BPSK	MCS0
Unwanted Emissions above 1 GHz	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
	802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
	802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
	802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0

3.5 Duty Cycle of Test Signal

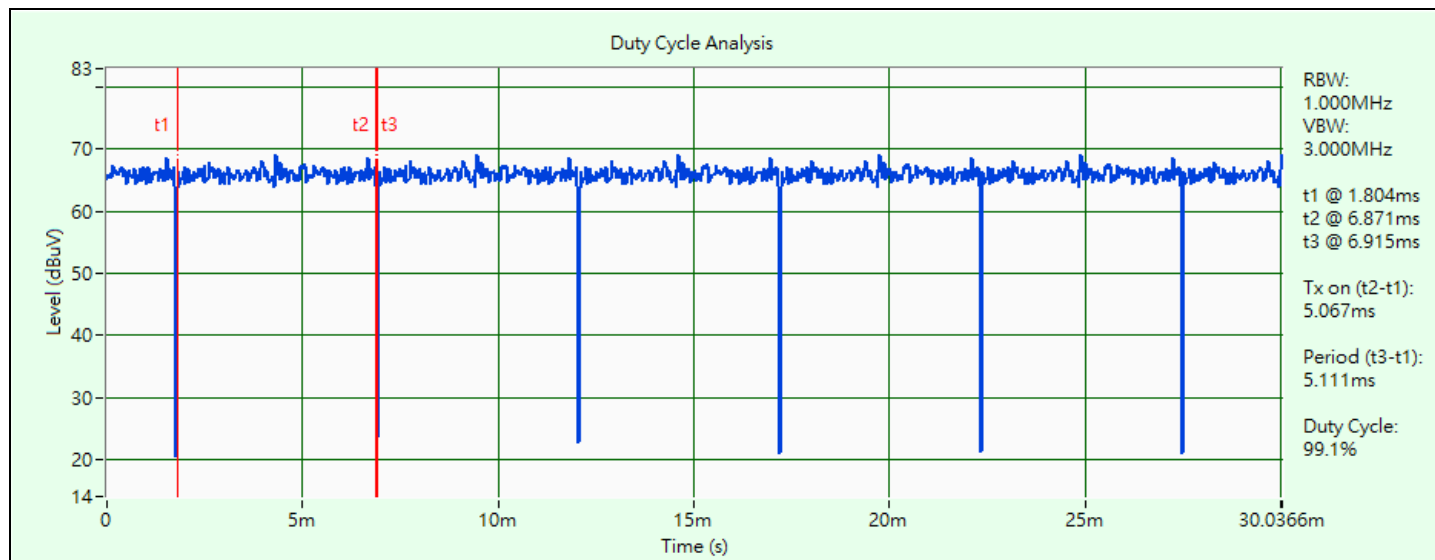
802.11a: Duty cycle = 5.067 ms / 5.111 ms x 100% = 99.1%

802.11ax (HE20): Duty cycle = 5.292 ms / 5.322 ms x 100% = 99.4%

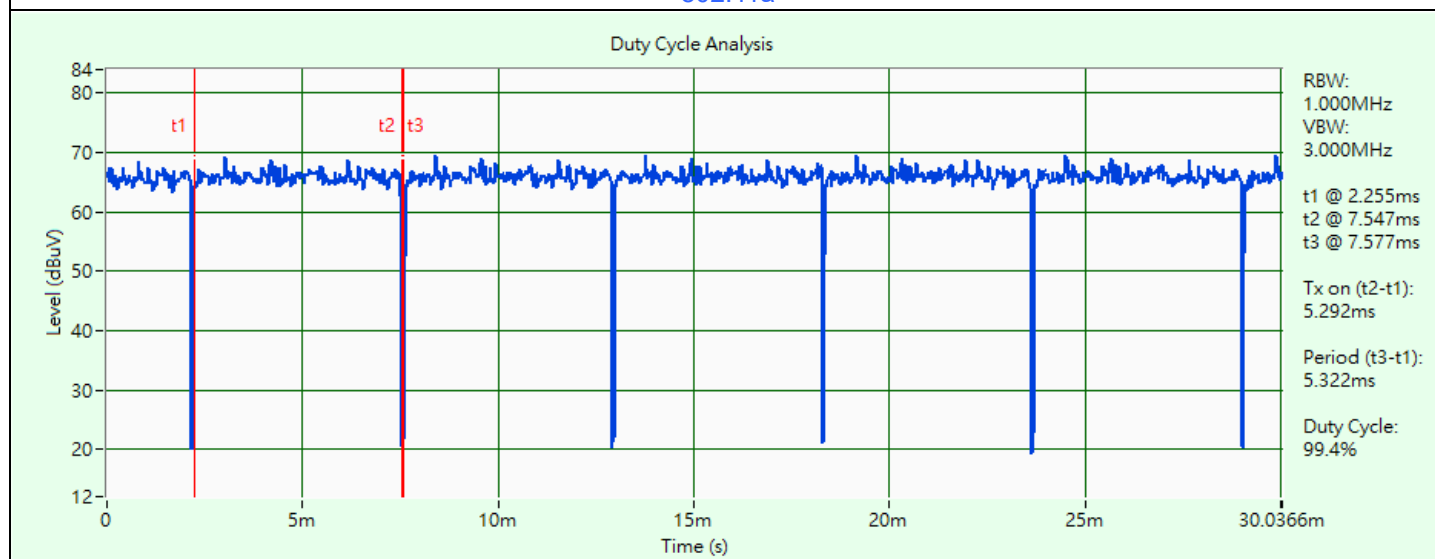
802.11ax (HE40): Duty cycle = 3.051 ms / 3.081 ms x 100% = 99.0%

802.11ax (HE80): Duty cycle = 3.02 ms / 3.071 ms x 100% = 98.3%

802.11ax (HE160): Duty cycle = 3.01 ms / 3.02 ms x 100% = 99.7%

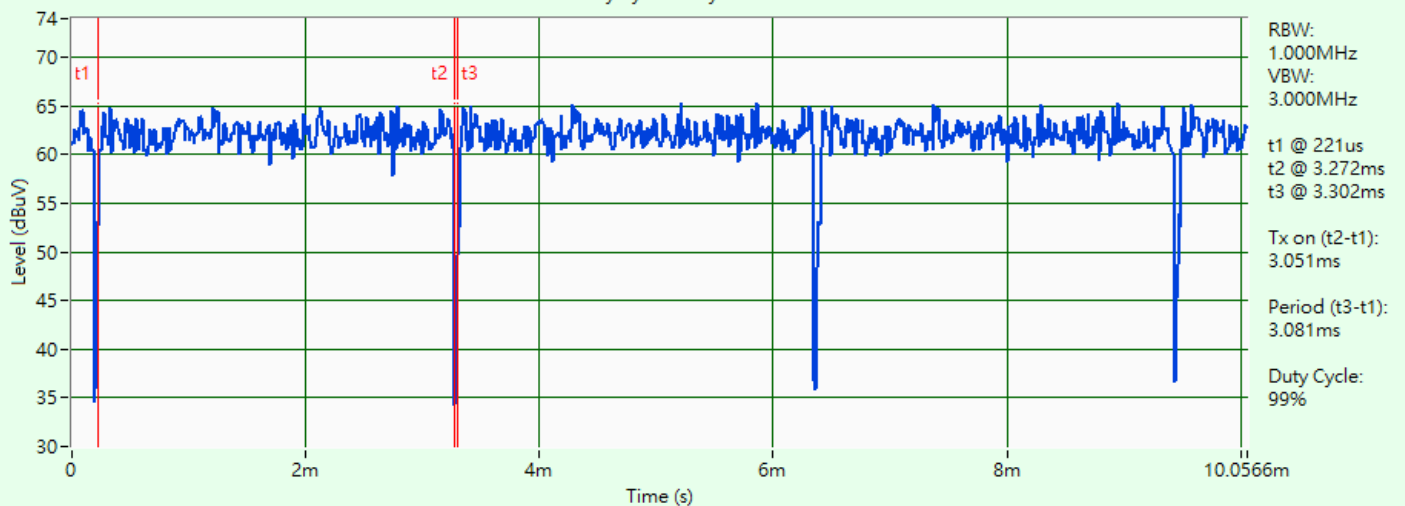


802.11a



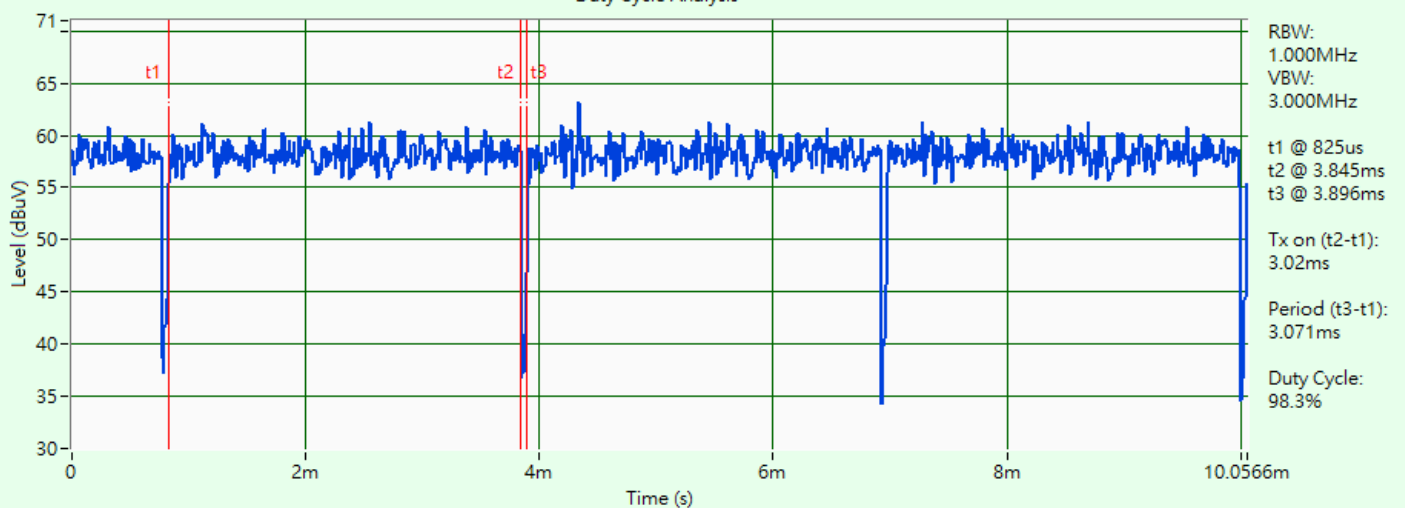
802.11ax (HE20)

Duty Cycle Analysis



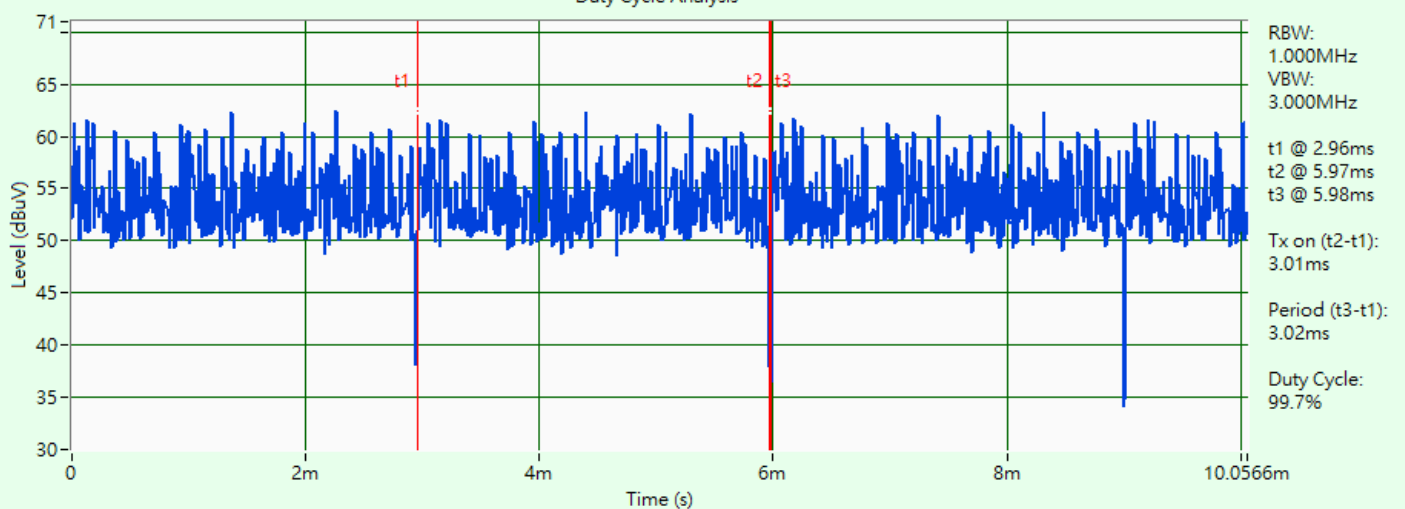
802.11ax (HE40)

Duty Cycle Analysis



802.11ax (HE80)

Duty Cycle Analysis

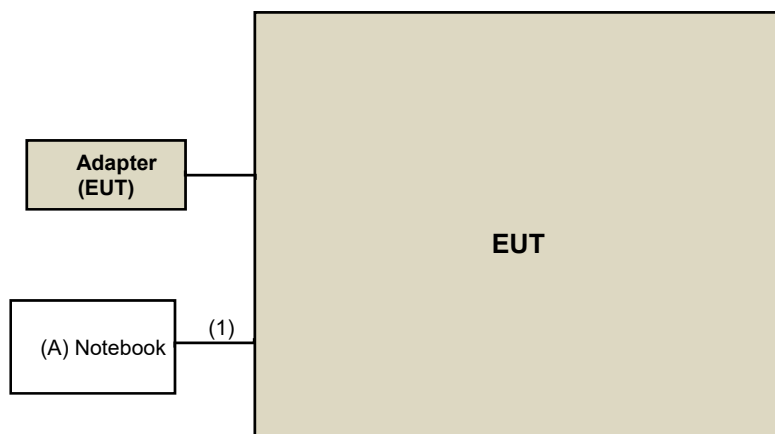


802.11ax (HE160)

3.6 Test Program Used and Operation Descriptions

Controlling software accessMtool_3.2.1.5 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

Remote Site

3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Notebook	Lenovo	P00048A	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	1.5	No	0	Supplied by applicant

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
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/10/30

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer Keysight	8990B	MY51000485	2023/1/19	2024/1/18
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Wideband Power Sensor Keysight	N1923A	MY58020002	2023/1/18	2024/1/17
		MY58140009	2023/1/18	2024/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/10/30

4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Supply JIN YIH Technology	6905S	1720444	N/A	N/A
Digital Multimeter Fluke	87-III	70360742	2023/7/6	2024/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2022/12/27	2023/12/26

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2023/10/30

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011276	01	2023/2/1	2024/1/31
	E1-011312	10	2023/1/30	2024/1/29
	E1-011591	17	2023/2/1	2024/1/31
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESCS 30	100288	2023/1/3	2024/1/2
Fixed Attenuator SGH	BNC10W10dB	PAD-COND2-01	2023/9/2	2024/9/1
LISN R&S	ESH2-Z5	100100	2023/3/7	2024/3/6
	ESH3-Z5	100312	2023/9/12	2024/9/11
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2023/9/2	2024/9/1
Software BVADT	BVADT_Cond_ V7.3.7.4	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2023/8/31	2024/8/30

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2023/12/14

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	UNAT_5+	PAD-CH6-01	N/A	N/A
Antenna Tower Controller Max-Full	MF-7802	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-616	2023/10/18	2024/10/17
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
MXE EMI Receiver Agilent	N9038A	MY52260177	2023/9/15	2024/9/14
Preamplifier Agilent	310N	187226	2023/6/13	2024/6/12
Preamplifier EMCI	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
RF Coaxial Cable ETS-Lindgren	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4)	2023/6/13	2024/6/12
	RFC-SMS-100-SMS-24-IN	Cable-CH1-02(RFC-SMS-100-SMS-24)	2023/6/13	2024/6/12
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	TT-1510	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802	N/A	N/A	N/A

Notes:

1. The test was performed in XD - 966 chamber 6.
2. Tested Date: 2023/10/24

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	UNAT_5+	PAD-CH6-01	N/A	N/A
Antenna Tower Controller Max-Full	MF-7802	N/A	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	8	N/A	N/A
Horn Antenna ETS-Lindgren	3117	00143293	2022/11/13	2023/11/12
Horn Antenna Schwarzbeck	BBHA 9170	BBHA9170241	2023/10/16	2024/10/15
MXE EMI Receiver Agilent	N9038A	MY52260177	2023/9/15	2024/9/14
Preamplifier Agilent	83017A	MY39501373	2023/6/13	2024/6/12
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
RF Coaxial Cable ETS-Lindgren	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4)	2023/6/13	2024/6/12
	RFC-SMS-100-SMS-24-IN	Cable-CH1-02(RFC-SMS-100-SMS-24)	2023/6/13	2024/6/12
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	2023/1/7	2024/1/6
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	2023/1/7	2024/1/6
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	TT-1510	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802	N/A	N/A	N/A

Notes:

1. The test was performed in XD - 966 chamber 6.
2. Tested Date: 2023/10/19 ~ 2023/10/21

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 Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	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

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

5.3 Power Spectral Density

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	17 dBm/MHz
	Fixed point-to-point Access Point	
	Indoor Access Point	
	Mobile and Portable client device	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 Frequency Stability

The frequency of the carrier signal shall be maintained within band of operation.

5.7 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.

5.8 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).

5.9 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.

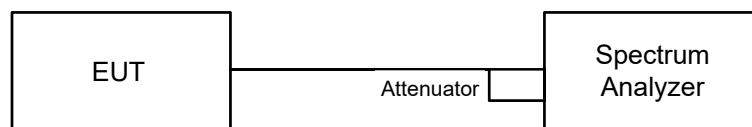
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

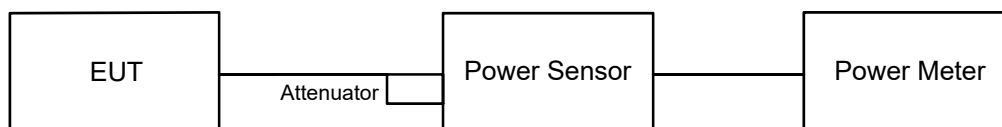


6.1.2 Test Procedure

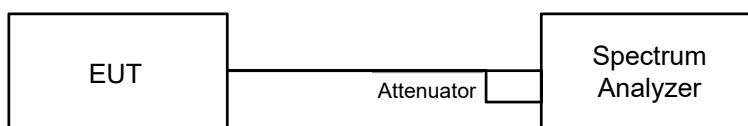
- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



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:

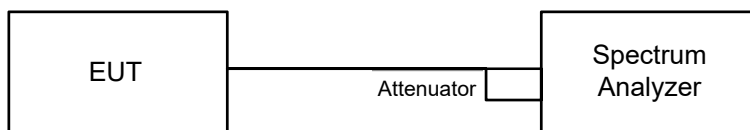
Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
- Sweep points ≥ $[2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing ≤ 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

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the EBW or 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 26 dB EBW or 99% OBW of the spectrum.

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) 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

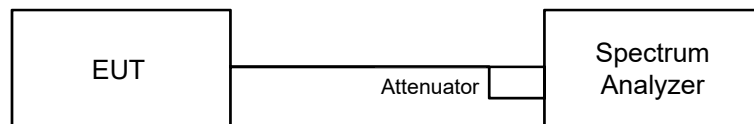
For specified measurement bandwidth 500 kHz:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) 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

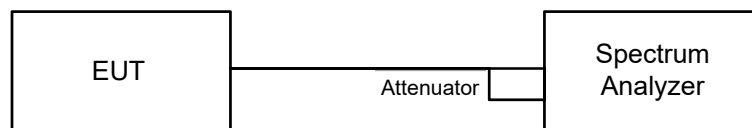


6.4.2 Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) 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

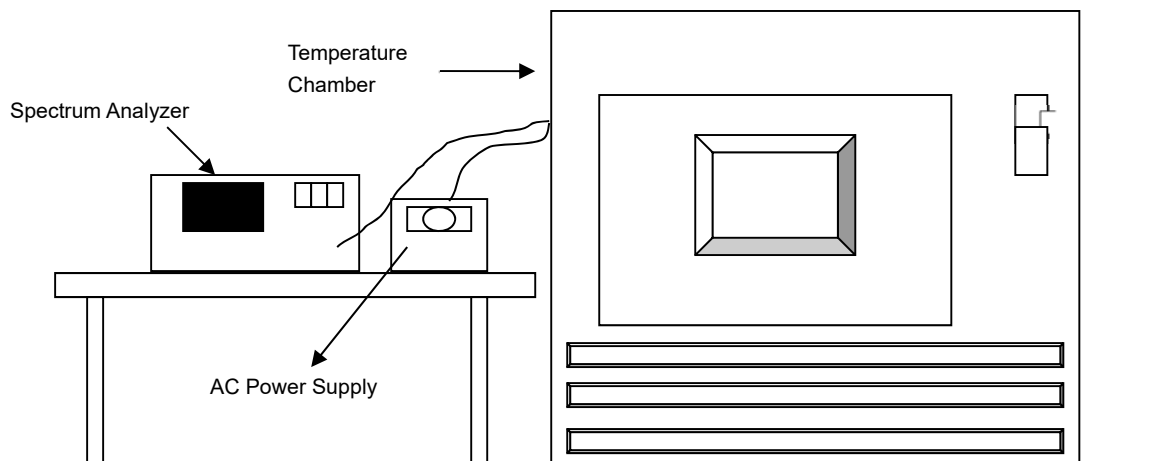


6.5.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to Sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

6.6 Frequency Stability

6.6.1 Test Setup

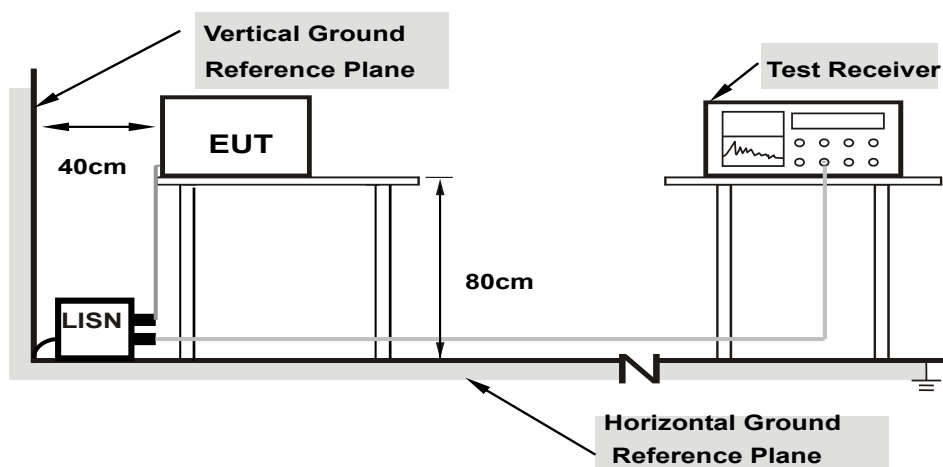


6.6.2 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

6.7 AC Power Conducted Emissions

6.7.1 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).

6.7.2 Test Procedure

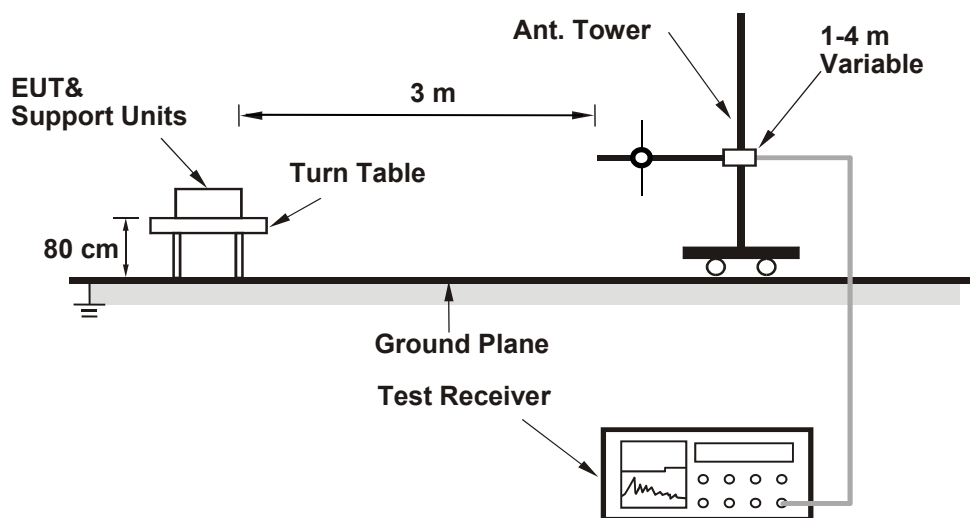
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The 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.

6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission above 30 MHz



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

6.8.2 Test Procedure

For Radiated emission above 30 MHz

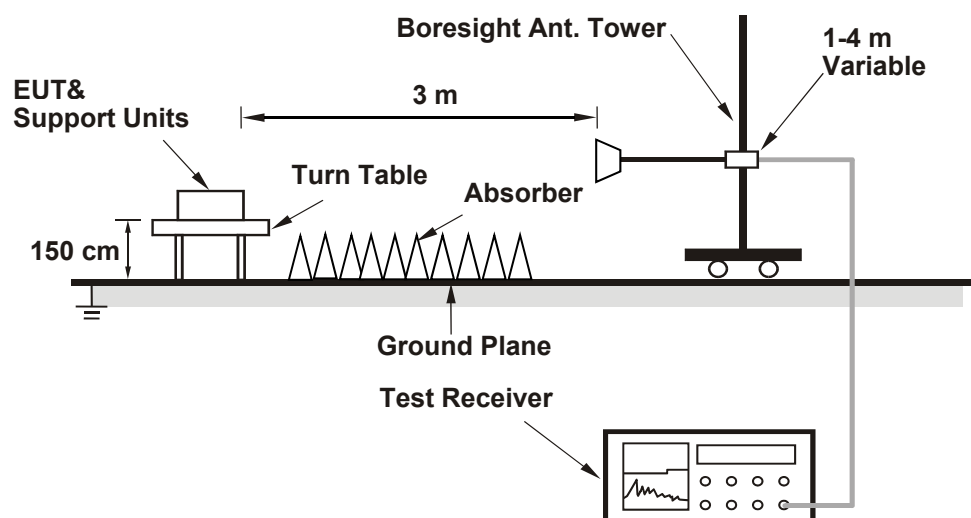
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup



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

6.9.2 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

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Henry Hsu
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802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	22.11	22.10
60	5300	22.07	22.21
64	5320	22.09	22.25
100	5500	22.31	22.20
116	5580	22.15	22.26
140	5700	21.72	21.75
144 (U-NII-2C)	5720	16.03	16.12
144 (U-NII-3)	5720	6.13	6.24

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	22.10	24.44	>	24
60	5300	22.07	24.43	>	24
64	5320	22.09	24.44	>	24
100	5500	22.20	24.46	>	24
116	5580	22.15	24.45	>	24
140	5700	21.72	24.36	>	24
144 (U-NII-2C)	5720	16.03	23.04	<	24

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

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	22.14	21.84
60	5300	24.26	21.91
64	5320	22.07	21.74
100	5500	24.13	22.67
116	5580	22.55	21.94
140	5700	21.96	21.85
144 (U-NII-2C)	5720	16.05	16.06
144 (U-NII-3)	5720	6.21	6.45

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	21.84	24.39 > 24
60	5300	21.91	24.4 > 24
64	5320	21.74	24.37 > 24
100	5500	22.67	24.55 > 24
116	5580	21.94	24.41 > 24
140	5700	21.85	24.39 > 24
144 (U-NII-2C)	5720	16.05	23.05 < 24

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

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	41.33	41.13
62	5310	41.78	41.79
102	5510	41.70	41.64
110	5550	41.27	41.58
134	5670	41.15	40.84
142 (U-NII-2C)	5710	35.40	35.33
142 (U-NII-3)	5710	5.64	5.65

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	41.13	27.14 > 24
62	5310	41.78	27.2 > 24
102	5510	41.64	27.19 > 24
110	5550	41.27	27.15 > 24
134	5670	40.84	27.11 > 24
142 (U-NII-2C)	5710	35.33	26.48 > 24

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

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	85.10	85.76
106	5530	85.20	85.66
122	5610	84.85	83.10
138 (U-NII-2C)	5690	76.39	76.49
138 (U-NII-3)	5690	8.38	7.34

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	85.10	30.29 > 24
106	5530	85.20	30.3 > 24
122	5610	83.10	30.19 > 24
138 (U-NII-2C)	5690	76.39	29.83 > 24

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

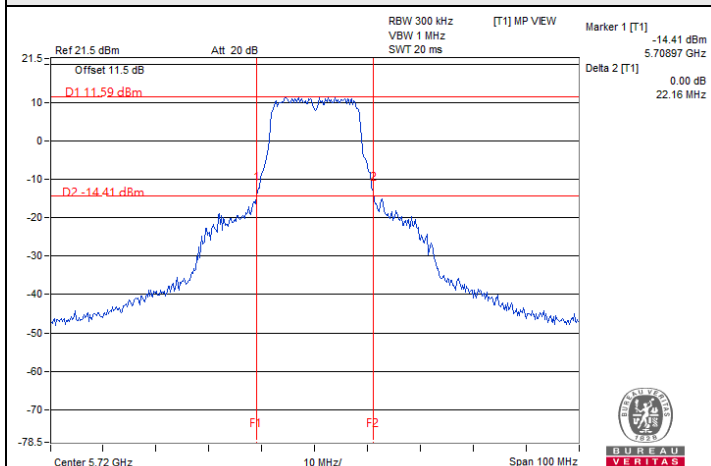
802.11ax (HE160)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
50 (U-NII-1)	5250	82.46	82.45
50 (U-NII-2A)	5250	82.95	83.37
114	5570	166.47	165.44

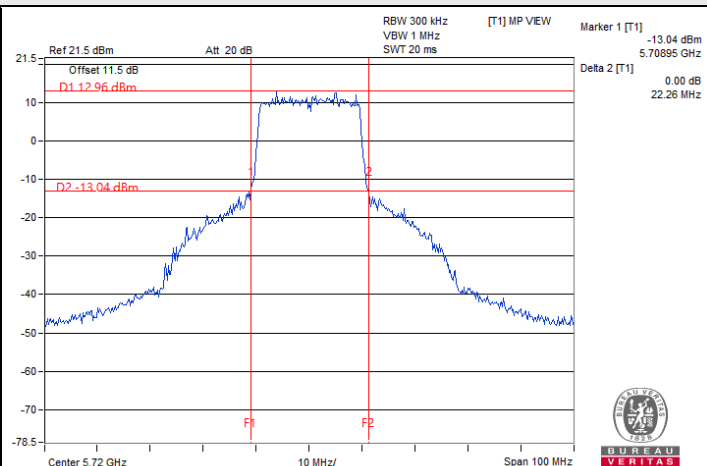
Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
50 (U-NII-2A)	5250	82.95	30.18 > 24
114	5570	165.44	33.18 > 24

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

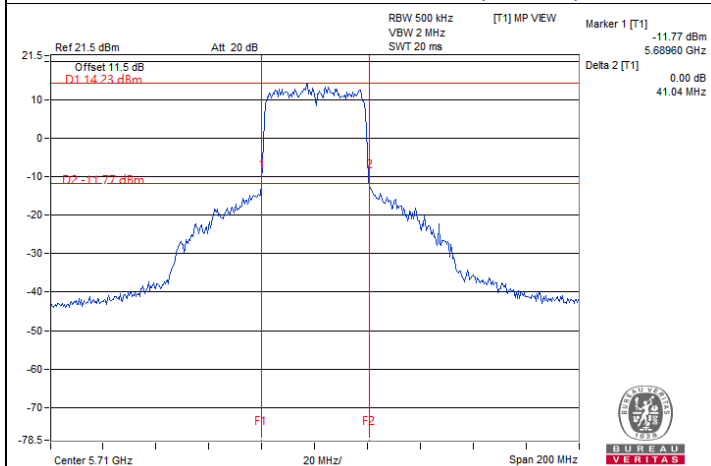
Spectrum Plot of Minimum Value



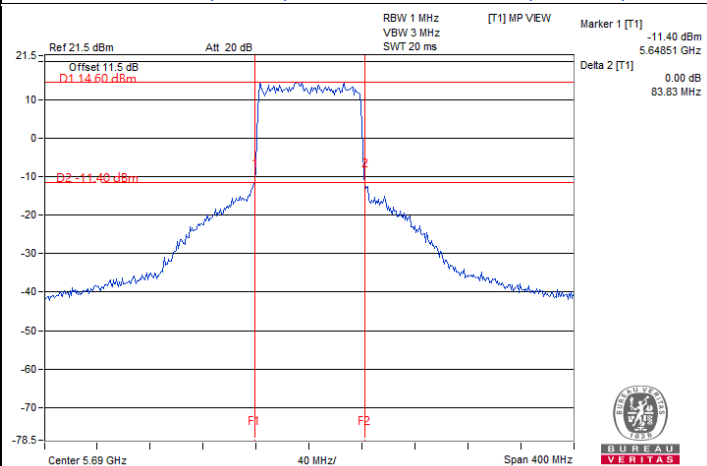
802.11a / Chain 0 : CH 144 (U-NII-3)



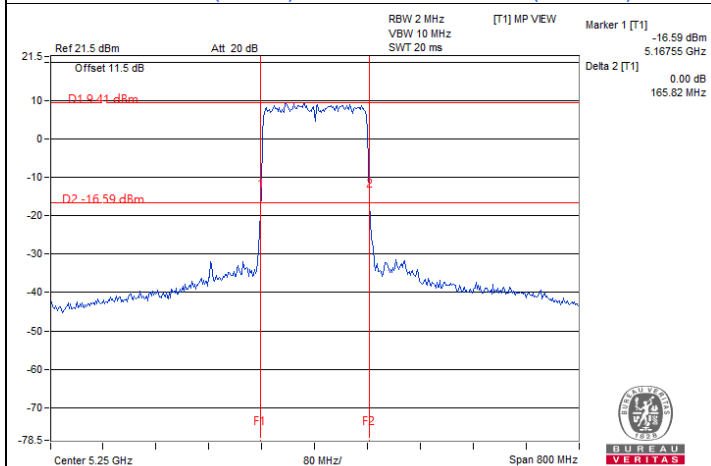
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)



802.11ax (HE160) / Chain 1 : CH 50 (U-NII-1)

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
3. For U-NII-1 straddle channel = 5250 MHz - Marker 1
4. For U-NII-2A straddle channel = Marker 1 + Delta 2 - 5250 MHz

7.2 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Henry Hsu
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802.11a CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	21.34	22.06	296.839	24.73	30	Pass
40	5200	23.05	24.14	461.255	26.64	30	Pass
48	5240	23.10	24.15	464.19	26.67	30	Pass
52	5260	18.85	19.97	176.048	22.46	24	Pass
60	5300	18.93	19.98	177.703	22.50	24	Pass
64	5320	20.23	21.18	236.659	23.74	24	Pass
100	5500	17.99	19.26	147.284	21.68	24	Pass
116	5580	18.67	19.70	166.946	22.23	24	Pass
140	5700	18.75	19.77	169.831	22.30	24	Pass
*144 (U-NII-2C)	5720	18.99	19.68	172.147	22.36	23.04	Pass
*144 (U-NII-3)	5720	10.23	11.25	23.879	13.78	30	Pass
149	5745	23.43	24.39	495.082	26.95	30	Pass
157	5785	23.41	24.38	493.438	26.93	30	Pass
165	5825	23.48	24.51	505.332	27.04	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.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	21.64	22.62	328.691	25.17	30	Pass
40	5200	23.12	24.19	467.538	26.70	30	Pass
48	5240	23.40	24.44	496.747	26.96	30	Pass
52	5260	19.39	20.28	193.556	22.87	24	Pass
60	5300	19.36	20.33	194.193	22.88	24	Pass
64	5320	20.29	21.33	242.737	23.85	24	Pass
100	5500	18.43	19.96	168.746	22.27	24	Pass
116	5580	19.02	19.96	178.883	22.53	24	Pass
140	5700	18.32	19.03	147.904	21.70	24	Pass
*144 (U-NII-2C)	5720	17.86	18.98	140.162	21.47	23.05	Pass
*144 (U-NII-3)	5720	9.28	9.86	18.155	12.59	30	Pass
149	5745	23.39	24.44	496.244	26.96	30	Pass
157	5785	23.65	24.70	526.86	27.22	30	Pass
165	5825	23.87	24.89	552.1	27.42	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.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	18.94	19.98	177.884	22.50	30	Pass
46	5230	23.20	24.16	469.545	26.72	30	Pass
54	5270	20.29	21.32	242.424	23.85	24	Pass
62	5310	18.54	19.62	163.072	22.12	24	Pass
102	5510	17.76	18.75	134.693	21.29	24	Pass
110	5550	20.28	21.38	244.064	23.88	24	Pass
134	5670	19.86	20.89	219.572	23.42	24	Pass
*142 (U-NII-2C)	5710	19.68	20.75	211.747	23.26	24	Pass
*142 (U-NII-3)	5710	8.78	9.86	17.234	12.36	30	Pass
151	5755	23.30	24.27	481.097	26.82	30	Pass
159	5795	23.57	24.62	517.244	27.14	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.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	19.42	20.50	199.7	23.00	30	Pass
58	5290	17.09	18.14	116.331	20.66	24	Pass
106	5530	16.94	17.96	111.948	20.49	24	Pass
122	5610	20.39	21.43	248.391	23.95	24	Pass
*138 (U-NII-2C)	5690	19.85	20.83	217.665	23.38	24	Pass
*138 (U-NII-3)	5690	7.25	8.06	11.706	10.68	30	Pass
155	5775	22.04	23.07	362.724	25.60	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.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 4.8 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE160) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
*50 (U-NII-1)	5250	12.85	13.64	42.396	16.27	30	Pass
*50 (U-NII-2A)	5250	12.64	13.55	41.012	16.13	24	Pass
114	5570	17.65	18.73	132.855	21.23	24	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 4.5 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.7 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	21.64	22.62	328.691	25.17	28.83	Pass
40	5200	23.12	24.19	467.538	26.70	28.83	Pass
48	5240	23.40	24.44	496.747	26.96	28.83	Pass
52	5260	19.39	20.28	193.556	22.87	22.93	Pass
60	5300	19.36	20.33	194.193	22.88	22.93	Pass
64	5320	19.09	20.13	184.135	22.65	22.93	Pass
100	5500	18.43	19.96	168.746	22.27	22.63	Pass
116	5580	19.02	19.96	178.883	22.53	22.63	Pass
140	5700	18.32	19.03	147.904	21.70	22.63	Pass
*144 (U-NII-2C)	5720	17.86	18.98	140.162	21.47	21.68	Pass
*144 (U-NII-3)	5720	9.28	9.86	18.155	12.59	28.48	Pass
149	5745	23.39	24.44	496.244	26.96	28.48	Pass
157	5785	23.65	24.70	526.86	27.22	28.48	Pass
165	5825	23.87	24.89	552.1	27.42	28.48	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6 dBi, so the output power limit shall be reduced to $30 - (7.17 - 6) = 28.83$ dBm.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (7.07 - 6)].
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (7.37 - 6)].
- For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to $30 - (7.52 - 6) = 28.48$ dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	18.94	19.98	177.884	22.50	28.83	Pass
46	5230	23.20	24.16	469.545	26.72	28.83	Pass
54	5270	19.34	20.38	195.045	22.90	22.93	Pass
62	5310	18.54	19.62	163.072	22.12	22.93	Pass
102	5510	17.76	18.75	134.693	21.29	22.63	Pass
110	5550	18.98	20.08	180.927	22.58	22.63	Pass
134	5670	19.06	20.09	182.632	22.62	22.63	Pass
*142 (U-NII-2C)	5710	19.03	20.10	182.313	22.61	22.63	Pass
*142 (U-NII-3)	5710	8.78	9.86	17.234	12.36	28.48	Pass
151	5755	23.30	24.27	481.097	26.82	28.48	Pass
159	5795	23.57	24.62	517.244	27.14	28.48	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6 dBi, so the output power limit shall be reduced to $30 - (7.17 - 6) = 28.83$ dBm.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (7.07 - 6)].
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit - (7.37 - 6)].
- For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to $30 - (7.52 - 6) = 28.48$ dBm.

802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	19.42	20.50	199.7	23.00	28.83	Pass
58	5290	17.09	18.14	116.331	20.66	22.93	Pass
106	5530	16.94	17.96	111.948	20.49	22.63	Pass
122	5610	19.04	20.08	182.027	22.60	22.63	Pass
*138 (U-NII-2C)	5690	19.05	20.03	181.046	22.58	22.63	Pass
*138 (U-NII-3)	5690	7.25	8.06	11.706	10.68	28.48	Pass
155	5775	22.04	23.07	362.724	25.60	28.48	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(7.17-6) = 28.83$ dBm.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.07-6)].
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.37-6)].
- For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the output power limit shall be reduced to $30-(7.52-6) = 28.48$ dBm.

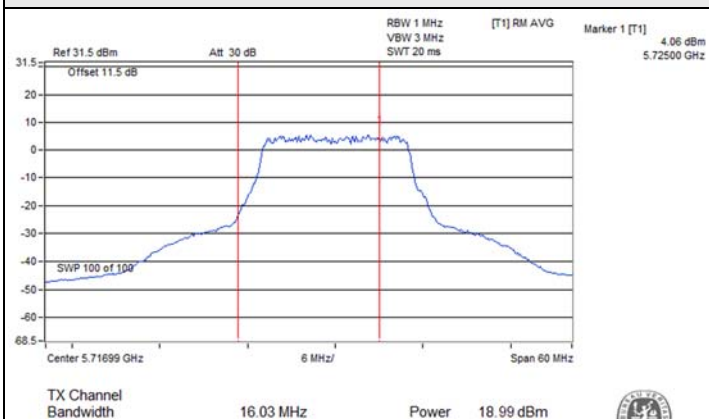
802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
*50 (U-NII-1)	5250	12.85	13.64	42.396	16.27	28.83	Pass
*50 (U-NII-2A)	5250	12.64	13.55	41.012	16.13	22.93	Pass
114	5570	17.65	18.73	132.855	21.23	22.63	Pass

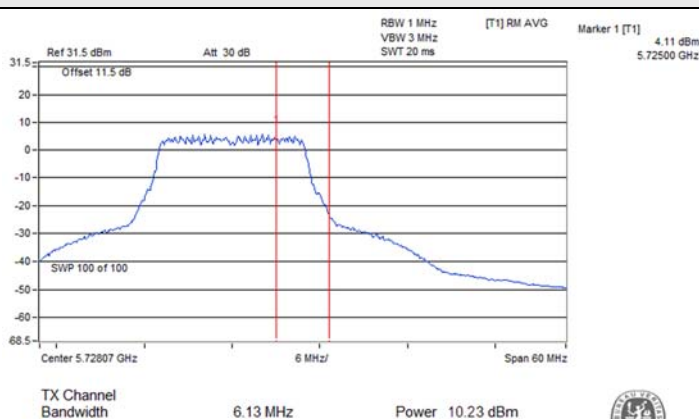
Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(7.17-6) = 28.83$ dBm.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.07-6)].
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(7.37-6)].

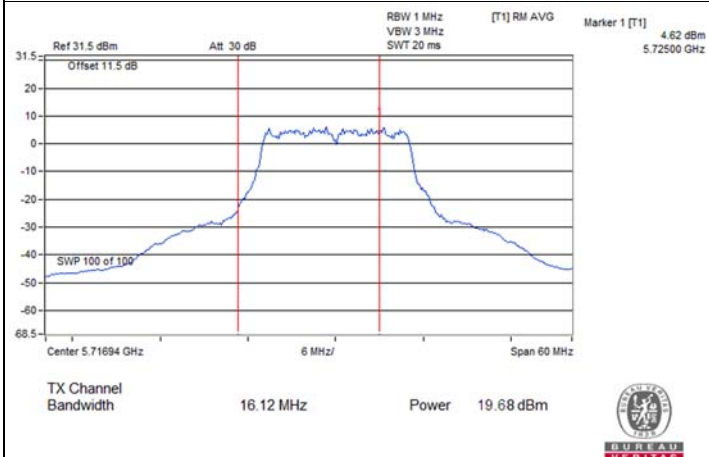
Spectrum Plot for channel straddling



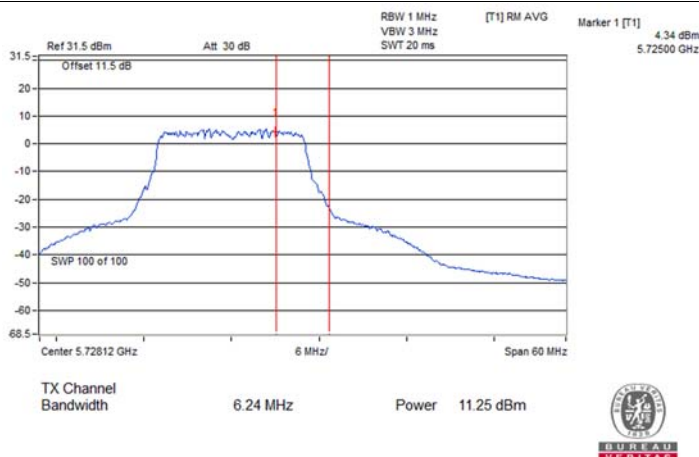
802.11a / Chain 0 : CH 144 (U-NII-2C)



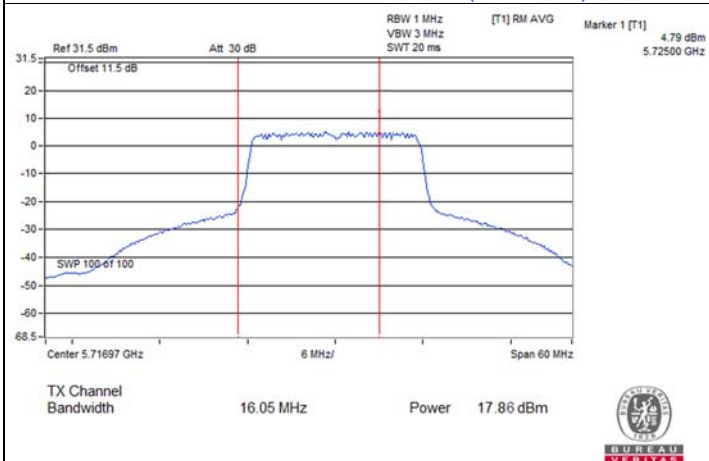
802.11a / Chain 0 : CH 144 (U-NII-3)



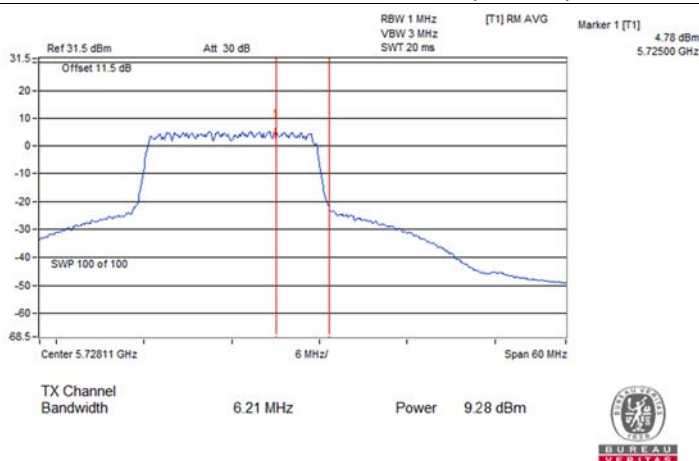
802.11a / Chain 1 : CH 144 (U-NII-2C)



802.11a / Chain 1 : CH 144 (U-NII-3)

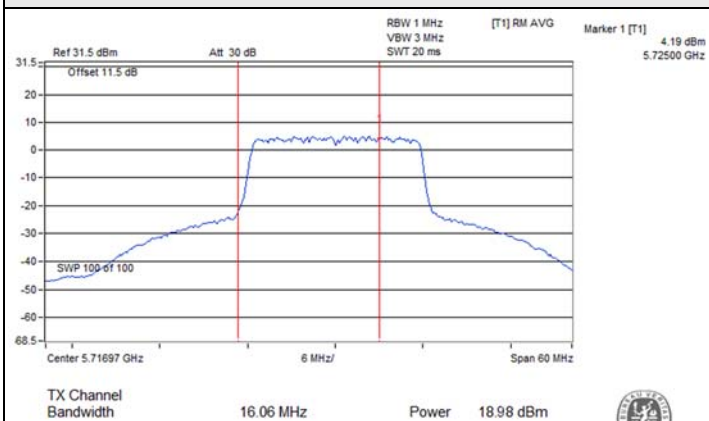


802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)

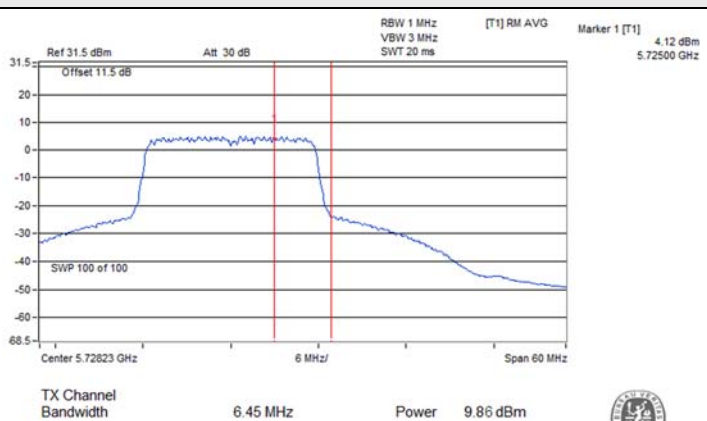


802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)

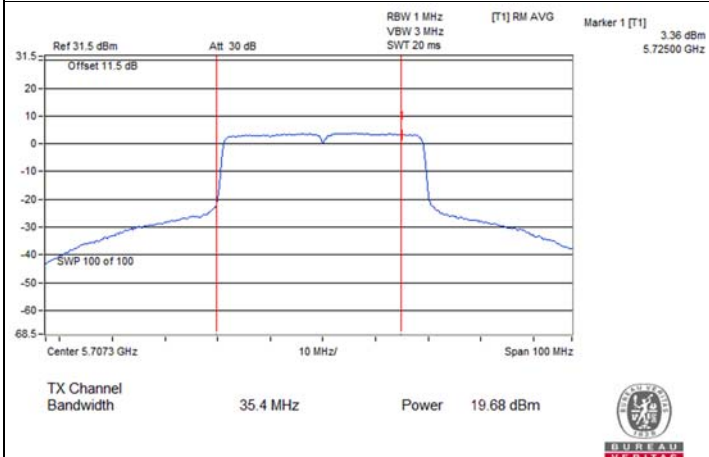
Spectrum Plot for channel straddling



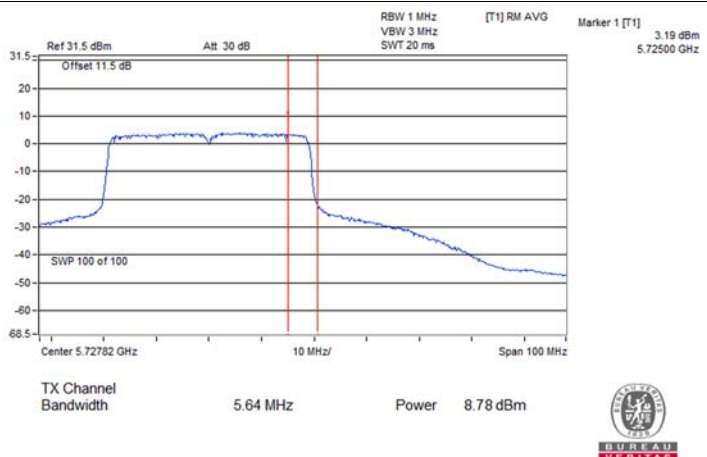
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-2C)



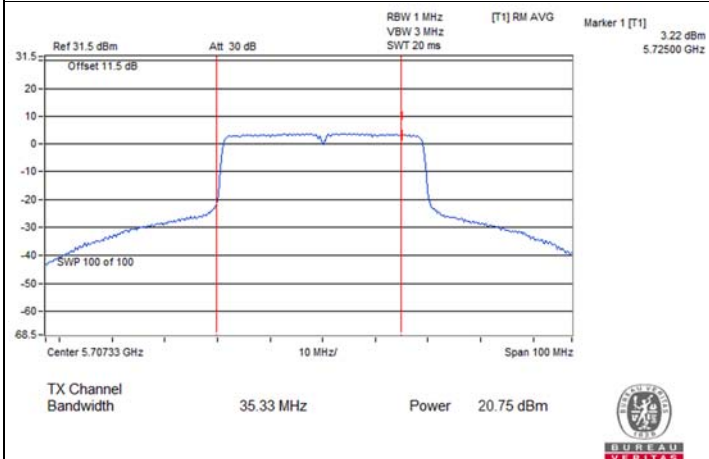
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)



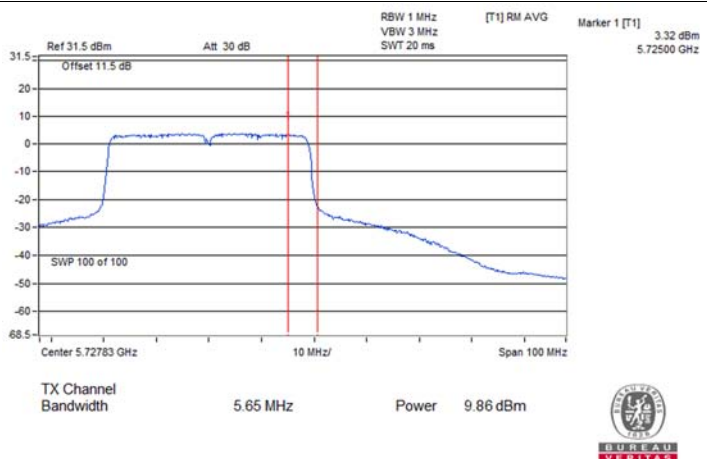
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-2C)



802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)

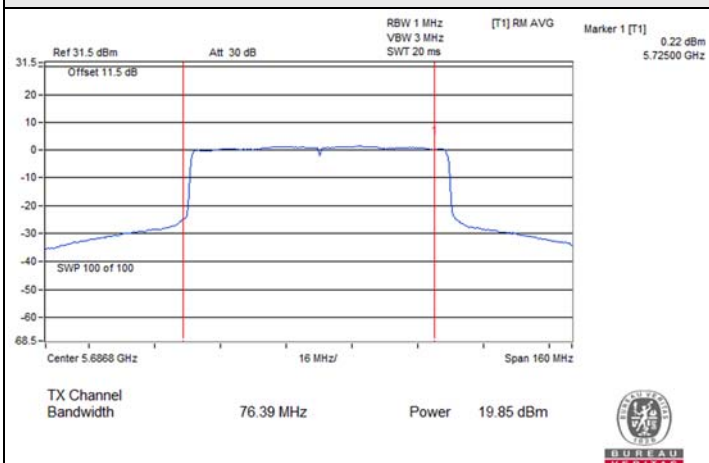


802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)

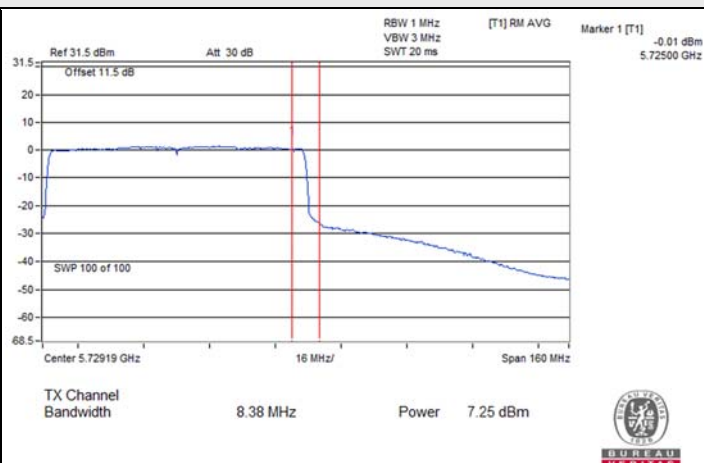


802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)

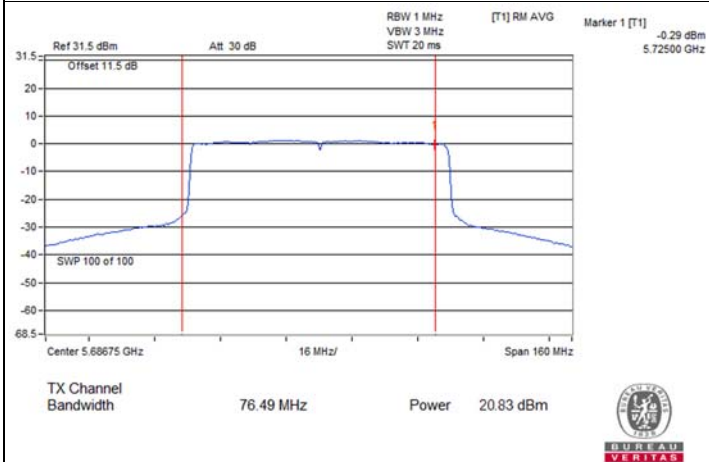
Spectrum Plot for channel straddling



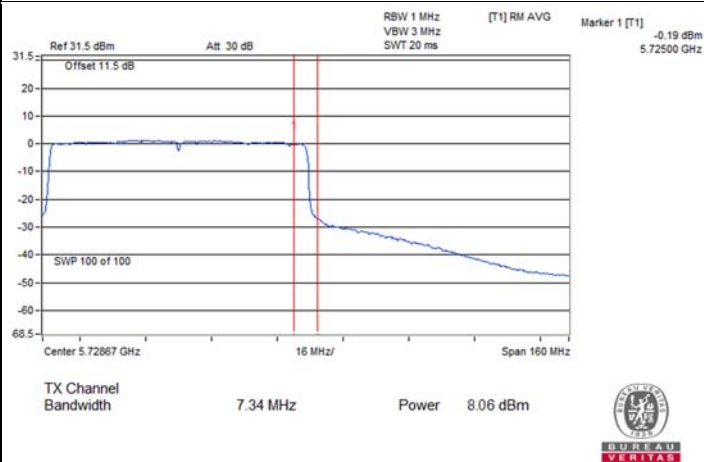
802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



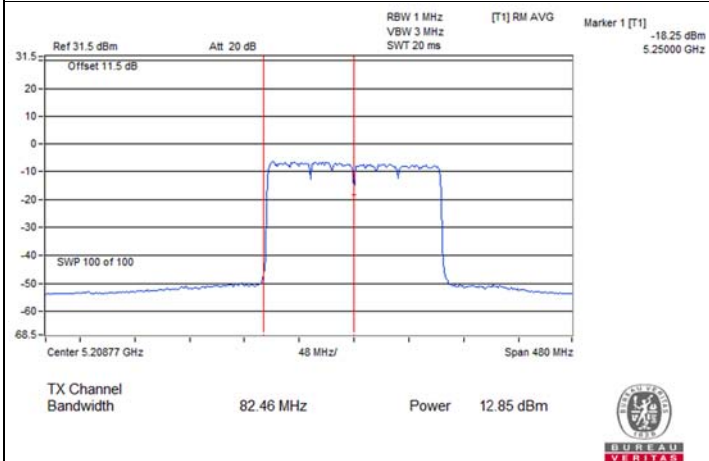
802.11ax (HE80) / Chain 0 : CH 138 (U-NII-3)



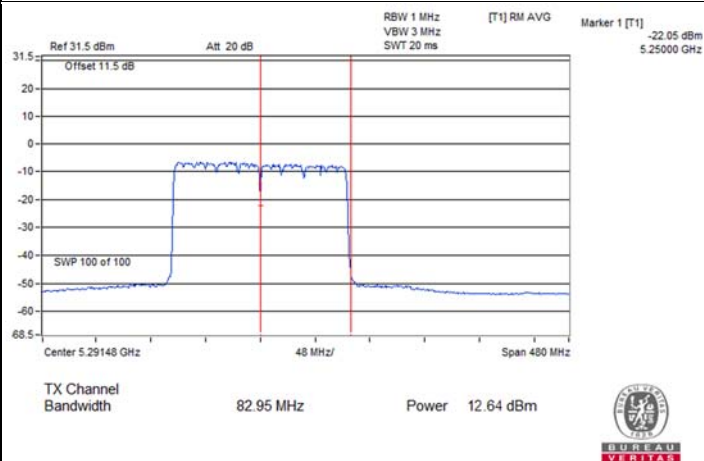
802.11ax (HE80) / Chain 1 : CH 138 (U-NII-2C)



802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)

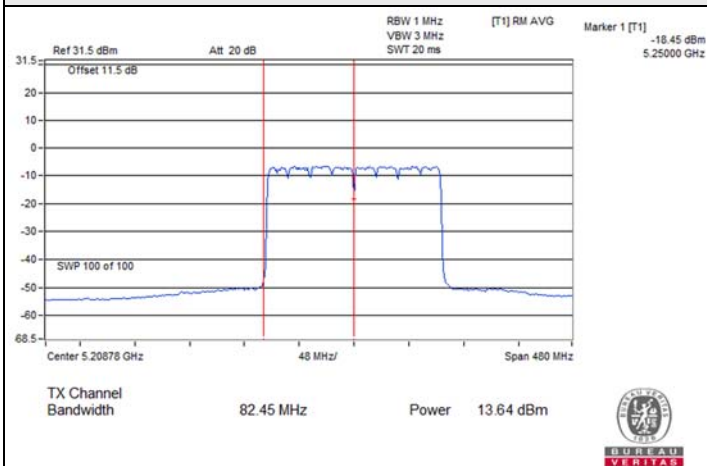


802.11ax (HE160) / Chain 0 : CH 50 (U-NII-1)

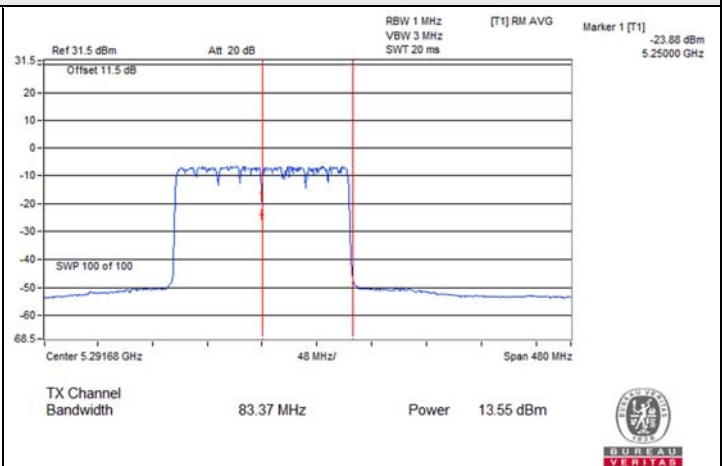


802.11ax (HE160) / Chain 0 : CH 50 (U-NII-2A)

Spectrum Plot for channel straddling



802.11ax (HE160) / Chain 1 : CH 50 (U-NII-1)



802.11ax (HE160) / Chain 1 : CH 50 (U-NII-2A)

7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Henry Hsu
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802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	8.30	8.86	11.60	15.83	Pass
40	5200	10.07	11.13	13.64	15.83	Pass
48	5240	9.91	11.18	13.60	15.83	Pass
52	5260	5.76	6.95	9.41	9.93	Pass
60	5300	5.92	7.00	9.50	9.93	Pass
64	5320	6.42	7.30	9.89	9.93	Pass
100	5500	5.49	6.28	8.91	9.63	Pass
116	5580	5.63	6.69	9.20	9.63	Pass
140	5700	5.71	6.71	9.25	9.63	Pass
144 (U-NII-2C)	5720	5.98	7.14	9.61	9.63	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 7.17 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.17-6) = 15.83$ dBm/MHz.
4. For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.07-6) = 9.93$ dBm/MHz.
5. For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.37-6) = 9.63$ dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	8.59	9.61	12.14	15.83	Pass
40	5200	10.12	11.17	13.69	15.83	Pass
48	5240	10.45	11.44	13.98	15.83	Pass
52	5260	6.44	7.28	9.89	9.93	Pass
60	5300	6.28	7.34	9.85	9.93	Pass
64	5320	6.92	6.89	9.92	9.93	Pass
100	5500	5.28	6.90	9.18	9.63	Pass
116	5580	6.02	6.96	9.53	9.63	Pass
140	5700	5.93	6.80	9.40	9.63	Pass
144 (U-NII-2C)	5720	5.94	6.85	9.43	9.63	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 7.17 dBi > 6dBi, so the power density limit shall be reduced to $17 - (7.17 - 6) = 15.83$ dBm/MHz.
4. For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the power density limit shall be reduced to $11 - (7.07 - 6) = 9.93$ dBm/MHz.
5. For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the power density limit shall be reduced to $11 - (7.37 - 6) = 9.63$ dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
38	5190	2.89	3.94	6.46	15.83	Pass
46	5230	7.26	8.11	10.72	15.83	Pass
54	5270	4.25	5.34	7.84	9.93	Pass
62	5310	2.54	3.65	6.14	9.93	Pass
102	5510	1.79	2.74	5.30	9.63	Pass
110	5550	4.27	5.30	7.83	9.63	Pass
134	5670	3.86	4.94	7.44	9.63	Pass
142 (U-NII-2C)	5710	4.19	5.25	7.76	9.63	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.17-6) = 15.83$ dBm/MHz.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.07-6) = 9.93$ dBm/MHz.
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.37-6) = 9.63$ dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
42	5210	0.43	1.46	3.99	15.83	Pass
58	5290	-1.96	-1.33	1.38	9.93	Pass
106	5530	-2.05	-1.13	1.44	9.63	Pass
122	5610	1.33	2.46	4.94	9.63	Pass
138 (U-NII-2C)	5690	1.38	2.39	4.92	9.63	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.17-6) = 15.83$ dBm/MHz.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.07-6) = 9.93$ dBm/MHz.
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.37-6) = 9.63$ dBm/MHz.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
50 (U-NII-1)	5250	-4.98	-3.87	-1.38	15.83	Pass
50 (U-NII-2A)	5250	-5.21	-4.41	-1.78	9.93	Pass
114	5570	-3.45	-2.61	0.00	9.63	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-1, the directional gain is 7.17 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.17-6) = 15.83$ dBm/MHz.
- For U-NII-2A, the directional gain is 7.07 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.07-6) = 9.93$ dBm/MHz.
- For U-NII-2C, the directional gain is 7.37 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.37-6) = 9.63$ dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
144 (U-NII-3)	5720	-2.40	-1.53	1.07	3.29	28.48	Pass
149	5745	1.41	2.43	4.96	7.18	28.48	Pass
157	5785	1.34	2.38	4.9	7.12	28.48	Pass
165	5825	1.51	2.52	5.05	7.27	28.48	Pass

Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to $30-(7.52-6) = 28.48$ dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
144 (U-NII-3)	5720	-3.15	-4.12	-0.6	1.62	28.48	Pass
149	5745	-0.35	0.74	3.24	5.46	28.48	Pass
157	5785	0.04	0.96	3.53	5.75	28.48	Pass
165	5825	0.14	1.16	3.69	5.91	28.48	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.52 - 6) = 28.48$ dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
142 (U-NII-3)	5710	-5.41	-4.85	-2.11	0.11	28.48	Pass
151	5755	-2.18	-1.29	1.3	3.52	28.48	Pass
159	5795	-1.86	-0.88	1.67	3.89	28.48	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.52 - 6) = 28.48$ dBm/500kHz.

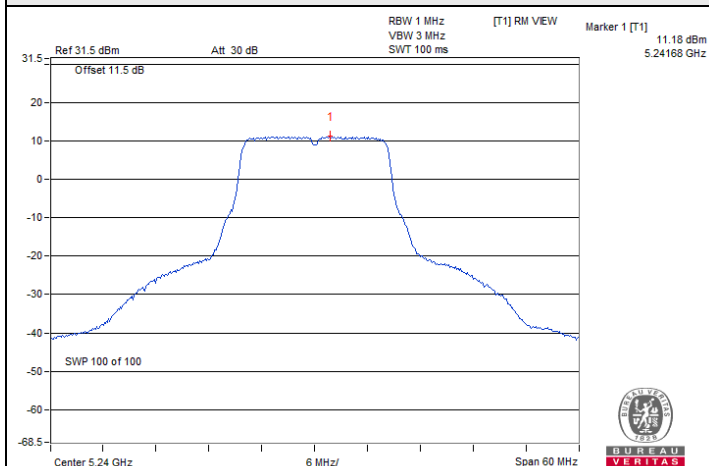
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
138 (U-NII-3)	5690	-8.65	-9.00	-5.81	-3.59	28.48	Pass
155	5775	-6.44	-5.42	-2.89	-0.67	28.48	Pass

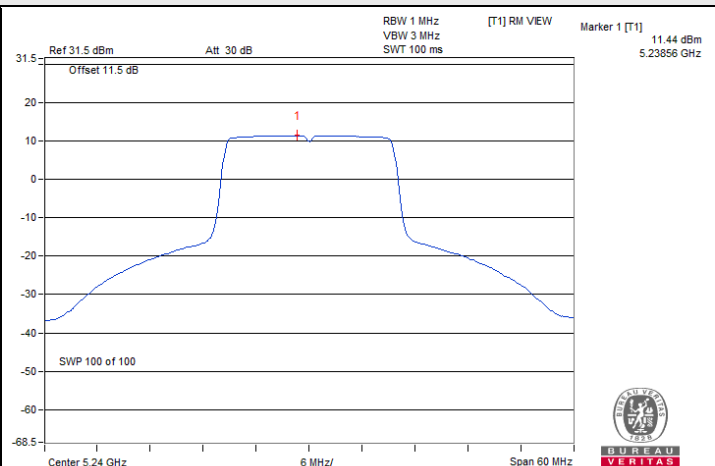
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.52 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.52 - 6) = 28.48$ dBm/500kHz.

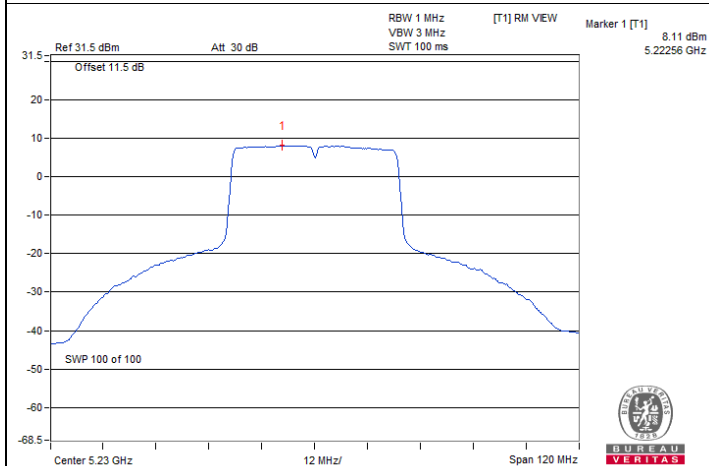
Spectrum Plot of Maximum Value



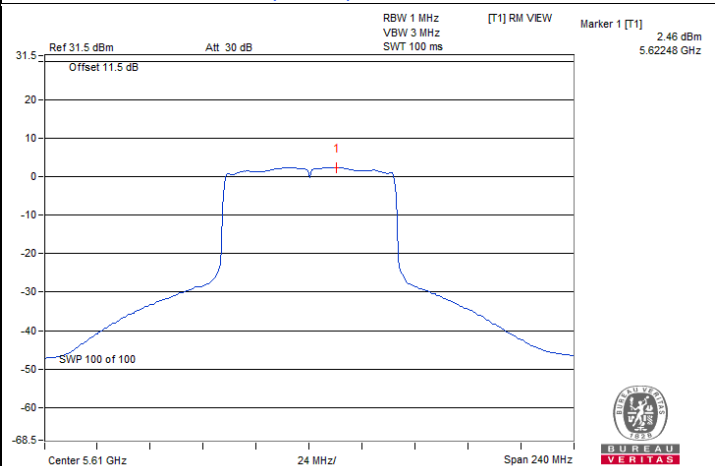
802.11a / Chain 1 : CH 48



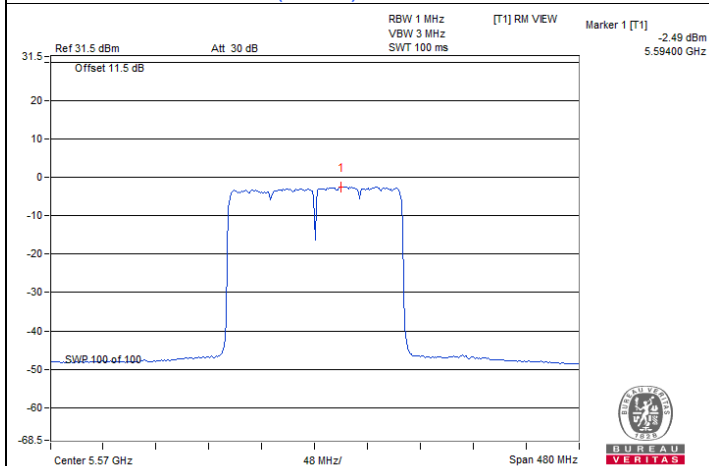
802.11ax (HE20) / Chain 1 : CH 48



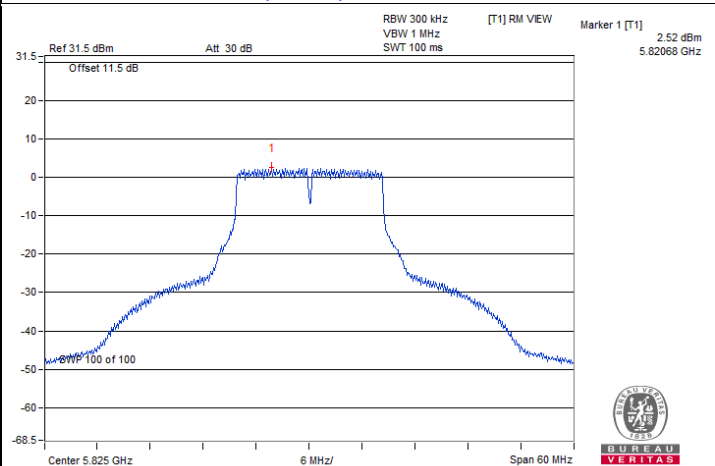
802.11ax (HE40) / Chain 1 : CH 46



802.11ax (HE80) / Chain 1 : CH 122

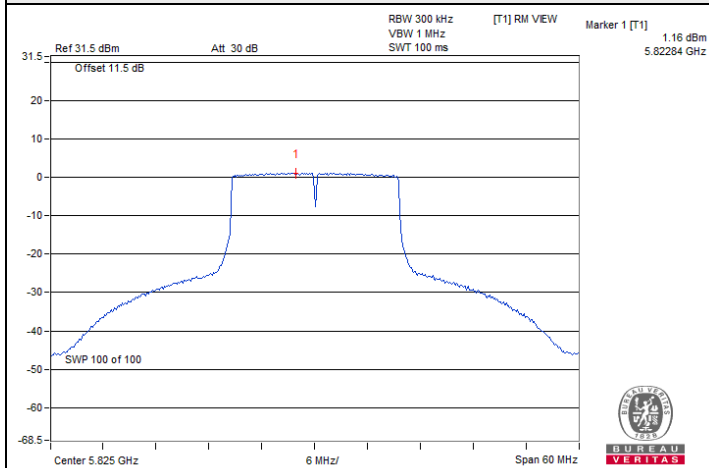


802.11ax (HE160) / Chain 1 : CH 114

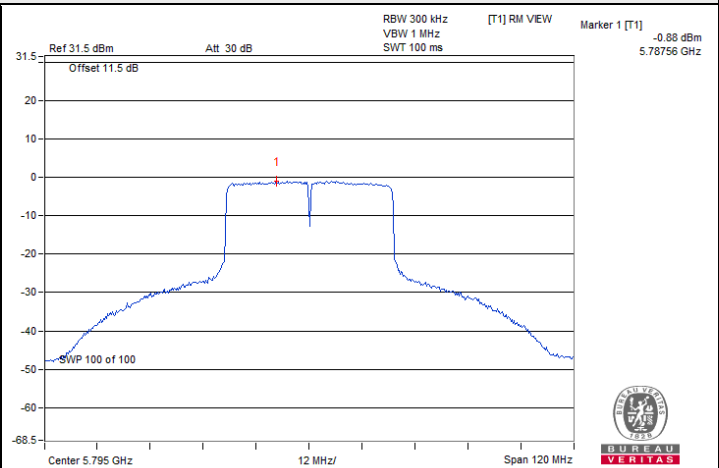


802.11a / Chain 1 : CH 165

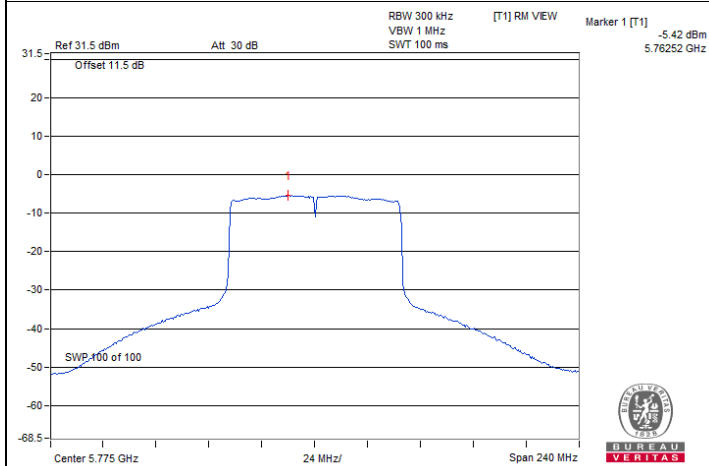
Spectrum Plot of Maximum Value



802.11ax (HE20) / Chain 1 : CH 165



802.11ax (HE40) / Chain 1 : CH 159



802.11ax (HE80) / Chain 1 : CH 155

7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Henry Hsu
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802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	3.24	3.24	0.5	Pass
149	5745	16.39	16.39	0.5	Pass
157	5785	16.40	16.39	0.5	Pass
165	5825	16.40	16.39	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	4.51	4.57	0.5	Pass
149	5745	19.03	19.00	0.5	Pass
157	5785	19.03	18.94	0.5	Pass
165	5825	18.96	18.86	0.5	Pass

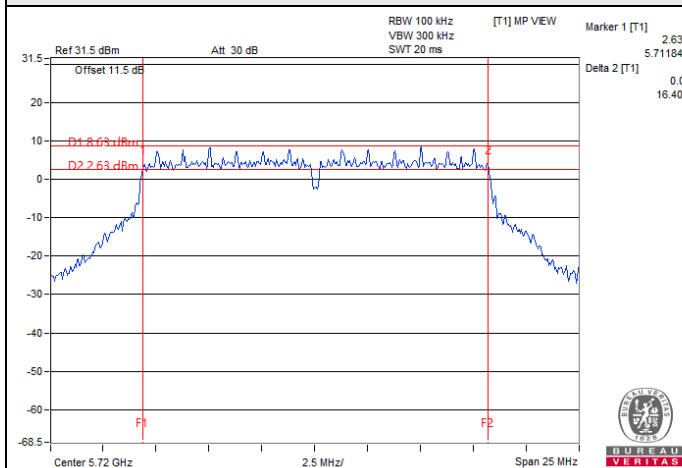
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	3.88	3.64	0.5	Pass
151	5755	37.67	37.01	0.5	Pass
159	5795	37.67	37.44	0.5	Pass

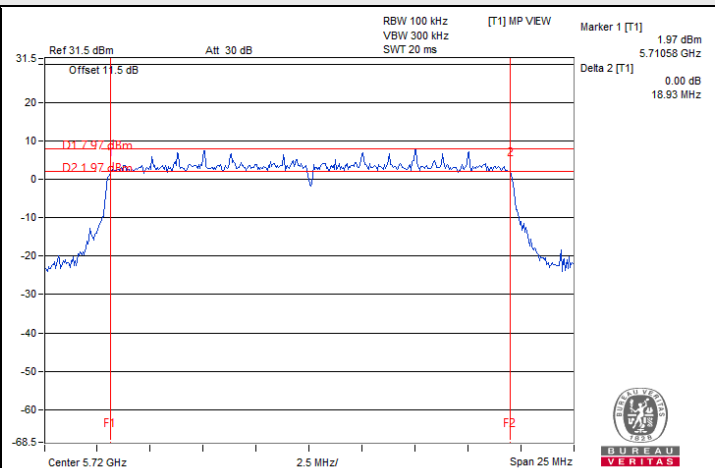
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
138 (U-NII-3)	5690	3.70	3.02	0.5	Pass
155	5775	77.16	76.55	0.5	Pass

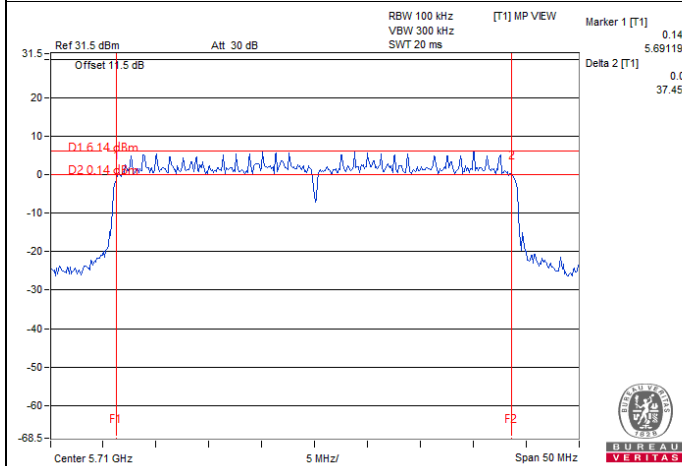
Spectrum Plot of Minimum Value



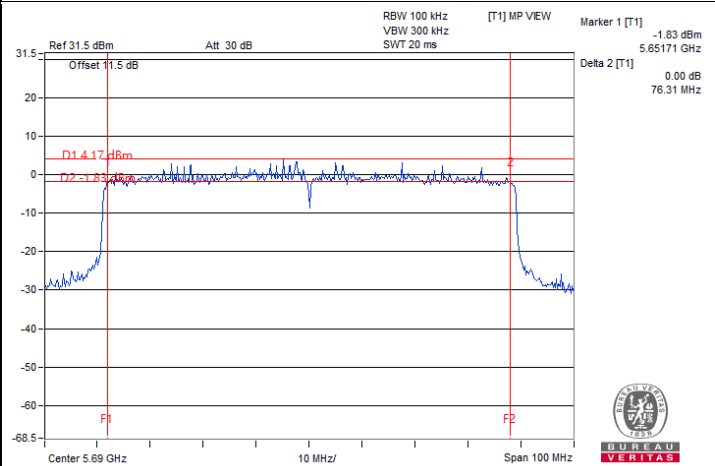
802.11a / Chain 0 : CH 144 (U-NII-3)



802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)

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

7.5 Occupied Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Henry Hsu
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.16	17.04
40	5200	17.28	17.04
48	5240	17.04	17.04
52	5260	17.16	17.04
60	5300	17.04	17.04
64	5320	17.04	17.04
100	5500	17.04	17.04
116	5580	17.04	17.04
140	5700	17.04	16.92
144 (U-NII-2C)	5720	13.52	13.64
144 (U-NII-3)	5720	3.52	3.52
149	5745	17.21	17.12
157	5785	17.30	17.21
165	5825	17.21	17.30

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.20	19.20
40	5200	19.20	19.20
48	5240	19.20	19.20
52	5260	19.08	19.20
60	5300	19.08	19.08
64	5320	19.32	19.08
100	5500	19.32	19.20
116	5580	19.20	19.20
140	5700	19.20	19.20
144 (U-NII-2C)	5720	14.60	14.60
144 (U-NII-3)	5720	4.60	4.60
149	5745	19.24	19.33
157	5785	19.20	19.20
165	5825	19.20	19.32

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	38.16	37.68
46	5230	38.16	38.16
54	5270	37.92	37.92
62	5310	37.68	37.92
102	5510	37.92	37.92
110	5550	37.92	38.16
134	5670	38.16	37.92
142 (U-NII-2C)	5710	34.20	33.96
142 (U-NII-3)	5710	3.96	3.96
151	5755	38.64	38.40
159	5795	38.40	38.16

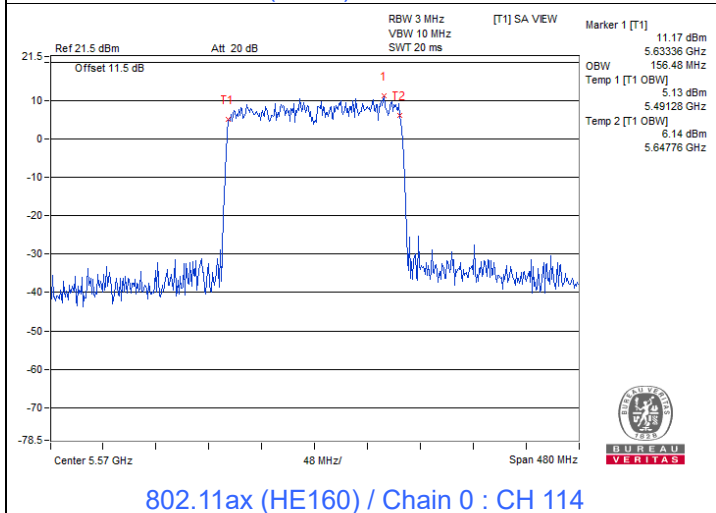
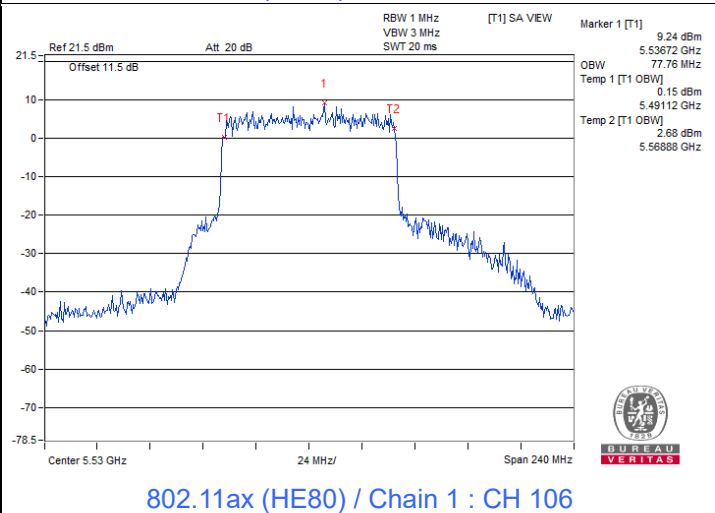
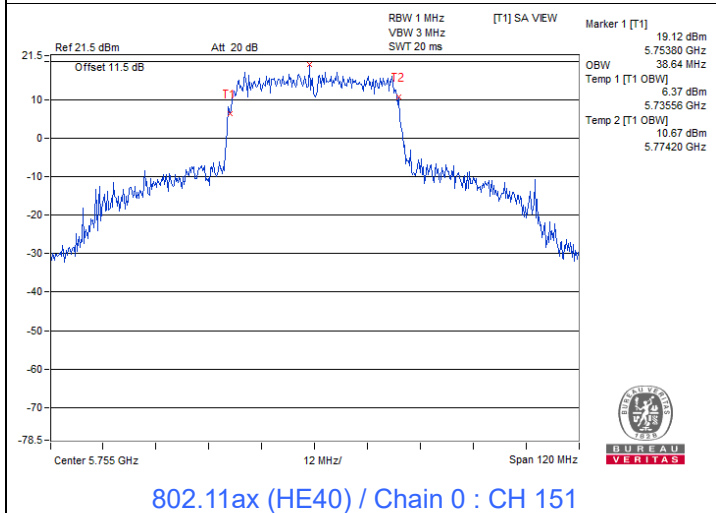
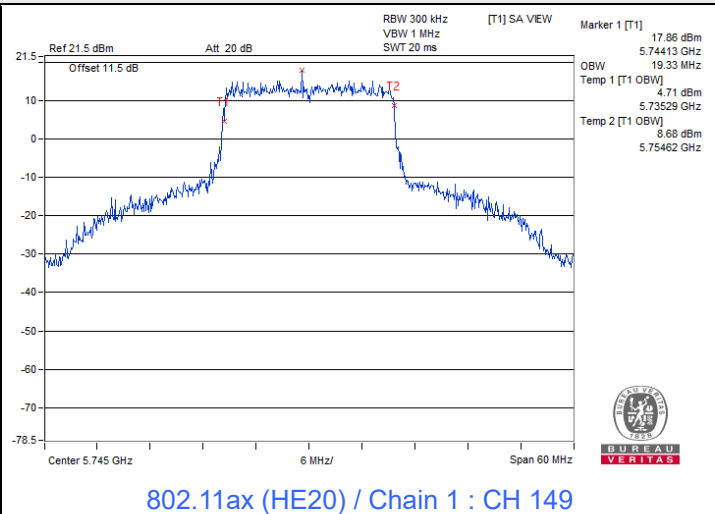
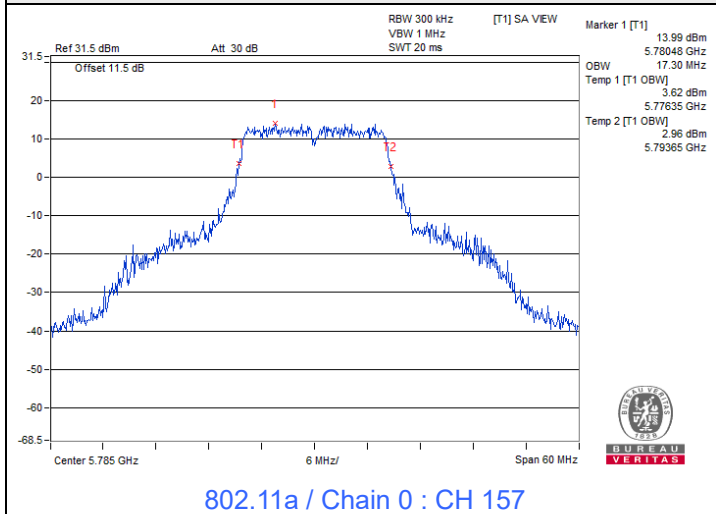
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.28	77.28
58	5290	77.28	77.28
106	5530	77.28	77.76
122	5610	77.28	77.28
138 (U-NII-2C)	5690	73.88	73.88
138 (U-NII-3)	5690	3.88	3.40
155	5775	77.28	77.28

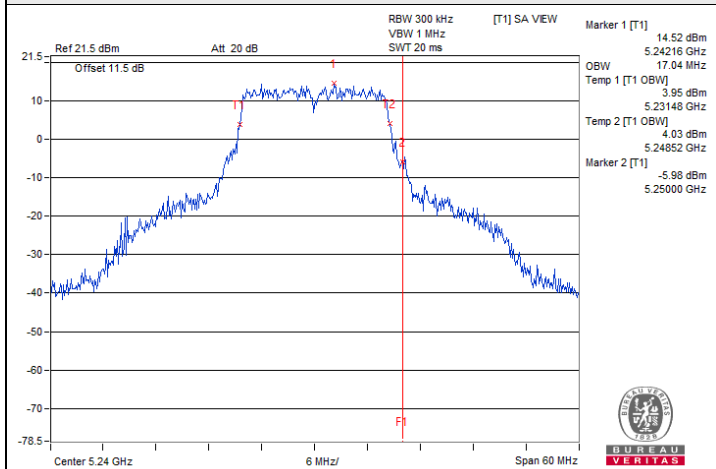
802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
50 (U-NII-1)	5250	78.72	78.72
50 (U-NII-2A)	5250	76.80	77.76
114	5570	156.48	155.52

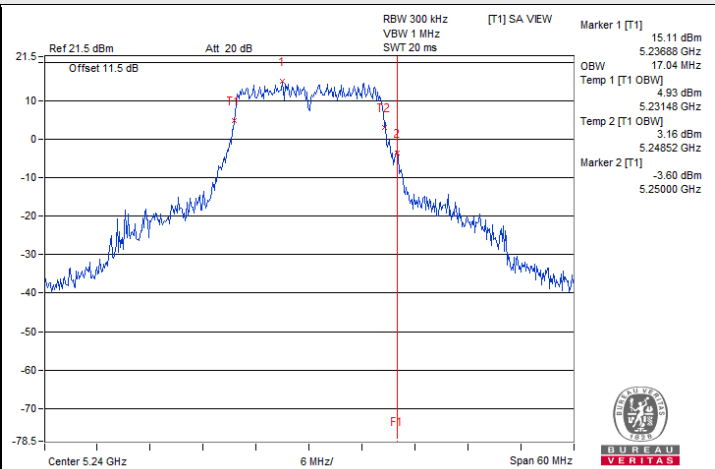
Spectrum Plot of Maximum Value



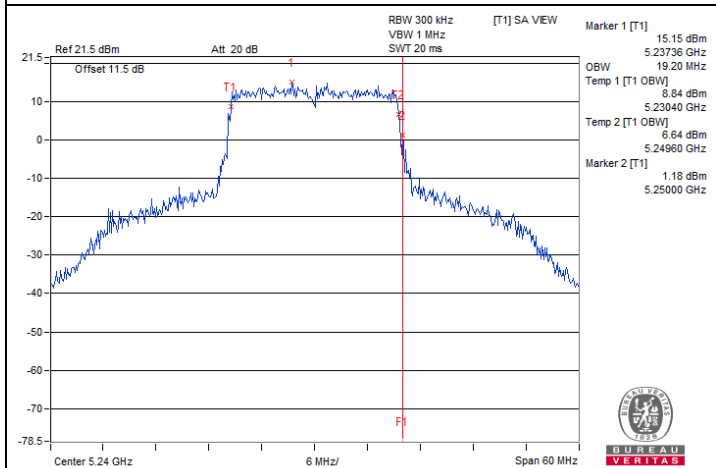
Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A)



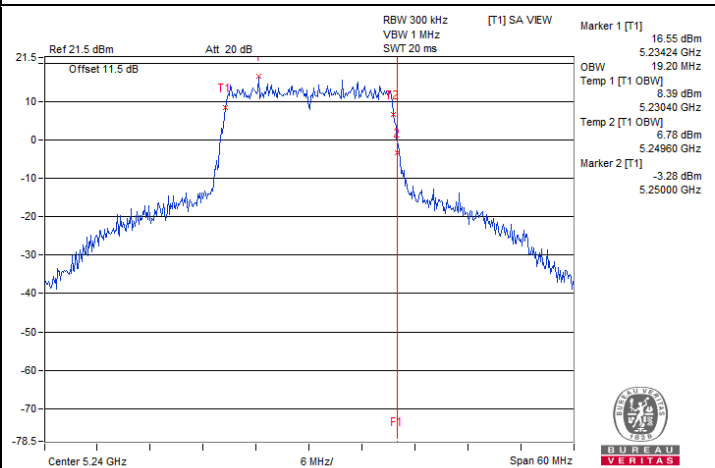
802.11a / Chain 0 : CH 48



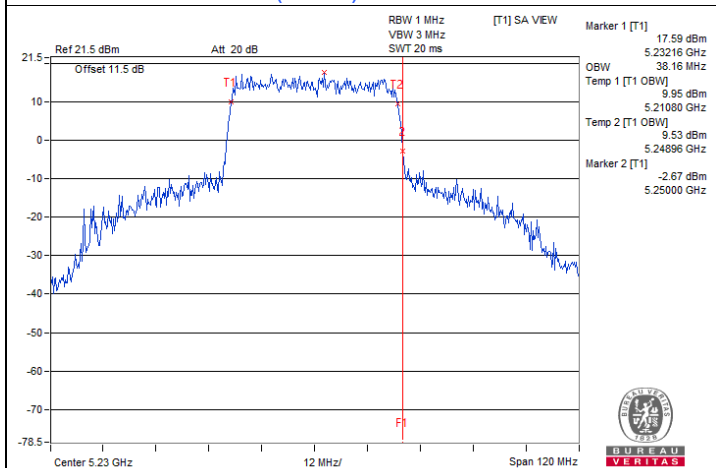
802.11a / Chain 1 : CH 48



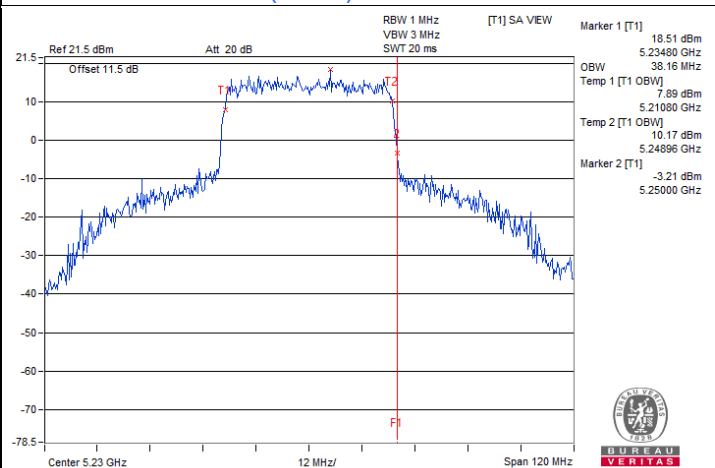
802.11ax (HE20) / Chain 0 : CH 48



802.11ax (HE20) / Chain 1 : CH 48

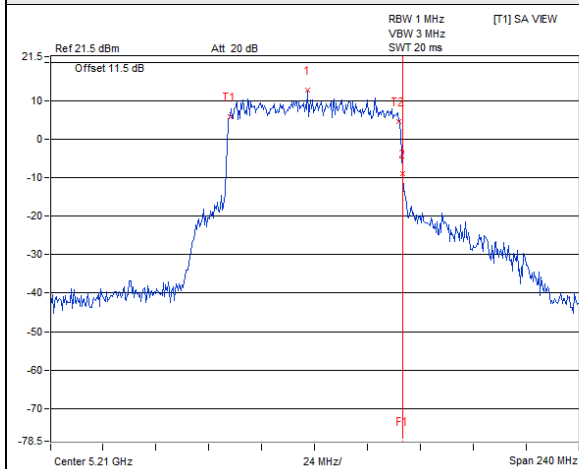


802.11ax (HE40) / Chain 0 : CH 46

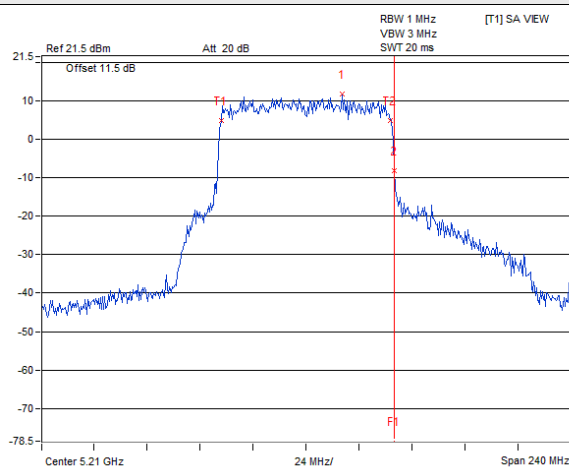


802.11ax (HE40) / Chain 1 : CH 46

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

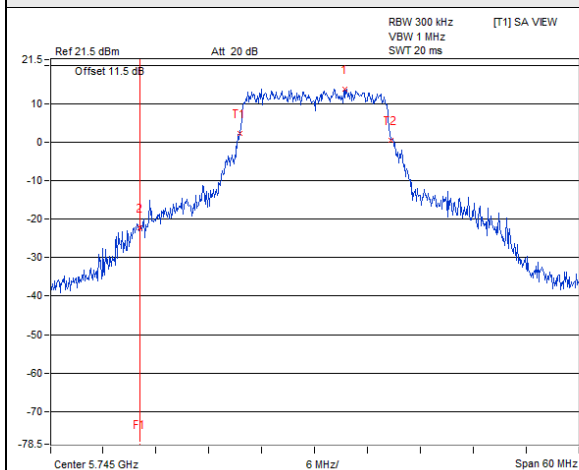


802.11ax (HE80) / Chain 0 : CH 42

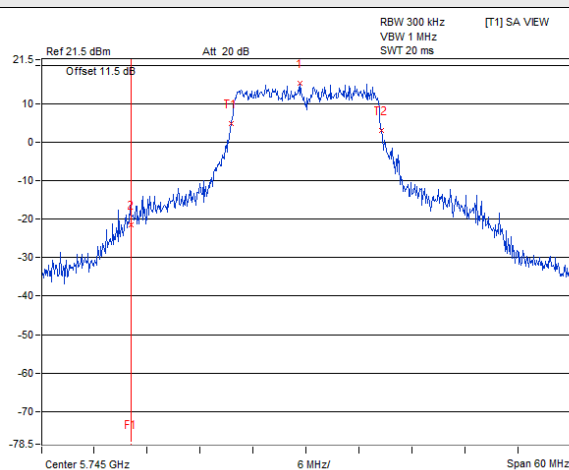


802.11ax (HE80) / Chain 1 : CH 42

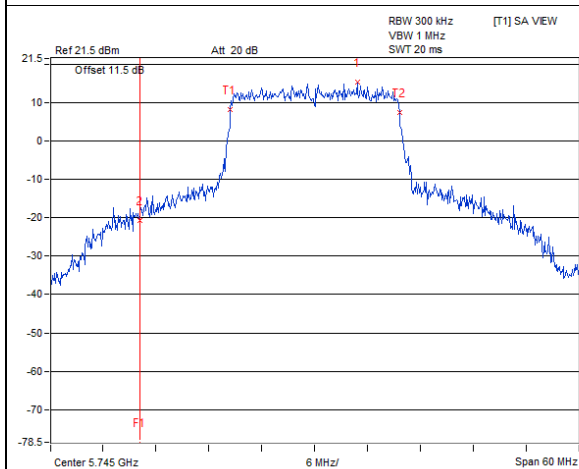
Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C)



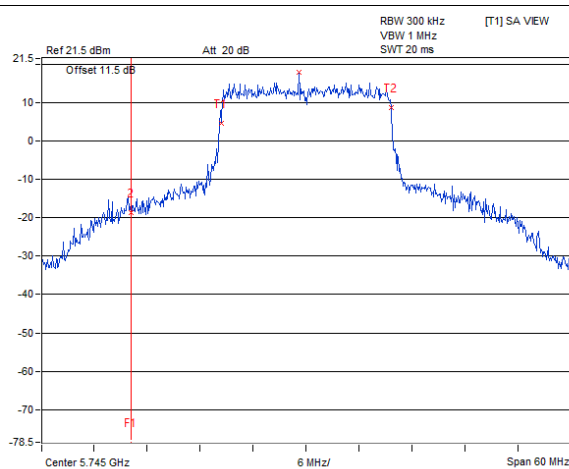
802.11a / Chain 0 : CH 149



802.11a / Chain 1 : CH 149

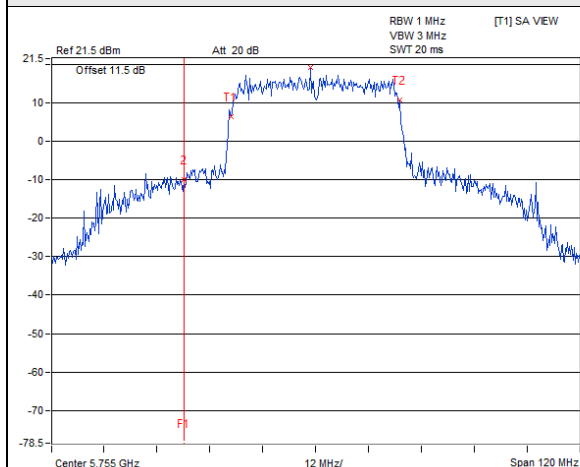


802.11ax (HE20) / Chain 0 : CH 149

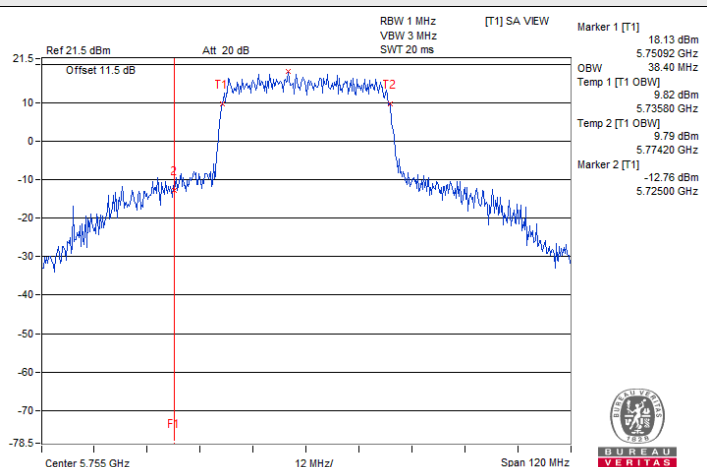


802.11ax (HE20) / Chain 1 : CH 149

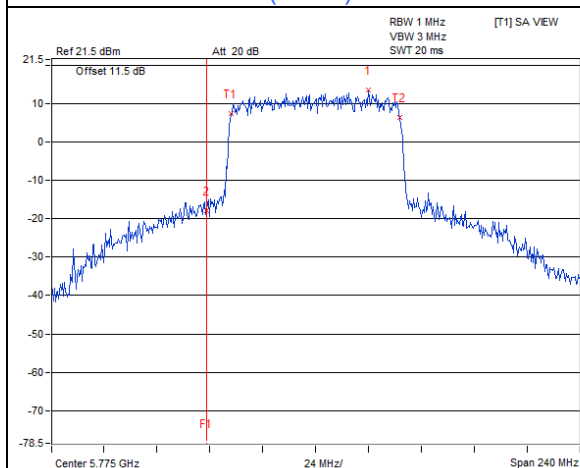
Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C)



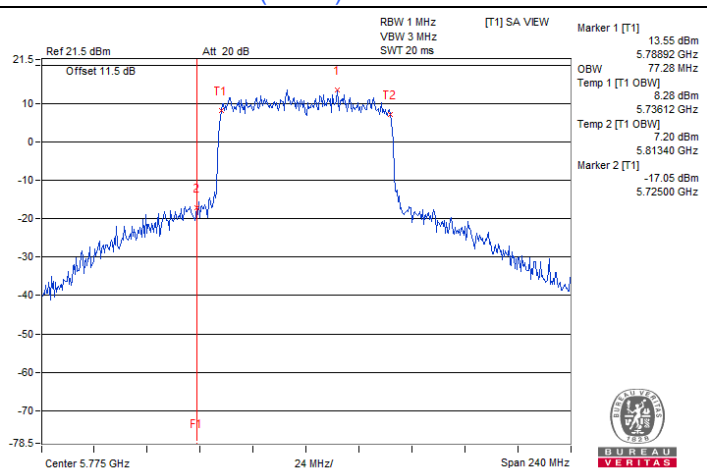
802.11ax (HE40) / Chain 0 : CH 151



802.11ax (HE40) / Chain 1 : CH 151



802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155

7.6 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Henry Hsu
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Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
40	120	5180.0239	Pass	5180.0227	Pass	5180.0196	Pass	5180.0238	Pass
30	120	5180.0103	Pass	5180.0061	Pass	5180.0096	Pass	5180.0096	Pass
20	120	5180.0008	Pass	5180.0036	Pass	5180.0006	Pass	5180.0018	Pass
10	120	5180.0121	Pass	5180.0139	Pass	5180.0138	Pass	5180.0142	Pass
0	120	5179.9872	Pass	5179.9869	Pass	5179.9915	Pass	5179.9881	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5179.9952	Pass	5179.9922	Pass	5179.9946	Pass	5179.9952	Pass
	120	5180.0008	Pass	5180.0036	Pass	5180.0006	Pass	5180.0018	Pass
	102	5180.0037	Pass	5180.004	Pass	5180.0003	Pass	5180.0024	Pass

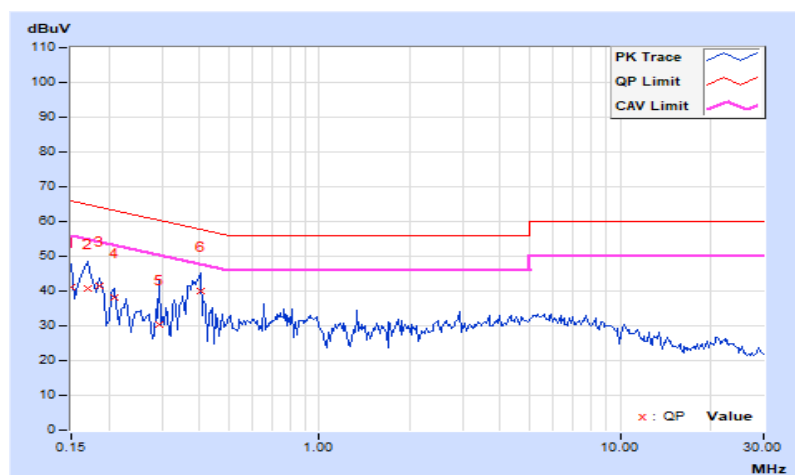
7.7 AC Power Conducted Emissions

RF Mode	802.11ax (HE20)	Channel	CH 165 : 5825 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	23°C, 66% RH
Tested By	Titan HSU		

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	0.15000	10.37	30.86	16.09	41.23	26.46	66.00	56.00	-24.77	-29.54
2	0.16953	10.38	30.30	17.36	40.68	27.74	64.98	54.98	-24.30	-27.24
3	0.18516	10.39	31.07	17.32	41.46	27.71	64.25	54.25	-22.79	-26.54
4	0.20859	10.40	27.87	15.01	38.27	25.41	63.26	53.26	-24.99	-27.85
5	0.29453	10.44	20.09	11.41	30.53	21.85	60.40	50.40	-29.87	-28.55
6	0.40391	10.49	29.67	11.82	40.16	22.31	57.77	47.77	-17.61	-25.46

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

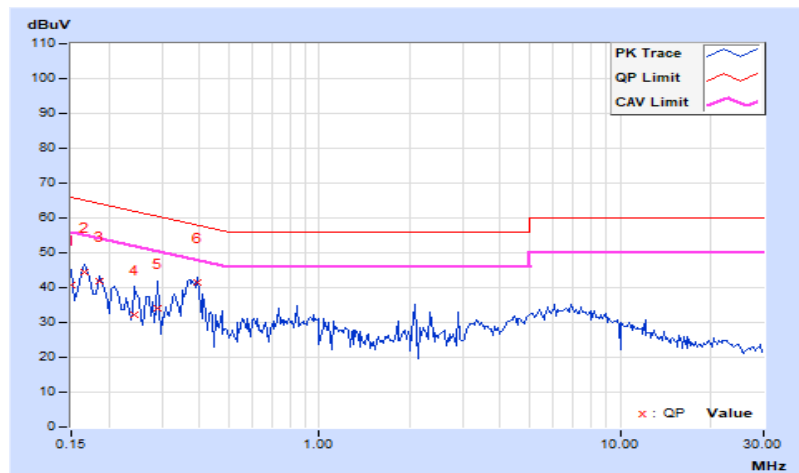


RF Mode	802.11ax (HE20)	Channel	CH 165 : 5825 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 66% RH
Tested By	Titan HSU		

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	0.15000	10.40	30.30	19.96	40.70	30.36	66.00	56.00	-25.30	-25.64
2	0.16562	10.41	34.01	24.93	44.42	35.34	65.18	55.18	-20.76	-19.84
3	0.18516	10.43	31.24	23.04	41.67	33.47	64.25	54.25	-22.58	-20.78
4	0.24375	10.46	21.65	12.58	32.11	23.04	61.97	51.97	-29.86	-28.93
5	0.29063	10.48	23.46	13.76	33.94	24.24	60.51	50.51	-26.57	-26.27
6	0.39219	10.53	30.83	26.44	41.36	36.97	58.02	48.02	-16.66	-11.05

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



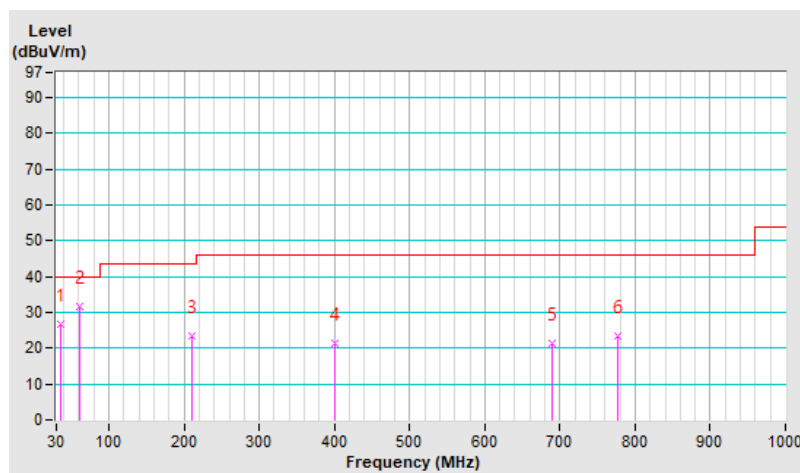
7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11ax (HE20)	Channel	CH 165 : 5825 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 61% RH
Tested By	Charles Hsiao		

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	35.55	26.8 QP	40.0	-13.2	1.45 H	187	45.6	-18.8
2	61.11	31.7 QP	40.0	-8.3	1.45 H	182	50.3	-18.6
3	210.00	23.5 QP	43.5	-20.0	1.59 H	265	44.5	-21.0
4	399.95	21.4 QP	46.0	-24.6	1.45 H	174	36.1	-14.7
5	689.98	21.3 QP	46.0	-24.7	1.00 H	36	30.6	-9.3
6	777.40	23.3 QP	46.0	-22.7	1.59 H	222	31.0	-7.7

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 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.

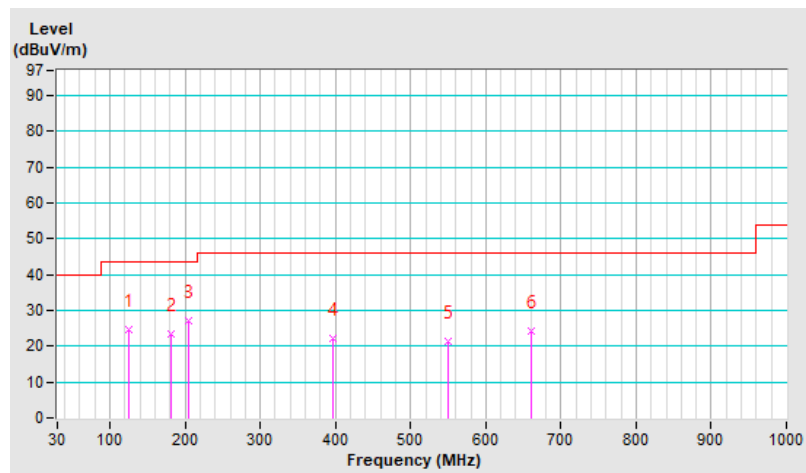


RF Mode	802.11ax (HE20)	Channel	CH 165 : 5825 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 61% RH
Tested By	Charles Hsiao		

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	124.44	24.6 QP	43.5	-18.9	1.59 V	229	44.1	-19.5
2	181.44	23.6 QP	43.5	-19.9	1.65 V	2	43.1	-19.5
3	205.50	27.0 QP	43.5	-16.5	1.15 V	1	48.0	-21.0
4	397.48	22.2 QP	46.0	-23.8	1.25 V	291	37.0	-14.8
5	549.91	21.4 QP	46.0	-24.6	1.42 V	311	33.1	-11.7
6	660.00	24.2 QP	46.0	-21.8	1.59 V	185	33.9	-9.7

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 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.



7.9 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	59.2 PK	74.0	-14.8	2.43 H	92	46.7	12.5
2	5150.00	49.3 AV	54.0	-4.7	2.43 H	92	36.8	12.5
3	*5180.00	112.8 PK			2.43 H	92	70.3	42.5
4	*5180.00	103.6 AV			2.43 H	92	61.1	42.5
5	#10360.00	56.4 PK	68.2	-11.8	1.67 H	7	37.9	18.5
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	62.6 PK	74.0	-11.4	2.35 V	86	50.1	12.5
2	5150.00	52.8 AV	54.0	-1.2	2.35 V	86	40.3	12.5
3	*5180.00	118.2 PK			2.32 V	85	75.7	42.5
4	*5180.00	109.3 AV			2.32 V	85	66.8	42.5
5	#10360.00	56.8 PK	68.2	-11.4	1.15 V	197	38.3	18.5

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	25°C, 61% RH
Tested By	Karl Lee		

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	116.4 PK			1.76 H	114	73.9	42.5
2	*5200.00	109.0 AV			1.76 H	114	66.5	42.5
3	#10400.00	56.6 PK	68.2	-11.6	2.23 H	48	38.1	18.5
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	120.6 PK			2.35 V	76	78.1	42.5
2	*5200.00	112.7 AV			2.35 V	76	70.2	42.5
3	#10400.00	56.1 PK	68.2	-12.1	2.61 V	107	37.6	18.5

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	25°C, 61% RH
Tested By	Charles Hsiao		

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	114.1 PK			2.43 H	144	71.4	42.7
2	*5240.00	106.6 AV			2.43 H	144	63.9	42.7
3	5350.00	57.6 PK	74.0	-16.4	2.43 H	144	44.7	12.9
4	5350.00	48.8 AV	54.0	-5.2	2.43 H	144	35.9	12.9
5	#10480.00	57.1 PK	68.2	-11.1	1.75 H	5	38.8	18.3
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	*5240.00	119.2 PK			2.32 V	85	76.5	42.7
2	*5240.00	111.4 AV			2.32 V	85	68.7	42.7
3	5350.00	58.2 PK	74.0	-15.8	2.32 V	85	45.3	12.9
4	5350.00	48.7 AV	54.0	-5.3	2.32 V	85	35.8	12.9
5	#10480.00	57.3 PK	68.2	-10.9	1.69 V	337	39.0	18.3

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	802.11a	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	25°C, 61% RH
Tested By	Karl Lee		

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	*5260.00	116.5 PK			1.82 H	108	73.8	42.7
2	*5260.00	109.3 AV			1.82 H	108	66.6	42.7
3	5350.00	58.2 PK	74.0	-15.8	1.79 H	121	45.3	12.9
4	5350.00	48.7 AV	54.0	-5.3	1.79 H	121	35.8	12.9
5	#10520.00	56.9 PK	68.2	-11.3	1.35 H	223	38.7	18.2
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	*5260.00	120.7 PK			2.35 V	83	78.0	42.7
2	*5260.00	113.2 AV			2.35 V	83	70.5	42.7
3	5350.00	61.3 PK	74.0	-12.7	2.35 V	86	48.4	12.9
4	5350.00	50.6 AV	54.0	-3.4	2.35 V	86	37.7	12.9
5	#10520.00	56.5 PK	68.2	-11.7	1.82 V	134	38.3	18.2

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 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	58.0 PK	74.0	-16.0	2.43 H	144	45.5	12.5
2	5150.00	48.0 AV	54.0	-6.0	2.43 H	144	35.5	12.5
3	*5300.00	112.2 PK			2.43 H	144	69.4	42.8
4	*5300.00	104.4 AV			2.43 H	144	61.6	42.8
5	5350.00	58.4 PK	74.0	-15.6	2.43 H	144	45.5	12.9
6	5350.00	48.5 AV	54.0	-5.5	2.43 H	144	35.6	12.9
7	10600.00	57.1 PK	74.0	-16.9	1.06 H	31	38.7	18.4
8	10600.00	47.9 AV	54.0	-6.1	1.06 H	31	29.5	18.4
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	5150.00	58.2 PK	74.0	-15.8	2.32 V	85	45.7	12.5
2	5150.00	48.1 AV	54.0	-5.9	2.32 V	85	35.6	12.5
3	*5300.00	119.1 PK			2.32 V	85	76.3	42.8
4	*5300.00	111.4 AV			2.32 V	85	68.6	42.8
5	5350.00	63.1 PK	74.0	-10.9	2.29 V	284	50.2	12.9
6	5350.00	52.6 AV	54.0	-1.4	2.29 V	284	39.7	12.9
7	10600.00	57.2 PK	74.0	-16.8	1.64 V	193	38.8	18.4
8	10600.00	48.3 AV	54.0	-5.7	1.64 V	193	29.9	18.4

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	802.11a	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	110.2 PK			2.91 H	144	67.3	42.9
2	*5320.00	102.3 AV			2.91 H	144	59.4	42.9
3	5350.00	58.3 PK	74.0	-15.7	2.91 H	144	45.4	12.9
4	5350.00	48.2 AV	54.0	-5.8	2.91 H	144	35.3	12.9
5	10640.00	56.6 PK	74.0	-17.4	1.78 H	335	38.2	18.4
6	10640.00	48.4 AV	54.0	-5.6	1.78 H	335	30.0	18.4
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	*5320.00	117.0 PK			2.32 V	85	74.1	42.9
2	*5320.00	109.8 AV			2.32 V	85	66.9	42.9
3	5350.00	62.3 PK	74.0	-11.7	2.41 V	241	49.4	12.9
4	5350.00	52.8 AV	54.0	-1.2	2.41 V	241	39.9	12.9
5	10640.00	56.8 PK	74.0	-17.2	1.05 V	200	38.4	18.4
6	10640.00	48.8 AV	54.0	-5.2	1.05 V	200	30.4	18.4

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	802.11a	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	25°C, 61% RH
Tested By	Karl Lee		

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	61.1 PK	74.0	-12.9	2.70 H	143	47.9	13.2
2	5460.00	50.6 AV	54.0	-3.4	2.70 H	143	37.4	13.2
3	#5470.00	62.7 PK	68.2	-5.5	1.62 H	191	49.5	13.2
4	*5500.00	116.3 PK			2.56 H	153	73.4	42.9
5	*5500.00	109.0 AV			2.56 H	153	66.1	42.9
6	11000.00	57.5 PK	74.0	-16.5	1.05 H	271	38.6	18.9
7	11000.00	47.9 AV	54.0	-6.1	1.05 H	271	29.0	18.9
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	5460.00	61.7 PK	74.0	-12.3	2.33 V	109	48.5	13.2
2	5460.00	52.9 AV	54.0	-1.1	2.33 V	109	39.7	13.2
3	#5470.00	64.1 PK	68.2	-4.1	2.24 V	126	50.9	13.2
4	*5500.00	119.9 PK			2.33 V	115	77.0	42.9
5	*5500.00	112.5 AV			2.33 V	115	69.6	42.9
6	11000.00	57.6 PK	74.0	-16.4	1.45 V	253	38.7	18.9
7	11000.00	47.9 AV	54.0	-6.1	1.45 V	253	29.0	18.9

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.
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	25°C, 61% RH
Tested By	Karl Lee		

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	117.1 PK			2.54 H	144	74.2	42.9
2	*5580.00	109.8 AV			2.54 H	144	66.9	42.9
3	11160.00	57.5 PK	74.0	-16.5	1.22 H	149	38.5	19.0
4	11160.00	47.9 AV	54.0	-6.1	1.22 H	149	28.9	19.0
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	*5580.00	120.6 PK			2.36 V	119	77.7	42.9
2	*5580.00	113.4 AV			2.36 V	119	70.5	42.9
3	11160.00	57.2 PK	74.0	-16.8	1.73 V	55	38.2	19.0
4	11160.00	47.6 AV	54.0	-6.4	1.73 V	55	28.6	19.0

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	802.11a	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	25°C, 61% RH
Tested By	Karl Lee		

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	112.5 PK			2.54 H	141	69.4	43.1
2	*5700.00	104.6 AV			2.54 H	141	61.5	43.1
3	#5725.00	64.4 PK	68.2	-3.8	2.39 H	172	51.2	13.2
4	11400.00	57.5 PK	74.0	-16.5	1.21 H	185	38.0	19.5
5	11400.00	47.9 AV	54.0	-6.1	1.21 H	185	28.4	19.5
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	114.9 PK			2.18 V	118	71.8	43.1
2	*5700.00	107.8 AV			2.18 V	118	64.7	43.1
3	#5725.00	67.1 PK	68.2	-1.1	2.21 V	125	53.9	13.2
4	11400.00	58.1 PK	74.0	-15.9	1.77 V	154	38.6	19.5
5	11400.00	48.3 AV	54.0	-5.7	1.77 V	154	28.8	19.5

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	25°C, 61% RH
Tested By	Charles Hsiao		

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	57.0 PK	74.0	-17.0	2.44 H	138	43.8	13.2
2	5460.00	47.1 AV	54.0	-6.9	2.44 H	138	33.9	13.2
3	#5470.00	57.6 PK	68.2	-10.6	2.44 H	138	44.4	13.2
4	*5720.00	112.2 PK			2.44 H	138	68.9	43.3
5	*5720.00	104.1 AV			2.44 H	138	60.8	43.3
6	11440.00	57.3 PK	74.0	-16.7	1.42 H	105	37.6	19.7
7	11440.00	47.8 AV	54.0	-6.2	1.42 H	105	28.1	19.7
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	5460.00	57.4 PK	74.0	-16.6	2.26 V	233	44.2	13.2
2	5460.00	47.7 AV	54.0	-6.3	2.26 V	233	34.5	13.2
3	#5470.00	58.1 PK	68.2	-10.1	2.26 V	233	44.9	13.2
4	*5720.00	118.2 PK			2.26 V	233	74.9	43.3
5	*5720.00	110.1 AV			2.26 V	233	66.8	43.3
6	11440.00	57.4 PK	74.0	-16.6	1.59 V	9	37.7	19.7
7	11440.00	48.1 AV	54.0	-5.9	1.59 V	9	28.4	19.7

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 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5643.24	58.0 PK	68.2	-10.2	2.44 H	56	45.1	12.9
2	*5745.00	112.2 PK			2.44 H	56	68.8	43.4
3	*5745.00	104.6 AV			2.44 H	56	61.2	43.4
4	#5930.33	58.5 PK	68.2	-9.7	2.44 H	56	44.7	13.8
5	11490.00	57.7 PK	74.0	-16.3	1.05 H	211	37.8	19.9
6	11490.00	48.0 AV	54.0	-6.0	1.05 H	211	28.1	19.9
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	#5642.44	60.8 PK	68.2	-7.4	2.26 V	234	47.9	12.9
2	*5745.00	118.2 PK			2.26 V	234	74.8	43.4
3	*5745.00	110.1 AV			2.26 V	234	66.7	43.4
4	#5941.94	59.0 PK	68.2	-9.2	2.26 V	234	45.1	13.9
5	11490.00	57.7 PK	74.0	-16.3	1.05 V	300	37.8	19.9
6	11490.00	48.2 AV	54.0	-5.8	1.05 V	300	28.3	19.9

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	802.11a	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5649.65	57.7 PK	68.2	-10.5	2.44 H	56	44.6	13.1
2	*5785.00	114.6 PK			2.44 H	56	71.2	43.4
3	*5785.00	106.7 AV			2.44 H	56	63.3	43.4
4	#5966.77	58.0 PK	68.2	-10.2	2.44 H	56	44.0	14.0
5	11570.00	57.6 PK	74.0	-16.4	1.58 H	210	37.7	19.9
6	11570.00	47.8 AV	54.0	-6.2	1.58 H	210	27.9	19.9
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	#5647.65	60.1 PK	68.2	-8.1	2.26 V	234	47.0	13.1
2	*5785.00	119.2 PK			2.26 V	234	75.8	43.4
3	*5785.00	111.6 AV			2.26 V	234	68.2	43.4
4	#5930.33	59.4 PK	68.2	-8.8	2.26 V	234	45.6	13.8
5	11570.00	58.1 PK	74.0	-15.9	1.67 V	319	38.2	19.9
6	11570.00	47.9 AV	54.0	-6.1	1.67 V	319	28.0	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5614.01	57.7 PK	68.2	-10.5	2.44 H	56	44.7	13.0
2	*5825.00	112.7 PK			2.44 H	56	69.2	43.5
3	*5825.00	104.4 AV			2.44 H	56	60.9	43.5
4	#5958.36	58.6 PK	68.2	-9.6	2.44 H	56	44.7	13.9
5	11650.00	57.7 PK	74.0	-16.3	1.82 H	29	37.8	19.9
6	11650.00	47.8 AV	54.0	-6.2	1.82 H	29	27.9	19.9
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	#5626.43	59.7 PK	68.2	-8.5	2.26 V	234	46.8	12.9
2	*5825.00	118.2 PK			2.26 V	234	74.7	43.5
3	*5825.00	110.4 AV			2.26 V	234	66.9	43.5
4	#5955.96	59.5 PK	68.2	-8.7	2.26 V	234	45.6	13.9
5	11650.00	58.3 PK	74.0	-15.7	1.72 V	316	38.4	19.9
6	11650.00	48.4 AV	54.0	-5.6	1.72 V	316	28.5	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Karl Lee		

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	59.4 PK	74.0	-14.6	2.43 H	84	46.9	12.5
2	5150.00	50.4 AV	54.0	-3.6	2.43 H	84	37.9	12.5
3	*5180.00	117.7 PK			2.43 H	92	75.2	42.5
4	*5180.00	106.6 AV			2.43 H	92	64.1	42.5
5	#10360.00	56.7 PK	68.2	-11.5	1.59 H	125	38.2	18.5
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	63.2 PK	74.0	-10.8	2.26 V	84	50.7	12.5
2	5150.00	52.9 AV	54.0	-1.1	2.26 V	84	40.4	12.5
3	*5180.00	122.2 PK			2.32 V	85	79.7	42.5
4	*5180.00	111.1 AV			2.32 V	85	68.6	42.5
5	#10360.00	57.0 PK	68.2	-11.2	2.71 V	46	38.5	18.5

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Karl Lee		

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	59.6 PK	74.0	-14.4	1.69 H	112	47.1	12.5
2	5150.00	48.7 AV	54.0	-5.3	1.69 H	112	36.2	12.5
3	*5200.00	118.5 PK			1.76 H	114	76.0	42.5
4	*5200.00	108.4 AV			1.76 H	114	65.9	42.5
5	5350.00	57.9 PK	74.0	-16.1	1.64 H	102	45.0	12.9
6	5350.00	47.4 AV	54.0	-6.6	1.64 H	102	34.5	12.9
7	#10400.00	57.1 PK	68.2	-11.1	1.42 H	253	38.6	18.5
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	61.6 PK	74.0	-12.4	2.47 V	84	49.1	12.5
2	5150.00	51.2 AV	54.0	-2.8	2.47 V	84	38.7	12.5
3	*5200.00	123.1 PK			2.37 V	77	80.6	42.5
4	*5200.00	112.3 AV			2.37 V	77	69.8	42.5
5	5350.00	59.2 PK	74.0	-14.8	2.37 V	71	46.3	12.9
6	5350.00	48.0 AV	54.0	-6.0	2.37 V	71	35.1	12.9
7	#10400.00	57.6 PK	68.2	-10.6	1.55 V	89	39.1	18.5

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Karl Lee		

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	57.9 PK	74.0	-16.1	1.76 H	109	45.4	12.5
2	5150.00	47.8 AV	54.0	-6.2	1.76 H	109	35.3	12.5
3	*5240.00	119.9 PK			1.76 H	113	77.2	42.7
4	*5240.00	108.5 AV			1.76 H	113	65.8	42.7
5	5350.00	57.3 PK	74.0	-16.7	1.82 H	93	44.4	12.9
6	5350.00	47.4 AV	54.0	-6.6	1.82 H	93	34.5	12.9
7	#10480.00	56.1 PK	68.2	-12.1	2.11 H	135	37.8	18.3
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	5150.00	60.6 PK	74.0	-13.4	2.38 V	82	48.1	12.5
2	5150.00	50.0 AV	54.0	-4.0	2.38 V	82	37.5	12.5
3	*5240.00	123.4 PK			2.38 V	85	80.7	42.7
4	*5240.00	112.3 AV			2.38 V	85	69.6	42.7
5	5350.00	59.2 PK	74.0	-14.8	2.43 V	94	46.3	12.9
6	5350.00	48.4 AV	54.0	-5.6	2.43 V	94	35.5	12.9
7	#10480.00	56.4 PK	68.2	-11.8	1.56 V	81	38.1	18.3

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	58.4 PK	74.0	-15.6	2.43 H	143	45.9	12.5
2	5150.00	48.3 AV	54.0	-5.7	2.43 H	143	35.8	12.5
3	*5260.00	116.3 PK			2.43 H	143	73.6	42.7
4	*5260.00	108.7 AV			2.43 H	143	66.0	42.7
5	#10520.00	56.3 PK	68.2	-11.9	1.75 H	3	38.1	18.2
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	5150.00	58.7 PK	74.0	-15.3	2.32 V	85	46.2	12.5
2	5150.00	49.7 AV	54.0	-4.3	2.32 V	85	37.2	12.5
3	*5260.00	122.0 PK			2.32 V	85	79.3	42.7
4	*5260.00	114.4 AV			2.32 V	85	71.7	42.7
5	#10520.00	56.5 PK	68.2	-11.7	1.16 V	349	38.3	18.2

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	58.2 PK	74.0	-15.8	2.43 H	144	45.7	12.5
2	5150.00	48.3 AV	54.0	-5.7	2.43 H	144	35.8	12.5
3	*5300.00	114.4 PK			2.43 H	144	71.6	42.8
4	*5300.00	106.6 AV			2.43 H	144	63.8	42.8
5	5350.00	58.4 PK	74.0	-15.6	2.43 H	144	45.5	12.9
6	5350.00	48.5 AV	54.0	-5.5	2.43 H	144	35.6	12.9
7	10600.00	57.0 PK	74.0	-17.0	1.05 H	100	38.6	18.4
8	10600.00	48.1 AV	54.0	-5.9	1.05 H	100	29.7	18.4
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	5150.00	58.6 PK	74.0	-15.4	2.32 V	85	46.1	12.5
2	5150.00	48.4 AV	54.0	-5.6	2.32 V	85	35.9	12.5
3	*5300.00	119.8 PK			2.32 V	85	77.0	42.8
4	*5300.00	111.1 AV			2.32 V	85	68.3	42.8
5	5350.00	63.7 PK	74.0	-10.3	2.30 V	284	50.8	12.9
6	5350.00	52.7 AV	54.0	-1.3	2.30 V	284	39.8	12.9
7	10600.00	57.2 PK	74.0	-16.8	1.64 V	4	38.8	18.4
8	10600.00	48.3 AV	54.0	-5.7	1.64 V	4	29.9	18.4

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	111.1 PK			2.43 H	144	68.2	42.9
2	*5320.00	103.6 AV			2.43 H	144	60.7	42.9
3	5350.00	58.2 PK	74.0	-15.8	2.43 H	144	45.3	12.9
4	5350.00	48.1 AV	54.0	-5.9	2.43 H	144	35.2	12.9
5	10640.00	57.1 PK	74.0	-16.9	1.89 H	9	38.7	18.4
6	10640.00	48.2 AV	54.0	-5.8	1.89 H	9	29.8	18.4
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	*5320.00	116.9 PK			2.32 V	85	74.0	42.9
2	*5320.00	108.7 AV			2.32 V	85	65.8	42.9
3	5350.00	62.1 PK	74.0	-11.9	2.29 V	284	49.2	12.9
4	5350.00	53.0 AV	54.0	-1.0	2.29 V	284	40.1	12.9
5	10640.00	57.3 PK	74.0	-16.7	1.75 V	197	38.9	18.4
6	10640.00	48.4 AV	54.0	-5.6	1.75 V	197	30.0	18.4

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Karl Lee		

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	60.7 PK	74.0	-13.3	2.52 H	139	47.5	13.2
2	5460.00	51.0 AV	54.0	-3.0	2.52 H	139	37.8	13.2
3	#5470.00	62.1 PK	68.2	-6.1	2.61 H	152	48.9	13.2
4	*5500.00	118.4 PK			2.56 H	153	75.5	42.9
5	*5500.00	107.2 AV			2.56 H	153	64.3	42.9
6	11000.00	57.1 PK	74.0	-16.9	1.67 H	251	38.2	18.9
7	11000.00	47.5 AV	54.0	-6.5	1.67 H	251	28.6	18.9
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	5460.00	63.5 PK	74.0	-10.5	2.08 V	114	50.3	13.2
2	5460.00	53.0 AV	54.0	-1.0	2.08 V	114	39.8	13.2
3	#5470.00	65.7 PK	68.2	-2.5	2.27 V	106	52.5	13.2
4	*5500.00	121.2 PK			2.33 V	115	78.3	42.9
5	*5500.00	110.3 AV			2.33 V	115	67.4	42.9
6	11000.00	57.4 PK	74.0	-16.6	1.82 V	93	38.5	18.9
7	11000.00	47.8 AV	54.0	-6.2	1.82 V	93	28.9	18.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Karl Lee		

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	59.2 PK	74.0	-14.8	2.52 H	136	46.0	13.2
2	5460.00	46.6 AV	54.0	-7.4	2.52 H	136	33.4	13.2
3	#5470.00	59.1 PK	68.2	-9.1	2.14 H	153	45.9	13.2
4	*5580.00	120.4 PK			2.54 H	144	77.5	42.9
5	*5580.00	109.3 AV			2.54 H	144	66.4	42.9
6	#5725.00	59.5 PK	68.2	-8.7	2.59 H	147	46.3	13.2
7	11160.00	56.8 PK	74.0	-17.2	1.31 H	226	37.8	19.0
8	11160.00	47.3 AV	54.0	-6.7	1.31 H	226	28.3	19.0
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	59.8 PK	74.0	-14.2	2.47 V	123	46.6	13.2
2	5460.00	49.2 AV	54.0	-4.8	2.47 V	123	36.0	13.2
3	#5470.00	58.9 PK	68.2	-9.3	2.34 V	108	45.7	13.2
4	*5580.00	123.4 PK			2.36 V	119	80.5	42.9
5	*5580.00	112.6 AV			2.36 V	119	69.7	42.9
6	#5725.00	60.5 PK	68.2	-7.7	2.36 V	112	47.3	13.2
7	11160.00	57.4 PK	74.0	-16.6	1.95 V	154	38.4	19.0
8	11160.00	47.7 AV	54.0	-6.3	1.95 V	154	28.7	19.0

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Karl Lee		

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	114.3 PK			2.54 H	141	71.2	43.1
2	*5700.00	103.0 AV			2.54 H	141	59.9	43.1
3	#5725.00	64.8 PK	68.2	-3.4	2.33 H	148	51.6	13.2
4	11400.00	57.9 PK	74.0	-16.1	2.04 H	119	38.4	19.5
5	11400.00	48.3 AV	54.0	-5.7	2.04 H	119	28.8	19.5
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	116.6 PK			2.18 V	118	73.5	43.1
2	*5700.00	106.1 AV			2.18 V	118	63.0	43.1
3	#5725.00	67.1 PK	68.2	-1.1	2.07 V	152	53.9	13.2
4	11400.00	58.3 PK	74.0	-15.7	1.67 V	102	38.8	19.5
5	11400.00	48.6 AV	54.0	-5.4	1.67 V	102	29.1	19.5

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	57.4 PK	74.0	-16.6	2.44 H	138	44.2	13.2
2	5460.00	47.5 AV	54.0	-6.5	2.44 H	138	34.3	13.2
3	#5470.00	57.8 PK	68.2	-10.4	2.44 H	138	44.6	13.2
4	*5720.00	113.1 PK			2.44 H	138	69.8	43.3
5	*5720.00	105.2 AV			2.44 H	138	61.9	43.3
6	11440.00	57.7 PK	74.0	-16.3	1.69 H	309	38.0	19.7
7	11440.00	47.9 AV	54.0	-6.1	1.69 H	309	28.2	19.7
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	5460.00	57.6 PK	74.0	-16.4	2.26 V	233	44.4	13.2
2	5460.00	47.7 AV	54.0	-6.3	2.26 V	233	34.5	13.2
3	#5470.00	58.0 PK	68.2	-10.2	2.26 V	233	44.8	13.2
4	*5720.00	119.7 PK			2.26 V	233	76.4	43.3
5	*5720.00	111.2 AV			2.26 V	233	67.9	43.3
6	11440.00	58.1 PK	74.0	-15.9	1.50 V	250	38.4	19.7
7	11440.00	48.2 AV	54.0	-5.8	1.50 V	250	28.5	19.7

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	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5648.85	58.7 PK	68.2	-9.5	2.44 H	56	45.6	13.1
2	*5745.00	115.2 PK			2.44 H	56	71.8	43.4
3	*5745.00	106.7 AV			2.44 H	56	63.3	43.4
4	#5945.55	58.5 PK	68.2	-9.7	2.44 H	56	44.6	13.9
5	11490.00	57.9 PK	74.0	-16.1	1.45 H	344	38.0	19.9
6	11490.00	48.0 AV	54.0	-6.0	1.45 H	344	28.1	19.9
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	#5646.45	61.0 PK	68.2	-7.2	2.26 V	234	47.9	13.1
2	*5745.00	121.4 PK			2.26 V	234	78.0	43.4
3	*5745.00	112.5 AV			2.26 V	234	69.1	43.4
4	#5953.95	59.4 PK	68.2	-8.8	2.26 V	234	45.5	13.9
5	11490.00	58.4 PK	74.0	-15.6	1.62 V	228	38.5	19.9
6	11490.00	48.3 AV	54.0	-5.7	1.62 V	228	28.4	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5612.41	57.8 PK	68.2	-10.4	2.44 H	56	44.8	13.0
2	*5785.00	115.1 PK			2.44 H	56	71.7	43.4
3	*5785.00	106.7 AV			2.44 H	56	63.3	43.4
4	#5952.75	58.4 PK	68.2	-9.8	2.44 H	56	44.5	13.9
5	11570.00	58.0 PK	74.0	-16.0	1.72 H	319	38.1	19.9
6	11570.00	48.2 AV	54.0	-5.8	1.72 H	319	28.3	19.9
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	#5634.03	59.1 PK	68.2	-9.1	2.26 V	234	46.2	12.9
2	*5785.00	120.2 PK			2.26 V	234	76.8	43.4
3	*5785.00	111.4 AV			2.26 V	234	68.0	43.4
4	#5941.54	59.7 PK	68.2	-8.5	2.26 V	234	45.9	13.8
5	11570.00	58.3 PK	74.0	-15.7	1.64 V	299	38.4	19.9
6	11570.00	48.2 AV	54.0	-5.8	1.64 V	299	28.3	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5647.25	57.8 PK	68.2	-10.4	2.44 H	56	44.7	13.1
2	*5825.00	114.1 PK			2.44 H	56	70.6	43.5
3	*5825.00	105.5 AV			2.44 H	56	62.0	43.5
4	#5972.37	58.9 PK	68.2	-9.3	2.44 H	56	44.9	14.0
5	11650.00	58.0 PK	74.0	-16.0	1.92 H	347	38.1	19.9
6	11650.00	48.0 AV	54.0	-6.0	1.92 H	347	28.1	19.9
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	#5648.85	59.5 PK	68.2	-8.7	2.26 V	234	46.4	13.1
2	*5825.00	120.3 PK			2.26 V	234	76.8	43.5
3	*5825.00	111.4 AV			2.26 V	234	67.9	43.5
4	#5929.13	60.0 PK	68.2	-8.2	2.26 V	234	46.2	13.8
5	11650.00	58.2 PK	74.0	-15.8	1.95 V	5	38.3	19.9
6	11650.00	48.1 AV	54.0	-5.9	1.95 V	5	28.2	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Karl Lee		

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	60.6 PK	74.0	-13.4	1.84 H	108	48.1	12.5
2	5150.00	50.0 AV	54.0	-4.0	1.84 H	108	37.5	12.5
3	*5190.00	112.6 PK			1.80 H	114	70.1	42.5
4	*5190.00	102.1 AV			1.80 H	114	59.6	42.5
5	5350.00	57.6 PK	74.0	-16.4	1.80 H	114	44.7	12.9
6	5350.00	44.6 AV	54.0	-9.4	1.80 H	114	31.7	12.9
7	#10380.00	56.6 PK	68.2	-11.6	1.43 H	225	38.2	18.4
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	5150.00	62.4 PK	74.0	-11.6	2.28 V	62	49.9	12.5
2	5150.00	53.0 AV	54.0	-1.0	2.28 V	62	40.5	12.5
3	*5190.00	116.5 PK			2.36 V	86	74.0	42.5
4	*5190.00	106.0 AV			2.36 V	86	63.5	42.5
5	5350.00	58.0 PK	74.0	-16.0	2.37 V	101	45.1	12.9
6	5350.00	47.5 AV	54.0	-6.5	2.37 V	101	34.6	12.9
7	#10380.00	57.2 PK	68.2	-11.0	1.60 V	249	38.8	18.4

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Karl Lee		

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	61.5 PK	74.0	-12.5	1.81 H	112	49.0	12.5
2	5150.00	50.1 AV	54.0	-3.9	1.81 H	112	37.6	12.5
3	*5230.00	116.1 PK			1.76 H	108	73.5	42.6
4	*5230.00	106.0 AV			1.76 H	108	63.4	42.6
5	5350.00	58.4 PK	74.0	-15.6	1.89 H	112	45.5	12.9
6	5350.00	48.2 AV	54.0	-5.8	1.89 H	112	35.3	12.9
7	#10460.00	56.2 PK	68.2	-12.0	2.56 H	126	37.9	18.3
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	5150.00	62.6 PK	74.0	-11.4	2.27 V	81	50.1	12.5
2	5150.00	52.9 AV	54.0	-1.1	2.27 V	81	40.4	12.5
3	*5230.00	119.8 PK			2.38 V	85	77.2	42.6
4	*5230.00	109.6 AV			2.38 V	85	67.0	42.6
5	5350.00	60.6 PK	74.0	-13.4	2.57 V	102	47.7	12.9
6	5350.00	49.9 AV	54.0	-4.1	2.57 V	102	37.0	12.9
7	#10460.00	56.8 PK	68.2	-11.4	1.42 V	207	38.5	18.3

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	58.1 PK	74.0	-15.9	2.43 H	144	45.6	12.5
2	5150.00	48.3 AV	54.0	-5.7	2.43 H	144	35.8	12.5
3	*5270.00	111.4 PK			2.43 H	144	68.7	42.7
4	*5270.00	103.6 AV			2.43 H	144	60.9	42.7
5	5350.00	58.4 PK	74.0	-15.6	2.43 H	144	45.5	12.9
6	5350.00	48.4 AV	54.0	-5.6	2.43 H	144	35.5	12.9
7	#10540.00	57.1 PK	68.2	-11.1	1.68 H	291	38.8	18.3
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	5150.00	58.4 PK	74.0	-15.6	2.32 V	85	45.9	12.5
2	5150.00	48.6 AV	54.0	-5.4	2.32 V	85	36.1	12.5
3	*5270.00	116.2 PK			2.32 V	85	73.5	42.7
4	*5270.00	108.5 AV			2.32 V	85	65.8	42.7
5	5350.00	62.8 PK	74.0	-11.2	2.29 V	284	49.9	12.9
6	5350.00	53.0 AV	54.0	-1.0	2.29 V	284	40.1	12.9
7	#10540.00	57.4 PK	68.2	-10.8	1.45 V	5	39.1	18.3

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	58.2 PK	74.0	-15.8	2.43 H	144	45.7	12.5
2	5150.00	48.5 AV	54.0	-5.5	2.43 H	144	36.0	12.5
3	*5310.00	107.1 PK			2.43 H	144	64.3	42.8
4	*5310.00	99.0 AV			2.43 H	144	56.2	42.8
5	5350.00	59.2 PK	74.0	-14.8	2.43 H	144	46.3	12.9
6	5350.00	49.3 AV	54.0	-4.7	2.43 H	144	36.4	12.9
7	10620.00	57.4 PK	74.0	-16.6	1.05 H	300	39.0	18.4
8	10620.00	47.8 AV	54.0	-6.2	1.05 H	300	29.4	18.4
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	5150.00	58.1 PK	74.0	-15.9	2.32 V	85	45.6	12.5
2	5150.00	48.3 AV	54.0	-5.7	2.32 V	85	35.8	12.5
3	*5310.00	113.1 PK			2.32 V	85	70.3	42.8
4	*5310.00	105.5 AV			2.32 V	85	62.7	42.8
5	5350.00	63.3 PK	74.0	-10.7	2.29 V	284	50.4	12.9
6	5350.00	52.8 AV	54.0	-1.2	2.29 V	284	39.9	12.9
7	10620.00	57.5 PK	74.0	-16.5	1.59 V	9	39.1	18.4
8	10620.00	48.2 AV	54.0	-5.8	1.59 V	9	29.8	18.4

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Karl Lee		

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	62.4 PK	74.0	-11.6	2.44 H	157	49.2	13.2
2	5460.00	51.2 AV	54.0	-2.8	2.44 H	157	38.0	13.2
3	#5470.00	63.7 PK	68.2	-4.5	2.46 H	161	50.5	13.2
4	*5510.00	113.2 PK			2.56 H	157	70.2	43.0
5	*5510.00	102.5 AV			2.56 H	157	59.5	43.0
6	#5725.00	58.3 PK	68.2	-9.9	1.84 H	142	45.1	13.2
7	11020.00	56.7 PK	74.0	-17.3	1.75 H	211	37.9	18.8
8	11020.00	47.1 AV	54.0	-6.9	1.75 H	211	28.3	18.8
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	62.3 PK	74.0	-11.7	2.26 V	108	49.1	13.2
2	5460.00	52.8 AV	54.0	-1.2	2.26 V	108	39.6	13.2
3	#5470.00	66.9 PK	68.2	-1.3	2.43 V	121	53.7	13.2
4	*5510.00	116.9 PK			2.33 V	113	73.9	43.0
5	*5510.00	105.8 AV			2.33 V	113	62.8	43.0
6	#5725.00	59.2 PK	68.2	-9.0	2.17 V	113	46.0	13.2
7	11020.00	57.2 PK	74.0	-16.8	1.66 V	148	38.4	18.8
8	11020.00	47.6 AV	54.0	-6.4	1.66 V	148	28.8	18.8

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Karl Lee		

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	60.8 PK	74.0	-13.2	2.39 H	145	47.6	13.2
2	5460.00	50.5 AV	54.0	-3.5	2.39 H	145	37.3	13.2
3	#5470.00	61.4 PK	68.2	-6.8	2.51 H	129	48.2	13.2
4	*5550.00	117.1 PK			2.54 H	144	74.1	43.0
5	*5550.00	106.5 AV			2.54 H	144	63.5	43.0
6	#5725.00	59.8 PK	68.2	-8.4	2.67 H	108	46.6	13.2
7	11100.00	56.8 PK	74.0	-17.2	2.86 H	124	37.8	19.0
8	11100.00	47.1 AV	54.0	-6.9	2.86 H	124	28.1	19.0
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	62.7 PK	74.0	-11.3	2.41 V	124	49.5	13.2
2	5460.00	52.4 AV	54.0	-1.6	2.41 V	124	39.2	13.2
3	#5470.00	63.5 PK	68.2	-4.7	2.33 V	141	50.3	13.2
4	*5550.00	120.8 PK			2.33 V	120	77.8	43.0
5	*5550.00	110.0 AV			2.33 V	120	67.0	43.0
6	#5725.00	60.7 PK	68.2	-7.5	2.50 V	137	47.5	13.2
7	11100.00	57.6 PK	74.0	-16.4	1.60 V	12	38.6	19.0
8	11100.00	47.9 AV	54.0	-6.1	1.60 V	12	28.9	19.0

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Karl Lee		

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	2.49 H	132	45.2	13.2
2	5460.00	47.1 AV	54.0	-6.9	2.49 H	132	33.9	13.2
3	#5470.00	59.2 PK	68.2	-9.0	2.57 H	161	46.0	13.2
4	*5670.00	113.1 PK			2.49 H	141	70.0	43.1
5	*5670.00	102.8 AV			2.49 H	141	59.7	43.1
6	#5725.00	64.8 PK	68.2	-3.4	2.62 H	154	51.6	13.2
7	11340.00	57.1 PK	74.0	-16.9	1.48 H	25	37.9	19.2
8	11340.00	47.5 AV	54.0	-6.5	1.48 H	25	28.3	19.2
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	5460.00	59.5 PK	74.0	-14.5	2.45 V	109	46.3	13.2
2	5460.00	48.0 AV	54.0	-6.0	2.45 V	109	34.8	13.2
3	#5470.00	59.0 PK	68.2	-9.2	2.52 V	122	45.8	13.2
4	*5670.00	117.6 PK			2.36 V	117	74.5	43.1
5	*5670.00	106.6 AV			2.36 V	117	63.5	43.1
6	#5725.00	66.9 PK	68.2	-1.3	2.51 V	132	53.7	13.2
7	11340.00	58.0 PK	74.0	-16.0	1.26 V	183	38.8	19.2
8	11340.00	48.5 AV	54.0	-5.5	1.26 V	183	29.3	19.2

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	57.3 PK	74.0	-16.7	2.44 H	138	44.1	13.2
2	5460.00	47.4 AV	54.0	-6.6	2.44 H	138	34.2	13.2
3	#5470.00	57.5 PK	68.2	-10.7	2.44 H	138	44.3	13.2
4	*5710.00	111.0 PK			2.44 H	138	67.9	43.1
5	*5710.00	103.3 AV			2.44 H	138	60.2	43.1
6	11420.00	57.5 PK	74.0	-16.5	1.75 H	309	38.0	19.5
7	11420.00	47.6 AV	54.0	-6.4	1.75 H	309	28.1	19.5
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	57.5 PK	74.0	-16.5	2.26 V	233	44.3	13.2
2	5460.00	47.6 AV	54.0	-6.4	2.26 V	233	34.4	13.2
3	#5470.00	57.8 PK	68.2	-10.4	2.26 V	233	44.6	13.2
4	*5710.00	116.4 PK			2.26 V	233	73.3	43.1
5	*5710.00	108.6 AV			2.26 V	233	65.5	43.1
6	11420.00	57.7 PK	74.0	-16.3	1.64 V	199	38.2	19.5
7	11420.00	47.9 AV	54.0	-6.1	1.64 V	199	28.4	19.5

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	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5646.45	59.7 PK	68.2	-8.5	2.44 H	56	46.6	13.1
2	*5755.00	112.3 PK			2.44 H	56	68.9	43.4
3	*5755.00	103.8 AV			2.44 H	56	60.4	43.4
4	#5957.96	58.5 PK	68.2	-9.7	2.44 H	56	44.6	13.9
5	11510.00	57.7 PK	74.0	-16.3	1.68 H	301	37.8	19.9
6	11510.00	47.6 AV	54.0	-6.4	1.68 H	301	27.7	19.9
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	#5648.85	62.4 PK	68.2	-5.8	2.26 V	234	49.3	13.1
2	*5755.00	118.1 PK			2.26 V	234	74.7	43.4
3	*5755.00	109.4 AV			2.26 V	234	66.0	43.4
4	#5949.15	60.6 PK	68.2	-7.6	2.26 V	234	46.7	13.9
5	11510.00	57.9 PK	74.0	-16.1	1.59 V	319	38.0	19.9
6	11510.00	48.2 AV	54.0	-5.8	1.59 V	319	28.3	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5646.85	58.2 PK	68.2	-10.0	2.44 H	56	45.1	13.1
2	*5795.00	112.0 PK			2.44 H	56	68.6	43.4
3	*5795.00	103.2 AV			2.44 H	56	59.8	43.4
4	#5927.13	59.2 PK	68.2	-9.0	2.44 H	56	45.4	13.8
5	11590.00	58.1 PK	74.0	-15.9	1.57 H	210	38.1	20.0
6	11590.00	48.2 AV	54.0	-5.8	1.57 H	210	28.2	20.0
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	#5643.64	60.5 PK	68.2	-7.7	2.26 V	234	47.6	12.9
2	*5795.00	117.3 PK			2.26 V	234	73.9	43.4
3	*5795.00	108.5 AV			2.26 V	234	65.1	43.4
4	#5944.74	60.3 PK	68.2	-7.9	2.26 V	234	46.4	13.9
5	11590.00	58.2 PK	74.0	-15.8	1.72 V	29	38.2	20.0
6	11590.00	48.1 AV	54.0	-5.9	1.72 V	29	28.1	20.0

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	802.11ax (HE80)	Channel	CH 42 : 5210 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	25°C, 61% RH
Tested By	Karl Lee		

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	58.4 PK	74.0	-15.6	1.82 H	94	45.9	12.5
2	5150.00	49.7 AV	54.0	-4.3	1.82 H	94	37.2	12.5
3	*5210.00	110.0 PK			1.81 H	107	67.4	42.6
4	*5210.00	100.1 AV			1.81 H	107	57.5	42.6
5	5350.00	58.2 PK	74.0	-15.8	1.81 H	107	45.3	12.9
6	5350.00	48.3 AV	54.0	-5.7	1.81 H	107	35.4	12.9
7	#10420.00	57.7 PK	68.2	-10.5	1.47 H	322	39.2	18.5
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	61.8 PK	74.0	-12.2	2.38 V	86	49.3	12.5
2	5150.00	53.0 AV	54.0	-1.0	2.38 V	86	40.5	12.5
3	*5210.00	115.3 PK			2.38 V	78	72.7	42.6
4	*5210.00	104.0 AV			2.38 V	78	61.4	42.6
5	5350.00	61.2 PK	74.0	-12.8	2.41 V	75	48.3	12.9
6	5350.00	50.6 AV	54.0	-3.4	2.41 V	75	37.7	12.9
7	#10420.00	56.8 PK	68.2	-11.4	2.30 V	217	38.3	18.5

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	802.11ax (HE80)	Channel	CH 58 : 5290 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	57.9 PK	74.0	-16.1	2.43 H	144	45.4	12.5
2	5150.00	48.0 AV	54.0	-6.0	2.43 H	144	35.5	12.5
3	*5290.00	104.4 PK			2.43 H	144	61.6	42.8
4	*5290.00	93.6 AV			2.43 H	144	50.8	42.8
5	5350.00	58.3 PK	74.0	-15.7	2.43 H	144	45.4	12.9
6	5350.00	48.6 AV	54.0	-5.4	2.43 H	144	35.7	12.9
7	#10580.00	57.6 PK	68.2	-10.6	1.97 H	199	39.2	18.4
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	5150.00	58.3 PK	74.0	-15.7	2.32 V	85	45.8	12.5
2	5150.00	48.4 AV	54.0	-5.6	2.32 V	85	35.9	12.5
3	*5290.00	110.1 PK			2.32 V	85	67.3	42.8
4	*5290.00	102.2 AV			2.32 V	85	59.4	42.8
5	5350.00	65.4 PK	74.0	-8.6	2.29 V	284	52.5	12.9
6	5350.00	52.5 AV	54.0	-1.5	2.29 V	284	39.6	12.9
7	#10580.00	58.1 PK	68.2	-10.1	1.45 V	197	39.7	18.4

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	802.11ax (HE80)	Channel	CH 106 : 5530 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	25°C, 61% RH
Tested By	Karl Lee		

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	60.0 PK	74.0	-14.0	2.55 H	154	46.8	13.2
2	5460.00	50.2 AV	54.0	-3.8	2.55 H	154	37.0	13.2
3	#5470.00	61.3 PK	68.2	-6.9	2.33 H	164	48.1	13.2
4	*5530.00	108.7 PK			2.53 H	162	65.7	43.0
5	*5530.00	97.7 AV			2.53 H	162	54.7	43.0
6	#5725.00	58.2 PK	68.2	-10.0	2.36 H	168	45.0	13.2
7	11060.00	56.6 PK	74.0	-17.4	2.91 H	132	37.7	18.9
8	11060.00	46.9 AV	54.0	-7.1	2.91 H	132	28.0	18.9
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	5460.00	63.1 PK	74.0	-10.9	2.50 V	142	49.9	13.2
2	5460.00	52.8 AV	54.0	-1.2	2.50 V	142	39.6	13.2
3	#5470.00	64.1 PK	68.2	-4.1	2.39 V	153	50.9	13.2
4	*5530.00	111.7 PK			2.45 V	121	68.7	43.0
5	*5530.00	101.0 AV			2.45 V	121	58.0	43.0
6	#5725.00	58.9 PK	68.2	-9.3	2.29 V	135	45.7	13.2
7	11060.00	57.1 PK	74.0	-16.9	1.43 V	235	38.2	18.9
8	11060.00	47.5 AV	54.0	-6.5	1.43 V	235	28.6	18.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE80)	Channel	CH 122 : 5610 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	25°C, 61% RH
Tested By	Karl Lee		

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	60.9 PK	74.0	-13.1	2.53 H	172	47.7	13.2
2	5460.00	50.4 AV	54.0	-3.6	2.53 H	172	37.2	13.2
3	#5470.00	61.0 PK	68.2	-7.2	2.60 H	183	47.8	13.2
4	*5610.00	113.8 PK			2.56 H	172	70.9	42.9
5	*5610.00	102.3 AV			2.56 H	172	59.4	42.9
6	#5725.00	65.3 PK	68.2	-2.9	2.53 H	147	52.1	13.2
7	11220.00	57.6 PK	74.0	-16.4	1.03 H	227	38.6	19.0
8	11220.00	47.8 AV	54.0	-6.2	1.03 H	227	28.8	19.0
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	62.5 PK	74.0	-11.5	2.23 V	108	49.3	13.2
2	5460.00	52.3 AV	54.0	-1.7	2.23 V	108	39.1	13.2
3	#5470.00	63.4 PK	68.2	-4.8	1.96 V	124	50.2	13.2
4	*5610.00	116.0 PK			2.18 V	121	73.1	42.9
5	*5610.00	105.6 AV			2.18 V	121	62.7	42.9
6	#5725.00	67.2 PK	68.2	-1.0	2.26 V	113	54.0	13.2
7	11220.00	57.3 PK	74.0	-16.7	2.06 V	29	38.3	19.0
8	11220.00	47.6 AV	54.0	-6.4	2.06 V	29	28.6	19.0

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	802.11ax (HE80)	Channel	CH 138 : 5690 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	57.3 PK	74.0	-16.7	2.44 H	55	44.1	13.2
2	5460.00	47.4 AV	54.0	-6.6	2.44 H	55	34.2	13.2
3	#5470.00	57.6 PK	68.2	-10.6	2.44 H	55	44.4	13.2
4	*5690.00	107.5 PK			2.44 H	55	64.4	43.1
5	*5690.00	99.6 AV			2.44 H	55	56.5	43.1
6	11380.00	57.5 PK	74.0	-16.5	1.59 H	209	38.1	19.4
7	11380.00	47.6 AV	54.0	-6.4	1.59 H	209	28.2	19.4
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	5460.00	58.5 PK	74.0	-15.5	2.26 V	233	45.3	13.2
2	5460.00	48.4 AV	54.0	-5.6	2.26 V	233	35.2	13.2
3	#5470.00	59.1 PK	68.2	-9.1	2.26 V	233	45.9	13.2
4	*5690.00	114.2 PK			2.26 V	233	71.1	43.1
5	*5690.00	106.3 AV			2.26 V	233	63.2	43.1
6	11380.00	57.6 PK	74.0	-16.4	1.05 V	200	38.2	19.4
7	11380.00	48.0 AV	54.0	-6.0	1.05 V	200	28.6	19.4

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	802.11ax (HE80)	Channel	CH 155 : 5775 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	#5647.25	60.5 PK	68.2	-7.7	2.44 H	56	47.4	13.1
2	*5775.00	109.4 PK			2.44 H	56	66.0	43.4
3	*5775.00	100.2 AV			2.44 H	56	56.8	43.4
4	#5933.93	60.3 PK	68.2	-7.9	2.44 H	56	46.5	13.8
5	11550.00	57.9 PK	74.0	-16.1	1.78 H	256	38.0	19.9
6	11550.00	48.0 AV	54.0	-6.0	1.78 H	256	28.1	19.9
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	#5637.24	64.9 PK	68.2	-3.3	2.26 V	234	52.0	12.9
2	*5775.00	115.1 PK			2.26 V	234	71.7	43.4
3	*5775.00	106.9 AV			2.26 V	234	63.5	43.4
4	#5926.33	66.8 PK	68.2	-1.4	2.25 V	79	53.0	13.8
5	11550.00	58.2 PK	74.0	-15.8	1.97 V	309	38.3	19.9
6	11550.00	48.3 AV	54.0	-5.7	1.97 V	309	28.4	19.9

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE160)	Channel	CH 50 : 5250 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	25°C, 61% RH
Tested By	Charles Hsiao		

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	58.7 PK	74.0	-15.3	2.43 H	144	46.2	12.5
2	5150.00	48.8 AV	54.0	-5.2	2.43 H	144	36.3	12.5
3	*5250.00	101.7 PK			2.43 H	144	59.0	42.7
4	*5250.00	93.6 AV			2.43 H	144	50.9	42.7
5	5350.00	58.7 PK	74.0	-15.3	2.43 H	144	45.8	12.9
6	5350.00	48.8 AV	54.0	-5.2	2.43 H	144	35.9	12.9
7	#10500.00	57.4 PK	68.2	-10.8	1.65 H	271	39.2	18.2
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	5150.00	60.0 PK	74.0	-14.0	2.32 V	85	47.5	12.5
2	5150.00	49.9 AV	54.0	-4.1	2.32 V	85	37.4	12.5
3	*5250.00	106.8 PK			2.32 V	85	64.1	42.7
4	*5250.00	98.7 AV			2.32 V	85	56.0	42.7
5	5350.00	63.2 PK	74.0	-10.8	2.29 V	241	50.3	12.9
6	5350.00	52.8 AV	54.0	-1.2	2.29 V	241	39.9	12.9
7	#10500.00	57.9 PK	68.2	-10.3	1.78 V	277	39.7	18.2

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	802.11ax (HE160)	Channel	CH 114 : 5570 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	25°C, 61% RH
Tested By	Karl Lee		

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	64.5 PK	74.0	-9.5	2.38 H	156	51.3	13.2
2	5460.00	49.2 AV	54.0	-4.8	2.38 H	156	36.0	13.2
3	#5470.00	65.2 PK	68.2	-3.0	2.37 H	136	52.0	13.2
4	*5570.00	105.8 PK			2.44 H	164	62.9	42.9
5	*5570.00	95.0 AV			2.44 H	164	52.1	42.9
6	#5725.00	62.1 PK	68.2	-6.1	2.51 H	122	48.9	13.2
7	11140.00	57.6 PK	74.0	-16.4	2.83 H	173	38.6	19.0
8	11140.00	48.0 AV	54.0	-6.0	2.83 H	173	29.0	19.0
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	67.0 PK	74.0	-7.0	2.59 V	125	53.8	13.2
2	5460.00	51.1 AV	54.0	-2.9	2.59 V	125	37.9	13.2
3	#5470.00	67.0 PK	68.2	-1.2	2.62 V	106	53.8	13.2
4	*5570.00	110.0 PK			2.64 V	119	67.1	42.9
5	*5570.00	99.1 AV			2.64 V	119	56.2	42.9
6	#5725.00	63.5 PK	68.2	-4.7	2.57 V	104	50.3	13.2
7	11140.00	57.2 PK	74.0	-16.8	2.13 V	188	38.2	19.0
8	11140.00	47.6 AV	54.0	-6.4	2.13 V	188	28.6	19.0

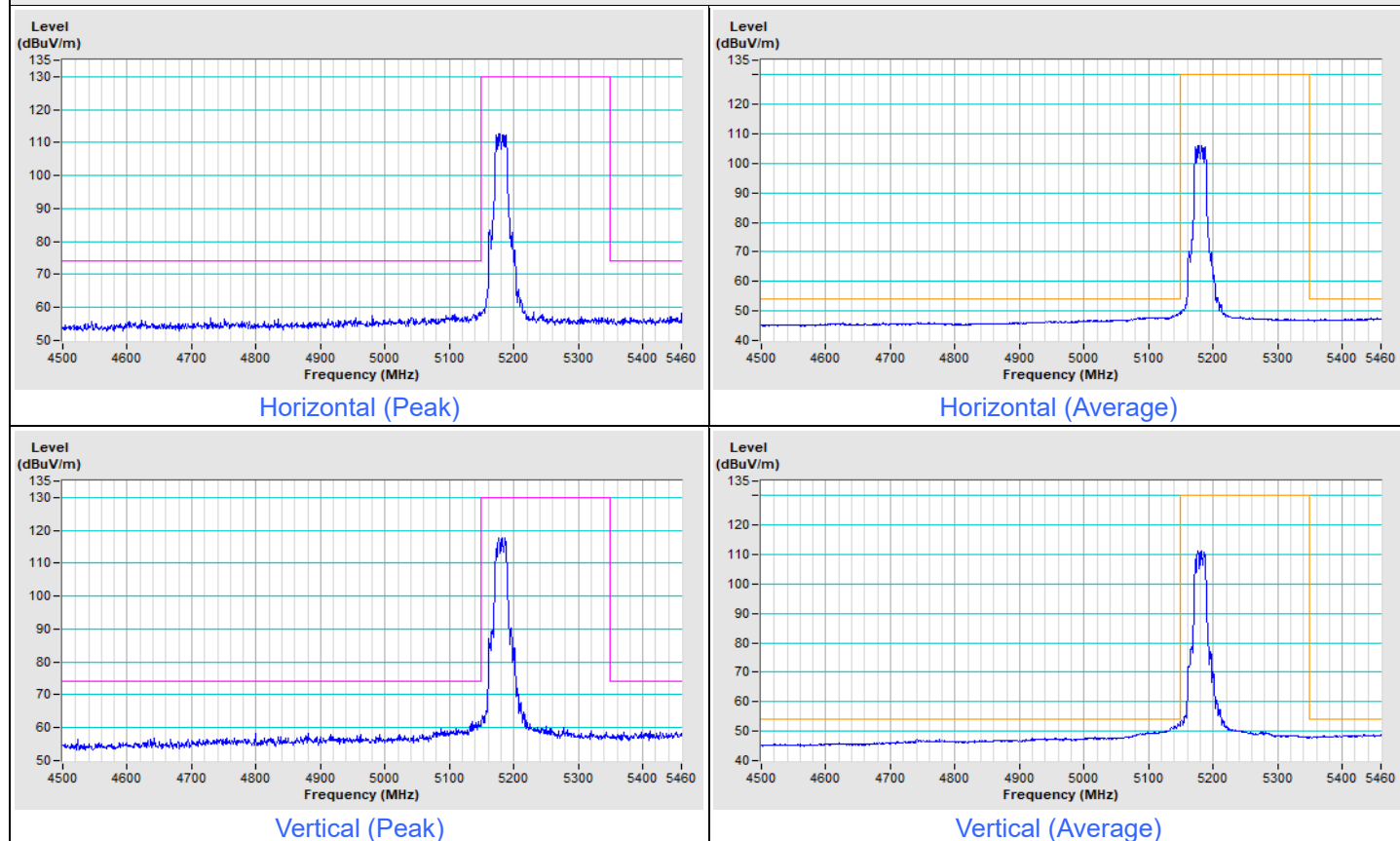
Remarks:

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.

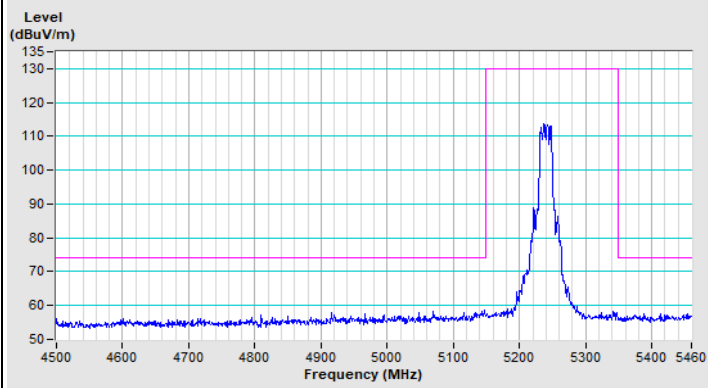
Plot of Band Edge

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
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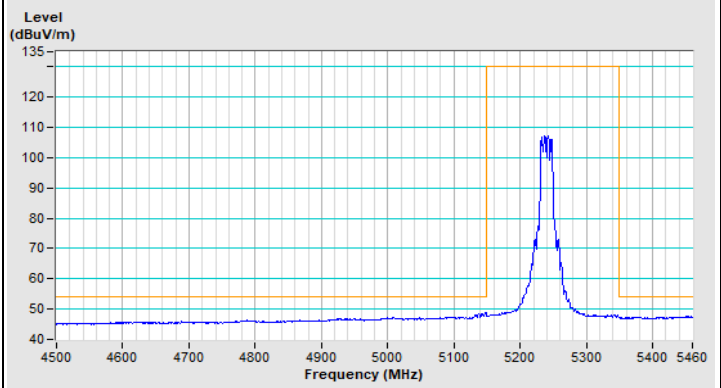
802.11a Channel 36



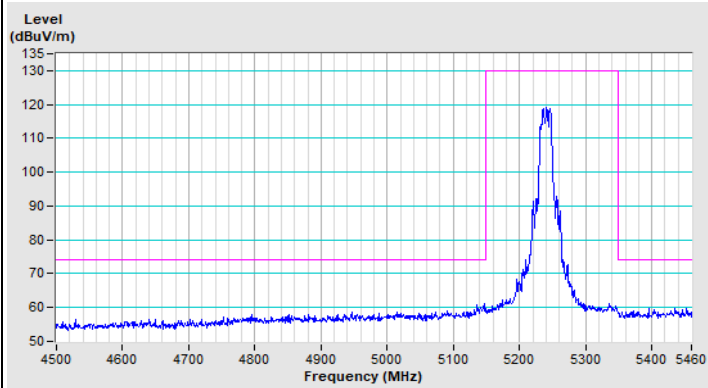
802.11a Channel 48



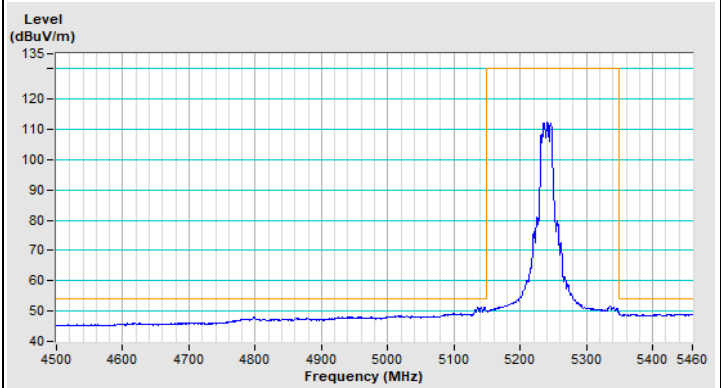
Horizontal (Peak)



Horizontal (Average)



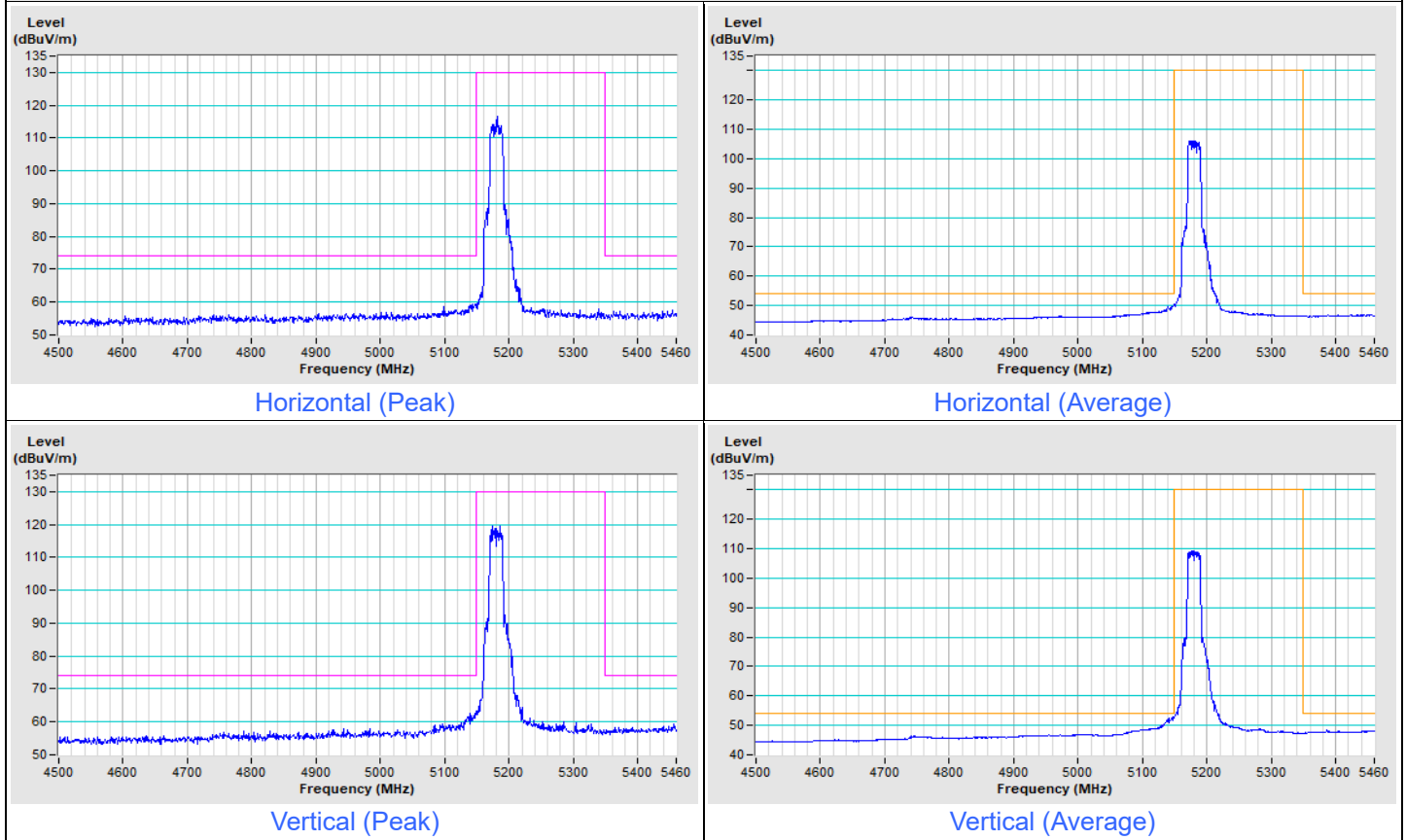
Vertical (Peak)

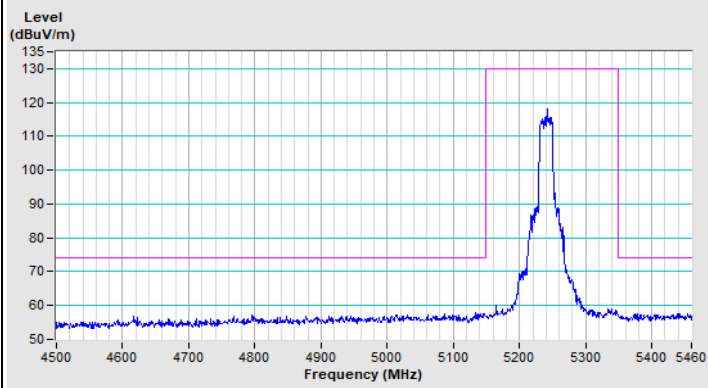


Vertical (Average)

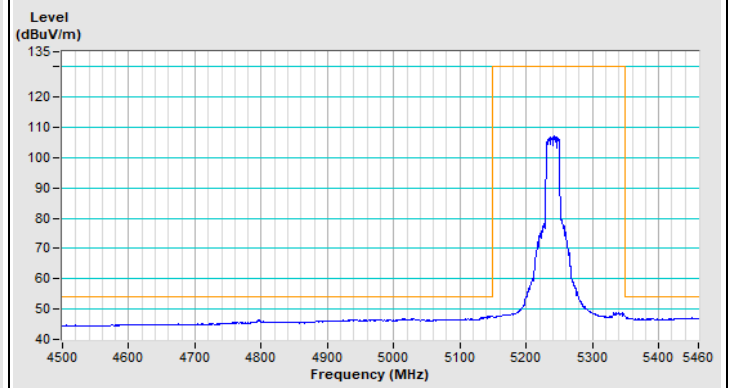
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE20) Channel 36

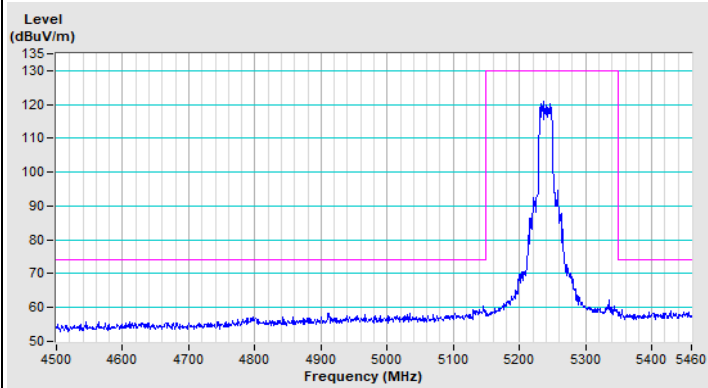


802.11ax (HE20) Channel 48

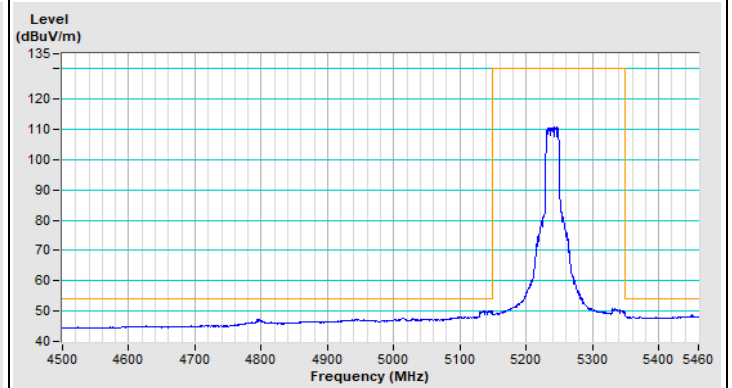
Horizontal (Peak)



Horizontal (Average)



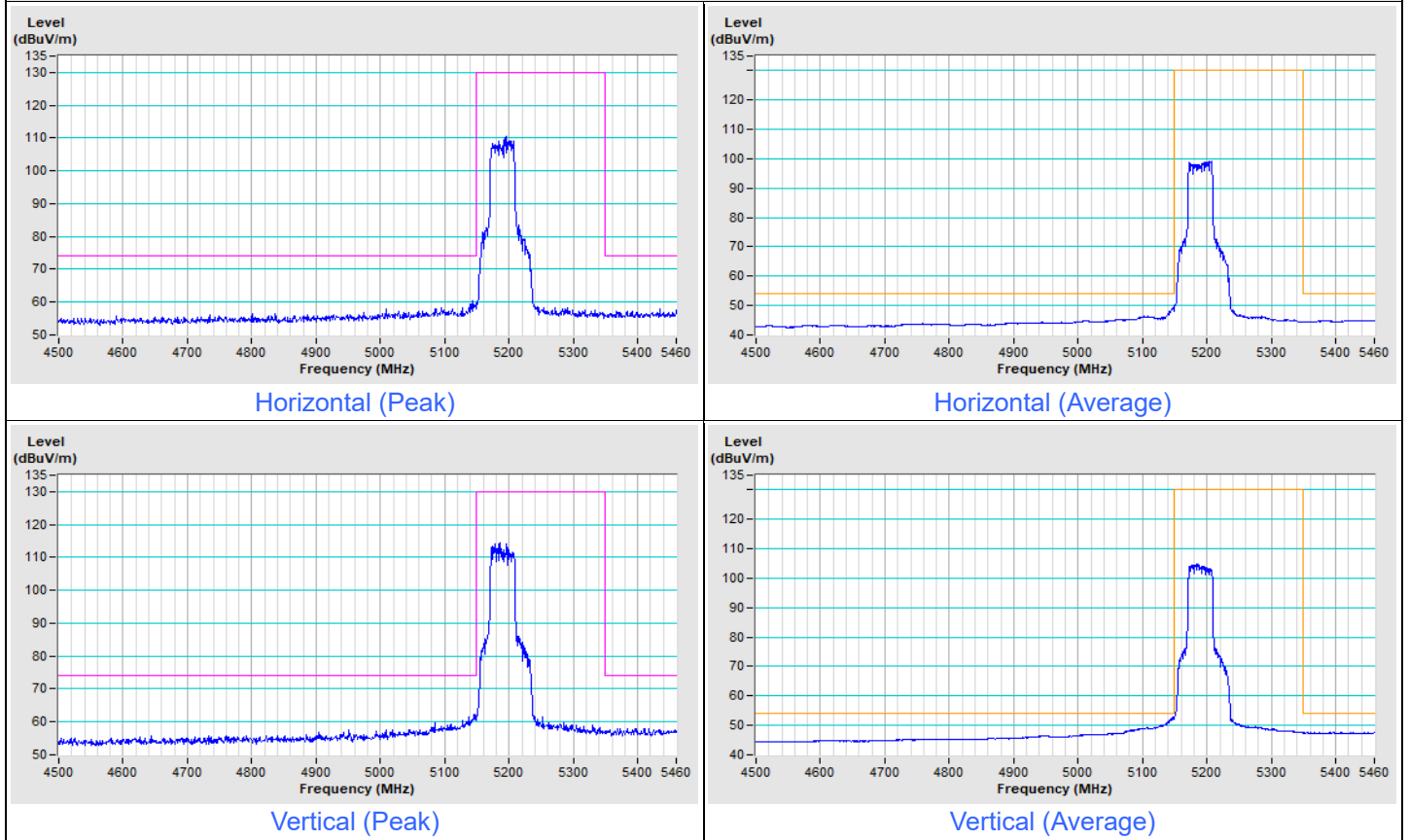
Vertical (Peak)



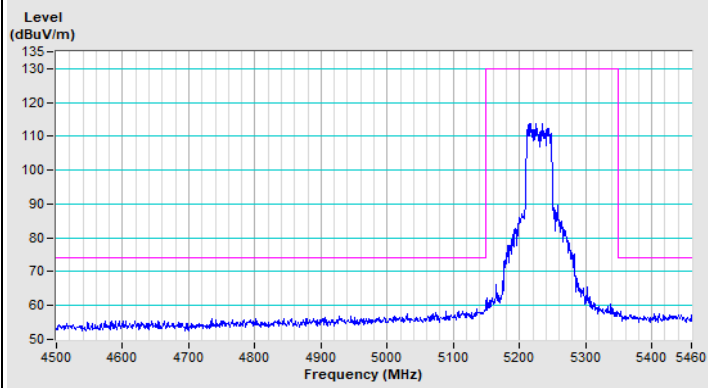
Vertical (Average)

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
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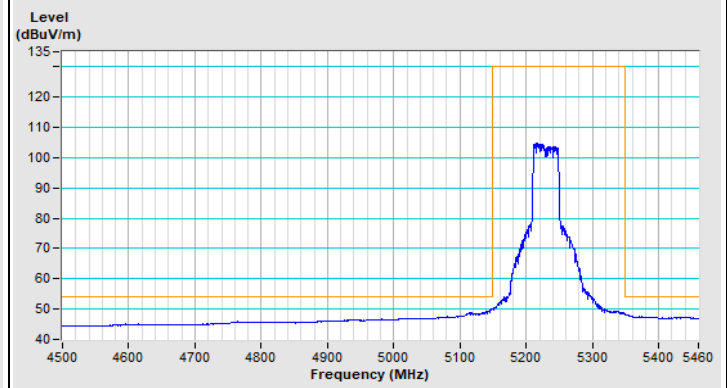
802.11ax (HE40) Channel 38



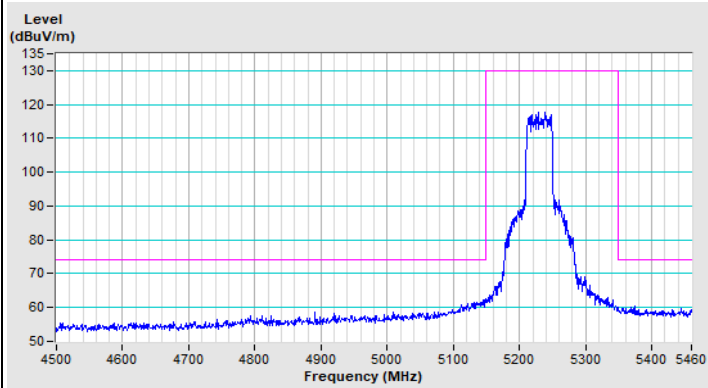
802.11ax (HE40) Channel 46



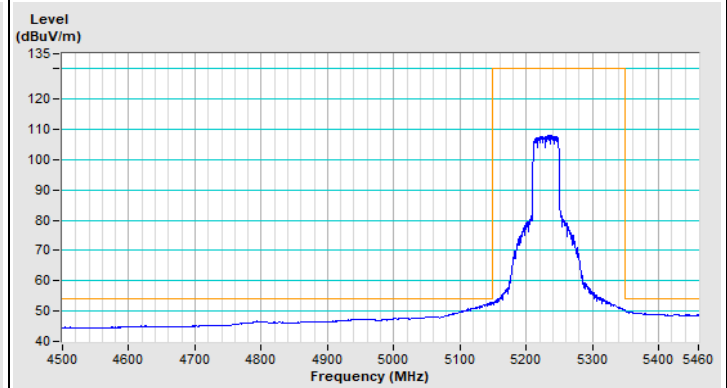
Horizontal (Peak)



Horizontal (Average)



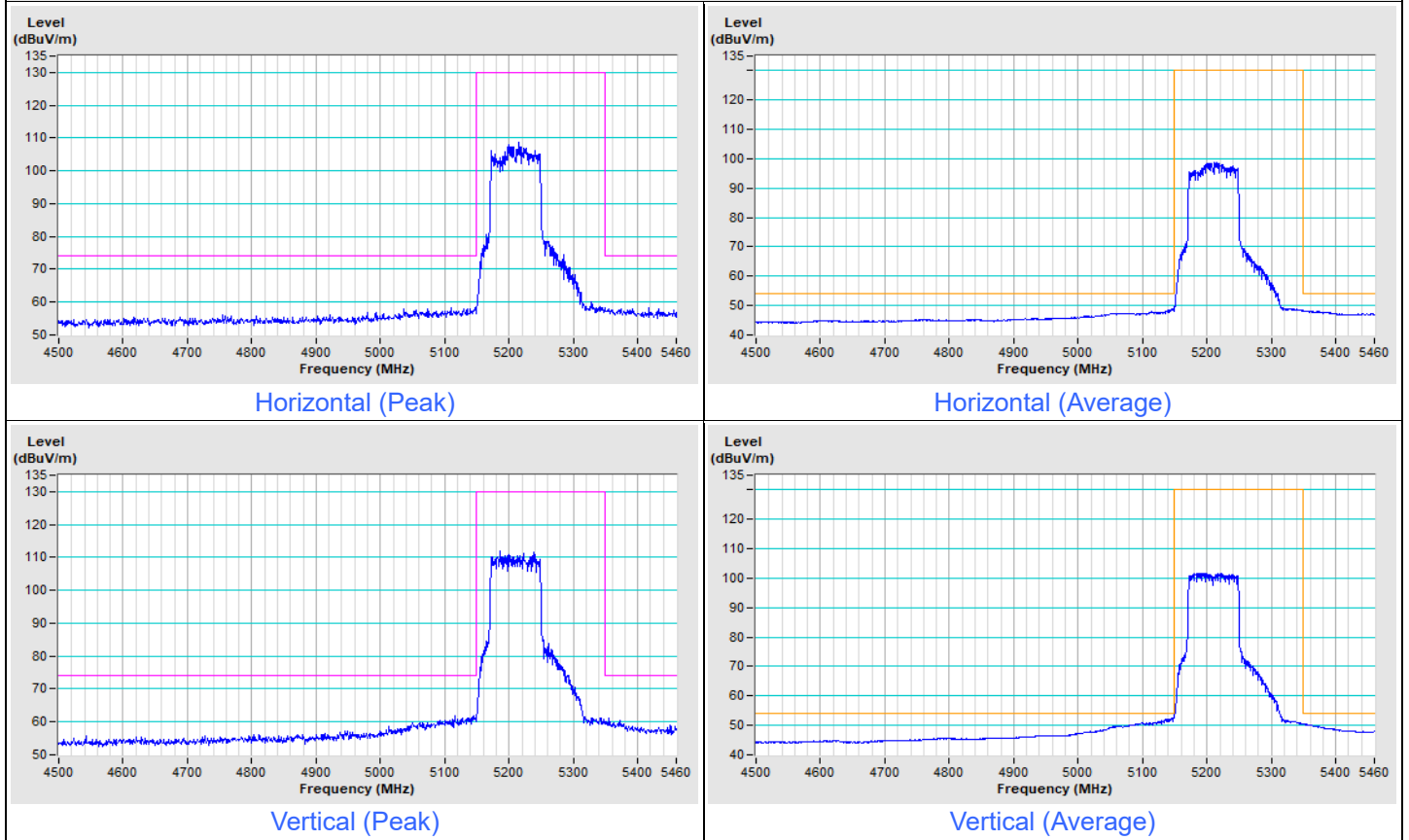
Vertical (Peak)



Vertical (Average)

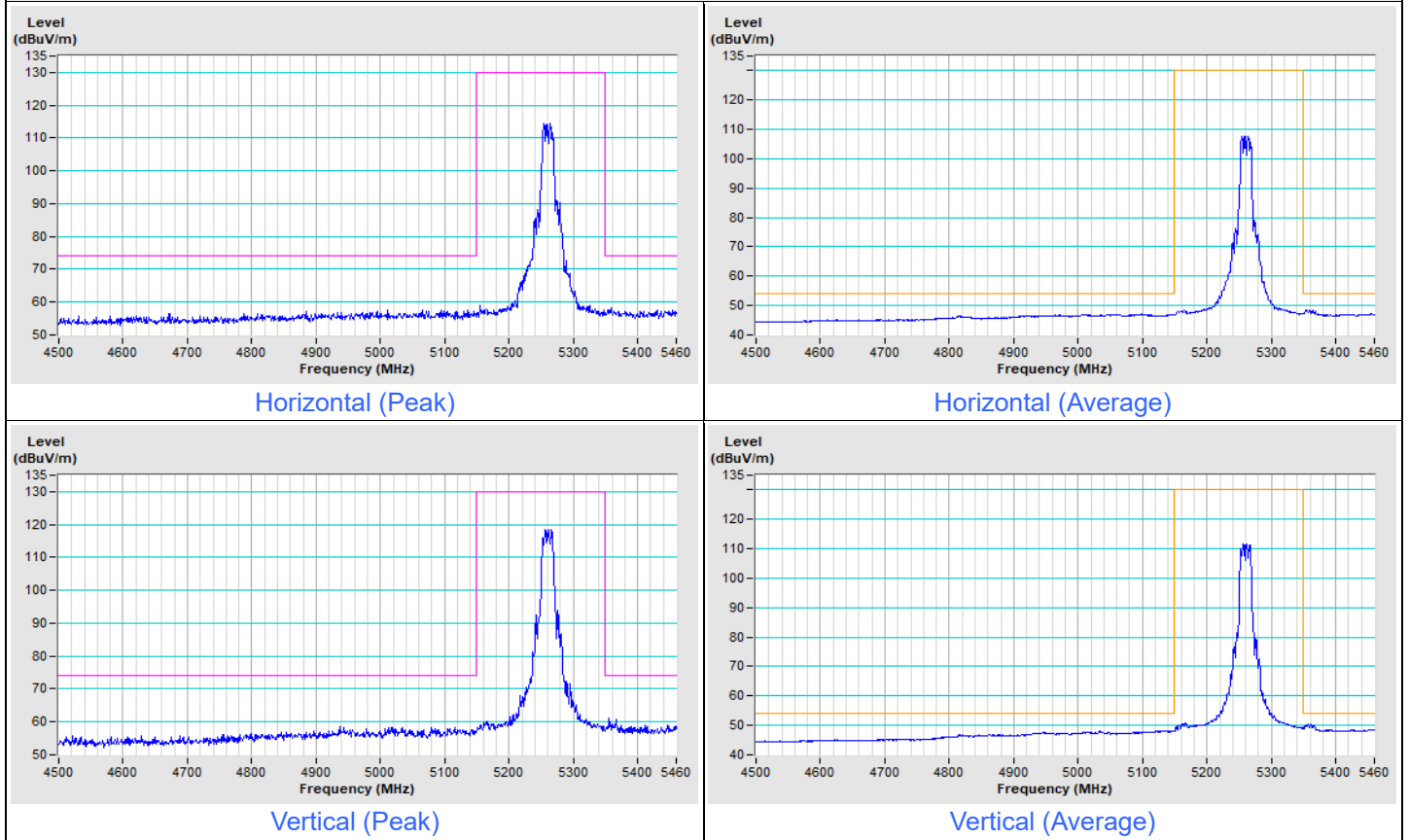
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE80) Channel 42

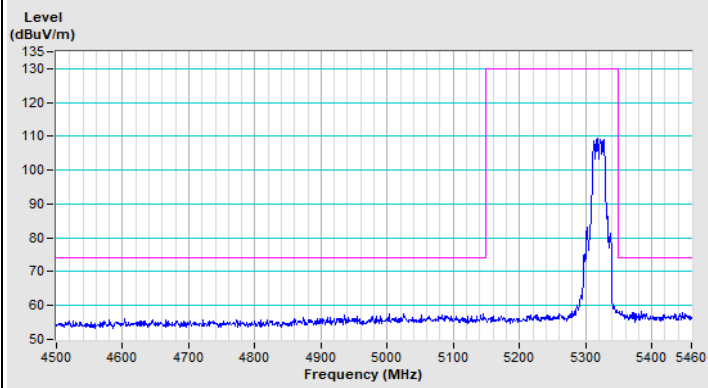


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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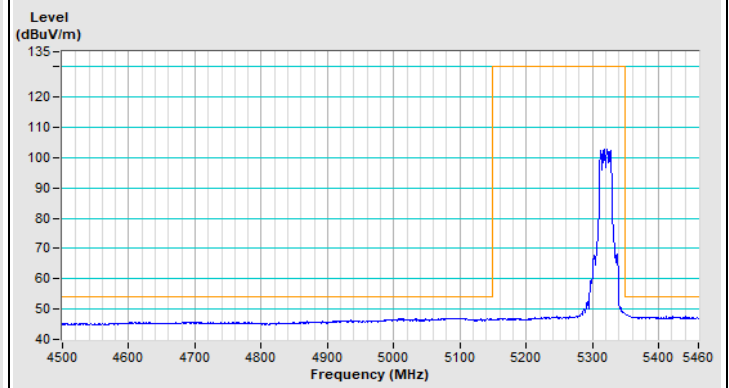
802.11a Channel 52



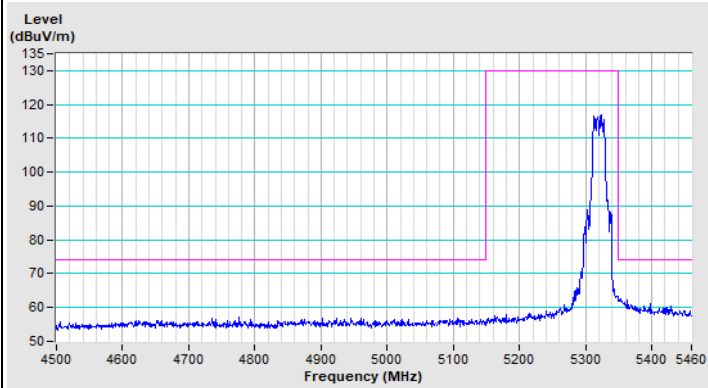
802.11a Channel 64



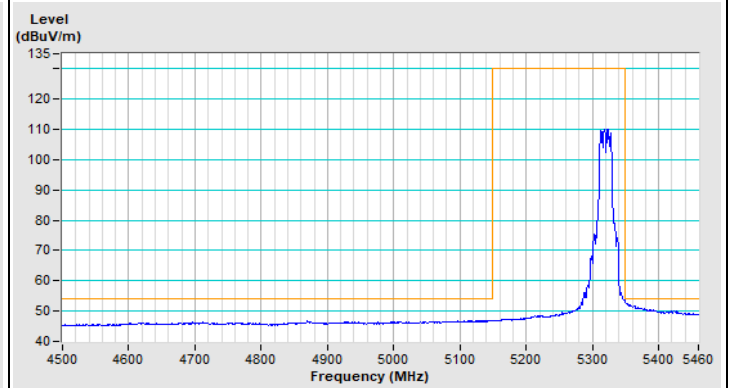
Horizontal (Peak)



Horizontal (Average)



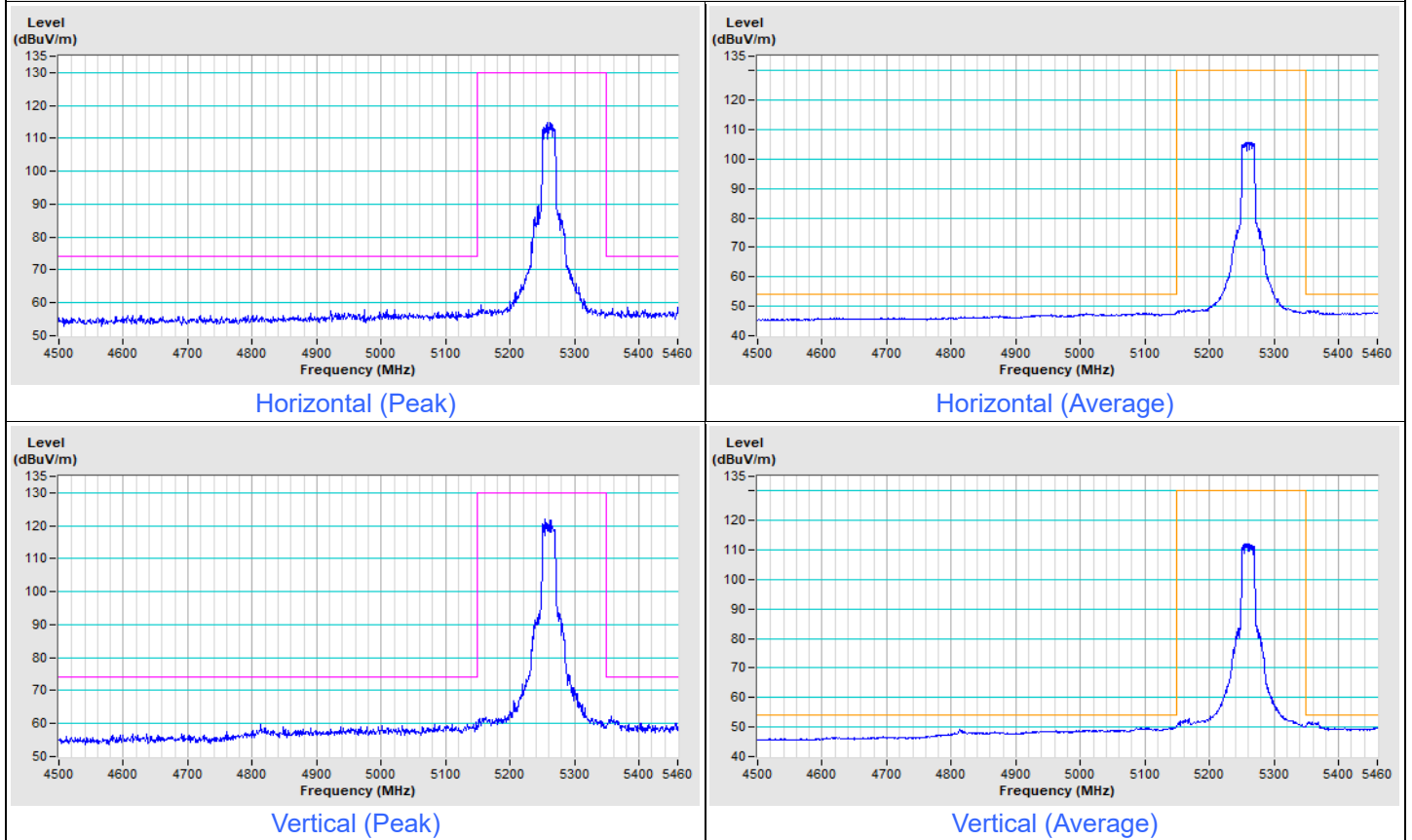
Vertical (Peak)

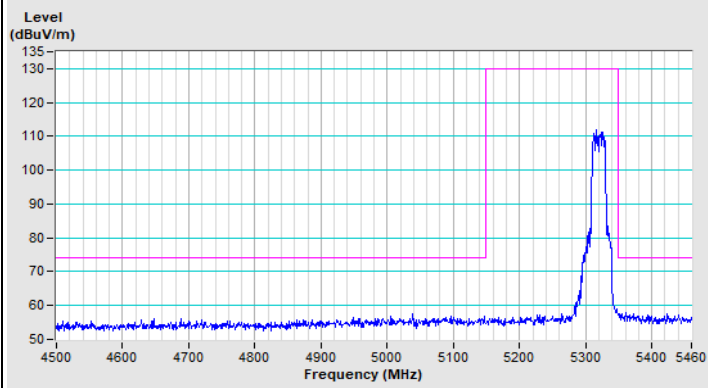


Vertical (Average)

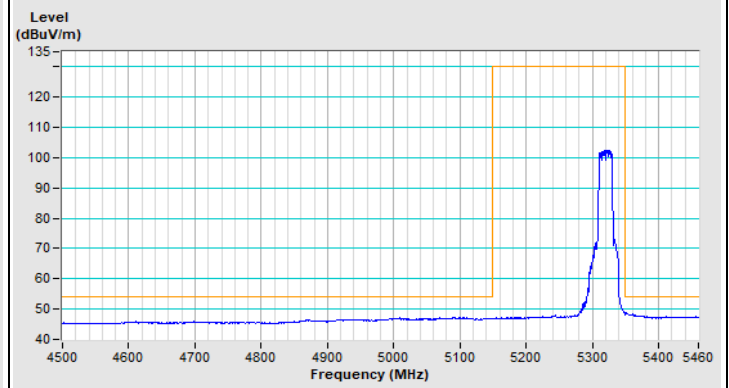
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE20) Channel 52

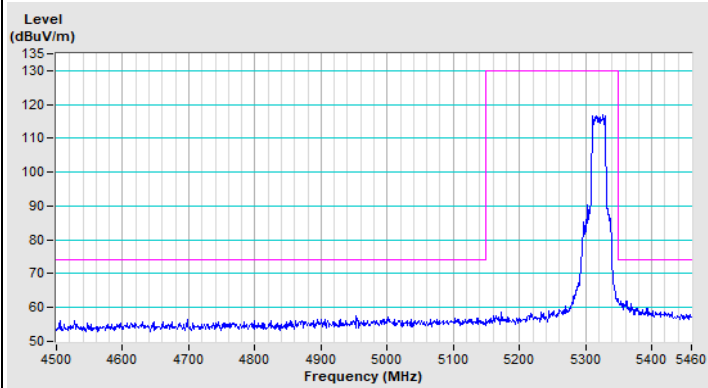


802.11ax (HE20) Channel 64

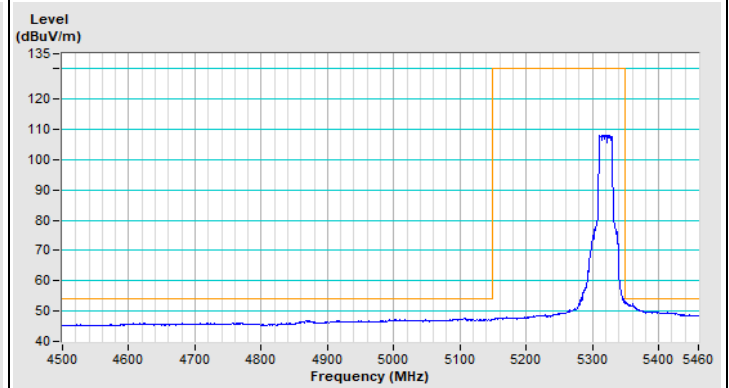
Horizontal (Peak)



Horizontal (Average)



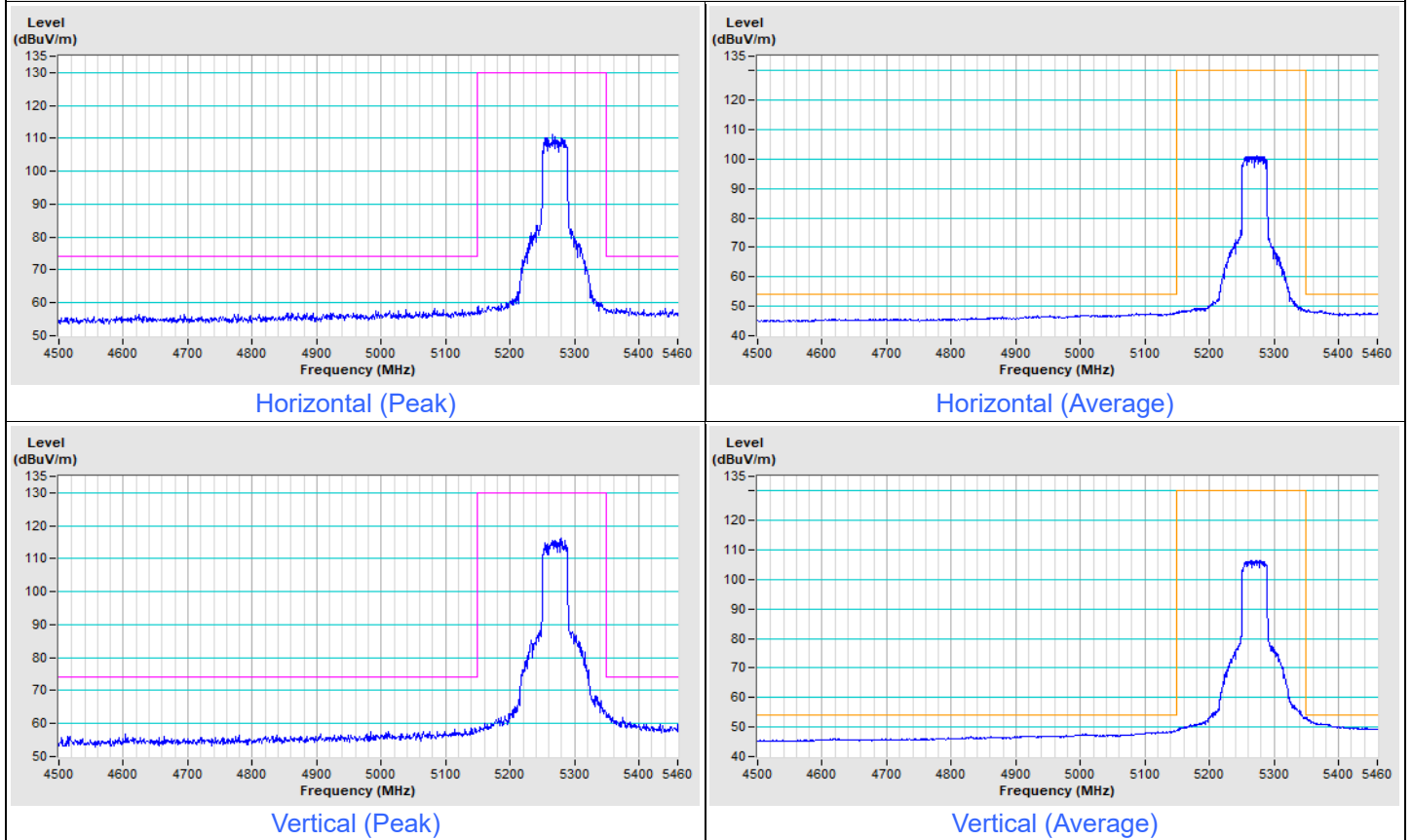
Vertical (Peak)

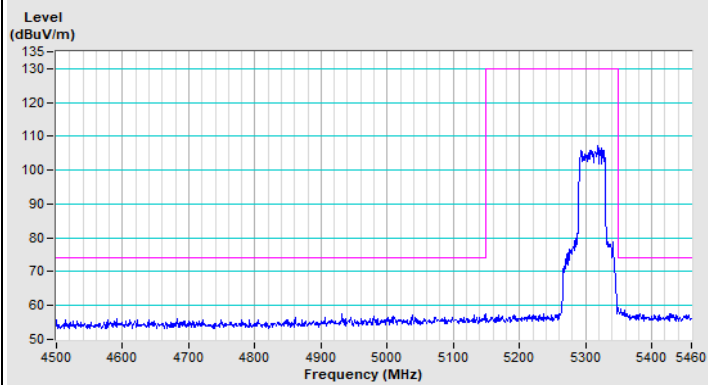


Vertical (Average)

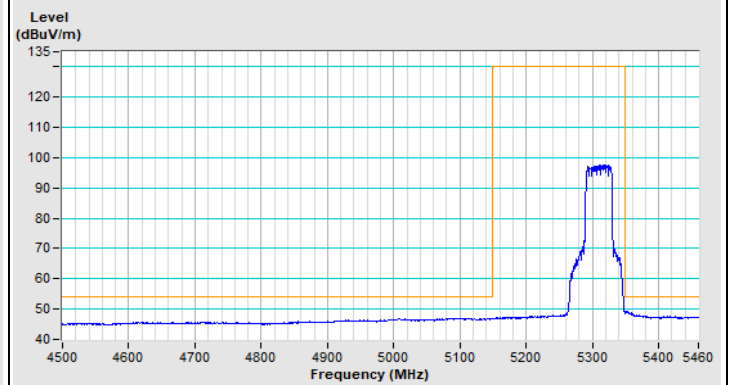
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE40) Channel 54

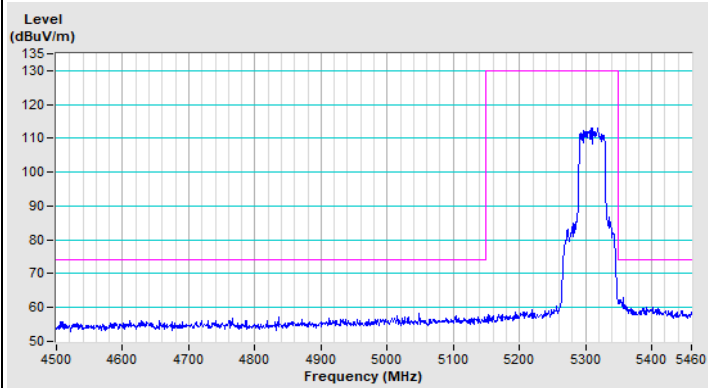


802.11ax (HE40) Channel 62

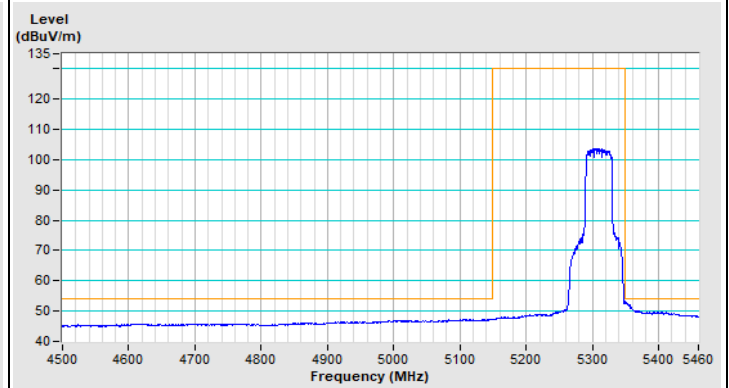
Horizontal (Peak)



Horizontal (Average)



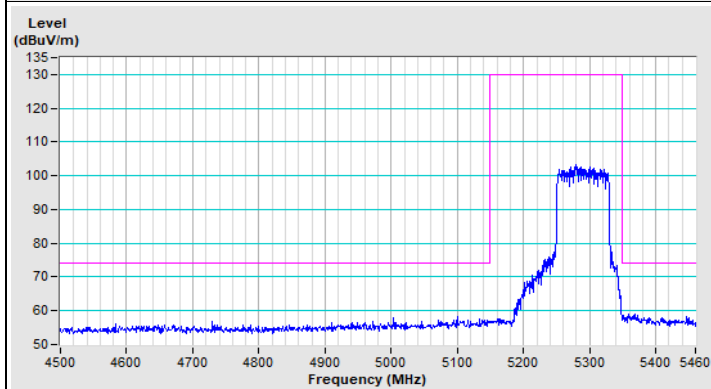
Vertical (Peak)



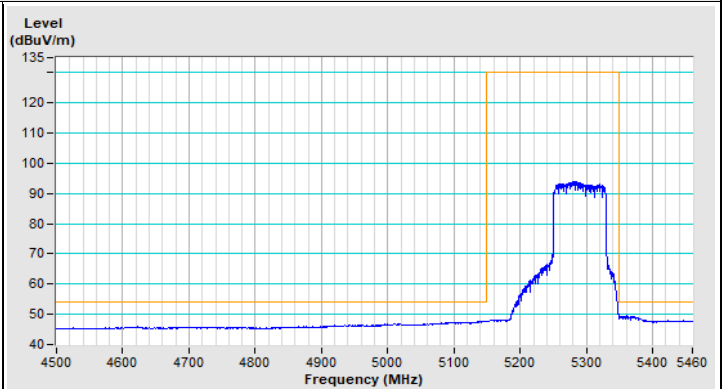
Vertical (Average)

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
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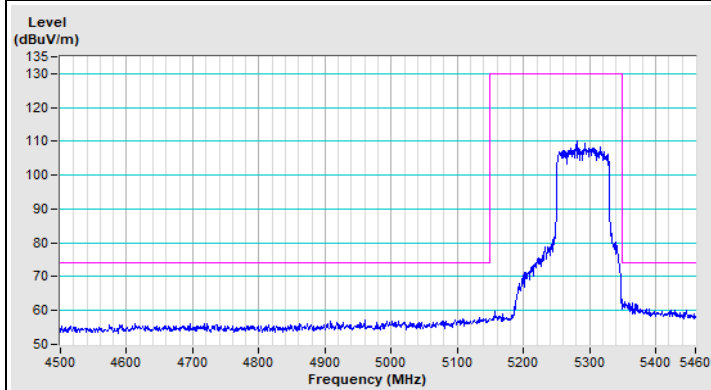
802.11ax (HE80) Channel 58



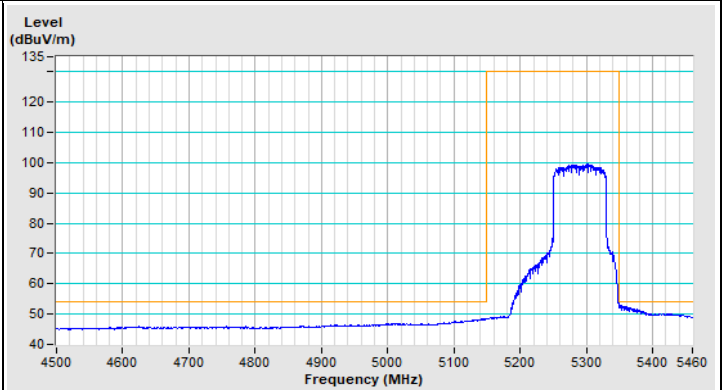
Horizontal (Peak)



Horizontal (Average)



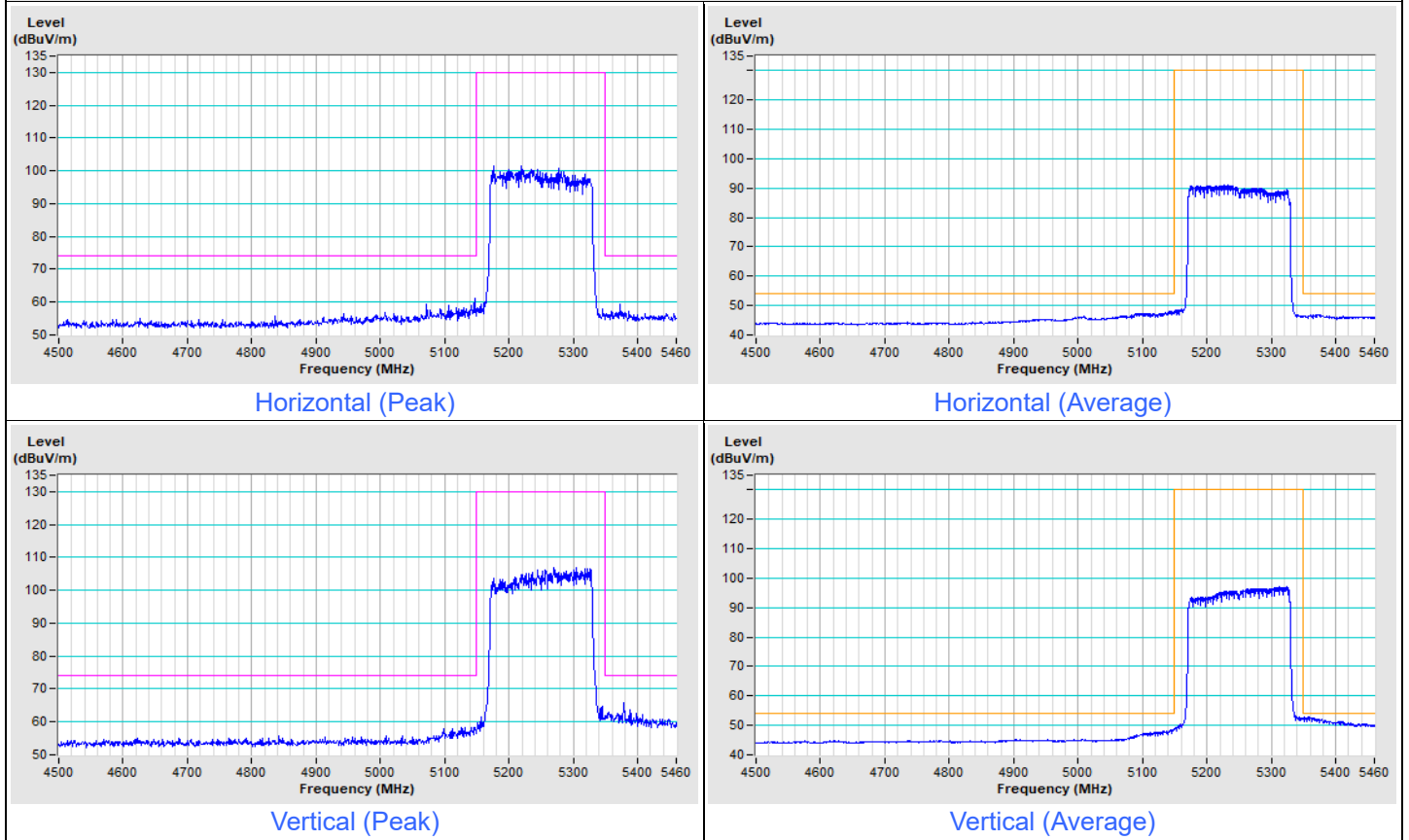
Vertical (Peak)



Vertical (Average)

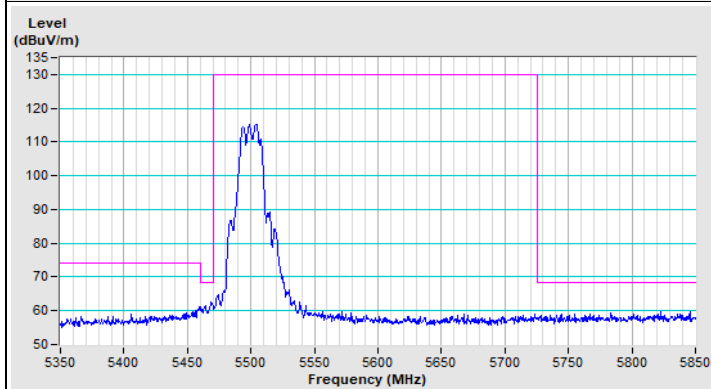
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE160) Channel 50

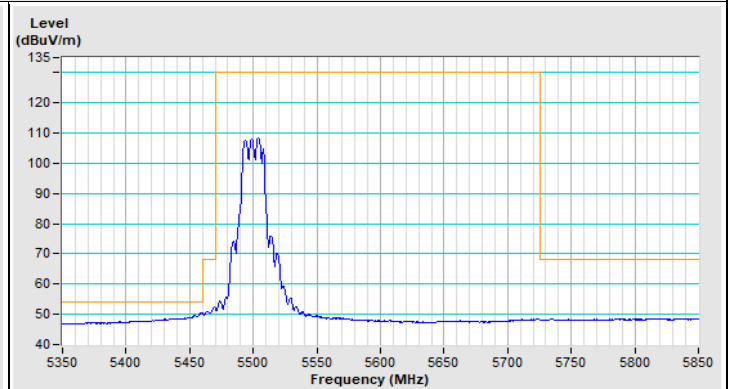


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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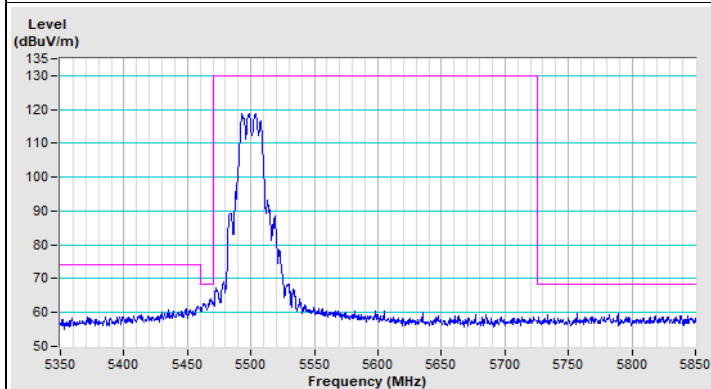
802.11a Channel 100



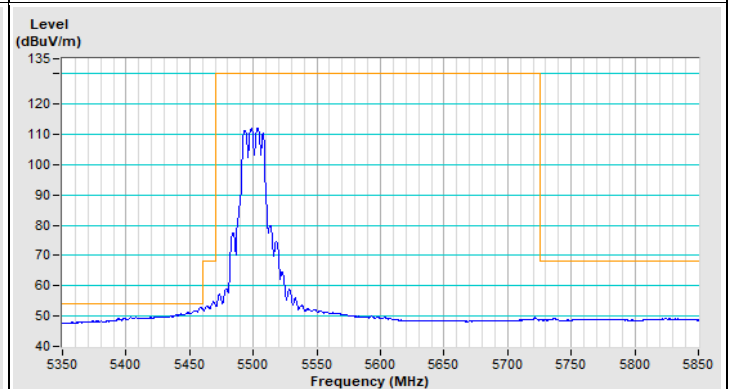
Horizontal (Peak)



Horizontal (Average)

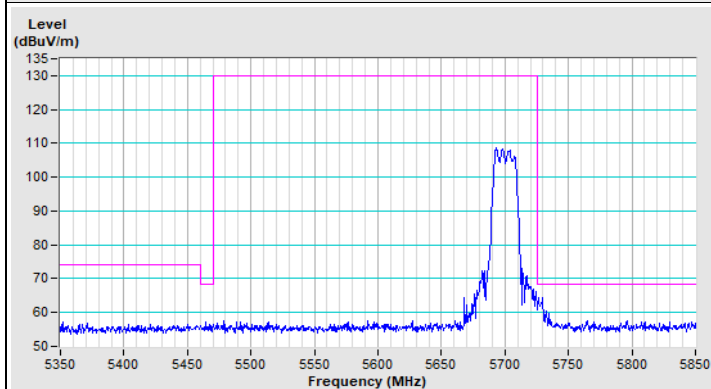


Vertical (Peak)

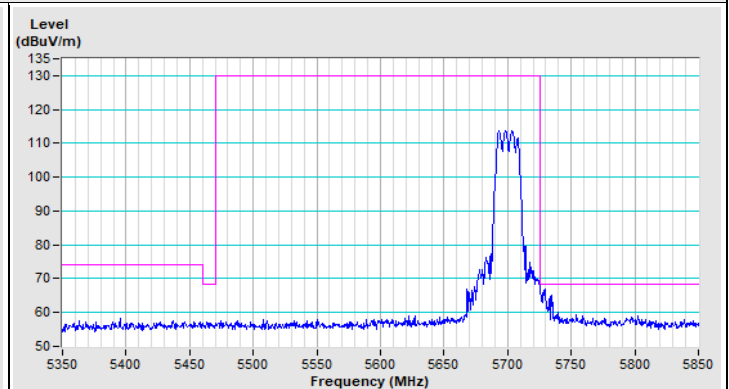


Vertical (Average)

802.11a Channel 140



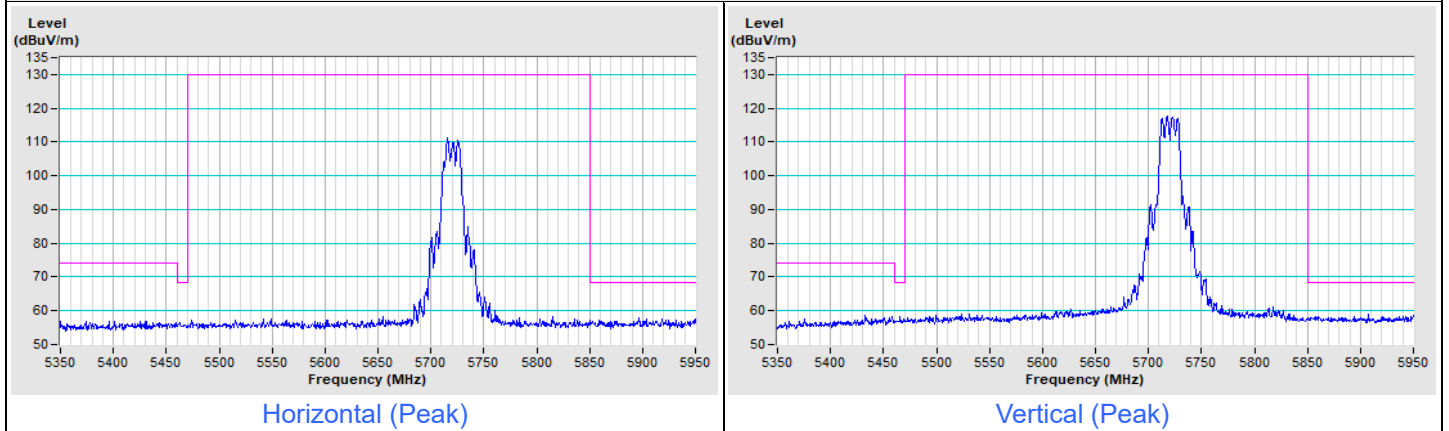
Horizontal (Peak)



Vertical (Peak)

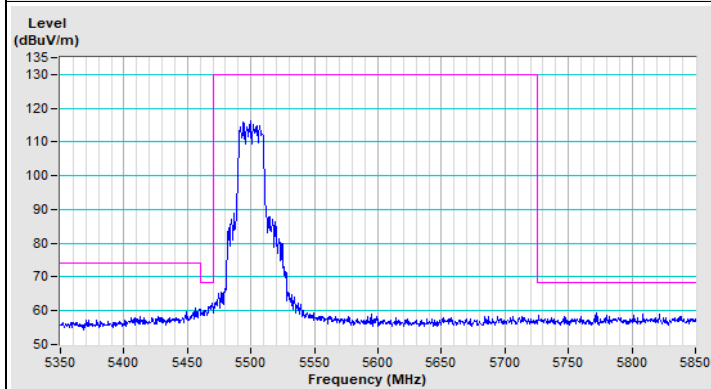
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11a Channel 144

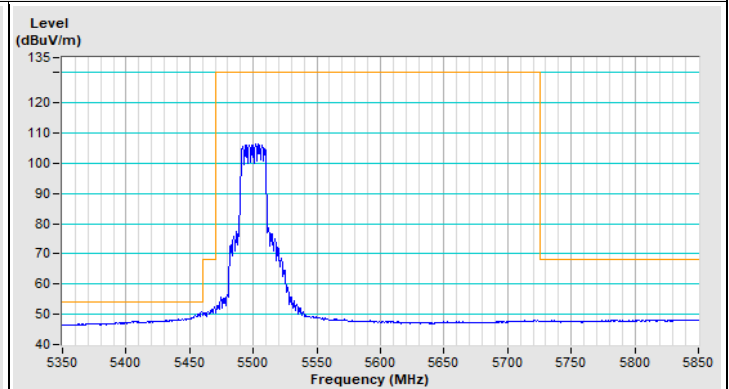


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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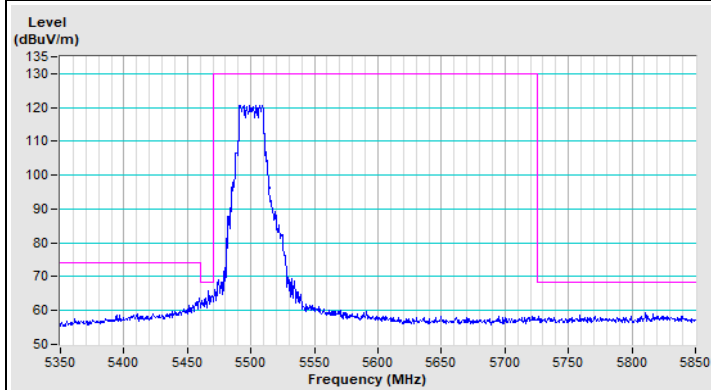
802.11ax (HE20) Channel 100



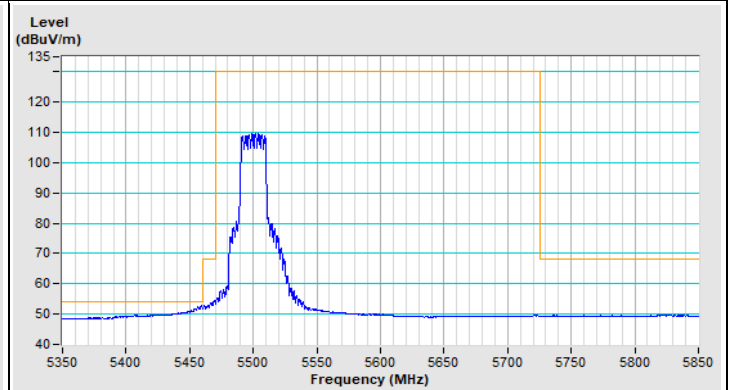
Horizontal (Peak)



Horizontal (Average)

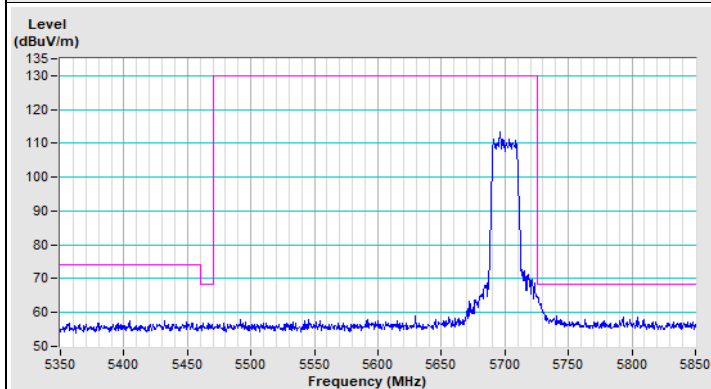


Vertical (Peak)

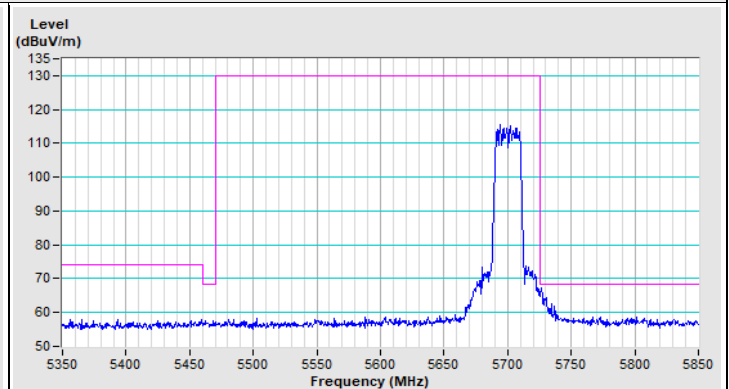


Vertical (Average)

802.11ax (HE20) Channel 140



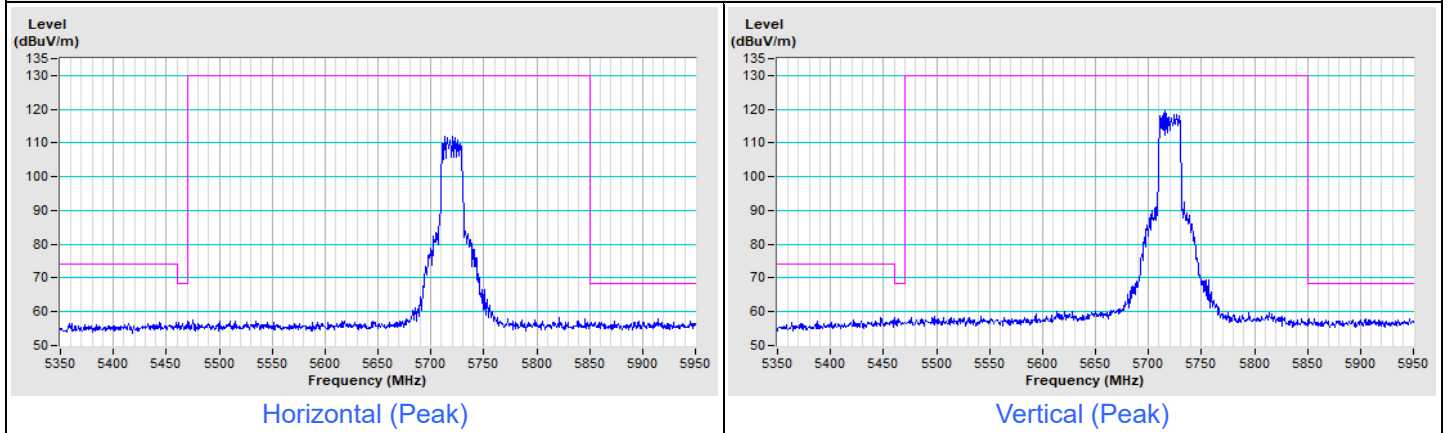
Horizontal (Peak)



Vertical (Peak)

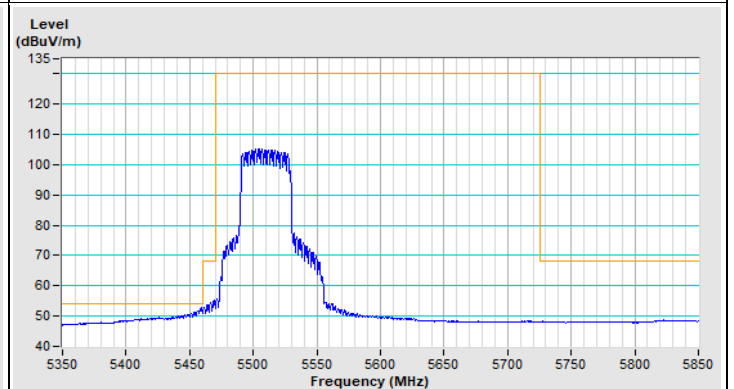
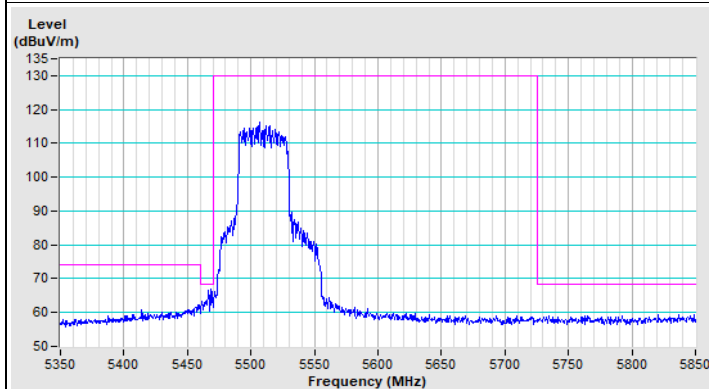
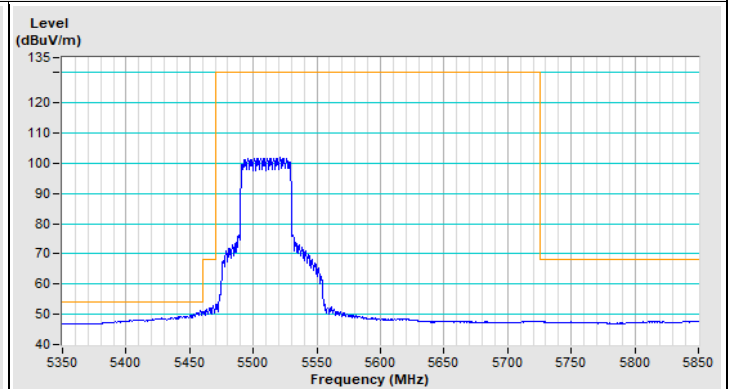
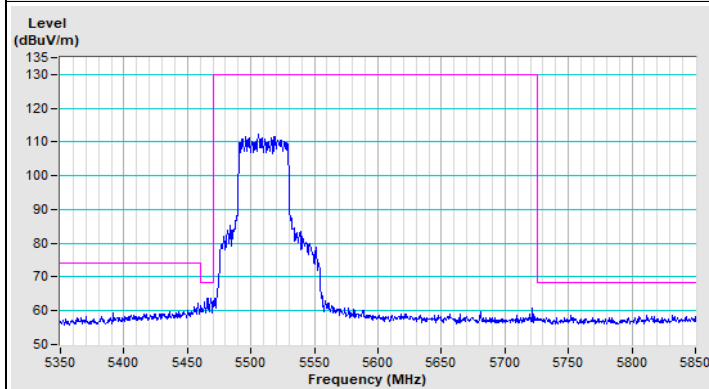
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE20) Channel 144

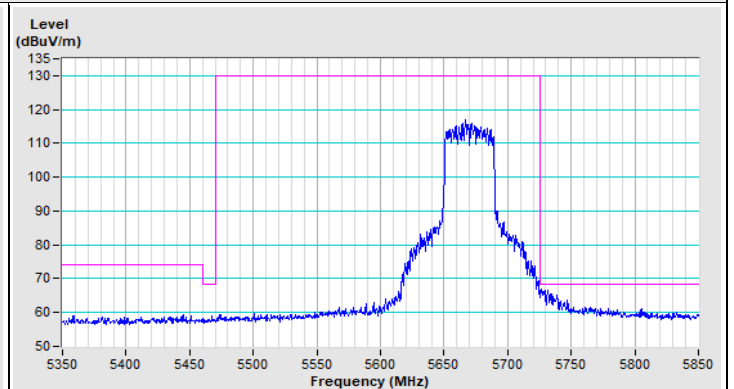
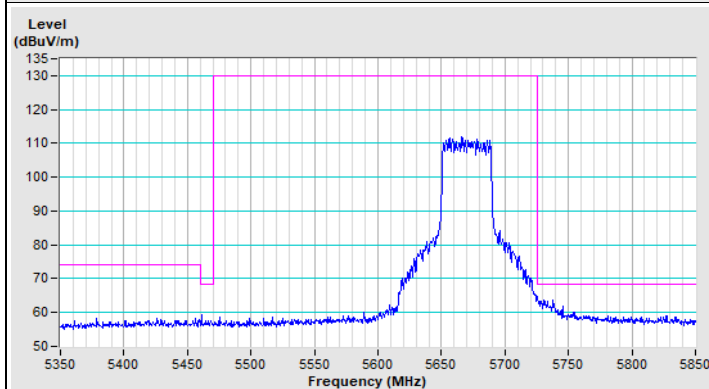


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE40) Channel 102

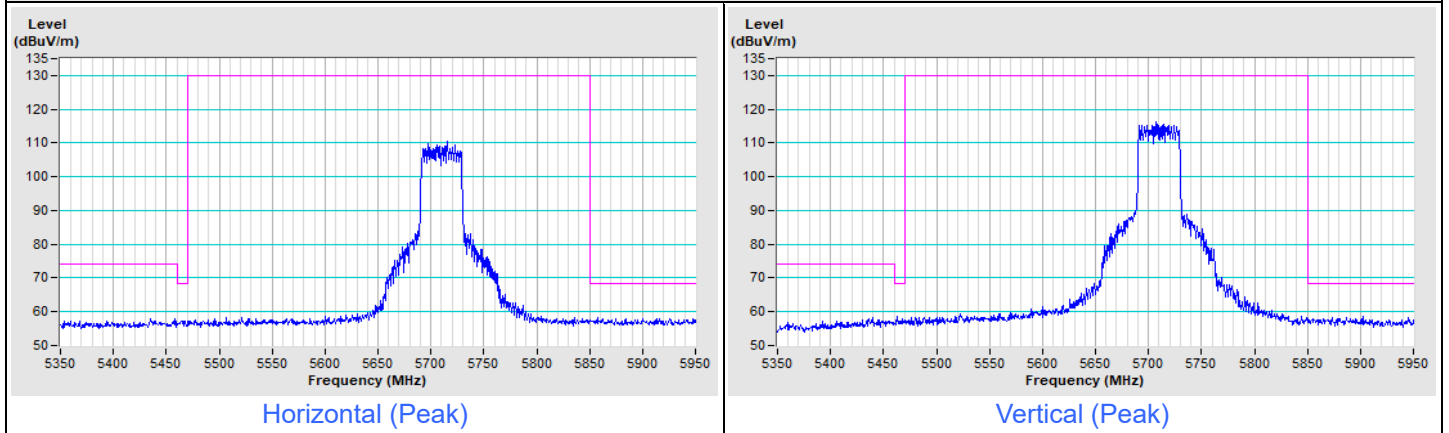


802.11ax (HE40) Channel 134



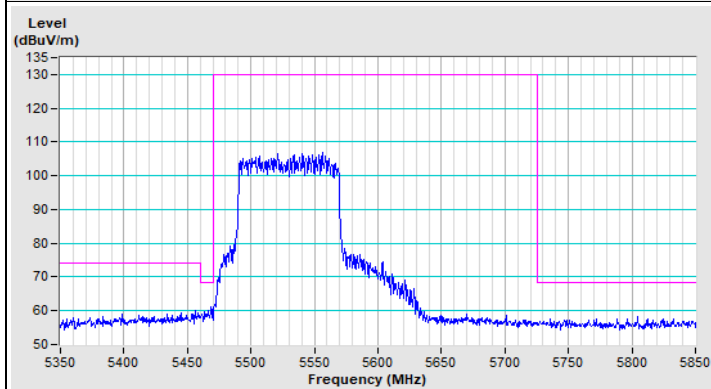
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE40) Channel 142

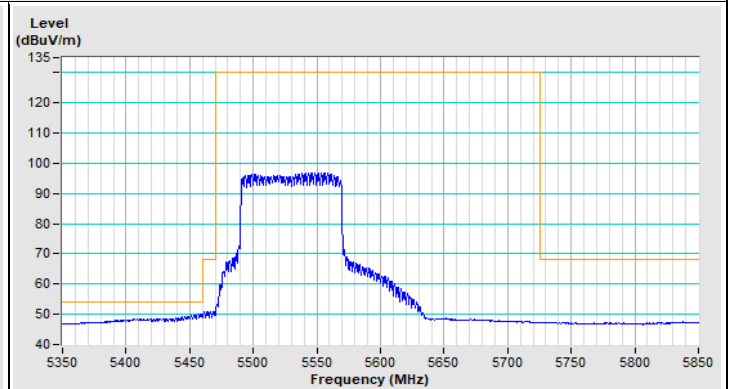


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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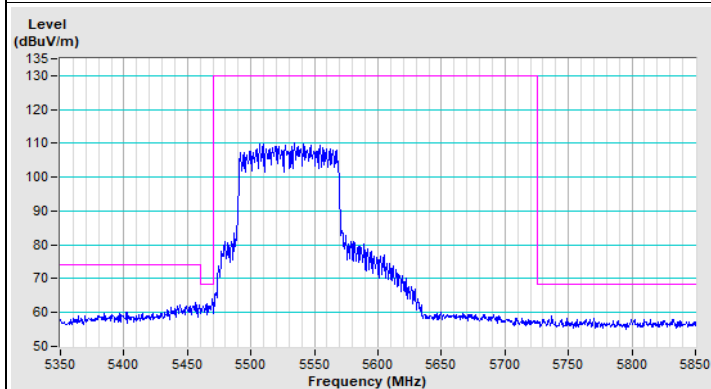
802.11ax (HE80) Channel 106



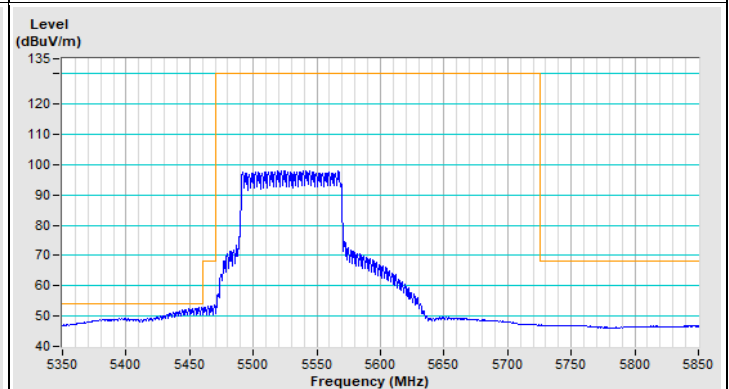
Horizontal (Peak)



Horizontal (Average)

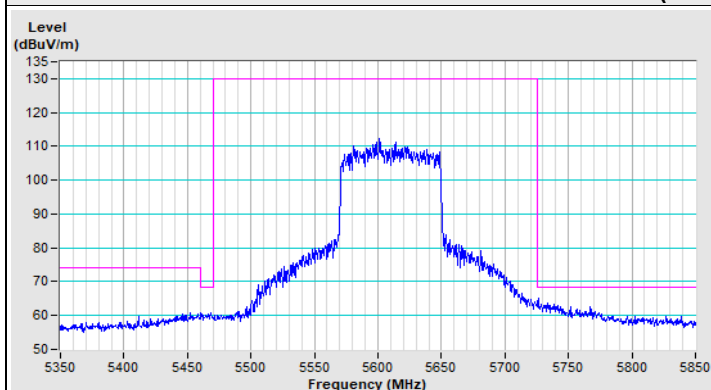


Vertical (Peak)

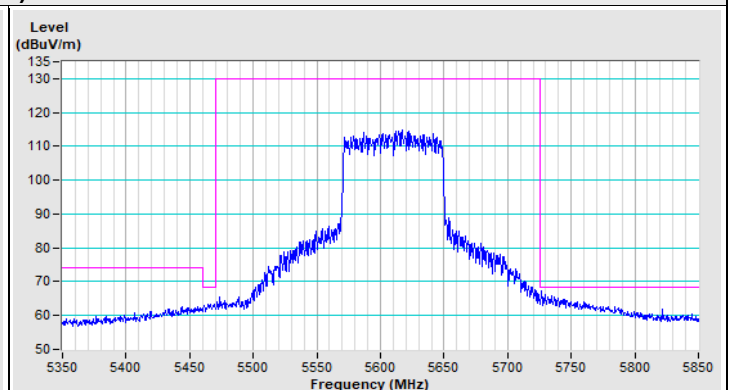


Vertical (Average)

802.11ax (HE80) Channel 122



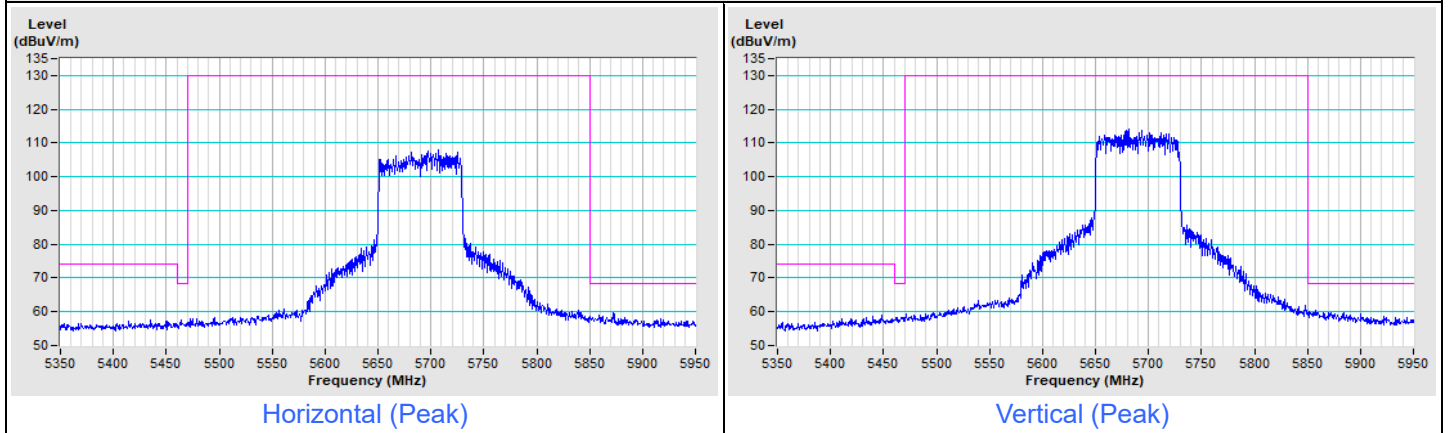
Horizontal (Peak)



Vertical (Peak)

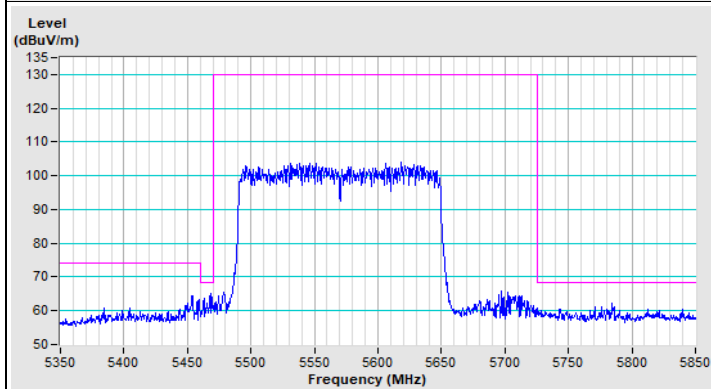
Frequency Range	5.35 GHz ~ 5.95 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11ax (HE80) Channel 138

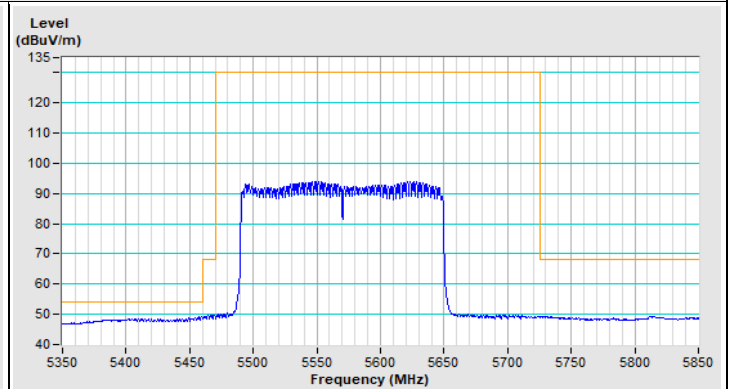


Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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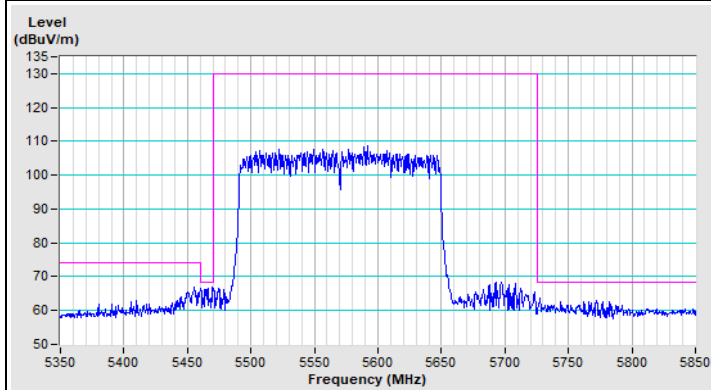
802.11ax (HE160) Channel 114



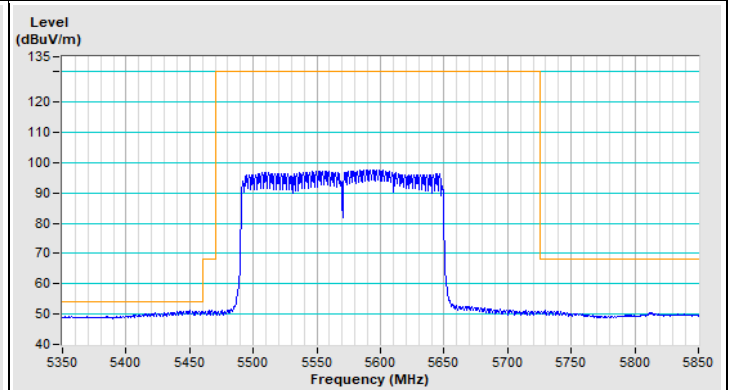
Horizontal (Peak)



Horizontal (Average)



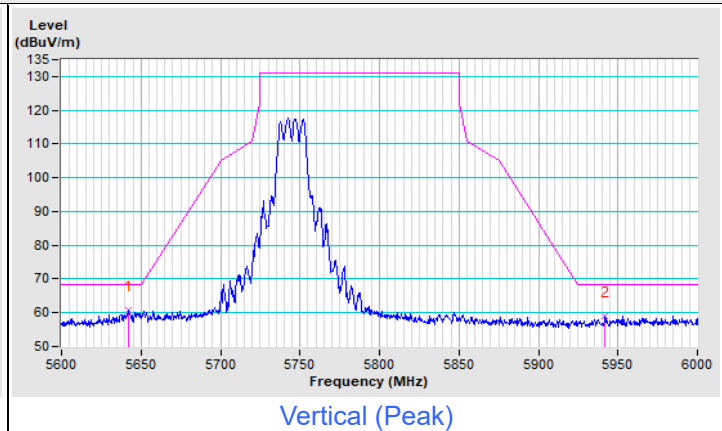
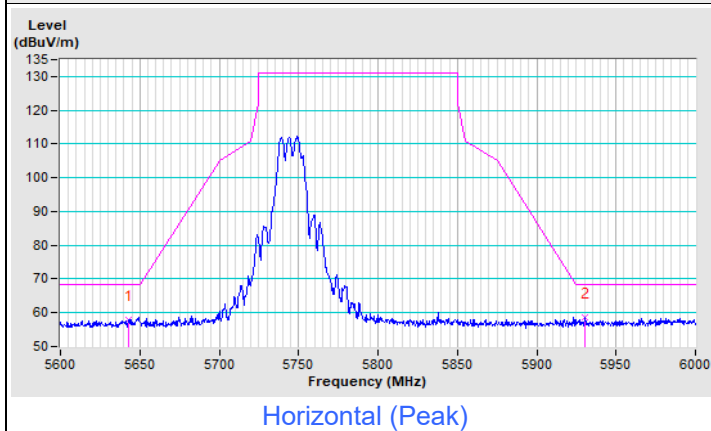
Vertical (Peak)



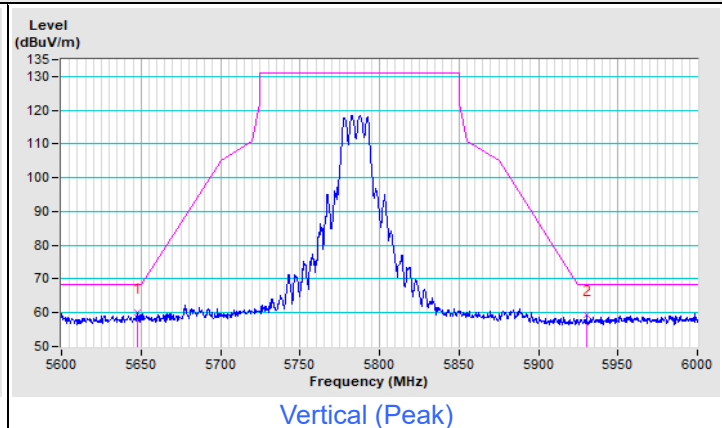
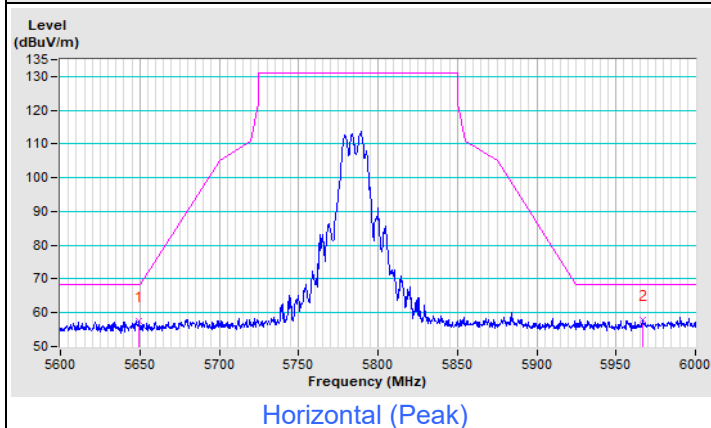
Vertical (Average)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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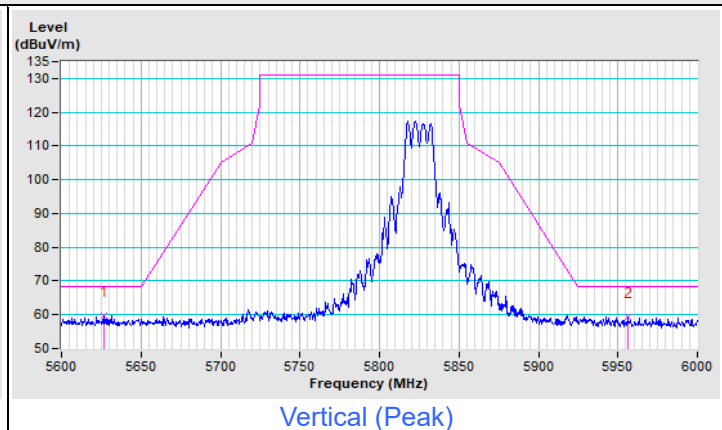
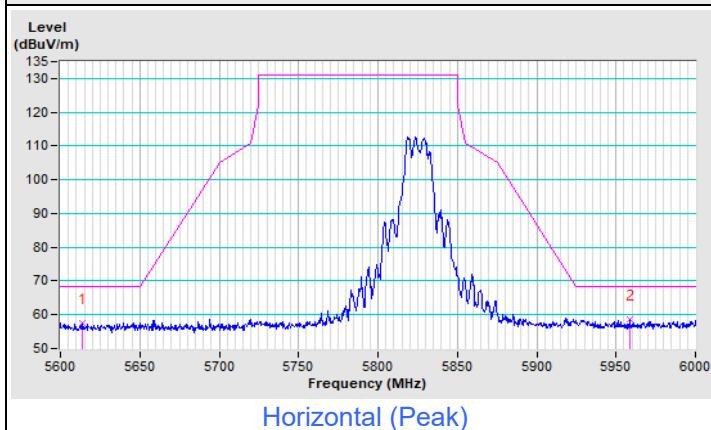
802.11a Channel 149



802.11a Channel 157

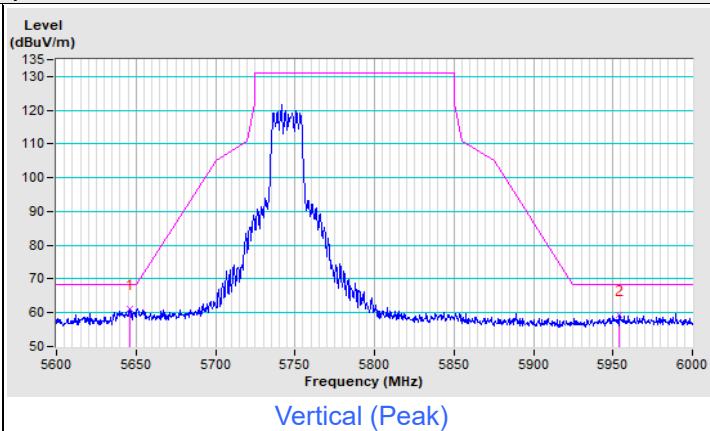
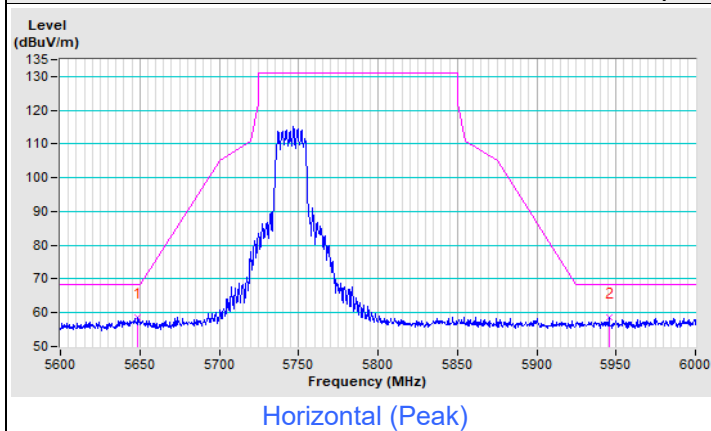


802.11a Channel 165

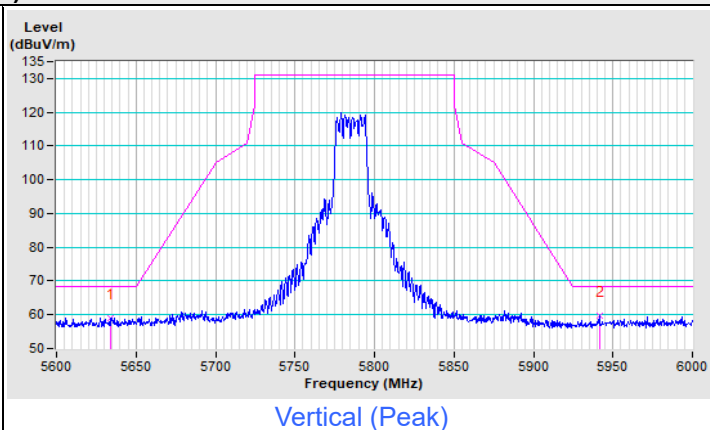
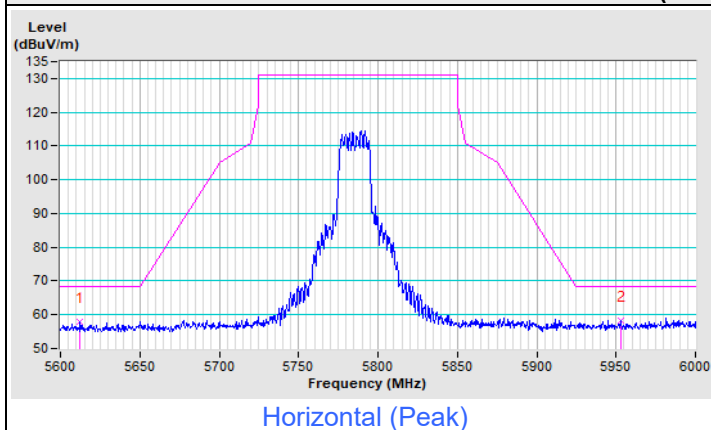


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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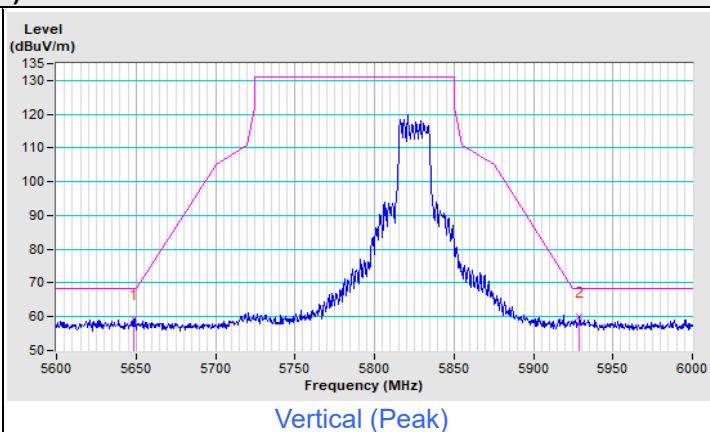
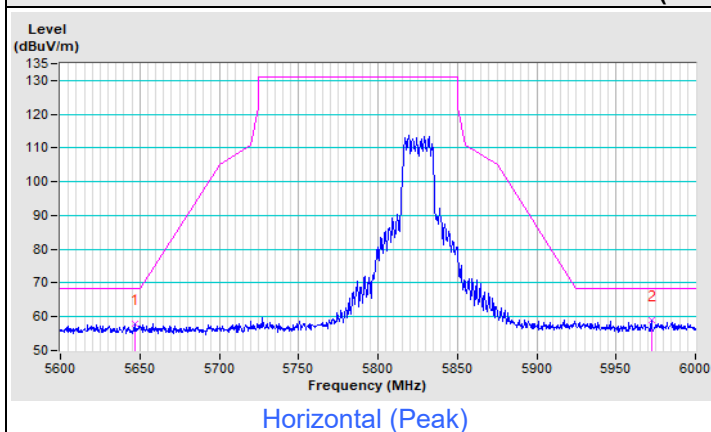
802.11ax (HE20) Channel 149



802.11ax (HE20) Channel 157

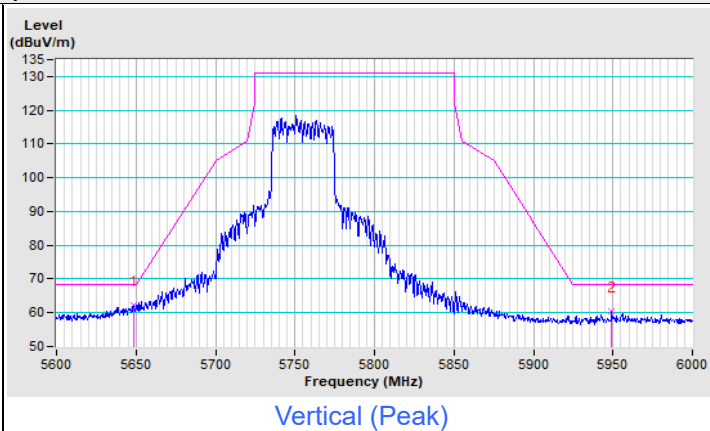
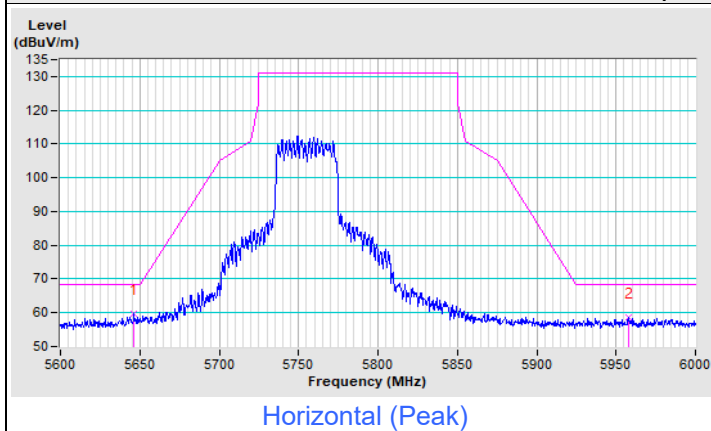


802.11ax (HE20) Channel 165

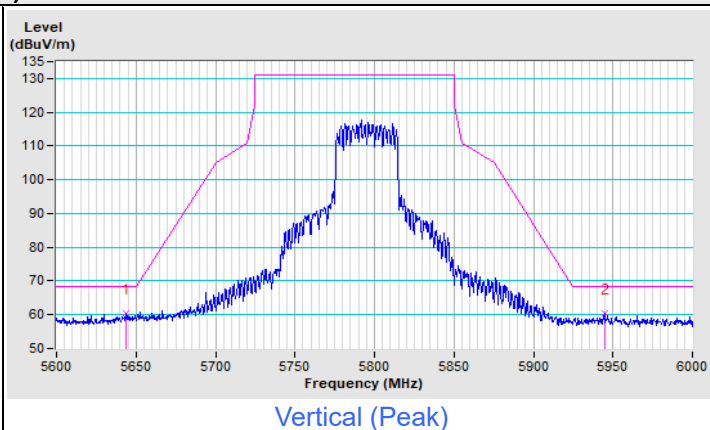
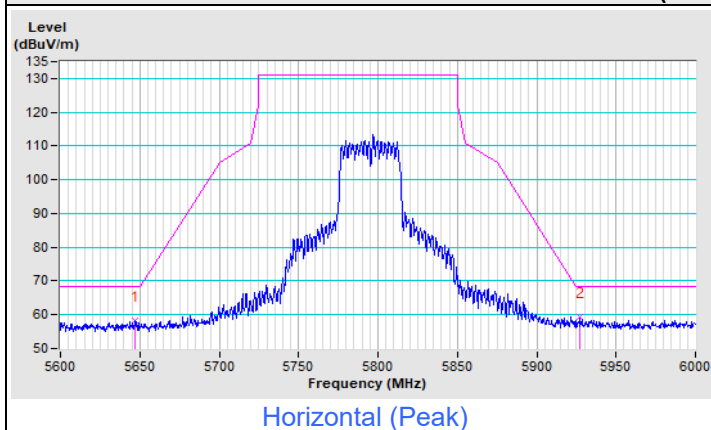


Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ax (HE40) Channel 151

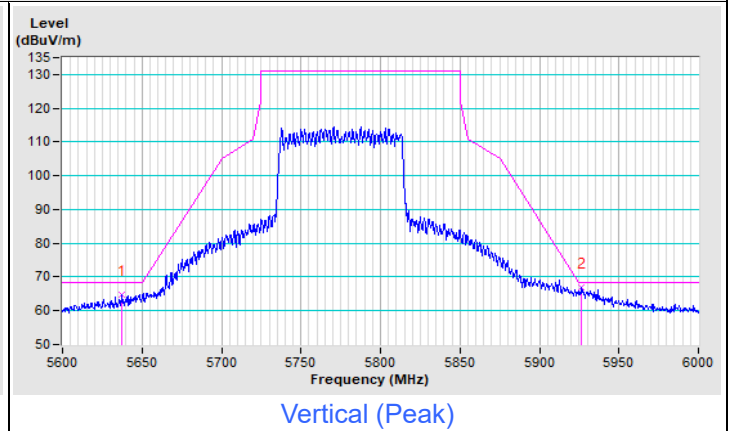
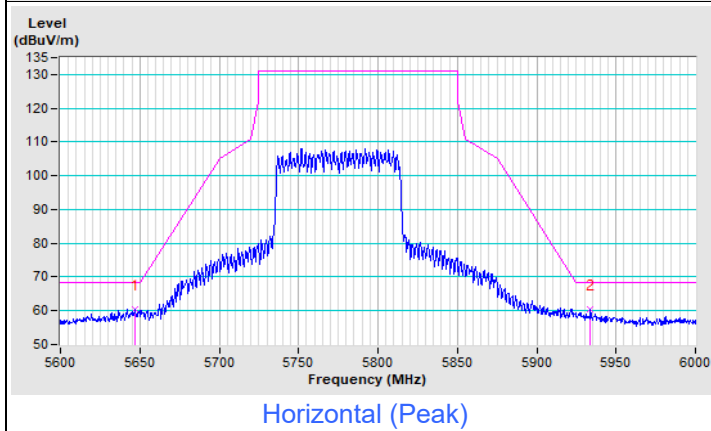


802.11ax (HE40) Channel 159



Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11ax (HE80) Channel 155



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:

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

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

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