TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBHQC-WTW-P22070552A-1
FCC ID:	XCNUBN2315
Product:	GPON IAD
Brand:	altice
Model No.:	UBN2315
Received Date:	2022/9/29
Test Date:	2022/11/19 ~ 2022/12/21
Issued Date:	2023/4/18
Applicant:	Ubee Interactive Holding Corp. Taiwan Branch
Address:	10F-1, No.5, Taiyuan 1st St. Jhubei Hsinchu, 302, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

Approved by: _____ , **Date:** **2023/4/18**

May Chen / Manager

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Prepared by : Vito Lung / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBHQC-WTW-P22070552A-1	Original release.	2023/4/18

1 Certificate

Product:	GPON IAD
Brand:	
Test Model:	UBN2315
Sample Status:	Mass product
Applicant:	Ubee Interactive Holding Corp. Taiwan Branch
Test Date:	2022/11/19 ~ 2022/12/21
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)(1/2/3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	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 -11.31 dB at 0.34922 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -8.4 dB at 52.93 MHz
15.407(b) (1/2/3/4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 5143.78, 5350.00, 5470.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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) (±)
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 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	GPON IAD
Brand	
Test Model	UBN2315
Status of EUT	Mass product
Power Supply Rating	Refer to Note 3
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11n: up to 600 Mbps 802.11ac: up to 3466.7 Mbps 802.11ax: up to 4803.9 Mbps
Operating Frequency	5.25 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 16 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 8 802.11ac (VHT80), 802.11ax (HE80): 4 802.11ac (VHT160), 802.11ax (HE160): 2
Output Power	**CDD Mode:** 5.25 GHz ~ 5.32 GHz : 242.073 mW (23.84 dBm) 5.5 GHz ~ 5.72 GHz : 248.921 mW (23.96 dBm) **Beamforming Mode:** 5.25 GHz ~ 5.32 GHz : 105.88 mW (20.25 dBm) 5.5 GHz ~ 5.72 GHz : 105.86 mW (20.25 dBm)
EUT Category	Indoor Access Point

Note:

1. This report is prepared for FCC class II change. The difference compared with the Report No.: RFBHQC-WTW-P22070552-1 as the following:
   - ◆ Add DFS band <5250~5350 MHz & 5470~5725 MHz> by software.
2. According to above conditions, for DFS band all of test items need to be performed and all data was verified to meet the requirements.
3. The EUT has three radios as following table:

Radio 1	Radio 2	Radio 3
WLAN (2.4 GHz)	WLAN (5 GHz)	WLAN (6 GHz)

4. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4 GHz)	WLAN (5 GHz)	WLAN (6 GHz)
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.			

5. The EUT uses following accessories.

AC Adapter 1		
Brand	Model	Specification
MOSO	MSS-V2500WR120-030EO	AC Input : 100-240V~50/60Hz 1.0A max. DC Output : 30.0W 12.0V 2.5A

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type	Cable Length	Cable Loss(dB)	excluding cable loss Antenna Gain(dBi)
1	2.4G Chain0 / 5G Chain 3	3.5	2.4~2.4835GHz	Dipole	ipex(MHF)	215mm	0.67	4.17
		4	5.15~5.85GHz	Dipole	ipex(MHF)	215mm	1.05	5.05
2	5G Chain1	3.4	5.15~5.85GHz	Dipole	ipex(MHF)	214mm	1.05	4.45
3	5G Chain0	3.4	5.15~5.85GHz	Dipole	ipex(MHF)	185mm	0.91	4.31
4	2.4G Chain1 / 5G Chain 2	3.3	2.4~2.4835GHz	Dipole	ipex(MHF)	113mm	0.35	3.65
		3.8	5.15~5.85GHz	Dipole	ipex(MHF)	113mm	0.55	4.35
5	Chain4	3.5	5.925GHz~7.125GHz	Dipole	ipex(MHF)	122mm	0.66	4.16
6	Chain5	3.4	5.925GHz~7.125GHz	Dipole	ipex(MHF)	73mm	0.39	3.79
7	Chain6	3.4	5.925GHz~7.125GHz	Dipole	ipex(MHF)	78mm	0.42	3.82
8	Chain7	3.4	5.925GHz~7.125GHz	Dipole	ipex(MHF)	187mm	1.01	4.41

* 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	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX

Note:
1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. 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.
3. 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) and 802.11ax mode for 20 MHz (40 MHz, 80 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 5250 ~ 5320 MHz

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

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

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

Channel	Frequency
58	5290 MHz

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

Channel	Frequency
50	5250 MHz

FOR 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 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), 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), 802.11ax (HE80):

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

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

Channel	Frequency
114	5570 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).

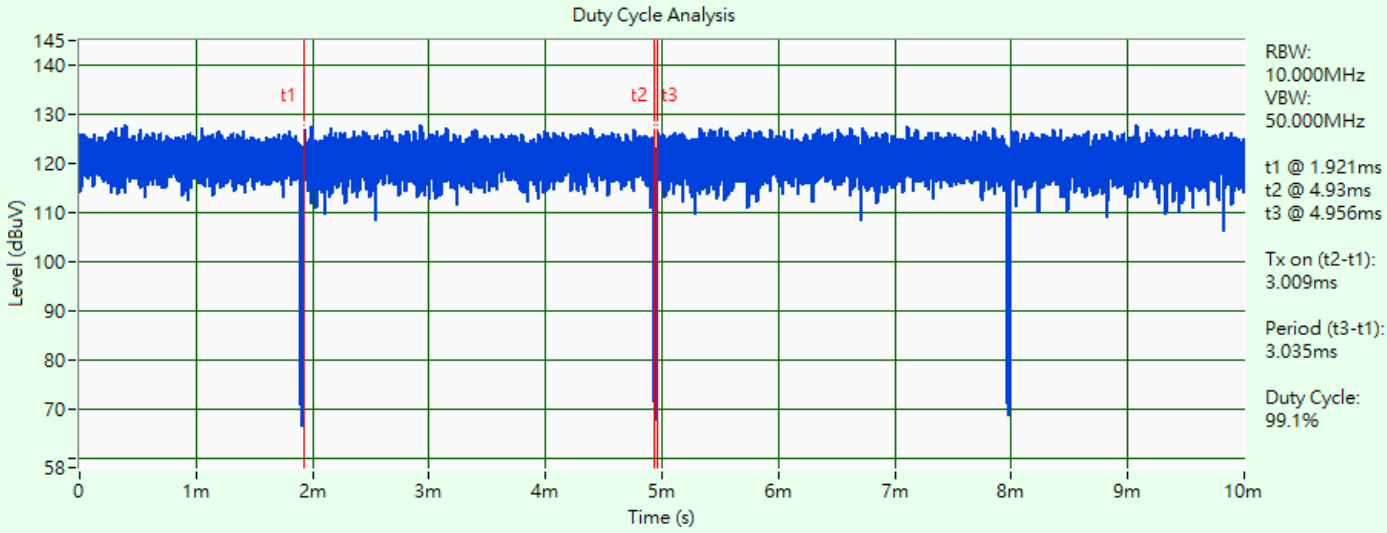
Following channel(s) was (were) selected for the final test as listed below:

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Frequency Stability	802.11a	-	52	un-modulation	-
AC Power Conducted Emissions	802.11ax (HE20)	CDD	100	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11ax (HE20)	CDD	100	BPSK	MCS0
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
6 dB Bandwidth	802.11a	CDD	144	BPSK	6Mb/s
	802.11ax (HE20)	CDD	144	BPSK	MCS0
	802.11ax (HE40)	CDD	142	BPSK	MCS0
	802.11ax (HE80)	CDD	138	BPSK	MCS0
RF Output Power	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ac (VHT20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ac (VHT40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ac (VHT80)	CDD & Beamforming	58, 106, 122, 138	BPSK	MCS0
	802.11ac (VHT160)	CDD & Beamforming	50, 114	BPSK	MCS0
	802.11ax (HE20)	CDD & Beamforming	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ax (HE40)	CDD & Beamforming	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ax (HE80)	CDD & Beamforming	58, 106, 122, 138	BPSK	MCS0
	802.11ax (HE160)	CDD & Beamforming	50, 114	BPSK	MCS0
Power Spectral Density	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

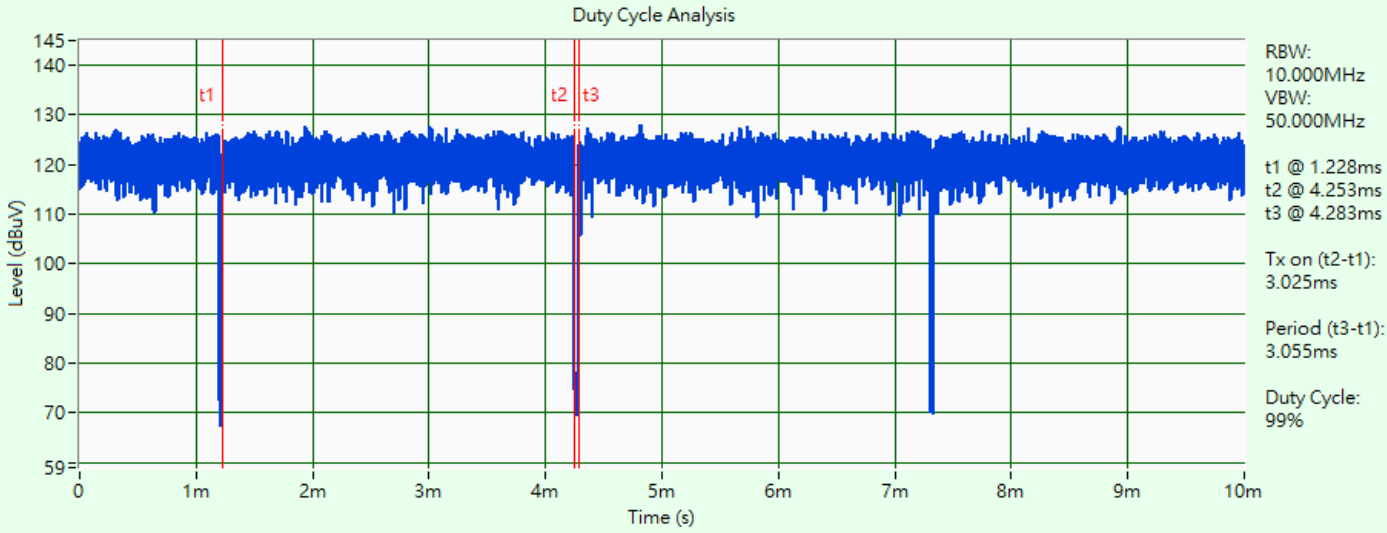
Occupied Bandwidth	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
	802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
	802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142	BPSK	MCS0
	802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
	802.11ax (HE160)	CDD	50, 114	BPSK	MCS0
Unwanted Emissions above 1 GHz	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

3.5 Duty Cycle of Test Signal

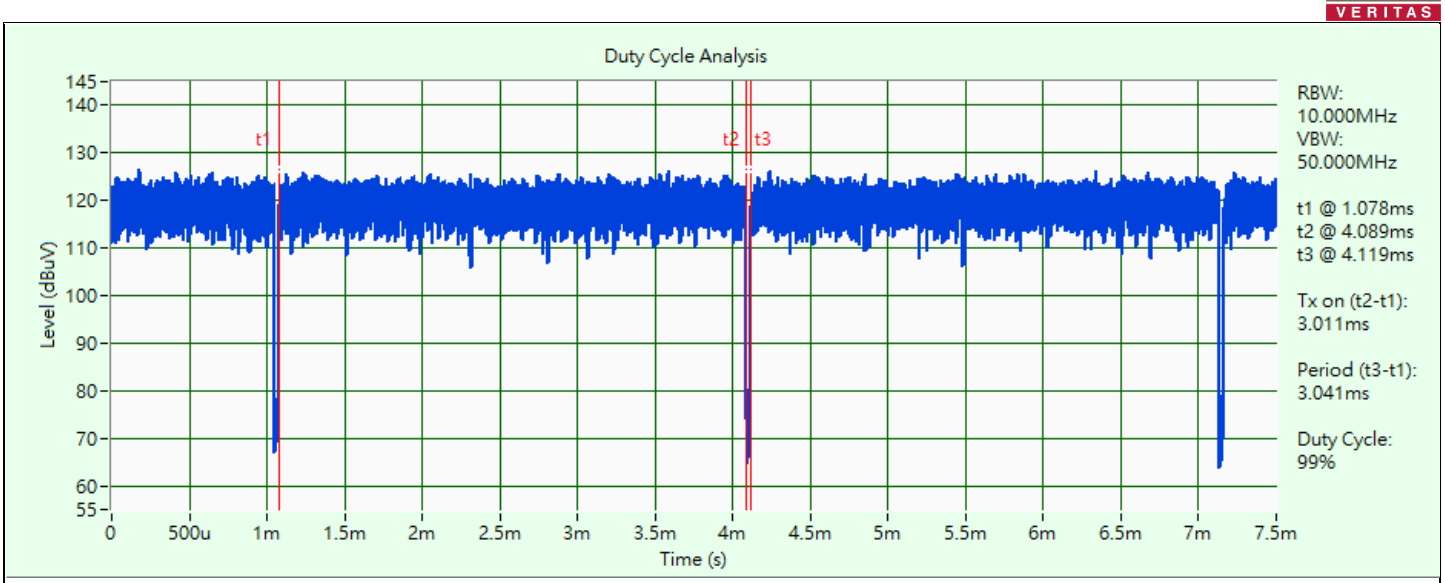
802.11a: Duty cycle = 3.009 ms / 3.035 ms x 100% = 99.1%
802.11ax (HE20): Duty cycle = 3.025 ms / 3.055 ms x 100% = 99.0%
802.11ax (HE40): Duty cycle = 3.011 ms / 3.041 ms x 100% = 99.0%
802.11ax (HE80): Duty cycle = 2.997 ms / 3.027 ms x 100% = 99.0%
802.11ax (HE160): Duty cycle = 2.997 ms / 3.027 ms x 100% = 99.0%



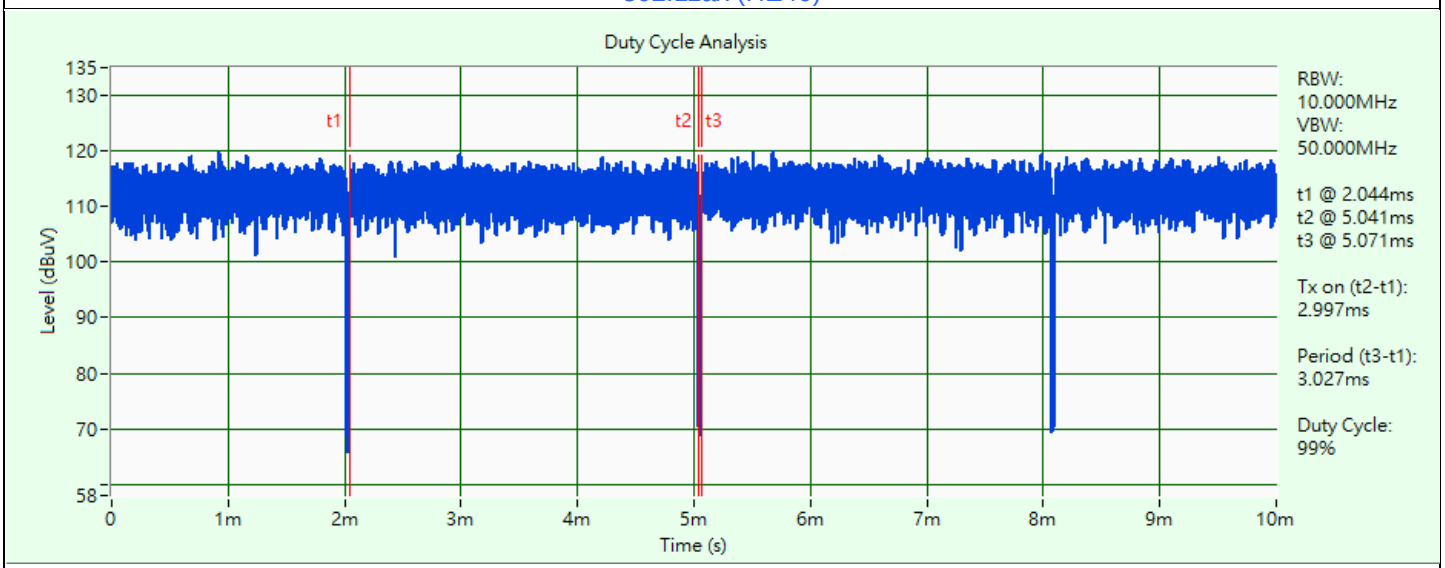
802.11a



802.11ax (HE20)



802.11ax (HE40)



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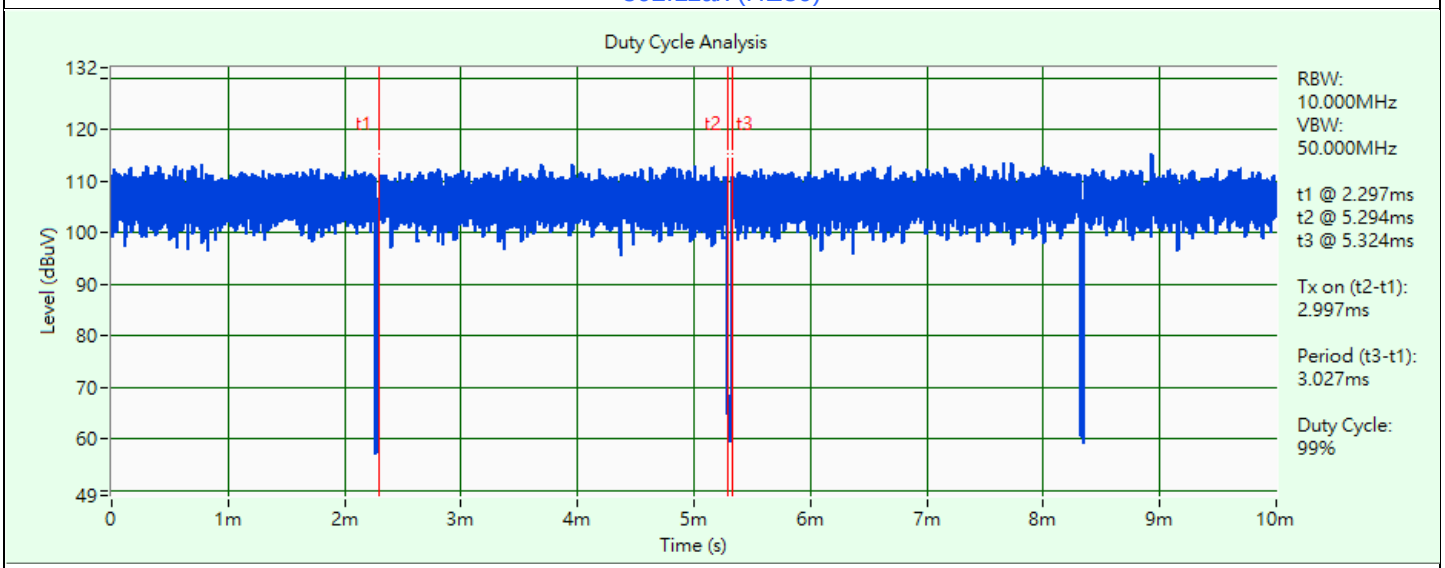
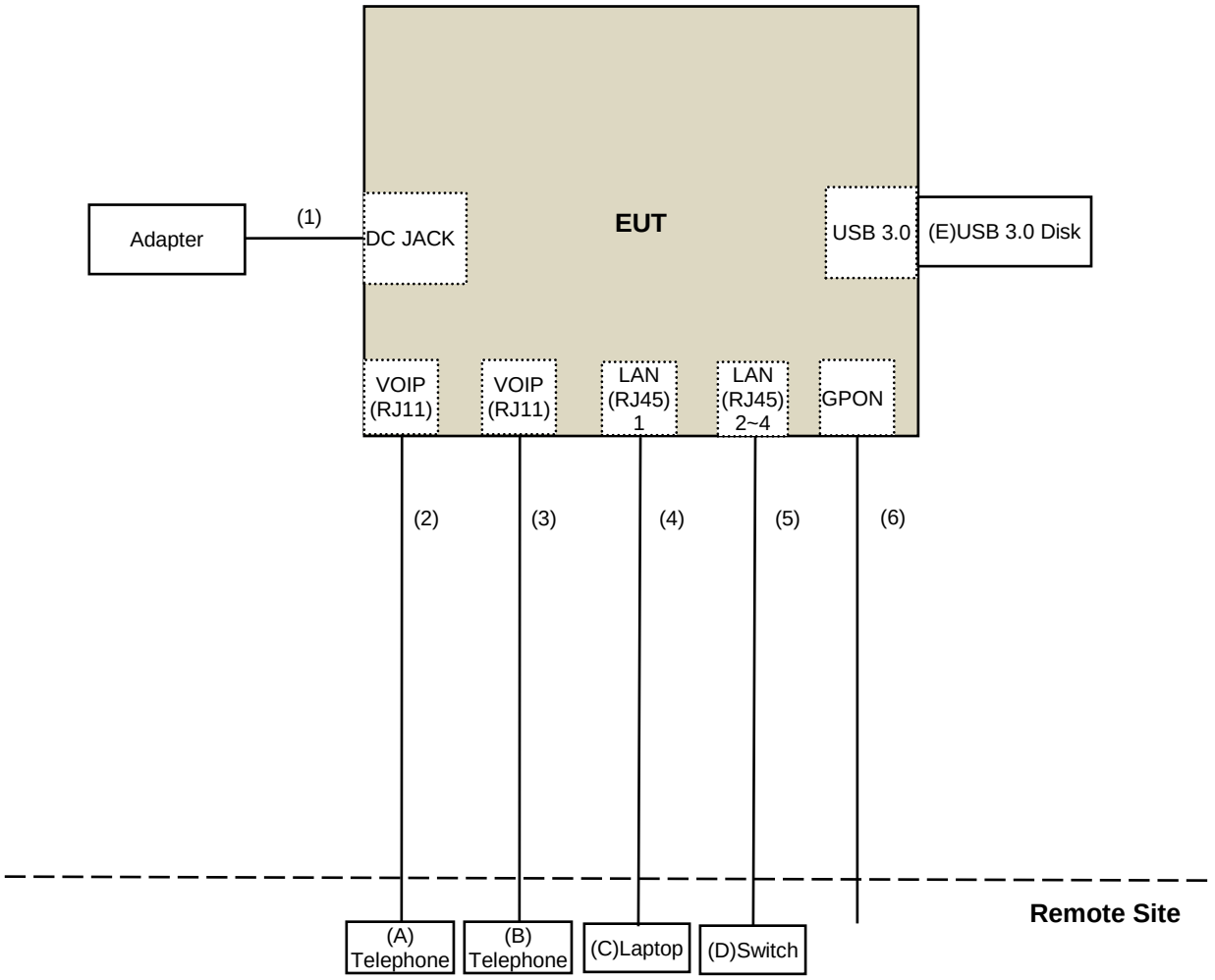


802.11ax (HE160)

3.6 Test Program Used and Operation Descriptions

Controlling software (accessMTool_REL_3_3_0_0) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Telephone	Romeo	TE-812	97285638	N/A	Provided by Lab
B	Telephone	Romeo	TE-812	97280903	N/A	Provided by Lab
C	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	N/A	Provided by Lab
D	Switch	D-Link	DGS-1005D	DR8WC92000523	N/A	Provided by Lab
E	USB 3.0 Disk	SanDisk	BM181225896Z	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.8	No	0	Supplied by applicant
2	RJ11	1	10	No	0	Provided by Lab
3	RJ11	1	10	No	0	Provided by Lab
4	RJ45	1	10	No	0	Provided by Lab
5	RJ45	3	10	No	0	Provided by Lab
6	Fiber Cable	1	10	No	0	Provided by Lab

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
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/12/21

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Power Meter Anritsu	ML2495A	1529002	2022/6/22	2023/6/21
Pulse Power Sensor Anritsu	MA2411B	1726434	2022/6/22	2023/6/21
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/12/21

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 Source GOOD WILL	6905S	1991551	N/A	N/A
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112409	2022/3/11	2023/3/10
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2022/1/14	2023/1/13
True RMS Clamp Meter Fluke	325	31130711WS	2022/6/9	2023/6/8

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/12/21

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	N/A	EMC-01	2022/9/27	2023/9/26
Fixed attenuator STI	STI02-2200-10	005	2022/8/24	2023/8/23
LISN R&S	ESH3-Z5	848773/004	2022/10/18	2023/10/17
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2022/8/24	2023/8/23
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A
TEST RECEIVER R&S	ESCS 30	847124/029	2022/10/14	2023/10/13

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2022/11/20

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2022/1/10	2023/1/9
LOOP ANTENNA Electro-Metrics	EM-6879	264	2022/3/18	2023/3/17
Pre_Amplifier Agilent	8447D	2944A10636	2022/3/19	2023/3/18
Pre_Amplifier EMCI	EMC330N	980701	2022/3/8	2023/3/7
RF Coaxial Cable COMMATE/PEWC	8D	966-4-1	2022/3/8	2023/3/7
		966-4-2	2022/3/8	2023/3/7
		966-4-3	2022/3/8	2023/3/7
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/1/6	2023/1/5
		LOOPCAB-002	2022/1/6	2023/1/5
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer KEYSIGHT	N9030B	MY57142938	2022/4/26	2023/4/25
Trilog Broadband Antenna Schwarzbeck	VULB 9168	9168-406	2022/10/21	2023/10/20

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2022/11/19

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2022/11/13	2023/11/12
	BBHA 9170	9170-739	2022/11/13	2023/11/12
Pre_Amplifier EMCI	EMC12630SE	980688	2022/10/4	2023/10/3
	EMC184045SE	980387	2022/1/10	2023/1/9
RF Cable-Frequency Range : 1-26.5GHz EMCI	EMC104-SM-SM-1200	160922	2021/12/24	2022/12/23
RF Cable-Frequency range: 1-40GHz EMCI	EMC102-KM-KM-1200	160924	2022/1/10	2023/1/9
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2022/3/8	2023/3/7
	EMC104-SM-SM-2000	180502	2022/4/25	2023/4/24
	EMC104-SM-SM-6000	210704	2022/11/4	2023/11/3
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2022/12/12 ~ 2022/12/13

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 ≦ 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	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	250mW (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.		

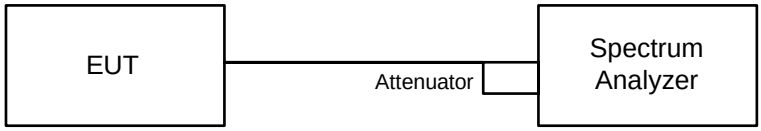
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

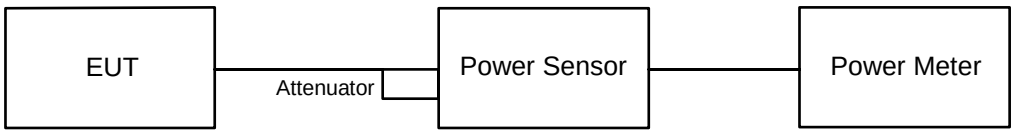


6.1.2 Test Procedure

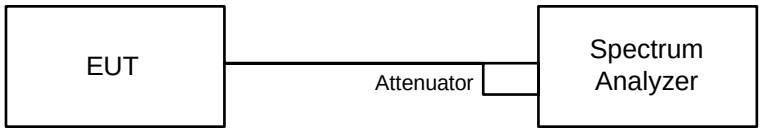
a. Set RBW = approximately 1% of the emission bandwidth.
b. Set the VBW > RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement 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:

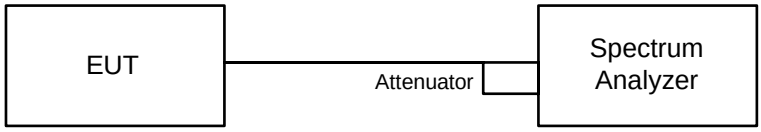
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. 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

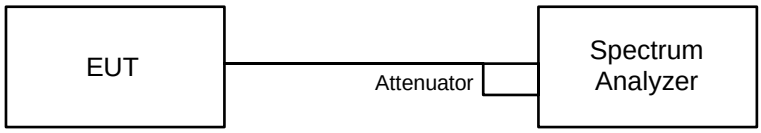
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. Record the max value

For specified measurement bandwidth 500 kHz:
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
c. 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 BWCF = 10log(500 kHz/300 kHz)
d. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
e. Sweep time = auto, trigger set to “free run”.
f. Trace average at least 100 traces in power averaging mode.
g. Record the max value

6.4 6 dB Bandwidth

6.4.1 Test Setup

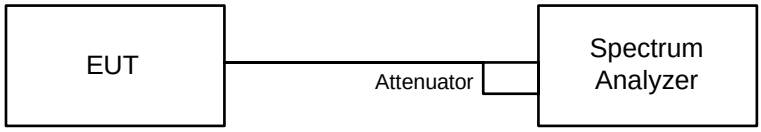


6.4.2 Test Procedure

a. Set resolution bandwidth (RBW) = 100 kHz.
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. 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

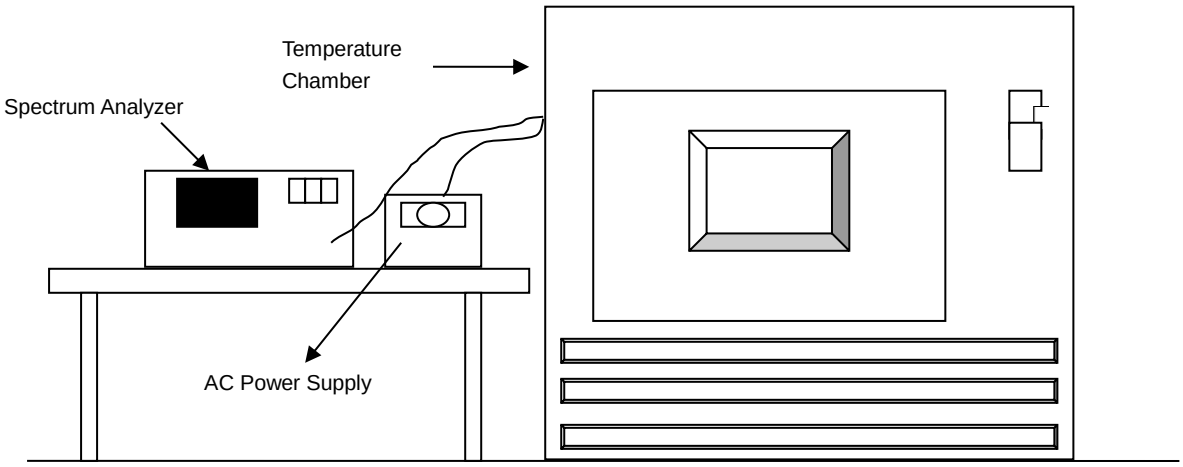


6.5.2 Test Procedure

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

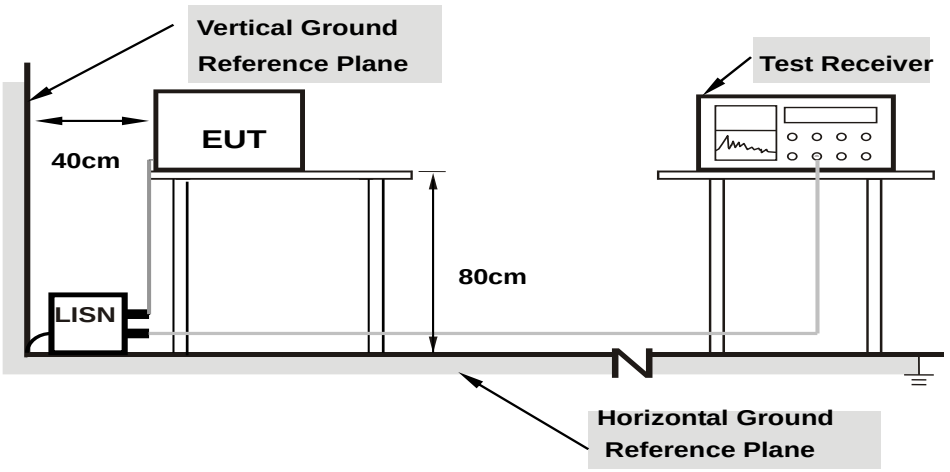


6.6.2 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. 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.
e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
f. 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

a. 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.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

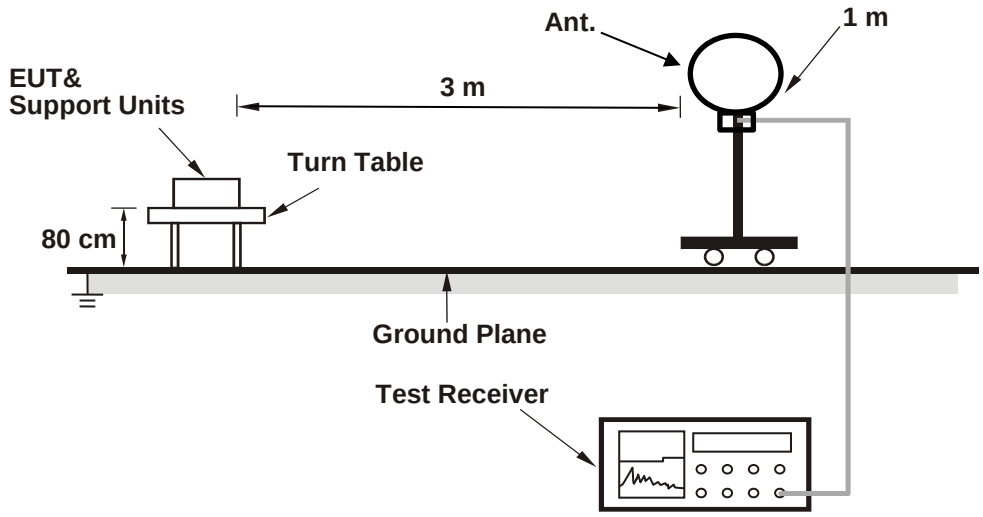
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

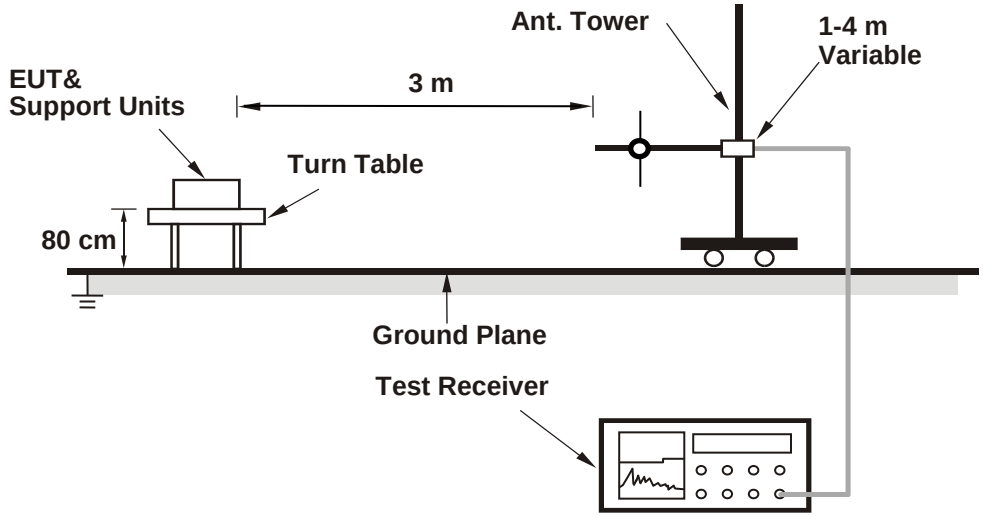
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



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 below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

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

For Radiated emission above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

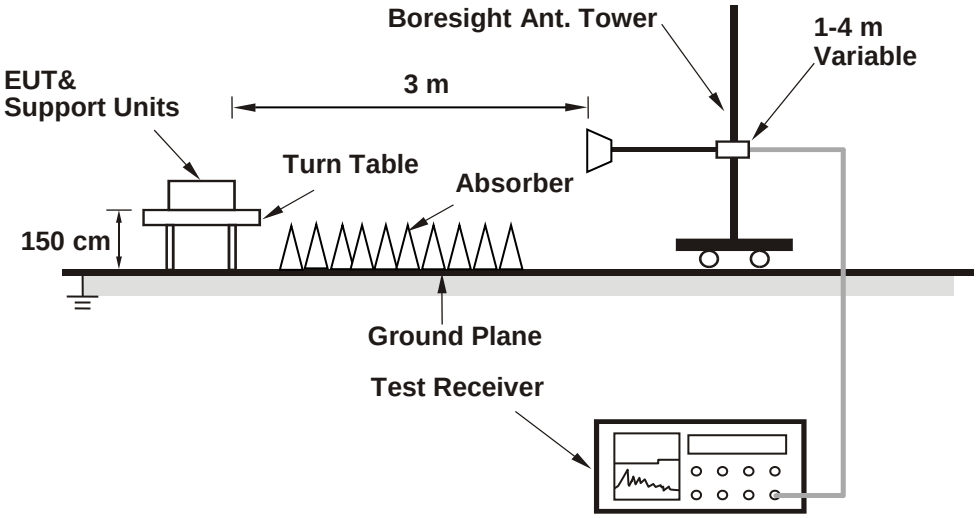
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. 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

a. 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.

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

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to 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:

1. 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.
2. All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 26 dB Bandwidth

nput Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.88	21.79	21.80	21.77
60	5300	21.72	21.75	21.66	21.78
64	5320	21.91	21.69	21.83	21.70
100	5500	21.98	21.87	21.68	21.75
116	5580	21.82	21.76	21.87	21.76
140	5700	22.04	21.97	21.73	21.84
144 (U-NII-2C)	5720	15.98	16.04	15.87	15.87
144 (U-NII-3)	5720	5.91	5.90	5.76	5.77

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	21.77	24.37 > 24
60	5300	21.66	24.35 > 24
64	5320	21.69	24.36 > 24
100	5500	21.68	24.36 > 24
116	5580	21.76	24.37 > 24
140	5700	21.73	24.37 > 24
144 (U-NII-2C)	5720	15.87	23 < 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	Chain 2	Chain 3
52	5260	21.94	21.77	21.84	21.82
60	5300	21.94	22.04	21.94	21.95
64	5320	21.91	21.80	21.93	21.98
100	5500	22.07	21.89	21.81	21.94
116	5580	22.18	21.93	22.15	21.88
140	5700	22.04	21.96	21.78	21.86
144 (U-NII-2C)	5720	16.09	15.99	16.04	15.91
144 (U-NII-3)	5720	6.02	5.95	5.87	5.81

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	21.77	24.37	>	24
60	5300	21.94	24.41	>	24
64	5320	21.80	24.38	>	24
100	5500	21.81	24.38	>	24
116	5580	21.88	24.4	>	24
140	5700	21.78	24.38	>	24
144 (U-NII-2C)	5720	15.91	23.01	<	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	Chain 2	Chain 3
54	5270	41.82	41.66	41.85	41.70
62	5310	41.83	41.84	41.73	41.74
102	5510	41.81	41.76	41.68	41.91
110	5550	41.97	41.79	41.88	41.72
134	5670	41.85	42.16	41.77	41.73
142 (U-NII-2C)	5710	35.94	35.88	36.64	36.01
142 (U-NII-3)	5710	5.77	5.76	5.90	6.02

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	41.66	27.19 > 24
62	5310	41.73	27.2 > 24
102	5510	41.68	27.19 > 24
110	5550	41.72	27.2 > 24
134	5670	41.73	27.2 > 24
142 (U-NII-2C)	5710	35.88	26.54 > 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	Chain 2	Chain 3
58	5290	83.26	83.05	83.13	82.59
106	5530	82.96	83.03	83.01	82.93
122	5610	82.97	83.13	83.31	82.77
138 (U-NII-2C)	5690	76.43	76.71	76.62	76.36
138 (U-NII-3)	5690	6.65	6.19	6.52	6.22

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	82.59	30.16 > 24
106	5530	82.93	30.18 > 24
122	5610	82.77	30.17 > 24
138 (U-NII-2C)	5690	76.36	29.82 > 24

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

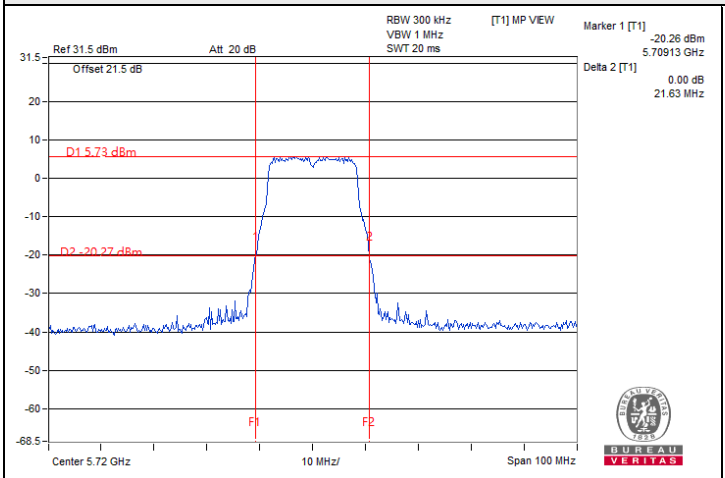
802.11ax (HE160)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-1)	5250	84.48	83.58	83.96	84.50
50 (U-NII-2A)	5250	84.57	83.31	83.61	84.32
114	5570	168.53	168.83	169.09	169.41

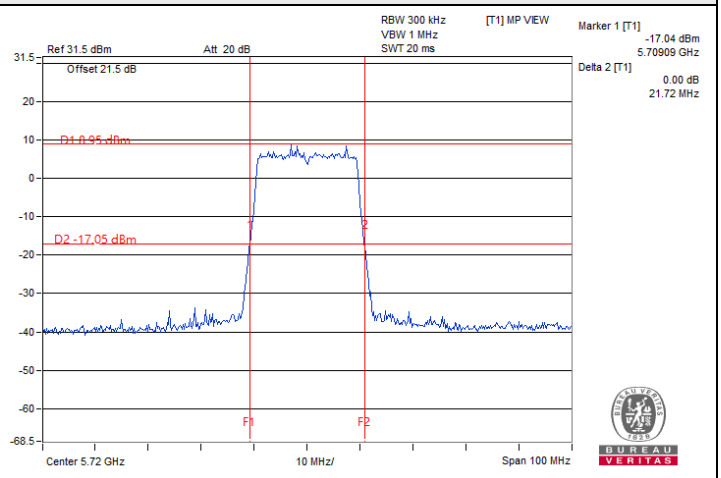
Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
50 (U-NII-2A)	5250	83.31	30.2	>	24
114	5570	168.53	33.26	>	24

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

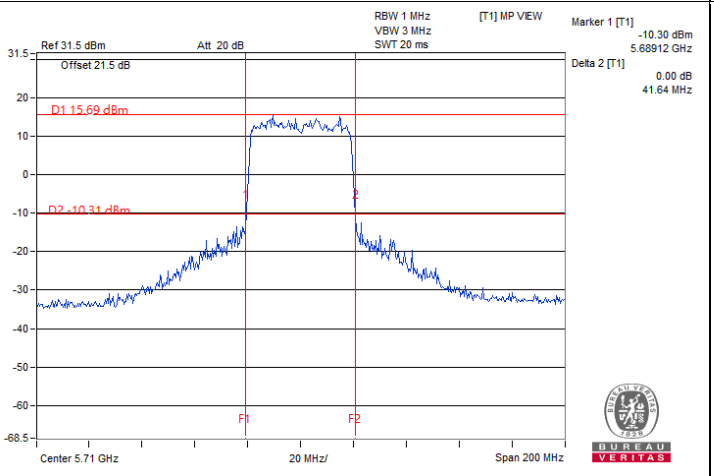
Spectrum Plot of Minimum Value



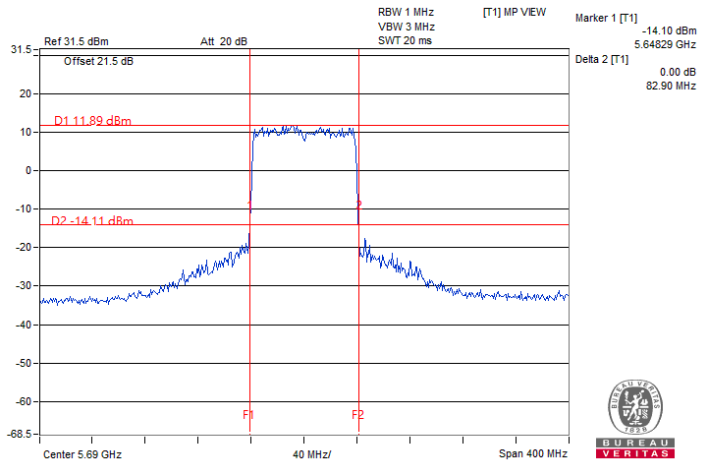
802.11a / Chain 2 : CH 144 (U-NII-3)



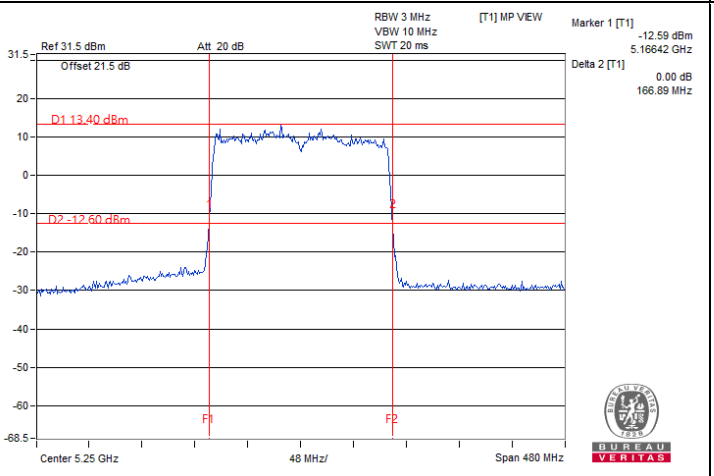
802.11ax (HE20) / Chain 3 : CH 144 (U-NII-3)



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



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



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

Notes:

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

7.2 RF Output Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

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	Chain 2	Chain 3				
52	5260	14.13	14.11	14.03	13.58	99.742	19.99	24	Pass
60	5300	14.31	14.22	14.15	13.54	101.997	20.09	24	Pass
64	5320	14.35	14.27	14.06	13.67	102.706	20.12	24	Pass
100	5500	14.09	14.13	14.04	13.94	101.652	20.07	24	Pass
116	5580	14.15	14.08	14.09	13.89	101.723	20.07	24	Pass
140	5700	14.18	14.19	14.14	13.82	102.465	20.11	24	Pass
*144 (U-NII-2C)	5720	13.62	13.94	13.62	13.35	92.43	19.66	23	Pass
*144 (U-NII-3)	5720	7.68	7.65	7.32	7.06	22.159	13.46	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	14.25	14.02	14.06	13.62	100.325	20.01	24	Pass
60	5300	14.25	14.03	14.04	13.58	100.055	20.00	24	Pass
64	5320	14.20	14.03	14.03	13.67	100.17	20.01	24	Pass
100	5500	14.19	14.00	14.00	13.63	99.547	19.98	24	Pass
116	5580	14.18	13.99	14.02	13.60	99.386	19.97	24	Pass
140	5700	14.18	14.03	14.00	13.58	99.397	19.97	24	Pass
*144 (U-NII-2C)	5720	13.35	13.39	13.14	13.18	84.858	19.29	23.01	Pass
*144 (U-NII-3)	5720	8.82	8.72	8.35	8.26	28.606	14.56	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	17.15	17.04	16.89	17.01	201.562	23.04	24	Pass
62	5310	17.13	17.10	16.77	16.98	200.35	23.02	24	Pass
102	5510	17.12	17.15	16.84	16.91	200.8	23.03	24	Pass
110	5550	17.17	17.08	16.87	16.87	200.451	23.02	24	Pass
134	5670	17.23	17.05	16.94	16.93	202.292	23.06	24	Pass
*142 (U-NII-2C)	5710	17.56	17.74	17.28	17.19	222.262	23.47	24	Pass
*142 (U-NII-3)	5710	8.20	7.96	7.96	7.58	24.838	13.95	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	17.88	17.42	17.55	17.85	234.423	23.70	24	Pass
106	5530	17.89	17.62	17.05	17.95	232.4	23.66	24	Pass
122	5610	17.88	17.84	17.47	17.24	231.003	23.64	24	Pass
*138 (U-NII-2C)	5690	18.13	17.48	18.11	17.63	243.646	23.87	24	Pass
*138 (U-NII-3)	5690	5.48	4.10	5.66	4.44	12.563	10.99	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT160) CDD

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	13.17	13.22	12.90	12.74	80.03	19.03	30	Pass
*50 (U-NII-2A)	5250	12.44	12.45	12.51	12.72	71.649	18.55	24	Pass
114	5570	17.02	17.20	17.22	17.35	209.879	23.22	24	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4 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	Chain 2	Chain 3				
52	5260	14.42	14.23	14.21	13.82	104.617	20.20	24	Pass
60	5300	14.43	14.29	14.22	13.83	105.165	20.22	24	Pass
64	5320	14.45	14.29	14.17	13.86	105.158	20.22	24	Pass
100	5500	14.51	14.26	14.23	13.88	105.837	20.25	24	Pass
116	5580	14.46	14.27	14.22	13.81	105.123	20.22	24	Pass
140	5700	14.44	14.28	14.16	13.79	104.584	20.19	24	Pass
*144 (U-NII-2C)	5720	13.35	13.39	13.14	13.18	84.858	19.29	23.01	Pass
*144 (U-NII-3)	5720	8.82	8.72	8.35	8.26	28.606	14.56	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4 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	Chain 2	Chain 3				
54	5270	17.37	17.29	17.05	17.17	210.974	23.24	24	Pass
62	5310	17.36	17.33	17.02	17.18	211.115	23.25	24	Pass
102	5510	17.33	17.30	17.04	17.13	210.003	23.22	24	Pass
110	5550	17.32	17.32	17.08	17.09	210.121	23.22	24	Pass
134	5670	17.38	17.25	17.10	17.11	210.481	23.23	24	Pass
*142 (U-NII-2C)	5710	17.56	17.74	17.28	17.19	222.262	23.47	24	Pass
*142 (U-NII-3)	5710	8.20	7.96	7.96	7.58	24.838	13.95	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4 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	Chain 2	Chain 3				
58	5290	18.09	17.56	17.60	18.00	242.073	23.84	24	Pass
106	5530	17.89	17.72	18.11	18.03	248.921	23.96	24	Pass
122	5610	18.06	18.00	17.63	17.42	240.22	23.81	24	Pass
*138 (U-NII-2C)	5690	18.13	17.48	18.11	17.63	243.646	23.87	24	Pass
*138 (U-NII-3)	5690	5.48	4.10	5.66	4.44	12.563	10.99	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 4 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	Chain 2	Chain 3				
*50 (U-NII-1)	5250	13.17	13.22	12.90	12.74	80.03	19.03	30	Pass
*50 (U-NII-2A)	5250	12.44	12.45	12.51	12.72	71.649	18.55	24	Pass
114	5570	17.14	17.37	17.39	17.59	218.576	23.40	24	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 4 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	14.25	14.02	14.06	13.62	100.325	20.01	20.33	Pass
60	5300	14.25	14.03	14.04	13.58	100.055	20.00	20.33	Pass
64	5320	14.20	14.03	14.03	13.67	100.17	20.01	20.33	Pass
100	5500	14.19	14.00	14.00	13.63	99.547	19.98	20.33	Pass
116	5580	14.18	13.99	14.02	13.60	99.386	19.97	20.33	Pass
140	5700	14.18	14.03	14.00	13.58	99.397	19.97	20.33	Pass
*144 (U-NII-2C)	5720	13.35	13.39	13.14	13.18	84.858	19.29	19.34	Pass
*144 (U-NII-3)	5720	8.82	8.72	8.35	8.26	28.606	14.56	26.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-3, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 dBm.

802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.18	14.08	13.84	13.97	100.924	20.04	20.33	Pass
62	5310	14.21	14.06	13.78	14.01	100.886	20.04	20.33	Pass
102	5510	14.21	14.07	13.77	13.99	100.775	20.03	20.33	Pass
110	5550	14.24	14.14	13.78	14.00	101.485	20.06	20.33	Pass
134	5670	14.23	14.06	13.82	13.94	100.827	20.04	20.33	Pass
*142 (U-NII-2C)	5710	14.15	14.39	13.86	13.83	101.957	20.08	20.33	Pass
*142 (U-NII-3)	5710	4.08	4.01	3.87	3.55	9.779	9.90	26.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-3, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 dBm.

802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	14.22	14.06	13.98	13.66	100.123	20.01	20.33	Pass
106	5530	14.23	14.15	14.02	13.74	101.381	20.06	20.33	Pass
122	5610	14.19	14.09	14.03	13.70	100.622	20.03	20.33	Pass
*138 (U-NII-2C)	5690	14.51	13.86	14.48	14.02	105.86	20.25	20.33	Pass
*138 (U-NII-3)	5690	1.88	0.58	2.04	0.83	5.495	7.40	26.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-3, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 dBm.

802.11ac (VHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	11.42	11.47	11.15	10.99	53.488	17.28	26.33	Pass
*50 (U-NII-2A)	5250	10.69	10.70	10.76	10.97	47.886	16.80	20.33	Pass
114	5570	14.09	13.99	14.11	13.88	100.903	20.04	20.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-1, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 dBm.
4. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].

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	Chain 2	Chain 3				
52	5260	14.42	14.23	14.21	13.82	104.617	20.20	20.33	Pass
60	5300	14.43	14.29	14.22	13.83	105.165	20.22	20.33	Pass
64	5320	14.45	14.29	14.17	13.86	105.158	20.22	20.33	Pass
100	5500	14.51	14.26	14.23	13.88	105.837	20.25	20.33	Pass
116	5580	14.46	14.27	14.22	13.81	105.123	20.22	20.33	Pass
140	5700	14.44	14.28	14.16	13.79	104.584	20.19	20.33	Pass
*144 (U-NII-2C)	5720	13.35	13.39	13.14	13.18	84.858	19.29	19.34	Pass
*144 (U-NII-3)	5720	8.82	8.72	8.35	8.26	28.606	14.56	26.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-3, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 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	Chain 2	Chain 3				
54	5270	14.41	14.30	14.01	14.18	105.88	20.25	20.33	Pass
62	5310	14.40	14.24	14.06	14.16	105.618	20.24	20.33	Pass
102	5510	14.39	14.27	14.06	14.12	105.5	20.23	20.33	Pass
110	5550	14.35	14.33	14.06	14.14	105.739	20.24	20.33	Pass
134	5670	14.42	14.27	14.02	14.18	105.816	20.25	20.33	Pass
*142 (U-NII-2C)	5710	14.15	14.39	13.86	13.83	101.957	20.08	20.33	Pass
*142 (U-NII-3)	5710	4.08	4.01	3.87	3.55	9.779	9.90	26.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-3, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 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	Chain 2	Chain 3				
58	5290	14.45	14.30	14.17	13.86	105.22	20.22	20.33	Pass
106	5530	14.44	14.30	14.21	13.90	105.623	20.24	20.33	Pass
122	5610	14.42	14.30	14.20	13.93	105.605	20.24	20.33	Pass
*138 (U-NII-2C)	5690	14.51	13.86	14.48	14.02	105.86	20.25	20.33	Pass
*138 (U-NII-3)	5690	1.88	0.58	2.04	0.83	5.495	7.40	26.33	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-3, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 dBm.

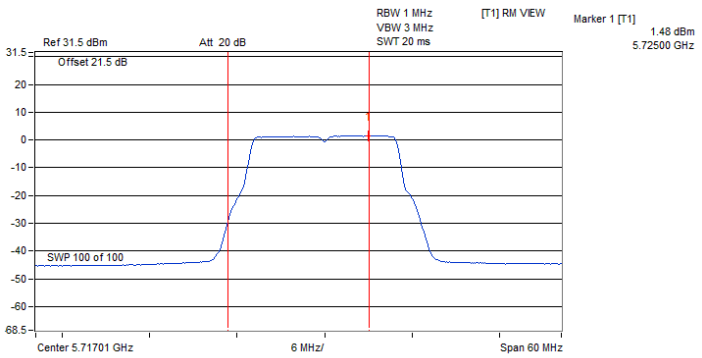
802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3				
*50 (U-NII-1)	5250	11.42	11.47	11.15	10.99	53.488	17.28	26.33	Pass
*50 (U-NII-2A)	5250	10.69	10.70	10.76	10.97	47.886	16.80	20.33	Pass
114	5570	14.27	14.22	14.29	14.08	105.593	20.24	20.33	Pass

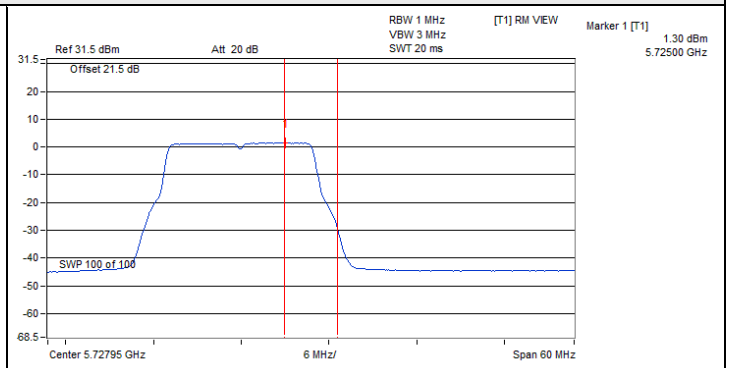
Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-1, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to 30-(9.67-6) = 26.33 dBm.
4. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].
5. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(9.67-6)].

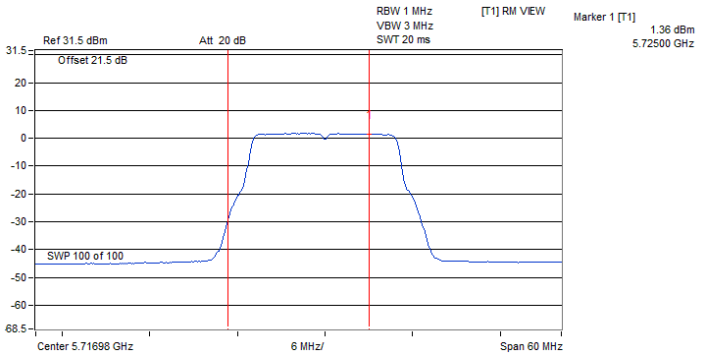
Spectrum Plot for channel straddling



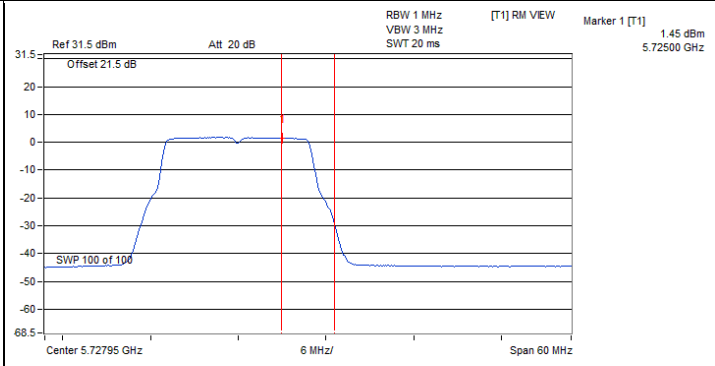
802.11a CDD / Chain 0 : CH 144 (U-NII-2C)



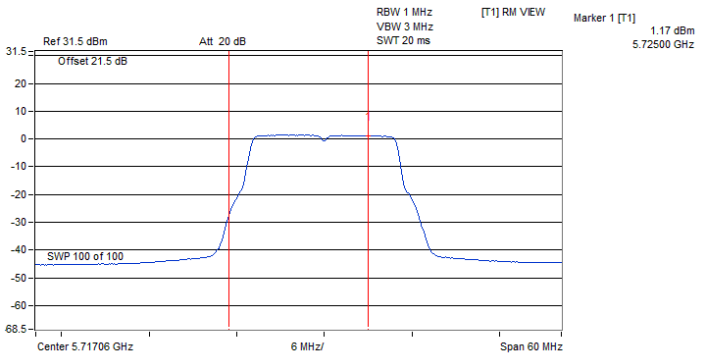
802.11a CDD / Chain 0 : CH 144 (U-NII-3)



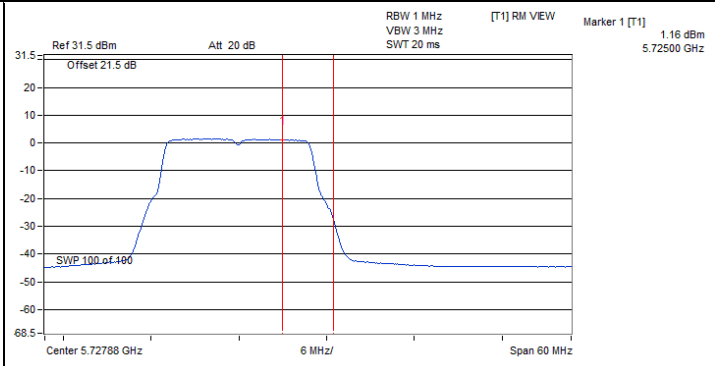
802.11a CDD / Chain 1 : CH 144 (U-NII-2C)



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

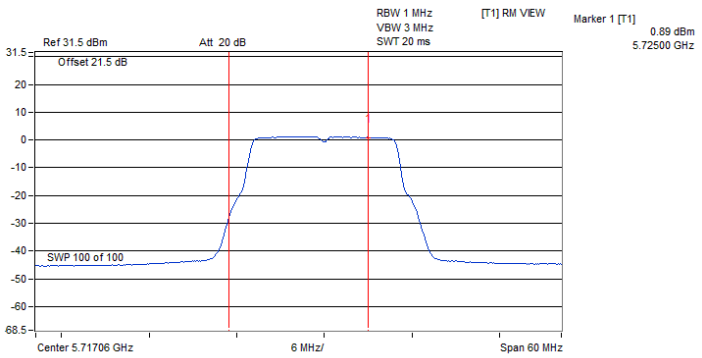


802.11a CDD / Chain 2 : CH 144 (U-NII-2C)



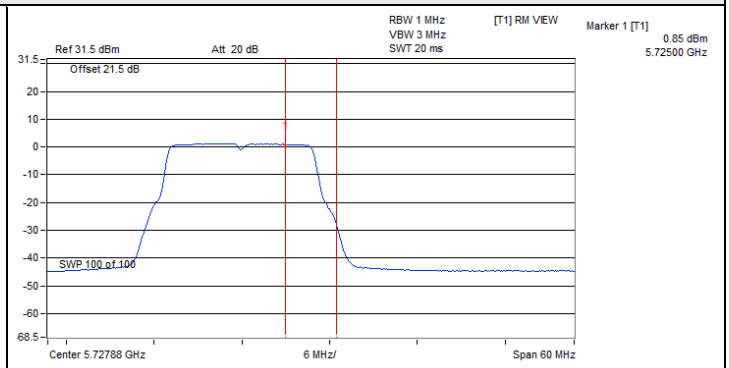
802.11a CDD / Chain 2 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



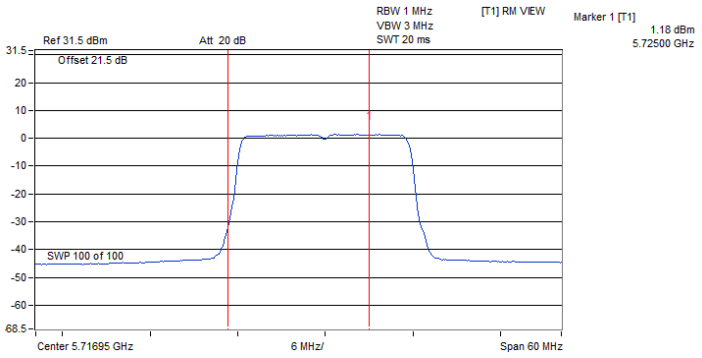
TX Channel Bandwidth 15.87 MHz Power 13.35 dBm

802.11a CDD / Chain 3 : CH 144 (U-NII-2C)



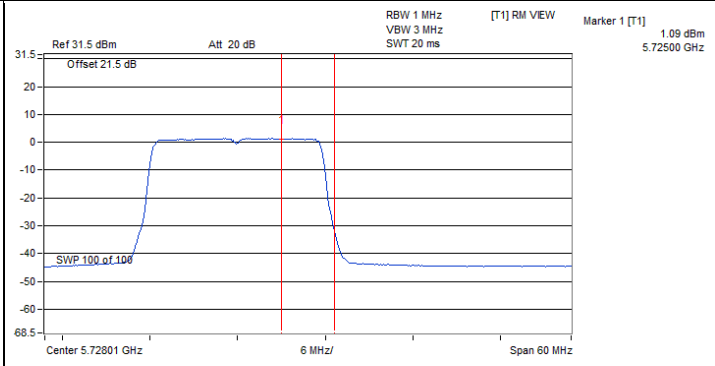
TX Channel Bandwidth 5.77 MHz Power 7.06 dBm

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



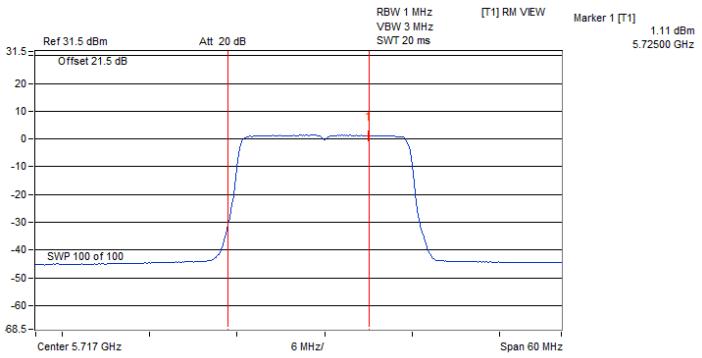
TX Channel Bandwidth 16.09 MHz Power 13.35 dBm

802.11ac (VHT20) CDD / Chain 0 : CH 144 (U-NII-2C)



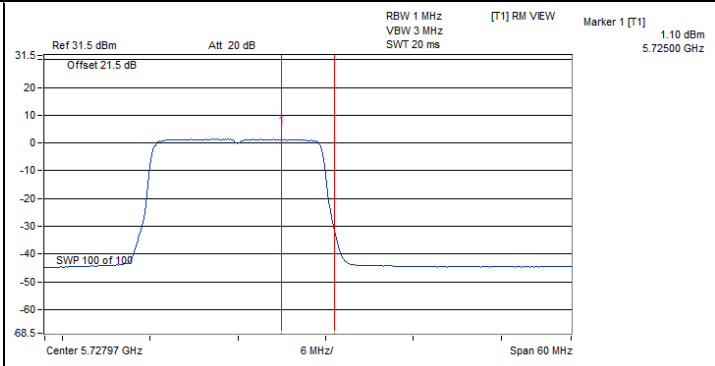
TX Channel Bandwidth 6.02 MHz Power 8.82 dBm

802.11ac (VHT20) CDD / Chain 0 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.99 MHz Power 13.39 dBm

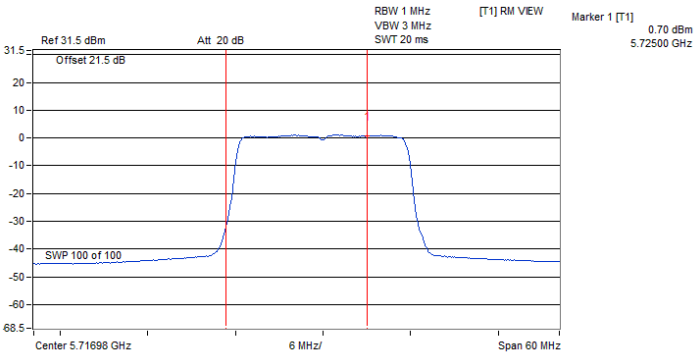
802.11ac (VHT20) CDD / Chain 1 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.95 MHz Power 8.72 dBm

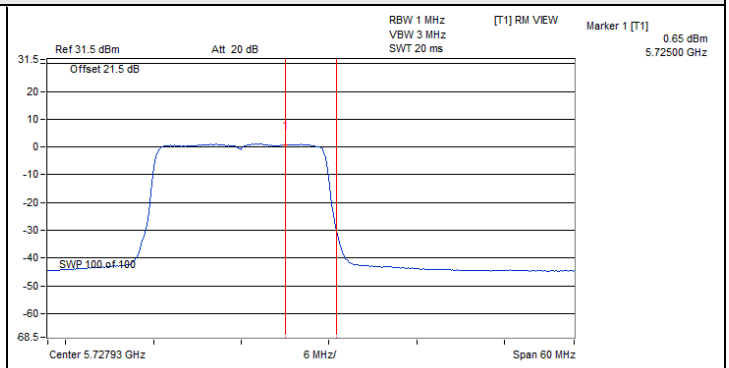
802.11ac (VHT20) CDD / Chain 1 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



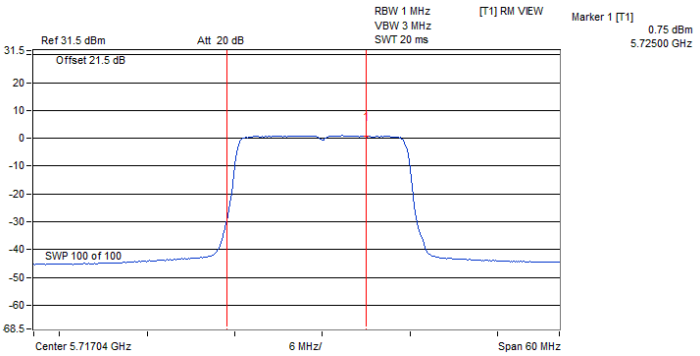
TX Channel Bandwidth 16.04 MHz Power 13.14 dBm

802.11ac (VHT20) CDD / Chain 2 : CH 144 (U-NII-2C)



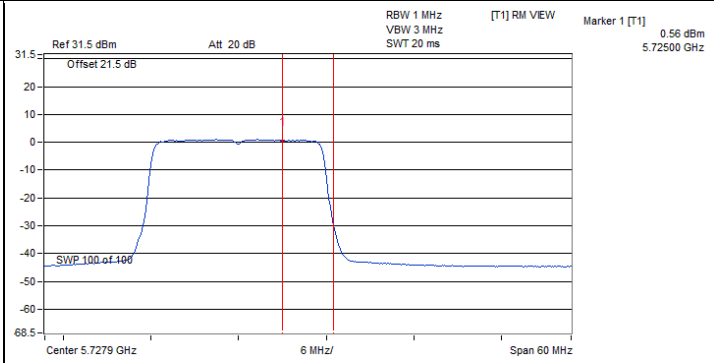
TX Channel Bandwidth 5.87 MHz Power 8.35 dBm

802.11ac (VHT20) CDD / Chain 2 : CH 144 (U-NII-3)



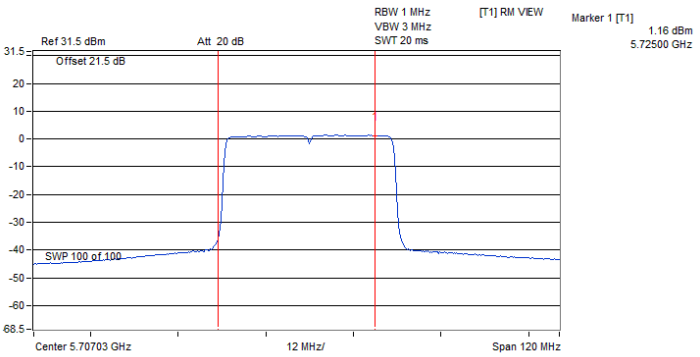
TX Channel Bandwidth 15.91 MHz Power 13.18 dBm

802.11ac (VHT20) CDD / Chain 3 : CH 144 (U-NII-2C)



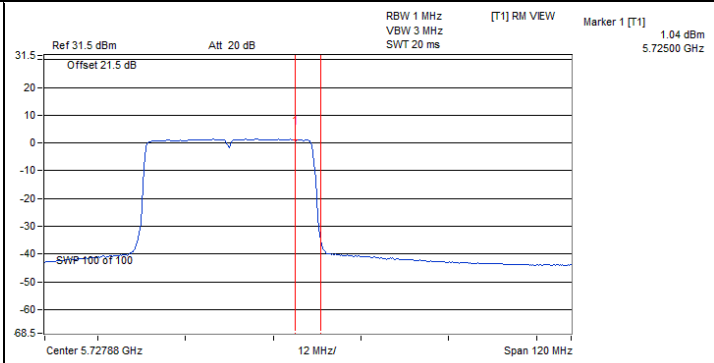
TX Channel Bandwidth 5.81 MHz Power 8.26 dBm

802.11ac (VHT20) CDD / Chain 3 : CH 144 (U-NII-3)



TX Channel Bandwidth 35.94 MHz Power 17.56 dBm

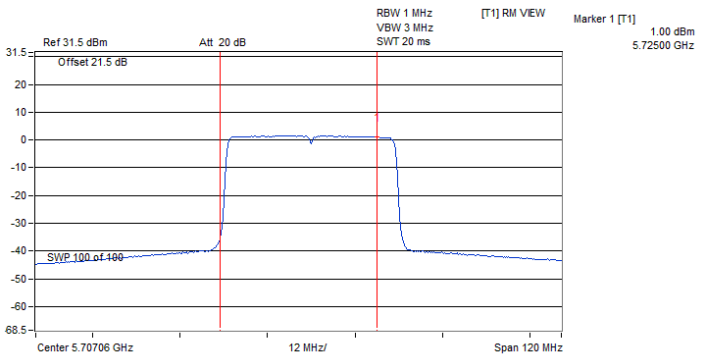
802.11ac (VHT40) CDD / Chain 0 : CH 142 (U-NII-2C)



TX Channel Bandwidth 5.77 MHz Power 8.2 dBm

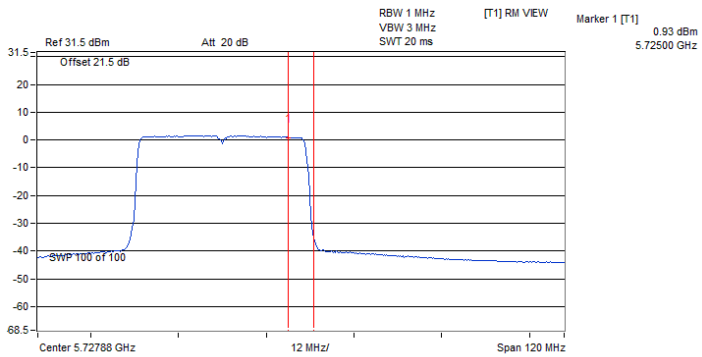
802.11ac (VHT40) CDD / Chain 0 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



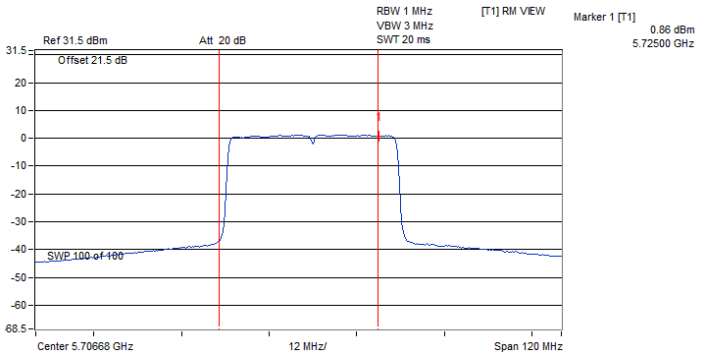
TX Channel Bandwidth 35.88 MHz Power 17.74 dBm

802.11ac (VHT40) CDD / Chain 1 : CH 142 (U-NII-2C)



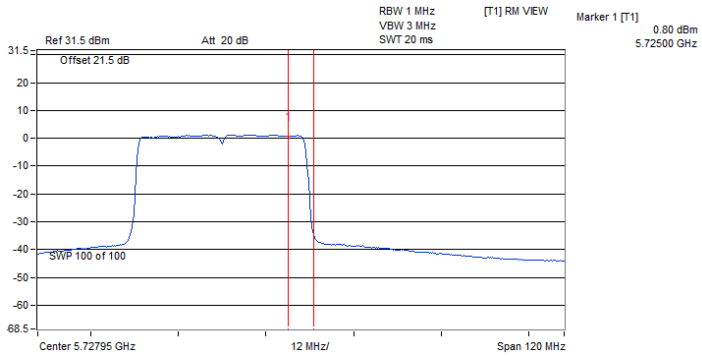
TX Channel Bandwidth 5.76 MHz Power 7.96 dBm

802.11ac (VHT40) CDD / Chain 1 : CH 142 (U-NII-3)



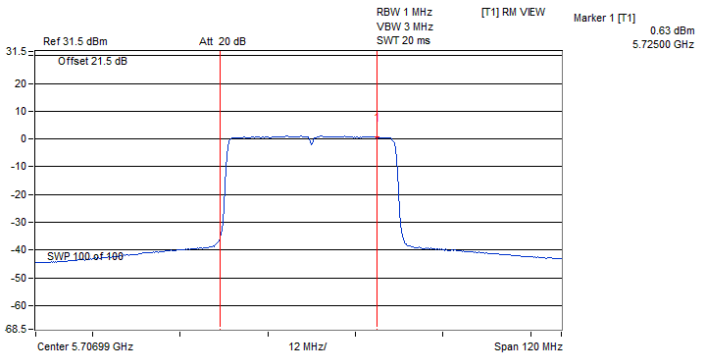
TX Channel Bandwidth 36.64 MHz Power 17.28 dBm

802.11ac (VHT40) CDD / Chain 2 : CH 142 (U-NII-2C)



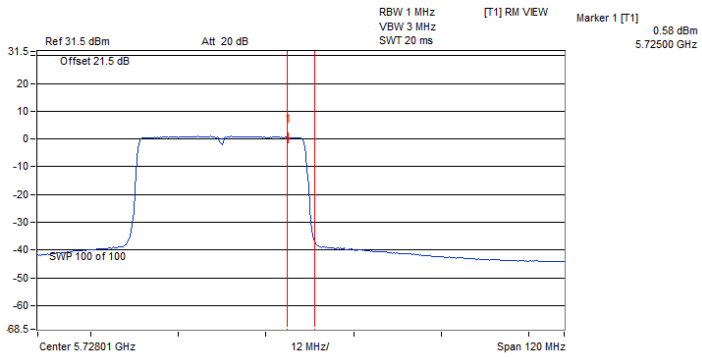
TX Channel Bandwidth 5.9 MHz Power 7.96 dBm

802.11ac (VHT40) CDD / Chain 2 : CH 142 (U-NII-3)



TX Channel Bandwidth 36.01 MHz Power 17.19 dBm

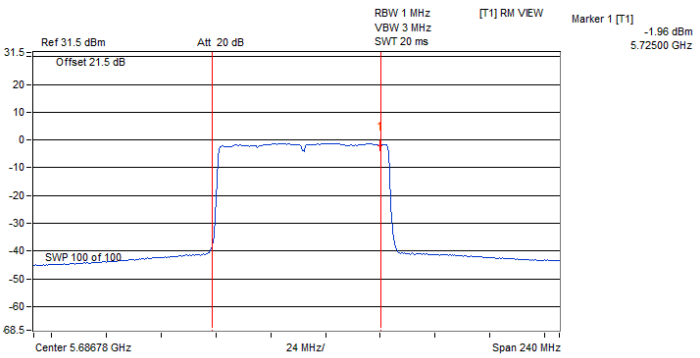
802.11ac (VHT40) CDD / Chain 3 : CH 142 (U-NII-2C)



TX Channel Bandwidth 6.02 MHz Power 7.58 dBm

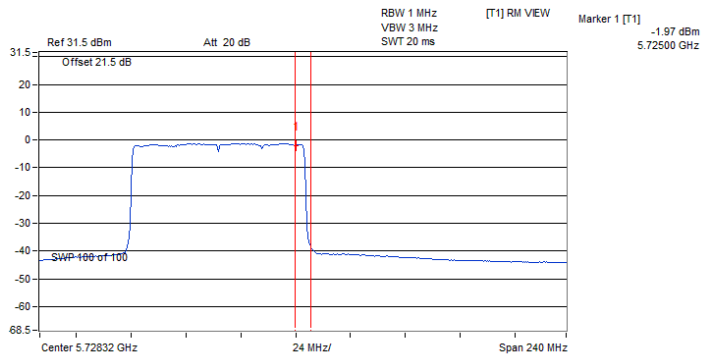
802.11ac (VHT40) CDD / Chain 3 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



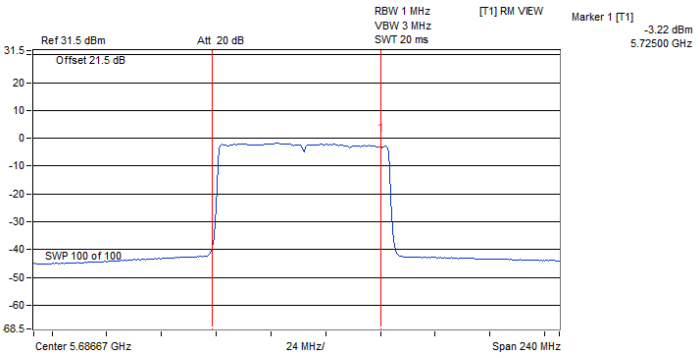
TX Channel Bandwidth 76.43 MHz Power 18.13 dBm

802.11ac (VHT80) CDD / Chain 0 : CH 138 (U-NII-2C)



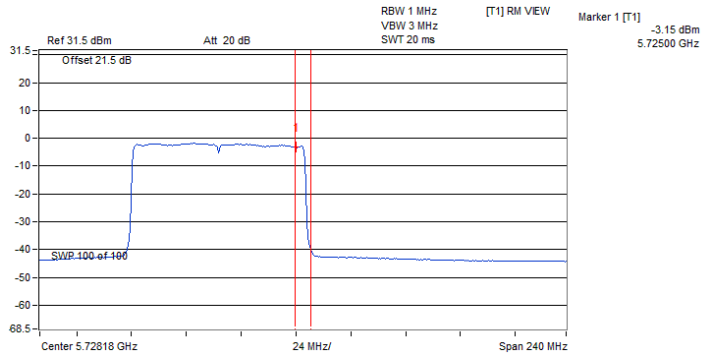
TX Channel Bandwidth 6.65 MHz Power 5.48 dBm

802.11ac (VHT80) CDD / Chain 0 : CH 138 (U-NII-3)



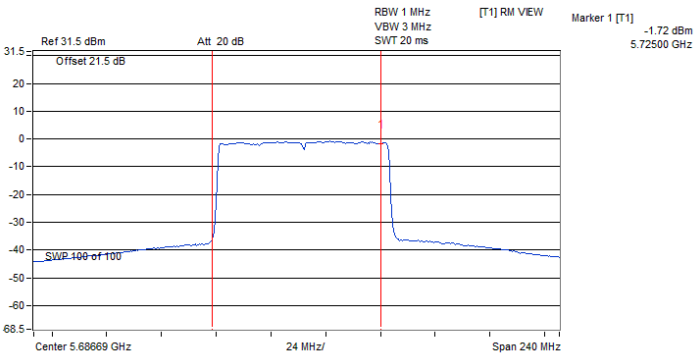
TX Channel Bandwidth 76.65 MHz Power 17.48 dBm

802.11ac (VHT80) CDD / Chain 1 : CH 138 (U-NII-2C)



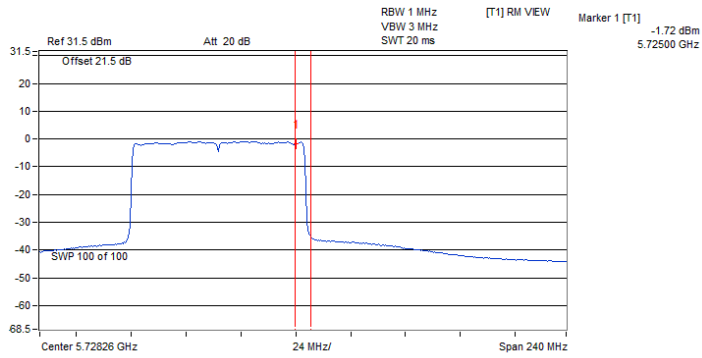
TX Channel Bandwidth 6.37 MHz Power 4.1 dBm

802.11ac (VHT80) CDD / Chain 1 : CH 138 (U-NII-3)



TX Channel Bandwidth 76.62 MHz Power 18.11 dBm

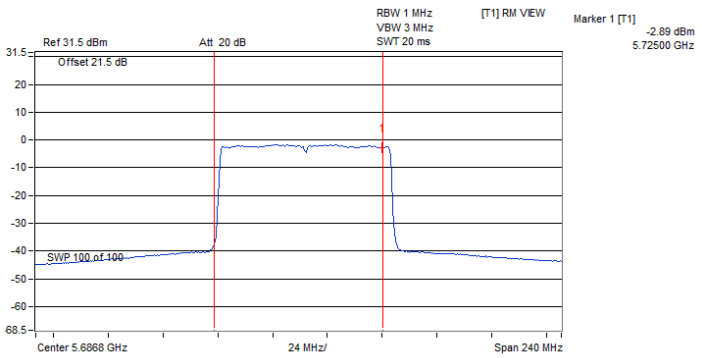
802.11ac (VHT80) CDD / Chain 2 : CH 138 (U-NII-2C)



TX Channel Bandwidth 6.52 MHz Power 5.66 dBm

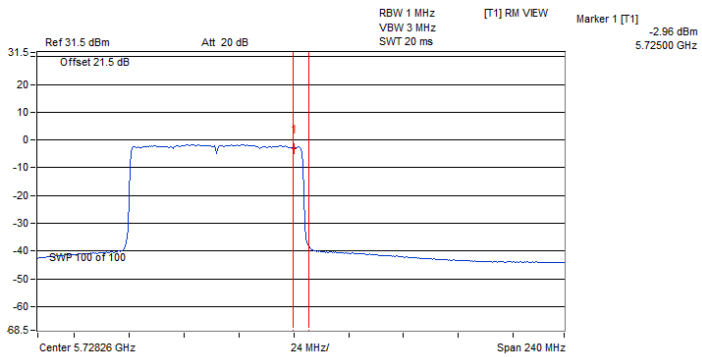
802.11ac (VHT80) CDD / Chain 2 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



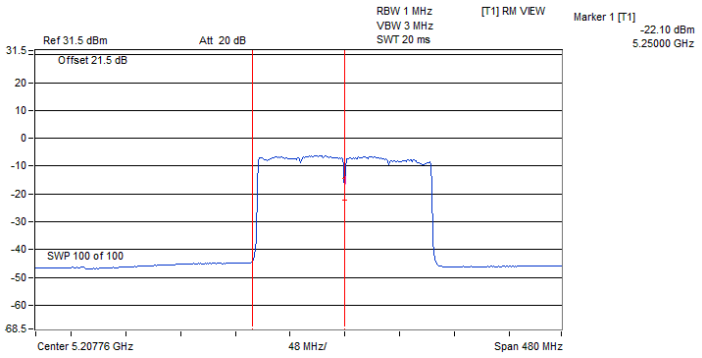
TX Channel Bandwidth 76.4 MHz Power 17.63 dBm

802.11ac (VHT80) CDD / Chain 3 : CH 138 (U-NII-2C)



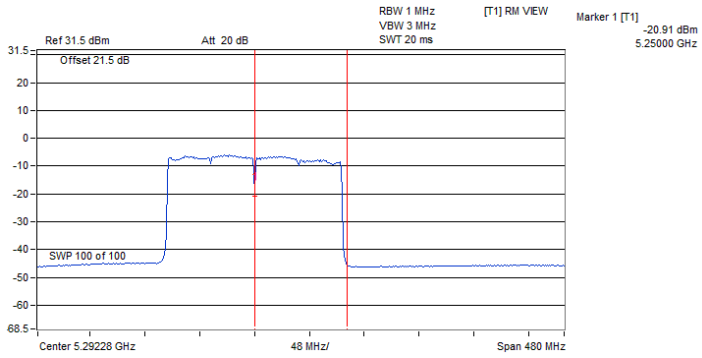
TX Channel Bandwidth 6.52 MHz Power 4.44 dBm

802.11ac (VHT80) CDD / Chain 3 : CH 138 (U-NII-3)



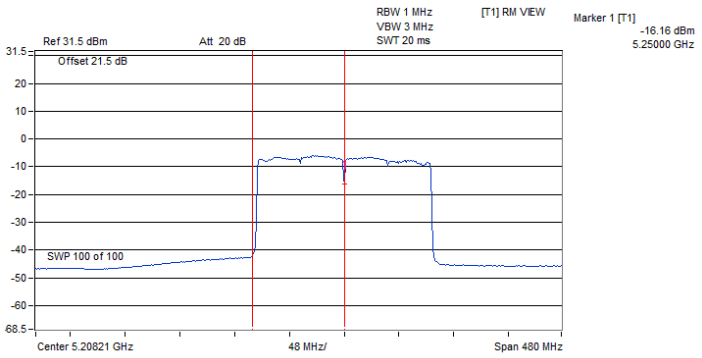
TX Channel Bandwidth 84.48 MHz Power 13.17 dBm

802.11ac (VHT160) CDD / Chain 0 : CH 50 (U-NII-1)



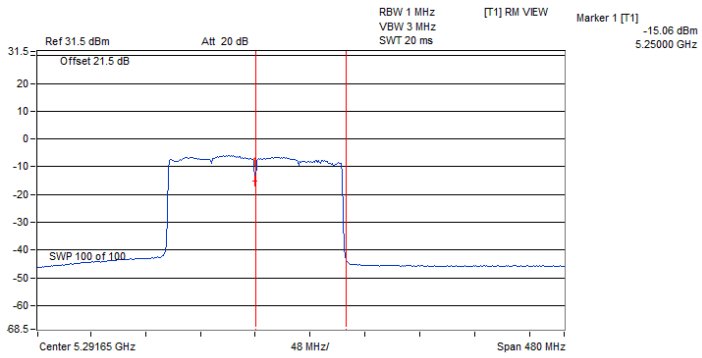
TX Channel Bandwidth 84.57 MHz Power 12.44 dBm

802.11ac (VHT160) CDD / Chain 0 : CH 50 (U-NII-2A)



TX Channel Bandwidth 83.58 MHz Power 13.22 dBm

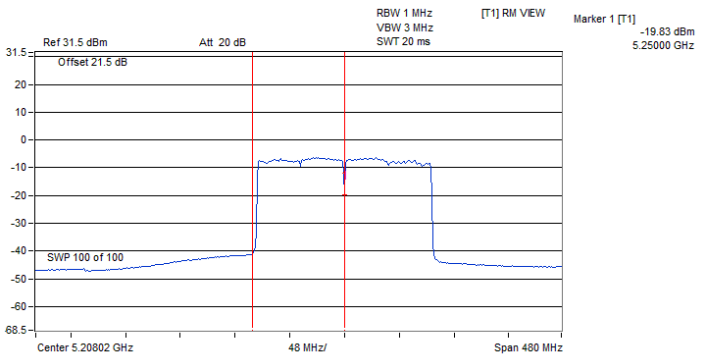
802.11ac (VHT160) CDD / Chain 1 : CH 50 (U-NII-1)



TX Channel Bandwidth 83.31 MHz Power 12.45 dBm

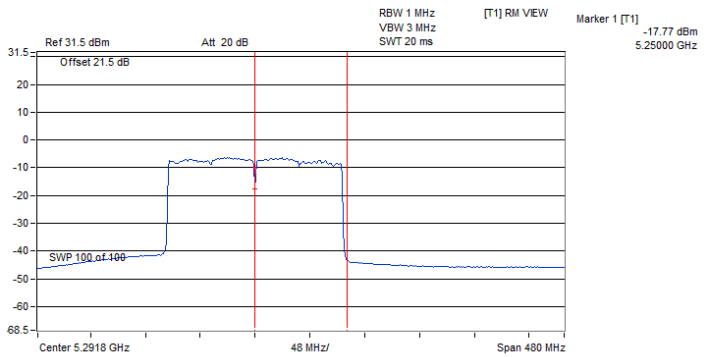
802.11ac (VHT160) CDD / Chain 1 : CH 50 (U-NII-2A)

Spectrum Plot for channel straddling



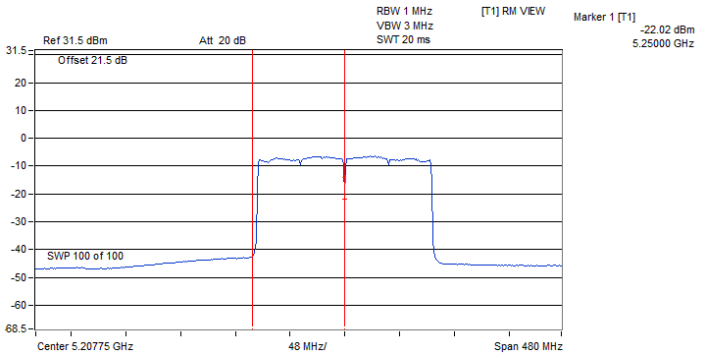
TX Channel Bandwidth 83.96 MHz Power 12.9 dBm

802.11ac (VHT160) CDD / Chain 2 : CH 50 (U-NII-1)



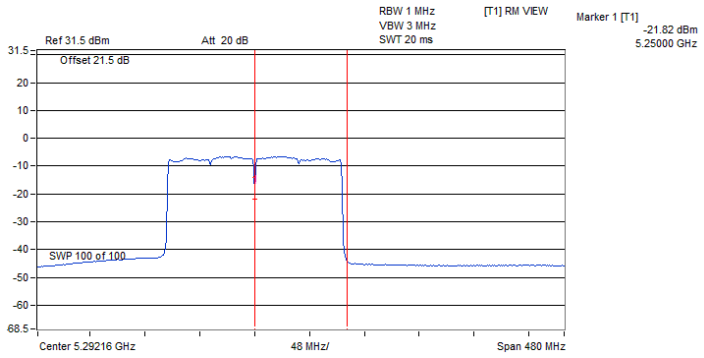
TX Channel Bandwidth 83.61 MHz Power 12.51 dBm

802.11ac (VHT160) CDD / Chain 2 : CH 50 (U-NII-2A)



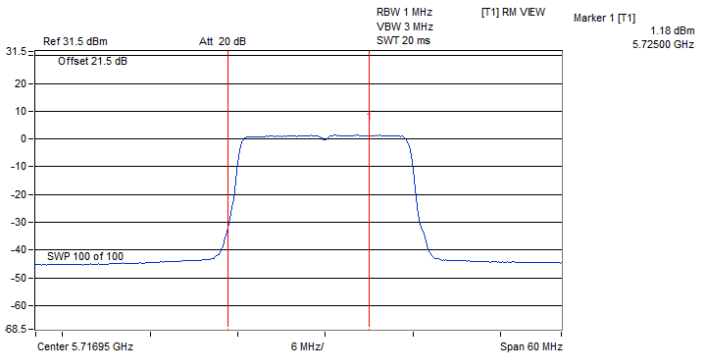
TX Channel Bandwidth 84.5 MHz Power 12.74 dBm

802.11ac (VHT160) CDD / Chain 3 : CH 50 (U-NII-1)



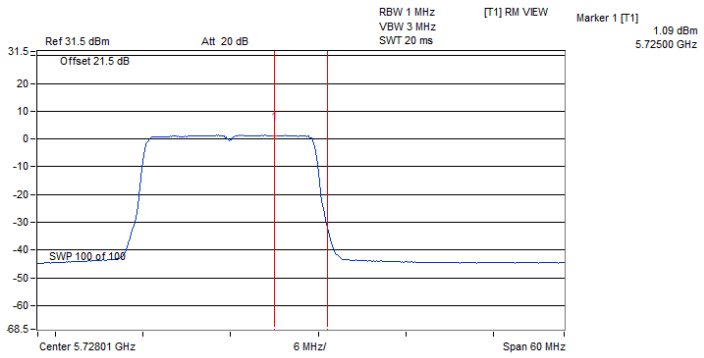
TX Channel Bandwidth 84.32 MHz Power 12.72 dBm

802.11ac (VHT160) CDD / Chain 3 : CH 50 (U-NII-2A)



TX Channel Bandwidth 16.09 MHz Power 13.35 dBm

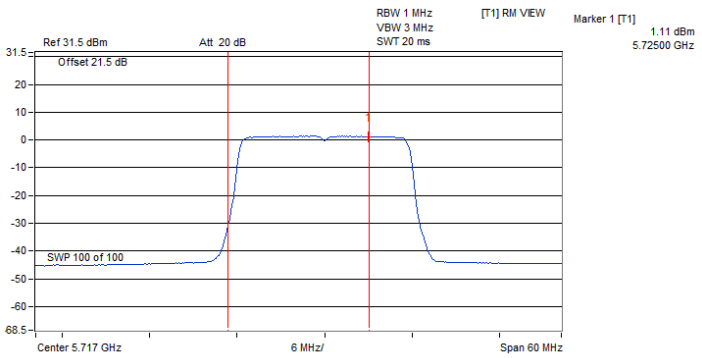
802.11ax (HE20) CDD / Chain 0 : CH 144 (U-NII-2C)



TX Channel Bandwidth 6.02 MHz Power 8.82 dBm

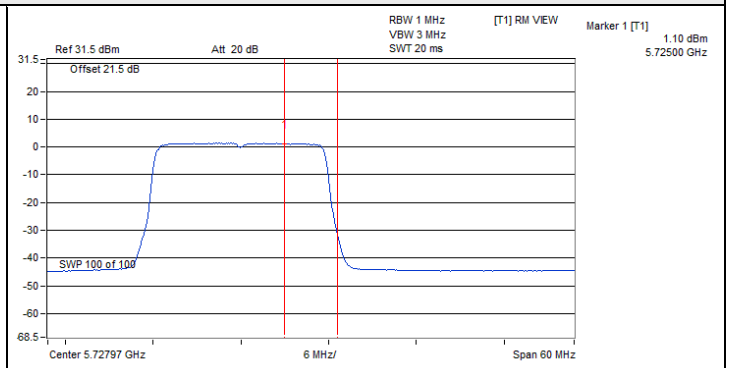
802.11ax (HE20) CDD / Chain 0 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



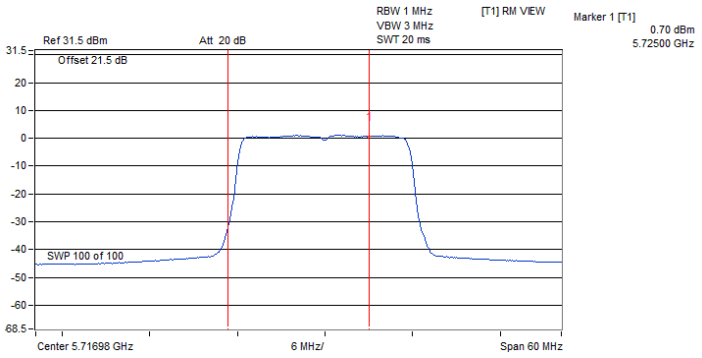
TX Channel Bandwidth 15.99 MHz Power 13.39 dBm

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



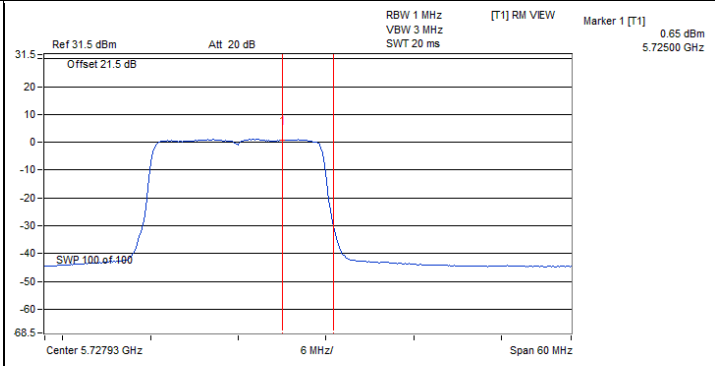
TX Channel Bandwidth 5.95 MHz Power 8.72 dBm

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



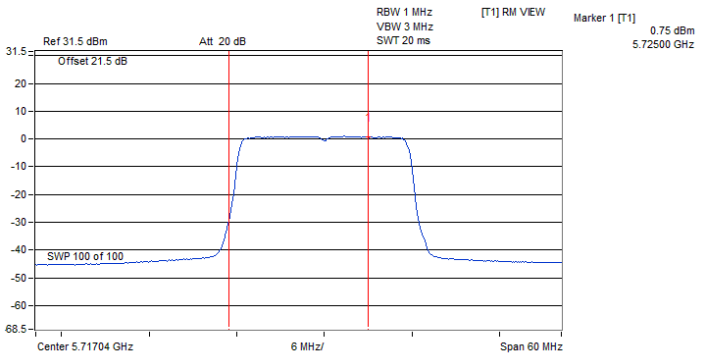
TX Channel Bandwidth 16.04 MHz Power 13.14 dBm

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



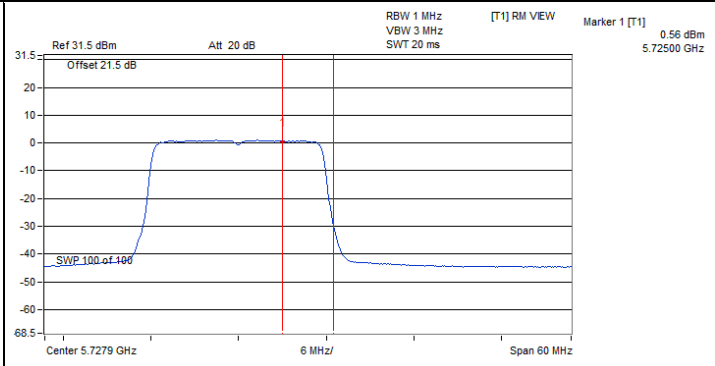
TX Channel Bandwidth 5.87 MHz Power 8.35 dBm

802.11ax (HE20) CDD / Chain 2 : CH 144 (U-NII-3)



TX Channel Bandwidth 15.91 MHz Power 13.18 dBm

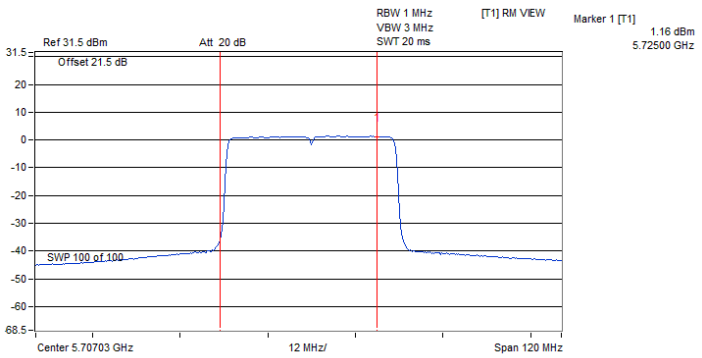
802.11ax (HE20) CDD / Chain 3 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.81 MHz Power 8.26 dBm

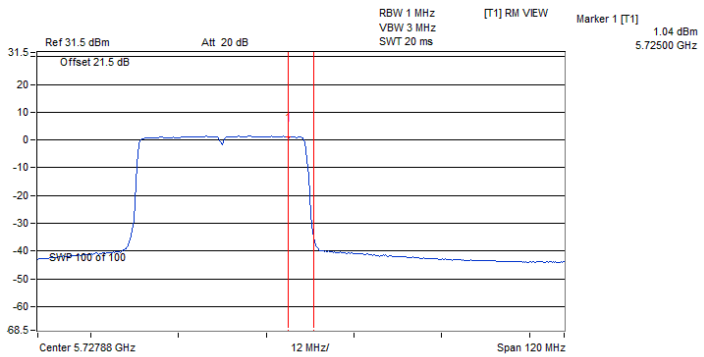
802.11ax (HE20) CDD / Chain 3 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



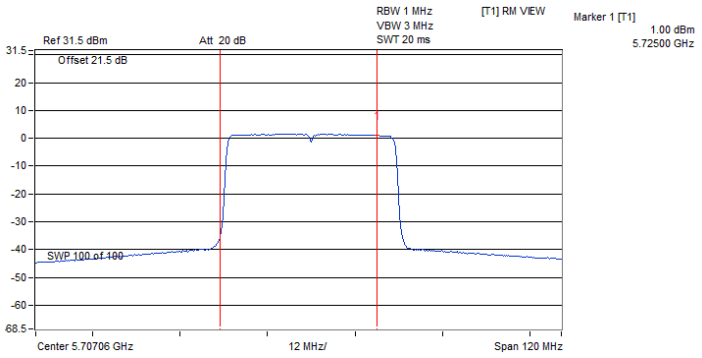
TX Channel Bandwidth 35.94 MHz Power 17.56 dBm

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



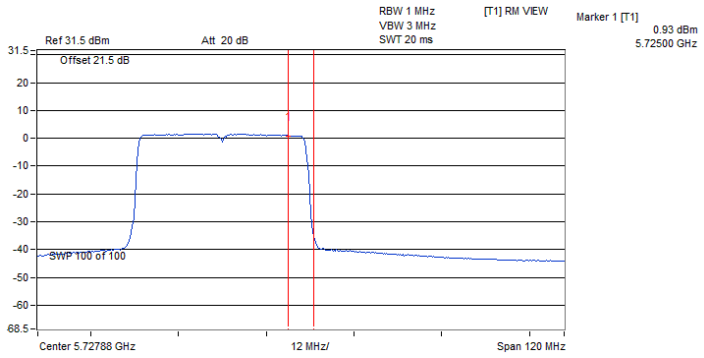
TX Channel Bandwidth 5.77 MHz Power 8.2 dBm

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



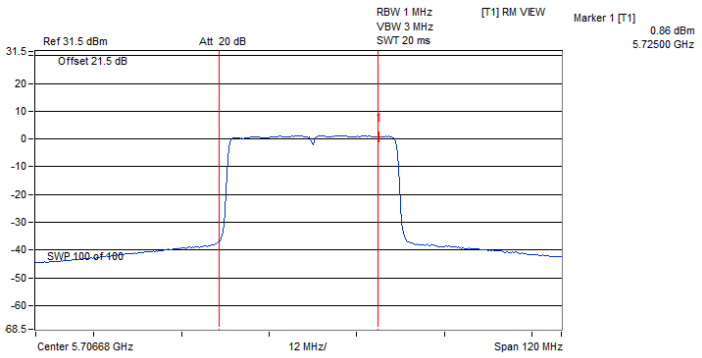
TX Channel Bandwidth 35.88 MHz Power 17.74 dBm

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



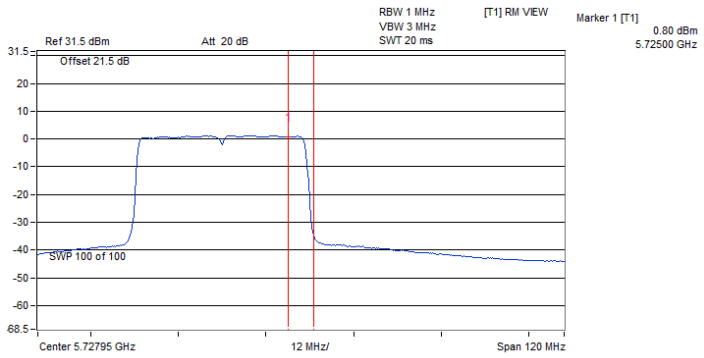
TX Channel Bandwidth 5.76 MHz Power 7.96 dBm

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



TX Channel Bandwidth 36.64 MHz Power 17.28 dBm

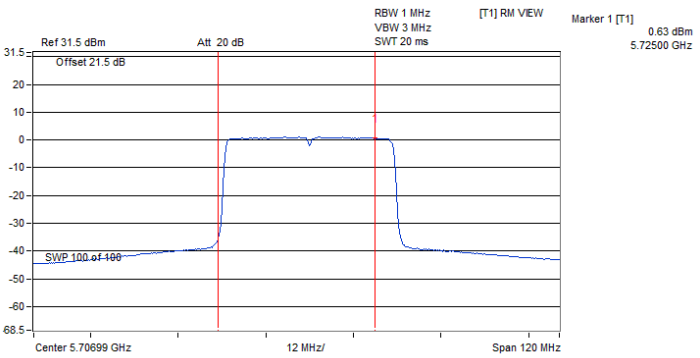
802.11ax (HE40) CDD / Chain 2 : CH 142 (U-NII-2C)



TX Channel Bandwidth 5.9 MHz Power 7.96 dBm

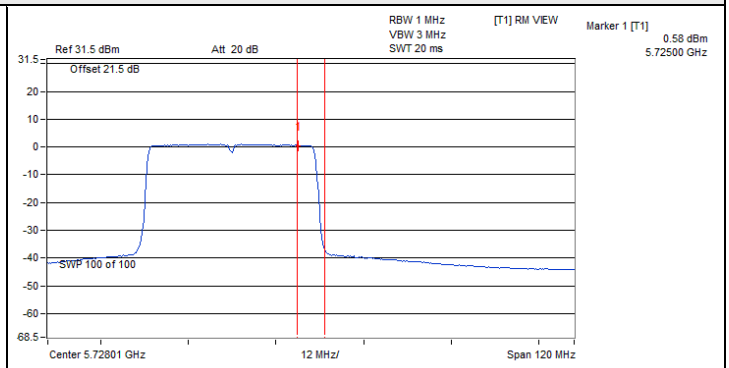
802.11ax (HE40) CDD / Chain 2 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



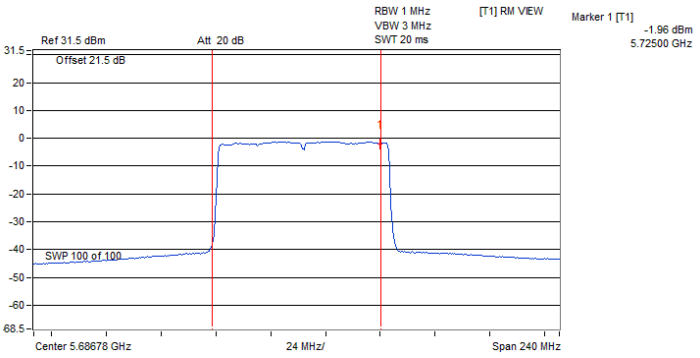
TX Channel Bandwidth 36.01 MHz Power 17.19 dBm

802.11ax (HE40) CDD / Chain 3 : CH 142 (U-NII-2C)



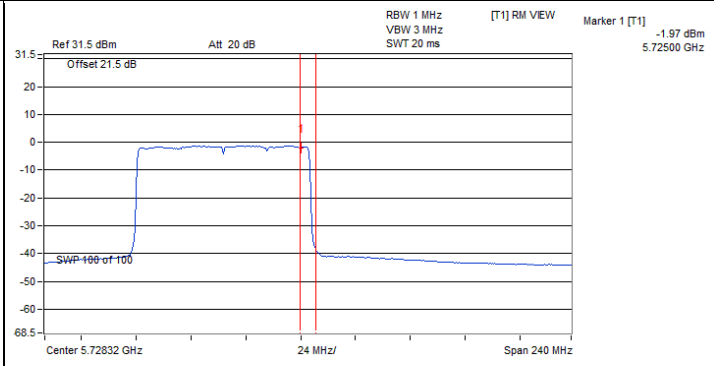
TX Channel Bandwidth 6.02 MHz Power 7.58 dBm

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



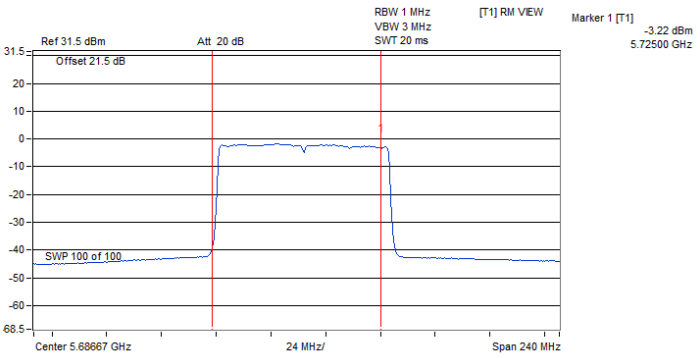
TX Channel Bandwidth 76.43 MHz Power 18.13 dBm

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



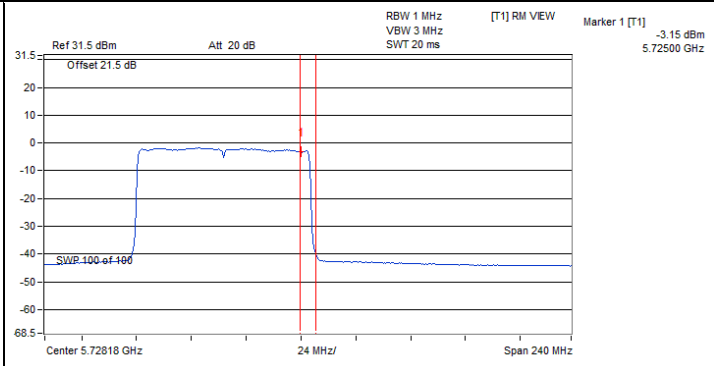
TX Channel Bandwidth 6.65 MHz Power 5.48 dBm

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



TX Channel Bandwidth 76.65 MHz Power 17.48 dBm

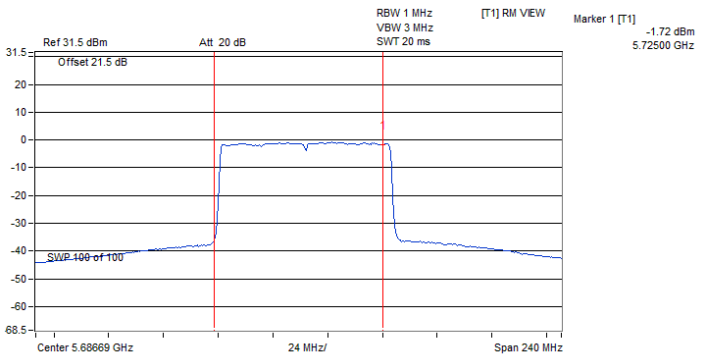
802.11ax (HE80) CDD / Chain 1 : CH 138 (U-NII-2C)



TX Channel Bandwidth 6.37 MHz Power 4.1 dBm

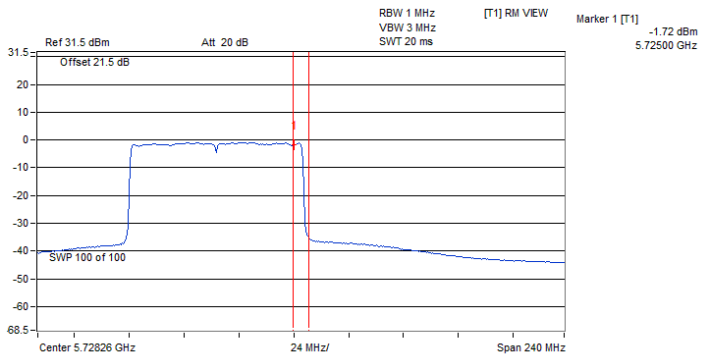
802.11ax (HE80) CDD / Chain 1 : CH 138 (U-NII-3)

Spectrum Plot for channel straddling



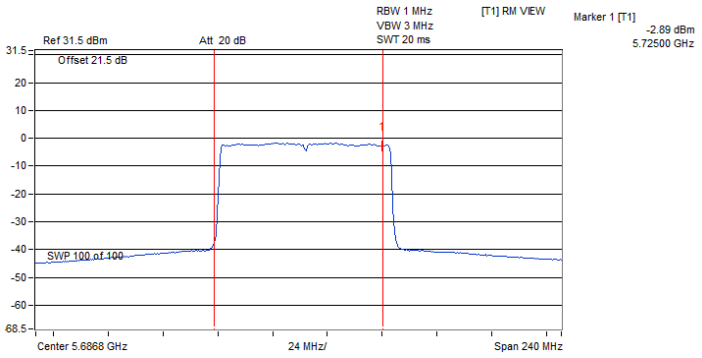
TX Channel Bandwidth 76.62 MHz Power 18.11 dBm

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



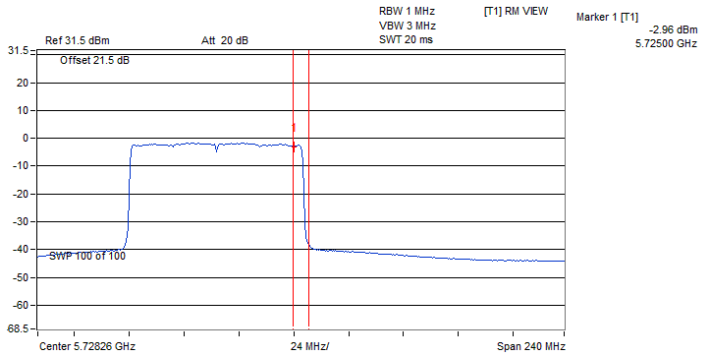
TX Channel Bandwidth 6.52 MHz Power 5.66 dBm

802.11ax (HE80) CDD / Chain 2 : CH 138 (U-NII-3)



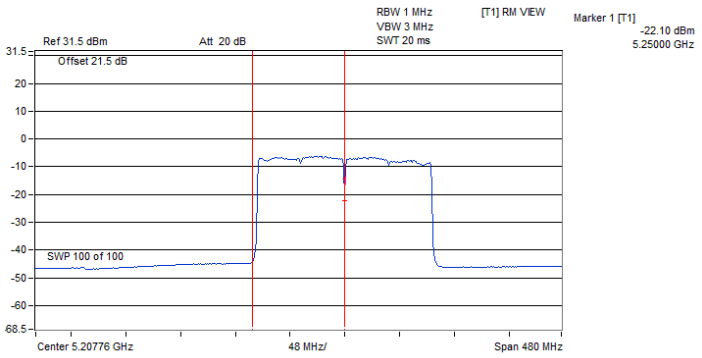
TX Channel Bandwidth 76.4 MHz Power 17.63 dBm

802.11ax (HE80) CDD / Chain 3 : CH 138 (U-NII-2C)



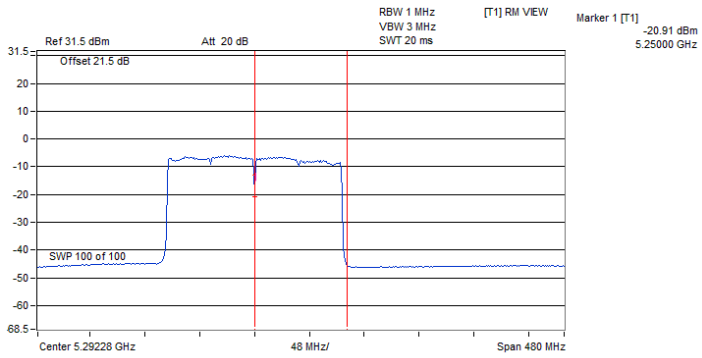
TX Channel Bandwidth 6.52 MHz Power 4.44 dBm

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



TX Channel Bandwidth 84.48 MHz Power 13.17 dBm

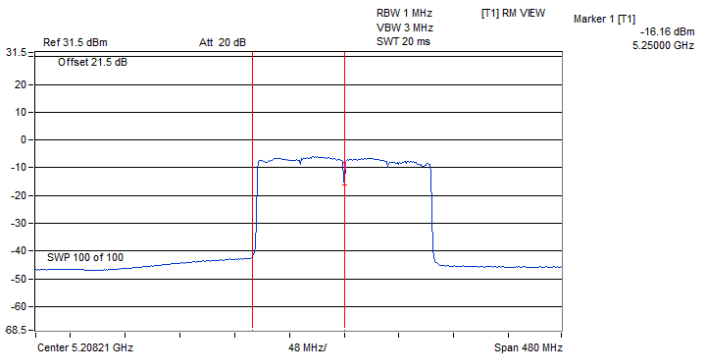
802.11ax (HE160) CDD / Chain 0 : CH 50 (U-NII-1)



TX Channel Bandwidth 84.57 MHz Power 12.44 dBm

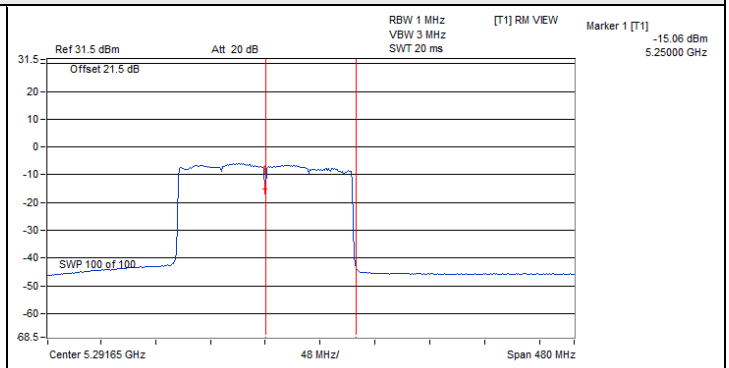
802.11ax (HE160) CDD / Chain 0 : CH 50 (U-NII-2A)

Spectrum Plot for channel straddling



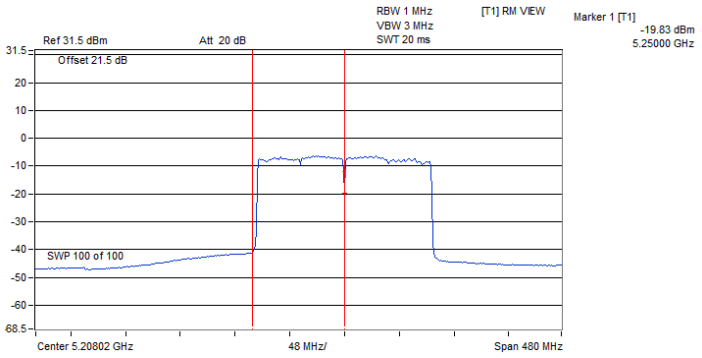
TX Channel Bandwidth 83.58 MHz Power 13.22 dBm

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



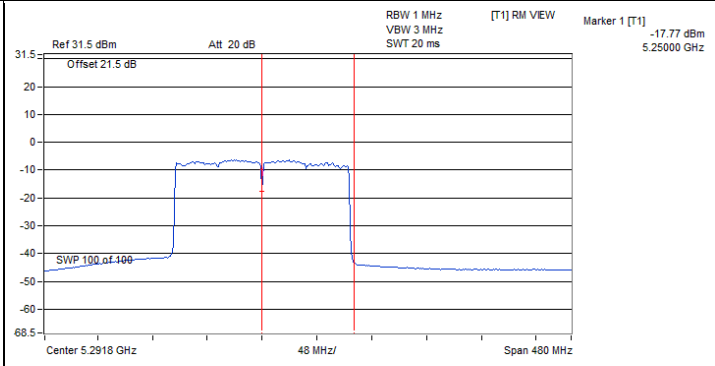
TX Channel Bandwidth 83.31 MHz Power 12.45 dBm

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



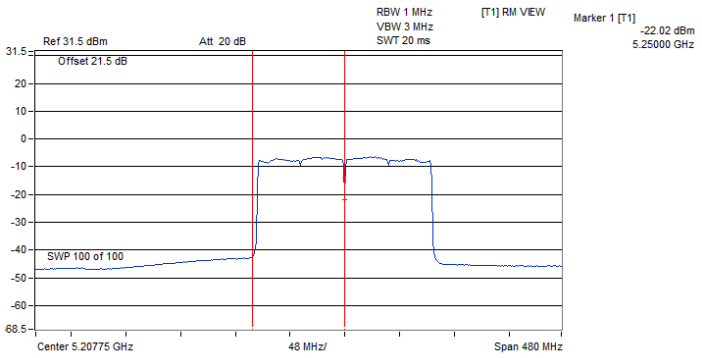
TX Channel Bandwidth 83.96 MHz Power 12.9 dBm

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



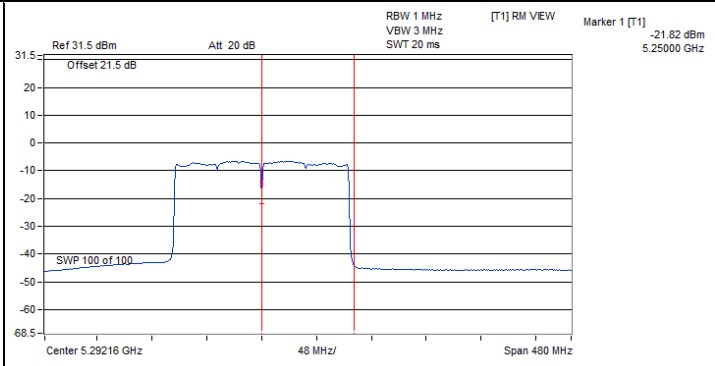
TX Channel Bandwidth 83.61 MHz Power 12.51 dBm

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



TX Channel Bandwidth 84.5 MHz Power 12.74 dBm

802.11ax (HE160) CDD / Chain 3 : CH 50 (U-NII-1)



TX Channel Bandwidth 84.32 MHz Power 12.72 dBm

802.11ax (HE160) CDD / Chain 3 : CH 50 (U-NII-2A)

7.3 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)				Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3			
52	5260	1.26	1.71	0.65	0.59	7.10	7.33	Pass
60	5300	1.18	1.69	0.50	0.23	6.96	7.33	Pass
64	5320	1.11	1.37	0.33	0.31	6.83	7.33	Pass
100	5500	0.70	0.60	1.63	0.95	7.01	7.33	Pass
116	5580	0.75	1.04	0.86	0.89	6.91	7.33	Pass
140	5700	0.28	1.63	1.35	0.66	7.03	7.33	Pass
144 (U-NII-2C)	5720	0.83	1.47	1.48	0.43	7.10	7.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 dBm/MHz.
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 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	Chain 2	Chain 3			
52	5260	1.18	1.42	0.59	0.32	6.92	7.33	Pass
60	5300	1.08	1.59	0.63	-0.04	6.88	7.33	Pass
64	5320	0.97	1.46	0.35	-0.03	6.75	7.33	Pass
100	5500	0.59	1.00	1.21	0.27	6.80	7.33	Pass
116	5580	0.57	0.81	1.08	1.00	6.89	7.33	Pass
140	5700	0.79	0.80	1.54	0.13	6.86	7.33	Pass
144 (U-NII-2C)	5720	0.69	0.54	0.87	0.71	6.72	7.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 dBm/MHz.
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 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	Chain 2	Chain 3			
54	5270	1.39	0.93	1.62	0.35	7.12	7.33	Pass
62	5310	1.42	1.58	1.17	0.80	7.27	7.33	Pass
102	5510	1.03	1.71	0.77	1.34	7.25	7.33	Pass
110	5550	1.14	0.75	1.26	1.54	7.20	7.33	Pass
134	5670	1.00	1.76	0.94	1.21	7.26	7.33	Pass
142 (U-NII-2C)	5710	1.28	1.37	1.10	1.16	7.25	7.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 dBm/MHz.
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 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	Chain 2	Chain 3			
58	5290	-0.92	-1.23	-1.45	-1.58	4.73	7.33	Pass
106	5530	-1.40	-1.54	-1.99	-1.65	4.38	7.33	Pass
122	5610	-1.07	-0.51	-0.28	-0.54	5.43	7.33	Pass
138 (U-NII-2C)	5690	-1.35	-0.80	-0.89	-1.01	5.01	7.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 dBm/MHz.
4. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 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	Chain 2	Chain 3			
50 (U-NII-1)	5250	-6.02	-5.99	-6.32	-6.48	-0.18	13.33	Pass
50 (U-NII-2A)	5250	-6.15	-6.36	-6.56	-6.73	-0.42	7.33	Pass
114	5570	-4.30	-4.79	-4.44	-4.29	1.57	7.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]
3. For U-NII-1, the directional gain is 9.67 dBi > 6dBi, so the power density limit shall be reduced to 17-(9.67-6) = 13.33 dBm/MHz.
4. For U-NII-2A, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 dBm/MHz.
5. For U-NII-2C, the directional gain is 9.67 dBi > 6 dBi, so the power density limit shall be reduced to 11-(9.67-6) = 7.33 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	Chain 2	Chain 3				
144 (U-NII-3)	5720	-4.08	-3.80	-3.93	-5.25	1.79	4.01	26.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]

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	Chain 2	Chain 3				
144 (U-NII-3)	5720	-4.45	-4.08	-4.81	-4.14	1.66	3.88	26.33	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[$(10^{Chain0/20} + 10^{Chain1/20} + 10^{Chain2/20} + 10^{Chain3/20})^2$ / 4]

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	Chain 2	Chain 3				
142 (U-NII-3)	5710	-8.08	-8.23	-8.36	-8.50	-2.27	-0.05	26.33	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[($10^{Chain0/20}$ + $10^{Chain1/20}$ + $10^{Chain2/20}$ + $10^{Chain3/20}$)^2 / 4]

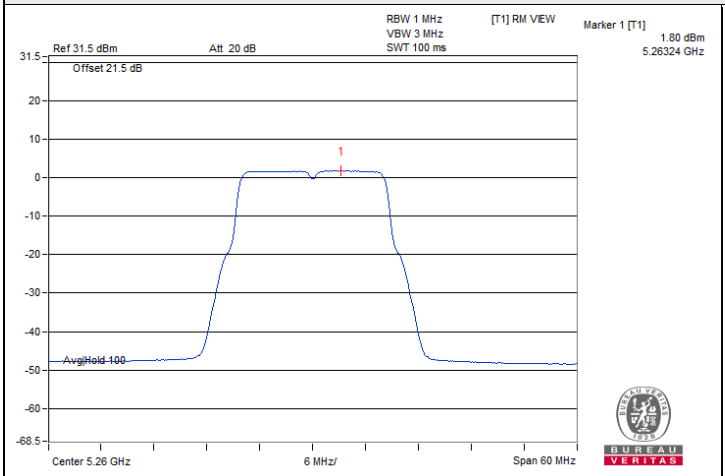
802.11ax (HE80)

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	Chain 2	Chain 3				
138 (U-NII-3)	5690	-10.82	-11.20	-10.26	-10.89	-4.76	-2.54	26.33	Pass

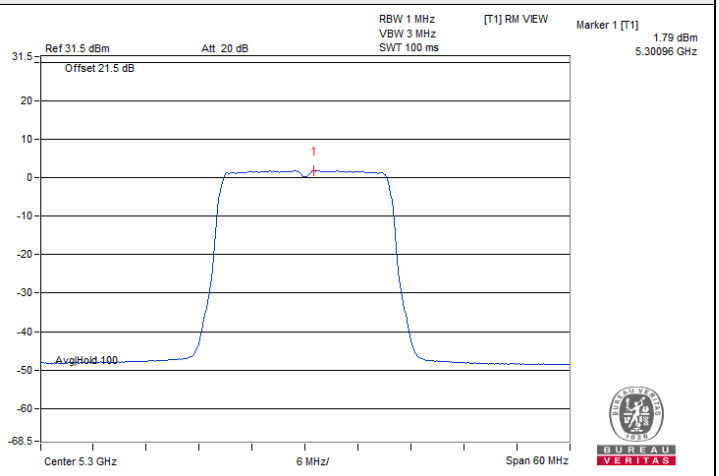
Notes:

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[($10^{Chain0/20}$ + $10^{Chain1/20}$ + $10^{Chain2/20}$ + $10^{Chain3/20}$)^2 / 4]

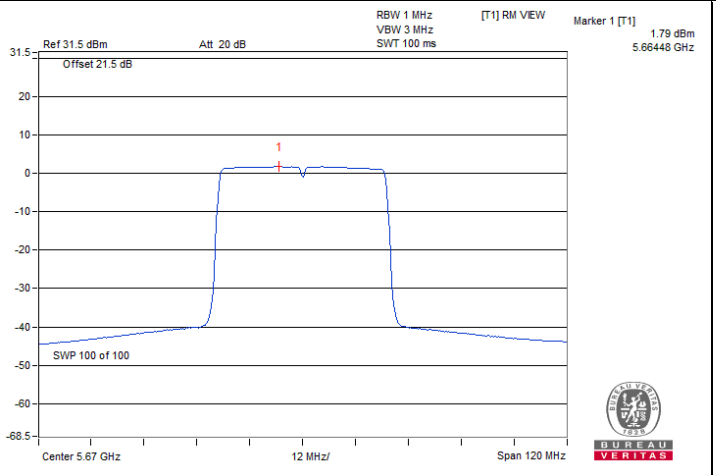
Spectrum Plot of Maximum Value



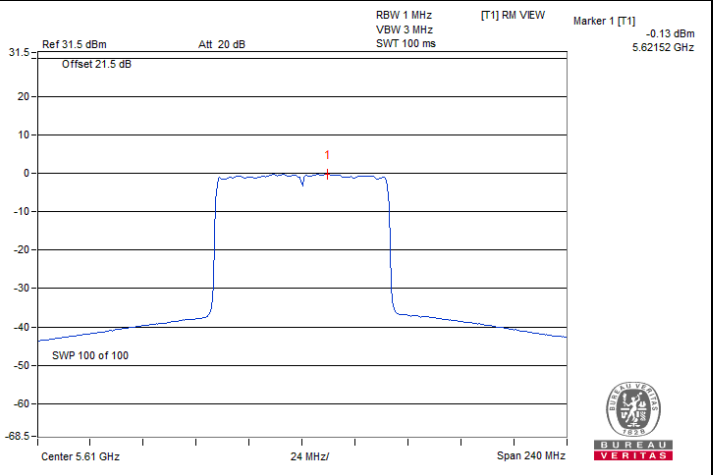
802.11a / Chain 1 : CH 52



802.11ax (HE20) / Chain 1 : CH 60

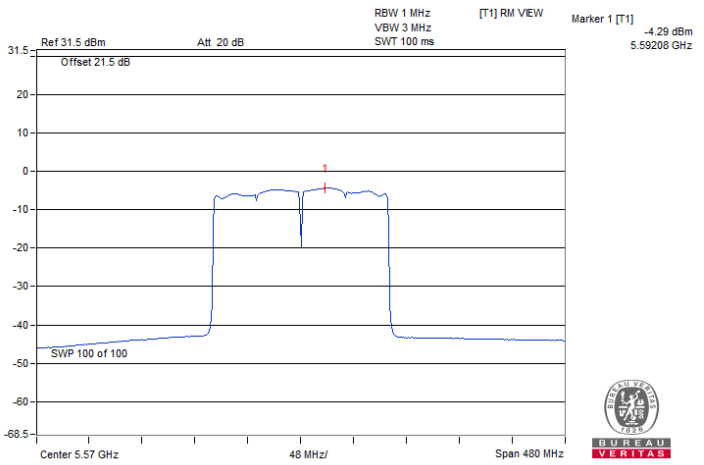


802.11ax (HE40) / Chain 1 : CH 134

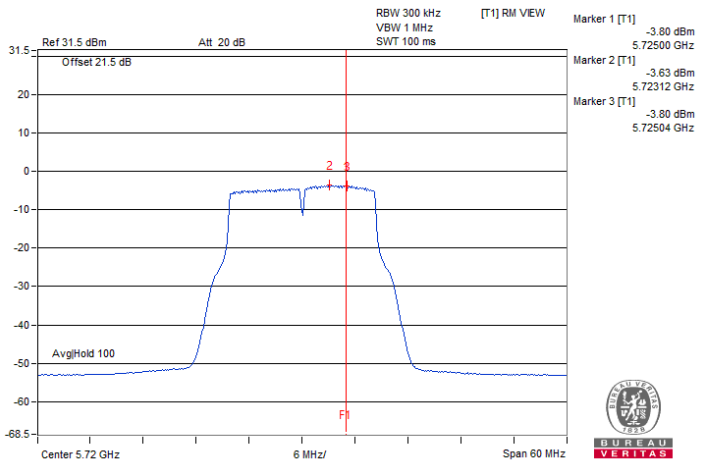


802.11ax (HE80) / Chain 2 : CH 122

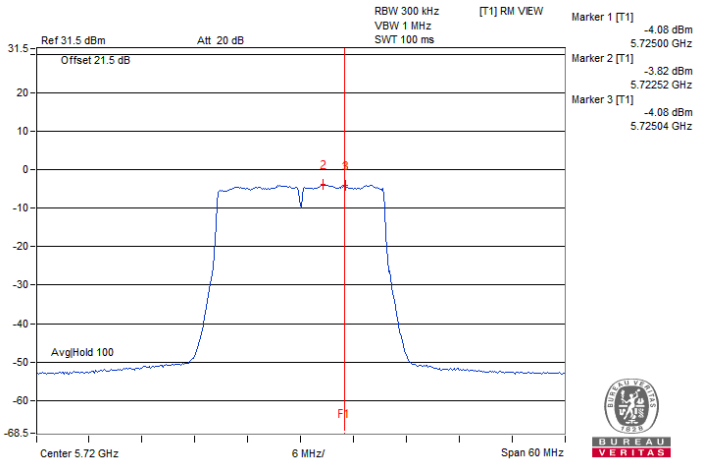
Spectrum Plot of Maximum Value



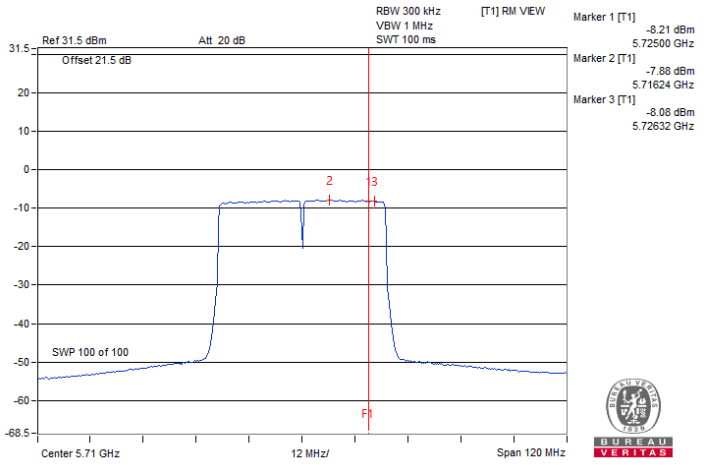
802.11ax (HE160) / Chain 3 : CH 114



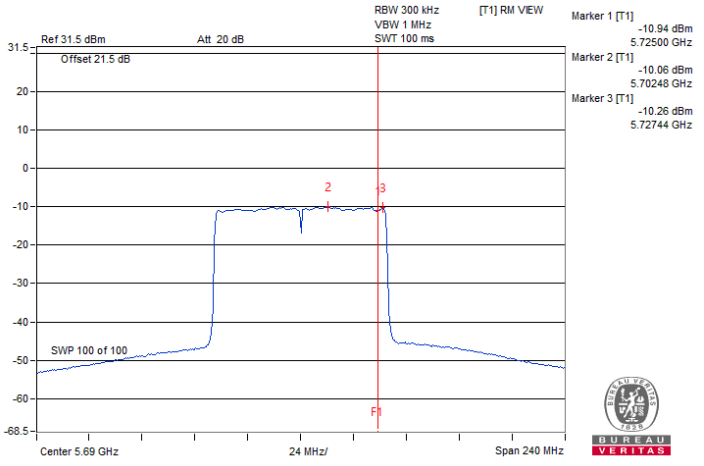
802.11a / Chain 1 : CH 144 (U-NII-3)



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



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



802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)

7.4 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (U-NII-3)	5720	3.17	3.17	3.17	3.17	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
144 (U-NII-3)	5720	4.55	4.49	4.50	4.48	0.5	Pass

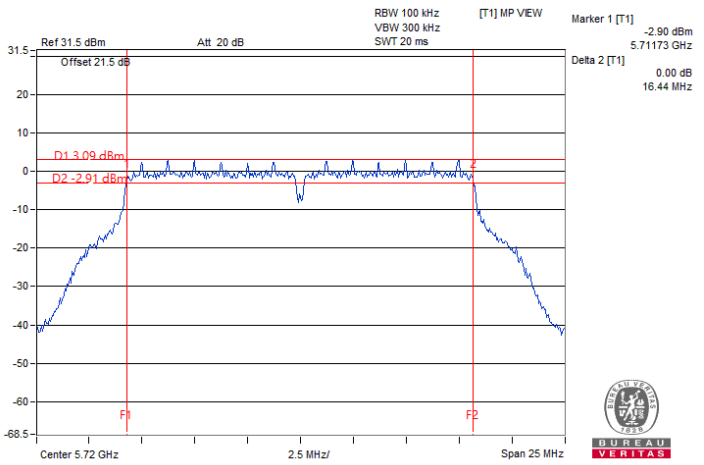
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
142 (U-NII-3)	5710	4.03	3.88	3.90	3.90	0.5	Pass

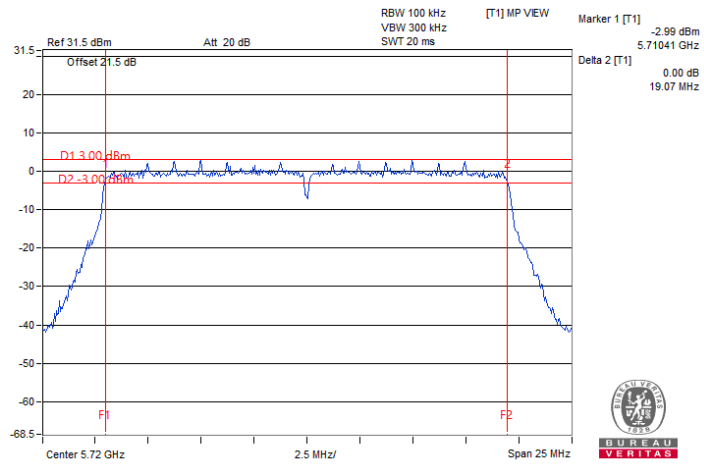
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
138 (U-NII-3)	5690	4.04	4.01	3.90	3.90	0.5	Pass

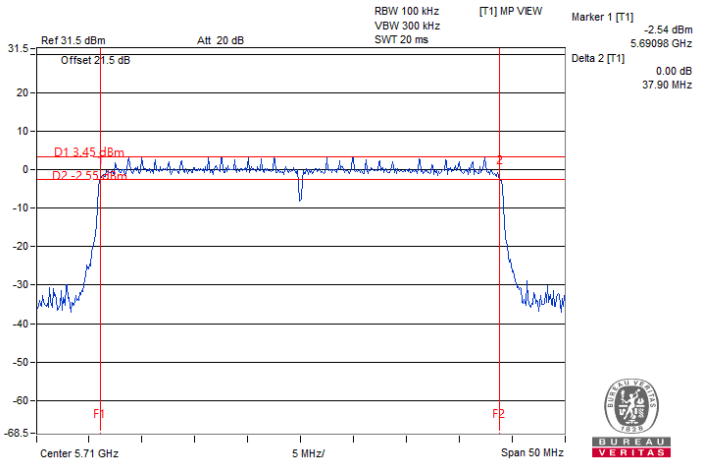
Spectrum Plot of Minimum Value



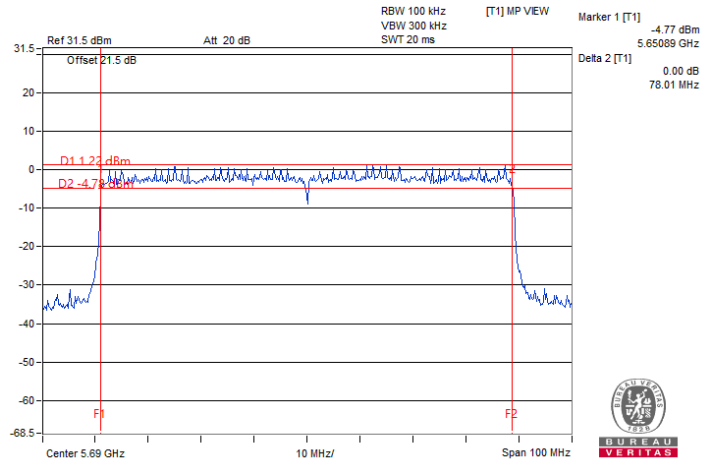
802.11a / Chain 0 : CH 144 (U-NII-3)



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



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



802.11ax (HE80) / Chain 2 : CH 138 (U-NII-3)

Notes:

1. 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:	John Peng

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	17.16	17.16	17.04	16.92
60	5300	17.04	16.92	17.04	16.92
64	5320	17.04	16.92	17.04	16.92
100	5500	17.16	17.04	16.92	16.92
116	5580	17.04	17.16	16.92	16.92
140	5700	17.28	17.04	16.92	16.92
144 (U-NII-2C)	5720	13.64	13.52	13.52	13.52
144 (U-NII-3)	5720	3.52	3.52	3.40	3.40

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	19.08	19.08	19.08	19.08
60	5300	19.08	19.20	19.20	19.20
64	5320	19.08	19.08	19.20	19.08
100	5500	19.08	19.08	19.20	19.20
116	5580	19.08	19.20	19.08	19.20
140	5700	19.20	19.20	19.08	19.08
144 (U-NII-2C)	5720	14.60	14.60	14.60	14.72
144 (U-NII-3)	5720	4.48	4.48	4.48	4.48

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	38.16	38.16	38.16	38.16
62	5310	38.16	37.92	38.16	37.92
102	5510	38.16	37.92	38.16	38.16
110	5550	38.16	37.92	38.16	38.16
134	5670	38.16	38.16	38.16	38.16
142 (U-NII-2C)	5710	34.20	34.20	33.96	34.20
142 (U-NII-3)	5710	3.96	3.96	3.96	3.96

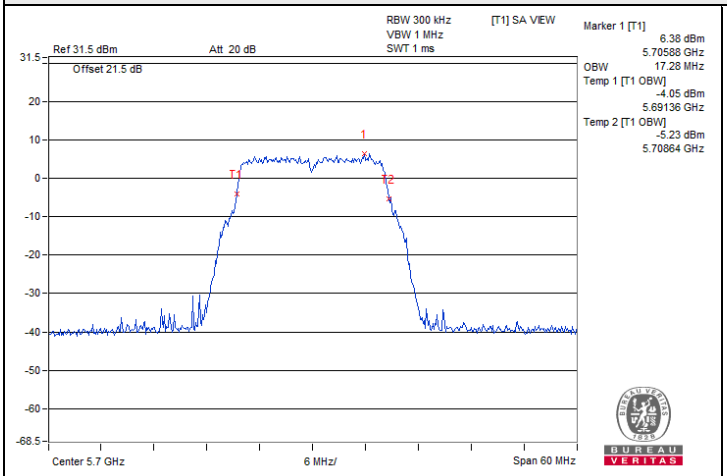
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	77.28	77.28	77.76	77.28
106	5530	77.28	77.28	77.28	77.28
122	5610	77.28	77.28	78.72	77.76
138 (U-NII-2C)	5690	73.88	73.88	73.88	73.88
138 (U-NII-3)	5690	3.88	3.40	3.40	3.88

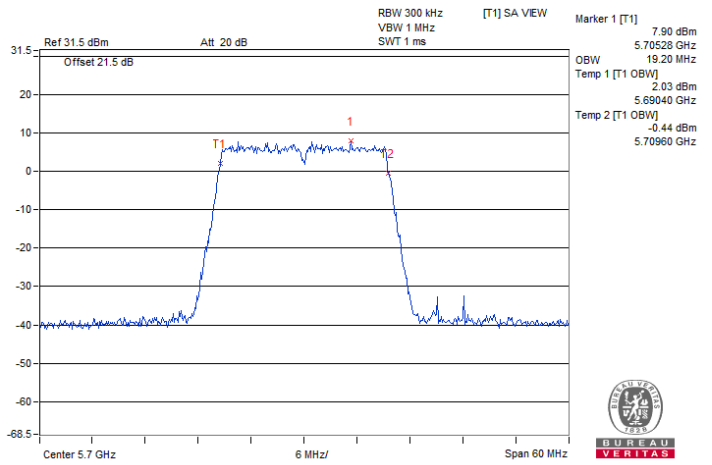
802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
50 (U-NII-1)	5250	78.72	78.72	78.72	78.72
50 (U-NII-2A)	5250	77.76	77.76	77.76	78.72
114	5570	156.48	156.48	157.44	157.44

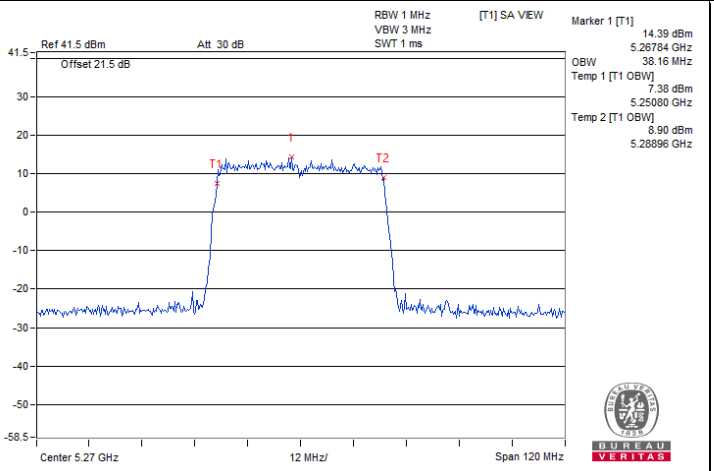
Spectrum Plot of Maximum Value



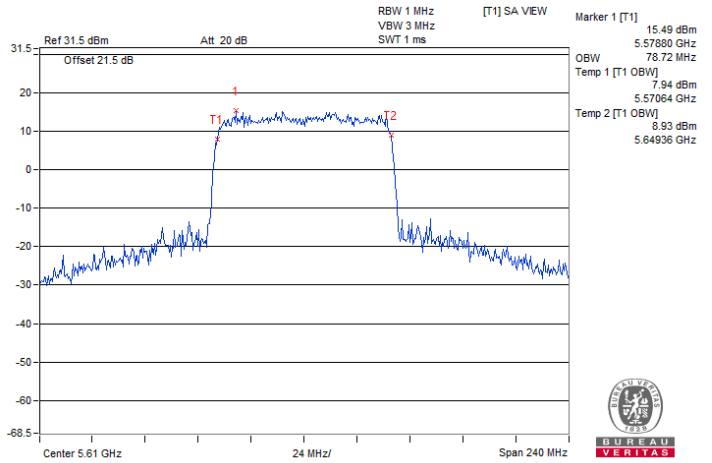
802.11a / Chain 0 : CH 140



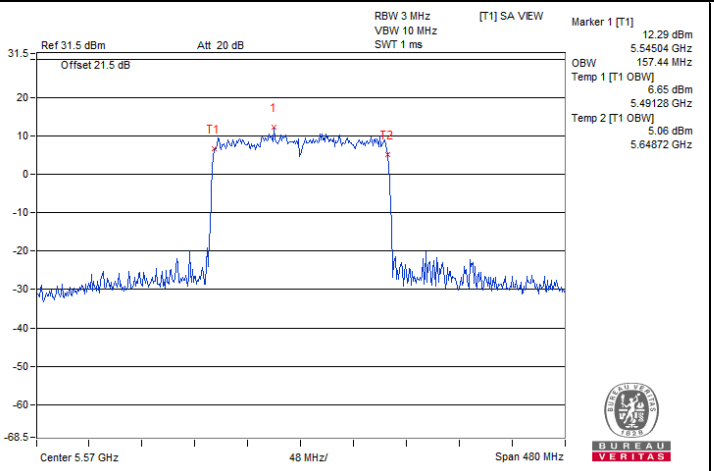
802.11ax (HE20) / Chain 0 : CH 140



802.11ax (HE40) / Chain 0 : CH 54



802.11ax (HE80) / Chain 2 : CH 122



802.11ax (HE160) / Chain 2 : CH 114

Note: For U-NII-1 straddle channel = 5250 MHz - Marker 1
For U-NII-2A straddle channel = Marker 1 + Delta 2 - 5250 MHz

7.6 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	John Peng

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5260 MHz									
Temp. (℃)	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	5260.0117	Pass	5260.0075	Pass	5260.011	Pass	5260.011	Pass
30	120	5260.0021	Pass	5260.0049	Pass	5260.0019	Pass	5260.0032	Pass
20	120	5260.0136	Pass	5260.0154	Pass	5260.014	Pass	5260.0155	Pass
10	120	5259.9846	Pass	5259.9896	Pass	5259.989	Pass	5259.9856	Pass
0	120	5259.9824	Pass	5259.9793	Pass	5259.9818	Pass	5259.9824	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
Temp. (℃)	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	5260.011	Pass	5260.0119	Pass	5260.012	Pass	5260.0118	Pass
	120	5260.0136	Pass	5260.0154	Pass	5260.014	Pass	5260.0155	Pass
	102	5260.0078	Pass	5260.0124	Pass	5260.0078	Pass	5260.0109	Pass

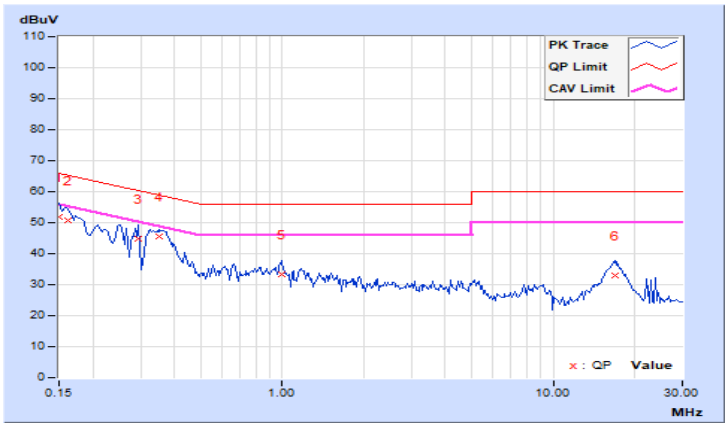
7.7 AC Power Conducted Emissions

RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	9.95	41.87	32.13	51.82	42.08	66.00	56.00	-14.18	-13.92
2	0.16172	9.95	40.78	32.19	50.73	42.14	65.38	55.38	-14.65	-13.24
3	0.29453	9.96	34.72	21.74	44.68	31.70	60.40	50.40	-15.72	-18.70
4	**0.34922**	**9.96**	**35.56**	**27.71**	**45.52**	**37.67**	**58.98**	**48.98**	**-13.46**	**-11.31**
5	0.99375	10.00	23.15	13.50	33.15	23.50	56.00	46.00	-22.85	-22.50
6	16.89063	11.02	22.09	13.76	33.11	24.78	60.00	50.00	-26.89	-25.22

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

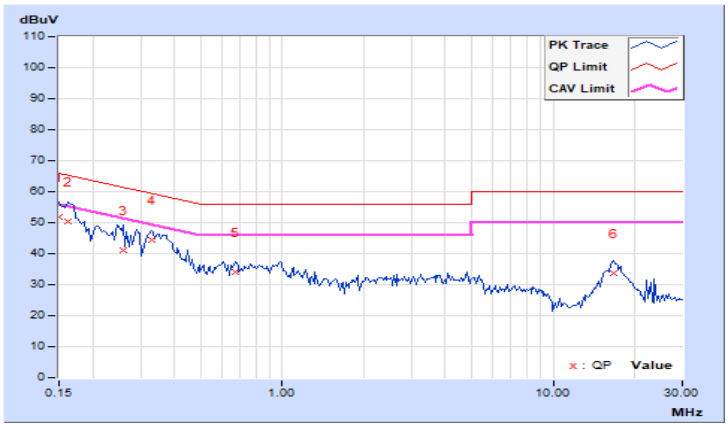


RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Ryan Du		

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	9.95	42.03	32.09	51.98	42.04	66.00	56.00	-14.02	-13.96
2	0.16172	9.95	40.30	32.15	50.25	42.10	65.38	55.38	-15.13	-13.28
3	0.25938	9.96	31.32	22.53	41.28	32.49	61.45	51.45	-20.17	-18.96
4	0.32969	9.96	34.32	24.10	44.28	34.06	59.46	49.46	-15.18	-15.40
5	0.66953	9.98	24.10	13.38	34.08	23.36	56.00	46.00	-21.92	-22.64
6	16.76563	10.84	22.84	14.42	33.68	25.26	60.00	50.00	-26.32	-24.74

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



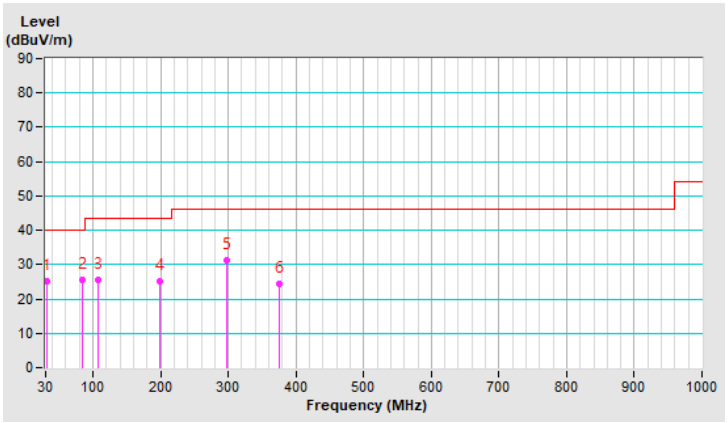
7.8 Unwanted Emissions below 1 GHz

RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Ryan Du		

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	30.97	25.2 QP	40.0	-14.8	1.00 H	42	39.1	-13.9
2	84.06	25.5 QP	40.0	-14.5	2.00 H	267	43.4	-17.9
3	107.99	25.5 QP	43.5	-18.0	1.50 H	294	40.6	-15.1
4	199.32	25.1 QP	43.5	-18.4	1.00 H	242	40.0	-14.9
5	297.49	31.4 QP	46.0	-14.6	1.00 H	147	42.2	-10.8
6	375.33	24.5 QP	46.0	-21.5	1.00 H	263	33.1	-8.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

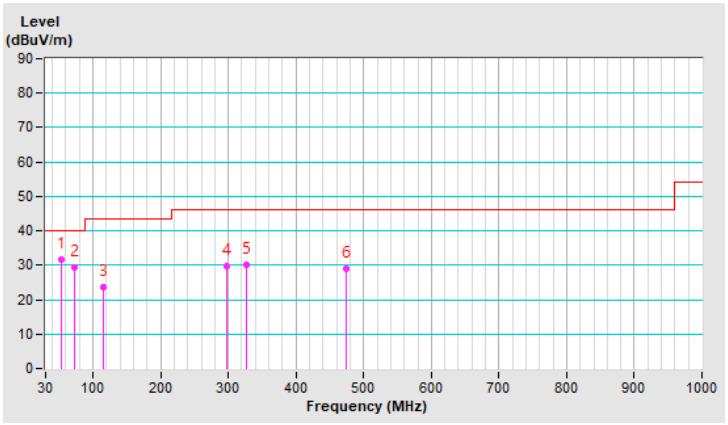


RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Ryan Du		

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	**52.93**	**31.6 QP**	**40.0**	**-8.4**	**1.50 V**	**23**	**44.2**	**-12.6**
2	72.94	29.5 QP	40.0	-10.5	1.00 V	134	45.0	-15.5
3	115.28	23.5 QP	43.5	-20.0	1.00 V	306	38.1	-14.6
4	297.49	29.6 QP	46.0	-16.4	1.50 V	347	40.4	-10.8
5	326.18	30.2 QP	46.0	-15.8	1.50 V	28	40.1	-9.9
6	473.63	29.0 QP	46.0	-17.0	1.50 V	13	34.7	-5.7

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 emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



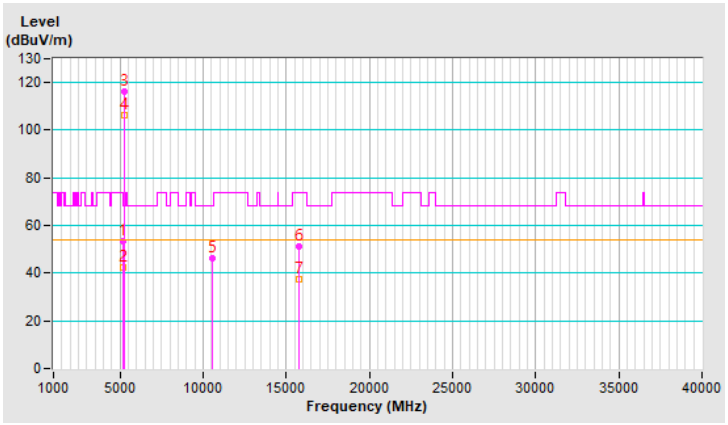
7.9 Unwanted Emissions above 1 GHz

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	53.5 PK	74.0	-20.5	1.40 H	37	49.0	4.5
2	5150.00	42.5 AV	54.0	-11.5	1.40 H	37	38.0	4.5
3	*5260.00	116.2 PK			1.40 H	37	112.2	4.0
4	*5260.00	106.3 AV			1.40 H	37	102.3	4.0
5	#10520.00	46.1 PK	68.2	-22.1	1.84 H	244	31.8	14.3
6	15780.00	51.0 PK	74.0	-23.0	1.85 H	33	36.6	14.4
7	15780.00	37.5 AV	54.0	-16.5	1.85 H	33	23.1	14.4

Remarks:

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

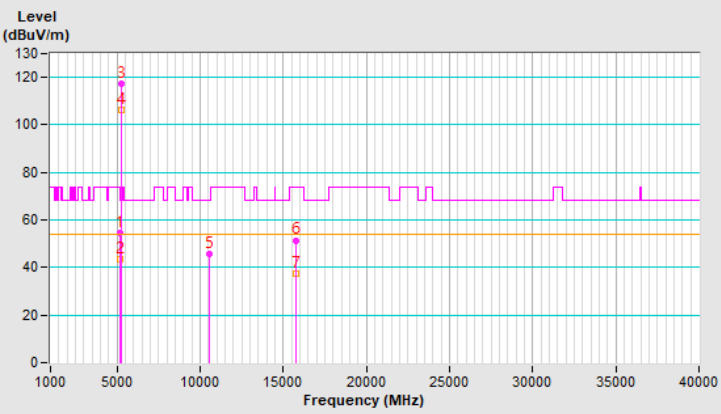


RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	54.6 PK	74.0	-19.4	2.11 V	259	50.1	4.5
2	5150.00	43.3 AV	54.0	-10.7	2.11 V	259	38.8	4.5
3	*5260.00	117.3 PK			2.11 V	259	113.3	4.0
4	*5260.00	106.3 AV			2.11 V	259	102.3	4.0
5	#10520.00	45.9 PK	68.2	-22.3	1.58 V	145	31.6	14.3
6	15780.00	51.5 PK	74.0	-22.5	1.88 V	147	37.1	14.4
7	15780.00	37.6 AV	54.0	-16.4	1.88 V	147	23.2	14.4

Remarks:

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

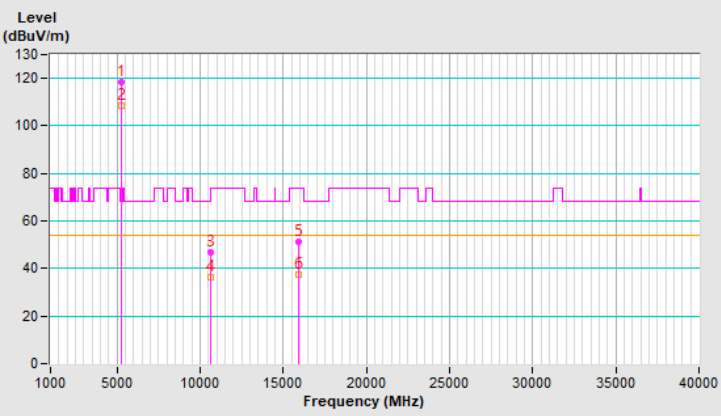


RF Mode	802.11a	**Channel**	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5300.00	118.3 PK			1.87 H	192	114.3	4.0
2	*5300.00	108.4 AV			1.87 H	192	104.4	4.0
3	10600.00	46.6 PK	74.0	-27.4	1.86 H	215	32.7	13.9
4	10600.00	36.5 AV	54.0	-17.5	1.86 H	215	22.6	13.9
5	15900.00	51.2 PK	74.0	-22.8	1.83 H	46	36.4	14.8
6	15900.00	37.5 AV	54.0	-16.5	1.83 H	46	22.7	14.8

Remarks:

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

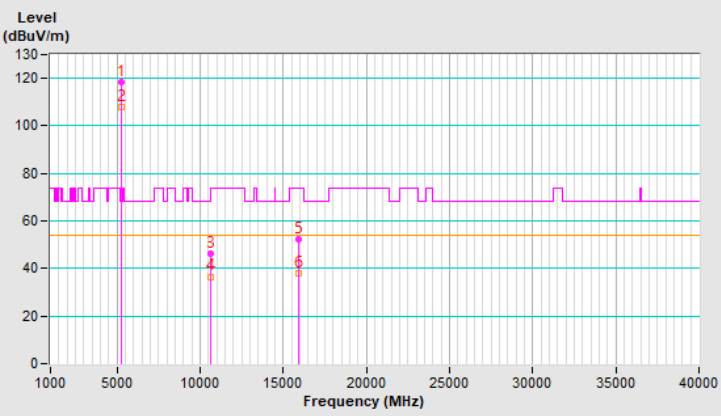


RF Mode	802.11a	**Channel**	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5300.00	118.2 PK			1.81 V	266	114.2	4.0
2	*5300.00	108.0 AV			1.81 V	266	104.0	4.0
3	10600.00	46.4 PK	74.0	-27.6	1.61 V	145	32.5	13.9
4	10600.00	36.6 AV	54.0	-17.4	1.61 V	145	22.7	13.9
5	15900.00	52.2 PK	74.0	-21.8	1.84 V	131	37.4	14.8
6	15900.00	38.1 AV	54.0	-15.9	1.84 V	131	23.3	14.8

Remarks:

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

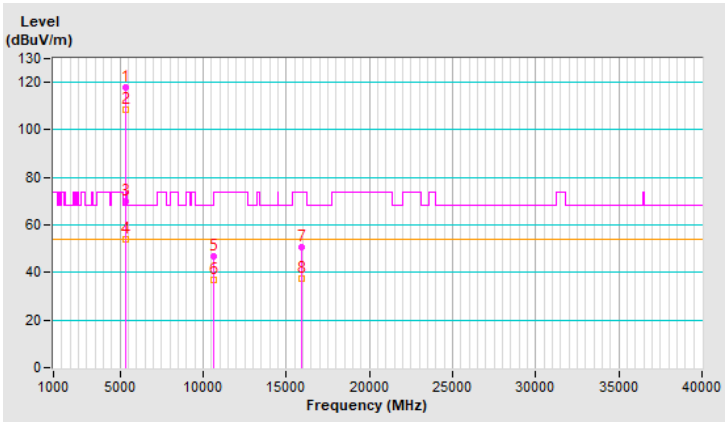


RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	117.9 PK			1.16 H	187	113.7	4.2
2	*5320.00	108.6 AV			1.16 H	187	104.4	4.2
3	5350.00	70.0 PK	74.0	-4.0	1.16 H	187	65.7	4.3
4	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.16 H**	**187**	**49.6**	**4.3**
5	10640.00	46.8 PK	74.0	-27.2	1.89 H	213	32.8	14.0
6	10640.00	36.8 AV	54.0	-17.2	1.89 H	213	22.8	14.0
7	15960.00	50.7 PK	74.0	-23.3	1.78 H	43	35.7	15.0
8	15960.00	37.2 AV	54.0	-16.8	1.78 H	43	22.2	15.0

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.

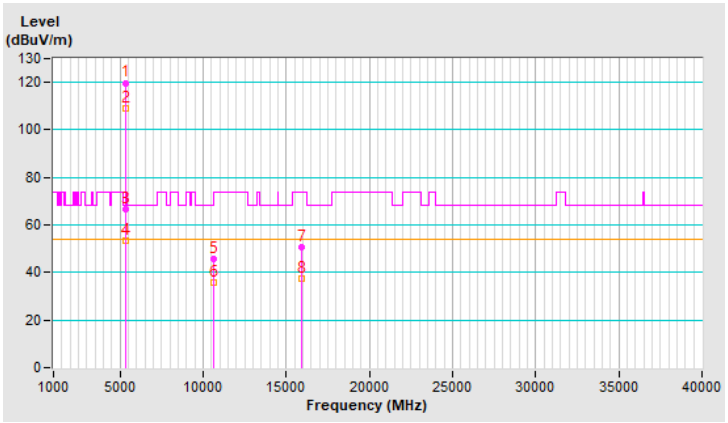


RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	119.8 PK			2.23 V	88	115.6	4.2
2	*5320.00	109.3 AV			2.23 V	88	105.1	4.2
3	5350.00	66.7 PK	74.0	-7.3	2.23 V	88	62.4	4.3
4	5350.00	53.6 AV	54.0	-0.4	2.23 V	88	49.3	4.3
5	10640.00	45.8 PK	74.0	-28.2	1.60 V	147	31.8	14.0
6	10640.00	36.0 AV	54.0	-18.0	1.60 V	147	22.0	14.0
7	15960.00	50.8 PK	74.0	-23.2	1.90 V	124	35.8	15.0
8	15960.00	37.2 AV	54.0	-16.8	1.90 V	124	22.2	15.0

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.

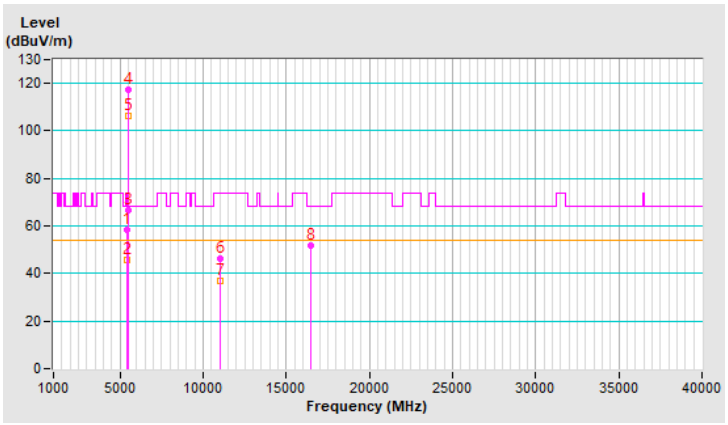


RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	5459.12	58.2 PK	74.0	-15.8	2.11 H	189	53.7	4.5
2	5459.12	45.7 AV	54.0	-8.3	2.11 H	189	41.2	4.5
3	#5461.55	66.5 PK	68.2	-1.7	2.11 H	189	62.0	4.5
4	*5500.00	117.1 PK			2.11 H	189	112.5	4.6
5	*5500.00	106.5 AV			2.11 H	189	101.9	4.6
6	11000.00	46.5 PK	74.0	-27.5	1.82 H	219	31.5	15.0
7	11000.00	36.7 AV	54.0	-17.3	1.82 H	219	21.7	15.0
8	#16500.00	51.6 PK	68.2	-16.6	1.81 H	55	34.4	17.2

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.

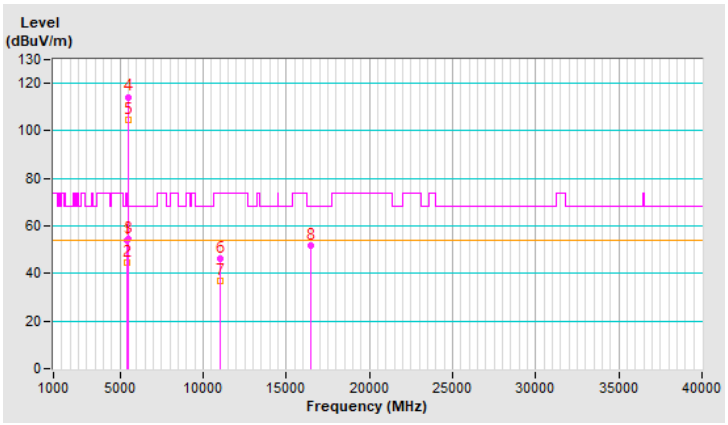


RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	5459.12	54.1 PK	74.0	-19.9	2.17 V	68	49.6	4.5
2	5459.12	44.5 AV	54.0	-9.5	2.17 V	68	40.0	4.5
3	#5461.55	54.4 PK	68.2	-13.8	2.17 V	68	49.9	4.5
4	*5500.00	114.3 PK			2.17 V	68	109.7	4.6
5	*5500.00	104.7 AV			2.17 V	68	100.1	4.6
6	11000.00	46.5 PK	74.0	-27.5	1.60 V	148	31.5	15.0
7	11000.00	36.9 AV	54.0	-17.1	1.60 V	148	21.9	15.0
8	#16500.00	51.9 PK	68.2	-16.3	1.81 V	136	34.7	17.2

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.

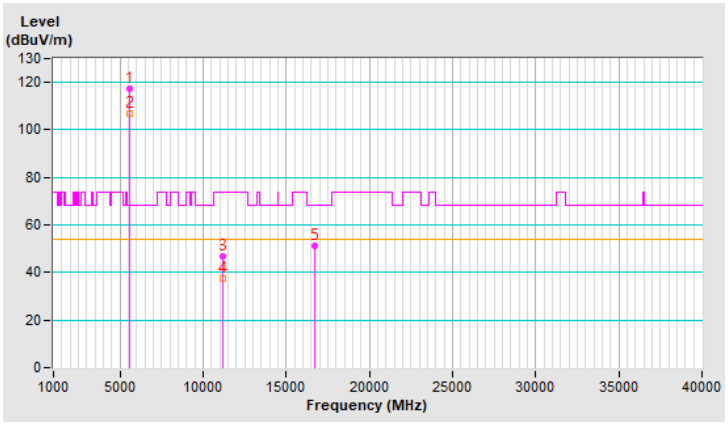


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	117.3 PK			2.17 H	182	112.9	4.4
2	*5580.00	106.7 AV			2.17 H	182	102.3	4.4
3	11160.00	47.0 PK	74.0	-27.0	1.88 H	237	32.7	14.3
4	11160.00	37.3 AV	54.0	-16.7	1.88 H	237	23.0	14.3
5	#16740.00	51.2 PK	68.2	-17.0	1.78 H	63	32.7	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.

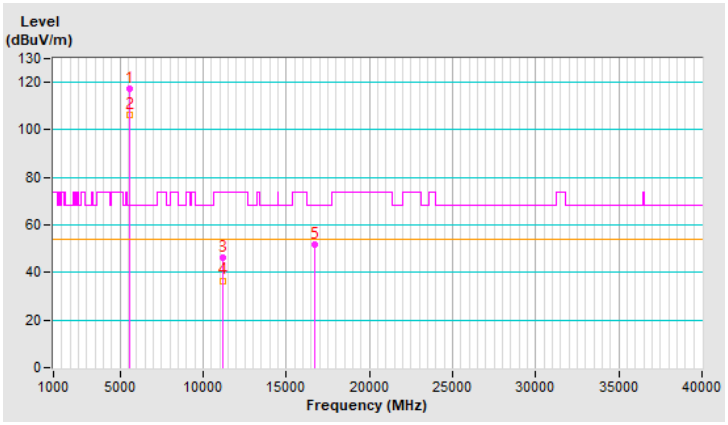


RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	117.2 PK			1.76 V	264	112.8	4.4
2	*5580.00	106.5 AV			1.76 V	264	102.1	4.4
3	11160.00	46.2 PK	74.0	-27.8	1.60 V	150	31.9	14.3
4	11160.00	36.6 AV	54.0	-17.4	1.60 V	150	22.3	14.3
5	#16740.00	51.7 PK	68.2	-16.5	1.88 V	133	33.2	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.

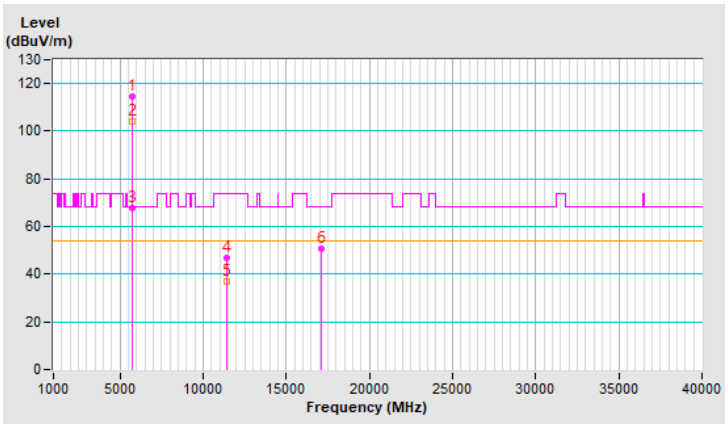


RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	114.4 PK			1.72 H	183	109.8	4.6
2	*5700.00	104.2 AV			1.72 H	183	99.6	4.6
3	#5725.00	67.6 PK	68.2	-0.6	1.72 H	183	62.9	4.7
4	11400.00	46.7 PK	74.0	-27.3	1.90 H	226	31.7	15.0
5	11400.00	36.7 AV	54.0	-17.3	1.90 H	226	21.7	15.0
6	#17100.00	50.8 PK	68.2	-17.4	1.77 H	63	31.8	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.

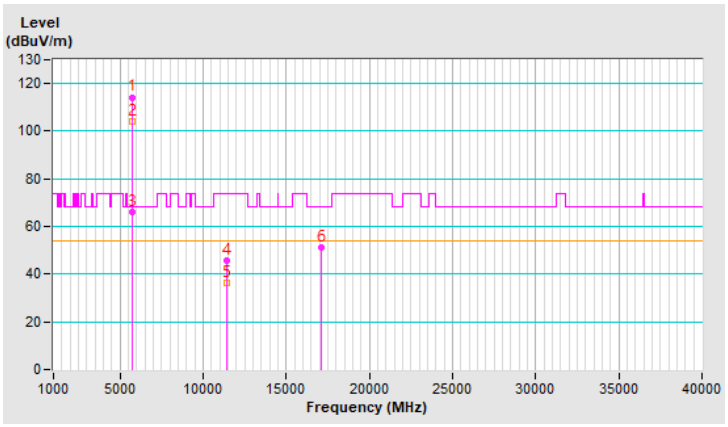


RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	114.3 PK			1.75 V	262	109.7	4.6
2	*5700.00	104.0 AV			1.75 V	262	99.4	4.6
3	#5725.00	66.3 PK	68.2	-1.9	1.75 V	262	61.6	4.7
4	11400.00	45.9 PK	74.0	-28.1	1.60 V	152	30.9	15.0
5	11400.00	36.1 AV	54.0	-17.9	1.60 V	152	21.1	15.0
6	#17100.00	51.2 PK	68.2	-17.0	1.82 V	123	32.2	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.

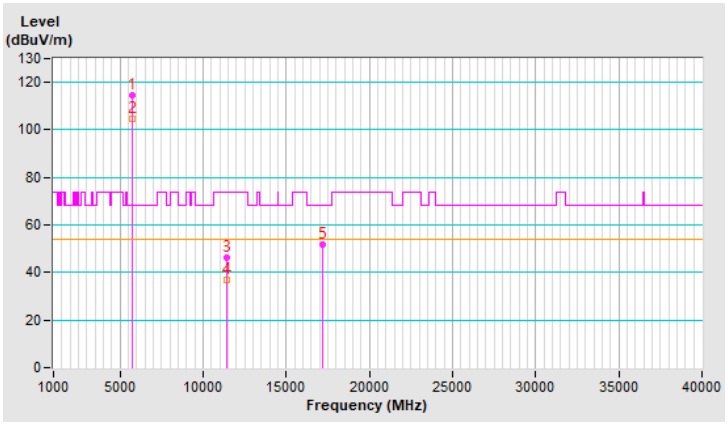


RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	*5720.00	114.7 PK			1.67 H	192	110.0	4.7
2	*5720.00	104.5 AV			1.67 H	192	99.8	4.7
3	11440.00	46.5 PK	74.0	-27.5	1.83 H	242	31.5	15.0
4	11440.00	36.8 AV	54.0	-17.2	1.83 H	242	21.8	15.0
5	#17160.00	51.9 PK	68.2	-16.3	1.80 H	58	32.9	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.

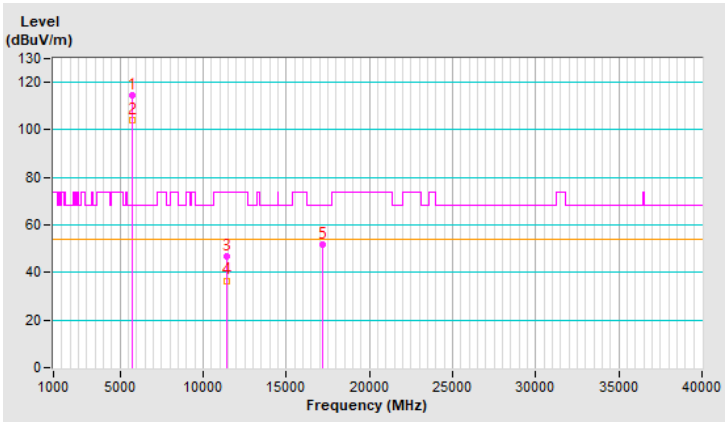


RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	*5720.00	114.6 PK			1.78 V	274	109.9	4.7
2	*5720.00	104.2 AV			1.78 V	274	99.5	4.7
3	11440.00	46.6 PK	74.0	-27.4	1.61 V	146	31.6	15.0
4	11440.00	36.6 AV	54.0	-17.4	1.61 V	146	21.6	15.0
5	#17160.00	52.0 PK	68.2	-16.2	1.82 V	142	33.0	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.

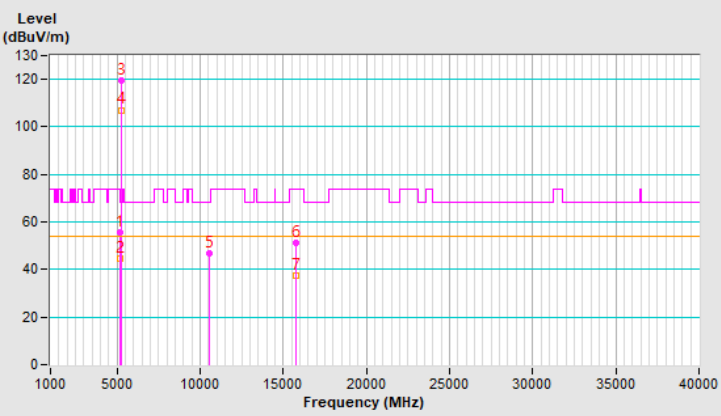


RF Mode	802.11ax (HE20)	**Channel**	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	55.8 PK	74.0	-18.2	2.17 H	192	51.3	4.5
2	5150.00	44.7 AV	54.0	-9.3	2.17 H	192	40.2	4.5
3	*5260.00	119.6 PK			2.17 H	192	115.6	4.0
4	*5260.00	107.1 AV			2.17 H	192	103.1	4.0
5	#10520.00	46.6 PK	68.2	-21.6	1.85 H	225	32.3	14.3
6	15780.00	51.1 PK	74.0	-22.9	1.83 H	55	36.7	14.4
7	15780.00	37.5 AV	54.0	-16.5	1.83 H	55	23.1	14.4

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.

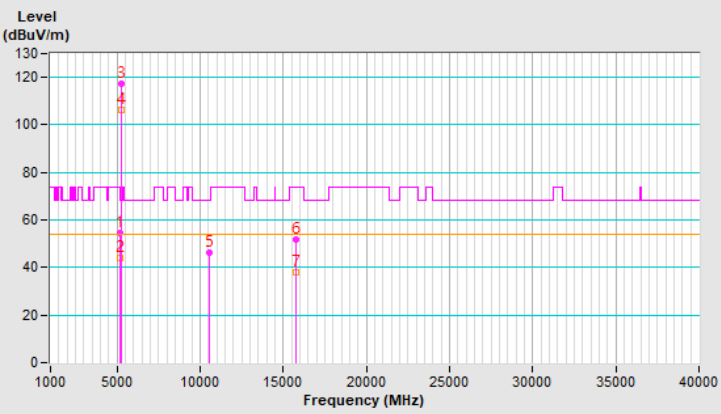


RF Mode	802.11ax (HE20)	**Channel**	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	54.3 PK	74.0	-19.7	1.74 V	274	49.8	4.5
2	5150.00	44.2 AV	54.0	-9.8	1.74 V	274	39.7	4.5
3	*5260.00	117.5 PK			1.74 V	274	113.5	4.0
4	*5260.00	106.5 AV			1.74 V	274	102.5	4.0
5	#10520.00	46.2 PK	68.2	-22.0	1.57 V	162	31.9	14.3
6	15780.00	51.7 PK	74.0	-22.3	1.81 V	128	37.3	14.4
7	15780.00	37.8 AV	54.0	-16.2	1.81 V	128	23.4	14.4

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.

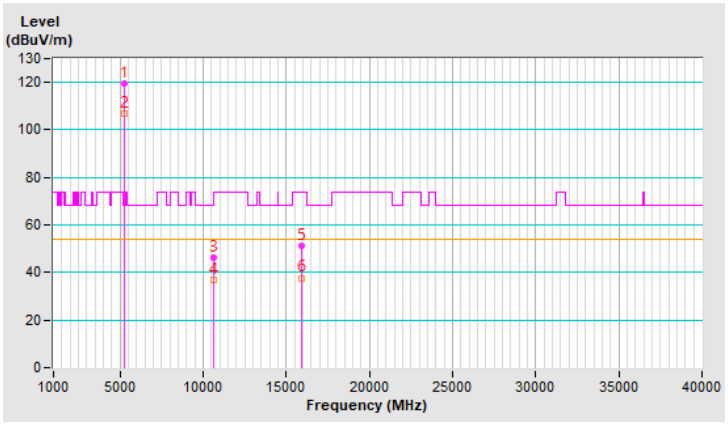


RF Mode	802.11ax (HE20)	**Channel**	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5300.00	119.3 PK			2.03 H	188	115.3	4.0
2	*5300.00	107.0 AV			2.03 H	188	103.0	4.0
3	10600.00	46.5 PK	74.0	-27.5	1.91 H	240	32.6	13.9
4	10600.00	36.9 AV	54.0	-17.1	1.91 H	240	23.0	13.9
5	15900.00	51.2 PK	74.0	-22.8	1.79 H	42	36.4	14.8
6	15900.00	37.7 AV	54.0	-16.3	1.79 H	42	22.9	14.8

Remarks:

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

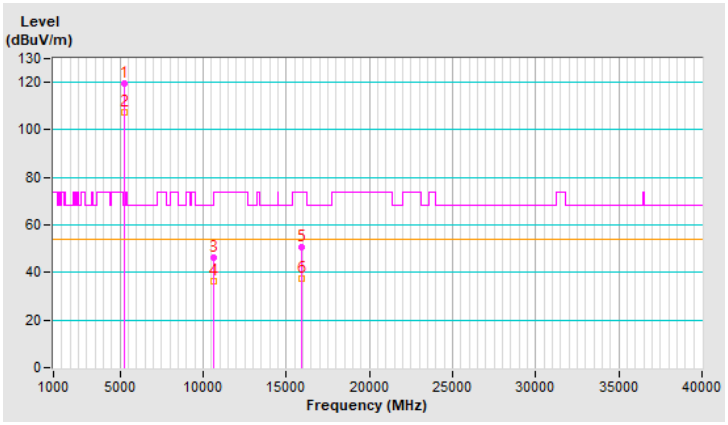


RF Mode	802.11ax (HE20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	119.6 PK			1.70 V	278	115.6	4.0
2	*5300.00	107.5 AV			1.70 V	278	103.5	4.0
3	10600.00	46.0 PK	74.0	-28.0	1.59 V	172	32.1	13.9
4	10600.00	36.1 AV	54.0	-17.9	1.59 V	172	22.2	13.9
5	15900.00	50.9 PK	74.0	-23.1	1.88 V	151	36.1	14.8
6	15900.00	37.2 AV	54.0	-16.8	1.88 V	151	22.4	14.8

Remarks:

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

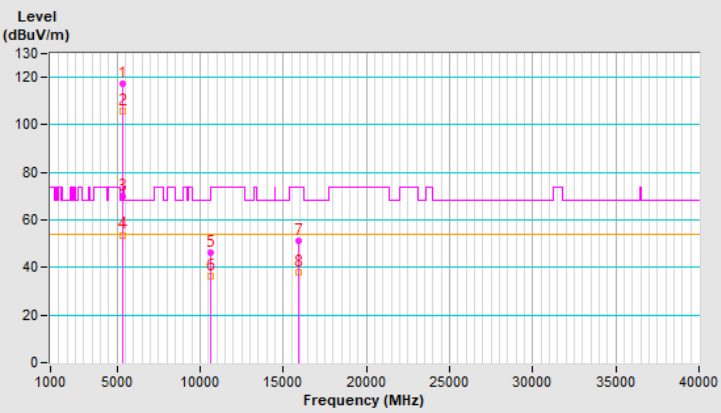


RF Mode	802.11ax (HE20)	**Channel**	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	117.4 PK			2.15 H	195	113.2	4.2
2	*5320.00	105.5 AV			2.15 H	195	101.3	4.2
3	5350.00	70.0 PK	74.0	-4.0	2.15 H	195	65.7	4.3
4	5350.00	53.7 AV	54.0	-0.3	2.15 H	195	49.4	4.3
5	10640.00	46.4 PK	74.0	-27.6	1.85 H	240	32.4	14.0
6	10640.00	36.4 AV	54.0	-17.6	1.85 H	240	22.4	14.0
7	15960.00	51.4 PK	74.0	-22.6	1.82 H	44	36.4	15.0
8	15960.00	37.9 AV	54.0	-16.1	1.82 H	44	22.9	15.0

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.

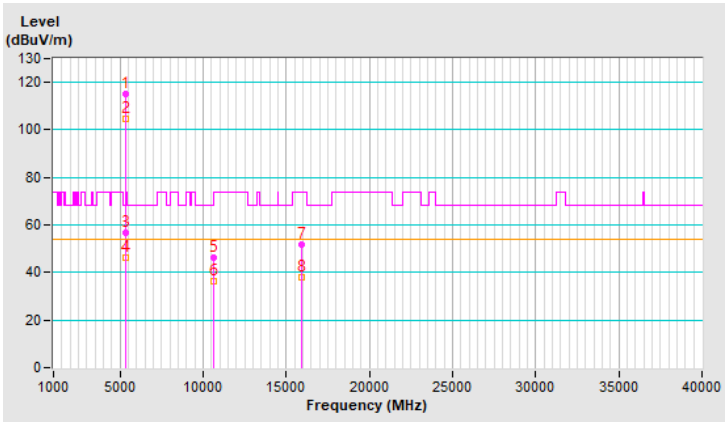


RF Mode	802.11ax (HE20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	115.2 PK			1.63 V	287	111.0	4.2
2	*5320.00	104.4 AV			1.63 V	287	100.2	4.2
3	5351.04	56.9 PK	74.0	-17.1	1.63 V	287	52.6	4.3
4	5351.04	46.5 AV	54.0	-7.5	1.63 V	287	42.2	4.3
5	10640.00	46.0 PK	74.0	-28.0	1.63 V	157	32.0	14.0
6	10640.00	36.2 AV	54.0	-17.8	1.63 V	157	22.2	14.0
7	15960.00	51.9 PK	74.0	-22.1	1.85 V	136	36.9	15.0
8	15960.00	37.9 AV	54.0	-16.1	1.85 V	136	22.9	15.0

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.

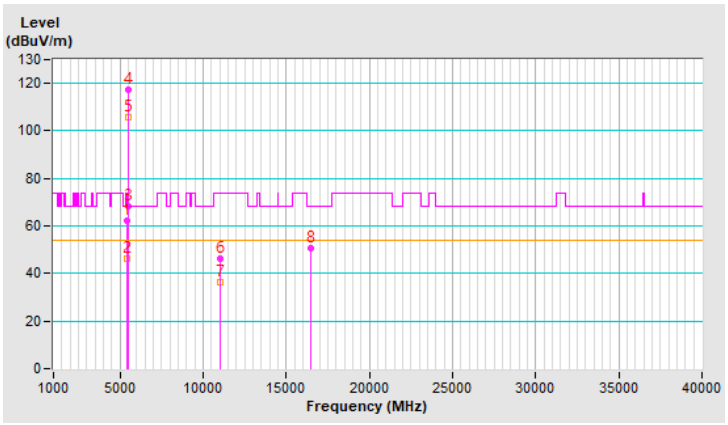


RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	1.99 H	194	57.9	4.5
2	5460.00	46.3 AV	54.0	-7.7	1.99 H	194	41.8	4.5
3	**#5470.00**	**68.1 PK**	**68.2**	**-0.1**	**1.99 H**	**194**	**63.6**	**4.5**
4	*5500.00	117.3 PK			1.99 H	194	112.7	4.6
5	*5500.00	105.8 AV			1.99 H	194	101.2	4.6
6	11000.00	46.1 PK	74.0	-27.9	1.88 H	243	31.1	15.0
7	11000.00	36.4 AV	54.0	-17.6	1.88 H	243	21.4	15.0
8	#16500.00	50.7 PK	68.2	-17.5	1.78 H	35	33.5	17.2

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.

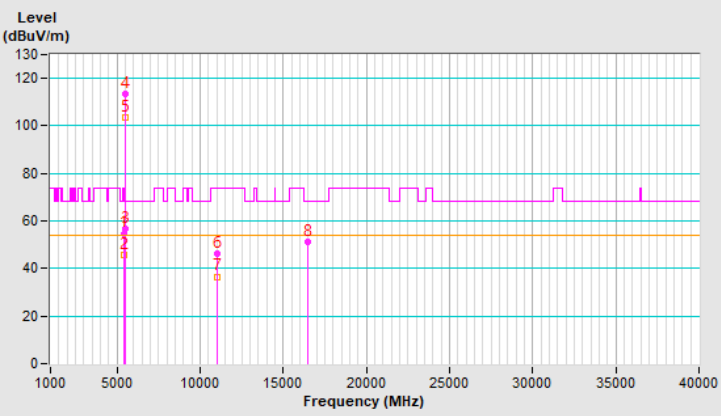


RF Mode	802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	5459.85	54.8 PK	74.0	-19.2	1.89 V	251	50.3	4.5
2	5459.85	45.6 AV	54.0	-8.4	1.89 V	251	41.1	4.5
3	#5465.90	56.6 PK	68.2	-11.6	1.89 V	251	52.1	4.5
4	*5500.00	113.5 PK			1.89 V	251	108.9	4.6
5	*5500.00	103.3 AV			1.89 V	251	98.7	4.6
6	11000.00	46.4 PK	74.0	-27.6	1.55 V	155	31.4	15.0
7	11000.00	36.6 AV	54.0	-17.4	1.55 V	155	21.6	15.0
8	#16500.00	51.4 PK	68.2	-16.8	1.88 V	134	34.2	17.2

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.

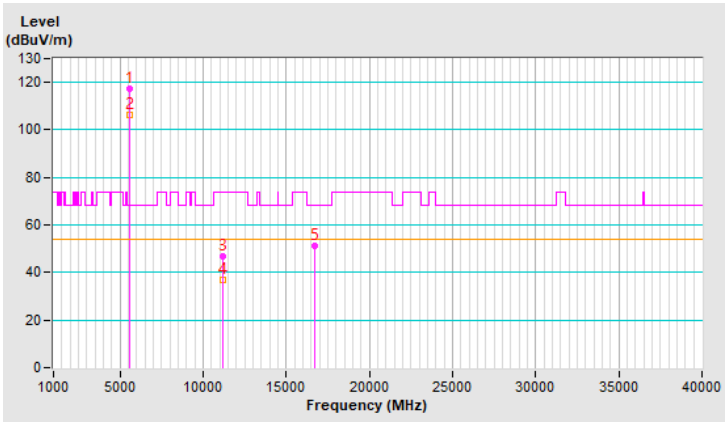


RF Mode	802.11ax (HE20)	**Channel**	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	117.5 PK			2.01 H	189	113.1	4.4
2	*5580.00	106.2 AV			2.01 H	189	101.8	4.4
3	11160.00	47.0 PK	74.0	-27.0	1.84 H	230	32.7	14.3
4	11160.00	37.0 AV	54.0	-17.0	1.84 H	230	22.7	14.3
5	#16740.00	51.0 PK	68.2	-17.2	1.76 H	63	32.5	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.

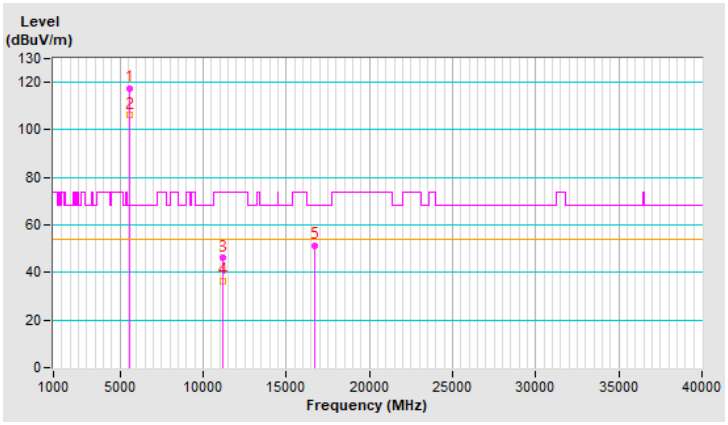


RF Mode	802.11ax (HE20)	**Channel**	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5580.00	117.6 PK			1.69 V	262	113.2	4.4
2	*5580.00	106.4 AV			1.69 V	262	102.0	4.4
3	11160.00	46.1 PK	74.0	-27.9	1.63 V	151	31.8	14.3
4	11160.00	36.6 AV	54.0	-17.4	1.63 V	151	22.3	14.3
5	#16740.00	51.5 PK	68.2	-16.7	1.81 V	125	33.0	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.

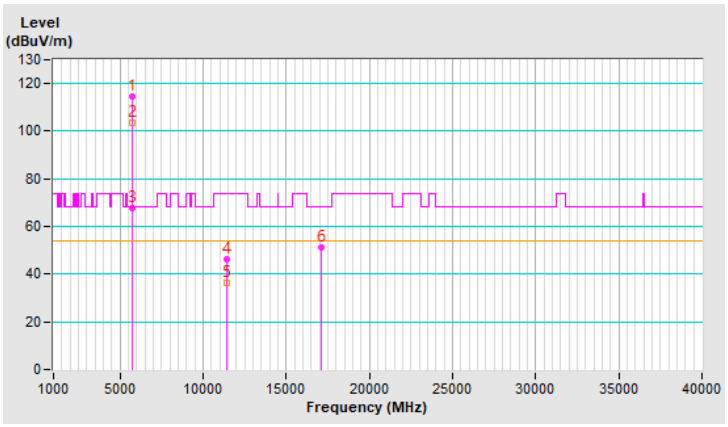


RF Mode	802.11ax (HE20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	114.6 PK			2.04 H	182	110.0	4.6
2	*5700.00	103.7 AV			2.04 H	182	99.1	4.6
3	#5725.00	67.9 PK	68.2	-0.3	2.04 H	182	63.2	4.7
4	11400.00	46.2 PK	74.0	-27.8	1.83 H	241	31.2	15.0
5	11400.00	36.5 AV	54.0	-17.5	1.83 H	241	21.5	15.0
6	#17100.00	51.2 PK	68.2	-17.0	1.83 H	34	32.2	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.

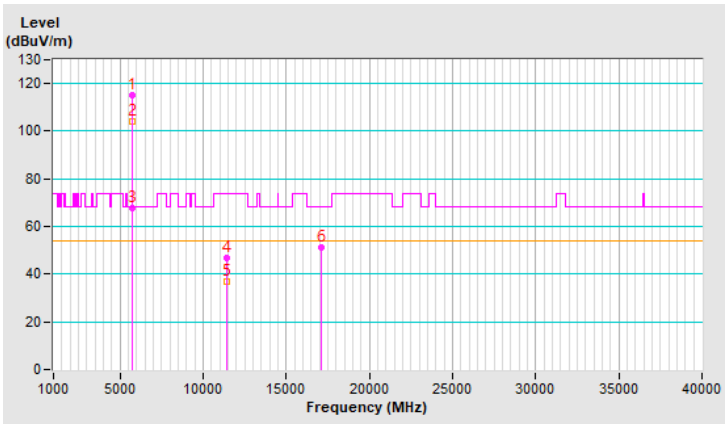


RF Mode	802.11ax (HE20)	**Channel**	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	115.0 PK			1.69 V	265	110.4	4.6
2	*5700.00	103.9 AV			1.69 V	265	99.3	4.6
3	#5725.00	67.8 PK	68.2	-0.4	1.69 V	265	63.1	4.7
4	11400.00	46.6 PK	74.0	-27.4	1.60 V	152	31.6	15.0
5	11400.00	36.8 AV	54.0	-17.2	1.60 V	152	21.8	15.0
6	#17100.00	51.4 PK	68.2	-16.8	1.81 V	137	32.4	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.

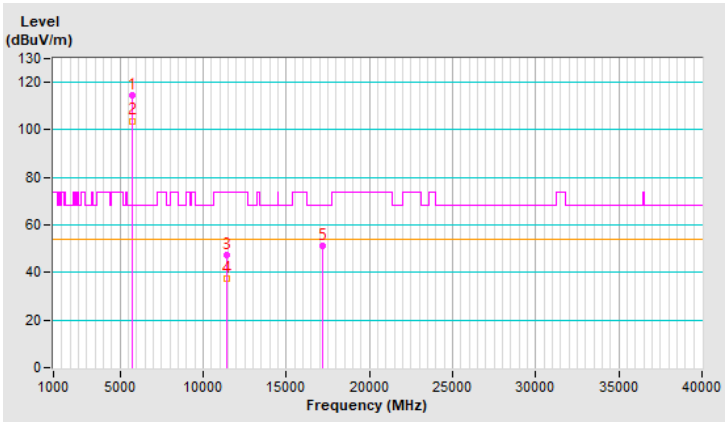


RF Mode	802.11ax (HE20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	*5720.00	114.5 PK			1.97 H	169	109.8	4.7
2	*5720.00	103.8 AV			1.97 H	169	99.1	4.7
3	11440.00	47.1 PK	74.0	-26.9	1.81 H	217	32.1	15.0
4	11440.00	37.2 AV	54.0	-16.8	1.81 H	217	22.2	15.0
5	#17160.00	51.4 PK	68.2	-16.8	1.78 H	34	32.4	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.

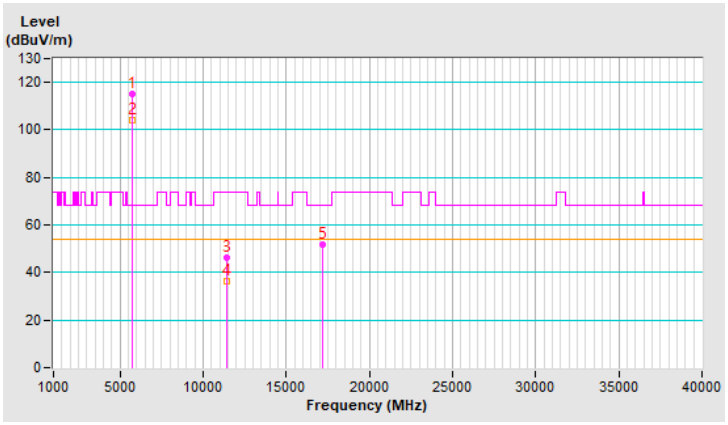


RF Mode	802.11ax (HE20)	**Channel**	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	*5720.00	115.3 PK			1.69 V	259	110.6	4.7
2	*5720.00	104.2 AV			1.69 V	259	99.5	4.7
3	11440.00	46.1 PK	74.0	-27.9	1.55 V	162	31.1	15.0
4	11440.00	36.5 AV	54.0	-17.5	1.55 V	162	21.5	15.0
5	#17160.00	51.9 PK	68.2	-16.3	1.89 V	125	32.9	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.

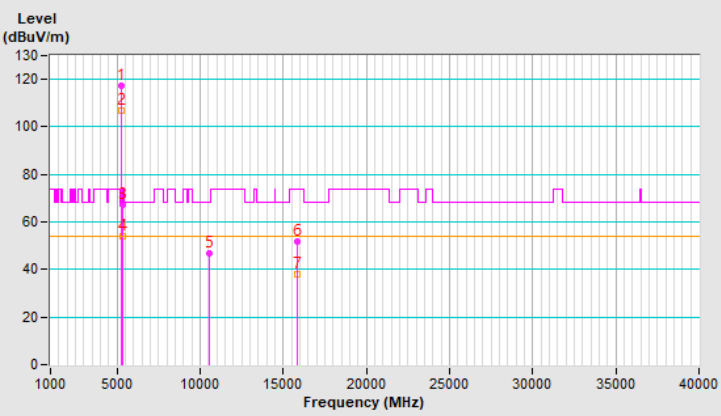


RF Mode	802.11ax (HE40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	*5270.00	117.4 PK			1.34 H	189	113.4	4.0
2	*5270.00	106.7 AV			1.34 H	189	102.7	4.0
3	5354.15	67.0 PK	74.0	-7.0	1.34 H	189	62.7	4.3
4	5354.15	53.8 AV	54.0	-0.2	1.34 H	189	49.5	4.3
5	#10540.00	46.7 PK	68.2	-21.5	1.81 H	225	32.6	14.1
6	15810.00	51.8 PK	74.0	-22.2	1.81 H	45	37.5	14.3
7	15810.00	37.9 AV	54.0	-16.1	1.81 H	45	23.6	14.3

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.

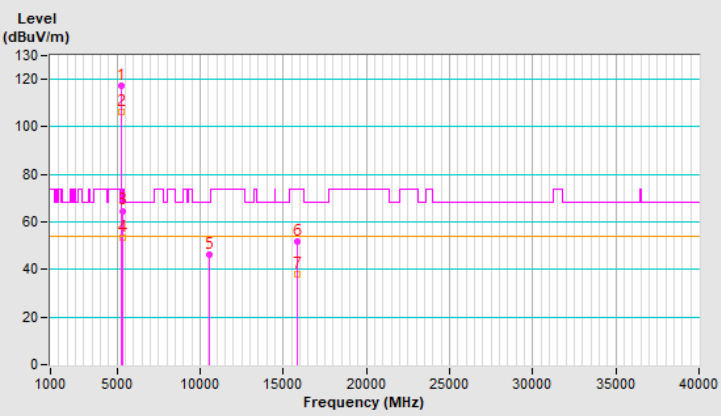


RF Mode	802.11ax (HE40)	**Channel**	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	*5270.00	117.4 PK			1.67 V	251	113.4	4.0
2	*5270.00	106.3 AV			1.67 V	251	102.3	4.0
3	5350.81	64.7 PK	74.0	-9.3	1.67 V	251	60.4	4.3
4	5350.81	53.3 AV	54.0	-0.7	1.67 V	251	49.0	4.3
5	#10540.00	46.2 PK	68.2	-22.0	1.59 V	169	32.1	14.1
6	15810.00	51.9 PK	74.0	-22.1	1.84 V	123	37.6	14.3
7	15810.00	37.9 AV	54.0	-16.1	1.84 V	123	23.6	14.3

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.

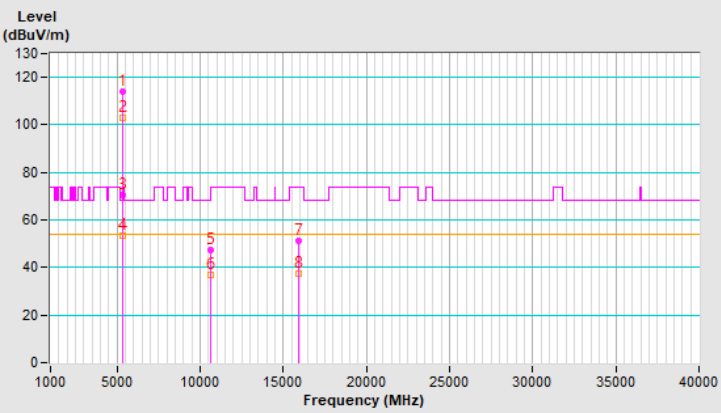


RF Mode	802.11ax (HE40)	**Channel**	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5310.00	113.9 PK			1.36 H	188	109.8	4.1
2	*5310.00	102.9 AV			1.36 H	188	98.8	4.1
3	5350.74	70.5 PK	74.0	-3.5	1.36 H	188	66.2	4.3
4	5350.74	53.6 AV	54.0	-0.4	1.36 H	188	49.3	4.3
5	10620.00	47.2 PK	74.0	-26.8	1.85 H	214	33.2	14.0
6	10620.00	37.0 AV	54.0	-17.0	1.85 H	214	23.0	14.0
7	15930.00	51.0 PK	74.0	-23.0	1.78 H	46	36.1	14.9
8	15930.00	37.6 AV	54.0	-16.4	1.78 H	46	22.7	14.9

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.

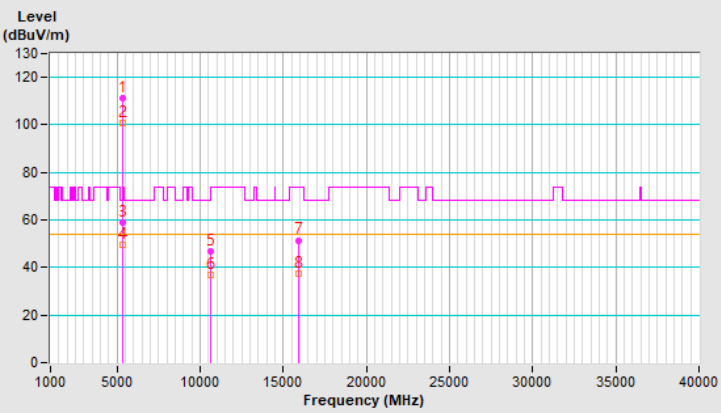


RF Mode	802.11ax (HE40)	**Channel**	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5310.00	111.1 PK			1.74 V	243	107.0	4.1
2	*5310.00	100.8 AV			1.74 V	243	96.7	4.1
3	5350.37	59.0 PK	74.0	-15.0	1.74 V	243	54.7	4.3
4	5350.37	49.6 AV	54.0	-4.4	1.74 V	243	45.3	4.3
5	10620.00	47.0 PK	74.0	-27.0	1.66 V	151	33.0	14.0
6	10620.00	37.0 AV	54.0	-17.0	1.66 V	151	23.0	14.0
7	15930.00	51.5 PK	74.0	-22.5	1.82 V	139	36.6	14.9
8	15930.00	37.5 AV	54.0	-16.5	1.82 V	139	22.6	14.9

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.

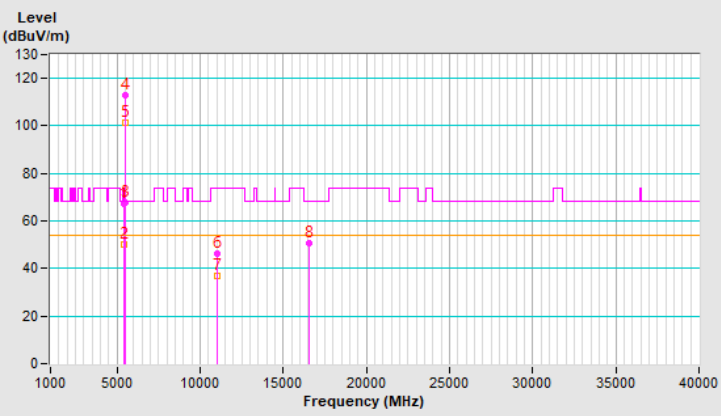


RF Mode	802.11ax (HE40)	**Channel**	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	5458.48	67.0 PK	74.0	-7.0	1.36 H	188	62.5	4.5
2	5458.48	50.3 AV	54.0	-3.7	1.36 H	188	45.8	4.5
3	#5464.07	67.8 PK	68.2	-0.4	1.36 H	188	63.3	4.5
4	*5510.00	112.9 PK			1.36 H	188	108.3	4.6
5	*5510.00	101.4 AV			1.36 H	188	96.8	4.6
6	11020.00	46.5 PK	74.0	-27.5	1.84 H	216	31.7	14.8
7	11020.00	36.8 AV	54.0	-17.2	1.84 H	216	22.0	14.8
8	#16530.00	50.9 PK	68.2	-17.3	1.82 H	63	33.7	17.2

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.

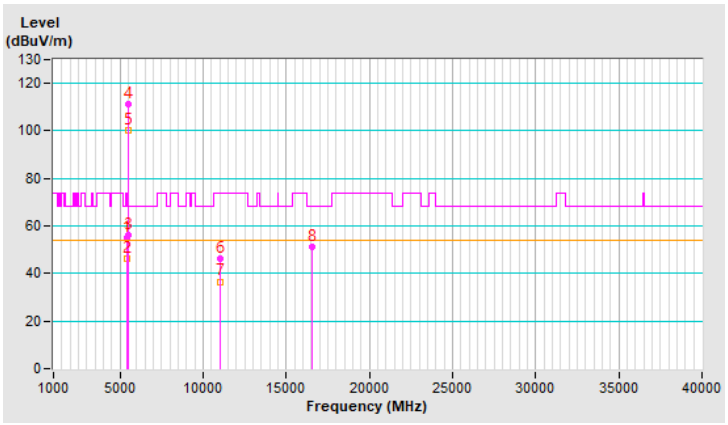


RF Mode	802.11ax (HE40)	**Channel**	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	55.0 PK	74.0	-19.0	1.74 V	227	50.5	4.5
2	5460.00	46.2 AV	54.0	-7.8	1.74 V	227	41.7	4.5
3	#5468.70	56.4 PK	68.2	-11.8	1.74 V	227	51.9	4.5
4	*5510.00	111.2 PK			1.74 V	227	106.6	4.6
5	*5510.00	100.3 AV			1.74 V	227	95.7	4.6
6	11020.00	46.5 PK	74.0	-27.5	1.59 V	174	31.7	14.8
7	11020.00	36.6 AV	54.0	-17.4	1.59 V	174	21.8	14.8
8	#16530.00	51.2 PK	68.2	-17.0	1.79 V	152	34.0	17.2

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.

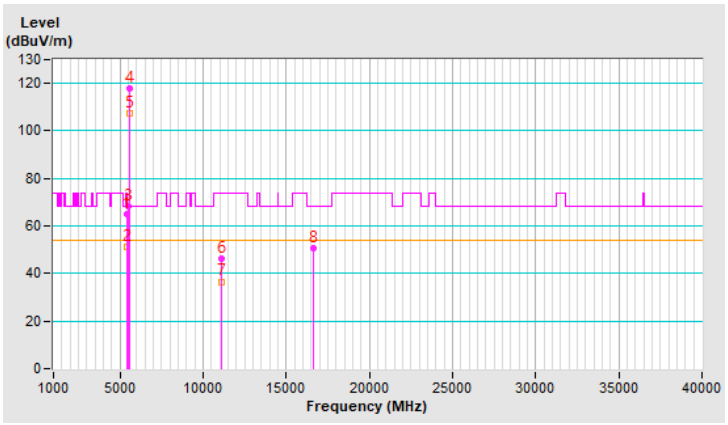


RF Mode	802.11ax (HE40)	**Channel**	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	65.2 PK	74.0	-8.8	1.86 H	194	60.7	4.5
2	5460.00	51.2 AV	54.0	-2.8	1.86 H	194	46.7	4.5
3	**#5470.00**	**68.1 PK**	**68.2**	**-0.1**	**1.86 H**	**194**	**63.6**	**4.5**
4	*5550.00	117.9 PK			1.86 H	194	113.5	4.4
5	*5550.00	107.6 AV			1.86 H	194	103.2	4.4
6	11100.00	46.4 PK	74.0	-27.6	1.92 H	227	32.1	14.3
7	11100.00	36.6 AV	54.0	-17.4	1.92 H	227	22.3	14.3
8	#16650.00	50.7 PK	68.2	-17.5	1.82 H	44	32.8	17.9

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.

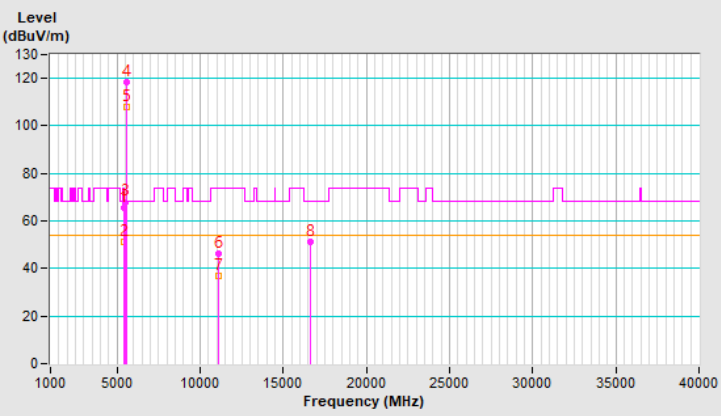


RF Mode	802.11ax (HE40)	**Channel**	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	65.6 PK	74.0	-8.4	1.78 V	273	61.1	4.5
2	5460.00	51.4 AV	54.0	-2.6	1.78 V	273	46.9	4.5
3	#5470.00	68.0 PK	68.2	-0.2	1.78 V	273	63.5	4.5
4	*5550.00	118.2 PK			1.78 V	273	113.8	4.4
5	*5550.00	107.8 AV			1.78 V	273	103.4	4.4
6	11100.00	46.4 PK	74.0	-27.6	1.57 V	163	32.1	14.3
7	11100.00	36.8 AV	54.0	-17.2	1.57 V	163	22.5	14.3
8	#16650.00	51.2 PK	68.2	-17.0	1.81 V	138	33.3	17.9

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.

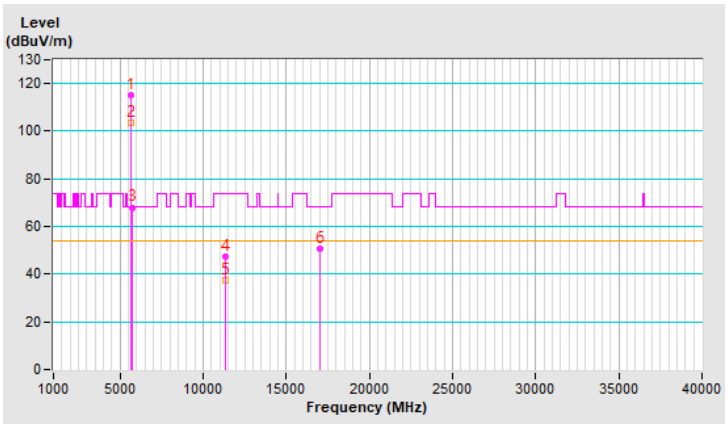


RF Mode	802.11ax (HE40)	**Channel**	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5670.00	114.9 PK			1.35 H	181	110.2	4.7
2	*5670.00	103.5 AV			1.35 H	181	98.8	4.7
3	#5725.00	68.0 PK	68.2	-0.2	1.35 H	181	63.3	4.7
4	11340.00	47.2 PK	74.0	-26.8	1.82 H	235	32.3	14.9
5	11340.00	37.2 AV	54.0	-16.8	1.82 H	235	22.3	14.9
6	#17010.00	50.7 PK	68.2	-17.5	1.78 H	61	31.8	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.

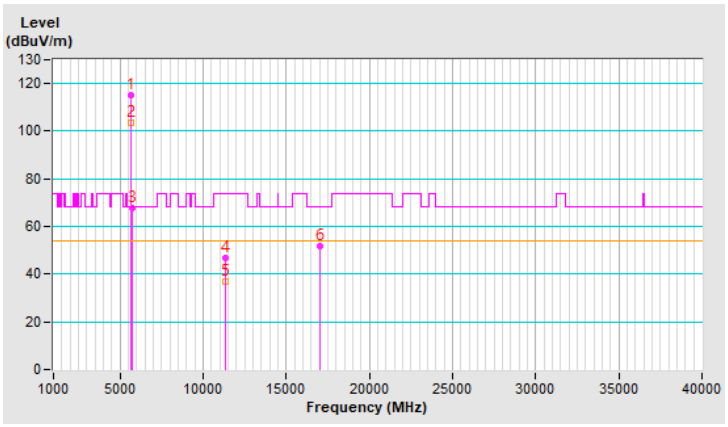


RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	115.2 PK			1.83 V	277	110.5	4.7
2	*5670.00	103.7 AV			1.83 V	277	99.0	4.7
3	#5725.00	67.9 PK	68.2	-0.3	1.83 V	277	63.2	4.7
4	11340.00	46.9 PK	74.0	-27.1	1.63 V	158	32.0	14.9
5	11340.00	36.8 AV	54.0	-17.2	1.63 V	158	21.9	14.9
6	#17010.00	51.9 PK	68.2	-16.3	1.78 V	123	33.0	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.

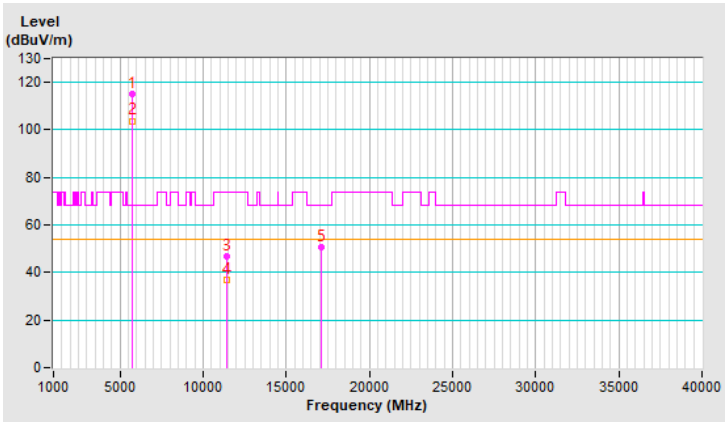


RF Mode	802.11ax (HE40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	*5710.00	115.1 PK			1.47 H	192	110.5	4.6
2	*5710.00	103.8 AV			1.47 H	192	99.2	4.6
3	11420.00	47.0 PK	74.0	-27.0	1.86 H	243	32.1	14.9
4	11420.00	37.1 AV	54.0	-16.9	1.86 H	243	22.2	14.9
5	#17130.00	50.6 PK	68.2	-17.6	1.78 H	32	31.6	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.

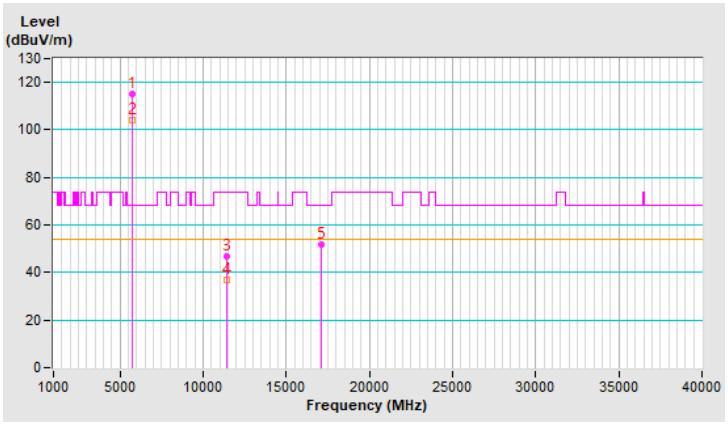


RF Mode	802.11ax (HE40)	**Channel**	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	*5710.00	115.2 PK			1.72 V	298	110.6	4.6
2	*5710.00	104.0 AV			1.72 V	298	99.4	4.6
3	11420.00	46.6 PK	74.0	-27.4	1.60 V	171	31.7	14.9
4	11420.00	36.9 AV	54.0	-17.1	1.60 V	171	22.0	14.9
5	#17130.00	51.6 PK	68.2	-16.6	1.86 V	128	32.6	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.

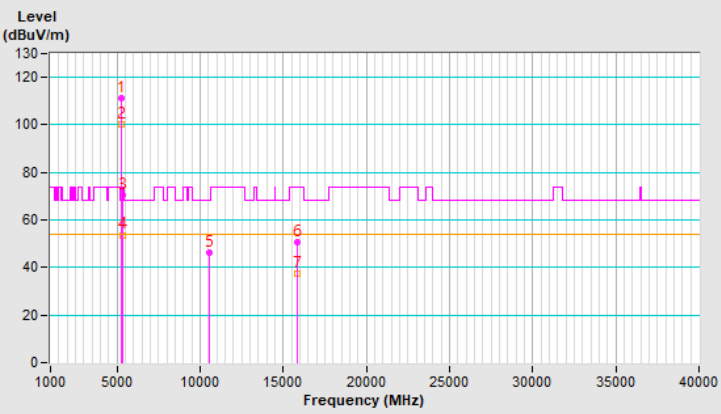


RF Mode	802.11ax (HE80)	Channel	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	*5290.00	111.3 PK			1.43 H	186	107.3	4.0
2	*5290.00	100.1 AV			1.43 H	186	96.1	4.0
3	5354.16	70.3 PK	74.0	-3.7	1.43 H	186	66.0	4.3
4	5354.16	53.7 AV	54.0	-0.3	1.43 H	186	49.4	4.3
5	#10580.00	46.5 PK	68.2	-21.7	1.82 H	228	32.5	14.0
6	15870.00	50.8 PK	74.0	-23.2	1.84 H	48	36.1	14.7
7	15870.00	37.2 AV	54.0	-16.8	1.84 H	48	22.5	14.7

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.

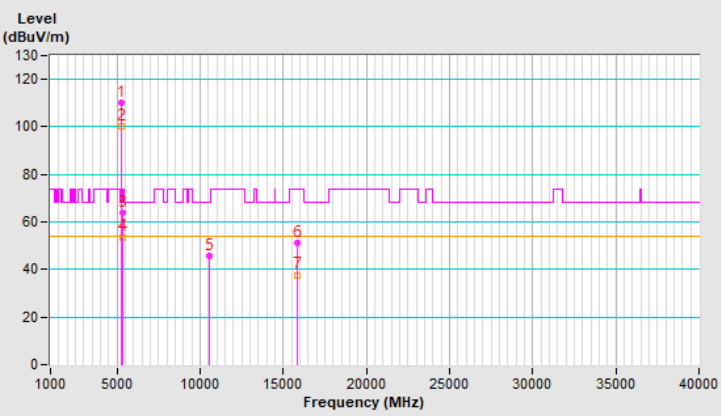


RF Mode	802.11ax (HE80)	**Channel**	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	*5290.00	110.3 PK			1.86 V	267	106.3	4.0
2	*5290.00	100.2 AV			1.86 V	267	96.2	4.0
3	5354.00	63.9 PK	74.0	-10.1	1.86 V	267	59.6	4.3
4	5354.00	53.7 AV	54.0	-0.3	1.86 V	267	49.4	4.3
5	#10580.00	45.9 PK	68.2	-22.3	1.65 V	150	31.9	14.0
6	15870.00	51.4 PK	74.0	-22.6	1.80 V	147	36.7	14.7
7	15870.00	37.7 AV	54.0	-16.3	1.80 V	147	23.0	14.7

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.

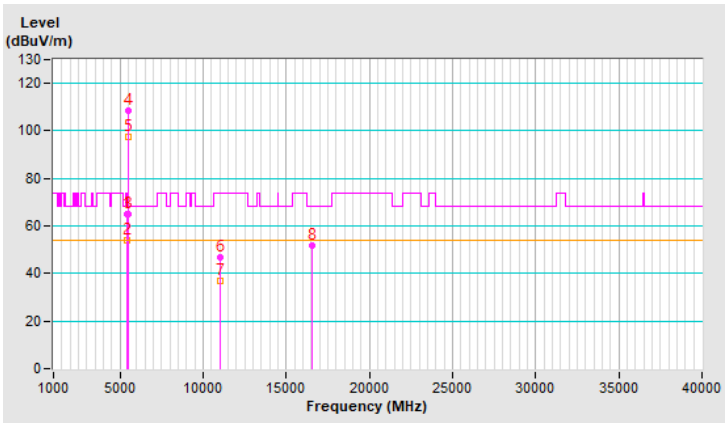


RF Mode	802.11ax (HE80)	Channel	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	5459.31	64.8 PK	74.0	-9.2	1.44 H	184	60.3	4.5
2	5459.31	53.8 AV	54.0	-0.2	1.44 H	184	49.3	4.5
3	#5467.50	65.1 PK	68.2	-3.1	1.44 H	184	60.6	4.5
4	*5530.00	108.4 PK			1.44 H	184	104.0	4.4
5	*5530.00	97.6 AV			1.44 H	184	93.2	4.4
6	11060.00	46.7 PK	74.0	-27.3	1.85 H	226	32.1	14.6
7	11060.00	36.7 AV	54.0	-17.3	1.85 H	226	22.1	14.6
8	#16590.00	51.7 PK	68.2	-16.5	1.79 H	35	34.3	17.4

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.

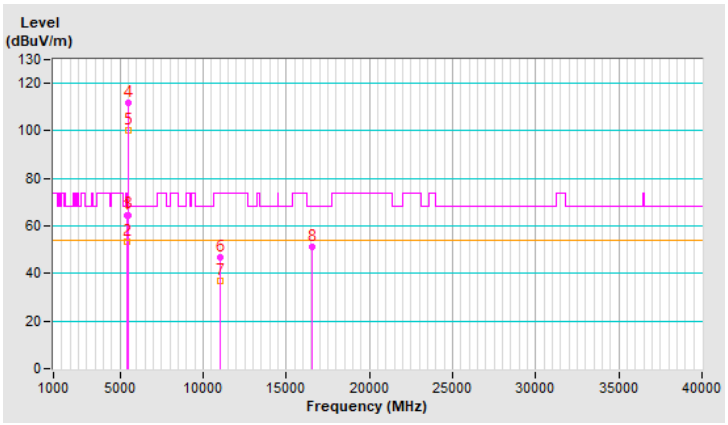


RF Mode	802.11ax (HE80)	**Channel**	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	5455.91	64.4 PK	74.0	-9.6	1.83 V	260	59.9	4.5
2	5455.91	53.5 AV	54.0	-0.5	1.83 V	260	49.0	4.5
3	#5465.55	64.7 PK	68.2	-3.5	1.83 V	260	60.2	4.5
4	*5530.00	111.6 PK			1.83 V	260	107.2	4.4
5	*5530.00	100.2 AV			1.83 V	260	95.8	4.4
6	11060.00	46.7 PK	74.0	-27.3	1.62 V	146	32.1	14.6
7	11060.00	37.0 AV	54.0	-17.0	1.62 V	146	22.4	14.6
8	#16590.00	51.4 PK	68.2	-16.8	1.89 V	152	34.0	17.4

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.

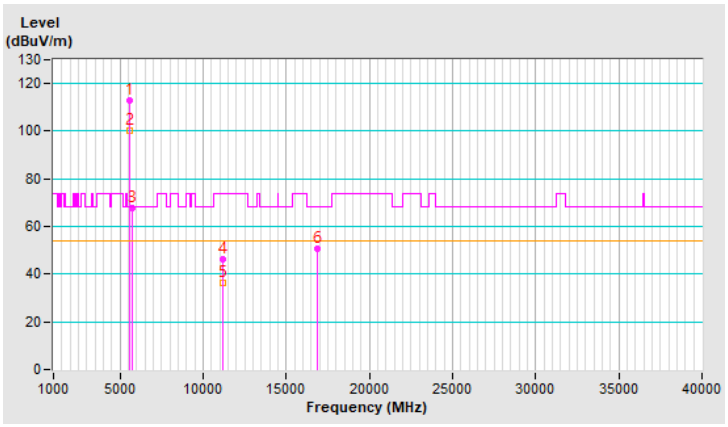


RF Mode	802.11ax (HE80)	**Channel**	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	*5610.00	112.8 PK			1.45 H	186	108.2	4.6
2	*5610.00	100.2 AV			1.45 H	186	95.6	4.6
3	#5725.00	67.9 PK	68.2	-0.3	1.45 H	186	63.2	4.7
4	11220.00	46.0 PK	74.0	-28.0	1.81 H	230	31.6	14.4
5	11220.00	36.4 AV	54.0	-17.6	1.81 H	230	22.0	14.4
6	#16830.00	50.7 PK	68.2	-17.5	1.83 H	54	32.3	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.

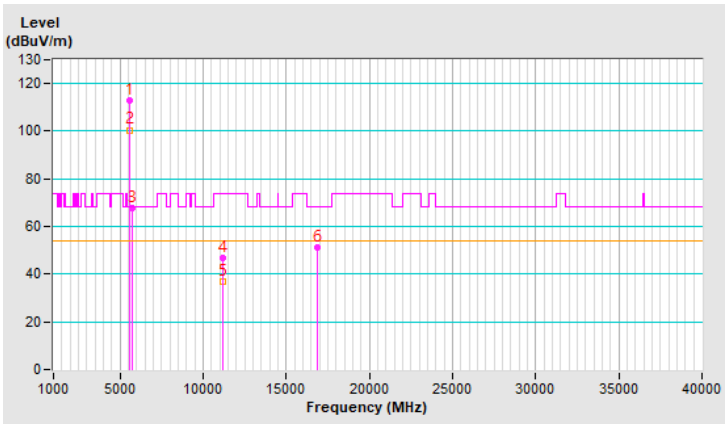


RF Mode	802.11ax (HE80)	**Channel**	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	*5610.00	113.0 PK			1.87 V	251	108.4	4.6
2	*5610.00	100.5 AV			1.87 V	251	95.9	4.6
3	#5725.00	67.8 PK	68.2	-0.4	1.87 V	251	63.1	4.7
4	11220.00	46.7 PK	74.0	-27.3	1.61 V	166	32.3	14.4
5	11220.00	36.9 AV	54.0	-17.1	1.61 V	166	22.5	14.4
6	#16830.00	51.2 PK	68.2	-17.0	1.80 V	129	32.8	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.

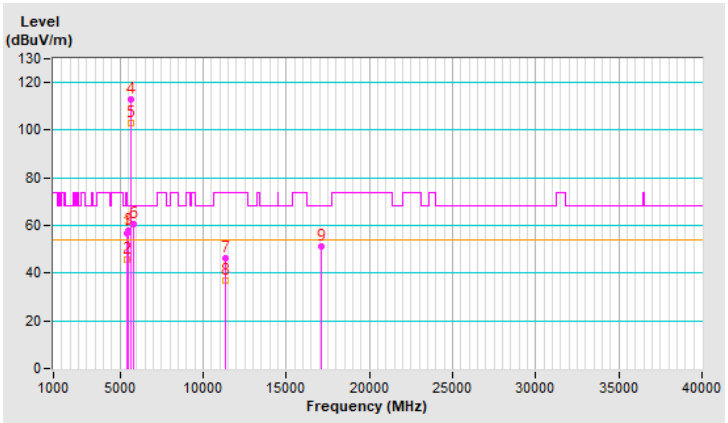


RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	1.85 H	191	52.5	4.5
2	5460.00	45.5 AV	54.0	-8.5	1.85 H	191	41.0	4.5
3	#5470.00	57.9 PK	68.2	-10.3	1.85 H	191	53.4	4.5
4	*5690.00	113.1 PK			1.85 H	191	108.5	4.6
5	*5690.00	102.9 AV			1.85 H	191	98.3	4.6
6	#5850.00	60.6 PK	68.2	-7.6	1.85 H	191	55.5	5.1
7	11380.00	46.4 PK	74.0	-27.6	1.83 H	216	31.4	15.0
8	11380.00	36.8 AV	54.0	-17.2	1.83 H	216	21.8	15.0
9	#17070.00	51.3 PK	68.2	-16.9	1.79 H	46	32.3	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.

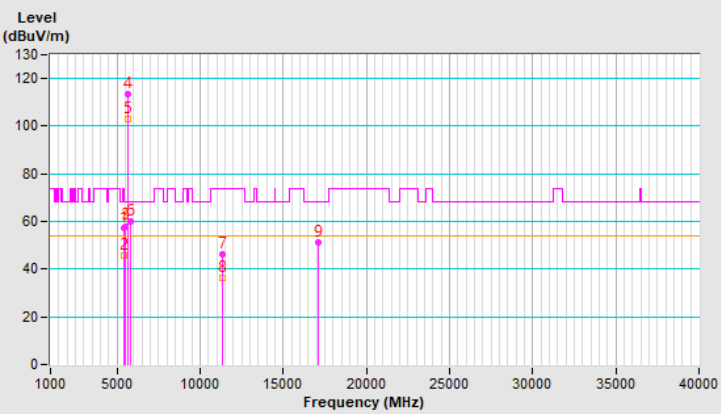


RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	1.78 V	249	53.0	4.5
2	5460.00	45.9 AV	54.0	-8.1	1.78 V	249	41.4	4.5
3	#5470.00	58.1 PK	68.2	-10.1	1.78 V	249	53.6	4.5
4	*5690.00	113.5 PK			1.78 V	249	108.9	4.6
5	*5690.00	103.2 AV			1.78 V	249	98.6	4.6
6	#5850.00	60.2 PK	68.2	-8.0	1.78 V	249	55.1	5.1
7	11380.00	46.2 PK	74.0	-27.8	1.57 V	172	31.2	15.0
8	11380.00	36.5 AV	54.0	-17.5	1.57 V	172	21.5	15.0
9	#17070.00	51.3 PK	68.2	-16.9	1.80 V	128	32.3	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.

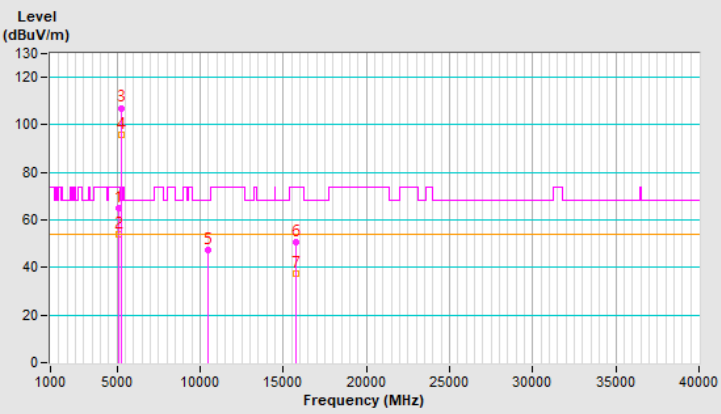


RF Mode	802.11ax (HE160)	**Channel**	CH 50：5250 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

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	5143.78	65.0 PK	74.0	-9.0	1.34 H	185	60.5	4.5
2	**5143.78**	**53.9 AV**	**54.0**	**-0.1**	**1.34 H**	**185**	**49.4**	**4.5**
3	*5250.00	107.1 PK			1.34 H	185	103.1	4.0
4	*5250.00	95.9 AV			1.34 H	185	91.9	4.0
5	#10500.00	47.2 PK	68.2	-21.0	1.90 H	240	32.9	14.3
6	15750.00	50.7 PK	74.0	-23.3	1.80 H	38	36.5	14.2
7	15750.00	37.3 AV	54.0	-16.7	1.80 H	38	23.1	14.2

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.

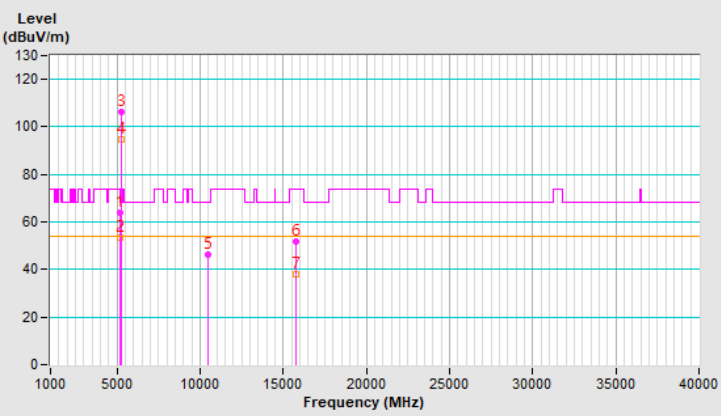


RF Mode	802.11ax (HE160)	Channel	CH 50：5250 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	5145.50	63.8 PK	74.0	-10.2	1.60 V	265	59.3	4.5
2	5145.50	53.6 AV	54.0	-0.4	1.60 V	265	49.1	4.5
3	*5250.00	106.3 PK			1.60 V	265	102.3	4.0
4	*5250.00	94.7 AV			1.60 V	265	90.7	4.0
5	#10500.00	46.2 PK	68.2	-22.0	1.66 V	153	31.9	14.3
6	15750.00	51.7 PK	74.0	-22.3	1.87 V	147	37.5	14.2
7	15750.00	38.0 AV	54.0	-16.0	1.87 V	147	23.8	14.2

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.

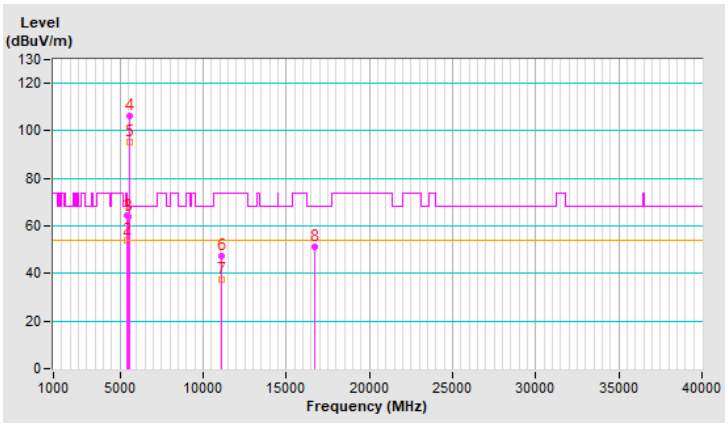


RF Mode	802.11ax (HE160)	Channel	CH 114：5570 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Nelson Teng		

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	5458.85	64.5 PK	74.0	-9.5	1.93 H	186	60.0	4.5
2	5458.85	53.8 AV	54.0	-0.2	1.93 H	186	49.3	4.5
3	#5469.32	64.0 PK	68.2	-4.2	1.93 H	186	59.5	4.5
4	*5570.00	106.3 PK			1.93 H	186	101.9	4.4
5	*5570.00	95.5 AV			1.93 H	186	91.1	4.4
6	11140.00	47.3 PK	74.0	-26.7	1.84 H	214	33.0	14.3
7	11140.00	37.3 AV	54.0	-16.7	1.84 H	214	23.0	14.3
8	#16710.00	51.4 PK	68.2	-16.8	1.83 H	45	32.9	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.

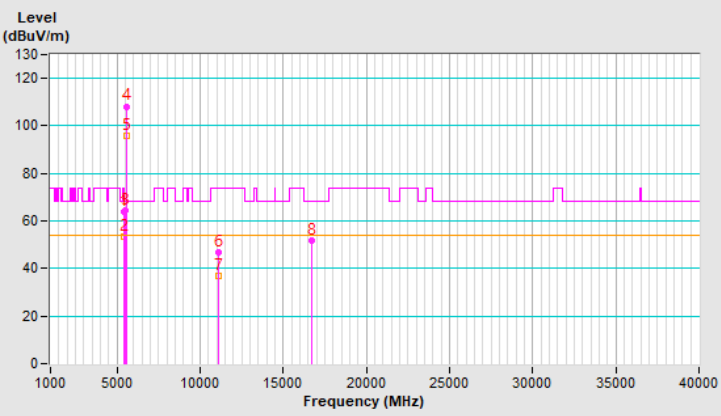


RF Mode	802.11ax (HE160)	**Channel**	CH 114：5570 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 70% RH
Tested By	Nelson Teng		

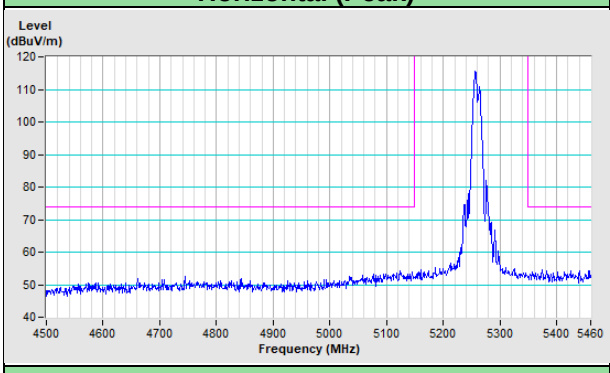
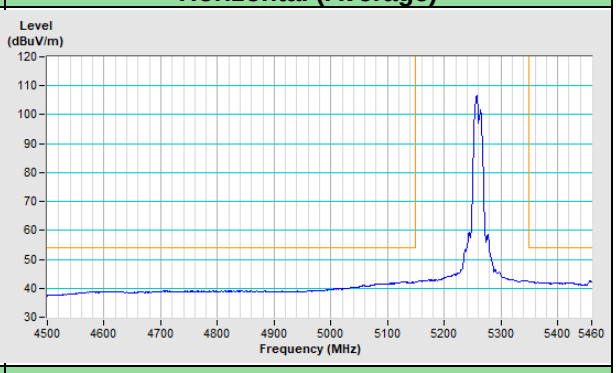
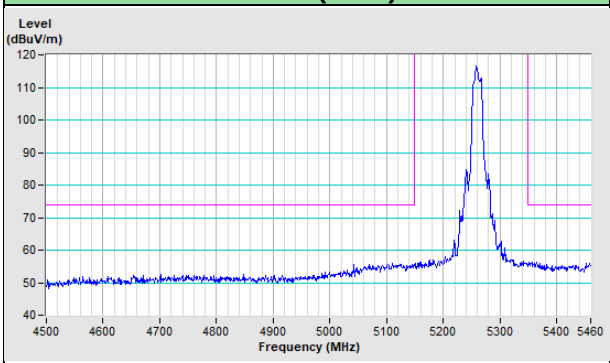
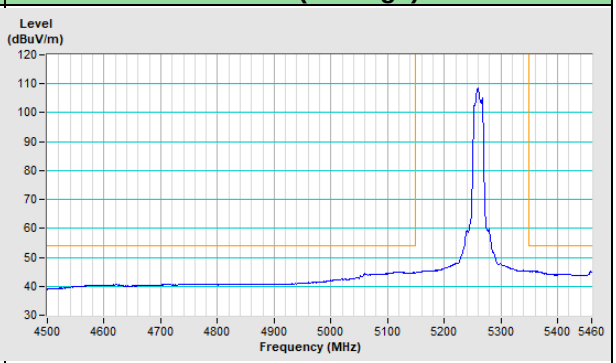
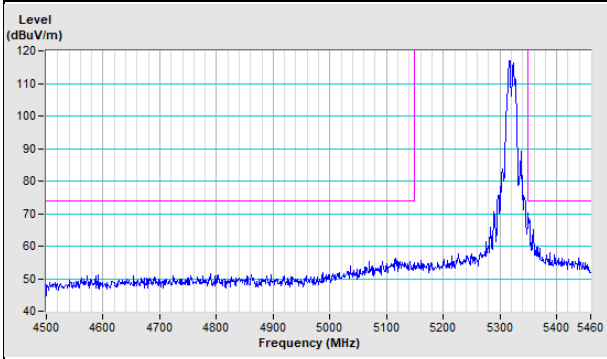
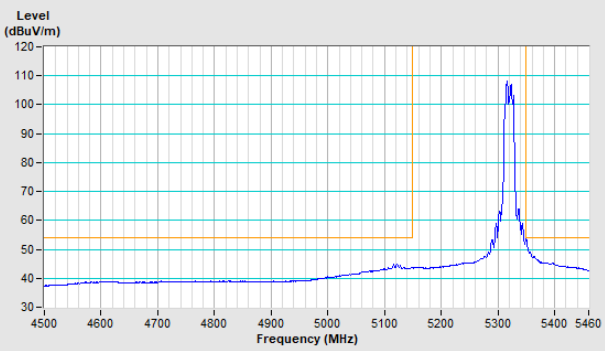
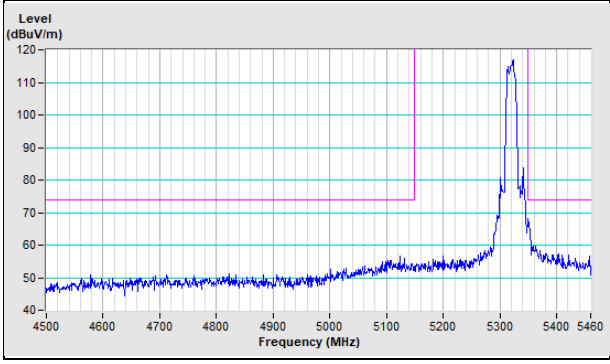
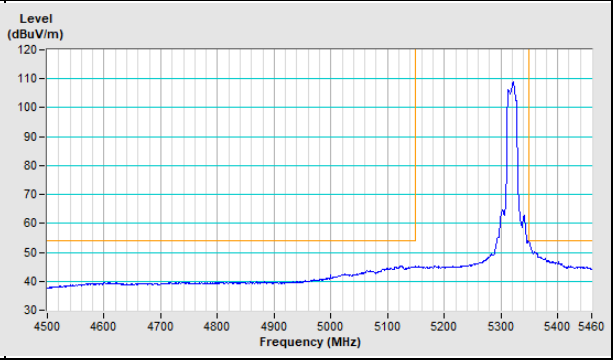
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5455.85	64.1 PK	74.0	-9.9	1.79 V	261	59.6	4.5
2	5455.85	53.6 AV	54.0	-0.4	1.79 V	261	49.1	4.5
3	#5465.55	64.4 PK	68.2	-3.8	1.79 V	261	59.9	4.5
4	*5570.00	108.2 PK			1.79 V	261	103.8	4.4
5	*5570.00	96.0 AV			1.79 V	261	91.6	4.4
6	11140.00	46.7 PK	74.0	-27.3	1.67 V	155	32.4	14.3
7	11140.00	36.8 AV	54.0	-17.2	1.67 V	155	22.5	14.3
8	#16710.00	51.6 PK	68.2	-16.6	1.84 V	127	33.1	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.

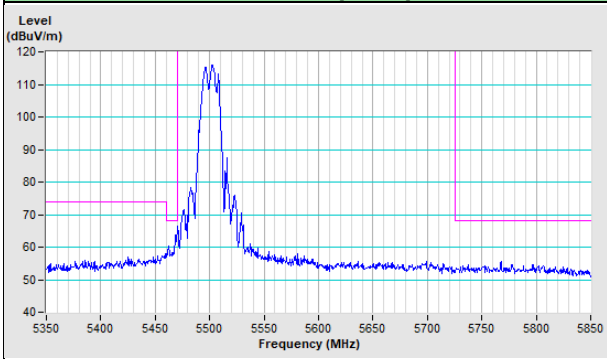


Plot of Band Edge

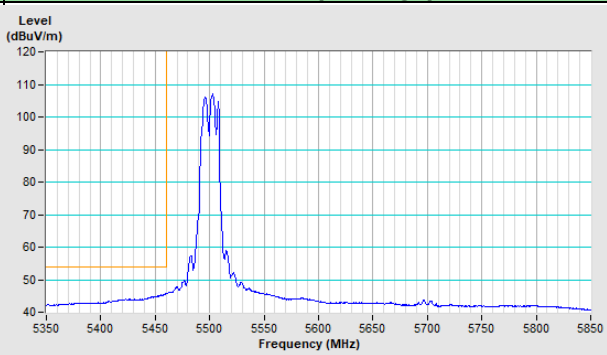
802.11a Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11a Channel 100

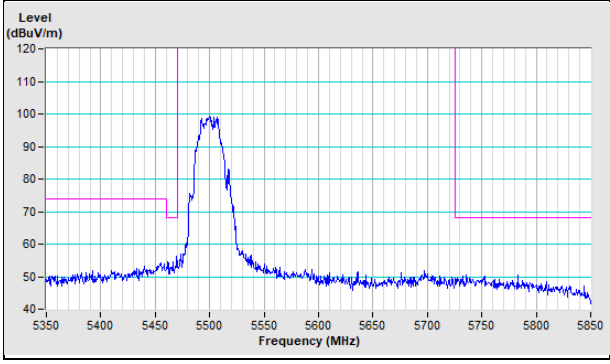
Horizontal (Peak)



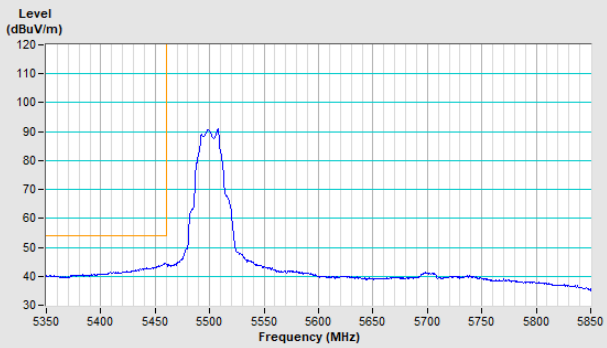
Horizontal (Average)



Vertical (Peak)

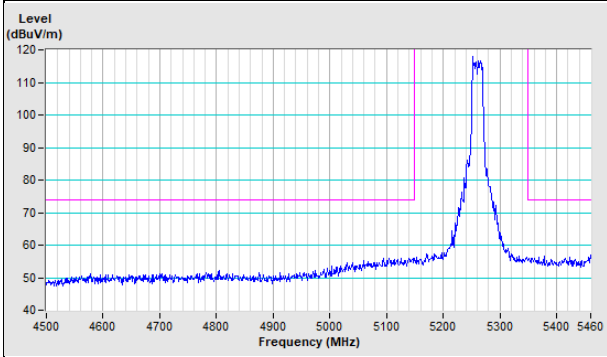


Vertical (Average)

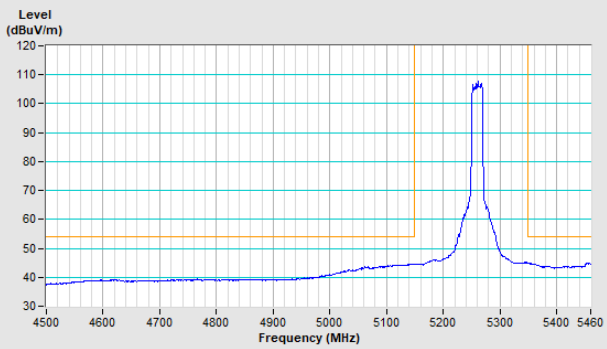


802.11ax (HE20) Channel 52

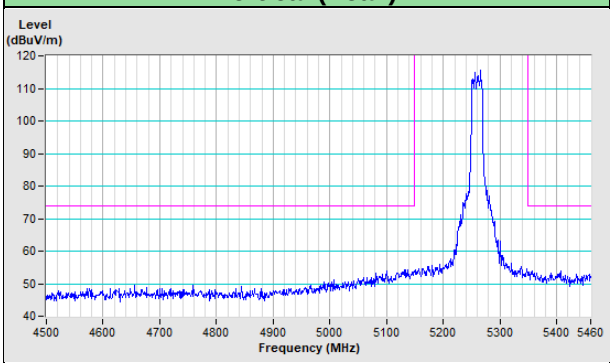
Horizontal (Peak)



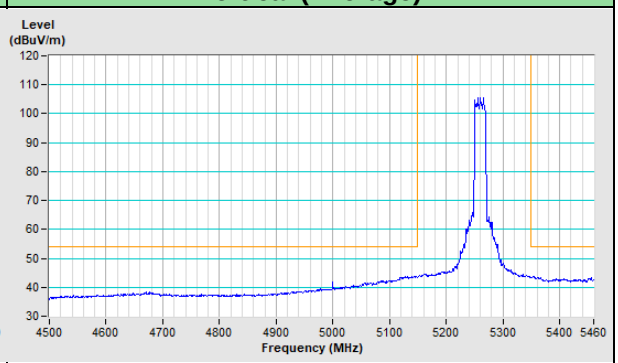
Horizontal (Average)



Vertical (Peak)

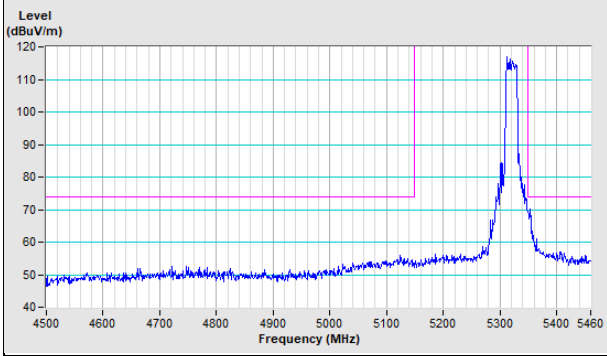


Vertical (Average)

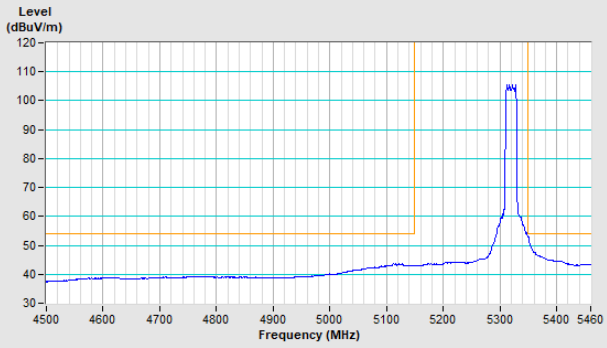


802.11ax (HE20) Channel 64

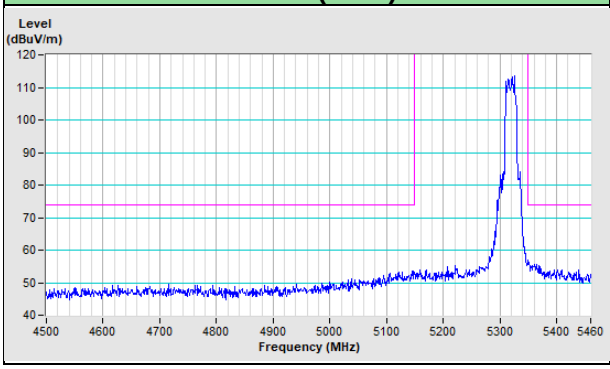
Horizontal (Peak)



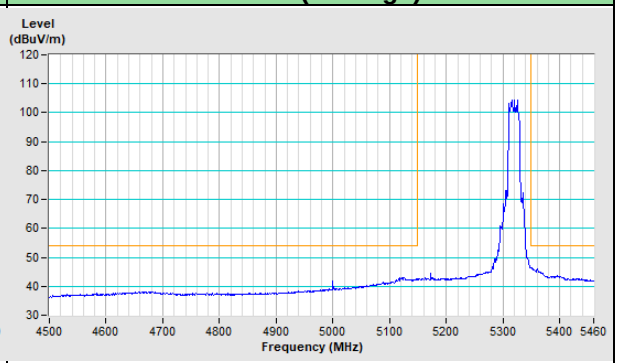
Horizontal (Average)

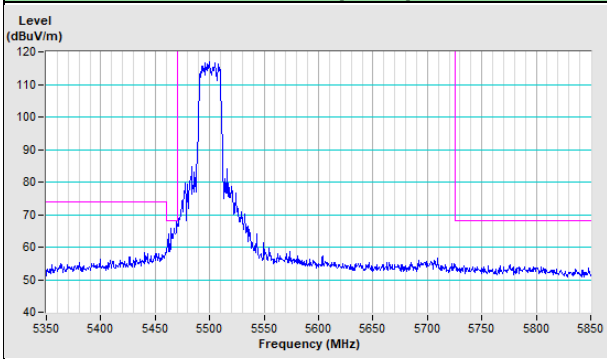
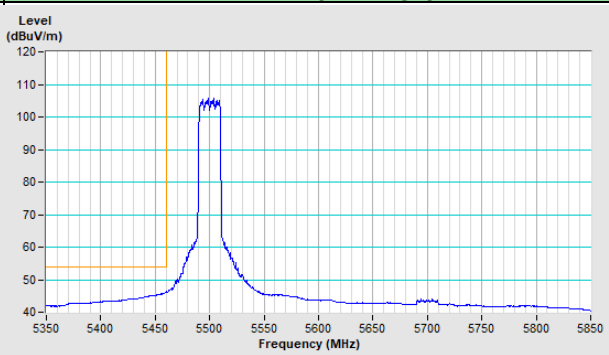
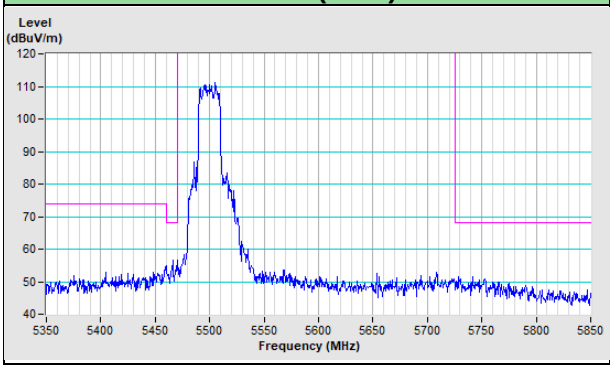
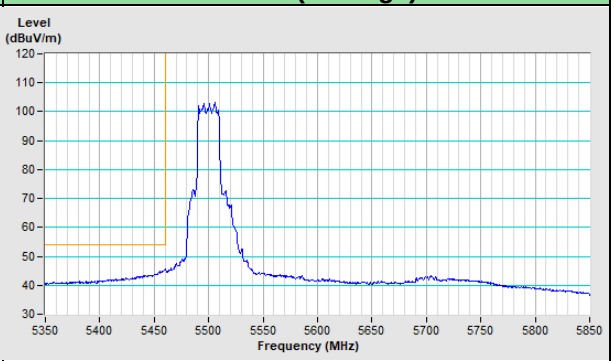


Vertical (Peak)



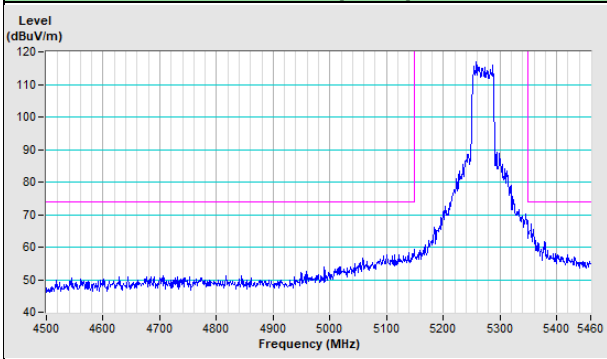
Vertical (Average)



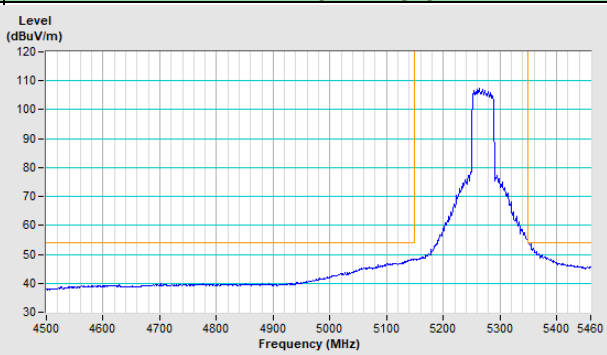
802.11ax (HE20) Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40) Channel 54

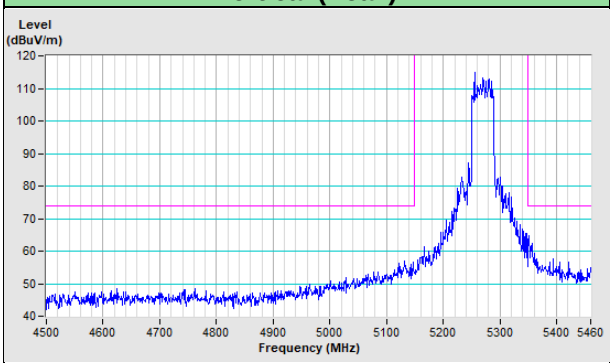
Horizontal (Peak)



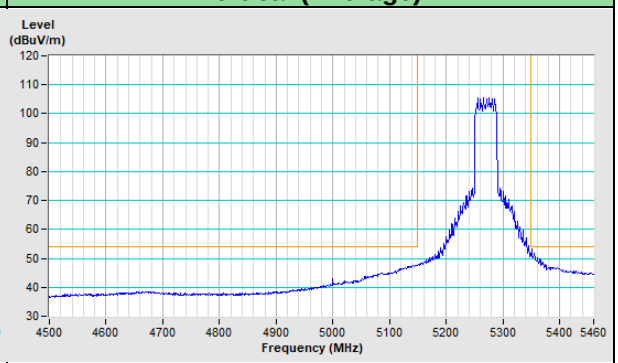
Horizontal (Average)



Vertical (Peak)

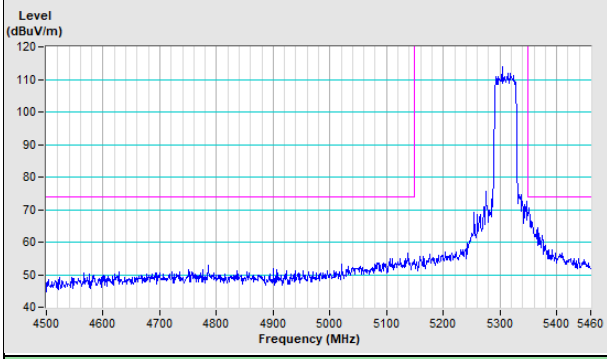


Vertical (Average)

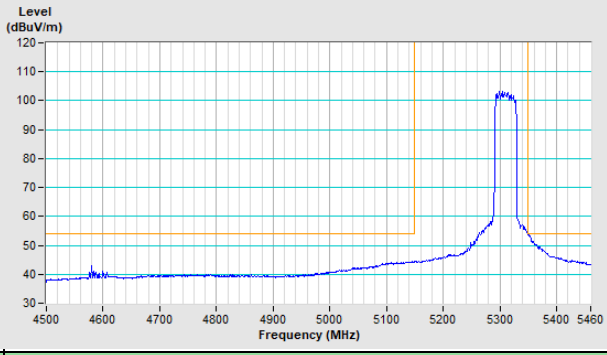


802.11ax (HE40) Channel 62

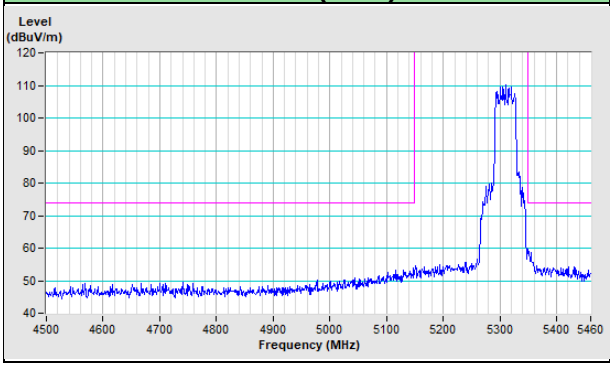
Horizontal (Peak)



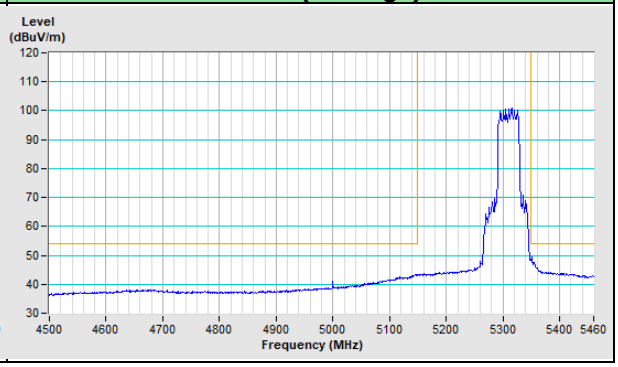
Horizontal (Average)



Vertical (Peak)

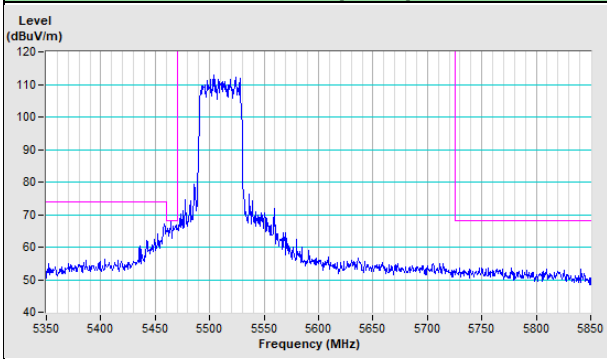


Vertical (Average)

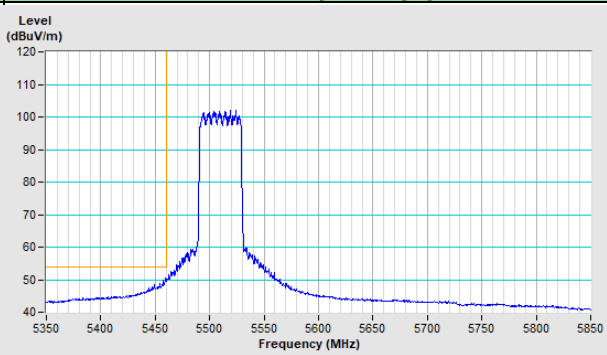


802.11ax (HE40) Channel 102

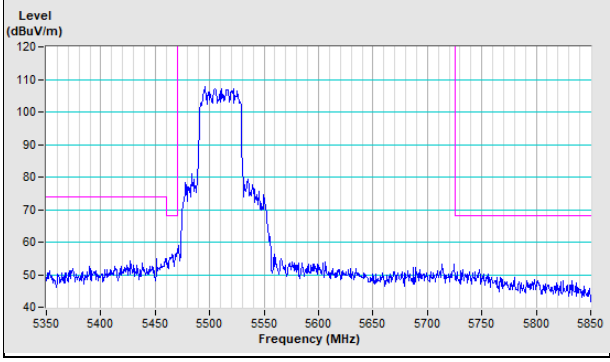
Horizontal (Peak)



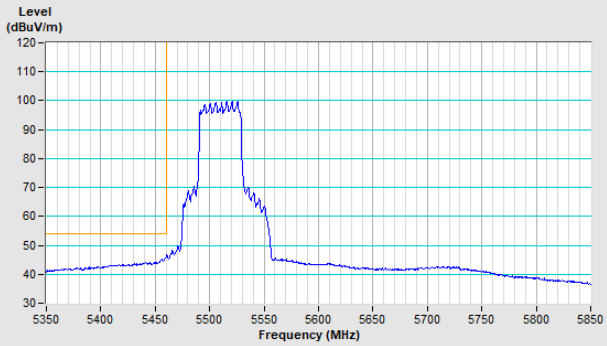
Horizontal (Average)



Vertical (Peak)

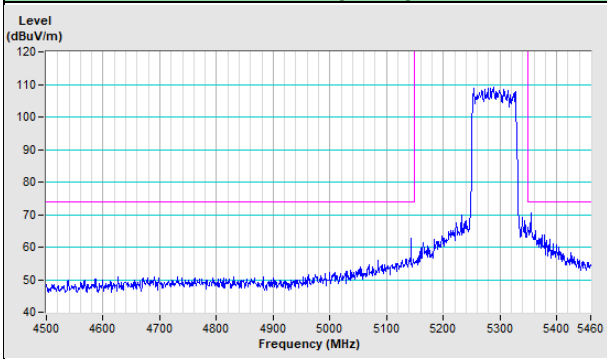


Vertical (Average)

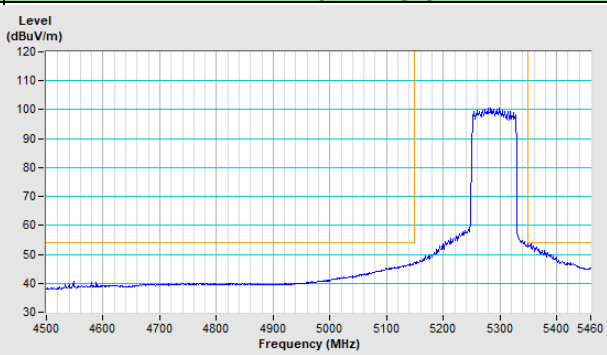


802.11ax (HE80) Channel 58

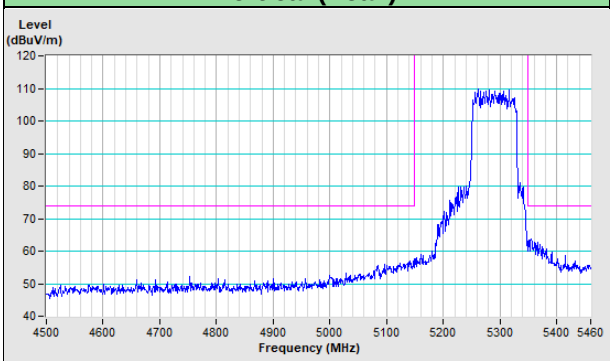
Horizontal (Peak)



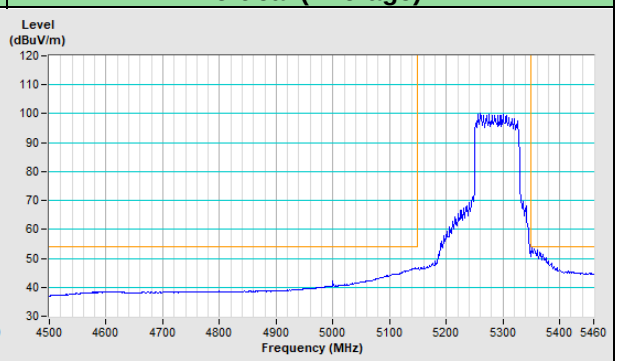
Horizontal (Average)



Vertical (Peak)

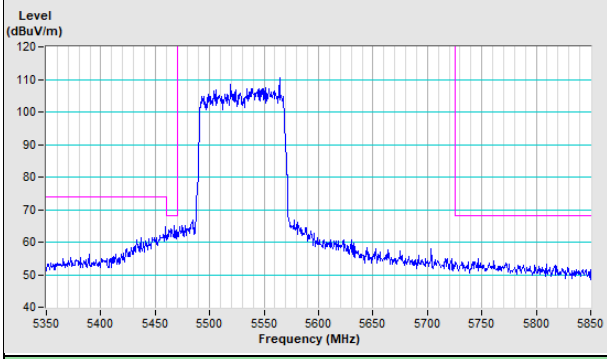


Vertical (Average)

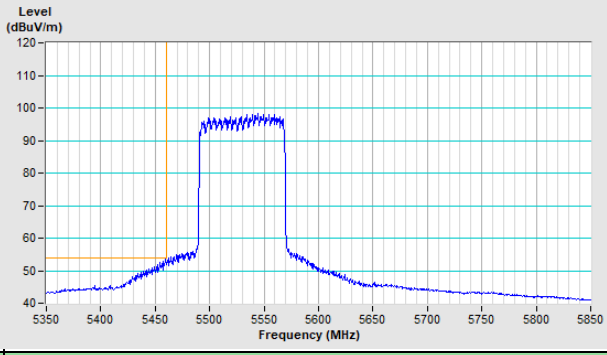


802.11ax (HE80) Channel 106

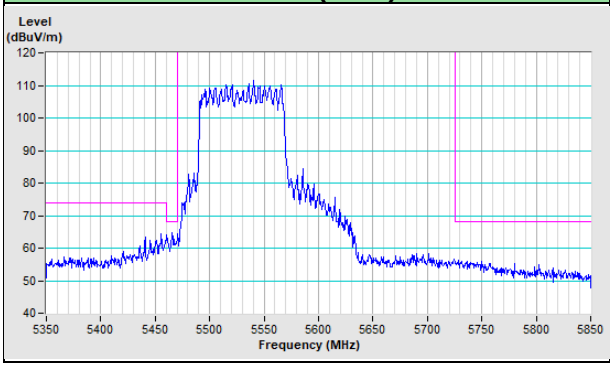
Horizontal (Peak)



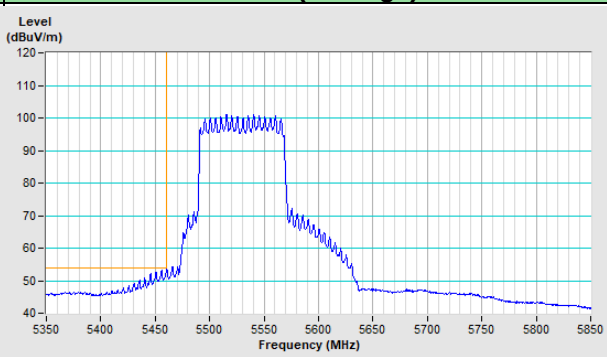
Horizontal (Average)



Vertical (Peak)

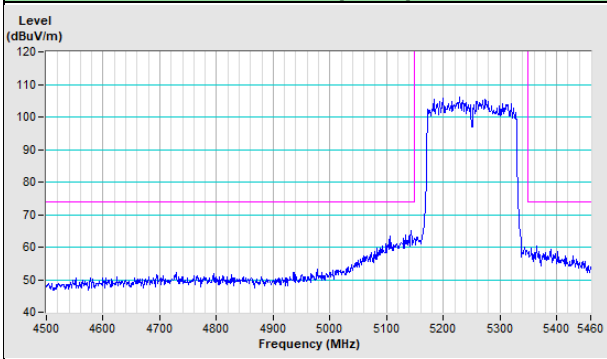


Vertical (Average)

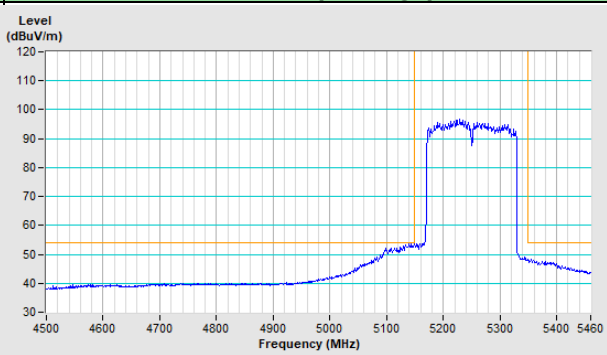


802.11ax (HE160) Channel 50

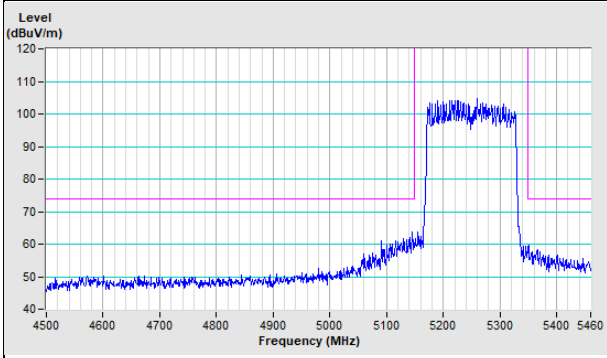
Horizontal (Peak)



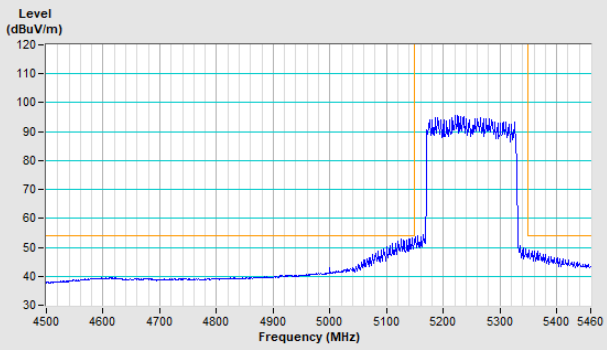
Horizontal (Average)



Vertical (Peak)

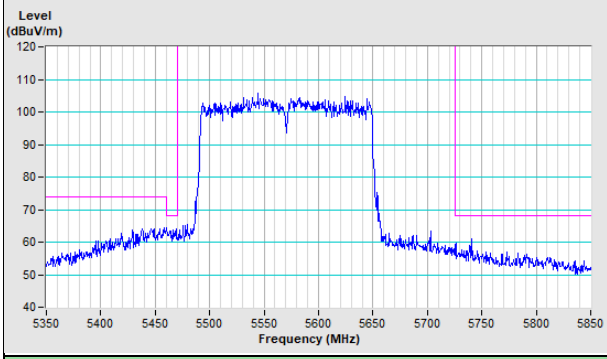


Vertical (Average)

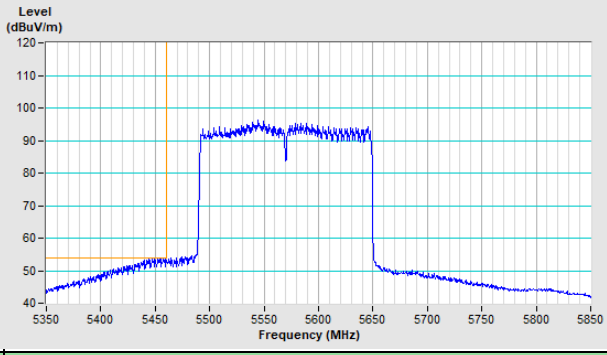


802.11ax (HE160) Channel 114

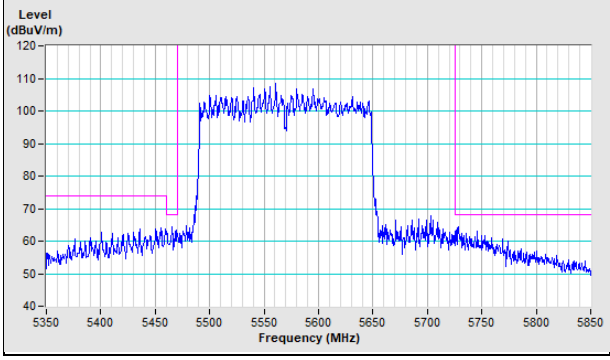
Horizontal (Peak)



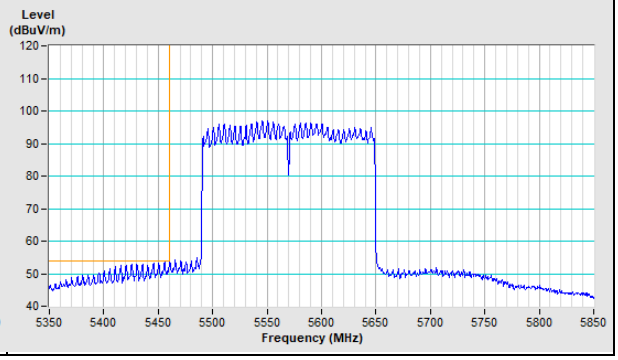
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@bureauveritas.com
Web Site: http://ee.bureauveritas.com.tw

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

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