TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBDYS-WTW-P23110748A
FCC ID:	TVE-240607
Product:	Secured Wireless Access Point
Brand:	FORTINET
Model No.:	FBS-10F-WiFi
Series Model:	FortiBranchSASE-10F-WiFixxxxxxxxxx, FBS-10F-WiFixxxxxxxxxx, FORTIBRANCHSASE-10F-WiFixxxxxxxxxx (where “x” can be used as “A-Z”, or “0-9”, or “-“, or blank for software changes or marketing purposes only)
Received Date:	2024/2/29
Test Date:	2024/2/29 ~ 2024/9/26
Issued Date:	2024/10/4
Applicant:	Fortinet, Inc.
Address:	909 Kifer Road Sunnyvale, Ca. 94086
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy Lin , **Date:** 2024/10/4

Jeremy Lin / Project Engineer

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Prepared by : Lena Wang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBDYS-WTW-P23110748A	Original Release	2024/10/4

1 Certificate

Product:	Secured Wireless Access Point
Brand:	FORTINET
Test Model:	FBS-10F-WiFi
Series Model:	FortiBranchSASE-10F-WiFixxxxxxxxxx, FBS-10F-WiFixxxxxxxxxx, FORTIBRANCHSASE-10F-WiFixxxxxxxxxx (where “x” can be used as “A-Z”, or “0-9”, or “-“, or blank for software changes or marketing purposes only)
Sample Status:	Engineering Sample
Applicant:	Fortinet, Inc.
Test Date:	2024/2/29 ~ 2024/9/26
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	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -14.74 dB at 0.47400 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -1.5 dB at 36.54 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.9 dB at 5725.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Notes: 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) (±)
26 dB Bandwidth	-	206.5 Hz
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.6 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 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	Secured Wireless Access Point
Brand	FORTINET
Test Model	FBS-10F-WiFi
Series Model:	FortiBranchSASE-10F-WiFixxxxxxxxxx, FBS-10F-WiFixxxxxxxxxx, FORTIBRANCHSASE-10F-WiFixxxxxxxxxx (where “x” can be used as “A-Z”, or “0-9”, or “-“, or blank for software changes or marketing purposes only)
Status of EUT	Engineering Sample
Power Supply Rating	12Vdc from Adapter 54Vdc from PoE
Modulation Type	802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to MCS15 802.11ac: up to MCS9 802.11ax: up to MCS11
Operating Frequency	5.26 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
Output Power	CDD Mode: 5.26 GHz ~ 5.32 GHz : 246.964 mW (23.93 dBm) 5.5 GHz ~ 5.72 GHz : 247.154 mW (23.93 dBm) Beamforming Mode: 5.26 GHz ~ 5.32 GHz : 143.091 mW (21.56 dBm) 5.5 GHz ~ 5.72 GHz : 138.985 mW (21.43 dBm)
EUT Category	Indoor Access Point

Note:

1. This report is issued as a supplementary report to the original BV CPS report no.: RFBDYS-WTW-P23110748-2 R1. The differences compared with the original report is adding 5.26GHz to 5.32GHz and 5.50GHz to 5.720GHz by software.
2. The EUT consumes power from the following adapter and PoE.

Adapter (support unit only)	
Brand	Asian Power Devices Inc.
Model	WA-36W12R
Input Power	100-240Vac, 50-60Hz, 0.9A Max
Output Power	12Vdc, 3.0A, 36.0W
Power Cord	1.5 meter non-shielded cable without core

PoE (support unit only)	
Brand	EnGenius
Model	EPA5006GPR
Input Power	100-240Vac, 50-60Hz, 0.8A
Output Power	54Vdc, 0.6A

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

4. Simultaneously transmission condition.

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

*WLAN 2.4G and BT technologies cannot transmit at same time.

5. 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 Type		PIFA	
Antenna Connector		i-pex(MHF)	
Antenna No.		Gain (dBi)	
		2.4~2.4835GHz	5.180~5.825GHz
1	Chain0	4.9	5.2
2	Chain1	3.8	5.5
3	BLE	3.6	-

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

2. The EUT incorporates a MIMO function:

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

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 5260 ~ 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	56	5280 MHz
60	5300 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

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		

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	1. X-axis/ Y-axis/ Z-axis Worst Condition: Y-axis

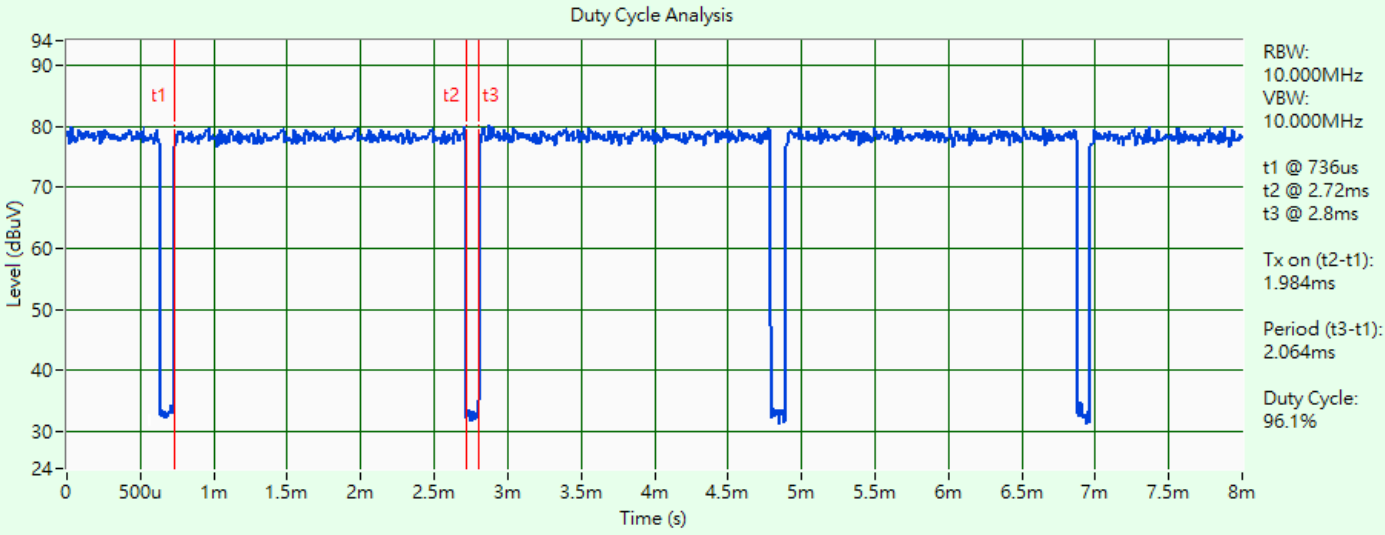
Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
26 dB Bandwidth	B	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
RF Output Power	B	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		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
Power Spectral Density	B	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
6 dB Bandwidth	B	802.11a	CDD	144, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	144, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	142, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	138, 155	BPSK	MCS0

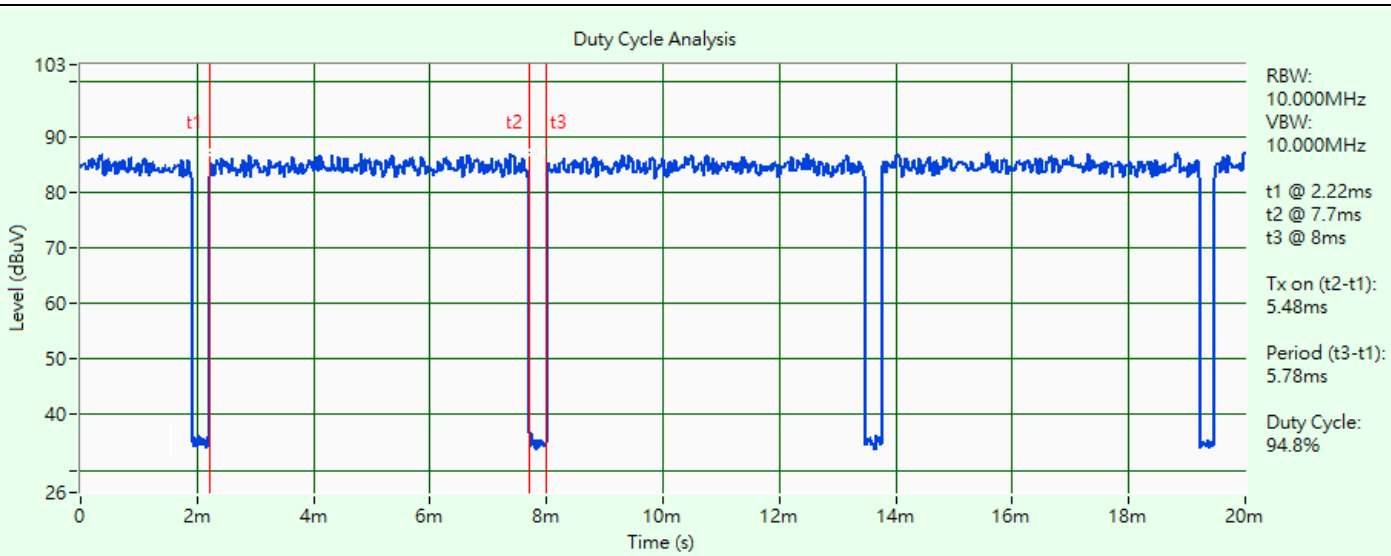
Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Occupied Bandwidth	B	802.11a	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s
		802.11ax (HE20)	CDD	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0
		802.11ax (HE40)	CDD	54, 62, 102, 110, 134, 142,	BPSK	MCS0
		802.11ax (HE80)	CDD	58, 106, 122, 138	BPSK	MCS0
Frequency Stability	B	802.11a	-	52	unmodulated	-
AC Power Conducted Emissions	A, B	802.11ax (HE40)	CDD	134	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11ax (HE40)	CDD	134	BPSK	MCS0
Unwanted Emissions above 1 GHz	A	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
EUT Configure Mode:	A	Adapter Mode				
	B	PoE Mode				

3.5 Duty Cycle of Test Signal

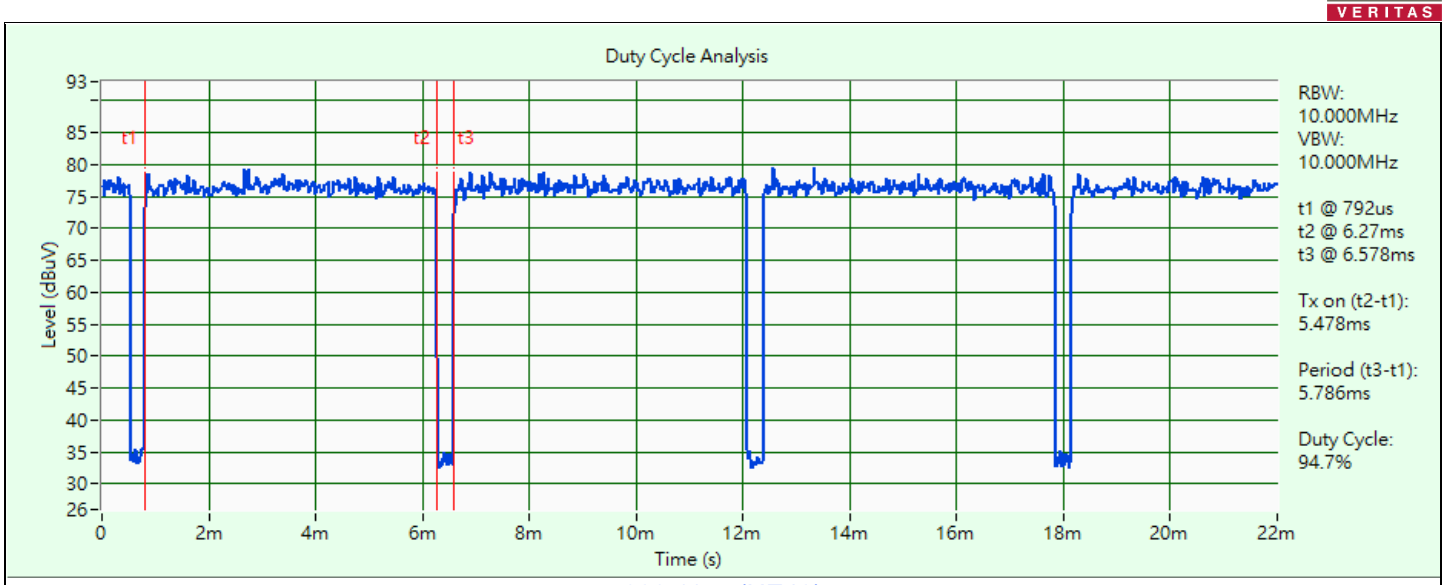
802.11a: Duty cycle = 1.984 ms / 2.064 ms x 100% = 96.1%, duty factor = 10 * log (1/Duty cycle) = 0.17 dB
802.11ax (HE20): Duty cycle = 5.48 ms / 5.78 ms x 100% = 94.8%, duty factor = 10 * log (1/Duty cycle) = 0.23 dB
802.11ax (HE40): Duty cycle = 5.478 ms / 5.786 ms x 100% = 94.7%, duty factor = 10 * log (1/Duty cycle) = 0.24 dB
802.11ax (HE80): Duty cycle = 5.46 ms / 5.76 ms x 100% = 94.8%, duty factor = 10 * log (1/Duty cycle) = 0.23 dB



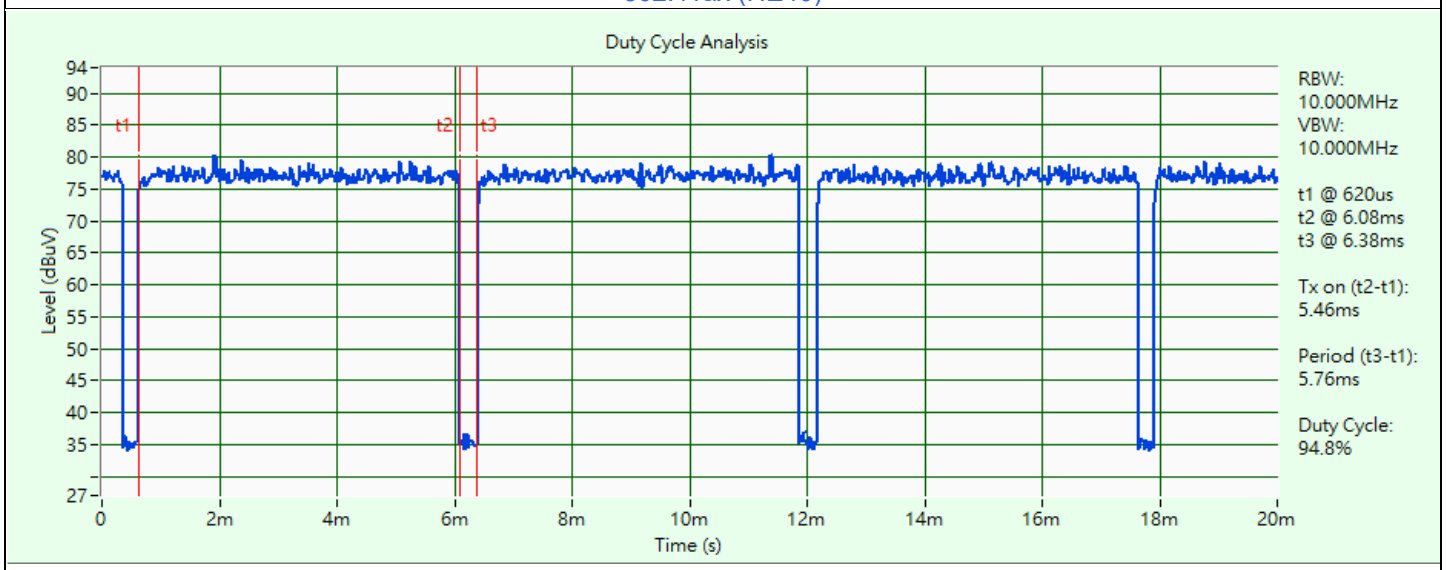
802.11a



802.11ax (HE20)



802.11ax (HE40)



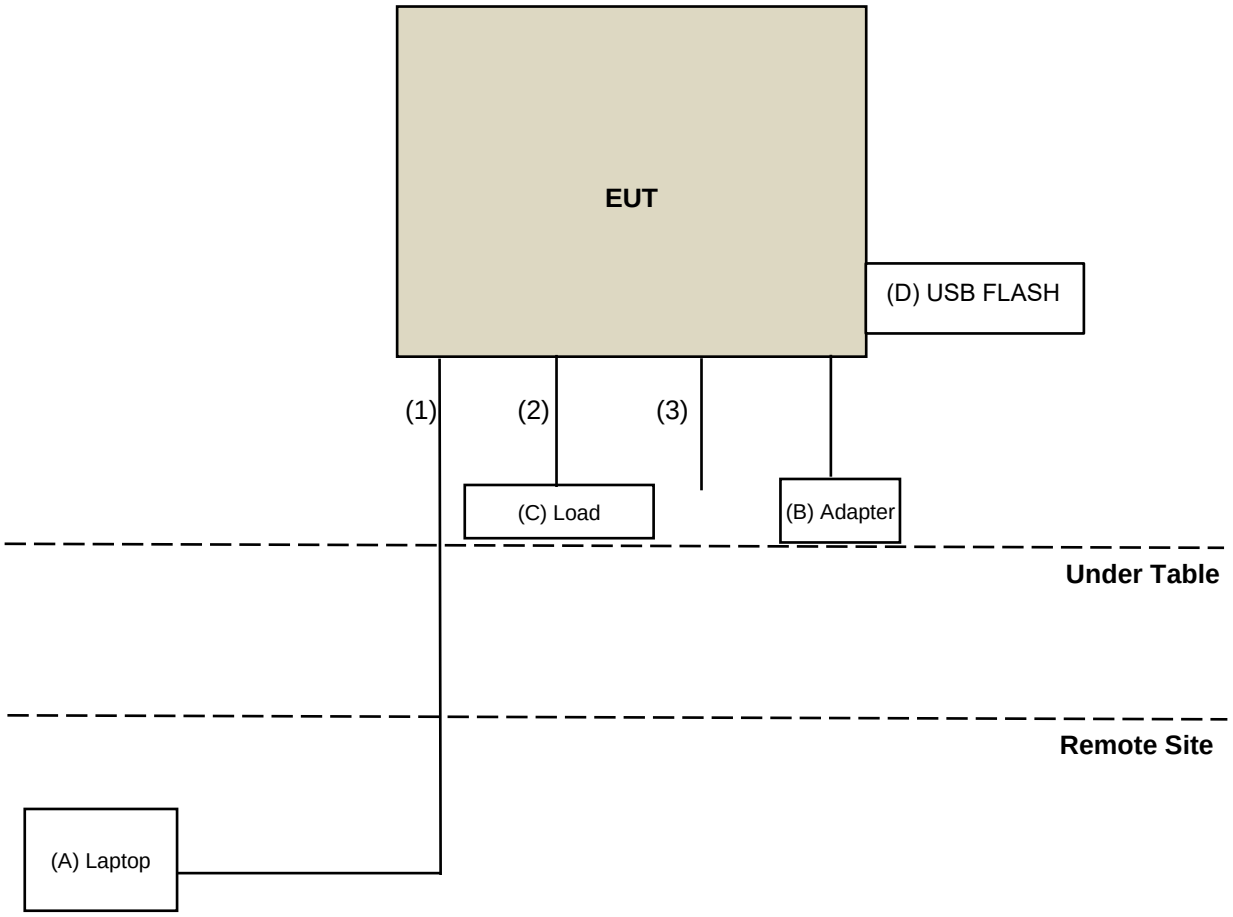
802.11ax (HE80)

3.6 Test Program Used and Operation Descriptions

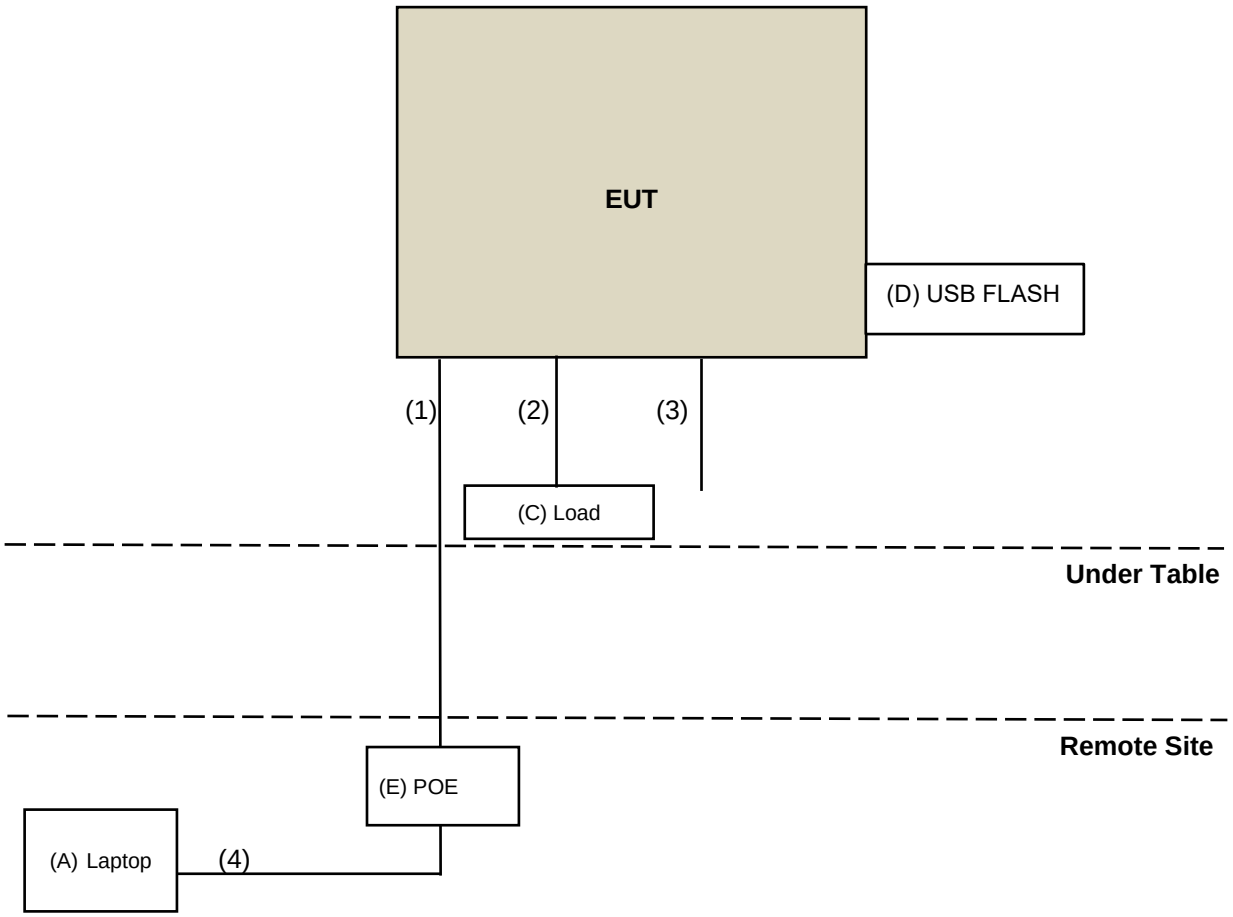
Controlling software QSPR_5.0-00202 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Mode A



Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	X260 4G	PC0ECUAT	N/A	Provided by Lab
B	Adapter	Asian Power Devices INC.	WA-36W12R	N/A	N/A	Supplied by applicant
C	Load	N/A	N/A	N/A	N/A	Provided by Lab
D	FLASH	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
E	PoE	EnGenius	EPA5006GPR	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	6	N	N	Provided by Lab
2	RJ-45 Cable	1	1.5	N	N	Provided by Lab
3	Console Cable	1	1.5	N	N	Provided by Lab
4	RJ-45 Cable	1	1.5	N	N	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
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/3 ~ 2024/4/6

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Peak Power Analyzer Keysight	8990B	MY51000485	2024/1/21	2025/1/20
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Wideband Power Sensor Keysight	N1923A	MY58020002	2024/1/18	2025/1/17
		MY58140009	2024/1/18	2025/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/3 ~ 2024/4/6

4.3 Power Spectral Density

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

4.4 6 dB Bandwidth

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

4.5 Occupied Bandwidth

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

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
3-channel DC power supply JIN YIH Technology	ODP3033	ODP30332128138	N/A	N/A
Digital Multimeter Fluke	87III	70360742	2023/7/6	2024/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2023/12/19	2024/12/18

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/4/3 ~ 2024/4/6

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011315	13	2023/11/22	2024/11/21
50 ohm terminal resistance	E1-011279	04	2023/11/22	2024/11/21
	E1-011280	05	2023/11/22	2024/11/21
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESCI	100613	2023/12/4	2024/12/3
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2024/1/6	2025/1/5
LISN R&S	ESH3-Z5	100116	2024/2/21	2025/2/20
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2024/1/6	2025/1/5
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2024/9/25

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower &Turn BV ADT	AT100	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-160	2023/10/17	2024/10/16
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Keysight	N9038B	MY60180018	2024/3/13	2025/3/12
Preamplifier Agilent	8447D	2944A10638	2024/5/1	2025/4/30
Preamplifier EMCI	EMC001340	980201	2024/9/24	2025/9/23
RF Coaxial Cable Woken	8D-FB	Cable-CH9-01	2024/5/1	2025/4/30
Signal & Spectrum Analyzer R&S	FSW43	101867	2023/12/29	2024/12/28
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 4.
2. Tested Date: 2024/9/26

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower &Turn BV ADT	AT100	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-1169	2023/11/12	2024/11/11
	BBHA 9170	9170-480	2023/11/12	2024/11/11
		BBHA9170243	2023/11/12	2024/11/11
MXE EMI Receiver Keysight	N9038A	MY55420137	2023/5/3	2024/5/2
Notch Filter Micro-Tronics	BRM17690	004	2024/1/23	2025/1/22
	BRM50716	060	2023/12/25	2024/12/24
Preamplifier Agilent	8449B	3008A02367	2024/1/6	2025/1/5
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	2024/1/6	2025/1/5
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	2024/1/6	2025/1/5
Signal & Spectrum Analyzer R&S	FSW43	101867	2023/12/29	2024/12/28
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 4.
2. Tested Date: 2024/2/29 ~ 2024/3/27

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

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

*B is the 26 dB emission bandwidth in megahertz

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

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

5.3 Power Spectral Density

Operation Band	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 5.25-5.35 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.		

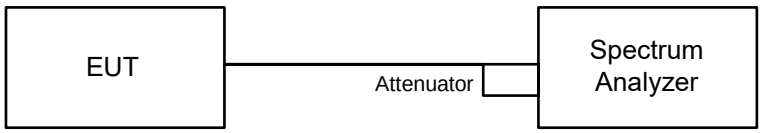
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup



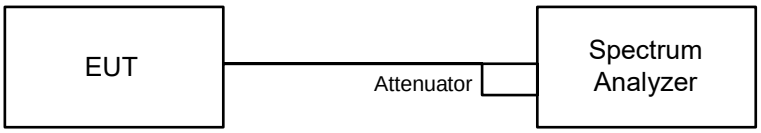
6.1.2 Test Procedure

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:

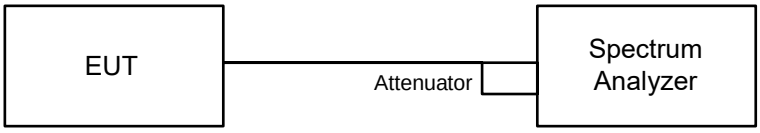
Method SA-2A

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. Manually set sweep time ≥ 10 × (number of points in sweep) × (total on/off period of the transmitted signal).
e. Perform a single sweep.
f. Record the max value and add 10 log (1/duty cycle).

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-2A

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. Manually set sweep time ≥ 10 × (number of points in sweep) × (total on/off period of the transmitted signal).
e. Perform a single sweep.
f. Record the max value and add 10 log (1/duty cycle).

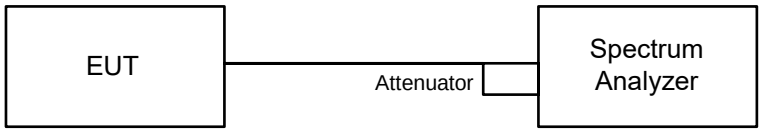
For specified measurement bandwidth 500 kHz:

Method SA-2A

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. Manually set sweep time ≥ 10 × (number of points in sweep) × (total on/off period of the transmitted signal).
f. Perform a single sweep.
g. Record the max value and add 10 log (1/duty cycle).

6.4 6 dB Bandwidth

6.4.1 Test Setup

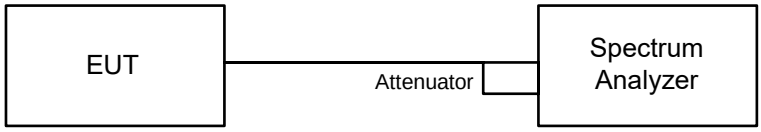


6.4.2 Test Procedure

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

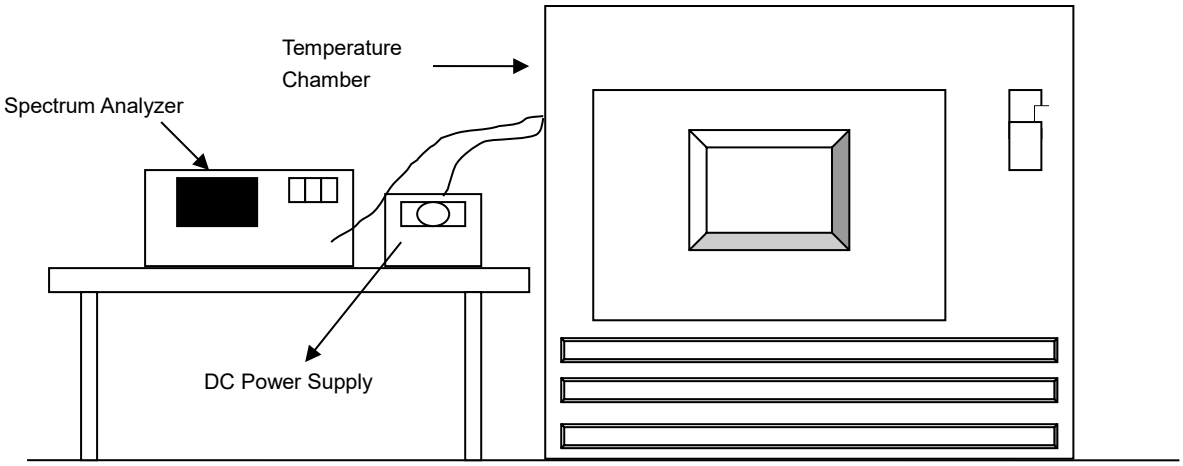


6.5.2 Test Procedure

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

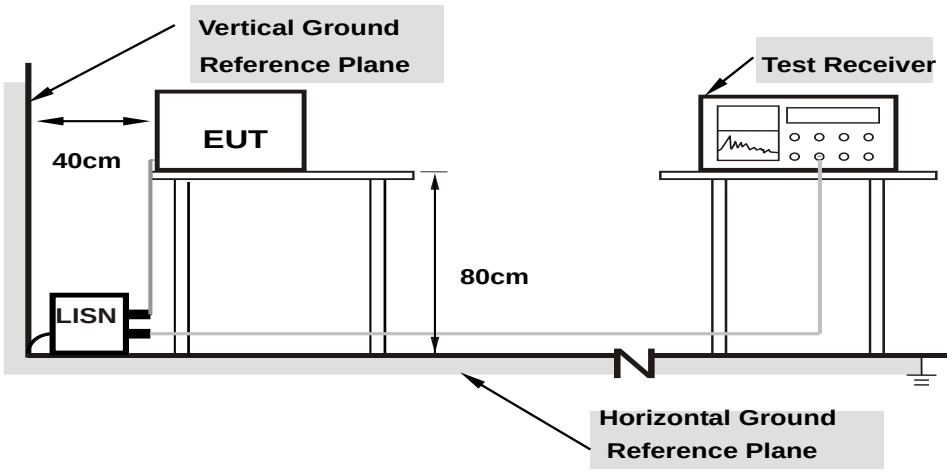


6.6.2 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal DC 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.

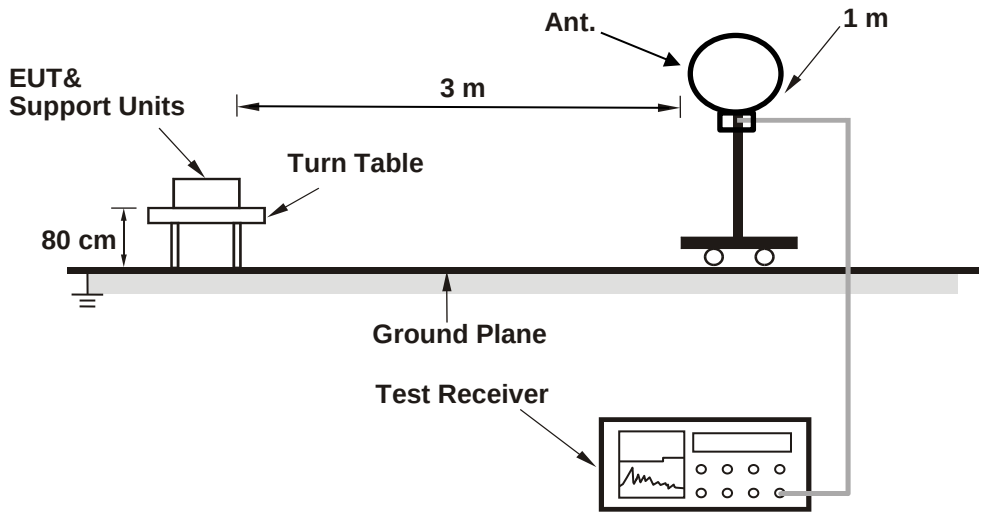
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

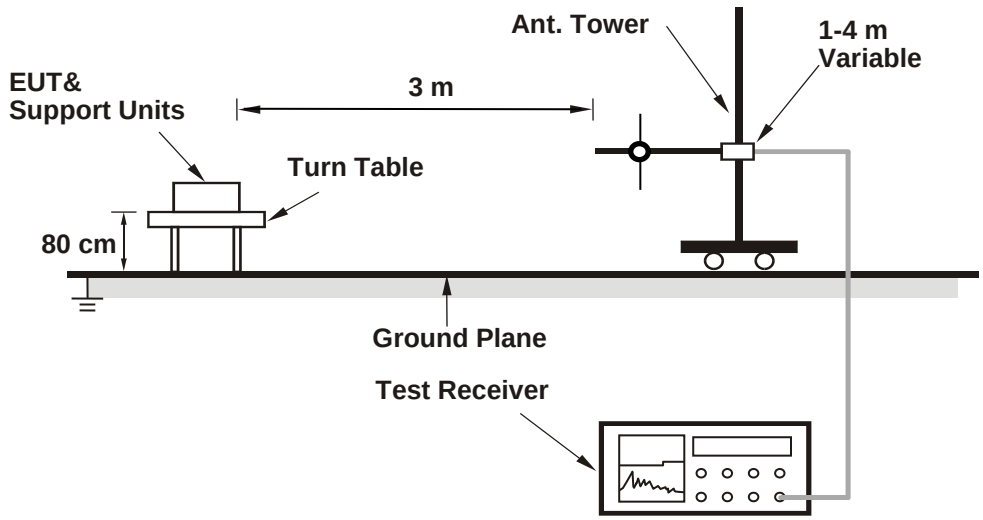
6.8 Unwanted Emissions below 1 GHz

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.

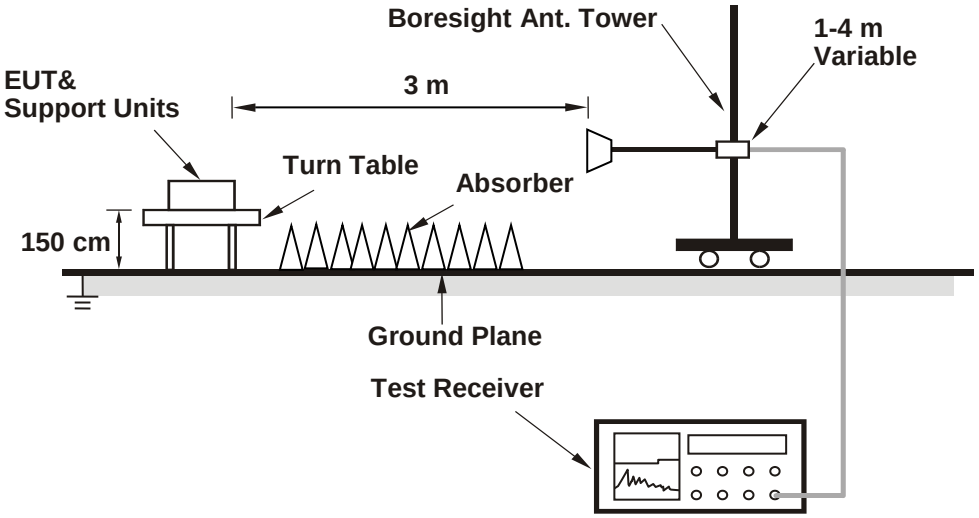
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	54 Vdc	Environmental Conditions:	22°C, 67% RH	Tested By:	Tim Chen

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	20.49	20.71
60	5300	20.23	20.75
64	5320	20.35	20.51
100	5500	20.53	20.55
116	5580	20.43	20.65
140	5700	20.46	19.90
144 (U-NII-2C)	5720	15.40	15.19
144 (U-NII-3)	5720	4.73	5.24

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.49	24.11	>	24
60	5300	20.23	24.05	>	24
64	5320	20.35	24.08	>	24
100	5500	20.53	24.12	>	24
116	5580	20.43	24.1	>	24
140	5700	19.90	23.98	<	24
144 (U-NII-2C)	5720	15.19	22.81	<	24

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

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	21.63	21.69
60	5300	21.78	21.81
64	5320	21.98	21.71
100	5500	21.83	21.61
116	5580	21.73	21.41
140	5700	21.58	21.78
144 (U-NII-2C)	5720	15.74	15.79
144 (U-NII-3)	5720	6.03	5.87

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	21.63	24.35	>	24
60	5300	21.78	24.38	>	24
64	5320	21.71	24.36	>	24
100	5500	21.61	24.34	>	24
116	5580	21.41	24.3	>	24
140	5700	21.58	24.34	>	24
144 (U-NII-2C)	5720	15.74	22.97	<	24

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

802.11ax (HE40)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	41.43	41.58
62	5310	41.89	41.56
102	5510	41.73	41.25
110	5550	41.42	41.36
134	5670	41.74	41.31
142 (U-NII-2C)	5710	35.70	35.72
142 (U-NII-3)	5710	5.63	5.87

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	41.43	27.17	>	24
62	5310	41.56	27.18	>	24
102	5510	41.25	27.15	>	24
110	5550	41.36	27.16	>	24
134	5670	41.31	27.16	>	24
142 (U-NII-2C)	5710	35.70	26.52	>	24

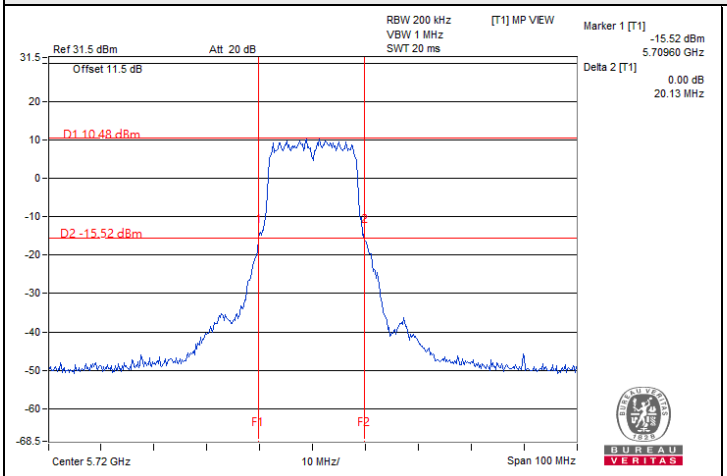
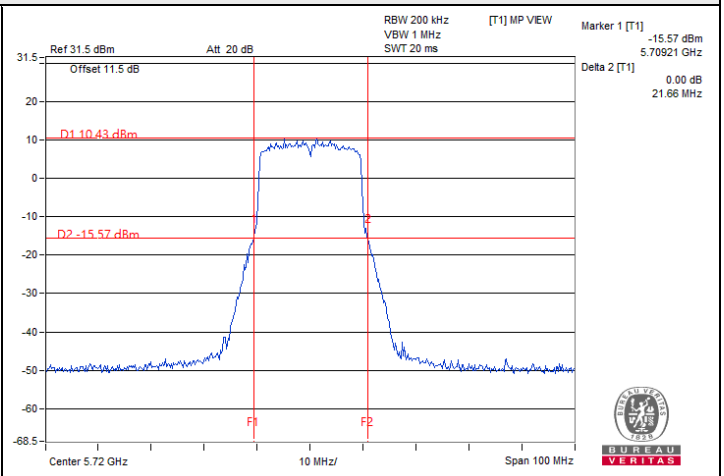
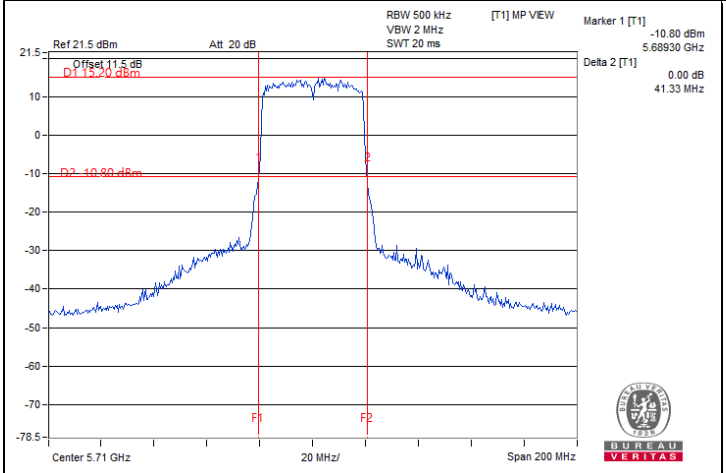
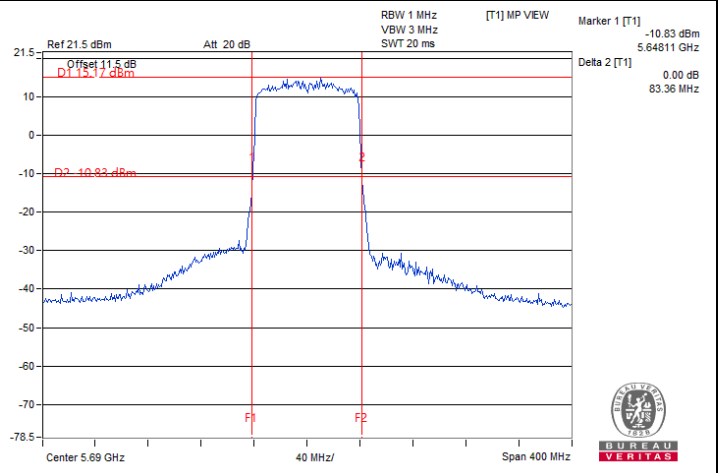
Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	83.65	83.35
106	5530	83.48	83.14
122	5610	82.91	84.08
138 (U-NII-2C)	5690	76.67	76.89
138 (U-NII-3)	5690	6.50	6.47

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	83.35	30.2	>	24
106	5530	83.14	30.19	>	24
122	5610	82.91	30.18	>	24
138 (U-NII-2C)	5690	76.67	29.84	>	24

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

Spectrum Plot of Minimum Value	
	
802.11a / Chain 0 : CH 144 (U-NII-3)	802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)
	
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)	802.11ax (HE80) / Chain 1 : CH 138 (U-NII-3)

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:	54 Vdc	Environmental Conditions:	22°C, 67% RH	Tested By:	Tim Chen

CDD Mode

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	18.06	17.64	122.05	20.87	24	Pass
60	5300	17.95	17.92	124.318	20.95	24	Pass
64	5320	18.04	17.81	124.074	20.94	24	Pass
100	5500	17.91	17.59	119.213	20.76	24	Pass
116	5580	17.88	17.79	121.494	20.85	24	Pass
140	5700	18.08	17.52	120.762	20.82	23.98	Pass
*144 (U-NII-2C)	5720	18.36	17.47	129.412	21.12	22.81	Pass
*144 (U-NII-3)	5720	11.93	10.97	29.231	14.66	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	18.54	18.47	141.757	21.52	24	Pass
60	5300	18.63	18.46	143.091	21.56	24	Pass
64	5320	18.34	18.12	133.097	21.24	24	Pass
100	5500	18.24	17.85	127.634	21.06	24	Pass
116	5580	18.17	18.05	129.441	21.12	24	Pass
140	5700	18.62	18.09	137.195	21.37	24	Pass
*144 (U-NII-2C)	5720	18.57	17.27	132.137	21.21	22.97	Pass
*144 (U-NII-3)	5720	12.86	11.64	35.764	15.53	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
54	5270	20.54	20.44	223.902	23.50	24	Pass
62	5310	21.01	20.82	246.964	23.93	24	Pass
102	5510	20.97	20.62	240.371	23.81	24	Pass
110	5550	20.96	20.58	239.026	23.78	24	Pass
134	5670	21.11	20.72	247.154	23.93	24	Pass
*142 (U-NII-2C)	5710	20.20	19.33	201.123	23.03	24	Pass
*142 (U-NII-3)	5710	9.88	9.41	19.495	12.90	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
58	5290	20.67	20.54	229.921	23.62	24	Pass
106	5530	20.45	19.57	201.491	23.04	24	Pass
122	5610	20.98	20.01	225.545	23.53	24	Pass
*138 (U-NII-2C)	5690	20.17	19.51	203.945	23.10	24	Pass
*138 (U-NII-3)	5690	5.94	5.21	7.643	8.83	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.5 dBi < 6 dBi, so the output power limit shall not be reduced.

Beamforming Mode

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	18.54	18.47	141.757	21.52	21.64	Pass
60	5300	18.63	18.46	143.091	21.56	21.64	Pass
64	5320	18.34	18.12	133.097	21.24	21.64	Pass
100	5500	18.24	17.85	127.634	21.06	21.64	Pass
116	5580	18.17	18.05	129.441	21.12	21.64	Pass
140	5700	18.62	18.09	137.195	21.37	21.64	Pass
*144 (U-NII-2C)	5720	17.57	16.27	104.96	20.21	20.61	Pass
*144 (U-NII-3)	5720	12.76	10.64	32.136	15.07	27.64	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.36-6)].
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.36-6)].
5. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.36-6) = 27.64 dBm.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
54	5270	18.04	17.94	125.91	21.00	21.64	Pass
62	5310	18.51	18.32	138.878	21.43	21.64	Pass
102	5510	18.47	18.12	135.171	21.31	21.64	Pass
110	5550	18.46	18.08	134.414	21.28	21.64	Pass
134	5670	18.61	18.22	138.985	21.43	21.64	Pass
*142 (U-NII-2C)	5710	17.70	16.83	113.1	20.53	21.64	Pass
*142 (U-NII-3)	5710	7.38	6.91	10.963	10.40	27.64	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.36-6)].
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.36-6)].
5. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.36-6) = 27.64 dBm.

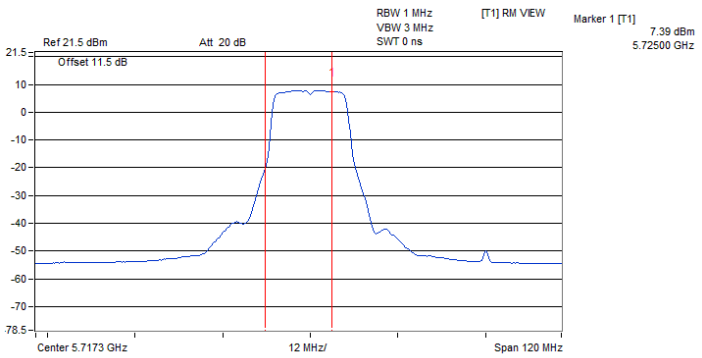
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
58	5290	18.17	18.04	129.294	21.12	21.64	Pass
106	5530	17.95	17.07	113.307	20.54	21.64	Pass
122	5610	18.48	17.51	126.833	21.03	21.64	Pass
*138 (U-NII-2C)	5690	17.67	17.01	114.687	20.60	21.64	Pass
*138 (U-NII-3)	5690	3.44	2.71	4.298	6.33	27.64	Pass

Notes:

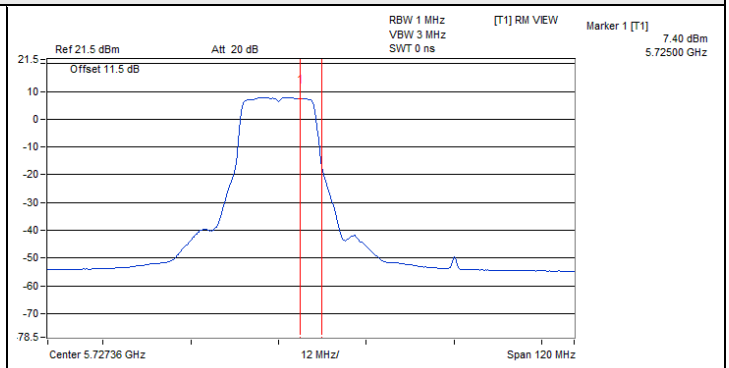
1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2A and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain = 10 log[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.36-6)].
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.36-6)].
5. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the output power limit shall be reduced to 30-(8.36-6) = 27.64 dBm.

Spectrum Plot for channel straddling



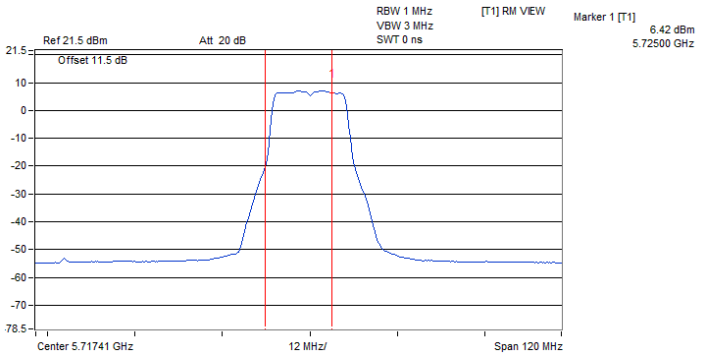
TX Channel Bandwidth 15.4 MHz Power 18.36 dBm

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



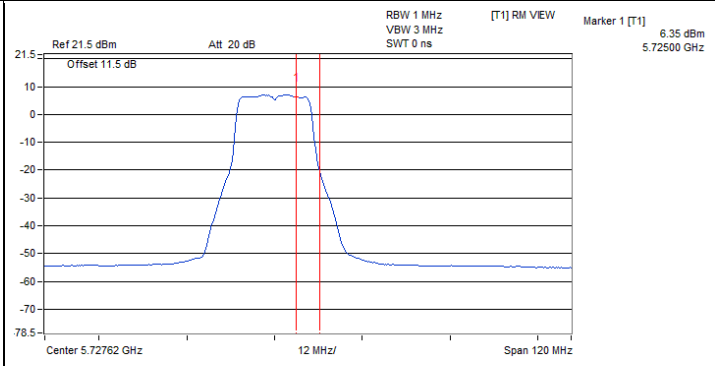
TX Channel Bandwidth 4.73 MHz Power 11.93 dBm

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



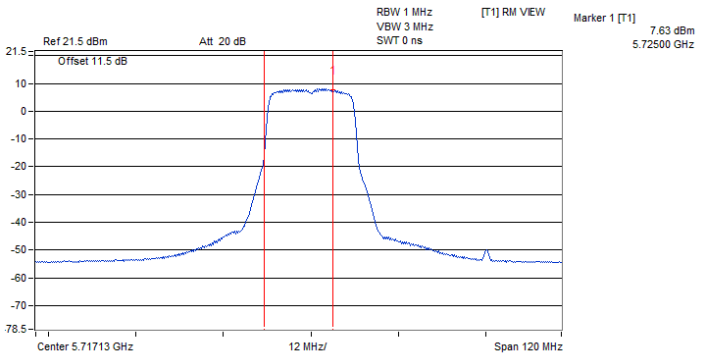
TX Channel Bandwidth 15.19 MHz Power 17.47 dBm

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



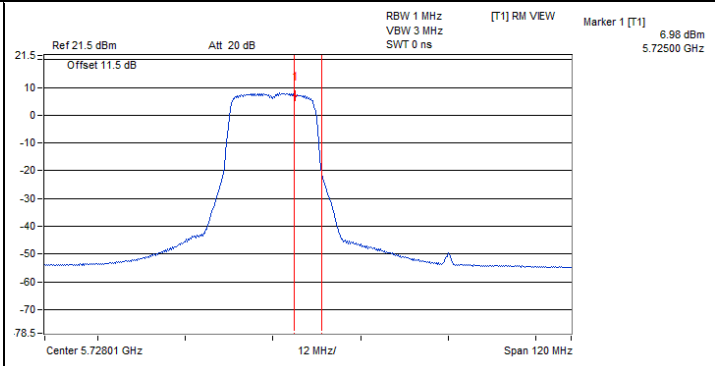
TX Channel Bandwidth 5.24 MHz Power 10.97 dBm

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



TX Channel Bandwidth 15.74 MHz Power 18.57 dBm

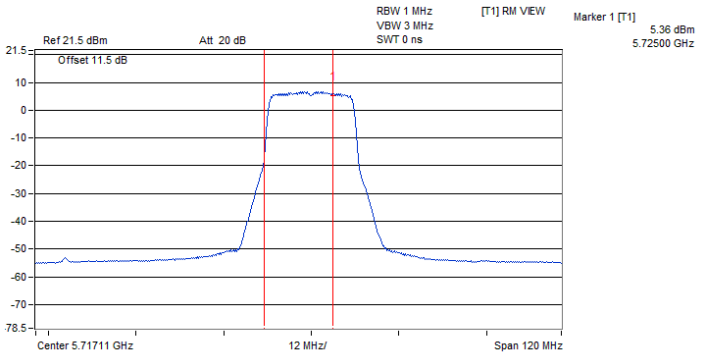
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



TX Channel Bandwidth 6.03 MHz Power 12.86 dBm

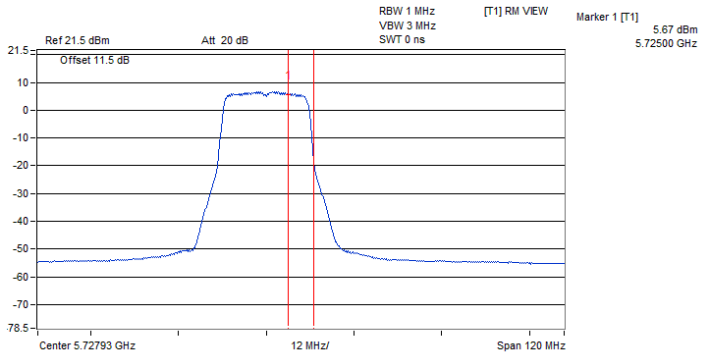
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



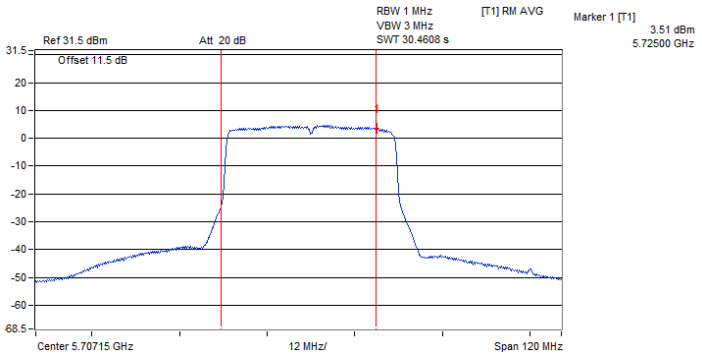
TX Channel Bandwidth 15.79 MHz Power 17.27 dBm

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



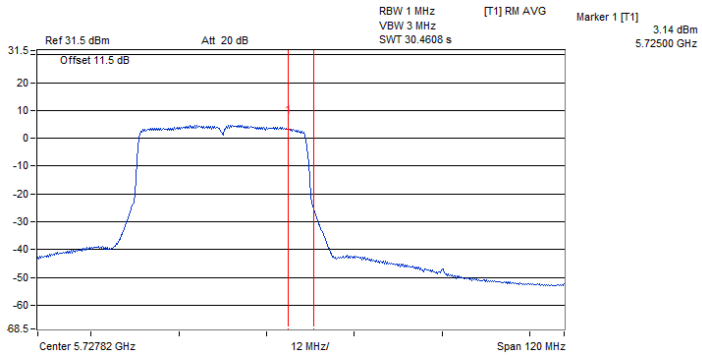
TX Channel Bandwidth 5.87 MHz Power 11.64 dBm

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



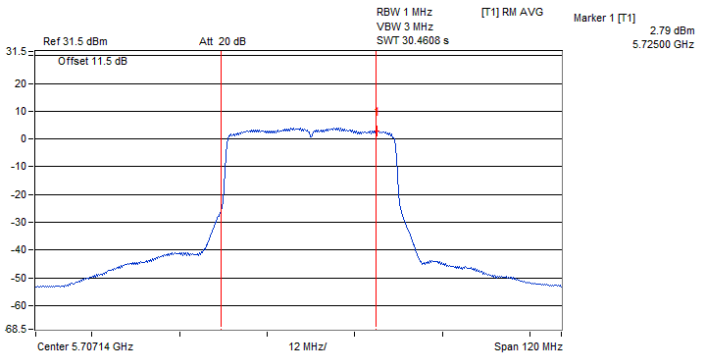
TX Channel Bandwidth 35.7 MHz Power 20.2 dBm

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



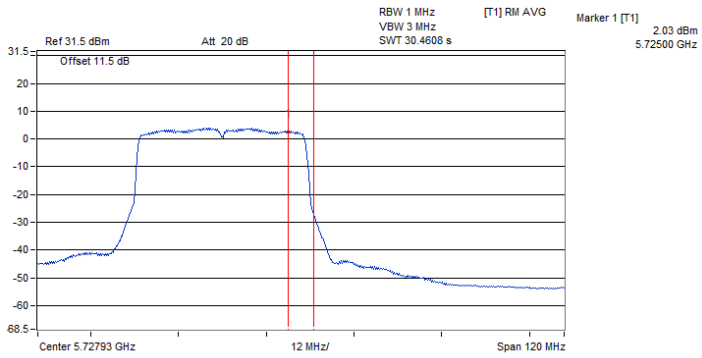
TX Channel Bandwidth 5.63 MHz Power 9.88 dBm

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



TX Channel Bandwidth 35.72 MHz Power 19.33 dBm

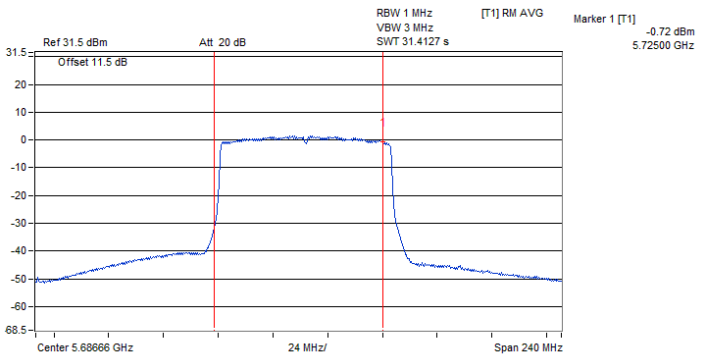
802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



TX Channel Bandwidth 5.87 MHz Power 9.41 dBm

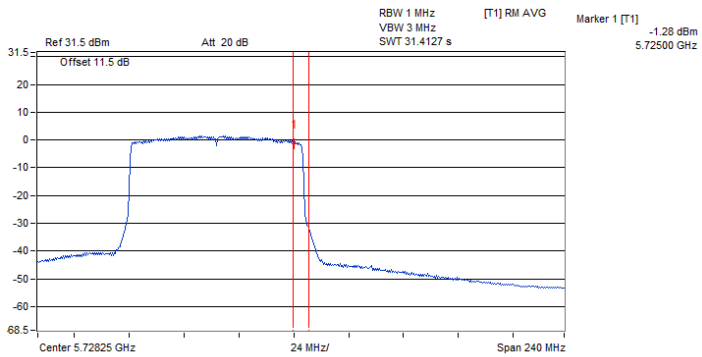
802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)

Spectrum Plot for channel straddling



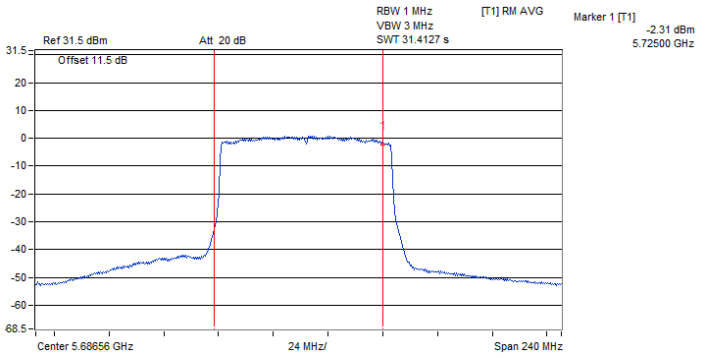
TX Channel Bandwidth 76.67 MHz Power 20.17 dBm

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



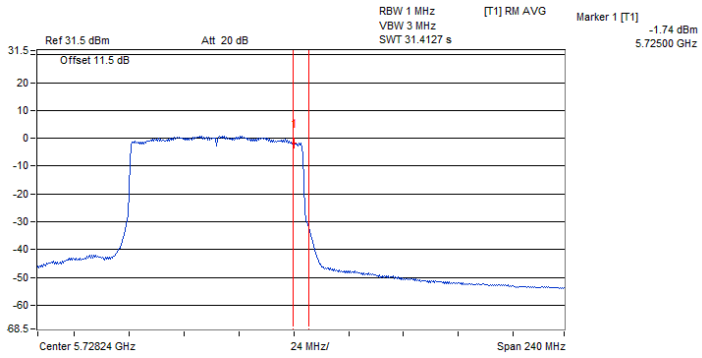
TX Channel Bandwidth 6.5 MHz Power 5.94 dBm

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



TX Channel Bandwidth 76.89 MHz Power 19.51 dBm

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



TX Channel Bandwidth 6.47 MHz Power 5.21 dBm

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

7.3 Power Spectral Density

Input Power:	54 Vdc	Environmental Conditions:	22°C, 67% RH	Tested By:	Tim Chen

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
52	5260	5.37	4.60	0.17	8.18	8.64	Pass
60	5300	5.32	4.69	0.17	8.20	8.64	Pass
64	5320	5.45	4.91	0.17	8.37	8.64	Pass
100	5500	5.26	4.69	0.17	8.16	8.64	Pass
116	5580	5.45	4.53	0.17	8.19	8.64	Pass
140	5700	5.26	5.04	0.17	8.33	8.64	Pass
144 (U-NII-2C)	5720	5.24	5.00	0.17	8.30	8.64	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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
52	5260	5.76	4.67	0.23	8.49	8.64	Pass
60	5300	5.84	4.77	0.23	8.58	8.64	Pass
64	5320	5.53	4.99	0.23	8.51	8.64	Pass
100	5500	5.52	5.02	0.23	8.52	8.64	Pass
116	5580	5.15	4.96	0.23	8.30	8.64	Pass
140	5700	5.67	4.38	0.23	8.31	8.64	Pass
144 (U-NII-2C)	5720	5.68	4.86	0.23	8.53	8.64	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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
54	5270	4.68	5.02	0.24	8.10	8.64	Pass
62	5310	5.36	5.19	0.24	8.53	8.64	Pass
102	5510	5.08	5.09	0.24	8.34	8.64	Pass
110	5550	5.40	5.04	0.24	8.47	8.64	Pass
134	5670	5.57	5.14	0.24	8.61	8.64	Pass
142 (U-NII-2C)	5710	5.30	4.24	0.24	8.05	8.64	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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
58	5290	2.19	1.88	0.23	5.28	8.64	Pass
106	5530	1.51	0.97	0.23	4.49	8.64	Pass
122	5610	1.95	1.65	0.23	5.04	8.64	Pass
138 (U-NII-2C)	5690	2.07	1.53	0.23	5.05	8.64	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[$(10^{Chain0/20} + 10^{Chain1/20})^2$ / 2]
3. For U-NII-2A, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.
4. For U-NII-2C, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.36-6) = 8.64 dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	-2.34	-3.61	0.08	0.17	2.47	27.64	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$^{Chain1/20}$)^2 / 2]
3. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.36-6) = 27.64 dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	-2.52	-4.03	-0.2	0.23	2.25	27.64	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$^{Chain1/20}$)^2 / 2]
3. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.36-6) = 27.64 dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
142 (U-NII-3)	5710	-5.06	-5.74	-2.38	0.24	0.08	27.64	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$^{Chain1/20}$)^2 / 2]
3. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.36-6) = 27.64 dBm/500kHz.

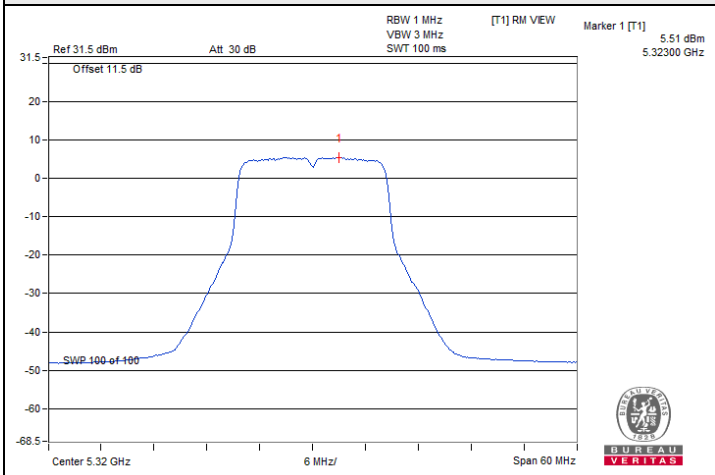
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
138 (U-NII-3)	5690	-9.08	-10.20	-6.59	0.23	-4.14	27.64	Pass

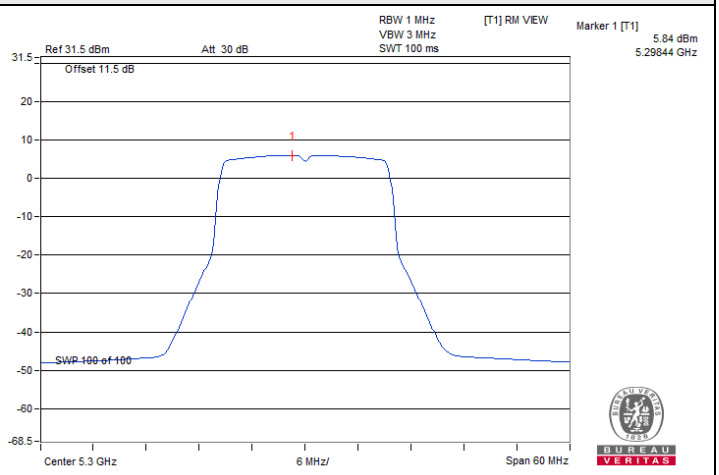
Notes:

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$^{Chain1/20}$)^2 / 2]
3. For U-NII-3, the directional gain is 8.36 dBi > 6 dBi, so the power density limit shall be reduced to 30-(8.36-6) = 27.64 dBm/500kHz.

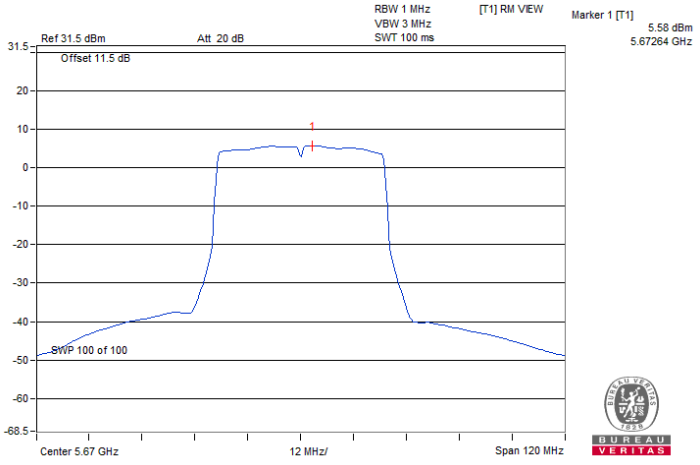
Spectrum Plot of Maximum Value



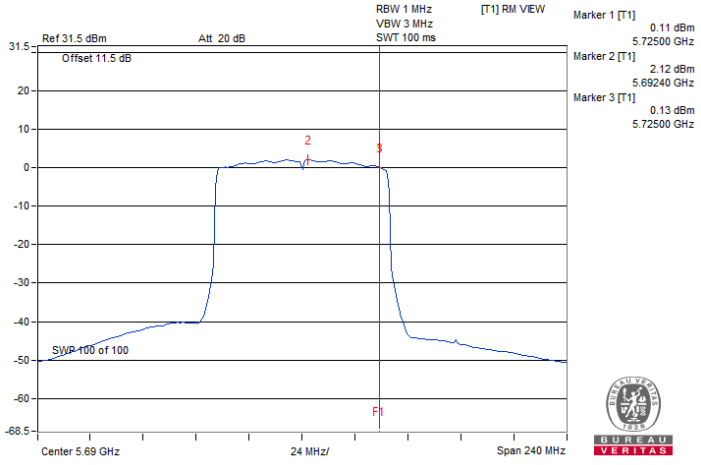
802.11a / Chain 0 : CH 64



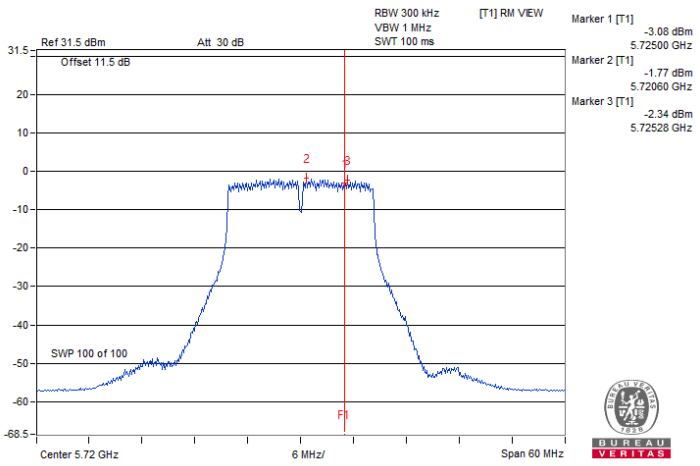
802.11ax (HE20) / Chain 0 : CH 60



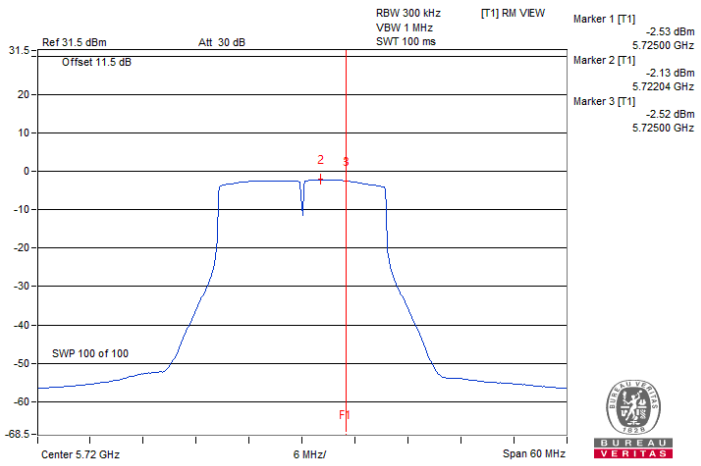
802.11ax (HE40) / Chain 0 : CH 134



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

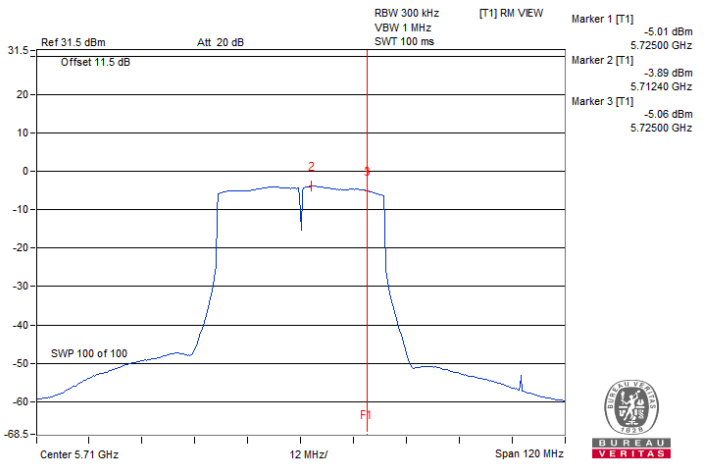


802.11a / Chain 0 : CH 144 (U-NII-3)

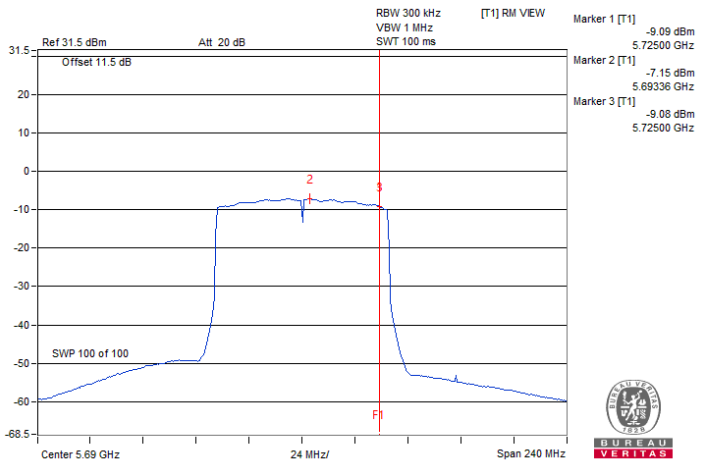


802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)

Spectrum Plot of Maximum Value



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



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

7.4 6 dB Bandwidth

Input Power:	54 Vdc	Environmental Conditions:	22°C, 67% RH	Tested By:	Tim Chen

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	2.85	2.89	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	4.12	4.35	0.5	Pass

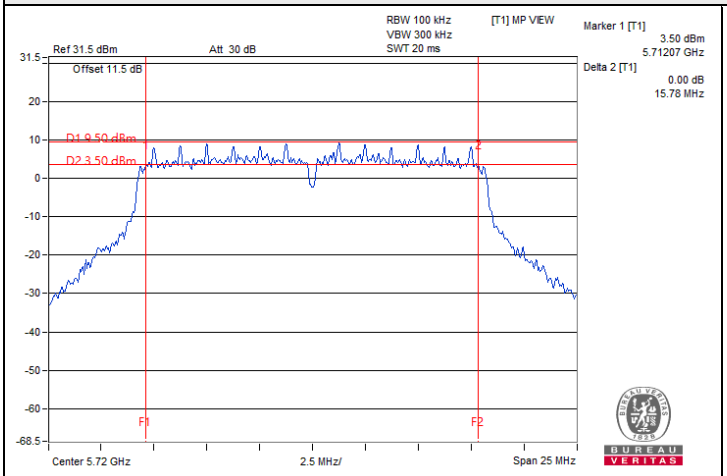
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	3.63	3.88	0.5	Pass

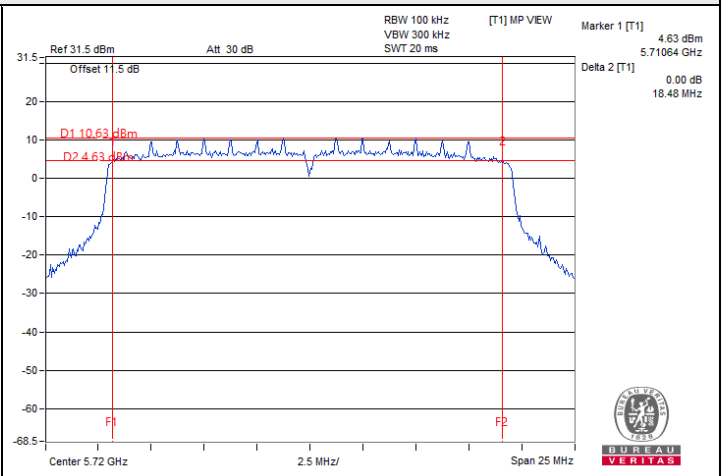
802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
138 (U-NII-3)	5690	2.71	2.69	0.5	Pass

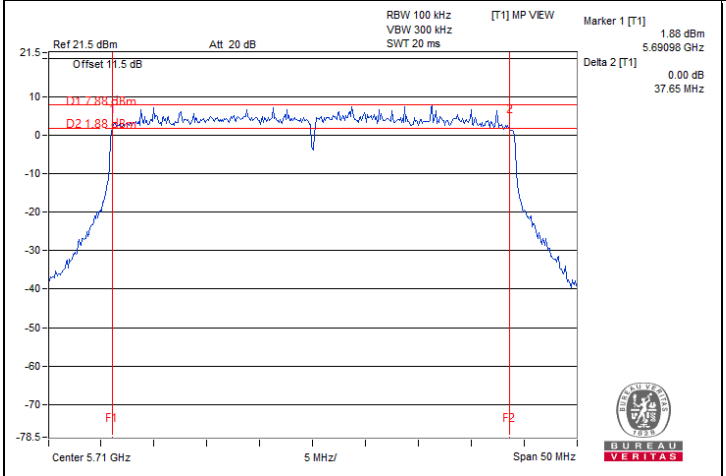
Spectrum Plot of Minimum Value



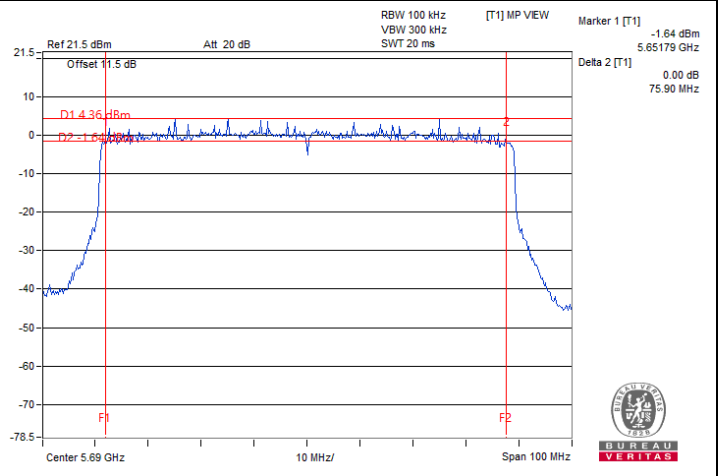
802.11a / Chain 0 : CH 144 (U-NII-3)



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



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



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

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

7.5 Occupied Bandwidth

Input Power:	54 Vdc	Environmental Conditions:	22°C, 67% RH	Tested By:	Tim Chen

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	16.44	16.44
60	5300	16.44	16.44
64	5320	16.44	16.44
100	5500	16.44	16.44
116	5580	16.44	16.44
140	5700	16.44	16.44
144 (U-NII-2C)	5720	13.28	13.28
144 (U-NII-3)	5720	3.16	3.16

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	18.96	18.96
60	5300	18.96	19.08
64	5320	18.96	19.08
100	5500	18.96	18.96
116	5580	18.96	18.96
140	5700	19.08	18.84
144 (U-NII-2C)	5720	14.60	14.60
144 (U-NII-3)	5720	4.36	4.36

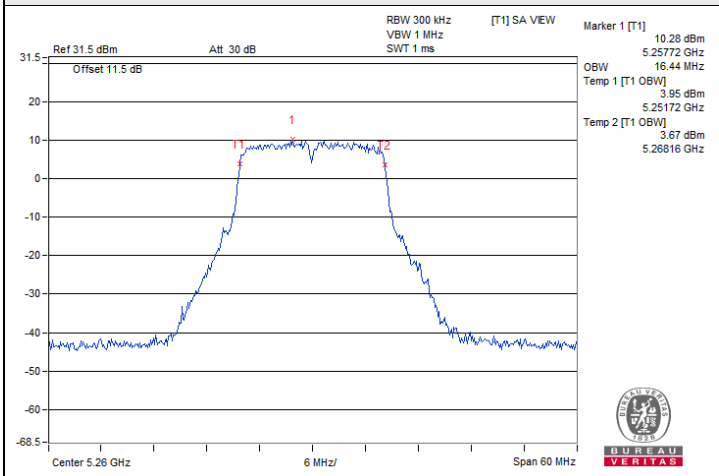
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	37.92	38.16
62	5310	38.16	38.16
102	5510	37.92	37.92
110	5550	37.92	37.92
134	5670	37.92	37.92
142 (U-NII-2C)	5710	34.20	33.96
142 (U-NII-3)	5710	3.72	3.96

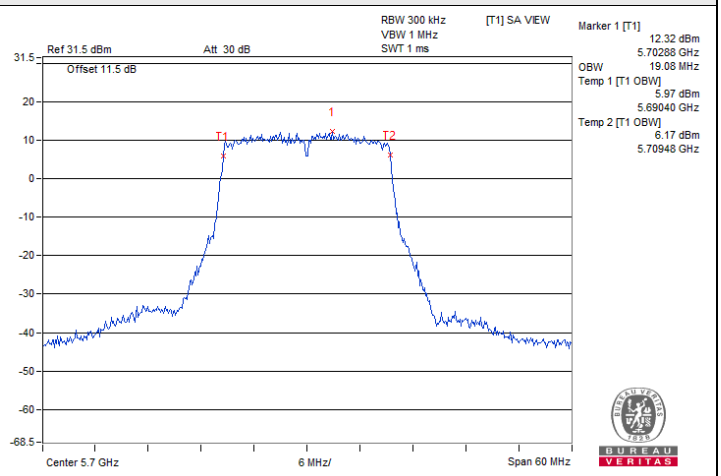
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	77.28	77.28
106	5530	77.28	77.28
122	5610	77.28	77.28
138 (U-NII-2C)	5690	73.64	73.88
138 (U-NII-3)	5690	3.40	3.40

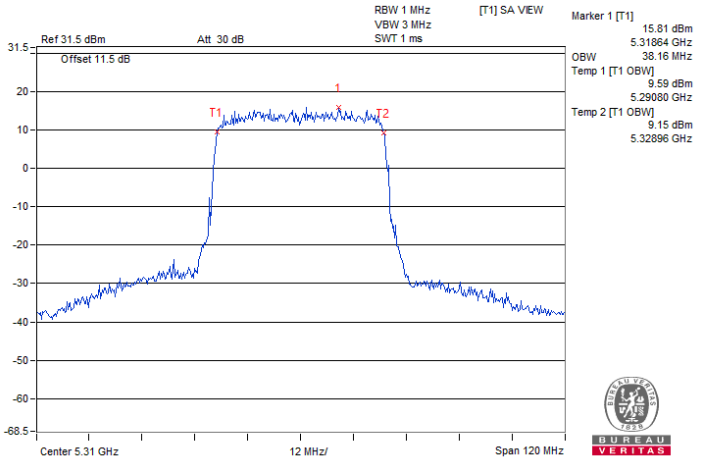
Spectrum Plot of Maximum Value



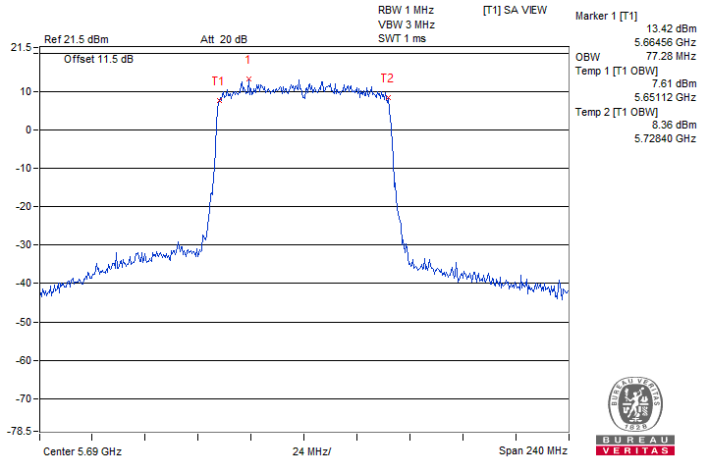
802.11a / Chain 0 : CH 52



802.11ax (HE20) / Chain 0 : CH 140



802.11ax (HE40) / Chain 0 : CH 62



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

7.6 Frequency Stability

Input Power:	54 Vdc	Environmental Conditions:	22°C, 67% RH	Tested By:	Tim Chen

Frequency Stability Versus Temperature									
Operating Frequency: 5260 MHz									
Temp. (℃)	Power Supply (Vdc)	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
50	54	5260.0084	Pass	5260.0072	Pass	5260.0093	Pass	5260.0083	Pass
40	54	5259.9945	Pass	5259.9955	Pass	5259.9938	Pass	5259.9937	Pass
30	54	5259.9901	Pass	5259.9876	Pass	5259.9899	Pass	5259.9859	Pass
20	54	5259.9964	Pass	5259.9981	Pass	5259.9967	Pass	5259.9971	Pass
10	54	5260.0135	Pass	5260.0133	Pass	5260.0127	Pass	5260.0145	Pass
0	54	5260.006	Pass	5260.0082	Pass	5260.0107	Pass	5260.006	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
Temp. (℃)	Power Supply (Vdc)	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	62.1	5259.9851	Pass	5259.9854	Pass	5259.9869	Pass	5259.9838	Pass
	54	5259.9964	Pass	5259.9981	Pass	5259.9967	Pass	5259.9971	Pass
	45.9	5259.9851	Pass	5259.9861	Pass	5259.9856	Pass	5259.9886	Pass

7.7 AC Power Conducted Emissions

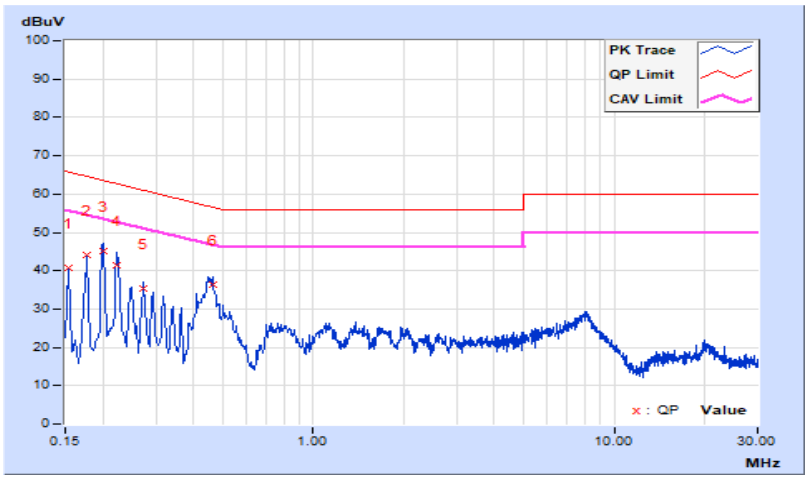
Mode A

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.68	31.05	20.10	40.73	29.78	65.78	55.78	-25.05	-26.00
2	0.17800	9.69	34.36	18.79	44.05	28.48	64.58	54.58	-20.53	-26.10
3	0.20042	9.70	35.30	16.83	45.00	26.53	63.59	53.59	-18.59	-27.06
4	0.22200	9.71	31.74	14.84	41.45	24.55	62.74	52.74	-21.29	-28.19
5	0.27400	9.74	25.58	11.50	35.32	21.24	61.00	51.00	-25.68	-29.76
6	0.46200	9.82	26.39	18.58	36.21	28.40	56.66	46.66	-20.45	-18.26

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

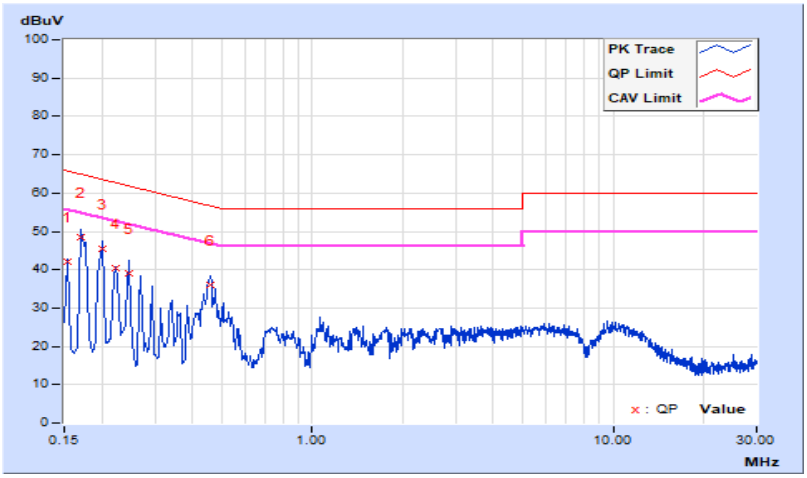


RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	0.15400	9.68	32.25	20.25	41.93	29.93	65.78	55.78	-23.85	-25.85
2	0.17000	9.69	38.88	17.18	48.57	26.87	64.96	54.96	-16.39	-28.09
3	0.20200	9.70	35.69	17.29	45.39	26.99	63.53	53.53	-18.14	-26.54
4	0.22152	9.72	30.52	13.65	40.24	23.37	62.76	52.76	-22.52	-29.39
5	0.24600	9.73	29.39	12.40	39.12	22.13	61.89	51.89	-22.77	-29.76
6	0.45800	9.85	26.30	19.07	36.15	28.92	56.73	46.73	-20.58	-17.81

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



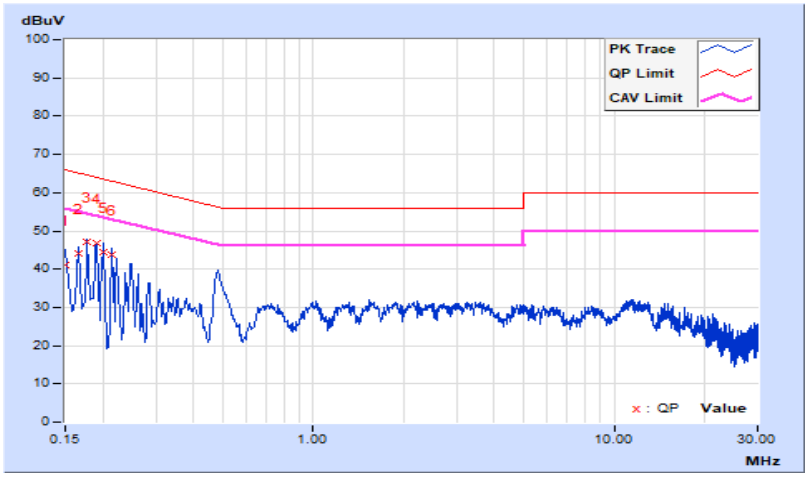
Mode B

RF Mode	802.11ax (HE40)	**Channel**	CH 134：5670 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23 °C, 66 % RH
Tested By	TitanHSU		

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	9.63	31.55	23.39	41.18	33.02	66.00	56.00	-24.82	-22.98
2	0.16600	9.63	34.52	22.29	44.15	31.92	65.16	55.16	-21.01	-23.24
3	0.17800	9.64	37.52	21.09	47.16	30.73	64.58	54.58	-17.42	-23.85
4	0.19000	9.64	37.20	19.19	46.84	28.83	64.04	54.04	-17.20	-25.21
5	0.20200	9.64	34.80	16.68	44.44	26.32	63.53	53.53	-19.09	-27.21
6	0.21400	9.64	34.09	17.47	43.73	27.11	63.05	53.05	-19.32	-25.94

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

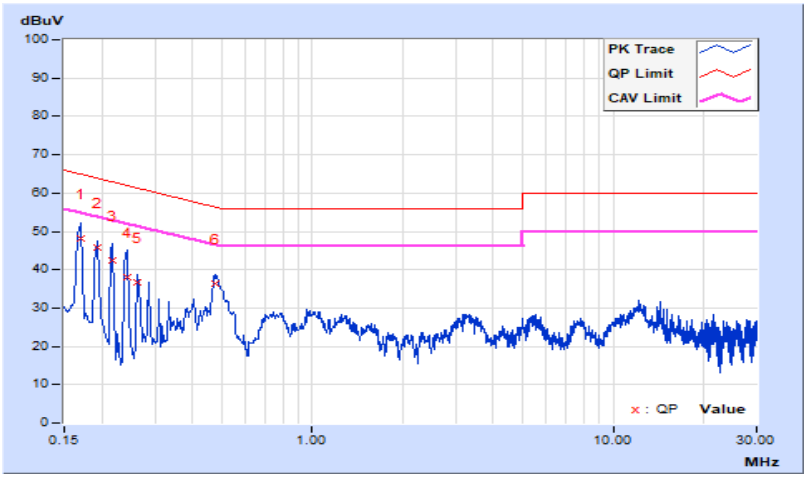


RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	TitanHSU		

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	0.17000	9.63	38.54	20.14	48.17	29.77	64.96	54.96	-16.79	-25.19
2	0.19400	9.64	36.02	17.34	45.66	26.98	63.86	53.86	-18.20	-26.88
3	0.21748	9.64	32.72	14.09	42.36	23.73	62.91	52.91	-20.55	-29.18
4	0.24200	9.65	28.51	11.69	38.16	21.34	62.03	52.03	-23.87	-30.69
5	0.26200	9.65	27.12	11.44	36.77	21.09	61.37	51.37	-24.60	-30.28
6	**0.47400**	**9.68**	**26.55**	**22.02**	**36.23**	**31.70**	**56.44**	**46.44**	**-20.21**	**-14.74**

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

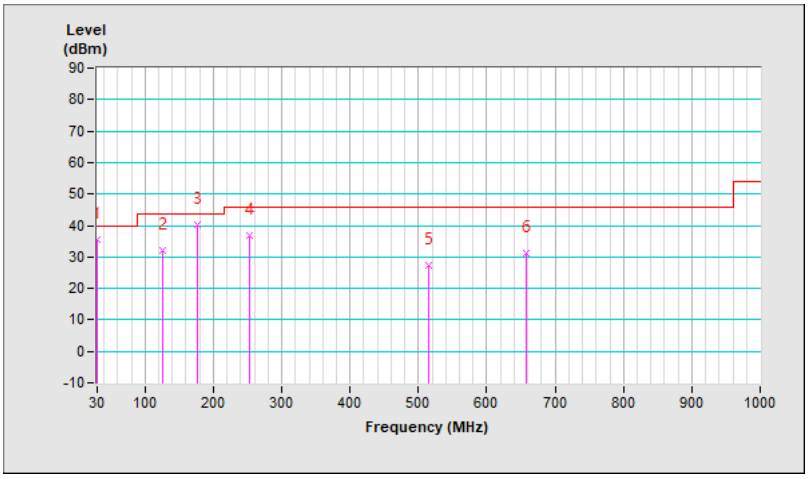
Mode A

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Adair Peng		

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	35.6 QP	40.0	-4.4	1.01 H	119	46.3	-10.7
2	125.55	32.2 QP	43.5	-11.3	2.00 H	119	42.3	-10.1
3	177.54	40.2 QP	43.5	-3.3	1.01 H	123	49.4	-9.2
4	252.13	36.7 QP	46.0	-9.3	1.01 H	226	45.2	-8.5
5	515.23	27.2 QP	46.0	-18.8	2.00 H	215	29.7	-2.5
6	657.57	31.1 QP	46.0	-14.9	1.00 H	221	30.9	0.2

Remarks:

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

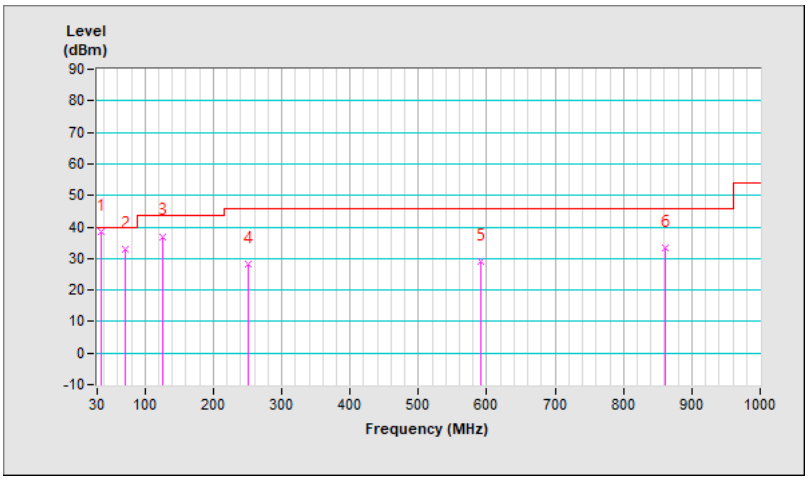


RF Mode	802.11ax (HE40)	**Channel**	CH 134：5670 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23 °C, 67 % RH
Tested By	Adair Peng		

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	**36.54**	**38.5 QP**	**40.0**	**-1.5**	**1.01 V**	**236**	**48.6**	**-10.1**
2	71.22	33.1 QP	40.0	-6.9	1.50 V	226	44.0	-10.9
3	125.12	37.0 QP	43.5	-6.5	1.01 V	55	47.2	-10.2
4	250.09	28.1 QP	46.0	-17.9	2.00 V	339	36.6	-8.5
5	591.25	29.1 QP	46.0	-16.9	1.01 V	177	30.1	-1.0
6	861.59	33.3 QP	46.0	-12.7	2.00 V	334	29.3	4.0

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



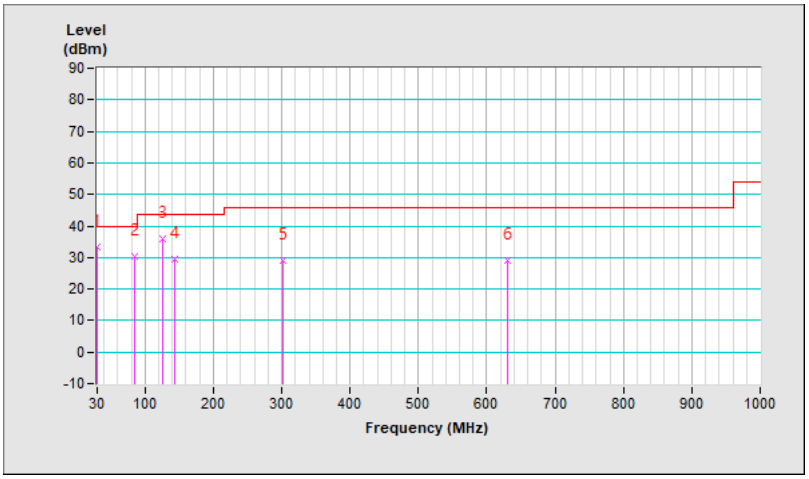
Mode B

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Adair Peng		

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	30.15	33.2 QP	40.0	-6.8	1.00 H	315	43.7	-10.5
2	84.12	30.2 QP	40.0	-9.8	1.99 H	215	44.1	-13.9
3	125.12	36.0 QP	43.5	-7.5	1.50 H	331	46.2	-10.2
4	143.22	29.4 QP	43.5	-14.1	1.50 H	277	37.9	-8.5
5	301.19	29.1 QP	46.0	-16.9	1.00 H	337	35.6	-6.5
6	630.15	29.1 QP	46.0	-16.9	1.50 H	224	29.2	-0.1

Remarks:

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

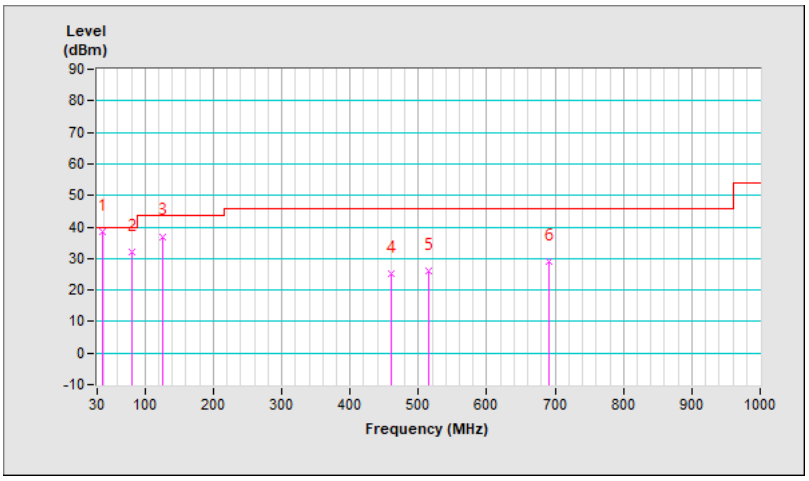


RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Adair Peng		

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	38.15	38.4 QP	40.0	-1.6	1.00 V	111	48.3	-9.9
2	80.11	32.0 QP	40.0	-8.0	1.00 V	111	45.1	-13.1
3	125.11	37.0 QP	43.5	-6.5	1.50 V	222	47.2	-10.2
4	460.12	25.1 QP	46.0	-20.9	1.50 V	2	28.5	-3.4
5	515.22	26.0 QP	46.0	-20.0	1.00 V	45	28.5	-2.5
6	691.66	29.1 QP	46.0	-16.9	1.50 V	224	28.4	0.7

Remarks:

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



7.9 Unwanted Emissions above 1 GHz

RF Mode	802.11a	**Channel**	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	61.0 PK	74.0	-13.0	1.46 H	26	40.3	20.7
2	5150.00	47.9 AV	54.0	-6.1	1.46 H	26	27.2	20.7
3	*5260.00	120.7 PK			1.46 H	26	80.2	40.5
4	*5260.00	110.2 AV			1.46 H	26	69.7	40.5
5	#10520.00	64.6 PK	68.2	-3.6	2.52 H	119	39.9	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	59.8 PK	74.0	-14.2	3.80 V	324	39.1	20.7
2	5150.00	46.8 AV	54.0	-7.2	3.80 V	324	26.1	20.7
3	*5260.00	116.4 PK			3.80 V	324	75.9	40.5
4	*5260.00	105.6 AV			3.80 V	324	65.1	40.5
5	#10520.00	64.2 PK	68.2	-4.0	3.07 V	145	39.5	24.7

Remarks:

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

RF Mode	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	120.2 PK			1.76 H	29	79.8	40.4
2	*5300.00	110.1 AV			1.76 H	29	69.7	40.4
3	10600.00	64.1 PK	74.0	-9.9	2.61 H	108	39.4	24.7
4	10600.00	51.1 AV	54.0	-2.9	2.61 H	108	26.4	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.7 PK			3.71 V	317	75.3	40.4
2	*5300.00	105.3 AV			3.71 V	317	64.9	40.4
3	10600.00	63.9 PK	74.0	-10.1	3.10 V	149	39.2	24.7
4	10600.00	50.9 AV	54.0	-3.1	3.10 V	149	26.2	24.7

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.

RF Mode	802.11a	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	120.1 PK			1.98 H	30	79.7	40.4
2	*5320.00	109.9 AV			1.98 H	30	69.5	40.4
3	5350.00	62.8 PK	74.0	-11.2	1.98 H	30	42.5	20.3
4	5350.00	50.6 AV	54.0	-3.4	1.98 H	30	30.3	20.3
5	10640.00	64.6 PK	74.0	-9.4	2.63 H	110	39.5	25.1
6	10640.00	51.3 AV	54.0	-2.7	2.63 H	110	26.2	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	116.1 PK			3.84 V	316	75.7	40.4
2	*5320.00	105.5 AV			3.84 V	316	65.1	40.4
3	5350.00	59.2 PK	74.0	-14.8	3.84 V	316	38.9	20.3
4	5350.00	47.3 AV	54.0	-6.7	3.84 V	316	27.0	20.3
5	10640.00	64.3 PK	74.0	-9.7	3.09 V	142	39.2	25.1
6	10640.00	51.1 AV	54.0	-2.9	3.09 V	142	26.0	25.1

Remarks:

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

RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	62.1 PK	74.0	-11.9	1.87 H	24	41.3	20.8
2	5460.00	48.0 AV	54.0	-6.0	1.87 H	24	27.2	20.8
3	#5470.00	67.1 PK	68.2	-1.1	1.87 H	24	46.3	20.8
4	*5500.00	118.7 PK			1.87 H	24	77.7	41.0
5	*5500.00	108.9 AV			1.87 H	24	67.9	41.0
6	11000.00	63.6 PK	74.0	-10.4	2.58 H	111	38.3	25.3
7	11000.00	50.8 AV	54.0	-3.2	2.58 H	111	25.5	25.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.6 PK	74.0	-14.4	3.95 V	305	38.8	20.8
2	5460.00	47.8 AV	54.0	-6.2	3.95 V	305	27.0	20.8
3	#5470.00	60.5 PK	68.2	-7.7	3.95 V	305	39.7	20.8
4	*5500.00	115.2 PK			3.95 V	305	74.2	41.0
5	*5500.00	104.3 AV			3.95 V	305	63.3	41.0
6	11000.00	63.4 PK	74.0	-10.6	3.08 V	144	38.1	25.3
7	11000.00	50.5 AV	54.0	-3.5	3.08 V	144	25.2	25.3

Remarks:

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

RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	119.0 PK			1.91 H	22	77.9	41.1
2	*5580.00	109.4 AV			1.91 H	22	68.3	41.1
3	11160.00	64.3 PK	74.0	-9.7	2.66 H	105	39.0	25.3
4	11160.00	51.0 AV	54.0	-3.0	2.66 H	105	25.7	25.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	114.9 PK			3.79 V	305	73.8	41.1
2	*5580.00	103.6 AV			3.79 V	305	62.5	41.1
3	11160.00	63.9 PK	74.0	-10.1	3.10 V	148	38.6	25.3
4	11160.00	50.7 AV	54.0	-3.3	3.10 V	148	25.4	25.3

Remarks:

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

RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	119.9 PK			1.87 H	4	78.6	41.3
2	*5700.00	109.0 AV			1.87 H	4	67.7	41.3
3	#5725.00	66.7 PK	68.2	-1.5	1.87 H	4	45.3	21.4
4	11400.00	63.6 PK	74.0	-10.4	2.58 H	110	37.9	25.7
5	11400.00	50.7 AV	54.0	-3.3	2.58 H	110	25.0	25.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	113.7 PK			4.00 V	305	72.4	41.3
2	*5700.00	103.2 AV			4.00 V	305	61.9	41.3
3	#5725.00	62.2 PK	68.2	-6.0	4.00 V	305	40.8	21.4
4	11400.00	63.3 PK	74.0	-10.7	3.13 V	145	37.6	25.7
5	11400.00	50.4 AV	54.0	-3.6	3.13 V	145	24.7	25.7

Remarks:

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

RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.4 PK	68.2	-6.8	1.99 H	311	40.6	20.8
2	*5720.00	120.4 PK			1.99 H	311	79.0	41.4
3	*5720.00	110.6 AV			1.99 H	311	69.2	41.4
4	#5850.00	61.3 PK	68.2	-6.9	1.99 H	311	39.9	21.4
5	11440.00	64.0 PK	74.0	-10.0	2.52 H	117	38.3	25.7
6	11440.00	51.0 AV	54.0	-3.0	2.52 H	117	25.3	25.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.1 PK	68.2	-7.1	3.96 V	304	40.3	20.8
2	*5720.00	116.2 PK			3.96 V	304	74.8	41.4
3	*5720.00	105.1 AV			3.96 V	304	63.7	41.4
4	#5850.00	61.1 PK	68.2	-7.1	3.96 V	304	39.7	21.4
5	11440.00	63.8 PK	74.0	-10.2	3.05 V	147	38.1	25.7
6	11440.00	50.8 AV	54.0	-3.2	3.05 V	147	25.1	25.7

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	61.5 PK	74.0	-12.5	1.92 H	33	40.8	20.7
2	5150.00	47.5 AV	54.0	-6.5	1.92 H	33	26.8	20.7
3	*5260.00	122.2 PK			1.92 H	33	81.7	40.5
4	*5260.00	109.4 AV			1.92 H	33	68.9	40.5
5	#10520.00	64.0 PK	68.2	-4.2	2.59 H	107	39.3	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.3 PK	74.0	-13.7	3.78 V	320	39.6	20.7
2	5150.00	46.8 AV	54.0	-7.2	3.78 V	320	26.1	20.7
3	*5260.00	117.5 PK			3.78 V	320	77.0	40.5
4	*5260.00	105.2 AV			3.78 V	320	64.7	40.5
5	#10520.00	63.8 PK	68.2	-4.4	3.16 V	144	39.1	24.7

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	122.3 PK			1.44 H	31	81.9	40.4
2	*5300.00	109.4 AV			1.44 H	31	69.0	40.4
3	10600.00	64.7 PK	74.0	-9.3	2.54 H	111	40.0	24.7
4	10600.00	51.5 AV	54.0	-2.5	2.54 H	111	26.8	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	117.8 PK			3.82 V	308	77.4	40.4
2	*5300.00	105.1 AV			3.82 V	308	64.7	40.4
3	10600.00	64.3 PK	74.0	-9.7	3.10 V	144	39.6	24.7
4	10600.00	51.0 AV	54.0	-3.0	3.10 V	144	26.3	24.7

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.

RF Mode	802.11ax (HE20)	Channel	CH 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	122.6 PK			1.75 H	26	82.2	40.4
2	*5320.00	109.4 AV			1.75 H	26	69.0	40.4
3	5350.00	63.5 PK	74.0	-10.5	1.75 H	26	43.2	20.3
4	5350.00	50.5 AV	54.0	-3.5	1.75 H	26	30.2	20.3
5	10640.00	65.0 PK	74.0	-9.0	2.68 H	113	39.9	25.1
6	10640.00	52.0 AV	54.0	-2.0	2.68 H	113	26.9	25.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	118.5 PK			3.84 V	313	78.1	40.4
2	*5320.00	105.1 AV			3.84 V	313	64.7	40.4
3	5350.00	59.9 PK	74.0	-14.1	3.84 V	313	39.6	20.3
4	5350.00	47.2 AV	54.0	-6.8	3.84 V	313	26.9	20.3
5	10640.00	64.7 PK	74.0	-9.3	3.11 V	148	39.6	25.1
6	10640.00	51.7 AV	54.0	-2.3	3.11 V	148	26.6	25.1

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	2.20 H	310	40.7	20.8
2	5460.00	48.7 AV	54.0	-5.3	2.20 H	310	27.9	20.8
3	#5470.00	66.2 PK	68.2	-2.0	2.20 H	310	45.4	20.8
4	*5500.00	123.0 PK			2.20 H	310	82.0	41.0
5	*5500.00	110.6 AV			2.20 H	310	69.6	41.0
6	11000.00	63.1 PK	74.0	-10.9	2.69 H	120	37.8	25.3
7	11000.00	50.3 AV	54.0	-3.7	2.69 H	120	25.0	25.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.7 PK	74.0	-14.3	3.97 V	312	38.9	20.8
2	5460.00	48.3 AV	54.0	-5.7	3.97 V	312	27.5	20.8
3	#5470.00	60.7 PK	68.2	-7.5	3.97 V	312	39.9	20.8
4	*5500.00	117.9 PK			3.97 V	312	76.9	41.0
5	*5500.00	104.6 AV			3.97 V	312	63.6	41.0
6	11000.00	62.8 PK	74.0	-11.2	3.10 V	145	37.5	25.3
7	11000.00	50.0 AV	54.0	-4.0	3.10 V	145	24.7	25.3

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	123.6 PK			2.35 H	313	82.5	41.1
2	*5580.00	110.3 AV			2.35 H	313	69.2	41.1
3	11160.00	64.1 PK	74.0	-9.9	2.58 H	114	38.8	25.3
4	11160.00	51.0 AV	54.0	-3.0	2.58 H	114	25.7	25.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	117.8 PK			3.10 V	348	76.7	41.1
2	*5580.00	104.7 AV			3.10 V	348	63.6	41.1
3	11160.00	63.8 PK	74.0	-10.2	3.11 V	146	38.5	25.3
4	11160.00	50.8 AV	54.0	-3.2	3.11 V	146	25.5	25.3

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	121.1 PK			1.69 H	2	79.8	41.3
2	*5700.00	108.6 AV			1.69 H	2	67.3	41.3
3	#5725.00	66.7 PK	68.2	-1.5	1.69 H	2	45.3	21.4
4	11400.00	63.8 PK	74.0	-10.2	2.67 H	105	38.1	25.7
5	11400.00	50.9 AV	54.0	-3.1	2.67 H	105	25.2	25.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	116.1 PK			3.29 V	348	74.8	41.3
2	*5700.00	103.1 AV			3.29 V	348	61.8	41.3
3	#5725.00	62.8 PK	68.2	-5.4	3.29 V	348	41.4	21.4
4	11400.00	63.3 PK	74.0	-10.7	3.11 V	149	37.6	25.7
5	11400.00	50.5 AV	54.0	-3.5	3.11 V	149	24.8	25.7

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.0 PK	68.2	-7.2	2.06 H	309	40.2	20.8
2	*5720.00	122.8 PK			2.06 H	309	81.4	41.4
3	*5720.00	109.8 AV			2.06 H	309	68.4	41.4
4	#5850.00	61.5 PK	68.2	-6.7	2.06 H	309	40.1	21.4
5	11440.00	64.0 PK	74.0	-10.0	2.61 H	113	38.3	25.7
6	11440.00	50.9 AV	54.0	-3.1	2.61 H	113	25.2	25.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.6 PK	68.2	-7.6	3.24 V	350	39.8	20.8
2	*5720.00	116.9 PK			3.24 V	350	75.5	41.4
3	*5720.00	104.1 AV			3.24 V	350	62.7	41.4
4	#5850.00	61.1 PK	68.2	-7.1	3.24 V	350	39.7	21.4
5	11440.00	63.8 PK	74.0	-10.2	3.15 V	144	38.1	25.7
6	11440.00	50.6 AV	54.0	-3.4	3.15 V	144	24.9	25.7

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 (HE40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.7 PK	74.0	-13.3	1.66 H	30	40.0	20.7
2	5150.00	48.1 AV	54.0	-5.9	1.66 H	30	27.4	20.7
3	*5270.00	120.3 PK			1.66 H	30	79.9	40.4
4	*5270.00	106.8 AV			1.66 H	30	66.4	40.4
5	#10540.00	64.4 PK	68.2	-3.8	2.69 H	107	39.7	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.5 PK	74.0	-14.5	3.90 V	306	38.8	20.7
2	5150.00	46.8 AV	54.0	-7.2	3.90 V	306	26.1	20.7
3	*5270.00	115.8 PK			3.90 V	306	75.4	40.4
4	*5270.00	102.7 AV			3.90 V	306	62.3	40.4
5	#10540.00	64.2 PK	68.2	-4.0	3.08 V	147	39.5	24.7

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 (HE40)	Channel	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	120.2 PK			1.78 H	26	79.8	40.4
2	*5310.00	106.2 AV			1.78 H	26	65.8	40.4
3	5350.00	66.5 PK	74.0	-7.5	1.78 H	26	46.2	20.3
4	5350.00	52.3 AV	54.0	-1.7	1.78 H	26	32.0	20.3
5	10620.00	65.4 PK	74.0	-8.6	2.55 H	119	40.4	25.0
6	10620.00	51.9 AV	54.0	-2.1	2.55 H	119	26.9	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	114.6 PK			3.88 V	314	74.2	40.4
2	*5310.00	101.9 AV			3.88 V	314	61.5	40.4
3	5350.00	59.9 PK	74.0	-14.1	3.88 V	314	39.6	20.3
4	5350.00	46.4 AV	54.0	-7.6	3.88 V	314	26.1	20.3
5	10620.00	64.6 PK	74.0	-9.4	3.12 V	145	39.6	25.0
6	10620.00	51.5 AV	54.0	-2.5	3.12 V	145	26.5	25.0

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 (HE40)	Channel	CH 102：5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	62.9 PK	74.0	-11.1	2.51 H	313	42.1	20.8
2	5460.00	49.4 AV	54.0	-4.6	2.51 H	313	28.6	20.8
3	#5470.00	66.6 PK	68.2	-1.6	2.51 H	313	45.8	20.8
4	*5510.00	117.6 PK			2.51 H	313	76.6	41.0
5	*5510.00	105.7 AV			2.51 H	313	64.7	41.0
6	11020.00	64.4 PK	74.0	-9.6	2.54 H	108	39.0	25.4
7	11020.00	51.2 AV	54.0	-2.8	2.54 H	108	25.8	25.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.6 PK	74.0	-13.4	3.96 V	312	39.8	20.8
2	5460.00	48.2 AV	54.0	-5.8	3.96 V	312	27.4	20.8
3	#5470.00	66.1 PK	68.2	-2.1	3.96 V	312	45.3	20.8
4	*5510.00	114.1 PK			3.96 V	312	73.1	41.0
5	*5510.00	99.9 AV			3.96 V	312	58.9	41.0
6	11020.00	64.1 PK	74.0	-9.9	3.10 V	147	38.7	25.4
7	11020.00	51.0 AV	54.0	-3.0	3.10 V	147	25.6	25.4

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	66.0 PK	74.0	-8.0	2.20 H	309	45.2	20.8
2	5460.00	49.2 AV	54.0	-4.8	2.20 H	309	28.4	20.8
3	#5470.00	66.8 PK	68.2	-1.4	2.20 H	309	46.0	20.8
4	*5550.00	121.1 PK			2.20 H	309	80.0	41.1
5	*5550.00	108.0 AV			2.20 H	309	66.9	41.1
6	11100.00	64.8 PK	74.0	-9.2	2.66 H	113	39.0	25.8
7	11100.00	51.5 AV	54.0	-2.5	2.66 H	113	25.7	25.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.3 PK	74.0	-13.7	3.90 V	315	39.5	20.8
2	5460.00	47.6 AV	54.0	-6.4	3.90 V	315	26.8	20.8
3	#5470.00	60.6 PK	68.2	-7.6	3.90 V	315	39.8	20.8
4	*5550.00	113.8 PK			3.90 V	315	72.7	41.1
5	*5550.00	100.6 AV			3.90 V	315	59.5	41.1
6	11100.00	64.5 PK	74.0	-9.5	3.15 V	144	38.7	25.8
7	11100.00	51.3 AV	54.0	-2.7	3.15 V	144	25.5	25.8

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	119.9 PK			2.11 H	308	78.5	41.4
2	*5670.00	106.8 AV			2.11 H	308	65.4	41.4
3	**#5725.00**	**67.3 PK**	**68.2**	**-0.9**	**2.11 H**	**308**	**45.9**	**21.4**
4	11340.00	64.4 PK	74.0	-9.6	2.50 H	104	38.9	25.5
5	11340.00	51.1 AV	54.0	-2.9	2.50 H	104	25.6	25.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	113.0 PK			3.83 V	306	71.6	41.4
2	*5670.00	99.3 AV			3.83 V	306	57.9	41.4
3	#5725.00	61.0 PK	68.2	-7.2	3.83 V	306	39.6	21.4
4	11340.00	64.2 PK	74.0	-9.8	3.13 V	148	38.7	25.5
5	11340.00	50.9 AV	54.0	-3.1	3.13 V	148	25.4	25.5

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.5 PK	68.2	-6.7	2.10 H	310	40.7	20.8
2	*5710.00	120.0 PK			2.10 H	310	78.6	41.4
3	*5710.00	108.0 AV			2.10 H	310	66.6	41.4
4	#5850.00	60.6 PK	68.2	-7.6	2.10 H	310	39.2	21.4
5	11420.00	64.9 PK	74.0	-9.1	2.67 H	117	39.2	25.7
6	11420.00	51.2 AV	54.0	-2.8	2.67 H	117	25.5	25.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	61.3 PK	68.2	-6.9	3.80 V	311	40.5	20.8
2	*5710.00	113.8 PK			3.80 V	311	72.4	41.4
3	*5710.00	100.6 AV			3.80 V	311	59.2	41.4
4	#5850.00	60.3 PK	68.2	-7.9	3.80 V	311	38.9	21.4
5	11420.00	64.6 PK	74.0	-9.4	3.12 V	145	38.9	25.7
6	11420.00	51.0 AV	54.0	-3.0	3.12 V	145	25.3	25.7

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, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	114.9 PK			1.86 H	30	74.5	40.4
2	*5290.00	102.5 AV			1.86 H	30	62.1	40.4
3	5350.00	68.4 PK	74.0	-5.6	1.86 H	30	48.1	20.3
4	5350.00	52.8 AV	54.0	-1.2	1.86 H	30	32.5	20.3
5	#10580.00	64.7 PK	68.2	-3.5	2.67 H	114	40.0	24.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5290.00	109.8 PK			3.88 V	305	69.4	40.4
2	*5290.00	97.4 AV			3.88 V	305	57.0	40.4
3	5350.00	59.6 PK	74.0	-14.4	3.88 V	305	39.3	20.3
4	5350.00	46.4 AV	54.0	-7.6	3.88 V	305	26.1	20.3
5	#10580.00	64.4 PK	68.2	-3.8	3.05 V	143	39.7	24.7

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, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

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	66.3 PK	74.0	-7.7	2.27 H	308	45.5	20.8
2	5460.00	52.0 AV	54.0	-2.0	2.27 H	308	31.2	20.8
3	#5470.00	66.6 PK	68.2	-1.6	2.27 H	308	45.8	20.8
4	*5530.00	112.6 PK			2.27 H	308	71.6	41.0
5	*5530.00	100.1 AV			2.27 H	308	59.1	41.0
6	11060.00	64.8 PK	74.0	-9.2	2.67 H	101	39.2	25.6
7	11060.00	51.5 AV	54.0	-2.5	2.67 H	101	25.9	25.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.0 PK	74.0	-13.0	4.00 V	322	40.2	20.8
2	5460.00	48.2 AV	54.0	-5.8	4.00 V	322	27.4	20.8
3	#5470.00	63.1 PK	68.2	-5.1	4.00 V	322	42.3	20.8
4	*5530.00	106.9 PK			4.00 V	322	65.9	41.0
5	*5530.00	93.8 AV			4.00 V	322	52.8	41.0
6	11060.00	64.3 PK	74.0	-9.7	3.13 V	152	38.7	25.6
7	11060.00	51.1 AV	54.0	-2.9	3.13 V	152	25.5	25.6

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 122：5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	67.0 PK	68.2	-1.2	2.27 H	310	46.2	20.8
2	*5610.00	116.0 PK			2.27 H	310	74.8	41.2
3	*5610.00	103.4 AV			2.27 H	310	62.2	41.2
4	#5725.00	65.6 PK	68.2	-2.6	2.27 H	310	44.2	21.4
5	11220.00	64.4 PK	74.0	-9.6	2.52 H	113	39.4	25.0
6	11220.00	50.8 AV	54.0	-3.2	2.52 H	113	25.8	25.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.6 PK	68.2	-7.6	3.84 V	321	39.8	20.8
2	*5610.00	106.9 PK			3.84 V	321	65.7	41.2
3	*5610.00	94.9 AV			3.84 V	321	53.7	41.2
4	#5725.00	60.7 PK	68.2	-7.5	3.84 V	321	39.3	21.4
5	11220.00	63.9 PK	74.0	-10.1	3.12 V	148	38.9	25.0
6	11220.00	50.6 AV	54.0	-3.4	3.12 V	148	25.6	25.0

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	20.9°C, 73.8% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	66.8 PK	68.2	-1.4	2.34 H	310	46.0	20.8
2	*5690.00	116.5 PK			2.34 H	310	75.1	41.4
3	*5690.00	103.8 AV			2.34 H	310	62.4	41.4
4	#5850.00	62.4 PK	68.2	-5.8	2.34 H	310	41.0	21.4
5	11380.00	65.2 PK	74.0	-8.8	2.61 H	108	39.6	25.6
6	11380.00	51.4 AV	54.0	-2.6	2.61 H	108	25.8	25.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.6 PK	68.2	-7.6	3.82 V	308	39.8	20.8
2	*5690.00	109.7 PK			3.82 V	308	68.3	41.4
3	*5690.00	97.0 AV			3.82 V	308	55.6	41.4
4	#5850.00	62.2 PK	68.2	-6.0	3.82 V	308	40.8	21.4
5	11380.00	64.9 PK	74.0	-9.1	3.12 V	145	39.3	25.6
6	11380.00	51.0 AV	54.0	-3.0	3.12 V	145	25.4	25.6

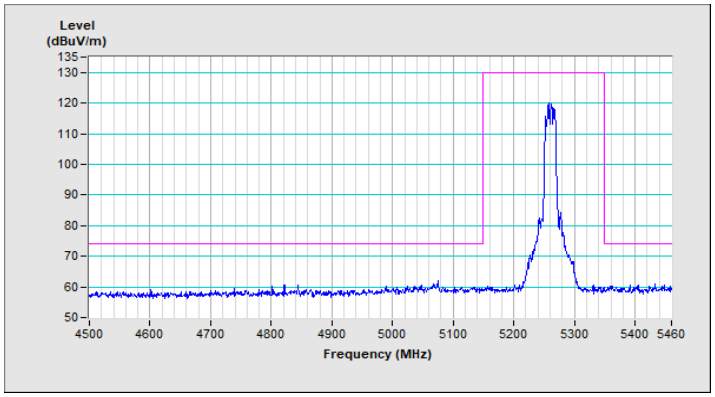
Remarks:

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

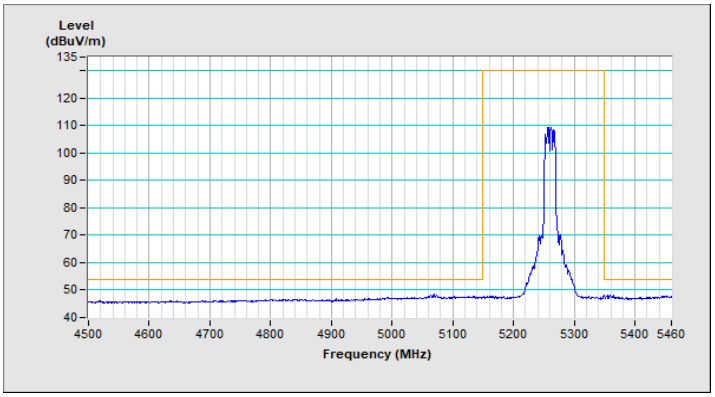
Plot of Band Edge

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

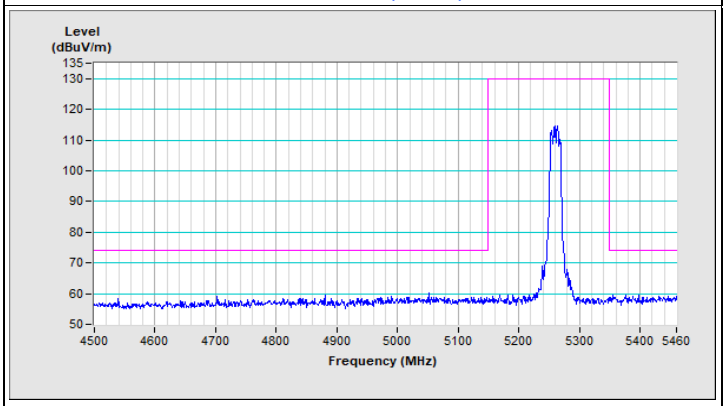
802.11a Channel 52



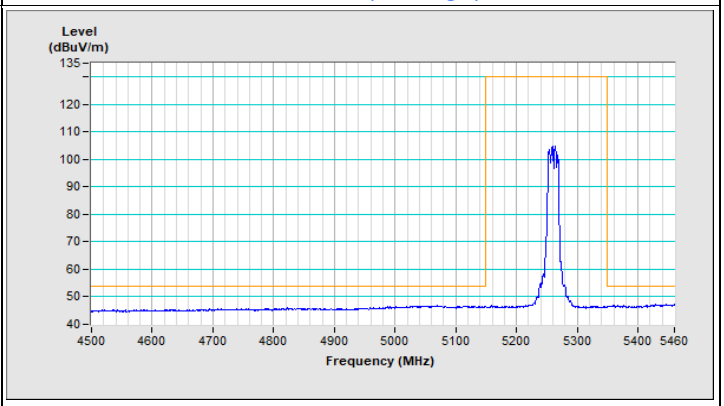
Horizontal (Peak)



Horizontal (Average)

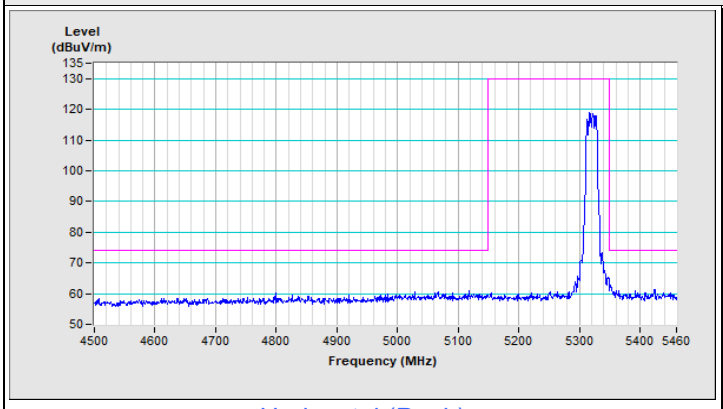


Vertical (Peak)

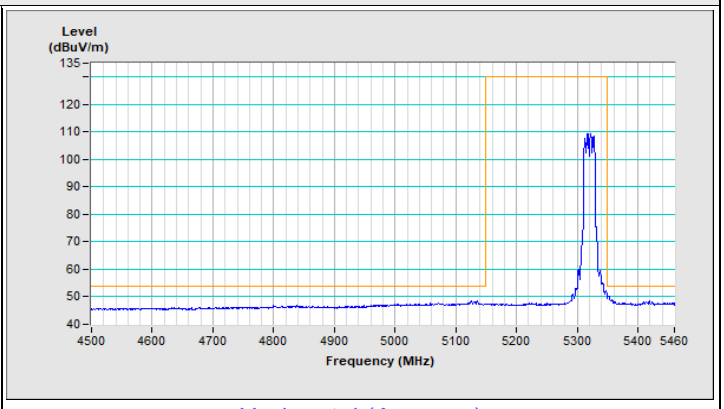


Vertical (Average)

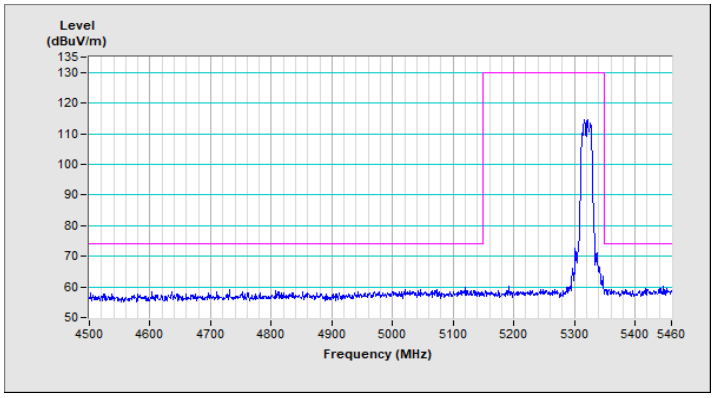
802.11a Channel 64



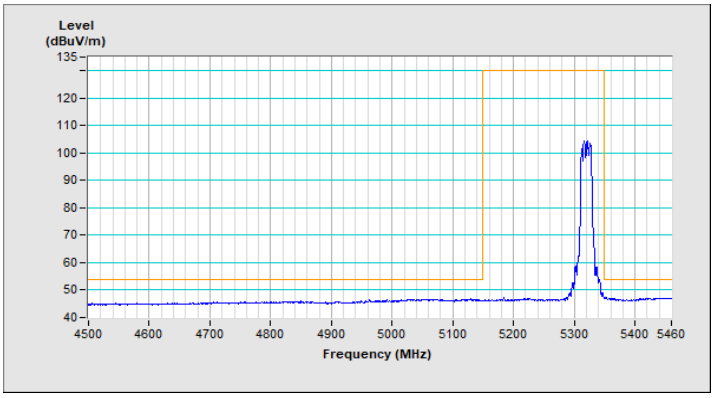
Horizontal (Peak)



Horizontal (Average)



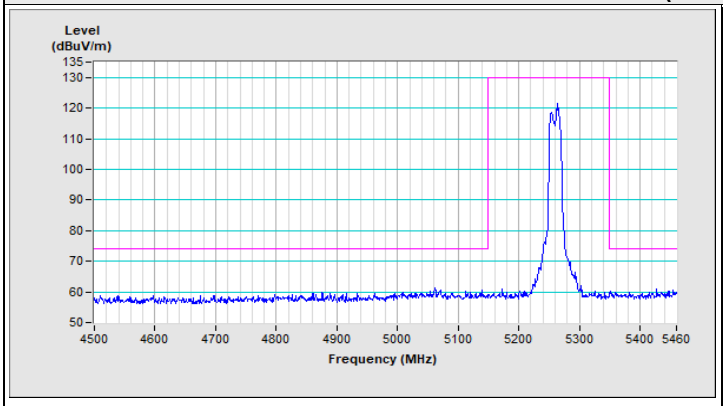
Vertical (Peak)



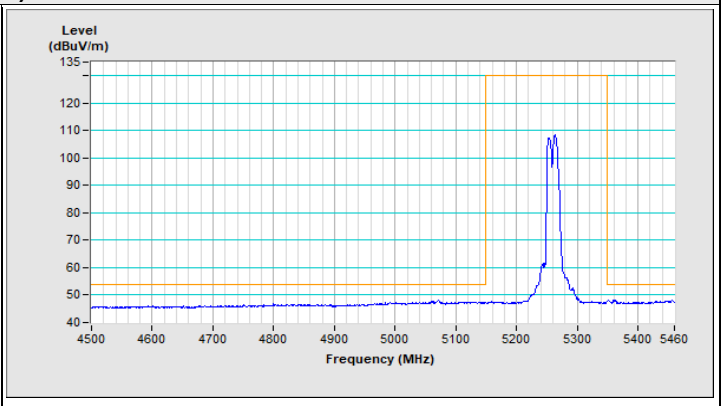
Vertical (Average)

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

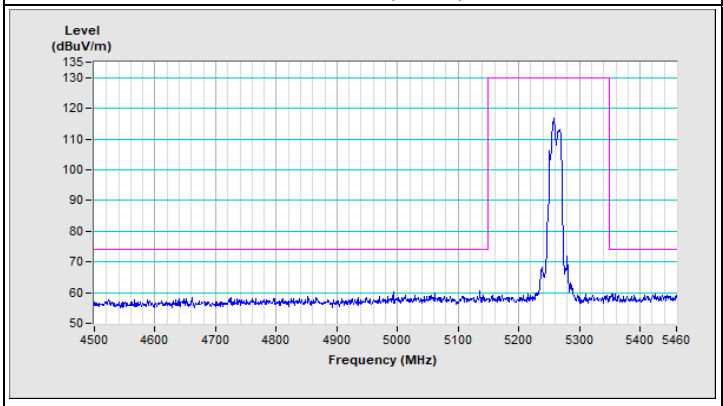
802.11ax (HE20) Channel 52



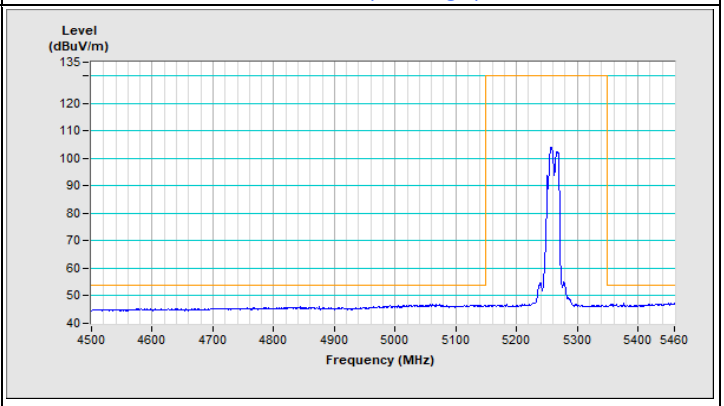
Horizontal (Peak)



Horizontal (Average)

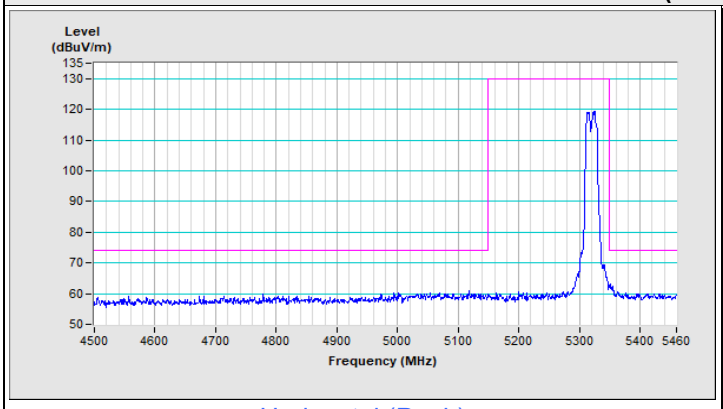


Vertical (Peak)

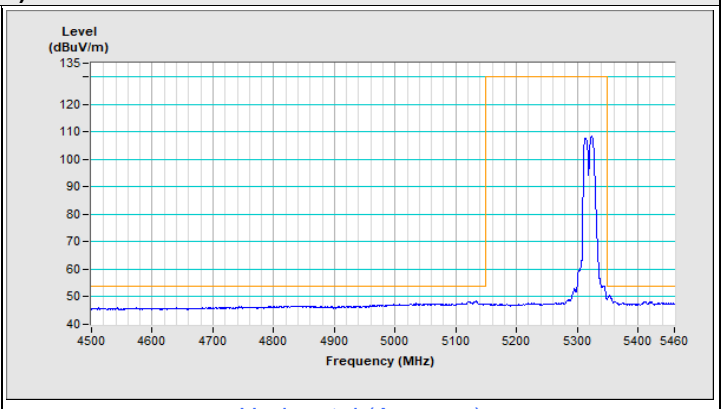


Vertical (Average)

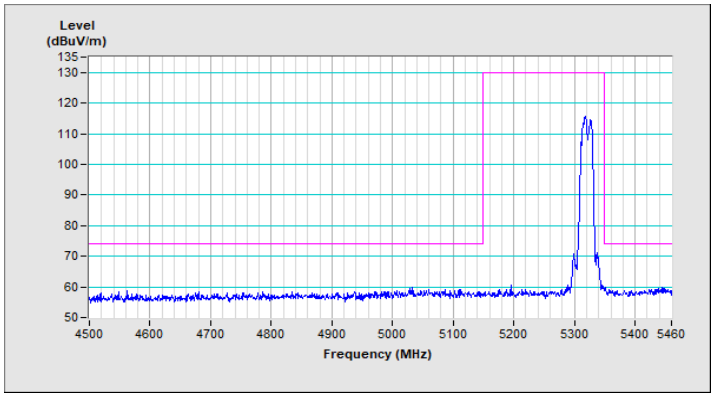
802.11ax (HE20) Channel 64



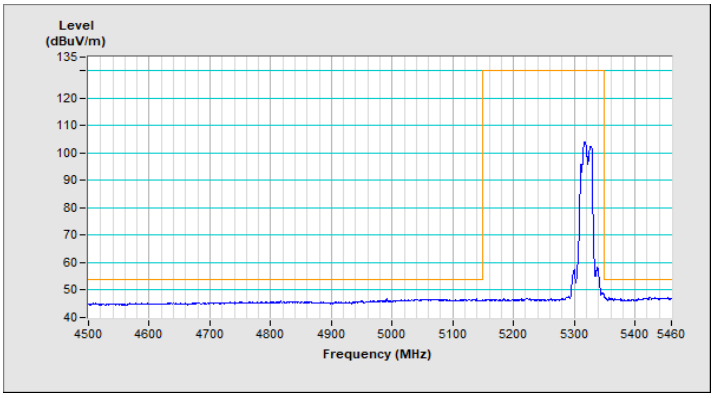
Horizontal (Peak)



Horizontal (Average)



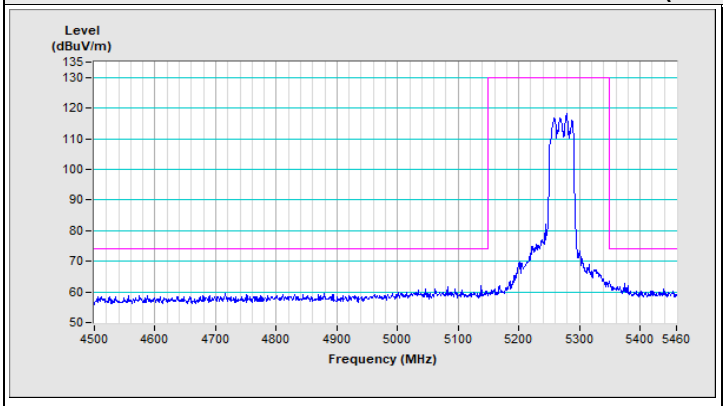
Vertical (Peak)



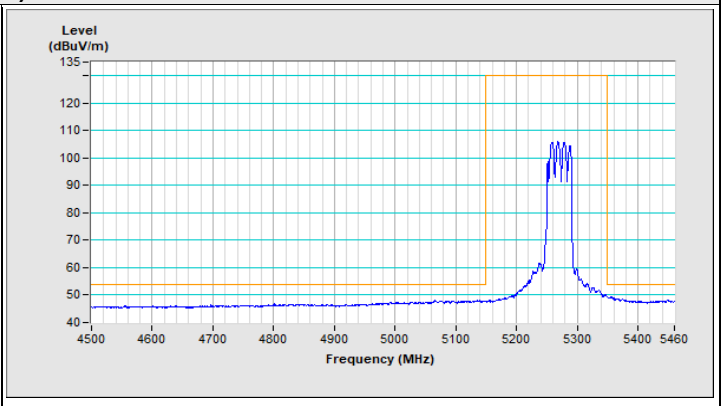
Vertical (Average)

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

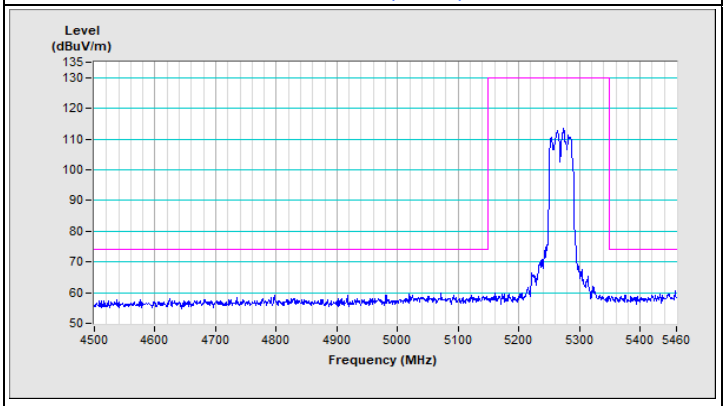
802.11ax (HE40) Channel 54



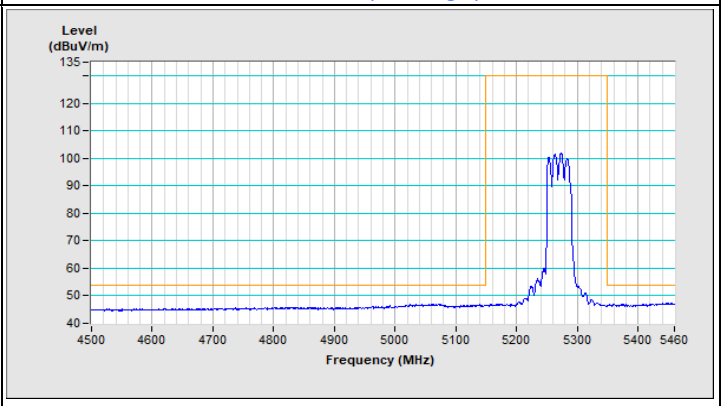
Horizontal (Peak)



Horizontal (Average)

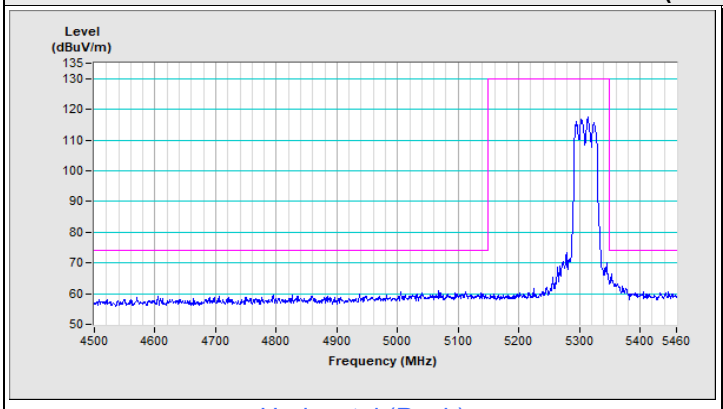


Vertical (Peak)

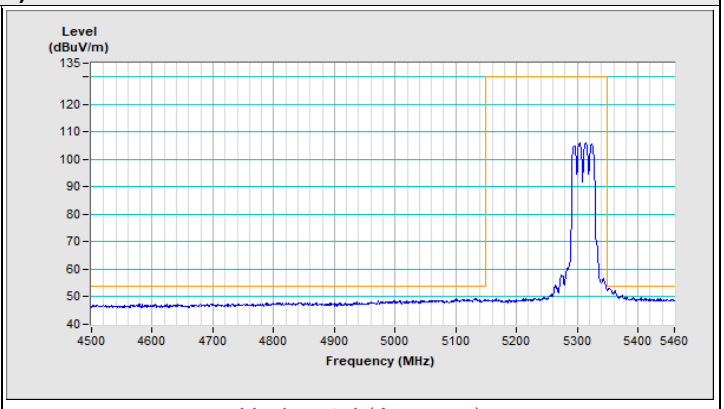


Vertical (Average)

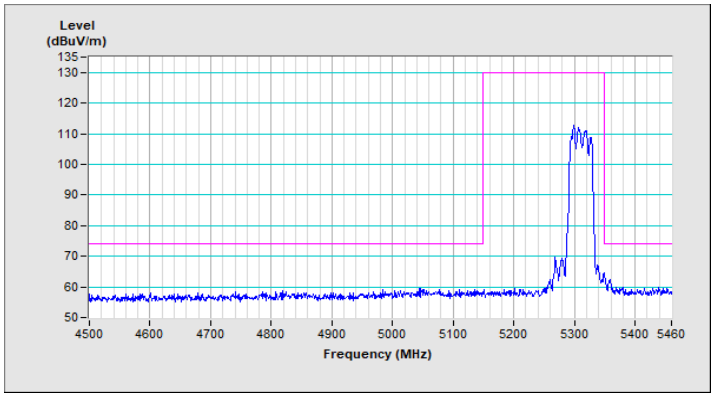
802.11ax (HE40) Channel 62



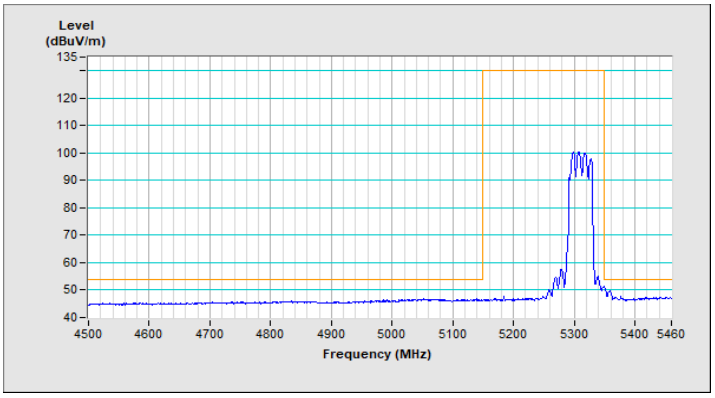
Horizontal (Peak)



Horizontal (Average)



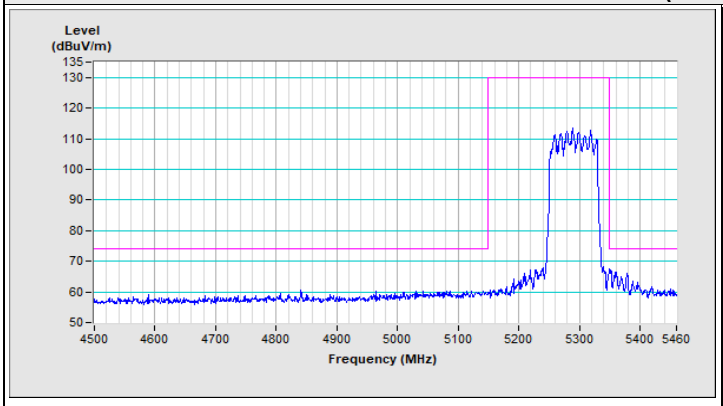
Vertical (Peak)



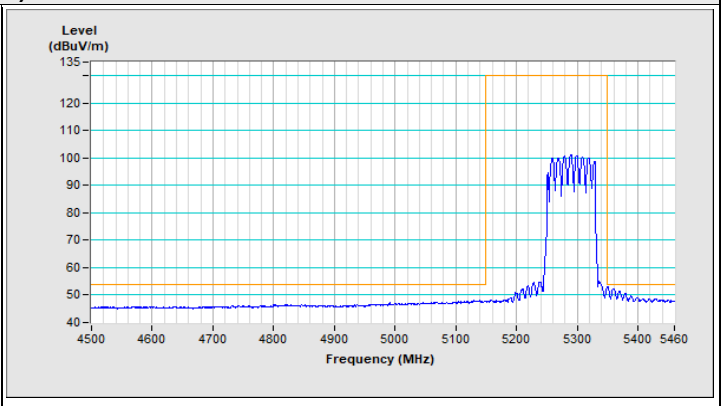
Vertical (Average)

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

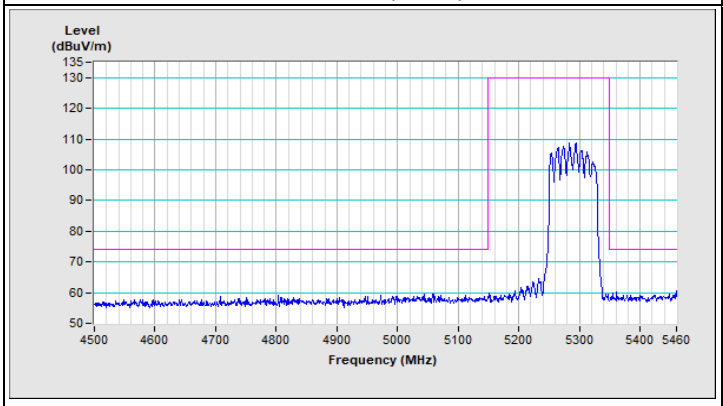
802.11ax (HE80) Channel 58



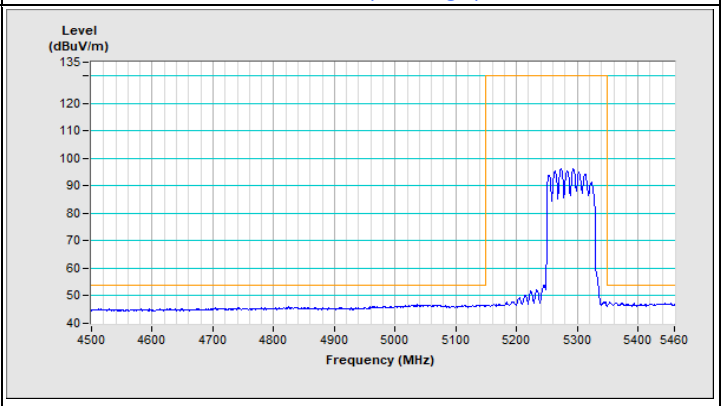
Horizontal (Peak)



Horizontal (Average)



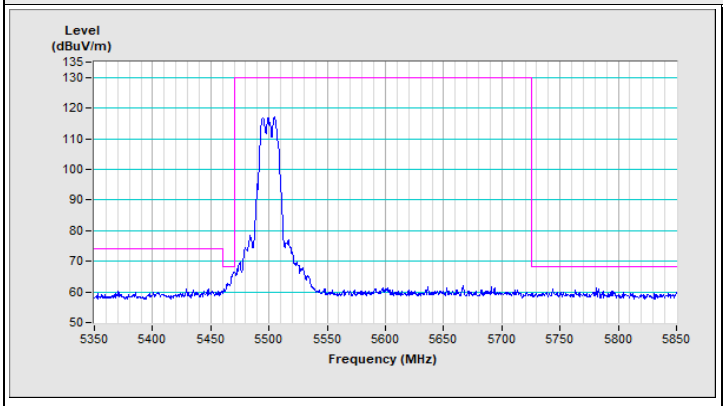
Vertical (Peak)



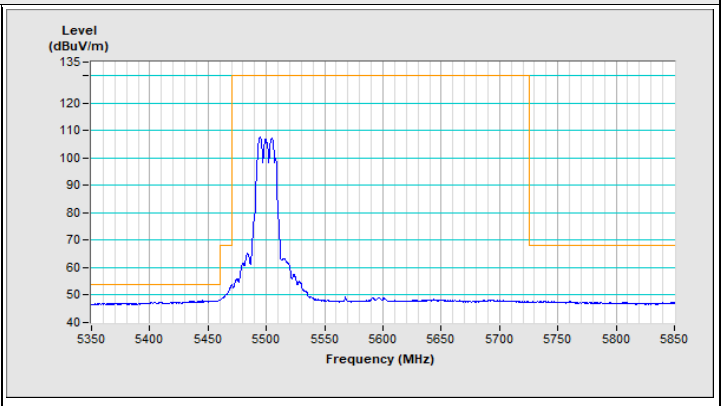
Vertical (Average)

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

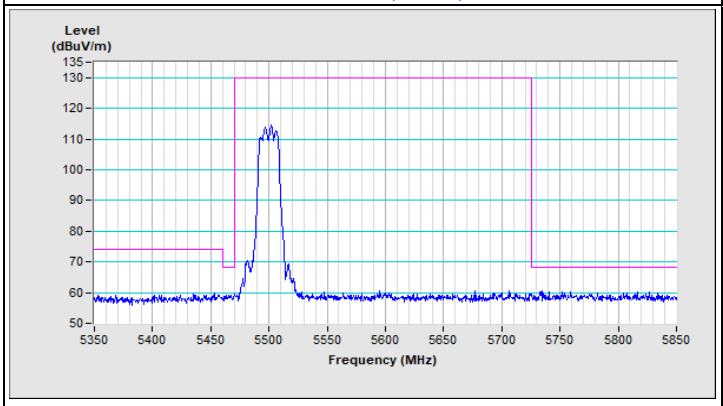
802.11a Channel 100



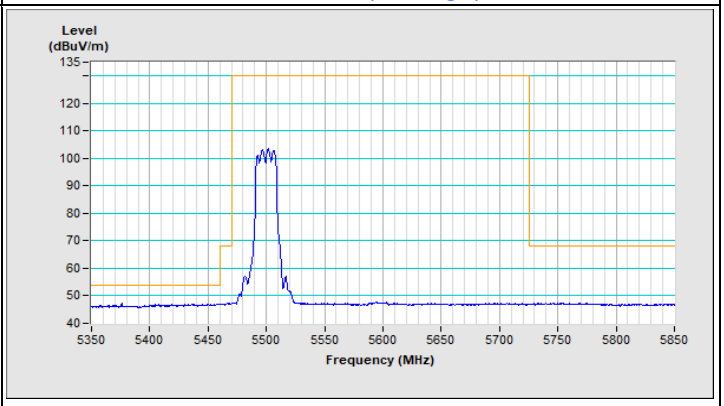
Horizontal (Peak)



Horizontal (Average)

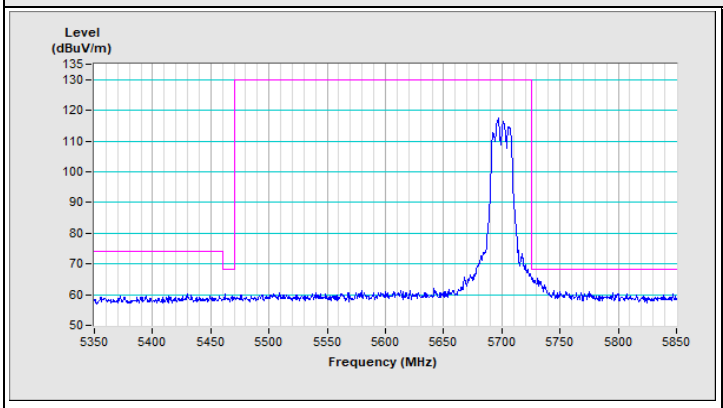


Vertical (Peak)

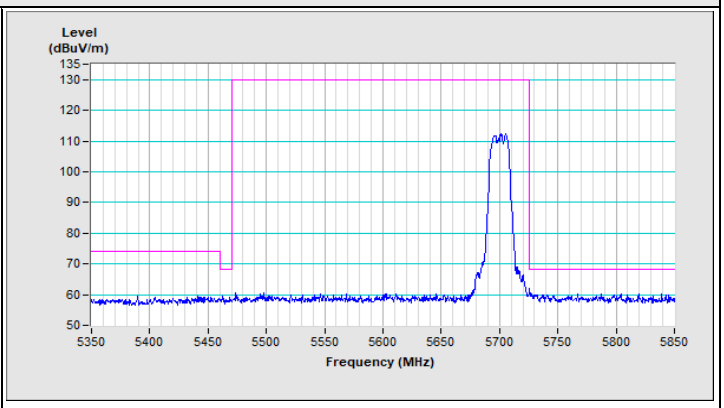


Vertical (Average)

802.11a Channel 140



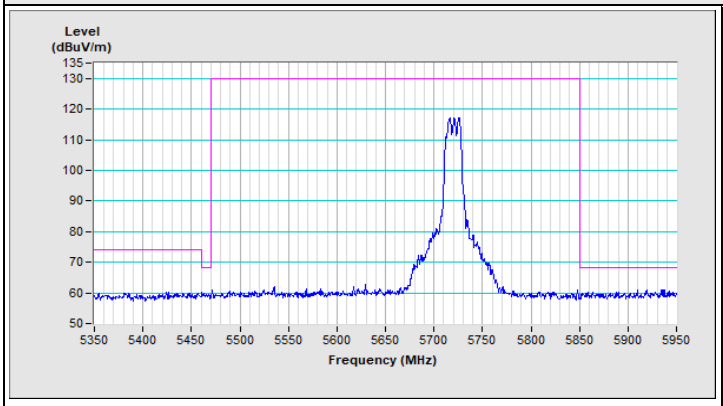
Horizontal (Peak)



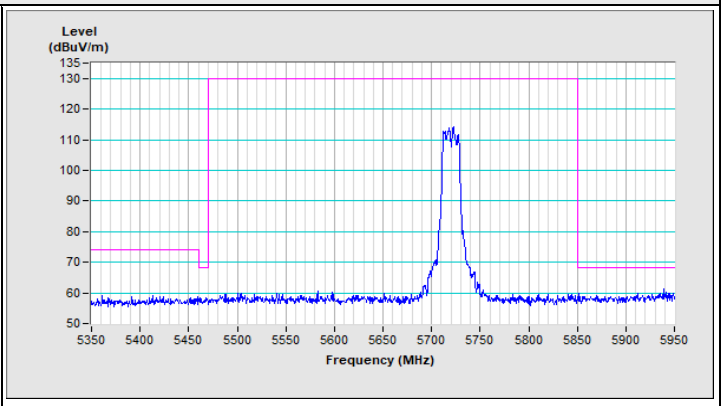
Vertical (Peak)

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

802.11a Channel 144



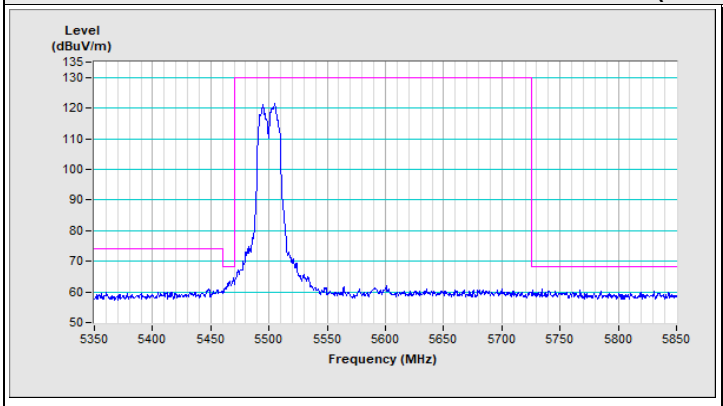
Horizontal (Peak)



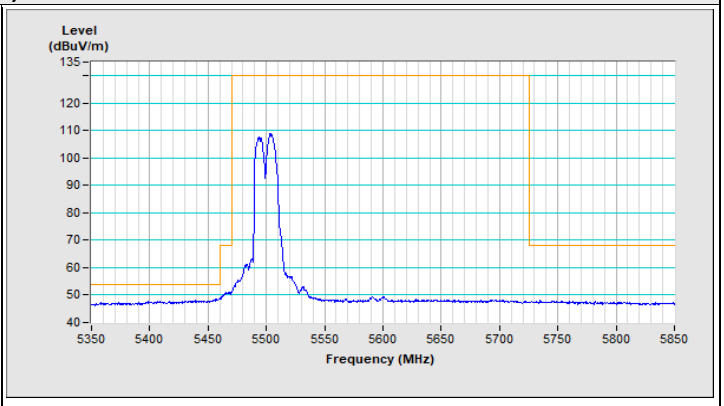
Vertical (Peak)

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

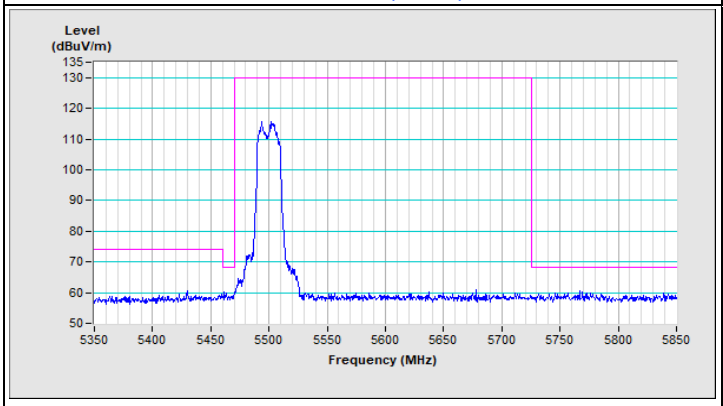
802.11ax (HE20) Channel 100



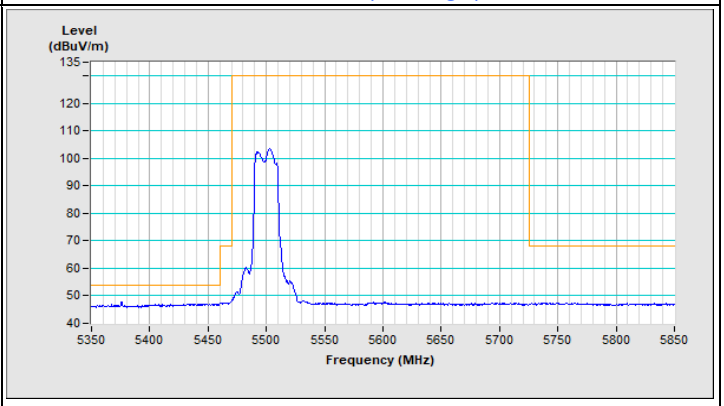
Horizontal (Peak)



Horizontal (Average)

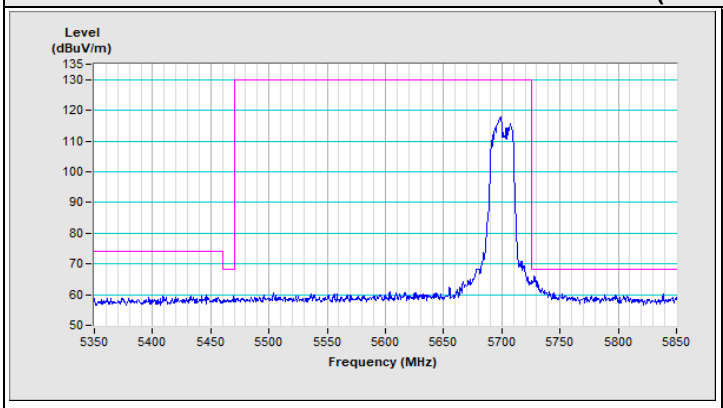


Vertical (Peak)

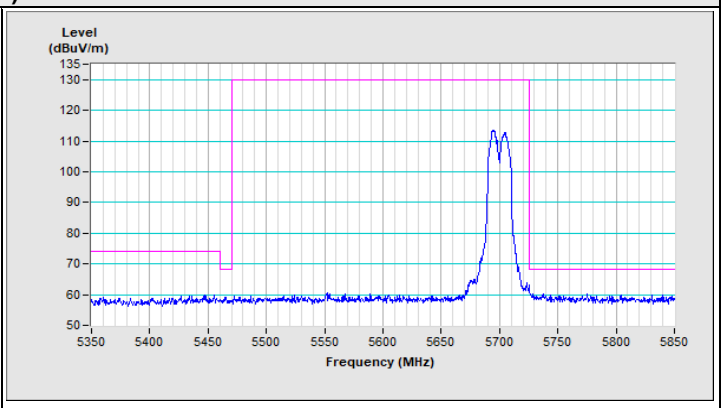


Vertical (Average)

802.11ax (HE20) Channel 140



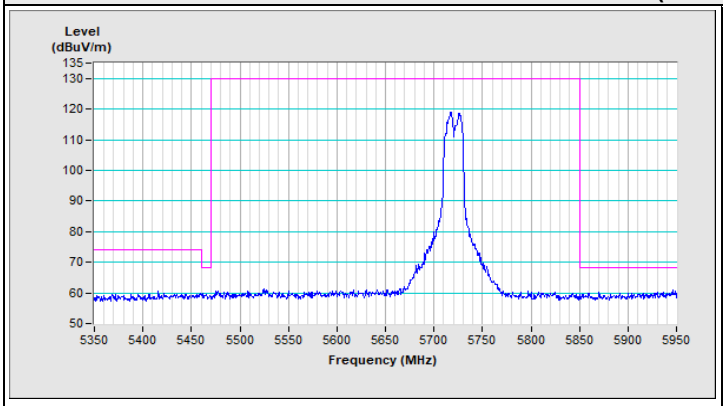
Horizontal (Peak)



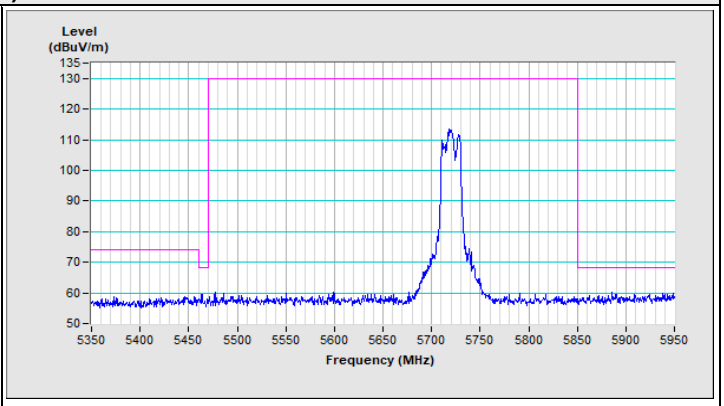
Vertical (Peak)

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

802.11ax (HE20) Channel 144



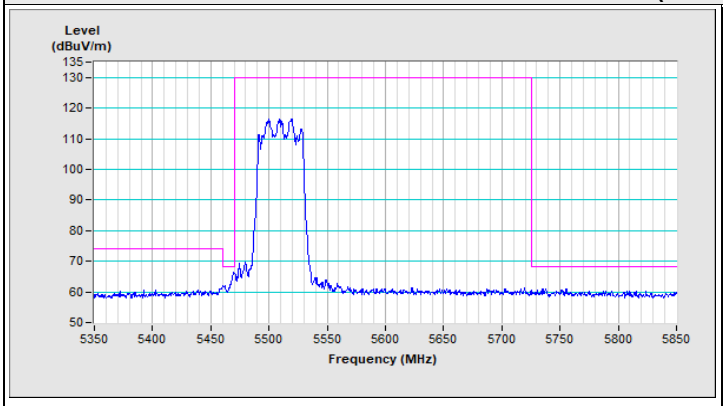
Horizontal (Peak)



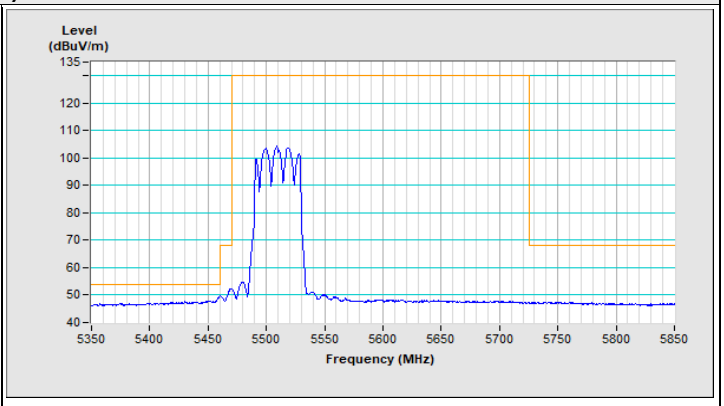
Vertical (Peak)

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

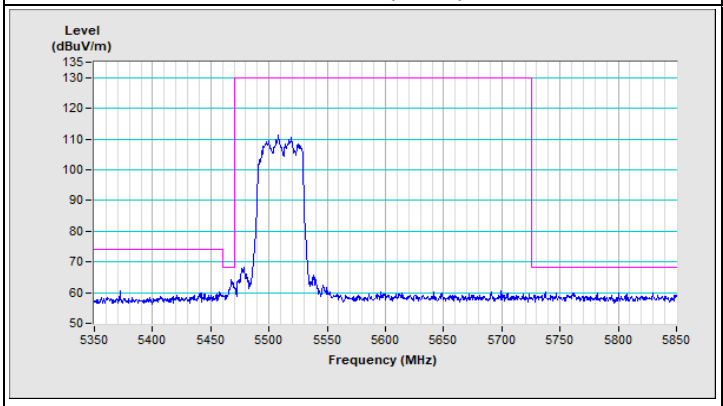
802.11ax (HE40) Channel 102



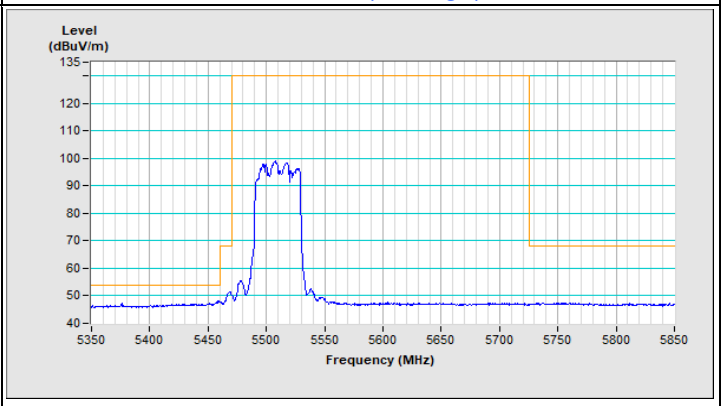
Horizontal (Peak)



Horizontal (Average)

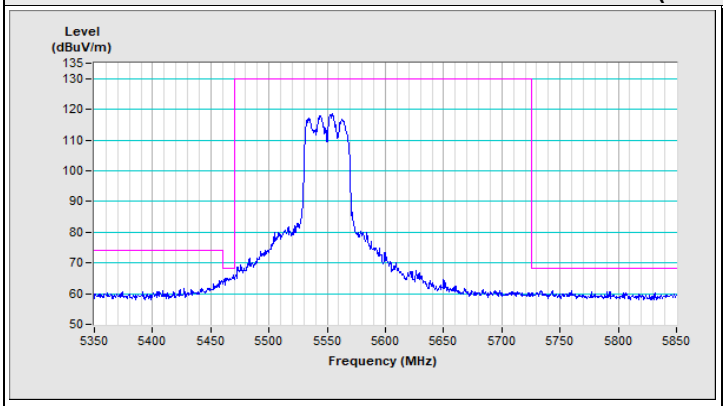


Vertical (Peak)

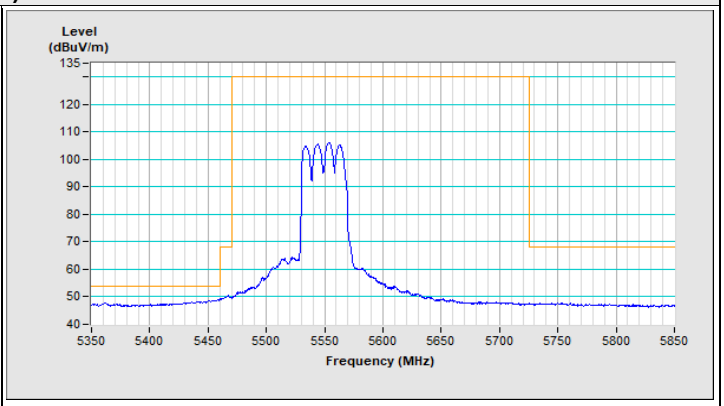


Vertical (Average)

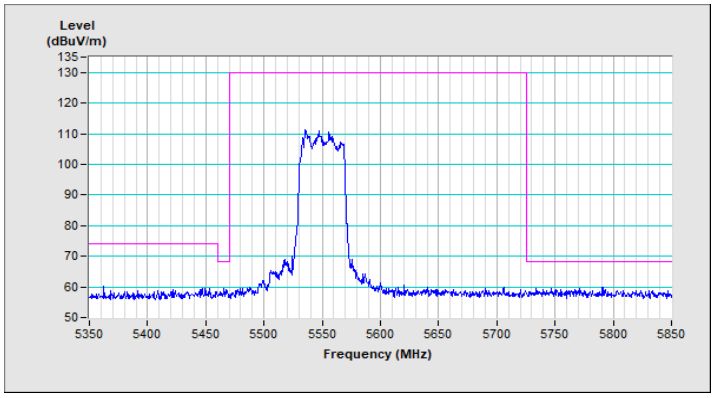
802.11ax (HE40) Channel 110



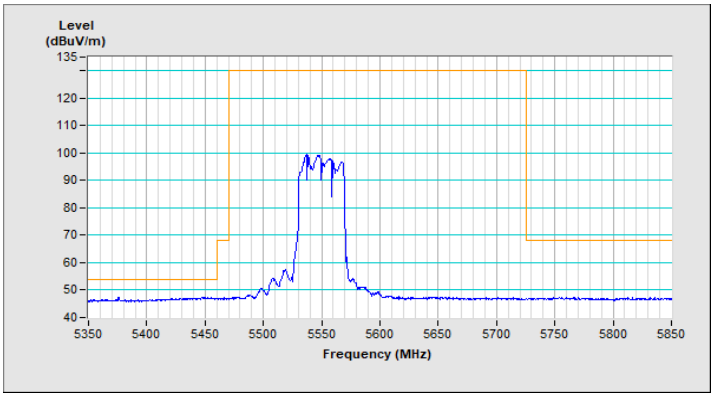
Horizontal (Peak)



Horizontal (Average)

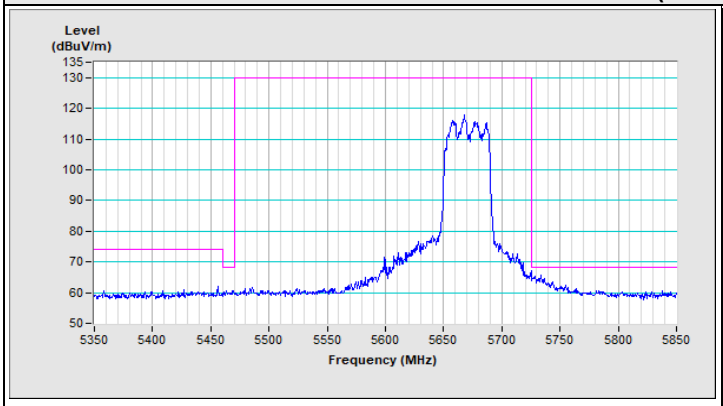


Vertical (Peak)

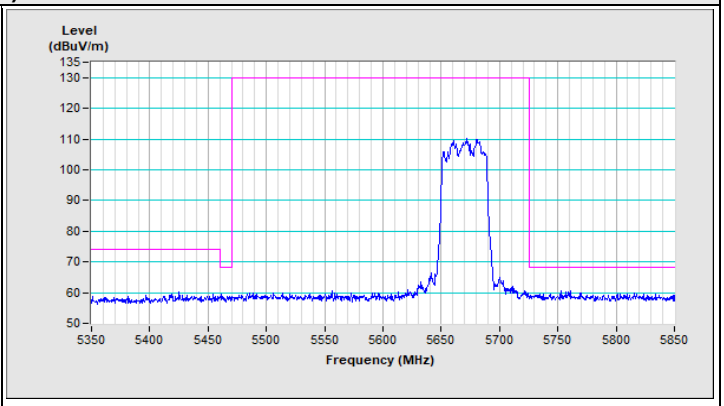


Vertical (Average)

802.11ax (HE40) Channel 134

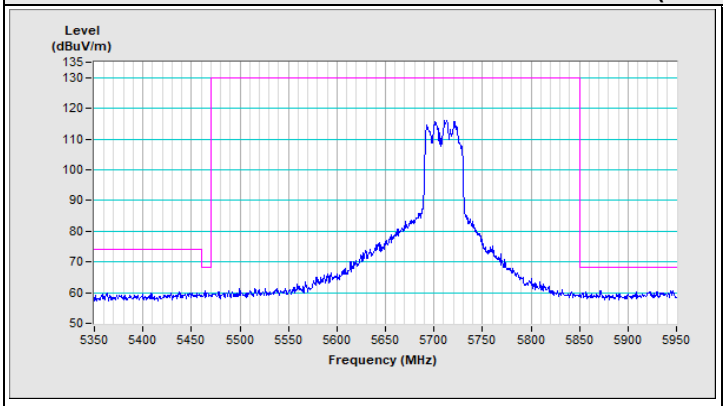


Horizontal (Peak)

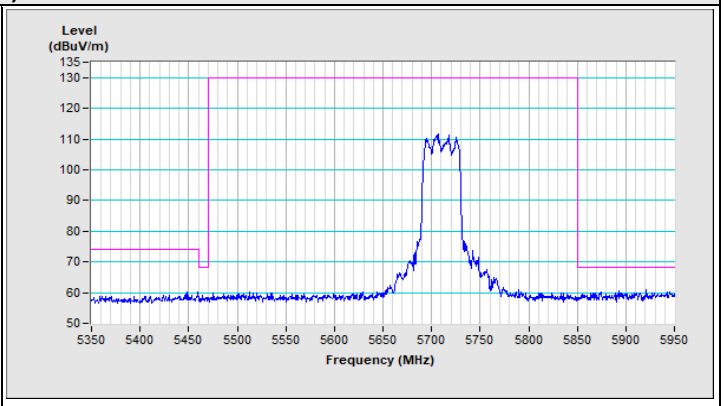


Vertical (Peak)

802.11ax (HE40) Channel 142



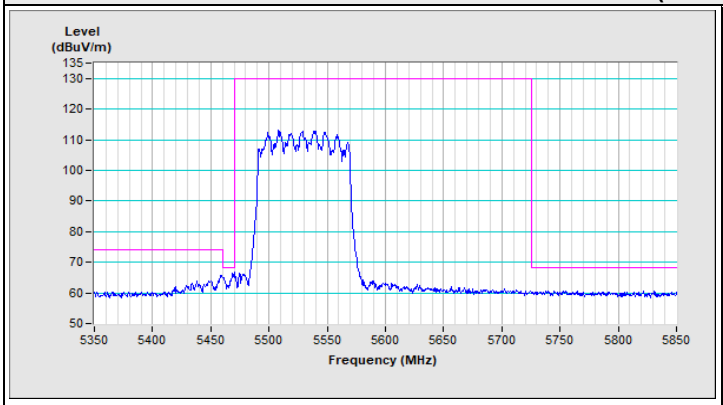
Horizontal (Peak)



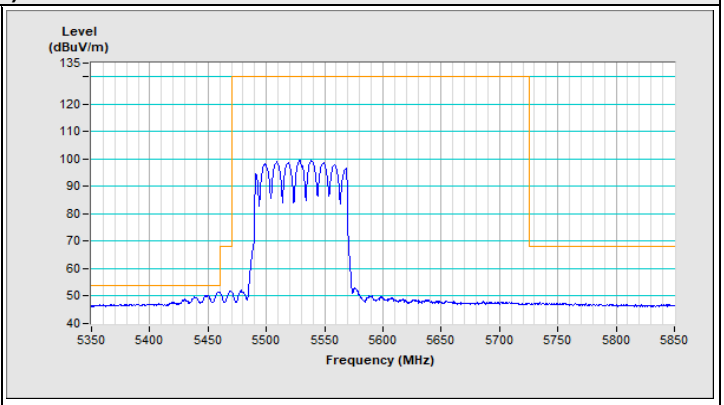
Vertical (Peak)

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

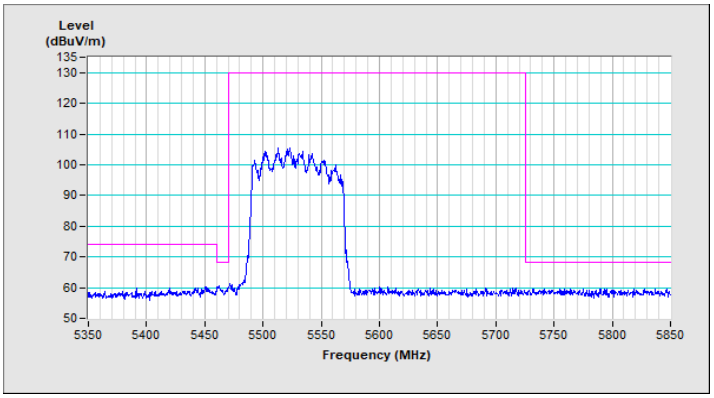
802.11ax (HE80) Channel 106



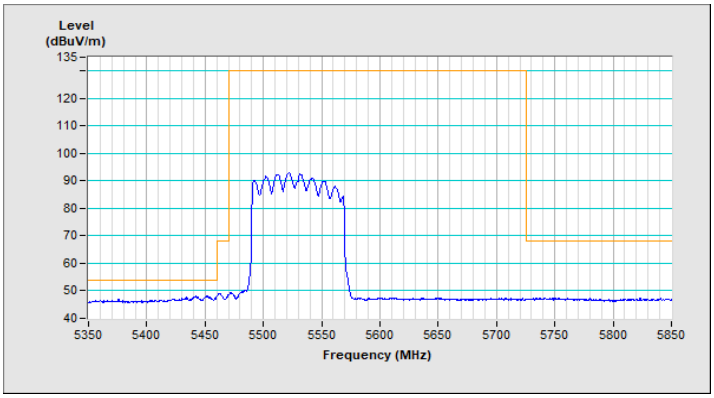
Horizontal (Peak)



Horizontal (Average)

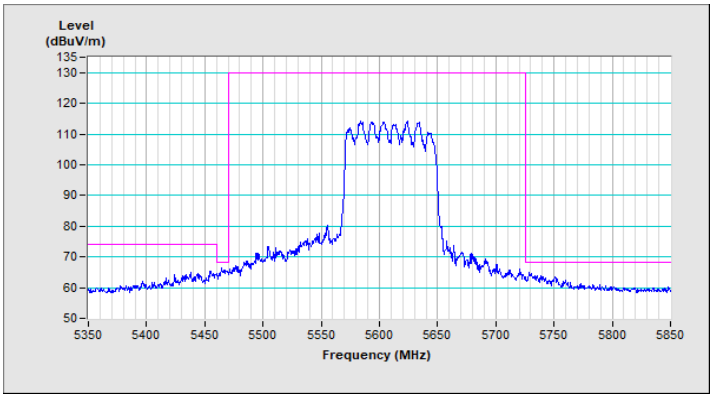


Vertical (Peak)

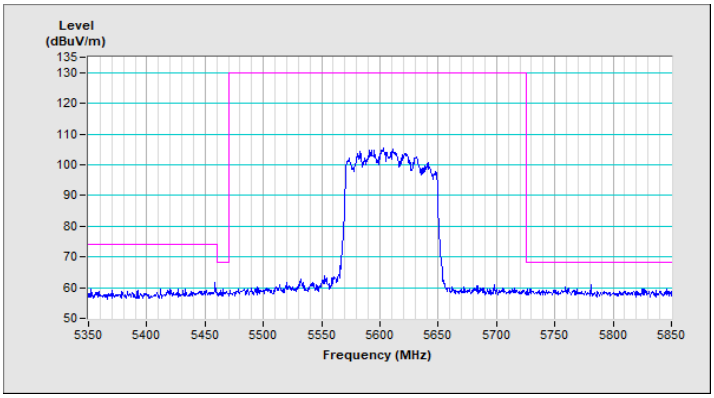


Vertical (Average)

802.11ax (HE80) Channel 122



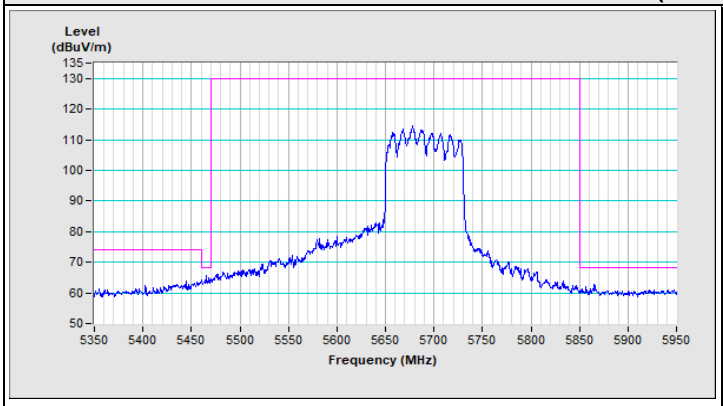
Horizontal (Peak)



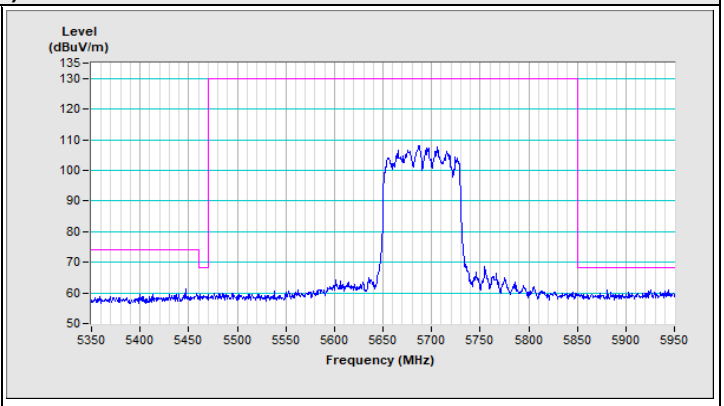
Vertical (Peak)

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

802.11ax (HE80) Channel 138



Horizontal (Peak)



Vertical (Peak)

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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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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