TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBEIH-WTW-P22110332-1
FCC ID:	P27-SCSIP0203
Product:	Stream TV
Brand:	Verizon
Model No.:	SC-SIP02
Series Model:	SC-SIP03, SC-SIPXX (the X should be 0 to 9, A to Z, a to z, "blank" or "-", for the marketing purpose)
Received Date:	2022/11/10
Test Date:	2022/12/14 ~ 2023/2/10
Issued Date:	2023/3/7
Applicant:	Sercomm Corp.
Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

Approved by: Jeremy Lin , **Date:** 2023/3/7

Jeremy Lin / Project Engineer

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Prepared by : Annie Chang / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBEIH-WTW-P22110332-1	Original release.	2023/3/7

1 Certificate

Product:	Stream TV
Brand:	Verizon
Test Model:	SC-SIP02
Series Model:	SC-SIP03, SC-SIPXX (the X should be 0 to 9, A to Z, a to z, "blank" or "-", for the marketing purpose)
Sample Status:	Engineering sample
Applicant:	Sercomm Corp.
Test Date:	2022/12/14 ~ 2023/2/10
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure:	ANSI C63.10-2013 KDB 789033 D02 General UNII Test Procedure New Rules v02r01 KDB 662911 D01 Multiple Transmitter Output v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	Pass	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1/2/3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -11.27 dB at 0.45078 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -5.2 dB at 44.50 MHz
15.407(b) (1/2/3/4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.3 dB at 11160.00 MHz
15.203	Antenna Requirement	Pass	No antenna connector is used.

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
AC Power Conducted Emissions	150 kHz ~ 30 MHz	3.00 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.38 dB
	30 MHz ~ 1 GHz	5.7 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 6 GHz	4.83 dB
	6 GHz ~ 18 GHz	5.37 dB
	18 GHz ~ 40 GHz	5.24 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	Stream TV
Brand	Verizon
Test Model	SC-SIP02
Series Model	SC-SIP03, SC-SIPXX (the X should be 0 to 9, A to Z, a to z, "blank" or "-", for the marketing purpose)
Model Difference	Refer to note as below
Status of EUT	Engineering sample
Power Supply Rating	5Vdc from USB interface
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax HE mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 1201.0 Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.26 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):25 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):12 802.11ac (VHT80), 802.11ax (HE80)):6
Output Power	5.18 GHz ~ 5.24 GHz : 182.613 mW (22.62 dBm) 5.26 GHz ~ 5.32 GHz : 189.973 mW (22.79 dBm) 5.5 GHz ~ 5.72 GHz : 194.019 mW (22.88 dBm) 5.745 GHz ~ 5.825 GHz : 137.624 mW (21.39 dBm)
EUT Category	Client device

Note:

1. The EUT has following two samples.

Sample	Test Model	Difference
1	SC-SIP02	OTT (2GB DDR)
2	SC-SIP03	FCL (4GB DDR)

2. The EUT uses following accessories.

Item	Brand	Model	Part Number	Remark
Remote Controller	Omni	RC461	RC4703101	for OTT (2GB DDR)
Remote Controller	Omni	RC562	RC4703102	for FCL (4GB DDR)
HDMI cable	-	-	-	Shielded 1.8m

3. The EUT uses following adapter.

Brand	Model	Rating
LEI	MU10AE050200UA1	Input: 100-240V, 50/60Hz, 0.3A Output: 5.0V, 2.0A

4. WLAN 2.4 GHz & WLAN 5 GHz & Bluetooth technology cannot transmit at same time.
5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna No.	Gain (dBi)			Antenna Type	Connector Type
	5150 MHz	5500 MHz	5850 MHz		
1	2.6	3.6	3.6	Dipole	IPEX
2	3.8	3.7	3.0	PIFA	NA

* 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. 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 5180 ~ 5320 MHz

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

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

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

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

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

Channel	Frequency	Channel	Frequency
42	5210 MHz	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		

FOR 5745 ~ 5825 MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

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

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1.EUT has Sample1、Sample2. Pre-Scan and find the worst case as a representative test condition.Sample1 =>OTT(2GB DDR size) / Sample2 =>OTT(4GB DDR size). 2.HDMI cable has Grey/Black color. Pre-Scan and find the worst case as a representative test condition. 3. EUT can be used in the following ways: XYZ 3-axis. Pre-scan in these ways and find the worst case as a representative test condition. 4. For Unwanted Emission below/ above 1 GHz has EUT with USB cable(Adapter) / EUT with USB cable(Laptop) mode of power supply. Pre-scan these modes and find the worst case as a representative test condition.
Worst Case:	1. Sample1/ Sample2 Worst Condition: Sample1 =>OTT(2GB DDR size). 2. HDMI cable Grey/ Black Worst Condition: Black 3. XYZ Worst Condition: X-axis 4. For Unwanted Emission below/ above 1 GHz : EUT with USB cable(Adapter)

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

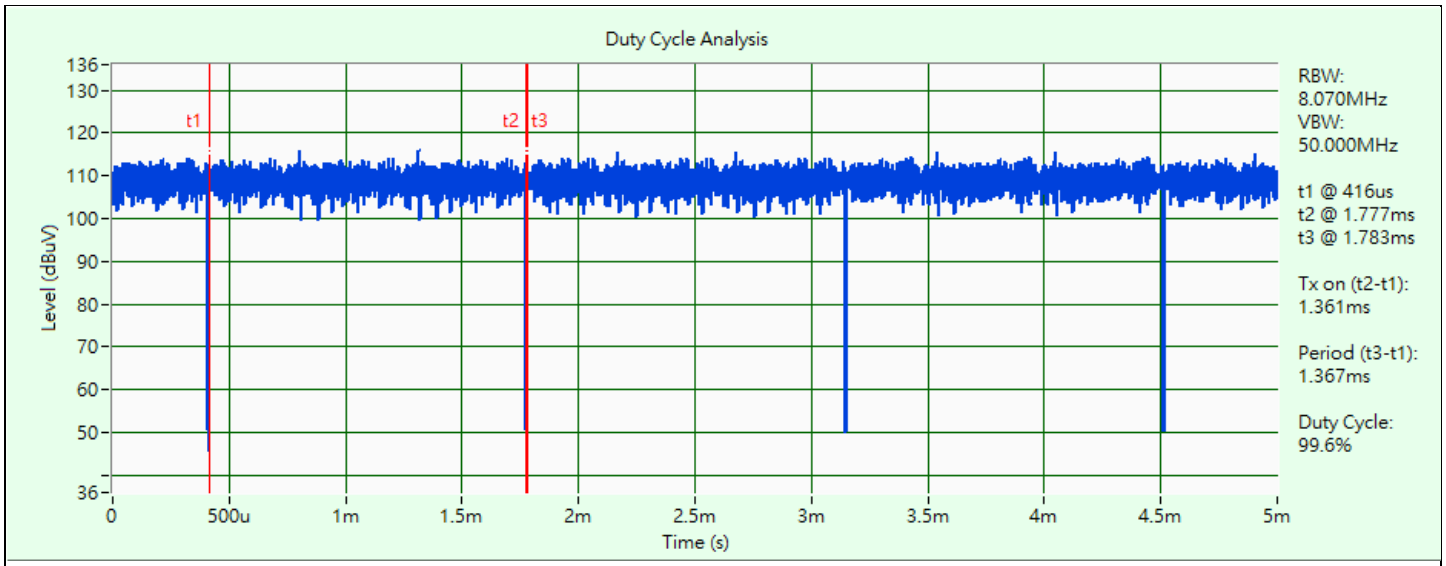
Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	A	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
6 dB Bandwidth	A	802.11a	CDD	144, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	144, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	142, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	138, 155	BPSK	MCS0
Occupied Bandwidth / Power Spectral Density / 26 dB Bandwidth	A	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
Frequency Stability	A	802.11a	-	36	un-modulation	-

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	A	802.11ax (HE20)	CDD	100	BPSK	MCS0
	B	802.11ax (HE20)	CDD	100	BPSK	MCS0
Unwanted Emissions below 1 GHz	A	802.11ax (HE20)	CDD	100	BPSK	MCS0
Unwanted Emissions above 1 GHz	A	802.11a	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s
		802.11ax (HE20)	CDD	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0
		802.11ax (HE40)	CDD	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0
		802.11ax (HE80)	CDD	42, 58, 106, 122, 138, 155	BPSK	MCS0
EUT Configure Mode:	A	EUT with USB cable(Adapter)				
	B	EUT with USB cable(Laptop)				

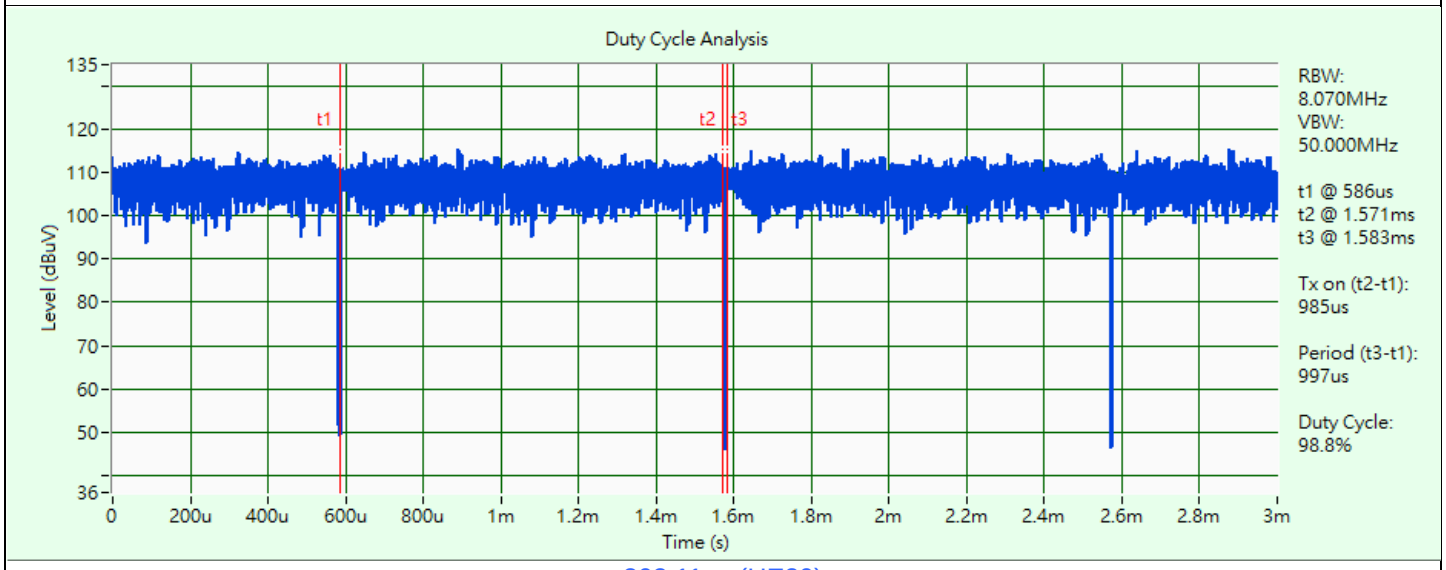
3.5 Duty Cycle of Test Signal

Mode A

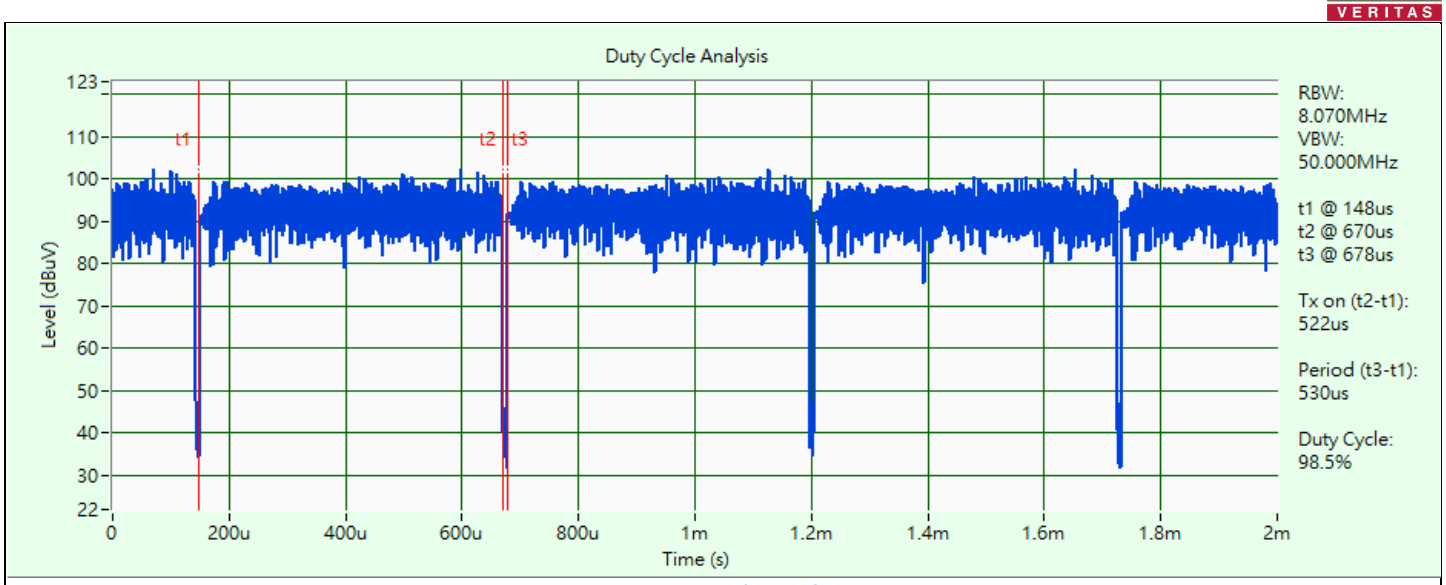
802.11a: Duty cycle = 1.361 ms / 1.367 ms x 100% = 99.6%
802.11ax (HE20): Duty cycle = 0.985 ms / 0.997 ms x 100% = 98.8%
802.11ax (HE40): Duty cycle = 0.522 ms / 0.53 ms x 100% = 98.5%
802.11ax (HE80): Duty cycle = 0.28 ms / 0.285 ms x 100% = 98.2%



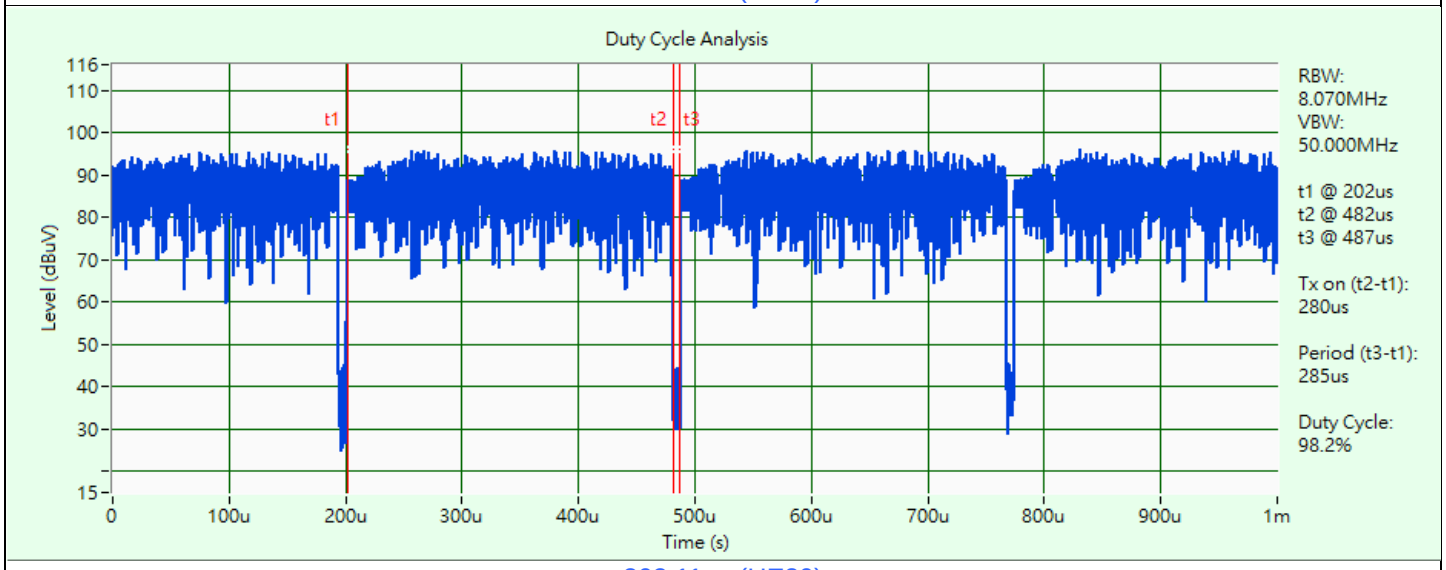
802.11a



802.11ax (HE20)



802.11ax (HE40)



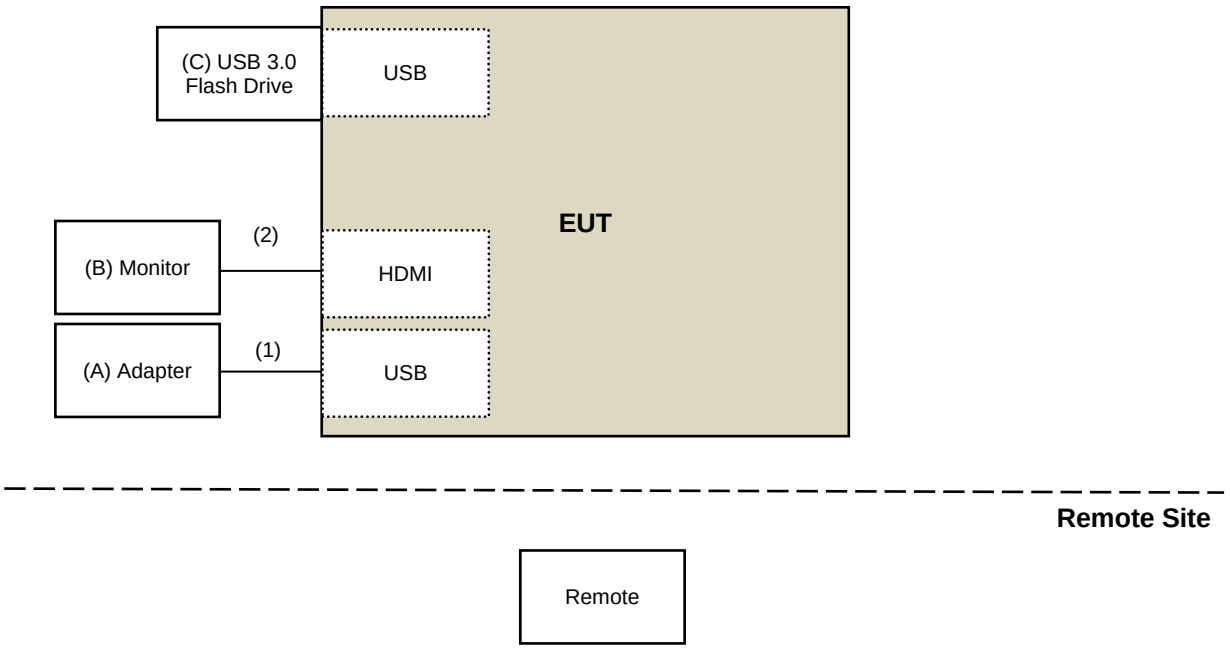
802.11ax (HE80)

3.6 Test Program Used and Operation Descriptions

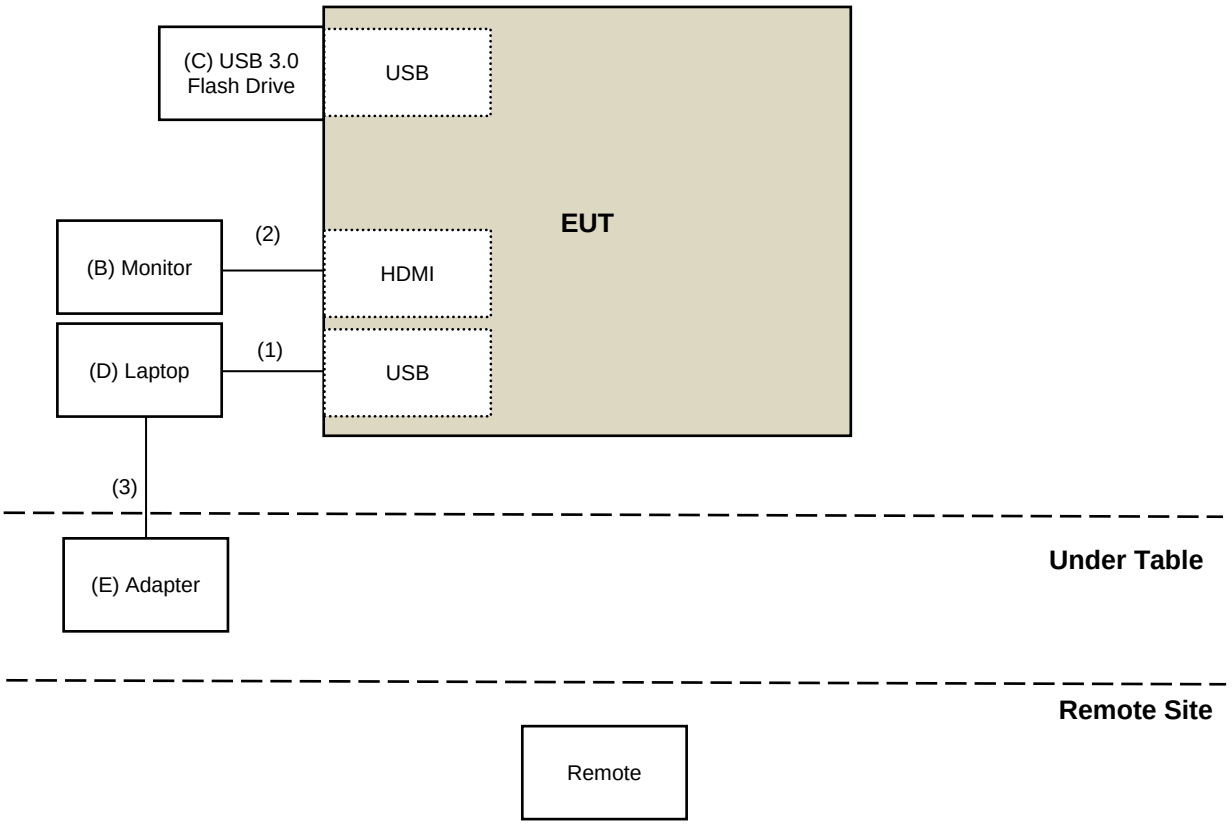
Controlling software (ADB v1.0.31) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

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	Adapter	LEI	MU10AE050200UA1	N/A	N/A	Supplied by applicant
B	Monitor	ASUS	PA279CV	M7LMTF235926	DoC	Provided by Lab
C	USB 3.0 Flash Drive	HP	v250w	N/A	DoC	Provided by Lab
D	Laptop	Lenovo	IdeaPad 5 15ITL05	N/A	N/A	Provided by Lab
E	Adapter	Lenovo	PA-1450-55LL	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Type C to USB Cable	1	2	Y	0	Supplied by applicant
2	HDMI Cable	1	1.8	Y	0	Supplied by applicant
3	DC Cable	1	1.8	N	0	Provided by Lab

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MIMO Powermeasurement Test set (4X4) KEYSIGHT	U2021XA	U2021XA_001	2022/6/13	2023/6/12
MXG Vector Signal Generator KEYSIGHT	N5182B	MY53052658	2022/5/9	2023/5/8
Power Meter Anritsu	ML2495A	1232003	2022/1/9	2023/1/8
Power Sensor Anritsu	MA2411B	1207333	2022/1/9	2023/1/8
Spectrum Analyzer KEYSIGHT	N9030A	MY54490260	2022/7/14	2023/7/13
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
		101544	2022/5/9	2023/5/8
Temperature & Humidity Chamber TERCHY	MHU-225AU	920409	2022/6/27	2023/6/26
Voltage Meter FLUKE	179	89610322	2022/10/3	2023/10/2

Notes:

1. The test was performed in LK - Oven
2. Tested Date: 2022/12/20

4.2 RF Output Power

Refer to section 4.1 to get information of the instruments.

4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

4.6 Frequency Stability

Refer to section 4.1 to get information of the instruments.

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal LYNICS	0900510	E1-011285	2022/9/19	2023/9/18
		E1-011286	2022/9/19	2023/9/18
Attenuator STI	STI02-2200-10	NO.4	2022/9/2	2023/9/1
DC LISN R&S	ESH3-Z6	100219	2022/8/2	2023/8/1
		844950/018	2022/8/2	2023/8/1
DC LISN Schwarzbeck	NNLK 8121	8121-808	2022/4/29	2023/4/28
High Voltage Probe Schwarzbeck	TK9420	00982	2022/12/14	2023/12/13
Isolation Transformer Erika Fiedler	D-65396	017	2022/9/8	2023/9/7
LISN R&S	ENV216	101196	2022/5/24	2023/5/23
LISN Schwarzbeck	NNLK 8121	8121-731	2022/5/26	2023/5/25
		8121-00759	2022/8/18	2023/8/17
	NNLK8129	8129229	2022/6/8	2023/6/7
	NSLK 8128	8128-244	2022/11/8	2023/11/7
RF Coaxial Cable Commate	5D-FB	Cable-CO5-01	2023/1/19	2024/1/18
Software BVADT	Cond_V7.3.7.4	N/A	N/A	N/A
Test Receiver R&S	ESR3	102412	2022/12/21	2023/12/20

Notes:

1. The test was performed in Linkou Conduction 5.
2. Tested Date: 2023/2/10

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
* LOOP ANTENNA EMCI	LPA600	270	2021/9/2	2023/9/1
Bi_Log Antenna Schwarzbeck	VULB 9168	137	2022/10/21	2023/10/20
Coupling/Dcoupling Network Schwarzbeck	CDNE-M2	00097	2022/6/1	2023/5/31
	CDNE-M3	00091	2022/6/1	2023/5/31
Pre_Amplifier EMCI	EMC001340	980269	2022/6/28	2023/6/27
Pre_Amplifier HP	8447D	2432A03504	2022/2/17	2023/2/16
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2022/6/30	2023/6/29
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101544	2022/5/9	2023/5/8
Test Receiver Agilent	N9038A	MY51210129	2022/4/8	2023/4/7
		MY51210137	2022/6/9	2023/6/8
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. * The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA
2. The test was performed in Linkou 966 Chamber 6 (CH 6).
3. Tested Date: 2023/2/9

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Band Pass Filter MICRO-TRONICS	BRM17690	005	2022/5/26	2023/5/25
Boresight antenna tower fixture BV	BAF-02	6	N/A	N/A
High Pass Filter Wainwright Instruments	WHK 3.1/18G-10SS	SN 8	2022/5/26	2023/5/25
Horn Antenna EMCO	3115	00027024	2022/11/13	2023/11/12
		00028257	2022/11/13	2023/11/12
Horn Antenna ETS-Lindgren	3117-PA	00215857	2022/11/13	2023/11/12
Horn Antenna Schwarzbeck	BBHA 9170	212	2022/10/20	2023/10/19
Notch Filter MICRO-TRONICS	BRC50703-01	010	2022/5/26	2023/5/25
Pre-amplifier HP	8449B	3008A01201	2022/2/17	2023/2/16
Pre-amplifier (18GHz-40GHz) EMCI	EMC184045B	980175	2022/9/3	2023/9/2
Pre_Amplifier EMCI	EMC0126545	980076	2022/2/17	2023/2/16
	EMC184045B	980235	2022/2/17	2023/2/16
RF Coaxial Cable EM	EM102-KMKM-3.5+1M	EM102-KMKM-3.5+1M-01	2022/7/7	2023/7/6
RF Coaxial Cable EMCI	EMC104	190801	2022/7/7	2023/7/6
		190804	2022/7/7	2023/7/6
RF Coaxial Cable HUBER SUHNER	SF-104	Cable-CH6-01	2022/9/20	2023/9/19
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Agilent	E4446A	MY51100009	2022/6/27	2023/6/26
Spectrum Analyzer KEYSIGHT	N9030A	MY54490260	2022/7/14	2023/7/13
Spectrum Analyzer R&S	FSV40	101042	2022/9/5	2023/9/4
		101544	2022/5/9	2023/5/8
Test Receiver Agilent	N9038A	MY51210129	2022/4/8	2023/4/7
		MY51210137	2022/6/9	2023/6/8
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2022/12/14 ~ 2022/12/20

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250mW (24 dBm)

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

*B is the 26 dB emission bandwidth in megahertz

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

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

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

5.3 Power Spectral Density

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	17 dBm/ MHz
	Fixed point-to-point Access Point	
	Indoor Access Point	
	Mobile and Portable client device	11 dBm/ MHz

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

5.4 6 dB Bandwidth

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

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Frequency Stability

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

5.7 AC Power Conducted Emissions

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

Notes:

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

5.8 Unwanted Emissions below 1 GHz

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

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

5.9 Unwanted Emissions above 1 GHz

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

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

Notes:

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

Limits of unwanted emission out of the restricted bands

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

For transmitters operating in the 5.15-5.25 GHz band:

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

For transmitters operating in the 5.25-5.35 GHz band:

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

For transmitters operating in the 5.47-5.725 GHz band:

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

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2 (dBµV/m) *1 PK: 105.2 (dBµV/m) *2 PK: 110.8 (dBµV/m) *3 PK: 122.2 (dBµV/m) *4
*1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

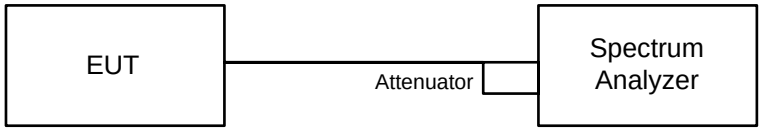
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

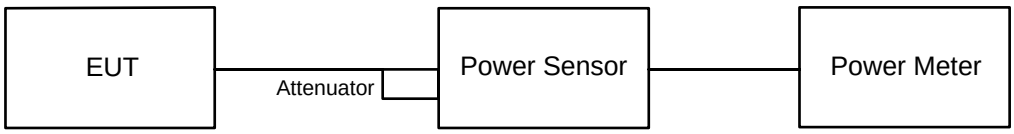


6.1.2 Test Procedure

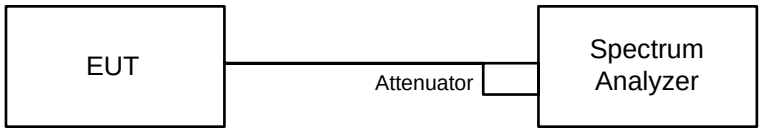
a. Set RBW = approximately 1% of the emission bandwidth.
b. Set the VBW > RBW.
c. Detector = Peak.
d. Trace mode = max hold.
e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



6.2.2 Test Procedure

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

For channel straddling:

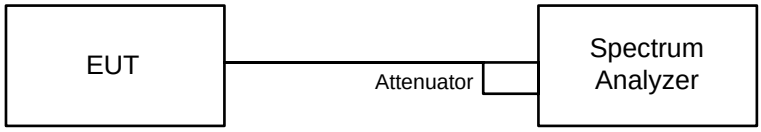
Method SA-1

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

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument’s band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:
Method SA-1

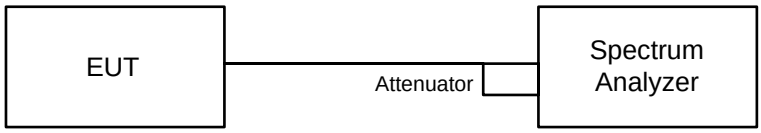
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
d. Sweep time = auto, trigger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

For specified measurement bandwidth 500 kHz:
Method SA-1

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

6.4 6 dB Bandwidth

6.4.1 Test Setup

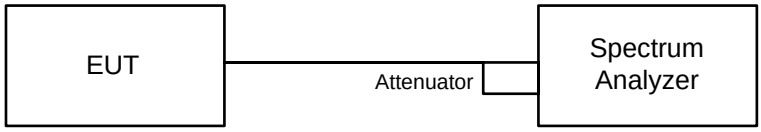


6.4.2 Test Procedure

a. Set resolution bandwidth (RBW) = 100 kHz.
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.5 Occupied Bandwidth

6.5.1 Test Setup

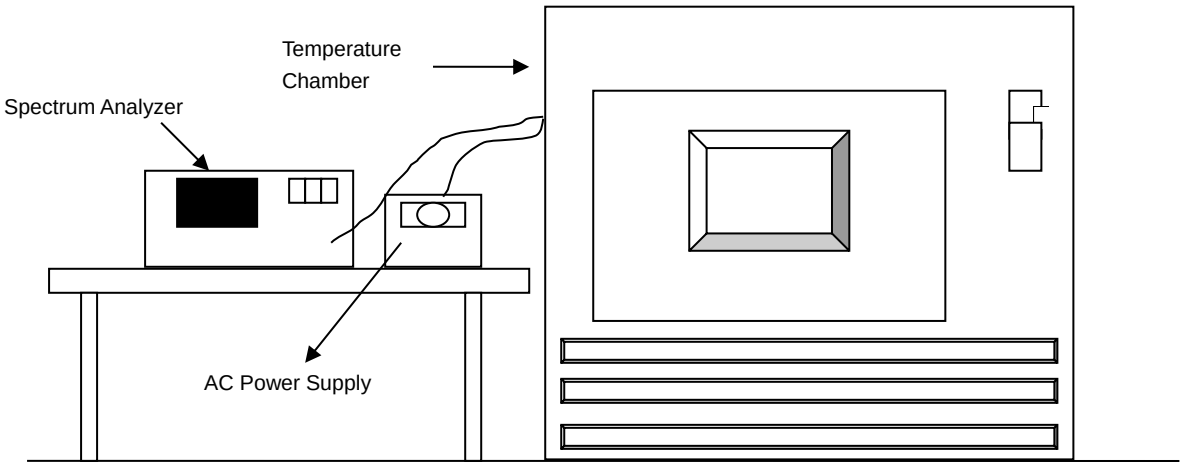


6.5.2 Test Procedure

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

6.6 Frequency Stability

6.6.1 Test Setup

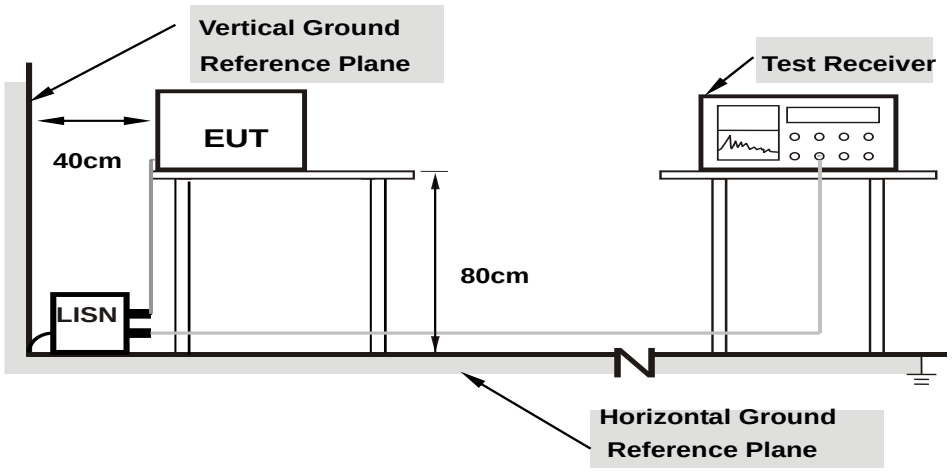


6.6.2 Test Procedure

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

6.7 AC Power Conducted Emissions

6.7.1 Test Setup



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

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

6.7.2 Test Procedure

a. The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.

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

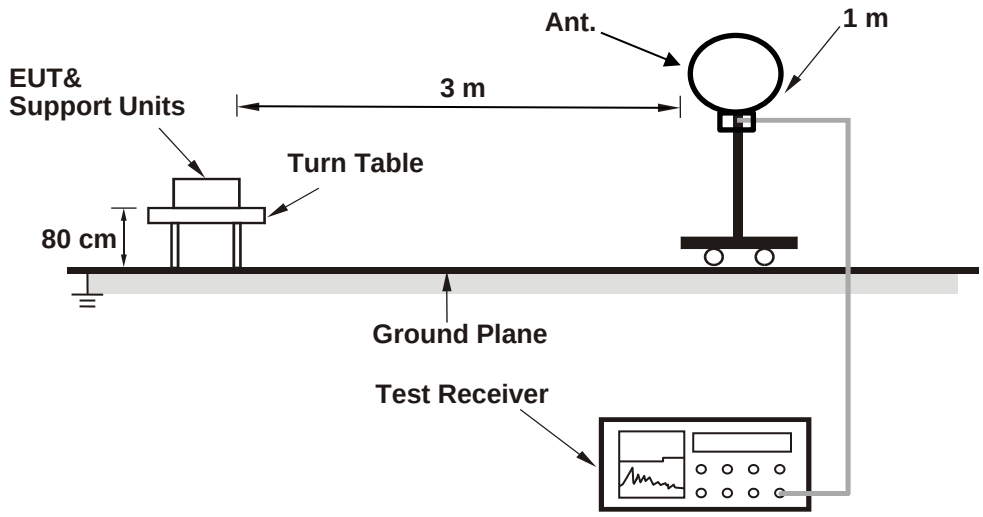
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

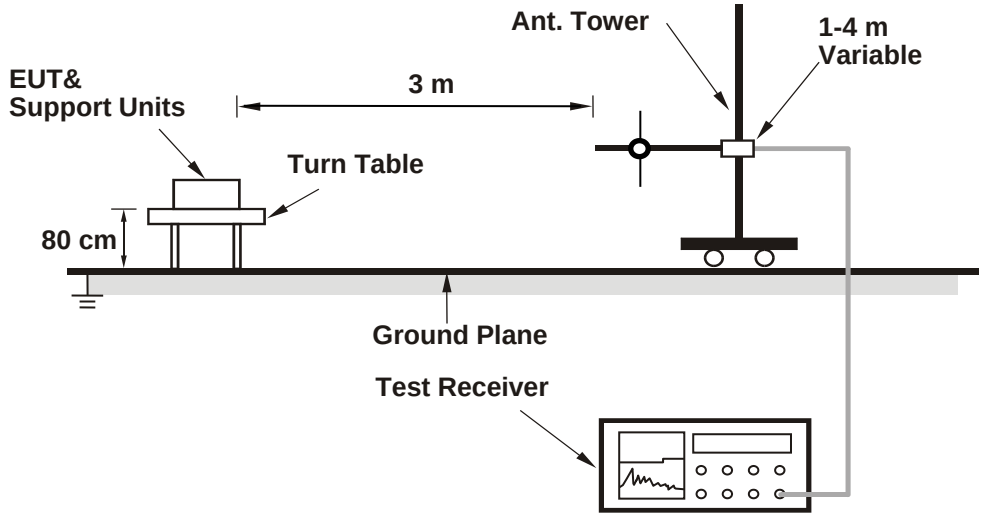
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.8.2 Test Procedure

For Radiated emission below 30 MHz

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

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

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

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

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

Notes:

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

For Radiated emission above 30 MHz

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

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

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

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

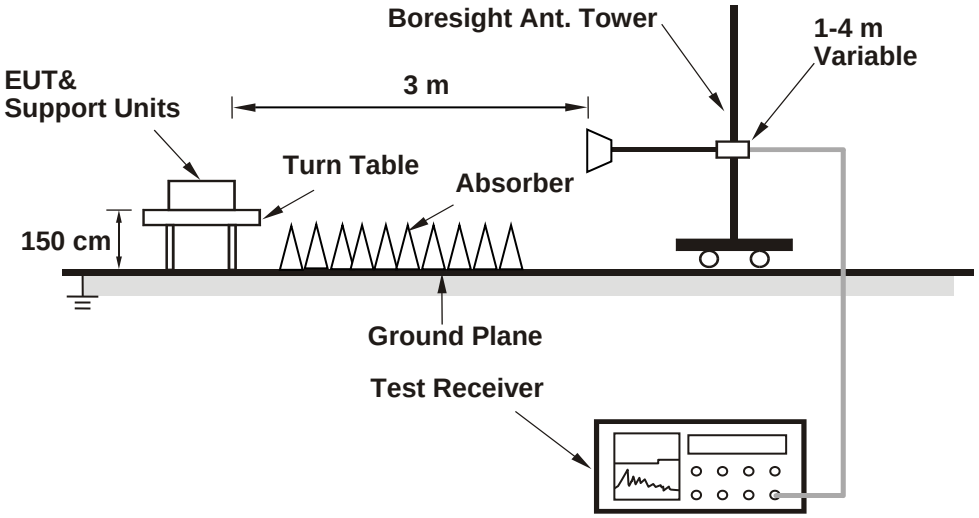
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

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

6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup



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

6.9.2 Test Procedure

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

e. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
2. 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

Mode A

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan

802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	18.87	18.88
60	5300	18.88	18.91
64	5320	18.85	18.94
100	5500	18.91	18.85
116	5580	18.84	18.85
140	5700	18.93	18.75
144 (U-NII-2C)	5720	14.44	14.42
144 (U-NII-3)	5720	4.46	4.35

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	18.87	23.75	<	24
60	5300	18.88	23.76	<	24
64	5320	18.85	23.75	<	24
100	5500	18.85	23.75	<	24
116	5580	18.84	23.75	<	24
140	5700	18.75	23.73	<	24
144 (U-NII-2C)	5720	14.42	22.58	<	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	20.83	20.86
60	5300	20.88	20.88
64	5320	20.89	20.90
100	5500	20.86	20.86
116	5580	20.89	20.89
140	5700	20.87	20.87
144 (U-NII-2C)	5720	15.43	15.46
144 (U-NII-3)	5720	5.42	5.41

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.83	24.18	>	24
60	5300	20.88	24.19	>	24
64	5320	20.89	24.19	>	24
100	5500	20.86	24.19	>	24
116	5580	20.89	24.19	>	24
140	5700	20.87	24.19	>	24
144 (U-NII-2C)	5720	15.43	22.88	<	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	41.26	41.28
62	5310	41.21	41.31
102	5510	41.29	41.25
110	5550	41.36	41.29
134	5670	41.22	41.34
142 (U-NII-2C)	5710	35.56	35.66
142 (U-NII-3)	5710	5.65	5.67

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	41.26	27.15	>	24
62	5310	41.21	27.15	>	24
102	5510	41.25	27.15	>	24
110	5550	41.29	27.15	>	24
134	5670	41.22	27.15	>	24
142 (U-NII-2C)	5710	35.56	26.5	>	24

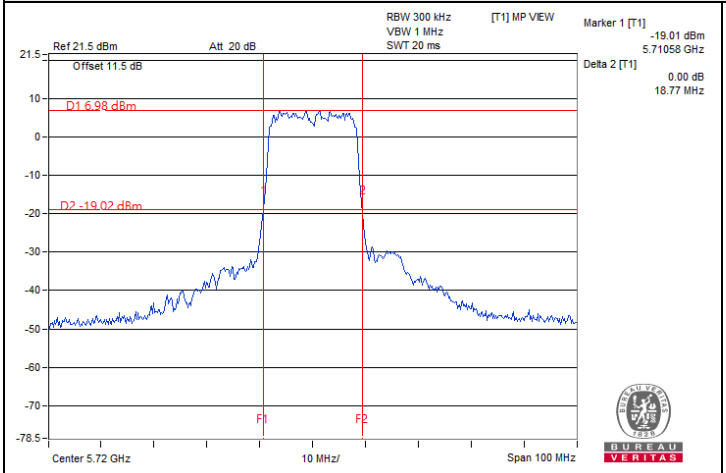
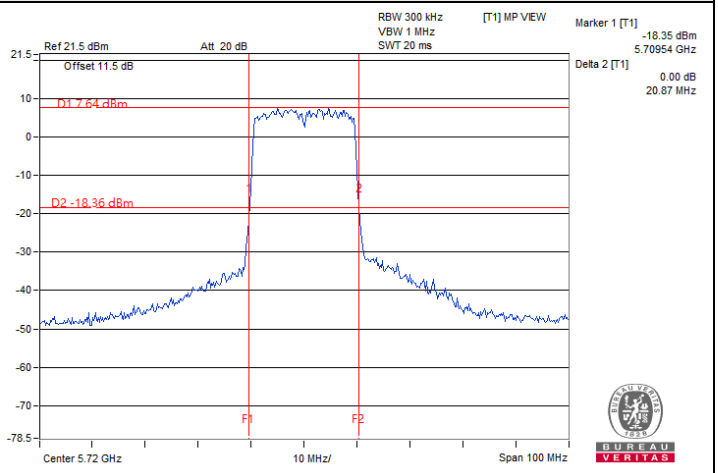
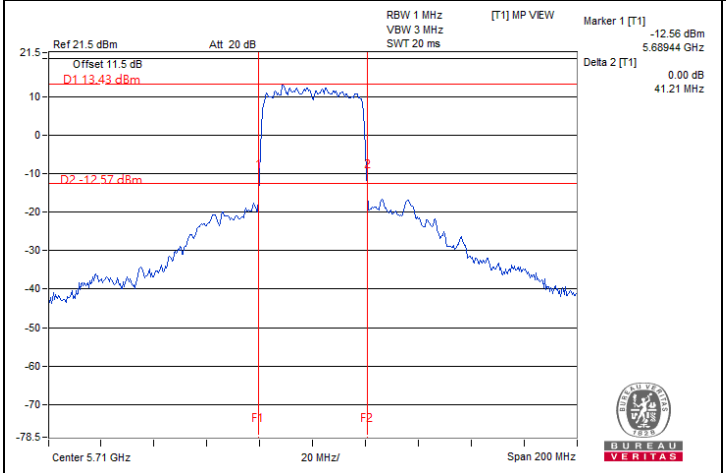
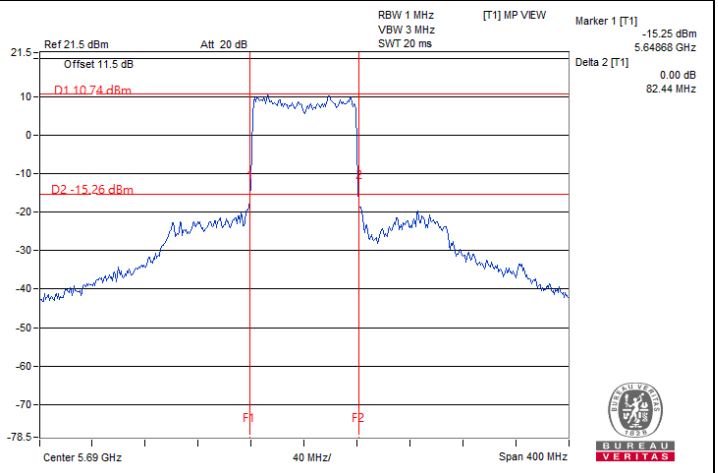
Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	82.52	82.55
106	5530	82.68	82.60
122	5610	82.57	82.50
138 (U-NII-2C)	5690	76.32	76.32
138 (U-NII-3)	5690	6.23	6.12

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	82.52	30.16	>	24
106	5530	82.60	30.16	>	24
122	5610	82.50	30.16	>	24
138 (U-NII-2C)	5690	76.32	29.82	>	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 1 : CH 144 (U-NII-3)	802.11ax (HE20) / Chain 1 : CH 144 (U-NII-3)
	
802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)	802.11ax (HE80) / Chain 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

Mode A

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	19.25	19.82	180.08	22.55	24	Pass
40	5200	19.19	19.45	171.09	22.33	24	Pass
48	5240	19.25	19.87	181.191	22.58	24	Pass
52	5260	19.45	19.82	184.045	22.65	23.75	Pass
60	5300	19.30	19.92	183.289	22.63	23.76	Pass
64	5320	19.18	19.46	171.102	22.33	23.75	Pass
100	5500	19.46	20.03	189.001	22.76	23.75	Pass
116	5580	19.14	19.49	170.955	22.33	23.75	Pass
140	5700	15.72	16.01	77.228	18.88	23.73	Pass
*144 (U-NII-2C)	5720	15.25	15.29	67.303	18.28	22.58	Pass
*144 (U-NII-3)	5720	8.78	8.90	15.313	11.85	30	Pass
149	5745	14.87	15.08	62.901	17.99	30	Pass
157	5785	15.46	15.71	72.395	18.60	30	Pass
165	5825	16.33	16.66	89.298	19.51	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.6 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				
36	5180	18.24	18.53	137.966	21.40	24	Pass
40	5200	19.40	19.69	180.207	22.56	24	Pass
48	5240	19.30	19.89	182.613	22.62	24	Pass
52	5260	19.53	20.01	189.973	22.79	24	Pass
60	5300	19.49	19.85	185.525	22.68	24	Pass
64	5320	17.54	17.91	118.556	20.74	24	Pass
100	5500	19.70	20.03	194.019	22.88	24	Pass
116	5580	19.39	19.89	184.395	22.66	24	Pass
140	5700	16.03	16.43	84.041	19.24	24	Pass
*144 (U-NII-2C)	5720	15.02	15.10	64.128	18.07	22.88	Pass
*144 (U-NII-3)	5720	9.45	9.58	17.889	12.53	30	Pass
149	5745	15.78	16.01	77.747	18.91	30	Pass
157	5785	16.73	16.96	96.757	19.86	30	Pass
165	5825	16.86	17.17	100.648	20.03	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.6 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				
38	5190	16.91	17.27	102.424	20.10	24	Pass
46	5230	18.94	19.49	167.263	22.23	24	Pass
54	5270	19.13	19.54	171.796	22.35	24	Pass
62	5310	16.08	16.30	83.209	19.20	24	Pass
102	5510	16.37	16.61	89.165	19.50	24	Pass
110	5550	19.02	19.37	166.296	22.21	24	Pass
134	5670	16.21	16.53	86.761	19.38	24	Pass
*142 (U-NII-2C)	5710	17.22	17.90	114.382	20.58	24	Pass
*142 (U-NII-3)	5710	7.07	7.88	11.231	10.50	30	Pass
151	5755	18.13	18.61	137.624	21.39	30	Pass
159	5795	17.88	18.53	132.662	21.23	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.6 dBi < 6 dBi, so the output power limit shall not be reduced.

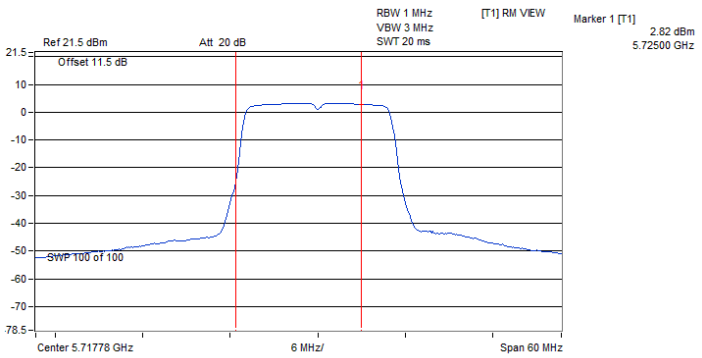
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	16.73	17.08	98.148	19.92	24	Pass
58	5290	16.17	16.43	85.354	19.31	24	Pass
106	5530	16.02	16.39	83.546	19.22	24	Pass
122	5610	17.82	18.04	124.214	20.94	24	Pass
*138 (U-NII-2C)	5690	17.54	18.01	119.996	20.79	24	Pass
*138 (U-NII-3)	5690	5.37	5.62	7.091	8.51	30	Pass
155	5775	17.86	18.21	127.316	21.05	30	Pass

Notes:

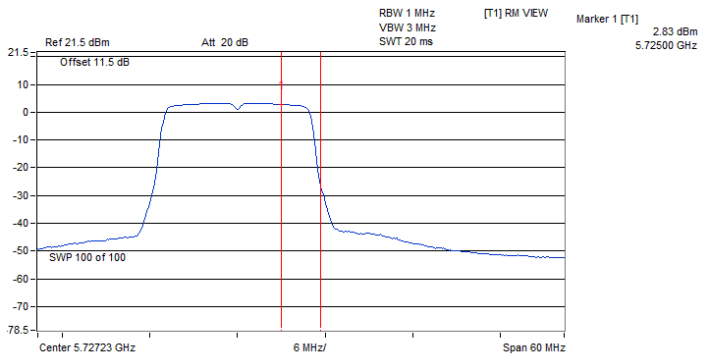
1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-1, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2A, the maximum gain is 3.8 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-2C, the maximum gain is 3.7 dBi < 6 dBi, so the output power limit shall not be reduced.
6. For U-NII-3, the maximum gain is 3.6 dBi < 6 dBi, so the output power limit shall not be reduced.

Spectrum Plot for channel straddling



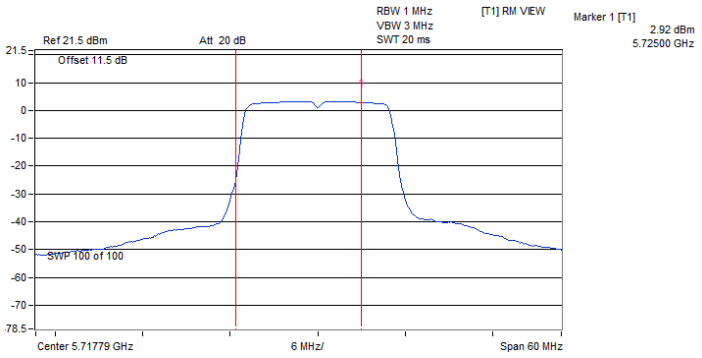
TX Channel Bandwidth 14.44 MHz Power 15.25 dBm

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



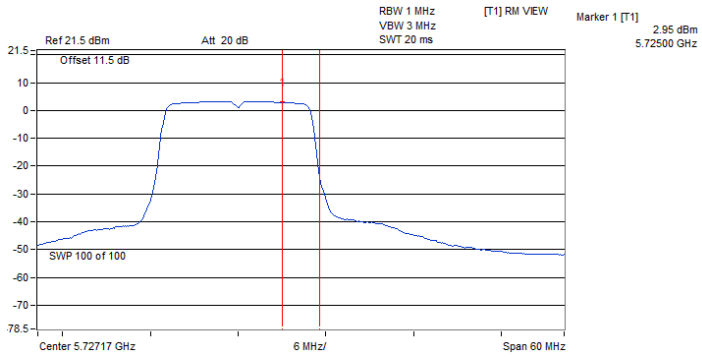
TX Channel Bandwidth 4.46 MHz Power 8.78 dBm

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



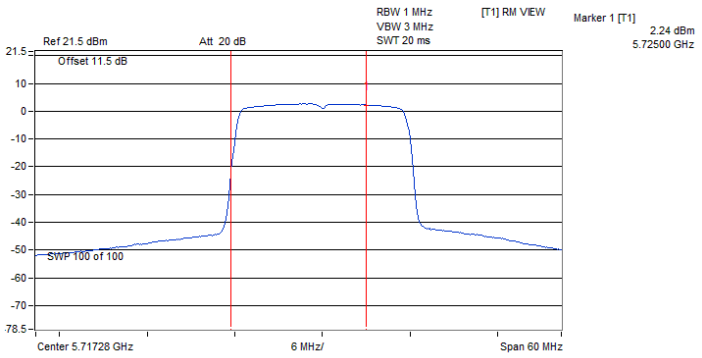
TX Channel Bandwidth 14.42 MHz Power 15.29 dBm

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



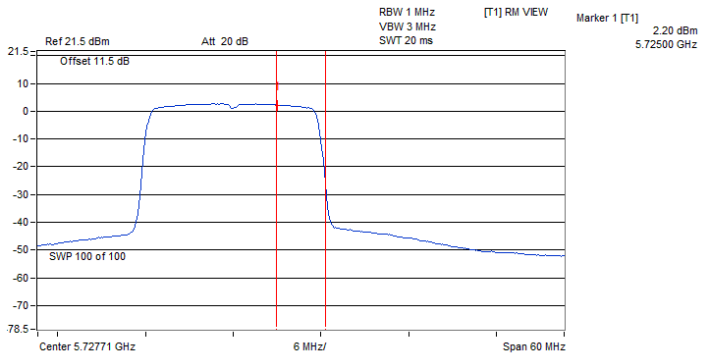
TX Channel Bandwidth 4.35 MHz Power 8.9 dBm

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



TX Channel Bandwidth 15.43 MHz Power 15.02 dBm

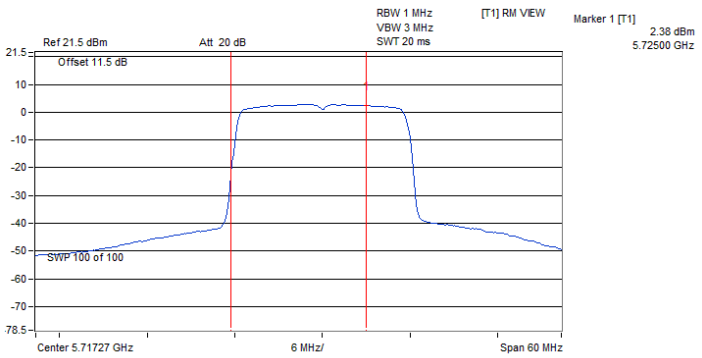
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



TX Channel Bandwidth 5.42 MHz Power 9.45 dBm

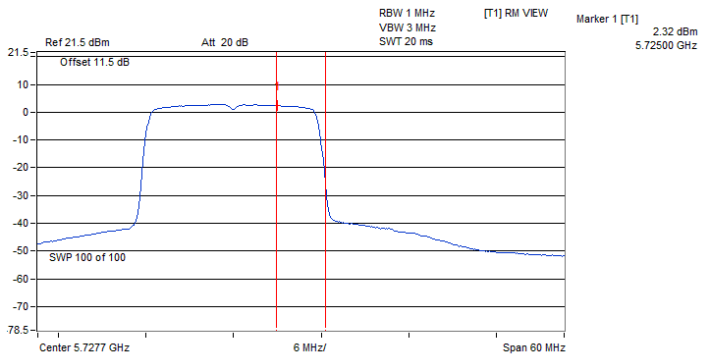
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)

Spectrum Plot for channel straddling



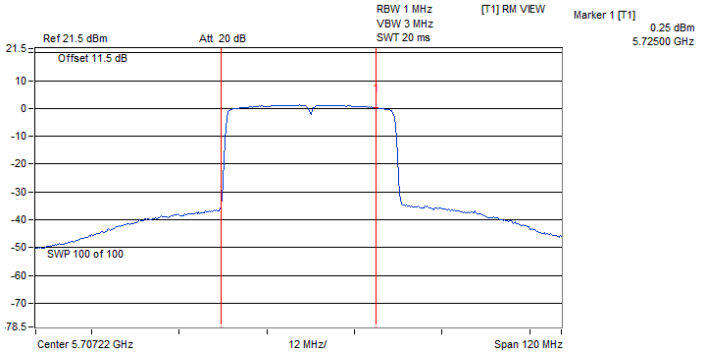
TX Channel Bandwidth 15.46 MHz Power 15.1 dBm

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



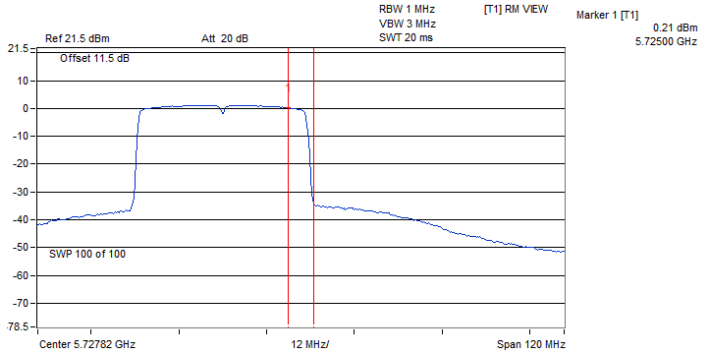
TX Channel Bandwidth 5.41 MHz Power 9.58 dBm

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



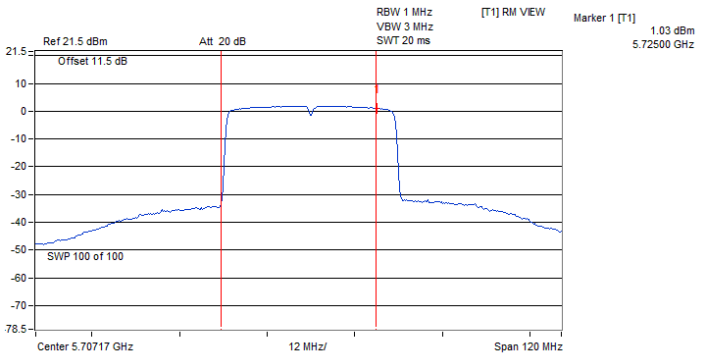
TX Channel Bandwidth 35.56 MHz Power 17.22 dBm

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



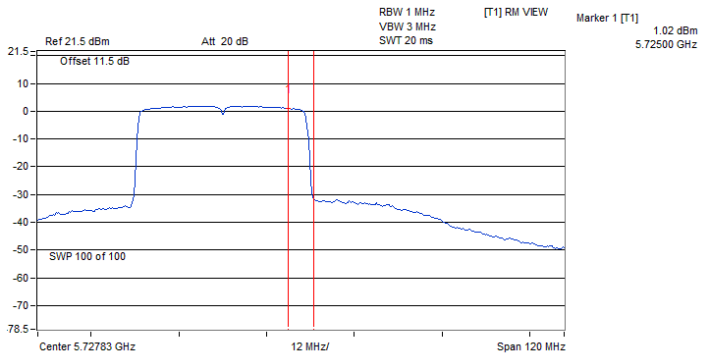
TX Channel Bandwidth 5.65 MHz Power 7.07 dBm

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



TX Channel Bandwidth 35.66 MHz Power 17.9 dBm

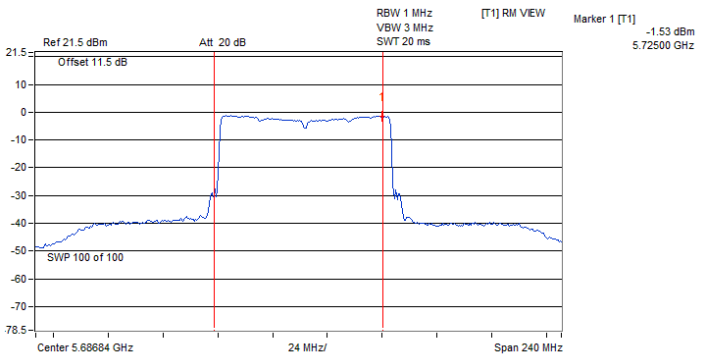
802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



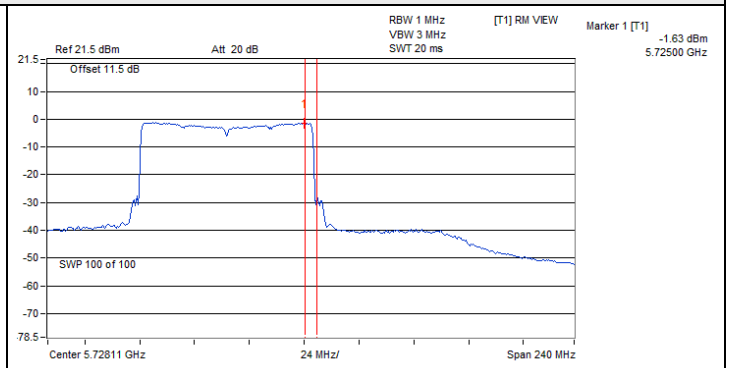
TX Channel Bandwidth 5.67 MHz Power 7.88 dBm

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

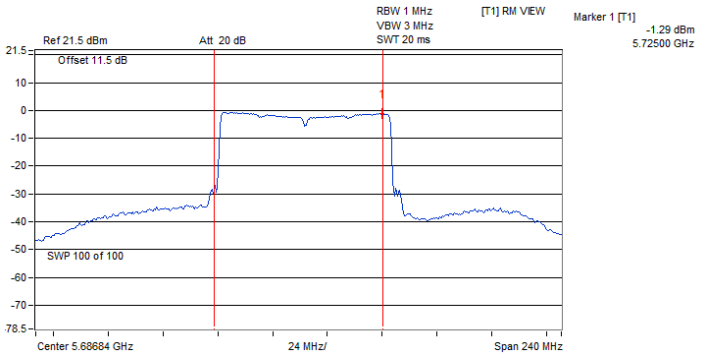
Spectrum Plot for channel straddling



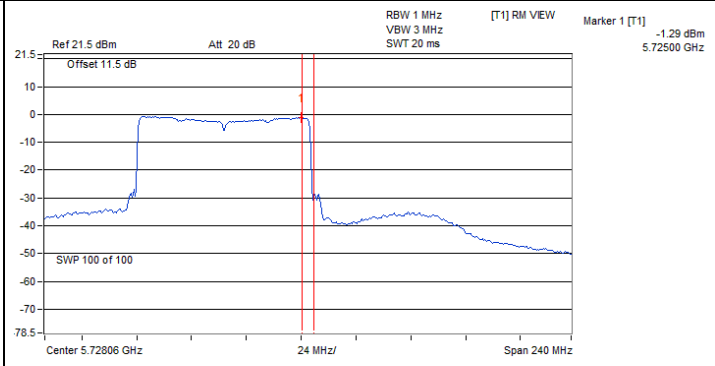
802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



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



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



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

7.3 Power Spectral Density

Mode A

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	5.70	6.03	8.88	10.77	Pass
40	5200	5.70	6.04	8.88	10.77	Pass
48	5240	5.71	5.94	8.84	10.77	Pass
52	5260	6.00	5.89	8.96	10.77	Pass
60	5300	6.00	5.83	8.93	10.77	Pass
64	5320	5.98	5.87	8.94	10.77	Pass
100	5500	6.06	5.30	8.71	10.34	Pass
116	5580	5.85	5.48	8.68	10.34	Pass
140	5700	2.22	2.35	5.30	10.34	Pass
144 (U-NII-2C)	5720	2.14	2.23	5.20	10.34	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-1, the directional gain is 6.23 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.23 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.66 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.66-6) = 10.34 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	4.34	4.61	7.49	10.77	Pass
40	5200	5.17	5.58	8.39	10.77	Pass
48	5240	5.25	5.46	8.37	10.77	Pass
52	5260	5.51	5.42	8.48	10.77	Pass
60	5300	5.54	5.37	8.47	10.77	Pass
64	5320	4.08	3.96	7.03	10.77	Pass
100	5500	5.50	4.82	8.18	10.34	Pass
116	5580	5.34	5.07	8.22	10.34	Pass
140	5700	2.19	2.38	5.30	10.34	Pass
144 (U-NII-2C)	5720	1.64	1.81	4.74	10.34	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-1, the directional gain is 6.23 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.23 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.66 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.66-6) = 10.34 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
38	5190	-0.28	0.35	3.06	10.77	Pass
46	5230	1.97	2.64	5.33	10.77	Pass
54	5270	2.36	2.54	5.46	10.77	Pass
62	5310	-0.11	0.20	3.06	10.77	Pass
102	5510	-0.08	-0.31	2.82	10.34	Pass
110	5550	2.06	2.07	5.08	10.34	Pass
134	5670	-1.01	-0.35	2.34	10.34	Pass
142 (U-NII-2C)	5710	1.14	1.78	4.48	10.34	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-1, the directional gain is 6.23 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.23 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.66 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.66-6) = 10.34 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
42	5210	-2.78	-2.42	0.41	10.77	Pass
58	5290	-3.33	-3.01	-0.16	10.77	Pass
106	5530	-2.75	-3.16	0.06	10.34	Pass
122	5610	-1.78	-1.44	1.40	10.34	Pass
138 (U-NII-2C)	5690	-1.21	-0.74	2.04	10.34	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-1, the directional gain is 6.23 dBi > 6dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
4. For U-NII-2A, the directional gain is 6.23 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.23-6) = 10.77 dBm/MHz.
5. For U-NII-2C, the directional gain is 6.66 dBi > 6 dBi, so the power density limit shall be reduced to 11-(6.66-6) = 10.34 dBm/MHz.

802.11a

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
Chain 0	144 (U-NII-3)	5720	-6.58	-4.36	3.01	-1.35	29.68	Pass
	149	5745	-7.14	-4.92	3.01	-1.91	29.68	Pass
	157	5785	-6.45	-4.23	3.01	-1.22	29.68	Pass
	165	5825	-5.6	-3.38	3.01	-0.37	29.68	Pass
Chain 1	144 (U-NII-3)	5720	-6.54	-4.32	3.01	-1.31	29.68	Pass
	149	5745	-6.97	-4.75	3.01	-1.74	29.68	Pass
	157	5785	-6.21	-3.99	3.01	-0.98	29.68	Pass
	165	5825	-5.35	-3.13	3.01	-0.12	29.68	Pass

Notes:

1. Method E) 2) c) Measure and add 10 log(NANT) dB 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 6.32 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.32-6) = 29.68 dBm/500kHz.

802.11ax (HE20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
Chain 0	144 (U-NII-3)	5720	-7.55	-5.33	3.01	-2.32	29.68	Pass
	149	5745	-7.32	-5.1	3.01	-2.09	29.68	Pass
	157	5785	-6.65	-4.43	3.01	-1.42	29.68	Pass
	165	5825	-6.23	-4.01	3.01	-1	29.68	Pass
Chain 1	144 (U-NII-3)	5720	-7.67	-5.45	3.01	-2.44	29.68	Pass
	149	5745	-7.06	-4.84	3.01	-1.83	29.68	Pass
	157	5785	-6.27	-4.05	3.01	-1.04	29.68	Pass
	165	5825	-6.07	-3.85	3.01	-0.84	29.68	Pass

Notes:

1. Method E) 2) c) Measure and add 10 log(NANT) dB 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 6.32 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.32-6) = 29.68 dBm/500kHz.

802.11ax (HE40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
Chain 0	142 (U-NII-3)	5710	-8.96	-6.74	3.01	-3.73	29.68	Pass
	151	5755	-7.98	-5.76	3.01	-2.75	29.68	Pass
	159	5795	-8.19	-5.97	3.01	-2.96	29.68	Pass
Chain 1	142 (U-NII-3)	5710	-8.17	-5.95	3.01	-2.94	29.68	Pass
	151	5755	-7.08	-4.86	3.01	-1.85	29.68	Pass
	159	5795	-7.37	-5.15	3.01	-2.14	29.68	Pass

Notes:

1. Method E) 2) c) Measure and add 10 log(NANT) dB 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 6.32 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.32-6) = 29.68 dBm/500kHz.

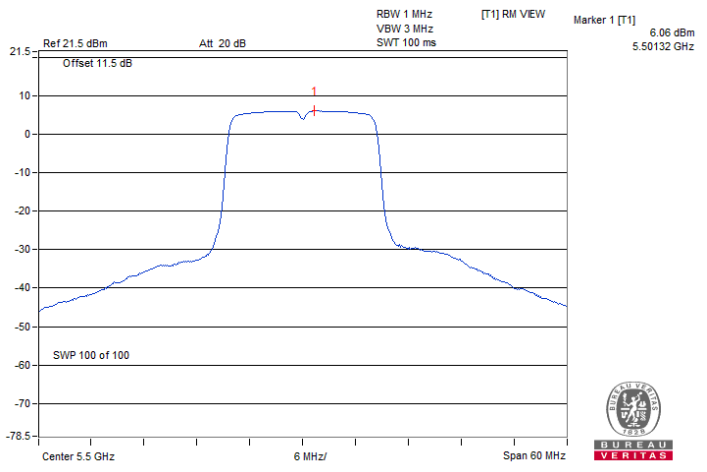
802.11ax (HE80)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
Chain 0	138 (U-NII-3)	5690	-10.8	-8.58	3.01	-5.57	29.68	Pass
	155	5775	-10.78	-8.56	3.01	-5.55	29.68	Pass
Chain 1	138 (U-NII-3)	5690	-10.17	-7.95	3.01	-4.94	29.68	Pass
	155	5775	-9.95	-7.73	3.01	-4.72	29.68	Pass

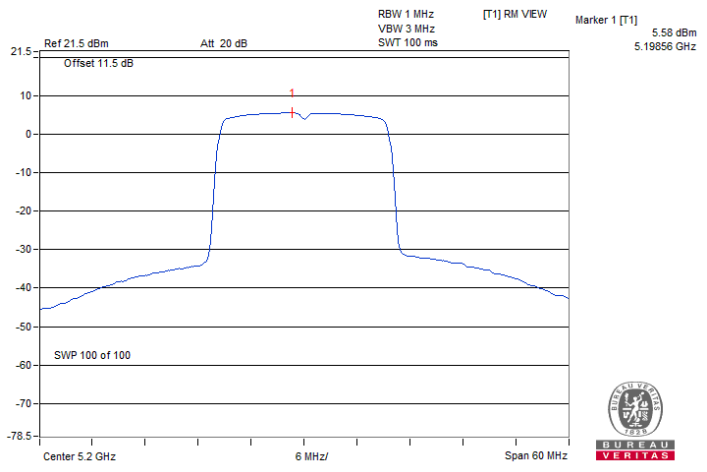
Notes:

1. Method E) 2) c) Measure and add 10 log(NANT) dB 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 6.32 dBi > 6 dBi, so the power density limit shall be reduced to 30-(6.32-6) = 29.68 dBm/500kHz.

Spectrum Plot of Maximum Value

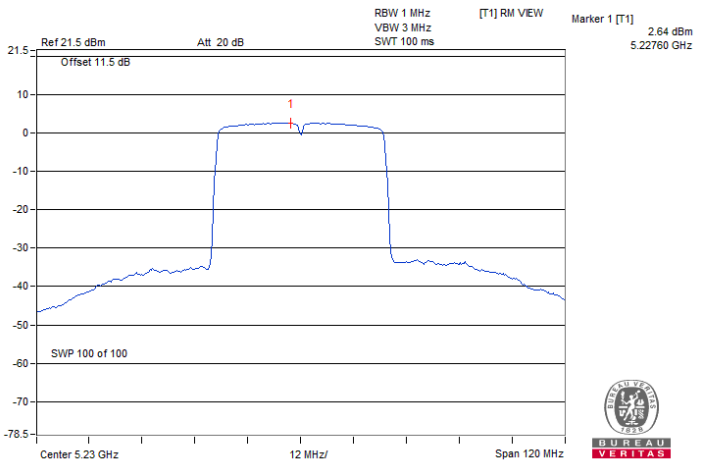


802.11a / Chain 0 : CH 100

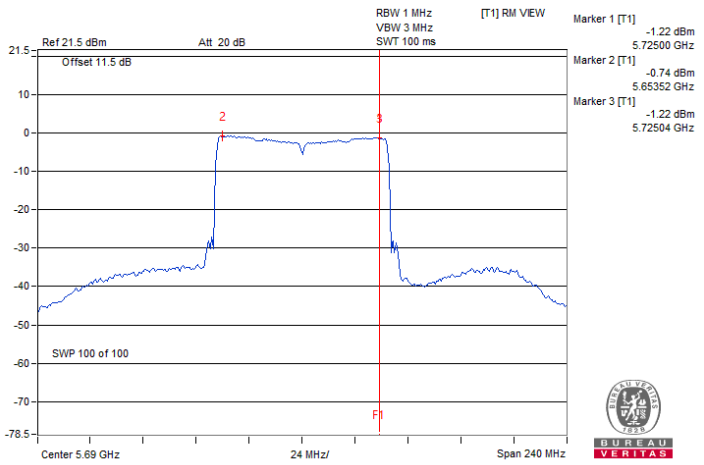


802.11ax (HE20) / Chain 1 : CH 40

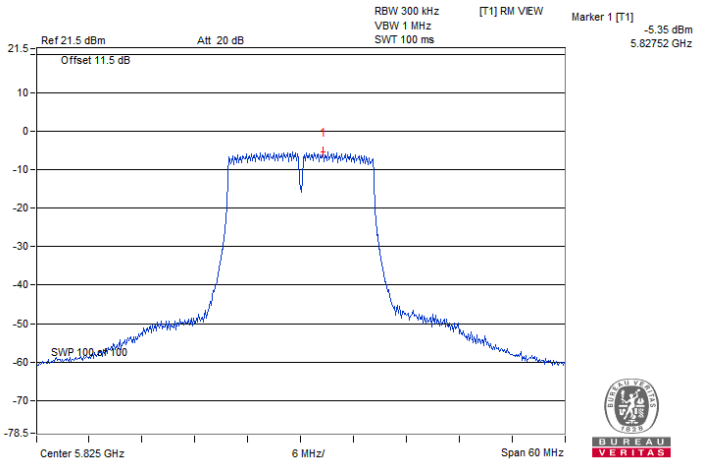
Spectrum Plot of Maximum Value



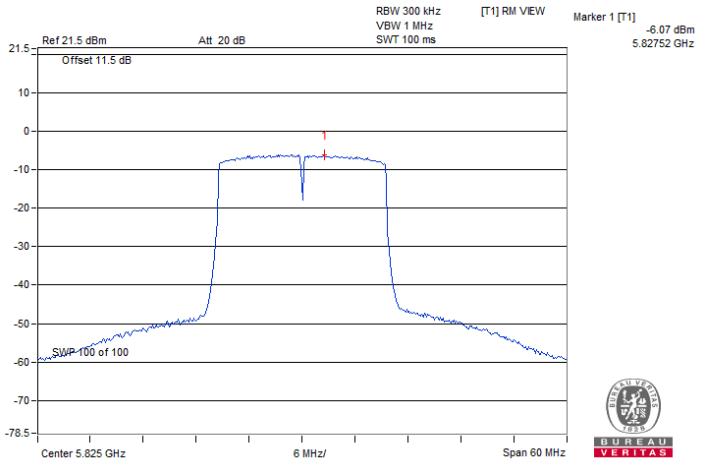
802.11ax (HE40) / Chain 1 : CH 46



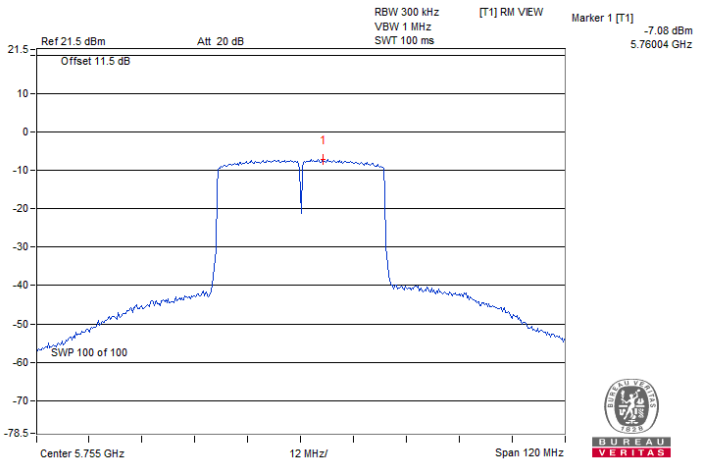
802.11ax (HE80) / Chain 1 : CH 138 (U-NII-2C)



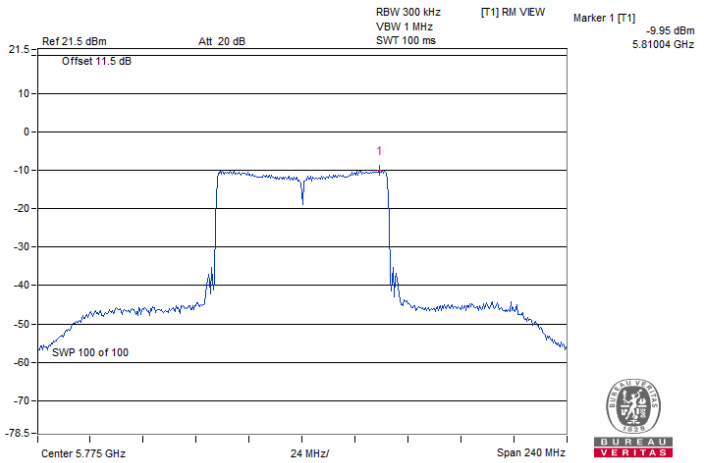
802.11a / Chain 1 : CH 165



802.11ax (HE20) / Chain 1 : CH 165



802.11ax (HE40) / Chain 1 : CH 151



802.11ax (HE80) / Chain 1 : CH 155

7.4 6 dB Bandwidth

Mode A

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan

802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	3.16	3.17	0.5	Pass
149	5745	16.33	16.36	0.5	Pass
157	5785	16.33	16.37	0.5	Pass
165	5825	16.34	16.36	0.5	Pass

802.11ax (HE20)

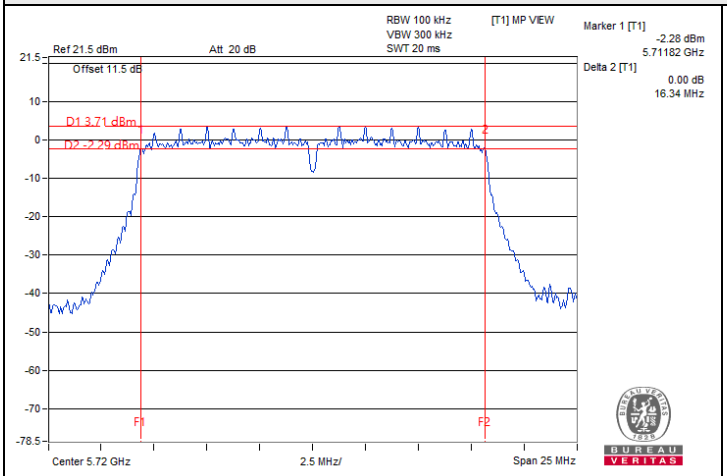
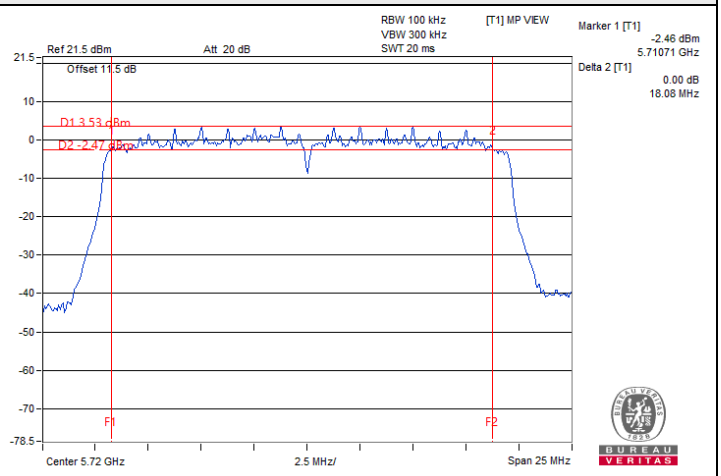
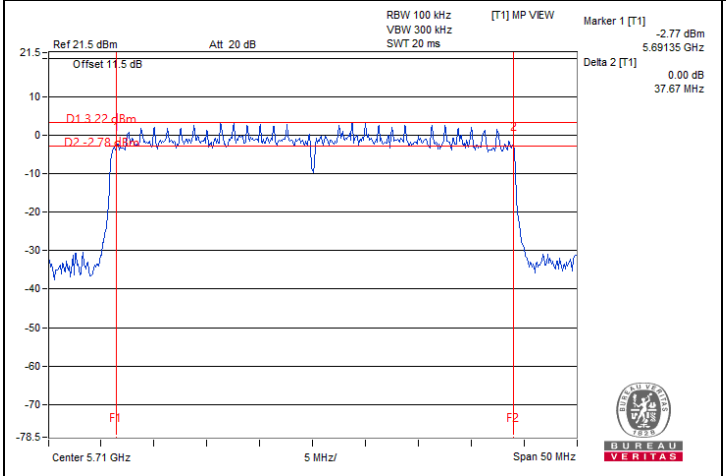
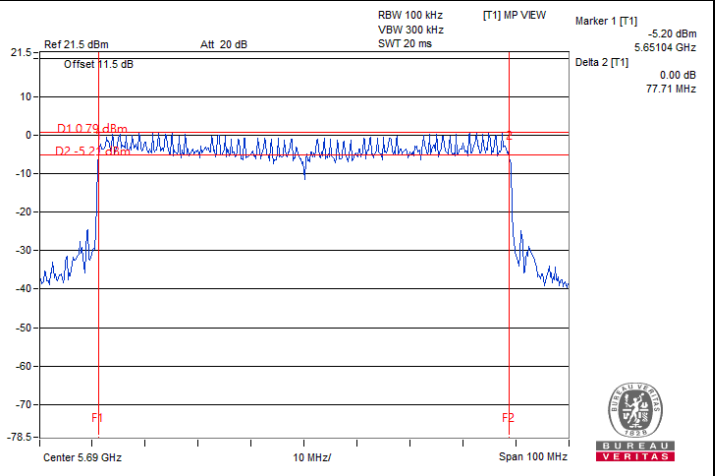
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	3.79	3.88	0.5	Pass
149	5745	18.10	18.10	0.5	Pass
157	5785	18.09	18.12	0.5	Pass
165	5825	18.08	18.16	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	4.02	4.03	0.5	Pass
151	5755	37.68	37.77	0.5	Pass
159	5795	37.70	37.78	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
138 (U-NII-3)	5690	3.75	3.86	0.5	Pass
155	5775	77.74	77.88	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 0 : CH 138 (U-NII-3)

Notes:

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

7.5 Occupied Bandwidth

Mode A

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.44	16.44
40	5200	16.44	16.44
48	5240	16.44	16.44
52	5260	16.44	16.44
60	5300	16.44	16.44
64	5320	16.44	16.32
100	5500	16.56	16.44
116	5580	16.44	16.44
140	5700	16.44	16.32
144 (U-NII-2C)	5720	13.28	13.16
144 (U-NII-3)	5720	3.16	3.16
149	5745	16.44	16.32
157	5785	16.44	16.32
165	5825	16.44	16.32

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.96	18.96
40	5200	18.96	18.96
48	5240	18.96	18.96
52	5260	18.96	18.96
60	5300	18.96	18.96
64	5320	18.96	18.96
100	5500	18.96	18.96
116	5580	18.96	18.96
140	5700	18.96	18.96
144 (U-NII-2C)	5720	14.48	14.48
144 (U-NII-3)	5720	4.36	4.36
149	5745	18.96	18.96
157	5785	18.96	18.96
165	5825	18.96	18.96

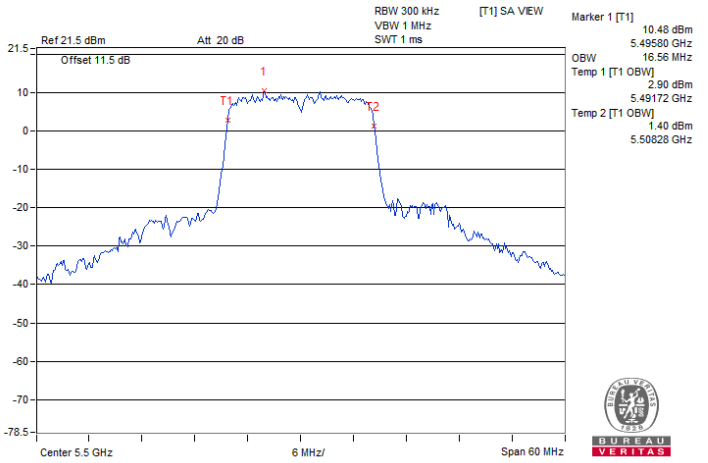
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.80
46	5230	37.68	38.16
54	5270	37.80	37.92
62	5310	37.80	37.80
102	5510	37.80	37.80
110	5550	37.92	38.16
134	5670	37.68	37.92
142 (U-NII-2C)	5710	33.96	33.96
142 (U-NII-3)	5710	3.96	3.96
151	5755	37.92	37.92
159	5795	37.92	37.80

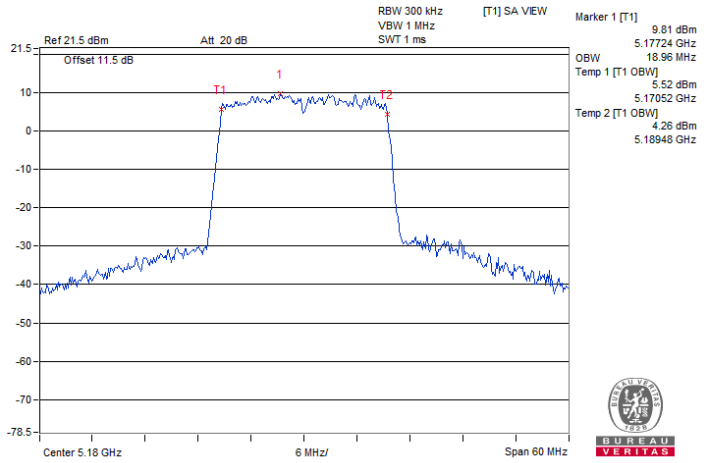
802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.76	77.76
58	5290	77.52	77.28
106	5530	77.76	77.76
122	5610	77.28	77.76
138 (U-NII-2C)	5690	73.88	73.88
138 (U-NII-3)	5690	3.88	3.88
155	5775	77.76	77.76

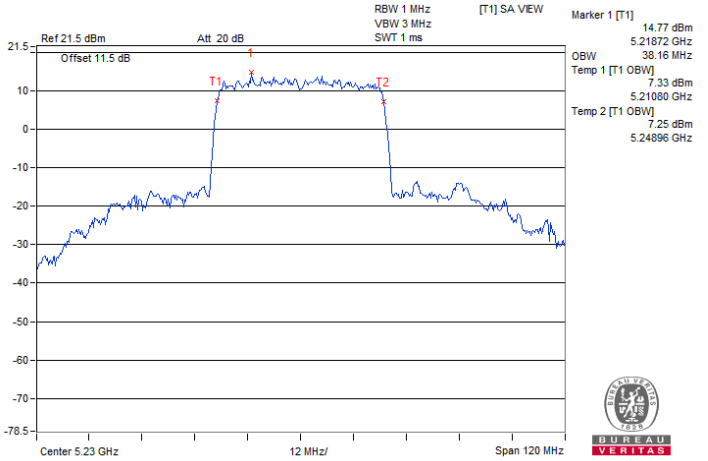
Spectrum Plot of Maximum Value



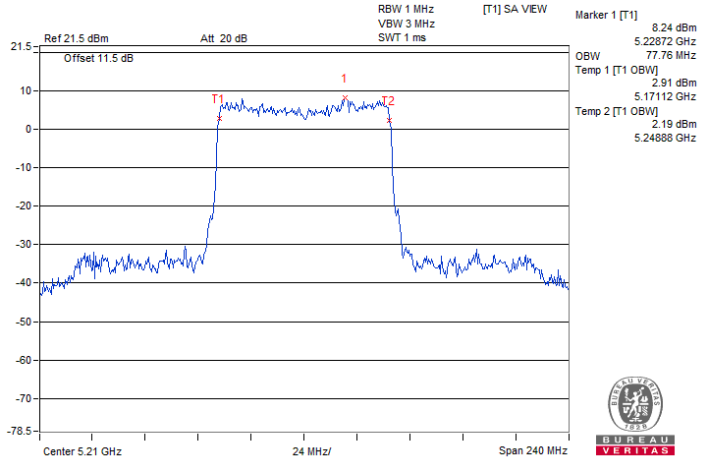
802.11a / Chain 0 : CH 100



802.11ax (HE20) / Chain 0 : CH 36

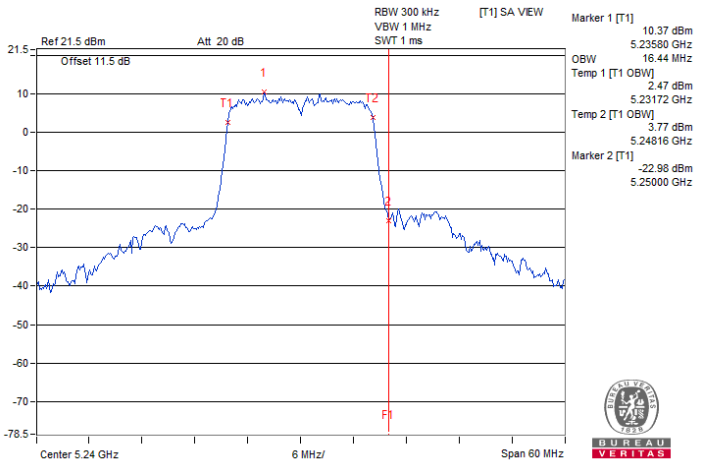


802.11ax (HE40) / Chain 1 : CH 46

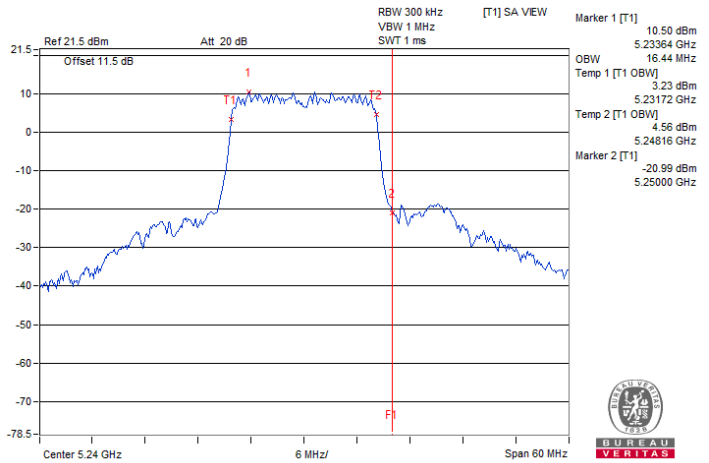


802.11ax (HE80) / Chain 0 : CH 42

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



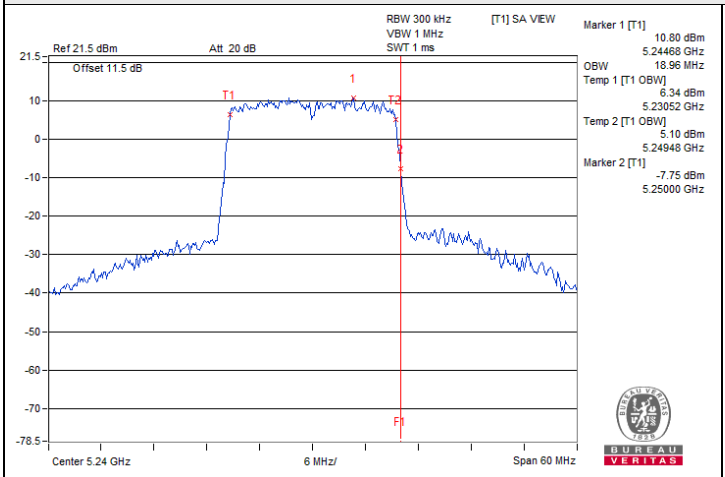
802.11a / Chain 0 : CH 48



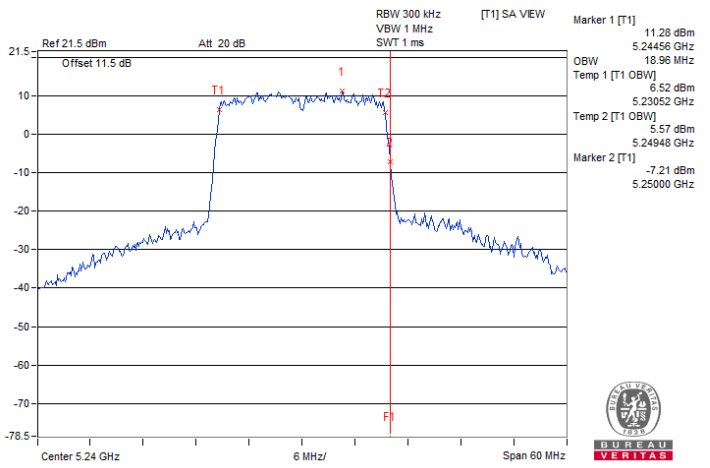
802.11a / Chain 1 : CH 48

Spectrum Plot for nearby DFS band

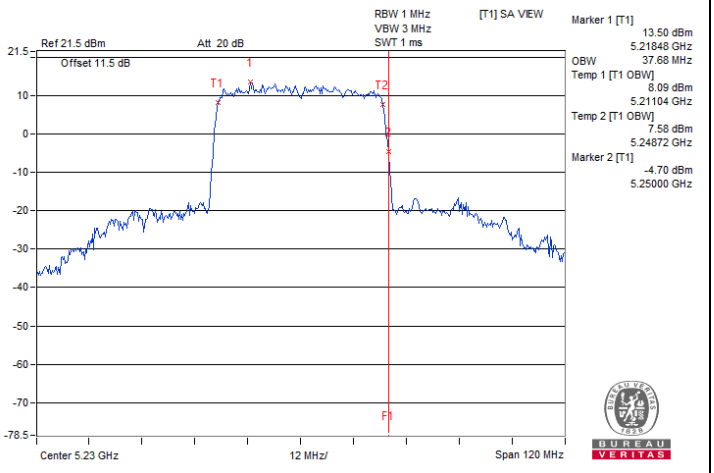
(DFS is required, if 99% OCP straddle into U-NII-2A)



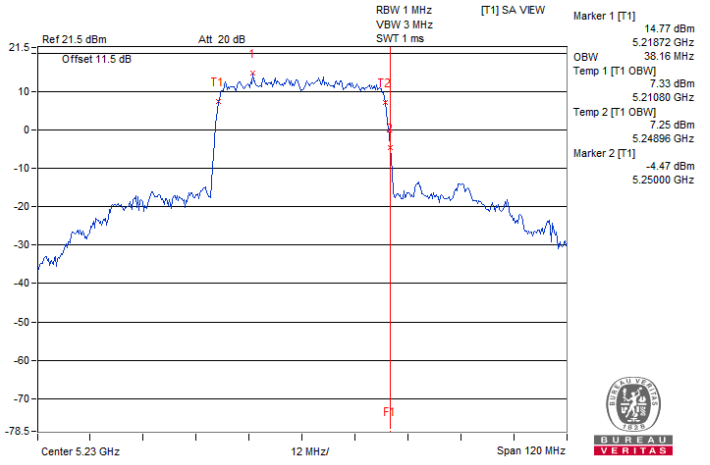
802.11ax (HE20) / Chain 0 : CH 48



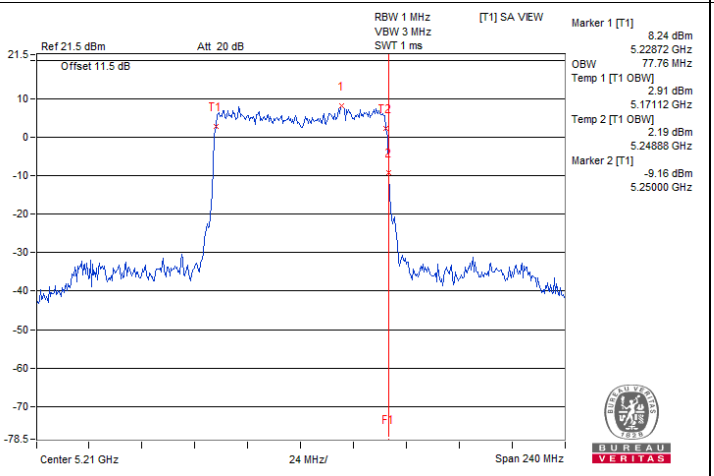
802.11ax (HE20) / Chain 1 : CH 48



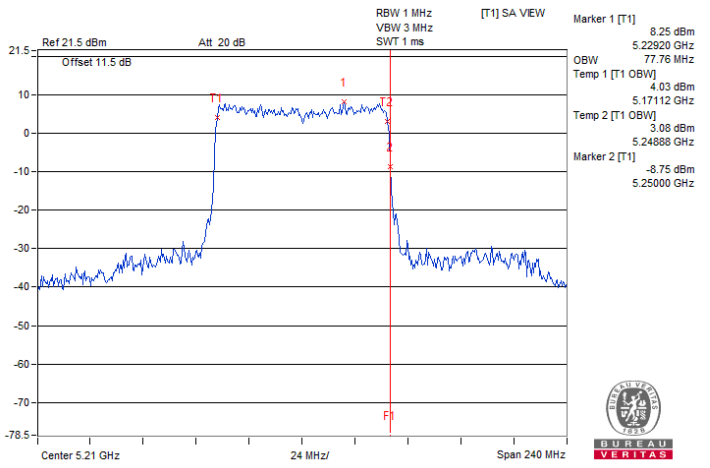
802.11ax (HE40) / Chain 0 : CH 46



802.11ax (HE40) / Chain 1 : CH 46



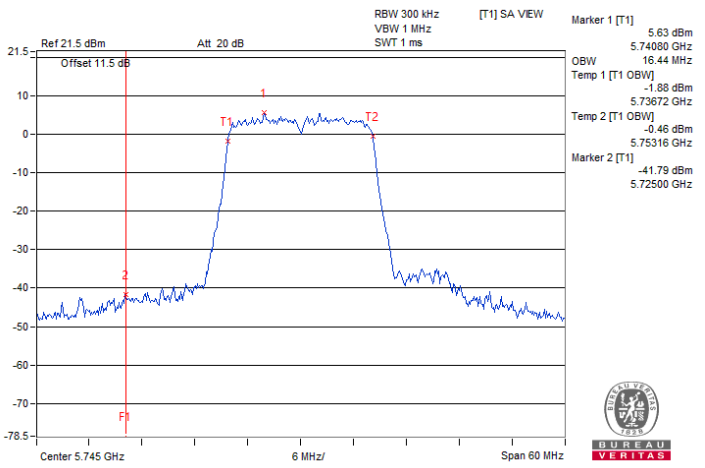
802.11ax (HE80) / Chain 0 : CH 42



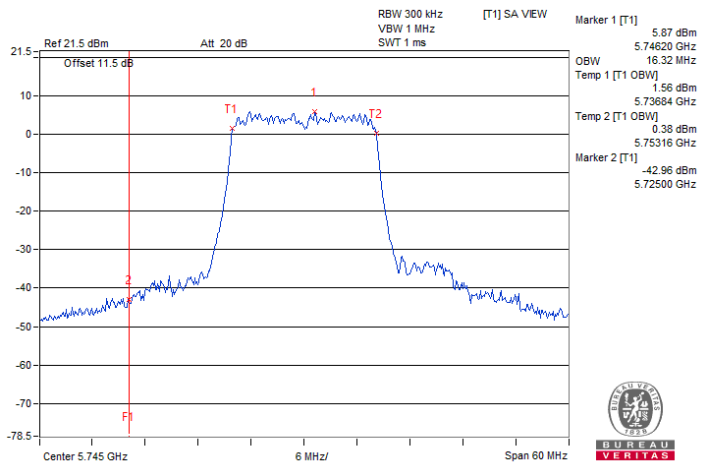
802.11ax (HE80) / Chain 1 : CH 42

Spectrum Plot for nearby DFS band

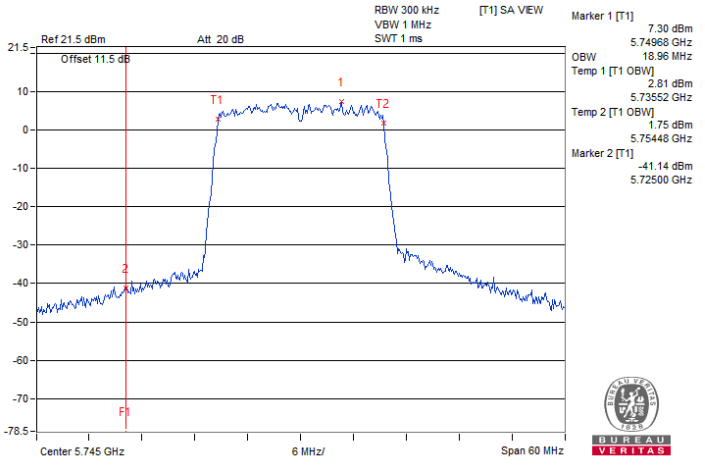
(DFS is required, if 99% OCP straddle into U-NII-2C)



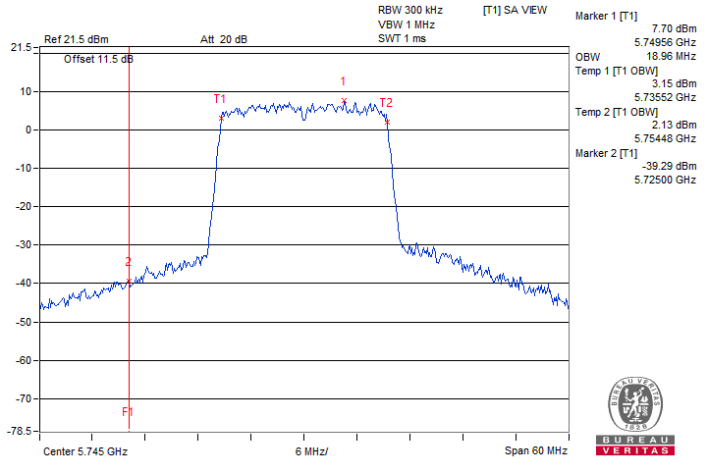
802.11a / Chain 0 : CH 149



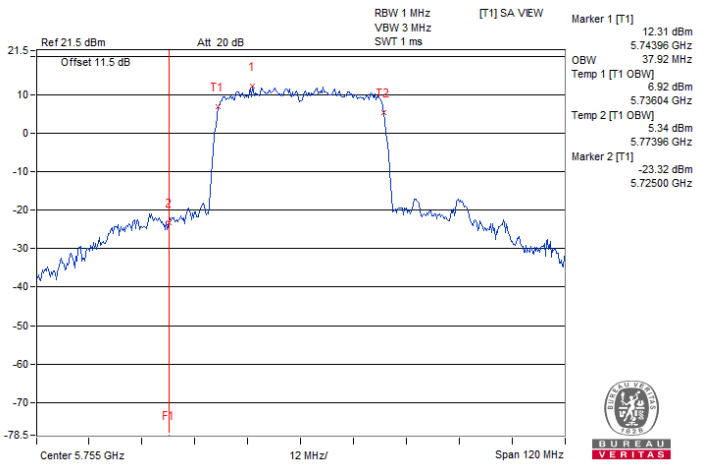
802.11a / Chain 1 : CH 149



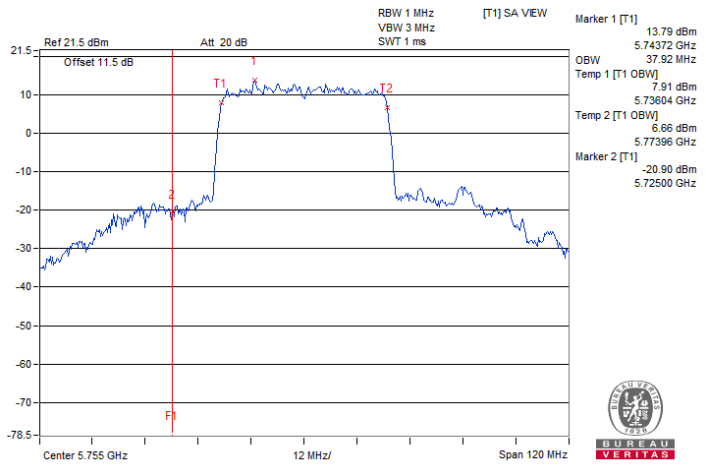
802.11ax (HE20) / Chain 0 : CH 149



802.11ax (HE20) / Chain 1 : CH 149



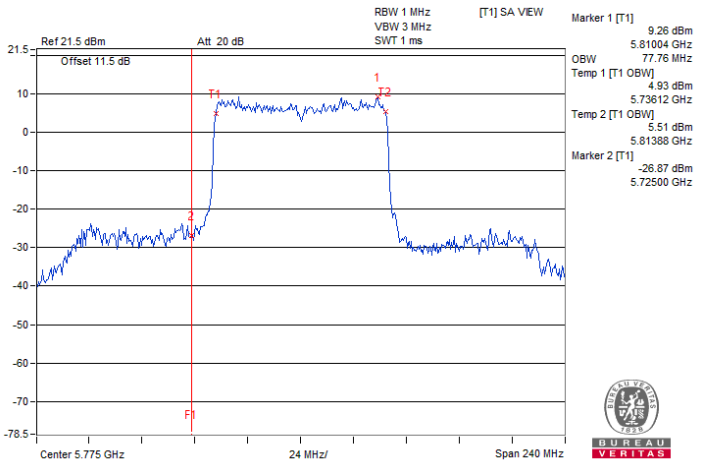
802.11ax (HE40) / Chain 0 : CH 151



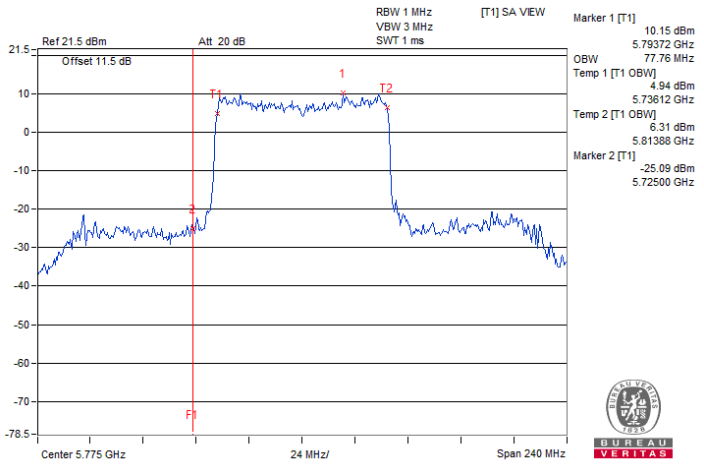
802.11ax (HE40) / Chain 1 : CH 151

Spectrum Plot for nearby DFS band

(DFS is required, if 99% OCP straddle into U-NII-2C)



802.11ax (HE80) / Chain 0 : CH 155



802.11ax (HE80) / Chain 1 : CH 155

7.6 Frequency Stability

Mode A

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan

802.11a

Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
40	120	5180.0003	Pass	5179.9992	Pass	5180.0012	Pass	5180.0003	Pass
30	120	5179.9866	Pass	5179.9877	Pass	5179.986	Pass	5179.9859	Pass
20	120	5179.9824	Pass	5179.9799	Pass	5179.9821	Pass	5179.9782	Pass
10	120	5179.9938	Pass	5179.9903	Pass	5179.9903	Pass	5179.9907	Pass
0	120	5180.0206	Pass	5180.0203	Pass	5180.0197	Pass	5180.0216	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5179.9867	Pass	5179.9889	Pass	5179.9862	Pass	5179.9868	Pass
	120	5179.9824	Pass	5179.9799	Pass	5179.9821	Pass	5179.9782	Pass
	102	5179.9746	Pass	5179.9749	Pass	5179.9763	Pass	5179.9733	Pass

7.7 AC Power Conducted Emissions

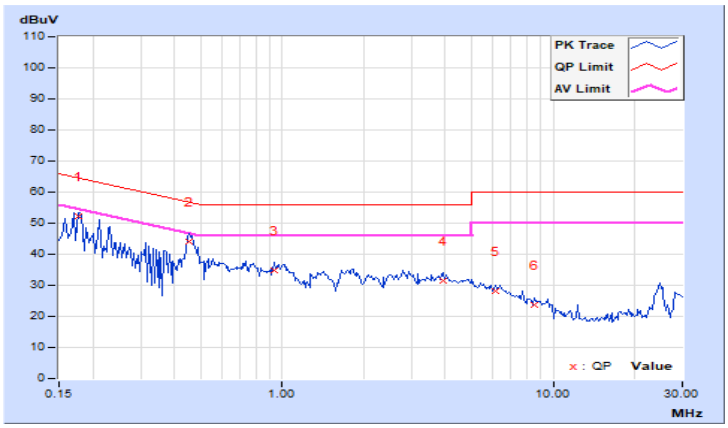
Mode A

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

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	0.17734	10.08	42.09	23.41	52.17	33.49	64.61	54.61	-12.44	-21.12
2	**0.45078**	**10.22**	**33.98**	**25.37**	**44.20**	**35.59**	**56.86**	**46.86**	**-12.66**	**-11.27**
3	0.93906	10.34	24.30	14.34	34.64	24.68	56.00	46.00	-21.36	-21.32
4	3.94141	10.50	21.12	9.96	31.62	20.46	56.00	46.00	-24.38	-25.54
5	6.09375	10.56	17.49	6.60	28.05	17.16	60.00	50.00	-31.95	-32.84
6	8.58203	10.62	12.91	3.29	23.53	13.91	60.00	50.00	-36.47	-36.09

Remarks:

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



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

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	10.06	42.57	22.56	52.63	32.62	66.00	56.00	-13.37	-23.38
2	0.21641	10.18	37.26	20.83	47.44	31.01	62.96	52.96	-15.52	-21.95
3	0.48594	10.20	30.31	19.87	40.51	30.07	56.24	46.24	-15.73	-16.17
4	0.62656	10.22	28.22	20.83	38.44	31.05	56.00	46.00	-17.56	-14.95
5	2.92188	10.35	18.44	11.46	28.79	21.81	56.00	46.00	-27.21	-24.19
6	6.22656	10.52	13.76	7.07	24.28	17.59	60.00	50.00	-35.72	-32.41

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

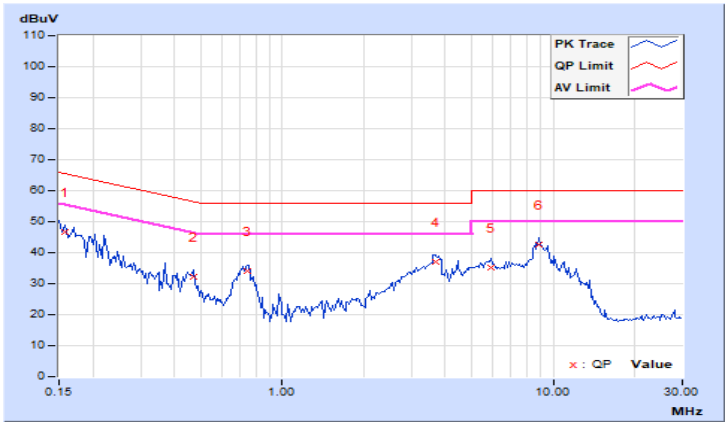
Mode B

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

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	0.15781	10.05	36.60	22.34	46.65	32.39	65.58	55.58	-18.93	-23.19
2	0.47031	10.23	21.85	17.35	32.08	27.58	56.51	46.51	-24.43	-18.93
3	0.73984	10.29	23.70	18.59	33.99	28.88	56.00	46.00	-22.01	-17.12
4	3.67578	10.48	26.42	18.02	36.90	28.50	56.00	46.00	-19.10	-17.50
5	5.86328	10.55	24.75	16.14	35.30	26.69	60.00	50.00	-24.70	-23.31
6	8.91406	10.63	32.07	19.03	42.70	29.66	60.00	50.00	-17.30	-20.34

Remarks:

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

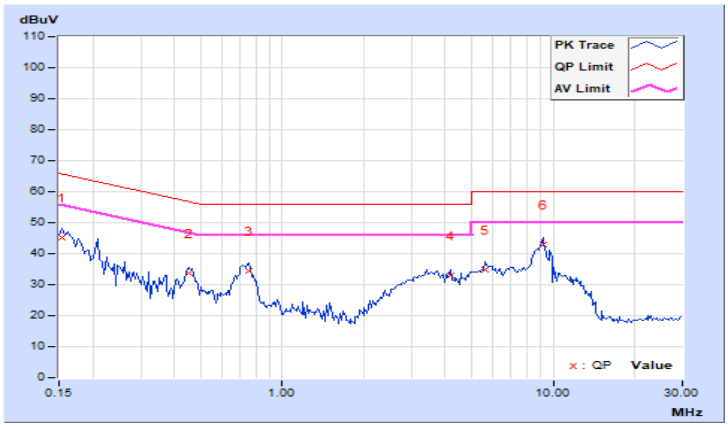


RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25°C, 75% RH
Tested By	Jed Wu		

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	0.15391	10.07	35.01	21.16	45.08	31.23	65.79	55.79	-20.71	-24.56
2	0.45469	10.20	23.48	14.71	33.68	24.91	56.79	46.79	-23.11	-21.88
3	0.75156	10.24	24.38	18.11	34.62	28.35	56.00	46.00	-21.38	-17.65
4	4.19141	10.44	22.58	9.98	33.02	20.42	56.00	46.00	-22.98	-25.58
5	5.59766	10.49	24.21	15.54	34.70	26.03	60.00	50.00	-25.30	-23.97
6	**9.21094**	**10.63**	**32.42**	**22.16**	**43.05**	**32.79**	**60.00**	**50.00**	**-16.95**	**-17.21**

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

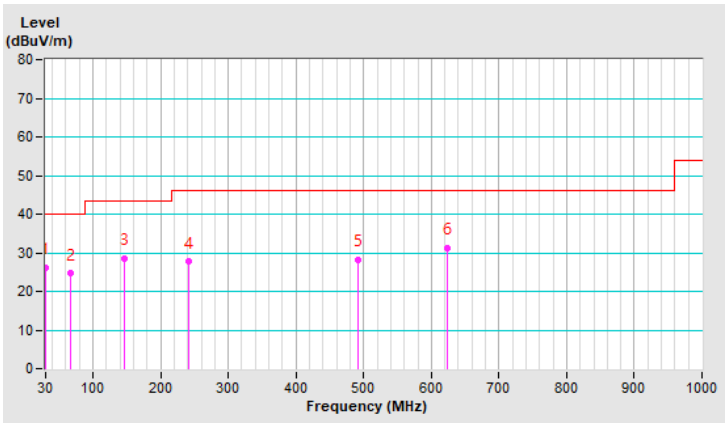
Mode A

RF Mode	802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 63% RH
Tested By	William Su		

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	30.58	26.2 QP	40.0	-13.8	2.16 H	182	36.7	-10.5
2	66.42	24.6 QP	40.0	-15.4	2.10 H	263	34.5	-9.9
3	146.50	28.5 QP	43.5	-15.0	1.83 H	253	36.5	-8.0
4	242.28	27.6 QP	46.0	-18.4	2.30 H	191	35.9	-8.3
5	491.28	28.3 QP	46.0	-17.7	1.57 H	205	29.7	-1.4
6	624.42	31.3 QP	46.0	-14.7	1.66 H	35	29.6	1.7

Remarks:

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

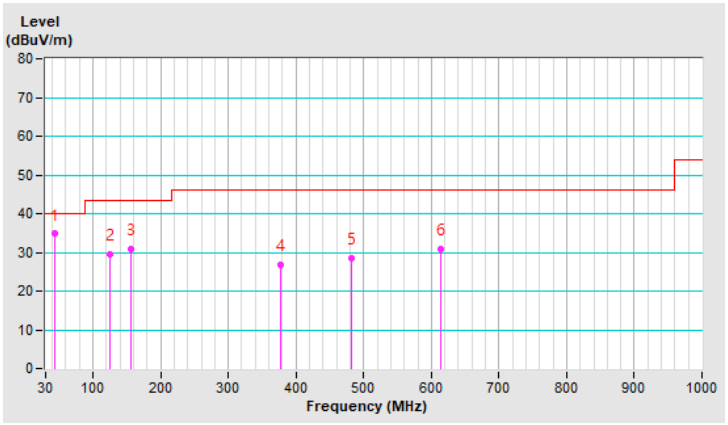


RF Mode	802.11ax (HE20)	**Channel**	CH 100：5500 MHz
Frequency Range	9 kHz ~ 1 GHz	**Detector Function & Bandwidth**	(QP) RB = 120kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23°C, 63% RH
Tested By	William Su		

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	**44.50**	**34.8 QP**	**40.0**	**-5.2**	**1.64 V**	**149**	**43.5**	**-8.7**
2	125.64	29.6 QP	43.5	-13.9	1.38 V	289	39.7	-10.1
3	157.02	30.9 QP	43.5	-12.6	1.19 V	360	38.8	-7.9
4	377.02	26.8 QP	46.0	-19.2	2.51 V	57	30.7	-3.9
5	481.54	28.6 QP	46.0	-17.4	2.10 V	0	30.2	-1.6
6	613.36	31.0 QP	46.0	-15.0	2.30 V	176	29.7	1.3

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 of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



7.9 Unwanted Emissions above 1 GHz

Mode A

RF Mode	802.11a	**Channel**	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	67.0 PK	74.0	-7.0	1.36 H	299	59.5	7.5
2	5150.00	52.4 AV	54.0	-1.6	1.36 H	299	44.9	7.5
3	*5180.00	111.3 PK			1.36 H	299	103.8	7.5
4	*5180.00	104.8 AV			1.36 H	299	97.3	7.5
5	#10360.00	58.0 PK	68.2	-10.2	1.10 H	296	42.6	15.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	64.7 PK	74.0	-9.3	1.25 V	23	57.2	7.5
2	5150.00	51.4 AV	54.0	-2.6	1.25 V	23	43.9	7.5
3	*5180.00	108.7 PK			1.25 V	23	101.2	7.5
4	*5180.00	102.1 AV			1.25 V	23	94.6	7.5
5	#10360.00	61.2 PK	68.2	-7.0	2.78 V	241	45.8	15.4

Remarks:

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

RF Mode	802.11a	**Channel**	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5200.00	112.0 PK			1.20 H	297	104.5	7.5
2	*5200.00	105.4 AV			1.20 H	297	97.9	7.5
3	#10400.00	58.8 PK	68.2	-9.4	1.26 H	294	43.3	15.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5200.00	109.4 PK			1.09 V	21	101.9	7.5
2	*5200.00	102.7 AV			1.09 V	21	95.2	7.5
3	#10400.00	62.0 PK	68.2	-6.2	2.62 V	239	46.5	15.5

Remarks:

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

RF Mode	802.11a	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	112.5 PK			3.00 H	290	104.6	7.9
2	*5240.00	105.9 AV			3.00 H	290	98.0	7.9
3	5350.00	59.8 PK	74.0	-14.2	3.00 H	290	51.2	8.6
4	5350.00	48.8 AV	54.0	-5.2	3.00 H	290	40.2	8.6
5	#10480.00	59.3 PK	68.2	-8.9	2.74 H	305	43.4	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	110.0 PK			2.89 V	14	102.1	7.9
2	*5240.00	103.6 AV			2.89 V	14	95.7	7.9
3	5350.00	59.2 PK	74.0	-14.8	2.89 V	14	50.6	8.6
4	5350.00	48.4 AV	54.0	-5.6	2.89 V	14	39.8	8.6
5	#10480.00	62.5 PK	68.2	-5.7	1.14 V	232	46.6	15.9

Remarks:

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

RF Mode	802.11a	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.8 PK	74.0	-14.2	1.37 H	74	52.3	7.5
2	5150.00	48.2 AV	54.0	-5.8	1.37 H	74	40.7	7.5
3	*5260.00	112.1 PK			1.37 H	74	104.0	8.1
4	*5260.00	104.2 AV			1.37 H	74	96.1	8.1
5	#10520.00	58.8 PK	68.2	-9.4	1.11 H	71	42.8	16.0
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	5150.00	58.8 PK	74.0	-15.2	1.26 V	202	51.3	7.5
2	5150.00	47.7 AV	54.0	-6.3	1.26 V	202	40.2	7.5
3	*5260.00	109.6 PK			1.26 V	202	101.5	8.1
4	*5260.00	101.8 AV			1.26 V	202	93.7	8.1
5	#10520.00	62.0 PK	68.2	-6.2	2.77 V	16	46.0	16.0

Remarks:

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

RF Mode	802.11a	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	113.8 PK			2.81 H	295	105.4	8.4
2	*5300.00	107.0 AV			2.81 H	295	98.6	8.4
3	10600.00	56.4 PK	74.0	-17.6	2.55 H	300	40.3	16.1
4	10600.00	47.2 AV	54.0	-6.8	2.55 H	300	31.1	16.1
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	*5300.00	111.2 PK			2.70 V	19	102.8	8.4
2	*5300.00	104.3 AV			2.70 V	19	95.9	8.4
3	10600.00	59.6 PK	74.0	-14.4	2.45 V	246	43.5	16.1
4	10600.00	49.5 AV	54.0	-4.5	2.45 V	246	33.4	16.1

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 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	113.6 PK			2.81 H	297	105.1	8.5
2	*5320.00	107.1 AV			2.81 H	297	98.6	8.5
3	5350.00	67.7 PK	74.0	-6.3	2.81 H	297	59.1	8.6
4	5350.00	53.1 AV	54.0	-0.9	2.81 H	297	44.5	8.6
5	10640.00	56.9 PK	74.0	-17.1	2.55 H	294	40.9	16.0
6	10640.00	47.7 AV	54.0	-6.3	2.55 H	294	31.7	16.0
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	*5320.00	111.1 PK			2.70 V	21	102.6	8.5
2	*5320.00	104.4 AV			2.70 V	21	95.9	8.5
3	5350.00	63.7 PK	74.0	-10.3	2.70 V	21	55.1	8.6
4	5350.00	51.3 AV	54.0	-2.7	2.70 V	21	42.7	8.6
5	10640.00	60.1 PK	74.0	-13.9	2.39 V	238	44.1	16.0
6	10640.00	50.5 AV	54.0	-3.5	2.39 V	238	34.5	16.0

Remarks:

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

RF Mode	802.11a	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.6 PK	74.0	-11.4	2.89 H	297	53.8	8.8
2	5460.00	49.7 AV	54.0	-4.3	2.89 H	297	40.9	8.8
3	#5470.00	67.2 PK	68.2	-1.0	2.89 H	297	58.4	8.8
4	*5500.00	112.9 PK			2.89 H	297	104.0	8.9
5	*5500.00	106.3 AV			2.89 H	297	97.4	8.9
6	11000.00	59.1 PK	74.0	-14.9	1.48 H	300	42.2	16.9
7	11000.00	49.3 AV	54.0	-4.7	1.48 H	300	32.4	16.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.2 PK	74.0	-11.8	2.78 V	39	53.4	8.8
2	5460.00	48.8 AV	54.0	-5.2	2.78 V	39	40.0	8.8
3	#5470.00	66.2 PK	68.2	-2.0	2.78 V	39	57.4	8.8
4	*5500.00	111.2 PK			2.78 V	39	102.3	8.9
5	*5500.00	104.6 AV			2.78 V	39	95.7	8.9
6	11000.00	62.1 PK	74.0	-11.9	2.40 V	242	45.2	16.9
7	11000.00	51.7 AV	54.0	-2.3	2.40 V	242	34.8	16.9

Remarks:

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

RF Mode	802.11a	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	113.1 PK			2.99 H	329	104.5	8.6
2	*5580.00	105.7 AV			2.99 H	329	97.1	8.6
3	11160.00	60.8 PK	74.0	-13.2	1.58 H	332	43.8	17.0
4	11160.00	51.3 AV	54.0	-2.7	1.58 H	332	34.3	17.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	111.4 PK			2.68 V	71	102.8	8.6
2	*5580.00	104.4 AV			2.68 V	71	95.8	8.6
3	11160.00	63.8 PK	74.0	-10.2	3.85 V	284	46.8	17.0
4	**11160.00**	**53.7 AV**	**54.0**	**-0.3**	**3.85 V**	**284**	**36.7**	**17.0**

Remarks:

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

RF Mode	802.11a	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	109.3 PK			2.84 H	296	101.2	8.1
2	*5700.00	102.8 AV			2.84 H	296	94.7	8.1
3	#5725.00	67.4 PK	68.2	-0.8	2.84 H	296	59.3	8.1
4	11400.00	60.1 PK	74.0	-13.9	1.43 H	301	42.5	17.6
5	11400.00	49.8 AV	54.0	-4.2	1.43 H	301	32.2	17.6
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	*5700.00	108.1 PK			2.73 V	38	100.0	8.1
2	*5700.00	101.6 AV			2.73 V	38	93.5	8.1
3	#5725.00	67.1 PK	68.2	-1.1	2.73 V	38	59.0	8.1
4	11400.00	63.1 PK	74.0	-10.9	2.53 V	284	45.5	17.6
5	11400.00	52.2 AV	54.0	-1.8	2.53 V	284	34.6	17.6

Remarks:

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

RF Mode	802.11a	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.4 PK	68.2	-7.8	2.84 H	302	51.6	8.8
2	*5720.00	109.8 PK			2.84 H	302	101.7	8.1
3	*5720.00	103.0 AV			2.84 H	302	94.9	8.1
4	11440.00	62.1 PK	74.0	-11.9	1.42 H	309	44.7	17.4
5	11440.00	51.4 AV	54.0	-2.6	1.42 H	309	34.0	17.4
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	#5470.00	60.0 PK	68.2	-8.2	2.72 V	44	51.2	8.8
2	*5720.00	108.0 PK			2.72 V	44	99.9	8.1
3	*5720.00	101.6 AV			2.72 V	44	93.5	8.1
4	11440.00	64.0 PK	74.0	-10.0	2.67 V	280	46.6	17.4
5	11440.00	53.2 AV	54.0	-0.8	2.67 V	280	35.8	17.4

Remarks:

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

RF Mode	802.11a	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	109.3 PK			2.81 H	304	101.3	8.0
2	*5745.00	102.5 AV			2.81 H	304	94.5	8.0
3	11490.00	59.7 PK	74.0	-14.3	2.58 H	78	42.7	17.0
4	11490.00	49.6 AV	54.0	-4.4	2.58 H	78	32.6	17.0
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	*5745.00	107.3 PK			2.69 V	42	99.3	8.0
2	*5745.00	100.7 AV			2.69 V	42	92.7	8.0
3	11490.00	62.7 PK	74.0	-11.3	2.45 V	288	45.7	17.0
4	11490.00	53.0 AV	54.0	-1.0	2.45 V	288	36.0	17.0

Remarks:

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

RF Mode	802.11a	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	110.4 PK			3.03 H	300	102.4	8.0
2	*5785.00	103.9 AV			3.03 H	300	95.9	8.0
3	11570.00	59.8 PK	74.0	-14.2	2.36 H	74	42.3	17.5
4	11570.00	49.4 AV	54.0	-4.6	2.36 H	74	31.9	17.5
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	*5785.00	108.6 PK			2.47 V	38	100.6	8.0
2	*5785.00	102.0 AV			2.47 V	38	94.0	8.0
3	11570.00	63.6 PK	74.0	-10.4	2.33 V	284	46.1	17.5
4	11570.00	52.8 AV	54.0	-1.2	2.33 V	284	35.3	17.5

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.

RF Mode	802.11a	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	111.0 PK			3.42 H	303	103.0	8.0
2	*5825.00	104.2 AV			3.42 H	303	96.2	8.0
3	11650.00	63.0 PK	74.0	-11.0	2.42 H	73	45.0	18.0
4	11650.00	49.7 AV	54.0	-4.3	2.42 H	73	31.7	18.0
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	*5825.00	108.2 PK			2.08 V	43	100.2	8.0
2	*5825.00	101.3 AV			2.08 V	43	93.3	8.0
3	11650.00	64.4 PK	74.0	-9.6	2.29 V	293	46.4	18.0
4	11650.00	53.1 AV	54.0	-0.9	2.29 V	293	35.1	18.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 36：5180 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.4 PK	74.0	-8.6	1.84 H	292	57.9	7.5
2	5150.00	53.0 AV	54.0	-1.0	1.84 H	292	45.5	7.5
3	*5180.00	113.2 PK			1.84 H	292	105.7	7.5
4	*5180.00	103.6 AV			1.84 H	292	96.1	7.5
5	#10360.00	59.9 PK	68.2	-8.3	1.58 H	289	44.5	15.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.3 PK	74.0	-10.7	1.73 V	16	55.8	7.5
2	5150.00	51.1 AV	54.0	-2.9	1.73 V	16	43.6	7.5
3	*5180.00	110.9 PK			1.73 V	16	103.4	7.5
4	*5180.00	101.0 AV			1.73 V	16	93.5	7.5
5	#10360.00	63.1 PK	68.2	-5.1	3.26 V	234	47.7	15.4

Remarks:

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

RF Mode	802.11ax (HE20)	**Channel**	CH 40：5200 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5200.00	115.0 PK			1.58 H	293	107.5	7.5
2	*5200.00	105.2 AV			1.58 H	293	97.7	7.5
3	#10400.00	61.8 PK	68.2	-6.4	1.32 H	302	46.3	15.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5200.00	112.5 PK			1.47 V	17	105.0	7.5
2	*5200.00	102.5 AV			1.47 V	17	95.0	7.5
3	#10400.00	65.0 PK	68.2	-3.2	3.00 V	235	49.5	15.5

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 48：5240 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	115.2 PK			2.87 H	293	107.3	7.9
2	*5240.00	105.8 AV			2.87 H	293	97.9	7.9
3	5350.00	59.9 PK	74.0	-14.1	2.87 H	293	51.3	8.6
4	5350.00	49.1 AV	54.0	-4.9	2.87 H	293	40.5	8.6
5	#10480.00	62.0 PK	68.2	-6.2	2.61 H	290	46.1	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	112.8 PK			2.76 V	29	104.9	7.9
2	*5240.00	103.6 AV			2.76 V	29	95.7	7.9
3	5350.00	59.4 PK	74.0	-14.6	2.76 V	29	50.8	8.6
4	5350.00	48.6 AV	54.0	-5.4	2.76 V	29	40.0	8.6
5	#10480.00	65.2 PK	68.2	-3.0	1.27 V	247	49.3	15.9

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 52：5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	2.60 H	293	51.8	7.5
2	5150.00	48.2 AV	54.0	-5.8	2.60 H	293	40.7	7.5
3	*5260.00	115.5 PK			2.60 H	293	107.4	8.1
4	*5260.00	105.8 AV			2.60 H	293	97.7	8.1
5	#10520.00	58.3 PK	68.2	-9.9	2.34 H	298	42.3	16.0
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	5150.00	58.5 PK	74.0	-15.5	2.49 V	17	51.0	7.5
2	5150.00	47.7 AV	54.0	-6.3	2.49 V	17	40.2	7.5
3	*5260.00	112.7 PK			2.49 V	17	104.6	8.1
4	*5260.00	103.0 AV			2.49 V	17	94.9	8.1
5	#10520.00	61.5 PK	68.2	-6.7	2.24 V	244	45.5	16.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 60：5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	116.7 PK			2.81 H	295	108.3	8.4
2	*5300.00	106.9 AV			2.81 H	295	98.5	8.4
3	10600.00	55.3 PK	74.0	-18.7	2.56 H	301	39.2	16.1
4	10600.00	45.1 AV	54.0	-8.9	2.56 H	301	29.0	16.1
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	*5300.00	114.1 PK			2.71 V	20	105.7	8.4
2	*5300.00	104.4 AV			2.71 V	20	96.0	8.4
3	10600.00	58.3 PK	74.0	-15.7	2.57 V	246	42.2	16.1
4	10600.00	47.7 AV	54.0	-6.3	2.57 V	246	31.6	16.1

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 64：5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	114.4 PK			2.80 H	297	105.9	8.5
2	*5320.00	105.2 AV			2.80 H	297	96.7	8.5
3	5350.00	65.3 PK	74.0	-8.7	2.80 H	297	56.7	8.6
4	5350.00	53.0 AV	54.0	-1.0	2.80 H	297	44.4	8.6
5	10640.00	55.6 PK	74.0	-18.4	2.57 H	303	39.6	16.0
6	10640.00	45.6 AV	54.0	-8.4	2.57 H	303	29.6	16.0
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	*5320.00	112.0 PK			2.69 V	21	103.5	8.5
2	*5320.00	102.6 AV			2.69 V	21	94.1	8.5
3	5350.00	62.9 PK	74.0	-11.1	2.69 V	21	54.3	8.6
4	5350.00	51.1 AV	54.0	-2.9	2.69 V	21	42.5	8.6
5	10640.00	58.6 PK	74.0	-15.4	2.55 V	247	42.6	16.0
6	10640.00	48.0 AV	54.0	-6.0	2.55 V	247	32.0	16.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 100：5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.0 PK	74.0	-12.0	2.89 H	295	53.2	8.8
2	5460.00	50.8 AV	54.0	-3.2	2.89 H	295	42.0	8.8
3	#5470.00	67.0 PK	68.2	-1.2	2.89 H	295	58.2	8.8
4	*5500.00	115.5 PK			2.89 H	295	106.6	8.9
5	*5500.00	105.8 AV			2.89 H	295	96.9	8.9
6	11000.00	57.9 PK	74.0	-16.1	1.47 H	302	41.0	16.9
7	11000.00	48.2 AV	54.0	-5.8	1.47 H	302	31.3	16.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.8 PK	74.0	-12.2	2.77 V	37	53.0	8.8
2	5460.00	50.4 AV	54.0	-3.6	2.77 V	37	41.6	8.8
3	#5470.00	66.6 PK	68.2	-1.6	2.77 V	37	57.8	8.8
4	*5500.00	113.6 PK			2.77 V	37	104.7	8.9
5	*5500.00	104.0 AV			2.77 V	37	95.1	8.9
6	11000.00	59.8 PK	74.0	-14.2	2.40 V	243	42.9	16.9
7	11000.00	50.0 AV	54.0	-4.0	2.40 V	243	33.1	16.9

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 116：5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	114.4 PK			2.99 H	328	105.8	8.6
2	*5580.00	104.9 AV			2.99 H	328	96.3	8.6
3	11160.00	58.8 PK	74.0	-15.2	1.57 H	269	41.8	17.0
4	11160.00	49.1 AV	54.0	-4.9	1.57 H	269	32.1	17.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	112.5 PK			2.67 V	70	103.9	8.6
2	*5580.00	102.9 AV			2.67 V	70	94.3	8.6
3	11160.00	60.7 PK	74.0	-13.3	2.30 V	276	43.7	17.0
4	11160.00	50.9 AV	54.0	-3.1	2.30 V	276	33.9	17.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 140：5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	112.5 PK			2.97 H	285	104.4	8.1
2	*5700.00	102.7 AV			2.97 H	285	94.6	8.1
3	#5725.00	67.3 PK	68.2	-0.9	2.97 H	285	59.2	8.1
4	11400.00	56.4 PK	74.0	-17.6	1.55 H	292	38.8	17.6
5	11400.00	46.7 AV	54.0	-7.3	1.55 H	292	29.1	17.6
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	*5700.00	110.5 PK			2.85 V	27	102.4	8.1
2	*5700.00	100.8 AV			2.85 V	27	92.7	8.1
3	#5725.00	66.2 PK	68.2	-2.0	2.85 V	27	58.1	8.1
4	11400.00	58.3 PK	74.0	-15.7	2.48 V	233	40.7	17.6
5	11400.00	48.5 AV	54.0	-5.5	2.48 V	233	30.9	17.6

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 (HE20)	Channel	CH 144：5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.3 PK	68.2	-7.9	1.46 H	81	51.5	8.8
2	*5720.00	111.9 PK			1.46 H	81	103.8	8.1
3	*5720.00	101.8 AV			1.46 H	81	93.7	8.1
4	11440.00	60.2 PK	74.0	-13.8	2.80 H	90	42.8	17.4
5	11440.00	49.5 AV	54.0	-4.5	2.80 H	90	32.1	17.4
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	#5470.00	59.7 PK	68.2	-8.5	1.34 V	265	50.9	8.8
2	*5720.00	110.0 PK			1.34 V	265	101.9	8.1
3	*5720.00	100.1 AV			1.34 V	265	92.0	8.1
4	11440.00	63.0 PK	74.0	-11.0	2.67 V	277	45.6	17.4
5	11440.00	52.9 AV	54.0	-1.1	2.67 V	277	35.5	17.4

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 149：5745 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5745.00	112.1 PK			2.80 H	292	104.1	8.0
2	*5745.00	102.0 AV			2.80 H	292	94.0	8.0
3	11490.00	60.0 PK	74.0	-14.0	2.57 H	66	43.0	17.0
4	11490.00	49.4 AV	54.0	-4.6	2.57 H	66	32.4	17.0
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	*5745.00	110.3 PK			2.68 V	30	102.3	8.0
2	*5745.00	100.3 AV			2.68 V	30	92.3	8.0
3	11490.00	63.0 PK	74.0	-11.0	2.45 V	285	46.0	17.0
4	11490.00	52.8 AV	54.0	-1.2	2.45 V	285	35.8	17.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5785.00	112.3 PK			3.04 H	303	104.3	8.0
2	*5785.00	103.0 AV			3.04 H	303	95.0	8.0
3	11570.00	61.4 PK	74.0	-12.6	2.35 H	77	43.9	17.5
4	11570.00	49.7 AV	54.0	-4.3	2.35 H	77	32.2	17.5
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	*5785.00	110.3 PK			2.46 V	43	102.3	8.0
2	*5785.00	101.0 AV			2.46 V	43	93.0	8.0
3	11570.00	64.4 PK	74.0	-9.6	2.50 V	290	46.9	17.5
4	11570.00	53.1 AV	54.0	-0.9	2.50 V	290	35.6	17.5

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.

RF Mode	802.11ax (HE20)	Channel	CH 165：5825 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5825.00	112.1 PK			2.68 H	355	104.1	8.0
2	*5825.00	102.8 AV			2.68 H	355	94.8	8.0
3	11650.00	60.9 PK	74.0	-13.1	2.45 H	129	42.9	18.0
4	11650.00	49.6 AV	54.0	-4.4	2.45 H	129	31.6	18.0
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	*5825.00	110.1 PK			2.56 V	93	102.1	8.0
2	*5825.00	101.0 AV			2.56 V	93	93.0	8.0
3	11650.00	63.9 PK	74.0	-10.1	2.25 V	289	45.9	18.0
4	11650.00	53.0 AV	54.0	-1.0	2.25 V	289	35.0	18.0

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 38：5190 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.5 PK	74.0	-6.5	1.35 H	292	60.0	7.5
2	5150.00	53.0 AV	54.0	-1.0	1.35 H	292	45.5	7.5
3	*5190.00	109.2 PK			1.35 H	292	101.7	7.5
4	*5190.00	99.4 AV			1.35 H	292	91.9	7.5
5	#10380.00	56.1 PK	68.2	-12.1	1.09 H	303	40.5	15.6
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.2 PK	74.0	-8.8	1.26 V	16	57.7	7.5
2	5150.00	51.3 AV	54.0	-2.7	1.26 V	16	43.8	7.5
3	*5190.00	106.8 PK			1.26 V	16	99.3	7.5
4	*5190.00	96.6 AV			1.26 V	16	89.1	7.5
5	#10380.00	59.3 PK	68.2	-8.9	2.79 V	234	43.7	15.6

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 (HE40)	**Channel**	CH 46：5230 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5230.00	113.0 PK			2.88 H	293	105.2	7.8
2	*5230.00	102.6 AV			2.88 H	293	94.8	7.8
3	5350.00	59.4 PK	74.0	-14.6	2.88 H	293	50.8	8.6
4	5350.00	49.1 AV	54.0	-4.9	2.88 H	293	40.5	8.6
5	#10460.00	59.9 PK	68.2	-8.3	2.62 H	290	44.0	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	*5230.00	110.4 PK			2.77 V	29	102.6	7.8
2	*5230.00	100.2 AV			2.77 V	29	92.4	7.8
3	5350.00	58.9 PK	74.0	-15.1	2.77 V	29	50.3	8.6
4	5350.00	48.7 AV	54.0	-5.3	2.77 V	29	40.1	8.6
5	#10460.00	63.1 PK	68.2	-5.1	1.26 V	247	47.2	15.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 54：5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.8 PK	74.0	-15.2	2.83 H	287	51.3	7.5
2	5150.00	48.4 AV	54.0	-5.6	2.83 H	287	40.9	7.5
3	*5270.00	112.8 PK			2.83 H	287	104.7	8.1
4	*5270.00	103.5 AV			2.83 H	287	95.4	8.1
5	#10540.00	56.7 PK	68.2	-11.5	2.60 H	293	40.8	15.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.4 PK	74.0	-15.6	2.72 V	31	50.9	7.5
2	5150.00	48.0 AV	54.0	-6.0	2.72 V	31	40.5	7.5
3	*5270.00	110.7 PK			2.72 V	31	102.6	8.1
4	*5270.00	101.4 AV			2.72 V	31	93.3	8.1
5	#10540.00	59.7 PK	68.2	-8.5	2.58 V	257	43.8	15.9

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 62：5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	110.4 PK			1.47 H	288	102.0	8.4
2	*5310.00	100.9 AV			1.47 H	288	92.5	8.4
3	5350.00	67.5 PK	74.0	-6.5	1.47 H	288	58.9	8.6
4	5350.00	53.1 AV	54.0	-0.9	1.47 H	288	44.5	8.6
5	10620.00	56.5 PK	74.0	-17.5	1.24 H	294	40.5	16.0
6	10620.00	46.5 AV	54.0	-7.5	1.24 H	294	30.5	16.0
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	108.4 PK			1.36 V	30	100.0	8.4
2	*5310.00	98.7 AV			1.36 V	30	90.3	8.4
3	5350.00	66.3 PK	74.0	-7.7	1.36 V	30	57.7	8.6
4	5350.00	52.3 AV	54.0	-1.7	1.36 V	30	43.7	8.6
5	10620.00	59.5 PK	74.0	-14.5	1.22 V	256	43.5	16.0
6	10620.00	48.9 AV	54.0	-5.1	1.22 V	256	32.9	16.0

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	63.9 PK	74.0	-10.1	3.01 H	302	55.1	8.8
2	5460.00	51.0 AV	54.0	-3.0	3.01 H	302	42.2	8.8
3	#5470.00	66.9 PK	68.2	-1.3	3.01 H	302	58.1	8.8
4	*5510.00	109.9 PK			3.01 H	302	101.1	8.8
5	*5510.00	100.2 AV			3.01 H	302	91.4	8.8
6	11020.00	57.3 PK	74.0	-16.7	1.59 H	295	40.5	16.8
7	11020.00	47.6 AV	54.0	-6.4	1.59 H	295	30.8	16.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.8 PK	74.0	-11.2	2.89 V	44	54.0	8.8
2	5460.00	50.6 AV	54.0	-3.4	2.89 V	44	41.8	8.8
3	#5470.00	66.4 PK	68.2	-1.8	2.89 V	44	57.6	8.8
4	*5510.00	108.1 PK			2.89 V	44	99.3	8.8
5	*5510.00	98.7 AV			2.89 V	44	89.9	8.8
6	11020.00	59.2 PK	74.0	-14.8	2.28 V	236	42.4	16.8
7	11020.00	49.4 AV	54.0	-4.6	2.28 V	236	32.6	16.8

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 110：5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	113.1 PK			2.73 H	294	104.3	8.8
2	*5550.00	103.1 AV			2.73 H	294	94.3	8.8
3	11100.00	55.5 PK	74.0	-18.5	1.63 H	301	39.0	16.5
4	11100.00	45.8 AV	54.0	-8.2	1.63 H	301	29.3	16.5
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	*5550.00	111.2 PK			2.61 V	36	102.4	8.8
2	*5550.00	101.6 AV			2.61 V	36	92.8	8.8
3	11100.00	57.4 PK	74.0	-16.6	2.56 V	242	40.9	16.5
4	11100.00	47.6 AV	54.0	-6.4	2.56 V	242	31.1	16.5

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.

RF Mode	802.11ax (HE40)	Channel	CH 134：5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	110.0 PK			2.63 H	293	101.9	8.1
2	*5670.00	100.3 AV			2.63 H	293	92.2	8.1
3	#5725.00	67.3 PK	68.2	-0.9	2.63 H	293	59.2	8.1
4	11340.00	57.7 PK	74.0	-16.3	1.21 H	300	40.3	17.4
5	11340.00	48.0 AV	54.0	-6.0	1.21 H	300	30.6	17.4
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	*5670.00	108.2 PK			2.51 V	35	100.1	8.1
2	*5670.00	97.9 AV			2.51 V	35	89.8	8.1
3	#5725.00	64.4 PK	68.2	-3.8	2.51 V	35	56.3	8.1
4	11340.00	59.6 PK	74.0	-14.4	2.14 V	241	42.2	17.4
5	11340.00	49.8 AV	54.0	-4.2	2.14 V	241	32.4	17.4

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 142：5710 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	60.6 PK	68.2	-7.6	1.47 H	79	51.8	8.8
2	*5710.00	112.0 PK			1.47 H	79	103.9	8.1
3	*5710.00	102.0 AV			1.47 H	79	93.9	8.1
4	11420.00	60.5 PK	74.0	-13.5	2.79 H	88	42.9	17.6
5	11420.00	49.9 AV	54.0	-4.1	2.79 H	88	32.3	17.6
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	60.0 PK	68.2	-8.2	1.33 V	263	51.2	8.8
2	*5710.00	110.1 PK			1.33 V	263	102.0	8.1
3	*5710.00	99.7 AV			1.33 V	263	91.6	8.1
4	11420.00	63.1 PK	74.0	-10.9	2.67 V	281	45.5	17.6
5	11420.00	53.1 AV	54.0	-0.9	2.67 V	281	35.5	17.6

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 (HE40)	Channel	CH 151：5755 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5755.00	112.6 PK			2.80 H	293	104.5	8.1
2	*5755.00	102.3 AV			2.80 H	293	94.2	8.1
3	11510.00	60.3 PK	74.0	-13.7	2.59 H	89	43.3	17.0
4	11510.00	49.0 AV	54.0	-5.0	2.59 H	89	32.0	17.0
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	*5755.00	110.5 PK			2.70 V	53	102.4	8.1
2	*5755.00	99.9 AV			2.70 V	53	91.8	8.1
3	11510.00	63.0 PK	74.0	-11.0	2.36 V	288	46.0	17.0
4	11510.00	52.5 AV	54.0	-1.5	2.36 V	288	35.5	17.0

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 159：5795 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5795.00	112.1 PK			3.52 H	330	104.1	8.0
2	*5795.00	101.7 AV			3.52 H	330	93.7	8.0
3	11590.00	60.6 PK	74.0	-13.4	3.31 H	126	42.9	17.7
4	11590.00	49.3 AV	54.0	-4.7	3.31 H	126	31.6	17.7
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	*5795.00	110.2 PK			1.98 V	68	102.2	8.0
2	*5795.00	99.8 AV			1.98 V	68	91.8	8.0
3	11590.00	62.9 PK	74.0	-11.1	2.46 V	290	45.2	17.7
4	11590.00	52.9 AV	54.0	-1.1	2.46 V	290	35.2	17.7

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 (HE80)	Channel	CH 42：5210 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.6 PK	74.0	-6.4	2.99 H	292	60.1	7.5
2	5150.00	53.0 AV	54.0	-1.0	2.99 H	292	45.5	7.5
3	*5210.00	105.2 PK			2.99 H	292	97.5	7.7
4	*5210.00	97.0 AV			2.99 H	292	89.3	7.7
5	5350.00	60.2 PK	74.0	-13.8	2.99 H	292	51.6	8.6
6	5350.00	49.2 AV	54.0	-4.8	2.99 H	292	40.6	8.6
7	#10420.00	52.0 PK	68.2	-16.2	2.73 H	303	36.3	15.7
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	64.4 PK	74.0	-9.6	2.88 V	30	56.9	7.5
2	5150.00	51.2 AV	54.0	-2.8	2.88 V	30	43.7	7.5
3	*5210.00	102.7 PK			2.88 V	30	95.0	7.7
4	*5210.00	94.6 AV			2.88 V	30	86.9	7.7
5	5350.00	59.3 PK	74.0	-14.7	2.88 V	30	50.7	8.6
6	5350.00	48.6 AV	54.0	-5.4	2.88 V	30	40.0	8.6
7	#10420.00	55.2 PK	68.2	-13.0	1.15 V	248	39.5	15.7

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 58：5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.8 PK	74.0	-14.2	1.47 H	289	52.3	7.5
2	5150.00	48.3 AV	54.0	-5.7	1.47 H	289	40.8	7.5
3	*5290.00	106.0 PK			1.47 H	289	97.6	8.4
4	*5290.00	97.6 AV			1.47 H	289	89.2	8.4
5	5350.00	67.6 PK	74.0	-6.4	1.47 H	289	59.0	8.6
6	5350.00	53.1 AV	54.0	-0.9	1.47 H	289	44.5	8.6
7	#10580.00	56.0 PK	68.2	-12.2	1.24 H	295	39.9	16.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	1.36 V	13	51.8	7.5
2	5150.00	47.8 AV	54.0	-6.2	1.36 V	13	40.3	7.5
3	*5290.00	104.0 PK			1.36 V	13	95.6	8.4
4	*5290.00	95.6 AV			1.36 V	13	87.2	8.4
5	5350.00	66.9 PK	74.0	-7.1	1.36 V	13	58.3	8.6
6	5350.00	52.4 AV	54.0	-1.6	1.36 V	13	43.8	8.6
7	#10580.00	59.1 PK	68.2	-9.1	1.22 V	239	43.0	16.1

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 106：5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	64.9 PK	74.0	-9.1	2.63 H	330	56.1	8.8
2	5460.00	52.8 AV	54.0	-1.2	2.63 H	330	44.0	8.8
3	#5470.00	65.7 PK	68.2	-2.5	2.63 H	330	56.9	8.8
4	*5530.00	105.1 PK			2.63 H	330	96.3	8.8
5	*5530.00	97.1 AV			2.63 H	330	88.3	8.8
6	11060.00	57.3 PK	74.0	-16.7	1.21 H	297	40.7	16.6
7	11060.00	47.6 AV	54.0	-6.4	1.21 H	297	31.0	16.6
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	64.6 PK	74.0	-9.4	2.51 V	2	55.8	8.8
2	5460.00	52.5 AV	54.0	-1.5	2.51 V	2	43.7	8.8
3	#5470.00	65.5 PK	68.2	-2.7	2.51 V	2	56.7	8.8
4	*5530.00	103.2 PK			2.51 V	2	94.4	8.8
5	*5530.00	95.1 AV			2.51 V	2	86.3	8.8
6	11060.00	59.2 PK	74.0	-14.8	2.14 V	208	42.6	16.6
7	11060.00	49.4 AV	54.0	-4.6	2.14 V	208	32.8	16.6

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 (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	107.7 PK			2.83 H	292	99.3	8.4
2	*5610.00	99.5 AV			2.83 H	292	91.1	8.4
3	#5725.00	67.3 PK	68.2	-0.9	2.83 H	292	59.2	8.1
4	11220.00	57.1 PK	74.0	-16.9	1.41 H	299	39.7	17.4
5	11220.00	47.4 AV	54.0	-6.6	1.41 H	299	30.0	17.4
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	*5610.00	105.9 PK			2.71 V	34	97.5	8.4
2	*5610.00	97.8 AV			2.71 V	34	89.4	8.4
3	#5725.00	66.7 PK	68.2	-1.5	2.71 V	34	58.6	8.1
4	11220.00	59.0 PK	74.0	-15.0	2.34 V	240	41.6	17.4
5	11220.00	49.2 AV	54.0	-4.8	2.34 V	240	31.8	17.4

Remarks:

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

RF Mode	802.11ax (HE80)	**Channel**	CH 138：5690 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	#5470.00	59.8 PK	68.2	-8.4	1.45 H	80	51.0	8.8
2	*5690.00	107.7 PK			1.45 H	80	99.6	8.1
3	*5690.00	99.6 AV			1.45 H	80	91.5	8.1
4	11380.00	58.2 PK	74.0	-15.8	2.79 H	91	40.6	17.6
5	11380.00	47.6 AV	54.0	-6.4	2.79 H	91	30.0	17.6
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	59.4 PK	68.2	-8.8	1.33 V	266	50.6	8.8
2	*5690.00	106.0 PK			1.33 V	266	97.9	8.1
3	*5690.00	97.8 AV			1.33 V	266	89.7	8.1
4	11380.00	60.7 PK	74.0	-13.3	2.45 V	288	43.1	17.6
5	11380.00	50.6 AV	54.0	-3.4	2.45 V	288	33.0	17.6

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.

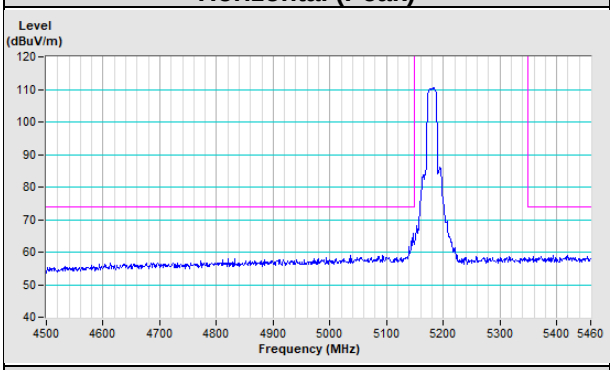
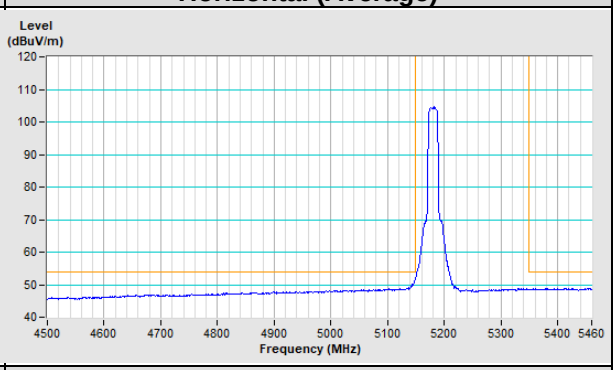
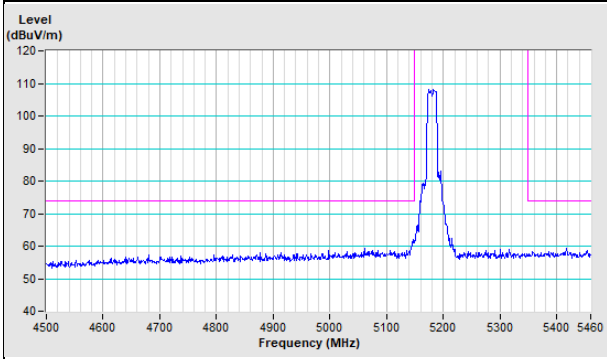
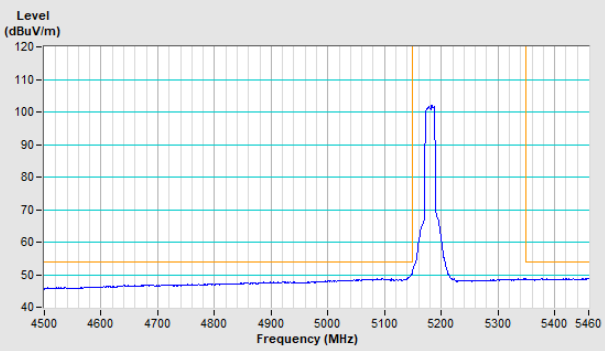
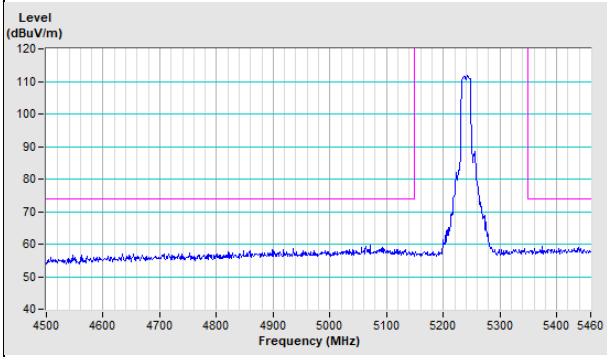
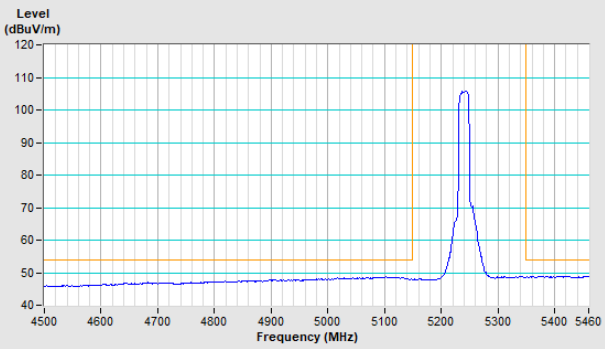
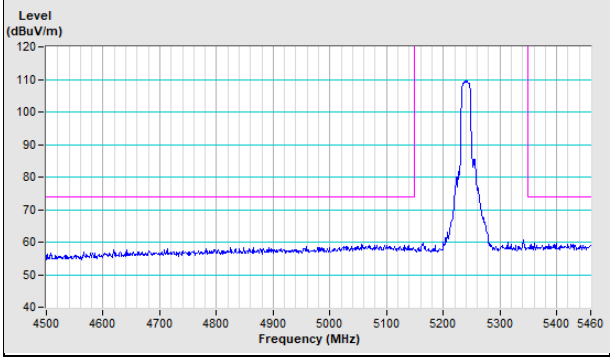
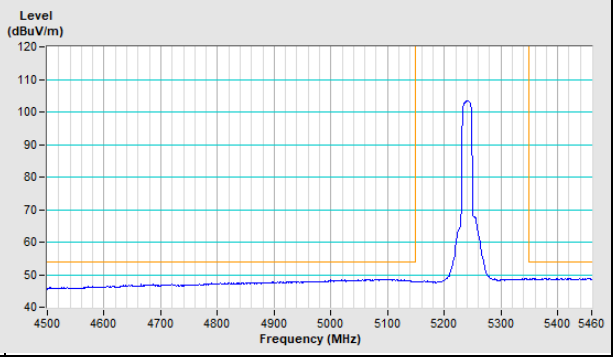
RF Mode	802.11ax (HE80)	Channel	CH 155：5775 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 10 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	18°C, 64% RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5775.00	108.0 PK			2.93 H	290	100.0	8.0
2	*5775.00	99.2 AV			2.93 H	290	91.2	8.0
3	11550.00	59.0 PK	74.0	-15.0	2.46 H	64	41.6	17.4
4	11550.00	47.6 AV	54.0	-6.4	2.46 H	64	30.2	17.4
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	*5775.00	106.1 PK			2.57 V	28	98.1	8.0
2	*5775.00	97.1 AV			2.57 V	28	89.1	8.0
3	11550.00	62.0 PK	74.0	-12.0	2.25 V	287	44.6	17.4
4	11550.00	51.0 AV	54.0	-3.0	2.25 V	287	33.6	17.4

Remarks:

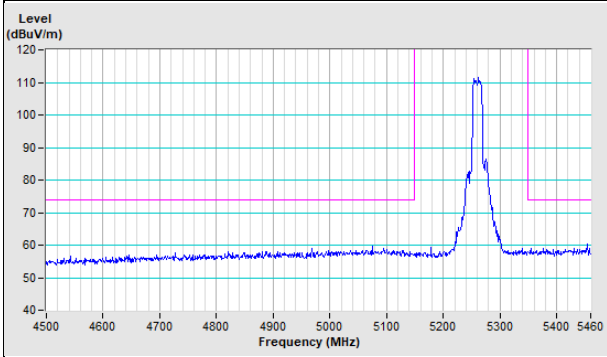
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency,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

Mode A_Plot of Band Edge

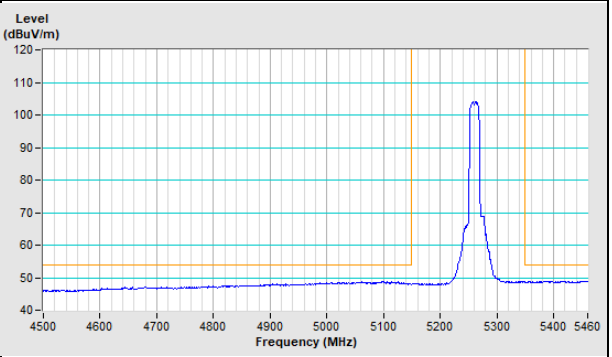
802.11a Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11a Channel 52

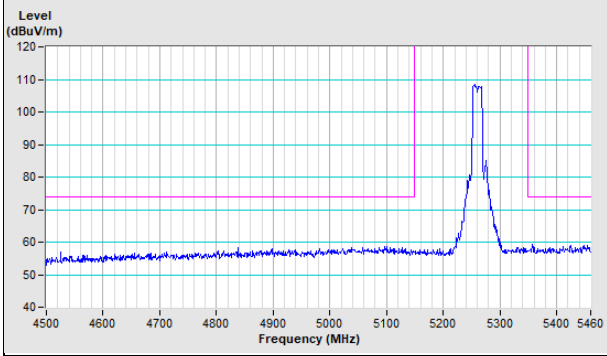
Horizontal (Peak)



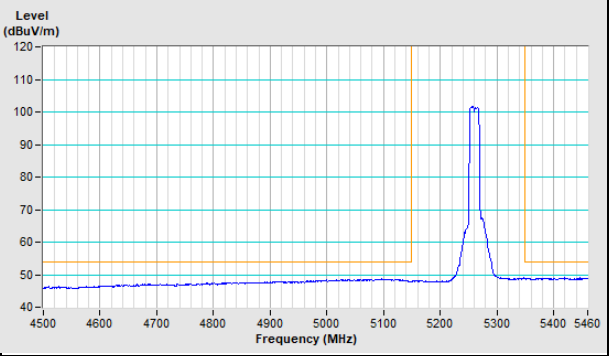
Horizontal (Average)



Vertical (Peak)

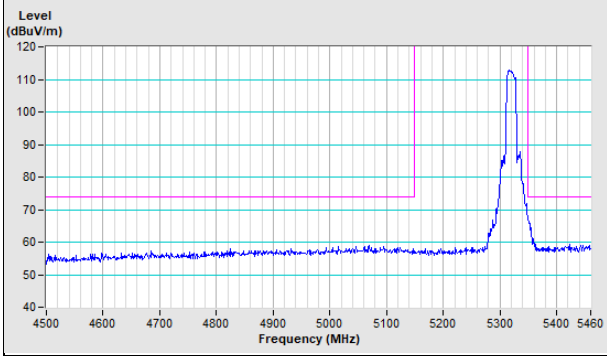


Vertical (Average)

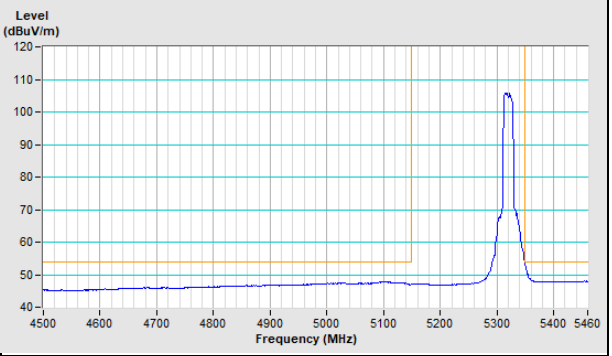


802.11a Channel 64

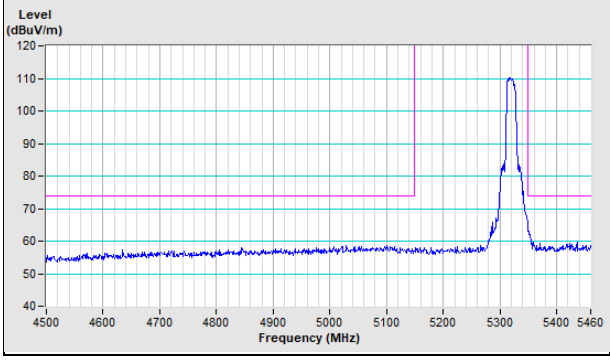
Horizontal (Peak)



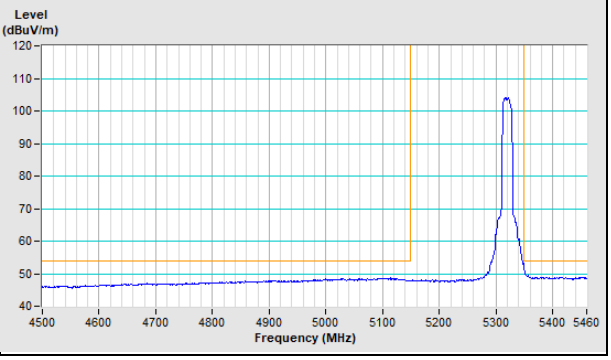
Horizontal (Average)



Vertical (Peak)

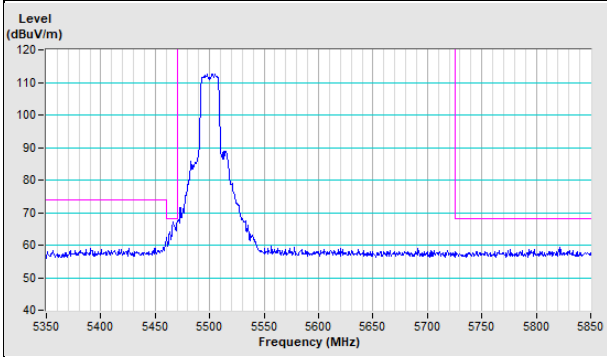


Vertical (Average)

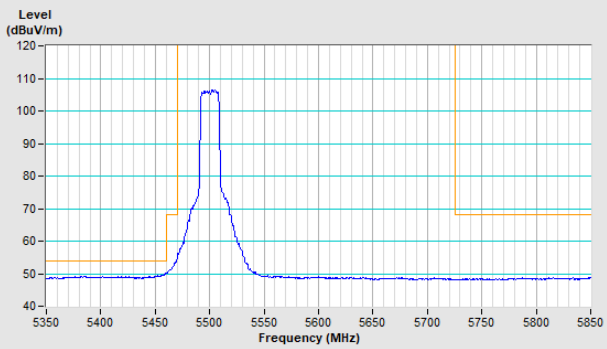


802.11a Channel 100

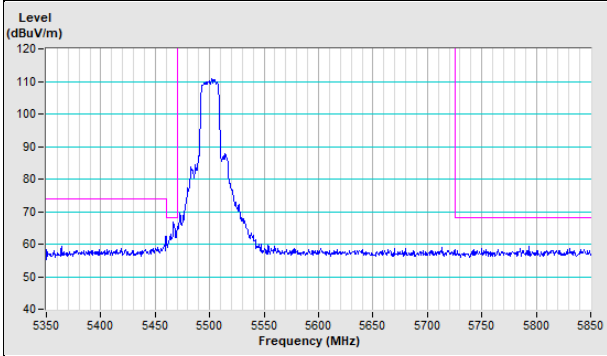
Horizontal (Peak)



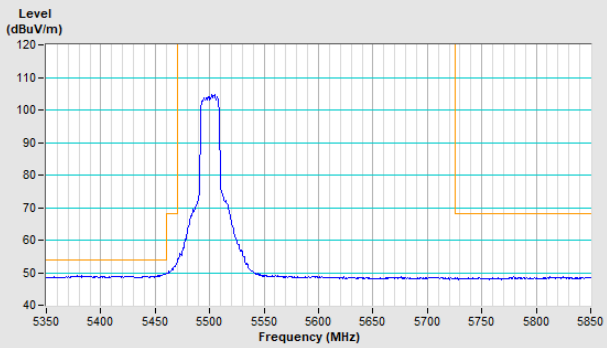
Horizontal (Average)



Vertical (Peak)

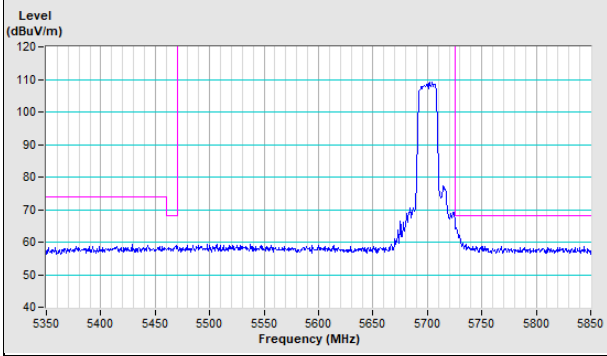


Vertical (Average)

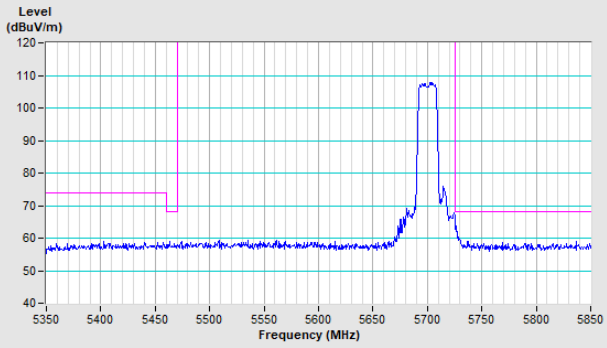


802.11a Channel 140

Horizontal (Peak)

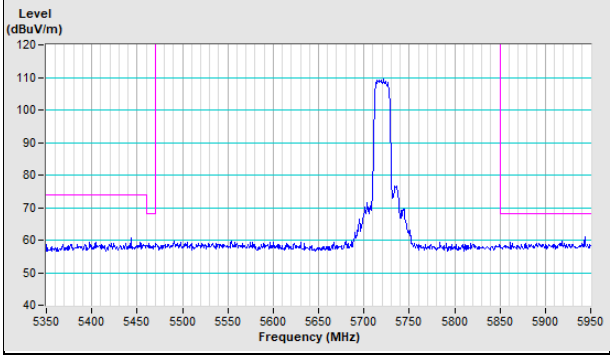


Vertical (Peak)

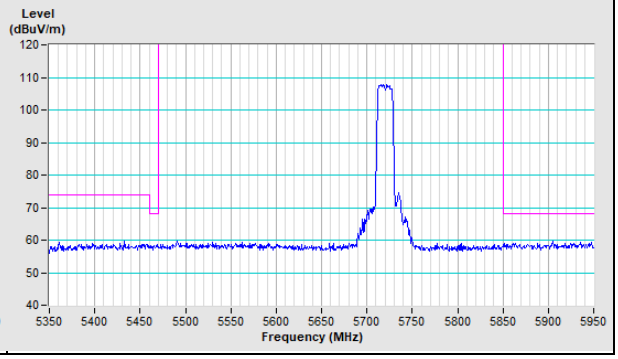


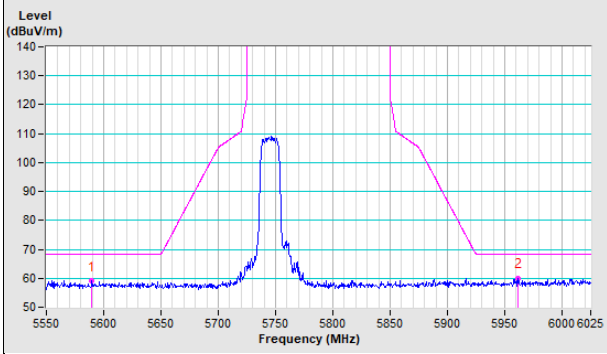
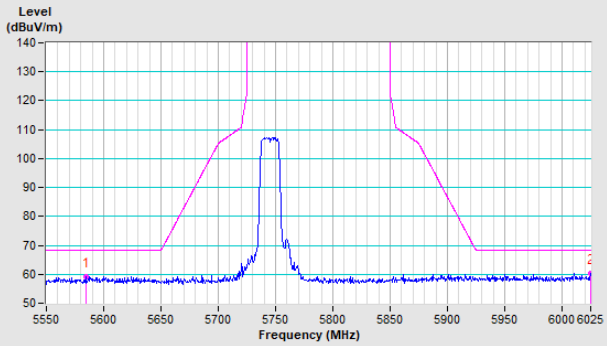
802.11a Channel 144

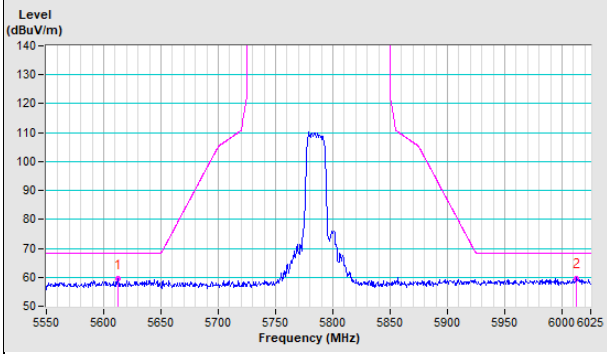
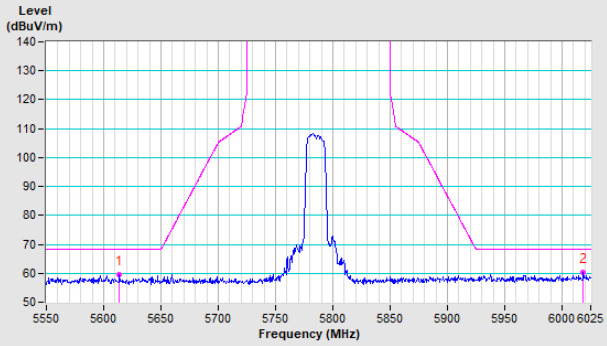
Horizontal (Peak)

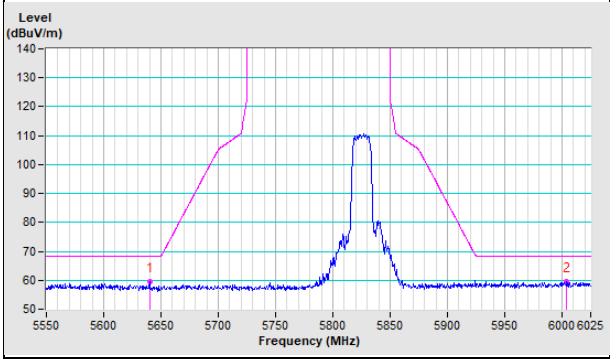
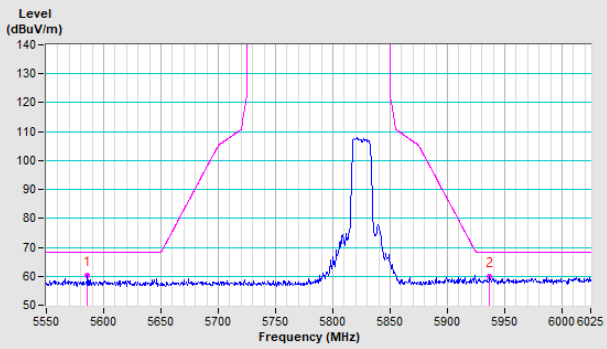


Vertical (Peak)



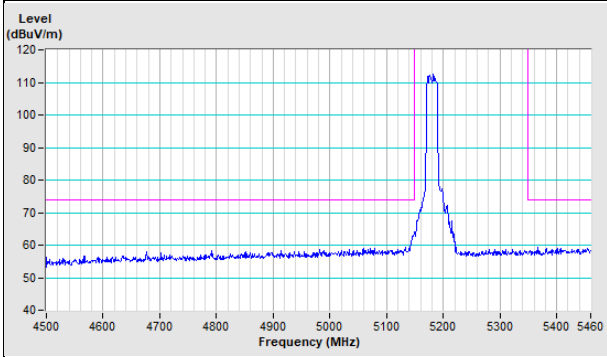
802.11a Channel 149	
Horizontal (Peak)	Vertical (Peak)
	

802.11a Channel 157	
Horizontal (Peak)	Vertical (Peak)
	

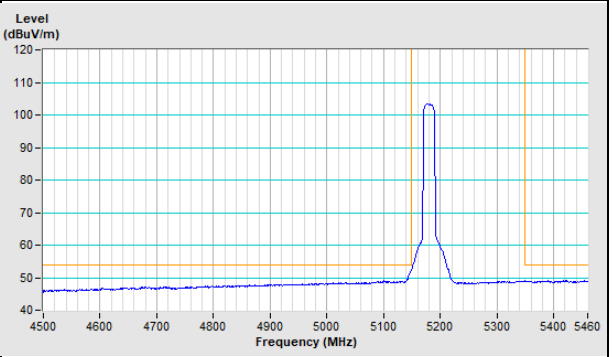
802.11a Channel 165	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE20) Channel 36

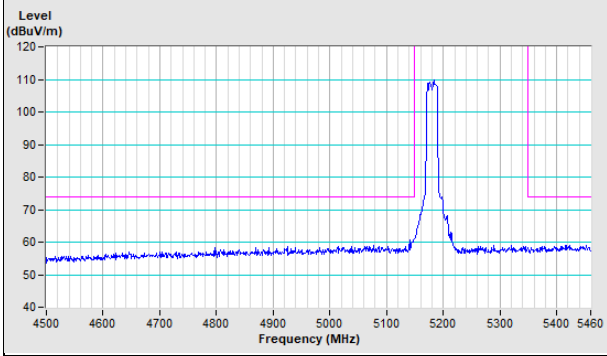
Horizontal (Peak)



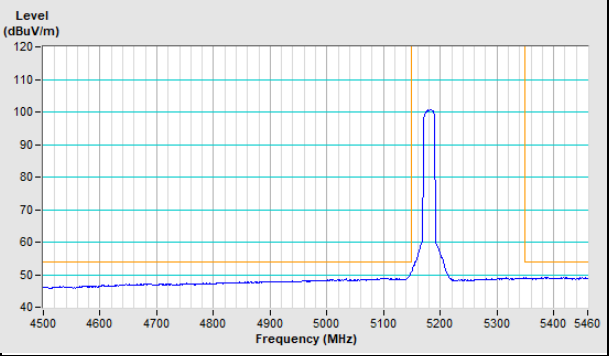
Horizontal (Average)



Vertical (Peak)

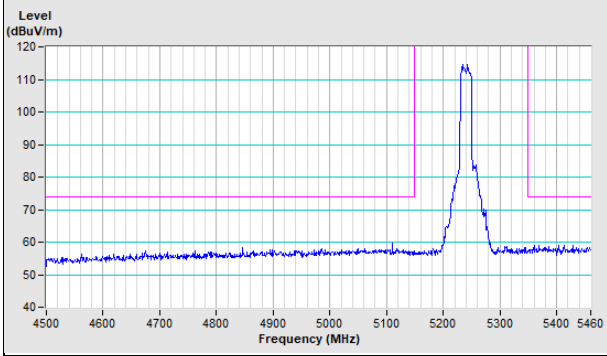


Vertical (Average)

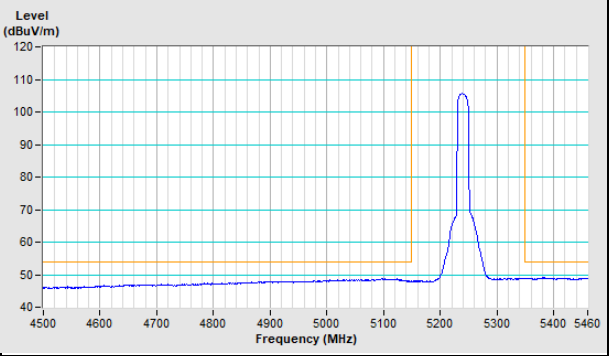


802.11ax (HE20) Channel 48

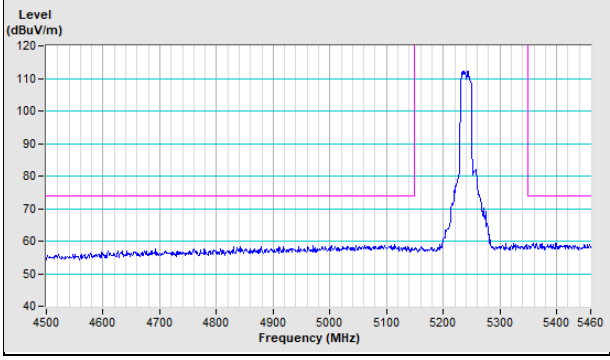
Horizontal (Peak)



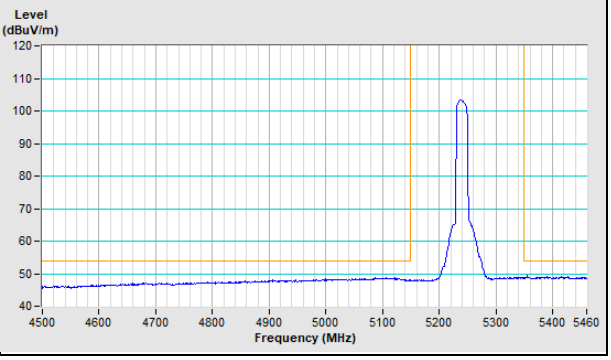
Horizontal (Average)



Vertical (Peak)

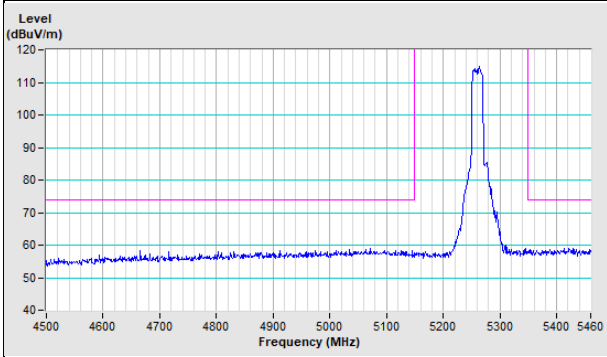


Vertical (Average)

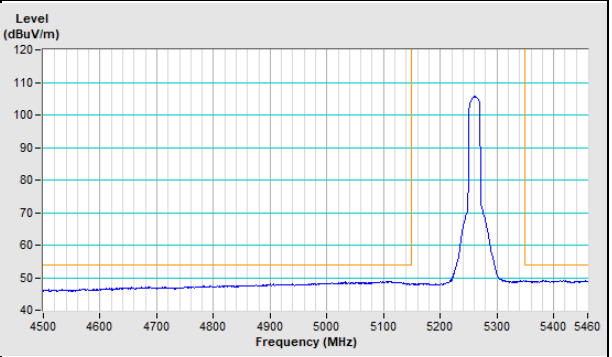


802.11ax (HE20) Channel 52

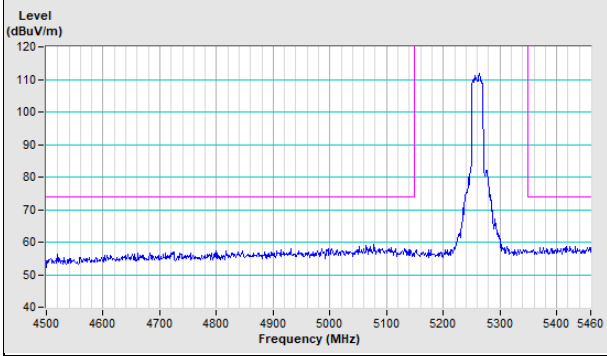
Horizontal (Peak)



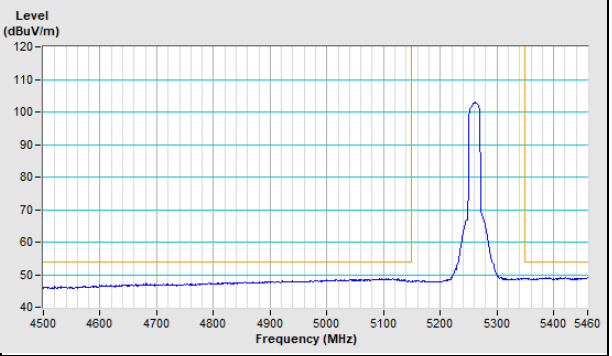
Horizontal (Average)



Vertical (Peak)

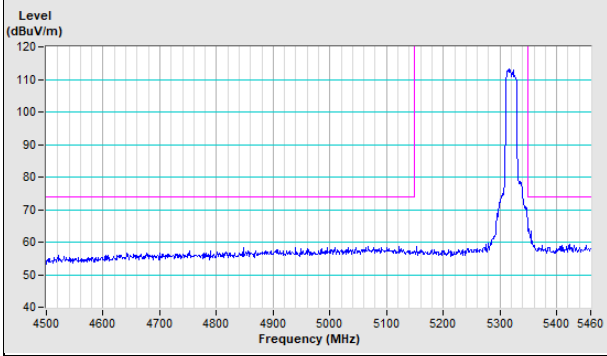


Vertical (Average)

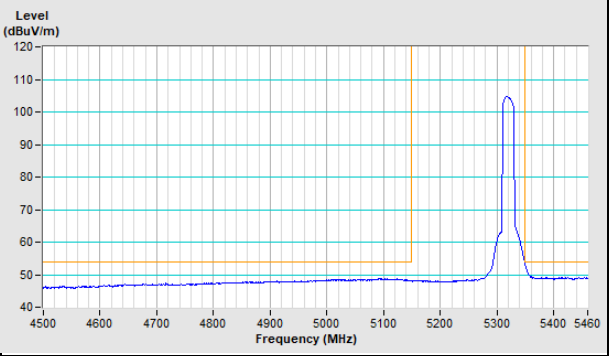


802.11ax (HE20) Channel 64

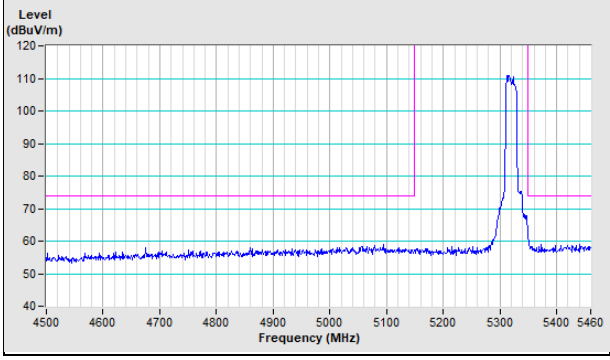
Horizontal (Peak)



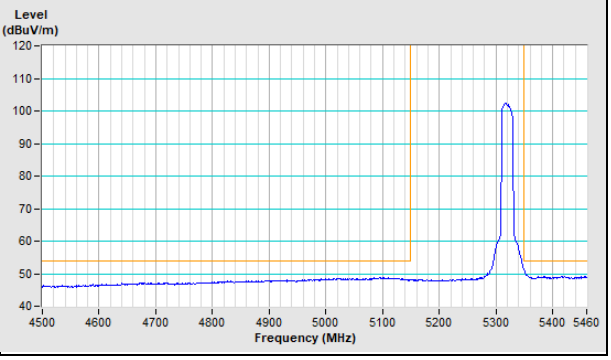
Horizontal (Average)



Vertical (Peak)

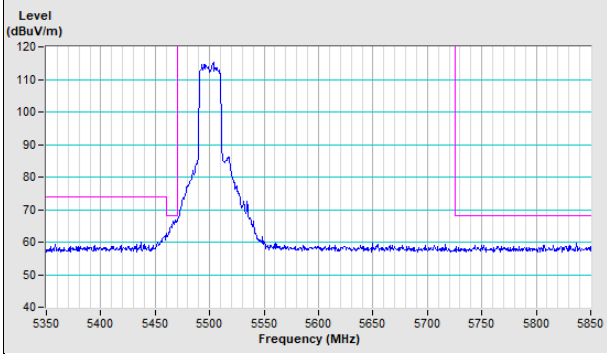


Vertical (Average)

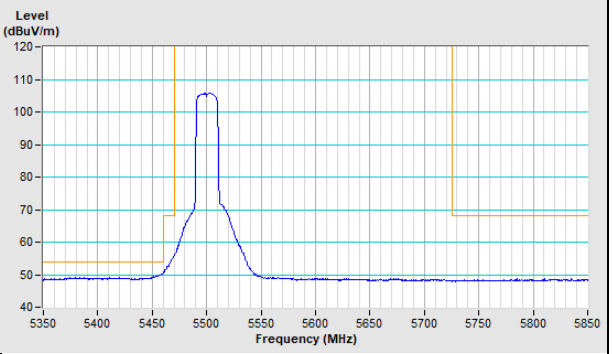


802.11ax (HE20) Channel 100

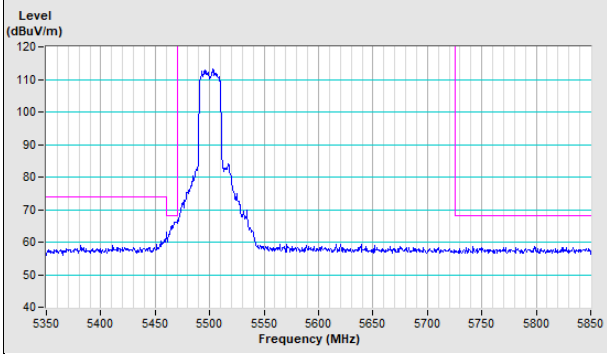
Horizontal (Peak)



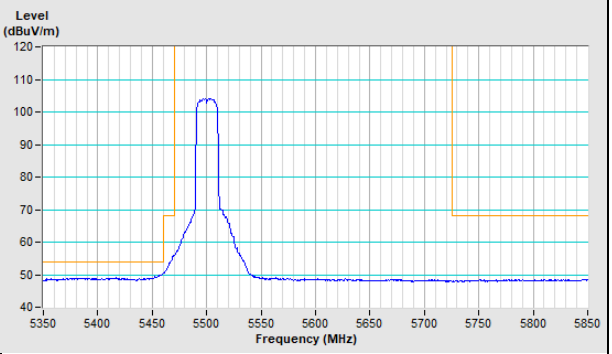
Horizontal (Average)



Vertical (Peak)

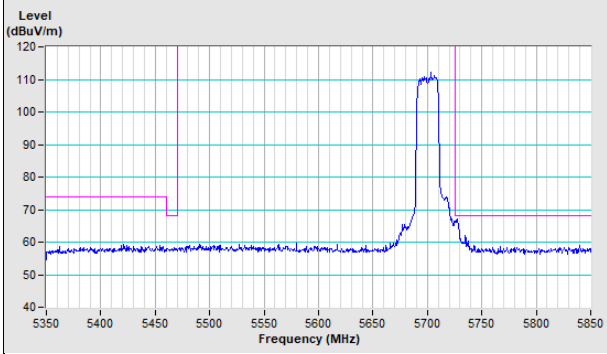


Vertical (Average)

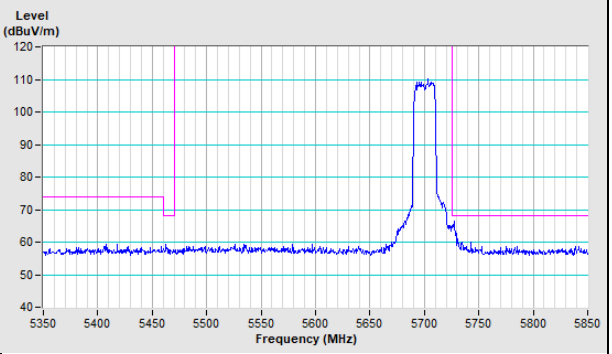


802.11ax (HE20) Channel 140

Horizontal (Peak)

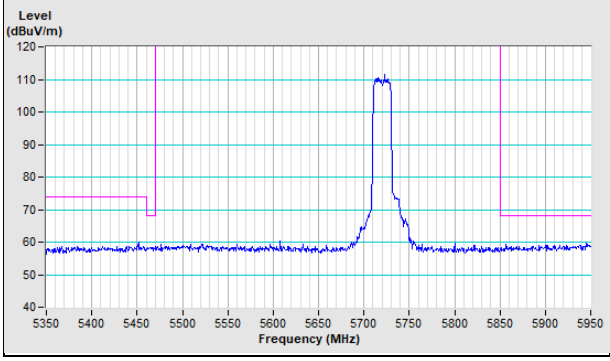


Vertical (Peak)

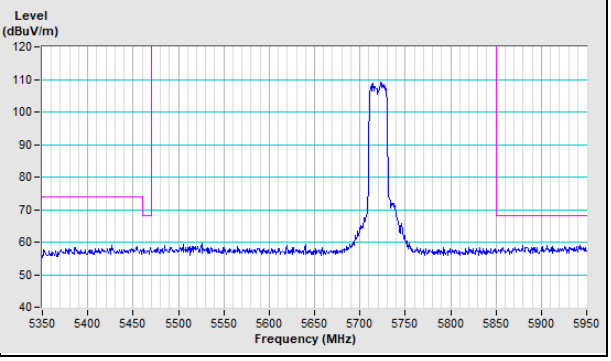


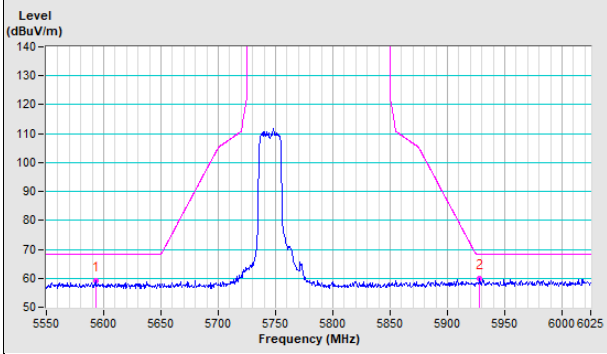
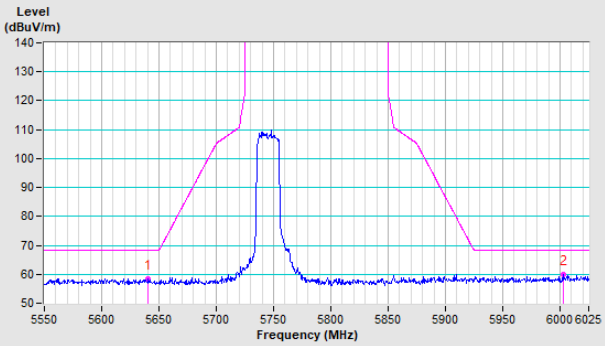
802.11ax (HE20) Channel 144

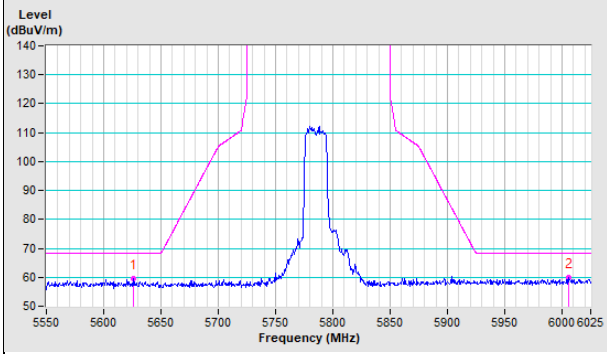
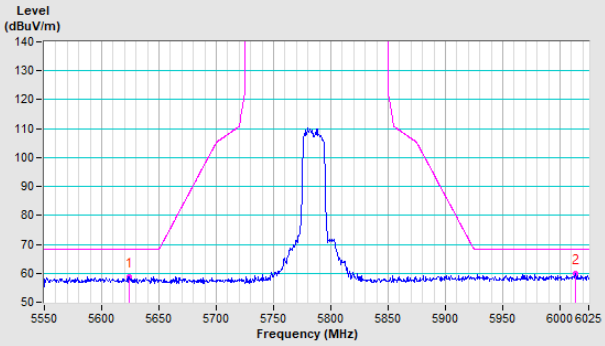
Horizontal (Peak)

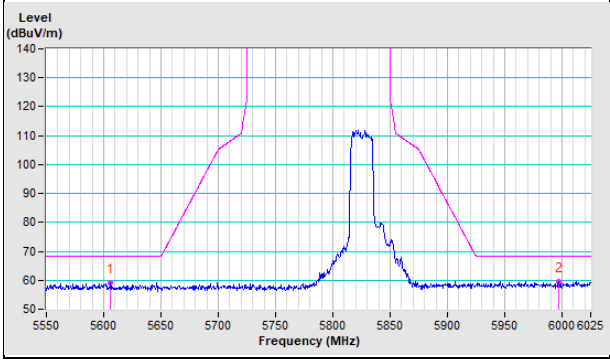
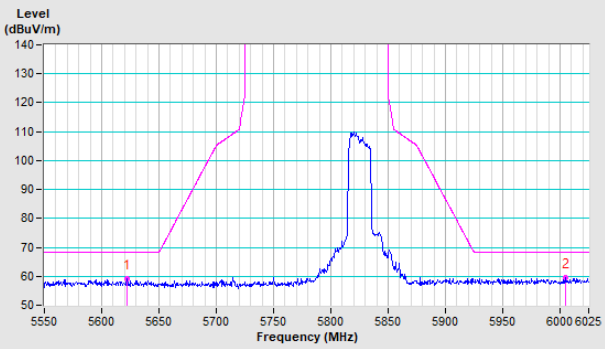


Vertical (Peak)



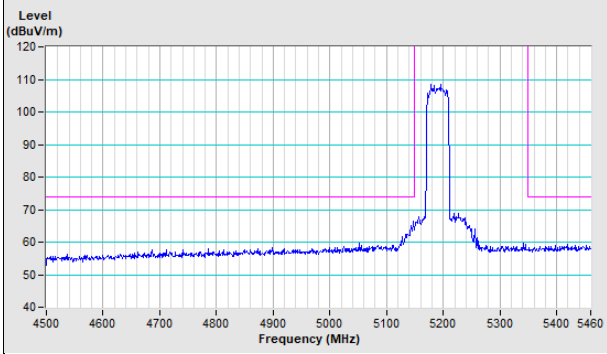
802.11ax (HE20) Channel 149	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE20) Channel 157	
Horizontal (Peak)	Vertical (Peak)
	

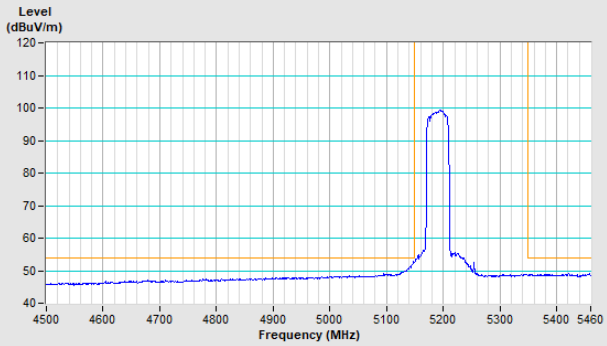
802.11ax (HE20) Channel 165	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE40) Channel 38

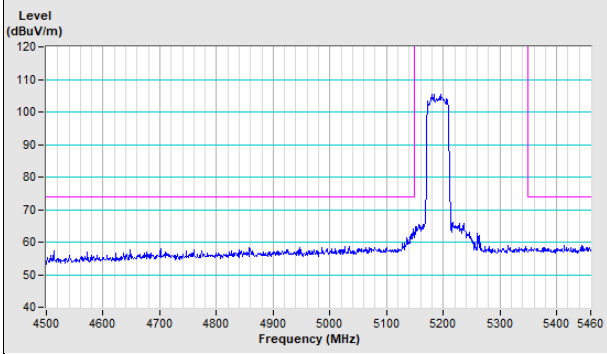
Horizontal (Peak)



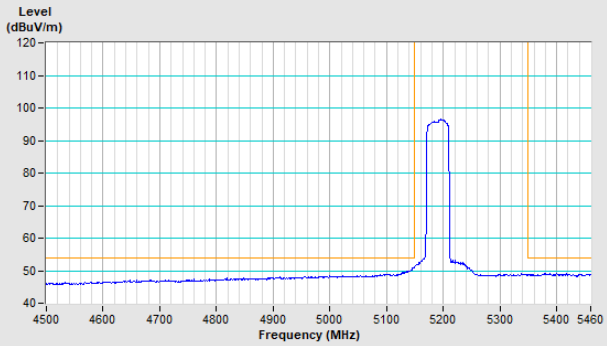
Horizontal (Average)



Vertical (Peak)

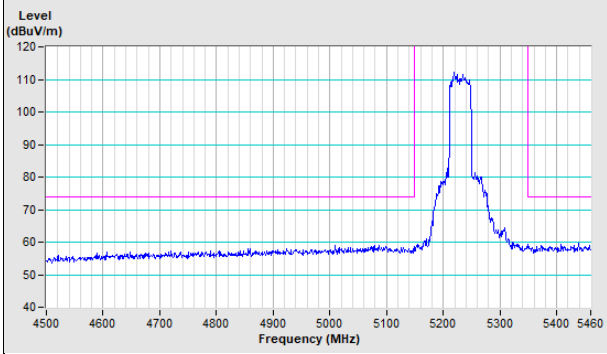


Vertical (Average)

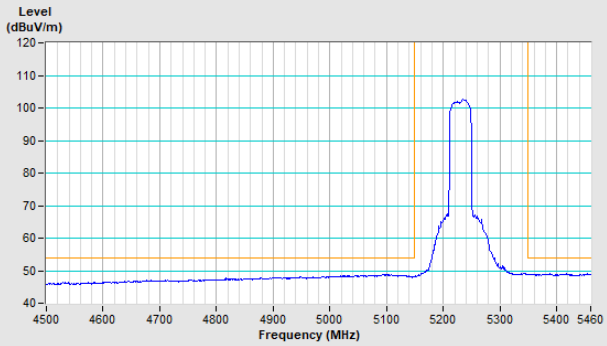


802.11ax (HE40) Channel 46

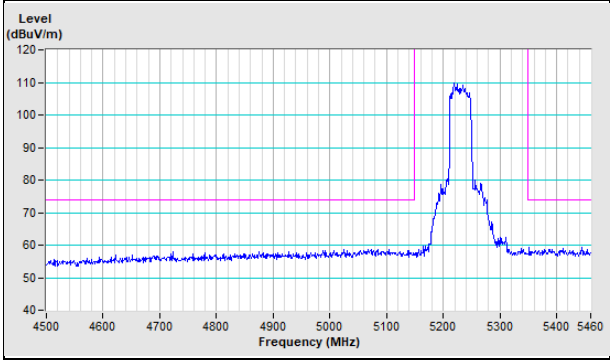
Horizontal (Peak)



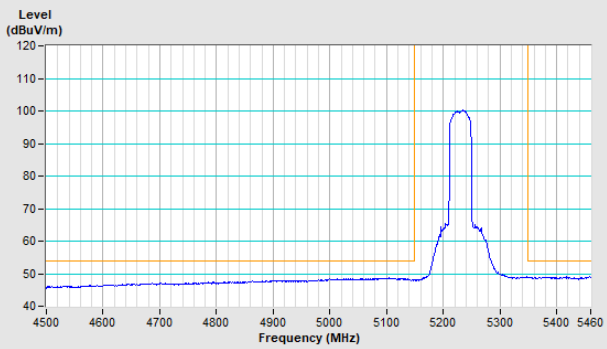
Horizontal (Average)



Vertical (Peak)

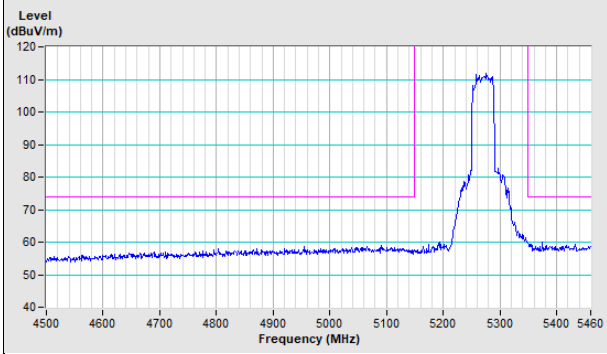


Vertical (Average)

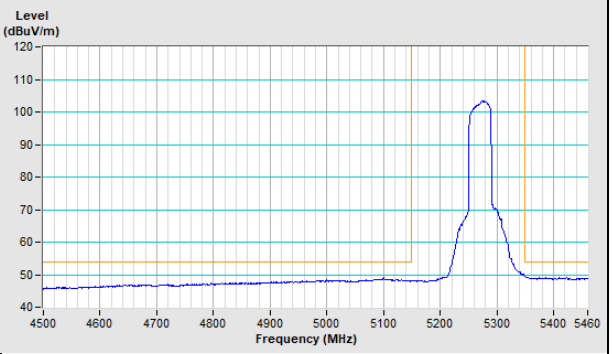


802.11ax (HE40) Channel 54

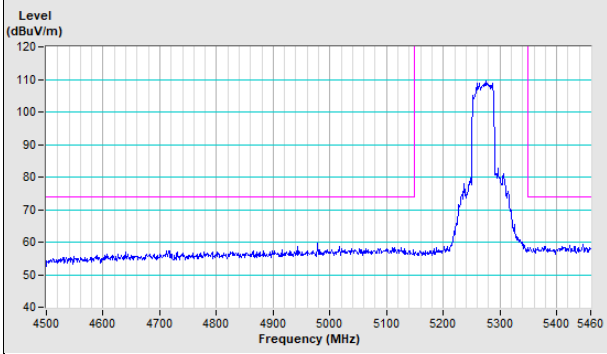
Horizontal (Peak)



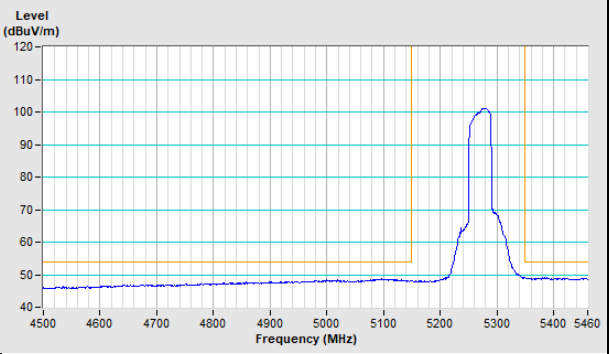
Horizontal (Average)



Vertical (Peak)

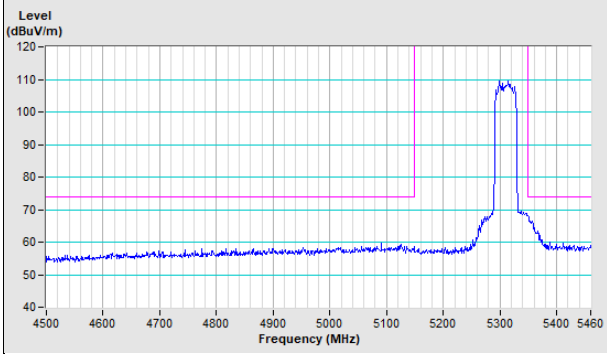


Vertical (Average)

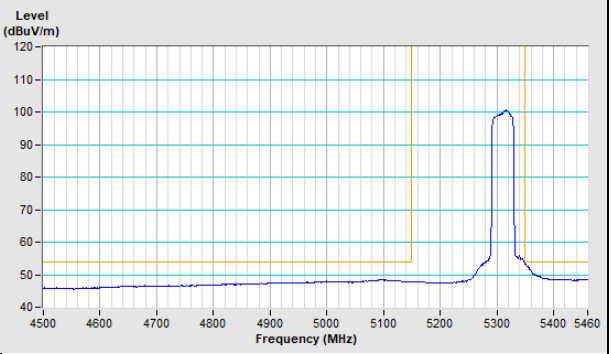


802.11ax (HE40) Channel 62

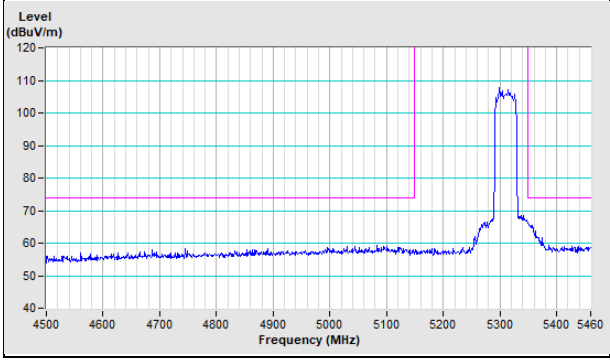
Horizontal (Peak)



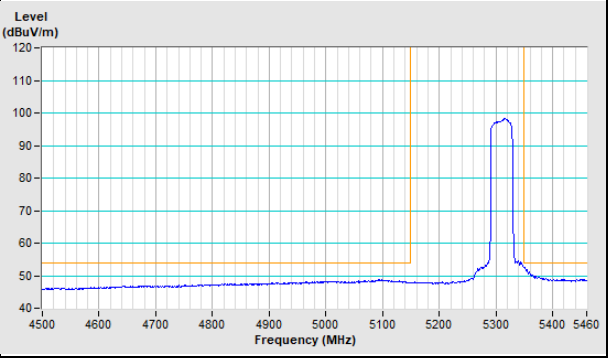
Horizontal (Average)



Vertical (Peak)

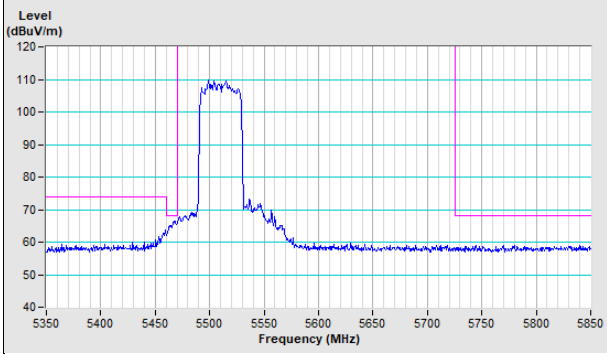


Vertical (Average)

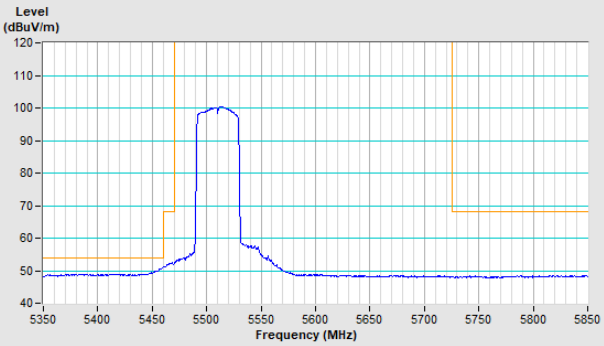


802.11ax (HE40) Channel 102

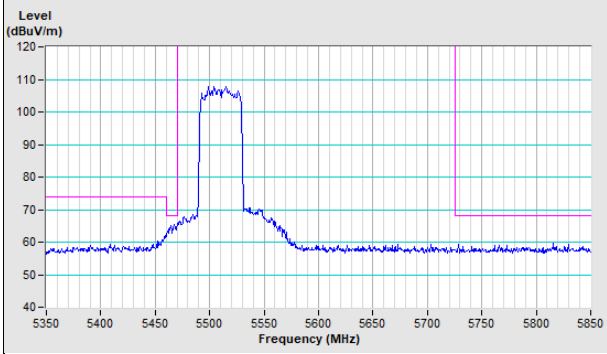
Horizontal (Peak)



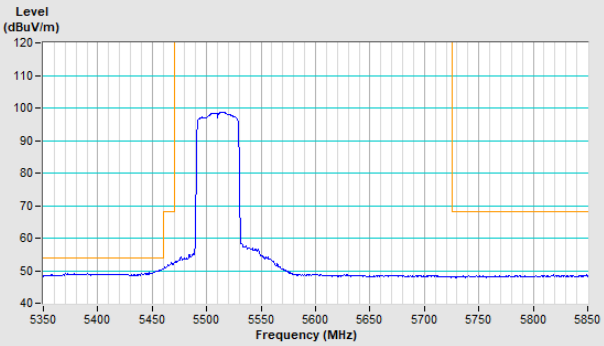
Horizontal (Average)



Vertical (Peak)

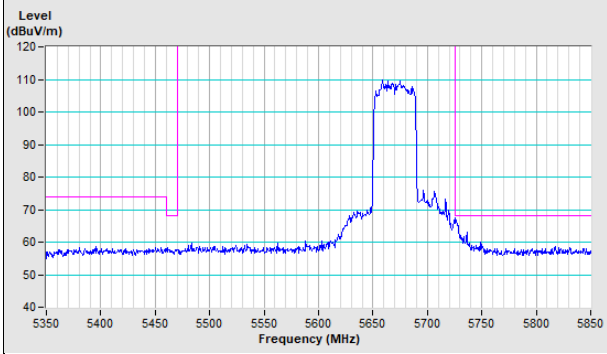


Vertical (Average)

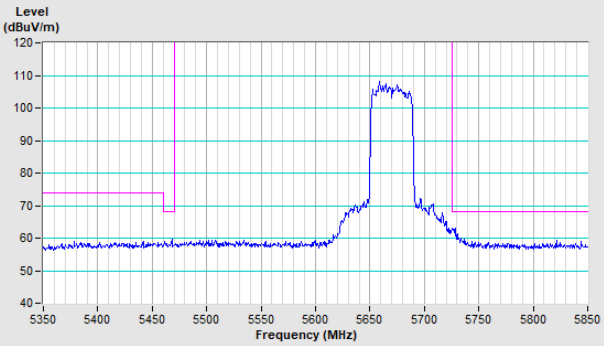


802.11ax (HE40) Channel 134

Horizontal (Peak)

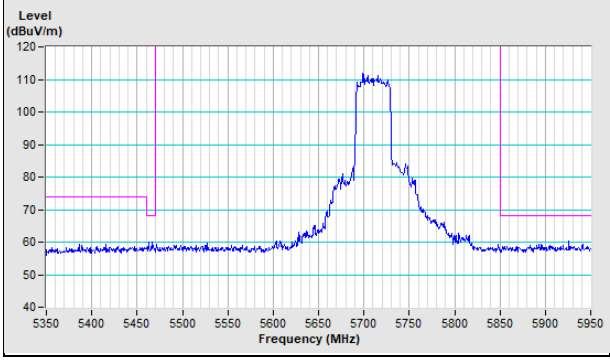


Vertical (Peak)

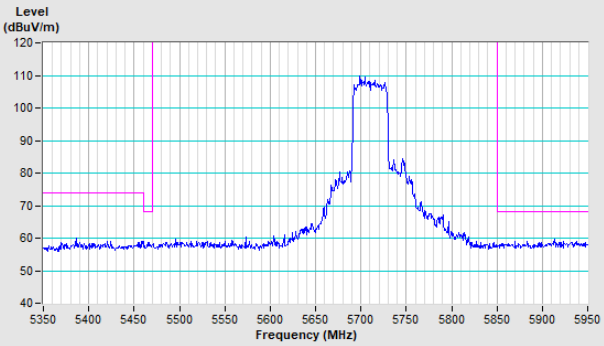


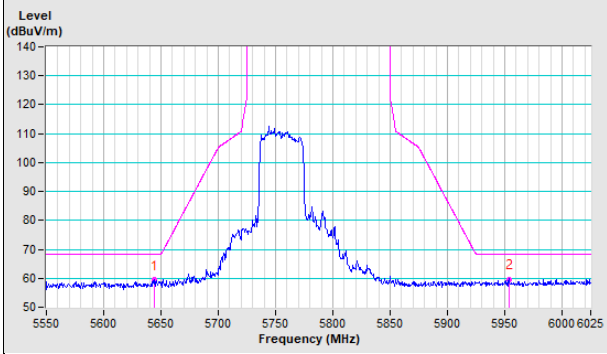
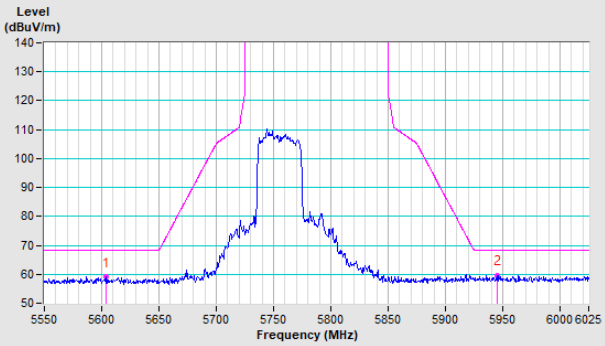
802.11ax (HE40) Channel 142

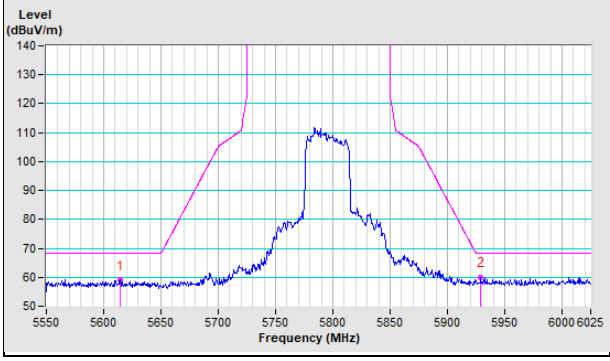
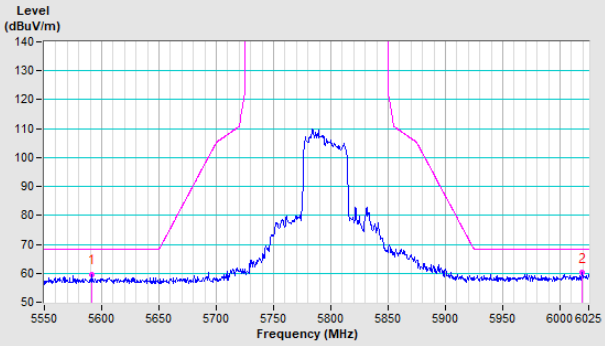
Horizontal (Peak)



Vertical (Peak)

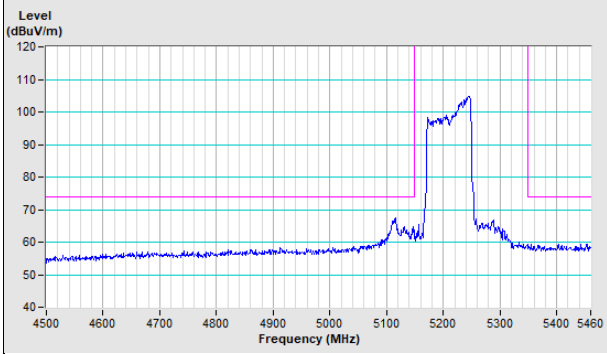


802.11ax (HE40) Channel 151	
Horizontal (Peak)	Vertical (Peak)
	

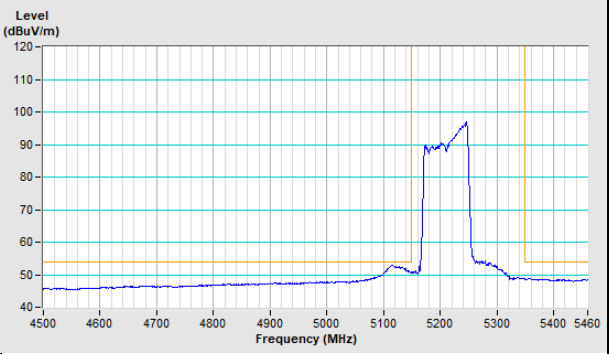
802.11ax (HE40) Channel 159	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (HE80) Channel 42

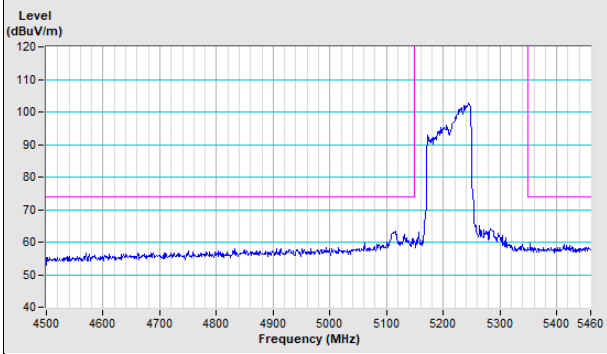
Horizontal (Peak)



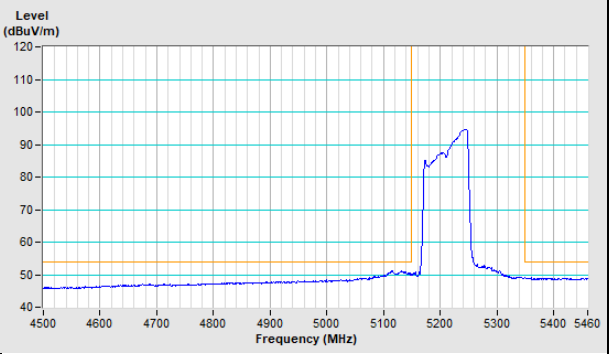
Horizontal (Average)



Vertical (Peak)

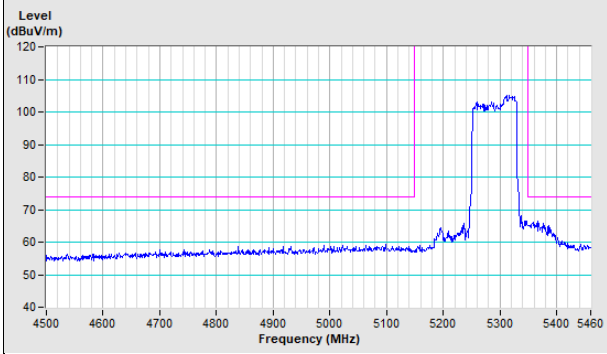


Vertical (Average)

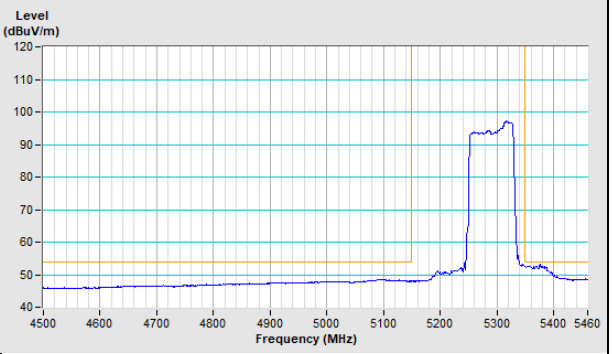


802.11ax (HE80) Channel 58

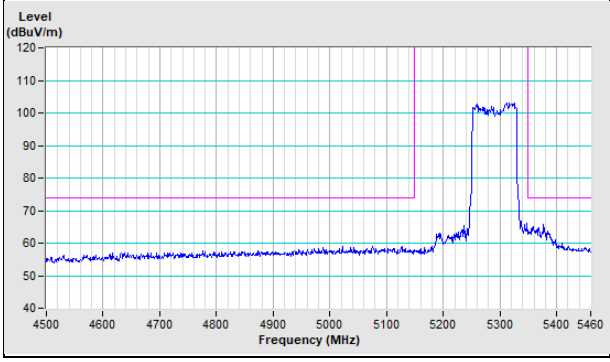
Horizontal (Peak)



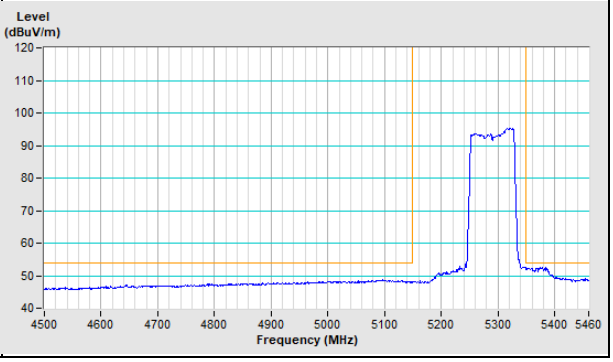
Horizontal (Average)



Vertical (Peak)

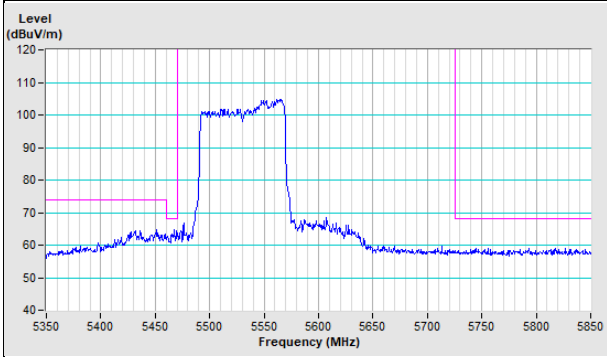


Vertical (Average)

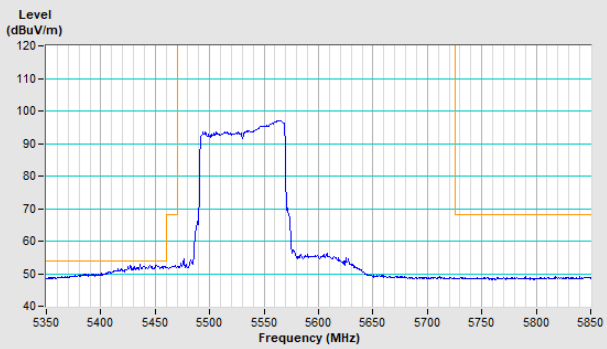


802.11ax (HE80) Channel 106

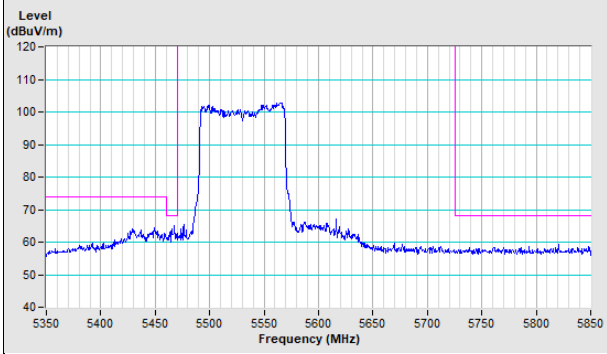
Horizontal (Peak)



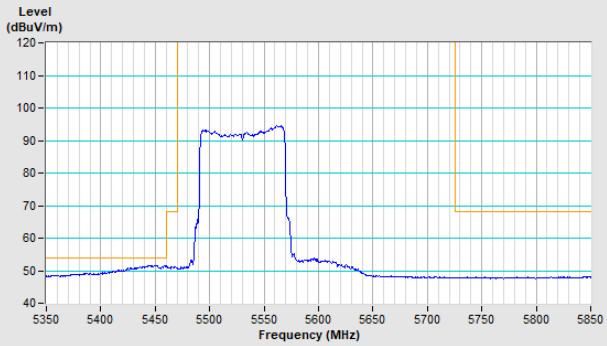
Horizontal (Average)



Vertical (Peak)

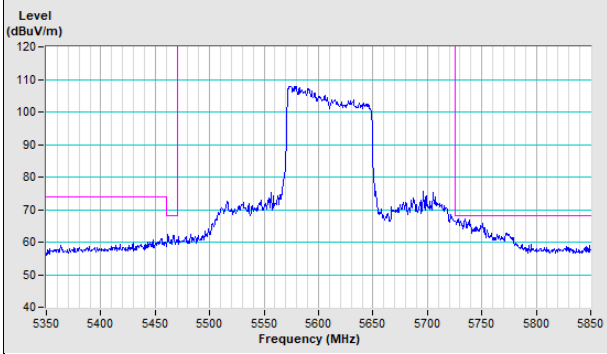


Vertical (Average)

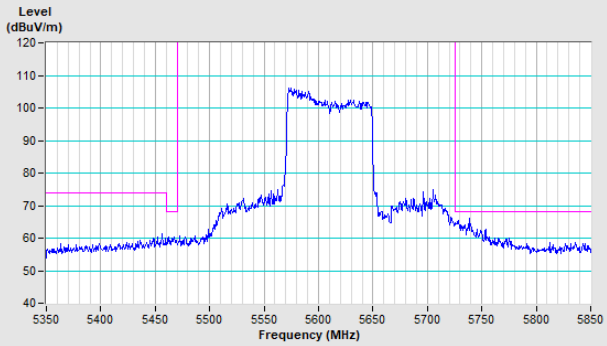


802.11ax (HE80) Channel 122

Horizontal (Peak)

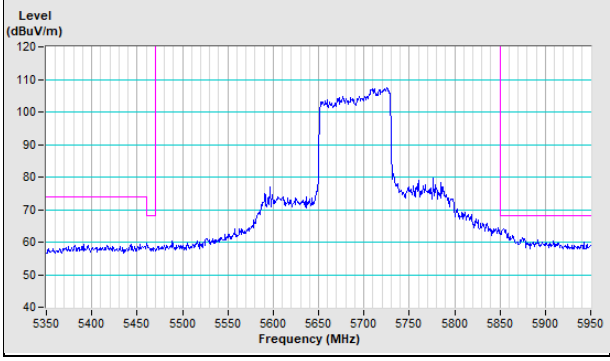


Vertical (Peak)

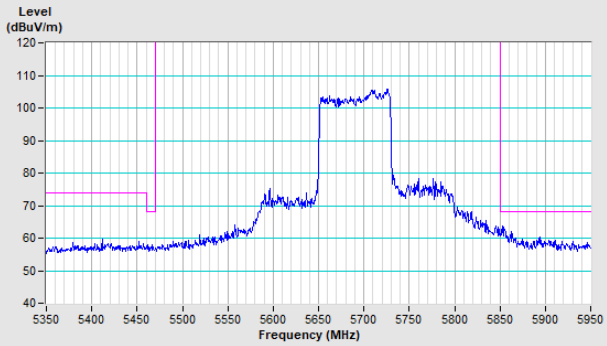


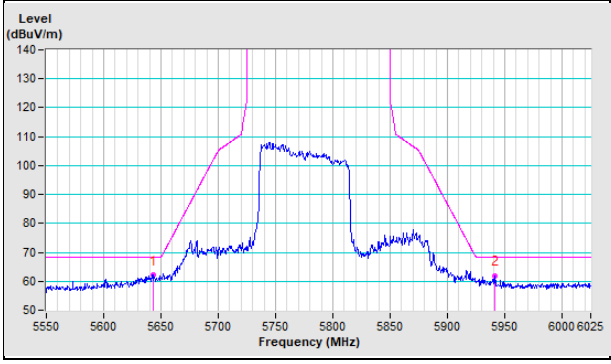
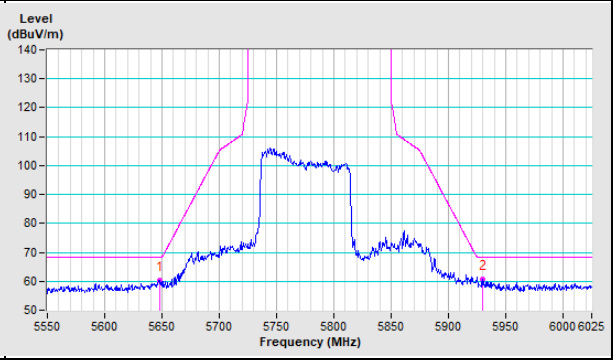
802.11ax (HE80) Channel 138

Horizontal (Peak)



Vertical (Peak)



802.11ax (HE80) Channel 155	
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.

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

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