

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBDQY-WTW-P21010024B
FCC ID: 2ASXXPAX1800
Product: WiFi 6 AP
Brand: Plasma Cloud Limited
Model No.: PAX1800
Received Date: 2025/8/1
Test Date: 2025/8/7 ~ 2025/8/27
Issued Date: 2025/9/30
Applicant: Plasma Cloud Limited
Address: 5/F, Yat Chau Building, 262 Des Voeux Road Central, Hong Kong
Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory
Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / 723255 / TW2022
Designation Number:

Approved by: _____, **Date:** 2025/9/30
May Chen / Manager

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Prepared by : Phoenix Huang / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBDQY-WTW-P21010024B	Original release.	2025/9/30

1 Certificate

Product: WiFi 6 AP

Brand: Plasma Cloud Limited

Test Model: PAX1800

Sample Status: Engineering sample

Applicant: Plasma Cloud Limited

Test Date: 2025/8/7 ~ 2025/8/27

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

Measurement ANSI C63.10-2020

procedure: KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(2)	26 dB Bandwidth	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -7.44 dB at 0.76328 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -8.0 dB at 47.82 MHz
15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.3 dB at 5470.00 MHz and 5725.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Notes:

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
26 dB Bandwidth	-	1050.00 Hz
RF Output Power	-	1.1 dB
Power Spectral Density	-	1.3 dB
6 dB Bandwidth	-	1050.00 Hz
Occupied Bandwidth	-	1050.00 Hz
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.4 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.0 dB
	18 GHz ~ 40 GHz	5.3 dB

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

2.2 Supplementary Information

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

3 General Information

3.1 General Description of EUT

Product	WiFi 6 AP
Brand	Plasma Cloud Limited
Test Model	PAX1800
Status of EUT	Engineering sample
Power Supply Rating	12 Vdc from power adapter or 48~54 Vdc from POE
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11ac: up to 866.7 Mbps 802.11ax: up to 1201.0 Mbps
Operating Frequency	5.26 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 16 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 8 802.11ac (VHT80), 802.11ax (HE80): 4
Output Power	CDD: 5.26 GHz ~ 5.32 GHz: 246.07 mW (23.91 dBm) 5.5 GHz ~ 5.72 GHz: 235.4 mW (23.72 dBm) Beamforming: 5.26 GHz ~ 5.32 GHz: 149.635 mW (21.75 dBm) 5.5 GHz ~ 5.72 GHz: 151.134 mW (21.79 dBm)

Note:

- This report is prepared for FCC class II permissive change. The difference compared with the original design is as the following:
 - ◆ Enable U-NII-2A and U-NII-2C bands through software change.
 - ◆ Add DDR (512MB), Brand: winbond / Model: W634GU6QB.
- According to above conditions, for U-NII-2A, U-NII-2C bands all of test items need to be performed and all data was verified to meet the requirements.
- The EUT has below radios as following table:

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

- Simultaneously transmission combination.

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

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

5. The EUT has below DDR could be chosen as following table:

Original		
No.	Model	Brand
1 (256MB)	NT5CC128M16JR-EK	NANYA
2 (512MB)	H5TC4G63EFR-RDA	SK hynix
Newly		
3 (512MB)	W634GU6QB	winbond
Note: From the above DDRs, the applicant's requirements, the DDR No.: 3 was selected for the test and its data was recorded in this report.		

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
1	2.4G Chain1	3.9	2.4 ~ 2.5	PIFA	i-pex(MHF)
2	2.4G Chain0	3	2.4 ~ 2.5	PIFA	i-pex(MHF)
3	5G Chain1	4.7	5.15 ~ 5.85	PIFA	i-pex(MHF)
4	5G Chain0	5.6	5.15 ~ 5.85	PIFA	i-pex(MHF)

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

2. The EUT incorporates a MIMO function:

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

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz) and 802.11ax mode for 20 MHz (40 MHz, 80 MHz). Therefore the investigated worst case is the representative mode in test report.

3.3 Channel List

FOR 5260 ~ 5320 MHz

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

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

Channel	Frequency
58	5290 MHz

FOR 5500 ~ 5720 MHz

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

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

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

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

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

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

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
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Following channel(s) was (were) selected for the final test as listed below:

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

Note: In the original report

1. For AC Power Conducted Emissions and Unwanted Emissions test items: POE is the worst mode.

3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 1.992 ms / 2.058 ms x 100% = 96.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.14 \text{ dB}$

802.11ac (VHT20): Duty cycle = 5.448 ms / 5.669 ms x 100% = 96.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.17 \text{ dB}$

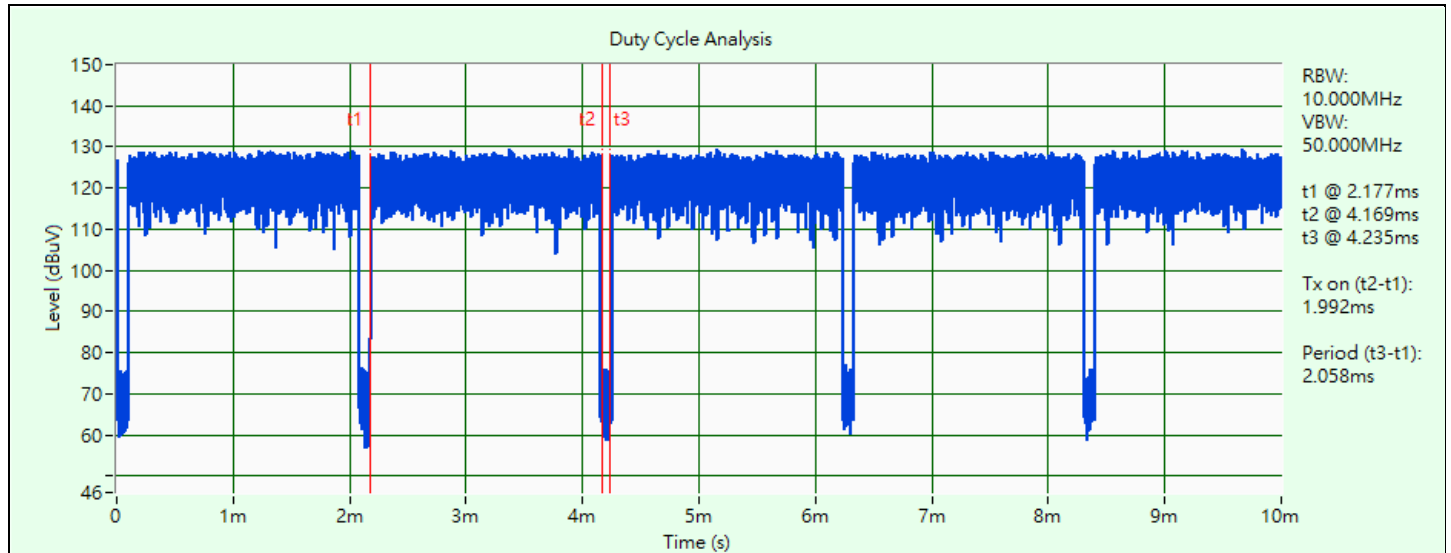
802.11ac (VHT40): Duty cycle = 5.447 ms / 5.731 ms x 100% = 95.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.22 \text{ dB}$

802.11ac (VHT80): Duty cycle = 5.447 ms / 5.676 ms x 100% = 96.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.18 \text{ dB}$

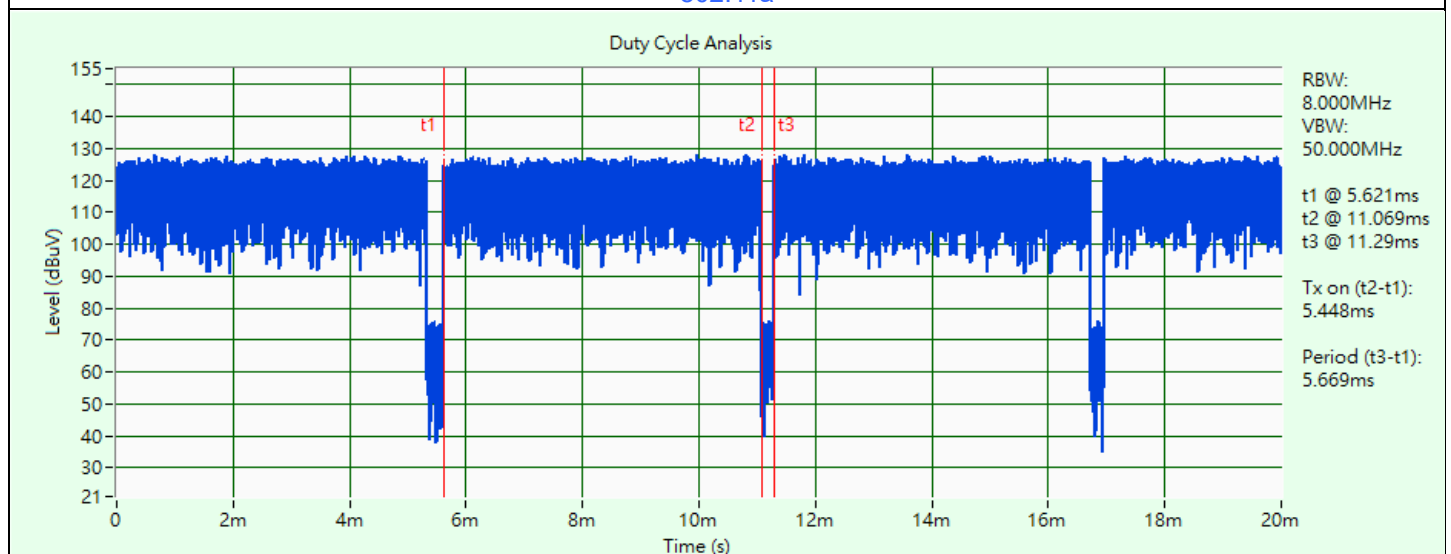
802.11ax (HE20): Duty cycle = 5.448 ms / 5.669 ms x 100% = 96.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.17 \text{ dB}$

802.11ax (HE40): Duty cycle = 5.447 ms / 5.731 ms x 100% = 95.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.22 \text{ dB}$

802.11ax (HE80): Duty cycle = 5.447 ms / 5.676 ms x 100% = 96.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.18 \text{ dB}$

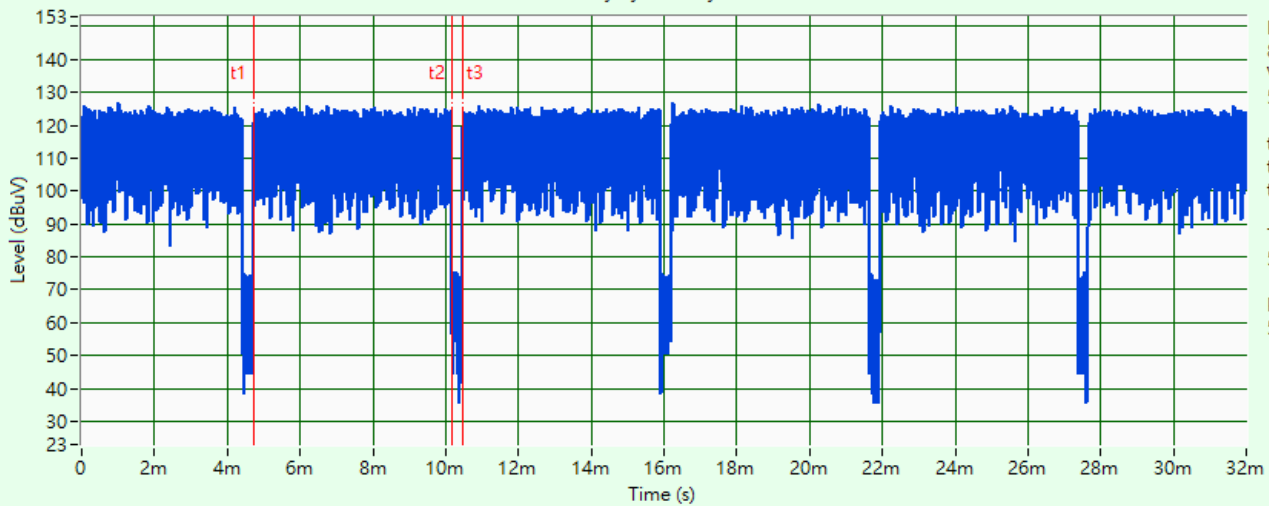


802.11a



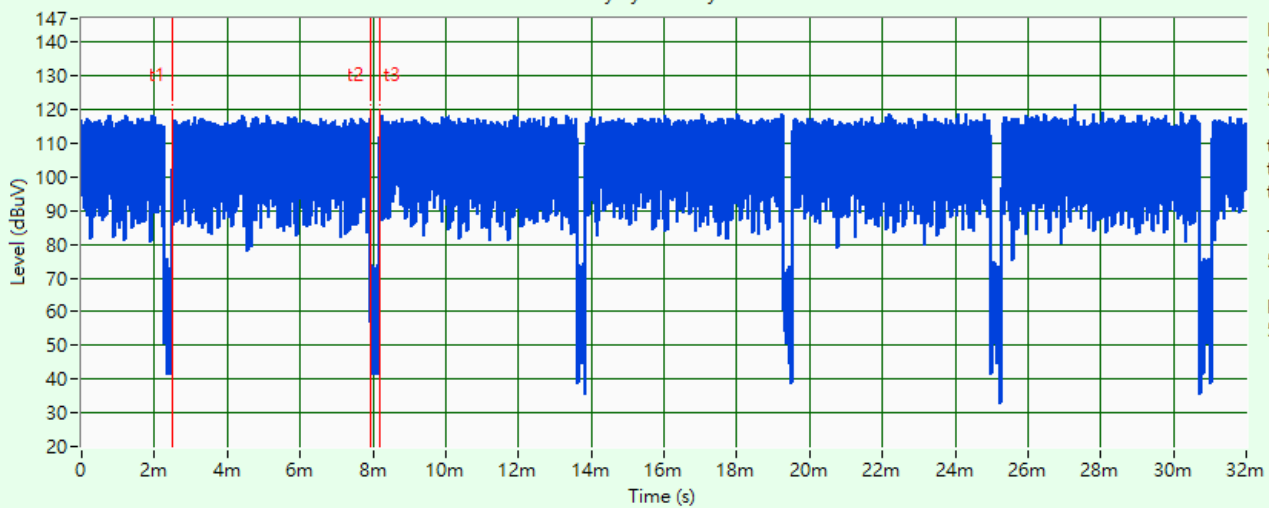
802.11ac (VHT20)

Duty Cycle Analysis



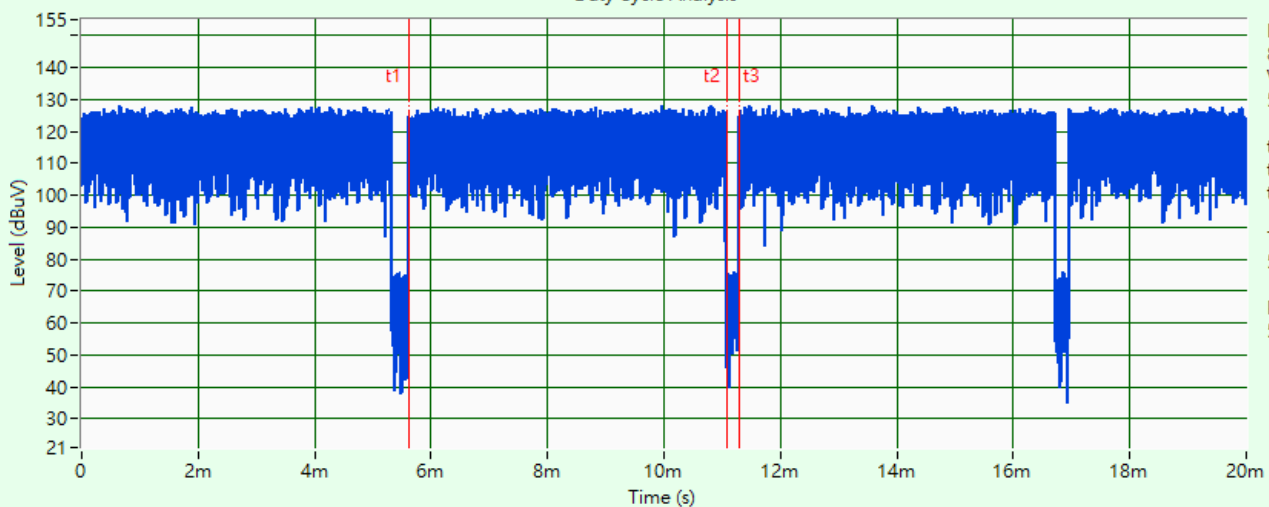
802.11ac (VHT40)

Duty Cycle Analysis



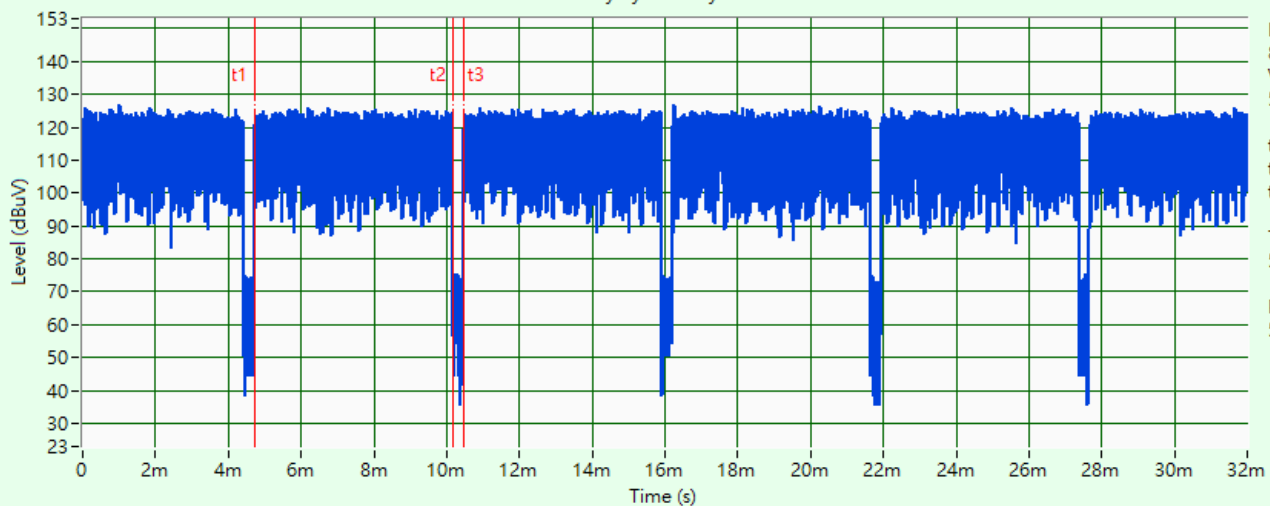
802.11ac (VHT80)

Duty Cycle Analysis



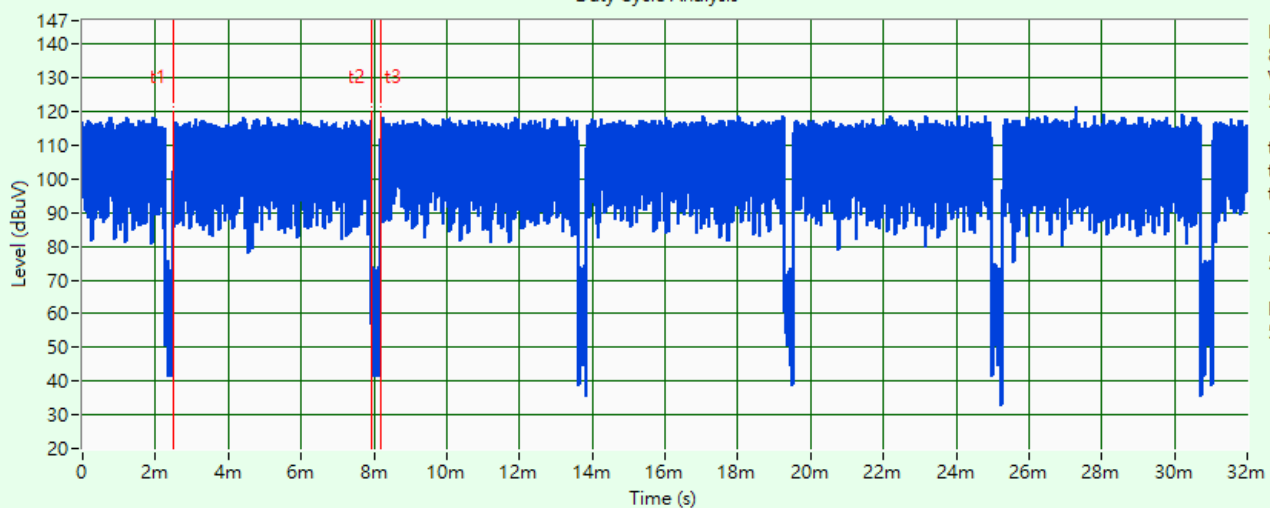
802.11ax (HE20)

Duty Cycle Analysis



802.11ax (HE40)

Duty Cycle Analysis



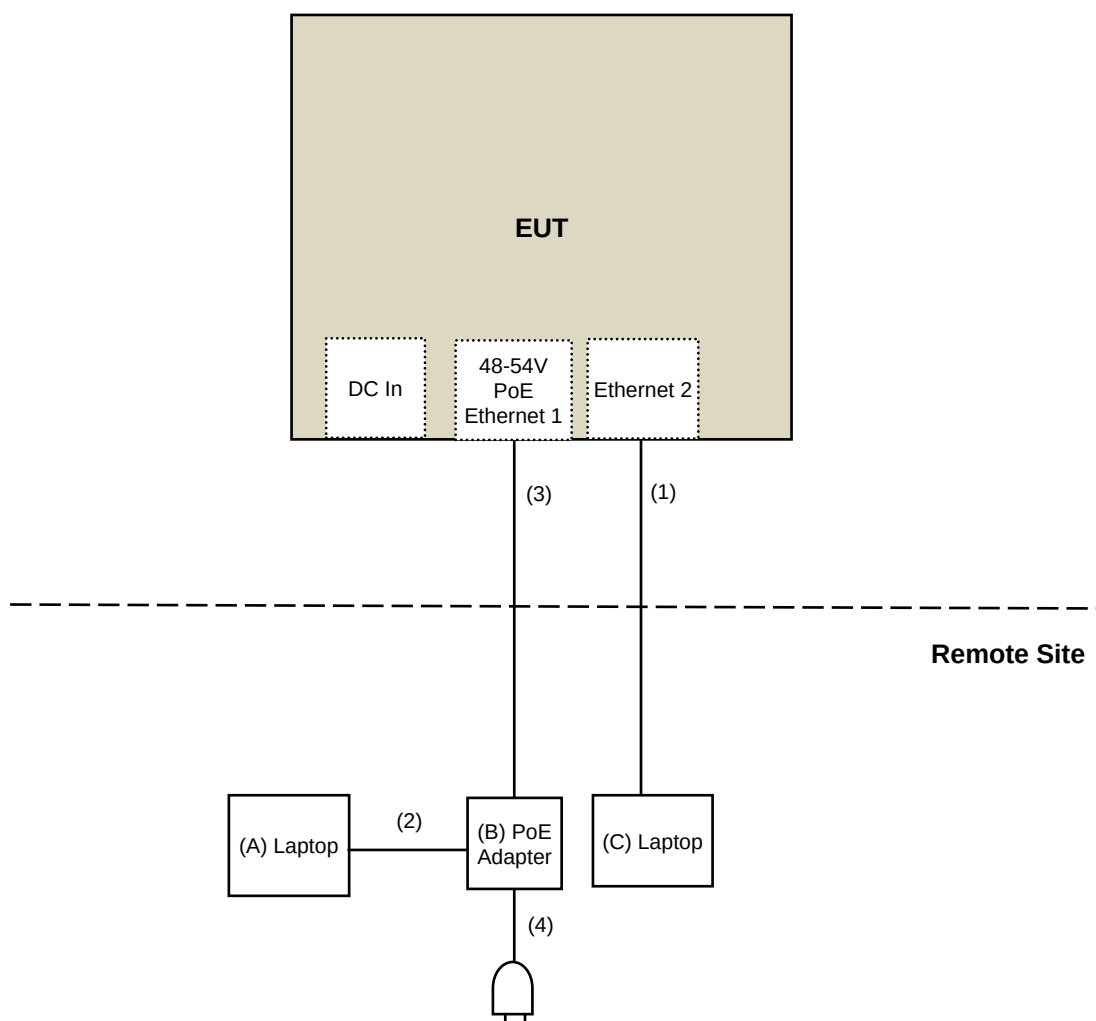
802.11ax (HE80)

3.6 Test Program Used and Operation Descriptions

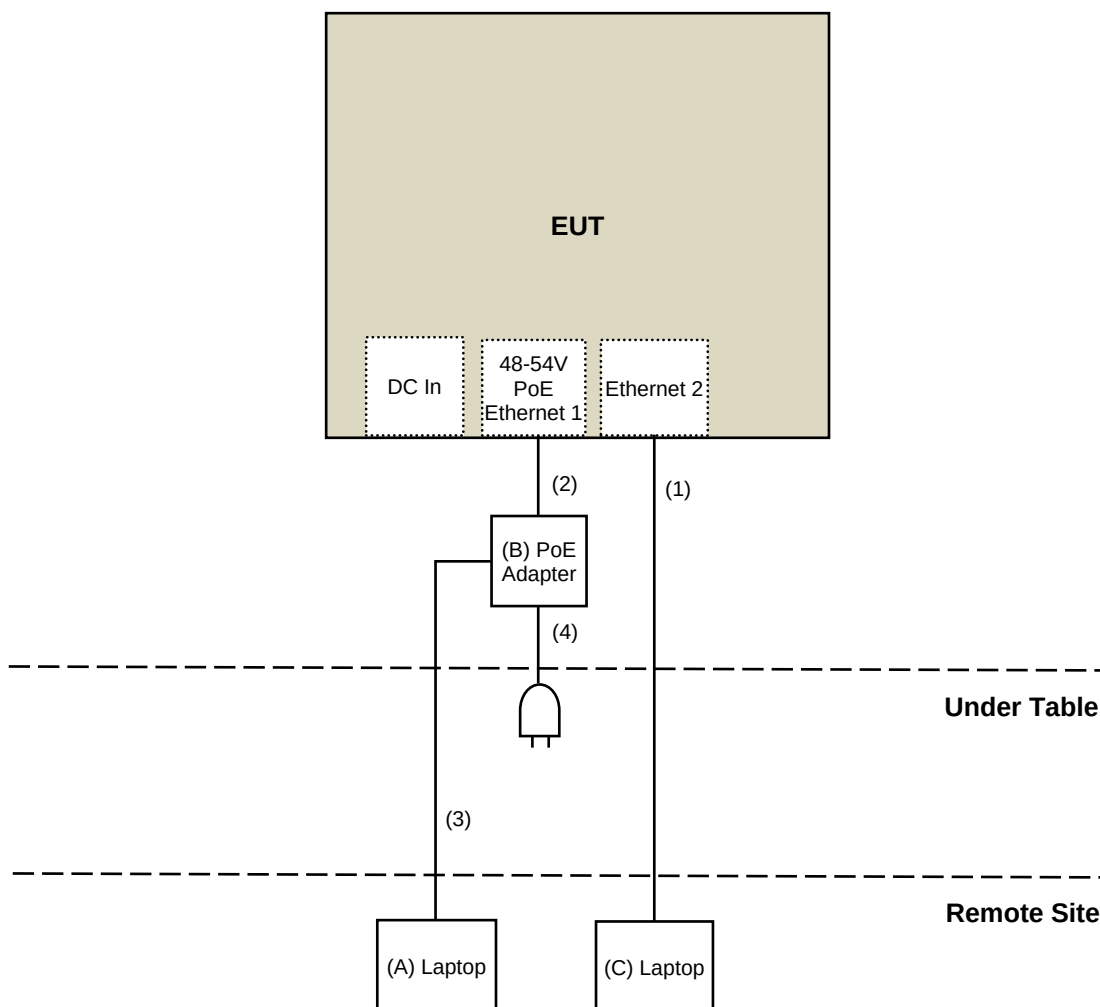
Controlling software (qdart_conn.win.1.0_installer_00076.1) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For Unwanted Emissions test:



For AC Power Conducted Emission test:



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	Lenovo	20U5S01X00 L14	PF-1ANPYA	N/A	Provided by Lab
B	PoE Adapter	Fo Shan Great Power	GRT-480125A	N/A	N/A	Supplied by client
C	Laptop	Lenovo	20U5S01X00 L14	PF-28LKK7	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	10	No	0	Provided by Lab
2	RJ-45 Cable	1	1.8	No	0	Provided by Lab
3	RJ-45 Cable	1	10	No	0	Provided by Lab
4	AC Cable	1	1.5	No	0	Provided by Lab

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
PXA Signal Analyzer Keysight	N9030A	MY55330160	2025/1/16	2026/1/15
Software	ADT_RF Test Software V8	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/8/27

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
	00800A1K01A-20	00800A1K01A-20-02	2025/5/23	2026/5/22
Pulse Power Sensor Anritsu	MA2411B	1726434	2025/6/3	2026/6/2
PXA Signal Analyzer Keysight	N9030A	MY55330160	2025/1/16	2026/1/15
RF Power Meter Anritsu	ML2495A	1529002	2025/6/3	2026/6/2
Software	ADT_RF Test Software V8	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2025/8/27

4.3 Power Spectral Density

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

4.4 6 dB Bandwidth

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

4.5 Occupied Bandwidth

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

4.6 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2024/11/1	2025/10/31
EMI Test Receiver R&S	ESCS 30	100375	2025/5/21	2026/5/20
Fixed Attenuator STI	STI02-2200-10	005	2025/2/17	2026/2/16
LISN R&S	ESH3-Z5	835239/001	2025/3/27	2026/3/26
		848773/004	2024/10/7	2025/10/6
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2025/2/17	2026/2/16
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2025/8/15

4.7 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-361	2024/10/8	2025/10/7
Fix tool for Boresight antenna tower BV	FBA-01	FBA_SIP01	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	2025/2/8	2026/2/7
Loop Antenna TESEQ	HLA 6121	63620	2024/10/17	2025/10/16
MXE EMI Receiver Agilent	N9038A	MY50010156	2025/6/5	2026/6/4
Preamplifier EMCI	EMC330N	980852	2025/2/8	2026/2/7
	EMC001340	980142	2025/2/17	2026/2/16
RF Coaxial Cable PEWEC	8D	001	2025/2/8	2026/2/7
		966-3-2	2025/2/8	2026/2/7
		966-3-3	2025/2/8	2026/2/7
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 3.
2. Tested Date: 2025/8/19

4.8 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	N/A	N/A
Fix tool for Boresight antenna tower BV	FBA-01	FBA_SIP01	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-406	2024/11/10	2025/11/9
	BBHA 9170	9170-739	2024/11/10	2025/11/9
MXE EMI Receiver Agilent	N9038A	MY50010156	2025/6/5	2026/6/4
Preamplifier EMCI	EMC12630SE	980384	2025/1/14	2026/1/13
	EMC184045SE	980387	2025/8/7	2026/8/6
PXA Signal Analyzer Keysight	N9030B	MY57141948	2025/5/20	2026/5/19
RF Coaxial Cable EMCI	EMC102-KM-KM-1200	160924	2025/1/24	2026/1/23
	EMC102-KM-KM-4000	200214	2025/1/24	2026/1/23
	EMC104-SM-SM-1500	180504	2025/1/18	2026/1/17
	EMC104-SM-SM-2000	180601	2025/1/18	2026/1/17
	EMC104-SM-SM-6000	210201	2025/1/18	2026/1/17
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 3.
2. Tested Date: 2025/8/7 ~ 2025/8/15

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

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

*B is the 26 dB emission bandwidth in megahertz

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

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

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

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

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

5.3 Power Spectral Density

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

5.4 6 dB Bandwidth

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

5.5 Occupied Bandwidth

The results are for reference only.

5.6 AC Power Conducted Emissions

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

Notes:

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

5.7 Unwanted Emissions below 1 GHz

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

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

Notes:

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

5.8 Unwanted Emissions above 1 GHz

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

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

Notes:

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

Limits of unwanted emission out of the restricted bands

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

For transmitters operating in the 5.25-5.35 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.		

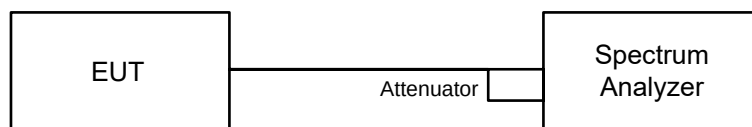
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

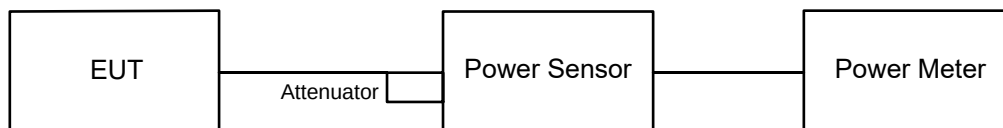


6.1.2 Test Procedure

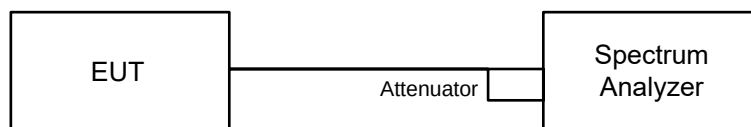
- Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max-hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and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

6.2 RF Output Power

6.2.1 Test Setup



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:

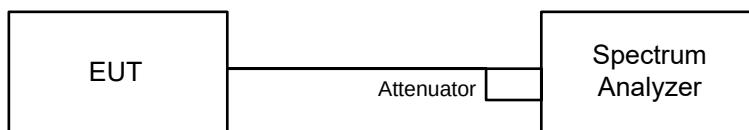
Method SA-2

- a. Measure the duty cycle D of the transmitter output signal.
- b. Set span to encompass the entire 99% OBW of the signal.
- c. Set RBW = 1 MHz.
- d. Set VBW $\geq$ 3 MHz.
- e. Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- f. Sweep time = auto.
- g. Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
- h. Do not use sweep triggering. Allow the sweep to "free run."
- i. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
- j. Compute power by integrating the spectrum across the 99% OBW of the signal using the instrument's band-power measurement function with band limits set equal to the 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 99% OBW of the spectrum.
- k. Add $[10 \log (1 / D)]$, where D is the duty cycle.

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

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-2

- Measure the duty cycle D of the transmitter output signal.
- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz.
- Set VBW $\geq$ 3 MHz.
- Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto.
- Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
- Do not use sweep triggering. Allow the sweep to “free run.”
- Trace average at least 100 traces in power averaging (rms) mode;.
- Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- Record the max value and add $10 \log (1/\text{duty cycle})$.

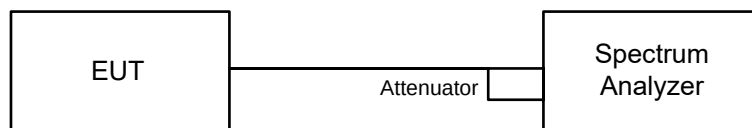
For specified measurement bandwidth 500 kHz:

Method SA-2

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

6.4 6 dB Bandwidth

6.4.1 Test Setup

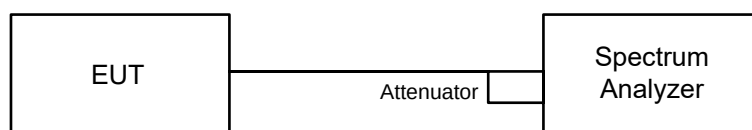


6.4.2 Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Trace mode = max-hold.
- Sweep = No faster than coupled (auto) time.
- Allow the trace to stabilize.
- Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value.

6.5 Occupied Bandwidth

6.5.1 Test Setup



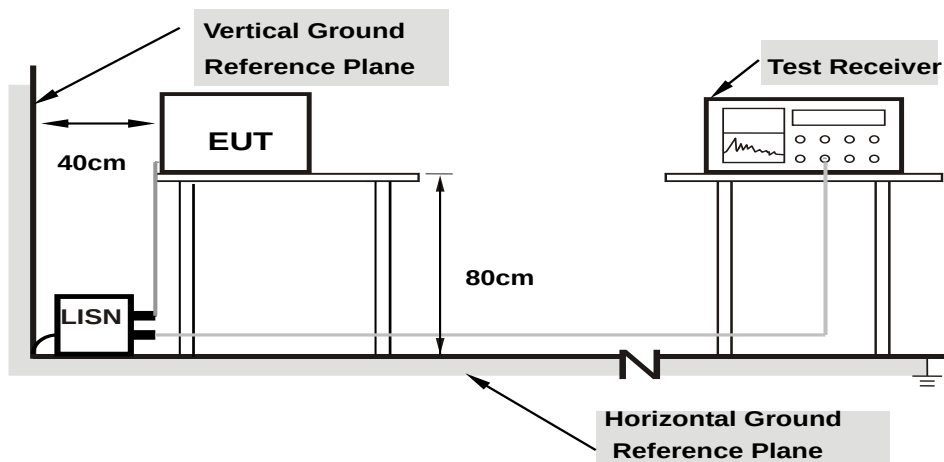
6.5.2 Test Procedure

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

- The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level.
- Step a) through step c) might require iteration to adjust within the specified range.
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

6.6 AC Power Conducted Emissions

6.6.1 Test Setup



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

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

6.6.2 Test Procedure

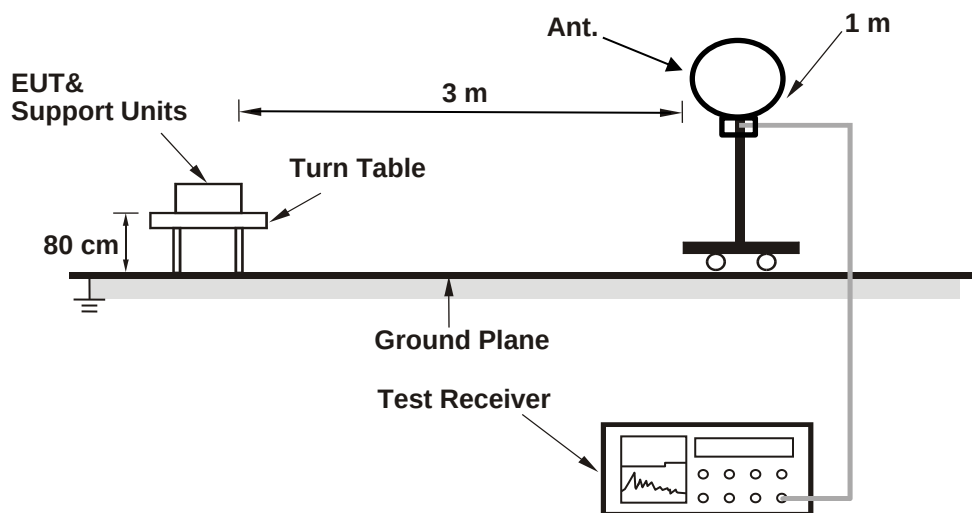
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The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

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

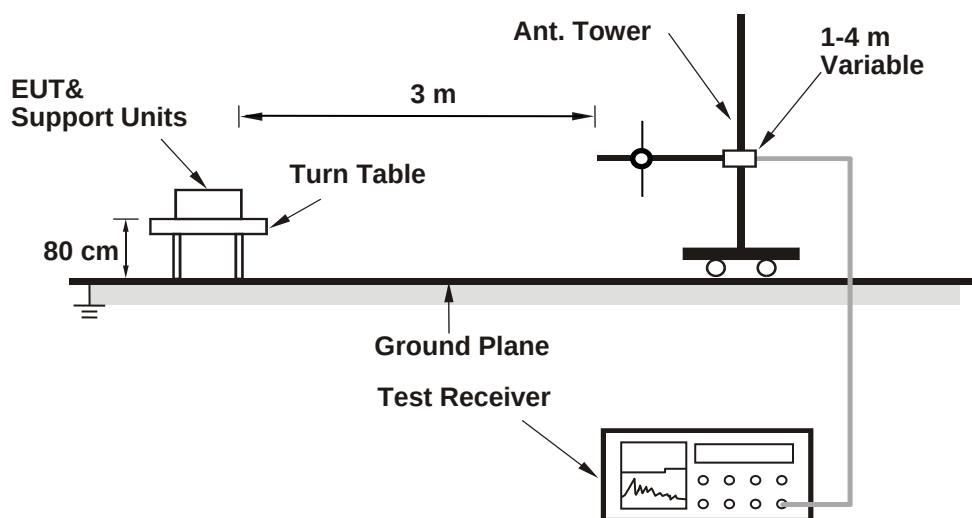
6.7 Unwanted Emissions below 1 GHz

6.7.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.7.2 Test Procedure

For Radiated emission below 30 MHz

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

Notes:

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

For Radiated emission above 30 MHz

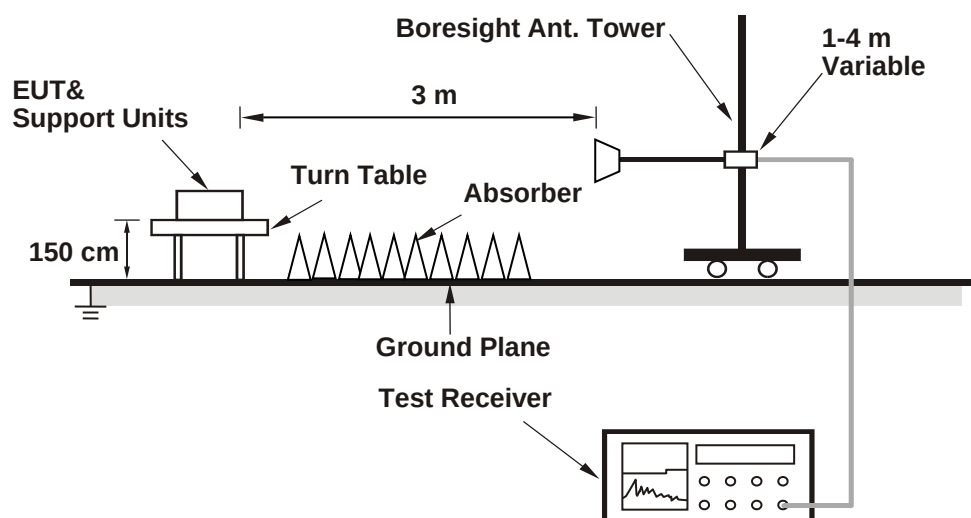
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the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

6.8 Unwanted Emissions above 1 GHz

6.8.1 Test Setup



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

6.8.2 Test Procedure

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

Notes:

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

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	54 Vdc	Environmental Conditions:	25°C, 63% RH	Tested By:	Chun Wu
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802.11a

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	20.28	20.78
60	5300	20.83	20.60
64	5320	20.80	20.58
100	5500	21.28	21.23
116	5580	21.43	21.33
140	5700	21.17	20.86
144 (U-NII-2C)	5720	16.34	15.45
144 (U-NII-3)	5720	5.88	5.80

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	20.28	24.07	>	24
60	5300	20.60	24.13	>	24
64	5320	20.58	24.13	>	24
100	5500	21.23	24.26	>	24
116	5580	21.33	24.28	>	24
140	5700	20.86	24.19	>	24
144 (U-NII-2C)	5720	15.45	22.88	<	24

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

802.11ax (HE20)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	21.57	21.87
60	5300	21.56	21.65
64	5320	21.63	21.38
100	5500	21.38	21.64
116	5580	23.12	21.93
140	5700	21.97	21.49
144 (U-NII-2C)	5720	15.86	15.94
144 (U-NII-3)	5720	6.49	5.62

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	21.57	24.33	>	24
60	5300	21.56	24.33	>	24
64	5320	21.38	24.3	>	24
100	5500	21.38	24.3	>	24
116	5580	21.93	24.41	>	24
140	5700	21.49	24.32	>	24
144 (U-NII-2C)	5720	15.86	23	<	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	40.81	40.69
62	5310	41.38	40.66
102	5510	40.67	41.35
110	5550	41.60	41.96
134	5670	41.08	41.89
142 (U-NII-2C)	5710	35.93	35.63
142 (U-NII-3)	5710	8.17	5.47

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
54	5270	40.69	27.09	>	24
62	5310	40.66	27.09	>	24
102	5510	40.67	27.09	>	24
110	5550	41.60	27.19	>	24
134	5670	41.08	27.13	>	24
142 (U-NII-2C)	5710	35.63	26.51	>	24

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

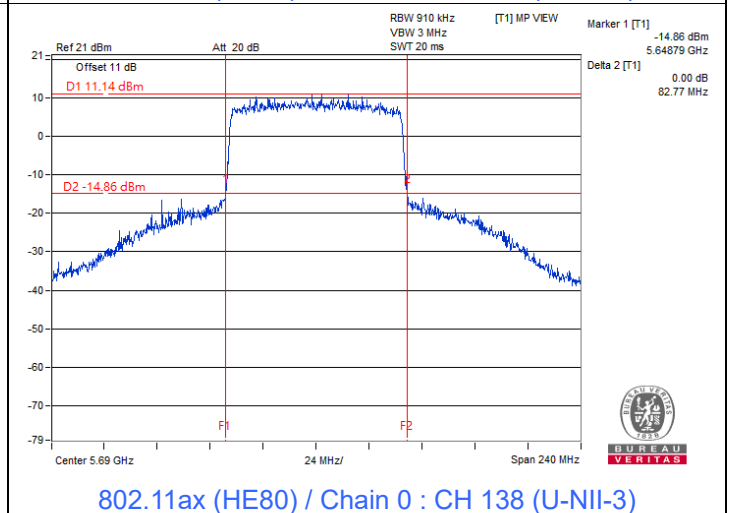
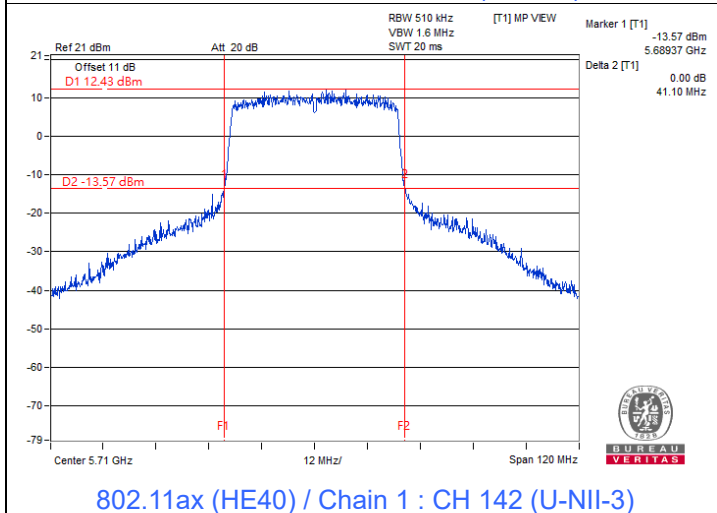
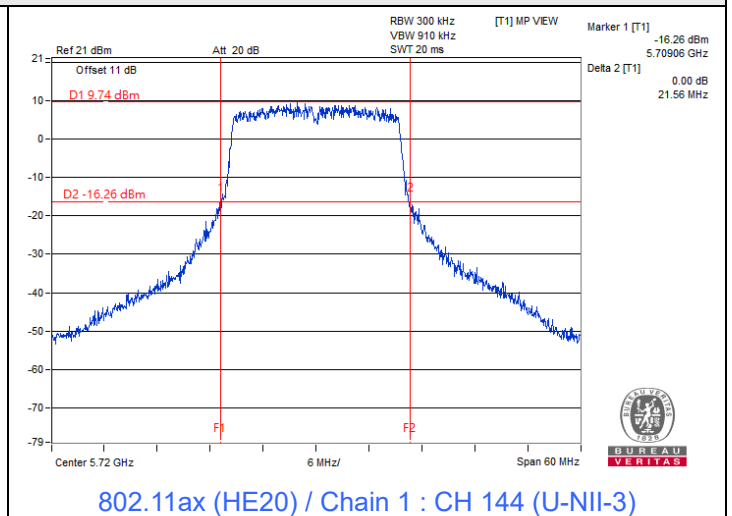
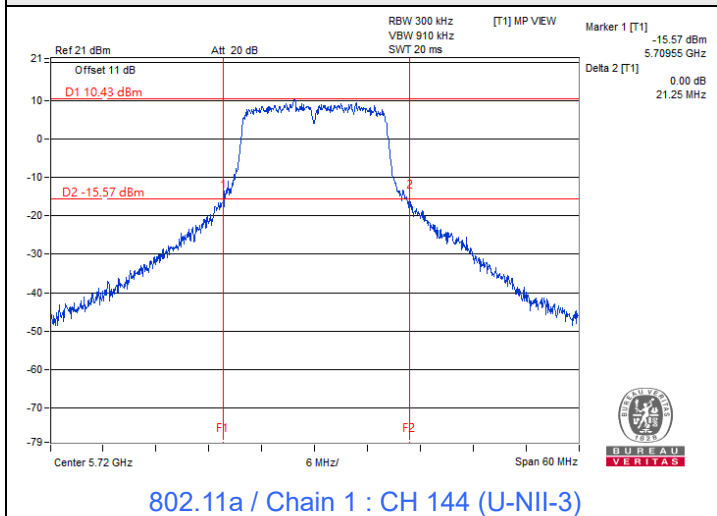
802.11ax (HE80)

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	81.80	81.79
106	5530	82.49	81.68
122	5610	82.21	81.96
138 (U-NII-2C)	5690	76.21	89.28
138 (U-NII-3)	5690	6.56	31.57

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
58	5290	81.79	30.12	>	24
106	5530	81.68	30.12	>	24
122	5610	81.96	30.13	>	24
138 (U-NII-2C)	5690	76.21	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



Notes:

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

7.2 RF Output Power

Input Power:	54 Vdc	Environmental Conditions:	25°C, 63% RH	Tested By:	Chun Wu
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	20.85	20.95	246.07	23.91	24	Pass
60	5300	20.65	20.76	235.269	23.72	24	Pass
64	5320	20.68	20.88	239.412	23.79	24	Pass
100	5500	20.55	20.86	235.4	23.72	24	Pass
116	5580	20.12	20.36	211.444	23.25	24	Pass
140	5700	19.40	20.35	195.489	22.91	24	Pass
*144 (U-NII-2C)	5720	18.68	18.98	157.923	21.98	22.88	Pass
*144 (U-NII-3)	5720	12.04	12.40	34.479	15.38	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	20.35	20.41	218.293	23.39	24	Pass
60	5300	20.33	20.51	220.355	23.43	24	Pass
64	5320	20.20	20.29	211.618	23.26	24	Pass
100	5500	19.28	19.50	173.848	22.40	24	Pass
116	5580	20.20	20.52	217.433	23.37	24	Pass
140	5700	18.95	19.90	176.247	22.46	24	Pass
*144 (U-NII-2C)	5720	18.17	18.74	146.128	21.65	23	Pass
*144 (U-NII-3)	5720	12.19	12.84	37.24	15.71	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
54	5270	20.40	20.53	222.627	23.48	24	Pass
62	5310	18.00	18.10	127.661	21.06	24	Pass
102	5510	17.55	17.95	119.259	20.76	24	Pass
110	5550	20.15	20.33	211.409	23.25	24	Pass
134	5670	19.51	19.82	185.271	22.68	24	Pass
*142 (U-NII-2C)	5710	19.40	19.20	179.151	22.53	24	Pass
*142 (U-NII-3)	5710	8.50	8.41	14.744	11.69	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
58	5290	17.43	17.56	112.351	20.51	24	Pass
106	5530	16.35	16.67	89.603	19.52	24	Pass
122	5610	19.37	19.58	177.279	22.49	24	Pass
*138 (U-NII-2C)	5690	19.57	19.86	195.28	22.91	24	Pass
*138 (U-NII-3)	5690	4.49	4.95	6.188	7.92	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	20.60	20.70	232.305	23.66	24	Pass
60	5300	20.70	20.80	237.716	23.76	24	Pass
64	5320	20.50	20.60	227.017	23.56	24	Pass
100	5500	19.55	19.70	183.483	22.64	24	Pass
116	5580	20.40	20.70	227.138	23.56	24	Pass
140	5700	19.10	21.63	226.829	23.56	24	Pass
*144 (U-NII-2C)	5720	18.93	19.81	180.936	22.58	23	Pass
*144 (U-NII-3)	5720	13.41	14.39	51.411	17.11	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
54	5270	20.70	20.80	237.716	23.76	24	Pass
62	5310	18.20	18.35	134.461	21.29	24	Pass
102	5510	17.80	18.10	124.821	20.96	24	Pass
110	5550	20.40	20.60	224.463	23.51	24	Pass
134	5670	19.60	20.01	191.432	22.82	24	Pass
*142 (U-NII-2C)	5710	19.68	19.70	195.931	22.92	24	Pass
*142 (U-NII-3)	5710	9.48	9.48	18.668	12.71	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. Directional gain is the maximum gain of antennas.
3. For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
58	5290	17.60	17.80	117.8	20.71	24	Pass
106	5530	16.60	16.90	94.687	19.76	24	Pass
122	5610	19.60	19.80	186.7	22.71	24	Pass
*138 (U-NII-2C)	5690	19.82	19.48	192.419	22.84	24	Pass
*138 (U-NII-3)	5690	5.59	5.16	7.194	8.57	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain is the maximum gain of antennas.
- For U-NII-2A, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 5.6 dBi $\leq$ 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	18.49	18.60	143.075	21.56	21.83	Pass
60	5300	18.53	18.68	145.076	21.62	21.83	Pass
64	5320	18.39	18.42	138.526	21.42	21.83	Pass
100	5500	18.44	18.61	142.434	21.54	21.83	Pass
116	5580	18.33	18.59	140.354	21.47	21.83	Pass
140	5700	17.92	19.10	143.227	21.56	21.83	Pass
*144 (U-NII-2C)	5720	16.68	17.43	106.027	20.25	20.83	Pass
*144 (U-NII-3)	5720	10.69	11.58	27.169	14.34	27.83	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi $>$ 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-2C, the directional gain is 8.17 dBi $>$ 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-3, the directional gain is 8.17 dBi $>$ 6 dBi, so the output power limit shall be reduced to $30 - (8.17 - 6) = 27.83$ dBm.

802.11ac (VHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
54	5270	18.62	18.62	145.556	21.63	21.83	Pass
62	5310	18.00	18.10	127.661	21.06	21.83	Pass
102	5510	17.55	17.95	119.259	20.76	21.83	Pass
110	5550	18.34	18.58	140.345	21.47	21.83	Pass
134	5670	18.53	18.82	147.493	21.69	21.83	Pass
*142 (U-NII-2C)	5710	17.51	18.53	134.305	21.28	21.83	Pass
*142 (U-NII-3)	5710	6.52	7.58	10.748	10.31	27.83	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(8.17-6) = 27.83$ dBm.

802.11ac (VHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
58	5290	17.43	17.56	112.351	20.51	21.83	Pass
106	5530	16.35	16.67	89.603	19.52	21.83	Pass
122	5610	18.44	18.68	143.614	21.57	21.83	Pass
*138 (U-NII-2C)	5690	17.50	18.32	129.374	21.12	21.83	Pass
*138 (U-NII-3)	5690	2.23	3.01	3.825	5.83	27.83	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(8.17-6) = 27.83$ dBm.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
52	5260	18.58	18.67	145.731	21.64	21.83	Pass
60	5300	18.67	18.75	148.61	21.72	21.83	Pass
64	5320	18.51	18.56	142.737	21.55	21.83	Pass
100	5500	18.51	18.66	144.409	21.60	21.83	Pass
116	5580	18.40	18.69	143.144	21.56	21.83	Pass
140	5700	18.06	19.15	146.198	21.65	21.83	Pass
*144 (U-NII-2C)	5720	16.66	16.89	99.072	19.96	20.83	Pass
*144 (U-NII-3)	5720	10.85	11.30	26.692	14.26	27.83	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(8.17-6) = 27.83$ dBm.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
54	5270	18.72	18.76	149.635	21.75	21.83	Pass
62	5310	18.20	18.35	134.461	21.29	21.83	Pass
102	5510	17.80	18.10	124.821	20.96	21.83	Pass
110	5550	18.43	18.64	142.777	21.55	21.83	Pass
134	5670	18.61	18.95	151.134	21.79	21.83	Pass
*142 (U-NII-2C)	5710	17.76	18.34	134.608	21.29	21.83	Pass
*142 (U-NII-3)	5710	7.48	7.73	12.128	10.84	27.83	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(8.17-6) = 27.83$ dBm.

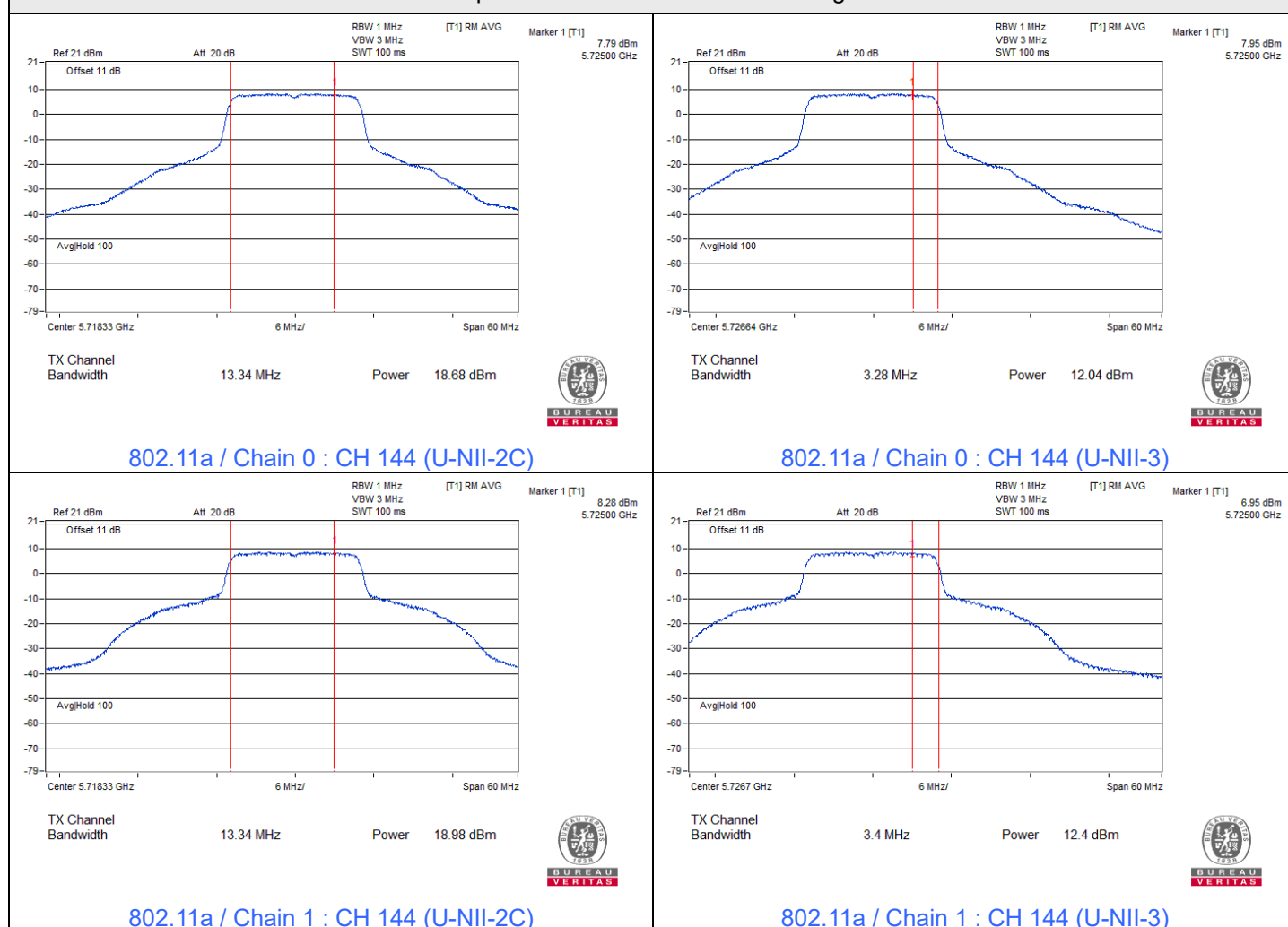
802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
58	5290	17.60	17.80	117.8	20.71	21.83	Pass
106	5530	16.60	16.90	94.687	19.76	21.83	Pass
122	5610	18.51	18.81	146.99	21.67	21.83	Pass
*138 (U-NII-2C)	5690	17.46	18.36	129.492	21.12	21.83	Pass
*138 (U-NII-3)	5690	3.14	3.97	4.747	6.76	27.83	Pass

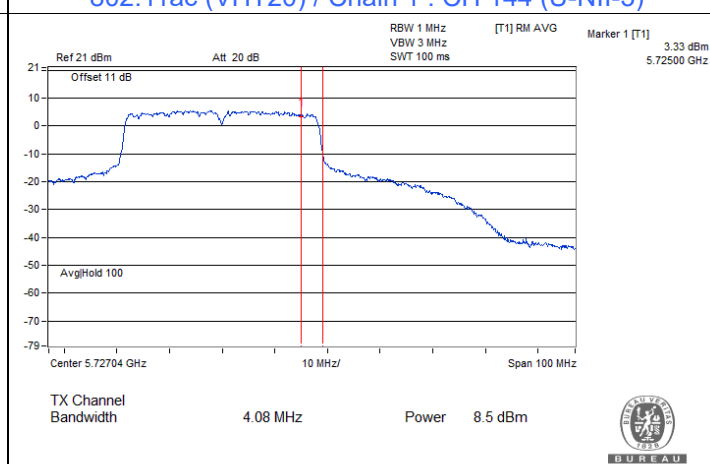
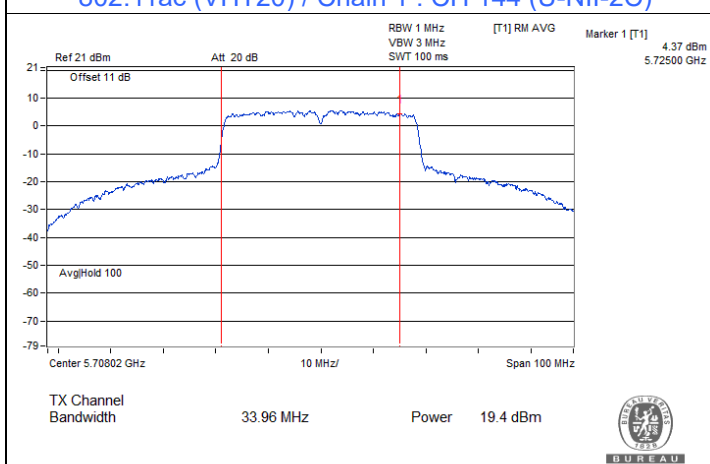
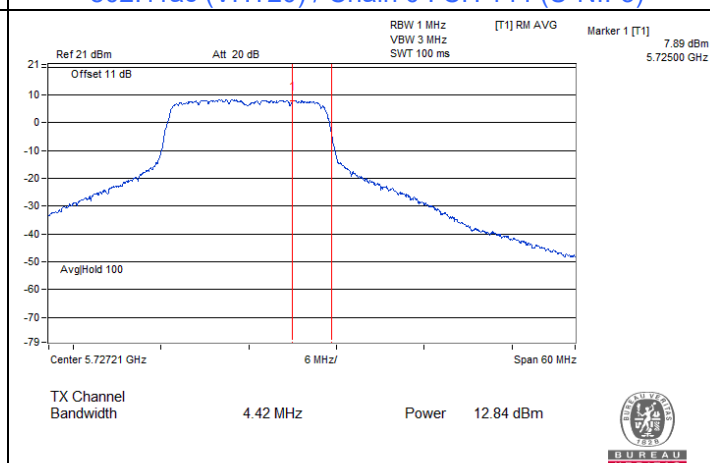
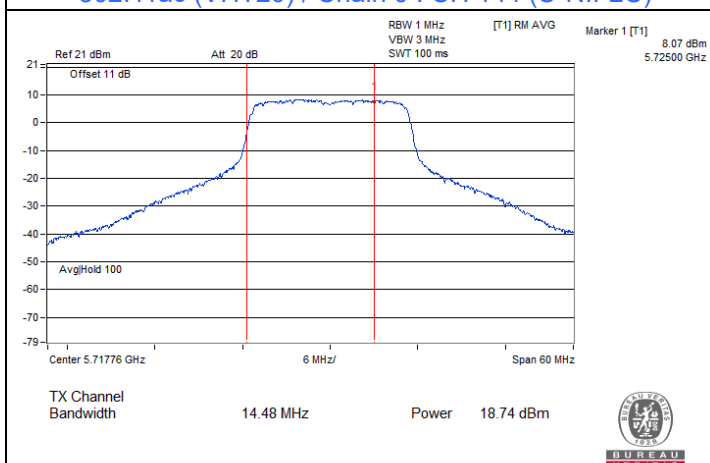
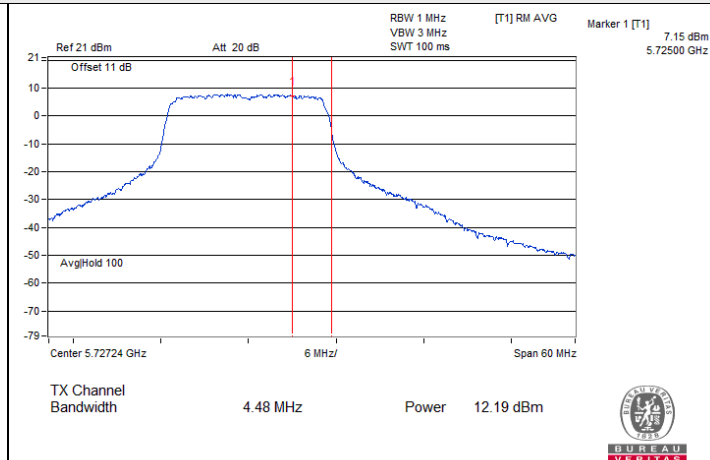
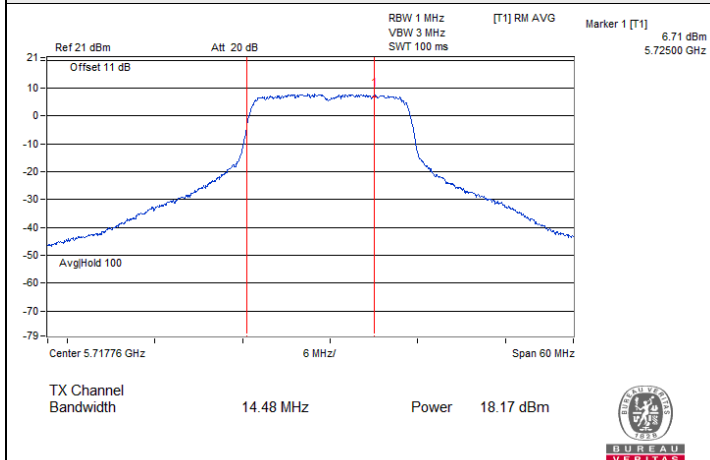
Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to [Determined Conducted Power Limit-(8.17-6)].
- For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the output power limit shall be reduced to $30-(8.17-6) = 27.83$ dBm.

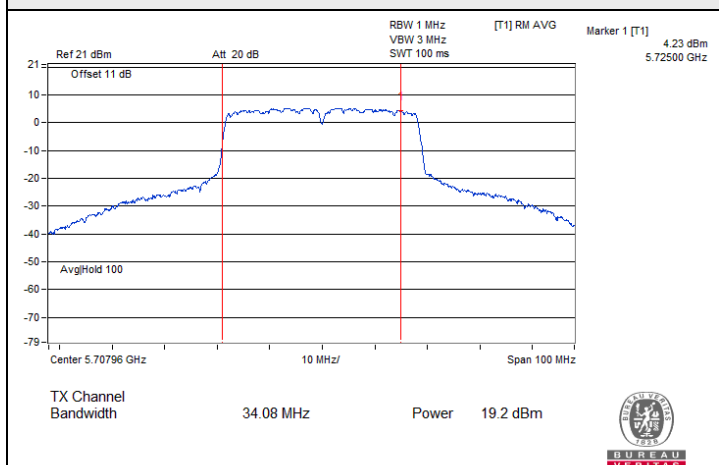
Spectrum Plot for channel straddling



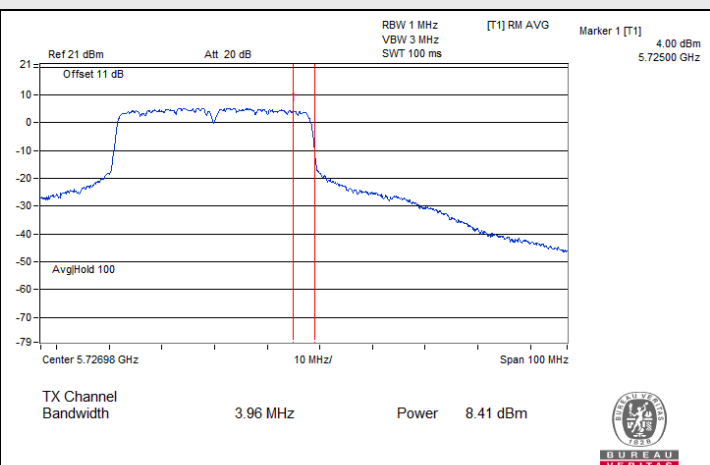
Spectrum Plot for channel straddling



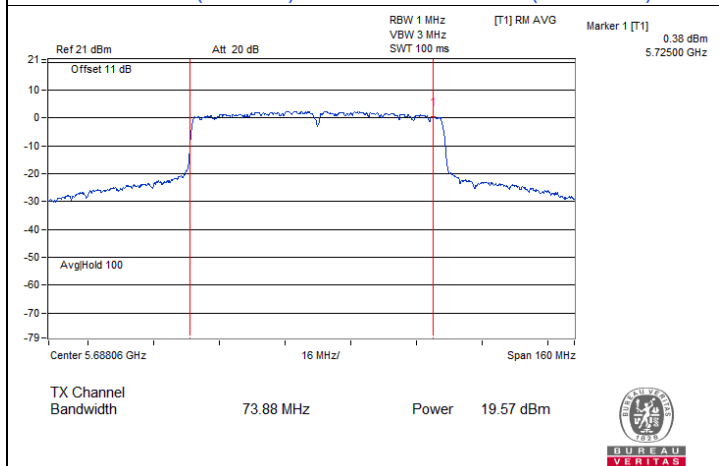
Spectrum Plot for channel straddling



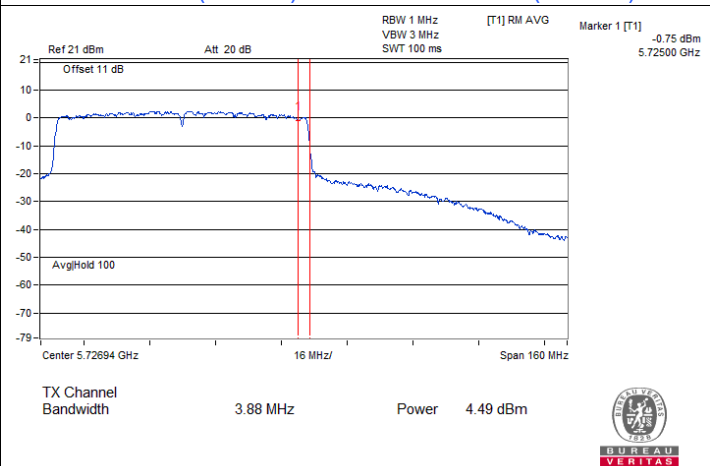
802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-2C)



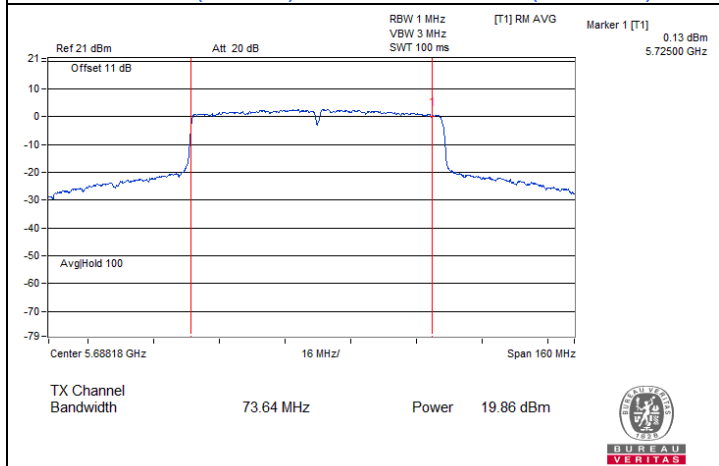
802.11ac (VHT40) / Chain 1 : CH 142 (U-NII-3)



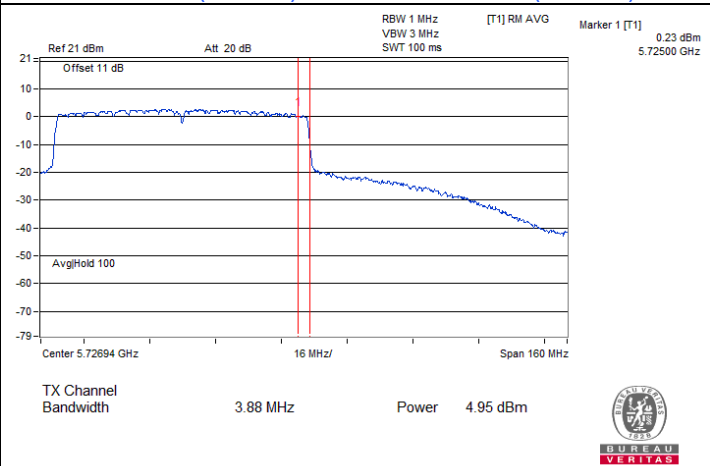
802.11ac (VHT80) / Chain 0 : CH 138 (U-NII-2C)



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

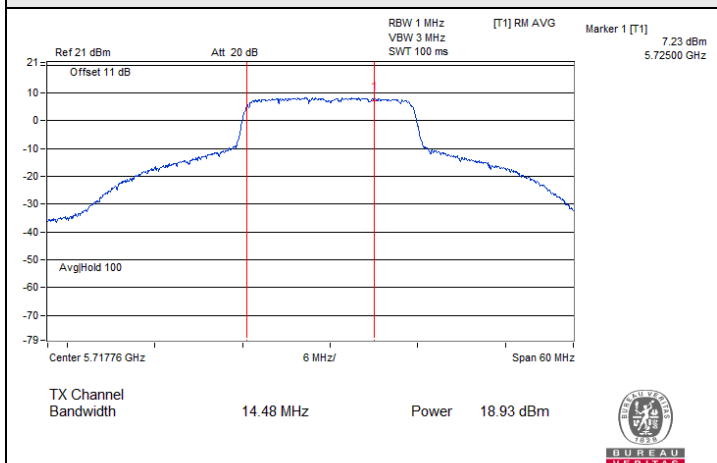


802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-2C)

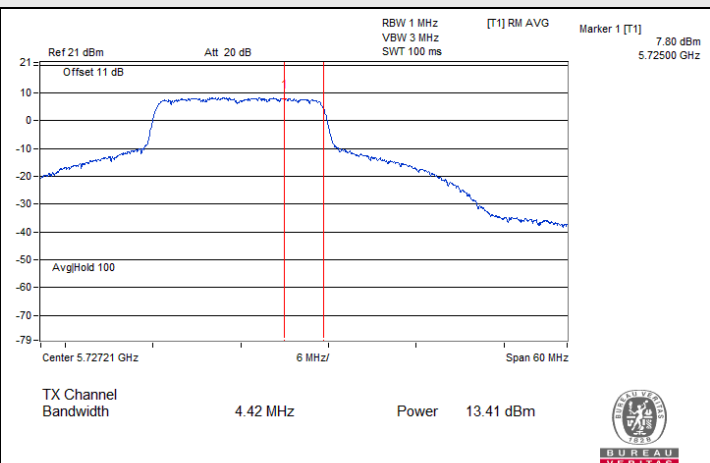


802.11ac (VHT80) / Chain 1 : CH 138 (U-NII-3)

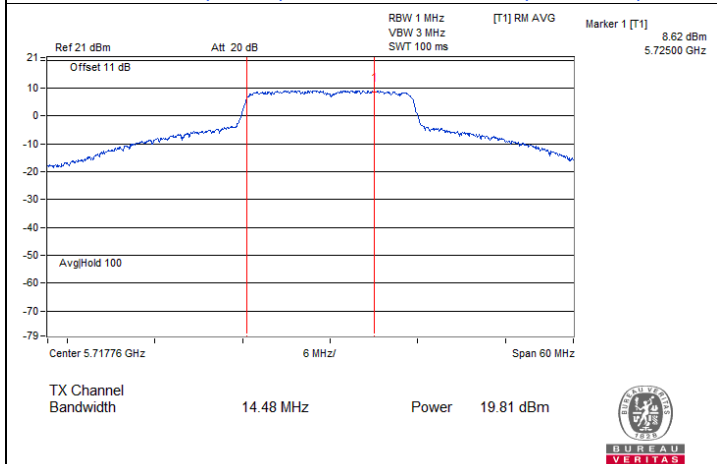
Spectrum Plot for channel straddling



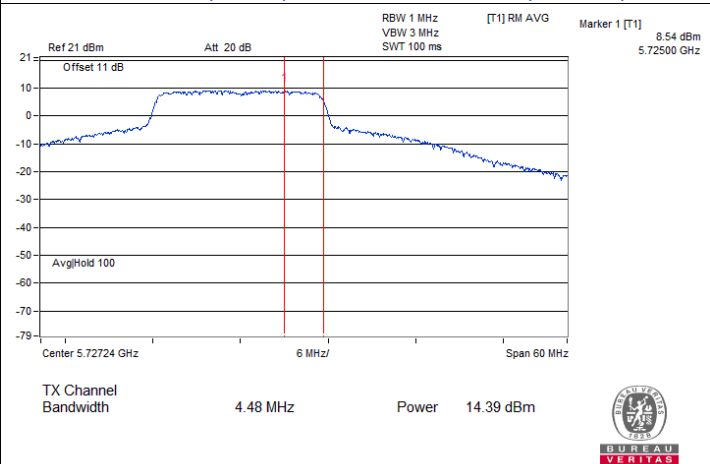
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-2C)



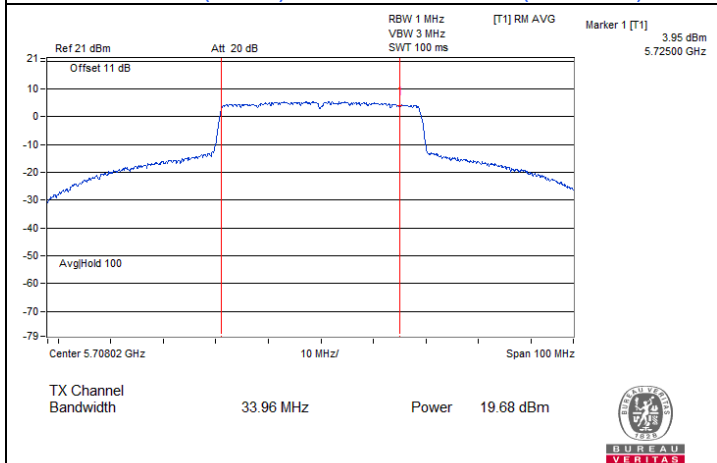
802.11ax (HE20) / Chain 0 : CH 144 (U-NII-3)



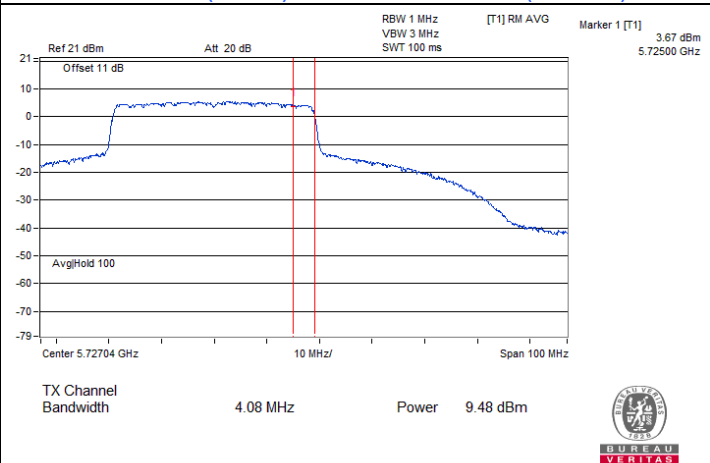
802.11ax (HE20) / Chain 1 : CH 144 (U-NII-2C)



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

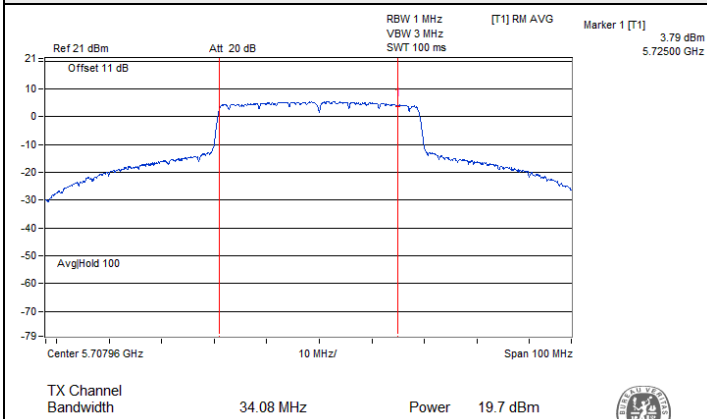


802.11ax (HE40) / Chain 0 : CH 142 (U-NII-2C)

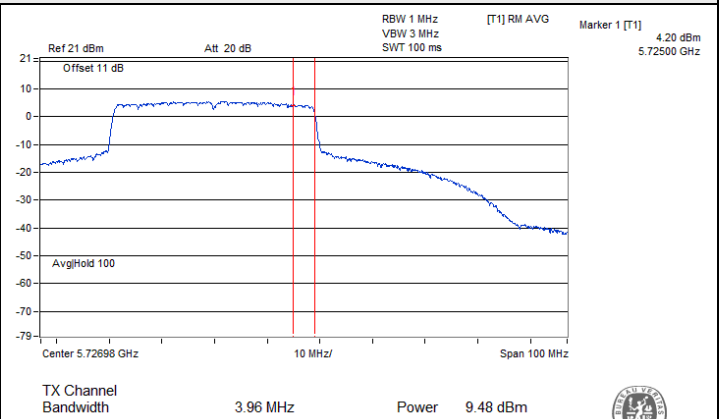


802.11ax (HE40) / Chain 0 : CH 142 (U-NII-3)

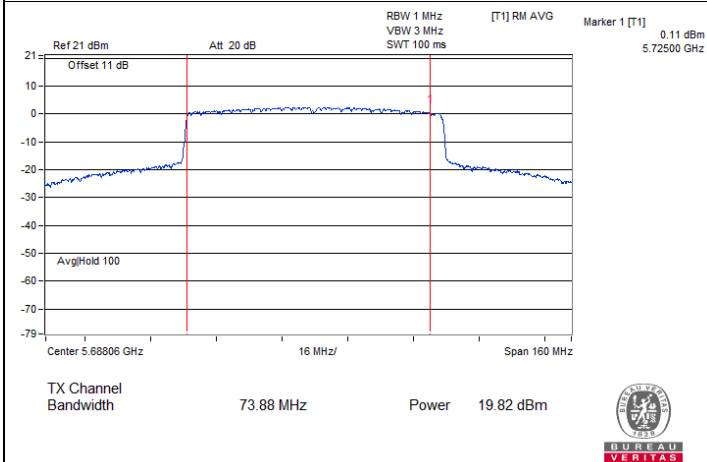
Spectrum Plot for channel straddling



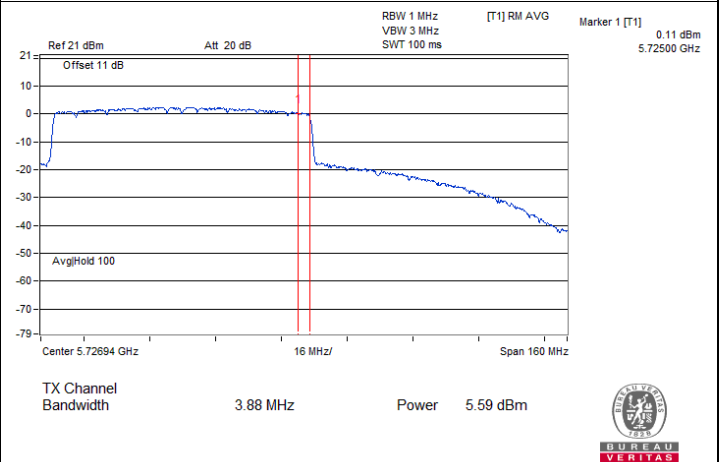
802.11ax (HE40) / Chain 1 : CH 142 (U-NII-2C)



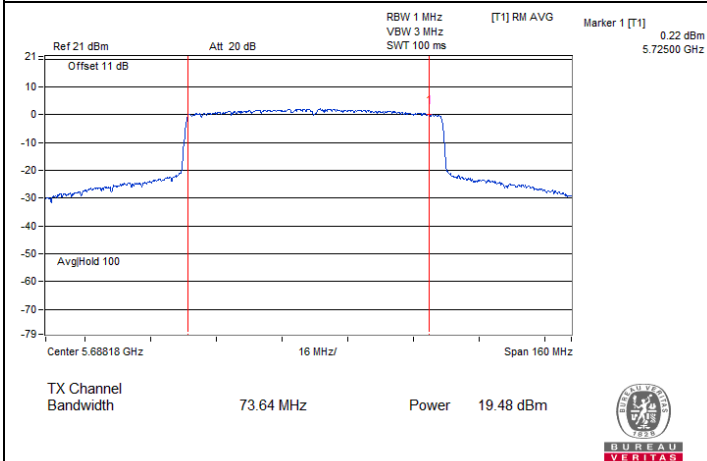
802.11ax (HE40) / Chain 1 : CH 142 (U-NII-3)



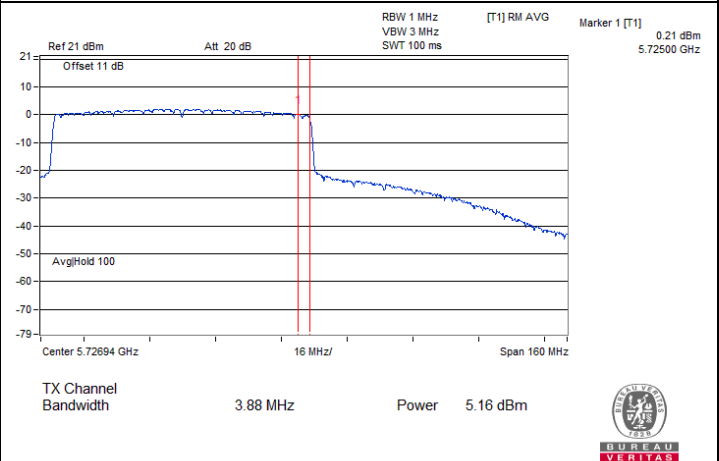
802.11ax (HE80) / Chain 0 : CH 138 (U-NII-2C)



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

Input Power:	54 Vdc	Environmental Conditions:	25°C, 63% RH	Tested By:	Chun Wu
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802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
52	5260	5.52	5.60	0.14	8.71	8.83	Pass
60	5300	4.98	5.56	0.14	8.43	8.83	Pass
64	5320	5.47	5.50	0.14	8.64	8.83	Pass
100	5500	5.24	5.71	0.14	8.63	8.83	Pass
116	5580	5.13	5.62	0.14	8.53	8.83	Pass
140	5700	5.42	4.24	0.14	8.02	8.83	Pass
144 (U-NII-2C)	5720	5.69	5.27	0.14	8.64	8.83	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
52	5260	5.48	5.13	0.17	8.49	8.83	Pass
60	5300	5.29	5.35	0.17	8.50	8.83	Pass
64	5320	5.16	5.24	0.17	8.38	8.83	Pass
100	5500	4.14	4.17	0.17	7.34	8.83	Pass
116	5580	5.25	5.37	0.17	8.49	8.83	Pass
140	5700	4.29	4.35	0.17	7.50	8.83	Pass
144 (U-NII-2C)	5720	4.79	5.89	0.17	8.56	8.83	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
54	5270	1.77	1.78	0.22	5.01	8.83	Pass
62	5310	-0.73	-0.68	0.22	2.53	8.83	Pass
102	5510	-0.40	-0.19	0.22	2.94	8.83	Pass
110	5550	2.10	2.23	0.22	5.40	8.83	Pass
134	5670	0.97	1.65	0.22	4.55	8.83	Pass
142 (U-NII-2C)	5710	1.82	2.56	0.22	5.44	8.83	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
58	5290	-4.48	-4.07	0.18	-1.08	8.83	Pass
106	5530	-4.86	-4.45	0.18	-1.46	8.83	Pass
122	5610	-0.09	-1.75	0.18	2.35	8.83	Pass
138 (U-NII-2C)	5690	-0.04	-0.76	0.18	2.81	8.83	Pass

Notes:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-2A, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.
- For U-NII-2C, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to 11-(8.17-6) = 8.83 dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	0.48	-0.24	3.15	0.14	5.51	27.83	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (8.17 - 6) = 27.83$ dBm/500kHz.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	0.02	-0.71	2.68	0.17	5.07	27.83	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (8.17 - 6) = 27.83$ dBm/500kHz.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
142 (U-NII-3)	5710	-3.95	-4.49	-1.2	0.22	1.24	27.83	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (8.17 - 6) = 27.83$ dBm/500kHz.

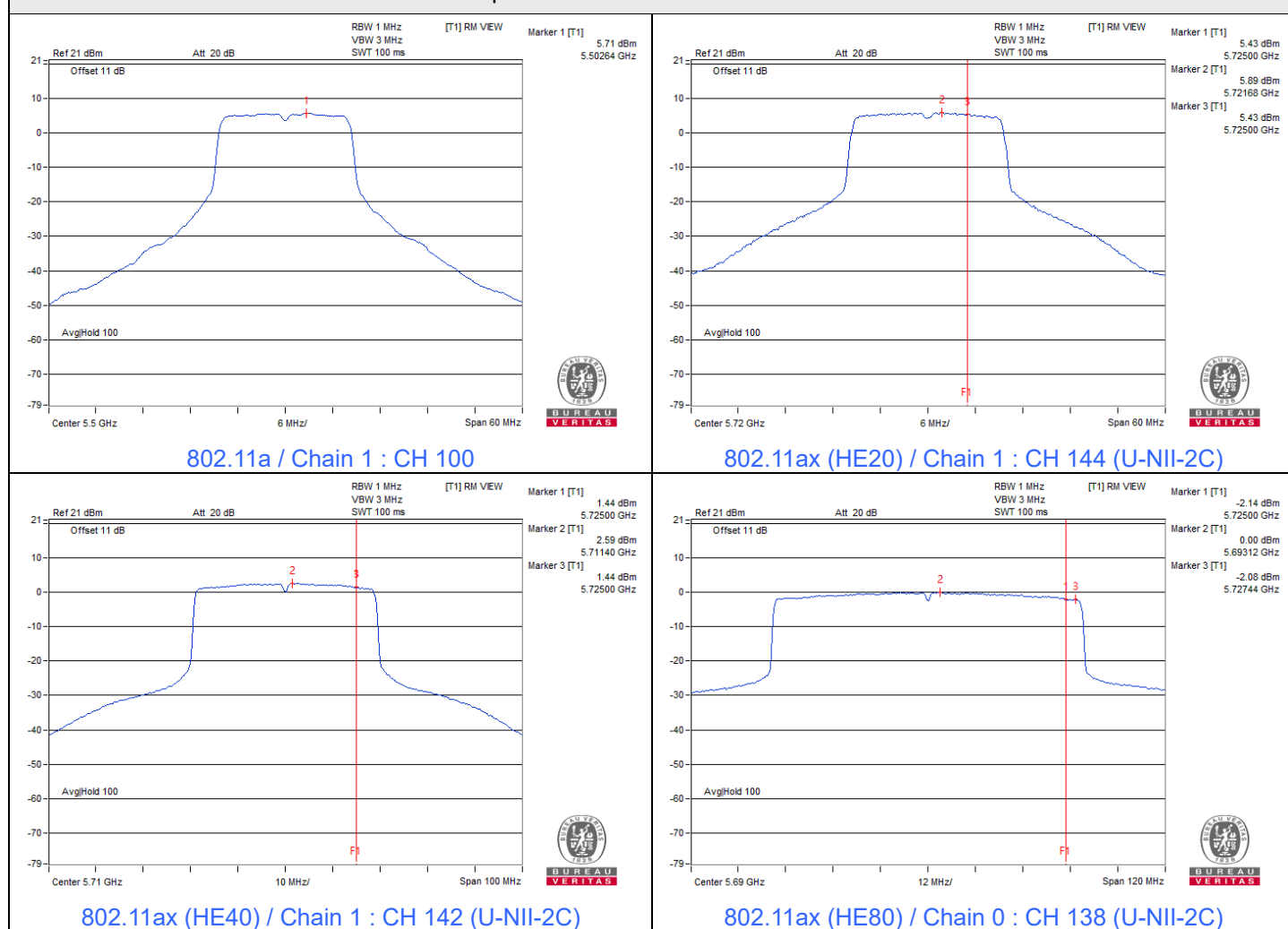
802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
138 (U-NII-3)	5690	-7.35	-7.71	-4.52	0.18	-2.12	27.83	Pass

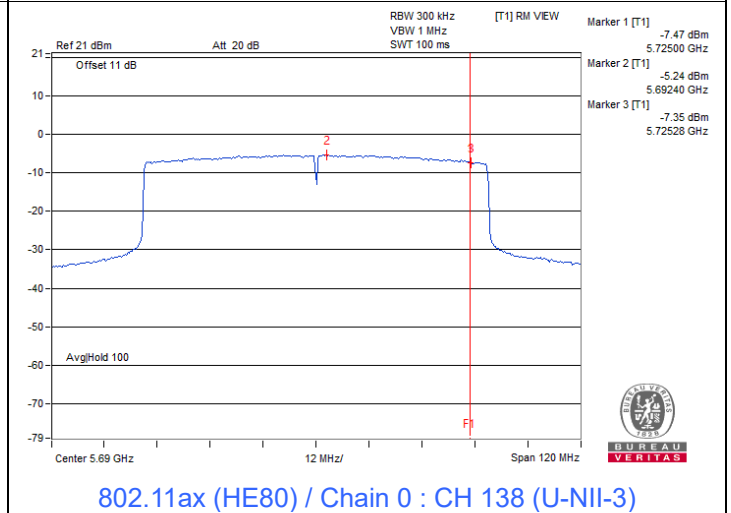
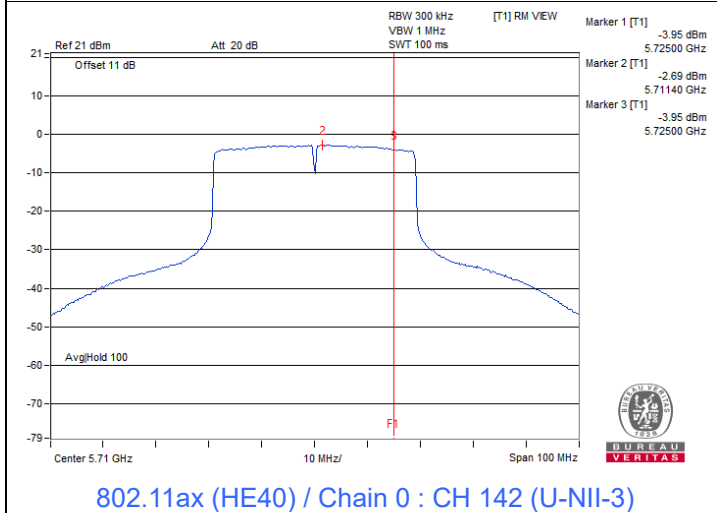
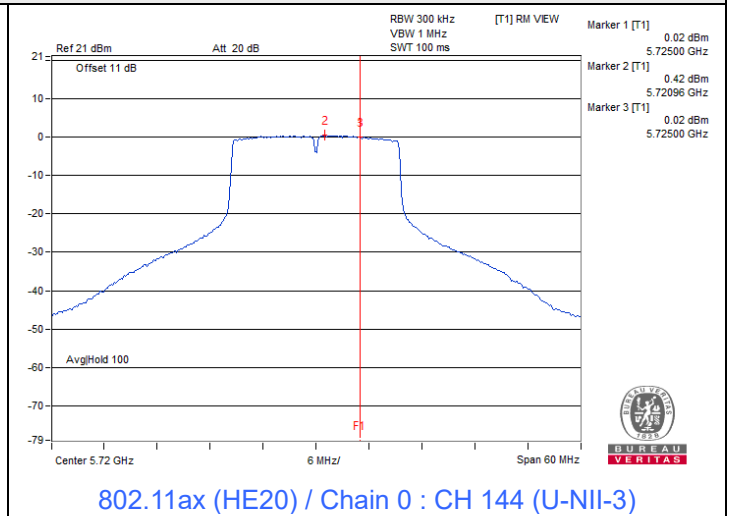
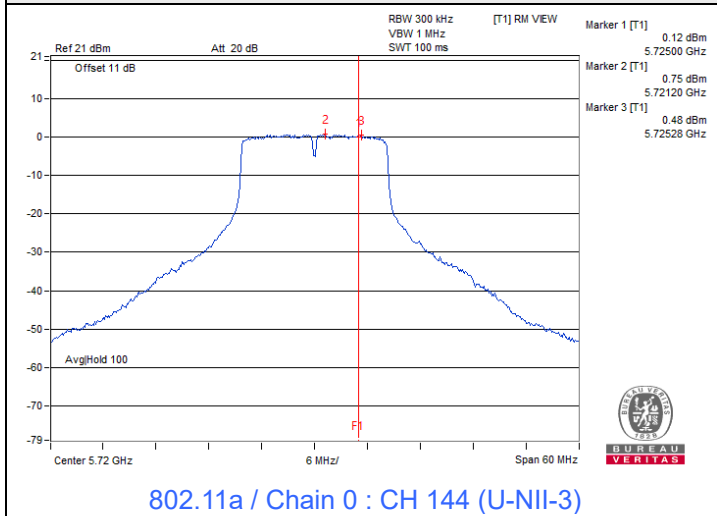
Notes:

- Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
- For U-NII-3, the directional gain is 8.17 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (8.17 - 6) = 27.83 \text{ dBm/500kHz}$.

Spectrum Plot of Maximum Value



Spectrum Plot of Maximum Value



7.4 6 dB Bandwidth

Input Power:	54 Vdc	Environmental Conditions:	25°C, 63% RH	Tested By:	Chun Wu
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802.11a

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	3.14	3.11	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	4.39	4.44	0.5	Pass

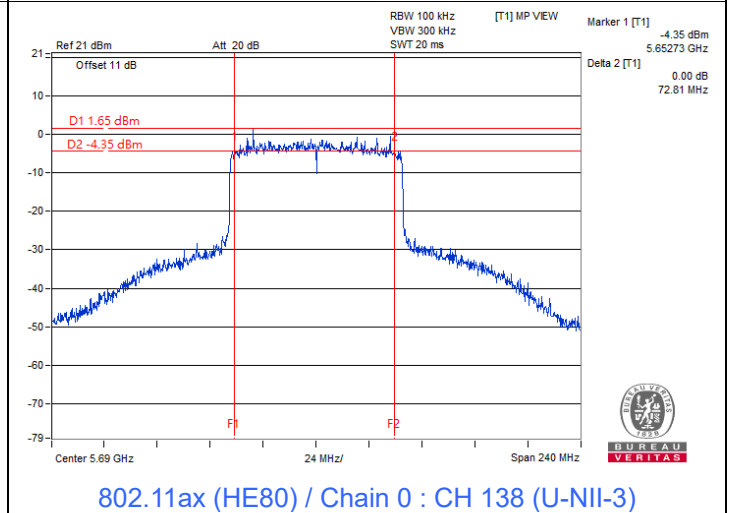
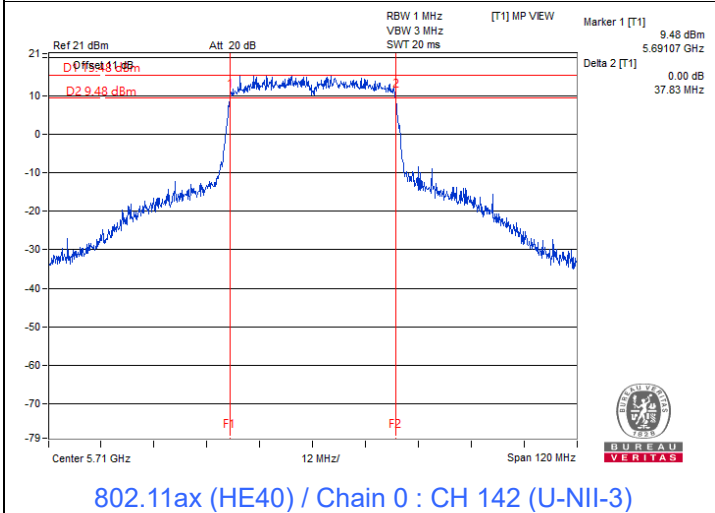
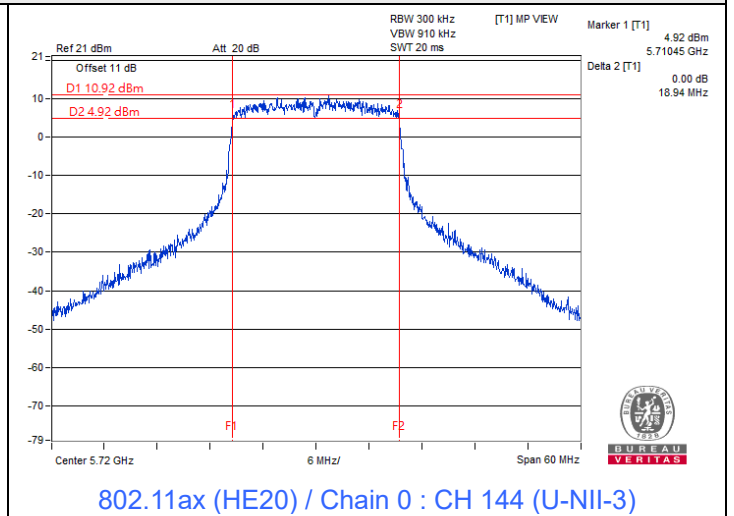
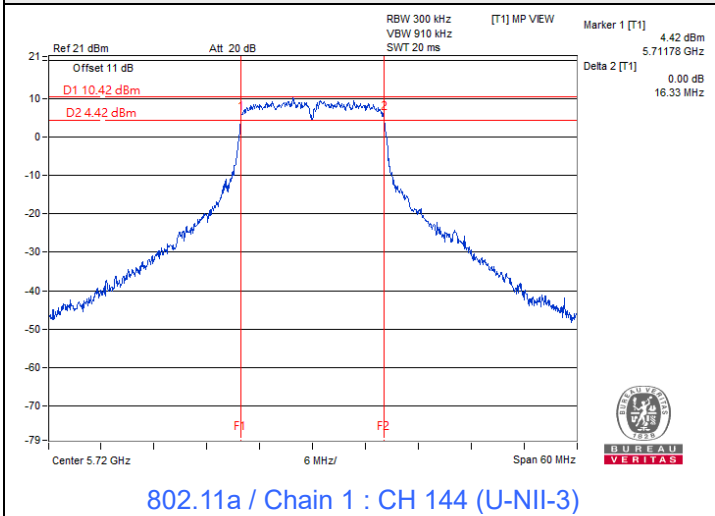
802.11ax (HE40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	3.90	3.99	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	0.54	3.19	0.5	Pass

Spectrum Plot of Minimum Value



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

7.5 Occupied Bandwidth

Input Power:	54 Vdc	Environmental Conditions:	25°C, 63% RH	Tested By:	Chun Wu
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	16.44	16.50
60	5300	16.38	16.44
64	5320	16.44	16.44
100	5500	16.50	16.50
116	5580	16.50	16.50
140	5700	16.50	16.50
144 (U-NII-2C)	5720	13.34	13.34
144 (U-NII-3)	5720	3.28	3.40

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	18.96	18.96
60	5300	18.96	18.96
64	5320	18.96	19.02
100	5500	18.96	18.96
116	5580	19.02	19.02
140	5700	18.96	18.90
144 (U-NII-2C)	5720	14.48	14.48
144 (U-NII-3)	5720	4.42	4.48

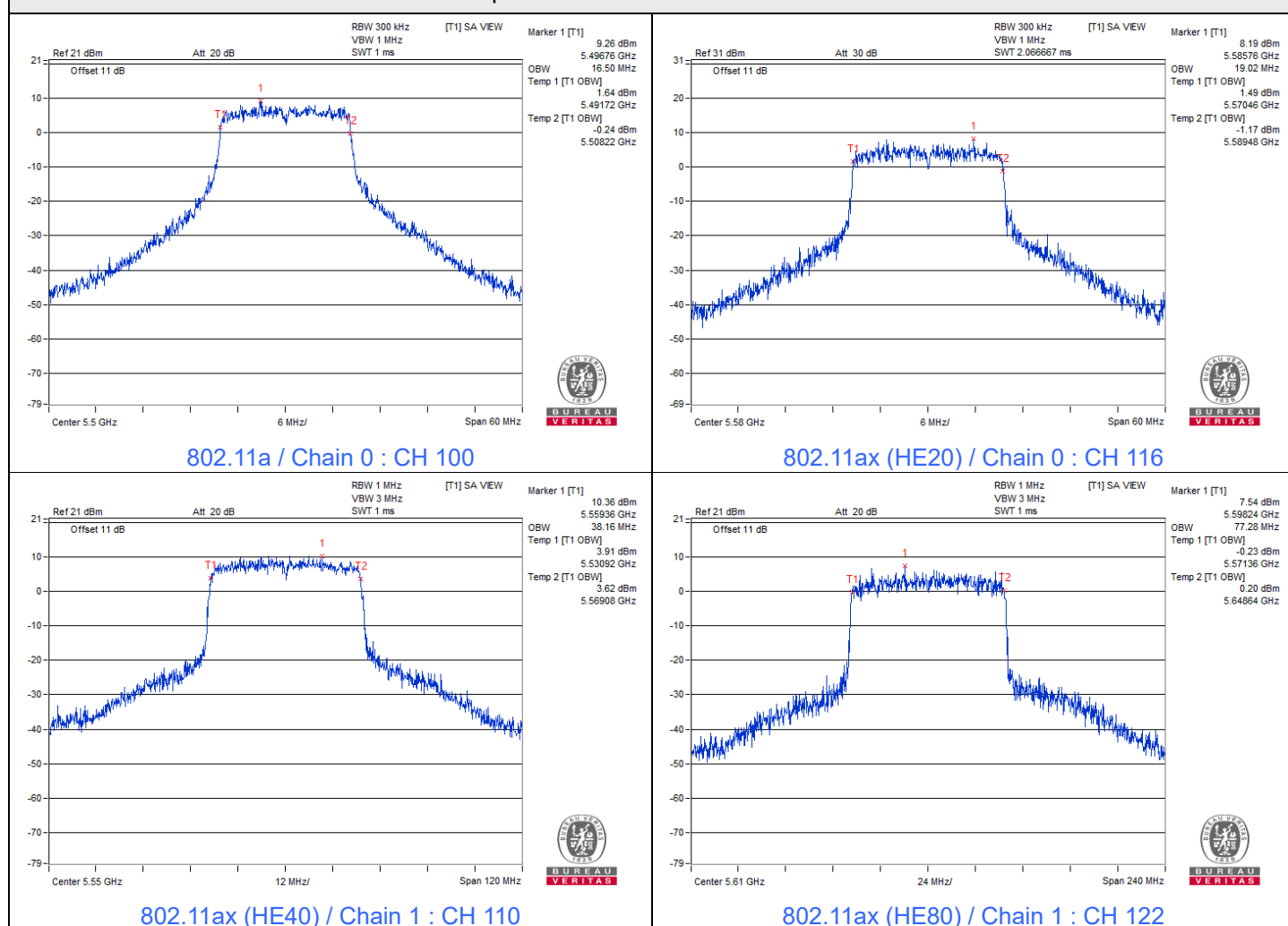
802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	38.04	37.92
62	5310	37.80	37.92
102	5510	37.80	37.92
110	5550	38.04	38.16
134	5670	38.04	37.92
142 (U-NII-2C)	5710	33.96	34.08
142 (U-NII-3)	5710	4.08	3.96

802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	77.04	77.04
106	5530	77.04	77.04
122	5610	77.04	77.28
138 (U-NII-2C)	5690	73.88	73.64
138 (U-NII-3)	5690	3.88	3.88

Spectrum Plot of Maximum Value



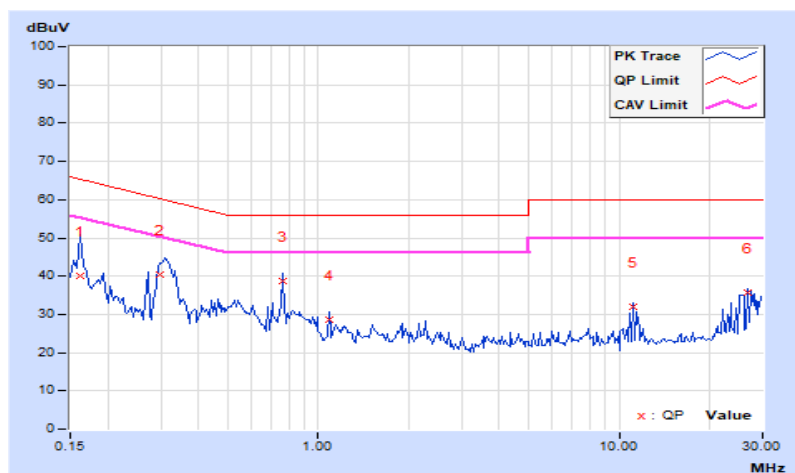
7.6 AC Power Conducted Emissions

RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

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	0.16172	9.96	30.06	18.64	40.02	28.60	65.38	55.38	-25.36	-26.78
2	0.29828	9.99	30.36	18.84	40.35	28.83	60.29	50.29	-19.94	-21.46
3	0.76328	10.01	28.67	28.37	38.68	38.38	56.00	46.00	-17.32	-7.62
4	1.08984	10.03	18.58	15.77	28.61	25.80	56.00	46.00	-27.39	-20.20
5	11.15625	10.51	21.64	21.20	32.15	31.71	60.00	50.00	-27.85	-18.29
6	26.67969	11.06	24.72	22.16	35.78	33.22	60.00	50.00	-24.22	-16.78

Remarks:

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

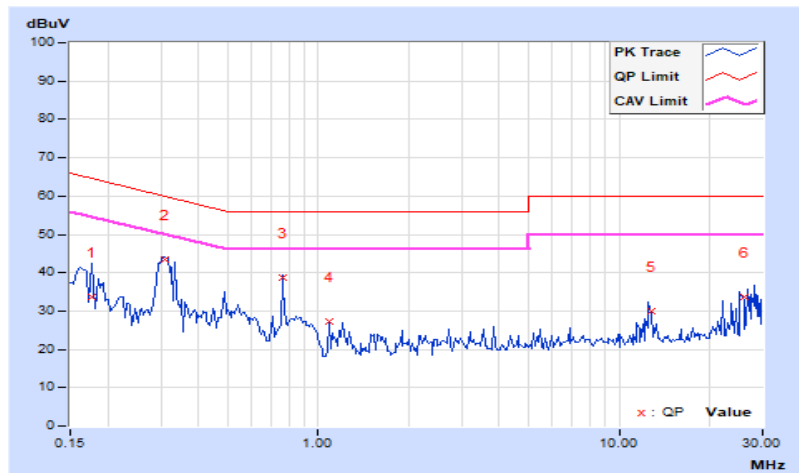


RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

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	0.17734	10.01	23.62	7.29	33.63	17.30	64.61	54.61	-30.98	-37.31
2	0.31016	10.01	33.28	23.36	43.29	33.37	59.97	49.97	-16.68	-16.60
3	0.76328	10.03	28.56	28.53	38.59	38.56	56.00	46.00	-17.41	-7.44
4	1.08984	10.05	17.09	15.61	27.14	25.66	56.00	46.00	-28.86	-20.34
5	12.78906	10.52	19.47	18.64	29.99	29.16	60.00	50.00	-30.01	-20.84
6	25.92188	10.85	22.70	18.72	33.55	29.57	60.00	50.00	-26.45	-20.43

Remarks:

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



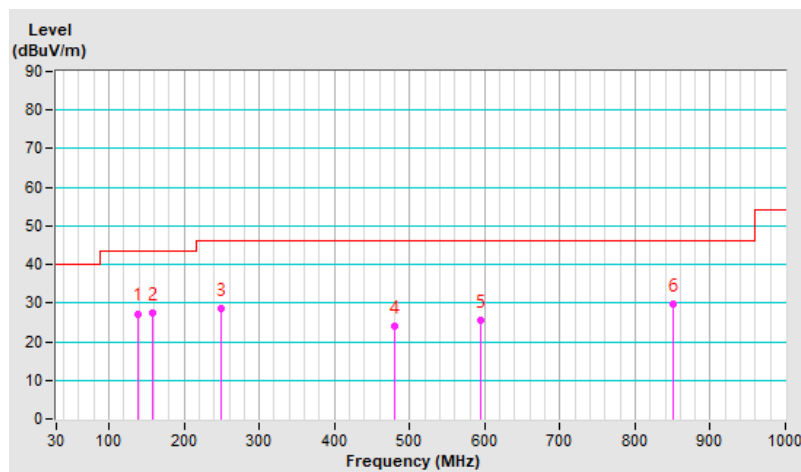
7.7 Unwanted Emissions below 1 GHz

RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 63% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	139.27	27.3 QP	43.5	-16.2	2.00 H	102	40.1	-12.8
2	157.51	27.3 QP	43.5	-16.2	3.00 H	117	39.9	-12.6
3	250.00	28.5 QP	46.0	-17.5	1.00 H	114	42.3	-13.8
4	479.50	23.9 QP	46.0	-22.1	1.00 H	120	31.5	-7.6
5	594.76	25.6 QP	46.0	-20.4	2.00 H	36	30.7	-5.1
6	850.26	29.8 QP	46.0	-16.2	3.00 H	171	30.4	-0.6

Remarks:

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

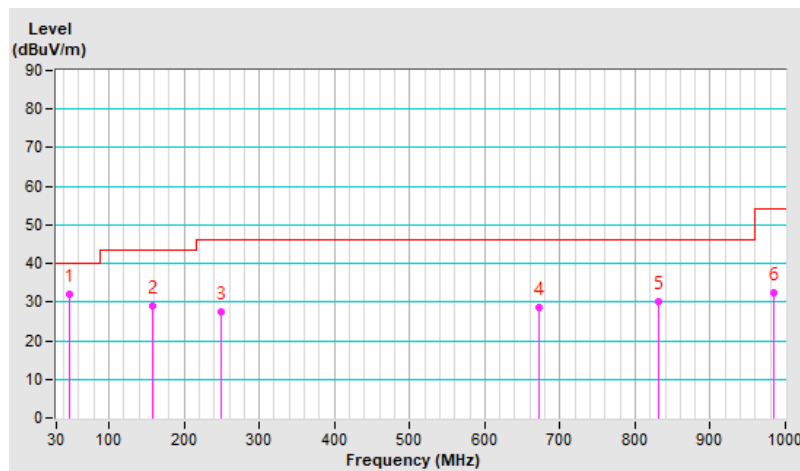


RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20 °C, 63% RH
Tested By	Vanness Huang		

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	47.82	32.0 QP	40.0	-8.0	1.00 V	258	44.7	-12.7
2	157.53	28.8 QP	43.5	-14.7	1.00 V	140	41.4	-12.6
3	250.00	27.3 QP	46.0	-18.7	1.00 V	69	41.1	-13.8
4	673.04	28.6 QP	46.0	-17.4	3.00 V	43	32.2	-3.6
5	830.66	30.0 QP	46.0	-16.0	1.00 V	24	30.9	-0.9
6	984.58	32.5 QP	54.0	-21.5	2.00 V	227	31.1	1.4

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



7.8 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	56.8 PK	74.0	-17.2	2.08 H	73	54.4	2.4
2	5150.00	46.9 AV	54.0	-7.1	2.08 H	73	44.5	2.4
3	*5260.00	121.5 PK			2.08 H	73	119.5	2.0
4	*5260.00	111.8 AV			2.08 H	73	109.8	2.0
5	#10520.00	48.9 PK	68.2	-19.3	1.62 H	160	38.0	10.9
6	15780.00	48.9 PK	74.0	-25.1	1.00 H	208	37.2	11.7
7	15780.00	37.8 AV	54.0	-16.2	1.00 H	208	26.1	11.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	52.1 PK	74.0	-21.9	1.01 V	178	49.7	2.4
2	5150.00	42.5 AV	54.0	-11.5	1.01 V	178	40.1	2.4
3	*5260.00	114.7 PK			1.01 V	178	112.7	2.0
4	*5260.00	104.9 AV			1.01 V	178	102.9	2.0
5	#10520.00	48.3 PK	68.2	-19.9	2.72 V	144	37.4	10.9
6	15780.00	48.4 PK	74.0	-25.6	3.44 V	265	36.7	11.7
7	15780.00	36.6 AV	54.0	-17.4	3.44 V	265	24.9	11.7

Remarks:

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

RF Mode	802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	120.7 PK			2.16 H	55	118.7	2.0
2	*5300.00	111.6 AV			2.16 H	55	109.6	2.0
3	10600.00	49.1 PK	74.0	-24.9	1.61 H	165	38.4	10.7
4	10600.00	38.1 AV	54.0	-15.9	1.61 H	165	27.4	10.7
5	15900.00	48.6 PK	74.0	-25.4	1.02 H	203	36.6	12.0
6	15900.00	37.7 AV	54.0	-16.3	1.02 H	203	25.7	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.8 PK			3.94 V	360	113.8	2.0
2	*5300.00	105.5 AV			3.94 V	360	103.5	2.0
3	10600.00	48.2 PK	74.0	-25.8	2.73 V	150	37.5	10.7
4	10600.00	37.5 AV	54.0	-16.5	2.73 V	150	26.8	10.7
5	15900.00	48.1 PK	74.0	-25.9	3.43 V	257	36.1	12.0
6	15900.00	36.2 AV	54.0	-17.8	3.43 V	257	24.2	12.0

Remarks:

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

RF Mode	802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	121.8 PK			2.06 H	54	119.7	2.1
2	*5320.00	111.9 AV			2.06 H	54	109.8	2.1
3	5350.00	64.8 PK	74.0	-9.2	2.06 H	54	62.6	2.2
4	5350.00	50.9 AV	54.0	-3.1	2.06 H	54	48.7	2.2
5	10640.00	48.6 PK	74.0	-25.4	1.62 H	154	37.9	10.7
6	10640.00	37.6 AV	54.0	-16.4	1.62 H	154	26.9	10.7
7	15960.00	48.9 PK	74.0	-25.1	1.03 H	194	36.6	12.3
8	15960.00	37.8 AV	54.0	-16.2	1.03 H	194	25.5	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	114.4 PK			3.93 V	360	112.3	2.1
2	*5320.00	104.3 AV			3.93 V	360	102.2	2.1
3	5350.00	58.2 PK	74.0	-15.8	3.93 V	360	56.0	2.2
4	5350.00	43.1 AV	54.0	-10.9	3.93 V	360	40.9	2.2
5	10640.00	48.0 PK	74.0	-26.0	2.73 V	135	37.3	10.7
6	10640.00	37.4 AV	54.0	-16.6	2.73 V	135	26.7	10.7
7	15960.00	47.3 PK	74.0	-26.7	3.44 V	262	35.0	12.3
8	15960.00	35.7 AV	54.0	-18.3	3.44 V	262	23.4	12.3

Remarks:

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

RF Mode	802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	60.9 PK	74.0	-13.1	2.08 H	63	58.6	2.3
2	5460.00	47.2 AV	54.0	-6.8	2.08 H	63	44.9	2.3
3	#5470.00	67.9 PK	68.2	-0.3	2.08 H	63	65.6	2.3
4	*5500.00	119.8 PK			2.08 H	63	117.4	2.4
5	*5500.00	110.7 AV			2.08 H	63	108.3	2.4
6	11000.00	48.3 PK	74.0	-25.7	1.60 H	161	37.0	11.3
7	11000.00	37.3 AV	54.0	-16.7	1.60 H	161	26.0	11.3
8	#16500.00	49.1 PK	68.2	-19.1	1.02 H	179	35.7	13.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	51.9 PK	74.0	-22.1	1.01 V	177	49.6	2.3
2	5460.00	40.3 AV	54.0	-13.7	1.01 V	177	38.0	2.3
3	#5470.00	61.3 PK	68.2	-6.9	1.01 V	177	59.0	2.3
4	*5500.00	112.4 PK			1.01 V	177	110.0	2.4
5	*5500.00	103.2 AV			1.01 V	177	100.8	2.4
6	11000.00	47.7 PK	74.0	-26.3	2.77 V	142	36.4	11.3
7	11000.00	37.0 AV	54.0	-17.0	2.77 V	142	25.7	11.3
8	#16500.00	47.4 PK	68.2	-20.8	3.41 V	254	34.0	13.4

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 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	122.9 PK			2.06 H	306	120.5	2.4
2	*5580.00	113.3 AV			2.06 H	306	110.9	2.4
3	11160.00	48.5 PK	74.0	-25.5	1.54 H	154	37.2	11.3
4	11160.00	37.7 AV	54.0	-16.3	1.54 H	154	26.4	11.3
5	#16740.00	49.3 PK	68.2	-18.9	1.07 H	172	33.9	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	*5580.00	114.8 PK			1.01 V	181	112.4	2.4
2	*5580.00	105.4 AV			1.01 V	181	103.0	2.4
3	11160.00	47.9 PK	74.0	-26.1	2.72 V	151	36.6	11.3
4	11160.00	37.2 AV	54.0	-16.8	2.72 V	151	25.9	11.3
5	#16740.00	47.1 PK	68.2	-21.1	3.44 V	268	31.7	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	802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	119.9 PK			2.18 H	309	117.5	2.4
2	*5700.00	110.5 AV			2.18 H	309	108.1	2.4
3	#5725.00	67.4 PK	68.2	-0.8	2.18 H	309	64.9	2.5
4	11400.00	48.7 PK	74.0	-25.3	1.59 H	167	36.8	11.9
5	11400.00	37.9 AV	54.0	-16.1	1.59 H	167	26.0	11.9
6	#17100.00	49.0 PK	68.2	-19.2	1.05 H	162	32.9	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	*5700.00	112.1 PK			1.24 V	184	109.7	2.4
2	*5700.00	102.4 AV			1.24 V	184	100.0	2.4
3	#5725.00	57.2 PK	68.2	-11.0	1.24 V	184	54.7	2.5
4	11400.00	48.5 PK	74.0	-25.5	2.77 V	151	36.6	11.9
5	11400.00	37.7 AV	54.0	-16.3	2.77 V	151	25.8	11.9
6	#17100.00	46.8 PK	68.2	-21.4	3.43 V	254	30.7	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	802.11a	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.2 PK	74.0	-16.8	2.32 H	310	54.9	2.3
2	5460.00	44.1 AV	54.0	-9.9	2.32 H	310	41.8	2.3
3	#5470.00	56.9 PK	68.2	-11.3	2.32 H	310	54.6	2.3
4	*5720.00	120.2 PK			2.32 H	310	117.7	2.5
5	*5720.00	109.7 AV			2.32 H	310	107.2	2.5
6	#5850.00	54.8 PK	68.2	-13.4	2.32 H	310	51.8	3.0
7	11440.00	48.6 PK	74.0	-25.4	1.55 H	155	36.7	11.9
8	11440.00	37.7 AV	54.0	-16.3	1.55 H	155	25.8	11.9
9	#17160.00	49.1 PK	68.2	-19.1	1.02 H	164	33.1	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	5460.00	53.6 PK	74.0	-20.4	1.10 V	181	51.3	2.3
2	5460.00	40.3 AV	54.0	-13.7	1.10 V	181	38.0	2.3
3	#5470.00	53.9 PK	68.2	-14.3	1.10 V	181	51.6	2.3
4	*5720.00	114.4 PK			1.10 V	181	111.9	2.5
5	*5720.00	103.6 AV			1.10 V	181	101.1	2.5
6	#5850.00	51.8 PK	68.2	-16.4	1.10 V	181	48.8	3.0
7	11440.00	48.1 PK	74.0	-25.9	2.77 V	163	36.2	11.9
8	11440.00	37.3 AV	54.0	-16.7	2.77 V	163	25.4	11.9
9	#17160.00	46.7 PK	68.2	-21.5	3.45 V	242	30.7	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 52 : 5260 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5260.00	123.8 PK			2.08 H	62	121.8	2.0
2	*5260.00	112.8 AV			2.08 H	62	110.8	2.0
3	#10520.00	48.6 PK	68.2	-19.6	3.97 H	171	37.7	10.9
4	15780.00	50.0 PK	74.0	-24.0	2.14 H	133	38.3	11.7
5	15780.00	37.0 AV	54.0	-17.0	2.14 H	133	25.3	11.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5260.00	116.7 PK			3.45 V	7	114.7	2.0
2	*5260.00	104.5 AV			3.45 V	7	102.5	2.0
3	#10520.00	47.1 PK	68.2	-21.1	3.63 V	156	36.2	10.9
4	15780.00	47.2 PK	74.0	-26.8	1.48 V	274	35.5	11.7
5	15780.00	35.8 AV	54.0	-18.2	1.48 V	274	24.1	11.7

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 60 : 5300 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	124.9 PK			2.10 H	63	122.9	2.0
2	*5300.00	113.4 AV			2.10 H	63	111.4	2.0
3	5350.00	70.4 PK	74.0	-3.6	2.10 H	63	68.2	2.2
4	5350.00	53.5 AV	54.0	-0.5	2.10 H	63	51.3	2.2
5	10600.00	47.9 PK	74.0	-26.1	3.96 H	157	37.2	10.7
6	10600.00	37.7 AV	54.0	-16.3	3.96 H	157	27.0	10.7
7	15900.00	50.2 PK	74.0	-23.8	2.09 H	128	38.2	12.0
8	15900.00	37.4 AV	54.0	-16.6	2.09 H	128	25.4	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	115.7 PK			3.95 V	27	113.7	2.0
2	*5300.00	104.8 AV			3.95 V	27	102.8	2.0
3	5350.00	52.2 PK	74.0	-21.8	3.95 V	27	50.0	2.2
4	5350.00	41.6 AV	54.0	-12.4	3.95 V	27	39.4	2.2
5	10600.00	47.3 PK	74.0	-26.7	3.64 V	167	36.6	10.7
6	10600.00	37.2 AV	54.0	-16.8	3.64 V	167	26.5	10.7
7	15900.00	47.5 PK	74.0	-26.5	1.50 V	265	35.5	12.0
8	15900.00	36.3 AV	54.0	-17.7	1.50 V	265	24.3	12.0

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 64 : 5320 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	123.4 PK			2.05 H	58	121.3	2.1
2	*5320.00	110.9 AV			2.05 H	58	108.8	2.1
3	5350.00	68.4 PK	74.0	-5.6	2.05 H	58	66.2	2.2
4	5350.00	52.7 AV	54.0	-1.3	2.05 H	58	50.5	2.2
5	10640.00	47.3 PK	74.0	-26.7	3.95 H	164	36.6	10.7
6	10640.00	37.3 AV	54.0	-16.7	3.95 H	164	26.6	10.7
7	15960.00	50.4 PK	74.0	-23.6	2.09 H	138	38.1	12.3
8	15960.00	37.8 AV	54.0	-16.2	2.09 H	138	25.5	12.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	115.2 PK			3.96 V	2	113.1	2.1
2	*5320.00	103.1 AV			3.96 V	2	101.0	2.1
3	5350.00	58.4 PK	74.0	-15.6	3.96 V	2	56.2	2.2
4	5350.00	44.5 AV	54.0	-9.5	3.96 V	2	42.3	2.2
5	10640.00	47.2 PK	74.0	-26.8	3.58 V	163	36.5	10.7
6	10640.00	36.9 AV	54.0	-17.1	3.58 V	163	26.2	10.7
7	15960.00	47.7 PK	74.0	-26.3	1.50 V	254	35.4	12.3
8	15960.00	36.3 AV	54.0	-17.7	1.50 V	254	24.0	12.3

Remarks:

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

RF Mode	802.11ax (HE20)	Channel	CH 100 : 5500 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.8 PK	74.0	-16.2	2.11 H	53	55.5	2.3
2	5460.00	44.2 AV	54.0	-9.8	2.11 H	53	41.9	2.3
3	#5470.00	67.9 PK	68.2	-0.3	2.11 H	53	65.6	2.3
4	*5500.00	120.7 PK			2.11 H	53	118.3	2.4
5	*5500.00	109.8 AV			2.11 H	53	107.4	2.4
6	11000.00	47.5 PK	74.0	-26.5	3.95 H	156	36.2	11.3
7	11000.00	37.2 AV	54.0	-16.8	3.95 H	156	25.9	11.3
8	#16500.00	50.2 PK	68.2	-18.0	2.11 H	143	36.8	13.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	50.9 PK	74.0	-23.1	1.03 V	183	48.6	2.3
2	5460.00	39.4 AV	54.0	-14.6	1.03 V	183	37.1	2.3
3	#5470.00	54.5 PK	68.2	-13.7	1.03 V	183	52.2	2.3
4	*5500.00	113.5 PK			1.03 V	183	111.1	2.4
5	*5500.00	101.4 AV			1.03 V	183	99.0	2.4
6	11000.00	47.1 PK	74.0	-26.9	3.55 V	169	35.8	11.3
7	11000.00	36.9 AV	54.0	-17.1	3.55 V	169	25.6	11.3
8	#16500.00	47.3 PK	68.2	-20.9	1.52 V	262	33.9	13.4

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 116 : 5580 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	123.3 PK			2.08 H	302	120.9	2.4
2	*5580.00	112.4 AV			2.08 H	302	110.0	2.4
3	11160.00	47.3 PK	74.0	-26.7	3.91 H	151	36.0	11.3
4	11160.00	36.9 AV	54.0	-17.1	3.91 H	151	25.6	11.3
5	#16740.00	49.8 PK	68.2	-18.4	2.10 H	147	34.4	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	*5580.00	116.5 PK			1.01 V	181	114.1	2.4
2	*5580.00	104.7 AV			1.01 V	181	102.3	2.4
3	11160.00	47.0 PK	74.0	-27.0	3.60 V	154	35.7	11.3
4	11160.00	36.6 AV	54.0	-17.4	3.60 V	154	25.3	11.3
5	#16740.00	47.4 PK	68.2	-20.8	1.50 V	270	32.0	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 140 : 5700 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	122.9 PK			2.07 H	302	120.5	2.4
2	*5700.00	109.9 AV			2.07 H	302	107.5	2.4
3	#5725.00	67.9 PK	68.2	-0.3	2.07 H	302	65.4	2.5
4	11400.00	47.3 PK	74.0	-26.7	3.93 H	149	35.4	11.9
5	11400.00	36.9 AV	54.0	-17.1	3.93 H	149	25.0	11.9
6	#17100.00	50.1 PK	68.2	-18.1	2.04 H	140	34.0	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	*5700.00	113.5 PK			1.22 V	180	111.1	2.4
2	*5700.00	101.2 AV			1.22 V	180	98.8	2.4
3	#5725.00	56.2 PK	68.2	-12.0	1.22 V	180	53.7	2.5
4	11400.00	46.6 PK	74.0	-27.4	3.60 V	151	34.7	11.9
5	11400.00	36.2 AV	54.0	-17.8	3.60 V	151	24.3	11.9
6	#17100.00	47.5 PK	68.2	-20.7	1.48 V	269	31.4	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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE20)	Channel	CH 144 : 5720 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.7 PK	74.0	-15.3	1.03 H	63	56.4	2.3
2	5460.00	45.2 AV	54.0	-8.8	1.03 H	63	42.9	2.3
3	#5470.00	58.2 PK	68.2	-10.0	1.03 H	63	55.9	2.3
4	*5720.00	124.6 PK			1.03 H	63	122.1	2.5
5	*5720.00	111.1 AV			1.03 H	63	108.6	2.5
6	#5850.00	56.9 PK	68.2	-11.3	1.03 H	63	53.9	3.0
7	11440.00	47.5 PK	74.0	-26.5	3.94 H	147	35.6	11.9
8	11440.00	37.3 AV	54.0	-16.7	3.94 H	147	25.4	11.9
9	#17160.00	50.3 PK	68.2	-17.9	2.05 H	132	34.3	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	5460.00	53.6 PK	74.0	-20.4	1.10 V	181	51.3	2.3
2	5460.00	40.6 AV	54.0	-13.4	1.10 V	181	38.3	2.3
3	#5470.00	53.5 PK	68.2	-14.7	1.10 V	181	51.2	2.3
4	*5720.00	117.5 PK			1.10 V	181	115.0	2.5
5	*5720.00	103.5 AV			1.10 V	181	101.0	2.5
6	#5850.00	51.9 PK	68.2	-16.3	1.10 V	181	48.9	3.0
7	11440.00	46.1 PK	74.0	-27.9	3.59 V	146	34.2	11.9
8	11440.00	35.8 AV	54.0	-18.2	3.59 V	146	23.9	11.9
9	#17160.00	46.9 PK	68.2	-21.3	1.54 V	270	30.9	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.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	802.11ax (HE40)	Channel	CH 54 : 5270 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	58.3 PK	74.0	-15.7	2.11 H	57	55.9	2.4
2	5150.00	49.2 AV	54.0	-4.8	2.11 H	57	46.8	2.4
3	*5270.00	122.6 PK			2.11 H	57	120.5	2.1
4	*5270.00	110.9 AV			2.11 H	57	108.8	2.1
5	5350.00	67.7 PK	74.0	-6.3	2.11 H	57	65.5	2.2
6	5350.00	53.3 AV	54.0	-0.7	2.11 H	57	51.1	2.2
7	#10540.00	47.2 PK	68.2	-21.0	3.93 H	145	36.3	10.9
8	15810.00	50.4 PK	74.0	-23.6	2.11 H	149	38.6	11.8
9	15810.00	37.7 AV	54.0	-16.3	2.11 H	149	25.9	11.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	51.5 PK	74.0	-22.5	3.45 V	360	49.1	2.4
2	5150.00	40.9 AV	54.0	-13.1	3.45 V	360	38.5	2.4
3	*5270.00	113.3 PK			3.45 V	360	111.2	2.1
4	*5270.00	101.5 AV			3.45 V	360	99.4	2.1
5	5350.00	58.5 PK	74.0	-15.5	3.45 V	360	56.3	2.2
6	5350.00	45.5 AV	54.0	-8.5	3.45 V	360	43.3	2.2
7	#10540.00	46.8 PK	68.2	-21.4	3.61 V	152	35.9	10.9
8	15810.00	47.2 PK	74.0	-26.8	1.53 V	260	35.4	11.8
9	15810.00	35.9 AV	54.0	-18.1	1.53 V	260	24.1	11.8

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 62 : 5310 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	118.2 PK			2.11 H	63	116.2	2.0
2	*5310.00	106.6 AV			2.11 H	63	104.6	2.0
3	5350.00	64.9 PK	74.0	-9.1	2.11 H	63	62.7	2.2
4	5350.00	52.9 AV	54.0	-1.1	2.11 H	63	50.7	2.2
5	10620.00	47.3 PK	74.0	-26.7	3.99 H	161	36.6	10.7
6	10620.00	36.8 AV	54.0	-17.2	3.99 H	161	26.1	10.7
7	15930.00	50.4 PK	74.0	-23.6	2.05 H	123	38.2	12.2
8	15930.00	37.8 AV	54.0	-16.2	2.05 H	123	25.6	12.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	109.8 PK			3.97 V	360	107.8	2.0
2	*5310.00	98.2 AV			3.97 V	360	96.2	2.0
3	5350.00	53.3 PK	74.0	-20.7	3.97 V	360	51.1	2.2
4	5350.00	41.9 AV	54.0	-12.1	3.97 V	360	39.7	2.2
5	10620.00	47.1 PK	74.0	-26.9	3.55 V	178	36.4	10.7
6	10620.00	36.5 AV	54.0	-17.5	3.55 V	178	25.8	10.7
7	15930.00	47.1 PK	74.0	-26.9	1.48 V	246	34.9	12.2
8	15930.00	36.0 AV	54.0	-18.0	1.48 V	246	23.8	12.2

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 102 : 5510 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	58.7 PK	74.0	-15.3	2.23 H	302	56.4	2.3
2	5460.00	45.2 AV	54.0	-8.8	2.23 H	302	42.9	2.3
3	#5470.00	66.1 PK	68.2	-2.1	2.23 H	302	63.8	2.3
4	*5510.00	116.5 PK			2.23 H	302	114.1	2.4
5	*5510.00	105.4 AV			2.23 H	302	103.0	2.4
6	11020.00	47.8 PK	74.0	-26.2	3.94 H	169	36.5	11.3
7	11020.00	37.0 AV	54.0	-17.0	3.94 H	169	25.7	11.3
8	#16530.00	50.7 PK	68.2	-17.5	2.08 H	121	36.9	13.8
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	52.3 PK	74.0	-21.7	1.05 V	187	50.0	2.3
2	5460.00	40.5 AV	54.0	-13.5	1.05 V	187	38.2	2.3
3	#5470.00	59.4 PK	68.2	-8.8	1.05 V	187	57.1	2.3
4	*5510.00	107.7 PK			1.05 V	187	105.3	2.4
5	*5510.00	96.1 AV			1.05 V	187	93.7	2.4
6	11020.00	46.4 PK	74.0	-27.6	3.53 V	166	35.1	11.3
7	11020.00	36.0 AV	54.0	-18.0	3.53 V	166	24.7	11.3
8	#16530.00	46.7 PK	68.2	-21.5	1.51 V	252	32.9	13.8

Remarks:

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

RF Mode	802.11ax (HE40)	Channel	CH 110 : 5550 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	62.9 PK	74.0	-11.1	2.25 H	309	60.6	2.3
2	5460.00	50.2 AV	54.0	-3.8	2.25 H	309	47.9	2.3
3	#5470.00	67.5 PK	68.2	-0.7	2.25 H	309	65.2	2.3
4	#5470.00	52.4 AV	54.0	-1.6	2.25 H	309	50.1	2.3
5	*5550.00	120.4 PK			2.25 H	309	118.0	2.4
6	*5550.00	108.9 AV			2.25 H	309	106.5	2.4
7	11100.00	47.5 PK	74.0	-26.5	3.93 H	176	36.1	11.4
8	11100.00	37.5 AV	54.0	-16.5	3.93 H	176	26.1	11.4
9	#16650.00	50.8 PK	68.2	-17.4	2.13 H	140	35.7	15.1
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	5460.00	54.9 PK	74.0	-19.1	1.11 V	175	52.6	2.3
2	5460.00	43.3 AV	54.0	-10.7	1.11 V	175	41.0	2.3
3	#5470.00	57.8 PK	68.2	-10.4	1.11 V	175	55.5	2.3
4	#5470.00	45.8 AV	54.0	-8.2	1.11 V	175	43.5	2.3
5	*5550.00	110.2 PK			1.11 V	175	107.8	2.4
6	*5550.00	100.3 AV			1.11 V	175	97.9	2.4
7	11100.00	47.2 PK	74.0	-26.8	3.57 V	165	35.8	11.4
8	11100.00	37.1 AV	54.0	-16.9	3.57 V	165	25.7	11.4
9	#16650.00	48.1 PK	68.2	-20.1	1.54 V	249	33.0	15.1

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 (HE40)	Channel	CH 134 : 5670 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	119.6 PK			2.21 H	305	117.2	2.4
2	*5670.00	107.6 AV			2.21 H	305	105.2	2.4
3	#5725.00	67.3 PK	68.2	-0.9	2.21 H	305	64.8	2.5
4	11340.00	47.5 PK	74.0	-26.5	3.99 H	151	35.9	11.6
5	11340.00	37.5 AV	54.0	-16.5	3.99 H	151	25.9	11.6
6	#17010.00	50.6 PK	68.2	-17.6	2.08 H	148	34.2	16.4
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	109.8 PK			1.07 V	180	107.4	2.4
2	*5670.00	100.3 AV			1.07 V	180	97.9	2.4
3	#5725.00	58.6 PK	68.2	-9.6	1.07 V	180	56.1	2.5
4	11340.00	47.1 PK	74.0	-26.9	3.53 V	158	35.5	11.6
5	11340.00	37.1 AV	54.0	-16.9	3.53 V	158	25.5	11.6
6	#17010.00	48.5 PK	68.2	-19.7	1.51 V	241	32.1	16.4

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, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.5 PK	74.0	-17.5	2.23 H	309	54.2	2.3
2	5460.00	43.4 AV	54.0	-10.6	2.23 H	309	41.1	2.3
3	#5470.00	58.3 PK	68.2	-9.9	2.23 H	309	56.0	2.3
4	*5710.00	121.1 PK			2.23 H	309	118.6	2.5
5	*5710.00	107.1 AV			2.23 H	309	104.6	2.5
6	#5850.00	59.8 PK	68.2	-8.4	2.23 H	309	56.8	3.0
7	11420.00	47.2 PK	74.0	-26.8	3.94 H	165	35.3	11.9
8	11420.00	37.4 AV	54.0	-16.6	3.94 H	165	25.5	11.9
9	#17130.00	50.3 PK	68.2	-17.9	2.06 H	146	34.3	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	5460.00	53.7 PK	74.0	-20.3	1.13 V	182	51.4	2.3
2	5460.00	40.1 AV	54.0	-13.9	1.13 V	182	37.8	2.3
3	#5470.00	53.5 PK	68.2	-14.7	1.13 V	182	51.2	2.3
4	*5710.00	113.9 PK			1.13 V	182	111.4	2.5
5	*5710.00	100.8 AV			1.13 V	182	98.3	2.5
6	#5850.00	53.4 PK	68.2	-14.8	1.13 V	182	50.4	3.0
7	11420.00	46.9 PK	74.0	-27.1	3.47 V	171	35.0	11.9
8	11420.00	36.7 AV	54.0	-17.3	3.47 V	171	24.8	11.9
9	#17130.00	48.6 PK	68.2	-19.6	1.52 V	253	32.6	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 (HE80)	Channel	CH 58 : 5290 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.7 PK	74.0	-19.3	2.04 H	66	52.3	2.4
2	5150.00	46.8 AV	54.0	-7.2	2.04 H	66	44.4	2.4
3	*5290.00	114.7 PK			2.04 H	66	112.7	2.0
4	*5290.00	102.8 AV			2.04 H	66	100.8	2.0
5	5350.00	66.9 PK	74.0	-7.1	2.04 H	66	64.7	2.2
6	5350.00	53.5 AV	54.0	-0.5	2.04 H	66	51.3	2.2
7	#10580.00	46.9 PK	68.2	-21.3	3.97 H	143	36.0	10.9
8	15870.00	50.4 PK	74.0	-23.6	2.12 H	165	38.4	12.0
9	15870.00	37.7 AV	54.0	-16.3	2.12 H	165	25.7	12.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.9 PK	74.0	-23.1	3.96 V	20	48.5	2.4
2	5150.00	41.9 AV	54.0	-12.1	3.96 V	20	39.5	2.4
3	*5290.00	106.4 PK			3.96 V	20	104.4	2.0
4	*5290.00	94.1 AV			3.96 V	20	92.1	2.0
5	5350.00	55.9 PK	74.0	-18.1	3.96 V	20	53.7	2.2
6	5350.00	41.8 AV	54.0	-12.2	3.96 V	20	39.6	2.2
7	#10580.00	46.5 PK	68.2	-21.7	3.61 V	152	35.6	10.9
8	15870.00	47.2 PK	74.0	-26.8	1.53 V	260	35.2	12.0
9	15870.00	35.9 AV	54.0	-18.1	1.53 V	260	23.9	12.0

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 106 : 5530 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	63.4 PK	74.0	-10.6	2.03 H	303	61.1	2.3
2	5460.00	49.9 AV	54.0	-4.1	2.03 H	303	47.6	2.3
3	#5470.00	66.8 PK	68.2	-1.4	2.03 H	303	64.5	2.3
4	*5530.00	113.3 PK			2.03 H	303	110.9	2.4
5	*5530.00	101.8 AV			2.03 H	303	99.4	2.4
6	#5725.00	52.9 PK	68.2	-15.3	2.03 H	303	50.4	2.5
7	11060.00	47.7 PK	74.0	-26.3	3.94 H	156	36.5	11.2
8	11060.00	37.6 AV	54.0	-16.4	3.94 H	156	26.4	11.2
9	#16590.00	50.8 PK	68.2	-17.4	2.13 H	146	36.2	14.6
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	53.8 PK	74.0	-20.2	1.22 V	178	51.5	2.3
2	5460.00	41.2 AV	54.0	-12.8	1.22 V	178	38.9	2.3
3	#5470.00	56.3 PK	68.2	-11.9	1.22 V	178	54.0	2.3
4	*5530.00	105.1 PK			1.22 V	178	102.7	2.4
5	*5530.00	92.5 AV			1.22 V	178	90.1	2.4
6	#5725.00	50.6 PK	68.2	-17.6	1.22 V	178	48.1	2.5
7	11060.00	47.0 PK	74.0	-27.0	3.53 V	153	35.8	11.2
8	11060.00	36.8 AV	54.0	-17.2	3.53 V	153	25.6	11.2
9	#16590.00	48.6 PK	68.2	-19.6	1.56 V	232	34.0	14.6

Remarks:

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

RF Mode	802.11ax (HE80)	Channel	CH 122 : 5610 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	114.9 PK			2.18 H	308	112.6	2.3
2	*5610.00	103.9 AV			2.18 H	308	101.6	2.3
3	#5725.00	67.1 PK	68.2	-1.1	2.18 H	308	64.6	2.5
4	11220.00	47.6 PK	74.0	-26.4	3.93 H	171	36.4	11.2
5	11220.00	37.4 AV	54.0	-16.6	3.93 H	171	26.2	11.2
6	#16830.00	50.6 PK	68.2	-17.6	2.16 H	151	34.9	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	*5610.00	105.5 PK			3.99 V	323	103.2	2.3
2	*5610.00	94.9 AV			3.99 V	323	92.6	2.3
3	#5725.00	55.9 PK	68.2	-12.3	3.99 V	323	53.4	2.5
4	11220.00	47.1 PK	74.0	-26.9	3.58 V	149	35.9	11.2
5	11220.00	36.9 AV	54.0	-17.1	3.58 V	149	25.7	11.2
6	#16830.00	48.6 PK	68.2	-19.6	1.51 V	238	32.9	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 138 : 5690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Vanness Huang		

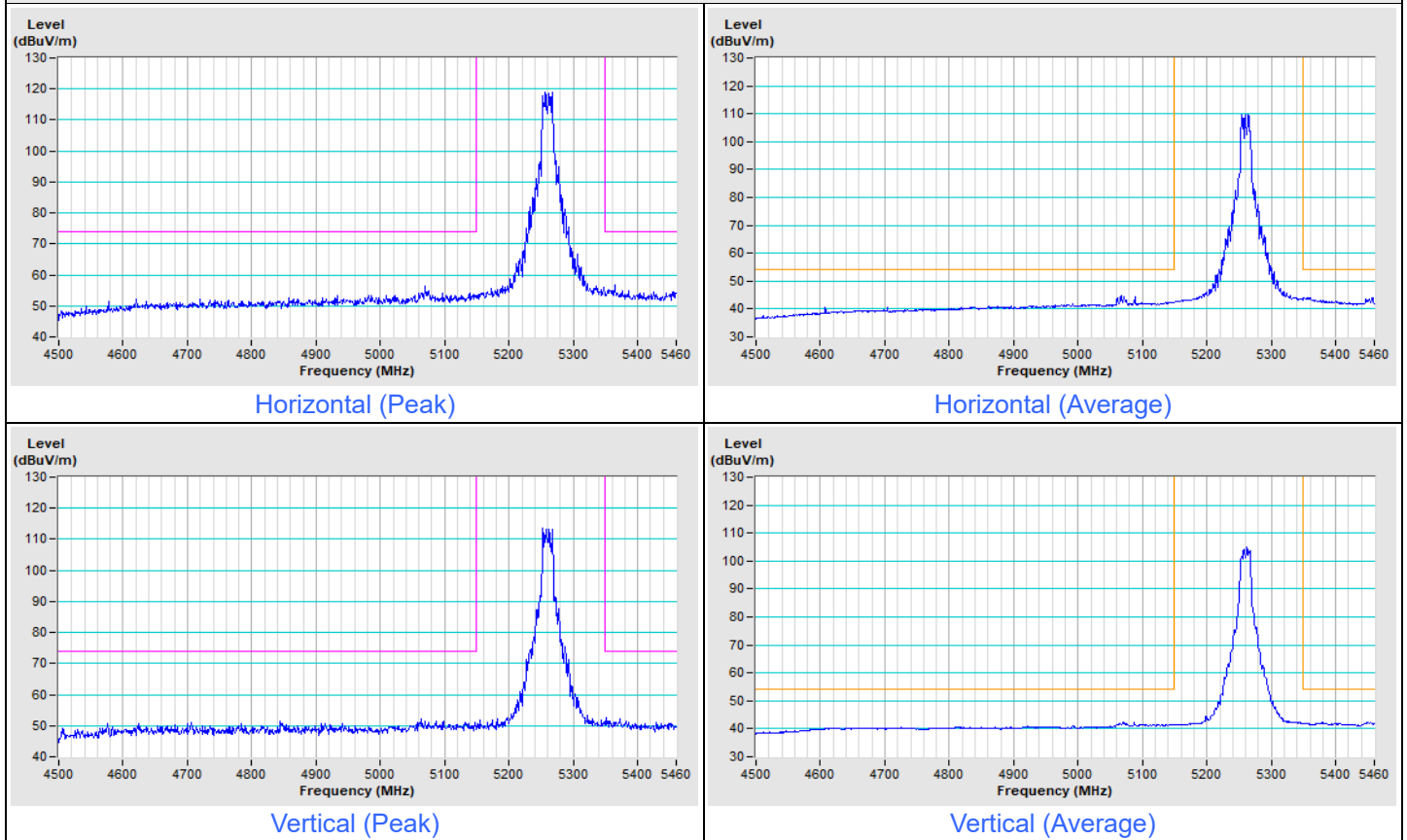
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.4 PK	74.0	-12.6	2.00 H	304	59.1	2.3
2	5460.00	46.8 AV	54.0	-7.2	2.00 H	304	44.5	2.3
3	#5470.00	61.1 PK	68.2	-7.1	2.00 H	304	58.8	2.3
4	*5690.00	117.2 PK			2.00 H	304	114.8	2.4
5	*5690.00	104.9 AV			2.00 H	304	102.5	2.4
6	#5850.00	67.8 PK	68.2	-0.4	2.00 H	304	64.8	3.0
7	11380.00	47.5 PK	74.0	-26.5	3.88 H	166	35.7	11.8
8	11380.00	37.1 AV	54.0	-16.9	3.88 H	166	25.3	11.8
9	#17070.00	51.0 PK	68.2	-17.2	2.17 H	161	34.9	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	5460.00	54.6 PK	74.0	-19.4	1.26 V	184	52.3	2.3
2	5460.00	41.6 AV	54.0	-12.4	1.26 V	184	39.3	2.3
3	#5470.00	55.9 PK	68.2	-12.3	1.26 V	184	53.6	2.3
4	*5690.00	110.7 PK			1.26 V	184	108.3	2.4
5	*5690.00	97.6 AV			1.26 V	184	95.2	2.4
6	#5850.00	58.8 PK	68.2	-9.4	1.26 V	184	55.8	3.0
7	11380.00	46.9 PK	74.0	-27.1	3.55 V	137	35.1	11.8
8	11380.00	36.8 AV	54.0	-17.2	3.55 V	137	25.0	11.8
9	#17070.00	49.3 PK	68.2	-18.9	1.56 V	247	33.2	16.1

Remarks:

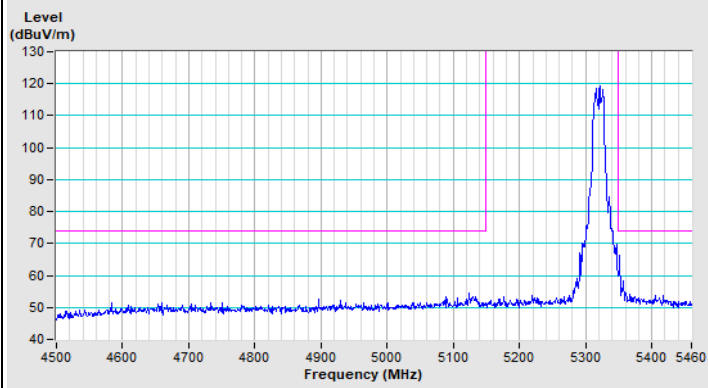
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency,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

Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
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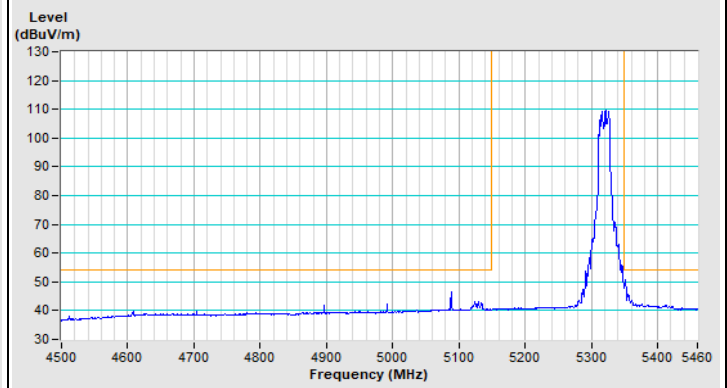
802.11a Channel 52



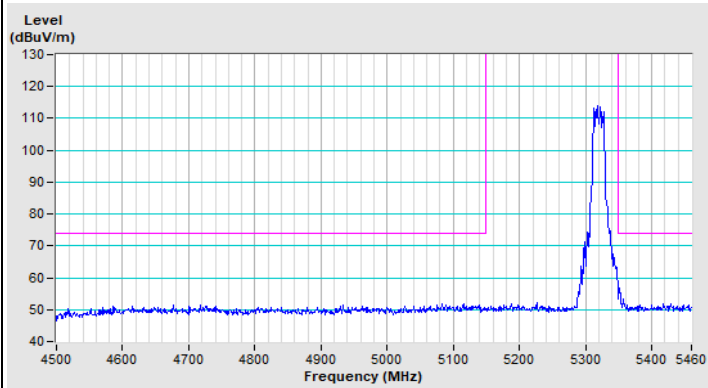
802.11a Channel 64



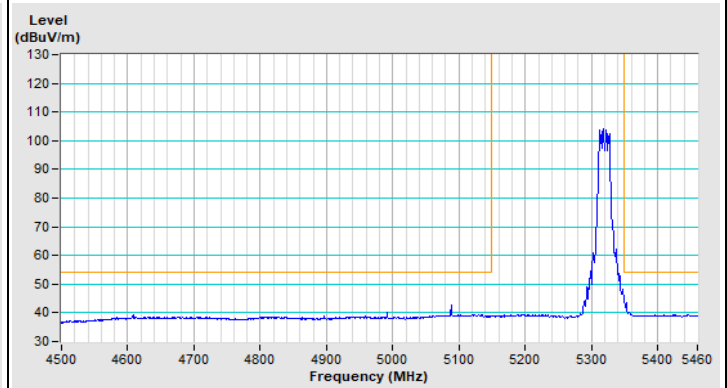
Horizontal (Peak)



Horizontal (Average)



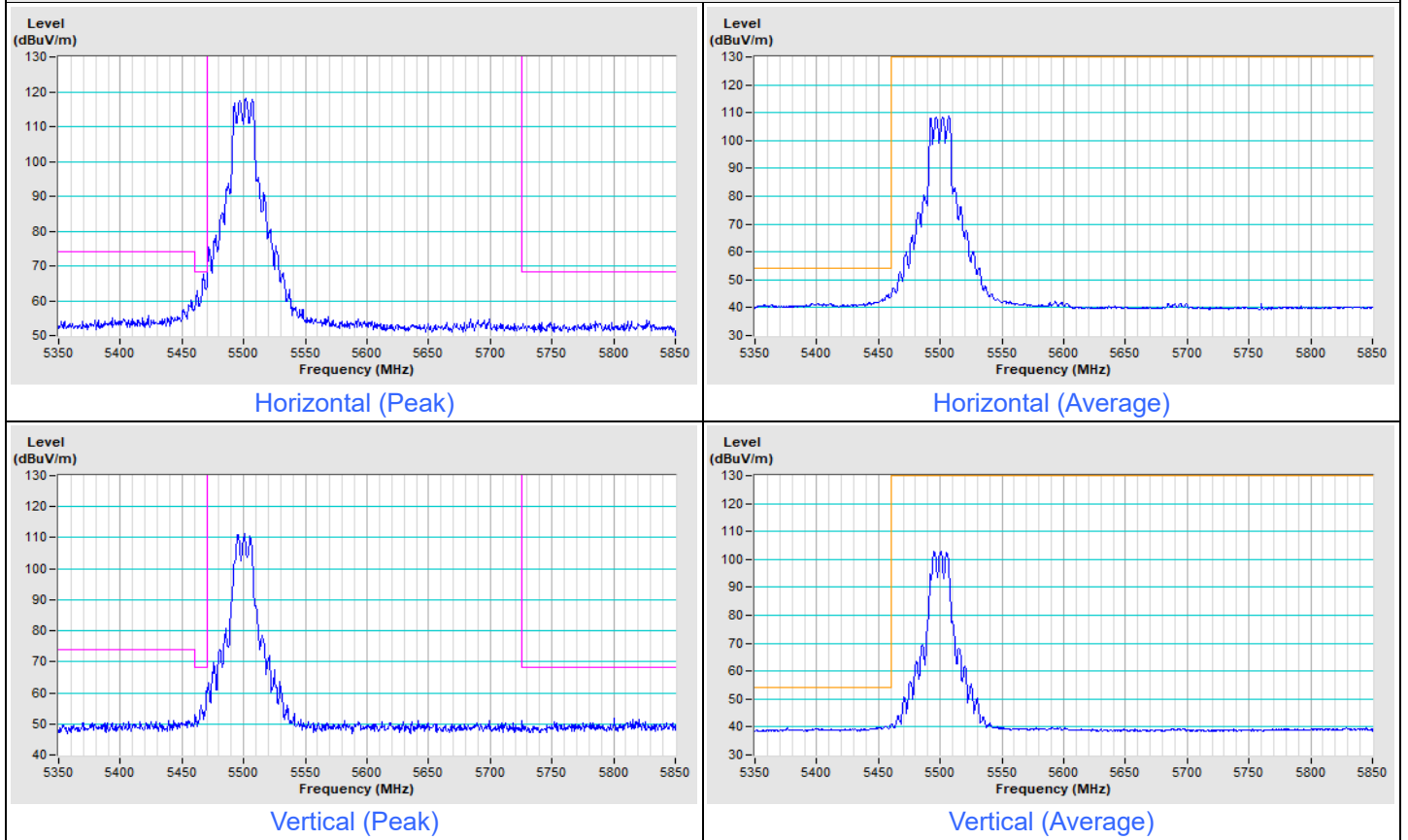
Vertical (Peak)



Vertical (Average)

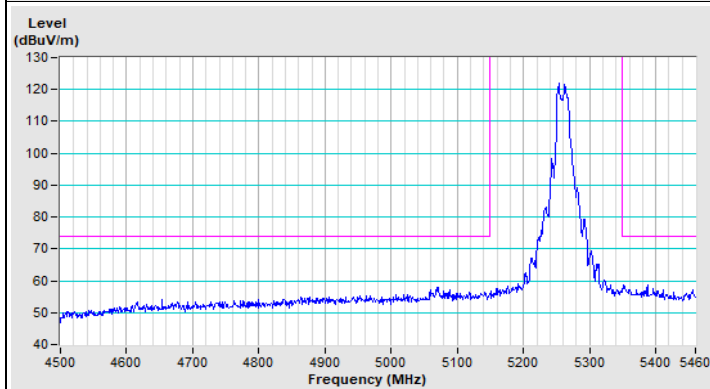
Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
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802.11a Channel 100

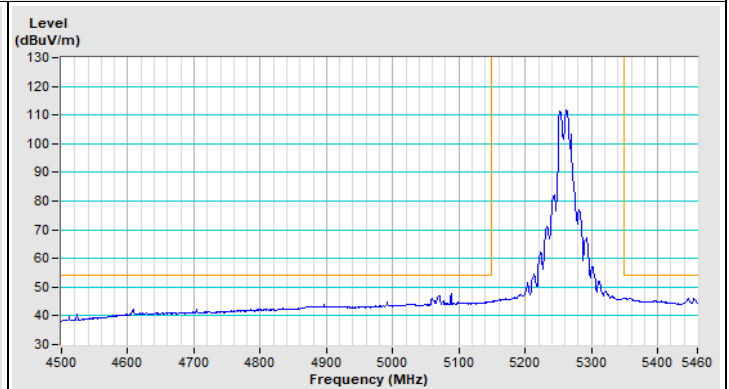


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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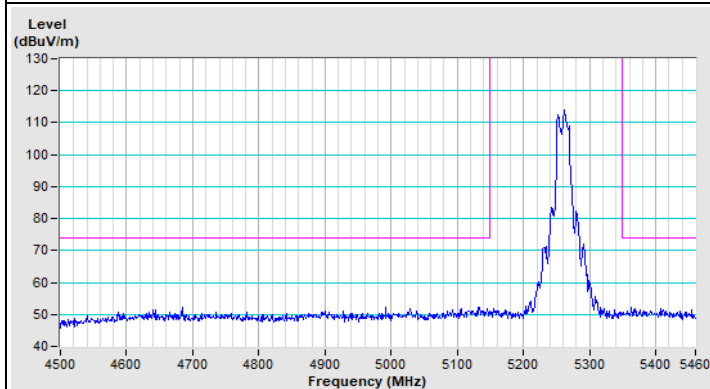
802.11ax (HE20) Channel 52



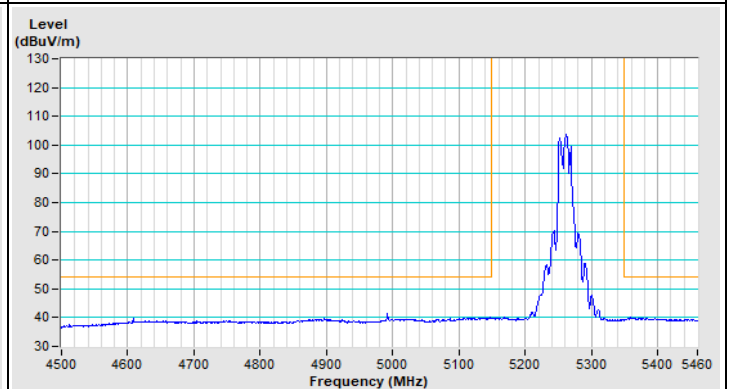
Horizontal (Peak)



Horizontal (Average)

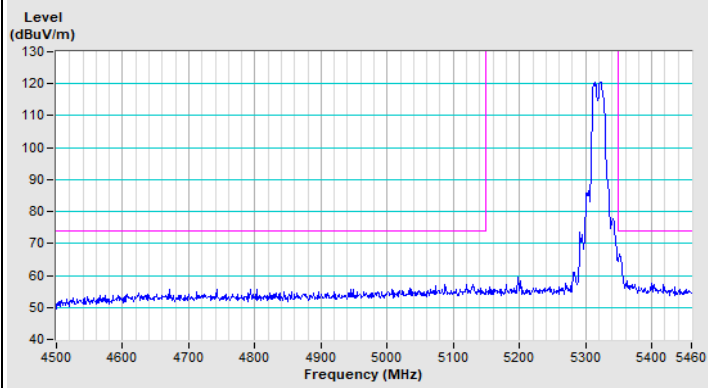


Vertical (Peak)

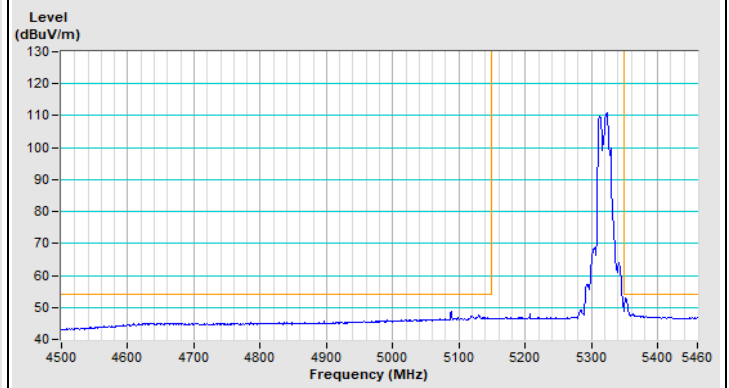


Vertical (Average)

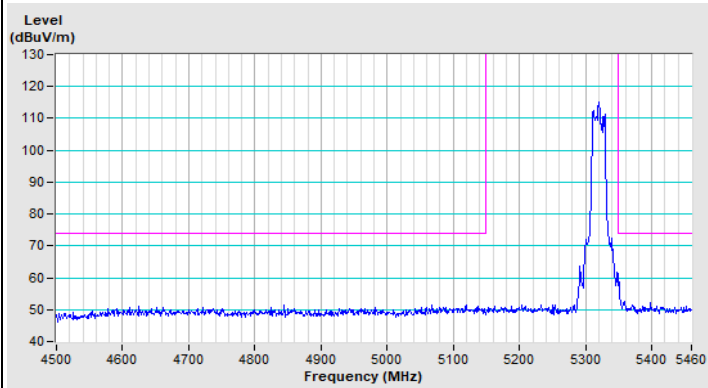
802.11ax (HE20) Channel 64



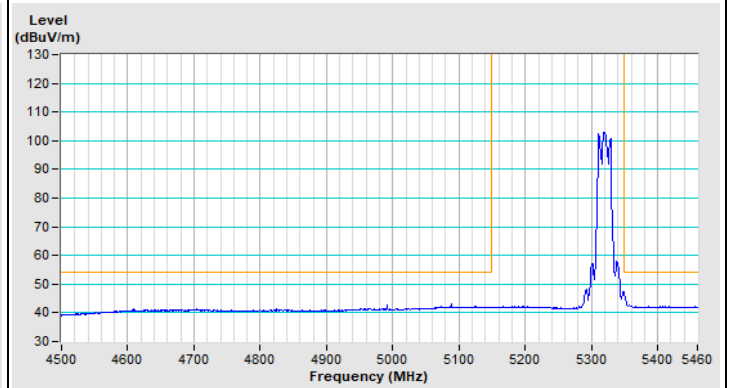
Horizontal (Peak)



Horizontal (Average)



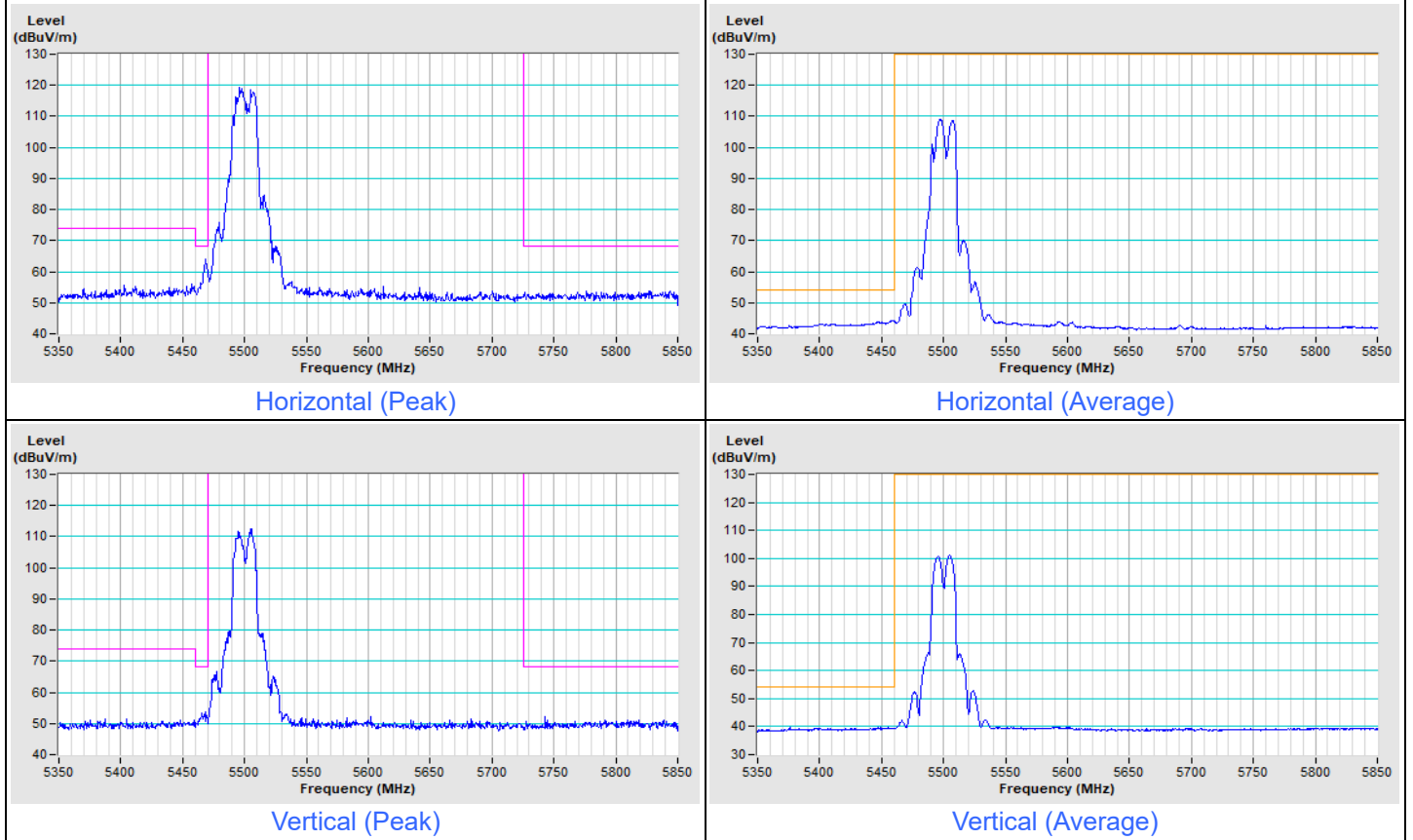
Vertical (Peak)



Vertical (Average)

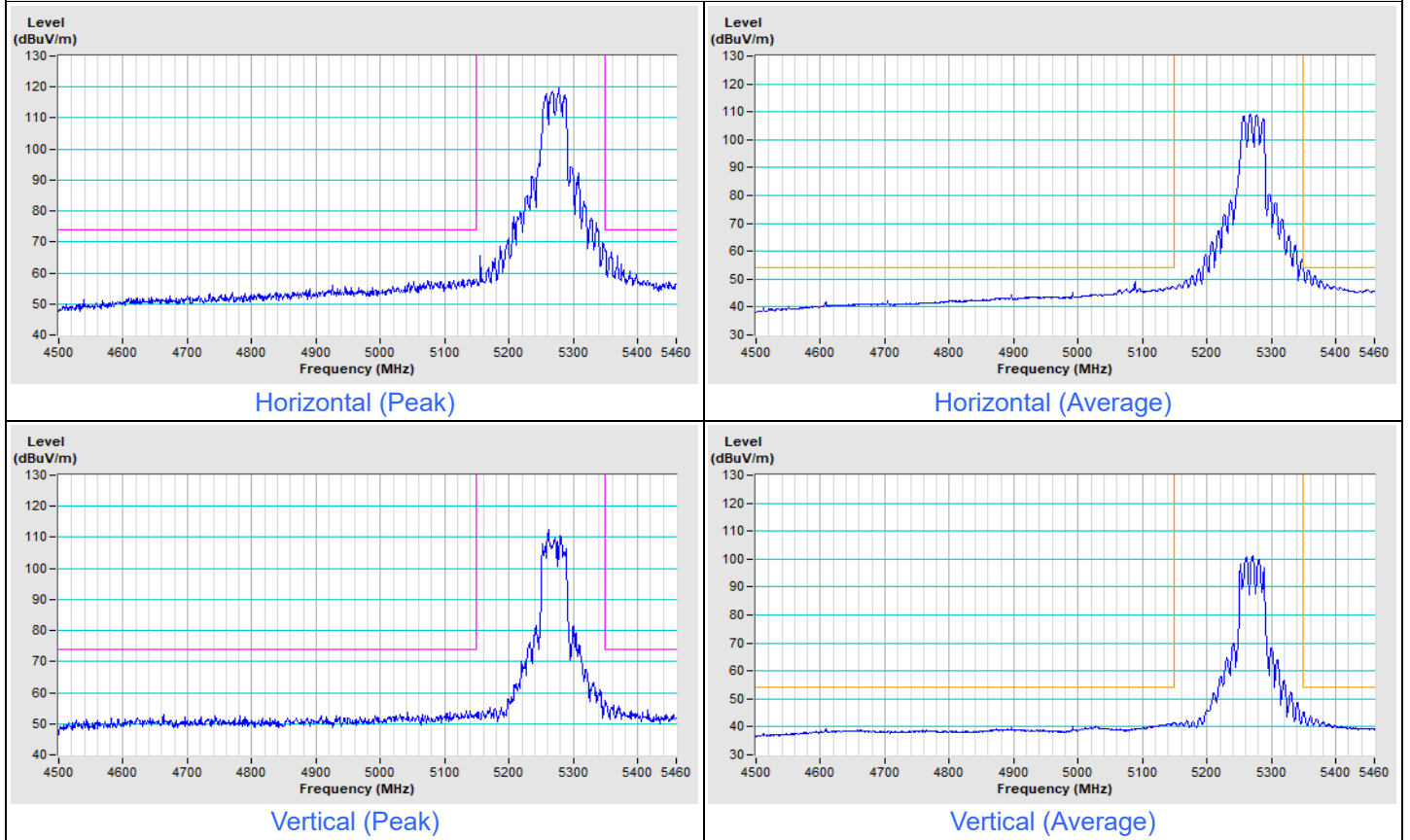
Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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802.11ax (HE20) Channel 100

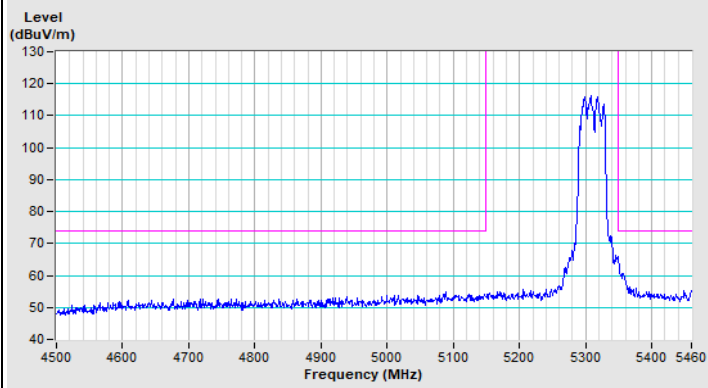


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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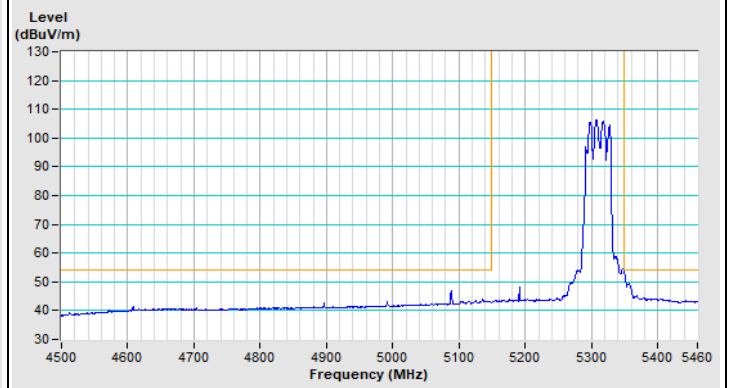
802.11ax (HE40) Channel 54



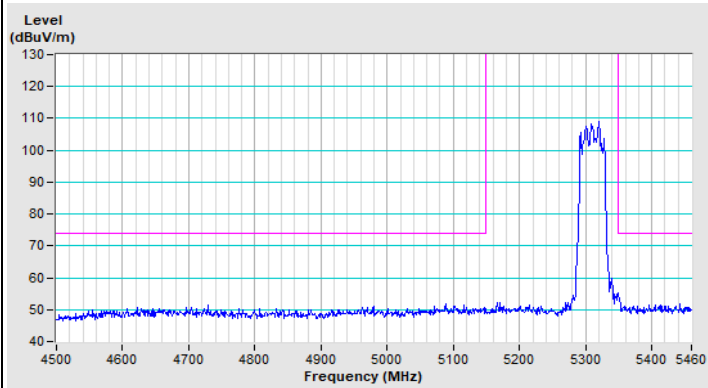
802.11ax (HE40) Channel 62



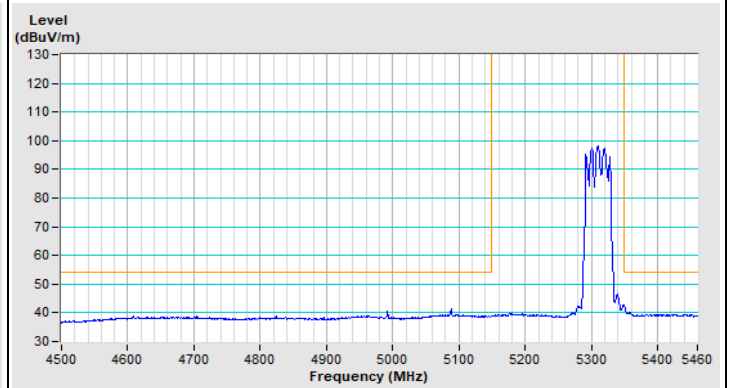
Horizontal (Peak)



Horizontal (Average)



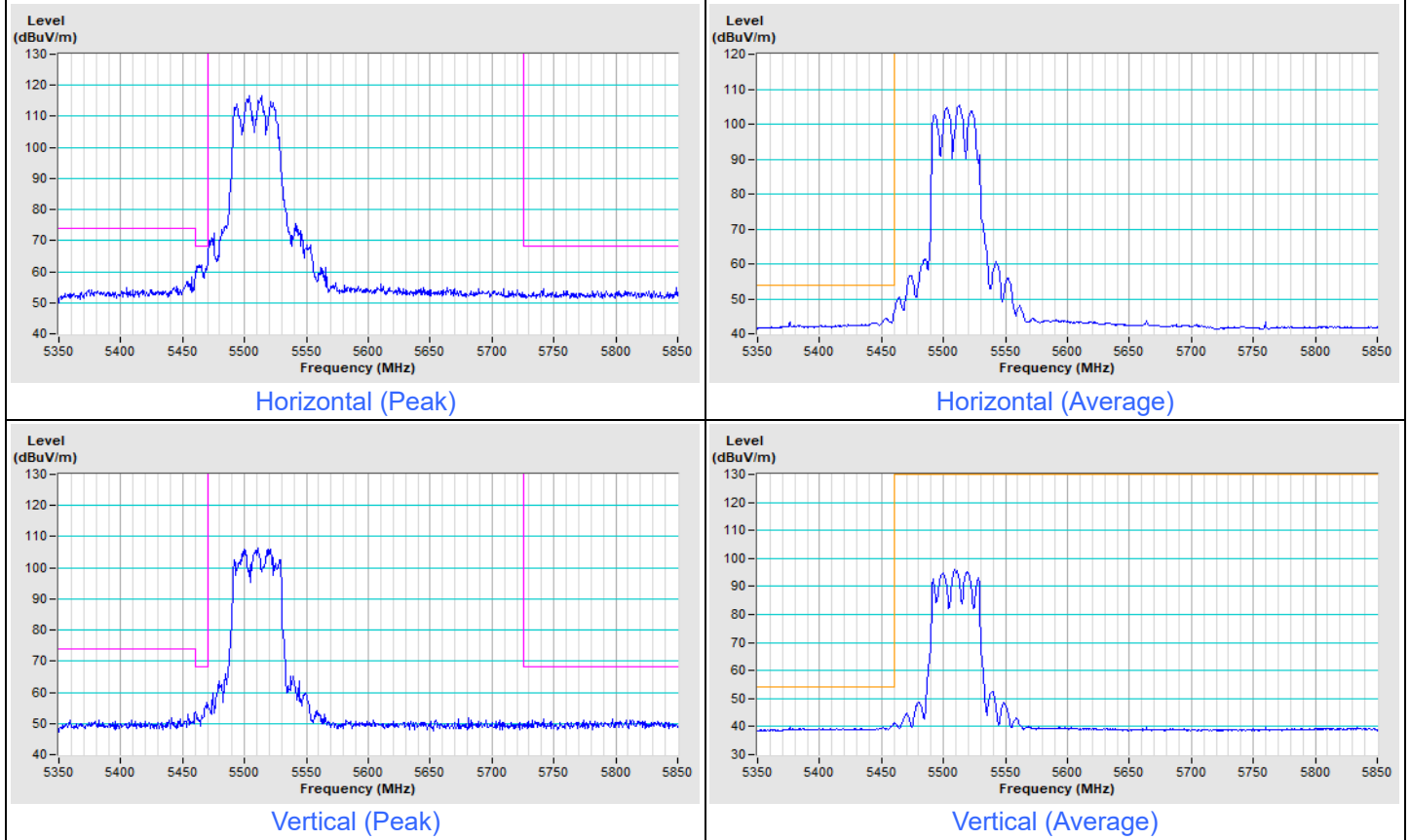
Vertical (Peak)



Vertical (Average)

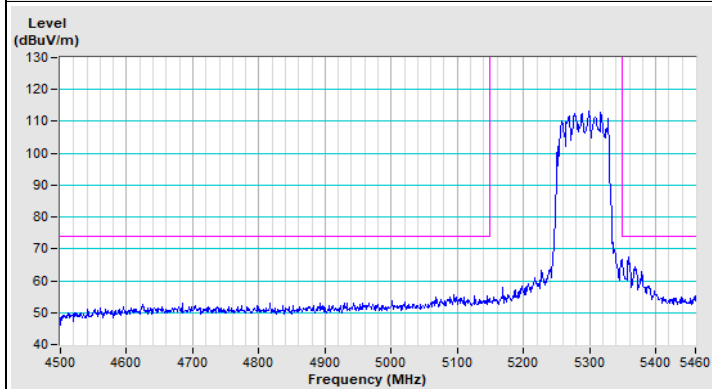
Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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802.11ax (HE40) Channel 102

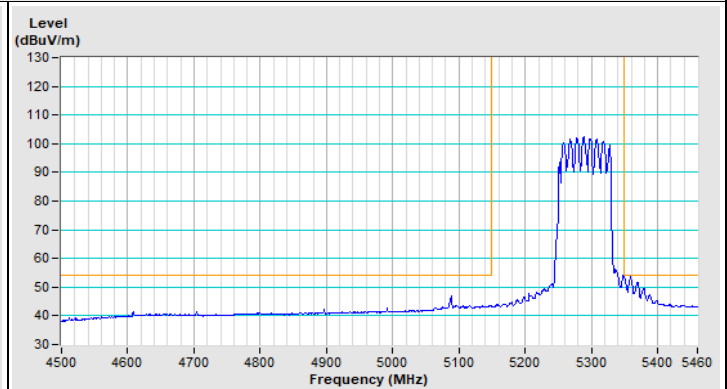


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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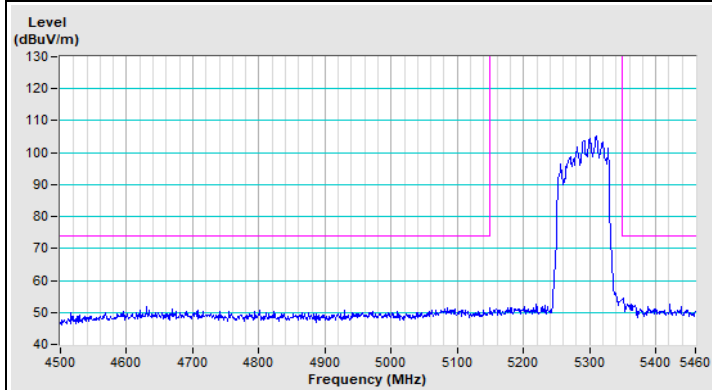
802.11ax (HE80) Channel 58



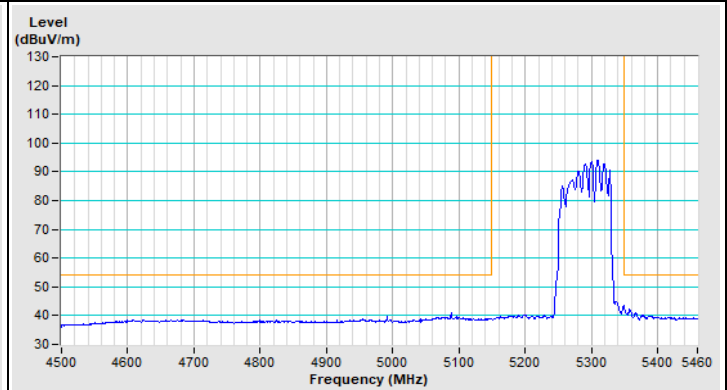
Horizontal (Peak)



Horizontal (Average)



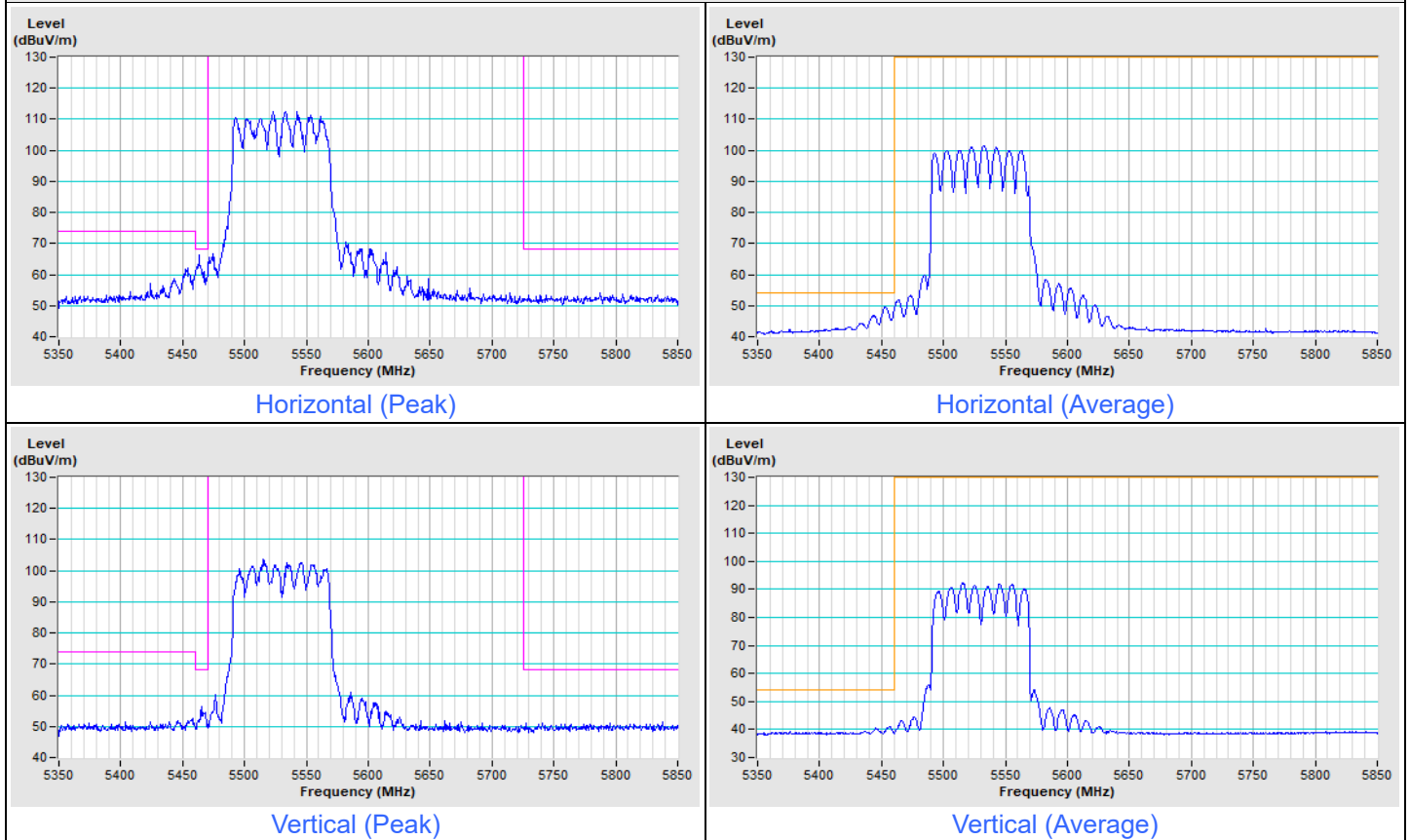
Vertical (Peak)



Vertical (Average)

Frequency Range	5.35 GHz ~ 5.85 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=200 Hz, DET=Peak
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802.11ax (HE80) Channel 106



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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

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