FCC Test Report

Report No.:	RFBHKO-WTW-P21030299-3
FCC ID:	2ACIX-ZEP
Test Model:	ZWM
Received Date:	Mar. 10, 2021
Test Date:	Mar. 10 to May 31, 2021
Issued Date:	Jun. 7, 2021
Applicant:	B&W Group Ltd.
Address:	Dale Road Worthing, BN11 2BH United Kingdom
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
RFBHKO-WTW-P21030299-3	Original release	Jun. 7, 2021

1 Certificate of Conformity

Product:	Zeppelin Wireless Module
Brand:	Bowers & Wilkins
Test Model:	ZWM
Sample Status:	Engineering sample
Applicant:	B&W Group Ltd.
Test Date:	Mar. 10 to May 31, 2021
Standards:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10:2013

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.

Prepared by : Jessica Cheng , **Date:** Jun. 7, 2021

Jessica Cheng / Senior Specialist

Approved by : Rex. Lai , **Date:** Jun. 7, 2021

Rex Lai / Associate Technical Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(8)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -21.60dB at 0.15000MHz.
15.407(b)(1/2/3/4(i/ii)/8)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -4.37dB at 368.63MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Note:
1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A. Test Procedures refer to report 4.1.3.
2. For U-NII-1, U-NII-2A, U-NII-2C band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
3. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Conducted Emissions	9kHz ~ 40GHz	2.63 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	2.61 dB
	30MHz ~ 1GHz	5.43 dB
Radiated Emissions above 1 GHz	Above 1GHz	5.42 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Zeppelin Wireless Module
Brand	Bowers & Wilkins
Test Model	ZWM
Sample Status	Engineering sample
Power Supply Rating	5Vdc from host equipment
Modulation Type	256QAM,64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	OFDM
Transfer Rate	802.11a: up to 54Mbps 802.11n up to 300Mbps 802.11ac: up to 866.7Mbps
Operating Frequency	5180~5240MHz, 5260~5320MHz, 5500~5700MHz, 5745~5825MHz
Number of Channel	5180~5240MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5260~5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5500~5700MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 8 802.11n (HT40), 802.11ac (VHT40): 3 802.11ac (VHT80): 1 5745~5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 5 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1
Output Power	5180~5240MHz: 41.818mW 5260~5320MHz: 40.298mW 5500~5700MHz: 39.967mW 5745~5825MHz: 41.172mW
Antenna Type	Ant 0: PIFA antenna with 4.17dBi gain Ant 1: PIFA antenna with 4.22dBi gain
Antenna Connector	i-pex(MHF)
Accessory Device	N/A
Cable Supplied	N/A

Note:

1. The EUT provides 2 completed transmitters and 2 receivers.

Modulation Mode	TX Function	RX Function
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

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40 on 802.11ac mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

2. WLAN & Bluetooth technologies can transmit at same time. 2.4GHz & 5GHz WLAN technologies cannot transmit at same time.
3. The emission of the simultaneous operation (BT and WLAN) has been evaluated and no non-compliance was found.
4. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

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

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

5260~5320MHz:

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

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):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

5500~5700MHz:

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

Channel	Frequency	Channel	Frequency
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	110	5550 MHz
134	5670 MHz		

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
106	5530 MHz

5745~5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where **RE≥1G:** Radiated Emission above 1GHz & Bandedge Measurement **RE<1G:** Radiated Emission below 1GHz

PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

Radiated Emission Test (Above 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	MCS0
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	MCS0
	802.11ac (VHT80)		42	42	OFDM	MCS0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	MCS0
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	MCS0
	802.11ac (VHT80)		58	58	OFDM	MCS0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
	802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	MCS0
	802.11ac (VHT40)		102 to 134	102, 110, 134,	OFDM	MCS0
	802.11ac (VHT80)		106	106	OFDM	MCS0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	MCS0
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	MCS0
	802.11ac (VHT80)		155	155	OFDM	MCS0

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	157	OFDM	6.0
-	802.11a	5260-5320	52 to 64		OFDM	6.0
-	802.11a	5500-5700	100 to 140		OFDM	6.0
-	802.11a	5745-5825	149 to 165		OFDM	6.0

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	157	OFDM	6.0
-	802.11a	5260-5320	52 to 64		OFDM	6.0
-	802.11a	5500-5700	100 to 140		OFDM	6.0
-	802.11a	5745-5825	149 to 165		OFDM	6.0

Antenna Port Conducted Measurement:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	MCS0
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	MCS0
	802.11ac (VHT80)		42	42	OFDM	MCS0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	MCS0
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	MCS0
	802.11ac (VHT80)		58	58	OFDM	MCS0
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
	802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	MCS0
	802.11ac (VHT40)		102 to 134	102, 110, 134,	OFDM	MCS0
	802.11ac (VHT80)		106	106	OFDM	MCS0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	MCS0
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	MCS0
	802.11ac (VHT80)		155	155	OFDM	MCS0

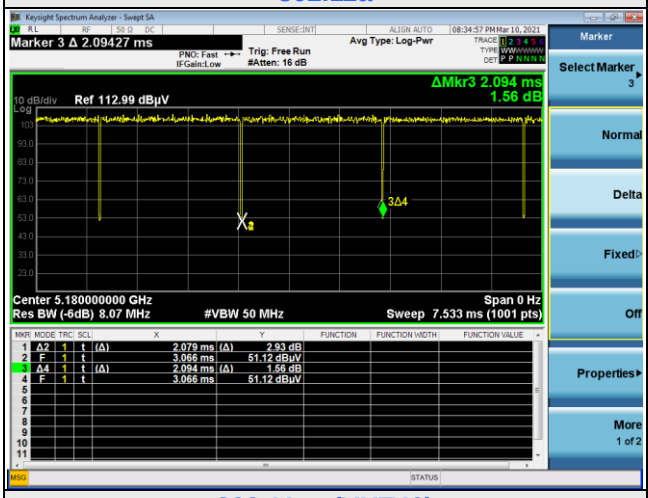
Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	16deg. C, 72%RH	120Vac, 60Hz	Ian Chang
RE<1G	16deg. C, 72%RH	120Vac, 60Hz	Ian Chang
PLC	25deg. C, 75%RH	120Vac, 60Hz	Ian Chang
APCM	25deg. C, 76%RH	120Vac, 60Hz	Pirar Hsieh

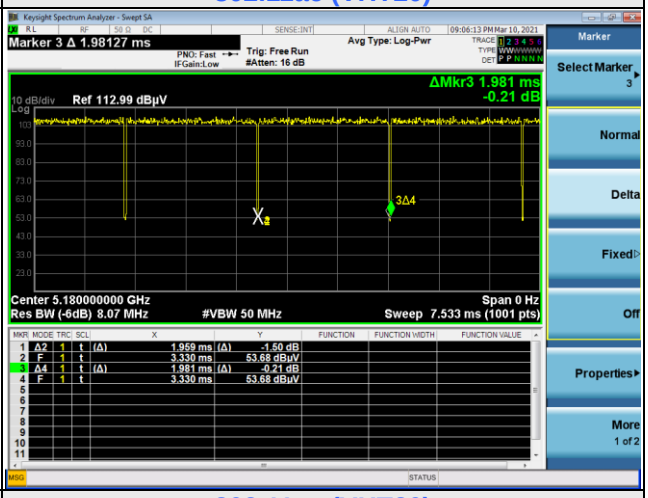
3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98%, duty factor shall be considered.
802.11a: Duty cycle = 2.079/2.094 = 0.993
802.11ac (VHT20): Duty cycle = 1.959/1.981 = 0.989
802.11ac (VHT40): Duty cycle = 0.966/0.996 = 0.970, Duty factor = 10 * log(1/0.970) = 0.13
802.11ac (VHT80): Duty cycle = 0.472/0.498 = 0.948, Duty factor = 10 * log(1/0.948) = 0.23

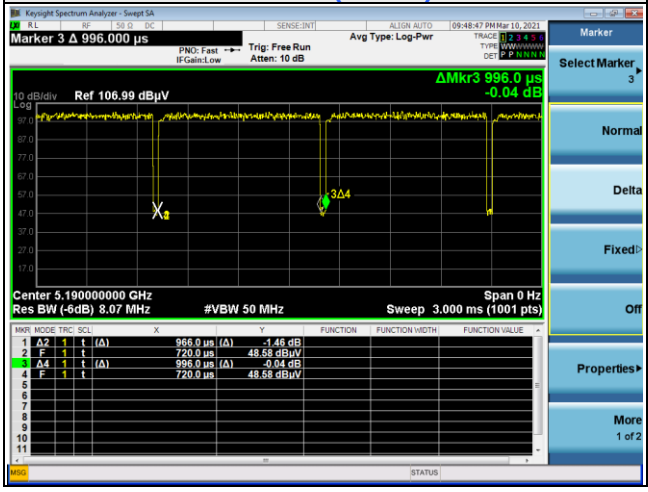
802.11a



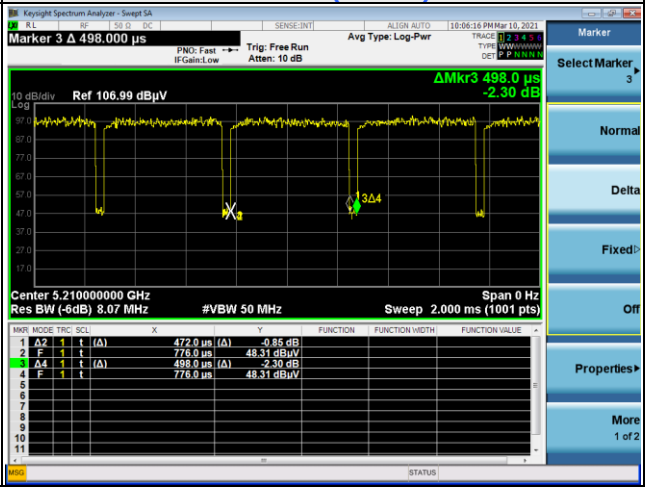
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



3.4 Description of Support Units

The ET has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

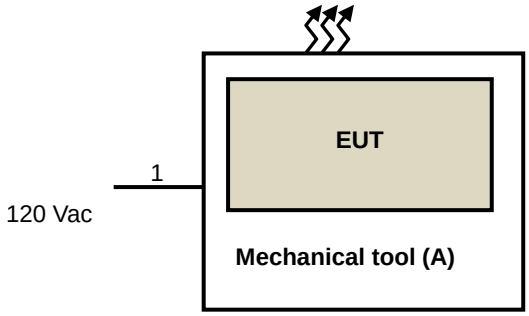
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Mechanical tool	N/A	N/A	N/A	N/A	Supplied by client

Note: All power cords of the above support units are non-shielded (1.8m).

No.	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/ No)	Cores (Qty.)	Remarks
1.	AC power cable	1	1.8	N	0	Supplied by client

NOTE: The core(s) is(are) originally attached to the cable(s).

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10:2013

All test items have been performed and recorded as per the above standards.

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

Note:

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 1000MHz, 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 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

<table>
<tr><td colspan="3">Applicable To</td><td colspan="2">Limit</td></tr>
<tr><td colspan="3" rowspan="2">789033 D02 General UNII Test Procedure New Rules v02r01</td><td colspan="2">Field Strength at 3m</td></tr>
<tr><td>PK: 74 (dBµV/m)</td><td>AV: 54 (dBµV/m)</td></tr>
<tr><td>Frequency Band</td><td colspan="2">Applicable To</td><td>EIRP Limit</td><td>Equivalent Field Strength at 3m</td></tr>
<tr><td>5150~5250 MHz</td><td colspan="2">15.407(b)(1)</td><td rowspan="3">PK: -27 (dBm/MHz)</td><td rowspan="3">PK: 68.2(dBµV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td colspan="2">15.407(b)(2)</td></tr>
<tr><td>5470~5725 MHz</td><td colspan="2">15.407(b)(3)</td></tr>
<tr><td rowspan="2">5725~5850 MHz</td><td>☒</td><td>15.407(b)(4)(i)</td><td>PK: -27 (dBm/MHz) *1
PK: 10 (dBm/MHz) *2
PK: 15.6 (dBm/MHz) *3
PK: 27 (dBm/MHz) *4</td><td>PK: 68.2(dBµV/m) *1
PK: 105.2 (dBµV/m) *2
PK: 110.8(dBµV/m) *3
PK: 122.2 (dBµV/m) *4</td></tr>
<tr><td>☐</td><td>15.407(b)(4)(ii)</td><td colspan="2">Emission limits in section 15.247(d)</td></tr>
<tr><td colspan="5">*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.</td></tr>
</table>

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

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

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
HP Preamplifier	8447D	2432A03504	Feb. 18, 2021	Feb. 17, 2022
HP Preamplifier	8449B	3008A01201	Feb. 19, 2021	Feb. 18, 2022
MITEQ Preamplifier	AMF-6F-260400-33-8P	892164	Feb. 18, 2021	Feb. 17, 2022
Agilent TEST RECEIVER	N9038A	MY51210129	Mar. 18, 2020	Mar. 17, 2021
			Mar. 12, 2021	Mar. 11, 2022
Schwarzbeck Antenna	VULB 9168	139	Nov. 6, 2020	Nov. 5, 2021
Schwarzbeck Antenna	VHBA 9123	480	Jun. 3, 2019	Jun. 2, 2021
Schwarzbeck Horn Antenna	BBHA-9170	212	Nov. 22, 2020	Nov. 21, 2021
EMCO Horn Antenna	3115	00027024	Nov. 22, 2020	Nov.21, 2021
ADT. Turn Table	TT100	0306	NA	NA
ADT. Tower	AT100	0306	NA	NA
Software	Radiated_V7.6.15.9.5	NA	NA	NA
SUHNER RF cable With 4dB PAD	SF102	Cable-CH6-01	Jul. 9, 2020	Jul. 8, 2021
EMEC RF cable With 3/4dB PAD	EM102-KMKM	01	Aug. 21, 2020	Aug. 20, 2021
KEYSIGHT MIMO Powermeasurement Test set	U2021XA	U2021XA-001	Jun. 16, 2020	Jun. 15, 2021
KEYSIGHT Spectrum Analyzer	N9030A	MY54490260	Jul. 22, 2020	Jul. 21, 2021
Loop Antenna EMCI	LPA600	270	Aug. 23, 2019	Aug. 22, 2021
EMCO Horn Antenna	3115	00028257	Nov. 22, 2020	Nov. 21, 2021
Highpass filter Wainwright Instruments	WHK 3.1/18G-10SS	SN 8	NA	NA
ROHDE & SCHWARZ Spectrum Analyzer	FSV40	101042	Sep. 8, 2020	Sep. 7, 2021
Anritsu Power Sensor	MA2411B	0738404	Apr. 13, 2020	Apr. 12, 2021
			Apr. 15, 2021	Apr. 14, 2022
Anritsu Power Meter	ML2495A	0842014	Apr. 13, 2020	Apr. 12, 2021
			Apr. 14, 2021	Apr. 13, 2022

NOTE: 1. The calibration interval of the above test instruments is 12/24 months. And the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in Chamber No. 6.

4.1.3 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
f. The test-receiver system was set to peak and average detect 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.

Note:

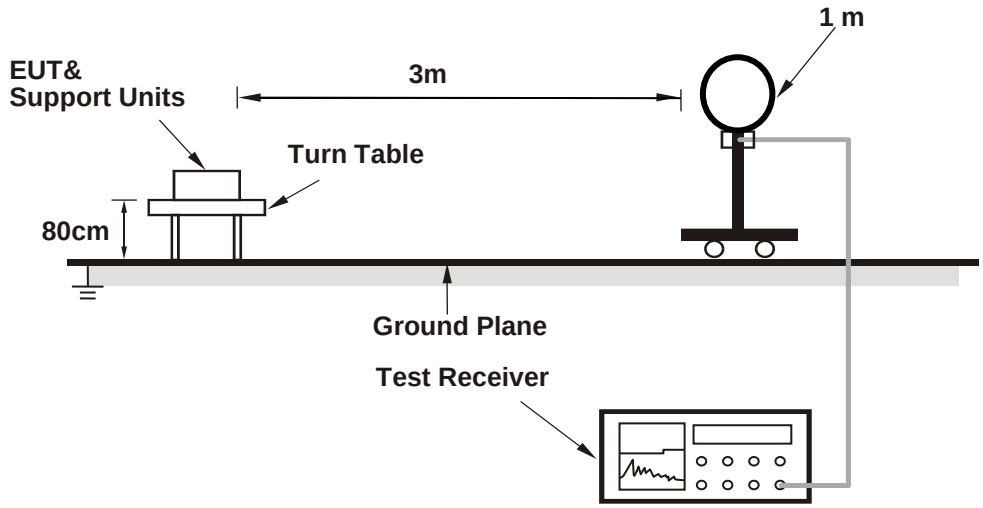
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz. (802.11a: RBW = 1MHz, VBW = 10Hz; 802.11ac (VHT20): RBW = 1MHz, VBW = 10Hz; 802.11ac (VHT40): RBW = 1MHz, VBW = 1.1kHz; 802.11ac (VHT80): RBW = 1MHz, VBW = 2.2kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

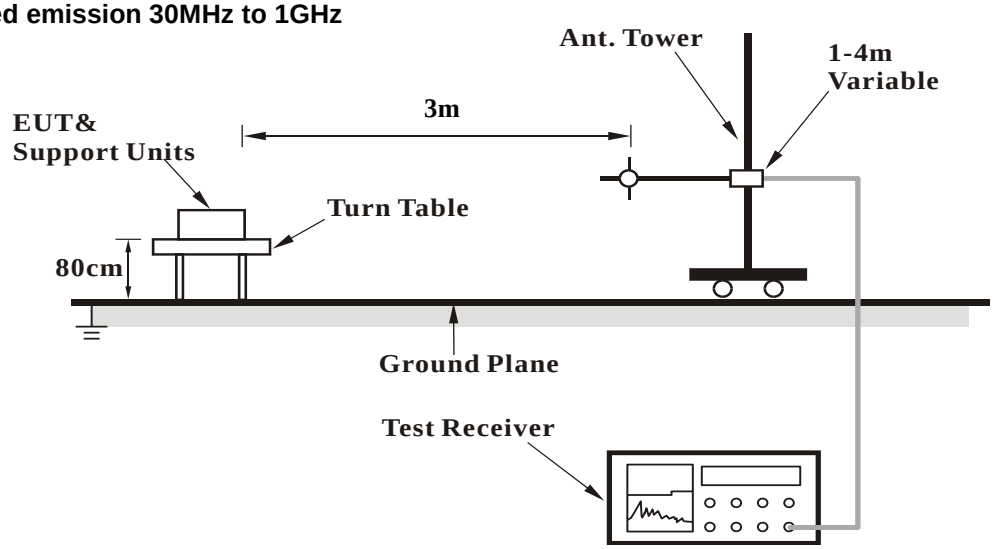
No deviation.

4.1.5 Test Setup

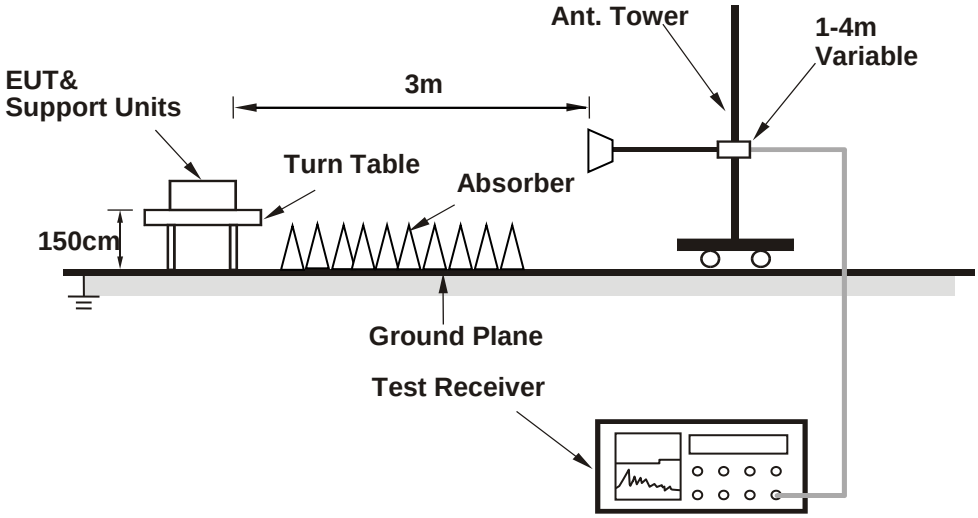
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

Set the EUT under transmission condition continuously at specific channel frequency continuously.

4.1.7 Test Results

Above 1GHz data:

RF Mode	TX 802.11a	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	56.87 PK	74.00	-17.13	3.98 H	4	47.20	9.67
2	5150.00	45.11 AV	54.00	-8.89	3.98 H	4	35.44	9.67
3	*5180.00	110.62 PK			3.98 H	4	100.84	9.78
4	*5180.00	99.52 AV			3.98 H	4	89.74	9.78
5	#10360.00	56.24 PK	68.20	-11.96	1.64 H	238	40.39	15.85
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	56.56 PK	74.00	-17.44	1.49 V	297	46.89	9.67
2	5150.00	44.54 AV	54.00	-9.46	1.49 V	297	34.87	9.67
3	*5180.00	109.97 PK			1.49 V	297	100.19	9.78
4	*5180.00	98.84 AV			1.49 V	297	89.06	9.78
5	#10360.00	55.50 PK	68.20	-12.70	1.89 V	267	39.65	15.85

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

RF Mode	TX 802.11a	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	110.41 PK			3.97 H	6	100.57	9.84
2	*5200.00	99.80 AV			3.97 H	6	89.96	9.84
3	#10400.00	56.49 PK	68.20	-11.71	2.41 H	158	40.52	15.97
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	109.52 PK			1.52 V	302	99.68	9.84
2	*5200.00	98.62 AV			1.52 V	302	88.78	9.84
3	#10400.00	55.37 PK	68.20	-12.83	1.68 V	229	39.40	15.97

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

RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	111.96 PK			3.85 H	7	101.93	10.03
2	*5240.00	101.31 AV			3.85 H	7	91.28	10.03
3	5350.00	53.11 PK	74.00	-20.89	3.85 H	7	42.25	10.86
4	5350.00	39.75 AV	54.00	-14.25	3.85 H	7	28.89	10.86
5	#10480.00	56.75 PK	68.20	-11.45	1.79 H	241	40.57	16.18
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	110.31 PK			1.54 V	299	100.28	10.03
2	*5240.00	100.32 AV			1.54 V	299	90.29	10.03
3	5350.00	52.73 PK	74.00	-21.27	1.54 V	299	41.87	10.86
4	5350.00	38.95 AV	54.00	-15.05	1.54 V	299	28.09	10.86
5	#10480.00	55.85 PK	68.20	-12.35	2.50 V	229	39.67	16.18

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

RF Mode	TX 802.11a	Channel	CH 52：5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	54.85 PK	74.00	-19.15	3.64 H	1	45.18	9.67
2	5150.00	41.57 AV	54.00	-12.43	3.64 H	1	31.90	9.67
3	*5260.00	111.20 PK			3.64 H	1	101.05	10.15
4	*5260.00	100.55 AV			3.64 H	1	90.40	10.15
5	#10520.00	56.52 PK	68.20	-11.68	1.87 H	44	40.32	16.20
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	53.92 PK	74.00	-20.08	1.59 V	299	44.25	9.67
2	5150.00	40.80 AV	54.00	-13.20	1.59 V	299	31.13	9.67
3	*5260.00	110.24 PK			1.59 V	299	100.09	10.15
4	*5260.00	99.41 AV			1.59 V	299	89.26	10.15
5	#10520.00	55.45 PK	68.20	-12.75	2.69 V	284	39.25	16.20

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

RF Mode	TX 802.11a	Channel	CH 60：5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	112.05 PK			3.84 H	6	101.59	10.46
2	*5300.00	101.75 AV			3.84 H	6	91.29	10.46
3	10600.00	56.71 PK	74.00	-17.29	2.84 H	195	40.63	16.08
4	10600.00	45.76 AV	54.00	-8.24	2.84 H	195	29.68	16.08
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	111.14 PK			1.47 V	310	100.68	10.46
2	*5300.00	100.12 AV			1.47 V	310	89.66	10.46
3	10600.00	55.76 PK	74.00	-18.24	1.26 V	229	39.68	16.08
4	10600.00	44.87 AV	54.00	-9.13	1.26 V	229	28.79	16.08

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.

RF Mode	TX 802.11a	Channel	CH 64：5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	109.76 PK			3.87 H	27	99.14	10.62
2	*5320.00	98.75 AV			3.87 H	27	88.13	10.62
3	5350.00	55.59 PK	74.00	-18.41	3.87 H	27	44.73	10.86
4	5350.00	43.18 AV	54.00	-10.82	3.87 H	27	32.32	10.86
5	10640.00	56.24 PK	74.00	-17.76	1.87 H	262	40.19	16.05
6	10640.00	45.69 AV	54.00	-8.31	1.87 H	262	29.64	16.05
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	109.07 PK			1.45 V	298	98.45	10.62
2	*5320.00	97.88 AV			1.45 V	298	87.26	10.62
3	5350.00	53.50 PK	74.00	-20.50	1.45 V	298	42.64	10.86
4	5350.00	41.89 AV	54.00	-12.11	1.45 V	298	31.03	10.86
5	10640.00	55.41 PK	74.00	-18.59	2.85 V	194	39.36	16.05
6	10640.00	44.48 AV	54.00	-9.52	2.85 V	194	28.43	16.05

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.

RF Mode	TX 802.11a	Channel	CH 100：5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	54.40 PK	74.00	-19.60	3.89 H	2	43.14	11.26
2	5460.00	41.49 AV	54.00	-12.51	3.89 H	2	30.23	11.26
3	#5470.00	58.38 PK	68.20	-9.82	3.89 H	2	47.10	11.28
4	*5500.00	110.25 PK			3.89 H	2	98.94	11.31
5	*5500.00	99.04 AV			3.89 H	2	87.73	11.31
6	11000.00	57.14 PK	74.00	-16.86	1.28 H	264	40.26	16.88
7	11000.00	46.23 AV	54.00	-7.77	1.28 H	264	29.35	16.88
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	53.78 PK	74.00	-20.22	1.44 V	299	42.52	11.26
2	5460.00	40.87 AV	54.00	-13.13	1.44 V	299	29.61	11.26
3	#5470.00	57.16 PK	68.20	-11.04	1.44 V	299	45.88	11.28
4	*5500.00	108.89 PK			1.44 V	299	97.58	11.31
5	*5500.00	97.66 AV			1.44 V	299	86.35	11.31
6	11000.00	56.14 PK	74.00	-17.86	2.51 V	147	39.26	16.88
7	11000.00	45.34 AV	54.00	-8.66	2.51 V	147	28.46	16.88

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

RF Mode	TX 802.11a	Channel	CH 116：5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	109.34 PK			3.79 H	6	98.79	10.55
2	*5580.00	97.83 AV			3.79 H	6	87.28	10.55
3	11160.00	58.18 PK	74.00	-15.82	1.85 H	263	40.58	17.60
4	11160.00	47.21 AV	54.00	-6.79	1.85 H	263	29.61	17.60
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	107.96 PK			1.52 V	302	97.41	10.55
2	*5580.00	97.07 AV			1.52 V	302	86.52	10.55
3	11160.00	56.86 PK	74.00	-17.14	1.21 V	208	39.26	17.60
4	11160.00	46.12 AV	54.00	-7.88	1.21 V	208	28.52	17.60

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.

RF Mode	TX 802.11a	Channel	CH 140：5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	110.78 PK			3.98 H	4	100.53	10.25
2	*5700.00	99.55 AV			3.98 H	4	89.30	10.25
3	#5725.00	56.04 PK	68.20	-12.16	3.98 H	4	45.75	10.29
4	11400.00	58.02 PK	74.00	-15.98	1.82 H	299	40.32	17.70
5	11400.00	47.54 AV	54.00	-6.46	1.82 H	299	29.84	17.70
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	109.51 PK			1.48 V	296	99.26	10.25
2	*5700.00	99.04 AV			1.48 V	296	88.79	10.25
3	#5725.00	54.50 PK	68.20	-13.70	1.48 V	360	44.21	10.29
4	11400.00	57.24 PK	74.00	-16.76	1.26 V	231	39.54	17.70
5	11400.00	46.13 AV	54.00	-7.87	1.26 V	231	28.43	17.70

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

RF Mode	TX 802.11a	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5585.32	54.18 PK	68.20	-14.02	3.91 H	5	43.68	10.50
2	*5745.00	113.61 PK			3.91 H	5	103.28	10.33
3	*5745.00	102.53 AV			3.91 H	5	92.20	10.33
4	#6018.22	53.27 PK	68.20	-14.93	3.91 H	5	42.56	10.71
5	11490.00	58.13 PK	74.00	-15.87	2.36 H	251	40.16	17.97
6	11490.00	47.13 AV	54.00	-6.87	2.36 H	251	29.16	17.97
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	#5627.31	53.72 PK	68.20	-14.48	1.49 V	294	43.41	10.31
2	*5745.00	112.59 PK			1.49 V	294	102.26	10.33
3	*5745.00	101.97 AV			1.49 V	294	91.64	10.33
4	#5960.67	52.80 PK	68.20	-15.40	1.49 V	294	42.26	10.54
5	11490.00	57.62 PK	74.00	-16.38	2.41 V	178	39.65	17.97
6	11490.00	46.31 AV	54.00	-7.69	2.41 V	178	28.34	17.97

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

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5632.47	54.13 PK	68.20	-14.07	3.82 H	6	43.83	10.30
2	*5785.00	113.61 PK			3.82 H	6	103.22	10.39
3	*5785.00	102.56 AV			3.82 H	6	92.17	10.39
4	#5980.75	52.59 PK	68.20	-15.61	3.82 H	6	41.95	10.64
5	11570.00	58.81 PK	74.00	-15.19	2.28 H	291	40.55	18.26
6	11570.00	47.82 AV	54.00	-6.18	2.28 H	291	29.56	18.26
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	#5631.57	53.40 PK	68.20	-14.80	1.53 V	303	43.10	10.30
2	*5785.00	112.76 PK			1.53 V	303	102.37	10.39
3	*5785.00	102.05 AV			1.53 V	303	91.66	10.39
4	#5937.66	53.32 PK	68.20	-14.88	1.53 V	303	42.90	10.42
5	11570.00	57.52 PK	74.00	-16.48	1.67 V	143	39.26	18.26
6	11570.00	46.74 AV	54.00	-7.26	1.67 V	143	28.48	18.26

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

RF Mode	TX 802.11a	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5645.58	54.20 PK	68.20	-14.00	3.89 H	4	43.92	10.28
2	*5825.00	113.77 PK			3.89 H	4	103.41	10.36
3	*5825.00	102.75 AV			3.89 H	4	92.39	10.36
4	#5941.21	53.46 PK	68.20	-14.74	3.89 H	4	43.02	10.44
5	11650.00	58.57 PK	74.00	-15.43	2.25 H	281	40.16	18.41
6	11650.00	47.96 AV	54.00	-6.04	2.25 H	281	29.55	18.41
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	#5557.92	52.63 PK	68.20	-15.57	1.50 V	299	41.85	10.78
2	*5825.00	112.45 PK			1.50 V	299	102.09	10.36
3	*5825.00	101.53 AV			1.50 V	299	91.17	10.36
4	#6004.85	52.68 PK	68.20	-15.52	1.50 V	299	41.96	10.72
5	11650.00	57.72 PK	74.00	-16.28	1.88 V	164	39.31	18.41
6	11650.00	46.57 AV	54.00	-7.43	1.88 V	164	28.16	18.41

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

RF Mode	TX 802.11n (HT20)	Channel	CH 36：5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	58.52 PK	74.00	-15.48	3.77 H	10	48.85	9.67
2	5150.00	45.69 AV	54.00	-8.31	3.77 H	10	36.02	9.67
3	*5180.00	109.64 PK			3.77 H	10	99.86	9.78
4	*5180.00	97.98 AV			3.77 H	10	88.20	9.78
5	#10360.00	56.37 PK	68.20	-11.83	1.84 H	194	40.52	15.85
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	56.61 PK	74.00	-17.39	1.56 V	303	46.94	9.67
2	5150.00	45.31 AV	54.00	-8.69	1.56 V	303	35.64	9.67
3	*5180.00	108.24 PK			1.56 V	303	98.46	9.78
4	*5180.00	97.67 AV			1.56 V	303	87.89	9.78
5	#10360.00	55.52 PK	68.20	-12.68	2.68 V	194	39.67	15.85

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

RF Mode	TX 802.11n (HT20)	Channel	CH 40：5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	109.73 PK			3.84 H	8	99.89	9.84
2	*5200.00	98.53 AV			3.84 H	8	88.69	9.84
3	#10400.00	56.62 PK	68.20	-11.58	1.89 H	227	40.65	15.97
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	108.29 PK			1.48 V	296	98.45	9.84
2	*5200.00	97.33 AV			1.48 V	296	87.49	9.84
3	#10400.00	55.61 PK	68.20	-12.59	2.16 V	230	39.64	15.97

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

RF Mode	TX 802.11n (HT20)	Channel	CH 48：5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	110.55 PK			3.86 H	8	100.52	10.03
2	*5240.00	99.04 AV			3.86 H	8	89.01	10.03
3	5350.00	52.97 PK	74.00	-21.03	3.86 H	8	42.11	10.86
4	5350.00	40.00 AV	54.00	-14.00	3.86 H	8	29.14	10.86
5	#10480.00	56.76 PK	68.20	-11.44	1.98 H	178	40.58	16.18
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	109.65 PK			1.51 V	304	99.62	10.03
2	*5240.00	98.55 AV			1.51 V	304	88.52	10.03
3	5350.00	52.42 PK	74.00	-21.58	1.51 V	304	41.56	10.86
4	5350.00	39.62 AV	54.00	-14.38	1.51 V	304	28.76	10.86
5	#10480.00	55.47 PK	68.20	-12.73	2.26 V	239	39.29	16.18

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

RF Mode	TX 802.11n (HT20)	Channel	CH 52：5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	54.14 PK	74.00	-19.86	3.48 H	0	44.47	9.67
2	5150.00	41.33 AV	54.00	-12.67	3.48 H	0	31.66	9.67
3	*5260.00	110.78 PK			3.48 H	0	100.63	10.15
4	*5260.00	98.85 AV			3.48 H	0	88.70	10.15
5	#10520.00	56.45 PK	68.20	-11.75	2.16 H	137	40.25	16.20
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	52.36 PK	74.00	-21.64	1.44 V	303	42.69	9.67
2	5150.00	40.76 AV	54.00	-13.24	1.44 V	303	31.09	9.67
3	*5260.00	109.41 PK			1.44 V	303	99.26	10.15
4	*5260.00	97.64 AV			1.44 V	303	87.49	10.15
5	#10520.00	55.58 PK	68.20	-12.62	1.69 V	345	39.38	16.20

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

RF Mode	TX 802.11n (HT20)	Channel	CH 60：5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	110.88 PK			3.82 H	2	100.42	10.46
2	*5300.00	99.15 AV			3.82 H	2	88.69	10.46
3	10600.00	56.37 PK	74.00	-17.63	1.84 H	269	40.29	16.08
4	10600.00	45.72 AV	54.00	-8.28	1.84 H	269	29.64	16.08
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	109.71 PK			1.51 V	305	99.25	10.46
2	*5300.00	98.06 AV			1.51 V	305	87.60	10.46
3	10600.00	55.52 PK	74.00	-18.48	1.19 V	229	39.44	16.08
4	10600.00	44.26 AV	54.00	-9.74	1.19 V	229	28.18	16.08

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 64：5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	110.58 PK			3.74 H	0	99.96	10.62
2	*5320.00	99.19 AV			3.74 H	0	88.57	10.62
3	5350.00	55.87 PK	74.00	-18.13	3.74 H	0	45.01	10.86
4	5350.00	43.91 AV	54.00	-10.09	3.74 H	0	33.05	10.86
5	10640.00	56.23 PK	74.00	-17.77	2.04 H	100	40.18	16.05
6	10640.00	45.39 AV	54.00	-8.61	2.04 H	100	29.34	16.05
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	109.08 PK			1.48 V	300	98.46	10.62
2	*5320.00	97.91 AV			1.48 V	300	87.29	10.62
3	5350.00	54.51 PK	74.00	-19.49	1.48 V	300	43.65	10.86
4	5350.00	42.74 AV	54.00	-11.26	1.48 V	300	31.88	10.86
5	10640.00	55.48 PK	74.00	-18.52	1.99 V	132	39.43	16.05
6	10640.00	44.84 AV	54.00	-9.16	1.99 V	132	28.79	16.05

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 100：5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	54.34 PK	74.00	-19.66	3.88 H	0	43.08	11.26
2	5460.00	40.51 AV	54.00	-13.49	3.88 H	0	29.25	11.26
3	#5470.00	56.43 PK	68.20	-11.77	3.88 H	0	45.15	11.28
4	*5500.00	108.49 PK			3.88 H	0	97.18	11.31
5	*5500.00	96.11 AV			3.88 H	0	84.80	11.31
6	11000.00	57.43 PK	74.00	-16.57	1.77 H	146	40.55	16.88
7	11000.00	46.55 AV	54.00	-7.45	1.77 H	146	29.67	16.88
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	53.82 PK	74.00	-20.18	1.48 V	289	42.56	11.26
2	5460.00	40.00 AV	54.00	-14.00	1.48 V	289	28.74	11.26
3	#5470.00	55.44 PK	68.20	-12.76	1.48 V	289	44.16	11.28
4	*5500.00	107.57 PK			1.48 V	289	96.26	11.31
5	*5500.00	94.96 AV			1.48 V	289	83.65	11.31
6	11000.00	56.30 PK	74.00	-17.70	2.09 V	316	39.42	16.88
7	11000.00	45.40 AV	54.00	-8.60	2.09 V	316	28.52	16.88

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

RF Mode	TX 802.11n (HT20)	Channel	CH 116：5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	109.23 PK			3.91 H	2	98.68	10.55
2	*5580.00	95.81 AV			3.91 H	2	85.26	10.55
3	11160.00	57.96 PK	74.00	-16.04	1.45 H	201	40.36	17.60
4	11160.00	47.04 AV	54.00	-6.96	1.45 H	201	29.44	17.60
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	108.01 PK			1.53 V	295	97.46	10.55
2	*5580.00	94.61 AV			1.53 V	295	84.06	10.55
3	11160.00	57.15 PK	74.00	-16.85	1.59 V	357	39.55	17.60
4	11160.00	46.38 AV	54.00	-7.62	1.59 V	357	28.78	17.60

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.

RF Mode	TX 802.11n (HT20)	Channel	CH 140：5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	109.97 PK			3.95 H	11	99.72	10.25
2	*5700.00	98.86 AV			3.95 H	11	88.61	10.25
3	#5725.00	56.36 PK	68.20	-11.84	3.95 H	11	46.07	10.29
4	11400.00	58.31 PK	74.00	-15.69	1.78 H	136	40.61	17.70
5	11400.00	47.57 AV	54.00	-6.43	1.78 H	136	29.87	17.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	108.67 PK			1.52 V	294	98.42	10.25
2	*5700.00	97.41 AV			1.52 V	294	87.16	10.25
3	#5725.00	55.37 PK	68.20	-12.83	1.52 V	294	45.08	10.29
4	11400.00	57.34 PK	74.00	-16.66	2.23 V	205	39.64	17.70
5	11400.00	46.17 AV	54.00	-7.83	2.23 V	205	28.47	17.70

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

RF Mode	TX 802.11n (HT20)	Channel	CH 149：5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5633.15	53.44 PK	68.20	-14.76	3.92 H	8	43.14	10.30
2	*5745.00	111.74 PK			3.92 H	8	101.41	10.33
3	*5745.00	100.17 AV			3.92 H	8	89.84	10.33
4	#5957.89	53.27 PK	68.20	-14.93	3.92 H	8	42.73	10.54
5	11490.00	58.13 PK	74.00	-15.87	1.72 H	164	40.16	17.97
6	11490.00	47.51 AV	54.00	-6.49	1.72 H	164	29.54	17.97
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	#5628.77	53.99 PK	68.20	-14.21	1.51 V	298	43.68	10.31
2	*5745.00	110.67 PK			1.51 V	298	100.34	10.33
3	*5745.00	98.94 AV			1.51 V	298	88.61	10.33
4	#5971.47	52.09 PK	68.20	-16.11	1.51 V	298	41.50	10.59
5	11490.00	57.22 PK	74.00	-16.78	2.95 V	262	39.25	17.97
6	11490.00	46.38 AV	54.00	-7.62	2.95 V	262	28.41	17.97

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

RF Mode	TX 802.11n (HT20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5583.49	56.03 PK	68.20	-12.17	3.84 H	5	45.52	10.51
2	*5785.00	111.78 PK			3.84 H	5	101.39	10.39
3	*5785.00	99.83 AV			3.84 H	5	89.44	10.39
4	#5971.92	53.32 PK	68.20	-14.88	3.84 H	5	42.73	10.59
5	11570.00	58.80 PK	74.00	-15.20	1.81 H	210	40.54	18.26
6	11570.00	47.45 AV	54.00	-6.55	1.81 H	210	29.19	18.26
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	#5633.89	53.29 PK	68.20	-14.91	1.53 V	302	42.99	10.30
2	*5785.00	110.61 PK			1.53 V	302	100.22	10.39
3	*5785.00	98.69 AV			1.53 V	162	88.30	10.39
4	#6018.31	53.08 PK	68.20	-15.12	1.53 V	302	42.37	10.71
5	11570.00	57.52 PK	74.00	-16.48	2.69 V	230	39.26	18.26
6	11570.00	46.67 AV	54.00	-7.33	2.69 V	230	28.41	18.26

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

RF Mode	TX 802.11n (HT20)	Channel	CH 165：5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5600.16	53.21 PK	68.20	-14.99	3.79 H	15	42.86	10.35
2	*5825.00	111.57 PK			3.79 H	15	101.21	10.36
3	*5825.00	99.72 AV			3.79 H	15	89.36	10.36
4	#5934.29	52.75 PK	68.20	-15.45	3.79 H	15	42.36	10.39
5	11650.00	58.63 PK	74.00	-15.37	2.02 H	132	40.22	18.41
6	11650.00	48.22 AV	54.00	-5.78	2.02 H	132	29.81	18.41
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	#5620.80	53.49 PK	68.20	-14.71	1.54 V	294	43.17	10.32
2	*5825.00	111.44 PK			1.54 V	294	101.08	10.36
3	*5825.00	99.64 AV			1.54 V	294	89.28	10.36
4	#5939.19	53.25 PK	68.20	-14.95	1.54 V	294	42.82	10.43
5	11650.00	57.82 PK	74.00	-16.18	2.31 V	210	39.41	18.41
6	11650.00	46.60 AV	54.00	-7.40	2.31 V	210	28.19	18.41

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

RF Mode	TX 802.11n (HT40)	Channel	CH 38：5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	56.34 PK	74.00	-17.66	3.92 H	11	46.67	9.67
2	5150.00	44.67 AV	54.00	-9.33	3.92 H	11	35.00	9.67
3	*5190.00	104.67 PK			3.92 H	11	94.85	9.82
4	*5190.00	94.85 AV			3.92 H	11	85.03	9.82
5	#10380.00	56.54 PK	68.20	-11.66	2.31 H	268	40.63	15.91
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.93 PK	74.00	-19.07	1.46 V	306	45.26	9.67
2	5150.00	43.76 AV	54.00	-10.24	1.46 V	306	34.09	9.67
3	*5190.00	103.10 PK			1.46 V	306	93.28	9.82
4	*5190.00	93.77 AV			1.46 V	306	83.95	9.82
5	#10380.00	55.19 PK	68.20	-13.01	1.85 V	29	39.28	15.91

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

RF Mode	TX 802.11n (HT40)	Channel	CH 46：5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	106.00 PK			3.90 H	7	96.02	9.98
2	*5230.00	96.12 AV			3.90 H	7	86.14	9.98
3	5350.00	55.53 PK	74.00	-18.47	3.90 H	7	44.67	10.86
4	5350.00	45.13 AV	54.00	-8.87	3.90 H	7	34.27	10.86
5	#10460.00	56.81 PK	68.20	-11.39	2.25 H	294	40.68	16.13
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5230.00	104.18 PK			1.47 V	301	94.20	9.98
2	*5230.00	94.27 AV			1.47 V	301	84.29	9.98
3	5350.00	55.71 PK	74.00	-18.29	1.47 V	301	44.85	10.86
4	5350.00	43.49 AV	54.00	-10.51	1.47 V	301	32.63	10.86
5	#10460.00	55.60 PK	68.20	-12.60	1.83 V	208	39.47	16.13

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

RF Mode	TX 802.11n (HT40)	Channel	CH 54：5270 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	58.87 PK	74.00	-15.13	3.81 H	6	49.20	9.67
2	5150.00	42.07 AV	54.00	-11.93	3.81 H	6	32.40	9.67
3	*5270.00	107.65 PK			3.81 H	6	97.42	10.23
4	*5270.00	97.97 AV			3.81 H	6	87.74	10.23
5	#10540.00	56.37 PK	68.20	-11.83	2.95 H	204	40.20	16.17
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	57.28 PK	74.00	-16.72	1.53 V	294	47.61	9.67
2	5150.00	40.89 AV	54.00	-13.11	1.53 V	294	31.22	9.67
3	*5270.00	106.81 PK			1.53 V	294	96.58	10.23
4	*5270.00	96.93 AV			1.53 V	294	86.70	10.23
5	#10540.00	55.83 PK	68.20	-12.37	1.55 V	162	39.66	16.17

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

RF Mode	TX 802.11n (HT40)	Channel	CH 62：5310 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	107.68 PK			3.77 H	1	97.14	10.54
2	*5310.00	98.05 AV			3.77 H	1	87.51	10.54
3	5350.00	57.98 PK	74.00	-16.02	3.77 H	1	47.12	10.86
4	5350.00	46.25 AV	54.00	-7.75	3.77 H	1	35.39	10.86
5	10620.00	56.32 PK	74.00	-17.68	1.22 H	158	40.25	16.07
6	10620.00	45.41 AV	54.00	-8.59	1.22 H	158	29.34	16.07
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	106.62 PK			1.47 V	299	96.08	10.54
2	*5310.00	97.02 AV			1.47 V	299	86.48	10.54
3	5350.00	56.68 PK	74.00	-17.32	1.47 V	299	45.82	10.86
4	5350.00	44.15 AV	54.00	-9.85	1.47 V	299	33.29	10.86
5	10620.00	55.33 PK	74.00	-18.67	2.24 V	164	39.26	16.07
6	10620.00	44.62 AV	54.00	-9.38	2.24 V	164	28.55	16.07

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.

RF Mode	TX 802.11n (HT40)	Channel	CH 102：5510 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	53.22 PK	74.00	-20.78	3.89 H	0	41.96	11.26
2	5460.00	41.78 AV	54.00	-12.22	3.89 H	0	30.52	11.26
3	#5470.00	60.89 PK	68.20	-7.31	3.89 H	0	49.61	11.28
4	*5510.00	104.82 PK			3.89 H	0	93.61	11.21
5	*5510.00	95.60 AV			3.89 H	0	84.39	11.21
6	11020.00	57.11 PK	74.00	-16.89	2.20 H	261	40.16	16.95
7	11020.00	46.36 AV	54.00	-7.64	2.20 H	261	29.41	16.95
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	52.49 PK	74.00	-21.51	1.54 V	291	41.23	11.26
2	5460.00	40.94 AV	54.00	-13.06	1.54 V	291	29.68	11.26
3	#5470.00	58.71 PK	68.20	-9.49	1.54 V	291	47.43	11.28
4	*5510.00	103.27 PK			1.54 V	291	92.06	11.21
5	*5510.00	94.85 AV			1.54 V	291	83.64	11.21
6	11020.00	56.21 PK	74.00	-17.79	1.12 V	169	39.26	16.95
7	11020.00	45.52 AV	54.00	-8.48	1.12 V	169	28.57	16.95

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

RF Mode	TX 802.11n (HT40)	Channel	CH 110：5550 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	105.07 PK			3.93 H	6	94.23	10.84
2	*5550.00	95.80 AV			3.93 H	6	84.96	10.84
3	11100.00	57.54 PK	74.00	-16.46	2.02 H	225	40.30	17.24
4	11100.00	46.40 AV	54.00	-7.60	2.02 H	225	29.16	17.24
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	104.06 PK			1.47 V	298	93.22	10.84
2	*5550.00	93.89 AV			1.47 V	298	83.05	10.84
3	11100.00	56.57 PK	74.00	-17.43	1.68 V	194	39.33	17.24
4	11100.00	45.45 AV	54.00	-8.55	1.68 V	194	28.21	17.24

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.

RF Mode	TX 802.11n (HT40)	Channel	CH 134：5670 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	105.39 PK			3.84 H	4	95.12	10.27
2	*5670.00	95.50 AV			3.84 H	4	85.23	10.27
3	#5725.00	54.74 PK	68.20	-13.46	3.84 H	4	44.45	10.29
4	11340.00	57.71 PK	74.00	-16.29	1.94 H	135	40.11	17.60
5	11340.00	46.80 AV	54.00	-7.20	1.94 H	135	29.20	17.60
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	104.40 PK			1.53 V	293	94.13	10.27
2	*5670.00	94.35 AV			1.53 V	293	84.08	10.27
3	#5725.00	52.98 PK	68.20	-15.22	1.53 V	293	42.69	10.29
4	11340.00	56.84 PK	74.00	-17.16	2.98 V	274	39.24	17.60
5	11340.00	45.96 AV	54.00	-8.04	2.98 V	274	28.36	17.60

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

RF Mode	TX 802.11n (HT40)	Channel	CH 151：5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5585.95	54.08 PK	68.20	-14.12	3.87 H	4	43.58	10.50
2	*5755.00	108.43 PK			3.87 H	4	98.10	10.33
3	*5755.00	98.58 AV			3.87 H	4	88.25	10.33
4	#5977.73	55.18 PK	68.20	-13.02	3.87 H	4	44.55	10.63
5	11510.00	58.28 PK	74.00	-15.72	2.28 H	164	40.24	18.04
6	11510.00	47.20 AV	54.00	-6.80	2.28 H	164	29.16	18.04
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	#5622.39	54.46 PK	68.20	-13.74	1.54 V	294	44.14	10.32
2	*5755.00	107.19 PK			1.54 V	294	96.86	10.33
3	*5755.00	96.82 AV			1.54 V	294	86.49	10.33
4	#5977.93	54.15 PK	68.20	-14.05	1.54 V	294	43.52	10.63
5	11510.00	57.36 PK	74.00	-16.64	2.21 V	26	39.32	18.04
6	11510.00	46.17 AV	54.00	-7.83	2.21 V	26	28.13	18.04

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

RF Mode	TX 802.11n (HT40)	Channel	CH 159：5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5571.35	55.41 PK	68.20	-12.79	3.35 H	6	44.78	10.63
2	*5795.00	108.65 PK			3.35 H	6	98.24	10.41
3	*5795.00	98.77 AV			3.35 H	6	88.36	10.41
4	#6017.76	53.35 PK	68.20	-14.85	3.35 H	6	42.64	10.71
5	11590.00	58.84 PK	74.00	-15.16	1.33 H	268	40.51	18.33
6	11590.00	47.95 AV	54.00	-6.05	1.33 H	268	29.62	18.33
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	#5565.03	55.06 PK	68.20	-13.14	1.55 V	294	44.36	10.70
2	*5795.00	107.87 PK			1.55 V	294	97.46	10.41
3	*5795.00	98.71 AV			1.55 V	294	88.30	10.41
4	#6017.60	53.87 PK	68.20	-14.33	1.55 V	294	43.16	10.71
5	11590.00	57.61 PK	74.00	-16.39	1.91 V	210	39.28	18.33
6	11590.00	47.04 AV	54.00	-6.96	1.91 V	210	28.71	18.33

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 42：5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.76 PK	74.00	-18.24	3.92 H	7	46.09	9.67
2	5150.00	44.01 AV	54.00	-9.99	3.92 H	7	34.34	9.67
3	*5210.00	101.51 PK			3.92 H	7	91.62	9.89
4	*5210.00	91.64 AV			3.92 H	7	81.75	9.89
5	5350.00	53.85 PK	74.00	-20.15	3.92 H	7	42.99	10.86
6	5350.00	41.00 AV	54.00	-13.00	3.92 H	7	30.14	10.86
7	#10420.00	56.30 PK	68.20	-11.90	1.94 H	237	40.28	16.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	54.52 PK	74.00	-19.48	1.49 V	295	44.85	9.67
2	5150.00	42.36 AV	54.00	-11.64	1.49 V	295	32.69	9.67
3	*5210.00	100.74 PK			1.49 V	295	90.85	9.89
4	*5210.00	90.45 AV			1.49 V	295	80.56	9.89
5	5350.00	53.02 PK	74.00	-20.98	1.49 V	295	42.16	10.86
6	5350.00	40.49 AV	54.00	-13.51	1.49 V	295	29.63	10.86
7	#10420.00	55.37 PK	68.20	-12.83	2.22 V	162	39.35	16.02

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 58：5290 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	54.72 PK	74.00	-19.28	3.80 H	3	45.05	9.67
2	5150.00	42.46 AV	54.00	-11.54	3.80 H	3	32.79	9.67
3	*5290.00	101.96 PK			3.80 H	3	91.58	10.38
4	*5290.00	92.43 AV			3.80 H	3	82.05	10.38
5	5350.00	59.17 PK	74.00	-14.83	3.80 H	3	48.31	10.86
6	5350.00	46.94 AV	54.00	-7.06	3.80 H	3	36.08	10.86
7	#10580.00	56.33 PK	68.20	-11.87	1.17 H	139	40.22	16.11
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	53.24 PK	74.00	-20.76	1.51 V	305	43.57	9.67
2	5150.00	41.15 AV	54.00	-12.85	1.51 V	305	31.48	9.67
3	*5290.00	100.63 PK			1.51 V	305	90.25	10.38
4	*5290.00	91.49 AV			1.51 V	305	81.11	10.38
5	5350.00	57.34 PK	74.00	-16.66	1.51 V	305	46.48	10.86
6	5350.00	45.41 AV	54.00	-8.59	1.51 V	305	34.55	10.86
7	#10580.00	55.72 PK	68.20	-12.48	2.88 V	176	39.61	16.11

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 106：5530 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	58.32 PK	74.00	-15.68	3.85 H	4	47.06	11.26
2	5460.00	48.74 AV	54.00	-5.26	3.85 H	4	37.48	11.26
3	#5470.00	55.61 PK	68.20	-12.59	3.85 H	4	44.33	11.28
4	*5530.00	101.30 PK			3.85 H	4	90.28	11.02
5	*5530.00	91.10 AV			3.85 H	4	80.08	11.02
6	11060.00	57.35 PK	74.00	-16.65	2.36 H	21	40.26	17.09
7	11060.00	46.22 AV	54.00	-7.78	2.36 H	21	29.13	17.09
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	56.49 PK	74.00	-17.51	1.45 V	294	45.23	11.26
2	5460.00	46.67 AV	54.00	-7.33	1.45 V	294	35.41	11.26
3	#5470.00	53.44 PK	68.20	-14.76	1.45 V	294	42.16	11.28
4	*5530.00	100.28 PK			1.45 V	294	89.26	11.02
5	*5530.00	90.65 AV			1.45 V	294	79.63	11.02
6	11060.00	56.35 PK	74.00	-17.65	1.77 V	184	39.26	17.09
7	11060.00	45.51 AV	54.00	-8.49	1.77 V	184	28.42	17.09

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

RF Mode	TX 802.11ac (VHT80)	Channel	CH 155：5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

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	#5626.71	53.90 PK	68.20	-14.30	3.88 H	10	43.59	10.31
2	*5775.00	103.34 PK			3.88 H	10	92.97	10.37
3	*5775.00	93.29 AV			3.88 H	10	82.92	10.37
4	#5978.93	53.21 PK	68.20	-14.99	3.88 H	10	42.58	10.63
5	11550.00	58.46 PK	74.00	-15.54	2.00 H	182	40.28	18.18
6	11550.00	47.68 AV	54.00	-6.32	2.00 H	182	29.50	18.18
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	#5654.78	59.50 PK	71.74	-12.24	1.55 V	305	49.23	10.27
2	*5775.00	101.99 PK			1.55 V	305	91.62	10.37
3	*5775.00	92.00 AV			1.55 V	305	81.63	10.37
4	#6003.04	53.22 PK	68.20	-14.98	1.55 V	305	42.49	10.73
5	11550.00	57.34 PK	74.00	-16.66	2.88 V	177	39.16	18.18
6	11550.00	46.59 AV	54.00	-7.41	2.88 V	177	28.41	18.18

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

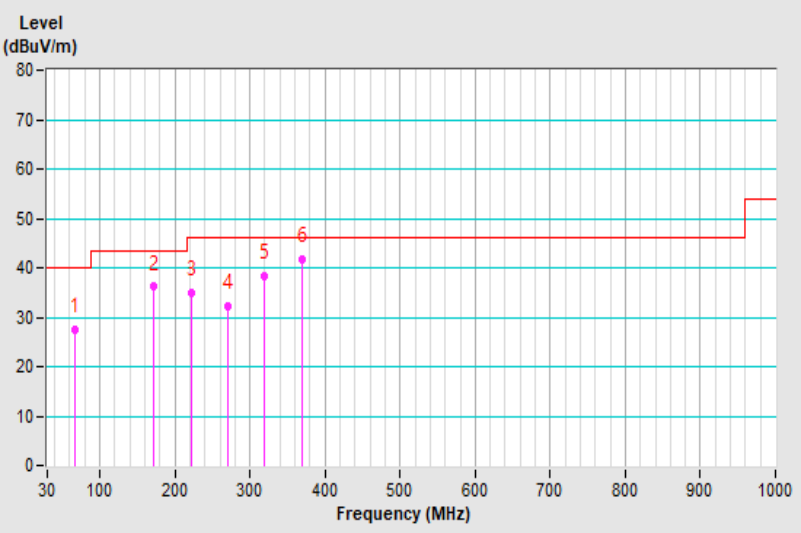
Below 1GHz Worst-Case Data:

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	66.47	27.42 QP	40.00	-12.58	1.36 H	300	35.81	-8.39
2	172.06	36.13 QP	43.50	-7.37	1.98 H	168	42.79	-6.66
3	221.19	34.98 QP	46.00	-11.02	2.53 H	170	43.59	-8.61
4	270.32	32.27 QP	46.00	-13.73	1.64 H	67	37.61	-5.34
5	319.50	38.30 QP	46.00	-7.70	2.10 H	146	41.91	-3.61
6	**368.63**	**41.63 QP**	**46.00**	**-4.37**	**2.09 H**	**334**	**44.34**	**-2.71**

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 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

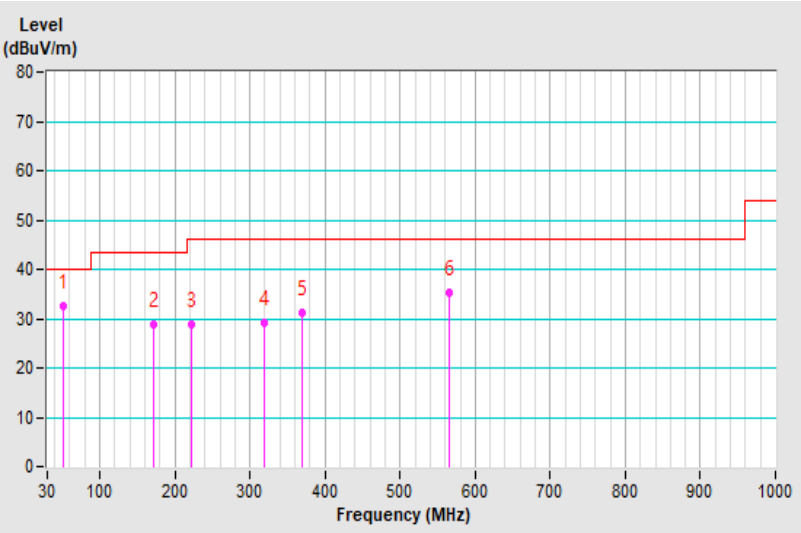


RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	50.95	32.70 QP	40.00	-7.30	1.28 V	224	39.74	-7.04
2	172.06	28.94 QP	43.50	-14.56	1.65 V	118	35.60	-6.66
3	221.19	28.87 QP	46.00	-17.13	1.72 V	132	37.48	-8.61
4	319.50	29.13 QP	46.00	-16.87	2.53 V	205	32.74	-3.61
5	368.68	31.24 QP	46.00	-14.76	2.62 V	224	33.95	-2.71
6	565.25	35.37 QP	46.00	-10.63	2.91 V	140	34.13	1.24

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 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

Note: 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 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
ROHDE & SCHWARZ TEST RECEIVER	ESR3	102412	Jan. 29, 2021	Jan. 28, 2022
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ENV216	101197	Jun. 10, 2020	Jun. 9, 2021
LISN With Adapter (for EUT)	101197	NA	Jun. 10, 2020	Jun. 9, 2021
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100218	Dec. 2, 2020	Dec. 1, 2021
SCHWARZBECK Artificial Mains Network (For EUT)	NNLK8129	8129229	May 20, 2021	May 19, 2022
SCHWARZBECK Artificial Mains Network (For EUT)	NNLK 8121	8121-808	Apr. 18, 2021	Apr. 17, 2022
Software	Cond_V7.3.7.4	NA	NA	NA
RF cable (JYEBAO) With 10dB PAD	5D-FB	Cable-C10.01	Feb. 10, 2021	Feb. 9, 2022
LYNICS Terminator (For ROHDE & SCHWARZ LISN)	0900510	E1-011484	May 25, 2021	May 24, 2022

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 10. (Conduction 10)
3. The VCCI Site Registration No. C-11852.

4.2.3 Test Procedures

a. The EUT was 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/ 50uH of coupling impedance for the measuring instrument.

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

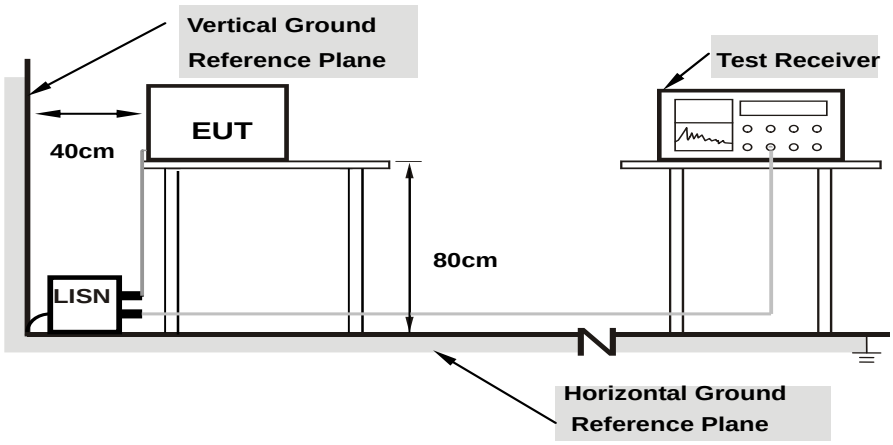
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 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).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

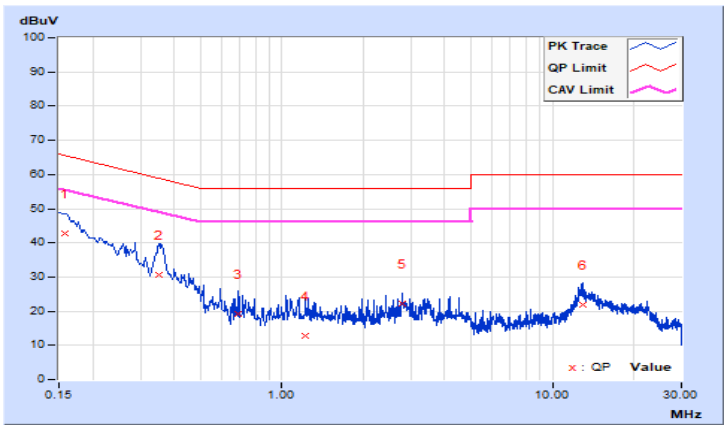
4.2.7 Test Results

RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

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	0.15760	9.72	33.16	16.62	42.88	26.34	65.59	55.59	-22.71	-29.25
2	0.34926	9.72	20.97	13.94	30.69	23.66	58.98	48.98	-28.29	-25.32
3	0.69164	9.73	9.40	7.47	19.13	17.20	56.00	46.00	-36.87	-28.80
4	1.22742	9.76	3.07	1.20	12.83	10.96	56.00	46.00	-43.17	-35.04
5	2.77229	9.81	12.44	10.72	22.25	20.53	56.00	46.00	-33.75	-25.47
6	13.03711	9.96	11.90	6.71	21.86	16.67	60.00	50.00	-38.14	-33.33

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

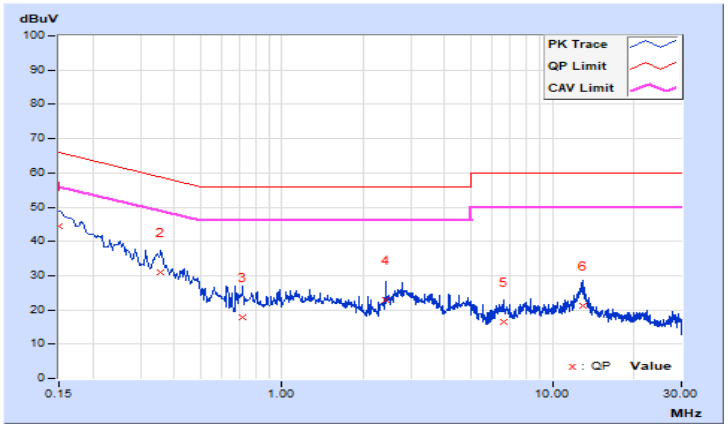


RF Mode	TX 802.11a	Channel	CH 157：5785 MHz
Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.15000**	**9.72**	**34.68**	**17.42**	**44.40**	**27.14**	**66.00**	**56.00**	**-21.60**	**-28.86**
2	0.35728	9.72	21.38	15.14	31.10	24.86	58.79	48.79	-27.69	-23.93
3	0.71902	9.74	8.25	2.18	17.99	11.92	56.00	46.00	-38.01	-34.08
4	2.42812	9.80	13.01	11.19	22.81	20.99	56.00	46.00	-33.19	-25.01
5	6.61524	9.89	6.45	0.32	16.34	10.21	60.00	50.00	-43.66	-39.79
6	12.90413	9.98	11.27	6.02	21.25	16.00	60.00	50.00	-38.75	-34.00

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



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

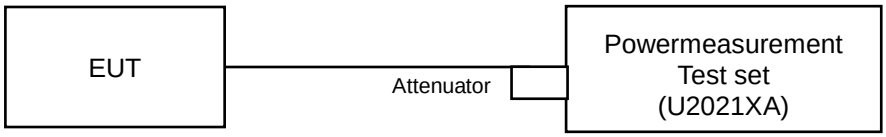
*B is the 26 dB emission bandwidth in megahertz
Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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 $N_{ANT} \geq 5$.

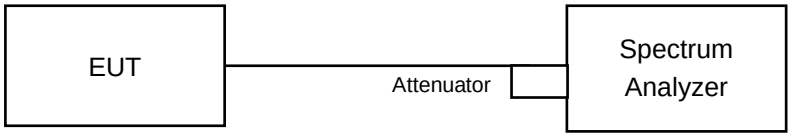
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

For Power Output Measurement



For 26dB Bandwidth Measurement



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

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 26dB Bandwidth Measurement

1. Set RBW = approximately 1% to 5% of the emission bandwidth.
2. Set the VBW $\geqq$ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

Power Output:

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	13.00	12.97	39.768	16.00	24.00	Pass
40	5200	12.81	13.10	39.516	15.97	24.00	Pass
48	5240	12.85	13.53	**41.818**	16.21	24.00	Pass
52	5260	12.08	13.83	**40.298**	16.05	24.00	Pass
60	5300	12.02	13.60	38.831	15.89	24.00	Pass
64	5320	12.35	13.58	39.983	16.02	24.00	Pass
100	5500	13.77	12.08	**39.967**	16.02	24.00	Pass
116	5580	12.82	13.02	39.187	15.93	24.00	Pass
140	5700	12.02	13.53	38.464	15.85	24.00	Pass
149	5745	12.69	13.54	**41.172**	16.15	30.00	Pass
157	5785	12.91	13.18	40.34	16.06	30.00	Pass
165	5825	13.22	12.75	39.826	16.00	30.00	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log(23.68) = 24.74 dBm > 24dBm.
2. 11dBm + 10log(23.5) = 24.71 dBm > 24dBm.
3. 11dBm + 10log(23.54) = 24.72 dBm > 24dBm.
4. 11dBm + 10log(23.66) = 24.74 dBm > 24dBm.
5. 11dBm + 10log(23.13) = 24.64 dBm > 24dBm.
6. 11dBm + 10log(24.32) = 24.86 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(23.81) = 24.77 dBm > 24dBm.
2. 11dBm + 10log(24.11) = 24.82 dBm > 24dBm.
3. 11dBm + 10log(24.29) = 24.85 dBm > 24dBm.
4. 11dBm + 10log(22.78) = 24.58 dBm > 24dBm.
5. 11dBm + 10log(23.31) = 24.68 dBm > 24dBm.
6. 11dBm + 10log(24.37) = 24.87 dBm > 24dBm.

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	11.80	12.05	31.168	14.94	24.00	Pass
40	5200	11.70	12.29	31.734	15.02	24.00	Pass
48	5240	10.84	12.78	31.101	14.93	24.00	Pass
52	5260	11.08	12.82	31.966	15.05	24.00	Pass
60	5300	10.88	12.69	30.824	14.89	24.00	Pass
64	5320	11.37	12.43	31.207	14.94	24.00	Pass
100	5500	10.84	12.71	30.798	14.89	24.00	Pass
116	5580	11.89	12.36	32.671	15.14	24.00	Pass
140	5700	10.83	12.57	30.178	14.80	24.00	Pass
149	5745	11.34	12.38	30.913	14.90	30.00	Pass
157	5785	11.94	12.19	32.189	15.08	30.00	Pass
165	5825	12.29	11.72	31.803	15.02	30.00	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log(23.76) = 24.76 dBm > 24dBm.
2. 11dBm + 10log(23.56) = 24.72 dBm > 24dBm.
3. 11dBm + 10log(23.81) = 24.77 dBm > 24dBm.
4. 11dBm + 10log(23.93) = 24.79 dBm > 24dBm.
5. 11dBm + 10log(23.79) = 24.76 dBm > 24dBm.
6. 11dBm + 10log(24.82) = 24.95 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(24.73) = 24.93 dBm > 24dBm.
2. 11dBm + 10log(23.94) = 24.79 dBm > 24dBm.
3. 11dBm + 10log(24.81) = 24.95 dBm > 24dBm.
4. 11dBm + 10log(23.52) = 24.71 dBm > 24dBm.
5. 11dBm + 10log(23.89) = 24.78 dBm > 24dBm.
6. 11dBm + 10log(25.38) = 25.04 dBm > 24dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	10.71	11.41	25.612	14.08	24.00	Pass
46	5230	10.06	11.48	24.2	13.84	24.00	Pass
54	5270	10.33	11.92	26.349	14.21	24.00	Pass
62	5310	10.11	11.54	24.513	13.89	24.00	Pass
102	5510	11.78	9.79	24.594	13.91	24.00	Pass
110	5550	11.76	10.66	26.638	14.26	24.00	Pass
134	5670	10.02	11.96	25.75	14.11	24.00	Pass
151	5755	10.72	11.53	26.026	14.15	30.00	Pass
159	5795	10.88	10.95	24.691	13.93	30.00	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log(41.88) = 27.22 dBm > 24dBm.
2. 11dBm + 10log(41.77) = 27.21 dBm > 24dBm.
3. 11dBm + 10log(41.71) = 27.20 dBm > 24dBm.
4. 11dBm + 10log(41.76) = 27.21 dBm > 24dBm.
5. 11dBm + 10log(42.24) = 27.26 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(41.78) = 27.21 dBm > 24dBm.
2. 11dBm + 10log(41.87) = 27.22 dBm > 24dBm.
3. 11dBm + 10log(41.51) = 27.18 dBm > 24dBm.
4. 11dBm + 10log(41.78) = 27.21 dBm > 24dBm.
5. 11dBm + 10log(41.75) = 27.21 dBm > 24dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	8.87	9.46	16.54	12.19	24.00	Pass
58	5290	8.07	9.63	15.595	11.93	24.00	Pass
106	5530	9.73	8.17	15.959	12.03	24.00	Pass
155	5775	8.61	9.27	15.714	11.96	30.00	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. 11dBm + 10log(83.96) = 30.24 dBm > 24dBm.
2. 11dBm + 10log(84.06) = 30.25 dBm > 24dBm.
3. 11dBm + 10log(84.59) = 30.27 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(83.2) = 30.20 dBm > 24dBm.
2. 11dBm + 10log(83.42) = 30.21 dBm > 24dBm.
3. 11dBm + 10log(83.64) = 30.22 dBm > 24dBm.

26dB Bandwidth:

802.11a

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	24.36	23.56
40	5200	23.7	22.52
48	5240	24.18	23.35
52	5260	23.68	23.81
60	5300	23.5	24.11
64	5320	23.54	24.29
100	5500	23.66	22.78
116	5580	23.13	23.31
140	5700	24.32	24.37

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	23.75	23.68
40	5200	24.87	23.72
48	5240	23.78	24.41
52	5260	23.76	24.73
60	5300	23.56	23.94
64	5320	23.81	24.81
100	5500	23.93	23.52
116	5580	23.79	23.89
140	5700	24.82	25.38

802.11ac (VHT40)

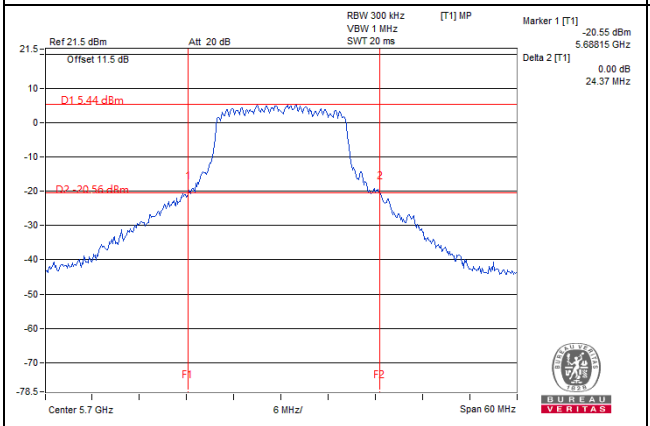
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	41.91	41.48
46	5230	41.82	41.56
54	5270	41.88	41.78
62	5310	41.77	41.87
102	5510	41.71	41.51
110	5550	41.76	41.78
134	5670	42.24	41.75

802.11ac (VHT80)

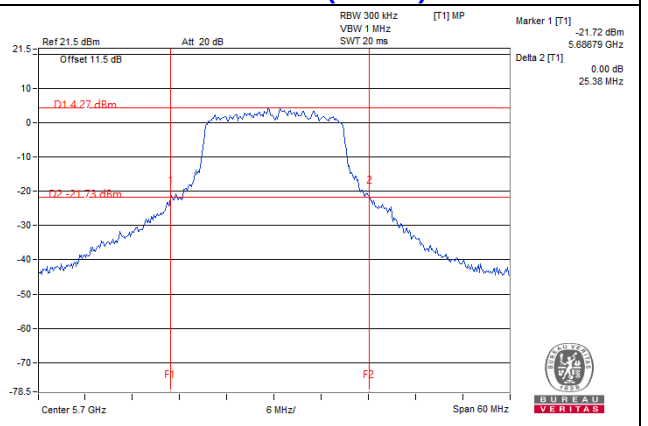
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	83.96	83.2
58	5290	84.06	83.42
106	5530	84.59	83.64

Spectrum Plot of Worst Value

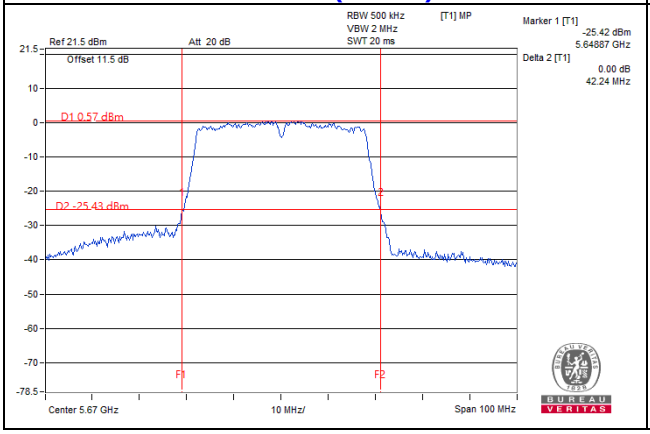
802.11a



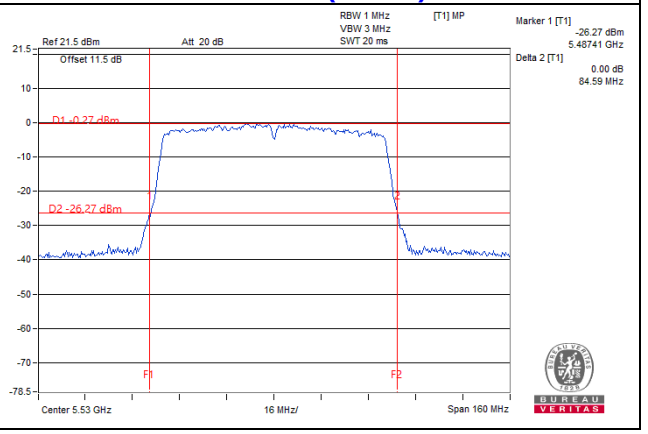
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



EUT Maximum Conducted Power

802.11a

ANT No.	Frequency Band (MHz)	MAX. Power	
		Output Power(dBm)	Output Power(mW)
1	5250~5350	**16.05**	**40.298**
1	5470~5725	**16.02**	**39.967**

802.11ac VHT20

ANT No.	Frequency Band (MHz)	MAX. Power	
		Output Power(dBm)	Output Power(mW)
1	5250~5350	**15.05**	**31.966**
1	5470~5725	**15.14**	**32.671**

802.11ac VHT40

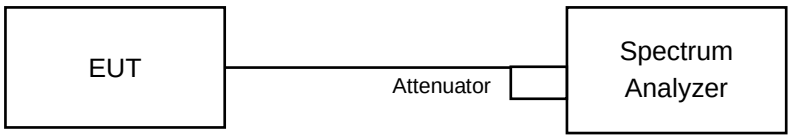
ANT No.	Frequency Band (MHz)	MAX. Power	
		Output Power(dBm)	Output Power(mW)
1	5250~5350	**14.21**	**26.349**
1	5470~5725	**14.26**	**26.638**

802.11ac VHT80

ANT No.	Frequency Band (MHz)	MAX. Power	
		Output Power(dBm)	Output Power(mW)
1	5250~5350	**11.93**	**15.595**
1	5470~5725	**12.03**	**15.959**

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

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

4.4.4 Test Result

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.8	16.68
40	5200	16.8	16.56
48	5240	16.8	16.56
52	5260	16.8	16.68
60	5300	16.8	16.68
64	5320	16.8	16.68
100	5500	16.8	16.56
116	5580	16.8	16.56
140	5700	16.8	16.8
149	5745	16.95	16.86
157	5785	17.2	17.3
165	5825	17.1	17.1

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.88	17.76
40	5200	17.88	17.88
48	5240	18	17.76
52	5260	18	17.88
60	5300	17.88	17.88
64	5320	17.88	17.88
100	5500	18	17.76
116	5580	17.88	17.88
140	5700	18	17.88
149	5745	17.92	17.9
157	5785	18.1	18.1
165	5825	18	18.1

802.11ac (VHT40)

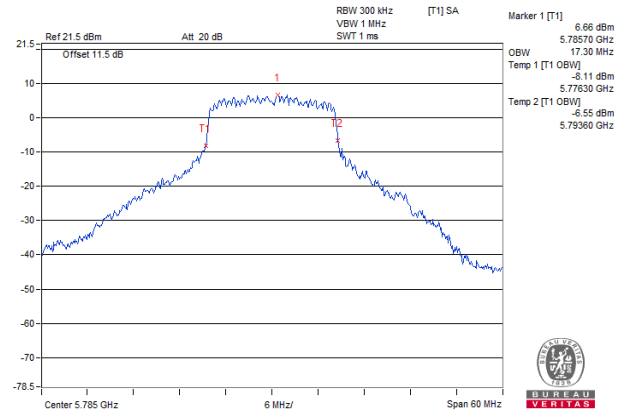
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	36.2	36.4
46	5230	36.4	36.4
54	5270	36.4	36.4
62	5310	36.4	36.4
102	5510	36.4	36.4
110	5550	36.4	36.4
134	5670	36.4	36.4
151	5755	36.24	36.34
159	5795	36.34	36.34

802.11ac (VHT80)

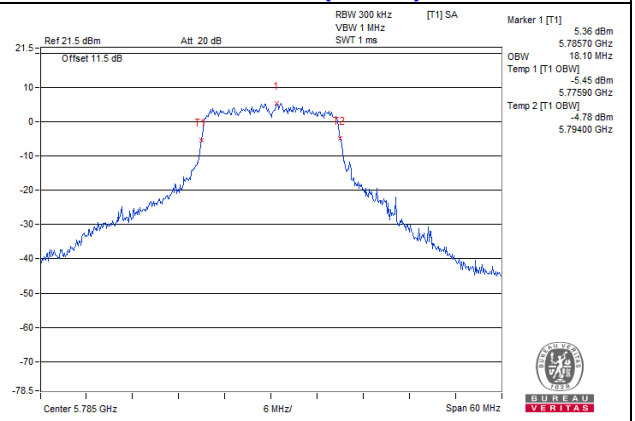
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	75.84	75.84
58	5290	75.84	75.6
106	5530	75.6	75.6
155	5775	75.68	75.6

Spectrum Plot of Worst Value

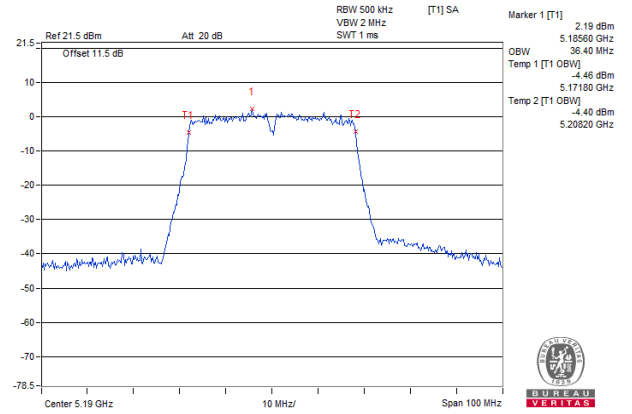
802.11a



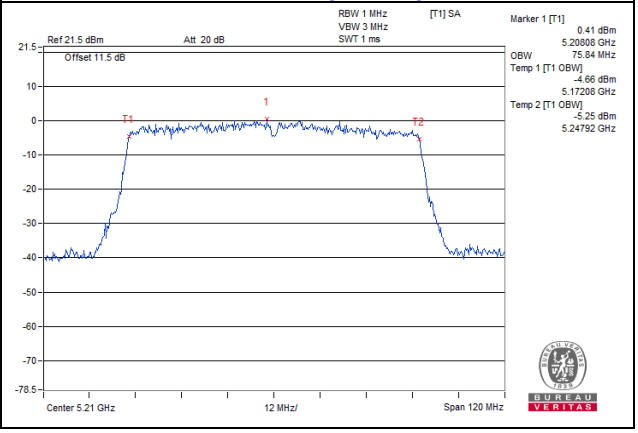
802.11ac (VHT20)

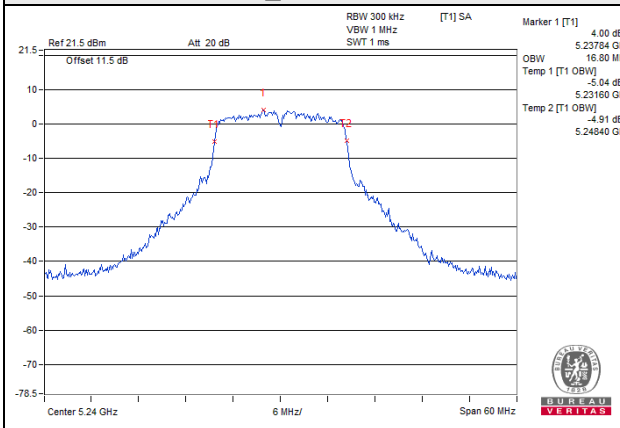
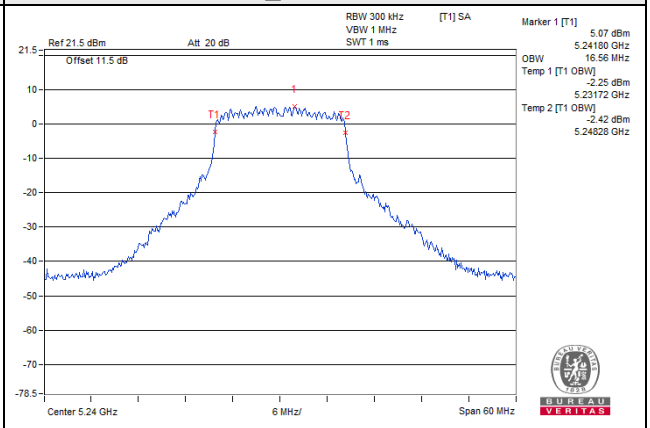
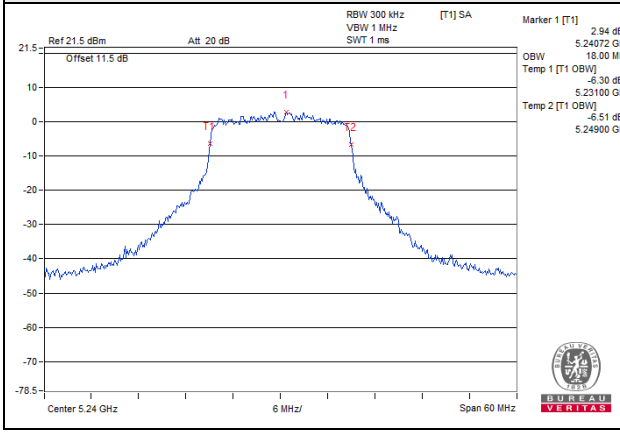
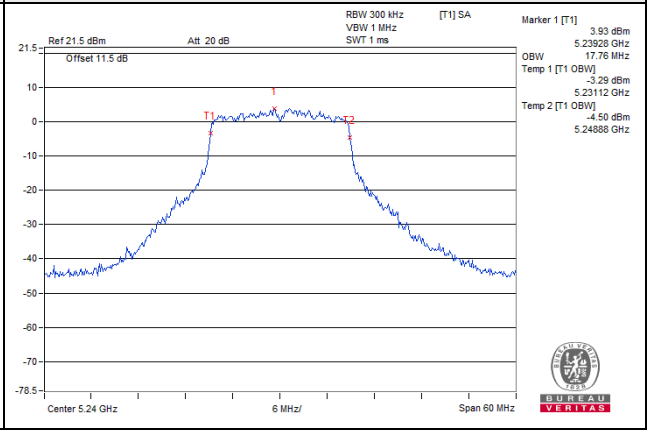


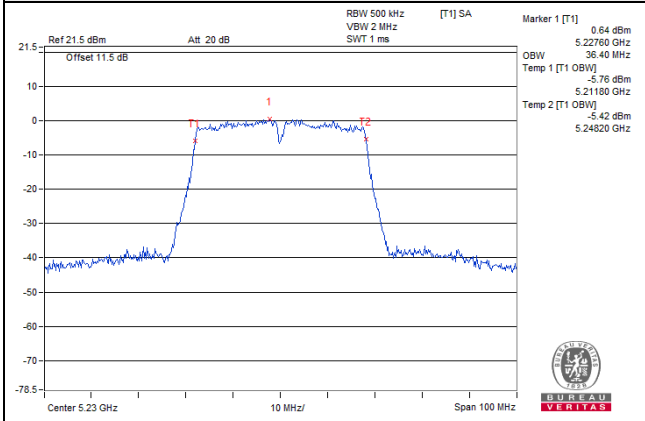
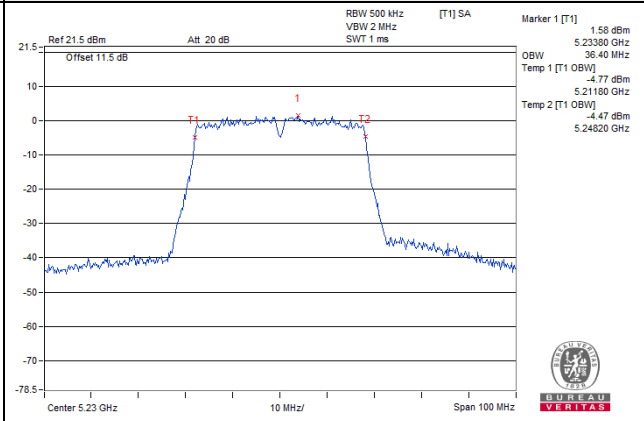
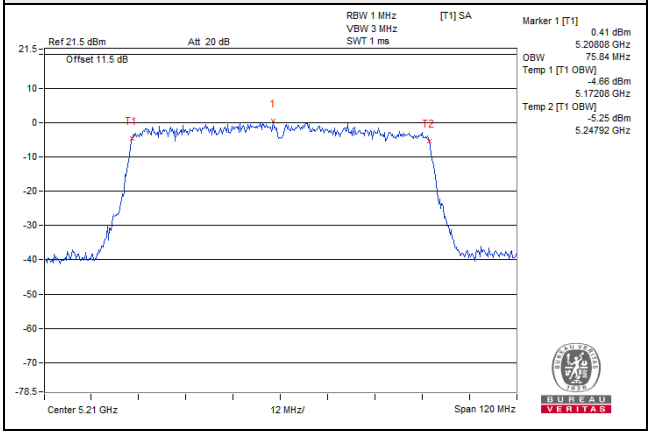
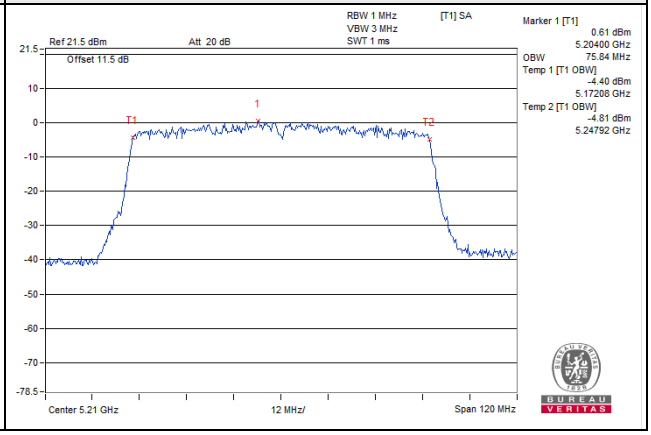
802.11ac (VHT40)

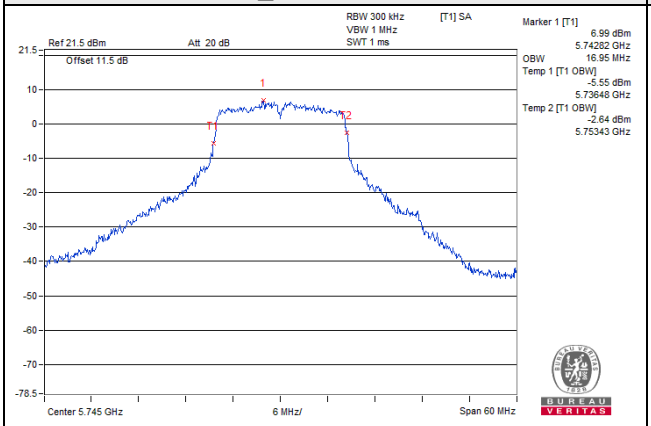
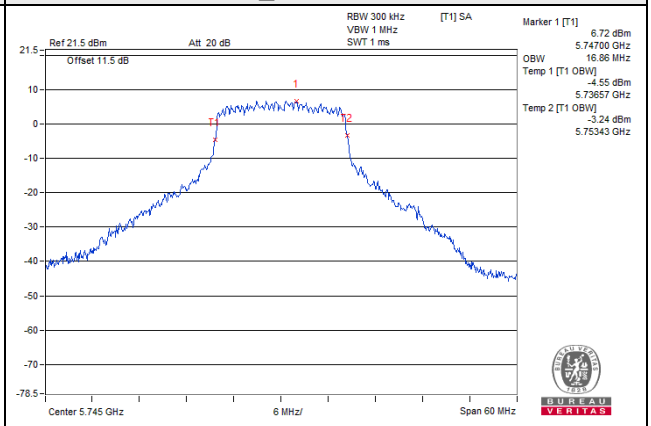
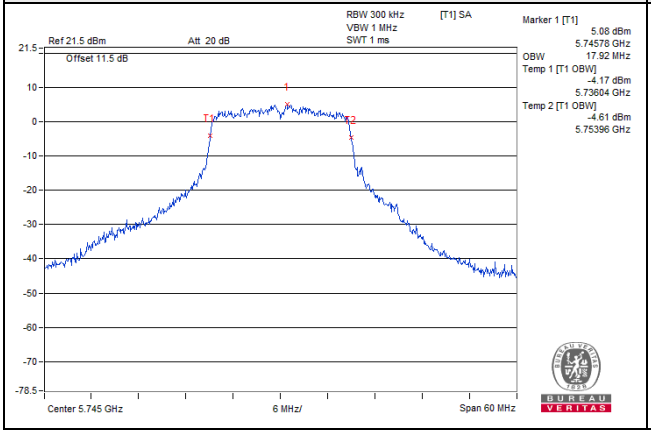
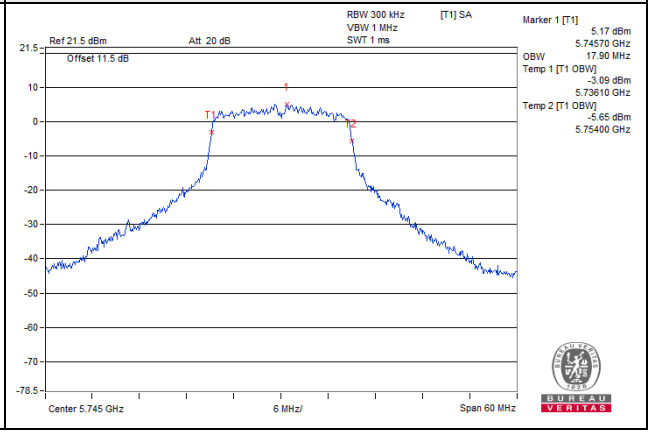


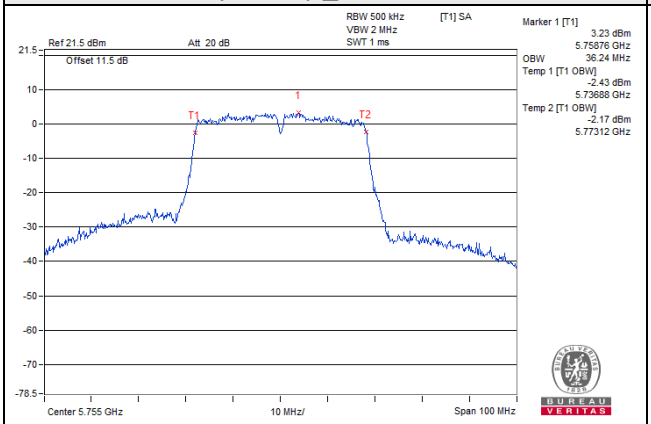
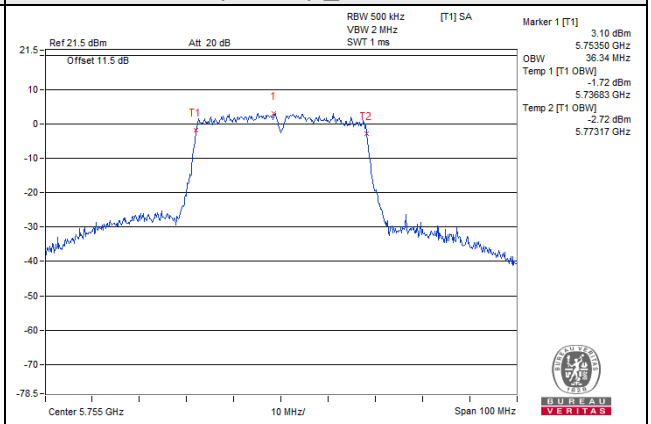
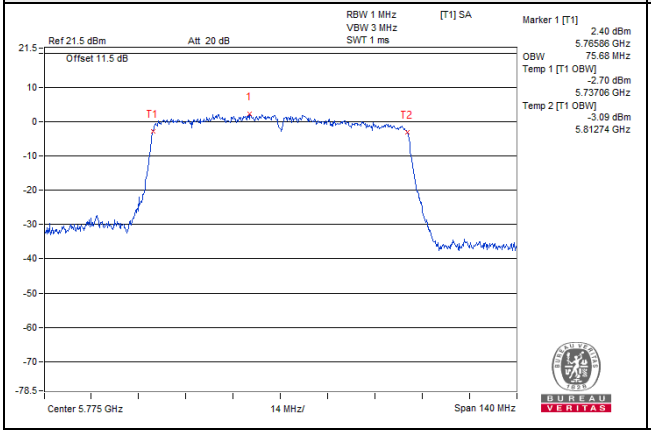
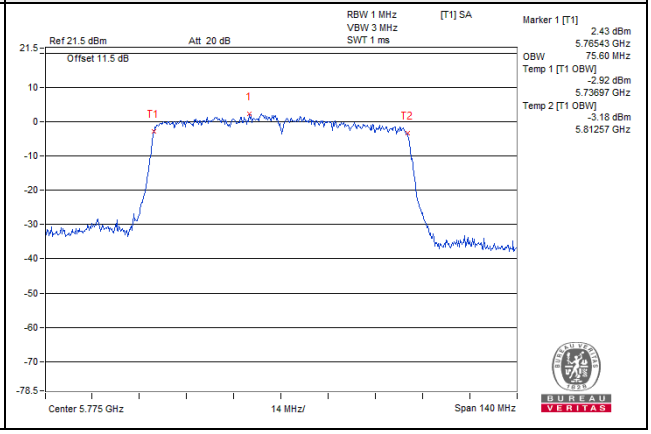
802.11ac (VHT80)



Spectrum Plot for near By DFS Band	
802.11a_ Chain 0 / CH 48	802.11a_ Chain 1 / CH 48
	
802.11ac (VHT20) _Chain 0 / CH 48	802.11ac (VHT20) _Chain 1 / CH 48
	

Spectrum Plot for near By DFS Band	
802.11ac (VHT40) _Chain 0 / CH 46	802.11ac (VHT40) _Chain 1 / CH 46
	
802.11ac (VHT80) _Chain 0 / CH 42	802.11ac (VHT80) _Chain 1 / CH 42
	

Spectrum Plot for near By DFS Band	
802.11a_ Chain 0 / CH 149	802.11a_ Chain 1 / CH 149
	
802.11ac (VHT20) _ Chain 0 / CH 149	802.11ac (VHT20) _ Chain 1 / CH 149
	

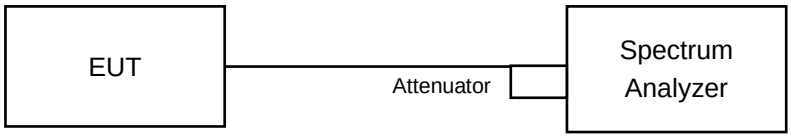
Spectrum Plot for near By DFS Band	
802.11ac (VHT40) _ Chain 0 / CH 151	802.11ac (VHT40) _ Chain 1 / CH 151
	
802.11ac (VHT80) _ Chain 0 / CH 155	02.11ac (VHT80) _ Chain 1 / CH 155
	

4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

For U-NII-1, U-NII-2A, U-NII-2C Band:
Using method SA-1
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Set Channel power measure = 1MHz
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
Using method SA-2
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Set Channel power measure = 1MHz
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. Record the max value and add 10 log (1/duty cycle).
For U-NII-3 band:
Duty cycle ≥ 98%
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 500 kHz, Set VBW ≥ 2 MHz, Detector = RMS
c. Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
Duty cycle <98%
a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 500 kHz, Set VBW ≥ 2 MHz, Detector = RMS
c. Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.
f. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

For U-NII-1, U-NII-2A, U-NII-2C:

802.11a

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	0.79	0.77	3.79	9.79	Pass
40	5200	0.57	0.70	3.65	9.79	Pass
48	5240	0.36	1.16	3.79	9.79	Pass
52	5260	0.64	1.45	4.07	9.79	Pass
60	5300	0.51	1.46	4.02	9.79	Pass
64	5320	1.25	1.71	4.50	9.79	Pass
100	5500	-0.33	-0.37	2.66	9.79	Pass
116	5580	-0.86	-0.67	2.25	9.79	Pass
140	5700	0.61	0.88	3.76	9.79	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 11-(7.21-6) = 9.79dBm.

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-1.12	-0.87	2.02	9.79	Pass
40	5200	-1.21	-0.80	2.01	9.79	Pass
48	5240	-1.26	-0.32	2.25	9.79	Pass
52	5260	-0.79	0.10	2.69	9.79	Pass
60	5300	-0.72	0.01	2.67	9.79	Pass
64	5320	0.01	0.50	3.27	9.79	Pass
100	5500	-1.86	-1.87	1.15	9.79	Pass
116	5580	-2.07	-1.61	1.18	9.79	Pass
140	5700	-0.83	-0.39	2.41	9.79	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 11-(7.21-6) = 9.79dBm.

802.11ac (VHT40)

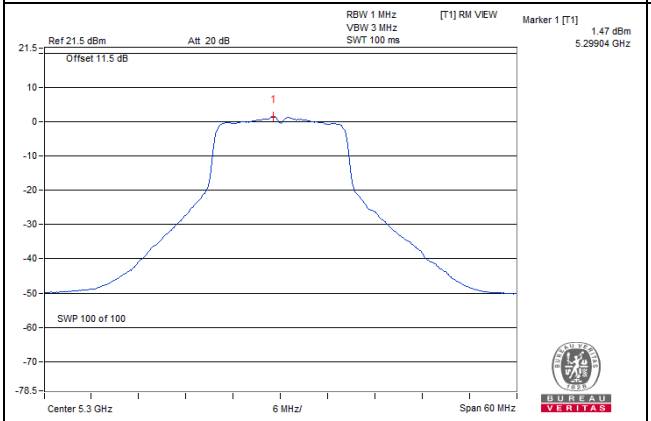
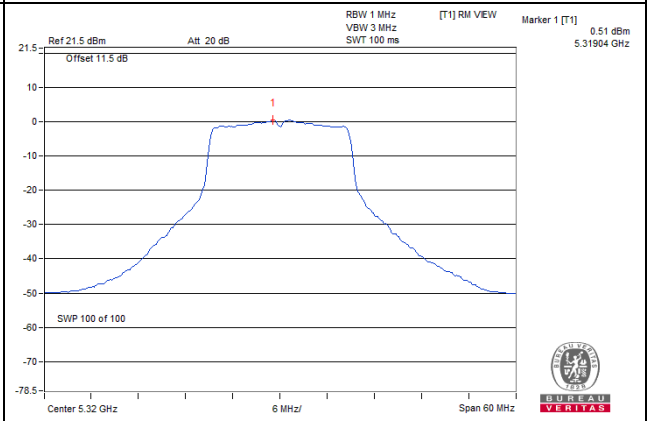
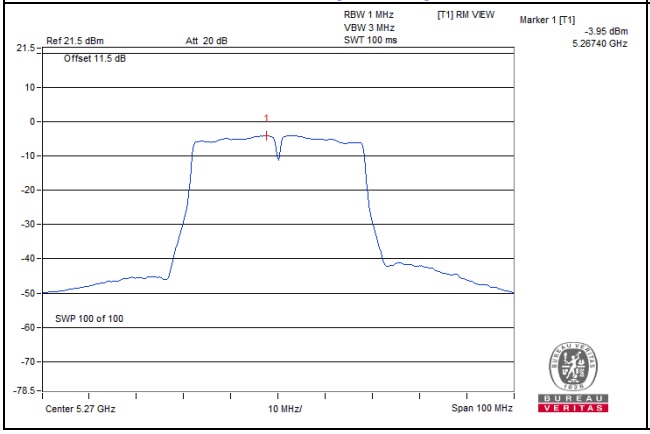
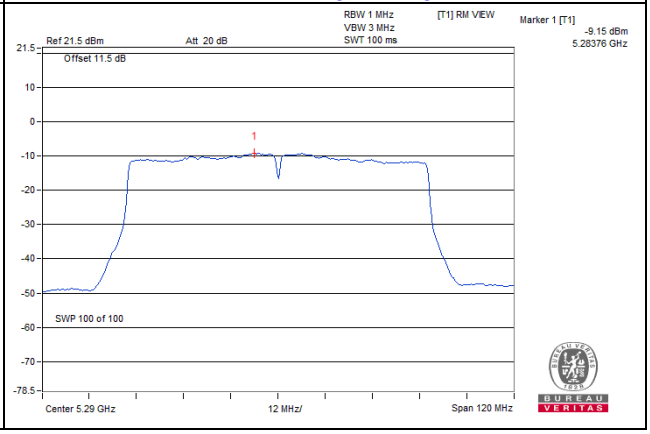
Chan.	Freq. (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-4.80	-4.76	0.13	-1.64	9.79	Pass
46	5230	-5.28	-4.71	0.13	-1.84	9.79	Pass
54	5270	-4.63	-3.96	0.13	-1.14	9.79	Pass
62	5310	-4.54	-4.08	0.13	-1.16	9.79	Pass
102	5510	-6.00	-6.40	0.13	-3.05	9.79	Pass
110	5550	-6.30	-6.32	0.13	-3.17	9.79	Pass
134	5670	-5.64	-4.77	0.13	-2.04	9.79	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 11-(7.21-6) = 9.79dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-9.72	-9.53	0.23	-6.38	9.79	Pass
58	5290	-9.58	-9.16	0.23	-6.12	9.79	Pass
106	5530	-10.76	-10.97	0.23	-7.62	9.79	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 11-(7.21-6) = 9.79dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a	**802.11ac (VHT20)**
	
802.11ac (VHT40)	**802.11ac (VHT80)**
	

For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1			
149	5745	-6.08	-5.80	-2.93	28.79	Pass
157	5785	-6.06	-6.19	-3.11	28.79	Pass
165	5825	-5.89	-6.42	-3.14	28.79	Pass

Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 30-(7.21-6) = 28.79dBm.

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1			
149	5745	-7.90	-7.77	-4.82	28.79	Pass
157	5785	-7.46	-7.40	-4.42	28.79	Pass
165	5825	-7.40	-7.90	-4.63	28.79	Pass

Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 30-(7.21-6) = 28.79dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1				
151	5755	-11.79	-11.81	0.13	-8.66	28.79	Pass
159	5795	-12.15	-12.34	0.13	-9.10	28.79	Pass

Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=7.21dBi > 6dBi, so the power density shall be reduced to 30-(7.21-6) = 28.79dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

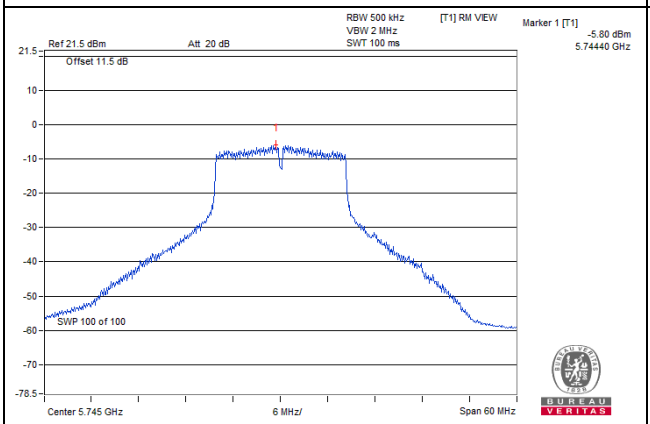
802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1				
155	5775	-16.69	-16.73	0.23	-13.47	28.79	Pass

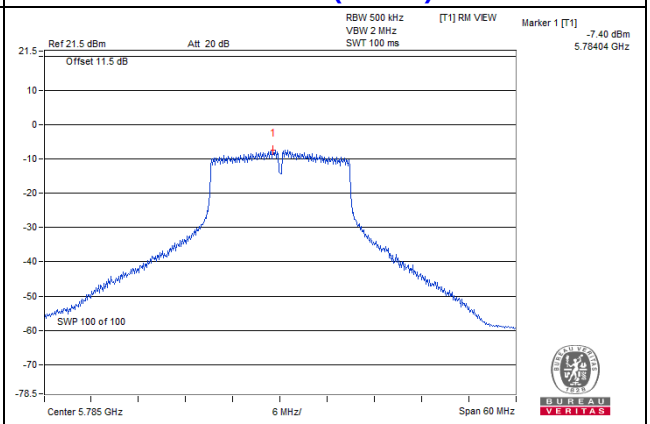
Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[(10$^{G1/20}$ + 10$^{G2/20}$ + ... + 10$^{GN/20}$)^2/2]=7.21dBi > 6dBi, so the power density shall be reduced to 30-(7.21-6) = 28.79dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

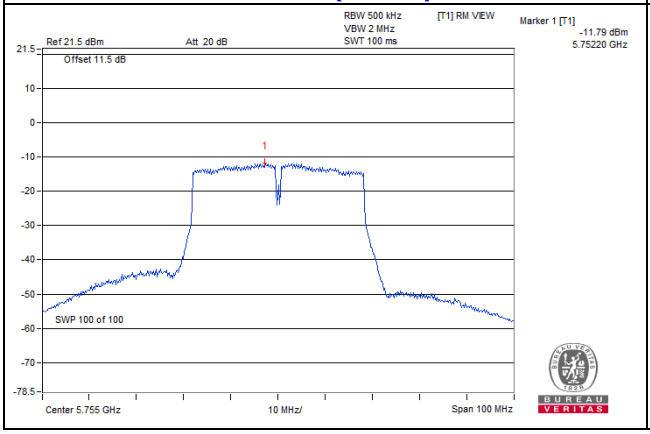
802.11a



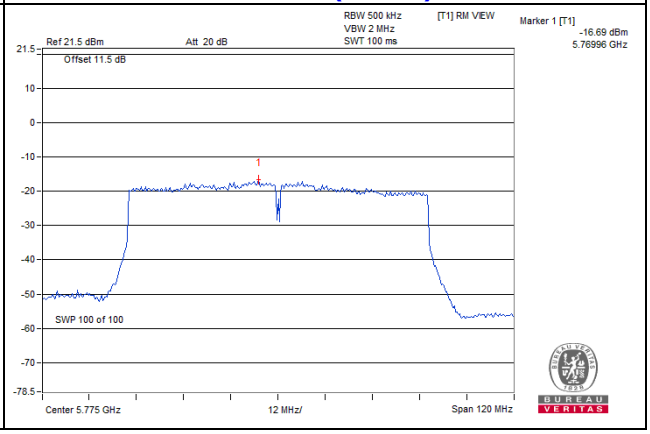
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)

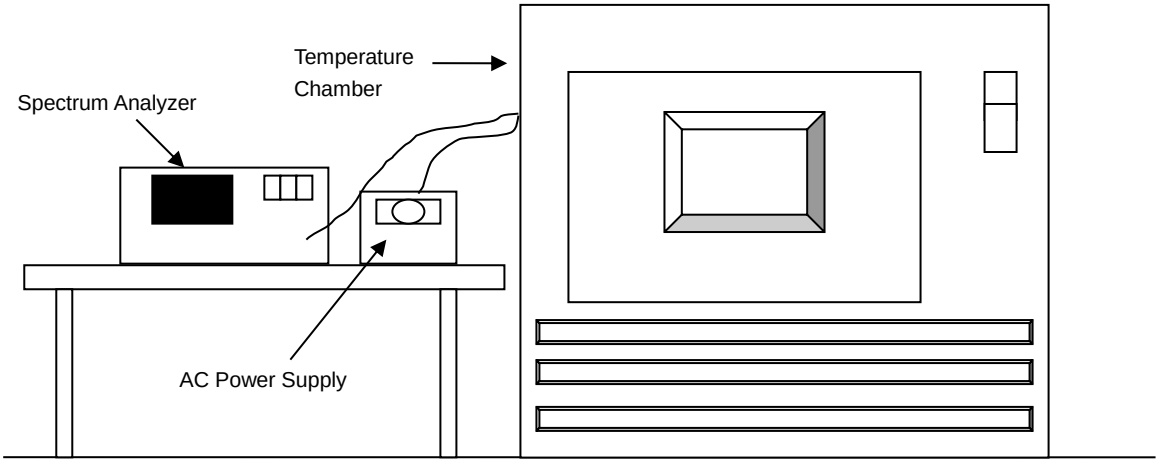


4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
ROHDE & SCHWARZ Spectrum Analyzer	FSV 40	101042	Sep. 8, 2020	Sep. 7, 2021
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 9, 2020	Sep. 8, 2021
DIGITAL POWER METER IDRC	CP-240	240515	Sep. 10, 2020	Sep. 9, 2021
AC Power Source ExTech	CFW-105	E000603	NA	NA

NOTE:1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested Date: May 31, 2021

4.6.4 Test Procedure

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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5180.0157	PASS	5180.0143	PASS	5180.0129	PASS	5180.0125	PASS
40	120	5179.9871	PASS	5179.9851	PASS	5179.9852	PASS	5179.988	PASS
30	120	5180.0015	PASS	5179.999	PASS	5180.0015	PASS	5180.0012	PASS
20	120	5179.9907	PASS	5179.9886	PASS	5179.9884	PASS	5179.991	PASS
10	120	5179.9742	PASS	5179.9762	PASS	5179.9724	PASS	5179.977	PASS
0	120	5179.9893	PASS	5179.9925	PASS	5179.9886	PASS	5179.9894	PASS
-10	120	5179.9967	PASS	5179.9971	PASS	5179.9972	PASS	5179.9954	PASS
-20	120	5180.0238	PASS	5180.0238	PASS	5180.0241	PASS	5180.0261	PASS
-30	120	5180.0165	PASS	5180.0122	PASS	5180.0166	PASS	5180.013	PASS

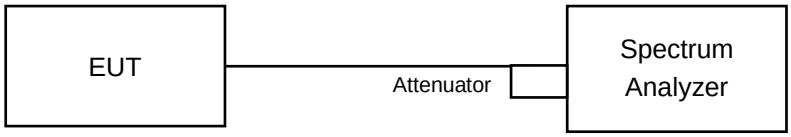
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5179.9915	PASS	5179.9886	PASS	5179.9894	PASS	5179.9901	PASS
	120	5179.9907	PASS	5179.9886	PASS	5179.9884	PASS	5179.991	PASS
	102	5179.9906	PASS	5179.9895	PASS	5179.9879	PASS	5179.9919	PASS

4.7 6dB Bandwidth Measurement

4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ROHDE & SCHWARZ Spectrum Analyzer	FSV40	101042	Sep. 8, 2020	Sep. 7, 2021

NOTE:1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested Date: Apr. 14, 2021

4.7.4 Test Procedure

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

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.7.7 Test Results

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	15.55	15.15	0.5	Pass
157	5785	15.39	15.22	0.5	Pass
165	5825	15.52	16.01	0.5	Pass

802.11ac (VHT20)

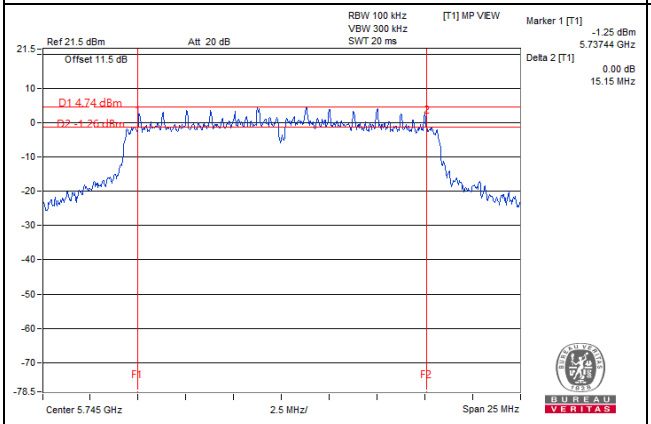
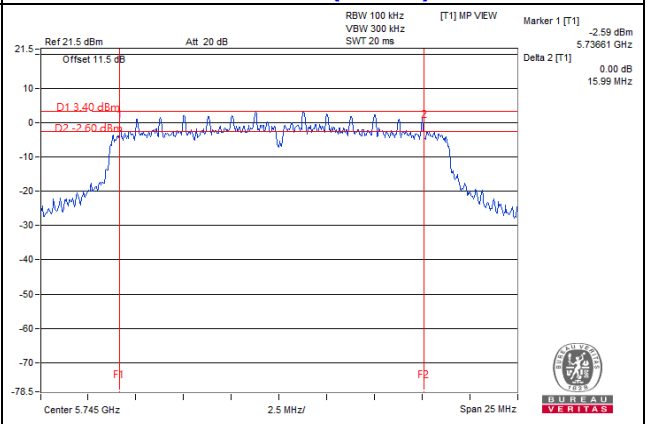
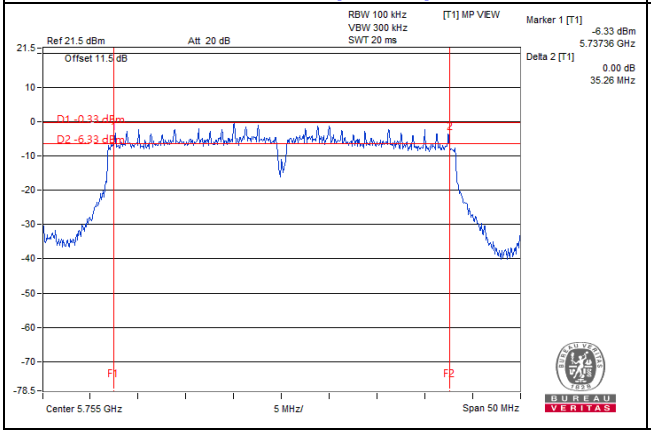
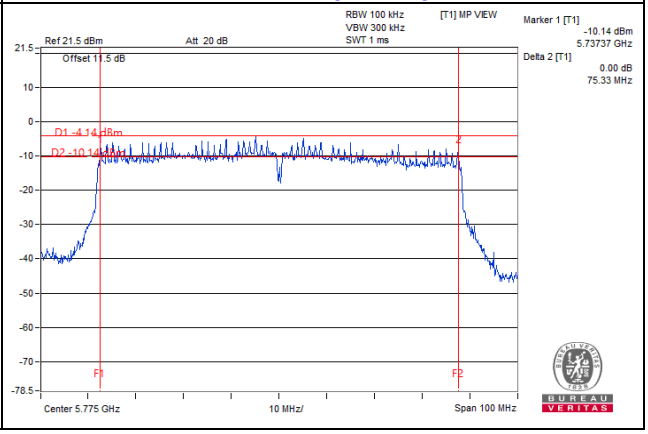
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	16.56	15.99	0.5	Pass
157	5785	16.03	16.55	0.5	Pass
165	5825	16.58	16.58	0.5	Pass

802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	35.81	35.26	0.5	Pass
159	5795	35.55	35.54	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	75.33	75.35	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	**802.11ac (VHT20)**
	
802.11ac (VHT40)	**802.11ac (VHT80)**
	

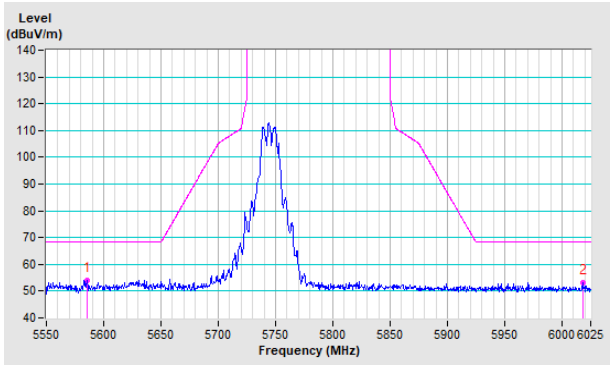
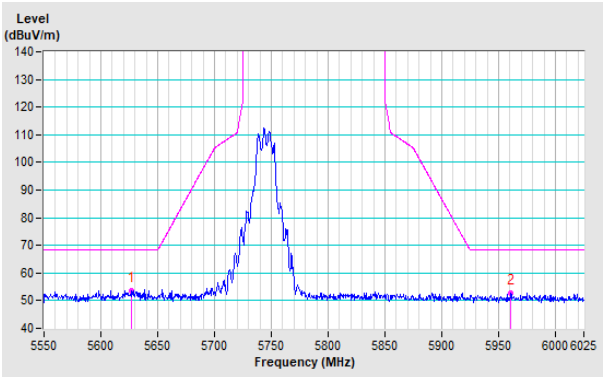
5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

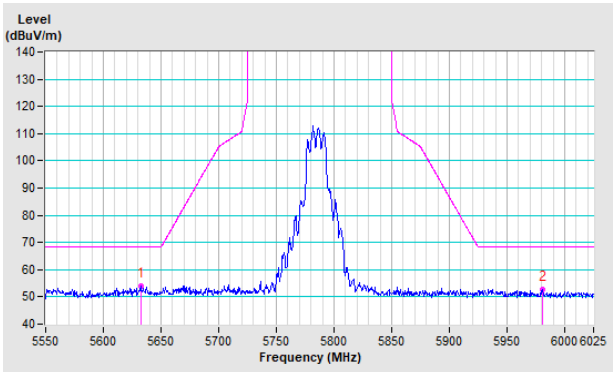
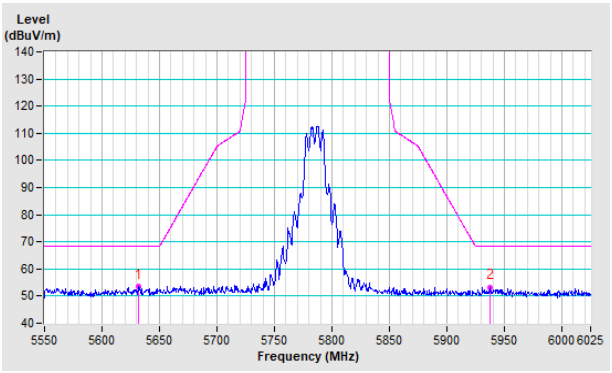
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a

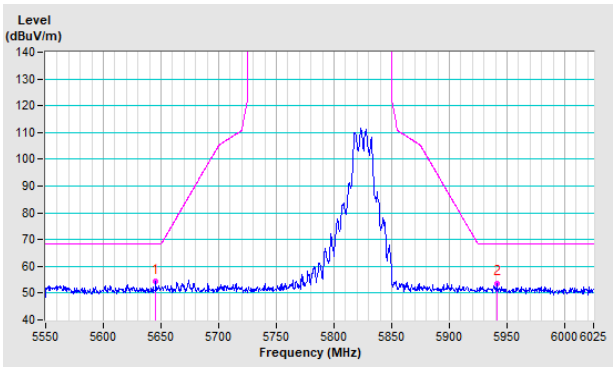
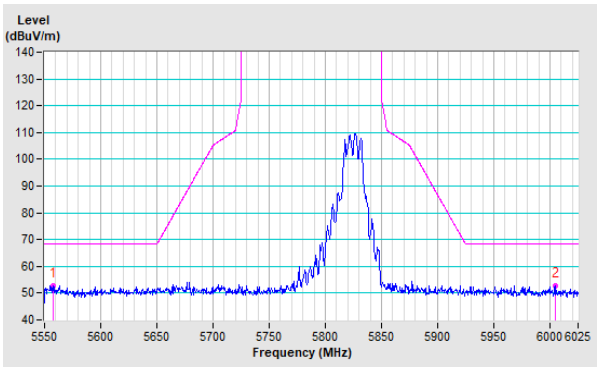
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

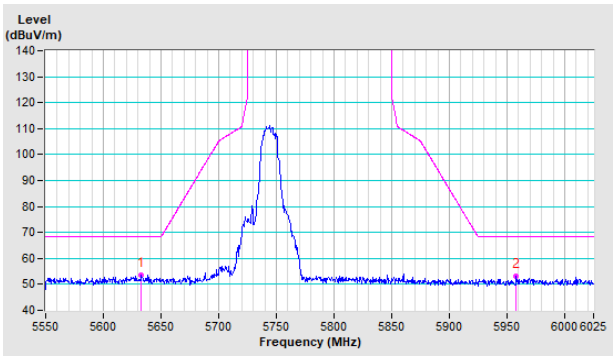
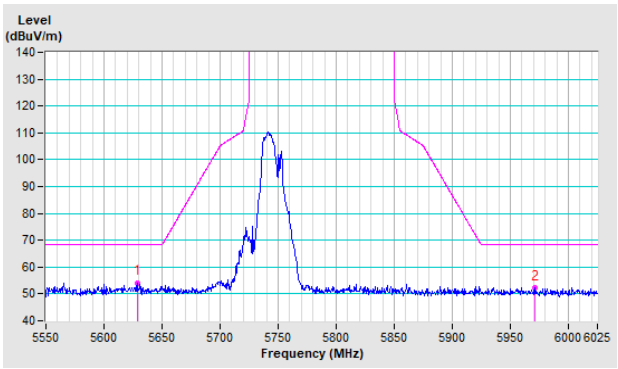
Horizontal	Vertical
	

CH 165 5825 MHz

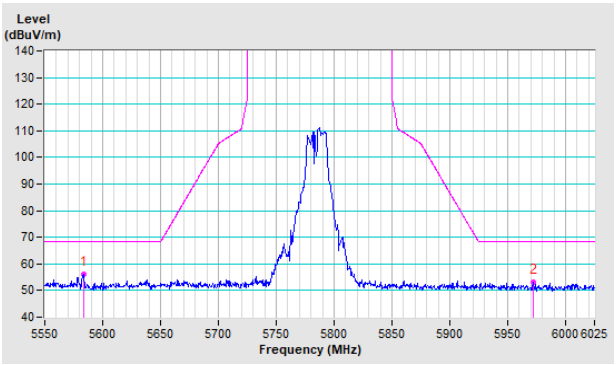
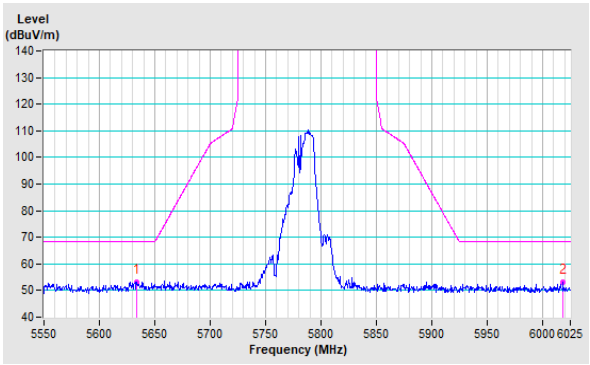
Horizontal	Vertical
	

802.11 ac (VHT20)

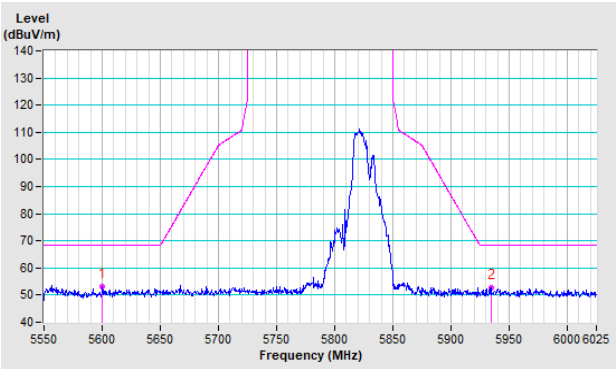
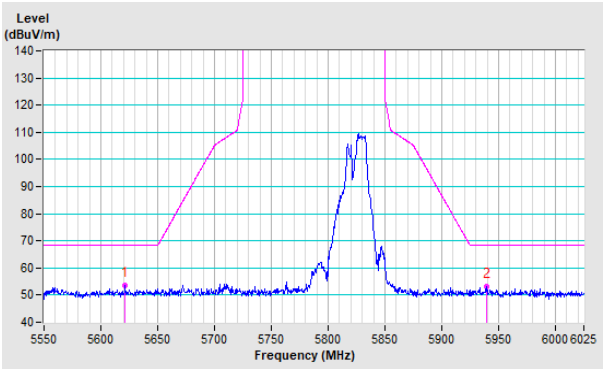
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

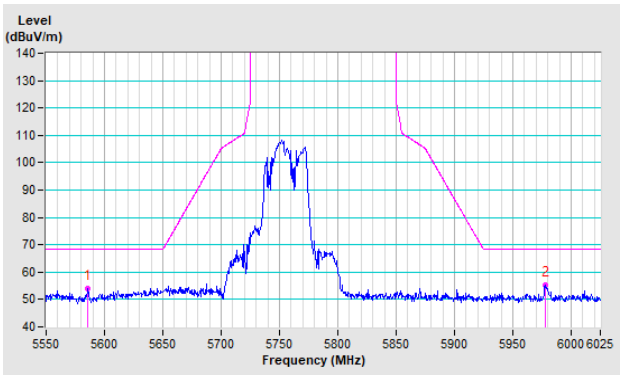
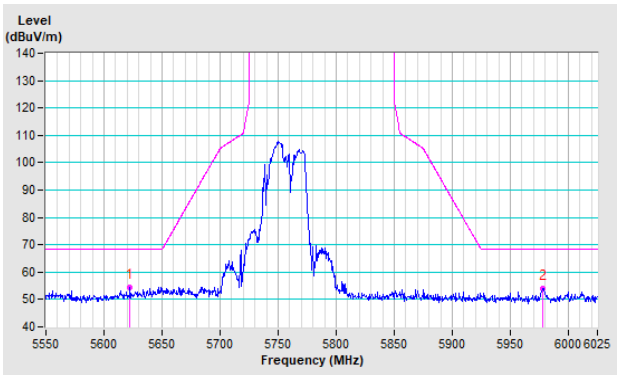
Horizontal	Vertical
	

CH 165 5825 MHz

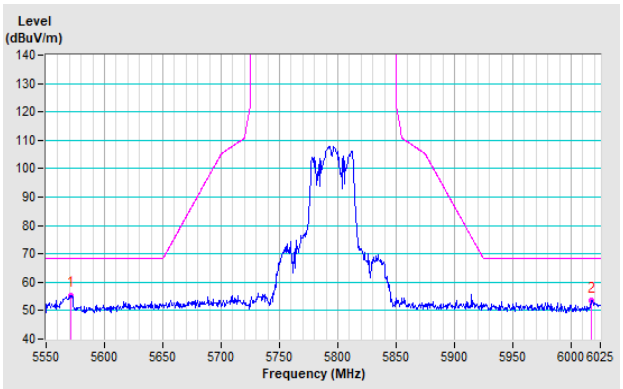
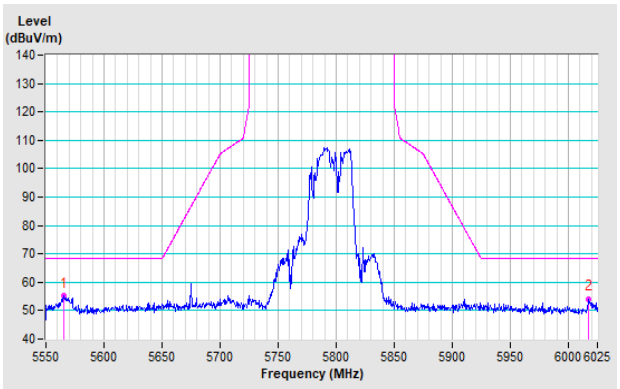
Horizontal	Vertical
	

802.11 ac (VHT40)

CH 151 5755 MHz

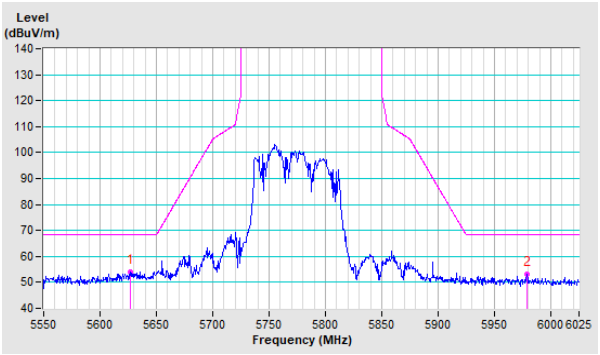
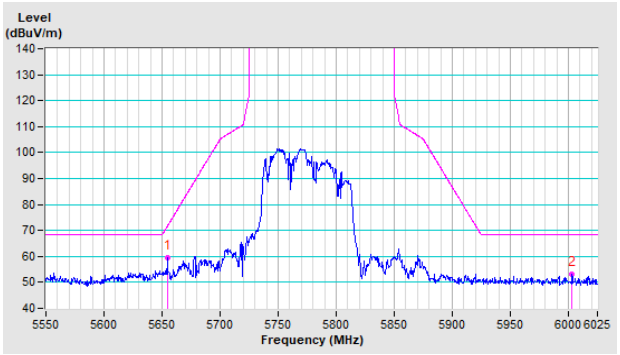
Horizontal	Vertical
	

CH 159 5795 MHz

Horizontal	Vertical
	

802.11 ac (VHT80)

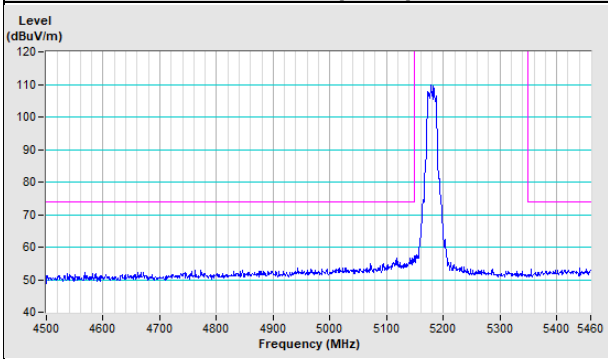
CH 155 5775 MHz

Horizontal	Vertical
	

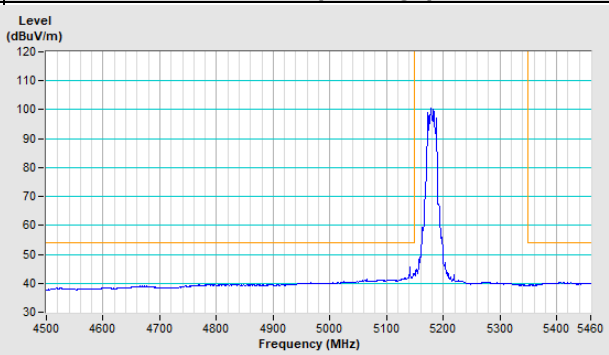
Annex B- Band Edge Measurement

802.11a Channel 36

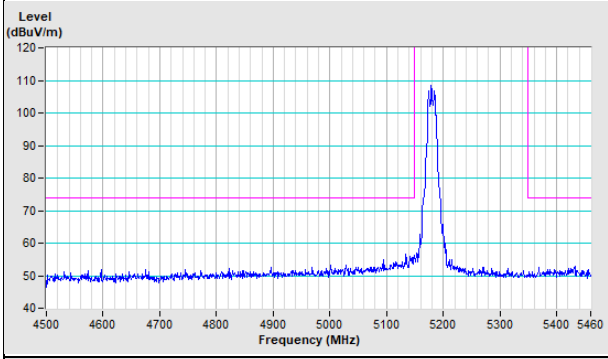
Horizontal (Peak)



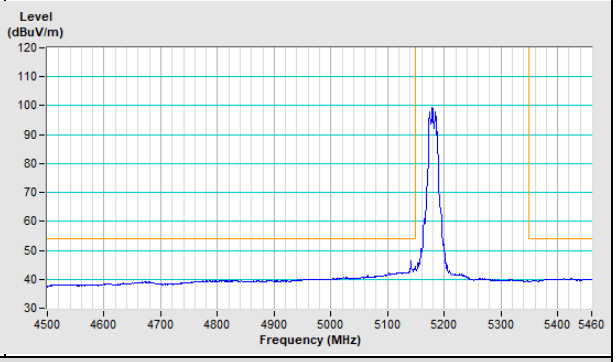
Horizontal (Average)



Vertical (Peak)

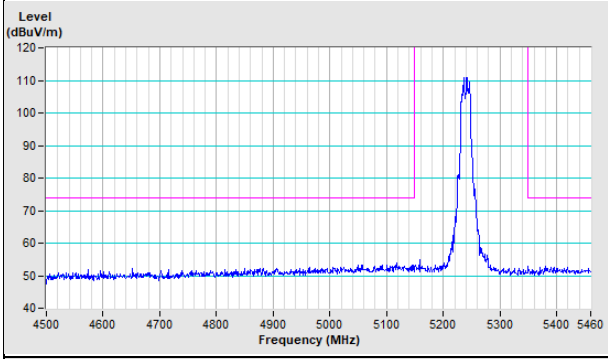


Vertical (Average)

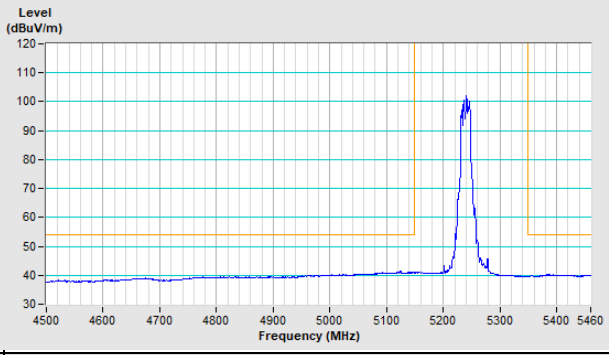


802.11a Channel 48

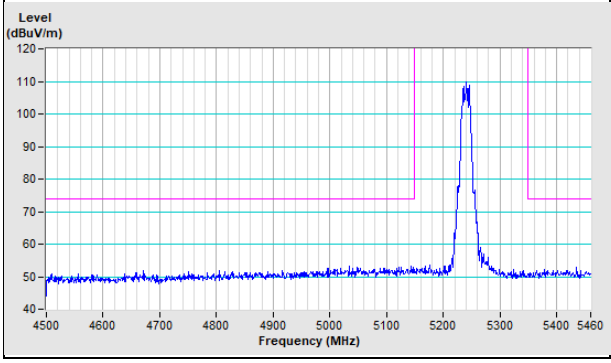
Horizontal (Peak)



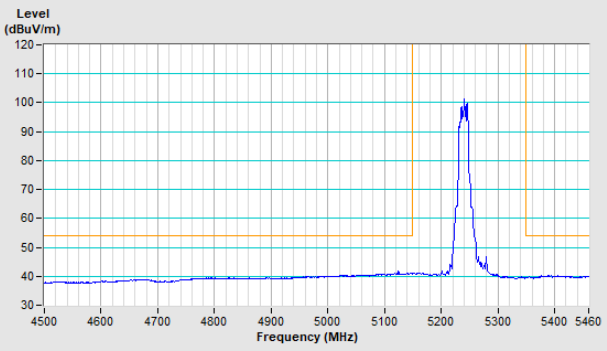
Horizontal (Average)

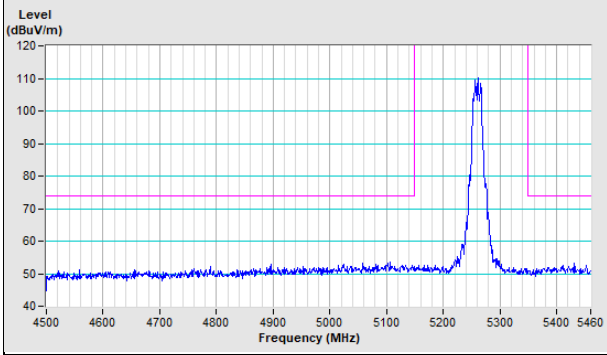
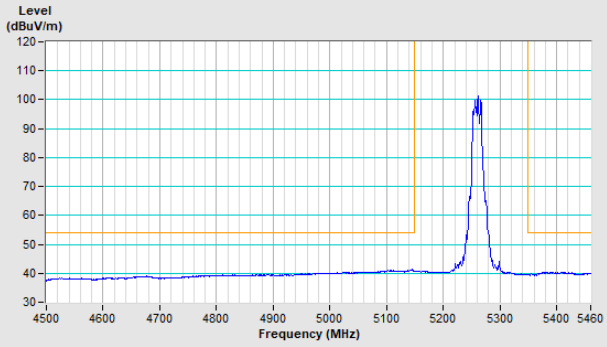
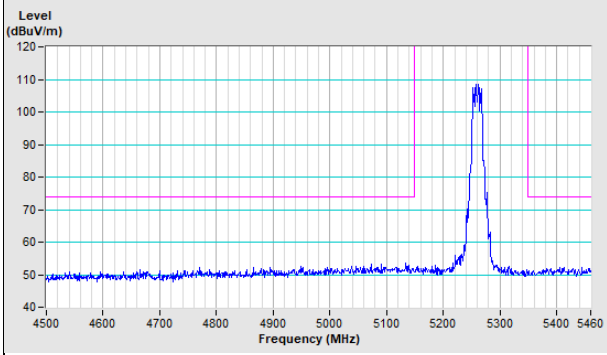
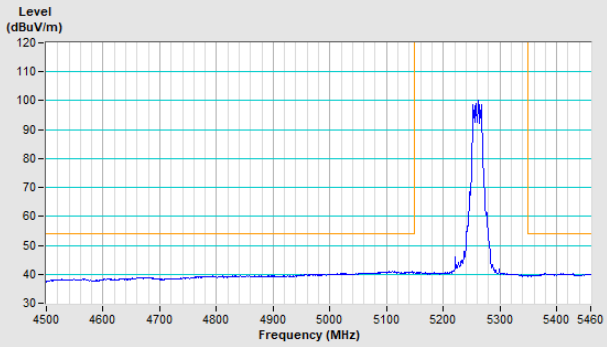
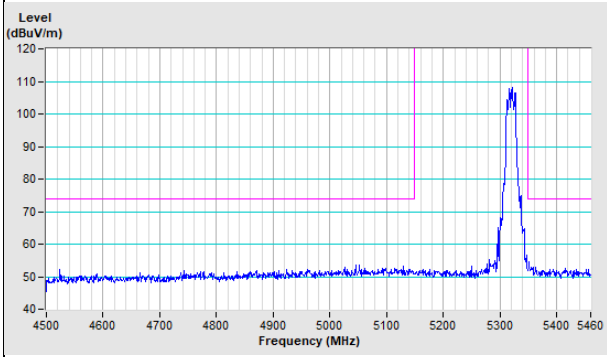
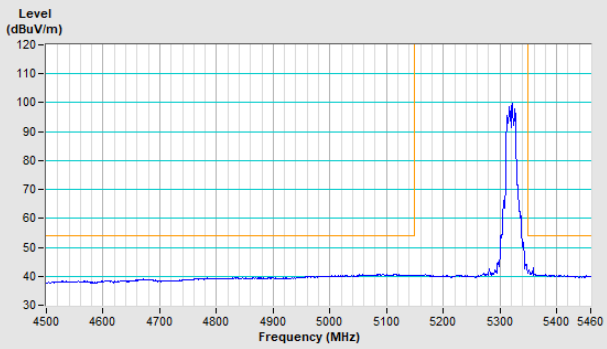
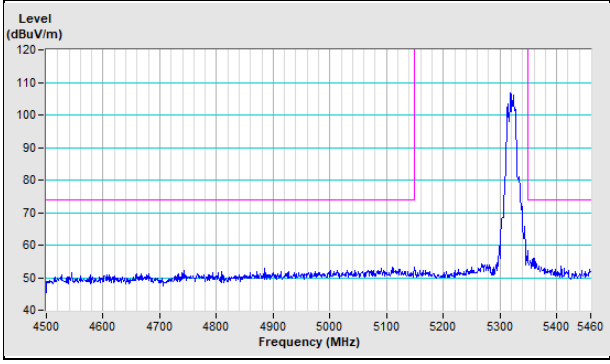
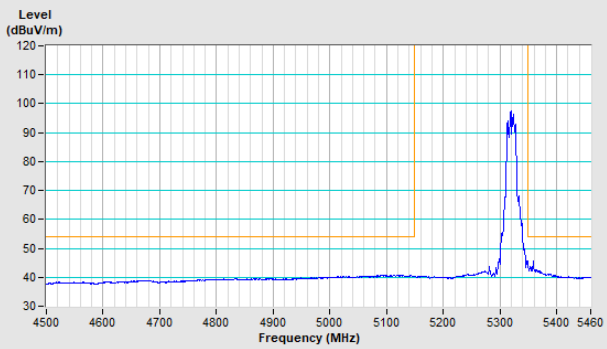


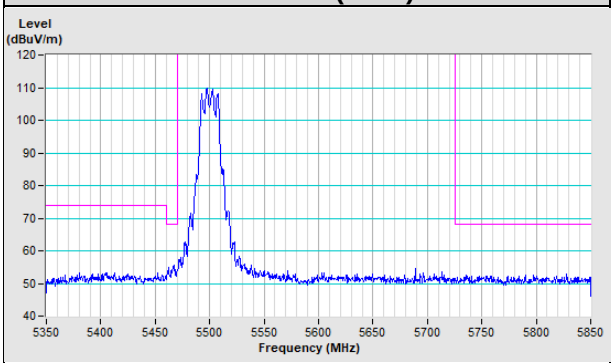
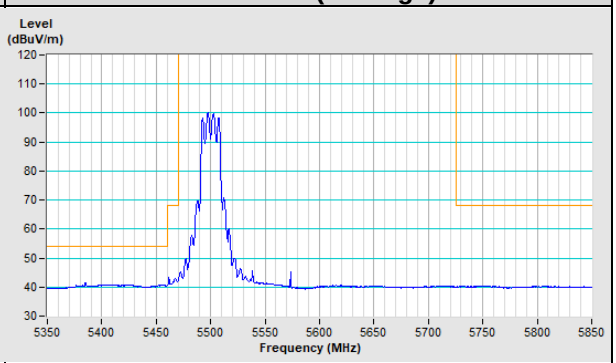
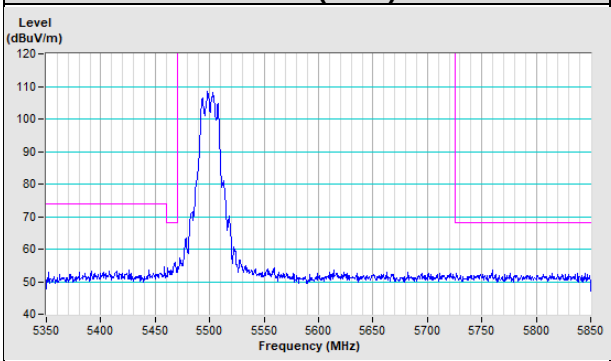
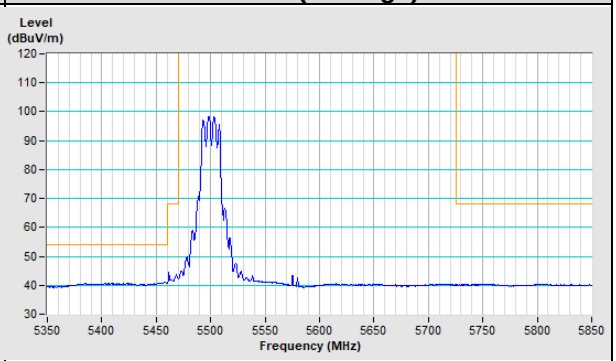
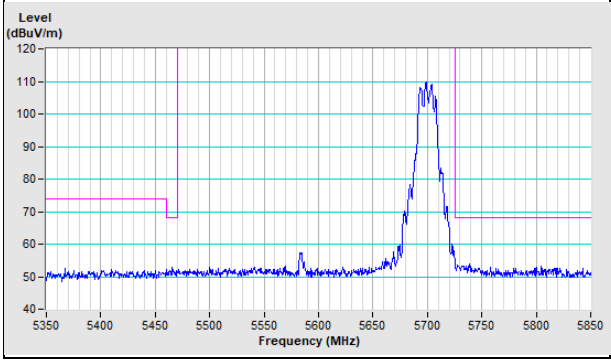
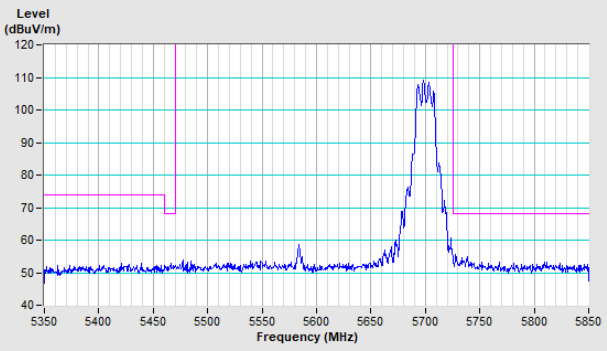
Vertical (Peak)

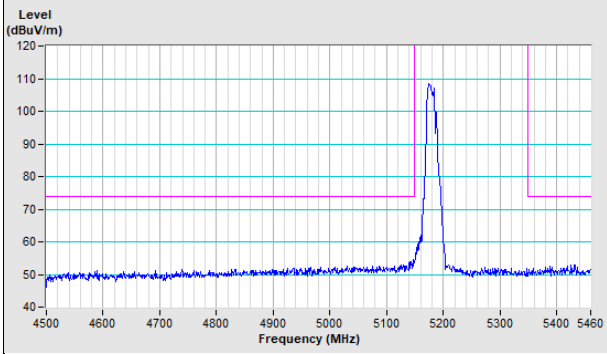
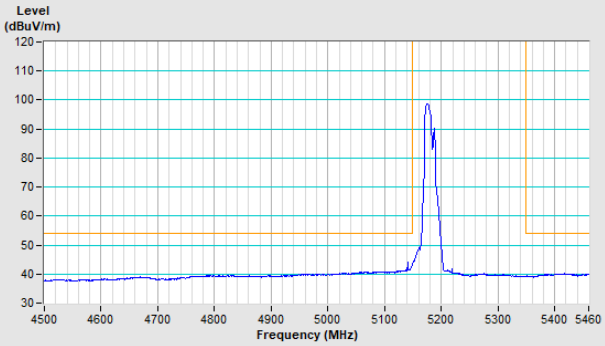
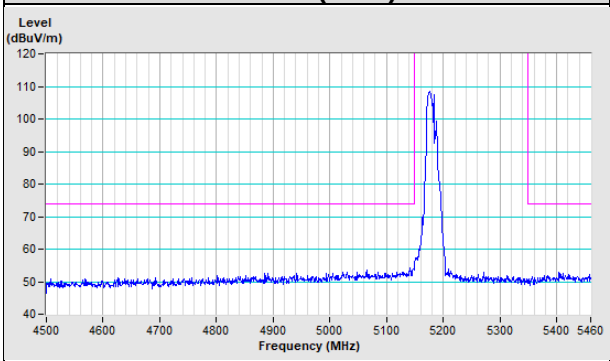
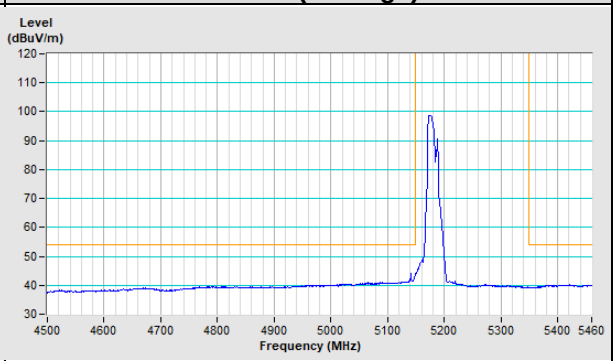
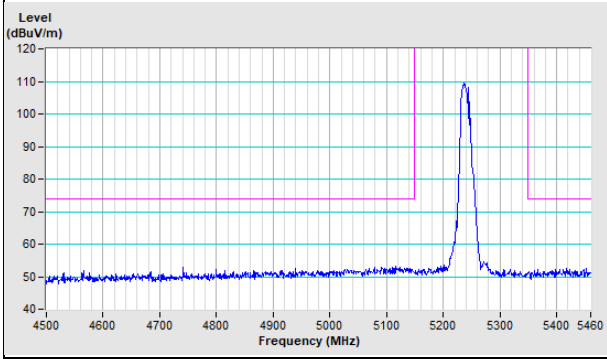
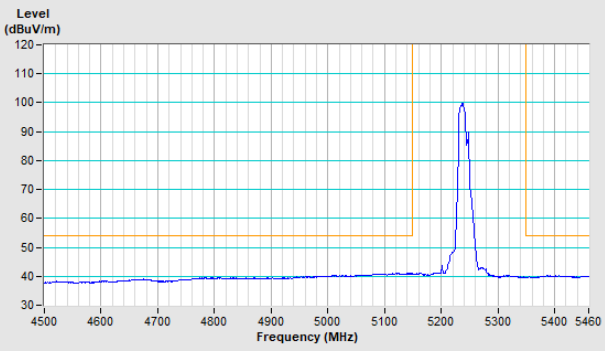
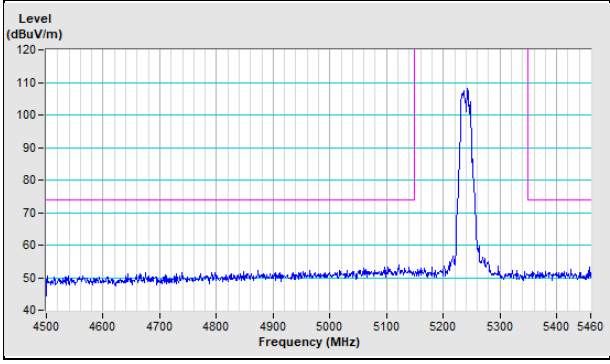
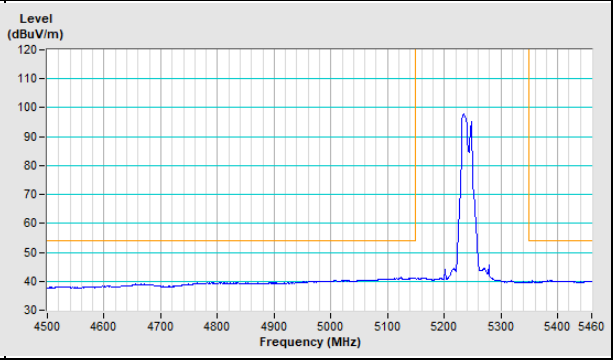


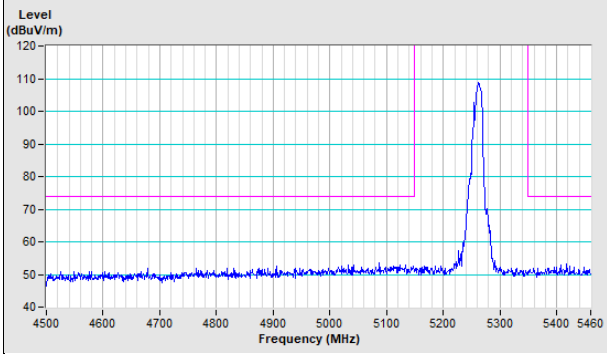
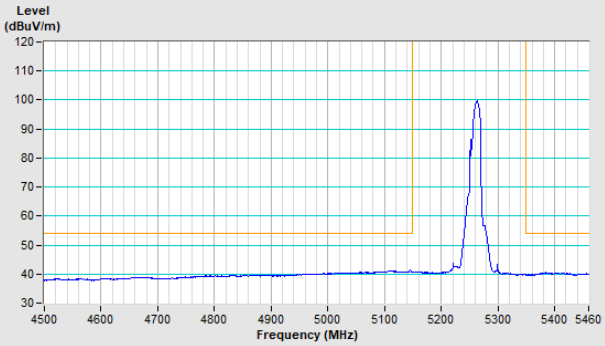
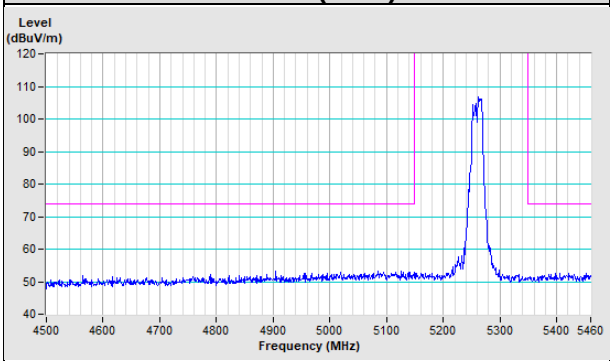
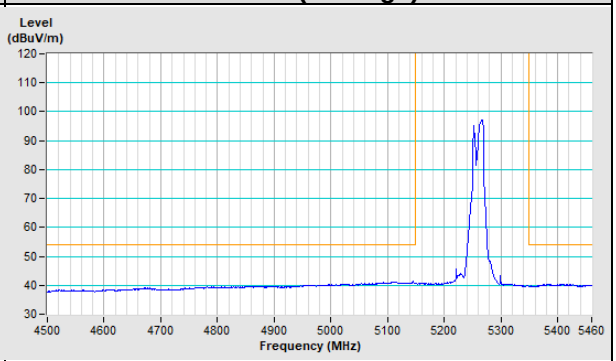
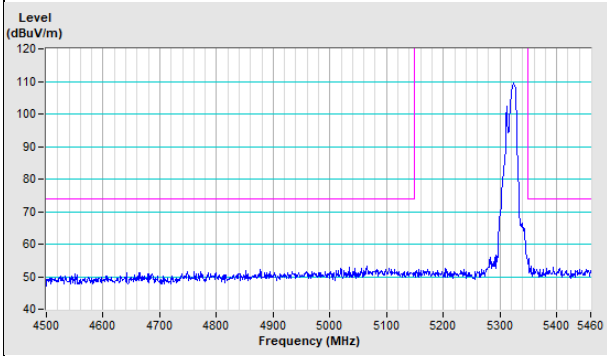
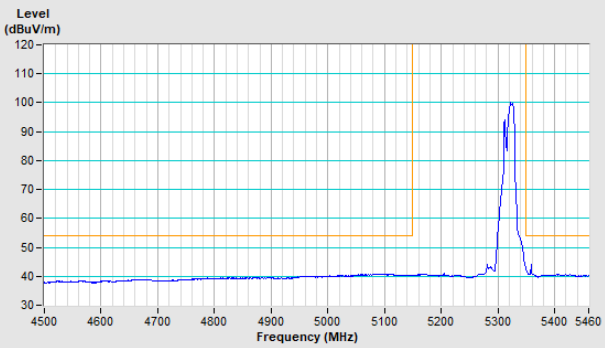
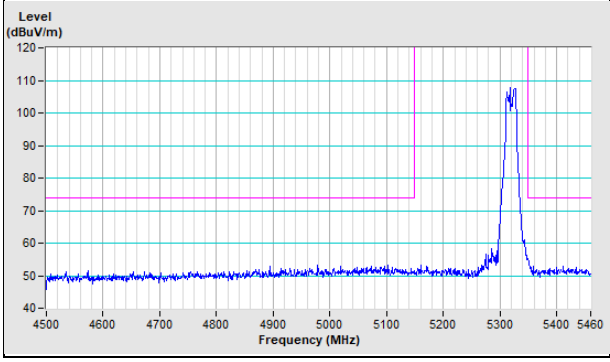
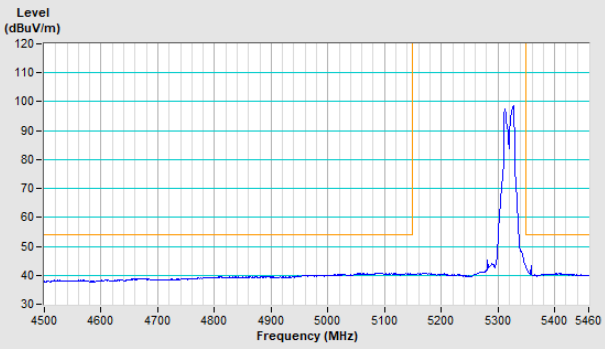
Vertical (Average)

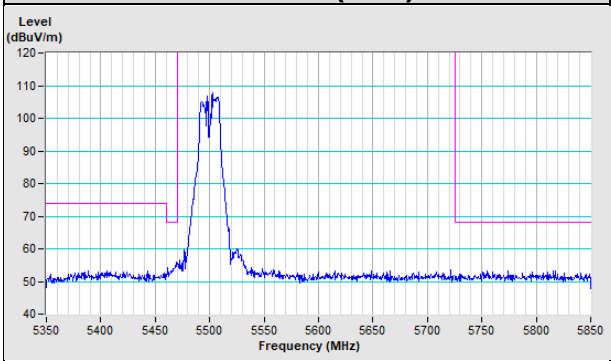
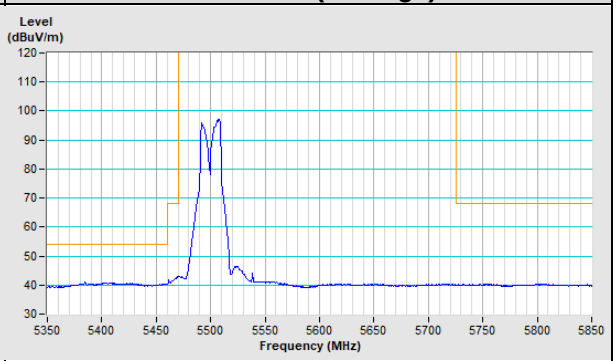
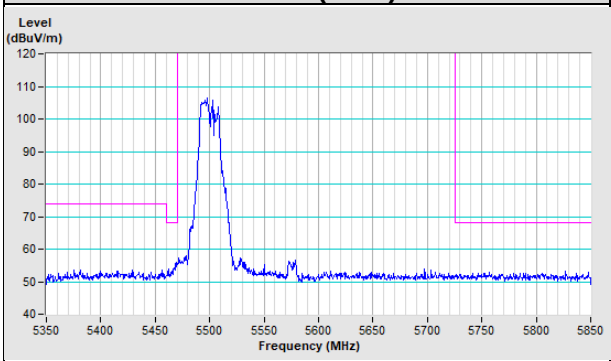
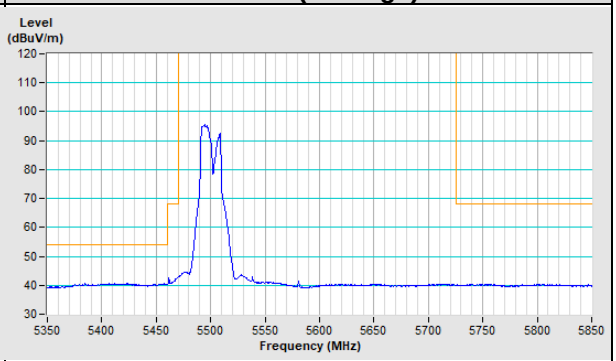
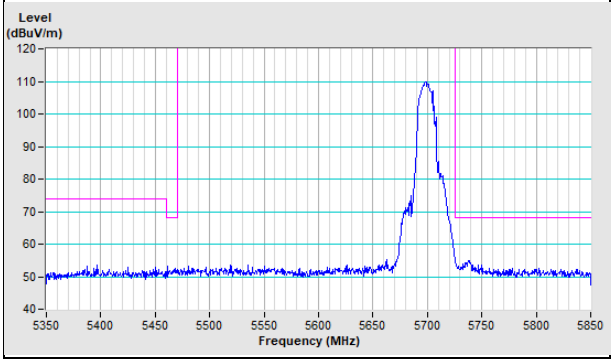
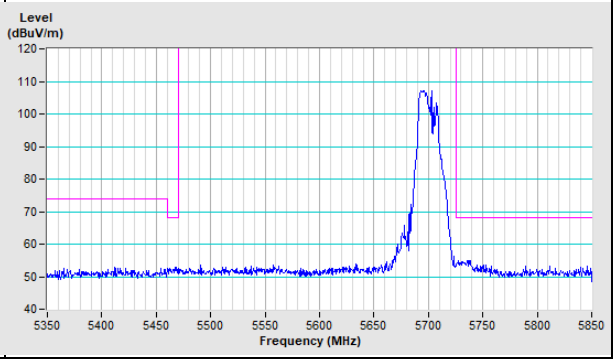


802.11a Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11a Channel 100	
Horizontal (Peak)	**Horizontal (Average)**
	
Vertical (Peak)	**Vertical (Average)**
	
802.11a Channel 140	
Horizontal (Peak)	**Vertical (Peak)**
	

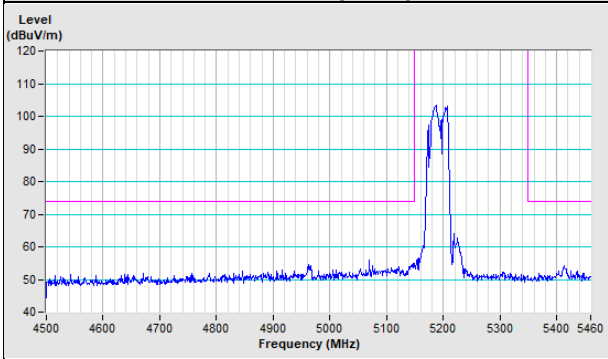
802.11ac (VHT20) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT20) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ac (VHT20) Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT20) Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

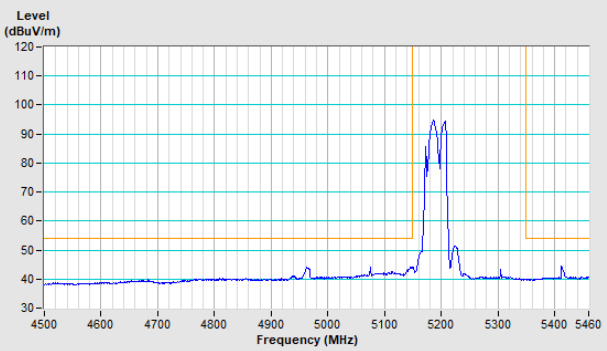
802.11ac (VHT20) Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT20) Channel 140	
Horizontal (Peak)	Vertical (Peak)
	

802.11ac (VHT40) Channel 38

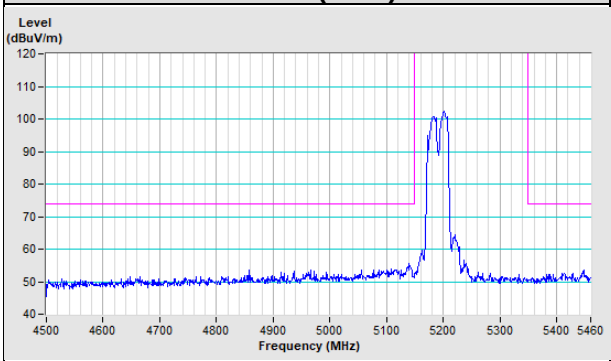
Horizontal (Peak)



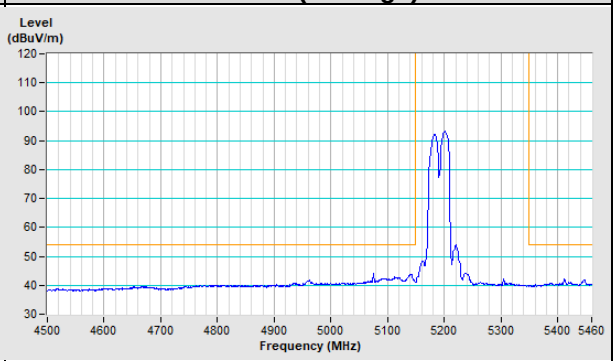
Horizontal (Average)



Vertical (Peak)

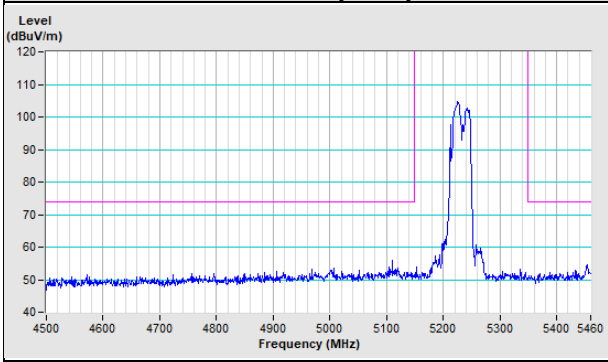


Vertical (Average)

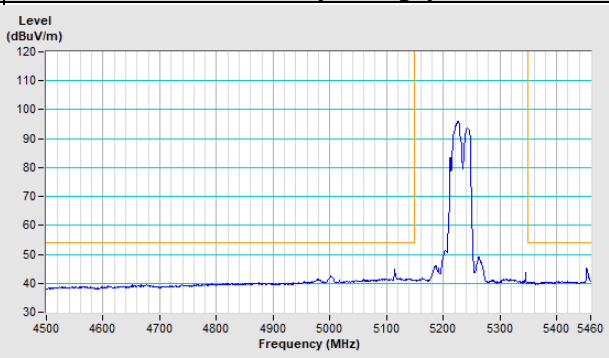


802.11ac (VHT40) Channel 46

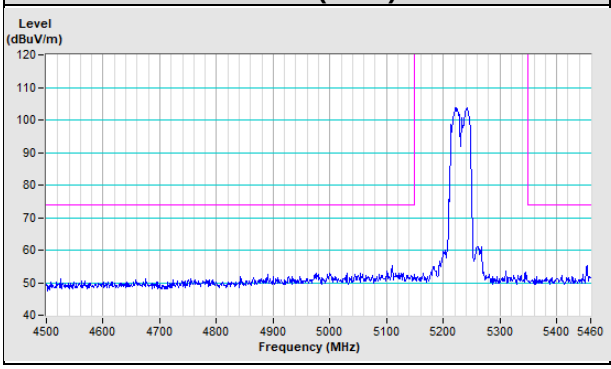
Horizontal (Peak)



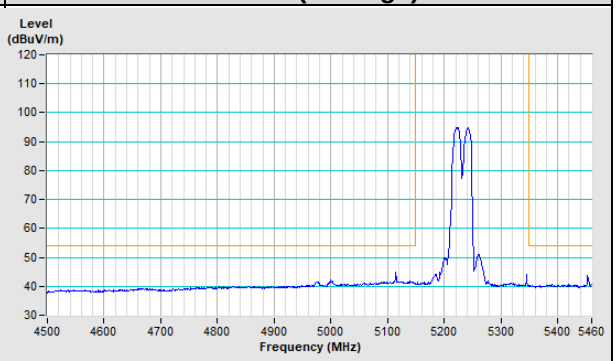
Horizontal (Average)

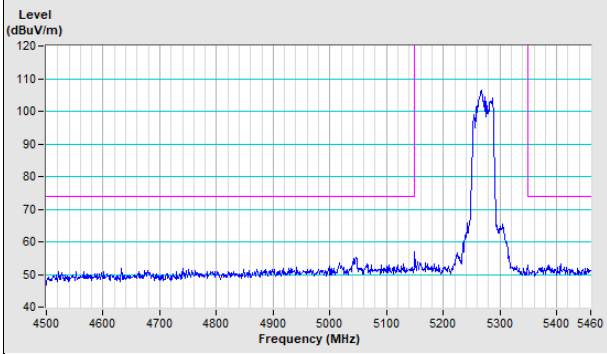
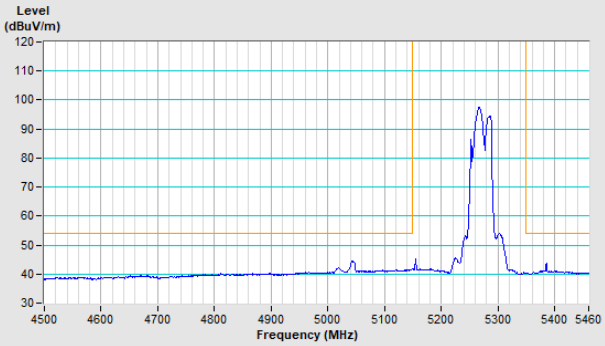
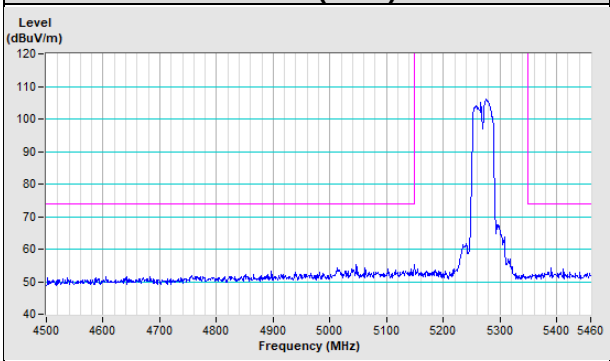
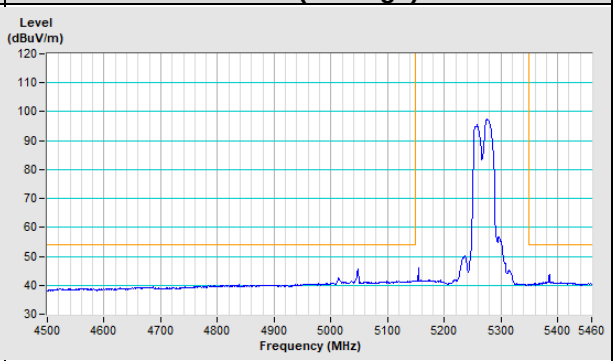
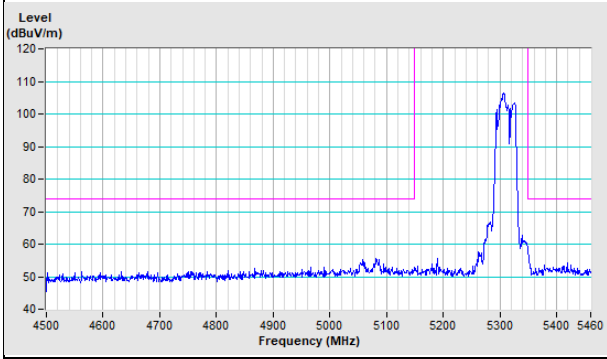
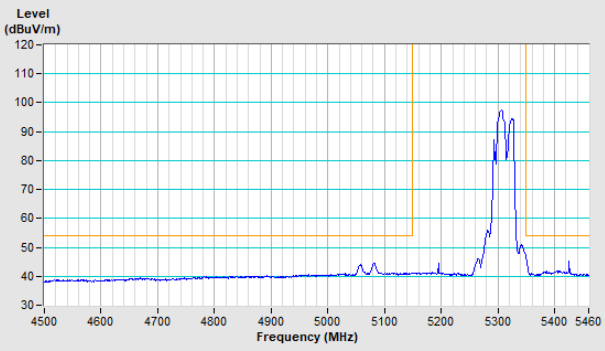
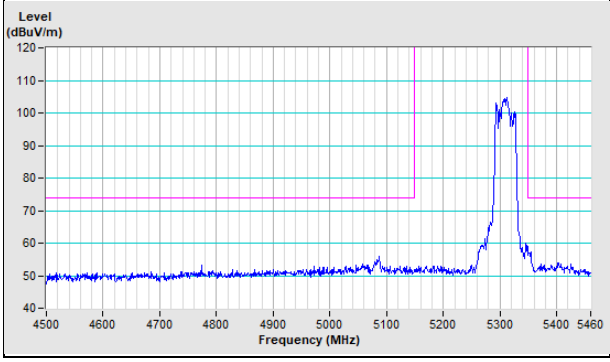
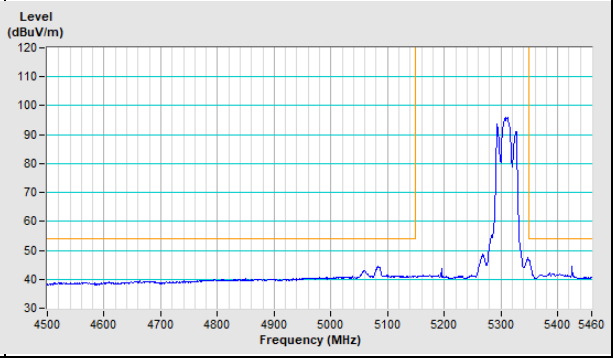


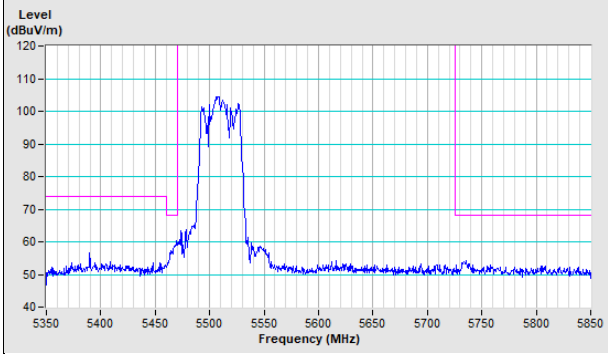
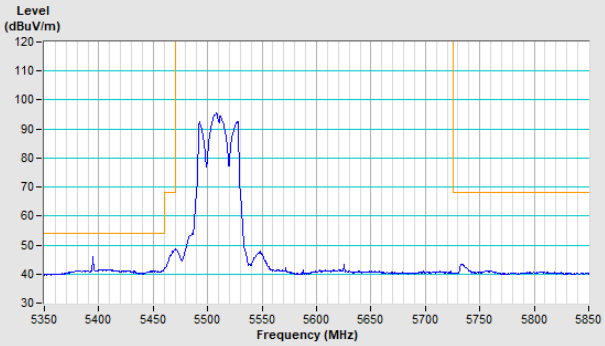
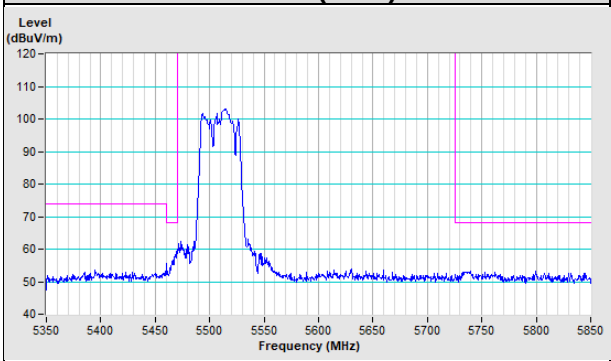
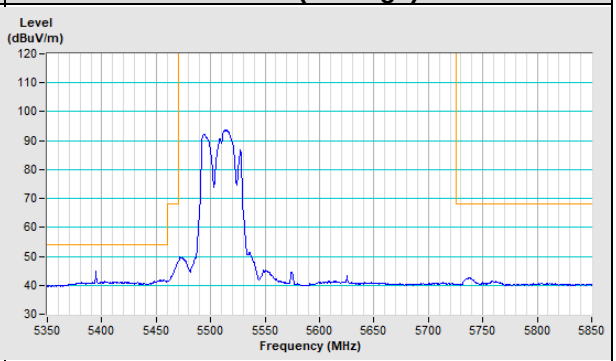
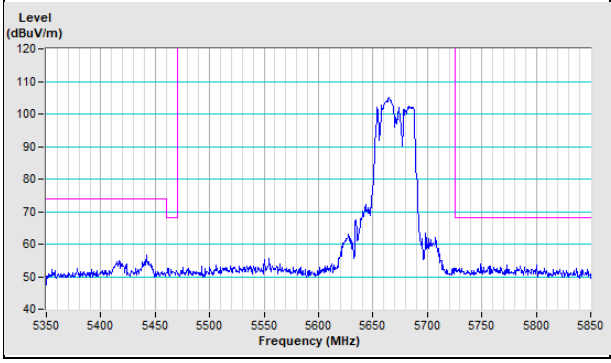
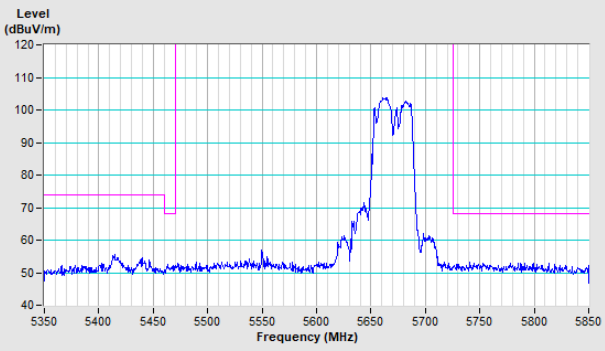
Vertical (Peak)

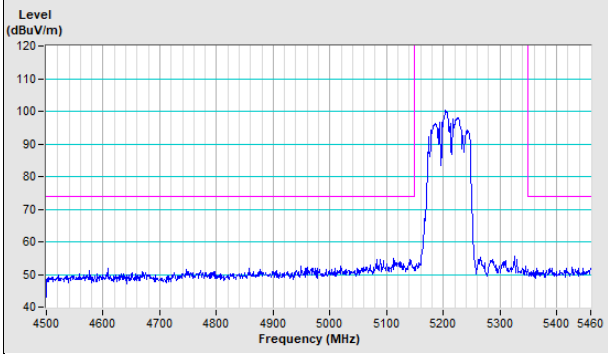
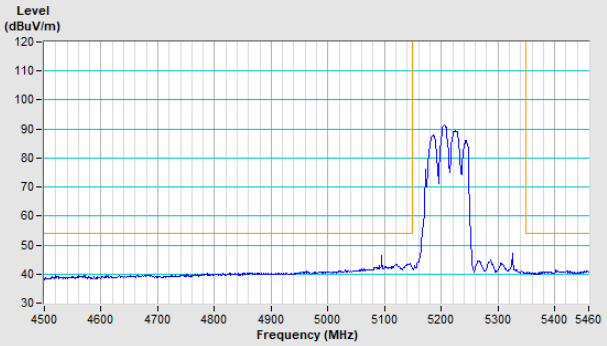
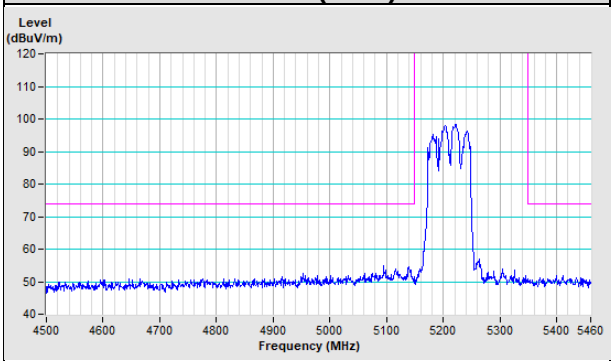
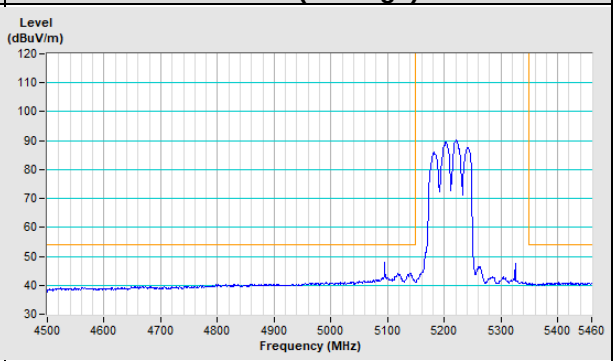
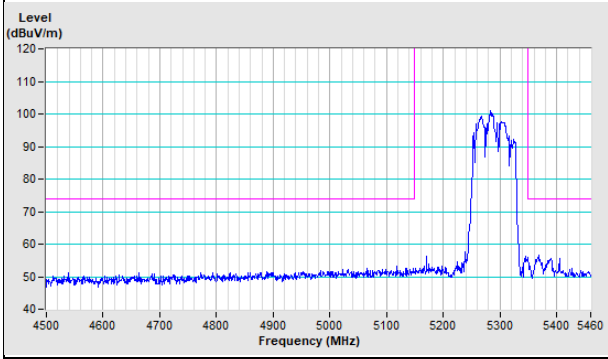
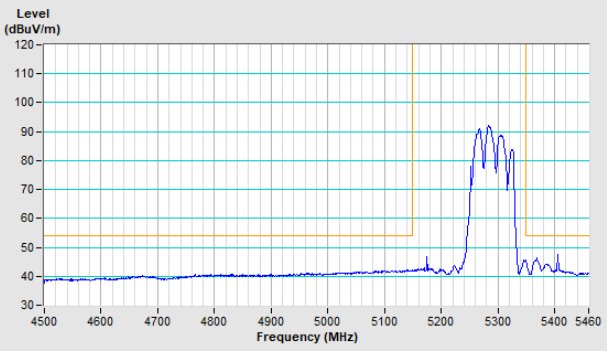
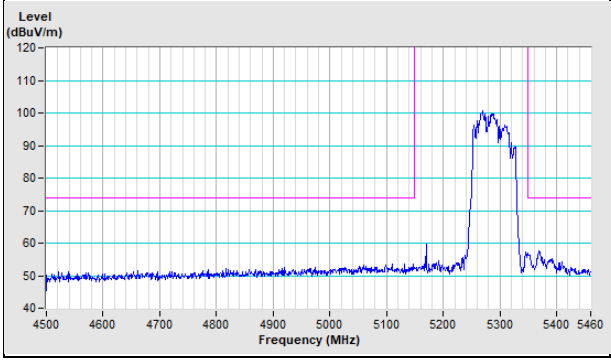
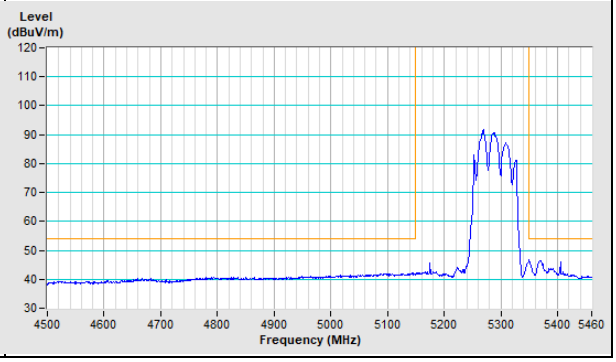


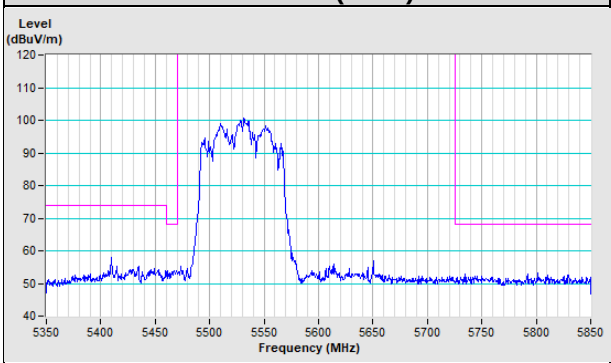
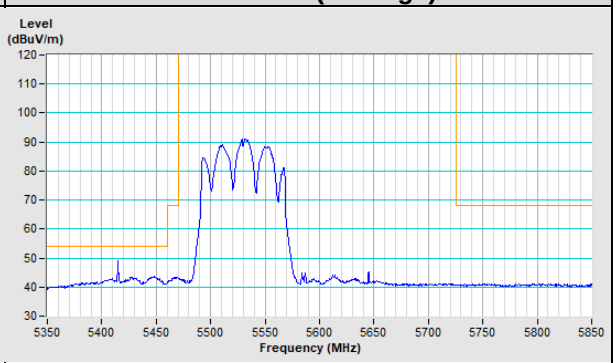
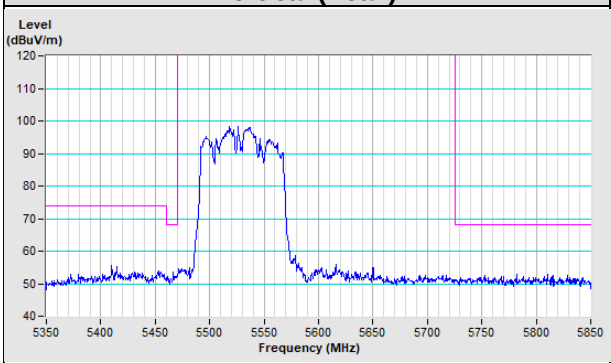
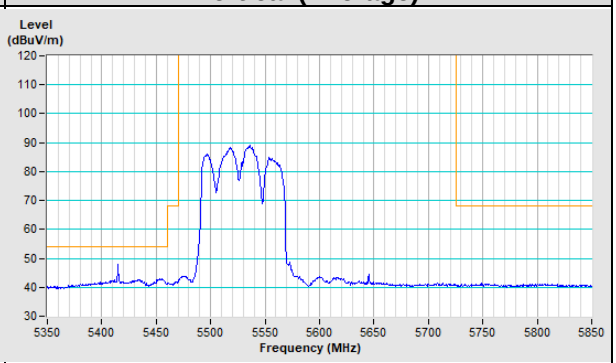
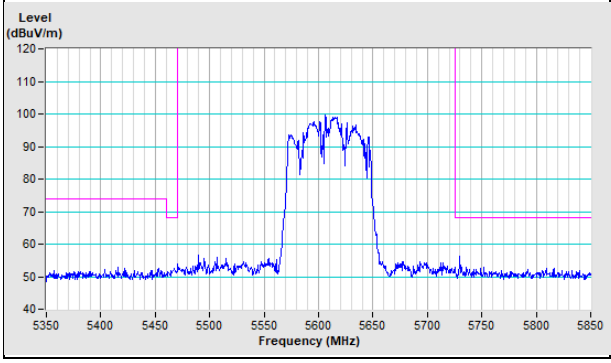
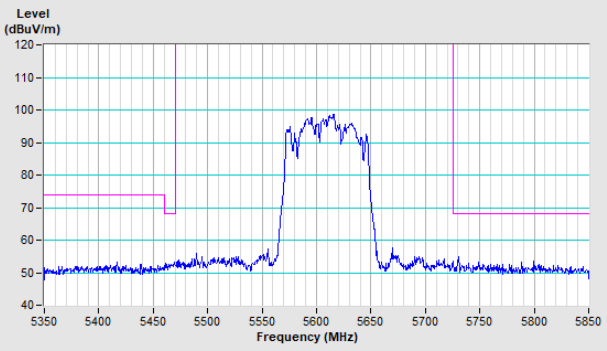
Vertical (Average)



802.11ac (VHT40) Channel 54	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT40) Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ac (VHT40) Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT40) Channel 134	
Horizontal (Peak)	Vertical (Peak)
	

802.11ac (VHT80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT80) Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ac (VHT80) Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT80) Channel 122	
Horizontal (Peak)	Vertical (Peak)
	

Appendix – 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 and approved according to ISO/IEC 17025.

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Web Site: www.bureauveritas-adt.com

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

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