FCC Test Report

Report No.:	RFBDKX-WTW-P21041107-1
FCC ID:	K7SWDC010
Test Model:	WDC010
Received Date:	May 5, 2021
Test Date:	May 17 to Jun. 30, 2021
Issued Date:	Jun. 30, 2021
Applicant:	Belkin International, Inc.
Address:	12045 East Waterfront Drive, Playa Vista, CA. 90094, USA
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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Report Issue History Record

Issue No.	Description	Date Issued
RFBDKX-WTW-P21041107-1	Original release	Jun. 30, 2021

Release Control Record

Issue No.	Description	Date Issued
RFBDKX-WTW-P21041107-1	Original release	Jun. 30, 2021

1 Certificate of Conformity

Product:	Doorbell Camera
Brand:	wemo
Test Model:	WDC010
Sample Status:	Engineering sample
Applicant:	Belkin International, Inc.
Test Date:	May 17 to Jun. 30, 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 : Annie Chang , **Date:** Jun. 30, 2021

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Jun. 30, 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 -18.86dB at 8.19531MHz.
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 -1.35dB at 5150.00MHz.
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 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	3.00 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	Doorbell Camera
Brand	wemo
Test Model	WDC010
Driver version	1.0.2
Power Supply Rating	3.8Vdc from Battery or 16-24Vac
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: 57.651mW 5260~5320MHz: 62.369mW 5500~5700MHz: 67.095mW 5745~5825MHz: 141.591mW
Antenna Type	Refer to Note as below
Antenna Connector	Refer to Note as below
Accessory Device	Power Kit
Cable Supplied	N/A

Note:

1. The EUT uses following rechargeable battery.

Manufacturer	Polymer
Model	FT602025P
Rating	3.8Vdc

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

Modulation Mode	TX Function	RX Function
802.11a	1TX	1RX
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)

3. WLAN 2.4GHz and WLAN 5GHz technologies cannot transmit at same time.

4. The following antennas were provided to the EUT.

Frequency (MHz)	Ant. 1 Gain (dBi)	Ant. 2 Gain (dBi)	Antenna Type	Antenna Connector
2400	-1.1	0.8	PCB	I-pex
2450	-0.2	0.3		
2500	0.8	-1.0		
5150	2.9	2.6		
5250	3.6	3.8		
5350	3.8	4.0		
5725	4.5	2.9		
5850	4.5	3.6		

*802.11b/g/a use Ant. 1 and Ant. 2 diversity.

5. 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.

6. 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

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane**.

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	6.5
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	13.5
	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	6.5
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	13.5
	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	6.5
	802.11ac (VHT40)		102 to 134	102, 110, 134,	OFDM	13.5
	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	6.5
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	13.5
	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)
-	802.11ac (VHT20)	5180-5240	36 to 48	157	OFDM	6.5
-	802.11ac (VHT20)	5260-5320	52 to 64		OFDM	6.5
-	802.11ac (VHT20)	5500-5700	100 to 140		OFDM	6.5
-	802.11ac (VHT20)	5745-5825	149 to 165		OFDM	6.5

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)
-	802.11ac (VHT20)	5180-5240	36 to 48	157	OFDM	6.5
-	802.11ac (VHT20)	5260-5320	52 to 64		OFDM	6.5
-	802.11ac (VHT20)	5500-5700	100 to 140		OFDM	6.5
-	802.11ac (VHT20)	5745-5825	149 to 165		OFDM	6.5

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	6.5
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	13.5
	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	6.5
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	13.5
	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	6.5
	802.11ac (VHT40)		102 to 134	102, 110, 134,	OFDM	13.5
	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	6.5
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT80)		155	155	OFDM	MCS0

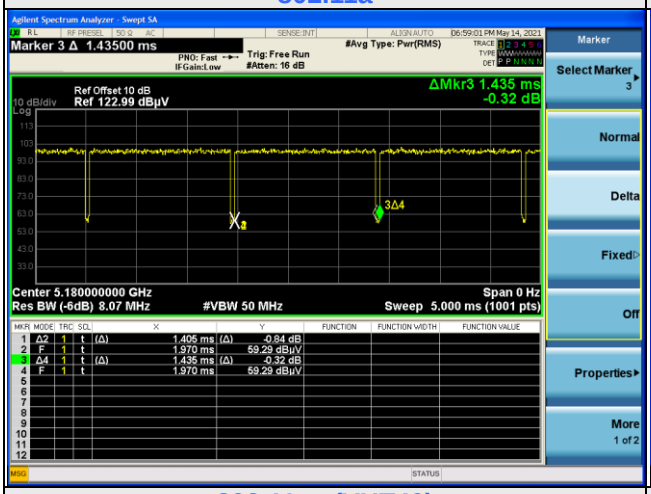
Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	21deg. C, 68%RH	120Vac, 60Hz	Ian Chang
RE<1G	21deg. C, 68%RH	120Vac, 60Hz	Ian Chang
PLC	21deg. C, 68%RH	120Vac, 60Hz	Vhenson Huang
APCM	25deg. C, 76%RH	120Vac, 60Hz	Pirar Hsieh

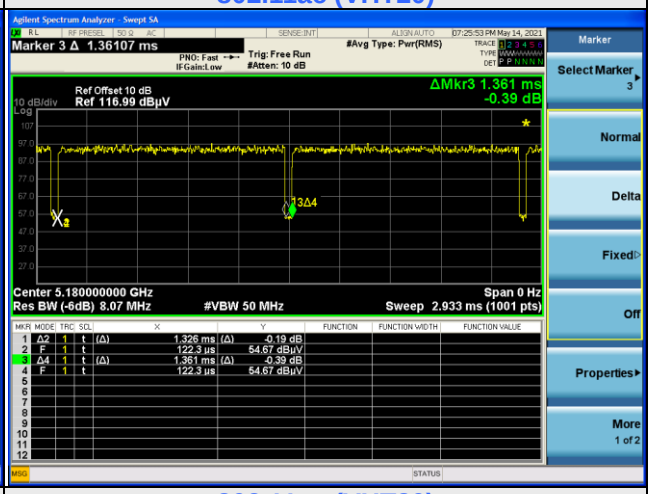
3.3 Duty Cycle of Test Signal

If duty cycle of test signal is ≥ 98 %, duty factor is not required.
If duty cycle of test signal is < 98%, duty factor shall be considered.
802.11a: Duty cycle = 1.405/1.435 = 0.979, Duty factor = 10 * log(1/0.979) = 0.09
802.11ac (VHT20): Duty cycle = 1.326/1.361 = 0.974, Duty factor = 10 * log(1/0.974) = 0.11
802.11ac (VHT40): Duty cycle = 0.660/0.696 = 0.948, Duty factor = 10 * log(1/0.948) = 0.23
802.11ac (VHT80): Duty cycle = 0.325/0.366 = 0.888, Duty factor = 10 * log(1/0.888) = 0.52

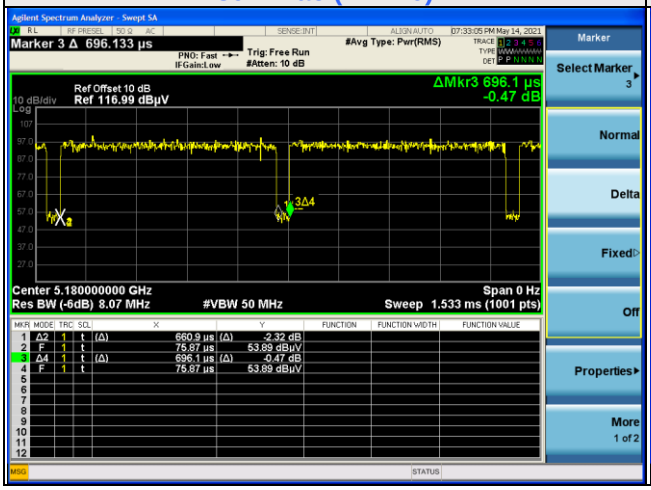
802.11a



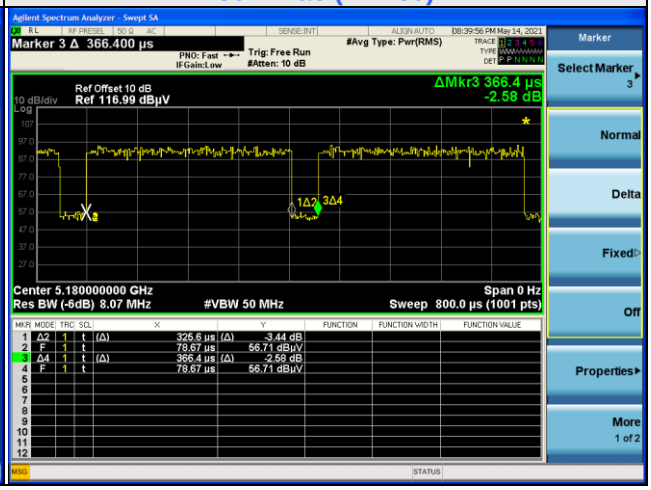
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



3.4 Description of Support Units

The EUT 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.

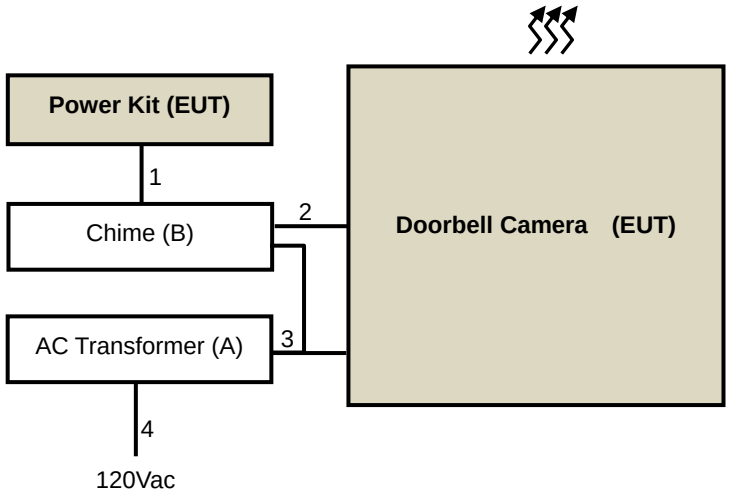
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	AC Transformer	N/A	N/A	N/A	N/A	Supplied by client
B.	Chime	N/A	N/A	N/A	N/A	Supplied by client

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

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	AC power cable	1	0.1	N	0	Supplied by client
2.	AC power cable	1	0.1	N	0	Supplied by client
3.	AC power cable	1	0.1	N	0	Supplied by client
4.	AC power cable	1	0.3	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

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK: 74 (dBµV/m)	AV: 54 (dBµV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2(dBµV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBµV/m) *1 PK: 105.2 (dBµV/m) *2 PK: 110.8(dBµV/m) *3 PK: 122.2 (dBµV/m) *4

*1 beyond 75 MHz or more above of the band edge.

*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

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

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. 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. 15, 2021	Apr. 14, 2022
Anritsu Power Meter	ML2495A	0842014	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. Tested Date: May 17 to 26, 2021

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 = 750Hz; 802.11ac (VHT20): RBW = 1MHz, VBW = 820Hz; 802.11ac (VHT40): RBW = 1MHz, VBW = 1.6kHz; 802.11ac (VHT80): RBW = 1MHz, VBW = 3.3kHz)

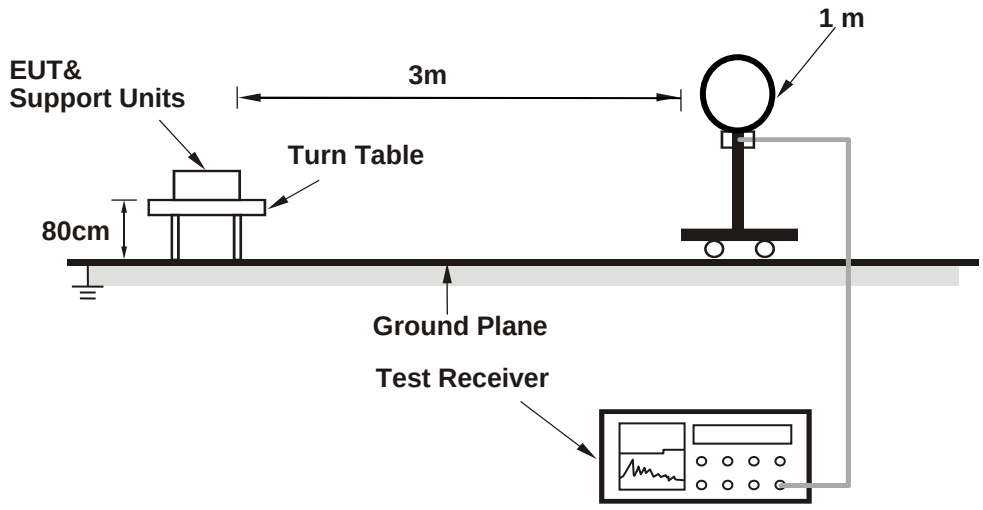
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

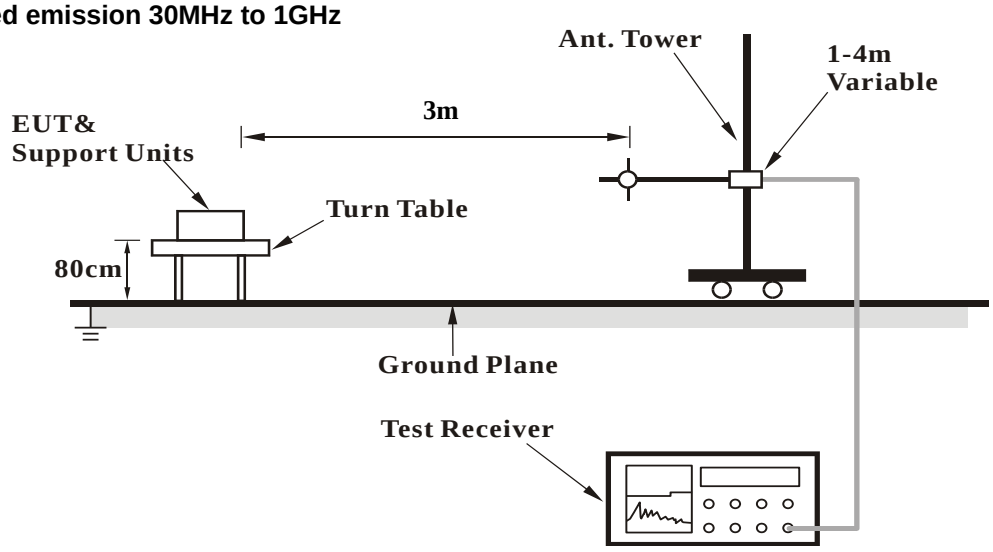
No deviation.

4.1.5 Test Setup

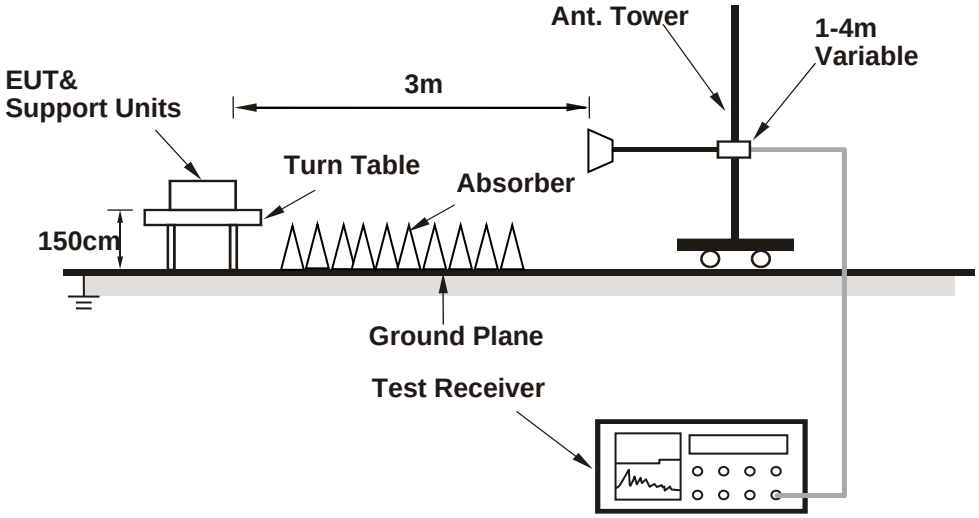
For Radiated emission below 30MHz



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

a. Connected the EUT to AC Transformer and set the EUT under charging condition.
b. 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	59.41 PK	74.00	-14.59	1.30 H	310	48.36	11.05
2	5150.00	47.66 AV	54.00	-6.34	1.30 H	310	36.61	11.05
3	*5180.00	107.10 PK			1.30 H	310	95.92	11.18
4	*5180.00	99.62 AV			1.30 H	310	88.44	11.18
5	#10360.00	56.68 PK	68.20	-11.52	1.84 H	124	38.89	17.79
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	56.36 PK	74.00	-17.64	3.01 V	257	45.31	11.05
2	5150.00	45.09 AV	54.00	-8.91	3.01 V	257	34.04	11.05
3	*5180.00	105.46 PK			3.01 V	257	94.28	11.18
4	*5180.00	98.08 AV			3.01 V	257	86.90	11.18
5	#10360.00	55.48 PK	68.20	-12.72	1.63 V	298	37.69	17.79

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	106.95 PK			1.34 H	305	95.69	11.26
2	*5200.00	99.89 AV			1.34 H	305	88.63	11.26
3	#10400.00	56.23 PK	68.20	-11.97	1.82 H	264	38.26	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	*5200.00	105.42 PK			2.94 V	263	94.16	11.26
2	*5200.00	98.39 AV			2.94 V	263	87.13	11.26
3	#10400.00	55.82 PK	68.20	-12.38	1.39 V	266	37.85	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 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	107.15 PK			1.28 H	310	95.71	11.44
2	*5240.00	99.60 AV			1.28 H	310	88.16	11.44
3	5350.00	52.49 PK	74.00	-21.51	1.28 H	310	40.39	12.10
4	5350.00	42.16 AV	54.00	-11.84	1.28 H	310	30.06	12.10
5	#10480.00	56.83 PK	68.20	-11.37	1.96 H	258	38.64	18.19
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	105.78 PK			3.05 V	255	94.34	11.44
2	*5240.00	98.57 AV			3.05 V	255	87.13	11.44
3	5350.00	52.23 PK	74.00	-21.77	3.05 V	255	40.13	12.10
4	5350.00	41.99 AV	54.00	-12.01	3.05 V	255	29.89	12.10
5	#10480.00	55.65 PK	68.20	-12.55	1.47 V	156	37.46	18.19

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	52.65 PK	74.00	-21.35	1.29 H	337	41.60	11.05
2	5150.00	41.56 AV	54.00	-12.44	1.29 H	337	30.51	11.05
3	*5260.00	105.24 PK			1.29 H	337	93.69	11.55
4	*5260.00	97.68 AV			1.29 H	337	86.13	11.55
5	#10520.00	56.52 PK	68.20	-11.68	1.85 H	287	38.26	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	5150.00	51.63 PK	74.00	-22.37	2.98 V	255	40.58	11.05
2	5150.00	41.07 AV	54.00	-12.93	2.98 V	255	30.02	11.05
3	*5260.00	103.98 PK			2.98 V	255	92.43	11.55
4	*5260.00	96.79 AV			2.98 V	255	85.24	11.55
5	#10520.00	55.45 PK	68.20	-12.75	2.33 V	36	37.19	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 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	105.42 PK			1.31 H	328	93.57	11.85
2	*5300.00	98.09 AV			1.31 H	328	86.24	11.85
3	10600.00	56.74 PK	74.00	-17.26	2.33 H	216	38.42	18.32
4	10600.00	45.75 AV	54.00	-8.25	2.33 H	216	27.43	18.32
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	103.99 PK			3.06 V	258	92.14	11.85
2	*5300.00	97.62 AV			3.06 V	258	85.77	11.85
3	10600.00	55.78 PK	74.00	-18.22	1.59 V	94	37.46	18.32
4	10600.00	44.83 AV	54.00	-9.17	1.59 V	94	26.51	18.32

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	105.09 PK			1.28 H	342	93.14	11.95
2	*5320.00	97.66 AV			1.28 H	342	85.71	11.95
3	5350.00	58.59 PK	74.00	-15.41	1.28 H	342	46.49	12.10
4	5350.00	46.62 AV	54.00	-7.38	1.28 H	342	34.52	12.10
5	10640.00	56.57 PK	74.00	-17.43	1.87 H	145	38.26	18.31
6	10640.00	46.15 AV	54.00	-7.85	1.87 H	145	27.84	18.31
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	103.97 PK			2.99 V	250	92.02	11.95
2	*5320.00	96.83 AV			2.99 V	250	84.88	11.95
3	5350.00	56.64 PK	74.00	-17.36	2.99 V	250	44.54	12.10
4	5350.00	45.19 AV	54.00	-8.81	2.99 V	250	33.09	12.10
5	10640.00	55.73 PK	74.00	-18.27	2.06 V	229	37.42	18.31
6	10640.00	44.50 AV	54.00	-9.50	2.06 V	229	26.19	18.31

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	55.69 PK	74.00	-18.31	1.36 H	250	43.22	12.47
2	5460.00	45.07 AV	54.00	-8.93	1.36 H	250	32.60	12.47
3	#5470.00	65.22 PK	68.20	-2.98	1.36 H	250	52.72	12.50
4	*5500.00	103.42 PK			1.36 H	250	90.82	12.60
5	*5500.00	96.03 AV			1.36 H	250	83.43	12.60
6	11000.00	57.23 PK	74.00	-16.77	1.84 H	269	38.26	18.97
7	11000.00	46.31 AV	54.00	-7.69	1.84 H	269	27.34	18.97
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	5460.00	54.63 PK	74.00	-19.37	3.03 V	256	42.16	12.47
2	5460.00	44.05 AV	54.00	-9.95	3.03 V	256	31.58	12.47
3	#5470.00	63.59 PK	68.20	-4.61	3.03 V	256	51.09	12.50
4	*5500.00	102.27 PK			3.03 V	256	89.67	12.60
5	*5500.00	94.84 AV			3.03 V	256	82.24	12.60
6	11000.00	56.46 PK	74.00	-17.54	3.02 V	164	37.49	18.97
7	11000.00	45.12 AV	54.00	-8.88	3.02 V	164	26.15	18.97

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 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	102.25 PK			1.41 H	248	90.26	11.99
2	*5580.00	95.35 AV			1.41 H	248	83.36	11.99
3	11160.00	58.00 PK	74.00	-16.00	1.39 H	266	38.24	19.76
4	11160.00	47.38 AV	54.00	-6.62	1.39 H	266	27.62	19.76
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	101.55 PK			2.98 V	256	89.56	11.99
2	*5580.00	94.33 AV			2.98 V	256	82.34	11.99
3	11160.00	57.32 PK	74.00	-16.68	1.28 V	64	37.56	19.76
4	11160.00	45.90 AV	54.00	-8.10	1.28 V	64	26.14	19.76

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	103.43 PK			1.39 H	247	91.74	11.69
2	*5700.00	96.15 AV			1.39 H	247	84.46	11.69
3	#5725.00	59.74 PK	68.20	-8.46	1.39 H	247	48.02	11.72
4	11400.00	57.85 PK	74.00	-16.15	1.44 H	123	38.22	19.63
5	11400.00	46.95 AV	54.00	-7.05	1.44 H	123	27.32	19.63
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	102.92 PK			3.02 V	255	91.23	11.69
2	*5700.00	95.01 AV			3.02 V	255	83.32	11.69
3	#5725.00	58.61 PK	68.20	-9.59	3.02 V	255	46.89	11.72
4	11400.00	56.87 PK	74.00	-17.13	2.14 V	169	37.24	19.63
5	11400.00	45.74 AV	54.00	-8.26	2.14 V	169	26.11	19.63

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	#5643.74	52.08 PK	68.20	-16.12	1.40 H	247	40.34	11.74
2	*5745.00	104.13 PK			1.40 H	247	92.37	11.76
3	*5745.00	96.46 AV			1.40 H	247	84.70	11.76
4	#5987.27	53.52 PK	68.20	-14.68	1.40 H	247	41.22	12.30
5	11490.00	58.40 PK	74.00	-15.60	1.67 H	239	38.36	20.04
6	11490.00	47.43 AV	54.00	-6.57	1.67 H	239	27.39	20.04
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	#5619.64	52.51 PK	68.20	-15.69	3.03 V	256	40.72	11.79
2	*5745.00	103.15 PK			3.03 V	256	91.39	11.76
3	*5745.00	95.31 AV			3.03 V	256	83.55	11.76
4	#5925.95	52.69 PK	68.20	-15.51	3.03 V	256	40.85	11.84
5	11490.00	57.36 PK	74.00	-16.64	1.77 V	145	37.32	20.04
6	11490.00	46.49 AV	54.00	-7.51	1.77 V	145	26.45	20.04

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 802.11a	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	#5621.30	53.05 PK	68.20	-15.15	1.45 H	256	41.25	11.80
2	*5785.00	105.06 PK			1.45 H	256	93.24	11.82
3	*5785.00	96.88 AV			1.45 H	256	85.06	11.82
4	#5929.51	52.51 PK	68.20	-15.69	1.45 H	256	40.64	11.87
5	11570.00	59.08 PK	74.00	-14.92	2.22 H	215	38.71	20.37
6	11570.00	47.99 AV	54.00	-6.01	2.22 H	215	27.62	20.37
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	#5625.64	52.00 PK	68.20	-16.20	3.01 V	249	40.22	11.78
2	*5785.00	103.88 PK			3.01 V	249	92.06	11.82
3	*5785.00	95.93 AV			3.01 V	249	84.11	11.82
4	#5954.85	53.64 PK	68.20	-14.56	3.01 V	249	41.57	12.07
5	11570.00	58.03 PK	74.00	-15.97	2.69 V	288	37.66	20.37
6	11570.00	46.56 AV	54.00	-7.44	2.69 V	288	26.19	20.37

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	#5629.37	52.26 PK	68.20	-15.94	1.39 H	240	40.48	11.78
2	*5825.00	105.58 PK			1.39 H	240	93.79	11.79
3	*5825.00	97.45 AV			1.39 H	240	85.66	11.79
4	#5927.44	53.37 PK	68.20	-14.83	1.39 H	240	41.51	11.86
5	11650.00	58.80 PK	74.00	-15.20	1.92 H	201	38.26	20.54
6	11650.00	48.45 AV	54.00	-5.55	1.92 H	201	27.91	20.54
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	#5634.29	51.40 PK	68.20	-16.80	3.05 V	251	39.63	11.77
2	*5825.00	103.77 PK			3.05 V	251	91.98	11.79
3	*5825.00	95.67 AV			3.05 V	251	83.88	11.79
4	#5934.92	52.39 PK	68.20	-15.81	3.05 V	251	40.48	11.91
5	11650.00	57.98 PK	74.00	-16.02	2.01 V	109	37.44	20.54
6	11650.00	46.82 AV	54.00	-7.18	2.01 V	109	26.28	20.54

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	54.41 PK	74.00	-19.59	1.31 H	306	43.36	11.05
2	5150.00	43.85 AV	54.00	-10.15	1.31 H	306	32.80	11.05
3	*5180.00	105.64 PK			1.31 H	306	94.46	11.18
4	*5180.00	98.41 AV			1.31 H	306	87.23	11.18
5	#10360.00	56.05 PK	68.20	-12.15	1.96 H	287	38.26	17.79
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	53.21 PK	74.00	-20.79	3.03 V	252	42.16	11.05
2	5150.00	42.69 AV	54.00	-11.31	3.03 V	252	31.64	11.05
3	*5180.00	104.35 PK			3.03 V	252	93.17	11.18
4	*5180.00	97.47 AV			3.03 V	252	86.29	11.18
5	#10360.00	55.43 PK	68.20	-12.77	2.22 V	254	37.64	17.79

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	105.52 PK			1.34 H	300	94.26	11.26
2	*5200.00	98.52 AV			1.34 H	300	87.26	11.26
3	#10400.00	56.60 PK	68.20	-11.60	1.85 H	241	38.63	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	*5200.00	104.51 PK			3.06 V	258	93.25	11.26
2	*5200.00	97.58 AV			3.06 V	258	86.32	11.26
3	#10400.00	55.49 PK	68.20	-12.71	1.88 V	177	37.52	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 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	104.43 PK			1.21 H	312	92.99	11.44
2	*5240.00	96.92 AV			1.21 H	312	85.48	11.44
3	5350.00	52.41 PK	74.00	-21.59	1.21 H	312	40.31	12.10
4	5350.00	42.15 AV	54.00	-11.85	1.21 H	312	30.05	12.10
5	#10480.00	56.81 PK	68.20	-11.39	1.87 H	263	38.62	18.19
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	103.47 PK			3.05 V	257	92.03	11.44
2	*5240.00	96.22 AV			3.05 V	257	84.78	11.44
3	5350.00	51.99 PK	74.00	-22.01	3.05 V	257	39.89	12.10
4	5350.00	41.93 AV	54.00	-12.07	3.05 V	257	29.83	12.10
5	#10480.00	55.40 PK	68.20	-12.80	1.26 V	308	37.21	18.19

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	52.57 PK	74.00	-21.43	1.29 H	338	41.52	11.05
2	5150.00	41.83 AV	54.00	-12.17	1.29 H	338	30.78	11.05
3	*5260.00	105.28 PK			1.29 H	338	93.73	11.55
4	*5260.00	97.38 AV			1.29 H	338	85.83	11.55
5	#10520.00	56.52 PK	68.20	-11.68	1.88 H	274	38.26	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	5150.00	51.31 PK	74.00	-22.69	2.98 V	253	40.26	11.05
2	5150.00	41.18 AV	54.00	-12.82	2.98 V	253	30.13	11.05
3	*5260.00	103.98 PK			2.98 V	253	92.43	11.55
4	*5260.00	96.34 AV			2.98 V	253	84.79	11.55
5	#10520.00	55.70 PK	68.20	-12.50	1.36 V	213	37.44	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 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	105.11 PK			1.35 H	342	93.26	11.85
2	*5300.00	97.54 AV			1.35 H	342	85.69	11.85
3	10600.00	56.78 PK	74.00	-17.22	2.08 H	55	38.46	18.32
4	10600.00	45.93 AV	54.00	-8.07	2.08 H	55	27.61	18.32
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	104.39 PK			3.03 V	259	92.54	11.85
2	*5300.00	96.11 AV			3.03 V	259	84.26	11.85
3	10600.00	55.78 PK	74.00	-18.22	2.98 V	274	37.46	18.32
4	10600.00	44.65 AV	54.00	-9.35	2.98 V	274	26.33	18.32

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	105.36 PK			1.29 H	346	93.41	11.95
2	*5320.00	98.14 AV			1.29 H	346	86.19	11.95
3	5350.00	54.90 PK	74.00	-19.10	1.29 H	346	42.80	12.10
4	5350.00	42.91 AV	54.00	-11.09	1.29 H	346	30.81	12.10
5	10640.00	56.57 PK	74.00	-17.43	1.44 H	123	38.26	18.31
6	10640.00	45.70 AV	54.00	-8.30	1.44 H	123	27.39	18.31
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	104.60 PK			3.03 V	261	92.65	11.95
2	*5320.00	96.98 AV			3.03 V	261	85.03	11.95
3	5350.00	53.13 PK	74.00	-20.87	3.03 V	261	41.03	12.10
4	5350.00	42.09 AV	54.00	-11.91	3.03 V	261	29.99	12.10
5	10640.00	55.77 PK	74.00	-18.23	1.97 V	220	37.46	18.31
6	10640.00	44.82 AV	54.00	-9.18	1.97 V	220	26.51	18.31

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	54.20 PK	74.00	-19.80	1.38 H	263	41.73	12.47
2	5460.00	43.25 AV	54.00	-10.75	1.38 H	263	30.78	12.47
3	#5470.00	57.84 PK	68.20	-10.36	1.38 H	263	45.34	12.50
4	*5500.00	105.86 PK			1.38 H	263	93.26	12.60
5	*5500.00	98.25 AV			1.38 H	263	85.65	12.60
6	11000.00	57.23 PK	74.00	-16.77	2.53 H	162	38.26	18.97
7	11000.00	46.41 AV	54.00	-7.59	2.53 H	162	27.44	18.97
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	5460.00	53.04 PK	74.00	-20.96	3.03 V	256	40.57	12.47
2	5460.00	42.54 AV	54.00	-11.46	3.03 V	256	30.07	12.47
3	#5470.00	57.02 PK	68.20	-11.18	3.03 V	256	44.52	12.50
4	*5500.00	105.14 PK			3.03 V	256	92.54	12.60
5	*5500.00	96.96 AV			3.03 V	256	84.36	12.60
6	11000.00	56.33 PK	74.00	-17.67	1.78 V	45	37.36	18.97
7	11000.00	45.16 AV	54.00	-8.84	1.78 V	45	26.19	18.97

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 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	105.25 PK			1.41 H	258	93.26	11.99
2	*5580.00	97.15 AV			1.41 H	258	85.16	11.99
3	11160.00	58.15 PK	74.00	-15.85	2.36 H	298	38.39	19.76
4	11160.00	47.02 AV	54.00	-6.98	2.36 H	298	27.26	19.76
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	104.23 PK			2.94 V	250	92.24	11.99
2	*5580.00	96.25 AV			2.94 V	250	84.26	11.99
3	11160.00	57.18 PK	74.00	-16.82	2.03 V	132	37.42	19.76
4	11160.00	46.11 AV	54.00	-7.89	2.03 V	132	26.35	19.76

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	103.97 PK			1.25 H	324	92.28	11.69
2	*5700.00	95.95 AV			1.25 H	324	84.26	11.69
3	#5725.00	56.71 PK	68.20	-11.49	1.25 H	324	44.99	11.72
4	11400.00	58.10 PK	74.00	-15.90	1.28 H	274	38.47	19.63
5	11400.00	47.25 AV	54.00	-6.75	1.28 H	274	27.62	19.63
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	103.32 PK			3.03 V	249	91.63	11.69
2	*5700.00	95.25 AV			3.03 V	249	83.56	11.69
3	#5725.00	55.40 PK	68.20	-12.80	3.03 V	249	43.68	11.72
4	11400.00	57.18 PK	74.00	-16.82	1.08 V	229	37.55	19.63
5	11400.00	46.12 AV	54.00	-7.88	1.08 V	229	26.49	19.63

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	#5578.35	53.30 PK	68.20	-14.90	1.86 H	271	41.30	12.00
2	*5745.00	110.41 PK			1.86 H	271	98.65	11.76
3	*5745.00	102.80 AV			1.86 H	271	91.04	11.76
4	#5957.07	52.99 PK	68.20	-15.21	1.86 H	271	40.89	12.10
5	11490.00	58.89 PK	74.00	-15.11	2.20 H	185	38.85	20.04
6	11490.00	47.73 AV	54.00	-6.27	2.20 H	185	27.69	20.04
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	#5583.35	54.33 PK	68.20	-13.87	2.96 V	256	42.37	11.96
2	*5745.00	109.00 PK			2.96 V	256	97.24	11.76
3	*5745.00	102.12 AV			2.96 V	256	90.36	11.76
4	#5963.58	53.55 PK	68.20	-14.65	2.96 V	256	41.42	12.13
5	11490.00	57.23 PK	74.00	-16.77	1.42 V	213	37.19	20.04
6	11490.00	46.36 AV	54.00	-7.64	1.42 V	213	26.32	20.04

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 (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	#5621.31	54.00 PK	68.20	-14.20	1.87 H	246	42.20	11.80
2	*5785.00	110.47 PK			1.87 H	246	98.65	11.82
3	*5785.00	103.05 AV			1.87 H	246	91.23	11.82
4	#5951.42	55.21 PK	68.20	-12.99	1.87 H	246	43.16	12.05
5	11570.00	58.58 PK	74.00	-15.42	1.82 H	201	38.21	20.37
6	11570.00	47.92 AV	54.00	-6.08	1.82 H	201	27.55	20.37
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	#5620.73	54.04 PK	68.20	-14.16	3.03 V	255	42.25	11.79
2	*5785.00	109.06 PK			3.03 V	255	97.24	11.82
3	*5785.00	102.37 AV			3.03 V	255	90.55	11.82
4	#5951.78	54.23 PK	68.20	-13.97	3.03 V	255	42.18	12.05
5	11570.00	58.03 PK	74.00	-15.97	1.13 V	213	37.66	20.37
6	11570.00	46.85 AV	54.00	-7.15	1.13 V	213	26.48	20.37

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	#5615.62	52.80 PK	68.20	-15.40	1.78 H	253	41.00	11.80
2	*5825.00	110.20 PK			1.78 H	253	98.41	11.79
3	*5825.00	103.12 AV			1.78 H	253	91.33	11.79
4	#5992.51	54.92 PK	68.20	-13.28	1.78 H	253	42.60	12.32
5	11650.00	58.70 PK	74.00	-15.30	2.98 H	289	38.16	20.54
6	11650.00	47.87 AV	54.00	-6.13	2.98 H	289	27.33	20.54
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	#5619.05	51.69 PK	68.20	-16.51	2.96 V	244	39.90	11.79
2	*5825.00	108.82 PK			2.96 V	244	97.03	11.79
3	*5825.00	102.42 AV			2.96 V	244	90.63	11.79
4	#5944.68	53.70 PK	68.20	-14.50	2.96 V	244	41.70	12.00
5	11650.00	57.76 PK	74.00	-16.24	1.78 V	189	37.22	20.54
6	11650.00	47.05 AV	54.00	-6.95	1.78 V	189	26.51	20.54

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	59.27 PK	74.00	-14.73	2.07 H	295	48.22	11.05
2	5150.00	49.00 AV	54.00	-5.00	2.07 H	295	37.95	11.05
3	*5190.00	103.00 PK			2.07 H	295	91.77	11.23
4	*5190.00	96.09 AV			2.07 H	295	84.86	11.23
5	#10380.00	56.18 PK	68.20	-12.02	1.57 H	145	38.30	17.88
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	5150.00	57.74 PK	74.00	-16.26	2.98 V	241	46.69	11.05
2	5150.00	46.90 AV	54.00	-7.10	2.98 V	241	35.85	11.05
3	*5190.00	101.57 PK			2.98 V	241	90.34	11.23
4	*5190.00	94.85 AV			2.98 V	241	83.62	11.23
5	#10380.00	55.46 PK	68.20	-12.74	2.98 V	285	37.58	17.88

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 (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	102.66 PK			1.30 H	302	91.27	11.39
2	*5230.00	95.76 AV			1.30 H	302	84.37	11.39
3	5350.00	52.68 PK	74.00	-21.32	1.30 H	302	40.58	12.10
4	5350.00	42.32 AV	54.00	-11.68	1.30 H	302	30.22	12.10
5	#10460.00	56.38 PK	68.20	-11.82	1.69 H	300	38.24	18.14
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	101.64 PK			3.05 V	253	90.25	11.39
2	*5230.00	94.73 AV			3.05 V	253	83.34	11.39
3	5350.00	51.78 PK	74.00	-22.22	3.05 V	253	39.68	12.10
4	5350.00	41.99 AV	54.00	-12.01	3.05 V	253	29.89	12.10
5	#10460.00	55.60 PK	68.20	-12.60	1.48 V	215	37.46	18.14

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	52.26 PK	74.00	-21.74	1.45 H	341	41.21	11.05
2	5150.00	42.23 AV	54.00	-11.77	1.45 H	341	31.18	11.05
3	*5270.00	102.53 PK			1.45 H	341	90.90	11.63
4	*5270.00	94.54 AV			1.45 H	341	82.91	11.63
5	#10540.00	56.50 PK	68.20	-11.70	1.87 H	103	38.22	18.28
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	51.73 PK	74.00	-22.27	2.99 V	262	40.68	11.05
2	5150.00	41.51 AV	54.00	-12.49	2.99 V	262	30.46	11.05
3	*5270.00	101.50 PK			2.99 V	262	89.87	11.63
4	*5270.00	92.69 AV			2.99 V	262	81.06	11.63
5	#10540.00	55.74 PK	68.20	-12.46	2.29 V	287	37.46	18.28

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	102.54 PK			1.44 H	343	90.64	11.90
2	*5310.00	94.94 AV			1.44 H	343	83.04	11.90
3	5350.00	54.55 PK	74.00	-19.45	1.44 H	343	42.45	12.10
4	5350.00	44.46 AV	54.00	-9.54	1.44 H	343	32.36	12.10
5	10620.00	56.87 PK	74.00	-17.13	1.85 H	223	38.55	18.32
6	10620.00	45.61 AV	54.00	-8.39	1.85 H	223	27.29	18.32
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	101.38 PK			3.02 V	254	89.48	11.90
2	*5310.00	93.91 AV			3.02 V	254	82.01	11.90
3	5350.00	53.34 PK	74.00	-20.66	3.02 V	254	41.24	12.10
4	5350.00	43.49 AV	54.00	-10.51	3.02 V	254	31.39	12.10
5	10620.00	55.87 PK	74.00	-18.13	2.69 V	284	37.55	18.32
6	10620.00	44.51 AV	54.00	-9.49	2.69 V	284	26.19	18.32

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	55.69 PK	74.00	-18.31	1.79 H	257	43.22	12.47
2	5460.00	44.07 AV	54.00	-9.93	1.79 H	257	31.60	12.47
3	#5470.00	57.14 PK	68.20	-11.06	1.79 H	257	44.64	12.50
4	*5510.00	102.11 PK			1.79 H	257	89.59	12.52
5	*5510.00	94.83 AV			1.79 H	257	82.31	12.52
6	11020.00	57.31 PK	74.00	-16.69	1.96 H	326	38.26	19.05
7	11020.00	46.39 AV	54.00	-7.61	1.96 H	326	27.34	19.05
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	5460.00	54.61 PK	74.00	-19.39	2.99 V	246	42.14	12.47
2	5460.00	42.83 AV	54.00	-11.17	2.99 V	246	30.36	12.47
3	#5470.00	55.71 PK	68.20	-12.49	2.99 V	246	43.21	12.50
4	*5510.00	100.93 PK			2.99 V	246	88.41	12.52
5	*5510.00	93.90 AV			2.99 V	246	81.38	12.52
6	11020.00	56.86 PK	74.00	-17.14	2.15 V	128	37.81	19.05
7	11020.00	45.22 AV	54.00	-8.78	2.15 V	128	26.17	19.05

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.
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	101.40 PK			1.82 H	251	89.17	12.23
2	*5550.00	94.43 AV			1.82 H	251	82.20	12.23
3	11100.00	58.26 PK	74.00	-15.74	1.28 H	221	38.87	19.39
4	11100.00	47.10 AV	54.00	-6.90	1.28 H	221	27.71	19.39
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	100.67 PK			3.03 V	242	88.44	12.23
2	*5550.00	93.86 AV			3.03 V	242	81.63	12.23
3	11100.00	57.27 PK	74.00	-16.73	1.99 V	247	37.88	19.39
4	11100.00	46.08 AV	54.00	-7.92	1.99 V	247	26.69	19.39

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	102.92 PK			1.80 H	267	91.20	11.72
2	*5670.00	95.30 AV			1.80 H	267	83.58	11.72
3	#5725.00	52.84 PK	68.20	-15.36	1.80 H	267	41.12	11.72
4	11340.00	58.43 PK	74.00	-15.57	1.69 H	232	38.74	19.69
5	11340.00	47.23 AV	54.00	-6.77	1.69 H	232	27.54	19.69
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	102.36 PK			2.94 V	239	90.64	11.72
2	*5670.00	94.03 AV			2.94 V	239	82.31	11.72
3	#5725.00	52.27 PK	68.20	-15.93	2.94 V	239	40.55	11.72
4	11340.00	57.29 PK	74.00	-16.71	1.87 V	197	37.60	19.69
5	11340.00	46.10 AV	54.00	-7.90	1.87 V	197	26.41	19.69

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	#5638.23	52.09 PK	68.20	-16.11	1.87 H	260	40.33	11.76
2	*5755.00	104.92 PK			1.87 H	260	93.16	11.76
3	*5755.00	97.53 AV			1.87 H	260	85.77	11.76
4	#5943.25	52.13 PK	68.20	-16.07	1.87 H	260	40.15	11.98
5	11510.00	58.79 PK	74.00	-15.21	2.78 H	178	38.66	20.13
6	11510.00	47.64 AV	54.00	-6.36	2.78 H	178	27.51	20.13
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	#5644.89	52.51 PK	68.20	-15.69	3.03 V	246	40.76	11.75
2	*5755.00	103.97 PK			3.03 V	246	92.21	11.76
3	*5755.00	96.08 AV			3.03 V	246	84.32	11.76
4	#5931.54	52.35 PK	68.20	-15.85	3.03 V	246	40.46	11.89
5	11510.00	57.36 PK	74.00	-16.64	2.32 V	161	37.23	20.13
6	11510.00	46.51 AV	54.00	-7.49	2.32 V	161	26.38	20.13

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 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	#5636.75	53.22 PK	68.20	-14.98	1.86 H	257	41.46	11.76
2	*5795.00	105.08 PK			1.86 H	257	93.25	11.83
3	*5795.00	97.53 AV			1.86 H	257	85.70	11.83
4	#5924.55	52.72 PK	68.53	-15.81	1.86 H	257	40.89	11.83
5	11590.00	58.86 PK	74.00	-15.14	2.26 H	294	38.42	20.44
6	11590.00	47.83 AV	54.00	-6.17	2.26 H	294	27.39	20.44
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	#5623.27	53.42 PK	68.20	-14.78	3.05 V	258	41.63	11.79
2	*5795.00	104.16 PK			3.05 V	258	92.33	11.83
3	*5795.00	96.44 AV			3.05 V	258	84.61	11.83
4	#5949.78	52.77 PK	68.20	-15.43	3.05 V	258	40.73	12.04
5	11590.00	58.12 PK	74.00	-15.88	1.85 V	217	37.68	20.44
6	11590.00	46.93 AV	54.00	-7.07	1.85 V	217	26.49	20.44

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	62.00 PK	74.00	-12.00	1.46 H	303	50.95	11.05
2	**5150.00**	**52.65 AV**	**54.00**	**-1.35**	**1.46 H**	**303**	**41.60**	**11.05**
3	*5210.00	99.04 PK			1.46 H	303	87.74	11.30
4	*5210.00	91.81 AV			1.46 H	303	80.51	11.30
5	5350.00	52.36 PK	74.00	-21.64	1.46 H	303	40.26	12.10
6	5350.00	42.68 AV	54.00	-11.32	1.46 H	303	30.58	12.10
7	#10420.00	56.28 PK	68.20	-11.92	2.54 H	287	38.25	18.03
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.26 PK	74.00	-13.74	2.97 V	252	49.21	11.05
2	5150.00	51.13 AV	54.00	-2.87	2.97 V	252	40.08	11.05
3	*5210.00	97.43 PK			2.97 V	252	86.13	11.30
4	*5210.00	90.95 AV			2.97 V	252	79.65	11.30
5	5350.00	51.97 PK	74.00	-22.03	2.97 V	252	39.87	12.10
6	5350.00	42.23 AV	54.00	-11.77	2.97 V	252	30.13	12.10
7	#10420.00	55.45 PK	68.20	-12.75	1.63 V	230	37.42	18.03

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	53.06 PK	74.00	-20.94	1.29 H	340	42.01	11.05
2	5150.00	42.96 AV	54.00	-11.04	1.29 H	340	31.91	11.05
3	*5290.00	99.28 PK			1.29 H	340	87.50	11.78
4	*5290.00	91.12 AV			1.29 H	340	79.34	11.78
5	5350.00	59.47 PK	74.00	-14.53	1.29 H	340	47.37	12.10
6	5350.00	48.43 AV	54.00	-5.57	1.29 H	340	36.33	12.10
7	#10580.00	56.74 PK	68.20	-11.46	2.98 H	288	38.43	18.31
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	52.16 PK	74.00	-21.84	2.98 V	250	41.11	11.05
2	5150.00	42.25 AV	54.00	-11.75	2.98 V	250	31.20	11.05
3	*5290.00	98.53 PK			2.98 V	250	86.75	11.78
4	*5290.00	90.42 AV			2.98 V	250	78.64	11.78
5	5350.00	58.35 PK	74.00	-15.65	2.98 V	250	46.25	12.10
6	5350.00	47.18 AV	54.00	-6.82	2.98 V	250	35.08	12.10
7	#10580.00	55.57 PK	68.20	-12.63	1.14 V	156	37.26	18.31

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	60.68 PK	74.00	-13.32	1.79 H	252	48.21	12.47
2	5460.00	49.05 AV	54.00	-4.95	1.79 H	252	36.58	12.47
3	#5470.00	60.59 PK	68.20	-7.61	1.79 H	252	48.09	12.50
4	*5530.00	100.26 PK			1.79 H	252	87.89	12.37
5	*5530.00	92.42 AV			1.79 H	252	80.05	12.37
6	11060.00	57.88 PK	74.00	-16.12	2.63 H	288	38.66	19.22
7	11060.00	47.03 AV	54.00	-6.97	2.63 H	288	27.81	19.22
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	59.35 PK	74.00	-14.65	2.96 V	258	46.88	12.47
2	5460.00	47.70 AV	54.00	-6.30	2.96 V	258	35.23	12.47
3	#5470.00	59.63 PK	68.20	-8.57	2.96 V	258	47.13	12.50
4	*5530.00	98.92 PK			2.96 V	258	86.55	12.37
5	*5530.00	92.01 AV			2.96 V	258	79.64	12.37
6	11060.00	56.64 PK	74.00	-17.36	1.77 V	145	37.42	19.22
7	11060.00	45.71 AV	54.00	-8.29	1.77 V	145	26.49	19.22

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	#5644.68	60.44 PK	68.20	-7.76	2.27 H	243	48.69	11.75
2	*5775.00	103.95 PK			2.27 H	243	92.15	11.80
3	*5775.00	96.87 AV			2.27 H	243	85.07	11.80
4	#5928.27	55.68 PK	68.20	-12.52	2.27 H	243	43.82	11.86
5	11550.00	58.59 PK	74.00	-15.41	2.85 H	146	38.31	20.28
6	11550.00	47.83 AV	54.00	-6.17	2.85 H	146	27.55	20.28
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	#5647.34	60.11 PK	68.20	-8.09	3.06 V	253	48.37	11.74
2	*5775.00	103.04 PK			3.06 V	253	91.24	11.80
3	*5775.00	96.06 AV			3.06 V	253	84.26	11.80
4	#5928.52	56.25 PK	68.20	-11.95	3.06 V	253	44.39	11.86
5	11550.00	58.16 PK	74.00	-15.84	1.69 V	218	37.88	20.28
6	11550.00	46.41 AV	54.00	-7.59	1.69 V	218	26.13	20.28

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.

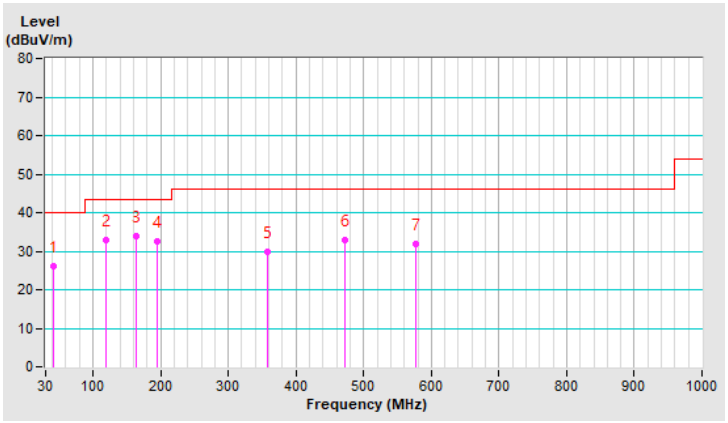
BELOW 1GHz WORST-CASE DATA

RF Mode	TX 802.11ac (VHT20)	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	41.64	26.14 QP	40.00	-13.86	2.92 H	184	33.57	-7.43
2	118.27	32.99 QP	43.50	-10.51	2.68 H	208	42.16	-9.17
3	162.89	34.02 QP	43.50	-9.48	2.41 H	234	40.36	-6.34
4	194.90	32.52 QP	43.50	-10.98	2.20 H	255	41.45	-8.93
5	357.86	29.86 QP	46.00	-16.14	1.90 H	285	32.96	-3.10
6	471.35	32.94 QP	46.00	-13.06	1.65 H	310	33.20	-0.26
7	576.11	31.99 QP	46.00	-14.01	1.36 H	338	30.30	1.69

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.

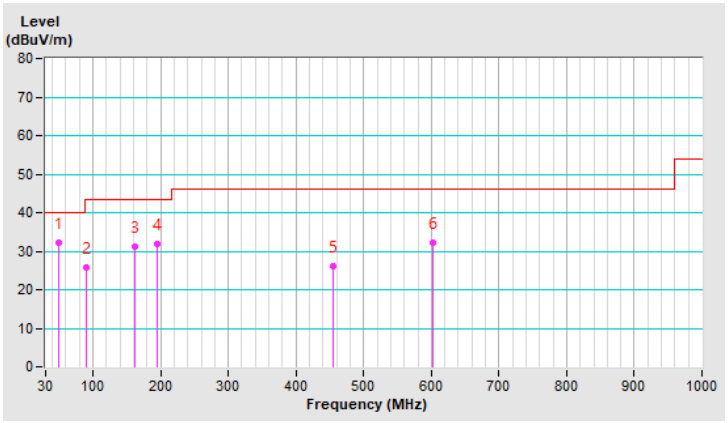


RF Mode	TX 802.11ac (VHT20)	Channel	CH 157：5785 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	48.43	32.27 QP	40.00	-7.73	2.50 V	153	39.24	-6.97
2	89.17	25.90 QP	43.50	-17.60	2.68 V	171	38.34	-12.44
3	160.95	31.27 QP	43.50	-12.23	2.29 V	132	37.60	-6.33
4	193.93	32.02 QP	43.50	-11.48	2.08 V	112	40.89	-8.87
5	454.86	26.23 QP	46.00	-19.77	3.13 V	215	26.79	-0.56
6	603.27	32.34 QP	46.00	-13.66	1.68 V	72	29.92	2.42

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	ESCS 30	100276	Apr. 15, 2021	Apr. 14, 2022
SCHWARZBECK Artificial Mains Network (for EUT)	NSLK 8128	8128-244	Nov. 19, 2020	Nov. 18, 2021
LISN With Adapter (for EUT)	AD10	C05Ada-001	Nov. 19, 2020	Nov. 18, 2021
R&S Artificial Mains Network (for peripheral)	ESH3-Z5	100220	Dec. 1, 2020	Nov. 30, 2021
Software	Cond_V7.3.7.4	NA	NA	NA
RF cable (JYEBAO) With 10dB PAD	5D-FB	Cable-C05.01	Jan. 29, 2021	Jan. 28, 2022
LYNICS Terminator (For R&S LISN)	0900510	E1-01-305	Feb. 17, 2021	Feb. 16, 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. 5. (Conduction 5)
3. The VCCI Site Registration No. C-11093.
4. Tested Date: Jun. 30, 2021

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.

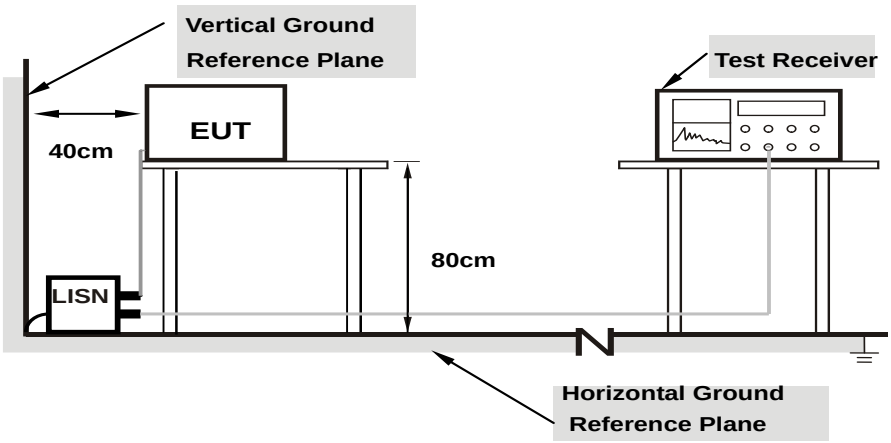
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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.

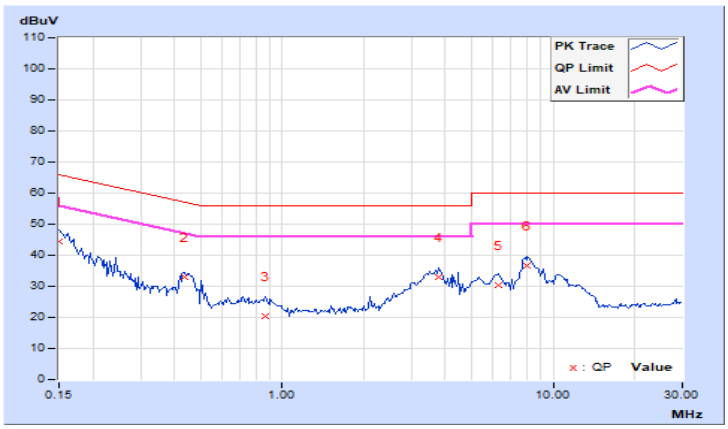
4.2.7 Test Results

RF Mode	TX 802.11ac (VHT20)	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	0.15000	9.89	34.38	17.60	44.27	27.49	66.00	56.00	-21.73	-28.51
2	0.43516	9.90	23.20	16.06	33.10	25.96	57.15	47.15	-24.05	-21.19
3	0.86875	9.95	10.37	3.76	20.32	13.71	56.00	46.00	-35.68	-32.29
4	3.76563	10.11	22.82	14.33	32.93	24.44	56.00	46.00	-23.07	-21.56
5	6.32422	10.21	20.34	14.32	30.55	24.53	60.00	50.00	-29.45	-25.47
6	8.05078	10.28	26.30	20.17	36.58	30.45	60.00	50.00	-23.42	-19.55

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 802.11ac (VHT20)	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	9.90	34.29	16.98	44.19	26.88	66.00	56.00	-21.81	-29.12
2	0.42734	9.92	19.58	13.81	29.50	23.73	57.30	47.30	-27.80	-23.57
3	0.73984	9.95	9.66	3.51	19.61	13.46	56.00	46.00	-36.39	-32.54
4	3.74609	10.12	23.04	14.41	33.16	24.53	56.00	46.00	-22.84	-21.47
5	5.48828	10.19	18.30	12.60	28.49	22.79	60.00	50.00	-31.51	-27.21
6	**8.19531**	**10.29**	**26.83**	**20.85**	**37.12**	**31.14**	**60.00**	**50.00**	**-22.88**	**-18.86**

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)

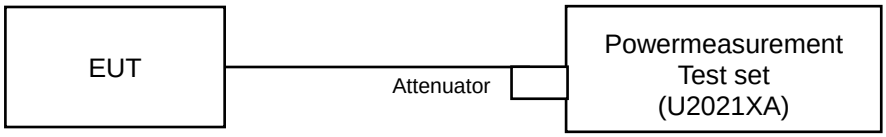
*B is the 26 dB emission bandwidth in megahertz
Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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 $N_{ANT} \geq 5$.

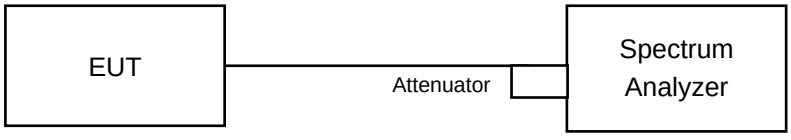
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

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 (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	47.643	16.78	24.00	Pass
40	5200	46.666	16.69	24.00	Pass
48	5240	46.989	16.72	24.00	Pass
52	5260	53.951	17.32	24.00	Pass
60	5300	53.580	17.29	24.00	Pass
64	5320	53.456	17.28	24.00	Pass
100	5500	52.966	17.24	24.00	Pass
116	5580	53.703	17.30	24.00	Pass
140	5700	52.240	17.18	24.00	Pass
149	5745	65.013	18.13	30.00	Pass
157	5785	64.863	18.12	30.00	Pass
165	5825	70.632	18.49	30.00	Pass

NOTE:

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

1. 11dBm + 10log(29.57) = 25.70 dBm > 24dBm.
2. 11dBm + 10log(29.76) = 25.73 dBm > 24dBm.
3. 11dBm + 10log(31.58) = 25.99 dBm > 24dBm.
4. 11dBm + 10log(33.75) = 26.28 dBm > 24dBm.
5. 11dBm + 10log(33.45) = 26.24 dBm > 24dBm.
6. 11dBm + 10log(28.27) = 25.51 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	11.05	11.31	26.256	14.19	24.00	Pass
40	5200	10.75	10.06	22.024	13.43	24.00	Pass
48	5240	10.82	10.53	23.376	13.69	24.00	Pass
52	5260	14.57	14.33	55.744	17.46	24.00	Pass
60	5300	14.48	14.16	54.116	17.33	24.00	Pass
64	5320	14.52	14.26	54.983	17.40	24.00	Pass
100	5500	15.11	14.94	63.623	18.04	24.00	Pass
116	5580	14.75	14.16	55.915	17.48	24.00	Pass
140	5700	14.68	14.21	55.740	17.46	24.00	Pass
149	5745	18.51	18.49	**141.591**	21.51	30.00	Pass
157	5785	18.52	18.48	**141.591**	21.51	30.00	Pass
165	5825	18.48	18.46	140.615	21.48	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(23.90) = 24.78 dBm > 24dBm.
2. 11dBm + 10log(25.74) = 25.11 dBm > 24dBm.
3. 11dBm + 10log(20.65) = 24.15 dBm > 24dBm.
4. 11dBm + 10log(20.71) = 24.16 dBm > 24dBm.
5. 11dBm + 10log(21.80) = 24.38 dBm > 24dBm.
6. 11dBm + 10log(21.09) = 24.24 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(23.96) = 24.79 dBm > 24dBm.
2. 11dBm + 10log(24.71) = 24.93 dBm > 24dBm.
3. 11dBm + 10log(20.62) = 24.14 dBm > 24dBm.
4. 11dBm + 10log(20.71) = 24.16 dBm > 24dBm.
5. 11dBm + 10log(22.05) = 24.43 dBm > 24dBm.
6. 11dBm + 10log(20.91) = 24.20 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	14.58	14.23	55.193	17.42	24.00	Pass
46	5230	14.56	14.41	56.182	17.50	24.00	Pass
54	5270	15.13	14.74	**62.369**	17.95	24.00	Pass
62	5310	15.12	14.67	61.818	17.91	24.00	Pass
102	5510	15.23	14.71	62.923	17.99	24.00	Pass
110	5550	15.21	14.79	63.320	18.02	24.00	Pass
134	5670	15.21	14.91	64.164	18.07	24.00	Pass
151	5755	17.41	17.37	109.657	20.40	30.00	Pass
159	5795	17.43	17.23	108.180	20.34	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(47.92) = 27.81 dBm > 24dBm.
2. 11dBm + 10log(40.91) = 27.12 dBm > 24dBm.
3. 11dBm + 10log(41.11) = 27.14 dBm > 24dBm.
4. 11dBm + 10log(51.52) = 28.12 dBm > 24dBm.
5. 11dBm + 10log(47.20) = 27.74 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(48.00) = 27.81 dBm > 24dBm.
2. 11dBm + 10log(41.16) = 27.14 dBm > 24dBm.
3. 11dBm + 10log(40.94) = 27.12 dBm > 24dBm.
4. 11dBm + 10log(51.34) = 28.10 dBm > 24dBm.
5. 11dBm + 10log(50.26) = 28.01 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	14.75	14.44	**57.651**	17.61	24.00	Pass
58	5290	14.91	14.49	59.093	17.72	24.00	Pass
106	5530	15.49	15.01	**67.095**	18.27	24.00	Pass
155	5775	18.64	18.31	140.878	21.49	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(82.02) = 30.14 dBm > 24dBm.
2. 11dBm + 10log(81.94) = 30.13 dBm > 24dBm.

Chain 1

1. 11dBm + 10log(81.90) = 30.13 dBm > 24dBm.
2. 11dBm + 10log(81.95) = 30.14 dBm > 24dBm.

26dB Bandwidth:

802.11a

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	20.45
40	5200	23.48
48	5240	26.76
52	5260	29.57
60	5300	29.76
64	5320	31.58
100	5500	33.75
116	5580	33.45
140	5700	28.27

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.59	20.66
40	5200	20.65	20.59
48	5240	20.61	20.62
52	5260	23.90	23.96
60	5300	25.74	24.71
64	5320	20.65	20.62
100	5500	20.71	20.71
116	5580	21.80	22.05
140	5700	21.09	20.91

802.11ac (VHT40)

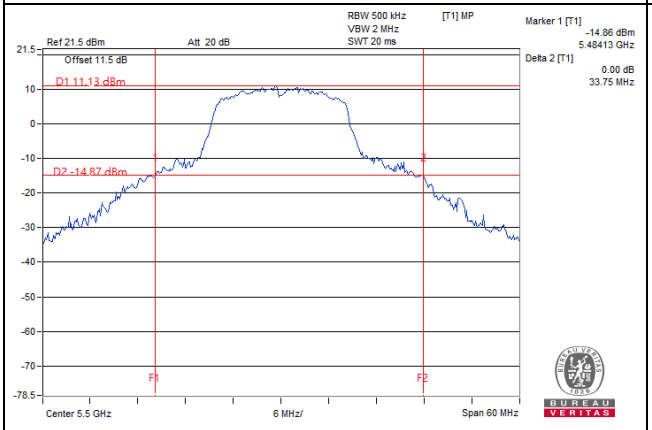
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	41.11	41.03
46	5230	41.24	41.12
54	5270	47.92	48.00
62	5310	40.91	41.16
102	5510	41.11	40.94
110	5550	51.52	51.34
134	5670	47.20	50.26

802.11ac (VHT80)

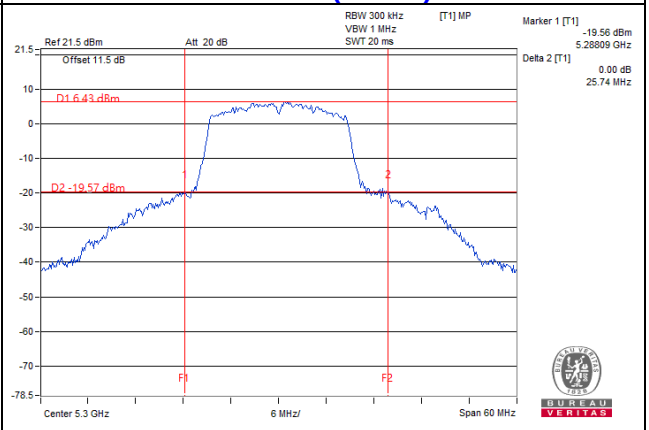
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	82.11	82.07
58	5290	82.02	81.90
106	5530	81.94	81.95

Spectrum Plot of Worst Value

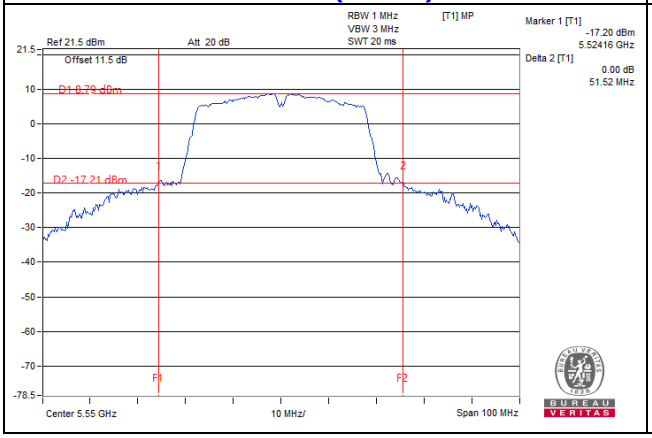
802.11a



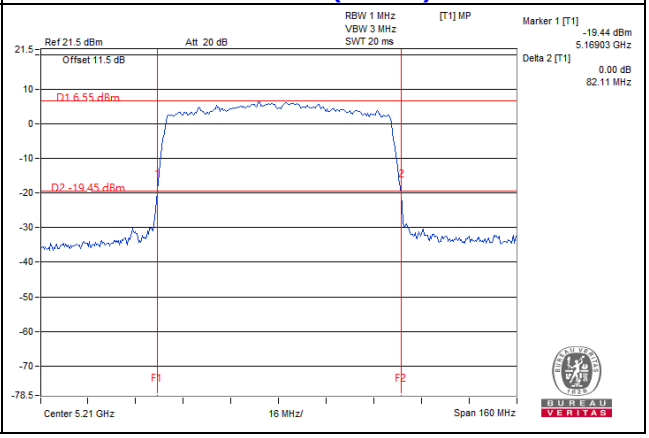
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



EUT Maximum Conducted Power

802.11a

Frequency Band (MHz)	MAX. Power	
	Output Power(mW)	Output Power(dBm)
5250~5350	53.951	17.32
5470~5725	53.703	17.30

802.11ac VHT20

Frequency Band (MHz)	MAX. Power	
	Output Power(mW)	Output Power(dBm)
5250~5350	55.744	17.46
5470~5725	63.623	18.04

802.11ac VHT40

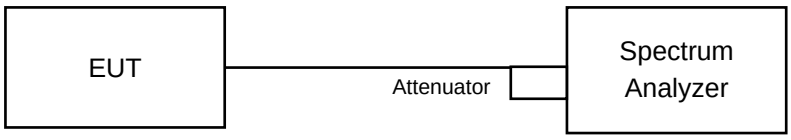
Frequency Band (MHz)	MAX. Power	
	Output Power(mW)	Output Power(dBm)
5250~5350	62.369	17.95
5470~5725	64.164	18.07

802.11ac VHT80

Frequency Band (MHz)	MAX. Power	
	Output Power(mW)	Output Power(dBm)
5250~5350	59.093	17.72
5470~5725	67.095	18.27

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)
36	5180	16.68
40	5200	17.04
48	5240	17.16
52	5260	17.52
60	5300	17.52
64	5320	17.64
100	5500	18.48
116	5580	18.12
140	5700	17.28
149	5745	17.65
157	5785	17.50
165	5825	17.50

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.64	17.64
40	5200	17.64	17.64
48	5240	17.64	17.64
52	5260	17.88	17.88
60	5300	17.88	17.88
64	5320	17.64	17.64
100	5500	17.64	17.64
116	5580	17.88	17.88
140	5700	17.76	17.88
149	5745	19.57	19.30
157	5785	19.00	19.00
165	5825	18.80	18.60

802.11ac (VHT40)

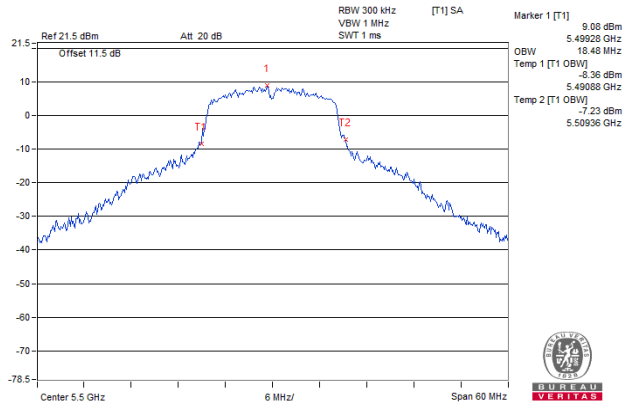
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	36.20	36.20
46	5230	36.20	36.20
54	5270	36.40	36.40
62	5310	36.20	36.20
102	5510	36.20	36.20
110	5550	36.60	36.40
134	5670	36.60	36.40
151	5755	36.81	36.83
159	5795	36.83	36.83

802.11ac (VHT80)

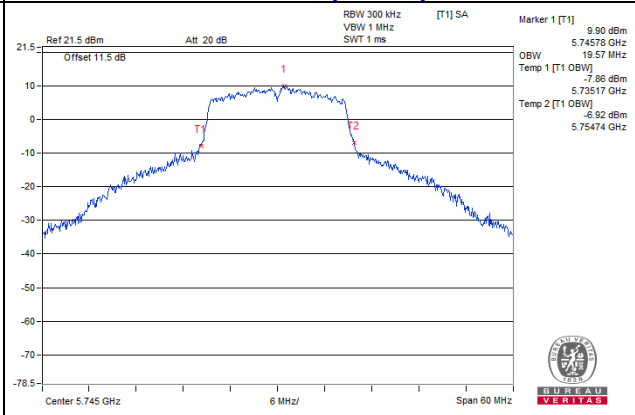
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	75.60	75.60
58	5290	75.60	75.60
106	5530	75.60	75.60
155	5775	76.49	76.72

Spectrum Plot of Worst Value

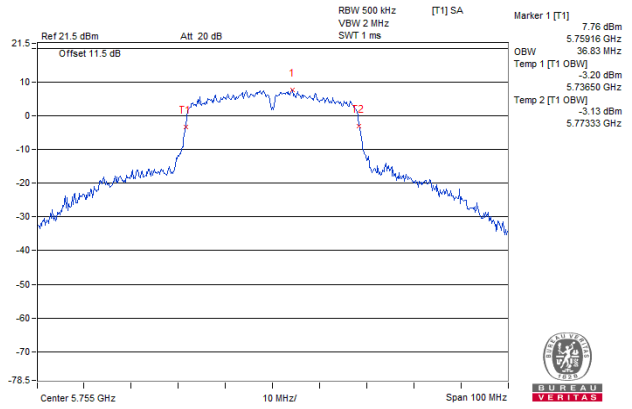
802.11a



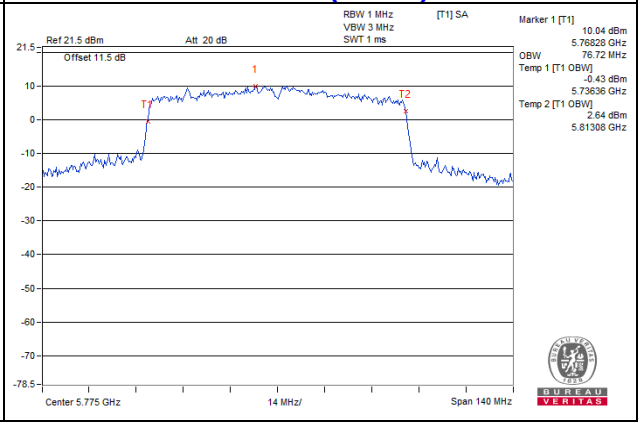
802.11ac (VHT20)



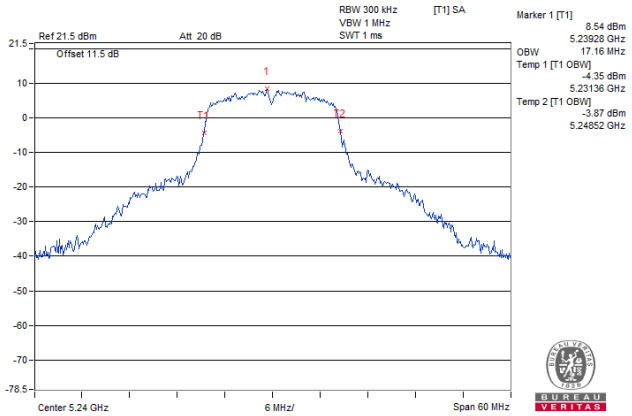
802.11ac (VHT40)



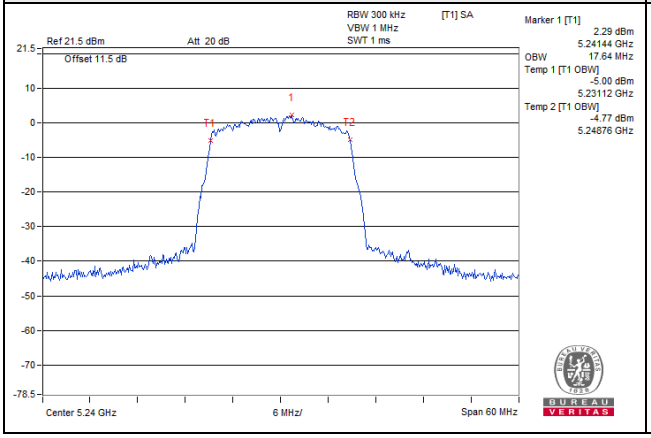
802.11ac (VHT80)

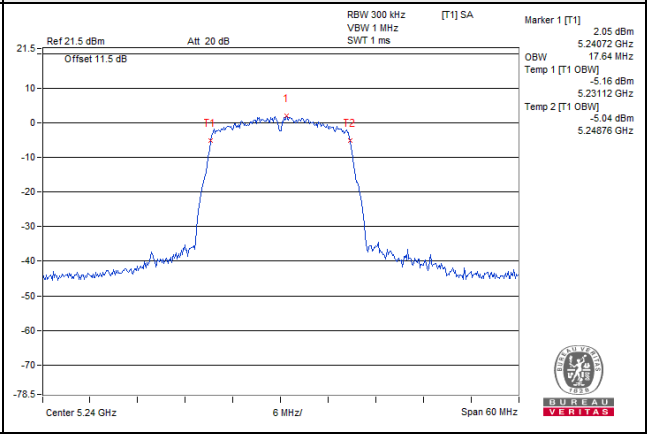


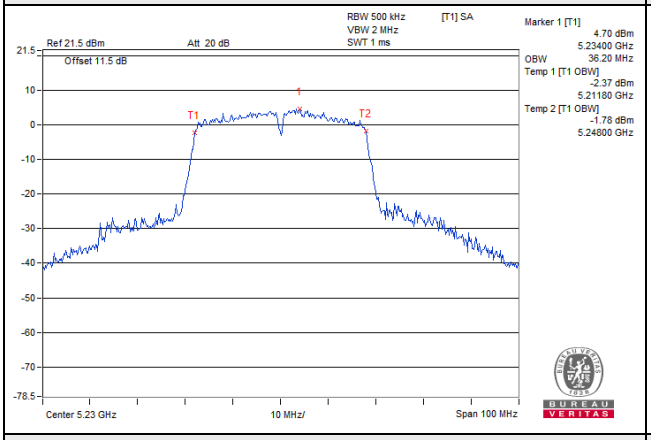
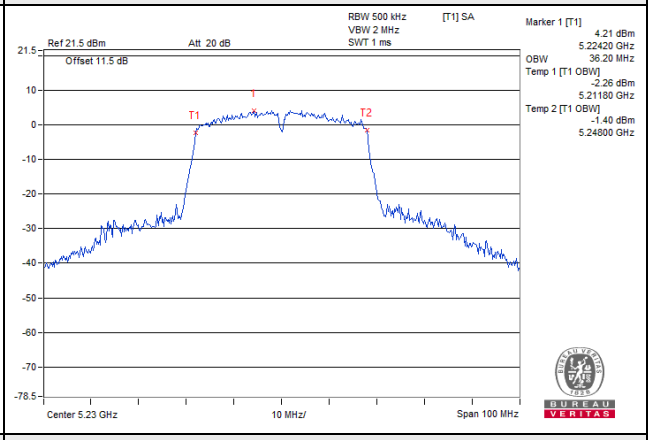
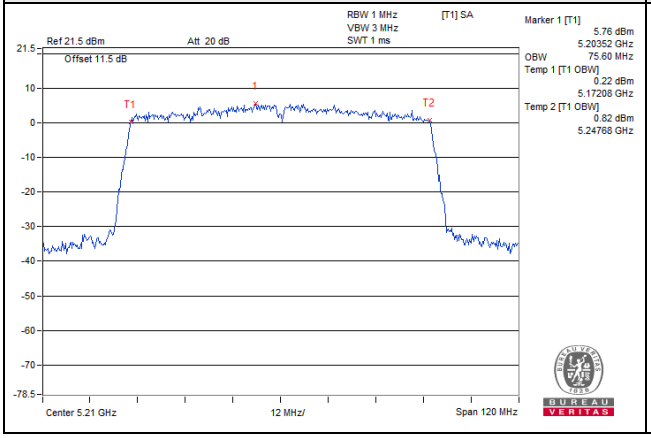
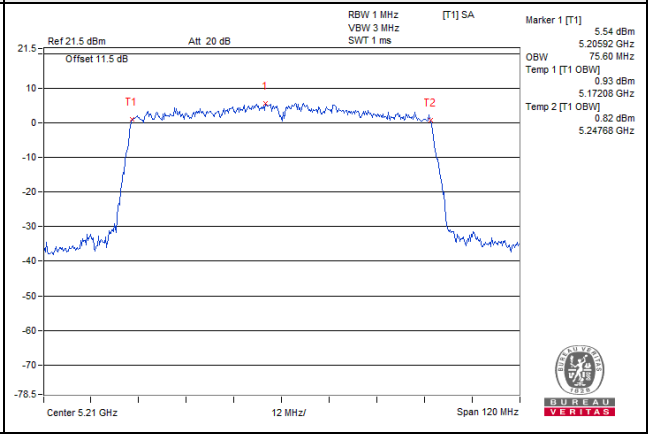
Spectrum Plot for near By DFS Band
802.11a CH 48



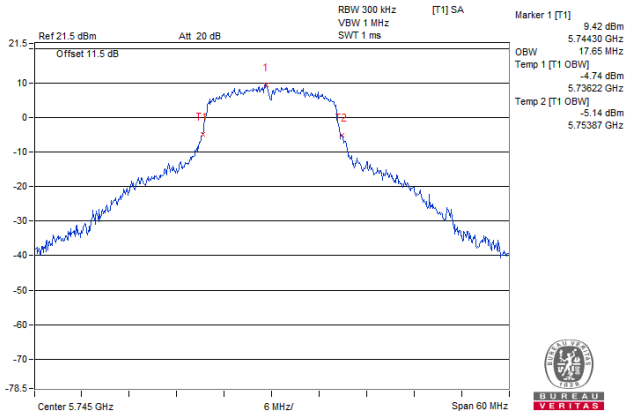
802.11ac (VHT20) _Chain 0 / CH 48	802.11ac (VHT20) _Chain 1 / CH 48



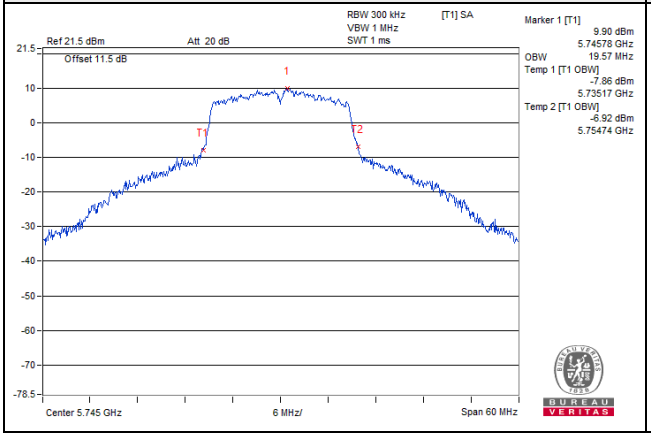


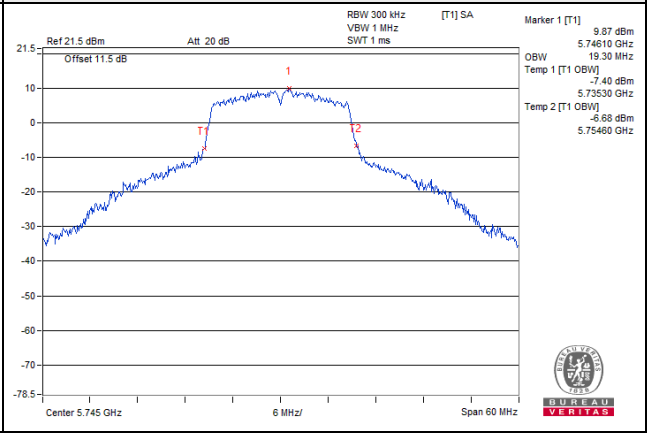
Spectrum Plot for near By DFS Band	
802.11ac (VHT40) _Chain 0 / CH 46	802.11ac (VHT40) _Chain 1 / CH 46
	
802.11ac (VHT80) _Chain 0 / CH 42	802.11ac (VHT80) _Chain 1 / CH 42
	

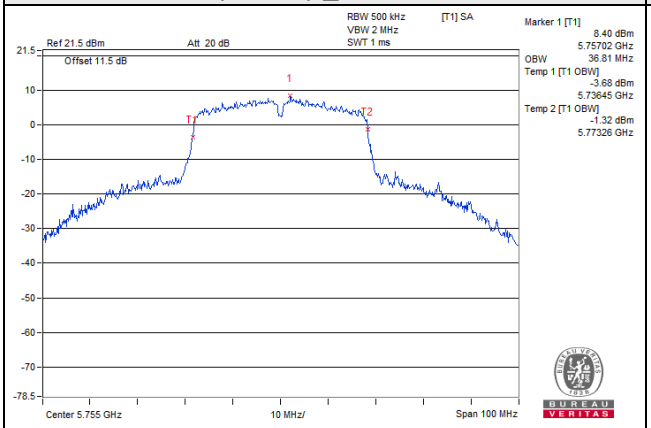
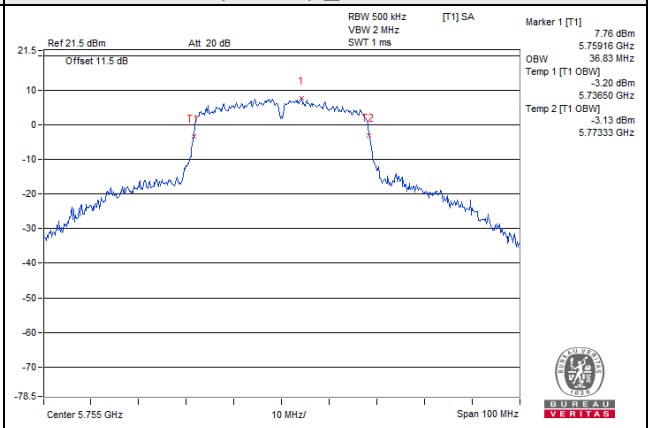
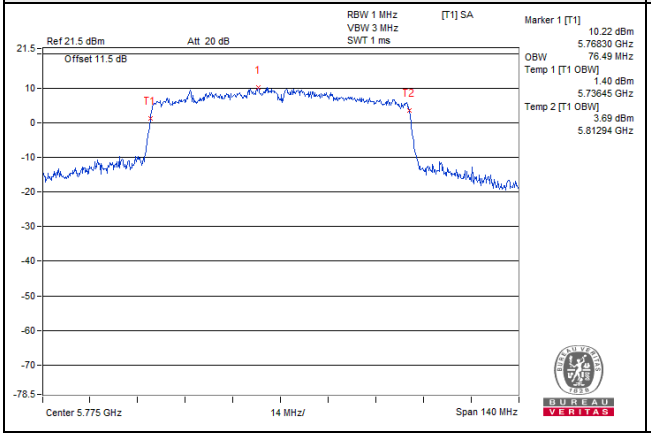
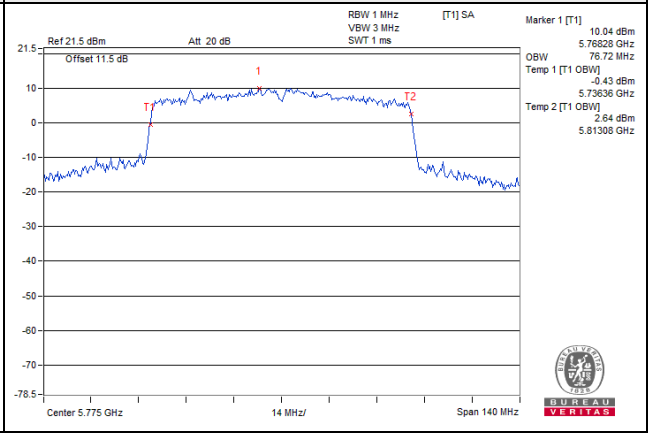
Spectrum Plot for near By DFS Band
802.11a / CH 149



802.11ac (VHT20) _ Chain 0 / CH 149	802.11ac (VHT20) _ Chain 1 / CH 149





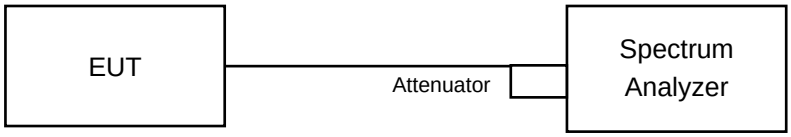
Spectrum Plot for near By DFS Band	
802.11ac (VHT40) _ Chain 0 / CH 151	802.11ac (VHT40) _ Chain 1 / CH 151
	
802.11ac (VHT80) _ Chain 0 / CH 155	802.11ac (VHT80) _ Chain 1 / CH 155
	

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:

Duty cycle of test signal is ≥ 98 %
Using method SA-1
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS.
3) Set Channel power measure = 1MHz.
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value.

Duty cycle of test signal is < 98%
Using method SA-2
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

Duty cycle of test signal is ≥ 98 %
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 500 kHz, Set VBW ≥ 2 MHz, Detector = RMS.
3) Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value.

Duty cycle of test signal is < 98%
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 500 kHz, Set VBW ≥ 3 RBW, Detector = RMS
3) Sweep time = auto, trigger set to “free run”.
4) Trace average at least 100 traces in power averaging mode.
5) 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 w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	4.75	0.09	4.84	11.00	Pass
40	5200	4.68	0.09	4.77	11.00	Pass
48	5240	4.71	0.09	4.80	11.00	Pass
52	5260	5.10	0.09	5.19	11.00	Pass
60	5300	4.97	0.09	5.06	11.00	Pass
64	5320	4.87	0.09	4.96	11.00	Pass
100	5500	5.09	0.09	5.18	11.00	Pass
116	5580	5.13	0.09	5.22	11.00	Pass
140	5700	4.67	0.09	4.76	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm)		Duty Factor (dB)	Total PSD With Duty Factor (dBm)	MAX. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	-1.46	-1.42	0.11	1.68	10.29	Pass
40	5200	-1.66	-1.60	0.11	1.49	10.29	Pass
48	5240	-1.64	-1.68	0.11	1.46	10.29	Pass
52	5260	2.63	2.60	0.11	5.74	10.09	Pass
60	5300	2.48	2.43	0.11	5.58	10.09	Pass
64	5320	2.51	2.49	0.11	5.62	10.09	Pass
100	5500	2.20	2.23	0.11	5.34	9.74	Pass
116	5580	1.63	1.57	0.11	4.72	9.74	Pass
140	5700	1.52	1.53	0.11	4.65	9.74	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 (5180~5240MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 6.71dBi > 6dBi, so the power density limit shall be reduced to 11-(6.71-6) = 10.29dBm.
   Directional gain (5260~5320MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 6.91Bi > 6dBi, so the power density limit shall be reduced to 11-(6.91-6) = 10.09dBm.
   Directional gain (5500~5700MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 7.26dBi > 6dBi, so the power density limit shall be reduced to 11-(7.26-6) = 9.74dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

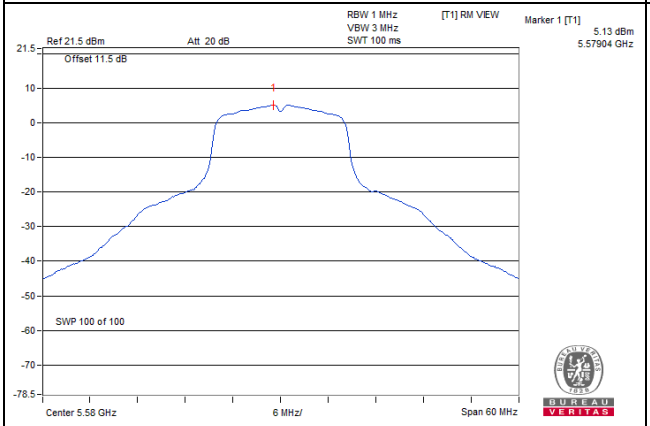
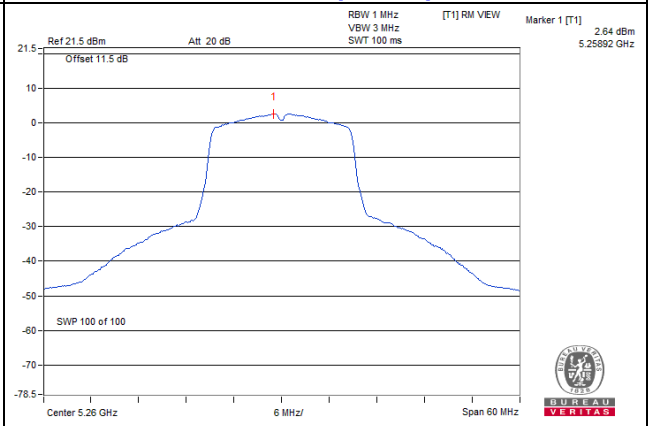
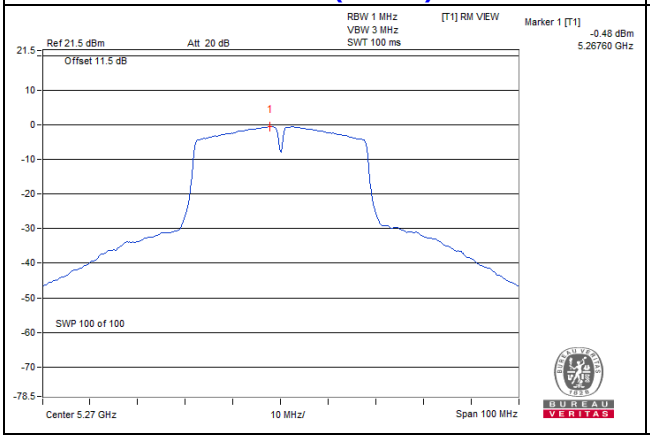
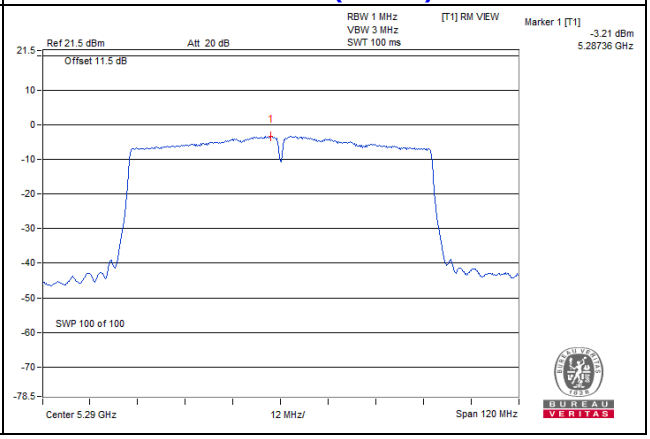
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm)		Duty Factor (dB)	Total PSD With Duty Factor (dBm)	MAX. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-1.26	-1.29	0.23	1.97	10.29	Pass
46	5230	-1.41	-1.42	0.23	1.83	10.29	Pass
54	5270	-0.51	-0.49	0.23	2.74	10.09	Pass
62	5310	-0.69	-0.67	0.23	2.56	10.09	Pass
102	5510	-0.69	-0.70	0.23	2.55	9.74	Pass
110	5550	-0.66	-0.53	0.23	2.65	9.74	Pass
134	5670	-0.85	-0.84	0.23	2.40	9.74	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 (5180~5240MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 6.71dBi > 6dBi, so the power density limit shall be reduced to 11-(6.71-6) = 10.29dBm.
   Directional gain (5260~5320MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 6.91Bi > 6dBi, so the power density limit shall be reduced to 11-(6.91-6) = 10.09dBm.
   Directional gain (5500~5700MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 7.26dBi > 6dBi, so the power density limit shall be reduced to 11-(7.26-6) = 9.74dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm)		Duty Factor (dB)	Total PSD With Duty Factor (dBm)	MAX. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-4.25	-4.30	0.52	-0.75	10.29	Pass
58	5290	-3.28	-3.22	0.52	0.28	10.09	Pass
106	5530	-3.54	-3.50	0.52	0.01	9.74	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 (5180~5240MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 6.71dBi > 6dBi, so the power density limit shall be reduced to 11-(6.71-6) = 10.29dBm.
   Directional gain (5260~5320MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 6.91Bi > 6dBi, so the power density limit shall be reduced to 11-(6.91-6) = 10.09dBm.
   Directional gain (5500~5700MHz) = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 7.26dBi > 6dBi, so the power density limit shall be reduced to 11-(7.26-6) = 9.74dBm.
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 W/O Duty Factor (dBm/500kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
149	5745	-2.64	0.09	-2.55	30.00	Pass
157	5785	-2.85	0.09	-2.76	30.00	Pass
165	5825	-2.58	0.09	-2.49	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

TX chain	Channel	Freq. (MHz)	PSD W/O Duty Factor (dBm/500kHz)	10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	149	5745	-2.37	3.01	0.11	0.75	28.93	Pass
	157	5785	-2.64	3.01	0.11	0.48	28.93	Pass
	165	5825	-2.82	3.01	0.11	0.30	28.93	Pass
1	149	5745	-2.26	3.01	0.11	0.86	28.93	Pass
	157	5785	-2.63	3.01	0.11	0.49	28.93	Pass
	165	5825	-2.85	3.01	0.11	0.27	28.93	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 7.07dBi > 6dBi , so the power density limit shall be reduced to 30-(7.07-6) = 28.93dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

TX chain	Channel	Freq. (MHz)	PSD W/O Duty Factor (dBm/500kHz)	10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	151	5755	-7.24	3.01	0.23	-4.00	28.93	Pass
	159	5795	-7.46	3.01	0.23	-4.22	28.93	Pass
1	151	5755	-7.25	3.01	0.23	-4.01	28.93	Pass
	159	5795	-7.26	3.01	0.23	-4.02	28.93	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 7.07dBi > 6dBi , so the power density limit shall be reduced to 30-(7.07-6) = 28.93dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

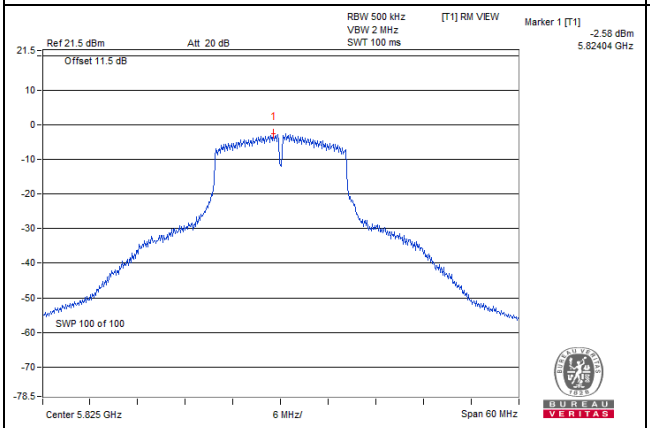
TX chain	Channel	Freq. (MHz)	PSD W/O Duty Factor (dBm/500kHz)	10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	155	5775	-8.97	3.01	0.52	-5.44	28.93	Pass
1	155	5775	-8.96	3.01	0.52	-5.43	28.93	Pass

Note:

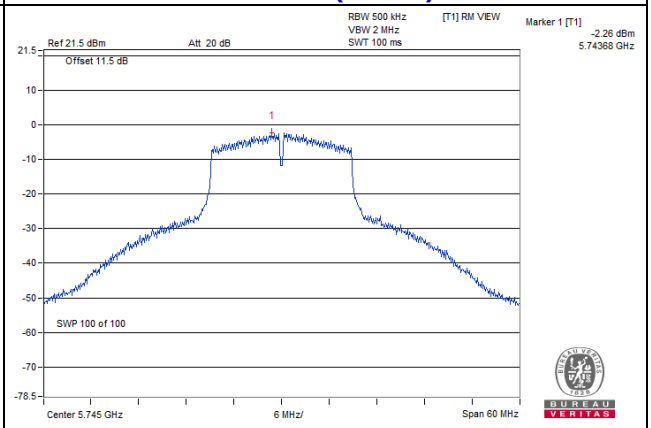
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2/2$] = 7.07dBi > 6dBi , so the power density limit shall be reduced to 30-(7.07-6) = 28.93dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

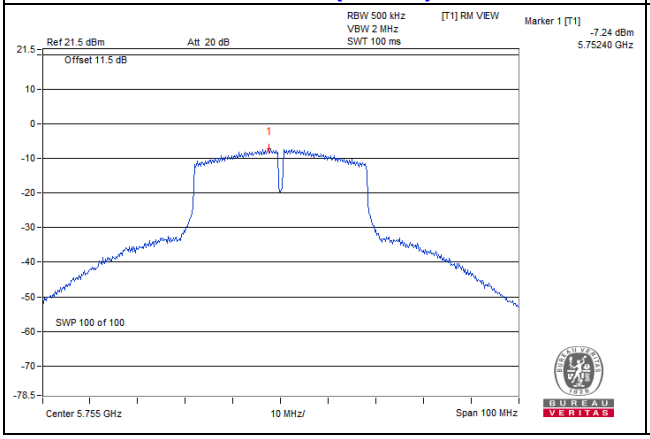
802.11a



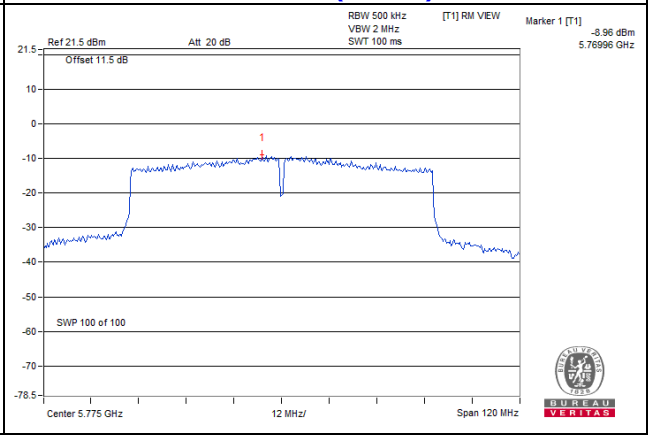
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)

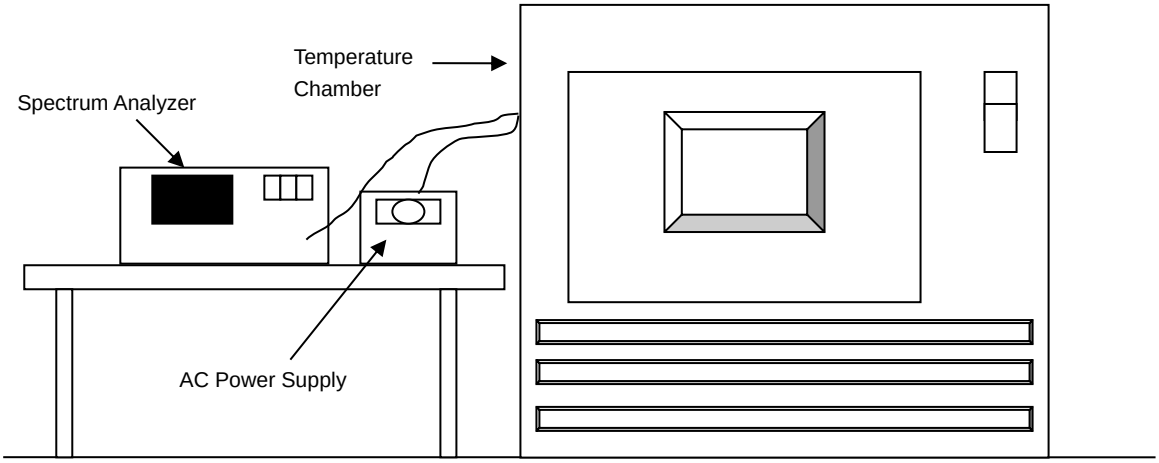


4.6 Frequency Stability

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

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	5179.9845	PASS	5179.9858	PASS	5179.9875	PASS	5179.986	PASS
40	120	5180.0008	PASS	5179.9993	PASS	5180.0011	PASS	5179.9994	PASS
30	120	5180.0027	PASS	5180.0052	PASS	5180.0038	PASS	5180.0029	PASS
20	120	5179.9857	PASS	5179.9826	PASS	5179.9836	PASS	5179.9834	PASS
10	120	5180.0143	PASS	5180.0156	PASS	5180.0146	PASS	5180.0141	PASS
0	120	5180.0168	PASS	5180.0215	PASS	5180.0215	PASS	5180.0217	PASS
-10	120	5179.9819	PASS	5179.9824	PASS	5179.9828	PASS	5179.9834	PASS
-20	120	5179.9865	PASS	5179.9872	PASS	5179.9834	PASS	5179.9828	PASS
-30	120	5179.9892	PASS	5179.994	PASS	5179.9925	PASS	5179.9891	PASS

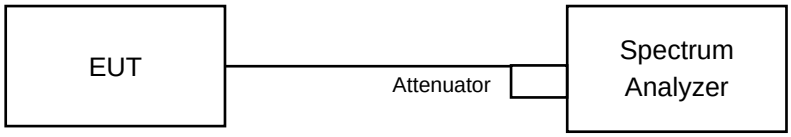
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5179.9862	PASS	5179.9823	PASS	5179.9827	PASS	5179.9842	PASS
	120	5179.9857	PASS	5179.9826	PASS	5179.9836	PASS	5179.9834	PASS
	102	5179.9865	PASS	5179.982	PASS	5179.9836	PASS	5179.9837	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

Refer to section 4.1.2 to get information of above instrument.

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
149	5745	15.17	0.5	Pass
157	5785	15.18	0.5	Pass
165	5825	15.17	0.5	Pass

802.11ac (VHT20)

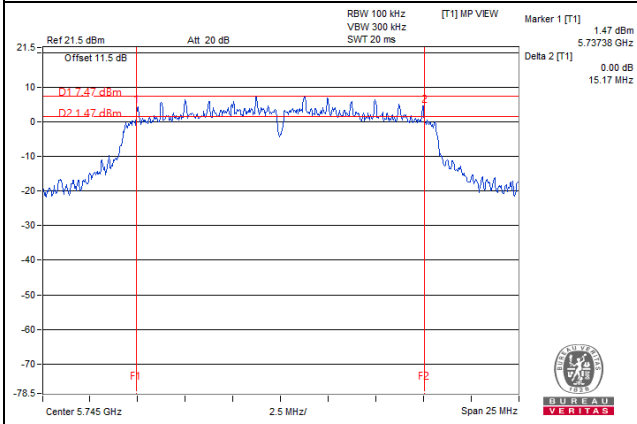
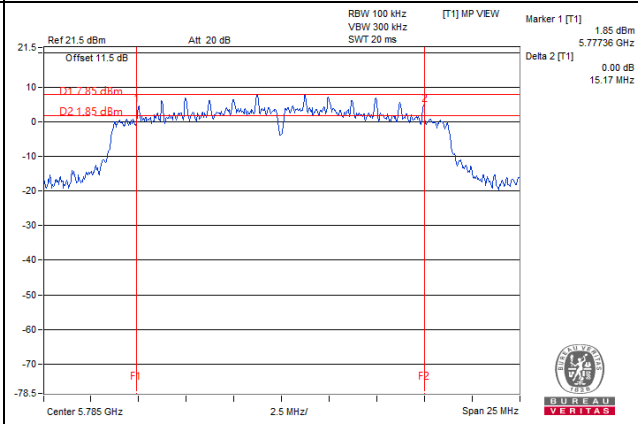
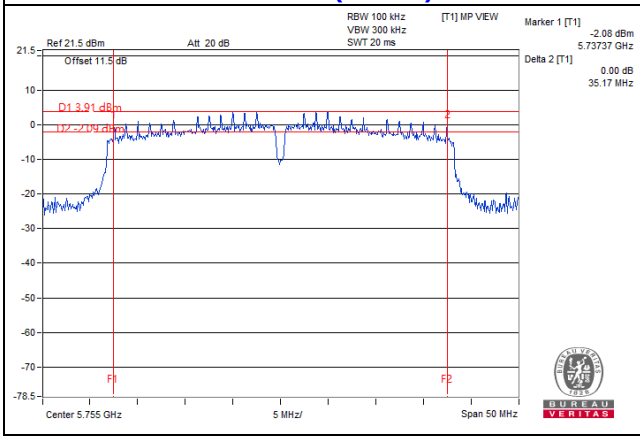
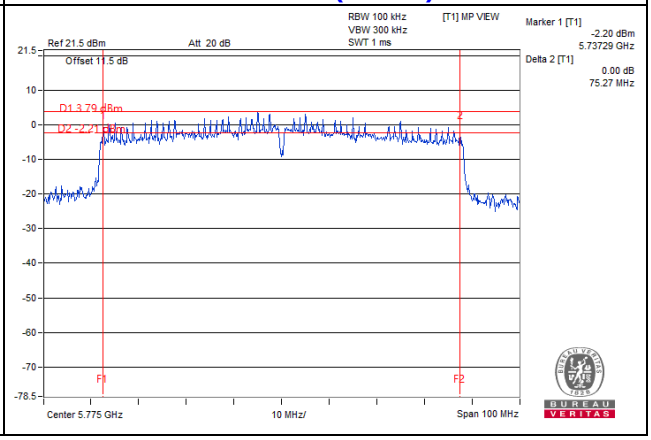
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	15.18	15.97	0.5	Pass
157	5785	15.18	15.17	0.5	Pass
165	5825	15.18	15.18	0.5	Pass

802.11ac (VHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	35.19	35.17	0.5	Pass
159	5795	35.18	35.18	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	75.27	75.30	0.5	Pass

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

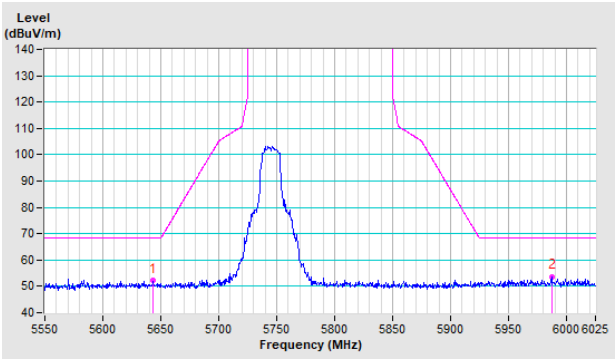
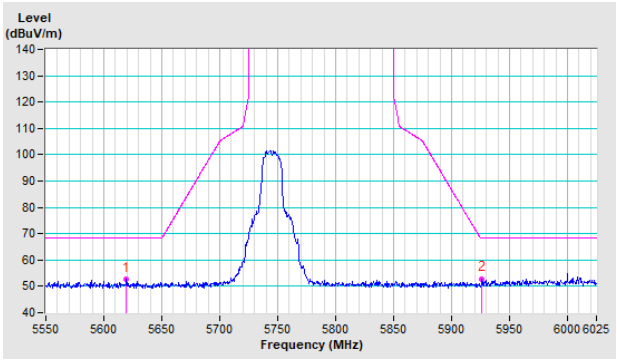
5 Pictures of Test Arrangements

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

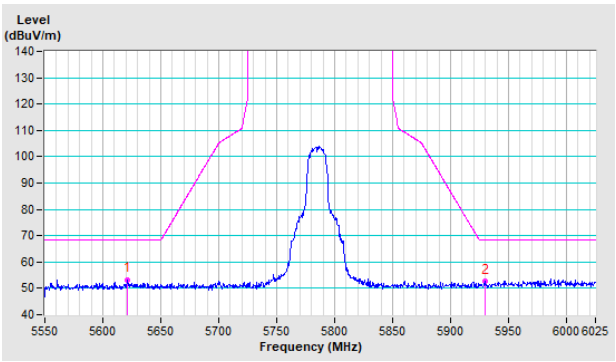
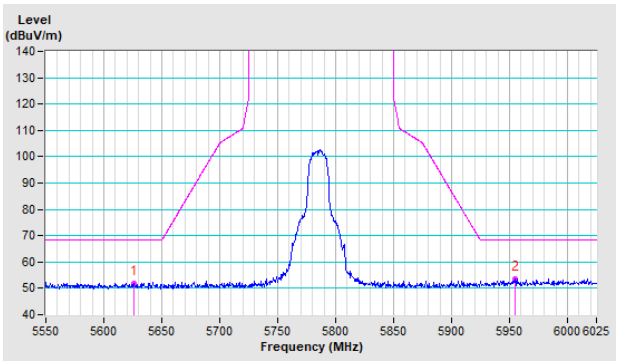
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a

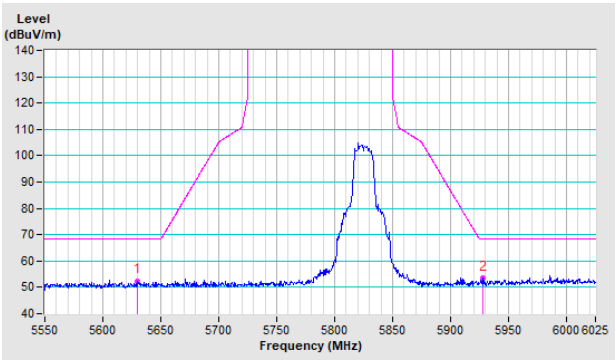
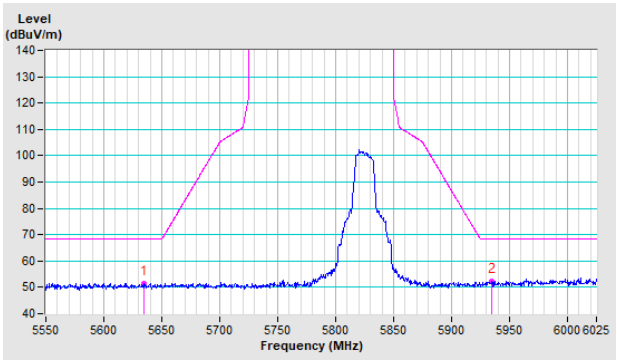
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

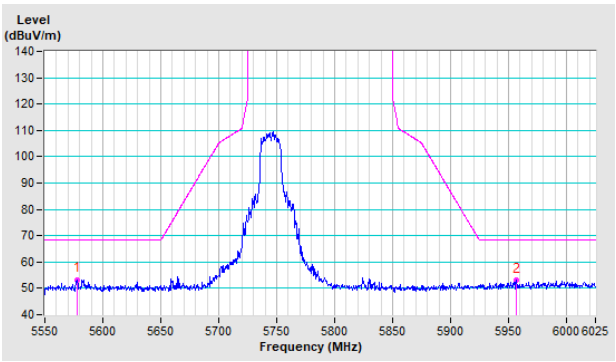
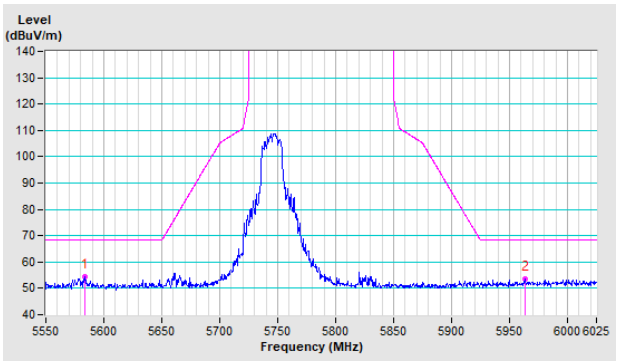
Horizontal	Vertical
	

CH 165 5825 MHz

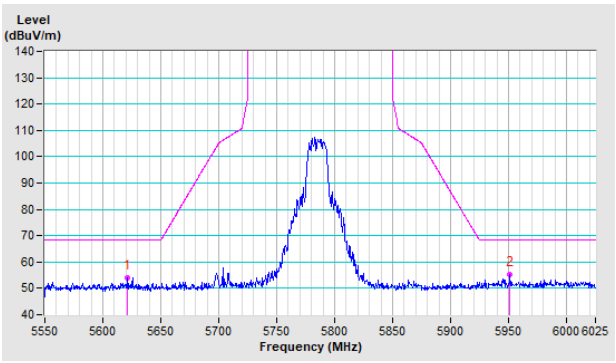
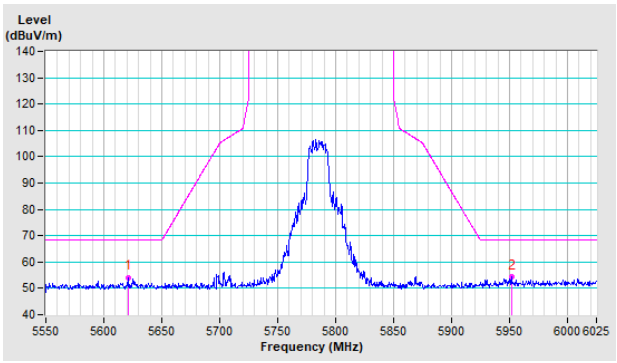
Horizontal	Vertical
	

802.11ac (VHT20)

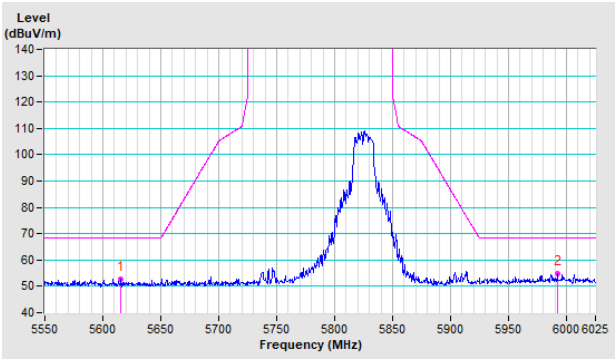
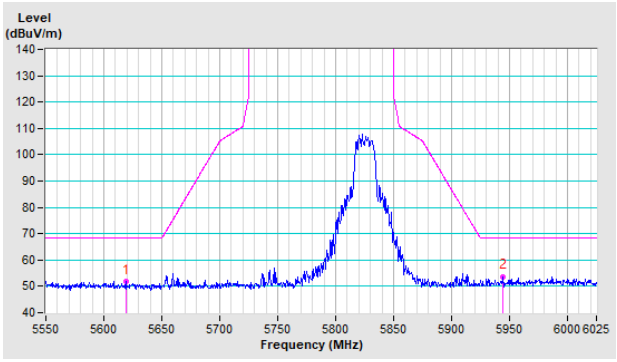
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

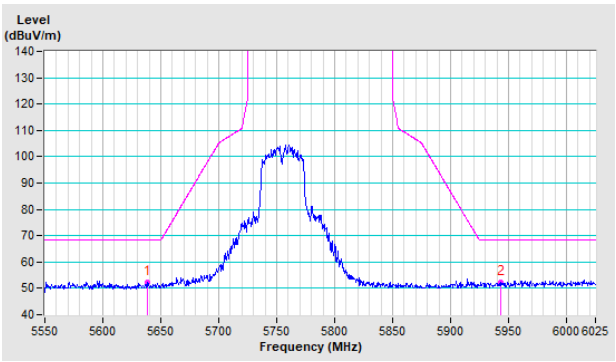
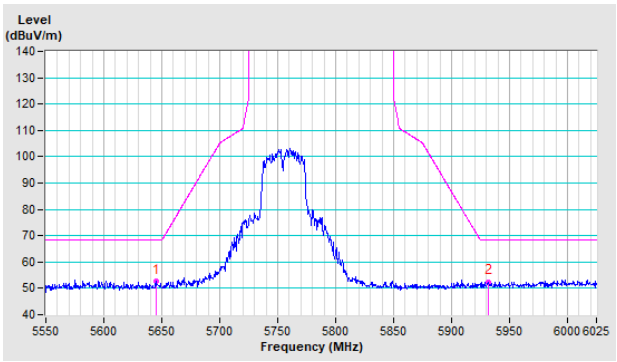
Horizontal	Vertical
	

CH 165 5825 MHz

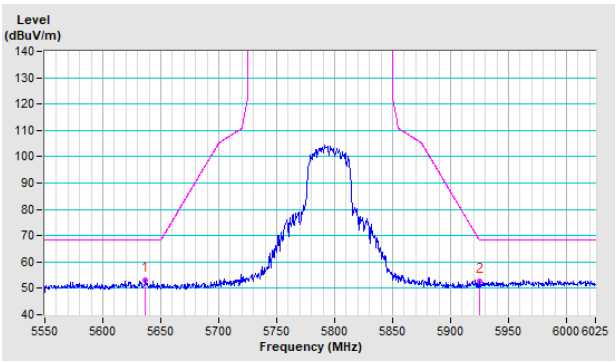
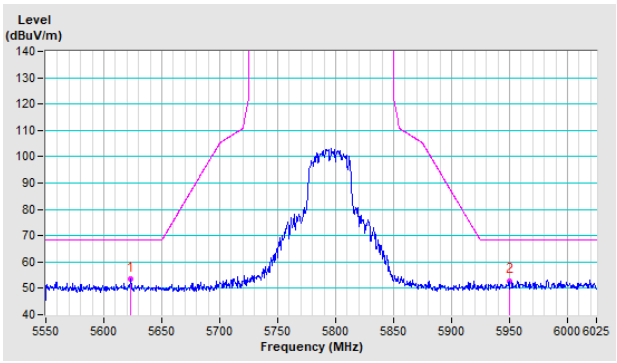
Horizontal	Vertical
	

802.11ac (VHT40)

CH 151 5755 MHz

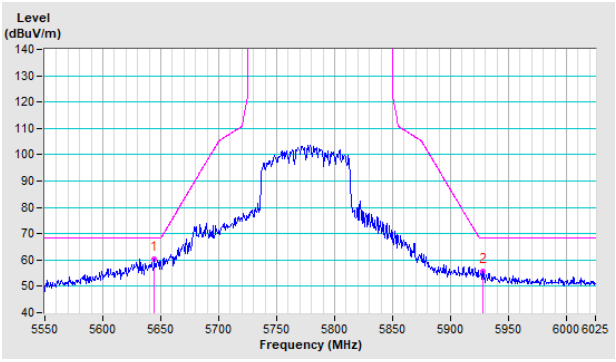
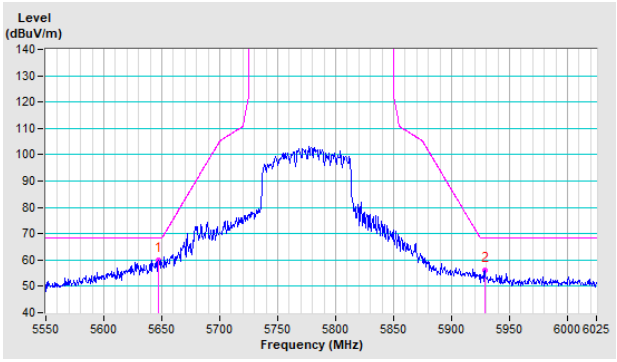
Horizontal	Vertical
	

CH 159 5795 MHz

Horizontal	Vertical
	

802.11ac (VHT80)

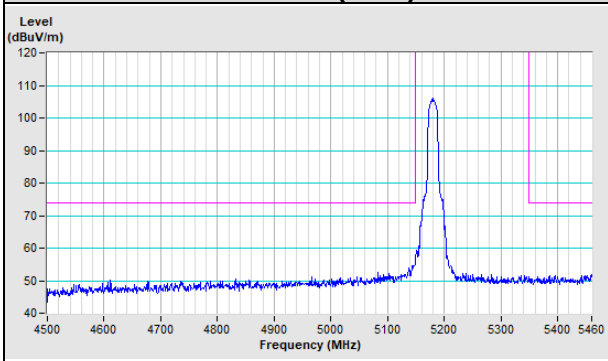
CH 155 5775 MHz

Horizontal	Vertical
	

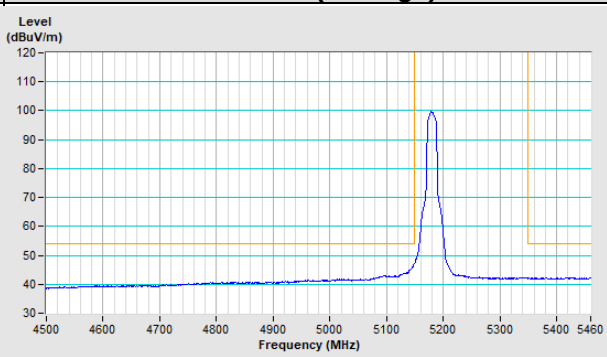
Annex B- Band Edge Measurement

802.11a Channel 36

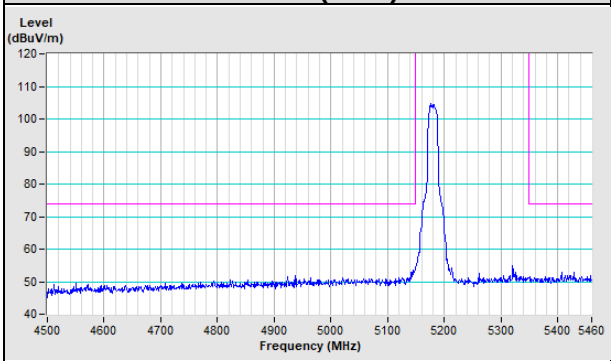
Horizontal (Peak)



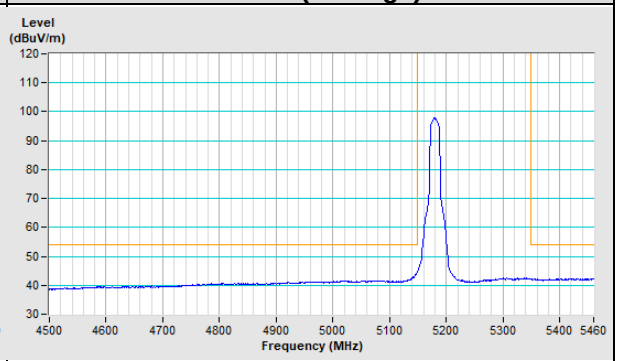
Horizontal (Average)



Vertical (Peak)

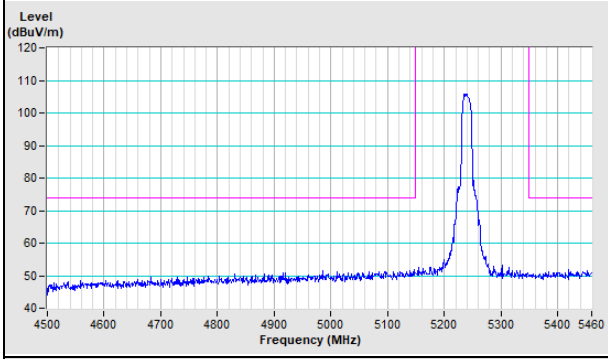


Vertical (Average)

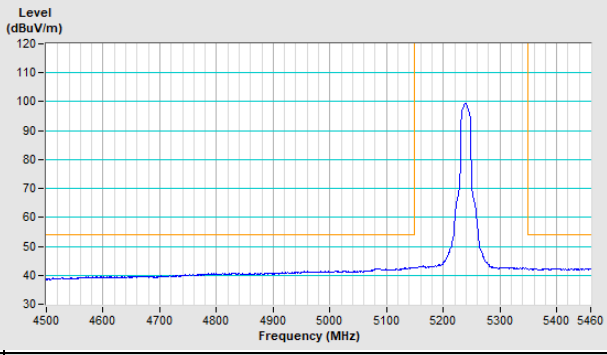


802.11a Channel 48

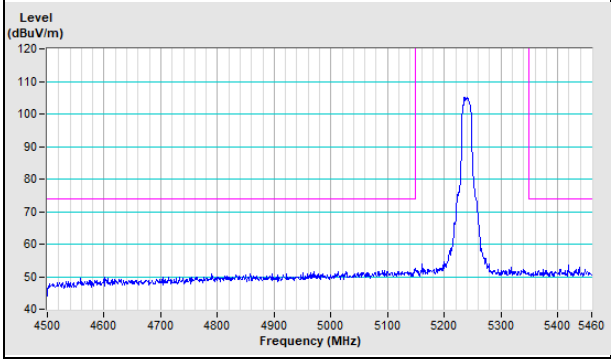
Horizontal (Peak)



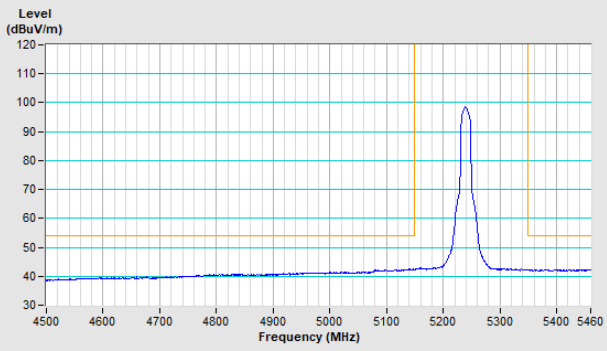
Horizontal (Average)



Vertical (Peak)

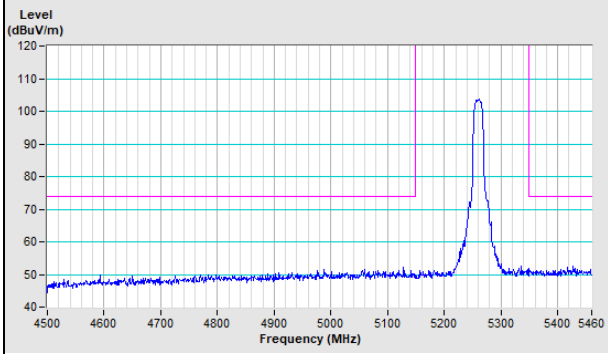


Vertical (Average)

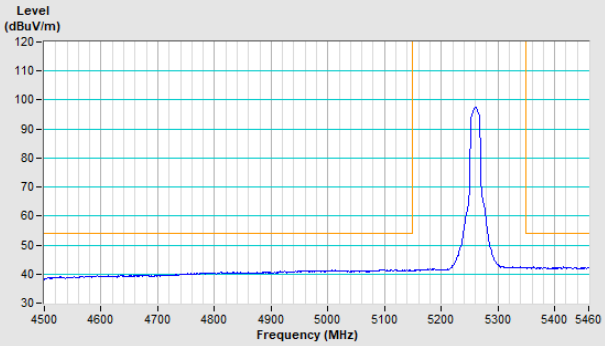


802.11a Channel 52

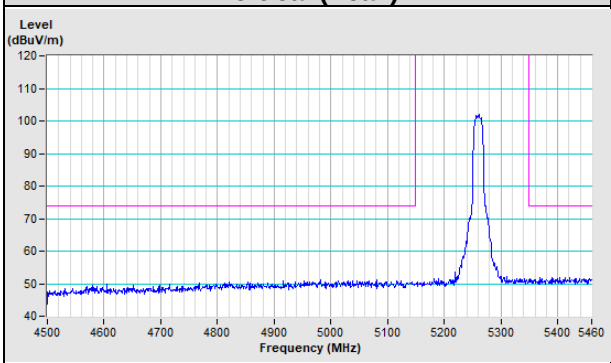
Horizontal (Peak)



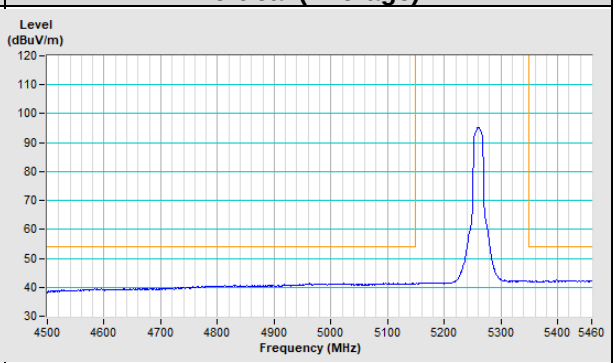
Horizontal (Average)



Vertical (Peak)

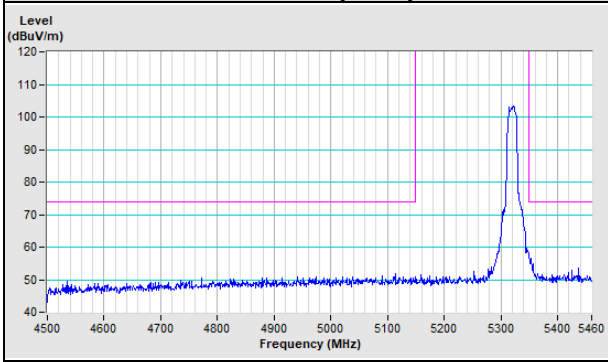


Vertical (Average)

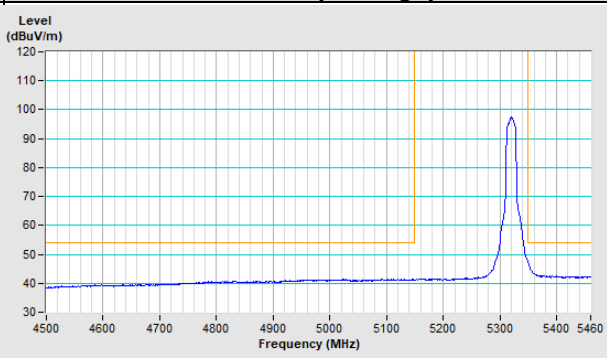


802.11a Channel 64

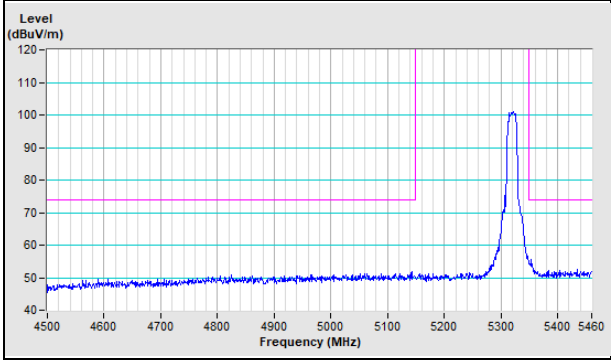
Horizontal (Peak)



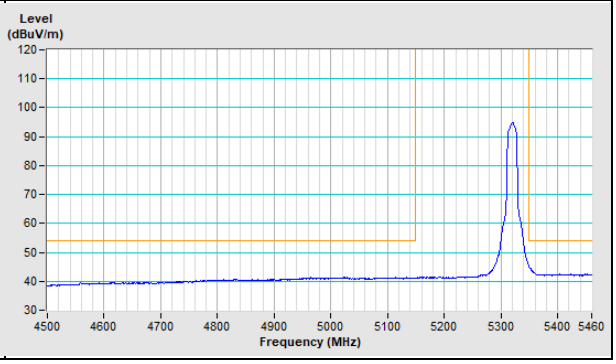
Horizontal (Average)

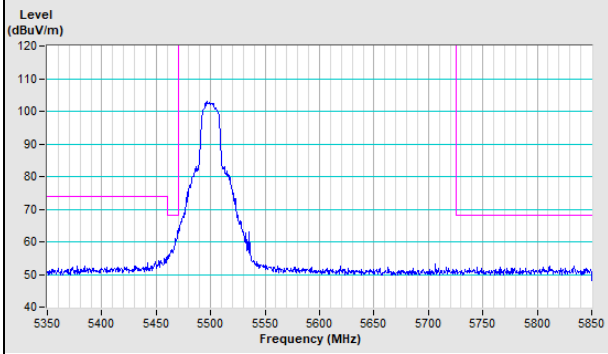
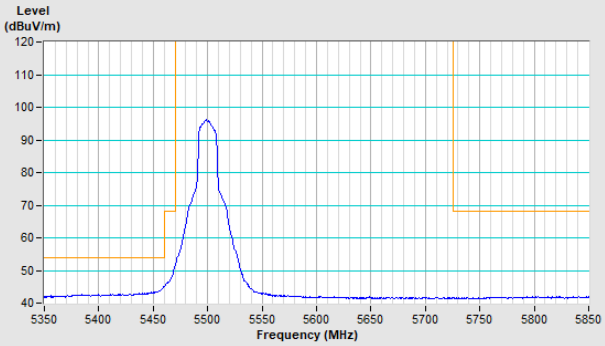
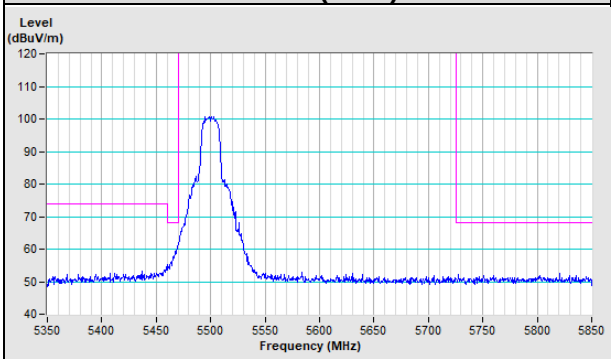
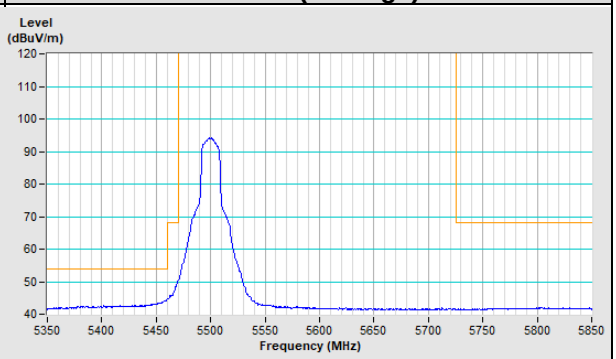
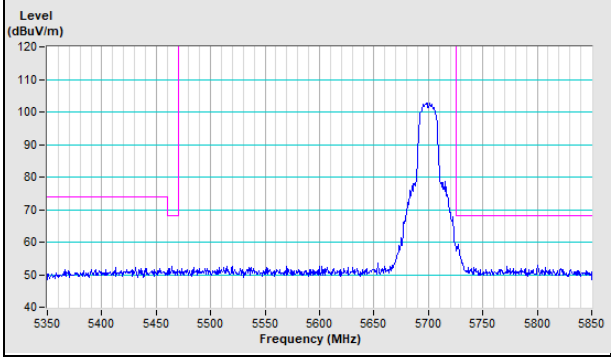
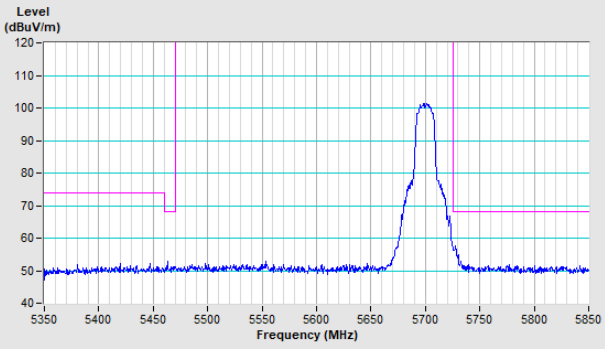


Vertical (Peak)



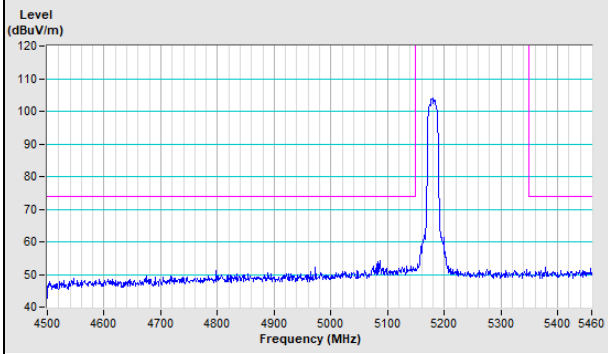
Vertical (Average)



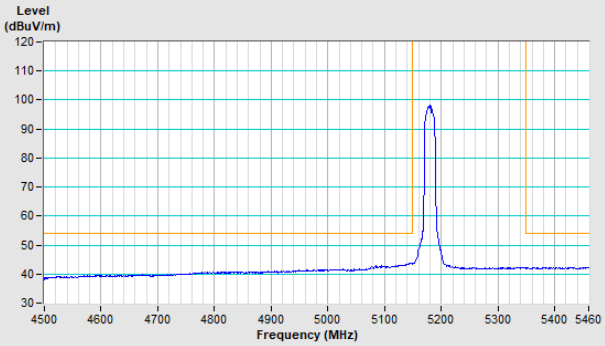
802.11a Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 140	
Horizontal (Peak)	Vertical (Peak)
	

802.11ac (VHT20) Channel 36

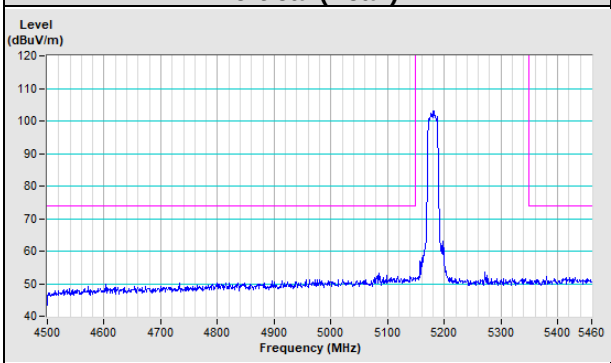
Horizontal (Peak)



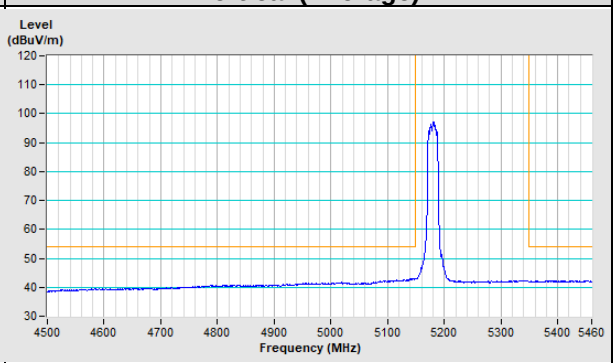
Horizontal (Average)



Vertical (Peak)

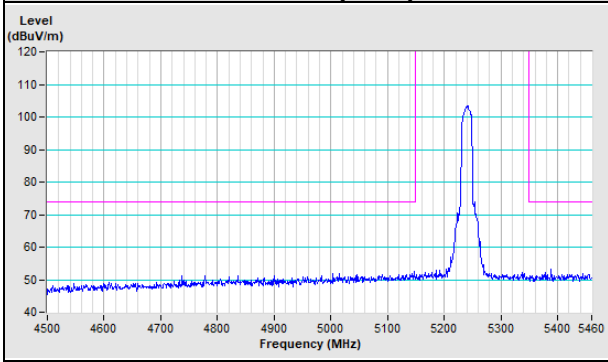


Vertical (Average)

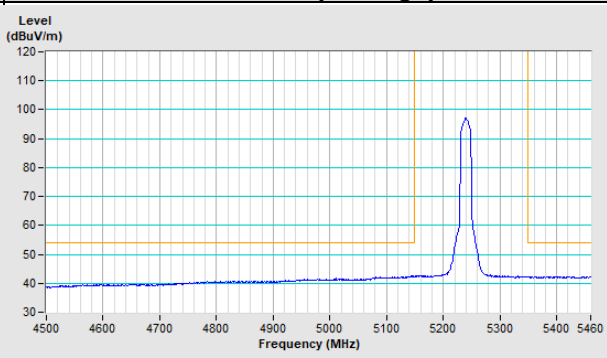


802.11ac (VHT20) Channel 48

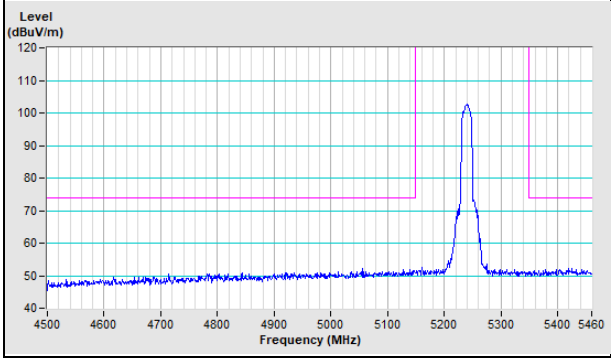
Horizontal (Peak)



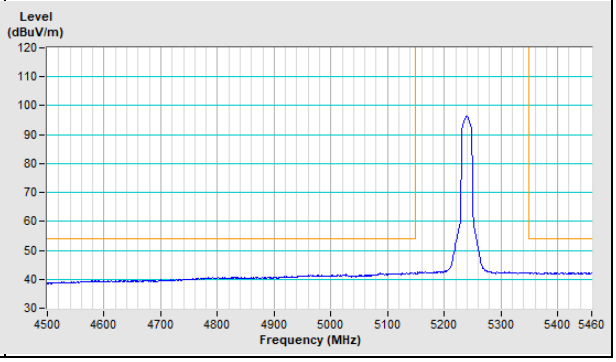
Horizontal (Average)



Vertical (Peak)

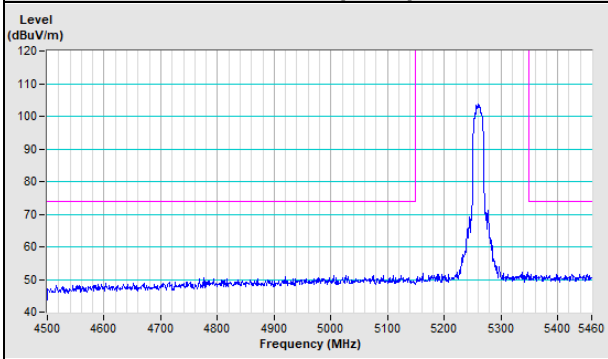


Vertical (Average)

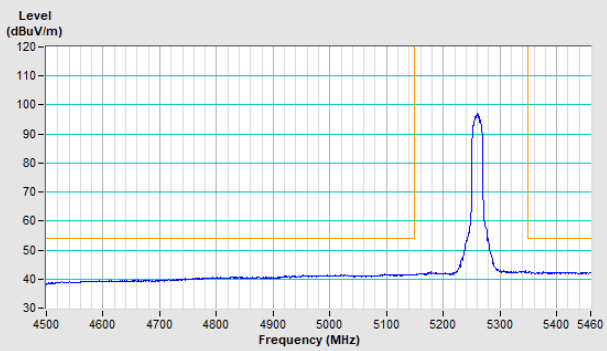


802.11ac (VHT20) Channel 52

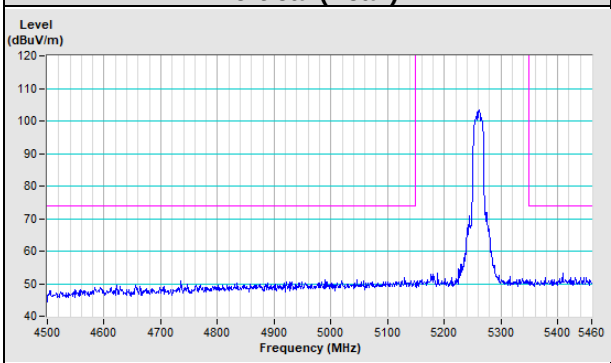
Horizontal (Peak)



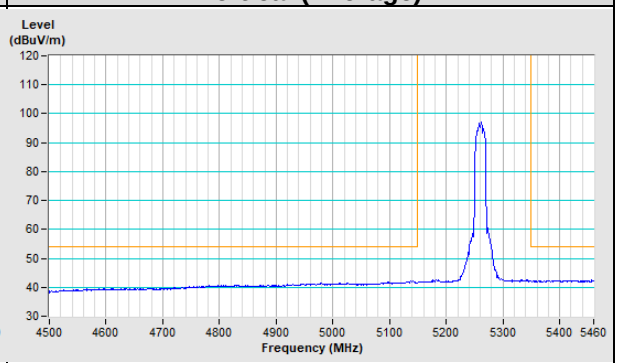
Horizontal (Average)



Vertical (Peak)

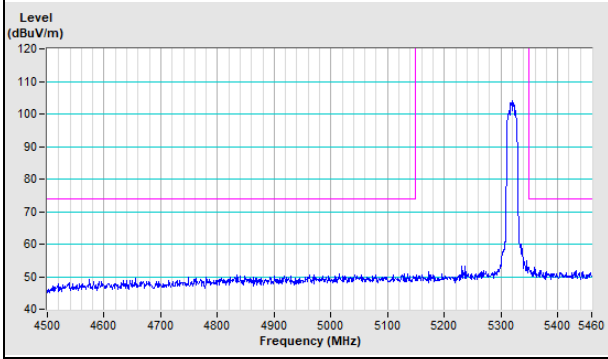


Vertical (Average)

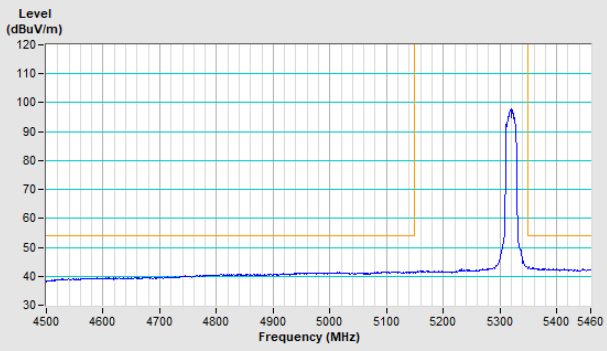


802.11ac (VHT20) Channel 64

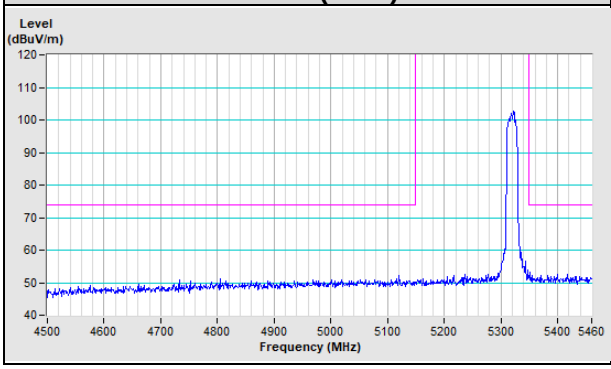
Horizontal (Peak)



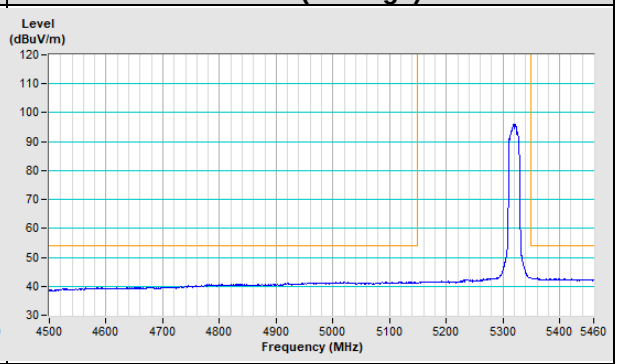
Horizontal (Average)



Vertical (Peak)

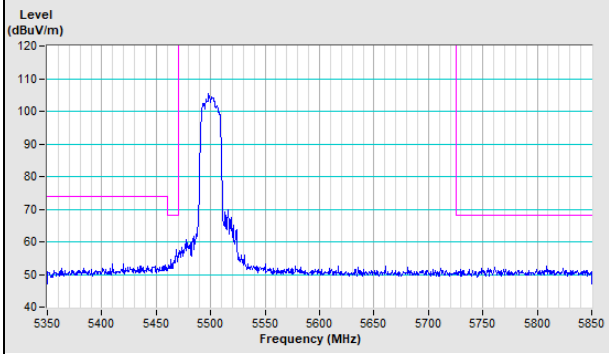


Vertical (Average)

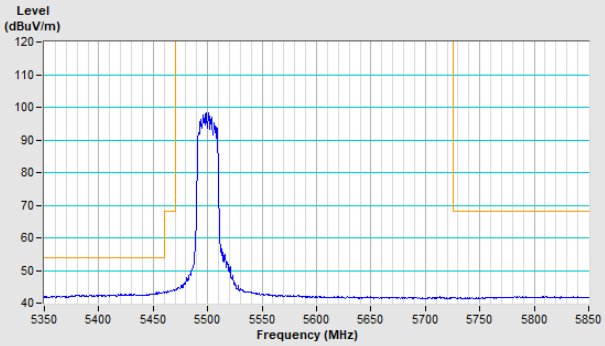


802.11ac (VHT20) Channel 100

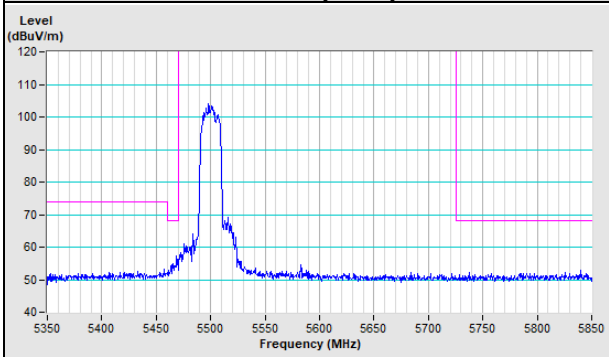
Horizontal (Peak)



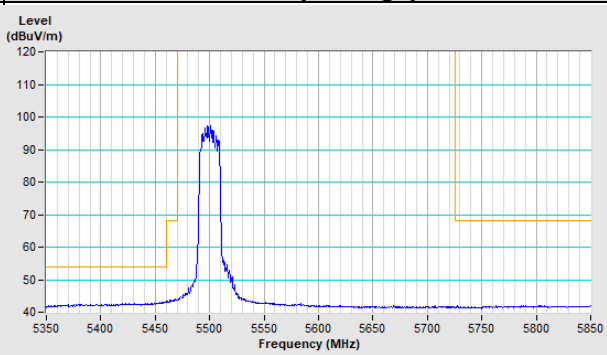
Horizontal (Average)



Vertical (Peak)

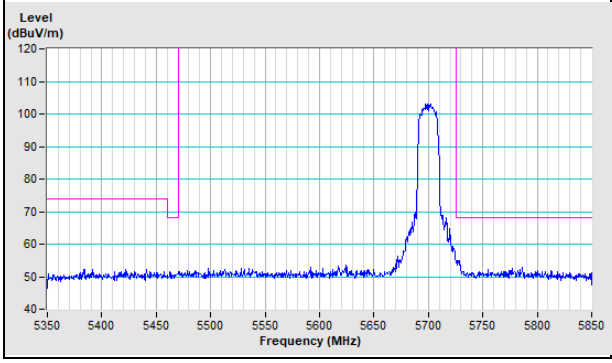


Vertical (Average)

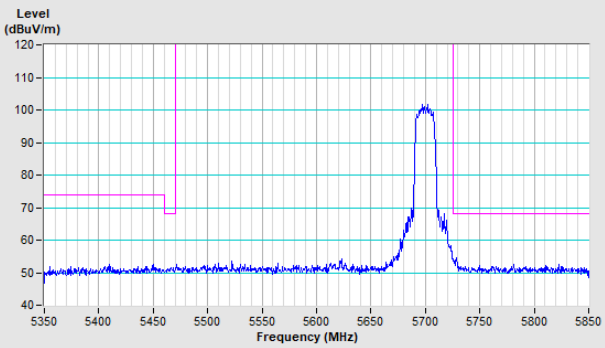


802.11ac (VHT20) Channel 140

Horizontal (Peak)

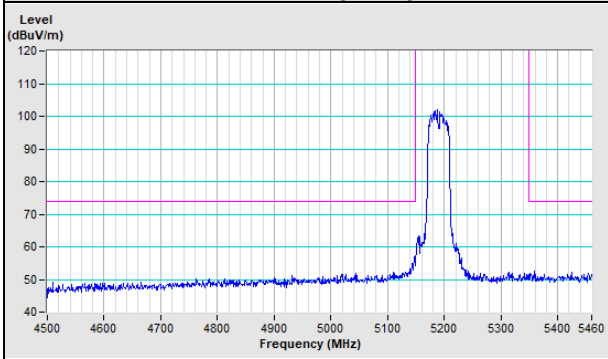


Vertical (Peak)

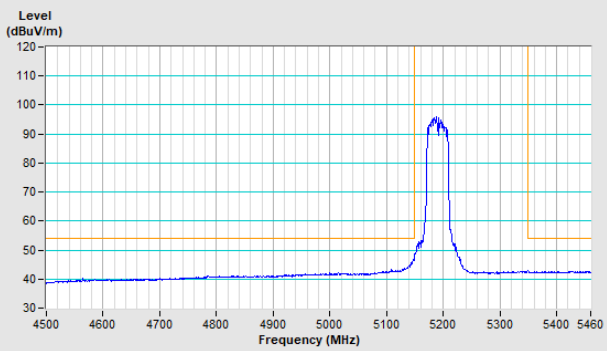


802.11ac (VHT40) Channel 38

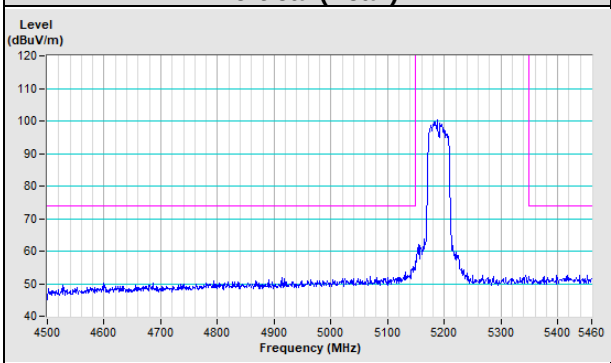
Horizontal (Peak)



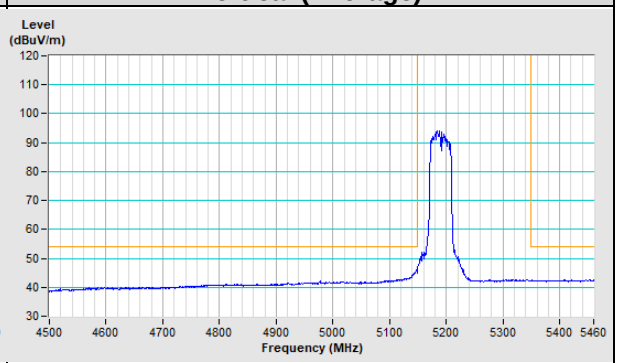
Horizontal (Average)



Vertical (Peak)

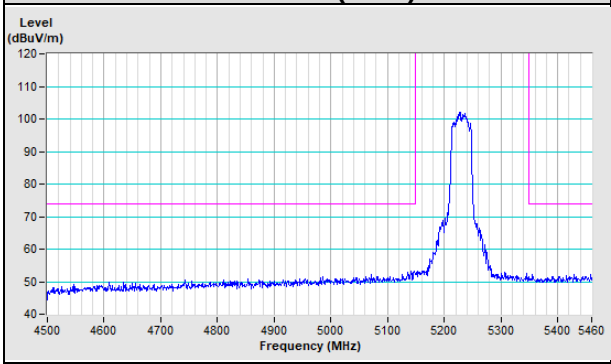


Vertical (Average)

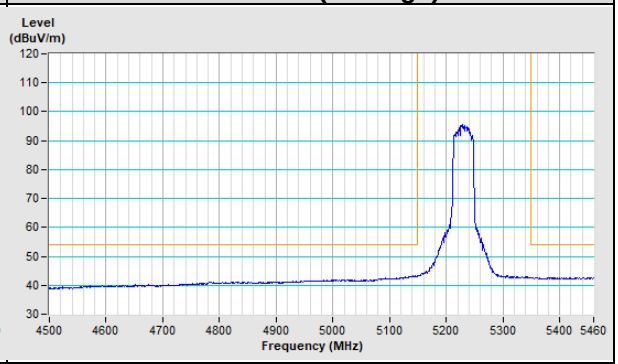


802.11ac (VHT40) Channel 46

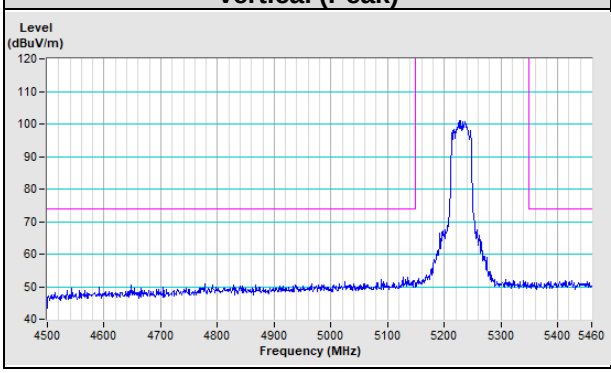
Horizontal (Peak)



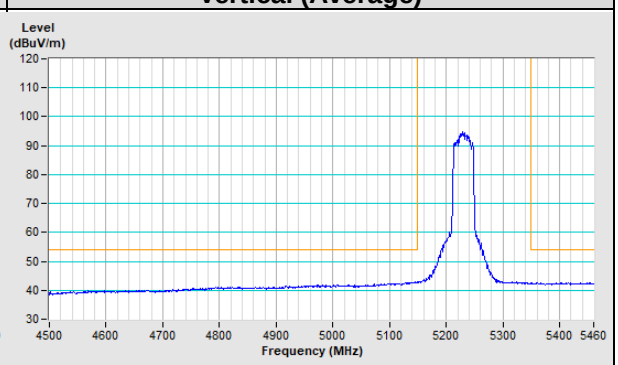
Horizontal (Average)



Vertical (Peak)

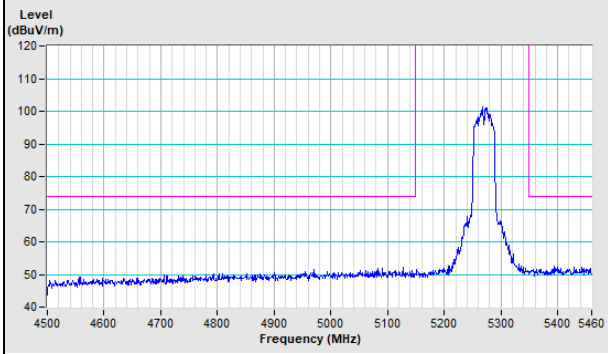


Vertical (Average)

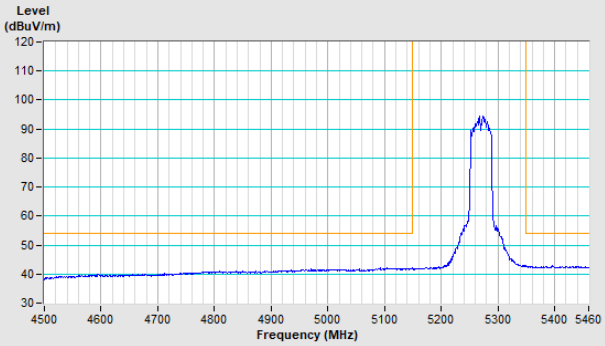


802.11ac (VHT40) Channel 54

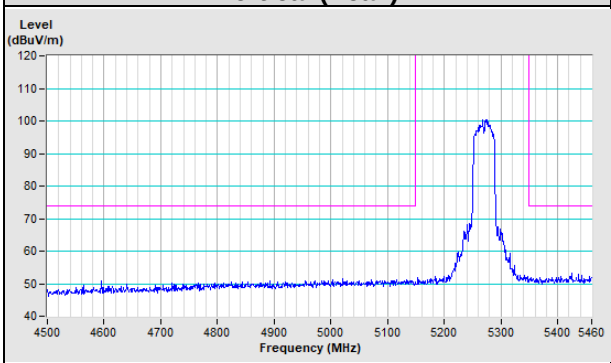
Horizontal (Peak)



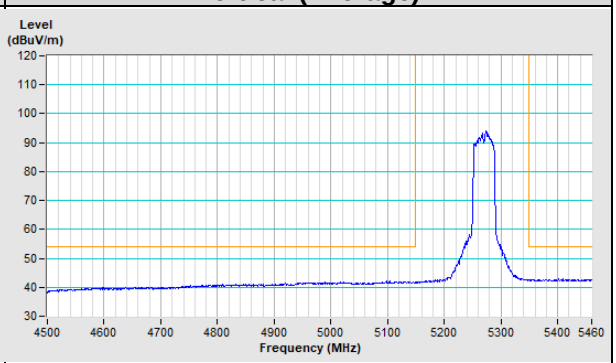
Horizontal (Average)



Vertical (Peak)

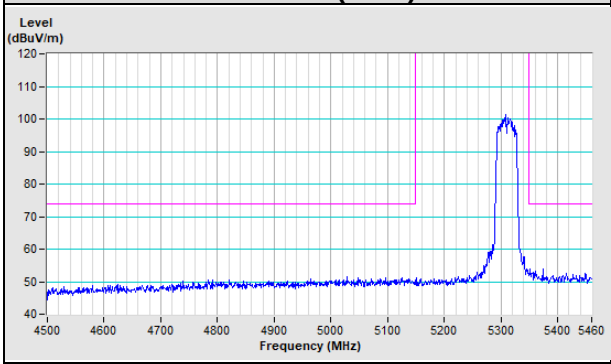


Vertical (Average)

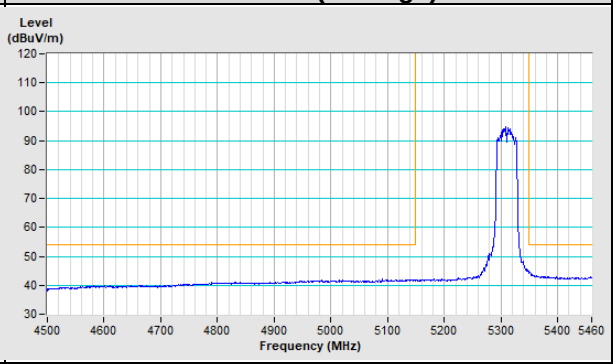


802.11ac (VHT40) Channel 62

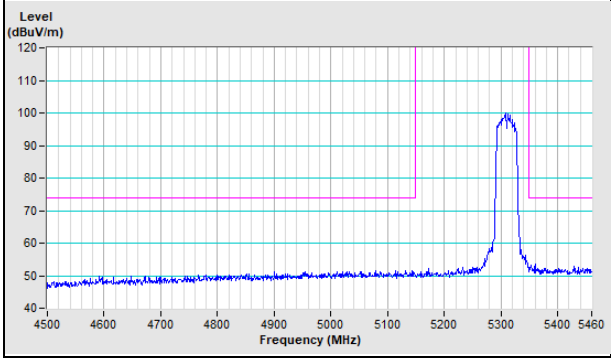
Horizontal (Peak)



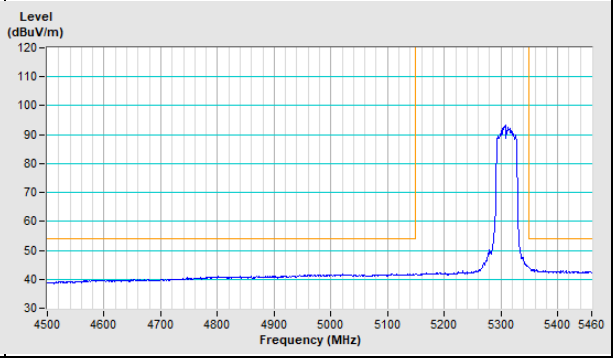
Horizontal (Average)

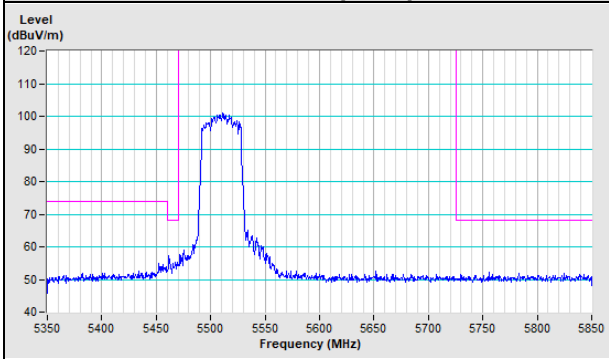
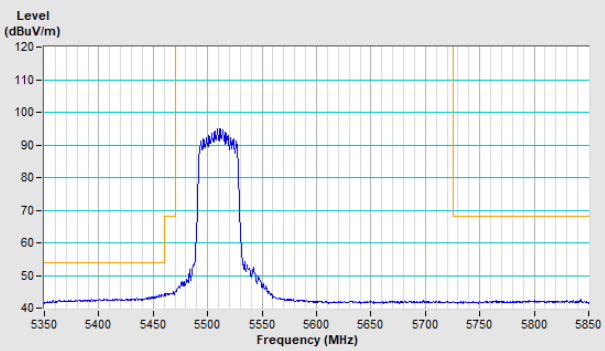
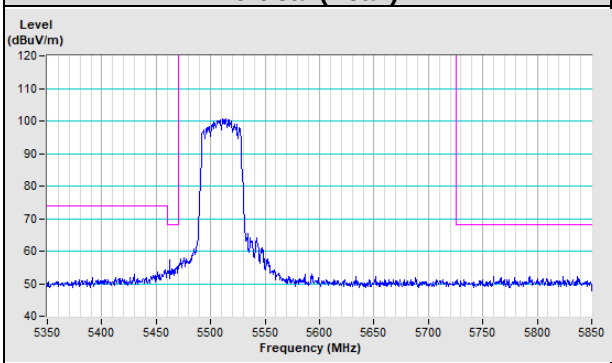
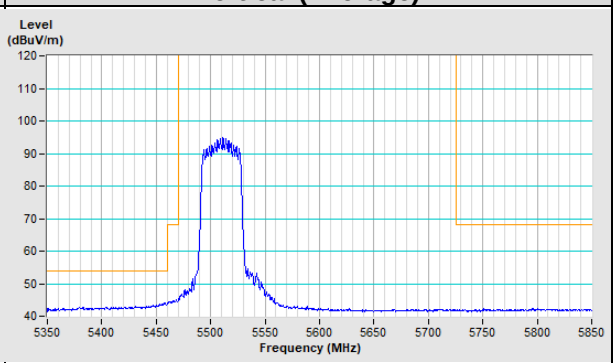
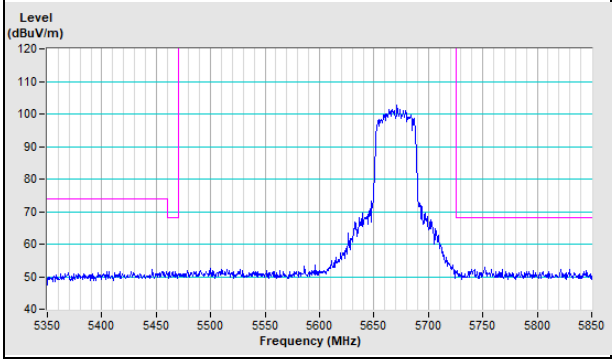
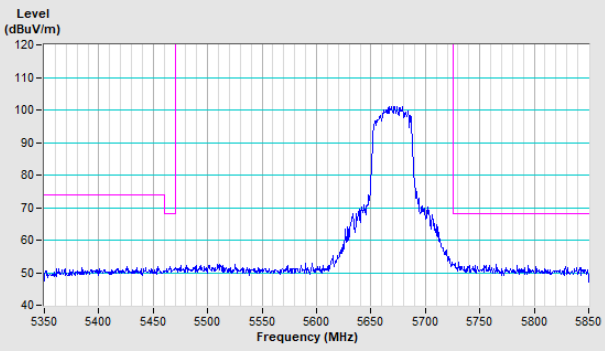


Vertical (Peak)



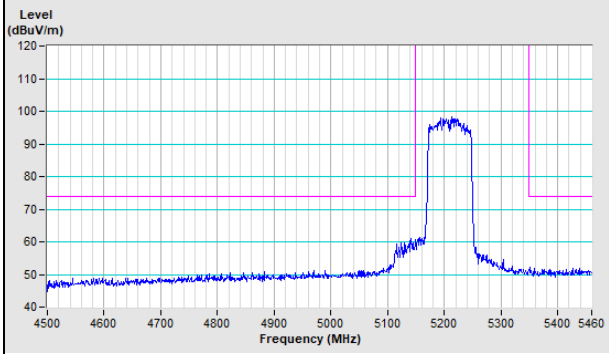
Vertical (Average)



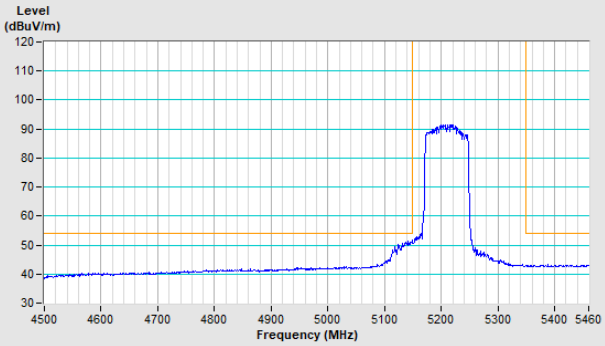
802.11ac (VHT40) Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ac (VHT40) Channel 134	
Horizontal (Peak)	Vertical (Peak)
	

802.11ac (VHT80) Channel 42

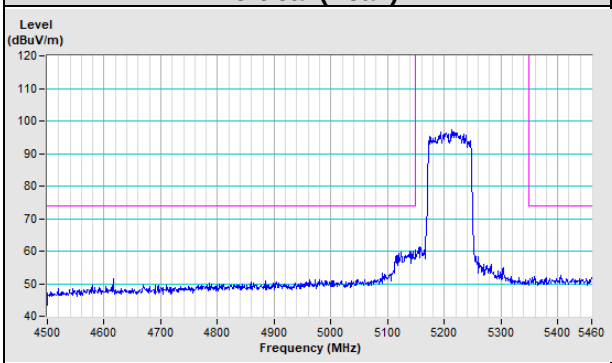
Horizontal (Peak)



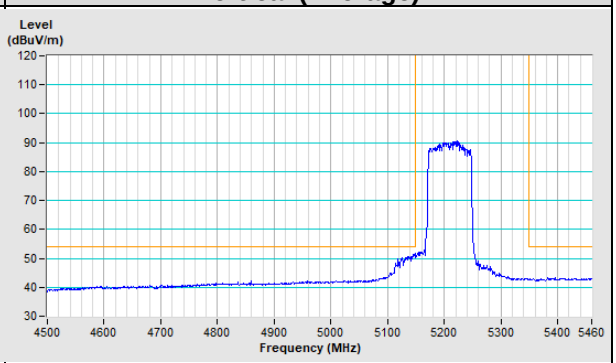
Horizontal (Average)



Vertical (Peak)

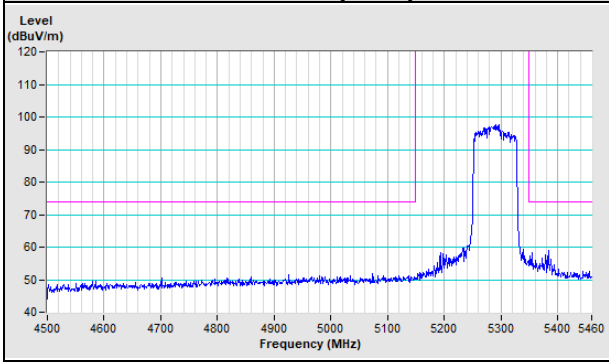


Vertical (Average)

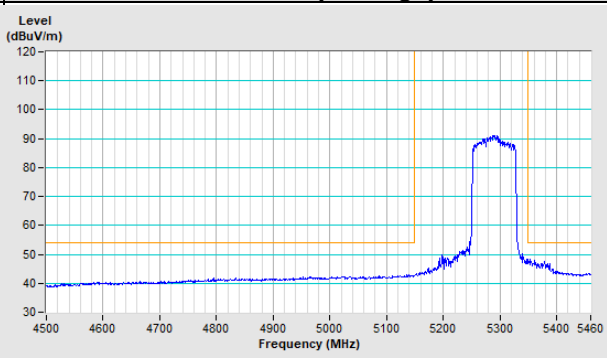


802.11ac (VHT80) Channel 58

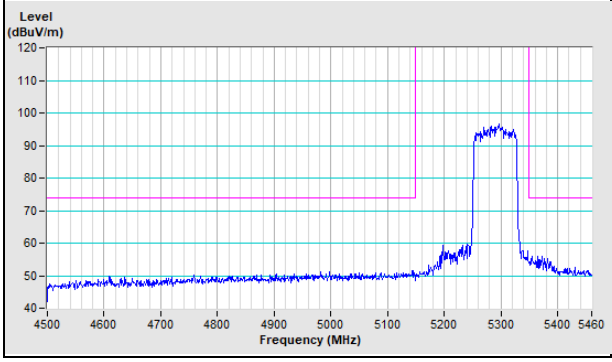
Horizontal (Peak)



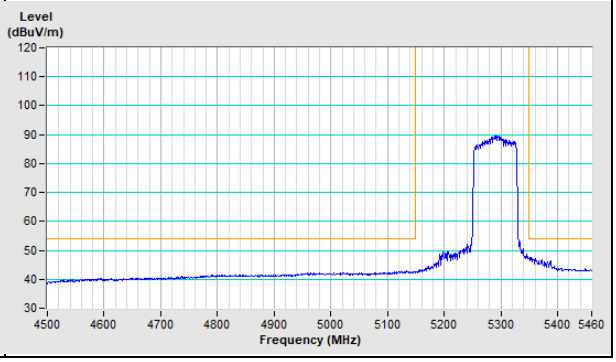
Horizontal (Average)

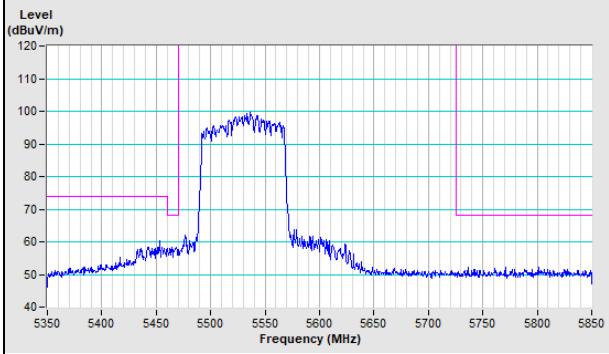
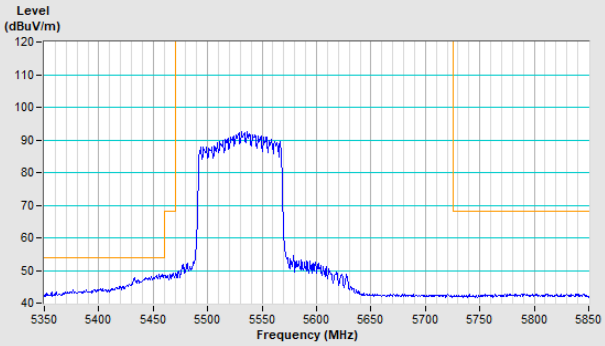
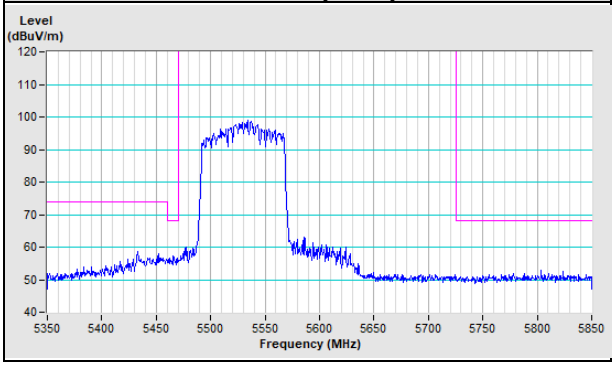
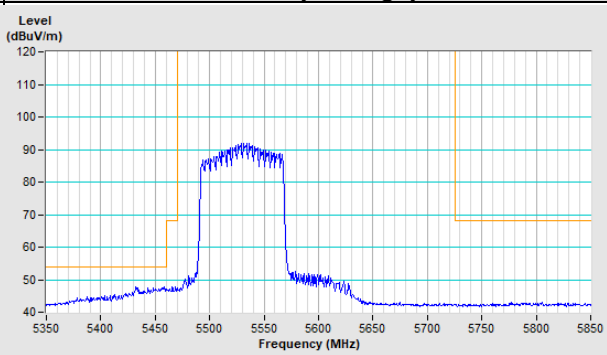


Vertical (Peak)



Vertical (Average)



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

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.

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

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

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

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

Email: service.adt@tw.bureauveritas.com
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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