FCC Test Report (WLAN)

Report No.:	RFBEIH-WTW-P20110721-1
FCC ID:	P27-XIONESCM1
Test Model:	SCXI13AEI-BCO
Series Model:	SCXIxxAEI-xCO (xx For Marketing purpose (e.g.11, 12,13,14~); x External Body Color for Product (e.g. Black=B; Gray=G; White= W))
Received Date:	Nov. 24, 2020
Test Date:	Dec. 7, 2020 to Jan. 5, 2021
Issued Date:	Jan. 15, 2021
Applicant:	Sercomm Corp.
Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C. (NanKang Software Park)
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
RFBEIH-WTW-P20110721-1	Original release	Jan. 15, 2021

1 Certificate of Conformity

Product:	Xione-SC
Brand:	Comcast Xnifity
Test Model:	SCXI13AEI-BCO
Series Model:	SCXIxxAEI-xCO (xx For Marketing purpose (e.g.11, 12,13,14~); x External Body Color for Product (e.g. Black=B; Gray=G; White= W))
Sample Status:	Engineering sample
Applicant:	Sercomm Corp.
Test Date:	Dec. 7, 2020 to Jan. 5, 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:** Jan. 15, 2021

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Jan. 15, 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)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -10.81dB at 0.59531MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.08dB 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	No antenna connector is used.

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 band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
3. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Conducted Emissions	9kHz ~ 40GHz	2.63 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	2.61 dB
	30MHz ~ 1GHz	5.43 dB
Radiated Emissions above 1 GHz	Above 1GHz	5.14 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Xione-SC
Brand	Comcast Xnifity
Test Model	SCXI13AEI-BCO
Series Model	SCXIxxAEI-xCO (xx For Marketing purpose (e.g.11, 12,13,14~); x External Body Color for Product (e.g. Black=B; Gray=G; White= W))
Model Difference	Marketing Differentiation
Sample Status	Engineering sample
Power Supply Rating	5Vdc from Adapter
Modulation Type	802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n (20MHz/40MHz): up to 300Mbps 802.11ac (20MHz/40MHz/80MHz): up to 866.7Mbps 802.11ax (20MHz/40MHz/80MHz): up to 1201Mbps
Operating Frequency	5180~5240MHz, 5260~5320MHz, 5500~5720MHz, 5745~5825MHz
Number of Channel	5180~5240MHz: 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 4 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 2 802.11ac (80MHz), 802.11ax (80MHz): 1 5260~5320MHz: 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 4 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 2 802.11ac (80MHz), 802.11ax (80MHz): 1 5500~5720MHz: 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 12 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 6 802.11ac (80MHz), 802.11ax (80MHz): 3 5745~5825MHz: 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz): 5 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz): 2 802.11ac (80MHz), 802.11ax (80MHz): 1
Output Power	CDD Mode: 5180~5240MHz: 227.627mW 5260~5320MHz: 218.592mW 5500~5720MHz: 222.695mW 5745~5825MHz: 424.365mW Beamforming Mode: 5180~5240MHz: 113.822mW 5260~5320MHz: 109.303mW 5500~5720MHz: 111.355mW 5745~5825MHz: 212.197mW
Antenna Type	Ant. 0: Printed Antenna with 3.84dBi gain Ant. 1: Printed Antenna with 4.03dBi gain
Antenna Connector	N/A
Accessory Device	Adapter

Cable Supplied	NA

Note:

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

Modulation Mode	CDD Mode	Beamforming Mode	TX Function
802.11a	Support	Not Support	2TX
802.11n (20MHz)	Support	Not Support	2TX
802.11n (40MHz)	Support	Not Support	2TX
802.11ac (20MHz)	Support	Support	2TX
802.11ac (40MHz)	Support	Support	2TX
802.11ac (80MHz)	Support	Support	2TX
802.11ax (20MHz)	Support	Support	2TX
802.11ax (40MHz)	Support	Support	2TX
802.11ax (80MHz)	Support	Support	2TX

* The bandwidth and modulation are similar for 20MHz/40MHz on 802.11n mode and 20MHz/40MHz on 802.11n mode and 20MHz/40MHz on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

* For 802.11n/ac/ax, CDD mode and Beamforming mode are presented in power output test item. For other test items, CDD mode is the worst case for final tests after pretesting.

2. WLAN & Bluetooth technologies can transmit at same time. 2.4GHz & 5GHz WLAN technologies cannot transmit at same time.

3. 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.

4. The EUT consumes power from a switching power adapter, which has several models could be chosen, as the following:

Adapter	Brand	Model No.	Specification
1	LEI	ML08-7050150-A1	AC I/P: 100-120V, 50/60Hz, 0.25A DC O/P: 5V, 1.5A AC 2 Pin Non-shielded DC cable (1.8m)
2	Acbel	WAK010	AC I/P: 100-120V, 50/60Hz, 0.25A DC O/P: 5V, 1.5A AC 2 Pin Non-shielded DC cable (1.8m)

The above two adapters were pre-tested, and Adapter 1 was the worst case for final test.

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

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

4 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

2 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz), 802.11ax (80MHz):

Channel	Frequency
42	5210MHz

5260~5320MHz:

4 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

2 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz), 802.11ax (80MHz):

Channel	Frequency
58	5290MHz

5500~5720MHz:

12 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

6 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

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

3 channels are provided for 802.11ac (80MHz), 802.11ax (80MHz):

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

5745~5825MHz:

5 channels are provided for 802.11a, 802.11n (20MHz), 802.11ac (20MHz), 802.11ax (20MHz):

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

2 channels are provided for 802.11n (40MHz), 802.11ac (40MHz), 802.11ax (40MHz):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (80MHz), 802.11ax (80MHz):

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

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-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)
CDD Mode						
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11ax (20MHz)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (40MHz)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (80MHz)		42	42	OFDMA	MCS0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11ax (20MHz)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (40MHz)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (80MHz)		58	58	OFDMA	MCS0
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11ax (20MHz)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (40MHz)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (80MHz)		106 to 138	106, 122, 138	OFDMA	MCS0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11ax (20MHz)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (40MHz)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (80MHz)		155	155	OFDMA	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)
CDD Mode						
-	802.11ax (20MHz)	5180-5240	36 to 48	157	OFDMA	MCS0
-	802.11ax (20MHz)	5260-5320	52 to 64		OFDMA	MCS0
-	802.11ax (20MHz)	5500-5720	100 to 144		OFDMA	MCS0
-	802.11ax (20MHz)	5745-5825	149 to 165		OFDMA	MCS0

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)
CDD Mode						
-	802.11ax (20MHz)	5180-5240	36 to 48	157	OFDMA	MCS0
-	802.11ax (20MHz)	5260-5320	52 to 64		OFDMA	MCS0
-	802.11ax (20MHz)	5500-5720	100 to 144		OFDMA	MCS0
-	802.11ax (20MHz)	5745-5825	149 to 165		OFDMA	MCS0

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)
CDD Mode						
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (20MHz)*		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (40MHz)*		38 to 46	38, 46	OFDM	13.5
	802.11ac (20MHz)*		36 to 48	36, 40, 48	OFDM	6.5
	802.11ac (40MHz)*		38 to 46	38, 46	OFDM	13.5
	802.11ac (80MHz)*		42	42	OFDM	65.0
	802.11ax (20MHz)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (40MHz)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (80MHz)		42	42	OFDMA	MCS0
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (20MHz)*		52 to 64	52, 60, 64	OFDM	6.5
	802.11n (40MHz)*		54 to 62	54, 62	OFDM	13.5
	802.11ac (20MHz)*		52 to 64	52, 60, 64	OFDM	6.5
	802.11ac (40MHz)*		54 to 62	54, 62	OFDM	13.5
	802.11ac (80MHz)*		58	58	OFDM	65.0
	802.11ax (20MHz)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (40MHz)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (80MHz)		58	58	OFDMA	MCS0
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (20MHz)*		100 to 144	100, 116, 140, 144	OFDM	6.5
	802.11n (40MHz)*		102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (20MHz)*		100 to 144	100, 116, 140, 144	OFDM	6.5
	802.11ac (40MHz)*		102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (80MHz)*		106 to 138	106, 122, 138	OFDM	65.0
	802.11ax (20MHz)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (40MHz)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (80MHz)		106 to 138	106, 122, 138	OFDMA	MCS0

-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (20MHz)*		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (40MHz)*		151 to 159	151, 159	OFDM	13.5
	802.11ac (20MHz)*		149 to 165	149, 157, 165	OFDM	6.5
	802.11ac (40MHz)*		151 to 159	151, 159	OFDM	13.5
	802.11ac (80MHz)*		155	155	OFDM	65.0
	802.11ax (20MHz)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (40MHz)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (80MHz)		155	155	OFDMA	MCS0
*802.11ac (20MHz), 802.11ac (40MHz), 802.11ac (80MHz) are for Conducted Output Power Measurement only.						
Beamforming Mode (Conducted Power Measurement only)						
-	802.11ac (20MHz)	5180-5240	36 to 48	36, 40, 48	OFDM	6.5
	802.11ac (40MHz)		38 to 46	38, 46	OFDM	13.5
	802.11ac (80MHz)		42	42	OFDM	65.0
	802.11ax (20MHz)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (40MHz)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (80MHz)		42	42	OFDMA	MCS0
-	802.11ac (20MHz)*	5260-5320	52 to 64	52, 60, 64	OFDM	6.5
	802.11ac (40MHz)*		54 to 62	54, 62	OFDM	13.5
	802.11ac (80MHz)*		58	58	OFDM	65.0
	802.11ax (20MHz)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (40MHz)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (80MHz)		58	58	OFDMA	MCS0
-	802.11ac (20MHz)*	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.5
	802.11ac (40MHz)*		102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (80MHz)*		106 to 138	106, 122, 138	OFDM	65.0
	802.11ax (20MHz)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (40MHz)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (80MHz)		106 to 138	106, 122, 138	OFDMA	MCS0
-	802.11ac (20MHz)	5745-5825	149 to 165	149, 157, 165	OFDM	6.5
	802.11ac (40MHz)		151 to 159	151, 159	OFDM	13.5
	802.11ac (80MHz)		155	155	OFDM	65.0
	802.11ax (20MHz)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (40MHz)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (80MHz)		155	155	OFDMA	MCS0

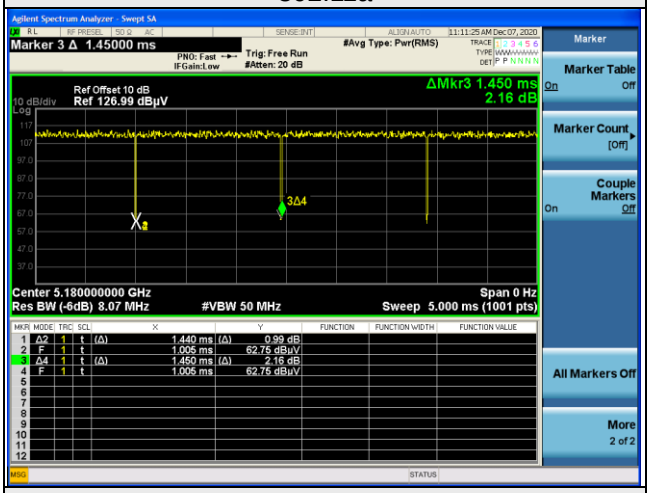
Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	17deg. C, 75%RH	120Vac, 60Hz	Dalen Dai
RE<1G	19deg. C, 77%RH	120Vac, 60Hz	Dalen Dai
PLC	25deg. C, 75%RH	120Vac, 60Hz	Pirar Hsieh
APCM	25deg. C, 76%RH	120Vac, 60Hz	Saxon Lee

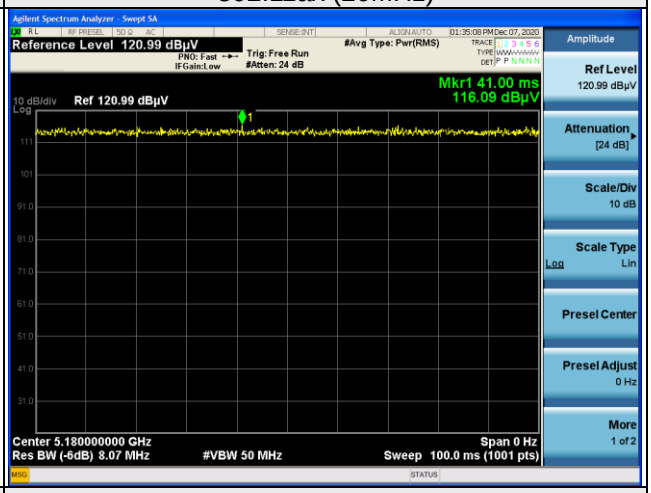
3.3 Duty Cycle of Test Signal

Duty cycle of test signal is ≥ 98 %, duty factor is not required.
802.11a: Duty cycle = 1.44/1.45 = 0.993
802.11ax (20MHz): Duty cycle = 100%
802.11ax (40MHz): Duty cycle = 100%
802.11ax (80MHz): Duty cycle = 100%

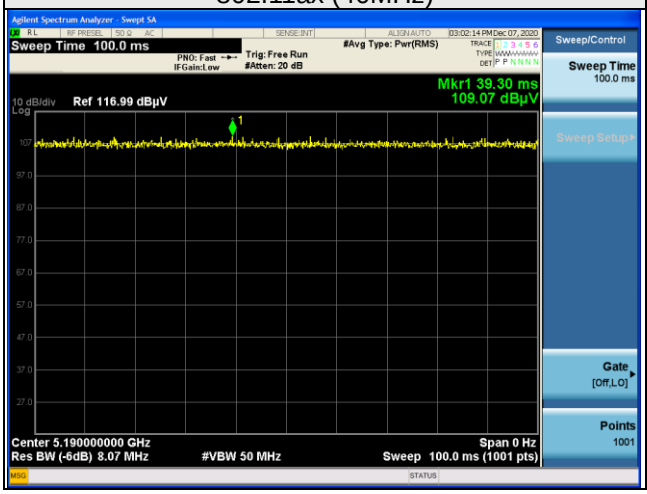
802.11a



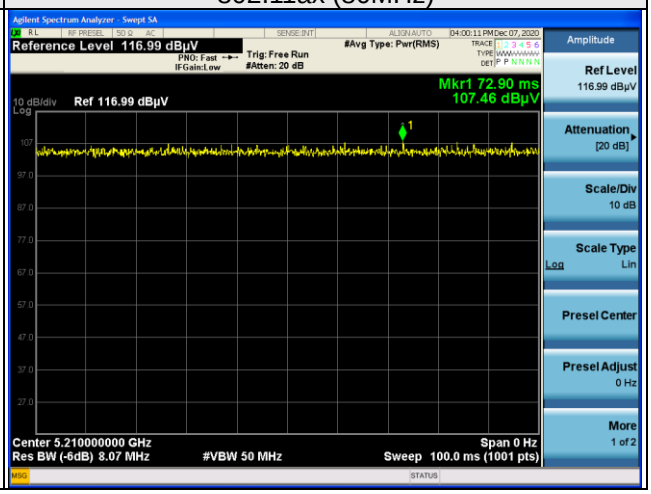
802.11ax (20MHz)



802.11ax (40MHz)



802.11ax (80MHz)



3.4 Description of Support Units

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

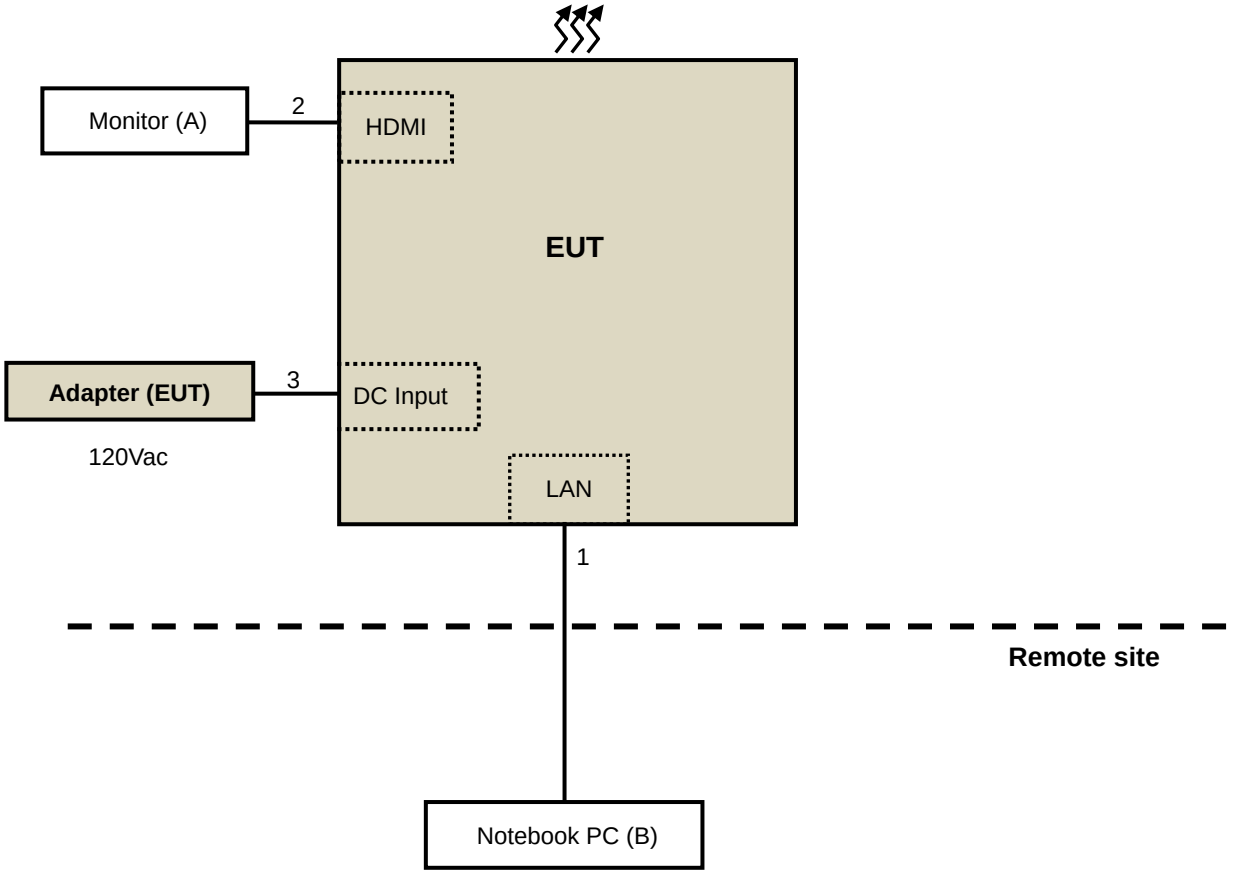
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	LCD Monitor	ASUS	MG28UQ	H8LMTF147978	N/A	Supplied by client
B.	Notebook PC	Lenovo	81LG	PHNGBDP	N/A	Provided by Lab

Note:
1. All power cords of the above support units are non-shielded (1.8m).
2. Item B acted as communication partners to transfer data.

No.	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/ No)	Cores (Qty.)	Remarks
1.	LAN cable	1	10	N	0	Provided by Lab (RJ45, Cat.5e)
2.	HDMI cable	1	1.5	Y	0	Provided by Lab
3.	DC cable	1	1.8	N	0	Supplied by client

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

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

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

Test standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10:2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

Note:

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

Limits of unwanted emission out of the restricted bands

<table>
<tr><td colspan="3">Applicable To</td><td colspan="2">Limit</td></tr>
<tr><td colspan="3" rowspan="2">789033 D02 General UNII Test Procedure New Rules v02r01</td><td colspan="2">Field Strength at 3m</td></tr>
<tr><td>PK: 74 (dBµV/m)</td><td>AV: 54 (dBµV/m)</td></tr>
<tr><td>Frequency Band</td><td colspan="2">Applicable To</td><td>EIRP Limit</td><td>Equivalent Field Strength at 3m</td></tr>
<tr><td>5150~5250 MHz</td><td colspan="2">15.407(b)(1)</td><td rowspan="3">PK: -27 (dBm/MHz)</td><td rowspan="3">PK: 68.2(dBµV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td colspan="2">15.407(b)(2)</td></tr>
<tr><td>5470~5725 MHz</td><td colspan="2">15.407(b)(3)</td></tr>
<tr><td rowspan="2">5725~5850 MHz</td><td>☒</td><td>15.407(b)(4)(i)</td><td>PK: -27 (dBm/MHz) *1
PK: 10 (dBm/MHz) *2
PK: 15.6 (dBm/MHz) *3
PK: 27 (dBm/MHz) *4</td><td>PK: 68.2(dBµV/m) *1
PK: 105.2 (dBµV/m) *2
PK: 110.8(dBµV/m) *3
PK: 122.2 (dBµV/m) *4</td></tr>
<tr><td>☐</td><td>15.407(b)(4)(ii)</td><td colspan="2">Emission limits in section 15.247(d)</td></tr>
<tr><td colspan="5">*1 beyond 75 MHz or more above of the band edge.
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.
*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</td></tr>
</table>

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

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

4.1.2 Test Instruments

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

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

4.1.3 Test Procedures

For Radiated emission below 30MHz

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

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

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

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

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

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

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

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

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

Note:

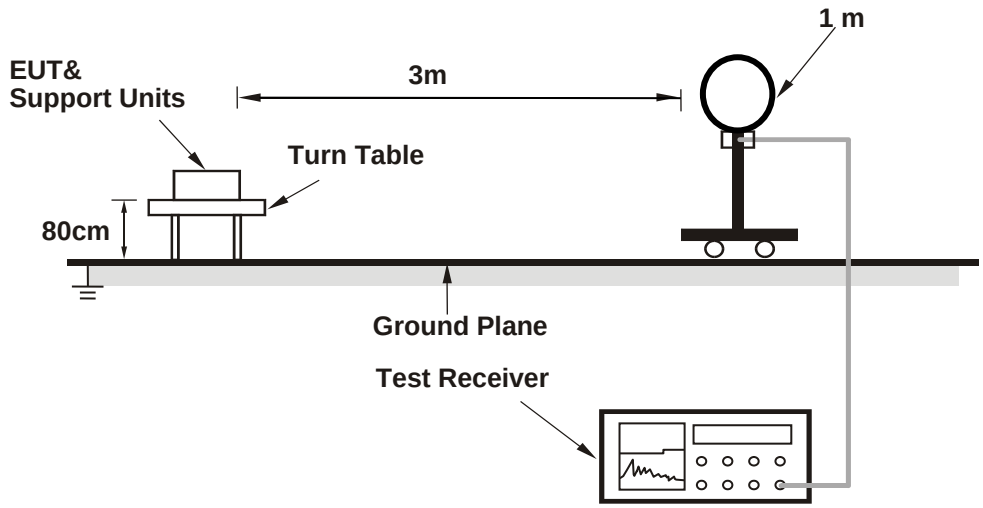
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz. (802.11a: RBW = 1MHz, VBW = 10Hz; 802.11ax (20MHz): RBW = 1MHz, VBW = 10Hz; 802.11ax (40MHz): RBW = 1MHz, VBW = 10Hz; 802.11ax (80MHz): RBW = 1MHz, VBW = 10Hz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

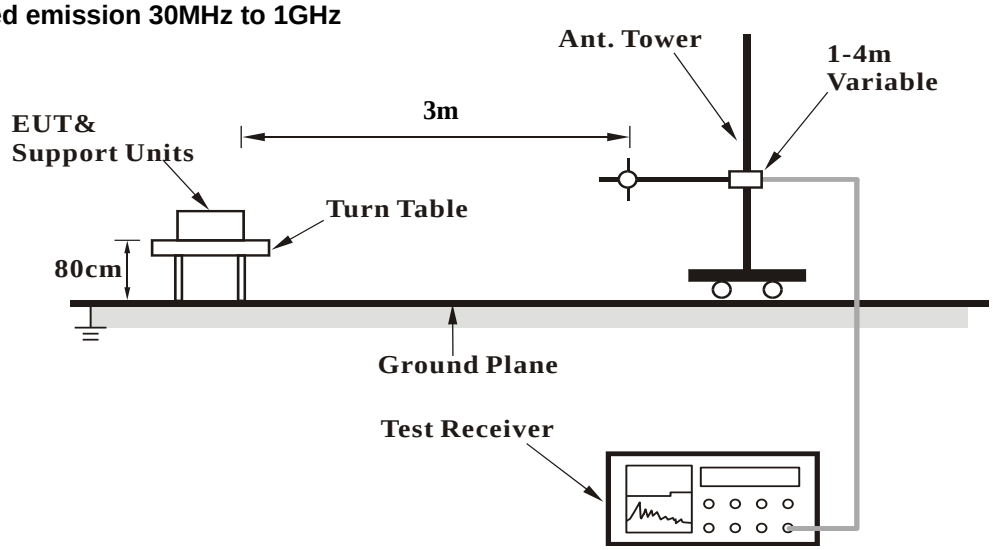
No deviation.

4.1.5 Test Setup

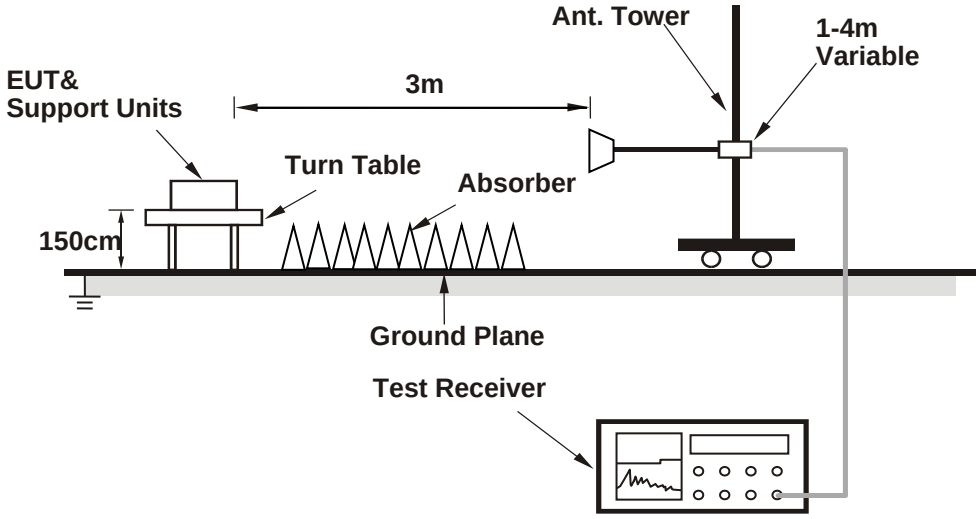
For Radiated emission below 30MHz



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. Placed the EUT on the testing table.
b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".

4.1.7 Test Results

CDD Mode

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	65.14 PK	74.00	-8.86	1.00 H	17	55.13	10.01
2	**5150.00**	**52.92 AV**	**54.00**	**-1.08**	**1.00 H**	**17**	**42.91**	**10.01**
3	*5180.00	115.63 PK			1.00 H	17	105.56	10.07
4	*5180.00	108.04 AV			1.00 H	17	97.97	10.07
5	#10360.00	57.11 PK	68.20	-11.09	1.06 H	138	40.93	16.18
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	5150.00	61.14 PK	74.00	-12.86	2.66 V	266	51.13	10.01
2	5150.00	48.95 AV	54.00	-5.05	2.66 V	266	38.94	10.01
3	*5180.00	111.76 PK			2.66 V	266	101.69	10.07
4	*5180.00	103.81 AV			2.66 V	266	93.74	10.07
5	#10360.00	56.83 PK	68.20	-11.37	1.39 V	231	40.65	16.18

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	117.14 PK			1.14 H	18	107.04	10.10
2	*5200.00	109.76 AV			1.14 H	18	99.66	10.10
3	#10400.00	57.39 PK	68.20	-10.81	1.21 H	153	41.19	16.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	113.08 PK			2.41 V	269	102.98	10.10
2	*5200.00	104.96 AV			2.41 V	269	94.86	10.10
3	#10400.00	56.94 PK	68.20	-11.26	1.52 V	227	40.74	16.20

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	117.45 PK			1.01 H	16	107.18	10.27
2	*5240.00	109.35 AV			1.01 H	16	99.08	10.27
3	5350.00	52.29 PK	74.00	-21.71	1.01 H	16	41.30	10.99
4	5350.00	42.38 AV	54.00	-11.62	1.01 H	16	31.39	10.99
5	#10480.00	57.33 PK	68.20	-10.87	1.18 H	145	41.19	16.14
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	*5240.00	112.86 PK			2.47 V	265	102.59	10.27
2	*5240.00	104.59 AV			2.47 V	265	94.32	10.27
3	5350.00	50.16 PK	74.00	-23.84	2.47 V	265	39.17	10.99
4	5350.00	41.08 AV	54.00	-12.92	2.47 V	265	30.09	10.99
5	#10480.00	56.90 PK	68.20	-11.30	1.45 V	238	40.76	16.14

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 802.11a	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	52.48 PK	74.00	-21.52	1.00 H	19	42.47	10.01
2	5150.00	42.32 AV	54.00	-11.68	1.00 H	19	32.31	10.01
3	*5260.00	117.85 PK			1.00 H	19	107.47	10.38
4	*5260.00	109.92 AV			1.00 H	19	99.54	10.38
5	#10520.00	57.30 PK	68.20	-10.90	1.13 H	150	41.21	16.09
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	52.12 PK	74.00	-21.88	2.63 V	269	42.11	10.01
2	5150.00	42.09 AV	54.00	-11.91	2.63 V	269	32.08	10.01
3	*5260.00	113.27 PK			2.63 V	269	102.89	10.38
4	*5260.00	105.40 AV			2.63 V	269	95.02	10.38
5	#10520.00	56.98 PK	68.20	-11.22	1.51 V	225	40.89	16.09

Remarks:

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

RF Mode	TX 802.11a	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	118.18 PK			1.01 H	18	107.51	10.67
2	*5300.00	110.44 AV			1.01 H	18	99.77	10.67
3	10600.00	57.33 PK	74.00	-16.67	1.09 H	156	41.38	15.95
4	10600.00	46.79 AV	54.00	-7.21	1.09 H	156	30.84	15.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	114.34 PK			2.66 V	267	103.67	10.67
2	*5300.00	116.49 AV			2.66 V	267	105.82	10.67
3	10600.00	57.11 PK	74.00	-16.89	1.48 V	233	41.16	15.95
4	10600.00	46.57 AV	54.00	-7.43	1.48 V	233	30.62	15.95

Remarks:

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

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	116.32 PK			1.00 H	17	105.52	10.80
2	*5320.00	107.99 AV			1.00 H	17	97.19	10.80
3	5350.00	63.39 PK	74.00	-10.61	1.00 H	17	52.40	10.99
4	5350.00	52.41 AV	54.00	-1.59	1.00 H	17	41.42	10.99
5	10640.00	57.16 PK	74.00	-16.84	1.12 H	158	41.02	16.14
6	10640.00	46.62 AV	54.00	-7.38	1.12 H	158	30.48	16.14
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	*5320.00	111.81 PK			2.65 V	266	101.01	10.80
2	*5320.00	103.66 AV			2.65 V	266	92.86	10.80
3	5350.00	59.38 PK	74.00	-14.62	2.65 V	266	48.39	10.99
4	5350.00	48.18 AV	54.00	-5.82	2.65 V	266	37.19	10.99
5	10640.00	56.75 PK	74.00	-17.25	1.44 V	229	40.61	16.14
6	10640.00	46.39 AV	54.00	-7.61	1.44 V	229	30.25	16.14

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.

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	60.93 PK	74.00	-13.07	1.02 H	28	49.33	11.60
2	5460.00	47.28 AV	54.00	-6.72	1.02 H	28	35.68	11.60
3	#5470.00	66.54 PK	68.20	-1.66	1.02 H	28	54.87	11.67
4	*5500.00	116.43 PK			1.02 H	28	104.59	11.84
5	*5500.00	108.27 AV			1.02 H	28	96.43	11.84
6	11000.00	57.13 PK	74.00	-16.87	1.16 H	157	40.15	16.98
7	11000.00	46.70 AV	54.00	-7.30	1.16 H	157	29.72	16.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.71 PK	74.00	-17.29	2.66 V	268	45.11	11.60
2	5460.00	45.03 AV	54.00	-8.97	2.66 V	268	33.43	11.60
3	#5470.00	64.85 PK	68.20	-3.35	2.66 V	268	53.18	11.67
4	*5500.00	111.95 PK			2.66 V	268	100.11	11.84
5	*5500.00	103.64 AV			2.66 V	268	91.80	11.84
6	11000.00	56.84 PK	74.00	-17.16	1.52 V	238	39.86	16.98
7	11000.00	46.63 AV	54.00	-7.37	1.52 V	238	29.65	16.98

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	116.94 PK			1.00 H	26	105.80	11.14
2	*5580.00	108.70 AV			1.00 H	26	97.56	11.14
3	11160.00	57.29 PK	74.00	-16.71	1.11 H	164	39.47	17.82
4	11160.00	46.92 AV	54.00	-7.08	1.11 H	164	29.10	17.82
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	112.66 PK			2.62 V	273	101.52	11.14
2	*5580.00	104.37 AV			2.62 V	273	93.23	11.14
3	11160.00	56.97 PK	74.00	-17.03	1.58 V	231	39.15	17.82
4	11160.00	46.75 AV	54.00	-7.25	1.58 V	231	28.93	17.82

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	115.82 PK			1.01 H	24	105.07	10.75
2	*5700.00	107.84 AV			1.01 H	24	97.09	10.75
3	#5725.00	67.06 PK	68.20	-1.14	1.01 H	24	56.35	10.71
4	11400.00	57.20 PK	74.00	-16.80	1.08 H	155	39.25	17.95
5	11400.00	46.73 AV	54.00	-7.27	1.08 H	155	28.78	17.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	110.99 PK			2.65 V	269	100.24	10.75
2	*5700.00	103.27 AV			2.65 V	269	92.52	10.75
3	#5725.00	63.24 PK	68.20	-4.96	2.65 V	269	52.53	10.71
4	11400.00	56.90 PK	74.00	-17.10	1.61 V	227	38.95	17.95
5	11400.00	46.68 AV	54.00	-7.32	1.61 V	227	28.73	17.95

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 144：5720 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	#5470.00	50.46 PK	68.20	-17.74	1.00 H	22	38.79	11.67
2	*5720.00	117.65 PK			1.00 H	22	106.92	10.73
3	*5720.00	109.32 AV			1.00 H	22	98.59	10.73
4	11440.00	57.25 PK	74.00	-16.75	1.12 H	165	39.05	18.20
5	11440.00	46.96 AV	54.00	-7.04	1.12 H	165	28.76	18.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	49.93 PK	68.20	-18.27	2.63 V	270	38.26	11.67
2	*5720.00	112.66 PK			2.63 V	270	101.93	10.73
3	*5720.00	104.78 AV			2.63 V	270	94.05	10.73
4	11440.00	56.90 PK	74.00	-17.10	1.55 V	234	38.70	18.20
5	11440.00	46.68 AV	54.00	-7.32	1.55 V	234	28.48	18.20

Remarks:

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

RF Mode	TX 802.11a	Channel	CH 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	#5608.57	56.29 PK	68.20	-11.91	2.74 H	22	45.36	10.93
2	*5745.00	119.68 PK			2.74 H	22	108.99	10.69
3	*5745.00	111.59 AV			2.74 H	22	100.90	10.69
4	#6010.92	57.56 PK	68.20	-10.64	2.74 H	22	46.59	10.97
5	11490.00	58.88 PK	74.00	-15.12	1.52 H	236	40.36	18.52
6	11490.00	47.83 AV	54.00	-6.17	1.52 H	236	29.31	18.52
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	#5611.54	56.50 PK	68.20	-11.70	2.78 V	198	45.58	10.92
2	*5745.00	115.31 PK			2.78 V	198	104.62	10.69
3	*5745.00	107.08 AV			2.78 V	198	96.39	10.69
4	#5993.41	56.86 PK	68.20	-11.34	2.78 V	198	45.90	10.96
5	11490.00	58.15 PK	74.00	-15.85	2.22 V	152	39.63	18.52
6	11490.00	47.19 AV	54.00	-6.81	2.22 V	152	28.67	18.52

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	#5612.15	55.47 PK	68.20	-12.73	2.50 H	17	44.55	10.92
2	*5785.00	119.59 PK			2.50 H	17	108.96	10.63
3	*5785.00	110.99 AV			2.50 H	17	100.36	10.63
4	#5942.79	56.92 PK	68.20	-11.28	2.50 H	17	46.17	10.75
5	11570.00	59.00 PK	74.00	-15.00	1.45 H	163	40.20	18.80
6	11570.00	48.44 AV	54.00	-5.56	1.45 H	163	29.64	18.80
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	#5605.85	56.07 PK	68.20	-12.13	2.81 V	188	45.13	10.94
2	*5785.00	114.89 PK			2.81 V	188	104.26	10.63
3	*5785.00	107.17 AV			2.81 V	188	96.54	10.63
4	#6000.55	56.76 PK	68.20	-11.44	2.81 V	188	45.77	10.99
5	11570.00	58.14 PK	74.00	-15.86	2.39 V	204	39.34	18.80
6	11570.00	47.44 AV	54.00	-6.56	2.39 V	204	28.64	18.80

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	#5597.51	56.21 PK	68.20	-11.99	2.57 H	25	45.25	10.96
2	*5825.00	119.54 PK			2.57 H	25	108.96	10.58
3	*5825.00	111.04 AV			2.57 H	25	100.46	10.58
4	#5997.77	56.73 PK	68.20	-11.47	2.57 H	25	45.75	10.98
5	11650.00	58.78 PK	74.00	-15.22	2.26 H	321	40.19	18.59
6	11650.00	47.93 AV	54.00	-6.07	2.26 H	321	29.34	18.59
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	#5617.93	56.26 PK	68.20	-11.94	2.84 V	186	45.35	10.91
2	*5825.00	115.32 PK			2.84 V	186	104.74	10.58
3	*5825.00	106.78 AV			2.84 V	186	96.20	10.58
4	#5955.91	57.06 PK	68.20	-11.14	2.84 V	186	46.25	10.81
5	11650.00	57.78 PK	74.00	-16.22	1.84 V	234	39.19	18.59
6	11650.00	46.93 AV	54.00	-7.07	1.84 V	234	28.34	18.59

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 802.11ax (20MHz)	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	67.86 PK	74.00	-6.14	1.01 H	19	57.85	10.01
2	5150.00	52.36 AV	54.00	-1.64	1.01 H	19	42.35	10.01
3	*5180.00	118.59 PK			1.01 H	19	108.52	10.07
4	*5180.00	107.51 AV			1.01 H	19	97.44	10.07
5	#10360.00	57.06 PK	68.20	-11.14	1.23 H	142	40.88	16.18
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.63 PK	74.00	-11.37	2.66 V	267	52.62	10.01
2	5150.00	49.77 AV	54.00	-4.23	2.66 V	267	39.76	10.01
3	*5180.00	113.51 PK			2.66 V	267	103.44	10.07
4	*5180.00	102.43 AV			2.66 V	267	92.36	10.07
5	#10360.00	56.85 PK	68.20	-11.35	1.46 V	259	40.67	16.18

Remarks:

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

RF Mode	TX 802.11ax (20MHz)	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	120.04 PK			1.00 H	20	109.94	10.10
2	*5200.00	108.58 AV			1.00 H	20	98.48	10.10
3	#10400.00	57.34 PK	68.20	-10.86	1.18 H	135	41.14	16.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	114.93 PK			2.64 V	266	104.83	10.10
2	*5200.00	103.88 AV			2.64 V	266	93.78	10.10
3	#10400.00	57.12 PK	68.20	-11.08	1.43 V	241	40.92	16.20

Remarks:

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

RF Mode	TX 802.11ax (20MHz)	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	119.41 PK			1.00 H	18	109.14	10.27
2	*5240.00	108.34 AV			1.00 H	18	98.07	10.27
3	5350.00	53.16 PK	74.00	-20.84	1.00 H	18	42.17	10.99
4	5350.00	42.22 AV	54.00	-11.78	1.00 H	18	31.23	10.99
5	#10480.00	57.22 PK	68.20	-10.98	1.13 H	131	41.08	16.14
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	*5240.00	114.29 PK			2.65 V	268	104.02	10.27
2	*5240.00	103.33 AV			2.65 V	268	93.06	10.27
3	5350.00	51.27 PK	74.00	-22.73	2.65 V	268	40.28	10.99
4	5350.00	40.93 AV	54.00	-13.07	2.65 V	268	29.94	10.99
5	#10480.00	56.99 PK	68.20	-11.21	1.52 V	237	40.85	16.14

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 802.11ax (20MHz)	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	52.54 PK	74.00	-21.46	1.00 H	20	42.53	10.01
2	5150.00	42.44 AV	54.00	-11.56	1.00 H	20	32.43	10.01
3	*5260.00	119.81 PK			1.00 H	20	109.43	10.38
4	*5260.00	109.02 AV			1.00 H	20	98.64	10.38
5	#10520.00	57.28 PK	68.20	-10.92	1.16 H	154	41.19	16.09
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	52.33 PK	74.00	-21.67	2.61 V	266	42.32	10.01
2	5150.00	42.25 AV	54.00	-11.75	2.61 V	266	32.24	10.01
3	*5260.00	115.26 PK			2.61 V	266	104.88	10.38
4	*5260.00	104.48 AV			2.61 V	266	94.10	10.38
5	#10520.00	56.97 PK	68.20	-11.23	1.56 V	229	40.88	16.09

Remarks:

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

RF Mode	TX 802.11ax (20MHz)	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	120.01 PK			1.01 H	25	109.34	10.67
2	*5300.00	109.28 AV			1.01 H	25	98.61	10.67
3	10600.00	57.27 PK	74.00	-16.73	1.08 H	151	41.32	15.95
4	10600.00	46.73 AV	54.00	-7.27	1.08 H	151	30.78	15.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	114.96 PK			2.65 V	268	104.29	10.67
2	*5300.00	104.22 AV			2.65 V	268	93.55	10.67
3	10600.00	57.04 PK	74.00	-16.96	1.49 V	232	41.09	15.95
4	10600.00	46.52 AV	54.00	-7.48	1.49 V	232	30.57	15.95

Remarks:

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

RF Mode	TX 802.11ax (20MHz)	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	118.64 PK			1.00 H	16	107.84	10.80
2	*5320.00	107.89 AV			1.00 H	16	97.09	10.80
3	5350.00	64.31 PK	74.00	-9.69	1.00 H	16	53.32	10.99
4	5350.00	52.27 AV	54.00	-1.73	1.00 H	16	41.28	10.99
5	10640.00	57.11 PK	74.00	-16.89	1.11 H	157	40.97	16.14
6	10640.00	46.60 AV	54.00	-7.40	1.11 H	157	30.46	16.14
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	*5320.00	114.52 PK			2.63 V	269	103.72	10.80
2	*5320.00	103.68 AV			2.63 V	269	92.88	10.80
3	5350.00	51.98 PK	74.00	-22.02	2.63 V	269	40.99	10.99
4	5350.00	49.36 AV	54.00	-4.64	2.63 V	269	38.37	10.99
5	10640.00	56.85 PK	74.00	-17.15	1.52 V	225	40.71	16.14
6	10640.00	46.41 AV	54.00	-7.59	1.52 V	225	30.27	16.14

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.

RF Mode	TX 802.11ax (20MHz)	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	58.94 PK	74.00	-15.06	1.00 H	22	47.34	11.60
2	5460.00	44.56 AV	54.00	-9.44	1.00 H	22	32.96	11.60
3	#5470.00	66.59 PK	68.20	-1.61	1.00 H	22	54.92	11.67
4	*5500.00	117.49 PK			1.00 H	22	105.65	11.84
5	*5500.00	106.32 AV			1.00 H	22	94.48	11.84
6	11000.00	57.08 PK	74.00	-16.92	1.13 H	155	40.10	16.98
7	11000.00	46.62 AV	54.00	-7.38	1.13 H	155	29.64	16.98
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	57.01 PK	74.00	-16.99	2.63 V	272	45.41	11.60
2	5460.00	44.07 AV	54.00	-9.93	2.63 V	272	32.47	11.60
3	#5470.00	63.25 PK	68.20	-4.95	2.63 V	272	51.58	11.67
4	*5500.00	112.62 PK			2.63 V	272	100.78	11.84
5	*5500.00	101.81 AV			2.63 V	272	89.97	11.84
6	11000.00	56.79 PK	74.00	-17.21	1.56 V	224	39.81	16.98
7	11000.00	46.55 AV	54.00	-7.45	1.56 V	224	29.57	16.98

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 802.11ax (20MHz)	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	117.97 PK			1.01 H	26	106.83	11.14
2	*5580.00	106.88 AV			1.01 H	26	95.74	11.14
3	11160.00	57.14 PK	74.00	-16.86	1.15 H	149	39.32	17.82
4	11160.00	46.70 AV	54.00	-7.30	1.15 H	149	28.88	17.82
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	113.93 PK			2.66 V	268	102.79	11.14
2	*5580.00	102.85 AV			2.66 V	268	91.71	11.14
3	11160.00	56.90 PK	74.00	-17.10	1.53 V	231	39.08	17.82
4	11160.00	46.64 AV	54.00	-7.36	1.53 V	231	28.82	17.82

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 802.11ax (20MHz)	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	117.31 PK			1.01 H	23	106.56	10.75
2	*5700.00	106.63 AV			1.01 H	23	95.88	10.75
3	#5725.00	67.09 PK	68.20	-1.11	1.01 H	23	56.38	10.71
4	11400.00	57.08 PK	74.00	-16.92	1.09 H	152	39.13	17.95
5	11400.00	46.56 AV	54.00	-7.44	1.09 H	152	28.61	17.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	113.19 PK			2.58 V	263	102.44	10.75
2	*5700.00	102.63 AV			2.58 V	263	91.88	10.75
3	#5725.00	63.14 PK	68.20	-5.06	2.58 V	263	52.43	10.71
4	11400.00	56.85 PK	74.00	-17.15	1.56 V	237	38.90	17.95
5	11400.00	46.44 AV	54.00	-7.56	1.56 V	237	28.49	17.95

Remarks:

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

RF Mode	TX 802.11ax (20MHz)	Channel	CH 144：5720 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	#5470.00	53.46 PK	68.20	-14.74	1.00 H	24	41.79	11.67
2	*5720.00	119.96 PK			1.00 H	24	109.23	10.73
3	*5720.00	108.93 AV			1.00 H	24	98.20	10.73
4	11440.00	57.29 PK	74.00	-16.71	1.14 H	129	39.09	18.20
5	11440.00	46.75 AV	54.00	-7.25	1.14 H	129	28.55	18.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	53.19 PK	68.20	-15.01	2.68 V	271	41.52	11.67
2	*5720.00	115.52 PK			2.68 V	271	104.79	10.73
3	*5720.00	104.67 AV			2.68 V	271	93.94	10.73
4	11440.00	57.06 PK	74.00	-16.94	1.56 V	228	38.86	18.20
5	11440.00	46.59 AV	54.00	-7.41	1.56 V	228	28.39	18.20

Remarks:

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

RF Mode	TX 802.11ax (20MHz)	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	#5644.63	56.67 PK	68.20	-11.53	2.60 H	17	45.83	10.84
2	*5745.00	121.97 PK			2.60 H	17	111.28	10.69
3	*5745.00	111.04 AV			2.60 H	17	100.35	10.69
4	#5983.38	56.22 PK	68.20	-11.98	2.60 H	17	45.30	10.92
5	11490.00	58.88 PK	74.00	-15.12	1.55 H	235	40.36	18.52
6	11490.00	48.16 AV	54.00	-5.84	1.55 H	235	29.64	18.52
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	#5625.25	55.84 PK	68.20	-12.36	2.84 V	192	44.95	10.89
2	*5745.00	118.15 PK			2.84 V	192	107.46	10.69
3	*5745.00	107.04 AV			2.84 V	192	96.35	10.69
4	#5954.38	56.32 PK	68.20	-11.88	2.84 V	192	45.52	10.80
5	11490.00	57.84 PK	74.00	-16.16	1.52 V	263	39.32	18.52
6	11490.00	47.20 AV	54.00	-6.80	1.52 V	263	28.68	18.52

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 802.11ax (20MHz)	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	#5616.37	56.83 PK	68.20	-11.37	2.59 H	17	45.92	10.91
2	*5785.00	122.59 PK			2.59 H	17	111.96	10.63
3	*5785.00	111.47 AV			2.59 H	17	100.84	10.63
4	#5942.79	56.67 PK	68.20	-11.53	2.59 H	17	45.92	10.75
5	11570.00	59.04 PK	74.00	-14.96	1.54 H	231	40.24	18.80
6	11570.00	48.11 AV	54.00	-5.89	1.54 H	231	29.31	18.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5628.54	55.43 PK	68.20	-12.77	2.68 V	197	44.55	10.88
2	*5785.00	118.15 PK			2.68 V	197	107.52	10.63
3	*5785.00	107.26 AV			2.68 V	197	96.63	10.63
4	#5964.47	56.79 PK	68.20	-11.41	2.68 V	197	45.95	10.84
5	11570.00	57.94 PK	74.00	-16.06	2.41 V	222	39.14	18.80
6	11570.00	47.12 AV	54.00	-6.88	2.41 V	222	28.32	18.80

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 802.11ax (20MHz)	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	#5580.23	56.40 PK	68.20	-11.80	2.68 H	20	45.26	11.14
2	*5825.00	122.03 PK			2.68 H	20	111.45	10.58
3	*5825.00	111.21 AV			2.68 H	20	100.63	10.58
4	#5965.06	57.42 PK	68.20	-10.78	2.68 H	20	46.56	10.86
5	11650.00	58.82 PK	74.00	-15.18	1.24 H	215	40.23	18.59
6	11650.00	47.90 AV	54.00	-6.10	1.24 H	215	29.31	18.59
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	#5585.68	56.24 PK	68.20	-11.96	2.63 V	199	45.15	11.09
2	*5825.00	117.67 PK			2.63 V	199	107.09	10.58
3	*5825.00	106.82 AV			2.63 V	199	96.24	10.58
4	#5991.55	56.47 PK	68.20	-11.73	2.63 V	199	45.51	10.96
5	11650.00	57.85 PK	74.00	-16.15	1.47 V	121	39.26	18.59
6	11650.00	47.11 AV	54.00	-6.89	1.47 V	121	28.52	18.59

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 802.11ax (40MHz)	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	67.23 PK	74.00	-6.77	1.01 H	19	57.22	10.01
2	5150.00	52.82 AV	54.00	-1.18	1.01 H	19	42.81	10.01
3	*5190.00	112.43 PK			1.01 H	19	102.34	10.09
4	*5190.00	101.88 AV			1.01 H	19	91.79	10.09
5	#10380.00	56.39 PK	68.20	-11.81	1.31 H	158	40.20	16.19
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	5150.00	61.36 PK	74.00	-12.64	2.66 V	277	51.35	10.01
2	5150.00	49.24 AV	54.00	-4.76	2.66 V	277	39.23	10.01
3	*5190.00	107.57 PK			2.66 V	277	97.48	10.09
4	*5190.00	96.29 AV			2.66 V	277	86.20	10.09
5	#10380.00	56.25 PK	68.20	-11.95	1.43 V	234	40.06	16.19

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 802.11ax (40MHz)	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	5150.00	65.04 PK	74.00	-8.96	1.00 H	18	55.03	10.01
2	5150.00	52.09 AV	54.00	-1.91	1.00 H	18	42.08	10.01
3	*5230.00	117.36 PK			1.00 H	18	107.13	10.23
4	*5230.00	105.61 AV			1.00 H	18	95.38	10.23
5	5350.00	52.69 PK	74.00	-21.31	1.00 H	18	41.70	10.99
6	5350.00	42.95 AV	54.00	-11.05	1.00 H	18	31.96	10.99
7	#10460.00	57.03 PK	68.20	-11.17	1.22 H	145	40.87	16.16
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	59.42 PK	74.00	-14.58	2.64 V	273	49.41	10.01
2	5150.00	48.82 AV	54.00	-5.18	2.64 V	273	38.81	10.01
3	*5230.00	112.18 PK			2.64 V	273	101.95	10.23
4	*5230.00	100.56 AV			2.64 V	273	90.33	10.23
5	5350.00	51.93 PK	74.00	-22.07	2.64 V	273	40.94	10.99
6	5350.00	42.27 AV	54.00	-11.73	2.64 V	273	31.28	10.99
7	#10460.00	56.79 PK	68.20	-11.41	1.55 V	231	40.63	16.16

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 802.11ax (40MHz)	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	*5270.00	117.81 PK			1.00 H	2	107.36	10.45
2	*5270.00	106.75 AV			1.00 H	2	96.30	10.45
3	5350.00	68.94 PK	74.00	-5.06	1.00 H	2	57.95	10.99
4	5350.00	52.85 AV	54.00	-1.15	1.00 H	2	41.86	10.99
5	#10540.00	56.91 PK	68.20	-11.29	1.10 H	160	40.86	16.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5270.00	113.30 PK			2.59 V	264	102.85	10.45
2	*5270.00	103.32 AV			2.59 V	264	92.87	10.45
3	5350.00	63.14 PK	74.00	-10.86	2.59 V	264	52.15	10.99
4	5350.00	49.66 AV	54.00	-4.34	2.59 V	264	38.67	10.99
5	#10540.00	56.77 PK	68.20	-11.43	1.63 V	237	40.72	16.05

Remarks:

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

RF Mode	TX 802.11ax (40MHz)	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	113.59 PK			1.00 H	14	102.85	10.74
2	*5310.00	102.32 AV			1.00 H	14	91.58	10.74
3	5350.00	65.09 PK	74.00	-8.91	1.00 H	14	54.10	10.99
4	5350.00	52.76 AV	54.00	-1.24	1.00 H	14	41.77	10.99
5	10620.00	56.81 PK	74.00	-17.19	1.12 H	163	40.77	16.04
6	10620.00	46.58 AV	54.00	-7.42	1.12 H	163	30.54	16.04
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	*5310.00	108.52 PK			2.71 V	262	97.78	10.74
2	*5310.00	97.48 AV			2.71 V	262	86.74	10.74
3	5350.00	60.85 PK	74.00	-13.15	2.71 V	262	49.86	10.99
4	5350.00	50.19 AV	54.00	-3.81	2.71 V	262	39.20	10.99
5	10620.00	56.69 PK	74.00	-17.31	1.60 V	233	40.65	16.04
6	10620.00	46.43 AV	54.00	-7.57	1.60 V	233	30.39	16.04

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.

RF Mode	TX 802.11ax (40MHz)	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	60.01 PK	74.00	-13.99	2.69 H	17	48.41	11.60
2	5460.00	45.33 AV	54.00	-8.67	2.69 H	17	33.73	11.60
3	#5470.00	67.01 PK	68.20	-1.19	2.69 H	17	55.34	11.67
4	*5510.00	116.48 PK			2.69 H	17	104.73	11.75
5	*5510.00	104.99 AV			2.69 H	17	93.24	11.75
6	11020.00	57.24 PK	74.00	-16.76	1.65 H	241	40.16	17.08
7	11020.00	46.71 AV	54.00	-7.29	1.65 H	241	29.63	17.08
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.79 PK	74.00	-18.21	2.68 V	159	44.19	11.60
2	5460.00	42.19 AV	54.00	-11.81	2.68 V	159	30.59	11.60
3	#5470.00	62.86 PK	68.20	-5.34	2.68 V	159	51.19	11.67
4	*5510.00	112.01 PK			2.68 V	159	100.26	11.75
5	*5510.00	101.51 AV			2.68 V	159	89.76	11.75
6	11020.00	56.34 PK	74.00	-17.66	2.14 V	154	39.26	17.08
7	11020.00	46.21 AV	54.00	-7.79	2.14 V	154	29.13	17.08

Remarks:

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

RF Mode	TX 802.11ax (40MHz)	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	5460.00	61.24 PK	74.00	-12.76	2.76 H	22	49.64	11.60
2	5460.00	48.66 AV	54.00	-5.34	2.76 H	22	37.06	11.60
3	#5470.00	66.90 PK	68.20	-1.30	2.76 H	22	55.23	11.67
4	*5550.00	118.49 PK			2.76 H	22	107.08	11.41
5	*5550.00	107.41 AV			2.76 H	22	96.00	11.41
6	11100.00	58.34 PK	74.00	-15.66	1.62 H	234	40.84	17.50
7	11100.00	47.18 AV	54.00	-6.82	1.62 H	234	29.68	17.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.96 PK	74.00	-17.04	2.74 V	187	45.36	11.60
2	5460.00	44.86 AV	54.00	-9.14	2.74 V	187	33.26	11.60
3	#5470.00	63.16 PK	68.20	-5.04	2.74 V	187	51.49	11.67
4	*5550.00	114.87 PK			2.74 V	187	103.46	11.41
5	*5550.00	103.77 AV			2.74 V	187	92.36	11.41
6	11100.00	57.76 PK	74.00	-16.24	1.25 V	263	40.26	17.50
7	11100.00	46.63 AV	54.00	-7.37	1.25 V	263	29.13	17.50

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 802.11ax (40MHz)	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	115.41 PK			2.55 H	15	104.62	10.79
2	*5670.00	104.74 AV			2.55 H	15	93.95	10.79
3	#5725.00	66.79 PK	68.20	-1.41	2.55 H	15	56.08	10.71
4	11340.00	58.15 PK	74.00	-15.85	1.84 H	265	40.66	17.49
5	11340.00	47.23 AV	54.00	-6.77	1.84 H	265	29.74	17.49
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	110.95 PK			2.69 V	196	100.16	10.79
2	*5670.00	100.43 AV			2.69 V	196	89.64	10.79
3	#5725.00	62.89 PK	68.20	-5.31	2.69 V	196	52.18	10.71
4	11340.00	57.70 PK	74.00	-16.30	2.41 V	266	40.21	17.49
5	11340.00	46.80 AV	54.00	-7.20	2.41 V	266	29.31	17.49

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 802.11ax (40MHz)	Channel	CH 142：5710 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	#5470.00	54.20 PK	68.20	-14.00	2.76 H	14	42.53	11.67
2	*5710.00	119.09 PK			2.76 H	14	108.36	10.73
3	*5710.00	107.68 AV			2.76 H	14	96.95	10.73
4	11420.00	58.76 PK	74.00	-15.24	1.84 H	156	40.68	18.08
5	11420.00	47.77 AV	54.00	-6.23	1.84 H	156	29.69	18.08
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5470.00	51.83 PK	68.20	-16.37	2.78 V	187	40.16	11.67
2	*5710.00	115.27 PK			2.78 V	187	104.54	10.73
3	*5710.00	103.09 AV			2.78 V	187	92.36	10.73
4	11420.00	58.23 PK	74.00	-15.77	1.63 V	263	40.15	18.08
5	11420.00	47.32 AV	54.00	-6.68	1.63 V	263	29.24	18.08

Remarks:

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

RF Mode	TX 802.11ax (40MHz)	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	#5649.49	67.12 PK	68.20	-1.08	2.72 H	14	56.29	10.83
2	*5755.00	117.10 PK			2.72 H	14	106.44	10.66
3	*5755.00	105.92 AV			2.72 H	14	95.26	10.66
4	#5971.03	55.47 PK	68.20	-12.73	2.72 H	14	44.60	10.87
5	11510.00	58.83 PK	74.00	-15.17	2.35 H	264	40.22	18.61
6	11510.00	47.95 AV	54.00	-6.05	2.35 H	264	29.34	18.61
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	#5643.63	63.97 PK	68.20	-4.23	2.85 V	189	53.13	10.84
2	*5755.00	114.09 PK			2.85 V	189	103.43	10.66
3	*5755.00	103.01 AV			2.85 V	189	92.35	10.66
4	#5930.63	56.26 PK	68.20	-11.94	2.85 V	189	45.59	10.67
5	11510.00	57.95 PK	74.00	-16.05	1.94 V	235	39.34	18.61
6	11510.00	46.96 AV	54.00	-7.04	1.94 V	235	28.35	18.61

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 802.11ax (40MHz)	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	#5645.37	58.48 PK	68.20	-9.72	2.70 H	22	47.64	10.84
2	*5795.00	118.25 PK			2.70 H	22	107.64	10.61
3	*5795.00	107.14 AV			2.70 H	22	96.53	10.61
4	#5928.11	58.79 PK	68.20	-9.41	2.70 H	22	48.13	10.66
5	11590.00	59.01 PK	74.00	-14.99	1.84 H	235	40.15	18.86
6	11590.00	48.12 AV	54.00	-5.88	1.84 H	235	29.26	18.86
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	#5644.00	56.28 PK	68.20	-11.92	2.78 V	191	45.44	10.84
2	*5795.00	114.13 PK			2.78 V	191	103.52	10.61
3	*5795.00	103.26 AV			2.78 V	191	92.65	10.61
4	#5958.07	56.98 PK	68.20	-11.22	2.78 V	191	46.16	10.82
5	11590.00	58.41 PK	74.00	-15.59	1.45 V	239	39.55	18.86
6	11590.00	47.28 AV	54.00	-6.72	1.45 V	239	28.42	18.86

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 802.11ax (80MHz)	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	67.64 PK	74.00	-6.36	1.00 H	18	57.63	10.01
2	5150.00	52.61 AV	54.00	-1.39	1.00 H	18	42.60	10.01
3	*5210.00	110.49 PK			1.00 H	18	100.35	10.14
4	*5210.00	99.60 AV			1.00 H	18	89.46	10.14
5	5350.00	52.51 PK	74.00	-21.49	1.00 H	18	41.52	10.99
6	5350.00	42.67 AV	54.00	-11.33	1.00 H	18	31.68	10.99
7	#10420.00	56.40 PK	68.20	-11.80	1.28 H	149	40.22	16.18
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.82 PK	74.00	-13.18	2.50 V	270	50.81	10.01
2	5150.00	49.36 AV	54.00	-4.64	2.50 V	270	39.35	10.01
3	*5210.00	105.19 PK			2.50 V	270	95.05	10.14
4	*5210.00	94.42 AV			2.50 V	270	84.28	10.14
5	5350.00	52.30 PK	74.00	-21.70	2.50 V	270	41.31	10.99
6	5350.00	42.38 AV	54.00	-11.62	2.50 V	270	31.39	10.99
7	#10420.00	56.23 PK	68.20	-11.97	1.48 V	227	40.05	16.18

Remarks:

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

RF Mode	TX 802.11ax (80MHz)	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	*5290.00	108.96 PK			1.00 H	17	98.36	10.60
2	*5290.00	98.37 AV			1.00 H	17	87.77	10.60
3	5350.00	64.41 PK	74.00	-9.59	1.00 H	17	53.42	10.99
4	5350.00	52.81 AV	54.00	-1.19	1.00 H	17	41.82	10.99
5	#10580.00	56.82 PK	68.20	-11.38	1.16 H	159	40.84	15.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	104.11 PK			2.66 V	270	93.51	10.60
2	*5290.00	93.82 AV			2.66 V	270	83.22	10.60
3	5350.00	59.48 PK	74.00	-14.52	2.66 V	270	48.49	10.99
4	5350.00	49.67 AV	54.00	-4.33	2.66 V	270	38.68	10.99
5	#10580.00	56.64 PK	68.20	-11.56	1.57 V	227	40.66	15.98

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 802.11ax (80MHz)	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	64.63 PK	74.00	-9.37	2.65 H	18	53.03	11.60
2	5460.00	50.95 AV	54.00	-3.05	2.65 H	18	39.35	11.60
3	#5470.00	66.80 PK	68.20	-1.40	2.65 H	18	55.13	11.67
4	*5530.00	112.48 PK			2.65 H	18	100.90	11.58
5	*5530.00	101.05 AV			2.65 H	18	89.47	11.58
6	11060.00	58.04 PK	74.00	-15.96	1.57 H	163	40.75	17.29
7	11060.00	46.97 AV	54.00	-7.03	1.57 H	163	29.68	17.29
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	61.27 PK	74.00	-12.73	2.96 V	193	49.67	11.60
2	5460.00	47.44 AV	54.00	-6.56	2.96 V	193	35.84	11.60
3	#5470.00	62.76 PK	68.20	-5.44	2.96 V	193	51.09	11.67
4	*5530.00	107.73 PK			2.96 V	193	96.15	11.58
5	*5530.00	97.07 AV			2.96 V	193	85.49	11.58
6	11060.00	57.42 PK	74.00	-16.58	2.25 V	236	40.13	17.29
7	11060.00	46.57 AV	54.00	-7.43	2.25 V	236	29.28	17.29

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 802.11ax (80MHz)	Channel	CH 122：5610 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	*5610.00	114.00 PK			2.71 H	15	103.07	10.93
2	*5610.00	102.70 AV			2.71 H	15	91.77	10.93
3	#5725.00	66.69 PK	68.20	-1.51	2.71 H	15	55.98	10.71
4	11220.00	58.56 PK	74.00	-15.44	1.74 H	185	40.69	17.87
5	11220.00	47.71 AV	54.00	-6.29	1.74 H	185	29.84	17.87
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5610.00	110.39 PK			2.78 V	296	99.46	10.93
2	*5610.00	99.60 AV			2.78 V	296	88.67	10.93
3	#5725.00	61.97 PK	68.20	-6.23	2.78 V	296	51.26	10.71
4	11220.00	57.92 PK	74.00	-16.08	1.74 V	152	40.05	17.87
5	11220.00	46.95 AV	54.00	-7.05	1.74 V	152	29.08	17.87

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 802.11ax (80MHz)	Channel	CH 138：5690 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	#5470.00	59.71 PK	68.20	-8.49	2.65 H	15	48.04	11.67
2	*5690.00	115.59 PK			2.65 H	15	104.83	10.76
3	*5690.00	104.39 AV			2.65 H	15	93.63	10.76
4	11380.00	58.15 PK	74.00	-15.85	1.89 H	265	40.36	17.79
5	11380.00	47.33 AV	54.00	-6.67	1.89 H	265	29.54	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	#5470.00	55.93 PK	68.20	-12.27	2.79 V	198	44.26	11.67
2	*5690.00	111.28 PK			2.79 V	198	100.52	10.76
3	*5690.00	100.43 AV			2.79 V	198	89.67	10.76
4	11380.00	57.80 PK	74.00	-16.20	2.23 V	263	40.01	17.79
5	11380.00	46.90 AV	54.00	-7.10	2.23 V	263	29.11	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 802.11ax (80MHz)	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	#5647.76	67.10 PK	68.20	-1.10	2.73 H	14	56.27	10.83
2	*5775.00	113.22 PK			2.73 H	14	102.58	10.64
3	*5775.00	101.97 AV			2.73 H	14	91.33	10.64
4	#5929.54	60.22 PK	68.20	-7.98	2.73 H	14	49.56	10.66
5	11550.00	58.84 PK	74.00	-15.16	1.42 H	236	40.11	18.73
6	11550.00	48.08 AV	54.00	-5.92	1.42 H	236	29.35	18.73
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	#5640.38	63.77 PK	68.20	-4.43	2.85 V	191	52.92	10.85
2	*5775.00	110.53 PK			2.85 V	191	99.89	10.64
3	*5775.00	99.29 AV			2.85 V	191	88.65	10.64
4	#5924.87	59.50 PK	68.30	-8.80	2.85 V	191	48.86	10.64
5	11550.00	57.99 PK	74.00	-16.01	2.36 V	210	39.26	18.73
6	11550.00	47.37 AV	54.00	-6.63	2.36 V	210	28.64	18.73

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.

CDD Mode

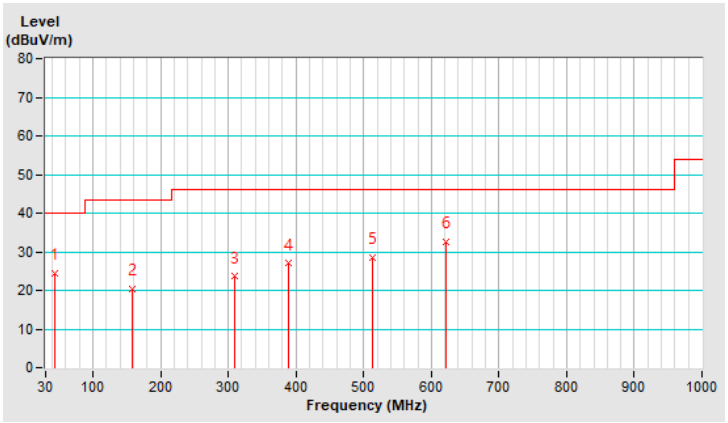
Below 1GHz Worst-Case Data:

RF Mode	TX 802.11ax (20MHz)	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	42.90	24.52 QP	40.00	-15.48	1.41 H	0	32.04	-7.52
2	157.94	20.45 QP	43.50	-23.05	1.53 H	17	26.96	-6.51
3	309.12	23.61 QP	46.00	-22.39	1.08 H	266	27.75	-4.14
4	388.46	26.96 QP	46.00	-19.04	1.59 H	302	29.40	-2.44
5	513.50	28.45 QP	46.00	-17.55	2.18 H	81	28.16	0.29
6	622.38	32.56 QP	46.00	-13.44	1.84 H	294	29.78	2.78

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.

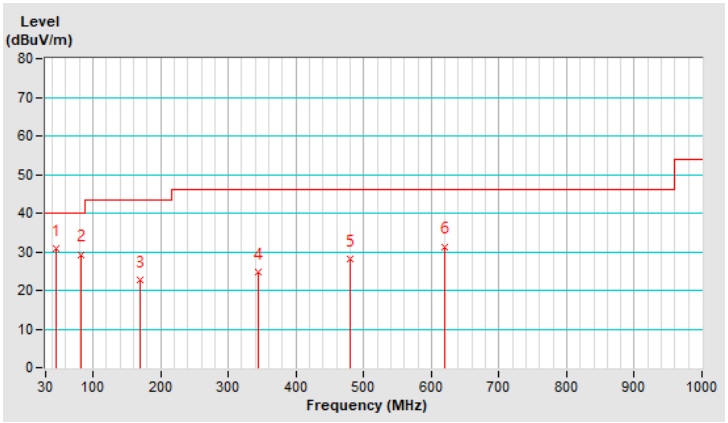


RF Mode	TX 802.11ax (20MHz)	Channel	CH 157：5785 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	44.70	30.72 QP	40.00	-9.28	1.44 V	222	38.09	-7.37
2	82.33	29.18 QP	40.00	-10.82	1.58 V	255	41.32	-12.14
3	170.02	22.56 QP	43.50	-20.94	1.13 V	297	29.28	-6.72
4	345.20	24.61 QP	46.00	-21.39	1.76 V	277	28.10	-3.49
5	479.84	28.02 QP	46.00	-17.98	2.08 V	292	28.33	-0.31
6	618.94	31.13 QP	46.00	-14.87	1.91 V	164	28.45	2.68

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	ESCS30	100276	Apr. 16, 2020	Apr. 15, 2021
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. 30, 2020	Jan. 29, 2021
LYNICS Terminator (For R&S LISN)	0900510	E1-01-305	Feb. 17, 2020	Feb. 16, 2021

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 5. (Conduction 5)
3. The VCCI Site Registration No. C-11093.

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.

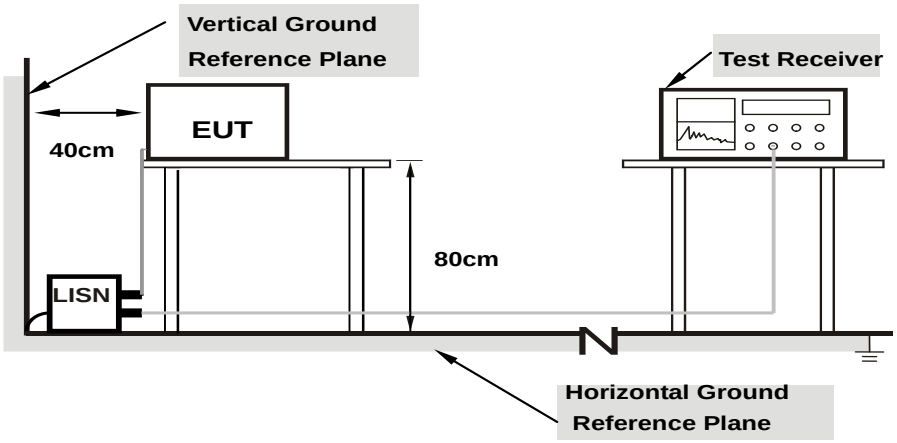
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

CDD Mode

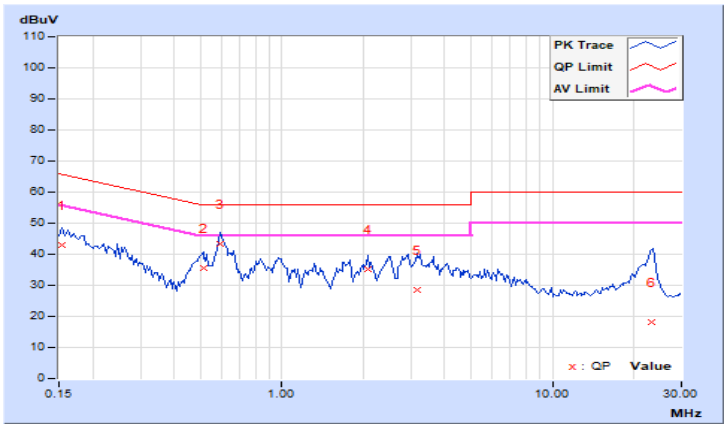
802.11ax (20MHz)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.93	33.21	22.38	43.14	32.31	65.79	55.79	-22.65	-23.48
2	0.51328	9.96	25.53	16.18	35.49	26.14	56.00	46.00	-20.51	-19.86
3	**0.59531**	**9.97**	**33.35**	**25.22**	**43.32**	**35.19**	**56.00**	**46.00**	**-12.68**	**-10.81**
4	2.08203	10.08	24.99	16.71	35.07	26.79	56.00	46.00	-20.93	-19.21
5	3.15625	10.18	18.32	10.86	28.50	21.04	56.00	46.00	-27.50	-24.96
6	23.20313	11.45	6.75	0.25	18.20	11.70	60.00	50.00	-41.80	-38.30

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.

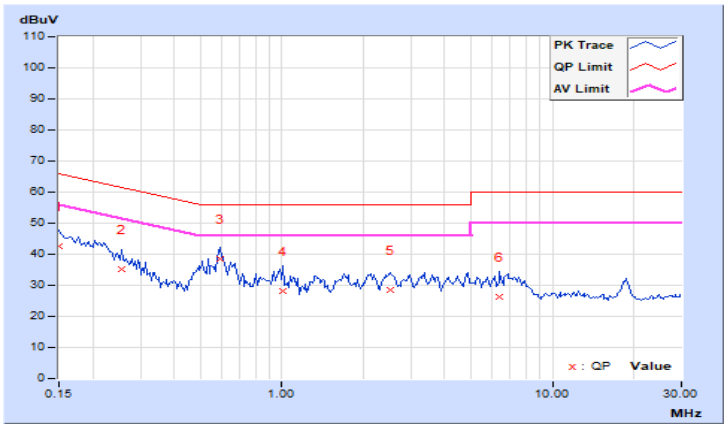


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.96	32.70	21.87	42.66	31.83	66.00	56.00	-23.34	-24.17
2	0.25547	9.98	25.07	12.06	35.05	22.04	61.58	51.58	-26.53	-29.54
3	0.59141	10.01	28.37	20.86	38.38	30.87	56.00	46.00	-17.62	-15.13
4	1.00781	10.04	18.05	8.58	28.09	18.62	56.00	46.00	-27.91	-27.38
5	2.51563	10.16	18.50	8.11	28.66	18.27	56.00	46.00	-27.34	-27.73
6	6.40625	10.42	15.93	6.61	26.35	17.03	60.00	50.00	-33.65	-32.97

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

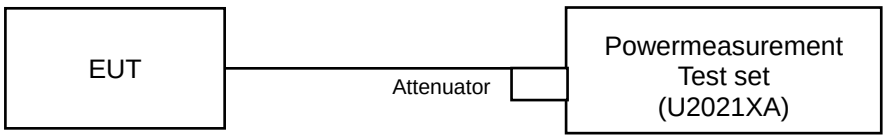
Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

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 $N_{ANT} \geq 5$.

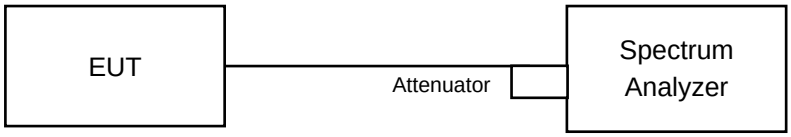
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

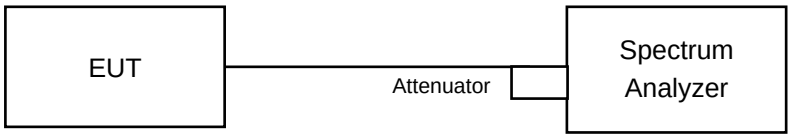
For Power Output Measurement



For Straddle Chanel:



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 Straddle Chanel:

a) Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
b) Set sweep trigger to “free run”.
c) Set RBW = 1 MHz.
d) Set VBW ≥ 3 MHz
e) Number of points in sweep ≥ 2 Span / RBW.
f) Sweep time ≤ (number of points in sweep) * T
g) Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
h) Detector = RMS.
i) Trace mode = max hold.
j) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
k) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

For 26dB Bandwidth Measurement

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > 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:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.64	17.84	118.89	20.75	24.00	Pass
40	5200	20.29	20.58	221.193	23.45	24.00	Pass
48	5240	20.20	20.67	221.394	23.45	24.00	Pass
52	5260	20.26	20.32	213.816	23.30	24.00	Pass
60	5300	20.23	20.36	214.081	23.31	24.00	Pass
64	5320	18.19	18.31	133.682	21.26	24.00	Pass
100	5500	18.75	19.11	156.460	21.94	24.00	Pass
116	5580	20.18	20.54	217.472	23.37	24.00	Pass
140	5700	17.72	18.14	124.319	20.95	24.00	Pass
144	5720 For U-NII-2C	17.27	17.23	106.178	20.26	22.90	Pass
144	5720 For U-NII-3	10.82	11.09	24.931	13.97	30.00	Pass
149	5745	22.43	22.49	352.404	25.47	30.00	Pass
157	5785	22.14	22.05	324.006	25.11	30.00	Pass
165	5825	22.78	22.93	386.007	25.87	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(32.15) = 26.07 dBm > 24dBm.
2. 11dBm + 10log(26.41) = 25.22 dBm > 24dBm.
3. 11dBm + 10log(20.84) = 24.19 dBm > 24dBm.
4. 11dBm + 10log(20.65) = 24.14 dBm > 24dBm.
5. 11dBm + 10log(20.80) = 24.18 dBm > 24dBm.
6. 11dBm + 10log(20.96) = 24.21 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.49) =22.90 dBm<24dBm.

Chain 1

1. 11dBm + 10log(33.00) = 26.19 dBm > 24dBm.
2. 11dBm + 10log(25.11) = 24.99 dBm > 24dBm.
3. 11dBm + 10log(20.82) = 24.18 dBm > 24dBm.
4. 11dBm + 10log(20.82) = 24.18 dBm > 24dBm.
5. 11dBm + 10log(20.76) = 24.17 dBm > 24dBm.
6. 11dBm + 10log(20.54) = 24.12 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.35) =22.95 dBm<24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	131.109	21.18

802.11n (20MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.78	16.97	97.417	19.89	24.00	Pass
40	5200	19.47	19.75	182.918	22.62	24.00	Pass
48	5240	19.53	19.80	185.242	22.68	24.00	Pass
52	5260	19.39	19.61	178.307	22.51	24.00	Pass
60	5300	19.35	19.48	174.815	22.43	24.00	Pass
64	5320	17.21	17.31	106.429	20.27	24.00	Pass
100	5500	17.14	17.36	106.211	20.26	24.00	Pass
116	5580	19.21	19.35	169.467	22.29	24.00	Pass
140	5700	15.61	15.96	75.837	18.80	24.00	Pass
144	5720 For U-NII-2C	16.07	16.09	81.102	19.09	22.96	Pass
144	5720 For U-NII-3	10.10	10.28	20.899	13.20	30.00	Pass
149	5745	21.44	21.63	284.862	24.55	30.00	Pass
157	5785	21.15	21.08	258.55	24.13	30.00	Pass
165	5825	21.81	21.98	309.466	24.91	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(28.27) = 25.51 dBm > 24dBm.
2. 11dBm + 10log(25.47) = 25.06 dBm > 24dBm.
3. 11dBm + 10log(21.44) = 24.31 dBm > 24dBm.
4. 11dBm + 10log(21.15) = 24.25 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.16) = 24.26 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.06) =23.03 dBm<24dBm.

Chain 1

1. 11dBm + 10log(28.08) = 25.48 dBm > 24dBm.
2. 11dBm + 10log(25.56) = 25.08 dBm > 24dBm.
3. 11dBm + 10log(21.50) = 24.32 dBm > 24dBm.
4. 11dBm + 10log(21.20) = 24.26 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.07) = 24.23 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.27) =22.96 dBm<24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	102.001	20.09

802.11n (40MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	14.52	14.79	58.444	17.67	24.00	Pass
46	5230	17.20	17.46	108.199	20.34	24.00	Pass
54	5270	18.24	18.52	137.802	21.39	24.00	Pass
62	5310	14.46	14.72	57.574	17.60	24.00	Pass
102	5510	14.59	14.86	59.394	17.74	24.00	Pass
110	5550	19.43	19.71	181.241	22.58	24.00	Pass
134	5670	16.85	17.16	100.417	20.02	24.00	Pass
142	5710 For U-NII-2C	17.62	17.60	115.354	20.62	24.00	Pass
142	5710 For U-NII-3	7.32	6.68	10.051	10.02	30.00	Pass
151	5755	22.22	22.50	344.553	25.37	30.00	Pass
159	5795	22.19	22.48	342.588	25.35	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(61.32) = 28.87 dBm > 24dBm.
2. 11dBm + 10log(40.74) = 27.10 dBm > 24dBm.
3. 11dBm + 10log(40.70) = 27.10 dBm > 24dBm.
4. 11dBm + 10log(40.92) = 27.12 dBm > 24dBm.
5. 11dBm + 10log(41.07) = 27.14 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5679.09) =27.61 dBm>24dBm.

Chain 1

1. 11dBm + 10log(66.44) = 29.22 dBm > 24dBm.
2. 11dBm + 10log(40.63) = 27.08 dBm > 24dBm.
3. 11dBm + 10log(40.68) = 27.09 dBm > 24dBm.
4. 11dBm + 10log(40.88) = 27.11 dBm > 24dBm.
5. 11dBm + 10log(40.49) = 27.07 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5680.52) =27.48 dBm>24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	125.405	20.98

802.11ac (20MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.99	17.23	102.848	20.12	24.00	Pass
40	5200	19.71	19.98	193.081	22.86	24.00	Pass
48	5240	19.74	20.07	195.814	22.92	24.00	Pass
52	5260	19.61	19.80	186.911	22.72	24.00	Pass
60	5300	19.58	19.72	184.538	22.66	24.00	Pass
64	5320	17.44	17.57	112.61	20.52	24.00	Pass
100	5500	17.38	17.62	112.511	20.51	24.00	Pass
116	5580	19.49	19.60	180.121	22.56	24.00	Pass
140	5700	15.88	16.16	80.031	19.03	24.00	Pass
144	5720 For U-NII-2C	16.29	16.31	85.316	19.31	22.96	Pass
144	5720 For U-NII-3	10.32	10.50	21.985	13.42	30.00	Pass
149	5745	22.35	22.48	348.802	25.43	30.00	Pass
157	5785	22.03	21.97	316.986	25.01	30.00	Pass
165	5825	22.67	22.83	376.794	25.76	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(28.27) = 25.51 dBm > 24dBm.
2. 11dBm + 10log(25.47) = 25.06 dBm > 24dBm.
3. 11dBm + 10log(21.44) = 24.31 dBm > 24dBm.
4. 11dBm + 10log(21.15) = 24.25 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.16) = 24.26 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.06) =23.03 dBm<24dBm.

Chain 1

1. 11dBm + 10log(28.08) = 25.48 dBm > 24dBm.
2. 11dBm + 10log(25.56) = 25.08 dBm > 24dBm.
3. 11dBm + 10log(21.50) = 24.32 dBm > 24dBm.
4. 11dBm + 10log(21.20) = 24.26 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.07) = 24.23 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.27) =22.96 dBm<24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	107.301	20.31

802.11ac (40MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	14.78	15.05	62.050	17.93	24.00	Pass
46	5230	17.47	17.74	115.276	20.62	24.00	Pass
54	5270	18.50	18.68	144.585	21.60	24.00	Pass
62	5310	14.69	14.92	60.490	17.82	24.00	Pass
102	5510	14.84	15.15	63.213	18.01	24.00	Pass
110	5550	19.70	19.97	192.637	22.85	24.00	Pass
134	5670	17.13	17.37	106.217	20.26	24.00	Pass
142	5710 For U-NII-2C	17.84	17.82	121.348	20.84	24.00	Pass
142	5710 For U-NII-3	7.54	6.90	10.573	10.24	30.00	Pass
151	5755	22.47	22.69	362.384	25.59	30.00	Pass
159	5795	22.52	22.76	367.448	25.65	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(61.32) = 28.87 dBm > 24dBm.
2. 11dBm + 10log(40.74) = 27.10 dBm > 24dBm.
3. 11dBm + 10log(40.70) = 27.10 dBm > 24dBm.
4. 11dBm + 10log(40.92) = 27.12 dBm > 24dBm.
5. 11dBm + 10log(41.07) = 27.14 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5679.09) =27.61 dBm>24dBm.

Chain 1

1. 11dBm + 10log(66.44) = 29.22 dBm > 24dBm.
2. 11dBm + 10log(40.63) = 27.08 dBm > 24dBm.
3. 11dBm + 10log(40.68) = 27.09 dBm > 24dBm.
4. 11dBm + 10log(40.88) = 27.11 dBm > 24dBm.
5. 11dBm + 10log(40.49) = 27.07 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5680.52) =27.48 dBm>24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	131.921	21.20

802.11ac (80MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.61	14.90	59.810	17.77	24.00	Pass
58	5290	13.50	13.69	45.776	16.61	24.00	Pass
106	5530	14.50	14.80	58.383	17.66	24.00	Pass
122	5610	17.53	17.78	116.603	20.67	24.00	Pass
138	5690 For U-NII-2C	17.58	17.57	114.427	20.59	24.00	Pass
138	5690 For U-NII-3	4.09	3.95	5.048	7.03	30.00	Pass
155	5775	17.55	17.74	116.315	20.66	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(82.15) = 30.14 dBm > 24dBm.
2. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
3. 11dBm + 10log(83.07) = 30.19 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5646.99) =29.92 dBm>24dBm.

Chain 1

1. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
2. 11dBm + 10log(82.53) = 30.16 dBm > 24dBm.
3. 11dBm + 10log(83.12) = 30.20 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5648.20) =29.85 dBm>24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
138	5690	119.475	20.77

802.11ax (20MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.62	17.89	119.327	20.77	24.00	Pass
40	5200	20.34	20.61	223.223	23.49	24.00	Pass
48	5240	20.43	20.69	**227.627**	23.57	24.00	Pass
52	5260	20.29	20.48	**218.592**	23.40	24.00	Pass
60	5300	20.23	20.35	213.831	23.30	24.00	Pass
64	5320	18.11	18.21	130.936	21.17	24.00	Pass
100	5500	18.02	18.26	130.375	21.15	24.00	Pass
116	5580	20.13	20.27	209.453	23.21	24.00	Pass
140	5700	16.53	16.84	93.284	19.70	24.00	Pass
144	5720 For U-NII-2C	16.92	16.94	98.635	19.94	22.96	Pass
144	5720 For U-NII-3	10.95	11.13	25.417	14.05	30.00	Pass
149	5745	22.35	22.48	348.802	25.43	30.00	Pass
157	5785	22.03	21.97	316.986	25.01	30.00	Pass
165	5825	22.67	22.83	376.794	25.76	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(28.27) = 25.51 dBm > 24dBm.
2. 11dBm + 10log(25.47) = 25.06 dBm > 24dBm.
3. 11dBm + 10log(21.44) = 24.31 dBm > 24dBm.
4. 11dBm + 10log(21.15) = 24.25 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.16) = 24.26 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.06) =23.03 dBm<24dBm.

Chain 1

1. 11dBm + 10log(28.08) = 25.48 dBm > 24dBm.
2. 11dBm + 10log(25.56) = 25.08 dBm > 24dBm.
3. 11dBm + 10log(21.50) = 24.32 dBm > 24dBm.
4. 11dBm + 10log(21.20) = 24.26 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.07) = 24.23 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.27) =22.96 dBm<24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	124.052	20.94

802.11ax (40MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.40	15.67	71.571	18.55	24.00	Pass
46	5230	18.12	18.37	133.570	21.26	24.00	Pass
54	5270	19.15	19.36	168.522	22.27	24.00	Pass
62	5310	15.37	15.59	70.659	18.49	24.00	Pass
102	5510	15.47	15.78	73.081	18.64	24.00	Pass
110	5550	20.34	20.59	**222.695**	23.48	24.00	Pass
134	5670	17.76	18.02	123.090	20.90	24.00	Pass
142	5710 For U-NII-2C	18.48	18.46	140.615	21.48	24.00	Pass
142	5710 For U-NII-3	8.18	7.54	12.252	10.88	30.00	Pass
151	5755	23.11	23.36	421.415	26.25	30.00	Pass
159	5795	23.13	23.40	**424.365**	26.28	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(61.32) = 28.87 dBm > 24dBm.
2. 11dBm + 10log(40.74) = 27.10 dBm > 24dBm.
3. 11dBm + 10log(40.70) = 27.10 dBm > 24dBm.
4. 11dBm + 10log(40.92) = 27.12 dBm > 24dBm.
5. 11dBm + 10log(41.07) = 27.14 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5679.09) =27.61 dBm>24dBm.

Chain 1

1. 11dBm + 10log(66.44) = 29.22 dBm > 24dBm.
2. 11dBm + 10log(40.63) = 27.08 dBm > 24dBm.
3. 11dBm + 10log(40.68) = 27.09 dBm > 24dBm.
4. 11dBm + 10log(40.88) = 27.11 dBm > 24dBm.
5. 11dBm + 10log(40.49) = 27.07 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5680.52) =27.48 dBm>24dBm.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	152.867	21.84

802.11ax (80MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	15.27	15.54	69.461	18.42	24.00	Pass
58	5290	14.19	14.31	53.220	17.26	24.00	Pass
106	5530	15.17	15.42	67.719	18.31	24.00	Pass
122	5610	18.14	18.46	135.308	21.31	24.00	Pass
138	5690 For U-NII-2C	18.20	18.19	131.987	21.21	24.00	Pass
138	5690 For U-NII-3	4.71	4.57	5.822	7.65	30.00	Pass
155	5775	18.22	18.37	135.081	21.31	30.00	Pass

NOTE:

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

Chain 0

1. 11dBm + 10log(82.15) = 30.14 dBm > 24dBm.
2. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
3. 11dBm + 10log(83.07) = 30.19 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5646.99) =29.92 dBm>24dBm.

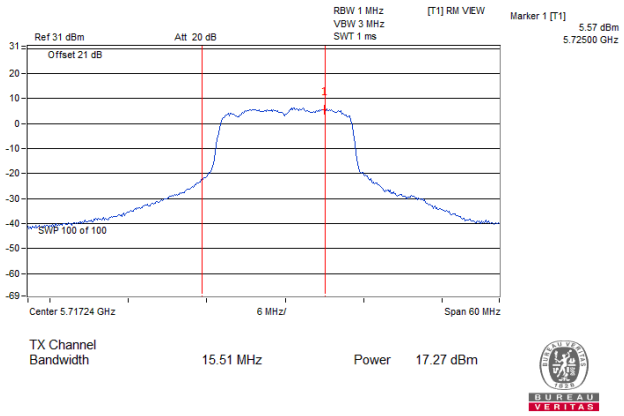
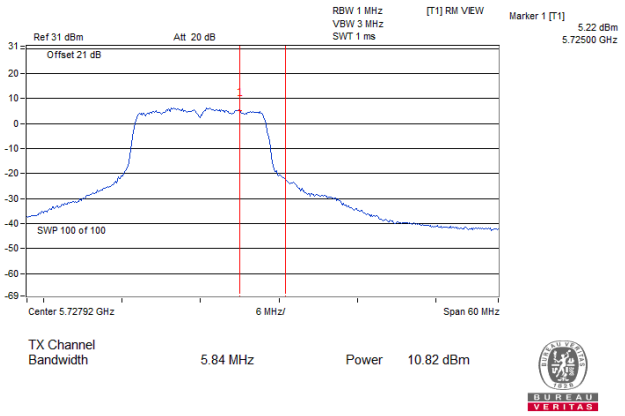
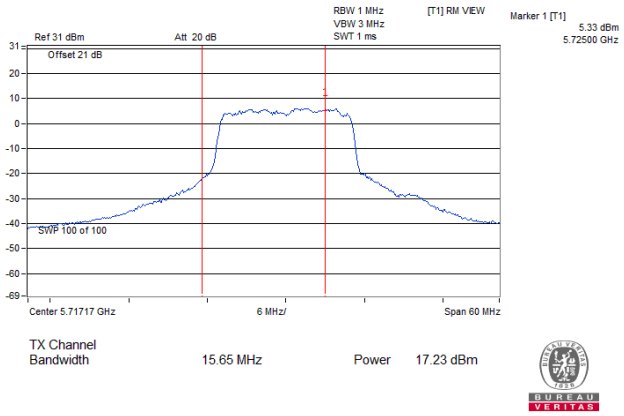
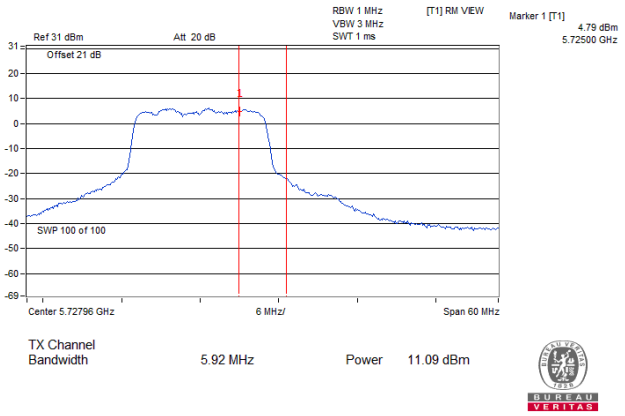
Chain 1

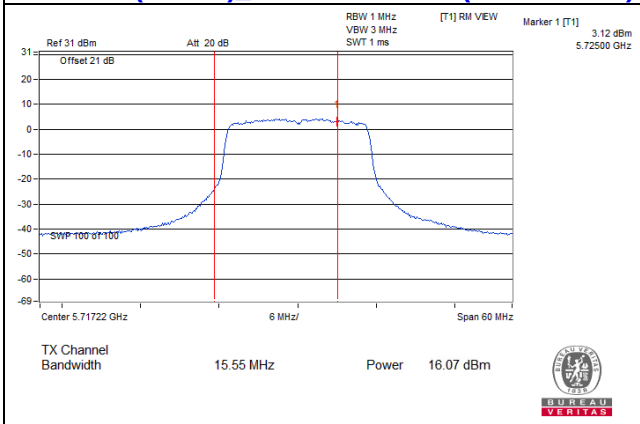
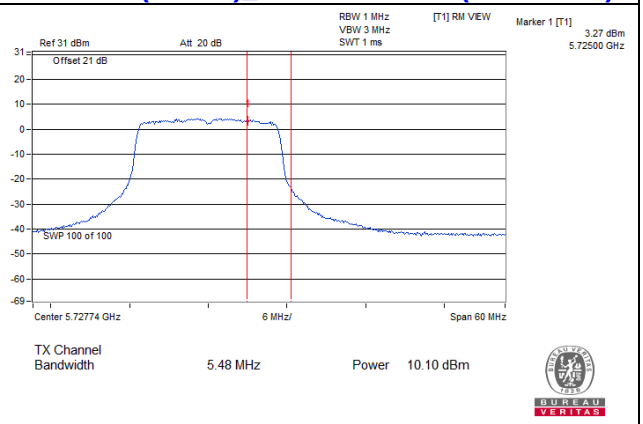
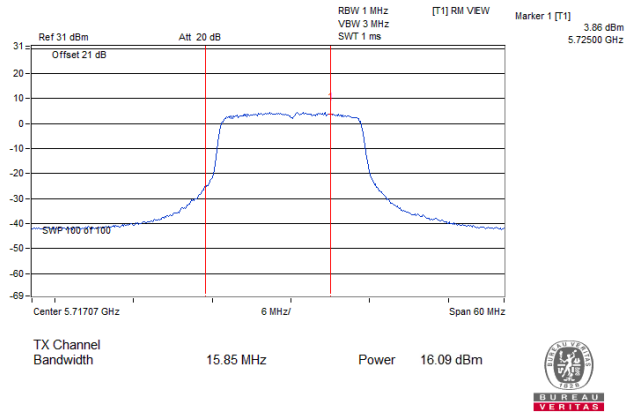
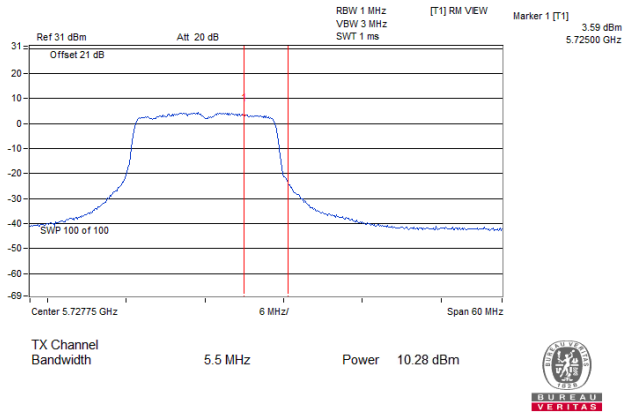
1. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
2. 11dBm + 10log(82.53) = 30.16 dBm > 24dBm.
3. 11dBm + 10log(83.12) = 30.20 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5648.20) =29.85 dBm>24dBm.

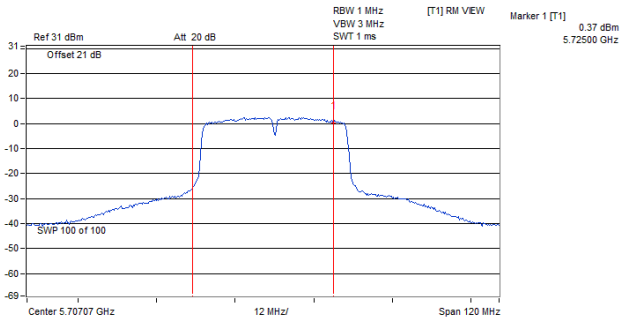
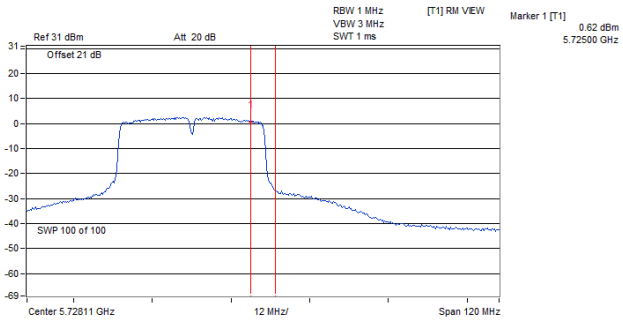
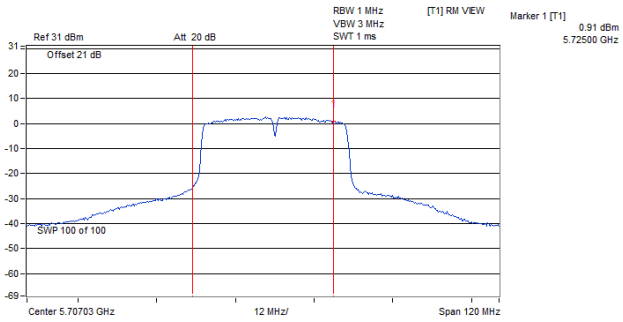
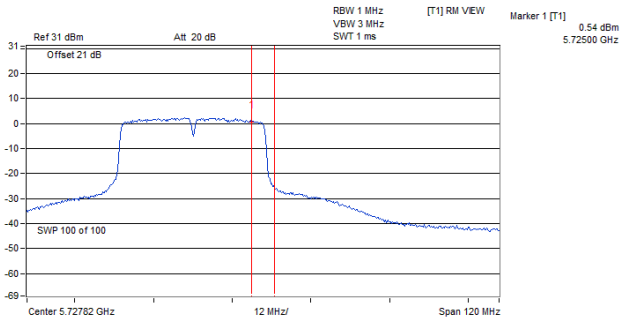
For Reference only-Power meter value

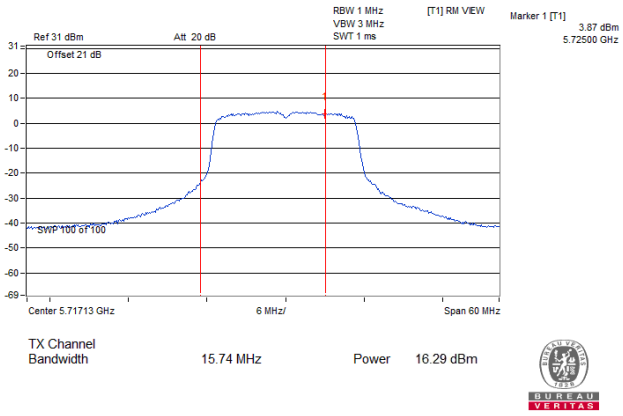
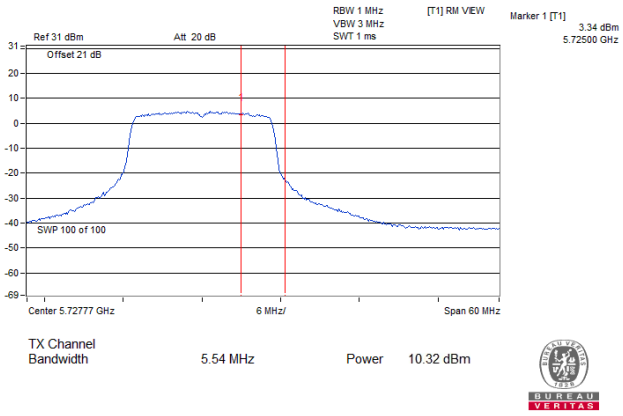
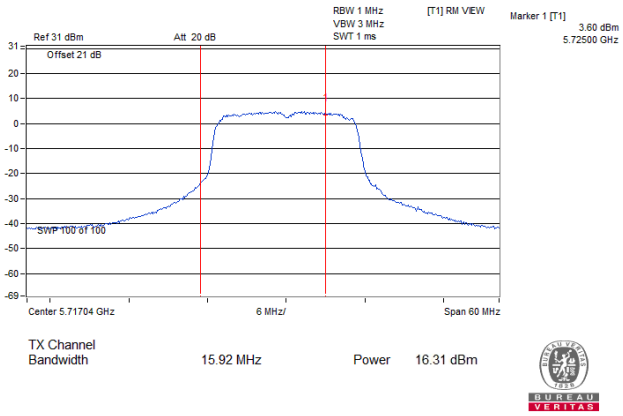
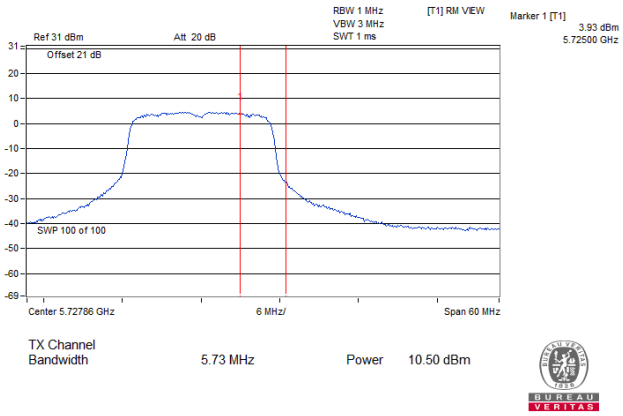
The power value was measured by power meter with average sensor

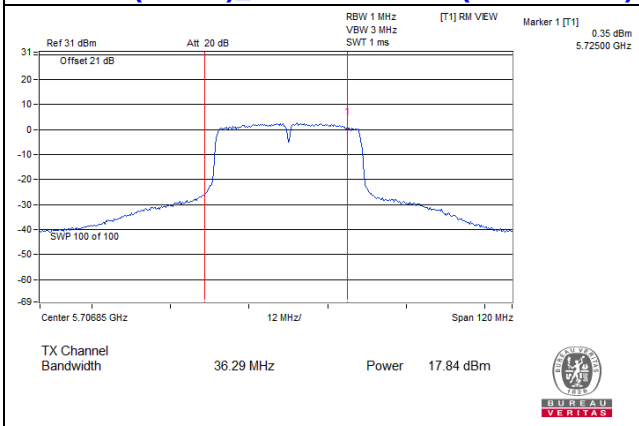
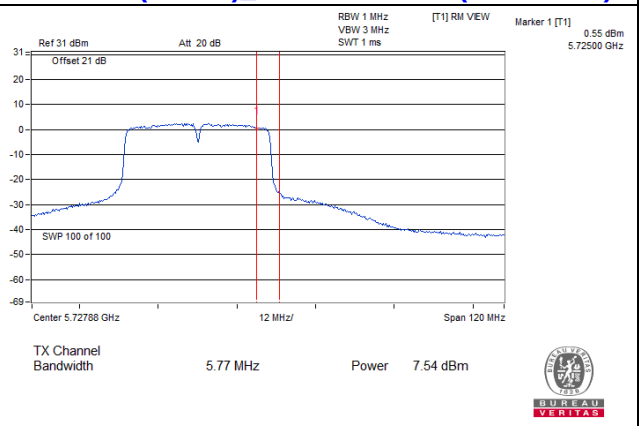
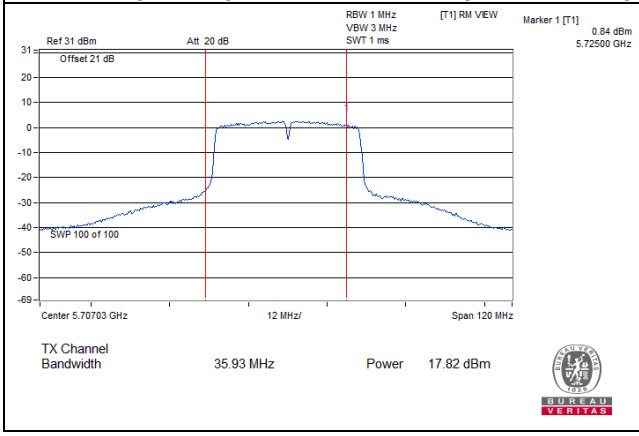
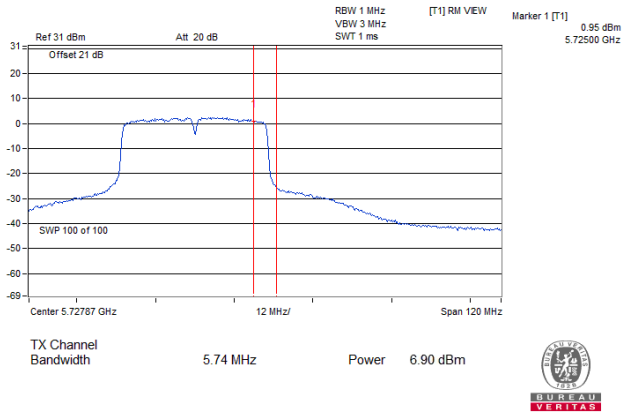
Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
138	5690	137.809	21.39

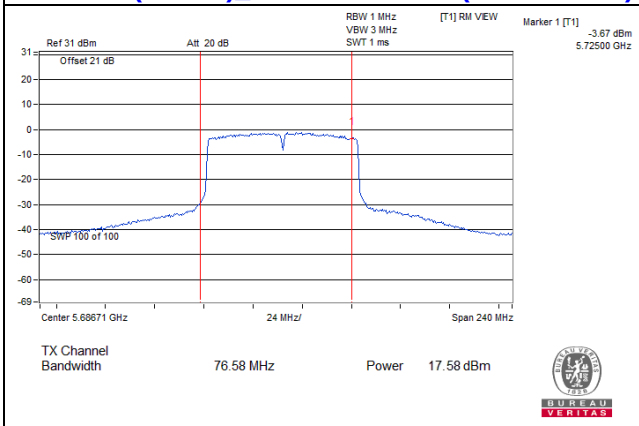
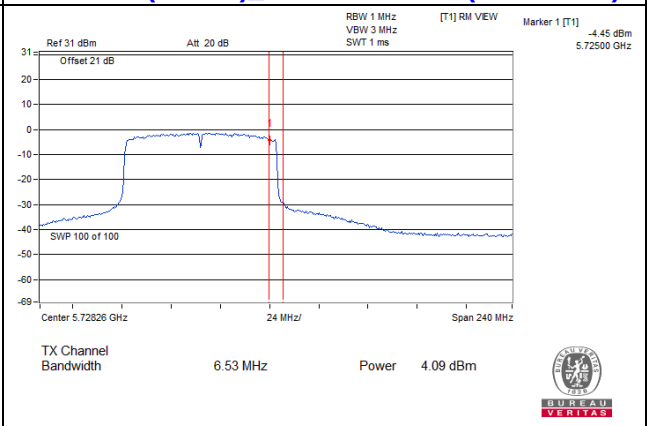
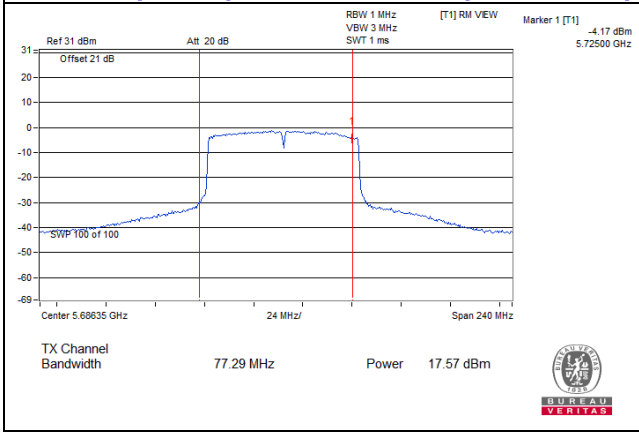
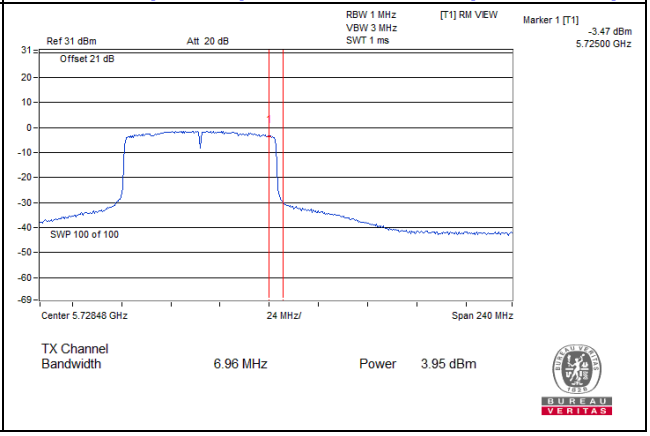
Spectrum Plot of Straddle channel	
802.11a_Chain 0: CH 144 (For U-NII-2C)	**802.11a_Chain 0: CH 144 (For U-NII-3)**
 TX Channel Bandwidth 15.51 MHz Power 17.27 dBm	 TX Channel Bandwidth 5.84 MHz Power 10.82 dBm
802.11a_Chain 1: CH 144 (For U-NII-2C)	**802.11a_Chain 1: CH 144 (For U-NII-3)**
 TX Channel Bandwidth 15.65 MHz Power 17.23 dBm	 TX Channel Bandwidth 5.92 MHz Power 11.09 dBm

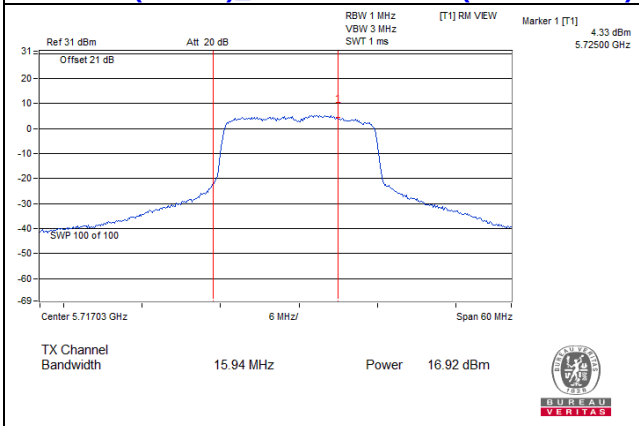
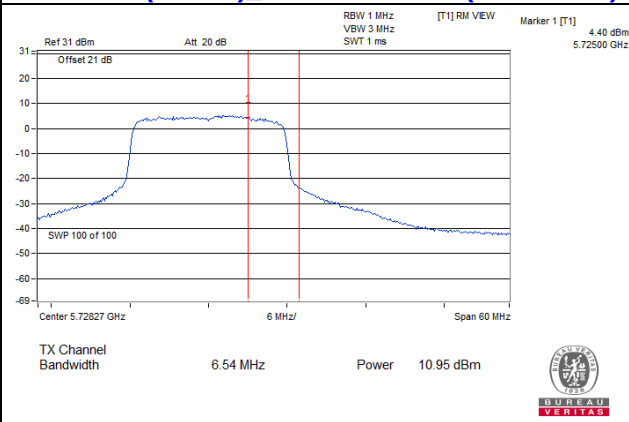
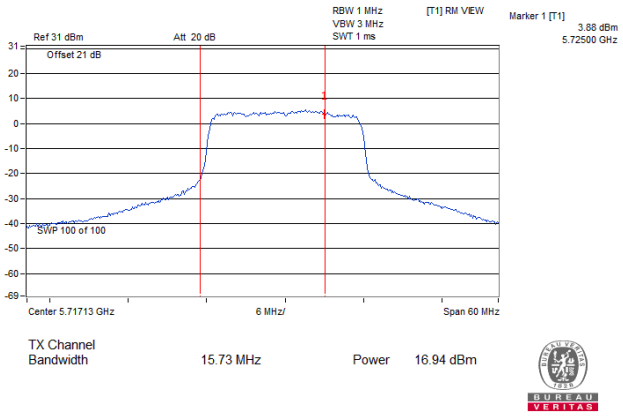
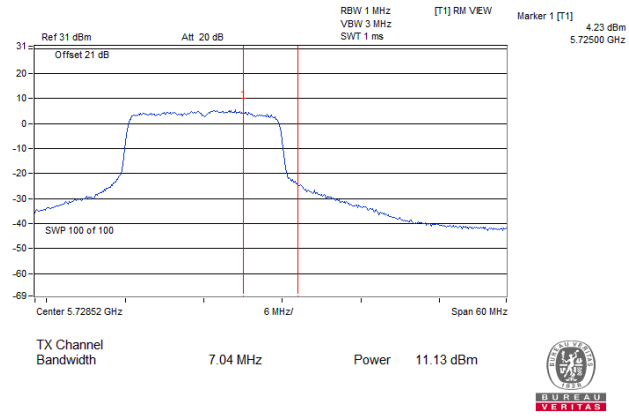
Spectrum Plot of Straddle channel	
802.11an (20MHz)_Chain 0: CH 144 (For U-NII-2C)	**802.11an (20MHz)_Chain 0: CH 144(For U-NII-3)**
 TX Channel Bandwidth 15.55 MHz Power 16.07 dBm	 TX Channel Bandwidth 5.48 MHz Power 10.10 dBm
802.11an (20MHz)_Chain 1: CH 144 (For U-NII-2C)	**802.11an (20MHz)_Chain 1: CH 144(For U-NII-3)**
 TX Channel Bandwidth 15.85 MHz Power 16.09 dBm	 TX Channel Bandwidth 5.5 MHz Power 10.28 dBm

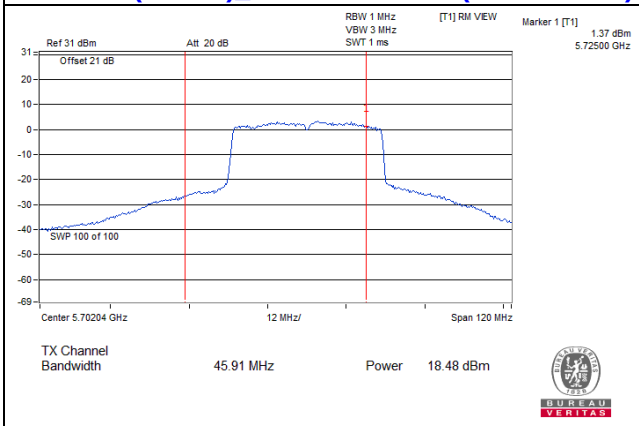
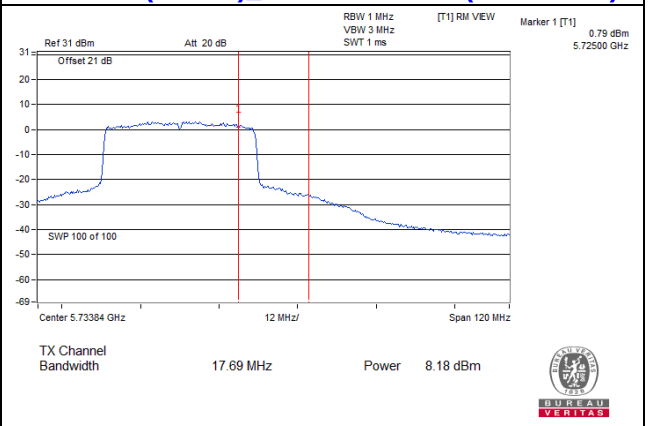
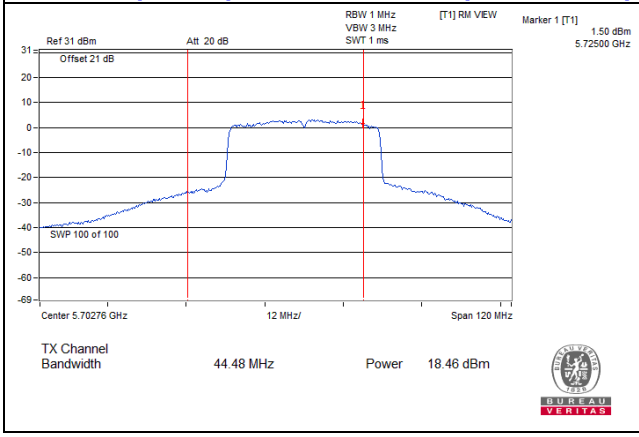
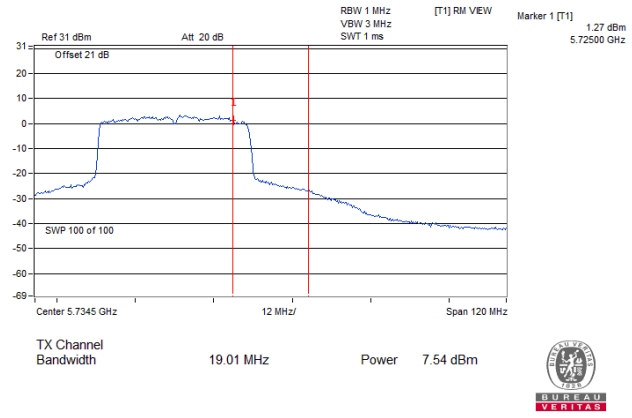
Spectrum Plot of Straddle channel	
802.11an (40MHz)_Chain 0: CH 142 (For U-NII-2C)	**802.11an (40MHz)_Chain 0: CH 142(For U-NII-3)**
 TX Channel Bandwidth 35.86 MHz Power 17.62 dBm	 TX Channel Bandwidth 6.23 MHz Power 7.32 dBm
802.11an (40MHz)_Chain 1: CH 142 (For U-NII-2C)	**802.11an (40MHz)_Chain 1: CH 142(For U-NII-3)**
 TX Channel Bandwidth 35.93 MHz Power 17.60 dBm	 TX Channel Bandwidth 5.64 MHz Power 6.68 dBm

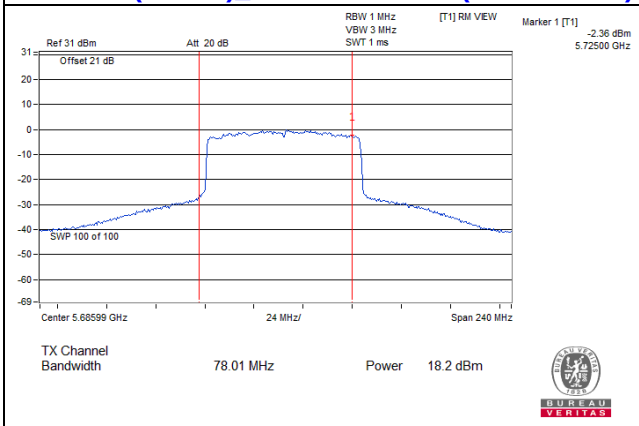
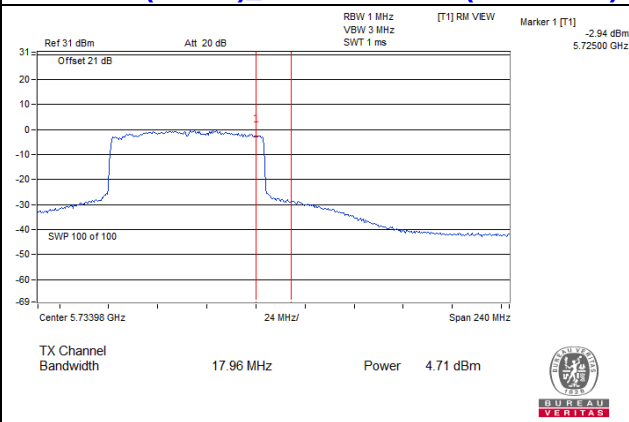
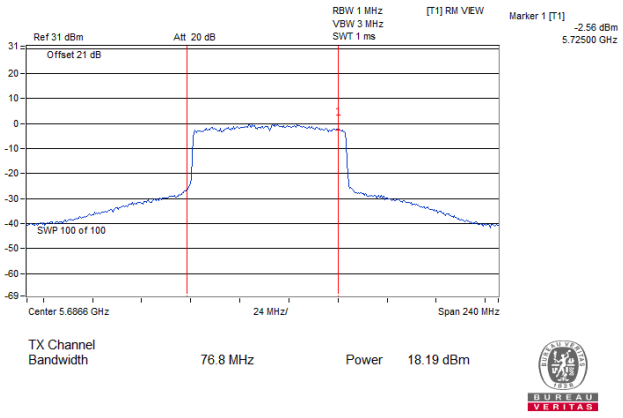
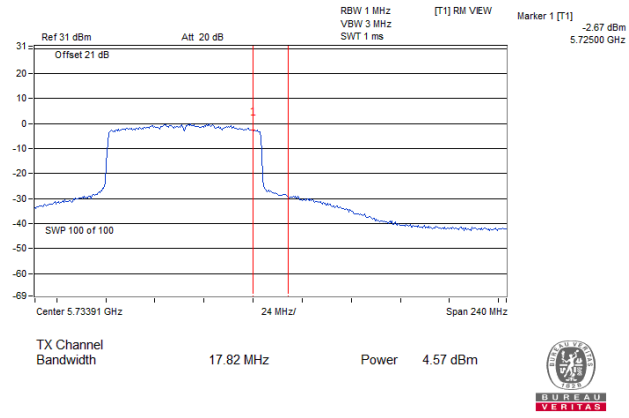
Spectrum Plot of Straddle channel	
802.11ac (20MHz)_Chain 0: CH 144 (For U-NII-2C)	**802.11ac (20MHz)_Chain 0: CH 144(For U-NII-3)**
 TX Channel Bandwidth 15.74 MHz Power 16.29 dBm	 TX Channel Bandwidth 5.54 MHz Power 10.32 dBm
802.11ac (20MHz)_Chain 1: CH 144 (For U-NII-2C)	**802.11ac (20MHz)_Chain 1: CH 144(For U-NII-3)**
 TX Channel Bandwidth 15.92 MHz Power 16.31 dBm	 TX Channel Bandwidth 5.73 MHz Power 10.50 dBm

Spectrum Plot of Straddle channel	
802.11ac (40MHz)_Chain 0: CH 142 (For U-NII-2C)	**802.11ac (40MHz)_Chain 0: CH 142(For U-NII-3)**
 TX Channel Bandwidth 36.29 MHz Power 17.84 dBm	 TX Channel Bandwidth 5.77 MHz Power 7.54 dBm
802.11ac (40MHz)_Chain 1: CH 142 (For U-NII-2C)	**802.11ac (40MHz)_Chain 1: CH 142(For U-NII-3)**
 TX Channel Bandwidth 35.93 MHz Power 17.82 dBm	 TX Channel Bandwidth 5.74 MHz Power 6.90 dBm

Spectrum Plot of Straddle channel	
802.11ac (80MHz)_Chain 0: CH 138 (For U-NII-2C)	**802.11ac (80MHz)_Chain 0: CH 138(For U-NII-3)**
 TX Channel Bandwidth 76.58 MHz Power 17.58 dBm	 TX Channel Bandwidth 6.53 MHz Power 4.09 dBm
802.11ac (80MHz)_Chain 1: CH 138 (For U-NII-2C)	**802.11ac (80MHz)_Chain 1: CH 138(For U-NII-3)**
 TX Channel Bandwidth 77.29 MHz Power 17.57 dBm	 TX Channel Bandwidth 6.96 MHz Power 3.95 dBm

Spectrum Plot of Straddle channel	
802.11ax (20MHz)_Chain 0: CH 144 (For U-NII-2C)	**802.11ax (20MHz)_Chain 0: CH 144(For U-NII-3)**
 TX Channel Bandwidth 15.94 MHz Power 16.92 dBm	 TX Channel Bandwidth 6.54 MHz Power 10.95 dBm
802.11ax (20MHz)_Chain 1: CH 144 (For U-NII-2C)	**802.11ax (20MHz)_Chain 1: CH 144(For U-NII-3)**
 TX Channel Bandwidth 15.73 MHz Power 16.94 dBm	 TX Channel Bandwidth 7.04 MHz Power 11.13 dBm

Spectrum Plot of Straddle channel	
802.11ax (40MHz)_Chain 0: CH 142 (For U-NII-2C)	**802.11ax (40MHz)_Chain 0: CH 142(For U-NII-3)**
 TX Channel Bandwidth 45.91 MHz Power 18.48 dBm	 TX Channel Bandwidth 17.69 MHz Power 8.18 dBm
802.11ax (40MHz)_Chain 1: CH 142 (For U-NII-2C)	**802.11ax (40MHz)_Chain 1: CH 142(For U-NII-3)**
 TX Channel Bandwidth 44.48 MHz Power 18.46 dBm	 TX Channel Bandwidth 19.01 MHz Power 7.54 dBm

Spectrum Plot of Straddle channel	
802.11ax (80MHz)_Chain 0: CH 138 (For U-NII-2C)	**802.11ax (80MHz)_Chain 0: CH 138(For U-NII-3)**
 TX Channel Bandwidth 78.01 MHz Power 18.2 dBm	 TX Channel Bandwidth 17.96 MHz Power 4.71 dBm
802.11ax (80MHz)_Chain 1: CH 138 (For U-NII-2C)	**802.11ax (80MHz)_Chain 1: CH 138(For U-NII-3)**
 TX Channel Bandwidth 76.8 MHz Power 18.19 dBm	 TX Channel Bandwidth 17.82 MHz Power 4.57 dBm

Beamforming Mode

802.11ac (20MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	13.98	14.22	51.428	17.11	23.05	Pass
40	5200	16.70	16.97	96.547	19.85	23.05	Pass
48	5240	16.73	17.06	97.914	19.91	23.05	Pass
52	5260	16.60	16.79	93.462	19.71	23.05	Pass
60	5300	16.57	16.71	92.275	19.65	23.05	Pass
64	5320	14.43	14.56	56.309	17.51	23.05	Pass
100	5500	14.37	14.61	56.259	17.50	23.05	Pass
116	5580	16.48	16.59	90.067	19.55	23.05	Pass
140	5700	12.87	13.15	40.018	16.02	23.05	Pass
144	5720 For U-NII-2C	13.28	13.30	42.661	16.30	22.01	Pass
144	5720 For U-NII-3	7.31	7.49	10.993	10.41	29.05	Pass
149	5745	18.68	18.82	149.998	21.76	29.05	Pass
157	5785	18.38	18.30	136.474	21.35	29.05	Pass
165	5825	19.00	19.15	161.657	22.09	29.05	Pass

For U-NII-1, U-NII-2ABand: Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]=6.95dBi > 6dBi, so the power limit shall be reduced to 24-(6.95-6) = 23.05dBm.
For U-NII-2C Band: Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]=6.95dBi > 6dBi, so the power limit shall be reduced to 22.96-(6.95-6) = 22.01dBm.
For U-NII-3: Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]=6.95dBi > 6dBi, so the power limit shall be reduced to 30-(6.95-6) = 29.05dBm.

NOTE:
For U-NII-2A, U-NII-2C Band:
Chain 0
1. 11dBm + 10log(28.27) = 25.51 dBm > 24dBm.
2. 11dBm + 10log(25.47) = 25.06 dBm > 24dBm.
3. 11dBm + 10log(21.44) = 24.31 dBm > 24dBm.
4. 11dBm + 10log(21.15) = 24.25 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.16) = 24.26 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.06) =23.02 dBm<24dBm.

Chain 1
1. 11dBm + 10log(28.08) = 25.48 dBm > 24dBm.
2. 11dBm + 10log(25.56) = 25.08 dBm > 24dBm.
3. 11dBm + 10log(21.50) = 24.32 dBm > 24dBm.
4. 11dBm + 10log(21.20) = 24.26 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.07) = 24.23 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.27) =22.96 dBm<24dBm.

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	53.654	17.30

802.11ac (40MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	11.77	12.04	31.027	14.92	23.05	Pass
46	5230	14.46	14.73	57.642	17.61	23.05	Pass
54	5270	15.49	15.67	72.297	18.59	23.05	Pass
62	5310	11.68	11.91	30.247	14.81	23.05	Pass
102	5510	11.83	12.14	31.609	15.00	23.05	Pass
110	5550	16.69	16.96	96.325	19.84	23.05	Pass
134	5670	14.12	14.36	53.112	17.25	23.05	Pass
142	5710 For U-NII-2C	14.83	14.81	60.678	17.83	23.05	Pass
142	5710 For U-NII-3	4.53	3.89	5.287	7.23	29.05	Pass
151	5755	19.46	19.68	181.205	22.58	29.05	Pass
159	5795	19.51	19.75	183.737	22.64	29.05	Pass

For U-NII-1, U-NII-2A, U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 24-(6.95-6) = 23.05dBm.
For U-NII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 30-(6.95-6) = 29.05dBm.

NOTE:

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

Chain 0

1. 11dBm + 10log(61.32) = 28.87 dBm > 24dBm.
2. 11dBm + 10log(40.74) = 27.10 dBm > 24dBm.
3. 11dBm + 10log(40.70) = 27.10 dBm > 24dBm.
4. 11dBm + 10log(40.92) = 27.12 dBm > 24dBm.
5. 11dBm + 10log(41.07) = 27.14 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5679.09) =27.61 dBm>24dBm.

Chain 1

1. 11dBm + 10log(66.44) = 29.22 dBm > 24dBm.
2. 11dBm + 10log(40.63) = 27.08 dBm > 24dBm.
3. 11dBm + 10log(40.68) = 27.09 dBm > 24dBm.
4. 11dBm + 10log(40.88) = 27.11 dBm > 24dBm.
5. 11dBm + 10log(40.49) = 27.07 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5680.52) =27.48 dBm>24dBm.

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	65.965	18.19

802.11ac (80MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	11.60	11.89	29.907	14.76	23.05	Pass
58	5290	10.49	10.68	22.889	13.60	23.05	Pass
106	5530	11.49	11.79	29.194	14.65	23.05	Pass
122	5610	14.52	14.77	58.306	17.66	23.05	Pass
138	5690 For U-NII-2C	14.57	14.56	57.218	17.58	23.05	Pass
138	5690 For U-NII-3	1.08	0.94	2.524	4.02	29.05	Pass
155	5775	14.54	14.73	58.161	17.65	29.05	Pass

For U-NII-1, U-NII-2A, U-NII-2C Band: Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]=6.95dBi > 6dBi, so the power limit shall be reduced to 24-(6.95-6) = 23.05dBm.
For U-NII-3: Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]=6.95dBi > 6dBi, so the power limit shall be reduced to 30-(6.95-6) = 29.05dBm.

NOTE:

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

Chain 0

1. 11dBm + 10log(82.15) = 30.14 dBm > 24dBm.
2. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
3. 11dBm + 10log(83.07) = 30.19 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5646.99) =29.92 dBm>24dBm.

Chain 1

1. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
2. 11dBm + 10log(82.53) = 30.16 dBm > 24dBm.
3. 11dBm + 10log(83.12) = 30.20 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5648.20) =29.85 dBm>24dBm.

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
138	5690	59.742	17.76

802.11ax (20MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	14.61	14.88	59.668	17.76	23.05	Pass
40	5200	17.33	17.60	111.619	20.48	23.05	Pass
48	5240	17.42	17.68	**113.822**	20.56	23.05	Pass
52	5260	17.28	17.47	**109.303**	20.39	23.05	Pass
60	5300	17.22	17.34	106.923	20.29	23.05	Pass
64	5320	15.10	15.20	65.472	18.16	23.05	Pass
100	5500	15.01	15.25	65.192	18.14	23.05	Pass
116	5580	17.12	17.26	104.734	20.20	23.05	Pass
140	5700	13.52	13.83	46.645	16.69	23.05	Pass
144	5720 For U-NII-2C	13.91	13.93	49.321	16.93	22.01	Pass
144	5720 For U-NII-3	7.94	8.12	12.709	11.04	29.05	Pass
149	5745	19.34	19.47	174.413	22.42	29.05	Pass
157	5785	19.02	18.96	158.504	22.00	29.05	Pass
165	5825	19.66	19.82	188.41	22.75	29.05	Pass

For U-NII-1, U-NII-2ABand: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 24-(6.95-6) = 23.05dBm.
For U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 22.96-(6.95-6) = 22.01dBm.
For U-NII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 30-(6.95-6) = 29.05dBm.

NOTE:

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

Chain 0

1. 11dBm + 10log(28.27) = 25.51 dBm > 24dBm.
2. 11dBm + 10log(25.47) = 25.06 dBm > 24dBm.
3. 11dBm + 10log(21.44) = 24.31 dBm > 24dBm.
4. 11dBm + 10log(21.15) = 24.25 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.16) = 24.26 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.06) =23.02 dBm<24dBm.

Chain 1

1. 11dBm + 10log(28.08) = 25.48 dBm > 24dBm.
2. 11dBm + 10log(25.56) = 25.08 dBm > 24dBm.
3. 11dBm + 10log(21.50) = 24.32 dBm > 24dBm.
4. 11dBm + 10log(21.20) = 24.26 dBm > 24dBm.
5. 11dBm + 10log(21.49) = 24.32 dBm > 24dBm.
6. 11dBm + 10log(21.07) = 24.23 dBm > 24dBm.
7. 11dBm + 10log(5725.00 -5709.27) =22.96 dBm<24dBm.

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	62.03	17.93

802.11ax (40MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	12.39	12.66	35.788	15.54	23.05	Pass
46	5230	15.11	15.36	66.790	18.25	23.05	Pass
54	5270	16.14	16.35	84.267	19.26	23.05	Pass
62	5310	12.36	12.58	35.332	15.48	23.05	Pass
102	5510	12.46	12.77	36.543	15.63	23.05	Pass
110	5550	17.33	17.58	**111.355**	20.47	23.05	Pass
134	5670	14.75	15.01	61.550	17.89	23.05	Pass
142	5710 For U-NII-2C	15.47	15.45	70.312	18.47	23.05	Pass
142	5710 For U-NII-3	5.17	4.53	6.126	7.87	29.05	Pass
151	5755	20.10	20.35	210.722	23.24	29.05	Pass
159	5795	20.12	20.39	**212.197**	23.27	29.05	Pass

For U-NII-1, U-NII-2A, U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 24-(6.95-6) = 23.05dBm.
For U-NII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 30-(6.95-6) = 29.05dBm.

NOTE:

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

Chain 0

1. 11dBm + 10log(61.32) = 28.87 dBm > 24dBm.
2. 11dBm + 10log(40.74) = 27.10 dBm > 24dBm.
3. 11dBm + 10log(40.70) = 27.10 dBm > 24dBm.
4. 11dBm + 10log(40.92) = 27.12 dBm > 24dBm.
5. 11dBm + 10log(41.07) = 27.14 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5679.09) =27.61 dBm>24dBm.

Chain 1

1. 11dBm + 10log(66.44) = 29.22 dBm > 24dBm.
2. 11dBm + 10log(40.63) = 27.08 dBm > 24dBm.
3. 11dBm + 10log(40.68) = 27.09 dBm > 24dBm.
4. 11dBm + 10log(40.88) = 27.11 dBm > 24dBm.
5. 11dBm + 10log(40.49) = 27.07 dBm > 24dBm.
6. 11dBm + 10log(5725.00 -5680.52) =27.48 dBm>24dBm.

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	76.438	18.83

802.11ax (80MHz)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	12.26	12.53	34.733	15.41	23.05	Pass
58	5290	11.18	11.30	26.612	14.25	23.05	Pass
106	5530	12.16	12.41	33.862	15.30	23.05	Pass
122	5610	15.13	15.45	67.659	18.30	23.05	Pass
138	5690 For U-NII-2C	15.19	15.18	65.998	18.20	23.05	Pass
138	5690 For U-NII-3	1.70	1.56	2.911	4.64	29.05	Pass
155	5775	15.21	15.36	67.545	18.30	29.05	Pass

For U-NII-1, U-NII-2A, U-NII-2C Band: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 24-(6.95-6) = 23.05dBm.
For U-NII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power limit shall be reduced to 30-(6.95-6) = 29.05dBm.

NOTE:

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

Chain 0

1. 11dBm + 10log(82.15) = 30.14 dBm > 24dBm.
2. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
3. 11dBm + 10log(83.07) = 30.19 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5646.99) =29.92 dBm>24dBm.

Chain 1

1. 11dBm + 10log(82.87) = 30.18 dBm > 24dBm.
2. 11dBm + 10log(82.53) = 30.16 dBm > 24dBm.
3. 11dBm + 10log(83.12) = 30.20 dBm > 24dBm.
4. 11dBm + 10log(5725.00 -5648.20) =29.85 dBm>24dBm.

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
138	5690	68.909	18.38

26dB Bandwidth:

802.11a

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.56	20.75
40	5200	29.2	26.2
48	5240	28.88	24.8
52	5260	32.15	33
60	5300	26.41	25.11
64	5320	20.84	20.82
100	5500	20.65	20.82
116	5580	20.8	20.76
140	5700	20.96	20.54
144	5720 For U-NII-2C	15.51	15.65
144	5720 For U-NII-3	5.84	5.92

802.11ax (20MHz)

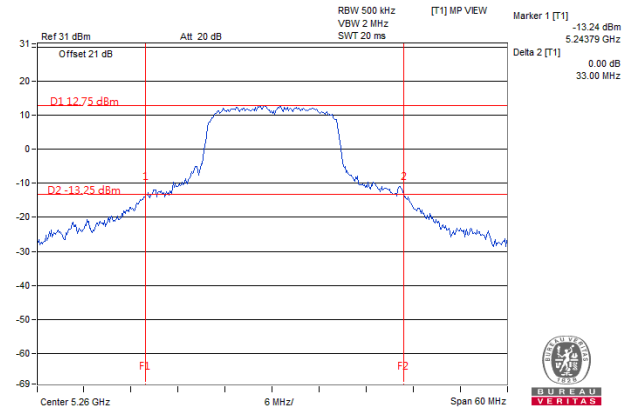
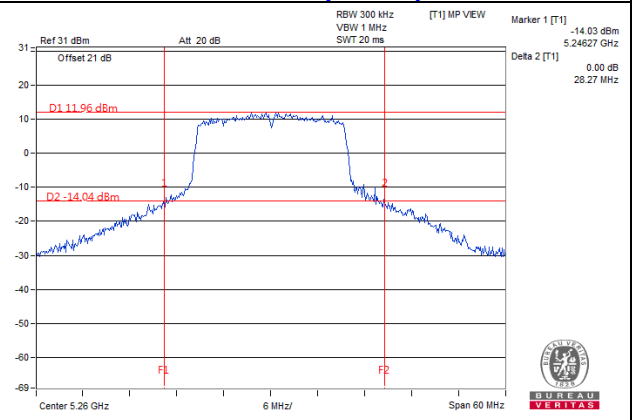
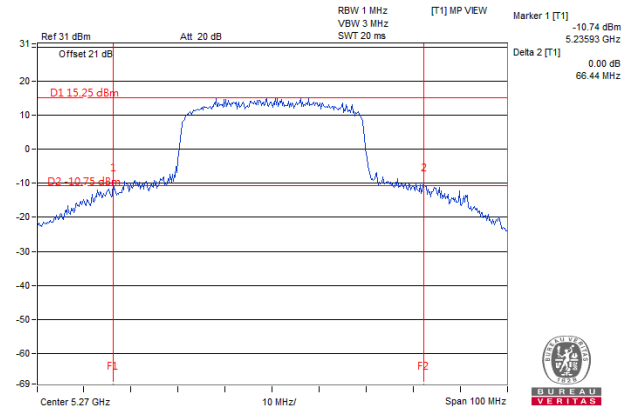
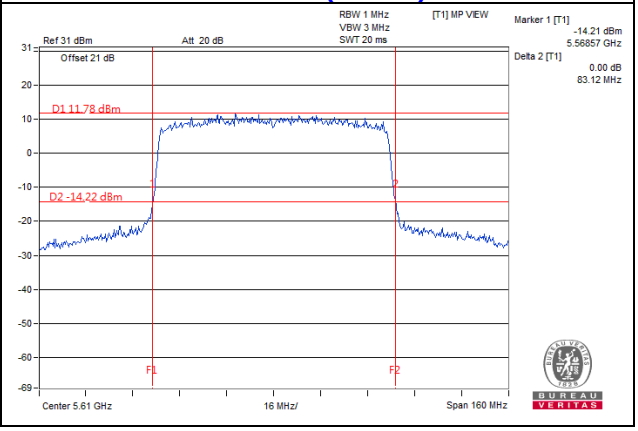
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	21.47	21.34
40	5200	25.95	27.46
48	5240	26.79	25.51
52	5260	28.27	28.08
60	5300	25.47	25.56
64	5320	21.44	21.5
100	5500	21.15	21.2
116	5580	21.49	21.49
140	5700	21.16	21.07
144	5720 For U-NII-2C	15.94	15.73
144	5720 For U-NII-3	6.54	7.04

802.11ax (40MHz)

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	40.62	40.71
46	5230	40.79	41.05
54	5270	61.32	66.44
62	5310	40.74	40.63
102	5510	40.7	40.68
110	5550	40.92	40.88
134	5670	41.07	40.49
142	5710 For U-NII-2C	45.91	44.48
142	5710 For U-NII-3	17.69	19.01

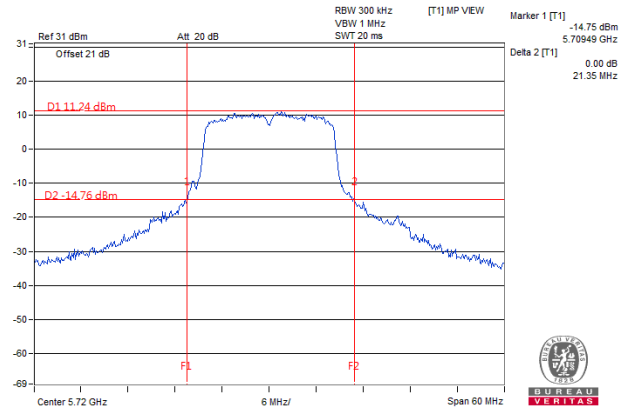
802.11ax (80MHz)

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	82.81	82.3
58	5290	82.15	82.87
106	5530	82.87	82.53
122	5610	83.07	83.12
138	5690 For U-NII-2C	78.01	76.8
138	5690 For U-NII-3	17.96	17.82

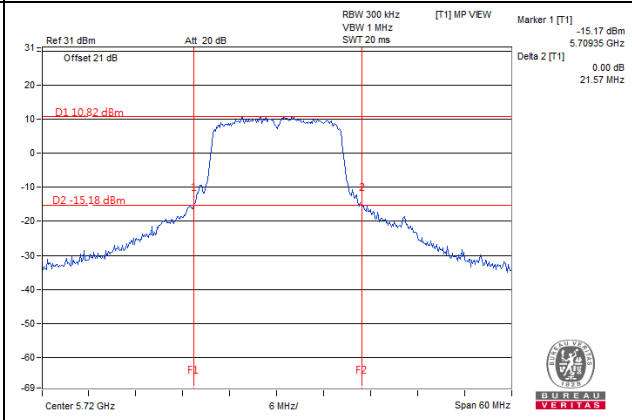
Spectrum Plot of Worst Value	
802.11a	802.11ax (20MHz)
	
802.11ax (40MHz)	802.11ax (80MHz)
	

Spectrum Plot of Straddle Channels

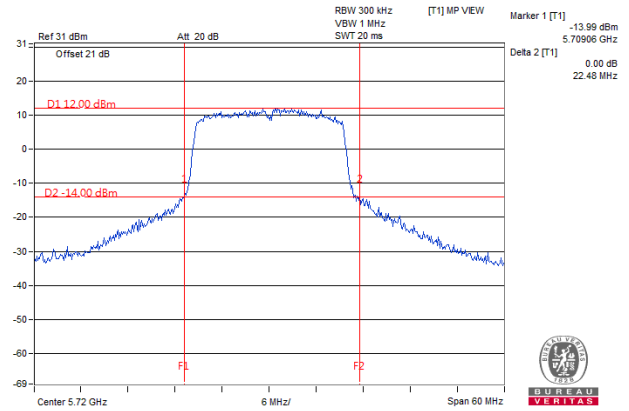
802.11a_Chain 0: CH 144



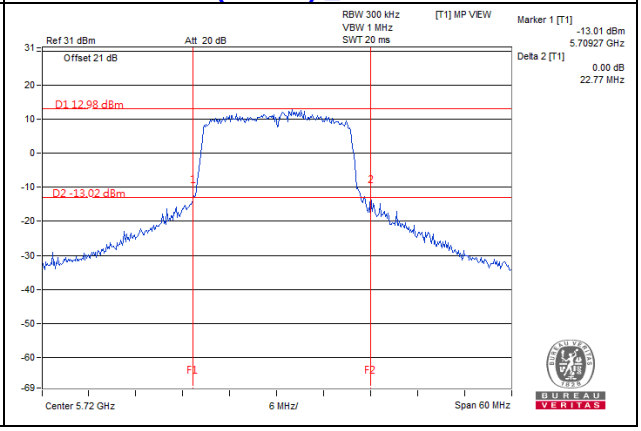
802.11a_Chain 1: CH 144

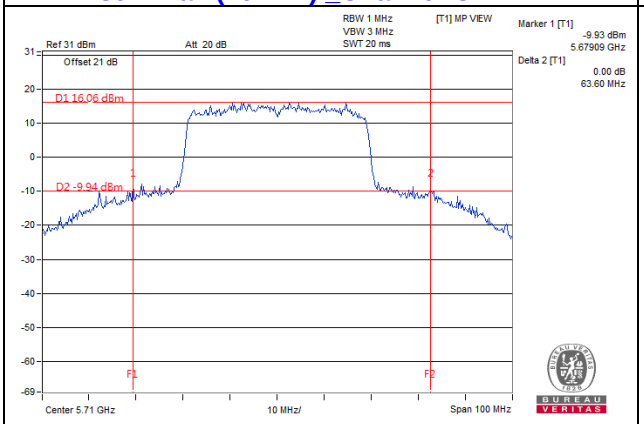
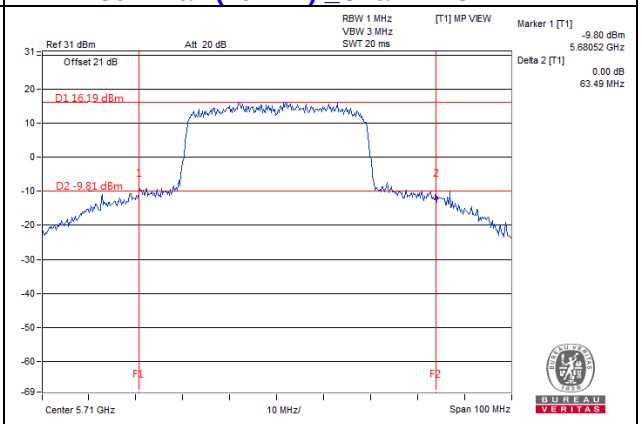
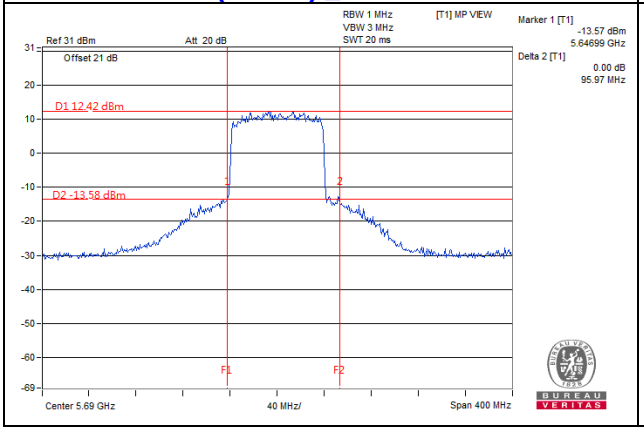
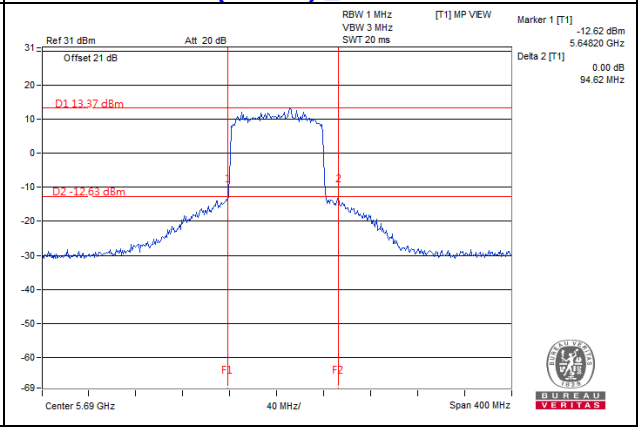


802.11ax (20MHz) _Chain 0: CH 144



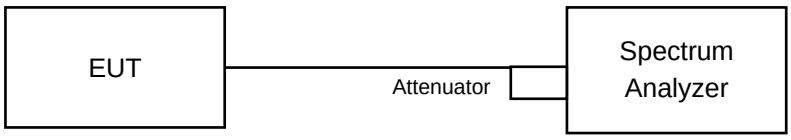
802.11ax (20MHz) _Chain 1: CH 144



Spectrum Plot of Straddle Channels	
802.11ax (40MHz) _Chain 0: CH 142	802.11ax (40MHz) _Chain 1: CH 142
	
802.11ax (80MHz) _Chain 0: CH 138	802.11ax (80MHz) _Chain 1: CH 138
	

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

CDD Mode

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.32	16.32
40	5200	16.68	16.80
48	5240	16.68	16.80
52	5260	16.92	16.80
60	5300	16.68	16.68
64	5320	16.44	16.32
100	5500	16.32	16.32
116	5580	16.32	16.32
140	5700	16.32	16.32
144	5720 For U-NII-2C	13.28	13.28
144	5720 For U-NII-3	3.28	3.28
149	5745	27.48	25.60
157	5785	25.10	26.00
165	5825	29.30	28.80

802.11ax (20MHz)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.96	18.96
40	5200	18.96	19.08
48	5240	19.08	18.96
52	5260	19.2	19.20
60	5300	19.2	18.96
64	5320	18.96	18.96
100	5500	18.96	18.96
116	5580	18.96	18.96
140	5700	18.96	18.96
144	5720 For U-NII-2C	14.48	14.48
144	5720 For U-NII-3	4.48	4.48
149	5745	25.04	25.50
157	5785	23.60	24.10
165	5825	27.60	28.10

802.11ax (40MHz)

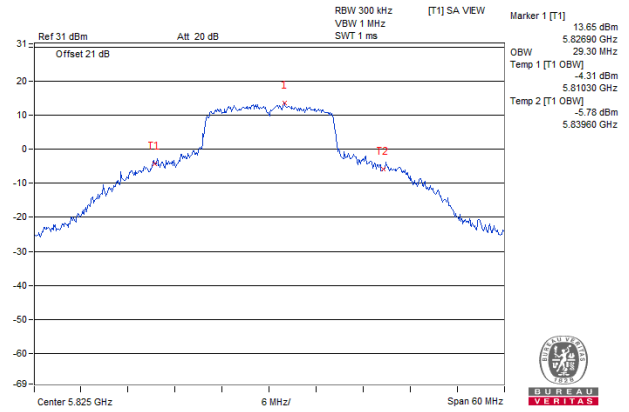
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.60
46	5230	38.00	37.60
54	5270	38.00	38.00
62	5310	37.60	37.60
102	5510	37.80	37.80
110	5550	37.80	37.80
134	5670	37.80	37.80
142	5710 For U-NII-2C	34.20	34.20
142	5710 For U-NII-3	3.96	3.96
151	5755	49.42	50.67
159	5795	43.50	45.00

802.11ax (80MHz)

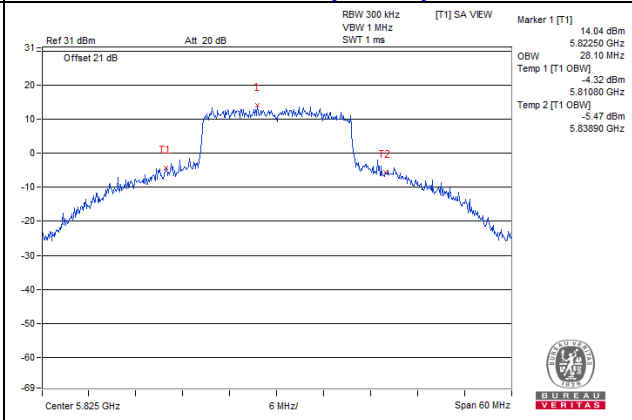
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.28	77.28
58	5290	77.28	77.04
106	5530	77.04	77.28
122	5610	77.28	77.52
138	5690 For U-NII-2C	73.88	73.88
138	5690 For U-NII-3	3.40	3.88
155	5775	77.30	77.28

Spectrum Plot of Worst Value

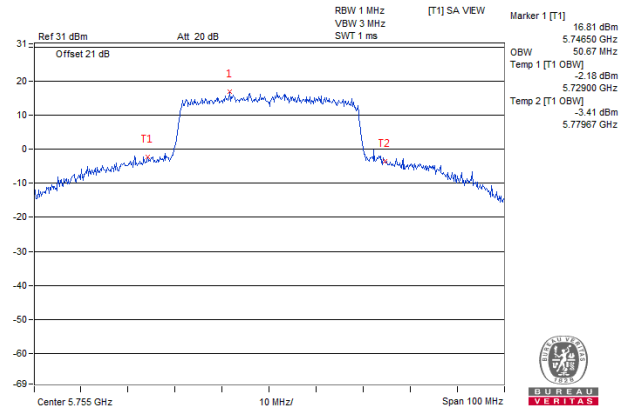
802.11a



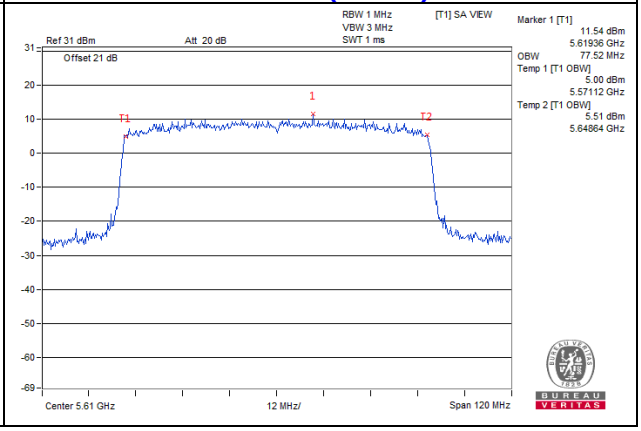
802.11ax (20MHz)

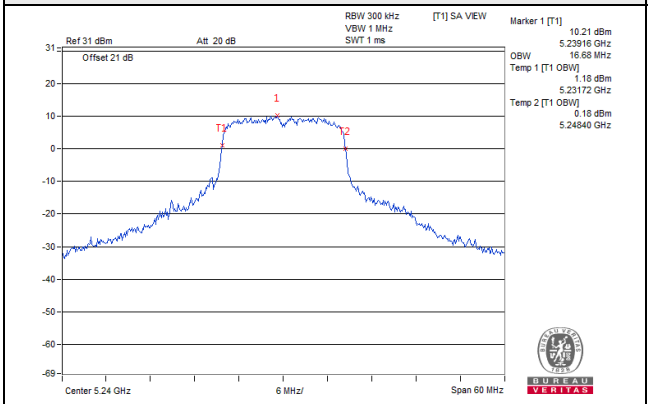
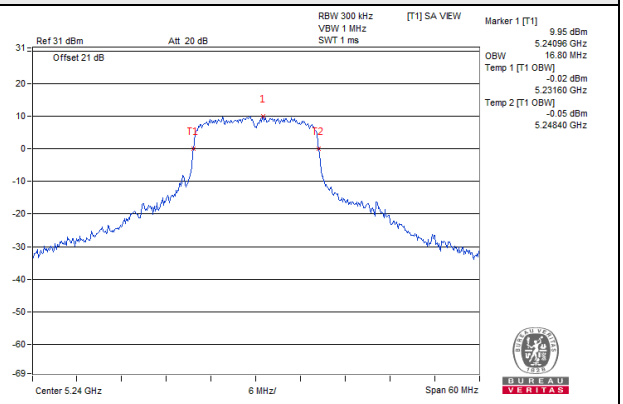
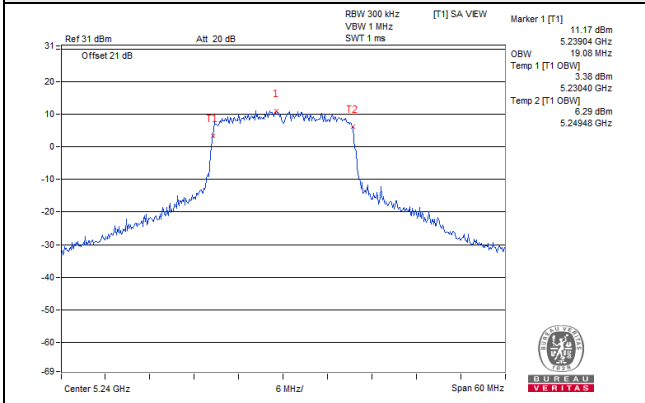
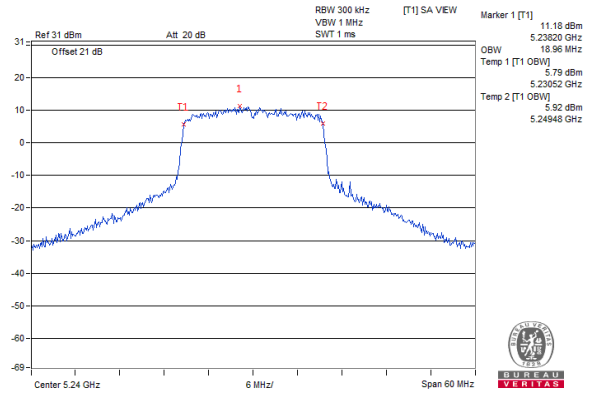
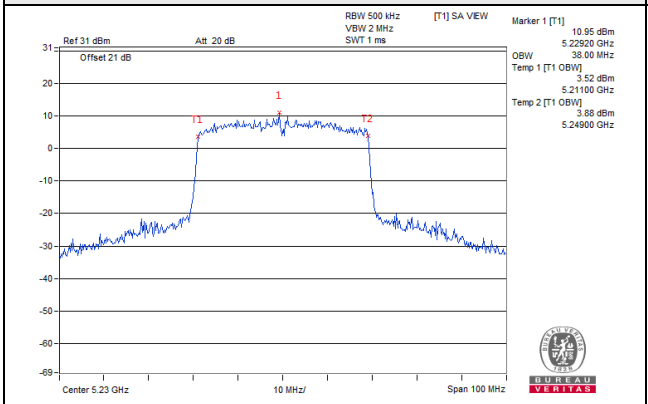
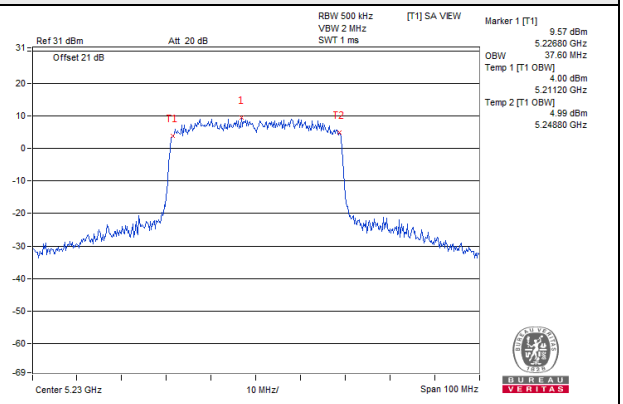
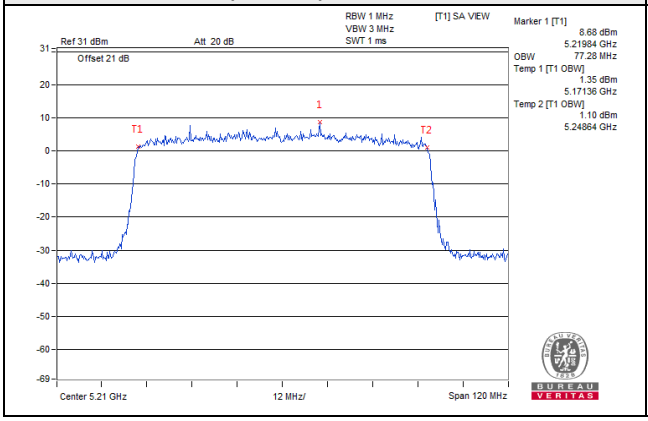
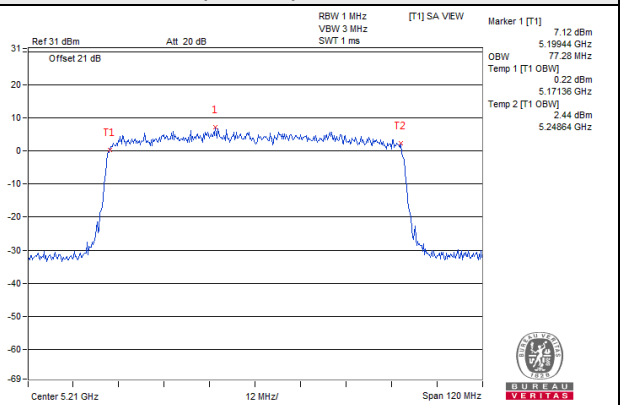


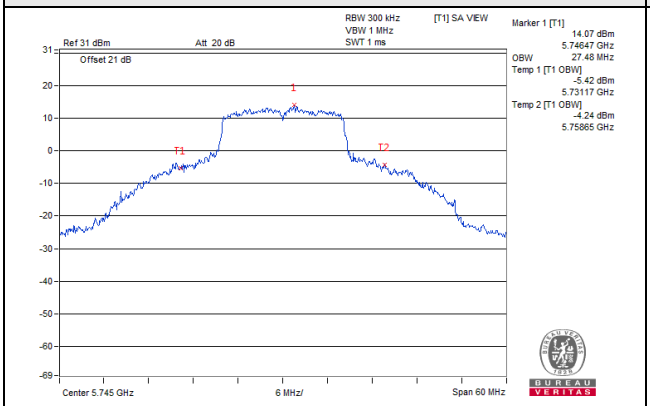
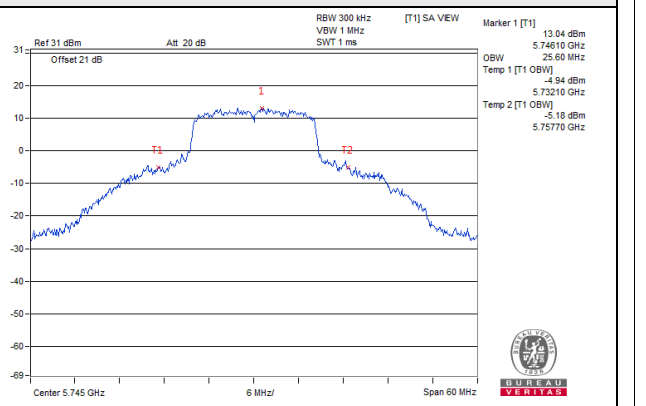
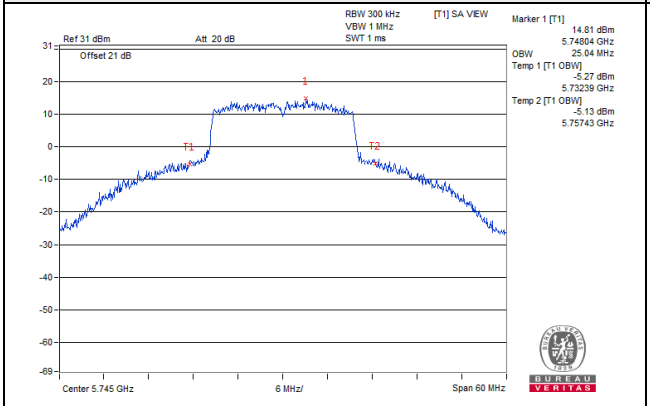
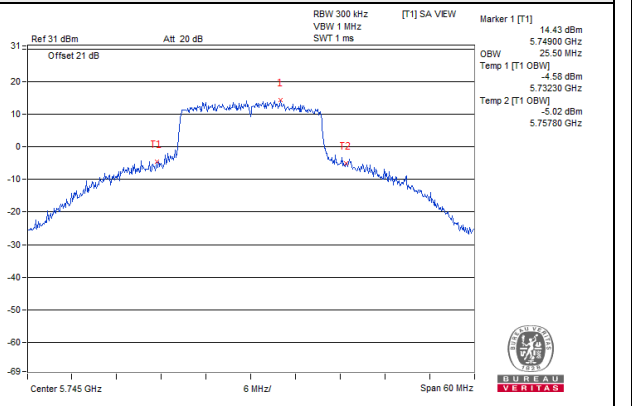
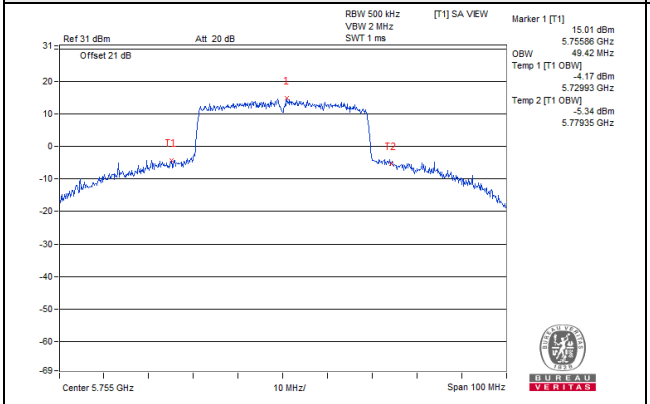
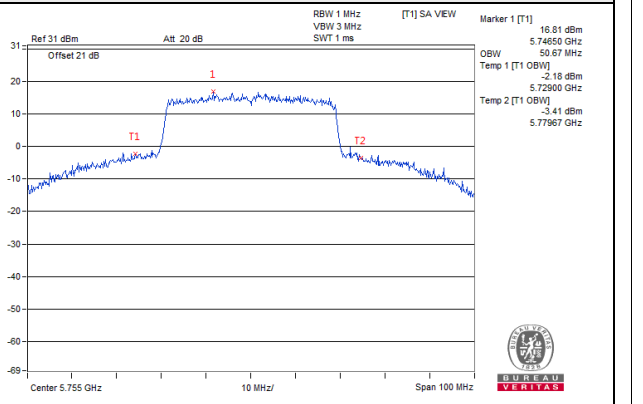
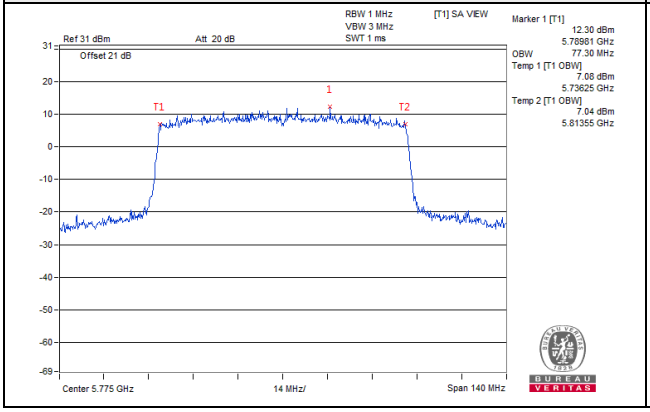
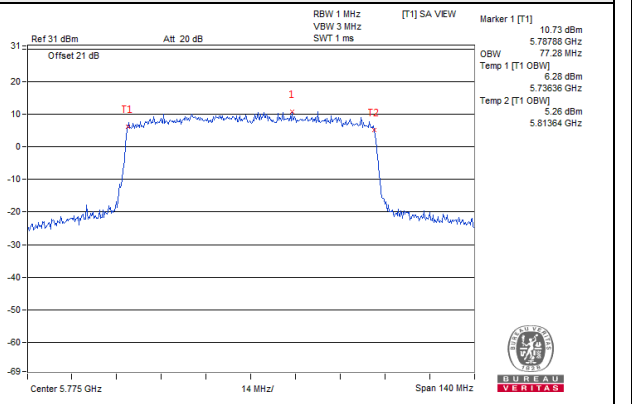
802.11ax (40MHz)



802.11ax (80MHz)



Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 48	802.11a / Chain 1 / CH 48
	
802.11ax (20MHz) / Chain 0 / CH 48	802.11ax (20MHz) / Chain 1 / CH 48
	
802.11ax (40MHz) / Chain 0 / CH 46	802.11ax (40MHz) / Chain 1 / CH 46
	
802.11ax (80MHz) / Chain 0 / CH 42	802.11ax (80MHz) / Chain 1 / CH 42
	

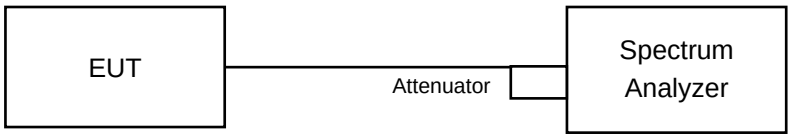
Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 149	802.11a / Chain 1 / CH 149
	
802.11ax (20MHz) / Chain 0 / CH 149	802.11ax (20MHz) / Chain 1 / CH 149
	
802.11ax (40MHz) / Chain 0 / CH 151	802.11ax (40MHz) / Chain 1 / CH 151
	
802.11ax (80MHz) / Chain 0 / CH 155	802.11ax (80MHz) / Chain 1 / CH 155
	

4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

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

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

For U-NII-1, U-NII-2A, U-NII-2C Band:
Using method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Set Channel power measure = 1MHz
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.

For U-NII-3 band:

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 500 kHz, Set VBW ≥ 1 MHz, Detector = RMS
c. Use the peak marker function to determine the maximum power level in any 500 kHz band segment within the fundamental EBW.
d. Sweep time = auto, trigger set to “free run”.
e. Trace average at least 100 traces in power averaging mode.

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

CDD Mode

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

802.11a

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	4.62	4.59	7.62	10.05	Pass
40	5200	6.11	6.19	9.16	10.05	Pass
48	5240	6.13	6.13	9.14	10.05	Pass
52	5260	6.49	6.52	9.52	10.05	Pass
60	5300	6.32	6.40	9.37	10.05	Pass
64	5320	5.25	5.21	8.24	10.05	Pass
100	5500	5.50	5.50	8.51	10.05	Pass
116	5580	5.64	5.67	8.67	10.05	Pass
140	5700	4.66	4.60	7.64	10.05	Pass
144	5720 For U-NII-2C	6.57	6.48	9.54	10.05	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 11-(6.95-6) = 10.05dBm.

802.11ax (20MHz)

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	3.74	3.69	6.73	10.05	Pass
40	5200	5.23	5.23	8.24	10.05	Pass
48	5240	5.27	5.24	8.27	10.05	Pass
52	5260	5.67	5.62	8.66	10.05	Pass
60	5300	5.39	5.41	8.41	10.05	Pass
64	5320	4.38	4.38	7.39	10.05	Pass
100	5500	4.32	4.32	7.33	10.05	Pass
116	5580	5.01	5.02	8.03	10.05	Pass
140	5700	2.84	2.81	5.84	10.05	Pass
144	5720 For U-NII-2C	5.73	5.71	8.73	10.05	Pass

Note:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 11-(6.95-6) = 10.05dBm.

802.11ax (40MHz)

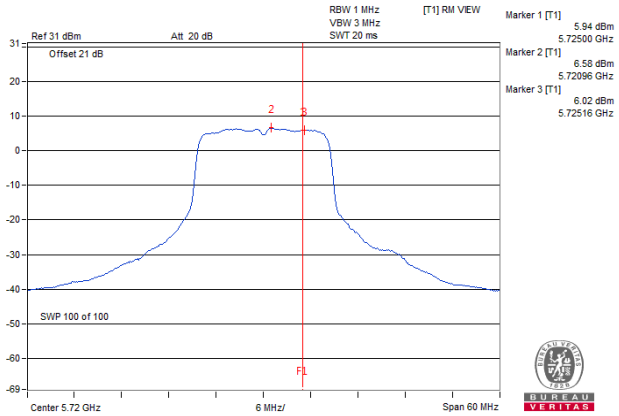
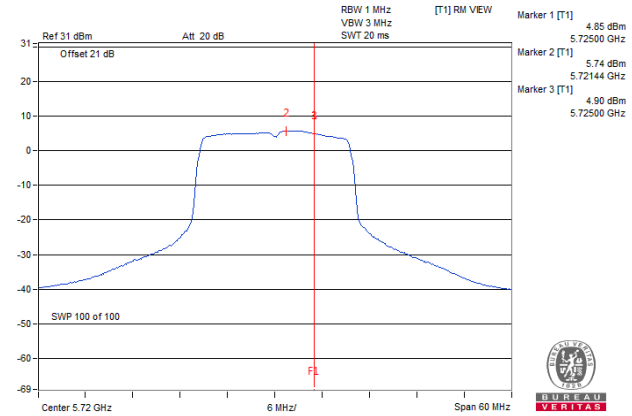
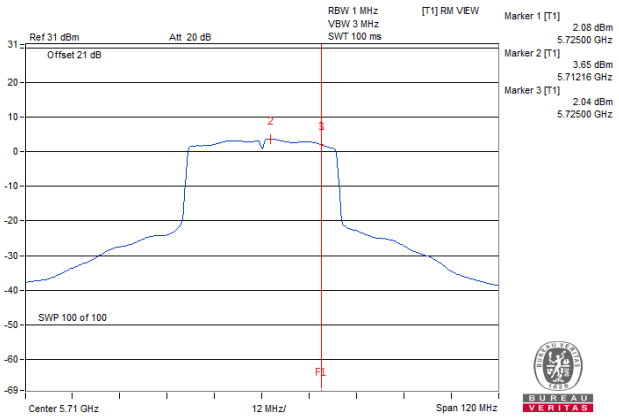
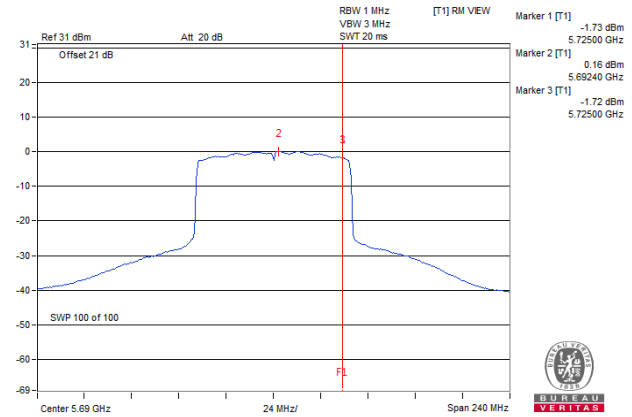
Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
38	5190	-1.46	-1.50	1.53	10.05	Pass
46	5230	1.40	1.41	4.42	10.05	Pass
54	5270	2.69	2.69	5.70	10.05	Pass
62	5310	-1.38	-1.35	1.65	10.05	Pass
102	5510	-1.20	-1.20	1.81	10.05	Pass
110	5550	2.79	2.80	5.81	10.05	Pass
134	5670	0.94	0.91	3.94	10.05	Pass
142	5710 For U-NII-2C	3.63	3.64	6.65	10.05	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 11-(6.95-6) = 10.05dBm.

802.11ax (80MHz)

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
42	5210	-4.63	-4.68	-1.64	10.05	Pass
58	5290	-5.50	-5.50	-2.49	10.05	Pass
106	5530	-4.20	-4.22	-1.20	10.05	Pass
122	5610	-1.37	-1.38	1.64	10.05	Pass
138	5690 For U-NII-2C	0.10	0.15	3.13	10.05	Pass

Note:
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 11-(6.95-6) = 10.05dBm.

Spectrum Plot of Worst Value	
802.11a	**802.11ax (20MHz)**
	
802.11ax (40MHz)	**802.11ax (80MHz)**
	

For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1			
144	5720 For U-NII-3	-2.34	-2.36	0.66	29.05	Pass
149	5745	0.49	0.53	3.52	29.05	Pass
157	5785	0.07	0.11	3.10	29.05	Pass
165	5825	0.47	0.47	3.48	29.05	Pass

Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 30-(6.95-6) = 29.05dBm.

802.11ax (20MHz)

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1			
144	5720 For U-NII-3	-4.32	-4.35	-1.32	29.05	Pass
149	5745	-1.07	-1.04	1.96	29.05	Pass
157	5785	-1.49	-1.39	1.57	29.05	Pass
165	5825	-1.12	-1.17	1.87	29.05	Pass

Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 30-(6.95-6) = 29.05dBm.

802.11ax (40MHz)

Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1			
142	5710 For U-NII-3	-7.19	-7.34	-4.25	29.05	Pass
151	5755	-3.91	-3.94	-0.91	29.05	Pass
159	5795	-4.43	-4.34	-1.37	29.05	Pass

Note:
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]=6.95dBi > 6dBi, so the power density shall be reduced to 30-(6.95-6) = 29.05dBm.

802.11ax (80MHz)

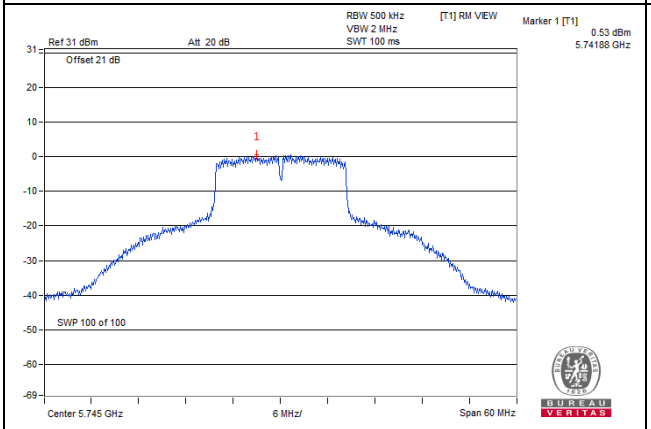
Chan.	Freq. (MHz)	PSD (dBm/500kHz)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		Chain 0	Chain 1			
138	5690 For U-NII-3	-11.07	-11.08	-8.06	29.05	Pass
155	5775	-10.17	-10.24	-7.19	29.05	Pass

Note:

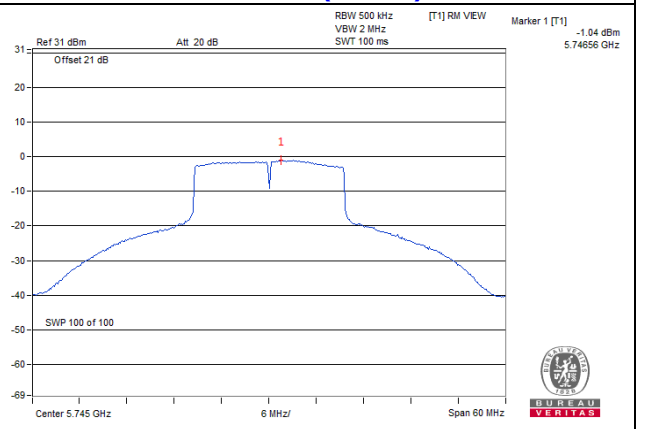
1. Method E) 2) b) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]=6.95dBi > 6dBi, so the power density shall be reduced to 30-(6.95-6) = 29.05dBm.

Spectrum Plot of Worst Value

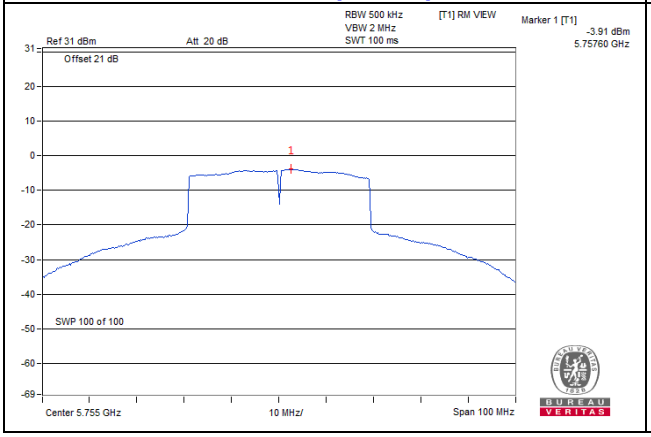
802.11a



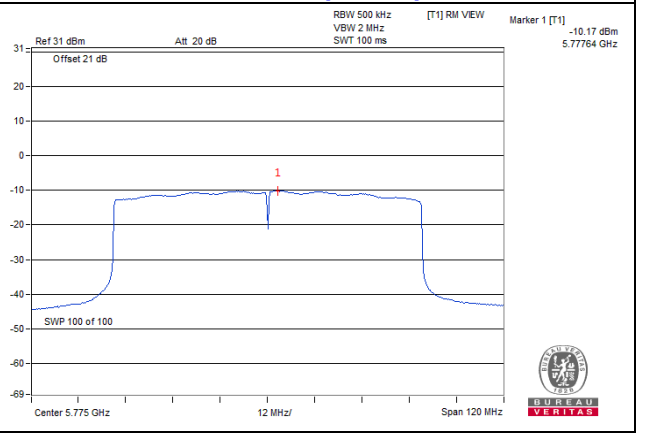
802.11ax (20MHz)



802.11ax (40MHz)



802.11ax (80MHz)

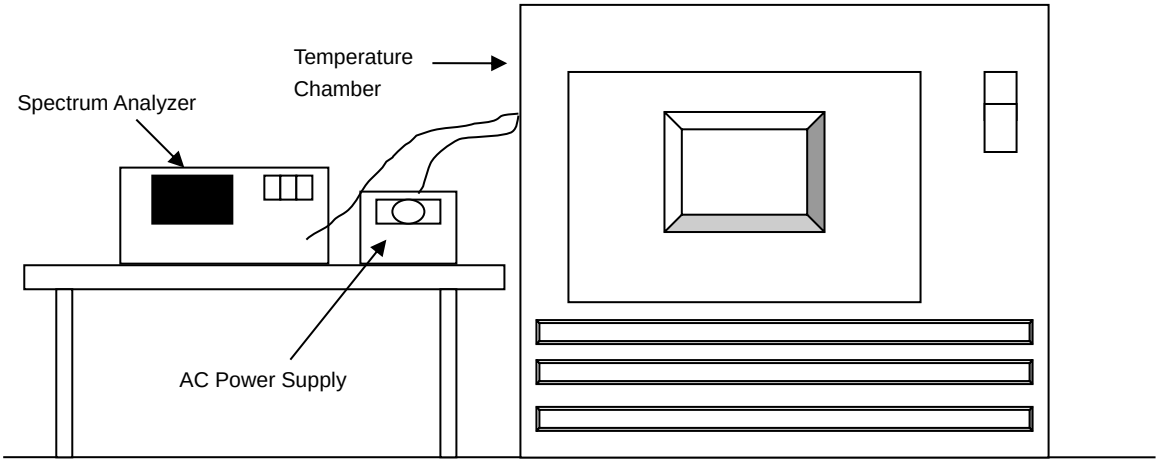


4.6 Frequency Stability

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	MHU-225AU	920409	May 22, 2020	May 21, 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

CDD Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5180.0178	Pass	5180.0201	Pass	5180.0204	Pass	5180.0168	Pass
40	120	5180.0220	Pass	5180.0213	Pass	5180.0227	Pass	5180.0200	Pass
30	120	5180.0230	Pass	5180.0239	Pass	5180.0230	Pass	5180.0265	Pass
20	120	5180.0174	Pass	5180.0177	Pass	5180.0190	Pass	5180.0207	Pass
10	120	5179.9986	Pass	5179.9968	Pass	5179.9951	Pass	5179.9991	Pass
0	120	5179.9887	Pass	5179.9873	Pass	5179.9865	Pass	5179.9882	Pass
-10	120	5179.9855	Pass	5179.9884	Pass	5179.9865	Pass	5179.9886	Pass
-20	120	5180.0205	Pass	5180.0202	Pass	5180.0222	Pass	5180.0201	Pass
-30	120	5180.0108	Pass	5180.0080	Pass	5180.0113	Pass	5180.0097	Pass

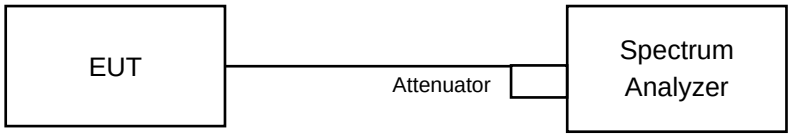
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0173	Pass	5180.0177	Pass	5180.0194	Pass	5180.0214	Pass
	120	5180.0174	Pass	5180.0177	Pass	5180.0190	Pass	5180.0207	Pass
	102	5180.0184	Pass	5180.0173	Pass	5180.0189	Pass	5180.0202	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

CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144	5720 For U-NII-3	2.90 Note*	2.63 Note*	0.5	Pass
149	5745	16.32	16.32	0.5	Pass
157	5785	16.30	16.34	0.5	Pass
165	5825	16.34	16.33	0.5	Pass

Note*: 2.90MHz= 5712.24MHz + 15.66MHz-5725MHz
2.63MHz= 5712.24MHz + 15.39MHz-5725MHz

802.11ax (20MHz)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144	5720 For U-NII-3	4.21 Note*	4.11 Note*	0.5	Pass
149	5745	18.62	18.44	0.5	Pass
157	5785	18.50	18.40	0.5	Pass
165	5825	18.61	18.63	0.5	Pass

Note*: 4.21MHz= 5710.83MHz + 18.38MHz-5725MHz
4.11MHz= 5710.79MHz + 18.32MHz-5725MHz

802.11ax (40MHz)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
142	5710 For U-NII-3	3.47 Note*	3.57 Note*	0.5	Pass
151	5755	37.71	37.75	0.5	Pass
159	5795	37.85	37.86	0.5	Pass

Note*: 3.47MHz= 5691.14MHz + 37.33MHz-5725MHz
3.57MHz= 5691.16MHz + 37.41MHz-5725MHz

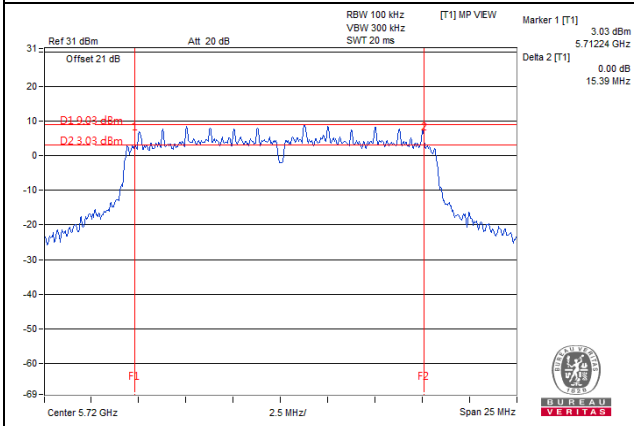
802.11ax (80MHz)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
138	5690 For U-NII-3	2.22 Note*	3.80 Note*	0.5	Pass
155	5775	75.77	75.52	0.5	Pass

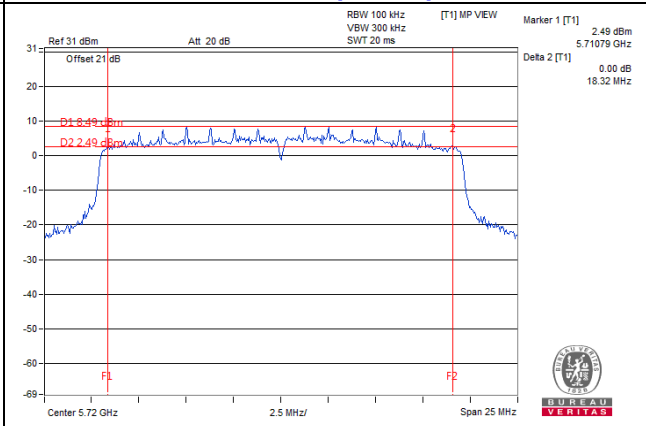
Note*: 2.22MHz= 5652.24MHz + 74.98MHz-5725MHz
3.80MHz= 5651.87MHz + 76.93MHz-5725MHz

Spectrum Plot of Worst Value

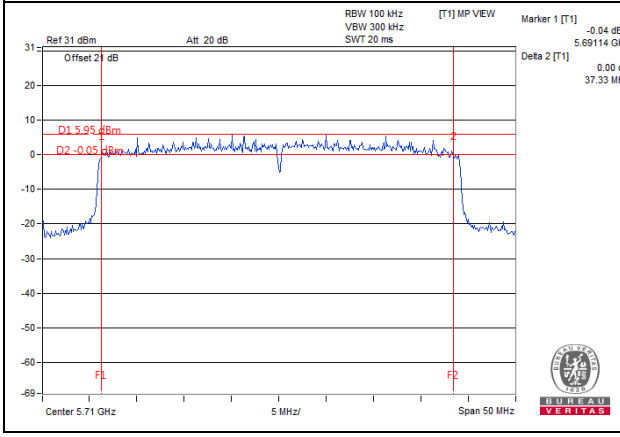
802.11a



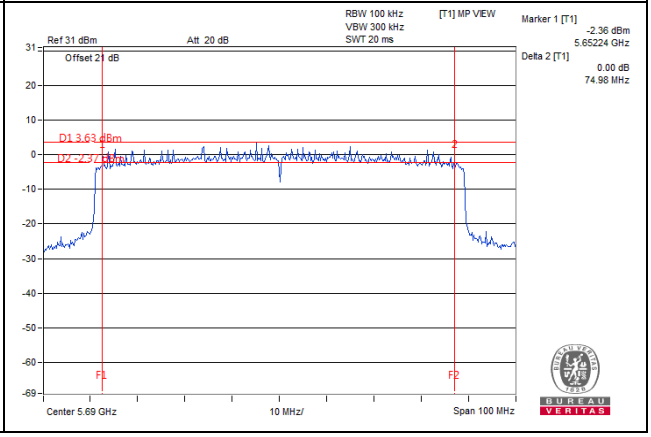
802.11ax (20MHz)

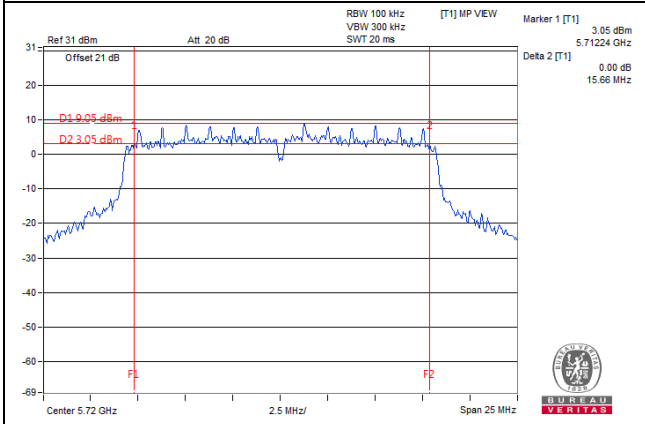
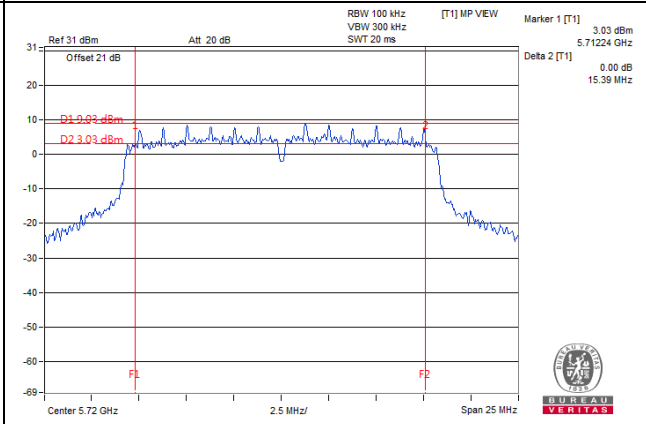
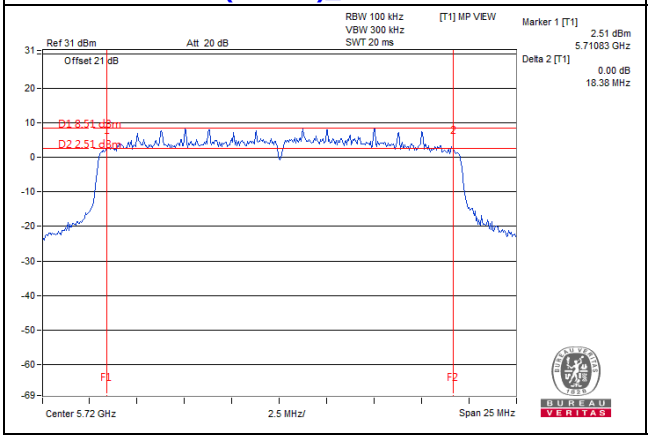
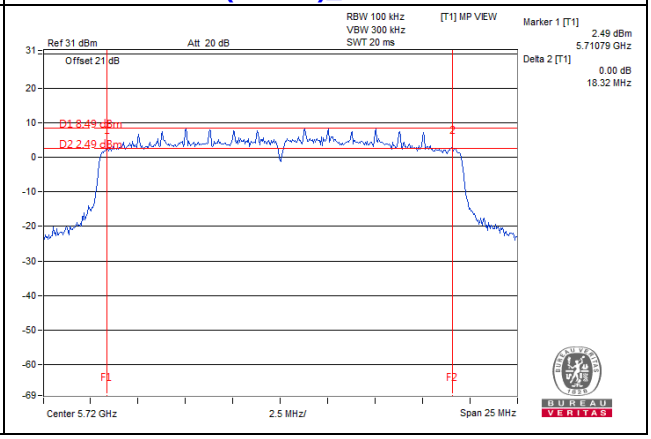


802.11ax (40MHz)

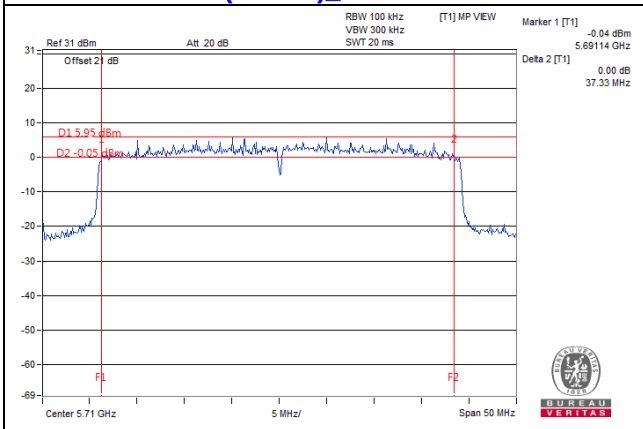


802.11ax (80MHz)

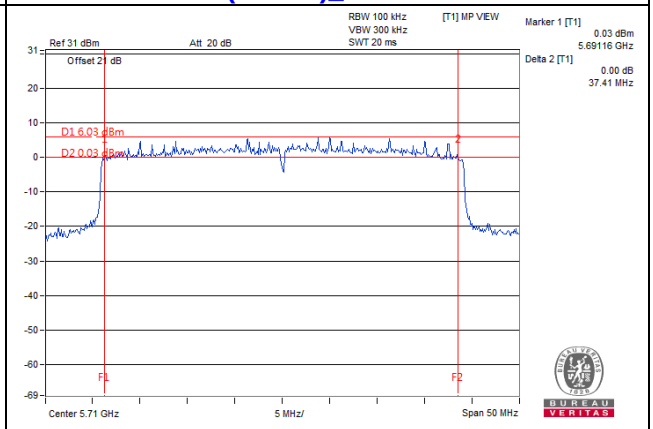


Spectrum Plot of Straddle channel	
802.11a_Chain 0: CH 144	**802.11a_Chain 1: CH 144**
	
802.11ax (20MHz)_Chain 0: CH 144	**802.11ax (20MHz)_Chain 1: CH 144**
	

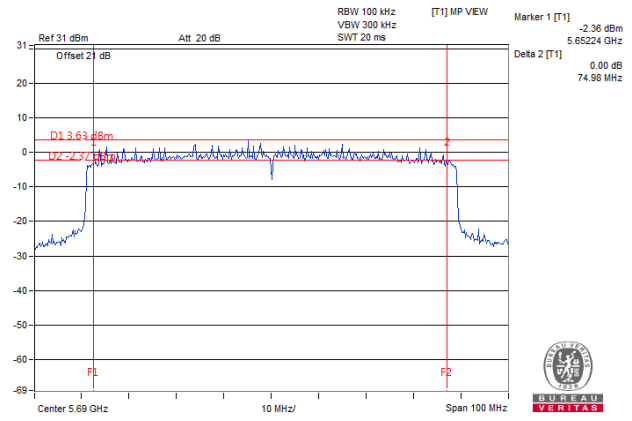
802.11ax (40MHz)_Chain 0: CH 142



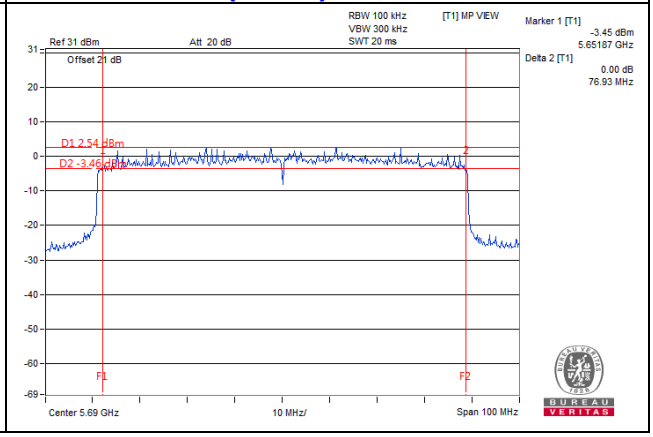
802.11ax (40MHz)_Chain 1: CH 142



802.11ax (80MHz)_Chain 0: CH 138



802.11ax (80MHz)_Chain 1: CH 138



5 Pictures of Test Arrangements

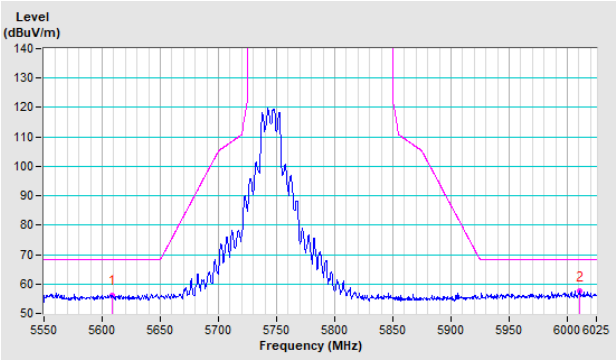
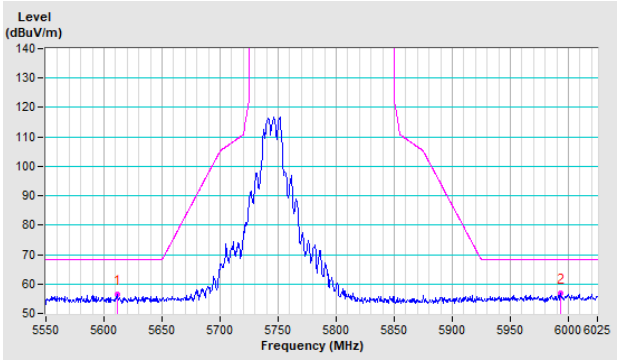
Please refer to the attached file (Test Setup Photo).

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

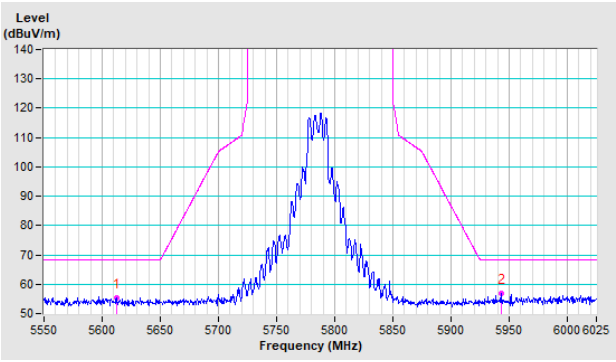
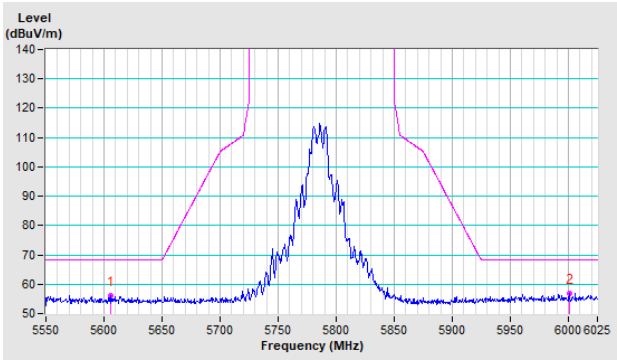
CDD Mode

802.11a

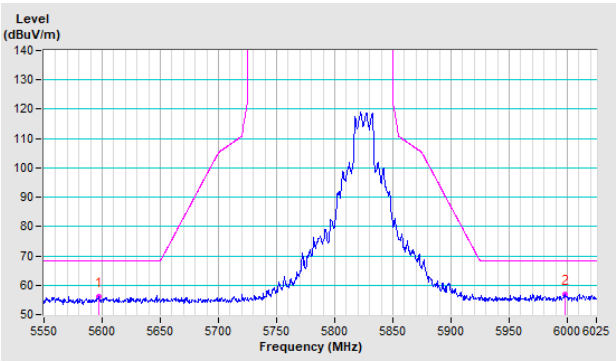
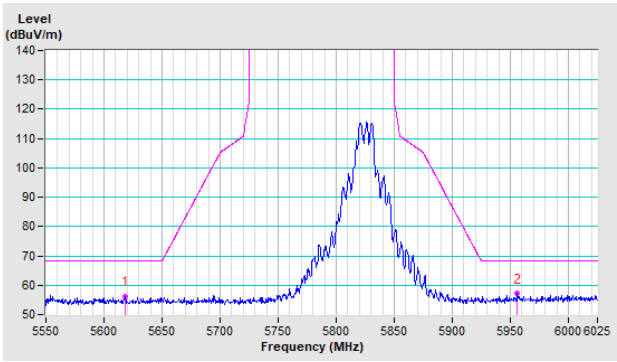
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

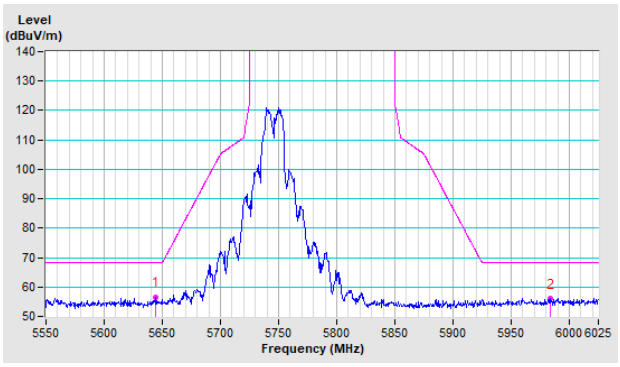
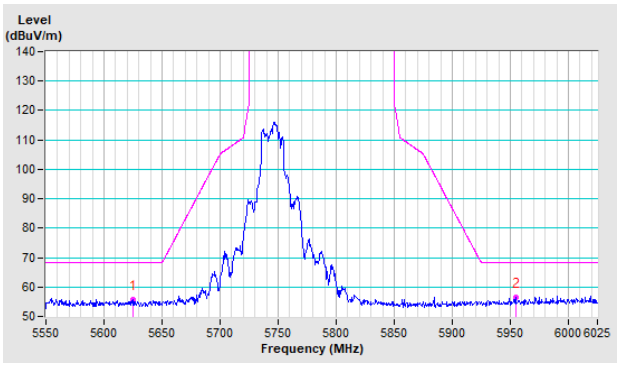
Horizontal	Vertical
	

CH 165 5825 MHz

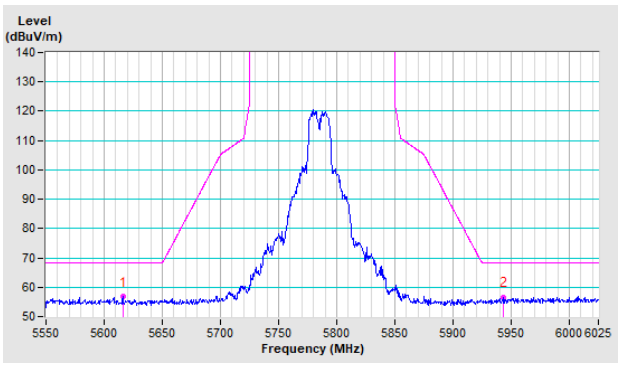
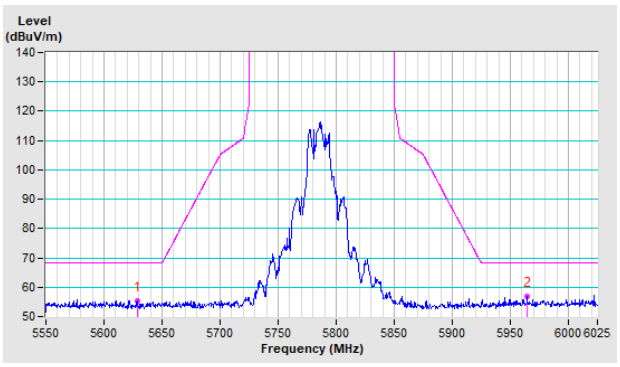
Horizontal	Vertical
	

802.11ax (20MHz)

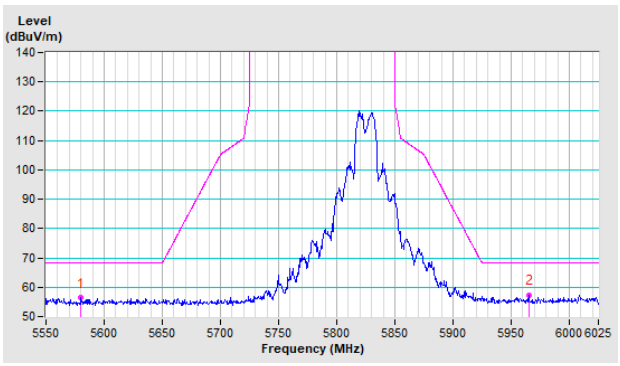
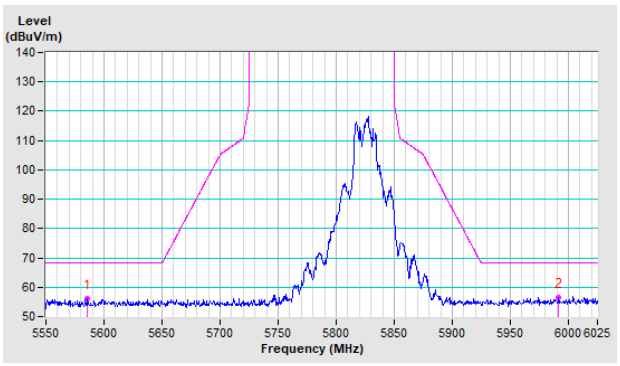
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

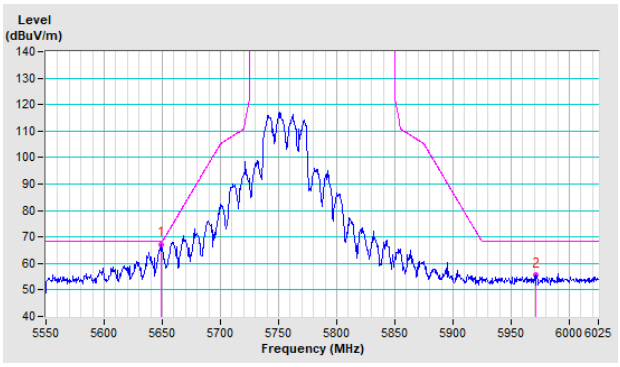
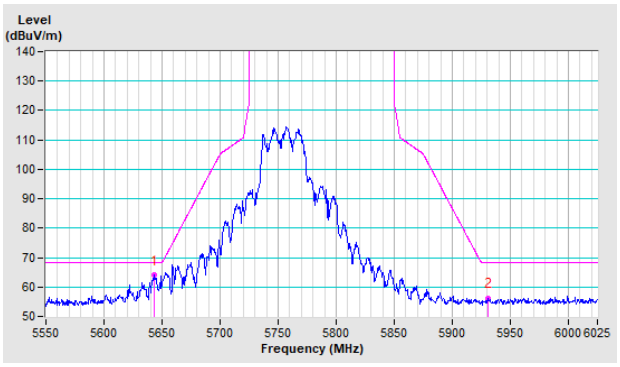
Horizontal	Vertical
	

CH 165 5825 MHz

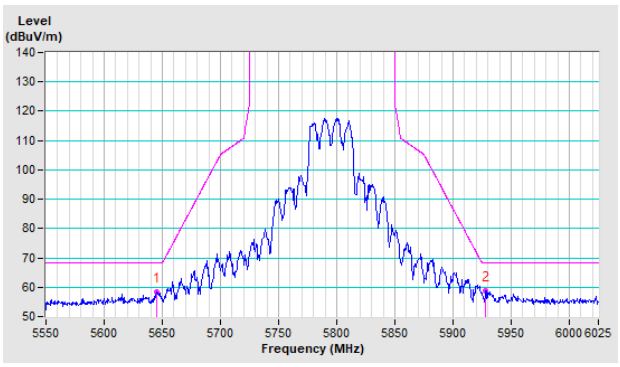
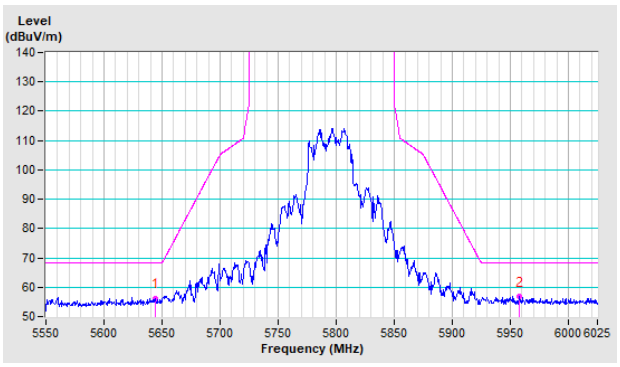
Horizontal	Vertical
	

802.11ax (40MHz)

CH 151 5755 MHz

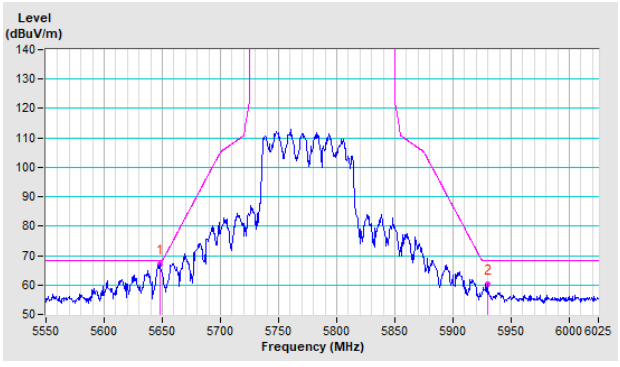
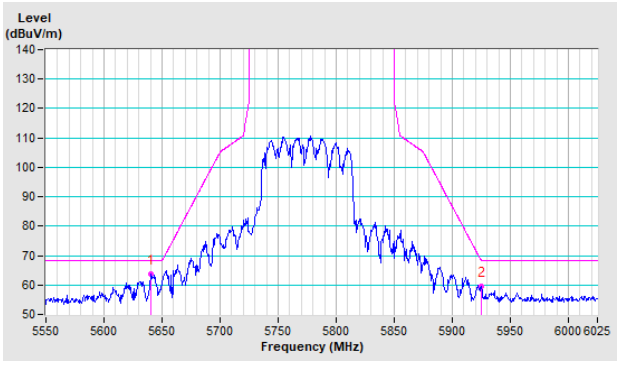
Horizontal	Vertical
	

CH 159 5795 MHz

Horizontal	Vertical
	

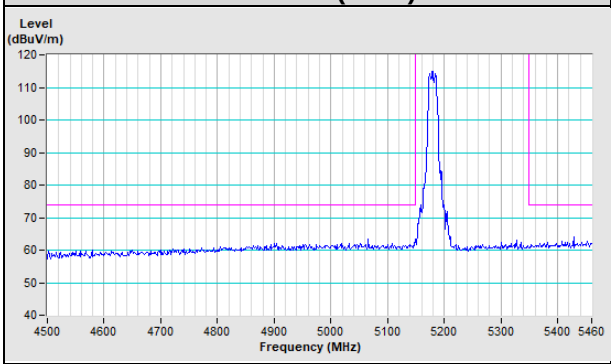
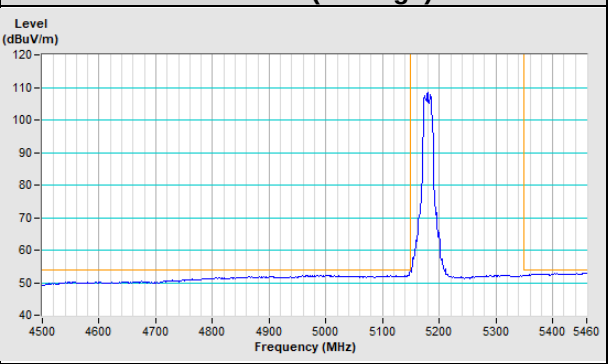
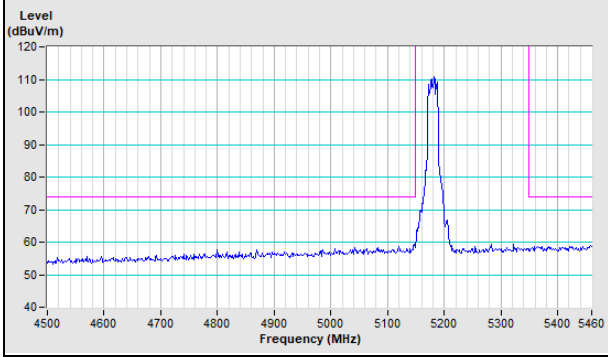
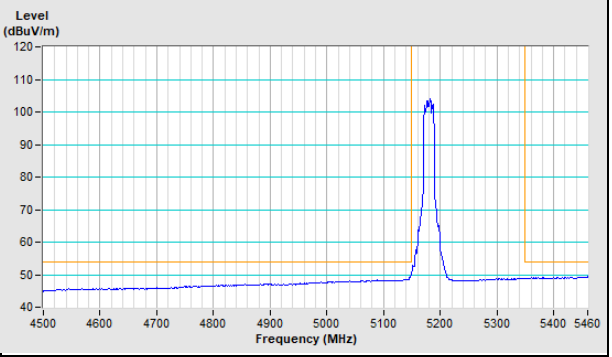
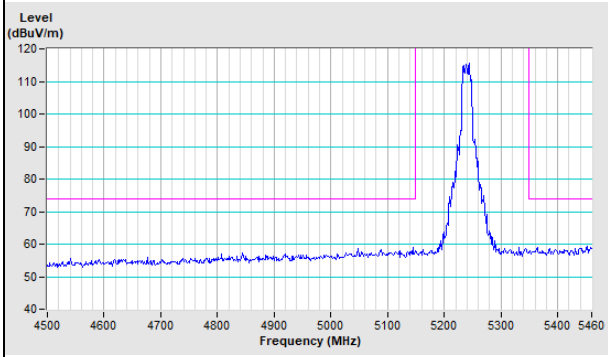
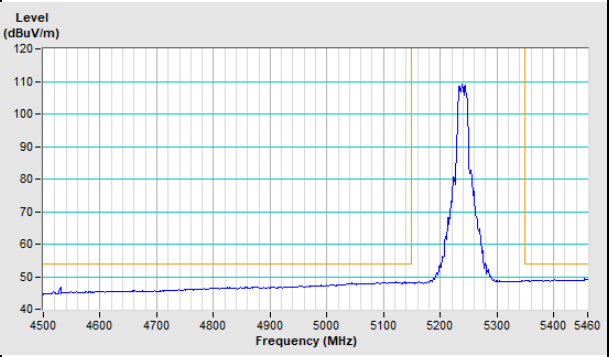
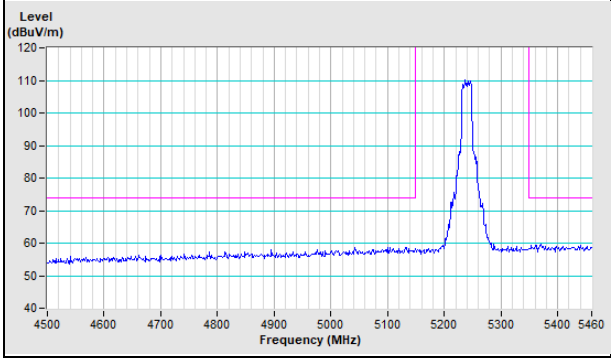
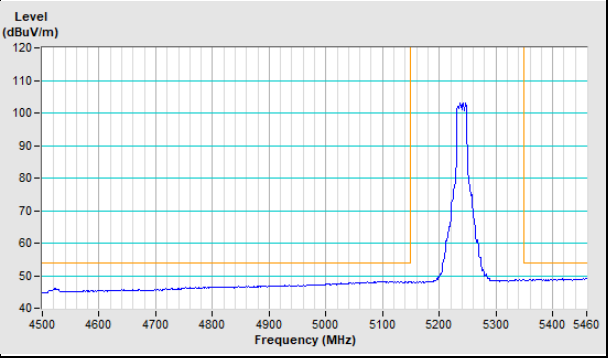
802.11ax (80MHz)

CH 155 5775 MHz

Horizontal	Vertical
	

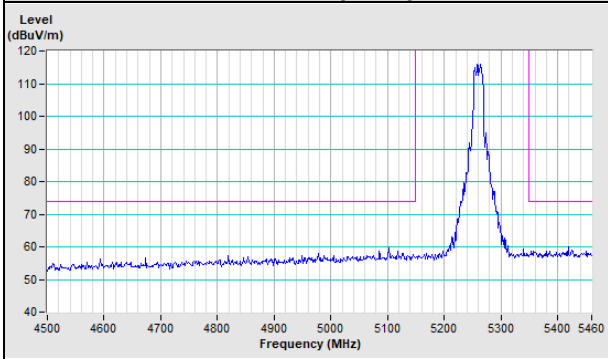
Annex B- Band Edge Measurement

CDD Mode

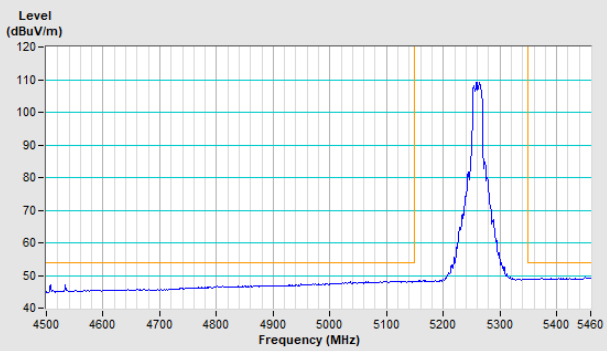
802.11a Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11a Channel 52

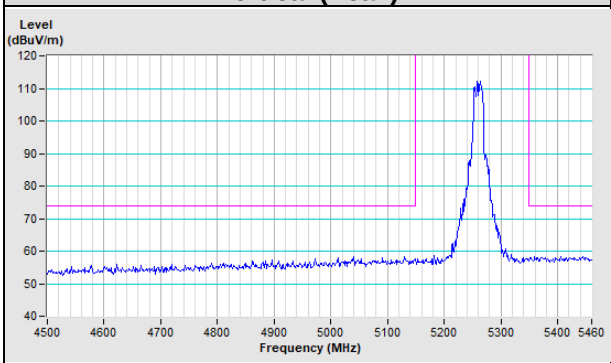
Horizontal (Peak)



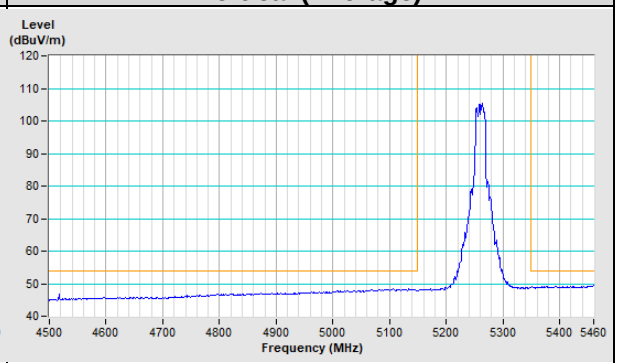
Horizontal (Average)



Vertical (Peak)

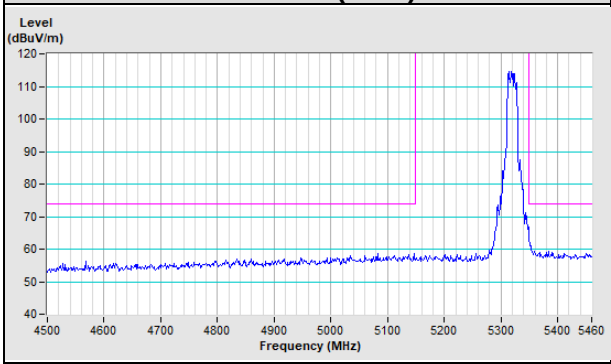


Vertical (Average)

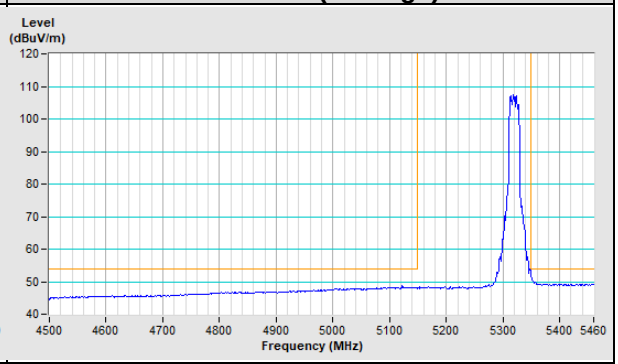


802.11a Channel 64

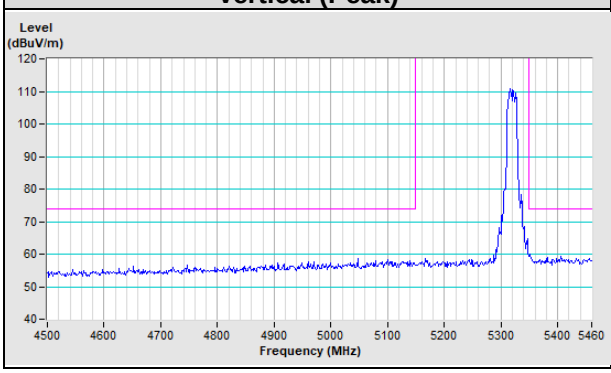
Horizontal (Peak)



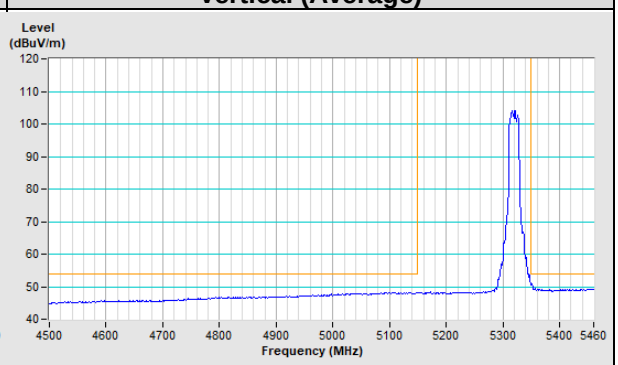
Horizontal (Average)

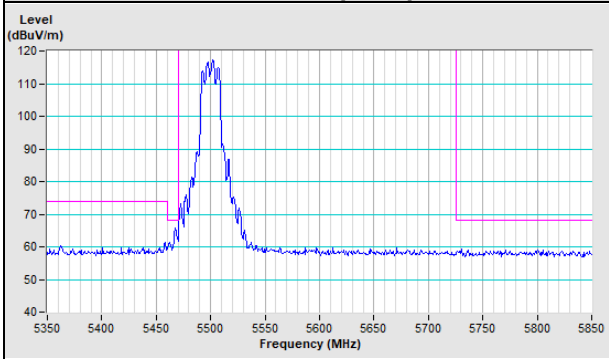
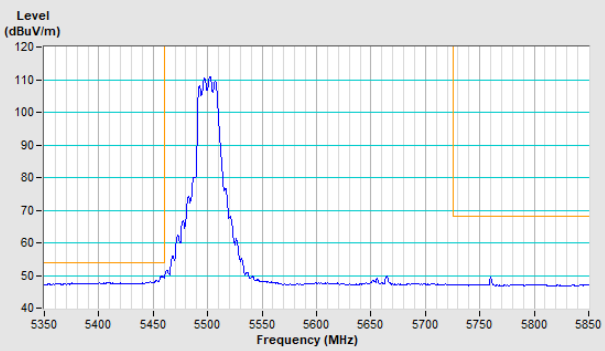
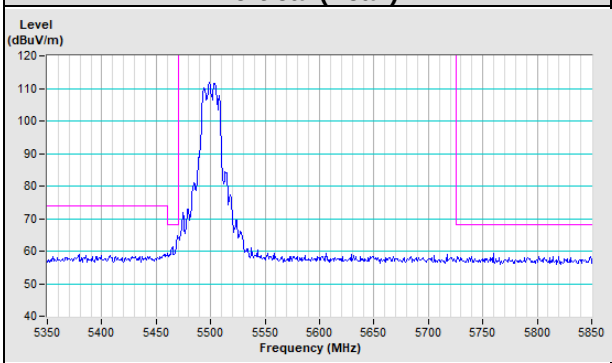
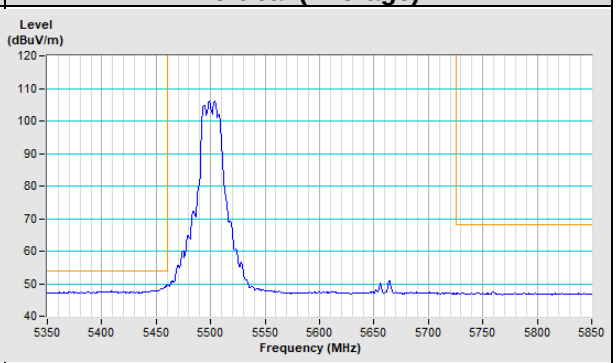
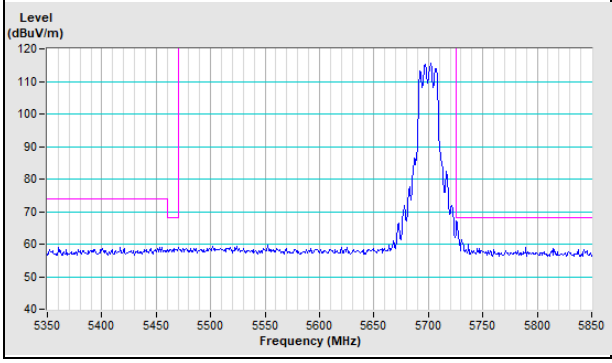
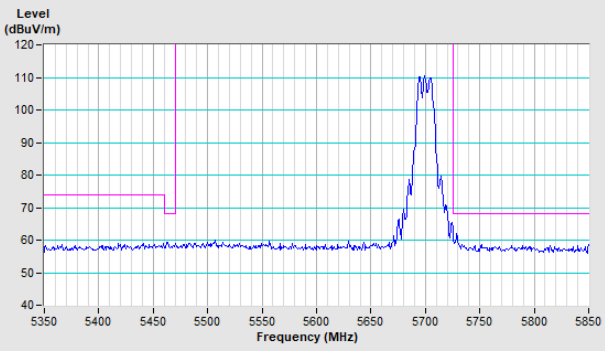


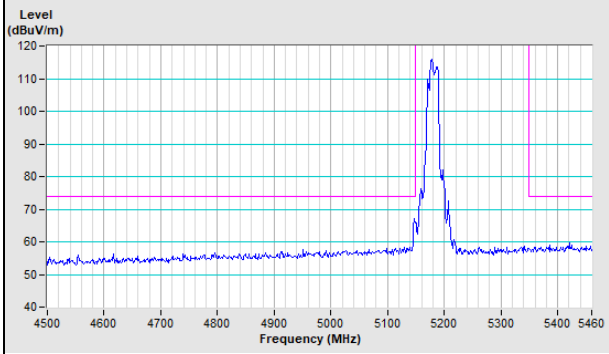
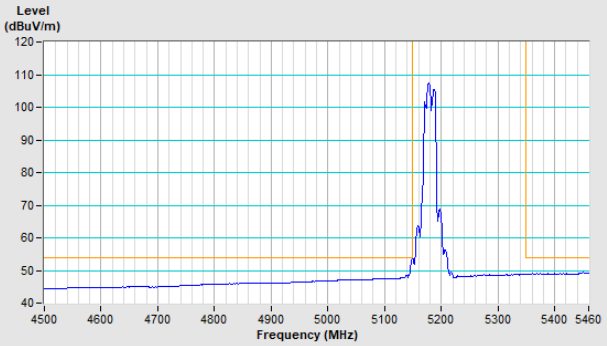
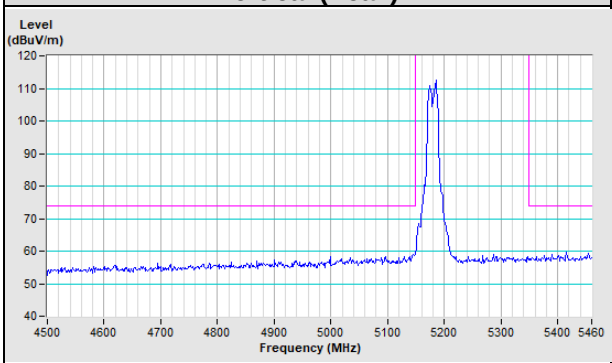
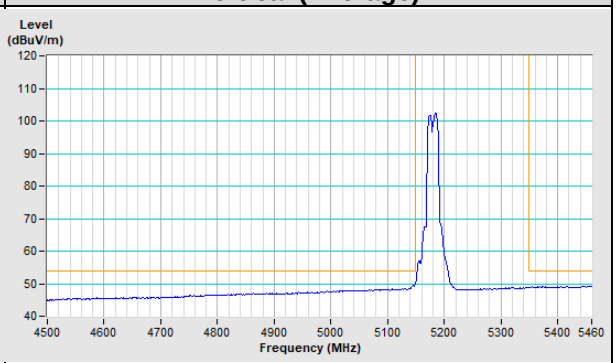
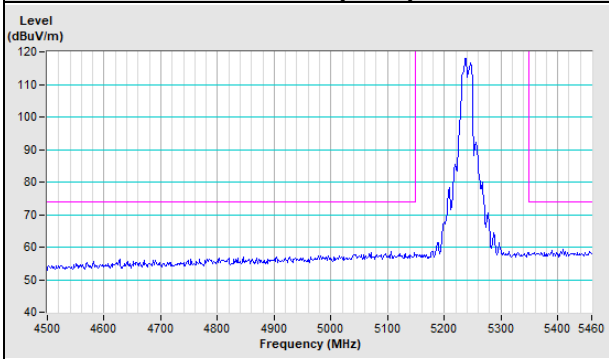
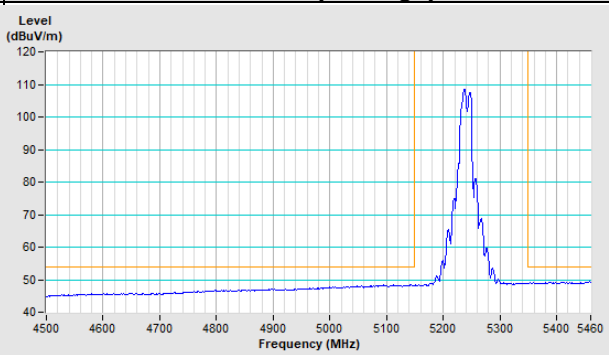
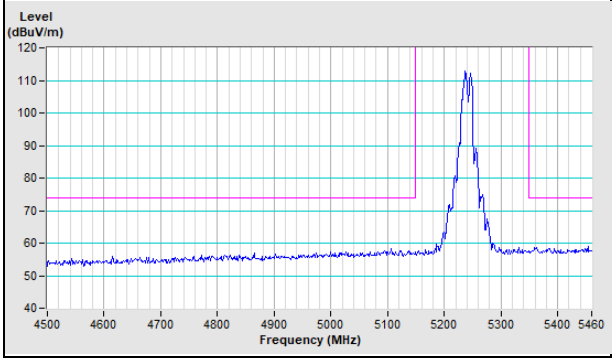
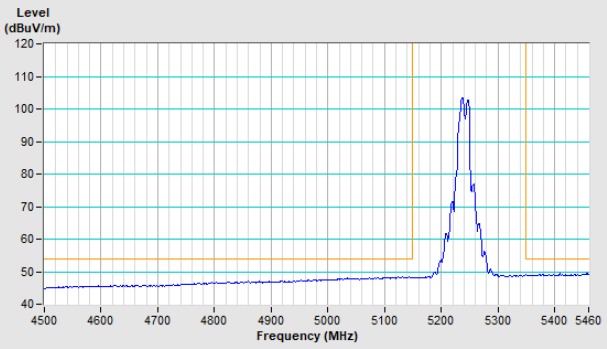
Vertical (Peak)

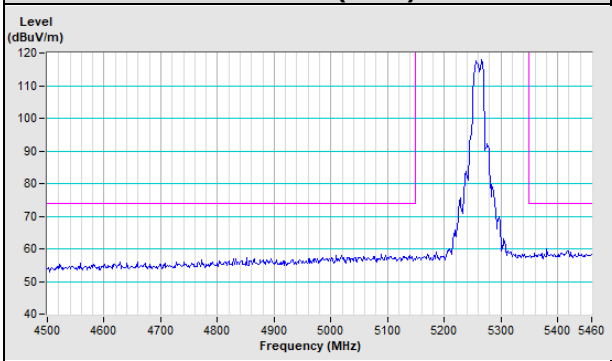
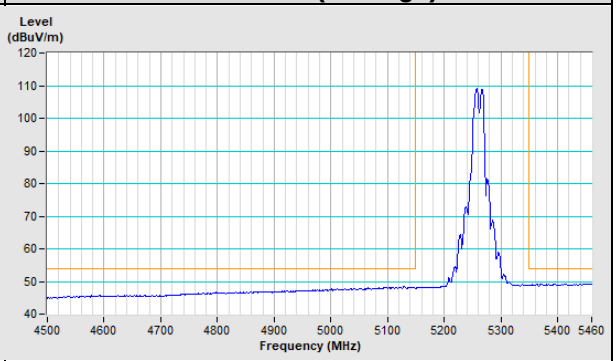
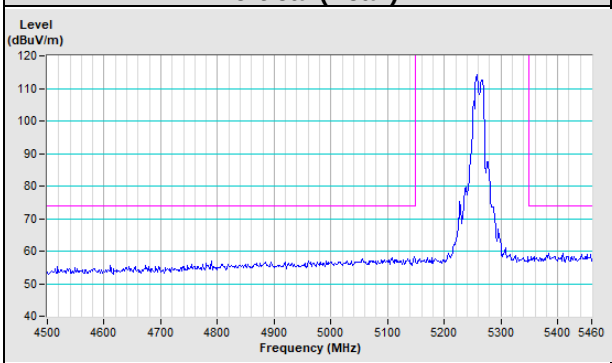
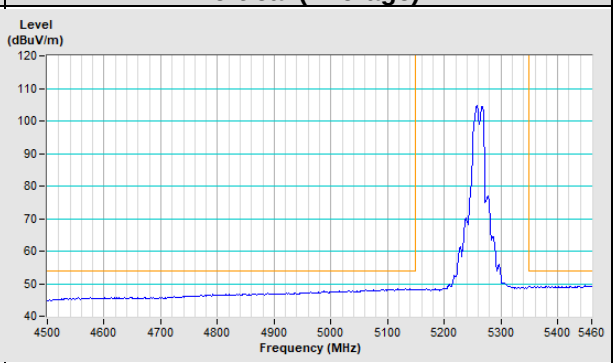
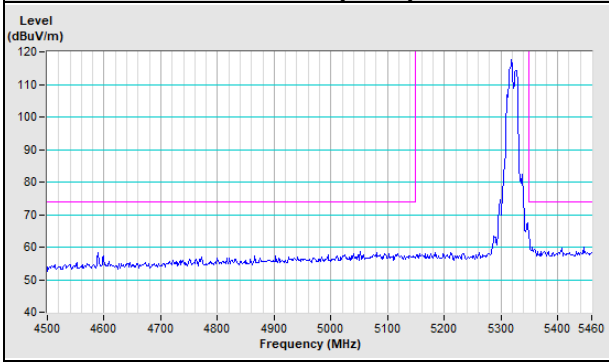
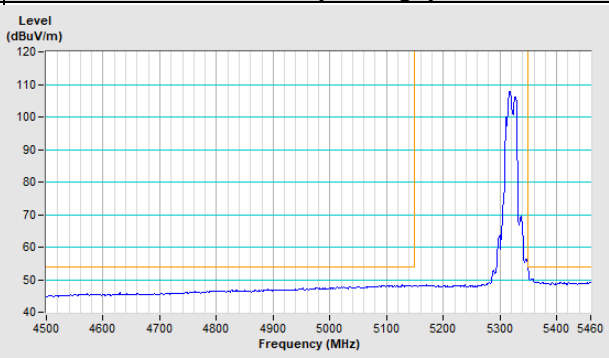
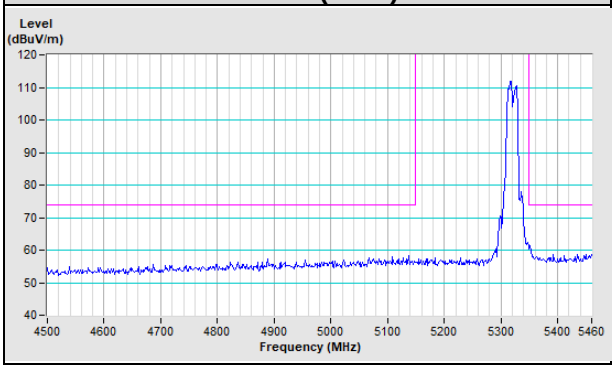
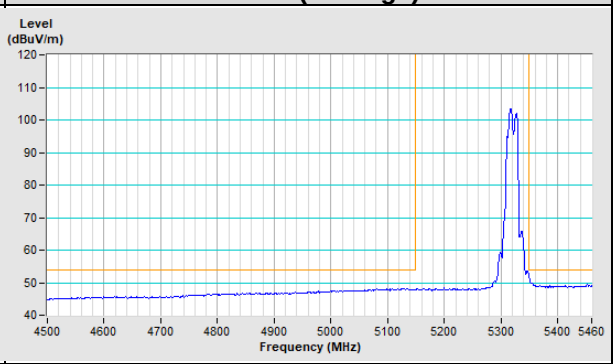


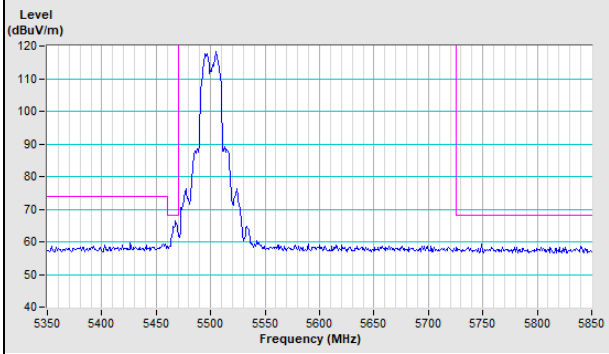
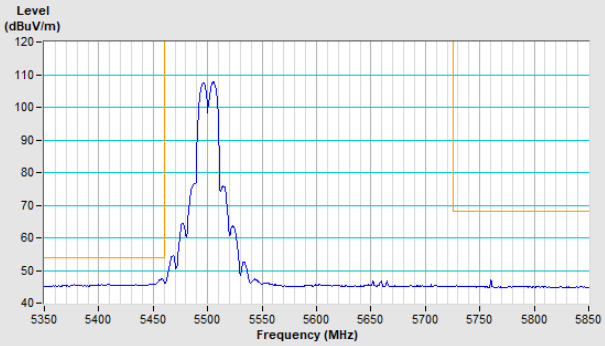
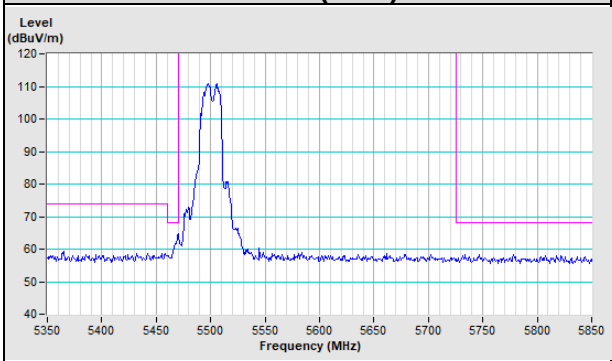
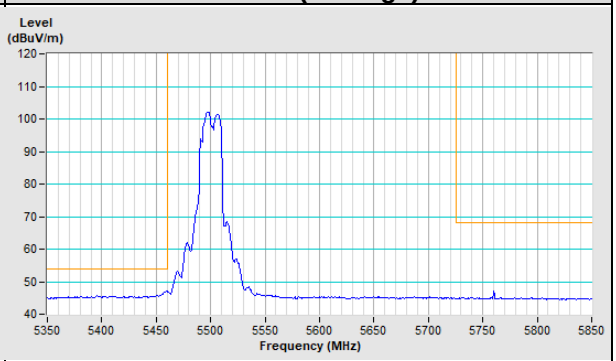
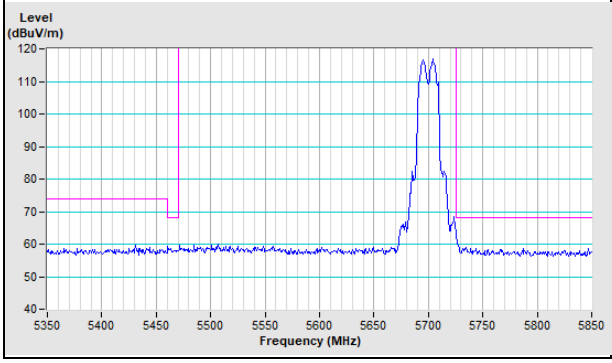
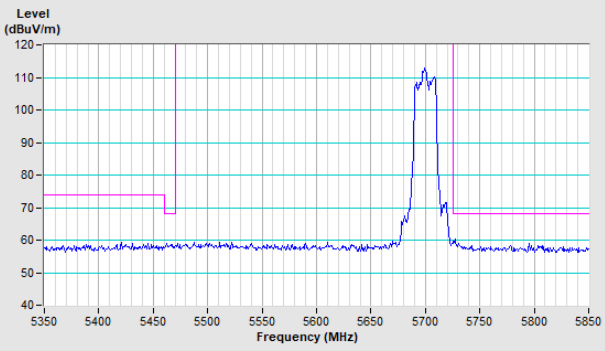
Vertical (Average)

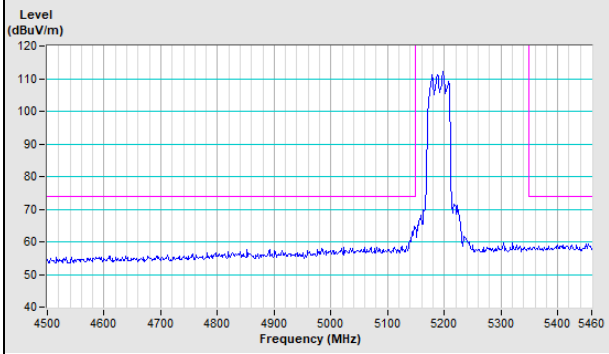
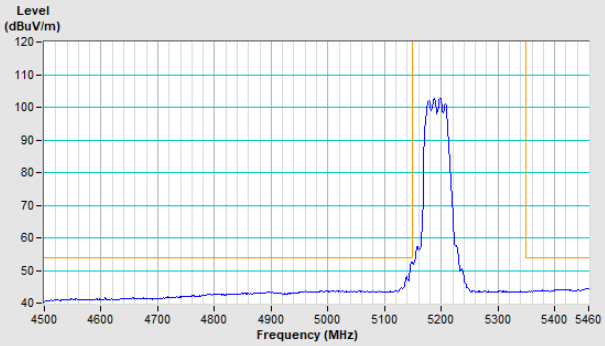
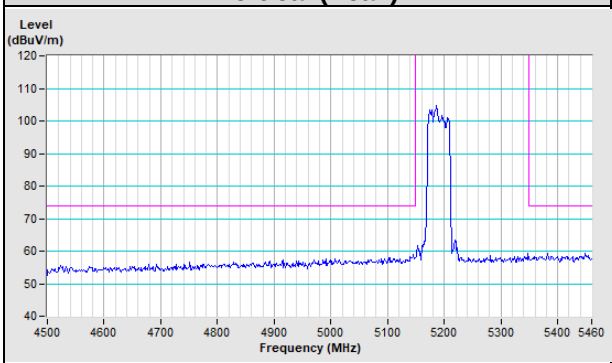
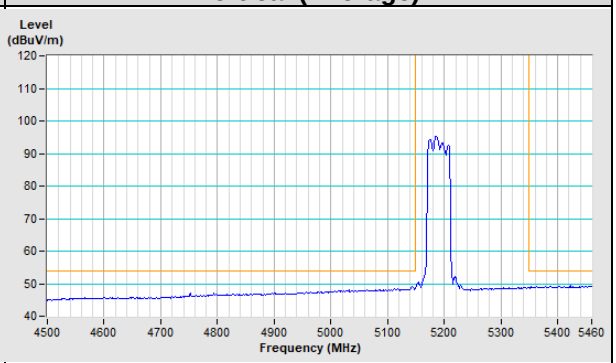
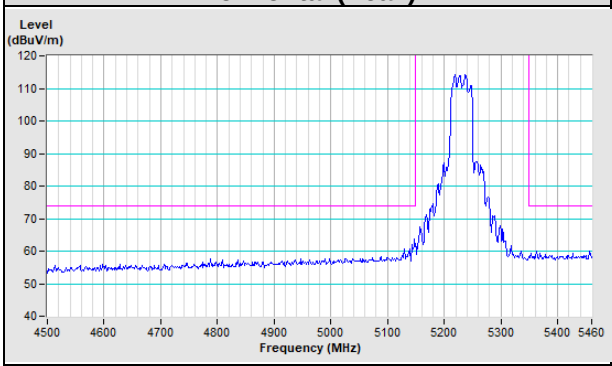
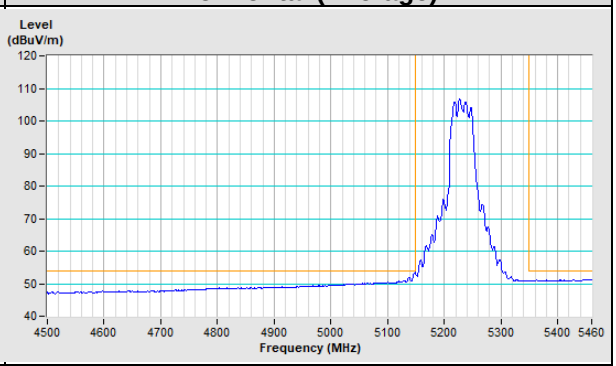
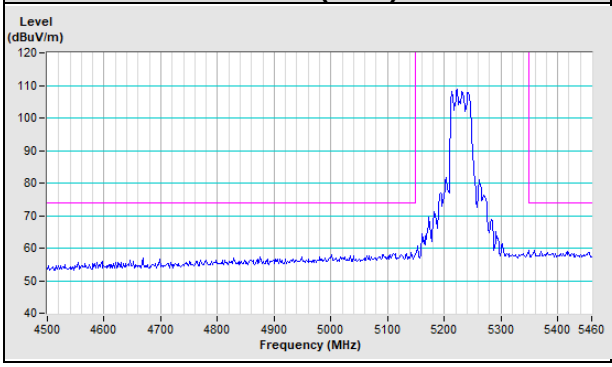
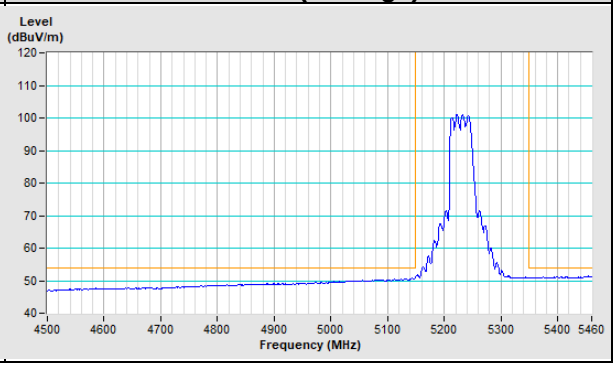


802.11a Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11a Channel 140	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (20MHz) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (20MHz) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

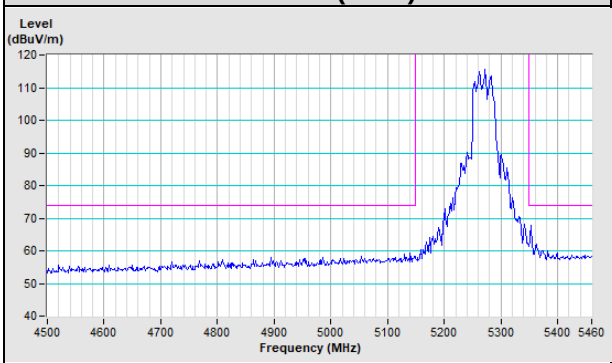
802.11ax (20MHz) Channel 52	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (20MHz) Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (20MHz) Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (20MHz) Channel 140	
Horizontal (Peak)	Vertical (Peak)
	

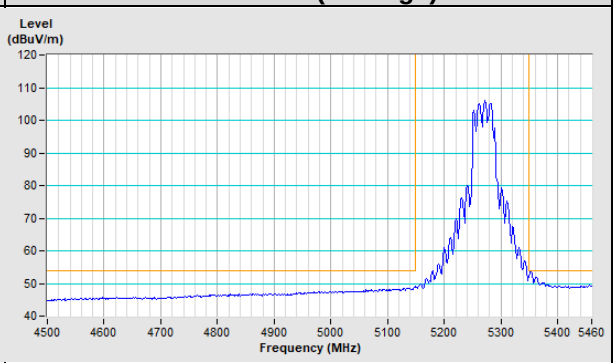
802.11ax (40MHz) Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (40MHz) Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (40MHz) Channel 54

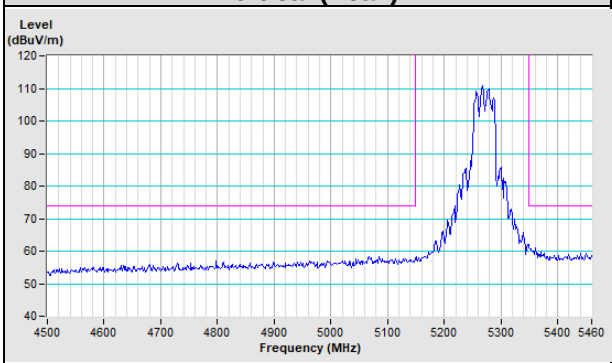
Horizontal (Peak)



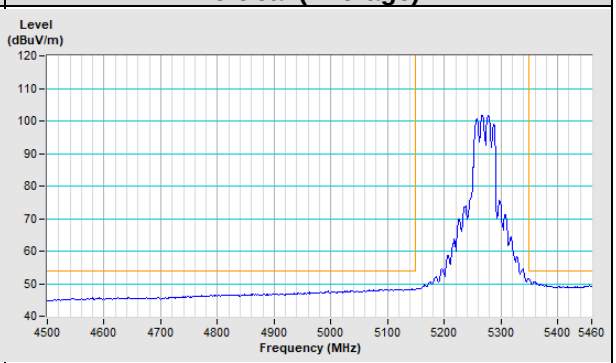
Horizontal (Average)



Vertical (Peak)

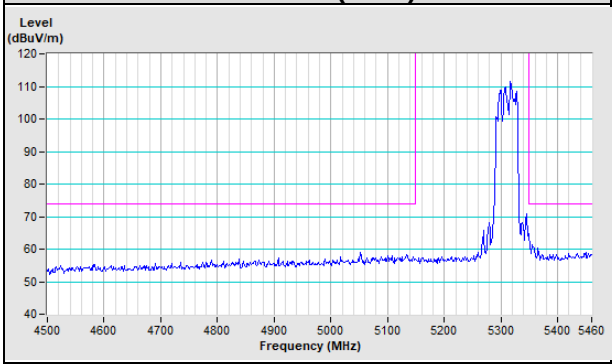


Vertical (Average)

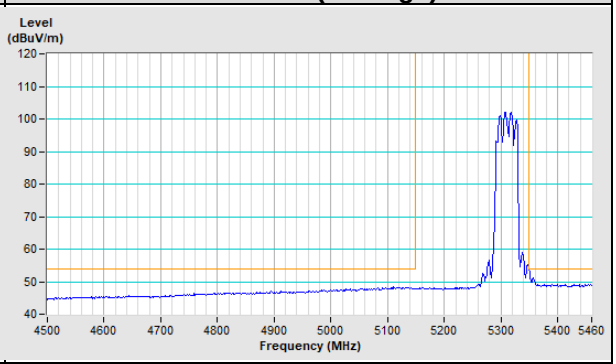


802.11ax (40MHz) Channel 62

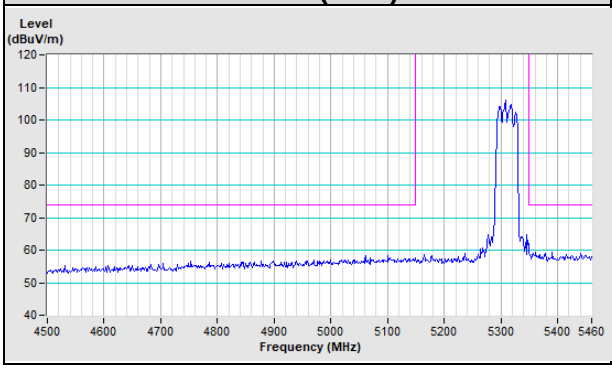
Horizontal (Peak)



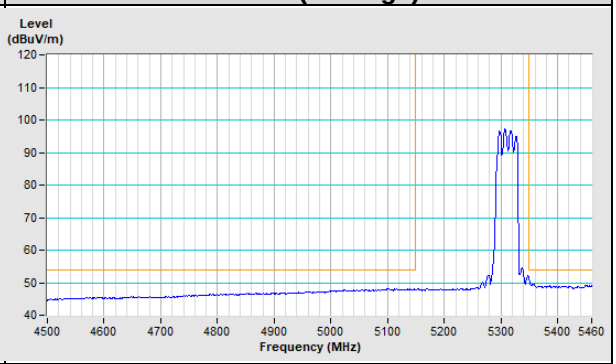
Horizontal (Average)

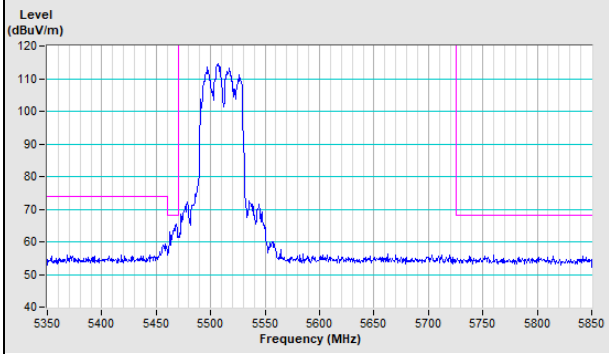
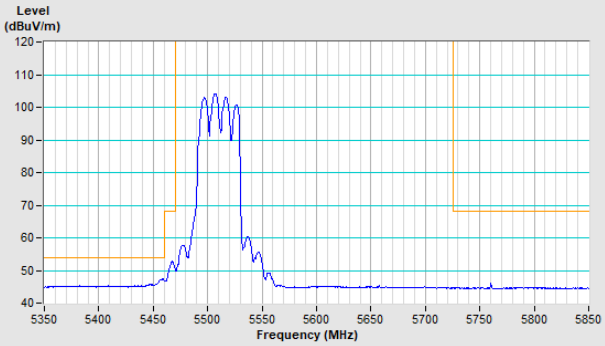
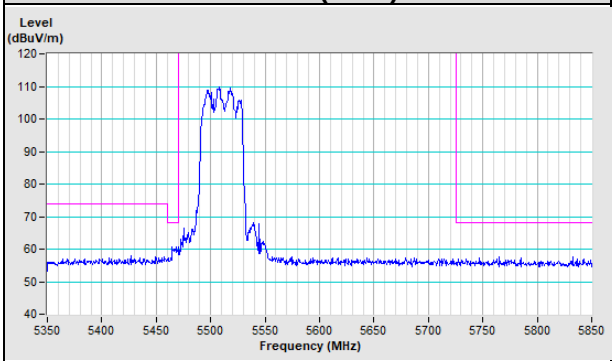
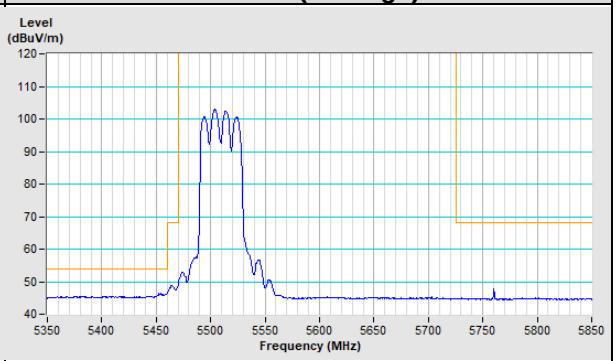
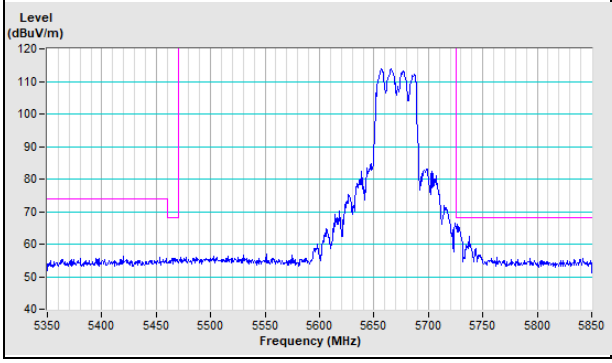
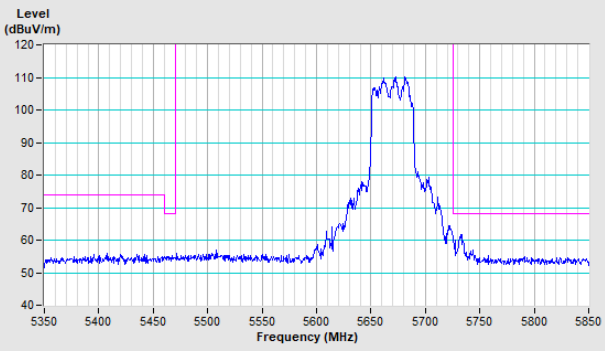


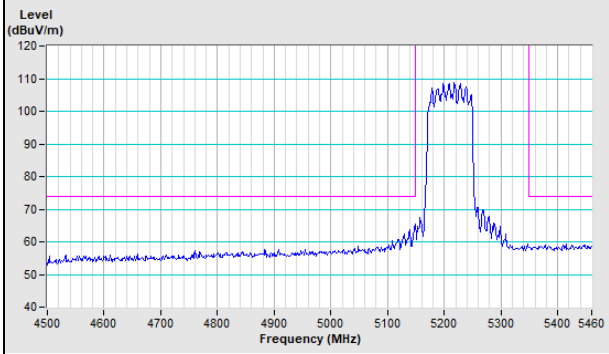
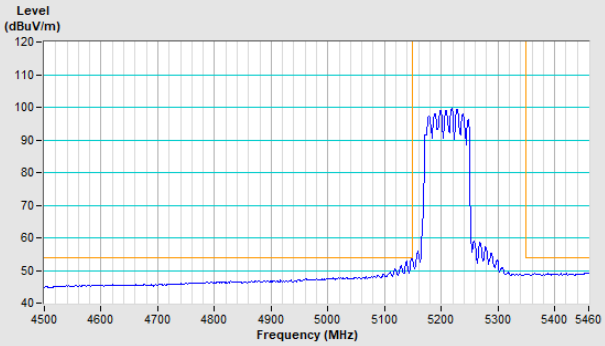
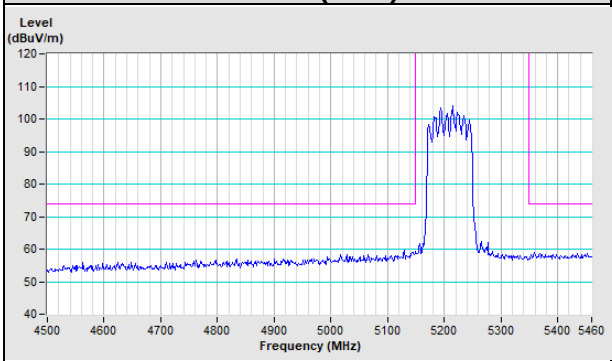
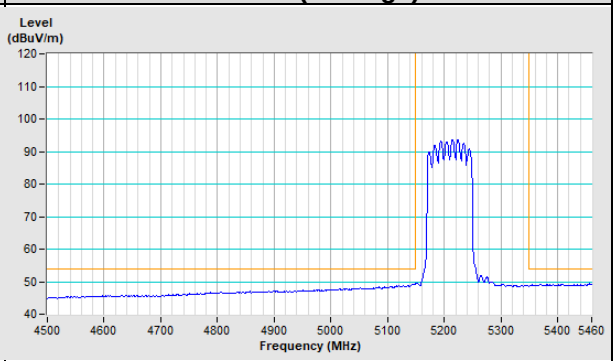
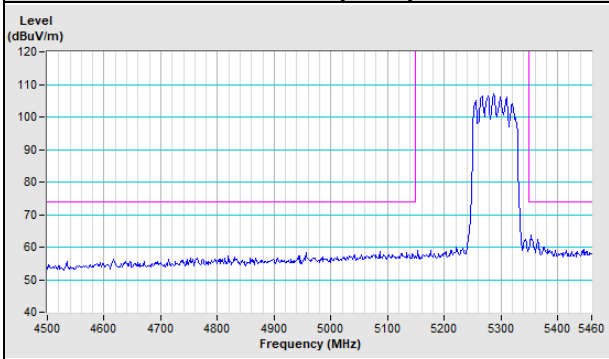
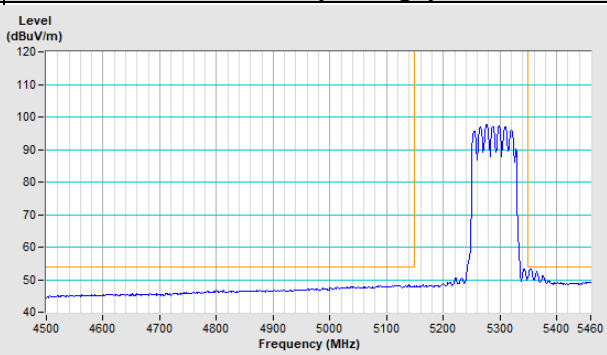
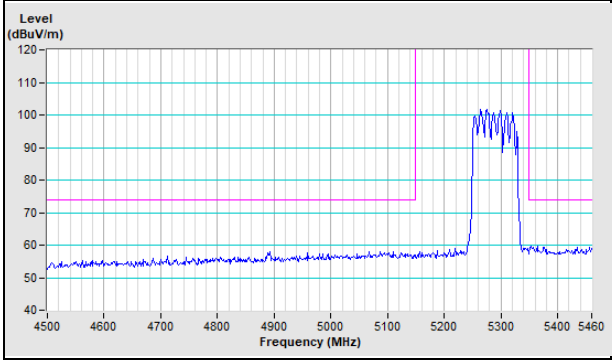
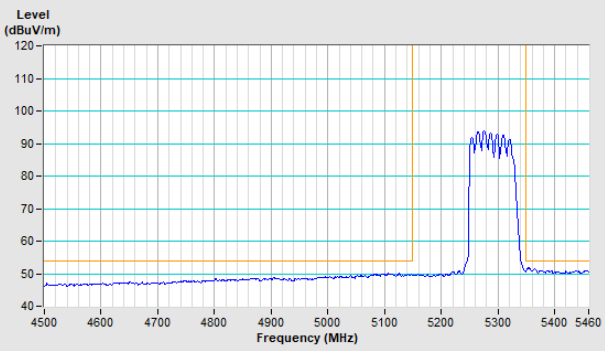
Vertical (Peak)

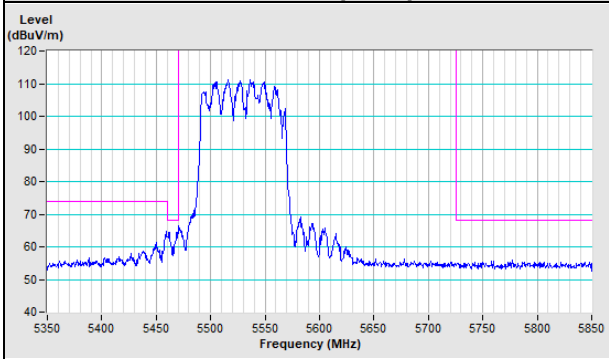
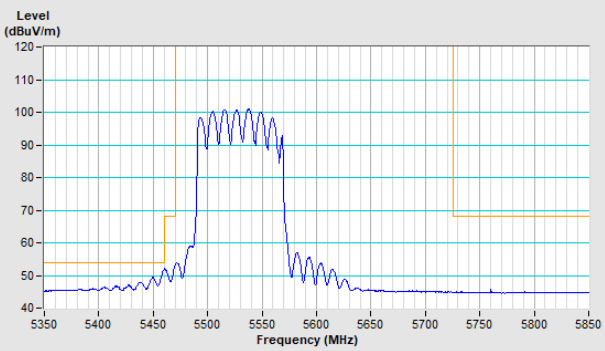
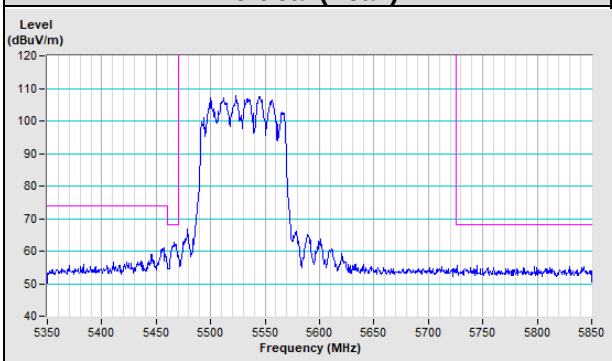
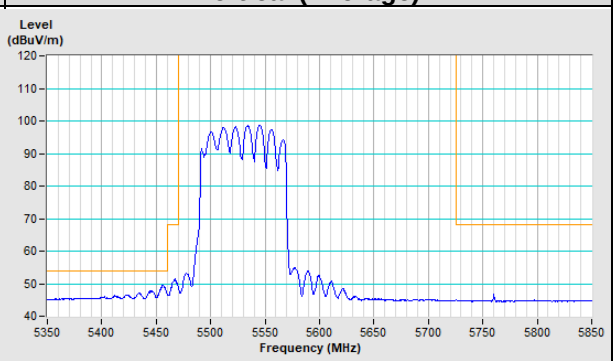
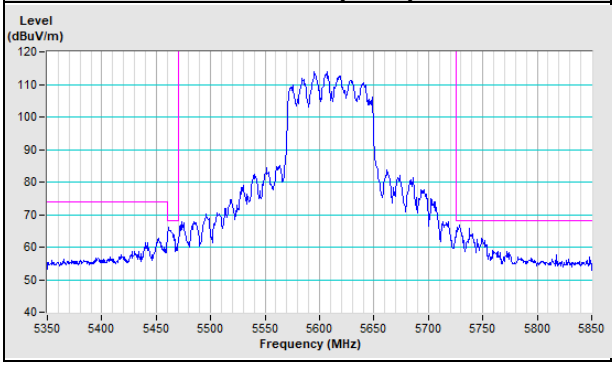
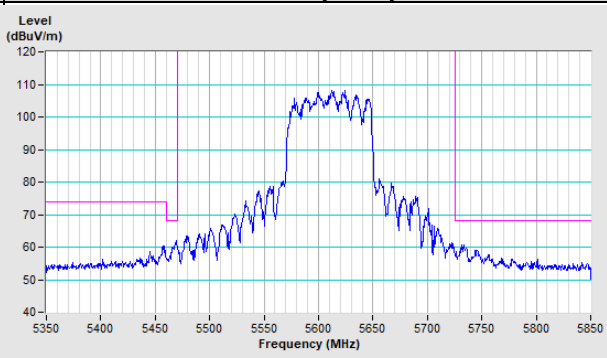


Vertical (Average)



802.11ax (40MHz) Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (40MHz) Channel 134	
Horizontal (Peak)	Vertical (Peak)
	

802.11ax (80MHz) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (80MHz) Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (80MHz) Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (80MHz) Channel 122	
Horizontal (Peak)	Vertical (Peak)
	

Appendix – Information of the Testing Laboratories

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

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

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Web Site: www.bureauveritas-adt.com

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

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