FCC Test Report

Report No.:	RFBDYS-WTW-P20110911-1
FCC ID:	TVE-371CBE0271
Test Model:	FAP-U234F
Series Model:	FortiAP U234Fxxxxxx, FAP-U234Fxxxxxx, FORTIAP-U234Fxxxxxx (Where “x” can be used as “A-Z”, or “0-9”, or “- “, or blank for software changes or marketing purposes only)
Received Date:	Nov. 29, 2020
Test Date:	Dec. 25, 2020 ~ Jan. 05, 2021
Issued Date:	Feb. 24, 2021
Applicant:	Fortinet, Inc.
Address:	899 Kifer Road Sunnyvale, CA 94086 USA
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
RFBDYS-WTW-P20110911-1	Original Release	Feb. 24, 2021

1 Certificate of Conformity

Product:	Secured Wireless Access Point
Brand:	Fortinet
Test Model:	FAP-U234F
Series Model:	FortiAP U234Fxxxxxx, FAP-U234Fxxxxxx, FORTIAP-U234Fxxxxxx (Where “x” can be used as “A-Z”, or “0-9”, or “- “, or blank for software changes or marketing purposes only)
Sample Status:	Engineering Sample
Applicant:	Fortinet, Inc.
Test Date:	Dec. 25, 2020 ~ Jan. 05, 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 : Pettie Chen , **Date:** Feb. 24, 2021

Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **Date:** Feb. 24, 2021

Bruce Chen / Senior Project Engineer

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 -5.02dB at 0.47800MHz.
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 -0.5dB at 11570MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is IPEX not a standard connector.

Note:

1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.
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	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Secured Wireless Access Point
Brand	Fortinet
Test Model	FAP-U234F
Series Model	FortiAP U234Fxxxxxx, FAP-U234Fxxxxxx, FORTIAP-U234Fxxxxxx (Where “x” can be used as “A-Z”, or “0-9”, or “- “, or blank for software changes or marketing purposes only)
Model Difference	Refer to note
Sample Status	Engineering sample
Power Supply Rating	54Vdc from POE
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/40): up to 300Mbps 802.11ac (VHT20/40/80): up to 866.7Mbps 802.11ax: up to 1201Mbps
Operating Frequency	5180 ~ 5240MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1

Output Power	5G traffic radio (Radio 1): CDD Mode: 5745 ~ 5825MHz: 327.364mW Beamforming Mode: 5745 ~ 5825MHz: 163.693mW 5G traffic radio (Radio 2): CDD Mode: 5180 ~ 5240MHz: 148.092mW (Outdoor Access Point) 5180 ~ 5240MHz: 198.636mW (Indoor Access Point) 5745 ~ 5825MHz: 348.006mW Beamforming Mode: 5180 ~ 5240MHz: 74.051mW (Outdoor Access Point) 5180 ~ 5240MHz: 99.325mW (Indoor Access Point) 5745 ~ 5825MHz: 174.015mW Scanning radio (Radio 3): CDD Mode: 5180 ~ 5240MHz: 49.784mW (Outdoor Access Point) 5180 ~ 5240MHz: 344.771mW (Indoor Access Point) 5745 ~ 5825MHz: 330.799mW Beamforming Mode: 5180 ~ 5240MHz: 24.894mW (Outdoor Access Point) 5180 ~ 5240MHz: 164.461mW (Indoor Access Point) 5745 ~ 5825MHz: 165.411mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	POE
Cable Supplied	0.5m non-shielded AC Power cable 1.75m non-shielded Grounding cable

Note:

1. The following models are provided to this EUT. The model FAP-U234F was chosen for final test.

Brand	Model	Description
Fortinet	FAP-U234F	where “x” can be used as “A-Z”, or “-0-9”, or “-“, or blank for software changes or marketing purposes only
	FortiAP U234Fxxxxxx	
	FAP-U234Fxxxxxx	
	FORTIAP-U234Fxxxxxx	

2. The EUT incorporates a MIMO function. Physically, the EUT provides 2 completed transmitters and 2 receivers.

Radio	Modulation Mode	Beamforming Mode	TX Function
5G traffic radio (Radio 1)	802.11a	Not Support	2TX
	802.11n (HT20)	Not Support	2TX
	802.11n (HT40)	Not Support	2TX
	802.11ac (VHT20)	Support	2TX
	802.11ac (VHT40)	Support	2TX
	802.11ac (VHT80)	Support	2TX
	802.11ax (HE20)	Support	2TX
	802.11ax (HE40)	Support	2TX
	802.11ax (HE80)	Support	2TX
5G traffic radio (Radio 2)	802.11a	Not Support	2TX
	802.11n (HT20)	Not Support	2TX
	802.11n (HT40)	Not Support	2TX
	802.11ac (VHT20)	Support	2TX
	802.11ac (VHT40)	Support	2TX
	802.11ac (VHT80)	Support	2TX
	802.11ax (HE20)	Support	2TX
	802.11ax (HE40)	Support	2TX
	802.11ax (HE80)	Support	2TX
Scanning radio (Radio 3)	802.11a	Not Support	2TX
	802.11n (HT20)	Not Support	2TX
	802.11n (HT40)	Not Support	2TX
	802.11ac (VHT20)	Support	2TX
	802.11ac (VHT40)	Support	2TX
	802.11ac (VHT80)	Support	2TX
	802.11ax (HE20)	Support	2TX
	802.11ax (HE40)	Support	2TX
	802.11ax (HE80)	Support	2TX

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40/VHT80 on 802.11ac mode and HE20/HE40/HE80 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, 802.11ac, 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.

3. The EUT consumes power from the following POE.

POE	
Brand	SENAO
Model	EPA5006GPR-4P
Input Power	100-240Vac, 50-60Hz, 0.8A
Output Power	54V, 0.6A

4. The following antennas were provided to the EUT.

No.	Type	Connector	Gain (dBi)						Remark
			2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz	
1	Patch Array	IPEX	9.45	10.15	9.77	-	-	-	2G traffic radio (Radio 1)
2	Patch Array	IPEX	9.21	10.12	10.33	-	-	-	
3	Patch Array	IPEX	-	-	-	9.55	10.23	10.13	5G traffic radio (Radio 1) (Band 4)
4	Patch Array	IPEX	-	-	-	9.87	10.39	10.82	
5	Patch Array	IPEX	-	-	-	9.52	10.29	10.16	5G traffic radio (Radio 2)
6	Patch Array	IPEX	-	-	-	9.79	10.21	10.54	
7	Dipole	IPEX	4.21	4.23	4.64	4.56	4.00	4.12	Scanning radio (Radio 3)
8	Dipole	IPEX	3.28	4.33	4.05	4.51	4.45	4.91	
9	Dipole	IPEX	3.68	4.22	4.00	-	-	-	BT LE / Zigbee

* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

5. The EUT will install at outdoor area, the highest antenna gain from the horizon above 30 degrees as below, for more detail information please refer to antenna specification and user manual.

Item	Antenna gain	Antenna install degree
Radio 2 Band 1	-0.91 dBi	
Radio 3 Band 1	4.02 dBi	

* Due to device Will restriced installation position as above photo, thus consider to above 30 degrees highest antenna gain are chosen from XY and XZ Plane (antenna specification of 30~150 dug)
* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

6. The simultaneous operation mode was determined by client.

No	Mode
1	2G traffic radio (Radio 1) + 5GHz traffic radio (Radio 2) + 5G Scanning radio (Radio 3) + BLE
2	5G traffic radio (Radio 1) + 5GHz traffic radio (Radio 2) + 2G Scanning radio (Radio 3) + BLE
3	5G traffic radio (Radio 1) + 5GHz traffic radio (Radio 2) + 5G Scanning radio (Radio 3) + BLE
4	2G traffic radio (Radio 1) + 5GHz traffic radio (Radio 2) + 5G Scanning radio (Radio 3) + Zigbee
5	5G traffic radio (Radio 1) + 5GHz traffic radio (Radio 2) + 2G Scanning radio (Radio 3) + Zigbee
5	5G traffic radio (Radio 1) + 5GHz traffic radio (Radio 2) + 5G Scanning radio (Radio 3) + Zigbee

* 5GHz traffic radio (Radio 2) and 5G Scanning radio (Radio 3) cannot transmit in the same band at same time. 2G traffic radio (Radio 1) and 2G Scanning radio (Radio 3) cannot transmit at same time.
* 5GHz traffic radio (Radio1) and 5GHz traffic radio (Radio2) cannot transmit at the same time in the UNII-3 band.
* Zigbee and BT technologies cannot transmit at same time.
* Spurious emission of the simultaneous operation has been evaluated and no non-compliance was found.

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

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

Channel	Frequency
42	5210MHz

For 5745 ~ 5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

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

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

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

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

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

Note:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane**.
2. Radiated emission test (below 1GHz) and power line conducted emission test items chosen the worst maximum power.

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)	Remark
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	Radio 1
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
	802.11ax (HE80)		155	155	OFDMA	MCS0	
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0	Radio 2
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0	
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	
	802.11ax (HE80)		42	42	OFDMA	MCS0	
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
	802.11ax (HE80)		155	155	OFDMA	MCS0	
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0	Radio 3
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0	
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	
	802.11ax (HE80)		42	42	OFDMA	MCS0	
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
	802.11ax (HE80)		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)	Remark
-	802.11ax (HE20)	5745-5825	149 to 165	157	OFDMA	MCS0	Radio 1
-	802.11ax (HE40)	5180-5240	38, 46	159	OFDMA	MCS0	Radio 2
		5745-5825	151, 159				
-	802.11a	5180-5240	36 to 48	48	OFDM	6.0	Radio 3
		5745-5825	149 to 165				

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)	Remark
-	802.11ax (HE20)	5745-5825	149 to 165	157	OFDMA	MCS0	Radio 1
-	802.11ax (HE40)	5180-5240	38, 46	159	OFDMA	MCS0	Radio 2
		5745-5825	151, 159				
-	802.11a	5180-5240	36 to 48	48	OFDM	6.0	Radio 3
		5745-5825	149 to 165				

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)	Remark
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	Radio 1
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5	
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5	
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	7.2	
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	15.0	
	802.11ac (VHT80)		155	155	OFDM	29.3	
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
	802.11ax (HE80)		155	155	OFDMA	MCS0	
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0	Radio 2, 3
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5	
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5	
	802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	7.2	
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	15.0	
	802.11ac (VHT80)		42	42	OFDM	29.3	
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0	
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	
	802.11ax (HE80)		42	42	OFDMA	MCS0	
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5	
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5	
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	7.2	
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	15.0	
	802.11ac (VHT80)		155	155	OFDM	29.3	
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
	802.11ax (HE80)		155	155	OFDMA	MCS0	

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	23 deg. C, 66% RH	54Vdc	Titan Hsu
RE<1G	23 deg. C, 66% RH	54Vdc	Adair Peng
PLC	23 deg. C, 67% RH	54Vdc	Adair Peng
APCM	25 deg. C, 60% RH	54Vdc	Alan Wu

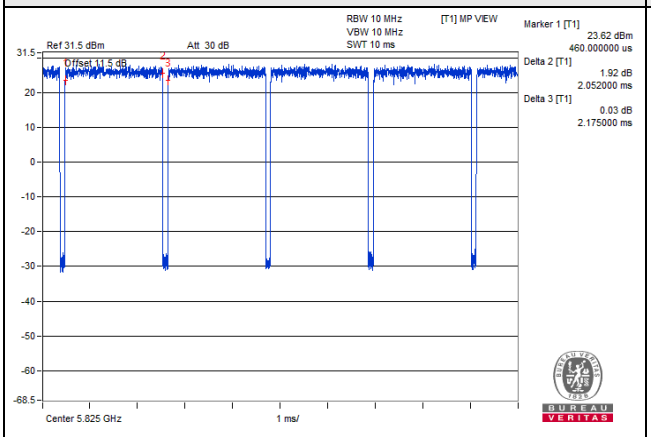
3.3 Duty Cycle of Test Signal

5G traffic radio (Radio 1)

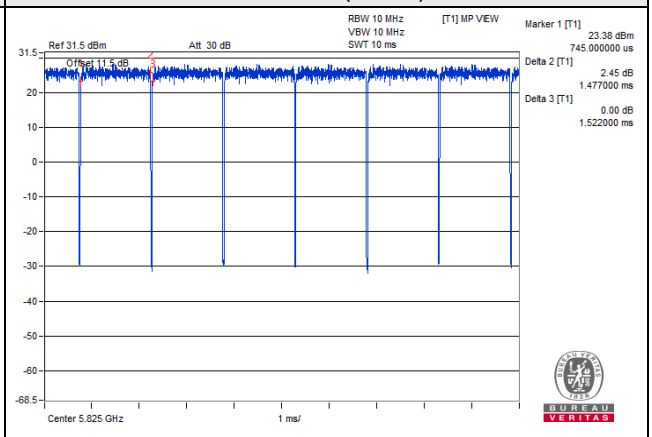
Duty cycle of test signal is < 98%, duty factor is required.

802.11a: Duty cycle = 2.052/2.175 = 0.943, Duty factor = 10 * log (1/0.943) = 0.25
802.11ax (HE20): Duty cycle = 1.477/1.522 = 0.97, Duty factor = 10 * log (1/0.97) = 0.13
802.11ax (HE40): Duty cycle = 0.769/0.815 = 0.944, Duty factor = 10 * log (1/0.944) = 0.25
802.11ax (HE80): Duty cycle = 0.41/0.447 = 0.917, Duty factor = 10 * log (1/0.917) = 0.38

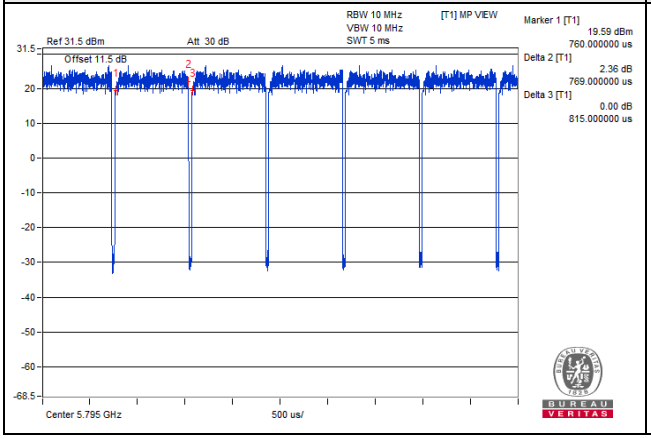
802.11a



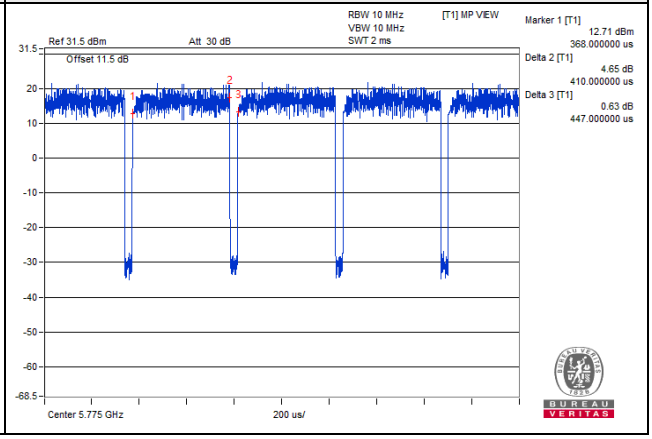
802.11ax (HE20)



802.11ax (HE40)



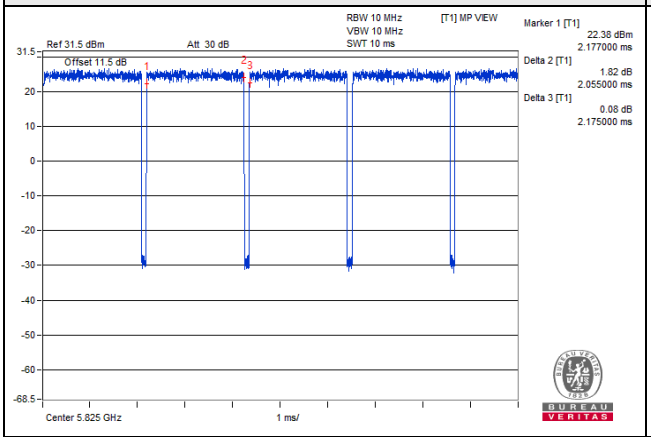
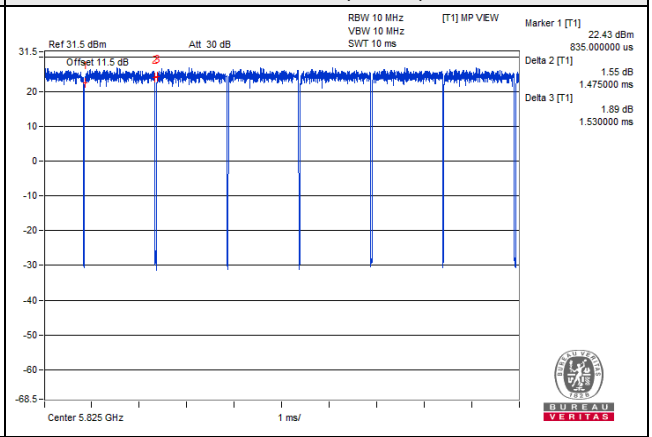
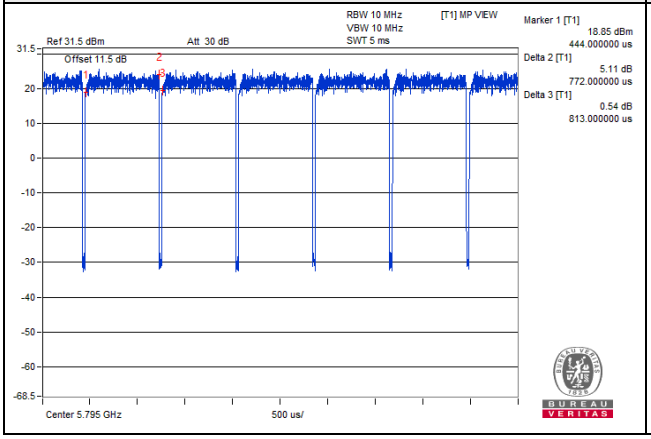
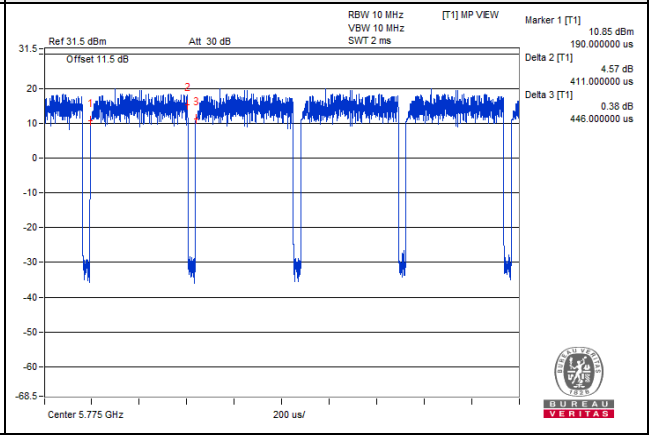
802.11ax (HE80)



5G traffic radio (Radio 2)

Duty cycle of test signal is < 98%, duty factor is required.

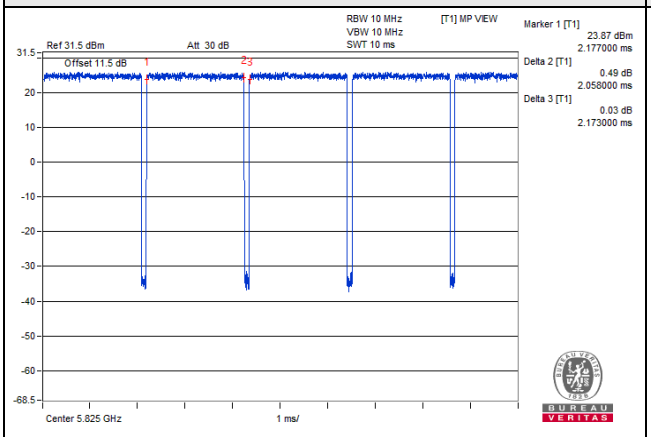
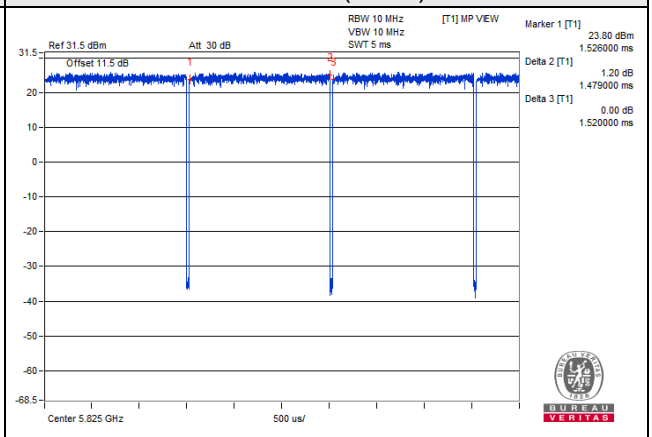
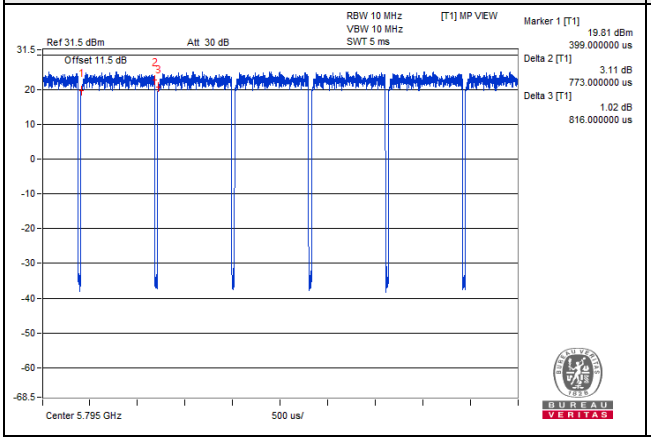
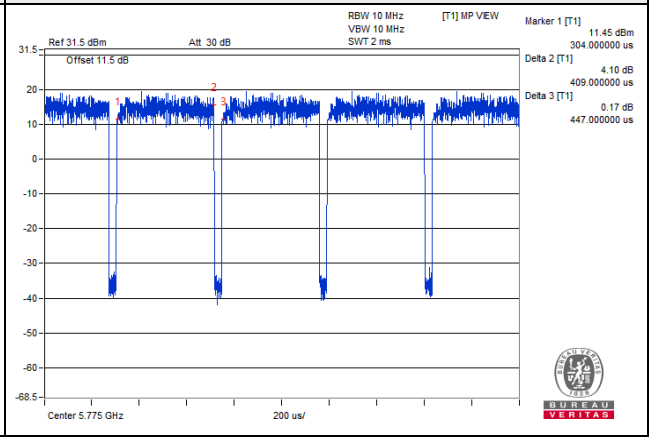
802.11a: Duty cycle = 2.055/2.175 = 0.945, Duty factor = 10 * log (1/0.945) = 0.25
802.11ax (HE20): Duty cycle = 1.475/1.53 = 0.964, Duty factor = 10 * log (1/0.964) = 0.16
802.11ax (HE40): Duty cycle = 0.772/0.813 = 0.950, Duty factor = 10 * log (1/0.950) = 0.22
802.11ax (HE80): Duty cycle = 0.411/0.446 = 0.922, Duty factor = 10 * log (1/0.922) = 0.35

802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Scanning radio (Radio 3)

Duty cycle of test signal is < 98%, duty factor is required.

802.11a: Duty cycle = 2.058/2.173 = 0.947, Duty factor = 10 * log (1/0.947) = 0.24
802.11ax (HE20): Duty cycle = 1.479/1.52 = 0.973, Duty factor = 10 * log (1/0.973) = 0.12
802.11ax (HE40): Duty cycle = 0.773/0.816 = 0.947, Duty factor = 10 * log (1/0.947) = 0.24
802.11ax (HE80): Duty cycle = 0.409/0.447 = 0.915, Duty factor = 10 * log (1/0.915) = 0.39

802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

3.4 Description of Support Units

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

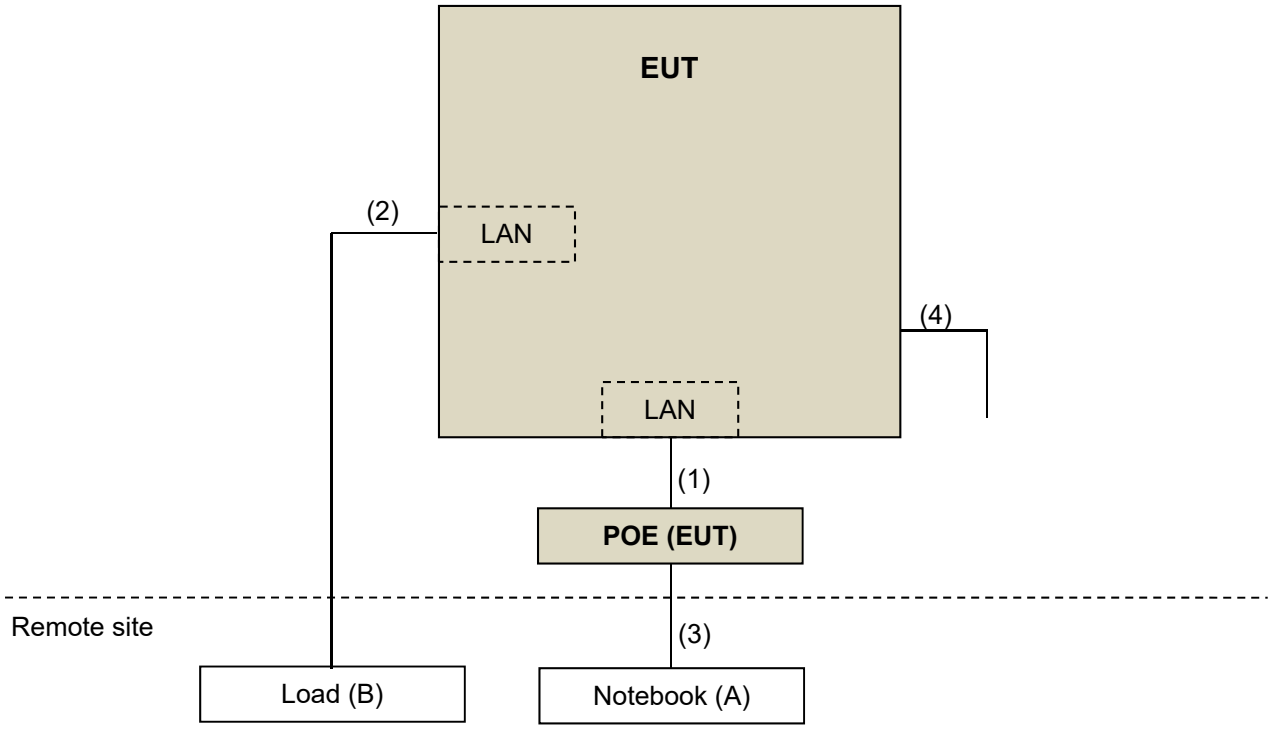
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-
B.	Load	NA	NA	NA	NA	-

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN	1	1.5	N	0	RJ45, Cat5e
2.	LAN	1	1.5	N	0	RJ45, Cat5e
3.	LAN	1	6	N	0	RJ45, Cat5e
4.	Console	1	1.5	N	0	-

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="2">Applicable To</td><td colspan="2">Limit</td></tr>
<tr><td colspan="2" 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:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102579	Jul. 07, 2020	Jul. 06, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jun. 09, 2020	Jun. 08, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSV40	100980	Apr. 20, 2020	Apr. 19, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 04, 2020	Nov. 03, 2021
HORN Antenna SCHWARZBECK	9120D	209	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 16, 2020	Aug. 15, 2021
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 23, 2020	Mar. 22, 2021
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM- SM-8000	Cable-CH3-03 (309224+170907)	Aug. 16, 2020	Aug. 15, 2021
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Sep. 04, 2020	Sep. 03, 2021
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY5519 0004/MY55190007/MY 55210005	Jul. 13, 2020	Jul. 12, 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 HwaYa Chamber 3.

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 = 1kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 3kHz; 802.11ax (HE80): RBW = 1MHz, VBW = 3kHz)

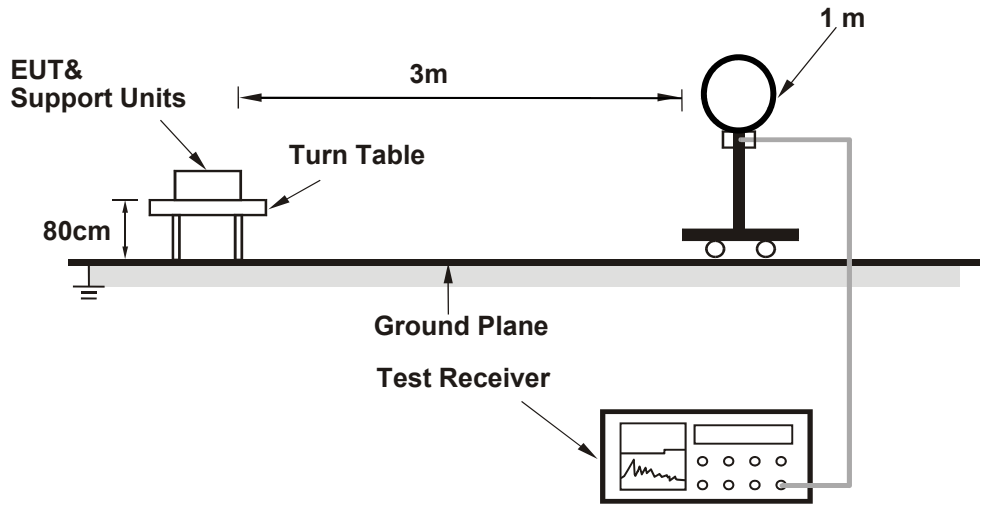
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

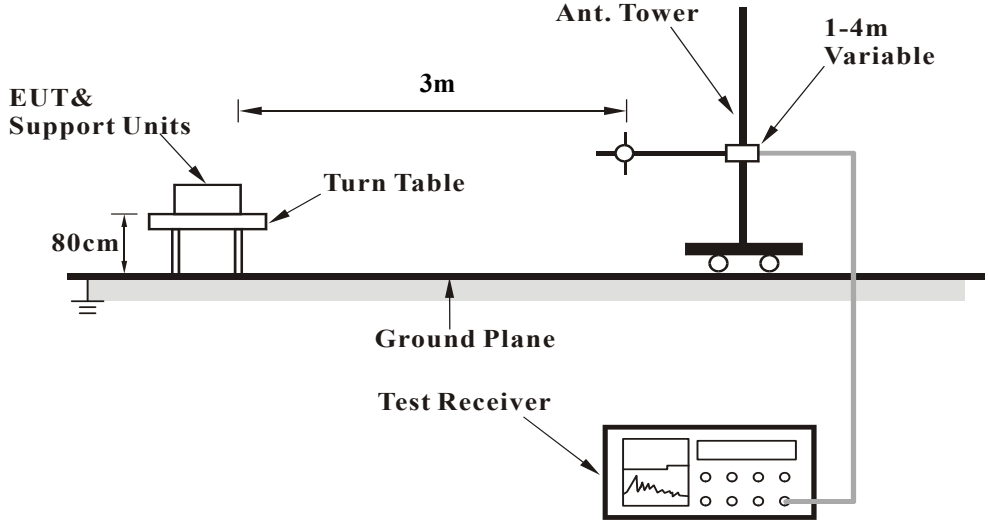
No deviation.

4.1.5 Test Setup

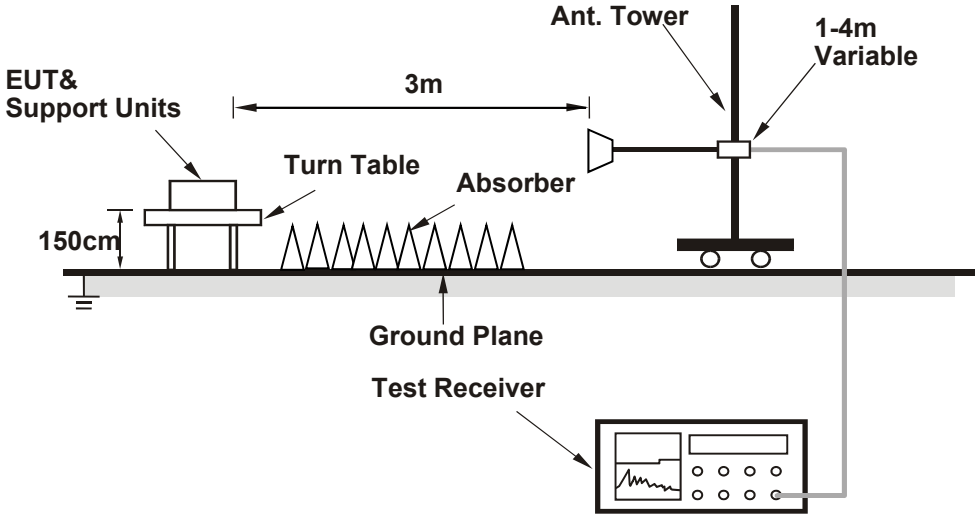
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

a. 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

Above 1GHz data:

5G traffic radio (Radio 1)

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	3830.00	54.9 PK	74.0	-19.1	2.28 H	24	51.5	3.4
2	3830.00	51.6 AV	54.0	-2.4	2.28 H	24	48.2	3.4
3	#5637.82	63.0 PK	68.2	-5.2	1.55 H	356	56.7	6.3
4	#5650.00	66.1 PK	68.2	-2.1	1.46 H	1	59.8	6.3
5	*5745.00	123.7 PK			1.55 H	356	81.5	42.2
6	*5745.00	114.1 AV			1.55 H	356	71.9	42.2
7	#5950.00	57.4 PK	68.2	-10.8	1.55 H	356	50.1	7.3
8	11490.00	59.7 PK	74.0	-14.3	2.22 H	188	41.4	18.3
9	11490.00	46.4 AV	54.0	-7.6	2.22 H	188	28.1	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3830.00	51.6 PK	74.0	-22.4	3.78 V	322	48.2	3.4
2	3830.00	46.4 AV	54.0	-7.6	3.78 V	322	43.0	3.4
3	#5641.03	62.6 PK	68.2	-5.6	1.54 V	346	56.3	6.3
4	#5650.00	62.1 PK	68.2	-6.1	1.51 V	344	55.8	6.3
5	*5745.00	123.1 PK			1.54 V	346	80.9	42.2
6	*5745.00	113.1 AV			1.54 V	346	70.9	42.2
7	#5975.64	59.1 PK	68.2	-9.1	1.54 V	346	51.9	7.2
8	11490.00	59.8 PK	74.0	-14.2	2.71 V	116	41.5	18.3
9	11490.00	46.1 AV	54.0	-7.9	2.71 V	116	27.8	18.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	3857.00	55.0 PK	74.0	-19.0	2.41 H	26	51.6	3.4
2	3857.00	51.7 AV	54.0	-2.3	2.41 H	26	48.3	3.4
3	#5644.23	60.1 PK	68.2	-8.1	1.37 H	356	53.8	6.3
4	*5785.00	124.1 PK			1.37 H	356	81.9	42.2
5	*5785.00	114.2 AV			1.37 H	356	72.0	42.2
6	#5998.72	58.8 PK	68.2	-9.4	1.37 H	356	51.6	7.2
7	11570.00	59.9 PK	74.0	-14.1	1.99 H	189	41.9	18.0
8	11570.00	46.5 AV	54.0	-7.5	1.99 H	189	28.5	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3857.00	49.9 PK	74.0	-24.1	1.33 V	285	46.5	3.4
2	3857.00	44.0 AV	54.0	-10.0	1.33 V	285	40.6	3.4
3	#5633.97	59.1 PK	68.2	-9.1	1.55 V	353	52.8	6.3
4	*5785.00	123.0 PK			1.55 V	353	80.8	42.2
5	*5785.00	113.2 AV			1.55 V	353	71.0	42.2
6	#5926.92	58.4 PK	68.2	-9.8	1.55 V	353	51.1	7.3
7	11570.00	60.4 PK	74.0	-13.6	1.79 V	213	42.4	18.0
8	11570.00	46.5 AV	54.0	-7.5	1.79 V	213	28.5	18.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	3883.00	54.0 PK	74.0	-20.0	2.50 H	29	50.4	3.6
2	3883.00	50.8 AV	54.0	-3.2	2.50 H	29	47.2	3.6
3	#5628.85	60.5 PK	68.2	-7.7	1.35 H	356	54.3	6.2
4	*5825.00	123.3 PK			1.35 H	356	81.0	42.3
5	*5825.00	113.7 AV			1.35 H	356	71.4	42.3
6	#5973.08	59.3 PK	68.2	-8.9	1.35 H	356	52.1	7.2
7	11650.00	60.0 PK	74.0	-14.0	1.89 H	261	42.0	18.0
8	11650.00	46.4 AV	54.0	-7.6	1.89 H	261	28.4	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3883.00	49.6 PK	74.0	-24.4	1.46 V	285	46.0	3.6
2	3883.00	43.8 AV	54.0	-10.2	1.46 V	285	40.2	3.6
3	#5620.51	60.6 PK	68.2	-7.6	1.59 V	352	54.4	6.2
4	*5825.00	122.5 PK			1.59 V	352	80.2	42.3
5	*5825.00	112.9 AV			1.59 V	352	70.6	42.3
6	#5957.69	58.5 PK	68.2	-9.7	1.59 V	352	51.2	7.3
7	11650.00	61.0 PK	74.0	-13.0	2.03 V	182	43.0	18.0
8	11650.00	46.4 AV	54.0	-7.6	2.03 V	182	28.4	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	3830.00	53.9 PK	74.0	-20.1	2.28 H	24	50.5	3.4
2	3830.00	50.4 AV	54.0	-3.6	2.28 H	24	47.0	3.4
3	#5643.59	62.7 PK	68.2	-5.5	1.43 H	357	56.4	6.3
4	#5650.00	65.3 PK	68.2	-2.9	1.36 H	357	59.0	6.3
5	*5745.00	126.4 PK			1.43 H	357	84.2	42.2
6	*5745.00	113.2 AV			1.43 H	357	71.0	42.2
7	#5980.13	58.7 PK	68.2	-9.5	1.43 H	357	51.5	7.2
8	11490.00	59.7 PK	74.0	-14.3	1.69 H	215	41.4	18.3
9	11490.00	46.5 AV	54.0	-7.5	1.69 H	215	28.2	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3830.00	50.0 PK	74.0	-24.0	1.48 V	321	46.6	3.4
2	3830.00	44.6 AV	54.0	-9.4	1.48 V	321	41.2	3.4
3	#5647.44	62.8 PK	68.2	-5.4	1.51 V	353	56.5	6.3
4	#5650.00	64.1 PK	68.2	-4.1	1.58 V	356	57.8	6.3
5	*5745.00	124.7 PK			1.51 V	353	82.5	42.2
6	*5745.00	112.1 AV			1.51 V	353	69.9	42.2
7	#5959.62	58.2 PK	68.2	-10.0	1.51 V	353	50.9	7.3
8	11490.00	60.6 PK	74.0	-13.4	2.22 V	186	42.3	18.3
9	11490.00	46.1 AV	54.0	-7.9	2.22 V	186	27.8	18.3

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	3857.00	54.2 PK	74.0	-19.8	2.24 H	26	50.8	3.4
2	3857.00	51.0 AV	54.0	-3.0	2.24 H	26	47.6	3.4
3	#5616.67	59.0 PK	68.2	-9.2	1.60 H	359	52.8	6.2
4	*5785.00	125.5 PK			1.60 H	359	83.3	42.2
5	*5785.00	112.6 AV			1.60 H	359	70.4	42.2
6	#5968.59	59.2 PK	68.2	-9.0	1.60 H	359	52.0	7.2
7	11570.00	59.8 PK	74.0	-14.2	1.69 H	217	41.8	18.0
8	11570.00	46.3 AV	54.0	-7.7	1.69 H	217	28.3	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3857.00	50.7 PK	74.0	-23.3	1.32 V	286	47.3	3.4
2	3857.00	45.2 AV	54.0	-8.8	1.32 V	286	41.8	3.4
3	#5641.67	59.2 PK	68.2	-9.0	1.61 V	350	52.9	6.3
4	*5785.00	125.4 PK			1.61 V	350	83.2	42.2
5	*5785.00	112.3 AV			1.61 V	350	70.1	42.2
6	#5989.74	57.9 PK	68.2	-10.3	1.61 V	350	50.7	7.2
7	11570.00	60.2 PK	74.0	-13.8	1.88 V	219	42.2	18.0
8	11570.00	46.5 AV	54.0	-7.5	1.88 V	219	28.5	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	3883.00	53.2 PK	74.0	-20.8	1.07 H	20	49.6	3.6
2	3883.00	49.5 AV	54.0	-4.5	1.07 H	20	45.9	3.6
3	#5626.28	60.6 PK	68.2	-7.6	1.40 H	359	54.4	6.2
4	*5825.00	125.3 PK			1.40 H	359	83.0	42.3
5	*5825.00	112.6 AV			1.40 H	359	70.3	42.3
6	#5985.90	59.1 PK	68.2	-9.1	1.40 H	359	51.9	7.2
7	11650.00	59.8 PK	74.0	-14.2	1.95 H	216	41.8	18.0
8	11650.00	46.4 AV	54.0	-7.6	1.95 H	216	28.4	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3883.00	49.8 PK	74.0	-24.2	1.48 V	134	46.2	3.6
2	3883.00	44.2 AV	54.0	-9.8	1.48 V	134	40.6	3.6
3	#5625.64	59.5 PK	68.2	-8.7	1.58 V	358	53.3	6.2
4	*5825.00	125.1 PK			1.58 V	358	82.8	42.3
5	*5825.00	112.1 AV			1.58 V	358	69.8	42.3
6	#5984.62	58.0 PK	68.2	-10.2	1.58 V	358	50.8	7.2
7	11650.00	60.1 PK	74.0	-13.9	2.19 V	196	42.1	18.0
8	11650.00	46.6 AV	54.0	-7.4	2.19 V	196	28.6	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	3837.00	53.4 PK	74.0	-20.6	2.29 H	25	50.0	3.4
2	3837.00	50.4 AV	54.0	-3.6	2.29 H	25	47.0	3.4
3	#5633.33	63.2 PK	68.2	-5.0	1.46 H	355	56.9	6.3
4	#5650.00	64.5 PK	68.2	-3.7	1.23 H	359	58.2	6.3
5	*5755.00	123.7 PK			1.46 H	355	81.4	42.3
6	*5755.00	110.7 AV			1.46 H	355	68.4	42.3
7	#5953.85	58.3 PK	68.2	-9.9	1.46 H	355	51.0	7.3
8	11510.00	60.5 PK	74.0	-13.5	2.36 H	188	42.3	18.2
9	11510.00	46.8 AV	54.0	-7.2	2.36 H	188	28.6	18.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3837.00	49.8 PK	74.0	-24.2	1.48 V	320	46.4	3.4
2	3837.00	44.4 AV	54.0	-9.6	1.48 V	320	41.0	3.4
3	#5637.18	61.6 PK	68.2	-6.6	1.59 V	345	55.3	6.3
4	#5650.00	63.8 PK	68.2	-4.4	1.52 V	349	57.5	6.3
5	*5755.00	122.9 PK			1.59 V	345	80.6	42.3
6	*5755.00	109.6 AV			1.59 V	345	67.3	42.3
7	#5982.69	58.0 PK	68.2	-10.2	1.59 V	345	50.8	7.2
8	11510.00	61.1 PK	74.0	-12.9	1.96 V	229	42.9	18.2
9	11510.00	46.7 AV	54.0	-7.3	1.96 V	229	28.5	18.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	3863.00	54.0 PK	74.0	-20.0	2.26 H	25	50.6	3.4
2	3863.00	50.9 AV	54.0	-3.1	2.26 H	25	47.5	3.4
3	#5646.15	60.6 PK	68.2	-7.6	1.43 H	354	54.3	6.3
4	*5795.00	123.6 PK			1.43 H	354	81.4	42.2
5	*5795.00	109.9 AV			1.43 H	354	67.7	42.2
6	#5955.77	58.6 PK	68.2	-9.6	1.43 H	354	51.3	7.3
7	11590.00	60.1 PK	74.0	-13.9	1.86 H	211	42.3	17.8
8	11590.00	46.7 AV	54.0	-7.3	1.86 H	211	28.9	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3863.00	50.1 PK	74.0	-23.9	1.46 V	285	46.7	3.4
2	3863.00	44.7 AV	54.0	-9.3	1.46 V	285	41.3	3.4
3	#5633.97	60.2 PK	68.2	-8.0	1.52 V	347	53.9	6.3
4	*5795.00	122.7 PK			1.52 V	347	80.5	42.2
5	*5795.00	109.3 AV			1.52 V	347	67.1	42.2
6	#5944.23	58.4 PK	68.2	-9.8	1.52 V	347	51.1	7.3
7	11590.00	60.1 PK	74.0	-13.9	1.84 V	262	42.3	17.8
8	11590.00	46.6 AV	54.0	-7.4	1.84 V	262	28.8	17.8

Remarks:

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

RF Mode	TX 802.11ax (HE80)	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	3850.00	54.2 PK	74.0	-19.8	2.40 H	26	50.8	3.4
2	3850.00	51.4 AV	54.0	-2.6	2.40 H	26	48.0	3.4
3	#5648.72	63.6 PK	68.2	-4.6	1.34 H	355	57.3	6.3
4	#5650.00	66.9 PK	68.2	-1.3	1.29 H	358	60.6	6.3
5	*5775.00	118.7 PK			1.34 H	355	76.5	42.2
6	*5775.00	106.4 AV			1.34 H	355	64.2	42.2
7	#5925.00	59.5 PK	68.2	-8.7	1.31 H	356	52.2	7.3
8	#5930.77	59.1 PK	68.2	-9.1	1.34 H	355	51.8	7.3
9	11550.00	60.1 PK	74.0	-13.9	2.22 H	176	42.0	18.1
10	11550.00	47.5 AV	54.0	-6.5	2.22 H	176	29.4	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3850.00	50.0 PK	74.0	-24.0	1.31 V	287	46.6	3.4
2	3850.00	45.2 AV	54.0	-8.8	1.31 V	287	41.8	3.4
3	#5647.44	63.4 PK	68.2	-4.8	1.55 V	353	57.1	6.3
4	#5650.00	64.1 PK	68.2	-4.1	1.51 V	346	57.8	6.3
5	*5775.00	116.9 PK			1.55 V	353	74.7	42.2
6	*5775.00	105.6 AV			1.55 V	353	63.4	42.2
7	#5925.00	59.9 PK	68.2	-8.3	1.49 V	355	52.6	7.3
8	#5953.21	59.0 PK	68.2	-9.2	1.55 V	353	51.7	7.3
9	11550.00	60.5 PK	74.0	-13.5	1.63 V	236	42.4	18.1
10	11550.00	47.6 AV	54.0	-6.4	1.63 V	236	29.5	18.1

Remarks:

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

5G traffic radio (Radio 2)

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	3885.00	49.3 PK	74.0	-24.7	1.59 H	58	45.7	3.6
2	3885.00	42.3 AV	54.0	-11.7	1.59 H	58	38.7	3.6
3	5150.00	72.4 PK	74.0	-1.6	1.75 H	345	65.8	6.6
4	5150.00	50.6 AV	54.0	-3.4	1.75 H	345	44.0	6.6
5	*5180.00	120.2 PK			1.88 H	344	78.0	42.2
6	*5180.00	110.2 AV			1.88 H	344	68.0	42.2
7	#10360.00	58.9 PK	68.2	-9.3	2.22 H	169	42.2	16.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3885.00	48.2 PK	74.0	-25.8	2.89 V	326	44.6	3.6
2	3885.00	39.6 AV	54.0	-14.4	2.89 V	326	36.0	3.6
3	5150.00	70.3 PK	74.0	-3.7	1.70 V	350	63.7	6.6
4	5150.00	49.2 AV	54.0	-4.8	1.70 V	350	42.6	6.6
5	*5180.00	118.4 PK			1.65 V	350	76.2	42.2
6	*5180.00	108.6 AV			1.65 V	350	66.4	42.2
7	#10360.00	58.9 PK	68.2	-9.3	1.99 V	201	42.2	16.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	5150.00	72.1 PK	74.0	-1.9	1.90 H	346	65.5	6.6
2	5150.00	52.8 AV	54.0	-1.2	1.90 H	346	46.2	6.6
3	*5200.00	125.3 PK			1.70 H	344	83.2	42.1
4	*5200.00	115.7 AV			1.70 H	344	73.6	42.1
5	#10400.00	58.7 PK	68.2	-9.5	1.86 H	211	41.8	16.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.3 PK	74.0	-3.7	1.69 V	350	63.7	6.6
2	5150.00	50.6 AV	54.0	-3.4	1.69 V	350	44.0	6.6
3	*5200.00	122.6 PK			1.60 V	348	80.5	42.1
4	*5200.00	113.3 AV			1.60 V	348	71.2	42.1
5	#10400.00	59.4 PK	68.2	-8.8	2.89 V	241	42.5	16.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	5150.00	65.2 PK	74.0	-8.8	1.88 H	344	58.6	6.6
2	5150.00	52.9 AV	54.0	-1.1	1.88 H	344	46.3	6.6
3	*5240.00	125.6 PK			1.69 H	344	83.6	42.0
4	*5240.00	115.5 AV			1.69 H	344	73.5	42.0
5	5350.00	62.6 PK	74.0	-11.4	1.81 H	343	56.2	6.4
6	5350.00	49.6 AV	54.0	-4.4	1.81 H	343	43.2	6.4
7	#10480.00	59.7 PK	68.2	-8.5	2.22 H	193	42.0	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.3 PK	74.0	-7.7	1.72 V	348	59.7	6.6
2	5150.00	52.0 AV	54.0	-2.0	1.72 V	348	45.4	6.6
3	*5240.00	123.1 PK			1.83 V	348	81.1	42.0
4	*5240.00	113.6 AV			1.83 V	348	71.6	42.0
5	5350.00	61.0 PK	74.0	-13.0	1.77 V	351	54.6	6.4
6	5350.00	48.2 AV	54.0	-5.8	1.77 V	351	41.8	6.4
7	#10480.00	60.1 PK	68.2	-8.1	2.61 V	255	42.4	17.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	3830.00	46.2 PK	74.0	-27.8	2.00 H	37	42.8	3.4
2	3830.00	38.2 AV	54.0	-15.8	2.00 H	37	34.8	3.4
3	#5637.18	62.6 PK	68.2	-5.6	1.67 H	356	56.3	6.3
4	*5745.00	125.2 PK			1.67 H	356	83.0	42.2
5	*5745.00	115.5 AV			1.67 H	356	73.3	42.2
6	#5971.15	61.7 PK	68.2	-6.5	1.67 H	356	54.5	7.2
7	11490.00	65.5 PK	74.0	-8.5	2.54 H	348	47.2	18.3
8	11490.00	52.4 AV	54.0	-1.6	2.54 H	348	34.1	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3830.00	45.5 PK	74.0	-28.5	2.82 V	354	42.1	3.4
2	3830.00	37.4 AV	54.0	-16.6	2.82 V	354	34.0	3.4
3	#5637.82	60.7 PK	68.2	-7.5	1.56 V	353	54.4	6.3
4	*5745.00	122.8 PK			1.56 V	353	80.6	42.2
5	*5745.00	112.6 AV			1.56 V	353	70.4	42.2
6	#5985.90	60.4 PK	68.2	-7.8	1.56 V	353	53.2	7.2
7	11490.00	67.5 PK	74.0	-6.5	1.52 V	343	49.2	18.3
8	11490.00	53.0 AV	54.0	-1.0	1.52 V	343	34.7	18.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	#5628.21	58.3 PK	68.2	-9.9	1.68 H	349	52.1	6.2
2	*5785.00	124.8 PK			1.68 H	349	82.6	42.2
3	*5785.00	115.4 AV			1.68 H	349	73.2	42.2
4	#5976.92	60.3 PK	68.2	-7.9	1.68 H	349	53.1	7.2
5	11570.00	67.5 PK	74.0	-6.5	1.68 H	2	49.5	18.0
6	11570.00	52.8 AV	54.0	-1.2	1.68 H	2	34.8	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5645.51	58.2 PK	68.2	-10.0	1.48 V	354	51.9	6.3
2	*5785.00	122.2 PK			1.48 V	354	80.0	42.2
3	*5785.00	112.1 AV			1.48 V	354	69.9	42.2
4	#5936.54	59.5 PK	68.2	-8.7	1.48 V	354	52.2	7.3
5	11570.00	68.4 PK	74.0	-5.6	1.51 V	344	50.4	18.0
6	**11570.00**	**53.5 AV**	**54.0**	**-0.5**	**1.51 V**	**344**	**35.5**	**18.0**

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	#5633.33	60.2 PK	68.2	-8.0	1.66 H	348	53.9	6.3
2	*5825.00	124.8 PK			1.66 H	348	82.5	42.3
3	*5825.00	115.0 AV			1.66 H	348	72.7	42.3
4	#5925.00	62.5 PK	68.2	-5.7	1.66 H	348	55.2	7.3
5	11650.00	65.8 PK	74.0	-8.2	1.67 H	5	47.8	18.0
6	11650.00	52.3 AV	54.0	-1.7	1.67 H	5	34.3	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.72	58.6 PK	68.2	-9.6	1.58 V	354	52.3	6.3
2	*5825.00	122.6 PK			1.58 V	354	80.3	42.3
3	*5825.00	112.4 AV			1.58 V	354	70.1	42.3
4	#5932.69	61.8 PK	68.2	-6.4	1.58 V	354	54.5	7.3
5	11650.00	66.2 PK	74.0	-7.8	1.46 V	323	48.2	18.0
6	11650.00	53.0 AV	54.0	-1.0	1.46 V	323	35.0	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	72.3 PK	74.0	-1.7	1.89 H	348	65.7	6.6
2	5150.00	51.7 AV	54.0	-2.3	1.89 H	348	45.1	6.6
3	*5180.00	122.4 PK			1.88 H	343	80.2	42.2
4	*5180.00	109.6 AV			1.88 H	343	67.4	42.2
5	#10360.00	58.9 PK	68.2	-9.3	1.85 H	196	42.2	16.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	68.6 PK	74.0	-5.4	1.70 V	349	62.0	6.6
2	5150.00	51.1 AV	54.0	-2.9	1.70 V	349	44.5	6.6
3	*5180.00	119.5 PK			1.66 V	351	77.3	42.2
4	*5180.00	107.3 AV			1.66 V	351	65.1	42.2
5	#10360.00	59.2 PK	68.2	-9.0	2.63 V	222	42.5	16.7

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	5150.00	72.4 PK	74.0	-1.6	1.86 H	346	65.8	6.6
2	5150.00	51.9 AV	54.0	-2.1	1.86 H	346	45.3	6.6
3	*5200.00	127.1 PK			1.77 H	344	85.0	42.1
4	*5200.00	114.4 AV			1.77 H	344	72.3	42.1
5	#10400.00	59.2 PK	68.2	-9.0	1.99 H	203	42.3	16.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.2 PK	74.0	-2.8	1.72 V	350	64.6	6.6
2	5150.00	51.6 AV	54.0	-2.4	1.72 V	350	45.0	6.6
3	*5200.00	124.3 PK			1.76 V	348	82.2	42.1
4	*5200.00	111.6 AV			1.76 V	348	69.5	42.1
5	#10400.00	59.4 PK	68.2	-8.8	2.36 V	199	42.5	16.9

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	5150.00	66.1 PK	74.0	-7.9	1.88 H	346	59.5	6.6
2	5150.00	52.6 AV	54.0	-1.4	1.88 H	346	46.0	6.6
3	*5240.00	127.4 PK			1.75 H	342	85.4	42.0
4	*5240.00	114.3 AV			1.75 H	342	72.3	42.0
5	5350.00	62.4 PK	74.0	-11.6	1.70 H	342	56.0	6.4
6	5350.00	49.2 AV	54.0	-4.8	1.70 H	342	42.8	6.4
7	#10480.00	60.1 PK	68.2	-8.1	2.21 H	195	42.4	17.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.8 PK	74.0	-9.2	1.71 V	351	58.2	6.6
2	5150.00	51.1 AV	54.0	-2.9	1.71 V	351	44.5	6.6
3	*5240.00	124.4 PK			1.66 V	347	82.4	42.0
4	*5240.00	112.1 AV			1.66 V	347	70.1	42.0
5	5350.00	60.6 PK	74.0	-13.4	1.76 V	343	54.2	6.4
6	5350.00	47.7 AV	54.0	-6.3	1.76 V	343	41.3	6.4
7	#10480.00	60.1 PK	68.2	-8.1	1.64 V	188	42.4	17.7

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	#5645.51	62.5 PK	68.2	-5.7	1.71 H	352	56.2	6.3
2	*5745.00	126.7 PK			1.71 H	352	84.5	42.2
3	*5745.00	114.4 AV			1.71 H	352	72.2	42.2
4	#5986.54	60.8 PK	68.2	-7.4	1.71 H	352	53.6	7.2
5	11490.00	64.5 PK	74.0	-9.5	1.69 H	3	46.2	18.3
6	11490.00	50.5 AV	54.0	-3.5	1.69 H	3	32.2	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.03	61.0 PK	68.2	-7.2	1.60 V	357	54.7	6.3
2	*5745.00	125.1 PK			1.60 V	357	82.9	42.2
3	*5745.00	111.8 AV			1.60 V	357	69.6	42.2
4	#5936.54	60.4 PK	68.2	-7.8	1.60 V	357	53.1	7.3
5	11490.00	68.1 PK	74.0	-5.9	1.48 V	344	49.8	18.3
6	11490.00	52.8 AV	54.0	-1.2	1.48 V	344	34.5	18.3

Remarks:

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

RF Mode	TX 802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5621.15	59.6 PK	68.2	-8.6	1.69 H	350	53.4	6.2
2	*5785.00	127.4 PK			1.69 H	350	85.2	42.2
3	*5785.00	114.5 AV			1.69 H	350	72.3	42.2
4	#5943.59	60.9 PK	68.2	-7.3	1.69 H	350	53.6	7.3
5	11570.00	66.1 PK	74.0	-7.9	1.68 H	2	48.1	18.0
6	11570.00	52.4 AV	54.0	-1.6	1.68 H	2	34.4	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5606.41	59.6 PK	68.2	-8.6	1.69 V	345	53.4	6.2
2	*5785.00	124.0 PK			1.69 V	345	81.8	42.2
3	*5785.00	111.8 AV			1.69 V	345	69.6	42.2
4	#5970.51	59.9 PK	68.2	-8.3	1.69 V	345	52.7	7.2
5	11570.00	67.5 PK	74.0	-6.5	1.52 V	343	49.5	18.0
6	11570.00	53.4 AV	54.0	-0.6	1.52 V	343	35.4	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	#5609.62	59.4 PK	68.2	-8.8	1.65 H	346	53.2	6.2
2	*5825.00	126.6 PK			1.65 H	346	84.3	42.3
3	*5825.00	114.4 AV			1.65 H	346	72.1	42.3
4	#5927.56	63.5 PK	68.2	-4.7	1.65 H	346	56.2	7.3
5	11650.00	65.3 PK	74.0	-8.7	1.66 H	3	47.3	18.0
6	11650.00	51.9 AV	54.0	-2.1	1.66 H	3	33.9	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5619.87	58.8 PK	68.2	-9.4	1.60 V	353	52.6	6.2
2	*5825.00	123.9 PK			1.60 V	353	81.6	42.3
3	*5825.00	111.7 AV			1.60 V	353	69.4	42.3
4	#5928.21	60.6 PK	68.2	-7.6	1.60 V	353	53.3	7.3
5	11650.00	63.9 PK	74.0	-10.1	1.74 V	354	45.9	18.0
6	11650.00	50.4 AV	54.0	-3.6	1.74 V	354	32.4	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	69.8 PK	74.0	-4.2	1.78 H	346	63.2	6.6
2	5150.00	53.0 AV	54.0	-1.0	1.78 H	346	46.4	6.6
3	*5190.00	118.6 PK			1.72 H	347	76.5	42.1
4	*5190.00	105.5 AV			1.72 H	347	63.4	42.1
5	#10380.00	59.1 PK	68.2	-9.1	2.29 H	173	42.3	16.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.4 PK	74.0	-7.6	1.67 V	352	59.8	6.6
2	5150.00	50.8 AV	54.0	-3.2	1.67 V	352	44.2	6.6
3	*5190.00	115.0 PK			1.68 V	351	72.9	42.1
4	*5190.00	103.0 AV			1.68 V	351	60.9	42.1
5	#10420.00	59.4 PK	68.2	-8.8	1.95 V	205	42.2	17.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	69.0 PK	74.0	-5.0	1.76 H	345	62.4	6.6
2	5150.00	53.0 AV	54.0	-1.0	1.76 H	345	46.4	6.6
3	*5230.00	122.0 PK			1.61 H	345	80.0	42.0
4	*5230.00	110.3 AV			1.61 H	345	68.3	42.0
5	#10460.00	59.6 PK	68.2	-8.6	2.29 H	162	42.2	17.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	66.5 PK	74.0	-7.5	1.58 V	351	59.9	6.6
2	5150.00	51.7 AV	54.0	-2.3	1.58 V	351	45.1	6.6
3	*5230.00	120.5 PK			1.47 V	349	78.5	42.0
4	*5230.00	107.7 AV			1.47 V	349	65.7	42.0
5	#10460.00	59.5 PK	68.2	-8.7	2.02 V	216	42.1	17.4

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	#5636.54	62.4 PK	68.2	-5.8	1.76 H	344	56.1	6.3
2	*5755.00	123.7 PK			1.76 H	344	81.4	42.3
3	*5755.00	112.0 AV			1.76 H	344	69.7	42.3
4	#5974.36	61.1 PK	68.2	-7.1	1.76 H	344	53.9	7.2
5	11510.00	61.7 PK	74.0	-12.3	1.66 H	338	43.5	18.2
6	11510.00	49.4 AV	54.0	-4.6	1.66 H	338	31.2	18.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5649.36	62.0 PK	68.2	-6.2	1.53 V	350	55.7	6.3
2	*5755.00	121.7 PK			1.53 V	350	79.4	42.3
3	*5755.00	109.8 AV			1.53 V	350	67.5	42.3
4	#5942.31	60.1 PK	68.2	-8.1	1.53 V	350	52.8	7.3
5	11510.00	65.2 PK	74.0	-8.8	1.54 V	345	47.0	18.2
6	11510.00	52.2 AV	54.0	-1.8	1.54 V	345	34.0	18.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	#5645.51	60.9 PK	68.2	-7.3	1.69 H	351	54.6	6.3
2	*5795.00	123.6 PK			1.69 H	351	81.4	42.2
3	*5795.00	111.9 AV			1.69 H	351	69.7	42.2
4	#5926.92	63.0 PK	68.2	-5.2	1.69 H	351	55.7	7.3
5	11590.00	61.5 PK	74.0	-12.5	1.59 H	330	43.7	17.8
6	11590.00	48.5 AV	54.0	-5.5	1.59 H	330	30.7	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5610.26	58.6 PK	68.2	-9.6	1.66 V	343	52.4	6.2
2	*5795.00	121.6 PK			1.66 V	343	79.4	42.2
3	*5795.00	109.1 AV			1.66 V	343	66.9	42.2
4	#5928.85	60.5 PK	68.2	-7.7	1.66 V	343	53.2	7.3
5	11590.00	64.0 PK	74.0	-10.0	1.53 V	344	46.2	17.8
6	11590.00	51.2 AV	54.0	-2.8	1.53 V	344	33.4	17.8

Remarks:

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

RF Mode	TX 802.11ax (HE80)	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	67.2 PK	74.0	-6.8	1.82 H	345	60.6	6.6
2	5150.00	53.0 AV	54.0	-1.0	1.82 H	345	46.4	6.6
3	*5210.00	115.6 PK			1.66 H	343	73.6	42.0
4	*5210.00	103.1 AV			1.66 H	343	61.1	42.0
5	5350.00	61.1 PK	74.0	-12.9	1.55 H	343	54.7	6.4
6	5350.00	48.5 AV	54.0	-5.5	1.55 H	343	42.1	6.4
7	#10420.00	59.4 PK	68.2	-8.8	2.15 H	172	42.2	17.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.9 PK	74.0	-8.1	1.59 V	350	59.3	6.6
2	5150.00	51.4 AV	54.0	-2.6	1.59 V	350	44.8	6.6
3	*5210.00	113.0 PK			1.65 V	349	71.0	42.0
4	*5210.00	100.7 AV			1.65 V	349	58.7	42.0
5	5350.00	58.9 PK	74.0	-15.1	1.50 V	348	52.5	6.4
6	5350.00	45.9 AV	54.0	-8.1	1.50 V	348	39.5	6.4
7	#10420.00	59.3 PK	68.2	-8.9	2.02 V	211	42.1	17.2

Remarks:

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

RF Mode	TX 802.11ax (HE80)	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	#5647.44	65.5 PK	68.2	-2.7	1.55 H	350	59.2	6.3
2	#5650.00	66.7 PK	68.2	-1.5	1.77 H	342	60.4	6.3
3	*5775.00	118.2 PK			1.78 H	356	76.0	42.2
4	*5775.00	105.7 AV			1.78 H	356	63.5	42.2
5	#5925.00	67.2 PK	68.2	-1.0	1.55 H	348	59.9	7.3
6	#5934.62	64.4 PK	68.2	-3.8	1.55 H	350	57.1	7.3
7	11550.00	60.2 PK	74.0	-13.8	1.37 H	323	42.1	18.1
8	11550.00	47.0 AV	54.0	-7.0	1.37 H	323	28.9	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5644.23	62.5 PK	68.2	-5.7	1.67 V	342	56.2	6.3
2	#5650.00	66.2 PK	68.2	-2.0	1.57 V	353	59.9	6.3
3	*5775.00	115.2 PK			1.67 V	342	73.0	42.2
4	*5775.00	103.3 AV			1.67 V	342	61.1	42.2
5	#5925.00	66.0 PK	68.2	-2.2	1.69 V	359	58.7	7.3
6	#5928.21	65.0 PK	68.2	-3.2	1.67 V	342	57.7	7.3
7	11550.00	61.3 PK	74.0	-12.7	1.74 V	355	43.2	18.1
8	11550.00	47.6 AV	54.0	-6.4	1.74 V	355	29.5	18.1

Remarks:

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

Scanning radio (Radio 3)

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	67.9 PK	74.0	-6.1	1.48 H	16	61.3	6.6
2	5150.00	48.2 AV	54.0	-5.8	1.48 H	16	41.6	6.6
3	*5180.00	111.7 PK			1.43 H	15	69.5	42.2
4	*5180.00	102.3 AV			1.43 H	15	60.1	42.2
5	#10360.00	58.7 PK	68.2	-9.5	1.96 H	11	42.0	16.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.2 PK	74.0	-2.8	2.30 V	353	64.6	6.6
2	5150.00	52.5 AV	54.0	-1.5	2.30 V	353	45.9	6.6
3	*5180.00	117.7 PK			2.33 V	359	75.5	42.2
4	*5180.00	108.3 AV			2.33 V	359	66.1	42.2
5	#10360.00	58.4 PK	68.2	-9.8	2.22 V	188	41.7	16.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	5150.00	64.6 PK	74.0	-9.4	1.42 H	9	58.0	6.6
2	5150.00	48.1 AV	54.0	-5.9	1.42 H	9	41.5	6.6
3	*5200.00	115.2 PK			1.35 H	10	73.1	42.1
4	*5200.00	105.7 AV			1.35 H	10	63.6	42.1
5	#10400.00	58.5 PK	68.2	-9.7	1.28 H	113	41.6	16.9
6	15600.00	66.3 PK	74.0	-7.7	1.33 H	16	48.5	17.8
7	15600.00	50.8 AV	54.0	-3.2	1.33 H	16	33.0	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.4 PK	74.0	-2.6	2.24 V	354	64.8	6.6
2	5150.00	52.8 AV	54.0	-1.2	2.24 V	354	46.2	6.6
3	*5200.00	120.6 PK			2.13 V	346	78.5	42.1
4	*5200.00	111.3 AV			2.13 V	346	69.2	42.1
5	#10400.00	59.5 PK	68.2	-8.7	1.96 V	251	42.6	16.9
6	15600.00	66.4 PK	74.0	-7.6	2.31 V	16	48.6	17.8
7	15600.00	50.1 AV	54.0	-3.9	2.31 V	16	32.3	17.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	5150.00	60.4 PK	74.0	-13.6	1.46 H	14	53.8	6.6
2	5150.00	47.6 AV	54.0	-6.4	1.46 H	14	41.0	6.6
3	*5240.00	114.4 PK			1.44 H	7	72.4	42.0
4	*5240.00	104.7 AV			1.44 H	7	62.7	42.0
5	5350.00	58.7 PK	74.0	-15.3	1.37 H	19	52.3	6.4
6	5350.00	46.2 AV	54.0	-7.8	1.37 H	19	39.8	6.4
7	#10480.00	59.3 PK	68.2	-8.9	1.22 H	18	41.6	17.7
8	15720.00	61.7 PK	74.0	-12.3	1.44 H	2	44.7	17.0
9	15720.00	48.0 AV	54.0	-6.0	1.44 H	2	31.0	17.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	65.9 PK	74.0	-8.1	2.36 V	356	59.3	6.6
2	5150.00	52.9 AV	54.0	-1.1	2.36 V	356	46.3	6.6
3	*5240.00	119.9 PK			2.48 V	355	77.9	42.0
4	*5240.00	110.3 AV			2.48 V	355	68.3	42.0
5	5350.00	60.7 PK	74.0	-13.3	2.35 V	346	54.3	6.4
6	5350.00	47.9 AV	54.0	-6.1	2.35 V	346	41.5	6.4
7	#10480.00	59.9 PK	68.2	-8.3	2.52 V	186	42.2	17.7
8	15720.00	61.7 PK	74.0	-12.3	2.44 V	18	44.7	17.0
9	15720.00	48.0 AV	54.0	-6.0	2.44 V	18	31.0	17.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	#5637.18	58.3 PK	68.2	-9.9	3.64 H	1	52.0	6.3
2	*5745.00	115.3 PK			3.64 H	1	73.1	42.2
3	*5745.00	104.6 AV			3.64 H	1	62.4	42.2
4	#5926.28	59.1 PK	68.2	-9.1	3.64 H	1	51.8	7.3
5	11490.00	59.9 PK	74.0	-14.1	1.93 H	33	41.6	18.3
6	11490.00	46.4 AV	54.0	-7.6	1.93 H	33	28.1	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5642.95	64.0 PK	68.2	-4.2	1.49 V	331	57.7	6.3
2	*5745.00	122.5 PK			1.49 V	332	80.3	42.2
3	*5745.00	112.6 AV			1.49 V	332	70.4	42.2
4	#5940.38	60.1 PK	68.2	-8.1	1.49 V	331	52.8	7.3
5	11490.00	62.8 PK	74.0	-11.2	1.43 V	345	44.5	18.3
6	11490.00	49.3 AV	54.0	-4.7	1.43 V	345	31.0	18.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	#5612.18	57.3 PK	68.2	-10.9	3.59 H	359	51.1	6.2
2	*5785.00	113.6 PK			3.59 H	359	71.4	42.2
3	*5785.00	103.8 AV			3.59 H	359	61.6	42.2
4	#5983.97	58.5 PK	68.2	-9.7	3.59 H	359	51.3	7.2
5	11570.00	59.3 PK	74.0	-14.7	2.09 H	39	41.3	18.0
6	11570.00	47.0 AV	54.0	-7.0	2.09 H	39	29.0	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5619.23	59.4 PK	68.2	-8.8	2.21 V	333	53.2	6.2
2	*5785.00	121.0 PK			2.21 V	333	78.8	42.2
3	*5785.00	111.5 AV			2.21 V	333	69.3	42.2
4	#5946.79	60.2 PK	68.2	-8.0	2.21 V	333	52.9	7.3
5	11570.00	59.7 PK	74.0	-14.3	1.46 V	13	41.7	18.0
6	11570.00	47.4 AV	54.0	-6.6	1.46 V	13	29.4	18.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
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	#5635.90	58.4 PK	68.2	-9.8	3.73 H	5	52.1	6.3
2	*5825.00	112.5 PK			3.73 H	5	70.2	42.3
3	*5825.00	102.9 AV			3.73 H	5	60.6	42.3
4	#5928.85	59.0 PK	68.2	-9.2	3.73 H	5	51.7	7.3
5	11650.00	60.9 PK	74.0	-13.1	2.01 H	29	42.9	18.0
6	11650.00	47.5 AV	54.0	-6.5	2.01 H	29	29.5	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5628.21	60.2 PK	68.2	-8.0	2.09 V	330	54.0	6.2
2	*5825.00	120.1 PK			2.09 V	330	77.8	42.3
3	*5825.00	110.7 AV			2.09 V	330	68.4	42.3
4	#5928.85	62.8 PK	68.2	-5.4	2.09 V	330	55.5	7.3
5	11650.00	63.8 PK	74.0	-10.2	1.56 V	0	45.8	18.0
6	11650.00	50.6 AV	54.0	-3.4	1.56 V	0	32.6	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	65.6 PK	74.0	-8.4	1.48 H	11	59.0	6.6
2	5150.00	48.7 AV	54.0	-5.3	1.48 H	11	42.1	6.6
3	*5180.00	113.6 PK			1.56 H	16	71.4	42.2
4	*5180.00	101.1 AV			1.56 H	16	58.9	42.2
5	#10360.00	59.1 PK	68.2	-9.1	1.88 H	203	42.4	16.7
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	71.9 PK	74.0	-2.1	1.55 V	336	65.3	6.6
2	5150.00	52.9 AV	54.0	-1.1	1.55 V	336	46.3	6.6
3	*5180.00	119.4 PK			1.59 V	336	77.2	42.2
4	*5180.00	106.9 AV			1.59 V	336	64.7	42.2
5	#10360.00	59.1 PK	68.2	-9.1	1.83 V	264	42.4	16.7

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	5150.00	64.6 PK	74.0	-9.4	1.39 H	13	58.0	6.6
2	5150.00	47.9 AV	54.0	-6.1	1.39 H	13	41.3	6.6
3	*5200.00	116.1 PK			1.48 H	11	74.0	42.1
4	*5200.00	103.9 AV			1.48 H	11	61.8	42.1
5	#10400.00	59.0 PK	68.2	-9.2	1.49 H	22	42.1	16.9
6	15600.00	65.3 PK	74.0	-8.7	1.36 H	16	47.5	17.8
7	15600.00	49.4 AV	54.0	-4.6	1.36 H	16	31.6	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	72.1 PK	74.0	-1.9	1.54 V	336	65.5	6.6
2	5150.00	52.6 AV	54.0	-1.4	1.54 V	336	46.0	6.6
3	*5200.00	122.0 PK			1.29 V	331	79.9	42.1
4	*5200.00	110.2 AV			1.29 V	331	68.1	42.1
5	#10400.00	59.2 PK	68.2	-9.0	2.26 V	219	42.3	16.9
6	15600.00	64.6 PK	74.0	-9.4	2.17 V	12	46.8	17.8
7	15600.00	49.0 AV	54.0	-5.0	2.17 V	12	31.2	17.8

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	5150.00	60.6 PK	74.0	-13.4	1.35 H	12	54.0	6.6
2	5150.00	47.6 AV	54.0	-6.4	1.35 H	12	41.0	6.6
3	*5240.00	115.7 PK			1.32 H	6	73.7	42.0
4	*5240.00	104.0 AV			1.32 H	6	62.0	42.0
5	5350.00	57.9 PK	74.0	-16.1	1.28 H	3	51.5	6.4
6	5350.00	45.4 AV	54.0	-8.6	1.28 H	3	39.0	6.4
7	#10480.00	60.0 PK	68.2	-8.2	1.88 H	210	42.3	17.7
8	15720.00	63.3 PK	74.0	-10.7	1.44 H	2	46.3	17.0
9	15720.00	47.9 AV	54.0	-6.1	1.44 H	2	30.9	17.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	67.6 PK	74.0	-6.4	2.25 V	358	61.0	6.6
2	5150.00	52.4 AV	54.0	-1.6	2.25 V	358	45.8	6.6
3	*5240.00	121.8 PK			2.37 V	355	79.8	42.0
4	*5240.00	109.8 AV			2.37 V	355	67.8	42.0
5	5350.00	60.9 PK	74.0	-13.1	2.08 V	319	54.5	6.4
6	5350.00	47.6 AV	54.0	-6.4	2.08 V	319	41.2	6.4
7	#10480.00	59.9 PK	68.2	-8.3	1.99 V	183	42.2	17.7
8	15720.00	61.8 PK	74.0	-12.2	2.38 V	17	44.8	17.0
9	15720.00	47.3 AV	54.0	-6.7	2.38 V	17	30.3	17.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	#5637.18	58.1 PK	68.2	-10.1	3.64 H	1	51.8	6.3
2	*5745.00	116.1 PK			3.64 H	1	73.9	42.2
3	*5745.00	103.5 AV			3.64 H	1	61.3	42.2
4	#5939.74	58.8 PK	68.2	-9.4	3.64 H	1	51.5	7.3
5	11490.00	59.8 PK	74.0	-14.2	2.36 H	292	41.5	18.3
6	11490.00	47.1 AV	54.0	-6.9	2.36 H	292	28.8	18.3
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5641.03	62.9 PK	68.2	-5.3	1.43 V	333	56.6	6.3
2	*5745.00	125.1 PK			1.43 V	333	82.9	42.2
3	*5745.00	111.7 AV			1.43 V	333	69.5	42.2
4	#5958.33	59.7 PK	68.2	-8.5	1.43 V	333	52.4	7.3
5	11490.00	61.4 PK	74.0	-12.6	1.79 V	15	43.1	18.3
6	11490.00	48.3 AV	54.0	-5.7	1.79 V	15	30.0	18.3

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	#5604.49	57.5 PK	68.2	-10.7	3.60 H	1	51.3	6.2
2	*5785.00	114.6 PK			3.60 H	1	72.4	42.2
3	*5785.00	103.2 AV			3.60 H	1	61.0	42.2
4	#5965.38	58.6 PK	68.2	-9.6	3.60 H	1	51.3	7.3
5	11570.00	62.5 PK	74.0	-11.5	2.49 H	294	44.5	18.0
6	11570.00	49.3 AV	54.0	-4.7	2.49 H	294	31.3	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.79	59.6 PK	68.2	-8.6	1.57 V	332	53.3	6.3
2	*5785.00	123.9 PK			1.57 V	332	81.7	42.2
3	*5785.00	111.4 AV			1.57 V	332	69.2	42.2
4	#5960.26	60.5 PK	68.2	-7.7	1.57 V	332	53.2	7.3
5	11570.00	64.3 PK	74.0	-9.7	1.37 V	12	46.3	18.0
6	11570.00	50.5 AV	54.0	-3.5	1.37 V	12	32.5	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE20)	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	#5628.21	57.0 PK	68.2	-11.2	1.50 H	2	50.8	6.2
2	*5825.00	115.8 PK			1.50 H	2	73.5	42.3
3	*5825.00	102.7 AV			1.50 H	2	60.4	42.3
4	#5944.87	59.4 PK	68.2	-8.8	1.50 H	2	52.1	7.3
5	11650.00	64.2 PK	74.0	-9.8	2.01 H	302	46.2	18.0
6	11650.00	51.3 AV	54.0	-2.7	2.01 H	302	33.3	18.0
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5612.18	59.1 PK	68.2	-9.1	1.64 V	333	52.9	6.2
2	*5825.00	123.4 PK			1.64 V	333	81.1	42.3
3	*5825.00	111.0 AV			1.64 V	333	68.7	42.3
4	#5929.49	64.7 PK	68.2	-3.5	1.64 V	333	57.4	7.3
5	11650.00	63.8 PK	74.0	-10.2	1.44 V	342	45.8	18.0
6	11650.00	50.9 AV	54.0	-3.1	1.44 V	342	32.9	18.0

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	64.8 PK	74.0	-9.2	1.61 H	20	58.2	6.6
2	5150.00	48.6 AV	54.0	-5.4	1.61 H	20	42.0	6.6
3	*5190.00	108.0 PK			1.56 H	15	65.9	42.1
4	*5190.00	96.5 AV			1.56 H	15	54.4	42.1
5	#10380.00	59.7 PK	68.2	-8.5	2.15 H	22	42.9	16.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	72.6 PK	74.0	-1.4	1.60 V	336	66.0	6.6
2	5150.00	53.0 AV	54.0	-1.0	1.60 V	336	46.4	6.6
3	*5190.00	114.3 PK			1.72 V	337	72.2	42.1
4	*5190.00	102.3 AV			1.72 V	337	60.2	42.1
5	#10380.00	59.2 PK	68.2	-9.0	1.93 V	201	42.4	16.8

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	62.5 PK	74.0	-11.5	1.69 H	22	55.9	6.6
2	5150.00	48.1 AV	54.0	-5.9	1.69 H	22	41.5	6.6
3	*5230.00	112.9 PK			1.57 H	19	70.9	42.0
4	*5230.00	101.5 AV			1.57 H	19	59.5	42.0
5	#10460.00	59.5 PK	68.2	-8.7	2.23 H	17	42.1	17.4
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	70.1 PK	74.0	-3.9	1.55 V	335	63.5	6.6
2	5150.00	52.7 AV	54.0	-1.3	1.55 V	335	46.1	6.6
3	*5230.00	119.1 PK			1.64 V	335	77.1	42.0
4	*5230.00	107.3 AV			1.64 V	335	65.3	42.0
5	#10460.00	58.9 PK	68.2	-9.3	1.99 V	209	41.5	17.4

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	#5636.54	58.3 PK	68.2	-9.9	2.39 H	333	52.0	6.3
2	#5650.00	60.7 PK	68.2	-7.5	2.34 H	334	54.4	6.3
3	*5755.00	113.1 PK			2.39 H	333	70.8	42.3
4	*5755.00	101.1 AV			2.39 H	333	58.8	42.3
5	#5957.69	58.9 PK	68.2	-9.3	2.39 H	333	51.6	7.3
6	11510.00	59.7 PK	74.0	-14.3	2.22 H	304	41.5	18.2
7	11510.00	49.3 AV	54.0	-4.7	2.22 H	304	31.1	18.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5642.95	63.5 PK	68.2	-4.7	1.61 V	333	57.2	6.3
2	#5650.00	67.2 PK	68.2	-1.0	1.69 V	333	60.9	6.3
3	*5755.00	120.8 PK			1.61 V	333	78.5	42.3
4	*5755.00	108.0 AV			1.61 V	333	65.7	42.3
5	#5935.26	60.0 PK	68.2	-8.2	1.61 V	333	52.7	7.3
6	11510.00	62.5 PK	74.0	-11.5	1.53 V	337	44.3	18.2
7	11510.00	49.2 AV	54.0	-4.8	1.53 V	337	31.0	18.2

Remarks:

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

RF Mode	TX 802.11ax (HE40)	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	#5639.10	58.1 PK	68.2	-10.1	2.46 H	335	51.8	6.3
2	#5650.00	58.8 PK	68.2	-9.4	2.79 H	14	52.5	6.3
3	*5795.00	114.5 PK			2.46 H	335	72.3	42.2
4	*5795.00	102.2 AV			2.46 H	335	60.0	42.2
5	#5950.00	58.6 PK	68.2	-9.6	2.46 H	335	51.3	7.3
6	11590.00	58.8 PK	74.0	-15.2	2.51 H	328	41.0	17.8
7	11590.00	46.1 AV	54.0	-7.9	2.51 H	328	28.3	17.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5639.74	64.4 PK	68.2	-3.8	1.67 V	330	58.1	6.3
2	#5650.00	65.9 PK	68.2	-2.3	1.64 V	329	59.6	6.3
3	*5795.00	121.5 PK			1.67 V	330	79.3	42.2
4	*5795.00	108.8 AV			1.67 V	330	66.6	42.2
5	#5937.82	60.0 PK	68.2	-8.2	1.67 V	330	52.7	7.3
6	11590.00	63.5 PK	74.0	-10.5	1.64 V	360	45.7	17.8
7	11590.00	50.2 AV	54.0	-3.8	1.64 V	360	32.4	17.8

Remarks:

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

RF Mode	TX 802.11ax (HE80)	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	65.1 PK	74.0	-8.9	1.71 H	17	58.5	6.6
2	5150.00	46.7 AV	54.0	-7.3	1.71 H	17	40.1	6.6
3	*5210.00	106.2 PK			1.75 H	23	64.2	42.0
4	*5210.00	94.4 AV			1.75 H	23	52.4	42.0
5	5350.00	58.9 PK	74.0	-15.1	1.66 H	25	52.5	6.4
6	5350.00	46.1 AV	54.0	-7.9	1.66 H	25	39.7	6.4
7	#10420.00	59.1 PK	68.2	-9.1	2.12 H	23	41.9	17.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	72.8 PK	74.0	-1.2	1.53 V	334	66.2	6.6
2	5150.00	51.3 AV	54.0	-2.7	1.53 V	334	44.7	6.6
3	*5210.00	112.5 PK			1.65 V	329	70.5	42.0
4	*5210.00	100.2 AV			1.65 V	329	58.2	42.0
5	5350.00	61.1 PK	74.0	-12.9	1.61 V	340	54.7	6.4
6	5350.00	48.4 AV	54.0	-5.6	1.61 V	340	42.0	6.4
7	#10420.00	58.7 PK	68.2	-9.5	2.01 V	223	41.5	17.2

Remarks:

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

RF Mode	TX 802.11ax (HE80)	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	#5638.46	58.1 PK	68.2	-10.1	2.94 H	12	51.8	6.3
2	#5650.00	59.3 PK	68.2	-8.9	2.42 H	329	53.0	6.3
3	*5775.00	108.5 PK			2.94 H	12	66.3	42.2
4	*5775.00	96.0 AV			2.94 H	12	53.8	42.2
5	#5925.00	57.4 PK	68.2	-10.8	2.55 H	312	50.1	7.3
6	#5994.23	58.7 PK	68.2	-9.5	2.94 H	12	51.5	7.2
7	11550.00	59.7 PK	74.0	-14.3	2.73 H	276	41.6	18.1
8	11550.00	46.6 AV	54.0	-7.4	2.73 H	276	28.5	18.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5648.08	64.1 PK	68.2	-4.1	1.60 V	334	57.8	6.3
2	#5650.00	67.2 PK	68.2	-1.0	1.37 V	332	60.9	6.3
3	*5775.00	114.5 PK			1.60 V	334	72.3	42.2
4	*5775.00	102.4 AV			1.60 V	334	60.2	42.2
5	#5925.00	64.1 PK	68.2	-4.1	1.33 V	341	56.8	7.3
6	#5995.51	58.8 PK	68.2	-9.4	1.60 V	334	51.6	7.2
7	11550.00	61.1 PK	74.0	-12.9	1.42 V	353	43.0	18.1
8	11550.00	48.1 AV	54.0	-5.9	1.42 V	353	30.0	18.1

Remarks:

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

Below 1GHz Worst-Case Data:

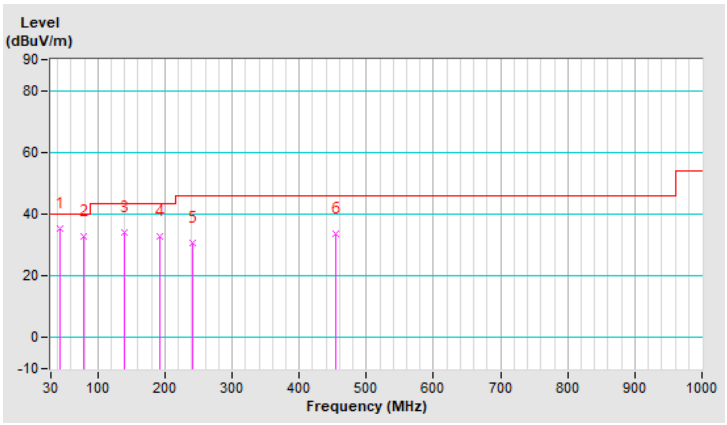
5G traffic radio (Radio 1)

RF Mode	TX 802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	30MHz ~ 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	44.06	35.5 QP	40.0	-4.5	1.00 H	250	44.7	-9.2
2	79.20	32.7 QP	40.0	-7.3	1.50 H	106	45.8	-13.1
3	139.65	33.9 QP	43.5	-9.6	1.50 H	143	42.9	-9.0
4	191.67	32.9 QP	43.5	-10.6	2.00 H	259	43.9	-11.0
5	240.87	30.6 QP	46.0	-15.4	1.50 H	54	39.7	-9.1
6	454.55	33.5 QP	46.0	-12.5	2.00 H	169	36.6	-3.1

Remarks:

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

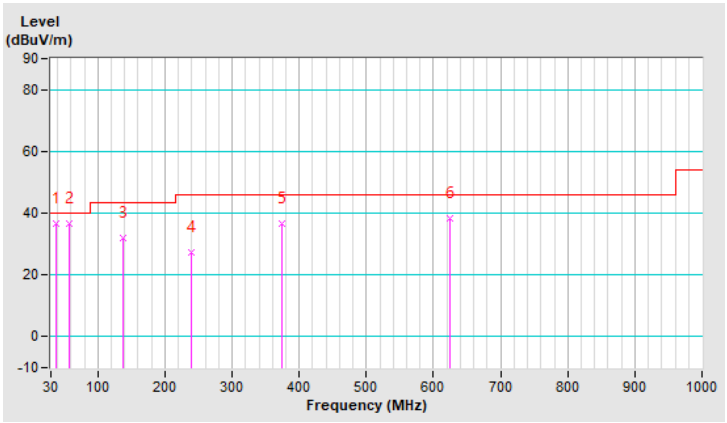


RF Mode	TX 802.11ax (HE20)	Channel	CH 157：5785 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	38.43	36.7 QP	40.0	-3.3	1.50 V	265	46.5	-9.8
2	58.12	36.8 QP	40.0	-3.2	1.50 V	14	46.1	-9.3
3	138.25	31.9 QP	43.5	-11.6	1.50 V	274	41.0	-9.1
4	239.46	27.1 QP	46.0	-18.9	1.50 V	14	36.3	-9.2
5	374.42	36.6 QP	46.0	-9.4	1.00 V	142	41.7	-5.1
6	624.65	38.2 QP	46.0	-7.8	2.00 V	187	37.4	0.8

Remarks:

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



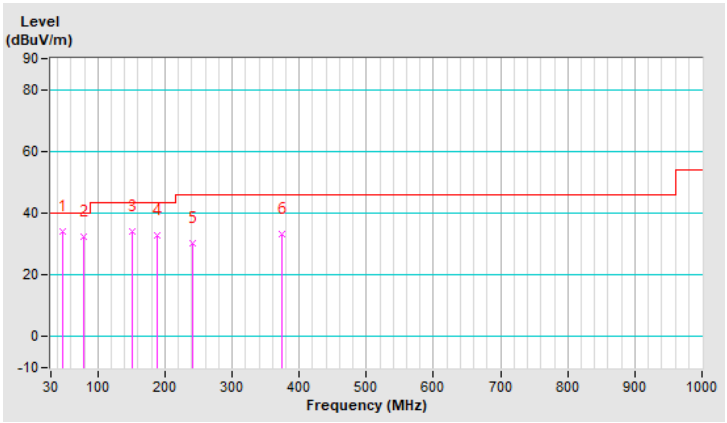
5G traffic radio (Radio 2)

RF Mode	TX 802.11ax (HE40)	Channel	CH 159：5795 MHz
Frequency Range	30MHz ~ 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	46.87	34.0 QP	40.0	-6.0	1.00 H	256	43.2	-9.2
2	79.20	32.3 QP	40.0	-7.7	1.50 H	275	45.4	-13.1
3	150.90	33.9 QP	43.5	-9.6	1.50 H	150	42.5	-8.6
4	187.45	32.6 QP	43.5	-10.9	2.00 H	246	43.3	-10.7
5	240.87	30.1 QP	46.0	-15.9	1.50 H	264	39.2	-9.1
6	374.42	33.3 QP	46.0	-12.7	1.00 H	132	38.4	-5.1

Remarks:

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

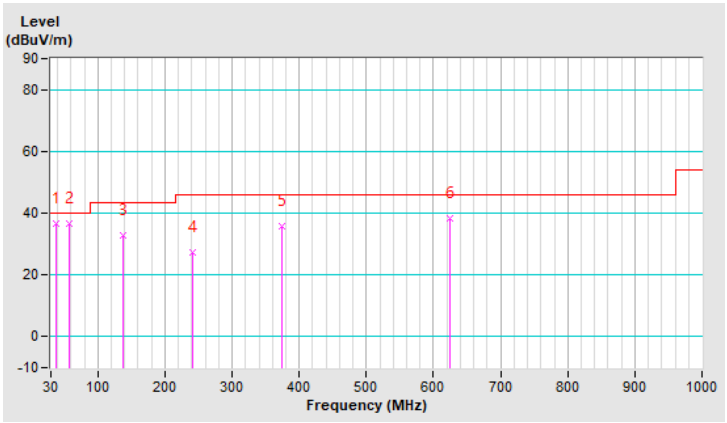


RF Mode	TX 802.11ax (HE40)	Channel	CH 159：5795 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	37.03	36.8 QP	40.0	-3.2	1.50 V	175	46.8	-10.0
2	58.12	36.8 QP	40.0	-3.2	1.00 V	53	46.1	-9.3
3	138.25	33.0 QP	43.5	-10.5	1.50 V	276	42.1	-9.1
4	240.87	27.4 QP	46.0	-18.6	1.00 V	22	36.5	-9.1
5	374.42	35.9 QP	46.0	-10.1	1.50 V	143	41.0	-5.1
6	624.65	38.1 QP	46.0	-7.9	1.00 V	173	37.3	0.8

Remarks:

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



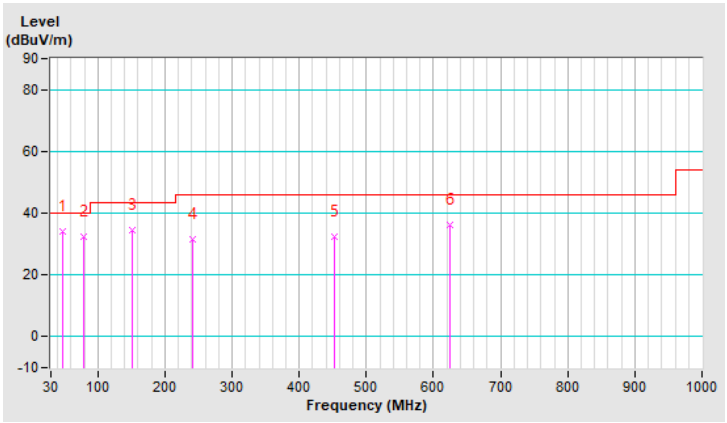
Scanning radio (Radio 3)

RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	30MHz ~ 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	46.87	34.1 QP	40.0	-5.9	1.50 H	247	43.3	-9.2
2	79.20	32.5 QP	40.0	-7.5	1.50 H	124	45.6	-13.1
3	150.90	34.3 QP	43.5	-9.2	1.50 H	164	42.9	-8.6
4	240.87	31.4 QP	46.0	-14.6	1.00 H	255	40.5	-9.1
5	453.14	32.3 QP	46.0	-13.7	1.50 H	175	35.5	-3.2
6	624.65	36.2 QP	46.0	-9.8	2.00 H	228	35.4	0.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

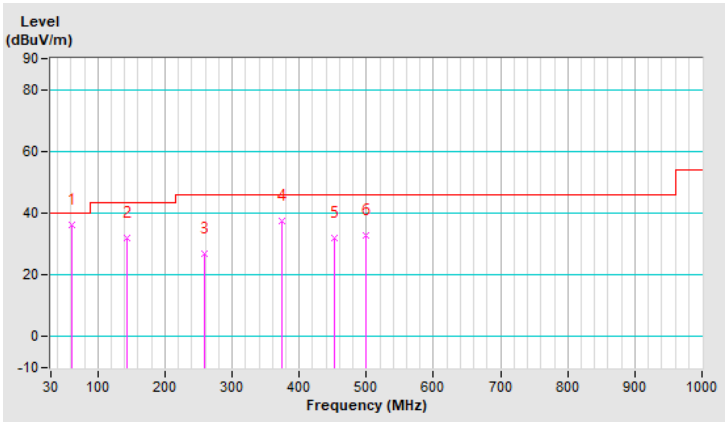


RF Mode	TX 802.11a	Channel	CH 48：5240 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	60.93	36.3 QP	40.0	-3.7	1.00 V	342	46.1	-9.8
2	142.46	31.9 QP	43.5	-11.6	1.50 V	276	40.8	-8.9
3	259.14	27.0 QP	46.0	-19.0	1.50 V	358	35.1	-8.1
4	374.42	37.3 QP	46.0	-8.7	2.00 V	145	42.4	-5.1
5	453.14	32.0 QP	46.0	-14.0	1.50 V	218	35.2	-3.2
6	499.54	32.9 QP	46.0	-13.1	1.00 V	329	35.2	-2.3

Remarks:

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

Test Date: Dec. 25, 2020

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Dec. 31, 2019	Dec. 30, 2020
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Sep. 04, 2020	Sep. 03, 2021
V-LISN SCHWARZBECK (EUT)	ENV216	101826	Feb. 20, 2020	Feb. 19, 2021
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 28, 2020	Aug. 27, 2021
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1 (Conduction 1).
3. The VCCI Site Registration No. is C-12040.

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.

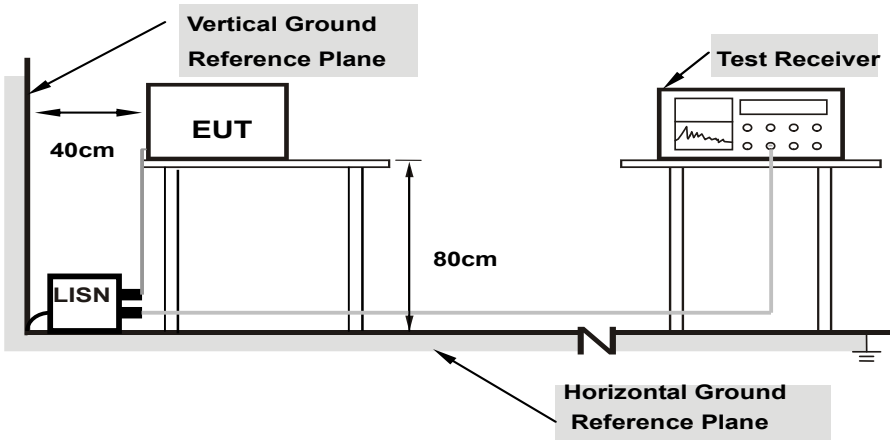
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

Worst-case data:

5G traffic radio (Radio 1)

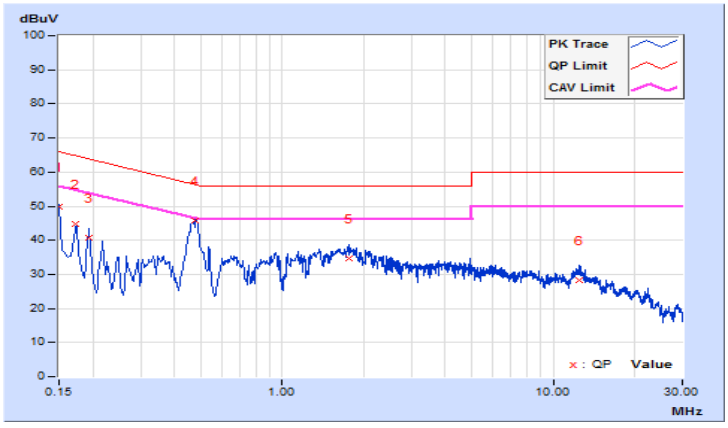
802.11ax (HE20)

Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 67%RH
Tested by	Adair Peng	**Test Date**	2020/12/25

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.65	40.07	27.38	49.72	37.03	66.00	56.00	-16.28	-18.97
2	0.17293	9.65	35.20	21.99	44.85	31.64	64.82	54.82	-19.97	-23.18
3	0.19400	9.66	31.13	17.19	40.79	26.85	63.86	53.86	-23.07	-27.01
4	0.47800	9.66	36.20	31.46	45.86	41.12	56.37	46.37	-10.51	-5.25
5	1.76200	9.69	25.13	20.91	34.82	30.60	56.00	46.00	-21.18	-15.40
6	12.54600	9.82	18.30	13.54	28.12	23.36	60.00	50.00	-31.88	-26.64

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

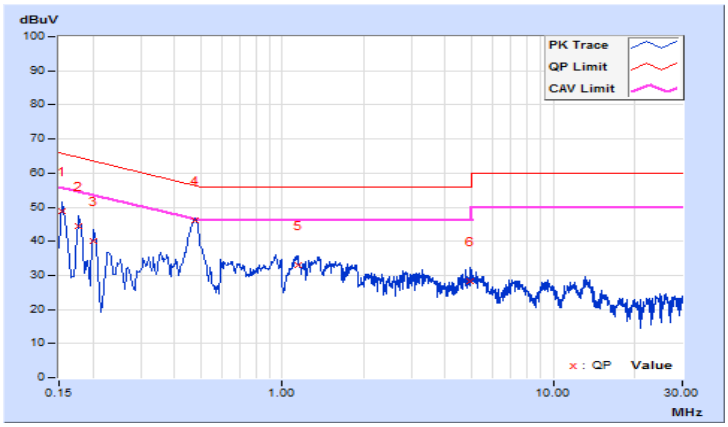


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 67%RH
Tested by	Adair Peng	**Test Date**	2020/12/25

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15400	9.68	39.10	26.14	48.78	35.82	65.78	55.78	-17.00	-19.96
2	0.17800	9.68	34.71	20.81	44.39	30.49	64.58	54.58	-20.19	-24.09
3	0.20200	9.68	30.26	16.19	39.94	25.87	63.53	53.53	-23.59	-27.66
4	**0.47800**	**9.68**	**36.38**	**31.67**	**46.06**	**41.35**	**56.37**	**46.37**	**-10.31**	**-5.02**
5	1.14200	9.70	23.28	19.10	32.98	28.80	56.00	46.00	-23.02	-17.20
6	4.95000	9.78	18.35	12.13	28.13	21.91	56.00	46.00	-27.87	-24.09

Remarks:

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



5G traffic radio (Radio 2)

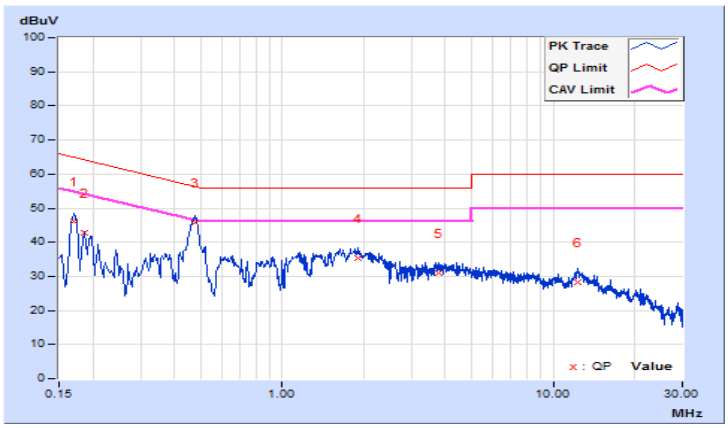
802.11ax (HE40)

Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 67%RH
Tested by	Adair Peng	**Test Date**	2020/12/25

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.17000	9.65	36.31	23.17	45.96	32.82	64.96	54.96	-19.00	-22.14
2	0.18600	9.66	32.96	19.66	42.62	29.32	64.21	54.21	-21.59	-24.89
3	0.47800	9.66	36.19	31.46	45.85	41.12	56.37	46.37	-10.52	-5.25
4	1.90600	9.70	25.52	21.32	35.22	31.02	56.00	46.00	-20.78	-14.98
5	3.80184	9.74	21.11	16.03	30.85	25.77	56.00	46.00	-25.15	-20.23
6	12.29000	9.82	18.30	13.55	28.12	23.37	60.00	50.00	-31.88	-26.63

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

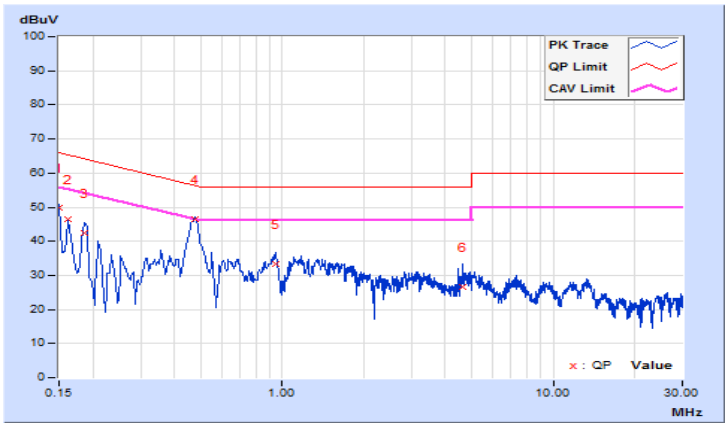


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 67%RH
Tested by	Adair Peng	**Test Date**	2020/12/25

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15000	9.68	40.17	27.20	49.85	36.88	66.00	56.00	-16.15	-19.12
2	0.16200	9.68	36.66	22.50	46.34	32.18	65.36	55.36	-19.02	-23.18
3	0.18600	9.68	32.84	19.16	42.52	28.84	64.21	54.21	-21.69	-25.37
4	0.47400	9.68	36.70	31.47	46.38	41.15	56.44	46.44	-10.06	-5.29
5	0.94097	9.69	23.70	19.95	33.39	29.64	56.00	46.00	-22.61	-16.36
6	4.65800	9.78	16.82	10.48	26.60	20.26	56.00	46.00	-29.40	-25.74

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



Scanning radio (Radio 3)

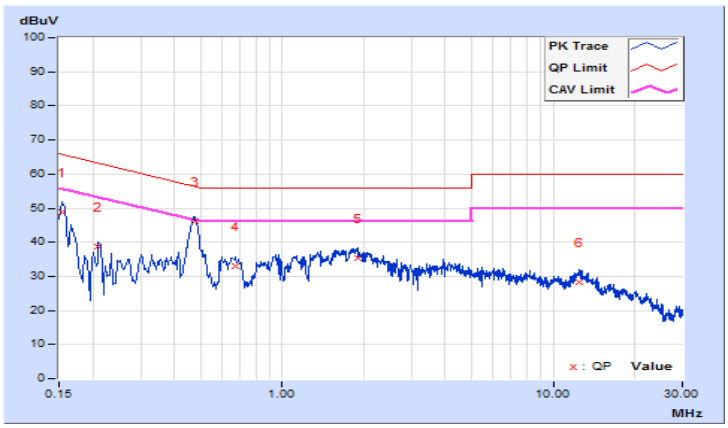
802.11a

Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 67%RH
Tested by	Adair Peng	**Test Date**	2020/12/25

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.15400	9.65	39.28	26.31	48.93	35.96	65.78	55.78	-16.85	-19.82
2	0.21000	9.66	29.11	16.60	38.77	26.26	63.21	53.21	-24.44	-26.95
3	0.47400	9.66	36.61	31.33	46.27	40.99	56.44	46.44	-10.17	-5.45
4	0.67000	9.66	23.29	18.57	32.95	28.23	56.00	46.00	-23.05	-17.77
5	1.90200	9.70	25.70	21.30	35.40	31.00	56.00	46.00	-20.60	-15.00
6	12.55400	9.82	18.37	13.56	28.19	23.38	60.00	50.00	-31.81	-26.62

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

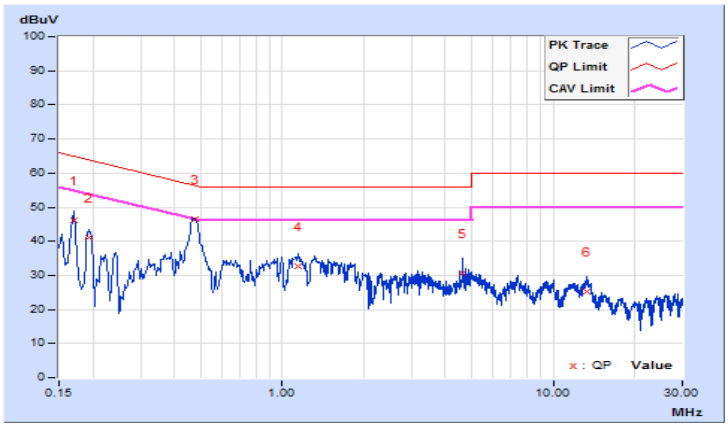


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	23℃, 67%RH
Tested by	Adair Peng	**Test Date**	2020/12/25

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.17000	9.68	36.47	23.05	46.15	32.73	64.96	54.96	-18.81	-22.23
2	0.19367	9.68	31.42	16.72	41.10	26.40	63.88	53.88	-22.78	-27.48
3	0.47400	9.68	36.69	31.48	46.37	41.16	56.44	46.44	-10.07	-5.28
4	1.14200	9.70	23.08	18.99	32.78	28.69	56.00	46.00	-23.22	-17.31
5	4.65000	9.78	20.89	12.09	30.67	21.87	56.00	46.00	-25.33	-24.13
6	13.25400	9.90	15.31	10.51	25.21	20.41	60.00	50.00	-34.79	-29.59

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)

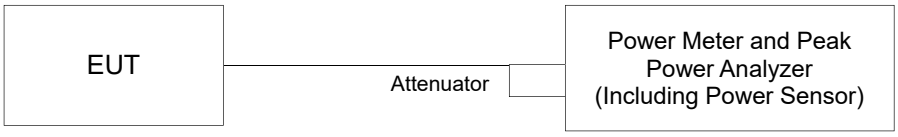
*B is the 26 dB emission bandwidth in megahertz

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



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

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

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

5G traffic radio (Radio 1)

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				
149	5745	21.98	22.03	317.349	25.02	25.18	Pass
157	5785	21.88	22.26	322.437	25.08	25.18	Pass
165	5825	22.05	21.95	317.000	25.01	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.80	21.75	300.980	24.79	25.18	Pass
157	5785	21.94	21.96	313.351	24.96	25.18	Pass
165	5825	22.07	21.40	299.103	24.76	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.08	21.43	300.431	24.78	25.18	Pass
159	5795	21.97	21.46	297.357	24.73	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.91	21.87	309.054	24.90	25.18	Pass
157	5785	22.04	22.06	320.650	25.06	25.18	Pass
165	5825	22.16	21.55	307.327	24.88	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.17	21.58	308.696	24.90	25.18	Pass
159	5795	22.07	21.51	302.644	24.81	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	19.73	19.27	178.500	22.52	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	22.01	21.98	316.616	25.01	25.18	Pass
157	5785	22.13	22.15	**327.364**	25.15	25.18	Pass
165	5825	22.24	21.69	315.065	24.98	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.25	21.62	313.092	24.96	25.18	Pass
159	5795	22.16	21.65	310.655	24.92	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	19.85	19.34	182.506	22.61	25.18	Pass

*Max. Gain = 10.82dBi > 6dBi, so the power limit shall be reduced to 30-(10.82-6) = 25.18dBm.

Beamforming Mode

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	18.90	18.86	154.538	21.89	22.46	Pass
157	5785	19.03	19.05	160.336	22.05	22.46	Pass
165	5825	19.15	18.54	153.674	21.87	22.46	Pass

*Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.54dBi > 6dBi, so the power limit shall be reduced to 30-(13.54-6) = 22.46dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	19.16	18.57	154.359	21.89	22.46	Pass
159	5795	19.06	18.50	151.332	21.80	22.46	Pass

*Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.54dBi > 6dBi, so the power limit shall be reduced to 30-(13.54-6) = 22.46dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	16.72	16.26	89.256	19.51	22.46	Pass

*Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.54dBi > 6dBi, so the power limit shall be reduced to 30-(13.54-6) = 22.46dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	19.00	18.97	158.319	22.00	22.46	Pass
157	5785	19.12	19.14	**163.693**	22.14	22.46	Pass
165	5825	19.23	18.68	157.543	21.97	22.46	Pass

*Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.54dBi > 6dBi, so the power limit shall be reduced to 30-(13.54-6) = 22.46dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	19.24	18.61	156.557	21.95	22.46	Pass
159	5795	19.15	18.64	155.338	21.91	22.46	Pass

*Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.54dBi > 6dBi, so the power limit shall be reduced to 30-(13.54-6) = 22.46dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	16.84	16.33	91.26	19.60	22.46	Pass

*Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.54dBi > 6dBi, so the power limit shall be reduced to 30-(13.54-6) = 22.46dBm.

5G traffic radio (Radio 2)

CDD Mode (For U-NII-1 Band - Outdoor Access Point)

802.11a

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	16.54	16.37	88.433	19.47	25.46	-0.91	18.56	21.00	Pass
40	5200	18.28	18.84	143.857	21.58	25.46	-0.91	20.67	21.00	Pass
48	5240	18.25	18.48	137.304	21.38	25.46	-0.91	20.47	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	16.84	16.71	95.187	19.79	25.46	-0.91	18.88	21.00	Pass
40	5200	18.12	18.73	139.508	21.45	25.46	-0.91	20.54	21.00	Pass
48	5240	18.14	18.75	140.152	21.47	25.46	-0.91	20.56	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	15.99	15.32	73.760	18.68	25.46	-0.91	17.77	21.00	Pass
46	5230	18.38	18.02	132.252	21.21	25.46	-0.91	20.30	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	16.95	16.83	97.740	19.90	25.46	-0.91	18.99	21.00	Pass
40	5200	18.20	18.85	142.805	21.55	25.46	-0.91	20.64	21.00	Pass
48	5240	18.22	18.87	143.465	21.57	25.46	-0.91	20.66	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	16.09	15.48	75.963	18.81	25.46	-0.91	17.90	21.00	Pass
46	5230	18.44	18.11	134.538	21.29	25.46	-0.91	20.38	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	15.84	15.71	75.610	18.79	25.46	-0.91	17.88	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ax (HE20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	17.05	16.94	100.13	20.01	25.46	-0.91	19.10	21.00	Pass
40	5200	18.37	18.96	147.411	21.69	25.46	-0.91	20.78	21.00	Pass
48	5240	18.39	18.98	**148.092**	21.71	25.46	-0.91	20.80	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ax (HE40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	16.18	15.53	77.223	18.88	25.46	-0.91	17.97	21.00	Pass
46	5230	18.59	18.29	139.730	21.45	25.46	-0.91	20.54	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ax (HE80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	15.95	15.83	77.637	18.90	25.46	-0.91	17.99	21.00	Pass

Note:
1. Gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.
2. Gain = -0.91dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (-0.91dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

CDD Mode (For U-NII-1 Band - Indoor Access Point)

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	16.54	16.37	88.433	19.47	25.46	Pass
40	5200	18.28	18.84	143.857	21.58	25.46	Pass
48	5240	18.25	18.48	137.304	21.38	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.84	16.71	95.187	19.79	25.46	Pass
40	5200	18.12	18.73	139.508	21.45	25.46	Pass
48	5240	18.14	18.75	140.152	21.47	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.99	15.32	73.760	18.68	25.46	Pass
46	5230	18.81	19.79	171.312	22.34	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.95	16.83	97.740	19.90	25.46	Pass
40	5200	18.20	18.85	142.805	21.55	25.46	Pass
48	5240	18.22	18.87	143.465	21.57	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	16.09	15.48	75.963	18.81	25.46	Pass
46	5230	19.92	19.81	193.894	22.88	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	15.84	15.71	75.610	18.79	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.05	16.94	100.130	20.01	25.46	Pass
40	5200	18.37	18.96	147.411	21.69	25.46	Pass
48	5240	18.39	18.98	148.092	21.71	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	16.18	15.53	77.223	18.88	25.46	Pass
46	5230	20.02	19.92	**198.636**	22.98	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	15.95	15.83	77.637	18.90	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

CDD Mode (For U-NII-3 Band)

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.77	22.75	338.679	25.30	25.46	Pass
157	5785	20.73	21.62	263.515	24.21	25.46	Pass
165	5825	21.69	22.56	327.872	25.16	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.60	22.22	311.269	24.93	25.46	Pass
157	5785	21.66	22.51	324.793	25.12	25.46	Pass
165	5825	21.71	22.68	333.605	25.23	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.31	21.98	327.977	25.16	25.46	Pass
159	5795	22.43	21.99	333.109	25.23	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.73	22.39	322.317	25.08	25.46	Pass
157	5785	21.79	22.65	335.085	25.25	25.46	Pass
165	5825	21.83	22.71	339.043	25.30	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.47	22.08	338.040	25.29	25.46	Pass
159	5795	22.58	22.09	342.942	25.35	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	18.82	18.60	148.651	21.72	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.85	22.45	328.901	25.17	25.46	Pass
157	5785	21.81	22.78	341.376	25.33	25.46	Pass
165	5825	21.85	22.83	344.976	25.38	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	22.52	22.17	343.465	25.36	25.46	Pass
159	5795	22.62	22.18	**348.006**	25.42	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	18.93	18.73	152.808	21.84	25.46	Pass

Note: Antenna gain = 10.54dBi > 6dBi, so the power limit shall be reduced to 30-(10.54-6) = 25.46dBm.

Beamforming Mode (For U-NII-1 Band - Outdoor Access Point)

802.11ac (VHT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	13.94	13.82	48.873	16.89	22.57	2.1	18.99	21.00	Pass
40	5200	15.19	15.84	71.408	18.54	22.57	2.1	20.64	21.00	Pass
48	5240	15.21	15.86	71.737	18.56	22.57	2.1	20.66	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.
2. Directional Gain = 2.1dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (-0.91dBi) + beamforming gain (3.01dBi).

802.11ac (VHT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	13.08	12.47	37.984	15.80	22.57	2.1	17.90	21.00	Pass
46	5230	15.43	15.10	67.273	18.28	22.57	2.1	20.38	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.
2. Directional Gain = 2.1dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (-0.91dBi) + beamforming gain (3.01dBi).

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	12.83	12.70	37.808	15.78	22.57	2.1	17.88	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.
2. Directional Gain = 2.1dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (-0.91dBi) + beamforming gain (3.01dBi).

802.11ax (HE20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	14.04	13.93	50.069	17.00	22.57	2.1	19.10	21.00	Pass
40	5200	15.36	15.95	73.711	18.68	22.57	2.1	20.78	21.00	Pass
48	5240	15.38	15.97	**74.051**	18.70	22.57	2.1	20.80	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.
2. Directional Gain = 2.1dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (-0.91dBi) + beamforming gain (3.01dBi).

802.11ax (HE40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	13.17	12.52	38.614	15.87	22.57	2.1	17.97	21.00	Pass
46	5230	15.58	15.28	69.870	18.44	22.57	2.1	20.54	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.
2. Directional Gain = 2.1dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (-0.91dBi) + beamforming gain (3.01dBi).

802.11ax (HE80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	12.94	12.82	38.821	15.89	22.57	2.1	17.99	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.
2. Directional Gain = 2.1dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (-0.91dBi) + beamforming gain (3.01dBi).

Beamforming Mode (For U-NII-1 Band - Indoor Access Point)

802.11ac (VHT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	13.94	13.82	48.873	16.89	22.57	Pass
40	5200	15.19	15.84	71.408	18.54	22.57	Pass
48	5240	15.21	15.86	71.737	18.56	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	13.08	12.47	37.984	15.80	22.57	Pass
46	5230	16.91	16.80	96.954	19.87	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	12.83	12.70	37.808	15.78	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	14.04	13.93	50.069	17.00	22.57	Pass
40	5200	15.36	15.95	73.711	18.68	22.57	Pass
48	5240	15.38	15.97	74.051	18.70	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	13.17	12.52	38.614	15.87	22.57	Pass
46	5230	17.01	16.91	**99.325**	19.97	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	12.94	12.82	38.821	15.89	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

Beamforming Mode (For U-NII-3 Band)

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	18.72	19.38	161.169	22.07	22.57	Pass
157	5785	18.78	19.64	167.554	22.24	22.57	Pass
165	5825	18.82	19.70	169.533	22.29	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	19.46	19.07	169.031	22.28	22.57	Pass
159	5795	19.57	19.08	171.483	22.34	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	15.81	15.59	74.331	18.71	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	18.84	19.44	164.462	22.16	22.57	Pass
157	5785	18.80	19.77	170.700	22.32	22.57	Pass
165	5825	18.84	19.82	172.500	22.37	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	19.51	19.16	171.744	22.35	22.57	Pass
159	5795	19.61	19.17	**174.015**	22.41	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	15.92	15.72	76.409	18.83	22.57	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power limit shall be reduced to 30-(13.43-6) = 22.57dBm.

Scanning radio (Radio 3)

CDD Mode (For U-NII-1 Band - Outdoor Access Point)

802.11a

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	13.99	13.76	48.829	16.89	30.00	4.02	20.91	21.00	Pass
40	5200	13.89	13.75	48.204	16.83	30.00	4.02	20.85	21.00	Pass
48	5240	13.79	13.76	47.702	16.79	30.00	4.02	20.81	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	13.54	13.70	46.037	16.63	30.00	4.02	20.65	21.00	Pass
40	5200	13.60	13.84	47.119	16.73	30.00	4.02	20.75	21.00	Pass
48	5240	13.50	13.83	46.542	16.68	30.00	4.02	20.70	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	13.63	13.81	47.111	16.73	30.00	4.02	20.75	21.00	Pass
46	5230	13.64	13.82	47.220	16.74	30.00	4.02	20.76	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	13.68	13.82	47.434	16.76	30.00	4.02	20.78	21.00	Pass
40	5200	13.73	13.95	48.436	16.85	30.00	4.02	20.87	21.00	Pass
48	5240	13.64	13.94	47.895	16.80	30.00	4.02	20.82	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	13.76	13.92	48.429	16.85	30.00	4.02	20.87	21.00	Pass
46	5230	13.77	13.93	48.540	16.86	30.00	4.02	20.88	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	13.64	13.76	46.889	16.71	30.00	4.02	20.73	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ax (HE20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	13.71	13.93	48.214	16.83	30.00	4.02	20.85	21.00	Pass
40	5200	13.85	14.05	49.676	16.96	30.00	4.02	20.98	21.00	Pass
48	5240	13.77	14.04	49.174	16.92	30.00	4.02	20.94	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ax (HE40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	13.88	14.02	49.669	16.96	30.00	4.02	20.98	21.00	Pass
46	5230	13.89	14.03	**49.784**	16.97	30.00	4.02	20.99	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

802.11ax (HE80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	13.77	13.88	48.258	16.84	30.00	4.02	20.86	21.00	Pass

Note:
1. Gain = 4.91dBi < 6dBi, so the limit no need to reduced.
2. Gain = 4.02dBi (above 30 degrees from the horizon).
3. EIRP = conducted power + (4.02dBi) + array gain (0 dB (i.e., no array gain) for $N_{ANT} \leq 4$).

CDD Mode (For U-NII-1 Band - Indoor Access Point)

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	19.47	19.55	178.669	22.52	30.00	Pass
40	5200	22.33	22.29	340.435	25.32	30.00	Pass
48	5240	22.37	22.36	**344.771**	25.38	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	18.83	19.07	157.107	21.96	30.00	Pass
40	5200	21.71	22.12	311.181	24.93	30.00	Pass
48	5240	21.80	21.84	304.113	24.83	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	16.49	16.92	93.770	19.72	30.00	Pass
46	5230	20.92	20.81	244.098	23.88	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	18.94	19.16	160.757	22.06	30.00	Pass
40	5200	21.83	22.20	318.364	25.03	30.00	Pass
48	5240	21.91	21.95	311.914	24.94	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	16.54	17.02	95.432	19.80	30.00	Pass
46	5230	21.02	20.92	250.068	23.98	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	16.93	16.88	98.070	19.92	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	19.04	19.24	164.114	22.15	30.00	Pass
40	5200	21.94	22.37	328.899	25.17	30.00	Pass
48	5240	22.01	22.05	319.179	25.04	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	16.68	17.11	97.963	19.91	30.00	Pass
46	5230	21.11	21.02	255.596	24.08	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	17.03	16.99	100.470	20.02	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

CDD Mode (For U-NII-3 Band)

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.63	21.69	293.117	24.67	30.00	Pass
157	5785	21.55	21.57	286.438	24.57	30.00	Pass
165	5825	21.35	21.25	269.810	24.31	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.79	21.85	304.117	24.83	30.00	Pass
157	5785	21.51	21.75	291.203	24.64	30.00	Pass
165	5825	21.43	21.34	275.140	24.40	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	21.05	20.90	250.377	23.99	30.00	Pass
159	5795	22.07	21.94	317.379	25.02	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.81	21.73	300.641	24.78	30.00	Pass
157	5785	21.65	21.62	291.429	24.65	30.00	Pass
165	5825	21.58	21.40	281.918	24.50	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	21.14	21.00	255.909	24.08	30.00	Pass
159	5795	22.16	22.04	324.393	25.11	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	18.03	18.68	137.324	21.38	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	21.92	21.85	308.705	24.90	30.00	Pass
157	5785	21.78	21.75	300.284	24.78	30.00	Pass
165	5825	21.62	21.55	288.101	24.60	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	21.22	21.19	263.957	24.22	30.00	Pass
159	5795	22.24	22.13	**330.799**	25.20	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	18.12	18.71	139.165	21.44	30.00	Pass

Note: Gain = 4.91dBi < 6dBi, so the limit no need to reduced.

Beamforming Mode (For U-NII-1 Band - Outdoor Access Point)

802.11ac (VHT20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	10.67	10.81	23.718	13.75	28.25	7.03	20.78	21.00	Pass
40	5200	10.72	10.94	24.220	13.84	28.25	7.03	20.87	21.00	Pass
48	5240	10.63	10.93	23.949	13.79	28.25	7.03	20.82	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.
2. Directional Gain = 7.03dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (4.02dBi) + beamforming gain (3.01dBi).

802.11ac (VHT40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	10.75	10.91	24.216	13.84	28.25	7.03	20.87	21.00	Pass
46	5230	10.76	10.92	24.272	13.85	28.25	7.03	20.88	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.
2. Directional Gain = 7.03dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (4.02dBi) + beamforming gain (3.01dBi).

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	10.63	10.75	23.446	13.70	28.25	7.03	20.73	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.
2. Directional Gain = 7.03dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (4.02dBi) + beamforming gain (3.01dBi).

802.11ax (HE20)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
36	5180	10.70	10.92	24.108	13.82	28.25	7.03	20.85	21.00	Pass
40	5200	10.84	11.04	24.840	13.95	28.25	7.03	20.98	21.00	Pass
48	5240	10.76	11.03	24.589	13.91	28.25	7.03	20.94	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.
2. Directional Gain = 7.03dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (4.02dBi) + beamforming gain (3.01dBi).

802.11ax (HE40)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
38	5190	10.87	11.01	24.836	13.95	28.25	7.03	20.98	21.00	Pass
46	5230	10.88	11.02	**24.894**	13.96	28.25	7.03	20.99	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.
2. Directional Gain = 7.03dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (4.02dBi) + beamforming gain (3.01dBi).

802.11ax (HE80)

Chan.	Freq. (MHz)	Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Direct-ional Gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
42	5210	10.76	10.87	24.130	13.83	28.25	7.03	20.86	21.00	Pass

Note:
1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.
2. Directional Gain = 7.03dBi (above 30 degrees from the horizon).
3. Beamforming gain = 3.01dBi
4. EIRP = conducted power + (4.02dBi) + beamforming gain (3.01dBi).

Beamforming Mode (For U-NII-1 Band - Indoor Access Point)

802.11ac (VHT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	15.93	16.15	80.384	19.05	28.25	Pass
40	5200	18.82	19.19	159.193	22.02	28.25	Pass
48	5240	18.90	18.94	155.968	21.93	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	13.53	14.01	47.719	16.79	28.25	Pass
46	5230	18.01	17.91	125.043	20.97	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	13.92	13.87	49.039	16.91	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.03	16.23	82.063	19.14	28.25	Pass
40	5200	18.93	19.36	**164.461**	22.16	28.25	Pass
48	5240	19.00	19.04	159.601	22.03	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	13.67	14.10	48.985	16.90	28.25	Pass
46	5230	18.10	18.01	127.807	21.07	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ax (HE80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.02	13.98	50.238	17.01	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

Beamforming Mode (For U-NII-3 Band)

802.11ac (VHT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	18.80	18.72	150.331	21.77	28.25	Pass
157	5785	18.64	18.61	145.725	21.64	28.25	Pass
165	5825	18.57	18.39	140.969	21.49	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ac (VHT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	18.13	17.99	127.964	21.07	28.25	Pass
159	5795	19.15	19.03	162.208	22.10	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	15.02	15.67	68.667	18.37	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	18.91	18.84	154.363	21.89	28.25	Pass
157	5785	18.77	18.74	150.153	21.77	28.25	Pass
165	5825	18.61	18.54	144.060	21.59	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	18.21	18.18	131.987	21.21	28.25	Pass
159	5795	19.23	19.12	**165.411**	22.19	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

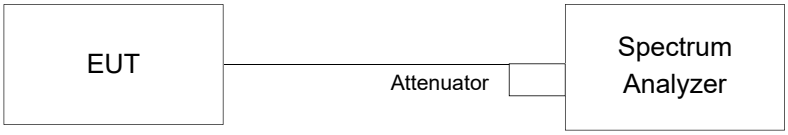
802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	15.11	15.70	69.587	18.43	28.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power limit shall be reduced to 30-(7.75-6) = 28.25dBm.

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 sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Result

5G traffic radio (Radio 1)

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
149	5745	17.28	17.04
157	5785	17.28	17.04
165	5825	17.40	16.92

802.11ax (HE20)

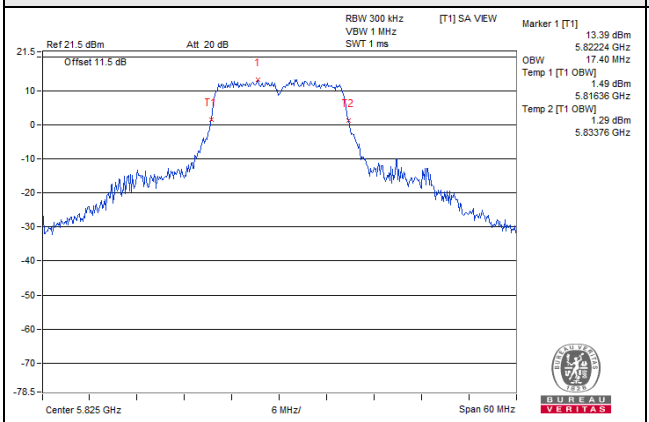
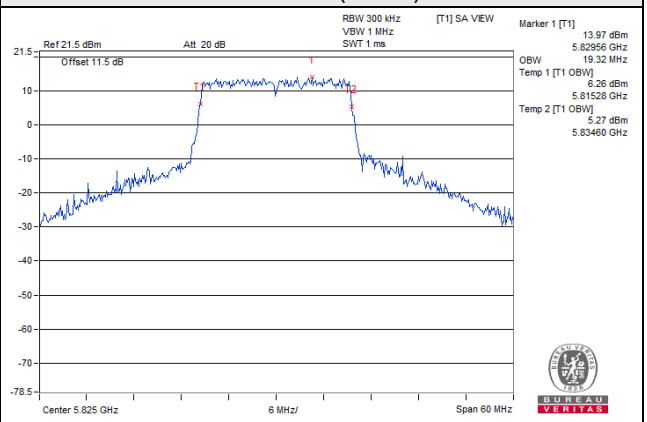
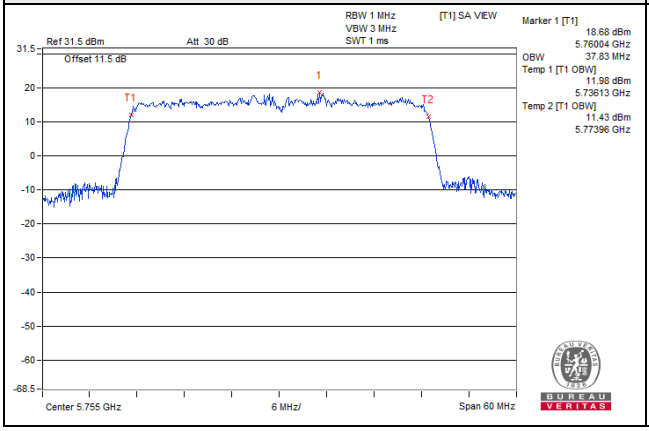
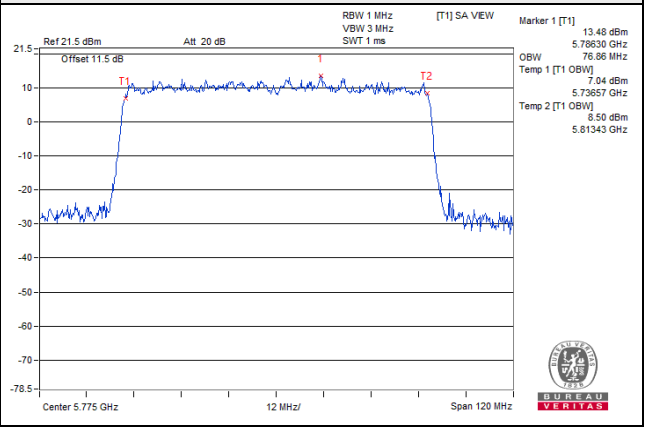
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
149	5745	19.20	19.22
157	5785	19.20	19.20
165	5825	19.32	19.20

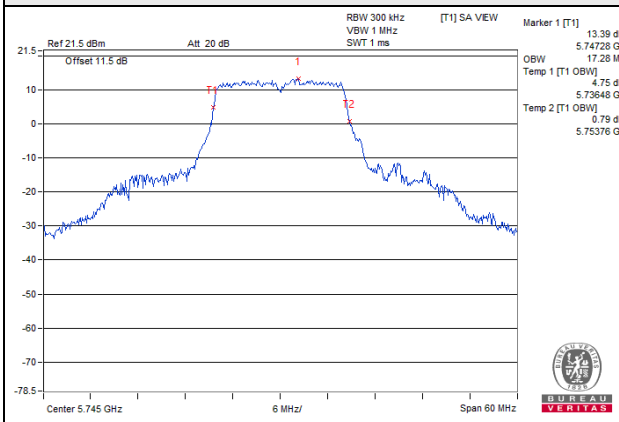
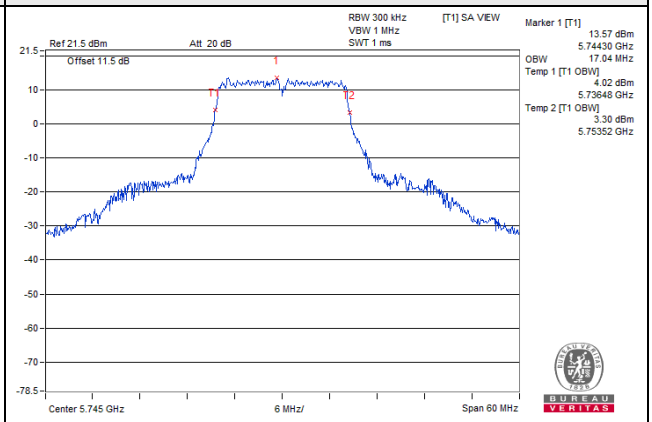
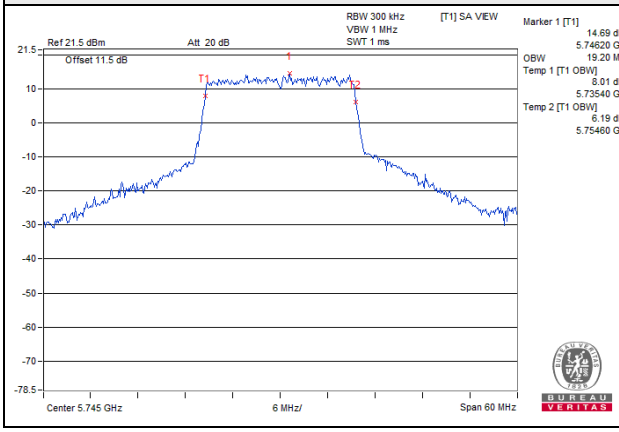
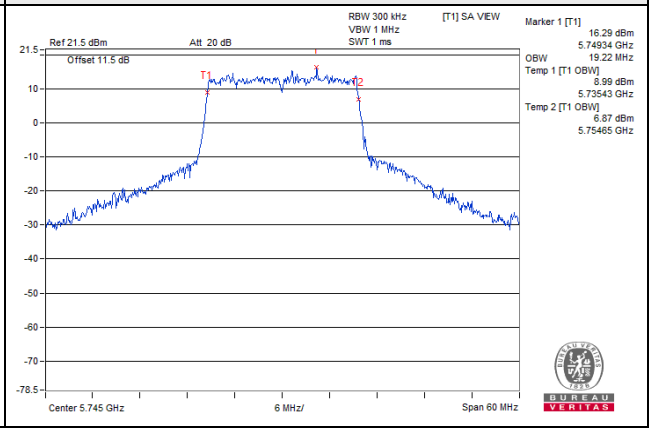
802.11ax (HE40)

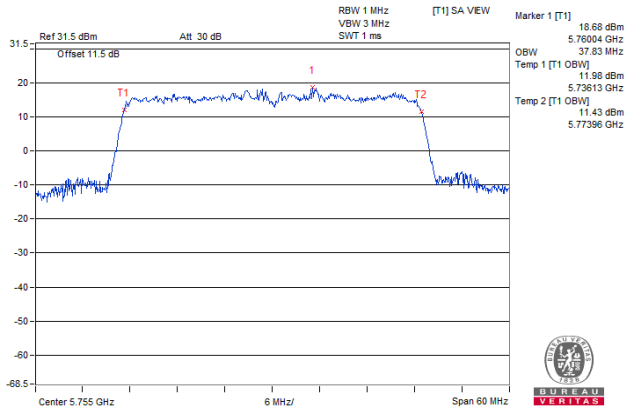
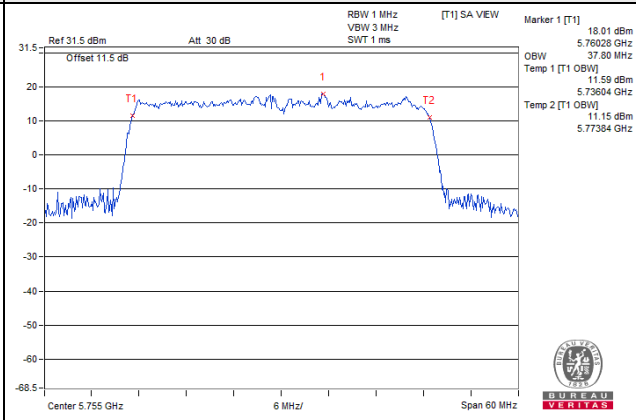
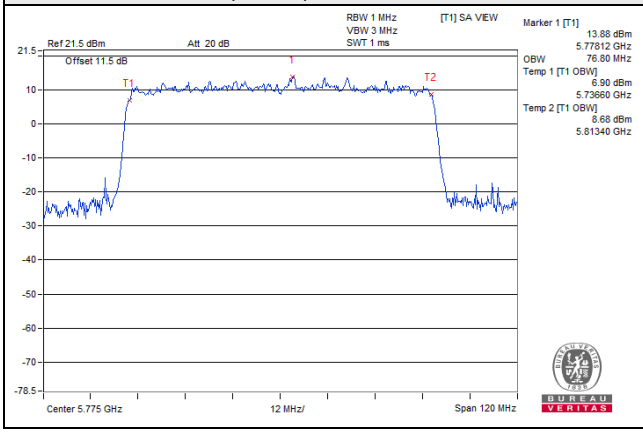
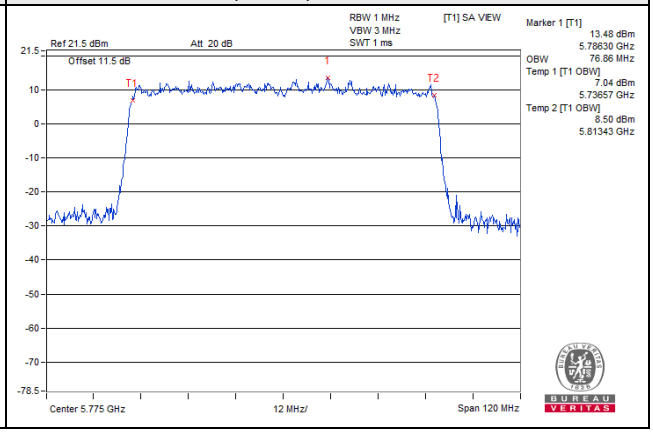
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
151	5755	37.83	37.80
159	5795	37.80	37.80

802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
155	5775	76.80	76.86

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 149	802.11a / Chain 1 / CH 149
	
802.11ax (HE20) / Chain 0 / CH 149	802.11ax (HE20) / Chain 1 / CH 149
	

802.11ax (HE40) / Chain 0 / CH 151	802.11ax (HE40) / Chain 1 / CH 151
	
802.11ax (HE80) / Chain 0 / CH 155	802.11ax (HE80) / Chain 1 / CH 155
	

5G traffic radio (Radio 2)

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.04	16.80
40	5200	17.04	16.80
48	5240	16.92	16.92
149	5745	17.28	17.57
157	5785	17.40	17.28
165	5825	17.28	17.64

802.11ax (HE20)

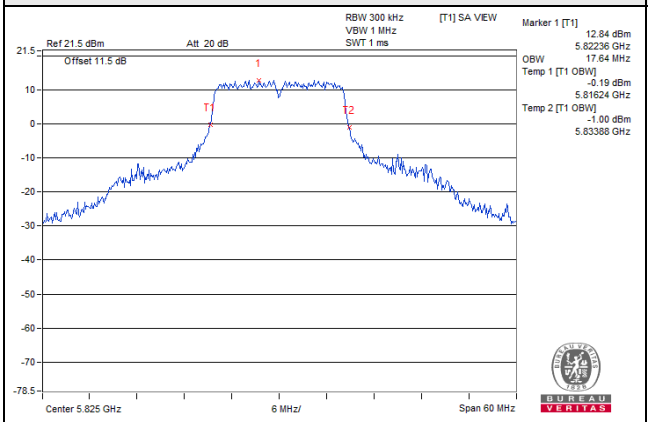
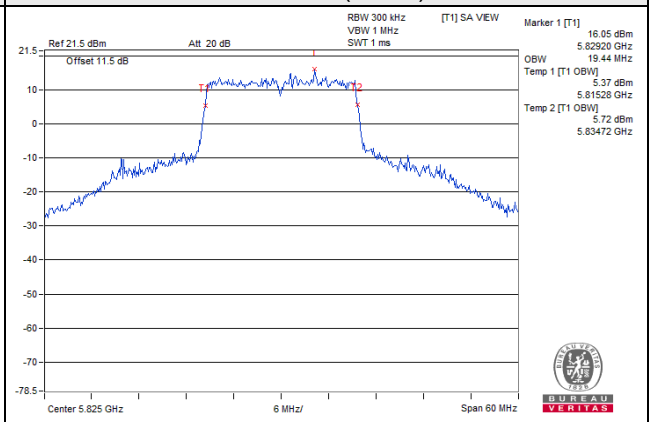
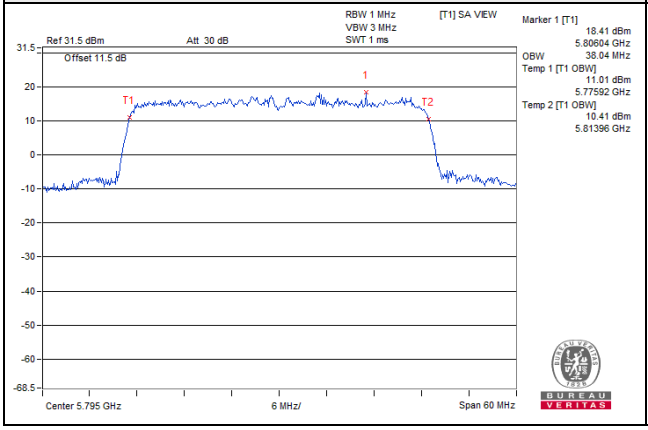
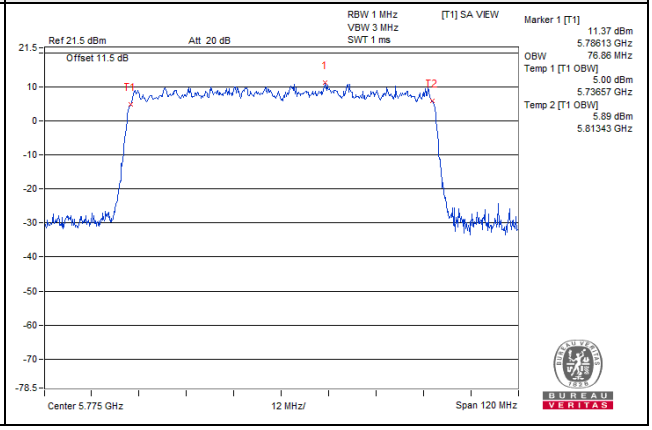
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.08	19.20
40	5200	19.20	19.20
48	5240	19.08	19.08
149	5745	19.20	19.30
157	5785	19.32	19.32
165	5825	19.32	19.44

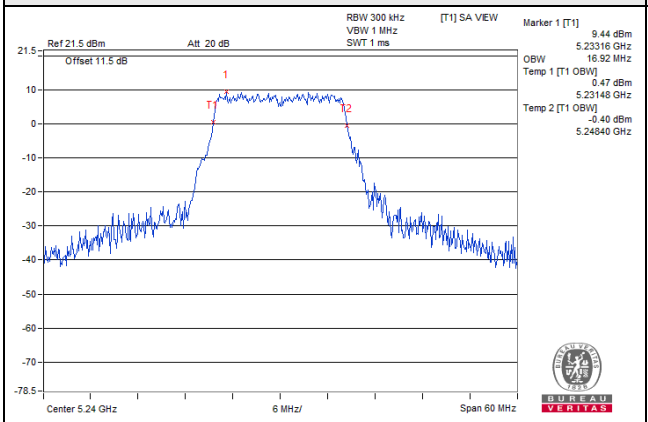
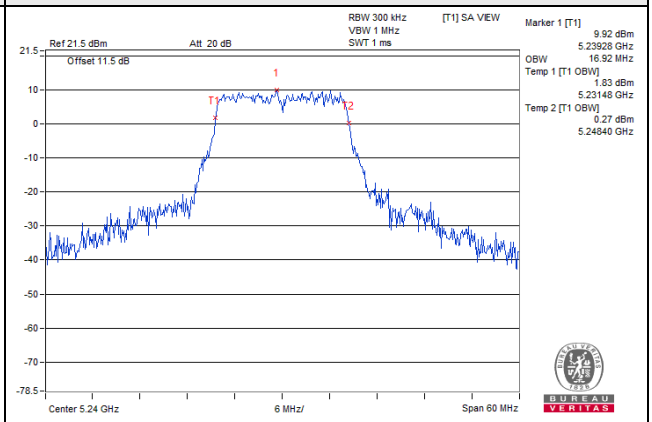
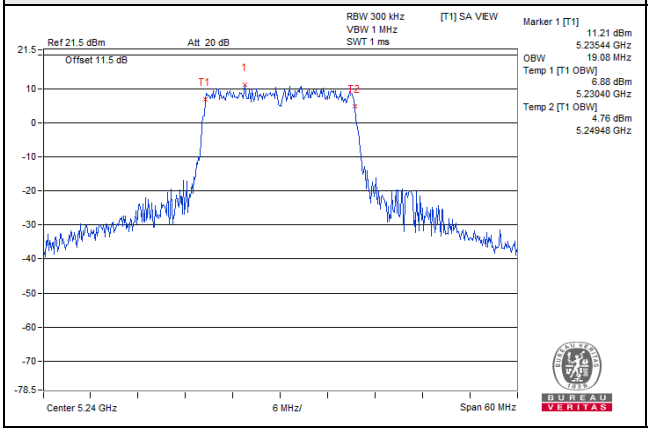
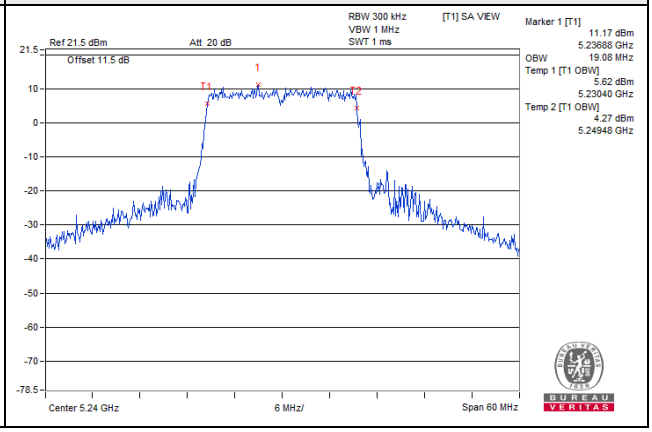
802.11ax (HE40)

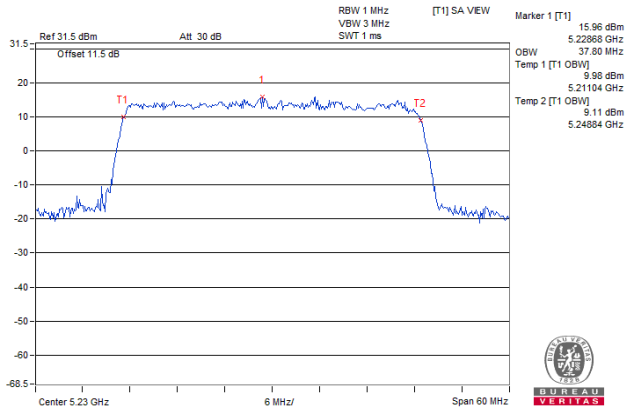
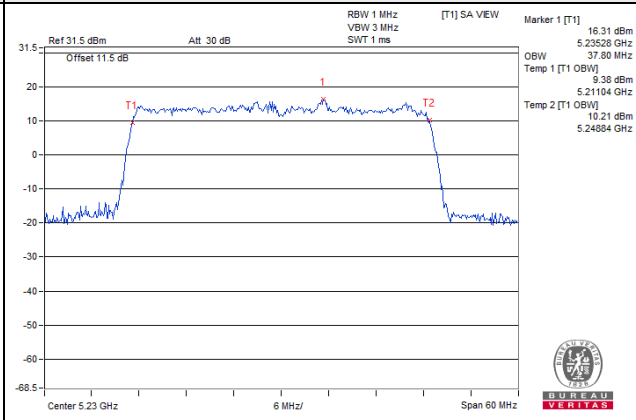
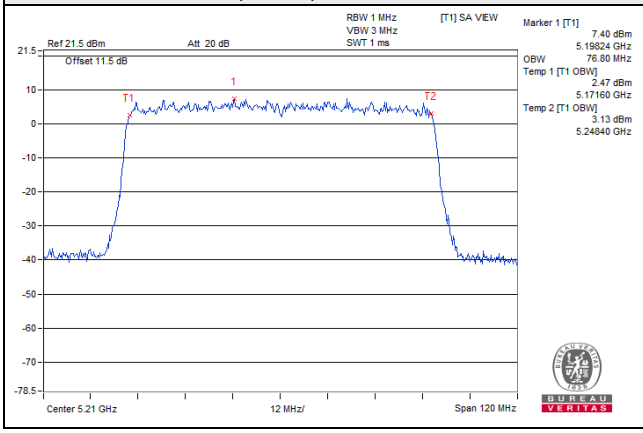
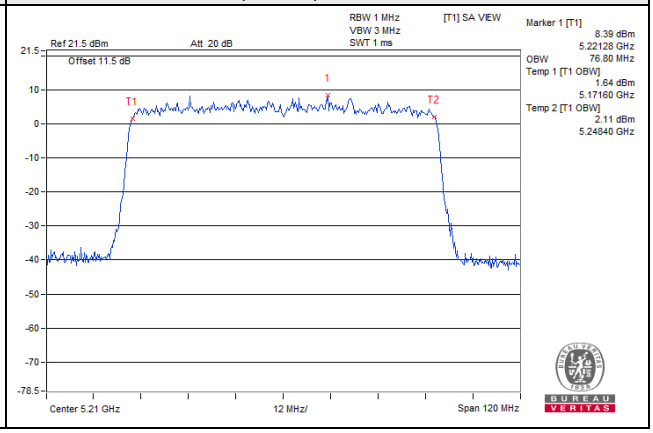
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.68
46	5230	37.80	37.80
151	5755	38.00	37.80
159	5795	38.04	37.80

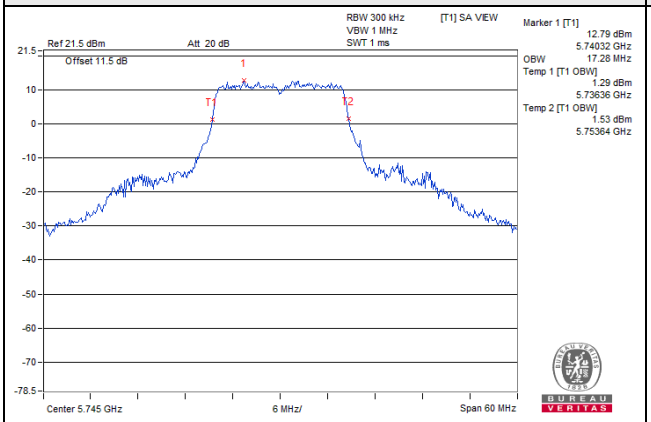
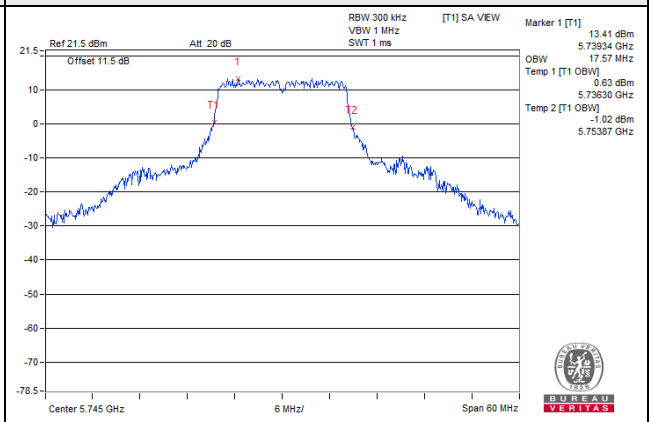
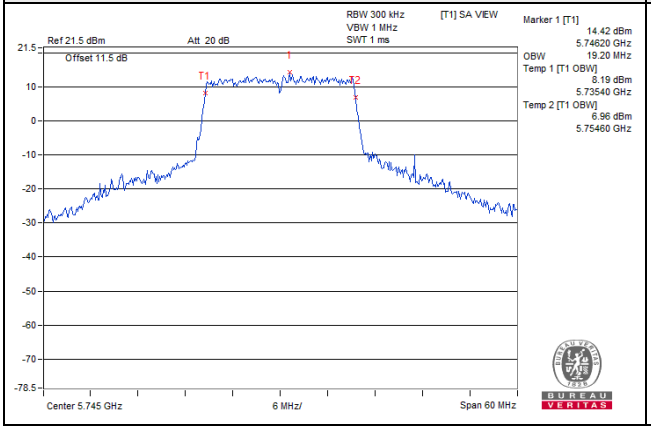
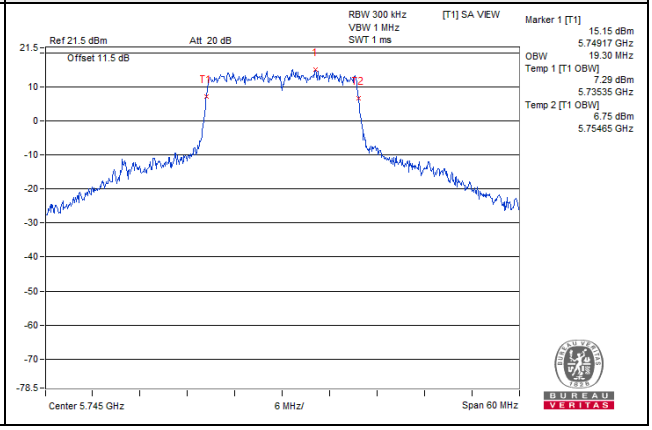
802.11ax (HE80)

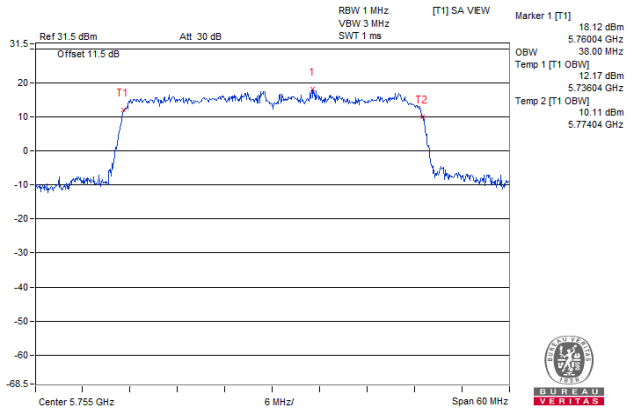
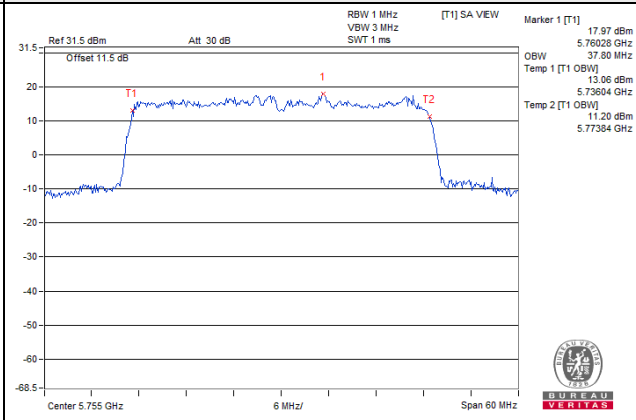
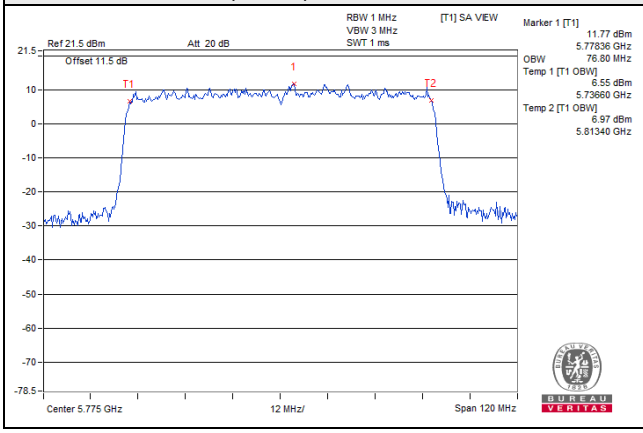
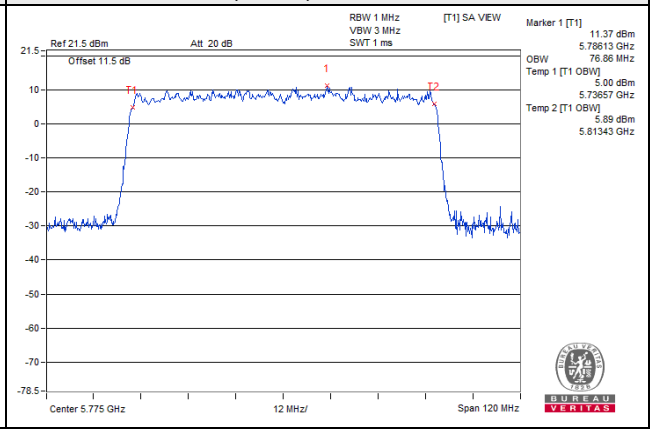
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	76.80	76.80
155	5775	76.80	76.86

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 48	802.11a / Chain 1 / CH 48
	
802.11ax (HE20) / Chain 0 / CH 48	802.11ax (HE20) / Chain 1 / CH 48
	

802.11ax (HE40) / Chain 0 / CH 46	802.11ax (HE40) / Chain 1 / CH 46
	
802.11ax (HE80) / Chain 0 / CH 42	802.11ax (HE80) / Chain 1 / CH 42
	

Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 149	802.11a / Chain 1 / CH 149
	
802.11ax (HE20) / Chain 0 / CH 149	802.11ax (HE20) / Chain 1 / CH 149
	

802.11ax (HE40) / Chain 0 / CH 151	802.11ax (HE40) / Chain 1 / CH 151
	
802.11ax (HE80) / Chain 0 / CH 155	802.11ax (HE80) / Chain 1 / CH 155
	

Scanning radio (Radio 3)

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.04	16.92
40	5200	18.84	18.72
48	5240	18.36	18.24
149	5745	20.88	20.16
157	5785	20.04	19.56
165	5825	19.44	19.32

802.11ax (HE20)

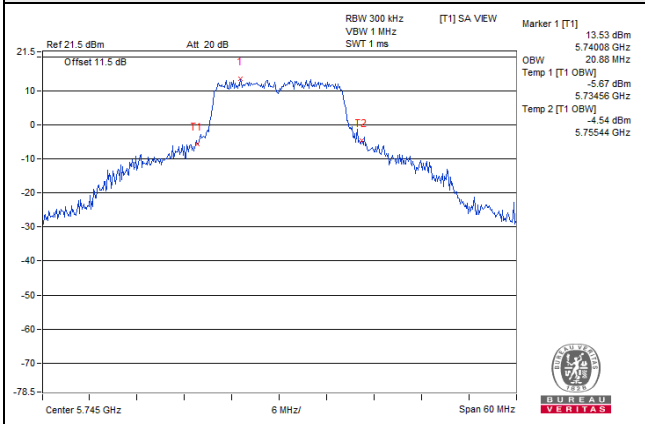
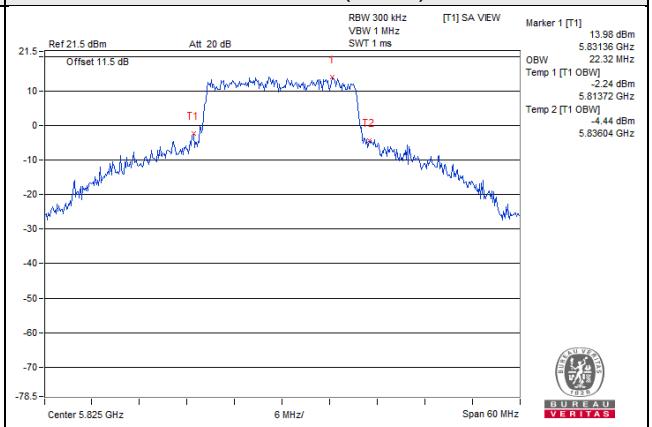
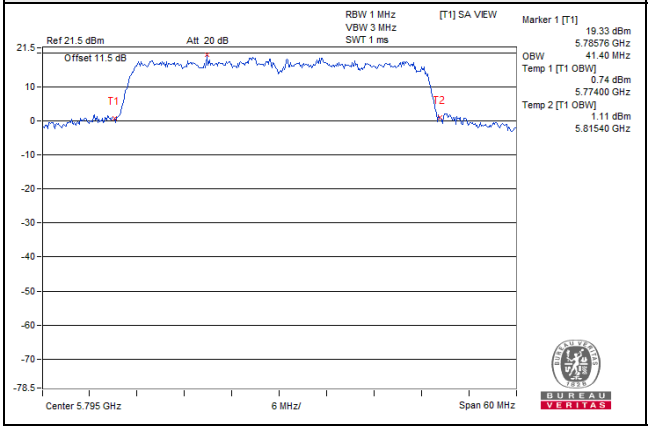
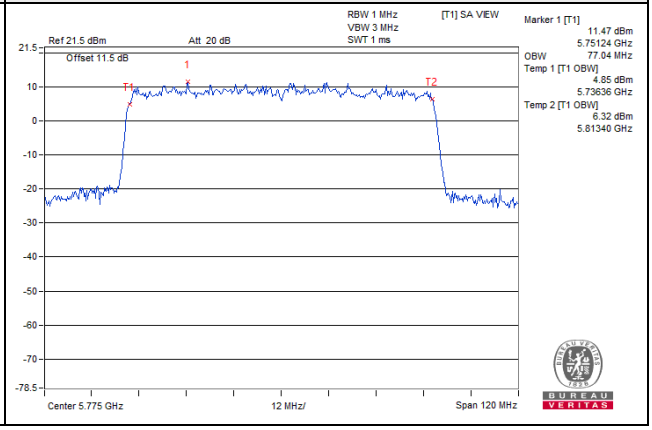
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.20	19.20
40	5200	19.44	19.56
48	5240	19.44	19.56
149	5745	22.20	21.12
157	5785	21.84	20.28
165	5825	22.32	20.52

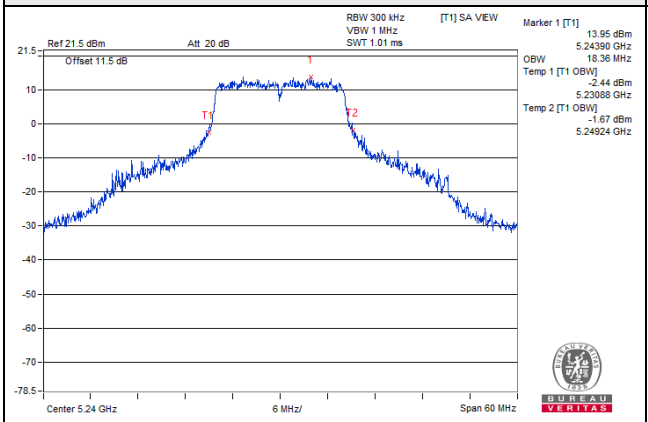
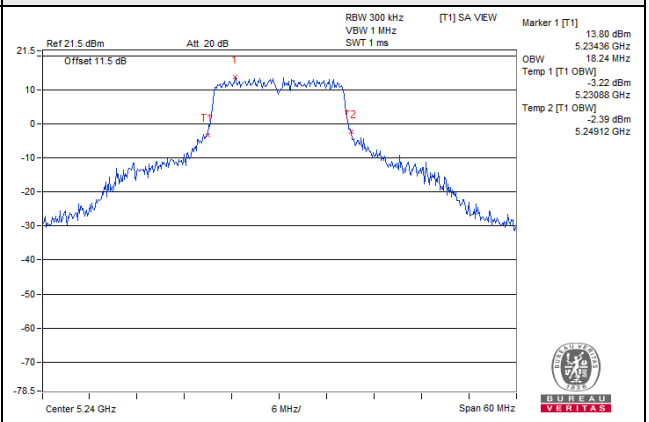
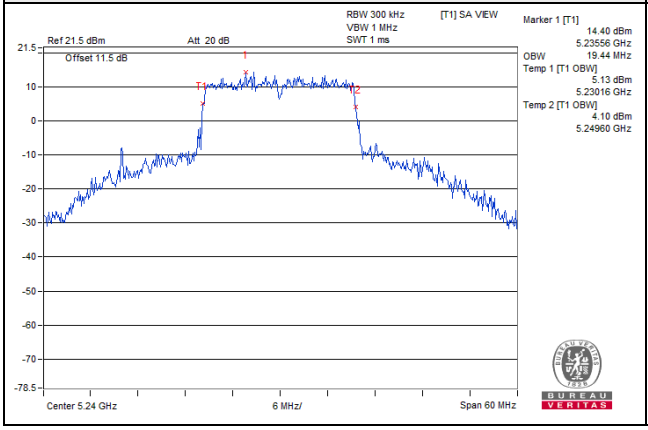
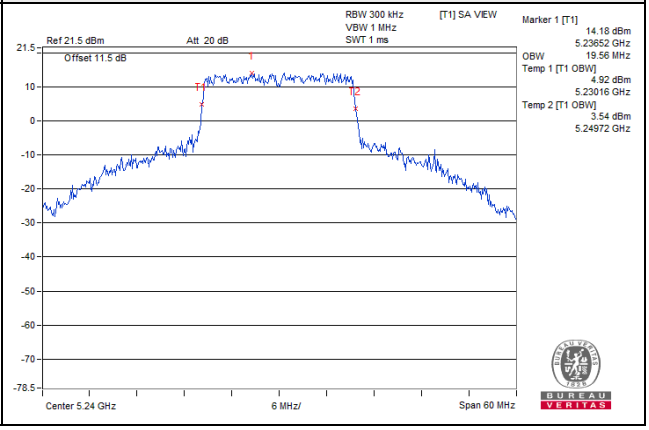
802.11ax (HE40)

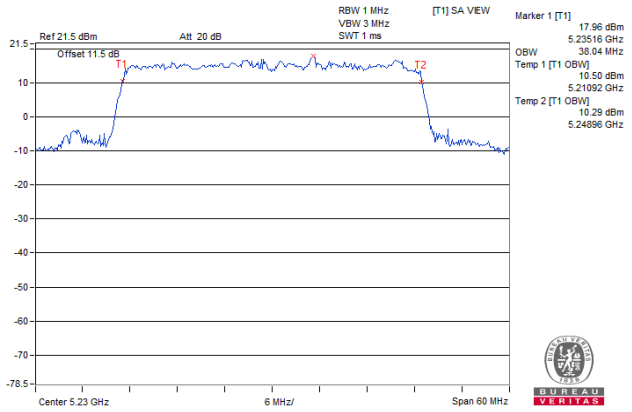
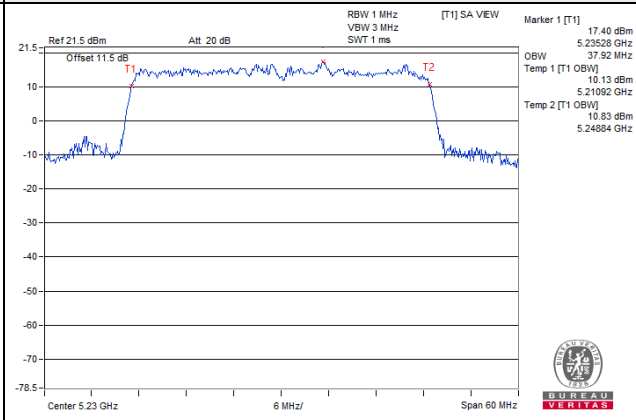
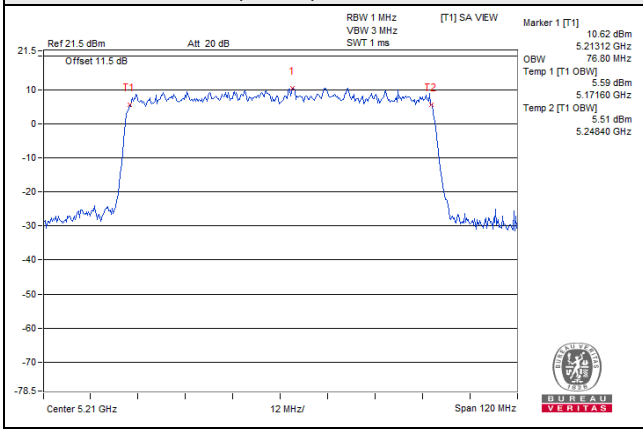
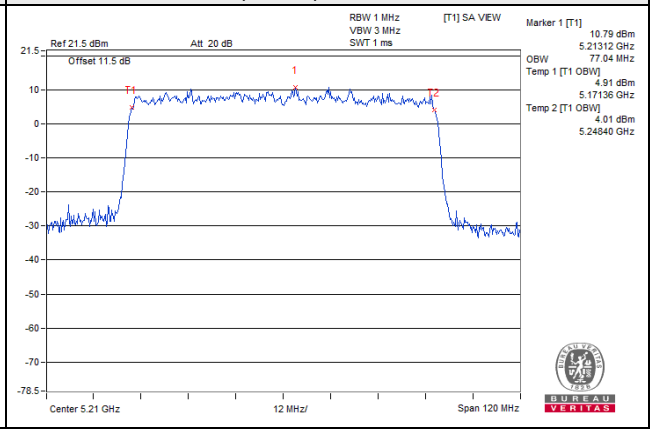
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.68
46	5230	38.04	37.92
151	5755	38.40	38.16
159	5795	41.40	40.92

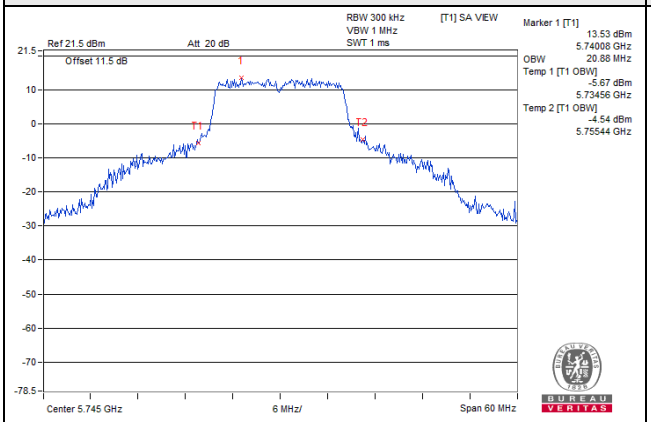
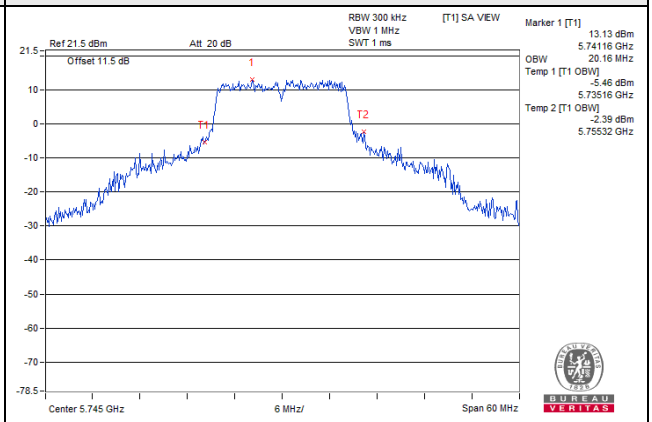
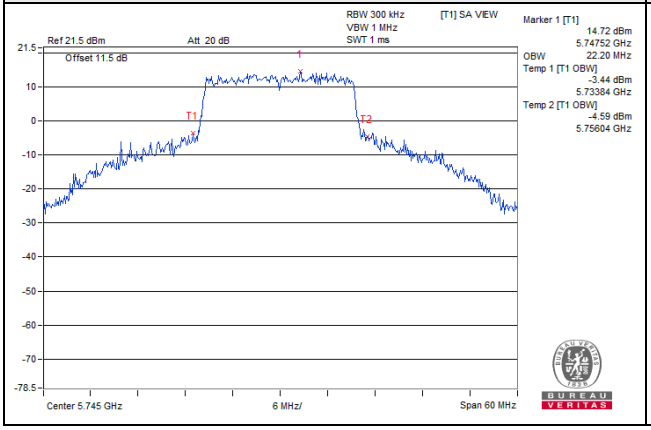
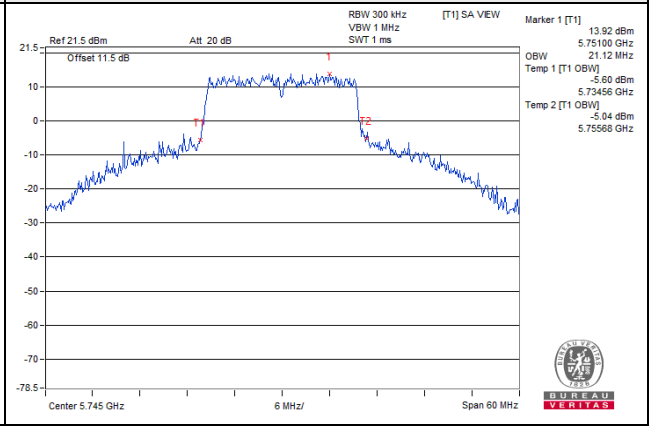
802.11ax (HE80)

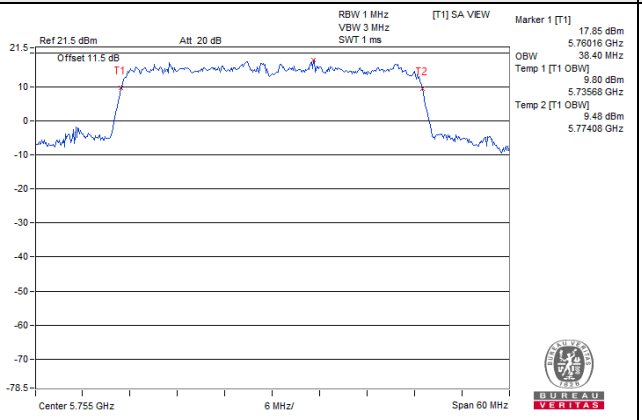
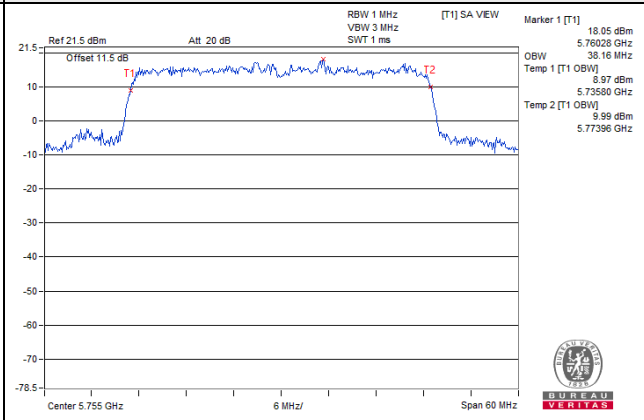
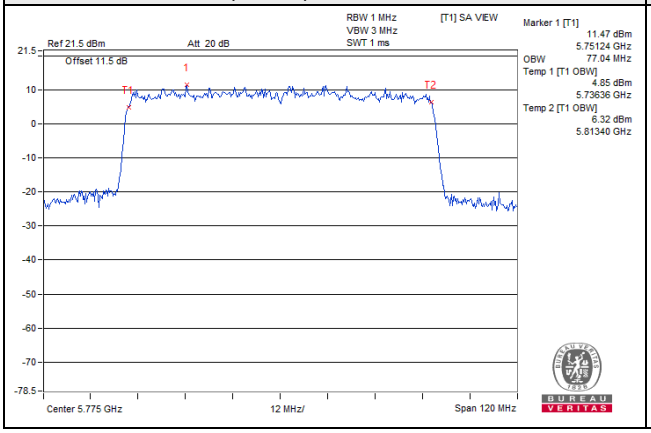
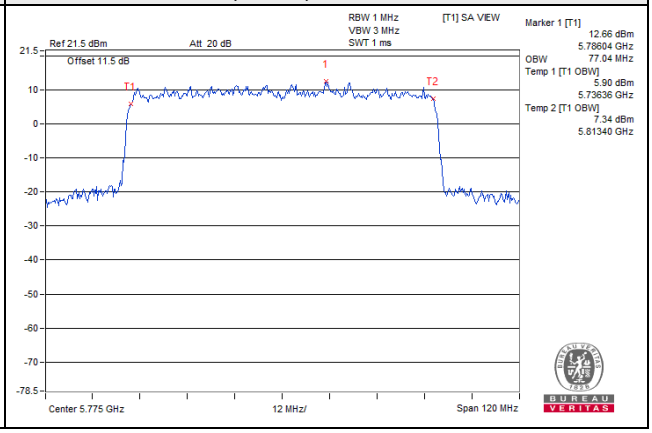
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	76.80	77.04
155	5775	77.04	77.04

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 48	802.11a / Chain 1 / CH 48
	
802.11ax (HE20) / Chain 0 / CH 48	802.11ax (HE20) / Chain 1 / CH 48
	

802.11ax (HE40) / Chain 0 / CH 46	802.11ax (HE40) / Chain 1 / CH 46
	
802.11ax (HE80) / Chain 0 / CH 42	802.11ax (HE80) / Chain 1 / CH 42
	

Spectrum Plot for near By DFS Band	
802.11a / Chain 0 / CH 149	802.11a / Chain 1 / CH 149
	
802.11ax (HE20) / Chain 0 / CH 149	802.11ax (HE20) / Chain 1 / CH 149
	

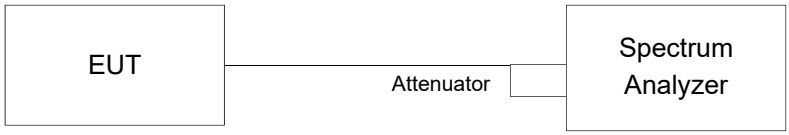
802.11ax (HE40) / Chain 0 / CH 151	802.11ax (HE40) / Chain 1 / CH 151
	
802.11ax (HE80) / Chain 0 / CH 155	802.11ax (HE80) / Chain 1 / CH 155
	

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 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.

f. Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS

c. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.

d. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz / 300 kHz)

e. Sweep time = auto, trigger set to “free run”.

f. Trace average at least 100 traces in power averaging mode.

g. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

5G traffic radio (Radio 1)

For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	0.69	2.91	3.01	0.25	6.17	22.46	Pass
	157	5785	0.91	3.13	3.01	0.25	6.39	22.46	Pass
	165	5825	0.98	3.20	3.01	0.25	6.46	22.46	Pass
1	149	5745	0.65	2.87	3.01	0.25	6.13	22.46	Pass
	157	5785	0.61	2.83	3.01	0.25	6.09	22.46	Pass
	165	5825	0.42	2.64	3.01	0.25	5.90	22.46	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20}$)^2/2]= 13.54dBi > 6dBi, so the power density limit shall be reduced to 30-(13.54-6) = 22.46dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	-0.66	1.56	3.01	0.13	4.70	22.46	Pass
	157	5785	-0.21	2.01	3.01	0.13	5.15	22.46	Pass
	165	5825	-0.34	1.88	3.01	0.13	5.02	22.46	Pass
1	149	5745	-0.64	1.58	3.01	0.13	4.72	22.46	Pass
	157	5785	-0.61	1.61	3.01	0.13	4.75	22.46	Pass
	165	5825	-0.70	1.52	3.01	0.13	4.66	22.46	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20}$)^2/2]= 13.54dBi > 6dBi, so the power density limit shall be reduced to 30-(13.54-6) = 22.46dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

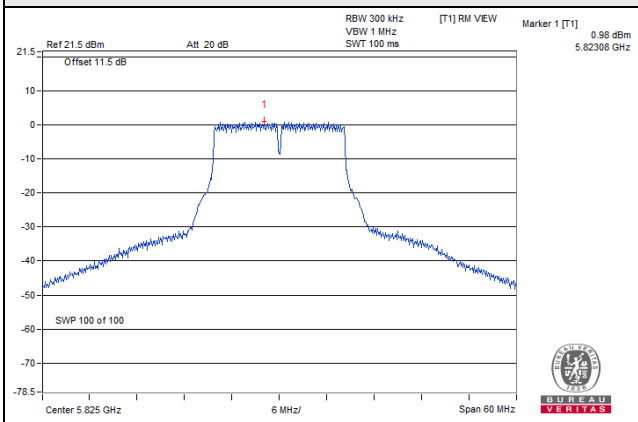
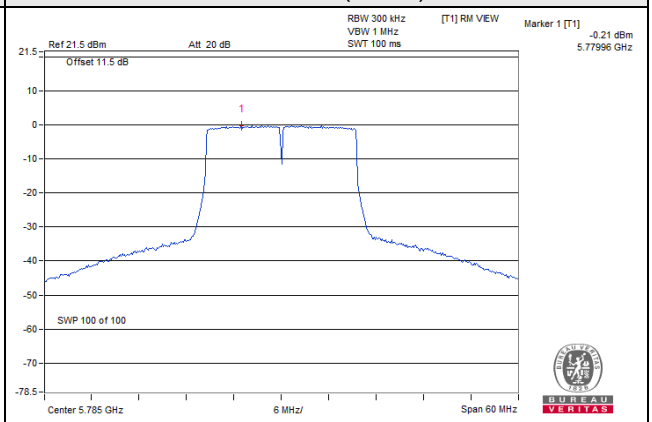
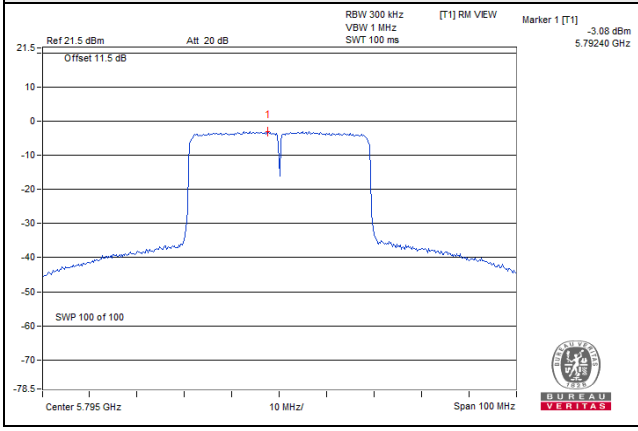
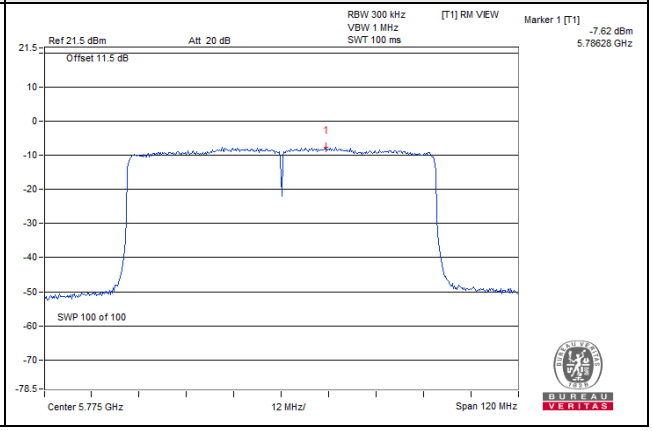
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-3.09	-0.87	3.01	0.25	2.39	22.46	Pass
	159	5795	-3.08	-0.86	3.01	0.25	2.40	22.46	Pass
1	151	5755	-3.69	-1.47	3.01	0.25	1.79	22.46	Pass
	159	5795	-3.75	-1.53	3.01	0.25	1.73	22.46	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.54dBi > 6dBi, so the power density limit shall be reduced to 30-(13.54-6) = 22.46dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-7.62	-5.40	3.01	0.38	-2.01	22.46	Pass
1	155	5775	-8.21	-5.99	3.01	0.38	-2.60	22.46	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.54dBi > 6dBi, so the power density limit shall be reduced to 30-(13.54-6) = 22.46dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

5G traffic radio (Radio 2)

For U-NII-1 Band

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	3.27	3.38	0.25	6.58	9.57	Pass
40	5200	5.59	5.88	0.25	8.99	9.57	Pass
48	5240	5.59	5.68	0.25	8.89	9.57	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[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 17-(13.43-6) = 9.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	3.00	3.32	0.16	6.33	9.57	Pass
40	5200	5.50	5.65	0.16	8.74	9.57	Pass
48	5240	5.63	5.69	0.16	8.83	9.57	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[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 17-(13.43-6) = 9.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-0.71	-1.16	0.22	2.31	9.57	Pass
46	5230	3.41	3.63	0.22	6.76	9.57	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[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 17-(13.43-6) = 9.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

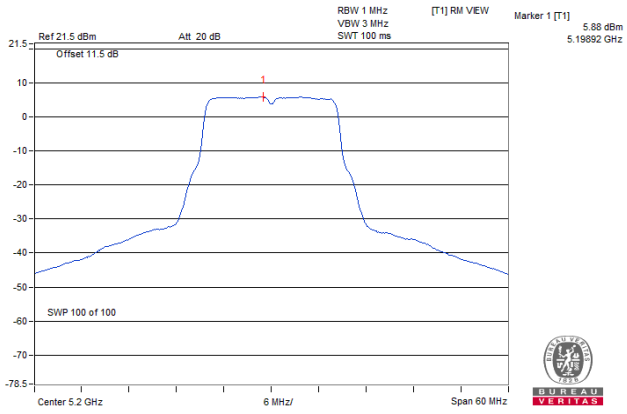
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-4.08	-4.57	0.35	-0.95	9.57	Pass

Note:

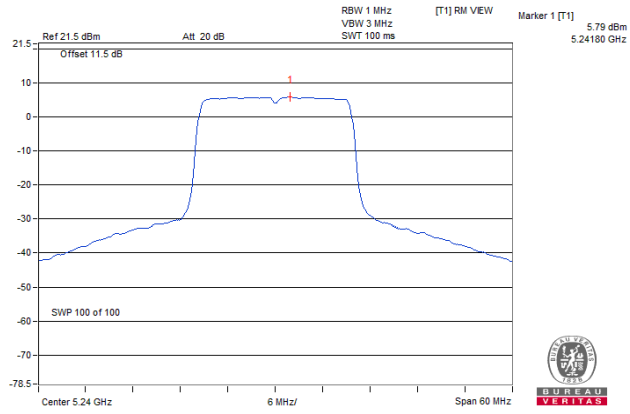
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 17-(13.43-6) = 9.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

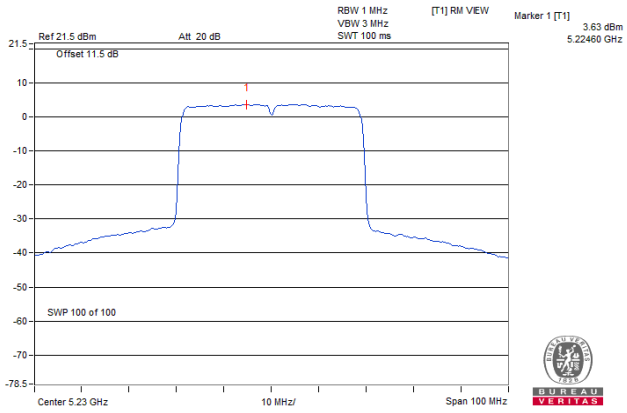
802.11a / Chain 1 / CH 40



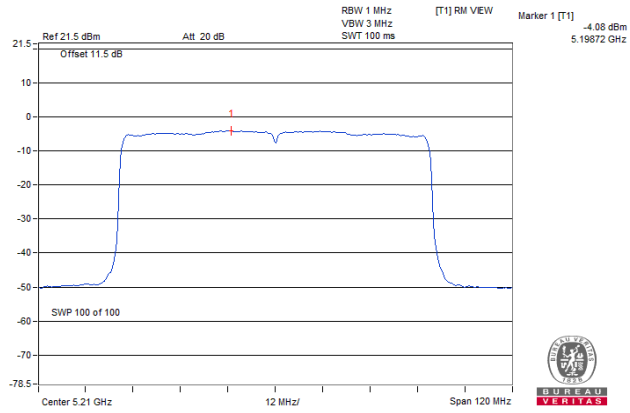
802.11ax (HE20) / Chain 1 / CH 48



802.11nax (HE40) / Chain 1 / CH 46



802.11ax (HE80) / Chain 0 / CH 42



For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	-0.10	2.12	3.01	0.25	5.38	22.57	Pass
	157	5785	-0.45	1.77	3.01	0.25	5.03	22.57	Pass
	165	5825	-0.50	1.72	3.01	0.25	4.98	22.57	Pass
1	149	5745	0.38	2.60	3.01	0.25	5.86	22.57	Pass
	157	5785	-0.34	1.88	3.01	0.25	5.14	22.57	Pass
	165	5825	0.28	2.50	3.01	0.25	5.76	22.57	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 30-(13.43-6) = 22.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	-1.29	0.93	3.01	0.16	4.10	22.57	Pass
	157	5785	-1.01	1.21	3.01	0.16	4.38	22.57	Pass
	165	5825	-1.28	0.94	3.01	0.16	4.11	22.57	Pass
1	149	5745	-0.39	1.83	3.01	0.16	5.00	22.57	Pass
	157	5785	-0.49	1.73	3.01	0.16	4.90	22.57	Pass
	165	5825	-0.49	1.73	3.01	0.16	4.90	22.57	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 30-(13.43-6) = 22.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

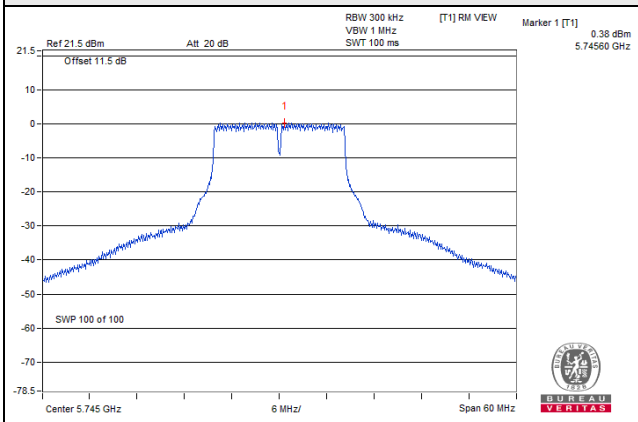
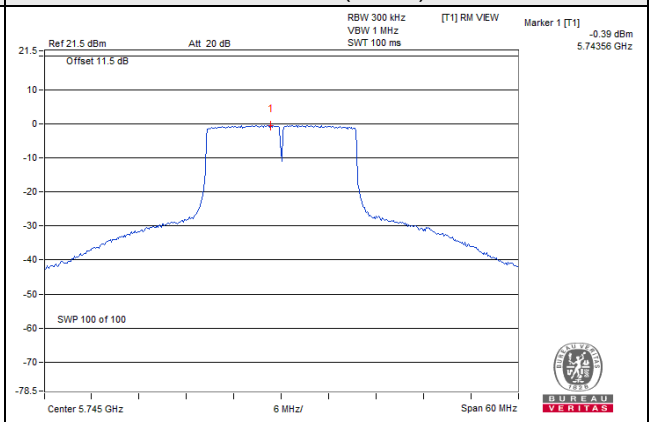
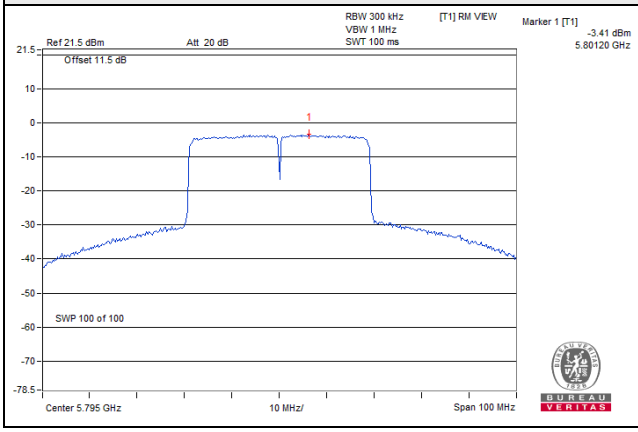
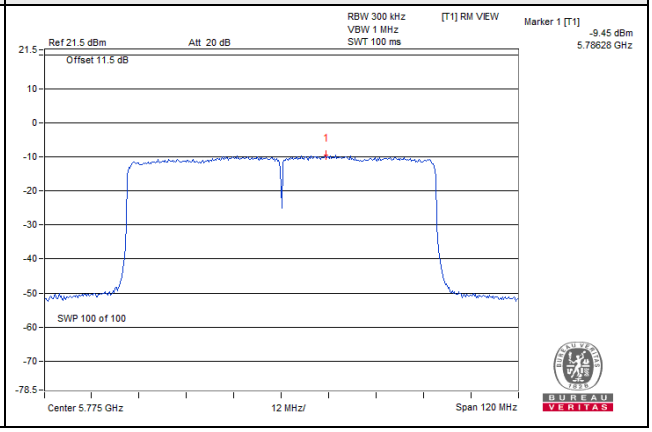
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-3.46	-1.24	3.01	0.22	1.99	22.57	Pass
	159	5795	-3.41	-1.19	3.01	0.22	2.04	22.57	Pass
1	151	5755	-3.65	-1.43	3.01	0.22	1.80	22.57	Pass
	159	5795	-3.59	-1.37	3.01	0.22	1.86	22.57	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 30-(13.43-6) = 22.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-9.45	-7.23	3.01	0.35	-3.87	22.57	Pass
1	155	5775	-10.04	-7.82	3.01	0.35	-4.46	22.57	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 13.43dBi > 6dBi, so the power density limit shall be reduced to 30-(13.43-6) = 22.57dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Scanning radio (Radio 3)

For U-NII-1 Band

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	6.22	6.41	0.24	9.56	15.25	Pass
40	5200	9.44	9.48	0.24	12.71	15.25	Pass
48	5240	9.14	9.31	0.24	12.47	15.25	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[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 17-(7.75-6) = 15.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	5.87	5.94	0.12	9.03	15.25	Pass
40	5200	8.69	8.91	0.12	11.93	15.25	Pass
48	5240	9.02	9.15	0.12	12.21	15.25	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[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 17-(7.75-6) = 15.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	0.30	0.45	0.24	3.62	15.25	Pass
46	5230	5.03	4.87	0.24	8.20	15.25	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[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 17-(7.75-6) = 15.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

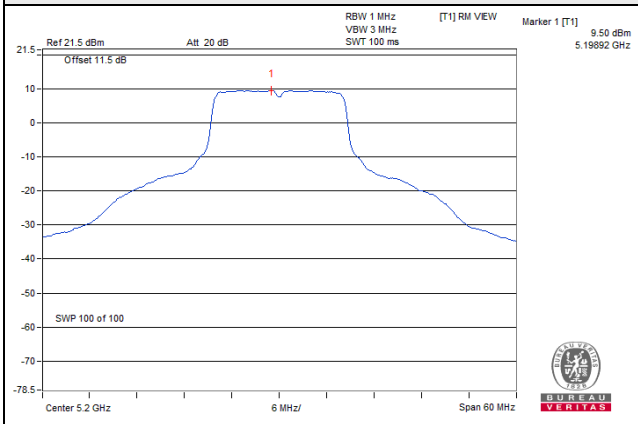
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-2.06	-1.84	0.39	1.45	15.25	Pass

Note:

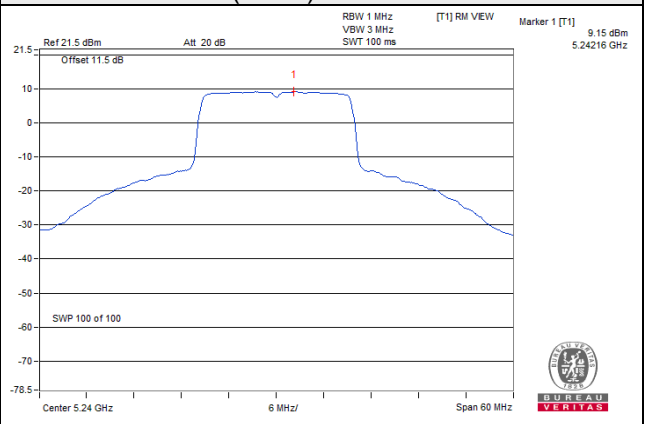
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 17-(7.75-6) = 15.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

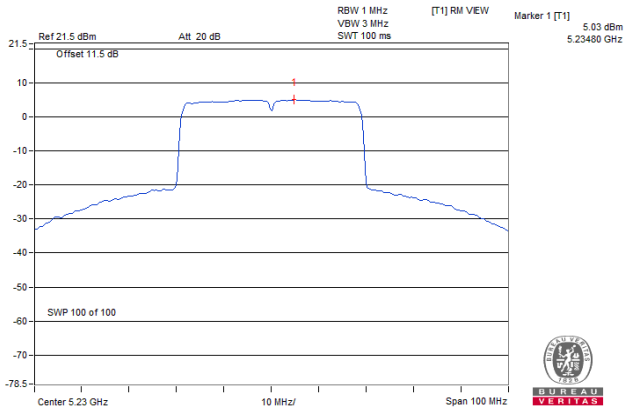
802.11a / Chain 1 / CH 40



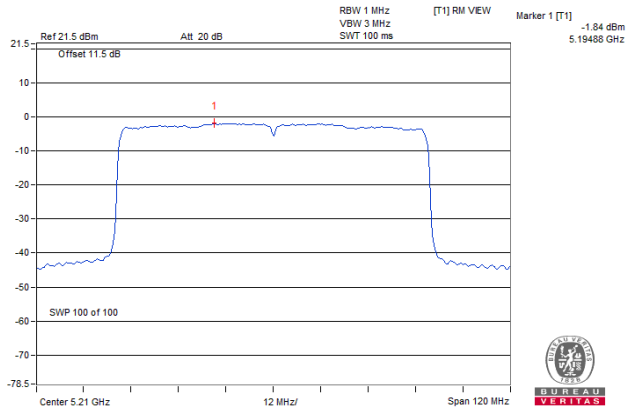
802.11ax (HE20) / Chain 1 / CH 48



802.11nax (HE40) / Chain 0 / CH 46



802.11ax (HE80) / Chain 1 / CH 42



For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	1.23	3.45	3.01	0.24	6.70	28.25	Pass
	157	5785	0.92	3.14	3.01	0.24	6.39	28.25	Pass
	165	5825	0.85	3.07	3.01	0.24	6.32	28.25	Pass
1	149	5745	1.12	3.34	3.01	0.24	6.59	28.25	Pass
	157	5785	0.87	3.09	3.01	0.24	6.34	28.25	Pass
	165	5825	1.13	3.35	3.01	0.24	6.60	28.25	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 30-(7.75-6) = 28.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	0.07	2.29	3.01	0.12	5.42	28.25	Pass
	157	5785	0.06	2.28	3.01	0.12	5.41	28.25	Pass
	165	5825	0.04	2.26	3.01	0.12	5.39	28.25	Pass
1	149	5745	0.01	2.23	3.01	0.12	5.36	28.25	Pass
	157	5785	-0.09	2.13	3.01	0.12	5.26	28.25	Pass
	165	5825	-0.23	1.99	3.01	0.12	5.12	28.25	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2/2$]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 30-(7.75-6) = 28.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

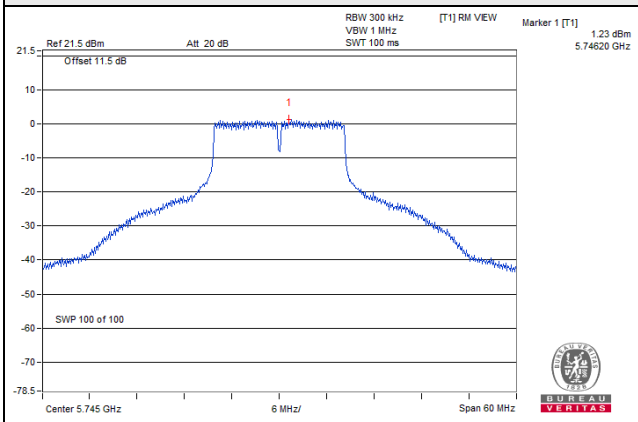
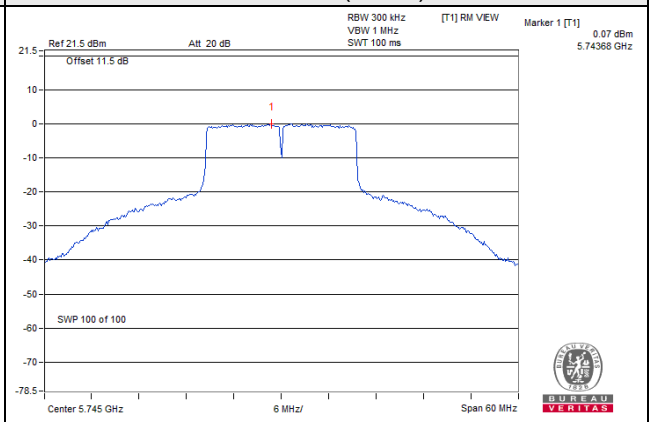
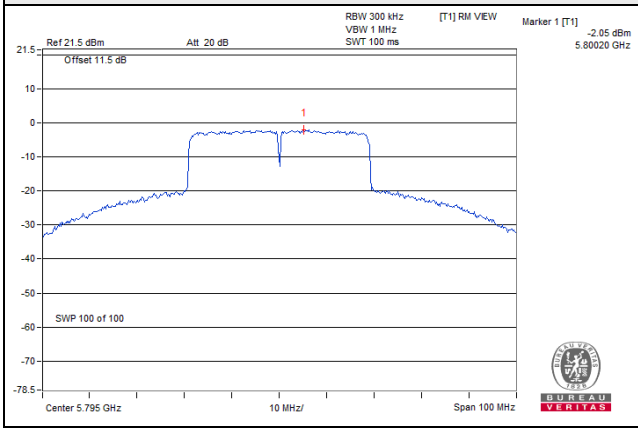
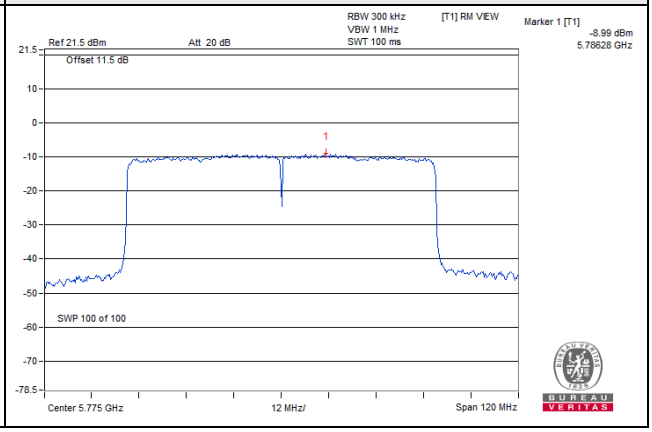
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-3.64	-1.42	3.01	0.24	1.83	28.25	Pass
	159	5795	-2.17	0.05	3.01	0.24	3.30	28.25	Pass
1	151	5755	-3.71	-1.49	3.01	0.24	1.76	28.25	Pass
	159	5795	-2.05	0.17	3.01	0.24	3.42	28.25	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 30-(7.75-6) = 28.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-9.47	-7.25	3.01	0.39	-3.85	28.25	Pass
1	155	5775	-8.99	-6.77	3.01	0.39	-3.37	28.25	Pass

Note:
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20}$)^2/2]= 7.75dBi > 6dBi, so the power density limit shall be reduced to 30-(7.75-6) = 28.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

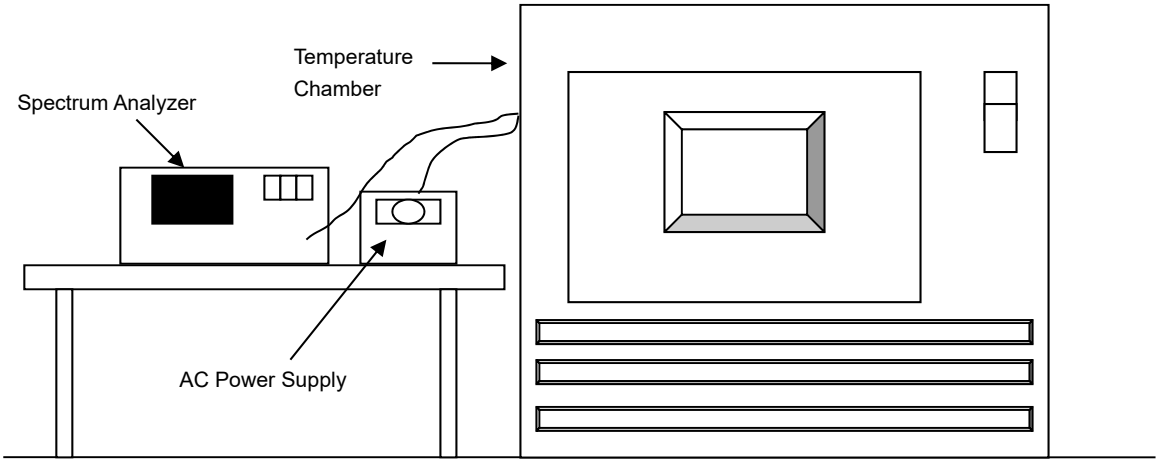
Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

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
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 16, 2020	Sep. 15, 2021
Standard Temperature And Humidity Chamber TERCHY	MHU-225AU	920842	May 27, 2020	May 26, 2021
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2020	Jun. 22, 2021
AC Power Supply Extech	CFW-105	E000603	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

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 every 10 degrees reduction until the lowest temperature achieved.

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

5G traffic radio (Radio 1)

Frequency Stability Versus Temp.									
Operating Frequency: 5745MHz									
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
60	120	5745.0075	PASS	5745.0056	PASS	5745.0086	PASS	5745.0058	PASS
50	120	5745.0028	PASS	5745.005	PASS	5745.0055	PASS	5745.0055	PASS
40	120	5744.9783	PASS	5744.975	PASS	5744.9761	PASS	5744.9776	PASS
30	120	5745.023	PASS	5745.0233	PASS	5745.0216	PASS	5745.0197	PASS
20	120	5745.0078	PASS	5745.005	PASS	5745.0082	PASS	5745.0067	PASS
10	120	5745.0212	PASS	5745.0193	PASS	5745.0171	PASS	5745.0181	PASS
0	120	5745.0184	PASS	5745.0189	PASS	5745.0167	PASS	5745.0148	PASS
-10	120	5745.0208	PASS	5745.0197	PASS	5745.0204	PASS	5745.0172	PASS
-20	120	5744.9882	PASS	5744.9863	PASS	5744.9867	PASS	5744.9829	PASS
-30	120	5744.9925	PASS	5744.9958	PASS	5744.9945	PASS	5744.9951	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5745MHz									
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	5745.0077	PASS	5745.0052	PASS	5745.0083	PASS	5745.0071	PASS
	120	5745.0078	PASS	5745.005	PASS	5745.0082	PASS	5745.0067	PASS
	102	5745.0088	PASS	5745.0045	PASS	5745.0071	PASS	5745.0064	PASS

5G traffic radio (Radio 2)

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
60	120	5180.0174	PASS	5180.0178	PASS	5180.0166	PASS	5180.0136	PASS
50	120	5179.9999	PASS	5180.0015	PASS	5180.0015	PASS	5179.9973	PASS
40	120	5179.9813	PASS	5179.9824	PASS	5179.9812	PASS	5179.9797	PASS
30	120	5180.0007	PASS	5180.0017	PASS	5179.9989	PASS	5179.9982	PASS
20	120	5180.0098	PASS	5180.0087	PASS	5180.0093	PASS	5180.0082	PASS
10	120	5179.9834	PASS	5179.9866	PASS	5179.9839	PASS	5179.9867	PASS
0	120	5179.9879	PASS	5179.9898	PASS	5179.9884	PASS	5179.9911	PASS
-10	120	5180.0042	PASS	5180.0021	PASS	5180.0019	PASS	5180.0038	PASS
-20	120	5180.0002	PASS	5180.0027	PASS	5180.003	PASS	5180.0032	PASS
-30	120	5179.9833	PASS	5179.9806	PASS	5179.9847	PASS	5179.9843	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	5180.0092	PASS	5180.0085	PASS	5180.0086	PASS	5180.0091	PASS
	120	5180.0098	PASS	5180.0087	PASS	5180.0093	PASS	5180.0082	PASS
	102	5180.0088	PASS	5180.0093	PASS	5180.0097	PASS	5180.0089	PASS

Scanning radio (Radio 3)

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
60	120	5179.9853	PASS	5179.9851	PASS	5179.9837	PASS	5179.9822	PASS
50	120	5179.9977	PASS	5179.9972	PASS	5179.9988	PASS	5179.9982	PASS
40	120	5180.0134	PASS	5180.0118	PASS	5180.0117	PASS	5180.0125	PASS
30	120	5179.9781	PASS	5179.9781	PASS	5179.9793	PASS	5179.9749	PASS
20	120	5180.0069	PASS	5180.0085	PASS	5180.0095	PASS	5180.0078	PASS
10	120	5180.0012	PASS	5180.0000	PASS	5180.0007	PASS	5180.0017	PASS
0	120	5179.9946	PASS	5179.9969	PASS	5179.9973	PASS	5179.9956	PASS
-10	120	5179.9941	PASS	5179.9948	PASS	5179.9972	PASS	5179.9942	PASS
-20	120	5179.9821	PASS	5179.9783	PASS	5179.9799	PASS	5179.9819	PASS
-30	120	5180.0002	PASS	5179.9987	PASS	5179.9999	PASS	5180.0013	PASS

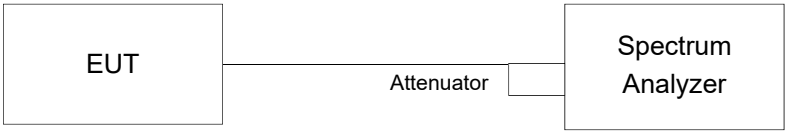
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0060	PASS	5180.0083	PASS	5180.0103	PASS	5180.0082	PASS
	120	5180.0069	PASS	5180.0085	PASS	5180.0095	PASS	5180.0078	PASS
	102	5180.0066	PASS	5180.0085	PASS	5180.0104	PASS	5180.0082	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

5G traffic radio (Radio 1)

802.11a

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	16.42	16.40	0.5	Pass
157	5785	16.43	16.43	0.5	Pass
165	5825	16.42	16.42	0.5	Pass

802.11ax (HE20)

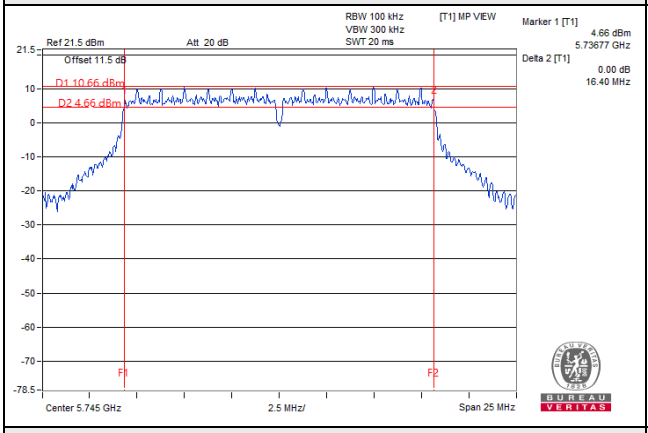
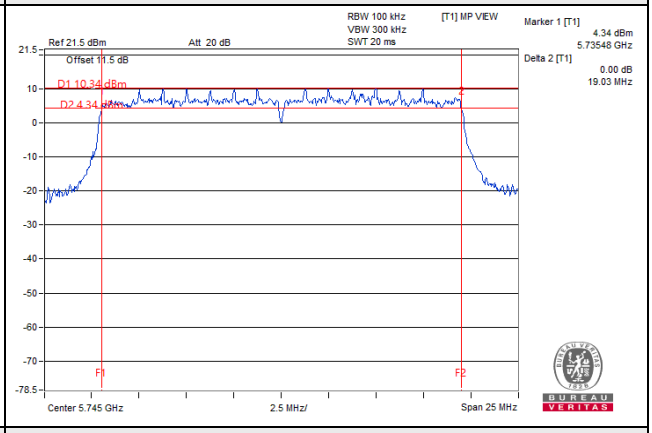
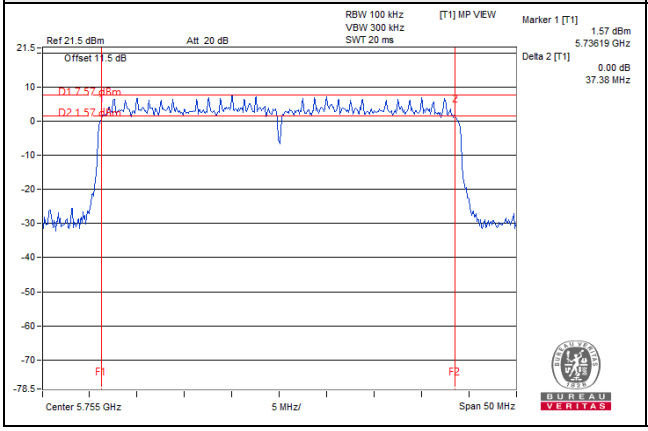
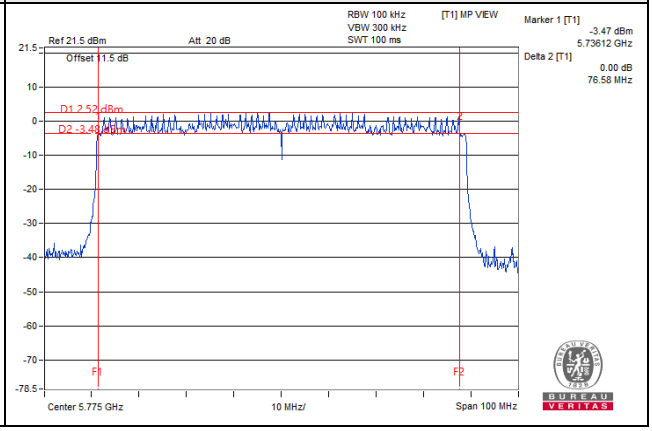
Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	19.08	19.03	0.5	Pass
157	5785	19.08	19.06	0.5	Pass
165	5825	19.08	19.08	0.5	Pass

802.11ax (HE40)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	37.67	37.38	0.5	Pass
159	5795	37.87	37.67	0.5	Pass

802.11ax (HE80)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	76.77	76.58	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

5G traffic radio (Radio 2)

802.11a

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	16.42	16.40	0.5	Pass
157	5785	16.43	16.42	0.5	Pass
165	5825	16.42	16.43	0.5	Pass

802.11ax (HE20)

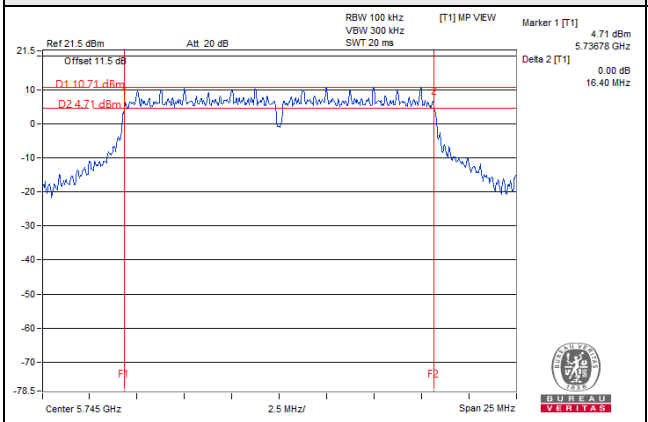
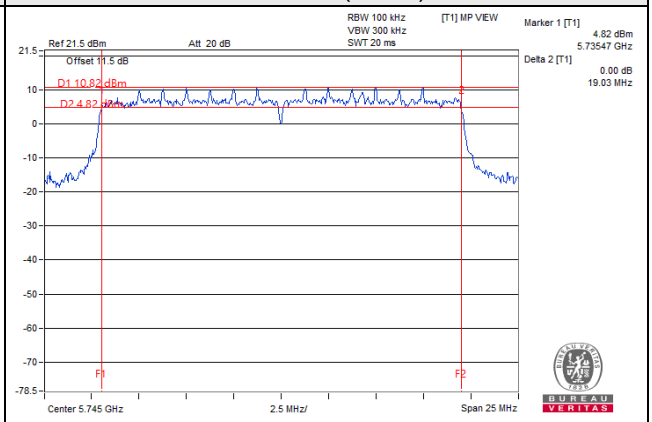
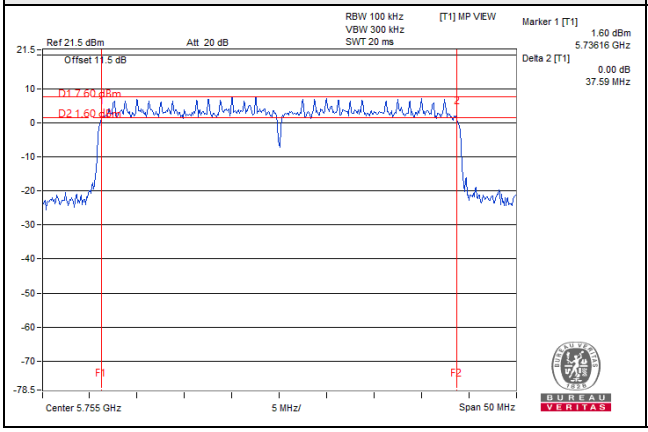
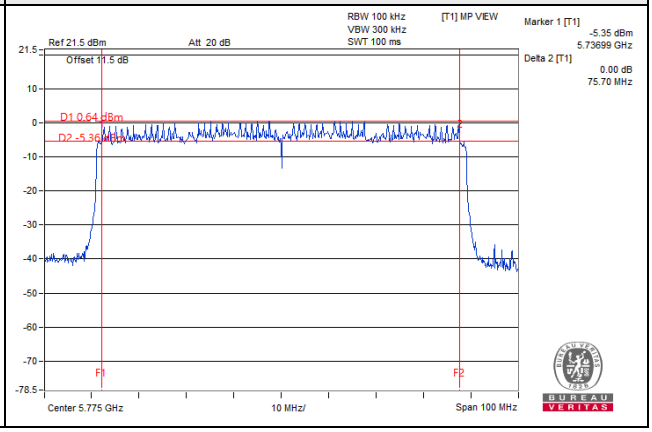
Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	19.07	19.03	0.5	Pass
157	5785	19.07	19.05	0.5	Pass
165	5825	19.08	19.03	0.5	Pass

802.11ax (HE40)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	37.73	37.59	0.5	Pass
159	5795	37.76	37.61	0.5	Pass

802.11ax (HE80)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	77.72	75.70	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Scanning radio (Radio 3)

802.11a

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	16.39	16.41	0.5	Pass
157	5785	16.39	16.40	0.5	Pass
165	5825	16.41	16.42	0.5	Pass

802.11ax (HE20)

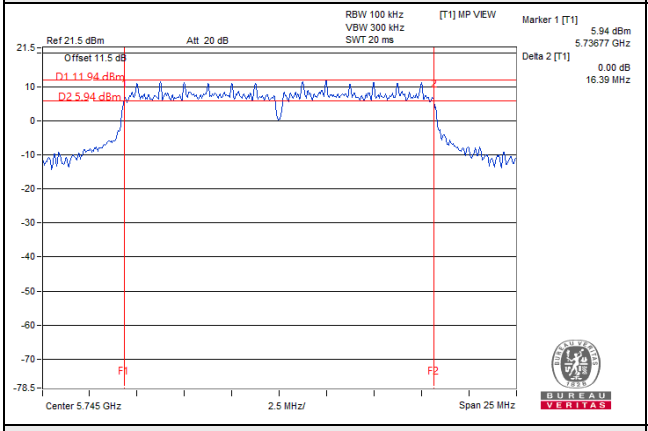
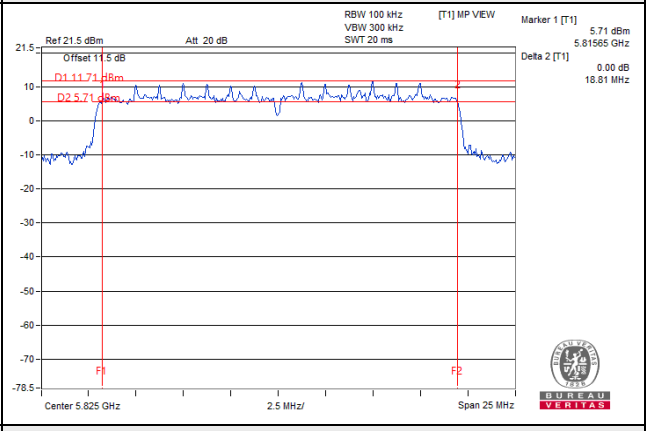
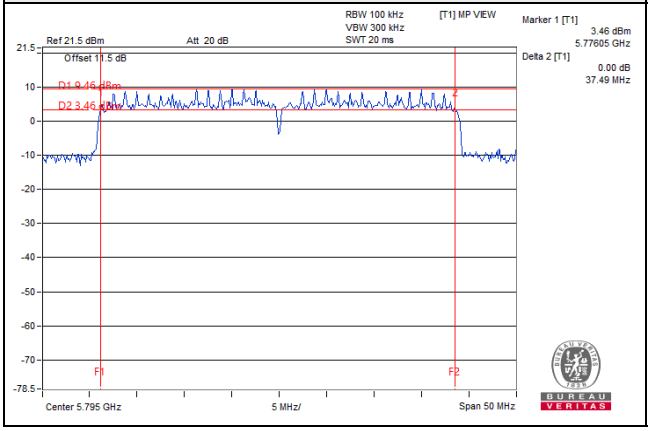
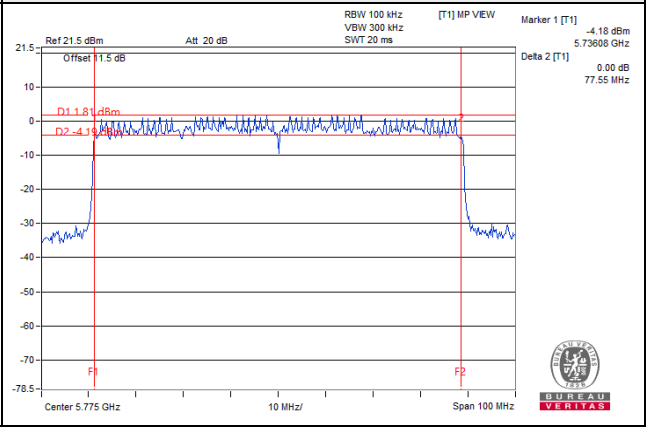
Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	18.96	18.93	0.5	Pass
157	5785	18.94	18.98	0.5	Pass
165	5825	18.97	18.81	0.5	Pass

802.11ax (HE40)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	37.78	37.50	0.5	Pass
159	5795	37.78	37.49	0.5	Pass

802.11ax (HE80)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
155	5775	77.81	77.55	0.5	Pass

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

5 Pictures of Test Arrangements

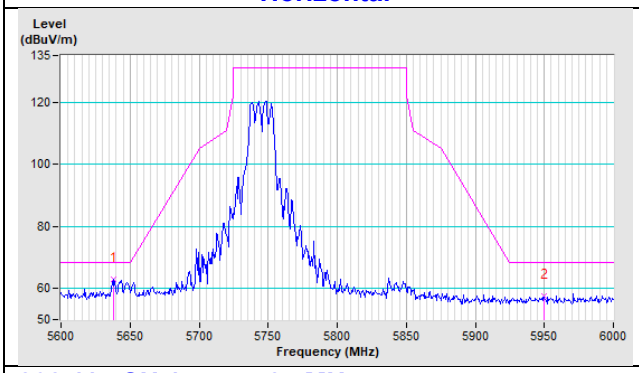
Please refer to the attached file (Test Setup Photo).

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

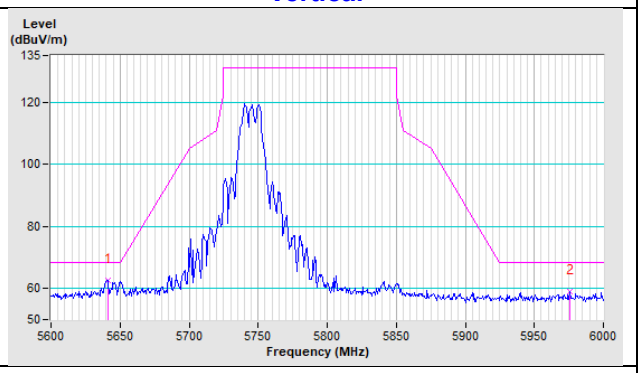
5G traffic radio (Radio 1)

802.11a CH 149：5745 MHz

Horizontal

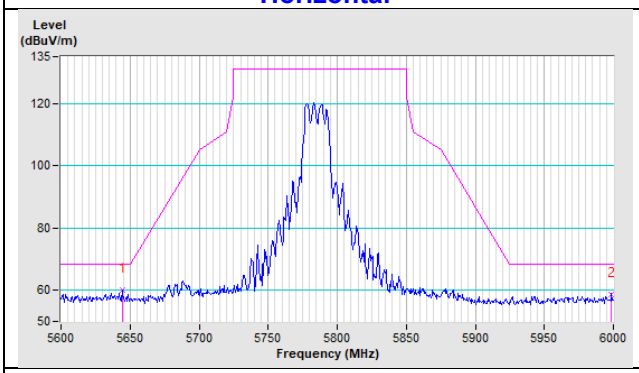


Vertical

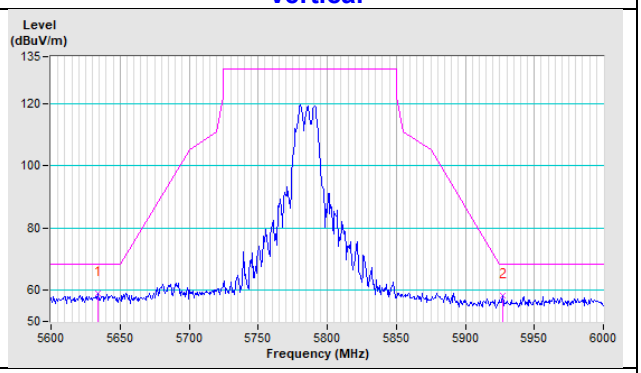


802.11a CH 157：5785 MHz

Horizontal

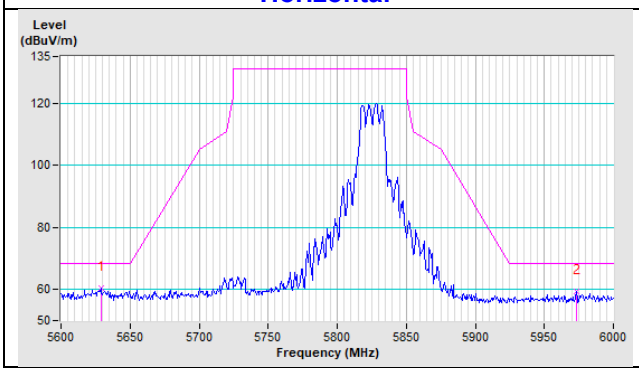


Vertical

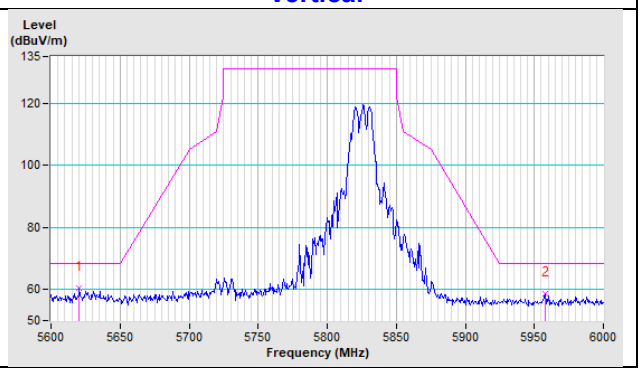


802.11a CH 165：5825 MHz

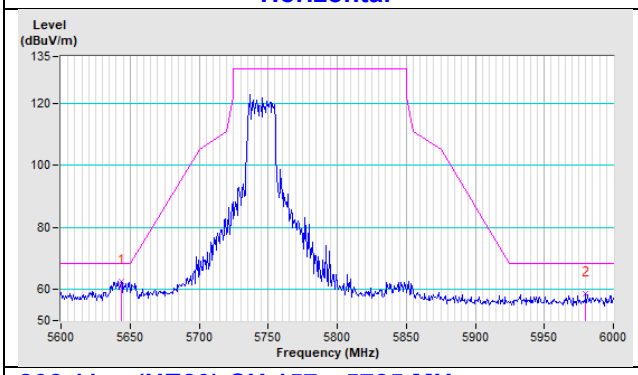
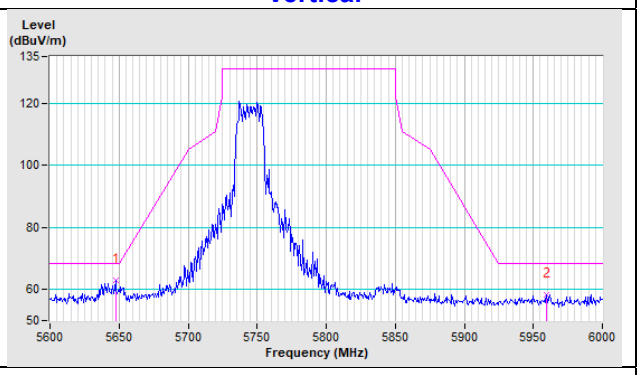
Horizontal



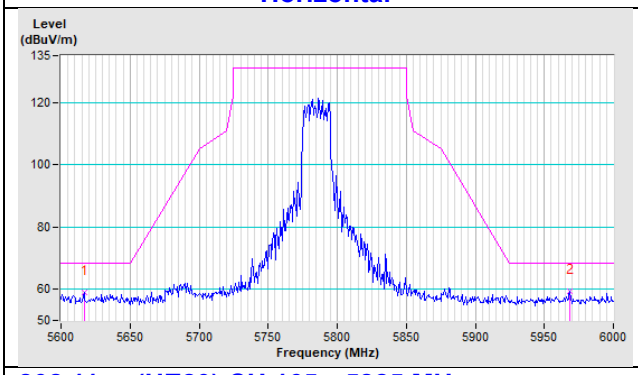
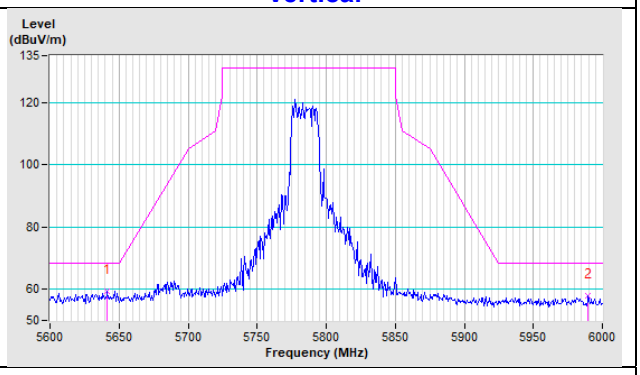
Vertical



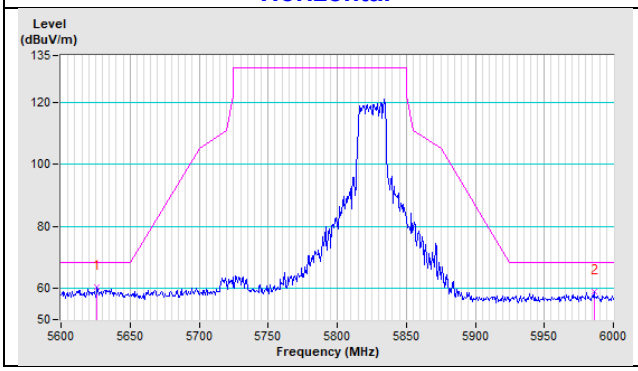
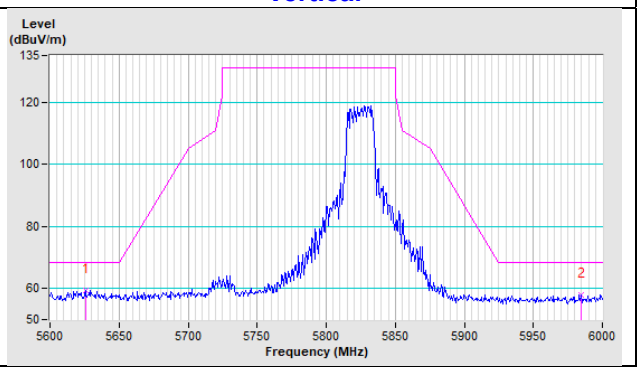
802.11ax (HE20) CH 149：5745 MHz

Horizontal	Vertical
	

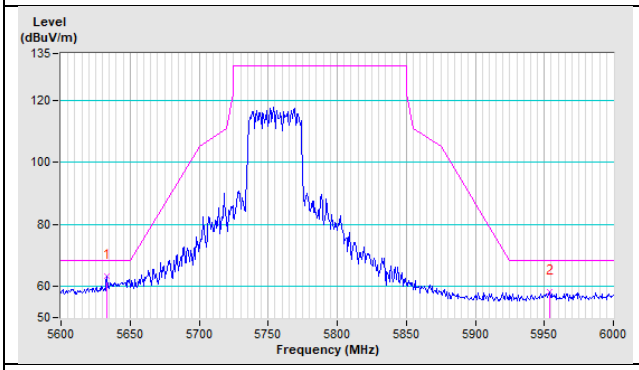
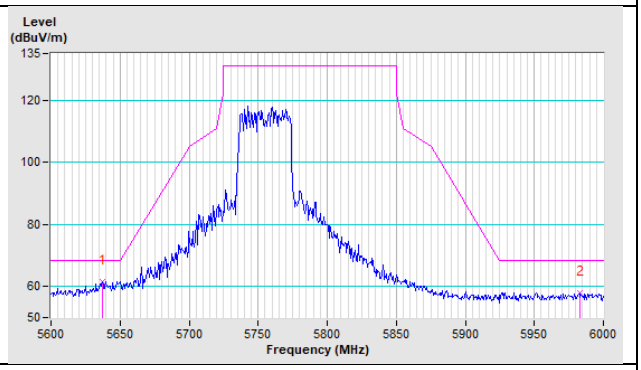
802.11ax (HE20) CH 157：5785 MHz

Horizontal	Vertical
	

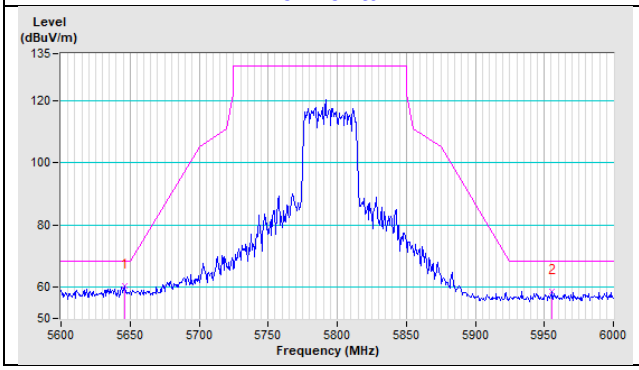
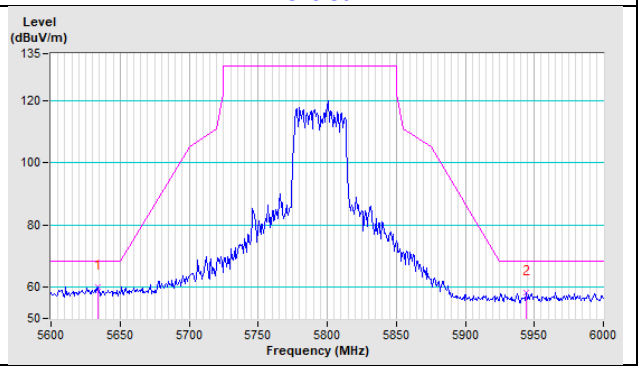
802.11ax (HE20) CH 165：5825 MHz

Horizontal	Vertical
	

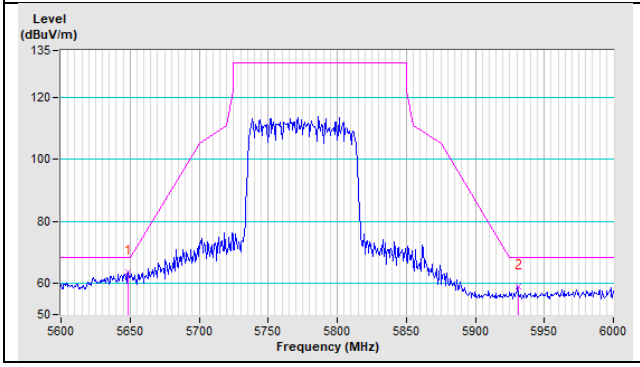
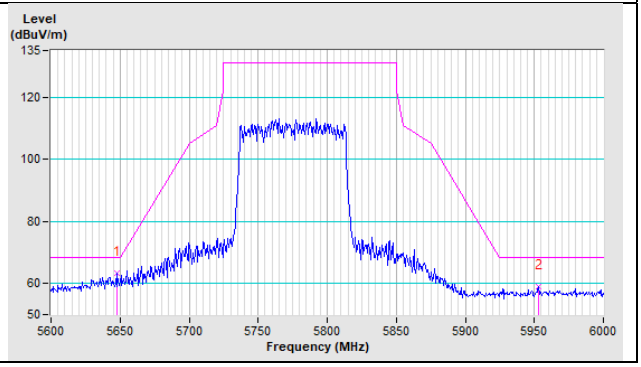
802.11ax (HE40) CH 151：5755 MHz

Horizontal	Vertical
	

802.11ax (HE40) CH 159：5795 MHz

Horizontal	Vertical
	

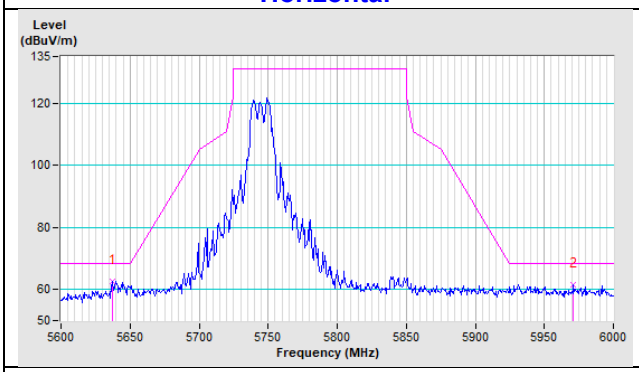
802.11ax (HE80) CH 155：5775 MHz

Horizontal	Vertical
	

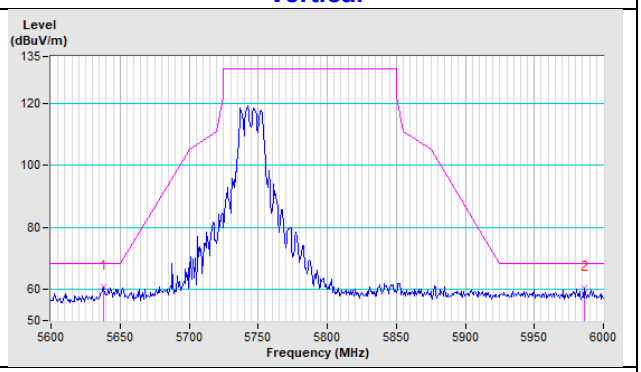
5G traffic radio (Radio 2)

802.11a CH 149：5745 MHz

Horizontal

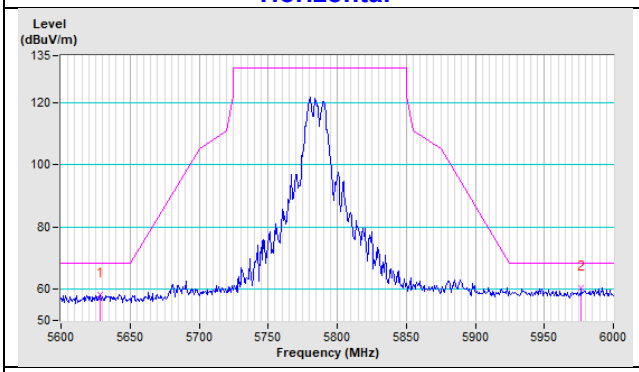


Vertical

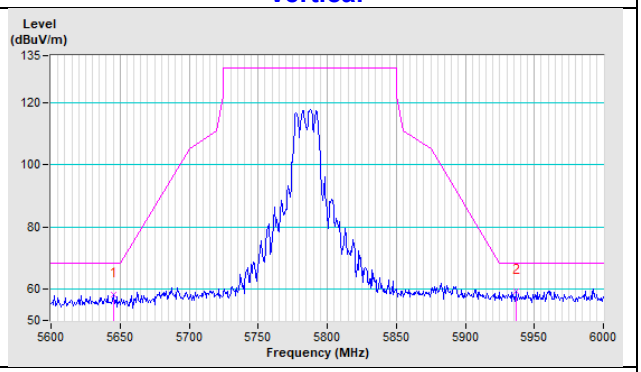


802.11a CH 157：5785 MHz

Horizontal

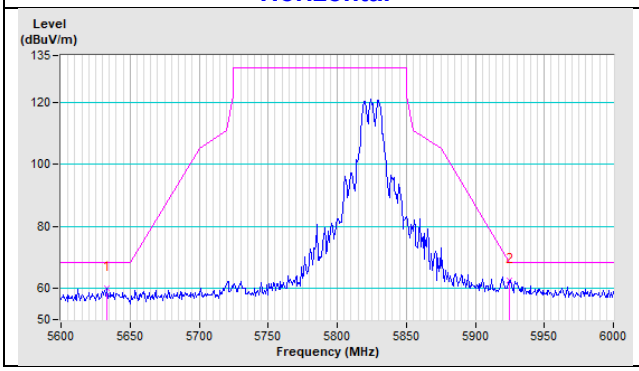


Vertical

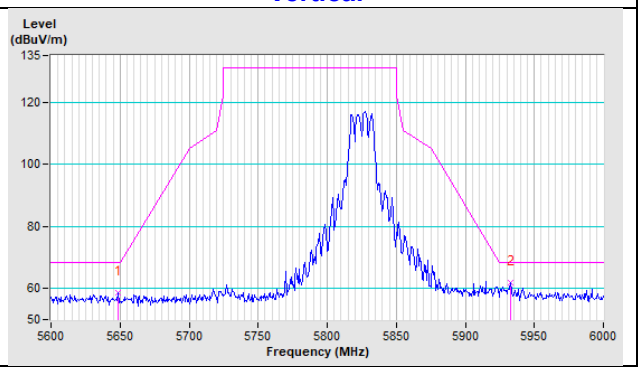


802.11a CH 165：5825 MHz

Horizontal

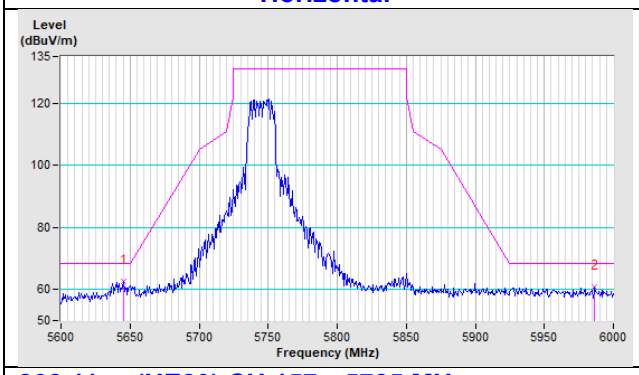


Vertical

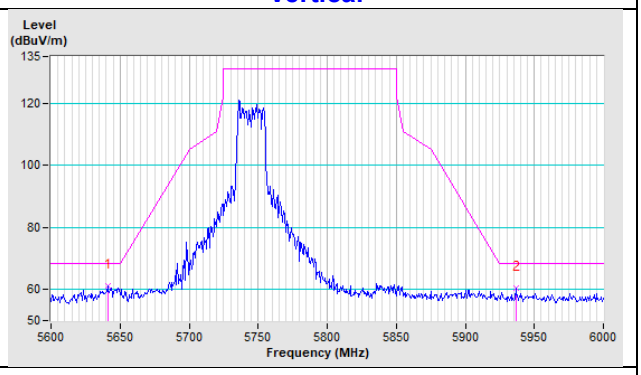


802.11ax (HE20) CH 149：5745 MHz

Horizontal

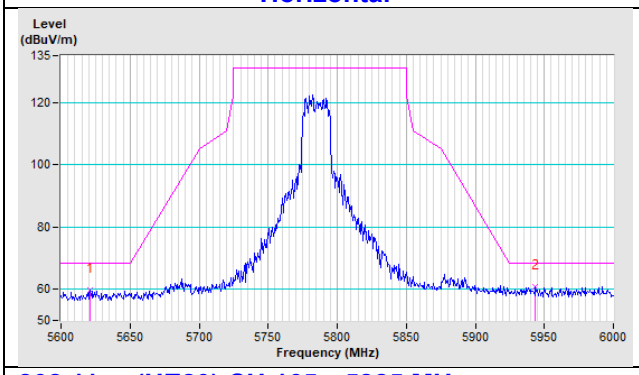


Vertical

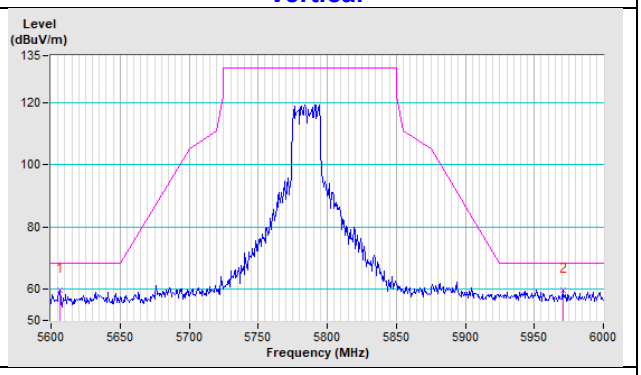


802.11ax (HE20) CH 157：5785 MHz

Horizontal

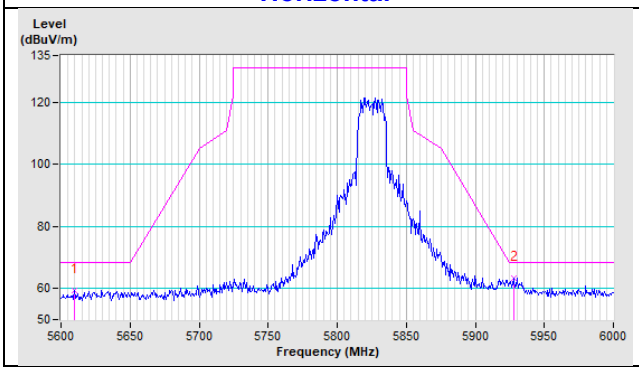


Vertical

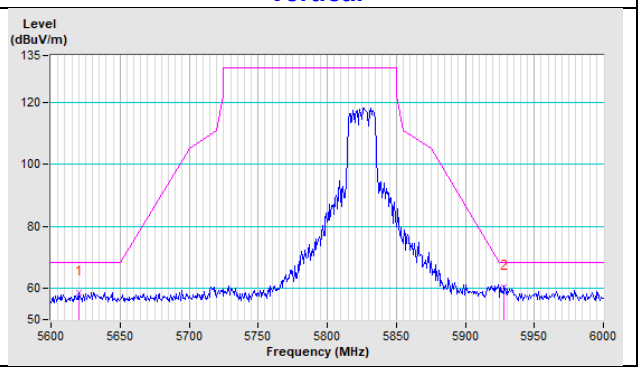


802.11ax (HE20) CH 165：5825 MHz

Horizontal

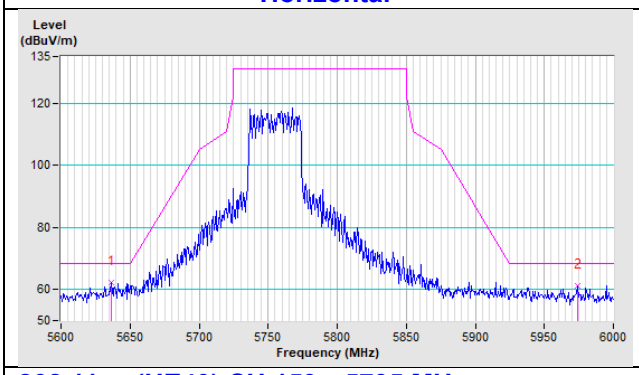


Vertical

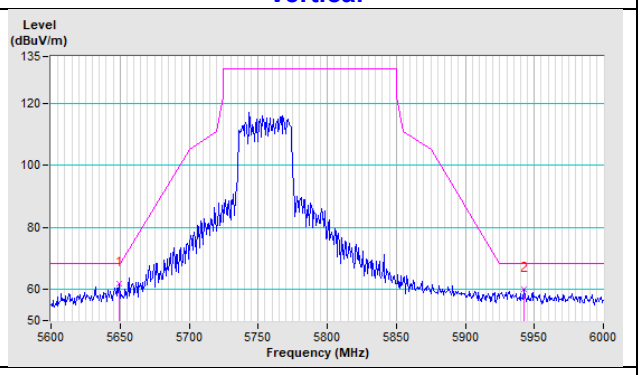


802.11ax (HE40) CH 151：5755 MHz

Horizontal

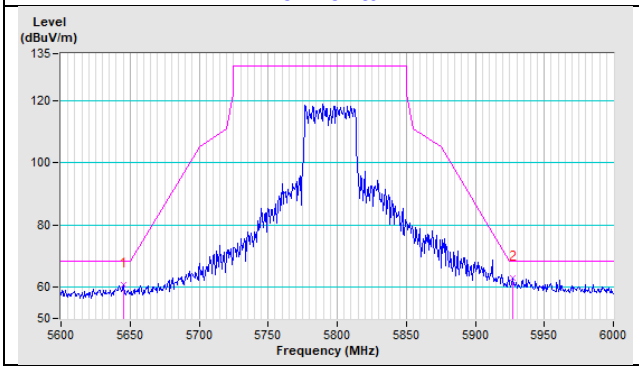


Vertical

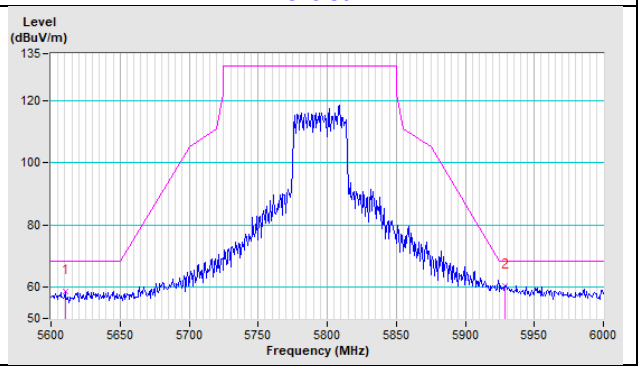


802.11ax (HE40) CH 159：5795 MHz

Horizontal

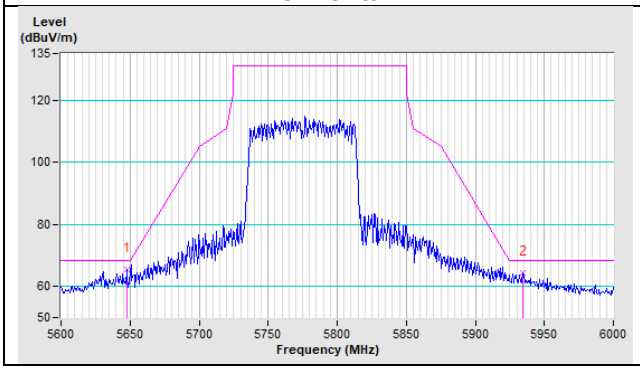


Vertical

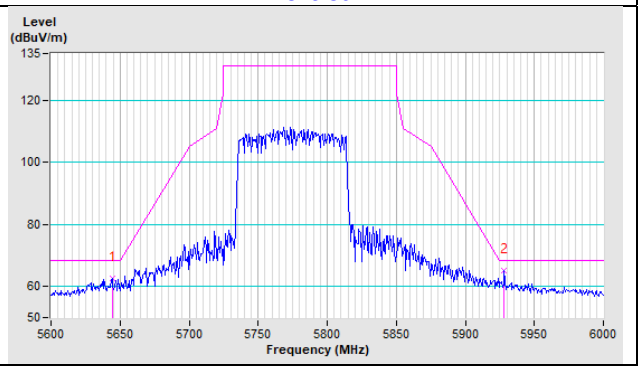


802.11ax (HE80) CH 155：5775 MHz

Horizontal



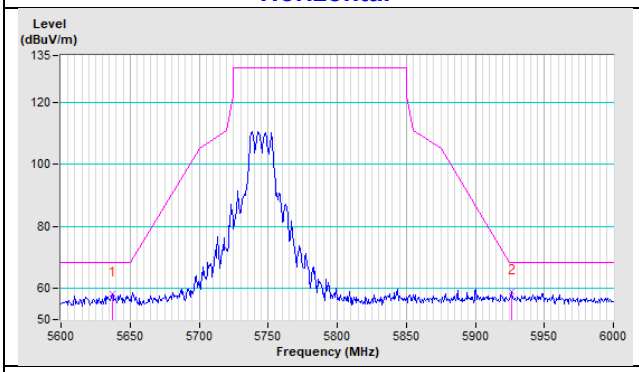
Vertical



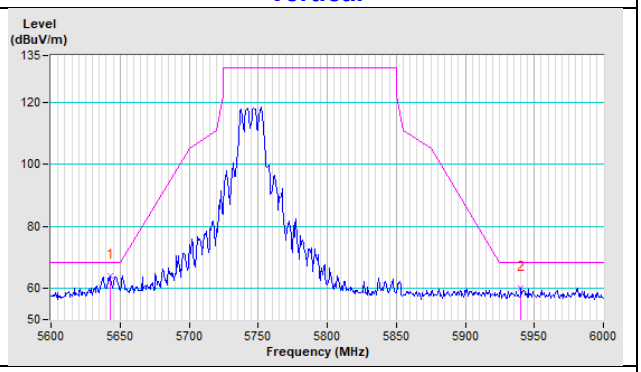
Scanning radio (Radio 3)

802.11a CH 149：5745 MHz

Horizontal

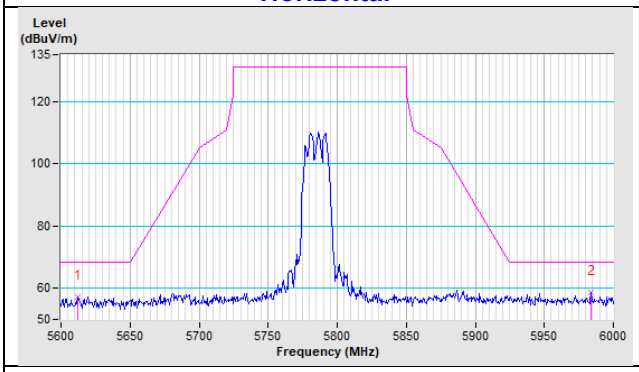


Vertical

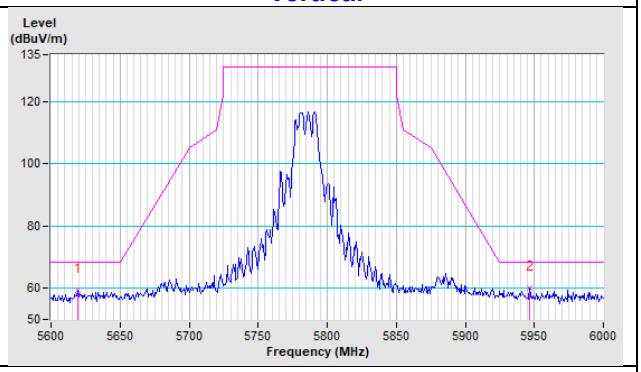


802.11a CH 157：5785 MHz

Horizontal

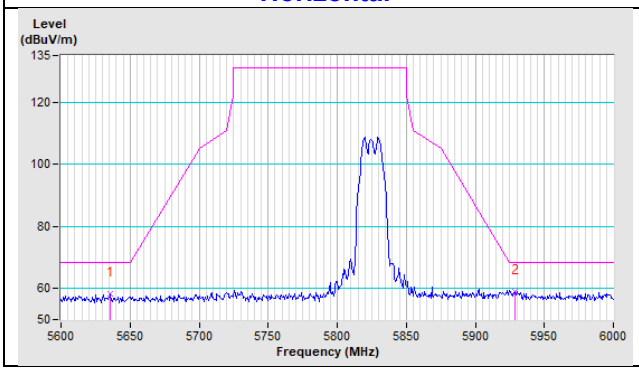


Vertical

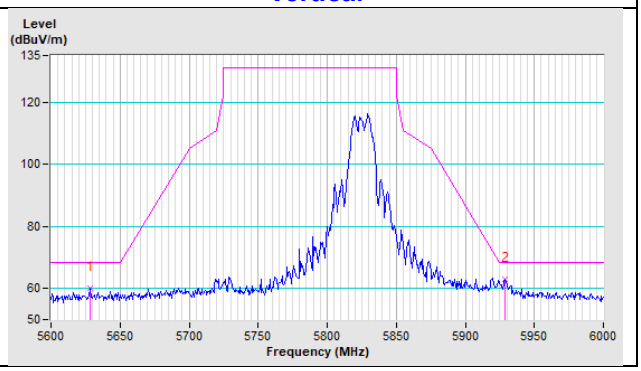


802.11a CH 165：5825 MHz

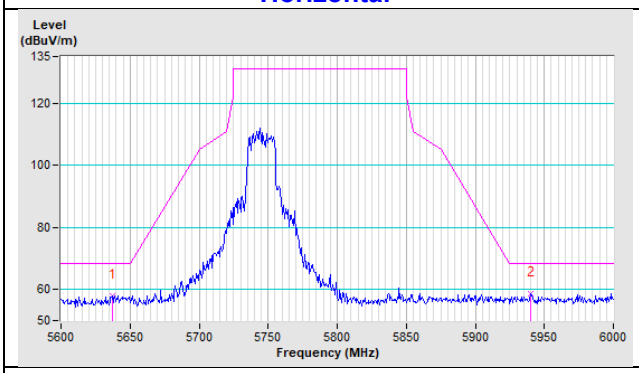
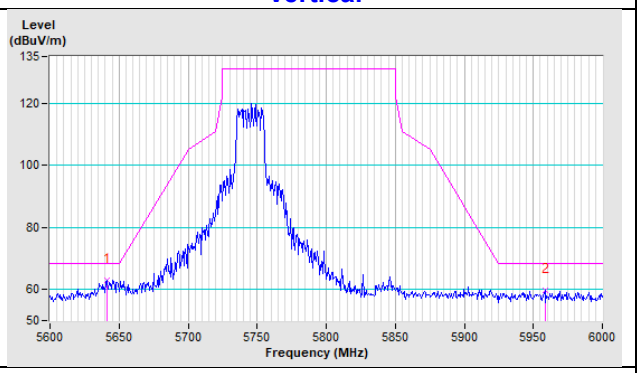
Horizontal



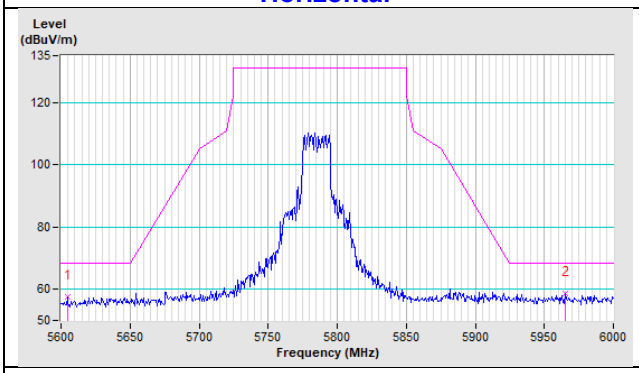
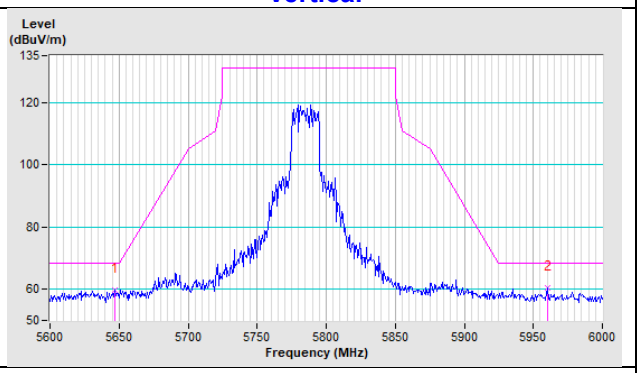
Vertical



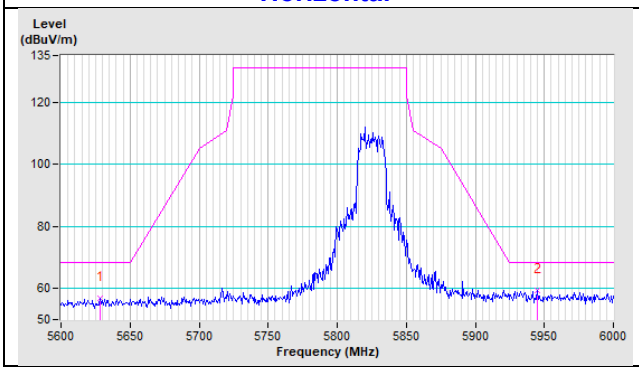
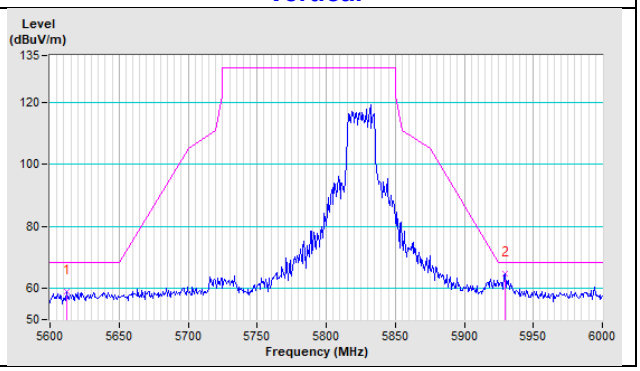
802.11ax (HE20) CH 149：5745 MHz

Horizontal	Vertical
	

802.11ax (HE20) CH 157：5785 MHz

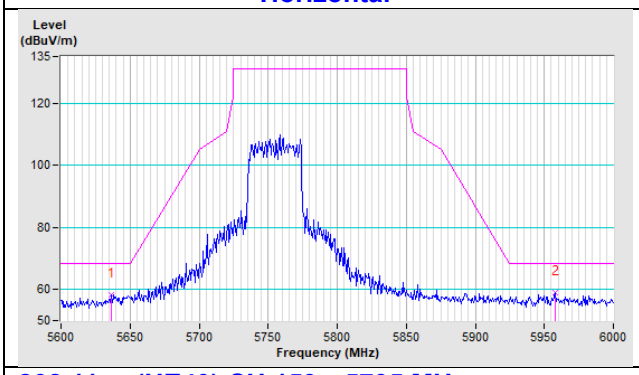
Horizontal	Vertical
	

802.11ax (HE20) CH 165：5825 MHz

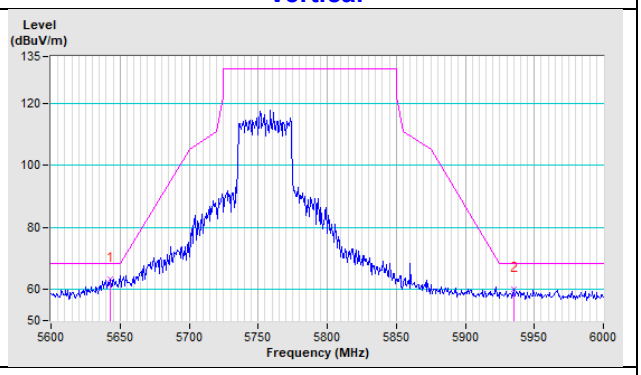
Horizontal	Vertical
	

802.11ax (HE40) CH 151：5755 MHz

Horizontal

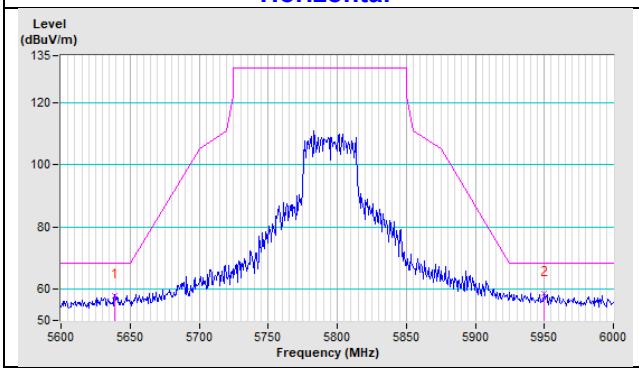


Vertical

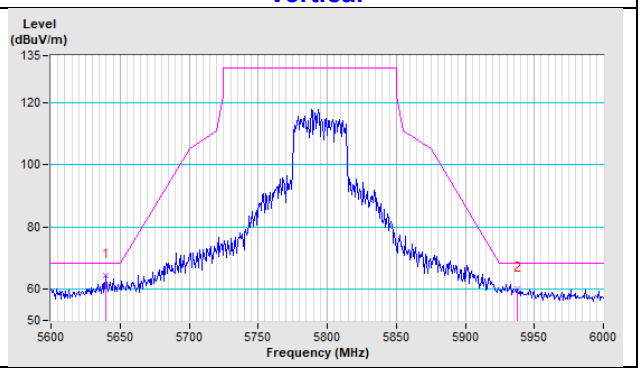


802.11ax (HE40) CH 159：5795 MHz

Horizontal

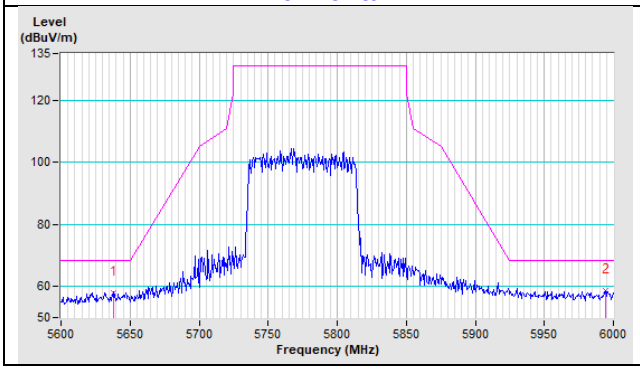


Vertical

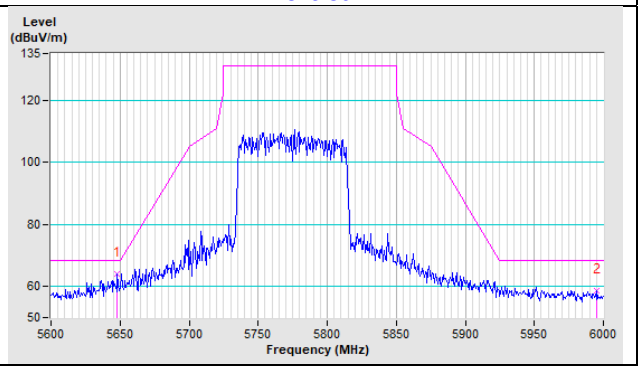


802.11ax (HE80) CH 155：5775 MHz

Horizontal



Vertical

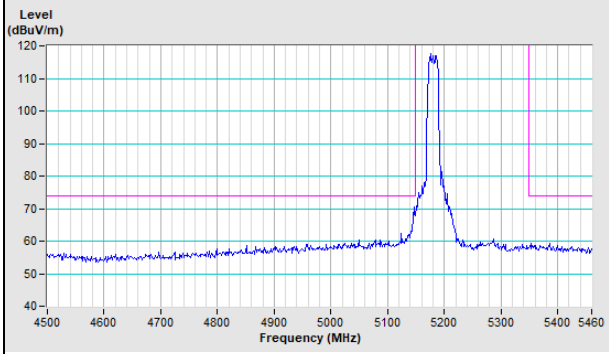


Annex B - Band Edge Measurement

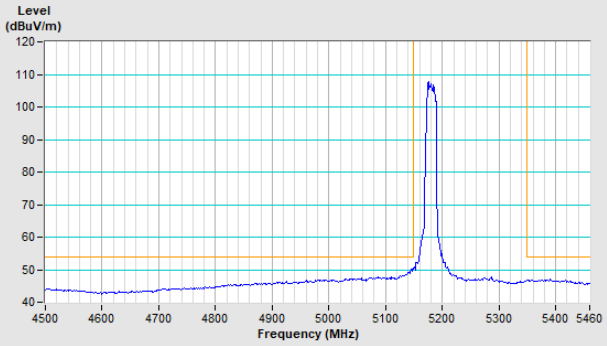
5G traffic radio (Radio 2)

802.11a Channel 36

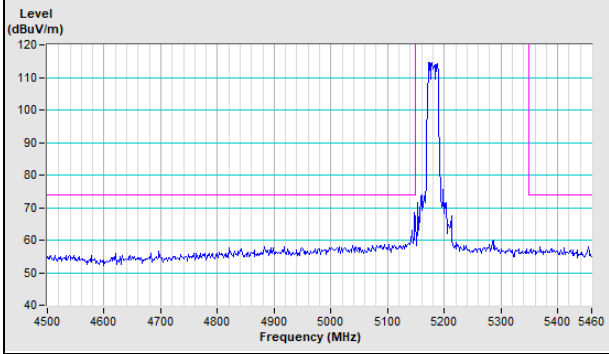
Horizontal (Peak)



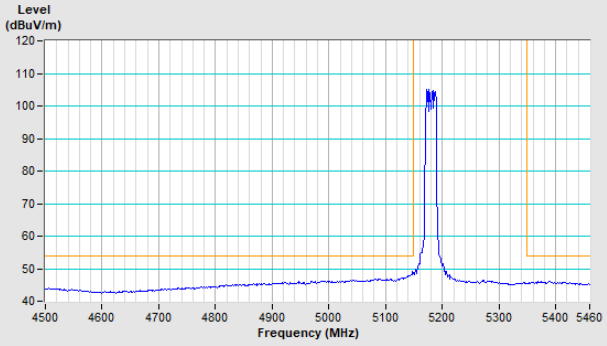
Horizontal (Average)



Vertical (Peak)

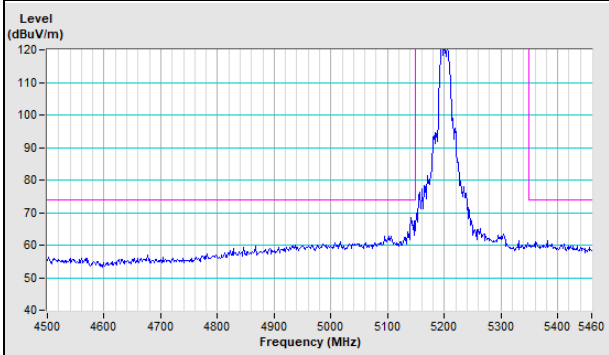


Vertical (Average)

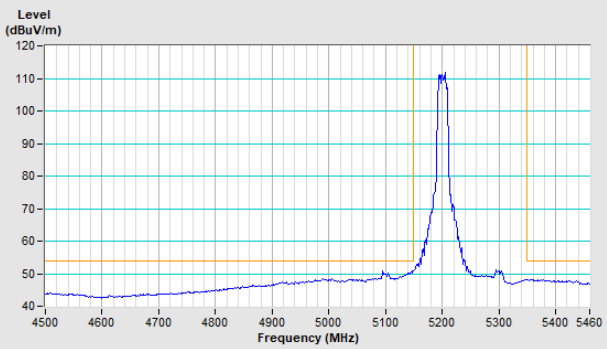


802.11a Channel 40

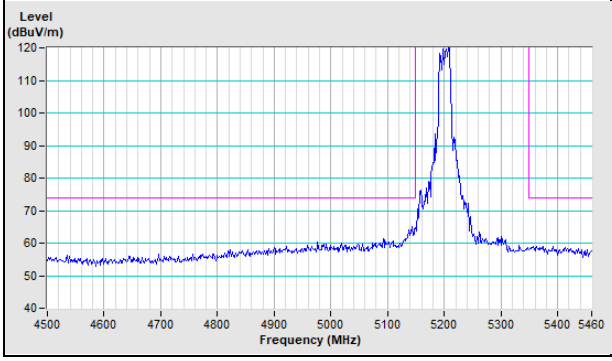
Horizontal (Peak)



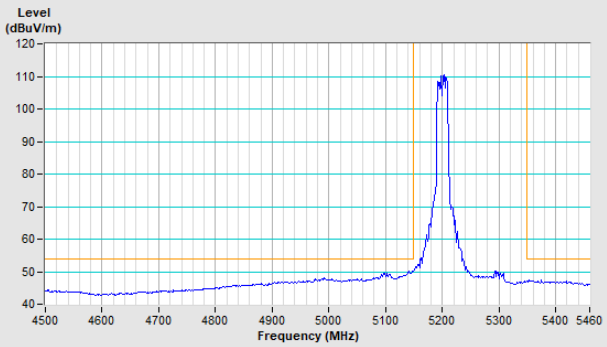
Horizontal (Average)

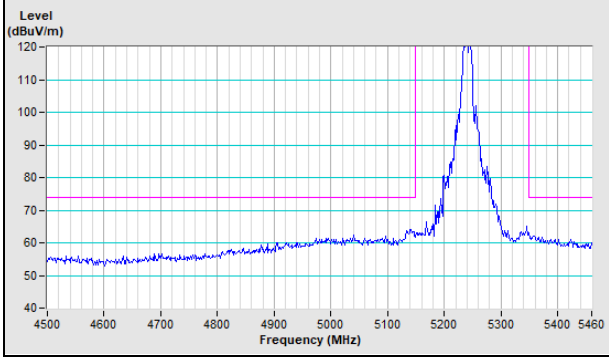
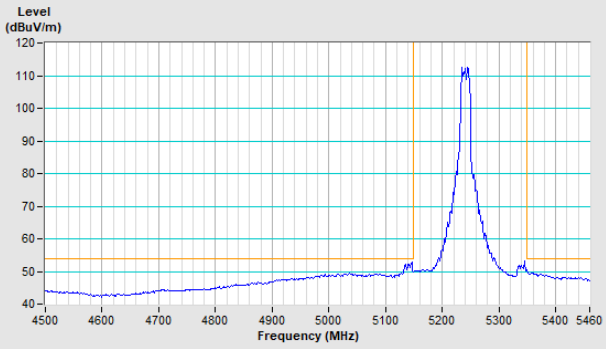
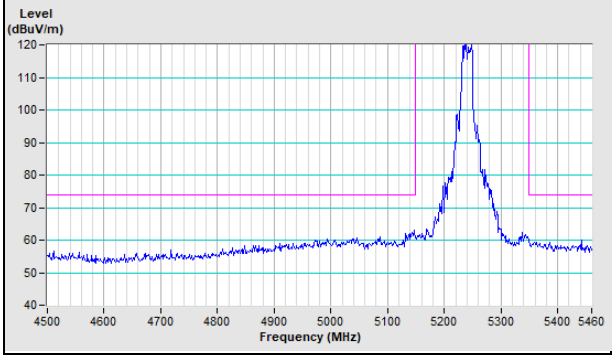
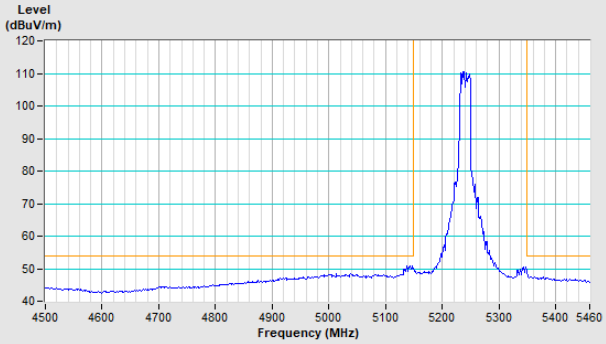


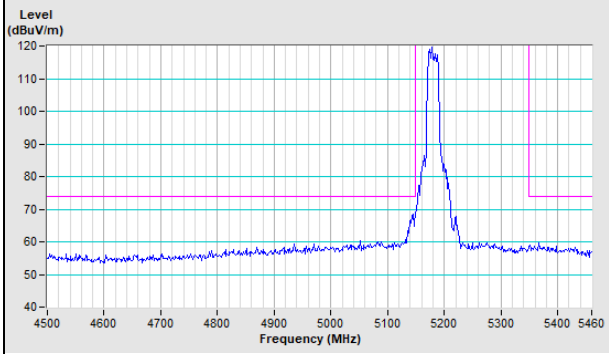
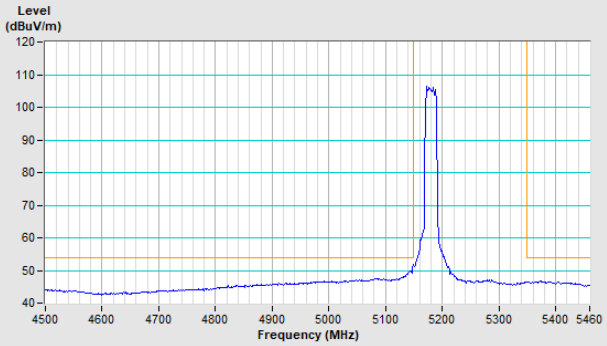
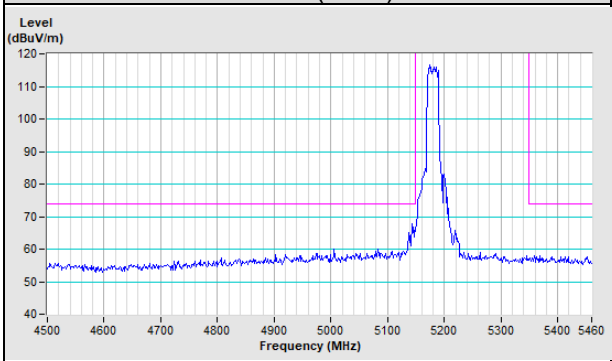
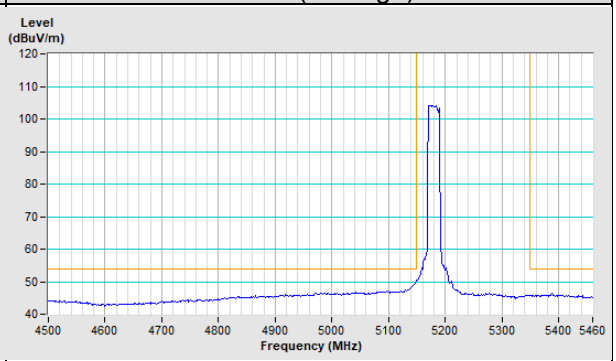
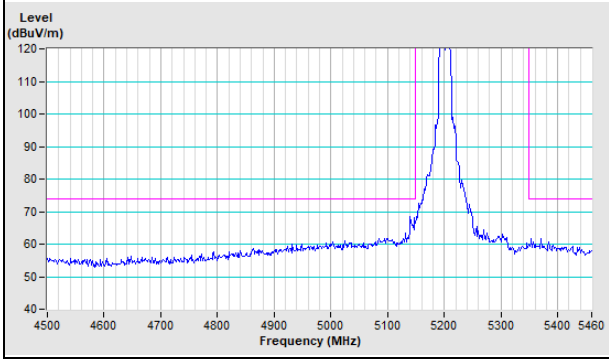
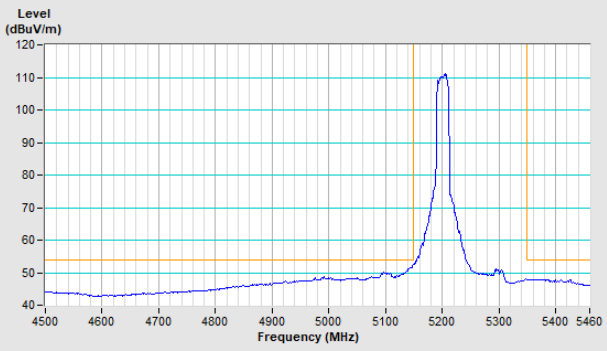
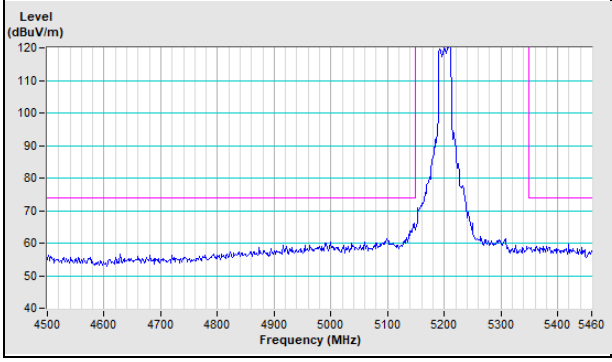
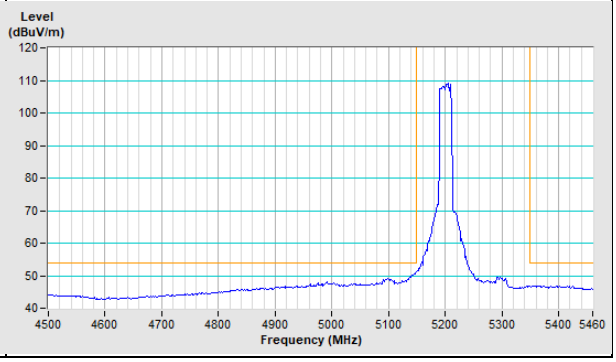
Vertical (Peak)

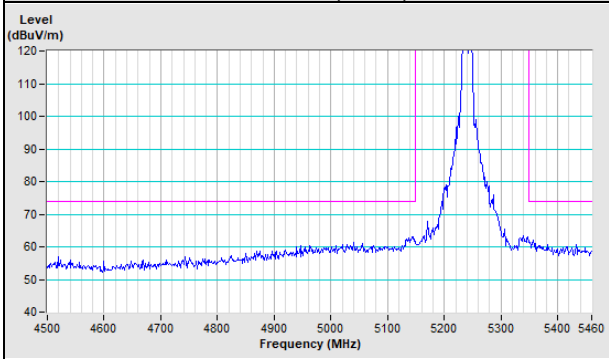
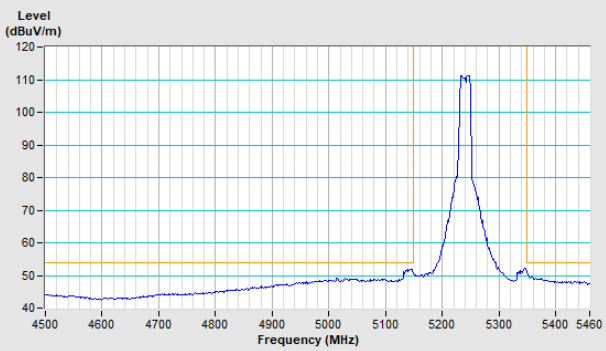
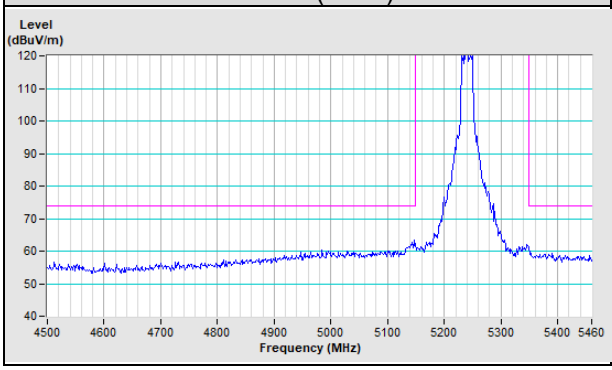
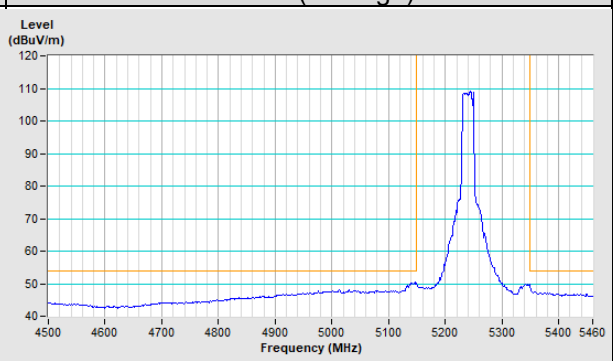


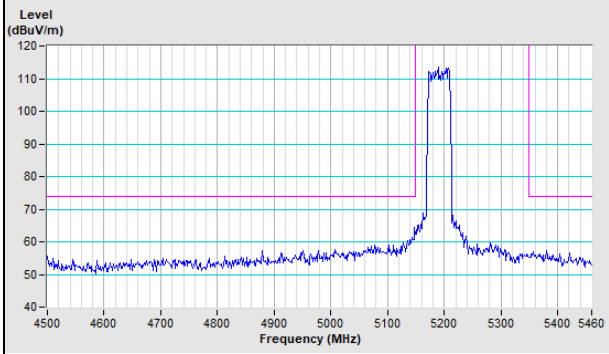
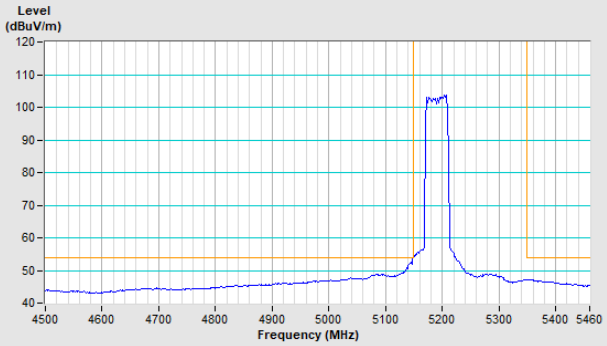
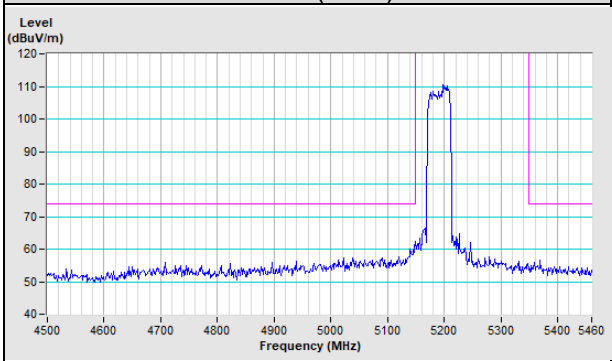
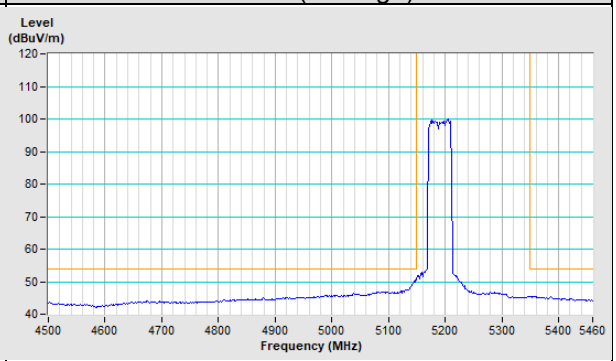
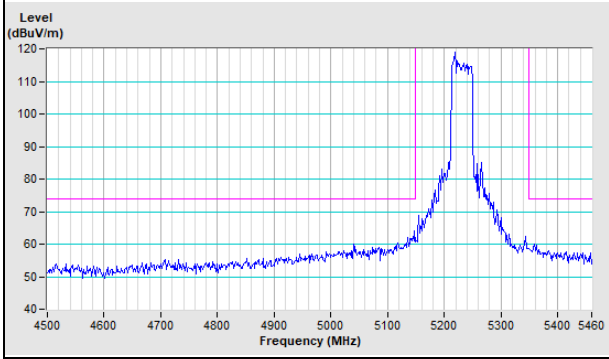
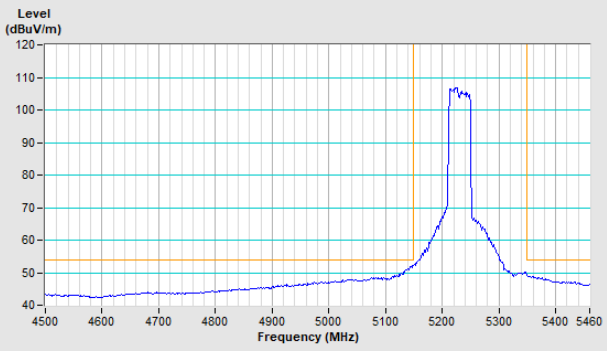
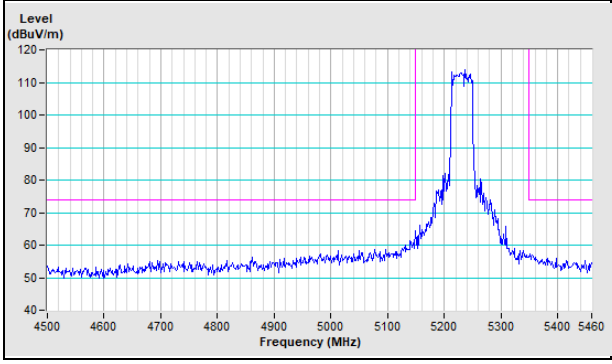
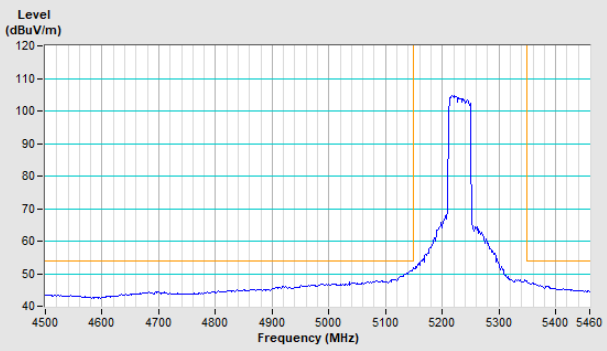
Vertical (Average)

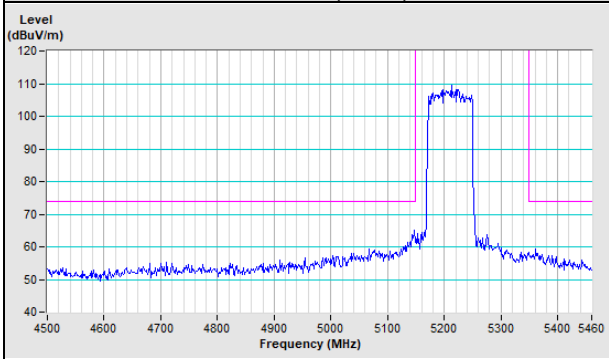
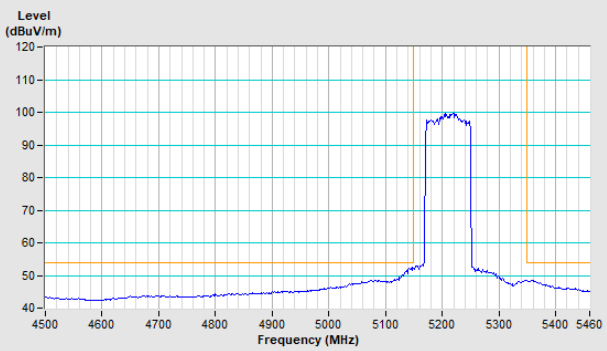
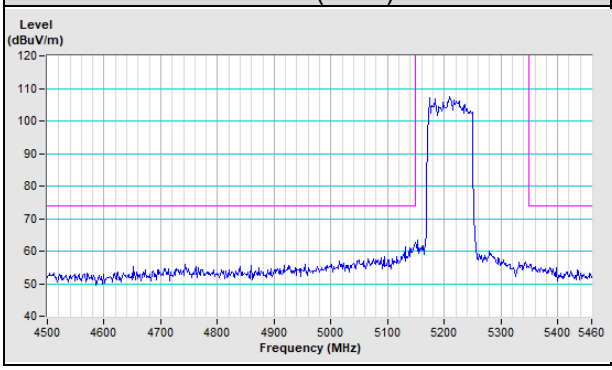
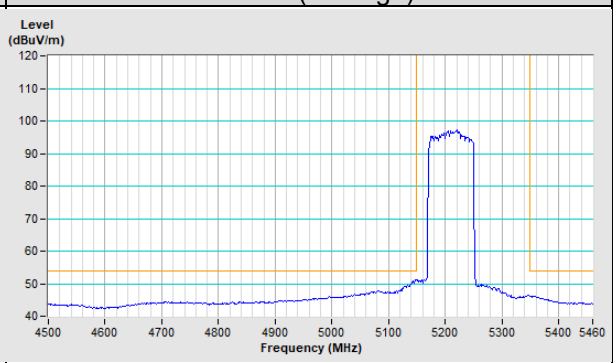


802.11a Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE20) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 40	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE20) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

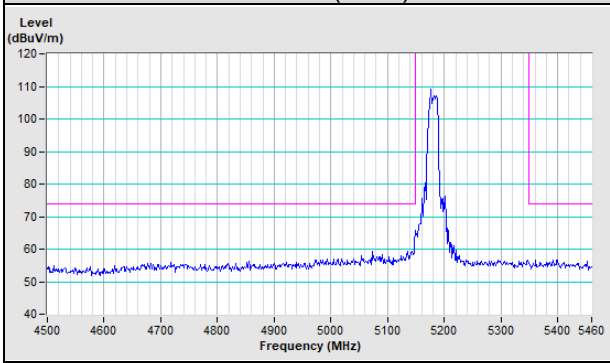
802.11ax (HE40) Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE40) Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

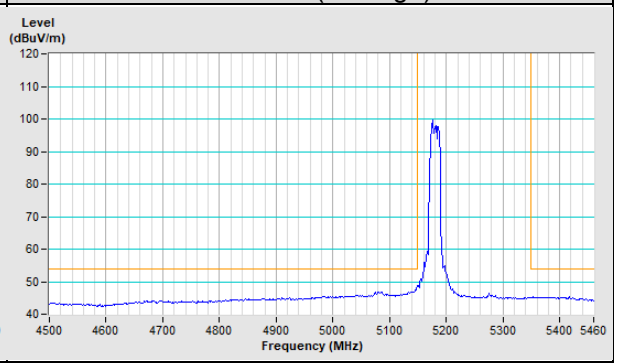
Scanning radio (Radio 3)

802.11a Channel 36

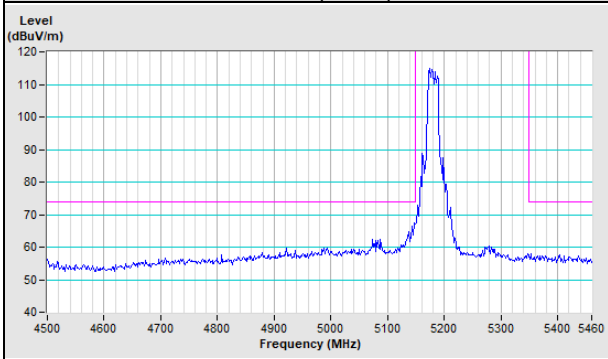
Horizontal (Peak)



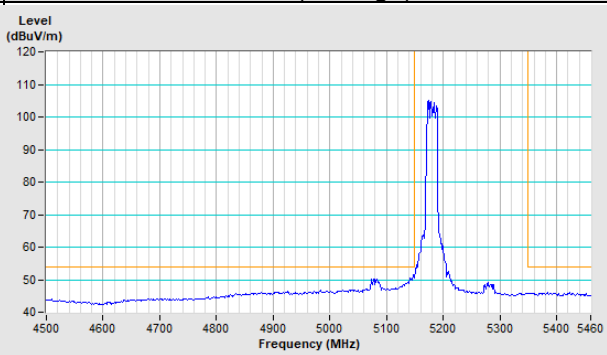
Horizontal (Average)



Vertical (Peak)

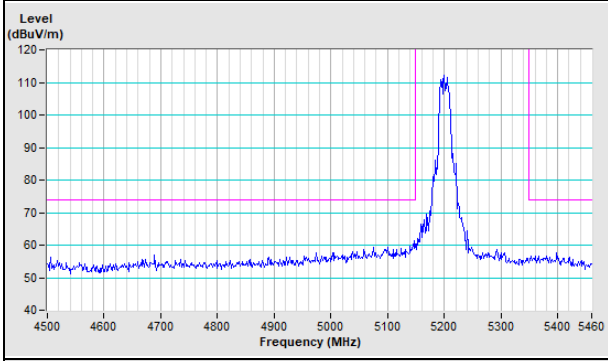


Vertical (Average)

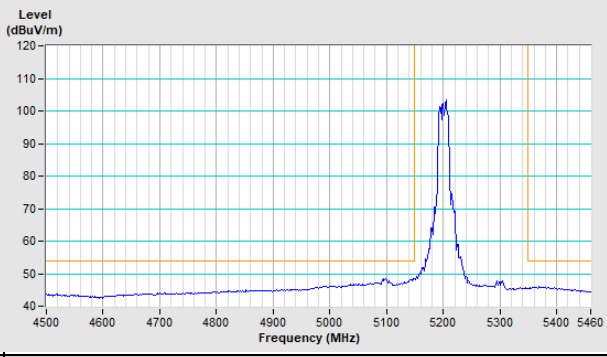


802.11a Channel 40

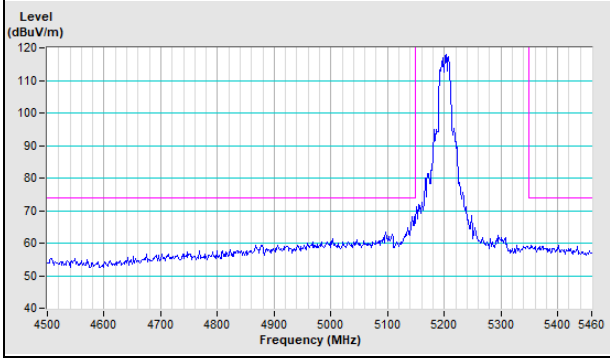
Horizontal (Peak)



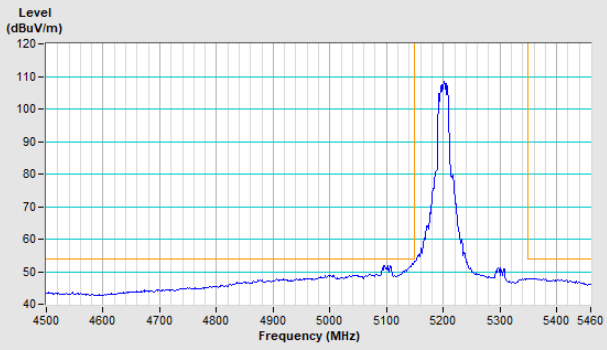
Horizontal (Average)

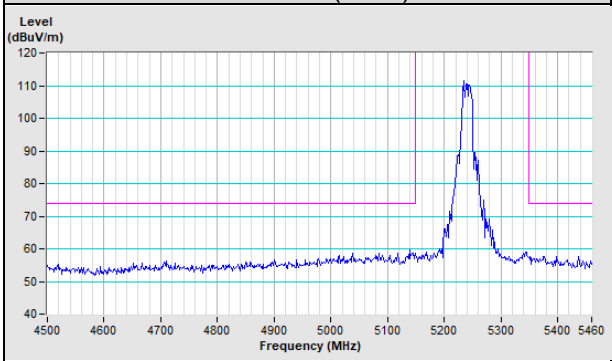
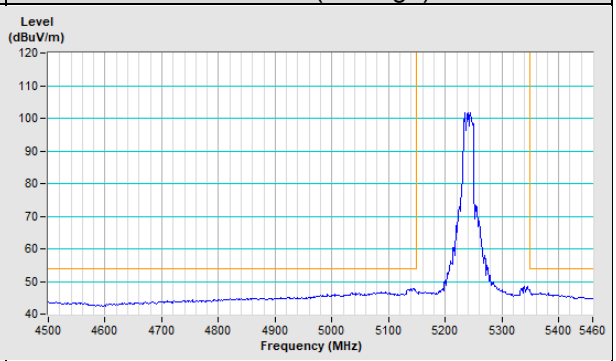
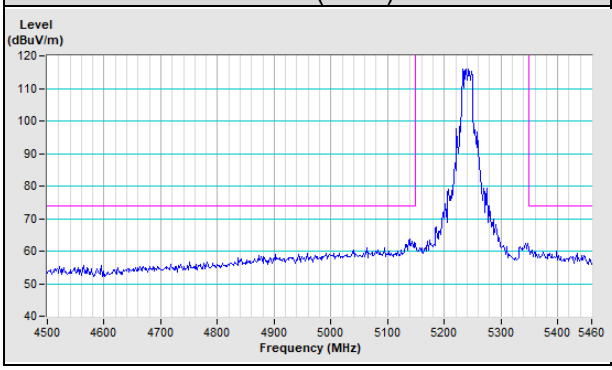
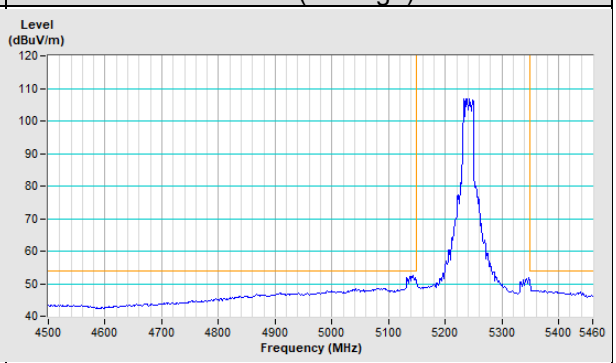


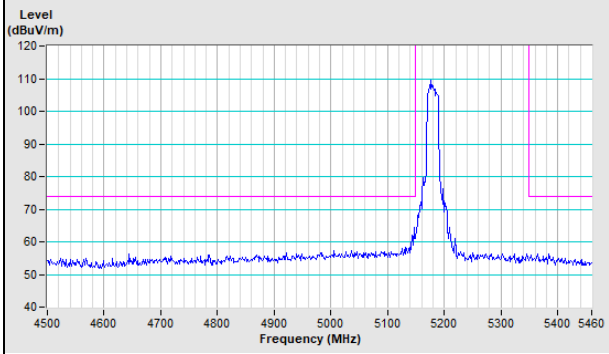
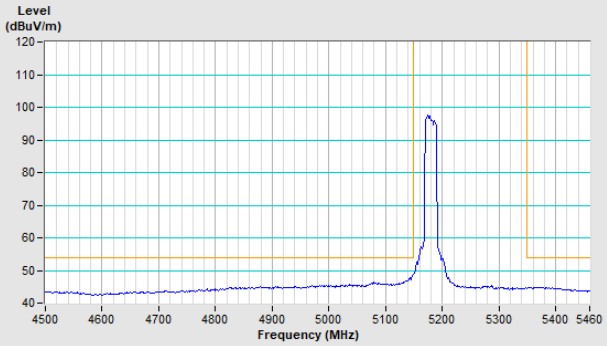
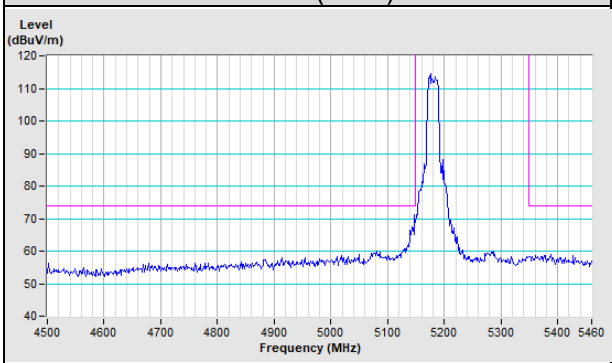
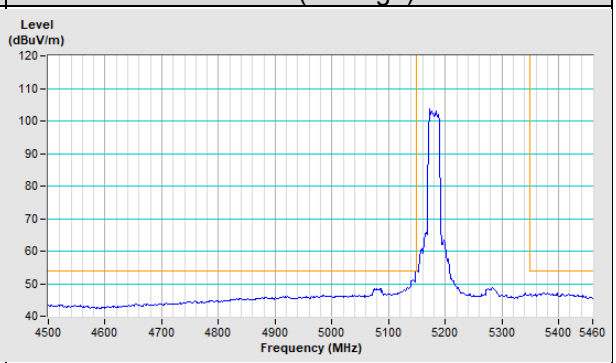
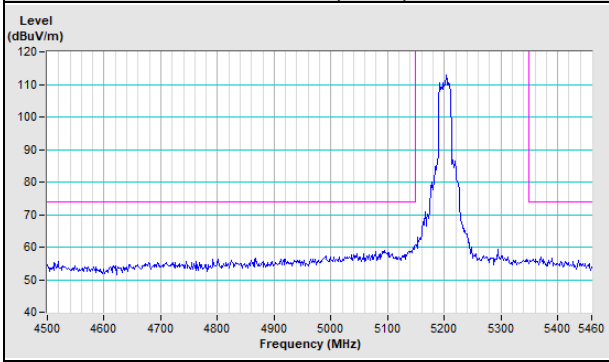
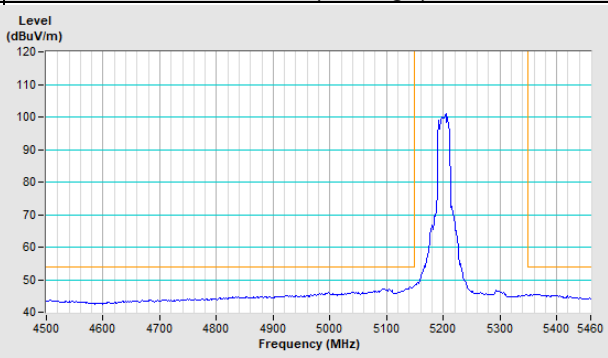
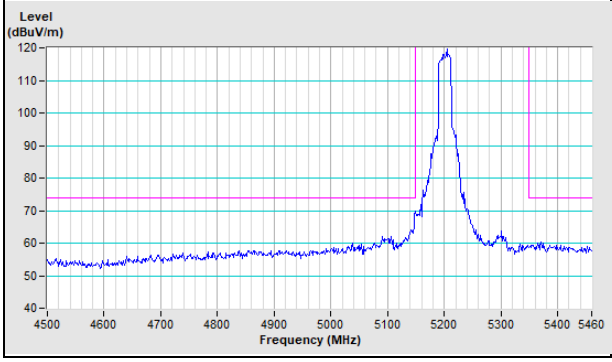
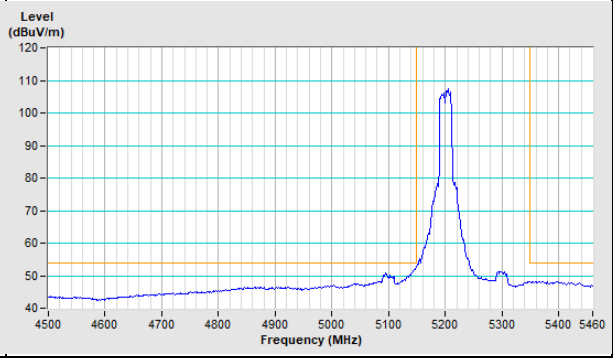
Vertical (Peak)

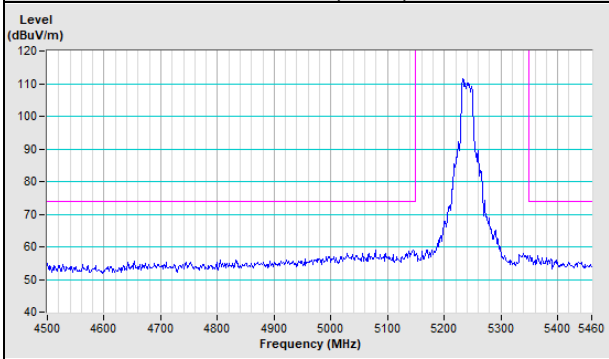
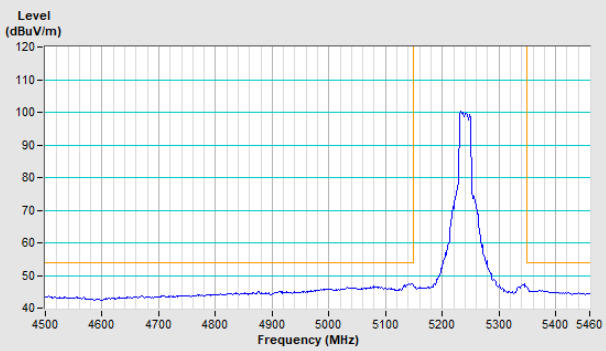
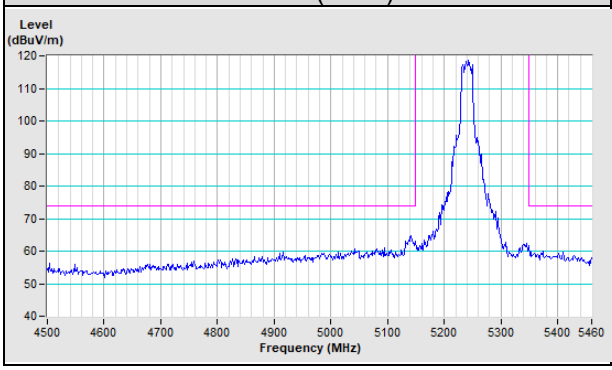
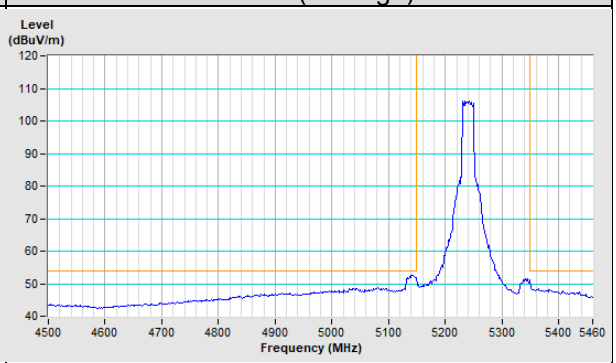


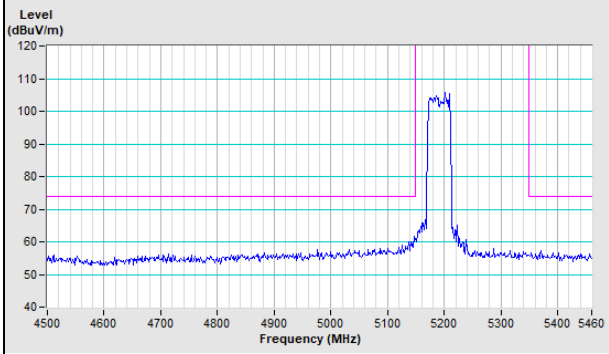
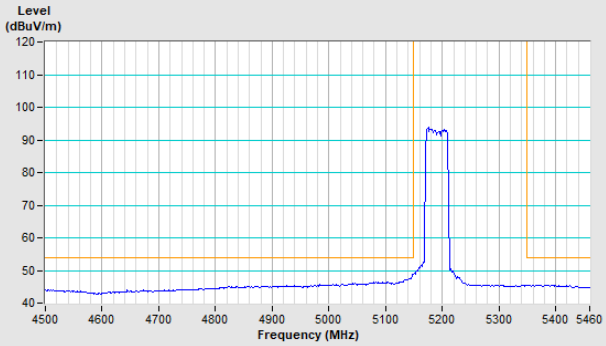
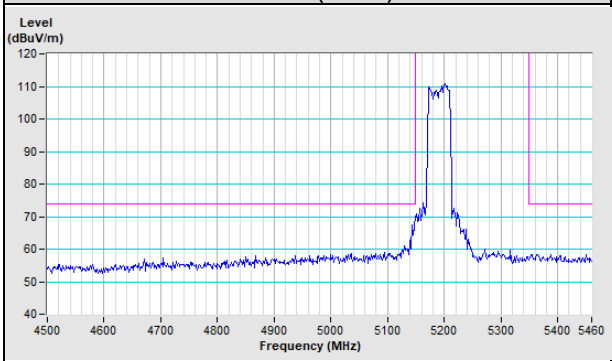
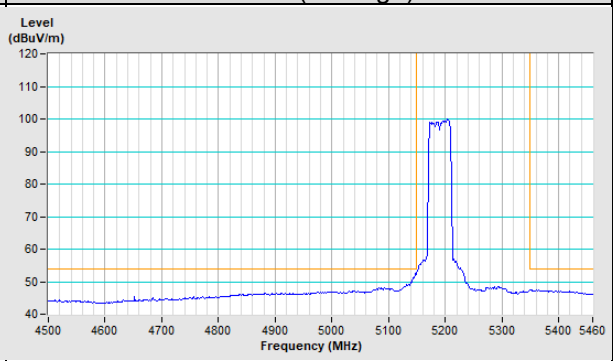
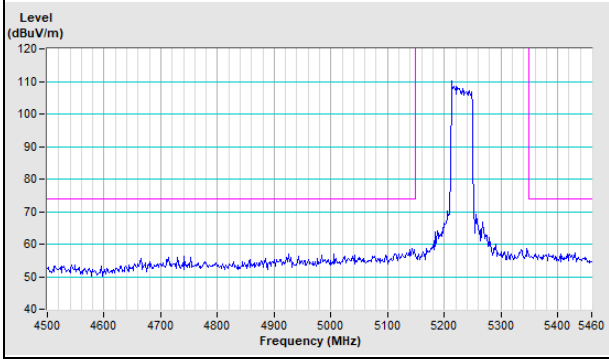
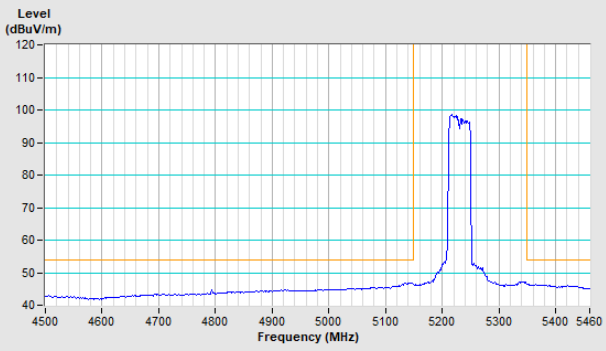
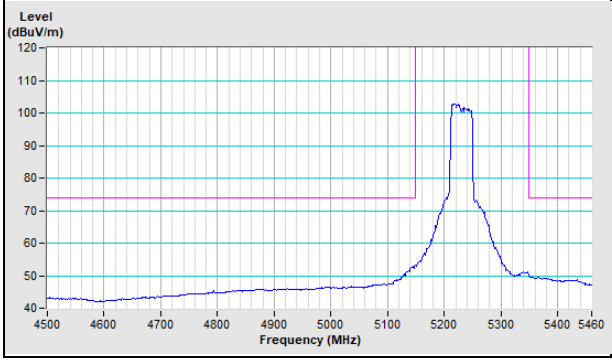
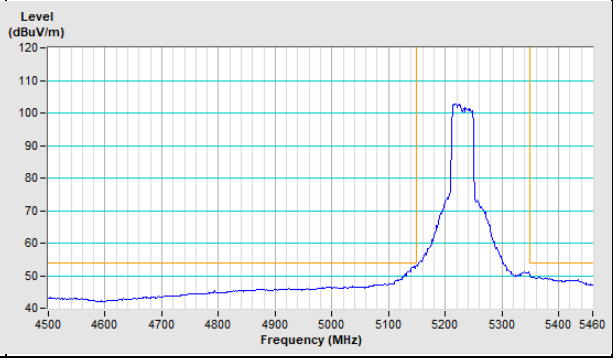
Vertical (Average)

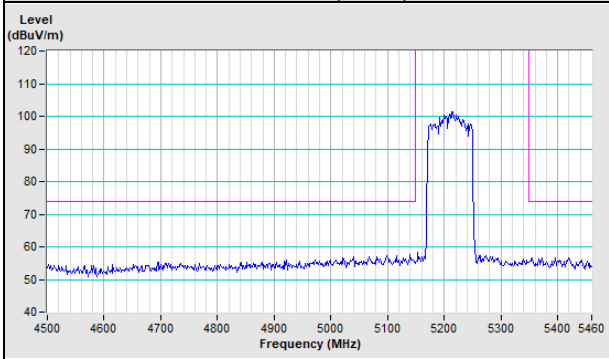
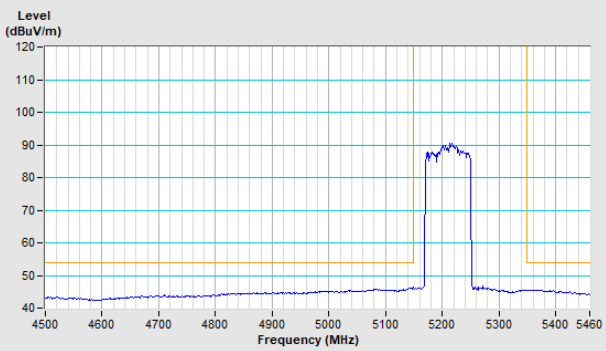
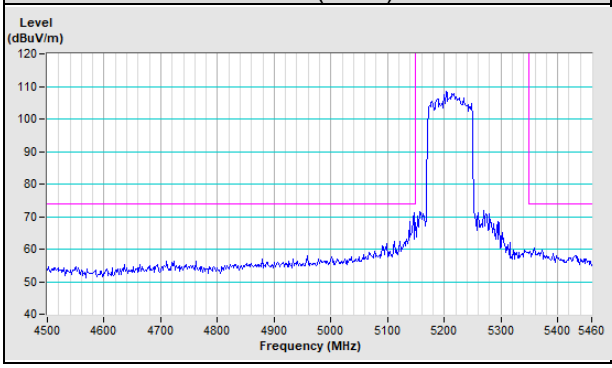
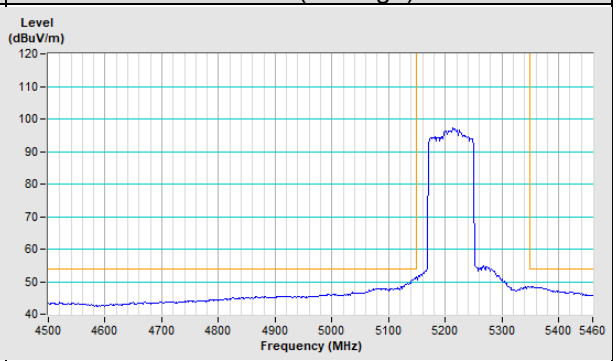


802.11a Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE20) Channel 36	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE20) Channel 40	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE20) Channel 48	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40) Channel 38	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE40) Channel 46	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80) Channel 42	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Appendix – Information of the Testing Laboratories

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

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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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