

FCC Test Report

Report No.: RF191111C01-1

FCC ID: TVE-4617T06785

Test Model: FAP-431F, FAP-433F (refer to item 3.1 for more details)

Series Model: FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx, FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)

Received Date: Nov. 11, 2019

Test Date: Jan. 04 ~ Mar. 02, 2020

Issued Date: Mar. 20, 2020

Applicant: Fortinet Inc.

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**FCC Registration /
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RF191111C01-1	Original release	Mar. 20, 2020

1 Certificate of Conformity

Product: Secured Wireless Access Point

Brand: Fortinet

Test Model: FAP-431F, FAP-433F (refer to item 3.1 for more details)

Series Model: FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx, FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)

Sample Status: Engineering sample

Applicant: Fortinet Inc.

Test Date: Jan. 04 ~ Mar. 02, 2020

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:** Mar. 20, 2020
Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **Date:** Mar. 20, 2020
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 -6.82dB at 0.52600MHz.
15.407(b)(1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.1dB at 5150.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	For internal antenna: Antenna connector is IPEX not a standard connector. For external antenna: Antenna connector is SMA. (The device is professionally installed)

Note:

1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB 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	2.94 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-431F, FAP-433F
Series Model	FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx, FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (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	12Vdc from Adapter 54Vdc from PoE
Modulation Type	802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/40): 6.5 to 600Mbps (MCS0 to MCS31) 802.11ac (VHT20/40): 6.5 to 1733Mbps (MCS0 to MCS9, NSS=1 to 4) 802.11ax: 18 to 2400Mbps (MCS0 to MCS11, NSS=1 to 4)
Operating Frequency	5180 ~ 5240MHz, 5745 ~ 5825MHz
Number of Channel	<u>5GHz traffic radio:</u> 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 <u>Scanning radio:</u> 5180 ~ 5240MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 5 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1

Output Power	<p>Model: FAP-431F 5180 ~ 5240MHz: 5G traffic radio: CDD Mode: 717.473mW 5G traffic radio: Beamforming Mode: 274.293mW Scanning radio: CDD Mode: 16.904mW 5745 ~ 5825MHz: 5G traffic radio: CDD Mode: 798.100mW 5G traffic radio: Beamforming Mode: 291.061mW Scanning radio: CDD Mode: 16.904mW</p> <p>Model: FAP-433F 5180 ~ 5240MHz: 5G traffic radio: CDD Mode: 535.974mW 5G traffic radio: Beamforming Mode: 235.516mW Scanning radio: CDD Mode: 16.711mW 5745 ~ 5825MHz: 5G traffic radio: CDD Mode: 864.483mW 5G traffic radio: Beamforming Mode: 203.444mW Scanning radio: CDD Mode: 16.144mW</p>
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Cable Supplied	NA

Note:

- The following models are provided to this EUT. The model FAP-433F, FAP-431F were chosen for final test.

Brand	Test Model	Series Model	Difference
Fortinet	FAP-431F	FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	internal antenna
	FAP-433F	FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	external antenna

2. The EUT incorporates a MIMO function. Physically, the EUT provides 4 completed transmitters and 4 receivers.

Modulation Mode	CDD Mode	Beamforming Mode	TX Function	Radio
802.11a	Support	Not Support	4TX	5G traffic radio
802.11n (HT20)	Support	Not Support	4TX	
802.11n (HT40)	Support	Not Support	4TX	
802.11ac (VHT20)	Support	Support	4TX	
802.11ac (VHT40)	Support	Support	4TX	
802.11ac (VHT80)	Support	Support	4TX	
802.11ax (HE20)	Support	Support	4TX	
802.11ax (HE40)	Support	Support	4TX	
802.11ax (HE80)	Support	Support	4TX	
802.11a	Support	Not Support	1TX	Scanning radio
802.11n (HT20)	Support	Not Support	1TX	
802.11n (HT40)	Support	Not Support	1TX	
802.11ac (VHT20)	Support	Not Support	1TX	
802.11ac (VHT40)	Support	Not Support	1TX	
802.11ac (VHT80)	Support	Not Support	1TX	

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40 on 802.11n mode and HE20/HE40 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/ax, CDD mode and Beamforming mode are presented in power output test item. For other test items, CDD mode is the worst case for final tests after pretesting.

3. The EUT consumes power from the following adapter and POE.

Adapter (support units only)	
Brand	Asian Power Devices Inc.
Model	WA-30J12R
Input Power	100-240Vac, 50-60Hz, 0.9A MAX
Output Power	12Vdc, 2.5A
Power Line	1.5m cable without core attached on adapter

POE (support units only)	
Brand	EnGenius
Model	EPA5006GAT
Input Power	100-240Vac, 50-60Hz, 0.8A
Output Power	54Vdc, 0.6A PIN 4,5:54Vdc PIN 7,8:RETURN

4. The following antennas were provided to the EUT.

For Internal Antenna

Antenna Type	PIFA					
Antenna Connector	IPEX					
Antenna No.	Gain (dBi)					
	2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz
DL1	4.04	4.36	4.79	6.21	6.33	5.25
DL2	5.52	5.29	5.19	5.07	5.99	5.03
DL3	4.34	5.06	5.05	5.30	5.15	5.18
DL4	4.72	4.66	5.62	5.34	6.37	5.85
Scanning	4.93	4.60	5.22	5.06	5.09	5.14
BT	4.23	4.66	4.71	-	-	-

For External Antenna

Antenna Type	Dipole					
Antenna Connector	SMA					
Gain (dBi)	Frequency					
	2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz
Ext. Ant.	3.88	3.33	4	6.01	6.18	6.2
BT	4.23	4.66	4.71	-	-	-

5. 2G traffic radio, 5GHz traffic radio, Scanning radio (5G) and BT technologies can transmit at same time. But 5GHz traffic radio and Scanning radio (5G) cannot transmit in the same band at same time. 2G traffic radio and Scanning radio (2.4G) cannot transmit at same time.

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 \geq 1G	RE<1G	PLC	APCM	EUT Model	Power
A	√	√	√	√	FAP-431F	Power from adapter
B	-	√	√	-		Power from PoE
C	√	√	√	√	FAP-433F	Power from adapter
D	-	√	√	-		Power from PoE

Where RE \geq 1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE<1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission
 APCM: Antenna Port Conducted Measurement

Note:

- The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane (For Model: FAP-431F_2G traffic radio), X-plane (For Model: FAP-431F_Scanning radio), X-plane (For Model: FAP-433F)..**
- Radiated emission test (below 1GHz) and power line conducted emission test items chosen the worst maximum power.
- "-": Means no effect.

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	
CDD Mode								
A, C	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0	5G traffic radio	
A, C	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0		
A, C	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0		
A, C	802.11ax (HE80)		42	42	OFDMA	MCS0		
A, C	802.11a		36 to 48	36, 40, 48	OFDM	6.0	Scanning radio	
A, C	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5		
A, C	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5		
A, C	802.11ac (VHT80)		42	42	OFDM	65.0		
A, C	802.11a		5745-5825	149 to 165	149, 157, 165	OFDM	6.0	5G traffic radio
A, C	802.11ax (HE20)			149 to 165	149, 157, 165	OFDMA	MCS0	
A, C	802.11ax (HE40)	151 to 159		151, 159	OFDMA	MCS0		
A, C	802.11ax (HE80)	155		155	OFDMA	MCS0		
A, C	802.11a	149 to 165		149, 157, 165	OFDM	6.0	Scanning radio	
A, C	802.11n (HT20)	149 to 165		149, 157, 165	OFDM	6.5		
A, C	802.11n (HT40)	151 to 159		151, 159	OFDM	13.5		
A, C	802.11ac (VHT80)	155		155	OFDM	65.0		
Beamforming Mode								
A, C	802.11ax (HE20)	5180-5240	36 to 48	36, 40, 48	OFDMA	MCS0	5G traffic radio	
A, C	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0		
A, C	802.11ax (HE80)		42	42	OFDMA	MCS0		
A, C	802.11ax (HE20)	5745-5825	149 to 165	149, 157, 165	OFDMA	MCS0	5G traffic radio	
A, C	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0		
A, C	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
CDD Mode							
A, B, C, D	802.11a	5180-5240	36 to 48	165	OFDM	6.0	5G traffic radio
		5745-5825	149 to 165				
A, B, C, D	802.11a	5180-5240	36 to 48	149	OFDM	6.0	Scanning radio
		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
CDD Mode							
A, B, C, D	802.11a	5180-5240	36 to 48	165	OFDM	6.0	5G traffic radio
		5745-5825	149 to 165				
A, B, C, D	802.11a	5180-5240	36 to 48	149	OFDM	6.0	Scanning radio
		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
CDD Mode							
A, C	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0	5G traffic radio
A, C	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5	
A, C	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5	
A, C	802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	6.5	
A, C	802.11ac (VHT40)		38 to 46	38, 46	OFDM	13.5	
A, C	802.11ac (VHT80)		42	42	OFDM	65.0	
A, C	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0	
A, C	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	
A, C	802.11ax (HE80)		42	42	OFDMA	MCS0	
A, C	802.11a		5180-5240	36 to 48	36, 40, 48	OFDM	
A, C	802.11n (HT20)	36 to 48		36, 40, 48	OFDM	6.5	
A, C	802.11n (HT40)	38 to 46		38, 46	OFDM	13.5	
A, C	802.11ac (VHT80)	42		42	OFDM	65.0	
A, C	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0	5G traffic radio
A, C	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5	
A, C	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5	
A, C	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	6.5	
A, C	802.11ac (VHT40)		151 to 159	151, 159	OFDM	13.5	
A, C	802.11ac (VHT80)		155	155	OFDM	65.0	
A, C	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
A, C	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
A, C	802.11ax (HE80)		155	155	OFDMA	MCS0	
A, C	802.11a		5745-5825	149 to 165	149, 157, 165	OFDM	
A, C	802.11n (HT20)	149 to 165		149, 157, 165	OFDM	6.5	
A, C	802.11n (HT40)	151 to 159		151, 159	OFDM	13.5	
A, C	802.11ac (VHT80)	155		155	OFDM	65.0	
Beamforming Mode							
A, C	802.11ac (VHT20)	5180-5240	36 to 48	36, 40, 48	OFDM	6.5	5G traffic radio
A, C	802.11ac (VHT40)		38 to 46	38, 46	OFDM	13.5	
A, C	802.11ac (VHT80)		42	42	OFDM	65.0	
A, C	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0	
A, C	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0	
A, C	802.11ax (HE80)		42	42	OFDMA	MCS0	
A, C	802.11ac (VHT20)	5745-5825	149 to 165	149, 157, 165	OFDM	6.5	5G traffic radio
A, C	802.11ac (VHT40)		151 to 159	151, 159	OFDM	13.5	
A, C	802.11ac (VHT80)		155	155	OFDM	65.0	
A, C	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0	
A, C	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0	
A, C	802.11ax (HE80)		155	155	OFDMA	MCS0	

*802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80) are for Conducted Output Power Measurement only.

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
RE<1G	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
PLC	23 deg. C, 66% RH	120Vac, 60Hz	Greg Lin
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Jisyong Wang

3.3 Duty Cycle of Test Signal

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

Test Mode A

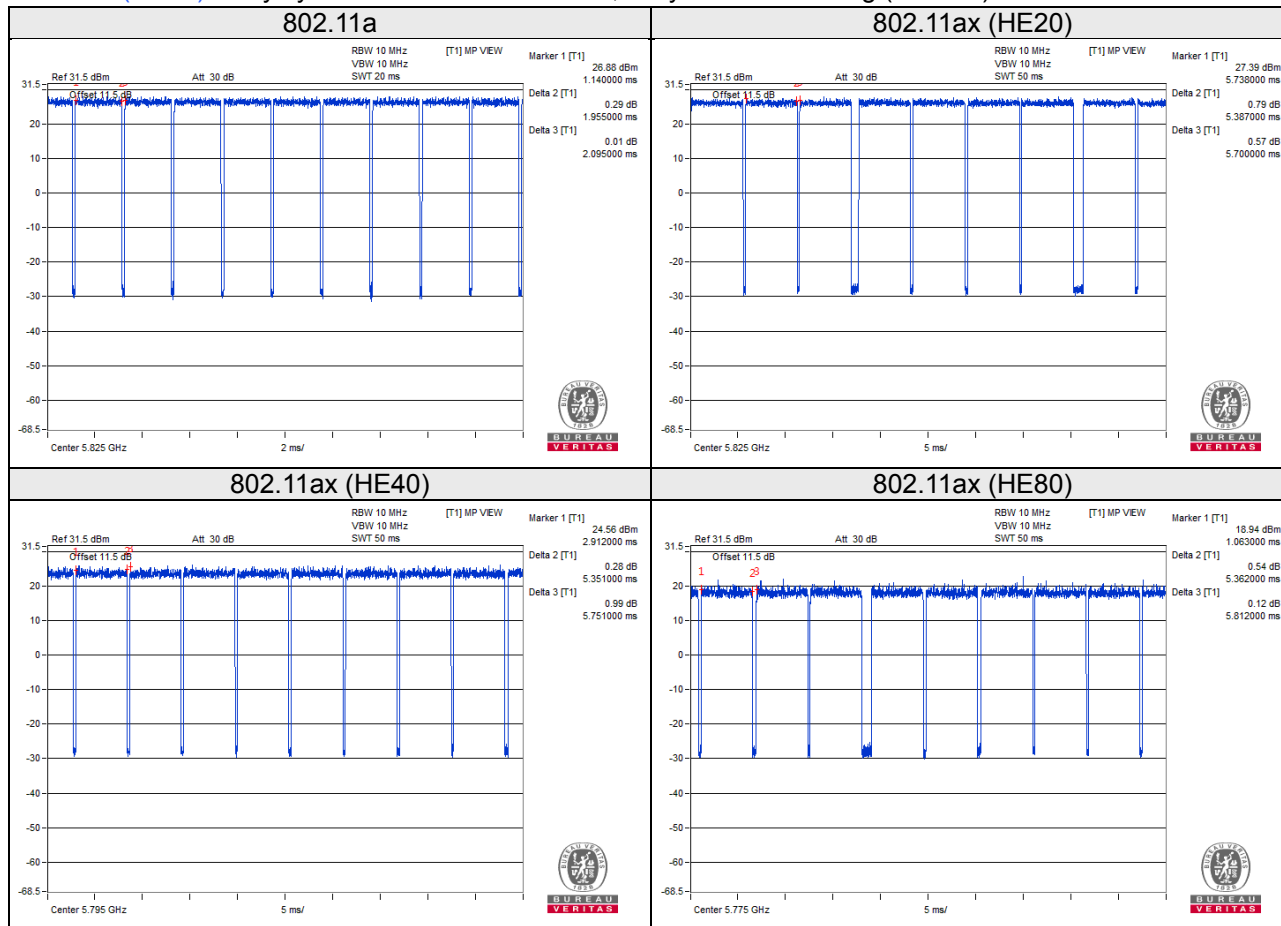
5G traffic radio: CDD Mode

802.11a: Duty cycle = $1.955/2.095 = 0.933$, Duty factor = $10 * \log(1/0.933) = 0.30$

802.11ax (HE20): Duty cycle = $5.387/5.7 = 0.945$, Duty factor = $10 * \log(1/0.945) = 0.25$

802.11ax (HE40): Duty cycle = $5.351/5.751 = 0.93$, Duty factor = $10 * \log(1/0.93) = 0.31$

802.11ax (HE80): Duty cycle = $5.362/5.812 = 0.923$, Duty factor = $10 * \log(1/0.923) = 0.35$



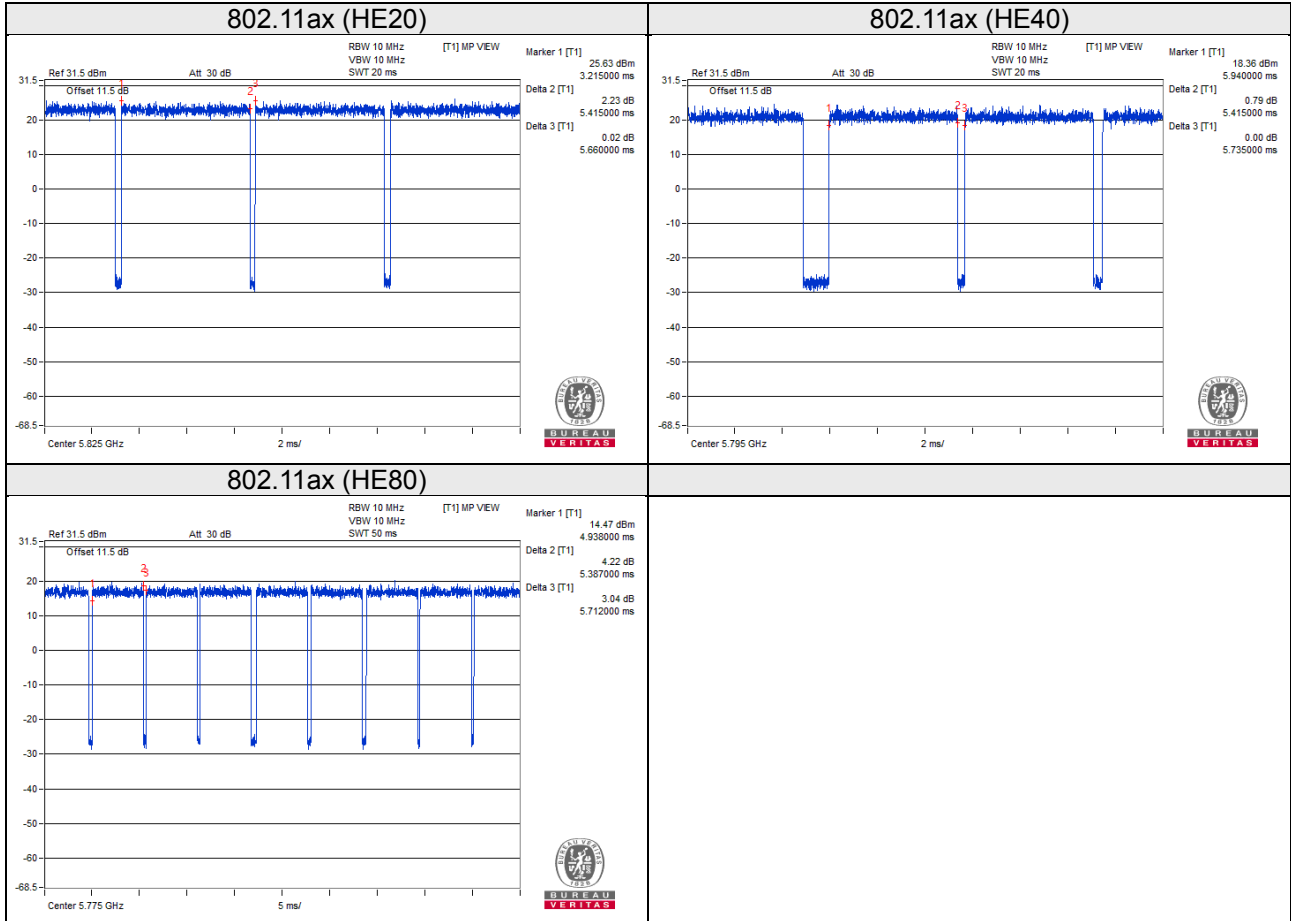
Test Mode A

5G traffic radio: Beamforming Mode

802.11ax (HE20): Duty cycle = $5.415/5.66 = 0.957$, Duty factor = $10 * \log(1/0.957) = 0.19$

802.11ax (HE40): Duty cycle = $5.415/5.735 = 0.944$, Duty factor = $10 * \log(1/0.944) = 0.25$

802.11ax (HE80): Duty cycle = $5.387/5.712 = 0.943$, Duty factor = $10 * \log(1/0.943) = 0.25$



Test Mode A

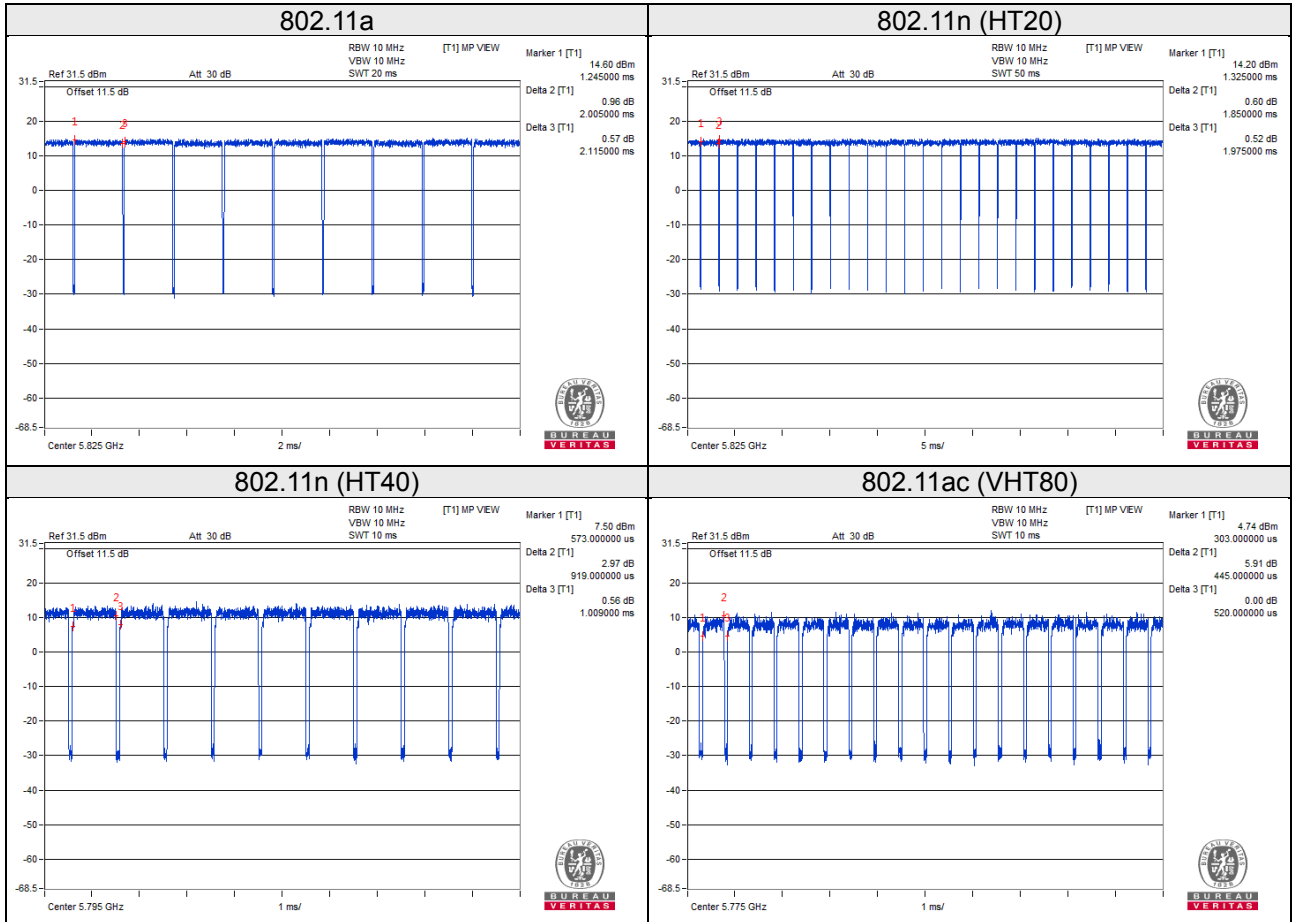
Scanning radio: CDD Mode

802.11a: Duty cycle = $2.005/2.115 = 0.948$, Duty factor = $10 * \log(1/0.948) = 0.23$

802.11n (HT20): Duty cycle = $1.85/1.975 = 0.937$, Duty factor = $10 * \log(1/0.937) = 0.28$

802.11n (HT40): Duty cycle = $0.919/1.009 = 0.911$, Duty factor = $10 * \log(1/0.911) = 0.41$

802.11ac (VHT80): Duty cycle = $0.445/0.52 = 0.856$, Duty factor = $10 * \log(1/0.856) = 0.68$



Test Mode C

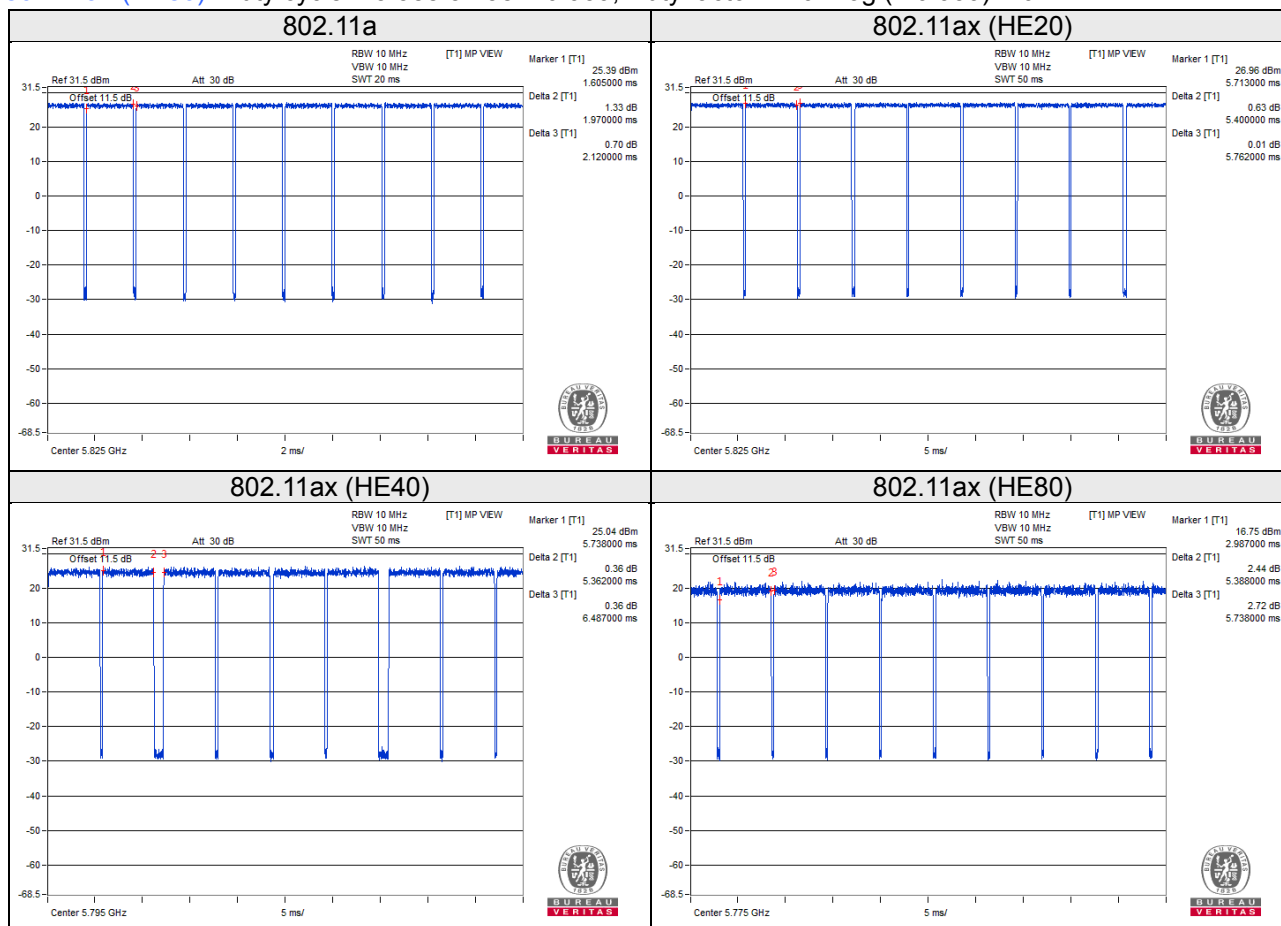
5G traffic radio: CDD Mode

802.11a: Duty cycle = $1.97/2.12 = 0.929$, Duty factor = $10 * \log(1/0.929) = 0.32$

802.11ax (HE20): Duty cycle = $5.4/5.762 = 0.937$, Duty factor = $10 * \log(1/0.937) = 0.28$

802.11ax (HE40): Duty cycle = $5.362/6.487 = 0.827$, Duty factor = $10 * \log(1/0.827) = 0.83$

802.11ax (HE80): Duty cycle = $5.388/5.738 = 0.939$, Duty factor = $10 * \log(1/0.939) = 0.27$



Test Mode C

5G traffic radio: Beamforming Mode

802.11ax (HE20): Duty cycle = $5.413/5.763 = 0.939$, Duty factor = $10 * \log(1/0.939) = 0.27$

802.11ax (HE40): Duty cycle = $5.4/5.85 = 0.923$, Duty factor = $10 * \log(1/0.923) = 0.35$

802.11ax (HE80): Duty cycle = $5.4/5.687 = 0.95$, Duty factor = $10 * \log(1/0.95) = 0.22$



Test Mode C

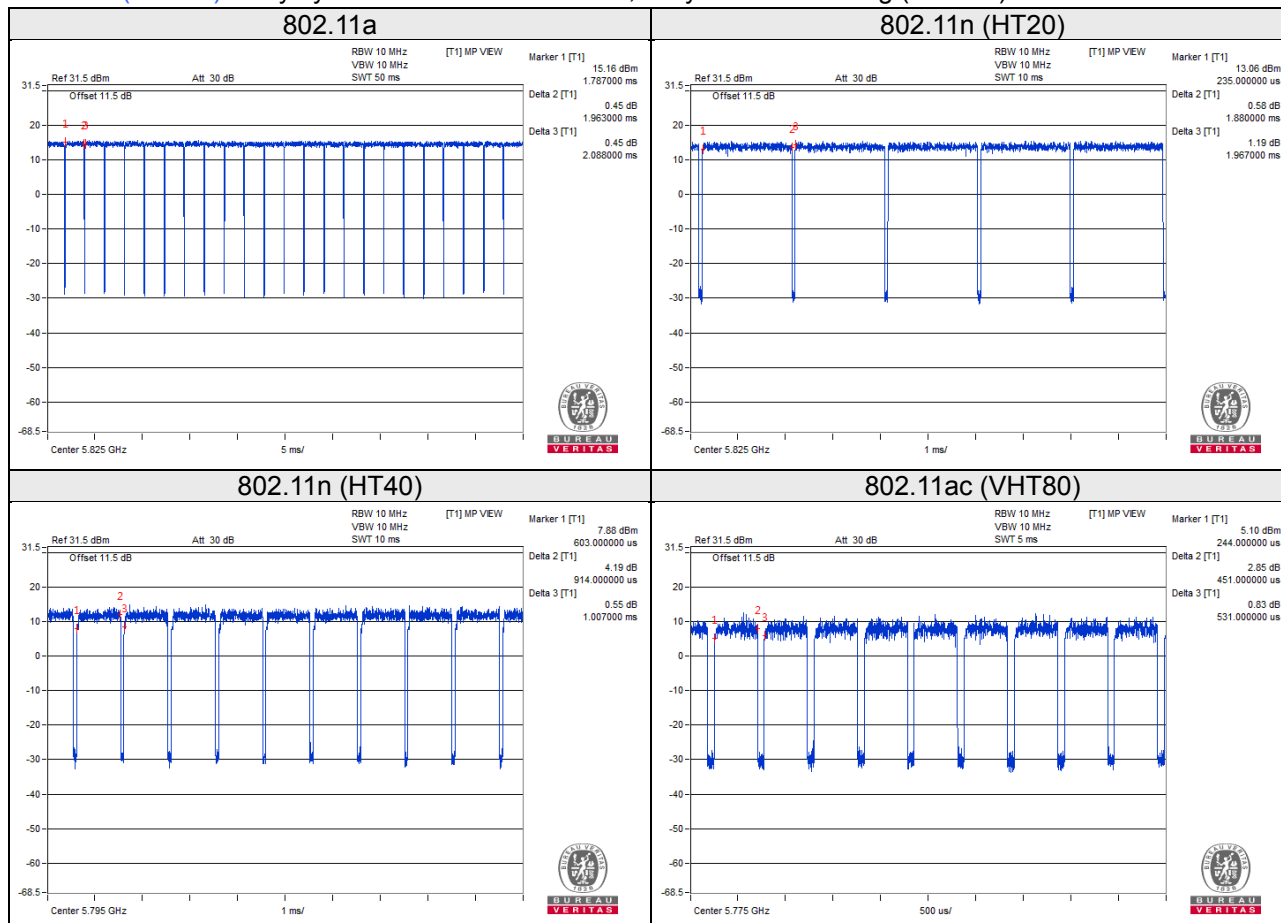
Scanning radio: CDD Mode

802.11a: Duty cycle = $1.963/2.088 = 0.94$, Duty factor = $10 * \log(1/0.94) = 0.27$

802.11n (HT20): Duty cycle = $1.88/1.967 = 0.956$, Duty factor = $10 * \log(1/0.956) = 0.20$

802.11n (HT40): Duty cycle = $0.914/1.007 = 0.908$, Duty factor = $10 * \log(1/0.908) = 0.42$

802.11ac (VHT80): Duty cycle = $0.451/0.531 = 0.849$, Duty factor = $10 * \log(1/0.849) = 0.71$



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	-
C.	Adapter	Asian Power Devices Inc.	WA-30J12R	NA	NA	Provided by client
D.	USB Flash	HP	v250W	09	NA	-
E.	POE	EnGenius	EPA5006GAT	NA	NA	Provided by client

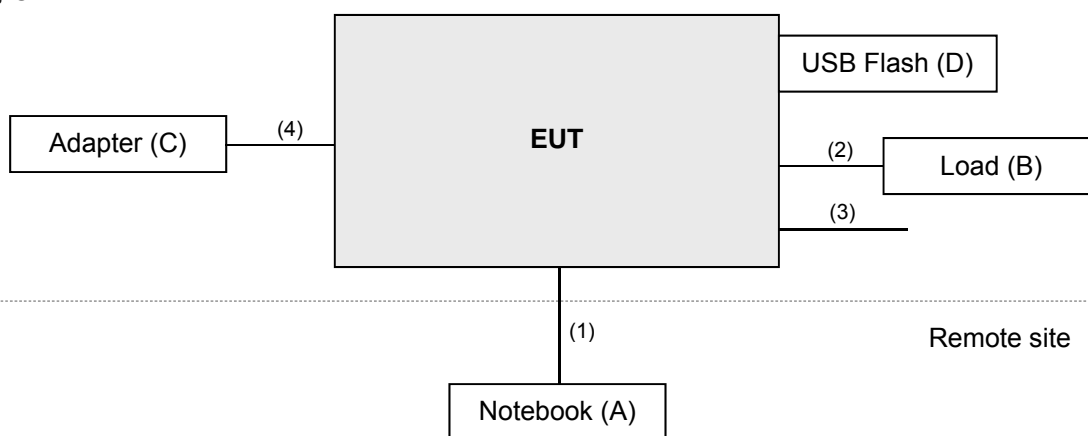
Note:

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

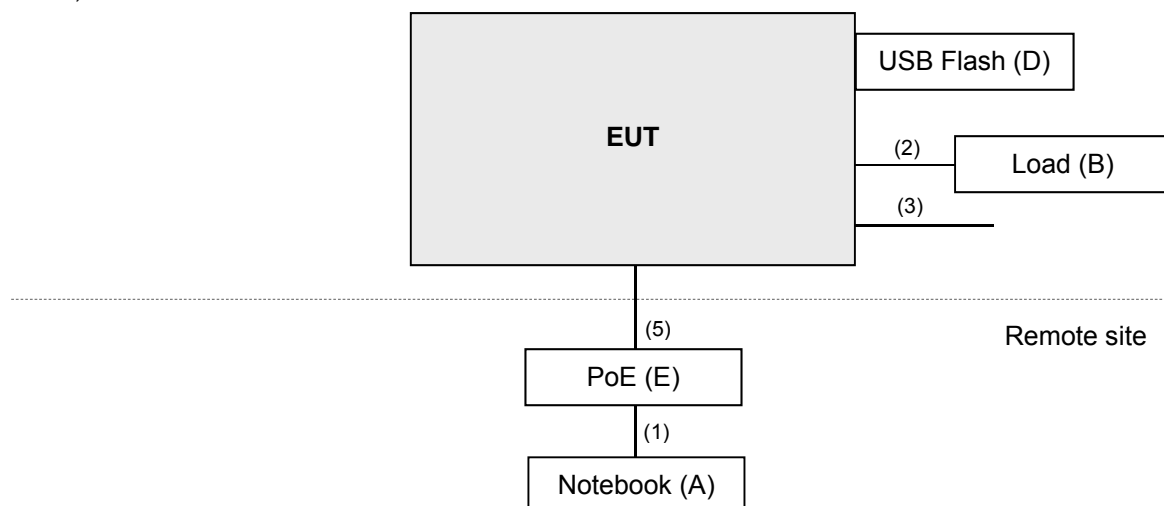
ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN	1	7.0	N	0	RJ45, Cat5e
2.	LAN	1	1.5	N	0	RJ45, Cat5e
3.	Console	1	1.0	Y	1	-
4.	Power cable	1	1.5	-	0	Provided by client
5.	LAN	1	1.5	N	0	RJ45, Cat5e

3.4.1 Configuration of System under Test

Mode A, C



Mode B, D



3.5 General Description of Applied Standards

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

Test standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10:2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

Note:

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

Limits of unwanted emission out of the restricted bands

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

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	May 30, 2019	May 29, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 11, 2019	Nov. 10, 2020
HORN Antenna SCHWARZBECK	9120D	209	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
Loop Antenna TESEQ	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 20, 2019	Aug. 19, 2020
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 27, 2019	Mar. 26, 2020
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM- SM-8000	Cable-CH3-03 (309224+170907)	Aug. 20, 2019	Aug. 19, 2020
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. 05, 2019	Sep. 04, 2020
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY5519 0004/MY55190007/MY 55210005	Jul. 15, 2019	Jul. 14, 2020

- 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:

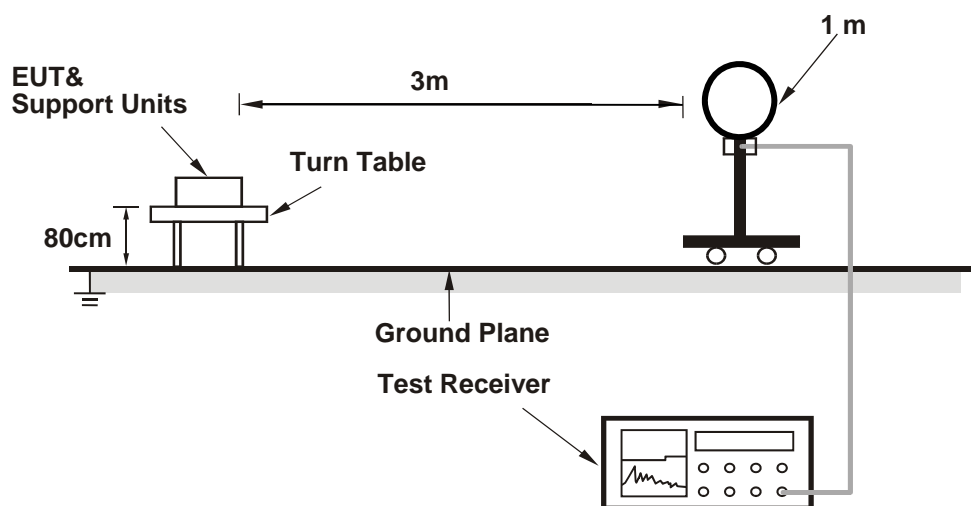
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
5G traffic radio: 802.11a: RBW = 1MHz, VBW = 1kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE80): RBW = 1MHz, VBW = 1kHz;
5G traffic radio: Beamforming Mode: 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE80): RBW = 1MHz, VBW = 1kHz;
Scanning radio: 802.11a: RBW = 1MHz, VBW = 1kHz; 802.11n (HT20): RBW = 1MHz, VBW = 1kHz; 802.11n (HT40): RBW = 1MHz, VBW = 3kHz; 802.11ac (VHT80): 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

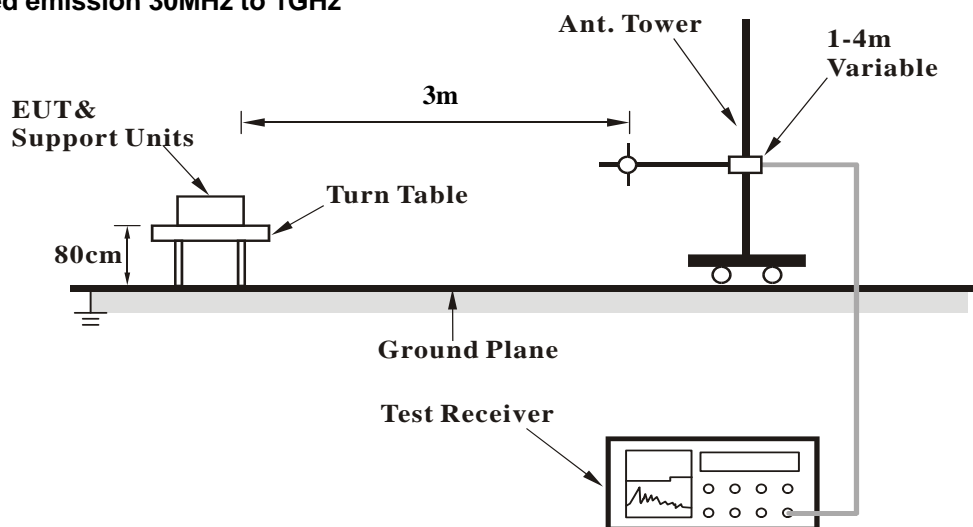
No deviation.

4.1.5 Test Setup

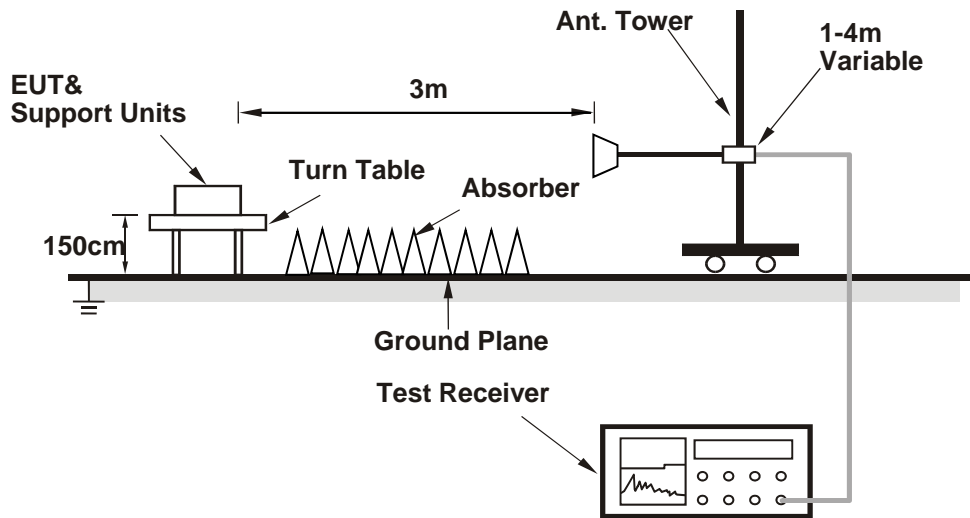
For Radiated emission below 30MHz



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:

Test Mode A

5G traffic radio: CDD Mode

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	1.82 H	6	62.0	4.1
2	5150.00	52.3 AV	54.0	-1.7	1.82 H	6	48.2	4.1
3	*5180.00	122.5 PK			1.80 H	7	83.2	39.3
4	*5180.00	112.6 AV			1.80 H	7	73.3	39.3
5	#10360.00	59.6 PK	68.2	-8.6	1.63 H	70	42.4	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	1.28 V	358	61.1	4.1
2	5150.00	50.6 AV	54.0	-3.4	1.28 V	358	46.5	4.1
3	*5180.00	122.0 PK			1.84 V	359	82.7	39.3
4	*5180.00	112.5 AV			1.84 V	359	73.2	39.3
5	#10360.00	59.3 PK	68.2	-8.9	1.91 V	122	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	60.0 PK	74.0	-14.0	1.85 H	3	55.9	4.1
2	5150.00	46.2 AV	54.0	-7.8	1.85 H	3	42.1	4.1
3	*5200.00	123.7 PK			1.81 H	10	84.4	39.3
4	*5200.00	113.8 AV			1.81 H	10	74.5	39.3
5	#10400.00	59.9 PK	68.2	-8.3	1.70 H	66	42.5	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.1 PK	74.0	-14.9	1.24 V	1	55.0	4.1
2	5150.00	46.3 AV	54.0	-7.7	1.24 V	1	42.2	4.1
3	*5200.00	122.7 PK			1.31 V	359	83.4	39.3
4	*5200.00	113.0 AV			1.31 V	359	73.7	39.3
5	#10400.00	59.5 PK	68.2	-8.7	2.01 V	130	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	125.6 PK			1.90 H	5	86.5	39.1
2	*5240.00	115.4 AV			1.90 H	5	76.3	39.1
3	5350.00	58.3 PK	74.0	-15.7	1.81 H	10	54.2	4.1
4	5350.00	44.6 AV	54.0	-9.4	1.81 H	10	40.5	4.1
5	#10480.00	60.9 PK	68.2	-7.3	1.71 H	63	42.9	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	125.0 PK			1.27 V	357	85.9	39.1
2	*5240.00	114.7 AV			1.27 V	357	75.6	39.1
3	5350.00	58.1 PK	74.0	-15.9	1.31 V	351	54.0	4.1
4	5350.00	44.2 AV	54.0	-9.8	1.31 V	351	40.1	4.1
5	#10480.00	60.5 PK	68.2	-7.7	2.01 V	130	42.5	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.20	58.9 PK	68.2	-9.3	1.52 H	1	54.4	4.5
2	*5745.00	123.9 PK			1.52 H	1	83.9	40.0
3	*5745.00	113.4 AV			1.52 H	1	73.4	40.0
4	#5987.20	57.9 PK	68.2	-10.3	1.52 H	1	52.5	5.4
5	11490.00	60.3 PK	74.0	-13.7	1.46 H	331	41.5	18.8
6	11490.00	47.6 AV	54.0	-6.4	1.46 H	331	28.8	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.80	58.7 PK	68.2	-9.5	1.61 V	346	54.2	4.5
2	*5745.00	124.2 PK			1.61 V	346	84.2	40.0
3	*5745.00	114.3 AV			1.61 V	346	74.3	40.0
4	#5939.20	58.4 PK	68.2	-9.8	1.61 V	346	53.1	5.3
5	11490.00	60.8 PK	74.0	-13.2	2.05 V	288	42.0	18.8
6	11490.00	48.1 AV	54.0	-5.9	2.05 V	288	29.3	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5600.80	57.4 PK	68.2	-10.8	1.61 H	359	52.9	4.5
2	*5785.00	123.3 PK			1.61 H	359	83.1	40.2
3	*5785.00	113.4 AV			1.61 H	359	73.2	40.2
4	#5958.40	57.8 PK	68.2	-10.4	1.61 H	359	52.5	5.3
5	11570.00	59.9 PK	74.0	-14.1	1.53 H	320	41.4	18.5
6	11570.00	47.3 AV	54.0	-6.7	1.53 H	320	28.8	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.80	57.0 PK	68.2	-11.2	1.39 V	347	52.5	4.5
2	*5785.00	124.0 PK			1.39 V	347	83.8	40.2
3	*5785.00	114.2 AV			1.39 V	347	74.0	40.2
4	#5978.40	58.4 PK	68.2	-9.8	1.39 V	347	53.1	5.3
5	11570.00	60.3 PK	74.0	-13.7	1.97 V	292	41.8	18.5
6	11570.00	47.6 AV	54.0	-6.4	1.97 V	292	29.1	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5600.80	57.4 PK	68.2	-10.8	1.59 H	5	52.9	4.5
2	*5825.00	124.5 PK			1.59 H	5	84.1	40.4
3	*5825.00	113.9 AV			1.59 H	5	73.5	40.4
4	#5927.20	57.9 PK	68.2	-10.3	1.59 H	5	52.6	5.3
5	11650.00	60.4 PK	74.0	-13.6	1.53 H	321	41.9	18.5
6	11650.00	47.6 AV	54.0	-6.4	1.53 H	321	29.1	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5600.80	57.5 PK	68.2	-10.7	1.42 V	350	53.0	4.5
2	*5825.00	125.1 PK			1.42 V	350	84.7	40.4
3	*5825.00	114.7 AV			1.42 V	350	74.3	40.4
4	#5970.40	57.8 PK	68.2	-10.4	1.42 V	350	52.5	5.3
5	11650.00	60.8 PK	74.0	-13.2	2.08 V	305	42.3	18.5
6	11650.00	48.0 AV	54.0	-6.0	2.08 V	305	29.5	18.5

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.

802.11ax (HE20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	70.8 PK	74.0	-3.2	2.10 H	10	66.7	4.1
2	5150.00	51.9 AV	54.0	-2.1	2.10 H	10	47.8	4.1
3	*5180.00	125.0 PK			2.33 H	13	85.7	39.3
4	*5180.00	111.1 AV			2.33 H	13	71.8	39.3
5	#10360.00	60.3 PK	68.2	-7.9	1.75 H	66	43.1	17.2

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.40 V	359	67.3	4.1
2	5150.00	52.4 AV	54.0	-1.6	1.40 V	359	48.3	4.1
3	*5180.00	125.5 PK			1.35 V	357	86.2	39.3
4	*5180.00	112.0 AV			1.35 V	357	72.7	39.3
5	#10360.00	60.7 PK	68.2	-7.5	1.99 V	129	43.5	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	62.6 PK	74.0	-11.4	2.35 H	10	58.5	4.1
2	5150.00	46.6 AV	54.0	-7.4	2.35 H	10	42.5	4.1
3	*5200.00	125.6 PK			2.22 H	15	86.3	39.3
4	*5200.00	112.1 AV			2.22 H	15	72.8	39.3
5	#10400.00	59.5 PK	68.2	-8.7	1.71 H	78	42.1	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	62.4 PK	74.0	-11.6	1.23 V	350	58.3	4.1
2	5150.00	46.2 AV	54.0	-7.8	1.23 V	350	42.1	4.1
3	*5200.00	126.6 PK			1.51 V	357	87.3	39.3
4	*5200.00	112.9 AV			1.51 V	357	73.6	39.3
5	#10400.00	60.8 PK	68.2	-7.4	1.95 V	130	43.4	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	125.4 PK			2.27 H	12	86.3	39.1
2	*5240.00	112.1 AV			2.27 H	12	73.0	39.1
3	5350.00	57.6 PK	74.0	-16.4	2.33 H	10	53.5	4.1
4	5350.00	45.6 AV	54.0	-8.4	2.33 H	10	41.5	4.1
5	#10480.00	60.2 PK	68.2	-8.0	1.69 H	68	42.2	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	125.1 PK			1.30 V	357	86.0	39.1
2	*5240.00	112.1 AV			1.30 V	357	73.0	39.1
3	5350.00	59.2 PK	74.0	-14.8	1.22 V	359	55.1	4.1
4	5350.00	48.6 AV	54.0	-5.4	1.22 V	359	44.5	4.1
5	#10480.00	61.5 PK	68.2	-6.7	1.88 V	127	43.5	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.00	57.5 PK	68.2	-10.7	1.58 H	357	53.0	4.5
2	*5745.00	126.3 PK			1.58 H	357	86.3	40.0
3	*5745.00	113.0 AV			1.58 H	357	73.0	40.0
4	#5940.00	57.5 PK	68.2	-10.7	1.58 H	357	52.2	5.3
5	11490.00	60.1 PK	74.0	-13.9	1.53 H	324	41.3	18.8
6	11490.00	47.3 AV	54.0	-6.7	1.53 H	324	28.5	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.00	58.1 PK	68.2	-10.1	1.39 V	346	53.6	4.5
2	*5745.00	126.7 PK			1.39 V	346	86.7	40.0
3	*5745.00	113.4 AV			1.39 V	346	73.4	40.0
4	#5926.40	58.8 PK	68.2	-9.4	1.39 V	346	53.5	5.3
5	11490.00	60.6 PK	74.0	-13.4	2.10 V	306	41.8	18.8
6	11490.00	47.5 AV	54.0	-6.5	2.10 V	306	28.7	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.80	56.4 PK	68.2	-11.8	1.63 H	353	51.9	4.5
2	*5785.00	126.5 PK			1.63 H	353	86.3	40.2
3	*5785.00	113.2 AV			1.63 H	353	73.0	40.2
4	#5932.80	58.3 PK	68.2	-9.9	1.63 H	353	53.0	5.3
5	11570.00	59.5 PK	74.0	-14.5	1.61 H	343	41.0	18.5
6	11570.00	46.5 AV	54.0	-7.5	1.61 H	343	28.0	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	57.7 PK	68.2	-10.5	1.62 V	347	53.2	4.5
2	*5785.00	127.0 PK			1.62 V	347	86.8	40.2
3	*5785.00	113.7 AV			1.62 V	347	73.5	40.2
4	#5991.20	58.6 PK	68.2	-9.6	1.62 V	347	53.2	5.4
5	11570.00	59.9 PK	74.0	-14.1	2.15 V	297	41.4	18.5
6	11570.00	46.8 AV	54.0	-7.2	2.15 V	297	28.3	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5617.60	58.1 PK	68.2	-10.1	1.57 H	2	53.6	4.5
2	*5825.00	125.7 PK			1.57 H	2	85.3	40.4
3	*5825.00	112.9 AV			1.57 H	2	72.5	40.4
4	#5976.80	58.2 PK	68.2	-10.0	1.57 H	2	52.9	5.3
5	11650.00	59.6 PK	74.0	-14.4	1.54 H	327	41.1	18.5
6	11650.00	46.2 AV	54.0	-7.8	1.54 H	327	27.7	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5615.20	57.3 PK	68.2	-10.9	1.44 V	337	52.8	4.5
2	*5825.00	126.3 PK			1.44 V	337	85.9	40.4
3	*5825.00	113.4 AV			1.44 V	337	73.0	40.4
4	#5926.40	58.8 PK	68.2	-9.4	1.44 V	337	53.5	5.3
5	11650.00	59.9 PK	74.0	-14.1	2.14 V	313	41.4	18.5
6	11650.00	46.6 AV	54.0	-7.4	2.14 V	313	28.1	18.5

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.

802.11ax (HE40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	67.1 PK	74.0	-6.9	1.79 H	13	63.0	4.1
2	5150.00	52.2 AV	54.0	-1.8	1.79 H	13	48.1	4.1
3	*5190.00	121.1 PK			1.88 H	10	81.8	39.3
4	*5190.00	108.2 AV			1.88 H	10	68.9	39.3
5	#10380.00	59.4 PK	68.2	-8.8	1.75 H	59	42.0	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	1.29 V	2	63.5	4.1
2	5150.00	52.7 AV	54.0	-1.3	1.29 V	2	48.6	4.1
3	*5190.00	121.8 PK			1.12 V	11	82.5	39.3
4	*5190.00	108.8 AV			1.12 V	11	69.5	39.3
5	#10380.00	59.9 PK	68.2	-8.3	1.97 V	133	42.5	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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	63.9 PK	74.0	-10.1	1.85 H	13	59.8	4.1
2	5150.00	51.5 AV	54.0	-2.5	1.85 H	13	47.4	4.1
3	*5230.00	122.8 PK			1.79 H	8	83.7	39.1
4	*5230.00	110.1 AV			1.79 H	8	71.0	39.1
5	5350.00	56.4 PK	74.0	-17.6	1.71 H	10	52.3	4.1
6	5350.00	45.6 AV	54.0	-8.4	1.71 H	10	41.5	4.1
7	#10460.00	59.9 PK	68.2	-8.3	1.74 H	77	42.1	17.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	64.5 PK	74.0	-9.5	1.41 V	353	60.4	4.1
2	5150.00	52.2 AV	54.0	-1.8	1.41 V	353	48.1	4.1
3	*5230.00	123.6 PK			1.28 V	350	84.5	39.1
4	*5230.00	110.9 AV			1.28 V	350	71.8	39.1
5	5350.00	59.6 PK	74.0	-14.4	1.35 V	359	55.5	4.1
6	5350.00	48.6 AV	54.0	-5.4	1.35 V	359	44.5	4.1
7	#10460.00	60.3 PK	68.2	-7.9	1.97 V	122	42.5	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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.20	60.9 PK	68.2	-7.3	1.74 H	3	56.4	4.5
2	#5650.00	66.6 PK	68.2	-1.6	1.52 H	1	62.2	4.4
3	*5755.00	122.0 PK			1.74 H	3	82.0	40.0
4	*5755.00	108.8 AV			1.74 H	3	68.8	40.0
5	#5944.00	58.6 PK	68.2	-9.6	1.74 H	3	53.3	5.3
6	11510.00	61.2 PK	74.0	-12.8	1.61 H	321	42.3	18.9
7	11510.00	47.2 AV	54.0	-6.8	1.61 H	321	28.3	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5649.60	60.8 PK	68.2	-7.4	1.51 V	350	56.3	4.5
2	#5650.00	66.3 PK	68.2	-1.9	1.47 V	359	61.9	4.4
3	*5755.00	121.6 PK			1.51 V	350	81.6	40.0
4	*5755.00	108.4 AV			1.51 V	350	68.4	40.0
5	#5958.40	57.6 PK	68.2	-10.6	1.51 V	350	52.3	5.3
6	11510.00	61.0 PK	74.0	-13.0	2.14 V	287	42.1	18.9
7	11510.00	46.9 AV	54.0	-7.1	2.14 V	287	28.0	18.9

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5651.20	59.6 PK	69.1	-9.5	2.30 H	27	55.1	4.5
2	*5795.00	121.5 PK			2.30 H	27	81.2	40.3
3	*5795.00	108.3 AV			2.30 H	27	68.0	40.3
4	#5925.00	66.5 PK	68.2	-1.7	2.53 H	30	61.2	5.3
5	#5931.20	63.5 PK	68.2	-4.7	2.30 H	27	58.2	5.3
6	11590.00	60.8 PK	74.0	-13.2	1.61 H	320	42.4	18.4
7	11590.00	46.7 AV	54.0	-7.3	1.61 H	320	28.3	18.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.00	57.7 PK	68.2	-10.5	1.53 V	333	53.2	4.5
2	*5795.00	121.0 PK			1.53 V	333	80.7	40.3
3	*5795.00	107.7 AV			1.53 V	333	67.4	40.3
4	#5925.00	66.0 PK	68.2	-2.2	1.61 V	312	60.7	5.3
5	#5934.40	61.6 PK	68.2	-6.6	1.53 V	333	56.3	5.3
6	11590.00	60.4 PK	74.0	-13.6	2.22 V	311	42.0	18.4
7	11590.00	46.3 AV	54.0	-7.7	2.22 V	311	27.9	18.4

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.

802.11ax (HE80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	69.6 PK	74.0	-4.4	1.23 H	19	65.5	4.1
2	5150.00	52.6 AV	54.0	-1.4	1.23 H	19	48.5	4.1
3	*5210.00	118.4 PK			1.40 H	8	79.2	39.2
4	*5210.00	105.4 AV			1.40 H	8	66.2	39.2
5	5350.00	59.4 PK	74.0	-14.6	1.29 H	11	55.3	4.1
6	5350.00	48.6 AV	54.0	-5.4	1.29 H	11	44.5	4.1
7	#10420.00	60.4 PK	68.2	-7.8	1.66 H	78	42.8	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	69.1 PK	74.0	-4.9	1.44 V	356	65.0	4.1
2	5150.00	52.4 AV	54.0	-1.6	1.44 V	356	48.3	4.1
3	*5210.00	118.2 PK			1.43 V	356	79.0	39.2
4	*5210.00	104.9 AV			1.43 V	356	65.7	39.2
5	5350.00	59.1 PK	74.0	-14.9	1.50 V	359	55.0	4.1
6	5350.00	48.4 AV	54.0	-5.6	1.50 V	359	44.3	4.1
7	#10420.00	60.1 PK	68.2	-8.1	1.95 V	129	42.5	17.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5647.20	61.7 PK	68.2	-6.5	1.61 H	2	57.2	4.5
2	#5650.00	66.3 PK	68.2	-1.9	1.47 H	357	61.9	4.4
3	*5775.00	116.6 PK			1.61 H	2	76.5	40.1
4	*5775.00	103.6 AV			1.61 H	2	63.5	40.1
5	#5925.00	60.3 PK	68.2	-7.9	1.55 H	1	55.0	5.3
6	#5930.40	60.1 PK	68.2	-8.1	1.61 H	2	54.8	5.3
7	11550.00	60.2 PK	74.0	-13.8	1.43 H	320	41.5	18.7
8	11550.00	47.1 AV	54.0	-6.9	1.43 H	320	28.4	18.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5635.20	62.1 PK	68.2	-6.1	1.57 V	356	57.6	4.5
2	#5650.00	66.5 PK	68.2	-1.7	1.51 V	341	62.1	4.4
3	*5775.00	116.7 PK			1.57 V	356	76.6	40.1
4	*5775.00	103.7 AV			1.57 V	356	63.6	40.1
5	#5925.00	60.4 PK	68.2	-7.8	1.61 V	350	55.1	5.3
6	#5936.00	59.6 PK	68.2	-8.6	1.57 V	356	54.3	5.3
7	11550.00	60.4 PK	74.0	-13.6	1.92 V	287	41.7	18.7
8	11550.00	47.2 AV	54.0	-6.8	1.92 V	287	28.5	18.7

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.

Test Mode A

5G traffic radio: Beamforming Mode

802.11ax (HE20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	72.2 PK	74.0	-1.8	1.96 H	3	68.1	4.1
2	5150.00	47.2 AV	54.0	-6.8	1.96 H	3	43.1	4.1
3	*5180.00	121.6 PK			1.94 H	4	82.3	39.3
4	*5180.00	108.8 AV			1.94 H	4	69.5	39.3
5	#10360.00	59.6 PK	68.2	-8.6	1.88 H	5	42.4	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	72.5 PK	74.0	-1.5	1.23 V	17	68.4	4.1
2	5150.00	48.8 AV	54.0	-5.2	1.23 V	17	44.7	4.1
3	*5180.00	123.1 PK			1.34 V	18	83.8	39.3
4	*5180.00	109.7 AV			1.34 V	18	70.4	39.3
5	#10360.00	60.1 PK	68.2	-8.1	1.66 V	54	42.9	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	1.91 H	5	63.8	4.1
2	5150.00	47.3 AV	54.0	-6.7	1.91 H	5	43.2	4.1
3	*5200.00	122.8 PK			1.83 H	2	83.5	39.3
4	*5200.00	110.8 AV			1.83 H	2	71.5	39.3
5	#10400.00	60.4 PK	68.2	-7.8	1.90 H	15	43.0	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	66.6 PK	74.0	-7.4	1.35 V	20	62.5	4.1
2	5150.00	46.9 AV	54.0	-7.1	1.35 V	20	42.8	4.1
3	*5200.00	123.5 PK			1.30 V	15	84.2	39.3
4	*5200.00	110.4 AV			1.30 V	15	71.1	39.3
5	#10400.00	60.5 PK	68.2	-7.7	1.57 V	44	43.1	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	123.6 PK			1.80 H	3	84.5	39.1
2	*5240.00	110.8 AV			1.80 H	3	71.7	39.1
3	5350.00	56.7 PK	74.0	-17.3	1.89 H	7	52.6	4.1
4	5350.00	44.3 AV	54.0	-9.7	1.89 H	7	40.2	4.1
5	#10480.00	60.9 PK	68.2	-7.3	1.89 H	16	42.9	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	123.8 PK			1.33 V	16	84.7	39.1
2	*5240.00	111.4 AV			1.33 V	16	72.3	39.1
3	5350.00	57.8 PK	74.0	-16.2	1.37 V	19	53.7	4.1
4	5350.00	43.8 AV	54.0	-10.2	1.37 V	19	39.7	4.1
5	#10480.00	61.2 PK	68.2	-7.0	1.71 V	55	43.2	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	58.3 PK	68.2	-9.9	2.98 H	9	53.8	4.5
2	*5745.00	121.5 PK			2.98 H	9	81.5	40.0
3	*5745.00	109.7 AV			2.98 H	9	69.7	40.0
4	#5941.67	58.2 PK	68.2	-10.0	2.98 H	9	52.9	5.3
5	11490.00	65.8 PK	74.0	-8.2	1.52 H	63	47.0	18.8
6	11490.00	51.9 AV	54.0	-2.1	1.52 H	63	33.1	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	58.0 PK	68.2	-10.2	1.46 V	40	53.5	4.5
2	*5745.00	119.6 PK			1.46 V	40	79.6	40.0
3	*5745.00	107.2 AV			1.46 V	40	67.2	40.0
4	#5932.69	58.1 PK	68.2	-10.1	1.46 V	40	52.8	5.3
5	11490.00	66.0 PK	74.0	-8.0	2.87 V	353	47.2	18.8
6	11490.00	52.6 AV	54.0	-1.4	2.87 V	353	33.8	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	56.7 PK	68.2	-11.5	2.86 H	28	52.2	4.5
2	*5785.00	121.6 PK			2.86 H	28	81.4	40.2
3	*5785.00	109.6 AV			2.86 H	28	69.4	40.2
4	#5966.03	58.1 PK	68.2	-10.1	2.86 H	28	52.8	5.3
5	11570.00	64.0 PK	74.0	-10.0	2.87 H	27	45.5	18.5
6	11570.00	51.0 AV	54.0	-3.0	2.87 H	27	32.5	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.92	56.7 PK	68.2	-11.5	1.40 V	306	52.2	4.5
2	*5785.00	120.7 PK			1.40 V	306	80.5	40.2
3	*5785.00	108.1 AV			1.40 V	306	67.9	40.2
4	#5985.26	57.8 PK	68.2	-10.4	1.40 V	306	52.4	5.4
5	11570.00	62.3 PK	74.0	-11.7	1.44 V	348	43.8	18.5
6	11570.00	49.2 AV	54.0	-4.8	1.44 V	348	30.7	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.00	56.4 PK	68.2	-11.8	2.85 H	24	51.9	4.5
2	*5825.00	122.6 PK			2.85 H	24	82.2	40.4
3	*5825.00	111.0 AV			2.85 H	24	70.6	40.4
4	#5961.54	57.8 PK	68.2	-10.4	2.85 H	24	52.5	5.3
5	11650.00	62.9 PK	74.0	-11.1	1.46 H	59	44.4	18.5
6	11650.00	50.3 AV	54.0	-3.7	1.46 H	59	31.8	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.49	56.5 PK	68.2	-11.7	1.28 V	334	52.0	4.5
2	*5825.00	119.9 PK			1.28 V	334	79.5	40.4
3	*5825.00	107.9 AV			1.28 V	334	67.5	40.4
4	#5983.33	57.3 PK	68.2	-10.9	1.28 V	334	51.9	5.4
5	11650.00	62.3 PK	74.0	-11.7	2.43 V	348	43.8	18.5
6	11650.00	48.9 AV	54.0	-5.1	2.43 V	348	30.4	18.5

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.

802.11ax (HE40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	69.4 PK	74.0	-4.6	1.91 H	6	65.3	4.1
2	5150.00	46.6 AV	54.0	-7.4	1.91 H	6	42.5	4.1
3	*5190.00	117.6 PK			1.87 H	3	78.3	39.3
4	*5190.00	104.3 AV			1.87 H	3	65.0	39.3
5	#10380.00	59.8 PK	68.2	-8.4	1.79 H	23	42.4	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.23 V	13	68.2	4.1
2	5150.00	48.8 AV	54.0	-5.2	1.23 V	13	44.7	4.1
3	*5190.00	117.5 PK			1.37 V	17	78.2	39.3
4	*5190.00	105.5 AV			1.37 V	17	66.2	39.3
5	#10380.00	60.0 PK	68.2	-8.2	1.73 V	63	42.6	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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	70.9 PK	74.0	-3.1	1.93 H	8	66.8	4.1
2	5150.00	49.4 AV	54.0	-4.6	1.93 H	8	45.3	4.1
3	*5230.00	121.7 PK			1.87 H	3	82.6	39.1
4	*5230.00	108.8 AV			1.87 H	3	69.7	39.1
5	#10460.00	60.3 PK	68.2	-7.9	1.85 H	13	42.5	17.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	70.9 PK	74.0	-3.1	1.58 V	24	66.8	4.1
2	5150.00	47.9 AV	54.0	-6.1	1.58 V	24	43.8	4.1
3	*5230.00	121.5 PK			1.22 V	15	82.4	39.1
4	*5230.00	108.3 AV			1.22 V	15	69.2	39.1
5	#10460.00	60.0 PK	68.2	-8.2	1.58 V	52	42.2	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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5634.62	60.2 PK	68.2	-8.0	3.06 H	292	55.7	4.5
2	#5650.00	66.4 PK	68.2	-1.8	3.06 H	336	62.0	4.4
3	*5755.00	119.0 PK			3.06 H	292	79.0	40.0
4	*5755.00	106.3 AV			3.06 H	292	66.3	40.0
5	#5946.79	58.9 PK	68.2	-9.3	3.06 H	292	53.6	5.3
6	11510.00	63.9 PK	74.0	-10.1	2.94 H	335	45.0	18.9
7	11510.00	50.4 AV	54.0	-3.6	2.94 H	335	31.5	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	57.0 PK	68.2	-11.2	1.41 V	309	52.5	4.5
2	#5650.00	59.9 PK	68.2	-8.3	1.51 V	311	55.5	4.4
3	*5755.00	116.9 PK			1.41 V	309	76.9	40.0
4	*5755.00	104.5 AV			1.41 V	309	64.5	40.0
5	#5987.18	57.6 PK	68.2	-10.6	1.41 V	309	52.2	5.4
6	11510.00	62.9 PK	74.0	-11.1	2.39 V	324	44.0	18.9
7	11510.00	49.4 AV	54.0	-4.6	2.39 V	324	30.5	18.9

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.31	59.2 PK	68.2	-9.0	3.04 H	7	54.7	4.5
2	*5795.00	119.3 PK			3.04 H	7	79.0	40.3
3	*5795.00	107.0 AV			3.04 H	7	66.7	40.3
4	#5951.92	60.7 PK	68.2	-7.5	3.04 H	7	55.4	5.3
5	11590.00	63.7 PK	74.0	-10.3	3.05 H	344	45.3	18.4
6	11590.00	49.6 AV	54.0	-4.4	3.05 H	344	31.2	18.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5601.28	56.9 PK	68.2	-11.3	1.41 V	305	52.4	4.5
2	*5795.00	117.9 PK			1.41 V	305	77.6	40.3
3	*5795.00	105.0 AV			1.41 V	305	64.7	40.3
4	#5985.26	57.7 PK	68.2	-10.5	1.41 V	305	52.3	5.4
5	11590.00	63.0 PK	74.0	-11.0	2.53 V	344	44.6	18.4
6	11590.00	49.0 AV	54.0	-5.0	2.53 V	344	30.6	18.4

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.

802.11ax (HE80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	64.3 PK	74.0	-9.7	1.97 H	10	60.2	4.1
2	5150.00	48.3 AV	54.0	-5.7	1.97 H	10	44.2	4.1
3	*5210.00	112.8 PK			1.90 H	4	73.6	39.2
4	*5210.00	100.2 AV			1.90 H	4	61.0	39.2
5	5350.00	58.3 PK	74.0	-15.7	1.91 H	9	54.2	4.1
6	5350.00	44.8 AV	54.0	-9.2	1.91 H	9	40.7	4.1
7	#10420.00	59.6 PK	68.2	-8.6	1.75 H	13	42.0	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.30 V	14	68.3	4.1
2	5150.00	49.5 AV	54.0	-4.5	1.30 V	14	45.4	4.1
3	*5210.00	112.9 PK			1.33 V	18	73.7	39.2
4	*5210.00	100.4 AV			1.33 V	18	61.2	39.2
5	5350.00	61.0 PK	74.0	-13.0	1.29 V	19	56.9	4.1
6	5350.00	46.6 AV	54.0	-7.4	1.29 V	19	42.5	4.1
7	#10420.00	59.6 PK	68.2	-8.6	1.70 V	49	42.0	17.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.87	63.7 PK	68.2	-4.5	2.90 H	8	59.2	4.5
2	#5650.00	66.7 PK	68.2	-1.5	3.03 H	359	62.3	4.4
3	*5775.00	113.6 PK			2.90 H	8	73.5	40.1
4	*5775.00	101.1 AV			2.90 H	8	61.0	40.1
5	#5925.00	61.8 PK	68.2	-6.4	3.15 H	11	56.5	5.3
6	#5926.92	60.3 PK	68.2	-7.9	2.90 H	8	55.0	5.3
7	11550.00	63.4 PK	74.0	-10.6	3.05 H	334	44.7	18.7
8	11550.00	49.0 AV	54.0	-5.0	3.05 H	334	30.3	18.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5640.38	62.6 PK	68.2	-5.6	1.42 V	310	58.1	4.5
2	#5650.00	64.8 PK	68.2	-3.4	1.50 V	311	60.4	4.4
3	*5775.00	112.1 PK			1.42 V	310	72.0	40.1
4	*5775.00	100.5 AV			1.42 V	310	60.4	40.1
5	#5925.00	61.6 PK	68.2	-6.6	1.53 V	311	56.3	5.3
6	#5926.92	58.7 PK	68.2	-9.5	1.42 V	310	53.4	5.3
7	11550.00	62.8 PK	74.0	-11.2	2.61 V	350	44.1	18.7
8	11550.00	48.7 AV	54.0	-5.3	2.61 V	350	30.0	18.7

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.

Test Mode A

Scanning radio: CDD Mode

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	2.85 H	342	52.1	4.1
2	5150.00	43.3 AV	54.0	-10.7	2.85 H	342	39.2	4.1
3	*5180.00	101.6 PK			2.81 H	339	62.3	39.3
4	*5180.00	91.3 AV			2.81 H	339	52.0	39.3
5	#10360.00	60.2 PK	68.2	-8.0	3.02 H	216	43.0	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	3.22 V	323	52.3	4.1
2	5150.00	43.7 AV	54.0	-10.3	3.22 V	323	39.6	4.1
3	*5180.00	104.3 PK			3.21 V	318	65.0	39.3
4	*5180.00	94.1 AV			3.21 V	318	54.8	39.3
5	#10360.00	60.1 PK	68.2	-8.1	3.36 V	236	42.9	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	2.99 H	342	52.0	4.1
2	5150.00	43.4 AV	54.0	-10.6	2.99 H	342	39.3	4.1
3	*5200.00	101.0 PK			2.96 H	341	61.7	39.3
4	*5200.00	90.9 AV			2.96 H	341	51.6	39.3
5	#10400.00	60.5 PK	68.2	-7.7	3.10 H	219	43.1	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.5 PK	74.0	-17.5	3.31 V	318	52.4	4.1
2	5150.00	43.8 AV	54.0	-10.2	3.31 V	318	39.7	4.1
3	*5200.00	103.5 PK			3.29 V	315	64.2	39.3
4	*5200.00	93.1 AV			3.29 V	315	53.8	39.3
5	#10400.00	60.2 PK	68.2	-8.0	3.39 V	243	42.8	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.5 PK			3.08 H	340	62.4	39.1
2	*5240.00	91.3 AV			3.08 H	340	52.2	39.1
3	5350.00	56.4 PK	74.0	-17.6	3.11 H	343	52.3	4.1
4	5350.00	43.6 AV	54.0	-10.4	3.11 H	343	39.5	4.1
5	#10480.00	61.1 PK	68.2	-7.1	3.10 H	219	43.1	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	103.5 PK			3.21 V	318	64.4	39.1
2	*5240.00	93.3 AV			3.21 V	318	54.2	39.1
3	5350.00	56.6 PK	74.0	-17.4	3.23 V	320	52.5	4.1
4	5350.00	43.7 AV	54.0	-10.3	3.23 V	320	39.6	4.1
5	#10480.00	61.0 PK	68.2	-7.2	3.42 V	251	43.0	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5600.00	56.6 PK	68.2	-11.6	3.20 H	341	52.1	4.5
2	*5745.00	101.5 PK			3.20 H	341	61.5	40.0
3	*5745.00	91.1 AV			3.20 H	341	51.1	40.0
4	#5971.15	56.8 PK	68.2	-11.4	3.20 H	341	51.5	5.3
5	11490.00	59.9 PK	74.0	-14.1	3.11 H	220	41.1	18.8
6	11490.00	47.0 AV	54.0	-7.0	3.11 H	220	28.2	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5637.82	56.4 PK	68.2	-11.8	2.49 V	331	51.9	4.5
2	*5745.00	104.6 PK			2.49 V	331	64.6	40.0
3	*5745.00	94.3 AV			2.49 V	331	54.3	40.0
4	#5976.28	57.3 PK	68.2	-10.9	2.49 V	331	52.0	5.3
5	11490.00	60.2 PK	74.0	-13.8	2.75 V	243	41.4	18.8
6	11490.00	47.3 AV	54.0	-6.7	2.75 V	243	28.5	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.77	56.4 PK	68.2	-11.8	3.13 H	349	51.9	4.5
2	*5785.00	101.1 PK			3.13 H	349	60.9	40.2
3	*5785.00	90.3 AV			3.13 H	349	50.1	40.2
4	#5953.21	57.0 PK	68.2	-11.2	3.13 H	349	51.7	5.3
5	11570.00	59.6 PK	74.0	-14.4	2.91 H	233	41.1	18.5
6	11570.00	46.6 AV	54.0	-7.4	2.91 H	233	28.1	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.49	56.6 PK	68.2	-11.6	2.53 V	330	52.1	4.5
2	*5785.00	103.9 PK			2.53 V	330	63.7	40.2
3	*5785.00	93.2 AV			2.53 V	330	53.0	40.2
4	#5960.26	56.4 PK	68.2	-11.8	2.53 V	330	51.1	5.3
5	11570.00	59.8 PK	74.0	-14.2	2.63 V	250	41.3	18.5
6	11570.00	46.8 AV	54.0	-7.2	2.63 V	250	28.3	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5633.97	56.0 PK	68.2	-12.2	3.15 H	344	51.5	4.5
2	*5825.00	101.9 PK			3.15 H	344	61.5	40.4
3	*5825.00	91.8 AV			3.15 H	344	51.4	40.4
4	#5987.18	56.6 PK	68.2	-11.6	3.15 H	344	51.2	5.4
5	11650.00	60.0 PK	74.0	-14.0	2.85 H	239	41.5	18.5
6	11650.00	47.0 AV	54.0	-7.0	2.85 H	239	28.5	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5627.56	56.2 PK	68.2	-12.0	2.47 V	325	51.7	4.5
2	*5825.00	104.8 PK			2.47 V	325	64.4	40.4
3	*5825.00	94.5 AV			2.47 V	325	54.1	40.4
4	#5998.72	57.9 PK	68.2	-10.3	2.47 V	325	52.5	5.4
5	11650.00	60.2 PK	74.0	-13.8	2.63 V	250	41.7	18.5
6	11650.00	47.1 AV	54.0	-6.9	2.63 V	250	28.6	18.5

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.

802.11ac (VHT20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	2.81 H	342	52.0	4.1
2	5150.00	43.4 AV	54.0	-10.6	2.81 H	342	39.3	4.1
3	*5180.00	100.6 PK			2.80 H	339	61.3	39.3
4	*5180.00	90.4 AV			2.80 H	339	51.1	39.3
5	#10360.00	60.0 PK	68.2	-8.2	3.05 H	214	42.8	17.2

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	3.22 V	320	52.3	4.1
2	5150.00	43.8 AV	54.0	-10.2	3.22 V	320	39.7	4.1
3	*5180.00	103.2 PK			3.19 V	319	63.9	39.3
4	*5180.00	93.1 AV			3.19 V	319	53.8	39.3
5	#10360.00	60.3 PK	68.2	-7.9	3.32 V	234	43.1	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	3.15 H	345	52.3	4.1
2	5150.00	43.6 AV	54.0	-10.4	3.15 H	345	39.5	4.1
3	*5200.00	101.1 PK			3.12 H	342	61.8	39.3
4	*5200.00	90.9 AV			3.12 H	342	51.6	39.3
5	#10400.00	60.3 PK	68.2	-7.9	3.14 H	223	42.9	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	2.93 V	320	52.3	4.1
2	5150.00	43.7 AV	54.0	-10.3	2.93 V	320	39.6	4.1
3	*5200.00	103.3 PK			2.90 V	317	64.0	39.3
4	*5200.00	92.7 AV			2.90 V	317	53.4	39.3
5	#10400.00	60.4 PK	68.2	-7.8	3.22 V	230	43.0	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	101.1 PK			2.84 H	343	62.0	39.1
2	*5240.00	90.8 AV			2.84 H	343	51.7	39.1
3	5350.00	56.3 PK	74.0	-17.7	2.86 H	346	52.2	4.1
4	5350.00	43.7 AV	54.0	-10.3	2.86 H	346	39.6	4.1
5	#10480.00	60.9 PK	68.2	-7.3	3.16 H	224	42.9	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	102.8 PK			3.15 V	316	63.7	39.1
2	*5240.00	92.4 AV			3.15 V	316	53.3	39.1
3	5350.00	56.4 PK	74.0	-17.6	3.18 V	320	52.3	4.1
4	5350.00	43.6 AV	54.0	-10.4	3.18 V	320	39.5	4.1
5	#10480.00	60.8 PK	68.2	-7.4	3.33 V	241	42.8	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.13	55.5 PK	68.2	-12.7	3.21 H	349	51.0	4.5
2	*5745.00	101.6 PK			3.21 H	349	61.6	40.0
3	*5745.00	91.6 AV			3.21 H	349	51.6	40.0
4	#5998.72	57.4 PK	68.2	-10.8	3.21 H	349	52.0	5.4
5	11490.00	60.1 PK	74.0	-13.9	2.85 H	236	41.3	18.8
6	11490.00	47.2 AV	54.0	-6.8	2.85 H	236	28.4	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.05	56.0 PK	68.2	-12.2	2.73 V	334	51.5	4.5
2	*5745.00	104.5 PK			2.73 V	334	64.5	40.0
3	*5745.00	94.4 AV			2.73 V	334	54.4	40.0
4	#5946.79	56.8 PK	68.2	-11.4	2.73 V	334	51.5	5.3
5	11490.00	60.6 PK	74.0	-13.4	2.82 V	241	41.8	18.8
6	11490.00	47.6 AV	54.0	-6.4	2.82 V	241	28.8	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5601.92	57.1 PK	68.2	-11.1	3.31 H	353	52.6	4.5
2	*5785.00	101.1 PK			3.31 H	353	60.9	40.2
3	*5785.00	90.8 AV			3.31 H	353	50.6	40.2
4	#5949.36	57.1 PK	68.2	-11.1	3.31 H	353	51.8	5.3
5	11570.00	59.6 PK	74.0	-14.4	2.88 H	253	41.1	18.5
6	11570.00	46.5 AV	54.0	-7.5	2.88 H	253	28.0	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5623.08	57.3 PK	68.2	-10.9	2.52 V	328	52.8	4.5
2	*5785.00	103.7 PK			2.52 V	328	63.5	40.2
3	*5785.00	93.3 AV			2.52 V	328	53.1	40.2
4	#5942.95	56.9 PK	68.2	-11.3	2.52 V	328	51.6	5.3
5	11570.00	59.9 PK	74.0	-14.1	2.66 V	247	41.4	18.5
6	11570.00	46.7 AV	54.0	-7.3	2.66 V	247	28.2	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	56.1 PK	68.2	-12.1	3.15 H	350	51.6	4.5
2	*5825.00	101.6 PK			3.15 H	350	61.2	40.4
3	*5825.00	91.5 AV			3.15 H	350	51.1	40.4
4	#5994.23	56.7 PK	68.2	-11.5	3.15 H	350	51.3	5.4
5	11650.00	59.7 PK	74.0	-14.3	2.98 H	241	41.2	18.5
6	11650.00	46.6 AV	54.0	-7.4	2.98 H	241	28.1	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	56.6 PK	68.2	-11.6	2.46 V	324	52.1	4.5
2	*5825.00	104.4 PK			2.46 V	324	64.0	40.4
3	*5825.00	94.3 AV			2.46 V	324	53.9	40.4
4	#5989.10	57.3 PK	68.2	-10.9	2.46 V	324	51.9	5.4
5	11650.00	60.0 PK	74.0	-14.0	2.81 V	260	41.5	18.5
6	11650.00	47.0 AV	54.0	-7.0	2.81 V	260	28.5	18.5

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.

802.11ac (VHT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	3.09 H	343	52.2	4.1
2	5150.00	43.6 AV	54.0	-10.4	3.09 H	343	39.5	4.1
3	*5190.00	98.5 PK			3.06 H	341	59.2	39.3
4	*5190.00	88.2 AV			3.06 H	341	48.9	39.3
5	#10380.00	60.5 PK	68.2	-7.7	3.23 H	231	43.1	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	2.90 V	318	52.3	4.1
2	5150.00	43.8 AV	54.0	-10.2	2.90 V	318	39.7	4.1
3	*5190.00	100.5 PK			2.88 V	316	61.2	39.3
4	*5190.00	90.3 AV			2.88 V	316	51.0	39.3
5	#10380.00	60.4 PK	68.2	-7.8	3.29 V	242	43.0	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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	3.09 H	342	52.0	4.1
2	5150.00	43.4 AV	54.0	-10.6	3.09 H	342	39.3	4.1
3	*5230.00	98.2 PK			3.06 H	340	59.1	39.1
4	*5230.00	88.0 AV			3.06 H	340	48.9	39.1
5	5350.00	56.3 PK	74.0	-17.7	3.11 H	343	52.2	4.1
6	5350.00	43.6 AV	54.0	-10.4	3.11 H	343	39.5	4.1
7	#10460.00	60.6 PK	68.2	-7.6	3.16 H	224	42.8	17.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	3.18 V	319	52.1	4.1
2	5150.00	43.7 AV	54.0	-10.3	3.18 V	319	39.6	4.1
3	*5230.00	99.5 PK			3.15 V	316	60.4	39.1
4	*5230.00	89.7 AV			3.15 V	316	50.6	39.1
5	5350.00	56.3 PK	74.0	-17.7	3.17 V	320	52.2	4.1
6	5350.00	43.6 AV	54.0	-10.4	3.17 V	320	39.5	4.1
7	#10460.00	60.9 PK	68.2	-7.3	3.35 V	237	43.1	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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.13	55.4 PK	68.2	-12.8	3.01 H	339	50.9	4.5
2	*5755.00	98.8 PK			3.01 H	339	58.8	40.0
3	*5755.00	88.1 AV			3.01 H	339	48.1	40.0
4	#5985.26	57.0 PK	68.2	-11.2	3.01 H	339	51.6	5.4
5	11510.00	60.4 PK	74.0	-13.6	2.68 H	241	41.5	18.9
6	11510.00	47.3 AV	54.0	-6.7	2.68 H	241	28.4	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5611.54	56.6 PK	68.2	-11.6	2.48 V	3	52.1	4.5
2	*5755.00	101.7 PK			2.48 V	3	61.7	40.0
3	*5755.00	91.0 AV			2.48 V	3	51.0	40.0
4	#5995.51	58.8 PK	68.2	-9.4	2.48 V	3	53.4	5.4
5	11510.00	60.7 PK	74.0	-13.3	2.61 V	229	41.8	18.9
6	11510.00	47.7 AV	54.0	-6.3	2.61 V	229	28.8	18.9

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.13	56.6 PK	68.2	-11.6	3.28 H	359	52.1	4.5
2	*5795.00	97.9 PK			3.28 H	359	57.6	40.3
3	*5795.00	87.5 AV			3.28 H	359	47.2	40.3
4	#5983.33	57.0 PK	68.2	-11.2	3.28 H	359	51.6	5.4
5	11590.00	60.9 PK	74.0	-13.1	2.88 H	236	42.5	18.4
6	11590.00	46.7 AV	54.0	-7.3	2.88 H	236	28.3	18.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	56.7 PK	68.2	-11.5	2.55 V	328	52.2	4.5
2	*5795.00	100.7 PK			2.55 V	328	60.4	40.3
3	*5795.00	90.3 AV			2.55 V	328	50.0	40.3
4	#5951.28	57.9 PK	68.2	-10.3	2.55 V	328	52.6	5.3
5	11590.00	61.3 PK	74.0	-12.7	2.63 V	253	42.9	18.4
6	11590.00	47.0 AV	54.0	-7.0	2.63 V	253	28.6	18.4

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.

802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	60.8 PK	74.0	-13.2	2.95 H	338	56.7	4.1
2	5150.00	48.2 AV	54.0	-5.8	2.95 H	338	44.1	4.1
3	*5210.00	96.6 PK			3.05 H	341	57.4	39.2
4	*5210.00	86.0 AV			3.05 H	341	46.8	39.2
5	5350.00	56.1 PK	74.0	-17.9	2.99 H	340	52.0	4.1
6	5350.00	43.6 AV	54.0	-10.4	2.99 H	340	39.5	4.1
7	#10420.00	60.7 PK	68.2	-7.5	3.11 H	222	43.1	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	63.2 PK	74.0	-10.8	2.68 V	317	59.1	4.1
2	5150.00	49.8 AV	54.0	-4.2	2.68 V	317	45.7	4.1
3	*5210.00	97.9 PK			2.78 V	360	58.7	39.2
4	*5210.00	86.5 AV			2.78 V	360	47.3	39.2
5	5350.00	56.3 PK	74.0	-17.7	2.80 V	354	52.2	4.1
6	5350.00	43.7 AV	54.0	-10.3	2.80 V	354	39.6	4.1
7	#10420.00	60.4 PK	68.2	-7.8	3.13 V	220	42.8	17.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	56.3 PK	68.2	-11.9	3.05 H	341	51.8	4.5
2	#5650.00	55.5 PK	68.2	-12.7	2.91 H	350	51.1	4.4
3	*5775.00	96.5 PK			3.05 H	341	56.4	40.1
4	*5775.00	85.5 AV			3.05 H	341	45.4	40.1
5	#5925.00	57.8 PK	68.2	-10.4	2.99 H	343	52.5	5.3
6	#5987.82	56.6 PK	68.2	-11.6	3.05 H	341	51.2	5.4
7	11550.00	61.4 PK	74.0	-12.6	2.81 H	242	42.7	18.7
8	11550.00	47.1 AV	54.0	-6.9	2.81 H	242	28.4	18.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	55.9 PK	68.2	-12.3	2.61 V	336	51.4	4.5
2	#5650.00	55.9 PK	68.2	-12.3	2.53 V	340	51.5	4.4
3	*5775.00	99.3 PK			2.61 V	336	59.2	40.1
4	*5775.00	88.2 AV			2.61 V	336	48.1	40.1
5	#5925.00	58.2 PK	68.2	-10.0	2.51 V	339	52.9	5.3
6	#5991.03	56.8 PK	68.2	-11.4	2.61 V	336	51.4	5.4
7	11550.00	61.8 PK	74.0	-12.2	2.67 V	250	43.1	18.7
8	11550.00	47.5 AV	54.0	-6.5	2.67 V	250	28.8	18.7

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.

Test Mode C

5G traffic radio: CDD Mode

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	1.61 H	288	52.9	4.1
2	5150.00	42.9 AV	54.0	-11.1	1.61 H	288	38.8	4.1
3	*5180.00	107.8 PK			1.49 H	255	68.5	39.3
4	*5180.00	97.8 AV			1.49 H	255	58.5	39.3
5	#10360.00	60.1 PK	68.2	-8.1	1.91 H	209	42.9	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	66.6 PK	74.0	-7.4	1.78 V	44	62.5	4.1
2	5150.00	52.4 AV	54.0	-1.6	1.78 V	44	48.3	4.1
3	*5180.00	124.7 PK			1.75 V	313	85.4	39.3
4	*5180.00	114.6 AV			1.75 V	313	75.3	39.3
5	#10360.00	60.6 PK	68.2	-7.6	1.60 V	138	43.4	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	1.53 H	265	52.3	4.1
2	5150.00	43.6 AV	54.0	-10.4	1.53 H	265	39.5	4.1
3	*5200.00	109.8 PK			1.51 H	263	70.5	39.3
4	*5200.00	100.3 AV			1.51 H	263	61.0	39.3
5	#10400.00	60.4 PK	68.2	-7.8	1.74 H	195	43.0	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.60 V	196	56.5	4.1
2	5150.00	50.1 AV	54.0	-3.9	1.60 V	196	46.0	4.1
3	*5200.00	127.1 PK			1.57 V	194	87.8	39.3
4	*5200.00	117.1 AV			1.57 V	194	77.8	39.3
5	#10400.00	60.9 PK	68.2	-7.3	1.68 V	140	43.5	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.1 PK			1.45 H	261	71.0	39.1
2	*5240.00	99.9 AV			1.45 H	261	60.8	39.1
3	5350.00	54.4 PK	74.0	-19.6	1.61 H	243	50.3	4.1
4	5350.00	45.0 AV	54.0	-9.0	1.61 H	243	40.9	4.1
5	#10480.00	61.1 PK	68.2	-7.1	1.91 H	203	43.1	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	127.3 PK			1.73 V	13	88.2	39.1
2	*5240.00	117.1 AV			1.73 V	13	78.0	39.1
3	5350.00	59.5 PK	74.0	-14.5	1.55 V	304	55.4	4.1
4	5350.00	49.9 AV	54.0	-4.1	1.55 V	304	45.8	4.1
5	#10480.00	61.5 PK	68.2	-6.7	1.71 V	133	43.5	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	55.6 PK	68.2	-12.6	2.97 H	78	51.1	4.5
2	*5745.00	111.9 PK			2.97 H	78	71.9	40.0
3	*5745.00	102.1 AV			2.97 H	78	62.1	40.0
4	#5980.77	56.5 PK	68.2	-11.7	2.97 H	78	51.1	5.4
5	11490.00	61.0 PK	74.0	-13.0	1.88 H	236	42.2	18.8
6	11490.00	48.0 AV	54.0	-6.0	1.88 H	236	29.2	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.59	60.7 PK	68.2	-7.5	1.56 V	204	56.2	4.5
2	*5745.00	126.1 PK			1.56 V	204	86.1	40.0
3	*5745.00	115.4 AV			1.56 V	204	75.4	40.0
4	#5935.26	58.0 PK	68.2	-10.2	1.56 V	204	52.7	5.3
5	11490.00	60.8 PK	74.0	-13.2	1.68 V	145	42.0	18.8
6	11490.00	47.8 AV	54.0	-6.2	1.68 V	145	29.0	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5614.74	56.4 PK	68.2	-11.8	2.79 H	66	51.9	4.5
2	*5785.00	110.4 PK			2.79 H	66	70.2	40.2
3	*5785.00	100.9 AV			2.79 H	66	60.7	40.2
4	#5958.33	57.9 PK	68.2	-10.3	2.79 H	66	52.6	5.3
5	11570.00	60.6 PK	74.0	-13.4	1.83 H	228	42.1	18.5
6	11570.00	47.7 AV	54.0	-6.3	1.83 H	228	29.2	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	58.0 PK	68.2	-10.2	1.51 V	202	53.5	4.5
2	*5785.00	125.7 PK			1.51 V	202	85.5	40.2
3	*5785.00	115.6 AV			1.51 V	202	75.4	40.2
4	#5958.33	57.7 PK	68.2	-10.5	1.51 V	202	52.4	5.3
5	11570.00	60.7 PK	74.0	-13.3	1.72 V	148	42.2	18.5
6	11570.00	47.6 AV	54.0	-6.4	1.72 V	148	29.1	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5627.56	55.4 PK	68.2	-12.8	2.98 H	67	50.9	4.5
2	*5825.00	110.6 PK			2.98 H	67	70.2	40.4
3	*5825.00	100.4 AV			2.98 H	67	60.0	40.4
4	#5978.21	56.5 PK	68.2	-11.7	2.98 H	67	51.2	5.3
5	11650.00	60.6 PK	74.0	-13.4	1.79 H	225	42.1	18.5
6	11650.00	47.5 AV	54.0	-6.5	1.79 H	225	29.0	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	57.9 PK	68.2	-10.3	1.31 V	201	53.4	4.5
2	*5825.00	125.6 PK			1.31 V	201	85.2	40.4
3	*5825.00	115.5 AV			1.31 V	201	75.1	40.4
4	#5928.21	60.7 PK	68.2	-7.5	1.31 V	201	55.4	5.3
5	11650.00	60.7 PK	74.0	-13.3	1.72 V	153	42.2	18.5
6	11650.00	47.6 AV	54.0	-6.4	1.72 V	153	29.1	18.5

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.

802.11ax (HE20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	2.46 H	105	52.3	4.1
2	5150.00	43.7 AV	54.0	-10.3	2.46 H	105	39.6	4.1
3	*5180.00	108.4 PK			2.43 H	102	69.1	39.3
4	*5180.00	95.4 AV			2.43 H	102	56.1	39.3
5	#10360.00	59.5 PK	68.2	-8.7	1.82 H	215	42.3	17.2

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	65.5 PK	74.0	-8.5	1.50 V	171	61.4	4.1
2	5150.00	52.5 AV	54.0	-1.5	1.50 V	171	48.4	4.1
3	*5180.00	127.1 PK			1.51 V	137	87.8	39.3
4	*5180.00	114.1 AV			1.51 V	137	74.8	39.3
5	#10360.00	60.3 PK	68.2	-7.9	1.69 V	142	43.1	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	2.45 H	90	52.1	4.1
2	5150.00	43.5 AV	54.0	-10.5	2.45 H	90	39.4	4.1
3	*5200.00	110.3 PK			2.43 H	87	71.0	39.3
4	*5200.00	97.7 AV			2.43 H	87	58.4	39.3
5	#10400.00	59.7 PK	68.2	-8.5	1.75 H	208	42.3	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.9 PK	74.0	-12.1	1.51 V	140	57.8	4.1
2	5150.00	52.5 AV	54.0	-1.5	1.51 V	140	48.4	4.1
3	*5200.00	129.2 PK			1.55 V	166	89.9	39.3
4	*5200.00	115.7 AV			1.55 V	166	76.4	39.3
5	#10400.00	60.4 PK	68.2	-7.8	1.72 V	146	43.0	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	113.5 PK			2.96 H	85	74.4	39.1
2	*5240.00	99.5 AV			2.96 H	85	60.4	39.1
3	5350.00	56.2 PK	74.0	-17.8	2.99 H	87	52.1	4.1
4	5350.00	43.3 AV	54.0	-10.7	2.99 H	87	39.2	4.1
5	#10480.00	60.1 PK	68.2	-8.1	1.79 H	220	42.1	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	129.0 PK			1.60 V	137	89.9	39.1
2	*5240.00	115.6 AV			1.60 V	137	76.5	39.1
3	5350.00	59.1 PK	74.0	-14.9	1.42 V	136	55.0	4.1
4	5350.00	49.5 AV	54.0	-4.5	1.42 V	136	45.4	4.1
5	#10480.00	61.0 PK	68.2	-7.2	1.72 V	146	43.0	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	55.4 PK	68.2	-12.8	2.99 H	78	50.9	4.5
2	*5745.00	114.4 PK			2.99 H	78	74.4	40.0
3	*5745.00	101.0 AV			2.99 H	78	61.0	40.0
4	#5947.44	56.4 PK	68.2	-11.8	2.99 H	78	51.1	5.3
5	11490.00	60.9 PK	74.0	-13.1	1.83 H	230	42.1	18.8
6	11490.00	48.0 AV	54.0	-6.0	1.83 H	230	29.2	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	61.1 PK	68.2	-7.1	1.44 V	198	56.6	4.5
2	*5745.00	127.5 PK			1.44 V	198	87.5	40.0
3	*5745.00	114.4 AV			1.44 V	198	74.4	40.0
4	#5950.64	57.2 PK	68.2	-11.0	1.44 V	198	51.9	5.3
5	11490.00	61.0 PK	74.0	-13.0	1.75 V	151	42.2	18.8
6	11490.00	48.0 AV	54.0	-6.0	1.75 V	151	29.2	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.03	56.8 PK	68.2	-11.4	2.80 H	63	52.3	4.5
2	*5785.00	113.4 PK			2.80 H	63	73.2	40.2
3	*5785.00	100.6 AV			2.80 H	63	60.4	40.2
4	#5930.77	56.3 PK	68.2	-11.9	2.80 H	63	51.0	5.3
5	11570.00	60.8 PK	74.0	-13.2	1.88 H	231	42.3	18.5
6	11570.00	47.7 AV	54.0	-6.3	1.88 H	231	29.2	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.85	58.5 PK	68.2	-9.7	1.45 V	204	54.0	4.5
2	*5785.00	127.2 PK			1.45 V	204	87.0	40.2
3	*5785.00	114.1 AV			1.45 V	204	73.9	40.2
4	#5937.82	56.4 PK	68.2	-11.8	1.45 V	204	51.1	5.3
5	11570.00	60.6 PK	74.0	-13.4	1.77 V	154	42.1	18.5
6	11570.00	47.6 AV	54.0	-6.4	1.77 V	154	29.1	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.05	55.1 PK	68.2	-13.1	2.90 H	64	50.6	4.5
2	*5825.00	114.1 PK			2.90 H	64	73.7	40.4
3	*5825.00	101.5 AV			2.90 H	64	61.1	40.4
4	#5983.33	57.3 PK	68.2	-10.9	2.90 H	64	51.9	5.4
5	11650.00	60.6 PK	74.0	-13.4	1.81 H	231	42.1	18.5
6	11650.00	47.6 AV	54.0	-6.4	1.81 H	231	29.1	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	58.2 PK	68.2	-10.0	1.24 V	173	53.7	4.5
2	*5825.00	127.6 PK			1.24 V	173	87.2	40.4
3	*5825.00	114.5 AV			1.24 V	173	74.1	40.4
4	#5926.28	61.3 PK	68.2	-6.9	1.24 V	173	56.0	5.3
5	11650.00	60.8 PK	74.0	-13.2	1.86 V	155	42.3	18.5
6	11650.00	47.8 AV	54.0	-6.2	1.86 V	155	29.3	18.5

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.

802.11ax (HE40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	3.35 H	68	52.2	4.1
2	5150.00	43.6 AV	54.0	-10.4	3.35 H	68	39.5	4.1
3	*5190.00	103.6 PK			3.31 H	65	64.3	39.3
4	*5190.00	90.4 AV			3.31 H	65	51.1	39.3
5	#10380.00	59.7 PK	68.2	-8.5	1.90 H	228	42.3	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	67.3 PK	74.0	-6.7	1.82 V	131	63.2	4.1
2	5150.00	52.8 AV	54.0	-1.2	1.82 V	131	48.7	4.1
3	*5190.00	120.7 PK			1.69 V	39	81.4	39.3
4	*5190.00	107.7 AV			1.69 V	39	68.4	39.3
5	#10380.00	60.6 PK	68.2	-7.6	1.79 V	148	43.2	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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	2.95 H	102	52.2	4.1
2	5150.00	43.6 AV	54.0	-10.4	2.95 H	102	39.5	4.1
3	*5230.00	107.8 PK			2.93 H	100	68.7	39.1
4	*5230.00	95.2 AV			2.93 H	100	56.1	39.1
5	5350.00	56.1 PK	74.0	-17.9	2.98 H	105	52.0	4.1
6	5350.00	43.4 AV	54.0	-10.6	2.98 H	105	39.3	4.1
7	#10460.00	60.1 PK	68.2	-8.1	1.85 H	226	42.3	17.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	66.9 PK	74.0	-7.1	1.60 V	41	62.8	4.1
2	5150.00	52.5 AV	54.0	-1.5	1.60 V	41	48.4	4.1
3	*5230.00	125.2 PK			1.64 V	39	86.1	39.1
4	*5230.00	112.4 AV			1.64 V	39	73.3	39.1
5	5350.00	58.5 PK	74.0	-15.5	1.41 V	134	54.4	4.1
6	5350.00	49.3 AV	54.0	-4.7	1.41 V	134	45.2	4.1
7	#10460.00	61.1 PK	68.2	-7.1	1.82 V	153	43.3	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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	55.6 PK	68.2	-12.6	2.90 H	105	51.1	4.5
2	#5650.00	56.3 PK	68.2	-11.9	2.92 H	108	51.9	4.4
3	*5755.00	109.6 PK			2.90 H	105	69.6	40.0
4	*5755.00	97.3 AV			2.90 H	105	57.3	40.0
5	#5969.23	56.8 PK	68.2	-11.4	2.90 H	105	51.5	5.3
6	11510.00	60.9 PK	74.0	-13.1	1.75 H	221	42.0	18.9
7	11510.00	48.0 AV	54.0	-6.0	1.75 H	221	29.1	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	62.0 PK	68.2	-6.2	1.45 V	202	57.5	4.5
2	#5650.00	66.7 PK	68.2	-1.5	1.48 V	194	62.3	4.4
3	*5755.00	124.3 PK			1.45 V	202	84.3	40.0
4	*5755.00	111.0 AV			1.45 V	202	71.0	40.0
5	#5925.00	56.8 PK	68.2	-11.4	1.45 V	202	51.5	5.3
6	11510.00	61.4 PK	74.0	-12.6	1.92 V	163	42.5	18.9
7	11510.00	48.1 AV	54.0	-5.9	1.92 V	163	29.2	18.9

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	55.6 PK	68.2	-12.6	2.89 H	107	51.1	4.5
2	*5795.00	110.1 PK			2.89 H	107	69.8	40.3
3	*5795.00	97.4 AV			2.89 H	107	57.1	40.3
4	#5925.00	57.3 PK	68.2	-10.9	2.91 H	108	52.0	5.3
5	#5937.82	56.5 PK	68.2	-11.7	2.89 H	107	51.2	5.3
6	11590.00	60.6 PK	74.0	-13.4	1.72 H	229	42.2	18.4
7	11590.00	47.5 AV	54.0	-6.5	1.72 H	229	29.1	18.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.40 V	171	59.0	4.5
2	*5795.00	124.4 PK			1.40 V	171	84.1	40.3
3	*5795.00	111.2 AV			1.40 V	171	70.9	40.3
4	#5925.00	66.7 PK	68.2	-1.5	1.37 V	172	61.4	5.3
5	#5930.13	61.6 PK	68.2	-6.6	1.40 V	171	56.3	5.3
6	11590.00	60.9 PK	74.0	-13.1	1.88 V	157	42.5	18.4
7	11590.00	47.7 AV	54.0	-6.3	1.88 V	157	29.3	18.4

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.

802.11ax (HE80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	2.95 H	26	52.0	4.1
2	5150.00	43.1 AV	54.0	-10.9	2.95 H	26	39.0	4.1
3	*5210.00	100.2 PK			2.93 H	22	61.0	39.2
4	*5210.00	88.0 AV			2.93 H	22	48.8	39.2
5	5350.00	56.2 PK	74.0	-17.8	2.99 H	30	52.1	4.1
6	5350.00	43.2 AV	54.0	-10.8	2.99 H	30	39.1	4.1
7	#10420.00	59.8 PK	68.2	-8.4	1.82 H	223	42.2	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.63 V	137	64.9	4.1
2	5150.00	52.9 AV	54.0	-1.1	1.63 V	137	48.8	4.1
3	*5210.00	117.0 PK			1.53 V	137	77.8	39.2
4	*5210.00	104.1 AV			1.53 V	137	64.9	39.2
5	5350.00	56.9 PK	74.0	-17.1	1.44 V	134	52.8	4.1
6	5350.00	47.4 AV	54.0	-6.6	1.44 V	134	43.3	4.1
7	#10420.00	60.8 PK	68.2	-7.4	1.81 V	155	43.2	17.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.28	55.9 PK	68.2	-12.3	2.91 H	106	51.4	4.5
2	#5650.00	56.4 PK	68.2	-11.8	2.93 H	110	52.0	4.4
3	*5775.00	105.0 PK			2.91 H	106	64.9	40.1
4	*5775.00	92.1 AV			2.91 H	106	52.0	40.1
5	#5925.00	57.4 PK	68.2	-10.8	2.99 H	112	52.1	5.3
6	#5956.41	56.8 PK	68.2	-11.4	2.91 H	106	51.5	5.3
7	11550.00	60.9 PK	74.0	-13.1	1.68 H	226	42.2	18.7
8	11550.00	47.8 AV	54.0	-6.2	1.68 H	226	29.1	18.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	66.7 PK	68.2	-1.5	1.49 V	195	62.3	4.4
2	*5775.00	117.3 PK			1.36 V	204	77.2	40.1
3	*5775.00	105.3 AV			1.36 V	204	65.2	40.1
4	#5925.00	57.8 PK	68.2	-10.4	1.52 V	202	52.5	5.3
5	11550.00	61.1 PK	74.0	-12.9	1.93 V	159	42.4	18.7
6	11550.00	47.9 AV	54.0	-6.1	1.93 V	159	29.2	18.7
7	#5642.95	60.8 PK	68.2	-7.4	1.36 V	204	56.3	4.5
8	#5959.62	57.5 PK	68.2	-10.7	1.36 V	204	52.2	5.3

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.

Test Mode C

5G traffic radio: Beamforming Mode

802.11ax (HE20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	1.92 H	272	52.2	4.1
2	5150.00	43.8 AV	54.0	-10.2	1.92 H	272	39.7	4.1
3	*5180.00	107.2 PK			1.88 H	270	67.9	39.3
4	*5180.00	95.6 AV			1.88 H	270	56.3	39.3
5	#10360.00	59.7 PK	68.2	-8.5	1.72 H	311	42.5	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (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	71.6 PK	74.0	-2.4	1.53 V	337	67.5	4.1
2	5150.00	51.2 AV	54.0	-2.8	1.53 V	337	47.1	4.1
3	*5180.00	123.1 PK			1.51 V	338	83.8	39.3
4	*5180.00	110.2 AV			1.51 V	338	70.9	39.3
5	#10360.00	60.1 PK	68.2	-8.1	1.63 V	265	42.9	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	1.90 H	286	52.0	4.1
2	5150.00	43.6 AV	54.0	-10.4	1.90 H	286	39.5	4.1
3	*5200.00	109.5 PK			1.88 H	283	70.2	39.3
4	*5200.00	97.1 AV			1.88 H	283	57.8	39.3
5	#10400.00	60.0 PK	68.2	-8.2	1.62 H	305	42.6	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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 V	299	65.7	4.1
2	5150.00	49.4 AV	54.0	-4.6	1.78 V	299	45.3	4.1
3	*5200.00	126.3 PK			1.58 V	337	87.0	39.3
4	*5200.00	113.7 AV			1.58 V	337	74.4	39.3
5	#10400.00	60.1 PK	68.2	-8.1	1.66 V	269	42.7	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	108.3 PK			1.88 H	253	69.2	39.1
2	*5240.00	95.7 AV			1.88 H	253	56.6	39.1
3	5350.00	55.8 PK	74.0	-18.2	1.92 H	255	51.7	4.1
4	5350.00	43.3 AV	54.0	-10.7	1.92 H	255	39.2	4.1
5	#10480.00	60.6 PK	68.2	-7.6	1.63 H	313	42.6	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	124.9 PK			1.66 V	339	85.8	39.1
2	*5240.00	112.5 AV			1.66 V	339	73.4	39.1
3	5350.00	58.4 PK	74.0	-15.6	1.47 V	259	54.3	4.1
4	5350.00	47.6 AV	54.0	-6.4	1.47 V	259	43.5	4.1
5	#10480.00	60.5 PK	68.2	-7.7	1.72 V	277	42.5	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.05	57.4 PK	68.2	-10.8	1.86 H	200	52.9	4.5
2	*5745.00	111.1 PK			1.86 H	200	71.1	40.0
3	*5745.00	99.0 AV			1.86 H	200	59.0	40.0
4	#5937.82	57.7 PK	68.2	-10.5	1.86 H	200	52.4	5.3
5	11490.00	60.8 PK	74.0	-13.2	1.88 H	299	42.0	18.8
6	11490.00	47.6 AV	54.0	-6.4	1.88 H	299	28.8	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5614.74	58.3 PK	68.2	-9.9	1.38 V	174	53.8	4.5
2	*5745.00	123.3 PK			1.38 V	174	83.3	40.0
3	*5745.00	110.6 AV			1.38 V	174	70.6	40.0
4	#5991.03	58.0 PK	68.2	-10.2	1.38 V	174	52.6	5.4
5	11490.00	60.5 PK	74.0	-13.5	1.85 V	203	41.7	18.8
6	11490.00	47.3 AV	54.0	-6.7	1.85 V	203	28.5	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.67	56.1 PK	68.2	-12.1	1.81 H	201	51.6	4.5
2	*5785.00	111.4 PK			1.81 H	201	71.2	40.2
3	*5785.00	98.9 AV			1.81 H	201	58.7	40.2
4	#5986.54	57.2 PK	68.2	-11.0	1.81 H	201	51.8	5.4
5	11570.00	61.4 PK	74.0	-12.6	1.75 H	312	42.9	18.5
6	11570.00	47.6 AV	54.0	-6.4	1.75 H	312	29.1	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.13	57.6 PK	68.2	-10.6	1.55 V	176	53.1	4.5
2	*5785.00	120.8 PK			1.55 V	176	80.6	40.2
3	*5785.00	108.9 AV			1.55 V	176	68.7	40.2
4	#5937.82	57.5 PK	68.2	-10.7	1.55 V	176	52.2	5.3
5	11570.00	61.5 PK	74.0	-12.5	1.79 V	193	43.0	18.5
6	11570.00	47.5 AV	54.0	-6.5	1.79 V	193	29.0	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.92	56.0 PK	68.2	-12.2	2.10 H	199	51.5	4.5
2	*5825.00	111.4 PK			2.01 H	199	71.0	40.4
3	*5825.00	99.1 AV			2.01 H	199	58.7	40.4
4	#5951.92	58.1 PK	68.2	-10.1	2.10 H	199	52.8	5.3
5	11650.00	61.4 PK	74.0	-12.6	1.88 H	310	42.9	18.5
6	11650.00	47.8 AV	54.0	-6.2	1.88 H	310	29.3	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5617.95	58.1 PK	68.2	-10.1	1.35 V	218	53.6	4.5
2	*5825.00	119.4 PK			1.35 V	218	79.0	40.4
3	*5825.00	107.3 AV			1.35 V	218	66.9	40.4
4	#5930.13	58.9 PK	68.2	-9.3	1.35 V	218	53.6	5.3
5	11650.00	61.2 PK	74.0	-12.8	1.77 V	218	42.7	18.5
6	11650.00	47.7 AV	54.0	-6.3	1.77 V	218	29.2	18.5

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.

802.11ax (HE40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	1.88 H	289	52.2	4.1
2	5150.00	43.6 AV	54.0	-10.4	1.88 H	289	39.5	4.1
3	*5190.00	104.4 PK			1.86 H	283	65.1	39.3
4	*5190.00	91.5 AV			1.86 H	283	52.2	39.3
5	#10380.00	59.9 PK	68.2	-8.3	1.62 H	309	42.5	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.55 V	307	68.3	4.1
2	5150.00	48.5 AV	54.0	-5.5	1.55 V	307	44.4	4.1
3	*5190.00	118.8 PK			1.47 V	349	79.5	39.3
4	*5190.00	108.3 AV			1.47 V	349	69.0	39.3
5	#10380.00	60.0 PK	68.2	-8.2	1.65 V	272	42.6	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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	106.3 PK			1.89 H	269	67.2	39.1
2	*5230.00	93.8 AV			1.89 H	269	54.7	39.1
3	5350.00	56.3 PK	74.0	-17.7	1.92 H	272	52.2	4.1
4	5350.00	43.6 AV	54.0	-10.4	1.92 H	272	39.5	4.1
5	#10460.00	61.0 PK	68.2	-7.2	1.59 H	305	43.2	17.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	121.5 PK			1.48 V	339	82.4	39.1
2	*5230.00	110.1 AV			1.48 V	339	71.0	39.1
3	5350.00	66.5 PK	74.0	-7.5	1.35 V	299	62.4	4.1
4	5350.00	50.2 AV	54.0	-3.8	1.35 V	299	46.1	4.1
5	#10460.00	60.5 PK	68.2	-7.7	1.72 V	264	42.7	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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.97	56.2 PK	68.2	-12.0	2.00 H	198	51.7	4.5
2	#5650.00	56.4 PK	68.2	-11.8	1.91 H	222	52.0	4.4
3	*5755.00	108.2 PK			2.00 H	198	68.2	40.0
4	*5755.00	95.4 AV			2.00 H	198	55.4	40.0
5	#5989.74	57.6 PK	68.2	-10.6	2.00 H	198	52.2	5.4
6	11510.00	61.1 PK	74.0	-12.9	1.88 H	293	42.2	18.9
7	11510.00	48.1 AV	54.0	-5.9	1.88 H	293	29.2	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	60.5 PK	68.2	-7.7	1.40 V	175	56.0	4.5
2	#5650.00	66.6 PK	68.2	-1.6	1.59 V	44	62.2	4.4
3	*5755.00	118.7 PK			1.40 V	175	78.7	40.0
4	*5755.00	105.3 AV			1.40 V	175	65.3	40.0
5	#5967.95	58.0 PK	68.2	-10.2	1.40 V	175	52.7	5.3
6	11510.00	61.2 PK	74.0	-12.8	1.89 V	203	42.3	18.9
7	11510.00	47.9 AV	54.0	-6.1	1.89 V	203	29.0	18.9

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	56.4 PK	68.2	-11.8	1.96 H	197	51.9	4.5
2	#5650.00	56.6 PK	68.2	-11.6	1.88 H	209	52.2	4.4
3	*5795.00	107.8 PK			1.96 H	197	67.5	40.3
4	*5795.00	95.8 AV			1.96 H	197	55.5	40.3
5	#5925.00	58.1 PK	68.2	-10.1	1.99 H	202	52.8	5.3
6	#5991.67	57.3 PK	68.2	-10.9	1.96 H	197	51.9	5.4
7	11590.00	61.4 PK	74.0	-12.6	1.74 H	297	43.0	18.4
8	11590.00	47.6 AV	54.0	-6.4	1.74 H	297	29.2	18.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	66.4 PK	68.2	-1.8	1.32 V	202	62.0	4.4
2	#5650.64	62.5 PK	68.7	-6.2	1.35 V	176	58.0	4.5
3	*5795.00	119.8 PK			1.35 V	176	79.5	40.3
4	*5795.00	107.0 AV			1.35 V	176	66.7	40.3
5	#5925.00	65.8 PK	68.2	-2.4	1.36 V	15	60.5	5.3
6	#5935.26	59.9 PK	68.2	-8.3	1.35 V	176	54.6	5.3
7	11590.00	61.2 PK	74.0	-12.8	1.90 V	199	42.8	18.4
8	11590.00	47.5 AV	54.0	-6.5	1.90 V	199	29.1	18.4

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.

802.11ax (HE80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	64.2 PK	74.0	-9.8	1.79 H	56	60.1	4.1
2	5150.00	43.3 AV	54.0	-10.7	1.79 H	56	39.2	4.1
3	*5210.00	98.7 PK			1.77 H	54	59.5	39.2
4	*5210.00	86.3 AV			1.77 H	54	47.1	39.2
5	5350.00	55.9 PK	74.0	-18.1	1.82 H	60	51.8	4.1
6	5350.00	43.6 AV	54.0	-10.4	1.82 H	60	39.5	4.1
7	#10420.00	60.6 PK	68.2	-7.6	1.52 H	302	43.0	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	67.3 PK	74.0	-6.7	1.65 V	264	63.2	4.1
2	5150.00	51.6 AV	54.0	-2.4	1.65 V	264	47.5	4.1
3	*5210.00	118.5 PK			1.43 V	337	79.3	39.2
4	*5210.00	102.5 AV			1.43 V	337	63.3	39.2
5	5350.00	60.7 PK	74.0	-13.3	1.49 V	324	56.6	4.1
6	5350.00	48.7 AV	54.0	-5.3	1.49 V	324	44.6	4.1
7	#10420.00	60.6 PK	68.2	-7.6	1.77 V	282	43.0	17.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.31	57.2 PK	68.2	-11.0	2.01 H	199	52.7	4.5
2	#5650.00	57.9 PK	68.2	-10.3	1.77 H	220	53.5	4.4
3	*5775.00	103.4 PK			2.01 H	199	63.3	40.1
4	*5775.00	91.3 AV			2.01 H	199	51.2	40.1
5	#5925.00	57.6 PK	68.2	-10.6	2.05 H	209	52.3	5.3
6	#5937.18	57.5 PK	68.2	-10.7	2.01 H	199	52.2	5.3
7	11550.00	62.0 PK	74.0	-12.0	1.79 H	309	43.3	18.7
8	11550.00	48.1 AV	54.0	-5.9	1.79 H	309	29.4	18.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	66.7 PK	68.2	-1.5	1.75 V	132	62.3	4.4
2	#5650.64	64.4 PK	68.2	-3.8	1.18 V	176	59.9	4.5
3	*5775.00	113.4 PK			1.18 V	176	73.3	40.1
4	*5775.00	100.7 AV			1.18 V	176	60.6	40.1
5	#5925.00	61.6 PK	68.2	-6.6	1.53 V	166	56.3	5.3
6	#5926.92	61.2 PK	68.2	-7.0	1.18 V	176	55.9	5.3
7	11550.00	61.5 PK	74.0	-12.5	1.69 V	208	42.8	18.7
8	11550.00	47.9 AV	54.0	-6.1	1.69 V	208	29.2	18.7

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.

Test Mode C

Scanning radio: CDD Mode

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	1.25 H	219	52.1	4.1
2	5150.00	43.7 AV	54.0	-10.3	1.25 H	219	39.6	4.1
3	*5180.00	93.3 PK			1.22 H	217	54.0	39.3
4	*5180.00	83.4 AV			1.22 H	217	44.1	39.3
5	#10360.00	59.4 PK	68.2	-8.8	2.25 H	315	42.2	17.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.5 PK	74.0	-15.5	1.53 V	223	54.4	4.1
2	5150.00	46.2 AV	54.0	-7.8	1.53 V	223	42.1	4.1
3	*5180.00	108.7 PK			1.52 V	224	69.4	39.3
4	*5180.00	98.2 AV			1.52 V	224	58.9	39.3
5	#10360.00	59.4 PK	68.2	-8.8	1.49 V	302	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	93.6 PK			1.17 H	217	54.3	39.3
2	*5200.00	83.6 AV			1.17 H	217	44.3	39.3
3	#10400.00	59.7 PK	68.2	-8.5	2.28 H	314	42.3	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	108.4 PK			1.49 V	223	69.1	39.3
2	*5200.00	98.1 AV			1.49 V	223	58.8	39.3
3	#10400.00	59.7 PK	68.2	-8.5	1.53 V	305	42.3	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	93.2 PK			1.39 H	219	54.1	39.1
2	*5240.00	83.2 AV			1.39 H	219	44.1	39.1
3	5350.00	56.6 PK	74.0	-17.4	1.42 H	223	52.5	4.1
4	5350.00	44.1 AV	54.0	-9.9	1.42 H	223	40.0	4.1
5	#10480.00	60.2 PK	68.2	-8.0	2.25 H	317	42.2	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	108.1 PK			1.57 V	225	69.0	39.1
2	*5240.00	97.8 AV			1.57 V	225	58.7	39.1
3	5350.00	57.7 PK	74.0	-16.3	1.60 V	227	53.6	4.1
4	5350.00	45.1 AV	54.0	-8.9	1.60 V	227	41.0	4.1
5	#10480.00	60.6 PK	68.2	-7.6	1.53 V	313	42.6	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5603.21	55.1 PK	68.2	-13.1	1.05 H	225	50.6	4.5
2	*5745.00	95.5 PK			1.05 H	225	55.5	40.0
3	*5745.00	84.9 AV			1.05 H	225	44.9	40.0
4	#5973.72	56.2 PK	68.2	-12.0	1.05 H	225	50.9	5.3
5	11490.00	61.0 PK	74.0	-13.0	2.13 H	321	42.2	18.8
6	11490.00	48.1 AV	54.0	-5.9	2.13 H	321	29.3	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5603.85	55.1 PK	68.2	-13.1	1.62 V	195	50.6	4.5
2	*5745.00	105.9 PK			1.62 V	195	65.9	40.0
3	*5745.00	95.5 AV			1.62 V	195	55.5	40.0
4	#5943.59	56.8 PK	68.2	-11.4	1.62 V	195	51.5	5.3
5	11490.00	61.0 PK	74.0	-13.0	1.55 V	309	42.2	18.8
6	11490.00	47.3 AV	54.0	-6.7	1.55 V	309	28.5	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.00	54.9 PK	68.2	-13.3	1.05 H	225	50.4	4.5
2	*5785.00	94.6 PK			1.05 H	225	54.4	40.2
3	*5785.00	84.4 AV			1.05 H	225	44.2	40.2
4	#5934.62	56.2 PK	68.2	-12.0	1.05 H	225	50.9	5.3
5	11570.00	60.8 PK	74.0	-13.2	2.23 H	325	42.3	18.5
6	11570.00	47.9 AV	54.0	-6.1	2.23 H	325	29.4	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5625.64	56.0 PK	68.2	-12.2	1.58 V	195	51.5	4.5
2	*5785.00	105.7 PK			1.58 V	195	65.5	40.2
3	*5785.00	95.5 AV			1.58 V	195	55.3	40.2
4	#5948.72	57.1 PK	68.2	-11.1	1.58 V	195	51.8	5.3
5	11570.00	60.8 PK	74.0	-13.2	1.59 V	326	42.3	18.5
6	11570.00	47.4 AV	54.0	-6.6	1.59 V	326	28.9	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (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	54.9 PK	68.2	-13.3	1.24 H	226	50.4	4.5
2	*5825.00	94.6 PK			1.24 H	226	54.2	40.4
3	*5825.00	83.9 AV			1.24 H	226	43.5	40.4
4	#5964.10	57.5 PK	68.2	-10.7	1.24 H	226	52.2	5.3
5	11650.00	60.6 PK	74.0	-13.4	2.15 H	320	42.1	18.5
6	11650.00	47.8 AV	54.0	-6.2	2.15 H	320	29.3	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5602.56	55.9 PK	68.2	-12.3	1.60 V	196	51.4	4.5
2	*5825.00	105.5 PK			1.60 V	196	65.1	40.4
3	*5825.00	95.4 AV			1.60 V	196	55.0	40.4
4	#5976.28	56.2 PK	68.2	-12.0	1.60 V	196	50.9	5.3
5	11650.00	61.0 PK	74.0	-13.0	1.68 V	319	42.5	18.5
6	11650.00	47.8 AV	54.0	-6.2	1.68 V	319	29.3	18.5

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.

802.11ac (VHT20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	1.46 H	219	52.2	4.1
2	5150.00	44.0 AV	54.0	-10.0	1.46 H	219	39.9	4.1
3	*5180.00	93.4 PK			1.44 H	218	54.1	39.3
4	*5180.00	82.6 AV			1.44 H	218	43.3	39.3
5	#10360.00	59.4 PK	68.2	-8.8	2.22 H	316	42.2	17.2

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	1.60 V	226	53.3	4.1
2	5150.00	45.4 AV	54.0	-8.6	1.60 V	226	41.3	4.1
3	*5180.00	108.8 PK			1.58 V	224	69.5	39.3
4	*5180.00	98.4 AV			1.58 V	224	59.1	39.3
5	#10360.00	59.8 PK	68.2	-8.4	1.55 V	307	42.6	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.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	93.1 PK			1.39 H	218	53.8	39.3
2	*5200.00	82.9 AV			1.39 H	218	43.6	39.3
3	#10400.00	59.4 PK	68.2	-8.8	2.19 H	315	42.0	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	108.7 PK			1.55 V	224	69.4	39.3
2	*5200.00	98.1 AV			1.55 V	224	58.8	39.3
3	#10400.00	59.9 PK	68.2	-8.3	1.58 V	312	42.5	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.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	92.3 PK			1.59 H	220	53.2	39.1
2	*5240.00	82.2 AV			1.59 H	220	43.1	39.1
3	5350.00	56.1 PK	74.0	-17.9	1.62 H	223	52.0	4.1
4	5350.00	43.6 AV	54.0	-10.4	1.62 H	223	39.5	4.1
5	#10480.00	59.8 PK	68.2	-8.4	2.25 H	321	41.8	18.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	108.0 PK			1.55 V	224	68.9	39.1
2	*5240.00	97.4 AV			1.55 V	224	58.3	39.1
3	5350.00	56.7 PK	74.0	-17.3	1.58 V	225	52.6	4.1
4	5350.00	45.1 AV	54.0	-8.9	1.58 V	225	41.0	4.1
5	#10480.00	60.5 PK	68.2	-7.7	1.59 V	314	42.5	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.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5610.90	55.4 PK	68.2	-12.8	1.21 H	227	50.9	4.5
2	*5745.00	93.7 PK			1.21 H	227	53.7	40.0
3	*5745.00	83.5 AV			1.21 H	227	43.5	40.0
4	#5967.95	56.3 PK	68.2	-11.9	1.21 H	227	51.0	5.3
5	11490.00	60.9 PK	74.0	-13.1	2.15 H	320	42.1	18.8
6	11490.00	48.0 AV	54.0	-6.0	2.15 H	320	29.2	18.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.77	56.2 PK	68.2	-12.0	1.52 V	195	51.7	4.5
2	*5745.00	105.5 PK			1.52 V	195	65.5	40.0
3	*5745.00	95.2 AV			1.52 V	195	55.2	40.0
4	#5983.97	57.0 PK	68.2	-11.2	1.52 V	195	51.6	5.4
5	11490.00	60.9 PK	74.0	-13.1	1.58 V	308	42.1	18.8
6	11490.00	47.4 AV	54.0	-6.6	1.58 V	308	28.6	18.8

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.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5635.26	55.0 PK	68.2	-13.2	1.02 H	226	50.5	4.5
2	*5785.00	94.9 PK			1.02 H	226	54.7	40.2
3	*5785.00	84.4 AV			1.02 H	226	44.2	40.2
4	#5970.51	56.2 PK	68.2	-12.0	1.02 H	226	50.9	5.3
5	11570.00	60.6 PK	74.0	-13.4	2.11 H	321	42.1	18.5
6	11570.00	48.0 AV	54.0	-6.0	2.11 H	321	29.5	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	57.1 PK	68.2	-11.1	1.52 V	196	52.6	4.5
2	*5785.00	105.2 PK			1.52 V	196	65.0	40.2
3	*5785.00	94.8 AV			1.52 V	196	54.6	40.2
4	#5941.03	56.8 PK	68.2	-11.4	1.52 V	196	51.5	5.3
5	11570.00	60.7 PK	74.0	-13.3	1.66 V	318	42.2	18.5
6	11570.00	47.5 AV	54.0	-6.5	1.66 V	318	29.0	18.5

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5601.28	55.3 PK	68.2	-12.9	1.05 H	224	50.8	4.5
2	*5825.00	95.4 PK			1.05 H	224	55.0	40.4
3	*5825.00	85.1 AV			1.05 H	224	44.7	40.4
4	#5989.74	56.3 PK	68.2	-11.9	1.05 H	224	50.9	5.4
5	11650.00	60.7 PK	74.0	-13.3	2.19 H	325	42.2	18.5
6	11650.00	48.0 AV	54.0	-6.0	2.19 H	325	29.5	18.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5640.38	55.6 PK	68.2	-12.6	1.49 V	197	51.1	4.5
2	*5825.00	105.5 PK			1.49 V	197	65.1	40.4
3	*5825.00	95.3 AV			1.49 V	197	54.9	40.4
4	#5982.05	56.3 PK	68.2	-11.9	1.49 V	197	50.9	5.4
5	11650.00	60.8 PK	74.0	-13.2	1.69 V	322	42.3	18.5
6	11650.00	47.8 AV	54.0	-6.2	1.69 V	322	29.3	18.5

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.

802.11ac (VHT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	1.45 H	221	52.3	4.1
2	5150.00	43.9 AV	54.0	-10.1	1.45 H	221	39.8	4.1
3	*5190.00	90.6 PK			1.43 H	218	51.3	39.3
4	*5190.00	79.7 AV			1.43 H	218	40.4	39.3
5	#10380.00	59.6 PK	68.2	-8.6	2.21 H	315	42.2	17.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.1 PK	74.0	-15.9	1.89 V	222	54.0	4.1
2	5150.00	44.7 AV	54.0	-9.3	1.89 V	222	40.6	4.1
3	*5190.00	105.5 PK			1.42 V	226	66.2	39.3
4	*5190.00	95.3 AV			1.42 V	226	56.0	39.3
5	#10380.00	59.7 PK	68.2	-8.5	1.63 V	322	42.3	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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	1.59 H	220	52.0	4.1
2	5150.00	43.6 AV	54.0	-10.4	1.59 H	220	39.5	4.1
3	*5230.00	89.6 PK			1.58 H	219	50.5	39.1
4	*5230.00	79.5 AV			1.58 H	219	40.4	39.1
5	5350.00	55.6 PK	74.0	-18.4	1.61 H	222	51.5	4.1
6	5350.00	43.3 AV	54.0	-10.7	1.61 H	222	39.2	4.1
7	#10460.00	59.8 PK	68.2	-8.4	2.11 H	315	42.0	17.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	1.55 V	228	53.3	4.1
2	5150.00	44.6 AV	54.0	-9.4	1.55 V	228	40.5	4.1
3	*5230.00	104.4 PK			1.52 V	227	65.3	39.1
4	*5230.00	94.3 AV			1.52 V	227	55.2	39.1
5	5350.00	56.4 PK	74.0	-17.6	1.58 V	231	52.3	4.1
6	5350.00	44.1 AV	54.0	-9.9	1.58 V	231	40.0	4.1
7	#10460.00	60.3 PK	68.2	-7.9	1.62 V	314	42.5	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.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.13	56.3 PK	68.2	-11.9	1.05 H	225	51.8	4.5
2	#5650.00	56.6 PK	68.2	-11.6	1.09 H	228	52.2	4.4
3	*5755.00	92.0 PK			1.05 H	225	52.0	40.0
4	*5755.00	81.8 AV			1.05 H	225	41.8	40.0
5	#5965.38	56.2 PK	68.2	-12.0	1.05 H	225	50.9	5.3
6	11510.00	60.9 PK	74.0	-13.1	2.18 H	320	42.0	18.9
7	11510.00	48.1 AV	54.0	-5.9	2.18 H	320	29.2	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5602.56	55.8 PK	68.2	-12.4	1.32 V	222	51.3	4.5
2	#5650.00	56.4 PK	68.2	-11.8	1.32 V	227	52.0	4.4
3	*5755.00	103.2 PK			1.32 V	222	63.2	40.0
4	*5755.00	92.8 AV			1.32 V	222	52.8	40.0
5	#5928.85	55.9 PK	68.2	-12.3	1.32 V	222	50.6	5.3
6	11510.00	61.4 PK	74.0	-12.6	1.72 V	326	42.5	18.9
7	11510.00	48.1 AV	54.0	-5.9	1.72 V	326	29.2	18.9

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5607.69	55.2 PK	68.2	-13.0	1.09 H	223	50.7	4.5
2	*5795.00	91.2 PK			1.09 H	223	50.9	40.3
3	*5795.00	80.8 AV			1.09 H	223	40.5	40.3
4	#5925.00	57.5 PK	68.2	-10.7	1.12 H	226	52.2	5.3
5	#5969.23	55.8 PK	68.2	-12.4	1.09 H	223	50.5	5.3
6	11590.00	60.5 PK	74.0	-13.5	2.09 H	318	42.1	18.4
7	11590.00	47.4 AV	54.0	-6.6	2.09 H	318	29.0	18.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	56.9 PK	68.2	-11.3	1.32 V	223	52.4	4.5
2	*5795.00	102.1 PK			1.32 V	223	61.8	40.3
3	*5795.00	92.2 AV			1.32 V	223	51.9	40.3
4	#5925.00	57.4 PK	68.2	-10.8	1.35 V	229	52.1	5.3
5	#5971.79	55.9 PK	68.2	-12.3	1.32 V	223	50.6	5.3
6	11590.00	60.7 PK	74.0	-13.3	1.72 V	321	42.3	18.4
7	11590.00	47.6 AV	54.0	-6.4	1.72 V	321	29.2	18.4

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.

802.11ac (VHT80)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	1.63 H	225	52.2	4.1
2	5150.00	43.7 AV	54.0	-10.3	1.63 H	225	39.6	4.1
3	*5210.00	84.7 PK			1.61 H	221	45.5	39.2
4	*5210.00	75.1 AV			1.61 H	221	35.9	39.2
5	5350.00	55.2 PK	74.0	-18.8	1.66 H	228	51.1	4.1
6	5350.00	43.1 AV	54.0	-10.9	1.66 H	228	39.0	4.1
7	#10420.00	59.7 PK	68.2	-8.5	2.02 H	311	42.1	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	1.56 V	224	62.0	4.1
2	5150.00	52.9 AV	54.0	-1.1	1.56 V	224	48.8	4.1
3	*5210.00	101.6 PK			1.59 V	223	62.4	39.2
4	*5210.00	90.8 AV			1.59 V	223	51.6	39.2
5	5350.00	56.5 PK	74.0	-17.5	1.61 V	228	52.4	4.1
6	5350.00	44.2 AV	54.0	-9.8	1.61 V	228	40.1	4.1
7	#10420.00	60.1 PK	68.2	-8.1	1.66 V	322	42.5	17.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5623.72	55.1 PK	68.2	-13.1	1.22 H	216	50.6	4.5
2	#5650.00	56.4 PK	68.2	-11.8	1.25 H	218	52.0	4.4
3	*5775.00	88.5 PK			1.22 H	216	48.4	40.1
4	*5775.00	78.5 AV			1.22 H	216	38.4	40.1
5	#5925.00	57.4 PK	68.2	-10.8	1.28 H	220	52.1	5.3
6	#5982.05	57.4 PK	68.2	-10.8	1.22 H	216	52.0	5.4
7	11550.00	60.9 PK	74.0	-13.1	2.05 H	316	42.2	18.7
8	11550.00	48.6 AV	54.0	-5.4	2.05 H	316	29.9	18.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (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	56.1 PK	68.2	-12.1	1.34 V	221	51.6	4.5
2	#5650.00	56.7 PK	68.2	-11.5	1.35 V	225	52.3	4.4
3	*5775.00	100.4 PK			1.34 V	221	60.3	40.1
4	*5775.00	89.9 AV			1.34 V	221	49.8	40.1
5	#5925.00	57.5 PK	68.2	-10.7	1.38 V	228	52.2	5.3
6	#5973.08	55.9 PK	68.2	-12.3	1.34 V	221	50.6	5.3
7	11550.00	61.1 PK	74.0	-12.9	1.72 V	325	42.4	18.7
8	11550.00	48.7 AV	54.0	-5.3	1.72 V	325	30.0	18.7

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.

Below 1GHz Worst-Case Data:

Test Mode A

5G traffic radio: CDD Mode

802.11a

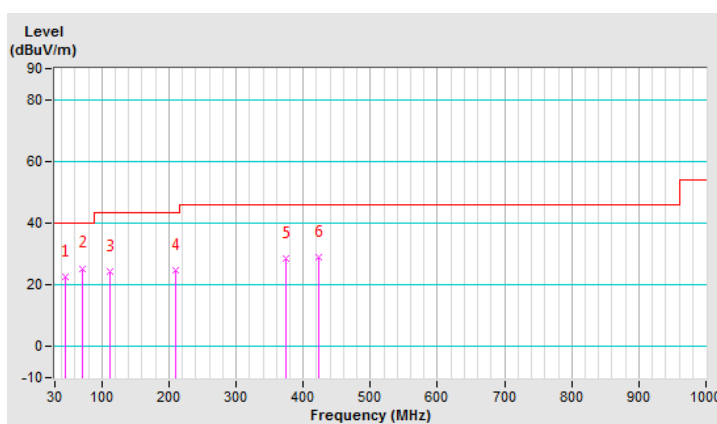
CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	45.46	22.8 QP	40.0	-17.2	1.50 H	25	31.7	-8.9
2	70.77	25.4 QP	40.0	-14.6	1.00 H	210	36.3	-10.9
3	111.54	24.5 QP	43.5	-19.0	1.00 H	272	36.3	-11.8
4	209.94	24.9 QP	43.5	-18.6	1.50 H	231	36.4	-11.5
5	374.42	28.7 QP	46.0	-17.3	1.00 H	239	33.8	-5.1
6	422.22	28.9 QP	46.0	-17.1	2.00 H	244	32.4	-3.5

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

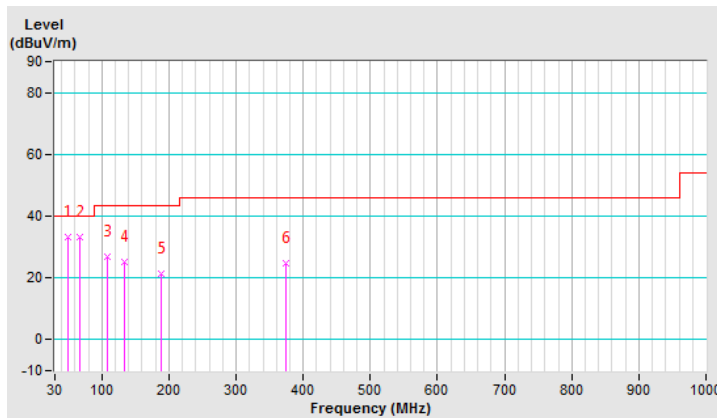


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	49.68	33.4 QP	40.0	-6.6	2.00 V	350	42.2	-8.8
2	66.55	33.4 QP	40.0	-6.6	1.50 V	10	43.4	-10.0
3	107.32	27.0 QP	43.5	-16.5	1.50 V	159	39.1	-12.1
4	134.03	25.1 QP	43.5	-18.4	1.50 V	93	34.6	-9.5
5	188.86	21.2 QP	43.5	-22.3	2.00 V	104	32.1	-10.9
6	374.42	24.7 QP	46.0	-21.3	1.50 V	231	29.8	-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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode A

Scanning radio: CDD Mode

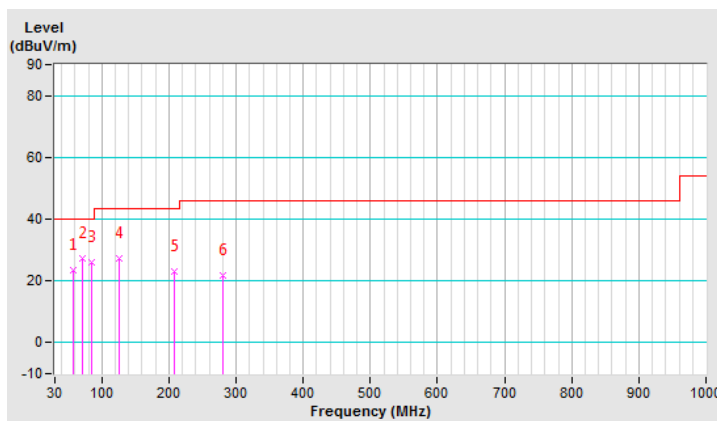
802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	56.71	23.3 QP	40.0	-16.7	1.50 H	226	32.4	-9.1
2	70.77	27.2 QP	40.0	-12.8	1.50 H	204	38.1	-10.9
3	84.83	26.1 QP	40.0	-13.9	1.50 H	226	40.0	-13.9
4	125.59	27.3 QP	43.5	-16.2	1.50 H	54	37.7	-10.4
5	208.54	23.1 QP	43.5	-20.4	1.50 H	276	34.6	-11.5
6	280.23	21.8 QP	46.0	-24.2	1.50 H	131	29.8	-8.0

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

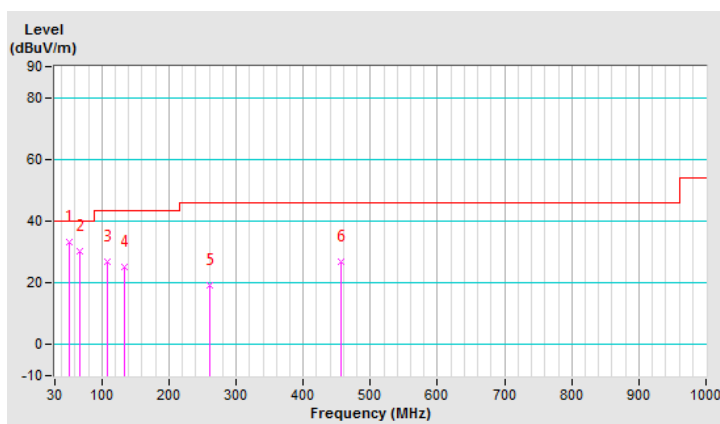


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	51.09	33.4 QP	40.0	-6.6	1.00 V	328	42.1	-8.7
2	66.55	30.2 QP	40.0	-9.8	1.50 V	14	40.2	-10.0
3	107.32	26.9 QP	43.5	-16.6	1.50 V	13	39.0	-12.1
4	134.03	25.1 QP	43.5	-18.4	1.50 V	14	34.6	-9.5
5	260.55	19.3 QP	46.0	-26.7	2.00 V	70	28.4	-9.1
6	455.96	26.7 QP	46.0	-19.3	1.50 V	249	29.2	-2.5

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode B

5G traffic radio: CDD Mode

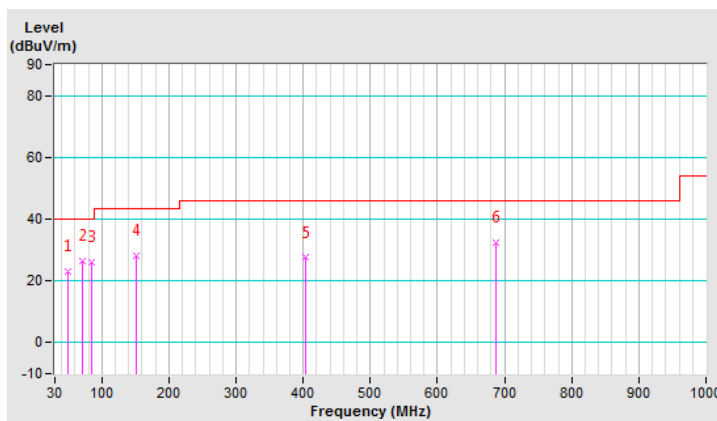
802.11a

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	49.68	23.0 QP	40.0	-17.0	1.50 H	70	31.8	-8.8
2	70.77	26.4 QP	40.0	-13.6	1.00 H	212	37.3	-10.9
3	84.83	26.1 QP	40.0	-13.9	1.00 H	52	40.0	-13.9
4	150.90	28.3 QP	43.5	-15.2	2.00 H	231	36.9	-8.6
5	403.94	27.5 QP	46.0	-18.5	1.00 H	105	31.8	-4.3
6	686.51	32.2 QP	46.0	-13.8	1.50 H	199	30.3	1.9

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

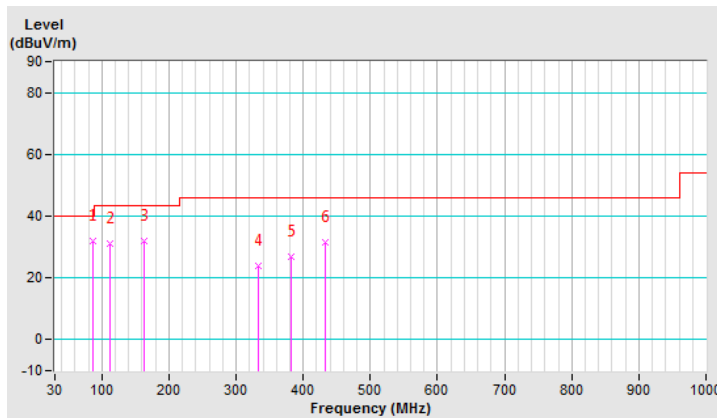


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	86.23	31.8 QP	40.0	-8.2	1.00 V	94	46.0	-14.2
2	111.54	31.0 QP	43.5	-12.5	1.00 V	67	42.8	-11.8
3	162.14	32.1 QP	43.5	-11.4	1.50 V	99	40.7	-8.6
4	332.25	24.0 QP	46.0	-22.0	1.00 V	168	30.4	-6.4
5	382.86	27.0 QP	46.0	-19.0	2.00 V	179	32.0	-5.0
6	432.06	31.5 QP	46.0	-14.5	1.00 V	177	34.6	-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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode B

Scanning radio: CDD Mode

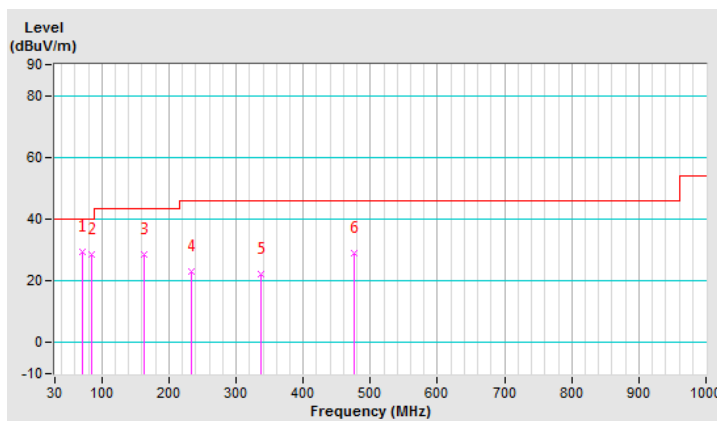
802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	70.77	29.4 QP	40.0	-10.6	1.50 H	210	40.3	-10.9
2	84.83	28.5 QP	40.0	-11.5	1.50 H	54	42.4	-13.9
3	163.55	28.6 QP	43.5	-14.9	1.50 H	89	37.3	-8.7
4	233.84	22.9 QP	46.0	-23.1	1.50 H	248	33.5	-10.6
5	336.46	22.2 QP	46.0	-23.8	1.50 H	9	28.5	-6.3
6	475.64	28.9 QP	46.0	-17.1	1.50 H	239	30.9	-2.0

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

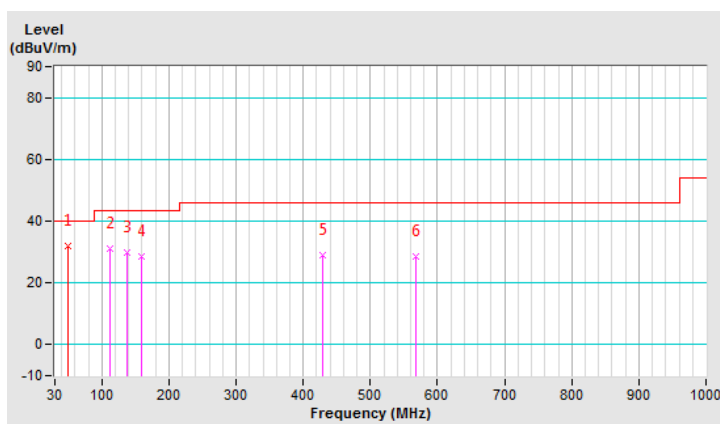


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	49.72	32.1 QP	40.0	-7.9	1.50 V	5	40.9	-8.8
2	111.54	31.0 QP	43.5	-12.5	1.50 V	15	42.8	-11.8
3	138.25	29.7 QP	43.5	-13.8	1.00 V	204	38.9	-9.2
4	159.33	28.7 QP	43.5	-14.8	1.50 V	107	37.2	-8.5
5	429.25	29.1 QP	46.0	-16.9	2.00 V	153	32.4	-3.3
6	568.42	28.6 QP	46.0	-17.4	1.50 V	207	28.5	0.1

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode C
5G traffic radio: CDD Mode

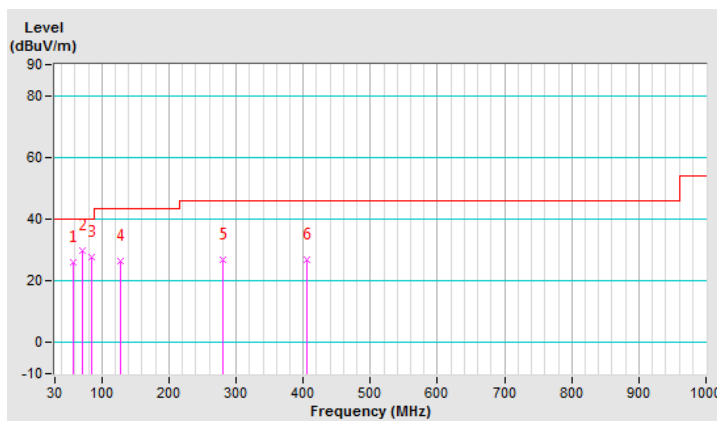
802.11a

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	56.71	26.1 QP	40.0	-13.9	1.99 H	228	35.2	-9.1
2	70.77	29.9 QP	40.0	-10.1	1.99 H	167	40.8	-10.9
3	84.83	27.6 QP	40.0	-12.4	1.99 H	272	41.5	-13.9
4	127.00	26.4 QP	43.5	-17.1	1.99 H	48	36.8	-10.4
5	280.23	26.8 QP	46.0	-19.2	1.00 H	144	34.8	-8.0
6	405.35	26.9 QP	46.0	-19.1	1.99 H	228	31.2	-4.3

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

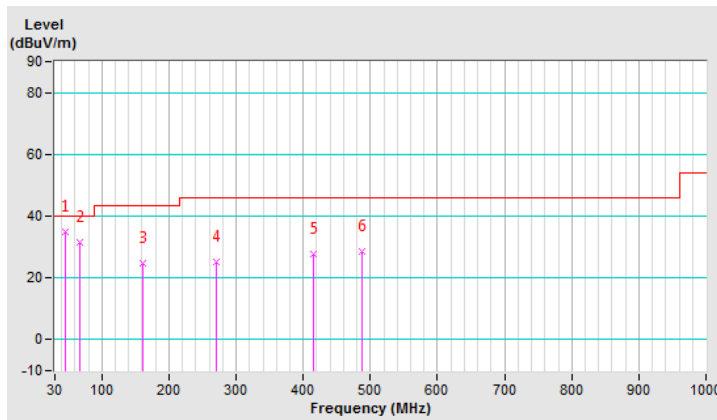


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	45.46	35.1 QP	40.0	-4.9	1.01 V	18	44.0	-8.9
2	66.55	31.7 QP	40.0	-8.3	1.01 V	310	41.7	-10.0
3	160.74	24.9 QP	43.5	-18.6	2.00 V	313	33.5	-8.6
4	270.39	25.0 QP	46.0	-21.0	1.50 V	155	33.5	-8.5
5	415.19	27.7 QP	46.0	-18.3	1.01 V	202	31.6	-3.9
6	488.29	28.4 QP	46.0	-17.6	1.01 V	90	30.2	-1.8

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode C

Scanning radio: CDD Mode

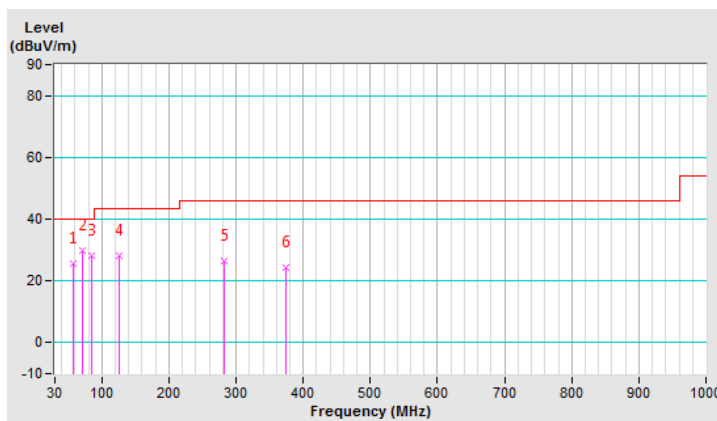
802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	56.71	25.7 QP	40.0	-14.3	1.99 H	60	34.8	-9.1
2	70.77	29.8 QP	40.0	-10.2	1.99 H	23	40.7	-10.9
3	84.83	28.3 QP	40.0	-11.7	1.99 H	248	42.2	-13.9
4	125.59	28.1 QP	43.5	-15.4	1.99 H	66	38.5	-10.4
5	281.64	26.5 QP	46.0	-19.5	1.00 H	147	34.5	-8.0
6	374.42	24.5 QP	46.0	-21.5	1.00 H	230	29.6	-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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

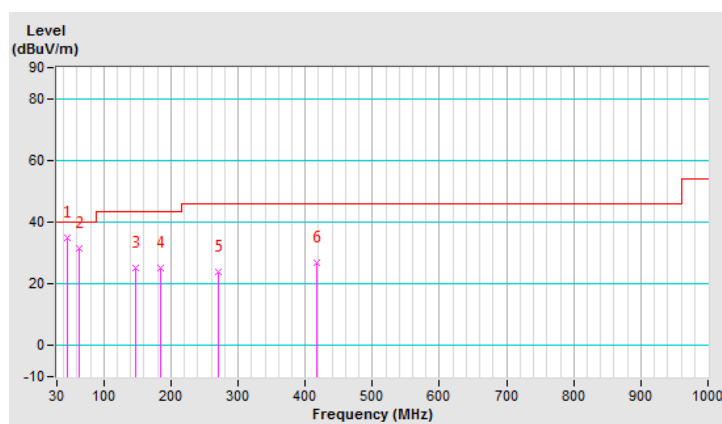


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	45.46	35.0 QP	40.0	-5.0	1.01 V	48	43.9	-8.9
2	62.33	31.6 QP	40.0	-8.4	1.51 V	5	41.1	-9.5
3	148.09	25.3 QP	43.5	-18.2	1.51 V	274	34.0	-8.7
4	184.64	25.3 QP	43.5	-18.2	1.01 V	35	35.8	-10.5
5	270.39	24.1 QP	46.0	-21.9	2.00 V	169	32.6	-8.5
6	418.00	26.9 QP	46.0	-19.1	1.01 V	207	30.6	-3.7

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode D

5G traffic radio: CDD Mode

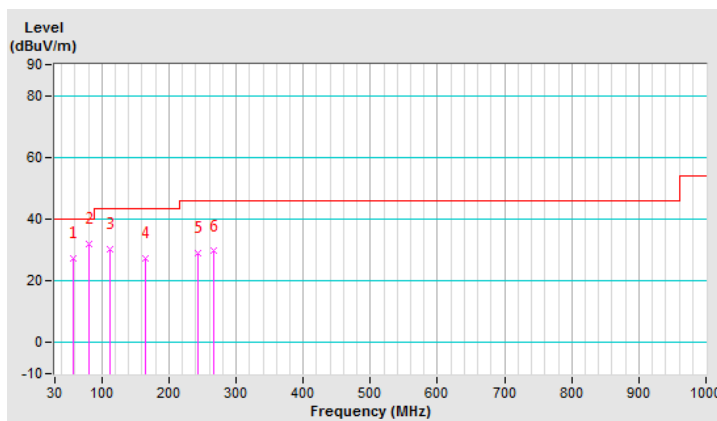
802.11a

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	56.71	27.1 QP	40.0	-12.9	2.00 H	172	36.2	-9.1
2	80.61	31.9 QP	40.0	-8.1	2.00 H	305	45.2	-13.3
3	112.94	30.4 QP	43.5	-13.1	1.49 H	95	42.0	-11.6
4	164.96	27.4 QP	43.5	-16.1	1.49 H	256	36.1	-8.7
5	243.68	29.1 QP	46.0	-16.9	1.00 H	152	38.8	-9.7
6	266.17	29.6 QP	46.0	-16.4	1.00 H	122	38.3	-8.7

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

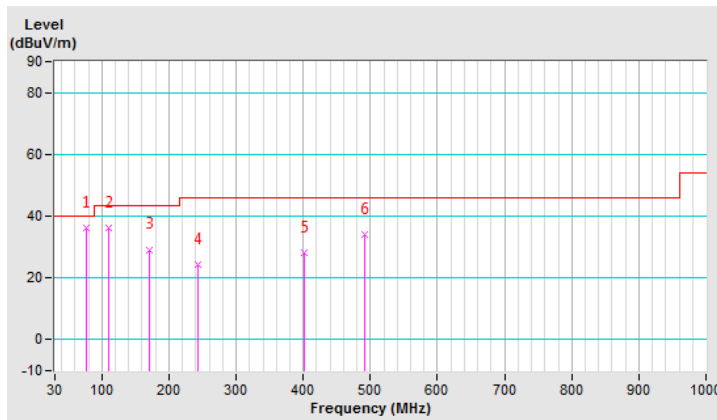


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	77.80	36.0 QP	40.0	-4.0	1.01 V	241	48.7	-12.7
2	110.13	36.2 QP	43.5	-7.3	1.01 V	15	48.0	-11.8
3	170.58	29.2 QP	43.5	-14.3	1.01 V	300	38.1	-8.9
4	243.68	24.5 QP	46.0	-21.5	2.00 V	42	34.2	-9.7
5	402.54	28.2 QP	46.0	-17.8	1.01 V	153	32.6	-4.4
6	491.10	34.1 QP	46.0	-11.9	1.01 V	96	35.7	-1.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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



Test Mode D

Scanning radio: CDD Mode

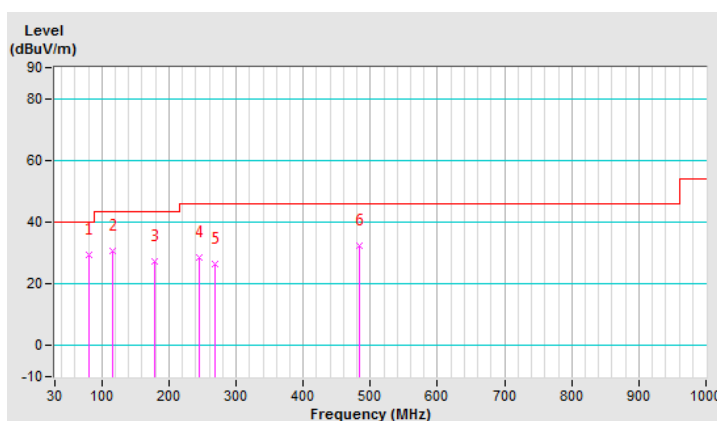
802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	80.61	29.5 QP	40.0	-10.5	2.00 H	316	42.8	-13.3
2	115.75	30.6 QP	43.5	-12.9	1.50 H	69	42.0	-11.4
3	179.01	27.4 QP	43.5	-16.1	1.50 H	86	37.2	-9.8
4	245.09	28.4 QP	46.0	-17.6	1.50 H	155	38.0	-9.6
5	268.99	26.4 QP	46.0	-19.6	1.00 H	150	34.9	-8.5
6	484.07	32.3 QP	46.0	-13.7	1.50 H	114	34.2	-1.9

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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

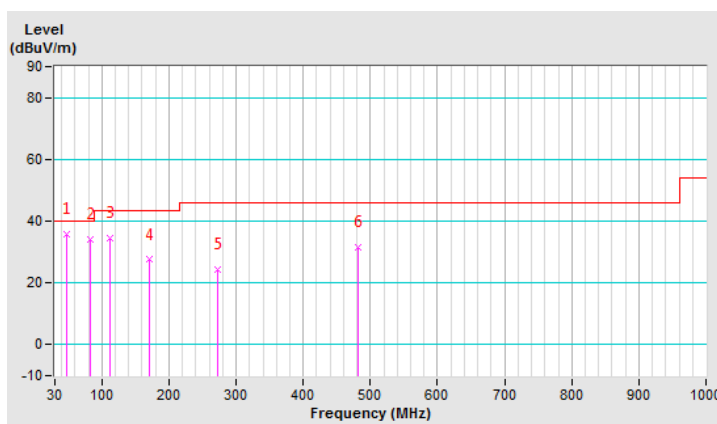


CHANNEL	TX Channel 149	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	48.28	35.8 QP	40.0	-4.2	1.00 V	301	44.5	-8.7
2	82.01	34.1 QP	40.0	-5.9	1.50 V	271	47.7	-13.6
3	112.94	34.7 QP	43.5	-8.8	2.00 V	67	46.3	-11.6
4	170.58	27.5 QP	43.5	-16.0	1.50 V	261	36.4	-8.9
5	271.80	24.3 QP	46.0	-21.7	1.50 V	247	32.6	-8.3
6	482.67	31.6 QP	46.0	-14.4	1.00 V	349	33.5	-1.9

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. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz
4. Margin value = Emission Level – Limit value
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: Jan. 04 ~ Jan. 18, 2020

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 11, 2019	Dec. 10, 2020
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2019	Sep. 04, 2020
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 21, 2019	Feb. 20, 2020
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 22, 2019	Aug. 21, 2020
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.

3. The VCCI Site Registration No. is C-12040.

4.2.3 Test Procedures

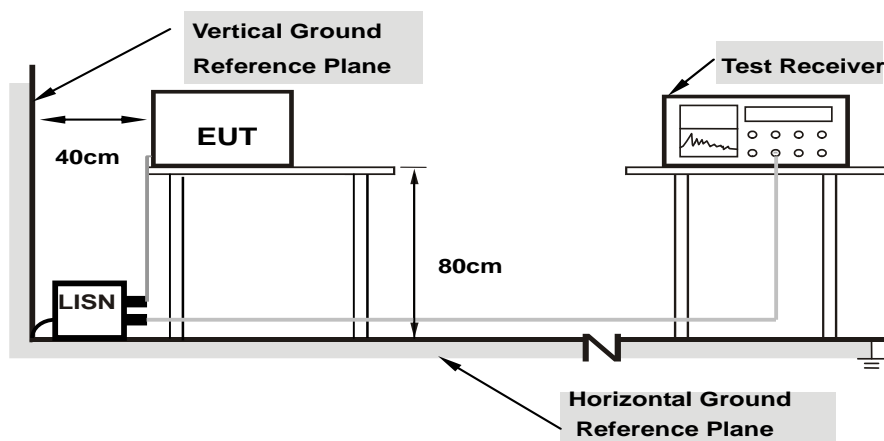
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- 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:

Test Mode A

5G traffic radio: CDD Mode

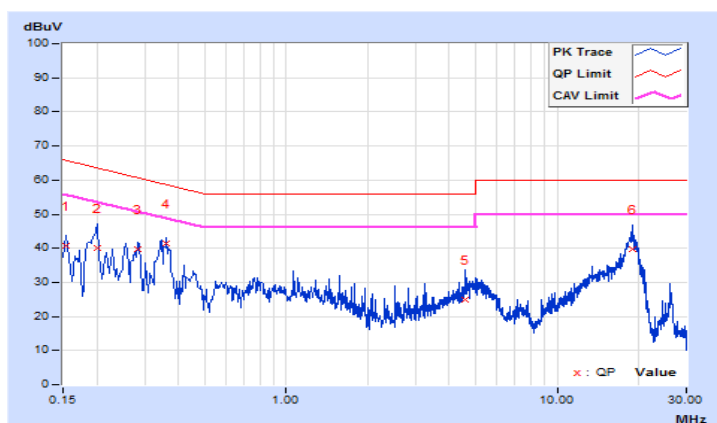
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.67	31.09	23.90	40.76	33.57	65.79	55.79	-25.03	-22.22
2	0.20083	9.66	30.27	17.88	39.93	27.54	63.58	53.58	-23.65	-26.04
3	0.28288	9.67	29.91	21.82	39.58	31.49	60.73	50.73	-21.15	-19.24
4	0.36114	9.68	31.75	25.32	41.43	35.00	58.70	48.70	-17.27	-13.70
5	4.59958	9.85	14.96	8.52	24.81	18.37	56.00	46.00	-31.19	-27.63
6	18.90236	9.98	29.90	23.06	39.88	33.04	60.00	50.00	-20.12	-16.96

Remarks:

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

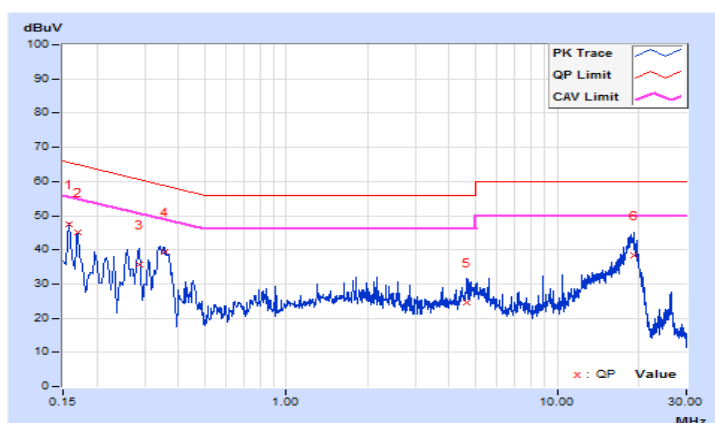


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15782	9.64	37.94	25.27	47.58	34.91	65.58	55.58	-18.00	-20.67
2	0.16955	9.64	35.43	22.10	45.07	31.74	64.98	54.98	-19.91	-23.24
3	0.28685	9.65	26.18	15.82	35.83	25.47	60.62	50.62	-24.79	-25.15
4	0.35723	9.66	29.90	22.37	39.56	32.03	58.79	48.79	-19.23	-16.76
5	4.63086	9.82	14.85	8.53	24.67	18.35	56.00	46.00	-31.33	-27.65
6	19.21907	10.04	28.48	23.19	38.52	33.23	60.00	50.00	-21.48	-16.77

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.



Test Mode A

Scanning radio: CDD Mode

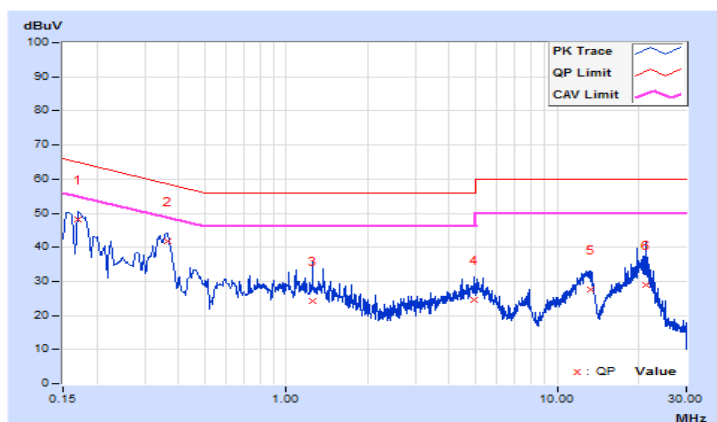
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17000	9.67	38.48	23.01	48.15	32.68	64.96	54.96	-16.81	-22.28
2	0.36352	9.68	32.00	25.24	41.68	34.92	58.65	48.65	-16.97	-13.73
3	1.24600	9.74	14.34	9.78	24.08	19.52	56.00	46.00	-31.92	-26.48
4	4.93000	9.85	14.67	9.00	24.52	18.85	56.00	46.00	-31.48	-27.15
5	13.25000	9.95	17.71	11.38	27.66	21.33	60.00	50.00	-32.34	-28.67
6	21.30200	9.99	18.94	11.25	28.93	21.24	60.00	50.00	-31.07	-28.76

Remarks:

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

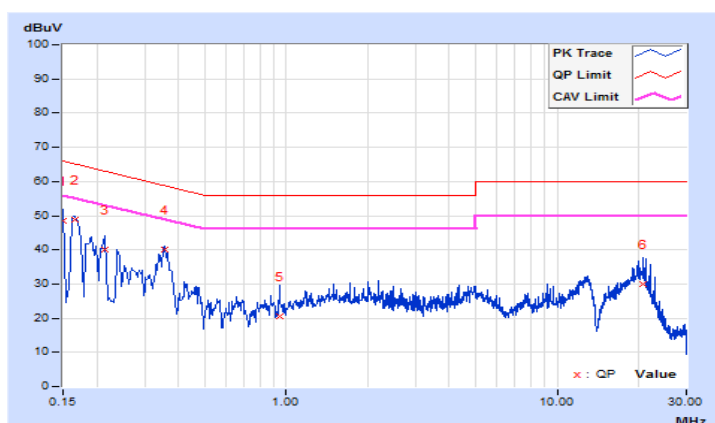


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.64	38.98	22.40	48.62	32.04	66.00	56.00	-17.38	-23.96
2	0.16535	9.64	39.13	25.84	48.77	35.48	65.19	55.19	-16.42	-19.71
3	0.21400	9.64	30.41	16.21	40.05	25.85	63.05	53.05	-23.00	-27.20
4	0.35400	9.66	30.51	22.73	40.17	32.39	58.87	48.87	-18.70	-16.48
5	0.94200	9.70	10.99	5.45	20.69	15.15	56.00	46.00	-35.31	-30.85
6	20.88600	10.06	19.79	12.58	29.85	22.64	60.00	50.00	-30.15	-27.36

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.



Test Mode B

5G traffic radio: CDD Mode

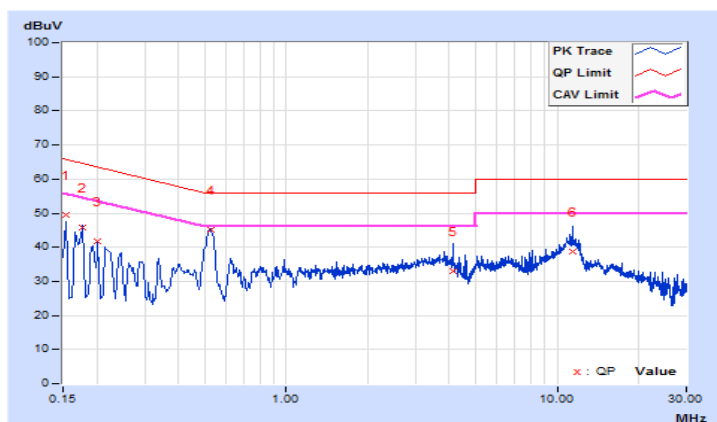
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.67	39.87	24.00	49.54	33.67	65.78	55.78	-16.24	-22.11
2	0.17800	9.66	36.11	21.46	45.77	31.12	64.58	54.58	-18.81	-23.46
3	0.20200	9.66	32.05	18.62	41.71	28.28	63.53	53.53	-21.82	-25.25
4	0.52600	9.70	35.32	29.48	45.02	39.18	56.00	46.00	-10.98	-6.82
5	4.14200	9.84	23.09	17.57	32.93	27.41	56.00	46.00	-23.07	-18.59
6	11.37000	9.94	28.80	23.76	38.74	33.70	60.00	50.00	-21.26	-16.30

Remarks:

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

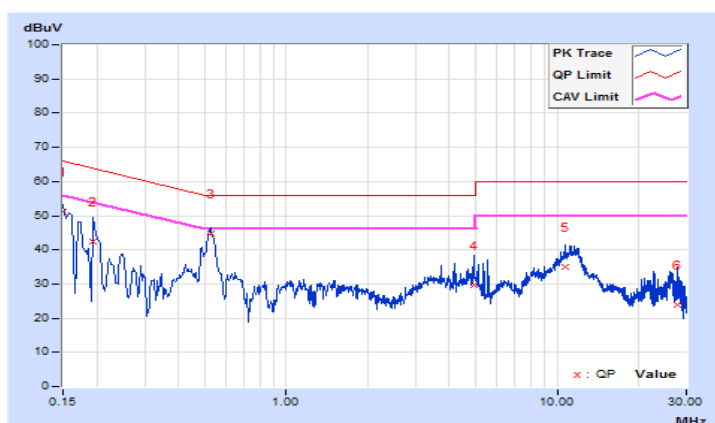


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.64	41.65	24.81	51.29	34.45	66.00	56.00	-14.71	-21.55
2	0.19400	9.64	32.91	18.09	42.55	27.73	63.86	53.86	-21.31	-26.13
3	0.52567	9.67	35.09	29.29	44.76	38.96	56.00	46.00	-11.24	-7.04
4	4.91400	9.83	19.85	12.90	29.68	22.73	56.00	46.00	-26.32	-23.27
5	10.67000	9.92	25.15	19.97	35.07	29.89	60.00	50.00	-24.93	-20.11
6	27.88600	10.10	13.93	9.17	24.03	19.27	60.00	50.00	-35.97	-30.73

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.



Test Mode B

Scanning radio: CDD Mode

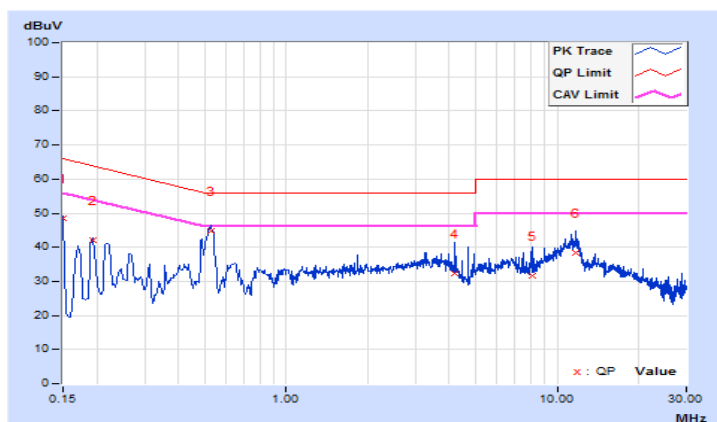
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.67	38.81	25.13	48.48	34.80	66.00	56.00	-17.52	-21.20
2	0.19265	9.66	32.47	17.98	42.13	27.64	63.92	53.92	-21.79	-26.28
3	0.52600	9.70	35.22	29.36	44.92	39.06	56.00	46.00	-11.08	-6.94
4	4.21000	9.84	22.60	17.06	32.44	26.90	56.00	46.00	-23.56	-19.10
5	8.15400	9.90	21.69	16.49	31.59	26.39	60.00	50.00	-28.41	-23.61
6	11.79000	9.94	28.42	23.65	38.36	33.59	60.00	50.00	-21.64	-16.41

Remarks:

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

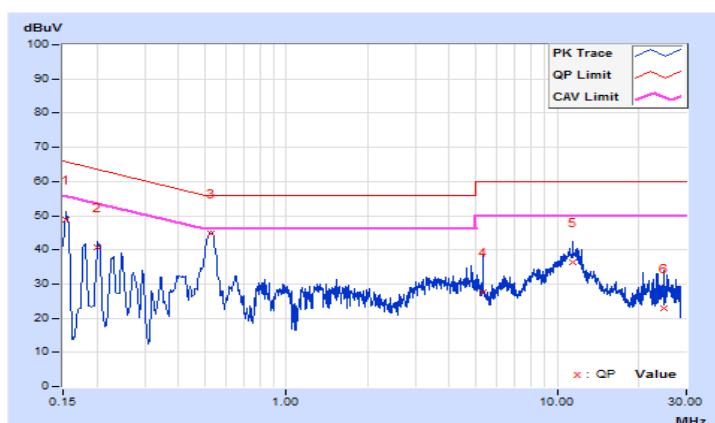


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.64	39.29	22.99	48.93	32.63	65.78	55.78	-16.85	-23.15
2	0.20200	9.64	31.20	17.96	40.84	27.60	63.53	53.53	-22.69	-25.93
3	0.52544	9.67	35.12	29.29	44.79	38.96	56.00	46.00	-11.21	-7.04
4	5.31400	9.83	17.75	9.57	27.58	19.40	60.00	50.00	-32.42	-30.60
5	11.43400	9.93	26.35	21.24	36.28	31.17	60.00	50.00	-23.72	-18.83
6	24.78200	10.09	12.71	7.40	22.80	17.49	60.00	50.00	-37.20	-32.51

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.



Test Mode C

5G traffic radio: CDD Mode

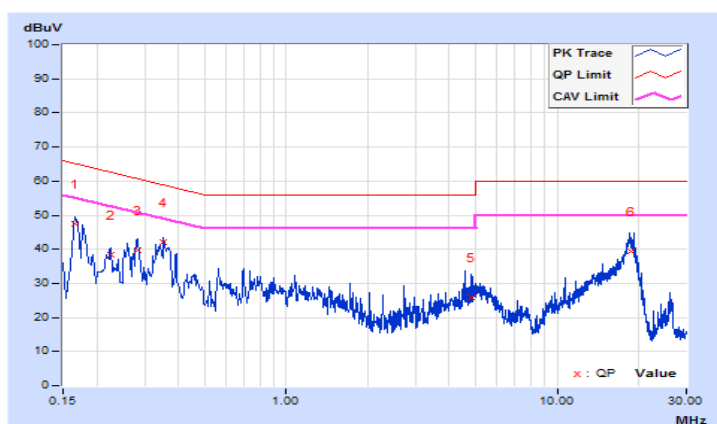
802.11a

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

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16564	9.67	37.96	25.21	47.63	34.88	65.18	55.18	-17.55	-20.30
2	0.22429	9.66	28.67	18.11	38.33	27.77	62.66	52.66	-24.33	-24.89
3	0.28294	9.67	30.05	21.60	39.72	31.27	60.73	50.73	-21.01	-19.46
4	0.35332	9.68	32.31	23.95	41.99	33.63	58.88	48.88	-16.89	-15.25
5	4.79899	9.85	16.20	9.27	26.05	19.12	56.00	46.00	-29.95	-26.88
6	18.69513	9.98	29.38	22.70	39.36	32.68	60.00	50.00	-20.64	-17.32

Remarks:

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

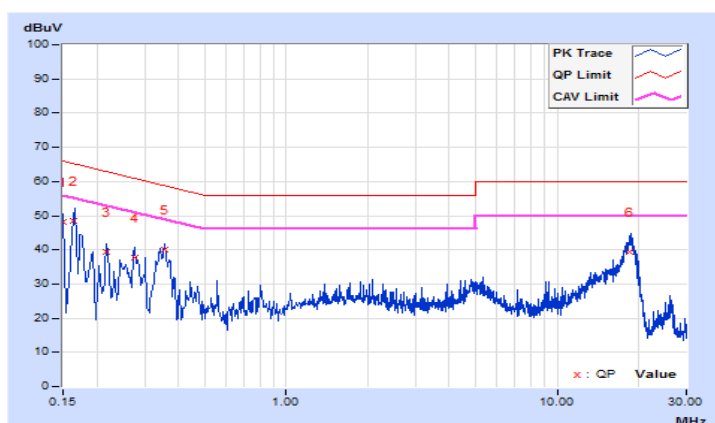


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.64	38.45	21.43	48.09	31.07	66.00	56.00	-17.91	-24.93
2	0.16482	9.64	38.76	25.71	48.40	35.35	65.22	55.22	-16.82	-19.87
3	0.21647	9.64	29.78	16.05	39.42	25.69	62.95	52.95	-23.53	-27.26
4	0.27512	9.65	28.04	16.99	37.69	26.64	60.96	50.96	-23.27	-24.32
5	0.35670	9.66	30.36	23.05	40.02	32.71	58.80	48.80	-18.78	-16.09
6	18.57783	10.03	29.46	22.44	39.49	32.47	60.00	50.00	-20.51	-17.53

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.



Test Mode C

Scanning radio: CDD Mode

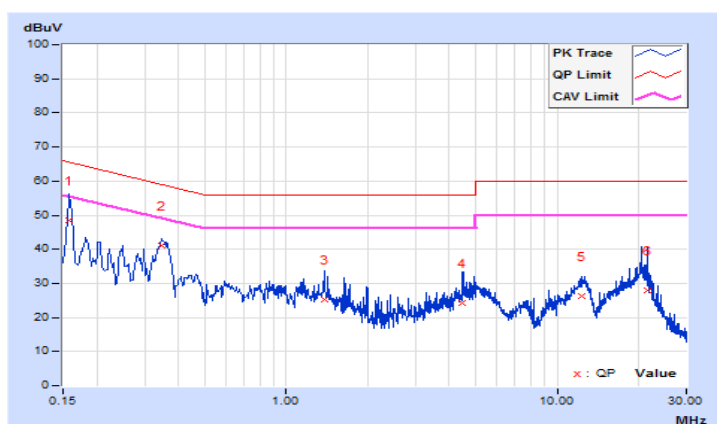
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	9.67	38.95	25.88	48.62	35.55	65.57	55.57	-16.95	-20.02
2	0.34600	9.68	31.29	22.21	40.97	31.89	59.06	49.06	-18.09	-17.17
3	1.37800	9.75	15.46	9.18	25.21	18.93	56.00	46.00	-30.79	-27.07
4	4.46600	9.85	14.41	8.05	24.26	17.90	56.00	46.00	-31.74	-28.10
5	12.37400	9.95	16.29	9.56	26.24	19.51	60.00	50.00	-33.76	-30.49
6	21.59000	9.99	17.80	9.82	27.79	19.81	60.00	50.00	-32.21	-30.19

Remarks:

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

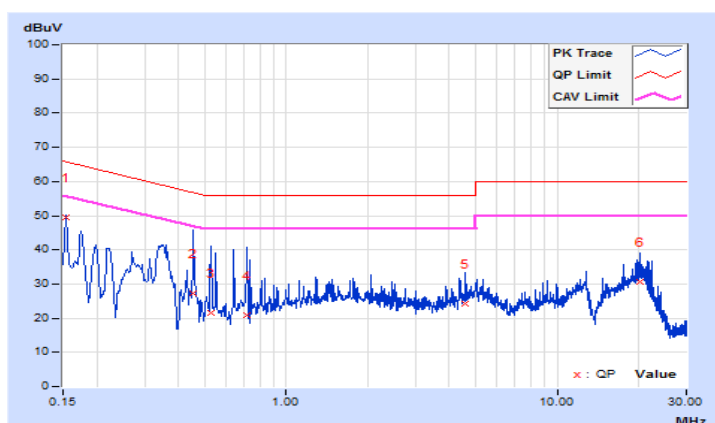


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.64	39.74	24.47	49.38	34.11	65.78	55.78	-16.40	-21.67
2	0.45400	9.66	17.61	9.86	27.27	19.52	56.80	46.80	-29.53	-27.28
3	0.52600	9.67	11.82	4.21	21.49	13.88	56.00	46.00	-34.51	-32.12
4	0.71400	9.68	11.22	5.16	20.90	14.84	56.00	46.00	-35.10	-31.16
5	4.57400	9.82	14.51	8.43	24.33	18.25	56.00	46.00	-31.67	-27.75
6	20.32600	10.05	20.53	12.71	30.58	22.76	60.00	50.00	-29.42	-27.24

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.



Test Mode D

5G traffic radio: CDD Mode

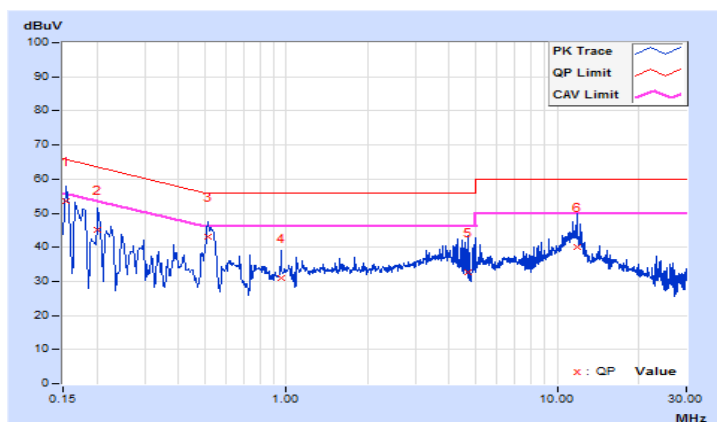
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.67	44.03	27.91	53.70	37.58	65.78	55.78	-12.08	-18.20
2	0.20200	9.66	35.60	21.46	45.26	31.12	63.53	53.53	-18.27	-22.41
3	0.51400	9.70	33.48	28.29	43.18	37.99	56.00	46.00	-12.82	-8.01
4	0.95800	9.73	21.29	16.67	31.02	26.40	56.00	46.00	-24.98	-19.60
5	4.69800	9.85	22.72	12.76	32.57	22.61	56.00	46.00	-23.43	-23.39
6	11.81000	9.94	30.18	25.12	40.12	35.06	60.00	50.00	-19.88	-14.94

Remarks:

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

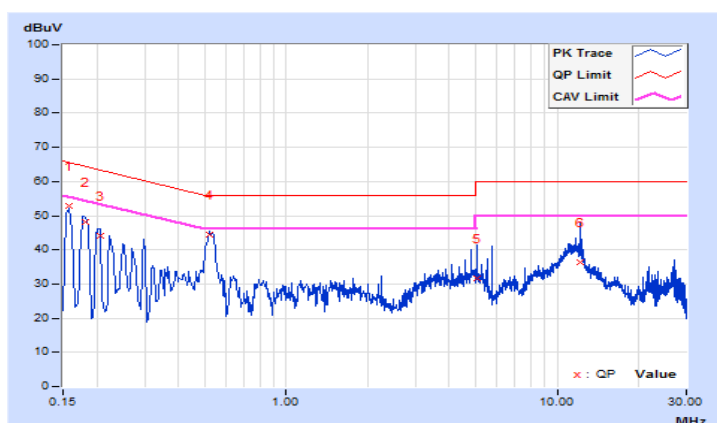


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15770	9.64	43.26	26.65	52.90	36.29	65.58	55.58	-12.68	-19.29
2	0.18200	9.64	38.41	22.83	48.05	32.47	64.39	54.39	-16.34	-21.92
3	0.20523	9.64	34.54	20.35	44.18	29.99	63.40	53.40	-19.22	-23.41
4	0.52200	9.67	34.65	29.18	44.32	38.85	56.00	46.00	-11.68	-7.15
5	5.05000	9.83	21.96	14.53	31.79	24.36	60.00	50.00	-28.21	-25.64
6	12.22600	9.95	26.57	21.28	36.52	31.23	60.00	50.00	-23.48	-18.77

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.



Test Mode D

Scanning radio: CDD Mode

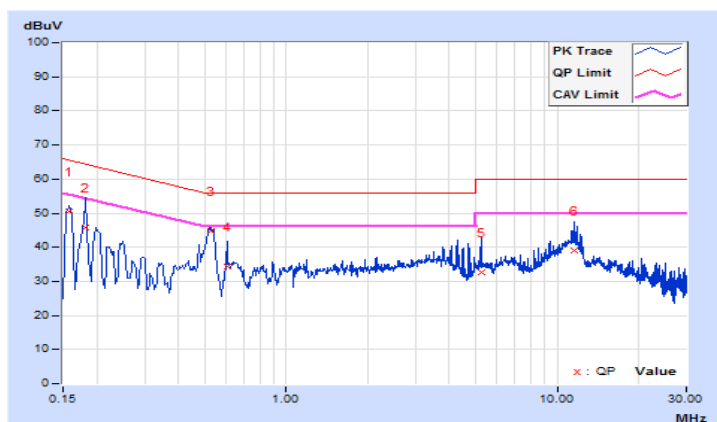
802.11a

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15800	9.67	40.88	24.48	50.55	34.15	65.57	55.57	-15.02	-21.42
2	0.18200	9.66	36.25	21.23	45.91	30.89	64.39	54.39	-18.48	-23.50
3	0.52567	9.70	35.19	29.41	44.89	39.11	56.00	46.00	-11.11	-6.89
4	0.60600	9.70	24.81	17.52	34.51	27.22	56.00	46.00	-21.49	-18.78
5	5.24600	9.86	22.94	17.62	32.80	27.48	60.00	50.00	-27.20	-22.52
6	11.56600	9.94	29.08	24.07	39.02	34.01	60.00	50.00	-20.98	-15.99

Remarks:

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

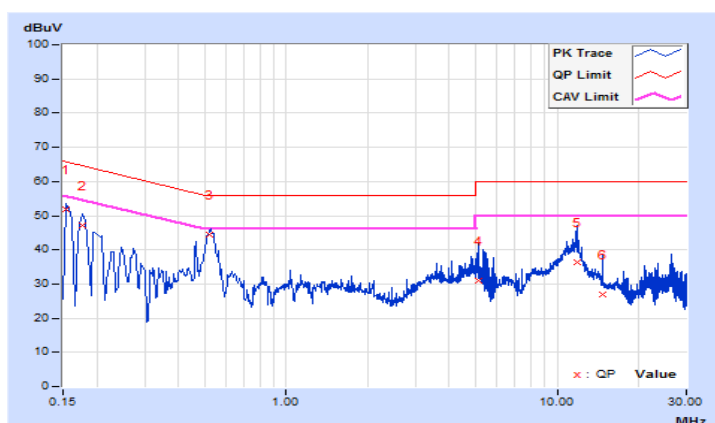


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.64	42.18	25.03	51.82	34.67	65.78	55.78	-13.96	-21.11
2	0.17754	9.64	37.66	22.20	47.30	31.84	64.60	54.60	-17.30	-22.76
3	0.52200	9.67	34.87	29.42	44.54	39.09	56.00	46.00	-11.46	-6.91
4	5.13400	9.83	21.15	13.11	30.98	22.94	60.00	50.00	-29.02	-27.06
5	11.92200	9.94	26.53	21.40	36.47	31.34	60.00	50.00	-23.53	-18.66
6	14.76600	9.99	16.98	11.77	26.97	21.76	60.00	50.00	-33.03	-28.24

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 \leq 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,

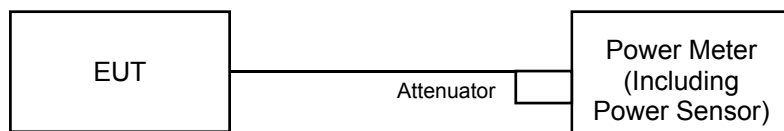
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

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

For Average Power Measurement

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

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

Test Mode A

5G traffic radio: 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	Chain 2	Chain 3				
36	5180	18.07	17.84	18.10	17.67	247.979	23.94	29.79	Pass
40	5200	18.12	17.65	18.21	17.57	246.443	23.92	29.79	Pass
48	5240	17.97	17.79	18.12	17.73	246.934	23.93	29.79	Pass
149	5745	22.91	22.70	23.03	22.63	765.783	28.84	30.00	Pass
157	5785	23.01	22.85	23.23	22.90	798.100	29.02	30.00	Pass
165	5825	22.90	22.93	23.02	22.66	776.269	28.90	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
36	5180	18.21	18.21	18.11	18.19	263.075	24.20	29.79	Pass
40	5200	18.16	18.30	18.36	18.21	267.843	24.28	29.79	Pass
48	5240	18.05	18.42	18.47	18.15	268.948	24.30	29.79	Pass
149	5745	22.59	22.61	22.78	22.12	716.543	28.55	30.00	Pass
157	5785	22.39	22.41	22.86	21.85	693.867	28.41	30.00	Pass
165	5825	22.22	22.21	22.73	22.18	685.761	28.36	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	19.92	20.20	20.42	20.15	416.556	26.20	29.79	Pass
46	5230	22.79	22.39	22.32	22.26	702.363	28.47	29.79	Pass
151	5755	21.09	21.12	21.26	21.13	521.327	27.17	30.00	Pass
159	5795	21.78	21.82	21.96	21.88	613.922	27.88	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
36	5180	18.31	18.30	18.20	18.27	268.584	24.29	29.79	Pass
40	5200	18.21	18.38	18.45	18.30	272.679	24.36	29.79	Pass
48	5240	18.12	18.51	18.56	18.21	273.822	24.37	29.79	Pass
149	5745	22.72	22.76	22.94	22.25	740.536	28.70	30.00	Pass
157	5785	22.49	22.51	23.01	21.96	712.679	28.53	30.00	Pass
165	5825	22.35	22.48	22.89	22.31	713.554	28.53	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	19.97	20.32	20.49	20.27	425.317	26.29	29.79	Pass
46	5230	22.87	22.43	22.51	22.32	717.473	28.56	29.79	Pass
151	5755	21.22	21.32	21.47	21.29	542.820	27.35	30.00	Pass
159	5795	21.92	21.98	22.08	21.97	632.192	28.01	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
42	5210	20.11	19.49	19.82	19.52	376.961	25.76	29.79	Pass
155	5775	19.22	18.92	19.32	18.61	319.661	25.05	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
36	5180	18.42	18.35	18.26	18.33	272.958	24.36	29.79	Pass
40	5200	18.29	18.43	18.51	18.38	276.939	24.42	29.79	Pass
48	5240	18.19	18.59	18.62	18.27	278.115	24.44	29.79	Pass
149	5745	22.87	22.84	23.02	22.37	758.982	28.80	30.00	Pass
157	5785	22.58	22.60	23.17	22.07	731.660	28.64	30.00	Pass
165	5825	22.54	22.63	23.05	22.50	742.369	28.71	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	20.06	20.41	20.66	18.33	395.782	25.97	29.79	Pass
46	5230	23.10	22.56	22.77	18.38	642.575	28.08	29.79	Pass
151	5755	21.36	21.44	21.57	21.40	557.676	27.46	30.00	Pass
159	5795	22.03	22.06	22.31	22.05	650.823	28.13	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

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	Chain 2	Chain 3				
42	5210	20.27	19.58	19.95	19.67	388.734	25.90	29.79	Pass
155	5775	19.35	19.05	19.48	18.76	330.330	25.19	30.00	Pass

Note: For 5180~5240MHz: Max. gain = 6.21dBi > 6dBi, so the power limit shall be reduced to $30-(6.21-6) = 29.79\text{dBm}$.

Test Mode A

5G traffic radio: 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	Chain 2	Chain 3				
36	5180	18.41	18.51	18.38	17.92	271.110	24.33	24.49	Pass
40	5200	17.36	18.25	18.55	17.72	252.054	24.01	24.49	Pass
48	5240	17.43	17.75	18.79	17.72	249.740	23.97	24.49	Pass
149	5745	18.61	18.65	18.85	18.31	290.393	24.63	24.65	Pass
157	5785	18.55	18.59	18.98	18.20	289.028	24.61	24.65	Pass
165	5825	18.43	18.52	18.91	18.45	288.572	24.60	24.65	Pass

Note:

For 5180~5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (11.51 - 6) = 24.49\text{dBm}$.

For 5745~5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	15.89	16.03	16.16	16.30	162.865	22.12	24.49	Pass
46	5230	18.43	17.99	18.61	17.98	268.031	24.28	24.49	Pass
151	5755	18.32	18.36	18.49	18.41	276.444	24.42	24.65	Pass
159	5795	18.49	18.46	18.63	18.65	287.006	24.58	24.65	Pass

Note:

For 5180~5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (11.51 - 6) = 24.49\text{dBm}$.

For 5745~5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.

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	Chain 2	Chain 3				
42	5210	15.39	15.02	15.51	15.11	134.360	21.28	24.49	Pass
155	5775	18.22	18.07	18.42	17.81	260.392	24.16	24.65	Pass

Note:

For 5180~5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (11.51 - 6) = 24.49\text{dBm}$.

For 5745~5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.

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	Chain 2	Chain 3				
36	5180	18.45	18.52	18.51	17.94	274.293	24.38	24.49	Pass
40	5200	17.43	18.22	18.66	17.69	253.909	24.05	24.49	Pass
48	5240	17.53	18.01	18.68	17.65	251.865	24.01	24.49	Pass
149	5745	18.65	18.63	18.86	18.32	291.061	24.64	24.65	Pass
157	5785	18.53	18.66	19.01	18.21	290.574	24.63	24.65	Pass
165	5825	18.62	18.61	18.93	18.25	290.386	24.63	24.65	Pass

Note:

For 5180~5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4]$ = 11.51dBi > 6dBi, so the power limit shall be reduced to $30 - (11.51 - 6) = 24.49$ dBm.

For 5745~5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4]$ = 11.35dBi > 6dBi, so the power limit shall be reduced to $30 - (11.35 - 6) = 24.65$ dBm.

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	Chain 2	Chain 3				
38	5190	16.01	16.22	16.23	16.34	166.810	22.22	24.49	Pass
46	5230	18.51	18.04	18.65	18.02	271.307	24.33	24.49	Pass
151	5755	18.38	18.43	18.58	18.46	280.785	24.48	24.65	Pass
159	5795	18.51	18.59	18.73	18.53	289.165	24.61	24.65	Pass

Note:

For 5180~5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4]$ = 11.51dBi > 6dBi, so the power limit shall be reduced to $30 - (11.51 - 6) = 24.49$ dBm.

For 5745~5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4]$ = 11.35dBi > 6dBi, so the power limit shall be reduced to $30 - (11.35 - 6) = 24.65$ dBm.

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	Chain 2	Chain 3				
42	5210	15.42	15.11	15.56	15.19	136.280	21.34	24.49	Pass
155	5775	18.22	18.07	18.42	17.81	260.392	24.16	24.65	Pass

Note:

For 5180~5240MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4]$ = 11.51dBi > 6dBi, so the power limit shall be reduced to $30 - (11.51 - 6) = 24.49$ dBm.

For 5745~5825MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4]$ = 11.35dBi > 6dBi, so the power limit shall be reduced to $30 - (11.35 - 6) = 24.65$ dBm.

Test Mode A

Scanning radio: CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	16.293	12.12	30.00	Pass
40	5200	16.032	12.05	30.00	Pass
48	5240	16.144	12.08	30.00	Pass
149	5745	16.144	12.08	30.00	Pass
157	5785	16.634	12.21	30.00	Pass
165	5825	16.255	12.11	30.00	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	16.032	12.05	30.00	Pass
40	5200	16.032	12.05	30.00	Pass
48	5240	16.218	12.10	30.00	Pass
149	5745	16.596	12.20	30.00	Pass
157	5785	16.368	12.14	30.00	Pass
165	5825	16.520	12.18	30.00	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	16.904	12.28	30.00	Pass
46	5230	16.406	12.15	30.00	Pass
151	5755	16.904	12.28	30.00	Pass
159	5795	16.368	12.14	30.00	Pass

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	15.922	12.02	30.00	Pass
155	5775	16.144	12.08	30.00	Pass

Test Mode C

5G traffic radio: 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	Chain 2	Chain 3				
36	5180	18.65	18.32	17.59	18.01	261.855	24.18	29.99	Pass
40	5200	18.62	18.59	17.52	18.11	266.263	24.25	29.99	Pass
48	5240	18.59	18.42	17.45	18.03	260.902	24.16	29.99	Pass
149	5745	23.83	23.38	23.02	22.61	842.154	29.25	29.80	Pass
157	5785	23.82	23.05	23.01	22.66	827.316	29.18	29.80	Pass
165	5825	23.97	23.51	23.05	22.76	864.483	29.37	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99$ dBm.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80$ dBm.

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	Chain 2	Chain 3				
36	5180	18.67	18.42	17.47	18.30	266.578	24.26	29.99	Pass
40	5200	18.63	18.58	17.44	18.37	269.227	24.30	29.99	Pass
48	5240	18.59	18.53	17.40	18.40	267.699	24.28	29.99	Pass
149	5745	23.36	22.49	22.54	21.81	725.367	28.61	29.80	Pass
157	5785	23.21	22.51	22.26	21.87	709.731	28.51	29.80	Pass
165	5825	23.51	22.72	22.32	22.43	757.049	28.79	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99$ dBm.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80$ dBm.

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	Chain 2	Chain 3				
38	5190	17.18	16.11	16.21	16.07	175.313	22.44	29.99	Pass
46	5230	21.50	21.42	20.51	21.21	524.520	27.20	29.99	Pass
151	5755	22.08	21.09	20.53	20.38	512.089	27.09	29.80	Pass
159	5795	23.01	22.31	21.67	21.65	663.313	28.22	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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	Chain 2	Chain 3				
36	5180	18.71	18.47	17.49	18.32	268.634	24.29	29.99	Pass
40	5200	18.69	18.62	17.46	18.41	271.801	24.34	29.99	Pass
48	5240	18.62	18.57	17.42	18.42	269.433	24.30	29.99	Pass
149	5745	23.78	22.55	22.69	22.17	769.264	28.86	29.80	Pass
157	5785	23.58	22.82	22.38	22.09	754.250	28.78	29.80	Pass
165	5825	23.61	22.88	22.47	22.58	781.442	28.93	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	17.33	16.19	16.33	16.18	180.115	22.56	29.99	Pass
46	5230	21.57	21.45	20.53	21.28	530.442	27.25	29.99	Pass
151	5755	22.18	21.29	20.64	20.44	526.322	27.21	29.80	Pass
159	5795	23.09	22.49	21.78	21.77	682.098	28.34	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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	Chain 2	Chain 3				
42	5210	17.09	15.42	14.41	15.43	148.522	21.72	29.99	Pass
155	5775	19.65	19.22	18.79	18.69	325.461	25.12	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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	Chain 2	Chain 3				
36	5180	18.78	18.52	17.53	18.36	271.803	24.34	29.99	Pass
40	5200	18.76	18.68	17.48	18.45	274.912	24.39	29.99	Pass
48	5240	18.69	18.62	17.43	18.49	272.706	24.36	29.99	Pass
149	5745	23.95	22.95	22.81	22.20	802.499	29.04	29.80	Pass
157	5785	23.68	22.90	22.54	22.28	776.847	28.90	29.80	Pass
165	5825	23.76	23.08	22.61	22.69	809.090	29.08	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	17.48	16.43	16.58	16.36	188.680	22.76	29.99	Pass
46	5230	21.62	21.51	20.58	21.30	535.974	27.29	29.99	Pass
151	5755	22.21	21.34	20.83	20.83	544.605	27.36	29.80	Pass
159	5795	23.27	22.58	21.97	21.82	702.911	28.47	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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	Chain 2	Chain 3				
42	5210	17.20	15.61	15.81	15.62	163.455	22.13	29.99	Pass
155	5775	19.70	19.36	19.07	18.74	335.164	25.25	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

Test Mode C

5G traffic radio: 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	Chain 2	Chain 3				
36	5180	18.55	17.78	16.73	16.98	228.579	23.59	23.97	Pass
40	5200	18.49	18.20	16.90	16.87	234.320	23.70	23.97	Pass
48	5240	18.42	18.18	16.85	16.66	230.030	23.62	23.97	Pass
149	5745	17.62	17.51	15.76	16.68	198.403	22.98	23.78	Pass
157	5785	17.60	17.13	15.76	16.29	189.416	22.77	23.78	Pass
165	5825	17.55	17.19	15.65	16.23	187.949	22.74	23.78	Pass

Note:

For 5180~5240MHz: Directional gain = 6.01dBi + 10log(4) = 12.03dBi > 6dBi, so the power limit shall be reduced to 30-(12.03-6) = 23.97dBm.

For 5745~5825MHz: Directional gain = 6.2dBi + 10log(4) = 12.22dBi > 6dBi, so the power limit shall be reduced to 30-(12.22-6) = 23.78dBm.

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	Chain 2	Chain 3				
38	5190	17.45	16.98	15.60	15.72	179.111	22.53	23.97	Pass
46	5230	18.37	18.26	16.53	16.79	228.426	23.59	23.97	Pass
151	5755	17.59	17.82	16.21	16.35	202.881	23.07	23.78	Pass
159	5795	17.42	17.75	16.25	16.31	199.700	23.00	23.78	Pass

Note:

For 5180~5240MHz: Directional gain = 6.01dBi + 10log(4) = 12.03dBi > 6dBi, so the power limit shall be reduced to 30-(12.03-6) = 23.97dBm.

For 5745~5825MHz: Directional gain = 6.2dBi + 10log(4) = 12.22dBi > 6dBi, so the power limit shall be reduced to 30-(12.22-6) = 23.78dBm.

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	Chain 2	Chain 3				
42	5210	17.22	17.59	15.73	15.87	186.183	22.70	23.97	Pass
155	5775	17.63	17.48	16.02	16.22	195.792	22.92	23.78	Pass

Note:

For 5180~5240MHz: Directional gain = 6.01dBi + 10log(4) = 12.03dBi > 6dBi, so the power limit shall be reduced to 30-(12.03-6) = 23.97dBm.

For 5745~5825MHz: Directional gain = 6.2dBi + 10log(4) = 12.22dBi > 6dBi, so the power limit shall be reduced to 30-(12.22-6) = 23.78dBm.

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	Chain 2	Chain 3				
36	5180	18.57	17.82	16.77	17.06	230.829	23.63	23.97	Pass
40	5200	18.54	18.21	16.91	16.88	235.516	23.72	23.97	Pass
48	5240	18.45	18.22	16.88	16.67	231.563	23.65	23.97	Pass
149	5745	17.67	17.52	15.78	16.71	199.698	23.00	23.78	Pass
157	5785	17.63	17.16	15.82	16.31	190.893	22.81	23.78	Pass
165	5825	17.61	17.11	15.72	16.27	188.770	22.76	23.78	Pass

Note:

For 5180~5240MHz: Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.03-6) = 23.97\text{dBm}$.

For 5745~5825MHz: Directional gain = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.22-6) = 23.78\text{dBm}$.

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	Chain 2	Chain 3				
38	5190	17.54	17.05	15.66	15.78	182.110	22.60	23.97	Pass
46	5230	18.41	18.27	16.56	16.81	229.749	23.61	23.97	Pass
151	5755	17.54	17.83	16.27	16.40	203.444	23.08	23.78	Pass
159	5795	17.52	17.43	16.38	16.51	200.051	23.01	23.78	Pass

Note:

For 5180~5240MHz: Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.03-6) = 23.97\text{dBm}$.

For 5745~5825MHz: Directional gain = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.22-6) = 23.78\text{dBm}$.

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	Chain 2	Chain 3				
42	5210	17.25	17.63	15.78	15.92	187.959	22.74	23.97	Pass
155	5775	17.69	17.54	16.05	16.27	198.139	22.97	23.78	Pass

Note:

For 5180~5240MHz: Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.03-6) = 23.97\text{dBm}$.

For 5745~5825MHz: Directional gain = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(12.22-6) = 23.78\text{dBm}$.

Test Mode C

Scanning radio: CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	16.032	12.05	29.99	Pass
40	5200	16.181	12.09	29.99	Pass
48	5240	16.711	12.23	29.99	Pass
149	5745	15.959	12.03	29.80	Pass
157	5785	16.069	12.06	29.80	Pass
165	5825	16.144	12.08	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	15.885	12.01	29.99	Pass
40	5200	16.331	12.13	29.99	Pass
48	5240	16.444	12.16	29.99	Pass
149	5745	15.922	12.02	29.80	Pass
157	5785	16.069	12.06	29.80	Pass
165	5825	15.885	12.01	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	15.885	12.01	29.99	Pass
46	5230	15.922	12.02	29.99	Pass
151	5755	15.959	12.03	29.80	Pass
159	5795	16.144	12.08	29.80	Pass

Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	10.864	10.36	29.99	Pass
155	5775	16.144	12.08	29.80	Pass

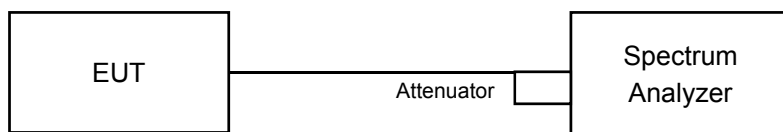
Note:

For 5180~5240MHz: Max. gain = 6.01dBi > 6dBi, so the power limit shall be reduced to $30-(6.01-6) = 29.99\text{dBm}$.

For 5745~5825MHz: Max. gain = 6.20dBi > 6dBi, so the power limit shall be reduced to $30-(6.20-6) = 29.80\text{dBm}$.

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

Test Mode A

5G traffic radio: CDD Mode

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.44	16.44	16.44	16.44
40	5200	16.56	16.44	16.44	16.44
48	5240	16.56	16.44	16.44	16.44

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	19.08	18.96	19.08	19.08
40	5200	18.84	18.96	18.96	19.08
48	5240	19.08	19.08	18.84	18.96

802.11ax (HE40)

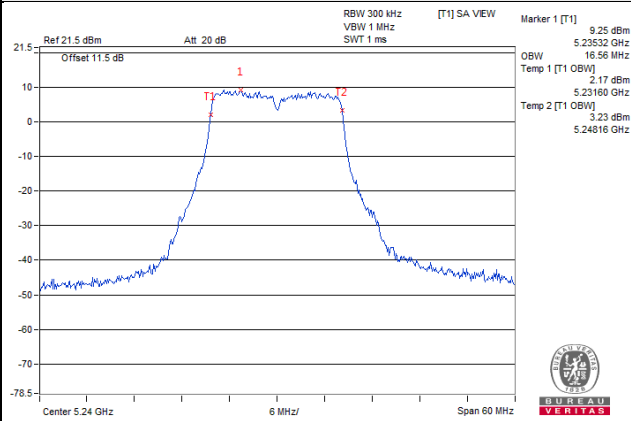
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	37.92	38.04	38.04	38.04
46	5230	38.16	38.04	38.04	37.92

802.11ax (HE80)

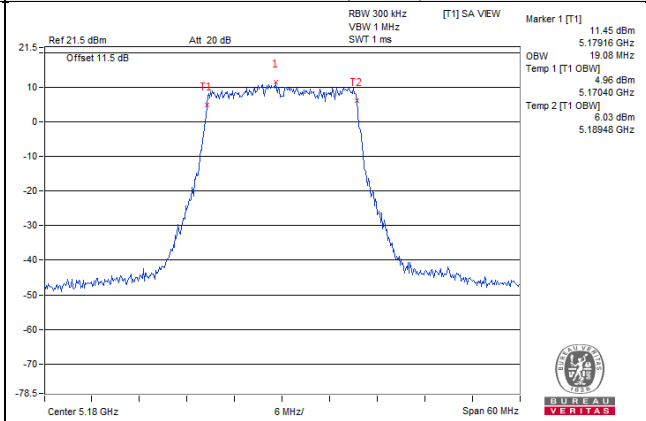
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.76	75.36	77.28	77.04

Spectrum Plot of Worst Value

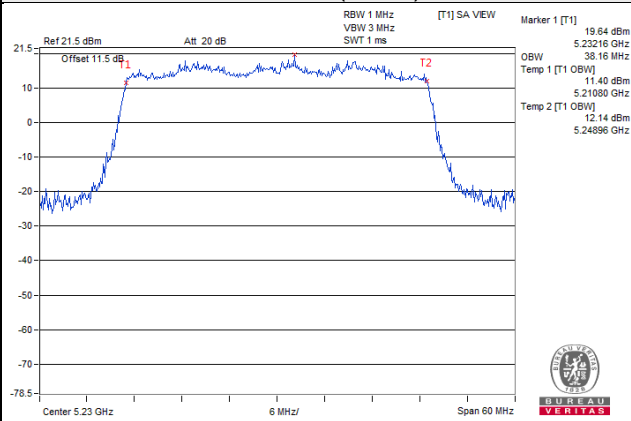
802.11a



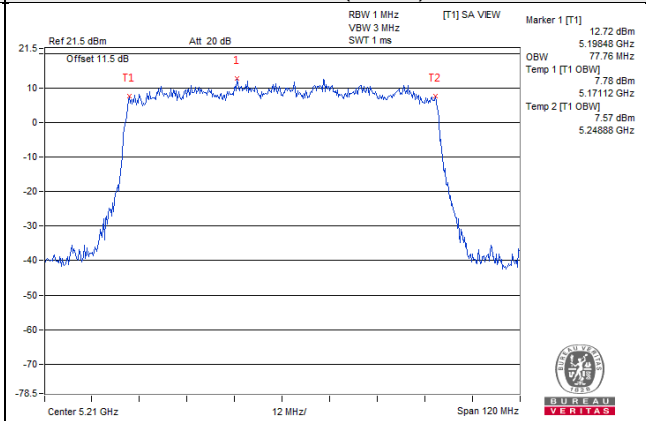
802.11ax (HE20)



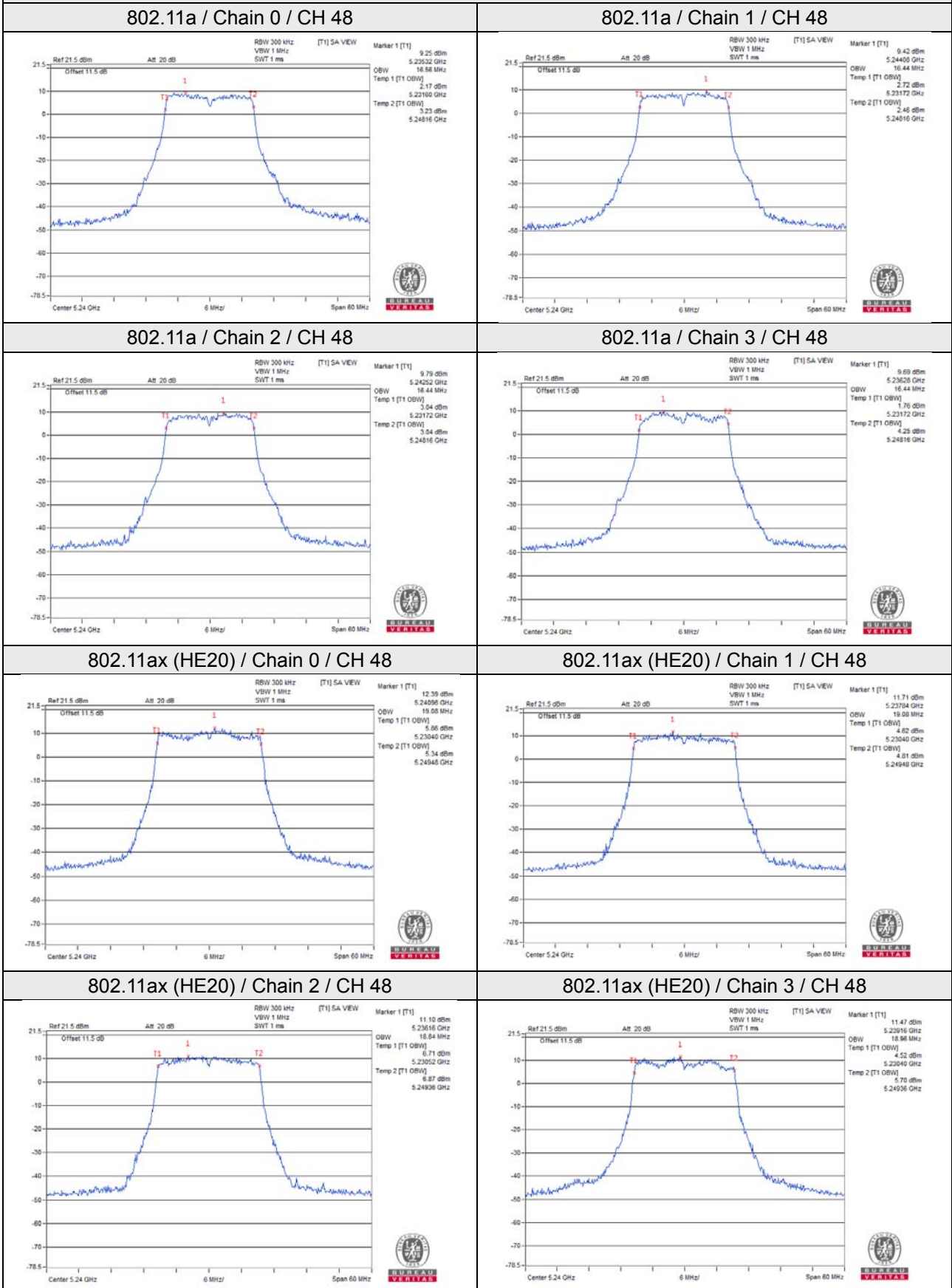
802.11ax (HE40)



802.11ax (HE80)

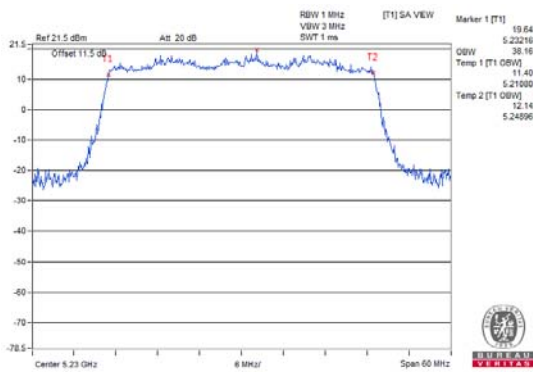


Spectrum Plot for near By DFS Band

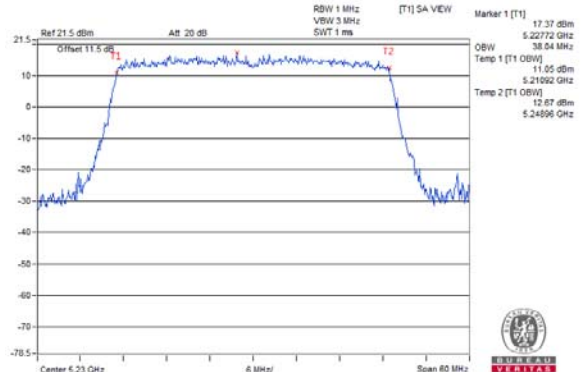


Spectrum Plot for near By DFS Band

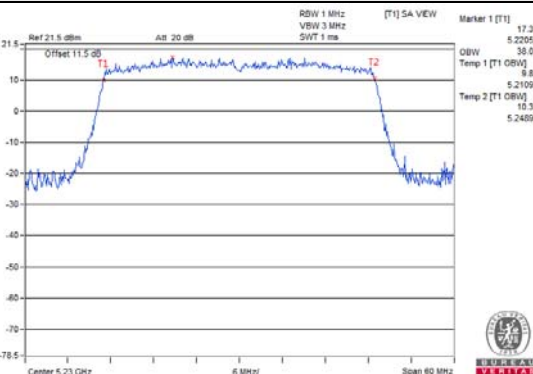
802.11ax (HE40) / Chain 0 / CH 46



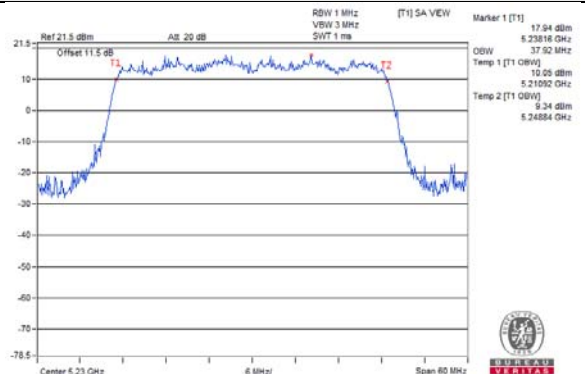
802.11ax (HE40) / Chain 1 / CH 46



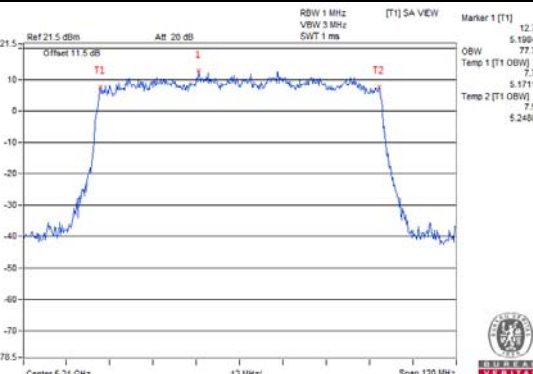
802.11ax (HE40) / Chain 2 / CH 46



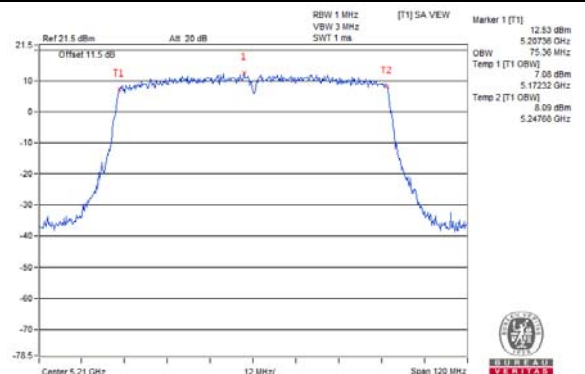
802.11ax (HE40) / Chain 3 / CH 46



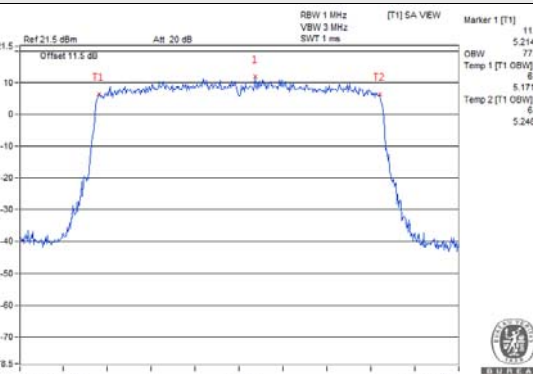
802.11ax (HE80) / Chain 0 / CH 42



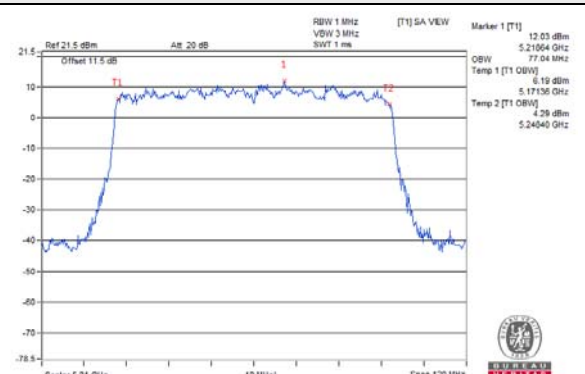
802.11ax (HE80) / Chain 1 / CH 42



802.11ax (HE80) / Chain 2 / CH 42



802.11ax (HE80) / Chain 3 / CH 42



802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	16.32	16.56	16.44	16.44
157	5785	16.68	16.56	16.56	16.44
165	5825	16.68	16.68	16.68	16.44

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	19.08	18.96	19.08	19.08
157	5785	18.84	19.08	18.84	19.08
165	5825	19.08	19.08	19.08	18.96

802.11ax (HE40)

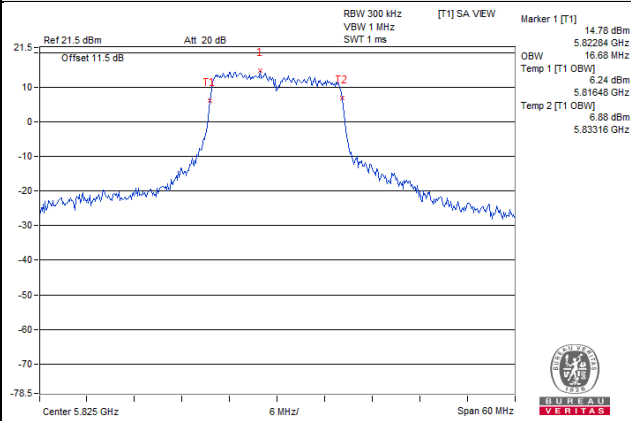
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	38.16	37.92	38.16	37.80
159	5795	38.04	38.04	38.16	38.16

802.11ax (HE80)

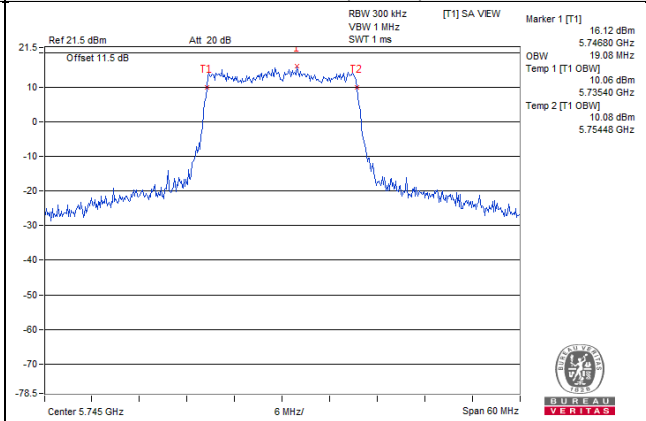
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.28	75.12	77.28	77.76

Spectrum Plot of Worst Value

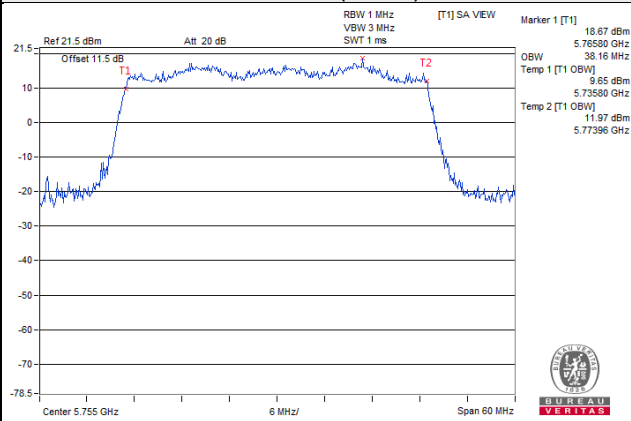
802.11a



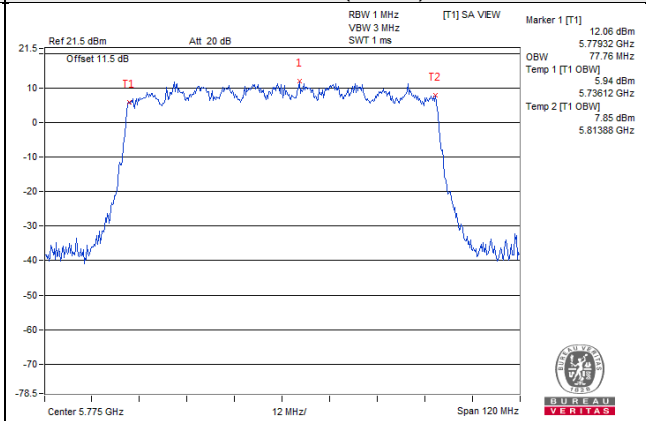
802.11ax (HE20)



802.11ax (HE40)

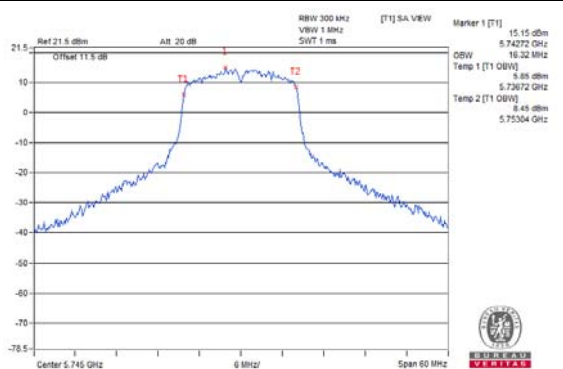


802.11ax (HE80)

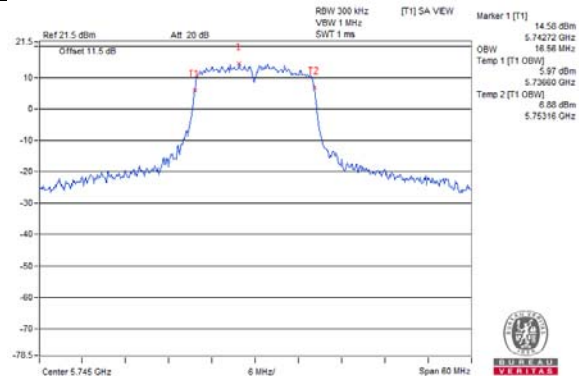


Spectrum Plot for near By DFS Band

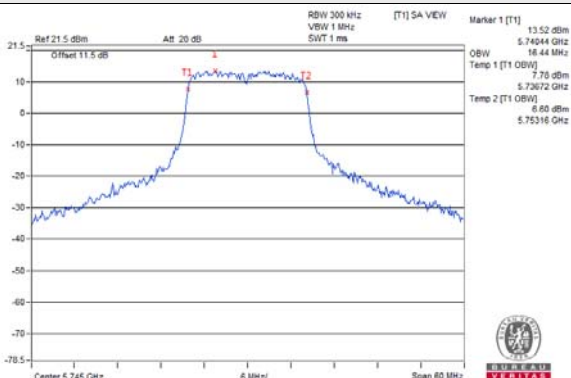
802.11a / Chain 0 / CH 149



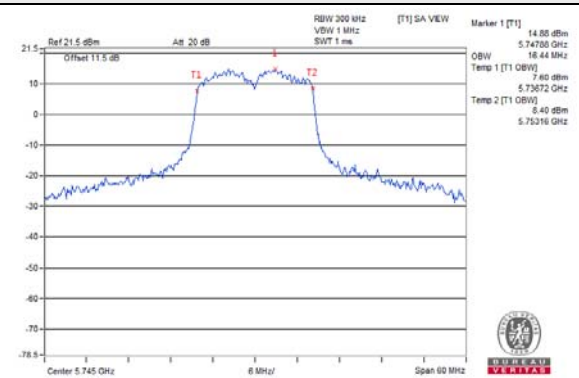
802.11a / Chain 1 / CH 149



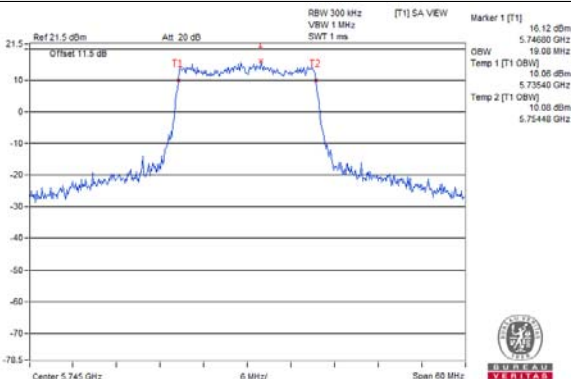
802.11a / Chain 2 / CH 149



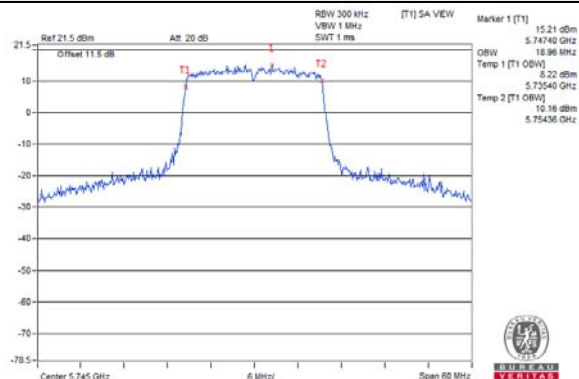
802.11a / Chain 3 / CH 149



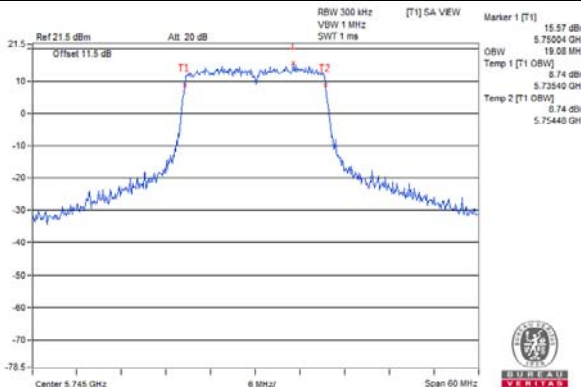
802.11ax (HE20) / Chain 0 / CH 149



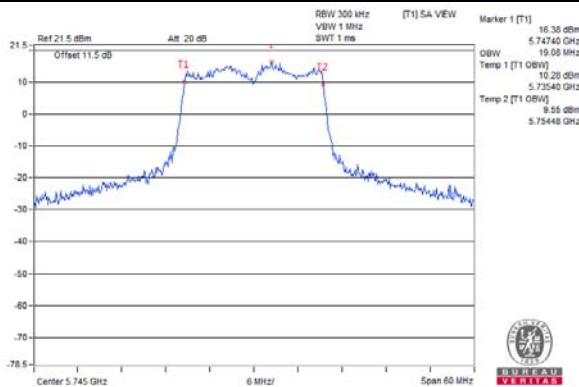
802.11ax (HE20) / Chain 1 / CH 149



802.11ax (HE20) / Chain 2 / CH 149

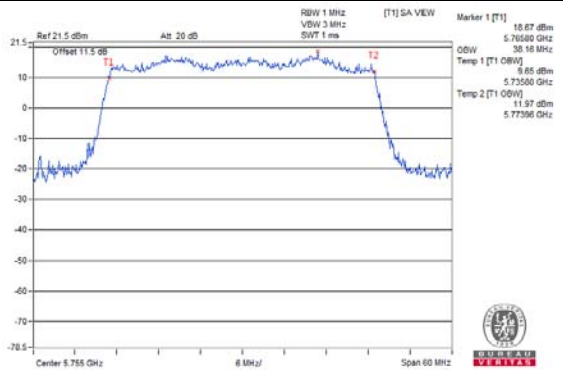


802.11ax (HE20) / Chain 3 / CH 149

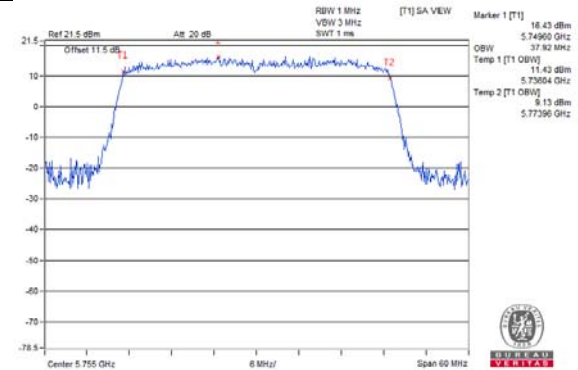


Spectrum Plot for near By DFS Band

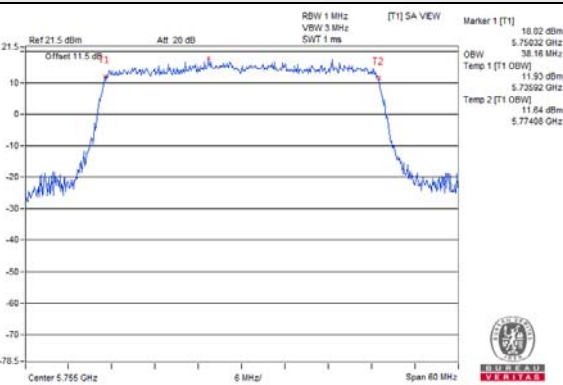
802.11ax (HE40) / Chain 0 / CH 151



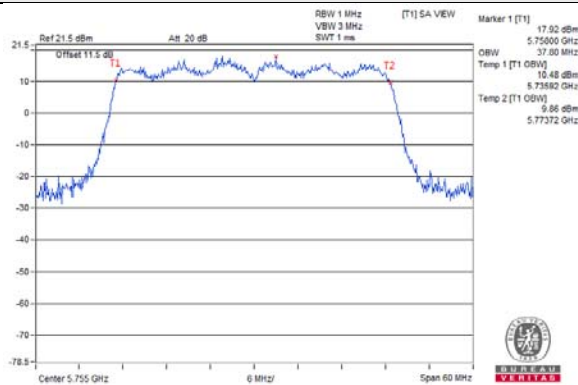
802.11ax (HE40) / Chain 1 / CH 151



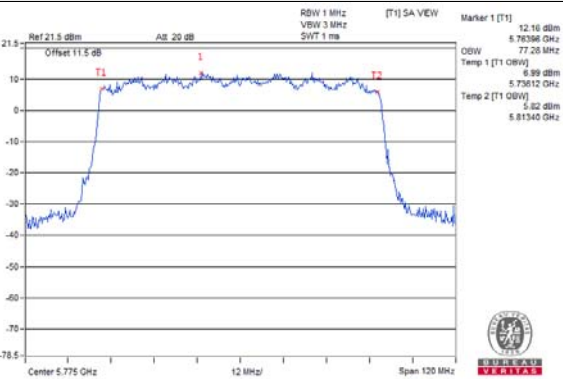
802.11ax (HE40) / Chain 2 / CH 151



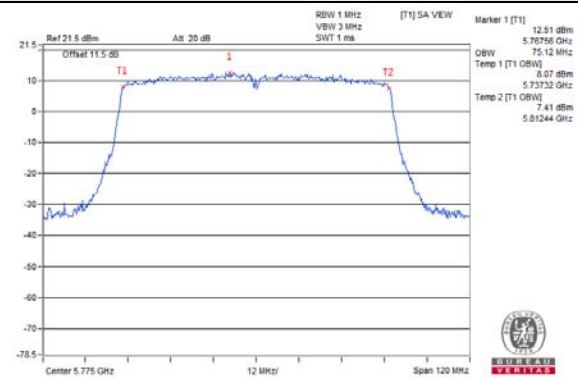
802.11ax (HE40) / Chain 3 / CH 151



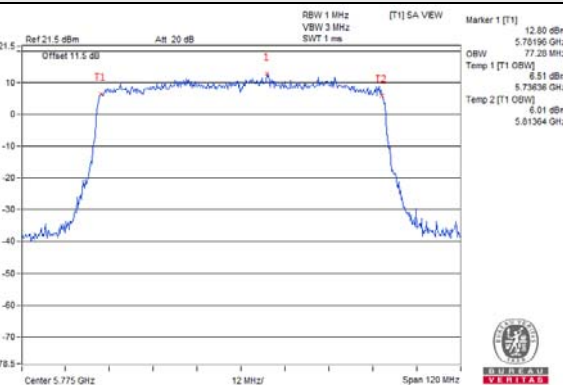
802.11ax (HE80) / Chain 0 / CH 155



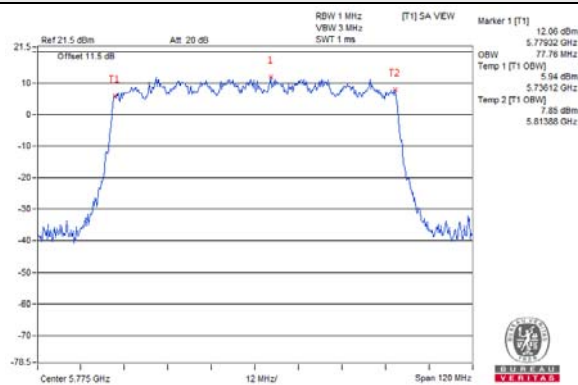
802.11ax (HE80) / Chain 1 / CH 155



802.11ax (HE80) / Chain 2 / CH 155



802.11ax (HE80) / Chain 3 / CH 155



Test Mode A

5G traffic radio: Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	18.84	18.96	18.96	18.96
40	5200	19.08	19.08	18.96	18.96
48	5240	18.84	19.08	18.84	18.96

802.11ax (HE40)

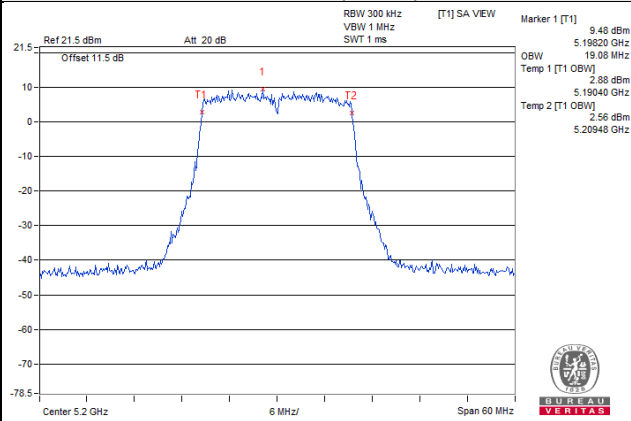
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	38.16	37.92	38.04	38.16
46	5230	38.04	38.04	38.16	37.80

802.11ax (HE80)

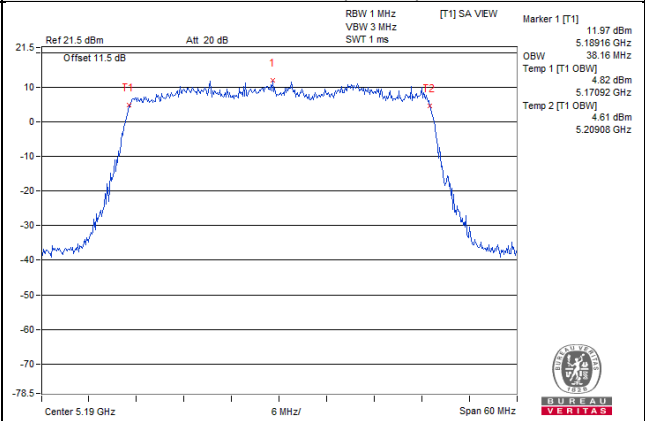
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.52	77.28	77.28	77.04

Spectrum Plot of Worst Value

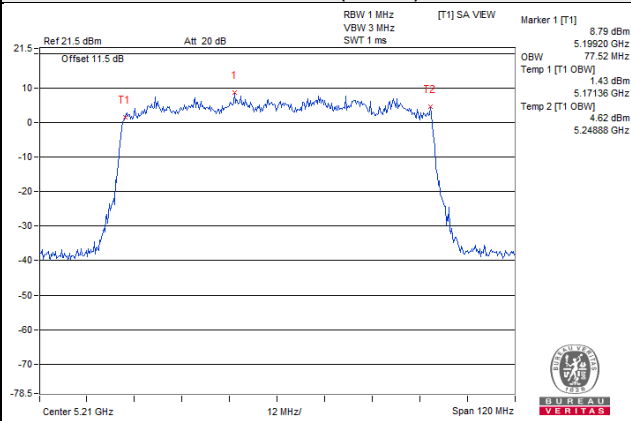
802.11ax (HE20)



802.11ax (HE40)

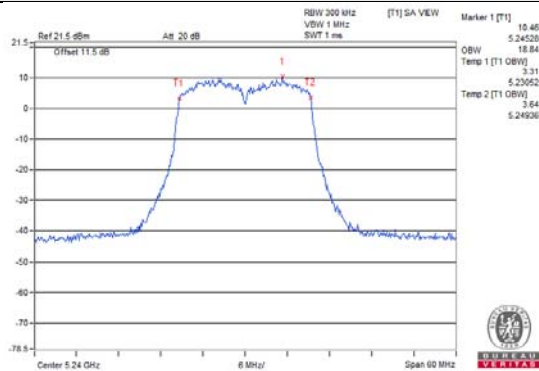


802.11ax (HE80)

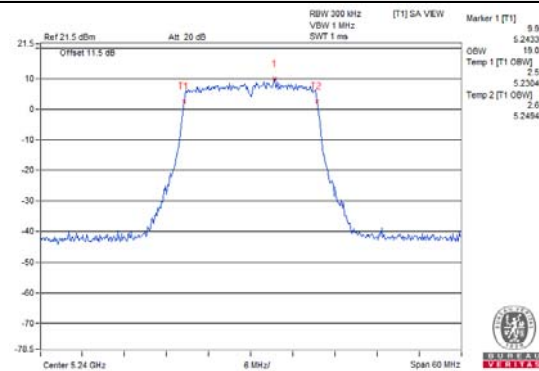


Spectrum Plot for near By DFS Band

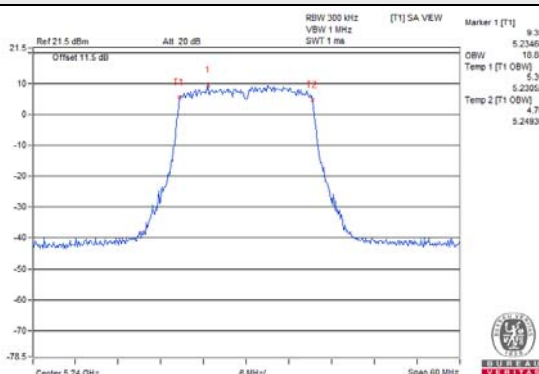
802.11ax (HE20) / Chain 0 / CH 48



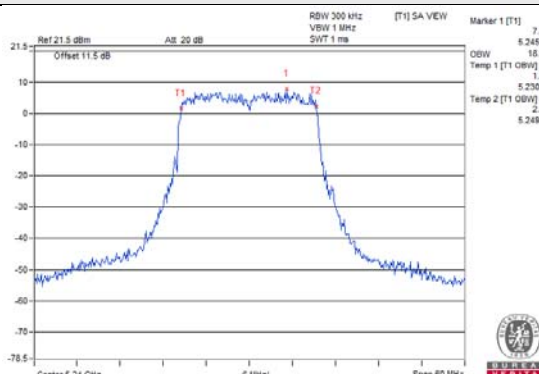
802.11ax (HE20) / Chain 1 / CH 48



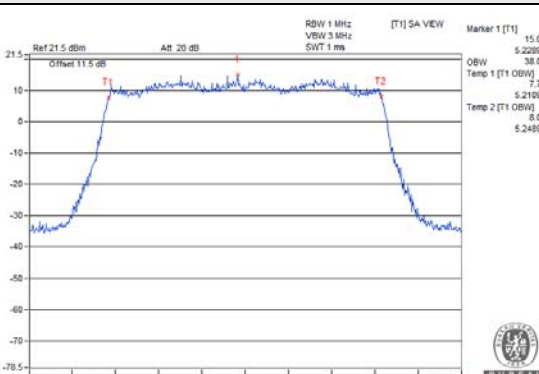
802.11ax (HE20) / Chain 2 / CH 48



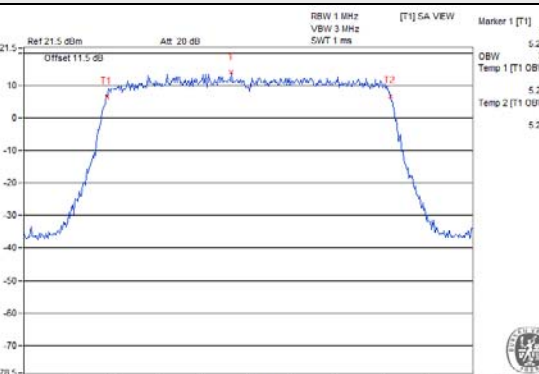
802.11ax (HE20) / Chain 3 / CH 48



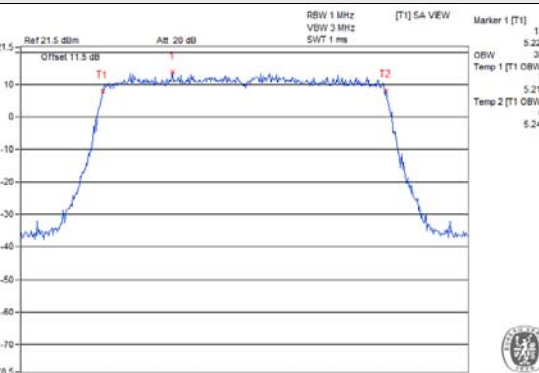
802.11ax (HE40) / Chain 0 / CH 46



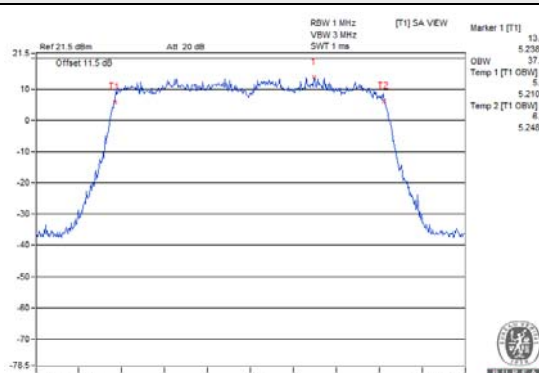
802.11ax (HE40) / Chain 1 / CH 46



802.11ax (HE40) / Chain 2 / CH 46

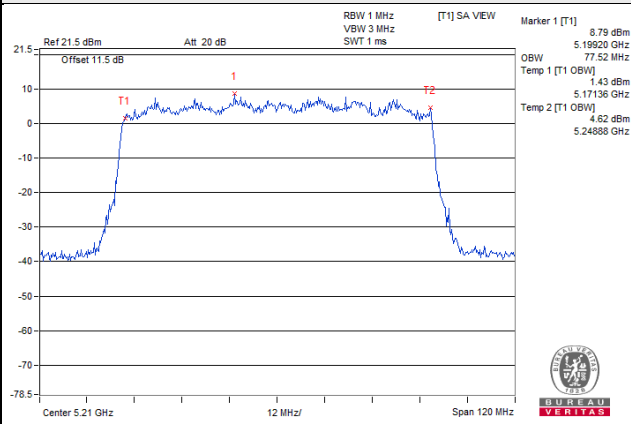


802.11ax (HE40) / Chain 3 / CH 46

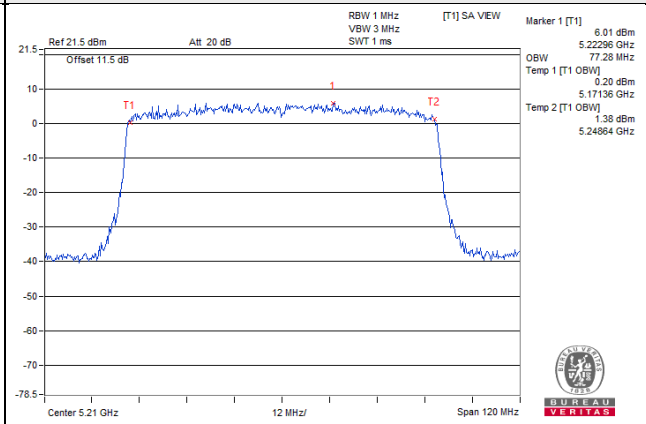


Spectrum Plot for near By DFS Band

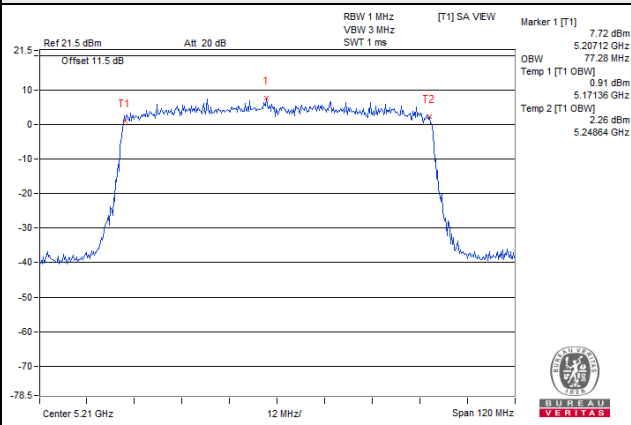
802.11ax (HE80) / Chain 0 / CH 42



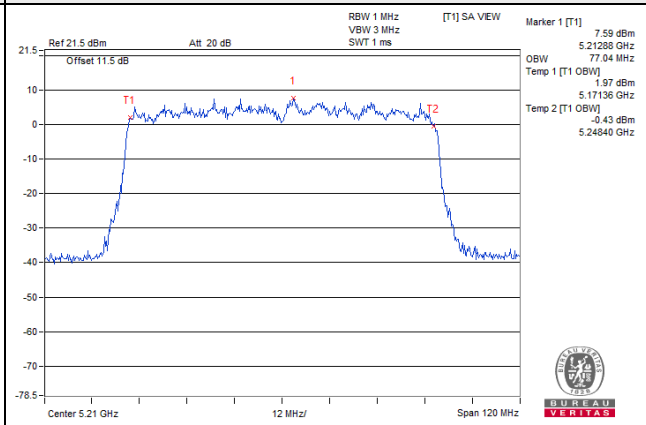
802.11ax (HE80) / Chain 1 / CH 42



802.11ax (HE80) / Chain 2 / CH 42



802.11ax (HE80) / Chain 3 / CH 42



802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	19.08	18.96	18.96	18.72
157	5785	18.96	19.08	19.08	18.84
165	5825	18.84	19.08	18.84	18.84

802.11ax (HE40)

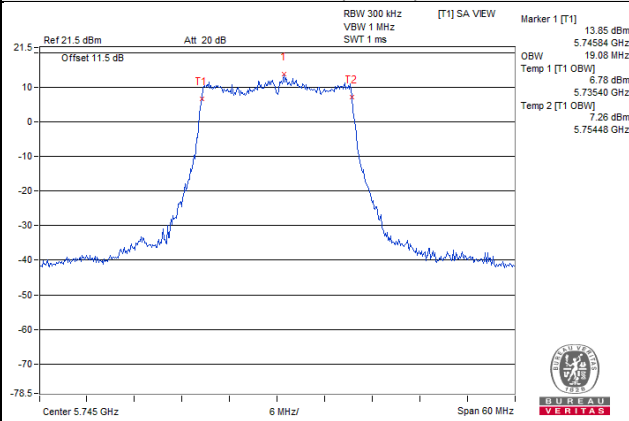
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	37.92	37.92	38.04	37.80
159	5795	37.92	37.92	38.16	37.92

802.11ax (HE80)

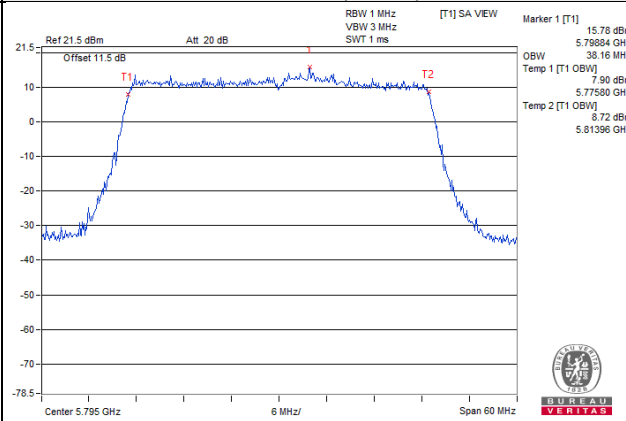
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.28	77.04	77.28	76.80

Spectrum Plot of Worst Value

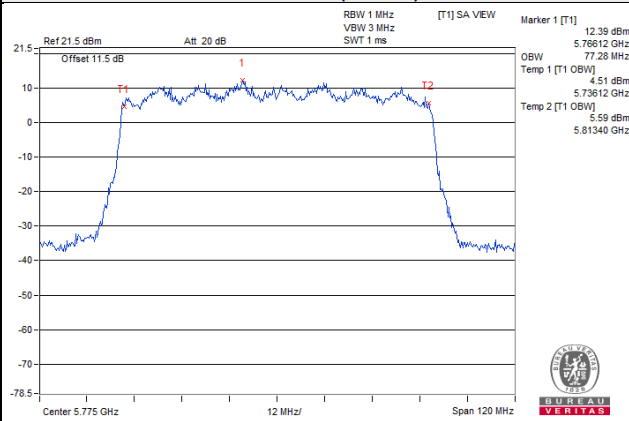
802.11ax (HE20)



802.11ax (HE40)

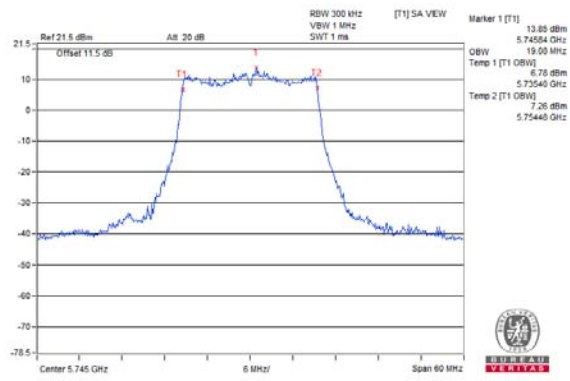


802.11ax (HE80)

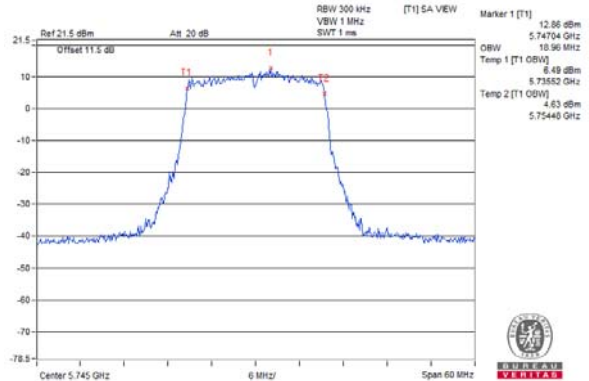


Spectrum Plot for near By DFS Band

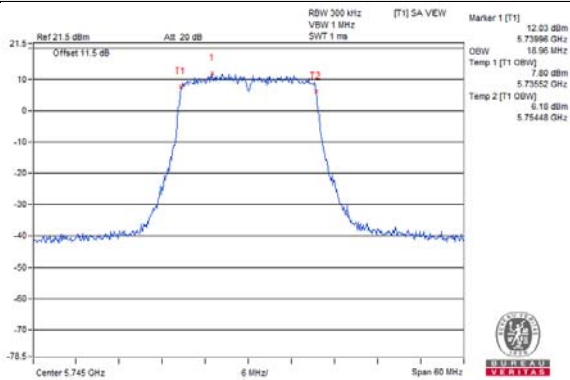
802.11ax (HE20) / Chain 0 / CH 149



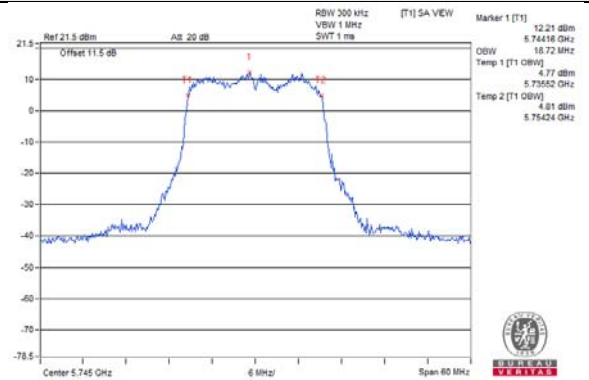
802.11ax (HE20) / Chain 1 / CH 149



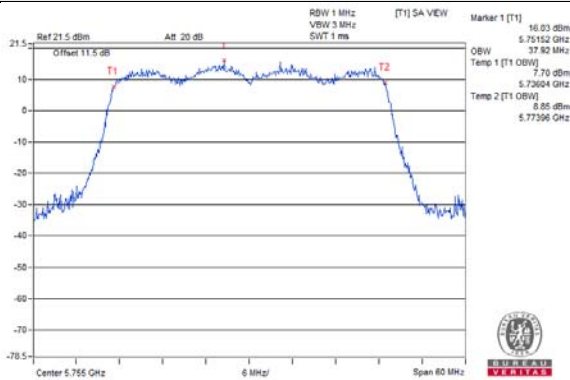
802.11ax (HE20) / Chain 2 / CH 149



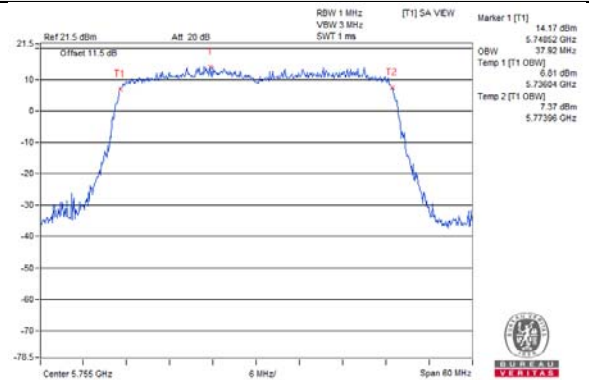
802.11ax (HE20) / Chain 3 / CH 149



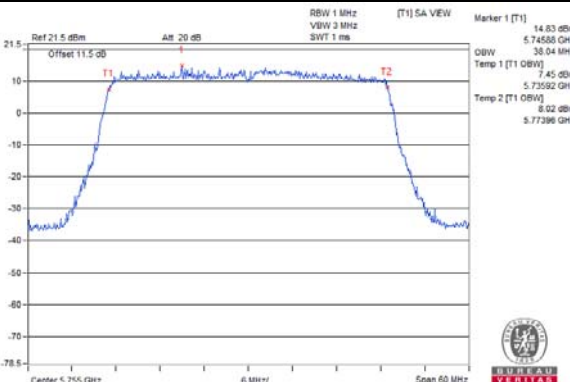
802.11ax (HE40) / Chain 0 / CH 151



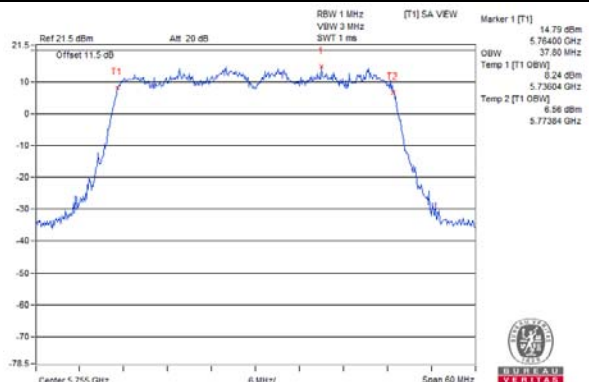
802.11ax (HE40) / Chain 1 / CH 151



802.11ax (HE40) / Chain 2 / CH 151

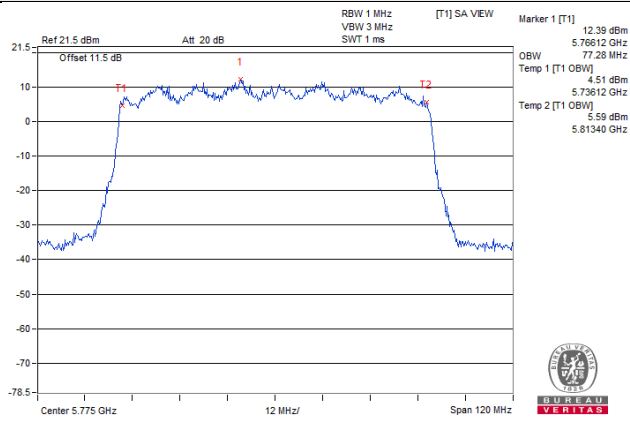


802.11ax (HE40) / Chain 3 / CH 151

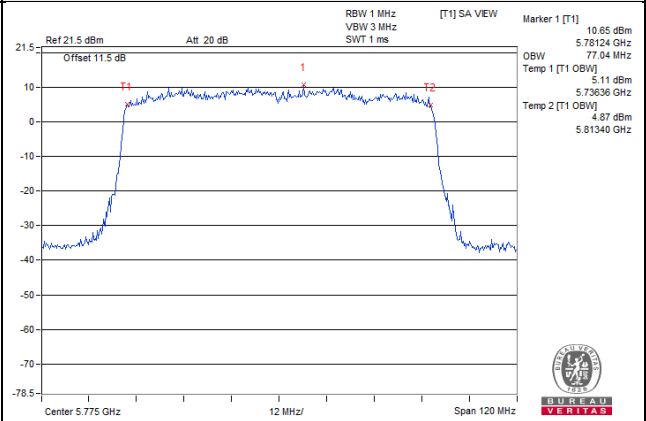


Spectrum Plot for near By DFS Band

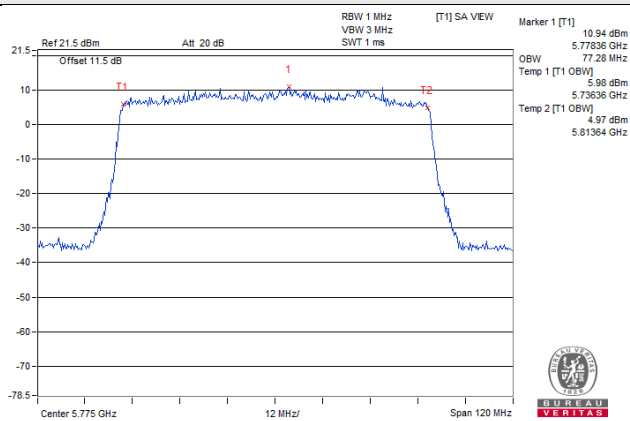
802.11ax (HE80) / Chain 0 / CH 155



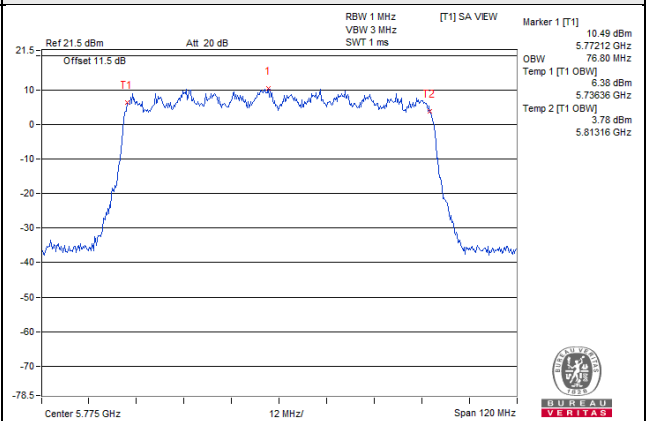
802.11ax (HE80) / Chain 1 / CH 155



802.11ax (HE80) / Chain 2 / CH 155



802.11ax (HE80) / Chain 3 / CH 155



Test Mode A

Scanning radio: CDD Mode

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.04
40	5200	17.04
48	5240	17.04

802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
40	5200	18.12
48	5240	18.24

802.11n (HT40)

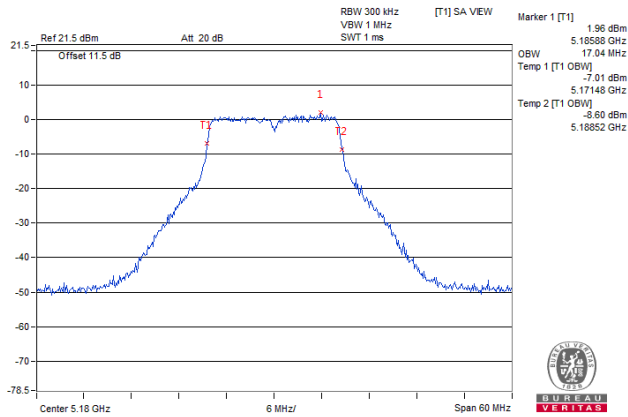
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	37.08
46	5230	37.32

802.11ac (VHT80)

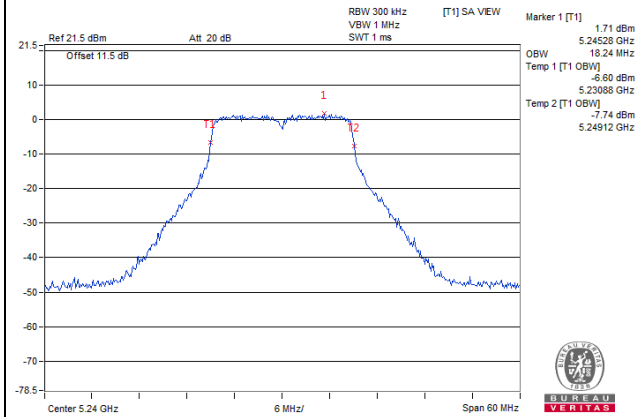
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	76.32

Spectrum Plot of Worst Value

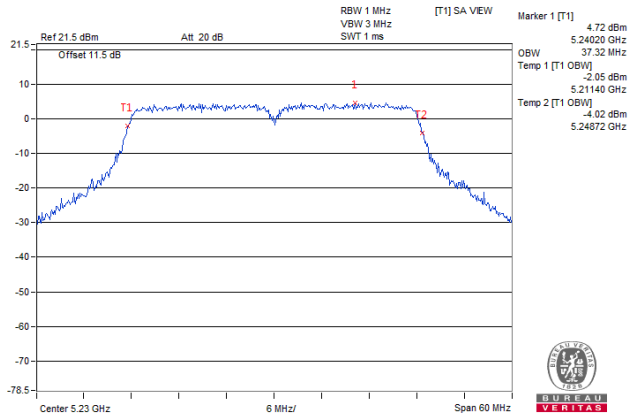
802.11a



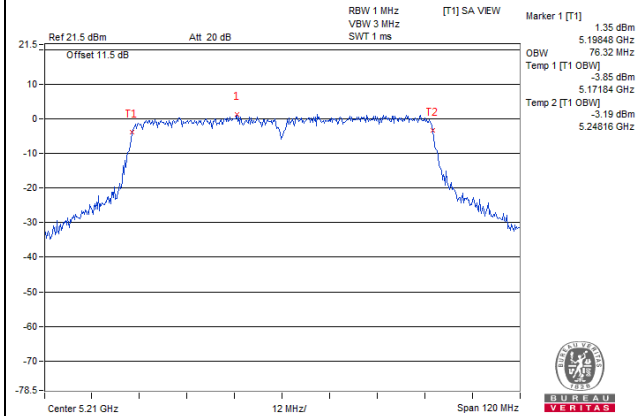
802.11n (HT20)



802.11n (HT40)

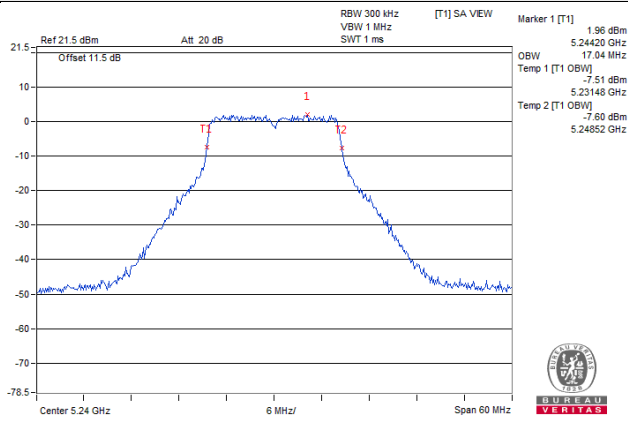


802.11ac (VHT80)

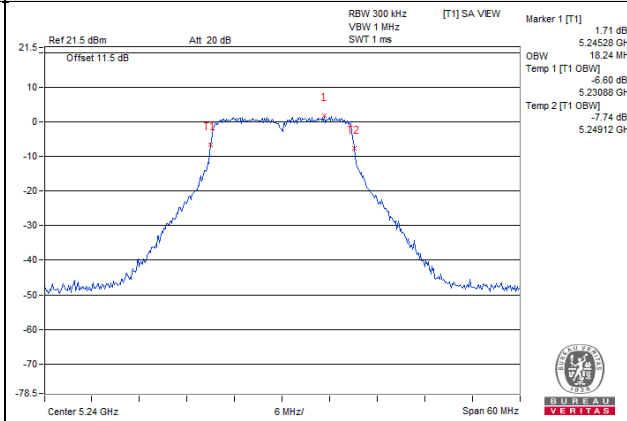


Spectrum Plot for near By DFS Band

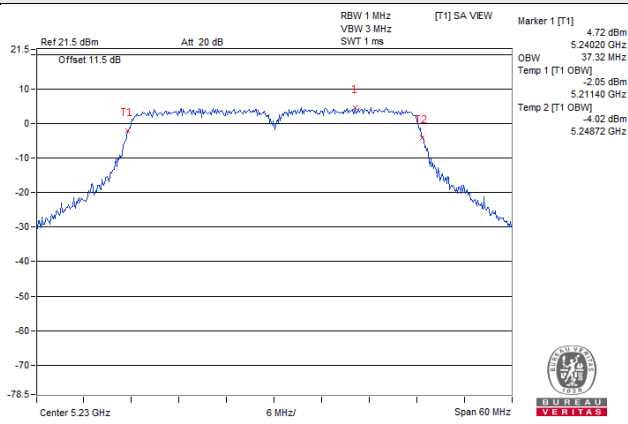
802.11a / CH 48



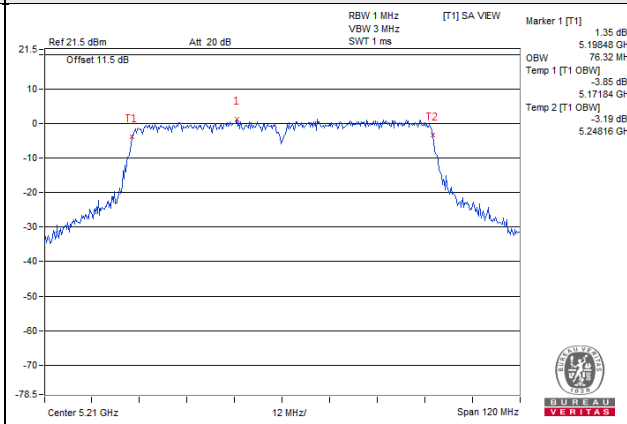
802.11n (HT20) / CH 48



802.11n (HT40) / CH 46



802.11ac (VHT80) / CH 42



802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
149	5745	17.04
157	5785	17.04
165	5825	17.16

802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
149	5745	18.12
157	5785	18.12
165	5825	18.12

802.11n (HT40)

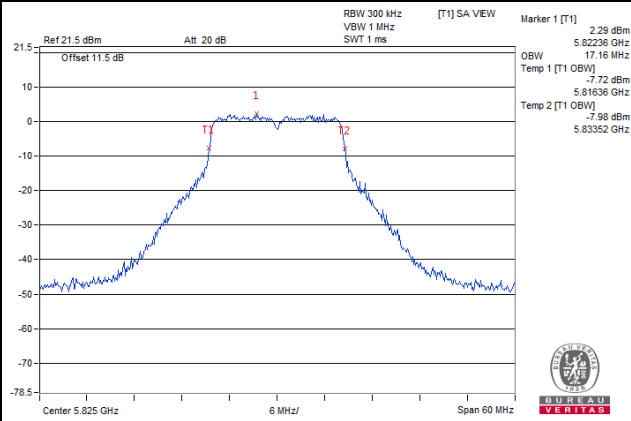
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
151	5755	37.20
159	5795	37.32

802.11ac (VHT80)

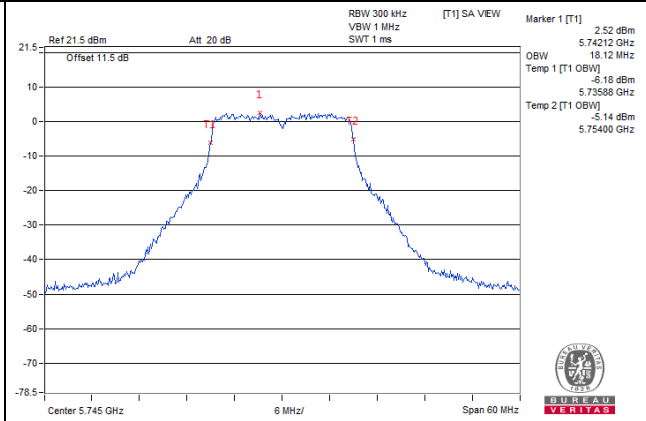
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
155	5775	76.56

Spectrum Plot of Worst Value

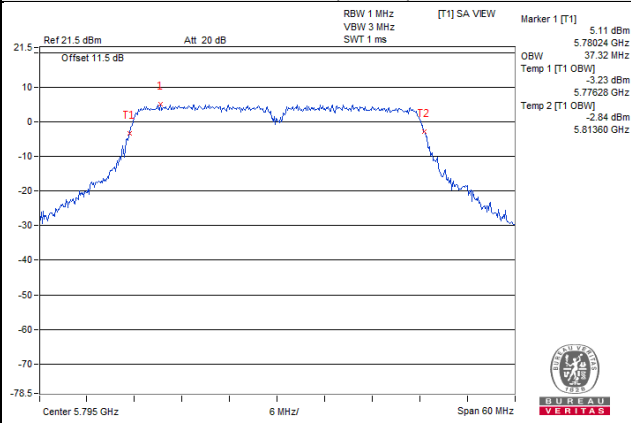
802.11a



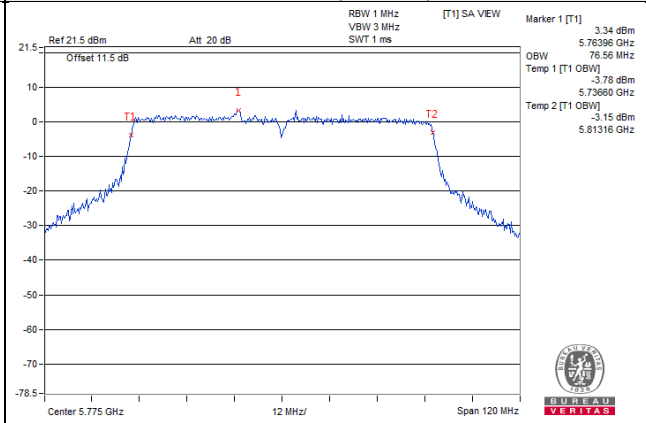
802.11n (HT20)



802.11n (HT40)

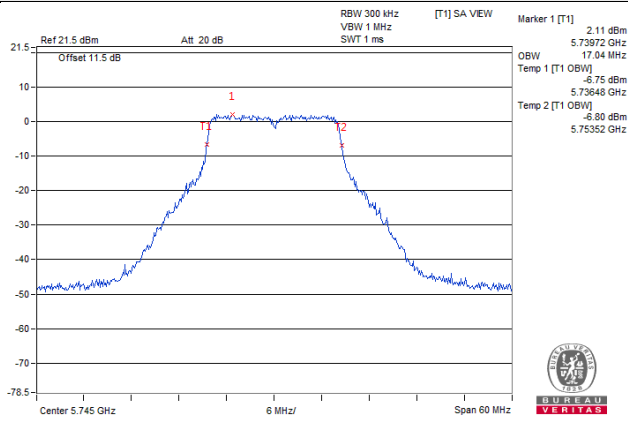


802.11ac (VHT80)

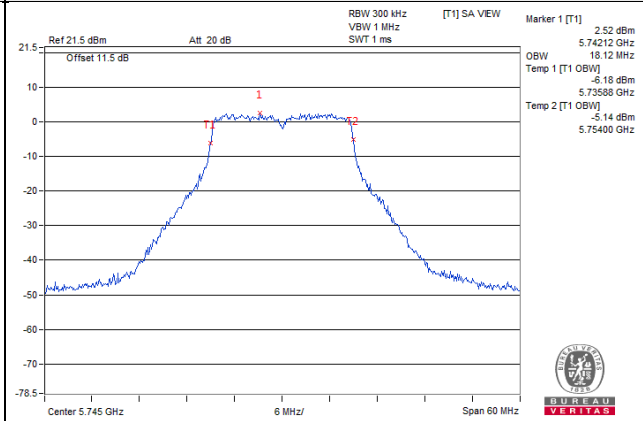


Spectrum Plot for near By DFS Band

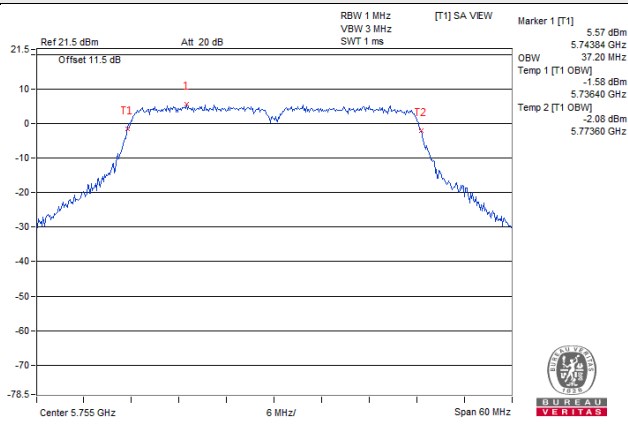
802.11a / CH 149



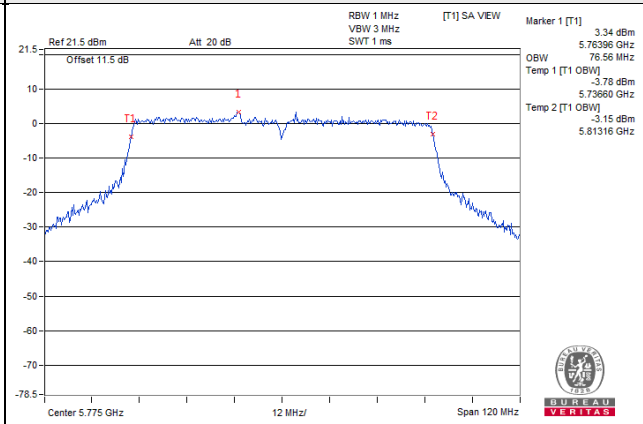
802.11n (HT20) / CH 149



802.11n (HT40) / CH 151



802.11ac (VHT80) / CH 155



Test Mode C

5G traffic radio: CDD Mode

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	16.56	16.44	16.44	16.44
40	5200	16.56	16.44	16.44	16.44
48	5240	16.56	16.44	16.44	16.32

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	18.84	18.96	19.08	18.84
40	5200	19.08	19.08	19.08	19.08
48	5240	18.84	18.96	18.96	19.08

802.11ax (HE40)

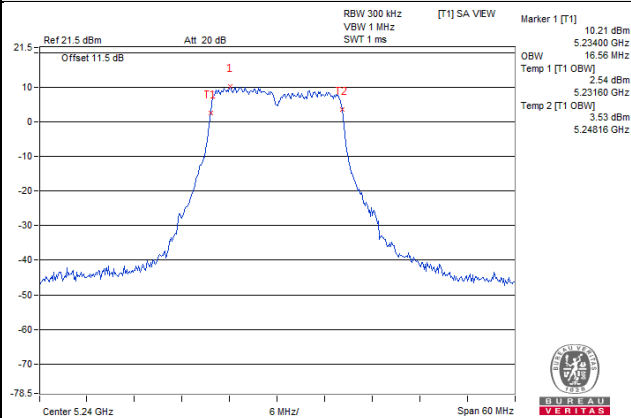
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	37.92	37.92	38.04	37.92
46	5230	38.04	38.04	37.92	38.04

802.11ax (HE80)

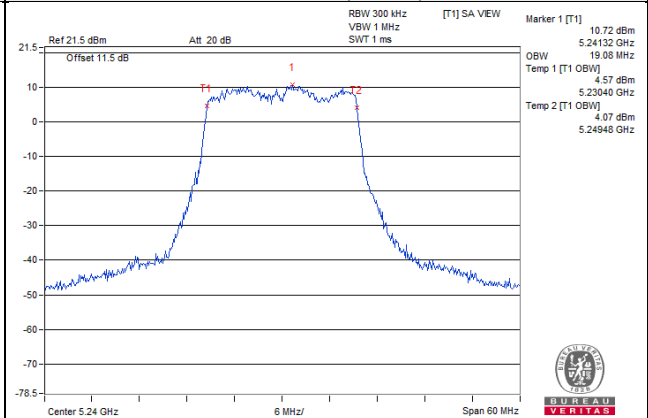
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.52	77.28	77.28	77.28

Spectrum Plot of Worst Value

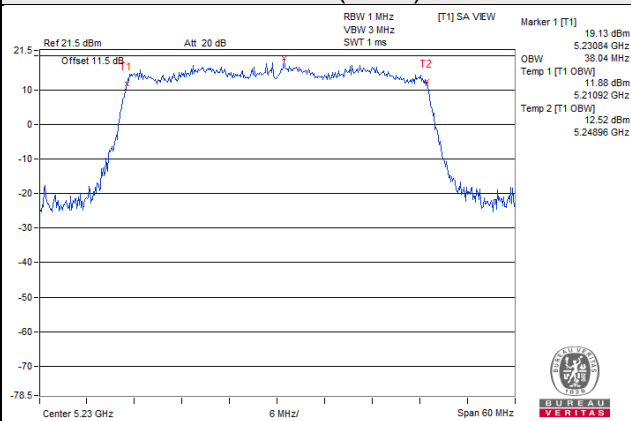
802.11a



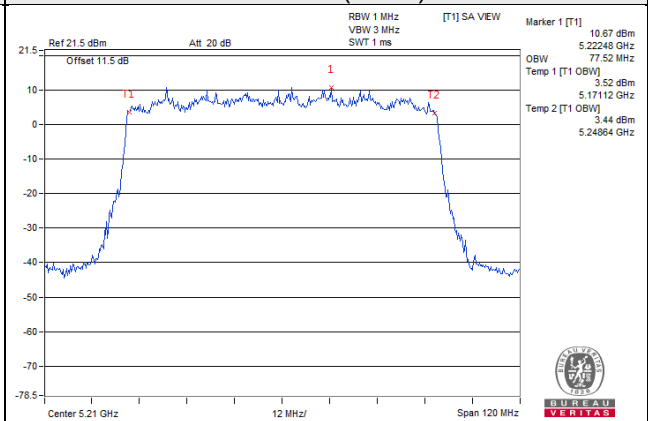
802.11ax (HE20)



802.11ax (HE40)

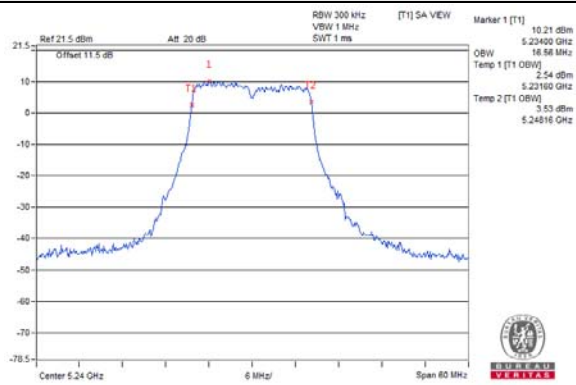


802.11ax (HE80)

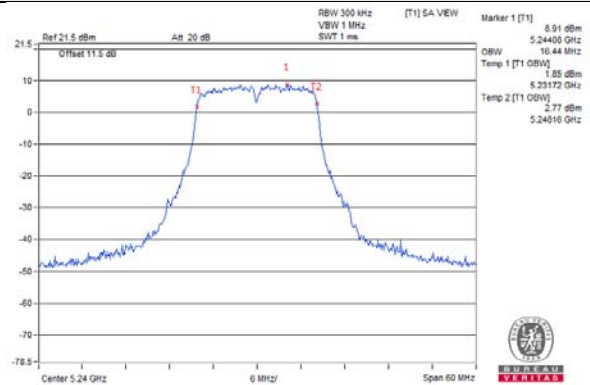


Spectrum Plot for near By DFS Band

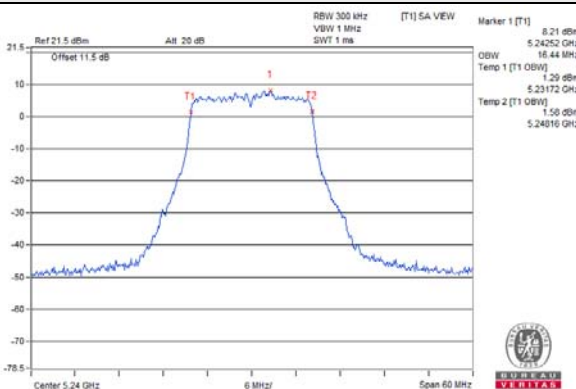
802.11a / Chain 0 / CH 48



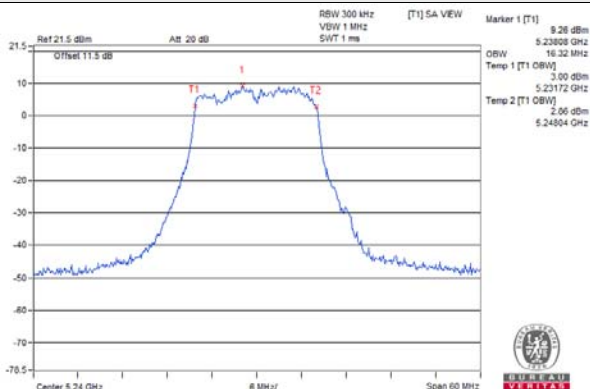
802.11a / Chain 1 / CH 48



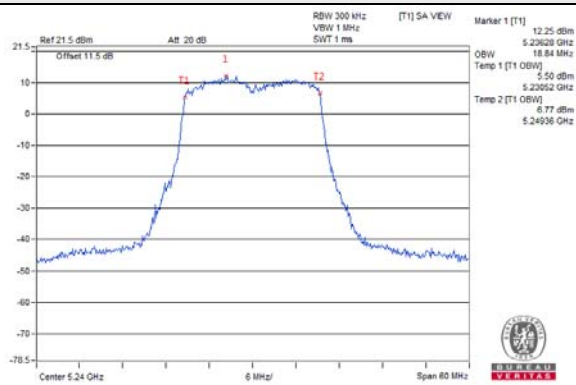
802.11a / Chain 2 / CH 48



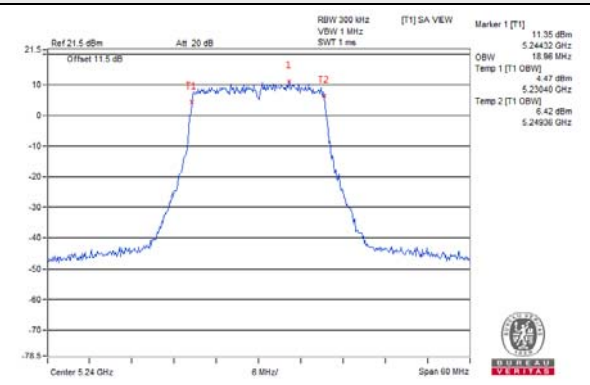
802.11a / Chain 3 / CH 48



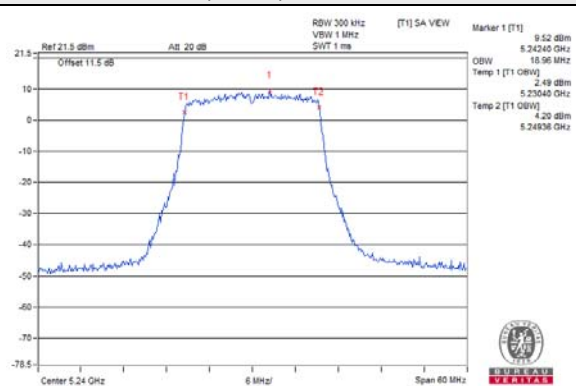
802.11ax (HE20) / Chain 0 / CH 48



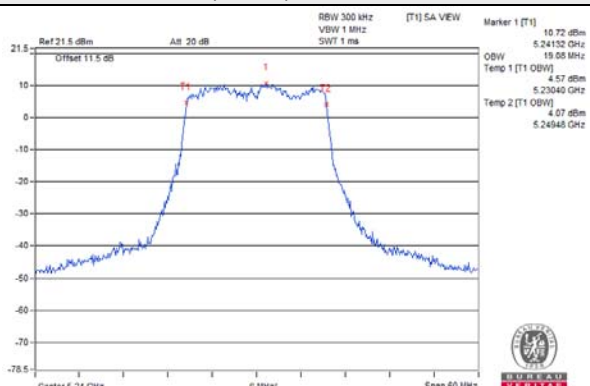
802.11ax (HE20) / Chain 1 / CH 48



802.11ax (HE20) / Chain 2 / CH 48

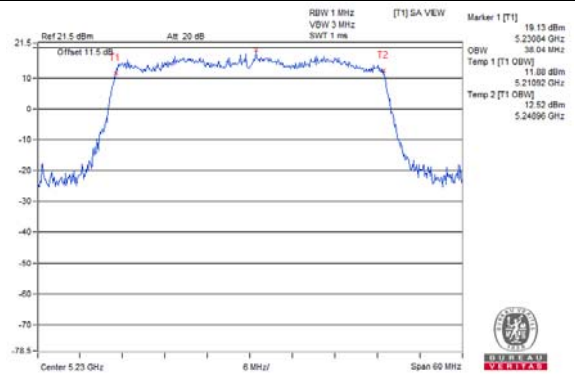


802.11ax (HE20) / Chain 3 / CH 48

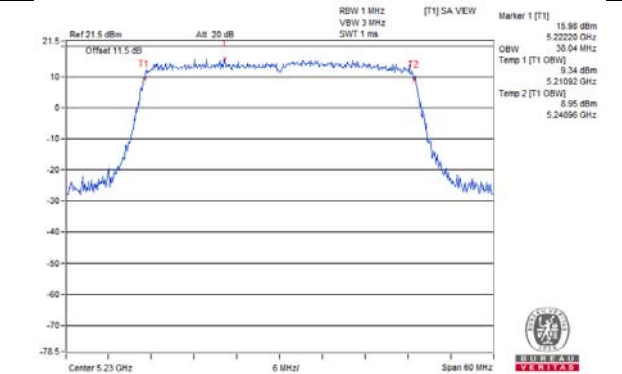


Spectrum Plot for near By DFS Band

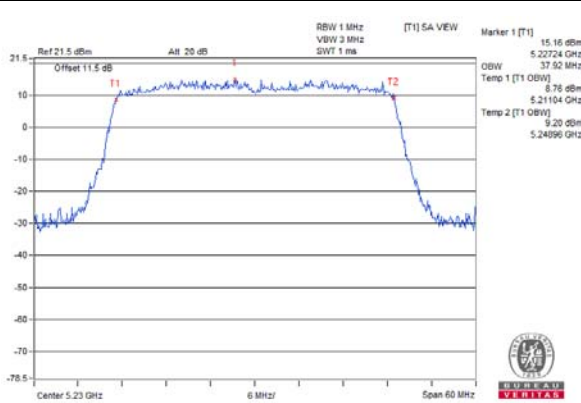
802.11ax (HE40) / Chain 0 / CH 46



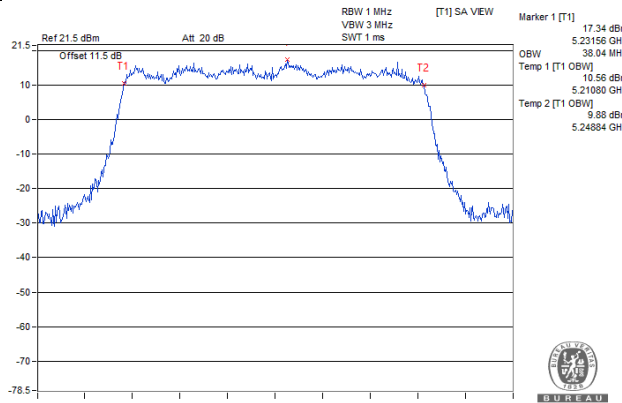
802.11ax (HE40) / Chain 1 / CH 46



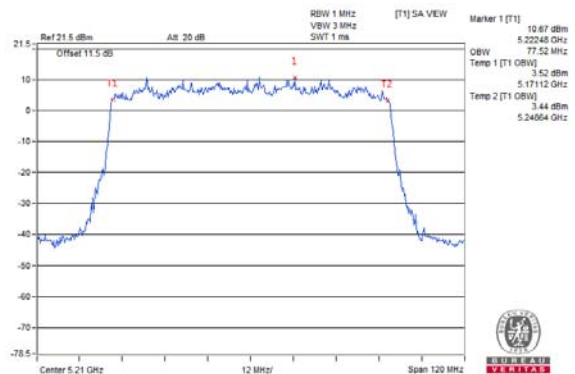
802.11ax (HE40) / Chain 2 / CH 46



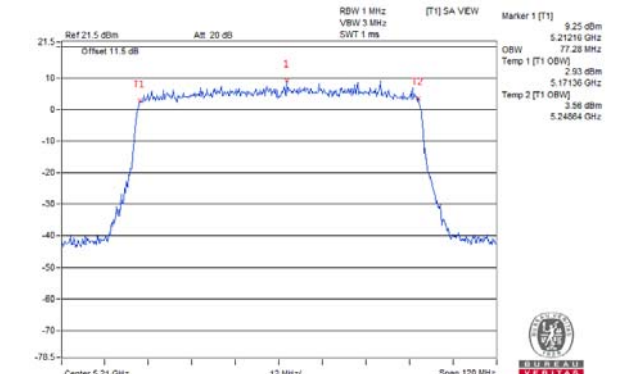
802.11ax (HE40) / Chain 3 / CH 46



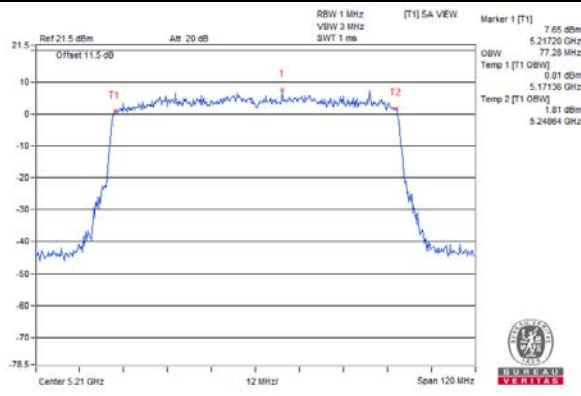
802.11ax (HE80) / Chain 0 / CH 42



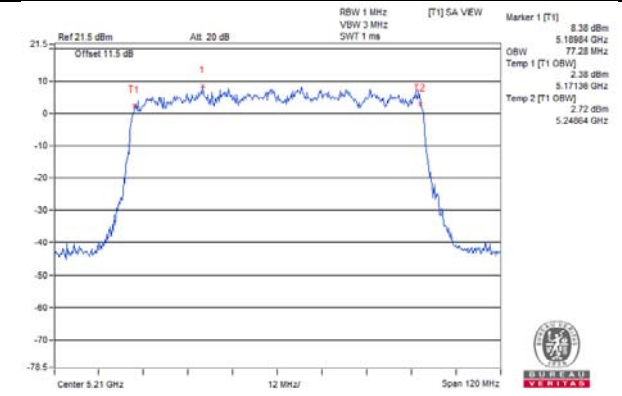
802.11ax (HE80) / Chain 1 / CH 42



802.11ax (HE80) / Chain 2 / CH 42



802.11ax (HE80) / Chain 3 / CH 42



802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	17.76	16.92	16.52	16.68
157	5785	18.12	17.16	16.56	16.56
165	5825	19.44	17.04	16.56	16.56

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	19.44	19.08	18.84	18.96
157	5785	19.32	19.08	18.96	18.96
165	5825	19.32	19.08	18.96	18.96

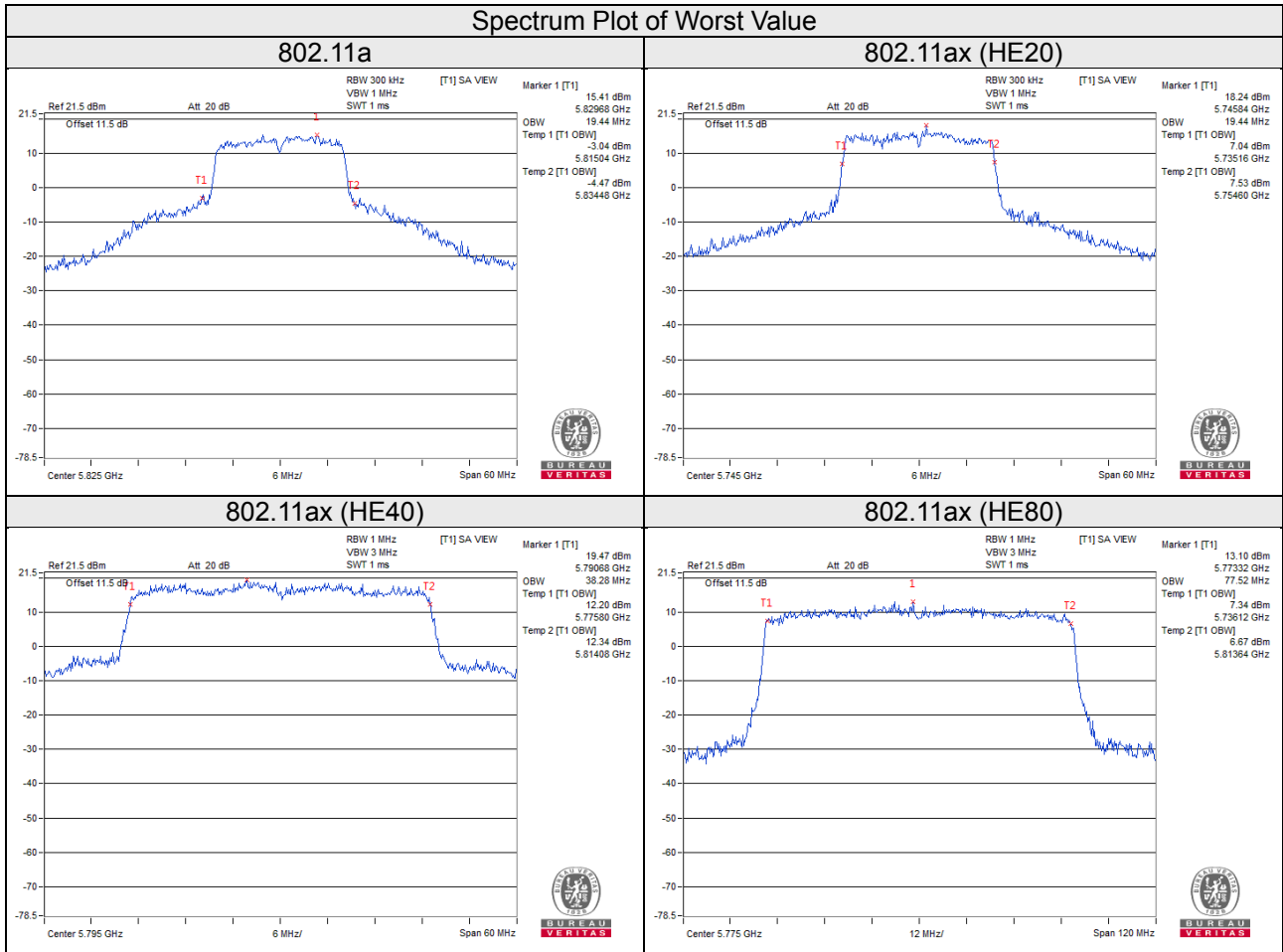
802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	38.04	38.04	37.92	37.80
159	5795	38.28	38.04	38.16	37.92

802.11ax (HE80)

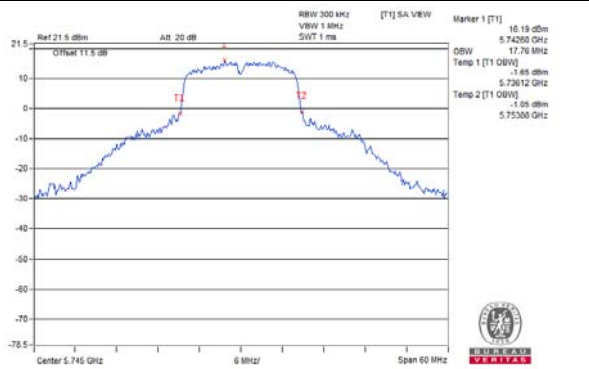
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.04	77.52	77.28	76.80

Spectrum Plot of Worst Value

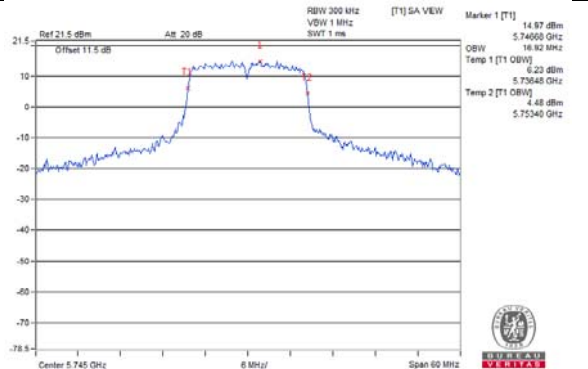


Spectrum Plot for near By DFS Band

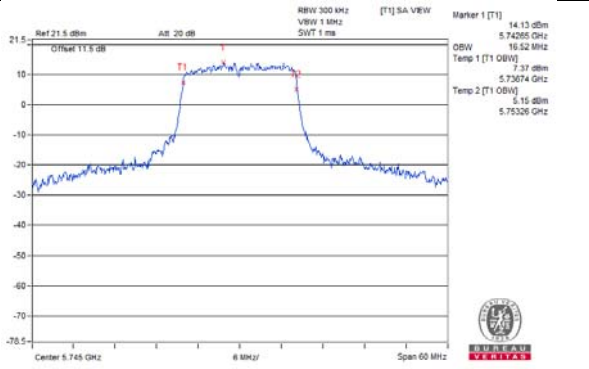
802.11a / Chain 0 / CH 149



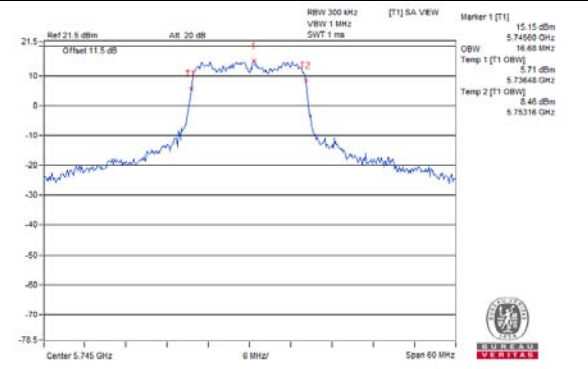
802.11a / Chain 1 / CH 149



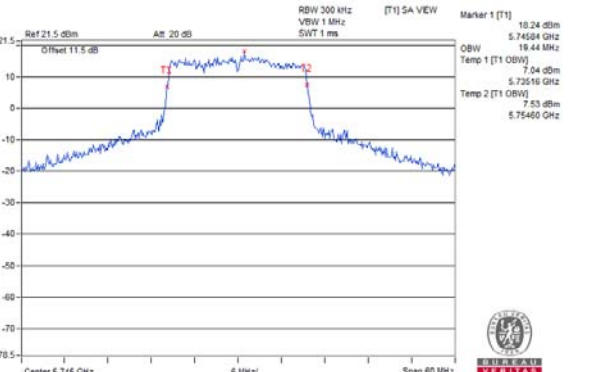
802.11a / Chain 2 / CH 149



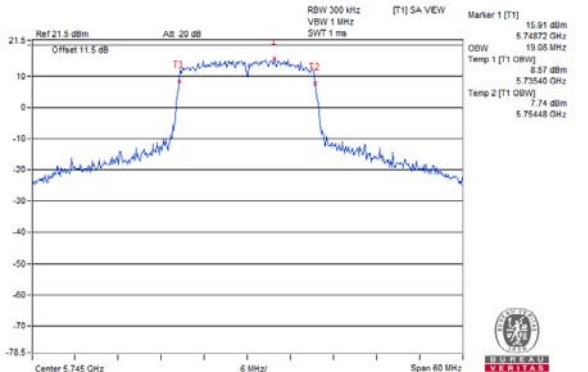
802.11a / Chain 3 / CH 149



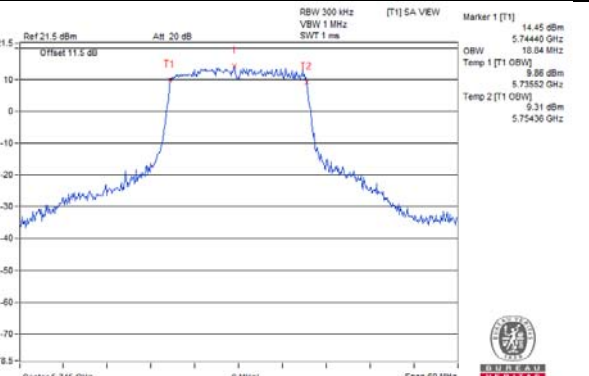
802.11ax (HE20) / Chain 0 / CH 149



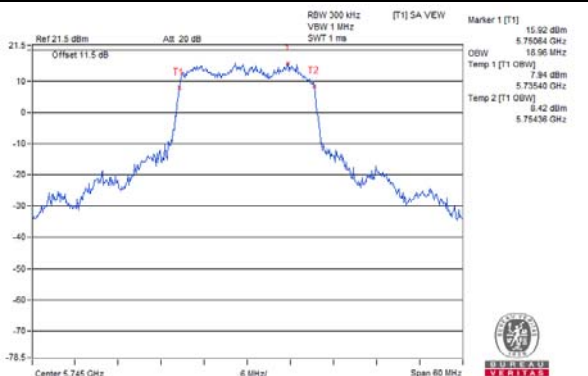
802.11ax (HE20) / Chain 1 / CH 149



802.11ax (HE20) / Chain 2 / CH 149

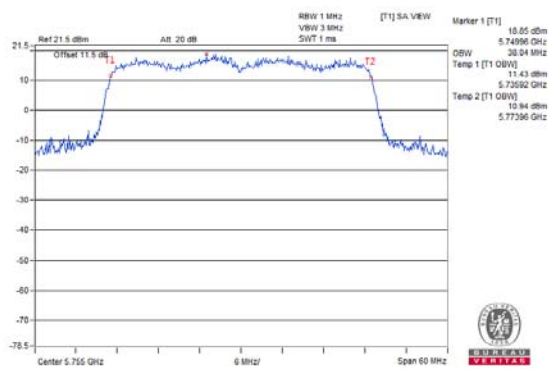


802.11ax (HE20) / Chain 3 / CH 149

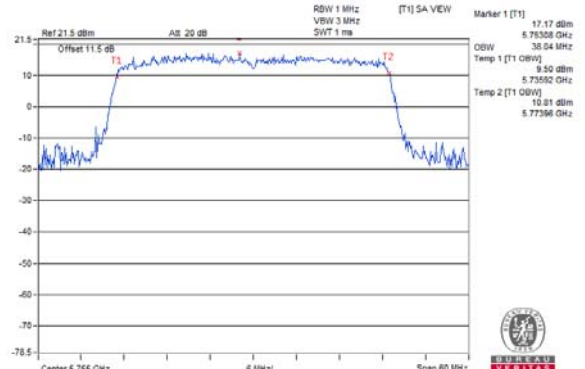


Spectrum Plot for near By DFS Band

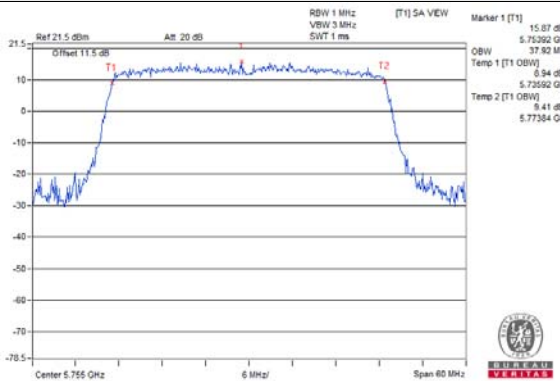
802.11ax (HE40) / Chain 0 / CH 151



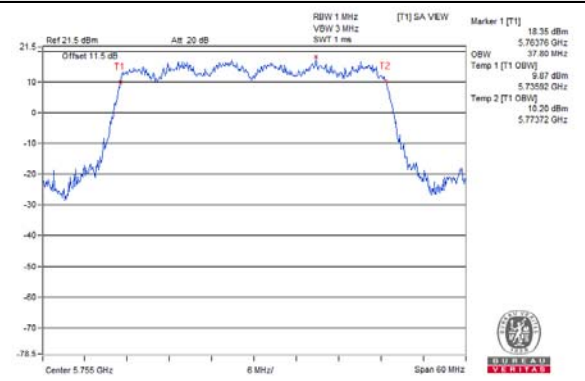
802.11ax (HE40) / Chain 1 / CH 151



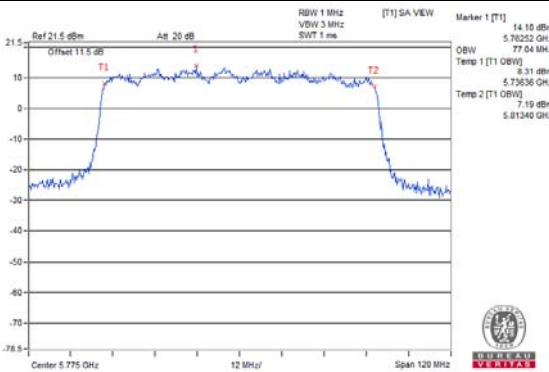
802.11ax (HE40) / Chain 2 / CH 151



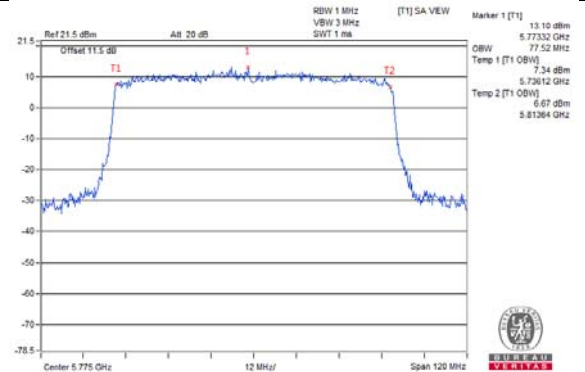
802.11ax (HE40) / Chain 3 / CH 151



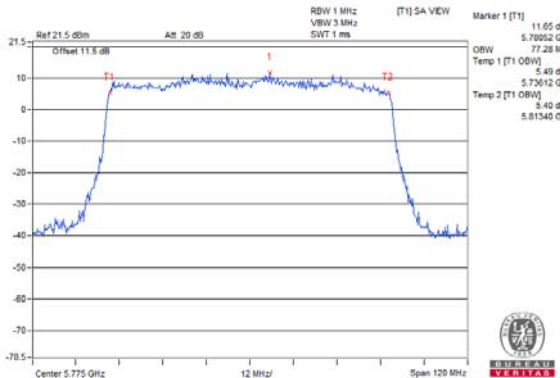
802.11ax (HE80) / Chain 0 / CH 155



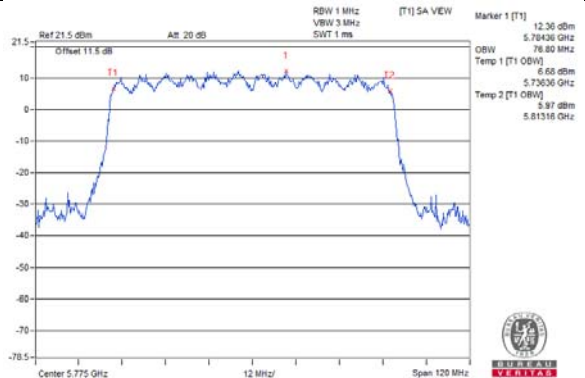
802.11ax (HE80) / Chain 1 / CH 155



802.11ax (HE80) / Chain 2 / CH 155



802.11ax (HE80) / Chain 3 / CH 155



Test Mode C

5G traffic radio: Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
36	5180	18.96	19.08	18.96	19.08
40	5200	18.96	18.84	19.08	18.84
48	5240	18.96	19.08	18.84	19.08

802.11ax (HE40)

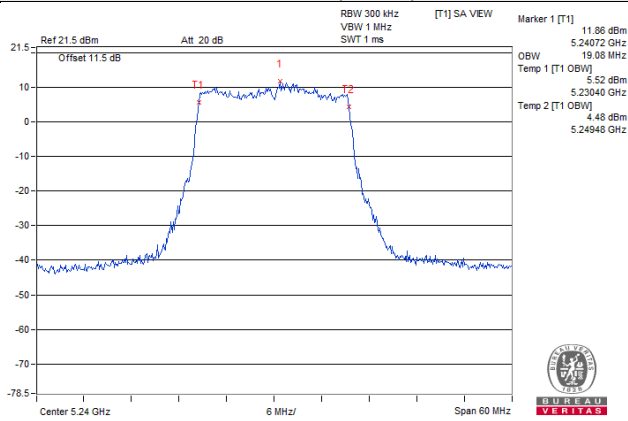
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
38	5190	38.04	38.04	37.92	38.16
46	5230	38.04	37.92	38.04	37.92

802.11ax (HE80)

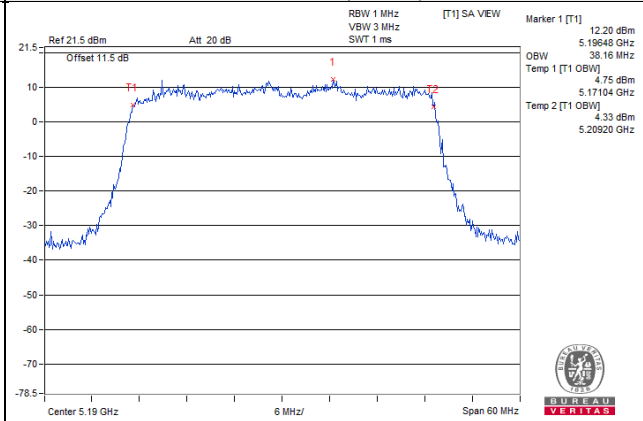
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
42	5210	77.28	77.28	77.04	77.28

Spectrum Plot of Worst Value

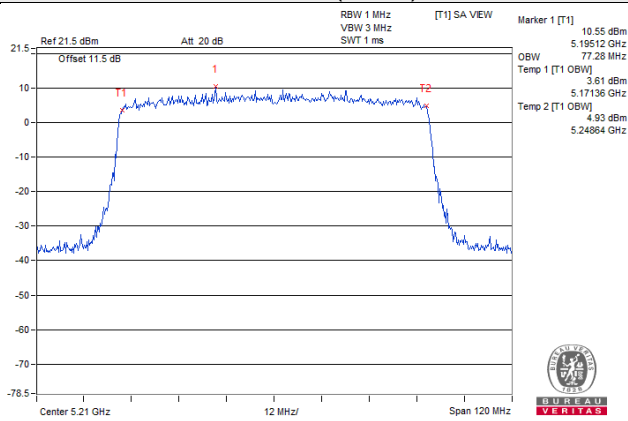
802.11ax (HE20)



802.11ax (HE40)

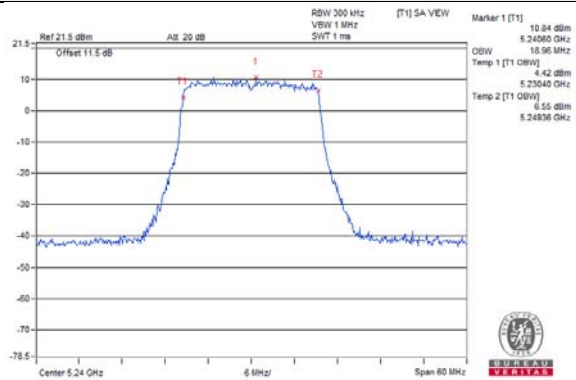


802.11ax (HE80)

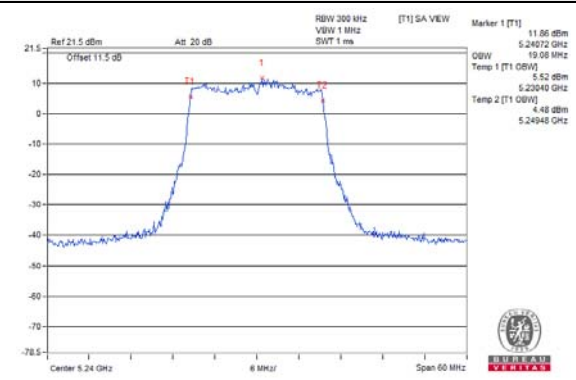


Spectrum Plot for near By DFS Band

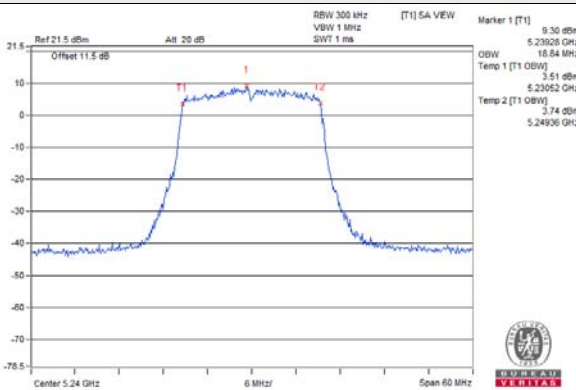
802.11ax (HE20) / Chain 0 / CH 48



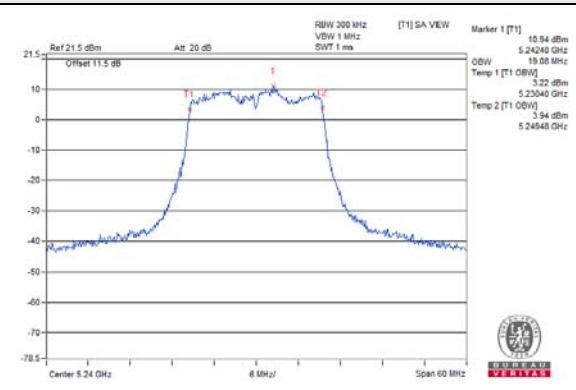
802.11ax (HE20) / Chain 1 / CH 48



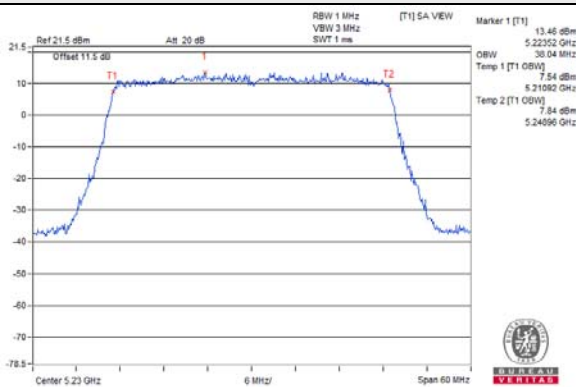
802.11ax (HE20) / Chain 2 / CH 48



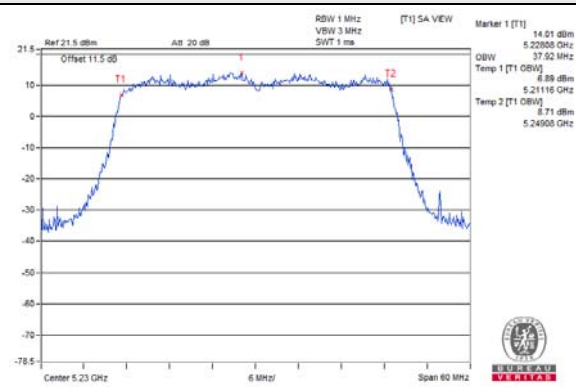
802.11ax (HE20) / Chain 3 / CH 48



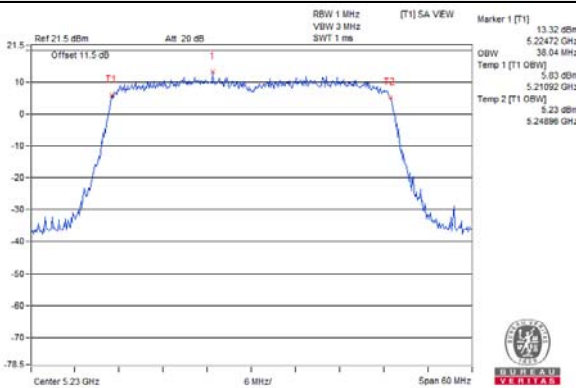
802.11ax (HE40) / Chain 0 / CH 46



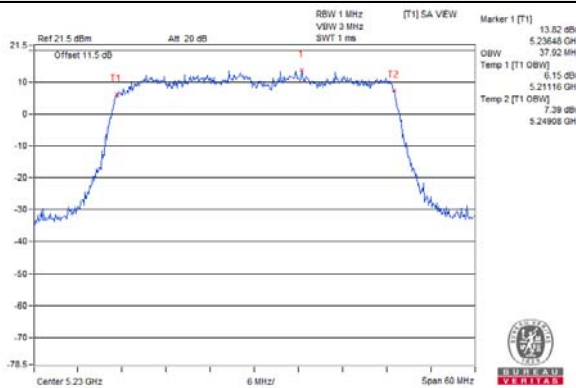
802.11ax (HE40) / Chain 1 / CH 46



802.11ax (HE40) / Chain 2 / CH 46

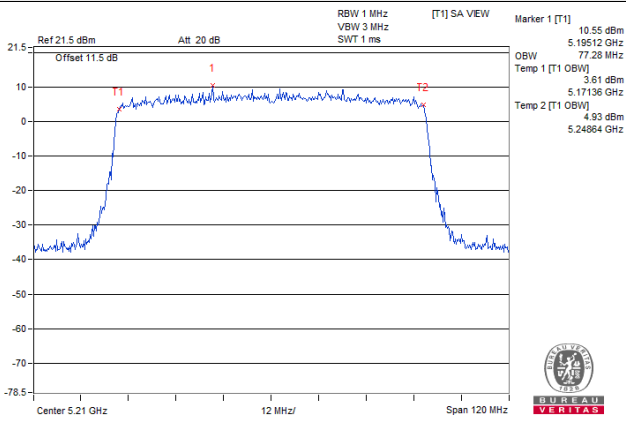


802.11ax (HE40) / Chain 3 / CH 46

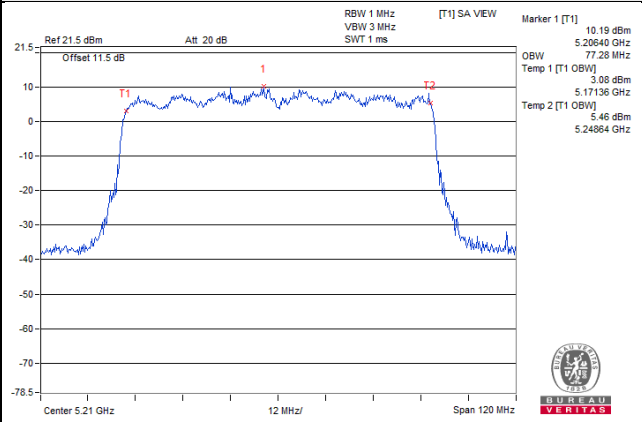


Spectrum Plot for near By DFS Band

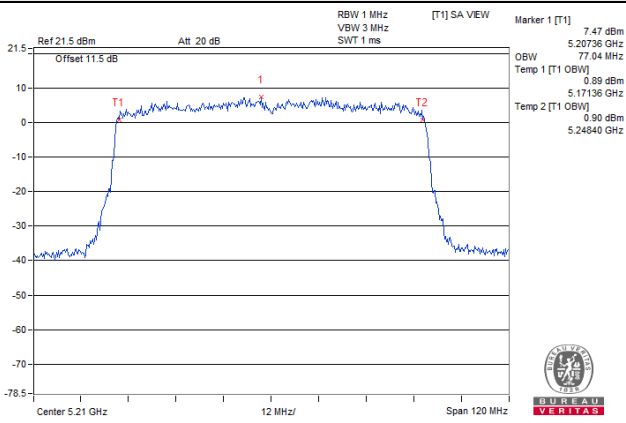
802.11ax (HE80) / Chain 0 / CH 42



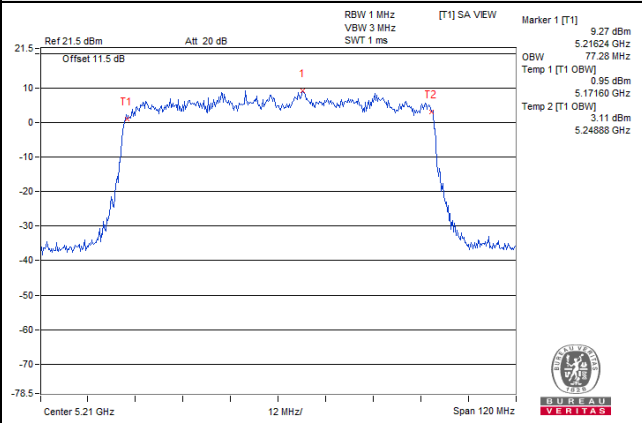
802.11ax (HE80) / Chain 1 / CH 42



802.11ax (HE80) / Chain 2 / CH 42



802.11ax (HE80) / Chain 3 / CH 42



802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
149	5745	19.08	19.08	18.96	19.08
157	5785	18.96	18.84	18.96	18.96
165	5825	18.96	18.96	18.96	19.08

802.11ax (HE40)

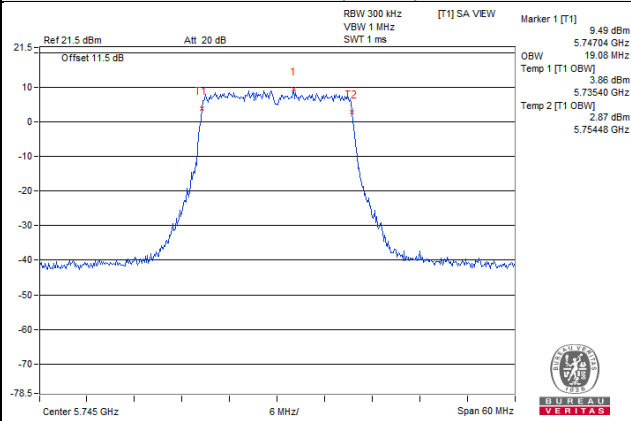
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
151	5755	38.04	37.92	37.92	37.80
159	5795	38.04	37.92	38.16	37.80

802.11ax (HE80)

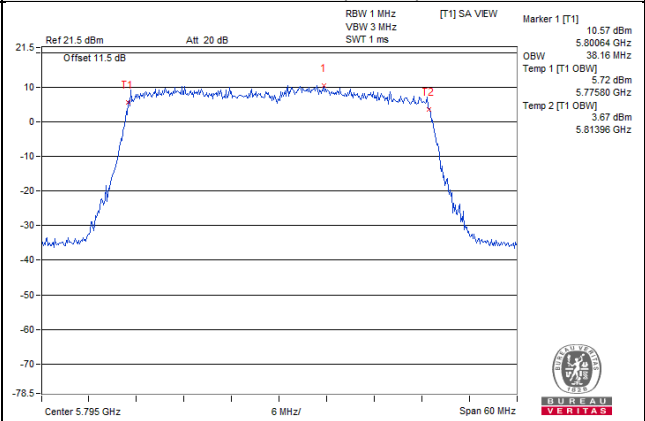
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
155	5775	77.28	77.28	77.28	76.80

Spectrum Plot of Worst Value

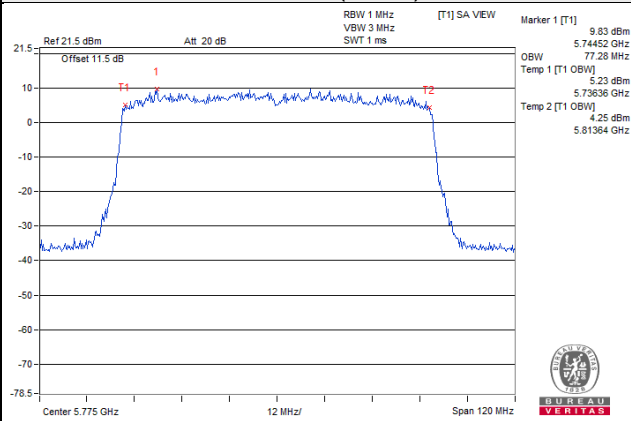
802.11ax (HE20)



802.11ax (HE40)

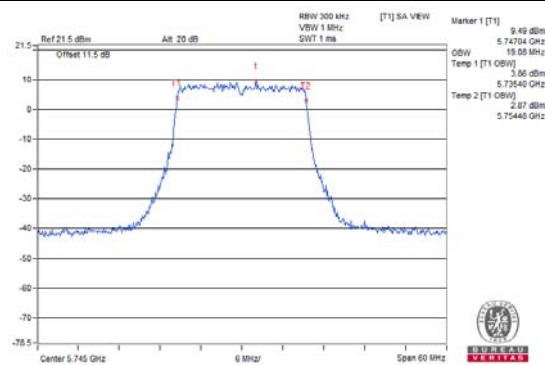


802.11ax (HE80)

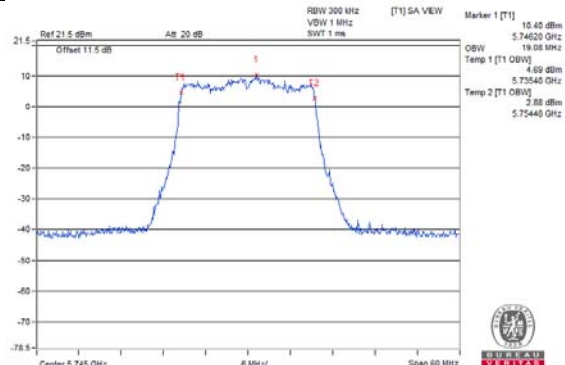


Spectrum Plot for near By DFS Band

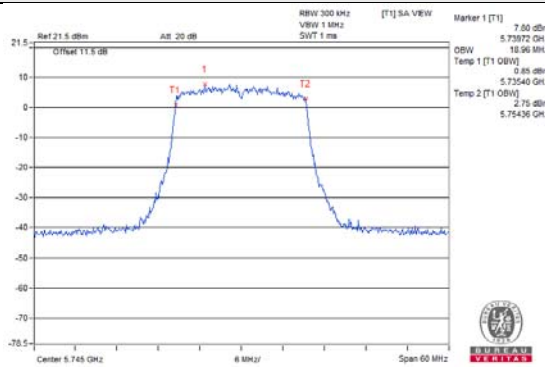
802.11ax (HE20) / Chain 0 / CH 149



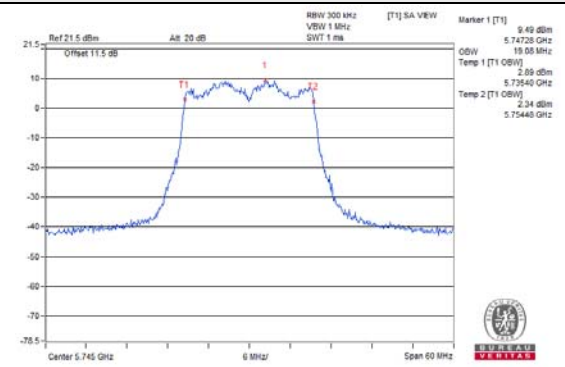
802.11ax (HE20) / Chain 1 / CH 149



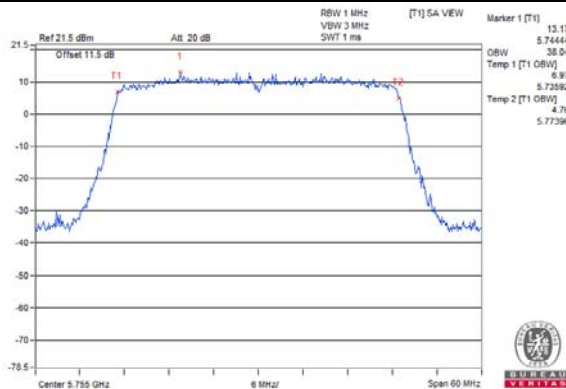
802.11ax (HE20) / Chain 2 / CH 149



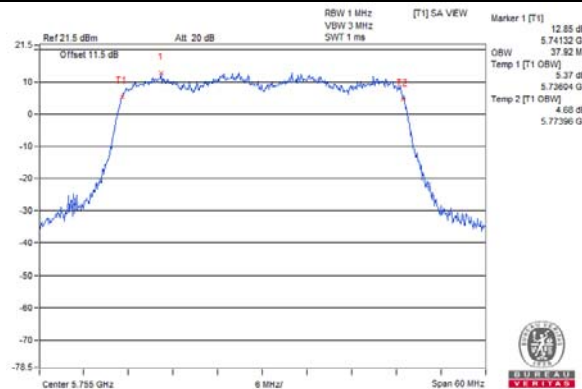
802.11ax (HE20) / Chain 3 / CH 149



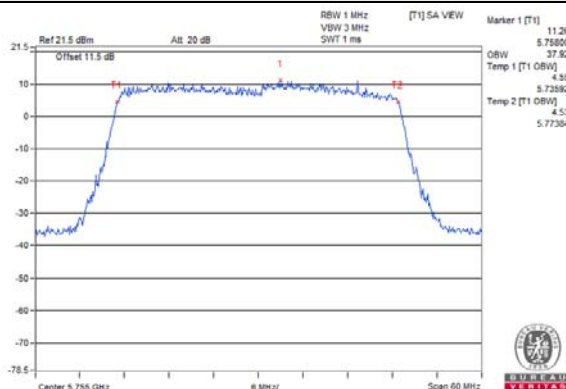
802.11ax (HE40) / Chain 0 / CH 151



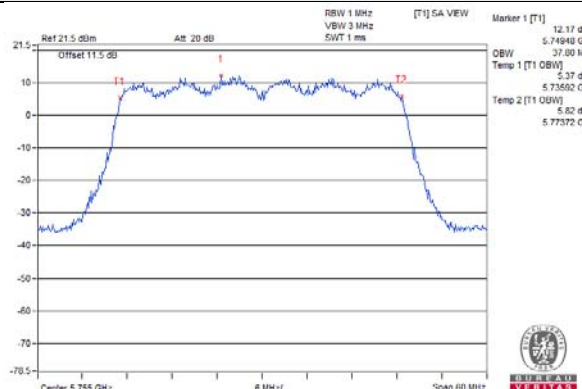
802.11ax (HE40) / Chain 1 / CH 151



802.11ax (HE40) / Chain 2 / CH 151

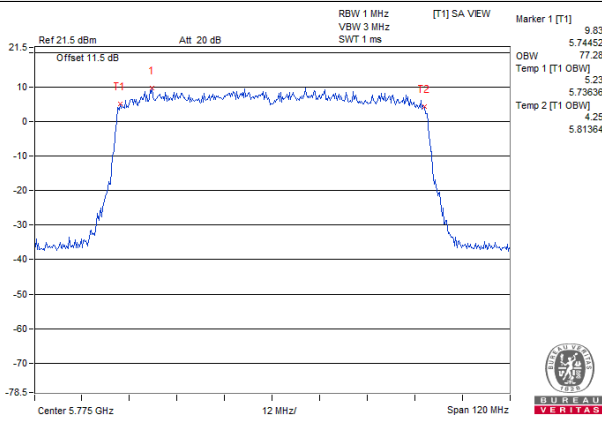


802.11ax (HE40) / Chain 3 / CH 151

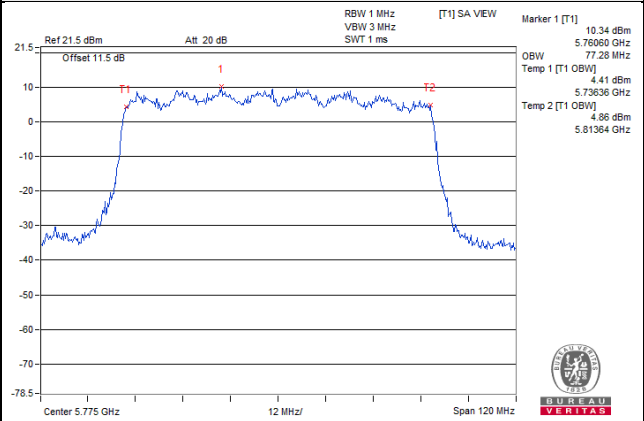


Spectrum Plot for near By DFS Band

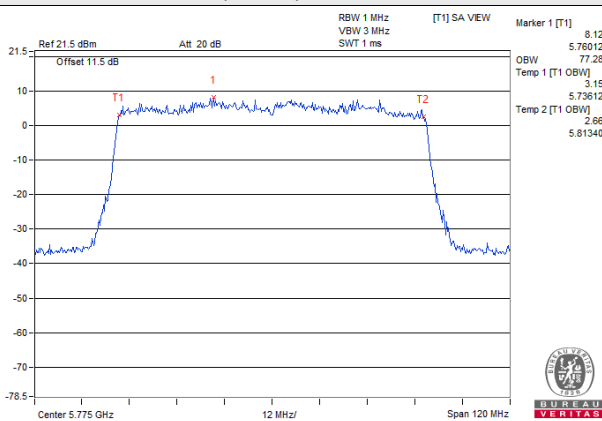
802.11ax (HE80) / Chain 0 / CH 155



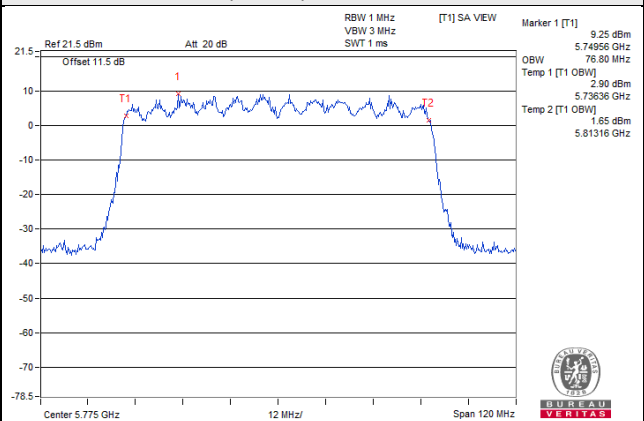
802.11ax (HE80) / Chain 1 / CH 155



802.11ax (HE80) / Chain 2 / CH 155



802.11ax (HE80) / Chain 3 / CH 155



Test Mode C

Scanning radio: CDD Mode

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.04
40	5200	17.04
48	5240	17.04

802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
40	5200	18.12
48	5240	18.12

802.11n (HT40)

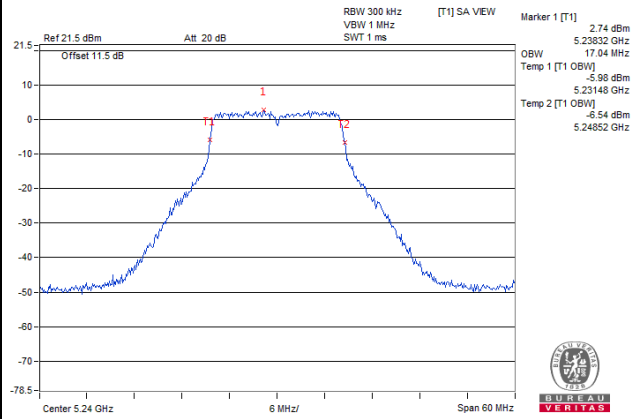
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	37.20
46	5230	37.20

802.11ac (VHT80)

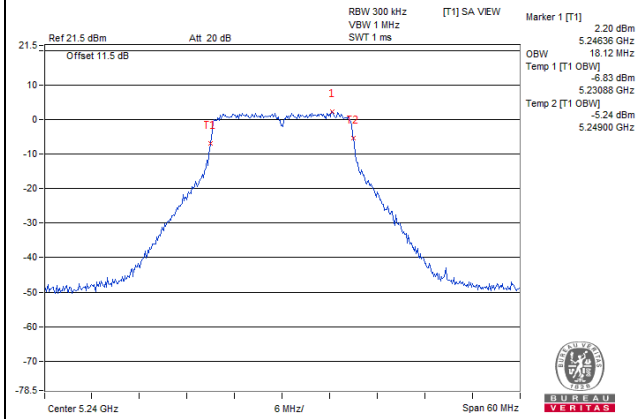
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	76.56

Spectrum Plot of Worst Value

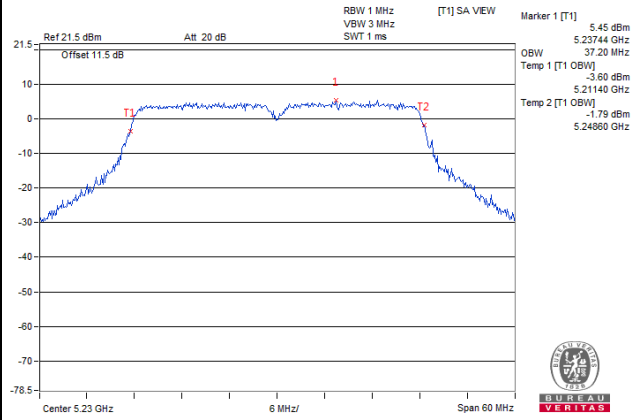
802.11a



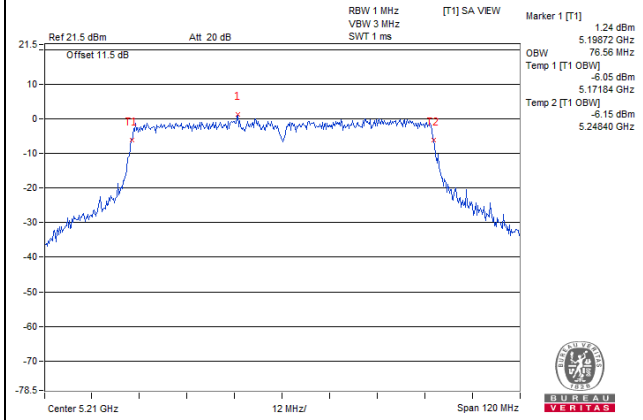
802.11n (HT20)



802.11n (HT40)

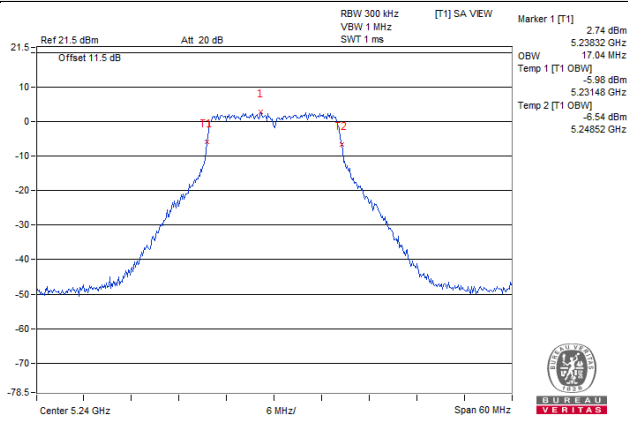


802.11ac (VHT80)

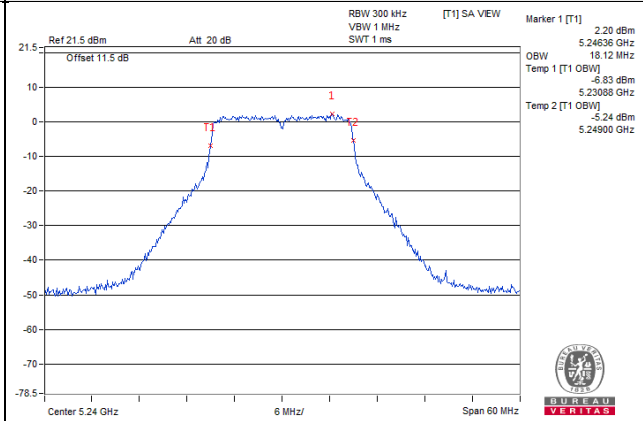


Spectrum Plot for near By DFS Band

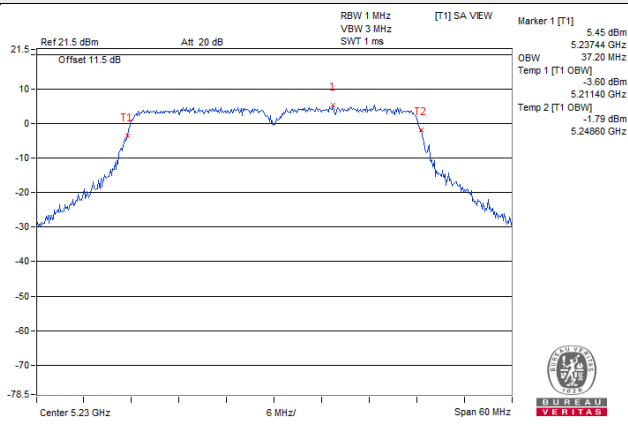
802.11a / CH 48



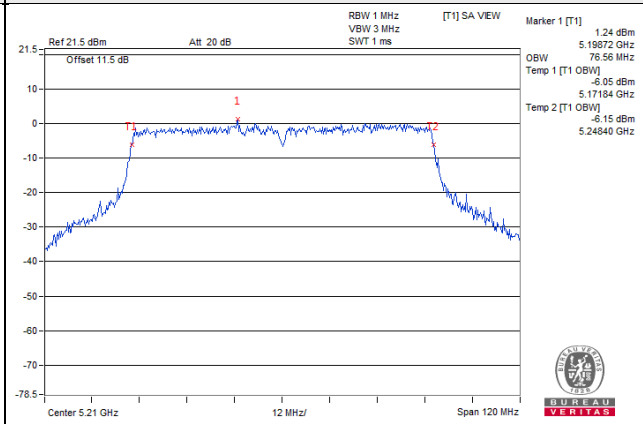
802.11n (HT20) / CH 48



802.11n (HT40) / CH 46



802.11ac (VHT80) / CH 42



802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
149	5745	16.92
157	5785	17.16
165	5825	16.92

802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
149	5745	18.12
157	5785	18.12
165	5825	18.12

802.11n (HT40)

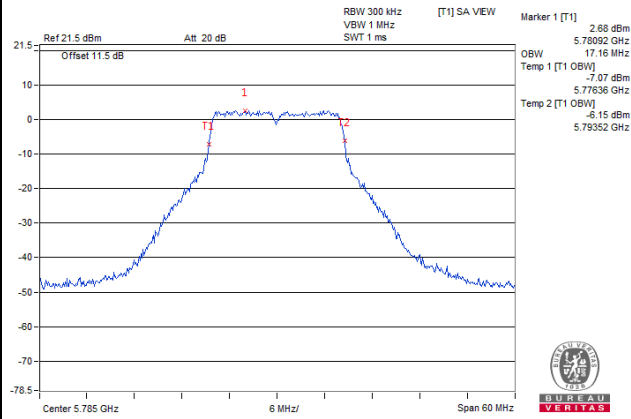
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
151	5755	37.32
159	5795	37.32

802.11ac (VHT80)

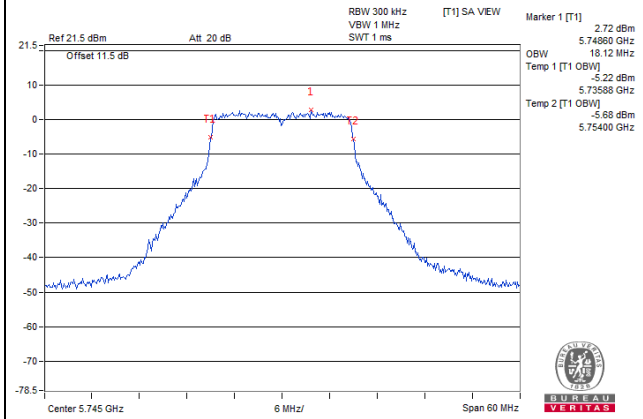
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
155	5775	76.56

Spectrum Plot of Worst Value

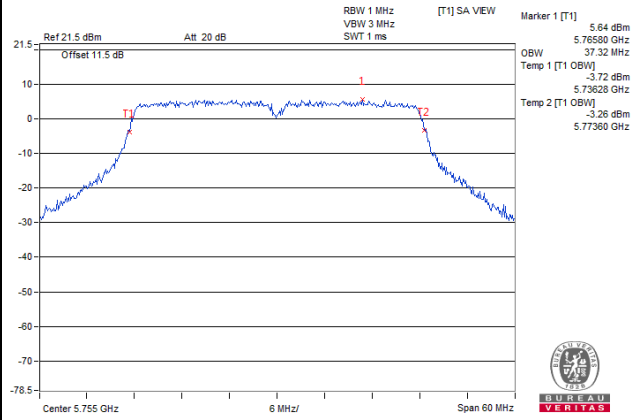
802.11a



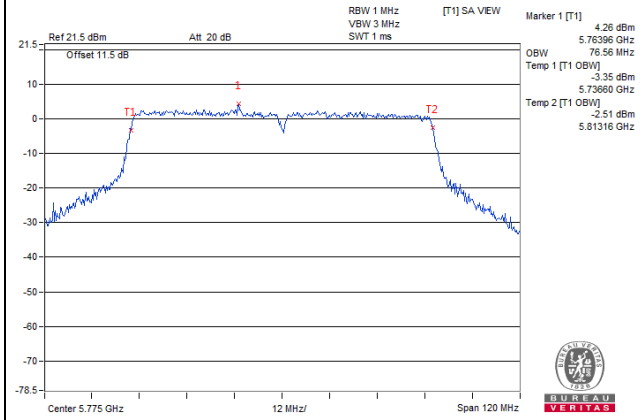
802.11n (HT20)



802.11n (HT40)

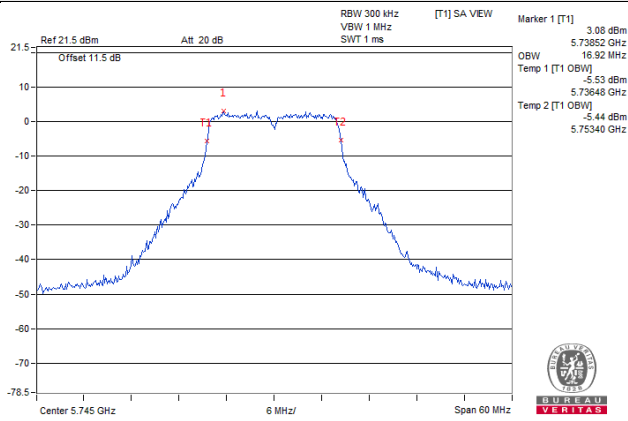


802.11ac (VHT80)

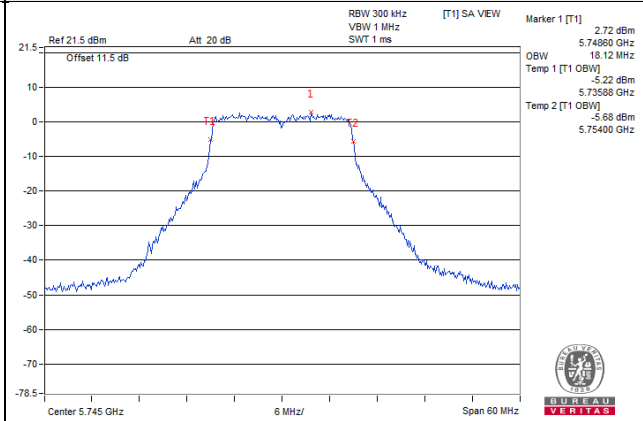


Spectrum Plot for near By DFS Band

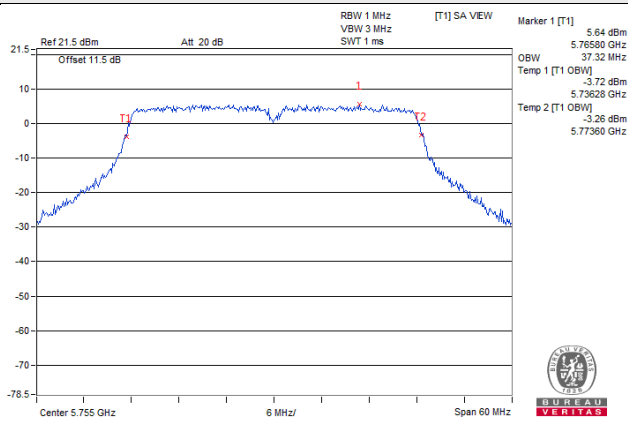
802.11a / CH 149



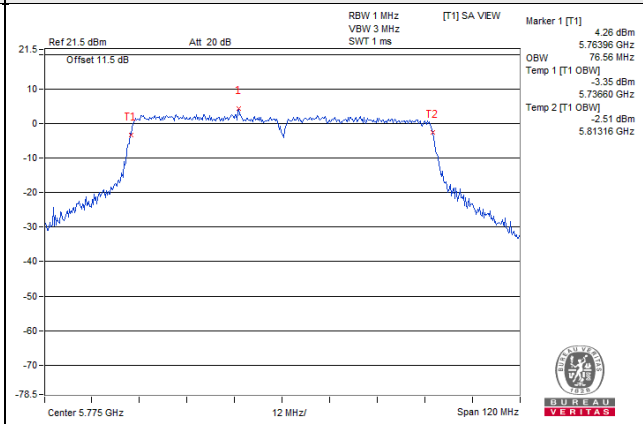
802.11n (HT20) / CH 149



802.11n (HT40) / CH 151



802.11ac (VHT80) / CH 155

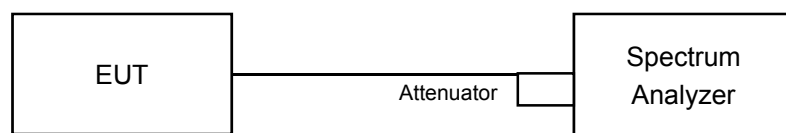


4.5 Peak Power Spectral Density Measurement

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

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1MHz, Set VBW \geq 3 MHz, Detector = RMS
- Set Channel power measure = 1MHz
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW \geq 1 MHz, Detector = RMS
- Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500 \text{ kHz} / 300 \text{ kHz})$
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- 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

Test Mode A

5G traffic radio: CDD Mode

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	Chain 2	Chain 3				
36	5180	6.46	4.30	4.52	4.25	0.30	11.31	11.49	Pass
40	5200	6.60	3.81	4.11	5.20	0.30	11.39	11.49	Pass
48	5240	5.89	4.00	4.63	5.53	0.30	11.40	11.49	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51 \text{dBi} > 6 \text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49 \text{dBm}$.
- 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	Chain 2	Chain 3				
36	5180	5.37	4.22	4.72	4.72	0.25	11.05	11.49	Pass
40	5200	5.40	4.49	4.67	4.72	0.25	11.10	11.49	Pass
48	5240	5.06	4.31	5.24	4.17	0.25	10.99	11.49	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51 \text{dBi} > 6 \text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49 \text{dBm}$.
- 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	Chain 2	Chain 3				
38	5190	2.46	2.91	3.17	2.96	0.31	9.21	11.49	Pass
46	5230	4.36	3.74	4.24	5.15	0.31	10.73	11.49	Pass

Note:

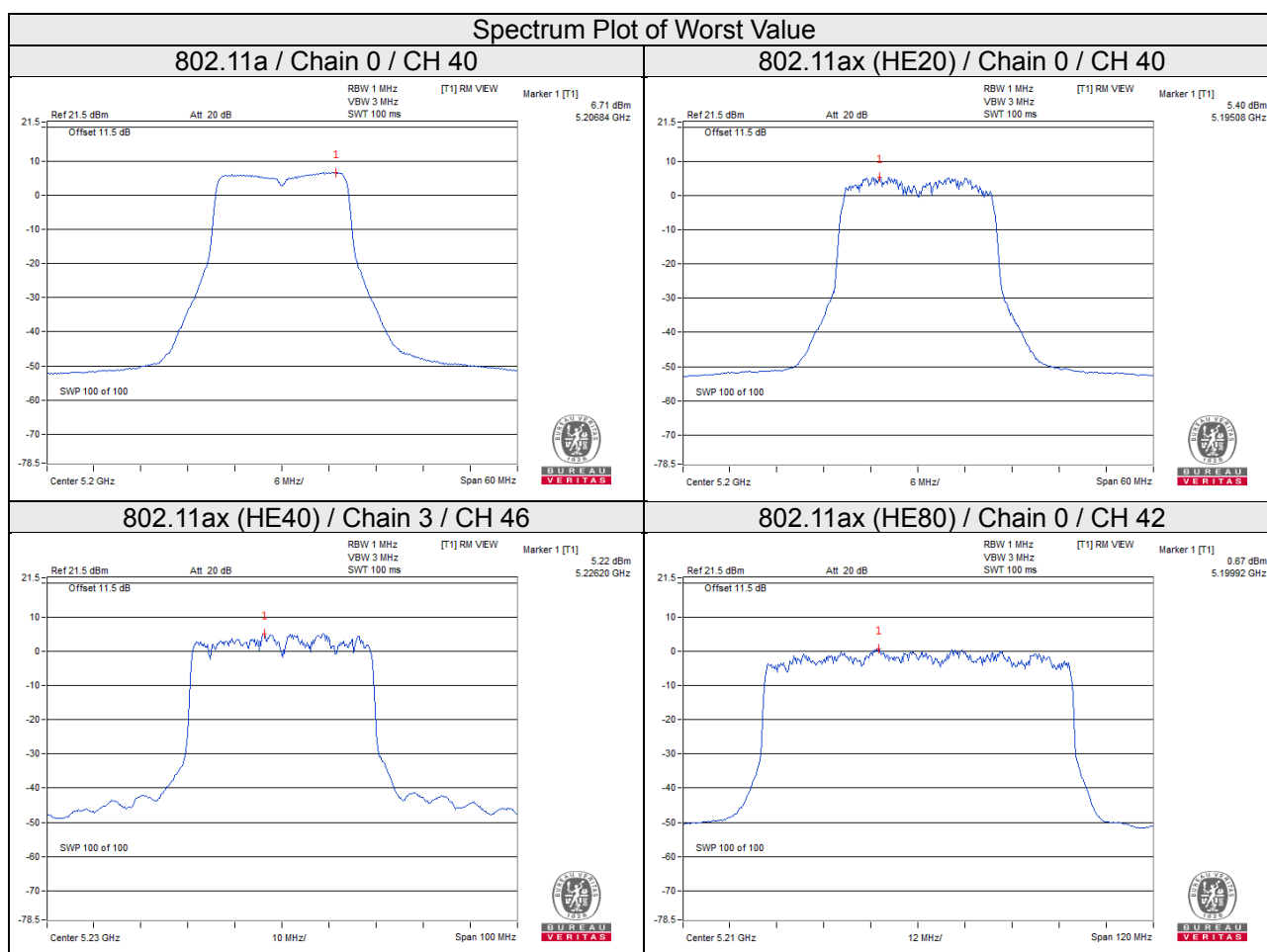
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51 \text{dBi} > 6 \text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49 \text{dBm}$.
- 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	Chain 2	Chain 3				
42	5210	0.42	-0.51	-1.19	-0.08	0.35	6.07	11.49	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51 \text{dBi} > 6 \text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49 \text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.



For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	2.06	4.28	6.02	0.30	10.60	24.65	Pass
	157	5785	2.37	4.59	6.02	0.30	10.91	24.65	Pass
	165	5825	2.09	4.31	6.02	0.30	10.63	24.65	Pass
1	149	5745	1.59	3.81	6.02	0.30	10.13	24.65	Pass
	157	5785	1.78	4.00	6.02	0.30	10.32	24.65	Pass
	165	5825	1.30	3.52	6.02	0.30	9.84	24.65	Pass
2	149	5745	1.05	3.27	6.02	0.30	9.59	24.65	Pass
	157	5785	1.83	4.05	6.02	0.30	10.37	24.65	Pass
	165	5825	1.27	3.49	6.02	0.30	9.81	24.65	Pass
3	149	5745	2.19	4.41	6.02	0.30	10.73	24.65	Pass
	157	5785	2.25	4.47	6.02	0.30	10.79	24.65	Pass
	165	5825	2.09	4.31	6.02	0.30	10.63	24.65	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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.
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=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	0.34	2.56	6.02	0.25	8.83	24.65	Pass
	157	5785	0.29	2.51	6.02	0.25	8.78	24.65	Pass
	165	5825	0.33	2.55	6.02	0.25	8.82	24.65	Pass
1	149	5745	-0.62	1.60	6.02	0.25	7.87	24.65	Pass
	157	5785	-0.01	2.21	6.02	0.25	8.48	24.65	Pass
	165	5825	-0.69	1.53	6.02	0.25	7.80	24.65	Pass
2	149	5745	-0.41	1.81	6.02	0.25	8.08	24.65	Pass
	157	5785	0.11	2.33	6.02	0.25	8.60	24.65	Pass
	165	5825	-0.26	1.96	6.02	0.25	8.23	24.65	Pass
3	149	5745	0.64	2.86	6.02	0.25	9.13	24.65	Pass
	157	5785	0.45	2.67	6.02	0.25	8.94	24.65	Pass
	165	5825	0.06	2.28	6.02	0.25	8.55	24.65	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 = $10 \log [(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35 \text{dBi} > 6 \text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65 \text{dBm}$.
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=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-3.36	-1.14	6.02	0.31	5.19	24.65	Pass
	159	5795	-2.92	-0.70	6.02	0.31	5.63	24.65	Pass
1	151	5755	-4.64	-2.42	6.02	0.31	3.91	24.65	Pass
	159	5795	-3.78	-1.56	6.02	0.31	4.77	24.65	Pass
2	151	5755	-4.37	-2.15	6.02	0.31	4.18	24.65	Pass
	159	5795	-3.58	-1.36	6.02	0.31	4.97	24.65	Pass
3	151	5755	-3.98	-1.76	6.02	0.31	4.57	24.65	Pass
	159	5795	-3.58	-1.36	6.02	0.31	4.97	24.65	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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

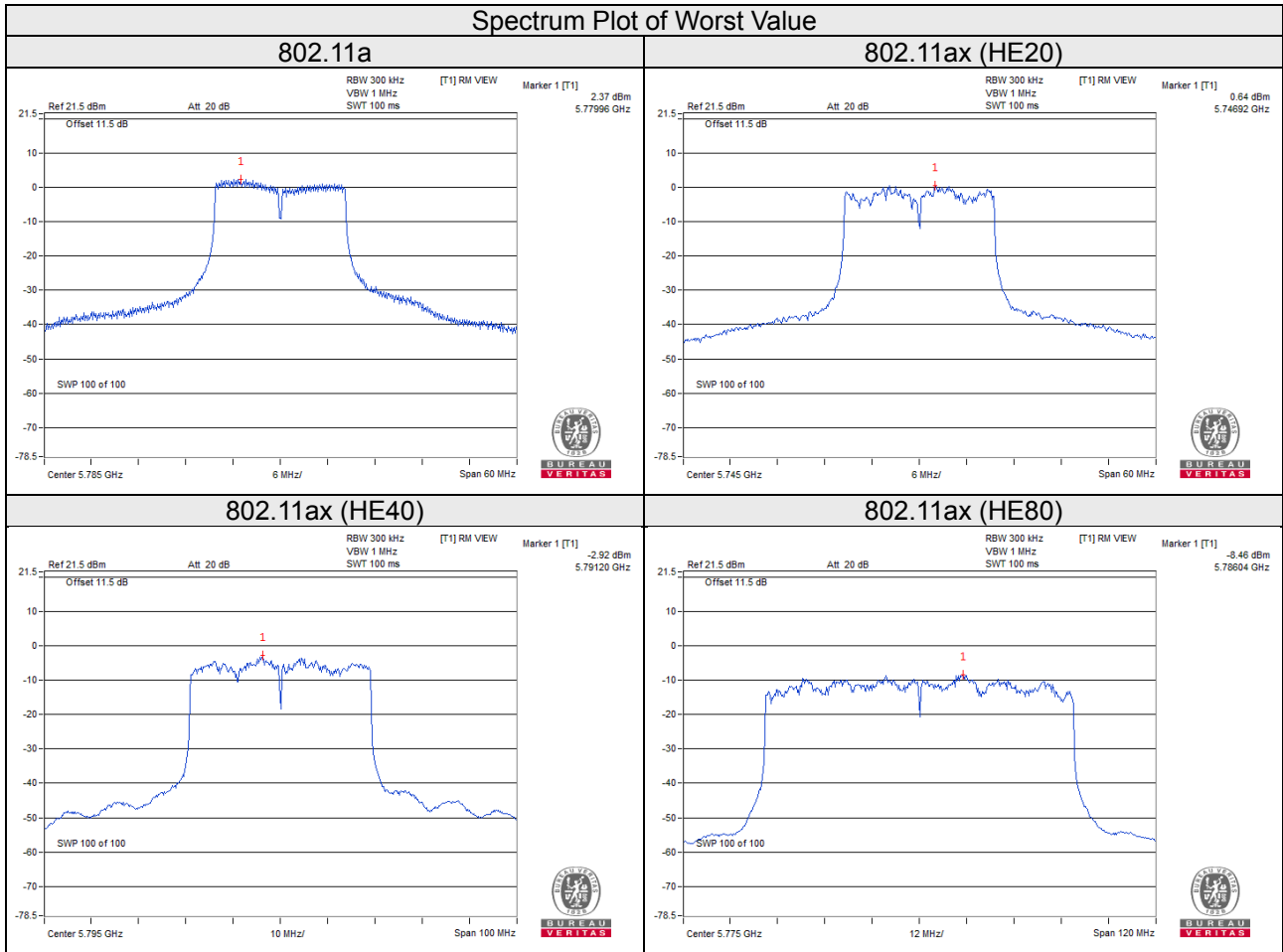
802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-8.46	-6.24	6.02	0.35	0.13	24.65	Pass
1	155	5775	-8.59	-6.37	6.02	0.35	0.00	24.65	Pass
2	155	5775	-9.26	-7.04	6.02	0.35	-0.67	24.65	Pass
3	155	5775	-8.99	-6.77	6.02	0.35	-0.40	24.65	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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value



Test Mode A

5G traffic radio: Beamforming Mode

For U-NII-1 band:

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	Chain 2	Chain 3				
36	5180	2.18	3.63	4.18	3.48	0.19	9.64	11.49	Pass
40	5200	2.28	2.22	2.55	2.57	0.19	8.62	11.49	Pass
48	5240	2.53	0.80	2.79	2.00	0.19	8.31	11.49	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49\text{dBm}$.
- 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	Chain 2	Chain 3				
38	5190	-2.04	-0.95	-0.63	-1.26	0.25	5.08	11.49	Pass
46	5230	1.06	-0.18	0.51	0.01	0.25	6.65	11.49	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

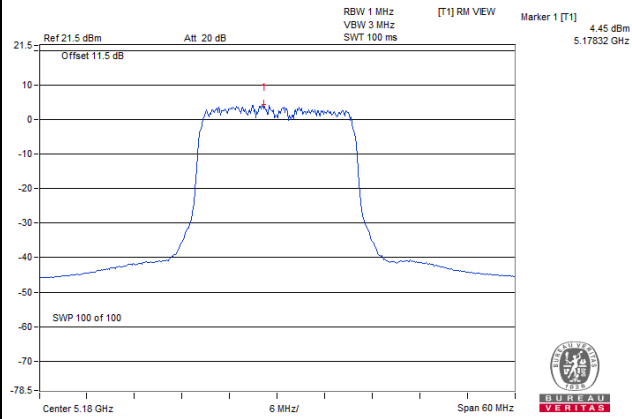
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	-4.72	-5.72	-5.52	-5.17	0.25	1.00	11.49	Pass

Note:

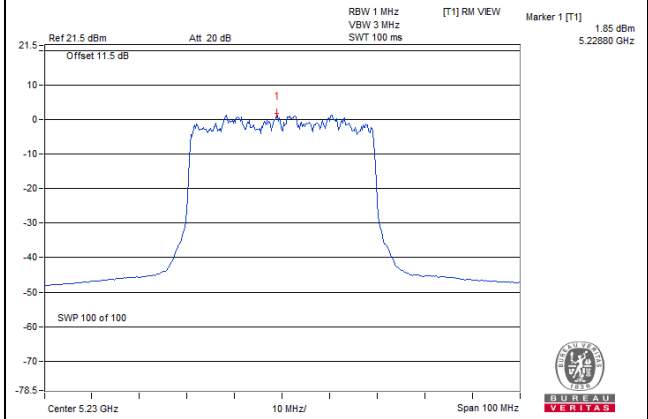
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.51\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (11.51 - 6) = 11.49\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

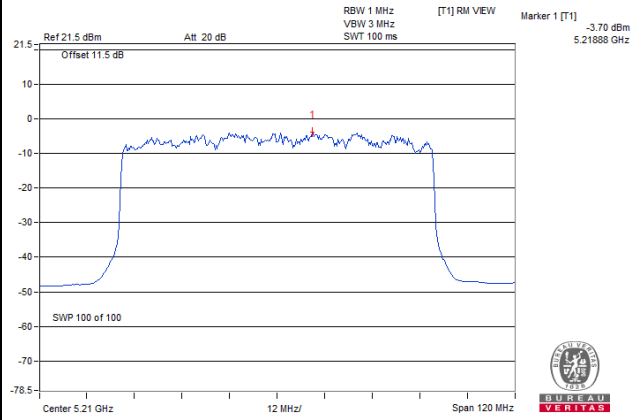
802.11ax (HE20) / Chain 2 / CH 36



802.11ax (HE40) / Chain 0 / CH 46



802.11ax (HE80) / Chain 0 / CH 42



For U-NII-3 band:

802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	-2.65	-0.43	6.02	0.19	5.78	24.65	Pass
	157	5785	-3.02	-0.80	6.02	0.19	5.41	24.65	Pass
	165	5825	-3.13	-0.91	6.02	0.19	5.30	24.65	Pass
1	149	5745	-3.47	-1.25	6.02	0.19	4.96	24.65	Pass
	157	5785	-3.87	-1.65	6.02	0.19	4.56	24.65	Pass
	165	5825	-3.48	-1.26	6.02	0.19	4.95	24.65	Pass
2	149	5745	-3.64	-1.42	6.02	0.19	4.79	24.65	Pass
	157	5785	-3.08	-0.86	6.02	0.19	5.35	24.65	Pass
	165	5825	-3.57	-1.35	6.02	0.19	4.86	24.65	Pass
3	149	5745	-3.13	-0.91	6.02	0.19	5.30	24.65	Pass
	157	5785	-2.84	-0.62	6.02	0.19	5.59	24.65	Pass
	165	5825	-3.26	-1.04	6.02	0.19	5.17	24.65	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 = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.
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=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-6.09	-3.87	6.02	0.25	2.40	24.65	Pass
	159	5795	-7.46	-5.24	6.02	0.25	1.03	24.65	Pass
1	151	5755	-7.25	-5.03	6.02	0.25	1.24	24.65	Pass
	159	5795	-8.21	-5.99	6.02	0.25	0.28	24.65	Pass
2	151	5755	-6.97	-4.75	6.02	0.25	1.52	24.65	Pass
	159	5795	-7.25	-5.03	6.02	0.25	1.24	24.65	Pass
3	151	5755	-6.68	-4.46	6.02	0.25	1.81	24.65	Pass
	159	5795	-8.03	-5.81	6.02	0.25	0.46	24.65	Pass

Note:

- 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.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

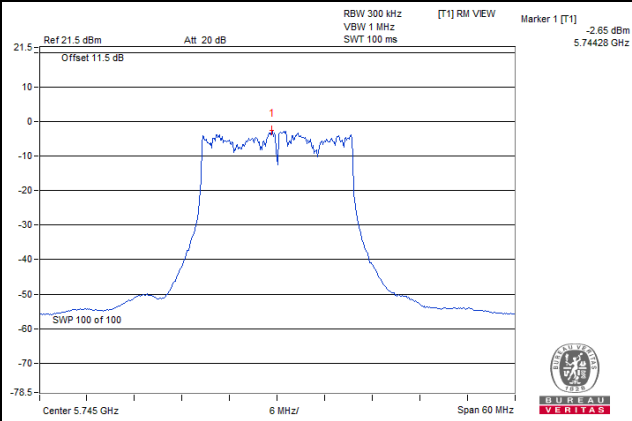
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-10.02	-7.80	6.02	0.25	-1.53	24.65	Pass
1	155	5775	-10.80	-8.58	6.02	0.25	-2.31	24.65	Pass
2	155	5775	-10.05	-7.83	6.02	0.25	-1.56	24.65	Pass
3	155	5775	-10.47	-8.25	6.02	0.25	-1.98	24.65	Pass

Note:

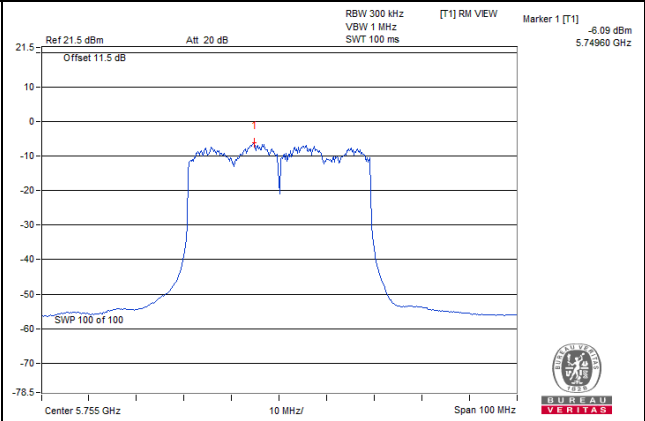
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.35\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (11.35 - 6) = 24.65\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

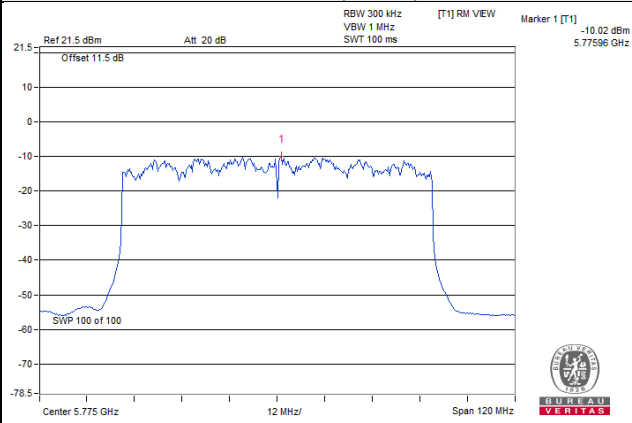
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Test Mode A

Scanning radio: CDD Mode

For U-NII-1 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
36	5180	-2.59	0.23	-2.36	17.00	Pass
40	5200	-2.48	0.23	-2.25	17.00	Pass
48	5240	-2.32	0.23	-2.09	17.00	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
36	5180	-2.91	0.28	-2.63	17.00	Pass
40	5200	-2.86	0.28	-2.58	17.00	Pass
48	5240	-2.67	0.28	-2.39	17.00	Pass

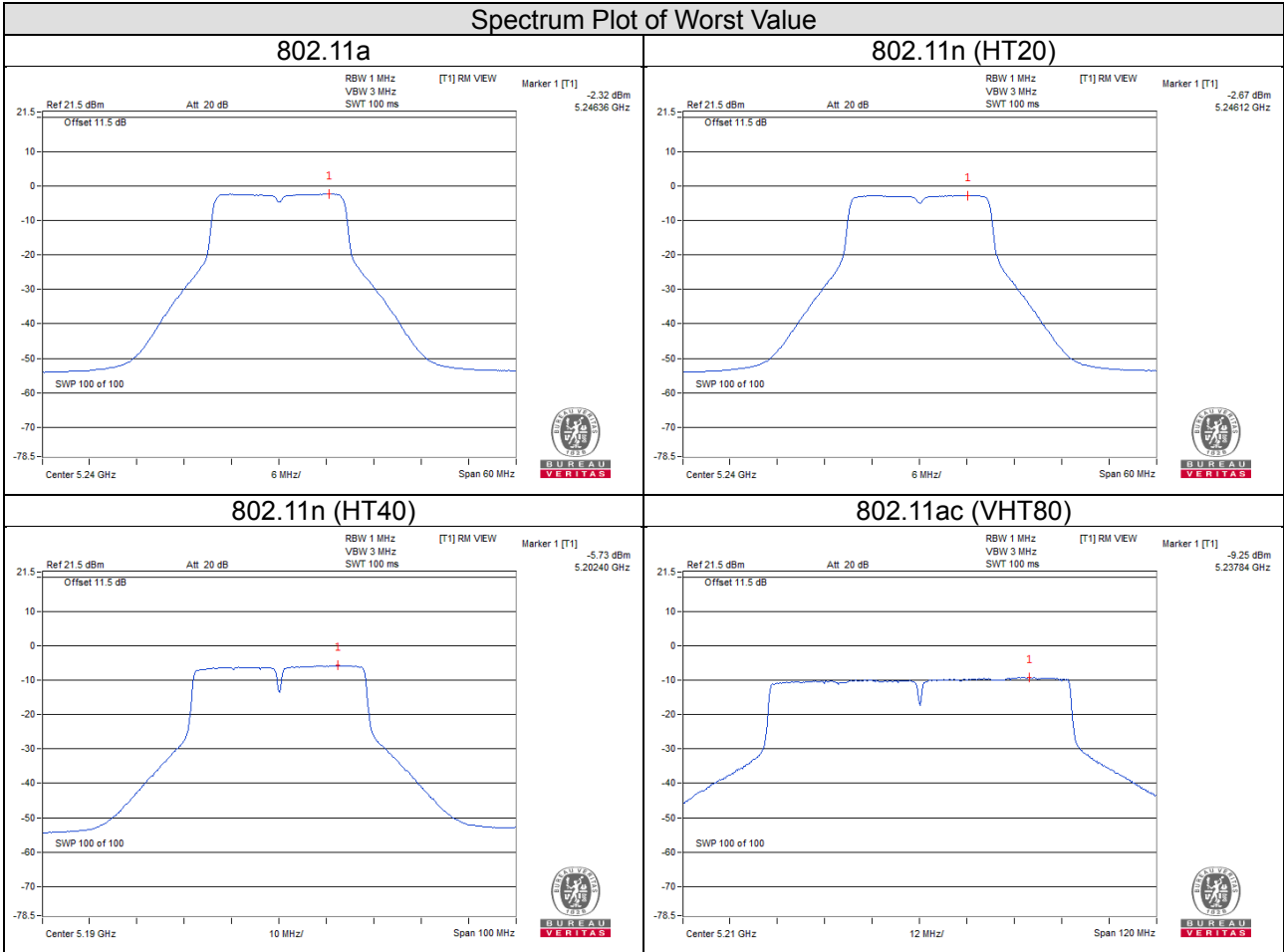
802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
38	5190	-5.73	0.41	-5.32	17.00	Pass
46	5230	-5.90	0.41	-5.49	17.00	Pass

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
42	5210	-9.25	0.68	-8.57	17.00	Pass

Spectrum Plot of Worst Value



802.11a

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
149	5745	-10.45	-8.23	0.23	-8.00	30.00	Pass
157	5785	-10.06	-7.84	0.23	-7.61	30.00	Pass
165	5825	-10.19	-7.97	0.23	-7.74	30.00	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
149	5745	-10.27	-8.05	0.28	-7.77	30.00	Pass
157	5785	-10.33	-8.11	0.28	-7.83	30.00	Pass
165	5825	-10.57	-8.35	0.28	-8.07	30.00	Pass

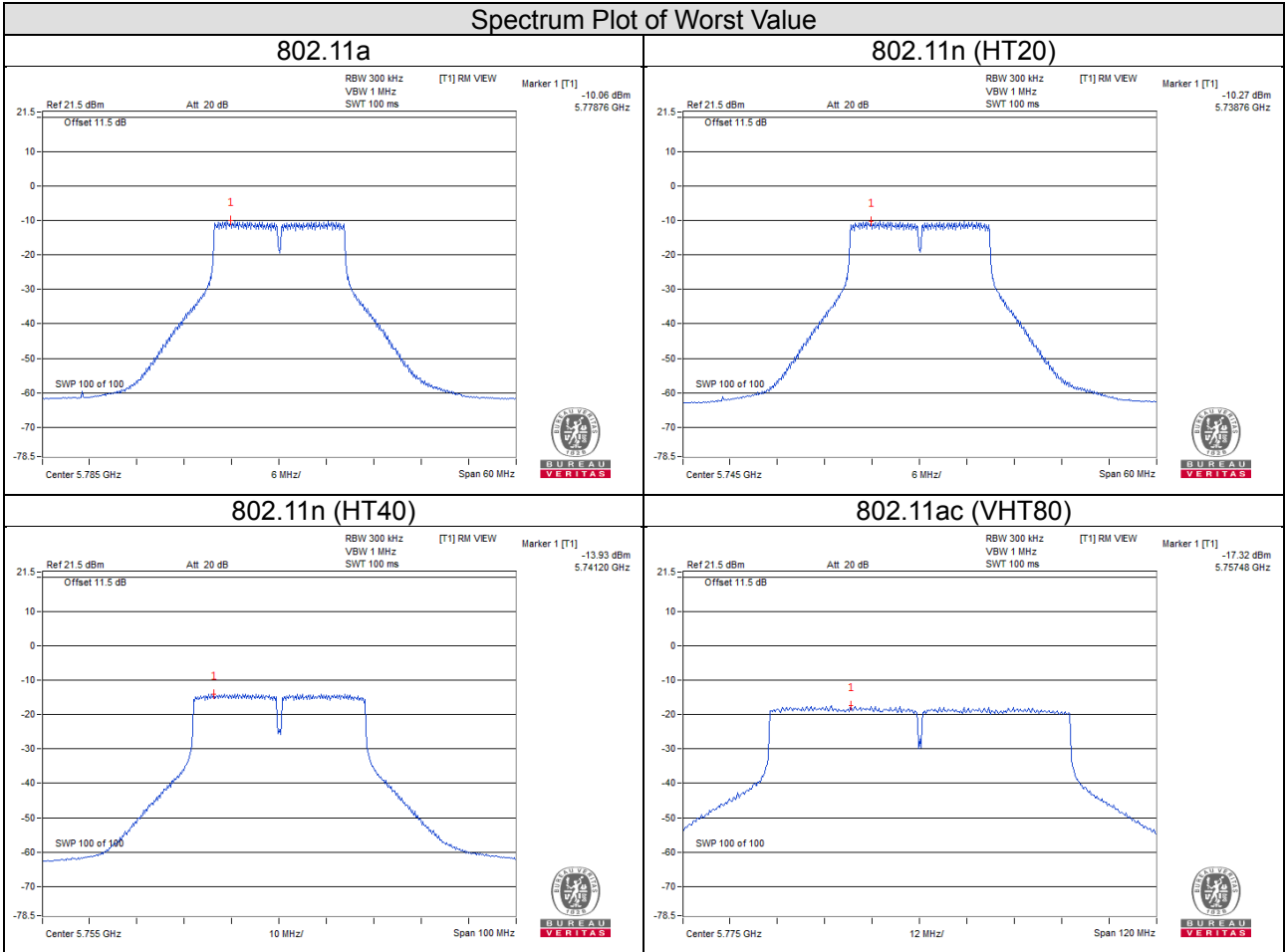
802.11n (HT40)

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
151	5755	-13.93	-11.71	0.41	-11.30	30.00	Pass
159	5795	-13.96	-11.74	0.41	-11.33	30.00	Pass

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
155	5775	-17.32	-15.10	0.68	-14.42	30.00	Pass

Spectrum Plot of Worst Value



Test Mode C

5G traffic radio: CDD Mode

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	Chain 2	Chain 3				
36	5180	5.44	3.96	2.91	3.78	0.32	10.46	10.97	Pass
40	5200	5.10	4.43	2.91	4.08	0.32	10.54	10.97	Pass
48	5240	5.33	4.31	2.49	4.27	0.32	10.56	10.97	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{dBm}$.
- 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	Chain 2	Chain 3				
36	5180	4.48	4.06	3.77	3.81	0.28	10.34	10.97	Pass
40	5200	6.16	4.41	3.33	2.02	0.28	10.55	10.97	Pass
48	5240	5.84	4.19	3.49	1.61	0.28	10.34	10.97	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{dBm}$.
- 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	Chain 2	Chain 3				
38	5190	0.73	-0.09	-1.96	-1.50	0.83	6.28	10.97	Pass
46	5230	4.91	3.40	2.11	4.58	0.83	10.73	10.97	Pass

Note:

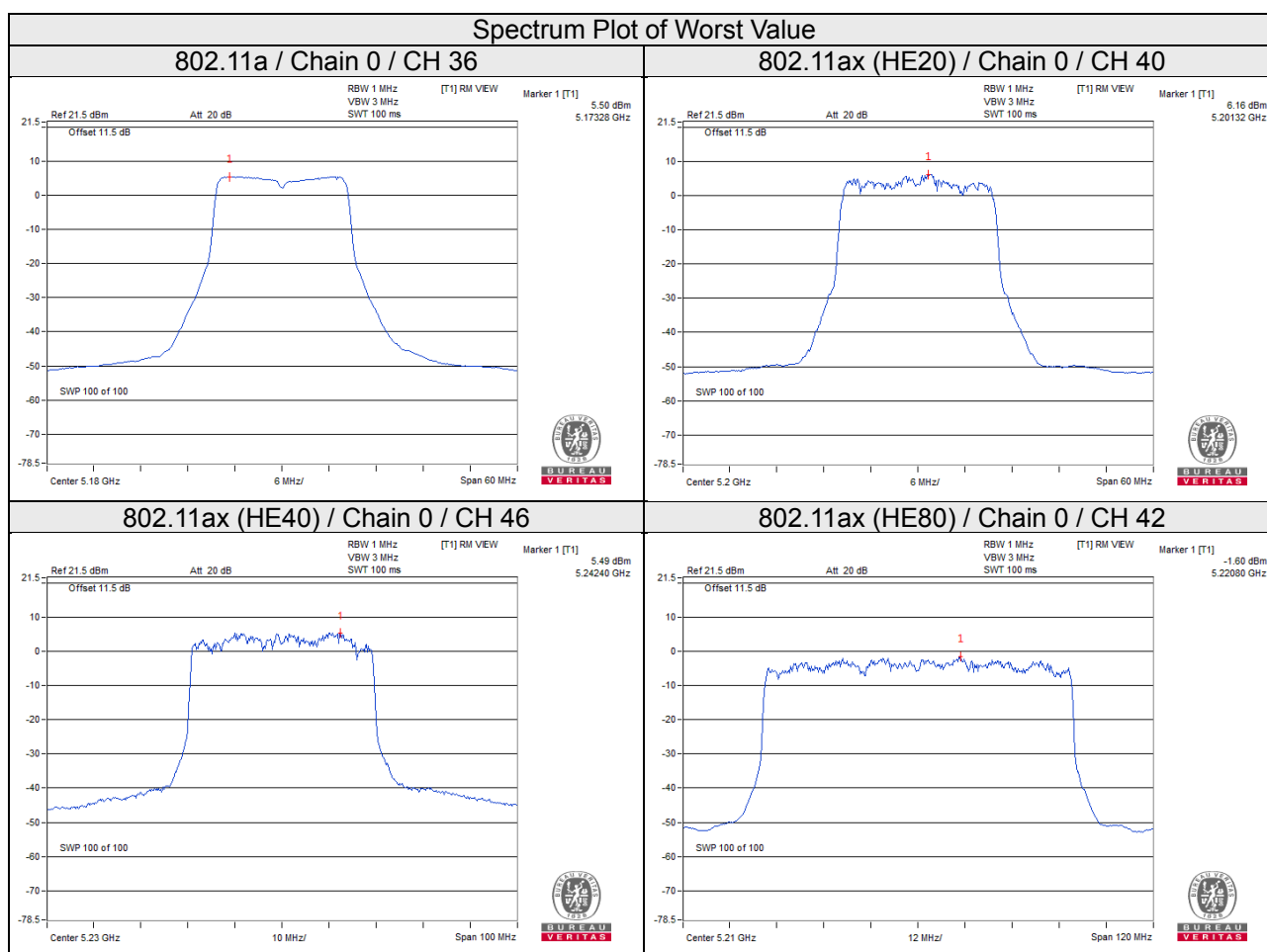
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{dBm}$.
- 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	Chain 2	Chain 3				
42	5210	-2.16	-4.41	-5.40	-4.62	0.27	2.32	10.97	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.



For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	3.34	5.56	6.02	0.32	11.90	23.78	Pass
	157	5785	3.05	5.27	6.02	0.32	11.61	23.78	Pass
	165	5825	2.79	5.01	6.02	0.32	11.35	23.78	Pass
1	149	5745	2.15	4.37	6.02	0.32	10.71	23.78	Pass
	157	5785	1.95	4.17	6.02	0.32	10.51	23.78	Pass
	165	5825	2.17	4.39	6.02	0.32	10.73	23.78	Pass
2	149	5745	0.76	2.98	6.02	0.32	9.32	23.78	Pass
	157	5785	0.43	2.65	6.02	0.32	8.99	23.78	Pass
	165	5825	0.46	2.68	6.02	0.32	9.02	23.78	Pass
3	149	5745	2.66	4.88	6.02	0.32	11.22	23.78	Pass
	157	5785	2.80	5.02	6.02	0.32	11.36	23.78	Pass
	165	5825	2.58	4.80	6.02	0.32	11.14	23.78	Pass

Note:

- 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.
- Directional gain = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78$ dBm.
- 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=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	1.89	4.11	6.02	0.28	10.41	23.78	Pass
	157	5785	1.22	3.44	6.02	0.28	9.74	23.78	Pass
	165	5825	1.17	3.39	6.02	0.28	9.69	23.78	Pass
1	149	5745	0.58	2.80	6.02	0.28	9.10	23.78	Pass
	157	5785	-0.03	2.19	6.02	0.28	8.49	23.78	Pass
	165	5825	0.07	2.29	6.02	0.28	8.59	23.78	Pass
2	149	5745	-1.40	0.82	6.02	0.28	7.12	23.78	Pass
	157	5785	-0.89	1.33	6.02	0.28	7.63	23.78	Pass
	165	5825	-1.22	1.00	6.02	0.28	7.30	23.78	Pass
3	149	5745	0.71	2.93	6.02	0.28	9.23	23.78	Pass
	157	5785	0.47	2.69	6.02	0.28	8.99	23.78	Pass
	165	5825	0.64	2.86	6.02	0.28	9.16	23.78	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 = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78$ dBm.
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=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-2.79	-0.57	6.02	0.83	6.28	23.78	Pass
	159	5795	-2.02	0.20	6.02	0.83	7.05	23.78	Pass
1	151	5755	-4.15	-1.93	6.02	0.83	4.92	23.78	Pass
	159	5795	-3.10	-0.88	6.02	0.83	5.97	23.78	Pass
2	151	5755	-5.82	-3.60	6.02	0.83	3.25	23.78	Pass
	159	5795	-3.99	-1.77	6.02	0.83	5.08	23.78	Pass
3	151	5755	-3.82	-1.60	6.02	0.83	5.25	23.78	Pass
	159	5795	-2.99	-0.77	6.02	0.83	6.08	23.78	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 = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78$ dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

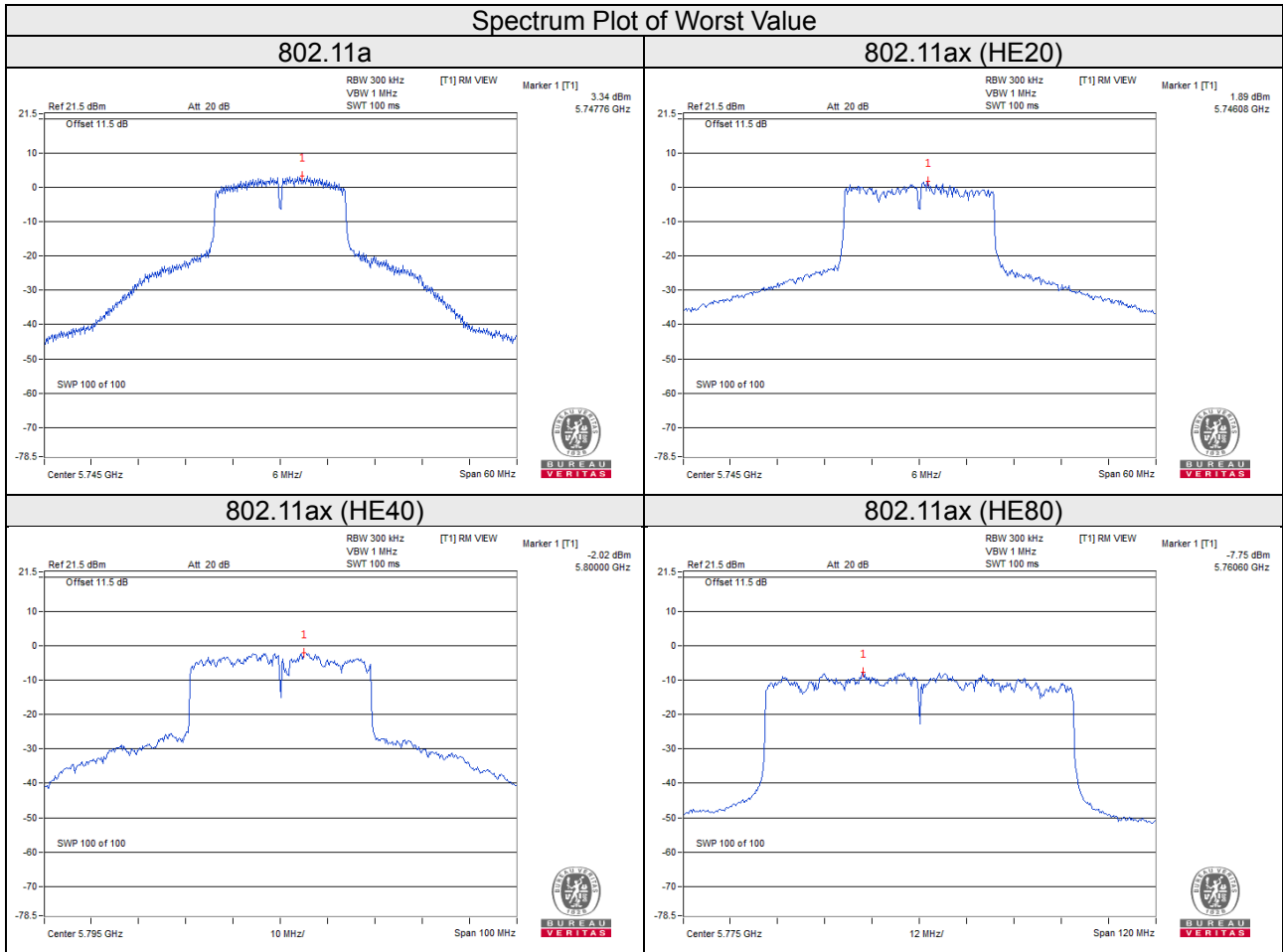
802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-7.75	-5.53	6.02	0.27	0.76	23.78	Pass
1	155	5775	-8.97	-6.75	6.02	0.27	-0.46	23.78	Pass
2	155	5775	-10.26	-8.04	6.02	0.27	-1.75	23.78	Pass
3	155	5775	-8.62	-6.40	6.02	0.27	-0.11	23.78	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 = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78$ dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value



Test Mode C

5G traffic radio: Beamforming Mode

For U-NII-1 band:

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	Chain 2	Chain 3				
36	5180	4.48	4.36	2.02	1.90	0.27	9.65	10.97	Pass
40	5200	4.47	3.30	1.07	2.77	0.27	9.36	10.97	Pass
48	5240	3.46	4.30	1.67	3.88	0.27	9.73	10.97	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{ dBm}$.
- 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	Chain 2	Chain 3				
38	5190	0.15	-0.46	-1.67	-0.84	0.35	5.71	10.97	Pass
46	5230	0.89	1.77	-1.73	0.35	0.35	6.87	10.97	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{ dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

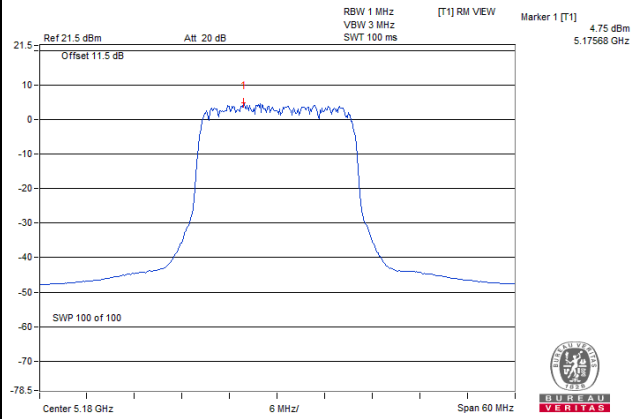
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
42	5210	-3.26	-2.03	-4.86	-3.50	0.22	2.94	10.97	Pass

Note:

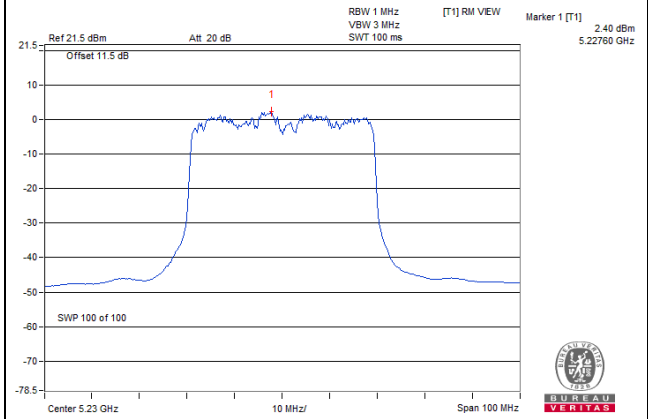
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- Directional gain = $6.01\text{dBi} + 10\log(4) = 12.03\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17 - (12.03 - 6) = 10.97\text{ dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

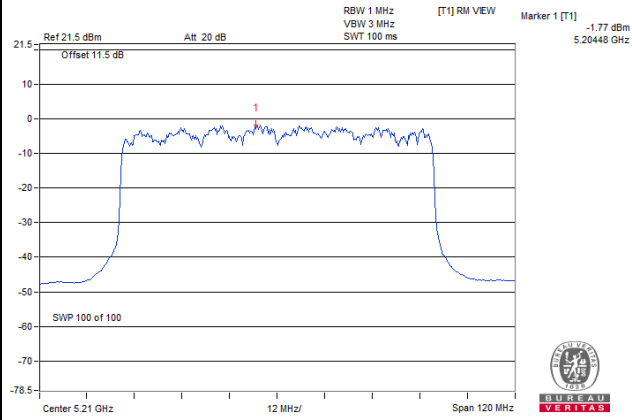
802.11ax (HE20) / Chain 0 / CH 36



802.11ax (HE40) / Chain 1 / CH 46



802.11ax (HE80) / Chain 1 / CH 42



For U-NII-3 band:

802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD w/o Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500 kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	-6.35	-4.13	6.02	0.27	2.16	23.78	Pass
	157	5785	-6.54	-4.32	6.02	0.27	1.97	23.78	Pass
	165	5825	-5.97	-3.75	6.02	0.27	2.54	23.78	Pass
1	149	5745	-5.53	-3.31	6.02	0.27	2.98	23.78	Pass
	157	5785	-6.22	-4.00	6.02	0.27	2.29	23.78	Pass
	165	5825	-5.72	-3.50	6.02	0.27	2.79	23.78	Pass
2	149	5745	-7.97	-5.75	6.02	0.27	0.54	23.78	Pass
	157	5785	-7.61	-5.39	6.02	0.27	0.90	23.78	Pass
	165	5825	-7.90	-5.68	6.02	0.27	0.61	23.78	Pass
3	149	5745	-6.37	-4.15	6.02	0.27	2.14	23.78	Pass
	157	5785	-6.70	-4.48	6.02	0.27	1.81	23.78	Pass
	165	5825	-6.36	-4.14	6.02	0.27	2.15	23.78	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 = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78\text{dBm}$.
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=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	151	5755	-8.94	-6.72	6.02	0.35	-0.35	23.78	Pass
	159	5795	-8.84	-6.62	6.02	0.35	-0.25	23.78	Pass
1	151	5755	-8.15	-5.93	6.02	0.35	0.44	23.78	Pass
	159	5795	-8.54	-6.32	6.02	0.35	0.05	23.78	Pass
2	151	5755	-10.66	-8.44	6.02	0.35	-2.07	23.78	Pass
	159	5795	-10.22	-8.00	6.02	0.35	-1.63	23.78	Pass
3	151	5755	-8.95	-6.73	6.02	0.35	-0.36	23.78	Pass
	159	5795	-8.79	-6.57	6.02	0.35	-0.20	23.78	Pass

Note:

- 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.
- Directional gain = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

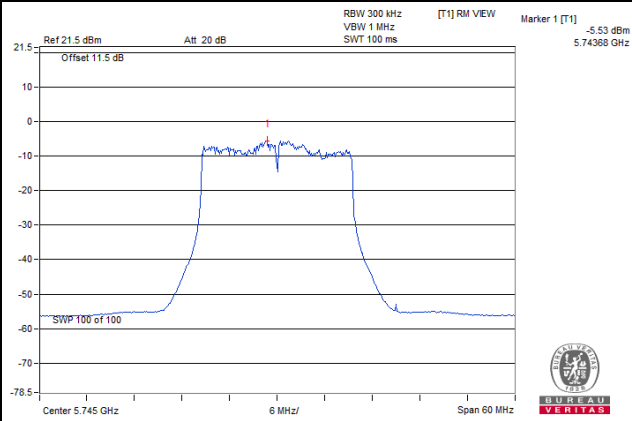
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	155	5775	-11.68	-9.46	6.02	0.22	-3.22	23.78	Pass
1	155	5775	-11.80	-9.58	6.02	0.22	-3.34	23.78	Pass
2	155	5775	-13.30	-11.08	6.02	0.22	-4.84	23.78	Pass
3	155	5775	-12.35	-10.13	6.02	0.22	-3.89	23.78	Pass

Note:

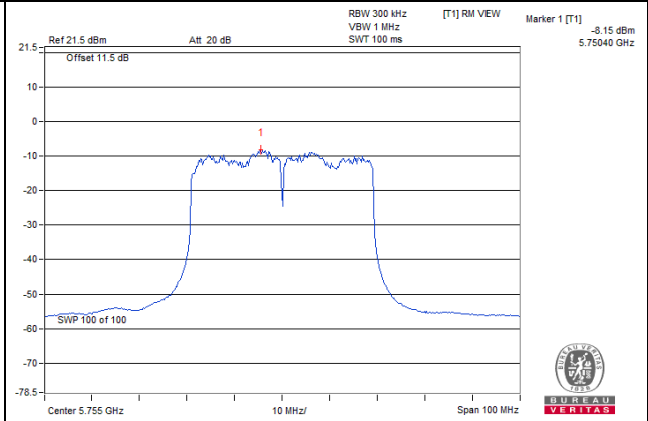
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add $10 \log (N_{ANT})$ dB.
- Directional gain = $6.2\text{dBi} + 10\log(4) = 12.22\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (12.22 - 6) = 23.78\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

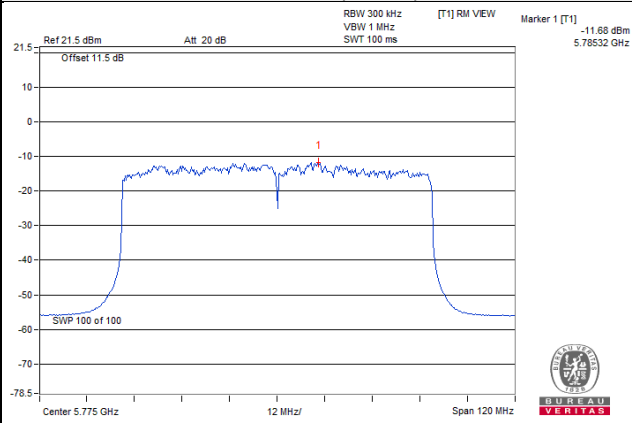
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Test Mode C

Scanning radio: CDD Mode

For U-NII-1 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
36	5180	-1.83	0.27	-1.56	16.99	Pass
40	5200	-1.58	0.27	-1.31	16.99	Pass
48	5240	-1.67	0.27	-1.40	16.99	Pass

Note: Gain = 6.01dBi > 6dBi, so the power density limit shall be reduced to $17-(6.01-6) = 16.99$ dBm.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
36	5180	-2.17	0.20	-1.97	16.99	Pass
40	5200	-2.05	0.20	-1.85	16.99	Pass
48	5240	-1.95	0.20	-1.75	16.99	Pass

Note: Gain = 6.01dBi > 6dBi, so the power density limit shall be reduced to $17-(6.01-6) = 16.99$ dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
38	5190	-5.37	0.42	-4.95	16.99	Pass
46	5230	-5.45	0.42	-5.03	16.99	Pass

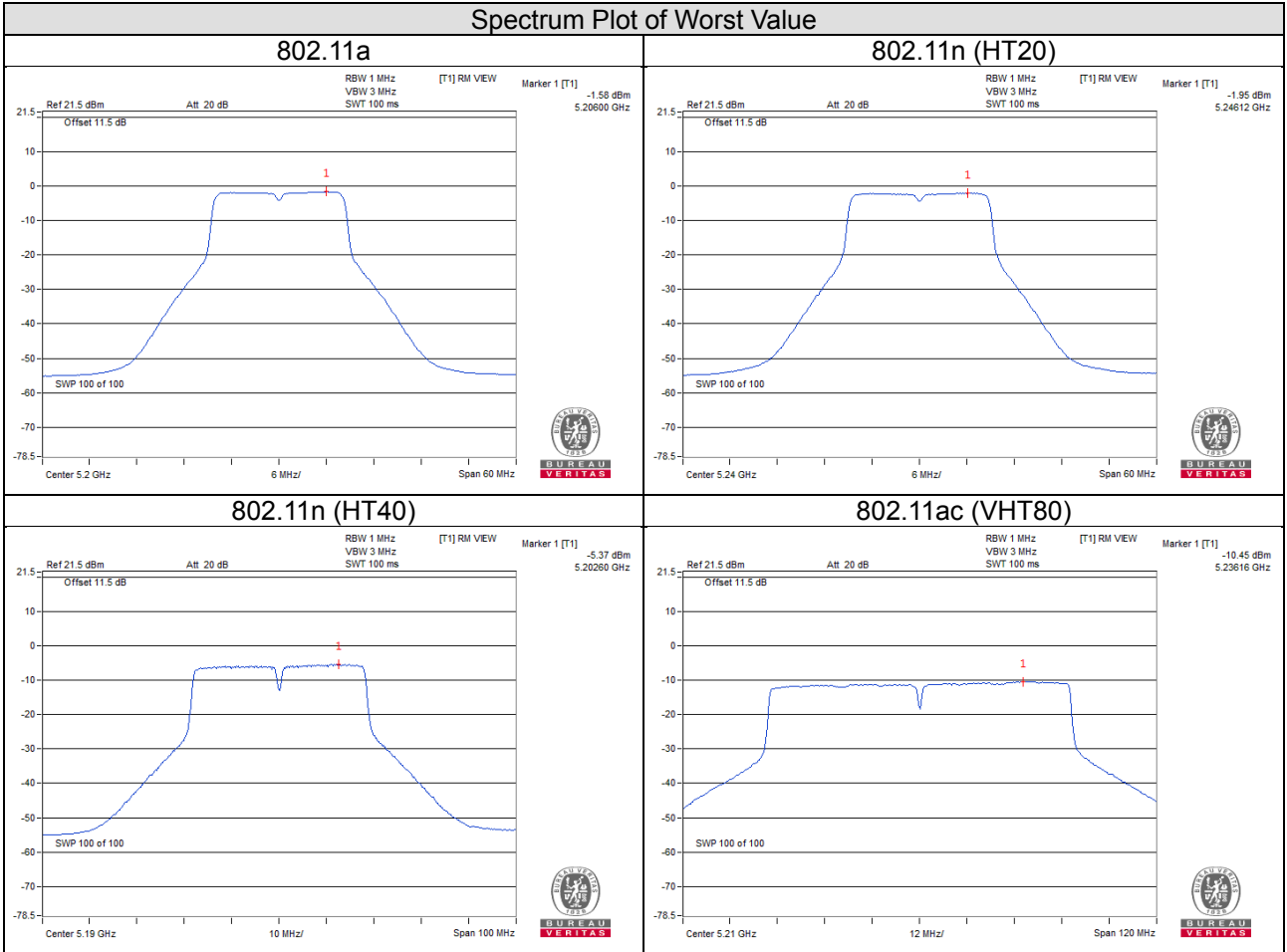
Note: Gain = 6.01dBi > 6dBi, so the power density limit shall be reduced to $17-(6.01-6) = 16.99$ dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o duty factor (dBm)	Duty factor	PSD with duty factor (dBm)	Max. Limit (dBm)	Pass / Fail
42	5210	-10.45	0.71	-9.74	16.99	Pass

Note: Gain = 6.01dBi > 6dBi, so the power density limit shall be reduced to $17-(6.01-6) = 16.99$ dBm.

Spectrum Plot of Worst Value



802.11a

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
149	5745	-9.90	-7.68	0.27	-7.41	29.80	Pass
157	5785	-9.70	-7.48	0.27	-7.21	29.80	Pass
165	5825	-9.71	-7.49	0.27	-7.22	29.80	Pass

Note: Gain = 6.20dBi > 6dBi, so the power density limit shall be reduced to $30-(6.20-6) = 29.80$ dBm.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
149	5745	-10.37	-8.15	0.20	-7.95	29.80	Pass
157	5785	-10.10	-7.88	0.20	-7.68	29.80	Pass
165	5825	-10.12	-7.90	0.20	-7.70	29.80	Pass

Note: Gain = 6.20dBi > 6dBi, so the power density limit shall be reduced to $30-(6.20-6) = 29.80$ dBm.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
151	5755	-14.06	-11.84	0.42	-11.42	29.80	Pass
159	5795	-13.28	-11.06	0.42	-10.64	29.80	Pass

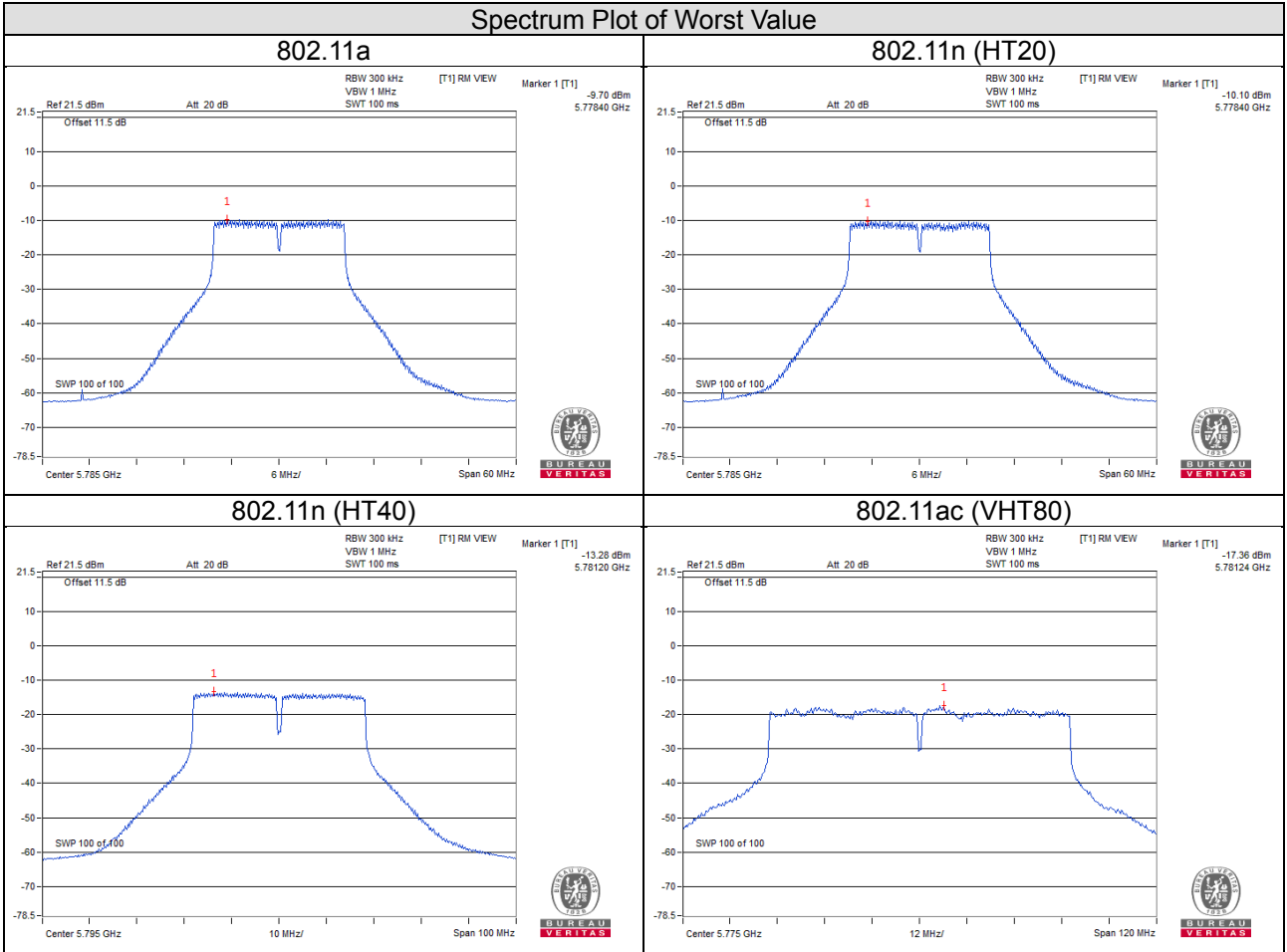
Note: Gain = 6.20dBi > 6dBi, so the power density limit shall be reduced to $30-(6.20-6) = 29.80$ dBm.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD (dBm/300k Hz)	PSD (dBm/500k Hz)	Duty factor	Total PSD (dBm/500k Hz)	Limit (dBm/500k Hz)	Pass / Fail
155	5775	-17.36	-15.14	0.71	-14.43	29.80	Pass

Note: Gain = 6.20dBi > 6dBi, so the power density limit shall be reduced to $30-(6.20-6) = 29.80$ dBm.

Spectrum Plot of Worst Value

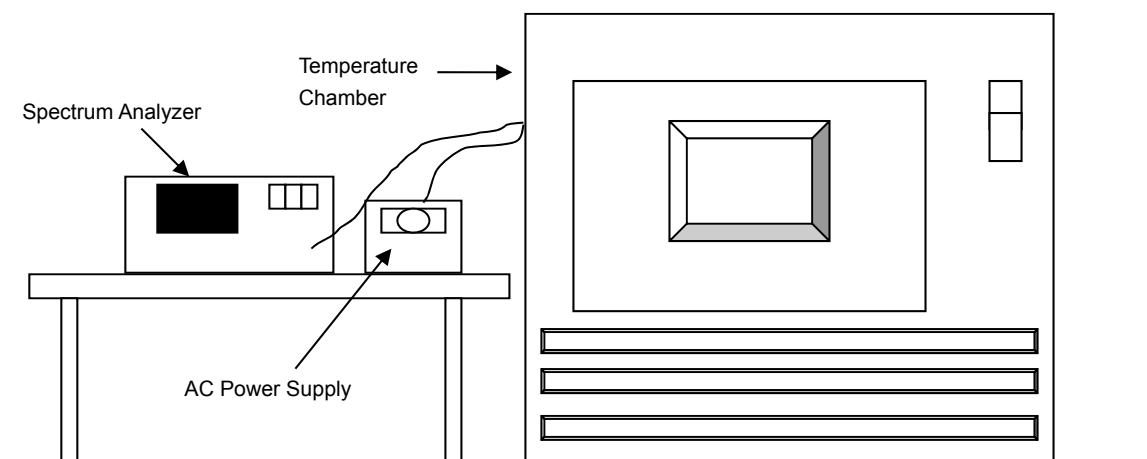


4.6 Frequency Stability

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	100039	Jun. 12, 2019	Jun. 11, 2020
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 03, 2019	Jun. 02, 2020
Digital Multimeter Fluke	87-III	70360742	Jun. 27, 2019	Jun. 26, 2020
AC Power Supply Exttech	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

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step d with the temperature chamber set to the next desired temperature.
- 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

Test Mode A

5G traffic radio: CDD Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	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
45	120	5179.9856	Pass	5179.9855	Pass	5179.9866	Pass	5179.9843	Pass
40	120	5180.0059	Pass	5180.0093	Pass	5180.0061	Pass	5180.0099	Pass
30	120	5179.9845	Pass	5179.9838	Pass	5179.9812	Pass	5179.9836	Pass
20	120	5180.0186	Pass	5180.0172	Pass	5180.0163	Pass	5180.0158	Pass
10	120	5179.9754	Pass	5179.9740	Pass	5179.9766	Pass	5179.9769	Pass
0	120	5180.0135	Pass	5180.0101	Pass	5180.0137	Pass	5180.0116	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	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	5180.0191	Pass	5180.018	Pass	5180.0164	Pass	5180.0167	Pass
	120	5180.0186	Pass	5180.0172	Pass	5180.0163	Pass	5180.0158	Pass
	102	5180.0187	Pass	5180.017	Pass	5180.0165	Pass	5180.0156	Pass

Test Mode A

5G traffic radio: Beamforming Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	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
45	120	5179.9882	Pass	5179.9897	Pass	5179.9853	Pass	5179.9858	Pass
40	120	5179.9828	Pass	5179.9793	Pass	5179.9782	Pass	5179.9801	Pass
30	120	5179.9847	Pass	5179.9841	Pass	5179.9855	Pass	5179.9880	Pass
20	120	5180.0273	Pass	5180.0274	Pass	5180.0240	Pass	5180.0252	Pass
10	120	5180.0059	Pass	5180.0071	Pass	5180.0066	Pass	5180.0078	Pass
0	120	5179.9922	Pass	5179.9918	Pass	5179.9885	Pass	5179.9908	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	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	5180.0277	Pass	5180.0275	Pass	5180.0233	Pass	5180.0253	Pass
	120	5180.0273	Pass	5180.0274	Pass	5180.0240	Pass	5180.0252	Pass
	102	5180.0280	Pass	5180.0280	Pass	5180.0238	Pass	5180.0251	Pass

Test Mode A

Scanning radio: CDD Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	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
45	120	5180.0143	Pass	5180.0111	Pass	5180.0108	Pass	5180.0138	Pass
40	120	5180.0158	Pass	5180.0164	Pass	5180.0174	Pass	5180.0160	Pass
30	120	5180.0120	Pass	5180.0144	Pass	5180.0151	Pass	5180.0110	Pass
20	120	5180.0215	Pass	5180.0257	Pass	5180.0218	Pass	5180.0249	Pass
10	120	5180.0078	Pass	5180.0036	Pass	5180.0041	Pass	5180.0062	Pass
0	120	5179.9836	Pass	5179.9813	Pass	5179.9827	Pass	5179.9842	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	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	5180.0221	Pass	5180.0261	Pass	5180.0215	Pass	5180.0241	Pass
	120	5180.0215	Pass	5180.0257	Pass	5180.0218	Pass	5180.0249	Pass
	102	5180.0222	Pass	5180.0248	Pass	5180.0224	Pass	5180.0241	Pass

Test Mode C

5G traffic radio: CDD Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	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
45	120	5179.9763	Pass	5179.9755	Pass	5179.9764	Pass	5179.9766	Pass
40	120	5180.0081	Pass	5180.0103	Pass	5180.0123	Pass	5180.0110	Pass
30	120	5180.0112	Pass	5180.0128	Pass	5180.0088	Pass	5180.0091	Pass
20	120	5179.9827	Pass	5179.9866	Pass	5179.9842	Pass	5179.9861	Pass
10	120	5180.0015	Pass	5180.0018	Pass	5180.0023	Pass	5180.0054	Pass
0	120	5179.9908	Pass	5179.9896	Pass	5179.9883	Pass	5179.9908	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5179.9827	Pass	5179.9867	Pass	5179.9852	Pass	5179.9856	Pass
	120	5179.9827	Pass	5179.9866	Pass	5179.9842	Pass	5179.9861	Pass
	102	5179.9827	Pass	5179.9857	Pass	5179.9836	Pass	5179.9865	Pass

Test Mode C

5G traffic radio: Beamforming Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	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
45	120	5180.0129	Pass	5180.0137	Pass	5180.0134	Pass	5180.0112	Pass
40	120	5179.9893	Pass	5179.9908	Pass	5179.9897	Pass	5179.9883	Pass
30	120	5180.0092	Pass	5180.0066	Pass	5180.0057	Pass	5180.0094	Pass
20	120	5180.0028	Pass	5180.0026	Pass	5180.0046	Pass	5180.0019	Pass
10	120	5179.9916	Pass	5179.9912	Pass	5179.9922	Pass	5179.9934	Pass
0	120	5180.0008	Pass	5180.0019	Pass	5179.9986	Pass	5179.9980	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	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	5180.0035	Pass	5180.0016	Pass	5180.0037	Pass	5180.0027	Pass
	120	5180.0028	Pass	5180.0026	Pass	5180.0046	Pass	5180.0019	Pass
	102	5180.0033	Pass	5180.0036	Pass	5180.0046	Pass	5180.0019	Pass

Test Mode C

Scanning radio: CDD Mode

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	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
45	120	5180.0120	Pass	5180.0071	Pass	5180.0090	Pass	5180.0089	Pass
40	120	5179.9849	Pass	5179.9843	Pass	5179.9821	Pass	5179.9848	Pass
30	120	5180.0140	Pass	5180.0163	Pass	5180.0169	Pass	5180.0143	Pass
20	120	5180.0130	Pass	5180.0125	Pass	5180.0135	Pass	5180.0091	Pass
10	120	5180.0211	Pass	5180.0253	Pass	5180.0237	Pass	5180.0204	Pass
0	120	5180.0017	Pass	5180.0014	Pass	5180.0054	Pass	5180.0040	Pass

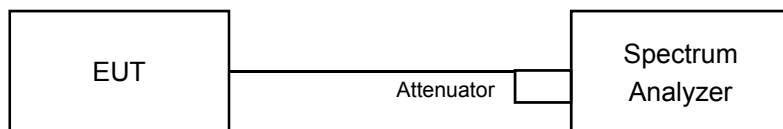
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5180.0129	Pass	5180.0125	Pass	5180.0143	Pass	5180.0091	Pass
	120	5180.0130	Pass	5180.0125	Pass	5180.0135	Pass	5180.0091	Pass
	102	5180.0125	Pass	5180.0127	Pass	5180.0141	Pass	5180.0084	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

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- 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

Test Mode A

5G traffic radio: CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	15.18	16.34	16.08	15.94	0.5	Pass
157	5785	16.35	16.09	15.96	15.71	0.5	Pass
165	5825	16.10	16.39	16.40	15.76	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	19.06	18.97	19.07	18.99	0.5	Pass
157	5785	17.83	18.96	18.46	18.78	0.5	Pass
165	5825	18.57	19.02	18.90	17.87	0.5	Pass

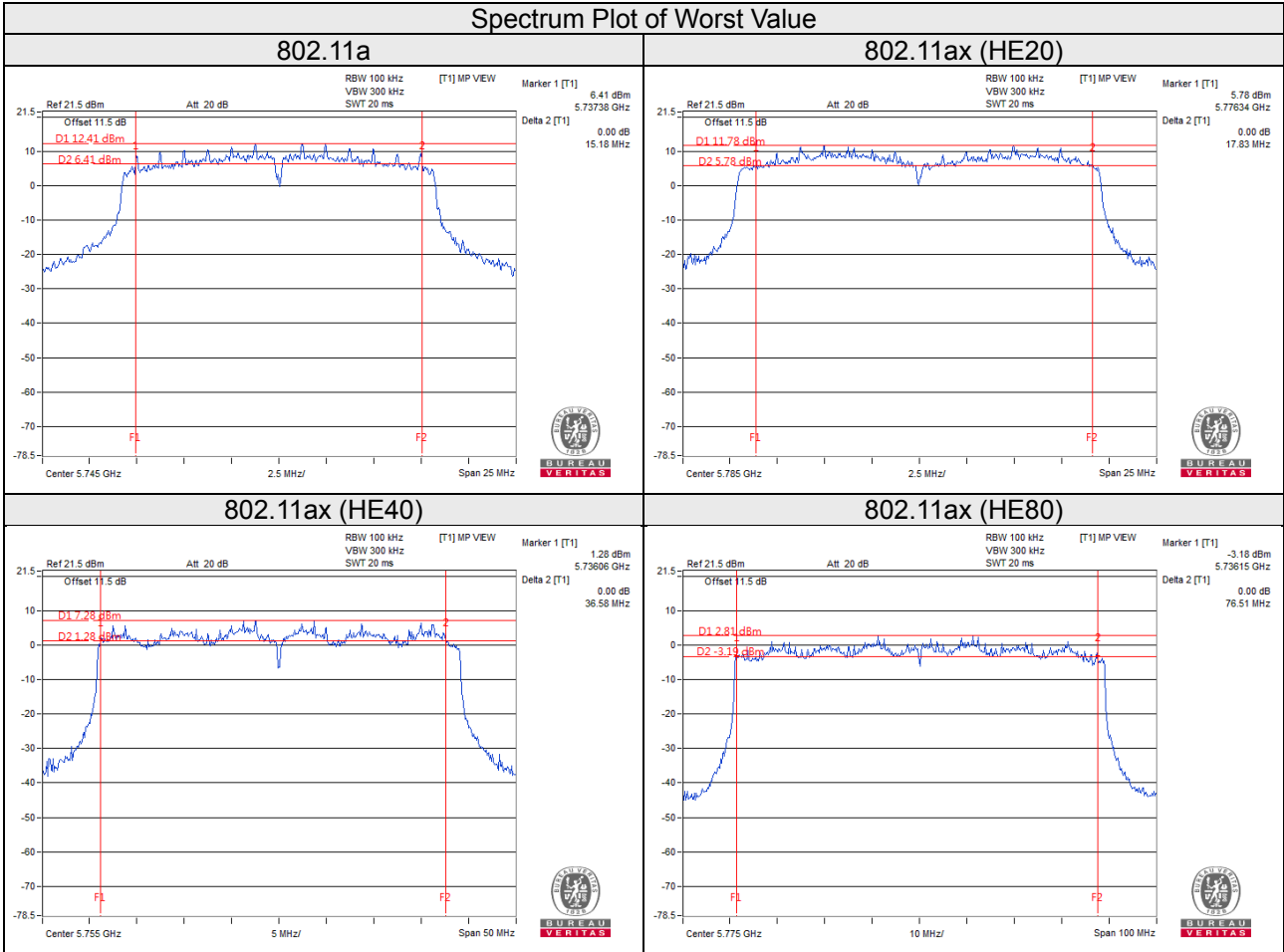
802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.98	37.48	38.14	36.58	0.5	Pass
159	5795	37.55	38.00	38.18	37.96	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	76.51	76.53	77.62	77.74	0.5	Pass

Spectrum Plot of Worst Value



Test Mode A

5G traffic radio: Beamforming Mode

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	19.06	18.59	19.00	17.15	0.5	Pass
157	5785	17.91	18.99	18.98	17.61	0.5	Pass
165	5825	18.44	18.92	18.40	16.88	0.5	Pass

802.11ax (HE40)

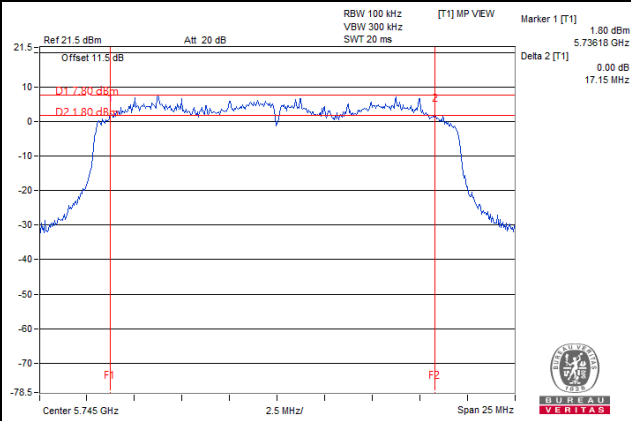
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.64	37.82	38.13	36.19	0.5	Pass
159	5795	37.44	35.88	37.62	36.55	0.5	Pass

802.11ax (HE80)

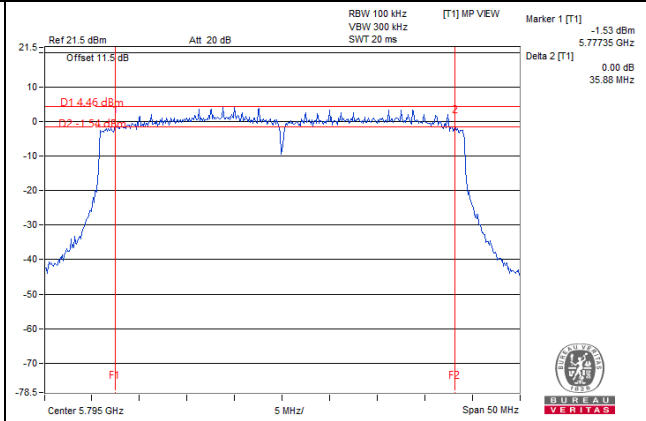
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	74.94	74.93	77.31	74.86	0.5	Pass

Spectrum Plot of Worst Value

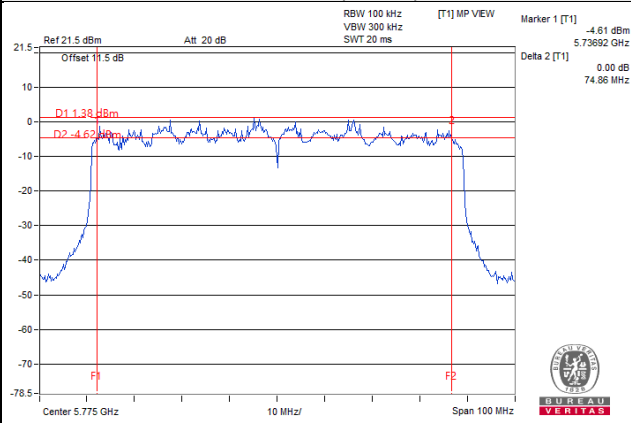
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Test Mode A

Scanning radio: CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.39	0.5	Pass
157	5785	16.40	0.5	Pass
165	5825	16.40	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	17.63	0.5	Pass
157	5785	17.62	0.5	Pass
165	5825	17.62	0.5	Pass

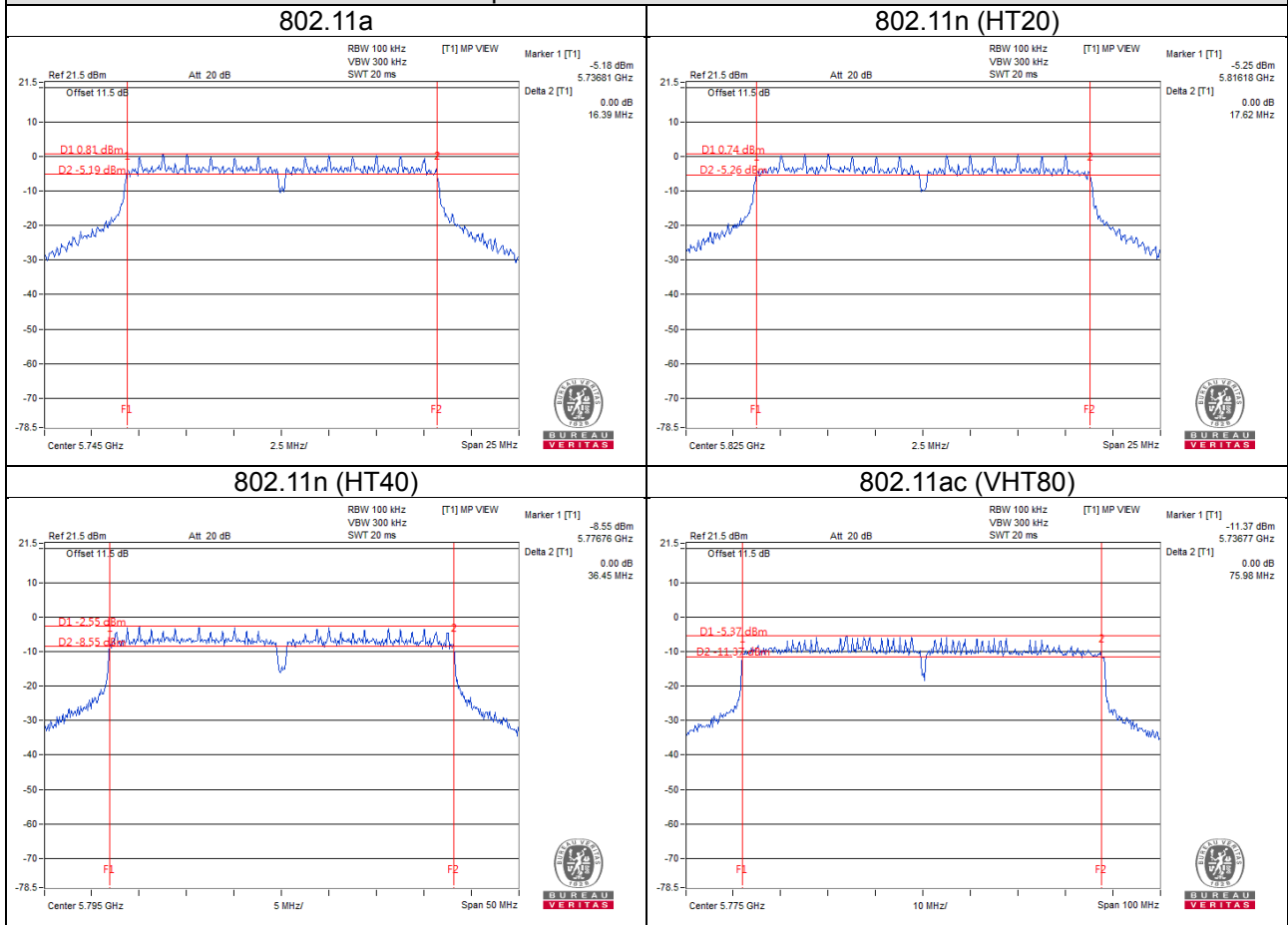
802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	36.46	0.5	Pass
159	5795	36.45	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
155	5775	75.98	0.5	Pass

Spectrum Plot of Worst Value



Test Mode C

5G traffic radio: CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	15.20	16.35	16.34	16.34	0.5	Pass
157	5785	15.35	16.35	15.99	15.93	0.5	Pass
165	5825	15.64	15.95	16.39	15.72	0.5	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	18.85	18.42	18.74	17.07	0.5	Pass
157	5785	18.71	18.50	18.80	17.57	0.5	Pass
165	5825	18.58	18.73	18.94	17.84	0.5	Pass

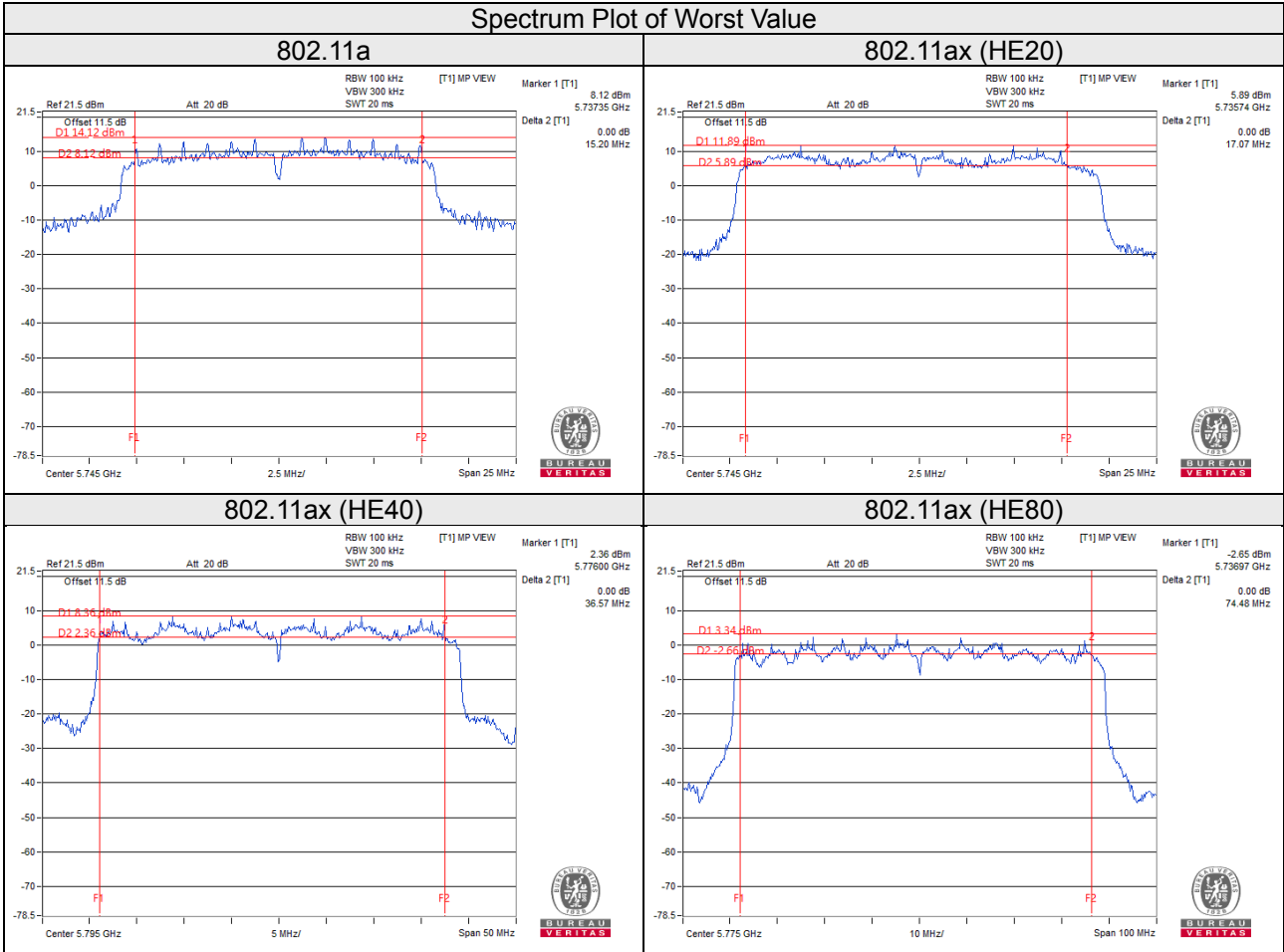
802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	36.90	37.93	38.03	36.58	0.5	Pass
159	5795	37.57	37.96	37.82	36.57	0.5	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	75.85	76.21	77.48	74.48	0.5	Pass

Spectrum Plot of Worst Value



Test Mode C

5G traffic radio: Beamforming Mode

802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
149	5745	18.99	18.94	18.87	18.87	0.5	Pass
157	5785	19.01	18.37	18.77	18.17	0.5	Pass
165	5825	18.91	18.66	18.70	18.48	0.5	Pass

802.11ax (HE40)

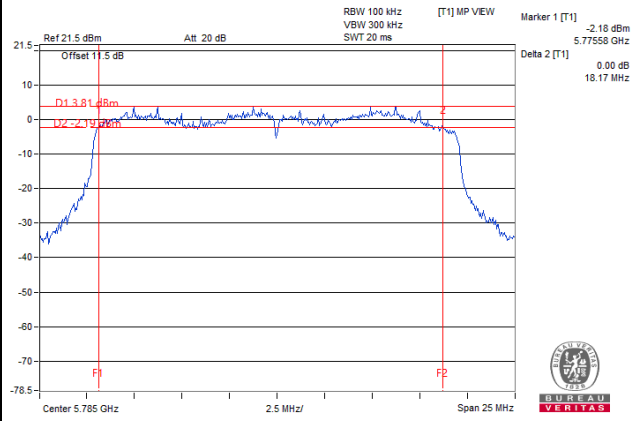
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
151	5755	37.91	37.47	37.44	36.16	0.5	Pass
159	5795	37.87	37.56	37.41	36.49	0.5	Pass

802.11ax (HE80)

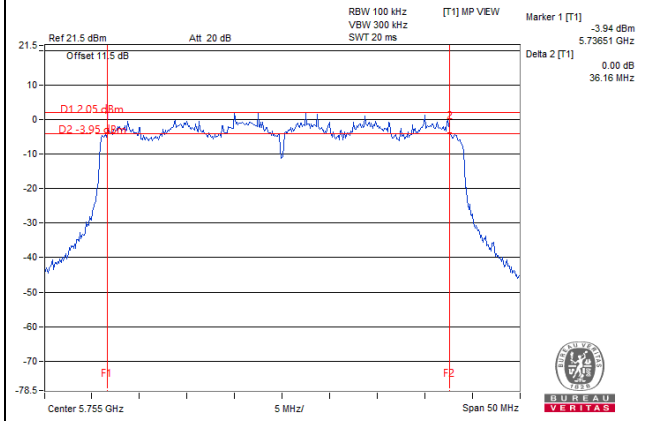
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
155	5775	77.08	76.42	76.76	75.91	0.5	Pass

Spectrum Plot of Worst Value

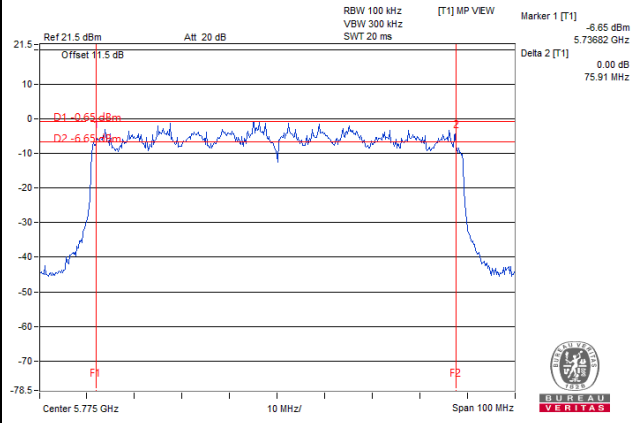
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



Test Mode C

Scanning radio: CDD Mode

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	16.38	0.5	Pass
157	5785	16.39	0.5	Pass
165	5825	16.38	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	17.61	0.5	Pass
157	5785	17.58	0.5	Pass
165	5825	17.62	0.5	Pass

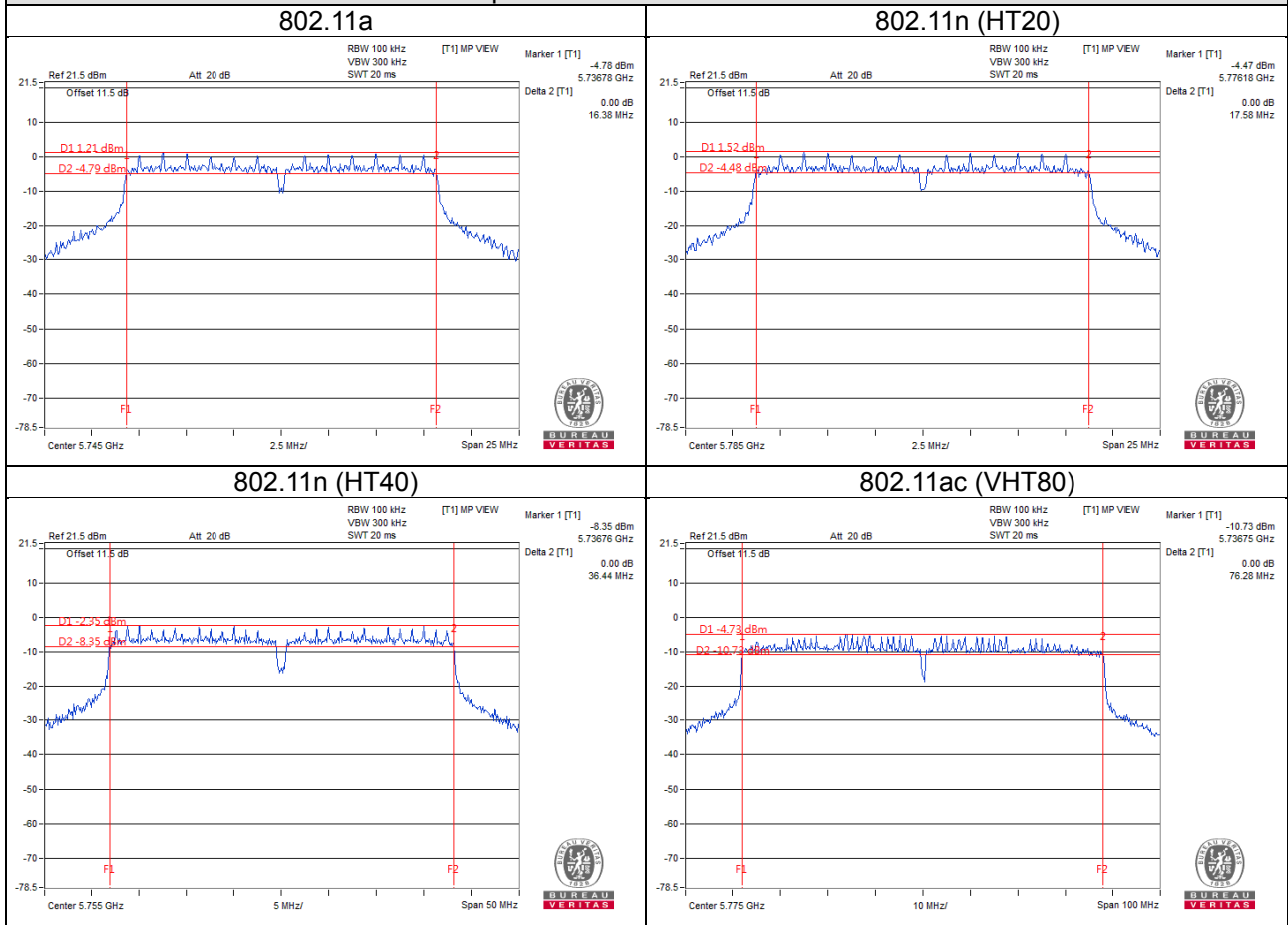
802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	36.44	0.5	Pass
159	5795	36.44	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
155	5775	76.28	0.5	Pass

Spectrum Plot of Worst Value



5 Pictures of Test Arrangements

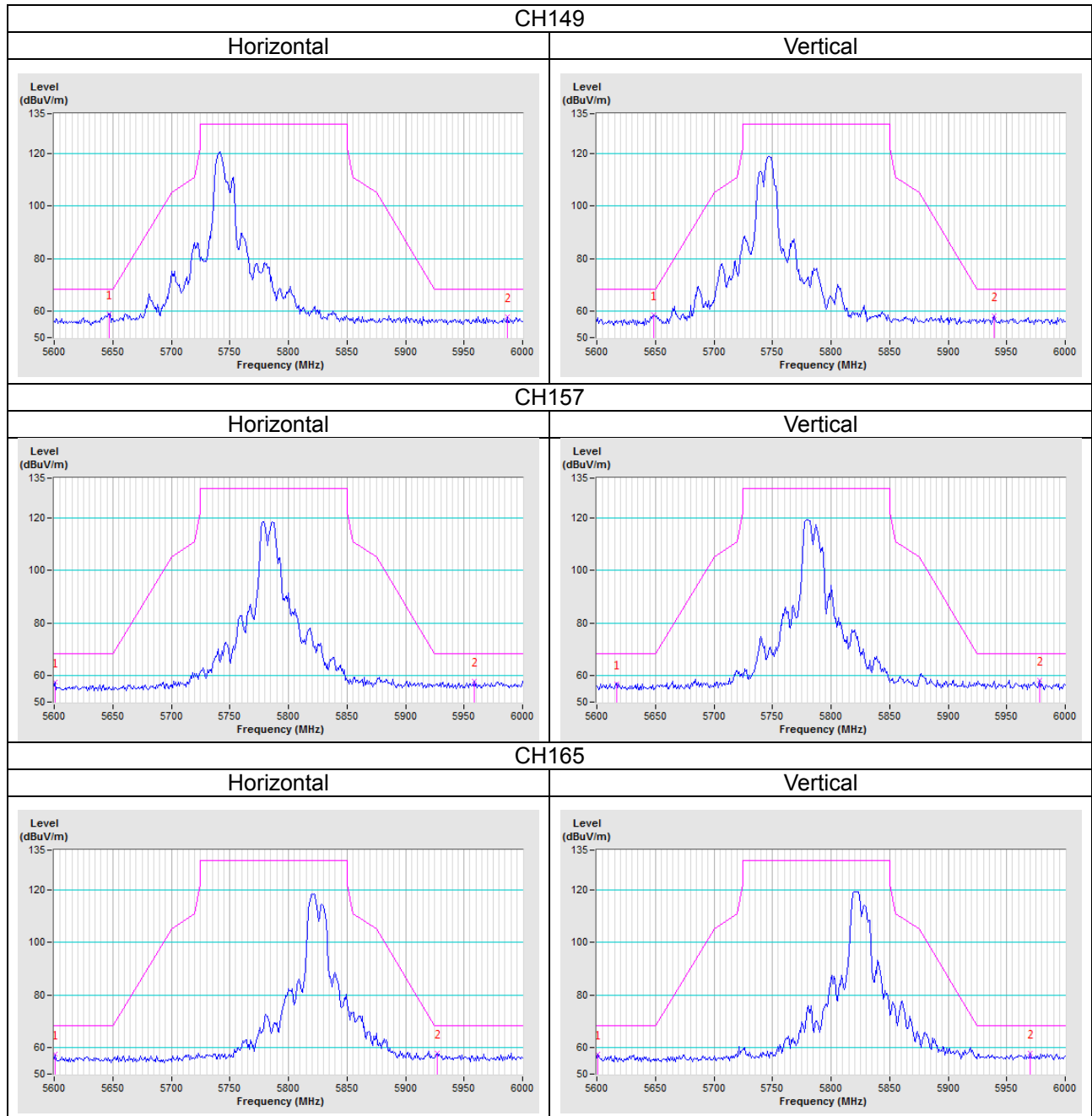
Please refer to the attached file (Test Setup Photo).

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

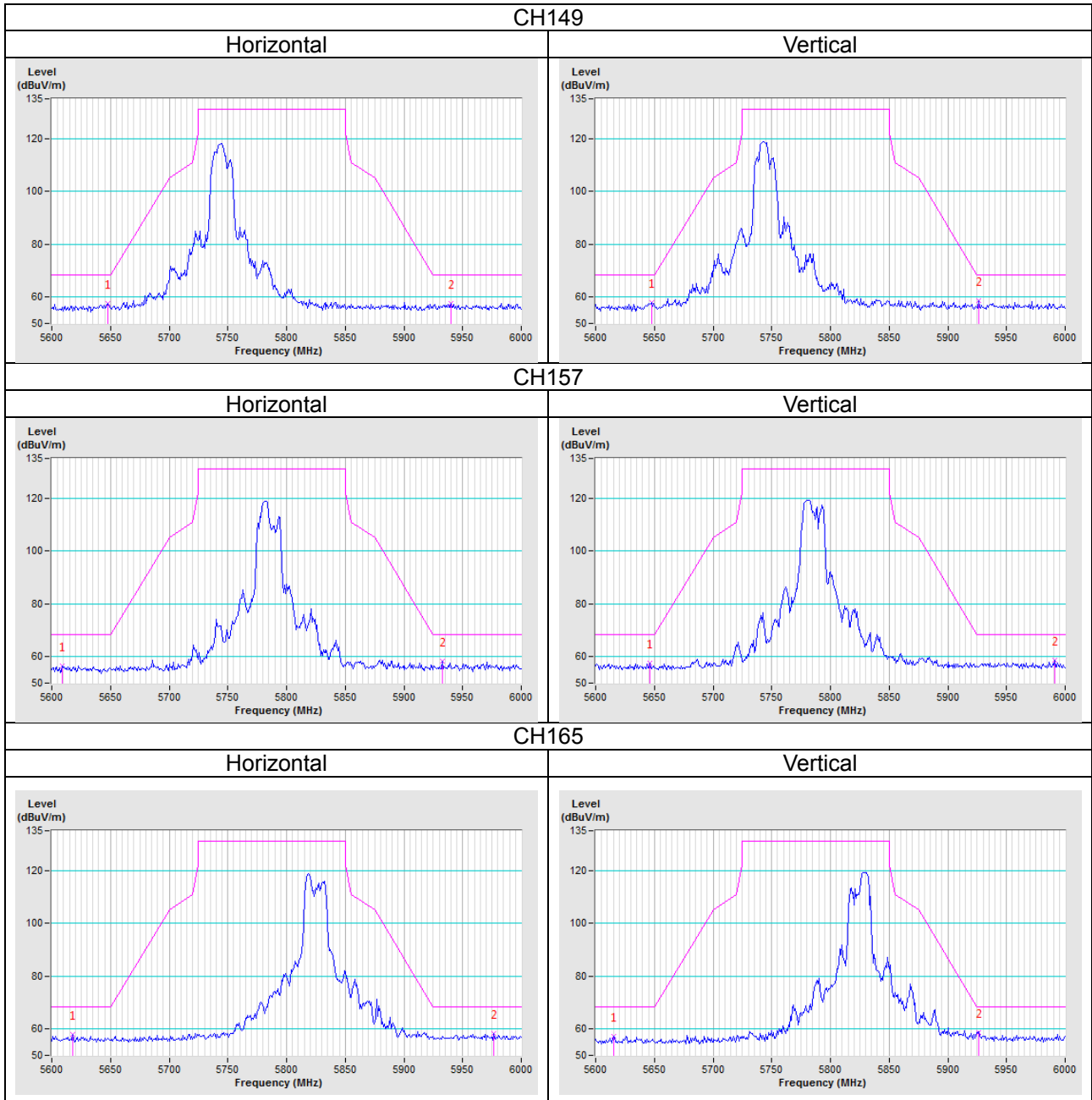
Test Mode A

5G traffic radio: CDD Mode

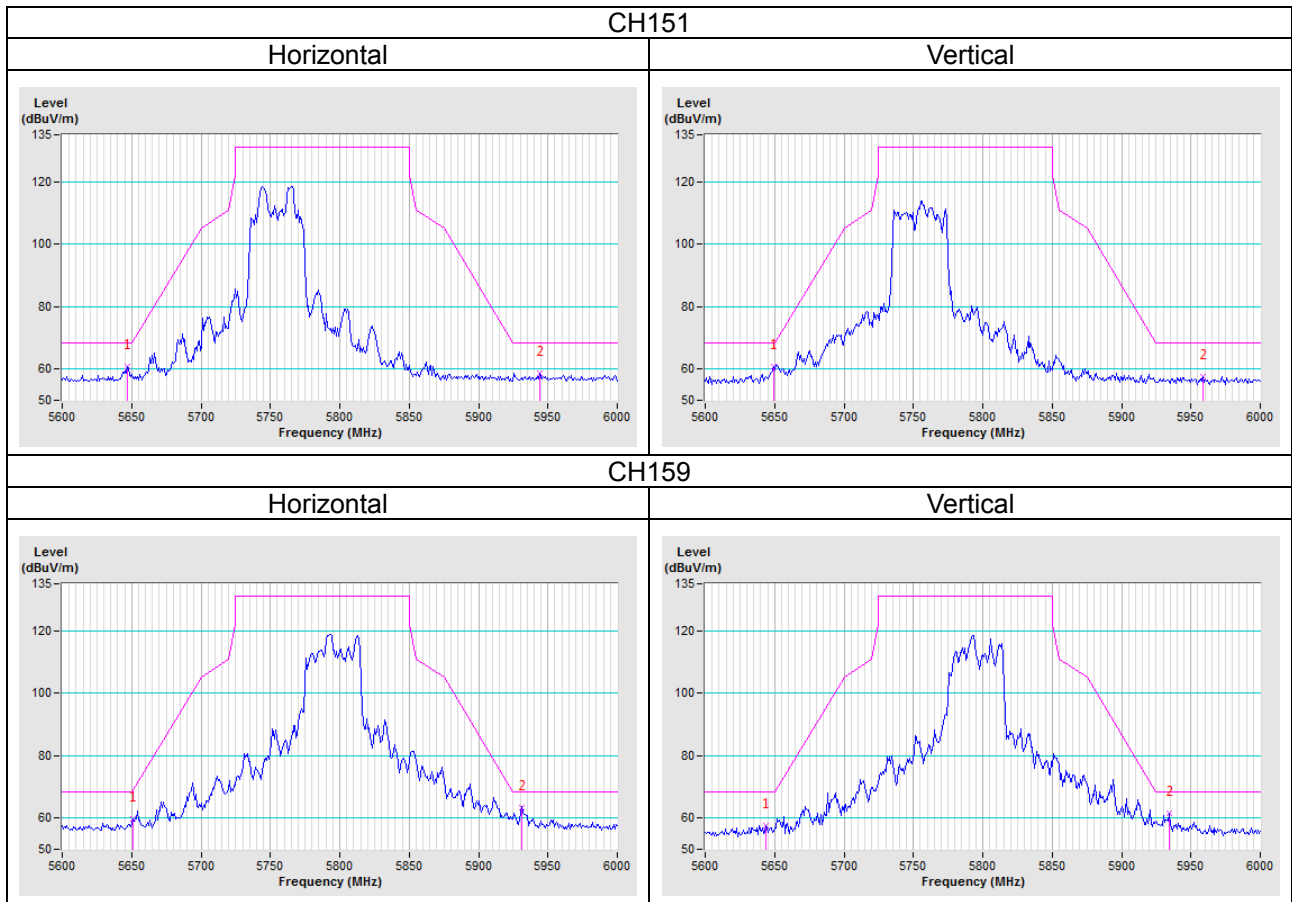
802.11a



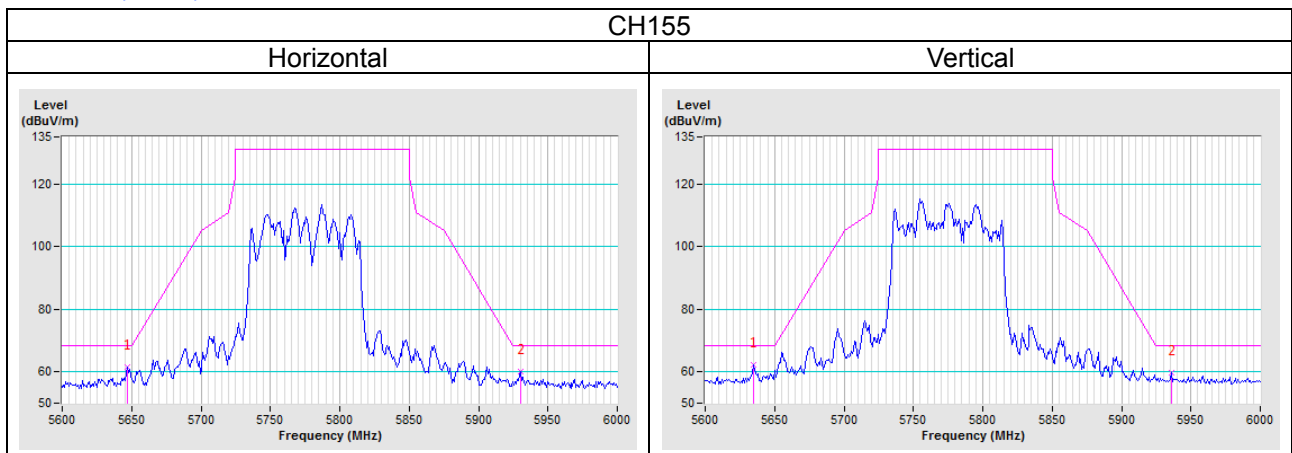
802.11ax (HE20)



802.11ax (HE40)



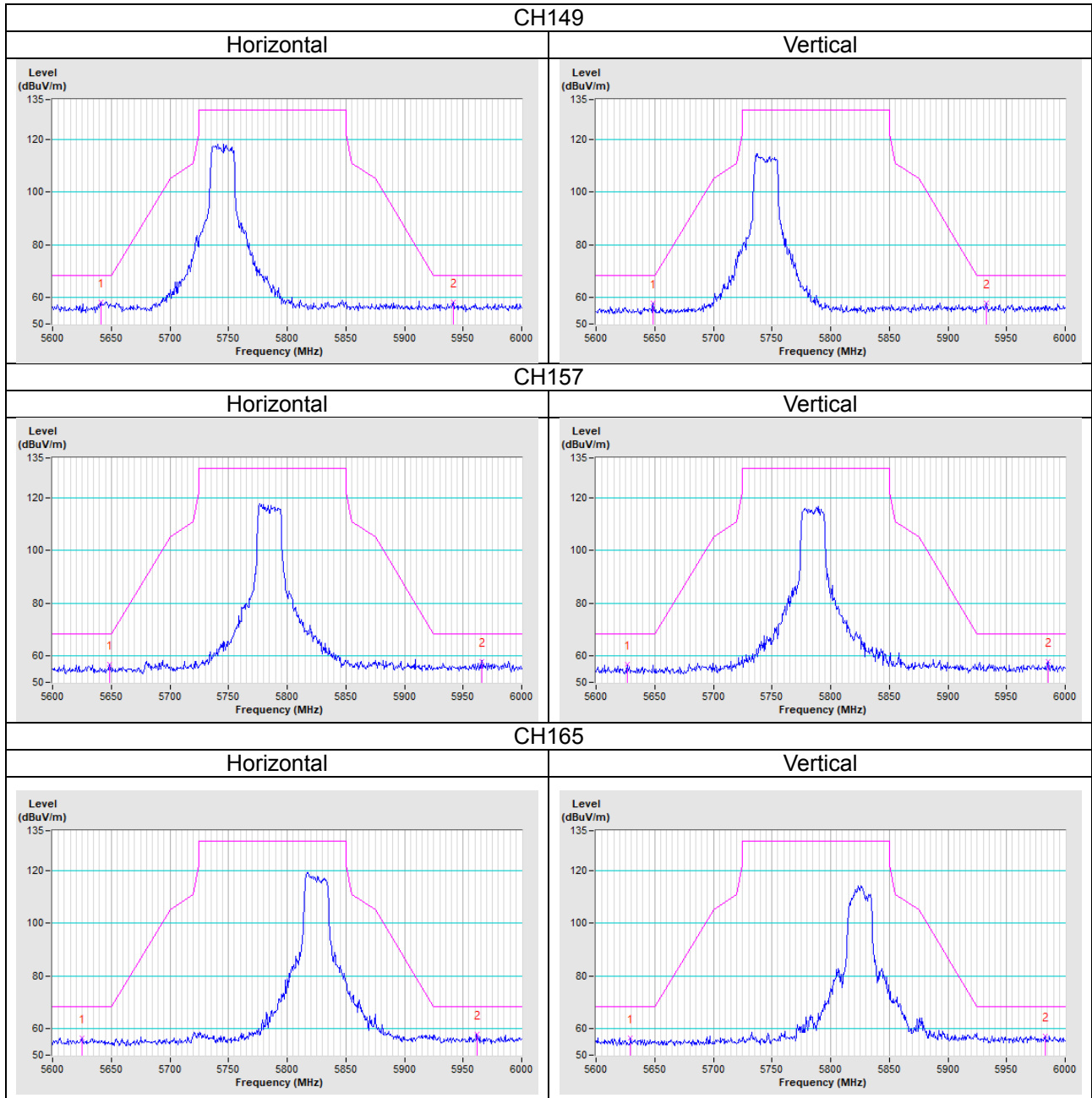
802.11ax (HE80)



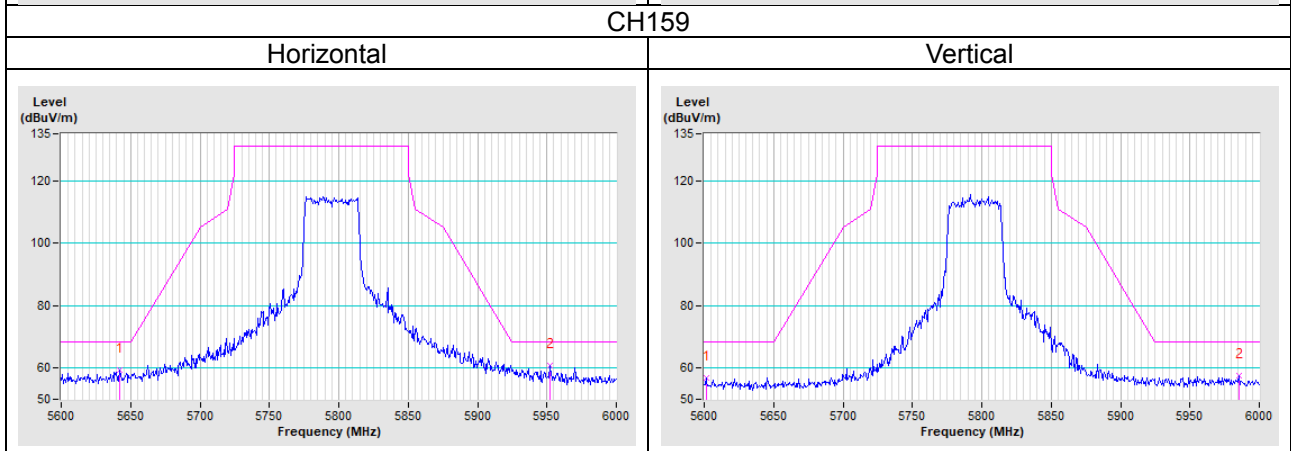
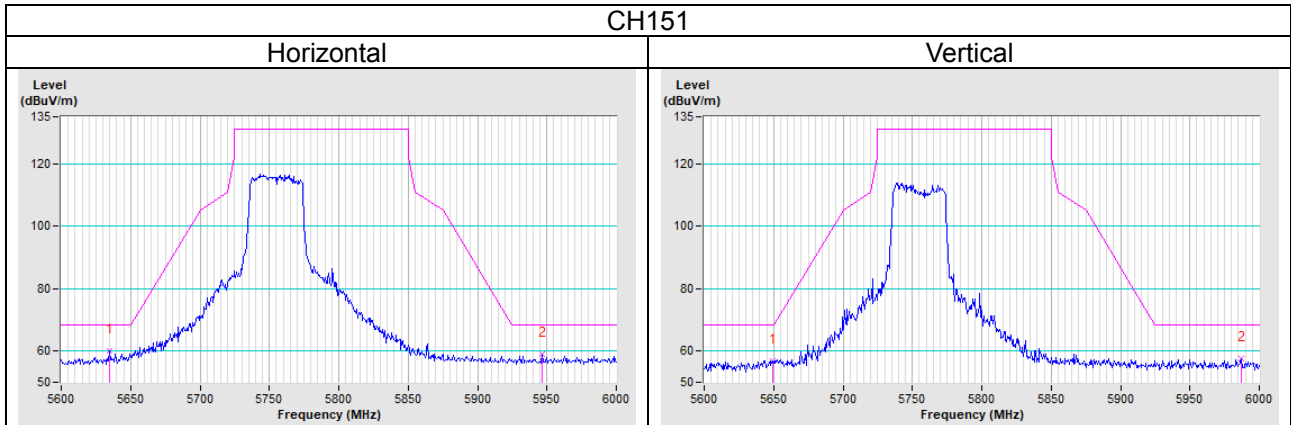
Test Mode A

5G traffic radio: Beamforming Mode

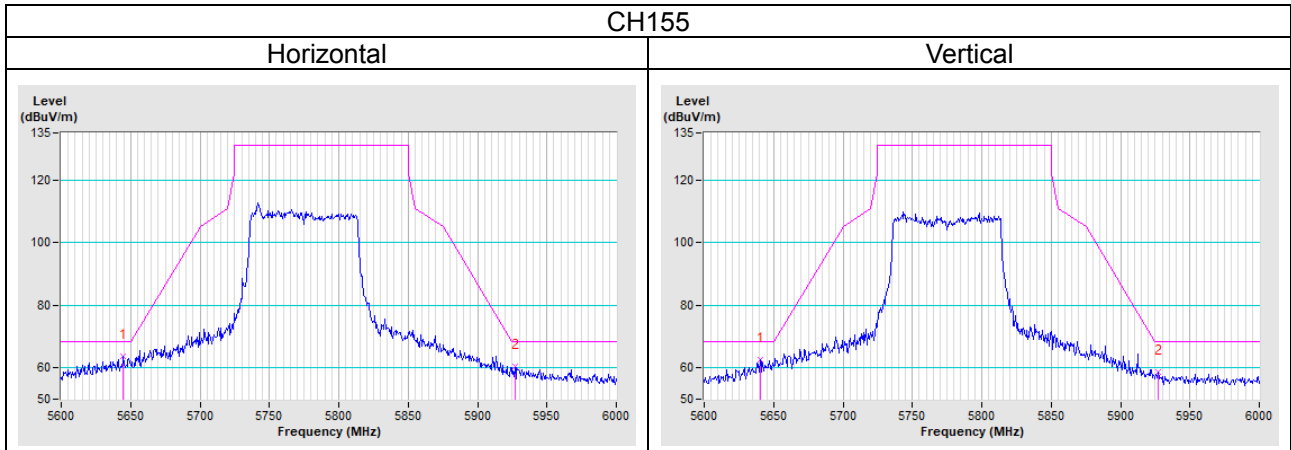
802.11ax (HE20)



802.11ax (HE40)



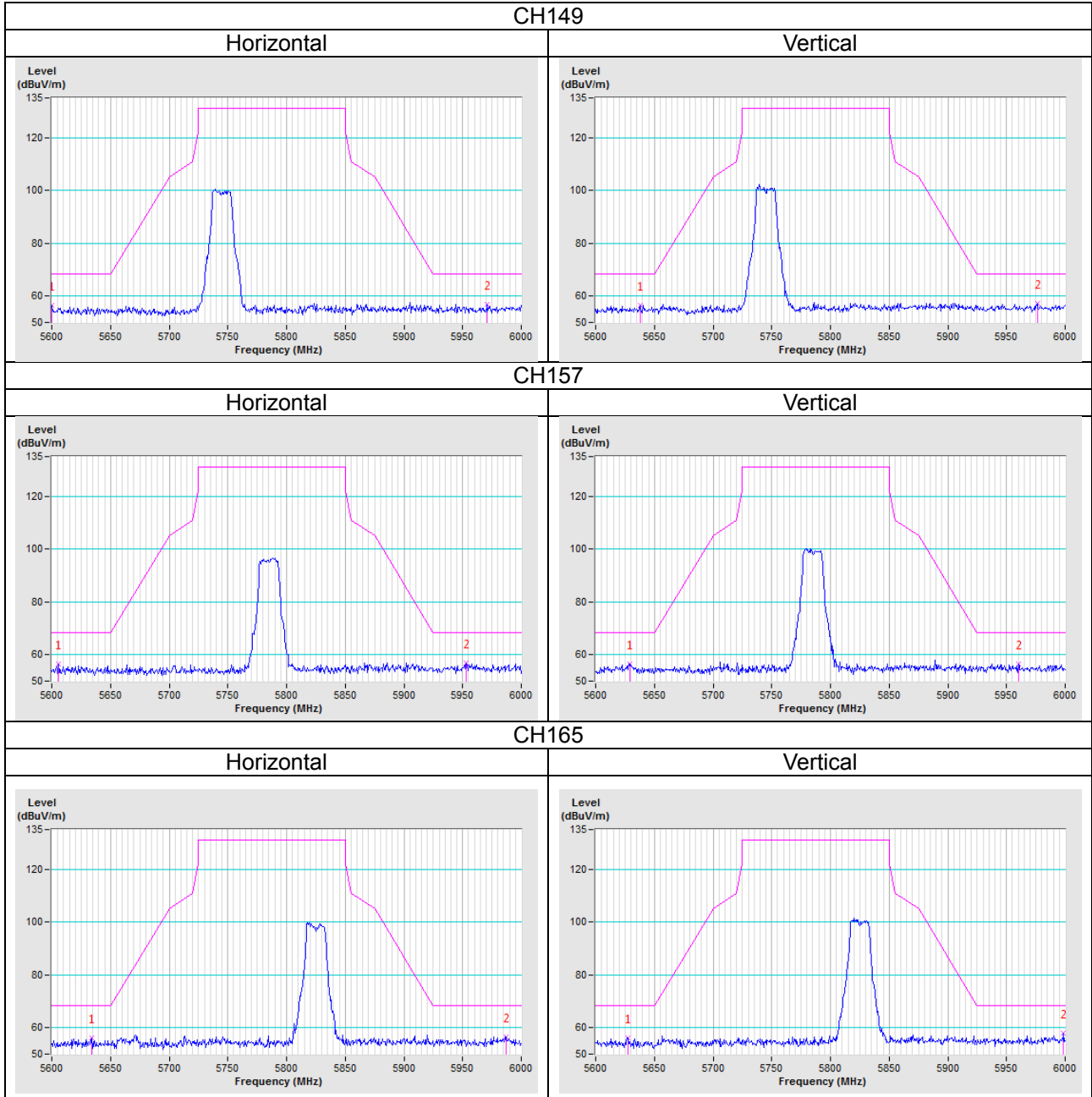
802.11ax (HE80)



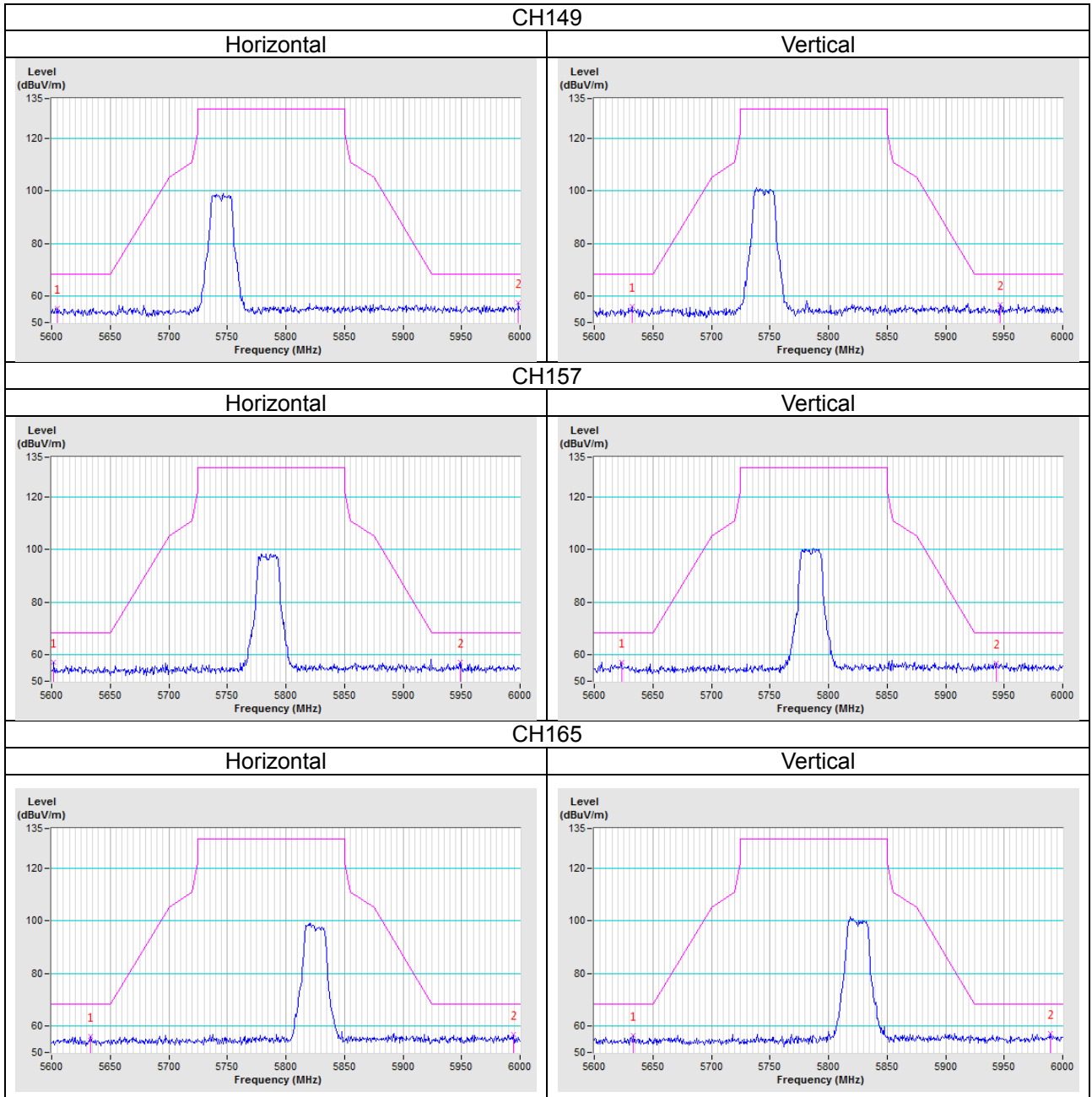
Test Mode A

Scanning radio: CDD Mode

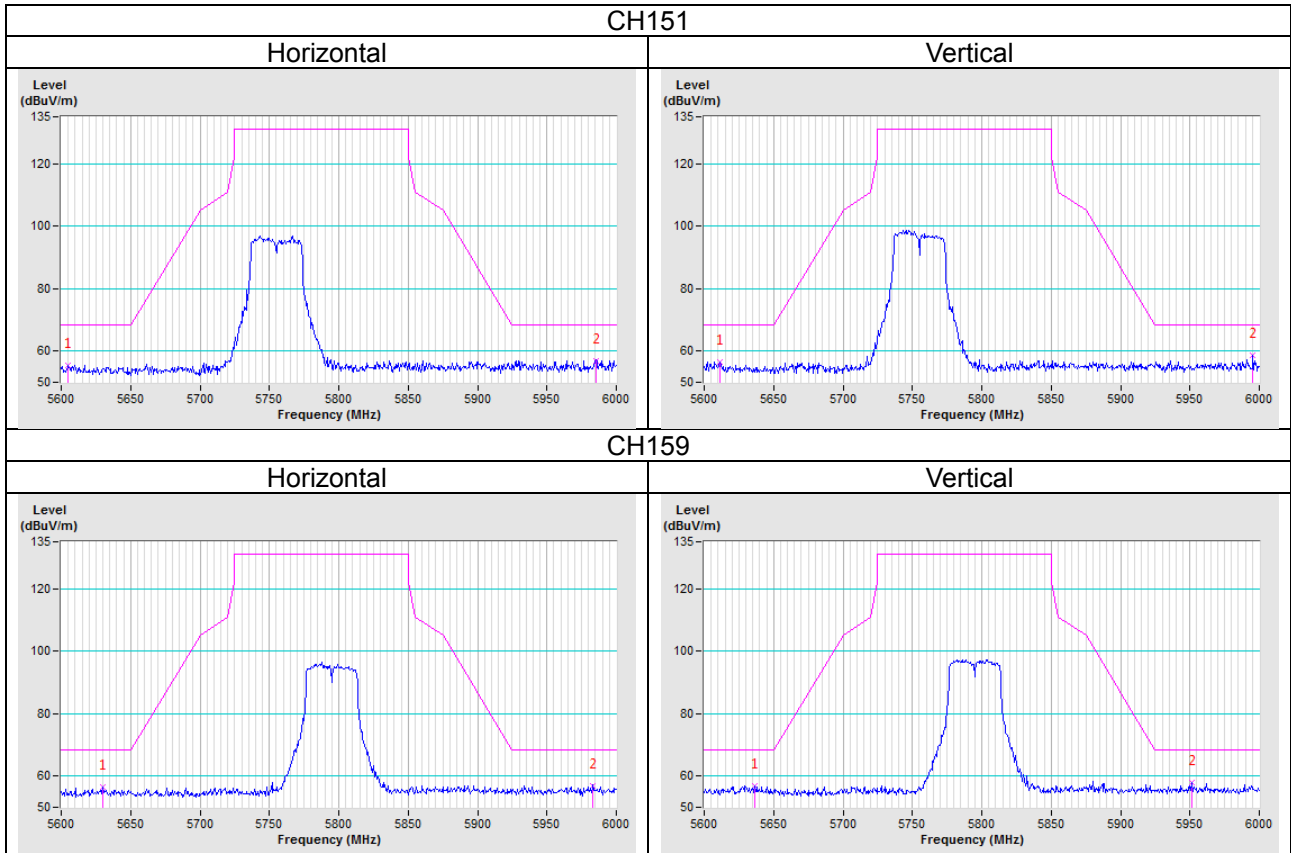
802.11a



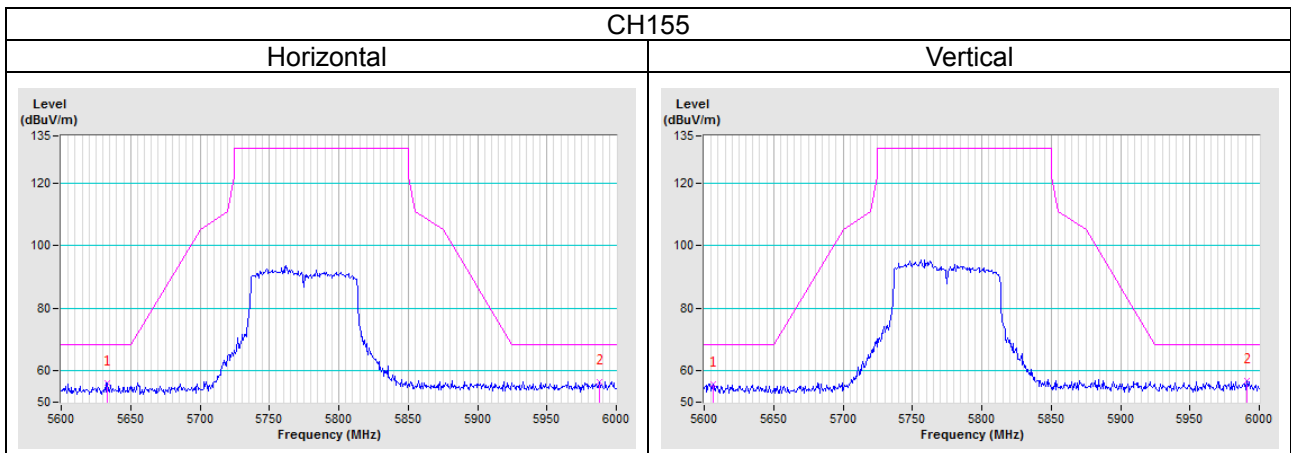
802.11ac (VHT20)



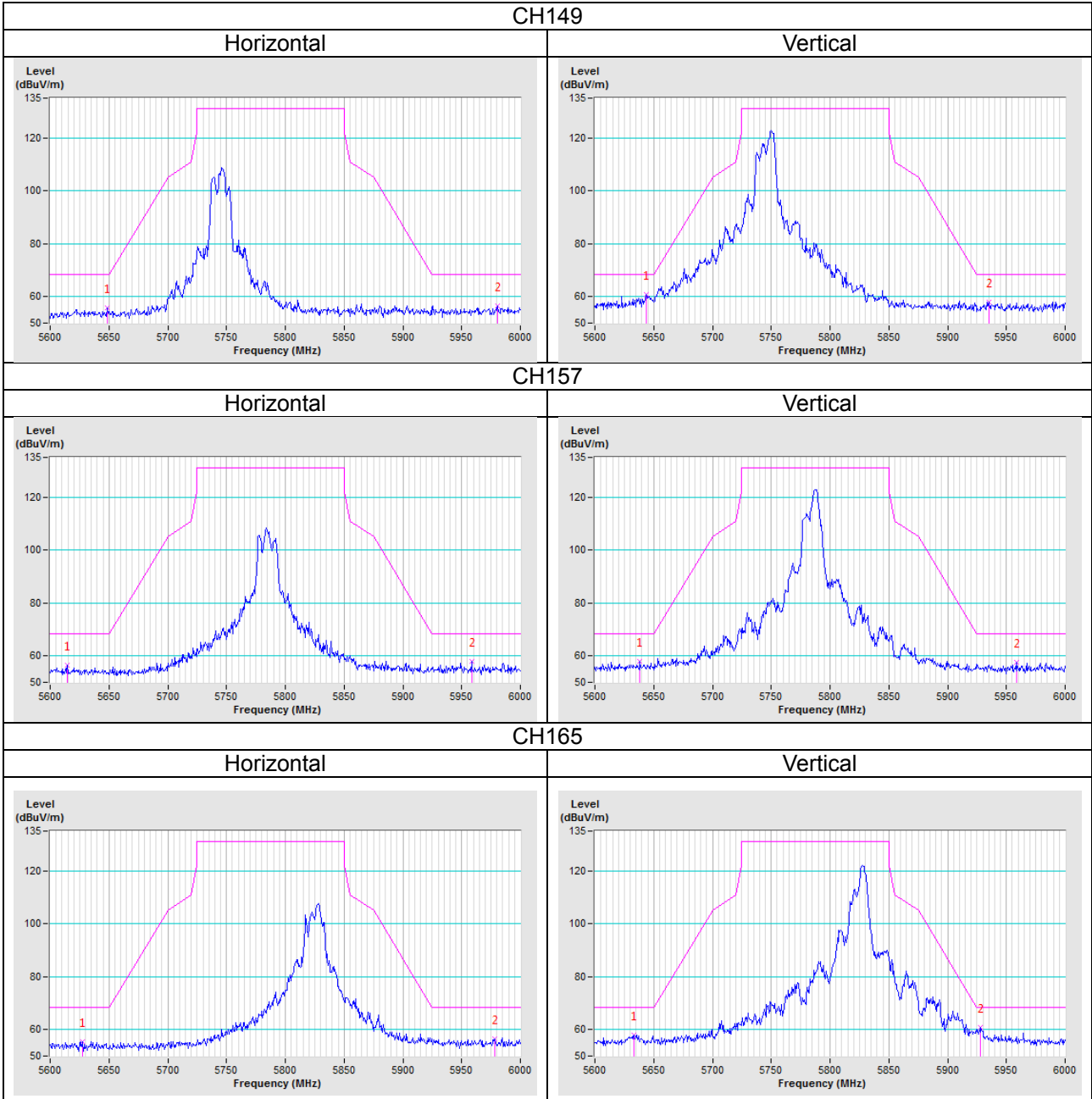
802.11ac (VHT40)



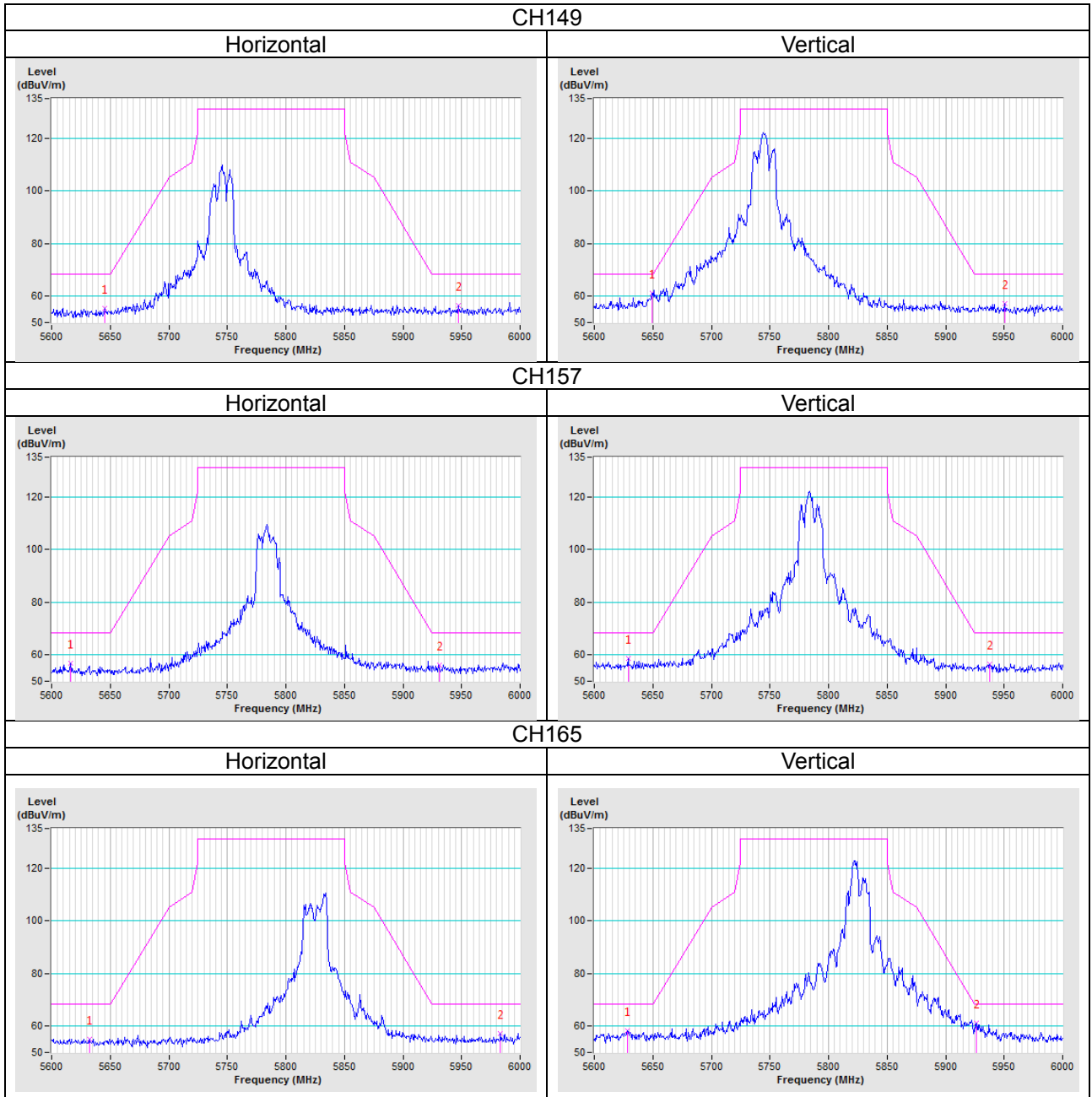
802.11ac (VHT80)



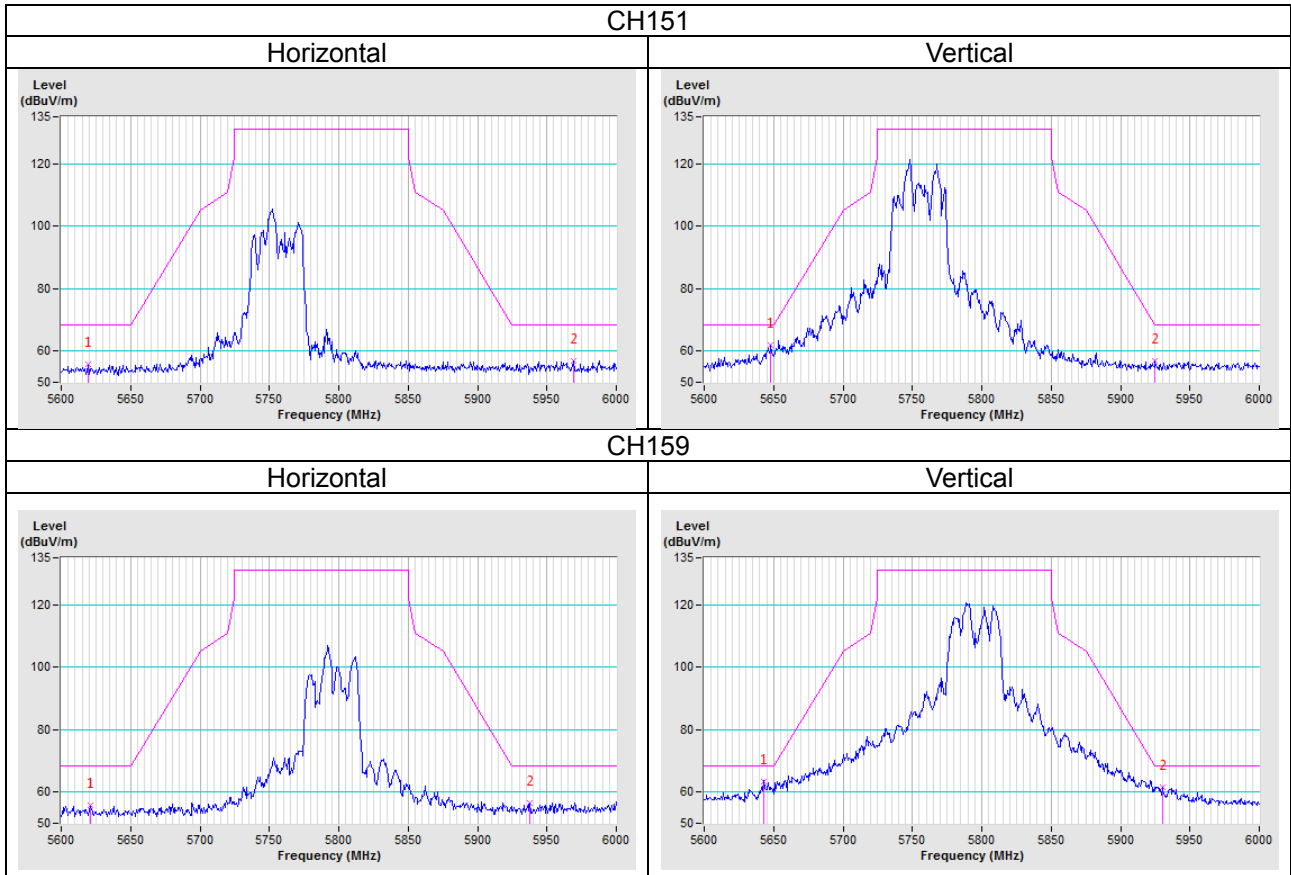
Test Mode C
5G traffic radio: CDD Mode
 802.11a



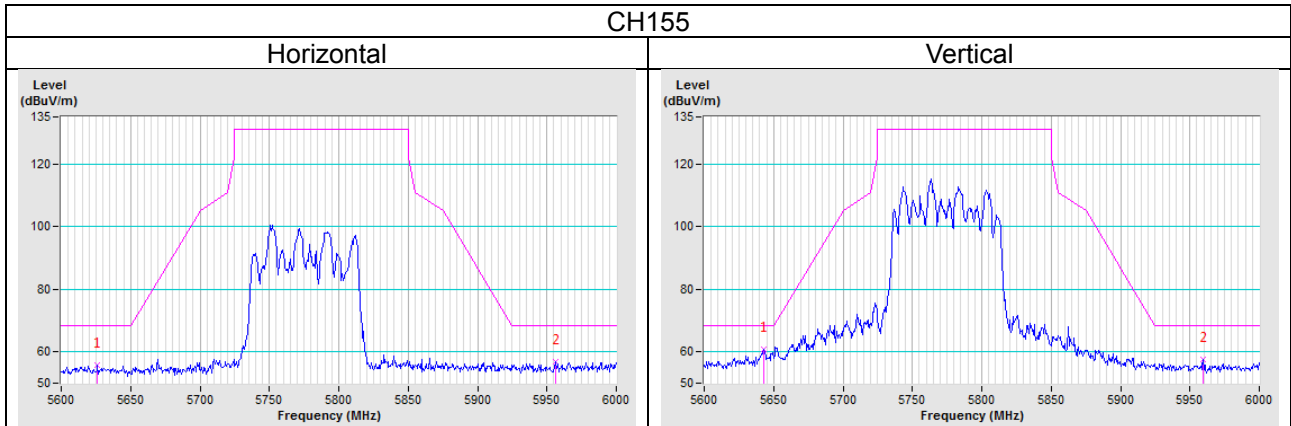
802.11ax (HE20)



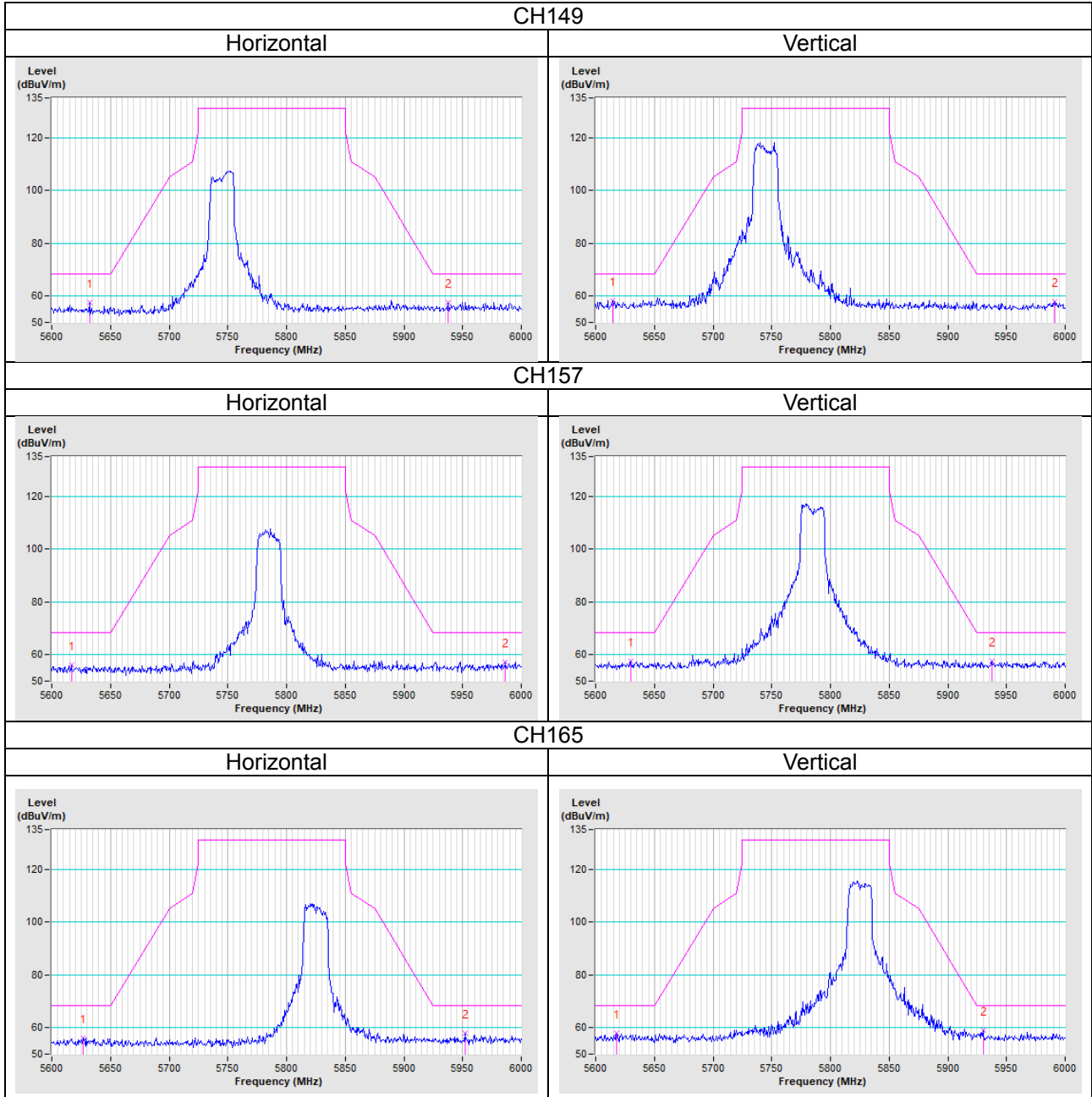
802.11ax (HE40)



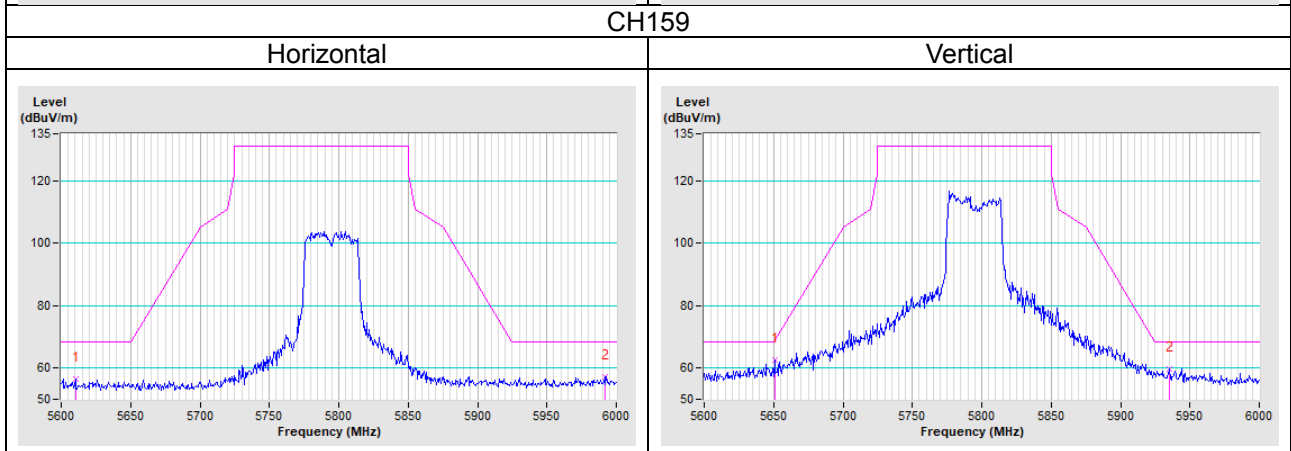
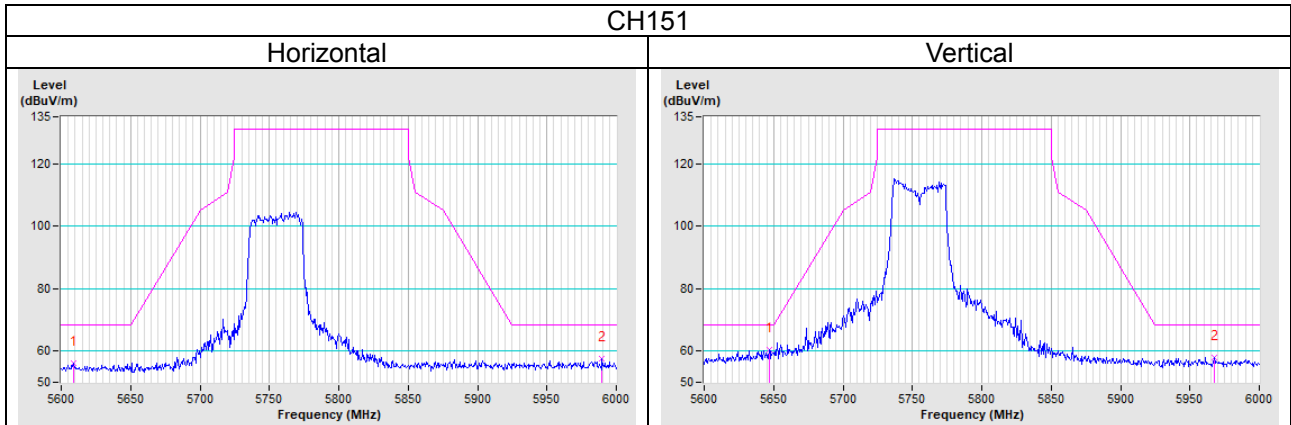
802.11ax (HE80)



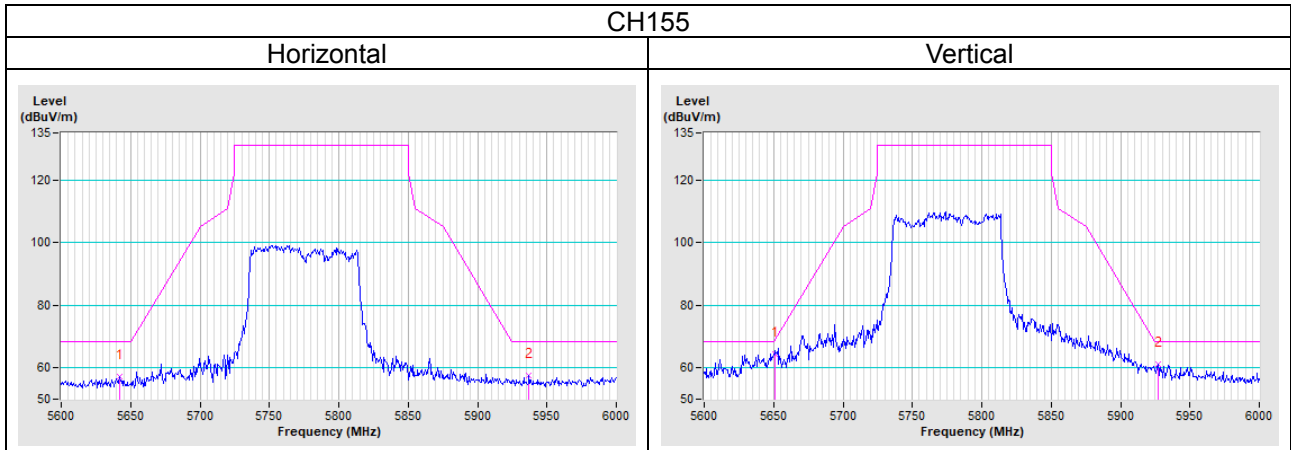
Test Mode C
5G traffic radio: Beamforming Mode
 802.11ax (HE20)



802.11ax (HE40)



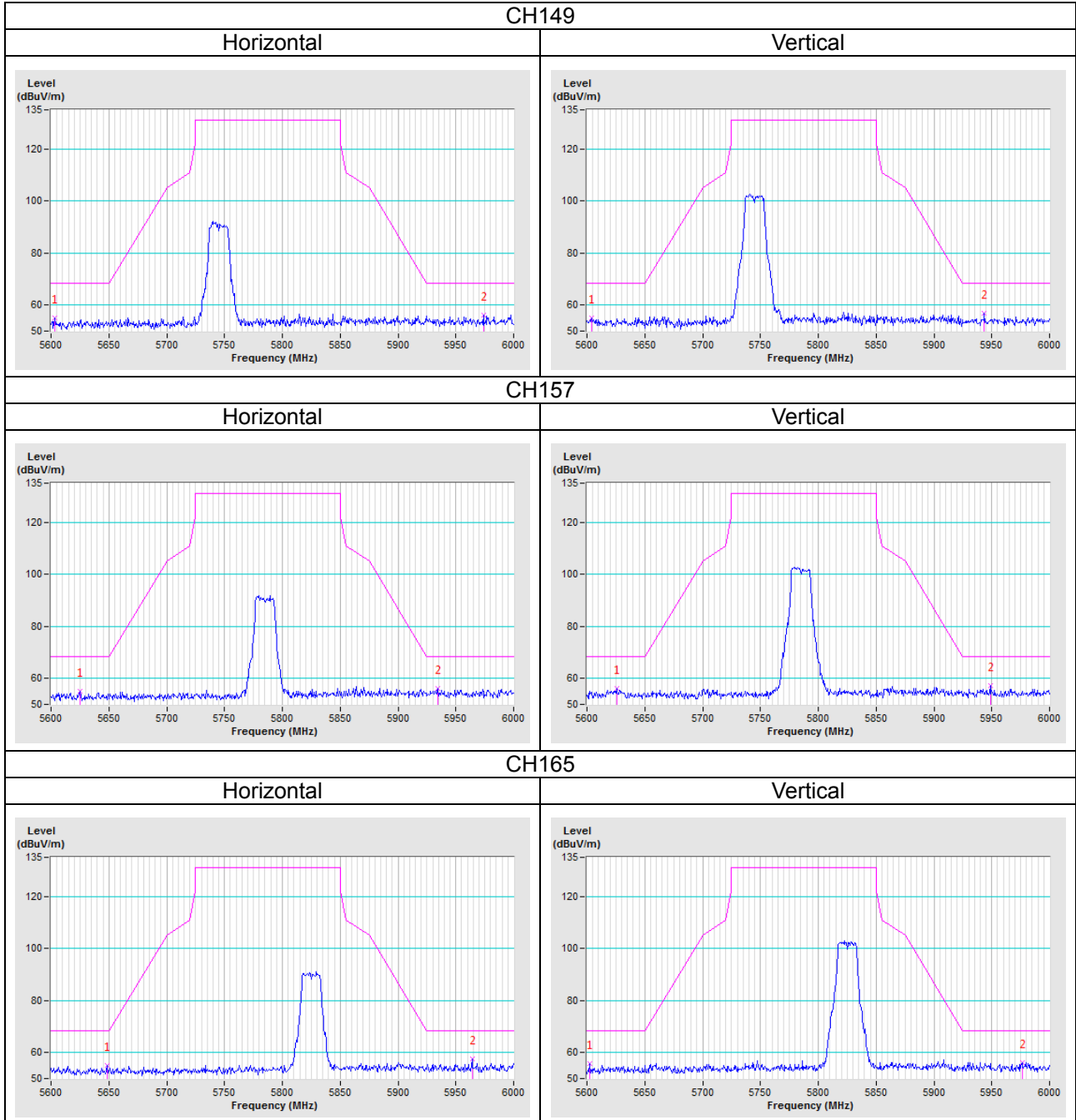
802.11ax (HE80)



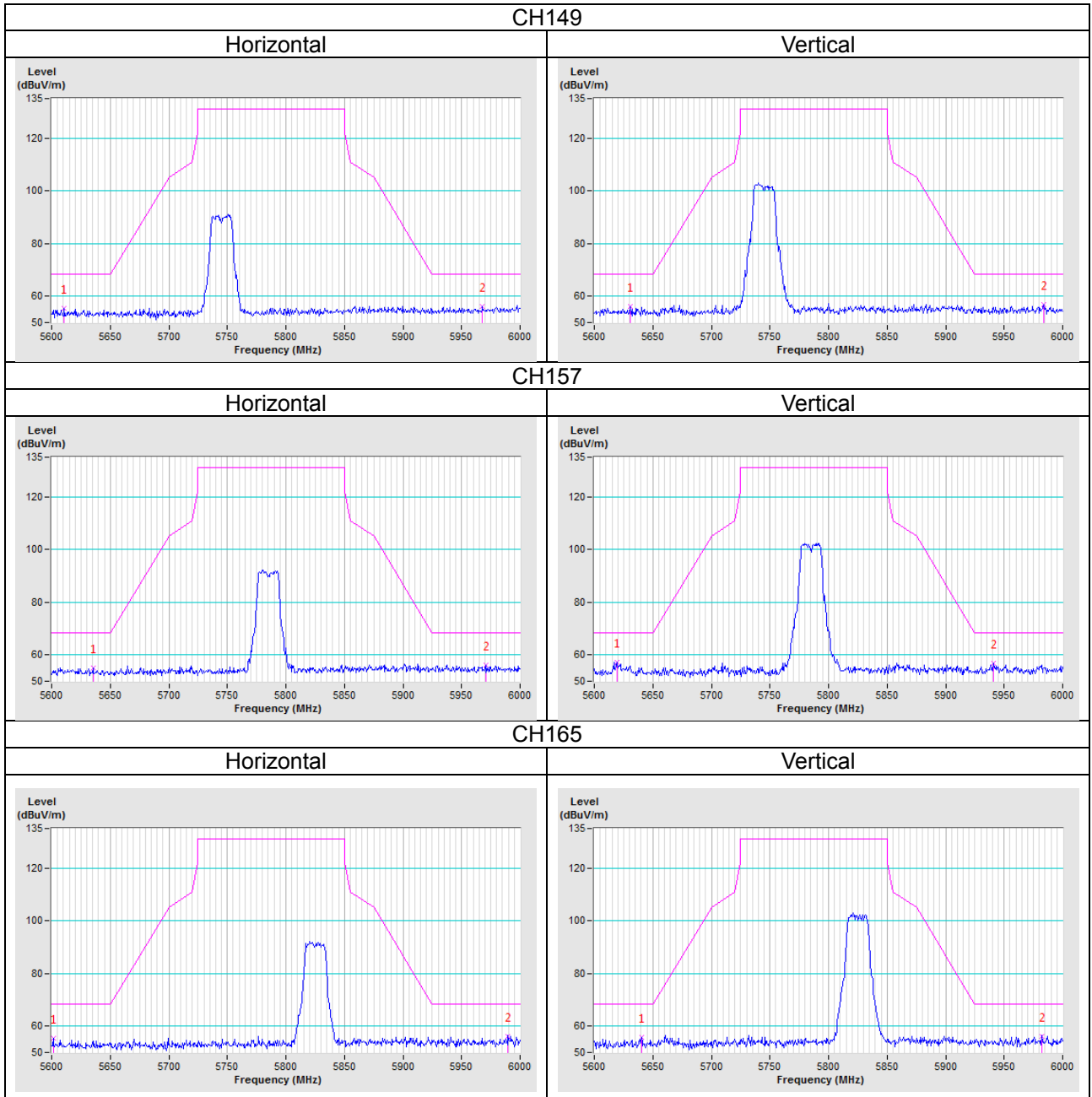
Test Mode C

Scanning radio: CDD Mode

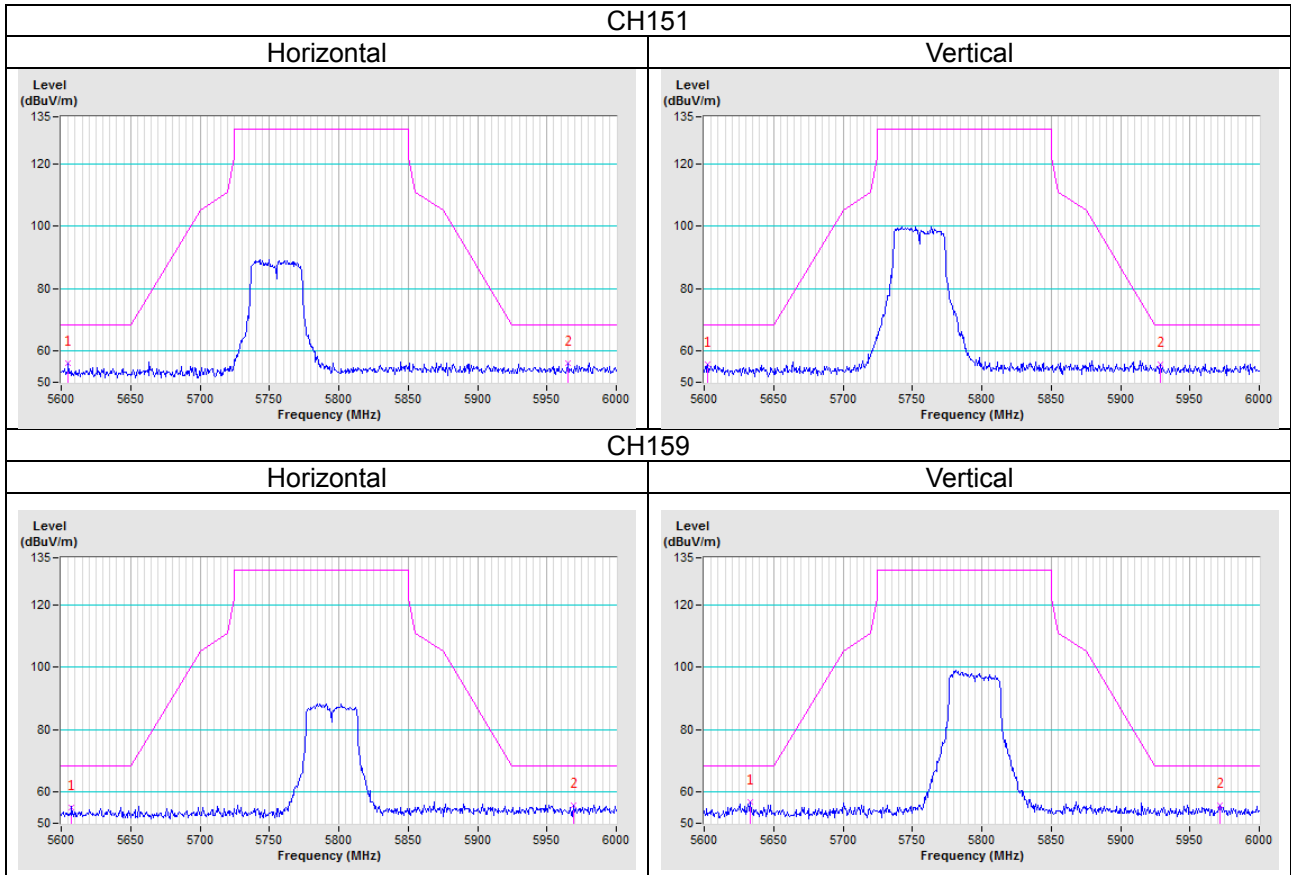
802.11a



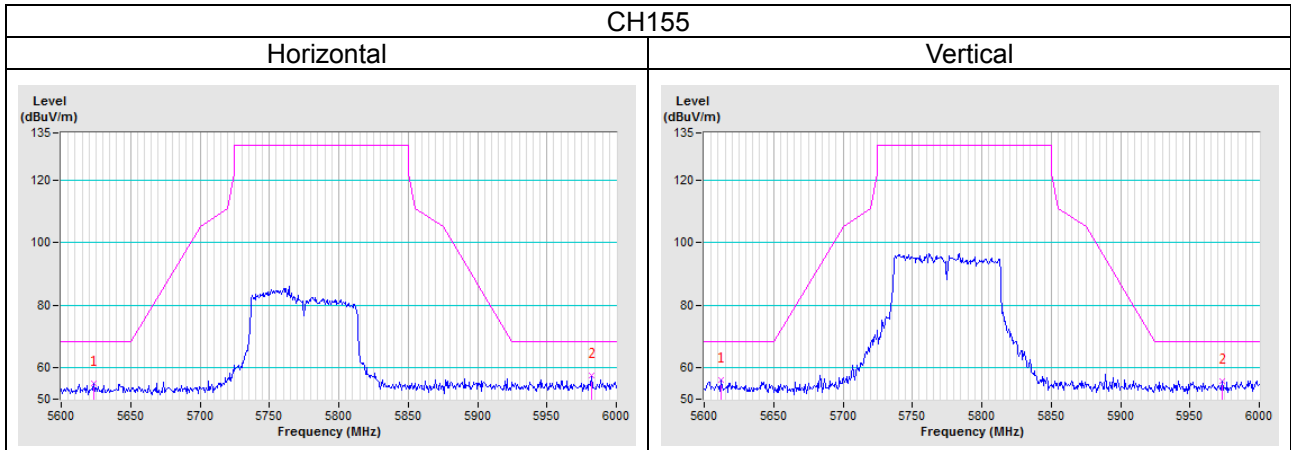
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)

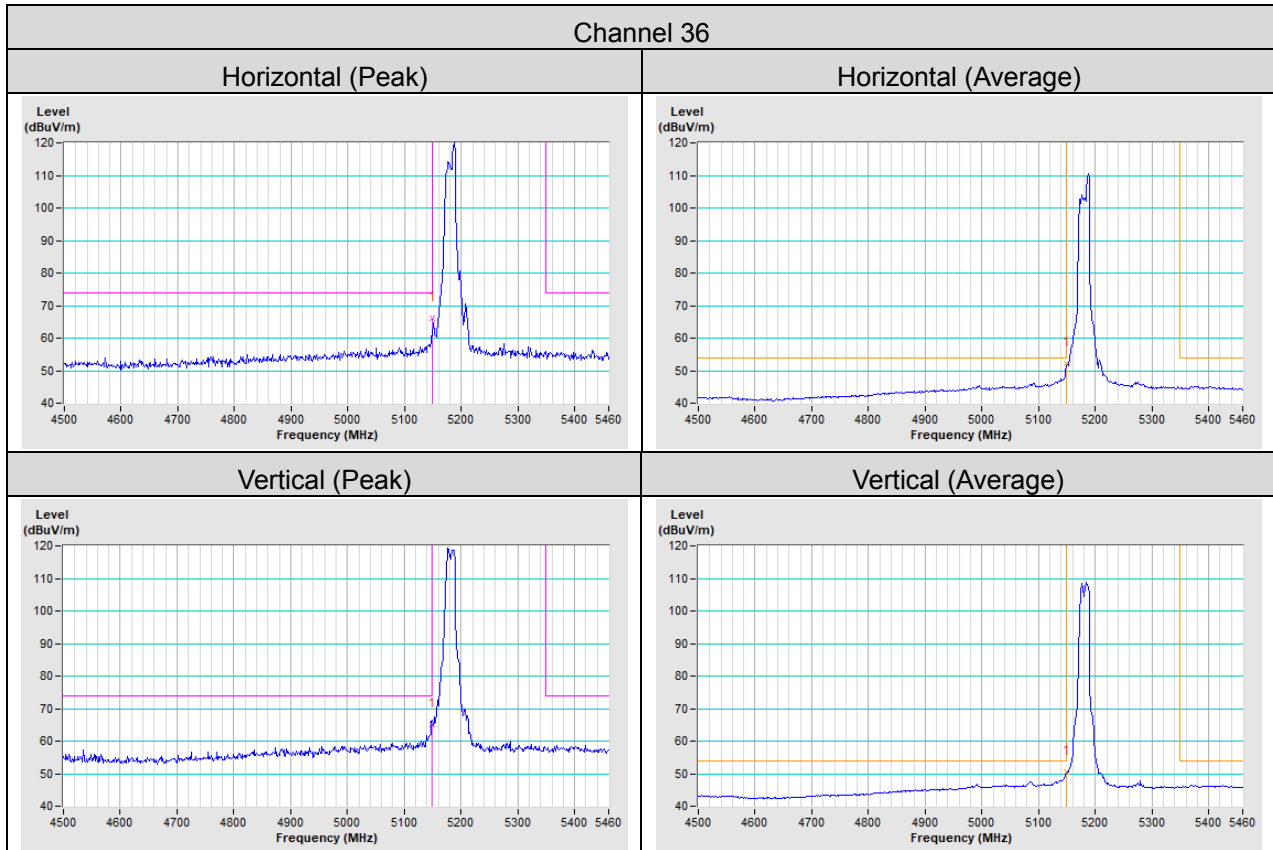


Annex B- Band Edge Measurement

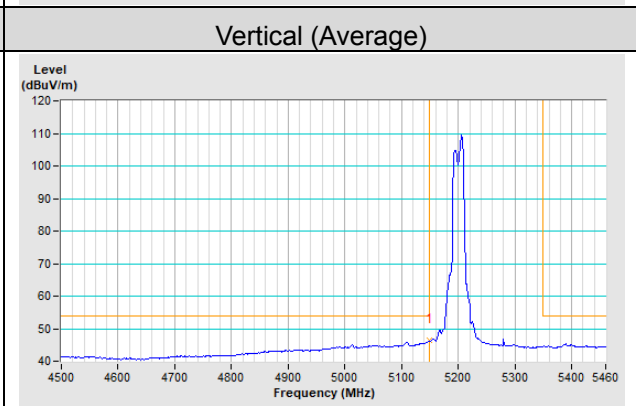
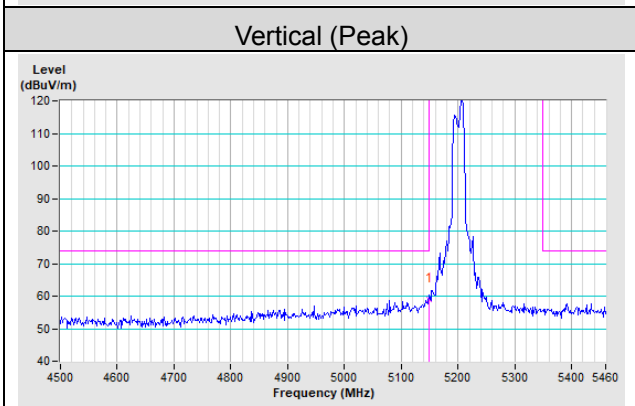
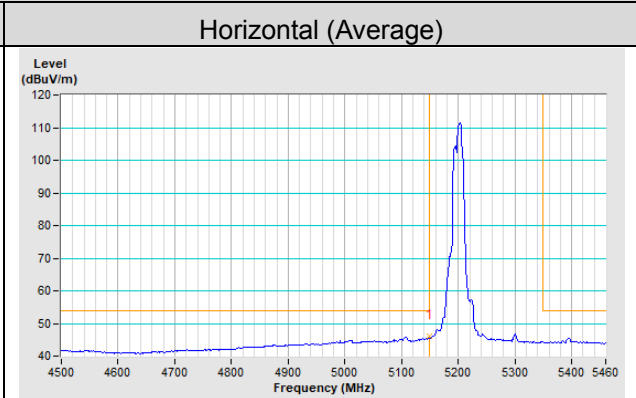
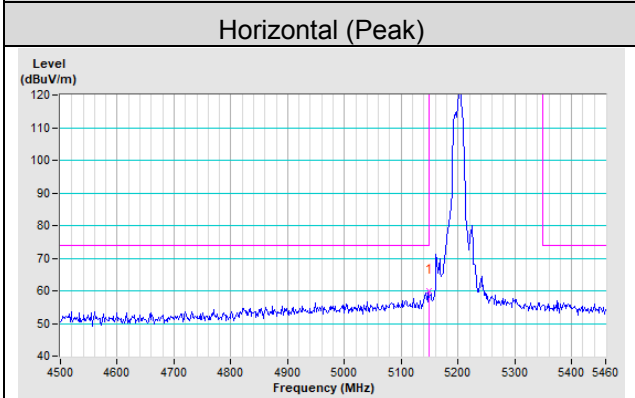
Test Mode A

5G traffic radio: CDD Mode

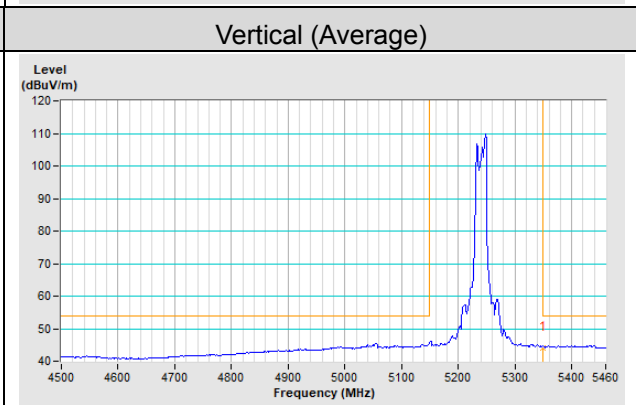
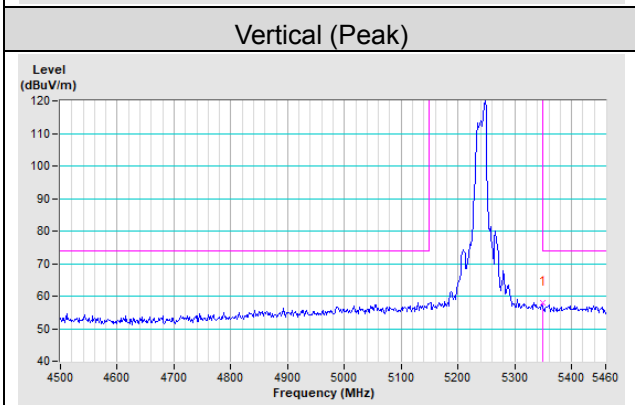
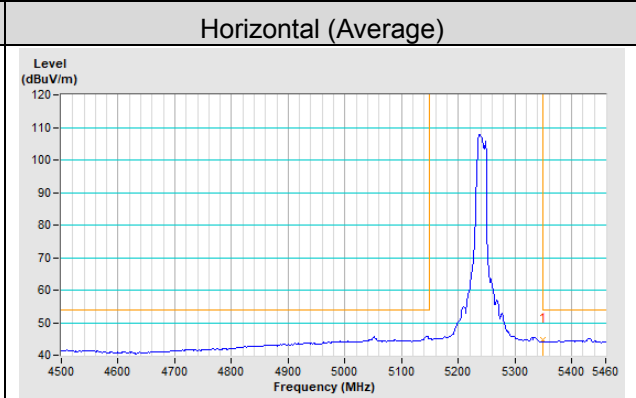
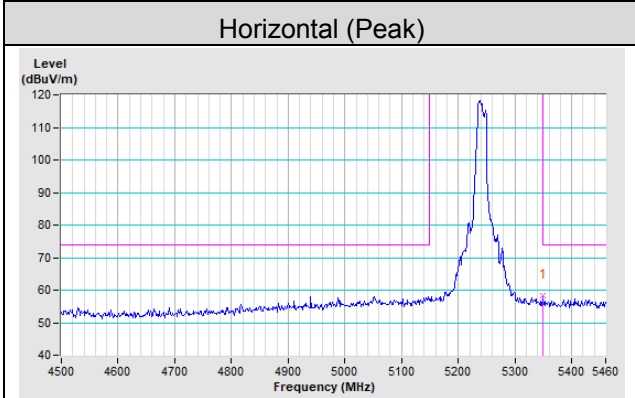
802.11a



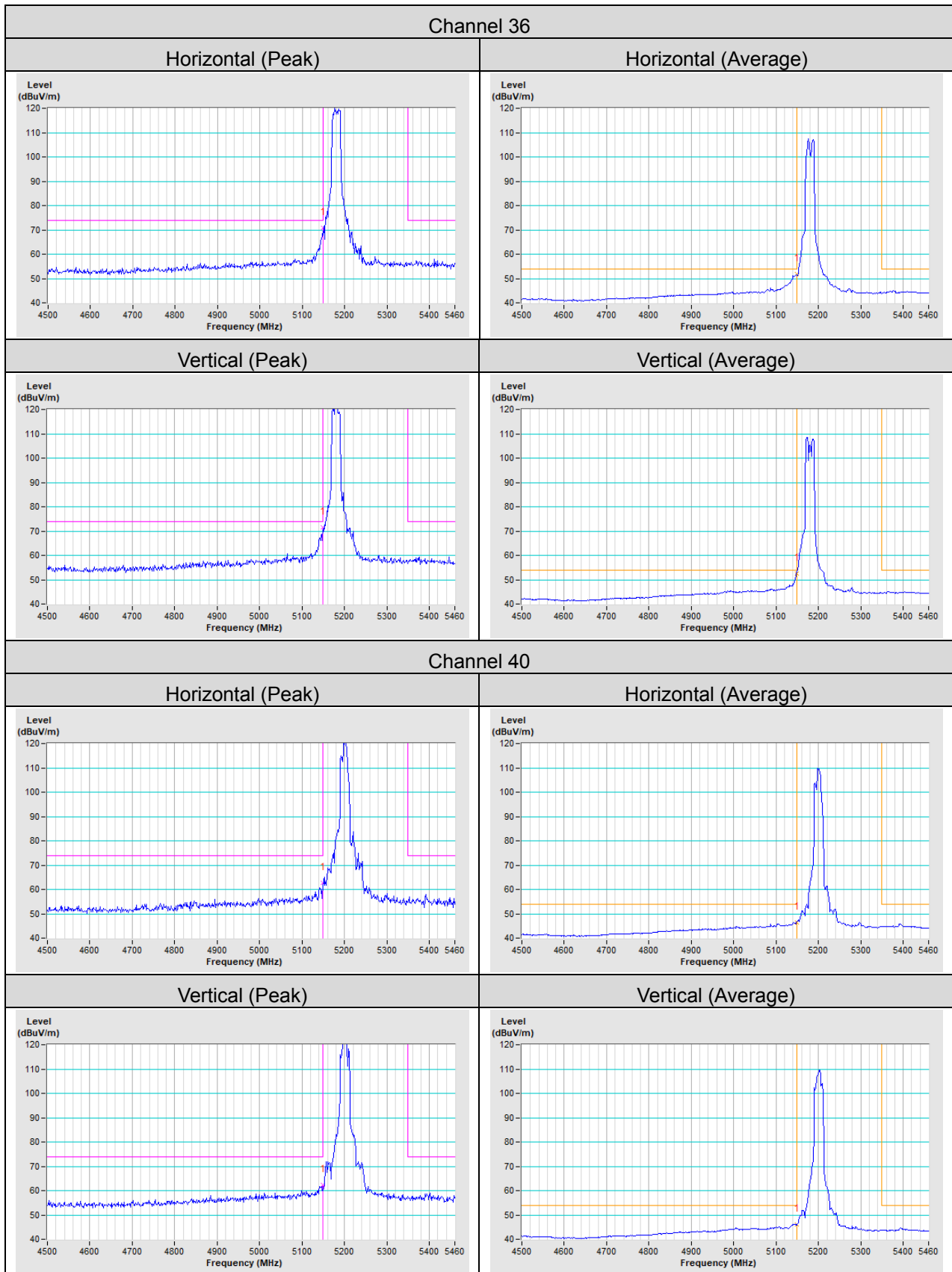
Channel 40



Channel 48

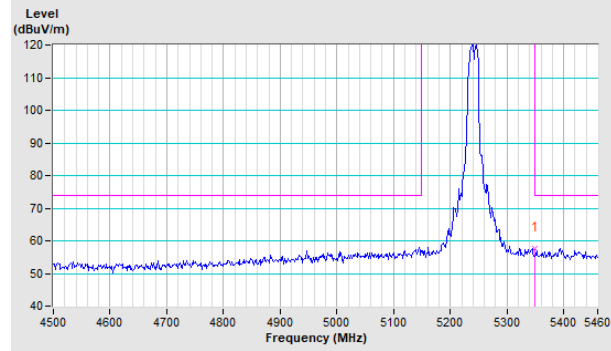


802.11ax (HE20)

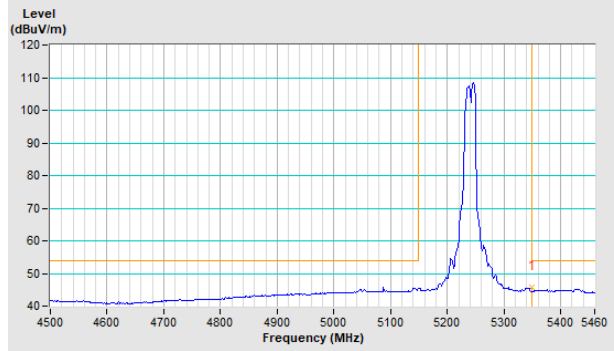


Channel 48

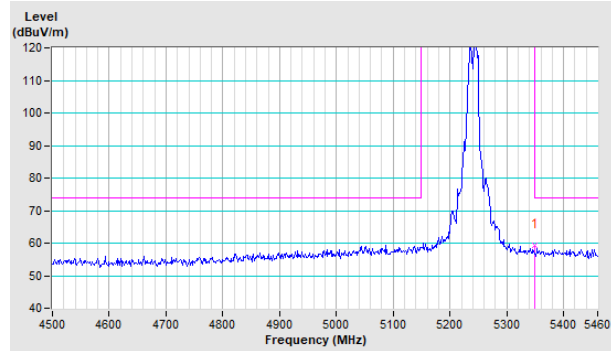
Horizontal (Peak)



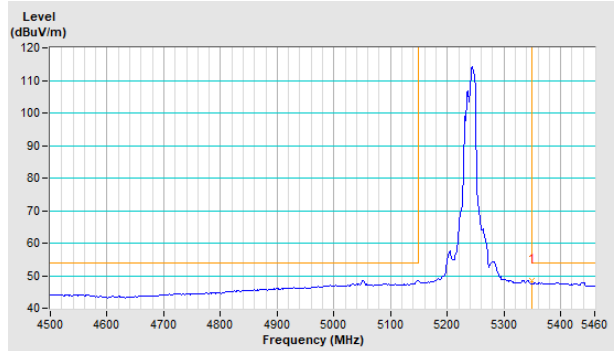
Horizontal (Average)



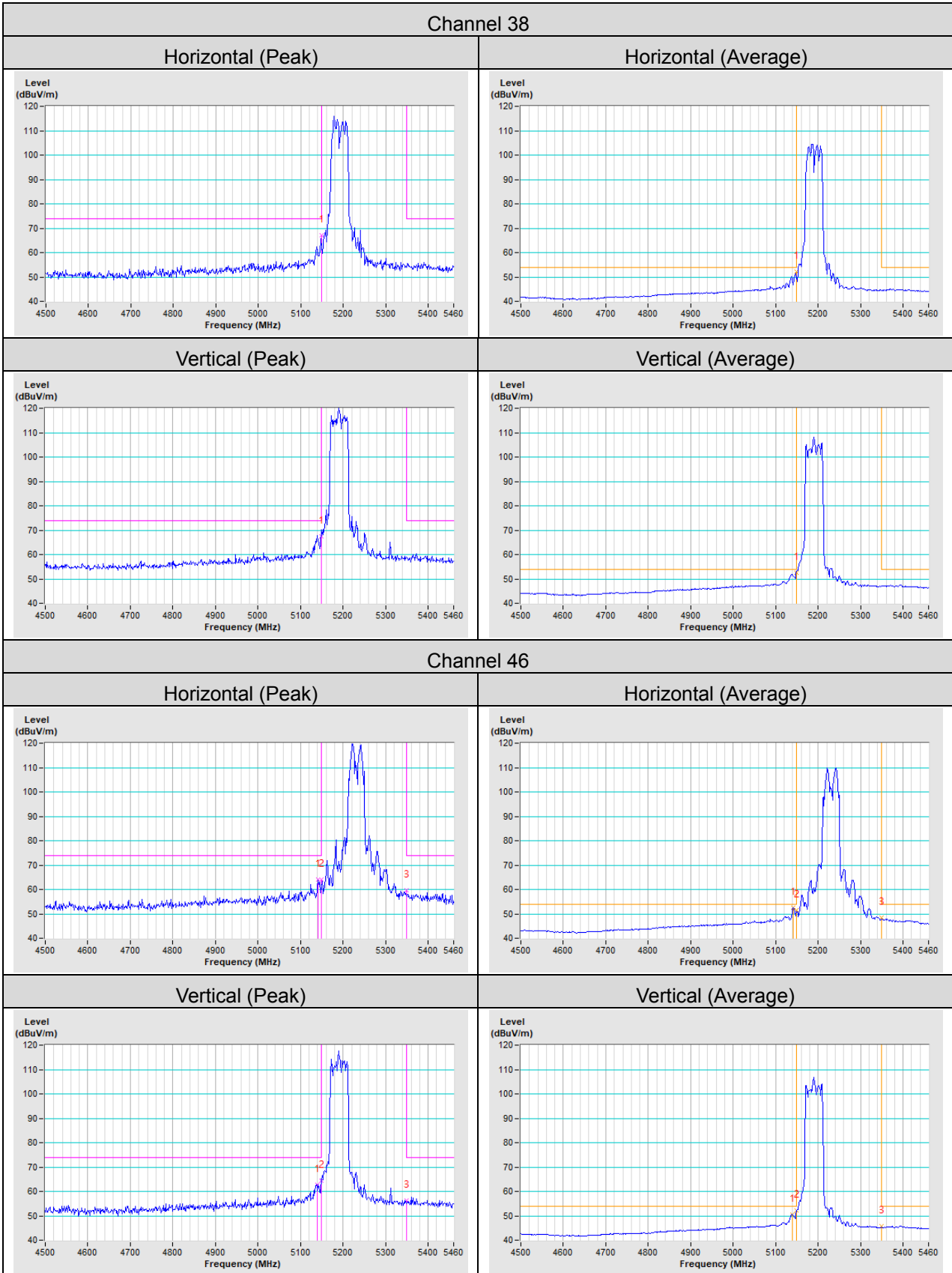
Vertical (Peak)



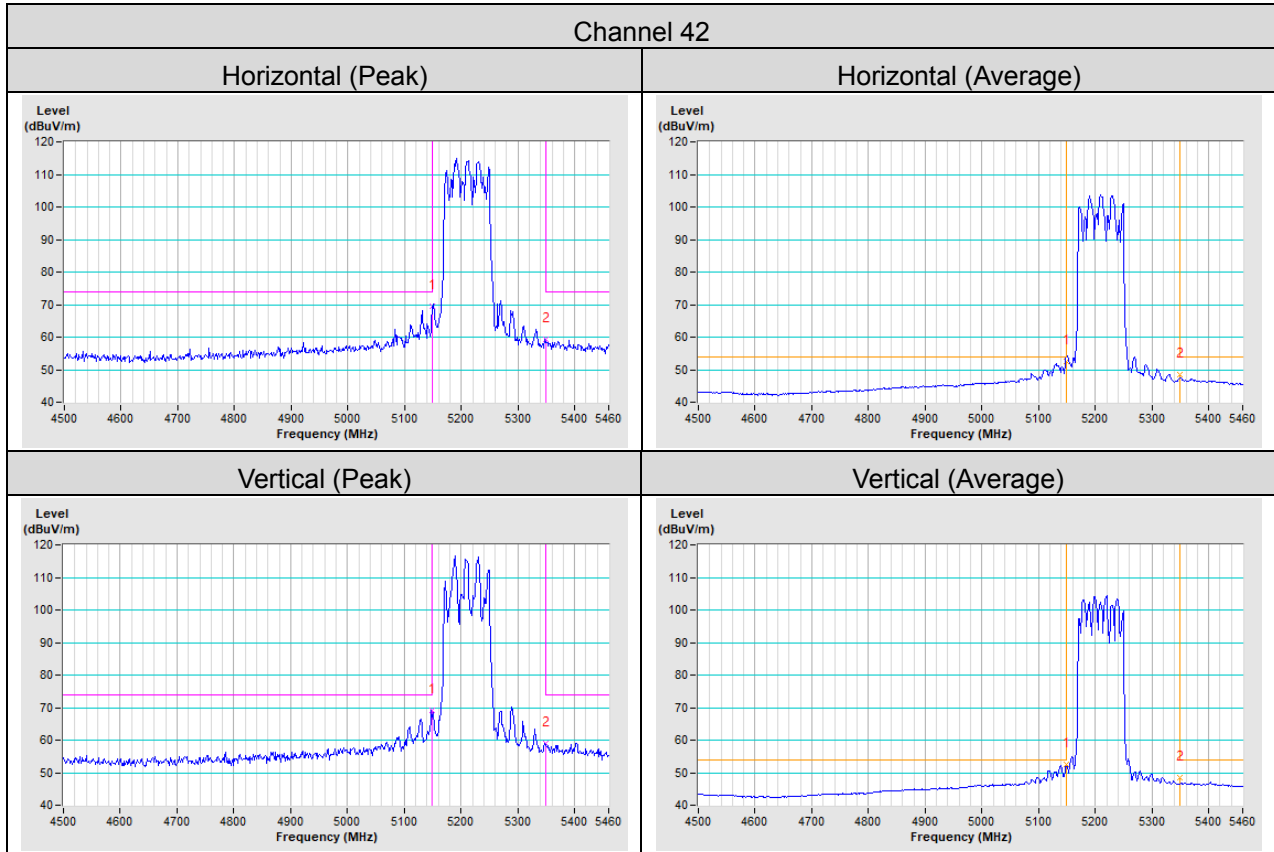
Vertical (Average)



802.11ax (HE40)



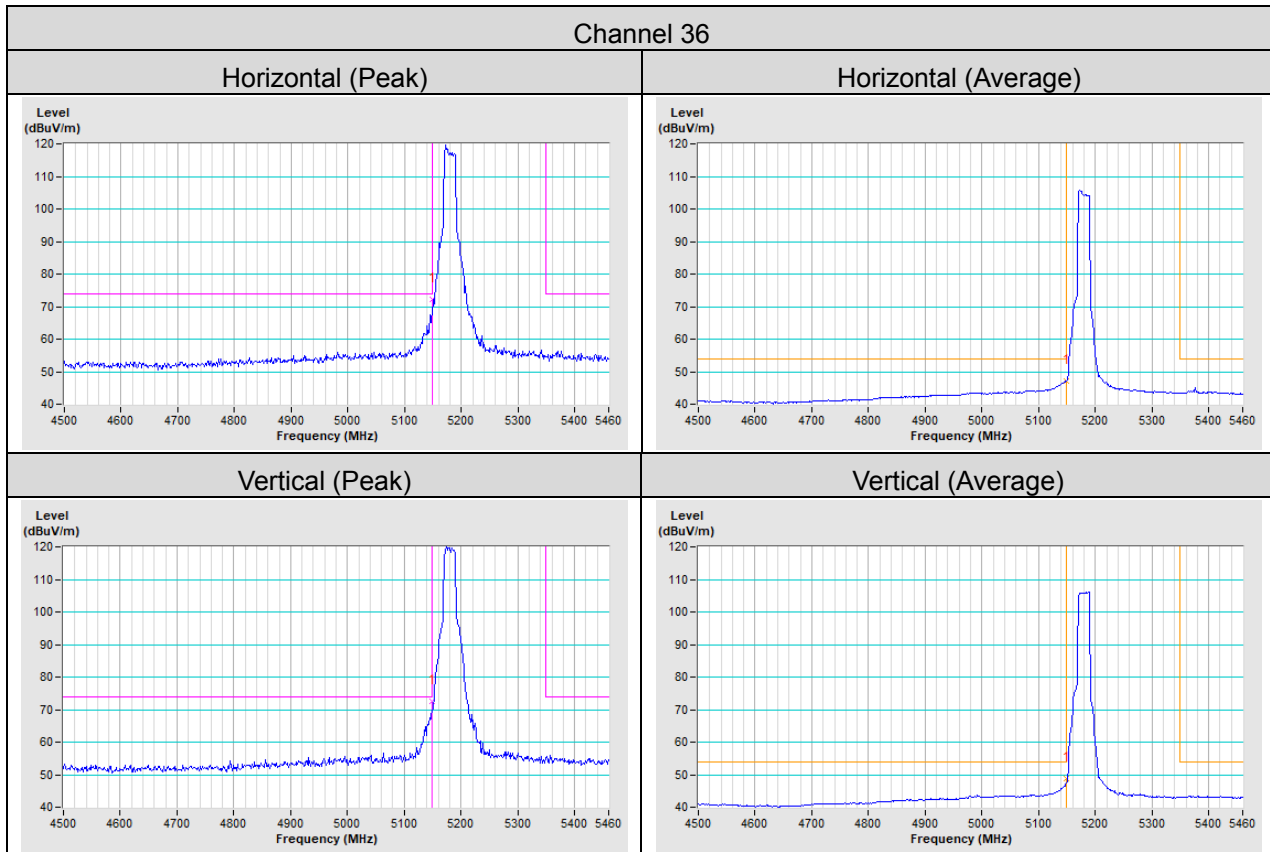
802.11ax (HE80)



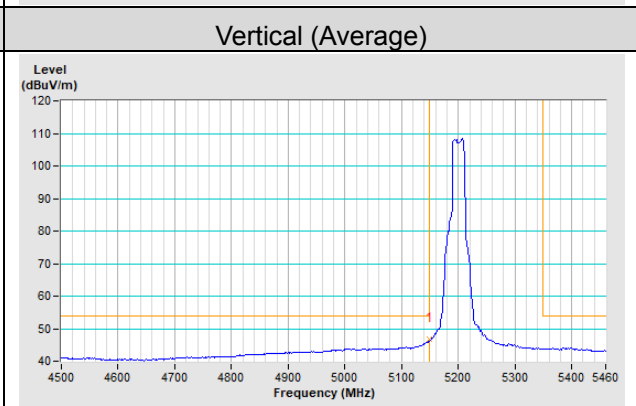
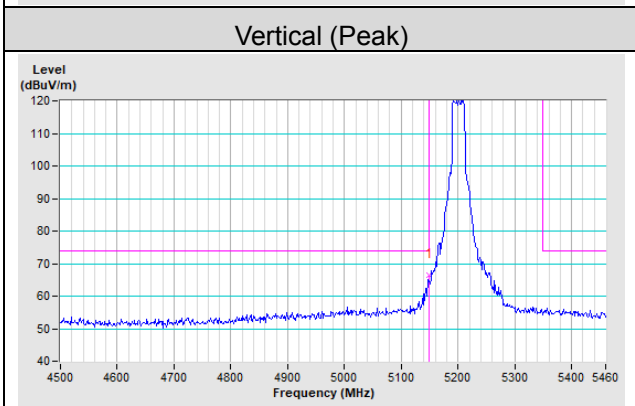
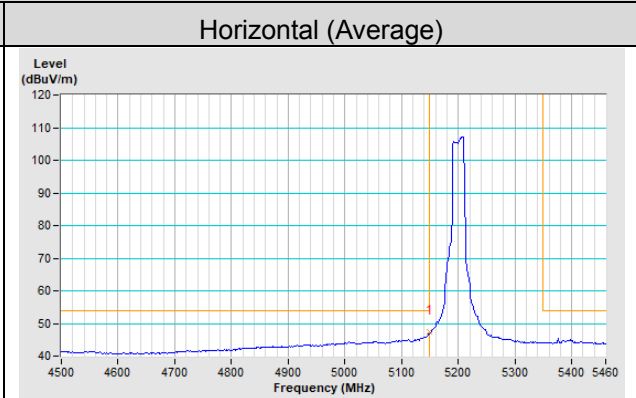
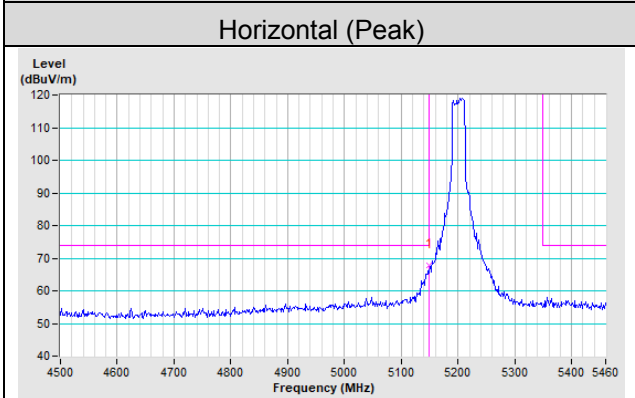
Test Mode A

5G traffic radio: Beamforming Mode

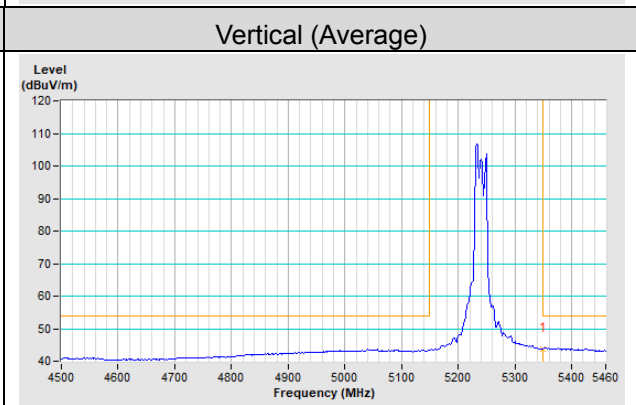
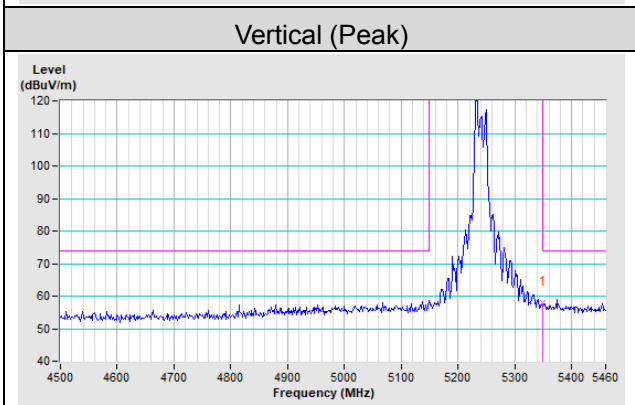
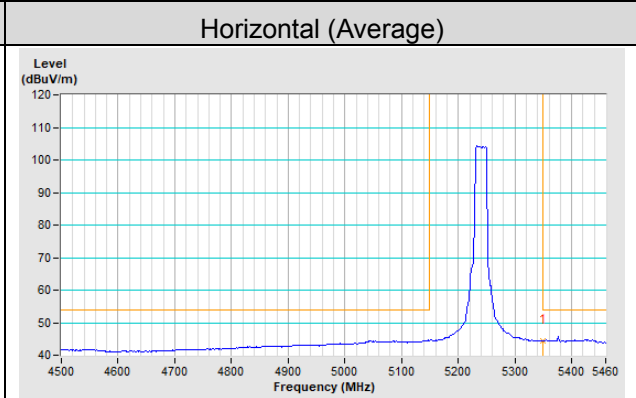
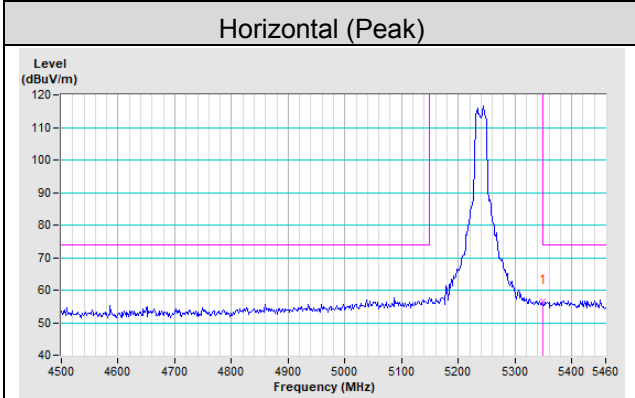
802.11ax (HE20)



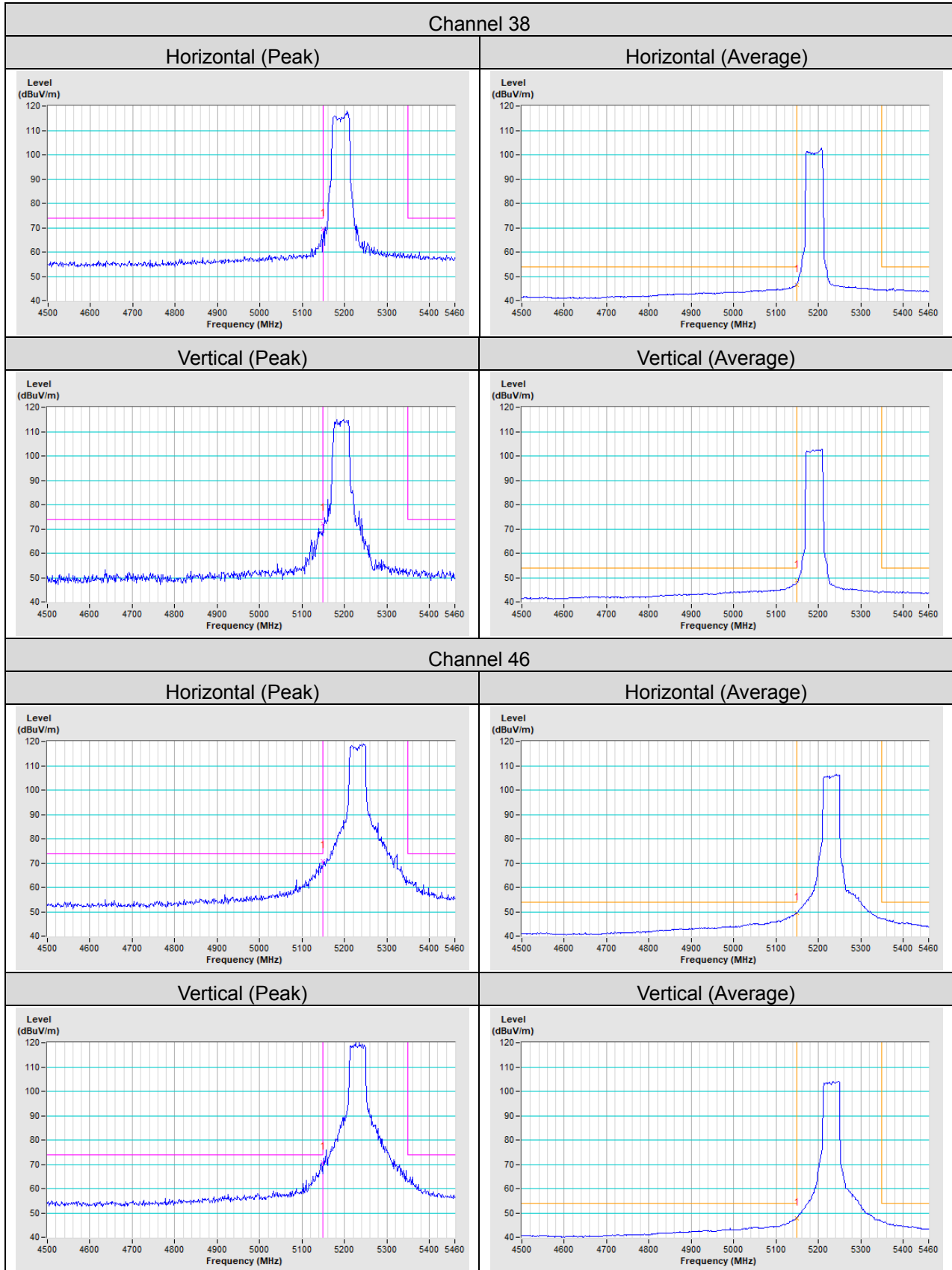
Channel 40



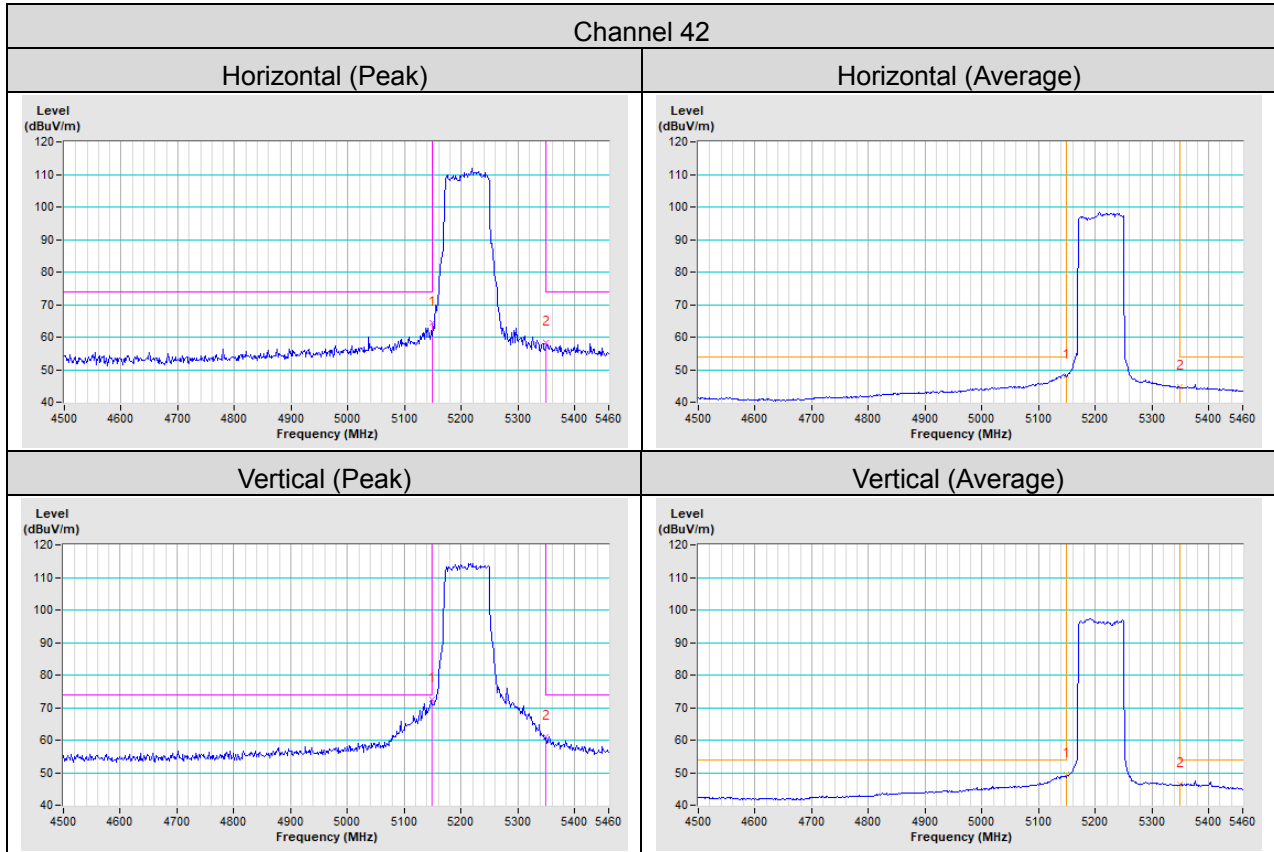
Channel 48



802.11ax (HE40)



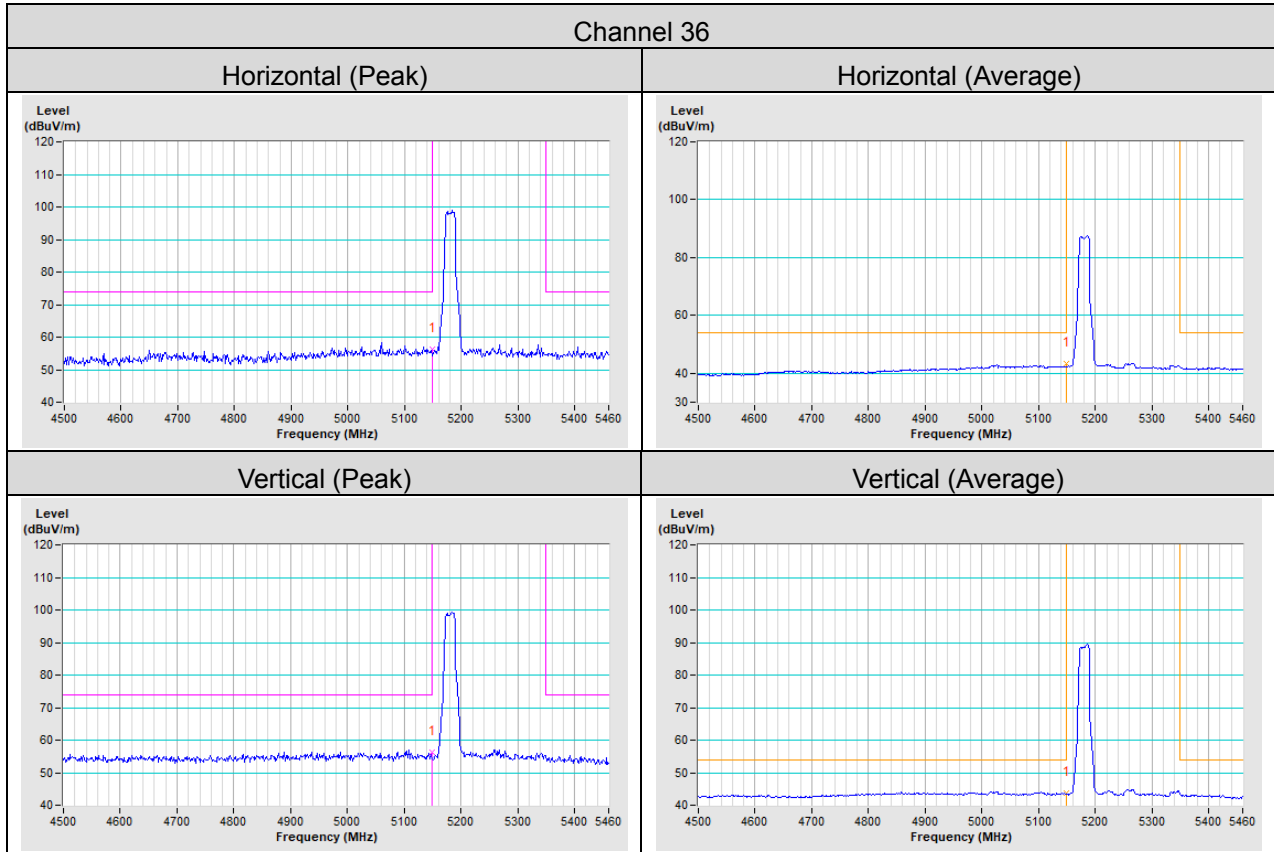
802.11ax (HE80)



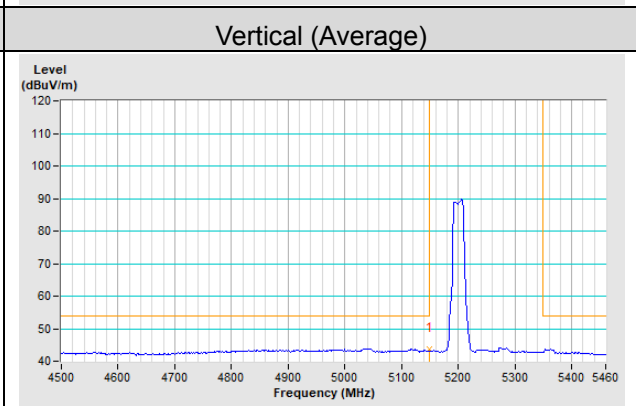
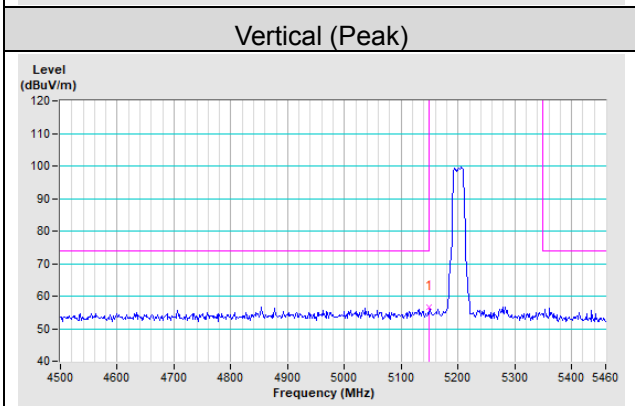
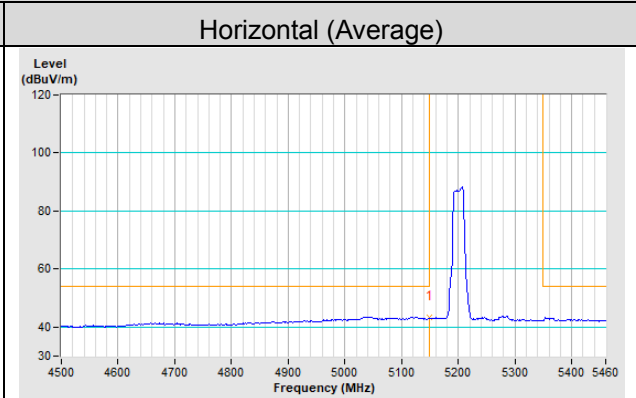
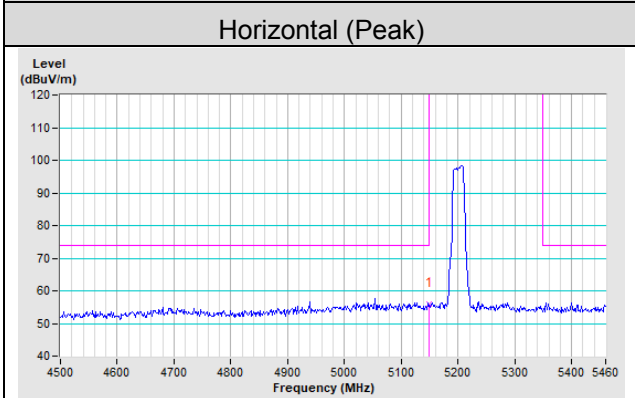
Test Mode A

Scanning radio: CDD Mode

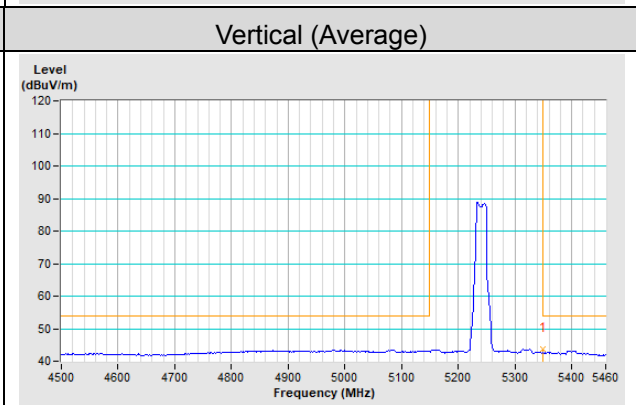
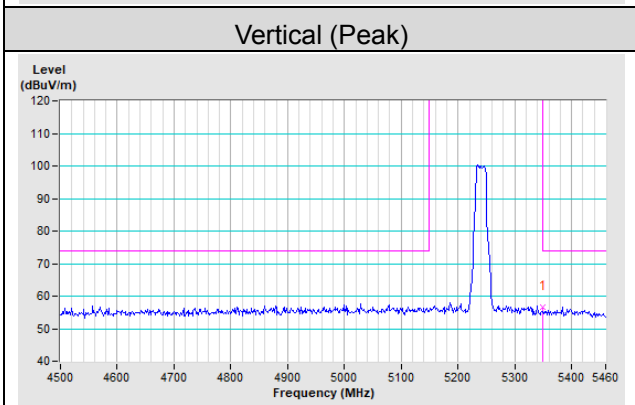
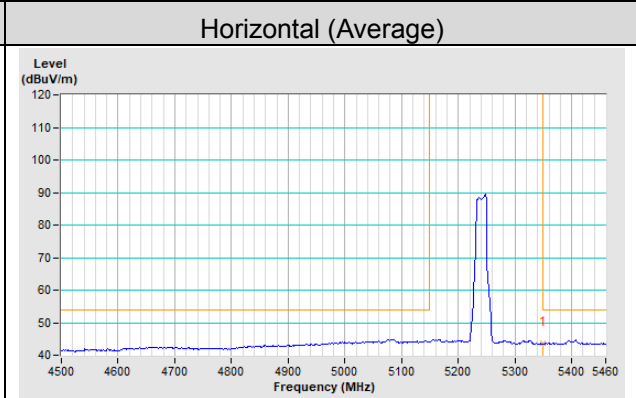
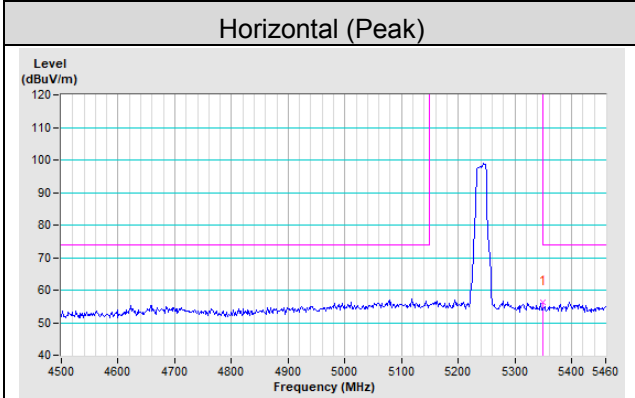
802.11a



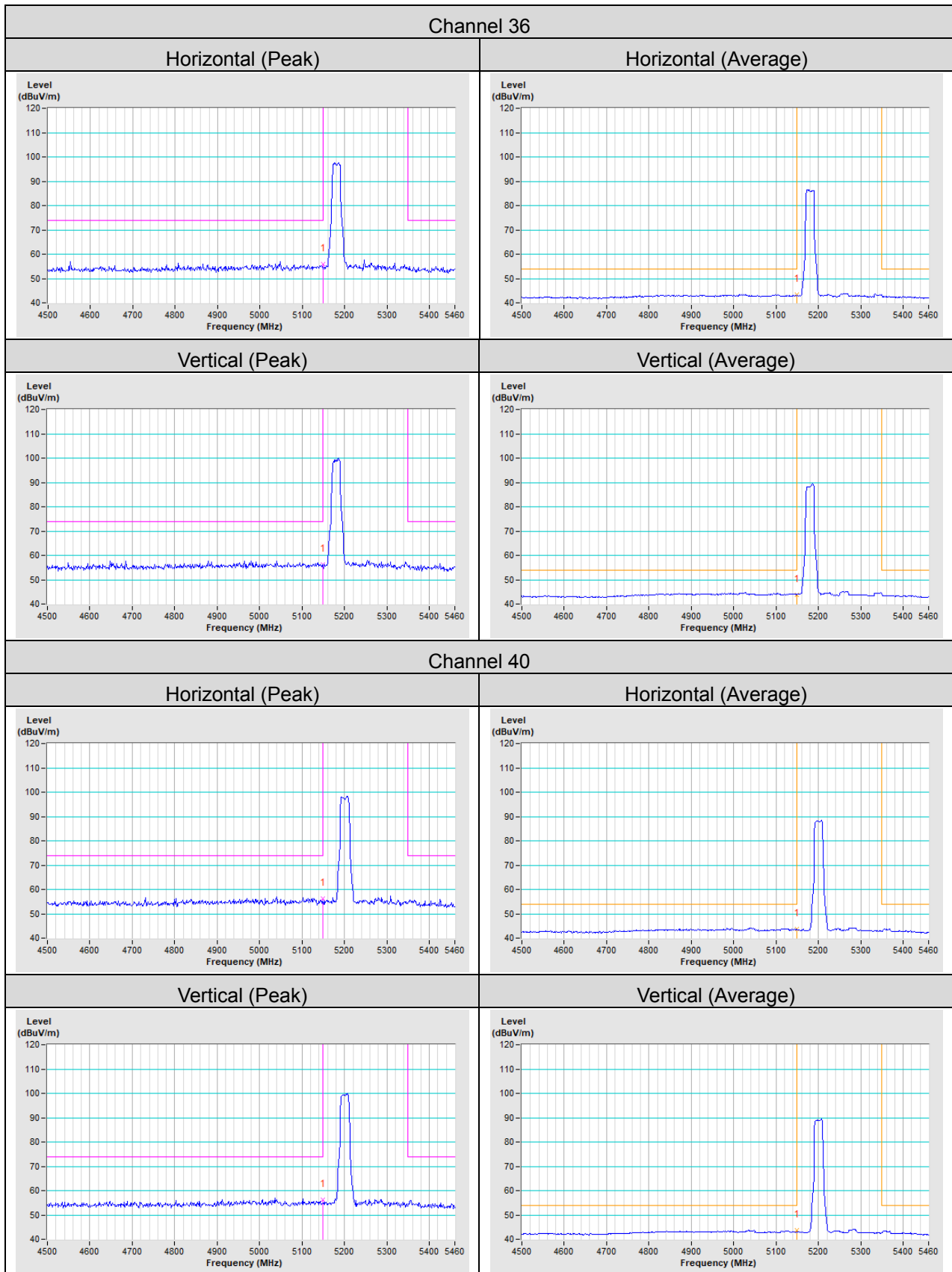
Channel 40



Channel 48

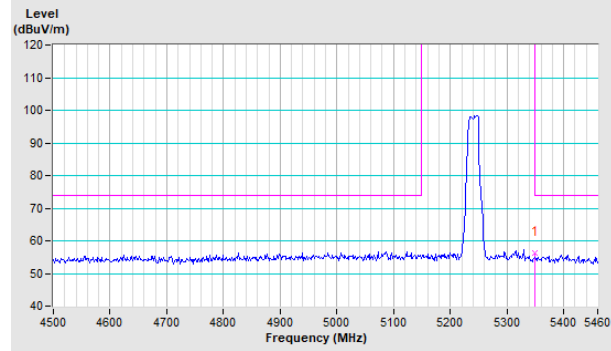


802.11ac (VHT20)

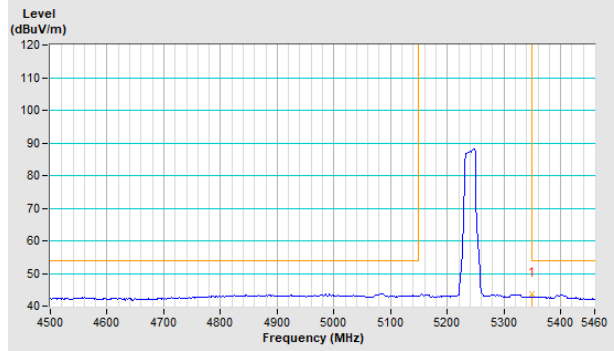


Channel 48

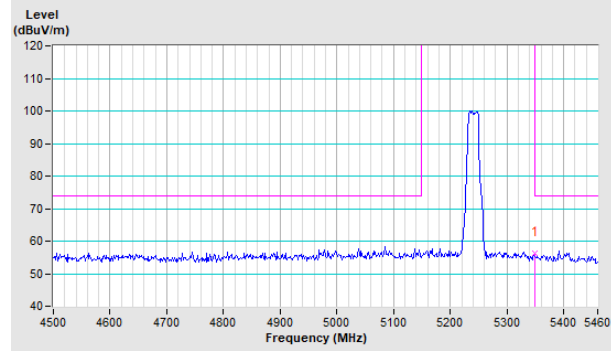
Horizontal (Peak)



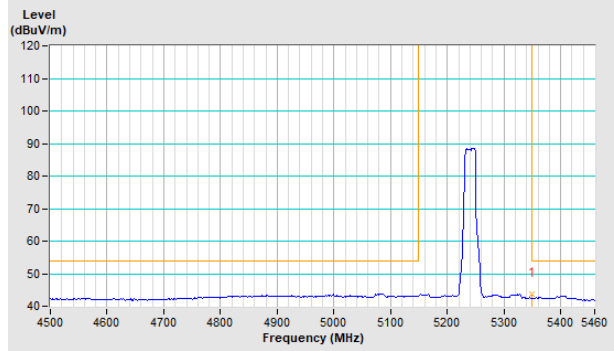
Horizontal (Average)



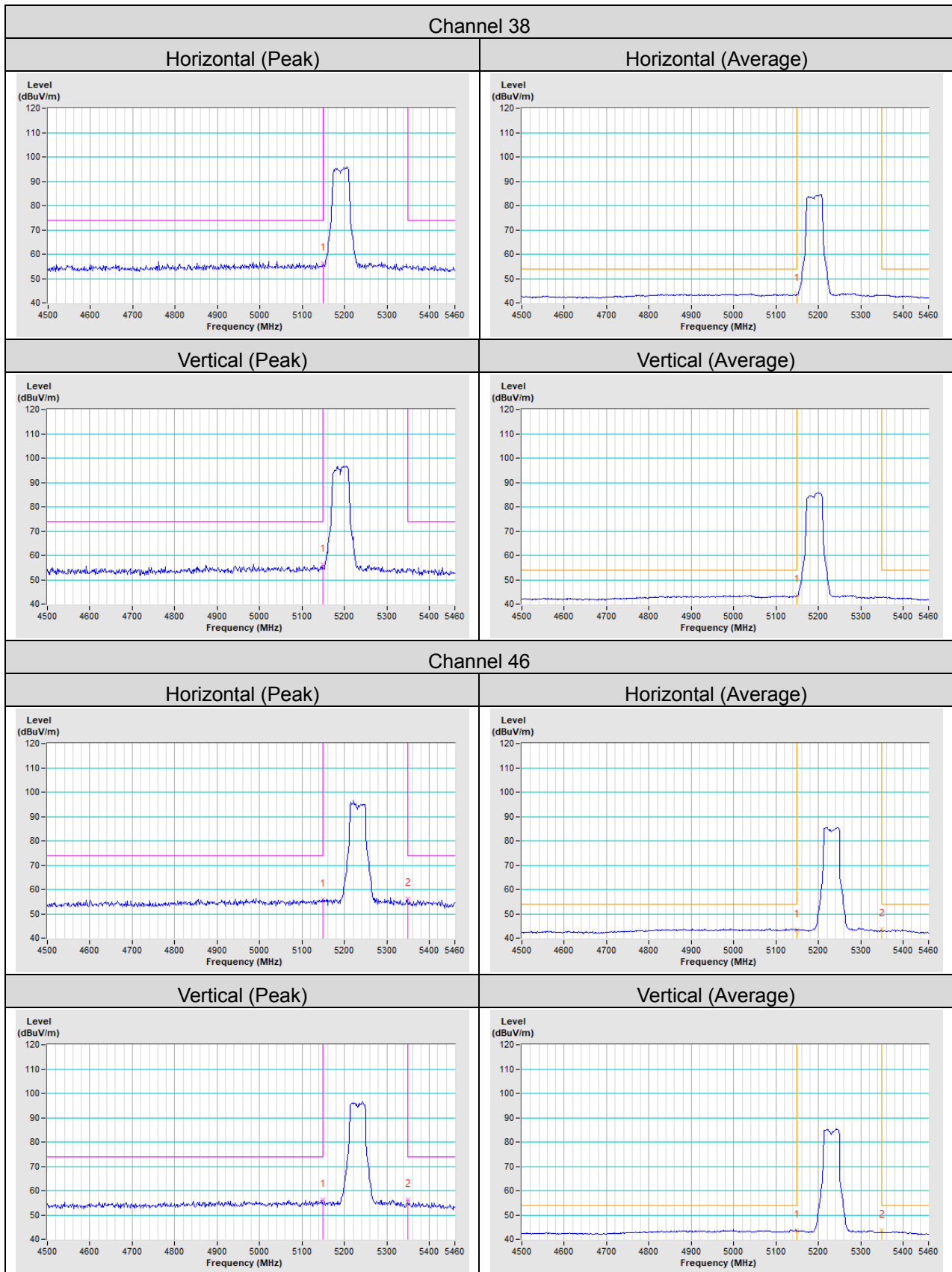
Vertical (Peak)



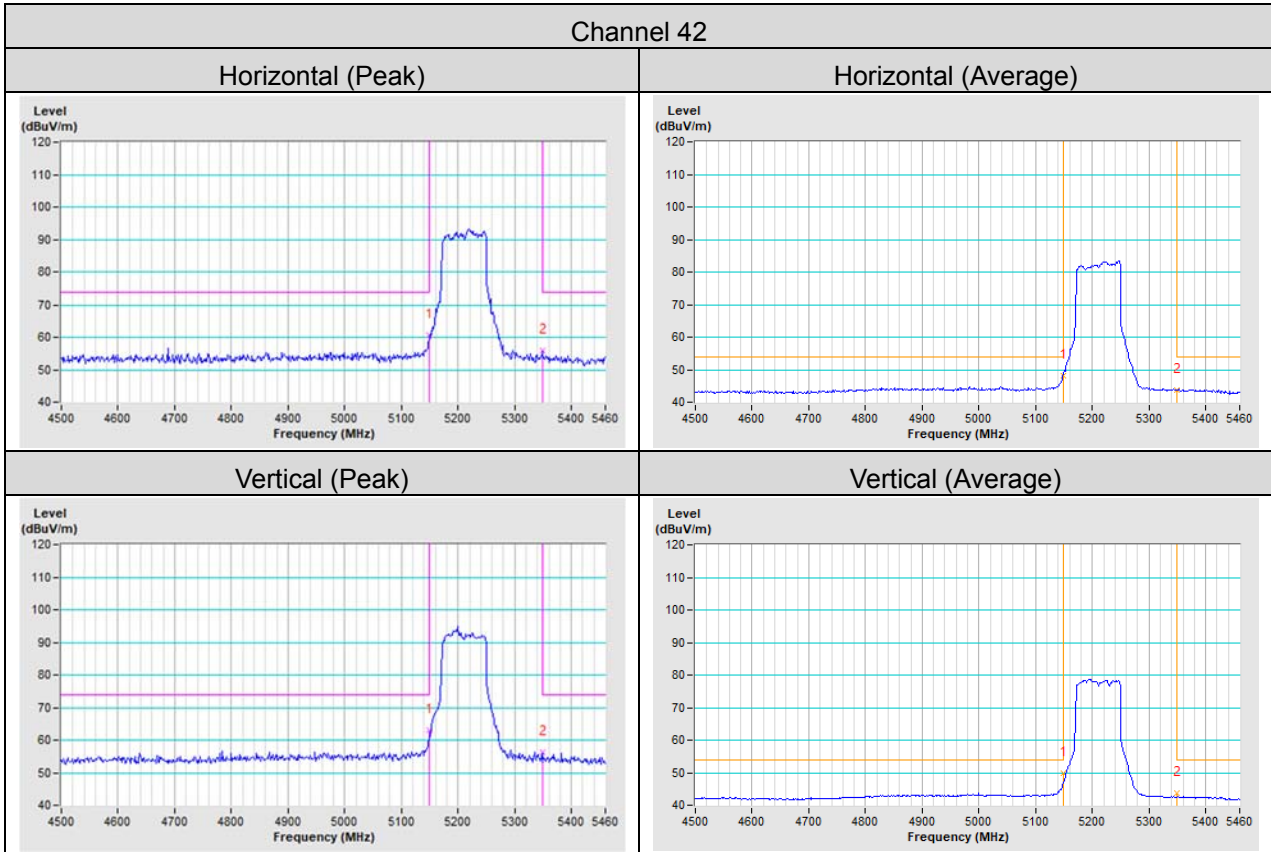
Vertical (Average)



802.11ac (VHT40)



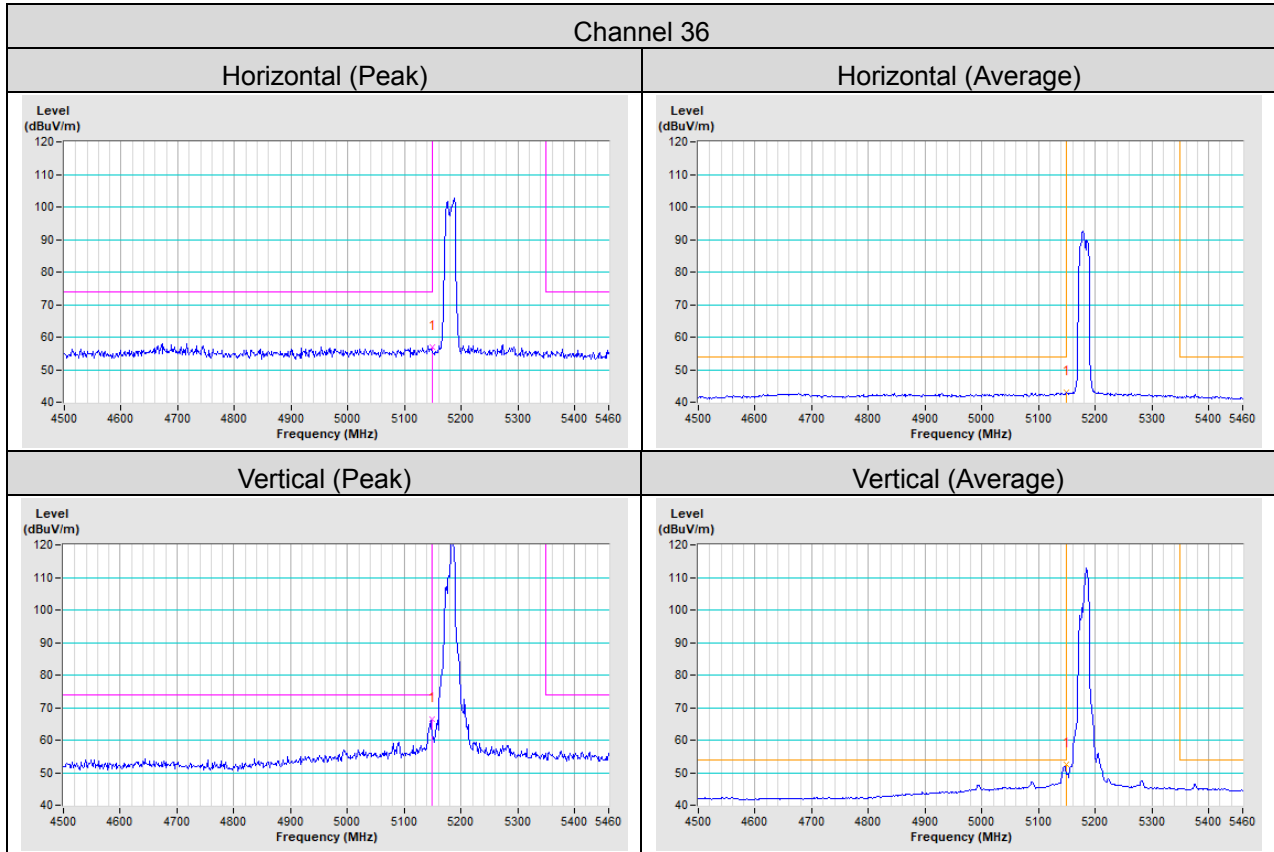
802.11ac (VHT80)



Test Mode C

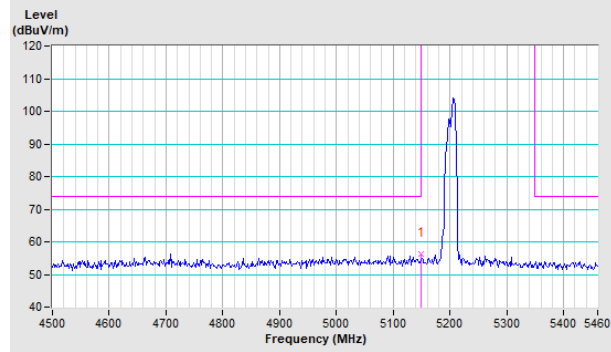
5G traffic radio: CDD Mode

802.11a

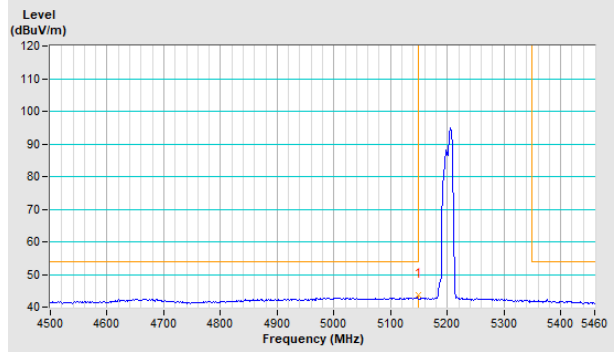


Channel 40

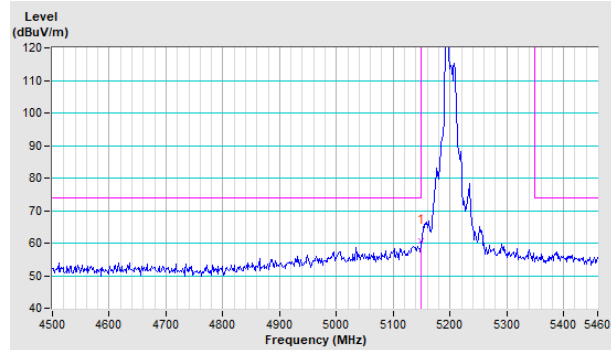
Horizontal (Peak)



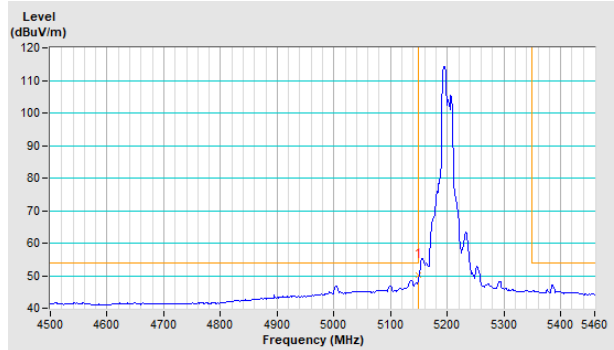
Horizontal (Average)



Vertical (Peak)

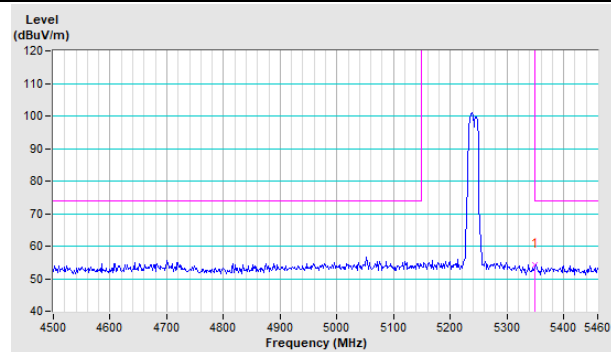


Vertical (Average)

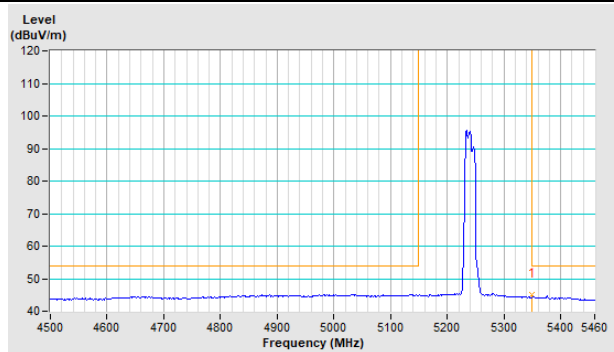


Channel 48

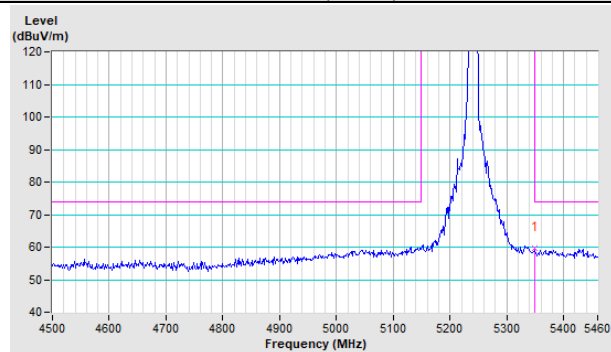
Horizontal (Peak)



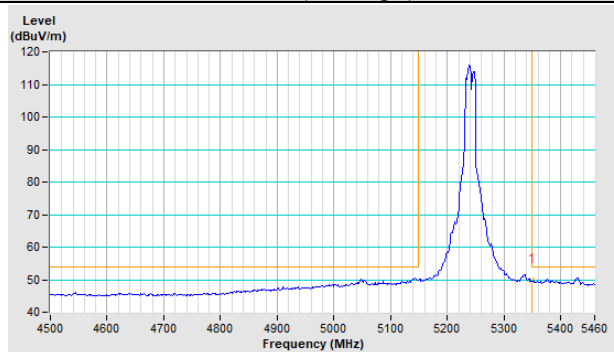
Horizontal (Average)



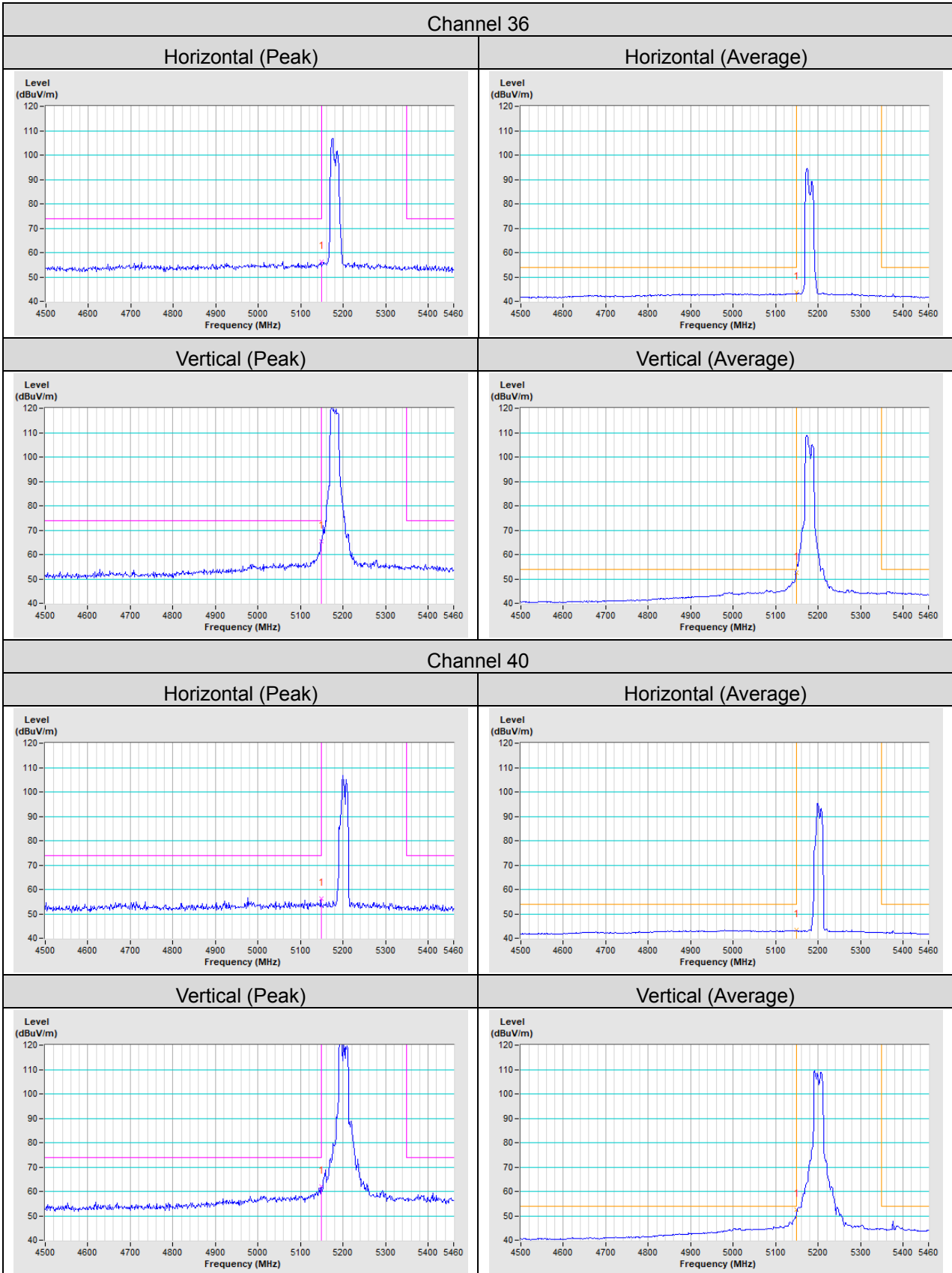
Vertical (Peak)



Vertical (Average)

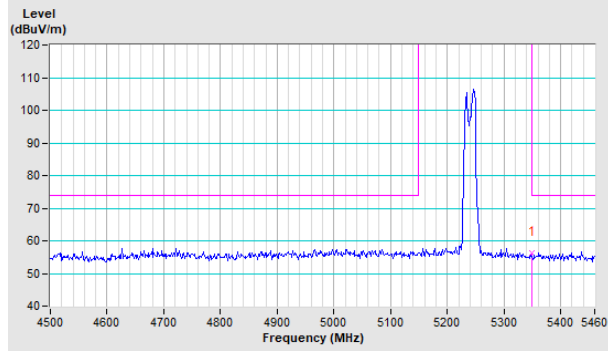


802.11ax (HE20)

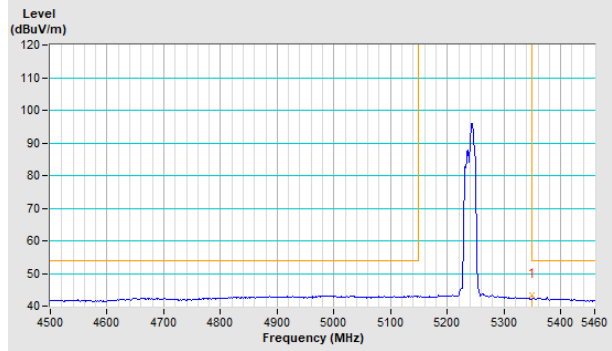


Channel 48

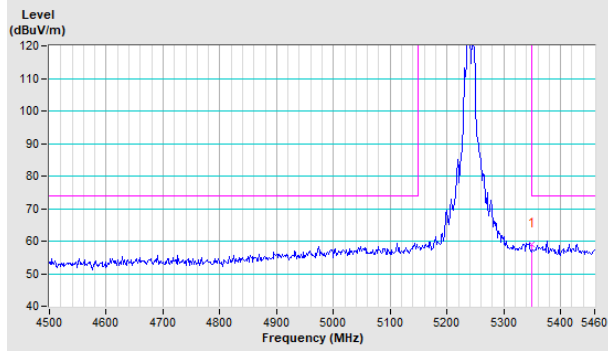
Horizontal (Peak)



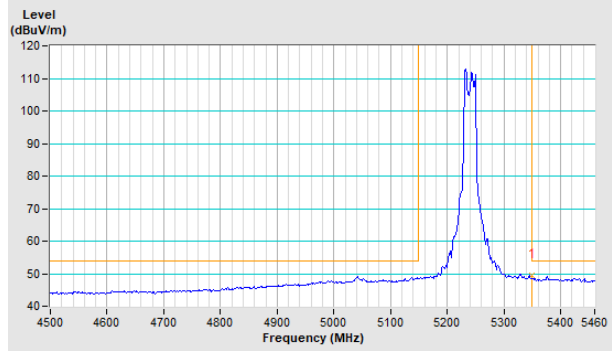
Horizontal (Average)



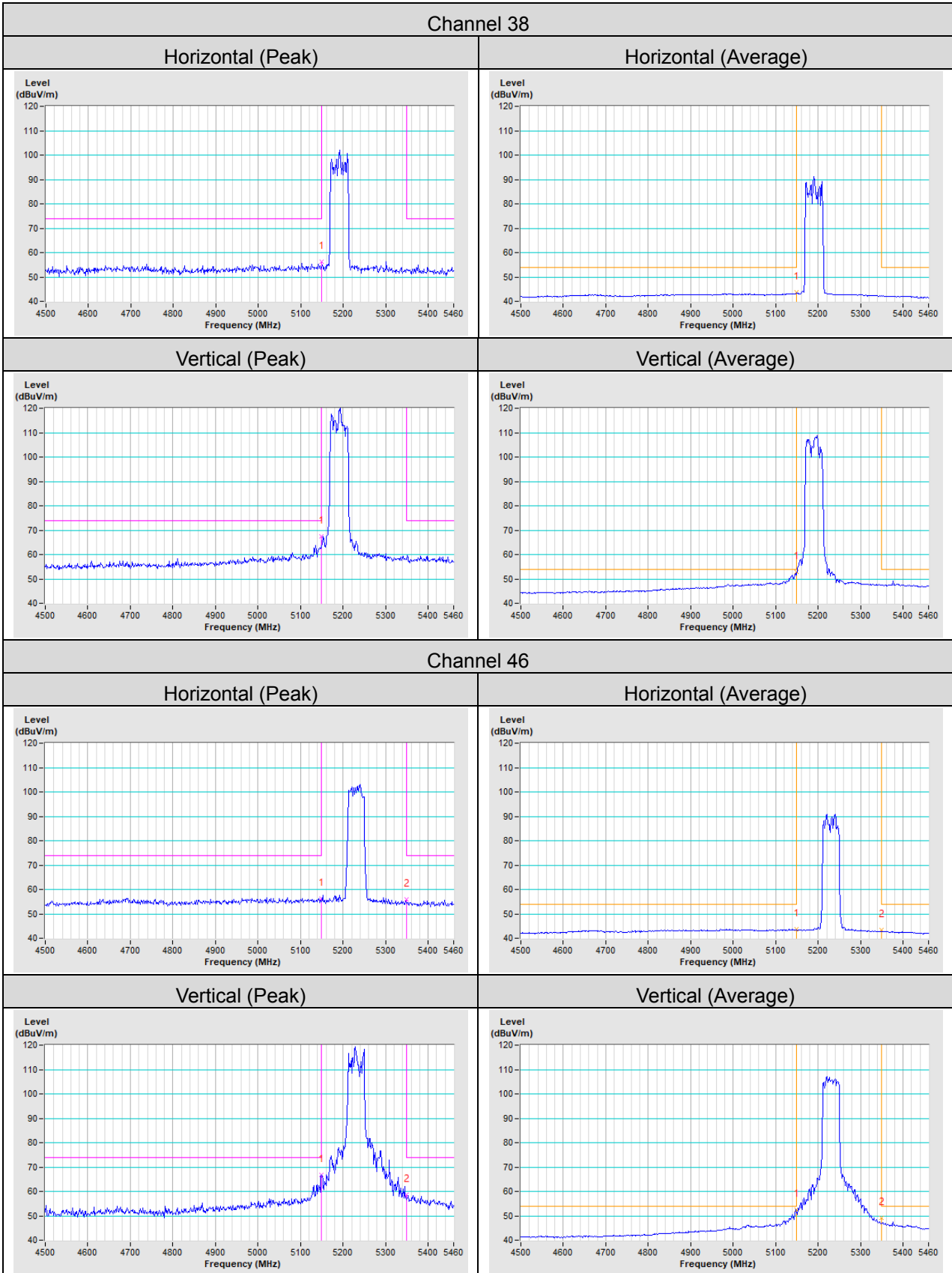
Vertical (Peak)



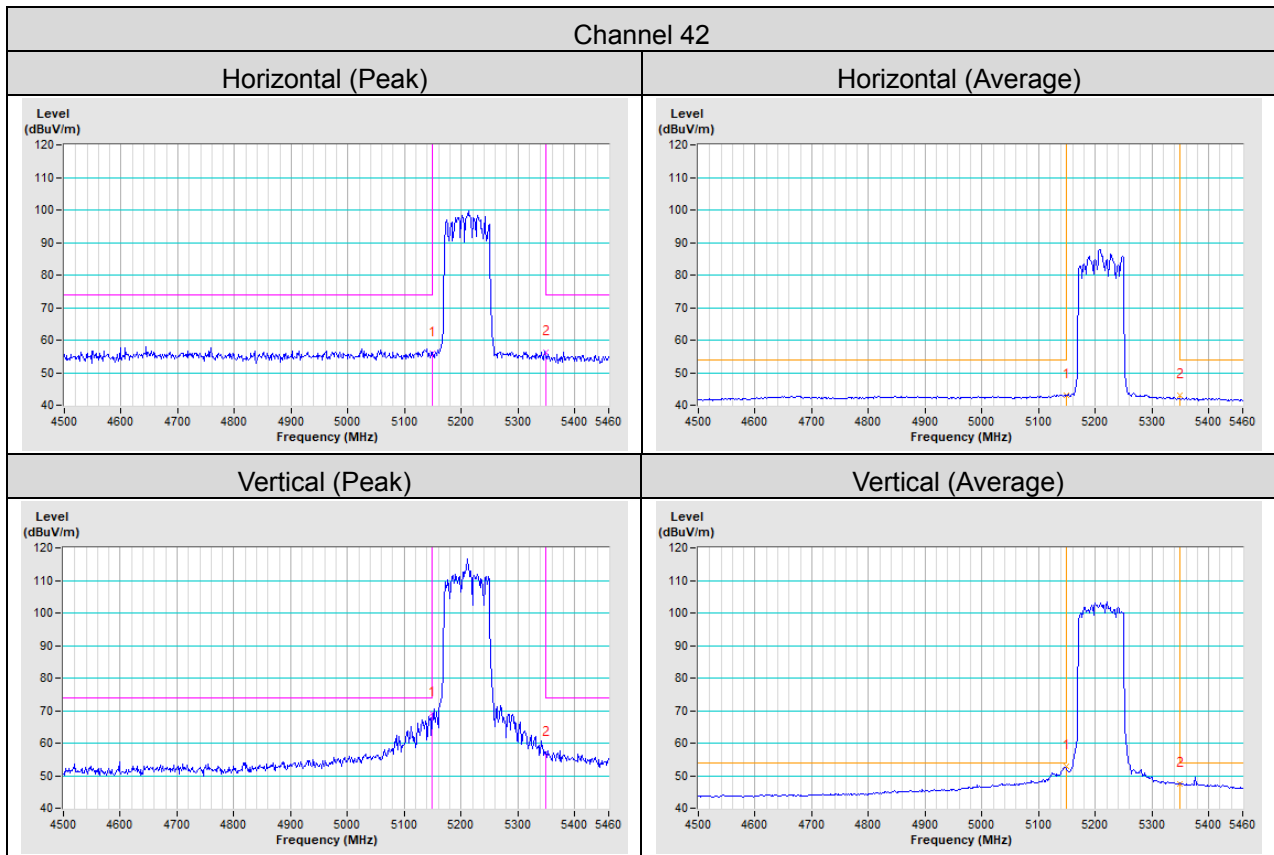
Vertical (Average)



802.11ax (HE40)



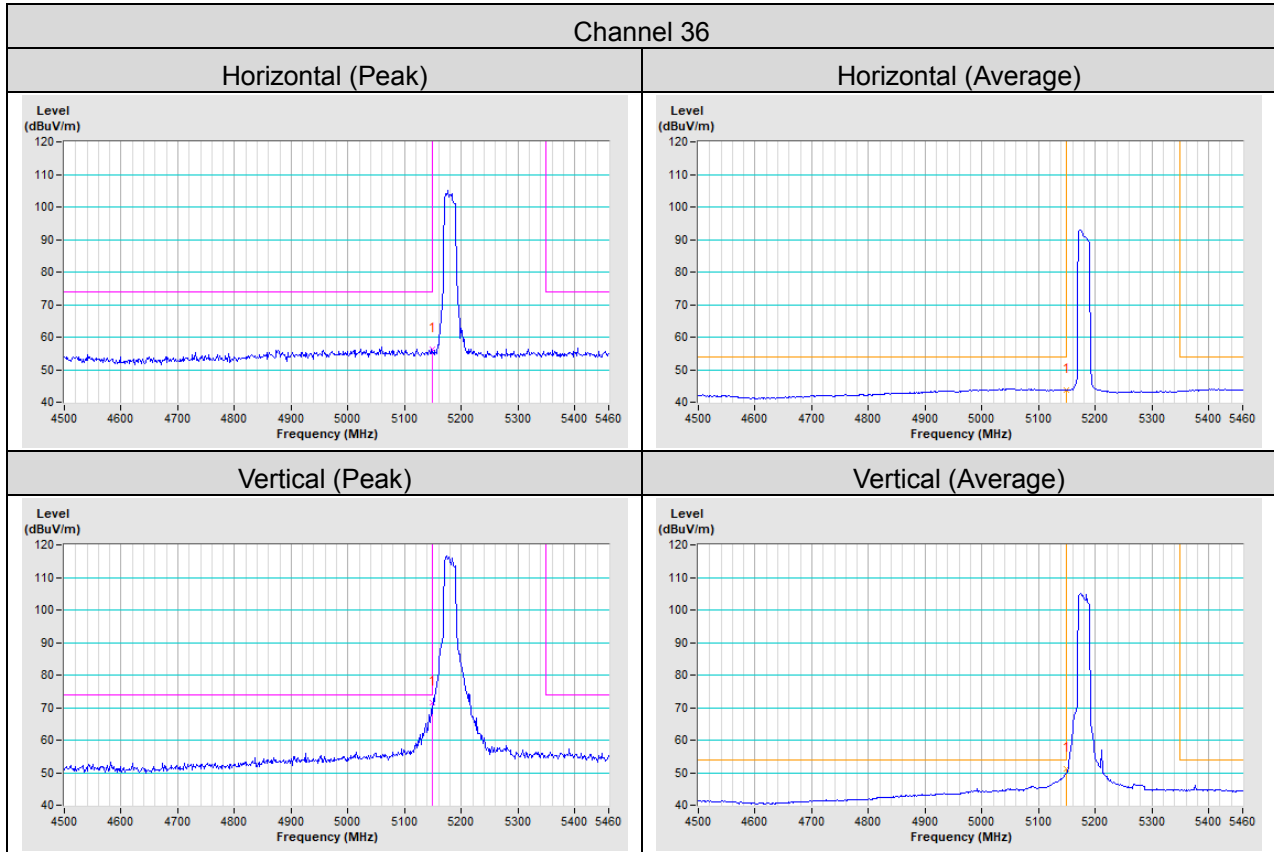
802.11ax (HE80)

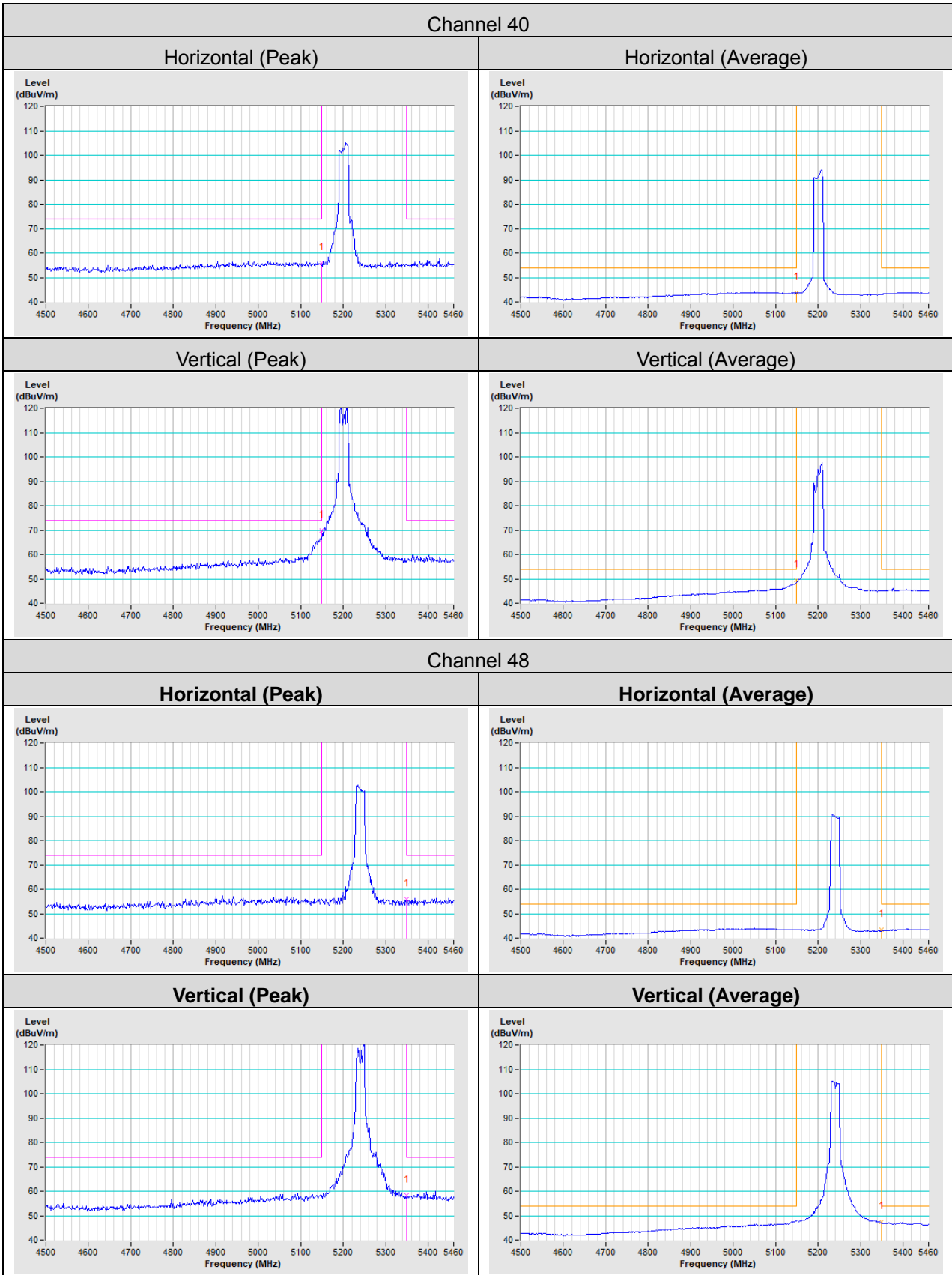


Test Mode C

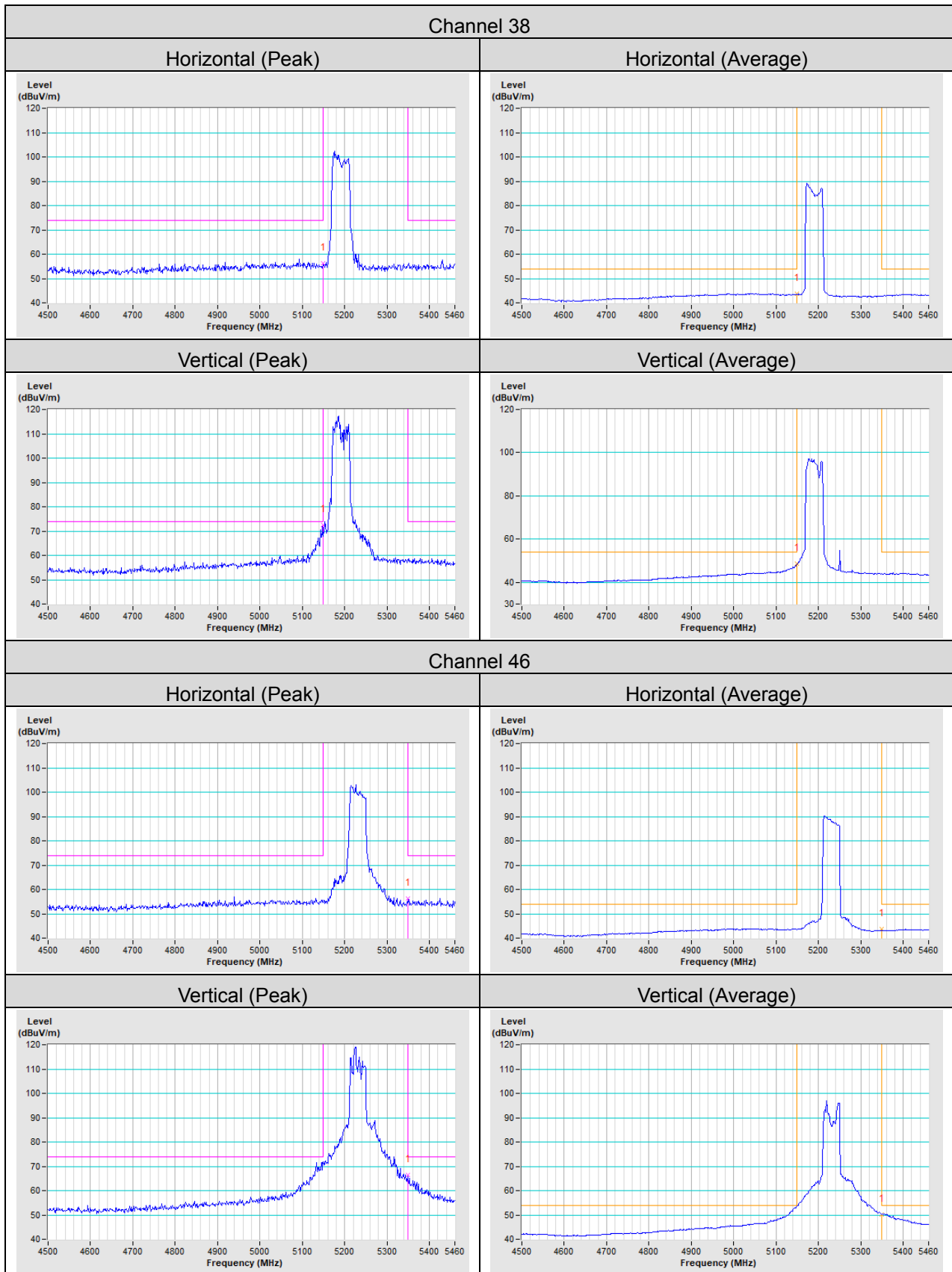
5G traffic radio: Beamforming Mode

802.11ax (HE20)

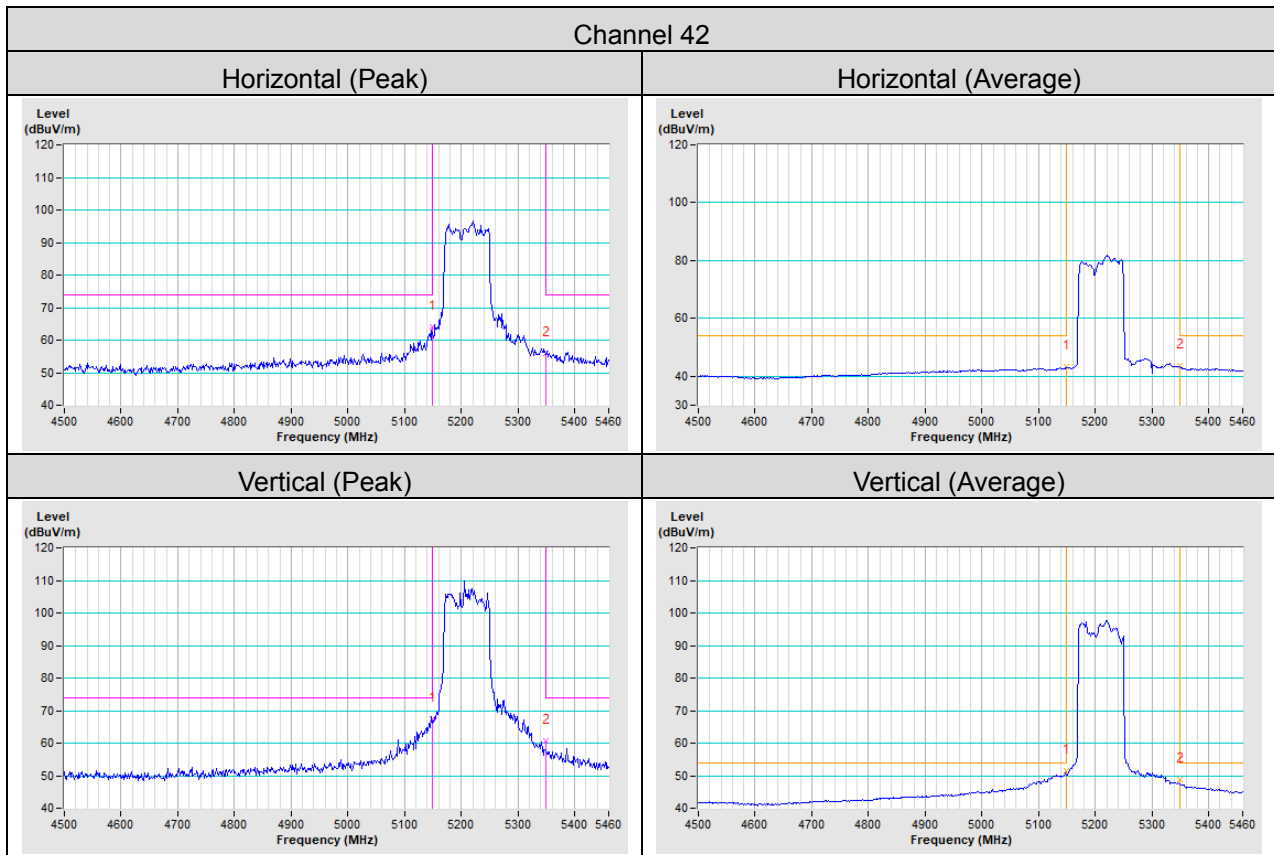




802.11ax (HE40)



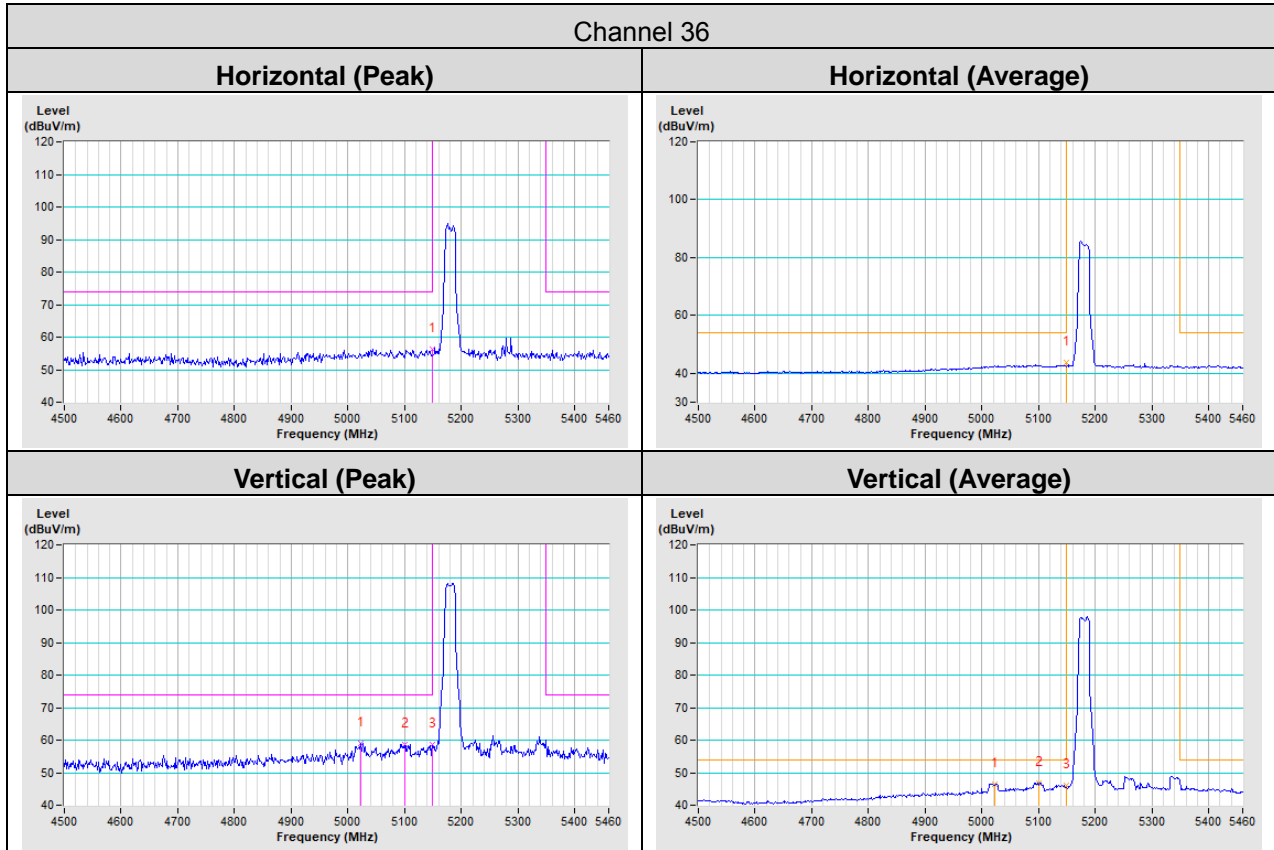
802.11ax (HE80)



Test Mode C

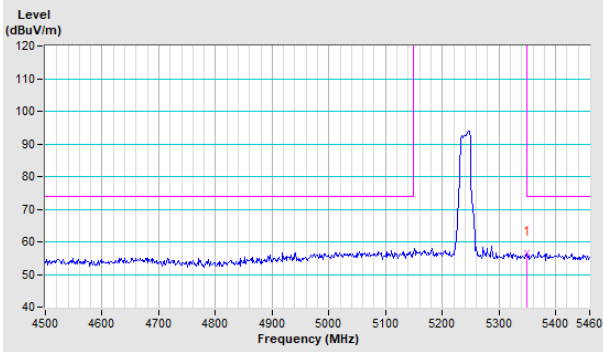
Scanning radio: CDD Mode

802.11a

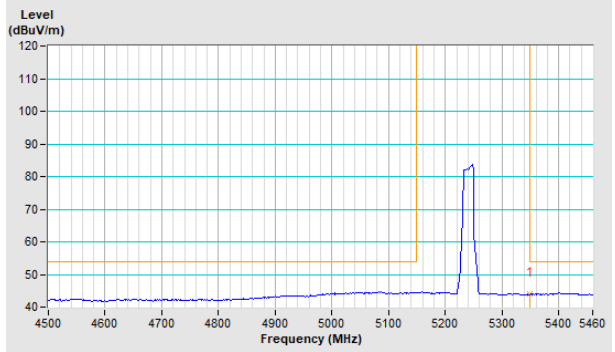


Channel 48

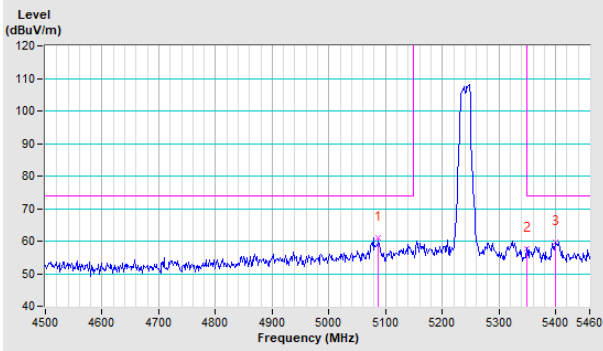
Horizontal (Peak)



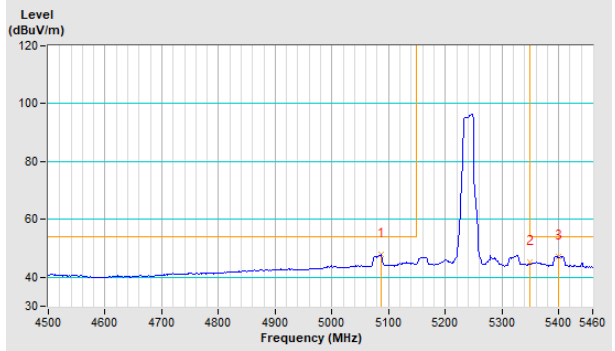
Horizontal (Average)



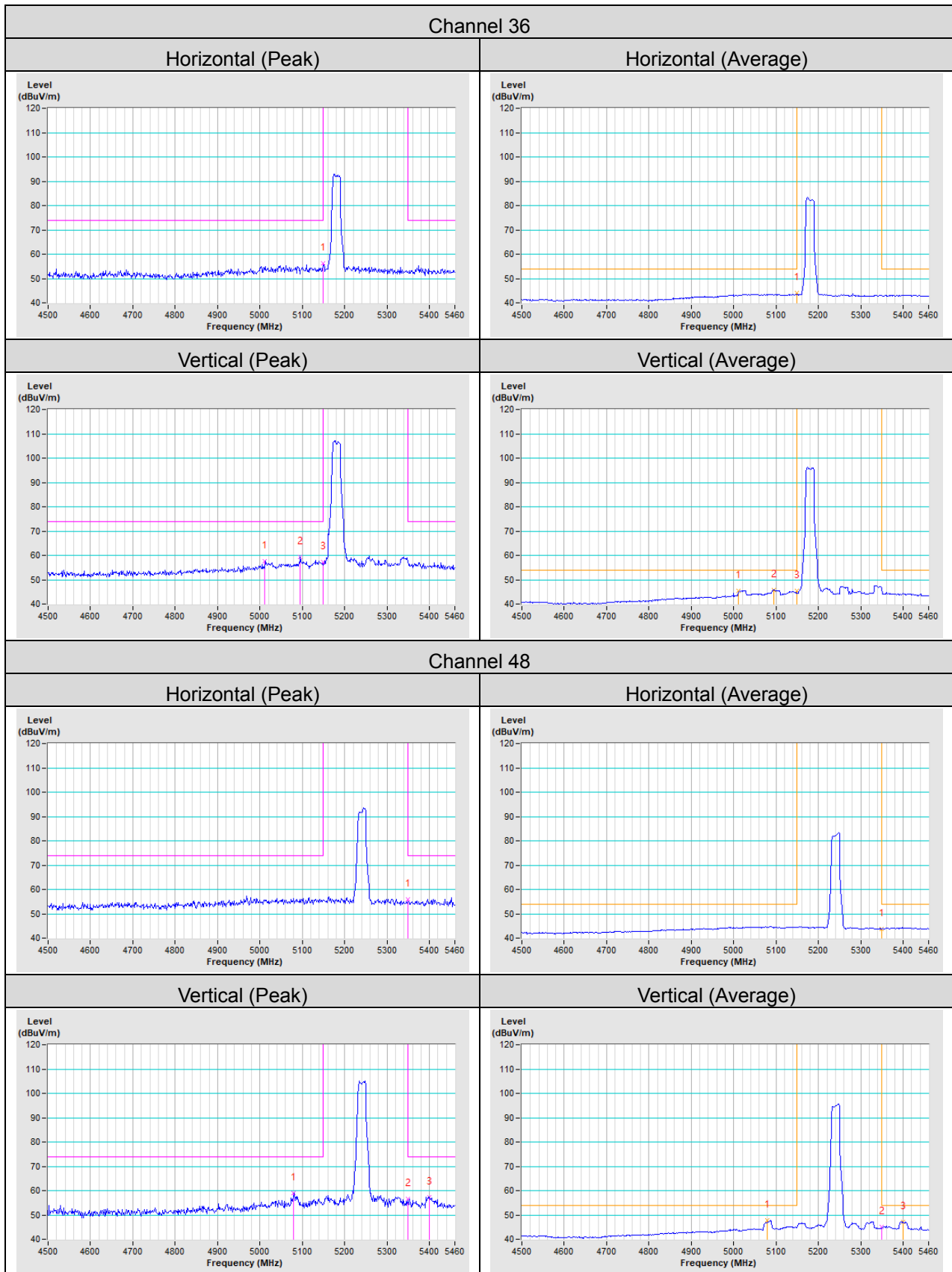
Vertical (Peak)



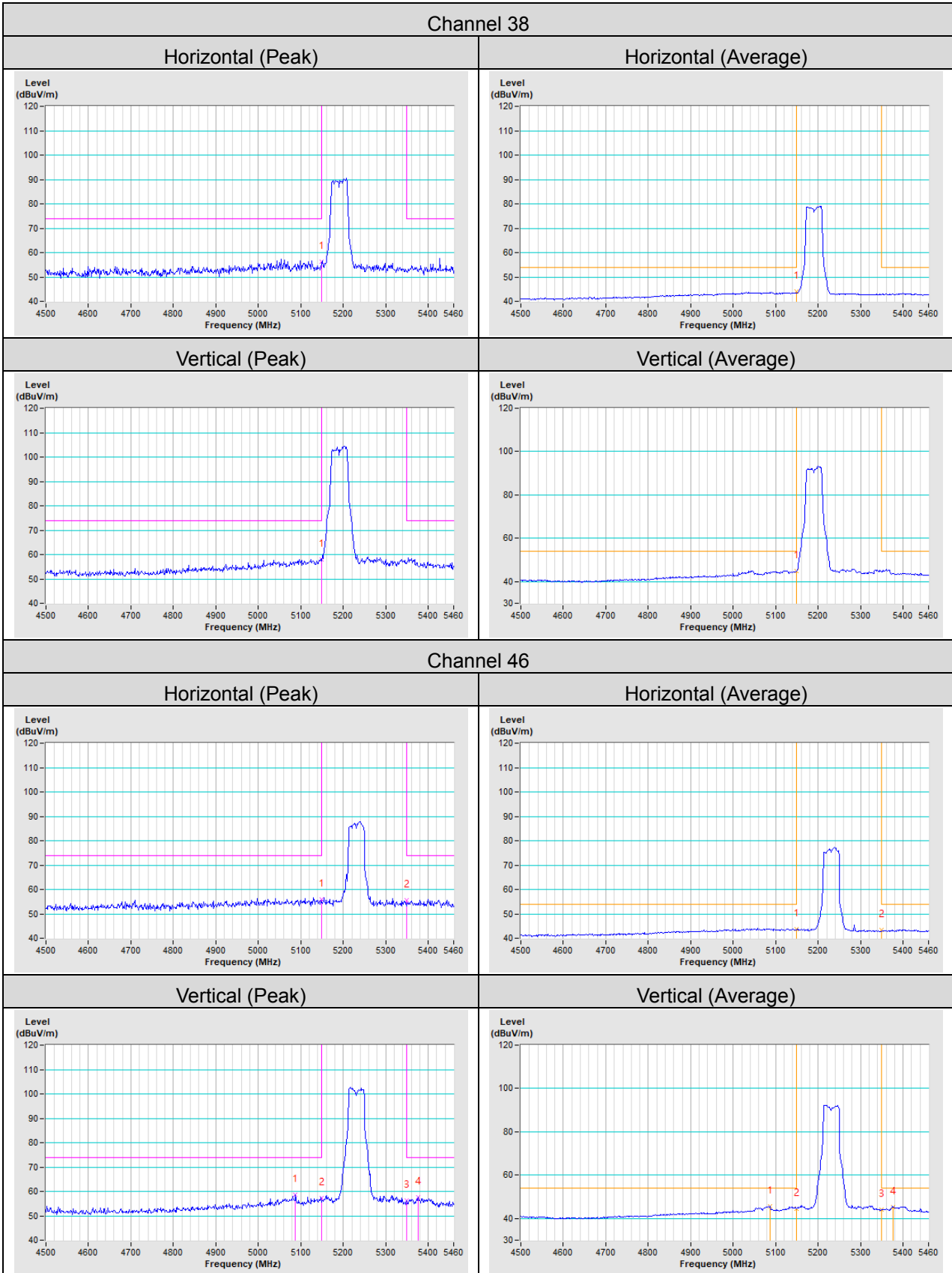
Vertical (Average)



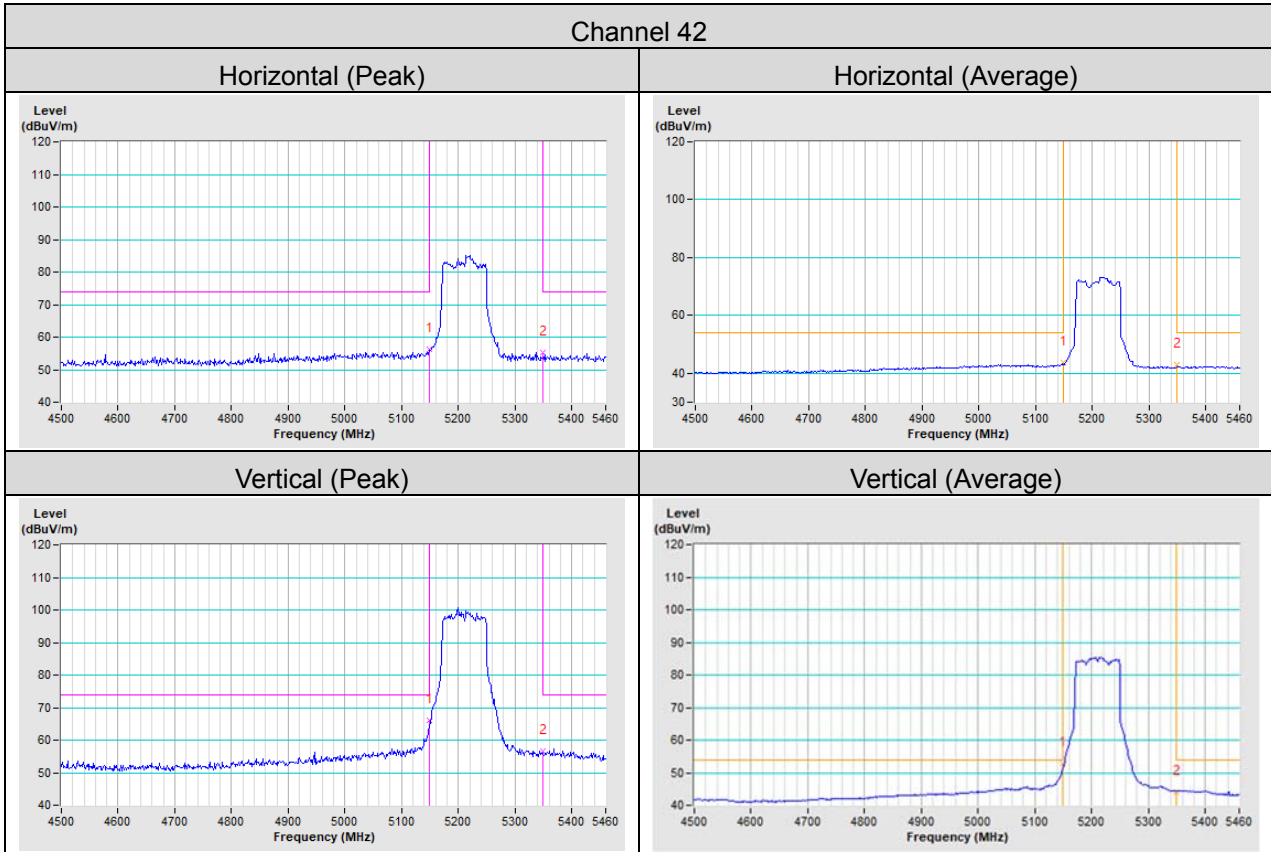
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



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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