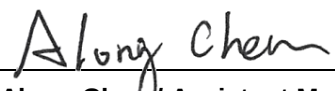


FCC C2PC Test Report

FCC ID : UIDTR4400
Equipment : 802.11ac Wireless Router
Model No. : TR4400-AC, RAC2V1A
(Two models are for marketing difference)
Brand Name : ARRIS
Applicant : ARRIS Group, Inc.
Address : 3871 LAKEFIELD DRIVE SUITE 300 SUWANEE
GA USA
Standard : 47 CFR FCC Part 15.407
Received Date : Feb. 10, 2017
Tested Date : Feb. 14 ~ Aug. 22, 2017

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:


Along Chen / Assistant Manager

Approved by:

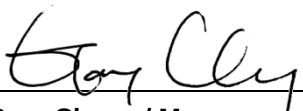

Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FR721001-01AN	Rev. 01	Initial issue	Sep. 01, 2017
FR721001-01AN	Rev. 02	Applicant changed	Sep. 08, 2017

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 2.500MHz 34.71 (Margin -11.29dB) - AV	Pass
15.407(b) 15.209	Radiated Emissions	[dBuV/m at 3m]: 5470.00MHz 68.06 (Margin -0.14dB) - PK	Pass
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: <i>Non-beamforming mode</i> 5250~5350MHz: 23.61 5470~5725MHz: 23.80 <i>Beamforming mode</i> 5250~5350MHz: 21.71 5470~5725MHz: 22.83	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

1 General Description

1.1 Information

This report is issued as a FCC Class II Permissive Change. The modification is only concerned with adding 5250~5350MHz and 5470~5725 MHz band by software setting.

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS
5250-5350 5470-5725	a	5260-5320 5500-5720	52-64 [4] 100-144 [9]	4	6-54 Mbps
5250-5350 5470-5725	n (HT20)	5260-5320 5500-5720	52-64 [4] 100-144 [9]	4	MCS 0-31
5250-5350 5470-5725	n (HT40)	5270-5310 5510-5710	54-62 [2] 102-142 [4]	4	MCS 0-31
5250-5350 5470-5725	ac (VHT20)	5260-5320 5500-5720	52-64 [4] 100-144 [9]	4	MCS 0-9
5250-5350 5470-5725	ac (VHT40)	5270-5310 5510-5710	54-62 [2] 102-142 [4]	4	MCS 0-9
5250-5350 5470-5725	ac (VHT80)	5290 5530-5690	58 [1] 106-138 [2]	4 / 2 ^{Note5}	MCS 0-9
Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 3: 802.11n/ac supports beamforming mode. Note 4: The device has disabled the 5600-5650MHz band by S/W setting. Note 5: The device supports non-contiguous 80+80MHz mode.					

Combination of channel list for 80+80MHz mode

Mode	Channels
1	CH42 (5210 MHz) + CH58 (5290 MHz)
2	CH42 (5210 MHz) + CH106 (5530 MHz)
3	CH42 (5210 MHz) + CH138 (5690 MHz)
4	CH42 (5210 MHz) + CH155 (5775 MHz)
5	CH58 (5290 MHz) + CH106 (5530 MHz)
6	CH58 (5290 MHz) + CH138 (5690 MHz)
7	CH58 (5290 MHz) + CH155 (5775 MHz)
8	CH106 (5530 MHz) + CH138 (5690 MHz)
9	CH106 (5530 MHz) + CH155 (5775 MHz)
10	CH138 (5690 MHz) + CH155 (5775 MHz)

1.1.2 Antenna Details

Model	Type	Connector	Gain (dBi)
5.0G ANT 1	Dipole	I-PEX	2.8
5.0G ANT 2	Dipole	I-PEX	2.5
5.0G ANT 3	Dipole	I-PEX	2.4
5.0G ANT 4	Dipole	I-PEX	3.9

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter
-------------------	-----------------------

1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	AC adapter	Brand: SERCOMM Model: PU30W120ULB18-CAU-00 Power Rating: I/P: 100-240Vac, 50-60Hz, 1.0A O/P: 12Vdc, 2.5A Power Line: 1.75m non-shielded without core
2	AC adapter	Brand: ARRIS Model: NBS36E120250VU Power Rating: I/P: 100-240Vac, 50/60Hz, 0.8A O/P: 12Vdc, 2.5A Power Line: 1.8m non-shielded without core
3	RJ45 cable	1.16m shielded without core

1.1.5 Channel List

802.11 a / HT20 / VHT20		HT40 / VHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
52	5260	54	5270
56	5280	62	5310
60	5300	102	5510
64	5320	110	5550
100	5500	134	5670
104	5520	142	5710
108	5540	VHT80	
112	5560	58	5290
116	5580	106	5530
132	5660	138	5690
136	5680	---	---
140	5700	---	---
144	5720	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	Non-beamforming: QCART, V3.0.144.0 Beamforming: LanTest20, V2.0.0.2				
Duty Cycle and Duty Factor	Mode	Non-beamforming		Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11a	98.29%	0.07	---	---
	VHT20	99.29%	0.03	93.24%	0.30
	VHT40	98.37%	0.07	93.02%	0.31
	VHT80	95.71%	0.19	91.88%	0.37

1.1.7 Power Setting

For Frequency band 5250~5350 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5260	13.5	---
11a	5300	13.5	---
11a	5320	13.5	---
HT20	5260	14	20
HT20	5300	14	20
HT20	5320	14	20
HT40	5270	17	20
HT40	5310	17	20
VHT20	5260	14	20
VHT20	5300	14	20
VHT20	5320	14	20
VHT40	5270	17	20
VHT40	5310	17	20
VHT80	5290	16	20

For Frequency band 5470~5725 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5500	13.5	---
11a	5580	13.5	---
11a	5700	13.5	---
HT20	5500	14	20
HT20	5580	14	20
HT20	5700	14	20
HT40	5510	17	20
HT40	5550	17	20
HT40	5670	16.5	20
VHT20	5500	14	20
VHT20	5580	14	20
VHT20	5700	14	20
VHT40	5510	17	20
VHT40	5550	17	20
VHT40	5670	16.5	20
VHT80	5530	14.5	20

Channel that extends across the 5.725 GHz boundary

For Frequency band 5470~5725 MHz			
Modulation Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
11a	5720	13.5	---
HT20	5720	14	20
HT40	5710	16.5	20
VHT20	5720	14	20
VHT40	5710	16.5	20
VHT80	5690	16.5	20

Channel for 80+80MHz mode

Mode	Test Frequency (MHz)	Power Set	
		Non-Beamforming	Beamforming
1	CH42 (5210 MHz) + CH58 (5290 MHz)	16.5	22
2	CH42 (5210 MHz) + CH106 (5530 MHz)	16.5	22
3	CH42 (5210 MHz) + CH138 (5690 MHz)	16.5	22
4	CH42 (5210 MHz) + CH155 (5775 MHz)	16.5	22
5	CH58 (5290 MHz) + CH106 (5530 MHz)	18.5	24
6	CH58 (5290 MHz) + CH138 (5690 MHz)	18.5	24
7	CH58 (5290 MHz) + CH155 (5775 MHz)	18.5	24
8	CH106 (5530 MHz) + CH138 (5690 MHz)	17	22
9	CH106 (5530 MHz) + CH155 (5775 MHz)	17	22
10	CH138 (5690 MHz) + CH155 (5775 MHz)	20	30

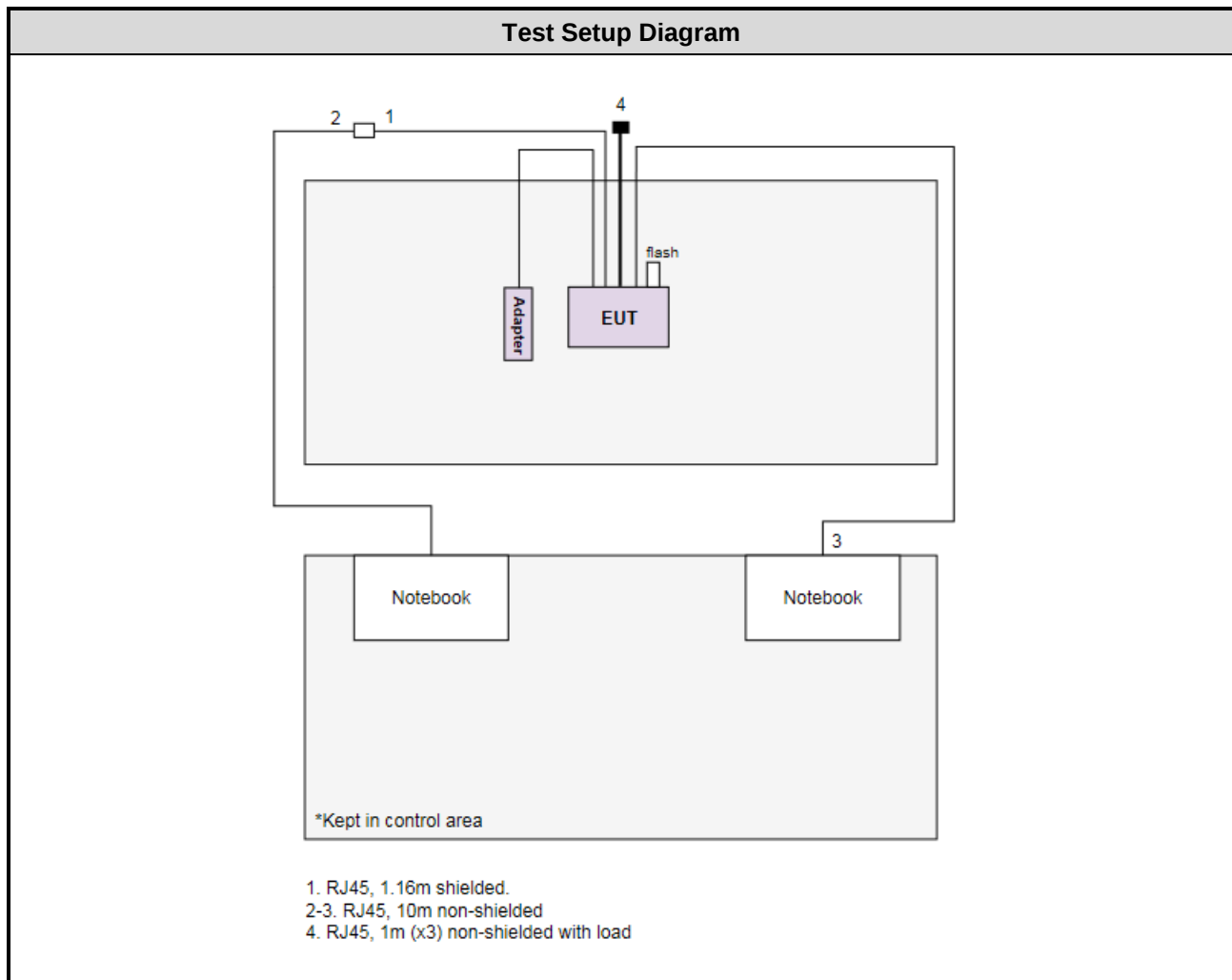
1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Signal cable / Length (m)
1	Notebook	DELL	Latitude E6430	DoC	RJ45, 10m non-shielded.
2	Notebook	DELL	Latitude E5420	DoC	RJ45, 10m non-shielded.
3	USB 3.0 flash	SONY	USM16GU	---	---
4	BF Client device	ARRIS	TR4400-AC	---	---

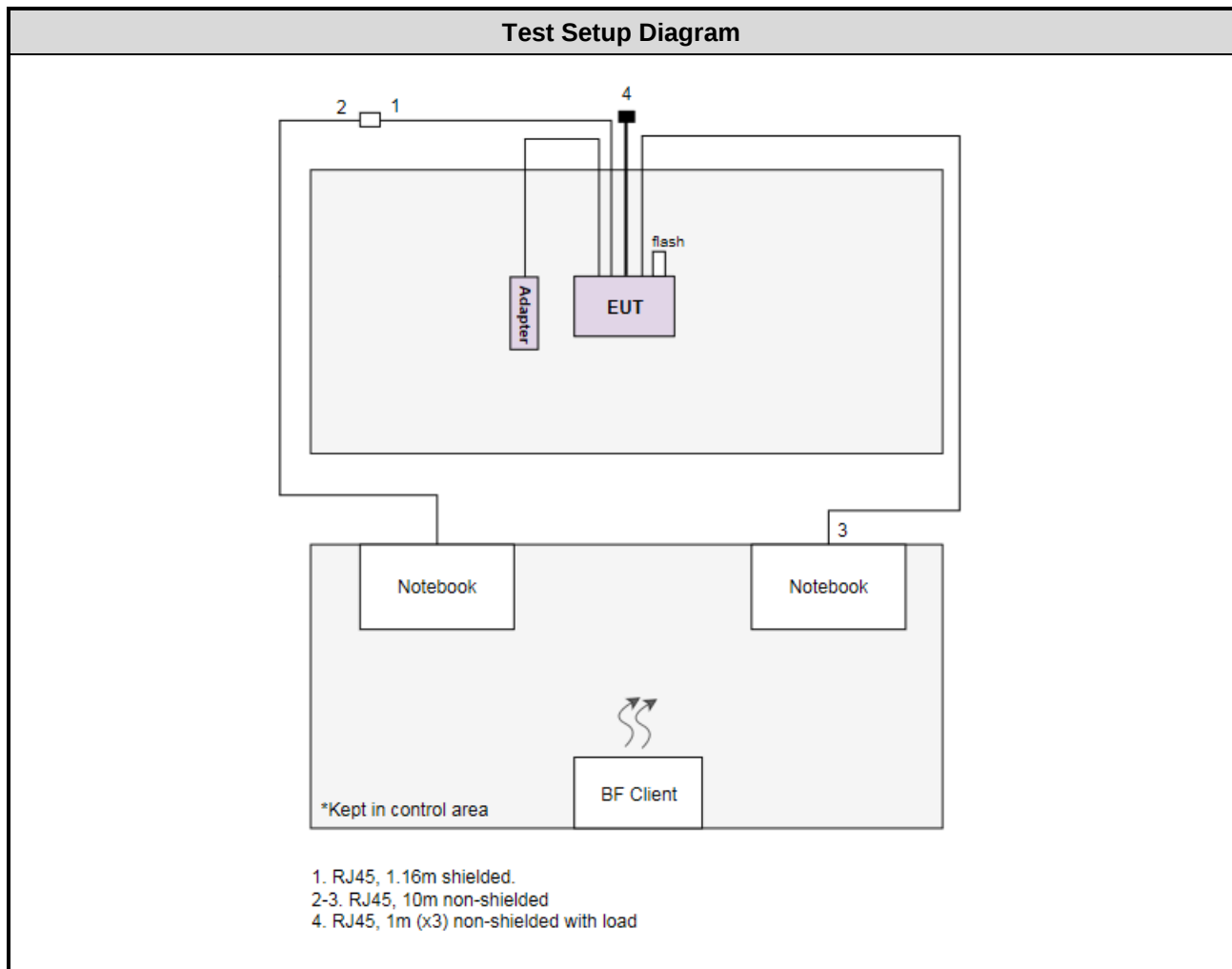
Note: No. 4 is provided by applicant.

1.3 Test Setup Chart

Non-beamforming mode



Beamforming mode



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Mar. 20 ~ Jul. 31, 2017				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Dec. 21, 2016	Dec. 20, 2017
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 08, 2016	Nov. 07, 2017
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Dec. 20, 2016	Dec. 19, 2017
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Feb. 14 ~ Mar. 17, 2017				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 09, 2016	Sep. 08, 2017
Receiver	Agilent	N9038A	MY53290044	Oct. 06, 2016	Oct. 05, 2017
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 26, 2016	Apr. 25, 2017
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 09, 2017	Feb. 08, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 25, 2016	Oct. 24, 2017
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 10, 2016	Nov. 09, 2017
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 09, 2016	Dec. 08, 2017
Preamplifier	EMC	EMC02325	980187	Sep. 08, 2016	Sep. 07, 2017
Preamplifier	Agilent	83017A	MY53270014	Aug. 22, 2016	Aug. 21, 2017
Preamplifier	EMC	EMC184045B	980192	Aug. 24, 2016	Aug. 23, 2017
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 04, 2017	Feb. 03, 2018
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 04, 2017	Feb. 03, 2018
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 04, 2017	Feb. 03, 2018
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 04, 2017	Feb. 03, 2018
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 04, 2017	Feb. 03, 2018
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 04, 2017	Feb. 03, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber 3 / (03CH03-WS)				
Tested Date	Aug. 01 ~ Aug. 10, 2017				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	Agilent	N9010A	MY53400091	Sep. 09, 2016	Sep. 08, 2017
Receiver	Agilent	N9038A	MY53290044	Oct. 06, 2016	Oct. 05, 2017
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 28, 2017	Apr. 27, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Feb. 09, 2017	Feb. 08, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 25, 2016	Oct. 24, 2017
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 10, 2016	Nov. 09, 2017
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 09, 2016	Dec. 08, 2017
Preamplifier	EMC	EMC02325	980187	Sep. 08, 2016	Sep. 07, 2017
Preamplifier	Agilent	83017A	MY53270014	Aug. 22, 2016	Aug. 21, 2017
Preamplifier	EMC	EMC184045B	980192	Aug. 24, 2016	Aug. 23, 2017
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Feb. 04, 2017	Feb. 03, 2018
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY22600/4	Feb. 04, 2017	Feb. 03, 2018
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Feb. 04, 2017	Feb. 03, 2018
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Feb. 04, 2017	Feb. 03, 2018
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Feb. 04, 2017	Feb. 03, 2018
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Feb. 04, 2017	Feb. 03, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Mar. 20 ~ Mar. 23, 2017 / Aug. 17 ~ Aug. 22, 2017				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Mar. 15, 2017	Mar. 14, 2018
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 21, 2016	Nov. 20, 2017
Power Meter	Anritsu	ML2495A	1241002	Oct. 06, 2016	Oct. 05, 2017
Power Sensor	Anritsu	MA2411B	1207366	Oct. 06, 2016	Oct. 05, 2017
AC POWER SOURCE	APC	AFC-500W	F312060012	Oct. 28, 2016	Oct. 27, 2017
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.407

ANSI C63.10-2013

FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04

FCC KDB 644545 D03 Guidance for IEEE 802.11ac New Rules v01

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor $k=2$)

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 34.134 Hz
Conducted power	± 0.808 dB
Frequency error	± 34.134 Hz
Power density	± 0.463 dB
Conducted emission	± 2.670 dB
AC conducted emission	± 2.90 dB
Radiated emission ≤ 1 GHz	± 3.66 dB
Radiated emission > 1 GHz	± 5.37 dB
Time	$\pm 0.1\%$
Temperature	± 0.6 °C

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	22°C / 57%	Howard Huang
Radiated Emissions	03CH03-WS	22-24°C / 62-68%	Aska Huang Vincent Yeh
RF Conducted	TH01-WS	21-22°C / 63-65%	Brad Wu Felix Sung

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- IC site registration No.: 10807C-2

2.2 The Worst Test Modes and Channel Details

Non-beamforming mode

For Frequency band 5250-5350 MHz, 5470-5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	VHT40	5510	MCS 0	---
Radiated Emissions ≤ 1 GHz	VHT40	5510	MCS 0	---
RF Output Power	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	---
	HT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	HT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
Radiated Emissions > 1 GHz Emission Bandwidth Peak Power Spectral Density	11a	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	6 Mbps	---
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
Frequency Stability	Un-modulation	5320	---	---
NOTE:				
1) Two adapters had been covered during the pretest and found that Adapter 2 was the worst case and was selected for final testing. (Adapter 1: SERCOMM; Adapter 2: ARRIS)				

80+80MHz mode		
Test item	Modulation Mode	Mode
Conducted Emissions	VHT80+80	Mode 4: CH42 (5210 MHz) + CH155 (5775 MHz)
Radiated Emissions ≤ 1 GHz	VHT80+80	Mode 4: CH42 (5210 MHz) + CH155 (5775 MHz)
RF Output Power Radiated Emissions > 1 GHz Emission Bandwidth Peak Power Spectral Density	VHT80+80	Mode 1: CH42 (5210 MHz) + CH58 (5290 MHz) Mode 2: CH42 (5210 MHz) + CH106 (5530 MHz) Mode 3: CH42 (5210 MHz) + CH138 (5690 MHz) Mode 4: CH42 (5210 MHz) + CH155 (5775 MHz) Mode 5: CH58 (5290 MHz) + CH106 (5530 MHz) Mode 6: CH58 (5290 MHz) + CH138 (5690 MHz) Mode 7: CH58 (5290 MHz) + CH155 (5775 MHz) Mode 8: CH106 (5530 MHz) + CH138 (5690 MHz) Mode 9: CH106 (5530 MHz) + CH155 (5775 MHz) Mode 10: CH138 (5690 MHz) + CH155 (5775 MHz)

Beamforming mode

For Frequency band 5250-5350 MHz, 5470-5725 MHz				
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Conducted Emissions	VHT40	5550	MCS 0	---
Radiated Emissions ≤1GHz	VHT40	5550	MCS 0	---
RF Output Power	HT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	---
	HT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
Radiated Emissions >1GHz Emission Bandwidth Peak Power Spectral Density	VHT20	5260 / 5300 / 5320 5500 / 5580 / 5700 / 5720	MCS 0	---
	VHT40	5270 / 5310 5510 / 5550 / 5670 / 5710	MCS 0	
	VHT80	5290 / 5530 / 5690	MCS 0	
NOTE:				
1) Two adapters had been covered during the pretest and found that Adapter 2 was the worst case and was selected for final testing. (Adapter 1: SERCOMM; Adapter 2: ARRIS)				

80+80MHz mode		
Test item	Modulation Mode	Mode
Conducted Emissions	VHT80+80	Mode 4: CH42 (5210 MHz) + CH155 (5775 MHz)
Radiated Emissions ≤ 1 GHz	VHT80+80	Mode 4: CH42 (5210 MHz) + CH155 (5775 MHz)
RF Output Power Radiated Emissions > 1 GHz Emission Bandwidth Peak Power Spectral Density	VHT80+80	Mode 1: CH42 (5210 MHz) + CH58 (5290 MHz) Mode 2: CH42 (5210 MHz) + CH106 (5530 MHz) Mode 3: CH42 (5210 MHz) + CH138 (5690 MHz) Mode 4: CH42 (5210 MHz) + CH155 (5775 MHz) Mode 5: CH58 (5290 MHz) + CH106 (5530 MHz) Mode 6: CH58 (5290 MHz) + CH138 (5690 MHz) Mode 7: CH58 (5290 MHz) + CH155 (5775 MHz) Mode 8: CH106 (5530 MHz) + CH138 (5690 MHz) Mode 9: CH106 (5530 MHz) + CH155 (5775 MHz) Mode 10: CH138 (5690 MHz) + CH155 (5775 MHz)

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

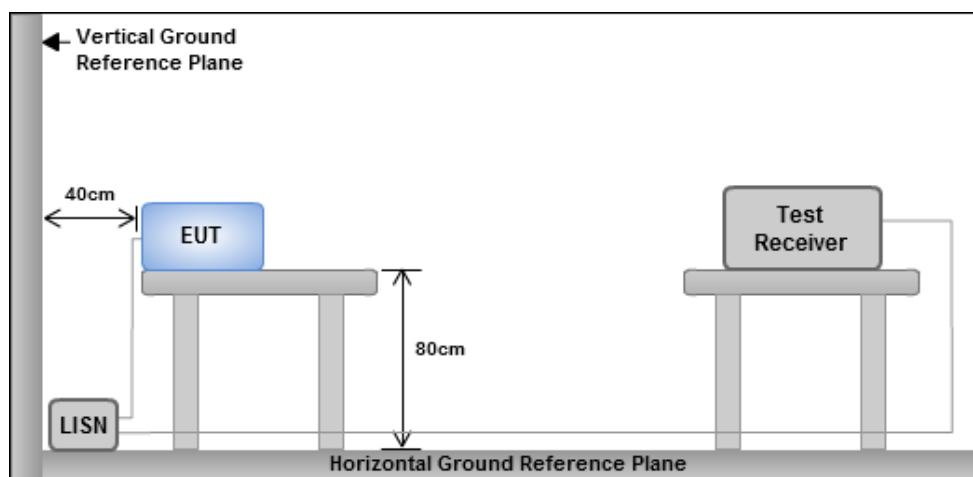
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V/60Hz

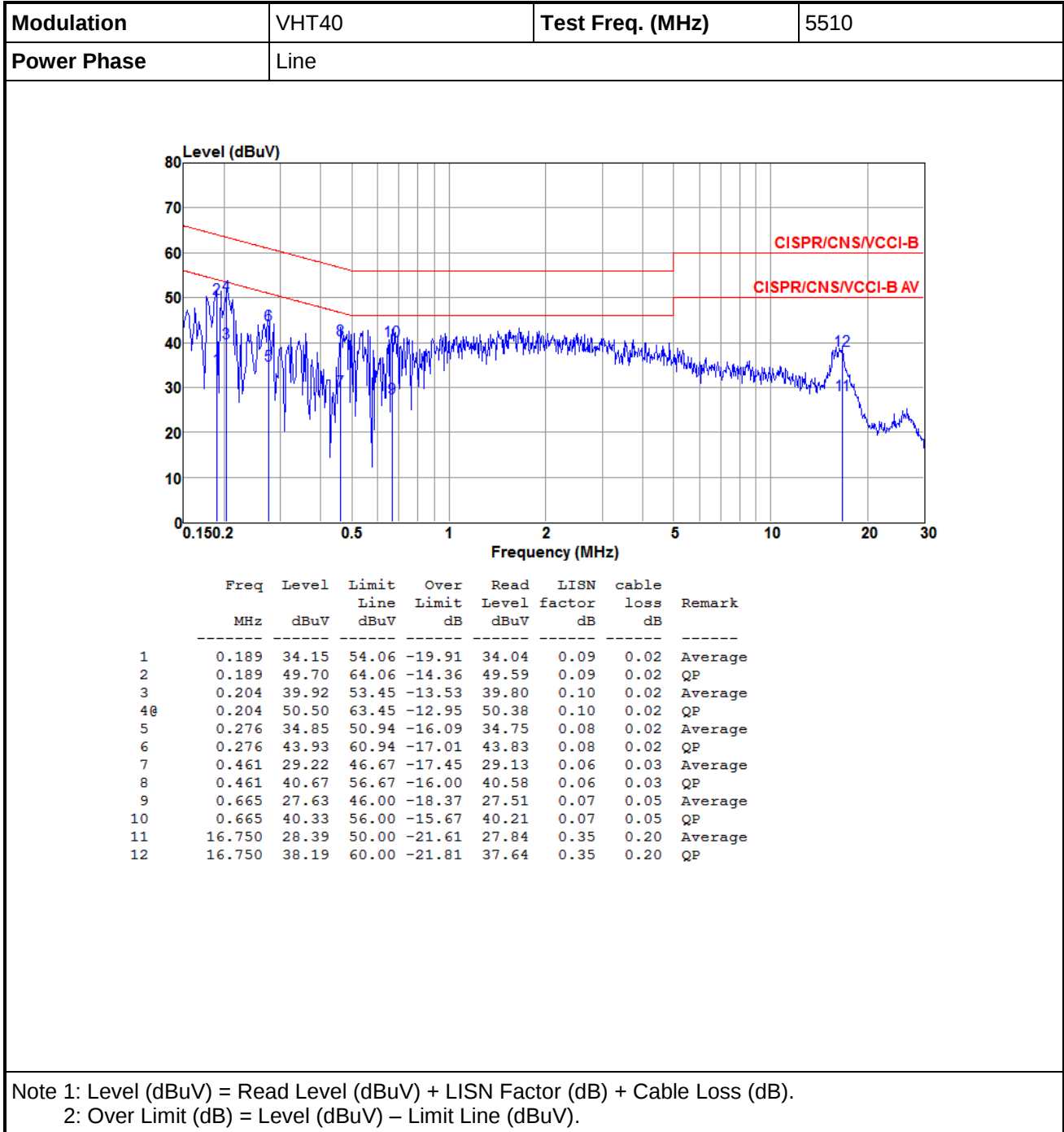
3.1.3 Test Setup



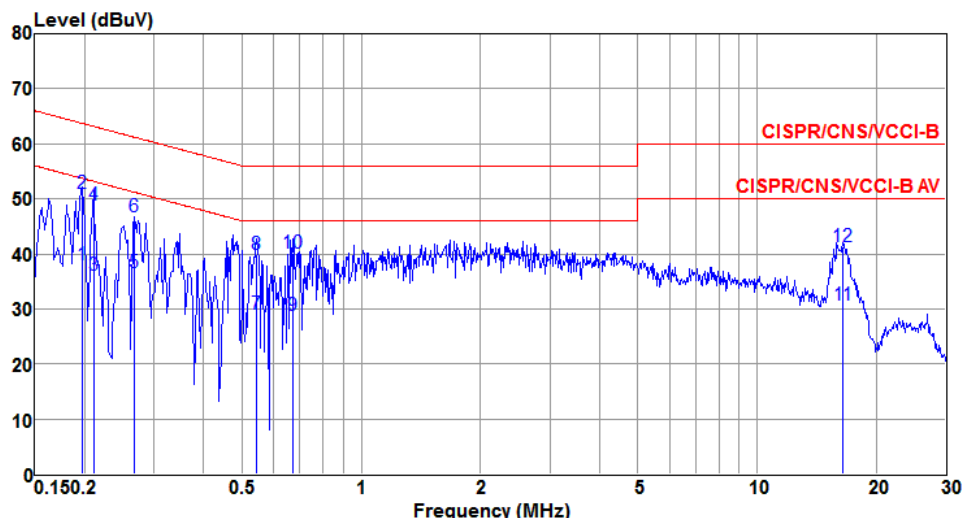
- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

Non- beamforming mode



Modulation	VHT40	Test Freq. (MHz)	5510
Power Phase	Neutral		



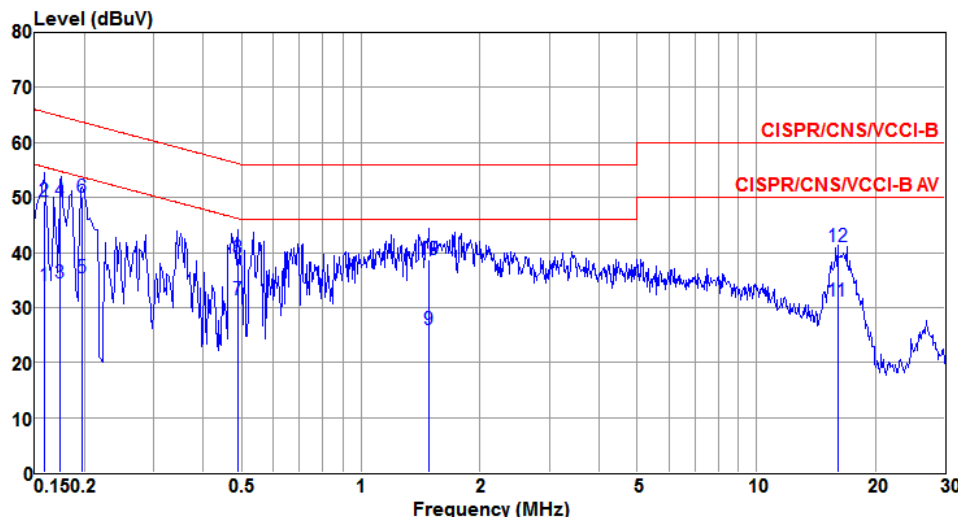
The graph displays the measured level in dBUV against frequency in MHz. Two red limit lines are shown: CISPR/CNS/VCCI-B (upper) and CISPR/CNS/VCCI-B AV (lower). The blue trace represents the measured signal, with several peaks labeled 1 through 12. The x-axis is logarithmic, ranging from 0.15 to 30 MHz. The y-axis ranges from 0 to 80 dBUV.

	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.198	38.08	53.71	-15.63	37.97	0.09	0.02	Average
2	0.198	50.88	63.71	-12.83	50.77	0.09	0.02	QP
3	0.211	36.14	53.18	-17.04	36.03	0.09	0.02	Average
4	0.211	48.88	63.18	-14.30	48.77	0.09	0.02	QP
5	0.267	36.56	51.20	-14.64	36.43	0.11	0.02	Average
6	0.267	46.76	61.20	-14.44	46.63	0.11	0.02	QP
7	0.544	28.97	46.00	-17.03	28.81	0.12	0.04	Average
8	0.544	39.82	56.00	-16.18	39.66	0.12	0.04	QP
9	0.672	28.87	46.00	-17.13	28.71	0.11	0.05	Average
10	0.672	40.09	56.00	-15.91	39.93	0.11	0.05	QP
11	16.486	30.63	50.00	-19.37	30.05	0.38	0.20	Average
12	16.486	41.35	60.00	-18.65	40.77	0.38	0.20	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

Modulation	VHT80+80	Test Freq. (MHz)	5210+5290
Power Phase	Line		

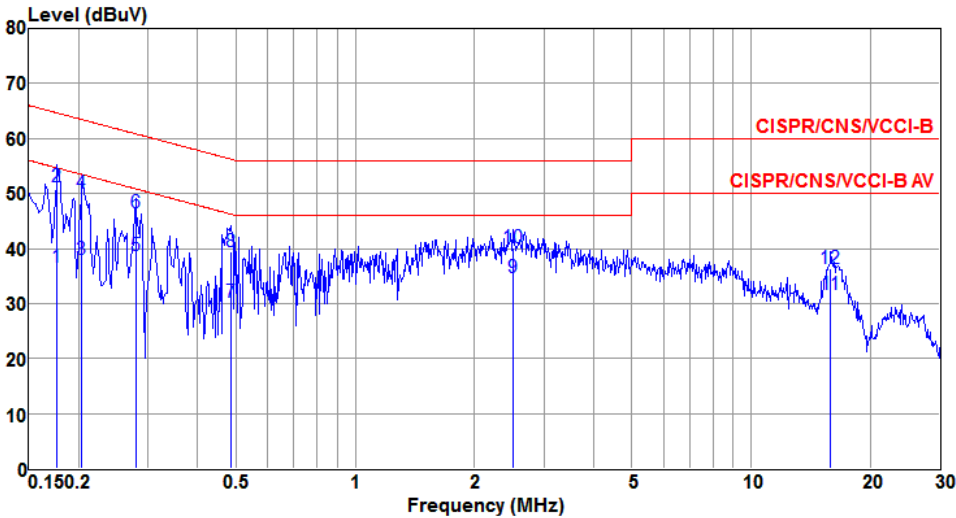


	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.159	33.93	55.52	-21.59	33.83	0.08	0.02	Average
2	0.159	49.24	65.52	-16.28	49.14	0.08	0.02	QP
3	0.174	34.52	54.77	-20.25	34.41	0.09	0.02	Average
4	0.174	49.39	64.77	-15.38	49.28	0.09	0.02	QP
5	0.198	35.47	53.71	-18.24	35.35	0.10	0.02	Average
6@	0.198	49.99	63.71	-13.72	49.87	0.10	0.02	QP
7	0.489	31.46	46.19	-14.73	31.36	0.06	0.04	Average
8	0.489	38.89	56.19	-17.30	38.79	0.06	0.04	QP
9	1.487	25.90	46.00	-20.10	25.73	0.10	0.07	Average
10	1.487	38.68	56.00	-17.32	38.51	0.10	0.07	QP
11	16.055	31.14	50.00	-18.86	30.60	0.34	0.20	Average
12	16.055	40.96	60.00	-19.04	40.42	0.34	0.20	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation	VHT80+80	Test Freq. (MHz)	5210+5290
Power Phase	Neutral		



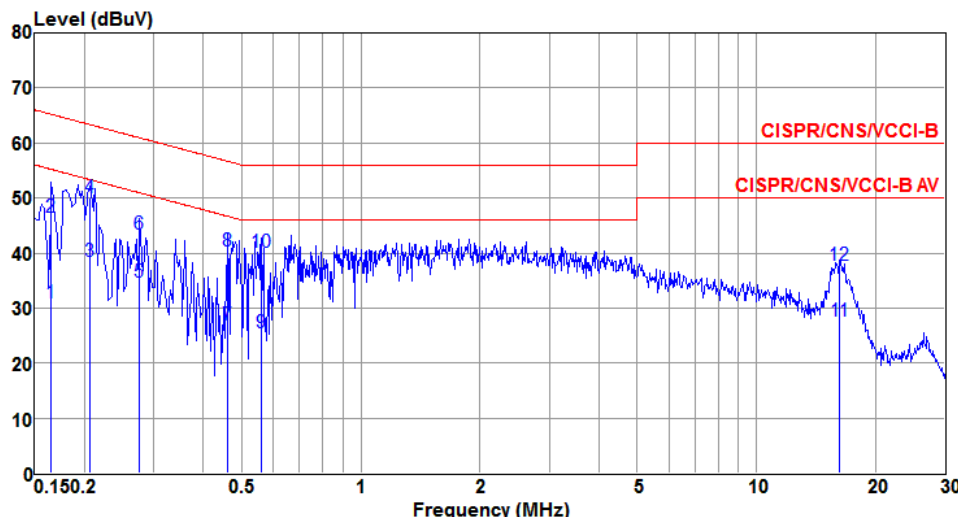
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.177	36.70	54.64	-17.94	36.57	0.09	0.04	Average
2	0.177	51.33	64.64	-13.31	51.20	0.09	0.04	QP
3	0.204	38.07	53.45	-15.38	37.94	0.09	0.04	Average
4	0.204	50.14	63.45	-13.31	50.01	0.09	0.04	QP
5	0.279	38.79	50.85	-12.06	38.64	0.11	0.04	Average
6	0.279	46.49	60.85	-14.36	46.34	0.11	0.04	QP
7	0.484	30.26	46.27	-16.01	30.10	0.12	0.04	Average
8	0.484	39.35	56.27	-16.92	39.19	0.12	0.04	QP
9@	2.500	34.71	46.00	-11.29	34.48	0.15	0.08	Average
10	2.500	40.12	56.00	-15.88	39.89	0.15	0.08	QP
11	15.885	31.71	50.00	-18.29	31.09	0.38	0.24	Average
12	15.885	36.33	60.00	-23.67	35.71	0.38	0.24	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

Beamforming mode

Modulation	VHT40	Test Freq. (MHz)	5550
Power Phase	Line		

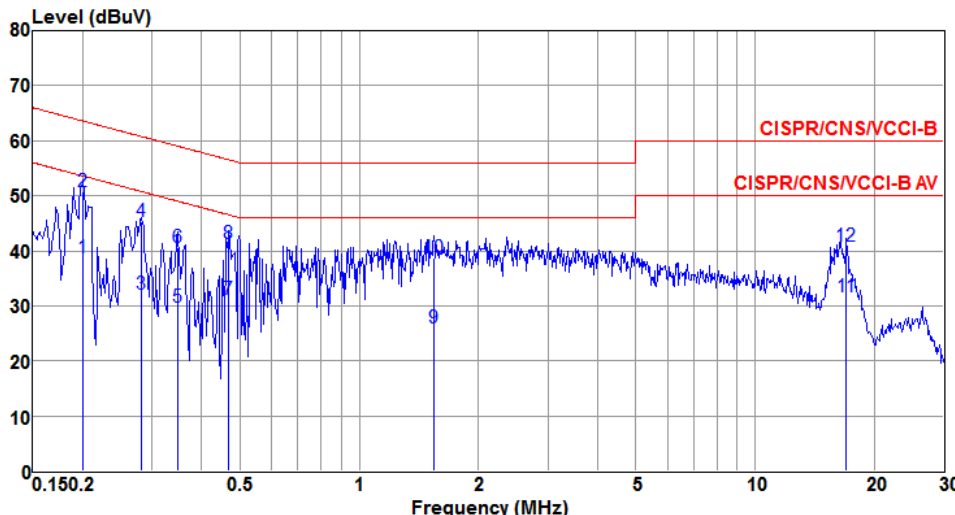


Freq	Level	Limit	Over	Read	LISN	cable		
MHz	dBuV	Line	Limit	Level	factor	loss	Remark	
		dBuV		dBuV				
1	0.165	30.89	55.21	-24.32	30.79	0.08	0.02	Average
2	0.165	46.58	65.21	-18.63	46.48	0.08	0.02	QP
3	0.207	38.49	53.32	-14.83	38.37	0.10	0.02	Average
4	0.207	49.98	63.32	-13.34	49.86	0.10	0.02	QP
5	0.276	34.75	50.94	-16.19	34.65	0.08	0.02	Average
6	0.276	43.50	60.94	-17.44	43.40	0.08	0.02	QP
7	0.461	26.99	46.67	-19.68	26.90	0.06	0.03	Average
8	0.461	40.45	56.67	-16.22	40.36	0.06	0.03	QP
9	0.561	25.59	46.00	-20.41	25.49	0.06	0.04	Average
10	0.561	40.03	56.00	-15.97	39.93	0.06	0.04	QP
11	16.226	27.61	50.00	-22.39	27.07	0.34	0.20	Average
12	16.226	37.78	60.00	-22.22	37.24	0.34	0.20	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

Modulation	VHT40	Test Freq. (MHz)	5550
Power Phase	Neutral		



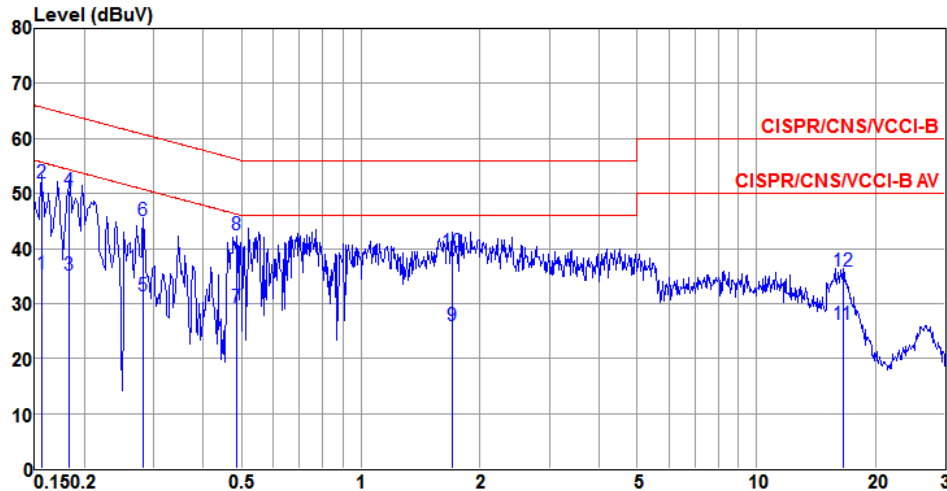
	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.201	38.79	53.58	-14.79	38.68	0.09	0.02	Average
2	0.201	50.75	63.58	-12.83	50.64	0.09	0.02	QP
3	0.282	32.15	50.76	-18.61	32.02	0.11	0.02	Average
4	0.282	45.27	60.76	-15.49	45.14	0.11	0.02	QP
5	0.348	29.64	49.00	-19.36	29.49	0.12	0.03	Average
6	0.348	40.62	59.00	-18.38	40.47	0.12	0.03	QP
7	0.469	31.15	46.54	-15.39	30.99	0.12	0.04	Average
8	0.469	41.22	56.54	-15.32	41.06	0.12	0.04	QP
9	1.544	25.97	46.00	-20.03	25.77	0.13	0.07	Average
10	1.544	38.80	56.00	-17.20	38.60	0.13	0.07	QP
11	17.018	31.55	50.00	-18.45	30.97	0.39	0.19	Average
12	17.018	40.77	60.00	-19.23	40.19	0.39	0.19	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

Modulation	VHT80+80	Test Freq. (MHz)	5210+5290
Power Phase	Line		

Level (dBuV)

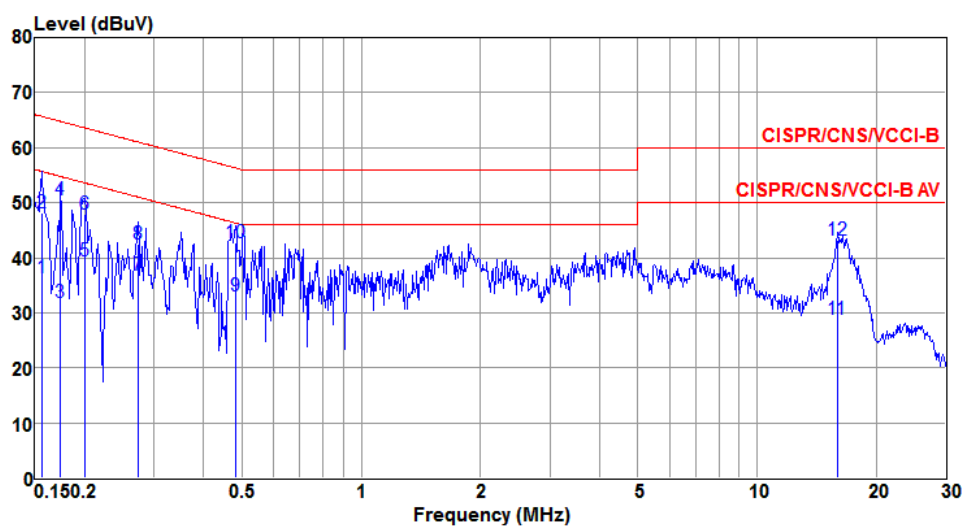


	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.156	35.42	55.69	-20.27	35.33	0.07	0.02	Average
2@	0.156	52.04	65.69	-13.65	51.95	0.07	0.02	QP
3	0.183	35.08	54.33	-19.25	34.97	0.09	0.02	Average
4	0.183	50.61	64.33	-13.72	50.50	0.09	0.02	QP
5	0.282	31.43	50.76	-19.33	31.33	0.08	0.02	Average
6	0.282	45.09	60.76	-15.67	44.99	0.08	0.02	QP
7	0.484	29.19	46.27	-17.08	29.09	0.06	0.04	Average
8	0.484	42.43	56.27	-13.84	42.33	0.06	0.04	QP
9	1.698	25.86	46.00	-20.14	25.66	0.12	0.08	Average
10	1.698	39.39	56.00	-16.61	39.19	0.12	0.08	QP
11	16.573	26.18	50.00	-23.82	25.63	0.35	0.20	Average
12	16.573	35.93	60.00	-24.07	35.38	0.35	0.20	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

Note 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation	VHT80+80	Test Freq. (MHz)	5210+5290
Power Phase	Neutral		



Freq	Level	Limit	Over	Read	LISN	cable		
MHz	dBuV	Line	Limit	Level	factor	loss	Remark	
		dBuV	dB	dBuV	dB	dB		
1	0.156	36.39	55.69	-19.30	36.27	0.10	0.02	Average
2	0.156	48.18	65.69	-17.51	48.06	0.10	0.02	QP
3	0.174	31.84	54.77	-22.93	31.73	0.09	0.02	Average
4	0.174	50.46	64.77	-14.31	50.35	0.09	0.02	QP
5	0.201	39.43	53.58	-14.15	39.32	0.09	0.02	Average
6	0.201	47.93	63.58	-15.65	47.82	0.09	0.02	QP
7	0.273	36.82	51.03	-14.21	36.69	0.11	0.02	Average
8	0.273	42.52	61.03	-18.51	42.39	0.11	0.02	QP
9@	0.481	33.12	46.32	-13.20	32.96	0.12	0.04	Average
10	0.481	42.61	56.32	-13.71	42.45	0.12	0.04	QP
11	15.970	28.75	50.00	-21.25	28.17	0.38	0.20	Average
12	15.970	43.14	60.00	-16.86	42.56	0.38	0.20	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 Emission Bandwidth

3.2.1 Test Procedures

26dB Bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW, Detector = Peak.
3. Trace mode = max hold.
4. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

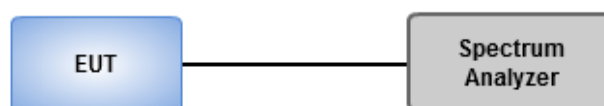
Occupied Bandwidth

1. Set RBW = 1 % to 5 % of the OBW
2. Set VBW $\geq$ 3 RBW
3. Sample detection and single sweep mode shall be used
4. Use the 99 % power bandwidth function of the instrument

6dB Bandwidth

1. Set RBW = 100kHz, VBW = 300kHz
2. Detector = Peak, Trace mode = max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

3.2.2 Test Setup

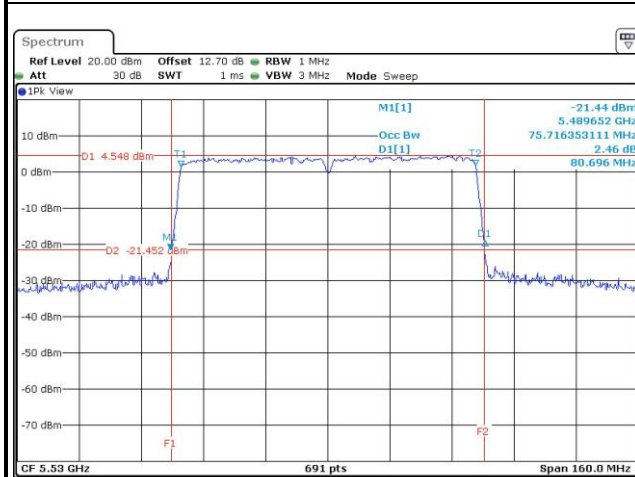


3.2.3 Test Result of Emission Bandwidth

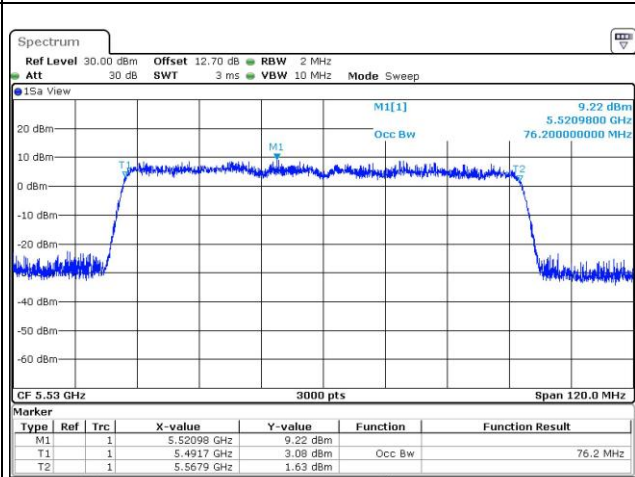
Non-beamforming mode

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	4	5260	19.65	20.23	20.23	20.23	16.45	16.46	16.48	16.47	23.93
11a	4	5300	20.00	20.06	20.35	20.35	16.47	16.48	16.50	16.49	24.00
11a	4	5320	19.94	19.77	19.83	20.06	16.46	16.44	16.49	16.47	23.96
VHT20	4	5260	20.46	20.70	20.70	20.64	17.61	17.64	17.64	17.63	24.00
VHT20	4	5300	20.41	20.64	20.93	20.99	17.63	17.64	17.69	17.64	24.00
VHT20	4	5320	20.52	20.75	20.70	20.75	17.62	17.61	17.66	17.62	24.00
VHT40	4	5270	40.58	40.58	40.93	40.70	36.26	36.30	36.30	36.30	24.00
VHT40	4	5310	40.35	40.70	40.81	40.70	36.22	36.30	36.26	36.30	24.00
VHT80	4	5290	80.23	80.46	80.23	80.46	75.96	76.04	76.00	75.96	24.00
11a	4	5500	19.65	19.25	19.36	19.88	16.45	16.40	16.40	16.45	23.84
11a	4	5580	19.59	19.36	19.36	19.77	16.44	16.42	16.40	16.46	23.87
11a	4	5700	19.71	19.48	19.59	19.77	16.44	16.43	16.47	16.47	23.90
VHT20	4	5500	20.29	20.41	20.29	20.46	17.62	17.58	17.56	17.61	24.00
VHT20	4	5580	20.29	20.52	20.29	20.52	17.59	17.60	17.56	17.62	24.00
VHT20	4	5700	20.29	20.58	20.52	20.46	17.62	17.61	17.64	17.62	24.00
VHT40	4	5510	40.00	40.58	40.70	40.70	36.22	36.34	36.34	36.32	24.00
VHT40	4	5550	40.46	40.70	40.93	40.93	36.34	36.34	36.44	36.34	24.00
VHT40	4	5670	40.58	40.81	41.04	40.81	36.34	36.34	36.30	36.34	24.00
VHT80	4	5530	80.23	80.46	80.23	80.70	76.08	76.16	76.20	76.08	24.00

Worst Plot of 26dB Bandwidth



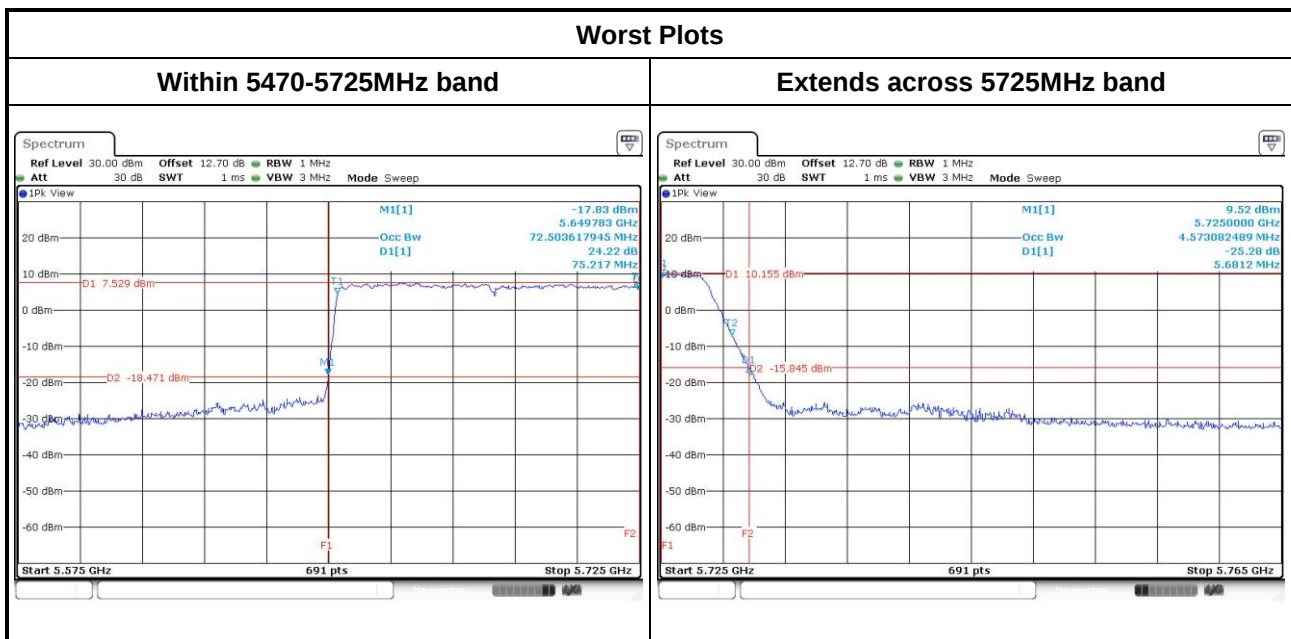
Worst Plot of 99% Bandwidth



Channel that extends across the 5.725 GHz boundary

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	4	5720	14.60	14.72	14.72	15.03	13.20	13.22	13.23	13.22	22.64
VHT20	4	5720	15.15	15.21	15.28	15.21	13.80	13.81	13.82	13.79	22.80
VHT40	4	5710	35.20	35.10	35.20	35.10	33.09	33.13	33.07	33.07	24.00
VHT80	4	5690	74.78	75.22	75.00	75.00	73.06	73.10	72.90	72.78	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
11a	4	5720	5.04	4.87	4.76	5.07	3.25	3.23	3.23	3.25	
VHT20	4	5720	5.20	5.37	5.54	5.39	3.82	3.80	3.83	3.83	
VHT40	4	5710	5.57	5.39	5.68	5.62	3.17	3.19	3.21	3.25	
VHT80	4	5690	5.30	5.30	5.39	5.22	3.10	3.10	3.14	3.26	



80+80MHz Mode 1

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	84.64	138.55	---	---	76.20	76.44	---	---	30.00
VHT80+80	2	5290	---	---	84.93	84.93	---	---	76.24	76.40	24.00

80+80MHz Mode 2

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	83.71	83.94	---	---	76.24	76.40	---	---	30.00
VHT80+80	2	5530	---	---	84.17	83.94	---	---	76.24	76.40	24.00

80+80MHz Mode 3

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	83.71	83.71	---	---	76.24	76.36	---	---	30

UNII Emission Bandwidth Result (Within 5470-5725MHz band)

Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	77.39	77.17	---	---	73.22	73.38	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)

Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	7.30	7.30	---	---	2.94	2.90	

80+80MHz Mode 4

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	83.04	83.71	---	---	76.20	76.40	---	---	30

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.24	76.20	---	---	75.83	75.83	0.5

80+80MHz Mode 5

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5290	83.25	83.94	---	---	76.20	76.32	---	---	24.00
VHT80+80	2	5530	---	---	83.94	84.17	---	---	76.20	76.36	24.00

80+80MHz Mode 6

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5290	83.94	83.71	---	---	76.20	76.28	---	---	24.00

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	77.39	76.96	---	---	73.22	73.46	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	7.74	7.48	---	---	2.94	2.94	

80+80MHz Mode 7

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5290	83.25	83.94	---	---	76.16	76.28	---	---	24.00

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.20	76.32	---	---	75.83	75.83	0.5

80+80MHz Mode 8

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5530	83.71	83.94	---	---	76.20	76.44	---	---	24.00

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	77.17	77.17	---	---	73.22	73.34	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	7.30	7.65	---	---	2.94	2.98	

80+80MHz Mode 9

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5530	83.71	83.94	---	---	76.24	76.48	---	---	24.00

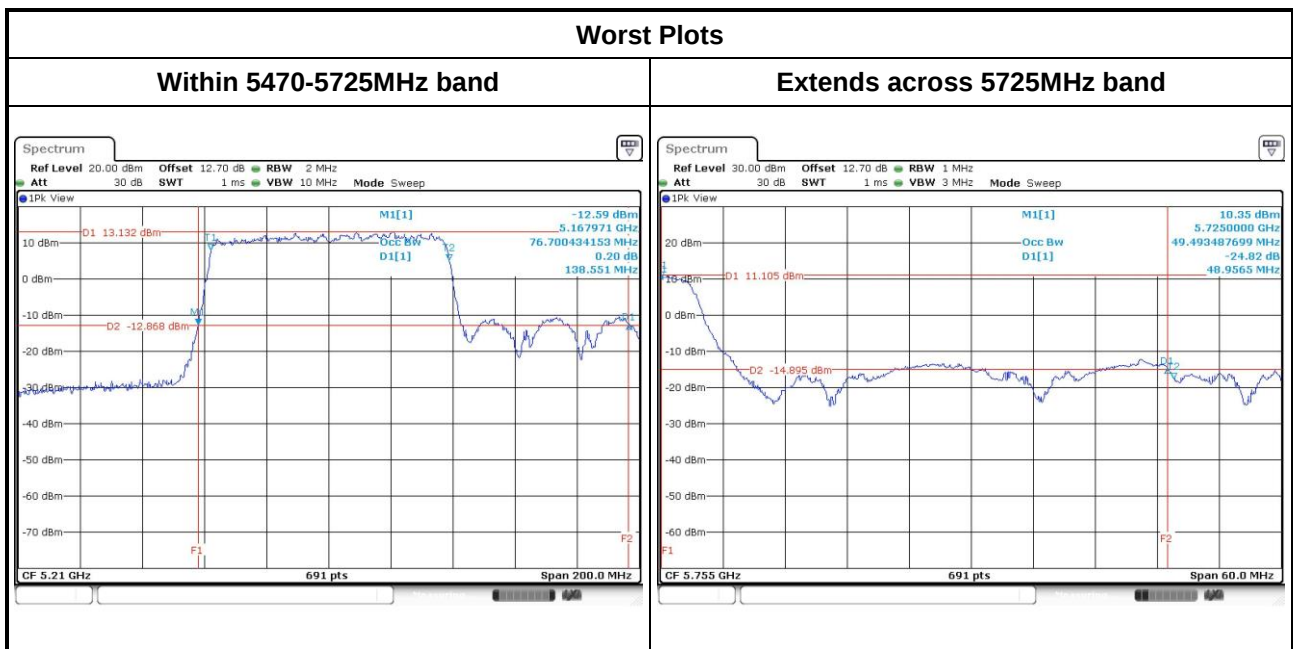
Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.20	76.28	---	---	75.83	75.83	0.5

80+80MHz Mode 10

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.20	76.24	---	---	75.83	75.83	0.5

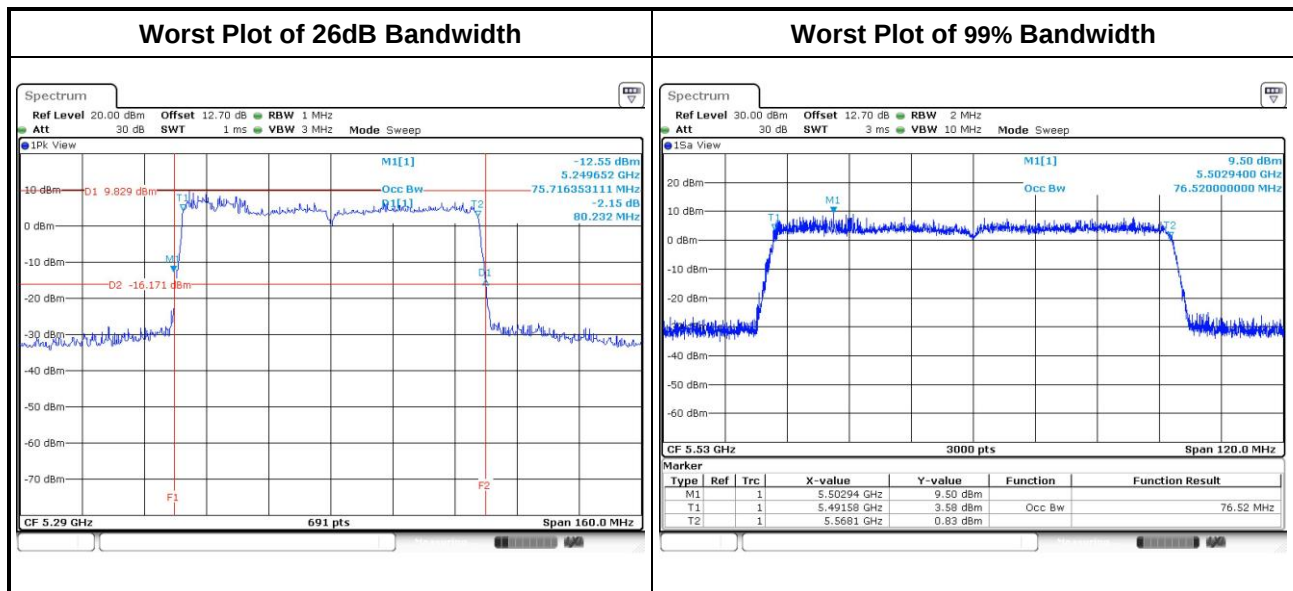
UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	76.52	76.74	---	---	73.06	73.26	---	---	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	7.48	48.96	---	---	3.10	3.10	---	---	



Beamforming mode

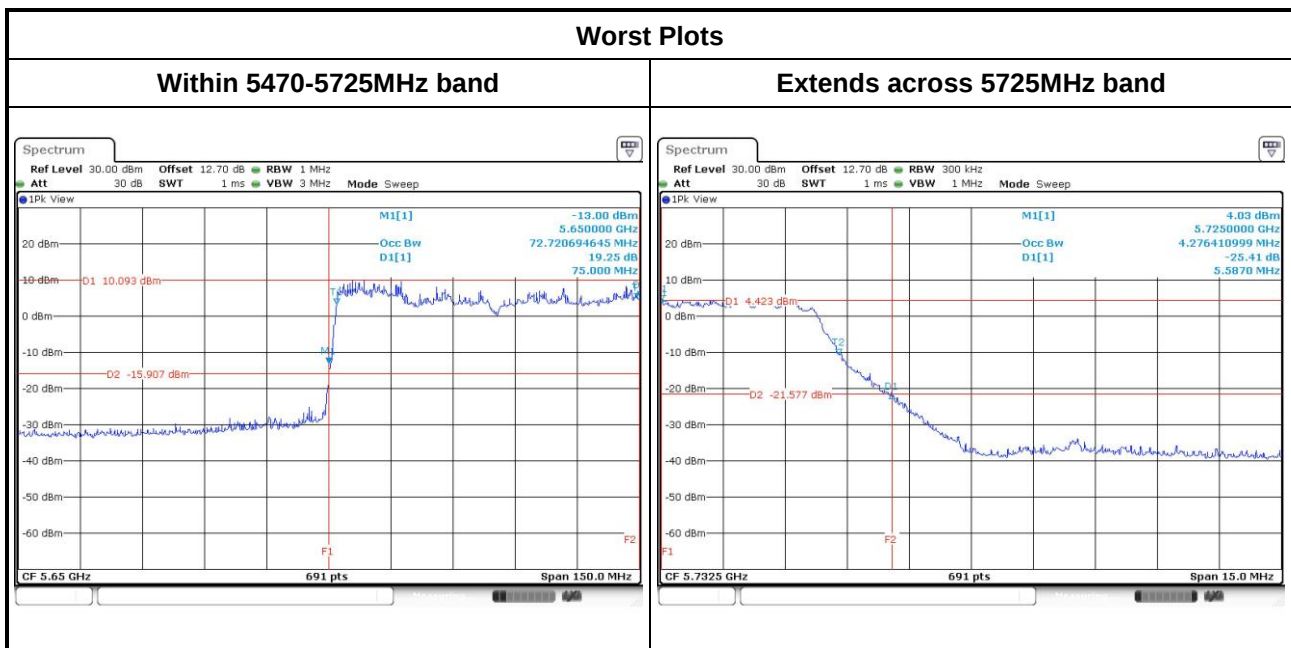
Emission Bandwidth											
Mode	N _{Tx}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT20	4	5260	20.52	20.93	20.64	21.04	17.65	17.66	17.68	17.66	24.00
VHT20	4	5300	21.04	20.52	20.87	20.81	17.67	17.66	17.69	17.67	24.00
VHT20	4	5320	20.81	20.58	20.87	21.04	17.64	17.63	17.67	17.65	24.00
VHT40	4	5270	40.12	39.88	40.23	40.23	36.30	36.36	36.16	36.38	24.00
VHT40	4	5310	40.23	40.00	40.23	40.23	36.32	36.32	36.34	36.26	24.00
VHT80	4	5290	80.23	79.77	80.00	79.77	76.08	76.04	76.44	76.44	24.00
VHT20	4	5500	20.87	20.52	20.41	20.81	17.66	17.61	17.58	17.65	24.00
VHT20	4	5580	20.58	20.58	20.06	20.70	17.63	17.63	17.58	17.64	24.00
VHT20	4	5700	20.41	20.64	20.75	20.64	17.63	17.63	17.67	17.64	24.00
VHT40	4	5510	40.46	39.77	39.88	40.12	36.32	36.28	36.38	36.30	24.00
VHT40	4	5550	40.12	40.58	39.88	39.88	36.38	36.32	36.24	36.36	24.00
VHT40	4	5670	40.12	40.23	39.88	40.12	36.40	36.38	36.28	36.38	24.00
VHT80	4	5530	79.54	80.00	79.30	80.00	76.52	76.24	76.28	76.16	24.00



Channel that extends across the 5.725 GHz boundary

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT20	4	5720	15.21	15.21	15.15	15.21	13.83	13.83	13.85	13.81	22.80
VHT40	4	5710	35.10	35.10	35.20	35.00	33.21	33.25	33.25	33.19	24.00
VHT80	4	5690	74.78	74.78	75.00	74.57	73.18	73.50	73.22	73.22	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT20	4	5720	5.35	5.39	5.59	5.43	3.81	3.79	3.83	3.81	
VHT40	4	5710	5.51	5.39	5.45	5.51	3.19	3.13	3.13	3.23	
VHT80	4	5690	5.22	5.13	5.13	5.13	3.10	3.06	3.06	3.18	



80+80MHz Mode 1

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	81.39	93.45	---	---	76.88	76.64	---	---	30
VHT80+80	2	5290	---	---	82.32	78.61	---	---	76.20	73.92	24.00

80+80MHz Mode 2

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	81.86	81.86	---	---	76.72	76.48	---	---	30
VHT80+80	2	5530	---	---	83.48	78.84	---	---	76.60	74.44	24.00

80+80MHz Mode 3

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	71.39	82.78	---	---	76.36	76.52	---	---	30

UNII Emission Bandwidth Result (Within 5470-5725MHz band)

Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	76.30	75.00	---	---	73.34	73.10	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)

Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3
VHT80+80	2	5690	---	---	8.09	8.70	---	---	3.02	1.90

80+80MHz Mode 4

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5210	81.86	81.39	---	---	76.64	76.68	---	---	30

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.44	74.36	---	---	75.83	61.45	0.5

80+80MHz Mode 5

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5290	82.32	80.70	---	---	76.12	76.56	---	---	24.00
VHT80+80	2	5530	---	---	84.17	79.54	---	---	76.36	75.00	24.00

80+80MHz Mode 6

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5290	82.09	82.78	---	---	76.24	76.68	---	---	24.00

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	76.52	74.78	---	---	73.22	72.54	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	8.17	6.87	---	---	2.98	2.34	

80+80MHz Mode 7

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5290	82.78	83.25	---	---	76.72	76.40	---	---	24.00

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.48	74.36	---	---	75.59	71.42	0.5

80+80MHz Mode 8

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5530	82.09	81.86	---	---	76.92	76.84	---	---	24.00

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	76.09	74.57	---	---	73.50	72.70	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	---	---	6.09	7.13	---	---	2.78	1.82	

80+80MHz Mode 9

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5530	82.32	81.86	---	---	76.80	76.64	---	---	24.00

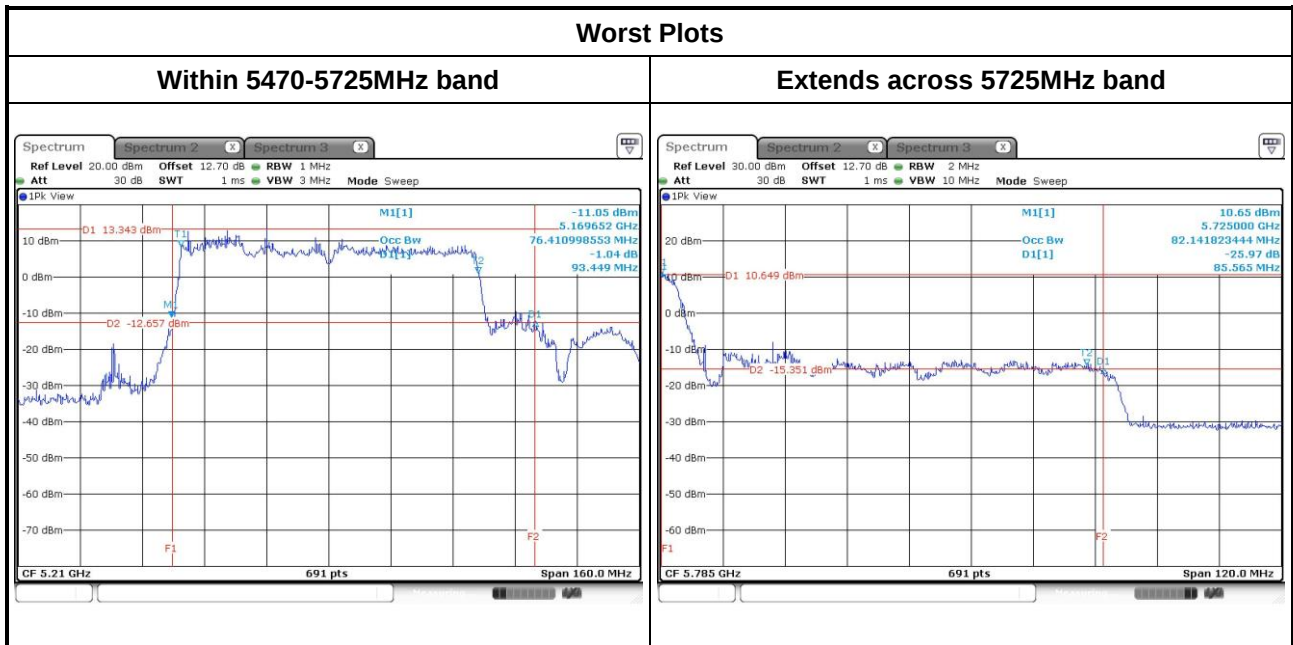
Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.52	75.76	---	---	73.28	17.62	0.5

80+80MHz Mode 10

Emission Bandwidth											
Mode	N _{TX}	Freq. (MHz)	OBW Bandwidth (MHz)				6dB Bandwidth (MHz)				6dB BW Limit (MHz)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5775	---	---	76.16	76.28	---	---	75.36	17.62	0.5

UNII Emission Bandwidth Result (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	76.52	75.65	---	---	73.74	73.98	---	---	24.00

UNII Emission Bandwidth Result (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	26dB Bandwidth (MHz)				99% Bandwidth (MHz)				
			Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	
VHT80+80	2	5690	8.17	85.57	---	---	3.06	3.10	---	---	



3.3 RF Output Power

3.3.1 Limit of RF Output Power

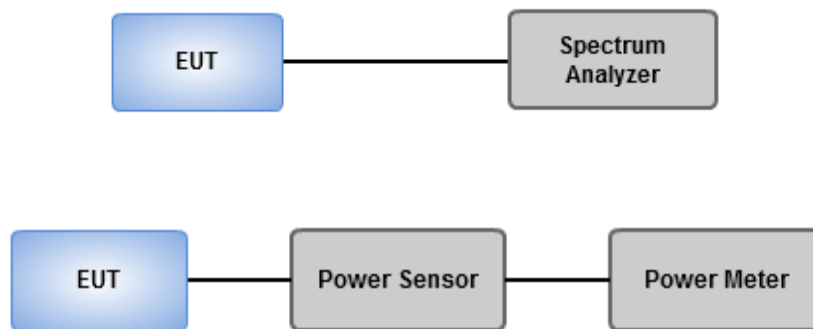
Frequency band 5150-5250 MHz		
Operating Mode		Limit
☐	Outdoor access point	Conducted Power: 1 W The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm)
☒	Indoor access point	Conducted Power: 1 W
☐	Fixed point-to-point access points	Conducted Power: 1 W
☐	Client devices	Conducted Power: 250 mW

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	250mW or 11dBm+10 log B
☒	5470 ~ 5725	250mW or 11dBm+10 log B
☒	5725 ~ 5850	1 W
Note: "B" is the 26dB emission bandwidth in MHz.		

3.3.2 Test Procedures

- ☒ Power meter (For channel that does not extends across the 5.725 GHz boundary)
 - ☒ Measurements is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required
- ☒ Spectrum analyzer (For channel that extends across the 5.725 GHz boundary)
 1. Set RBW=1MHz, VBW=3MHz , Sweep time= Auto, Detector = RMS
 2. Trace average at least 100 traces in power averaging mode
 3. Compute power by integrating the spectrum across the 26 dB EBW
 4. Add $10 \log(1/X)$, X:duty cycle) if duty cycle is <98%)

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

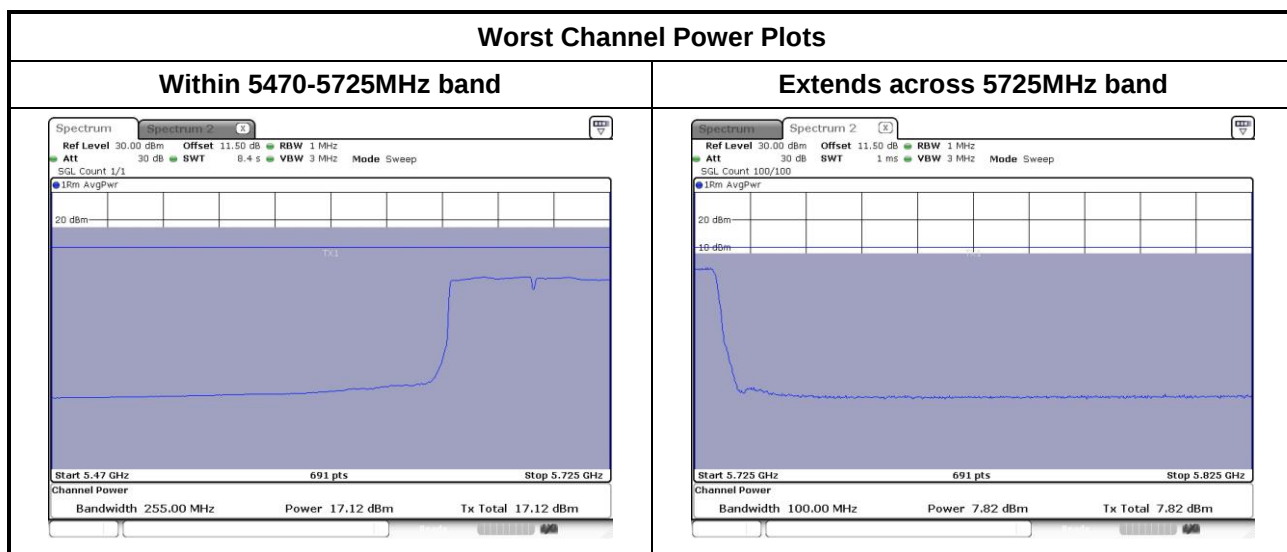
Non-beamforming mode

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
11a	4	5260	13.92	14.27	14.29	14.13	104.126	20.18	23.93
11a	4	5300	13.88	14.21	14.68	14.02	105.409	20.23	24.00
11a	4	5320	13.91	14.17	14.79	14.17	106.977	20.29	23.96
HT20	4	5260	14.22	14.45	14.76	14.31	111.185	20.46	24.00
HT20	4	5300	14.01	14.69	15.02	14.18	112.572	20.51	24.00
HT20	4	5320	14.52	15.10	15.24	14.48	122.147	20.87	24.00
HT40	4	5270	17.14	17.96	17.54	17.32	224.983	23.52	24.00
HT40	4	5310	17.04	17.89	17.77	17.16	223.941	23.50	24.00
VHT20	4	5260	14.32	14.5	14.84	14.48	113.757	20.56	24.00
VHT20	4	5300	14.07	14.85	15.09	14.35	115.588	20.63	24.00
VHT20	4	5320	14.67	15.11	15.3	14.69	125.072	20.97	24.00
VHT40	4	5270	17.22	18.01	17.68	17.41	229.659	23.61	24.00
VHT40	4	5310	17.15	18.00	17.81	17.36	229.821	23.61	24.00
VHT80	4	5290	16.39	17.21	16.77	16.81	191.660	22.83	24.00
11a	4	5500	14.15	14.21	14.69	14.34	108.974	20.37	23.84
11a	4	5580	13.68	14.03	14.89	14.07	104.986	20.21	23.87
11a	4	5700	13.97	14.09	14.66	14.51	108.081	20.34	23.90
HT20	4	5500	14.75	14.42	15.29	15.01	123.025	20.90	24.00
HT20	4	5580	14.65	14.51	15.64	14.78	124.128	20.94	24.00
HT20	4	5700	14.39	15.02	15.25	14.73	122.461	20.88	24.00
HT40	4	5510	17.52	17.74	17.53	17.77	232.388	23.66	24.00
HT40	4	5550	17.38	18.01	17.63	17.49	231.990	23.65	24.00
HT40	4	5670	17.02	17.38	17.56	17.51	218.432	23.39	24.00
VHT20	4	5500	14.84	14.51	15.33	15.09	125.132	20.97	24.00
VHT20	4	5580	14.72	14.66	15.7	14.82	126.382	21.02	24.00
VHT20	4	5700	14.52	15.06	15.4	14.9	125.953	21.00	24.00
VHT40	4	5510	17.61	17.83	17.62	17.84	236.973	23.75	24.00
VHT40	4	5550	17.54	18.05	17.71	17.54	236.355	23.74	24.00
VHT40	4	5670	17.10	17.51	17.63	17.66	223.937	23.50	24.00
VHT80	4	5530	15.31	15.61	15.89	15.61	145.561	21.63	24.00

Channel that extends across the 5.725 GHz boundary

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
11a	4	5720	12.65	12.82	13.69	13.46	19.20	0.00	83.121	19.20	22.64
HT20	4	5720	12.38	12.83	13.67	13.47	19.14	0.00	81.999	19.14	22.80
HT40	4	5710	15.93	16.71	16.81	16.81	22.60	0.00	182.002	22.60	24.00
VHT20	4	5720	12.44	12.96	13.69	13.53	19.20	0.00	83.239	19.20	22.80
VHT40	4	5710	16.05	16.94	16.88	16.87	22.72	0.00	187.096	22.72	24.00
VHT80	4	5690	15.86	16.73	17.12	16.78	22.67	0.19	193.076	22.86	24.00

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
11a	4	5720	6.53	6.52	7.03	7.18	12.85	0.00	19.256	12.85	30.00
HT20	4	5720	6.84	7.17	7.26	7.57	13.24	0.00	21.078	13.24	30.00
HT40	4	5710	4.90	5.06	5.54	5.33	11.24	0.00	13.289	11.24	30.00
VHT20	4	5720	6.88	7.26	7.28	7.82	13.34	0.00	21.595	13.34	30.00
VHT40	4	5710	4.93	5.18	5.62	5.45	11.32	0.00	13.563	11.32	30.00
VHT80	4	5690	2.17	2.56	2.94	2.61	8.60	0.19	7.567	8.79	30.00



80+80MHz Mode 1

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.79	17.32	---	---	101.704	20.07	30.00
VHT80+80	2	5290	---	---	17.45	17.21	108.192	20.34	24.00

80+80MHz Mode 2

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.78	17.34	---	---	101.843	20.08	30.00
VHT80+80	2	5530	---	---	17.28	17.41	108.537	20.36	24.00

80+80MHz Mode 3

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.86	17.35	---	---	102.854	20.12	30.00

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	16.62	17.56	20.13	0.19	107.540	20.32	24.00

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	2.00	2.75	5.40	0.19	3.624	5.59	30.00

80+80MHz Mode 4

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.77	17.33	---	---	101.609	20.07	30.00
VHT80+80	2	5775	---	---	16.71	17.18	99.121	19.96	30.00

80+80MHz Mode 5

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5290	18.71	19.18	---	---	157.096	21.96	24.00
VHT80+80	2	5530	---	---	19.21	19.53	173.111	22.38	24.00

80+80MHz Mode 6

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5290	18.82	19.31	---	---	161.518	22.08	24.00

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	18.75	19.49	22.15	0.19	171.240	22.34	24.00

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	4.09	4.69	7.41	0.19	5.755	7.60	30.00

80+80MHz Mode 7

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5290	18.71	19.22	---	---	157.862	21.98	24.00
VHT80+80	2	5775	---	---	19.02	19.23	163.552	22.14	30.00

80+80MHz Mode 8

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5530	17.45	17.92	---	---	117.535	20.70	24.00

Maximum Conducted Output Power (Within 5470-5725MHz band)

Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	17.24	18.08	20.69	0.19	122.478	20.88	24.00

Maximum Conducted Output Power (Extends across 5725MHz band)

Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	2.54	3.32	5.96	0.19	4.119	6.15	30.00

Total power in 5470 ~ 5725 MHz Band

Mode	N _{TX}	Freq. (MHz)	Total Conducted Power (dBm)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
VHT80+80	2	5530	20.70	117.535	23.80	24.00
VHT80+80	2	5690	20.88	122.478		

80+80MHz Mode 9

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5530	17.68	17.95	---	---	120.987	20.83	24.00
VHT80+80	2	5775	---	---	17.13	17.82	112.176	20.50	30.00

80+80MHz Mode 10

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5775	---	---	20.11	20.67	219.246	23.41	30.00

Maximum Conducted Output Power (Within 5470-5725MHz band)

Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	20.60	20.59	---	---	23.61	0.19	239.624	23.80	24.00

Maximum Conducted Output Power (Extends across 5725MHz band)

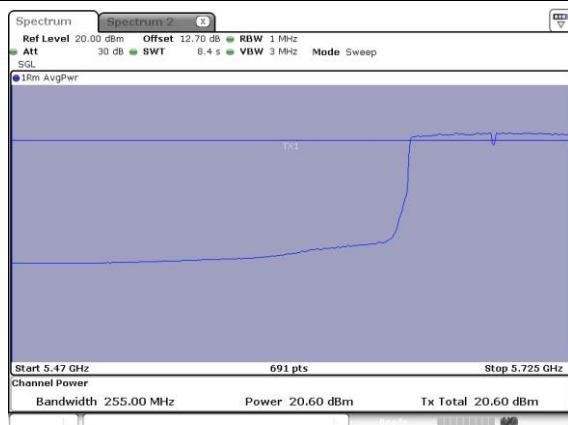
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	6.76	6.79	---	---	9.79	0.19	9.943	9.98	30.00

Total power in 5725~ 5850 MHz Band

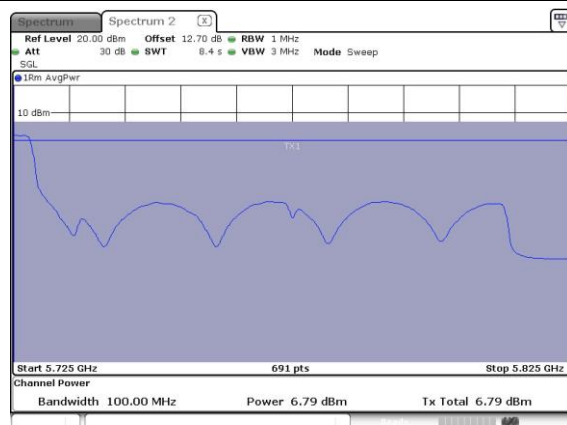
Mode	N _{TX}	Freq. (MHz)	Total Conducted Power (dBm)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
VHT80+80	2	5690	9.98	9.943	23.60	24.00
VHT80+80	2	5775	23.41	219.246		

Worst Channel Power Plots

Within 5470-5725MHz band



Extends across 5725MHz band



Beamforming mode

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
HT20	4	5260	13.74	14.18	14.13	14.04	101.074	20.05	21.06
HT20	4	5300	14.00	14.12	14.43	14.07	104.202	20.18	21.06
HT20	4	5320	14.12	14.11	14.51	14.03	105.128	20.22	21.06
HT40	4	5270	14.07	14.46	14.32	14.14	106.434	20.27	21.06
HT40	4	5310	13.84	14.54	14.73	14.02	107.606	20.32	21.06
VHT20	4	5260	13.86	14.21	14.26	14.15	103.356	20.14	21.06
VHT20	4	5300	14.02	14.34	14.59	14.14	107.115	20.30	21.06
VHT20	4	5320	14.34	14.23	14.66	14.2	109.194	20.38	21.06
VHT40	4	5270	14.13	14.58	14.49	14.25	109.316	20.39	21.06
VHT40	4	5310	13.98	14.65	14.80	14.13	110.259	20.42	21.06
VHT80	4	5290	13.95	14.35	14.22	14.02	103.717	20.16	21.06
HT20	4	5500	14.12	14.32	14.54	14.51	109.556	20.40	21.06
HT20	4	5580	13.91	14.12	14.87	14.32	108.156	20.34	21.06
HT20	4	5700	13.86	14.25	14.74	14.28	107.506	20.31	21.06
HT40	4	5510	14.42	14.51	14.61	14.63	113.865	20.56	21.06
HT40	4	5550	14.43	14.59	14.86	14.42	114.796	20.60	21.06
HT40	4	5670	14.12	14.69	14.54	13.86	108.033	20.34	21.06
VHT20	4	5500	14.25	14.4	14.74	14.58	112.643	20.52	21.06
VHT20	4	5580	13.94	14.24	14.95	14.48	110.635	20.44	21.06
VHT20	4	5700	13.98	14.33	14.81	14.34	109.539	20.40	21.06
VHT40	4	5510	14.55	14.62	14.68	14.77	116.852	20.68	21.06
VHT40	4	5550	14.52	14.66	14.94	14.55	117.255	20.69	21.06
VHT40	4	5670	14.20	14.74	14.66	13.91	109.933	20.41	21.06
VHT80	4	5530	13.84	14.06	14.44	14.15	103.477	20.15	21.06

Note:

1. Directional gain = $10 * \log((10^{2.8/20} + 10^{2.5/20} + 10^{2.4/20} + 10^{3.9/20})^2 / 4) = 8.94 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (8.94 \text{ dBi} - 6 \text{ dBi}) = 21.06 \text{ dBm}$

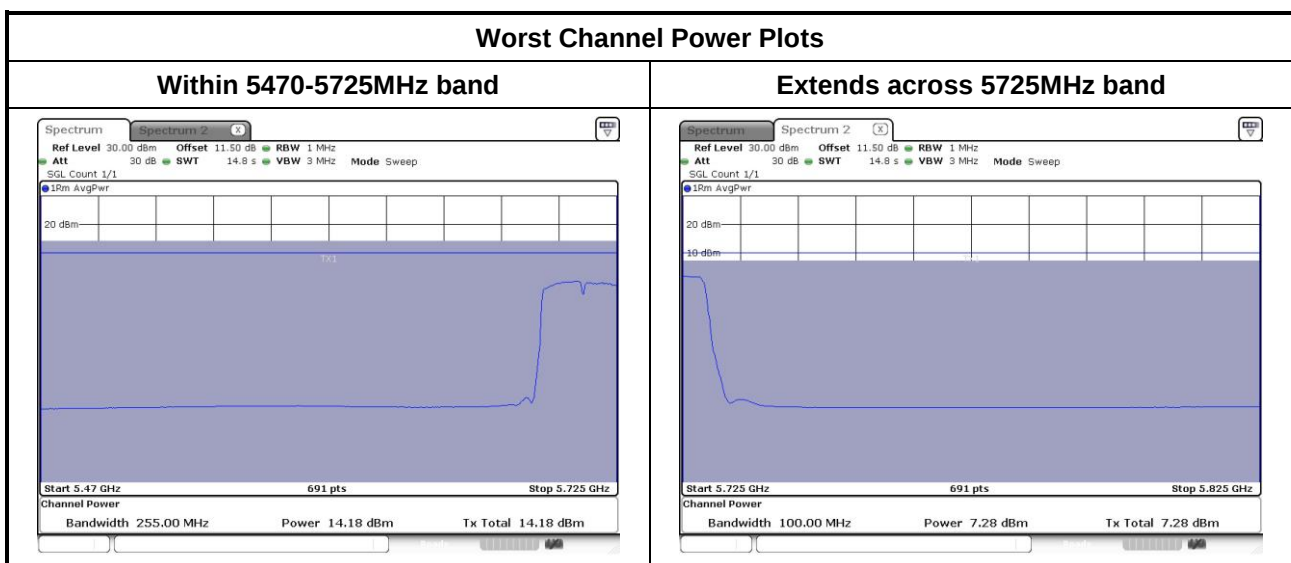
Channel that extends across the 5.725 GHz boundary

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
HT20	4	5720	12.31	12.73	13.46	13.22	18.97	0.30	84.589	19.27	19.86
HT40	4	5710	13.48	13.91	14.17	13.27	19.74	0.31	101.215	20.05	21.06
VHT20	4	5720	12.38	12.78	13.52	13.27	19.03	0.30	85.709	19.33	19.86
VHT40	4	5710	13.50	13.94	14.18	13.28	19.76	0.31	101.626	20.07	21.06
VHT80	4	5690	13.04	13.71	14.03	13.97	19.73	0.37	102.221	20.10	21.06

Note: Directional gain = $10 * \log((10^{2.8/20} + 10^{2.5/20} + 10^{2.4/20} + 10^{3.9/20})^2 / 4) = 8.94 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced 2.94 dB (8.94 dBi – 6 dBi)

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
HT20	4	5720	6.70	6.91	7.12	7.25	13.02	0.30	21.481	13.32	27.06
HT40	4	5710	2.21	2.08	2.67	1.57	8.17	0.31	7.048	8.48	27.06
VHT20	4	5720	6.71	7.05	7.18	7.28	13.08	0.30	21.781	13.38	27.06
VHT40	4	5710	2.16	2.13	2.80	1.73	8.24	0.31	7.166	8.55	27.06
VHT80	4	5690	-0.47	-0.45	0.00	-0.26	5.73	0.37	4.074	6.10	27.06

Note: Directional gain = $10 * \log((10^{2.8/20} + 10^{2.5/20} + 10^{2.4/20} + 10^{3.9/20})^2 / 4) = 8.94 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to 30 dBm – (8.94 dBi – 6 dBi) = 27.06 dBm



80+80MHz Mode 1

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.30	17.03	---	---	93.124	19.69	30.00
VHT80+80	2	5290	---	---	17.35	16.98	104.213	20.18	23.81

80+80MHz Mode 2

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.59	17.46	---	---	101.322	20.06	30.00
VHT80+80	2	5530	---	---	17.16	17.22	104.723	20.20	23.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 23.81 \text{ dBm}$

80+80MHz Mode 3

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.55	17.59	---	---	102.597	20.11	30.00

Maximum Conducted Output Power (Within 5470-5725MHz band)

Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	15.28	16.81	19.12	0.37	88.968	19.49	23.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 23.81 \text{ dBm}$

Maximum Conducted Output Power (Extends across 5725MHz band)

Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	0.06	0.82	3.47	0.37	2.419	3.84	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

80+80MHz Mode 4

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5210	16.66	17.35	---	---	100.670	20.03	30.00
VHT80+80	2	5775	---	---	16.59	17.22	98.327	19.93	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

80+80MHz Mode 5

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5290	18.02	18.82	---	---	139.595	21.45	24.00
VHT80+80	2	5530	---	---	18.65	18.65	146.565	21.66	23.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 23.81 \text{ dBm}$

80+80MHz Mode 6

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5290	18.36	19.02	---	---	148.348	21.71	24.00

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	16.90	17.88	20.43	0.37	120.168	20.80	23.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 23.81 \text{ dBm}$

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	2.27	2.54	5.42	0.37	3.791	5.79	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

80+80MHz Mode 7

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5290	18.18	18.86	---	---	142.679	21.54	24.00
VHT80+80	2	5775	---	---	18.49	19.11	152.102	21.82	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

80+80MHz Mode 8

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5530	16.80	17.53	---	---	104.487	20.19	24.00

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	15.53	16.49	19.05	0.37	87.433	19.42	23.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 23.81 \text{ dBm}$

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	---	---	-0.01	0.62	3.33	0.37	2.342	3.70	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

Total power in 5470 ~ 5725 MHz Band

Mode	N _{TX}	Freq. (MHz)	Total Conducted Power (dBm)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
VHT80+80	2	5530	20.19	104.487	22.83	23.81
VHT80+80	2	5690	19.42	87.433		

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $24 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 23.81 \text{ dBm}$

80+80MHz Mode 9

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5530	16.75	17.51	---	---	103.679	20.16	24.00
VHT80+80	2	5775	---	---	17.02	17.35	104.675	20.20	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

80+80MHz Mode 10

Mode	N _{TX}	Freq. (MHz)	Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
VHT80+80	2	5775	---	---	18.50	18.88	148.063	21.70	29.81

Note:

- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

Maximum Conducted Output Power (Within 5470-5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	17.32	17.42	---	---	20.38	0.37	118.866	20.75	24.00

Maximum Conducted Output Power (Extends across 5725MHz band)											
Mode	N _{TX}	Freq. (MHz)	Conducted Power without duty factor					Duty factor (dB)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3	Total Power (dBm)				
VHT80	2	5690	1.59	1.77	---	---	4.69	0.37	3.207	5.06	30.00

Total power in 5725 ~ 5850 MHz Band

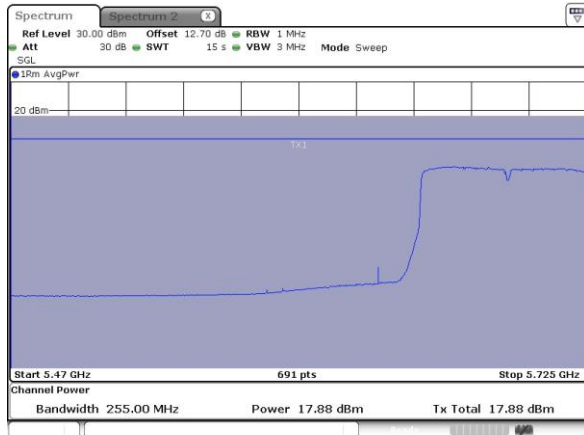
Mode	N _{TX}	Freq. (MHz)	Total Conducted Power (dBm)	Total Power (mW)	Total Power (dBm)	Limit (dBm)
VHT80+80	2	5690	5.06	3.206	21.80	29.81
VHT80+80	2	5775	21.7	148.063		

Note:

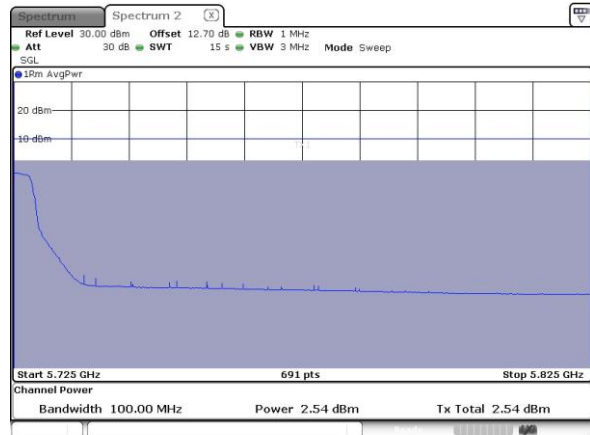
- Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$

Worst Channel Power Plots

Within 5470-5725MHz band



Extends across 5725MHz band



3.4 Peak Power Spectral Density

3.4.1 Limit of Peak Power Spectral Density

Frequency band 5150-5250 MHz		
Operating Mode		Limit
☐	Outdoor access point	17 dBm / MHz
☒	Indoor access point	17 dBm / MHz
☐	Fixed point-to-point access points	17 dBm / MHz
☐	Client devices	11 dBm / MHz

Frequency Band (MHz)		Limit
☒	5250 ~ 5350	11 dBm / MHz
☒	5470 ~ 5725	11 dBm / MHz
☒	5725 ~ 5850	30 dBm / 500 kHz

3.4.2 Test Procedures

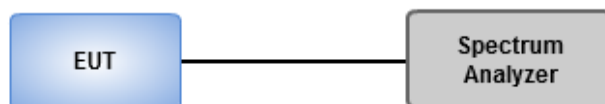
For 5150 ~ 5250 MHz / 5250 ~ 5350 MHz / 5470 ~ 5725 MHz

- ☒ Method SA-1 (Non- Beamforming: 11a/VHT20/VHT40)
 1. Set RBW = 1 MHz, VBW = 3 MHz, Sweep time = auto, Detector = RMS.
 2. Trace average 100 traces.
 3. Use the peak marker function to determine the maximum amplitude level.
- ☒ Method SA-2 Alternative (Non- Beamforming: VHT80 / Beamforming: all modes)
 1. Set RBW = 1 MHz, VBW = 3 MHz, Detector = RMS.
 2. Set sweep time $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
 3. Perform a single sweep.
 4. Use the peak marker function to determine the maximum amplitude level.
 5. Add $10 \log(1/x)$, where x is the duty cycle if duty cycle < 98%

For 5725 ~ 5850 MHz

- ☒ Method SA-1 (Non- Beamforming: 11a/VHT20/VHT40)
 1. Set RBW = 500 kHz, VBW = 2 MHz, Sweep time = auto, Detector = RMS.
 2. Trace average 100 traces.
 3. Use the peak marker function to determine the maximum amplitude level.
- ☒ Method SA-2 Alternative (Non- Beamforming: VHT80 / Beamforming: all modes)
 1. Set RBW = 500 kHz, VBW = 2 MHz, Detector = RMS.
 2. Set sweep time $\geq 10 * (\text{number of points in sweep}) * (\text{total on/off period of the transmitted signal})$.
 3. Perform a single sweep.
 4. Use the peak marker function to determine the maximum amplitude level.
 5. Add $10 \log(1/x)$, where x is the duty cycle.

3.4.3 Test Setup



3.4.4 Test Result of Peak Power Spectral Density

Non-beamforming mode

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
11a	4	5260	7.81	0.00	7.81	8.06
11a	4	5300	7.70	0.00	7.70	8.06
11a	4	5320	8.00	0.00	8.00	8.06
VHT20	4	5260	8.00	0.00	8.00	8.06
VHT20	4	5300	7.83	0.00	7.83	8.06
VHT20	4	5320	8.03	0.00	8.03	8.06
VHT40	4	5270	7.68	0.00	7.68	8.06
VHT40	4	5310	7.18	0.00	7.18	8.06
VHT80	4	5290	3.35	0.19	3.54	8.06
11a	4	5500	7.77	0.00	7.77	8.06
11a	4	5580	7.79	0.00	7.79	8.06
11a	4	5700	7.58	0.00	7.58	8.06
11a	4	5720	7.58	0.00	7.58	8.06
VHT20	4	5500	7.80	0.00	7.80	8.06
VHT20	4	5580	8.03	0.00	8.03	8.06
VHT20	4	5700	7.77	0.00	7.77	8.06
VHT20	4	5720	7.61	0.00	7.61	8.06
VHT40	4	5510	7.32	0.00	7.32	8.06
VHT40	4	5550	6.90	0.00	6.90	8.06
VHT40	4	5670	5.86	0.00	5.86	8.06
VHT40	4	5710	6.14	0.00	6.14	8.06
VHT80	4	5530	1.15	0.19	1.34	8.06
VHT80	4	5690	2.88	0.19	3.07	8.06

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.8/20} + 10^{2.5/20} + 10^{2.4/20} + 10^{3.9/20}) / 4) = 8.94 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (8.94 \text{ dBi} - 6 \text{ dBi}) = 8.06 \text{ dBm}$.

80+80MHz Mode 1

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	0.79	0.19	0.98	17
VHT80+80	2	5290	1.46	0.19	1.65	10.81

80+80MHz Mode 2

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	0.76	0.19	0.95	17
VHT80+80	2	5530	0.73	0.19	0.92	10.81

80+80MHz Mode 3

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	0.81	0.19	1.00	17
VHT80+80	2	5690	1.21	0.19	1.40	10.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})/2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 10.81 \text{ dBm}$.

80+80MHz Mode 4

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	0.81	0.19	1.00	17

Condition			Peak Power Spectral Density (dBm/500kHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	-0.42	0.19	-0.23	29.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})/2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$.

80+80MHz Mode 5

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5290	3.11	0.19	3.30	11
VHT80+80	2	5530	2.65	0.19	2.84	10.81

80+80MHz Mode 6

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5290	3.06	0.19	3.25	11
VHT80+80	2	5690	3.19	0.19	3.38	10.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 10.81 \text{ dBm}$.

80+80MHz Mode 7

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5290	3.17	0.19	3.36	11

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	1.50	0.19	1.69	29.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$.

80+80MHz Mode 8

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5530	1.39	0.19	1.58	11
VHT80+80	2	5690	1.77	0.19	1.96	10.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 10.81 \text{ dBm}$.

80+80MHz Mode 9

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5530	1.40	0.19	1.59	11

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	0.02	0.19	0.21	29.81

80+80MHz Mode 10

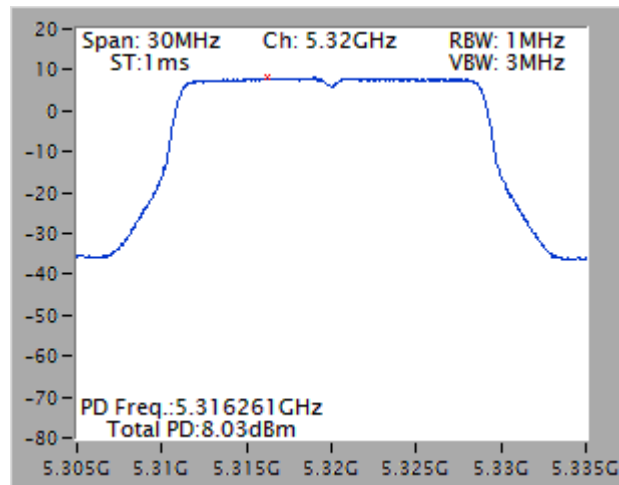
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5690	4.39	0.19	4.58	11

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	3.02	0.19	3.21	29.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$.

Worst Plot



Beamforming mode

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT20	4	5260	6.05	0.30	6.35	8.06
VHT20	4	5300	6.67	0.30	6.97	8.06
VHT20	4	5320	7.08	0.30	7.38	8.06
VHT40	4	5270	3.79	0.31	4.10	8.06
VHT40	4	5310	4.13	0.31	4.44	8.06
VHT80	4	5290	0.46	0.37	0.83	8.06
VHT20	4	5500	6.79	0.30	7.09	8.06
VHT20	4	5580	7.25	0.30	7.55	8.06
VHT20	4	5700	6.27	0.30	6.57	8.06
VHT20	4	5720	5.52	0.30	5.82	8.06
VHT40	4	5510	3.90	0.31	4.21	8.06
VHT40	4	5550	3.29	0.31	3.60	8.06
VHT40	4	5670	3.33	0.31	3.64	8.06
VHT40	4	5710	2.36	0.31	2.67	8.06
VHT80	4	5530	-0.33	0.37	0.04	8.06
VHT80	4	5690	-0.71	0.37	-0.34	8.06

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.8/20} + 10^{2.5/20} + 10^{2.4/20} + 10^{3.9/20})^2 / 4) = 8.94 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (8.94 \text{ dBi} - 6 \text{ dBi}) = 8.06 \text{ dBm}$.

80+80MHz Mode 1

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	2.04	0.37	2.41	17
VHT80+80	2	5290	2.86	0.37	3.23	10.81

80+80MHz Mode 2

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	0.18	0.37	0.55	17
VHT80+80	2	5530	1.76	0.37	2.13	10.81

80+80MHz Mode 3

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	1.51	0.37	1.88	17
VHT80+80	2	5690	1.56	0.37	1.93	10.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})/2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 10.81 \text{ dBm}$.

80+80MHz Mode 4

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5210	1.09	0.37	1.46	17

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	0.12	0.37	0.49	29.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})/2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$.

80+80MHz Mode 5

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5290	3.97	0.37	4.34	11
VHT80+80	2	5530	3.74	0.37	4.11	10.81

80+80MHz Mode 6

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5290	4.25	0.37	4.62	11
VHT80+80	2	5690	3.71	0.37	4.08	10.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $11 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 10.81 \text{ dBm}$.

80+80MHz Mode 7

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5290	1.79	0.37	2.16	11

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	1.47	0.37	1.84	29.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to $30 \text{ dBm} - (6.19 \text{ dBi} - 6 \text{ dBi}) = 29.81 \text{ dBm}$.

80+80MHz Mode 8

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5530	-0.95	0.37	-0.58	11
VHT80+80	2	5690	2.79	0.37	3.16	10.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to 11 dBm – (6.19 dBi – 6 dBi) = 10.81 dBm.

80+80MHz Mode 9

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5530	1.08	0.37	1.45	11

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	6.16	0.37	6.53	29.81

80+80MHz Mode 10

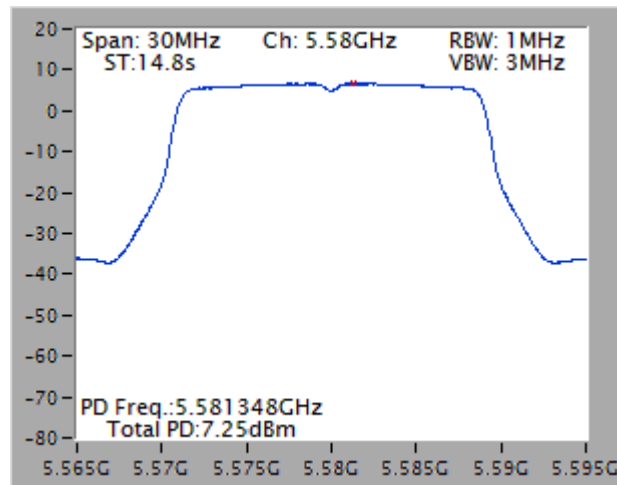
Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/MHz)	Duty Factor (dB)	PPSD with D.F (dBm/MHz)	PPSD Limit (dBm/MHz)
VHT80+80	2	5690	2.51	0.37	2.88	11

Condition			Peak Power Spectral Density (dBm/MHz)			
Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)
VHT80+80	2	5775	4.82	0.37	5.19	29.81

Note:

1. D.F is duty factor.
2. Test result is bin-by-bin summing measured value of each TX port.
3. Directional gain = $10 * \log((10^{2.4/20} + 10^{3.9/20})^2 / 2) = 6.19 \text{ dBi} > 6 \text{ dBi}$
Limit shall be reduced to 30 dBm – (6.19 dBi – 6 dBi) = 29.81 dBm.

Worst Plot



Note: Worst plot is w/o duty factor.

3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Test Procedures

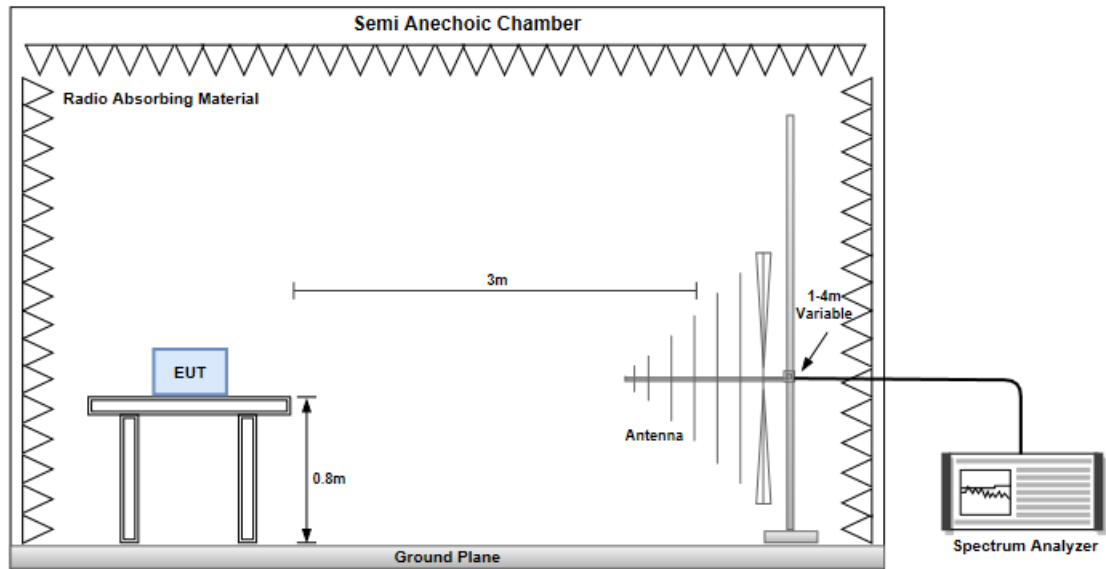
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360° . A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360° , the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

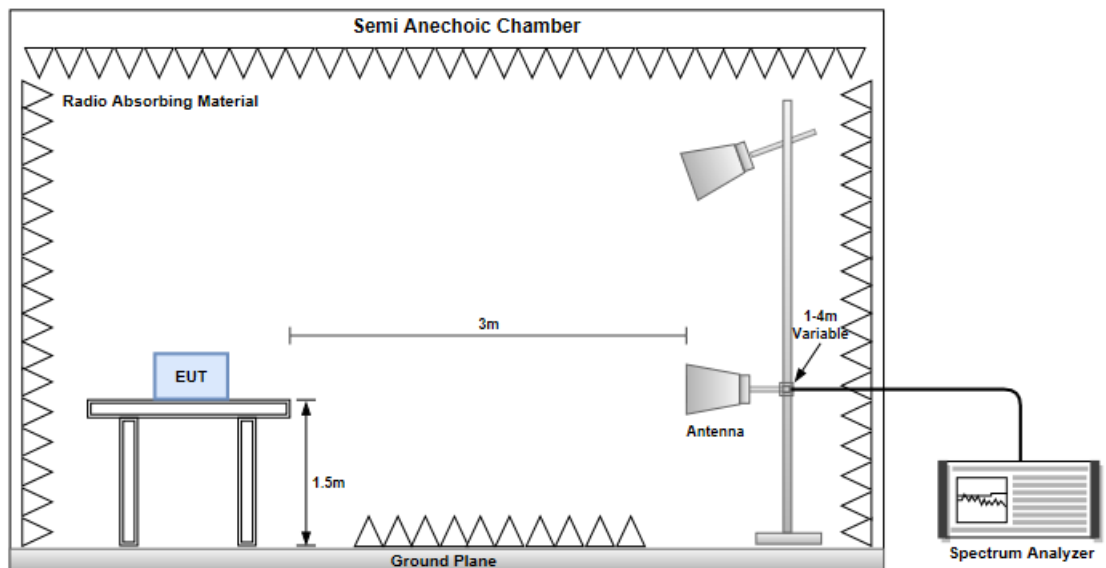
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.5.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz

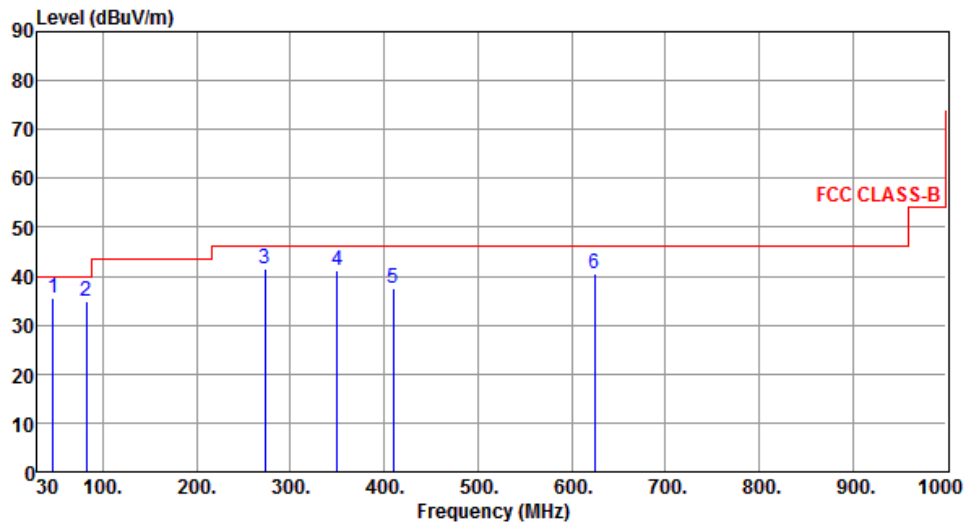


Non- beamforming mode

3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.38	35.44	40.00	-4.56	43.66	-8.22	QP	100	18
2	82.41	34.73	40.00	-5.27	48.26	-13.53	Peak	---	---
3	273.24	41.45	46.00	-4.55	50.15	-8.70	Peak	---	---
4	349.62	41.24	46.00	-4.76	47.84	-6.60	Peak	---	---
5	409.35	37.44	46.00	-8.56	42.40	-4.96	Peak	---	---
6	624.82	40.40	46.00	-5.60	40.92	-0.52	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

Modulation	11a	Test Freq. (MHz)	5260
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5260
Polarization	Vertical		
Level (dBuV/m) </			

Modulation	11a	Test Freq. (MHz)	5300
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5300
Polarization	Vertical		
Level (dBuV/m) </			

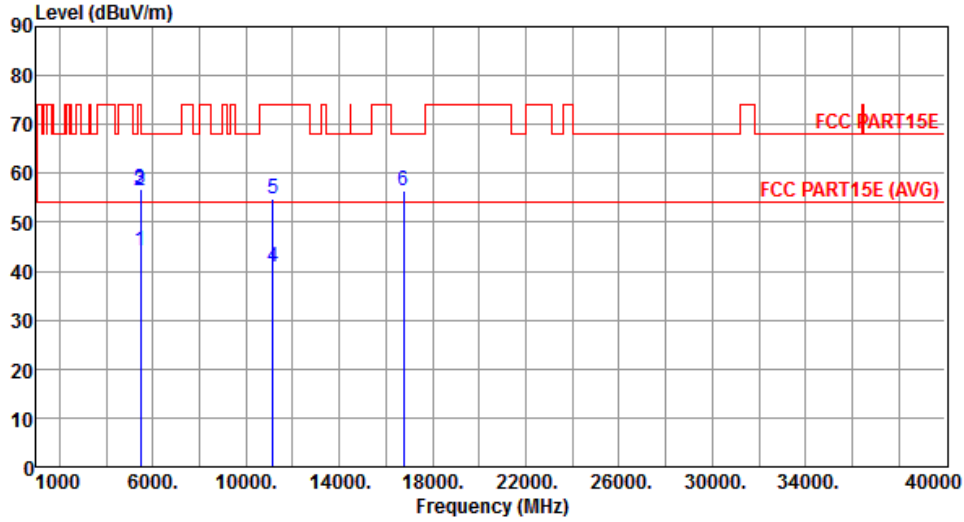
Modulation	11a	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5320
Polarization	Vertical		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5500
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	11a	Test Freq. (MHz)	5500
Polarization	Vertical		
Level (dBuV/m) <			

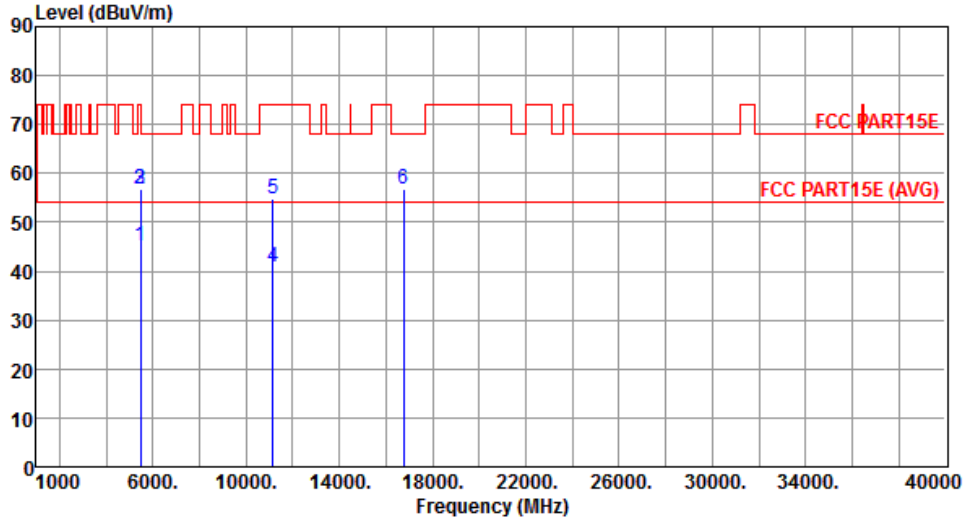
Modulation	11a	Test Freq. (MHz)	5580
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.01	54.00	-9.99	38.55	5.46	Average	140	195
2	5460.00	56.58	74.00	-17.42	51.12	5.46	Peak	140	195
3	5470.00	56.71	68.20	-11.49	51.24	5.47	Peak	140	195
4	11160.00	40.87	54.00	-13.13	26.43	14.44	Average	100	153
5	11160.00	54.68	74.00	-19.32	40.24	14.44	Peak	100	153
6	16740.00	56.52	68.20	-11.68	40.55	15.97	Peak	100	175

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	11a	Test Freq. (MHz)	5580
Polarization	Vertical		

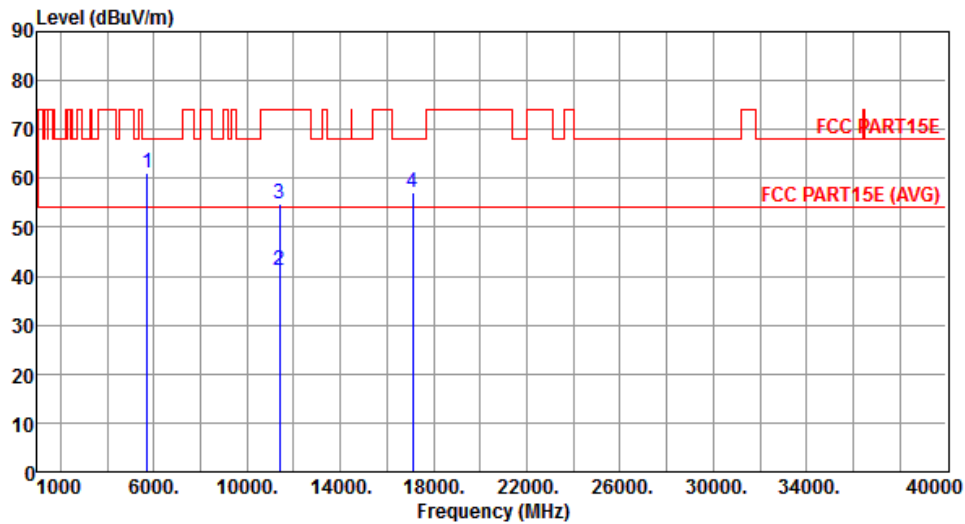


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.02	54.00	-8.98	39.56	5.46	Average	152	155
2	5460.00	56.70	74.00	-17.30	51.24	5.46	Peak	152	155
3	5470.00	56.80	68.20	-11.40	51.33	5.47	Peak	152	155
4	11160.00	40.82	54.00	-13.18	26.38	14.44	Average	100	162
5	11160.00	54.85	74.00	-19.15	40.41	14.44	Peak	100	162
6	16740.00	56.70	68.20	-11.50	40.73	15.97	Peak	100	183

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	61.04	68.20	-7.16	55.23	5.81	Peak	153	157
2	11400.00	41.19	54.00	-12.81	26.54	14.65	Average	100	166
3	11400.00	54.92	74.00	-19.08	40.27	14.65	Peak	100	166
4	17100.00	57.26	68.20	-10.94	40.75	16.51	Peak	100	193

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

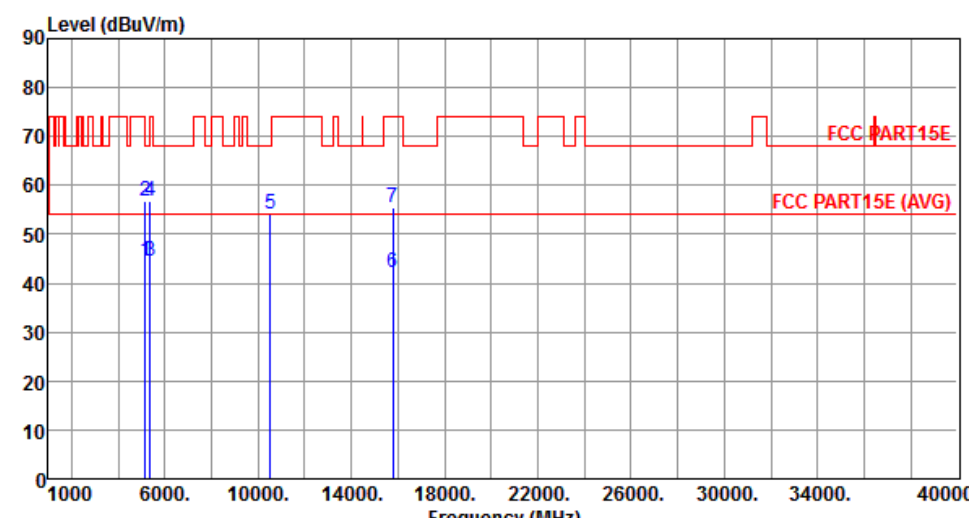
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	11a	Test Freq. (MHz)	5720
Polarization	Vertical		
Level (dBuV/m) <			

3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT20

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		



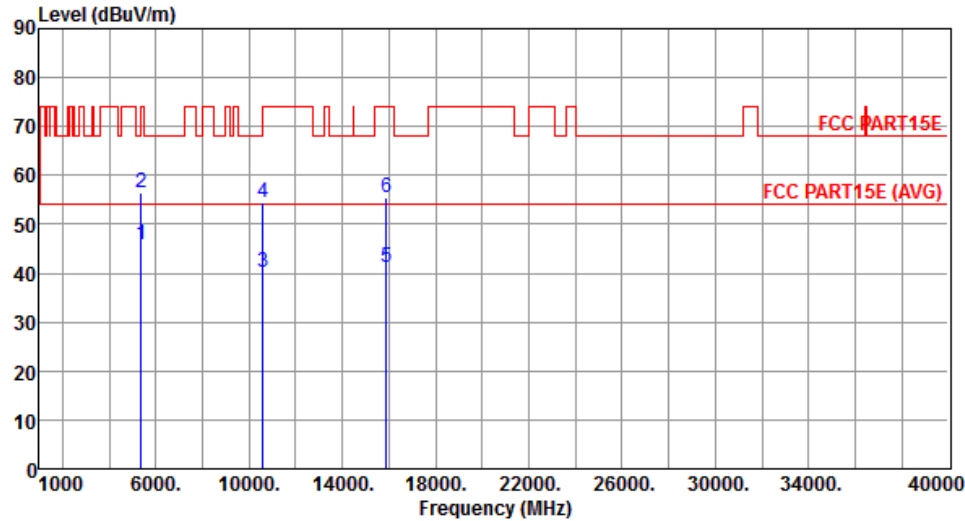
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	44.47	54.00	-9.53	39.45	5.02	Average	135	182
2	5150.00	56.77	74.00	-17.23	51.75	5.02	Peak	135	182
3	5350.00	44.52	54.00	-9.48	39.21	5.31	Average	135	182
4	5350.00	56.75	74.00	-17.25	51.44	5.31	Peak	135	182
5	10520.00	54.28	68.20	-13.92	40.44	13.84	Peak	100	165
6	15780.00	42.32	54.00	-11.68	27.45	14.87	Average	100	163
7	15780.00	55.39	74.00	-18.61	40.52	14.87	Peak	100	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		
Level (dBuV/m)			

Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.76	54.00	-8.24	40.45	5.31	Average	100	230
2	5350.00	56.53	74.00	-17.47	51.22	5.31	Peak	100	230
3	10600.00	40.17	54.00	-13.83	26.25	13.92	Average	100	155
4	10600.00	54.39	74.00	-19.61	40.47	13.92	Peak	100	155
5	15900.00	41.09	54.00	-12.91	26.25	14.84	Average	100	122
6	15900.00	55.32	74.00	-18.68	40.48	14.84	Peak	100	122

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

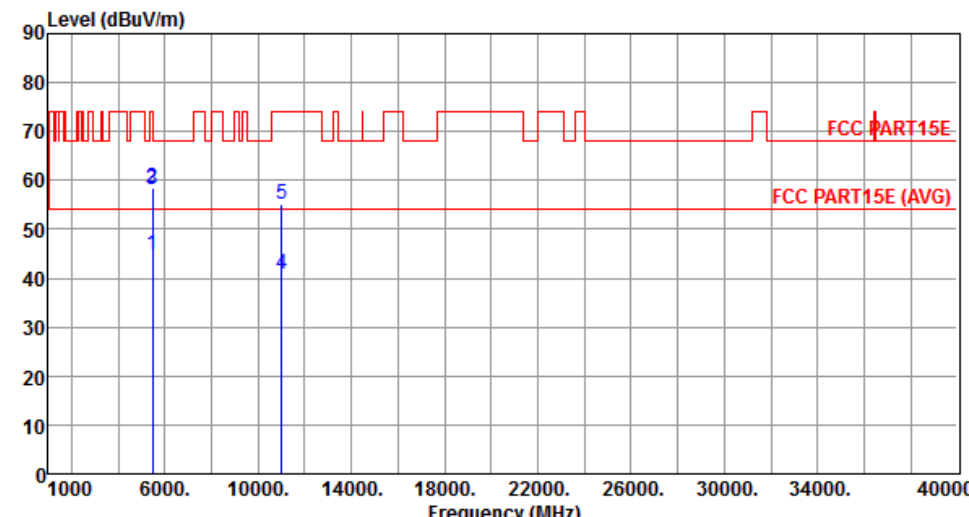
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		
 </			

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		
Level (dBuV/m)			

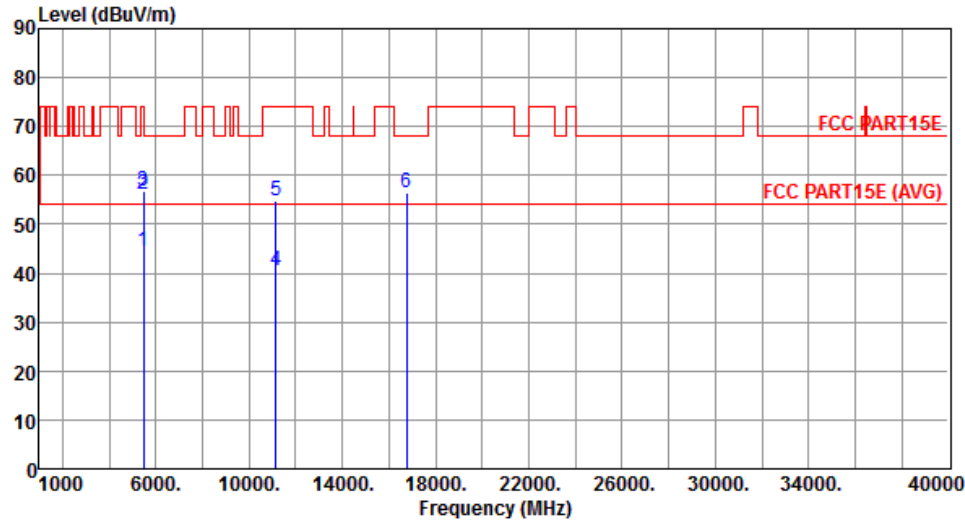
Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.98	54.00	-9.02	39.52	5.46	Average	145	356
2	5460.00	58.53	74.00	-15.47	53.07	5.46	Peak	145	356
3	5470.00	58.23	68.20	-9.97	52.76	5.47	Peak	145	356
4	11000.00	40.69	54.00	-13.31	26.39	14.30	Average	100	154
5	11000.00	55.16	74.00	-18.84	40.86	14.30	Peak	100	154

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

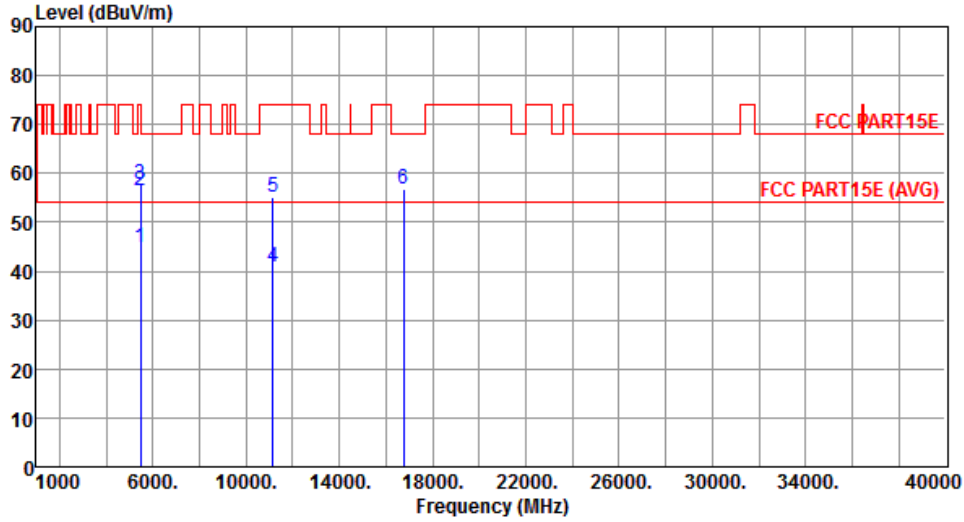
Modulation	VHT20	Test Freq. (MHz)	5580						
Polarization	Horizontal								
									
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.59	54.00	-9.41	39.13	5.46	Average	172	158
2	5460.00	55.97	74.00	-18.03	50.51	5.46	Peak	175	158
3	5470.00	56.91	68.20	-11.29	51.44	5.47	Peak	175	158
4	11160.00	40.67	54.00	-13.33	26.23	14.44	Average	100	186
5	11160.00	54.95	74.00	-19.05	40.51	14.44	Peak	100	186
6	16740.00	56.41	68.20	-11.79	40.44	15.97	Peak	100	187

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		

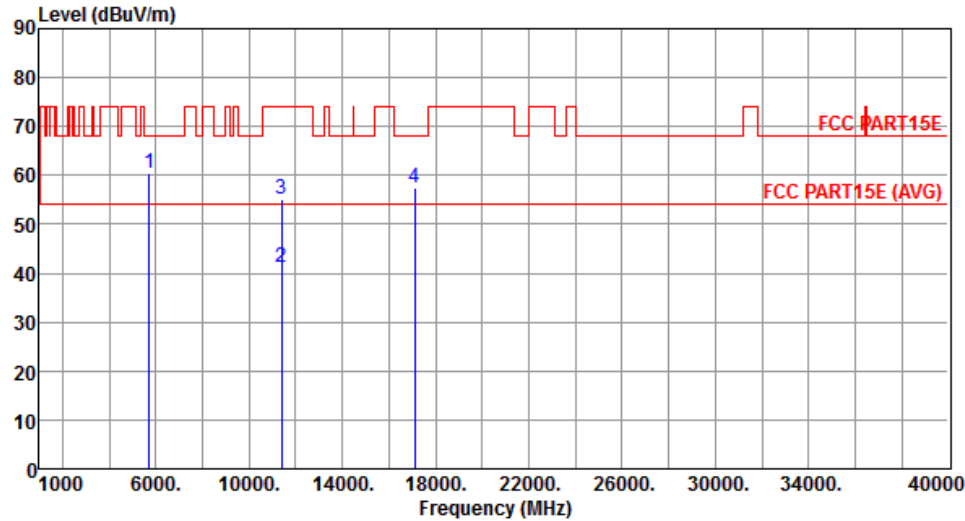


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.68	54.00	-9.32	39.22	5.46	Average	175	160
2	5460.00	56.38	74.00	-17.62	50.92	5.46	Peak	175	160
3	5470.00	57.79	68.20	-10.41	52.32	5.47	Peak	175	160
4	11160.00	40.92	54.00	-13.08	26.48	14.44	Average	100	169
5	11160.00	55.15	74.00	-18.85	40.71	14.44	Peak	100	169
6	16740.00	56.86	68.20	-11.34	40.89	15.97	Peak	100	191

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		
Level (dBuV/m)			

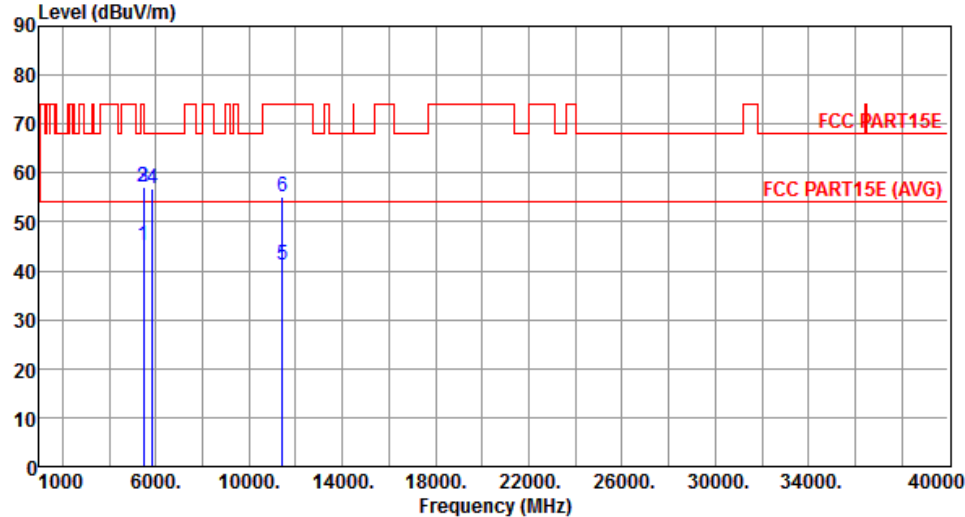
Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	60.37	68.20	-7.83	54.56	5.81	Peak	146	358
2	11400.00	41.26	54.00	-12.74	26.61	14.65	Average	100	120
3	11400.00	55.04	74.00	-18.96	40.39	14.65	Peak	100	120
4	17100.00	57.33	68.20	-10.87	40.82	16.51	Peak	100	192

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		
Level (dBUV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Vertical		
Level (dBuV/m)  Freq. Emission Limit Margin SA Factor Remark ANT Turn MHz level dBuV/m dBuV/m dB reading dBuV dB cm deg 1 5460.00 45.10 54.00 -8.90 39.64 5.46 Average 159 178 2 5460.00 57.19 74.00 -16.81 51.73 5.46 Peak 159 178 3 5470.00 57.11 68.20 -11.09 51.64 5.47 Peak 159 178 4 5850.00 56.67 68.20 -11.53 50.68 5.99 Peak 159 178 5 11440.00 41.32 54.00 -12.68 26.63 14.69 Average 100 107 6 11440.00 55.08 74.00 -18.92 40.39 14.69 Peak 100 107			
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).			

3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT40

Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		
Level (dBuV/m) </			

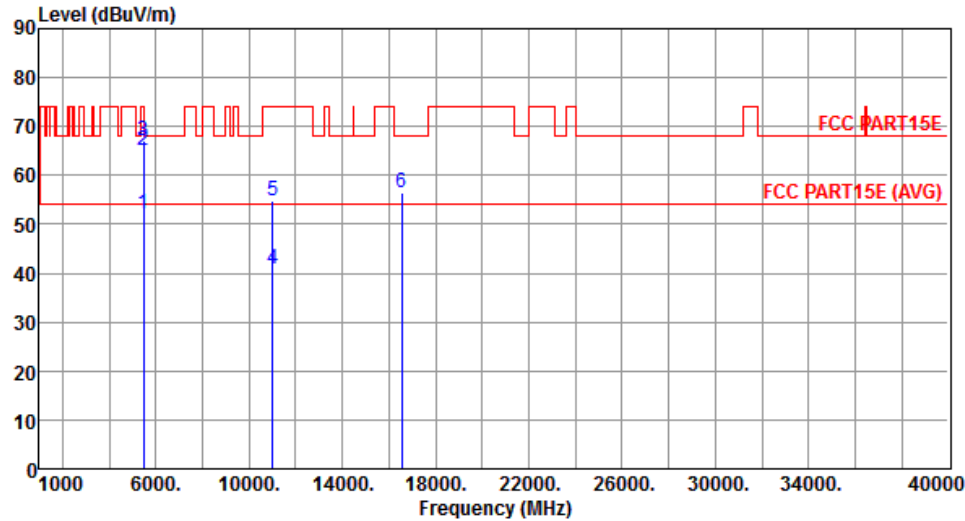
Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		
Level (dBuV/m)			

Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		
 </			

Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		
Level (dBuV/m)			

Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		
 </			

Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



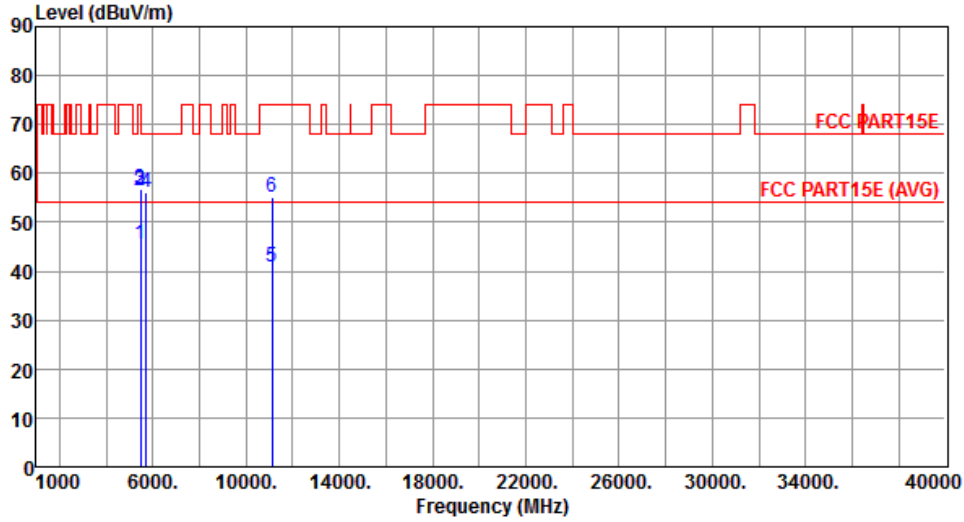
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	51.99	54.00	-2.01	46.53	5.46	Average	148	171
2	5460.00	64.96	74.00	-9.04	59.50	5.46	Peak	148	171
3	5470.00	66.96	68.20	-1.24	61.49	5.47	Peak	148	171
4	11020.00	40.89	54.00	-13.11	26.57	14.32	Average	100	159
5	11020.00	54.85	74.00	-19.15	40.53	14.32	Peak	100	159
6	16530.00	56.55	68.20	-11.65	40.70	15.85	Peak	100	171

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

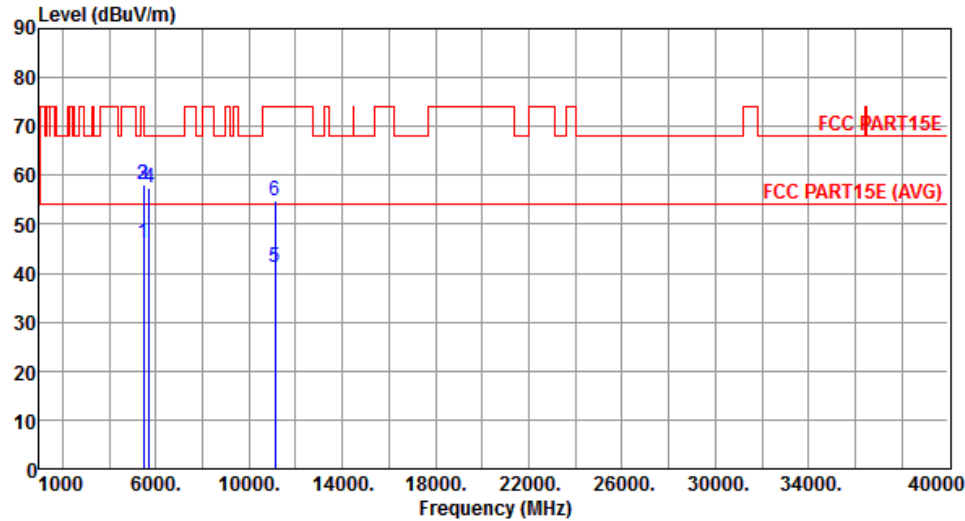
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.35	54.00	-8.65	39.89	5.46	Average	169	73
2	5460.00	56.44	74.00	-17.56	50.98	5.46	Peak	169	73
3	5470.00	56.69	68.20	-11.51	51.22	5.47	Peak	169	73
4	5725.00	56.20	68.20	-12.00	50.39	5.81	Peak	169	73
5	11100.00	40.80	54.00	-13.20	26.41	14.39	Average	100	152
6	11100.00	55.24	74.00	-18.76	40.85	14.39	Peak	100	152

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical		



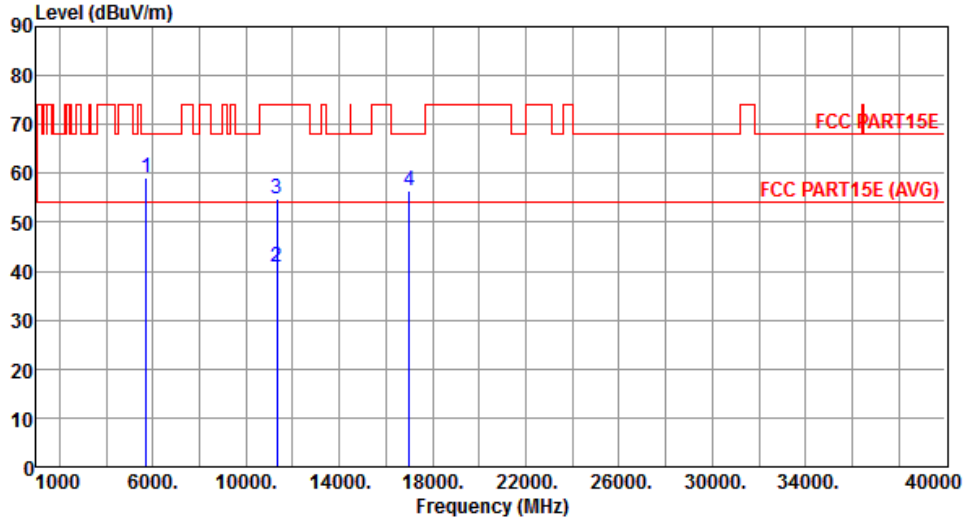
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.11	54.00	-7.89	40.65	5.46	Average	200	176
2	5460.00	58.02	74.00	-15.98	52.56	5.46	Peak	200	176
3	5470.00	57.98	68.20	-10.22	52.51	5.47	Peak	200	176
4	5725.00	57.38	68.20	-10.82	51.57	5.81	Peak	200	176
5	11100.00	41.16	54.00	-12.84	26.77	14.39	Average	100	269
6	11100.00	54.77	74.00	-19.23	40.38	14.39	Peak	100	269

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

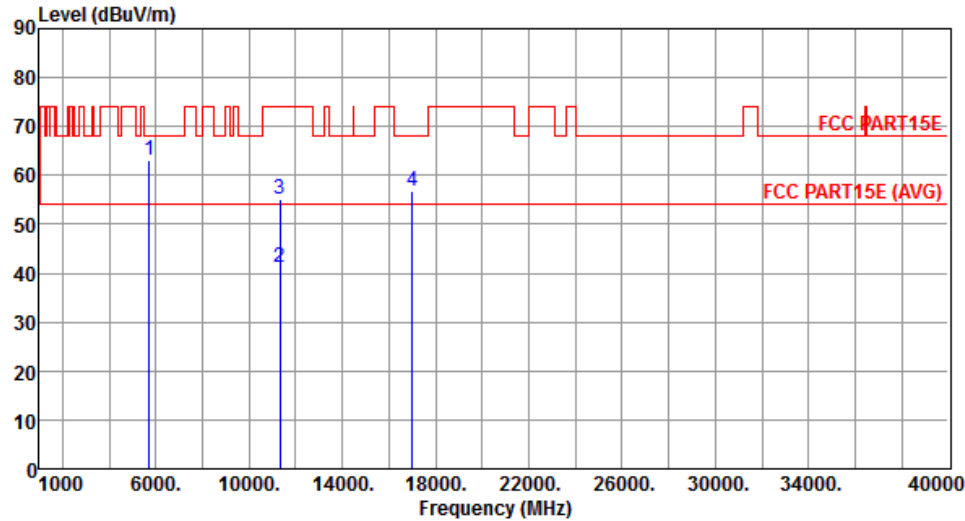
Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	59.12	68.20	-9.08	53.31	5.81	Peak	150	163
2	11340.00	40.94	54.00	-13.06	26.34	14.60	Average	100	144
3	11340.00	54.91	74.00	-19.09	40.31	14.60	Peak	100	144
4	17010.00	56.42	68.20	-11.78	40.27	16.15	Peak	100	193

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level	dBuV/m	dB	reading	dB		High	Table
		dBuV/m			dBuV			cm	deg
1	5725.00	63.19	68.20	-5.01	57.38	5.81	Peak	157	172
2	11340.00	41.02	54.00	-12.98	26.42	14.60	Average	100	121
3	11340.00	55.19	74.00	-18.81	40.59	14.60	Peak	100	121
4	17010.00	56.83	68.20	-11.37	40.68	16.15	Peak	100	205

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		
Level (dBUV/m)			

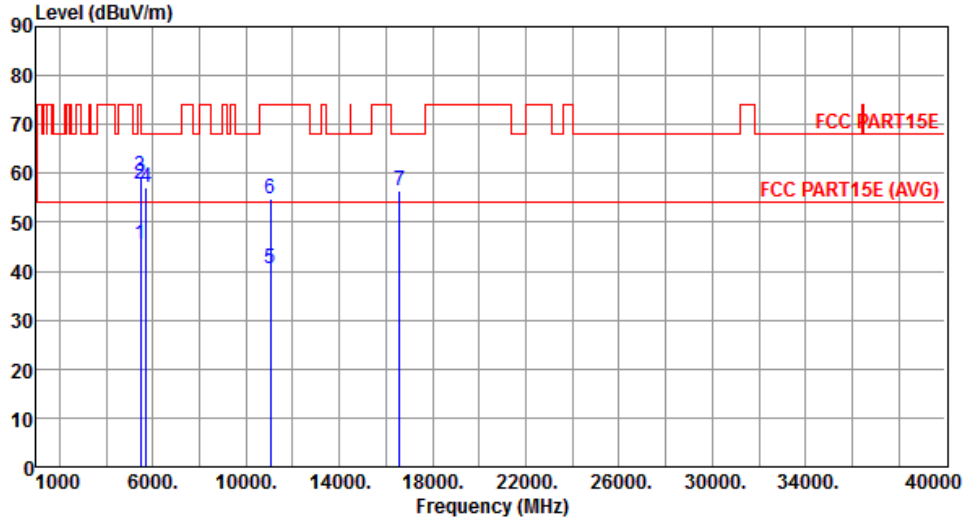
Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Vertical		
Level (dBuV/m) </			

3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT80

Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		
Level (dBuV/m)			

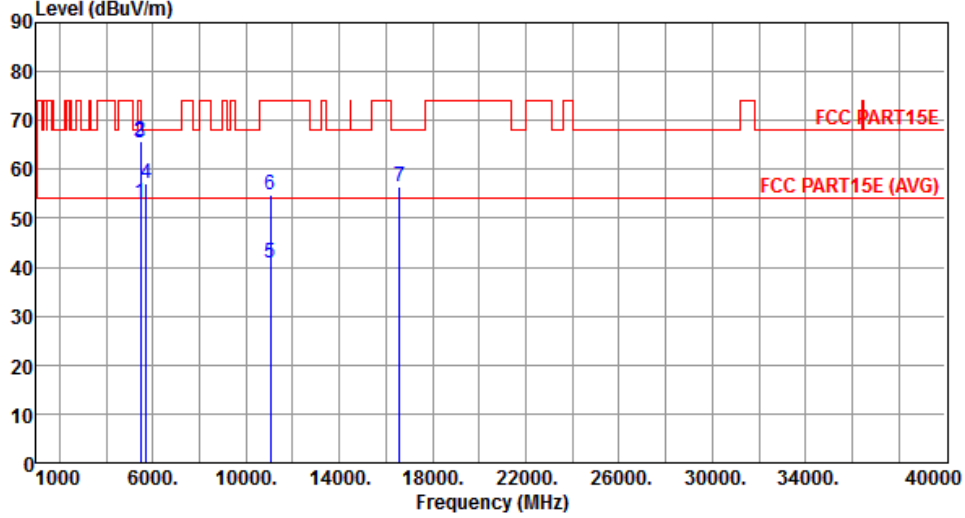
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.62	54.00	-8.38	40.16	5.46	Average	152	173
2	5460.00	57.91	74.00	-16.09	52.45	5.46	Peak	152	173
3	5470.00	59.43	68.20	-8.77	53.96	5.47	Peak	152	173
4	5725.00	57.25	68.20	-10.95	51.44	5.81	Peak	152	173
5	11060.00	40.56	54.00	-13.44	26.21	14.35	Average	100	144
6	11060.00	54.66	74.00	-19.34	40.31	14.35	Peak	100	144
7	16590.00	56.30	68.20	-11.90	40.42	15.88	Peak	100	185

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.01	54.00	-0.99	47.55	5.46	Average	162	175
2	5460.00	65.74	74.00	-8.26	60.28	5.46	Peak	162	175
3	5470.00	65.54	68.20	-2.66	60.07	5.47	Peak	162	175
4	5725.00	56.96	68.20	-11.24	51.15	5.81	Peak	214	175
5	11060.00	40.68	54.00	-13.32	26.33	14.35	Average	100	116
6	11060.00	54.78	74.00	-19.22	40.43	14.35	Peak	100	116
7	16590.00	56.37	68.20	-11.83	40.49	15.88	Peak	100	154

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Horizontal		
Level (dBuV/m) </			

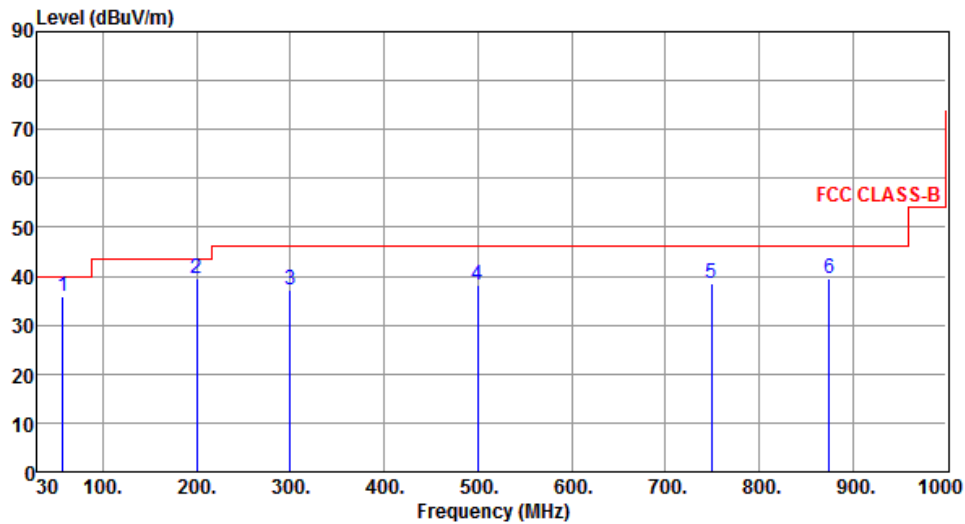
Modulation	VHT80	Test Freq. (MHz)	5690
Polarization	Vertical		
Level (dBuV/m)			

Non- beamforming mode_80+80MHz mode

3.5.9 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								
Level (dBuV/m)									

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.42	35.86	40.00	-4.14	44.57	-8.71	QP	100	110
2	200.01	39.45	43.50	-4.05	50.68	-11.23	Peak	100	149
3	299.68	37.21	46.00	-8.79	45.06	-7.85	Peak	---	---
4	499.52	38.21	46.00	-7.79	41.45	-3.24	Peak	---	---
5	749.75	38.68	46.00	-7.32	36.88	1.80	Peak	---	---
6	874.86	39.68	46.00	-6.32	36.14	3.54	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

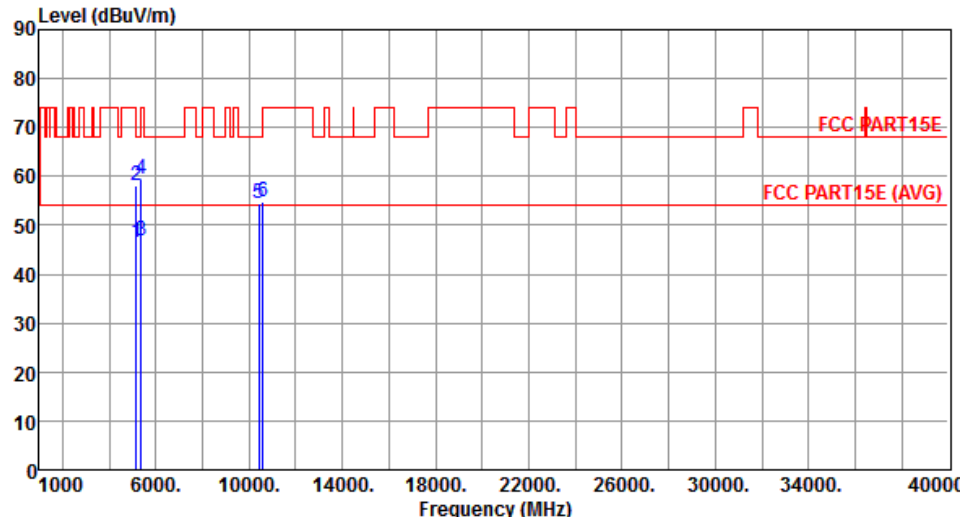
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.10 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 1

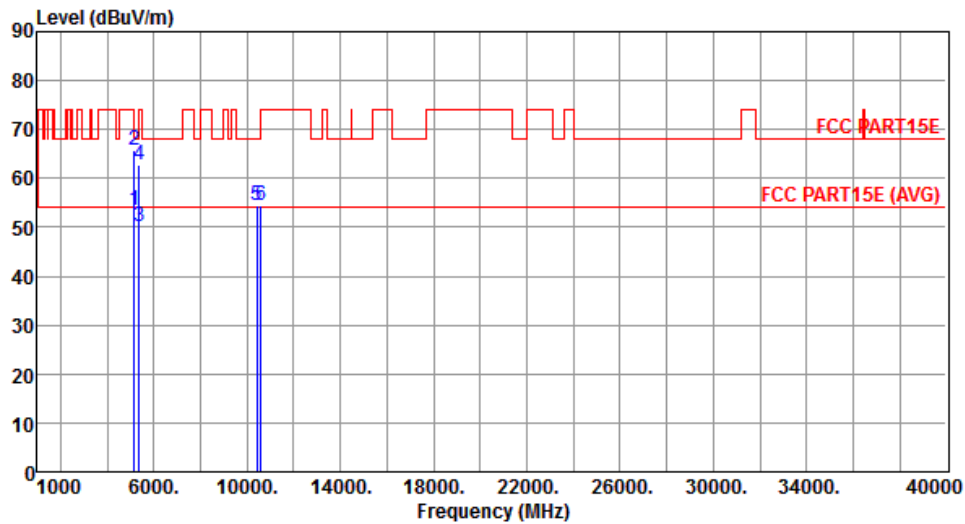
Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH58 (5290 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.34	54.00	-7.66	41.32	5.02	Average	274	212
2	5150.00	58.03	74.00	-15.97	53.01	5.02	Peak	274	212
3	5350.00	46.98	54.00	-7.02	41.67	5.31	Average	145	115
4	5350.00	59.52	74.00	-14.48	54.21	5.31	Peak	145	115
5	10420.00	54.45	68.20	-13.75	40.67	13.78	Peak	100	168
6	10580.00	54.66	68.20	-13.54	40.76	13.90	Peak	100	175

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH58 (5290 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.51	54.00	-0.49	48.49	5.02	Average	203	227
2	5150.00	65.92	74.00	-8.08	60.90	5.02	Peak	203	227
3	5350.00	50.17	54.00	-3.83	44.86	5.31	Average	187	4
4	5350.00	62.74	74.00	-11.26	57.43	5.31	Peak	187	4
5	10420.00	54.63	68.20	-13.57	40.85	13.78	Peak	100	165
6	10580.00	54.63	68.20	-13.57	40.73	13.90	Peak	100	193

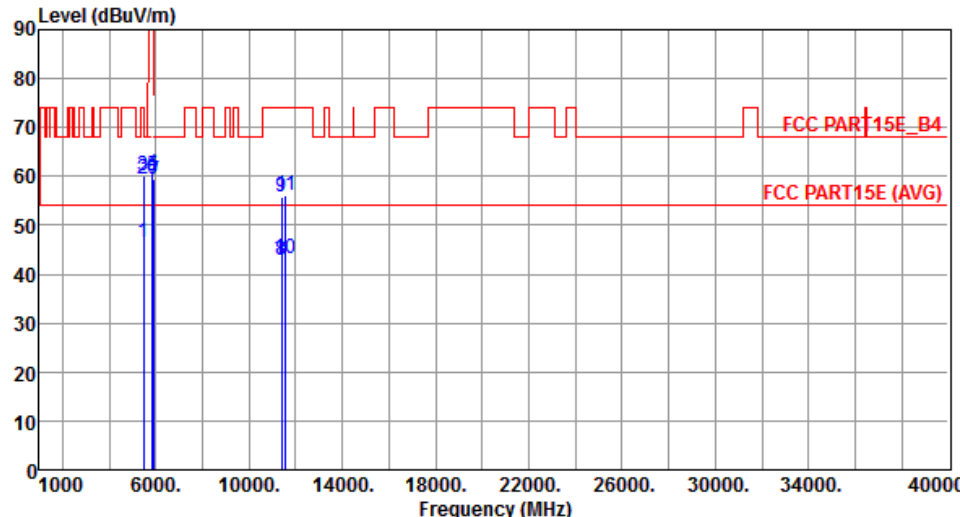
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.11 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 2

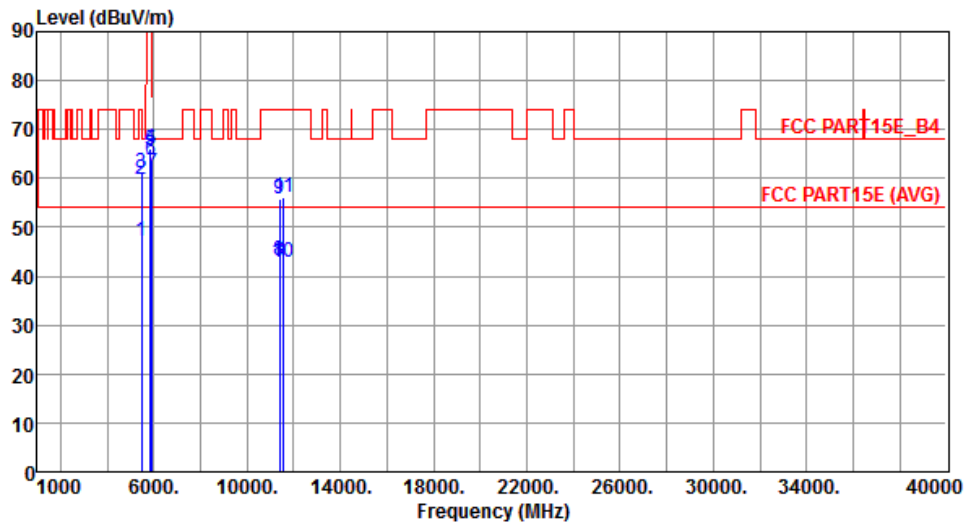
Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH106 (5530 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.41	54.00	-7.59	40.95	5.46	Average	110	121
2	5460.00	59.31	74.00	-14.69	53.85	5.46	Peak	110	121
3	5470.00	60.00	68.20	-8.20	54.53	5.47	Peak	110	121
4	5850.00	60.54	122.20	-61.66	54.55	5.99	Peak	221	178
5	5855.00	60.12	110.80	-50.68	54.12	6.00	Peak	221	178
6	5875.00	59.56	105.20	-45.64	53.54	6.02	Peak	221	178
7	5925.00	59.24	68.20	-8.96	53.15	6.09	Peak	221	178
8	11380.00	42.84	54.00	-11.16	28.21	14.63	Average	100	165
9	11380.00	55.94	74.00	-18.06	41.31	14.63	Peak	100	165
10	11550.00	43.01	54.00	-10.99	28.37	14.64	Average	100	149
11	11550.00	56.20	74.00	-17.80	41.56	14.64	Peak	100	149

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH106 (5530 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.05	54.00	-6.95	41.59	5.46	Average	149	224
2	5460.00	59.78	74.00	-14.22	54.32	5.46	Peak	149	224
3	5470.00	61.00	68.20	-7.20	55.53	5.47	Peak	149	224
4	5850.00	66.19	122.20	-56.01	60.20	5.99	Peak	186	82
5	5855.00	65.85	110.80	-44.95	59.85	6.00	Peak	186	82
6	5875.00	63.76	105.20	-41.44	57.74	6.02	Peak	186	82
7	5925.00	61.25	68.20	-6.95	55.16	6.09	Peak	186	82
8	11380.00	43.06	54.00	-10.94	28.43	14.63	Average	100	175
9	11380.00	55.94	74.00	-18.06	41.31	14.63	Peak	100	175
10	11550.00	42.92	54.00	-11.08	28.28	14.64	Average	100	196
11	11550.00	55.97	74.00	-18.03	41.33	14.64	Peak	100	196

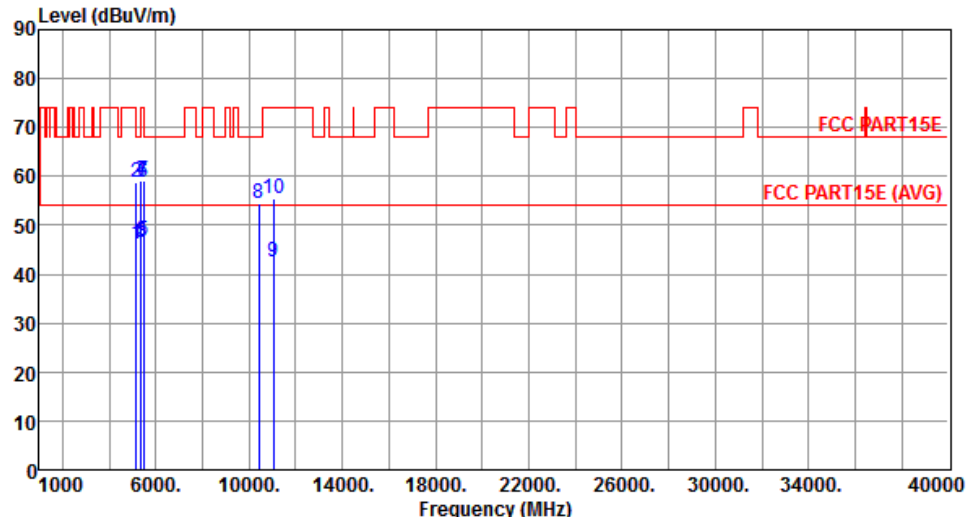
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.12 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 3

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH138 (5690 MHz)						
Polarization	Horizontal								



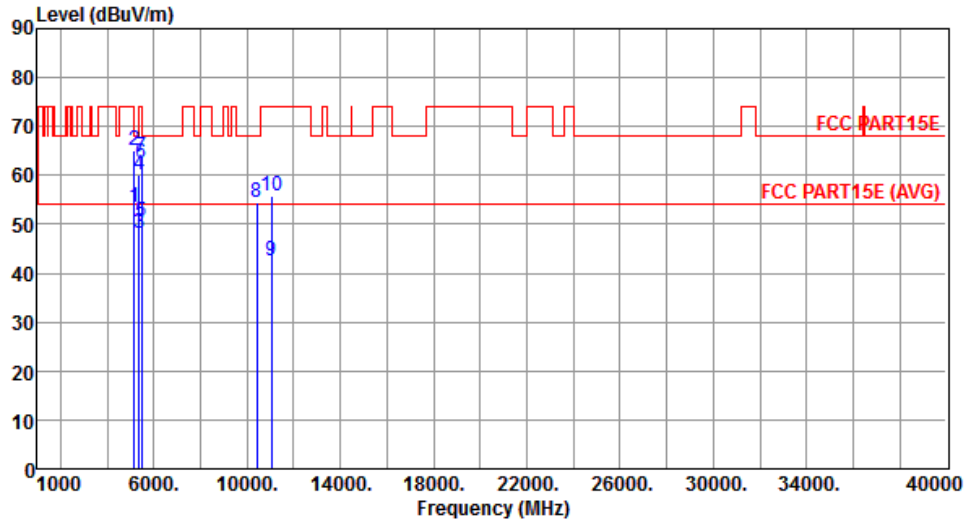
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.30	54.00	-7.70	41.28	5.02	Average	273	213
2	5150.00	58.74	74.00	-15.26	53.72	5.02	Peak	273	213
3	5350.00	46.51	54.00	-7.49	41.20	5.31	Average	273	213
4	5350.00	59.26	74.00	-14.74	53.95	5.31	Peak	273	213
5	5460.00	46.73	54.00	-7.27	41.27	5.46	Average	128	104
6	5460.00	58.81	74.00	-15.19	53.35	5.46	Peak	128	104
7	5470.00	59.28	68.20	-8.92	53.81	5.47	Peak	128	104
8	10420.00	54.32	68.20	-13.88	40.54	13.78	Peak	100	163
9	11060.00	42.56	54.00	-11.44	28.21	14.35	Average	100	152
10	11060.00	55.46	74.00	-18.54	41.11	14.35	Peak	100	152

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH138 (5690 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.58	54.00	-0.42	48.56	5.02	Average	203	225
2	5150.00	65.23	74.00	-8.77	60.21	5.02	Peak	203	225
3	5350.00	48.19	54.00	-5.81	42.88	5.31	Average	203	225
4	5350.00	60.06	74.00	-13.94	54.75	5.31	Peak	203	225
5	5460.00	50.45	54.00	-3.55	44.99	5.46	Average	133	3
6	5460.00	62.32	74.00	-11.68	56.86	5.46	Peak	133	3
7	5470.00	63.65	68.20	-4.55	58.18	5.47	Peak	133	3
8	10420.00	54.32	68.20	-13.88	40.54	13.78	Peak	100	162
9	11060.00	42.45	54.00	-11.55	28.10	14.35	Average	100	138
10	11060.00	55.66	74.00	-18.34	41.31	14.35	Peak	100	138

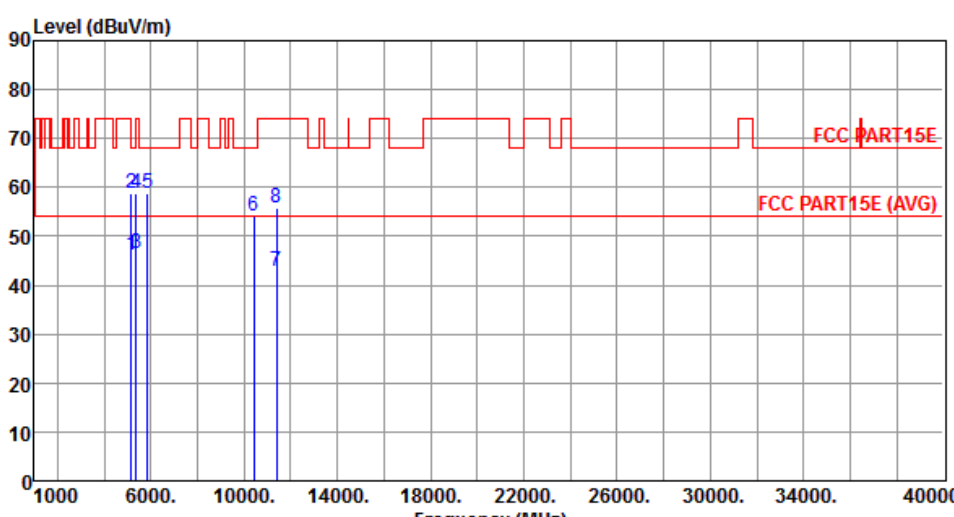
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.13 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 4

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								



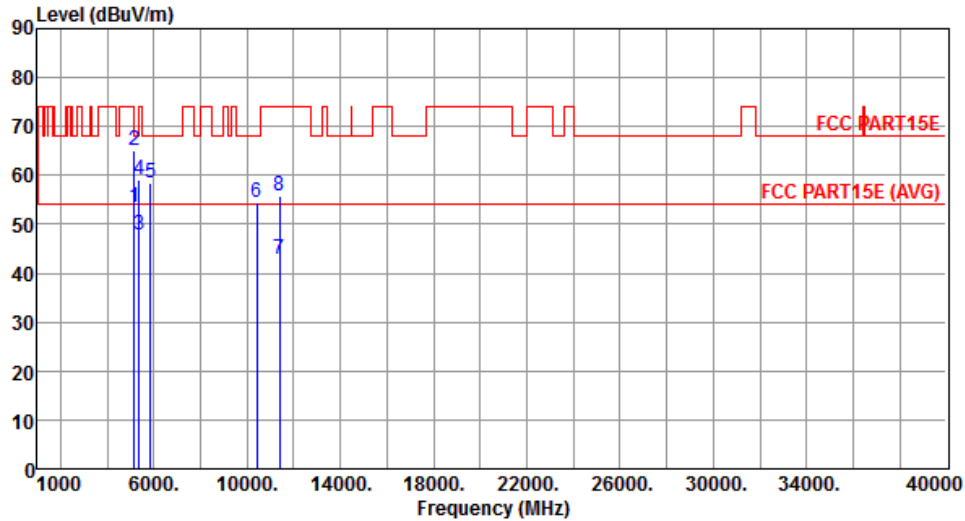
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.30	54.00	-7.70	41.28	5.02	Average	274	213
2	5150.00	58.68	74.00	-15.32	53.66	5.02	Peak	274	213
3	5350.00	46.45	54.00	-7.55	41.14	5.31	Average	274	213
4	5350.00	58.67	74.00	-15.33	53.36	5.31	Peak	274	213
5	5850.00	58.88	68.20	-9.32	52.89	5.99	Peak	235	99
6	10420.00	54.03	68.20	-14.17	40.25	13.78	Peak	100	158
7	11380.00	42.87	54.00	-11.13	28.24	14.63	Average	100	165
8	11380.00	55.75	74.00	-18.25	41.12	14.63	Peak	100	165

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.58	54.00	-0.42	48.56	5.02	Average	222	236
2	5150.00	65.18	74.00	-8.82	60.16	5.02	Peak	222	236
3	5350.00	47.79	54.00	-6.21	42.48	5.31	Average	222	236
4	5350.00	59.14	74.00	-14.86	53.83	5.31	Peak	222	236
5	5850.00	58.54	68.20	-9.66	52.55	5.99	Peak	175	7
6	10420.00	54.43	68.20	-13.77	40.65	13.78	Peak	100	182
7	11380.00	42.94	54.00	-11.06	28.31	14.63	Average	100	162
8	11380.00	55.84	74.00	-18.16	41.21	14.63	Peak	100	162

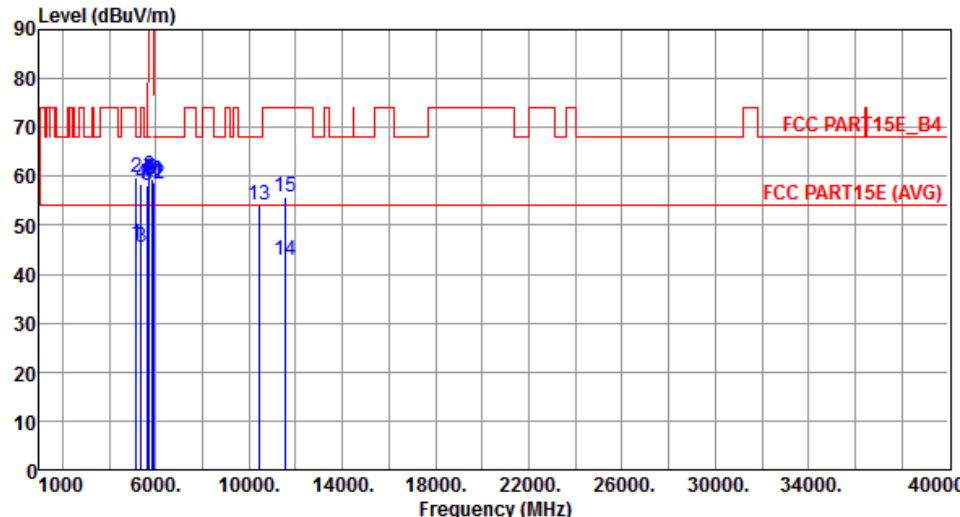
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.14 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 5

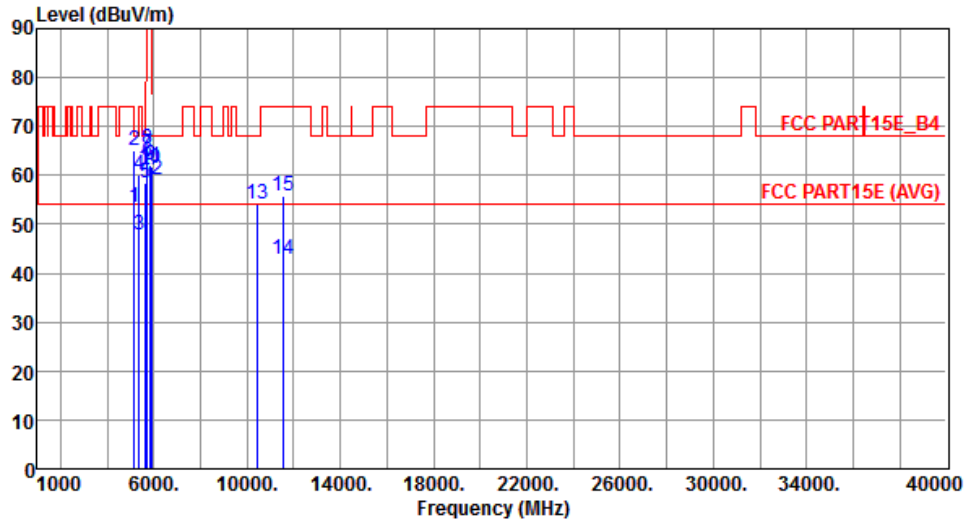
Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH106 (5530 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.11	54.00	-7.89	41.09	5.02	Average	273	213
2	5150.00	59.94	74.00	-14.06	54.92	5.02	Peak	273	213
3	5350.00	45.43	54.00	-8.57	40.12	5.31	Average	273	213
4	5350.00	58.52	74.00	-15.48	53.21	5.31	Peak	273	213
5	5650.00	58.03	68.20	-10.17	52.34	5.69	Peak	221	178
6	5700.00	59.15	105.20	-46.05	53.38	5.77	Peak	221	178
7	5720.00	59.36	110.80	-51.44	53.57	5.79	Peak	221	178
8	5725.00	60.12	122.20	-62.08	54.31	5.81	Peak	221	178
9	5850.00	59.37	122.20	-62.83	53.38	5.99	Peak	221	178
10	5855.00	59.12	110.80	-51.68	53.12	6.00	Peak	221	178
11	5875.00	58.77	105.20	-46.43	52.75	6.02	Peak	221	178
12	5925.00	58.52	68.20	-9.68	52.43	6.09	Peak	221	178
13	10420.00	54.29	68.20	-13.91	40.51	13.78	Peak	100	136
14	11550.00	42.90	54.00	-11.10	28.26	14.64	Average	100	168
15	11550.00	55.69	74.00	-18.31	41.05	14.64	Peak	100	168

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH106 (5530 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.58	54.00	-0.42	48.56	5.02	Average	221	220
2	5150.00	65.14	74.00	-8.86	60.12	5.02	Peak	221	220
3	5350.00	47.79	54.00	-6.21	42.48	5.31	Average	221	220
4	5350.00	60.18	74.00	-13.82	54.87	5.31	Peak	221	220
5	5650.00	58.47	68.20	-9.73	52.78	5.69	Peak	186	83
6	5700.00	62.85	105.20	-42.35	57.08	5.77	Peak	186	83
7	5720.00	64.36	110.80	-46.44	58.57	5.79	Peak	186	83
8	5725.00	65.44	122.20	-56.76	59.63	5.81	Peak	186	83
9	5850.00	62.11	122.20	-60.09	56.12	5.99	Peak	186	83
10	5855.00	61.42	110.80	-49.38	55.42	6.00	Peak	186	83
11	5875.00	61.71	105.20	-43.49	55.69	6.02	Peak	186	83
12	5925.00	59.10	68.20	-9.10	53.01	6.09	Peak	186	83
13	10420.00	54.28	68.20	-13.92	40.50	13.78	Peak	100	163
14	11550.00	42.88	54.00	-11.12	28.24	14.64	Average	100	151
15	11550.00	55.95	74.00	-18.05	41.31	14.64	Peak	100	151

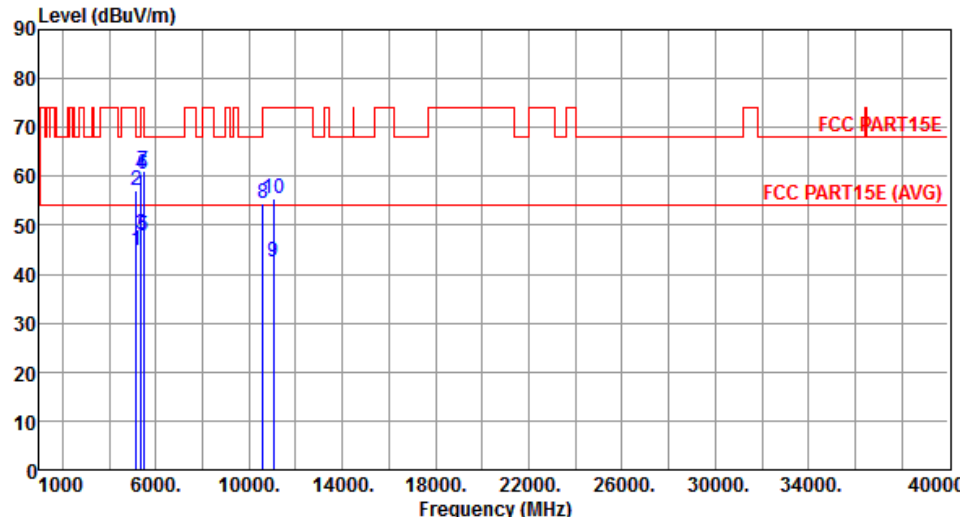
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.15 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 6

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH138 (5690 MHz)						
Polarization	Horizontal								



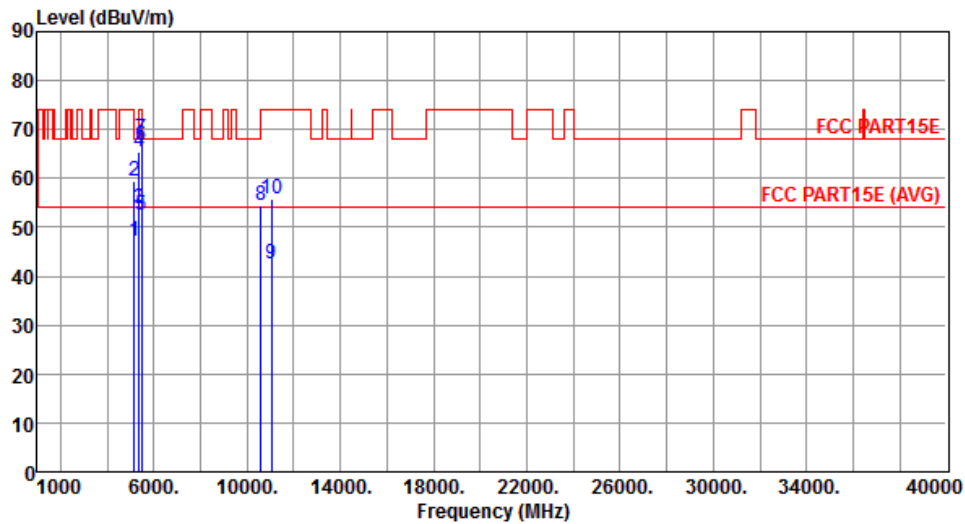
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	44.83	54.00	-9.17	39.81	5.02	Average	104	209
2	5150.00	57.17	74.00	-16.83	52.15	5.02	Peak	104	209
3	5350.00	48.26	54.00	-5.74	42.95	5.31	Average	104	209
4	5350.00	60.29	74.00	-13.71	54.98	5.31	Peak	104	209
5	5460.00	47.90	54.00	-6.10	42.44	5.46	Average	132	106
6	5460.00	60.31	74.00	-13.69	54.85	5.46	Peak	132	106
7	5470.00	61.00	68.20	-7.20	55.53	5.47	Peak	132	106
8	10580.00	54.62	68.20	-13.58	40.72	13.90	Peak	100	155
9	11060.00	42.47	54.00	-11.53	28.12	14.35	Average	100	138
10	11060.00	55.59	74.00	-18.41	41.24	14.35	Peak	100	138

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH138 (5690 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	47.14	54.00	-6.86	42.12	5.02	Average	230	238
2	5150.00	59.30	74.00	-14.70	54.28	5.02	Peak	230	238
3	5350.00	53.70	54.00	-0.30	48.39	5.31	Average	230	238
4	5350.00	65.46	74.00	-8.54	60.15	5.31	Peak	230	238
5	5460.00	52.54	54.00	-1.46	47.08	5.46	Average	230	238
6	5460.00	66.80	74.00	-7.20	61.34	5.46	Peak	230	238
7	5470.00	68.06	68.20	-0.14	62.59	5.47	Peak	230	238
8	10580.00	54.51	68.20	-13.69	40.61	13.90	Peak	100	161
9	11060.00	42.40	54.00	-11.60	28.05	14.35	Average	100	146
10	11060.00	55.66	74.00	-18.34	41.31	14.35	Peak	100	146

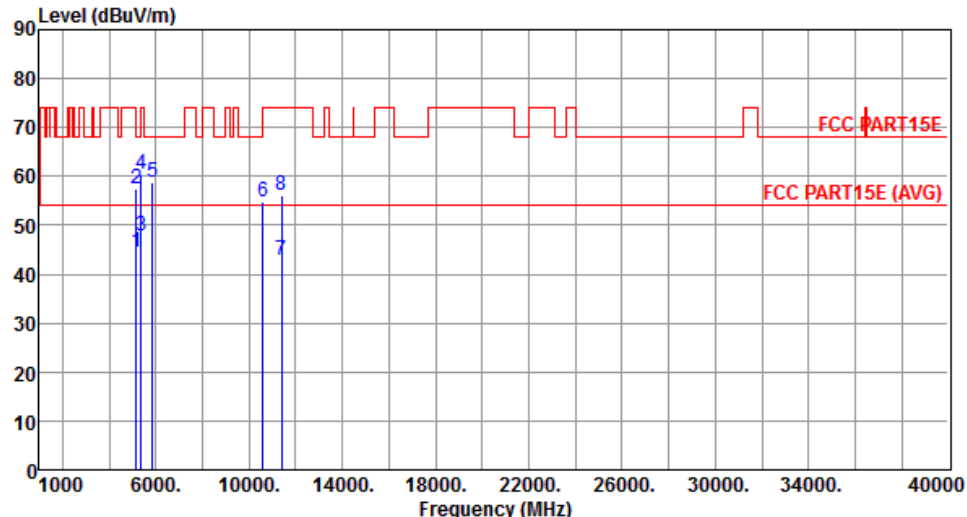
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.16 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 7

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								



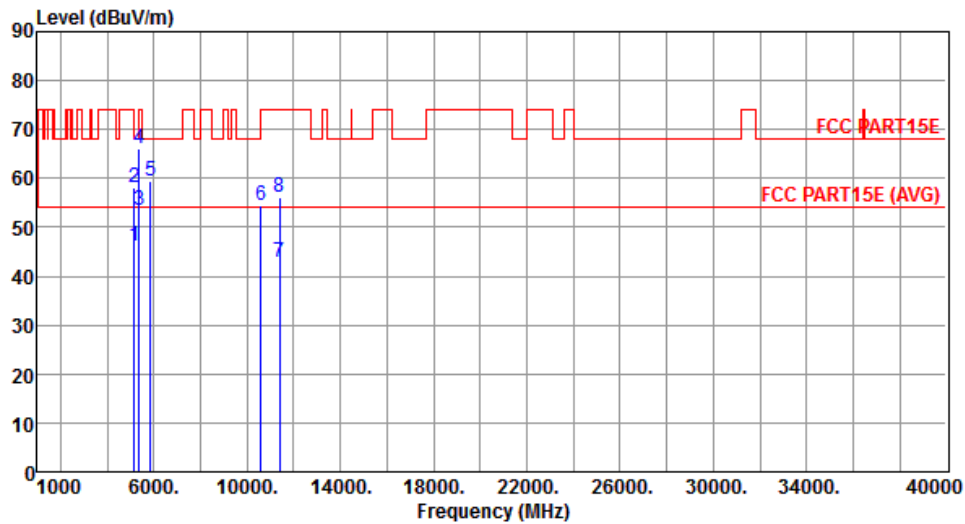
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	44.51	54.00	-9.49	39.49	5.02	Average	104	209
2	5150.00	57.51	74.00	-16.49	52.49	5.02	Peak	104	209
3	5350.00	47.87	54.00	-6.13	42.56	5.31	Average	104	209
4	5350.00	60.44	74.00	-13.56	55.13	5.31	Peak	104	209
5	5850.00	58.76	68.20	-9.44	52.77	5.99	Peak	234	99
6	10580.00	54.74	68.20	-13.46	40.84	13.90	Peak	100	167
7	11380.00	42.95	54.00	-11.05	28.32	14.63	Average	100	175
8	11380.00	56.06	74.00	-17.94	41.43	14.63	Peak	100	175

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.20	54.00	-7.80	41.18	5.02	Average	219	238
2	5150.00	58.21	74.00	-15.79	53.19	5.02	Peak	219	238
3	5350.00	53.62	54.00	-0.38	48.31	5.31	Average	219	238
4	5350.00	66.20	74.00	-7.80	60.89	5.31	Peak	219	238
5	5850.00	59.54	68.20	-8.66	53.55	5.99	Peak	175	2
6	10580.00	54.63	68.20	-13.57	40.73	13.90	Peak	100	153
7	11380.00	42.87	54.00	-11.13	28.24	14.63	Average	100	183
8	11380.00	55.98	74.00	-18.02	41.35	14.63	Peak	100	183

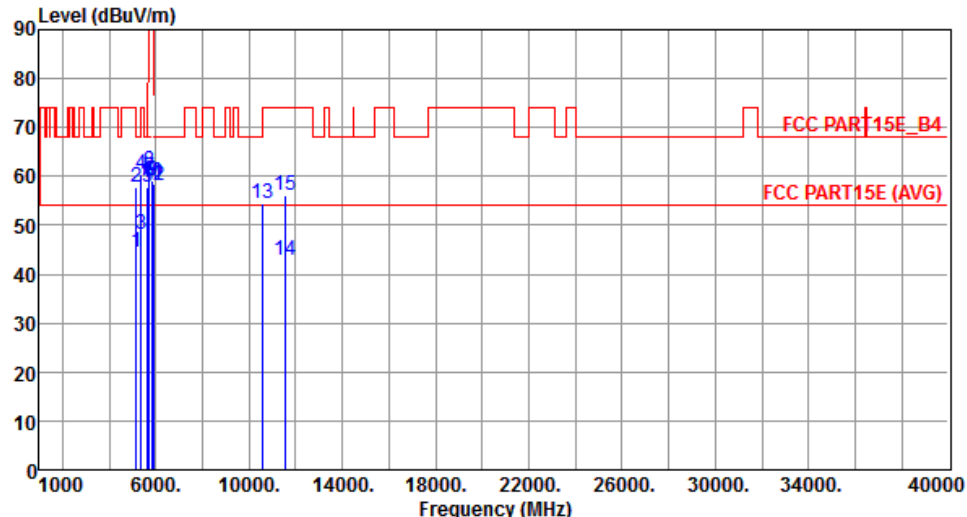
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

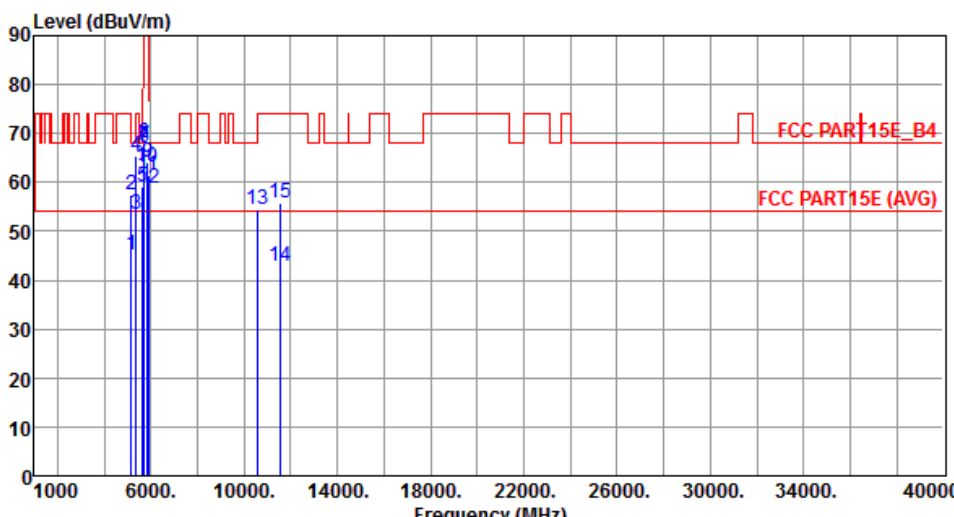
3.5.17 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 8

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH138 (5690 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	44.53	54.00	-9.47	39.51	5.02	Average	104	209
2	5150.00	57.71	74.00	-16.29	52.69	5.02	Peak	104	209
3	5350.00	48.16	54.00	-5.84	42.85	5.31	Average	104	209
4	5350.00	60.32	74.00	-13.68	55.01	5.31	Peak	104	209
5	5650.00	57.94	68.20	-10.26	52.25	5.69	Peak	221	178
6	5700.00	59.01	105.20	-46.19	53.24	5.77	Peak	221	178
7	5720.00	59.93	110.80	-50.87	54.14	5.79	Peak	221	178
8	5725.00	61.06	122.20	-61.14	55.25	5.81	Peak	221	178
9	5850.00	59.11	122.20	-63.09	53.12	5.99	Peak	221	178
10	5855.00	58.75	110.80	-52.05	52.75	6.00	Peak	221	178
11	5875.00	58.45	105.20	-46.75	52.43	6.02	Peak	221	178
12	5925.00	58.28	68.20	-9.92	52.19	6.09	Peak	221	178
13	10580.00	54.44	68.20	-13.76	40.54	13.90	Peak	100	163
14	11550.00	42.88	54.00	-11.12	28.24	14.64	Average	100	168
15	11550.00	55.98	74.00	-18.02	41.34	14.64	Peak	100	168

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH138 (5690 MHz)						
Polarization	Vertical								
									
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.27	54.00	-8.73	40.25	5.02	Average	220	238
2	5150.00	57.50	74.00	-16.50	52.48	5.02	Peak	220	238
3	5350.00	53.57	54.00	-0.43	48.26	5.31	Average	220	238
4	5350.00	65.53	74.00	-8.47	60.22	5.31	Peak	220	238
5	5650.00	59.23	68.20	-8.97	53.54	5.69	Peak	186	84
6	5700.00	67.02	105.20	-38.18	61.25	5.77	Peak	186	84
7	5720.00	67.45	110.80	-43.35	61.66	5.79	Peak	186	84
8	5725.00	68.06	122.20	-54.14	62.25	5.81	Peak	186	84
9	5850.00	64.11	122.20	-58.09	58.12	5.99	Peak	186	84
10	5855.00	63.12	110.80	-47.68	57.12	6.00	Peak	186	84
11	5875.00	61.45	105.20	-43.75	55.43	6.02	Peak	186	84
12	5925.00	58.83	68.20	-9.37	52.74	6.09	Peak	186	84
13	10580.00	54.44	68.20	-13.76	40.54	13.90	Peak	100	172
14	11550.00	42.94	54.00	-11.06	28.30	14.64	Average	100	149
15	11550.00	55.85	74.00	-18.15	41.21	14.64	Peak	100	149

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

3.5.18 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 9

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								

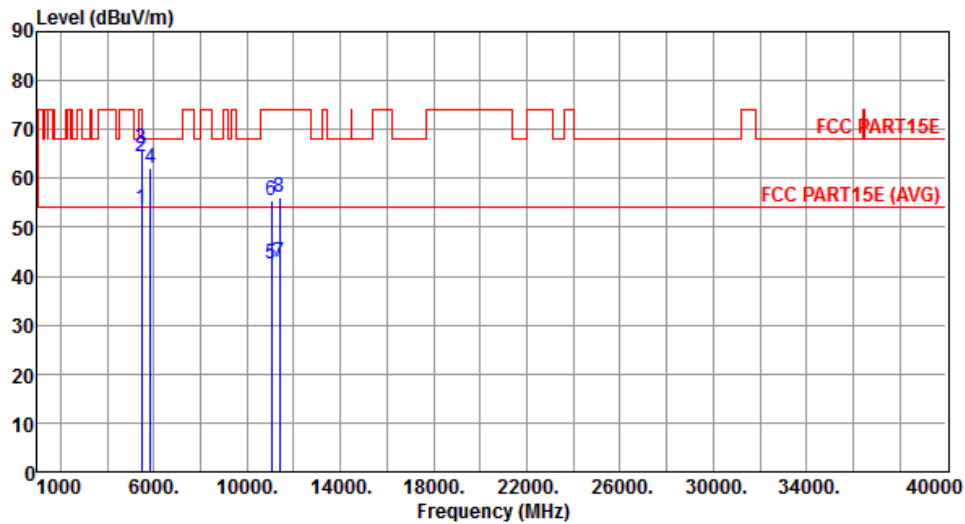
The spectrum plot displays the emission level in dBUV/m across a frequency range from 1000 to 40000 MHz. The stepped limit line (FCC PART15E) starts at 70 dBUV/m from 1000 to 6000 MHz, drops to 68 dBUV/m from 6000 to 11000 MHz, and then to 60 dBUV/m from 11000 to 40000 MHz. The average limit line (FCC PART15E (AVG)) is a constant horizontal line at 55 dBUV/m. Test results are indicated by vertical blue lines with labels: 34 at 5460 MHz, 68 at 5470 MHz, and 57 at 5850 MHz. The test results show that the emission levels are within the limits specified by FCC PART15E.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.10	54.00	-5.90	42.64	5.46	Average	100	140
2	5460.00	60.24	74.00	-13.76	54.78	5.46	Peak	100	140
3	5470.00	61.14	68.20	-7.06	55.67	5.47	Peak	100	140
4	5850.00	61.42	68.20	-6.78	55.43	5.99	Peak	236	99
5	11060.00	42.66	54.00	-11.34	28.31	14.35	Average	100	142
6	11060.00	55.63	74.00	-18.37	41.28	14.35	Peak	100	142
7	11380.00	43.08	54.00	-10.92	28.45	14.63	Average	100	169
8	11380.00	55.97	74.00	-18.03	41.34	14.63	Peak	100	169

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.64	54.00	-0.36	48.18	5.46	Average	178	225
2	5460.00	64.50	74.00	-9.50	59.04	5.46	Peak	178	225
3	5470.00	65.98	68.20	-2.22	60.51	5.47	Peak	178	225
4	5850.00	62.26	68.20	-5.94	56.27	5.99	Peak	133	2
5	11060.00	42.50	54.00	-11.50	28.15	14.35	Average	100	147
6	11060.00	55.60	74.00	-18.40	41.25	14.35	Peak	100	147
7	11380.00	42.85	54.00	-11.15	28.22	14.63	Average	100	156
8	11380.00	56.06	74.00	-17.94	41.43	14.63	Peak	100	156

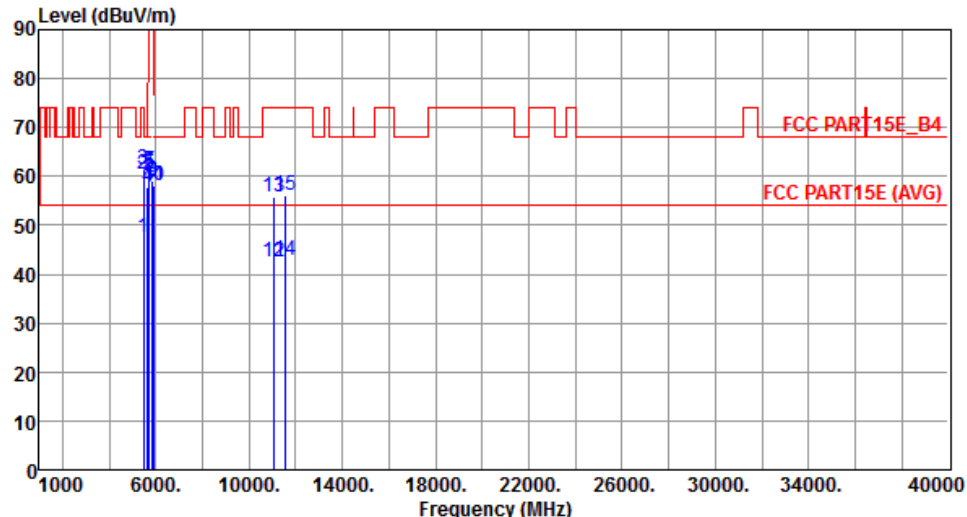
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.19 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 10

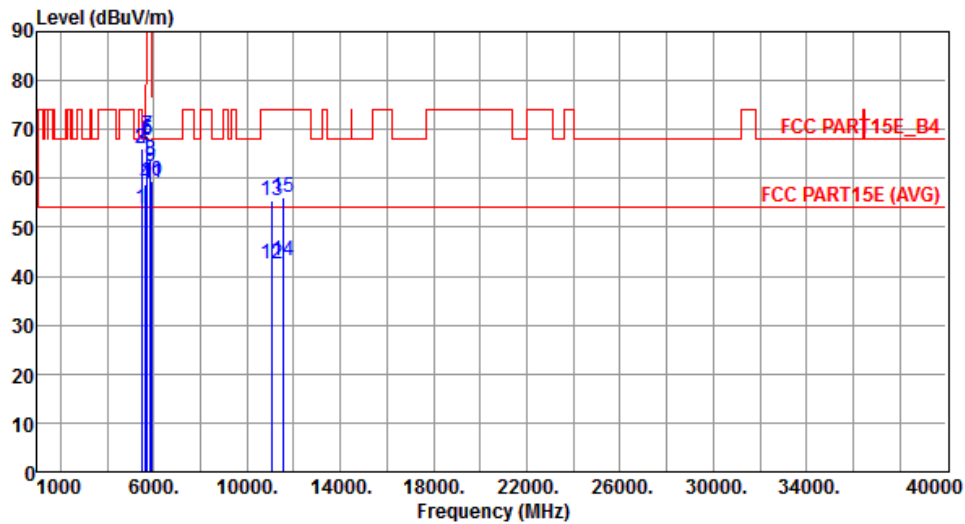
Modulation	VHT80+80	Test Freq. (MHz)	CH138 (5690 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.47	54.00	-6.53	42.01	5.46	Average	100	141
2	5460.00	60.58	74.00	-13.42	55.12	5.46	Peak	100	141
3	5470.00	61.32	68.20	-6.88	55.85	5.47	Peak	100	141
4	5650.00	57.94	68.20	-10.26	52.25	5.69	Peak	221	178
5	5700.00	60.51	105.20	-44.69	54.74	5.77	Peak	221	178
6	5720.00	60.92	110.80	-49.88	55.13	5.79	Peak	221	178
7	5725.00	61.12	122.20	-61.08	55.31	5.81	Peak	221	178
8	5850.00	59.11	122.20	-63.09	53.12	5.99	Peak	221	178
9	5855.00	58.78	110.80	-52.02	52.78	6.00	Peak	221	178
10	5875.00	58.27	105.20	-46.93	52.25	6.02	Peak	221	178
11	5925.00	58.21	68.20	-9.99	52.12	6.09	Peak	221	178
12	11060.00	42.59	54.00	-11.41	28.24	14.35	Average	100	164
13	11060.00	55.66	74.00	-18.34	41.31	14.35	Peak	100	164
14	11550.00	42.88	54.00	-11.12	28.24	14.64	Average	100	161
15	11550.00	56.01	74.00	-17.99	41.37	14.64	Peak	100	161

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH138 (5690 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.67	54.00	-0.33	48.21	5.46	Average	178	225
2	5460.00	66.01	74.00	-7.99	60.55	5.46	Peak	178	225
3	5470.00	65.99	68.20	-2.21	60.52	5.47	Peak	178	225
4	5650.00	58.81	68.20	-9.39	53.12	5.69	Peak	186	83
5	5700.00	67.87	105.20	-37.33	62.10	5.77	Peak	186	83
6	5720.00	68.03	110.80	-42.77	62.24	5.79	Peak	186	83
7	5725.00	68.63	122.20	-53.57	62.82	5.81	Peak	186	83
8	5850.00	63.77	122.20	-58.43	57.78	5.99	Peak	186	83
9	5855.00	62.53	110.80	-48.27	56.53	6.00	Peak	186	83
10	5875.00	59.50	105.20	-45.70	53.48	6.02	Peak	186	83
11	5925.00	59.19	68.20	-9.01	53.10	6.09	Peak	186	83
12	11060.00	42.47	54.00	-11.53	28.12	14.35	Average	100	143
13	11060.00	55.40	74.00	-18.60	41.05	14.35	Peak	100	143
14	11550.00	43.05	54.00	-10.95	28.41	14.64	Average	100	193
15	11550.00	55.99	74.00	-18.01	41.35	14.64	Peak	100	193

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

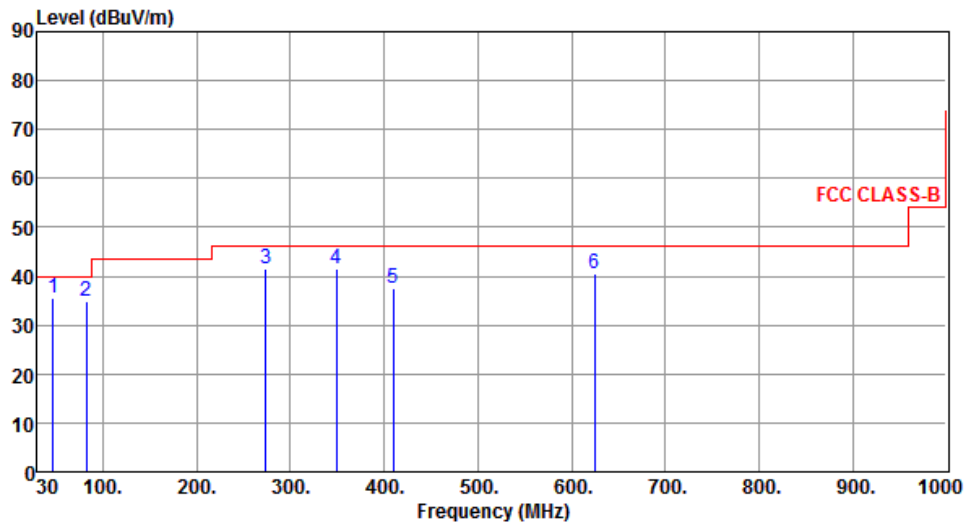
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Beamforming mode

3.5.20 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.44	35.46	40.00	-4.54	43.68	-8.22	QP	100	18
2	82.41	34.91	40.00	-5.09	48.44	-13.53	Peak	---	---
3	273.51	41.35	46.00	-4.65	50.04	-8.69	Peak	---	---
4	349.53	41.44	46.00	-4.56	48.04	-6.60	Peak	---	---
5	409.48	37.62	46.00	-8.38	42.57	-4.95	Peak	---	---
6	624.86	40.68	46.00	-5.32	41.20	-0.52	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

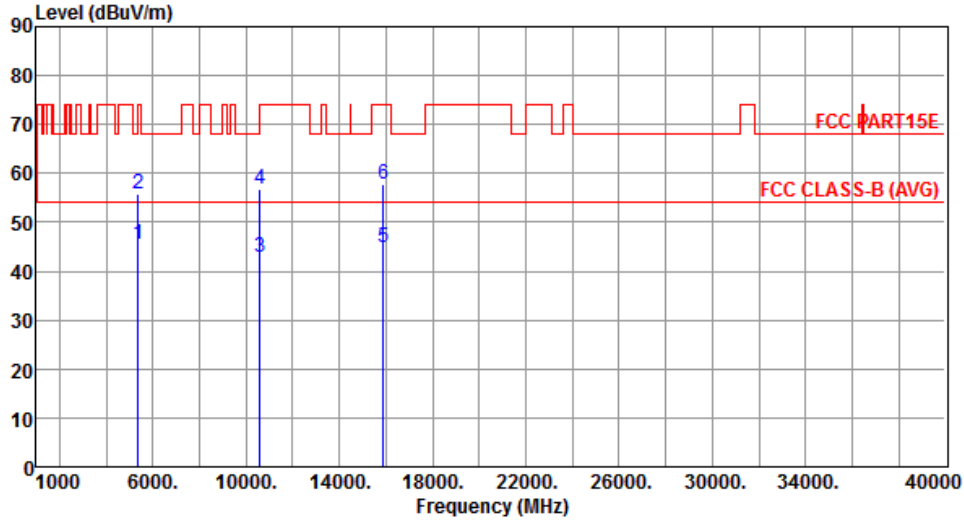
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.5.21 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT20

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5260
Polarization	Vertical		
Level (dBuV/m)			

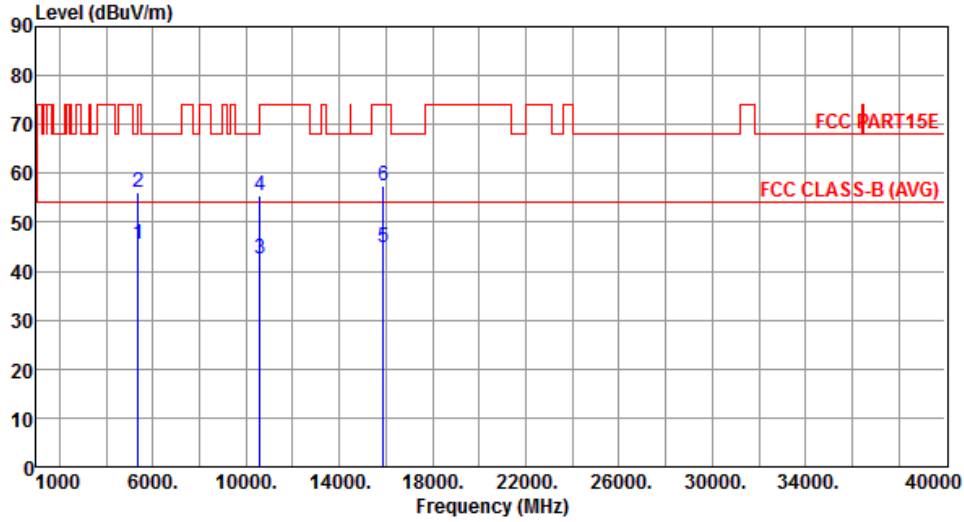
Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.52	54.00	-8.48	40.21	5.31	Average	152	110
2	5350.00	55.88	74.00	-18.12	50.57	5.31	Peak	152	110
3	10600.00	42.78	54.00	-11.22	28.86	13.92	Average	100	83
4	10600.00	56.63	74.00	-17.37	42.71	13.92	Peak	100	83
5	15900.00	44.82	54.00	-9.18	29.98	14.84	Average	173	291
6	15900.00	57.63	74.00	-16.37	42.79	14.84	Peak	173	291

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5300
Polarization	Vertical		

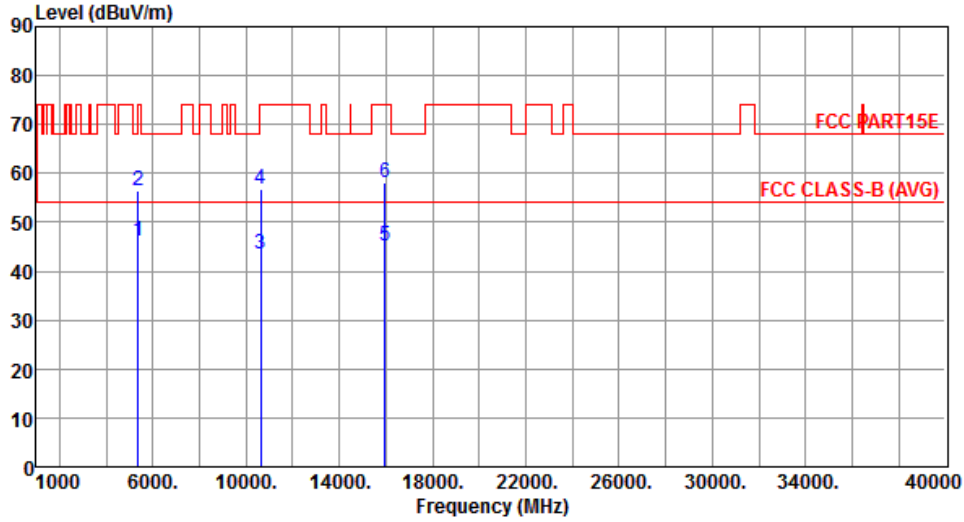


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	45.46	54.00	-8.54	40.15	5.31	Average	191	194
2	5350.00	56.14	74.00	-17.86	50.83	5.31	Peak	191	194
3	10600.00	42.43	54.00	-11.57	28.51	13.92	Average	100	65
4	10600.00	55.50	74.00	-18.50	41.58	13.92	Peak	100	65
5	15900.00	44.88	54.00	-9.12	30.04	14.84	Average	100	127
6	15900.00	57.61	74.00	-16.39	42.77	14.84	Peak	100	127

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Horizontal		
Level (dBuV/m) <			

Modulation	VHT20	Test Freq. (MHz)	5320
Polarization	Vertical		



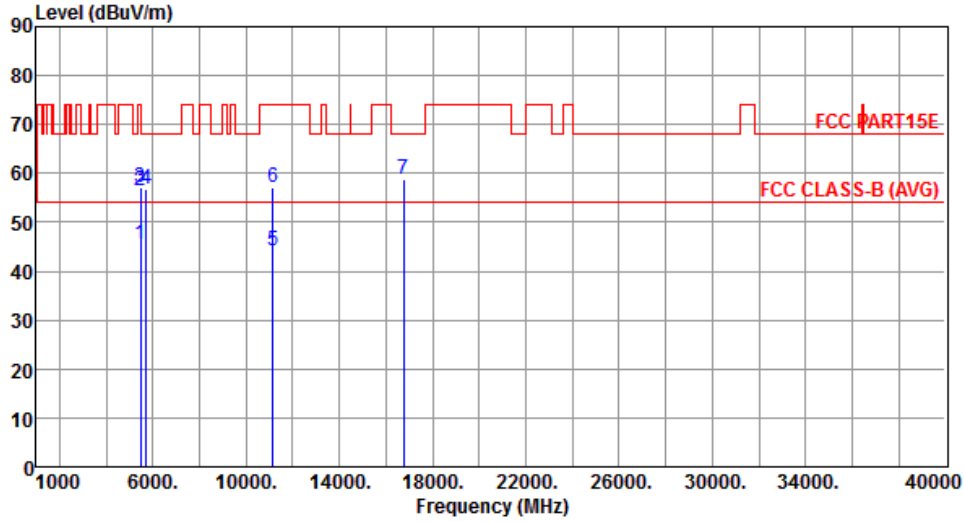
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	46.09	54.00	-7.91	40.78	5.31	Average	196	177
2	5350.00	56.48	74.00	-17.52	51.17	5.31	Peak	196	177
3	10640.00	43.59	54.00	-10.41	29.63	13.96	Average	100	119
4	10640.00	56.78	74.00	-17.22	42.82	13.96	Peak	100	119
5	15960.00	45.28	54.00	-8.72	30.47	14.81	Average	100	183
6	15960.00	57.95	74.00	-16.05	43.14	14.81	Peak	100	183

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Horizontal		
 			

Modulation	VHT20	Test Freq. (MHz)	5500
Polarization	Vertical		
Level (dBUV/m)			

Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Horizontal		

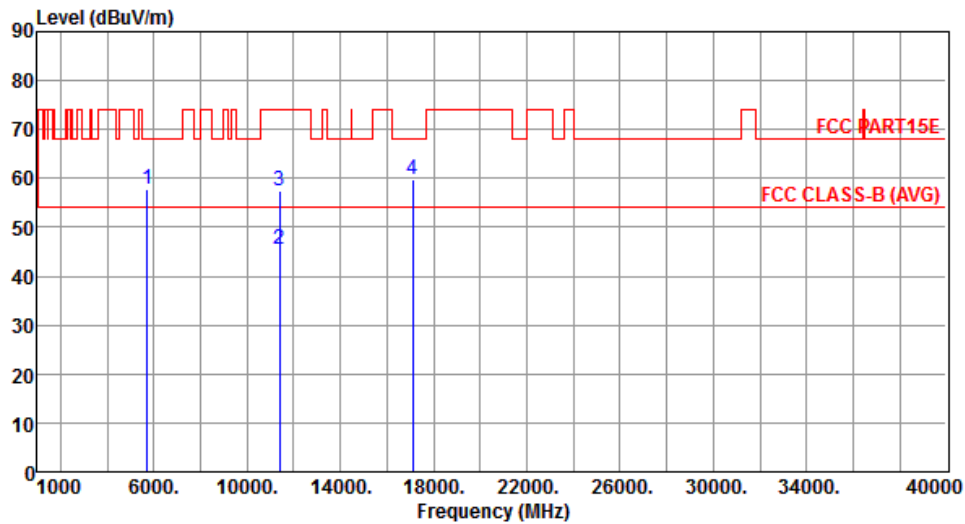


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.62	54.00	-8.38	40.16	5.46	Average	147	123
2	5460.00	56.43	74.00	-17.57	50.97	5.46	Peak	147	123
3	5470.00	57.15	68.20	-11.05	51.68	5.47	Peak	147	123
4	5725.00	56.65	68.20	-11.55	50.84	5.81	Peak	147	123
5	11160.00	44.27	54.00	-9.73	29.83	14.44	Average	100	263
6	11160.00	57.20	74.00	-16.80	42.76	14.44	Peak	100	263
7	16740.00	58.88	68.20	-9.32	42.91	15.97	Peak	192	175

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT20	Test Freq. (MHz)	5580
Polarization	Vertical		
Level (dBUV/m) </			

Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5725.00	57.82	68.20	-10.38	52.01	5.81	Peak	162	149
2	11400.00	45.46	54.00	-8.54	30.81	14.65	Average	100	131
3	11400.00	57.40	74.00	-16.60	42.75	14.65	Peak	100	131
4	17100.00	59.90	68.20	-8.30	43.39	16.51	Peak	100	82

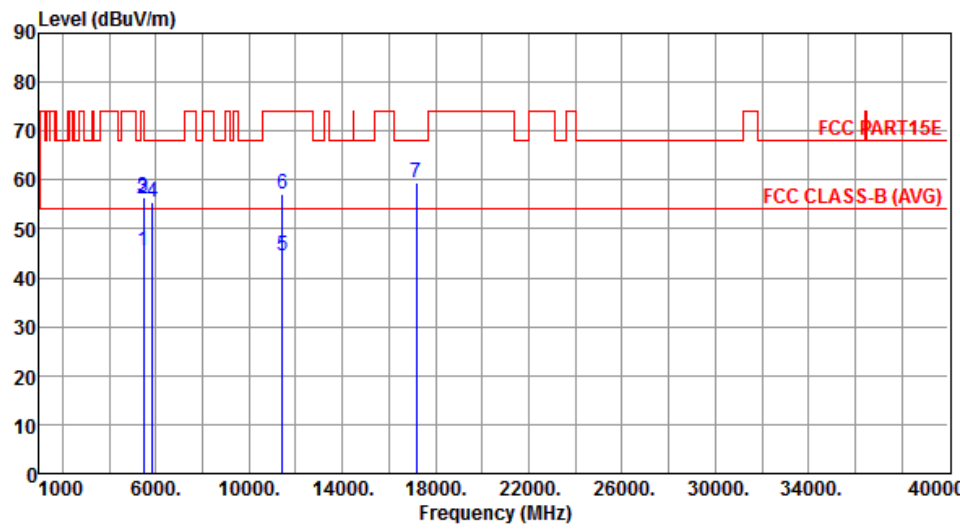
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT20	Test Freq. (MHz)	5700
Polarization	Vertical		
Level (dBuV/m)			

Modulation	VHT20	Test Freq. (MHz)	5720
Polarization	Horizontal		
Level (dBuV/m)			

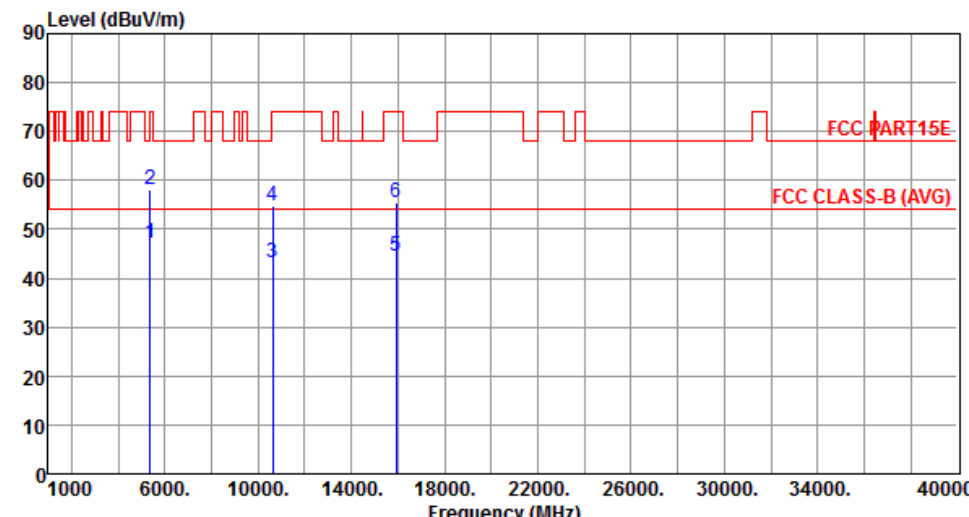
Modulation	VHT20	Test Freq. (MHz)	5720																																																																																										
Polarization	Vertical																																																																																												
Level (dBuV/m)  <table><tr><th></th><th>Freq.</th><th>Emission level</th><th>Limit</th><th>Margin</th><th>SA reading</th><th>Factor</th><th>Remark</th><th>ANT High</th><th>Turn Table</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th></th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5460.00</td><td>45.51</td><td>54.00</td><td>-8.49</td><td>40.05</td><td>5.46</td><td>Average</td><td>202</td><td>170</td></tr><tr><td>2</td><td>5460.00</td><td>56.06</td><td>74.00</td><td>-17.94</td><td>50.60</td><td>5.46</td><td>Peak</td><td>202</td><td>170</td></tr><tr><td>3</td><td>5470.00</td><td>56.36</td><td>68.20</td><td>-11.84</td><td>50.89</td><td>5.47</td><td>Peak</td><td>202</td><td>170</td></tr><tr><td>4</td><td>5850.00</td><td>55.60</td><td>68.20</td><td>-12.60</td><td>49.61</td><td>5.99</td><td>Peak</td><td>202</td><td>170</td></tr><tr><td>5</td><td>11440.00</td><td>44.51</td><td>54.00</td><td>-9.49</td><td>29.82</td><td>14.69</td><td>Average</td><td>100</td><td>145</td></tr><tr><td>6</td><td>11440.00</td><td>57.00</td><td>74.00</td><td>-17.00</td><td>42.31</td><td>14.69</td><td>Peak</td><td>100</td><td>145</td></tr><tr><td>7</td><td>17160.00</td><td>59.33</td><td>68.20</td><td>-8.87</td><td>42.57</td><td>16.76</td><td>Peak</td><td>100</td><td>94</td></tr></table>					Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table		MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg	1	5460.00	45.51	54.00	-8.49	40.05	5.46	Average	202	170	2	5460.00	56.06	74.00	-17.94	50.60	5.46	Peak	202	170	3	5470.00	56.36	68.20	-11.84	50.89	5.47	Peak	202	170	4	5850.00	55.60	68.20	-12.60	49.61	5.99	Peak	202	170	5	11440.00	44.51	54.00	-9.49	29.82	14.69	Average	100	145	6	11440.00	57.00	74.00	-17.00	42.31	14.69	Peak	100	145	7	17160.00	59.33	68.20	-8.87	42.57	16.76	Peak	100	94
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table																																																																																				
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg																																																																																				
1	5460.00	45.51	54.00	-8.49	40.05	5.46	Average	202	170																																																																																				
2	5460.00	56.06	74.00	-17.94	50.60	5.46	Peak	202	170																																																																																				
3	5470.00	56.36	68.20	-11.84	50.89	5.47	Peak	202	170																																																																																				
4	5850.00	55.60	68.20	-12.60	49.61	5.99	Peak	202	170																																																																																				
5	11440.00	44.51	54.00	-9.49	29.82	14.69	Average	100	145																																																																																				
6	11440.00	57.00	74.00	-17.00	42.31	14.69	Peak	100	145																																																																																				
7	17160.00	59.33	68.20	-8.87	42.57	16.76	Peak	100	94																																																																																				
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).																																																																																													

3.5.22 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT40

Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT40	Test Freq. (MHz)	5270
Polarization	Vertical		
Level (dBuV/m)			

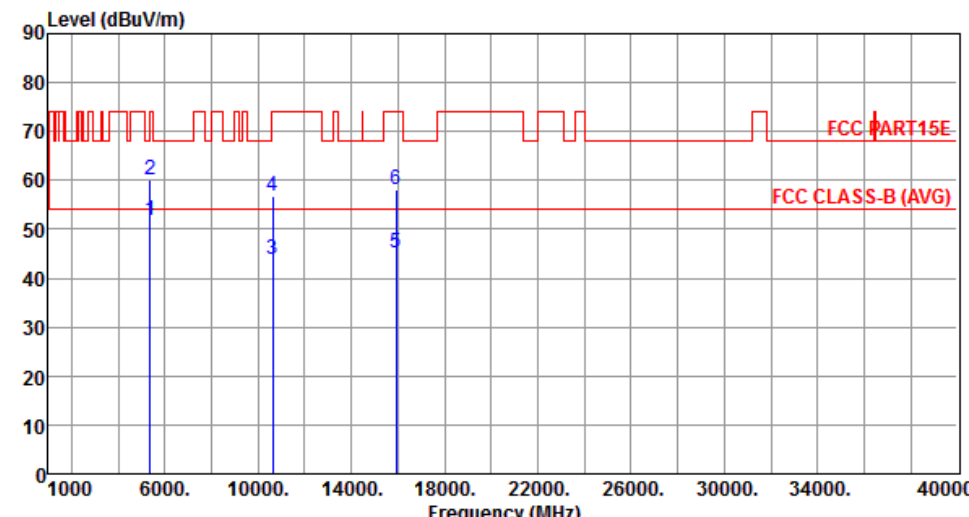
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	47.05	54.00	-6.95	41.74	5.31	Average	161	149
2	5350.00	58.14	74.00	-15.86	52.83	5.31	Peak	161	149
3	10620.00	43.25	54.00	-10.75	29.32	13.93	Average	100	303
4	10620.00	54.72	74.00	-19.28	40.79	13.93	Peak	100	303
5	15930.00	44.54	54.00	-9.46	29.72	14.82	Average	100	157
6	15930.00	55.45	74.00	-18.55	40.63	14.82	Peak	100	157

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

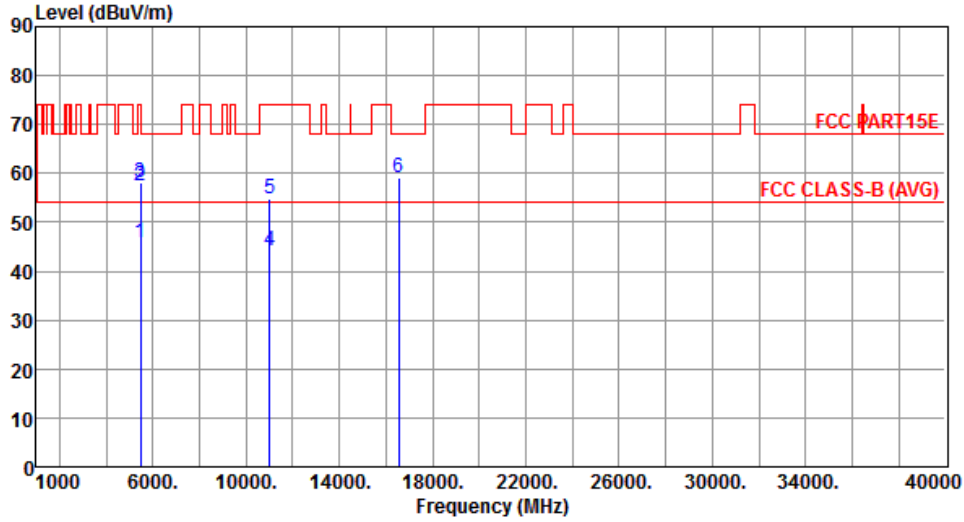
Modulation	VHT40	Test Freq. (MHz)	5310
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5350.00	51.93	54.00	-2.07	46.62	5.31	Average	198	173
2	5350.00	60.08	74.00	-13.92	54.77	5.31	Peak	198	173
3	10620.00	43.99	54.00	-10.01	30.06	13.93	Average	100	169
4	10620.00	56.69	74.00	-17.31	42.76	13.93	Peak	100	169
5	15930.00	45.04	54.00	-8.96	30.22	14.82	Average	100	124
6	15930.00	58.08	74.00	-15.92	43.26	14.82	Peak	100	124

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

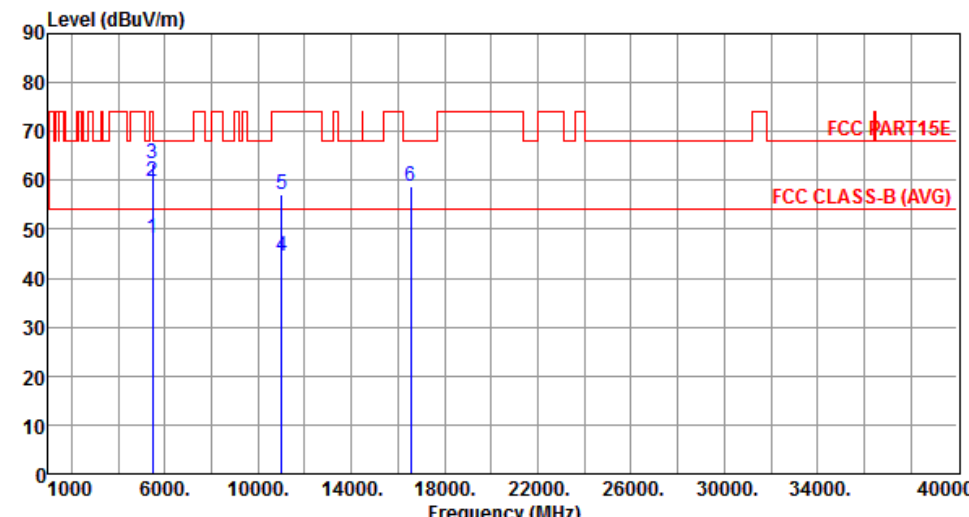
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.85	54.00	-8.15	40.39	5.46	Average	155	283
2	5460.00	57.40	74.00	-16.60	51.94	5.46	Peak	155	283
3	5470.00	58.20	68.20	-10.00	52.73	5.47	Peak	155	283
4	11020.00	44.07	54.00	-9.93	29.75	14.32	Average	100	146
5	11020.00	54.93	74.00	-19.07	40.61	14.32	Peak	100	146
6	16530.00	59.12	68.20	-9.08	43.27	15.85	Peak	100	195

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

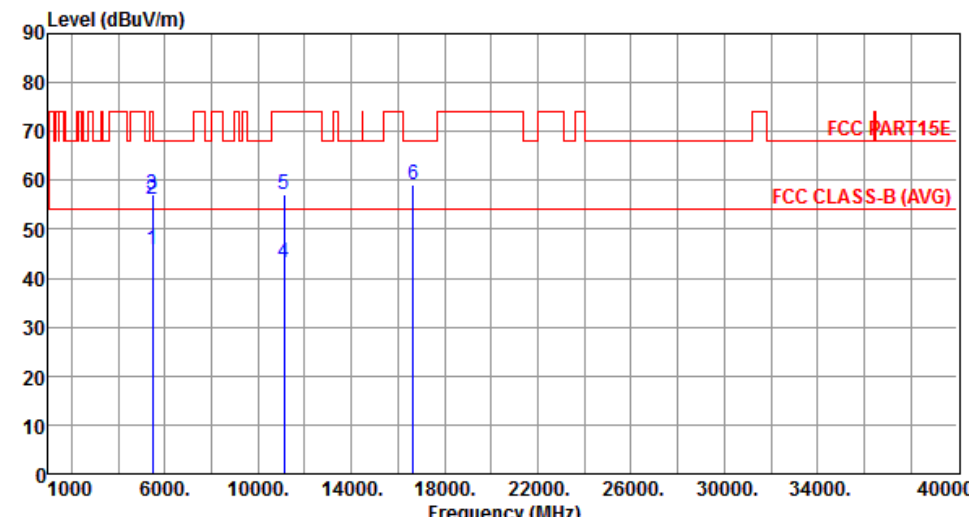
Modulation	VHT40	Test Freq. (MHz)	5510
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	48.24	54.00	-5.76	42.78	5.46	Average	199	174
2	5460.00	59.77	74.00	-14.23	54.31	5.46	Peak	199	174
3	5470.00	63.42	68.20	-4.78	57.95	5.47	Peak	199	174
4	11020.00	44.40	54.00	-9.60	30.08	14.32	Average	100	163
5	11020.00	57.28	74.00	-16.72	42.96	14.32	Peak	100	163
6	16530.00	58.95	68.20	-9.25	43.10	15.85	Peak	100	91

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

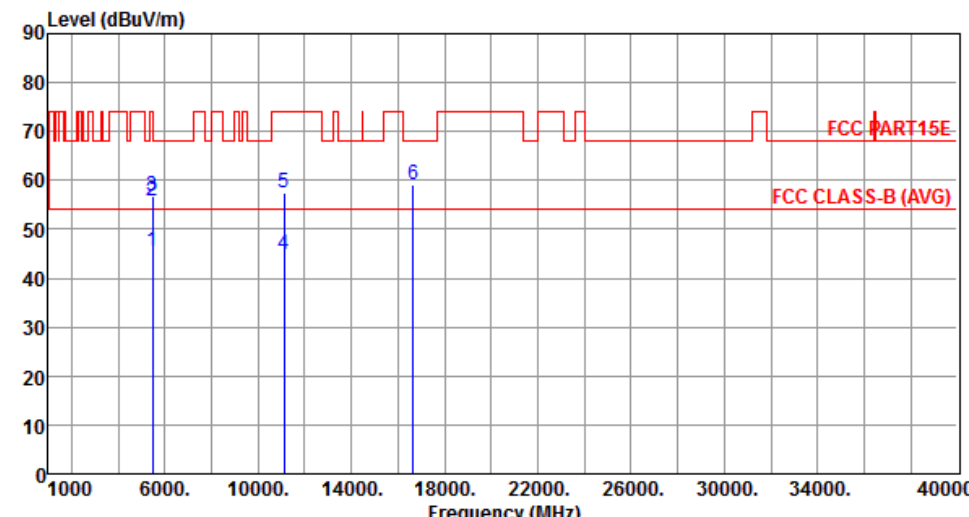
Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.69	54.00	-8.31	40.23	5.46	Average	162	257
2	5460.00	56.05	74.00	-17.95	50.59	5.46	Peak	162	257
3	5470.00	57.09	68.20	-11.11	51.62	5.47	Peak	162	257
4	11100.00	43.20	54.00	-10.80	28.81	14.39	Average	100	141
5	11100.00	57.12	74.00	-16.88	42.73	14.39	Peak	100	141
6	16650.00	58.98	68.20	-9.22	43.06	15.92	Peak	100	169

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5550
Polarization	Vertical		

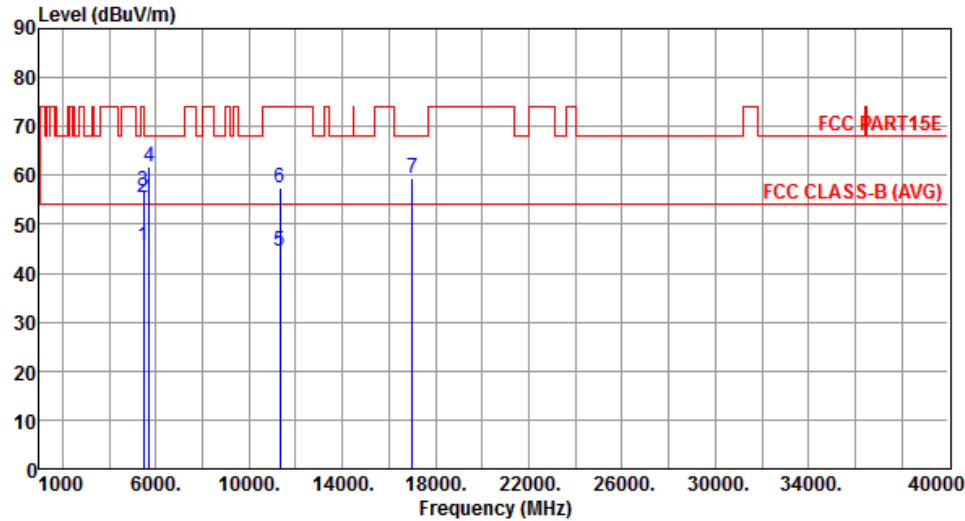


	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.54	54.00	-8.46	40.08	5.46	Average	195	173
2	5460.00	55.87	74.00	-18.13	50.41	5.46	Peak	195	173
3	5470.00	56.68	68.20	-11.52	51.21	5.47	Peak	195	173
4	11100.00	44.86	54.00	-9.14	30.47	14.39	Average	100	197
5	11100.00	57.60	74.00	-16.40	43.21	14.39	Peak	100	197
6	16650.00	59.21	68.20	-8.99	43.29	15.92	Peak	100	155

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Horizontal		
Level (dBuV/m)			

Modulation	VHT40	Test Freq. (MHz)	5670
Polarization	Vertical		



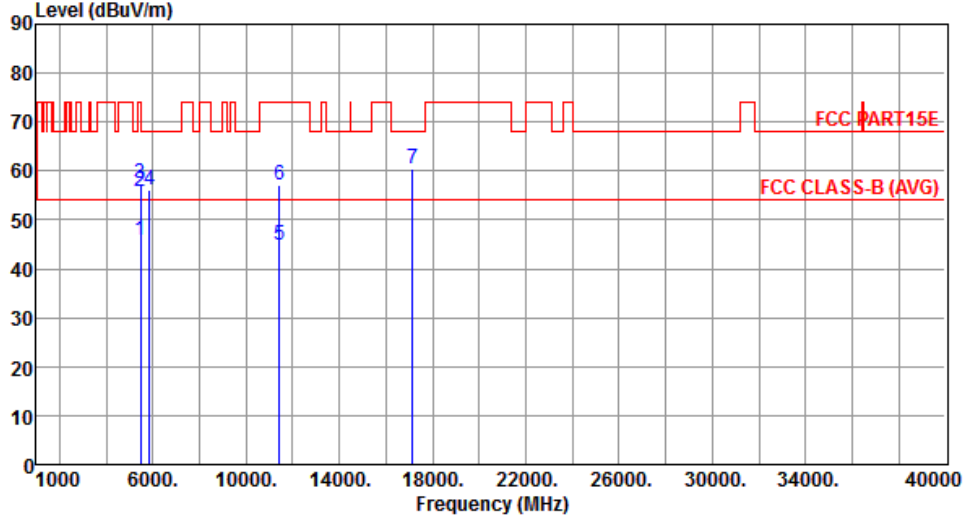
The spectrum plot shows the emission level in dBUV/m across a frequency range from 1000 to 40000 MHz. The y-axis ranges from 0 to 90 dBUV/m. The x-axis ranges from 1000 to 40000 MHz. A red line represents the emission level, which is stepped across different frequency bands. Two horizontal red lines represent the limits: FCC CLASS-B (AVG) at approximately 54 dBUV/m and FCC PART 15E at approximately 68 dBUV/m. Seven specific frequency points are marked with blue vertical lines and labeled 1 through 7.

	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.54	54.00	-8.46	40.08	5.46	Average	198	172
2	5460.00	55.48	74.00	-18.52	50.02	5.46	Peak	198	172
3	5470.00	56.79	68.20	-11.41	51.32	5.47	Peak	198	172
4	5725.00	61.67	68.20	-6.53	55.86	5.81	Peak	198	172
5	11340.00	44.65	54.00	-9.35	30.05	14.60	Average	100	104
6	11340.00	57.51	74.00	-16.49	42.91	14.60	Peak	100	104
7	17010.00	59.53	68.20	-8.67	43.38	16.15	Peak	100	239

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT40	Test Freq. (MHz)	5710
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	45.82	54.00	-8.18	40.36	5.46	Average	193	178
2	5460.00	55.71	74.00	-18.29	50.25	5.46	Peak	193	178
3	5470.00	57.33	68.20	-10.87	51.86	5.47	Peak	193	178
4	5850.00	56.27	68.20	-11.93	50.28	5.99	Peak	193	178
5	11420.00	44.98	54.00	-9.02	30.31	14.67	Average	100	136
6	11420.00	57.25	74.00	-16.75	42.58	14.67	Peak	100	136
7	17130.00	60.56	68.20	-7.64	43.92	16.64	Peak	100	67

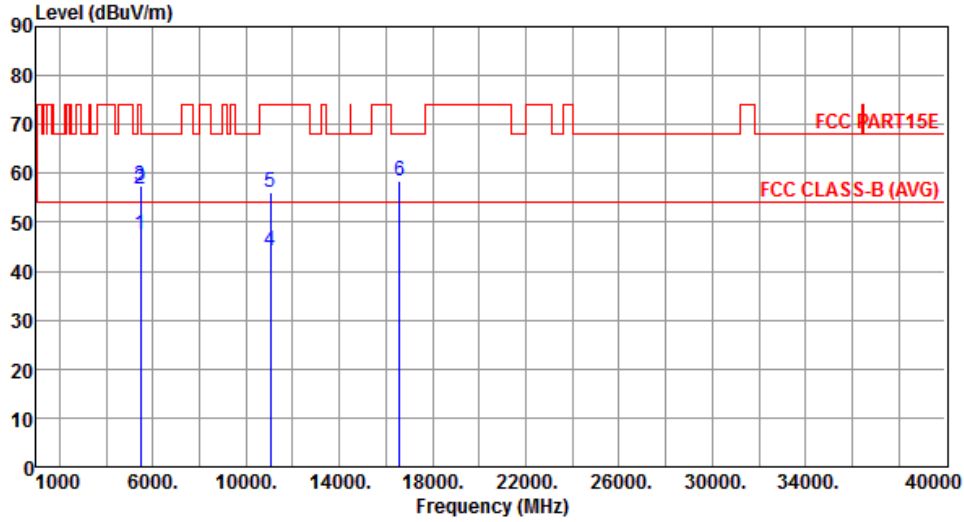
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.23 Transmitter Radiated Unwanted Emissions (Above 1GHz) for VHT80

Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Horizontal		
Level (dBuV/m) </			

Modulation	VHT80	Test Freq. (MHz)	5290
Polarization	Vertical		
Level (dBuV/m)			

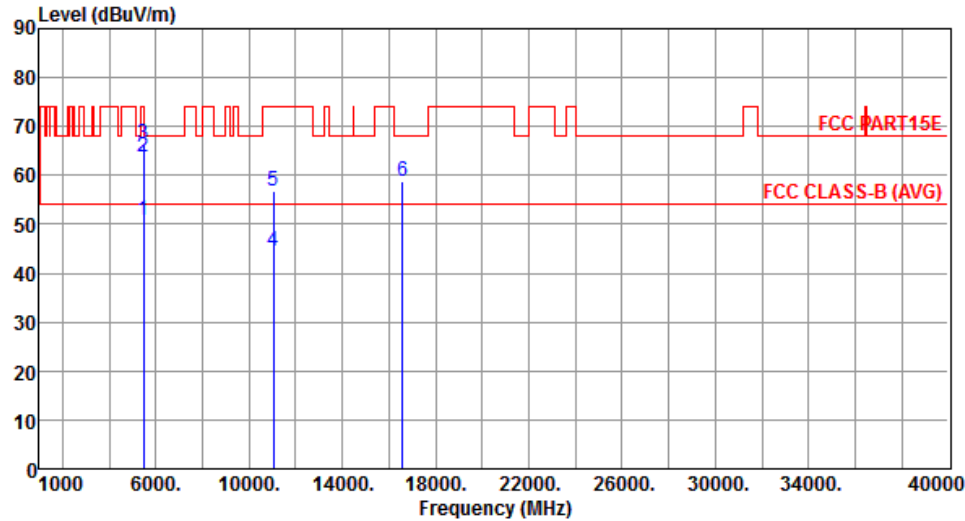
Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Horizontal		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	47.40	54.00	-6.60	41.94	5.46	Average	151	184
2	5460.00	56.83	74.00	-17.17	51.37	5.46	Peak	151	184
3	5470.00	57.43	68.20	-10.77	51.96	5.47	Peak	151	184
4	11060.00	44.07	54.00	-9.93	29.72	14.35	Average	100	127
5	11060.00	56.21	74.00	-17.79	41.86	14.35	Peak	100	127
6	16590.00	58.42	68.20	-9.78	42.54	15.88	Peak	100	193

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80	Test Freq. (MHz)	5530
Polarization	Vertical		

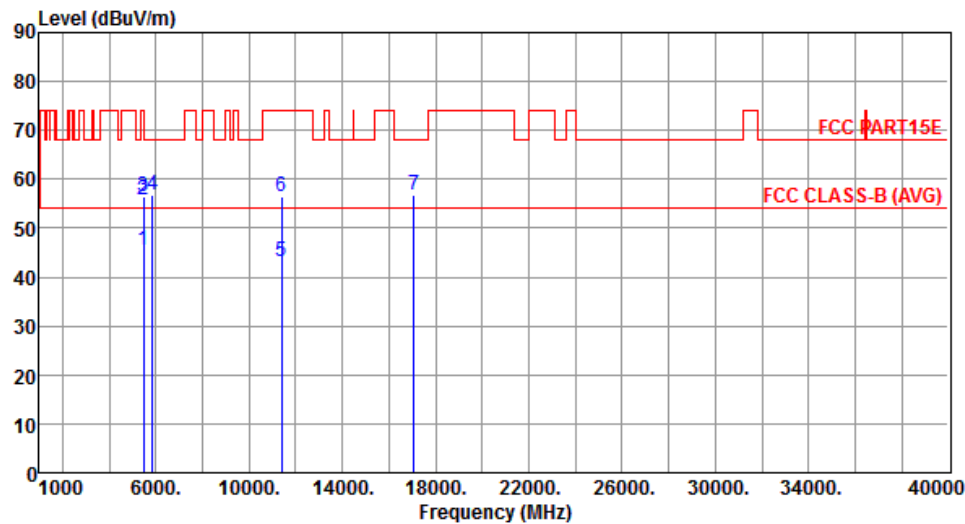


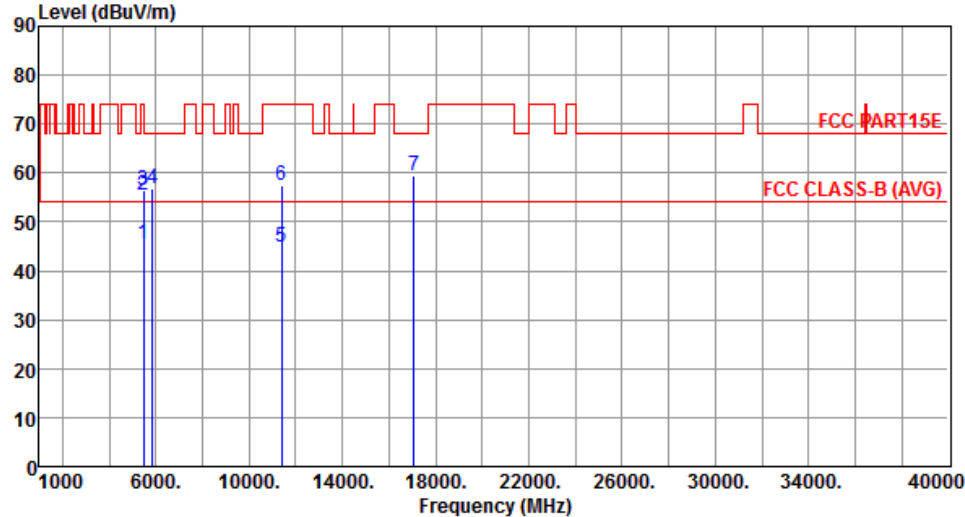
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	50.74	54.00	-3.26	45.28	5.46	Average	192	169
2	5460.00	63.75	74.00	-10.25	58.29	5.46	Peak	192	169
3	5470.00	66.30	68.20	-1.90	60.83	5.47	Peak	192	169
4	11060.00	44.42	54.00	-9.58	30.07	14.35	Average	100	215
5	11060.00	56.64	74.00	-17.36	42.29	14.35	Peak	100	215
6	16590.00	58.90	68.20	-9.30	43.02	15.88	Peak	100	148

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

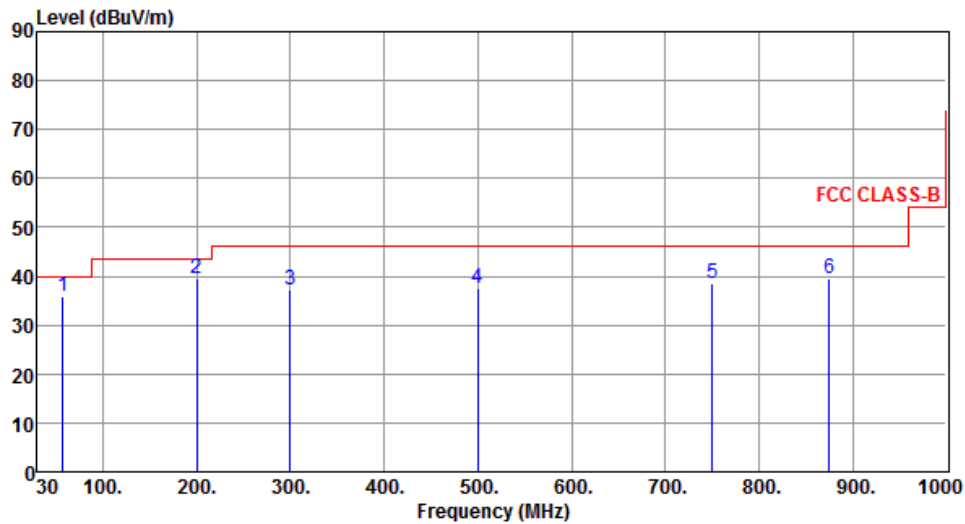
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80	Test Freq. (MHz)	5690																																																																																
Polarization	Horizontal																																																																																		
 <table><thead><tr><th></th><th>Freq. MHz</th><th>Emission level dBUV/m</th><th>Limit dBUV/m</th><th>Margin dB</th><th>SA reading dBUV</th><th>Factor dB</th><th>Remark</th><th>ANT High cm</th><th>Turn Table deg</th></tr></thead><tbody><tr><td>1</td><td>5460.00</td><td>45.54</td><td>54.00</td><td>-8.46</td><td>40.08</td><td>5.46</td><td>Average</td><td>152</td><td>143</td></tr><tr><td>2</td><td>5460.00</td><td>55.68</td><td>74.00</td><td>-18.32</td><td>50.22</td><td>5.46</td><td>Peak</td><td>152</td><td>143</td></tr><tr><td>3</td><td>5470.00</td><td>56.51</td><td>68.20</td><td>-11.69</td><td>51.04</td><td>5.47</td><td>Peak</td><td>152</td><td>143</td></tr><tr><td>4</td><td>5850.00</td><td>56.95</td><td>68.20</td><td>-11.25</td><td>50.96</td><td>5.99</td><td>Peak</td><td>152</td><td>143</td></tr><tr><td>5</td><td>11380.00</td><td>43.31</td><td>54.00</td><td>-10.69</td><td>28.68</td><td>14.63</td><td>Average</td><td>100</td><td>94</td></tr><tr><td>6</td><td>11380.00</td><td>56.49</td><td>74.00</td><td>-17.51</td><td>41.86</td><td>14.63</td><td>Peak</td><td>100</td><td>94</td></tr><tr><td>7</td><td>17070.00</td><td>56.74</td><td>68.20</td><td>-11.46</td><td>40.35</td><td>16.39</td><td>Peak</td><td>100</td><td>162</td></tr></tbody></table>					Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg	1	5460.00	45.54	54.00	-8.46	40.08	5.46	Average	152	143	2	5460.00	55.68	74.00	-18.32	50.22	5.46	Peak	152	143	3	5470.00	56.51	68.20	-11.69	51.04	5.47	Peak	152	143	4	5850.00	56.95	68.20	-11.25	50.96	5.99	Peak	152	143	5	11380.00	43.31	54.00	-10.69	28.68	14.63	Average	100	94	6	11380.00	56.49	74.00	-17.51	41.86	14.63	Peak	100	94	7	17070.00	56.74	68.20	-11.46	40.35	16.39	Peak	100	162
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg																																																																										
1	5460.00	45.54	54.00	-8.46	40.08	5.46	Average	152	143																																																																										
2	5460.00	55.68	74.00	-18.32	50.22	5.46	Peak	152	143																																																																										
3	5470.00	56.51	68.20	-11.69	51.04	5.47	Peak	152	143																																																																										
4	5850.00	56.95	68.20	-11.25	50.96	5.99	Peak	152	143																																																																										
5	11380.00	43.31	54.00	-10.69	28.68	14.63	Average	100	94																																																																										
6	11380.00	56.49	74.00	-17.51	41.86	14.63	Peak	100	94																																																																										
7	17070.00	56.74	68.20	-11.46	40.35	16.39	Peak	100	162																																																																										
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).																																																																																			

Modulation	VHT80	Test Freq. (MHz)	5690																																																																																
Polarization	Vertical																																																																																		
Level (dBuV/m)  Frequency (MHz) <table><thead><tr><th></th><th>Freq. MHz</th><th>Emission level dBuV/m</th><th>Limit dBuV/m</th><th>Margin dB</th><th>SA reading dBuV</th><th>Factor dB</th><th>Remark</th><th>ANT High cm</th><th>Turn Table deg</th></tr></thead><tbody><tr><td>1</td><td>5460.00</td><td>45.59</td><td>54.00</td><td>-8.41</td><td>40.13</td><td>5.46</td><td>Average</td><td>192</td><td>172</td></tr><tr><td>2</td><td>5460.00</td><td>55.51</td><td>74.00</td><td>-18.49</td><td>50.05</td><td>5.46</td><td>Peak</td><td>192</td><td>172</td></tr><tr><td>3</td><td>5470.00</td><td>56.61</td><td>68.20</td><td>-11.59</td><td>51.14</td><td>5.47</td><td>Peak</td><td>192</td><td>172</td></tr><tr><td>4</td><td>5850.00</td><td>56.72</td><td>68.20</td><td>-11.48</td><td>50.73</td><td>5.99</td><td>Peak</td><td>192</td><td>172</td></tr><tr><td>5</td><td>11380.00</td><td>44.98</td><td>54.00</td><td>-9.02</td><td>30.35</td><td>14.63</td><td>Average</td><td>100</td><td>189</td></tr><tr><td>6</td><td>11380.00</td><td>57.37</td><td>74.00</td><td>-16.63</td><td>42.74</td><td>14.63</td><td>Peak</td><td>100</td><td>189</td></tr><tr><td>7</td><td>17070.00</td><td>59.37</td><td>68.20</td><td>-8.83</td><td>42.98</td><td>16.39</td><td>Peak</td><td>100</td><td>153</td></tr></tbody></table> Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).					Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg	1	5460.00	45.59	54.00	-8.41	40.13	5.46	Average	192	172	2	5460.00	55.51	74.00	-18.49	50.05	5.46	Peak	192	172	3	5470.00	56.61	68.20	-11.59	51.14	5.47	Peak	192	172	4	5850.00	56.72	68.20	-11.48	50.73	5.99	Peak	192	172	5	11380.00	44.98	54.00	-9.02	30.35	14.63	Average	100	189	6	11380.00	57.37	74.00	-16.63	42.74	14.63	Peak	100	189	7	17070.00	59.37	68.20	-8.83	42.98	16.39	Peak	100	153
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg																																																																										
1	5460.00	45.59	54.00	-8.41	40.13	5.46	Average	192	172																																																																										
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4	5850.00	56.72	68.20	-11.48	50.73	5.99	Peak	192	172																																																																										
5	11380.00	44.98	54.00	-9.02	30.35	14.63	Average	100	189																																																																										
6	11380.00	57.37	74.00	-16.63	42.74	14.63	Peak	100	189																																																																										
7	17070.00	59.37	68.20	-8.83	42.98	16.39	Peak	100	153																																																																										

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.44	35.76	40.00	-4.24	44.48	-8.72	QP	100	105
2	200.03	39.43	43.50	-4.07	50.66	-11.23	QP	100	152
3	299.72	37.35	46.00	-8.65	45.20	-7.85	Peak	---	---
4	499.53	37.52	46.00	-8.48	40.76	-3.24	Peak	---	---
5	749.82	38.54	46.00	-7.46	36.74	1.80	Peak	---	---
6	874.76	39.53	46.00	-6.47	35.99	3.54	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

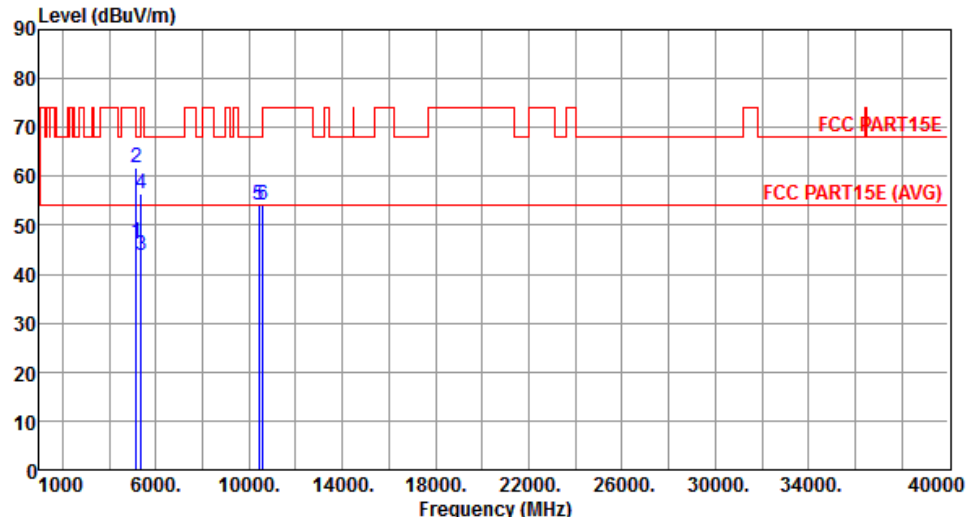
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

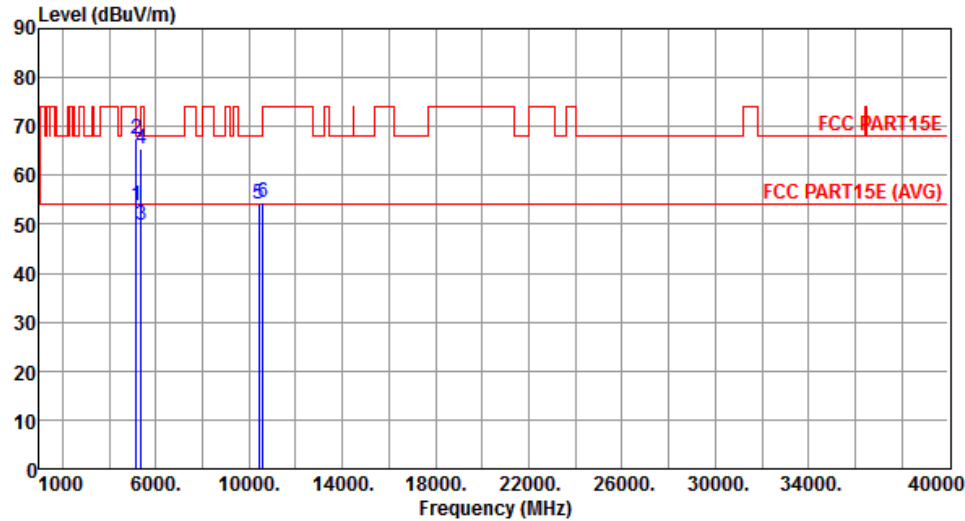
3.5.25 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 1

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH58 (5290 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.47	54.00	-7.53	41.45	5.02	Average	159	197
2	5150.00	61.68	74.00	-12.32	56.66	5.02	Peak	159	197
3	5350.00	43.86	54.00	-10.14	38.55	5.31	Average	155	52
4	5350.00	56.56	74.00	-17.44	51.25	5.31	Peak	155	52
5	10420.00	54.22	68.20	-13.98	40.44	13.78	Peak	100	146
6	10580.00	54.21	68.20	-13.99	40.31	13.90	Peak	100	146

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH58 (5290 MHz)																																																																																																
Polarization	Vertical																																																																																																		
Level (dBuV/m)  Frequency (MHz) <table><thead><tr><th></th><th>Freq.</th><th>Emission</th><th>Limit</th><th>Margin</th><th>SA</th><th>Factor</th><th>Remark</th><th>ANT</th><th>Turn</th></tr><tr><th></th><th>MHz</th><th>level</th><th></th><th></th><th>reading</th><th></th><th></th><th>High</th><th>Table</th></tr><tr><th></th><th></th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th></th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>5150.00</td><td>53.70</td><td>54.00</td><td>-0.30</td><td>48.68</td><td>5.02</td><td>Average</td><td>267</td><td>262</td></tr><tr><td>2</td><td>5150.00</td><td>67.53</td><td>74.00</td><td>-6.47</td><td>62.51</td><td>5.02</td><td>Peak</td><td>267</td><td>262</td></tr><tr><td>3</td><td>5350.00</td><td>49.85</td><td>54.00</td><td>-4.15</td><td>44.54</td><td>5.31</td><td>Average</td><td>186</td><td>54</td></tr><tr><td>4</td><td>5350.00</td><td>65.43</td><td>74.00</td><td>-8.57</td><td>60.12</td><td>5.31</td><td>Peak</td><td>186</td><td>54</td></tr><tr><td>5</td><td>10420.00</td><td>54.03</td><td>68.20</td><td>-14.17</td><td>40.25</td><td>13.78</td><td>Peak</td><td>100</td><td>177</td></tr><tr><td>6</td><td>10580.00</td><td>54.55</td><td>68.20</td><td>-13.65</td><td>40.65</td><td>13.90</td><td>Peak</td><td>100</td><td>163</td></tr></tbody></table>											Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn		MHz	level			reading			High	Table			dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg	1	5150.00	53.70	54.00	-0.30	48.68	5.02	Average	267	262	2	5150.00	67.53	74.00	-6.47	62.51	5.02	Peak	267	262	3	5350.00	49.85	54.00	-4.15	44.54	5.31	Average	186	54	4	5350.00	65.43	74.00	-8.57	60.12	5.31	Peak	186	54	5	10420.00	54.03	68.20	-14.17	40.25	13.78	Peak	100	177	6	10580.00	54.55	68.20	-13.65	40.65	13.90	Peak	100	163
	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn																																																																																										
	MHz	level			reading			High	Table																																																																																										
		dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg																																																																																										
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3	5350.00	49.85	54.00	-4.15	44.54	5.31	Average	186	54																																																																																										
4	5350.00	65.43	74.00	-8.57	60.12	5.31	Peak	186	54																																																																																										
5	10420.00	54.03	68.20	-14.17	40.25	13.78	Peak	100	177																																																																																										
6	10580.00	54.55	68.20	-13.65	40.65	13.90	Peak	100	163																																																																																										
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).																																																																																																			

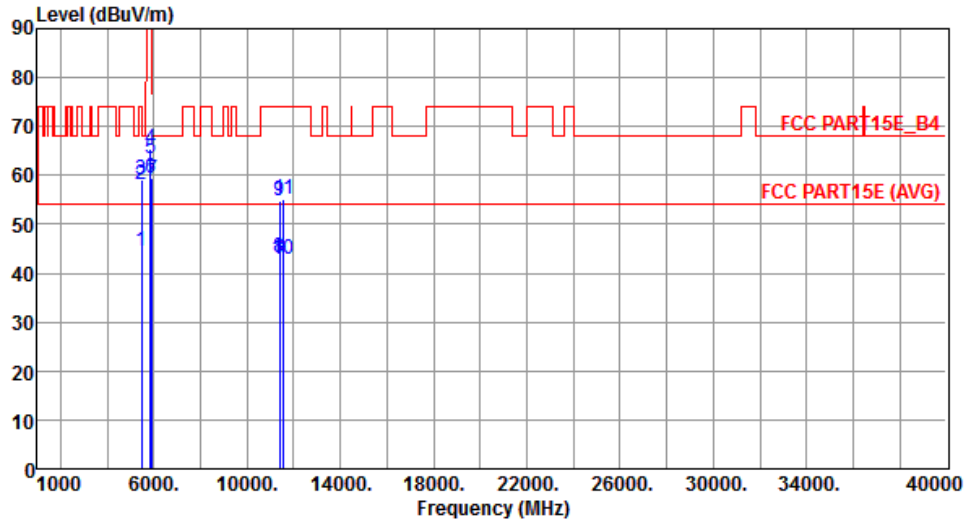
3.5.26 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 2

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH106 (5530 MHz)						
Polarization	Horizontal								

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	43.74	54.00	-10.26	38.28	5.46	Average	149	340
2	5460.00	56.90	74.00	-17.10	51.44	5.46	Peak	149	340
3	5470.00	57.68	68.20	-10.52	52.21	5.47	Peak	149	340
4	5850.00	58.52	122.20	-63.68	52.53	5.99	Peak	202	245
5	5855.00	59.12	110.80	-51.68	53.12	6.00	Peak	202	245
6	5875.00	58.27	105.20	-46.93	52.25	6.02	Peak	202	245
7	5925.00	58.24	68.20	-9.96	52.15	6.09	Peak	202	245
8	11380.00	42.97	54.00	-11.03	28.34	14.63	Average	100	144
9	11380.00	55.08	74.00	-18.92	40.45	14.63	Peak	100	144
10	11550.00	42.93	54.00	-11.07	28.29	14.64	Average	100	168
11	11550.00	55.19	74.00	-18.81	40.55	14.64	Peak	100	168

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH106 (5530 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	44.36	54.00	-9.64	38.90	5.46	Average	244	197
2	5460.00	58.02	74.00	-15.98	52.56	5.46	Peak	244	197
3	5470.00	59.15	68.20	-9.05	53.68	5.47	Peak	244	197
4	5850.00	65.44	122.20	-56.76	59.45	5.99	Peak	166	1
5	5855.00	63.56	110.80	-47.24	57.56	6.00	Peak	166	1
6	5875.00	59.57	105.20	-45.63	53.55	6.02	Peak	166	1
7	5925.00	59.20	68.20	-9.00	53.11	6.09	Peak	166	1
8	11380.00	43.01	54.00	-10.99	28.38	14.63	Average	100	168
9	11380.00	54.90	74.00	-19.10	40.27	14.63	Peak	100	168
10	11550.00	42.99	54.00	-11.01	28.35	14.64	Average	100	163
11	11550.00	55.16	74.00	-18.84	40.52	14.64	Peak	100	163

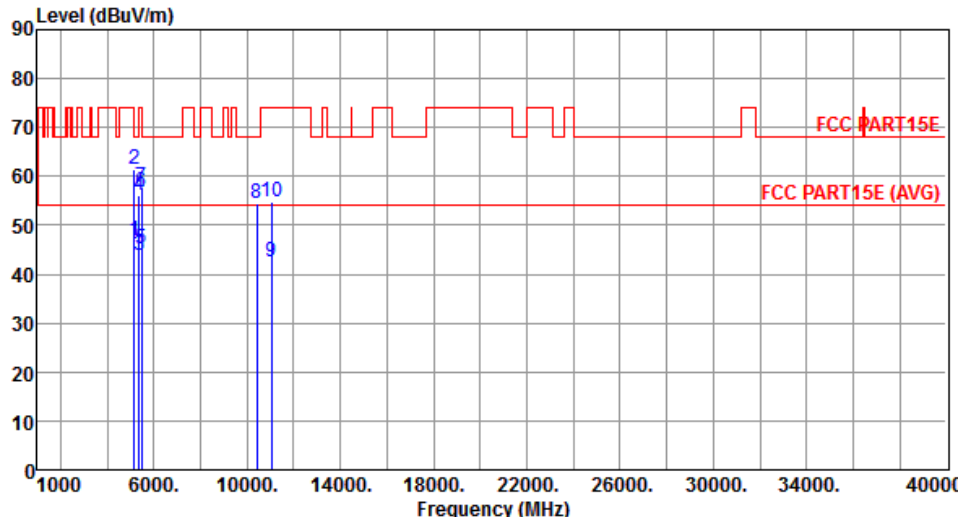
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.27 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 3

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH138 (5690 MHz)						
Polarization	Horizontal								



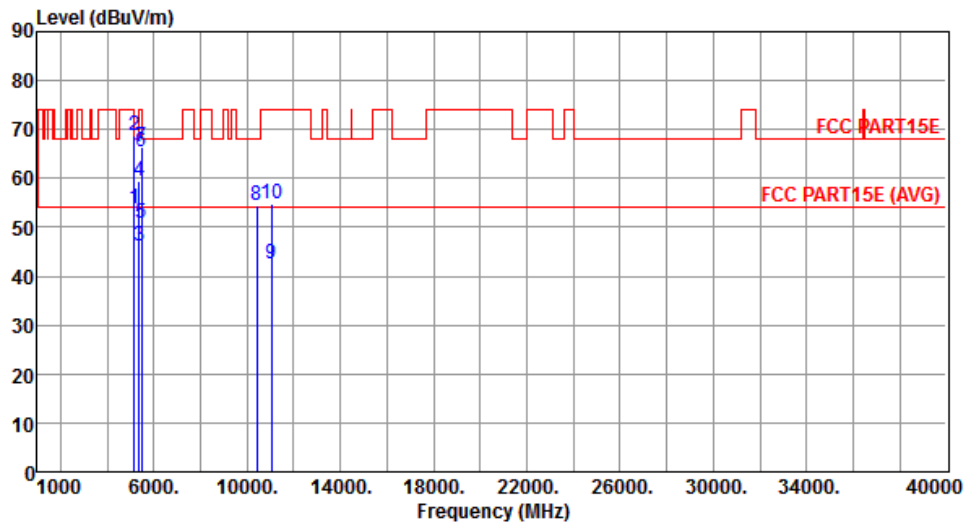
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.89	54.00	-7.11	41.87	5.02	Average	154	337
2	5150.00	61.38	74.00	-12.62	56.36	5.02	Peak	154	337
3	5350.00	43.94	54.00	-10.06	38.63	5.31	Average	154	337
4	5350.00	56.15	74.00	-17.85	50.84	5.31	Peak	154	335
5	5460.00	45.23	54.00	-8.77	39.77	5.46	Average	154	106
6	5460.00	56.81	74.00	-17.19	51.35	5.46	Peak	154	106
7	5470.00	57.83	68.20	-10.37	52.36	5.47	Peak	154	106
8	10420.00	54.34	68.20	-13.86	40.56	13.78	Peak	100	133
9	11060.00	42.59	54.00	-11.41	28.24	14.35	Average	100	168
10	11060.00	54.96	74.00	-19.04	40.61	14.35	Peak	100	168

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH138 (5690 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.67	54.00	-0.33	48.65	5.02	Average	206	234
2	5150.00	68.88	74.00	-5.12	63.86	5.02	Peak	206	234
3	5350.00	46.32	54.00	-7.68	41.01	5.31	Average	206	234
4	5350.00	59.59	74.00	-14.41	54.28	5.31	Peak	206	234
5	5460.00	50.67	54.00	-3.33	45.21	5.46	Average	136	0
6	5460.00	65.52	74.00	-8.48	60.06	5.46	Peak	136	0
7	5470.00	66.29	68.20	-1.91	60.82	5.47	Peak	136	0
8	10420.00	54.32	68.20	-13.88	40.54	13.78	Peak	100	175
9	11060.00	42.58	54.00	-11.42	28.23	14.35	Average	100	116
10	11060.00	54.78	74.00	-19.22	40.43	14.35	Peak	100	116

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.28 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 4

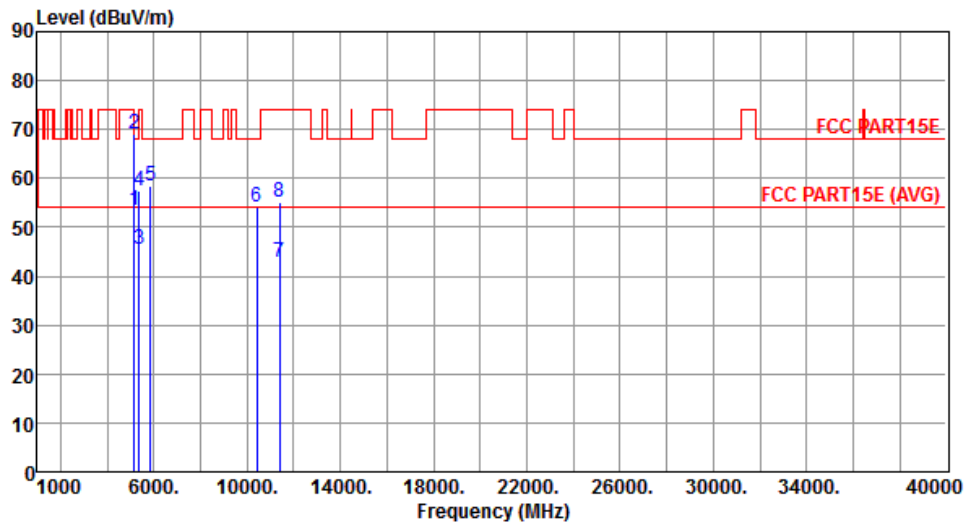
Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								

The spectrum plot shows the emission level in dBuV/m across a frequency range from 1000 to 40000 MHz. The y-axis ranges from 0 to 90 dBuV/m. The x-axis ranges from 1000 to 40000 MHz. The plot displays a stepped limit line (FCC PART15E) and a flat average limit line (FCC PART15E (AVG)). Test results are shown as vertical blue lines with labels 1 through 8.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.77	54.00	-7.23	41.75	5.02	Average	153	335
2	5150.00	61.23	74.00	-12.77	56.21	5.02	Peak	153	335
3	5350.00	43.84	54.00	-10.16	38.53	5.31	Average	153	335
4	5350.00	56.33	74.00	-17.67	51.02	5.31	Peak	153	335
5	5850.00	58.28	68.20	-9.92	52.29	5.99	Peak	207	252
6	10420.00	54.06	68.20	-14.14	40.28	13.78	Peak	100	156
7	11380.00	42.79	54.00	-11.21	28.16	14.63	Average	100	163
8	11380.00	54.94	74.00	-19.06	40.31	14.63	Peak	100	163

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH42 (5210 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.62	54.00	-0.38	48.60	5.02	Average	206	235
2	5150.00	69.14	74.00	-4.86	64.12	5.02	Peak	206	235
3	5350.00	45.43	54.00	-8.57	40.12	5.31	Average	206	235
4	5350.00	57.56	74.00	-16.44	52.25	5.31	Peak	206	235
5	5850.00	58.33	68.20	-9.87	52.34	5.99	Peak	168	4
6	10420.00	54.16	68.20	-14.04	40.38	13.78	Peak	100	172
7	11380.00	42.79	54.00	-11.21	28.16	14.63	Average	100	158
8	11380.00	54.98	74.00	-19.02	40.35	14.63	Peak	100	158

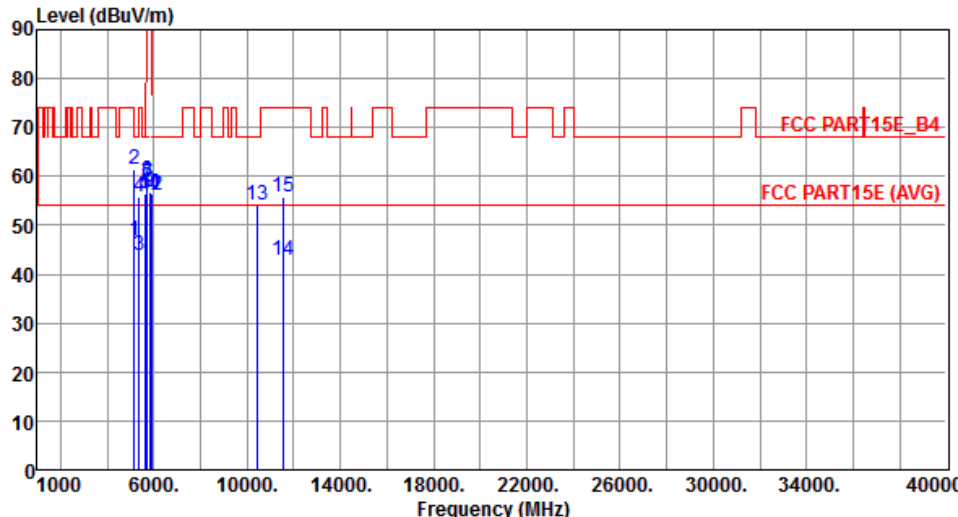
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.29 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 5

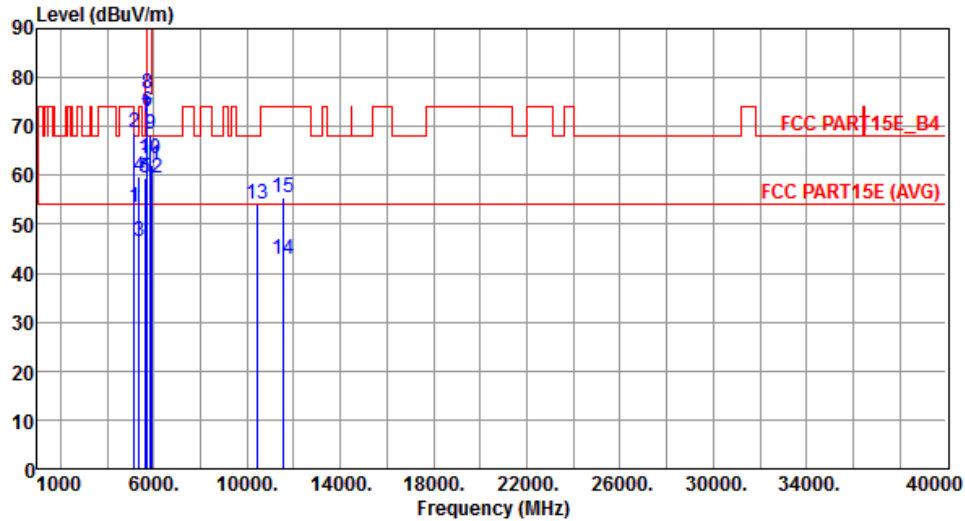
Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH106 (5530 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	46.78	54.00	-7.22	41.76	5.02	Average	152	336
2	5150.00	61.43	74.00	-12.57	56.41	5.02	Peak	152	336
3	5350.00	43.76	54.00	-10.24	38.45	5.31	Average	152	336
4	5350.00	55.74	74.00	-18.26	50.43	5.31	Peak	152	336
5	5650.00	56.30	68.20	-11.90	50.61	5.69	Peak	193	69
6	5700.00	58.75	105.20	-46.45	52.98	5.77	Peak	193	69
7	5720.00	58.31	110.80	-52.49	52.52	5.79	Peak	193	69
8	5725.00	59.21	122.20	-62.99	53.40	5.81	Peak	193	69
9	5850.00	56.89	122.20	-65.31	50.90	5.99	Peak	193	69
10	5855.00	56.60	110.80	-54.20	50.60	6.00	Peak	193	69
11	5875.00	56.37	105.20	-48.83	50.35	6.02	Peak	193	69
12	5925.00	56.19	68.20	-12.01	50.10	6.09	Peak	193	69
13	10420.00	54.02	68.20	-14.18	40.24	13.78	Peak	100	152
14	11550.00	42.88	54.00	-11.12	28.24	14.64	Average	100	165
15	11550.00	55.95	74.00	-18.05	41.31	14.64	Peak	100	165

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH106 (5530 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	53.52	54.00	-0.48	48.50	5.02	Average	206	233
2	5150.00	68.91	74.00	-5.09	63.89	5.02	Peak	206	233
3	5350.00	46.45	54.00	-7.55	41.14	5.31	Average	206	233
4	5350.00	59.62	74.00	-14.38	54.31	5.31	Peak	206	233
5	5650.00	59.53	68.20	-8.67	53.84	5.69	Peak	166	1
6	5700.00	73.18	105.20	-32.02	67.41	5.77	Peak	166	1
7	5720.00	71.89	110.80	-38.91	66.10	5.79	Peak	166	1
8	5725.00	76.59	122.20	-45.61	70.78	5.81	Peak	166	1
9	5850.00	68.44	122.20	-53.76	62.45	5.99	Peak	166	1
10	5855.00	63.46	110.80	-47.34	57.46	6.00	Peak	166	1
11	5875.00	62.23	105.20	-42.97	56.21	6.02	Peak	166	1
12	5925.00	59.51	68.20	-8.69	53.42	6.09	Peak	166	1
13	10420.00	54.23	68.20	-13.97	40.45	13.78	Peak	100	177
14	11550.00	43.00	54.00	-11.00	28.36	14.64	Average	100	145
15	11550.00	55.39	74.00	-18.61	40.75	14.64	Peak	100	145

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

3.5.30 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 6

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH138 (5690 MHz)						
Polarization	Horizontal								

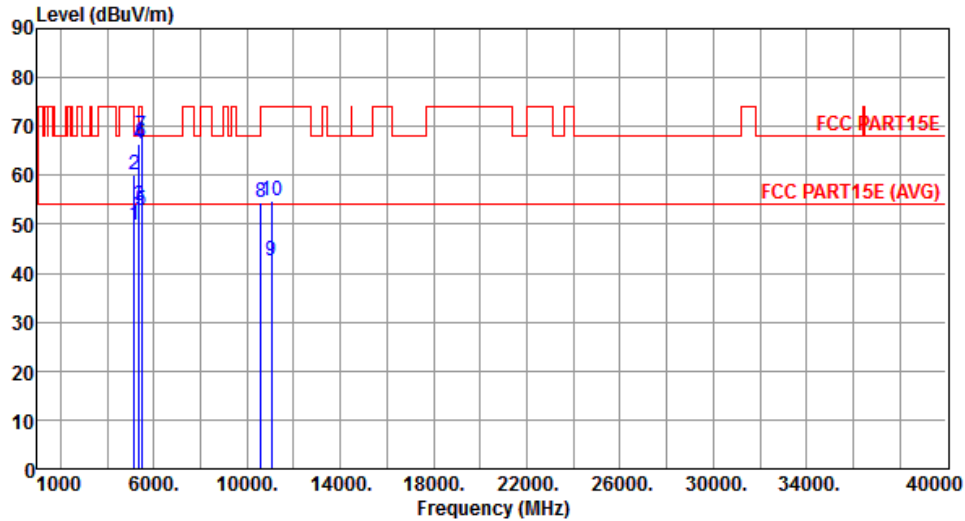
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.61	54.00	-8.39	40.59	5.02	Average	228	287
2	5150.00	57.37	74.00	-16.63	52.35	5.02	Peak	228	287
3	5350.00	45.98	54.00	-8.02	40.67	5.31	Average	228	287
4	5350.00	57.60	74.00	-16.40	52.29	5.31	Peak	228	287
5	5460.00	44.77	54.00	-9.23	39.31	5.46	Average	192	79
6	5460.00	57.58	74.00	-16.42	52.12	5.46	Peak	192	79
7	5470.00	58.82	68.20	-9.38	53.35	5.47	Peak	192	79
8	10580.00	54.62	68.20	-13.58	40.72	13.90	Peak	100	166
9	11060.00	42.59	54.00	-11.41	28.24	14.35	Average	100	138
10	11060.00	54.84	74.00	-19.16	40.49	14.35	Peak	100	138

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH138 (5690 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.79	54.00	-4.21	44.77	5.02	Average	275	9
2	5150.00	60.22	74.00	-13.78	55.20	5.02	Peak	275	9
3	5350.00	53.76	54.00	-0.24	48.45	5.31	Average	275	9
4	5350.00	66.36	74.00	-7.64	61.05	5.31	Peak	275	9
5	5460.00	52.79	54.00	-1.21	47.33	5.46	Average	119	1
6	5460.00	66.68	74.00	-7.32	61.22	5.46	Peak	119	1
7	5470.00	68.02	68.20	-0.18	62.55	5.47	Peak	119	1
8	10580.00	54.41	68.20	-13.79	40.51	13.90	Peak	100	165
9	11060.00	42.63	54.00	-11.37	28.28	14.35	Average	100	148
10	11060.00	54.79	74.00	-19.21	40.44	14.35	Peak	100	148

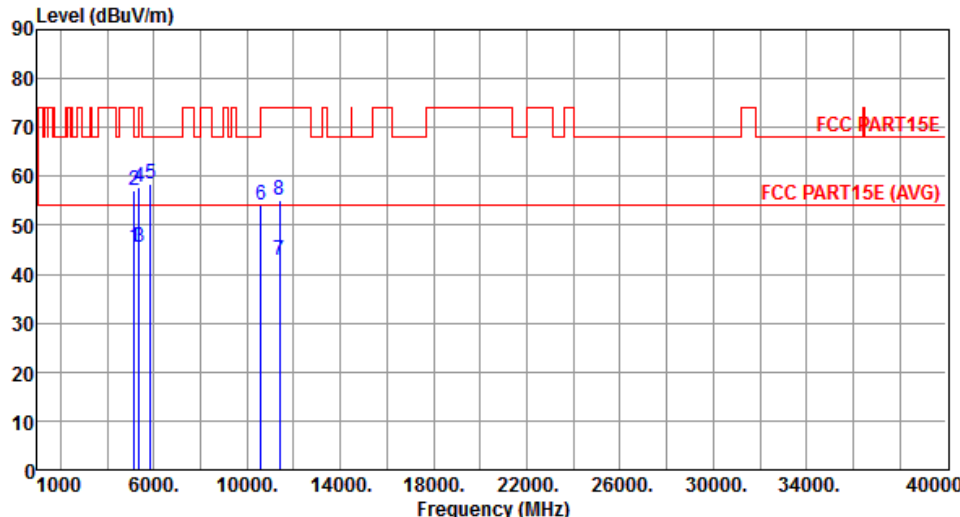
Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

3.5.31 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 7

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								



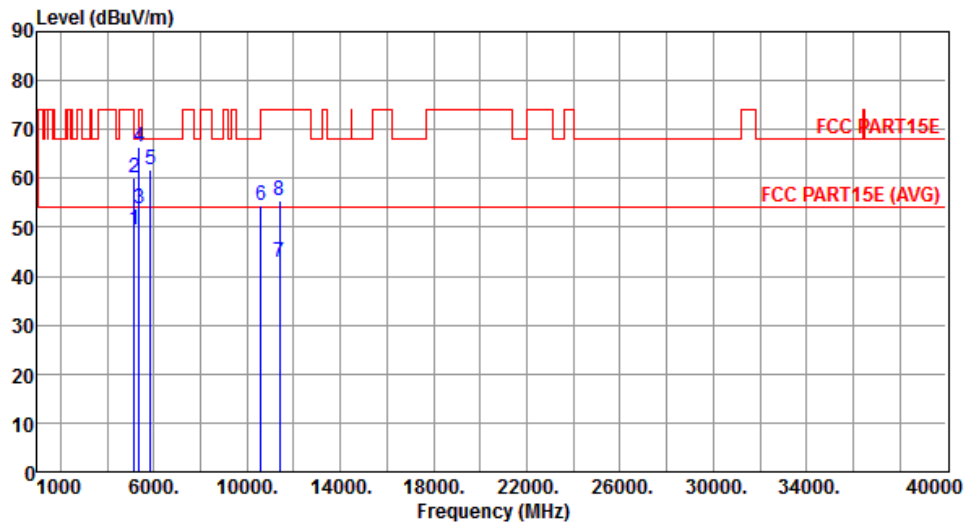
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.53	54.00	-8.47	40.51	5.02	Average	228	285
2	5150.00	57.18	74.00	-16.82	52.16	5.02	Peak	228	285
3	5350.00	45.66	54.00	-8.34	40.35	5.31	Average	228	285
4	5350.00	57.72	74.00	-16.28	52.41	5.31	Peak	228	285
5	5850.00	58.59	68.20	-9.61	52.60	5.99	Peak	220	239
6	10580.00	54.28	68.20	-13.92	40.38	13.90	Peak	100	158
7	11380.00	42.89	54.00	-11.11	28.26	14.63	Average	100	175
8	11380.00	55.01	74.00	-18.99	40.38	14.63	Peak	100	175

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH58 (5290 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	49.53	54.00	-4.47	44.51	5.02	Average	274	9
2	5150.00	60.23	74.00	-13.77	55.21	5.02	Peak	274	9
3	5350.00	53.74	54.00	-0.26	48.43	5.31	Average	274	9
4	5350.00	66.53	74.00	-7.47	61.22	5.31	Peak	274	9
5	5850.00	61.76	68.20	-6.44	55.77	5.99	Peak	158	342
6	10580.00	54.46	68.20	-13.74	40.56	13.90	Peak	100	137
7	11380.00	42.77	54.00	-11.23	28.14	14.63	Average	100	155
8	11380.00	55.36	74.00	-18.64	40.73	14.63	Peak	100	155

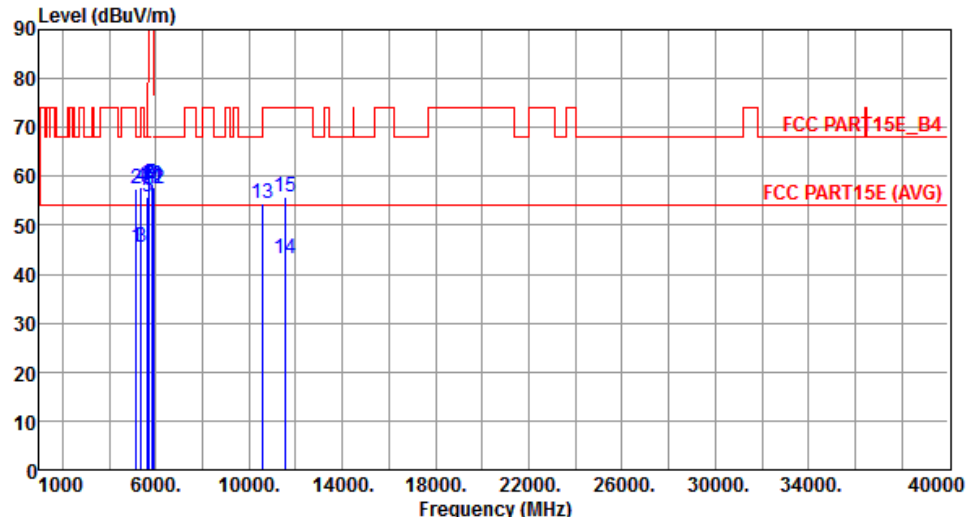
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

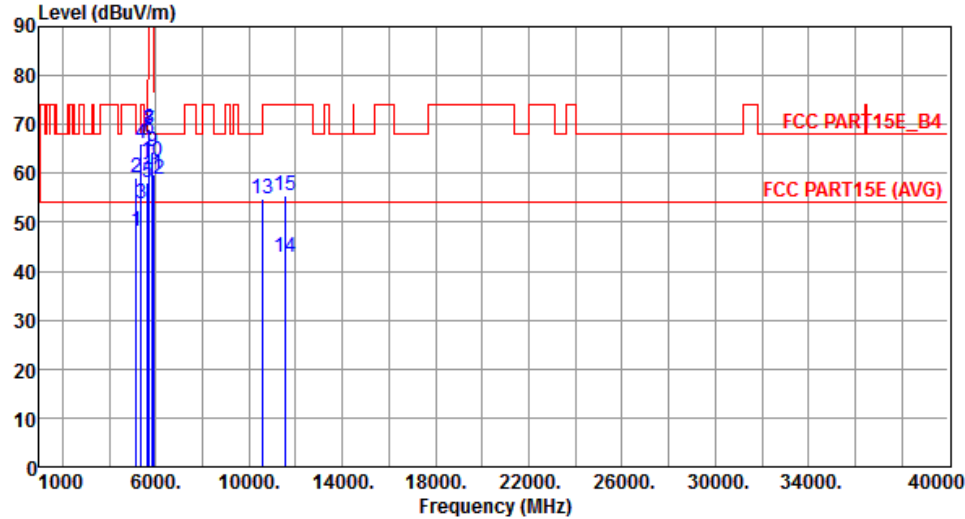
3.5.32 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 8

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH138 (5690 MHz)						
Polarization	Horizontal								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5150.00	45.40	54.00	-8.60	40.38	5.02	Average	225	286
2	5150.00	57.43	74.00	-16.57	52.41	5.02	Peak	225	286
3	5350.00	45.62	54.00	-8.38	40.31	5.31	Average	225	286
4	5350.00	57.67	74.00	-16.33	52.36	5.31	Peak	225	286
5	5650.00	55.81	68.20	-12.39	50.12	5.69	Peak	203	248
6	5700.00	57.00	105.20	-48.20	51.23	5.77	Peak	203	248
7	5720.00	58.11	110.80	-52.69	52.32	5.79	Peak	203	248
8	5725.00	58.29	122.20	-63.91	52.48	5.81	Peak	203	248
9	5850.00	58.43	122.20	-63.77	52.44	5.99	Peak	203	248
10	5855.00	58.12	110.80	-52.68	52.12	6.00	Peak	203	248
11	5875.00	57.88	105.20	-47.32	51.86	6.02	Peak	203	248
12	5925.00	57.51	68.20	-10.69	51.42	6.09	Peak	203	248
13	10580.00	54.46	68.20	-13.74	40.56	13.90	Peak	100	175
14	11550.00	43.02	54.00	-10.98	28.38	14.64	Average	100	155
15	11550.00	55.69	74.00	-18.31	41.05	14.64	Peak	100	155

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH138 (5690 MHz)						
Polarization	Vertical								
									
	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
	MHz	level			reading			High	Table
		dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	5150.00	48.30	54.00	-5.70	43.28	5.02	Average	272	10
2	5150.00	59.23	74.00	-14.77	54.21	5.02	Peak	272	10
3	5350.00	53.80	54.00	-0.20	48.49	5.31	Average	272	10
4	5350.00	66.19	74.00	-7.81	60.88	5.31	Peak	272	10
5	5650.00	58.19	68.20	-10.01	52.50	5.69	Peak	162	0
6	5700.00	67.14	105.20	-38.06	61.37	5.77	Peak	162	0
7	5720.00	68.63	110.80	-42.17	62.84	5.79	Peak	162	0
8	5725.00	68.96	122.20	-53.24	63.15	5.81	Peak	162	0
9	5850.00	64.35	122.20	-57.85	58.36	5.99	Peak	162	0
10	5855.00	62.42	110.80	-48.38	56.42	6.00	Peak	162	0
11	5875.00	59.63	105.20	-45.57	53.61	6.02	Peak	162	0
12	5925.00	58.91	68.20	-9.29	52.82	6.09	Peak	162	0
13	10580.00	54.65	68.20	-13.55	40.75	13.90	Peak	100	162
14	11550.00	42.99	54.00	-11.01	28.35	14.64	Average	100	172
15	11550.00	55.40	74.00	-18.60	40.76	14.64	Peak	100	172

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.33 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 9

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								

The spectrum plot displays the emission level in dBuV/m across a frequency range from 1000 to 40000 MHz. The stepped limit line (FCC PART15E) starts at 70 dBuV/m from 1000 to 6000 MHz, then steps down to 68 dBuV/m from 6000 to 11000 MHz, and finally to 60 dBuV/m from 11000 to 40000 MHz. The average limit line (FCC PART15E (AVG)) is a constant horizontal line at 55 dBuV/m. Test results are shown as vertical lines with values 34, 68, and 57, indicating the emission level at specific frequencies.

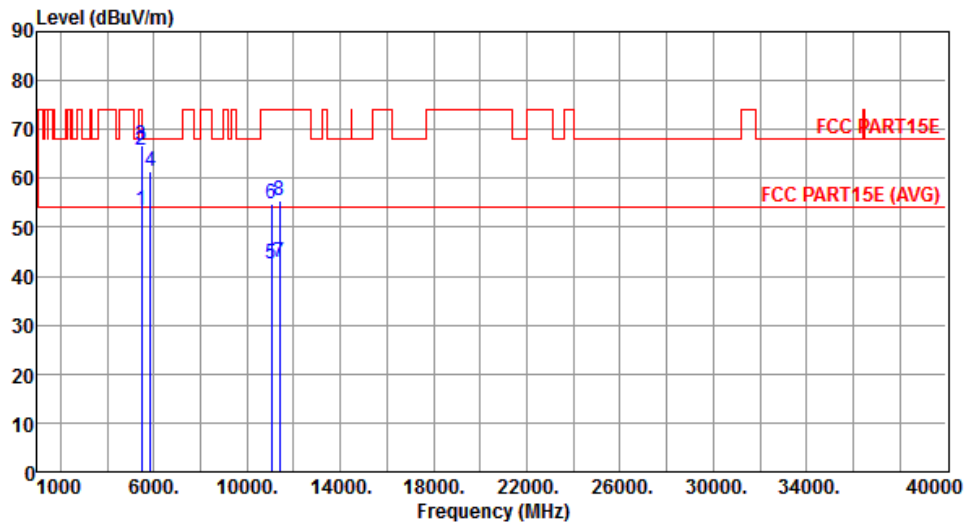
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.65	54.00	-7.35	41.19	5.46	Average	169	356
2	5460.00	58.24	74.00	-15.76	52.78	5.46	Peak	169	356
3	5470.00	58.98	68.20	-9.22	53.51	5.47	Peak	169	356
4	5850.00	58.44	68.20	-9.76	52.45	5.99	Peak	223	238
5	11060.00	42.58	54.00	-11.42	28.23	14.35	Average	100	147
6	11060.00	54.82	74.00	-19.18	40.47	14.35	Peak	100	147
7	11380.00	43.01	54.00	-10.99	28.38	14.63	Average	100	169
8	11380.00	55.30	74.00	-18.70	40.67	14.63	Peak	100	169

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH106 (5530 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.58	54.00	-0.42	48.12	5.46	Average	158	342
2	5460.00	65.90	74.00	-8.10	60.44	5.46	Peak	158	342
3	5470.00	66.73	68.20	-1.47	61.26	5.47	Peak	158	342
4	5850.00	61.41	68.20	-6.79	55.42	5.99	Peak	155	340
5	11060.00	42.59	54.00	-11.41	28.24	14.35	Average	100	167
6	11060.00	54.72	74.00	-19.28	40.37	14.35	Peak	100	167
7	11380.00	42.82	54.00	-11.18	28.19	14.63	Average	100	145
8	11380.00	55.33	74.00	-18.67	40.70	14.63	Peak	100	145

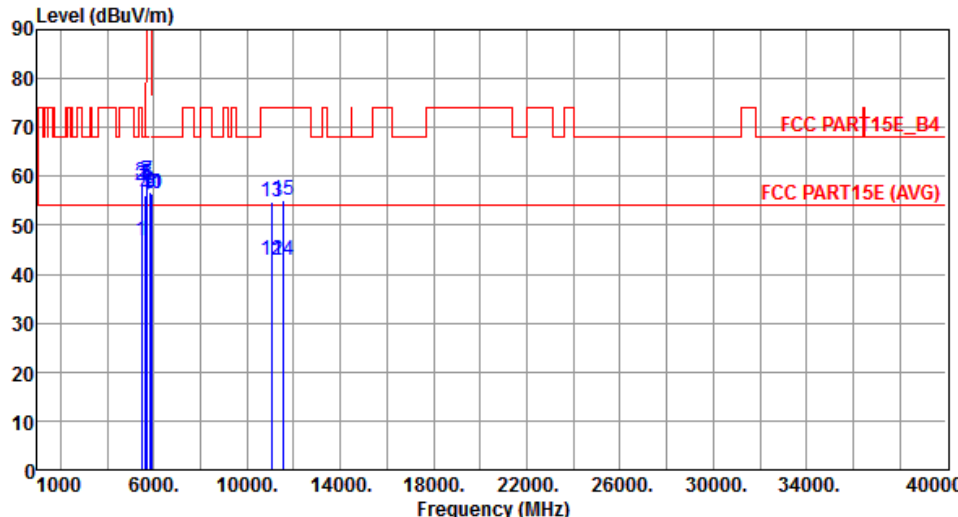
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.5.34 Transmitter Radiated Unwanted Emissions (Above 1GHz) for Mode 10

Modulation	VHT80+80	Test Freq. (MHz)	CH138 (5690 MHz) + CH155 (5775 MHz)						
Polarization	Horizontal								



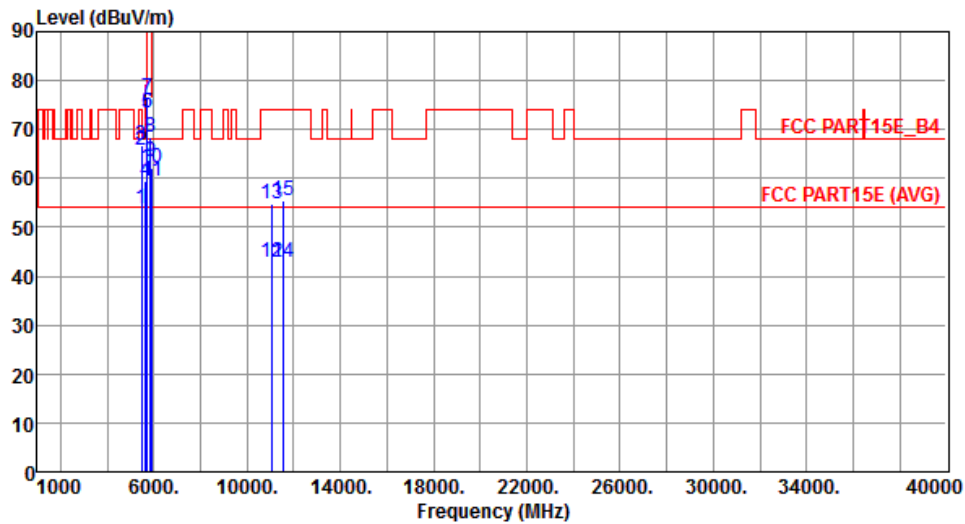
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	46.70	54.00	-7.30	41.24	5.46	Average	165	355
2	5460.00	58.12	74.00	-15.88	52.66	5.46	Peak	165	355
3	5470.00	58.75	68.20	-9.45	53.28	5.47	Peak	165	355
4	5650.00	56.26	68.20	-11.94	50.57	5.69	Peak	192	70
5	5700.00	58.53	105.20	-46.67	52.76	5.77	Peak	192	70
6	5720.00	58.18	110.80	-52.62	52.39	5.79	Peak	192	70
7	5725.00	59.19	122.20	-63.01	53.38	5.81	Peak	192	70
8	5850.00	56.75	122.20	-65.45	50.76	5.99	Peak	192	70
9	5855.00	56.45	110.80	-54.35	50.45	6.00	Peak	192	70
10	5875.00	56.30	105.20	-48.90	50.28	6.02	Peak	192	70
11	5925.00	56.39	68.20	-11.81	50.30	6.09	Peak	192	70
12	11060.00	42.91	54.00	-11.09	28.56	14.35	Average	100	185
13	11060.00	54.70	74.00	-19.30	40.35	14.35	Peak	100	185
14	11550.00	42.97	54.00	-11.03	28.33	14.64	Average	100	147
15	11550.00	55.18	74.00	-18.82	40.54	14.64	Peak	100	147

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	VHT80+80	Test Freq. (MHz)	CH138 (5690 MHz) + CH155 (5775 MHz)
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	5460.00	53.71	54.00	-0.29	48.25	5.46	Average	157	341
2	5460.00	65.83	74.00	-8.17	60.37	5.46	Peak	157	341
3	5470.00	66.85	68.20	-1.35	61.38	5.47	Peak	157	341
4	5650.00	59.42	68.20	-8.78	53.73	5.69	Peak	162	0
5	5700.00	73.29	105.20	-31.91	67.52	5.77	Peak	162	0
6	5720.00	73.53	110.80	-37.27	67.74	5.79	Peak	162	0
7	5725.00	76.44	122.20	-45.76	70.63	5.81	Peak	162	0
8	5850.00	68.37	122.20	-53.83	62.38	5.99	Peak	162	0
9	5855.00	63.36	110.80	-47.44	57.36	6.00	Peak	162	0
10	5875.00	62.07	105.20	-43.13	56.05	6.02	Peak	162	0
11	5925.00	59.44	68.20	-8.76	53.35	6.09	Peak	162	0
12	11060.00	42.69	54.00	-11.31	28.34	14.35	Average	100	172
13	11060.00	54.71	74.00	-19.29	40.36	14.35	Peak	100	172
14	11550.00	42.92	54.00	-11.08	28.28	14.64	Average	100	185
15	11550.00	55.37	74.00	-18.63	40.73	14.64	Peak	100	185

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.6 Frequency Stability

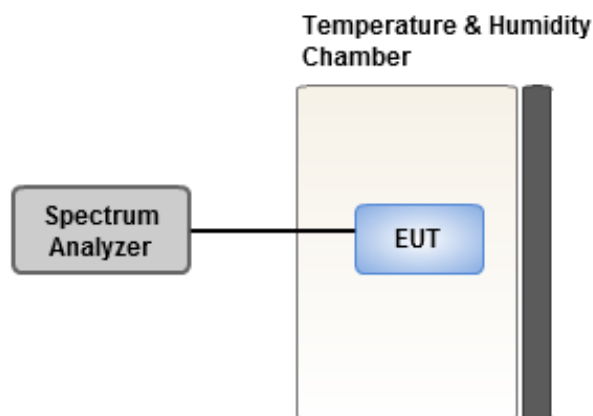
3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2 Test Procedures

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

Frequency: 5320 MHz	Frequency Drift (ppm)			
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes
T20°C Vmax	7.03	6.99	7.36	7.02
T20°C Vmin	6.85	6.82	7.07	7.07
T50°C Vnom	5.26	5.09	5.68	5.98
T40°C Vnom	4.06	4.04	4.03	4.24
T30°C Vnom	4.08	4.30	4.08	4.10
T20°C Vnom	3.99	5.30	5.45	5.10
T10°C Vnom	4.33	4.06	4.18	5.02
T0°C Vnom	5.14	5.43	5.48	5.11
T-10°C Vnom	3.12	3.13	3.14	2.95
T-20°C Vnom	1.10	1.64	1.44	0.92
T-30°C Vnom	2.18	2.40	2.77	2.87
Vnom [Vac]: 120		Vmax [Vac]: 138		Vmin [Vac]: 102
Tnom [°C]: 20		Tmax [°C]: 50		Tmin [°C]: -30

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

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If you have any suggestion, please feel free to contact us as below information.

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