

FCC Radio Test Report (Spot Check Verification)

FCC ID: SI5VRE3000

This report concerns: Class II Permissive Change

Project No. : 1807T004B
Equipment : Verizon 5G Home Wi-Fi Extender
Test Model : VRE3000
Series Model : N/A
Applicant : U-MEDIA Communications, Inc.
Address : 9F, No.1, Jin-shan 7th St. Hsinchu Taiwan

Date of Receipt : Feb. 20, 2019
Date of Test : Feb. 20, 2019 ~ Apr. 03, 2019
Issued Date : Apr. 08, 2019
Tested by : BTL Inc.

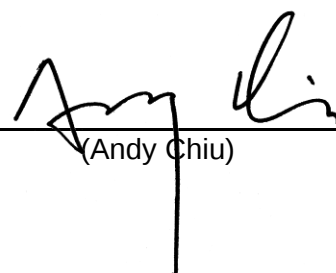
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The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue. This is a supplementary report to the original test report (BTL-FCCP-1-1807T004A, FCC ID: SI5VRE3000). The difference compared with original report is changed power amplifier component from SKY85728-11 to AP5519.	Mar. 25, 2019
R01	Revised report to address TCB's comments.	Apr. 03, 2019
R02	Revised typo.	Apr. 08, 2019

1 CERTIFICATION

Equipment : Verizon 5G Home Wi-Fi Extender
Brand Name : Verizon
Test Model : VRE3000
Series Model : N/A
Applicant : U-MEDIA Communications, Inc.
Manufacturer : U-MEDIA Communications, Inc.
Address : No. 90, Kuang Fu Nth.Rd., Hsinchu Industrial Park, Hu Kou, Hsinchu, 303, Taiwan
Date of Test : Feb. 20, 2019 ~ Apr. 03, 2019
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart E (§15.407)
ANSI C63.10-2013

The above equipment has been tested and found in compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1807T004B) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the RLAN 5GHz part.

2 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

FCC Part15, Subpart E (§15.407)				
FCC Clause No	Description	Test Result	Judgement	Remark
§15.205 §15.209 §15.407(b)	Radiated Emissions	APPENDIX A APPENDIX B	Pass	-----
§15.407(a)	Conducted Output Power	APPENDIX C	Pass	-----

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) This is a supplementary report to the original test report (BTL-FCCP-1-1807T004A, FCC ID: SI5VRE3000). The difference compared with original report is changed power amplifier component from SKY85728-11 to AP5519.
Declared by manufacturer, the power amplifiers are electrically and functionally identical. Only the model name is different.
- (3) The spot check test channels were verified based on the worst channel results reported in the original FCC ID filing test report (BTL-FCCP-1-1807T004A).
Radiated Emissions and Conducted Output Power tests were criticized and reconfirmed in this report.
- (4) After spot check, this revision does not change original radio parameters.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report:

CB15: (VCCI RN: R-20020; FCC RN:674415; FCC DN:TW0659)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{CISPR} requirement.

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

A. Radiated emissions below 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
CB15 (3m)	CISPR	30 MHz ~ 200 MHz	V	4.20
		30 MHz ~ 200 MHz	H	3.64
		200 MHz ~ 1,000 MHz	V	4.56
		200 MHz ~ 1,000 MHz	H	3.90

B. Radiated emissions above 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
CB15 (3m)	CISPR	1 GHz ~ 6 GHz	V	4.46
		1 GHz ~ 6 GHz	H	4.40
		6 GHz ~18 GHz	V	3.88
		6 GHz ~18 GHz	H	4.00

Test Site	Method	Measurement Frequency Range	U (dB)
CB15 (1m)	CISPR	18 GHz ~ 26.5 GHz	4.62
		26.5 GHz ~ 40 GHz	5.12

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR} , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz : 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz : 5.2 dB

3 GENERAL INFORMATION

3.1 DESCRIPTION OF EUT

Equipment	Verizon 5G Home Wi-Fi Extender													
Brand Name	Verizon													
Test Model	VRE3000													
Series Model	N/A													
Model Difference	N/A													
Power Source	DC Voltage supplied from AC/DC adapter.													
Power Rating	#1 Ktec / KSA-24W-120200HU I/P: 100-240V~50/60Hz, 0.6A O/P: 12V 2.0A #2 UMEC / UP0251M-12PA I/P: 100-240V~50/60Hz, 0.6A MAX O/P: +12V 2A, 24W MAX													
Product Specification	Frequency Range	UNII-1: 5150 MHz to 5250 MHz UNII-2A: 5250 MHz to 5350 MHz UNII-2C: 5470 MHz to 5725 MHz UNII-3: 5725 MHz to 5850 MHz												
	Operation Frequency	UNII-1: 5180 MHz to 5240 MHz UNII-2A: 5260 MHz to 5320 MHz UNII-2C: 5500 MHz to 5700 MHz UNII-3: 5745 MHz to 5825 MHz												
	Modulation Type	OFDM												
	Bit Rate of Transmitter	up to 1733 Mbps												
	RF Chips	The EUT contains two RF Chips which functions are as below <table border="1"> <thead> <tr> <th>Chip</th><th>2.4 GHz</th><th>5 GHz</th><th>Chains</th></tr> </thead> <tbody> <tr> <td>MT7615N</td><td>NO</td><td>YES UNII-1 UNII-2A</td><td>4T4R</td></tr> <tr> <td>MT7615DN</td><td>YES</td><td>YES UNII-2C UNII-3</td><td>2T2R</td></tr> </tbody> </table>		Chip	2.4 GHz	5 GHz	Chains	MT7615N	NO	YES UNII-1 UNII-2A	4T4R	MT7615DN	YES	YES UNII-2C UNII-3
Chip	2.4 GHz	5 GHz	Chains											
MT7615N	NO	YES UNII-1 UNII-2A	4T4R											
MT7615DN	YES	YES UNII-2C UNII-3	2T2R											

Product Specification	Maximum Output Power for UNII-1	IEEE 802.11a: 23.07 dBm (0.2026 W) IEEE 802.11n (HT20): 21.38 dBm (0.1373 W) IEEE 802.11n (HT40): 21.43 dBm (0.1388 W) IEEE 802.11ac (VHT20): 20.97 dBm (0.1250 W) IEEE 802.11ac (VHT40): 20.98 dBm (0.1254 W) IEEE 802.11ac (VHT80): 20.00 dBm (0.1000 W)
	Maximum Output Power for UNII-2A	IEEE 802.11a: 0.00 dBm (0.0000 W) IEEE 802.11n (HT20): 0.00 dBm (0.0000 W) IEEE 802.11n (HT40): 0.00 dBm (0.0000 W) IEEE 802.11ac (VHT20): 0.00 dBm (0.0000 W) IEEE 802.11ac (VHT40): 0.00 dBm (0.0000 W) IEEE 802.11ac (VHT80): 0.00 dBm (0.0000 W)
	Maximum Output Power for UNII-2C	IEEE 802.11a: 18.96 dBm (0.0787 W) IEEE 802.11n (HT20): 18.54 dBm (0.0714 W) IEEE 802.11n (HT40): 21.34 dBm (0.1361 W) IEEE 802.11ac (VHT20): 18.23 dBm (0.0665 W) IEEE 802.11ac (VHT40): 21.09 dBm (0.1285 W) IEEE 802.11ac (VHT80): 20.96 dBm (0.1249 W)
	Maximum Output Power for UNII-3	IEEE 802.11a: 21.96 dBm (0.1572 W) IEEE 802.11n (HT20): 21.06 dBm (0.1277 W) IEEE 802.11n (HT40): 19.95 dBm (0.0990 W) IEEE 802.11ac (VHT20): 20.19 dBm (0.1045 W) IEEE 802.11ac (VHT40): 19.44 dBm (0.0879 W) IEEE 802.11ac (VHT80): 19.30 dBm (0.0851 W)
Product Covered	2 * Adapter: (1) Ktec / KSA-24W-120200HU (2) UMEC / UP0251M-12PA	

NOTE:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

(2) Channel List:

UNII-1					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

UNII-2A					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

UNII-2C					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590	138	5690
112	5560	126	5630		
116	5580	134	5670		
120	5600				
124	5620				
128	5640				
132	5660				
136	5680				
140	5700				

UNII-3					
IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

(3) Table for Filed Antenna:

Group 1:

UNII-1:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC1	Galtronics	02102142-06808Ax	PCB	iPEX	3.4
JC3	Galtronics	02102142-06808Ax	PCB	iPEX	3.4
JC4	Galtronics	02102142-06808Ax	PCB	iPEX	3.4
JC5	Galtronics	02102142-06808Ax	PCB	iPEX	3.4

UNII-2A:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC1	Galtronics	02102142-06808Ax	PCB	iPEX	3.4
JC3	Galtronics	02102142-06808Ax	PCB	iPEX	3.4
JC4	Galtronics	02102142-06808Ax	PCB	iPEX	3.4
JC5	Galtronics	02102142-06808Ax	PCB	iPEX	3.4

UNII-2C:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC6	Galtronics	02102140-06808Ax	PCB	iPEX	3.5
JC7	Galtronics	02102140-06808Ax	PCB	iPEX	3.5

UNII-3:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC6	Galtronics	02102140-06808Ax	PCB	iPEX	3.8
JC7	Galtronics	02102140-06808Ax	PCB	iPEX	3.8

Group 2:

UNII-1:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC1	Galtronics	02102142-06808Cx	PCB	iPEX	3.1
JC3	Galtronics	02102142-06808Cx	PCB	iPEX	3.1
JC4	Galtronics	02102142-06808Cx	PCB	iPEX	3.1
JC5	Galtronics	02102142-06808Cx	PCB	iPEX	3.1

UNII-2A:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC1	Galtronics	02102142-06808Cx	PCB	iPEX	3.1
JC3	Galtronics	02102142-06808Cx	PCB	iPEX	3.1
JC4	Galtronics	02102142-06808Cx	PCB	iPEX	3.1
JC5	Galtronics	02102142-06808Cx	PCB	iPEX	3.1

UNII-2C:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC6	Galtronics	02102140-06808Bx	PCB	iPEX	2.8
JC7	Galtronics	02102140-06808Bx	PCB	iPEX	2.8

UNII-3:

Ant.	Brand	Model	Type	Connector	Gain (dBi)
JC6	Galtronics	02102140-06808Bx	PCB	iPEX	3.0
JC7	Galtronics	02102140-06808Bx	PCB	iPEX	3.0

NOTE:

- The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (**UNII-1 and UNII-2A**: 4T4R, **UNII-2C and UNII-3**: 2T2R). 2.4 GHz and 5GHz can transmit simultaneously.
- For **UNII-1 and UNII-2A**:
All JC1, JC3, JC4 and JC5 can be used as transmitting/receiving antenna.
C1, JC3, JC4 and JC5 could transmit/receive simultaneously.
The C1 + JC3 + JC4 + JC5 generated the worst case, so it was selected to test and record in the report.
For **UNII-2C and UNII-3**:
All JC6 and JC7 can be used as transmitting/receiving antenna.
JC6 and JC7 could transmit/receive simultaneously.
The C6 + JC7 generated the worst case, so it was selected to test and record in the report.
- The EUT **UNII-1 and UNII-2A** (N mode & AC mode) are with beamforming function.
The **UNII-1 and UNII-2A** beamforming gain is 4.46 dBi.
The EUT **UNII-1** (A mode), **UNII-2A** (A mode), **UNII-2C and UNII-3** do not support beamforming function.
- For Conducted Output Power (CDD mode)
For **UNII-1**:
For $N_{ANT} = 4 < 5$,
Direction gain = $G_{ANT} + 0 = 3.4 + 0 = 3.4$ dBi.
The Direction gain is less than 6 dBi, so conducted power limits will not be reduced.
For **UNII-2A**:
For $N_{ANT} = 4 < 5$,
Direction gain = $G_{ANT} + 0 = 3.4 + 0 = 3.4$ dBi.
The Direction gain is less than 6 dBi, so conducted power limits will not be reduced.
For **UNII-2C**:
For $N_{ANT} = 2 < 5$,
Direction gain = $G_{ANT} + 0 = 3.5 + 0 = 3.5$ dBi.
The Direction gain is less than 6 dBi, so conducted power limits will not be reduced.
For **UNII-3**:

For $N_{ANT} = 2 < 5$,

Direction gain = $G_{ANT} + 0 = 3.8 + 0 = 3.8$ dBi.

The Direction gain is less than 6 dBi, so conducted power limits will not be reduced.

(e) For Conducted Output Power (beamforming mode)

For **UNII-1** (N mode & AC mode in beamforming mode):

Directional Gain = $G_{ANT} + 10\log(N_{ANT}/N_{SS}) = 3.4$ dBi + $10\log(4/1) = 9.42$ dBi.

The Direction gain exceeds 6 dBi, so the reduced conducted output power limits =

Limit - (Directional Gain + Beamforming Gain + 6 dBi) = $30 - (9.42 + 4.46 - 6) = 22.12$ dBm.

For **UNII-2A** (N mode & AC mode in beamforming mode):

Directional Gain = $G_{ANT} + 10\log(N_{ANT}/N_{SS}) = 3.4$ dBi + $10\log(4/1) = 9.42$ dBi.

The Direction gain exceeds 6 dBi, so the reduced conducted output power limits =

Limit - (Directional Gain + Beamforming Gain + 6 dBi) = $24 - (9.42 + 4.46 - 6) = 16.12$ dBm.

For **UNII-2C**: does not support beamforming function.

For **UNII-3**: does not support beamforming function.

3.2 TEST MODES

Radiated emissions test	
Test Mode	Description
1	UNII-1_TX AC (VHT80) MODE CHANNEL 42
2	UNII-2A_TX AC (VHT80) MODE CHANNEL 58
3	UNII-2C_TX AC (VHT80) MODE CHANNEL 106
4	UNII-3_TX A MODE CHANNEL 149

Conducted test	
Test Mode	Description
1	UNII-1_TX A MODE CHANNEL 36/40/48
2	UNII-1_TX N (HT20) MODE CHANNEL 36/40/48
3	UNII-1_TX N (HT40) MODE CHANNEL 38/46
4	UNII-1_TX AC (HT20) MODE CHANNEL 36/40/48
5	UNII-1_TX AC (HT40) MODE CHANNEL 38/46
6	UNII-1_TX AC (VHT80) MODE CHANNEL 42
7	UNII-2A_TX A MODE CHANNEL 52/60/64
8	UNII-2A_TX N (HT20) MODE CHANNEL 52/60/64
9	UNII-2A_TX N (HT40) MODE CHANNEL 54/62
10	UNII-2A_TX AC (VHT20) MODE CHANNEL 52/60/64
11	UNII-2A_TX AC (VHT40) MODE CHANNEL 54/62
12	UNII-2A_TX AC (VHT80) MODE CHANNEL 58
13	UNII-2C_TX A MODE CHANNEL 100/116/140
14	UNII-2C_TX N (HT20) MODE CHANNEL 100/116/140
15	UNII-2C_TX N (HT40) MODE CHANNEL 102/110/134
16	UNII-2C_TX AC (VHT20) MODE CHANNEL 100/116/140
17	UNII-2C_TX AC (VHT40) MODE CHANNEL 102/110/134
18	UNII-2C_TX AC (VHT80) MODE CHANNEL 106/122
19	UNII-3_TX A MODE CHANNEL 149/157/165
20	UNII-3_TX N (HT20) MODE CHANNEL 149/157/165
21	UNII-3_TX N (HT40) MODE CHANNEL 151/159
22	UNII-3_TX AC (VHT20) MODE CHANNEL 149/157/165
23	UNII-3_TX AC (VHT40) MODE CHANNEL 151/159
24	UNII-3_TX AC (VHT80) MODE CHANNEL 155

NOTE:

- (1) The spot check test channels were verified based on the worst channel results reported in the original FCC ID filing test report (BTL-FCCP-1-1807T004A).
- (2) Due to the measured conducted powers are lower than the originals, the Radiated emissions test were verified based on the worst band edge test results reported in the original report.

3.3 PARAMETERS OF TEST SOFTWARE

UNII-1			
Test Software	QATool(0.0.1.85)		
Mode	5180 MHz	5200 MHz	5240 MHz
IEEE 802.11a	18	17	19
IEEE 802.11n (HT20)	12	13	12
IEEE 802.11ac (VHT20)	12	13	12
Mode	5190 MHz	5230 MHz	
IEEE 802.11n (HT40)	12	11	
IEEE 802.11ac (VHT40)	13	12	
Mode	5210 MHz		
IEEE 802.11ac (VHT80)	0D		

UNII-2A			
Test Software	QATool(0.0.1.85)		
Mode	5260 MHz	5300 MHz	5320 MHz
IEEE 802.11a	0A	0A	0B
IEEE 802.11n (HT20)	00	7F	00
IEEE 802.11ac (VHT20)	00	00	
Mode	5270 MHz	5310 MHz	
IEEE 802.11n (HT40)	7D	7B	
IEEE 802.11ac (VHT40)	03	7F	
Mode	5290 MHz		
IEEE 802.11ac (VHT80)	7D		

UNII-2C			
Test Software	QATool(0.0.1.85)		
Mode	5500 MHz	5580 MHz	5700 MHz
IEEE 802.11a	11	11	16
IEEE 802.11n (HT20)	15	12	16
IEEE 802.11ac (VHT20)	15	12	14
Mode	5510 MHz	5550 MHz	5670 MHz
IEEE 802.11n (HT40)	12	1B	15
IEEE 802.11ac (VHT40)	13	1B	15
Mode	5530 MHz	5610 MHz	
IEEE 802.11ac (VHT80)	0E	18	

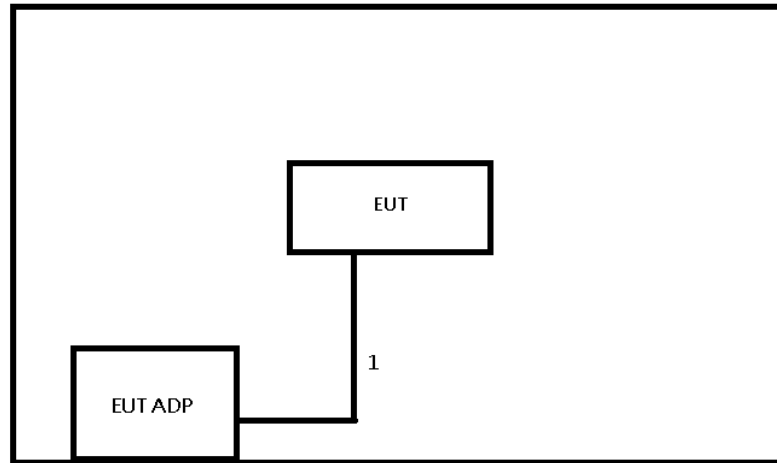
UNII-3			
Test Software	QATool(0.0.1.85)		
Mode	5745 MHz	5785 MHz	5825 MHz
IEEE 802.11a	11	11	10
IEEE 802.11n (HT20)	11	10	0D
IEEE 802.11ac (VHT20)	0F	0F	0B
Mode	5755 MHz	5795 MHz	
IEEE 802.11n (HT40)	10	10	
IEEE 802.11ac (VHT40)	10	0F	
Mode	5775 MHz		
IEEE 802.11ac (VHT80)	0D		

NOTE:

(1) The parameter setting of CDD and beamforming mode is the same.

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 3.5.



3.5 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
-	-	-	-	-	-

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	NO	NO	1.5 m	Power Cable	Supplied by test requester

4 RADIATED EMISSIONS TEST

4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
5470-5725	-27	68.3
5725-5850	-27 (NOTE 2)	68.3
	10 (NOTE 2)	105.3
	15.6 (NOTE 2)	110.9
	27 (NOTE 2)	122.3

NOTE:

- The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m}$, where P is the eirp (Watts)
- According to FCC 16-24, All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

4.2 TEST PROCEDURE

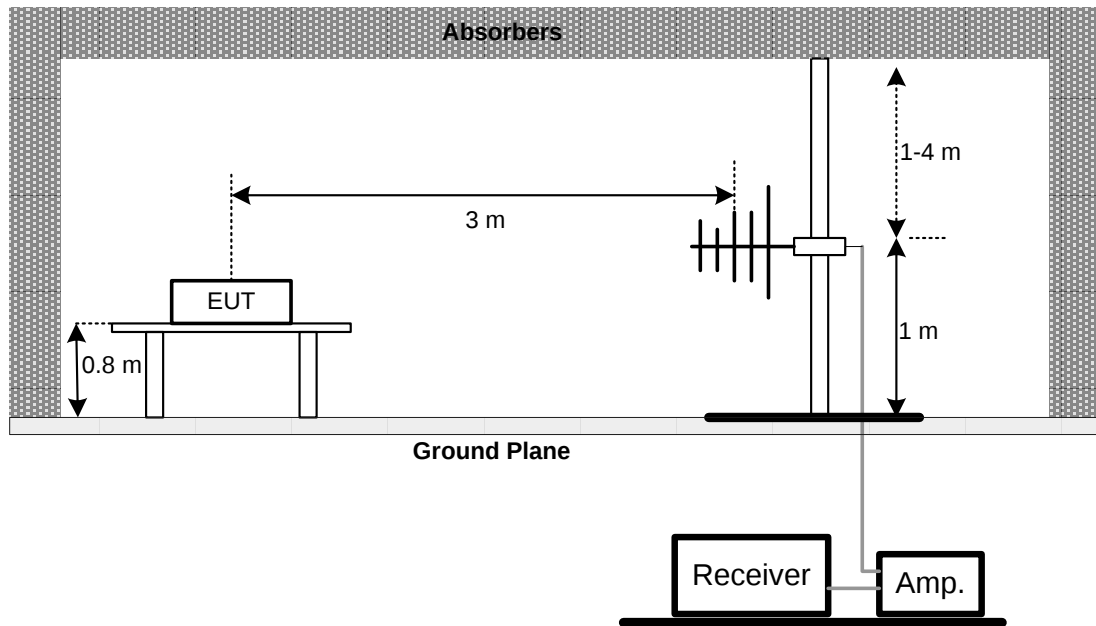
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.3 DEVIATION FROM TEST STANDARD

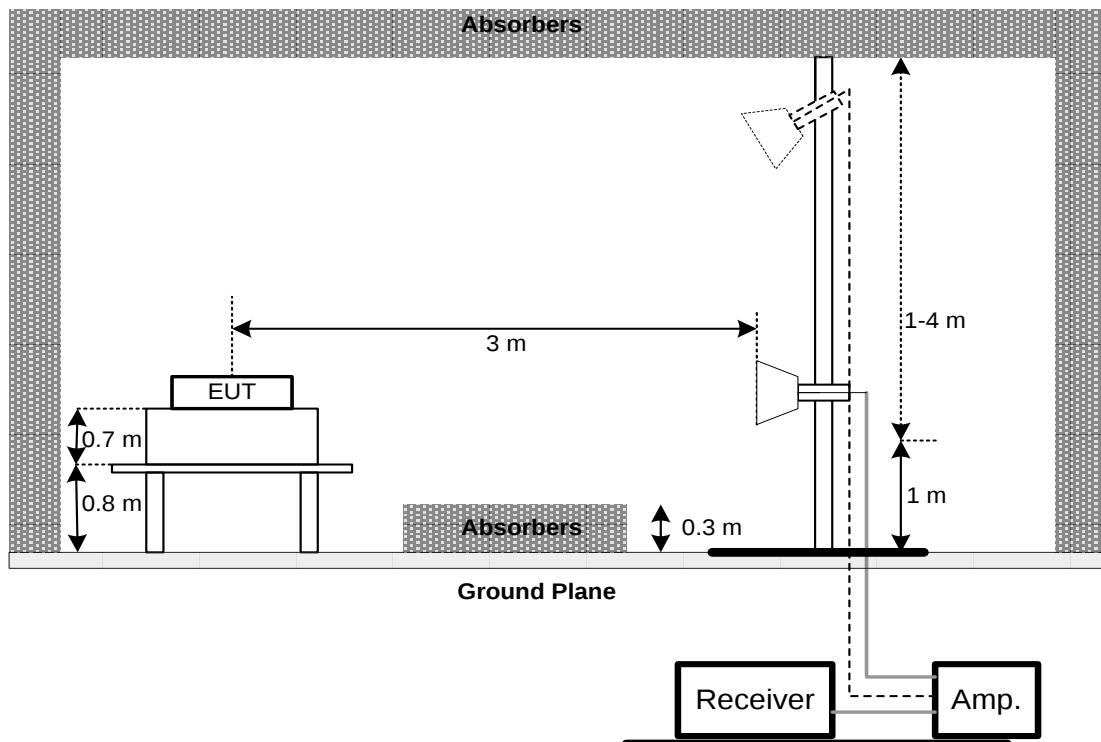
No deviation.

4.4 TEST SETUP

30 MHz to 1 GHz



Above 1 GHz



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT – 30 MHZ TO 1 GHZ

Temperature: 23 °C Relative Humidity: 70 % Test Voltage: AC 120V/50Hz

Please refer to the APPENDIX A.

4.7 TEST RESULT – ABOVE 1 GHZ

Temperature: 23 °C Relative Humidity: 70 % Test Voltage: AC 120V/50Hz

Please refer to the APPENDIX B.

NOTE:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5 PEAK OUTPUT POWER TEST

5.1 LIMIT

FCC Part15, Subpart E (§15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
§15.407(a)	Maximum Output Power	Fixed:1 Watt (30 dBm) Mobile and portable: 250 mW (24 dBm)	5150-5250
		250 mW (24 dBm)	5250-5350
			5470-5725
		1 Watt (30dBm)	5725-5850
Note: 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).			

5.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz
VBW	≥ 3 MHz
Detector	RMS
Trace	Max Hold
Sweep Time	auto

- c. The maximum peak conducted output power was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT

Please refer to the APPENDIX C.

6 LIST OF MEASURING EQUIPMENTS

Radiated Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Preamplifier	EMCI	012645B	980267	Apr. 14, 2019
2	Preamplifier	EMCI	EMC02325	980217	Apr. 14, 2019
3	Preamplifier	EMCI	EMC2654045	980030	Apr. 14, 2019
4	Test Cable	EMCI	EMC104-SM-SM-8000	8m	Apr. 14, 2019
5	Test Cable	EMCI	EMC104-SM-SM-800	150207	Apr. 14, 2019
6	Test Cable	EMCI	EEMC104-SM-SM-3000	151205	Apr. 14, 2019
7	MXE EMI Receiver	Agilent	N9038A	MY55420127	Jan. 26, 2020
8	Signal Analyzer	Agilent	N9010A	MY52220990	Apr. 16, 2019
9	Loop Ant	EMCI	LPA600	274	Aug. 05, 2019
10	Horn Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	May 03, 2019
11	Horn Ant	Schwarzbeck	BBHA 9170	187	Dec. 25, 2019
12	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-548	Mar. 21, 2020
13	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0623	Mar. 21, 2020

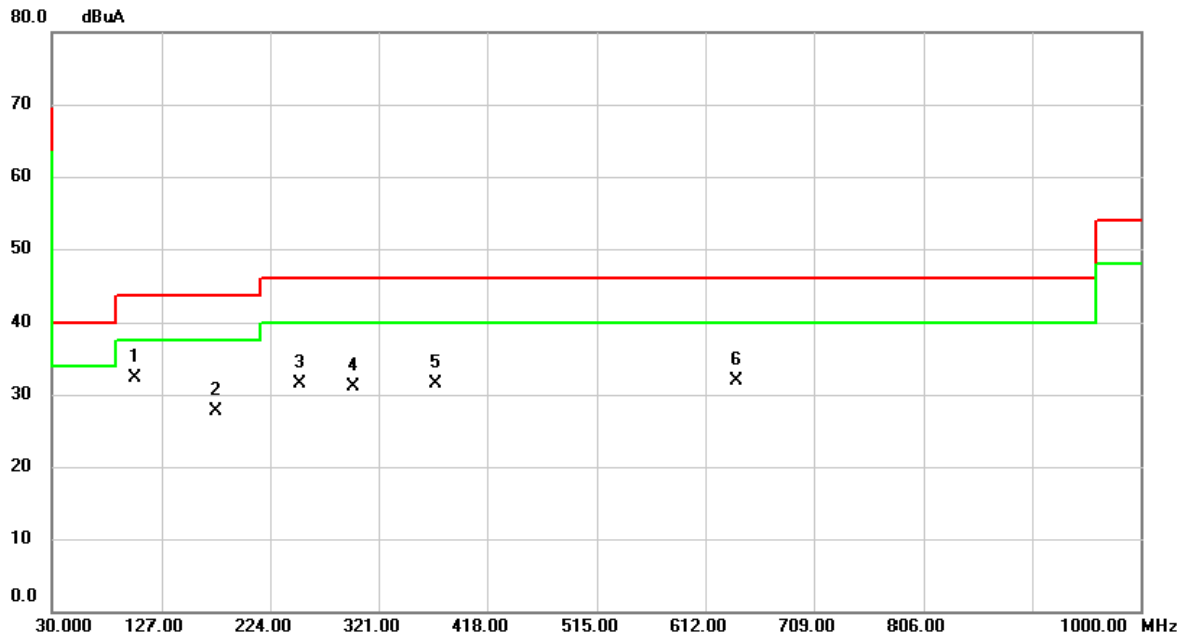
Conducted Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	Aug. 15, 2019
2	Power Sensor	Anritsu	MA2411B	1126001	Aug. 15, 2019

Remark: "N/A" denotes no model name, no serial no. or no calibration specified.
All calibration period of equipment list is one year.

APPENDIX A RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

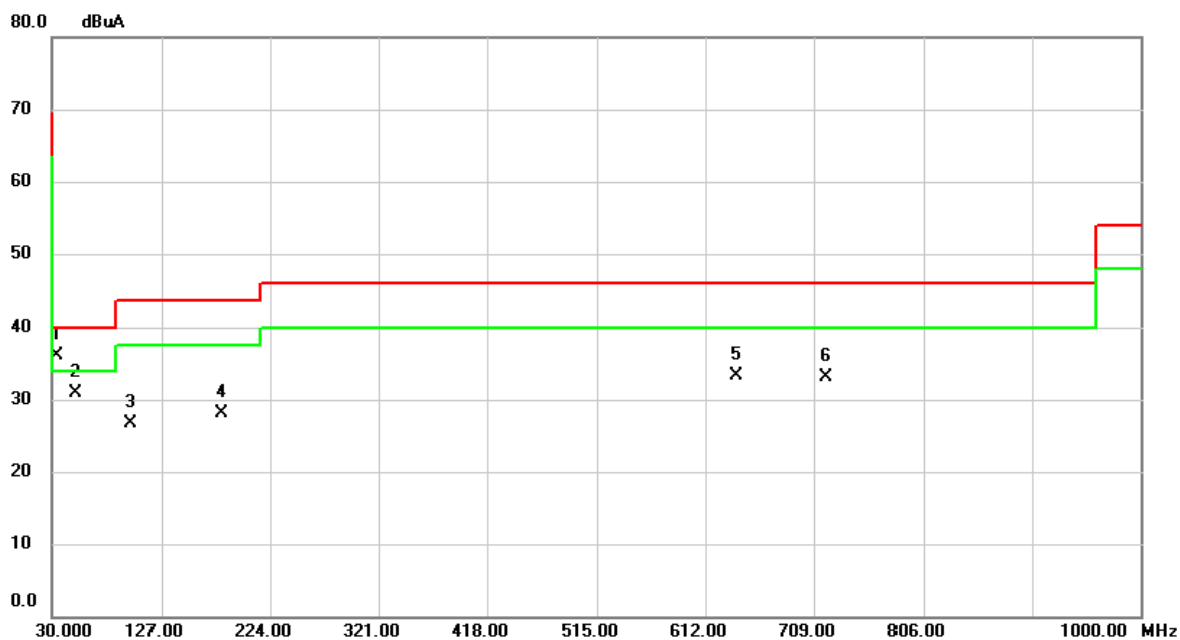
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Test Mode	UNII-1_TX AC (VHT80) MODE CHANNEL 42	Polarization	Vertical
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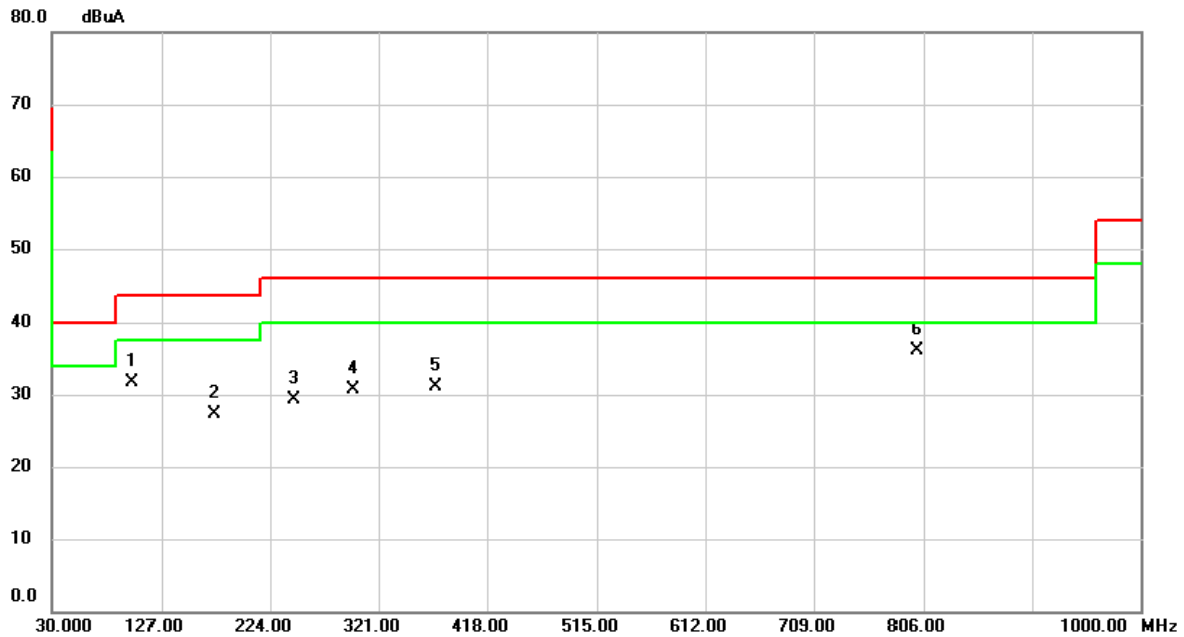
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	*	103.7200	44.55	-12.28	32.27	43.50	-11.23	QP	
2		175.5000	37.17	-9.47	27.70	43.50	-15.80	QP	
3		250.1900	40.54	-9.10	31.44	46.00	-14.56	QP	
4		298.6900	38.62	-7.54	31.08	46.00	-14.92	QP	
5		372.4100	37.13	-5.69	31.44	46.00	-14.56	QP	
6		640.1300	31.75	0.07	31.82	46.00	-14.18	QP	

Test Mode	UNII-1_TX AC (VHT80) MODE CHANNEL 42	Polarization	Horizontal
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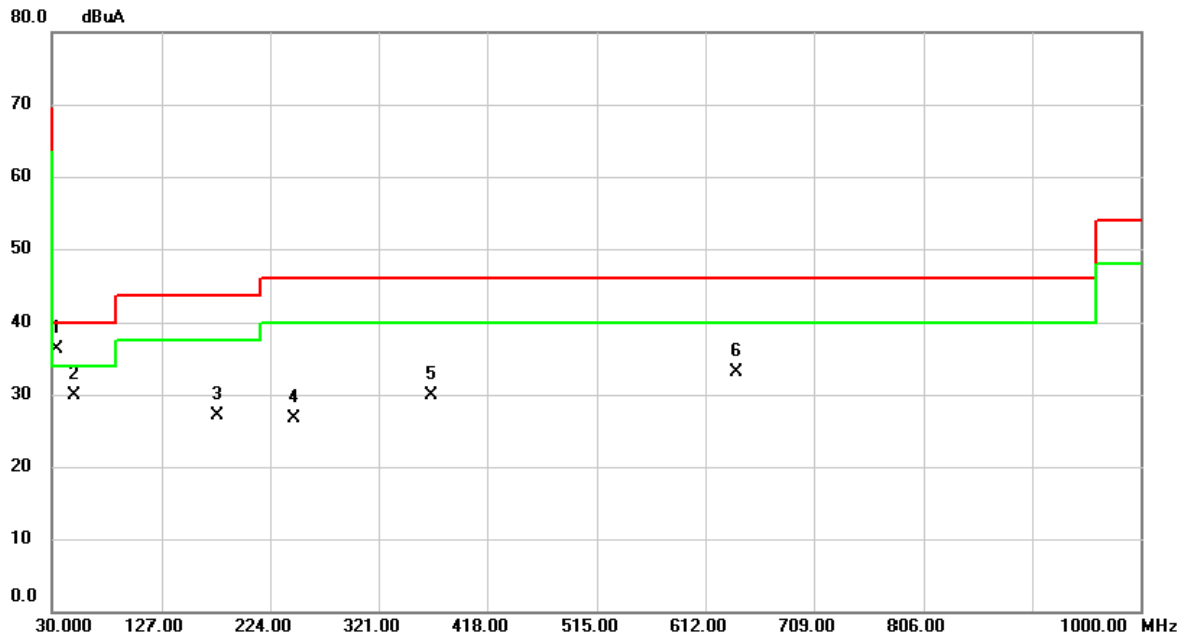
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	*	33.8800	45.10	-9.02	36.08	40.00	-3.92	QP	
2		51.3400	39.03	-8.13	30.90	40.00	-9.10	QP	
3		100.8100	39.39	-12.77	26.62	43.50	-16.88	QP	
4		180.3500	38.14	-10.00	28.14	43.50	-15.36	QP	
5		640.1300	33.33	0.07	33.40	46.00	-12.60	QP	
6		719.6700	31.37	1.69	33.06	46.00	-12.94	QP	

Test Mode	UNII-2A_TX AC (VHT80) MODE CHANNEL 58	Polarization	Vertical
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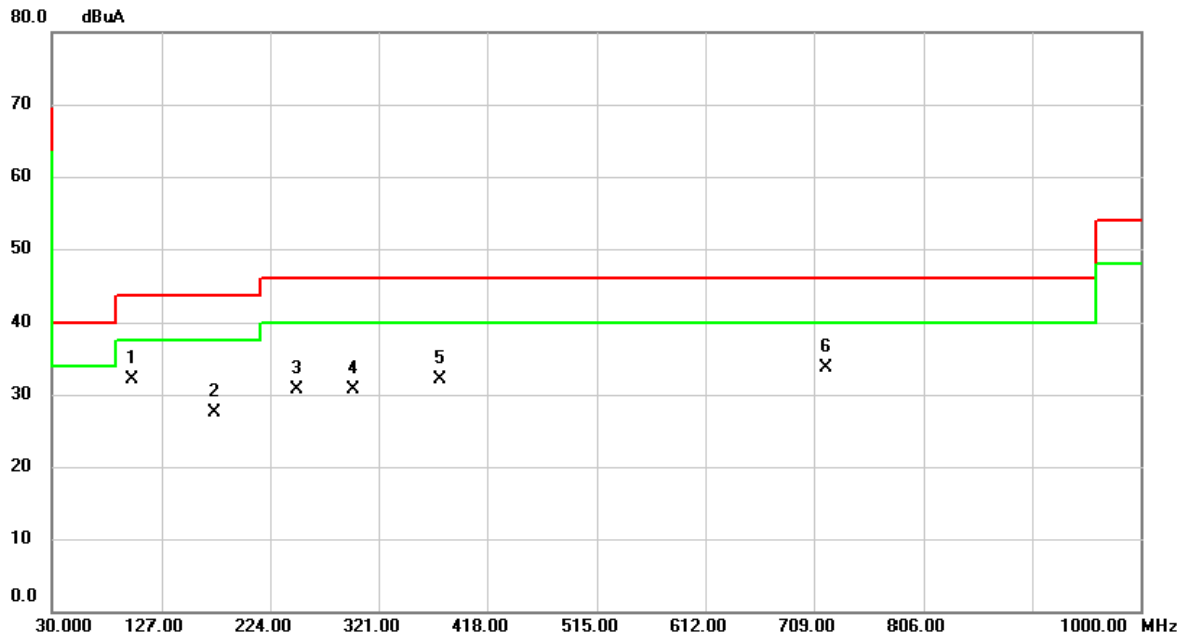
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		101.7800	44.34	-12.61	31.73	43.50	-11.77	QP	
2		173.5600	36.55	-9.26	27.29	43.50	-16.21	QP	
3		245.3400	38.51	-9.12	29.39	46.00	-16.61	QP	
4		297.7200	38.34	-7.56	30.78	46.00	-15.22	QP	
5		371.4400	36.88	-5.72	31.16	46.00	-14.84	QP	
6	*	800.1800	33.13	3.06	36.19	46.00	-9.81	QP	

Test Mode	UNII-2A_TX AC (VHT80) MODE CHANNEL 58	Polarization	Horizontal
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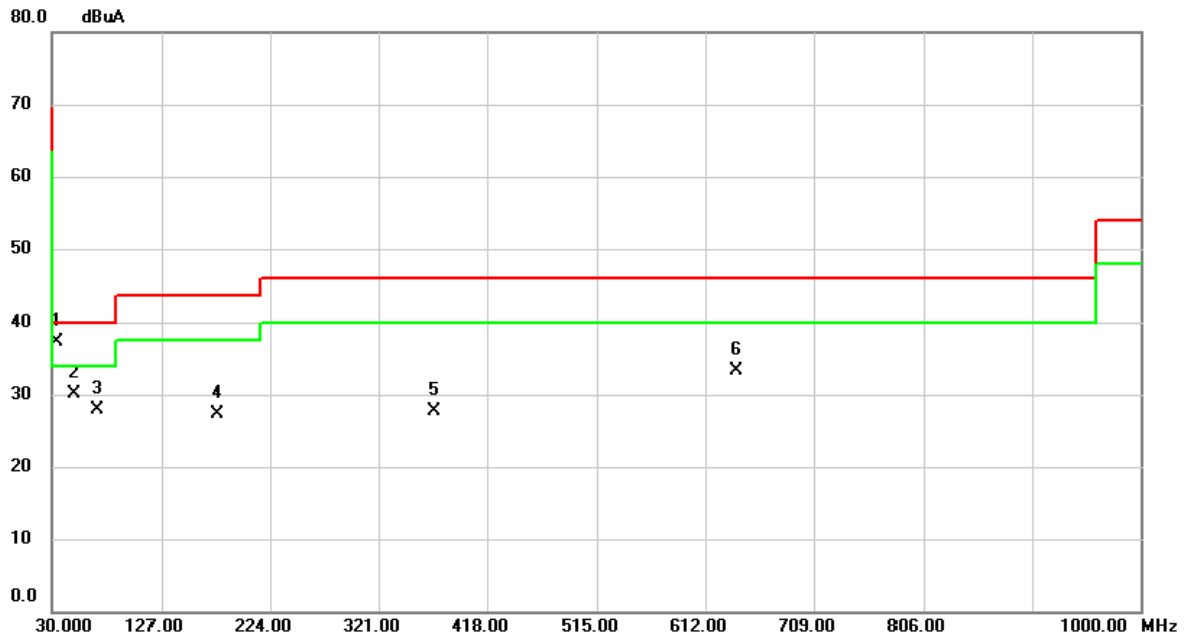
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	*	33.8800	45.42	-9.02	36.40	40.00	-3.60	QP	
2		50.3700	37.90	-8.07	29.83	40.00	-10.17	QP	
3		176.4700	36.64	-9.58	27.06	43.50	-16.44	QP	
4		245.3400	35.89	-9.12	26.77	46.00	-19.23	QP	
5		368.5300	35.61	-5.78	29.83	46.00	-16.17	QP	
6		640.1300	32.97	0.07	33.04	46.00	-12.96	QP	

Test Mode	UNII-2C_TX AC (VHT80) MODE CHANNEL 106	Polarization	Vertical
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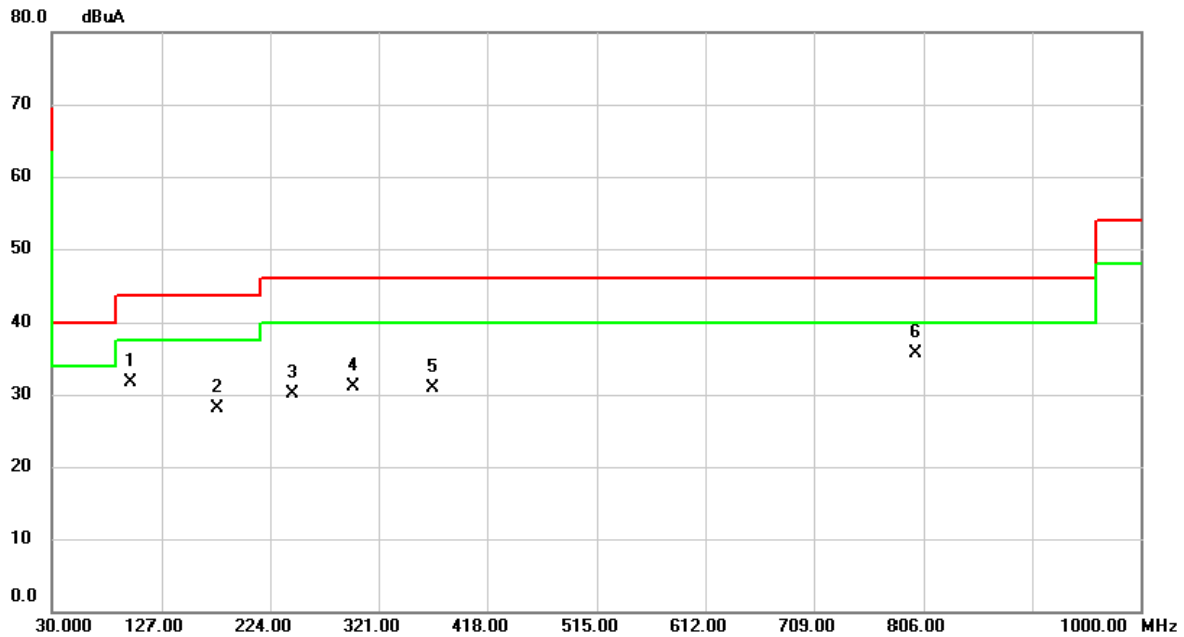
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	*	101.7800	44.70	-12.61	32.09	43.50	-11.41	QP	
2		174.5300	36.85	-9.36	27.49	43.50	-16.01	QP	
3		248.2500	39.80	-9.12	30.68	46.00	-15.32	QP	
4		297.7200	38.36	-7.56	30.80	46.00	-15.20	QP	
5		375.3200	37.79	-5.63	32.16	46.00	-13.84	QP	
6		719.6700	31.96	1.69	33.65	46.00	-12.35	QP	

Test Mode	UNII-2C_TX AC (VHT80) MODE CHANNEL 106	Polarization	Horizontal
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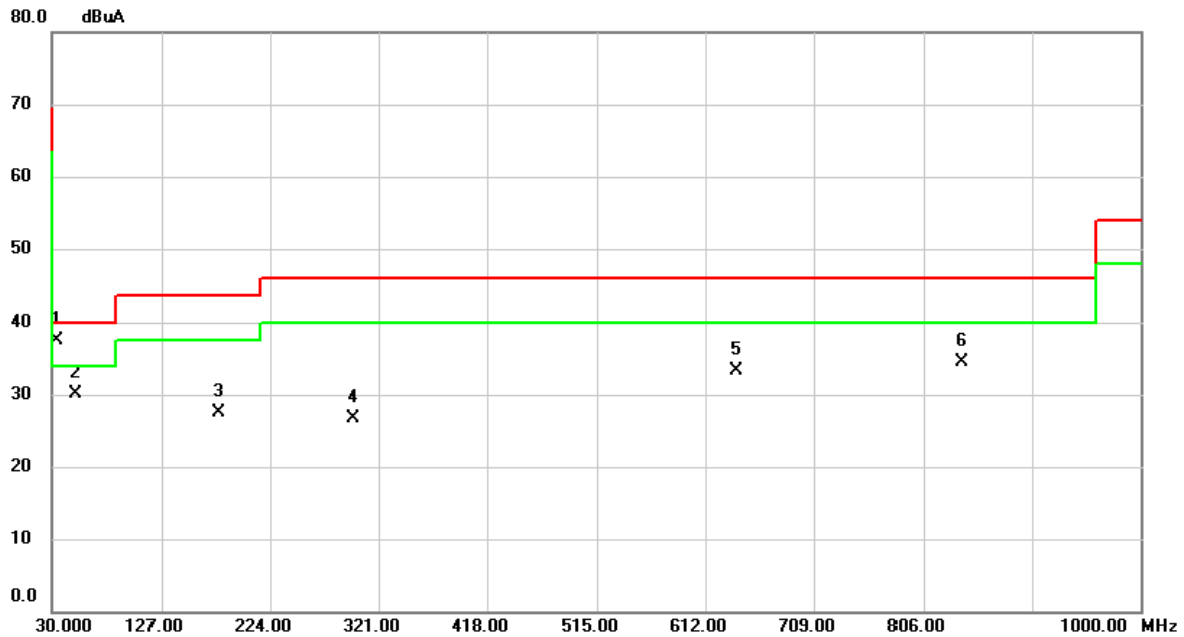
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	*	33.8800	46.27	-9.02	37.25	40.00	-2.75	QP	
2		50.3700	38.16	-8.07	30.09	40.00	-9.91	QP	
3		70.7400	38.74	-10.83	27.91	40.00	-12.09	QP	
4		176.4700	36.83	-9.58	27.25	43.50	-16.25	QP	
5		370.4700	33.39	-5.74	27.65	46.00	-18.35	QP	
6		640.1300	33.33	0.07	33.40	46.00	-12.60	QP	

Test Mode	UNII-3_TX A MODE CHANNEL 149	Polarization	Vertical
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No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		100.8100	44.57	-12.77	31.80	43.50	-11.70	QP	
2		176.4700	37.71	-9.58	28.13	43.50	-15.37	QP	
3		244.3700	39.15	-9.12	30.03	46.00	-15.97	QP	
4		297.7200	38.68	-7.56	31.12	46.00	-14.88	QP	
5		369.5000	36.62	-5.76	30.86	46.00	-15.14	QP	
6	*	799.2100	32.58	3.05	35.63	46.00	-10.37	QP	

Test Mode	UNII-3_TX A MODE CHANNEL 149	Polarization	Horizontal
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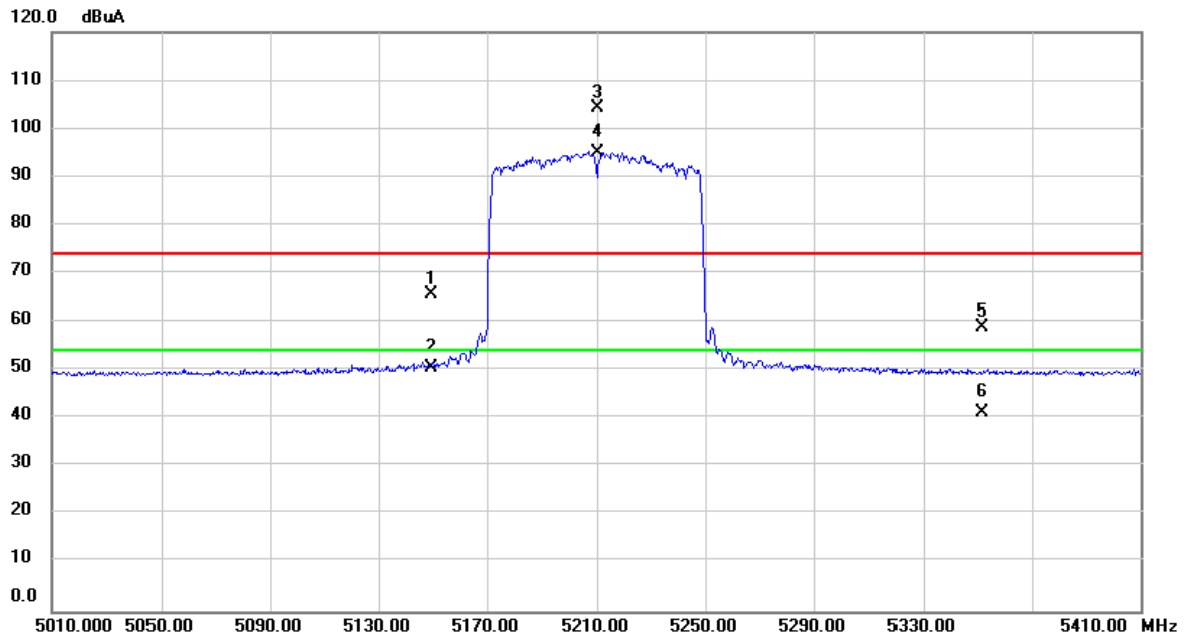


No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	*	33.8800	46.51	-9.02	37.49	40.00	-2.51	QP	
2		51.3400	38.27	-8.13	30.14	40.00	-9.86	QP	
3		177.4400	37.27	-9.69	27.58	43.50	-15.92	QP	
4		297.7200	34.19	-7.56	26.63	46.00	-19.37	QP	
5		640.1300	33.26	0.07	33.33	46.00	-12.67	QP	
6		839.9500	30.74	3.78	34.52	46.00	-11.48	QP	

APPENDIX B RADIATED EMISSIONS - ABOVE 1 GHZ

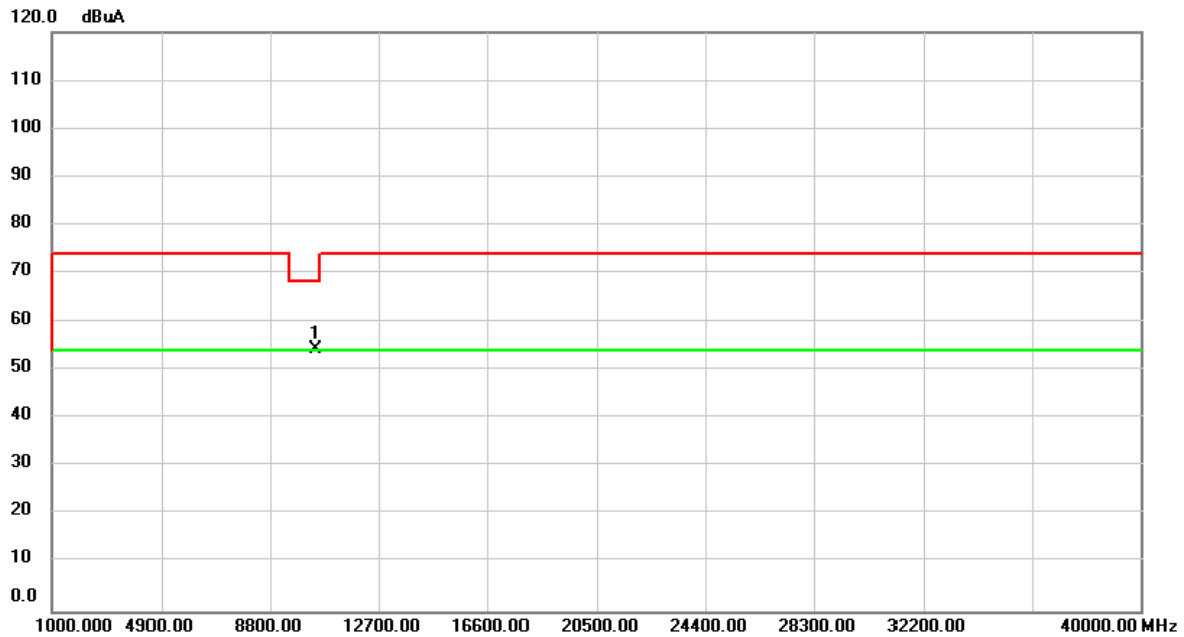
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Test Mode	UNII-1_TX AC (VHT80) MODE CHANNEL 42	Polarization	Vertical
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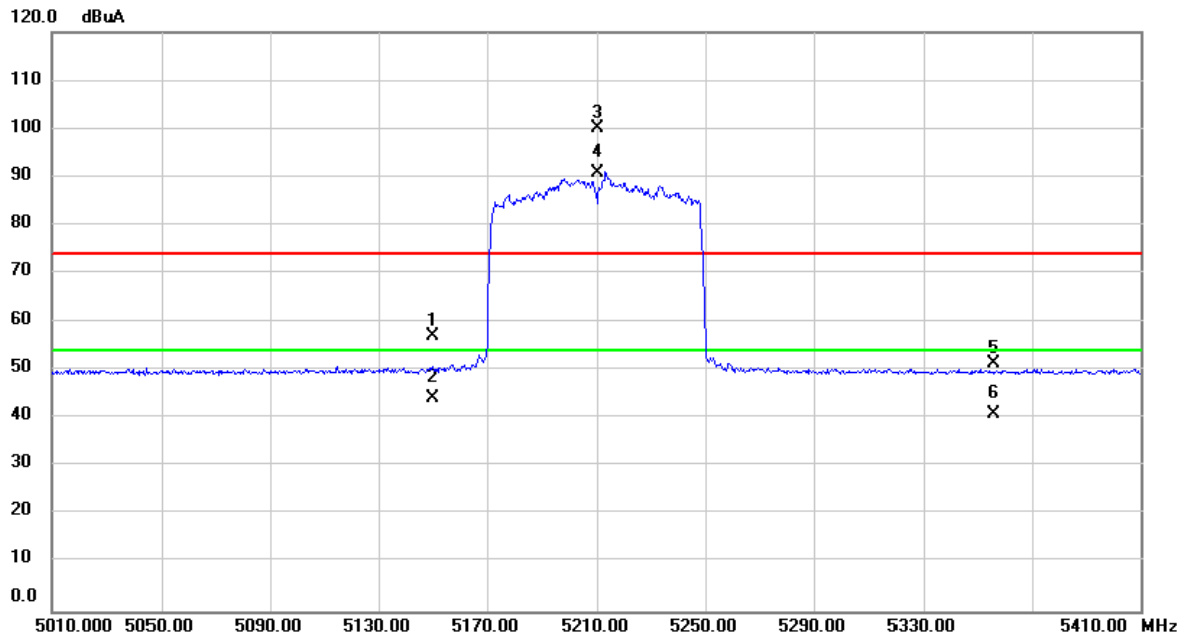
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5149.440	28.36	37.23	65.59	74.00	-8.41	peak	
2		5149.440	13.35	37.23	50.58	54.00	-3.42	AVG	
3	X	5210.000	66.96	37.32	104.28	74.00	30.28	peak	No Limit
4	*	5210.000	57.57	37.32	94.89	54.00	40.89	AVG	No Limit
5		5351.500	21.38	37.50	58.88	74.00	-15.12	peak	
6		5351.500	3.75	37.50	41.25	54.00	-12.75	AVG	

Test Mode	UNII-1_TX AC (VHT80) MODE CHANNEL 42	Polarization	Vertical
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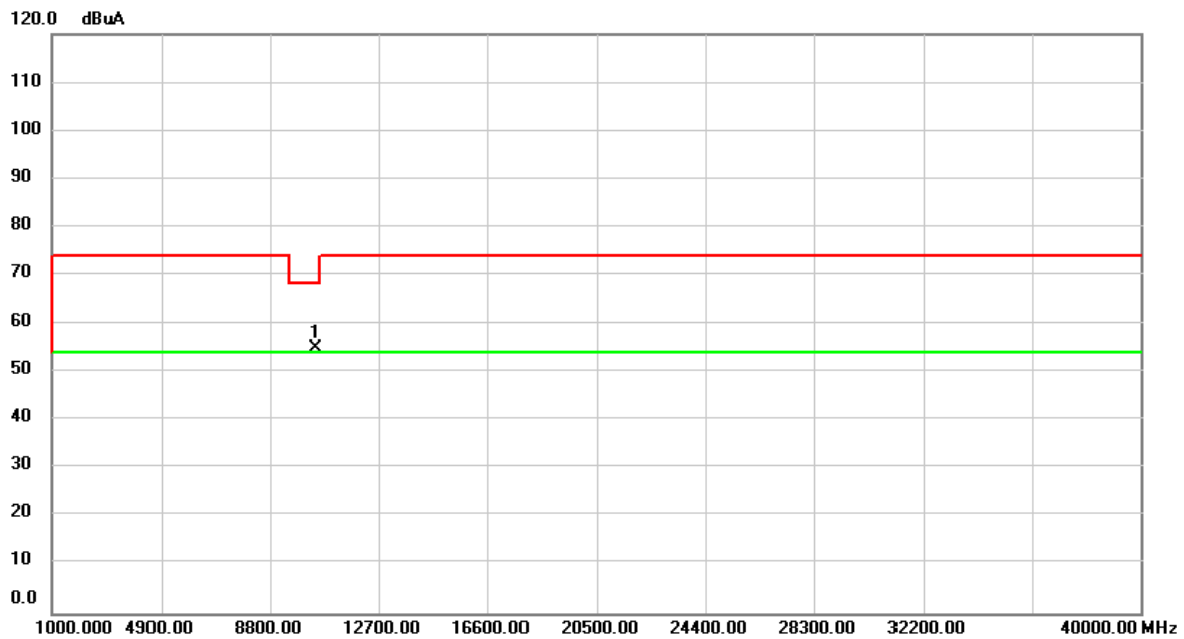
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector	Comment
1	*	10420.00	52.84	1.72	54.56	68.20	-13.64	peak	

Test Mode	UNII-1_TX AC (VHT80) MODE CHANNEL 42	Polarization	Horizontal
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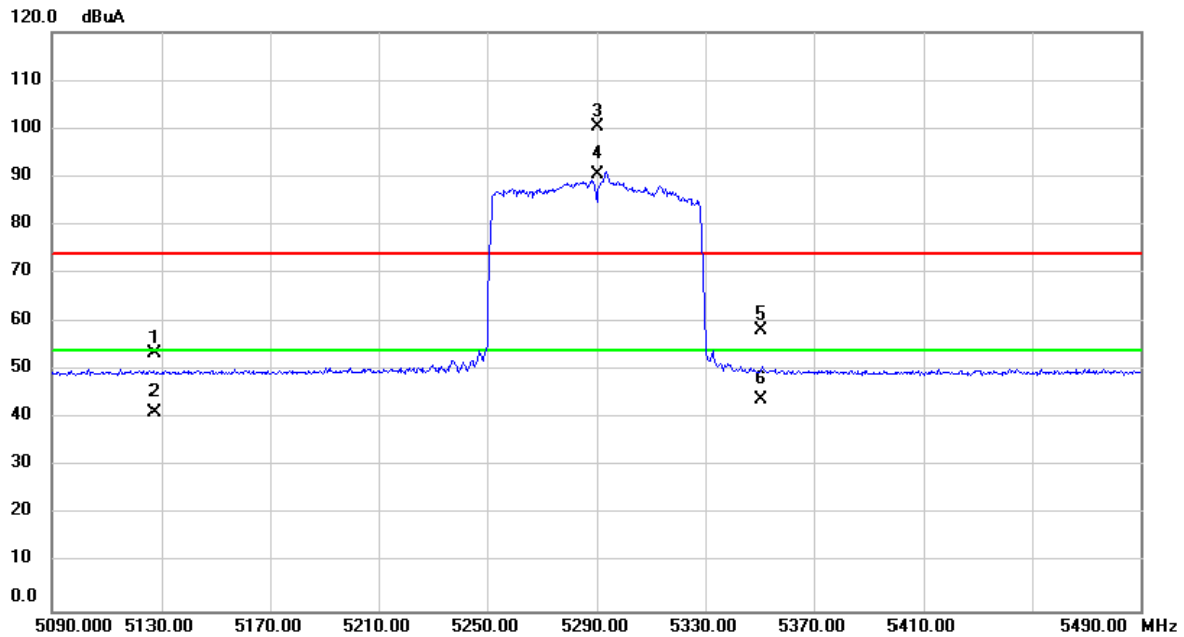
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5149.860	20.07	37.23	57.30	74.00	-16.70	peak	
2		5149.860	7.04	37.23	44.27	54.00	-9.73	AVG	
3	X	5210.000	62.58	37.32	99.90	74.00	25.90	peak	No Limit
4	*	5210.000	53.32	37.32	90.64	54.00	36.64	AVG	No Limit
5		5355.880	13.95	37.50	51.45	74.00	-22.55	peak	
6		5355.880	3.39	37.50	40.89	54.00	-13.11	AVG	

Test Mode	UNII-1_TX AC (VHT80) MODE CHANNEL 42	Polarization	Horizontal
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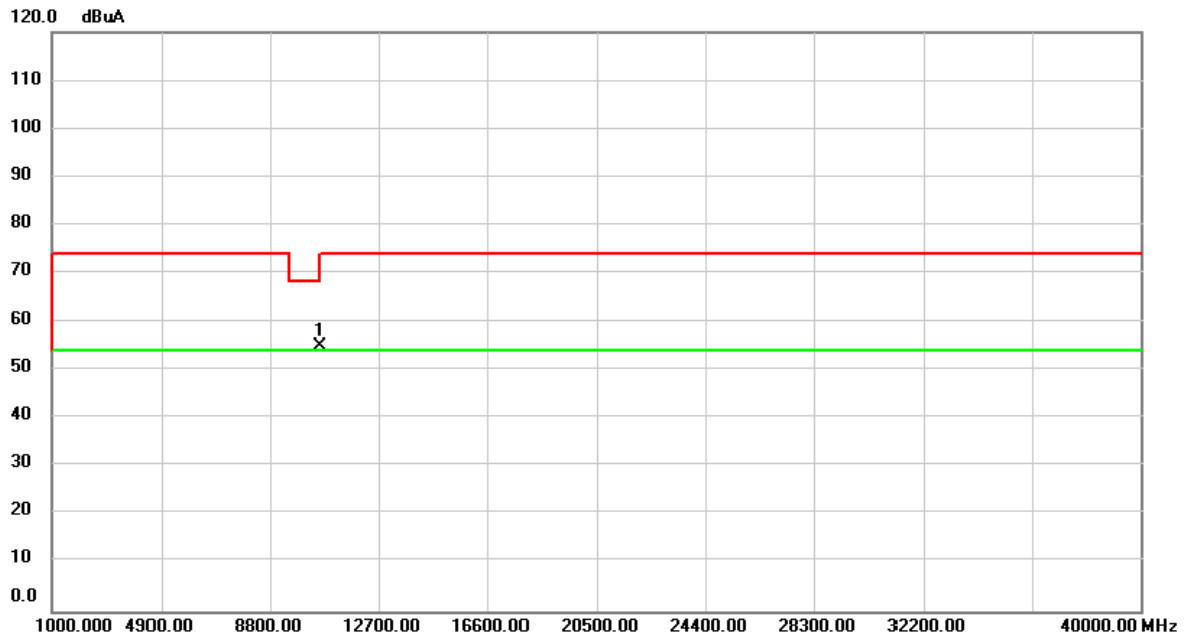
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector	Comment
1	*	10420.00	53.26	1.72	54.98	68.20	-13.22	peak	

Test Mode	UNII-2A_TX AC (VHT80) MODE CHANNEL 58	Polarization	Vertical
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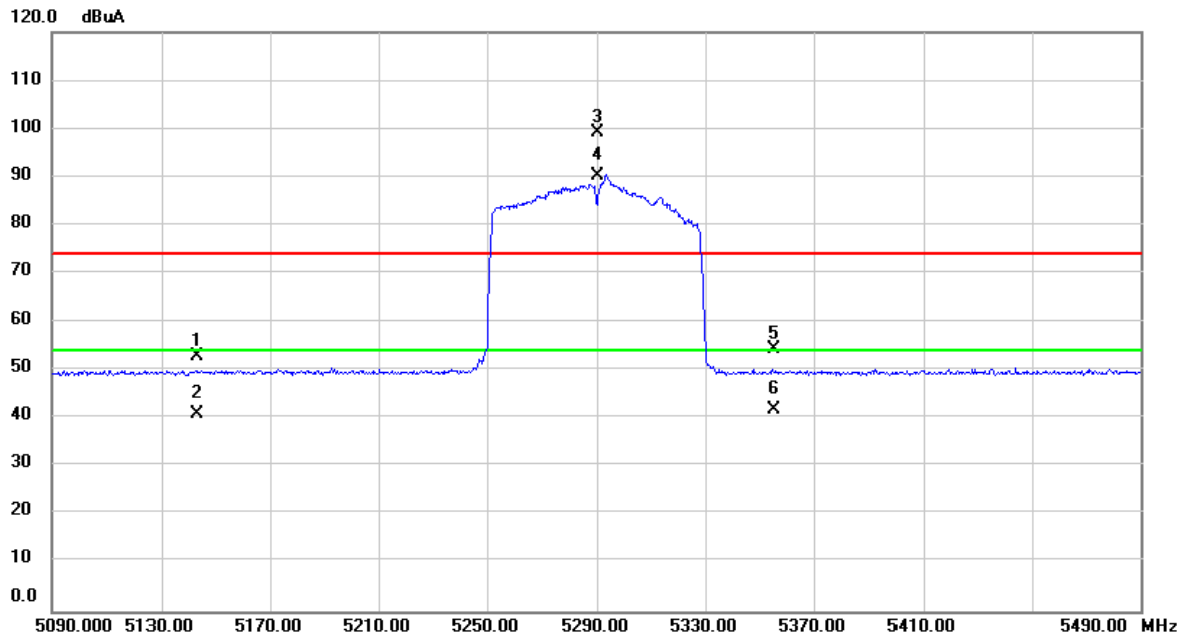
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5127.680	16.36	37.20	53.56	74.00	-20.44	peak	
2		5127.680	3.98	37.20	41.18	54.00	-12.82	AVG	
3	X	5290.000	62.95	37.41	100.36	74.00	26.36	peak	No Limit
4	*	5290.000	53.17	37.41	90.58	54.00	36.58	AVG	No Limit
5		5350.440	20.97	37.50	58.47	74.00	-15.53	peak	
6		5350.440	6.32	37.50	43.82	54.00	-10.18	AVG	

Test Mode	UNII-2A_TX AC (VHT80) MODE CHANNEL 58	Polarization	Vertical
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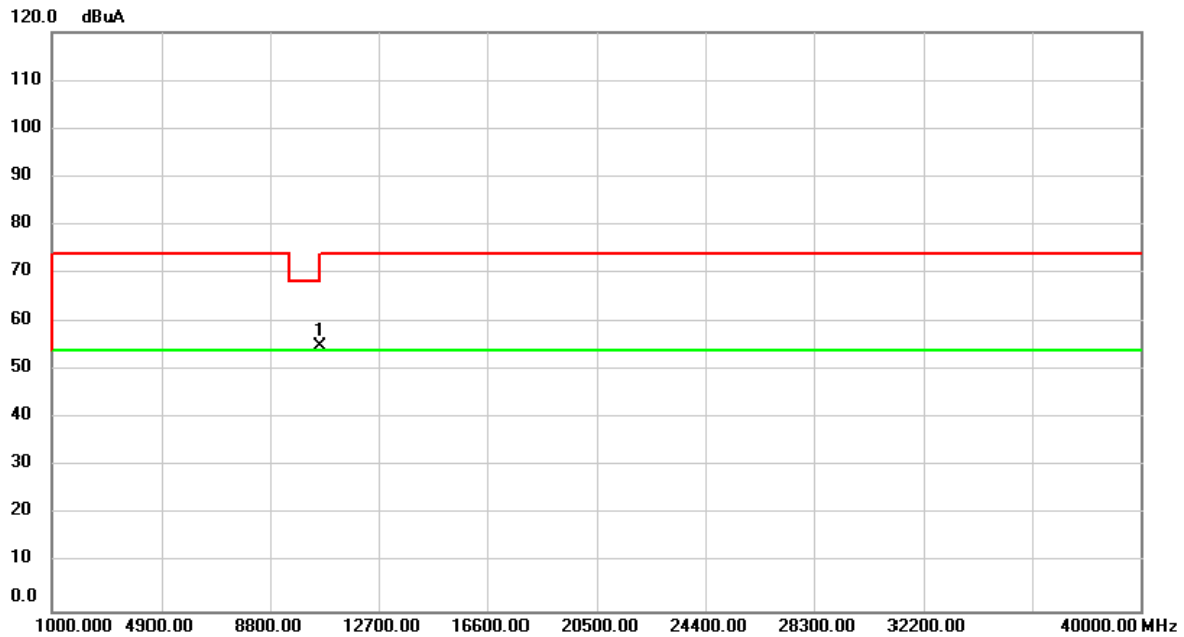
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector	Comment
1	*	10580.00	53.07	1.94	55.01	68.20	-13.19	peak	

Test Mode	UNII-2A_TX AC (VHT80) MODE CHANNEL 58	Polarization	Horizontal
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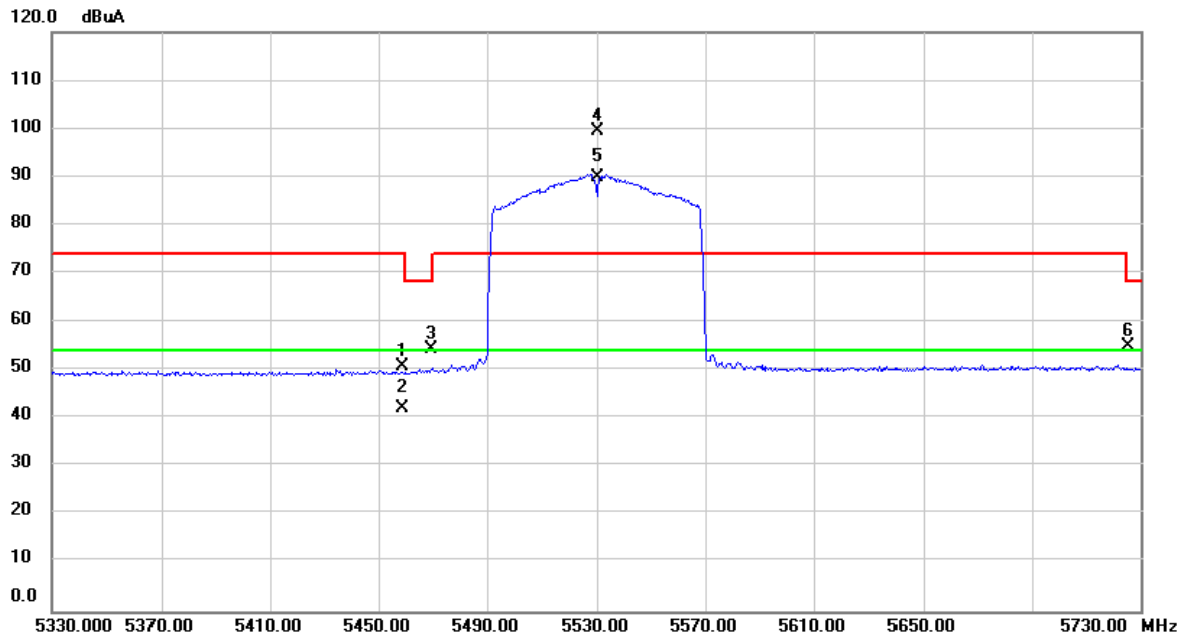
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1	X	5143.280	15.87	37.22	53.09	74.00	-20.91	peak	
2	X	5143.280	3.78	37.22	41.00	54.00	-13.00	AVG	
3	X	5290.000	61.81	37.41	99.22	74.00	25.22	peak	No Limit
4	*	5290.000	52.87	37.41	90.28	54.00	36.28	AVG	No Limit
5	X	5355.170	16.88	37.50	54.38	74.00	-19.62	peak	
6	X	5355.170	4.33	37.50	41.83	54.00	-12.17	AVG	

Test Mode	UNII-2A_TX AC (VHT80) MODE CHANNEL 58	Polarization	Horizontal
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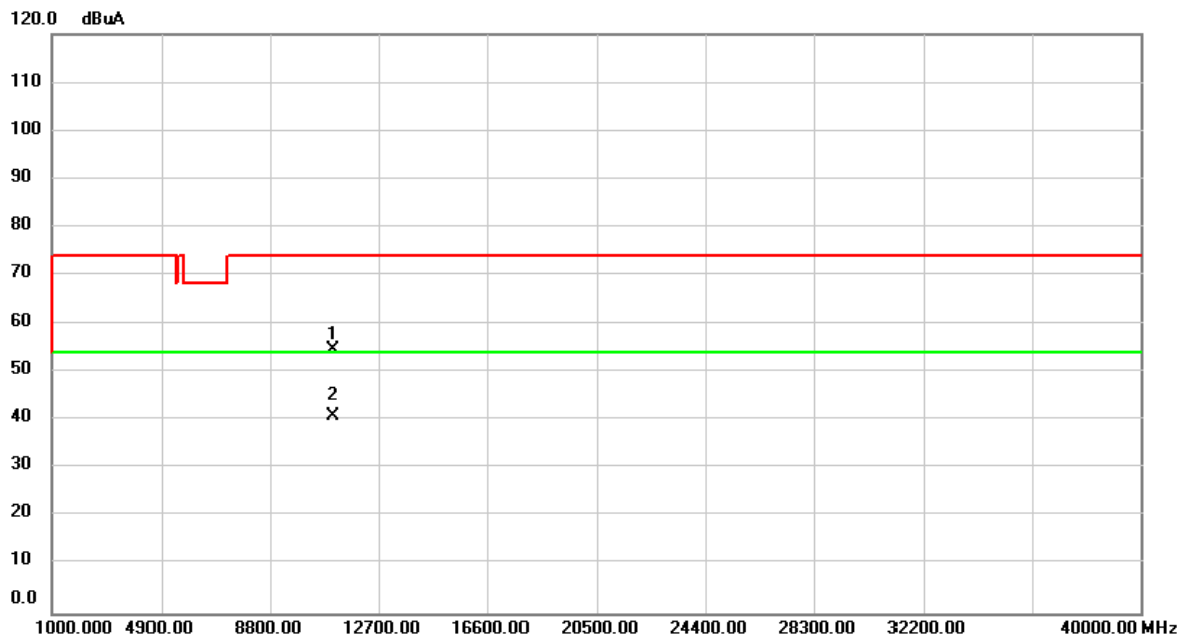
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector	Comment
1	*	10580.00	53.23	1.94	55.17	68.20	-13.03	peak	

Test Mode	UNII-2C_TX AC (VHT80) MODE CHANNEL 106	Polarization	Vertical
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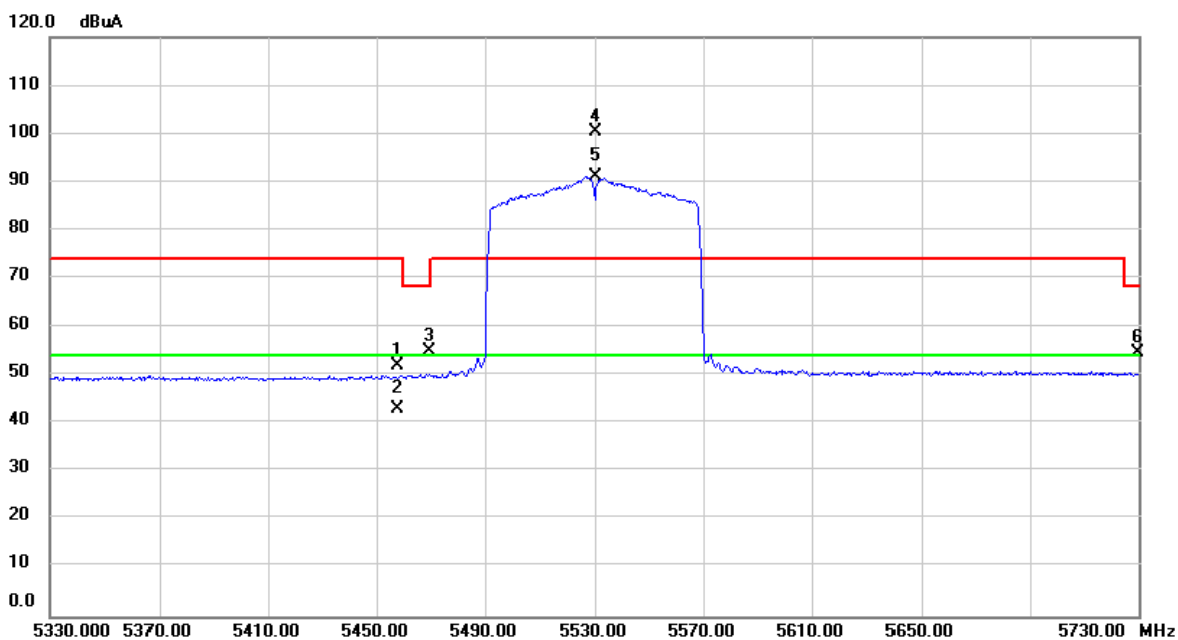
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5458.960	13.09	37.64	50.73	74.00	-23.27	peak	
2		5458.960	4.49	37.64	42.13	54.00	-11.87	AVG	
3		5469.270	16.83	37.65	54.48	68.20	-13.72	peak	
4	X	5530.000	61.82	37.74	99.56	74.00	25.56	peak	No Limit
5	*	5530.000	52.14	37.74	89.88	54.00	35.88	AVG	No Limit
6		5725.560	17.07	38.11	55.18	68.20	-13.02	peak	

Test Mode	UNII-2C_TX AC (VHT80) MODE CHANNEL 106	Polarization	Vertical
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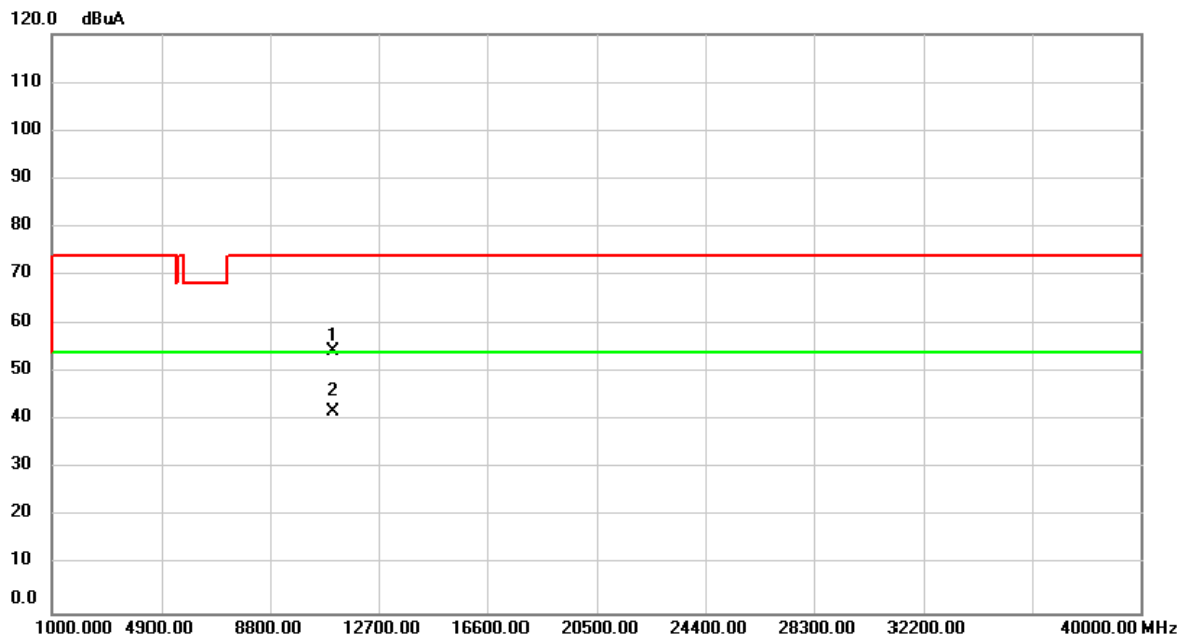
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		11060.00	52.18	2.64	54.82	74.00	-19.18	peak	
2	*	11060.00	38.36	2.64	41.00	54.00	-13.00	AVG	

Test Mode UNII-2C_TX AC (VHT80) MODE CHANNEL 106 Polarization Horizontal



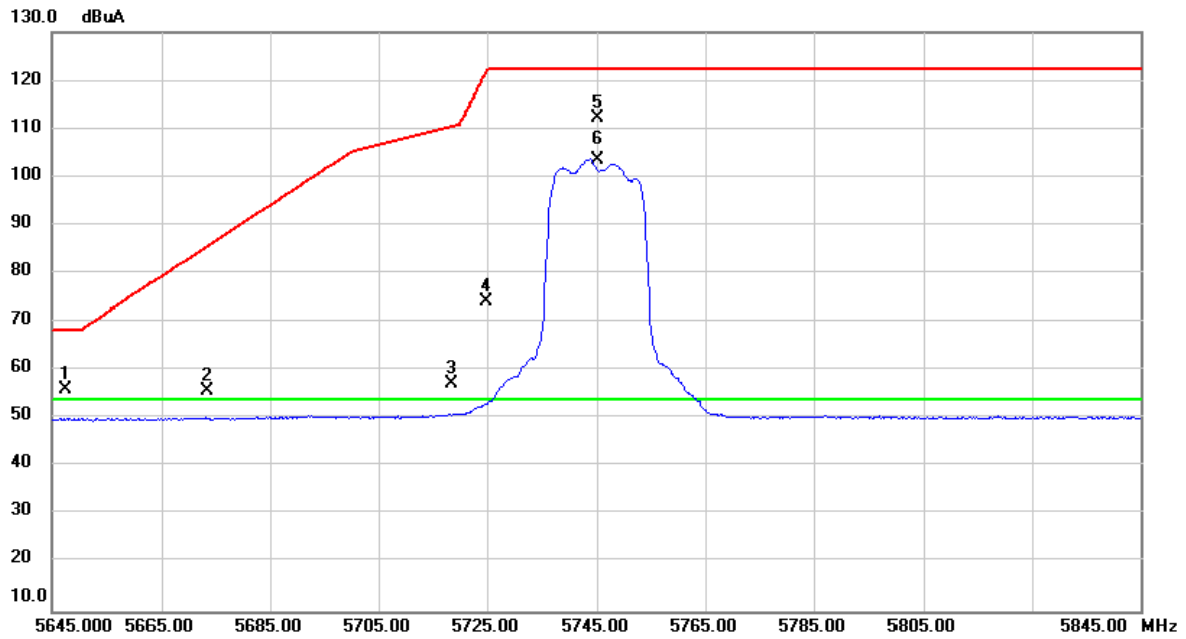
No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5457.530	14.53	37.64	52.17	74.00	-21.83	peak	
2		5457.530	5.43	37.64	43.07	54.00	-10.93	AVG	
3		5469.530	17.29	37.65	54.94	68.20	-13.26	peak	
4	X	5530.000	62.57	37.74	100.31	74.00	26.31	peak	No Limit
5	*	5530.000	53.25	37.74	90.99	54.00	36.99	AVG	No Limit
6		5729.475	16.61	38.12	54.73	68.20	-13.47	peak	

Test Mode	UNII-2C_TX AC (VHT80) MODE CHANNEL 106	Polarization	Horizontal
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No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		11060.00	51.71	2.64	54.35	74.00	-19.65	peak	
2	*	11060.00	39.31	2.64	41.95	54.00	-12.05	AVG	

Test Mode	UNII-3_TX A MODE CHANNEL 149	Polarization	Vertical
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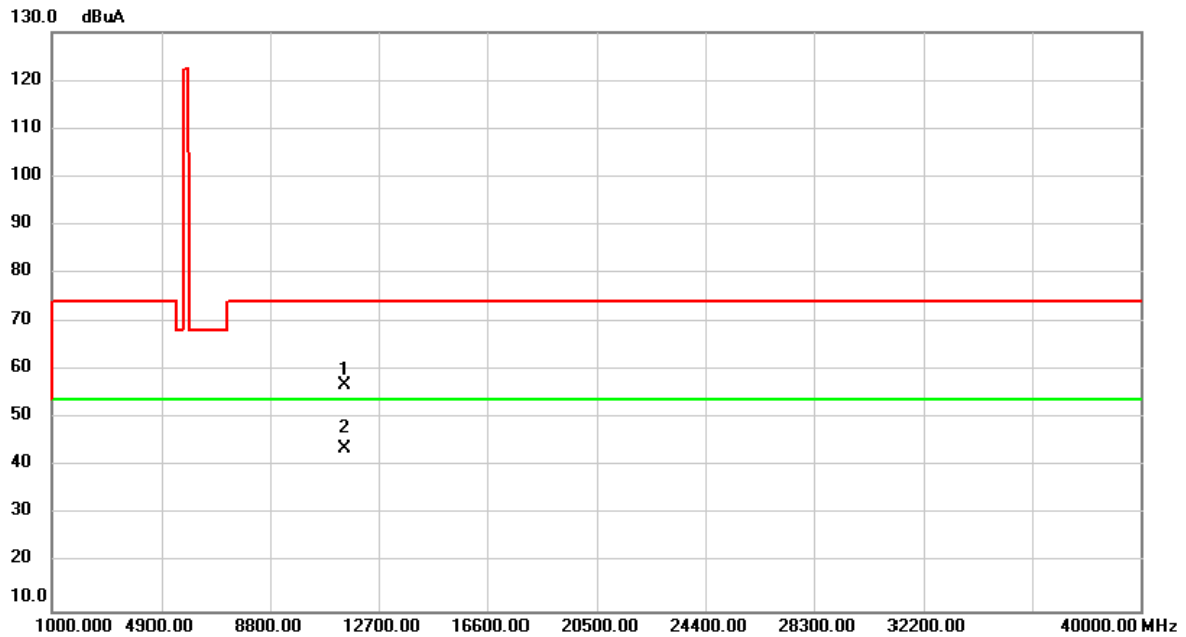


No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5647.485	18.05	37.97	56.02	68.20	-12.18	peak	
2		5673.450	17.70	38.01	55.71	85.59	-29.88	peak	
3		5718.500	19.14	38.10	57.24	110.38	-53.14	peak	
4		5724.940	35.83	38.10	73.93	122.06	-48.13	peak	
5		5745.000	73.94	38.14	112.08	122.20	-10.12	peak	No Limit
6	*	5745.000	65.38	38.14	103.52	54.00	49.52	AVG	No Limit

Test Mode UNII-3_TX A MODE CHANNEL 149

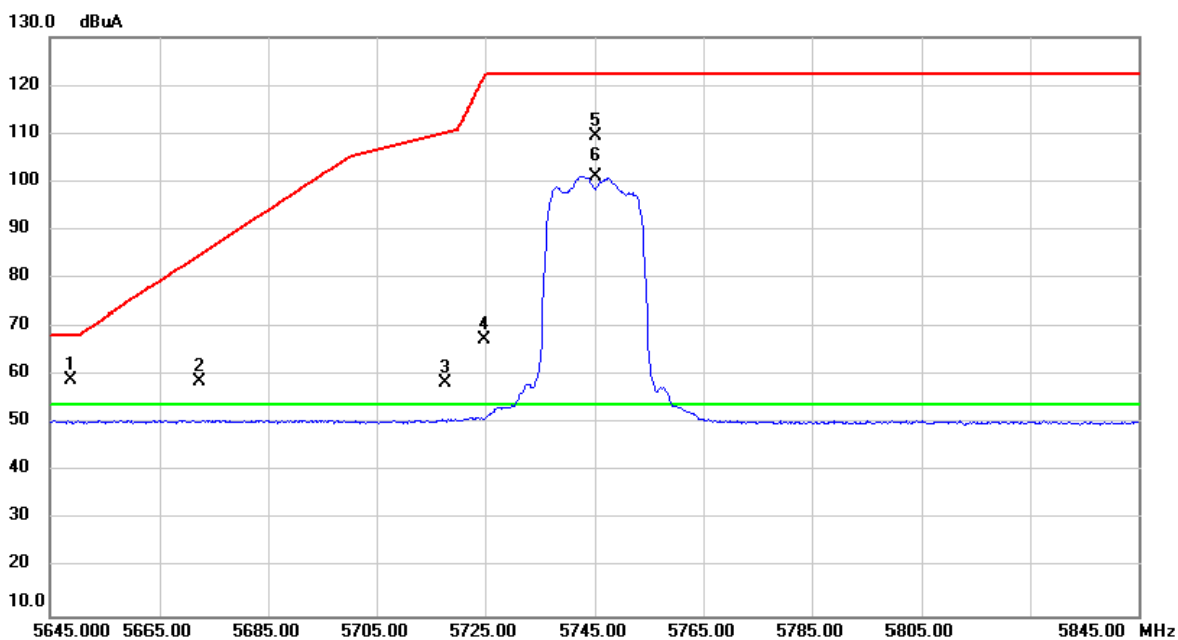
Polarization

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		11490.00	53.92	2.99	56.91	74.00	-17.09	peak	
2	*	11490.00	40.81	2.99	43.80	54.00	-10.20	AVG	

Test Mode	UNII-3_TX A MODE CHANNEL 149	Polarization	Horizontal
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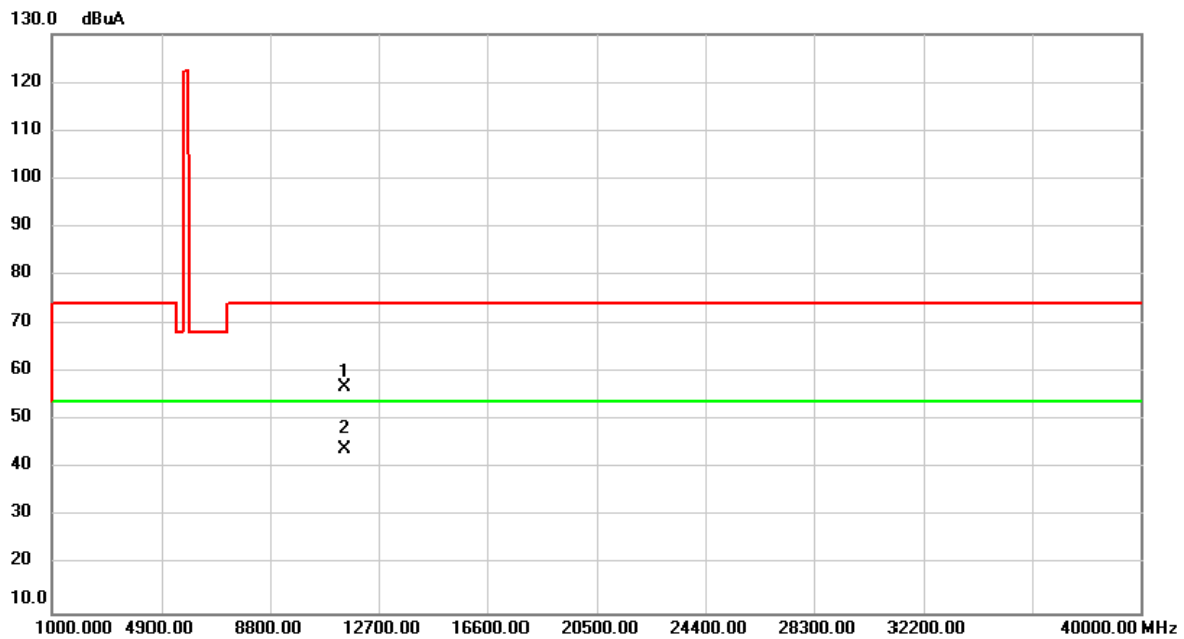


No.	Mk.	Freq. MHz	Reading Level dBuA	Correct Factor dB	Measure- ment dBuA	Limit dBuA	Over dB	Detector	Comment
1		5648.945	21.17	37.97	59.14	68.20	-9.06	peak	
2		5672.400	20.69	38.01	58.70	84.82	-26.12	peak	
3		5717.620	20.22	38.09	58.31	110.13	-51.82	peak	
4		5724.870	29.37	38.10	67.47	121.90	-54.43	peak	
5		5745.000	71.46	38.14	109.60	122.20	-12.60	peak	No Limit
6	*	5745.000	62.86	38.14	101.00	54.00	47.00	AVG	No Limit

Test Mode UNII-3_TX A MODE CHANNEL 149

Polarization

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuA	dB	dBuA	dBuA	dB	Detector	Comment
1		11490.00	53.96	2.99	56.95	74.00	-17.05	peak	
2	*	11490.00	41.14	2.99	44.13	54.00	-9.87	AVG	

APPENDIX C CONDUCTED OUTPUT POWER

CONTINUE ON NEXT PAGE

Test Mode	UNII-1_ IEEE 802.11a_ ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	16.31	0.0428	30.00	1.0000	Complies
5200	16.56	0.0453	30.00	1.0000	Complies
5240	16.53	0.0450	30.00	1.0000	Complies

Test Mode	UNII-1_ IEEE 802.11a_ ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	16.53	0.0450	30.00	1.0000	Complies
5200	17.04	0.0506	30.00	1.0000	Complies
5240	17.75	0.0596	30.00	1.0000	Complies

Test Mode	UNII-1_ IEEE 802.11a_ ANT 3
-----------	-----------------------------

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	16.51	0.0448	30.00	1.0000	Complies
5200	16.37	0.0434	30.00	1.0000	Complies
5240	17.02	0.0504	30.00	1.0000	Complies

Test Mode	UNII-1_ IEEE 802.11a_ ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	16.44	0.0441	30.00	1.0000	Complies
5200	16.96	0.0497	30.00	1.0000	Complies
5240	16.79	0.0478	30.00	1.0000	Complies

Test Mode	UNII-1_ IEEE 802.11a_ Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	22.47	0.1766	30.00	1.0000	Complies
5200	22.76	0.1889	30.00	1.0000	Complies
5240	23.07	0.2026	30.00	1.0000	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	14.79	0.0301	22.12	0.4550	Complies
5200	15.06	0.0321	22.12	0.4550	Complies
5240	14.85	0.0305	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	15.11	0.0324	22.12	0.4550	Complies
5200	15.61	0.0364	22.12	0.4550	Complies
5240	15.98	0.0396	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT20)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	15.07	0.0321	22.12	0.4550	Complies
5200	15.15	0.0327	22.12	0.4550	Complies
5240	15.39	0.0346	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT20)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	15.09	0.0323	22.12	0.4550	Complies
5200	15.55	0.0359	22.12	0.4550	Complies
5240	15.12	0.0325	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	21.04	0.1270	22.12	0.4550	Complies
5200	21.37	0.1371	22.12	0.4550	Complies
5240	21.38	0.1373	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	14.52	0.0283	22.12	0.4550	Complies
5200	14.69	0.0294	22.12	0.4550	Complies
5240	14.12	0.0258	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	14.72	0.0296	22.12	0.4550	Complies
5200	15.18	0.0330	22.12	0.4550	Complies
5240	15.39	0.0346	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT20)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	14.69	0.0294	22.12	0.4550	Complies
5200	14.75	0.0299	22.12	0.4550	Complies
5240	14.92	0.0310	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT20)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	14.63	0.0290	22.12	0.4550	Complies
5200	15.15	0.0327	22.12	0.4550	Complies
5240	14.45	0.0279	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	20.66	0.1164	22.12	0.4550	Complies
5200	20.97	0.1250	22.12	0.4550	Complies
5240	20.77	0.1193	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	14.77	0.0300	22.12	0.4550	Complies
5230	14.34	0.0272	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	15.57	0.0361	22.12	0.4550	Complies
5230	15.92	0.0391	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT40)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	15.36	0.0344	22.12	0.4550	Complies
5230	15.77	0.0378	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT40)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	15.49	0.0354	22.12	0.4550	Complies
5230	15.42	0.0348	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11n (HT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	21.33	0.1358	22.12	0.4550	Complies
5230	21.43	0.1388	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	14.62	0.0290	22.12	0.4550	Complies
5230	14.08	0.0256	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	15.15	0.0327	22.12	0.4550	Complies
5230	15.41	0.0348	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT40)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	14.94	0.0312	22.12	0.4550	Complies
5230	15.12	0.0325	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT40)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	15.12	0.0325	22.12	0.4550	Complies
5230	14.75	0.0299	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	20.98	0.1254	22.12	0.4550	Complies
5230	20.89	0.1227	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT80)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	12.74	0.0188	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT80)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	14.55	0.0285	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT80)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	14.39	0.0275	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT80)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	14.01	0.0252	22.12	0.4550	Complies

Test Mode	UNII-1_IIEEE 802.11ac (VHT80)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	20.00	0.1000	22.12	0.4550	Complies

Test Mode	UNII-2A_ IEEE 802.11a_ ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	11.29	0.0135	24.00	0.2512	Complies
5300	10.67	0.0117	24.00	0.2512	Complies
5320	10.97	0.0125	24.00	0.2512	Complies

Test Mode	UNII-2A_ IEEE 802.11a_ ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	11.39	0.0138	24.00	0.2512	Complies
5300	11.83	0.0152	24.00	0.2512	Complies
5320	12.04	0.0160	24.00	0.2512	Complies

Test Mode	UNII-2A_ IEEE 802.11a_ ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	10.41	0.0110	24.00	0.2512	Complies
5300	10.37	0.0109	24.00	0.2512	Complies
5320	10.61	0.0115	24.00	0.2512	Complies

Test Mode	UNII-2A_ IEEE 802.11a_ ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	10.37	0.0109	24.00	0.2512	Complies
5300	11.37	0.0137	24.00	0.2512	Complies
5320	11.81	0.0152	24.00	0.2512	Complies

Test Mode	UNII-2A_ IEEE 802.11a_ Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	16.91	0.0491	24.00	0.2512	Complies
5300	17.12	0.0515	24.00	0.2512	Complies
5320	17.42	0.0552	24.00	0.2512	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	7.38	0.0055	16.12	0.0409	Complies
5300	6.57	0.0045	16.12	0.0409	Complies
5320	6.69	0.0047	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	7.58	0.0057	16.12	0.0409	Complies
5300	7.63	0.0058	16.12	0.0409	Complies
5320	7.88	0.0061	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT20)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	6.29	0.0043	16.12	0.0409	Complies
5300	5.76	0.0038	16.12	0.0409	Complies
5320	6.14	0.0041	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT20)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	6.33	0.0043	16.12	0.0409	Complies
5300	7.03	0.0050	16.12	0.0409	Complies
5320	7.28	0.0053	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	12.96	0.0197	16.12	0.0409	Complies
5300	12.82	0.0191	16.12	0.0409	Complies
5320	13.07	0.0203	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	7.09	0.0051	16.12	0.0409	Complies
5300	6.40	0.0044	16.12	0.0409	Complies
5320	6.62	0.0046	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	7.24	0.0053	16.12	0.0409	Complies
5300	7.32	0.0054	16.12	0.0409	Complies
5320	7.82	0.0061	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT20)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	5.95	0.0039	16.12	0.0409	Complies
5300	5.45	0.0035	16.12	0.0409	Complies
5320	6.20	0.0042	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT20)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	6.06	0.0040	16.12	0.0409	Complies
5300	6.54	0.0045	16.12	0.0409	Complies
5320	7.16	0.0052	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5260	12.64	0.0184	16.12	0.0409	Complies
5300	12.50	0.0178	16.12	0.0409	Complies
5320	13.01	0.0200	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	7.39	0.0055	16.12	0.0409	Complies
5310	6.06	0.0040	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	7.32	0.0054	16.12	0.0409	Complies
5310	7.37	0.0055	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT40)_ANT 3
-----------	------------------------------------

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	6.33	0.0043	16.12	0.0409	Complies
5310	5.69	0.0037	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT40)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270 MHz	6.26	0.0042	16.12	0.0409	Complies
5310 MHz	6.81	0.0048	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11n (HT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	12.88	0.0194	16.12	0.0409	Complies
5310	12.55	0.0180	16.12	0.0409	Complies

Test Mode	UNII-2A_ IEEE 802.11ac (VHT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	7.29	0.0054	16.12	0.0409	Complies
5310	5.99	0.0040	16.12	0.0409	Complies

Test Mode	UNII-2A_ IEEE 802.11ac (VHT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	7.49	0.0056	16.12	0.0409	Complies
5310	7.05	0.0051	16.12	0.0409	Complies

Test Mode	UNII-2A_ IEEE 802.11ac (VHT40)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	6.18	0.0041	16.12	0.0409	Complies
5310	5.42	0.0035	16.12	0.0409	Complies

Test Mode	UNII-2A_ IEEE 802.11ac (VHT40)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270 MHz	6.24	0.0042	16.12	0.0409	Complies
5310 MHz	6.58	0.0045	16.12	0.0409	Complies

Test Mode	UNII-2A_ IEEE 802.11ac (VHT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5270	12.86	0.0193	16.12	0.0409	Complies
5310	12.32	0.0171	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT80)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5290	6.34	0.0043	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT80)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5290	7.74	0.0059	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT80)_ANT 3
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5290	5.61	0.0036	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT80)_ANT 4
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5290	6.87	0.0049	16.12	0.0409	Complies

Test Mode	UNII-2A_IIEEE 802.11ac (VHT80)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5290	12.73	0.0188	16.12	0.0409	Complies

Test Mode	UNII-2C_IIEEE 802.11a_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	15.47	0.0352	24.00	0.2512	Complies
5580	15.84	0.0384	24.00	0.2512	Complies
5700	15.33	0.0341	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11a_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	15.81	0.0381	24.00	0.2512	Complies
5580	16.06	0.0404	24.00	0.2512	Complies
5700	15.75	0.0376	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11a_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	18.65	0.0733	24.00	0.2512	Complies
5580	18.96	0.0787	24.00	0.2512	Complies
5700	18.56	0.0717	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11n (HT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	15.39	0.0346	24.00	0.2512	Complies
5580	14.48	0.0281	24.00	0.2512	Complies
5700	14.79	0.0301	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11n (HT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	15.66	0.0368	24.00	0.2512	Complies
5580	14.72	0.0296	24.00	0.2512	Complies
5700	15.17	0.0329	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11n (HT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	18.54	0.0714	24.00	0.2512	Complies
5580	17.61	0.0577	24.00	0.2512	Complies
5700	17.99	0.0630	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	15.18	0.0330	24.00	0.2512	Complies
5580	14.04	0.0254	24.00	0.2512	Complies
5700	14.19	0.0262	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	15.26	0.0336	24.00	0.2512	Complies
5580	14.39	0.0275	24.00	0.2512	Complies
5700	14.57	0.0286	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5500	18.23	0.0665	24.00	0.2512	Complies
5580	17.23	0.0528	24.00	0.2512	Complies
5700	17.39	0.0549	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11n (HT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5510	13.65	0.0232	24.00	0.2512	Complies
5550	17.84	0.0608	24.00	0.2512	Complies
5670	15.18	0.0330	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11n (HT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5510	13.76	0.0238	24.00	0.2512	Complies
5550	18.77	0.0753	24.00	0.2512	Complies
5670	16.63	0.0460	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11n (HT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5510	16.72	0.0469	24.00	0.2512	Complies
5550	21.34	0.1361	24.00	0.2512	Complies
5670	18.98	0.0790	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5510	13.59	0.0229	24.00	0.2512	Complies
5550	17.64	0.0581	24.00	0.2512	Complies
5670	15.16	0.0328	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5510	13.68	0.0233	24.00	0.2512	Complies
5550	18.48	0.0705	24.00	0.2512	Complies
5670	16.52	0.0449	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5510	16.65	0.0462	24.00	0.2512	Complies
5550	21.09	0.1285	24.00	0.2512	Complies
5670	18.90	0.0777	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT80)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5530	13.31	0.0214	24.00	0.2512	Complies
5610	17.47	0.0558	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT80)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5530	14.34	0.0272	24.00	0.2512	Complies
5610	18.39	0.0690	24.00	0.2512	Complies

Test Mode	UNII-2C_IIEEE 802.11ac (VHT80)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5530	16.87	0.0486	24.00	0.2512	Complies
5610	20.96	0.1249	24.00	0.2512	Complies

Test Mode	UNII-3_ IEEE 802.11a_ ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	18.21	0.0662	30.00	1.0000	Complies
5785	18.19	0.0659	30.00	1.0000	Complies
5825	18.75	0.0750	30.00	1.0000	Complies

Test Mode	UNII-3_ IEEE 802.11a_ ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	19.59	0.0910	30.00	1.0000	Complies
5785	19.44	0.0879	30.00	1.0000	Complies
5825	18.92	0.0780	30.00	1.0000	Complies

Test Mode	UNII-3_ IEEE 802.11a_ Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	21.96	0.1572	30.00	1.0000	Complies
5785	21.87	0.1538	30.00	1.0000	Complies
5825	21.85	0.1530	30.00	1.0000	Complies

Test Mode	UNII-3_ IEEE 802.11n (HT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	17.29	0.0536	30.00	1.0000	Complies
5785	16.90	0.0490	30.00	1.0000	Complies
5825	17.95	0.0624	30.00	1.0000	Complies

Test Mode	UNII-3_ IEEE 802.11n (HT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	18.65	0.0733	30.00	1.0000	Complies
5785	18.22	0.0664	30.00	1.0000	Complies
5825	18.15	0.0653	30.00	1.0000	Complies

Test Mode	UNII-3_ IEEE 802.11n (HT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	21.03	0.1269	30.00	1.0000	Complies
5785	20.62	0.1154	30.00	1.0000	Complies
5825	21.06	0.1277	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT20)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	16.44	0.0441	30.00	1.0000	Complies
5785	16.15	0.0412	30.00	1.0000	Complies
5825	16.93	0.0493	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT20)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	17.81	0.0604	30.00	1.0000	Complies
5785	17.66	0.0583	30.00	1.0000	Complies
5825	16.98	0.0499	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT20)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	20.19	0.1045	30.00	1.0000	Complies
5785	19.98	0.0996	30.00	1.0000	Complies
5825	19.97	0.0992	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11n (HT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	16.28	0.0425	30.00	1.0000	Complies
5795	16.01	0.0399	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11n (HT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	17.52	0.0565	30.00	1.0000	Complies
5795	17.24	0.0530	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11n (HT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	19.95	0.0990	30.00	1.0000	Complies
5795	19.68	0.0929	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT40)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	15.65	0.0367	30.00	1.0000	Complies
5795	15.13	0.0326	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT40)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	17.09	0.0512	30.00	1.0000	Complies
5795	16.58	0.0455	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT40)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	19.44	0.0879	30.00	1.0000	Complies
5795	18.93	0.0781	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT80)_ANT 1
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5775	15.72	0.0373	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT80)_ANT 2
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5775	16.79	0.0478	30.00	1.0000	Complies

Test Mode	UNII-3_IIEEE 802.11ac (VHT80)_Total
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Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5775	19.30	0.0851	30.00	1.0000	Complies

End of Test Report