

**FCC &ISED Radio Test Report****FCC ID: 2AC23-WC16  
IC:12290A-WC16****The report concerns: Class II Permissive Change**

Report Reference No. .... : 21EFSS05009 04291  
Date Sample(s) Received ..... : 2021-04-30  
Date of Tested ..... : 2021-04-30 to 2021-05-30  
Date of issue ..... : 2021-06-01  
Testing Laboratory ..... : DongGuan ShuoXin Electronic Technology Co., Ltd.  
Address ..... : Zone A, 1F, No. 6, XinGang Road YuanGang Street,  
XinAn District, ChangAn Town, DongGuan City,  
GuangDong, China  
  
Applicant's name ..... : Hui Zhou Gaoshengda Technology Co., LTD  
Address ..... : NO.75 Zhongkai Development Area, Huizhou,  
Guangdong, China  
Manufacturer ..... : Hui Zhou Gaoshengda Technology Co., LTD  
  
Equipment ..... : WIFI+BT Module  
Trade Mark ..... : GSD  
Model ..... : WC16R2601, WC16R2601F  
Ratings ..... : I/P: DC 3.3V

Test Engineer:



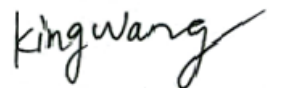
Blue Qiu

Responsible Engineer :



Smile Wang

Authorized Signatory:



King Wang

Table of Contents	Page
<b>1 . TEST REPORT DECLARE</b>	<b>4</b>
<b>2 . SUMMARY OF TEST RESULTS</b>	<b>5</b>
2.1 MEASUREMENT UNCERTAINTY	6
<b>3 . GENERAL INFORMATION</b>	<b>7</b>
3.1 GENERAL DESCRIPTION OF EUT	7
3.2 TEST MODES	9
3.3 PARAMETERS OF TEST SOFTWARE	11
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	12
3.5 SUPPORT UNITS	12
3.6 TEST ENVIRONMENT CONDITIONS	12
3.7 DUTY CYCLE	13
<b>4 . AC POWER LINE CONDUCTED EMISSIONS TEST</b>	<b>14</b>
4.1 LIMIT	14
4.2 TEST PROCEDURE	14
4.3 MEASUREMENT INSTRUMENTS LIST	14
4.4 TESTSETUP	15
4.5 EUT OPERATION CONDITIONS	15
4.6 TEST RESULTS	16
<b>5 . RADIATED EMISSIONSTEST</b>	<b>18</b>
5.1 LIMIT	18
5.2 TEST PROCEDURE	19
5.3 MEASUREMENT INSTRUMENTS LIST	19
5.4 TESTSETUP	20
5.5 EUT OPERATION CONDITIONS	20
5.6 TEST RESULTS - 9 KHZ to 30MHZ	21
5.7 TEST RESULTS - 30 MHz TO 1000 MHz	22
5.8 TEST RESULTS - ABOVE1000 MHz(BAND EDGE)	24
5.9 TEST RESULTS - ABOVE1000 MHz (HARMONIC)	60
<b>6 . BANDWIDTH TEST</b>	<b>122</b>
6.1 LIMIT	122
6.2 TEST PROCEDURE AND SETTING	122
6.3 MEASUREMENT INSTRUMENTS LIST	122
6.4 TEST SETUP	123

<b>Table of Contents</b>	<b>Page</b>
6.5 EUT OPERATION CONDITIONS	123
6.6 TEST RESULTS	124
<b>7 . MAXIMUM OUTPUT POWER TEST</b>	<b>130</b>
7.1 LIMIT	130
7.2 TEST PROCEDURE AND SETTING	130
7.3 MEASUREMENT INSTRUMENTS LIST	130
7.4 TEST SETUP	131
7.5 EUT OPERATION CONDITIONS	131
7.6 TEST RESULTS	132
<b>8 . POWER SPECTRAL DENSITY TEST</b>	<b>143</b>
8.1 LIMIT	143
8.2 TEST PROCEDURE AND SETTING	143
8.3 MEASUREMENT INSTRUMENTS LIST	143
8.4 TEST SETUP	143
8.5 EUT OPERATION CONDITIONS	144
8.6 TEST RESULTS	145
<b>9 . FREQUENCY STABILITY MEASUREMENT</b>	<b>157</b>
9.1 LIMIT	157
9.2 TEST PROCEDURE AND SETTING	157
9.3 MEASUREMENT INSTRUMENTS LIST	157
9.4 TEST SETUP	157
9.5 EUT OPERATION CONDITIONS	157
9.6 TEST RESULTS	158

## 1. TEST REPORT DECLARE

Applicant	Hui Zhou Gaoshengda Technology Co., LTD
Address	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China
Manufacturer	Hui Zhou Gaoshengda Technology Co., LTD
Address	No.2,Jin-da Road, Huinan High-tech Industrial Park, Hui-ao Avenue, Huizhou City, Guangdong, China
Factory	Hui Zhou Gaoshengda Technology Co., LTD
Address	No.2,Jin-da Road, Huinan High-tech Industrial Park, Hui-ao Avenue, Huizhou City, Guangdong, China
Equipment	WIFI+BT Module
Model No.	WC16R2601, WC16R2601F
Model Different	The WC16R2601 and WC16R2601F only differ in power supply port.
Trade Mark	GSD
Issued History 1	The purpose of this letter is to request a Class II Permissive change for FCC ID: 2AC23-WC16, original granted on 09/14/2020. There is no other hardware or electrical modification made to the applying modular transmitter itself, only opened the UNII-2A and UNII-2C band through software, this report only for UNNII-2A and UNII-2C.
Standard	FCC Part15, Subpart E(15.407) RSS-247 Issue 2, Feb. 2017 RSS-Gen Issue 5, Apr. 2018 ANSI C63.10-2013 FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

### We Declare:

The equipment described above is tested by DongGuan ShuoXin Electronic Technology Co., Ltd(ATT). and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and DongGuan ShuoXin Electronic Technology Co., Ltd.(ATT) is assumed of full responsibility for the accuracy and completeness of these tests.

ATT is not responsible for the sampling stage, so the results only apply to the sample as received.

ATT's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. ATT shall have no liability for any declarations, inferences or generalizations drawn by the client or others from ATT issued reports.

## 2. SUMMARY OF TEST RESULTS

The EUT have been tested according to the applicable standards as referenced below:

Standard(s) Section		Test Item	Judgment	Remark
FCC	IC			
15.207 15.407(b)	RSS-GEN 8.8	AC Power Line Conducted Emissions	PASS	-----
15.407(b) 15.205(a) 15.209(a)	RSS-247 6.2.1.2 RSS-247 6.2.4.2 RSS-GEN 8.9 RSS-GEN 8.10	Radiated Emissions	PASS	-----
15.407(a) 15.407(e)	RSS-247 6.2.1.1 RSS-247 6.2.2.1 RSS-247 6.2.3.1 RSS-247 6.2.4.1 RSS-GEN 6.7	Spectrum Bandwidth	PASS	-----
15.407(a)	RSS-247 6.2.1.1 RSS-247 6.2.2.1 RSS-247 6.2.3.1 RSS-247 6.2.4.1	Maximum Output Power	PASS	-----
15.407(a)	RSS-247 6.2.1.1 RSS-247 6.2.2.1 RSS-247 6.2.3.1 RSS-247 6.2.4.1	Power Spectral Density	PASS	-----
15.407(g)	RSS-GEN 6.11	Frequency Stability	PASS	-----
15.203	RSS-247 6.4(a)	Antenna Requirements	PASS	Note(4)
15.407(c)	RSS-GEN 8.8	Automatically Discontinue Transmission	PASS	Note(2)

**Note:**

- (1) "N/A" denotes test is not applicable in this test report.
- (2) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (3) For UNII-1 this device was functioned as a  
 Access point device     Client device
- (4) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

**2.1.MEASUREMENT UNCERTAINTY**

Test Item	Uncertainty
Uncertainty for Conduction emission test (9kHz-150kHz)	3.7 dB
Uncertainty for Conduction emission test (150kHz-30MHz)	3.3 dB
Uncertainty for Radiation Emission test (30MHz-200MHz)	4.60 dB (Polarize: V)
	4.60 dB (Polarize: H)
Uncertainty for Radiation Emission test (200MHz-1GHz)	6.10 dB (Polarize: V)
	5.08 dB (Polarize: H)
Uncertainty for Radiation Emission test (1GHz-6GHz)	5.01 dB (Polarize: V)
	5.01 dB (Polarize: H)
Uncertainty for Radiation Emission test (6GHz-18GHz)	5.26 dB (Polarize: V)
	5.26 dB (Polarize: H)
Uncertainty for Radiation Emission test (18GHz-40GHz)	5.06 dB (Polarize: V)
	5.06 dB (Polarize: H)
Uncertainty for radio frequency	±0.048kHz
Uncertainty for conducted RF Power	±0.32dB

**Note:**

This uncertainty represents an expanded uncertainty expressed at approximately the 95%confidence level using a coverage factor of k=2.

**Test Facility:**

The Test site used by DongGuan ShuoXin Electronic Technology Co., Ltd. to collect test data is located on the Zone A, 1F, No. 6, XinGang Road YuanGang Street, XinAn District, ChangAn Town, DongGuan City, GuangDong, China

The test facility is recognized, certified, or accredited by the following organizations:

Item	Registration No.	Expiration Date
CNAS	L3098	2024-08-27
A2LA	4893.01	2022-06-30
Innovation, Science and Economic Development Canada (ISED)	11033A	2022-06-30
Federal Communications Commission (FCC)	171688 Designation No.:CN1235	2022-06-30

### 3. GENERAL INFORMATION

#### 3.1. GENERAL DESCRIPTION OF EUT

Equipment	WIFI+BT Module	
Brand Name	GSD	
Test Model	WC16R2601, WC16R2601F	
Series Model	N/A	
Model Difference(s)	N/A	
Hardware Version	V1.0	
Software Version	V1.0	
Power Source	Supplied from USB.	
Power Rating	DC 5V	
Operation Frequency Bands	UNII-2A: 5250 MHz~5350 MHz UNII-2C: 5470 MHz~5725 MHz	
Modulation Type	OFDM	
Bit Rate of Transmitter	Up to 866.6Mbps	
Operating Mode	IEEE 802.11a: 1TX(Ant 1 or Ant 2) IEEE 802.11n (HT20): 2TX(Ant 1+Ant 2) IEEE 802.11n (HT40): 2TX(Ant 1+Ant 2) IEEE 802.11ac (VHT20): 2TX(Ant 1+Ant 2) IEEE 802.11ac (VHT40): 2TX(Ant 1+Ant 2) IEEE 802.11ac (VHT80): 2TX(Ant 1+Ant 2)	
Antenna Information	Antenna Type: PIFA	Maximum Peak Gain: 3dBi(Ant 1) 3dBi(Ant 2)
Maximum Output Power for UNII-2A	IEEE 802.11a: 14.92dBm (0.0310W) IEEE 802.11n (HT20): 17.63dBm (0.0579W) IEEE 802.11n (HT40): 17.79dBm (0.0601W) IEEE 802.11ac (VHT20): 17.92dBm (0.0619W) IEEE 802.11ac (VHT40): 17.63dBm (0.0579W) IEEE 802.11ac (VHT80): 15.32dBm (0.0340W)	
Maximum Output Power for UNII-2C	IEEE 802.11a: 14.89dBm (0.0308W) IEEE 802.11n (HT20): 17.71dBm (0.0590 W) IEEE 802.11n (HT40): 17.71dBm (0.0590 W) IEEE 802.11ac (VHT20): 17.75 dBm (0.0596 W) IEEE 802.11ac (VHT40): 17.91dBm (0.0618 W) IEEE 802.11ac (VHT80): 15.90dBm (0.0389 W)	

Note:

1. For a more detailed features description, please refer to the manufacturer’s specifications or the user’s manual.
2. Channel List:

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

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-2C		UNII-2C		UNII-2C	
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		
112	5560	126	5630		
116	5580	134	5670		
120	5600				
124	5620				
128	5640				
132	5660				
136	5680				
140	5700				

3. It is not open 5600MHz-5650MHz for Canada. And all test data in the 5600MHz-5650MHz range is FCC only.



### 3.2. TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 2	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 3	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 4	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 6	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 7	TX A Mode / CH100, CH120, CH140 (UNII-2C)
Mode 8	TX N (HT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 9	TX N (HT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 10	TX AC (VHT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 11	TX AC (VHT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 12	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

<b>AC power line conducted emissions test</b>	
Final Test Mode	Description
Mode 1	TX A Mode / CH52 (UNII-2A)

<b>Radiated emissions test - Below 1GHz</b>	
Final Test Mode	Description
Mode 1	TX A Mode / CH52 (UNII-2A)

Radiated emissions test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 2	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 3	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 4	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 6	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 7	TX A Mode / CH100, CH120, CH140 (UNII-2C)
Mode 8	TX N (HT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 9	TX N (HT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 10	TX AC (VHT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 11	TX AC (VHT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 12	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)

Conducted test	
Final Test Mode	Description
Mode 1	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 2	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 3	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 4	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 6	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 7	TX A Mode / CH100, CH120, CH140 (UNII-2C)
Mode 8	TX N (HT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 9	TX N (HT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 10	TX AC (VHT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 11	TX AC (VHT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 12	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)

Note:

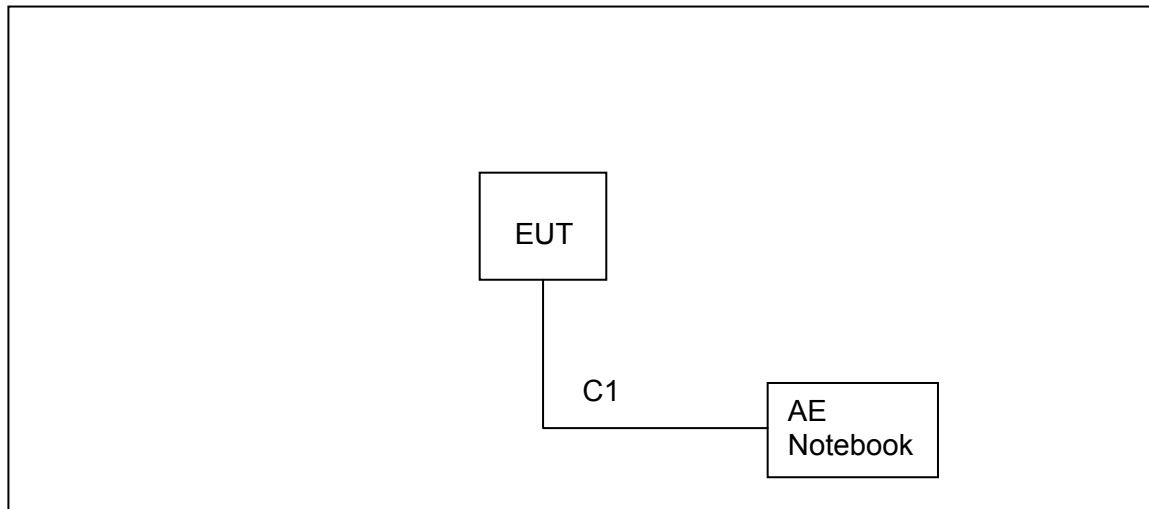
- (1) For radiated emission below 1 GHz and AC power line conducted emissions test, the IEEE 802.11a channel 52 is found to be the worst case and recorded.

### 3.3. PARAMETERS OF TEST SOFTWARE

UNII-2A			
Test Software	MP_Kit_RTL11ac_8822CU		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	80	80	80
IEEE 802.11n (HT20)	80	75	80
IEEE 802.11ac (VHT20)	80	75	75
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	80	80	
IEEE 802.11ac (VHT40)	80	75	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	70		

UNII-2C			
Test Software	MP_Kit_RTL11ac_8822CU		
Test Frequency (MHz)	5500	5600	5700
IEEE 802.11a	70	70	70
IEEE 802.11n (HT20)	67	70	70
IEEE 802.11ac (VHT20)	70	70	70
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	70	75	70
IEEE 802.11ac (VHT40)	70	75	70
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	65	65	

### 3.4. BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



### 3.5. SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
AE	Notebook	ACER	MS2367	32807810766

Item	Cable Type	Shielded Type	Ferrite Core	Length
C1	DC Cable	NO	NO	1m

### 3.6. TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage
AC Power Line Conducted Emissions	25°C	53%	DC 3.3V
Radiated Emissions-9K-30MHz	25°C	60%	DC 3.3V
Radiated Emissions-30 MHz to 1GHz	24°C	68%	DC 3.3V
Radiated Emissions-Above 1000 MHz	24°C	68%	DC 3.3V
Spectrum Bandwidth	25.3°C	44.8%	DC 3.3V
Maximum Output Power	25.3°C	44.8%	DC 3.3V
Power Spectral Density	25.3°C	44.8%	DC 3.3V
Frequency Stability	Normal, Extreme	44.8%	Normal, Extreme

### 3.7. DUTY CYCLE

All tests were performed under the condition of 100% Duty Cycle

**NOTE:**

For IEEE 802.11a, IEEE 802.11n (HT20) and IEEE 802.11ac (VHT20):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

For IEEE 802.11ac (VHT80):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 kHz (Duty cycle < 98%).

## 4. AC POWER LINE CONDUCTED EMISSIONS TEST

### 4.1. LIMIT

Frequency (MHz)	Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

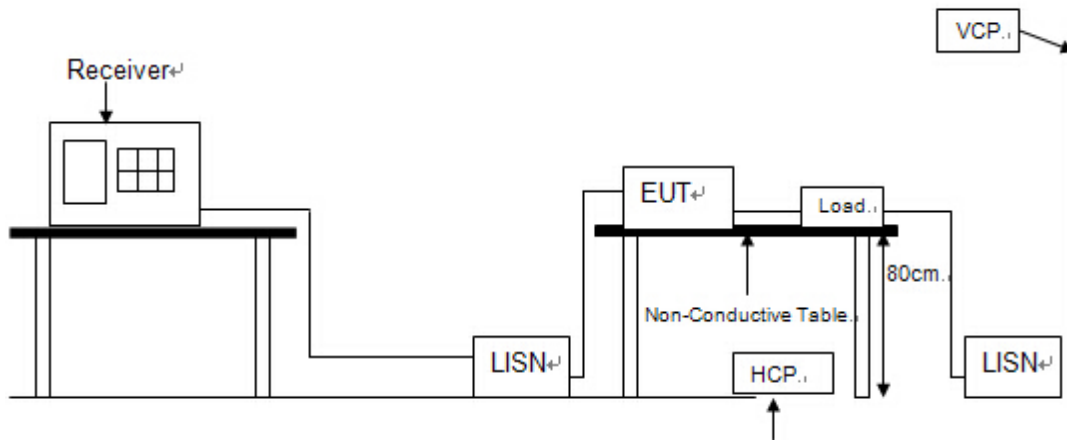
### 4.2. TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.

### 4.3. MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Pulse Limiter	MTS-systemtechnik	MTS-IMP-136	261115-010-0024	12/11/2021
2	EMI Test Receiver	R&S	ESCI	101308	12/12/2021
3	LISN	AFJ	LS16	16011103219	06/09/2021
4	LISN	Schwarzbeck	NSLK 8127	8127-432	12/11/2021
5	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

## 4.4. TESTSETUP



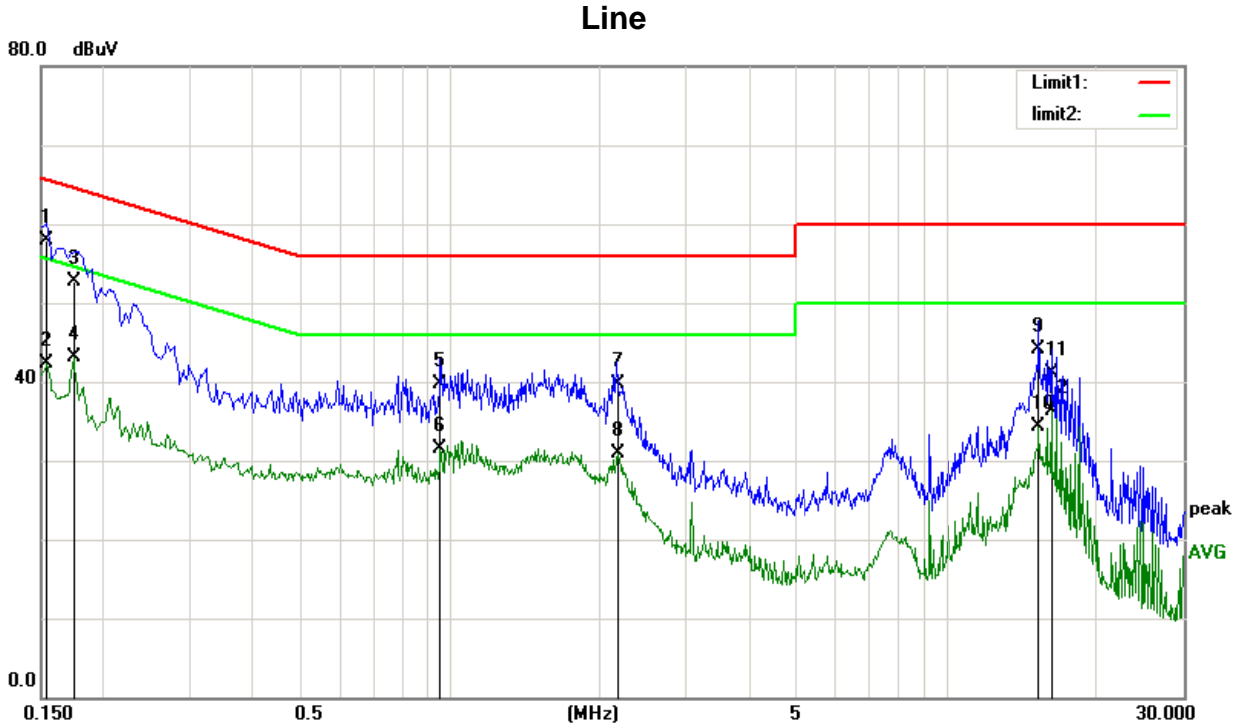
## 4.5. EUT OPERATION CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

The EUT was programmed to be in continuously transmitting/TX mode.

## 4.6. TEST RESULTS

Test Mode: TX A Mode / CH52 (UNII 2A)



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1539	46.14	11.77	57.91	65.78	-7.87	QP
2	0.1539	30.52	11.77	42.29	55.78	-13.49	AVG
3	0.1740	41.09	11.59	52.68	64.76	-12.08	QP
4	0.1740	31.50	11.59	43.09	54.76	-11.67	AVG
5	0.9580	29.54	10.09	39.63	56.00	-16.37	QP
6	0.9580	21.48	10.09	31.57	46.00	-14.43	AVG
7	2.1780	29.54	10.22	39.76	56.00	-16.24	QP
8	2.1780	20.59	10.22	30.81	46.00	-15.19	AVG
9	15.3419	33.08	11.00	44.08	60.00	-15.92	QP
10	15.3419	23.28	11.00	34.28	50.00	-15.72	AVG
11	16.2658	30.14	11.04	41.18	60.00	-18.82	QP
12	16.2658	25.25	11.04	36.29	50.00	-13.71	AVG

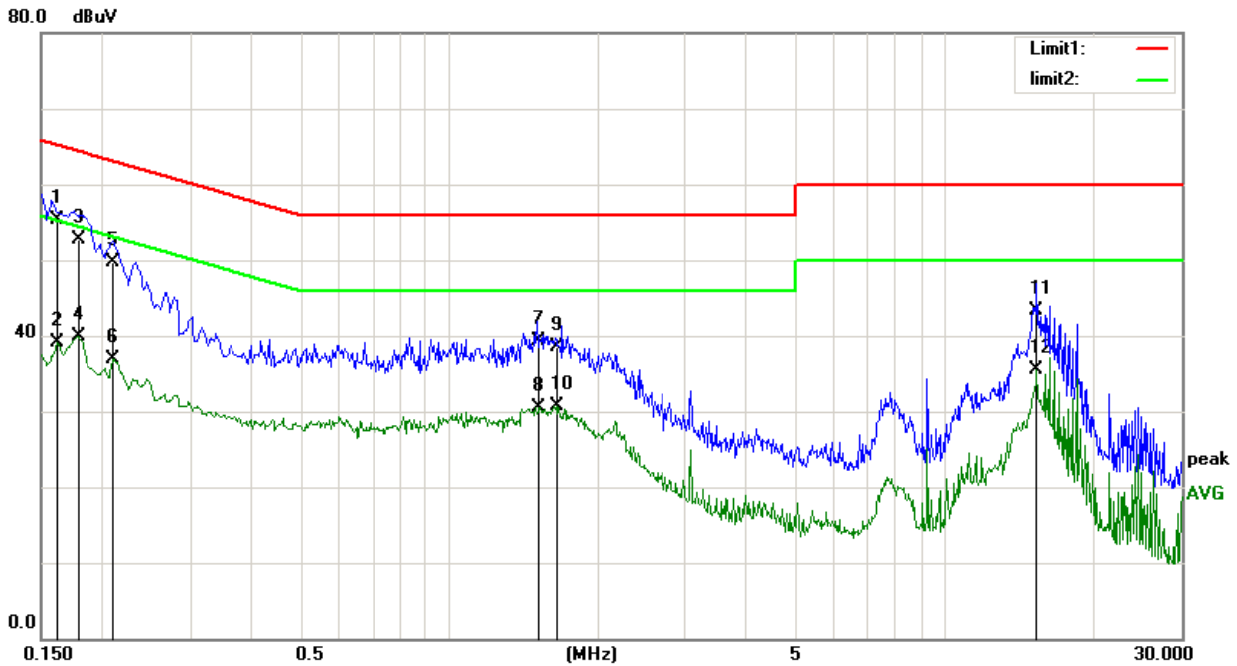
**REMARKS:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Test Mode: TX A Mode / CH52 (UNII 2A)

## Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1620	43.65	11.70	55.35	65.36	-10.01	QP
2	0.1620	27.41	11.70	39.11	55.36	-16.25	AVG
3	0.1780	41.08	11.55	52.63	64.57	-11.94	QP
4	0.1780	28.43	11.55	39.98	54.57	-14.59	AVG
5	0.2100	38.44	11.26	49.70	63.20	-13.50	QP
6	0.2100	25.73	11.26	36.99	53.20	-16.21	AVG
7	1.5220	29.18	10.15	39.33	56.00	-16.67	QP
8	1.5220	20.43	10.15	30.58	46.00	-15.42	AVG
9	1.6460	28.27	10.17	38.44	56.00	-17.56	QP
10	1.6460	20.47	10.17	30.64	46.00	-15.36	AVG
11	15.3499	32.31	11.00	43.31	60.00	-16.69	QP
12	15.3499	24.54	11.00	35.54	50.00	-14.46	AVG

**Remarks:**

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## 5.. RADIATED EMISSIONSTEST

### 5.1. LIMIT

In case the emission fall within the restricted band specified on 15.205(a)&RSS-Gen 8.10, then the 15.209(a)&RSS-Gen 8.9 limit in the table below has to be followed.

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

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
Above 960	500	3

#### LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency (MHz)	EIRP Limit (dBm/MHz)	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:

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

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

(2) According to 15.407(b)(4)(i), 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 25MHz 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 27dBm/MHz at the band edge.

(3) Radiation larger than 26.5GHz is background, so the following data only measures the maximum 26.5GHz

(4) Duty Cycle compensation less than 98% has been compensated in the test software prior to the implementation of the test

## 5.2. TEST PROCEDURE

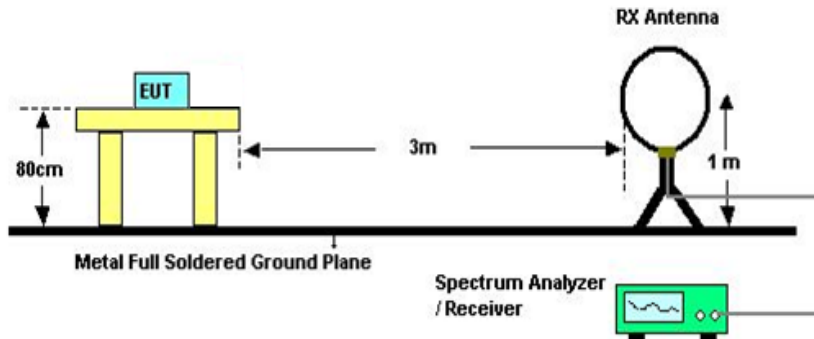
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance 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 0.8m or 1.5m; 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. The test result is calculated as the following:
  - (1) Result = Reading + Correct Factor
  - (2) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain + Attenuator
  - (3) Margin = Result - Limit

## 5.3. MEASUREMENT INSTRUMENTS LIST

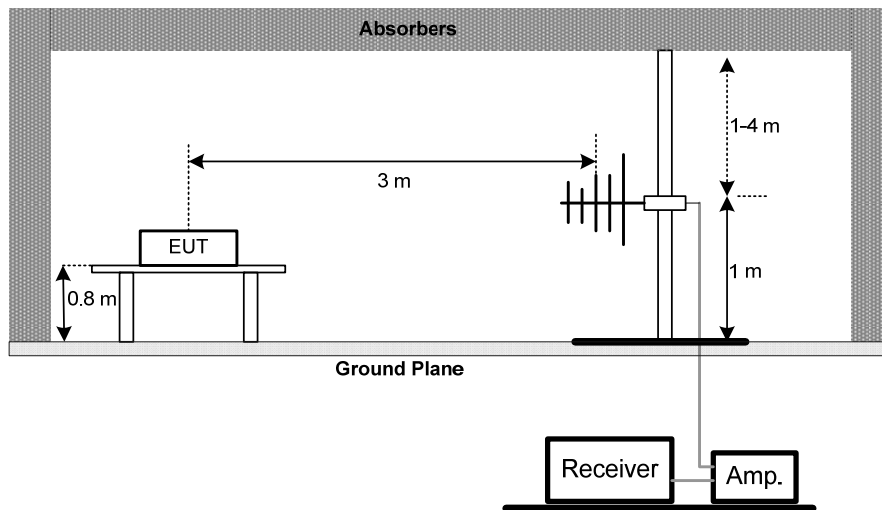
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	101307	12/12/2021
2	Spectrum Analyzer	Agilent	E4407B	US40240708	11/17/2021
3	Spectrum Analyzer	R&S	FSP	1164.4391.38	06/01/2021
4	Loop antenna	SCHWARZBECK	FMZB1519	1519-062	12/14/2021
5	Broadband antenna	SCHWARZBECK	VULB9168	VULB9168-192	08/06/2021
6	HORN ANTENNA	SCHWARZBECK	BBHA9120D	9120D 1065	04/20/2022
7	DRG Horn Antenna	A.H. Systems	SAS-574	588	06/01/2021
8	Preamplifier Amplifier	HP	8447F	3113A05680	12/11/2021
9	Preamplifier Amplifier	Aeroflex	33711-392-77150-11	97	06/01/2021
10	PRE-AMPLIFIER	CY	EMC011830	980136	12/11/2021
11	RF Cable	R&S	Test Cable 4	4	12/11/2021
12	RF Cable	R&S	Test Cable 5	5	12/11/2021
13	RF Cable	R&S	Test Cable 9	9	04/20/2022
14	RF Cable	R&S	Test Cable 10	10	12/11/2021
15	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

## 5.4. TESTSETUP

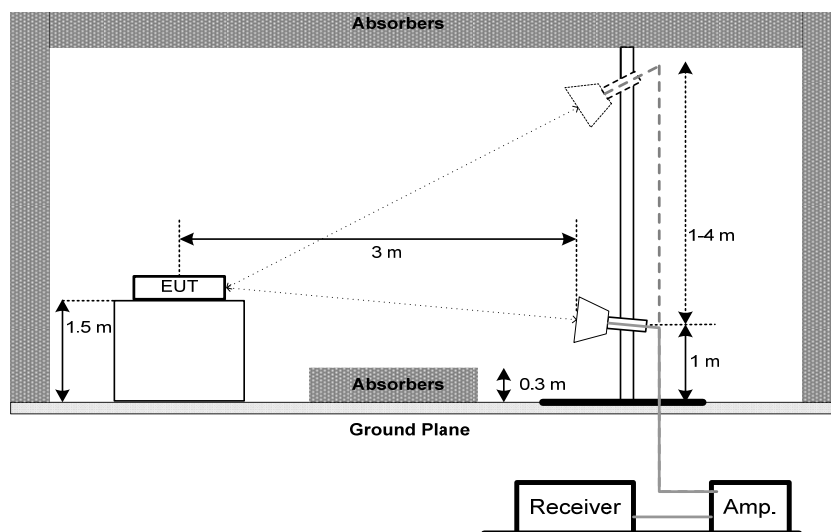
### 9 kHz to 30 MHz



### 30 MHz to 1 GHz



### Above 1 GHz



## 5.5. EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

**5.6. TEST RESULTS - 9 KHZ to 30MHZ**

Test Mode:	TX A Mode / CH52 (UNII 2A)
------------	----------------------------

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

**Note:**

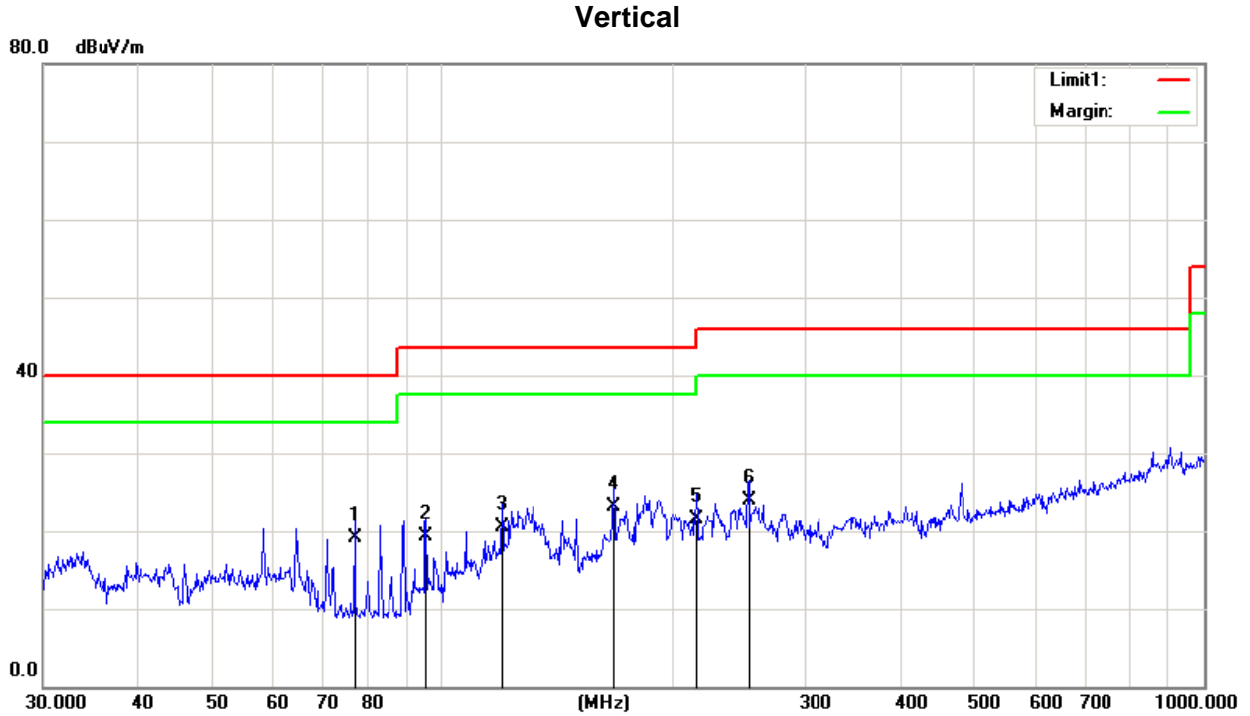
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =  $20 \log(\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor

## 5.7. TEST RESULTS - 30 MHz TO 1000 MHz

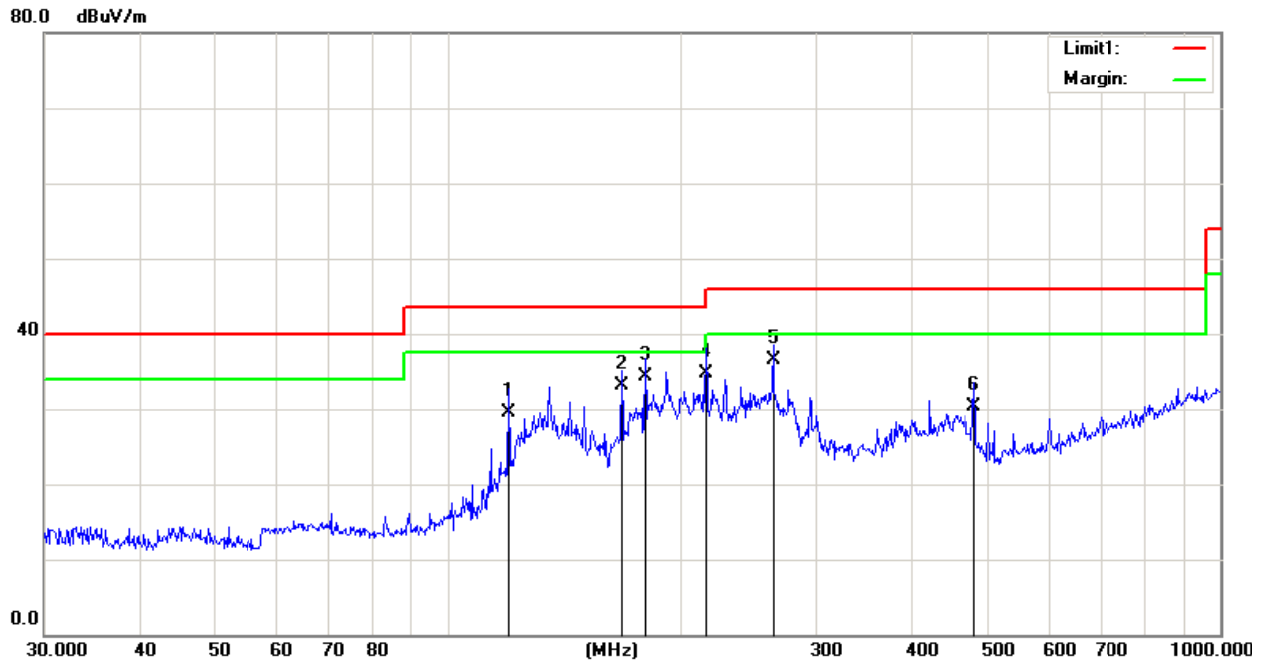
Test Mode: TX A Mode / CH52 (UNII 2A)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	76.7806	34.15	-14.99	19.16	40.00	-20.84	QP
2	95.4270	34.09	-14.77	19.32	43.50	-24.18	QP
3	119.8555	33.44	-12.89	20.55	43.50	-22.95	QP
4	167.8240	33.58	-10.48	23.10	43.50	-20.40	QP
5	216.0240	32.16	-10.58	21.58	46.00	-24.42	QP
6	252.9482	32.34	-8.44	23.90	46.00	-22.10	QP

Test Mode: TX A Mode / CH52 (UNII 2A)

### Horizontal

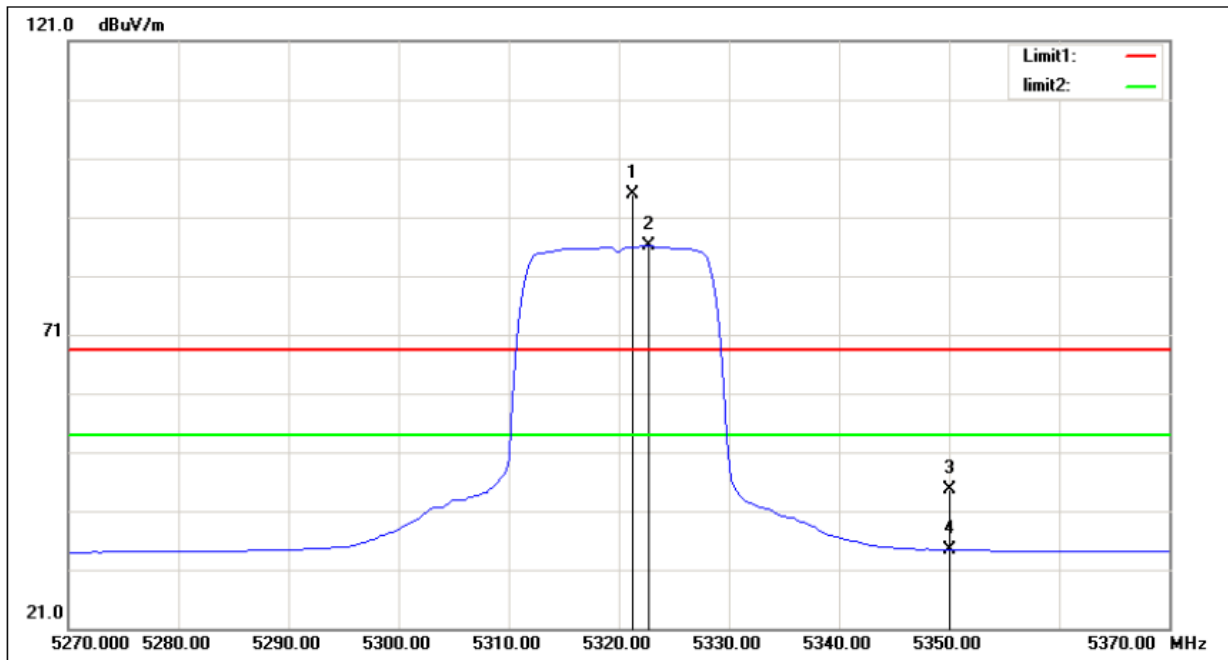


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	119.8555	43.33	-13.89	29.44	43.50	-14.06	QP
2	167.8240	44.02	-10.91	33.11	43.50	-10.39	QP
3	180.0165	43.94	-9.72	34.22	43.50	-9.28	QP
4	216.0240	44.15	-9.38	34.77	46.00	-11.23	QP
5	263.8190	41.32	-4.76	36.56	46.00	-9.44	QP
6	480.5276	35.71	-5.46	30.25	46.00	-15.75	QP

## 5.8. TEST RESULTS - ABOVE1000 MHz(BAND EDGE)

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

### Vertical

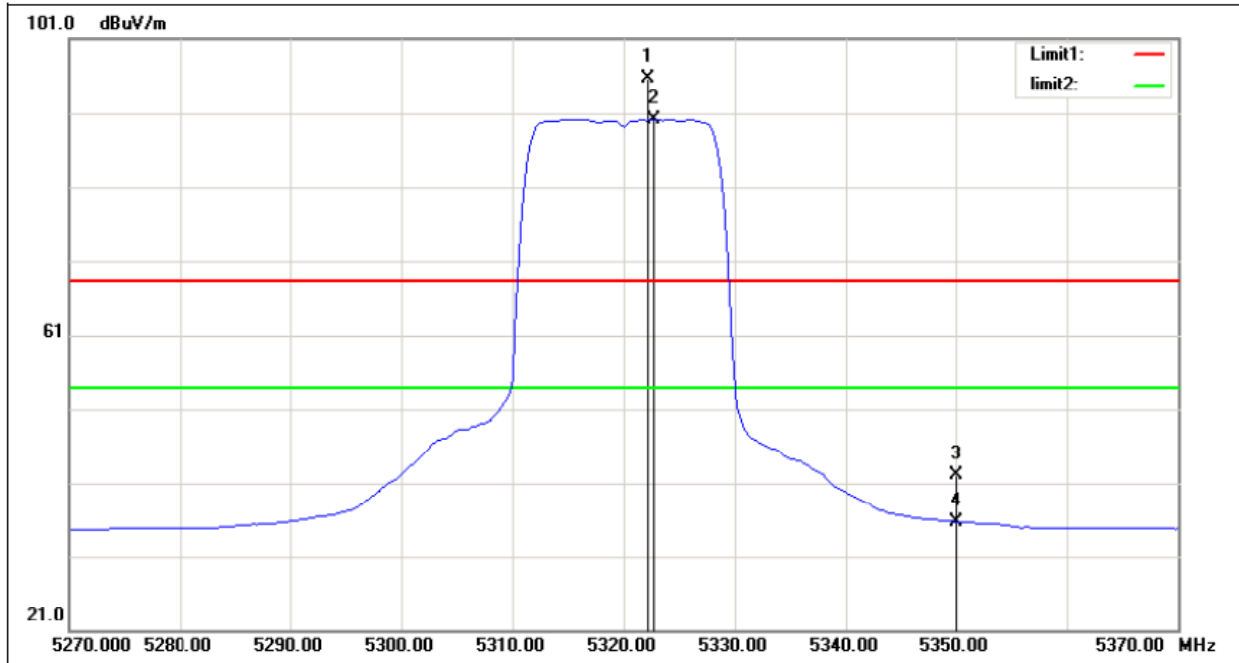


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5321.250	59.34	35.42	94.76	/	/	peak
2	5322.750	50.73	35.42	86.15	/	/	AVG
3	5350.000	9.02	35.50	44.52	68.30	-23.78	peak
4	5350.000	-1.09	35.50	34.41	54.00	-19.59	AVG



Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

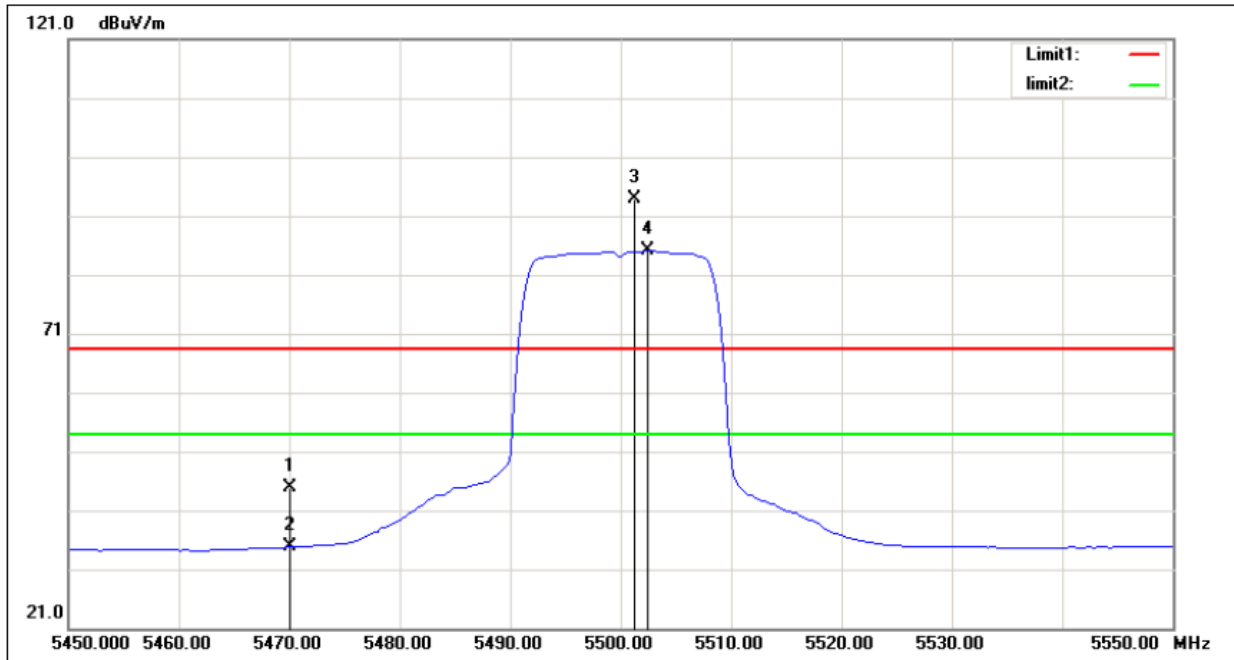
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5322.250	60.24	35.42	/	/	/	peak
2	5322.750	54.71	35.42	/	/	/	AVG
3	5350.000	6.58	35.50	42.08	68.30	-26.22	peak
4	5350.000	0.26	35.50	35.76	54.00	-18.24	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

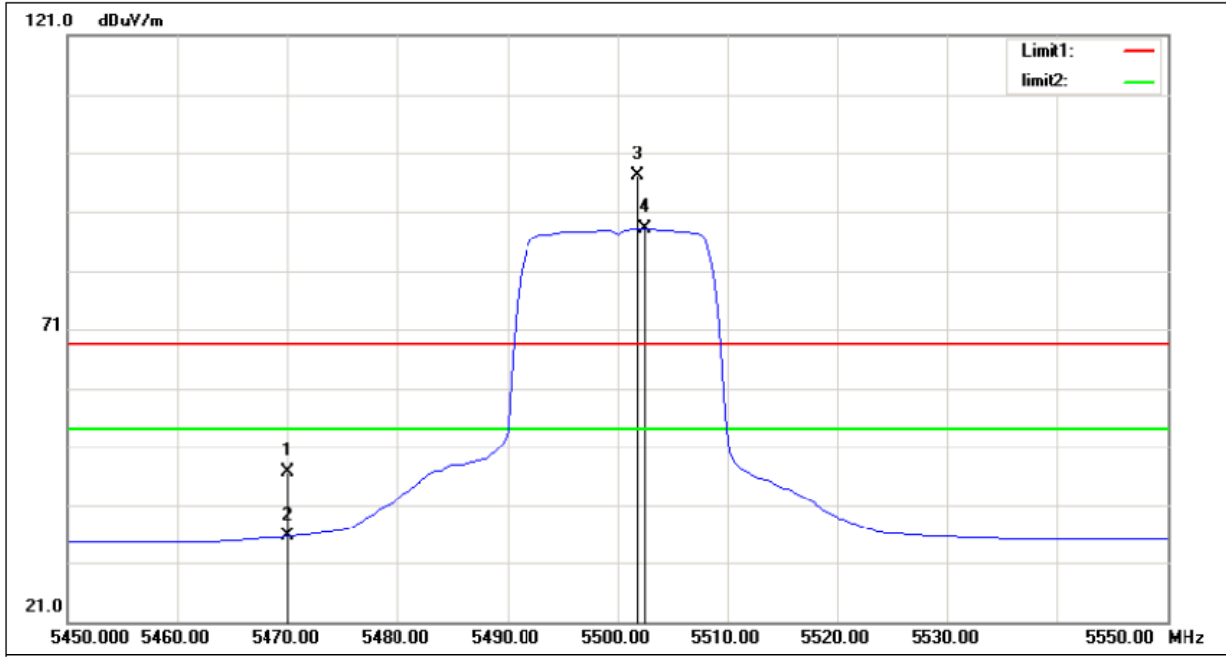
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	9.09	35.84	44.93	68.30	-23.37	peak
2	5470.000	-1.05	35.84	34.79	54.00	-19.21	AVG
3	5501.250	57.89	35.93	93.82	/	/	peak
4	5502.500	49.16	35.93	85.09	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

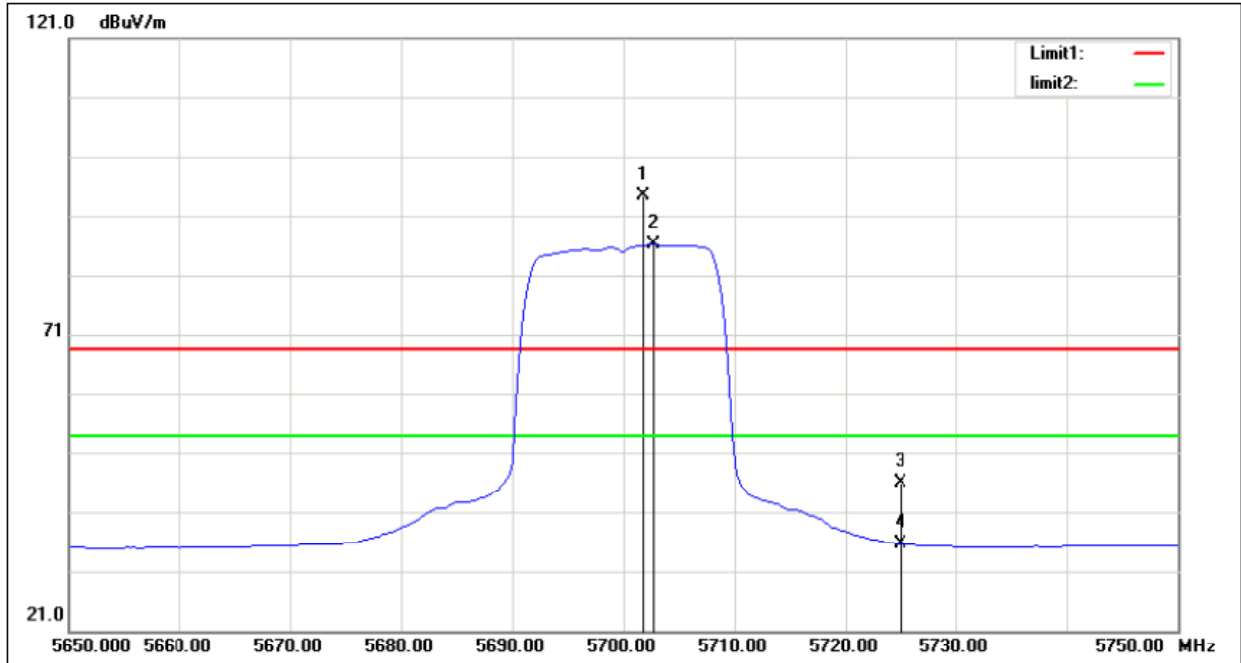
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	10.84	35.84	46.68	68.30	-21.62	peak
2	5470.000	-0.22	35.84	35.62	54.00	-18.38	AVG
3	5501.750	61.08	35.93	97.01	/	/	peak
4	5502.500	52.27	35.93	88.20	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

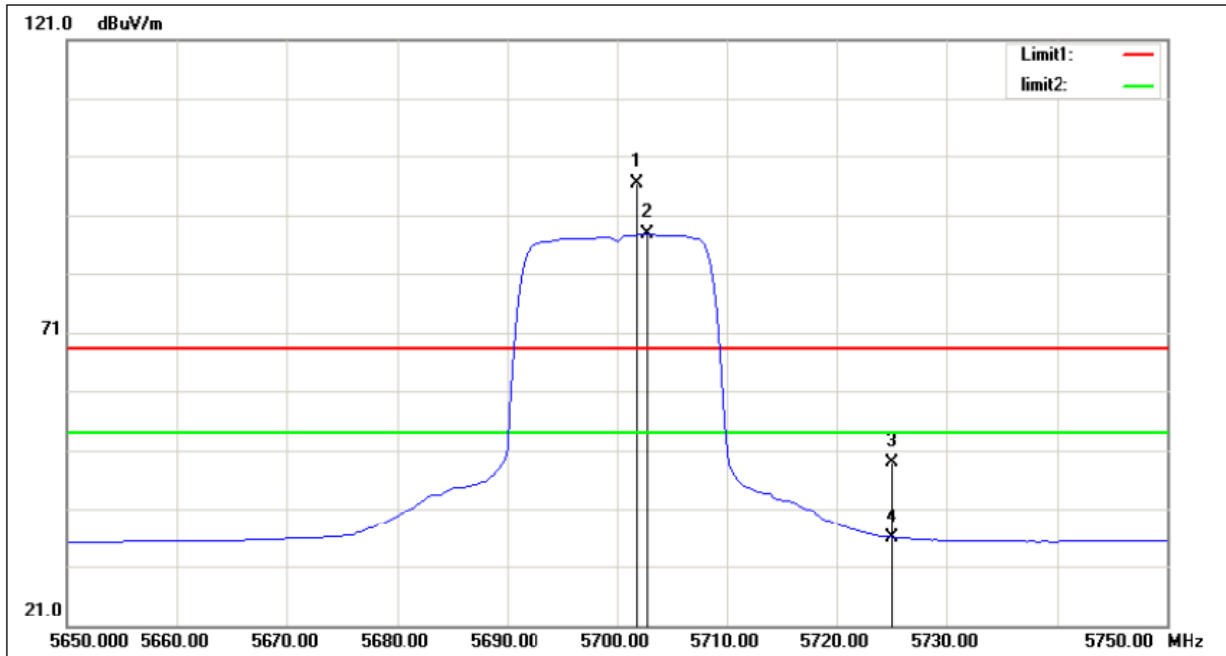
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5701.750	58.59	35.85	94.44	/	/	peak
2	5702.750	50.27	35.85	86.12	/	/	AVG
3	5725.000	10.08	35.84	45.92	68.30	-22.38	peak
4	5725.000	-0.10	35.84	35.74	54.00	-18.26	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

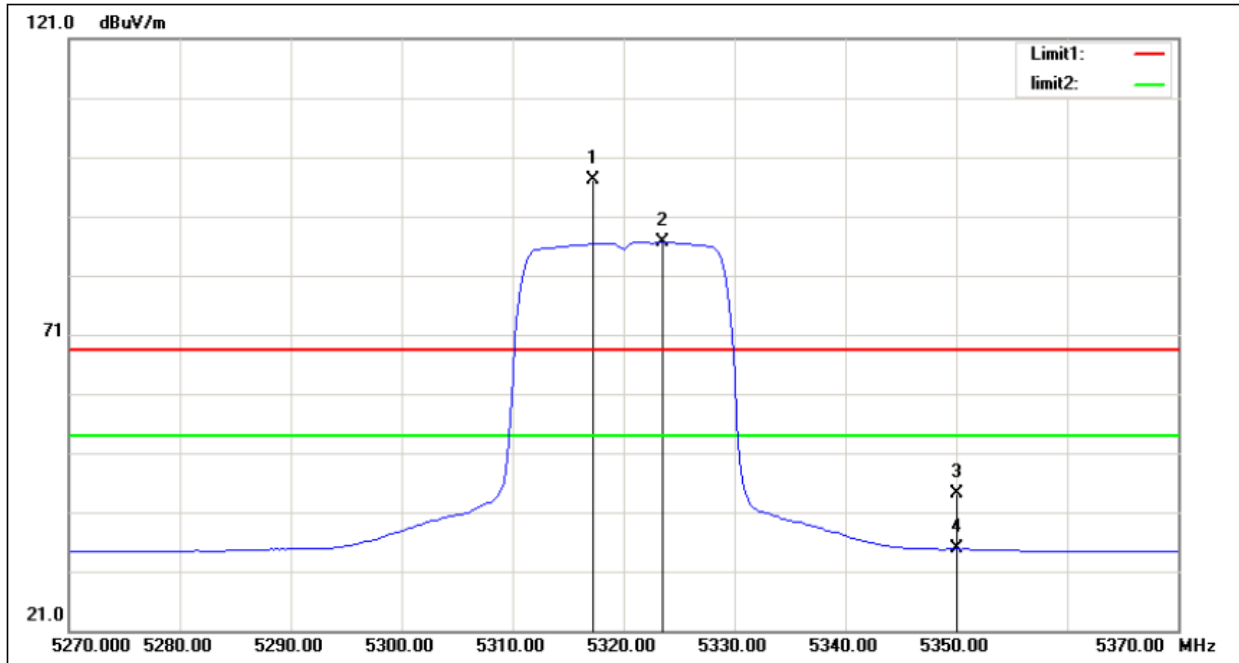
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5701.750	60.48	35.85	96.33	/	/	peak
2	5702.750	52.07	35.85	87.92	/	/	AVG
3	5725.000	13.15	35.84	48.99	68.30	-19.31	peak
4	5725.000	0.14	35.84	35.98	54.00	-18.02	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

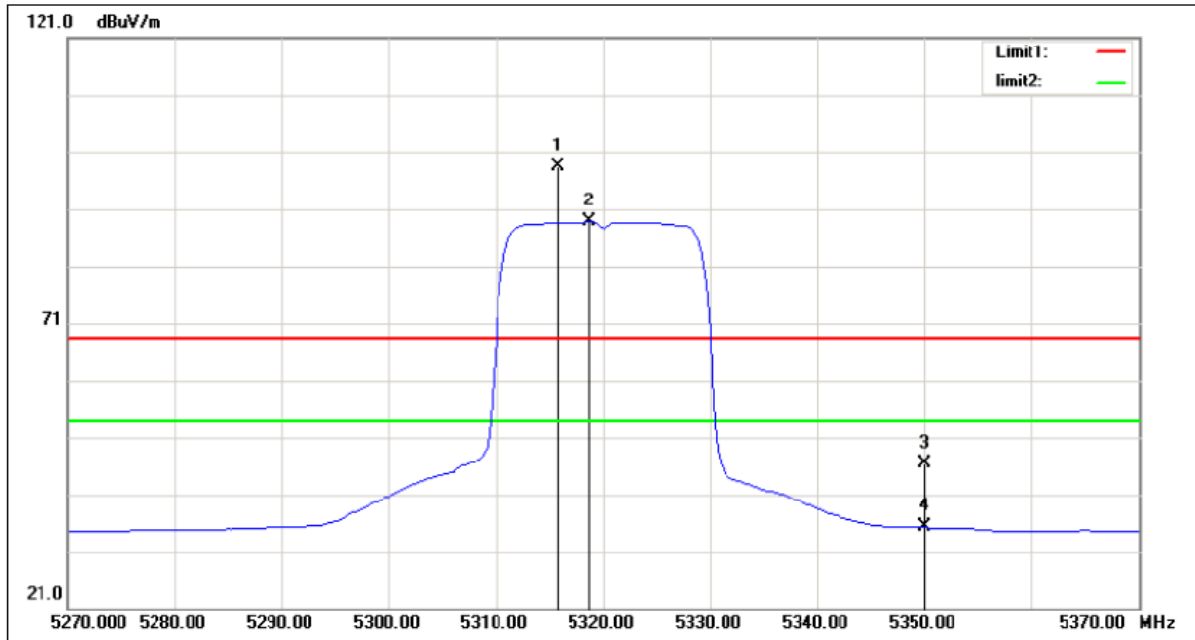
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5317.250	61.65	35.41	97.06	/	/	peak
2	5323.500	51.18	35.43	86.61	/	/	AVG
3	5350.000	8.65	35.50	44.15	68.30	-24.15	peak
4	5350.000	-0.69	35.50	34.81	54.00	-19.19	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

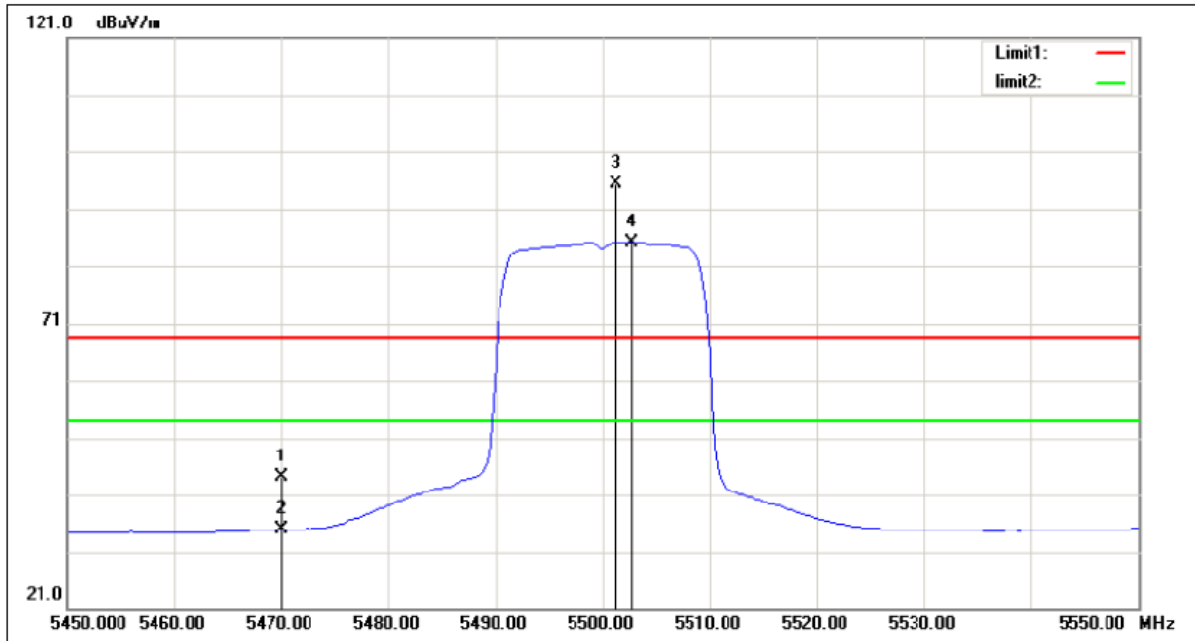
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5315.750	63.00	35.41	98.41	/	/	peak
2	5318.750	53.39	35.41	88.80	/	/	AVG
3	5350.000	10.87	35.50	46.37	68.30	-21.93	peak
4	5350.000	-0.21	35.50	35.29	54.00	-18.71	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz

### Vertical

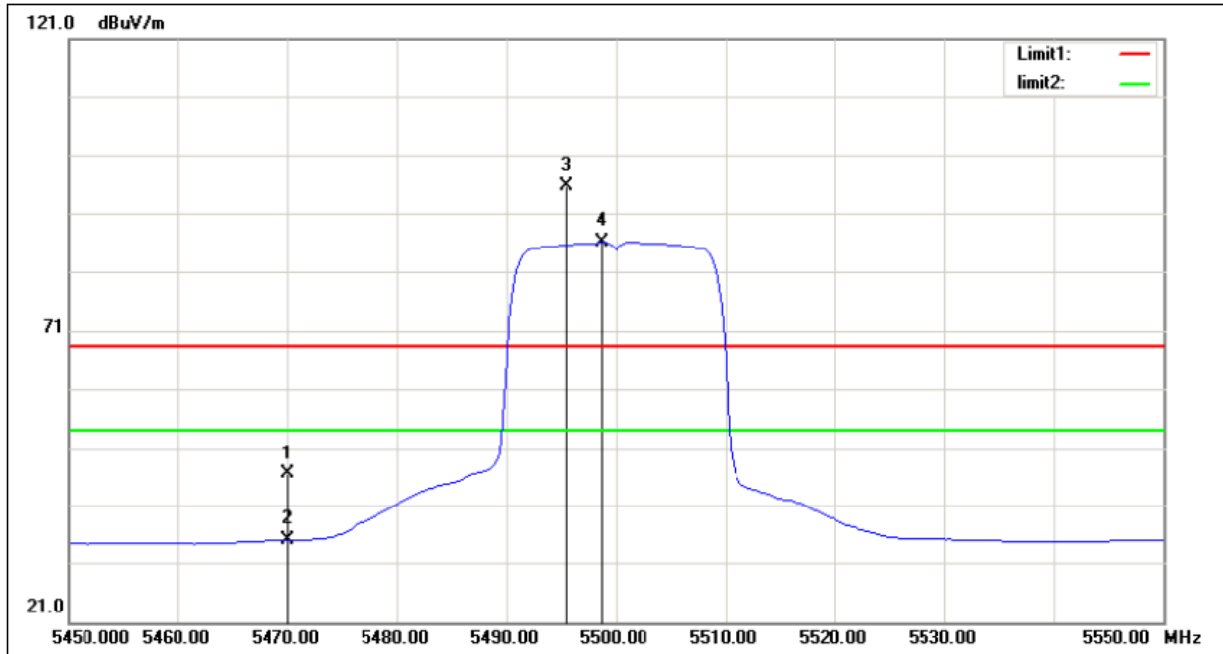


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	8.18	35.84	44.02	68.30	-24.28	peak
2	5470.000	-0.97	35.84	34.87	54.00	-19.13	AVG
3	5501.250	59.45	35.93	95.38	/	/	peak
4	5502.750	49.32	35.93	85.25	/	/	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz

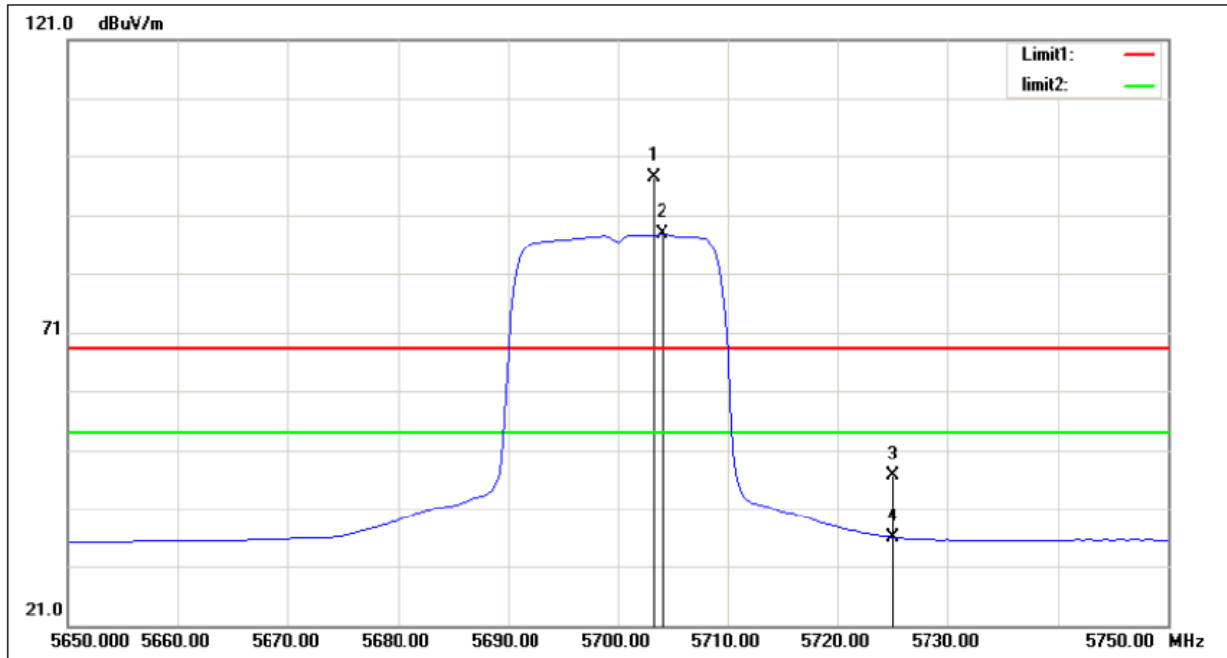
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	10.42	35.84	46.26	68.30	-22.04	peak
2	5470.000	-0.72	35.84	35.12	54.00	-18.88	AVG
3	5495.500	59.61	35.91	95.52	/	/	peak
4	5498.750	50.14	35.92	86.06	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz

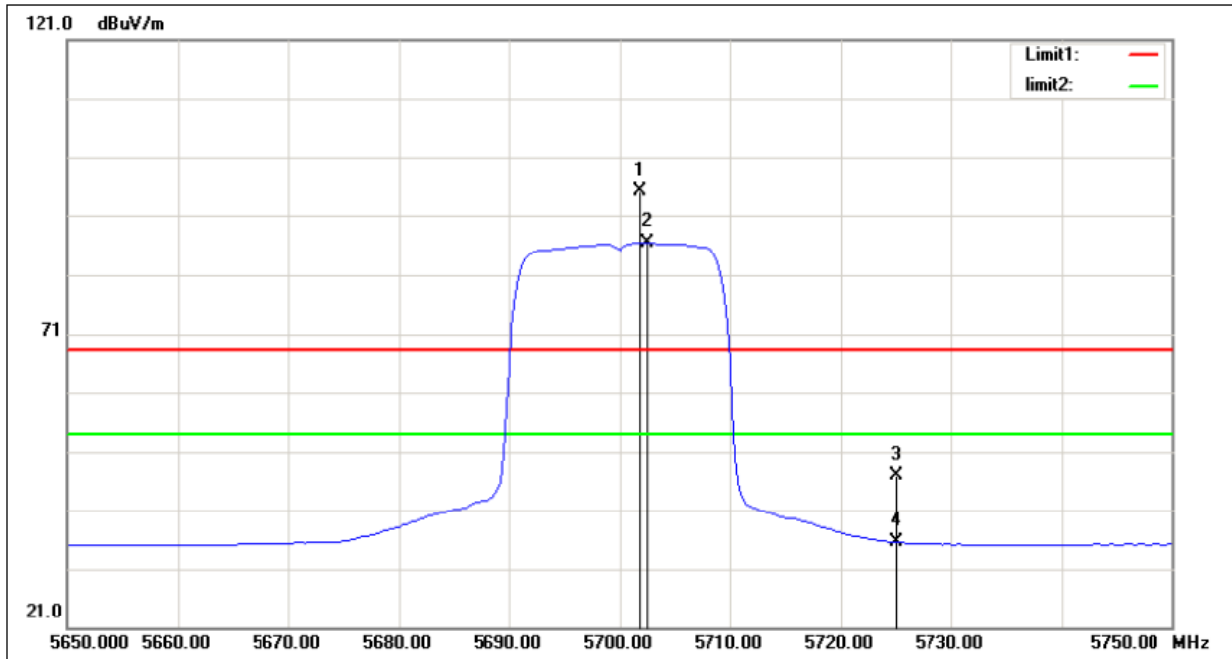
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5703.250	61.41	35.85	97.26	/	/	peak
2	5704.000	52.00	35.85	87.85	/	/	AVG
3	5725.000	10.73	35.84	46.57	68.30	-21.73	peak
4	5725.000	0.07	35.84	35.91	54.00	-18.09	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz

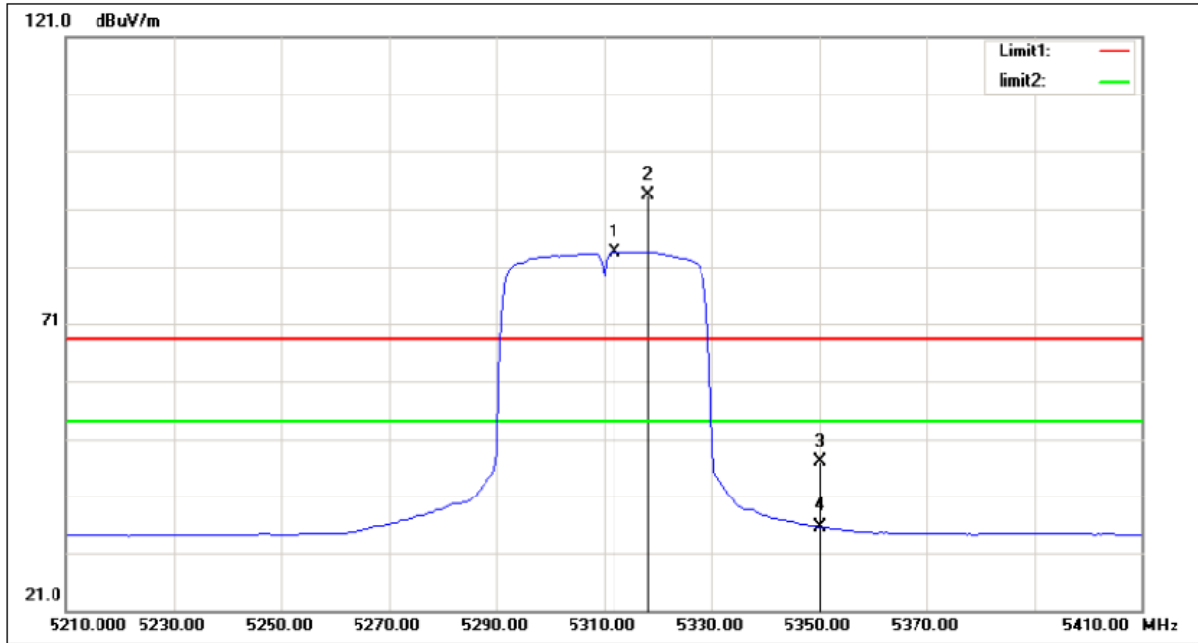
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5701.750	59.27	35.85	95.12	/	/	peak
2	5702.500	50.46	35.85	86.31	/	/	AVG
3	5725.000	10.92	35.84	46.76	68.30	-21.54	peak
4	5725.000	-0.25	35.84	35.59	54.00	-18.41	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz

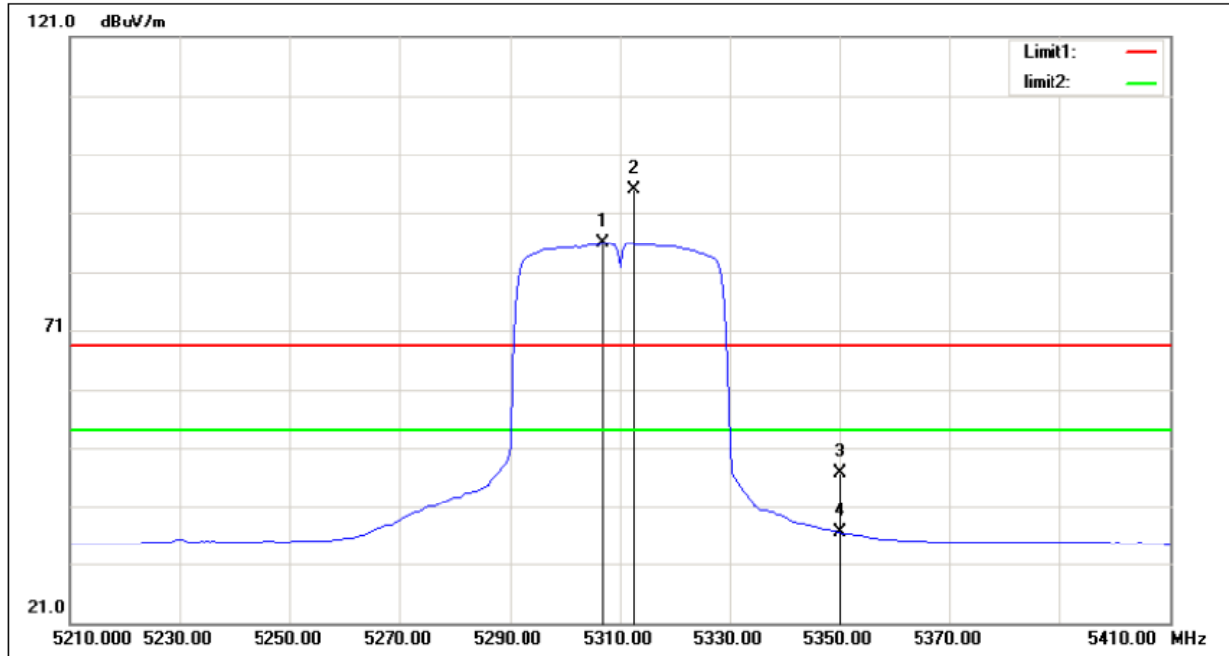
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5312.000	47.99	35.40	83.39	/	/	AVG
2	5318.000	58.09	35.41	93.50	/	/	peak
3	5350.000	11.32	35.50	46.82	68.30	-21.48	peak
4	5350.000	0.13	35.50	35.63	54.00	-18.37	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz

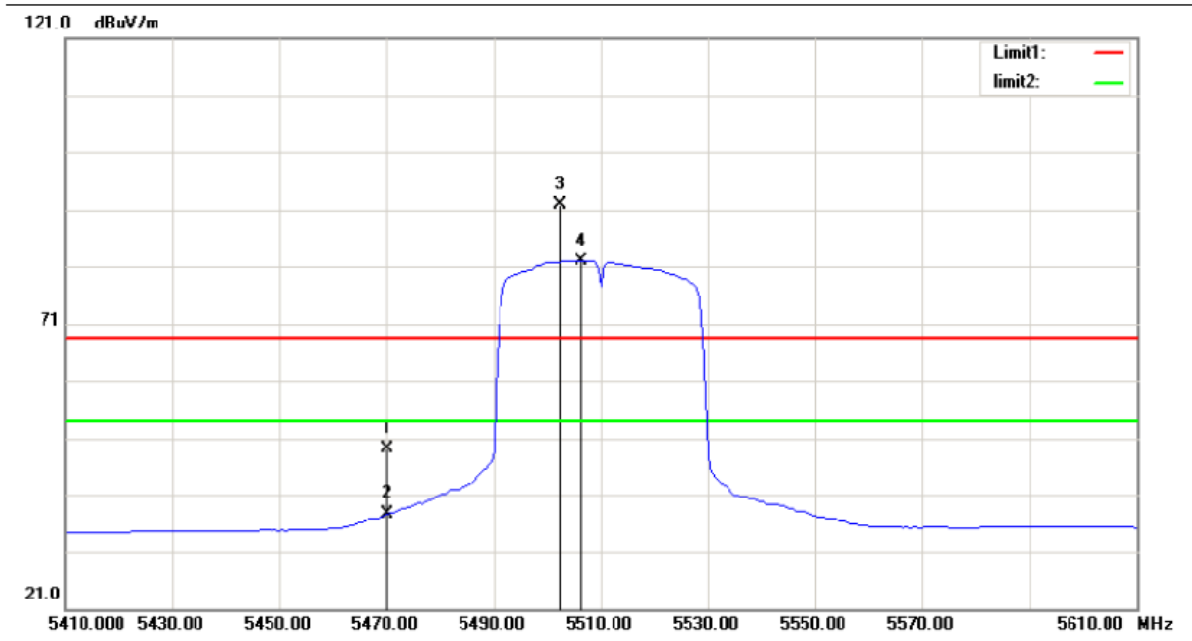
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5307.000	50.44	35.39	85.83	/	/	AVG
2	5312.500	59.36	35.40	94.76	/	/	peak
3	5350.000	11.20	35.50	46.70	68.30	-21.60	peak
4	5350.000	1.05	35.50	36.55	54.00	-17.45	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz

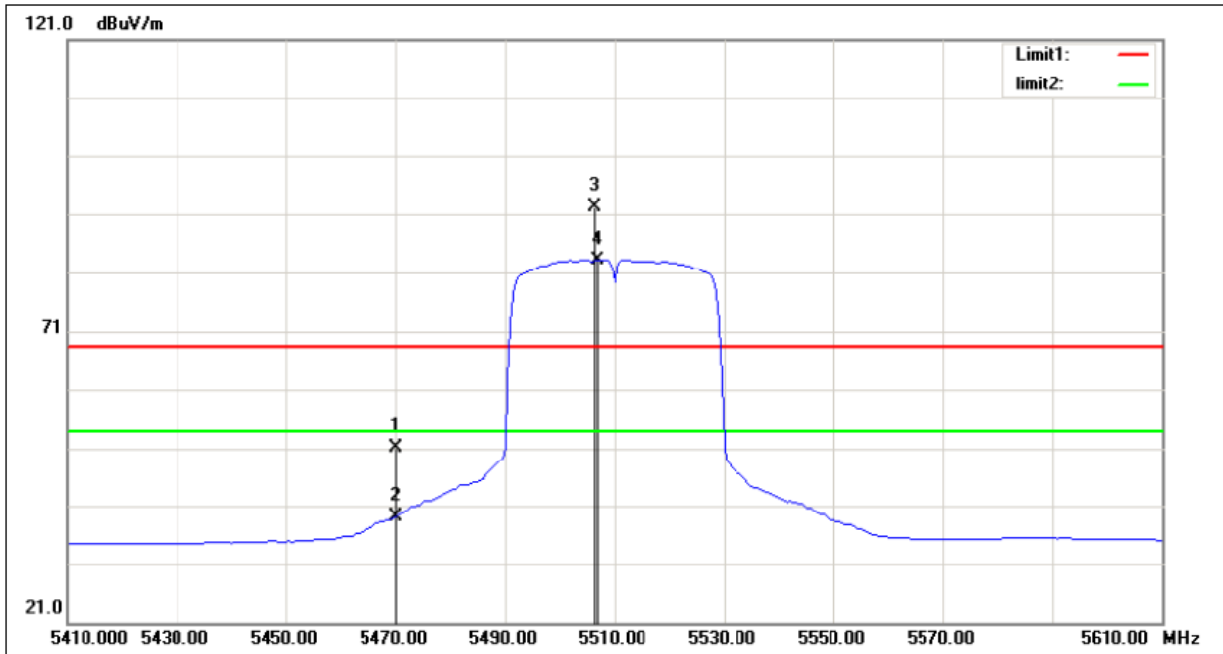
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	13.34	35.84	49.18	68.30	-19.12	peak
2	5470.000	1.71	35.84	37.55	54.00	-16.45	AVG
3	5502.500	56.01	35.93	91.94	/	/	peak
4	5506.500	45.96	35.92	81.88	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz

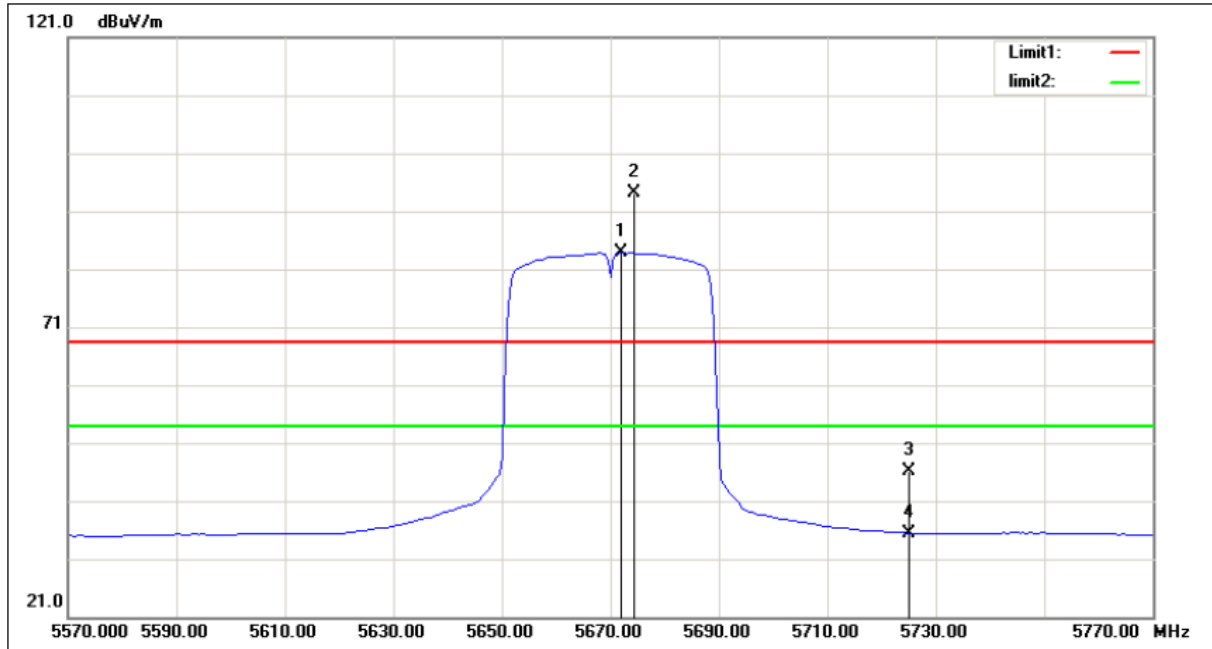
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	15.31	35.84	51.15	68.30	-17.15	peak
2	5470.000	3.41	35.84	39.25	54.00	-14.75	AVG
3	5506.500	56.12	35.92	92.04	/	/	peak
4	5507.000	47.33	35.92	83.25	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz

### Vertical

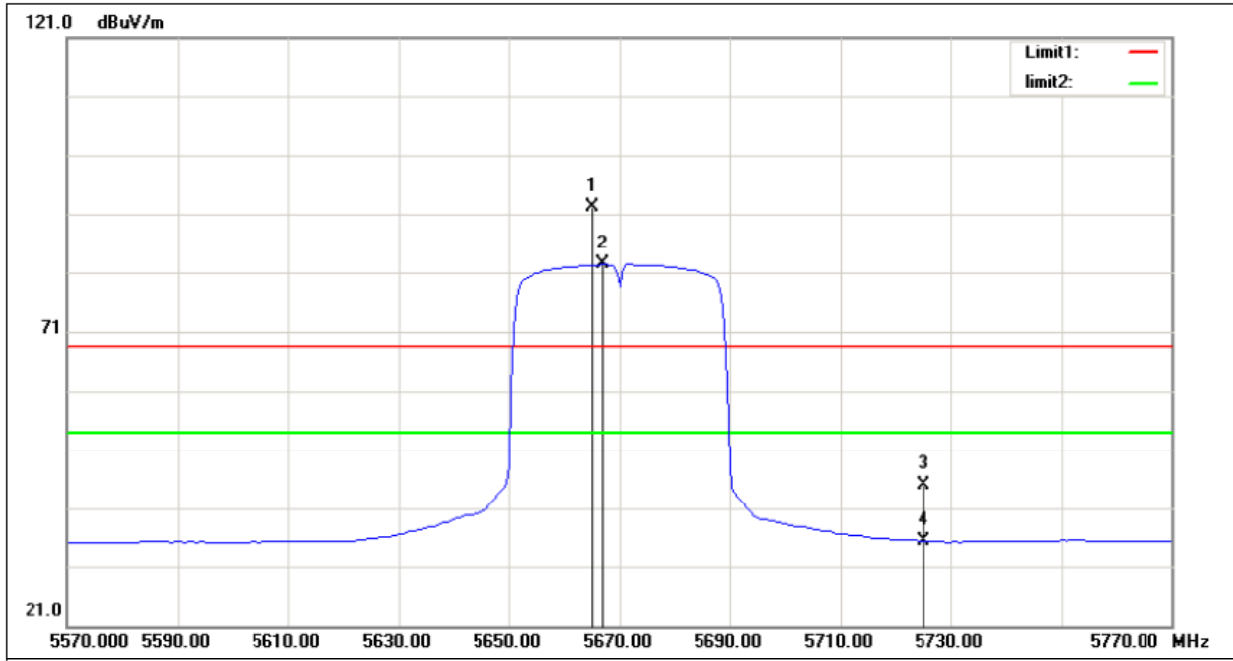


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5672.000	47.90	35.86	83.76	/	/	AVG
2	5674.500	58.24	35.86	94.10	/	/	peak
3	5725.000	10.36	35.84	46.20	68.30	-22.10	peak
4	5725.000	-0.39	35.84	35.45	54.00	-18.55	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz

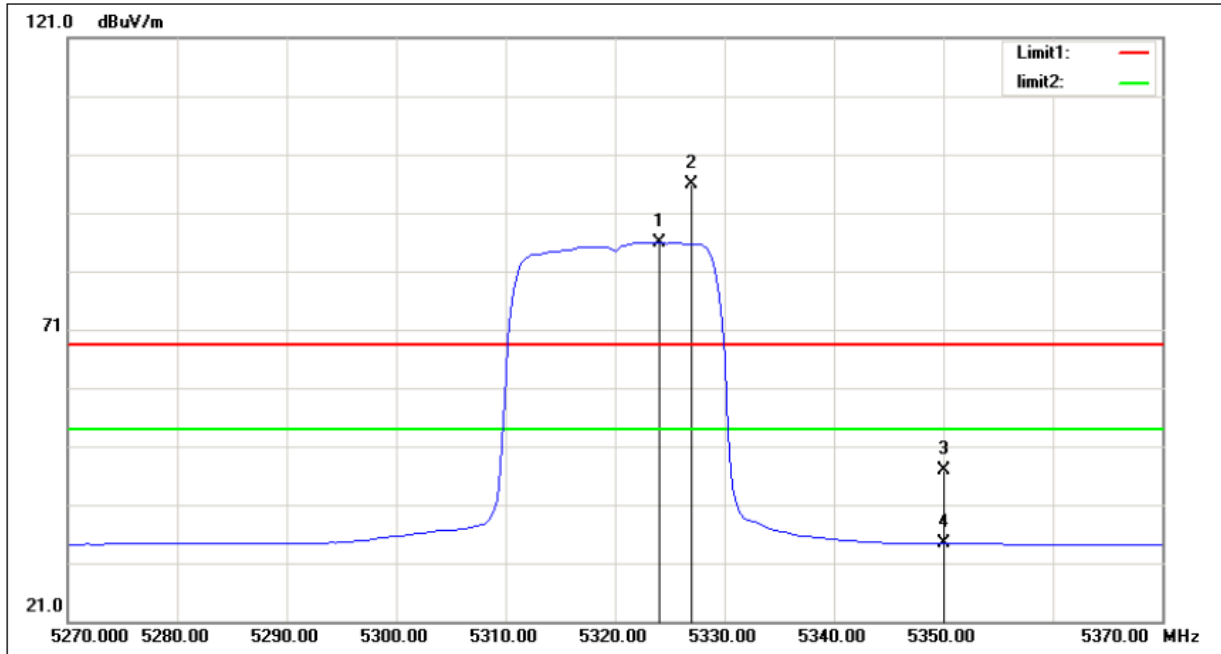
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5665.000	56.20	35.86	92.06	/	/	peak
2	5667.000	46.43	35.86	82.29	/	/	AVG
3	5725.000	9.04	35.84	44.88	68.30	-23.42	peak
4	5725.000	-0.44	35.84	35.40	54.00	-18.60	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz

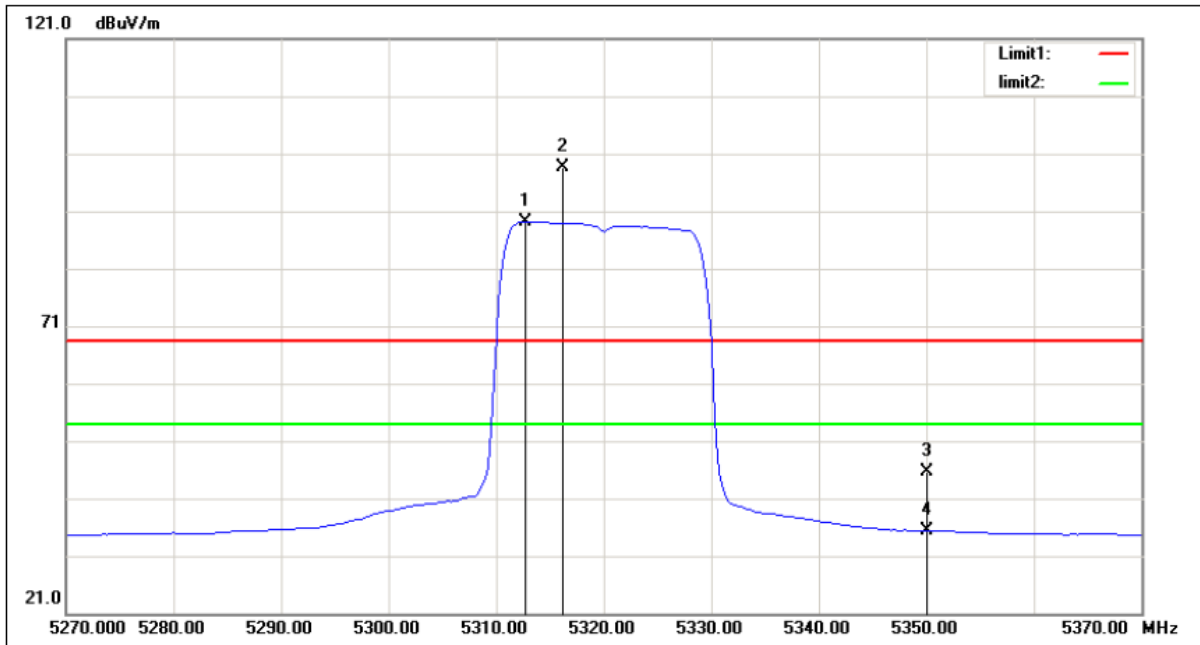
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5324.000	50.45	35.43	85.88	/	/	AVG
2	5327.000	60.55	35.43	95.98	/	/	peak
3	5350.000	11.27	35.50	46.77	68.30	-21.53	peak
4	5350.000	-1.11	35.50	34.39	54.00	-19.61	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz

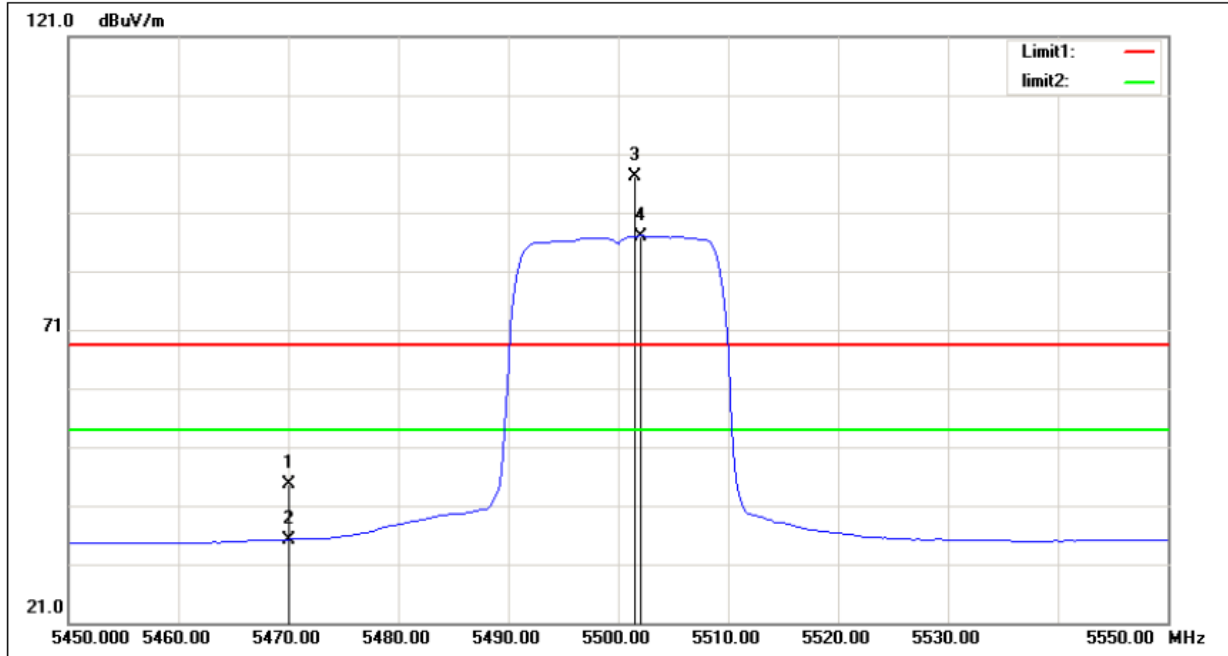
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5312.750	53.81	35.40	89.21	/	/	AVG
2	5316.250	63.29	35.41	98.70	/	/	peak
3	5350.000	10.14	35.50	45.64	68.30	-22.66	peak
4	5350.000	-0.09	35.50	35.41	54.00	-18.59	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz

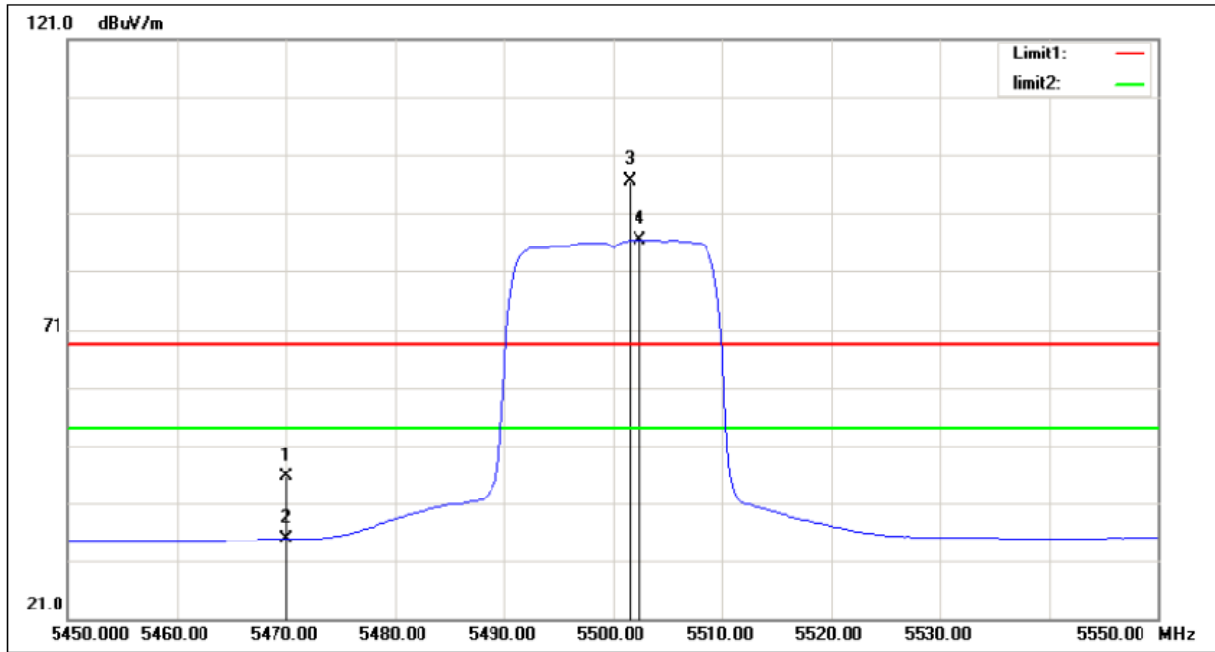
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	8.72	35.84	44.56	68.30	-23.74	peak
2	5470.000	-0.61	35.84	35.23	54.00	-18.77	AVG
3	5501.500	61.21	35.93	97.14	/	/	peak
4	5502.000	51.07	35.93	87.00	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz

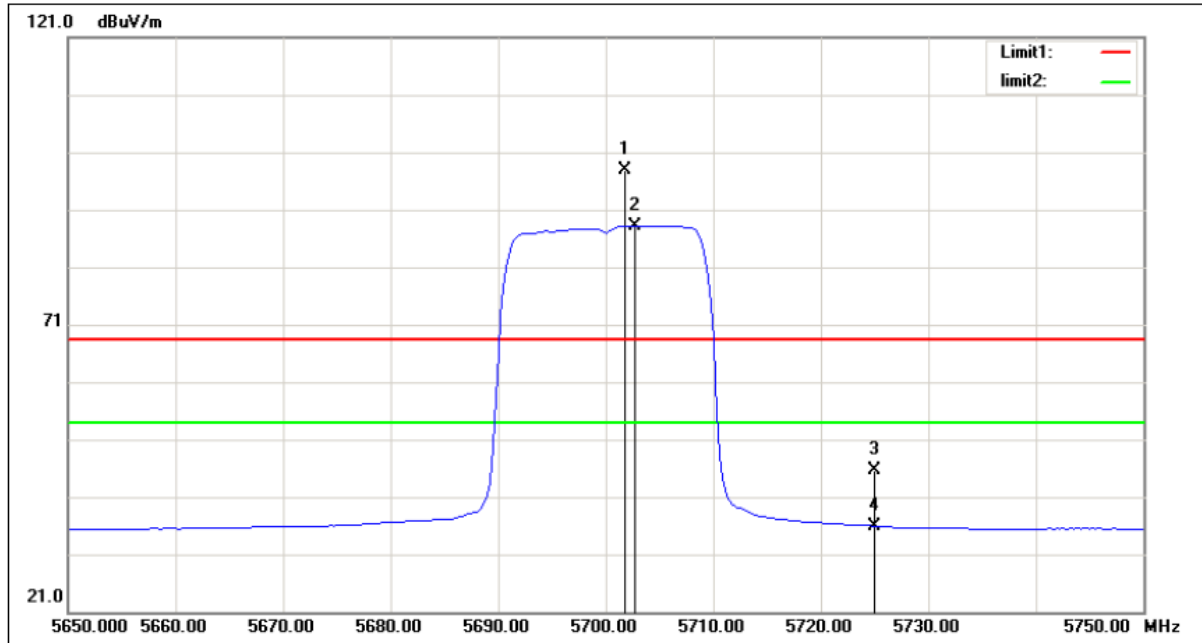
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	9.83	35.84	45.67	68.30	-22.63	peak
2	5470.000	-0.99	35.84	34.85	54.00	-19.15	AVG
3	5501.500	60.62	35.93	96.55	/	/	peak
4	5502.500	50.49	35.93	86.42	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz

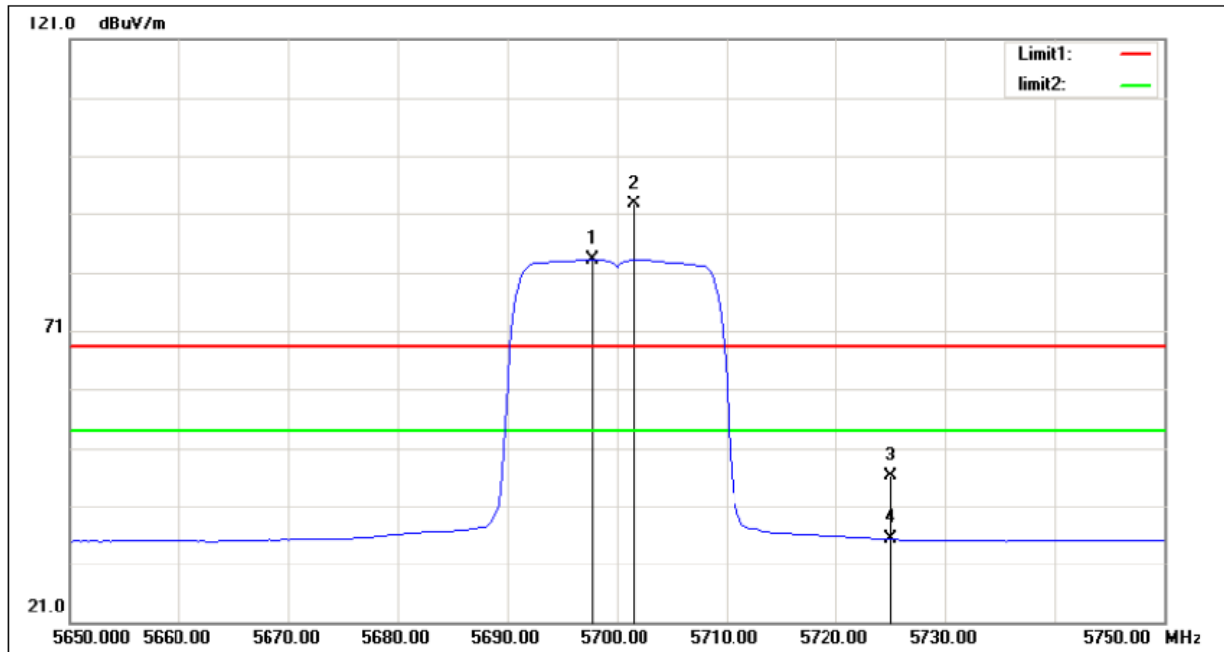
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5701.750	61.97	35.85	97.82	/	/	peak
2	5702.750	52.40	35.85	88.25	/	/	AVG
3	5725.000	9.90	35.84	45.74	68.30	-22.56	peak
4	5725.000	0.06	35.84	35.90	54.00	-18.10	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz

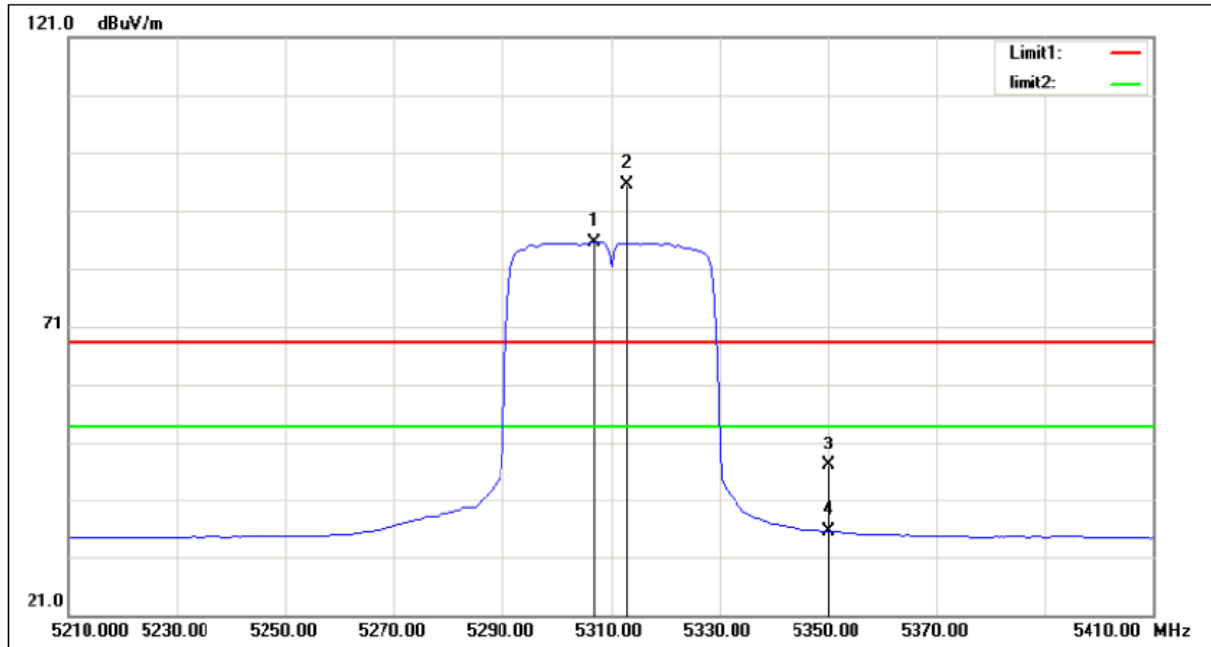
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5697.750	47.34	35.85	83.19	/	/	AVG
2	5701.500	56.80	35.85	92.65	/	/	peak
3	5725.000	10.27	35.84	46.11	68.30	-22.19	peak
4	5725.000	-0.53	35.84	35.31	54.00	-18.69	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz

### Vertical

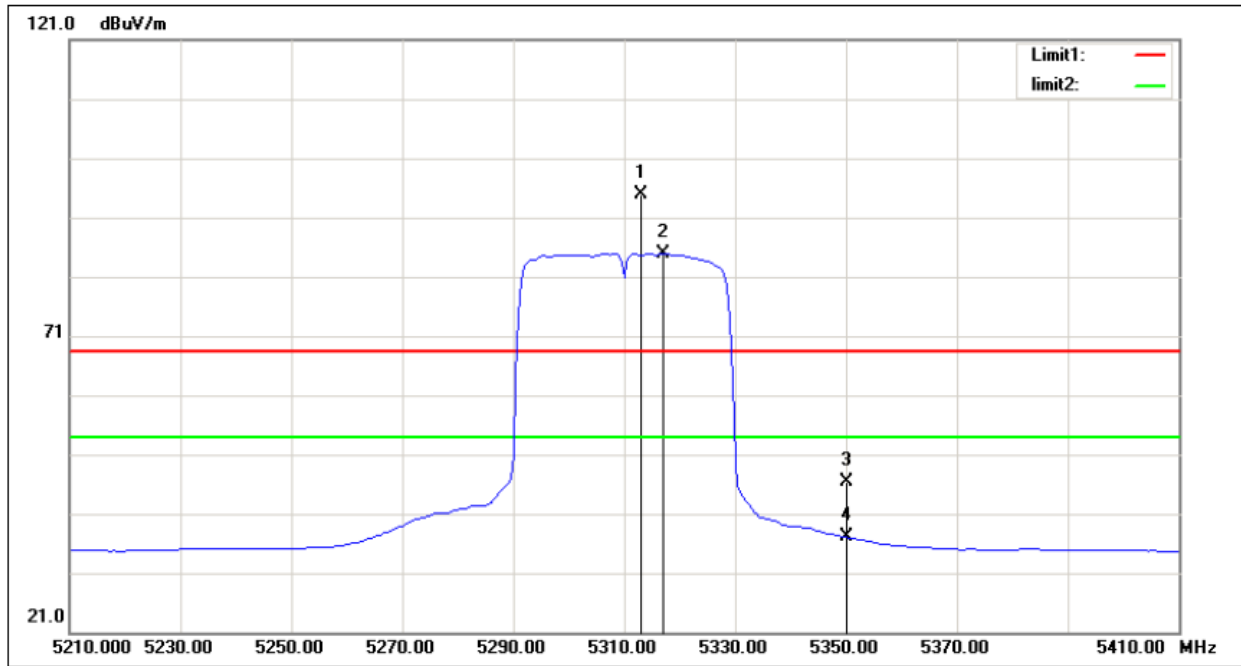


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5307.000	50.13	35.39	85.52	/	/	AVG
2	5313.000	60.29	35.40	95.69	/	/	peak
3	5350.000	11.51	35.50	47.01	68.30	-21.29	peak
4	5350.000	0.09	35.50	35.59	54.00	-18.41	AVG



Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz

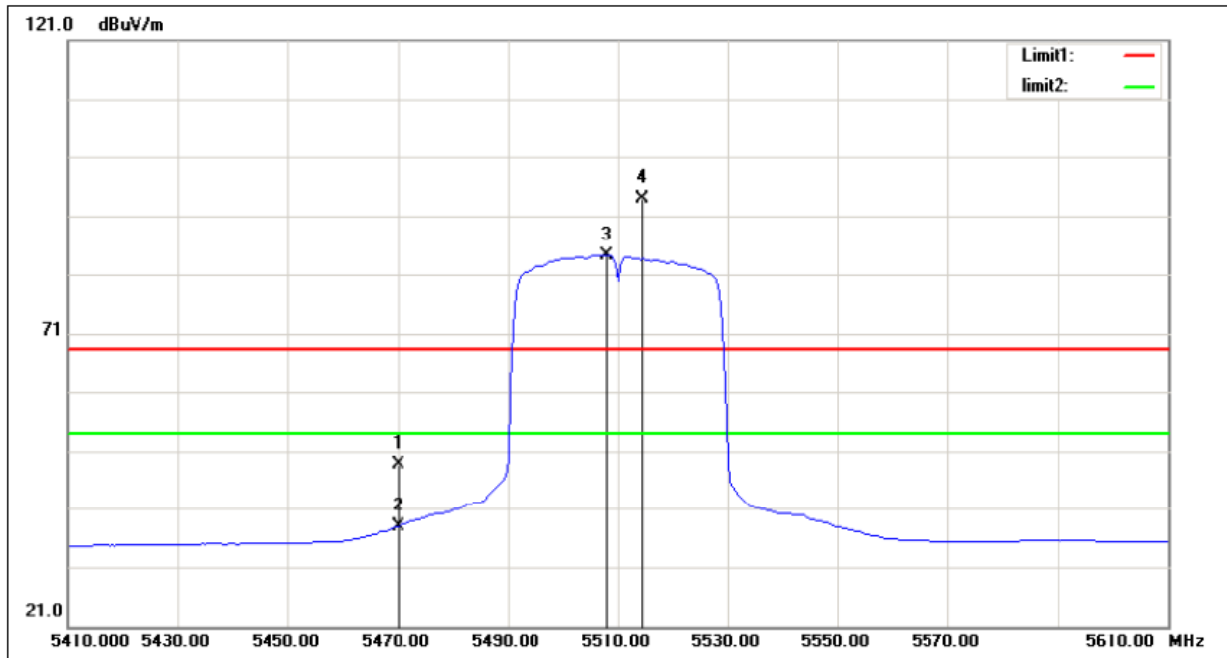
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5313.000	59.44	35.40	94.84	/	/	peak
2	5317.000	49.53	35.41	84.94	/	/	AVG
3	5350.000	10.88	35.50	46.38	68.30	-21.92	peak
4	5350.000	1.63	35.50	37.13	54.00	-16.87	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz

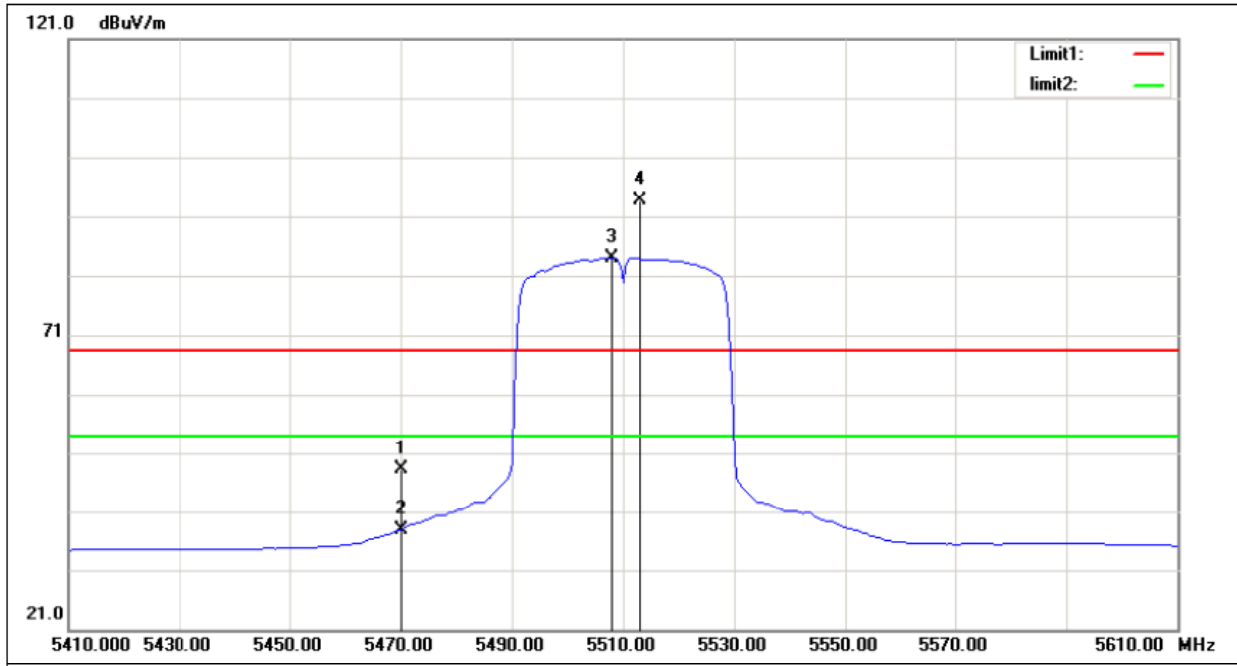
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	12.89	35.84	48.73	68.30	-19.57	peak
2	5470.000	2.01	35.84	37.85	54.00	-16.15	AVG
3	5508.000	48.22	35.92	84.14	/	/	AVG
4	5514.500	57.94	35.92	93.86	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz

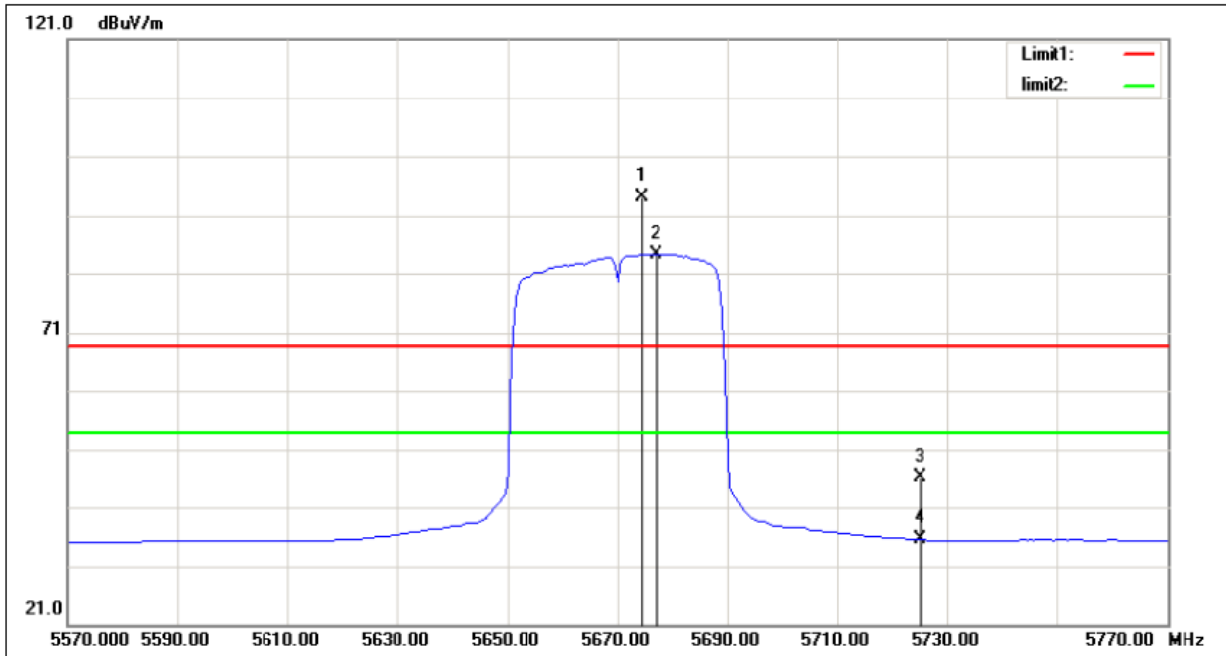
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	12.40	35.84	48.24	68.30	-20.06	peak
2	5470.000	2.07	35.84	37.91	54.00	-16.09	AVG
3	5508.000	48.04	35.92	83.96	/	/	AVG
4	5513.000	57.68	35.92	93.60	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz

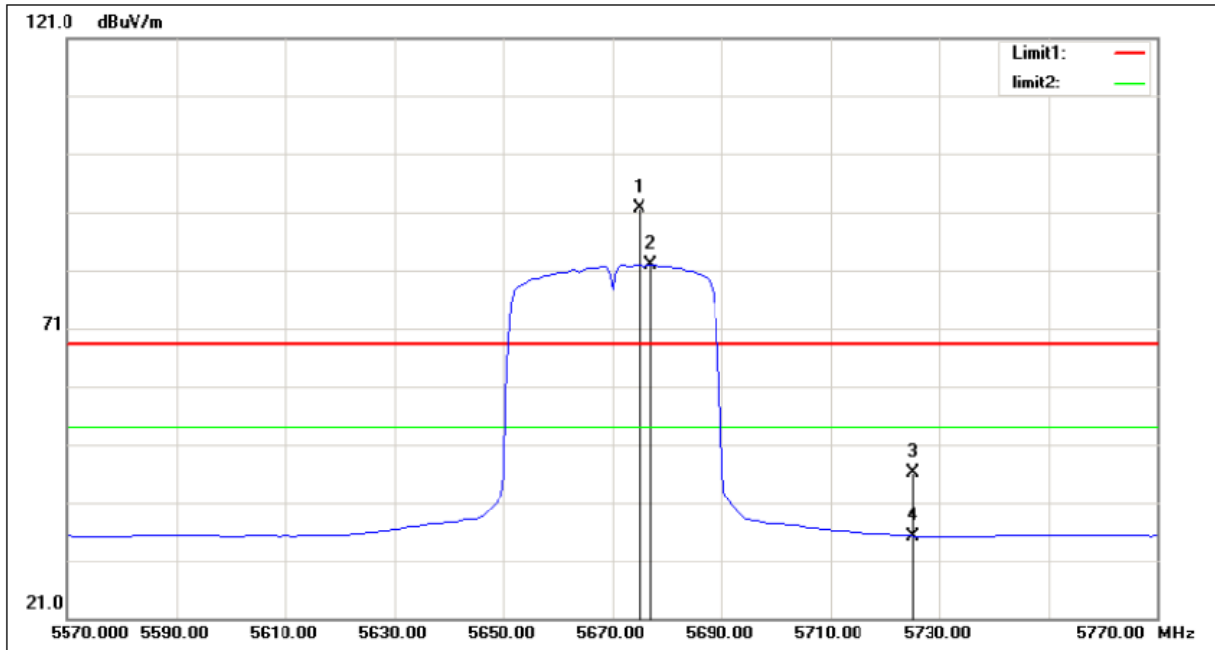
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5674.500	58.20	35.86	94.06	/	/	peak
2	5677.000	48.38	35.86	84.24	/	/	AVG
3	5725.000	10.36	35.84	46.20	68.30	-22.10	peak
4	5725.000	-0.26	35.84	35.58	54.00	-18.42	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz

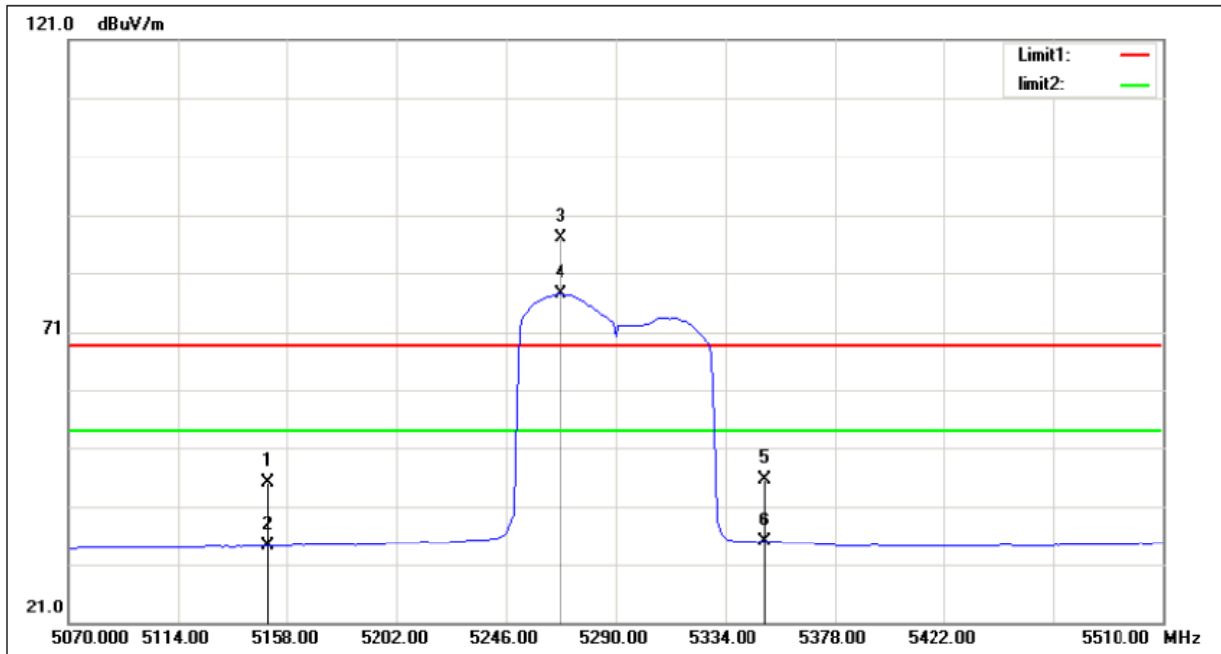
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5675.000	55.72	35.86	91.58	/	/	peak
2	5677.000	46.03	35.86	81.89	/	/	AVG
3	5725.000	10.30	35.84	46.14	68.30	-22.16	peak
4	5725.000	-0.61	35.84	35.23	54.00	-18.77	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz

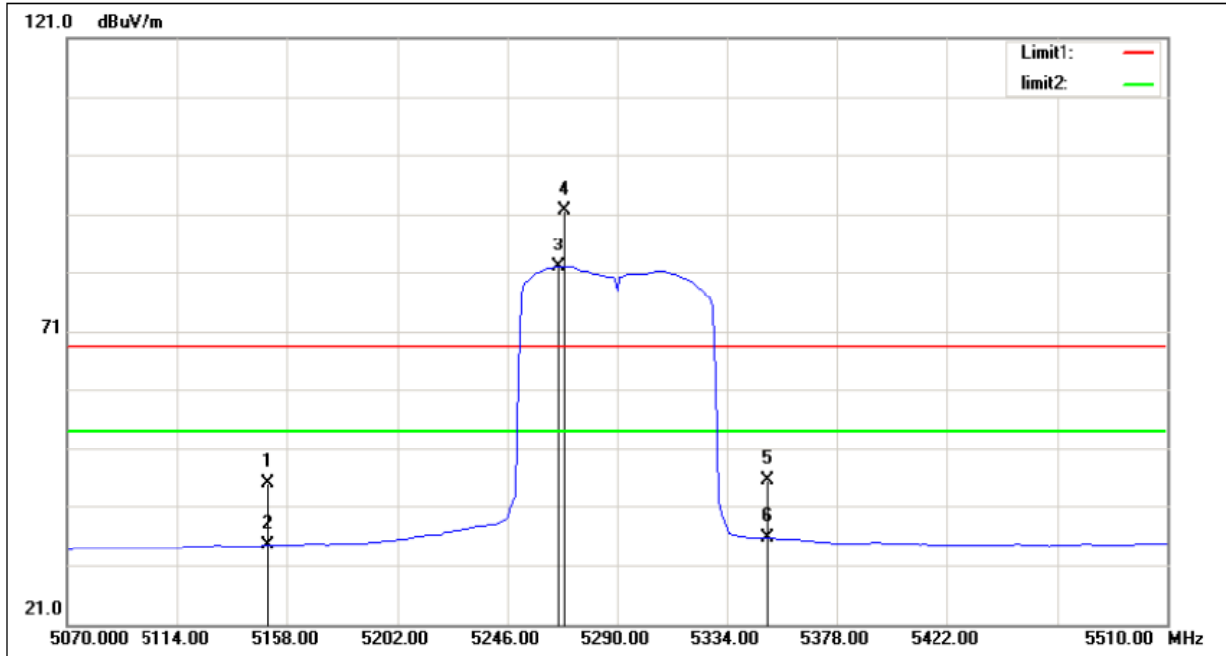
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	10.08	34.94	45.02	68.30	-23.28	peak
2	5150.000	-0.80	34.94	34.14	54.00	-19.86	AVG
3	5268.000	51.78	35.27	87.05	/	/	peak
4	5268.000	42.01	35.27	77.28	/	/	AVG
5	5350.000	10.25	35.50	45.75	68.30	-22.55	peak
6	5350.000	-0.62	35.50	34.88	54.00	-19.12	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz

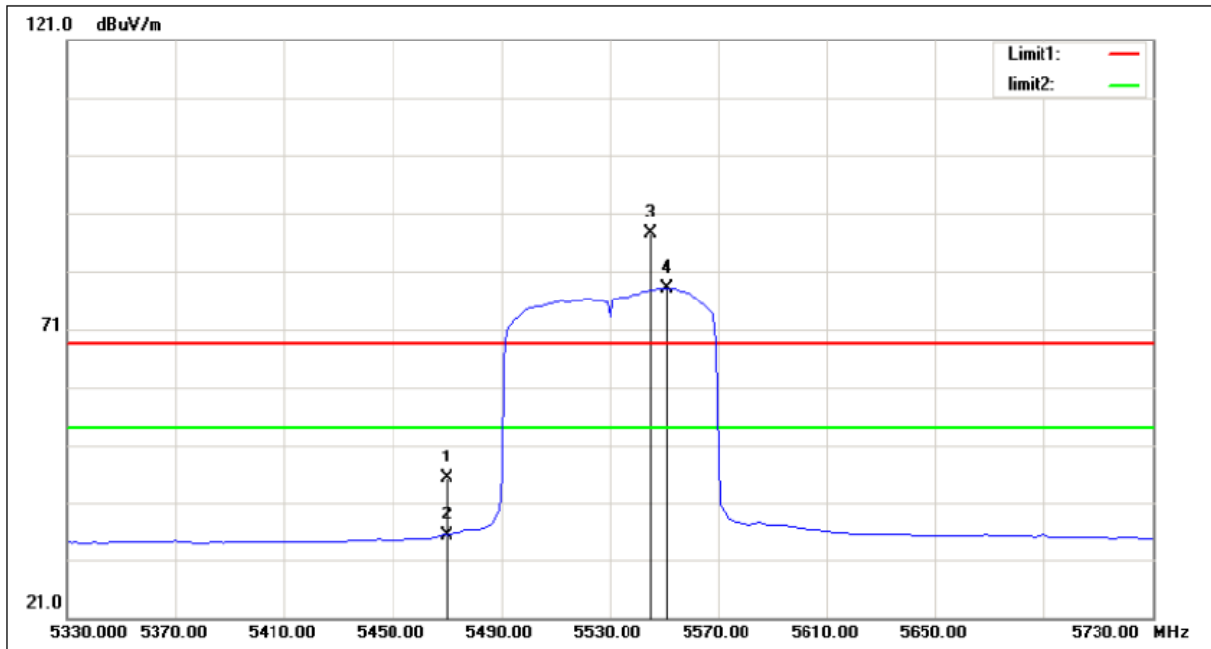
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	10.21	34.94	45.15	68.30	-23.15	peak
2	5150.000	-0.63	34.94	34.31	54.00	-19.69	AVG
3	5266.900	46.70	35.27	81.97	/	/	AVG
4	5269.100	56.44	35.28	91.72	/	/	peak
5	5350.000	10.19	35.50	45.69	68.30	-22.61	peak
6	5350.000	0.16	35.50	35.66	54.00	-18.34	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz

### Vertical

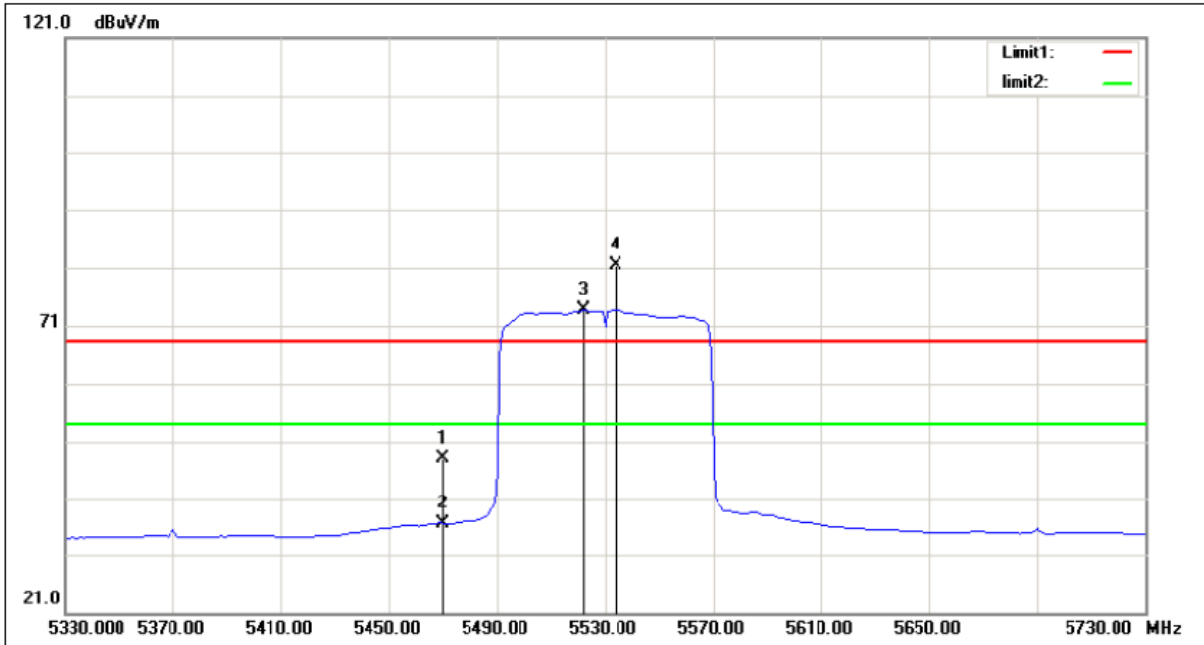


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	9.29	35.84	45.13	68.30	-23.17	peak
2	5470.000	-0.60	35.84	35.24	54.00	-18.76	AVG
3	5545.000	51.58	35.90	87.48	/	/	peak
4	5551.000	41.92	35.91	77.83	/	/	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz

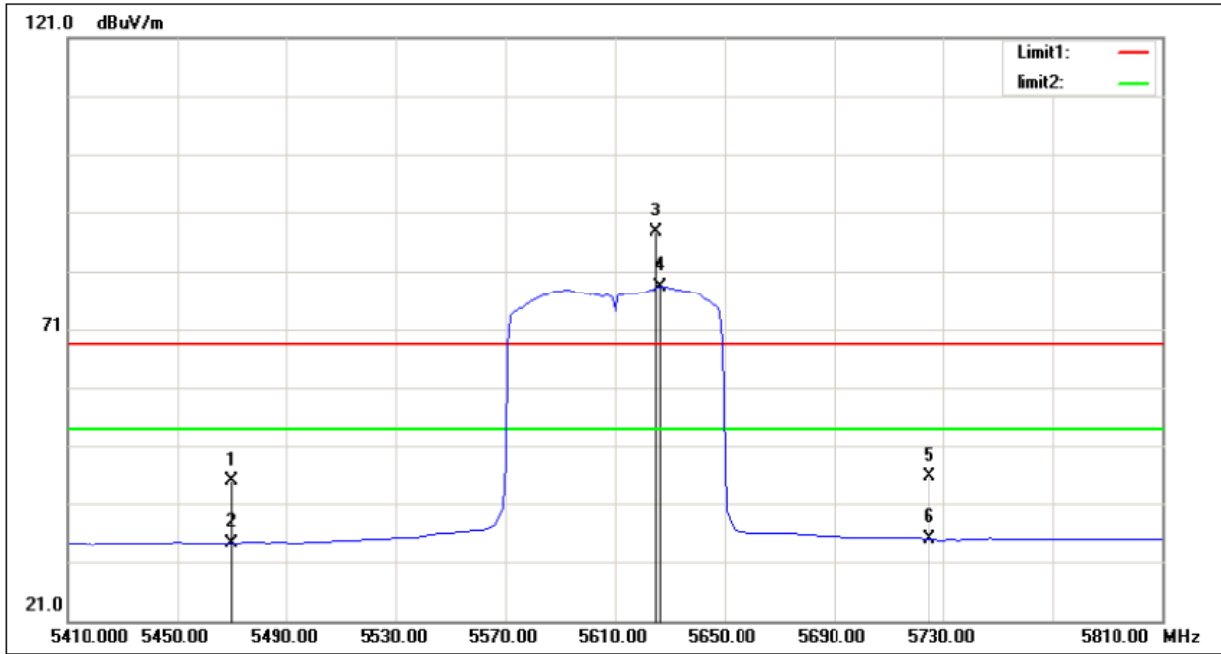
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	11.99	35.84	47.83	68.30	-20.47	peak
2	5470.000	0.81	35.84	36.65	54.00	-17.35	AVG
3	5522.000	37.69	35.91	73.60	/	/	AVG
4	5533.750	45.36	35.91	81.27	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz

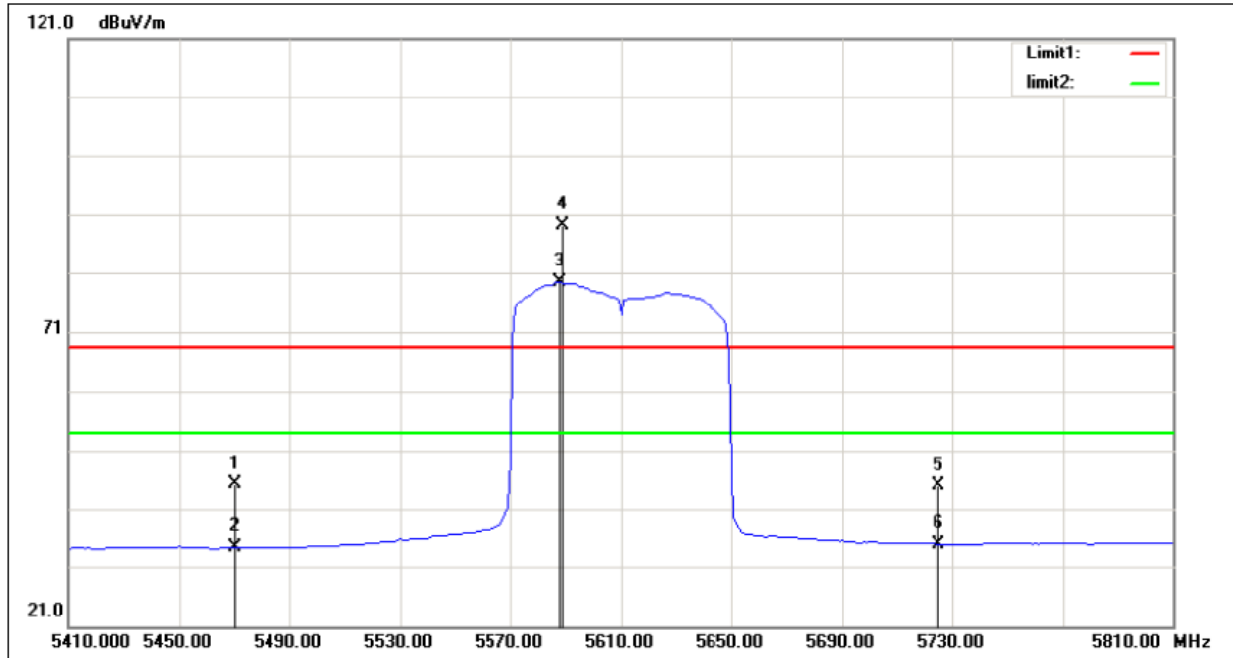
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	9.14	35.84	44.98	68.30	-23.32	peak
2	5470.000	-1.37	35.84	34.47	54.00	-19.53	AVG
3	5625.000	51.84	35.88	87.72	/	/	peak
4	5627.000	42.43	35.88	78.31	/	/	AVG
5	5725.000	9.82	35.84	45.66	68.30	-22.64	peak
6	5725.000	-0.71	35.84	35.13	54.00	-18.87	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz

### Horizontal

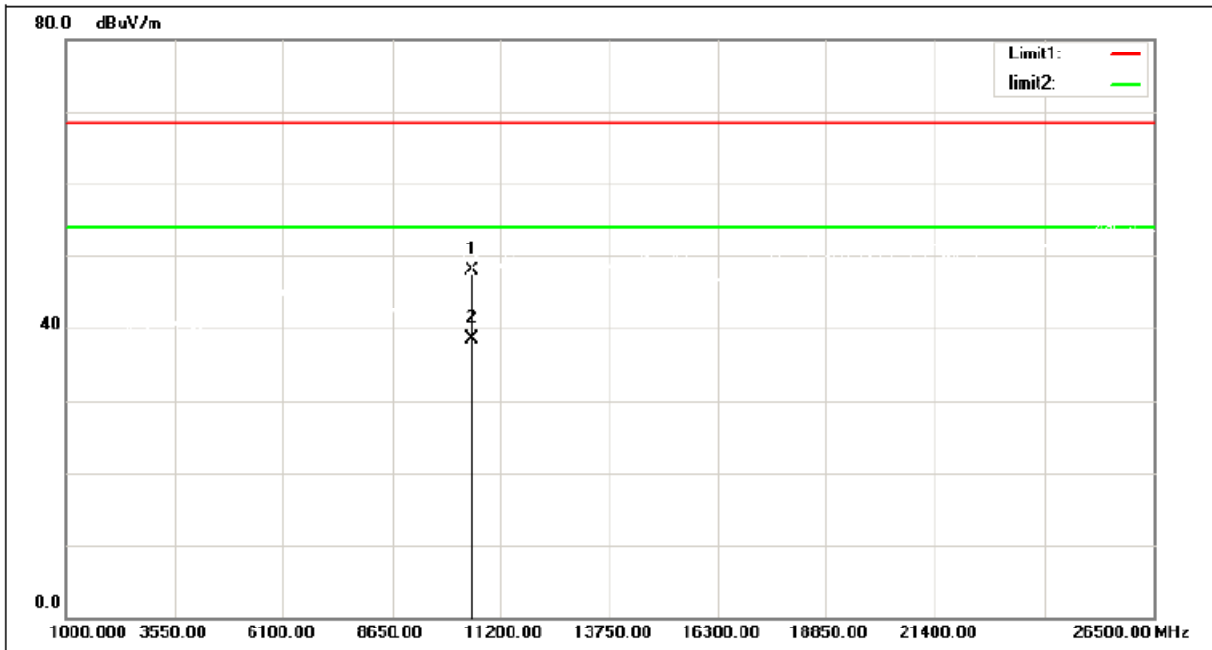


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	9.28	35.84	45.12	68.30	-23.18	peak
2	5470.000	-1.43	35.84	34.41	54.00	-19.59	AVG
3	5588.000	43.41	35.89	79.30	/	/	AVG
4	5589.000	53.25	35.89	89.14	/	/	peak
5	5725.000	9.15	35.84	44.99	68.30	-23.31	peak
6	5725.000	-0.90	35.84	34.94	54.00	-19.06	AVG

### 5.9. TEST RESULTS - ABOVE1000 MHz (HARMONIC)

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz

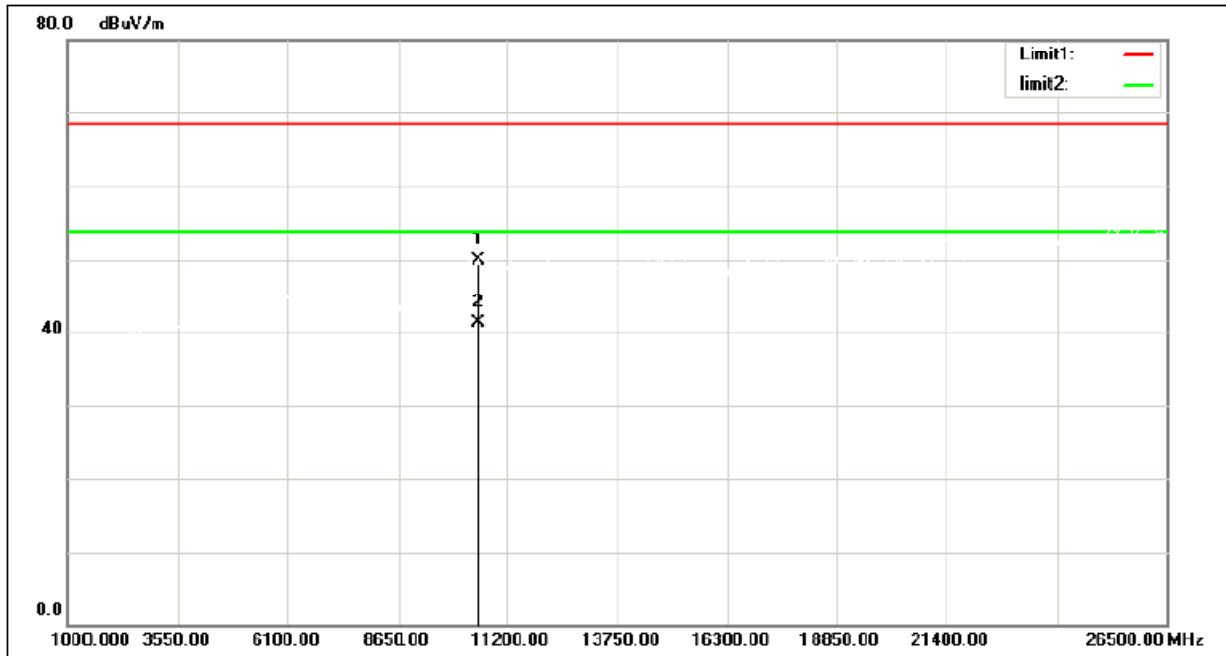
#### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	41.19	6.74	47.93	68.30	-20.37	peak
2	10520.000	31.82	6.74	38.56	54.00	-15.44	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz

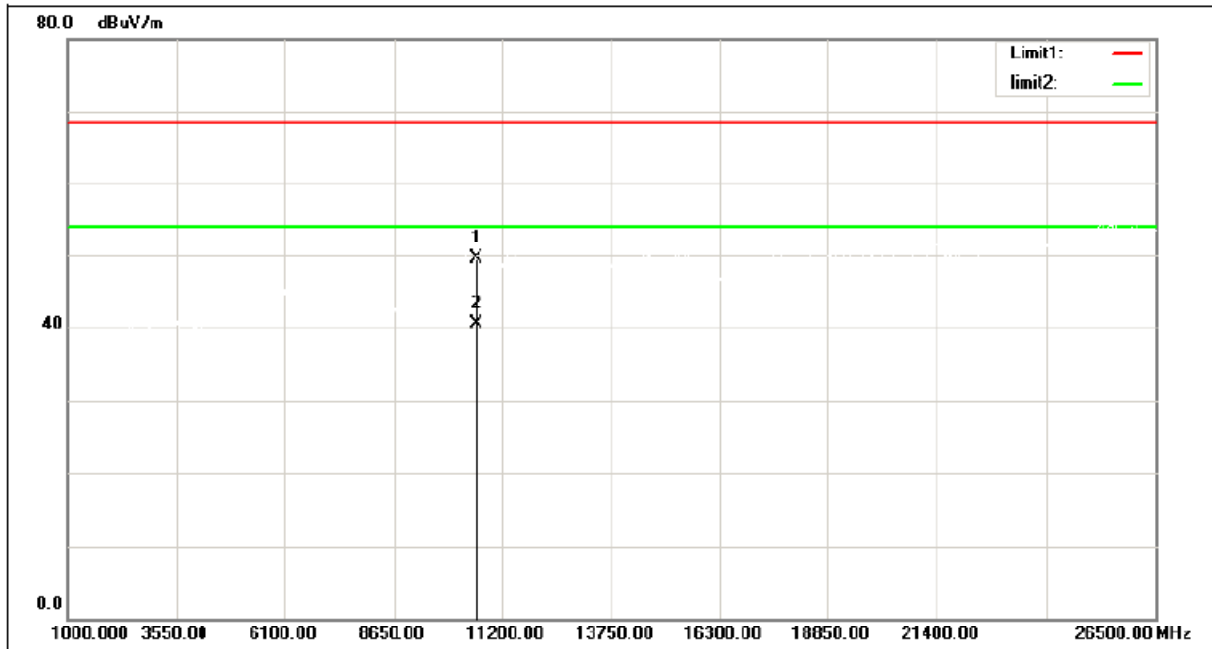
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	43.15	6.74	49.89	68.30	-18.41	peak
2	10520.000	34.54	6.74	41.28	54.00	-12.72	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz

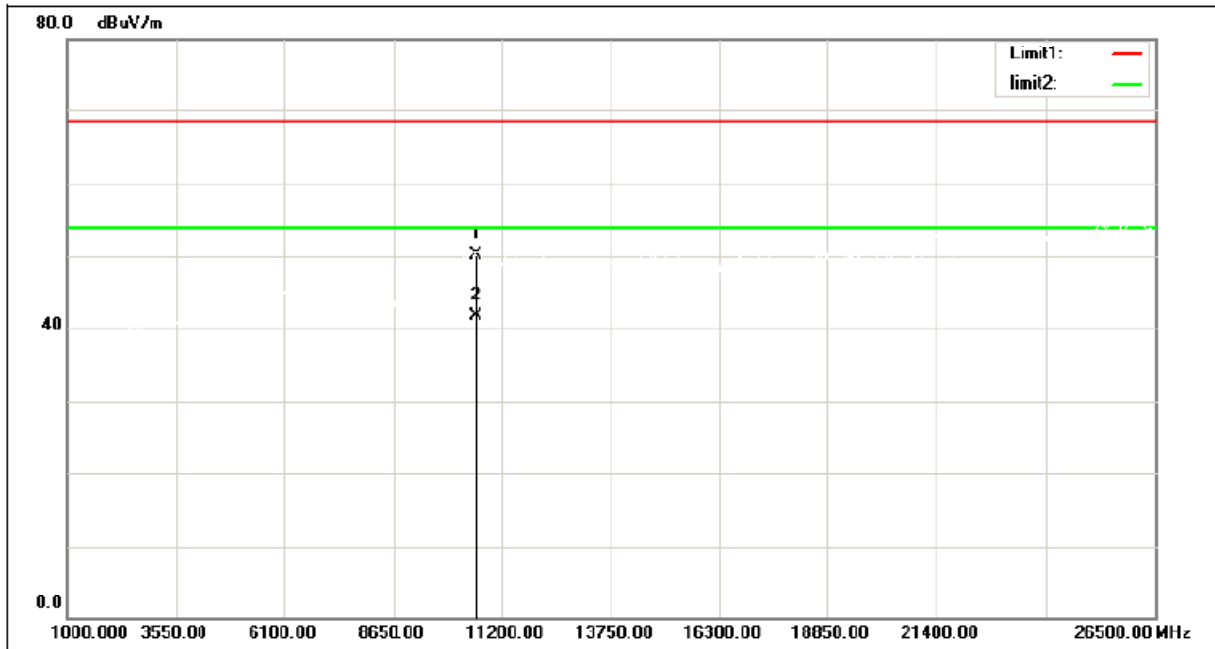
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	42.41	7.00	49.41	68.30	-18.89	peak
2	10600.000	33.58	7.00	40.58	54.00	-13.42	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz

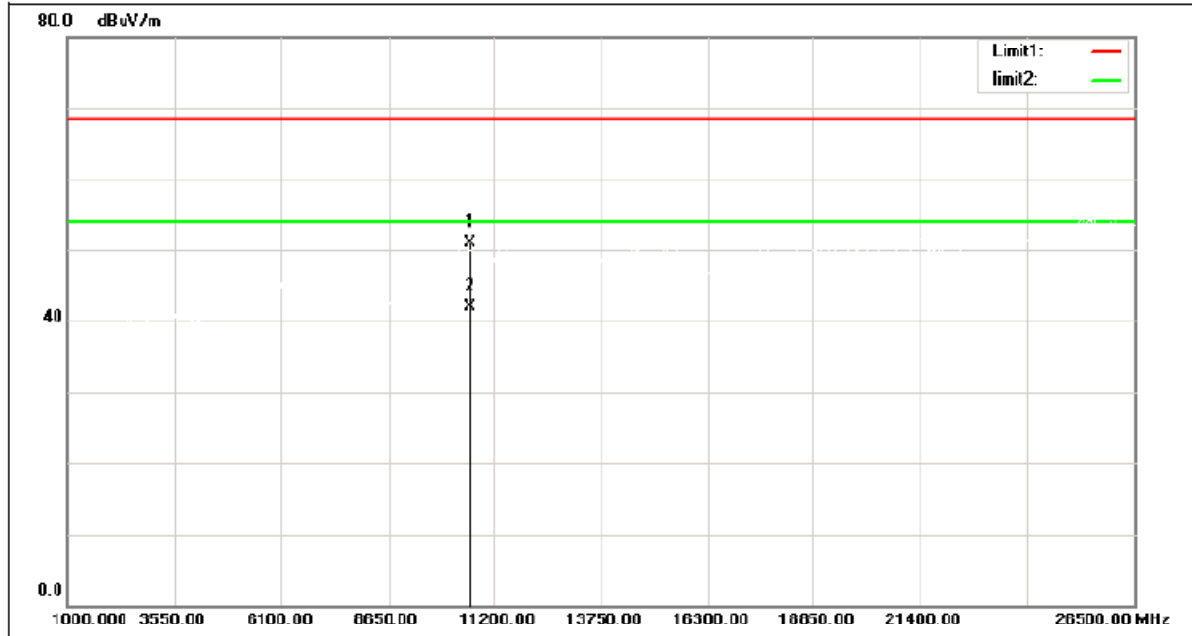
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	43.13	7.00	50.13	68.30	-18.17	peak
2	10600.000	34.66	7.00	41.66	54.00	-12.34	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

### Vertical

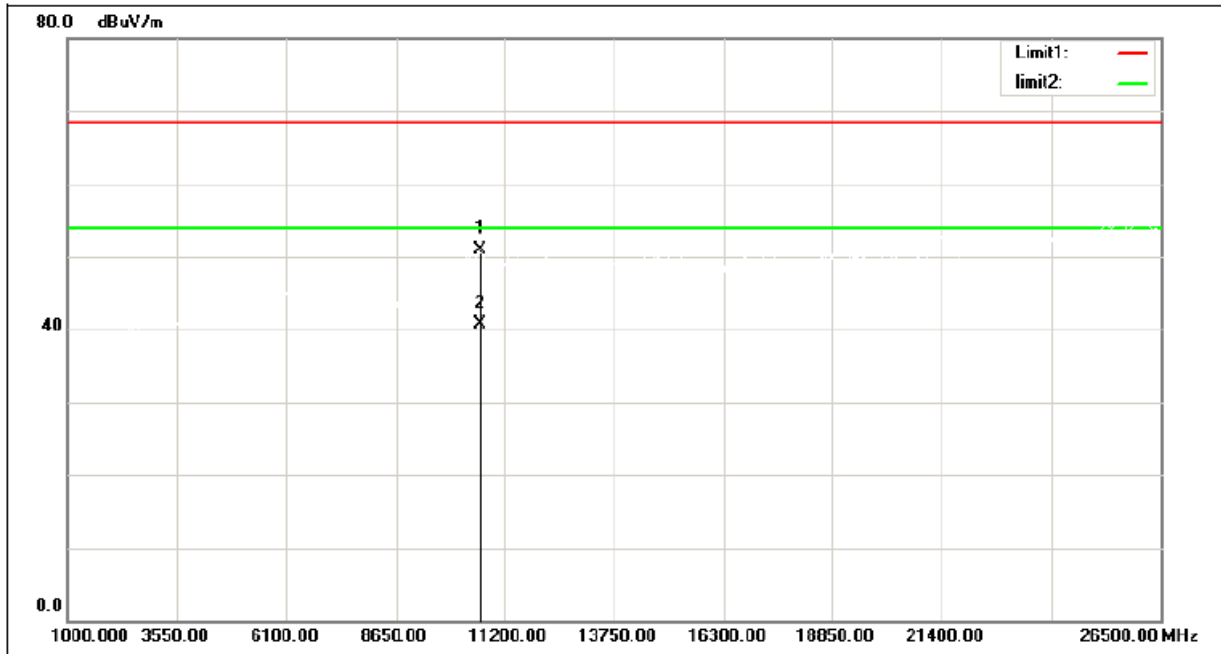


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	43.71	7.13	50.84	68.30	-17.46	peak
2	10640.000	34.82	7.13	41.95	54.00	-12.05	AVG



Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz

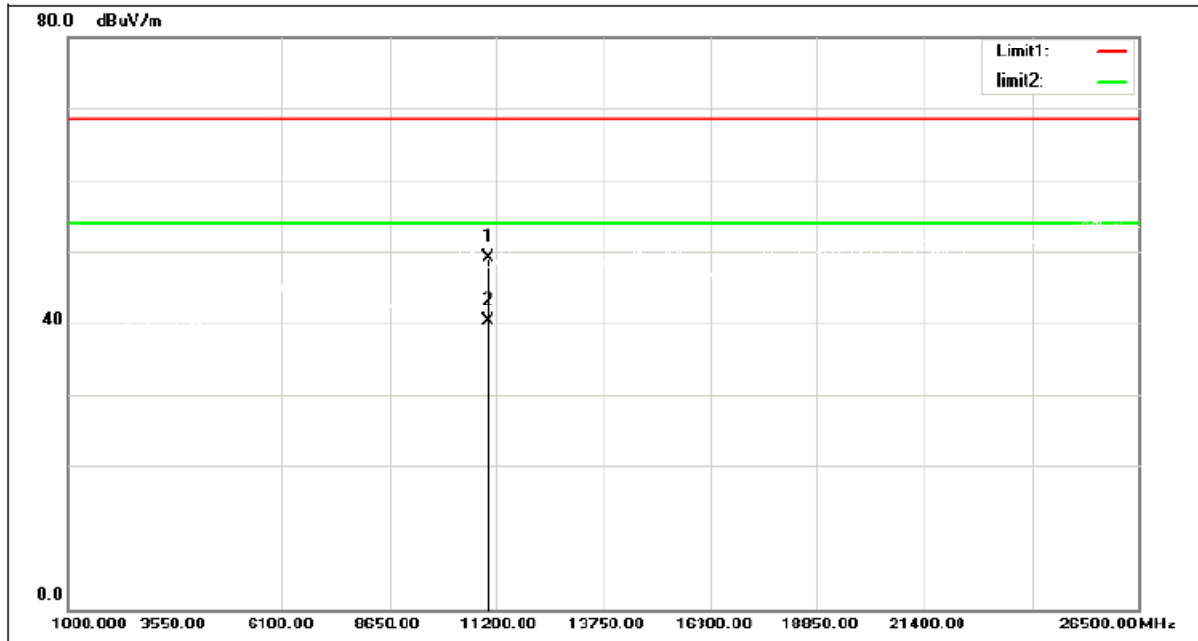
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	43.82	7.13	50.95	68.30	-17.35	peak
2	10640.000	33.51	7.13	40.64	54.00	-13.36	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

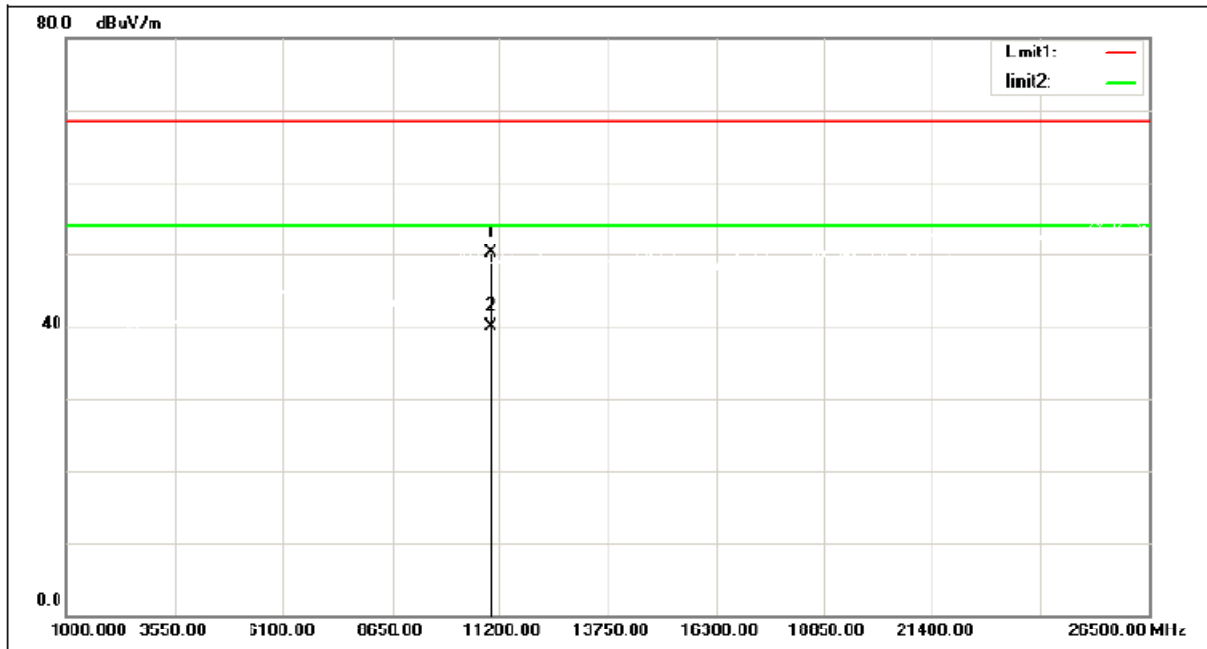
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	40.87	8.32	49.19	68.30	-19.11	peak
2	11000.000	31.92	8.32	40.24	54.00	-13.76	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz

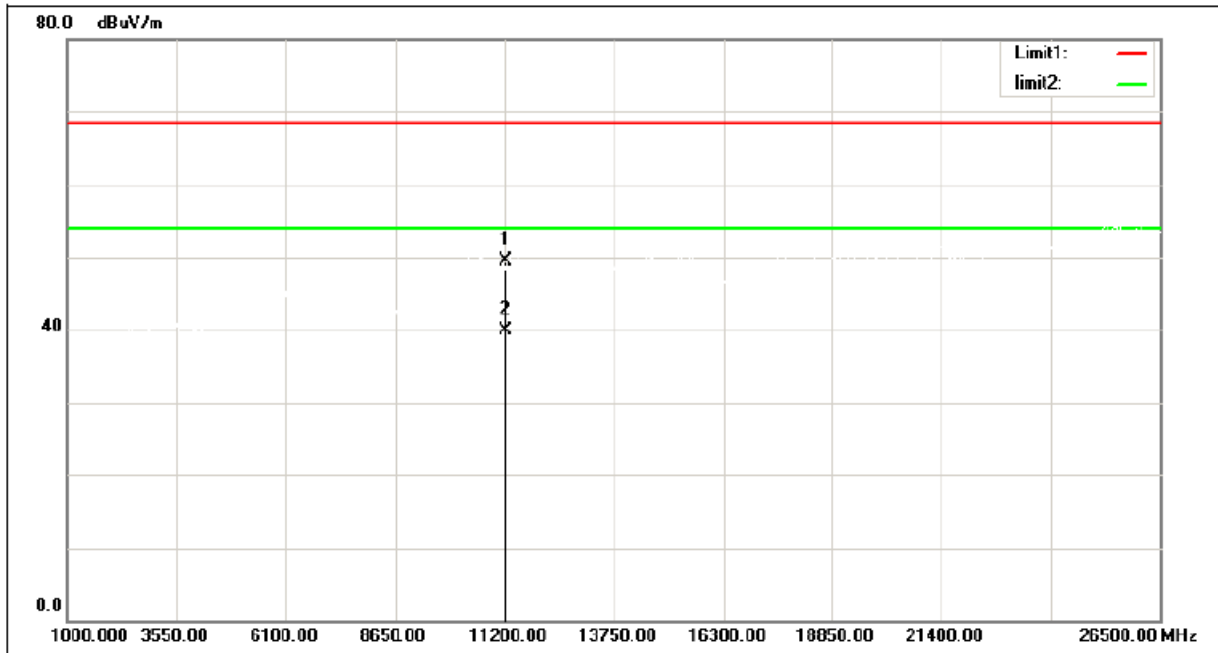
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	41.76	8.32	50.08	68.30	-18.22	peak
2	11000.000	31.83	8.32	40.15	54.00	-13.85	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5600 MHz

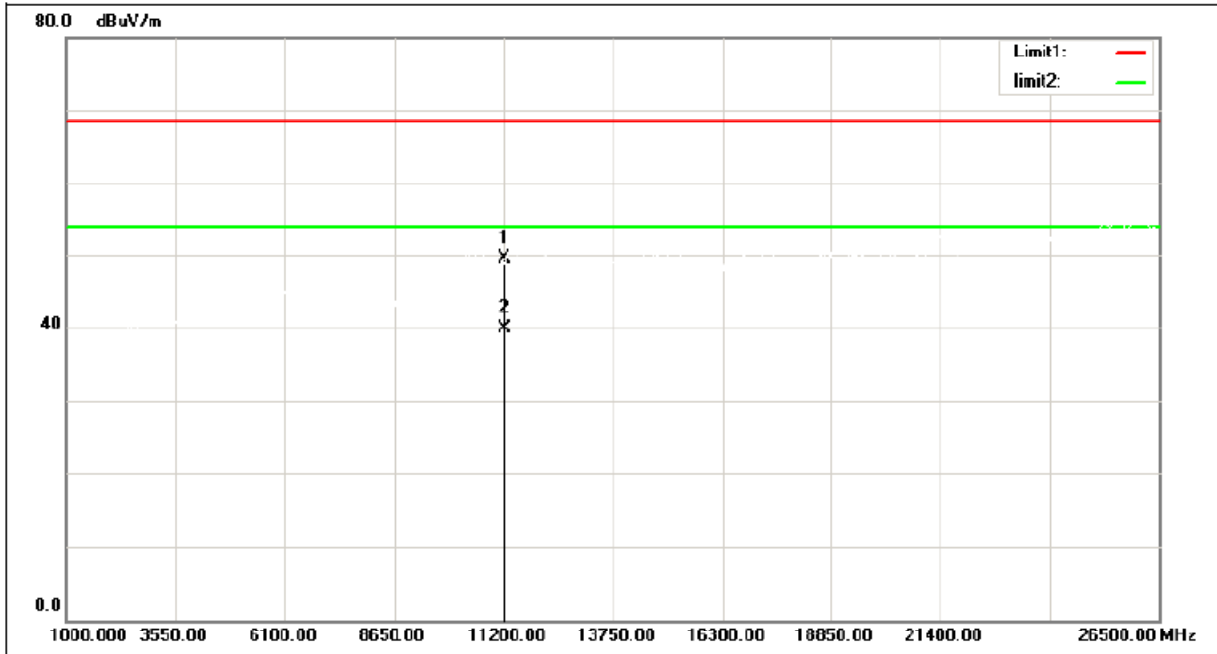
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	41.25	8.21	49.46	68.30	-18.84	peak
2	11200.000	31.64	8.21	39.85	54.00	-14.15	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5600 MHz

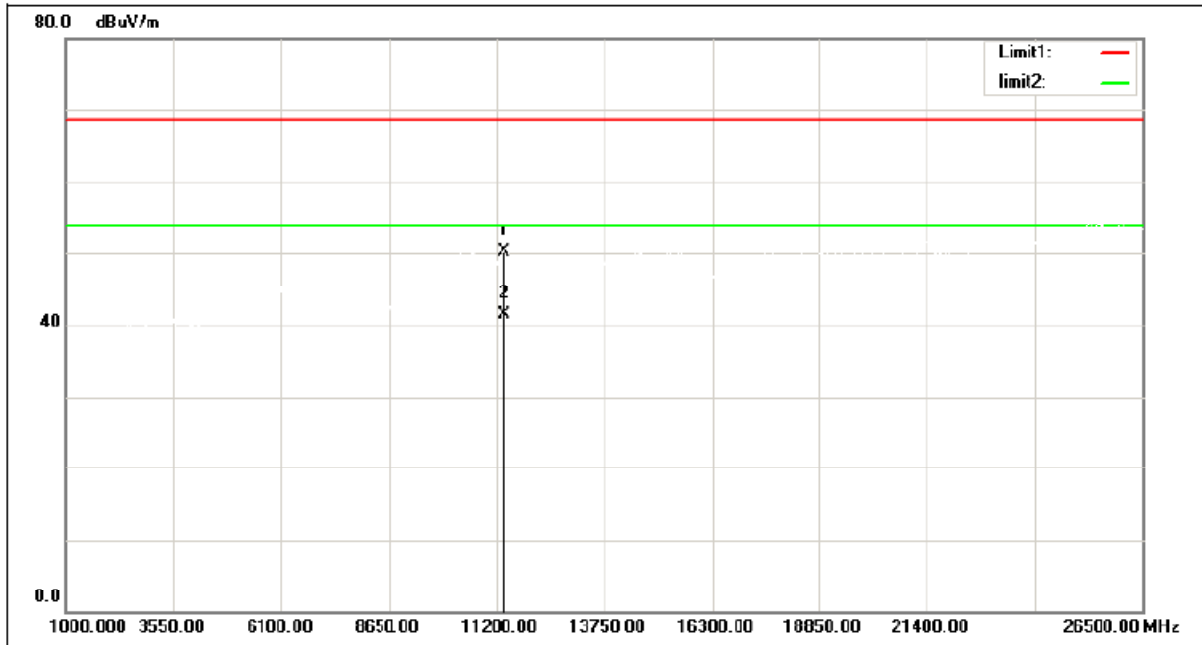
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	41.28	8.21	49.49	68.30	-18.81	peak
2	11200.000	31.66	8.21	39.87	54.00	-14.13	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

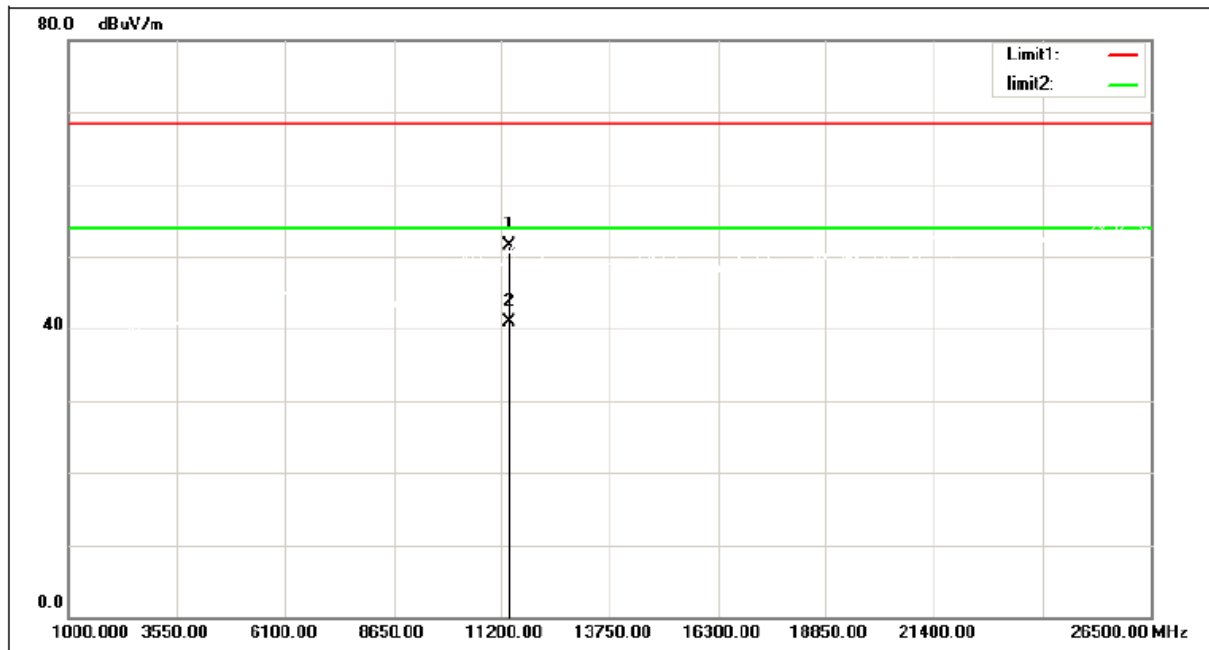
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	42.08	8.10	50.18	68.30	-18.12	peak
2	11400.000	33.41	8.10	41.51	54.00	-12.49	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz

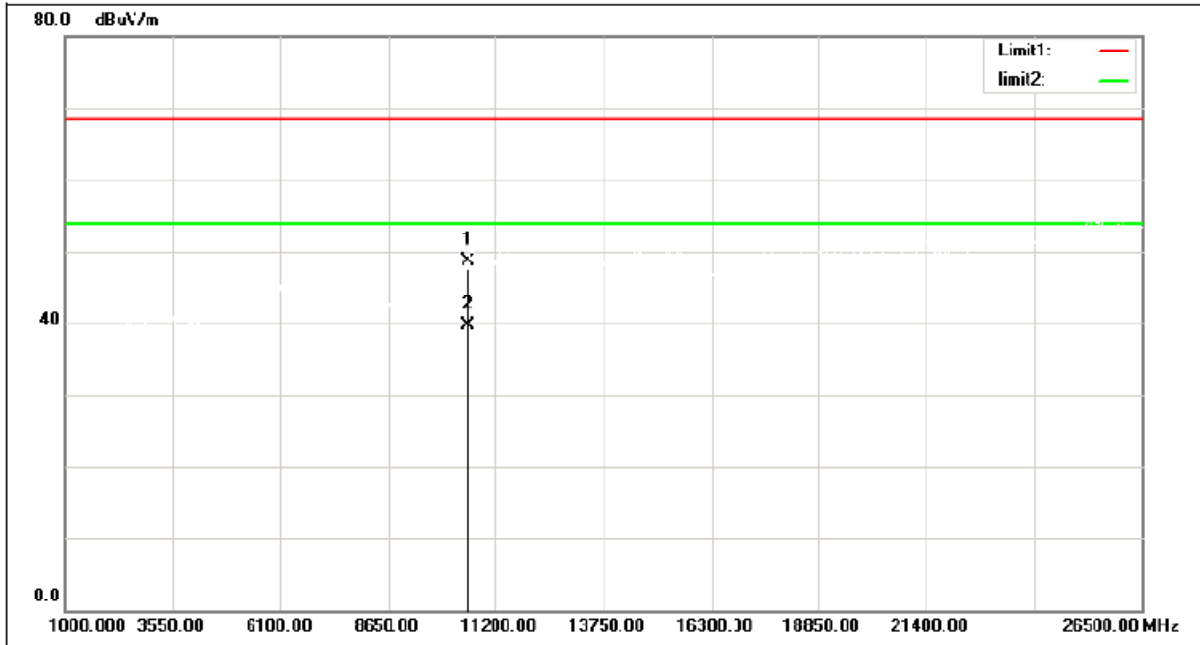
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	43.33	8.10	51.43	68.30	-16.87	peak
2	11400.000	32.89	8.10	40.99	54.00	-13.01	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz

### Vertical

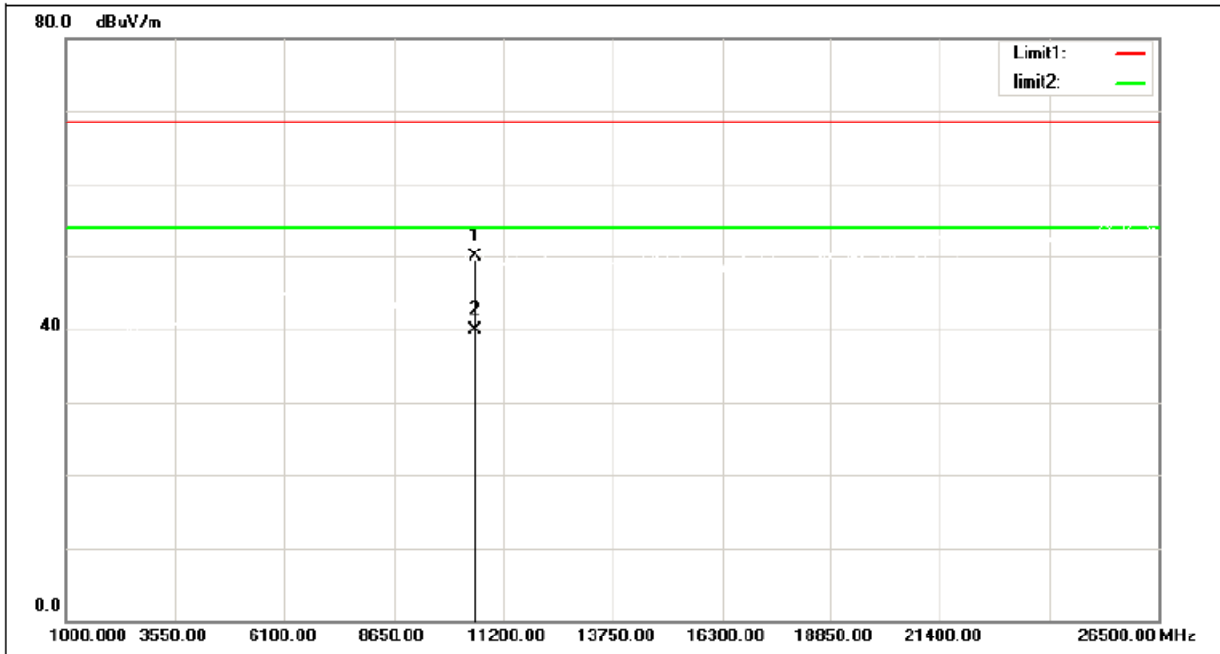


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	41.87	6.74	48.61	68.30	-19.69	peak
2	10520.000	32.99	6.74	39.73	54.00	-14.27	AVG



Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz

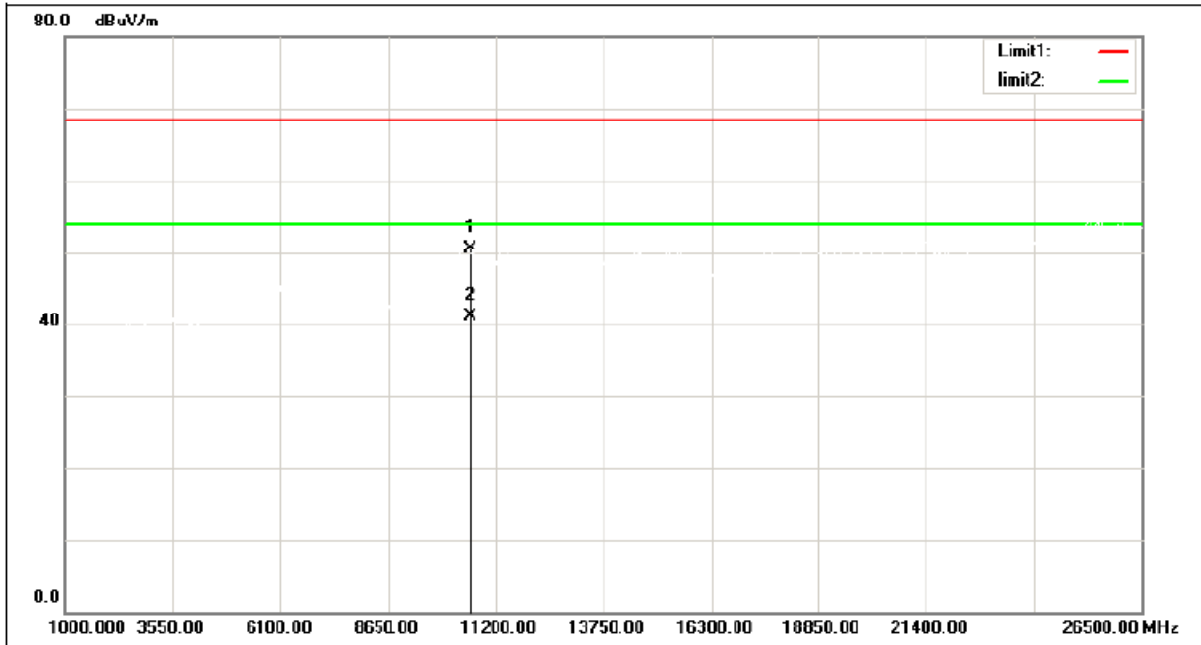
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	43.25	6.74	49.99	68.30	-18.31	peak
2	10520.000	33.14	6.74	39.88	54.00	-14.12	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz

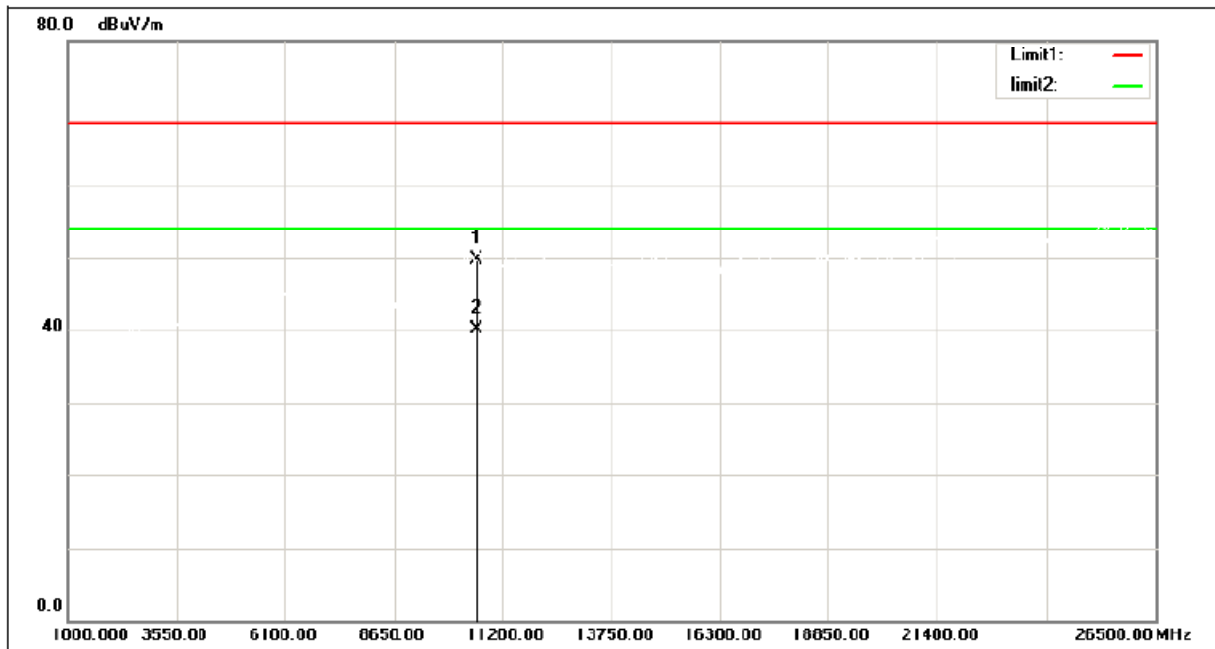
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	43.55	7.00	50.55	68.30	-17.75	peak
2	10600.000	34.02	7.00	41.02	54.00	-12.98	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz

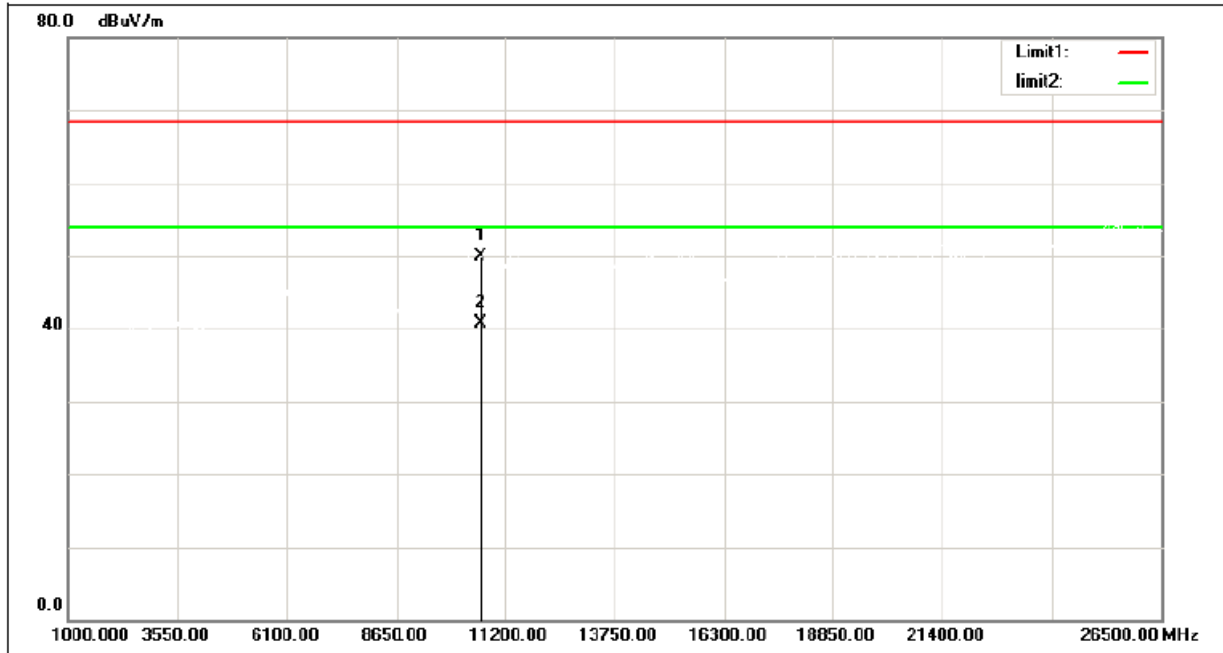
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	42.64	7.00	49.64	68.30	-18.66	peak
2	10600.000	33.03	7.00	40.03	54.00	-13.97	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

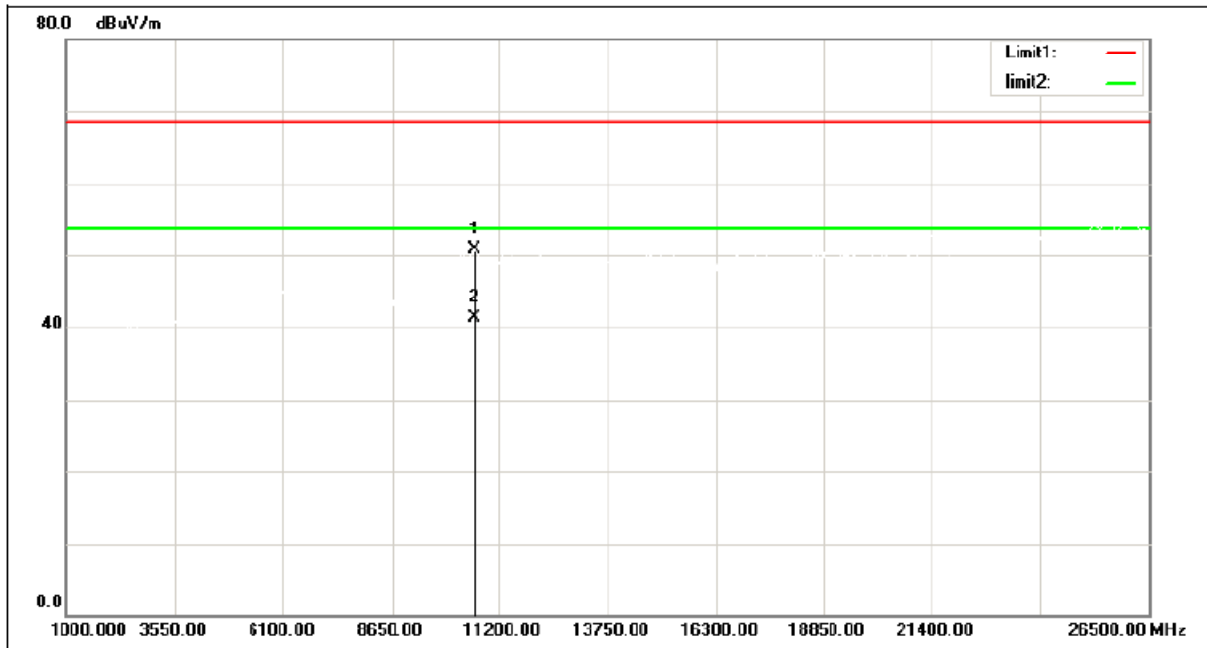
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	42.87	7.13	50.00	68.30	-18.30	peak
2	10640.000	33.54	7.13	40.67	54.00	-13.33	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz

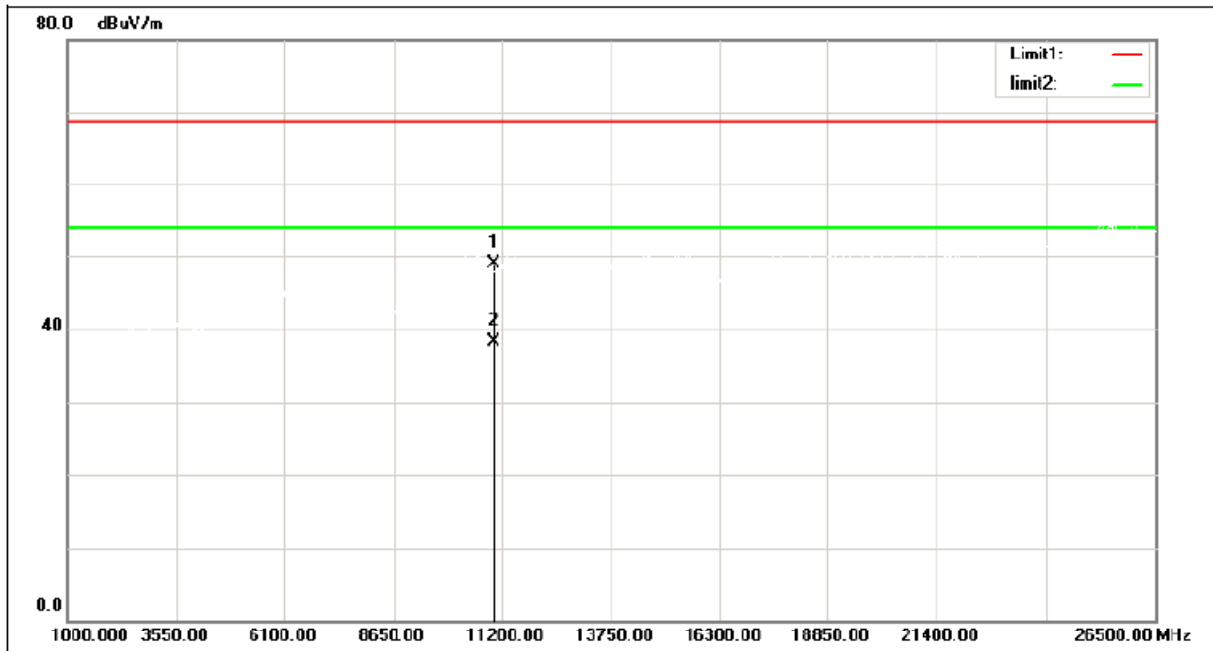
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	43.58	7.13	50.71	68.30	-17.59	peak
2	10640.000	34.22	7.13	41.35	54.00	-12.65	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz

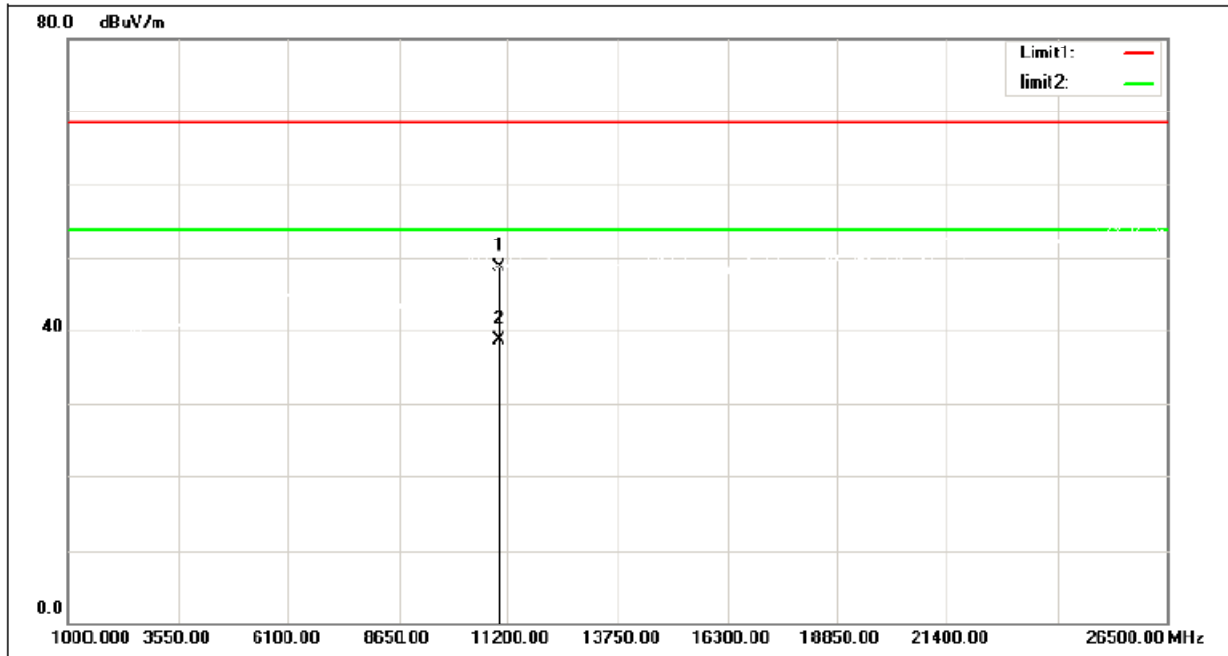
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	40.51	8.32	48.83	68.30	-19.47	peak
2	11000.000	29.89	8.32	38.21	54.00	-15.79	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz

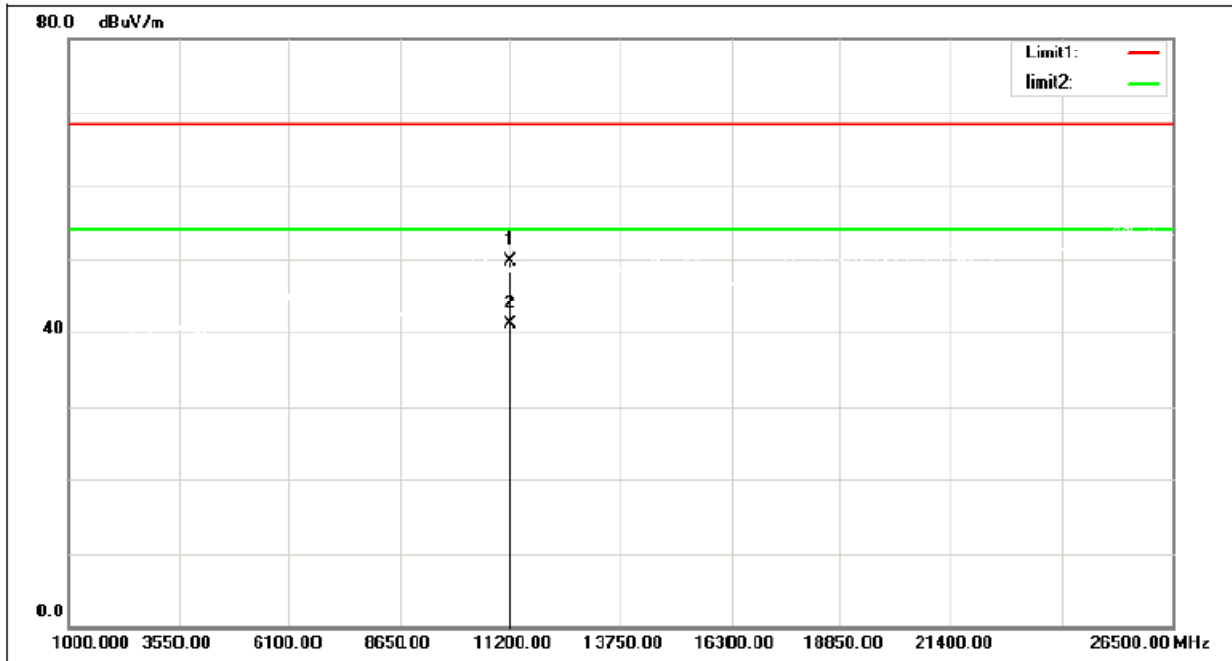
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	40.35	8.32	48.67	68.30	-19.63	peak
2	11000.000	30.46	8.32	38.78	54.00	-15.22	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5600 MHz

### Vertical

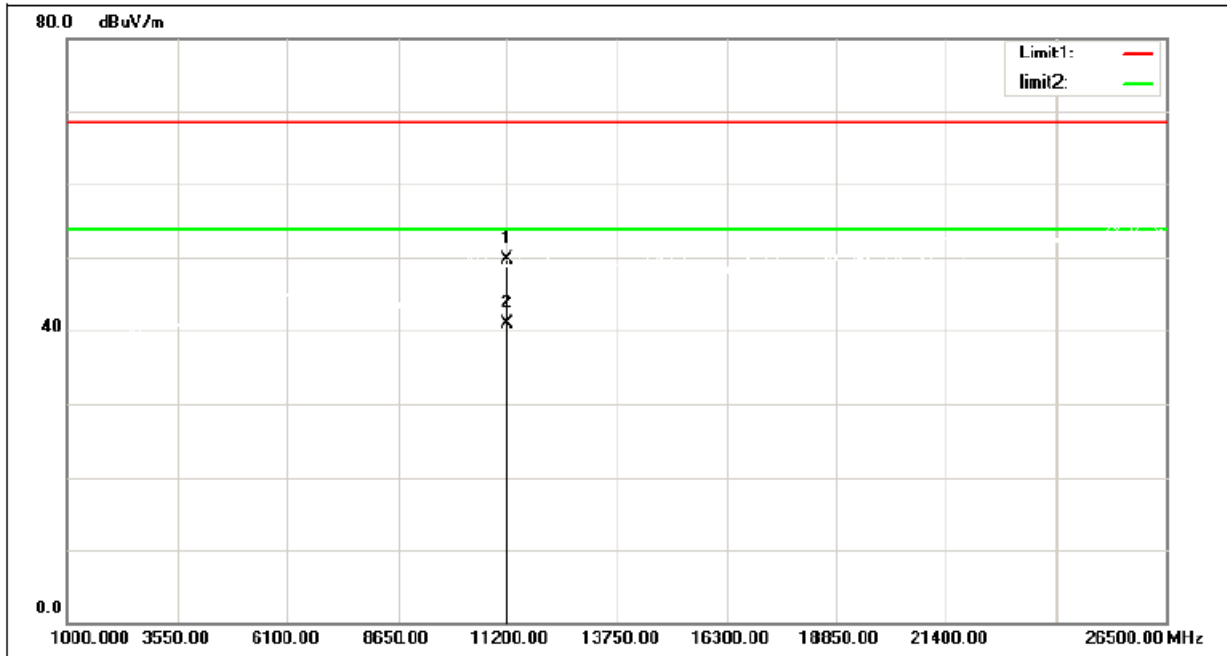


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	41.43	8.21	49.64	68.30	-18.66	peak
2	11200.000	32.88	8.21	41.09	54.00	-12.91	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5600 MHz

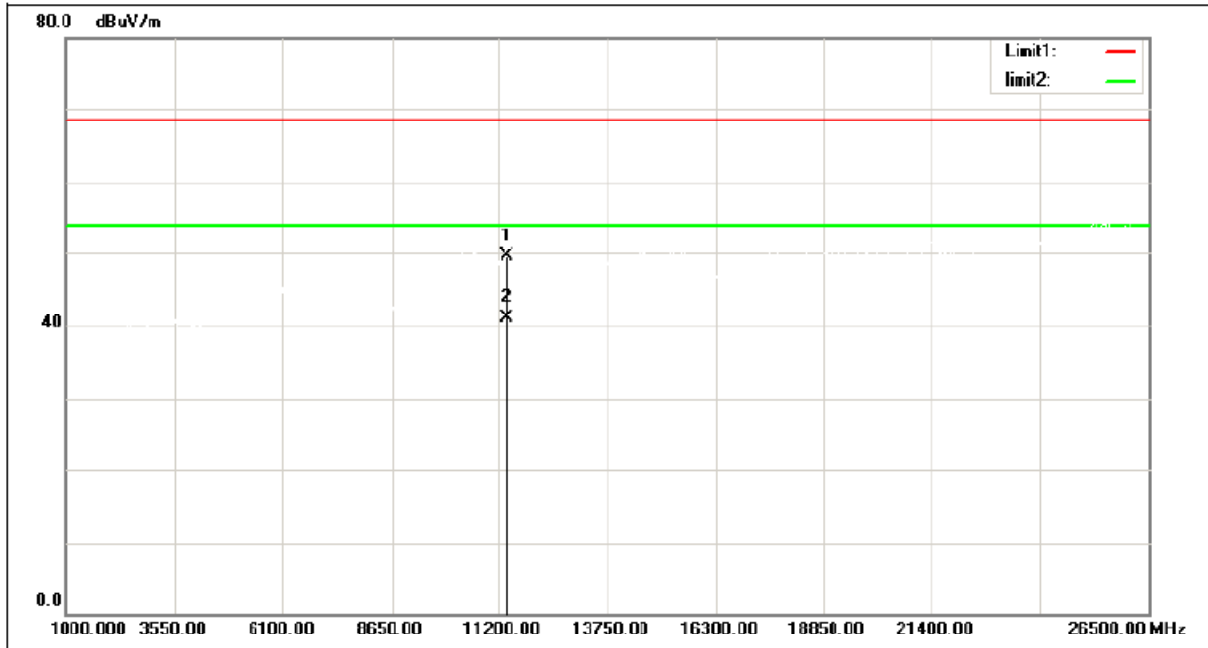
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	41.55	8.21	49.76	68.30	-18.54	peak
2	11200.000	32.64	8.21	40.85	54.00	-13.15	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz

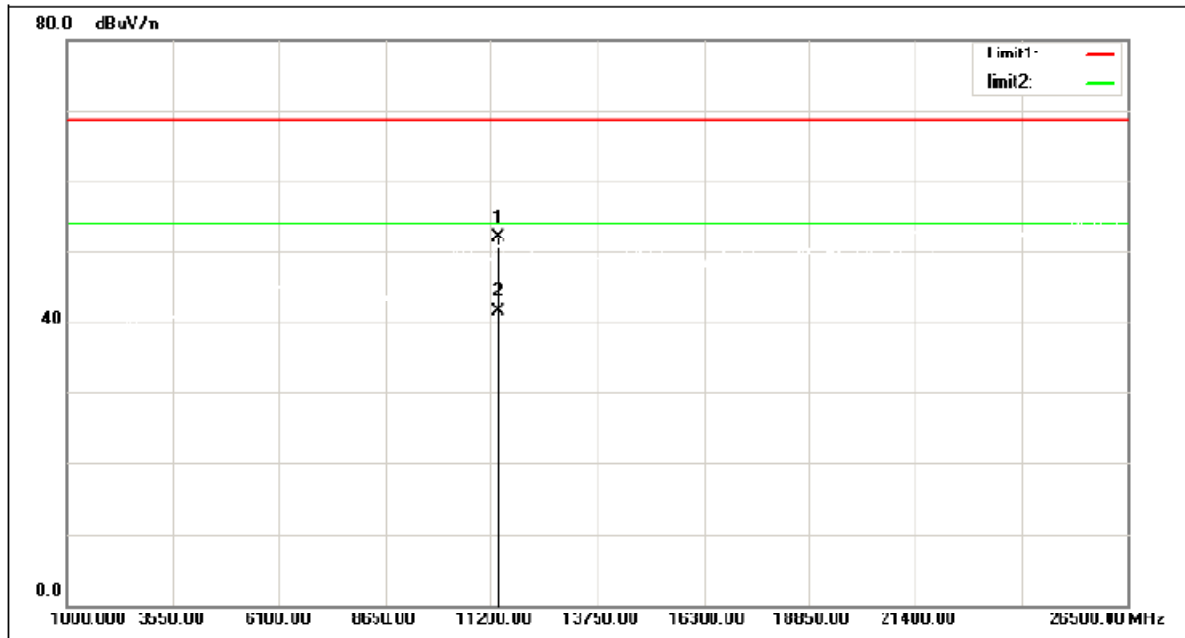
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	41.47	8.10	49.57	68.30	-18.73	peak
2	11400.000	33.04	8.10	41.14	54.00	-12.86	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz

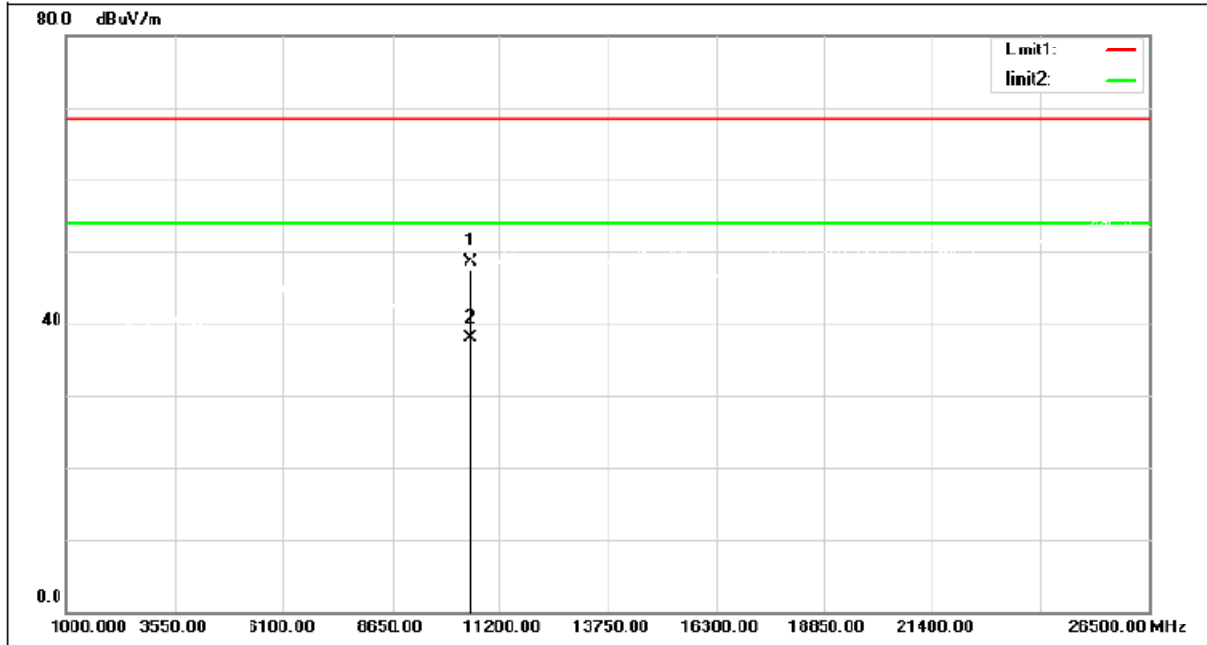
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	43.82	8.10	51.92	68.30	-16.38	peak
2	11400.000	33.41	8.10	41.51	54.00	-12.49	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 MHz

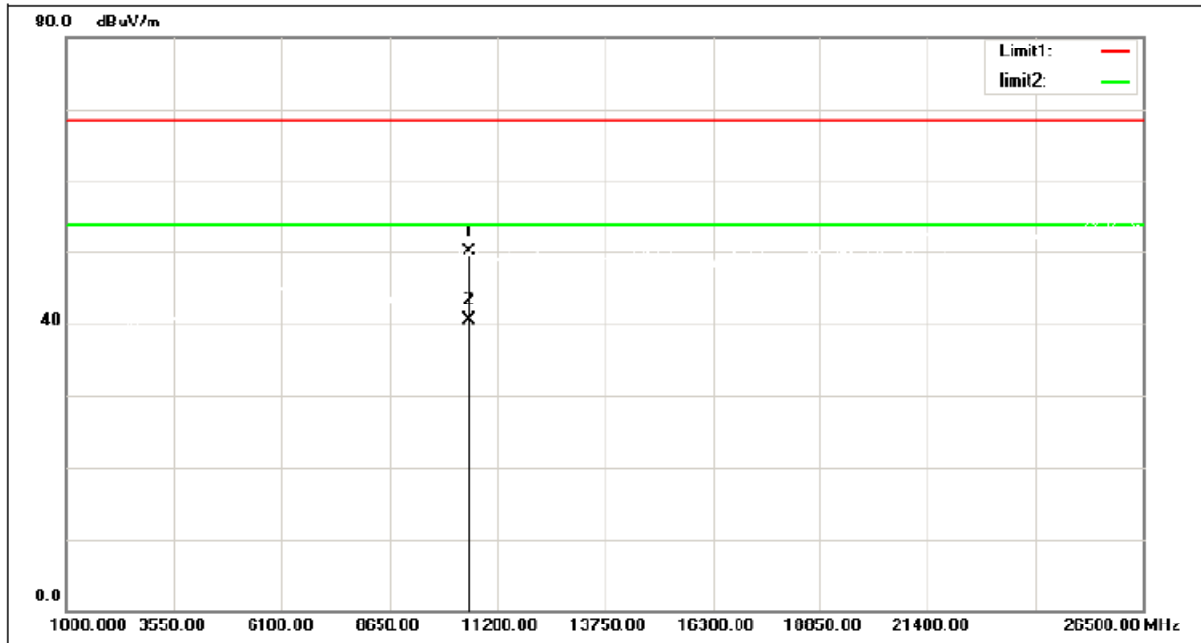
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	41.74	6.80	48.54	68.30	-19.76	peak
2	10540.000	31.06	6.80	37.86	54.00	-16.14	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 MHz

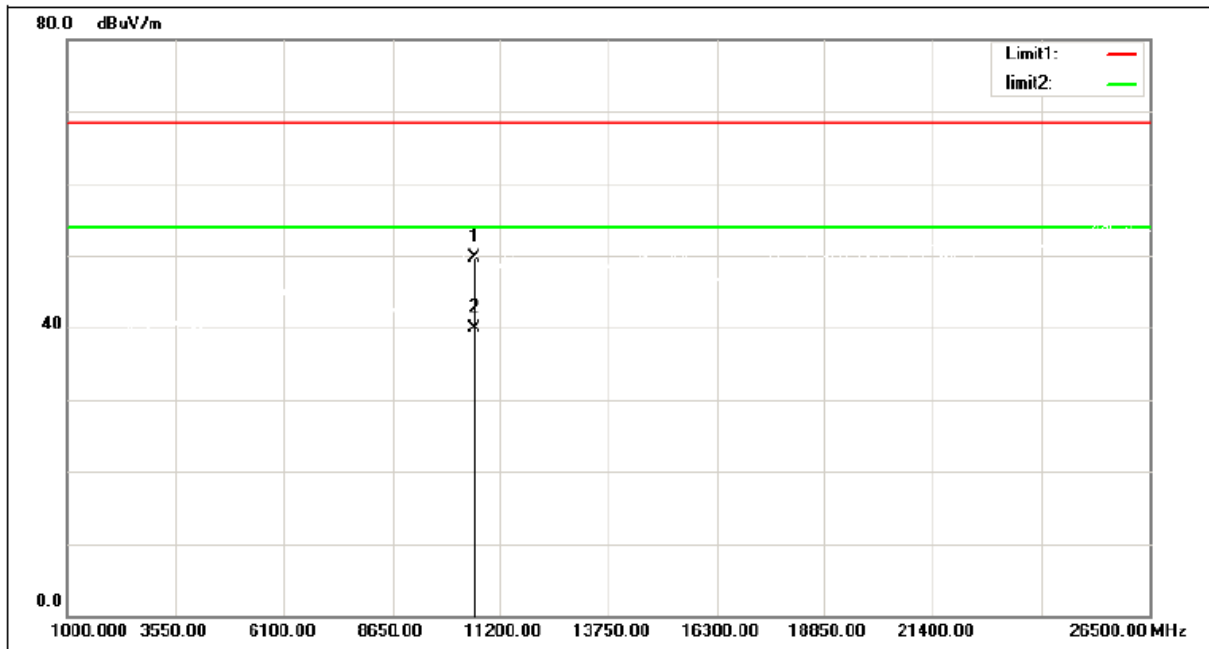
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	43.28	6.80	50.08	68.30	-18.22	peak
2	10540.000	33.61	6.80	40.41	54.00	-13.59	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz

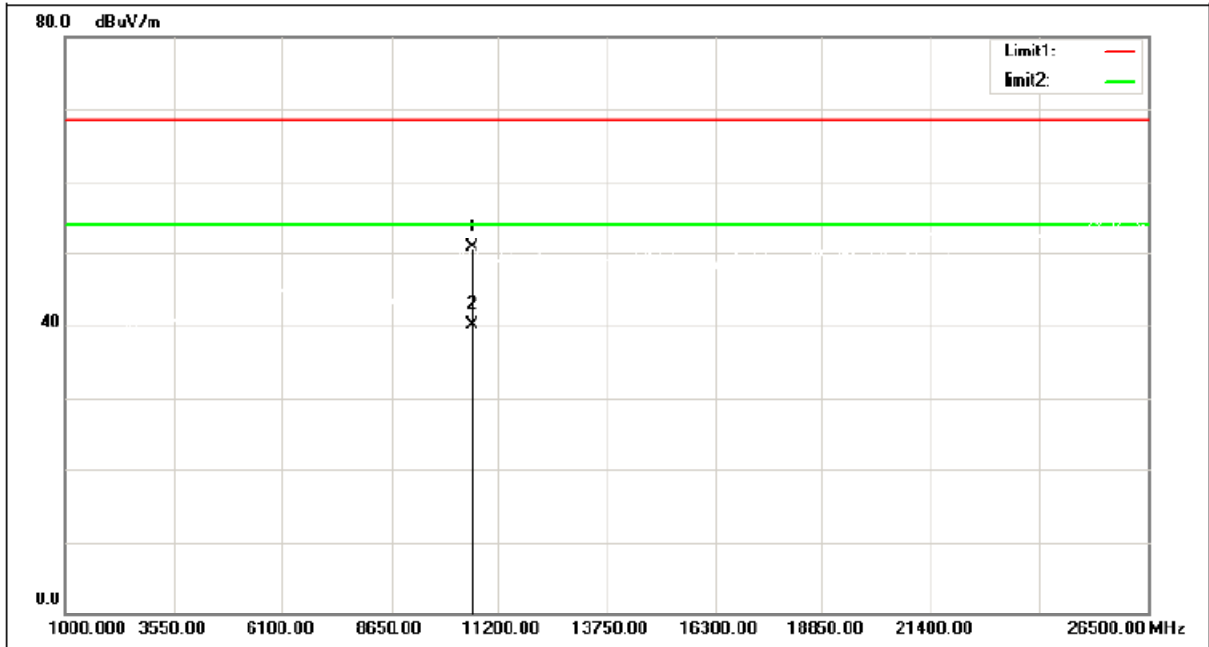
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	42.56	7.07	49.63	68.30	-18.67	peak
2	10620.000	32.88	7.07	39.95	54.00	-14.05	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz

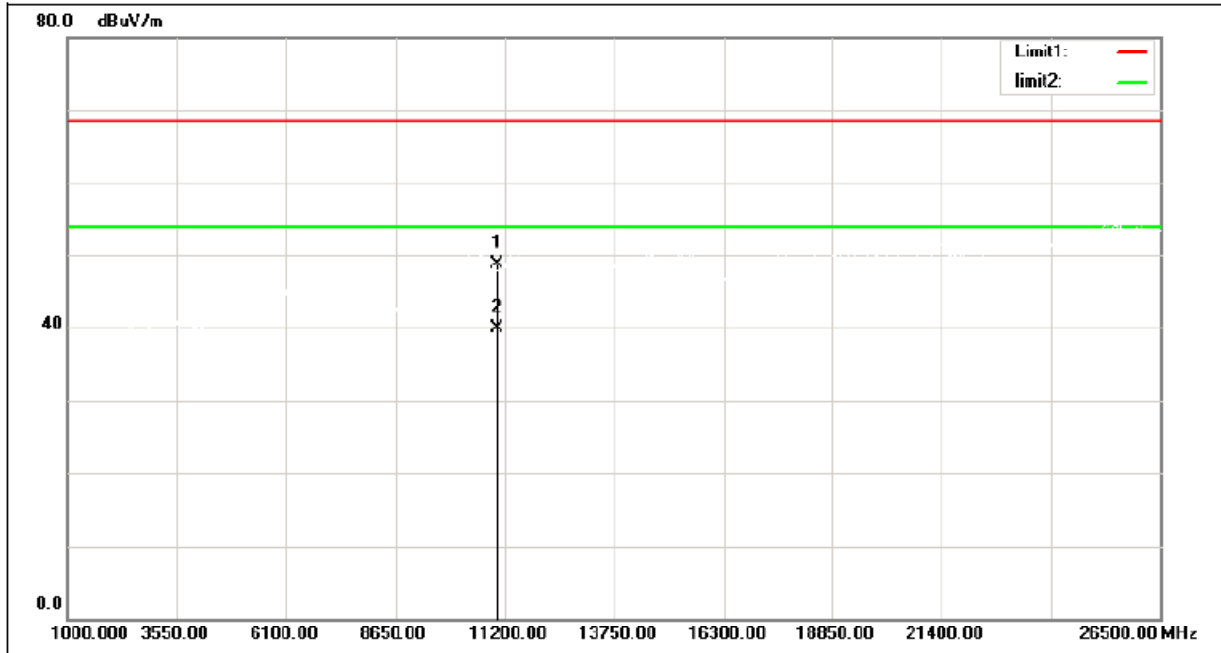
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	43.55	7.07	50.62	68.30	-17.68	peak
2	10620.000	33.12	7.07	40.19	54.00	-13.81	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz

### Vertical

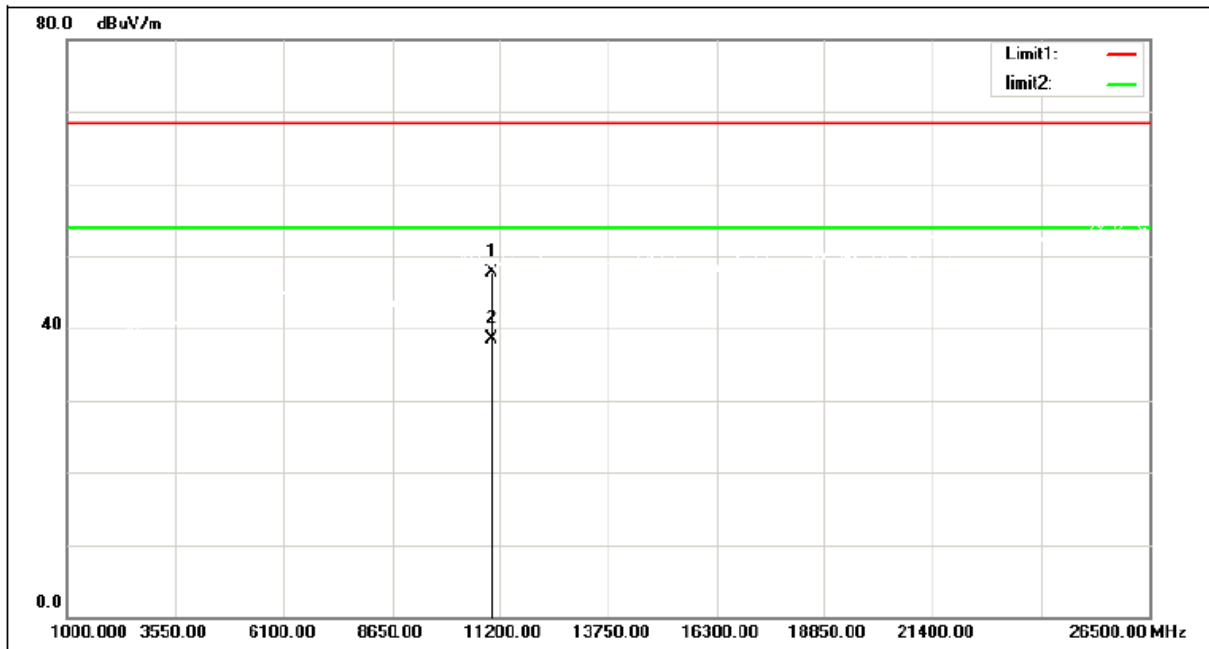


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	40.33	8.30	48.63	68.30	-19.67	peak
2	11020.000	31.59	8.30	39.89	54.00	-14.11	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz

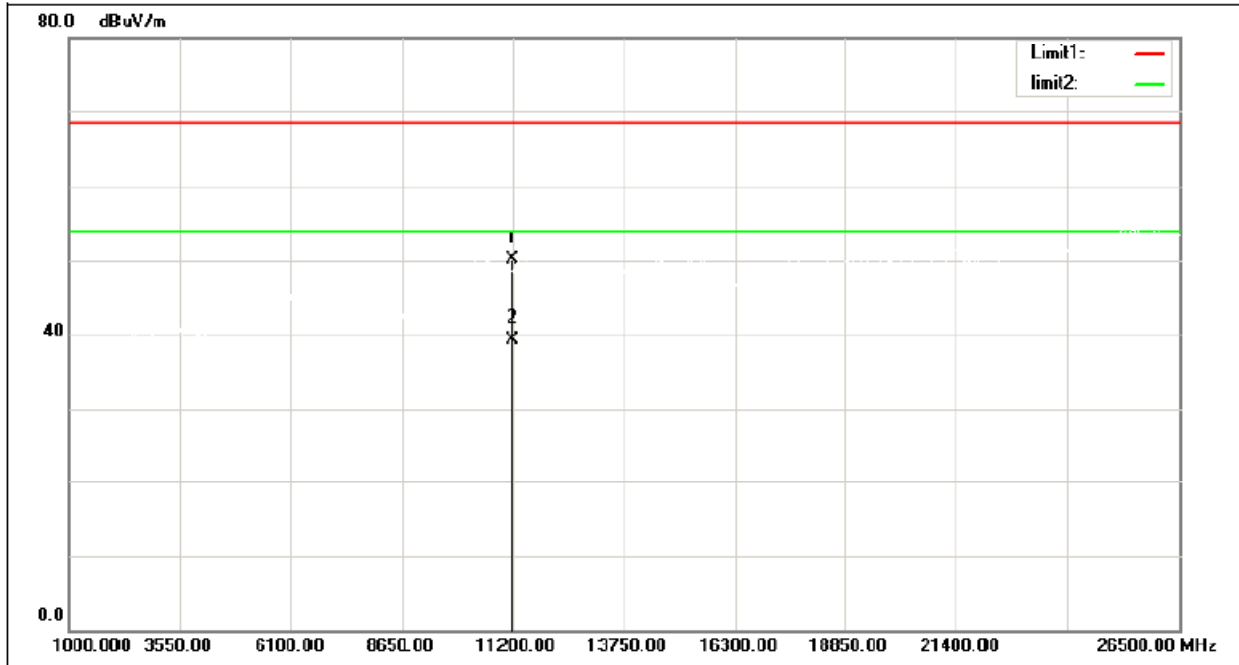
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	39.46	8.30	47.76	68.30	-20.54	peak
2	11020.000	30.11	8.30	38.41	54.00	-15.59	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5590 MHz

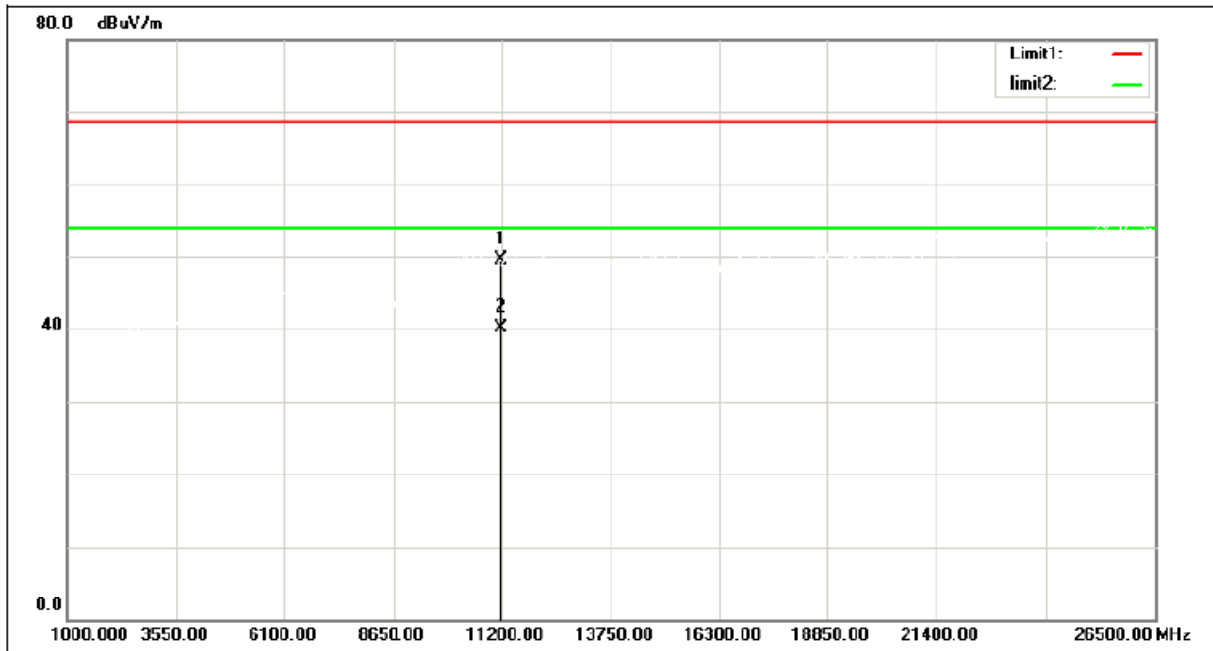
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	41.83	8.23	50.06	68.30	-18.24	peak
2	11180.000	31.00	8.23	39.23	54.00	-14.77	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5590 MHz

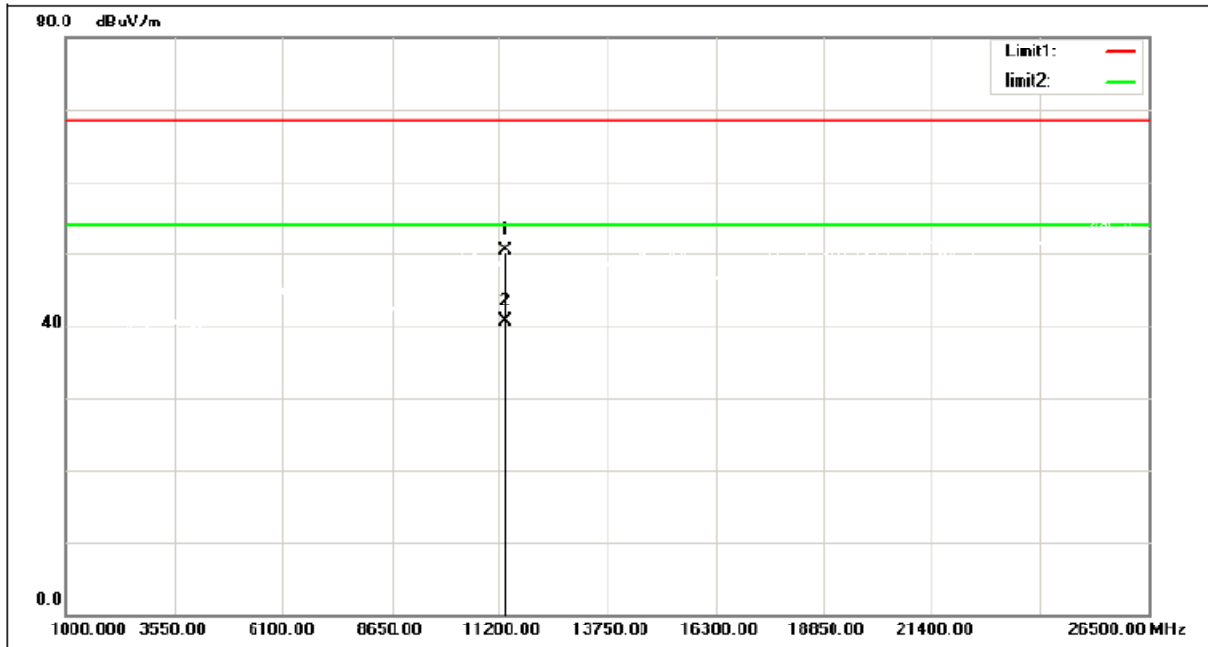
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	41.35	8.23	49.58	68.30	-18.72	peak
2	11180.000	31.84	8.23	40.07	54.00	-13.93	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz

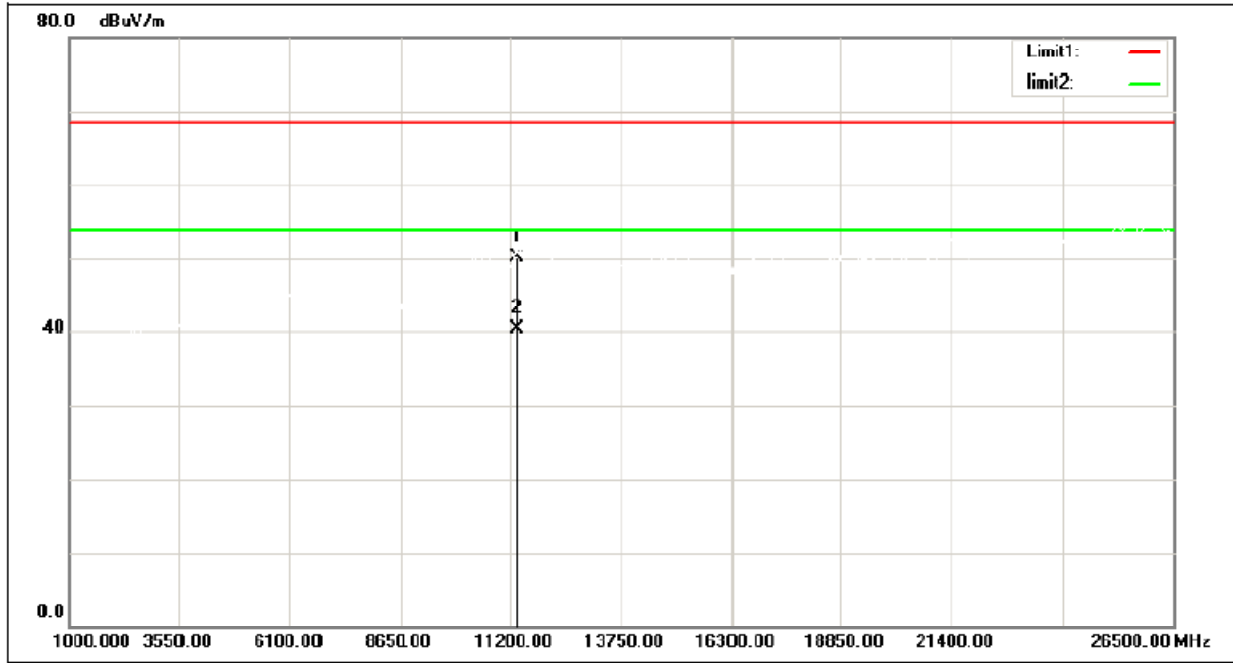
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	42.15	8.14	50.29	68.30	-18.01	peak
2	11340.000	32.63	8.14	40.77	54.00	-13.23	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz

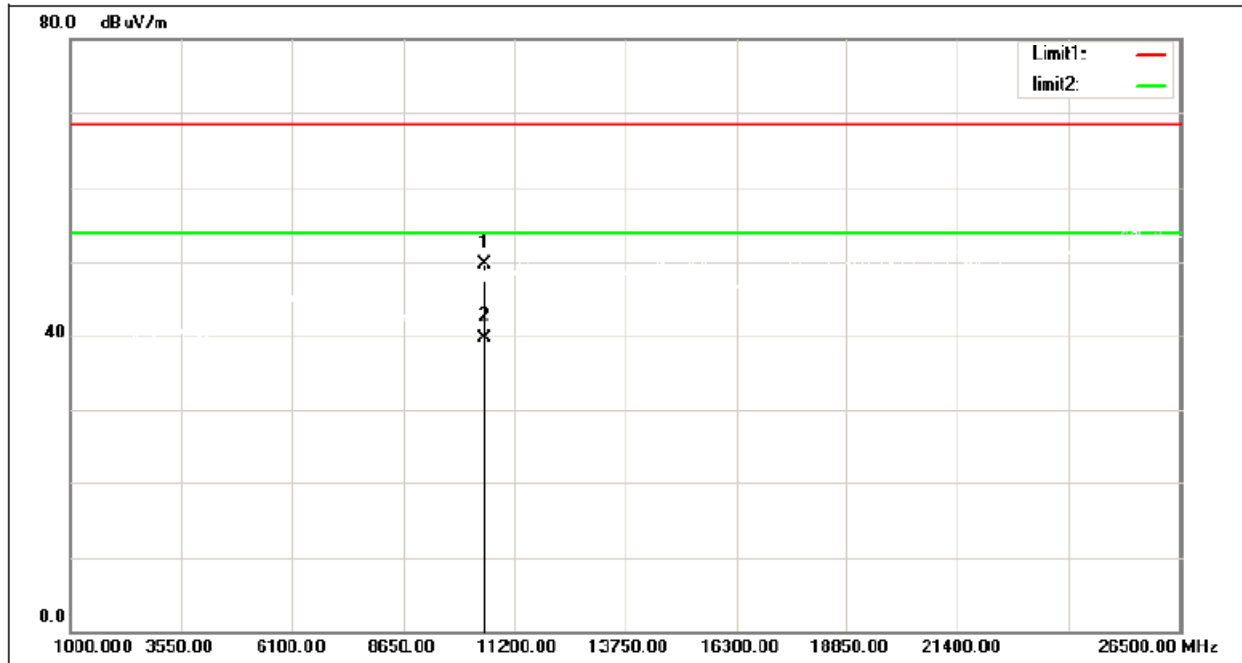
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	42.01	8.14	50.15	68.30	-18.15	peak
2	11340.000	32.22	8.14	40.36	54.00	-13.64	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz

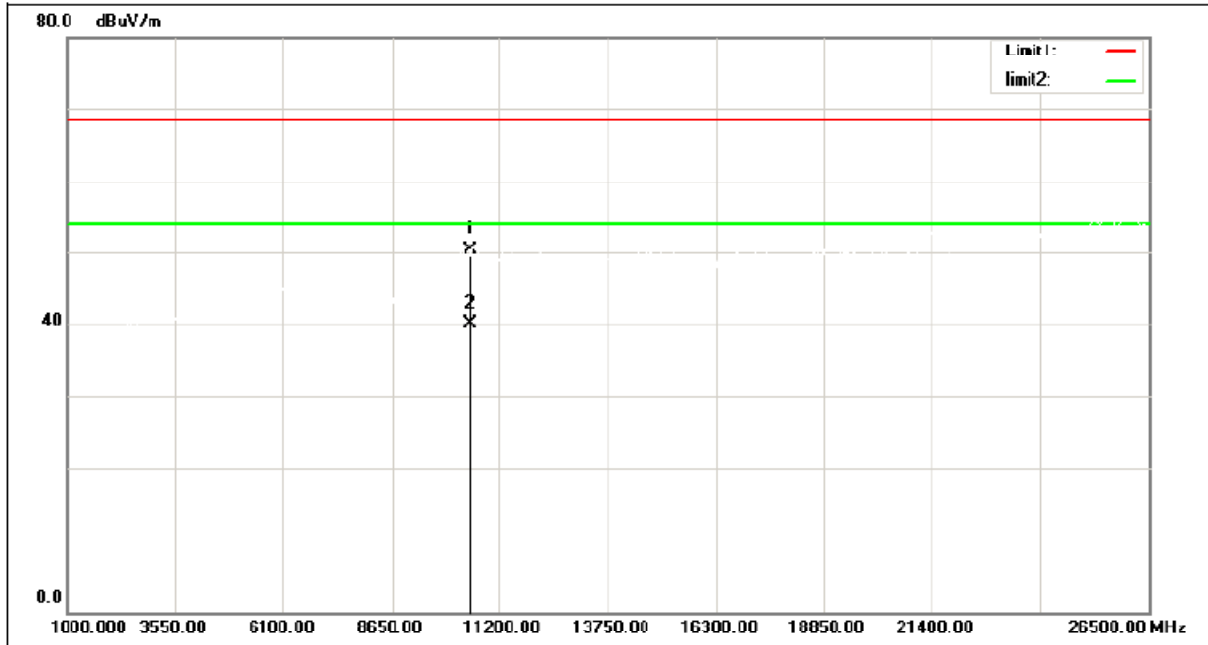
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	43.02	6.74	49.76	68.30	-18.54	peak
2	10520.000	32.97	6.74	39.71	54.00	-14.29	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz

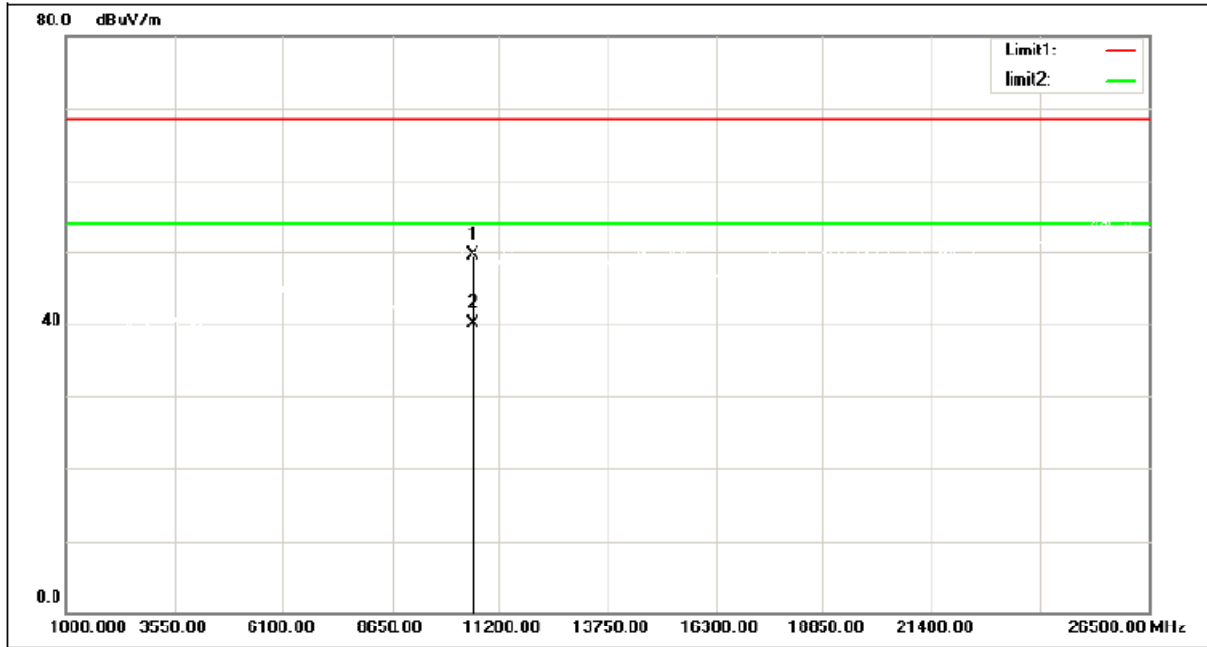
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	43.55	6.74	50.29	68.30	-18.01	peak
2	10520.000	33.46	6.74	40.20	54.00	-13.80	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5300 MHz

### Vertical

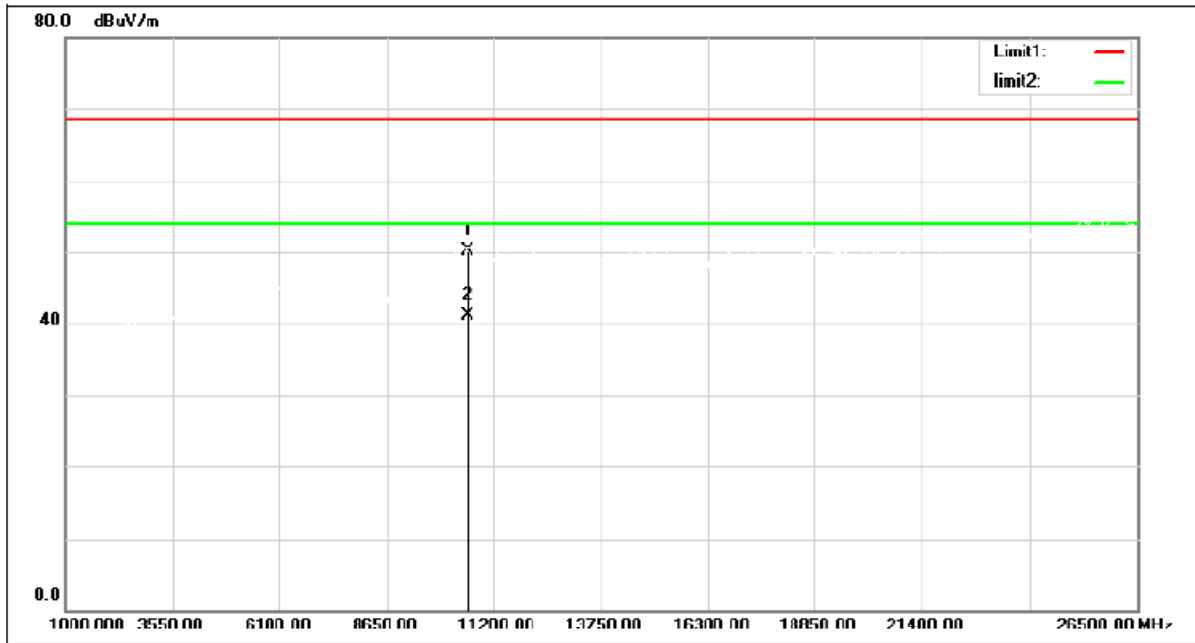


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	42.41	7.00	49.41	68.30	-18.89	peak
2	10600.000	33.01	7.00	40.01	54.00	-13.99	AVG



Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5300 MHz

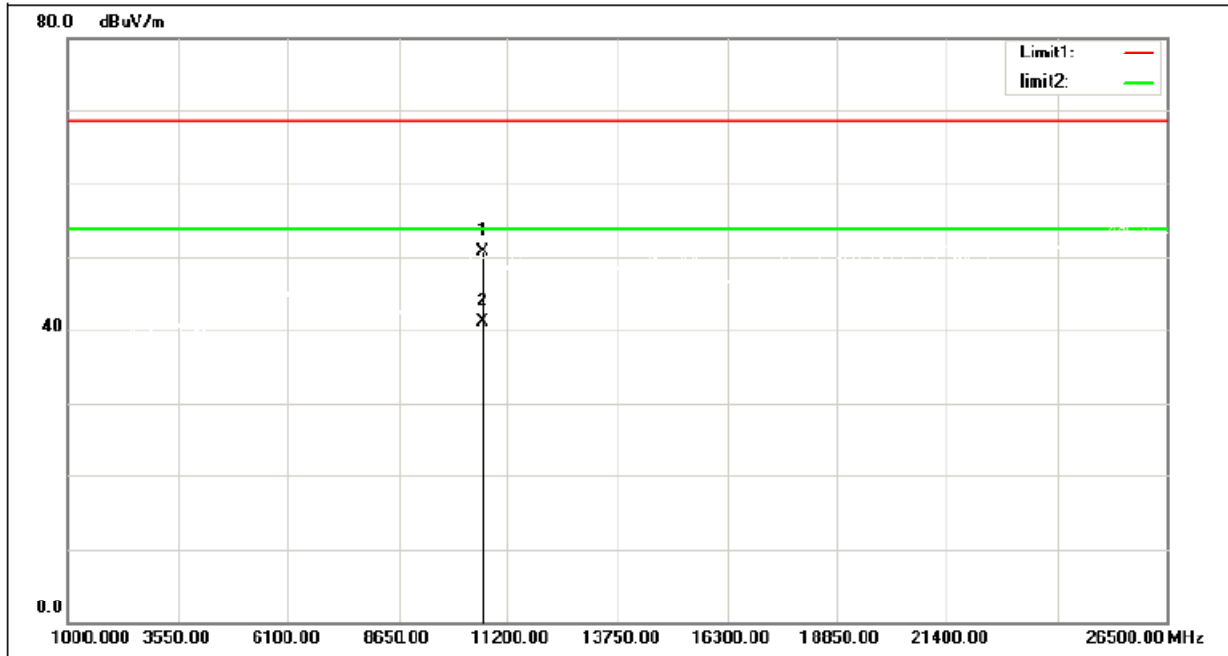
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	43.09	7.00	50.09	68.30	-18.21	peak
2	10600.000	34.16	7.00	41.16	54.00	-12.84	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz

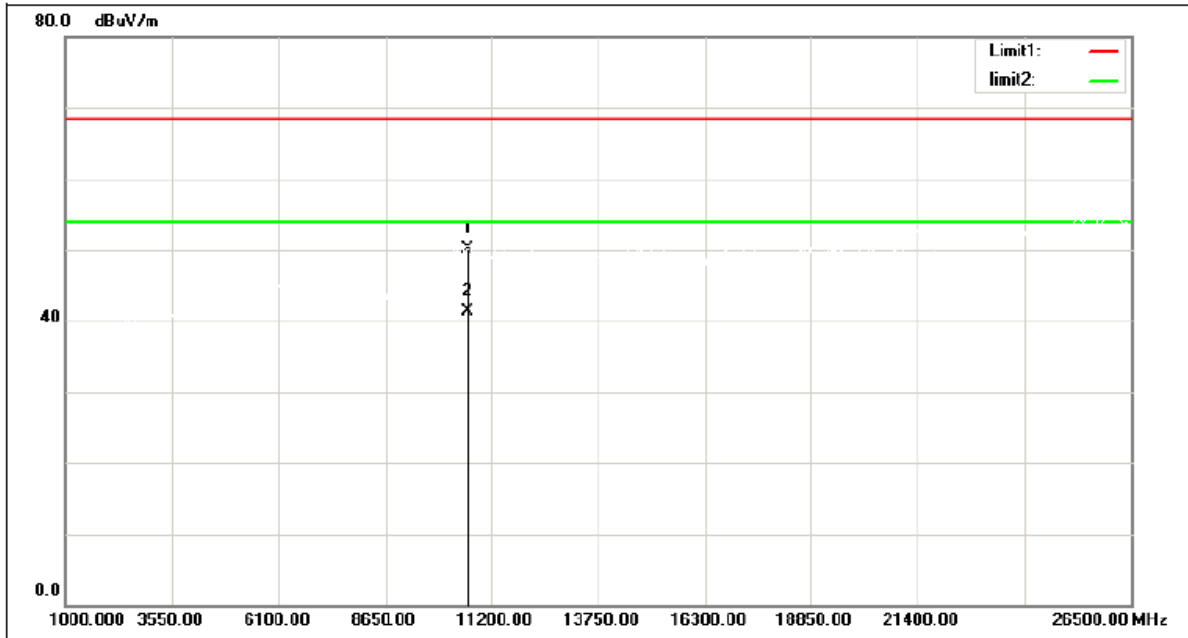
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	43.54	7.13	50.67	68.30	-17.63	peak
2	10640.000	34.00	7.13	41.13	54.00	-12.87	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz

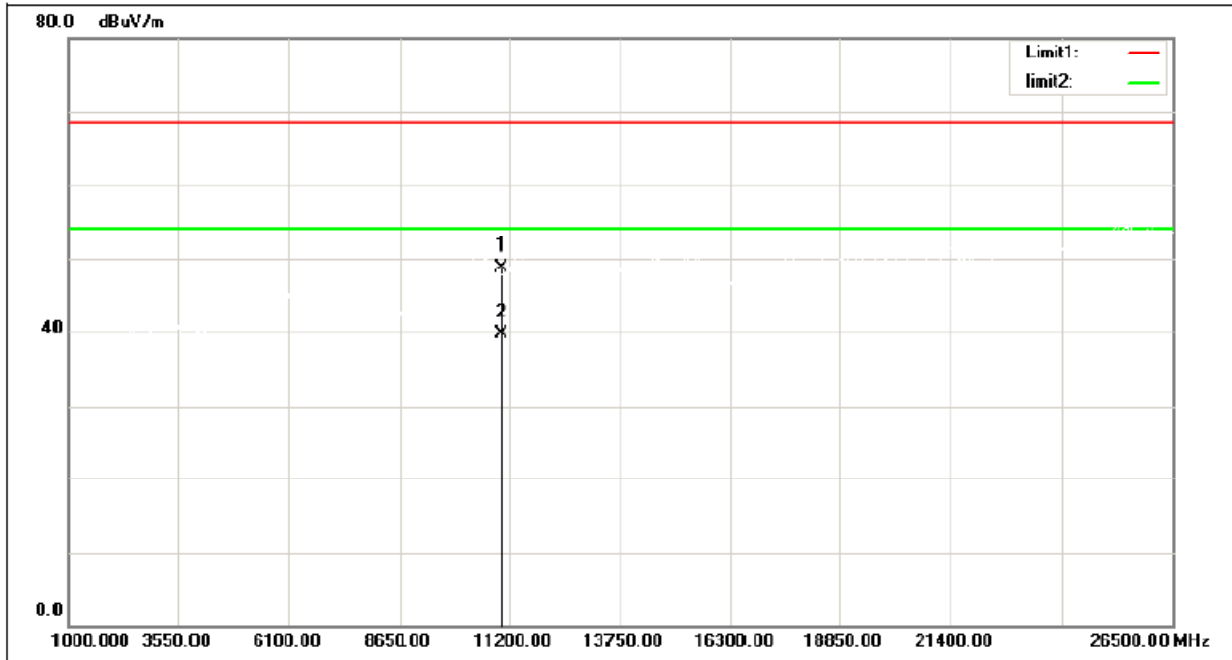
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	43.05	7.13	50.18	68.30	-18.12	peak
2	10640.000	34.18	7.13	41.31	54.00	-12.69	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz

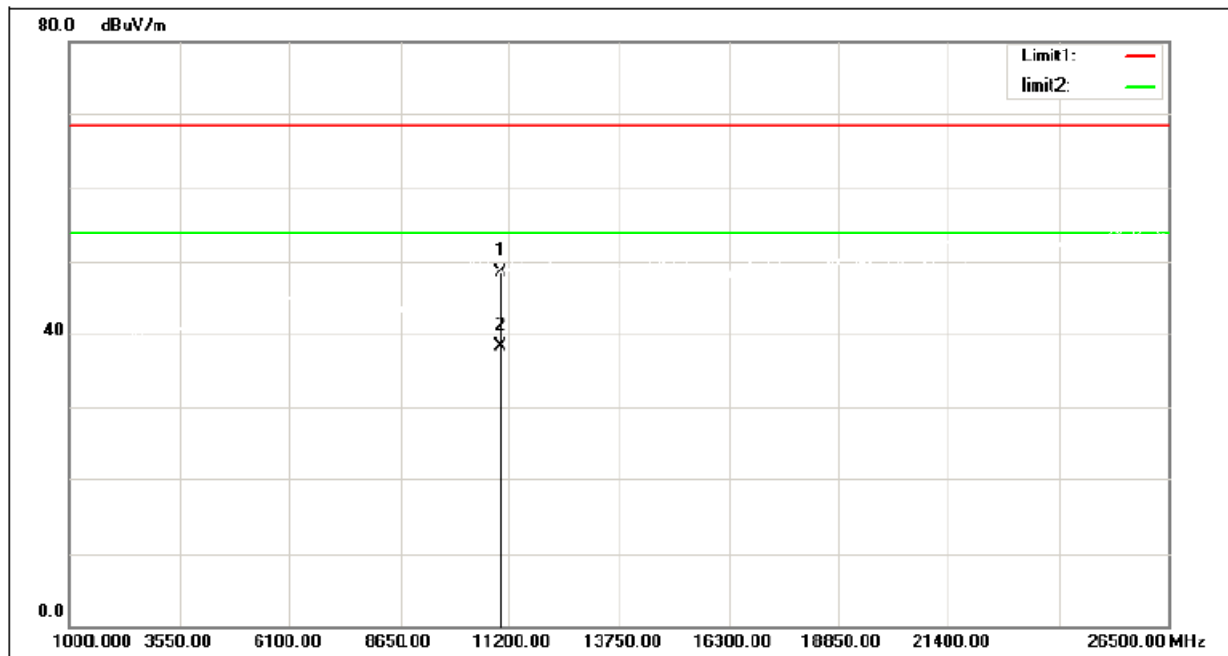
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	40.33	8.32	48.65	68.30	-19.65	peak
2	11000.000	31.41	8.32	39.73	54.00	-14.27	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz

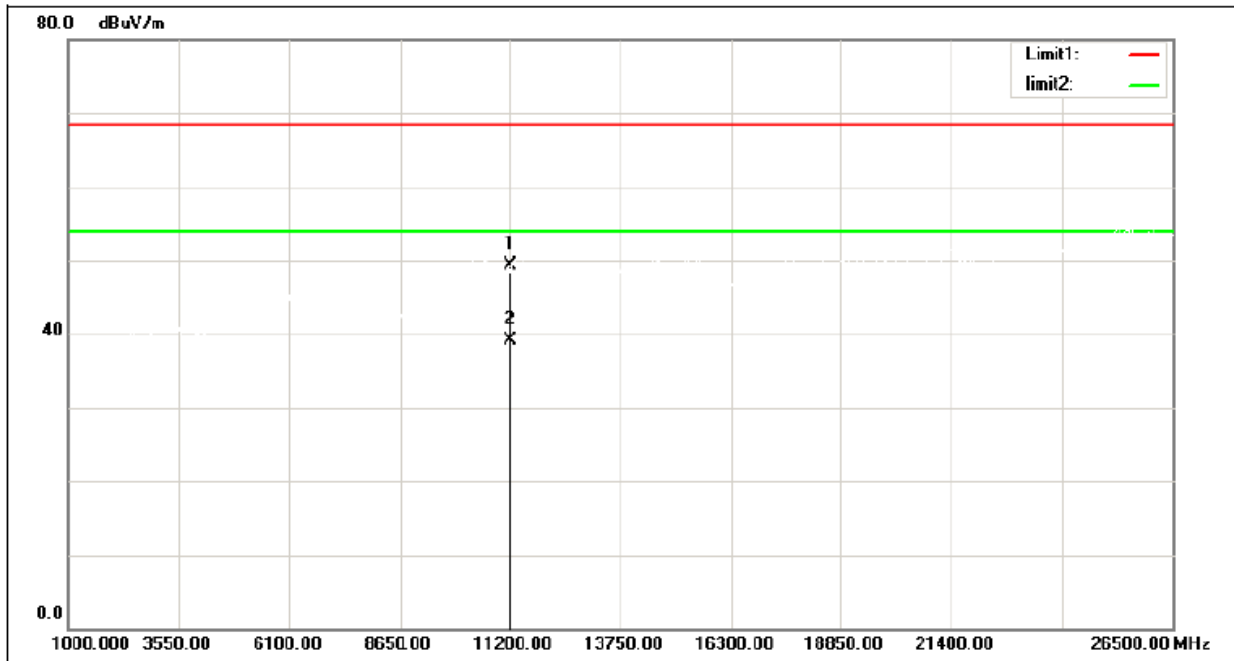
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	40.13	8.32	48.45	68.30	-19.85	peak
2	11000.000	30.06	8.32	38.38	54.00	-15.62	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5600 MHz

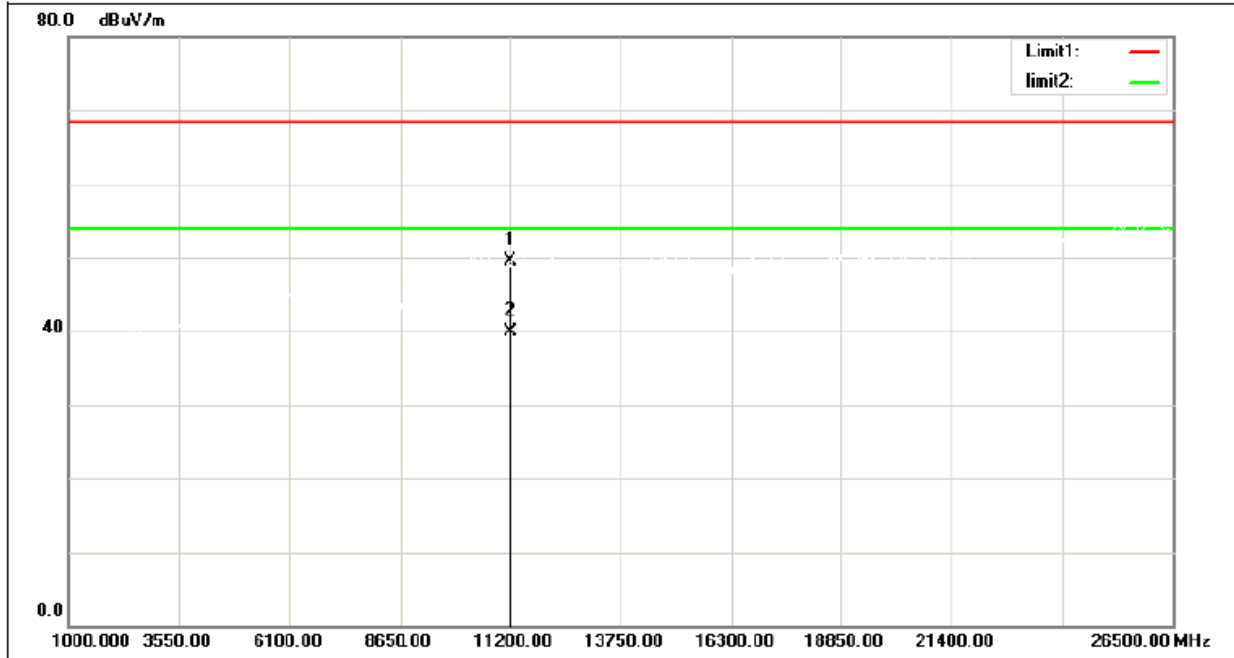
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	41.05	8.21	49.26	68.30	-19.04	peak
2	11200.000	30.86	8.21	39.07	54.00	-14.93	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5600 MHz

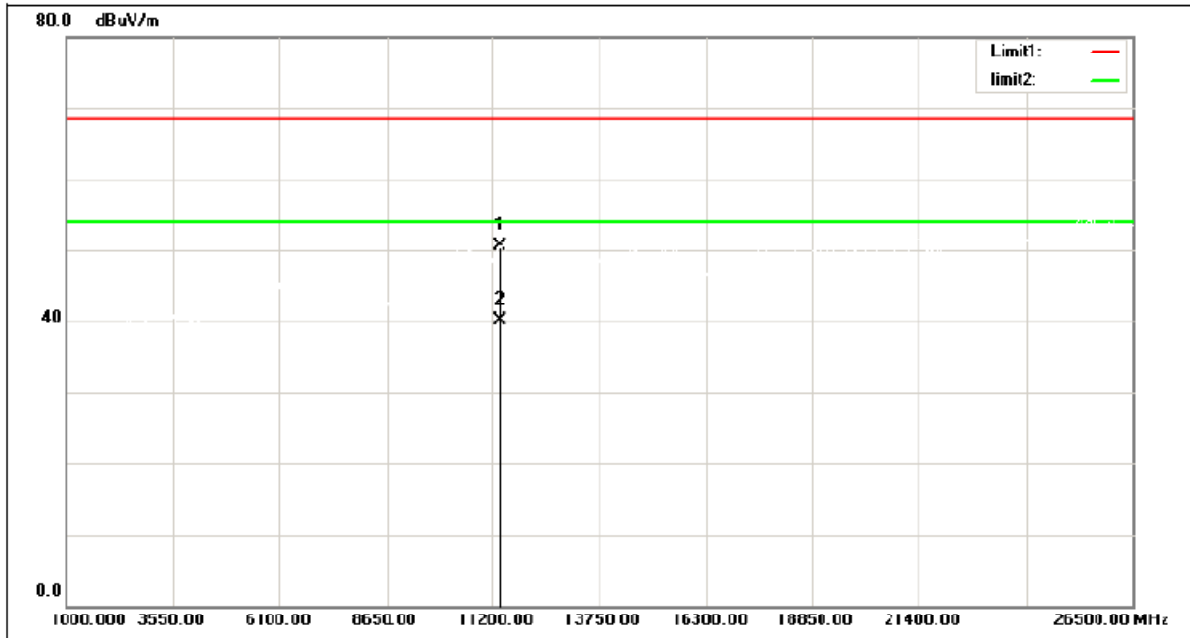
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	41.37	8.21	49.58	68.30	-18.72	peak
2	11200.000	31.69	8.21	39.90	54.00	-14.10	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz

### Vertical

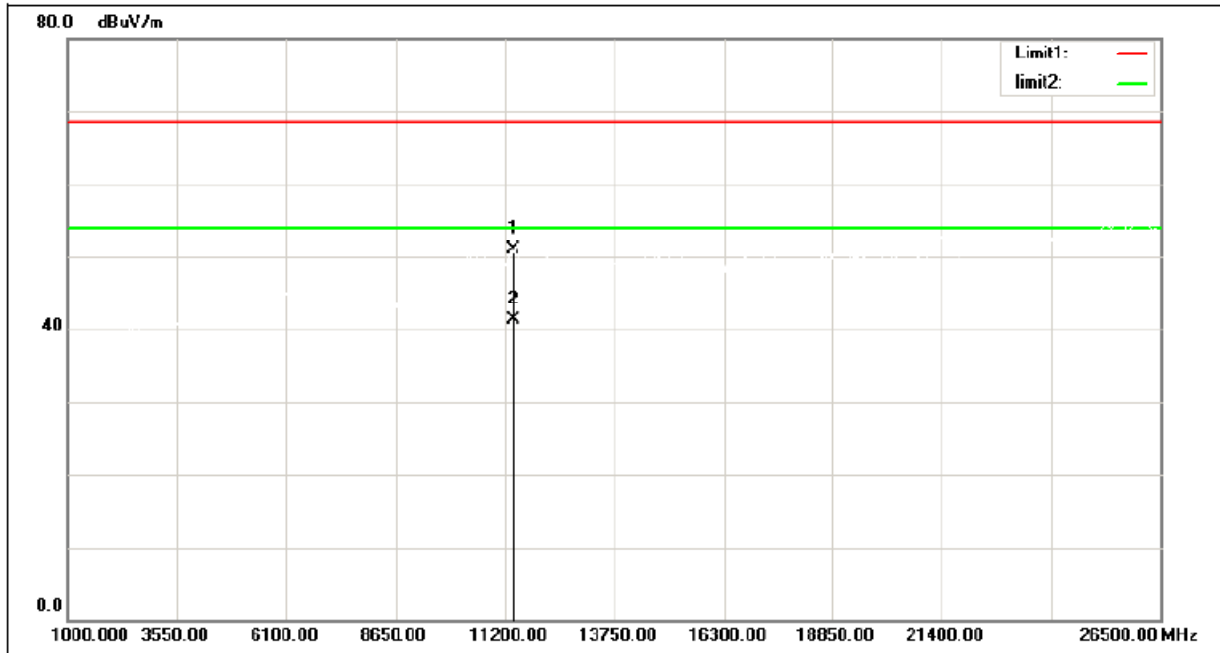


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	42.31	8.10	50.41	68.30	-17.89	peak
2	11400.000	32.09	8.10	40.19	54.00	-13.81	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz

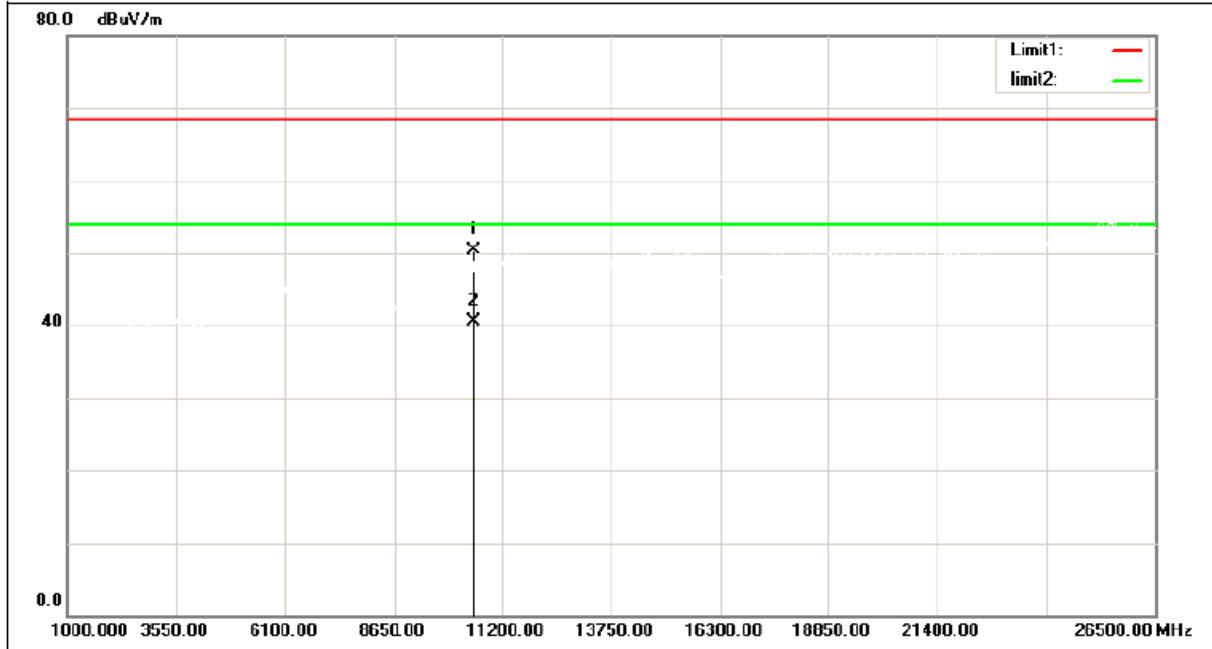
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	42.74	8.10	50.84	68.30	-17.46	peak
2	11400.000	33.19	8.10	41.29	54.00	-12.71	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5270 MHz

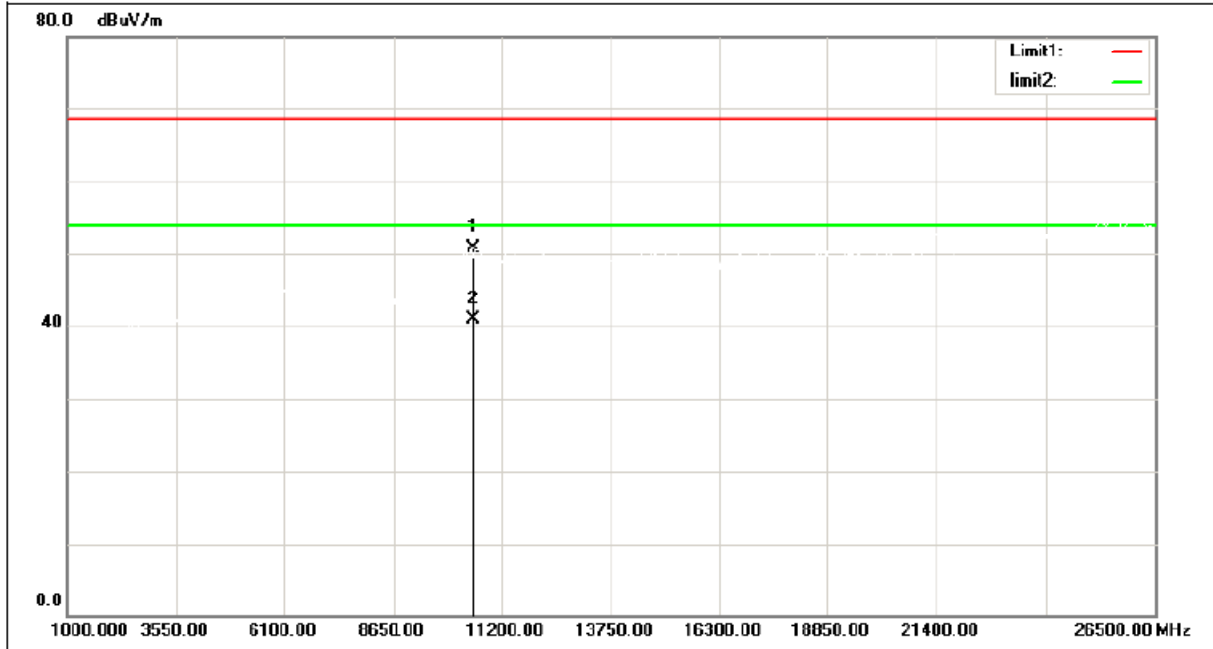
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	43.55	6.80	50.35	68.30	-17.95	peak
2	10540.000	33.64	6.80	40.44	54.00	-13.56	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5270 MHz

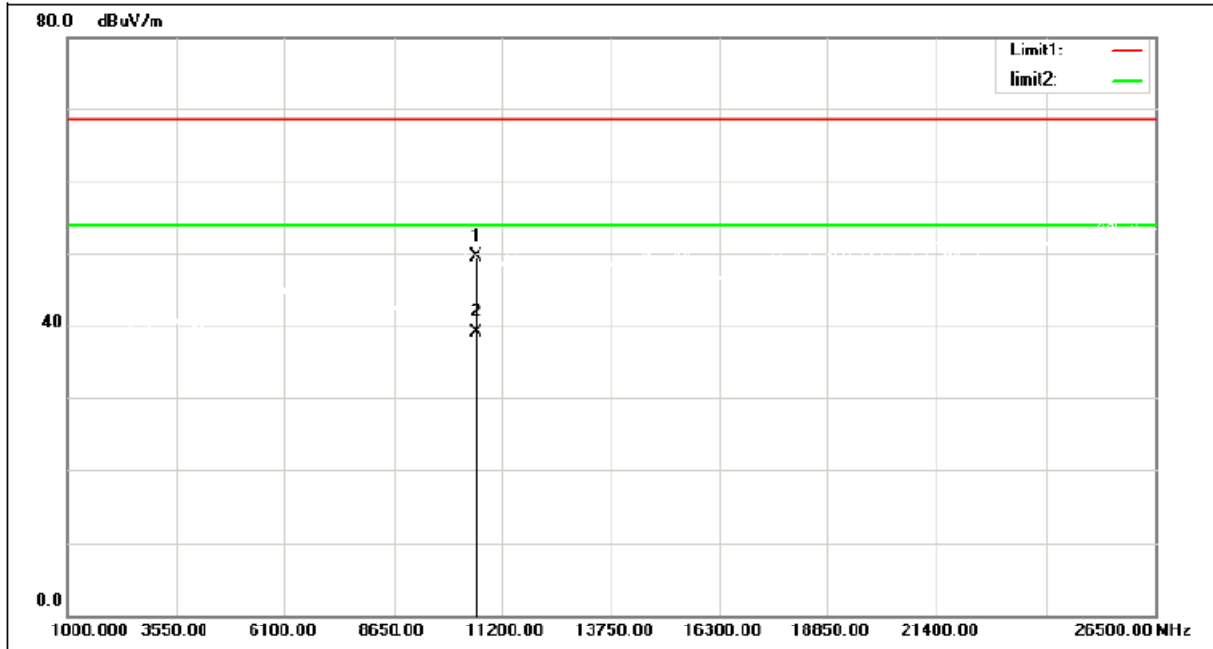
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	43.93	6.80	50.73	68.30	-17.57	peak
2	10540.000	34.09	6.80	40.89	54.00	-13.11	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz

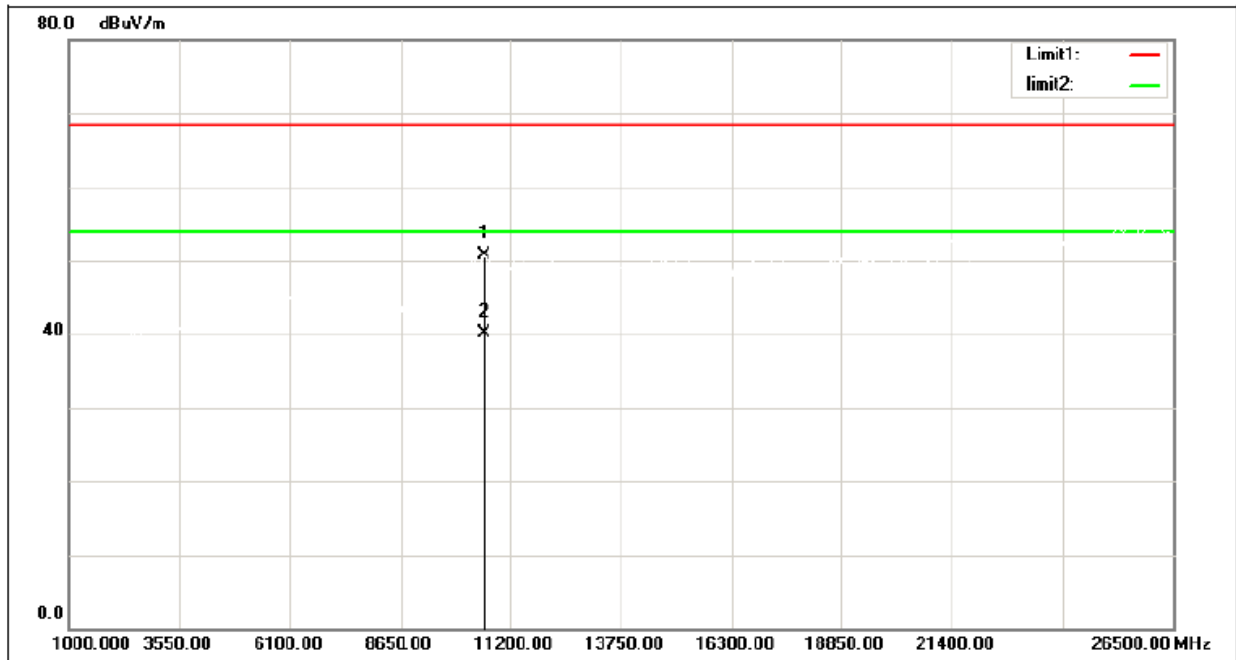
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	42.43	7.07	49.50	68.30	-18.80	peak
2	10620.000	32.01	7.07	39.08	54.00	-14.92	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz

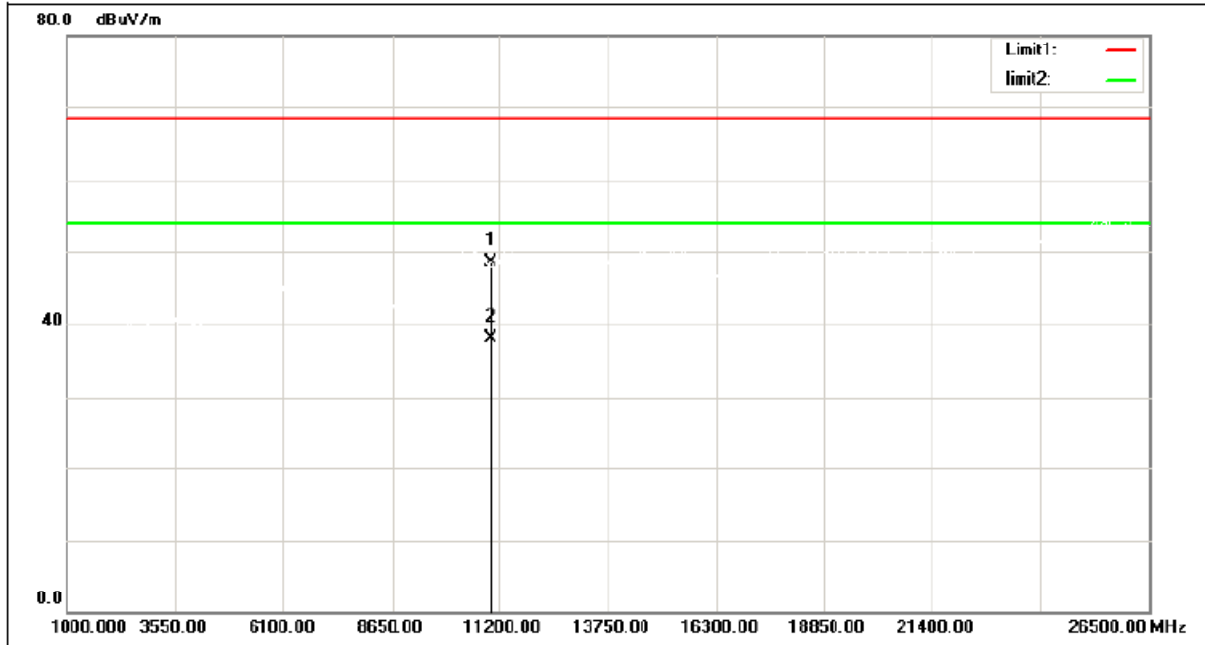
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	43.71	7.07	50.78	68.30	-17.52	peak
2	10620.000	32.94	7.07	40.01	54.00	-13.99	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz

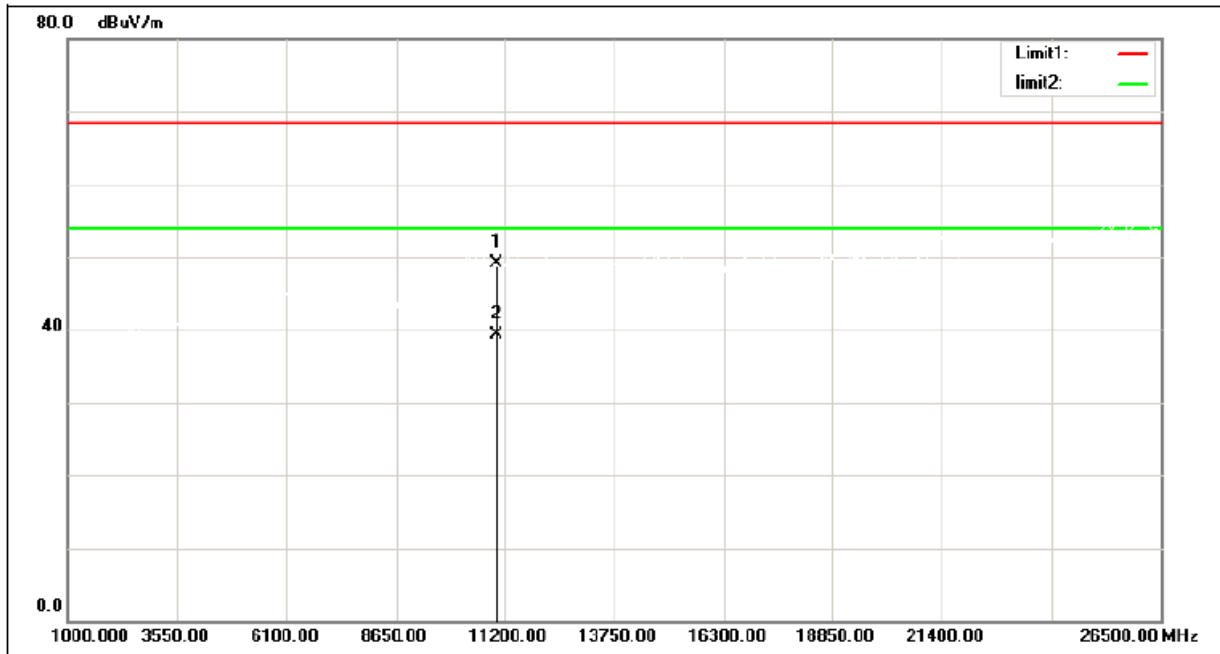
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	40.13	8.30	48.43	68.30	-19.87	peak
2	11020.000	29.89	8.30	38.19	54.00	-15.81	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz

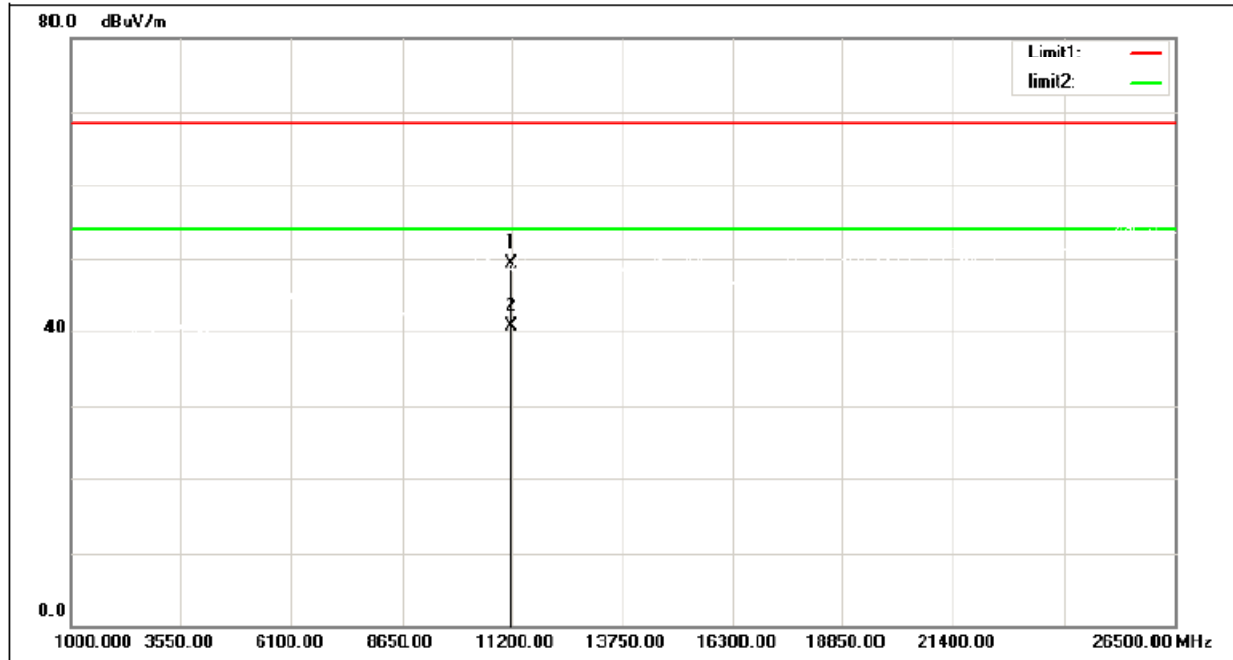
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	40.85	8.30	49.15	68.30	-19.15	peak
2	11020.000	30.96	8.30	39.26	54.00	-14.74	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5590 MHz

### Vertical

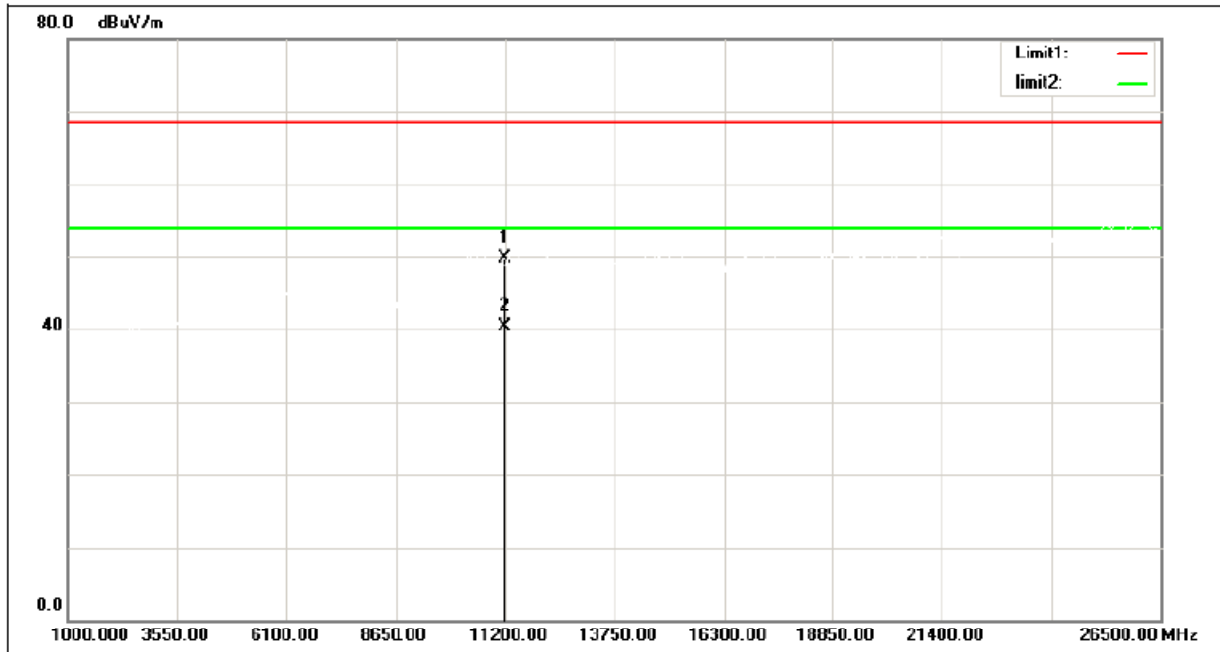


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	41.12	8.23	49.35	68.30	-18.95	peak
2	11180.000	32.46	8.23	40.69	54.00	-13.31	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5590 MHz

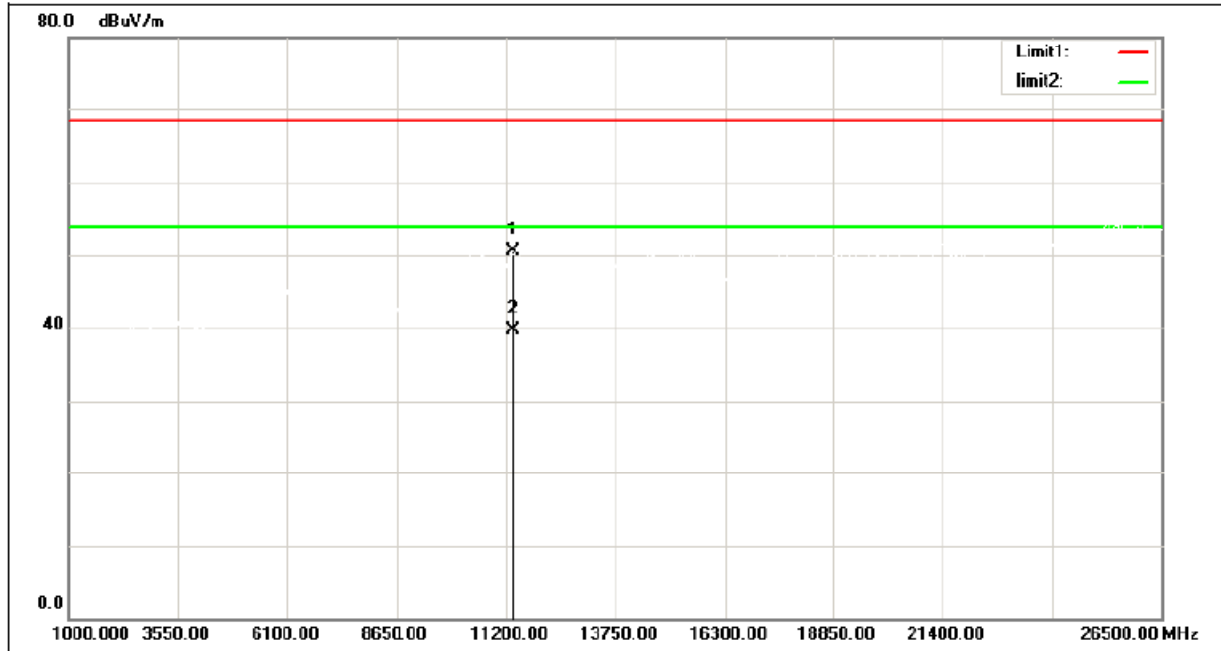
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	41.44	8.23	49.67	68.30	-18.63	peak
2	11180.000	32.03	8.23	40.26	54.00	-13.74	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz

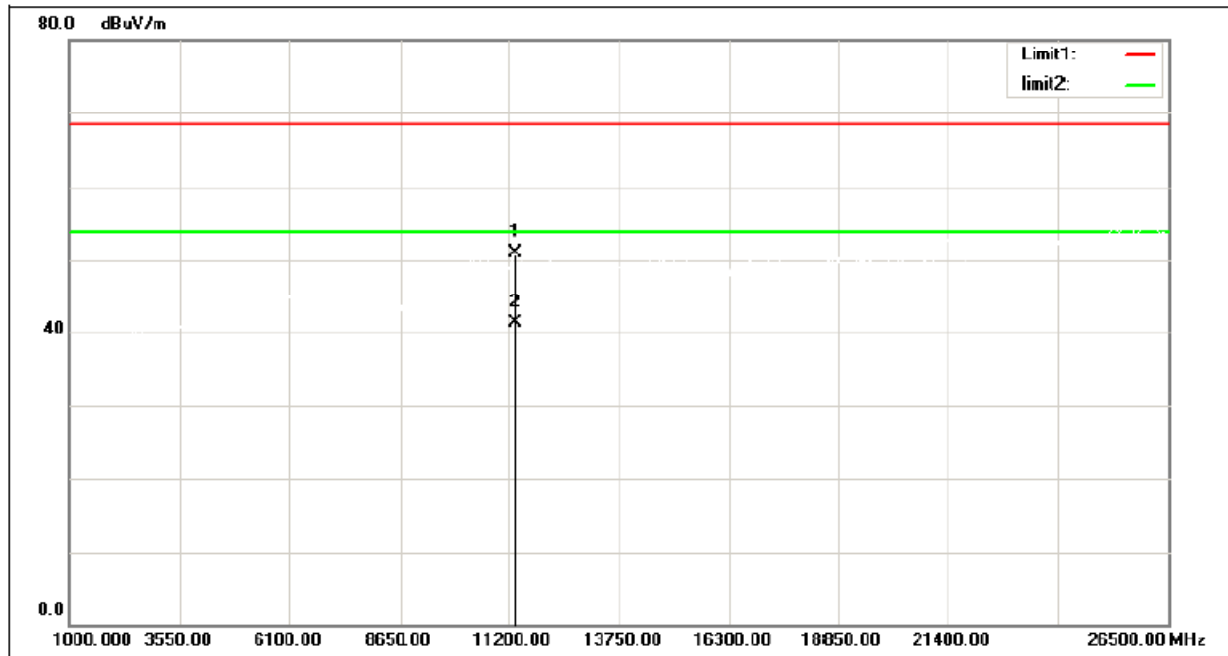
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	42.31	8.14	50.45	68.30	-17.85	peak
2	11340.000	31.56	8.14	39.70	54.00	-14.30	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz

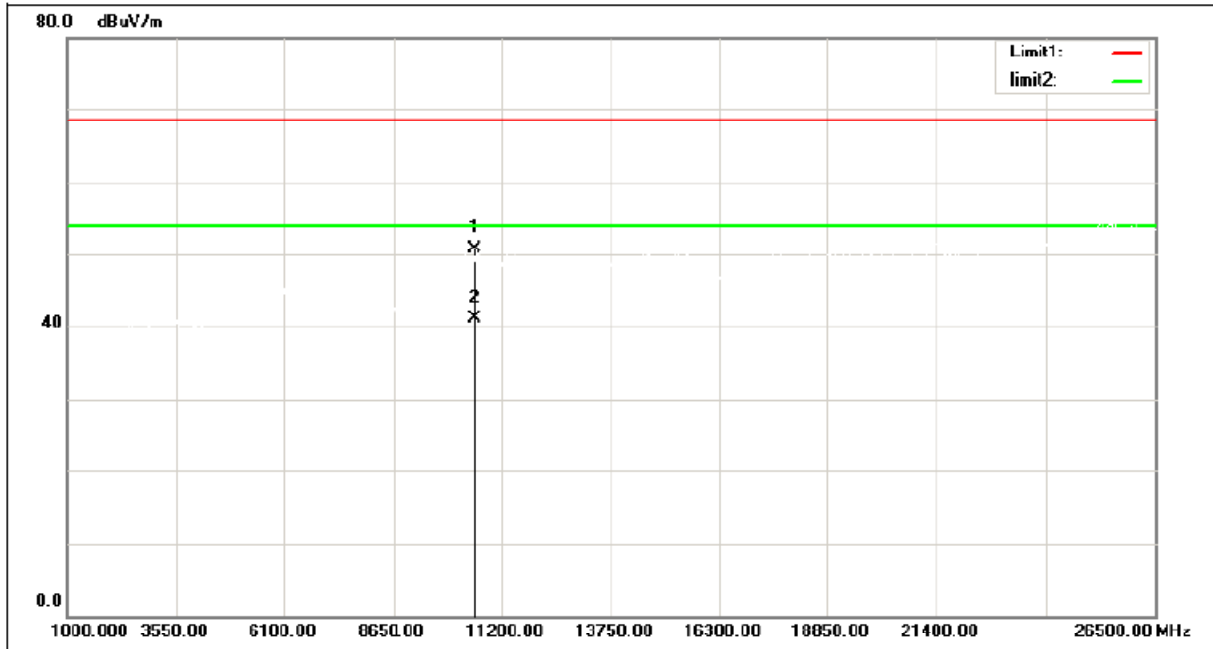
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	42.68	8.14	50.82	68.30	-17.48	peak
2	11340.000	33.11	8.14	41.25	54.00	-12.75	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz

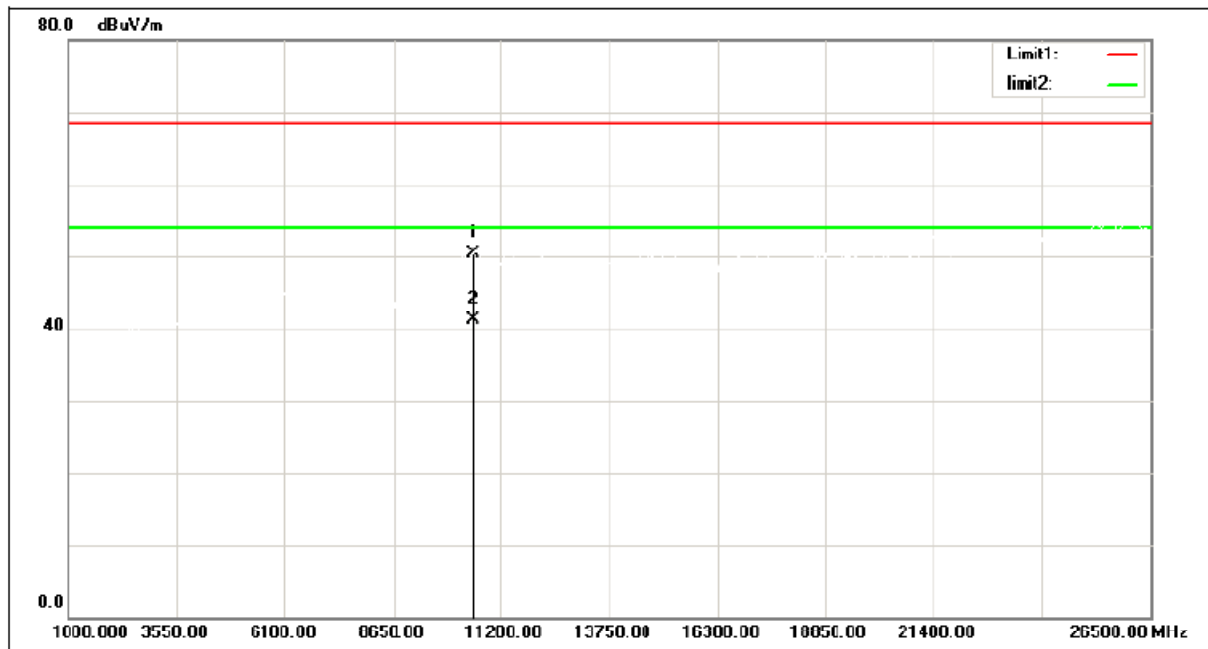
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10580.000	43.69	6.94	50.63	68.30	-17.67	peak
2	10580.000	34.16	6.94	41.10	54.00	-12.90	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz

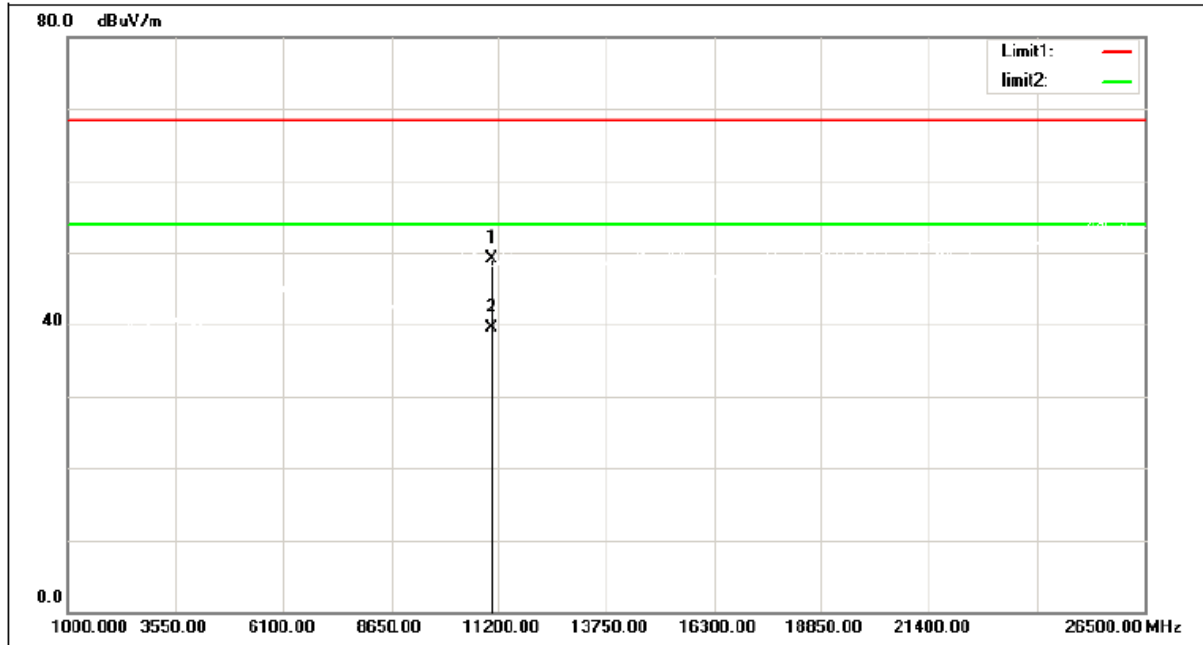
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10580.000	43.43	6.94	50.37	68.30	-17.93	peak
2	10580.000	34.31	6.94	41.25	54.00	-12.75	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz

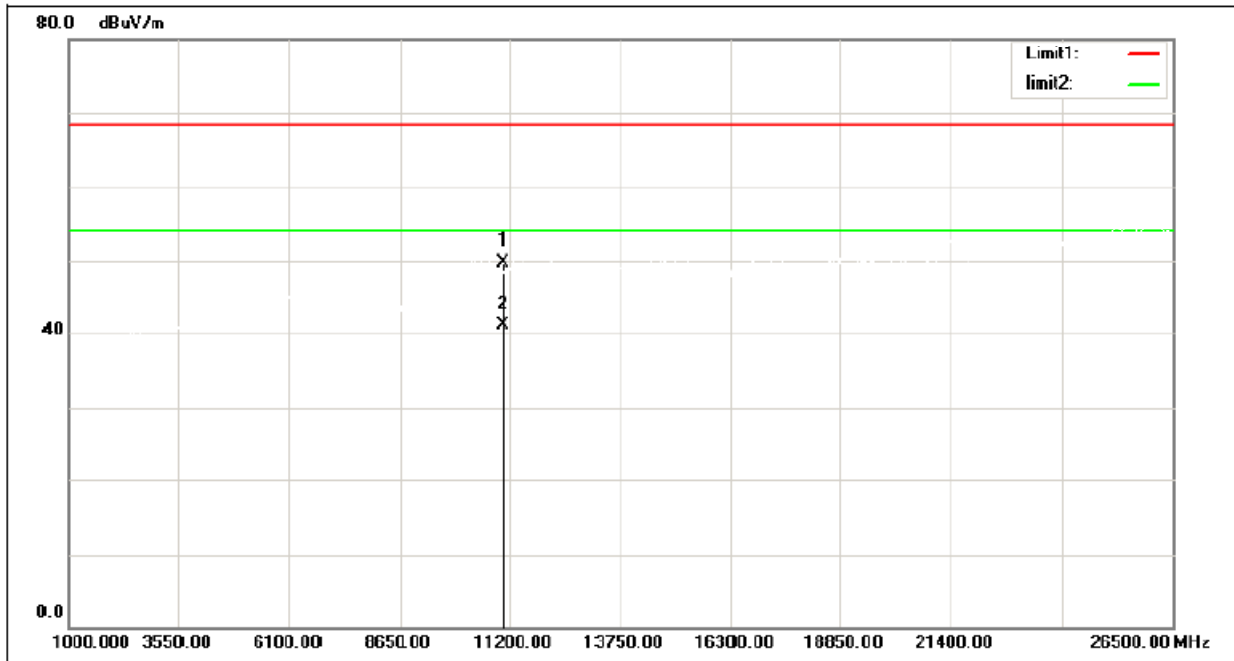
### Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11060.000	40.85	8.28	49.13	68.30	-19.17	peak
2	11060.000	31.32	8.28	39.60	54.00	-14.40	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz

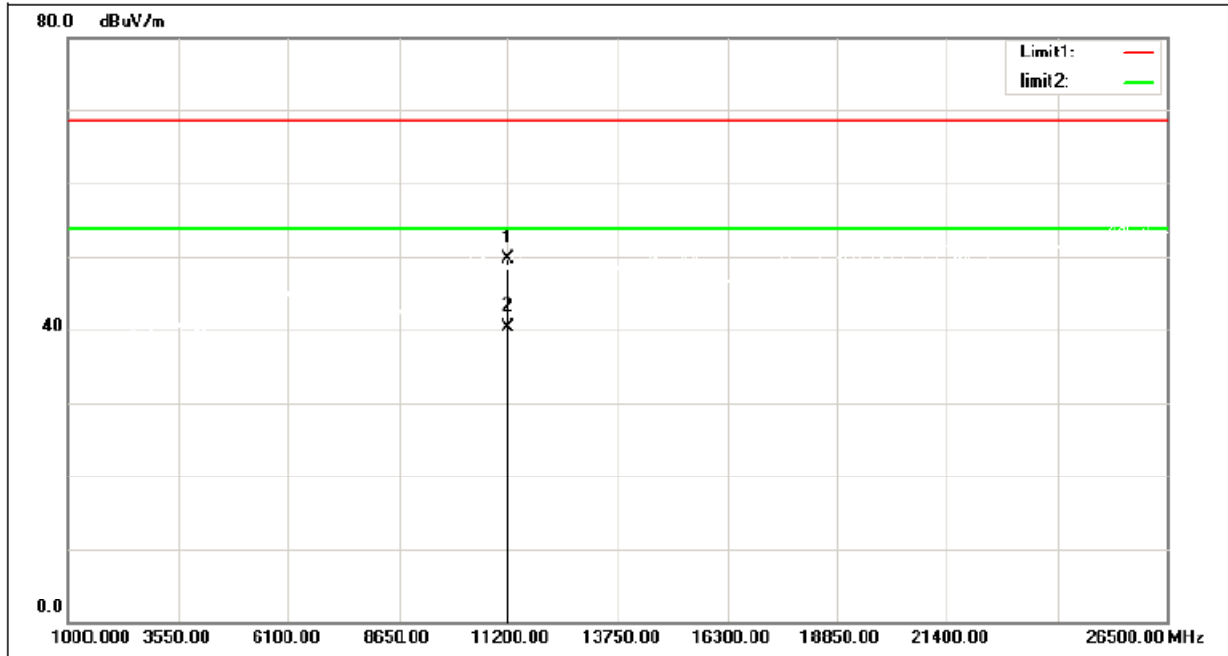
### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11060.000	41.39	8.28	49.67	68.30	-18.63	peak
2	11060.000	32.88	8.28	41.16	54.00	-12.84	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz

### Vertical

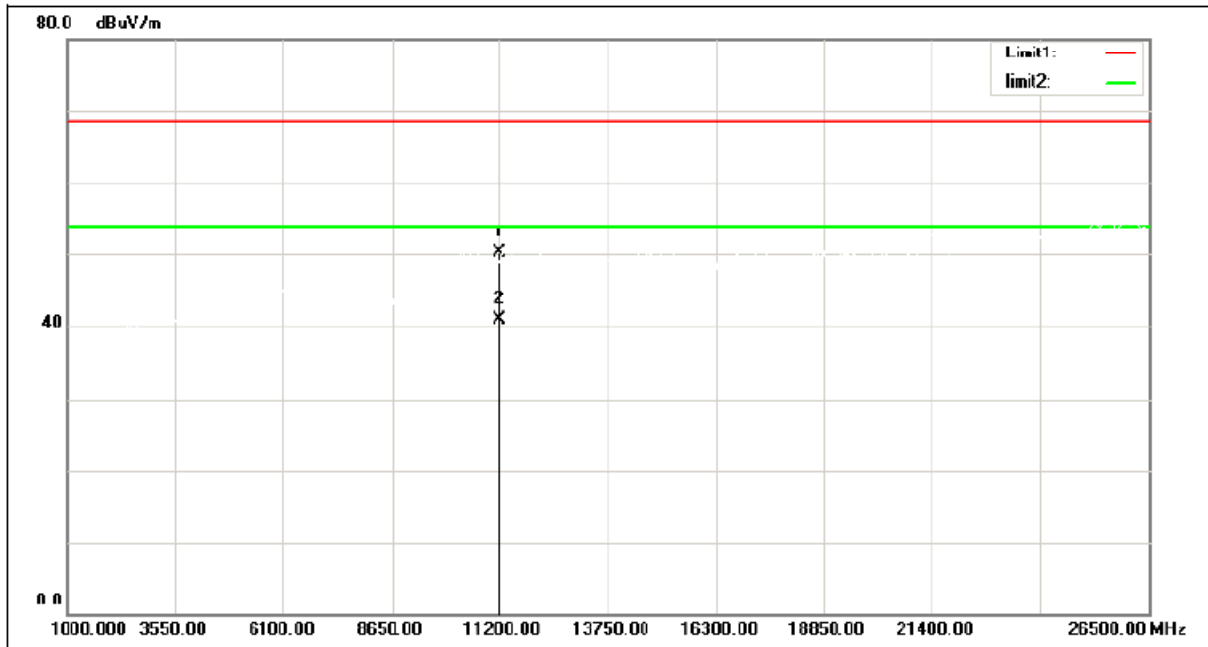


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11220.000	41.47	8.19	49.66	68.30	-18.64	peak
2	11220.000	32.03	8.19	40.22	54.00	-13.78	AVG



Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz

### Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11220.000	42.01	8.19	50.20	68.30	-18.10	peak
2	11220.000	32.79	8.19	40.98	54.00	-13.02	AVG

## 6. BANDWIDTH TEST

### 6.1. LIMIT

FCC Part15, Subpart E (15.407) RSS-Gen and RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a) 15.407(e)	26 dB Bandwidth	-	5150-5250
RSS-247 6.2.1.1	26 dB Bandwidth	-	5250-5350
RSS-247 6.2.2.1	26 dB Bandwidth	-	5470-5725
RSS-247 6.2.3.1	26 dB Bandwidth	-	5470-5725
RSS-247 6.2.4.1	6dB Bandwidth	Minimum 500 kHz	5725-5850

### 6.2. TEST PROCEDURE AND SETTING

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below

b. Spectrum Setting:

For UNII-1:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	300 kHz (Bandwidth 20 MHz) 1 MHz (Bandwidth 40 MHz and 80 MHz)
VBW	1 MHz (Bandwidth 20 MHz) 3 MHz (Bandwidth 40 MHz and 80 MHz)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

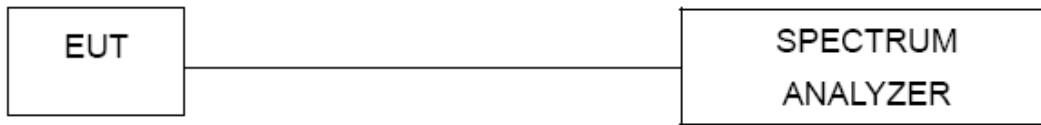
For UNII-3:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26dB / 6dB below carrier.

### 6.3. MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2022/05/23
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

**6.4. TEST SETUP****6.5. EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

## 6.6. TEST RESULTS

UNII-2A_TX A Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	21.36	16.633
60	5300	19.08	16.597
64	5320	19.11	16.594

**CH52**



**CH60**



**CH64**



UNII-2A_TX N (HT20) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	19.85	17.666
60	5300	19.87	17.627
64	5320	19.87	17.616

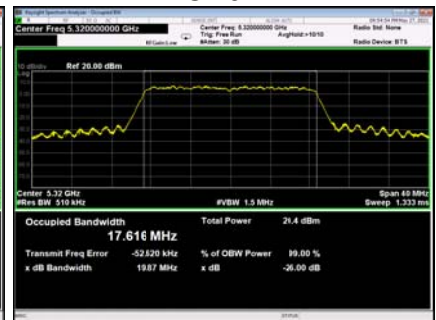
**CH52**



**CH60**



**CH64**



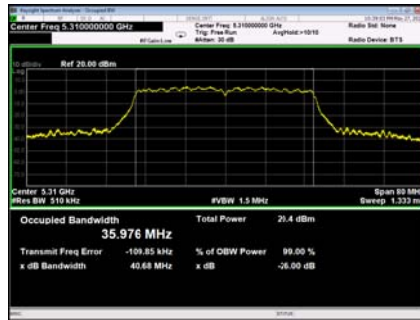
### UNII-2A\_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
54	5270	40.76	36.006
62	5310	40.68	35.976

**CH54**



**CH62**



### UNII-2C\_TX A Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	19.19	16.579
120	5600	31.29	17.001
140	5700	28.21	16.890

**CH100**



**CH120**



**CH140**



### UNII-2C\_TX N (HT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	19.95	17.622
120	5600	28.13	17.812
140	5700	24.83	17.709

**CH100**



**CH120**



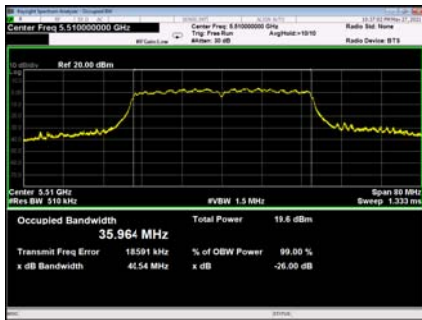
**CH140**



## UNII-2C\_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
102	5510	40.54	35.964
118	5590	44.96	36.057
134	5670	50.57	36.139

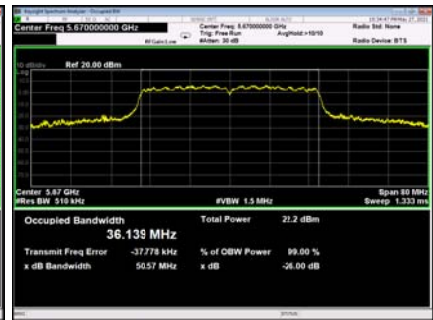
**CH102**



**CH118**



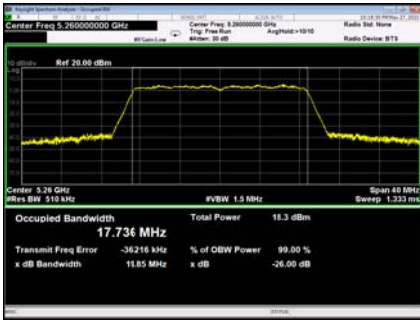
**CH134**



### UNII-2A\_TX AC (VHT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	19.85	17.736
60	5300	19.85	17.749
64	5320	19.85	17.738

**CH52**



**CH60**



**CH64**



### UNII-2A\_TX AC (VHT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
54	5270	40.18	36.167
62	5310	40.65	36.204

**CH54**



**CH62**



### UNII-2A\_TX AC (VHT80) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
58	5290	81.18	75.247

**CH58**





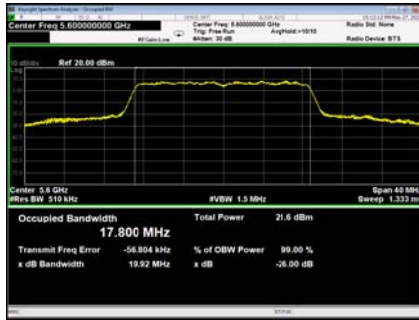
### UNII-2C\_TX AC (VHT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	19.92	17.748
120	5600	19.92	17.800
140	5700	22.9	17.783

**CH100**



**CH120**



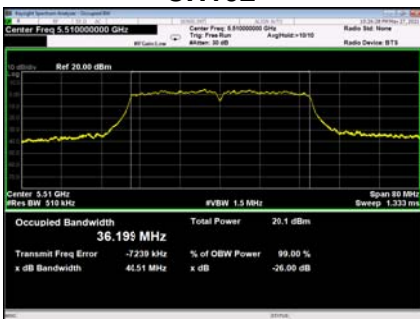
**CH140**



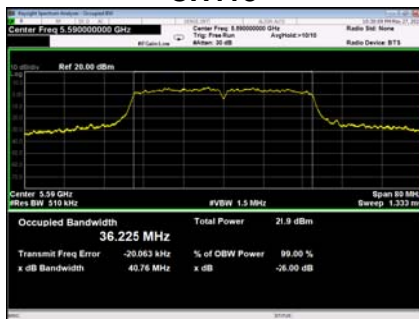
### UNII-2C\_TX AC (VHT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
102	5510	40.51	36.199
118	5590	40.76	36.225
134	5670	41.66	36.278

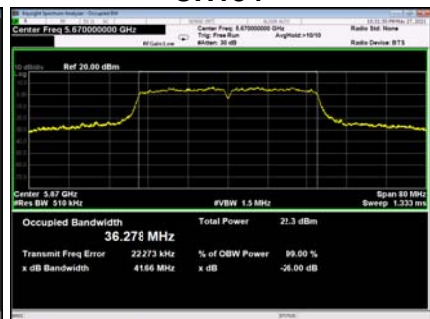
**CH102**



**CH118**



**CH134**



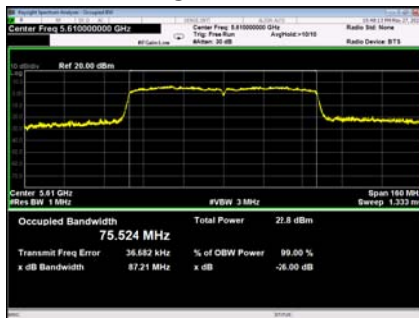
### UNII-2C\_TX AC (VHT80) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
106	5530	81.74	75.622
122	5610	87.21	75.524

**CH106**



**CH122**



## 7. MAXIMUM OUTPUT POWER TEST

### 7.1. LIMIT

FCC Part15, Subpart E (15.407)&RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
RSS-247 6.2.1.1 RSS-247 6.2.2.1 RSS-247 6.2.3.1 RSS-247 6.2.4.1	EIRP Output Power	not exceed 200 mW or 10 + 10 logB, dBm, whichever power is less	5150-5250
		not exceed 1.0 W or 17 + 10 logB, dBm, whichever is less	5250-5350 5470-5600 5650-5725
15.407(a)	Maximum Output Power	AP device:1 Watt (30dBm) Client device: 250mW (24dBm)	5150-5250
		250mW (24dBm)	5250-5350 5470-5725
15.407(a) RSS-247 6.2.4.1	Maximum Output Power	1 Watt (30dBm)	5725-5850

**Note:**

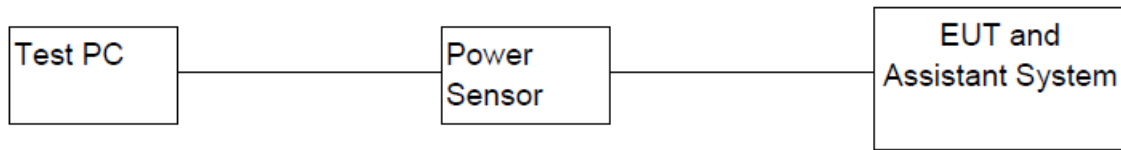
- a. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.  
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.
- b. EIRP Power=Output Power+Antenna Gain
- c. MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=3.57dBi+3.57dBi=6.58dBi

### 7.2. TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

### 7.3. MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Power Sensor	KEYSIGHT	U2021XA	MY55240009	05/23/2022
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Micable	C10-01-01-1	100309	N/A
4	Test Software	KEYSIGHT	Power Panel	V3.11	N/A

**7.4. TEST SETUP****7.5. EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

## 7.6. TEST RESULTS

### UNII-2A\_TX A Mode\_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	14.71	0.00	14.71	24.00	0.25	PASS
60	5300	14.92	0.00	14.92	24.00	0.25	PASS
64	5320	14.91	0.00	14.91	24.00	0.25	PASS

### UNII-2A\_TX A Mode\_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	14.73	0.00	14.73	24.00	0.25	PASS
60	5300	14.79	0.00	14.79	24.00	0.25	PASS
64	5320	14.82	0.00	14.82	24.00	0.25	PASS

### UNII-2C\_TX A Mode\_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	14.17	0.00	14.17	24.00	0.25	PASS
120	5600	14.21	0.00	14.21	24.00	0.25	PASS
140	5700	14.76	0.00	14.76	24.00	0.25	PASS

### UNII-2C\_TX A Mode\_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	14.85	0.00	14.85	24.00	0.25	PASS
120	5600	14.30	0.00	14.30	24.00	0.25	PASS
140	5700	14.89	0.00	14.89	24.00	0.25	PASS

**UNII-2A\_TX N (HT20) Mode \_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	14.66	0.00	14.66	24.00	0.25	PASS
60	5300	14.96	0.00	14.96	24.00	0.25	PASS
64	5320	14.61	0.00	14.61	24.00	0.25	PASS

**UNII-2A\_TX N (HT20) Mode \_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	14.58	0.00	14.58	24.00	0.25	PASS
60	5300	14.23	0.00	14.23	24.00	0.25	PASS
64	5320	14.17	0.00	14.17	24.00	0.25	PASS

**UNII-2A\_TX N (HT20) Mode \_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	17.63	24.00	0.25	PASS
60	5300	17.62	24.00	0.25	PASS
64	5320	17.41	24.00	0.25	PASS

**UNII-2C\_TX N (HT20) Mode \_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	14.46	0.00	14.46	24.00	0.25	PASS
120	5600	14.89	0.00	14.89	24.00	0.25	PASS
140	5700	14.33	0.00	14.33	24.00	0.25	PASS

**UNII-2C\_TX N (HT20) Mode \_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	14.92	0.00	14.92	24.00	0.25	PASS
120	5600	14.26	0.00	14.26	24.00	0.25	PASS
140	5700	14.73	0.00	14.73	24.00	0.25	PASS

**UNII-2C\_TX N (HT20) Mode \_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	17.71	24.00	0.25	PASS
120	5600	17.60	24.00	0.25	PASS
140	5700	17.54	24.00	0.25	PASS

**UNII-2A\_TX N (HT40) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	14.32	0.00	14.32	24.00	0.25	PASS
62	5310	14.83	0.00	14.83	24.00	0.25	PASS

**UNII-2A\_TX N (HT40) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	14.74	0.00	14.74	24.00	0.25	PASS
62	5310	14.72	0.00	14.72	24.00	0.25	PASS

**UNII-2A\_TX N (HT40) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	17.55	24.00	0.25	PASS
62	5310	17.79	24.00	0.25	PASS

**UNII-2C\_TX N (HT40) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	14.49	0.00	14.49	24.00	0.25	PASS
118	5590	14.77	0.00	14.77	24.00	0.25	PASS
134	5670	14.47	0.00	14.47	24.00	0.25	PASS

**UNII-2C\_TX N (HT40) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	14.84	0.00	14.84	24.00	0.25	PASS
118	5590	14.62	0.00	14.62	24.00	0.25	PASS
134	5670	14.40	0.00	14.40	24.00	0.25	PASS

**UNII-2C\_TX N (HT40) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	17.68	24.00	0.25	PASS
118	5590	17.71	24.00	0.25	PASS
134	5670	17.45	24.00	0.25	PASS



**UNII-2A\_TX AC (VHT20) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	14.93	0.00	14.93	24.00	0.25	PASS
60	5300	14.12	0.00	14.12	24.00	0.25	PASS
64	5320	14.34	0.00	14.34	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT20) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	14.88	0.00	14.88	24.00	0.25	PASS
60	5300	14.56	0.00	14.56	24.00	0.25	PASS
64	5320	14.41	0.00	14.41	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT20) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
52	5260	17.92	24.00	0.25	PASS
60	5300	17.36	24.00	0.25	PASS
64	5320	17.39	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT20) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	14.56	0.00	14.56	24.00	0.25	PASS
120	5600	14.19	0.00	14.19	24.00	0.25	PASS
140	5700	14.90	0.00	14.90	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT20) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	14.80	0.00	14.80	24.00	0.25	PASS
120	5600	14.26	0.00	14.26	24.00	0.25	PASS
140	5700	14.58	0.00	14.58	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT20) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
100	5500	17.69	24.00	0.25	PASS
120	5600	17.24	24.00	0.25	PASS
140	5700	17.75	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT40) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	14.81	0.00	14.81	24.00	0.25	PASS
62	5310	14.23	0.00	14.23	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT40) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	14.27	0.00	14.27	24.00	0.25	PASS
62	5310	14.98	0.00	14.98	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT40) Mode\_Total For FCC**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	17.56	24.00	0.25	PASS
62	5310	17.63	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT40) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	14.83	0.00	14.83	24.00	0.25	PASS
118	5590	14.38	0.00	14.38	24.00	0.25	PASS
134	5670	14.92	0.00	14.92	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT40) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	14.18	0.00	14.18	24.00	0.25	PASS
118	5590	14.87	0.00	14.87	24.00	0.25	PASS
134	5670	14.88	0.00	14.88	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT40) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	17.53	24.00	0.25	PASS
118	5590	17.64	24.00	0.25	PASS
134	5670	17.91	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT80) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
58	5290	12.39	0.00	12.39	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT80) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
58	5290	12.23	0.00	12.23	24.00	0.25	PASS

**UNII-2A\_TX AC (VHT80) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
58	5290	15.32	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT80) Mode\_Ant 1**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
106	5530	12.80	0.00	12.80	24.00	0.25	PASS
122	5610	12.71	0.00	12.71	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT80) Mode\_Ant 2**

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
106	5530	12.98	0.00	12.98	24.00	0.25	PASS
122	5610	12.23	0.00	12.23	24.00	0.25	PASS

**UNII-2C\_TX AC (VHT80) Mode\_Total**

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
106	5530	15.90	24.00	0.25	PASS
122	5610	15.49	24.00	0.25	PASS

## 8. POWER SPECTRAL DENSITY TEST

### 8.1. LIMIT

FCC Part15, Subpart E (15.407)&RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
RSS-247 6.2.1.2	EIRP Power Spectral Density	10dBm/MHz	5150-5250
15.407(a)	Power Spectral Density	AP device:17dBm/MHz Client device:11dBm/MHz	5150-5250
15.407(a) RSS-247 6.2.4.2	Power Spectral Density	30dBm/500kHz	5725-5850

### 8.2. TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer 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	= 1MHz.
VBW	≥ 3MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

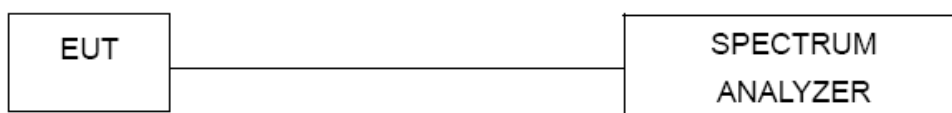
Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
- The value measured with RBW=1MHz is to be added with  $10\log(500\text{kHz}/1\text{MHz})$  which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.
- EIRP Power Spectral Density = Power Spectral Density+Antenna Gain  
MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=3.57dBi+3.57dBi=6.58dBi

### 8.3. MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2022/05/23
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

### 8.4. TEST SETUP



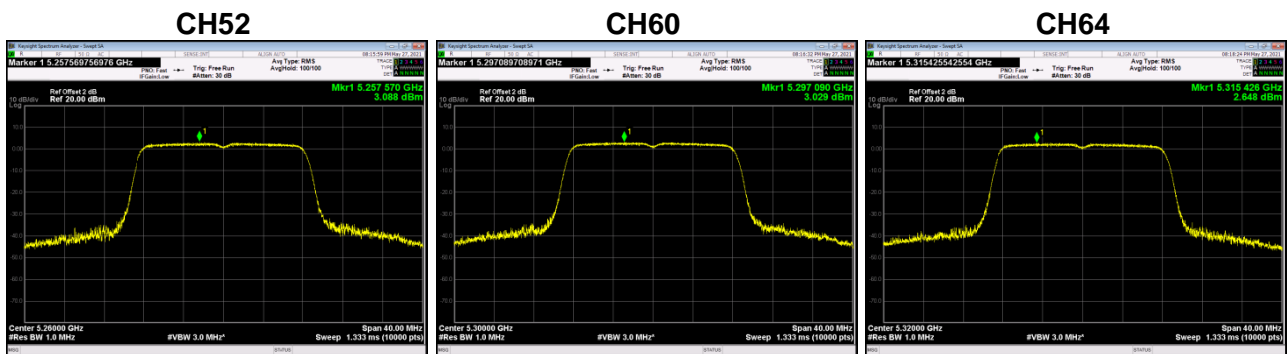
**8.5. EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

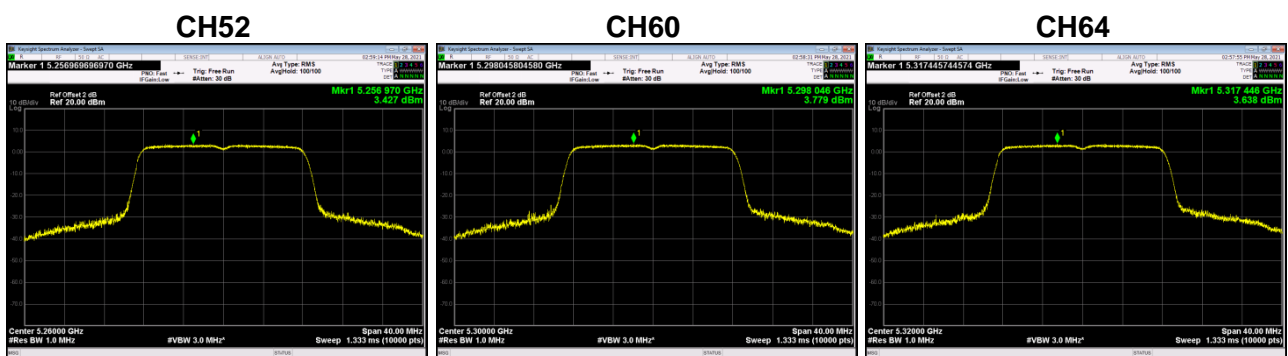


## 8.6. TEST RESULTS

UNII-2A_TX A Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.088	0.00	3.088	11.00	PASS
60	5300	3.029	0.00	3.029	11.00	PASS
64	5320	2.648	0.00	2.648	11.00	PASS



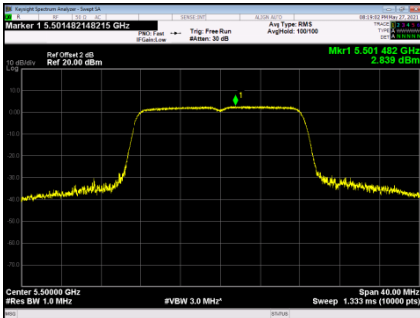
UNII-2A_TX A Mode_Ant 2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.427	0.00	3.427	11.00	PASS
60	5300	3.779	0.00	3.779	11.00	PASS
64	5320	3.638	0.00	3.638	11.00	PASS



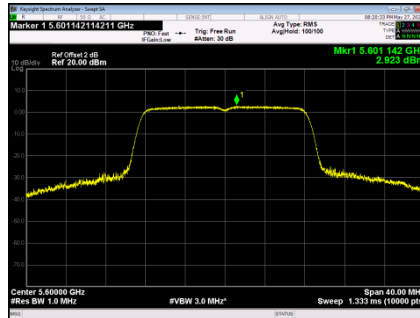
### UNII-2C\_TX A Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	2.839	0.00	2.839	11.00	PASS
120	5600	2.923	0.00	2.923	11.00	PASS
140	5700	3.857	0.00	3.857	11.00	PASS

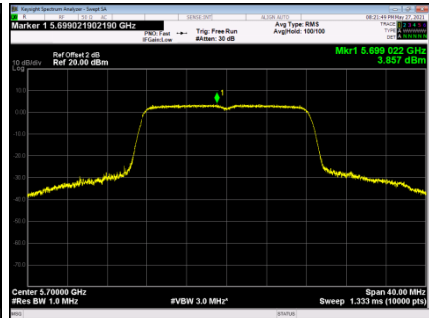
CH100



CH120



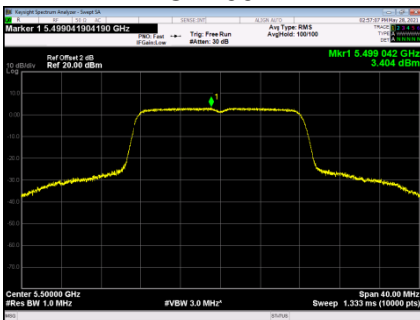
CH140



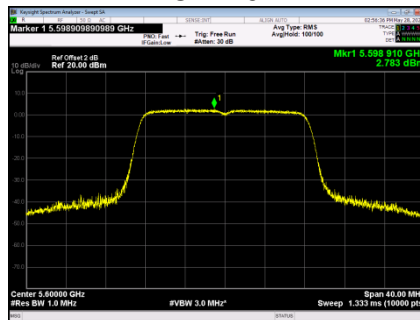
### UNII-2C\_TX A Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.404	0.00	3.404	11.00	PASS
120	5600	2.783	0.00	2.783	11.00	PASS
140	5700	3.440	0.00	3.440	11.00	PASS

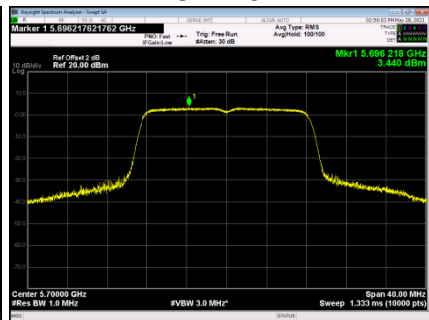
CH100



CH120



CH140



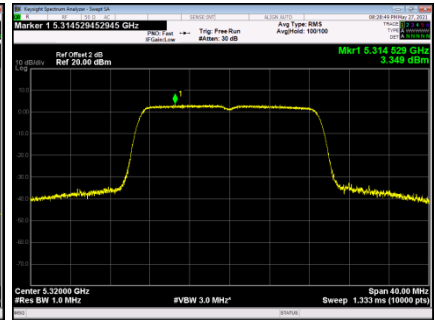
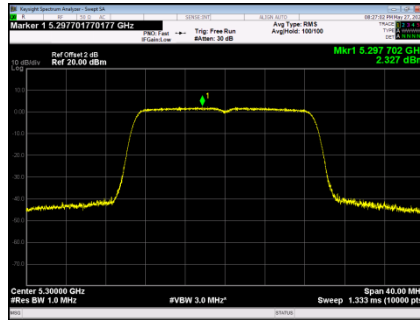
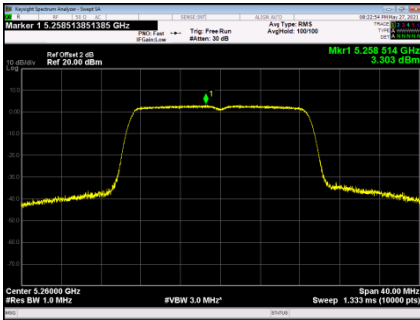
### UNII-2A\_TX N (HT20) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.303	0.00	3.303	11.00	PASS
60	5300	2.327	0.00	2.327	11.00	PASS
64	5320	3.349	0.00	3.349	11.00	PASS

CH52

CH60

CH64



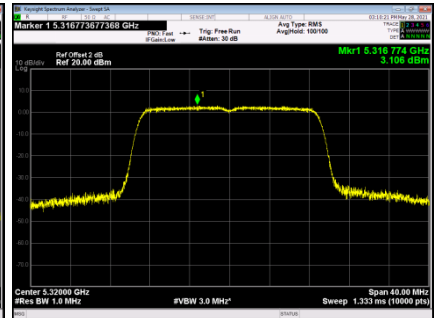
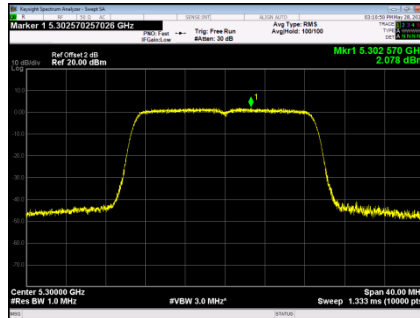
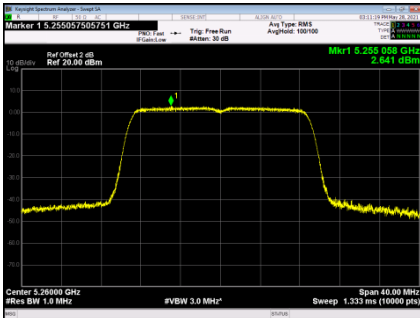
### UNII-2A\_TX N (HT20) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	2.641	0.00	2.641	11.00	PASS
60	5300	2.078	0.00	2.078	11.00	PASS
64	5320	3.106	0.00	3.106	11.00	PASS

CH52

CH60

CH64



### UNII-2A\_TX N (HT20) Mode Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	5.99	11.00	PASS
60	5300	5.21	11.00	PASS
64	5320	6.24	11.00	PASS

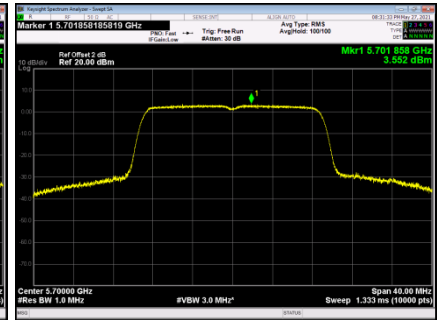
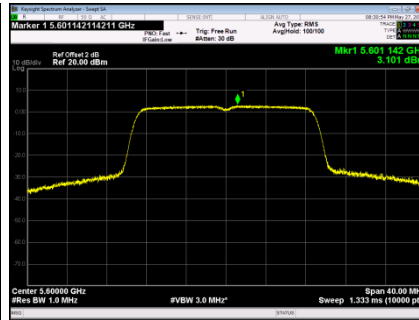
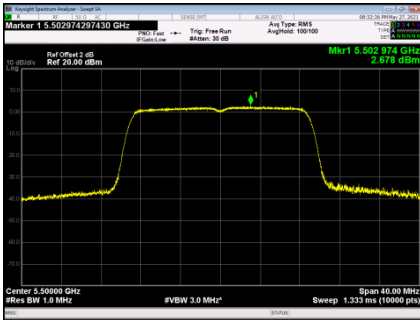
### UNII-2C\_TX N (HT20) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	2.678	0.00	2.678	11.00	PASS
120	5600	3.101	0.00	3.101	11.00	PASS
140	5700	3.552	0.00	3.552	11.00	PASS

**CH100**

**CH120**

**CH140**



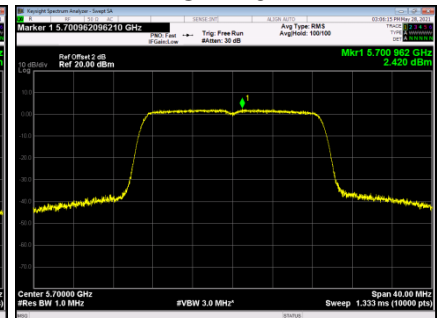
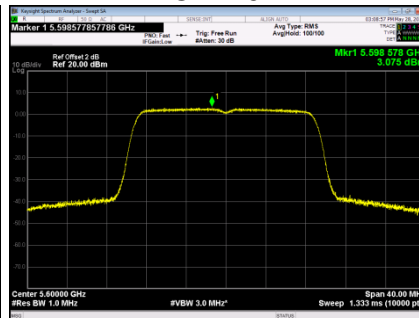
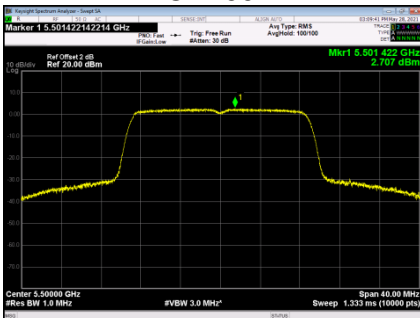
### UNII-2C\_TX N (HT20) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	2.707	0.00	2.707	11.00	PASS
120	5600	3.075	0.00	3.075	11.00	PASS
140	5700	2.420	0.00	2.420	11.00	PASS

**CH100**

**CH120**

**CH140**



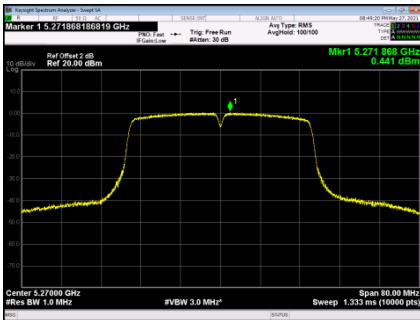
### UNII-2C\_TX N (HT20) Mode Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.72	11.00	PASS
120	5600	4.07	11.00	PASS
140	5700	4.01	11.00	PASS

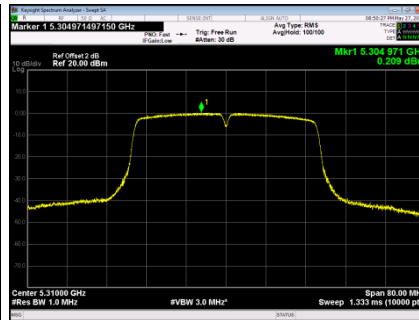
### UNII-2A\_TX N (HT40) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.441	0.00	0.441	11.00	PASS
62	5310	0.209	0.00	0.209	11.00	PASS

**CH54**



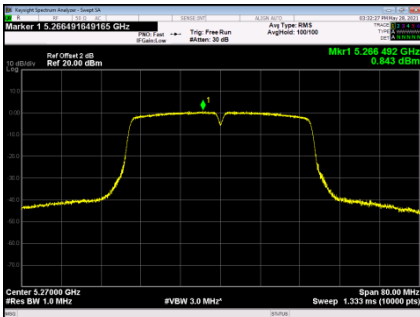
**CH62**



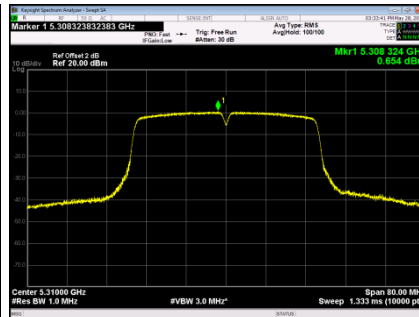
### UNII-2A\_TX N (HT40) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.843	0.00	0.843	11.00	PASS
62	5310	0.645	0.00	0.645	11.00	PASS

**CH54**



**CH62**



### UNII-2A\_TX N (HT40) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	3.66	11.00	PASS
62	5310	3.44	11.00	PASS

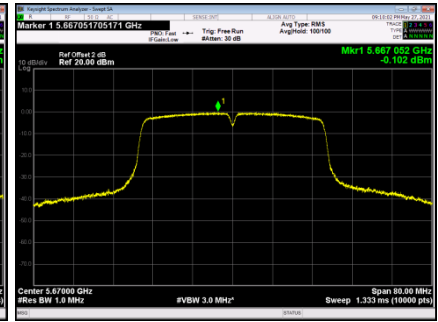
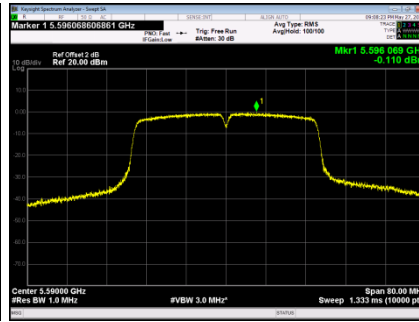
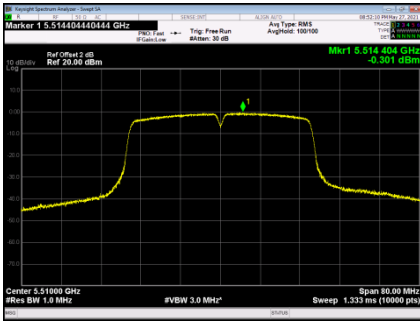
### UNII-2C\_TX N (HT40) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	-0.301	0.00	-0.301	11.00	PASS
118	5590	-0.110	0.00	-0.110	11.00	PASS
134	5670	-0.102	0.00	-0.102	11.00	PASS

CH102

CH118

CH134



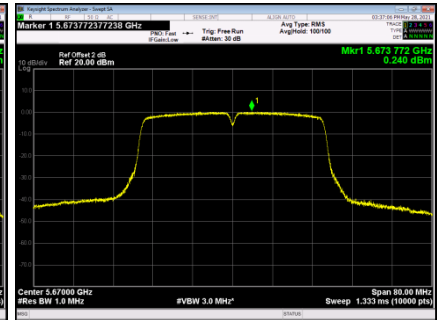
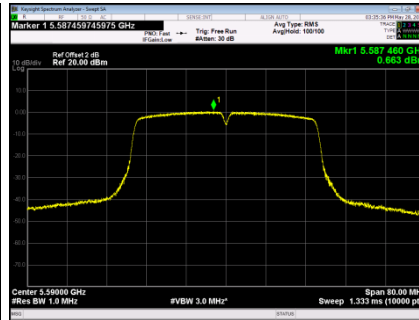
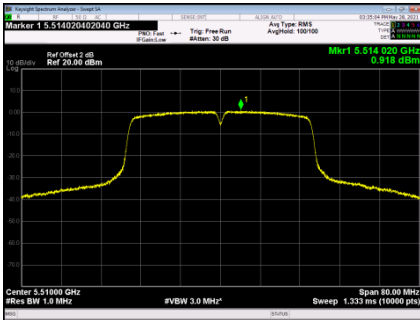
### UNII-2C\_TX N (HT40) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	0.918	0.00	0.918	11.00	PASS
118	5590	0.663	0.00	0.663	11.00	PASS
134	5670	0.240	0.00	0.240	11.00	PASS

CH102

CH118

CH134



### UNII-2C\_TX N (HT40) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	3.36	11.00	PASS
118	5590	3.30	11.00	PASS
134	5670	3.08	11.00	PASS

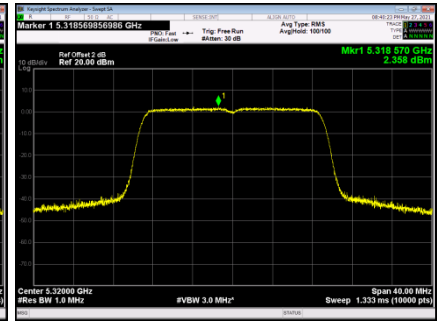
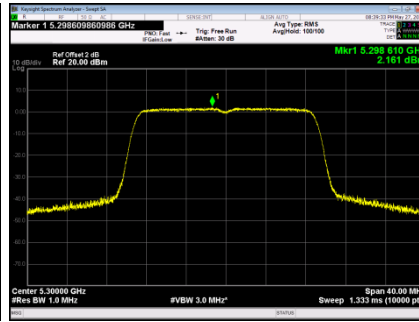
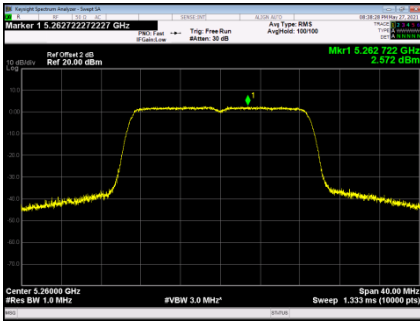
### UNII-2A\_TX AC (VHT20) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	2.572	0.00	2.572	11.00	PASS
60	5300	2.161	0.00	2.161	11.00	PASS
64	5320	2.358	0.00	2.358	11.00	PASS

**CH52**

**CH60**

**CH64**



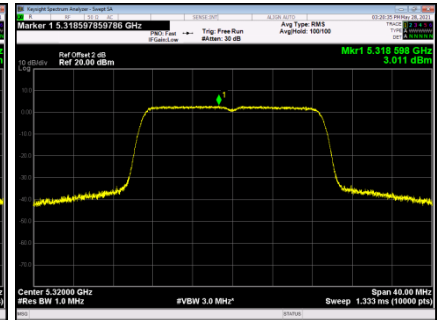
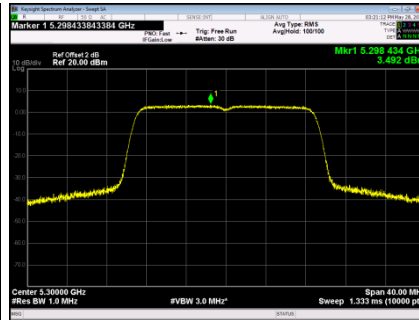
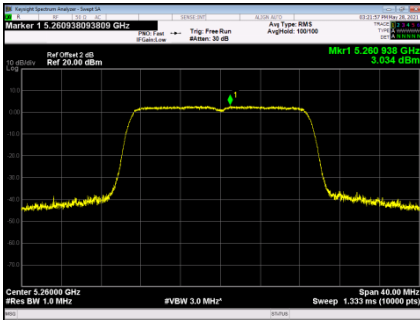
### UNII-2A\_TX AC (VHT20) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.034	0.00	3.034	11.00	PASS
60	5300	3.492	0.00	3.492	11.00	PASS
64	5320	3.011	0.00	3.011	11.00	PASS

**CH52**

**CH60**

**CH64**



### UNII-2A\_TX AC (VHT20) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	5.82	11.00	PASS
60	5300	5.89	11.00	PASS
64	5320	5.71	11.00	PASS

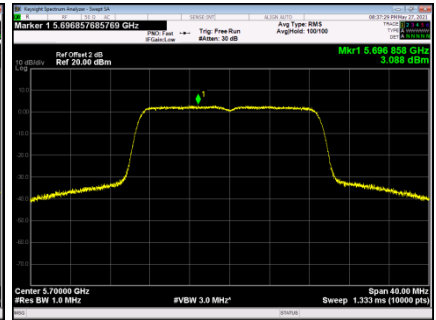
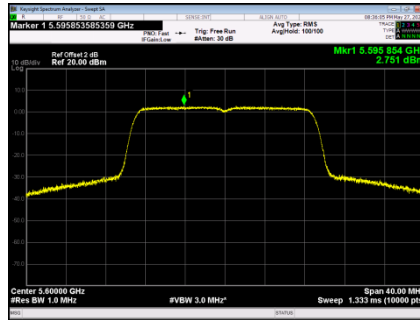
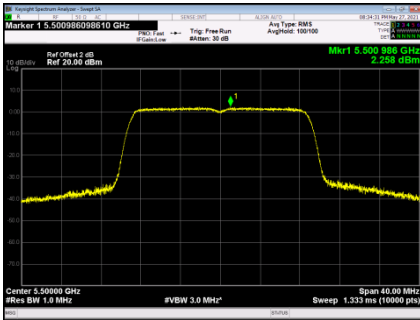
### UNII-2C\_TX AC (VHT20) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	2.258	0.00	2.258	11.00	PASS
120	5600	2.751	0.00	2.751	11.00	PASS
140	5700	3.088	0.00	3.088	11.00	PASS

**CH100**

**CH120**

**CH140**



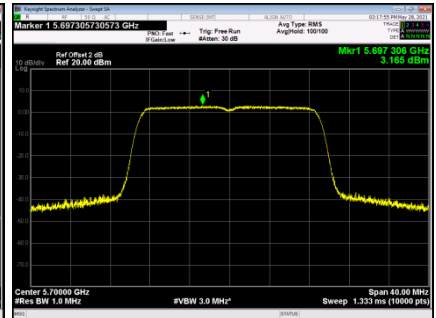
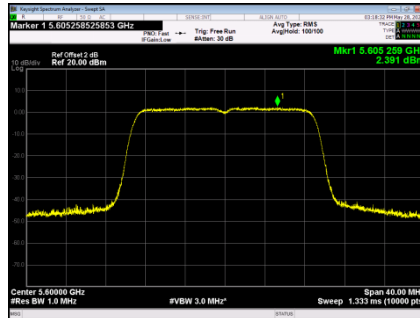
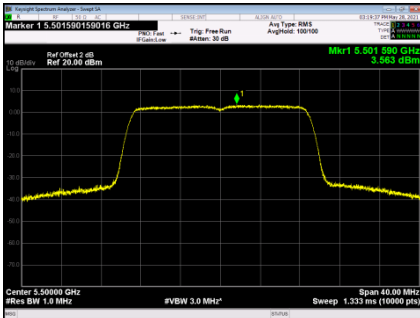
### UNII-2C\_TX AC (VHT20) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.563	0.00	3.563	11.00	PASS
120	5600	2.931	0.00	2.931	11.00	PASS
140	5700	3.165	0.00	3.165	11.00	PASS

**CH100**

**CH120**

**CH140**



### UNII-2C\_TX AC (VHT20) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	5.71	11.00	PASS
120	5600	5.85	11.00	PASS
140	5700	6.14	11.00	PASS

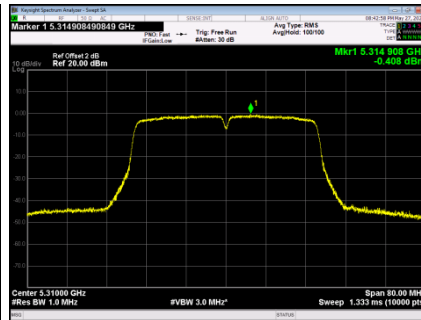
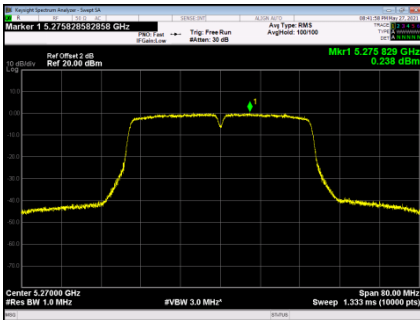


### UNII-2A\_TX AC (VHT40) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.238	0.00	0.238	11.00	PASS
62	5310	-0.408	0.00	-0.408	11.00	PASS

CH54

CH62

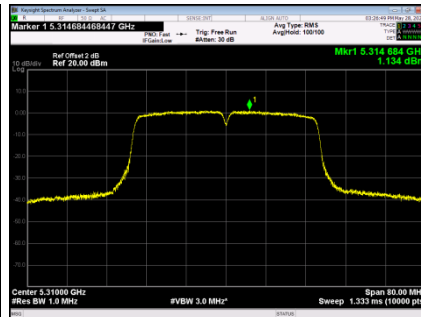
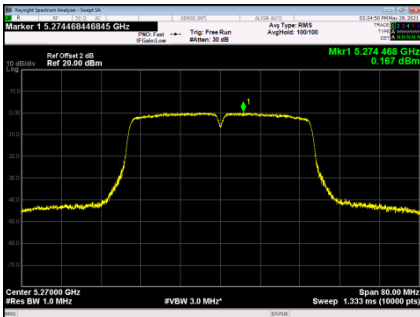


### UNII-2A\_TX AC (VHT40) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.167	0.00	0.167	11.00	PASS
62	5310	1.134	0.00	1.134	11.00	PASS

CH54

CH62



### UNII-2A\_TX AC (VHT40) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	3.21	11.00	PASS
62	5310	3.44	11.00	PASS

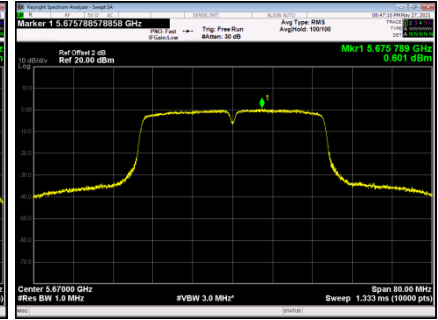
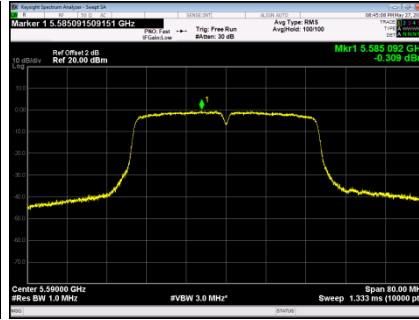
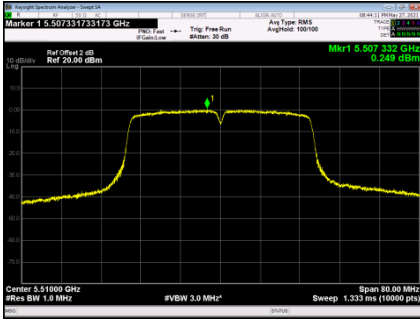
### UNII-2C\_TX AC (VHT40) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	0.249	0.00	0.249	11.00	PASS
118	5590	-0.309	0.00	-0.309	11.00	PASS
134	5670	0.601	0.00	0.601	11.00	PASS

CH102

CH118

CH134



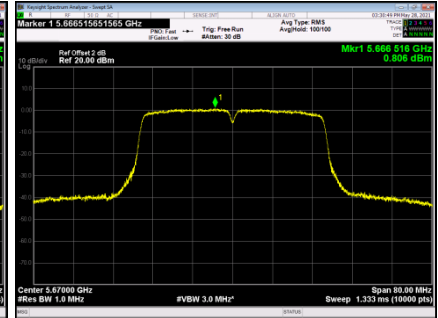
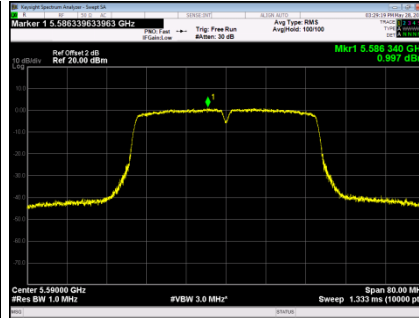
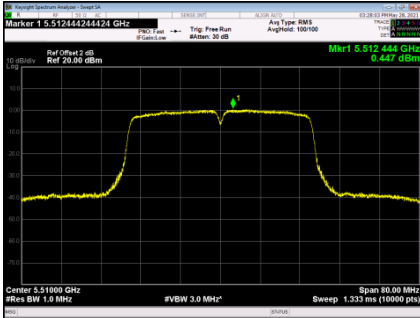
### UNII-2C\_TX AC (VHT40) Mode\_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	0.447	0.00	0.447	11.00	PASS
118	5590	0.997	0.00	0.997	11.00	PASS
134	5670	0.806	0.00	0.806	11.00	PASS

CH102

CH118

CH134



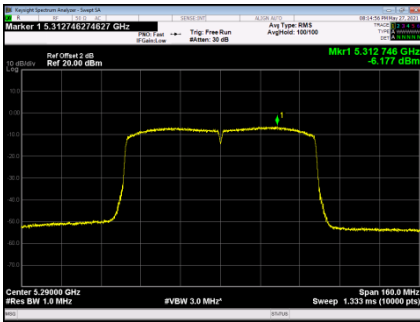
### UNII-2C\_TX AC (VHT40) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	3.36	11.00	PASS
118	5590	3.40	11.00	PASS
134	5670	3.72	11.00	PASS

### UNII-2A\_TX AC (VHT80) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290	-6.177	0.00	-6.177	11.00	PASS

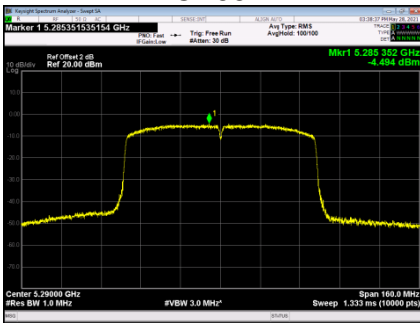
#### CH58



### UNII-2A\_TX AC (VHT80) Mode\_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290	-4.494	0.00	-4.494	11.00	PASS

#### CH58



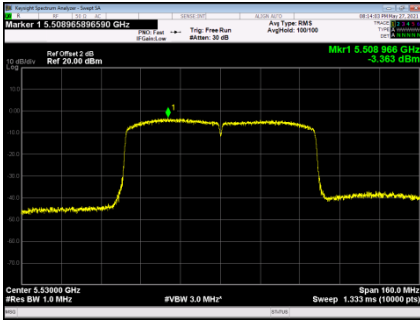
### UNII-2A\_TX AC (VHT80) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290	-2.24	11.00	PASS

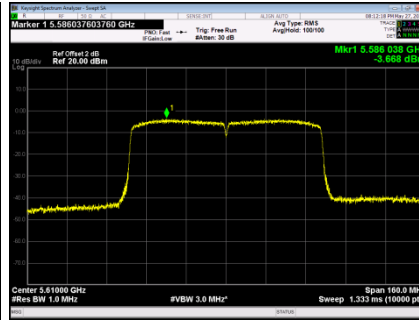
### UNII-2C\_TX AC (VHT80) Mode\_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
106	5530	-3.363	0.00	-3.363	11.00	PASS
122	5610	-3.668	0.00	-3.668	11.00	PASS

**CH106**



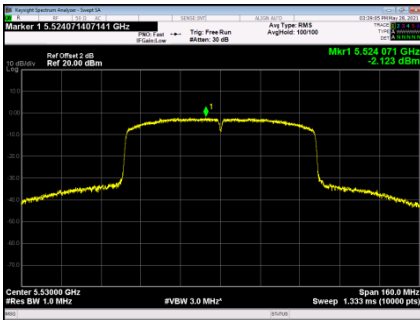
**CH122**



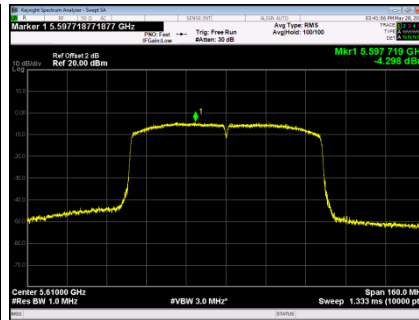
### UNII-2C\_TX AC (VHT80) Mode\_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
106	5530	-2.123	0.00	-2.213	11.00	PASS
122	5610	-4.298	0.00	-4.298	11.00	PASS

**CH106**



**CH122**



### UNII-2C\_TX AC (VHT80) Mode\_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
106	5530	0.26	11.00	PASS
122	5610	-0.96	11.00	PASS

## 9. FREQUENCY STABILITY MEASUREMENT

### 9.1. LIMIT

FCC Part15, Subpart E (15.407)&RSS-GEN			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(g) RSS-GEN 6.11	Frequency Stability	Specified in the user's manual	5150-5250
			5725-5850

### 9.2. TEST PROCEDURE AND SETTING

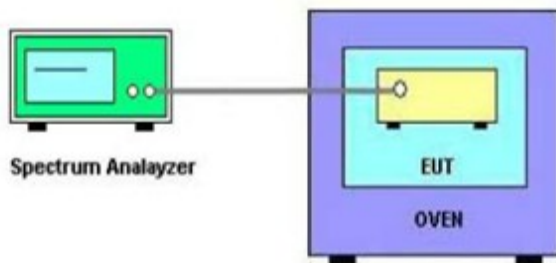
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10kHz
Sweep Time	Auto

### 9.3. MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2022/05/23
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A
4	Temperature conditioning	Guan Jian.HTH1000	-20-130°C	GJ1000-10D001	N/A
5	DC Power Supply	G.KE	IPR-10010D	010931954	N/A

### 9.4. TEST SETUP



### 9.5. EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 9.6. TEST RESULTS

Temperature vs. Frequency Stability-UNII-2A		
Voltage	Temperature	Measurement Frequency (MHz)
3.3V	(°C)	5260
	-20	5260.0377
	25	5260.0377
	50	5260.0376
2.1V	25	5260.0377
Max. Deviation (MHz)		0.0376
Max. Deviation (ppm)		7.17

Temperature vs. Frequency Stability-UNII-2C		
Voltage	Temperature	Measurement Frequency (MHz)
3.3V	(°C)	5500
	-20	5500.0378
	25	5500.0378
	50	5500.0377
2.1V	25	5500.0377
Max. Deviation (MHz)		0.0378
Max. Deviation (ppm)		6.87

Note: 2.1 V is the end point voltage, and products below 2.1V will cease working.

**END OF TEST REPORT**