

FCC &ISED Radio Test Report

FCC ID: 2AC23-WCT5K
IC:12290A-WCT5K

The report concerns: Class II Permissive Change

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Date Sample(s) Received : 2022-02-15
Date of Tested : 2022-02-15 to 2022-03-03
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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 : WCT5KM2301
Ratings : I/P: DC 3.3V

Test Engineer:



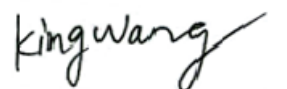
Blue Qiu

Responsible Engineer :



Smile Wang

Authorized Signatory:



King Wang

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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.	WCT5KM2301
Model Different	/
Trade Mark	GSD
Issued History 1	The purpose of this letter is to request a Class II Permissive change for FCC ID: 2AC23-WCT5, original granted on 12/02/2019. 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	V1.1	
Software Version	V1.1	
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: 14.80dBm (0.0302W) IEEE 802.11n (HT20): 16.68dBm (0.0466W) IEEE 802.11n (HT40): 16.72dBm (0.0469W) IEEE 802.11ac (VHT20): 16.74dBm (0.0472W) IEEE 802.11ac (VHT40): 16.70dBm (0.0468W) IEEE 802.11ac (VHT80): 16.37dBm (0.0433W)	
Maximum Output Power for UNII-2C	IEEE 802.11a: 14.84dBm (0.0305W) IEEE 802.11n (HT20): 16.77dBm (0.0475 W) IEEE 802.11n (HT40): 16.72dBm (0.0470 W) IEEE 802.11ac (VHT20): 16.68 dBm (0.0466 W) IEEE 802.11ac (VHT40): 16.66dBm (0.0463 W) IEEE 802.11ac (VHT80): 16.74dBm (0.0472 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.

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

Radiated emissions test - Below 1GHz	
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:

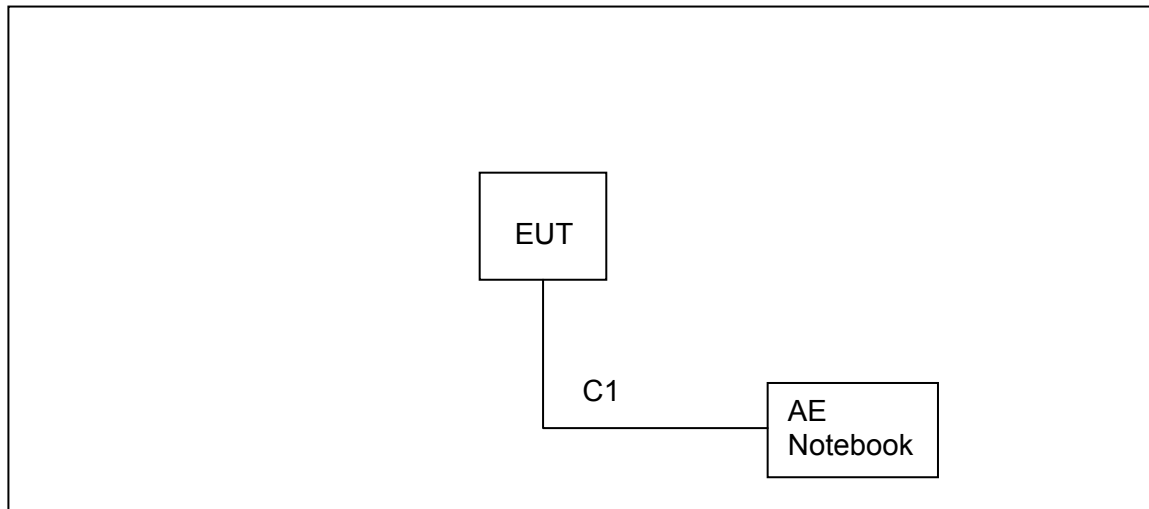
- (1) For radiated emission below 1 GHz and AC power line conducted emissions test, the IEEE 802.11a channel 52 is found to be the worst case and recorded.

3.3 PARAMETERS OF TEST SOFTWARE

UNII-2A			
Test Software	MT7663QA		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	21	21	21
IEEE 802.11n (HT20)	22	22	22
IEEE 802.11ac (VHT20)	21	21	21
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	23	23	
IEEE 802.11ac (VHT40)	23	23	
Test Frequency (MHz)	5290		
IEEE 802.11ac (VHT80)	23		

UNII-2C			
Test Software	MT7663QA		
Test Frequency (MHz)	5500	5600	5700
IEEE 802.11a	21	21	21
IEEE 802.11n (HT20)	22	22	22
IEEE 802.11ac (VHT20)	21	21	21
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	23	23	23
IEEE 802.11ac (VHT40)	23	23	23
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	23	23	

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 μ 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

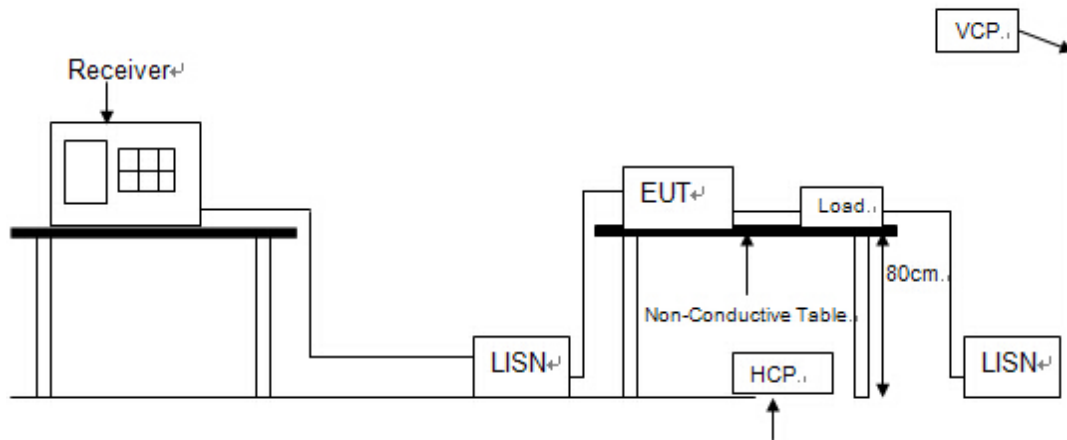
4.2 TEST PROCEDURE

- 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	12/19/2022
2	EMI Test Receiver	R&S	ESCI	101308	12/17/2022
3	LISN	AFJ	LS16	16011103219	06/09/2022
4	LISN	Schwarzbeck	NSLK 8127	8127-432	12/17/2022
5	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

4.4 TESTSETUP



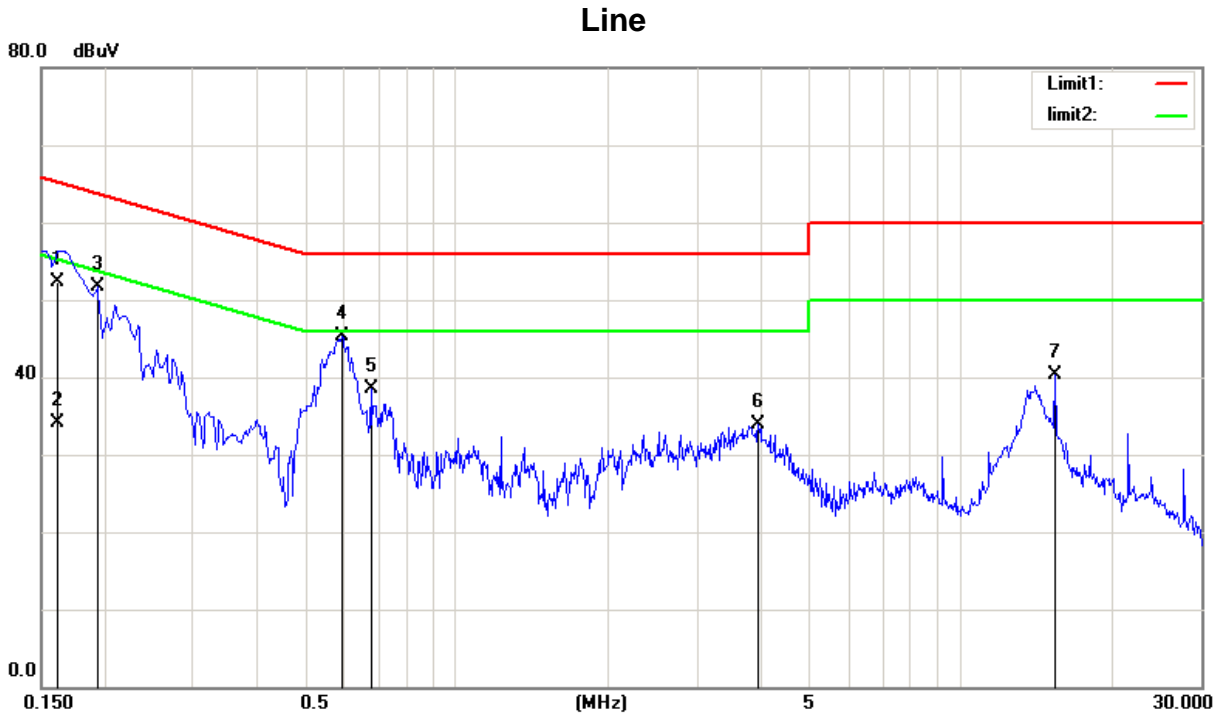
4.5 EUT OPERATION CONDITIONS

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)



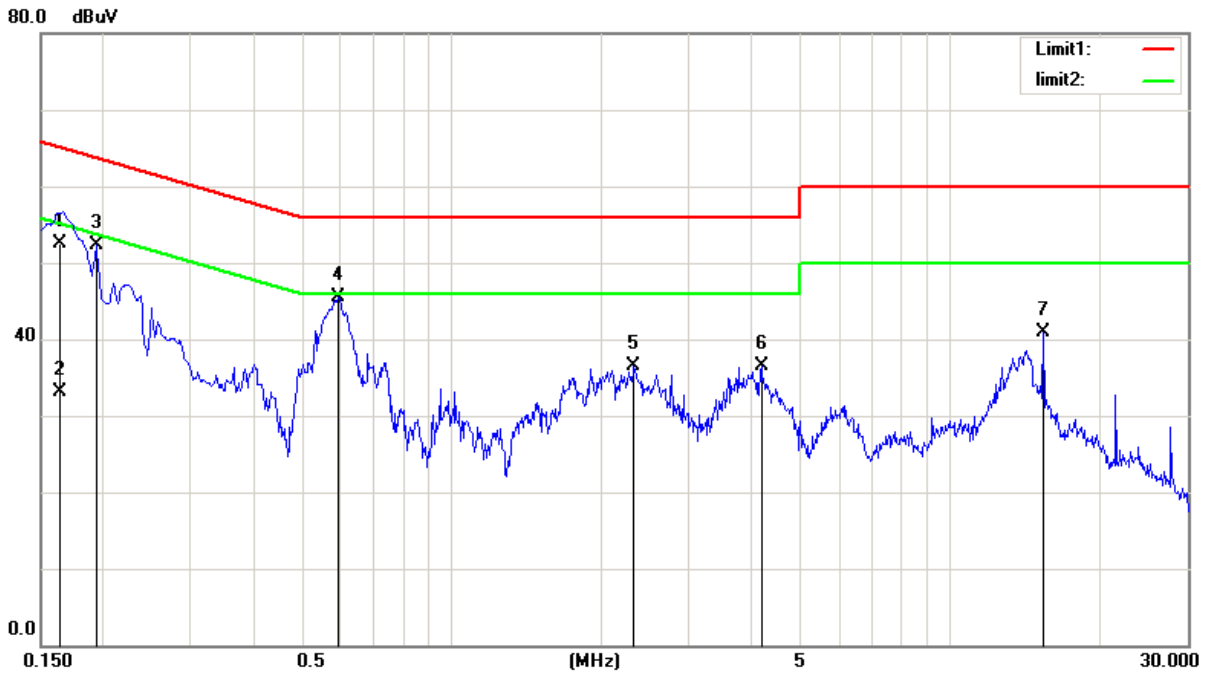
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1615	40.86	11.39	52.25	65.38	-13.13	QP
2	0.1615	22.63	11.39	34.02	55.38	-21.36	AVG
3	0.1940	40.45	11.17	51.62	63.86	-12.24	peak
4	0.5940	35.10	10.15	45.25	56.00	-10.75	peak
5	0.6780	28.45	10.13	38.58	56.00	-17.42	peak
6	3.9660	23.85	10.14	33.99	56.00	-22.01	peak
7	15.4140	30.14	10.17	40.31	60.00	-19.69	peak

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	0.1632	41.15	11.38	52.53	65.29	-12.76	QP
2	0.1632	21.74	11.38	33.12	55.29	-22.17	AVG
3	0.1940	41.20	11.17	52.37	63.86	-11.49	peak
4	0.5940	35.26	10.15	45.41	56.00	-10.59	peak
5	2.3260	26.33	10.12	36.45	56.00	-19.55	peak
6	4.1820	26.37	10.13	36.50	56.00	-19.50	peak
7	15.4180	30.67	10.17	40.84	60.00	-19.16	peak

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

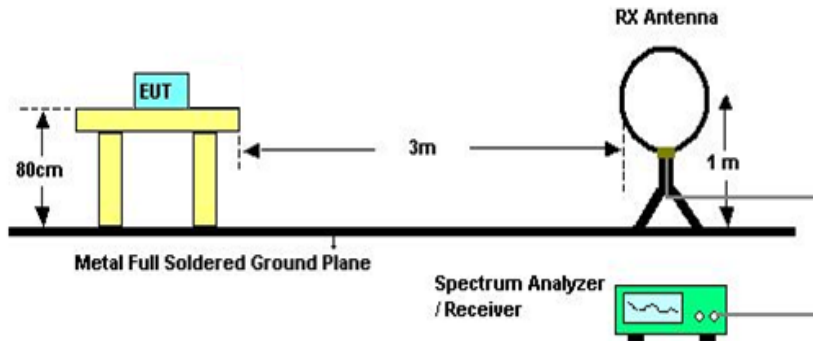
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance 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

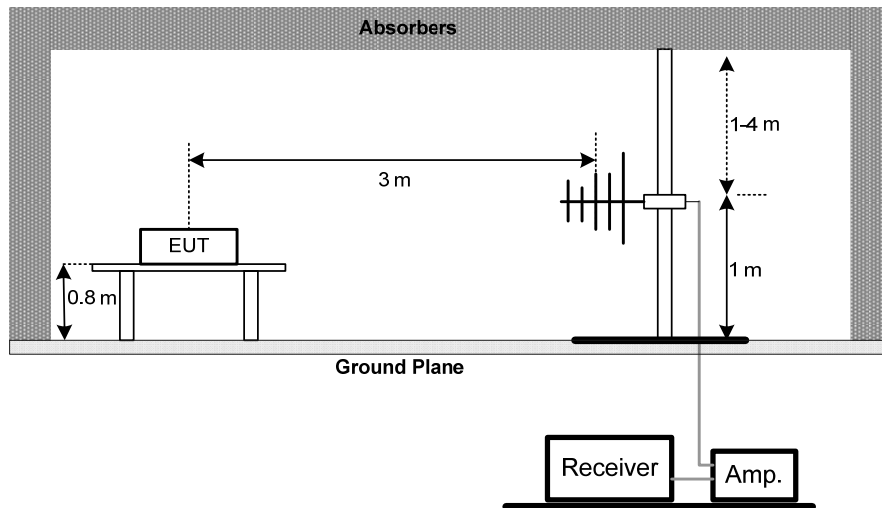
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	101307	12/19/2022
2	Spectrum Analyzer	Agilent	E4407B	US40240708	11/16/2022
3	Spectrum Analyzer	R&S	FSP	1164.4391.38	06/01/2022
4	Loop antenna	SCHWARZBECK	FMZB1519	1519-062	12/14/2022
5	Broadband antenna	SCHWARZBECK	VULB9168	VULB9168-192	008/05/2022
6	HORN ANTENNA	SCHWARZBECK	BBHA9120D	9120D 1065	04/21/2022
7	DRG Horn Antenna	A.H. Systems	SAS-574	588	06/01/2022
8	Preamplifier Amplifier	HP	8447F	3113A05680	12/19/2022
9	Preamplifier Amplifier	Aeroflex	33711-392-77150-11	97	06/01/2022
10	PRE-AMPLIFIER	EMEC	EM01G26G	60679	04/19/2022
11	RF Cable	R&S	Test Cable 4	4	12/19/2022
12	RF Cable	R&S	Test Cable 5	5	12/19/2022
13	RF Cable	R&S	Test Cable 9	9	04/21/2022
14	RF Cable	R&S	Test Cable 10	10	12/19/2022
15	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

5.4 TESTSETUP

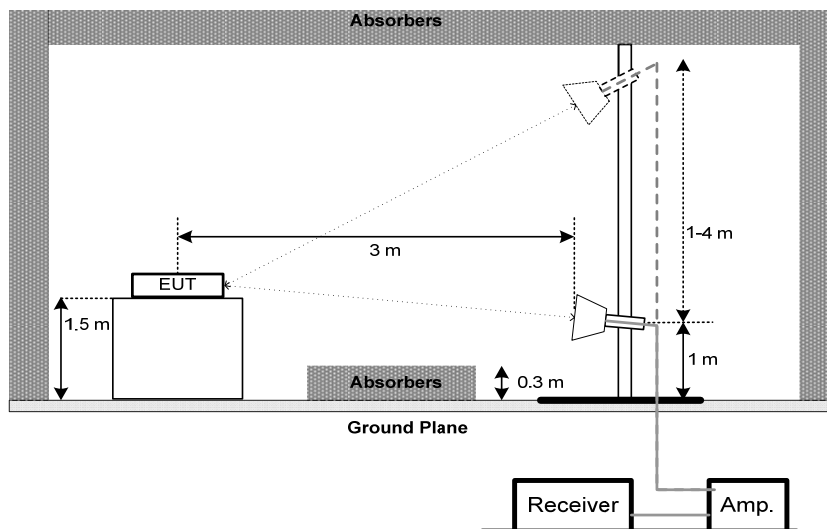
9 kHz to 30 MHz



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

Note:

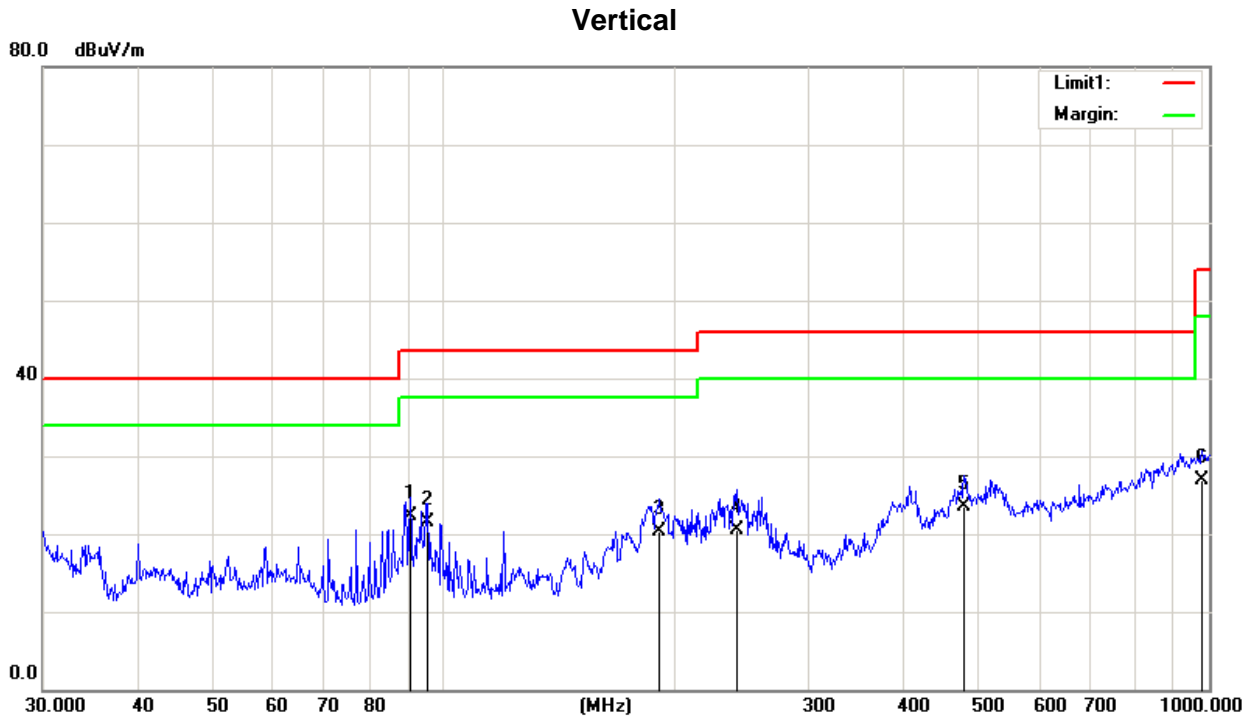
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

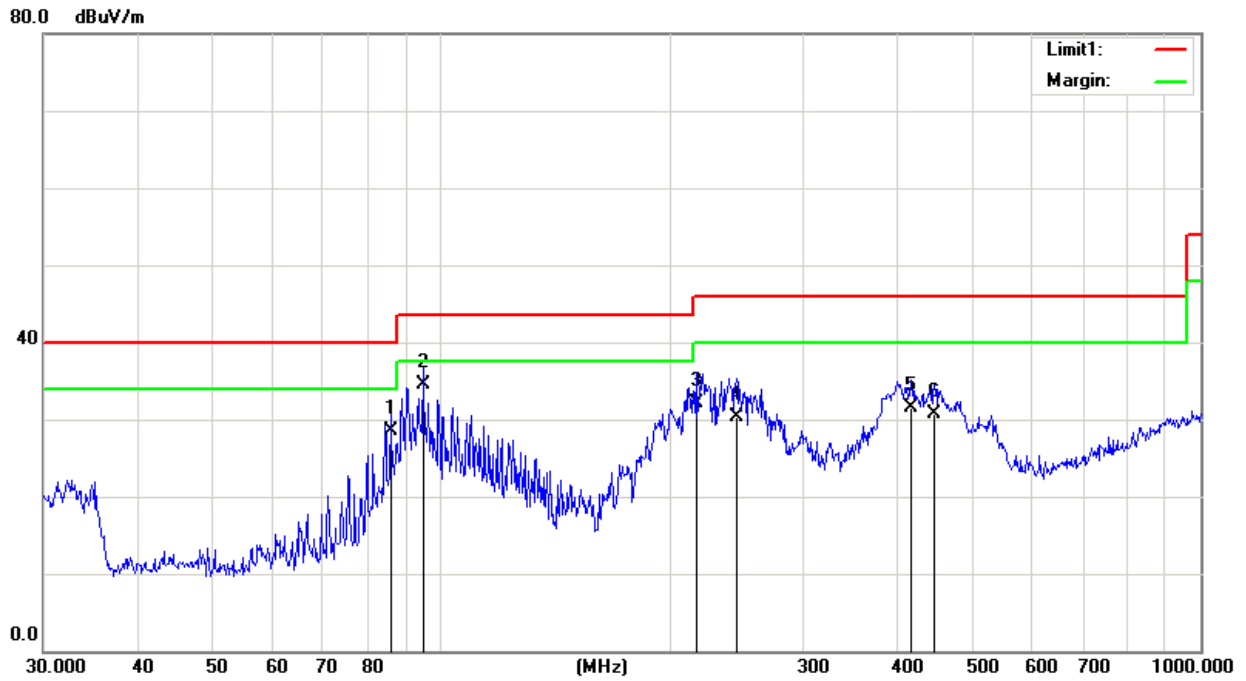
Test Mode: TX A Mode / CH52 (UNII 2A)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Height (cm)	Degree
1	90.5374	37.43	-15.11	22.32	43.50	-21.18	QP	100	35°
2	95.4270	36.33	-14.77	21.56	43.50	-21.94	QP	100	123°
3	191.7450	31.83	-11.49	20.34	43.50	-23.16	QP	100	318°
4	241.6762	28.74	-8.18	20.56	46.00	-25.44	QP	100	14°
5	478.8455	29.07	-5.61	23.46	46.00	-22.54	QP	100	53°
6	979.1803	22.66	4.31	26.97	54.00	-27.03	QP	100	65°

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

Horizontal

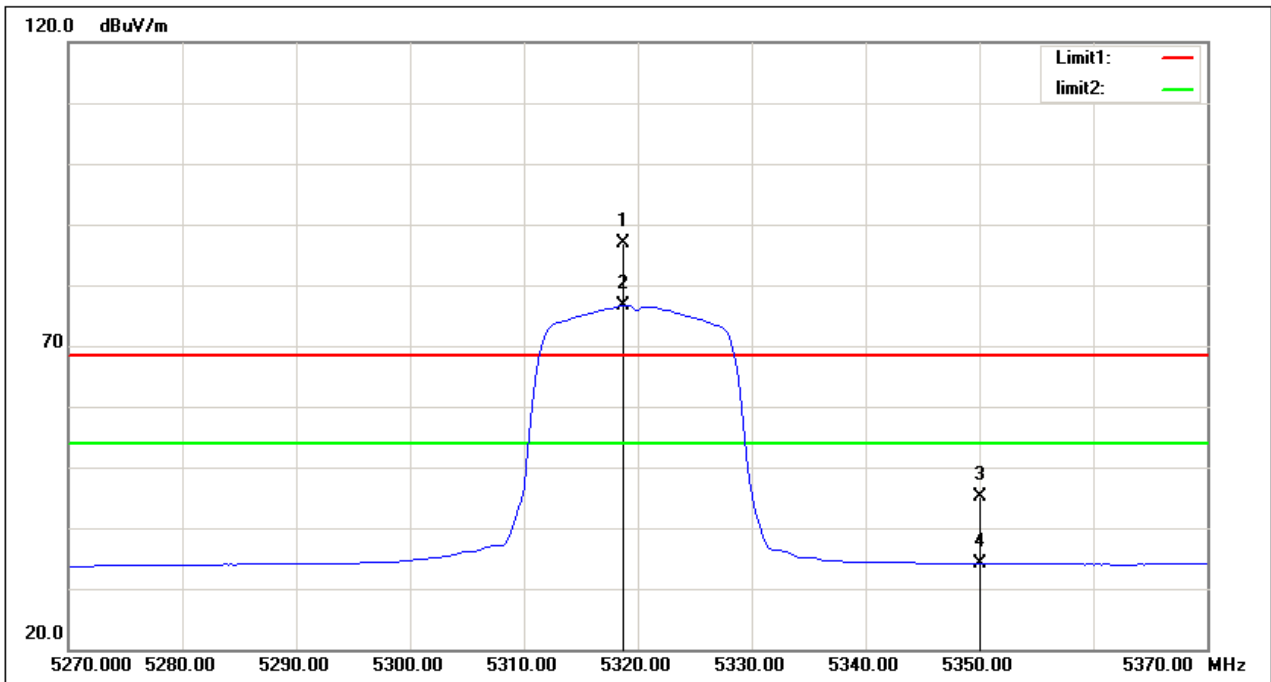


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Height (cm)	Degree
1	85.8983	45.78	-17.30	28.48	40.00	-11.52	QP	100	13°
2	94.7600	51.33	-16.82	34.51	43.50	-8.99	QP	300	15°
3	216.7828	41.21	-9.20	32.01	46.00	-13.99	QP	300	152°
4	245.0900	36.35	-6.13	30.22	46.00	-15.78	QP	100	263°
5	416.1791	38.65	-7.24	31.41	46.00	-14.59	QP	300	328°
6	446.4141	37.06	-6.35	30.71	46.00	-15.29	QP	100	186°

5.8 TEST RESULTS - ABOVE1000 MHz(BAND EDGE)

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz Height:150cm Degree:23°

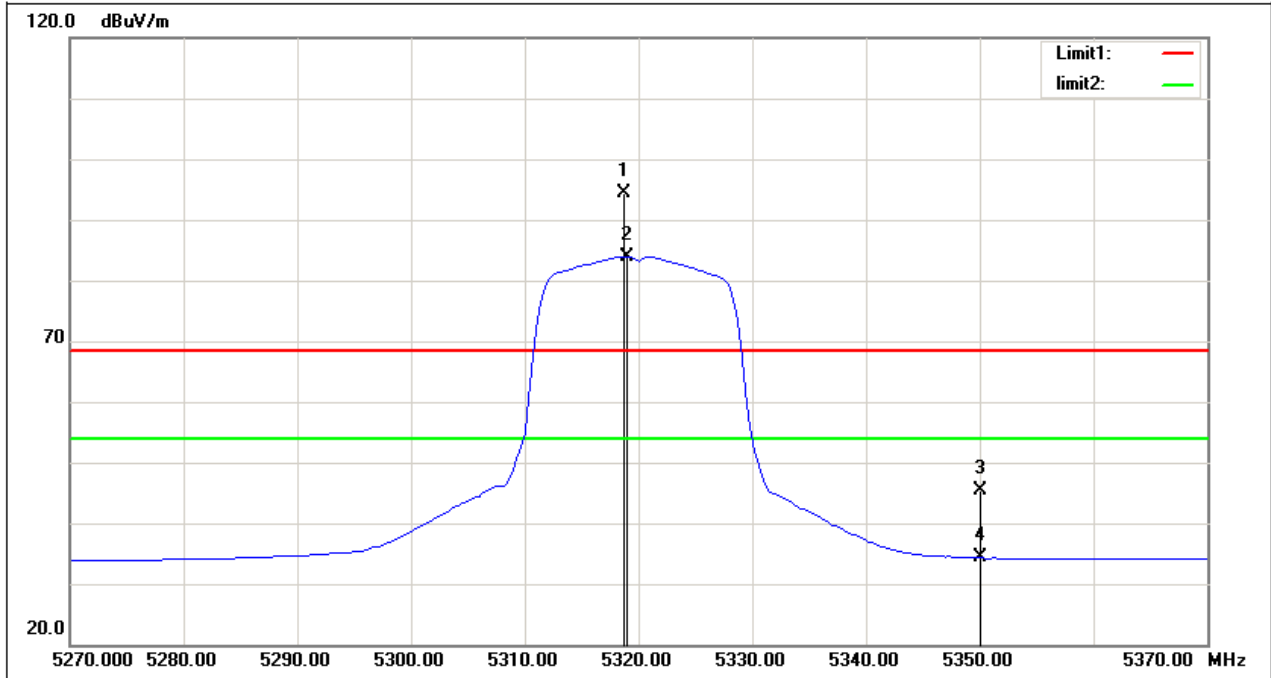
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.750	92.40	-5.45	86.95	/	/	peak
2	5318.750	82.06	-5.45	76.61	/	/	AVG
3	5350.000	50.42	-5.30	45.12	68.30	-23.18	peak
4	5350.000	39.41	-5.30	34.11	54.00	-19.89	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz Height:150cm Degree:156°

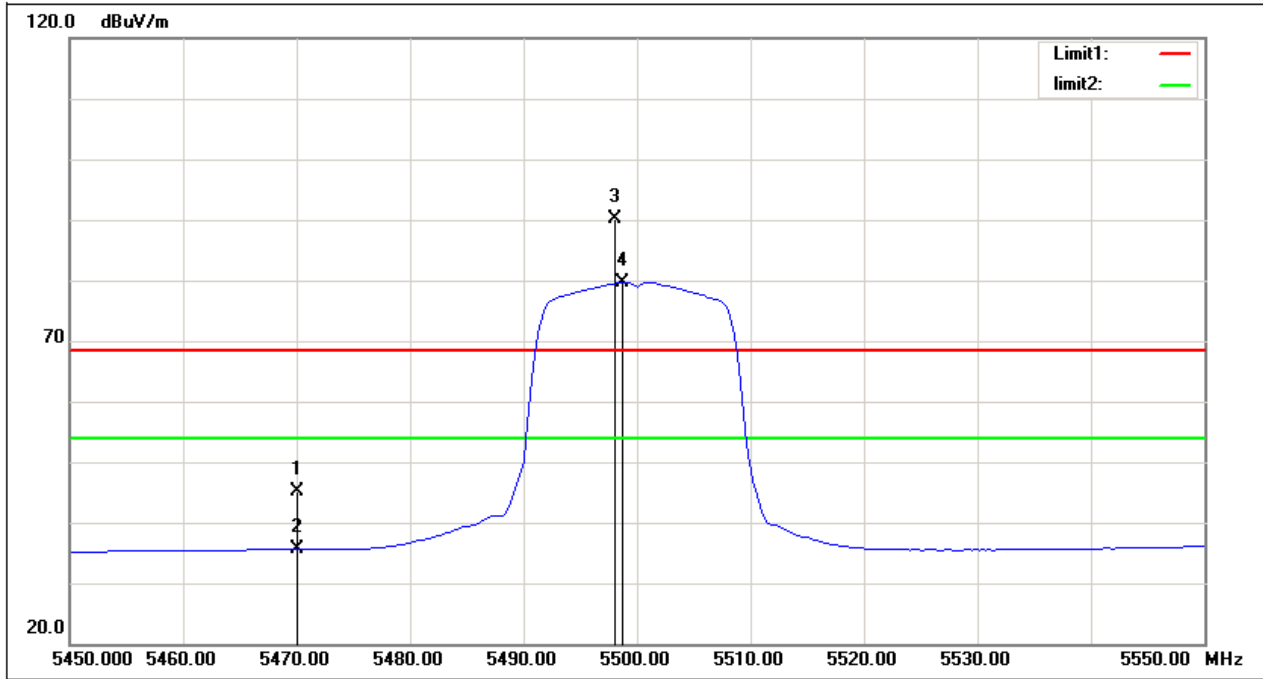
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.750	99.88	-5.45	94.43	/	/	peak
2	5319.000	89.42	-5.44	83.98	/	/	AVG
3	5350.000	50.73	-5.30	45.43	68.30	-22.87	peak
4	5350.000	39.59	-5.30	34.29	54.00	-19.71	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz Height:150cm Degree:25°

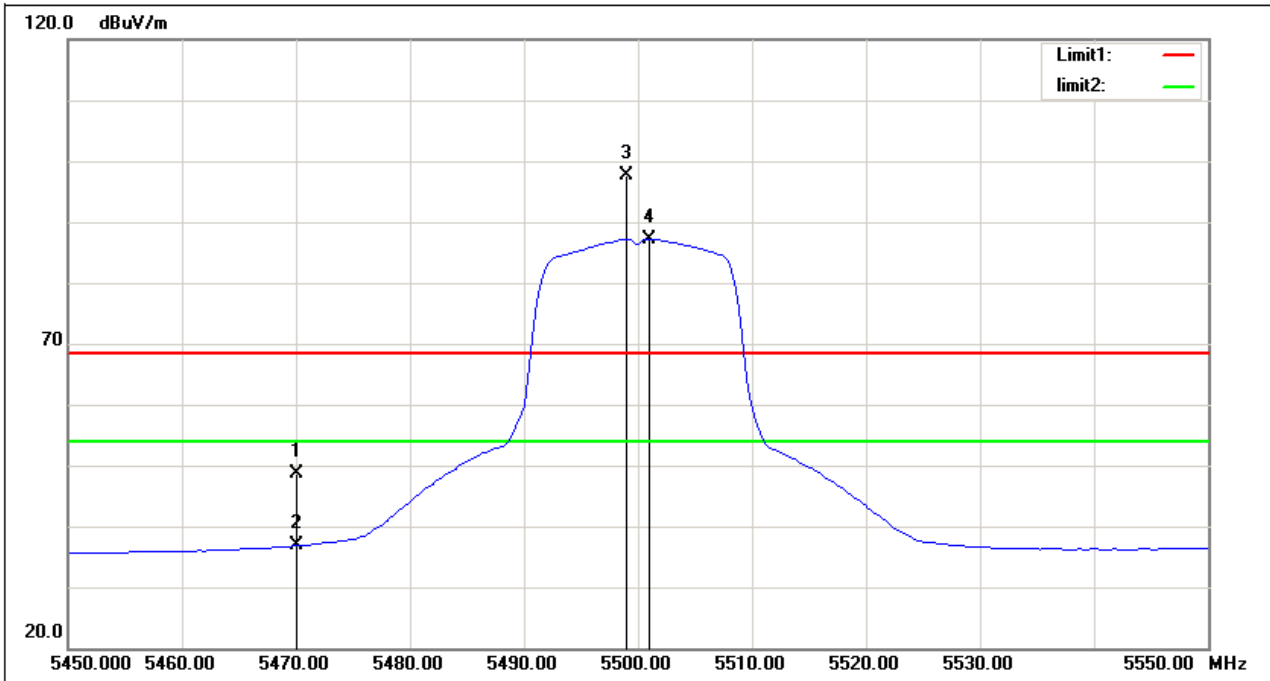
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	49.95	-4.72	45.23	68.30	-23.07	peak
2	5470.000	40.31	-4.72	35.59	54.00	-18.41	AVG
3	5498.000	94.63	-4.58	90.05	/	/	peak
4	5498.750	84.24	-4.58	79.66	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C _TX A Mode 5500 MHz Height:150cm Degree:153°

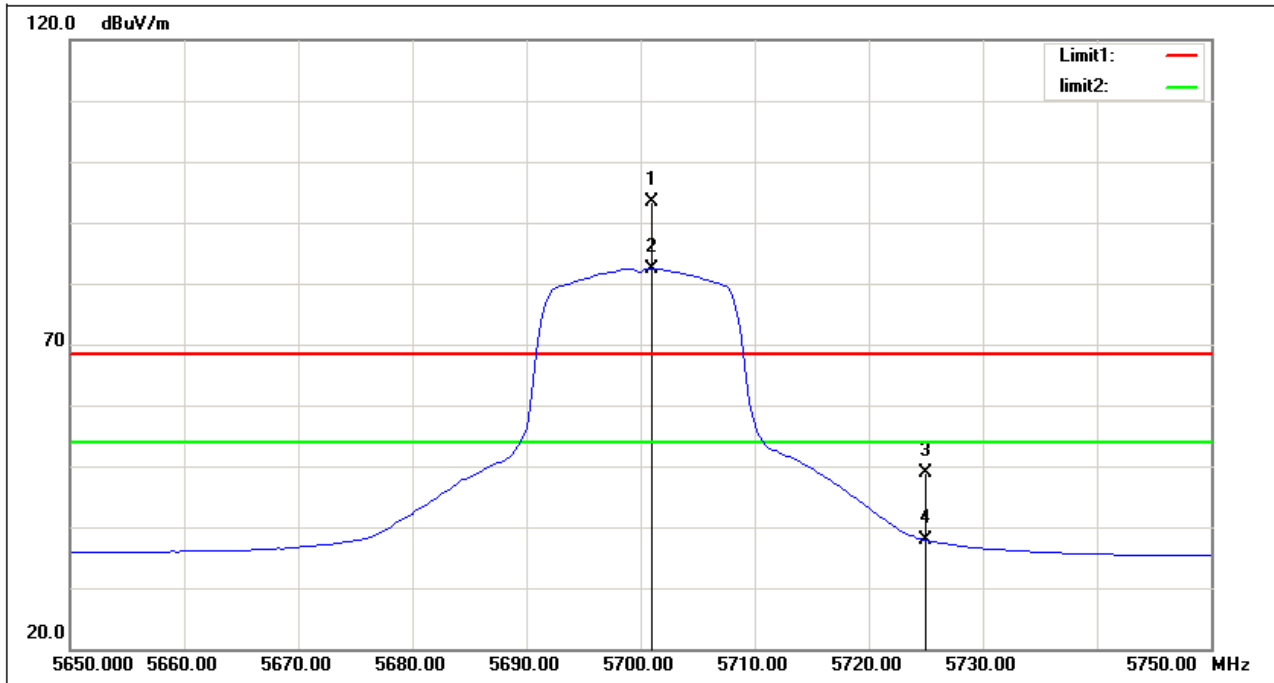
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	53.46	-4.72	48.74	68.30	-19.56	peak
2	5470.000	41.50	-4.72	36.78	54.00	-17.22	AVG
3	5499.000	102.15	-4.58	97.57	/	/	peak
4	5501.000	91.78	-4.57	87.21	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz Height:150cm Degree:26°

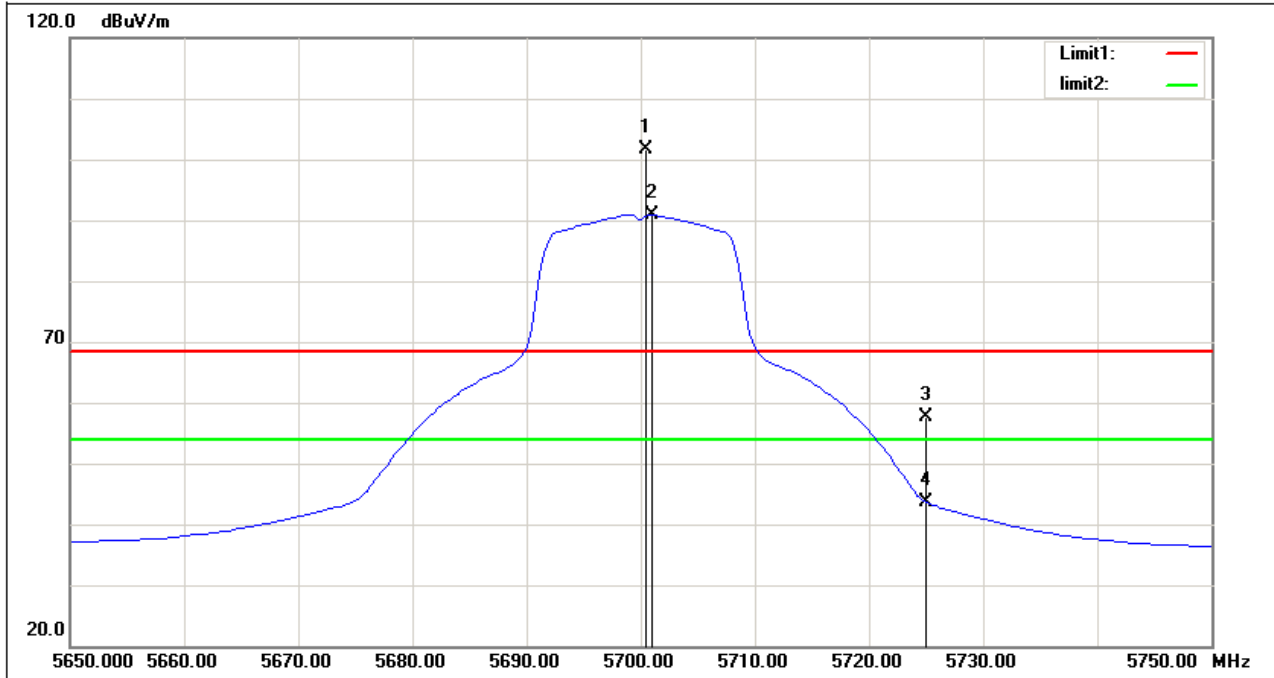
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5701.000	97.53	-4.25	93.28	/	/	peak
2	5701.000	86.73	-4.25	82.48	/	/	AVG
3	5725.000	53.07	-4.21	48.86	68.30	-19.44	peak
4	5725.000	42.04	-4.21	37.83	54.00	-16.17	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz Height:150cm Degree:155°

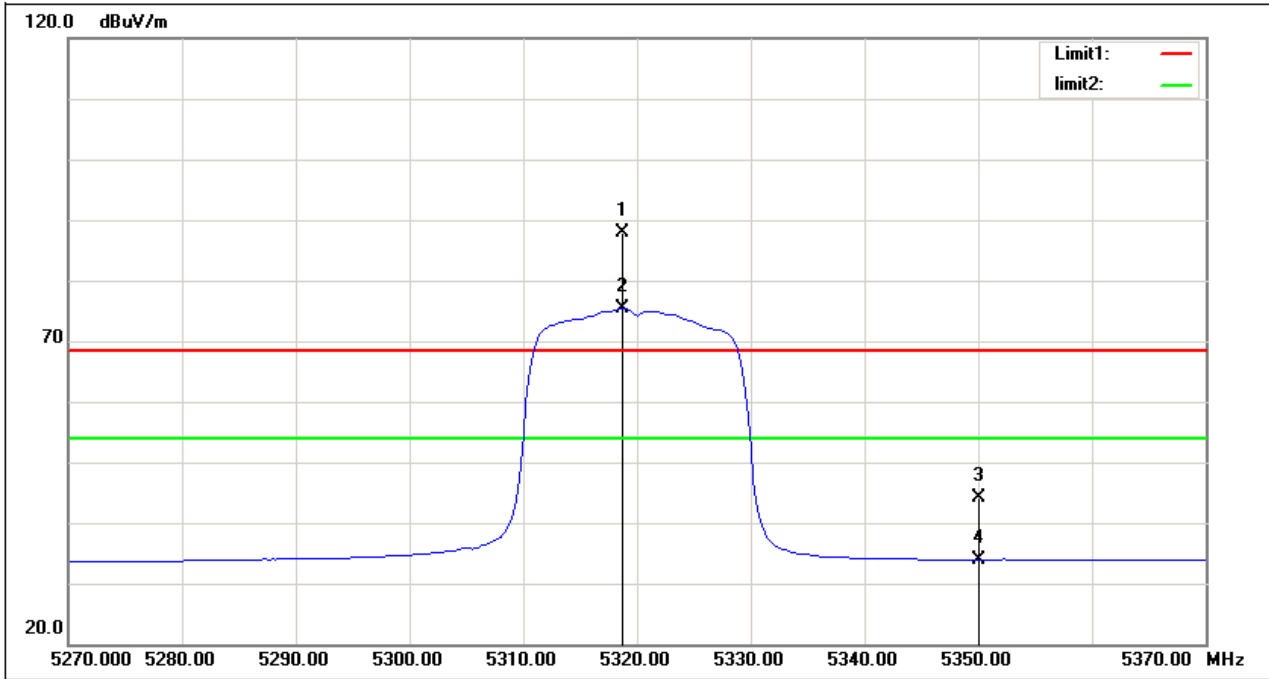
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5700.500	105.95	-4.25	101.70	/	/	peak
2	5701.000	95.11	-4.25	90.86	/	/	AVG
3	5725.000	61.76	-4.21	57.55	68.30	-10.75	peak
4	5725.000	47.83	-4.21	43.62	54.00	-10.38	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz Height:150cm Degree:23°

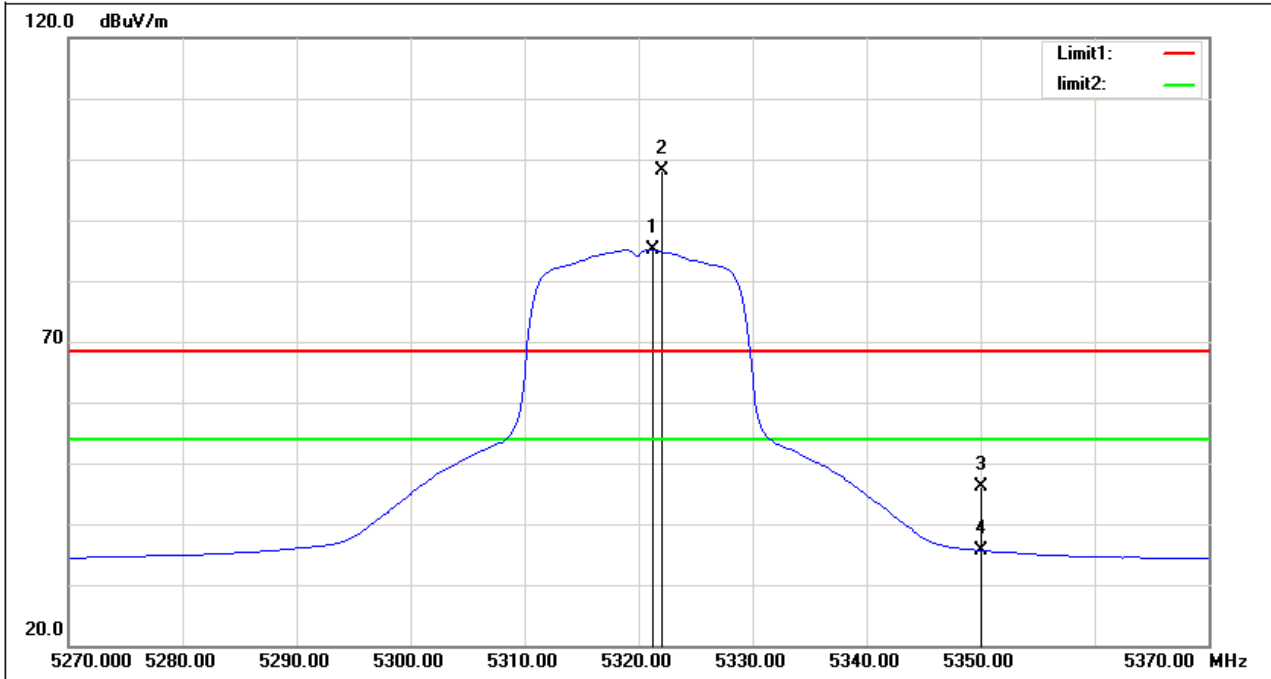
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.750	93.40	-5.45	87.95	/	/	peak
2	5318.750	80.79	-5.45	75.34	/	/	AVG
3	5350.000	49.38	-5.30	44.08	68.30	-24.22	peak
4	5350.000	39.22	-5.30	33.92	54.00	-20.08	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz Height:150cm Degree:156°

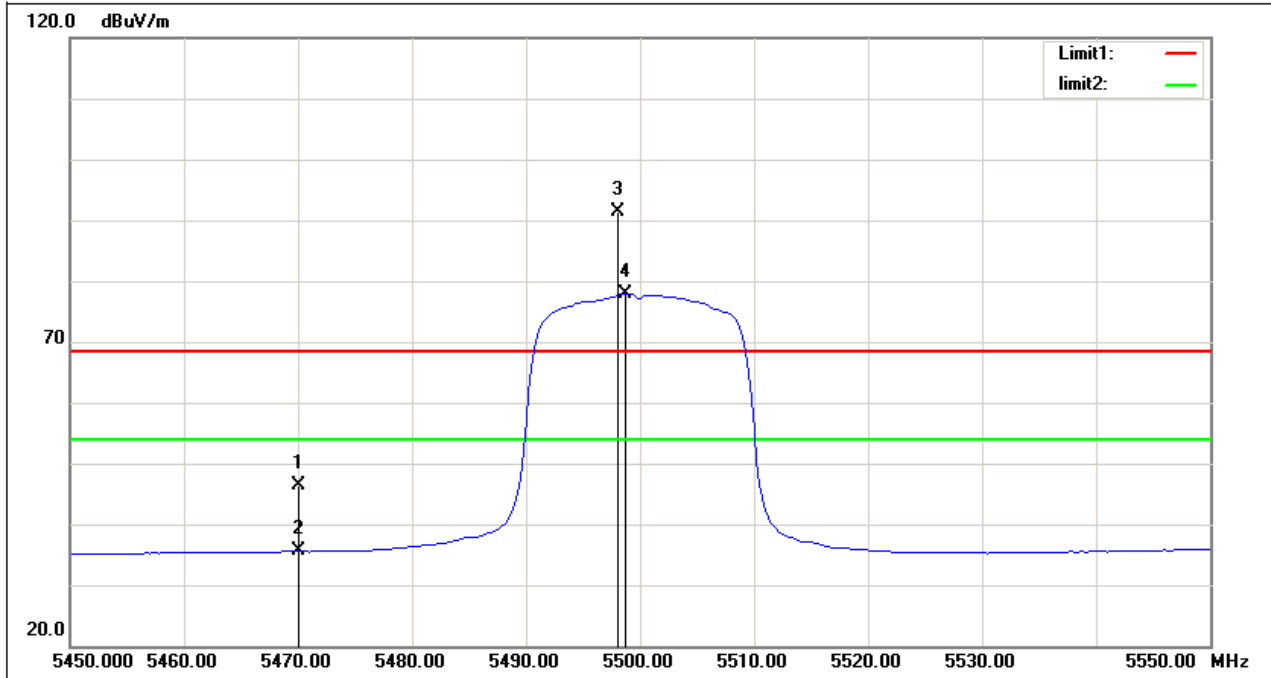
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5321.250	90.59	-5.44	85.15	/	/	AVG
2	5322.000	103.50	-5.44	98.06	/	/	peak
3	5350.000	51.48	-5.30	46.18	68.30	-22.12	peak
4	5350.000	40.93	-5.30	35.63	54.00	-18.37	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz Height:150cm Degree:28°

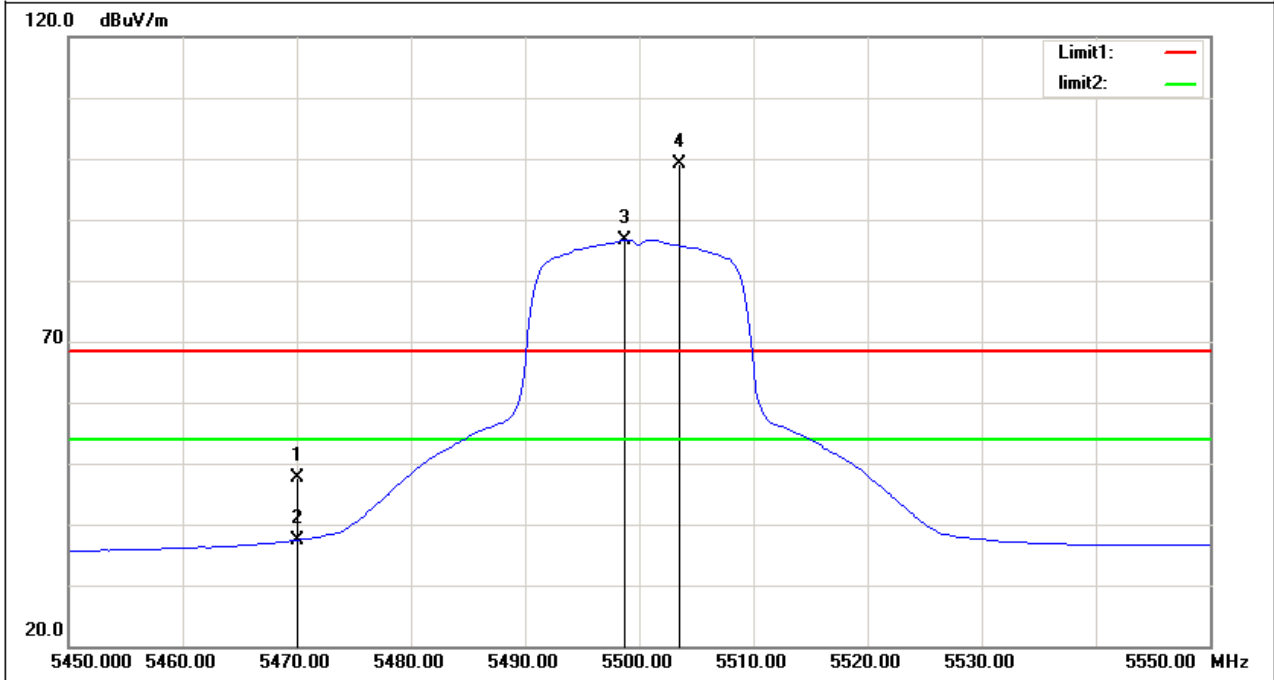
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	51.11	-4.72	46.39	68.30	-21.91	peak
2	5470.000	40.29	-4.72	35.57	54.00	-18.43	AVG
3	5498.000	96.08	-4.58	91.50	/	/	peak
4	5498.750	82.56	-4.58	77.98	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz Height:150cm Degree:151°

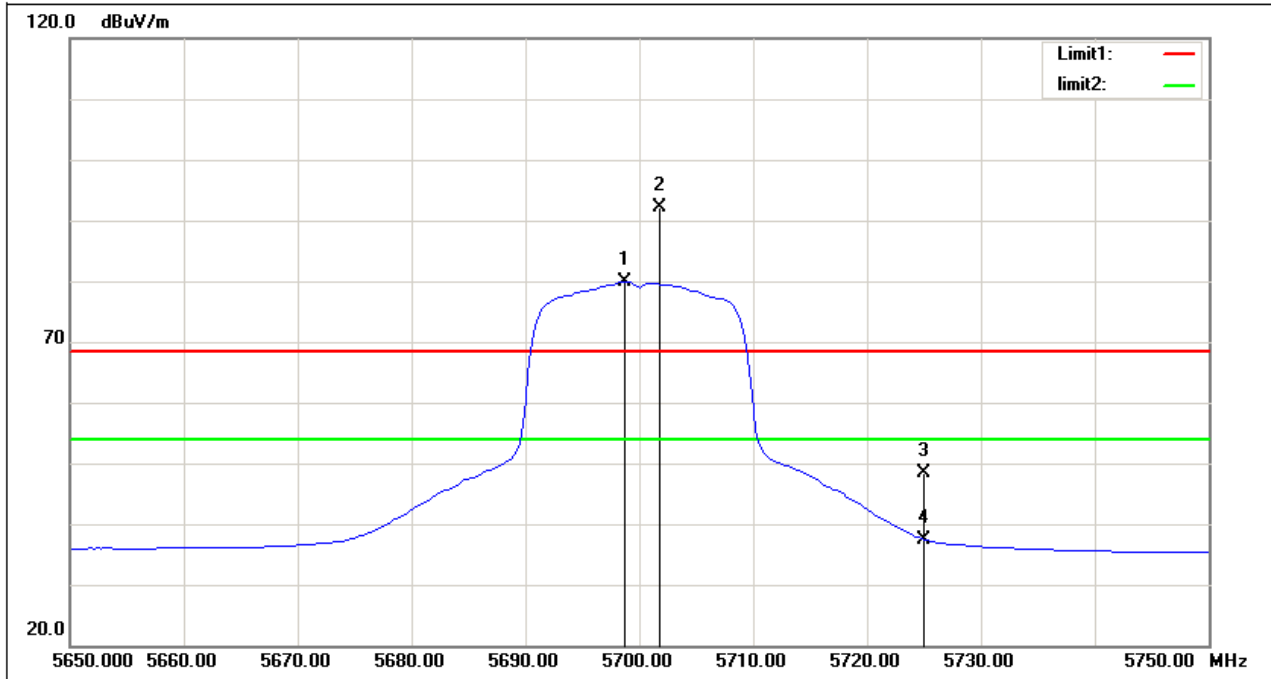
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	52.35	-4.72	47.63	68.30	-20.67	peak
2	5470.000	42.14	-4.72	37.42	54.00	-16.58	AVG
3	5498.750	91.23	-4.58	86.65	/	/	AVG
4	5503.500	103.67	-4.56	99.11	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz Height:150cm Degree:30°

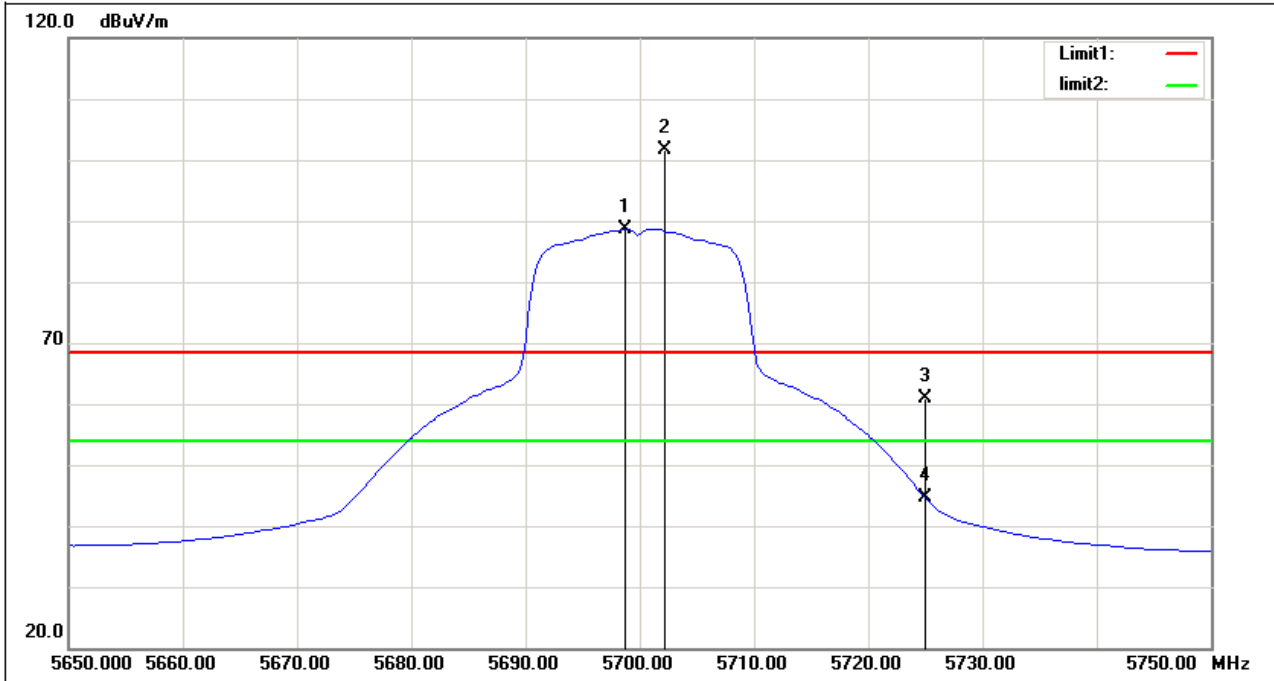
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5698.750	84.22	-4.25	79.97	/	/	AVG
2	5701.750	96.37	-4.25	92.12	/	/	peak
3	5725.000	52.59	-4.21	48.38	68.30	-19.92	peak
4	5725.000	41.69	-4.21	37.48	54.00	-16.52	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz Height:150cm Degree:150°

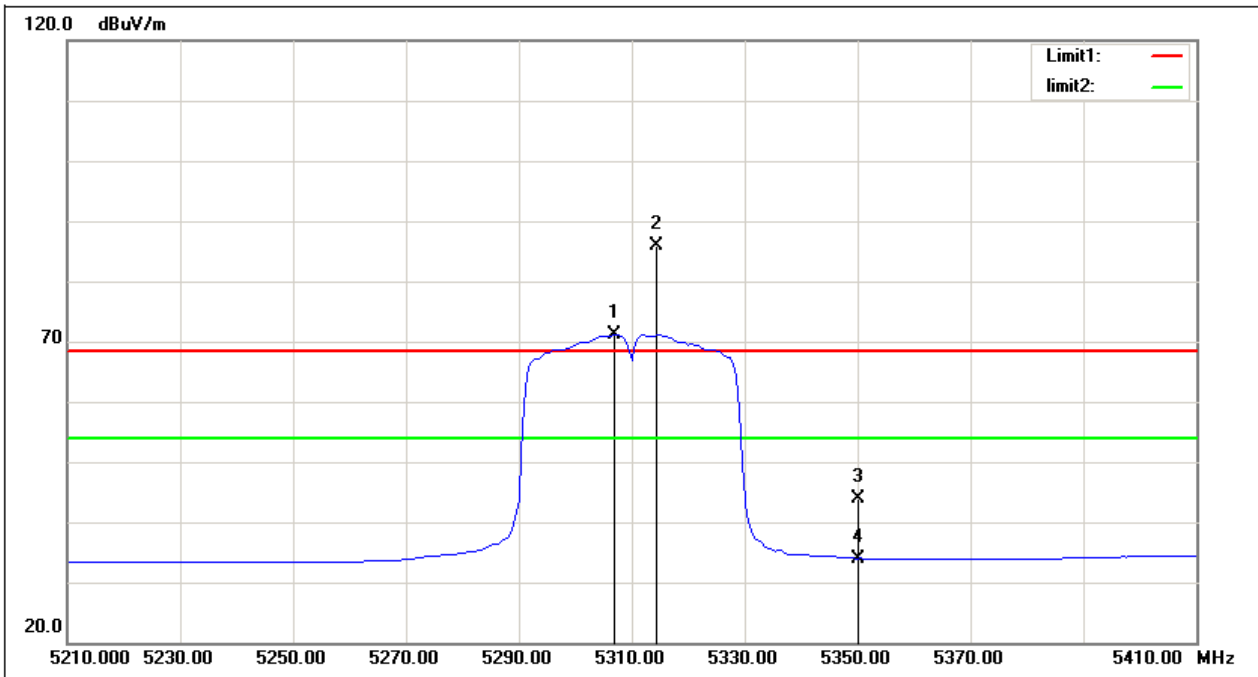
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5698.750	92.94	-4.25	88.69	/	/	AVG
2	5702.250	106.00	-4.25	101.75	/	/	peak
3	5725.000	65.06	-4.21	60.85	68.30	-7.45	peak
4	5725.000	48.86	-4.21	44.65	54.00	-9.35	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz Height:150cm Degree:28°

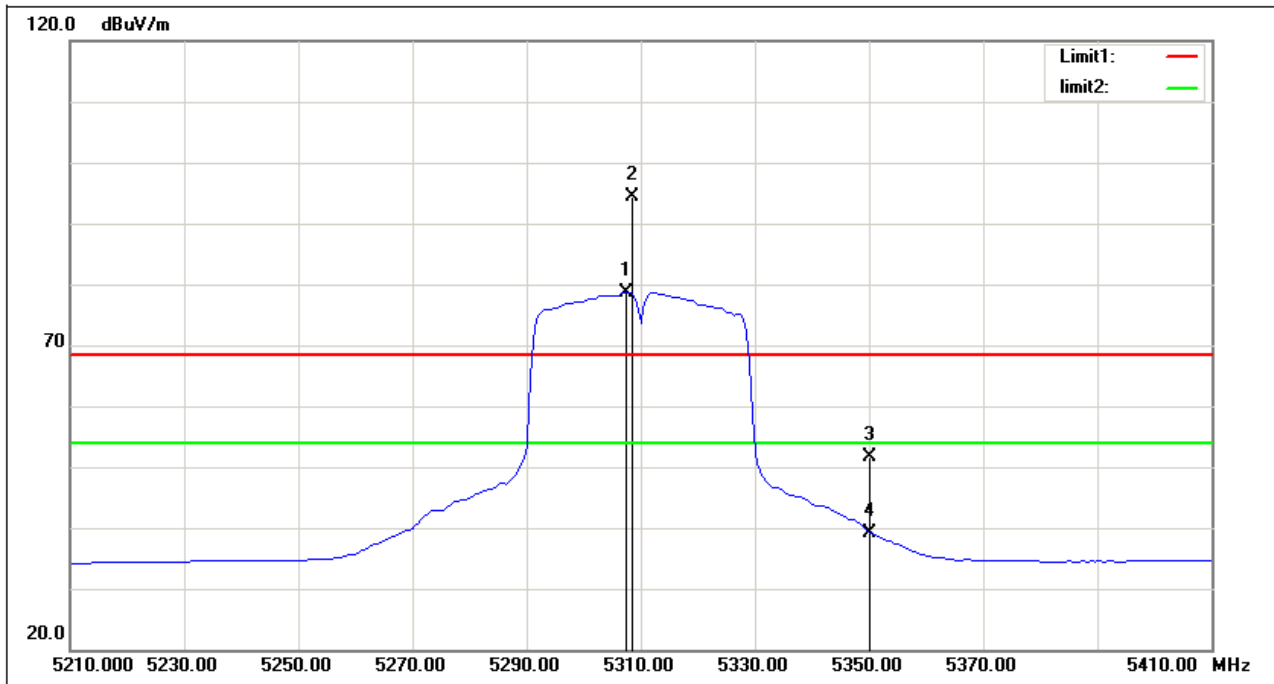
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5307.000	76.59	-5.50	71.09	/	/	AVG
2	5314.500	91.45	-5.47	85.98	/	/	peak
3	5350.000	49.23	-5.30	43.93	68.30	-24.37	peak
4	5350.000	39.29	-5.30	33.99	54.00	-20.01	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz Height:150cm Degree:152°

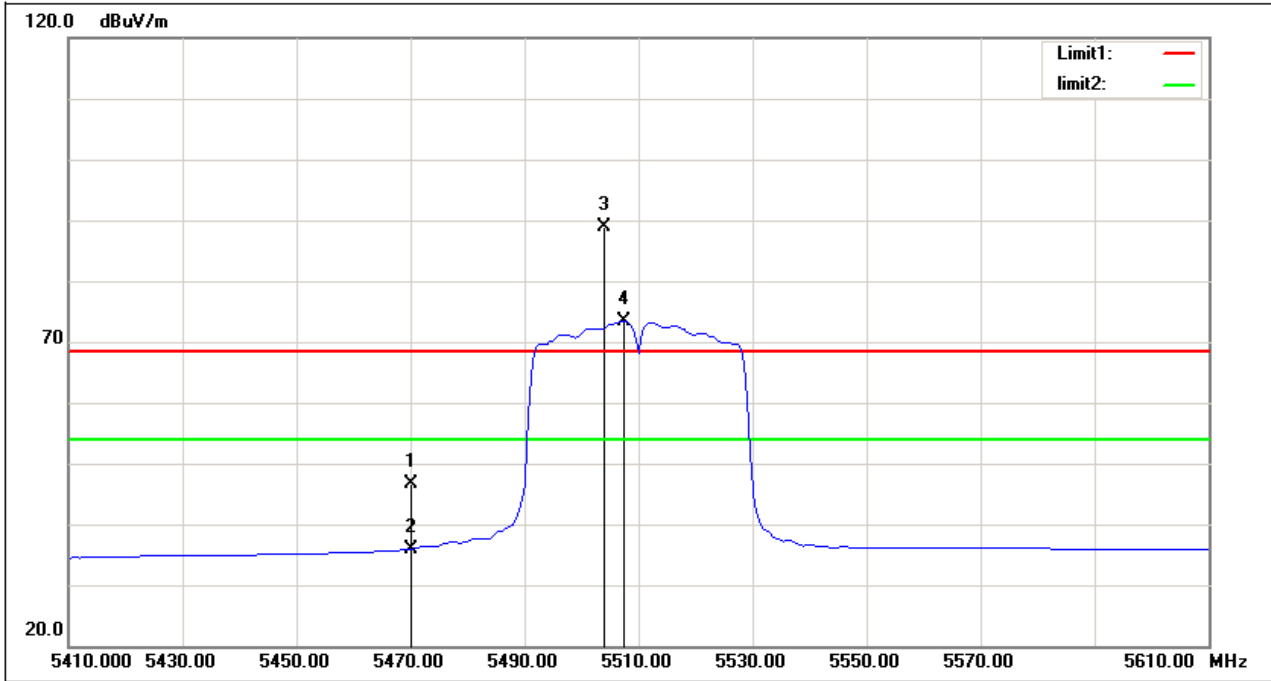
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5307.500	84.23	-5.49	78.74	/	/	AVG
2	5308.500	99.85	-5.49	94.36	/	/	peak
3	5350.000	57.05	-5.30	51.75	68.30	-16.55	peak
4	5350.000	44.53	-5.30	39.23	54.00	-14.77	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz Height:150cm Degree:26°

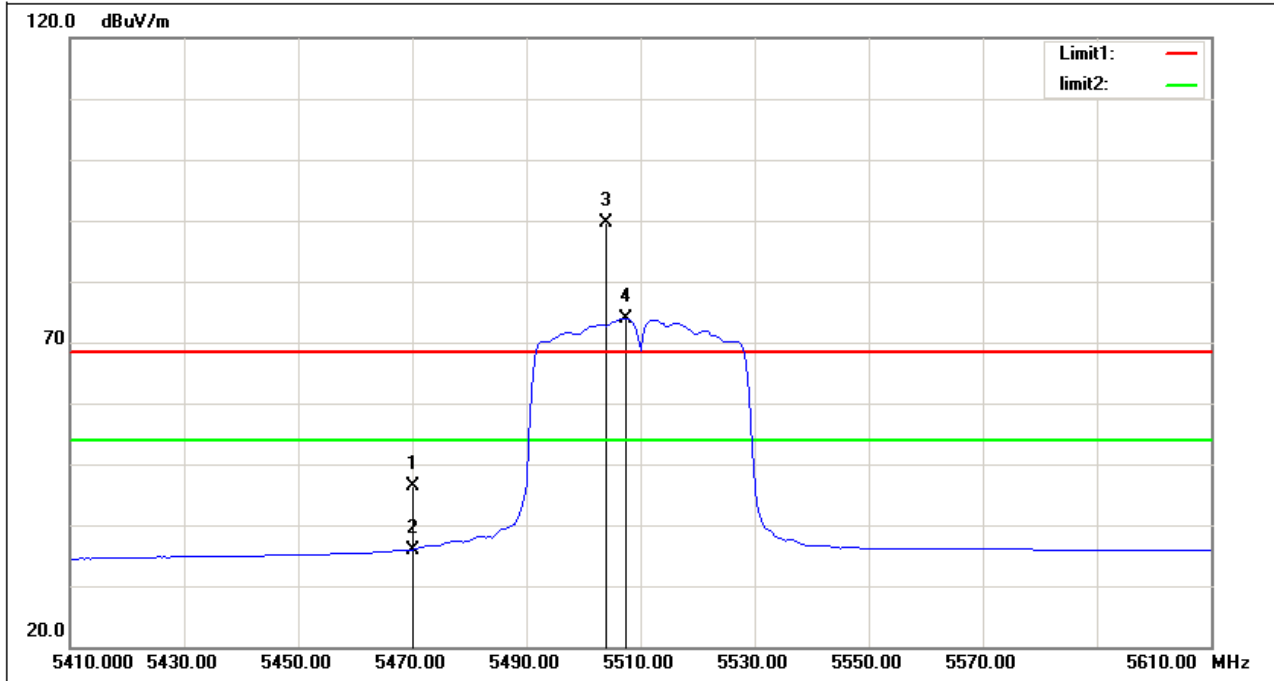
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	51.34	-4.72	46.62	68.30	-21.68	peak
2	5470.000	40.59	-4.72	35.87	54.00	-18.13	AVG
3	5504.000	93.37	-4.56	88.81	/	/	peak
4	5507.500	77.94	-4.56	73.38	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz Height:150cm Degree:153°

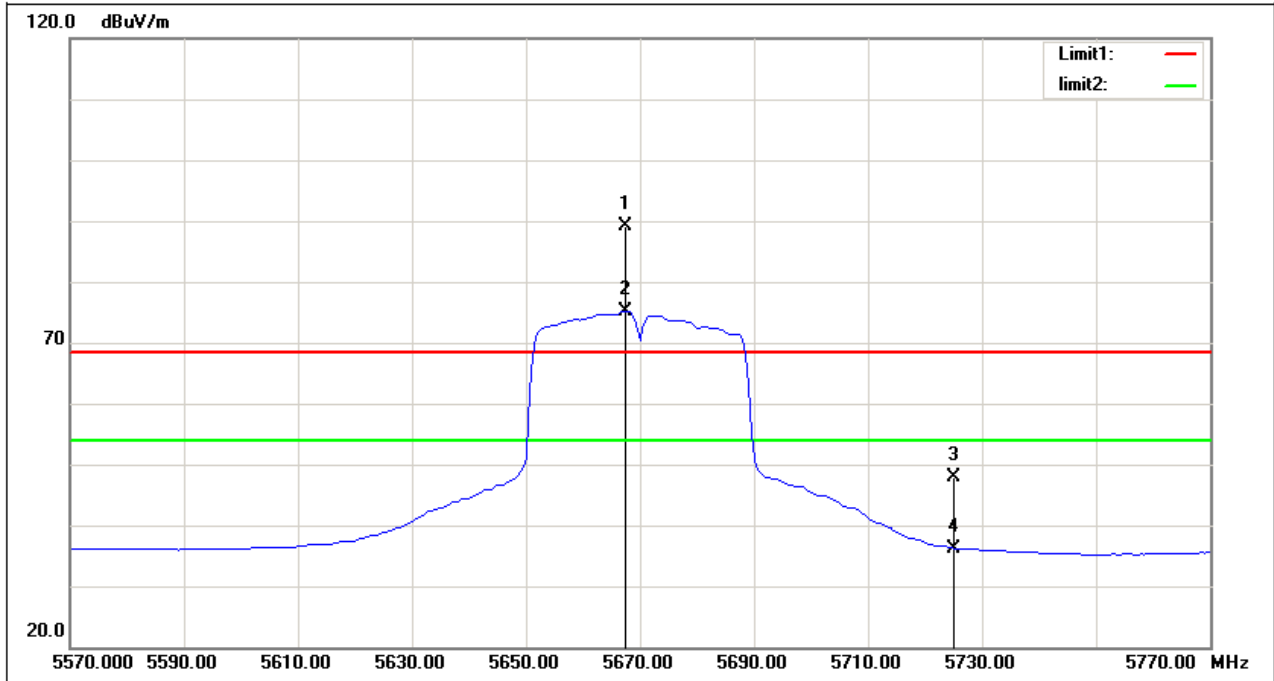
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	51.07	-4.72	46.35	68.30	-21.95	peak
2	5470.000	40.69	-4.72	35.97	54.00	-18.03	AVG
3	5504.000	94.26	-4.56	89.70	/	/	peak
4	5507.500	78.55	-4.56	73.99	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz Height:150cm Degree:22°

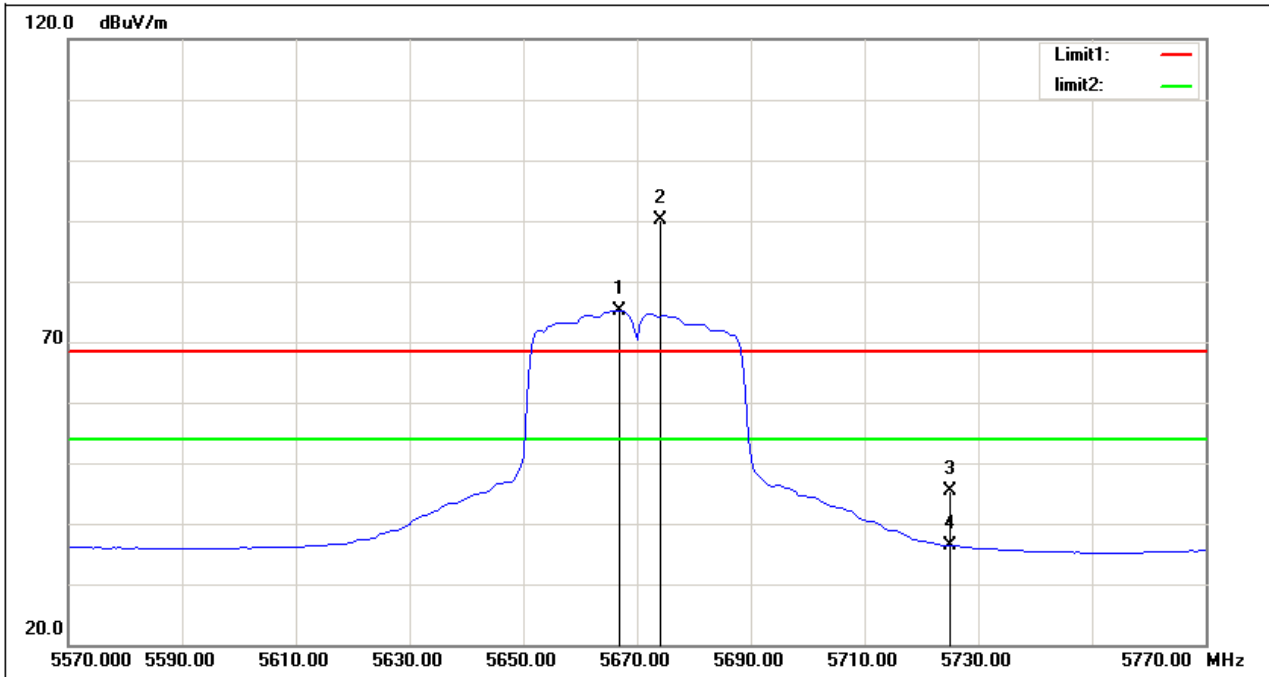
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5667.500	93.40	-4.30	89.10	/	/	peak
2	5667.500	79.41	-4.30	75.11	/	/	AVG
3	5725.000	52.04	-4.21	47.83	68.30	-20.47	peak
4	5725.000	40.45	-4.21	36.24	54.00	-17.76	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz Height:150cm Degree:154°

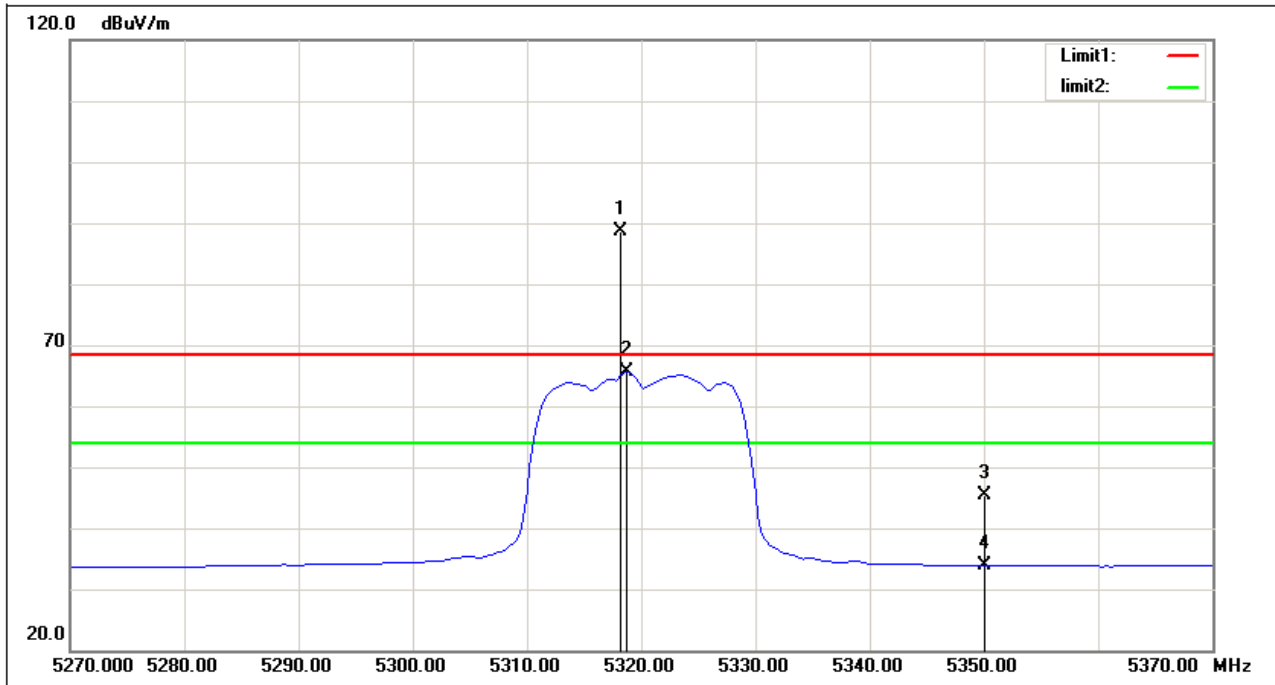
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5667.000	79.45	-4.31	75.14	/	/	AVG
2	5674.000	94.37	-4.29	90.08	/	/	peak
3	5725.000	49.62	-4.21	45.41	68.30	-22.89	peak
4	5725.000	40.56	-4.21	36.35	54.00	-17.65	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz Height:150cm Degree:28°

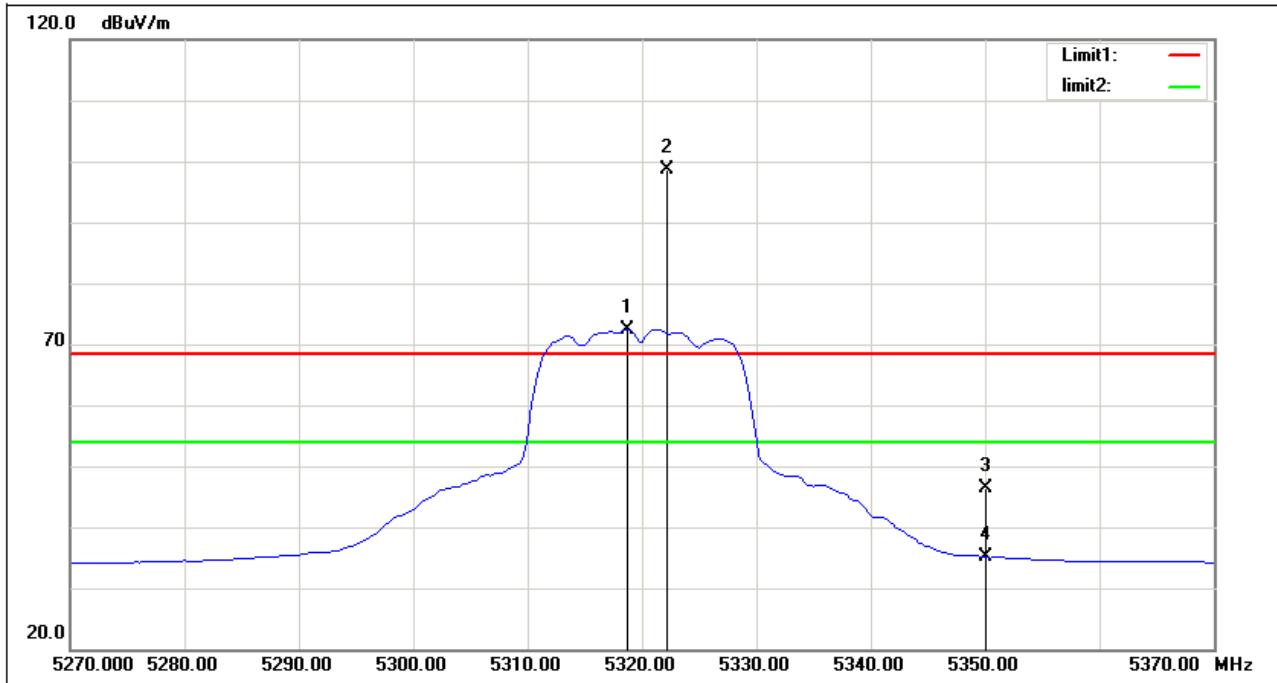
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.250	94.07	-5.45	88.62	/	/	peak
2	5318.750	70.98	-5.45	65.53	/	/	AVG
3	5350.000	50.62	-5.30	45.32	68.30	-22.98	peak
4	5350.000	39.18	-5.30	33.88	54.00	-20.12	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz Height:150cm Degree:149°

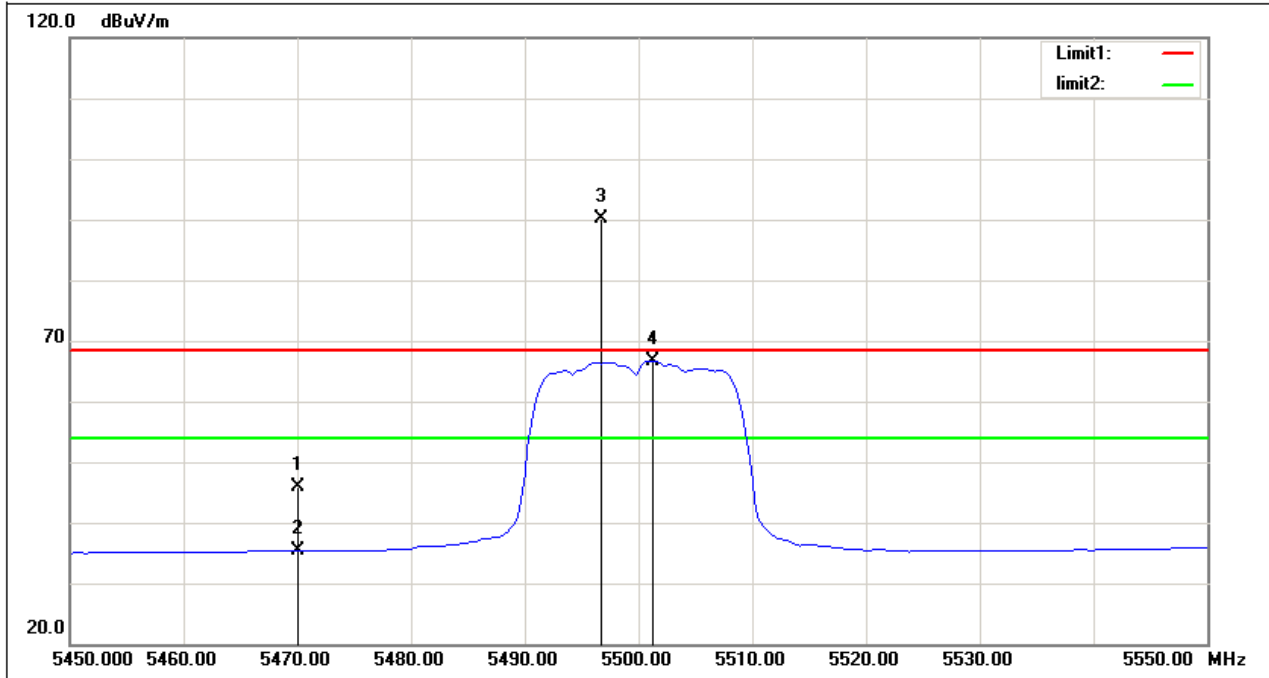
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.750	77.77	-5.45	72.32	/	/	AVG
2	5322.250	104.01	-5.44	98.57	/	/	peak
3	5350.000	51.60	-5.30	46.30	68.30	-22.00	peak
4	5350.000	40.41	-5.30	35.11	54.00	-18.89	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz Height:150cm Degree:31°

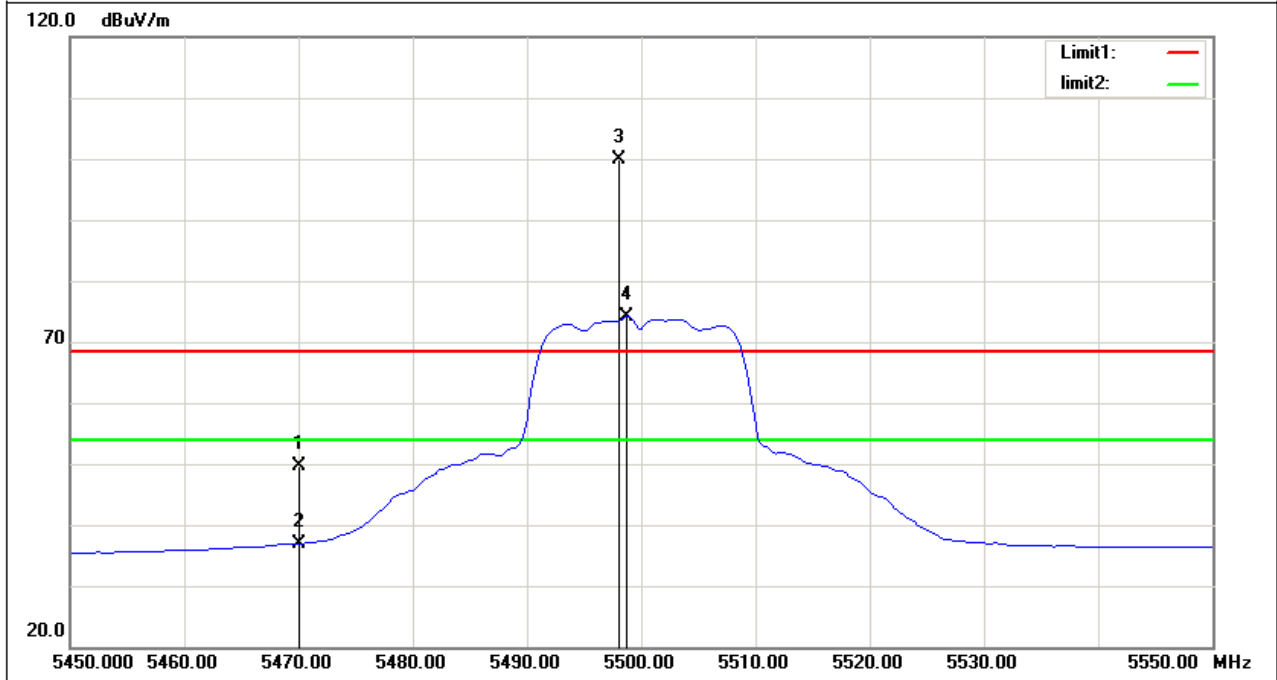
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	50.50	-4.72	45.78	68.30	-22.52	peak
2	5470.000	40.04	-4.72	35.32	54.00	-18.68	AVG
3	5496.750	94.82	-4.60	90.22	/	/	peak
4	5501.250	71.30	-4.57	66.73	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz Height:150cm Degree:163°

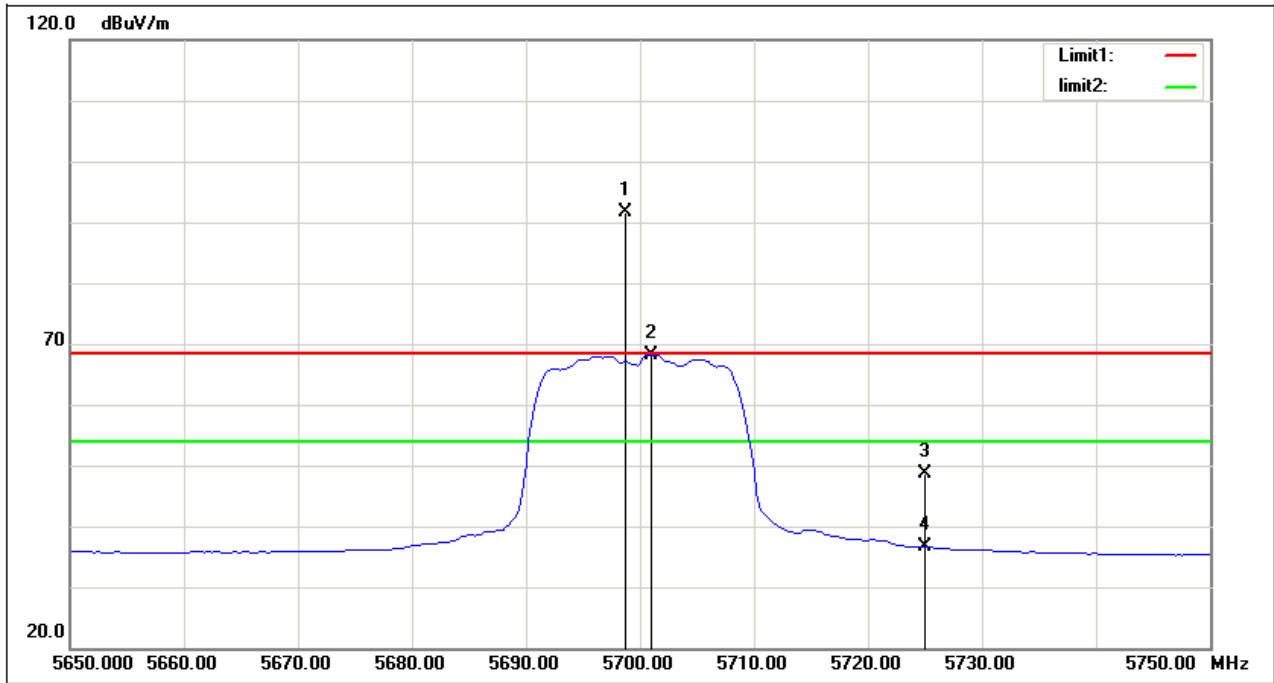
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	54.32	-4.72	49.60	68.30	-18.70	peak
2	5470.000	41.67	-4.72	36.95	54.00	-17.05	AVG
3	5498.000	104.41	-4.58	99.83	/	/	peak
4	5498.750	78.67	-4.58	74.09	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz Height:150cm Degree:32°

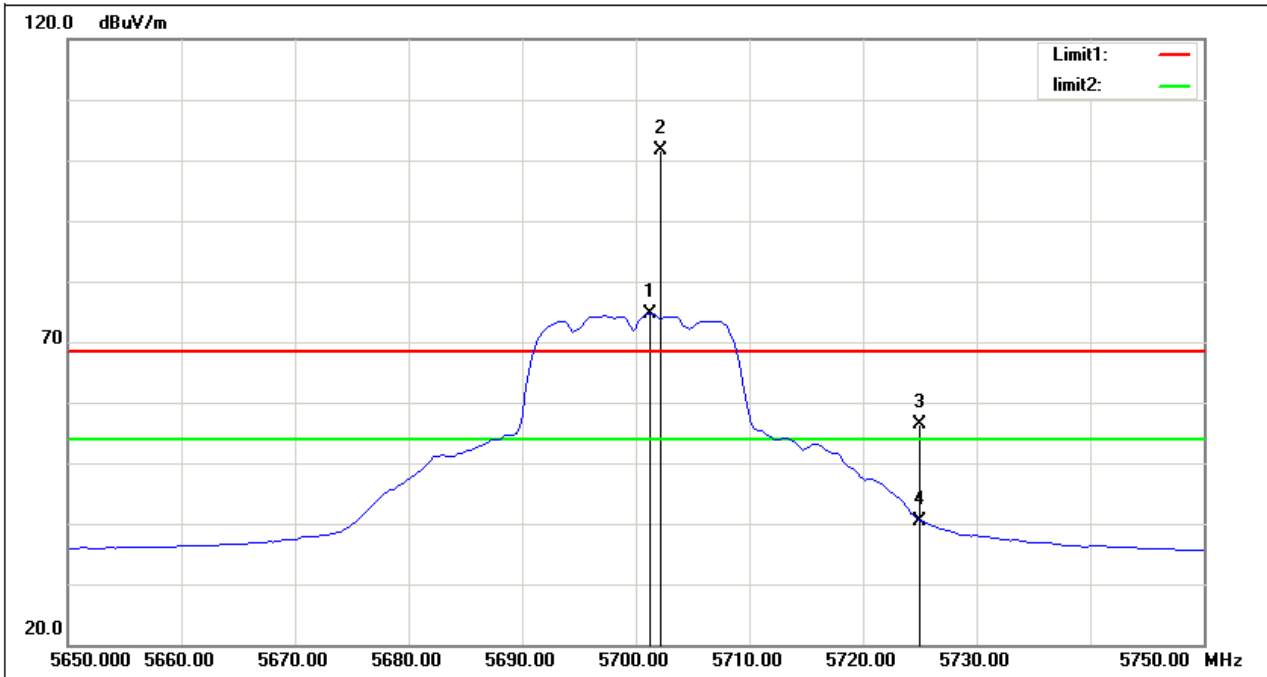
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5698.750	95.98	-4.25	91.73	/	/	peak
2	5701.000	72.45	-4.25	68.20	/	/	AVG
3	5725.000	52.87	-4.21	48.66	68.30	-19.64	peak
4	5725.000	40.74	-4.21	36.53	54.00	-17.47	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz Height:150cm Degree:153°

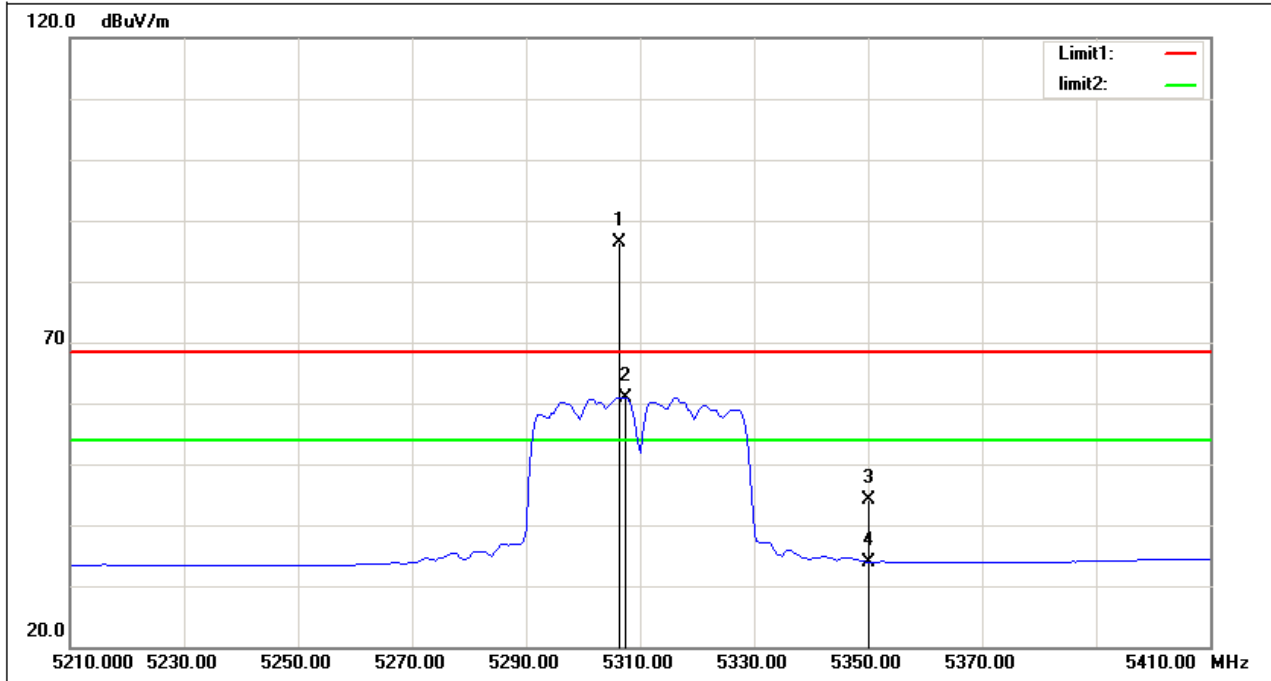
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5701.250	78.99	-4.25	74.74	/	/	AVG
2	5702.250	105.84	-4.25	101.59	/	/	peak
3	5725.000	60.61	-4.21	56.40	68.30	-11.90	peak
4	5725.000	44.69	-4.21	40.48	54.00	-13.52	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz Height:150cm Degree:19°

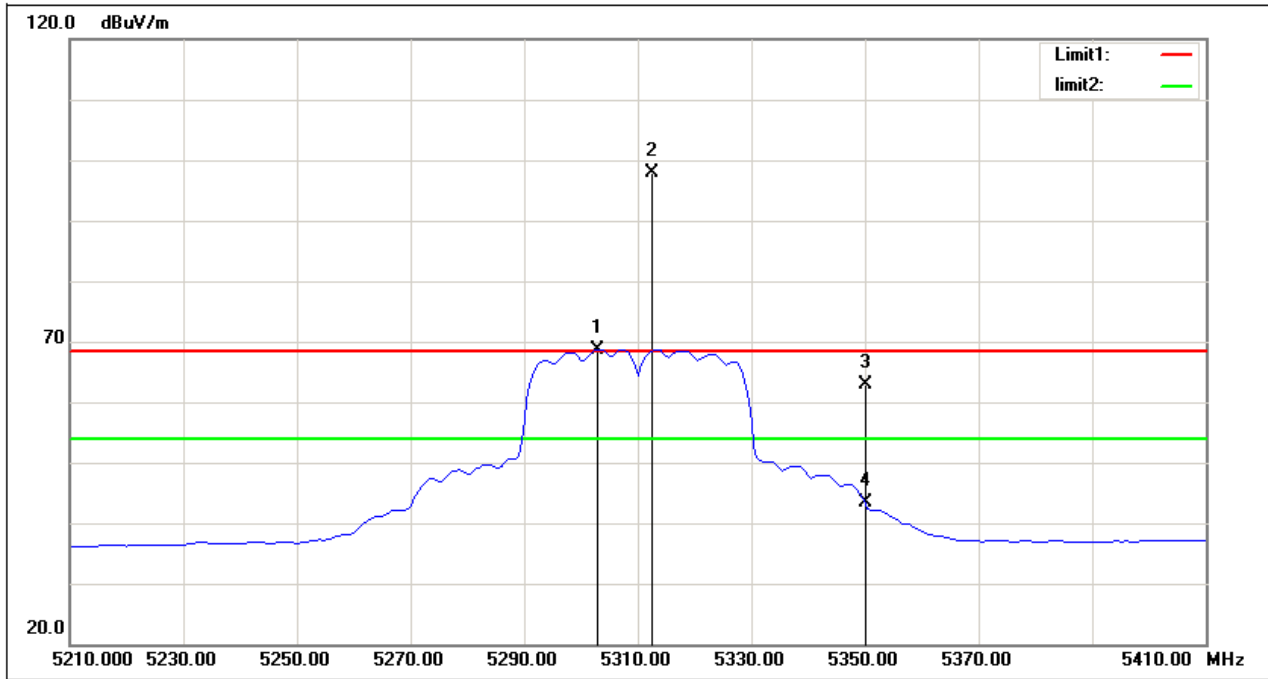
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5306.500	91.97	-5.50	86.47	/	/	peak
2	5307.500	66.46	-5.49	60.97	/	/	AVG
3	5350.000	49.32	-5.30	44.02	68.30	-24.28	peak
4	5350.000	39.29	-5.30	33.99	54.00	-20.01	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz Height:150cm Degree:166°

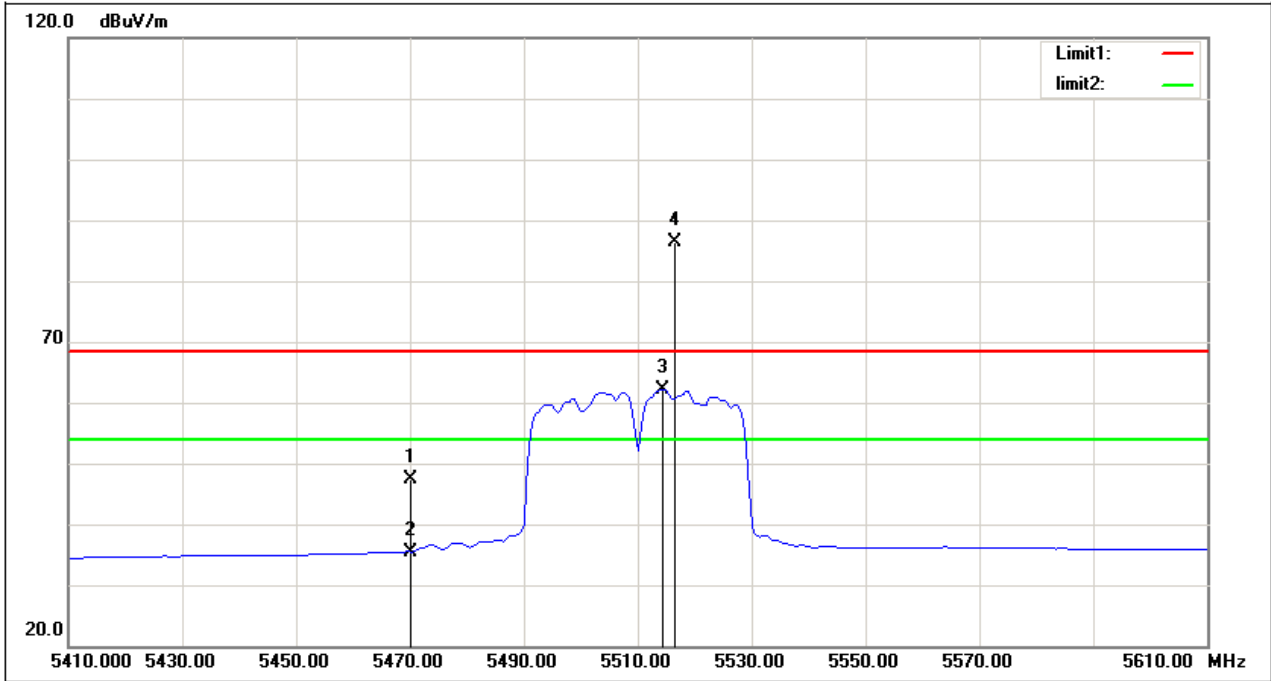
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5303.000	74.26	-5.52	68.74	/	/	AVG
2	5312.500	103.32	-5.48	97.84	/	/	peak
3	5350.000	68.21	-5.30	62.91	68.30	-5.39	peak
4	5350.000	48.56	-5.30	43.26	54.00	-10.74	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz Height:150cm Degree:29°

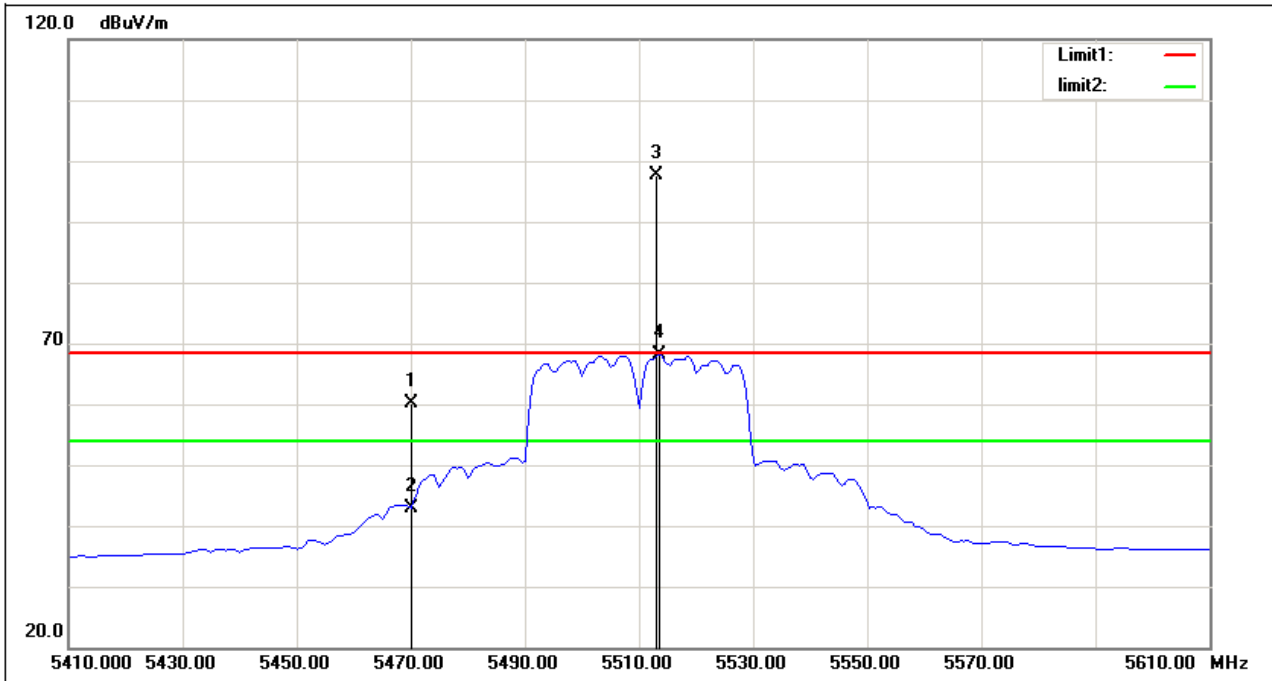
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	52.10	-4.72	47.38	68.30	-20.92	peak
2	5470.000	40.22	-4.72	35.50	54.00	-18.50	AVG
3	5514.500	66.73	-4.55	62.18	/	/	AVG
4	5516.500	91.02	-4.55	86.47	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz Height:150cm Degree:152°

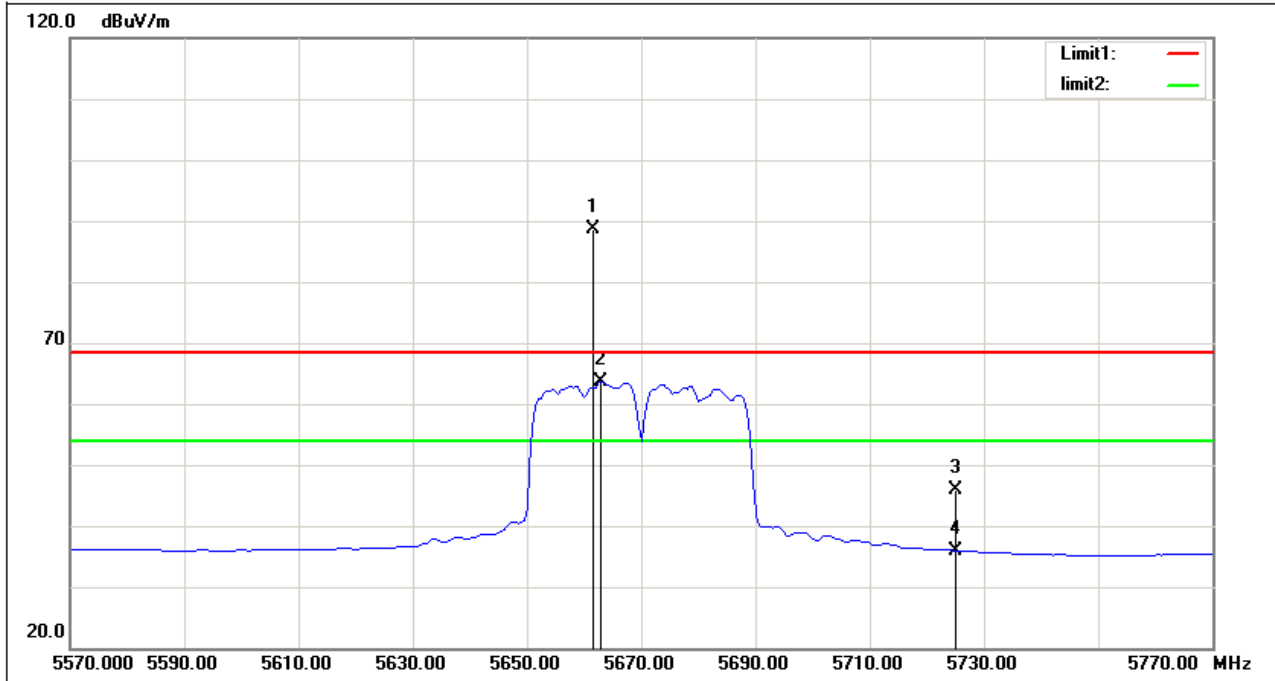
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	64.90	-4.72	60.18	68.30	-8.12	peak
2	5470.000	47.67	-4.72	42.95	54.00	-11.05	AVG
3	5513.000	102.17	-4.55	97.62	/	/	peak
4	5513.500	72.65	-4.55	68.10	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz Height:150cm Degree:32°

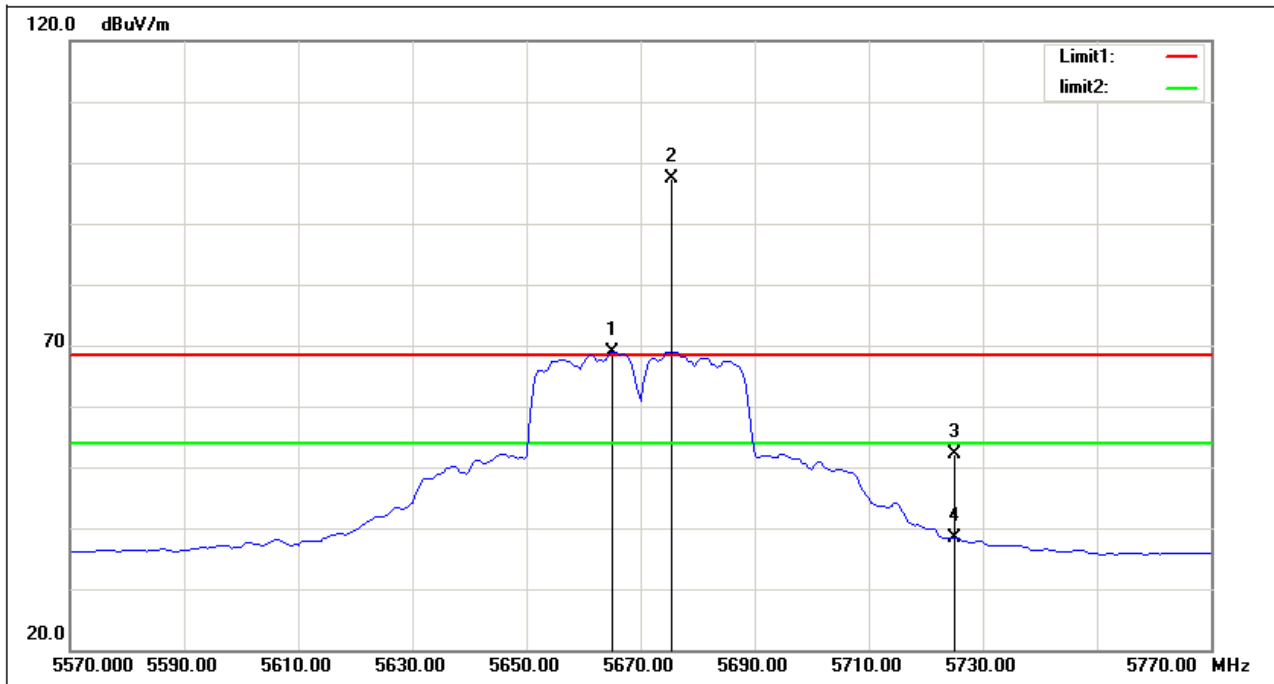
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5661.500	92.86	-4.32	88.54	/	/	peak
2	5663.000	67.84	-4.31	63.53	/	/	AVG
3	5725.000	50.18	-4.21	45.97	68.30	-22.33	peak
4	5725.000	40.14	-4.21	35.93	54.00	-18.07	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz Height:150cm Degree:152°

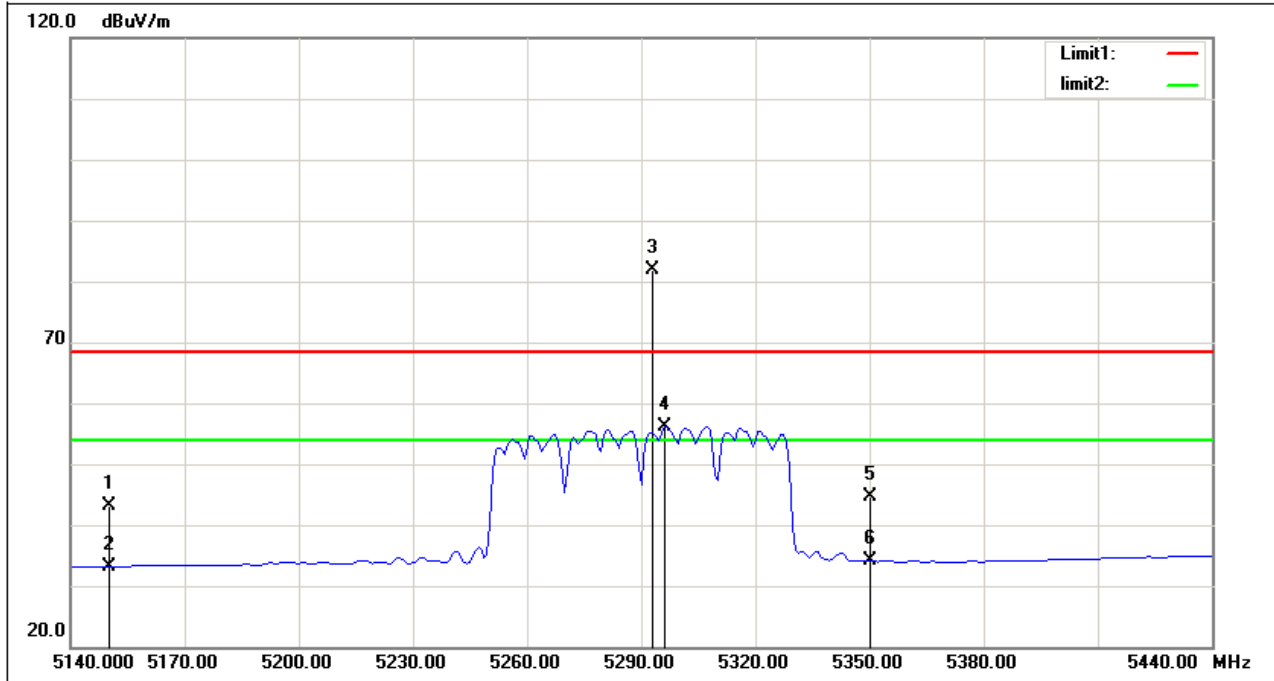
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5665.000	73.21	-4.31	68.90	/	/	AVG
2	5675.500	101.58	-4.29	97.29	/	/	peak
3	5725.000	56.36	-4.21	52.15	68.30	-16.15	peak
4	5725.000	42.62	-4.21	38.41	54.00	-15.59	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz Height:150cm Degree:28°

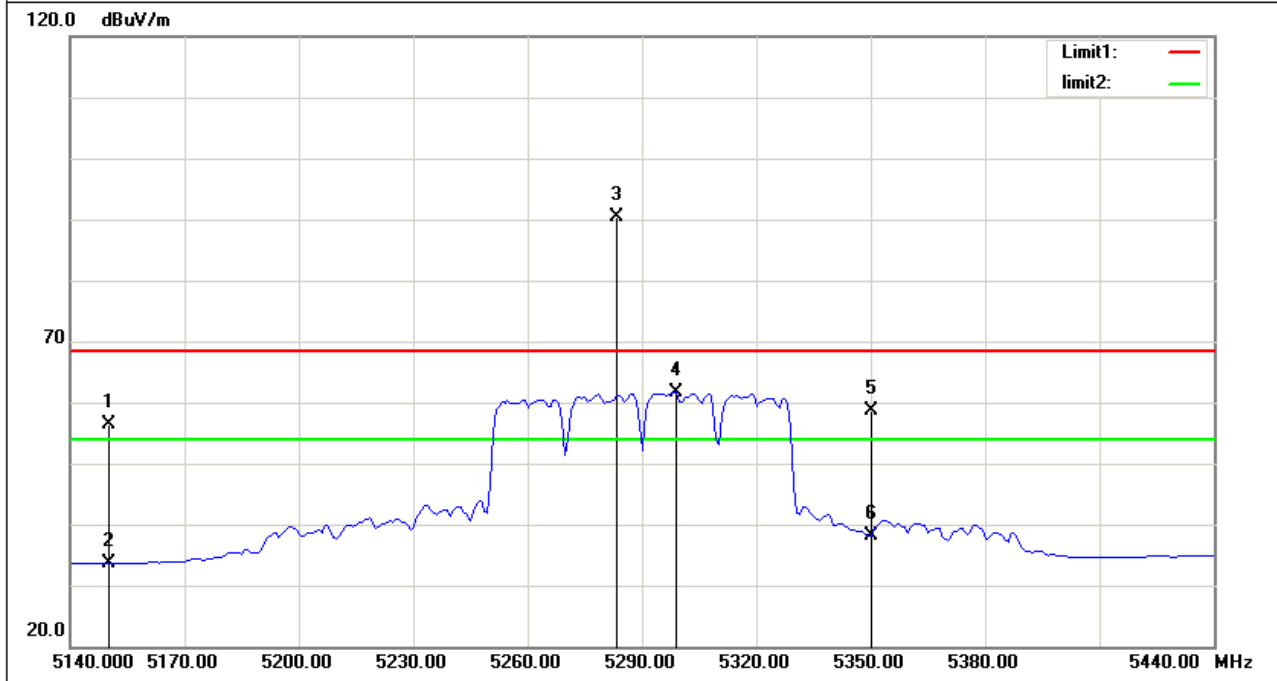
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	49.49	-6.26	43.23	68.30	-25.07	peak
2	5150.000	39.46	-6.26	33.20	54.00	-20.80	AVG
3	5293.000	87.55	-5.57	81.98	/	/	peak
4	5296.000	61.69	-5.56	56.13	/	/	AVG
5	5350.000	49.83	-5.30	44.53	68.30	-23.77	peak
6	5350.000	39.34	-5.30	34.04	54.00	-19.96	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz Height:150cm Degree:156°

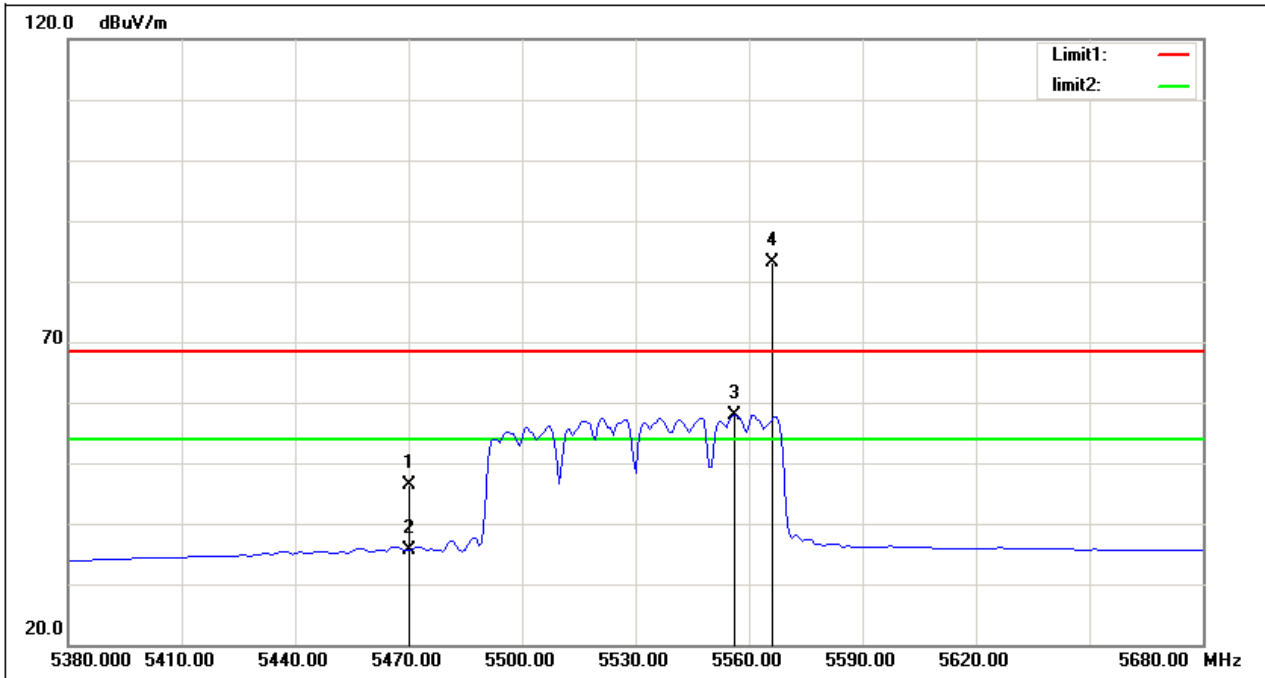
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	62.58	-6.26	56.32	68.30	-11.98	peak
2	5150.000	39.86	-6.26	33.60	54.00	-20.40	AVG
3	5283.250	96.02	-5.61	90.41	/	/	peak
4	5299.000	67.28	-5.54	61.74	/	/	AVG
5	5350.000	63.92	-5.30	58.62	68.30	-9.68	peak
6	5350.000	43.43	-5.30	38.13	54.00	-15.87	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz Height:150cm Degree:23°

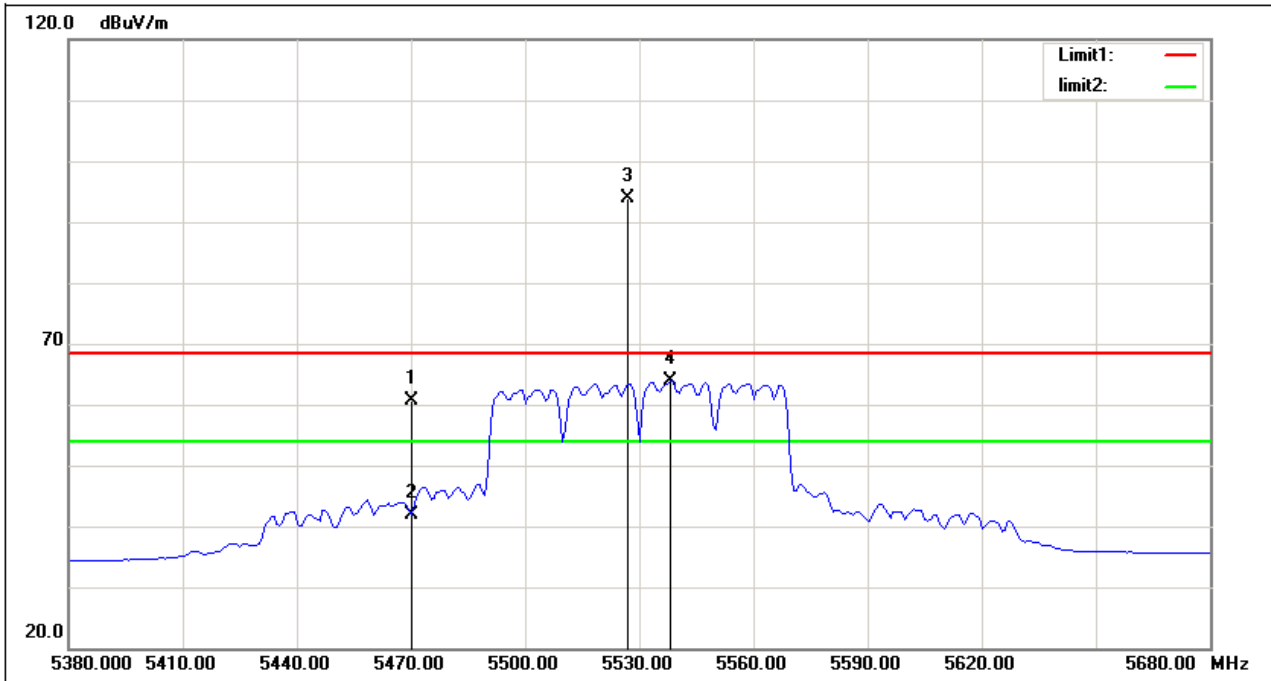
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	51.10	-4.72	46.38	68.30	-21.92	peak
2	5470.000	40.26	-4.72	35.54	54.00	-18.46	AVG
3	5556.250	62.42	-4.49	57.93	/	/	AVG
4	5566.000	87.54	-4.47	83.07	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz Height:150cm Degree:153°

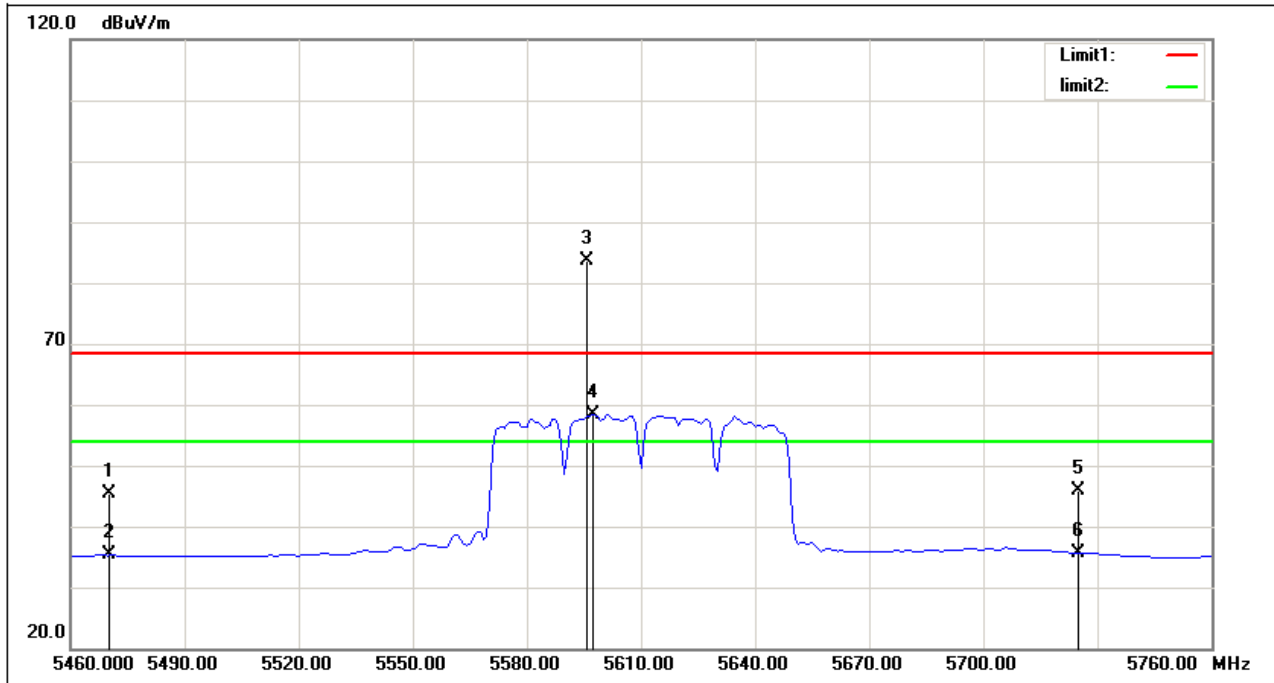
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	65.31	-4.72	60.59	68.30	-7.71	peak
2	5470.000	46.50	-4.72	41.78	54.00	-12.22	AVG
3	5527.000	98.33	-4.53	93.80	/	/	peak
4	5538.250	68.28	-4.51	63.77	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz Height:150cm Degree:33°

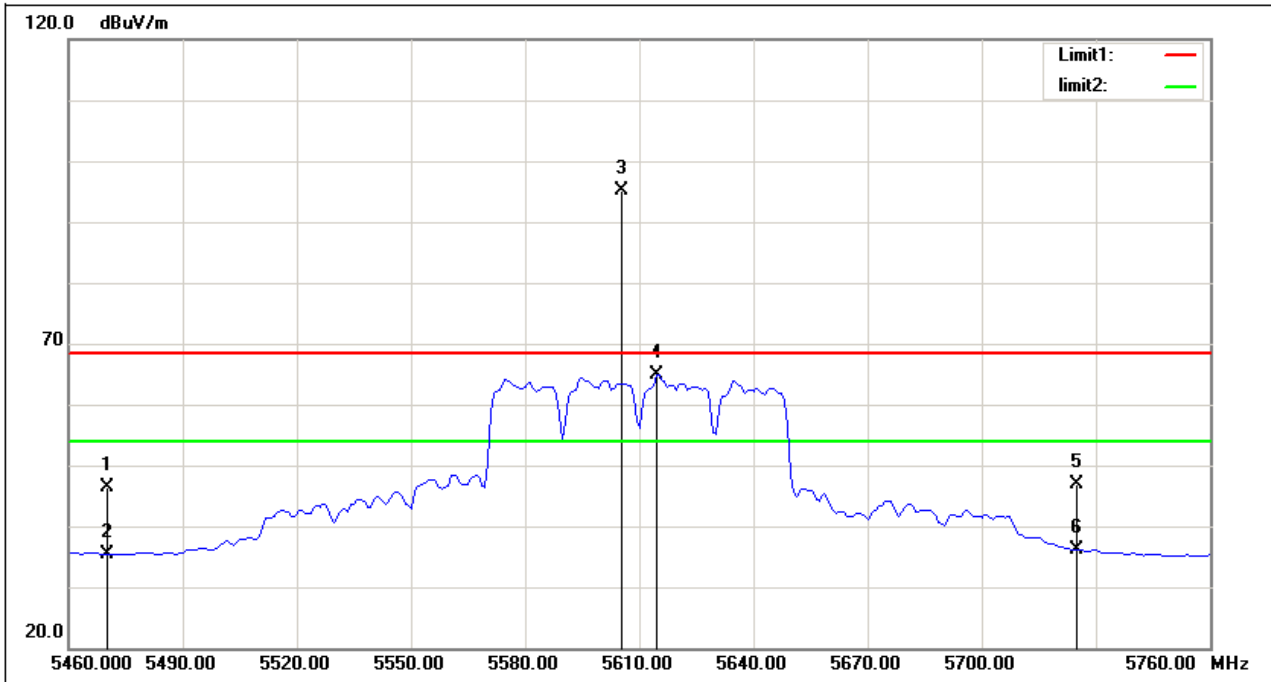
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	50.05	-4.72	45.33	68.30	-22.97	peak
2	5470.000	40.00	-4.72	35.28	54.00	-18.72	AVG
3	5595.750	87.99	-4.43	83.56	/	/	peak
4	5597.250	62.72	-4.43	58.29	/	/	AVG
5	5725.000	50.09	-4.21	45.88	68.30	-22.42	peak
6	5725.000	39.86	-4.21	35.65	54.00	-18.35	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz Height:150cm Degree:160°

Horizontal

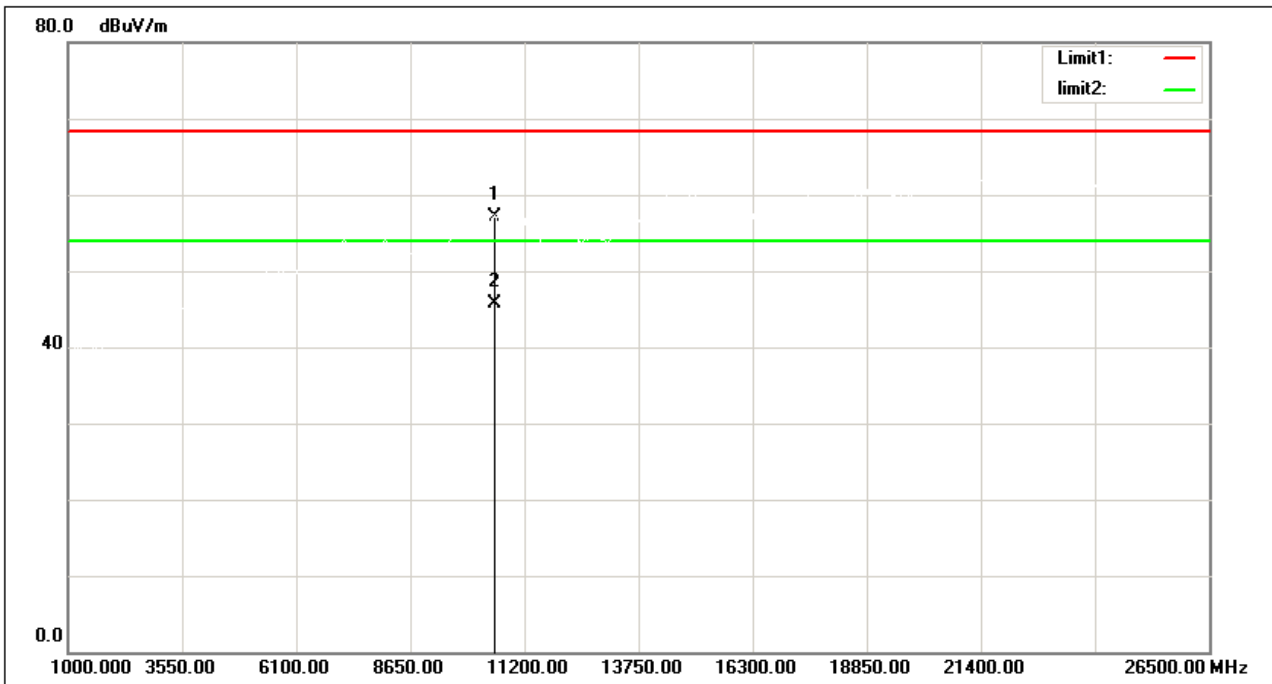


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	51.05	-4.72	46.33	68.30	-21.97	peak
2	5470.000	40.18	-4.72	35.46	54.00	-18.54	AVG
3	5605.500	99.58	-4.40	95.18	/	/	peak
4	5614.500	69.22	-4.39	64.83	/	/	AVG
5	5725.000	51.09	-4.21	46.88	68.30	-21.42	peak
6	5725.000	40.31	-4.21	36.10	54.00	-17.90	AVG

5.9 TEST RESULTS - ABOVE1000 MHz (HARMONIC)

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz Height:150cm Degree:36°

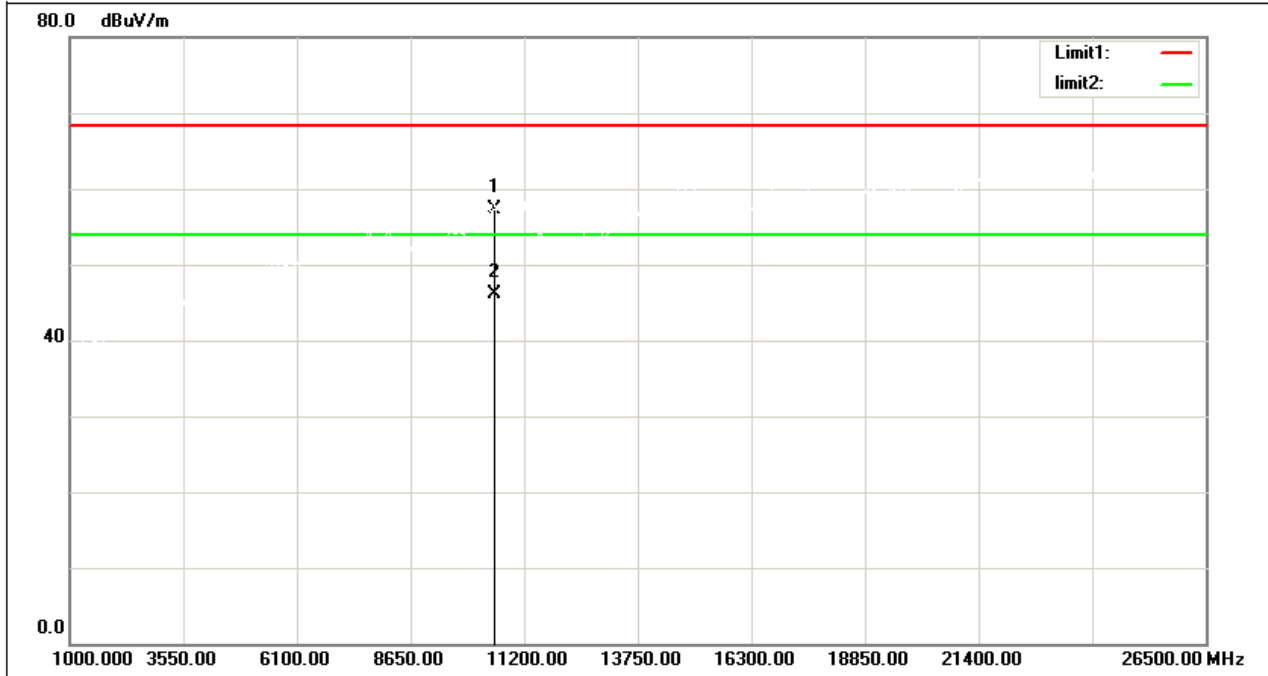
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	50.36	6.74	57.10	68.30	-11.20	peak
2	10520.000	38.95	6.74	45.69	54.00	-8.31	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5260 MHz Height:150cm Degree:149°

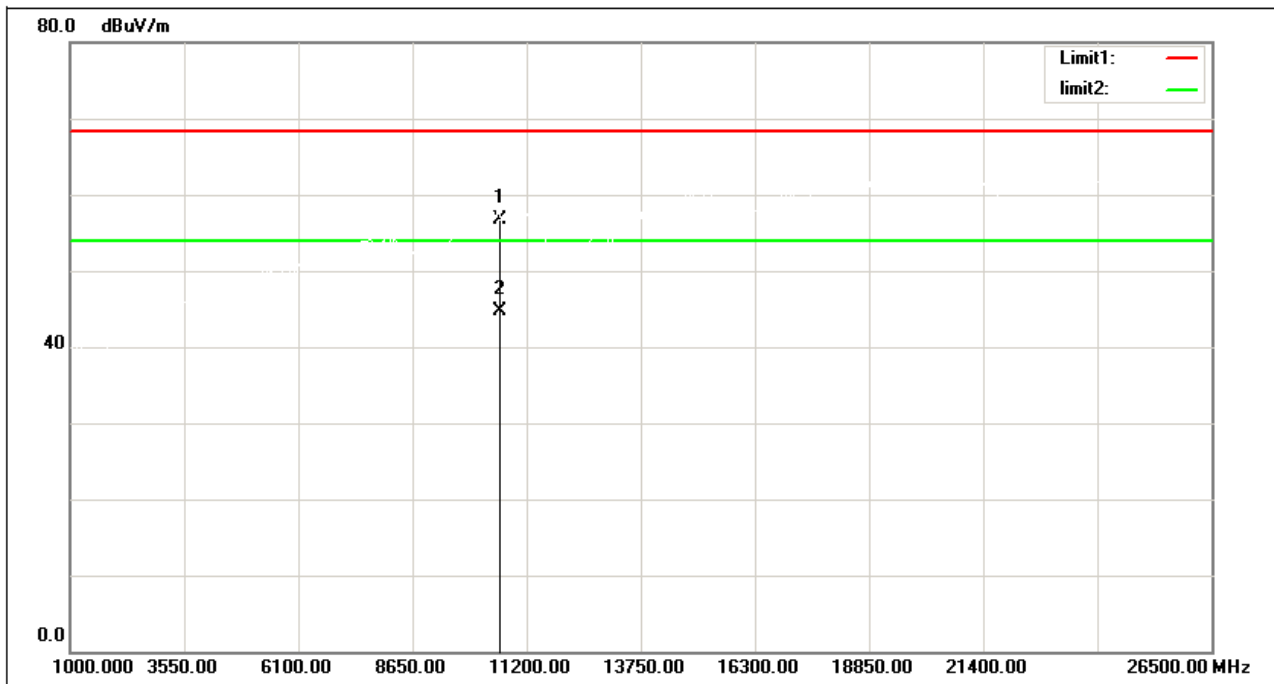
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	50.61	6.74	57.35	68.30	-10.95	peak
2	10520.000	39.29	6.74	46.03	54.00	-7.97	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz Height:150cm Degree:29°

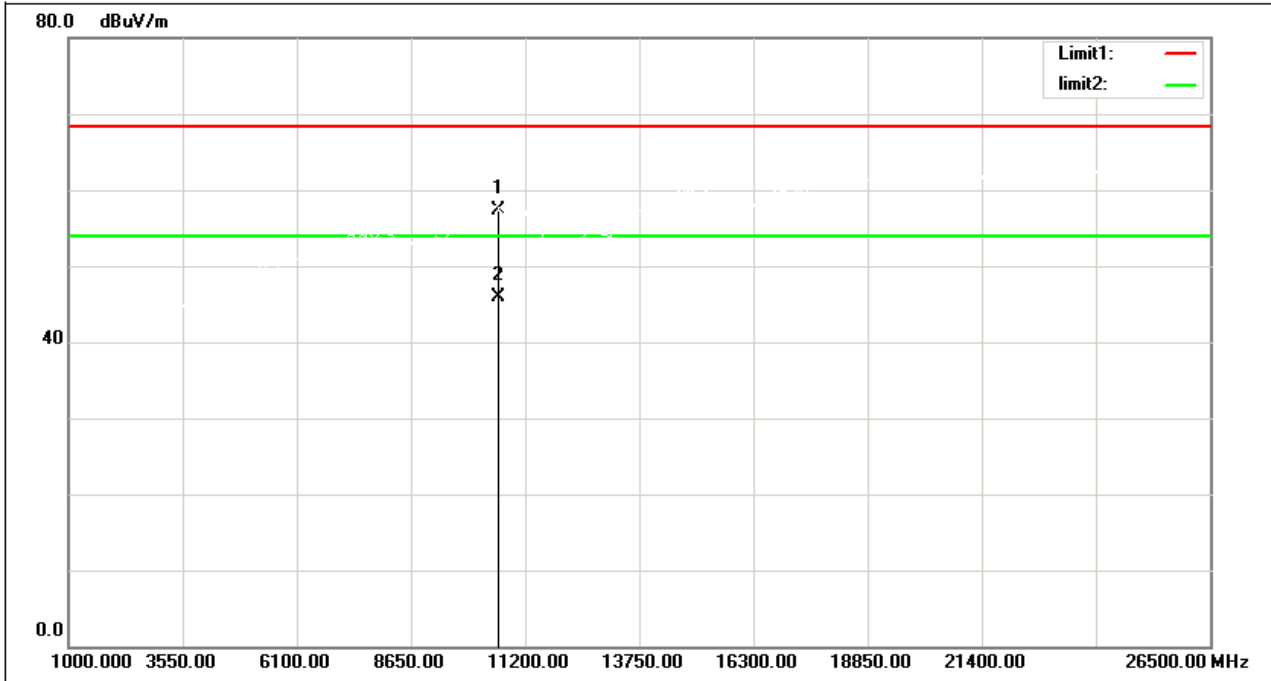
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	49.70	7.00	56.70	68.30	-11.60	peak
2	10600.000	37.67	7.00	44.67	54.00	-9.33	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5300 MHz Height:150cm Degree:163°

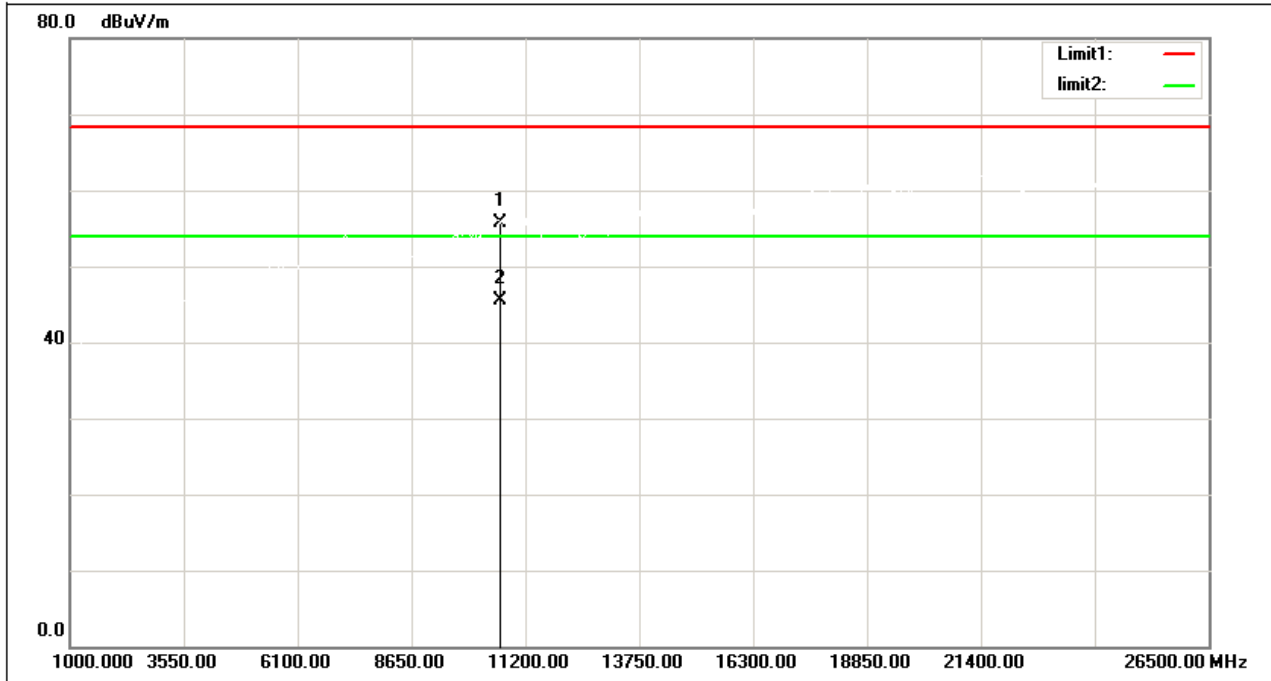
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	50.36	7.00	57.36	68.30	-10.94	peak
2	10600.000	38.87	7.00	45.87	54.00	-8.13	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz Height:150cm Degree:25°

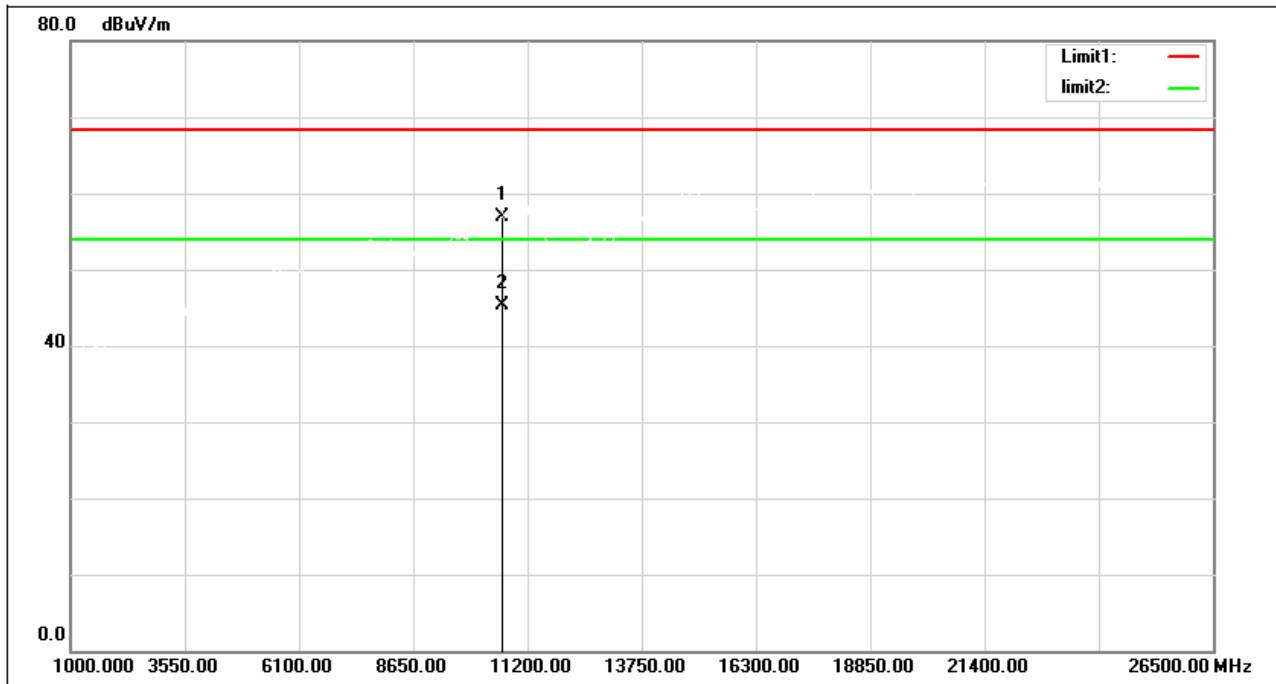
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	48.55	7.13	55.68	68.30	-12.62	peak
2	10640.000	38.36	7.13	45.49	54.00	-8.51	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX A Mode 5320 MHz Height:150cm Degree:162°

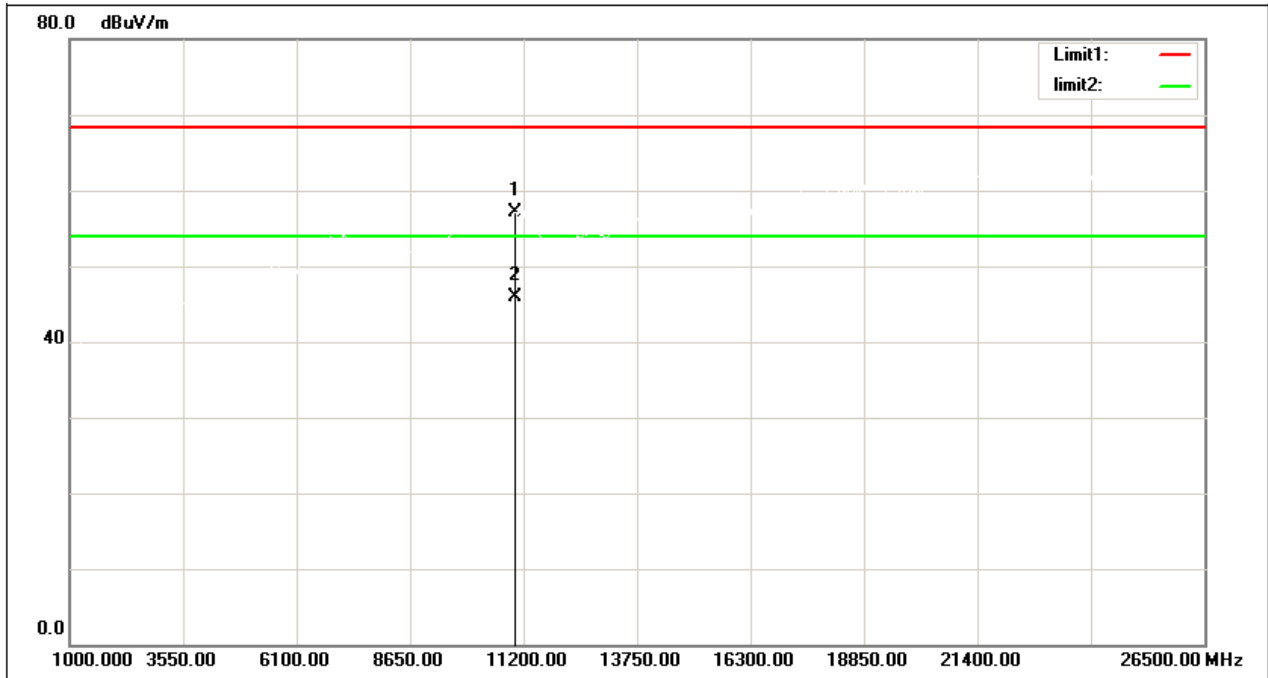
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	49.87	7.13	57.00	68.30	-11.30	peak
2	10640.000	38.13	7.13	45.26	54.00	-8.74	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz Height:150cm Degree:29°

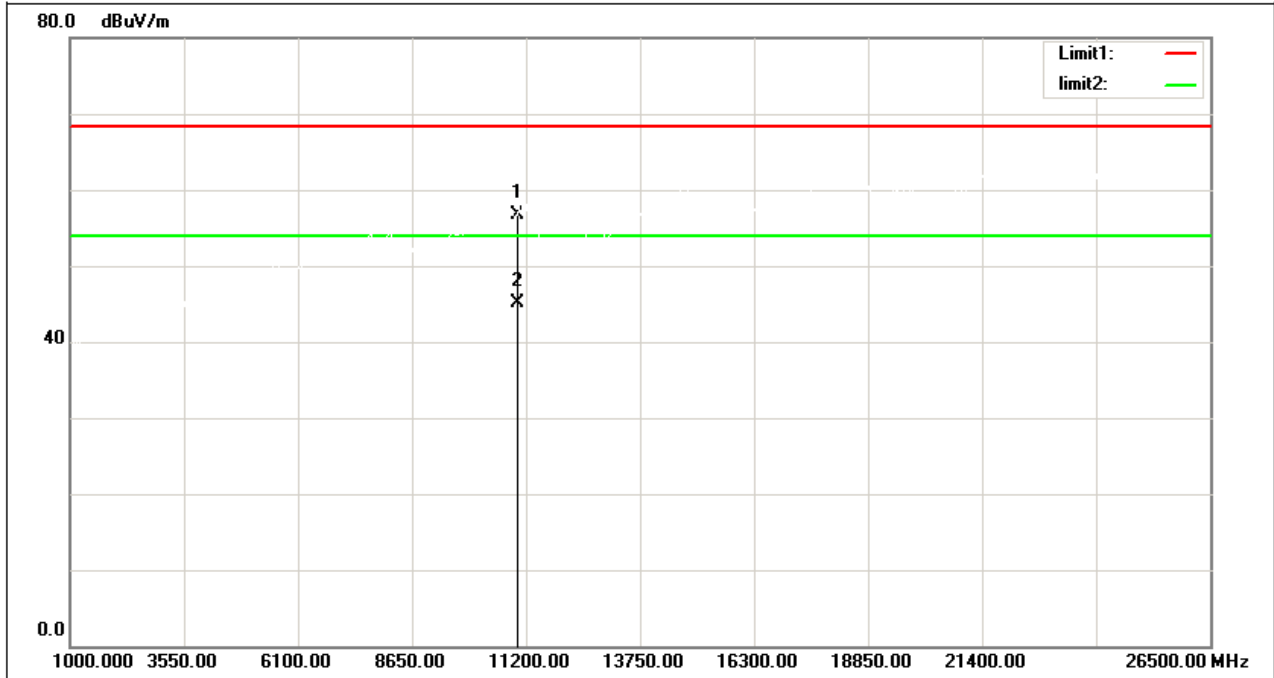
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	48.80	8.32	57.12	68.30	-11.18	peak
2	11000.000	37.66	8.32	45.98	54.00	-8.02	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5500 MHz Height:150cm Degree:153°

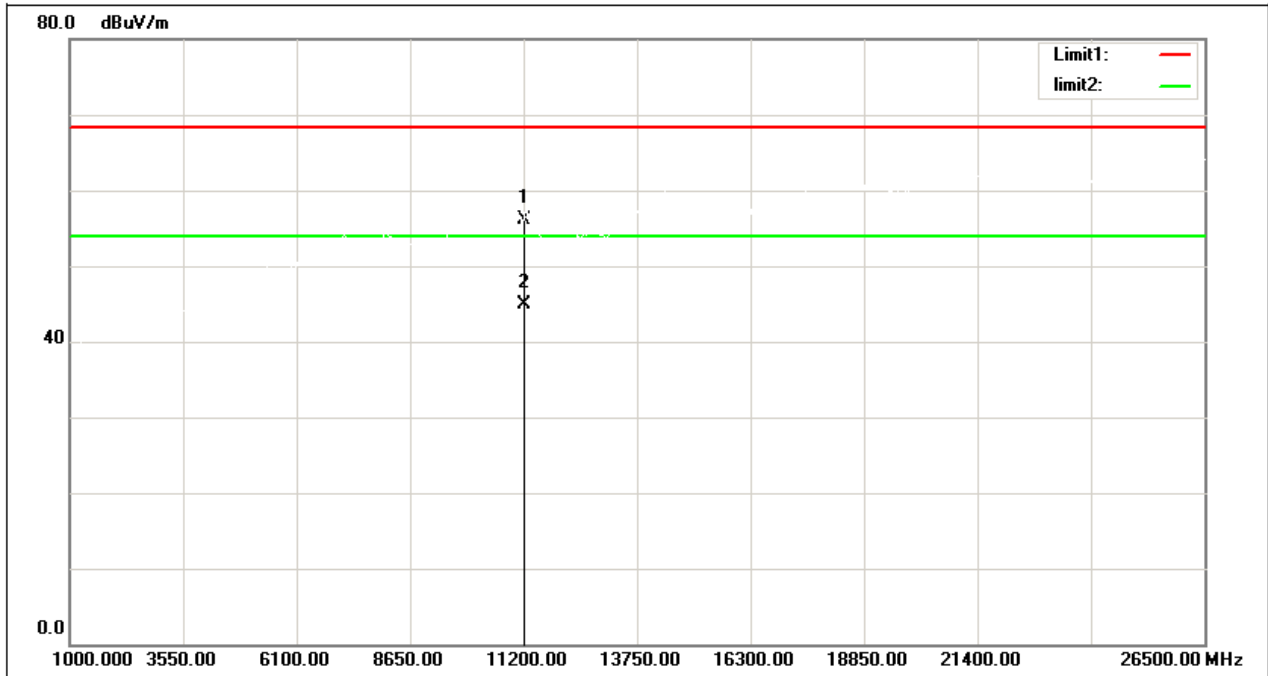
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	48.41	8.32	56.73	68.30	-11.57	peak
2	11000.000	36.80	8.32	45.12	54.00	-8.88	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5600 MHz Height:150cm Degree:29°

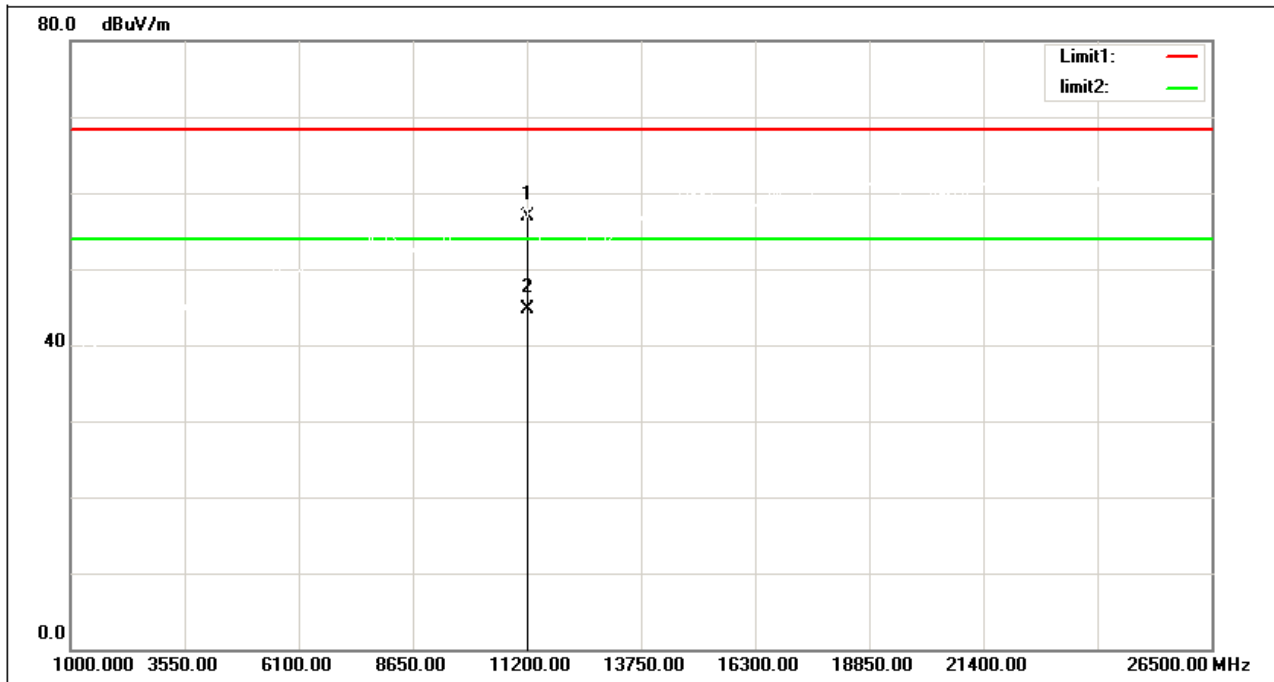
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	47.85	8.21	56.06	68.30	-12.24	peak
2	11200.000	36.64	8.21	44.85	54.00	-9.15	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5600 MHz Height:150cm Degree:162°

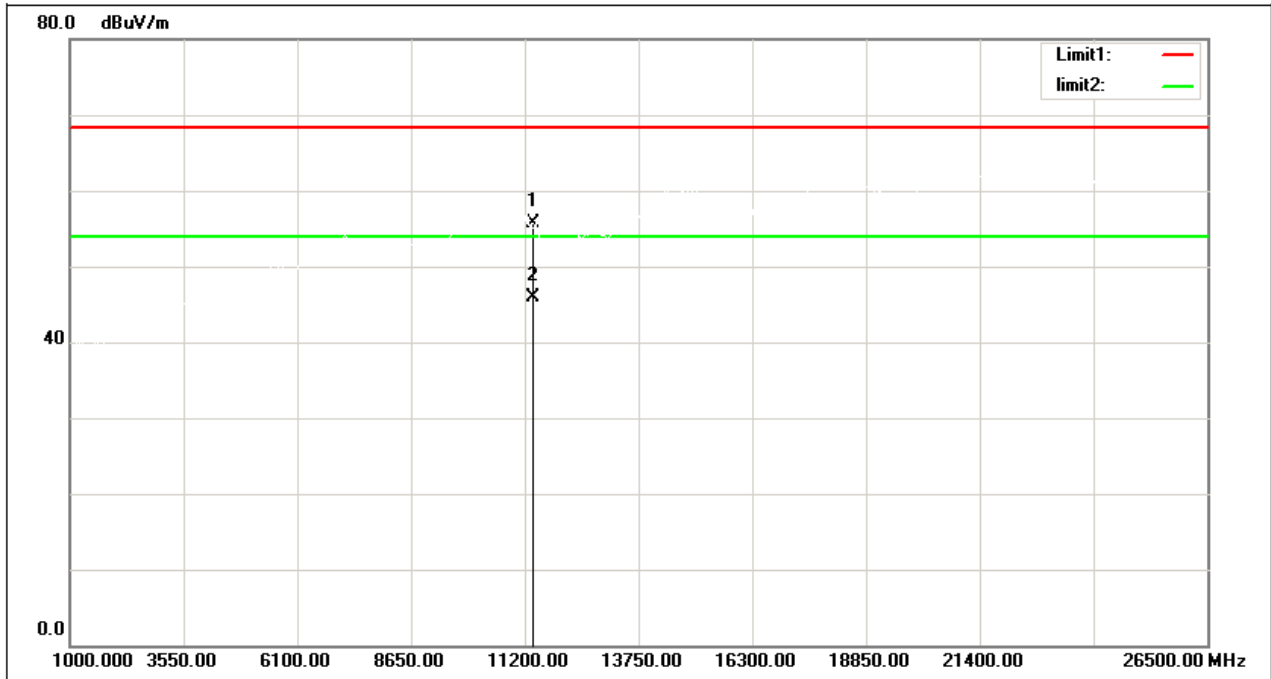
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	48.61	8.21	56.82	68.30	-11.48	peak
2	11200.000	36.41	8.21	44.62	54.00	-9.38	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz Height:150cm Degree:31°

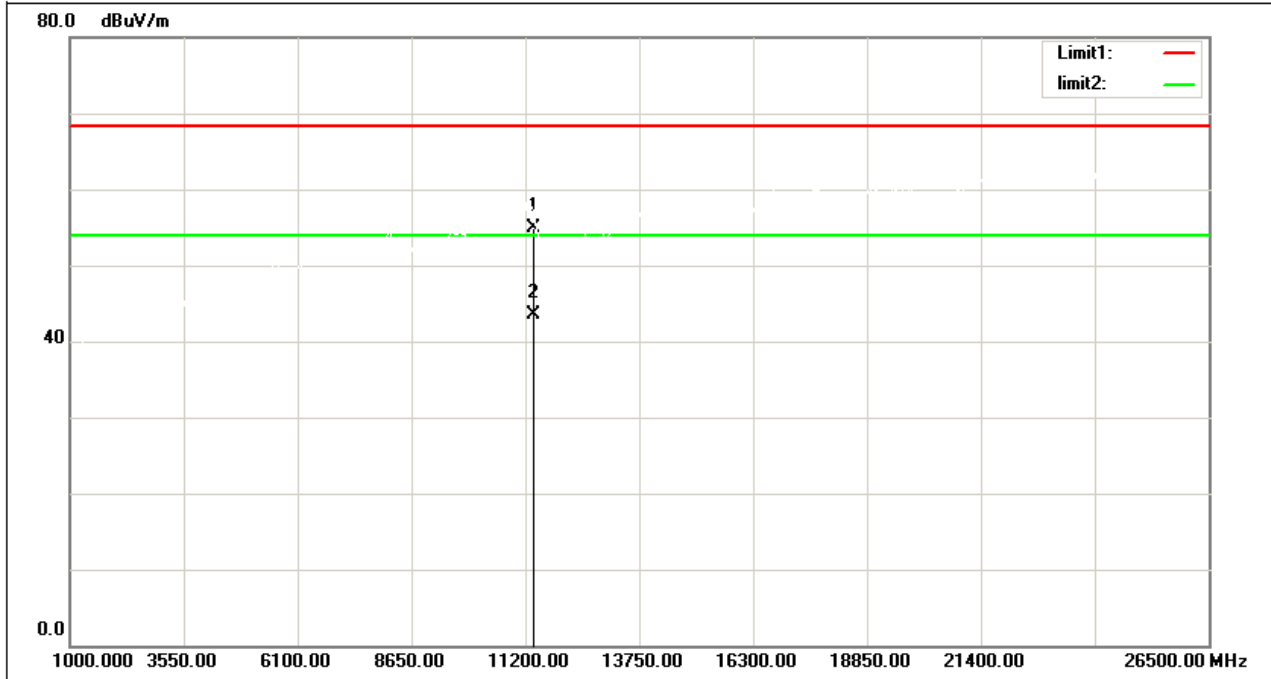
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	47.53	8.10	55.63	68.30	-12.67	peak
2	11400.000	37.71	8.10	45.81	54.00	-8.19	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX A Mode 5700 MHz Height:150cm Degree:158°

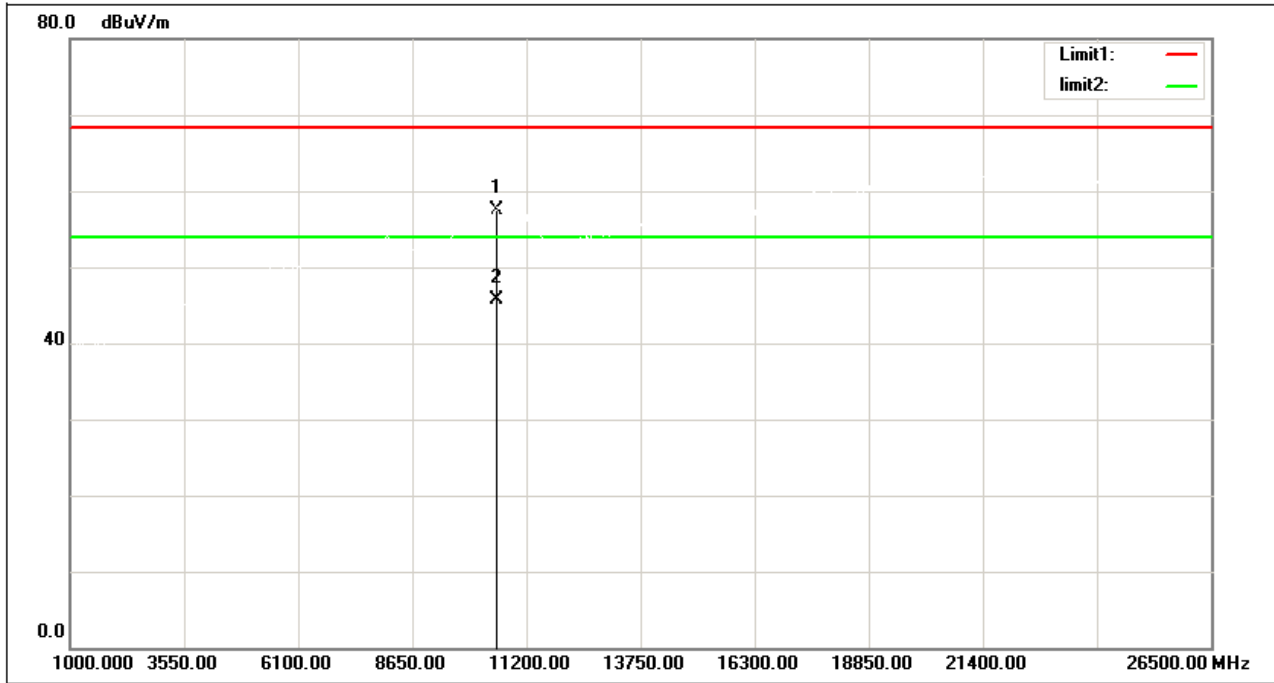
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	46.87	8.10	54.97	68.30	-13.33	peak
2	11400.000	35.46	8.10	43.56	54.00	-10.44	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz Height:150cm Degree:34°

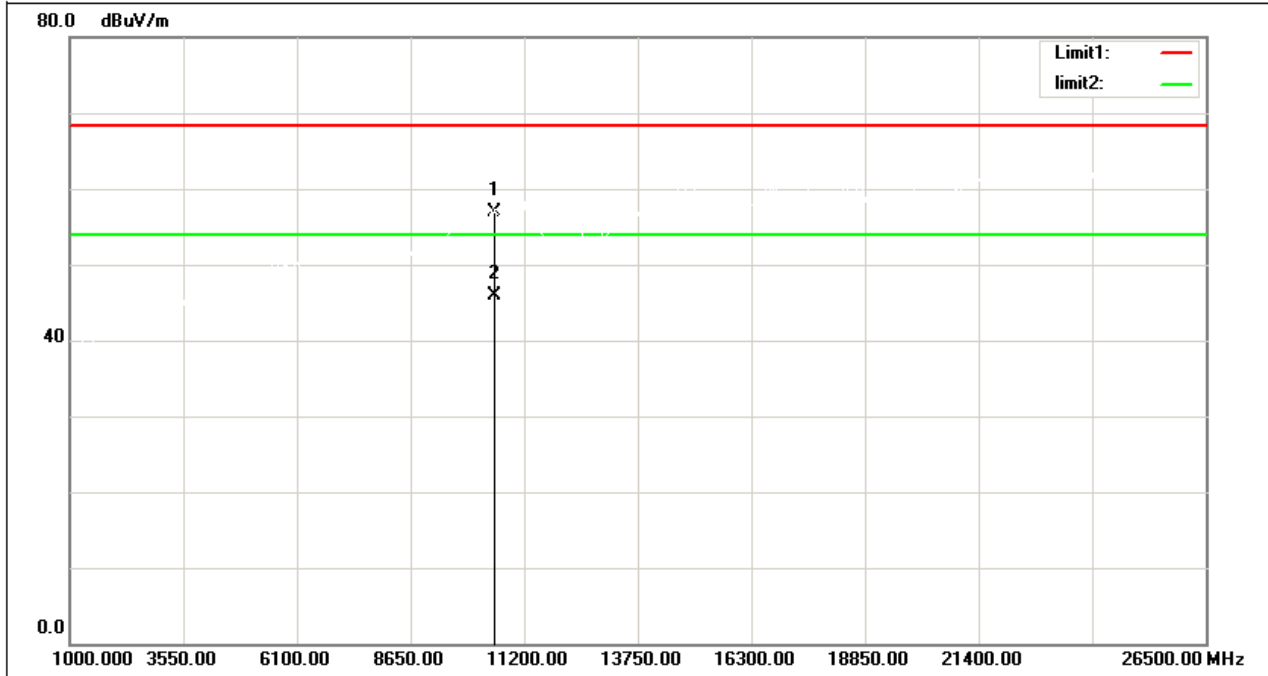
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	50.86	6.74	57.60	68.30	-10.70	peak
2	10520.000	38.99	6.74	45.73	54.00	-8.27	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5260 MHz Height:150cm Degree:160°

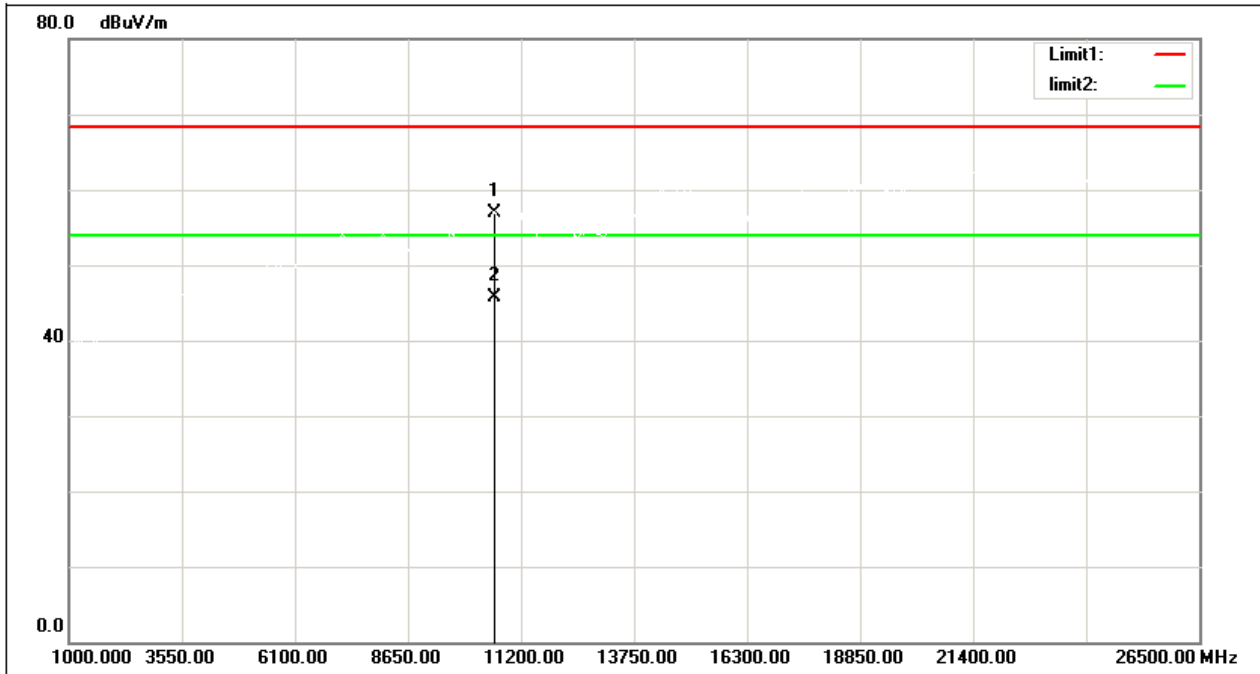
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	50.11	6.74	56.85	68.30	-11.45	peak
2	10520.000	39.09	6.74	45.83	54.00	-8.17	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz Height:150cm Degree:38°

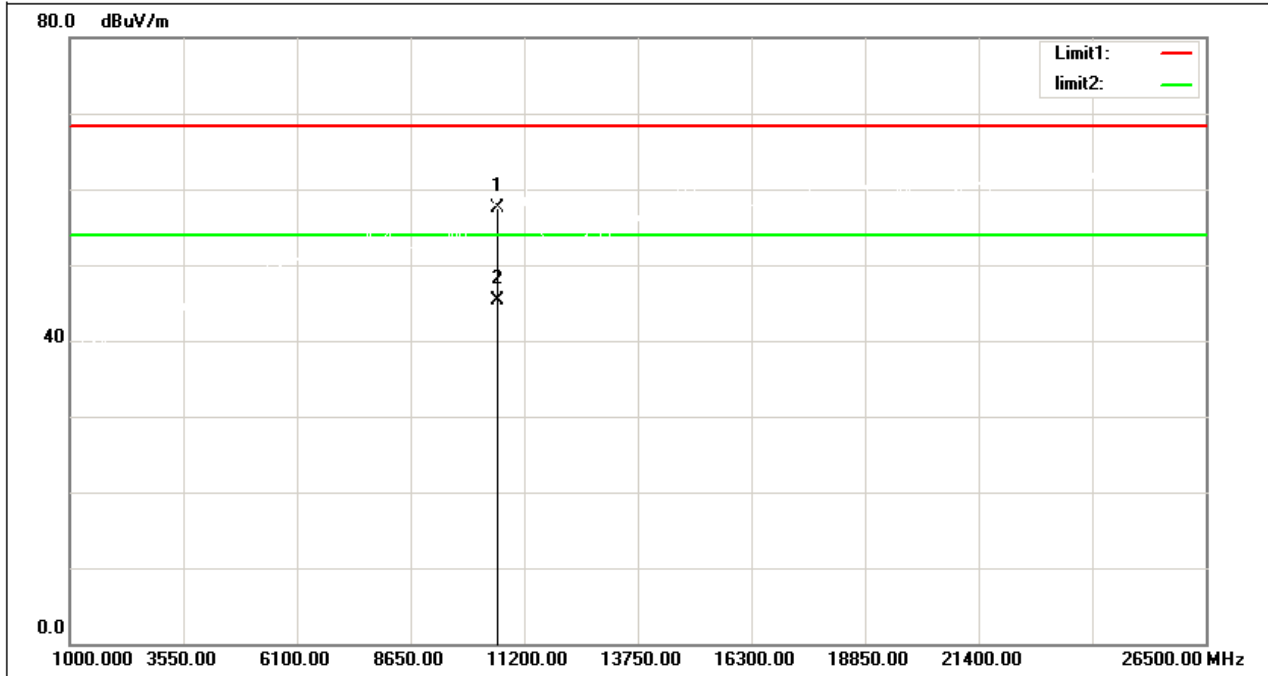
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	49.92	7.00	56.92	68.30	-11.38	peak
2	10600.000	38.76	7.00	45.76	54.00	-8.24	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5300 MHz Height:150cm Degree:154°

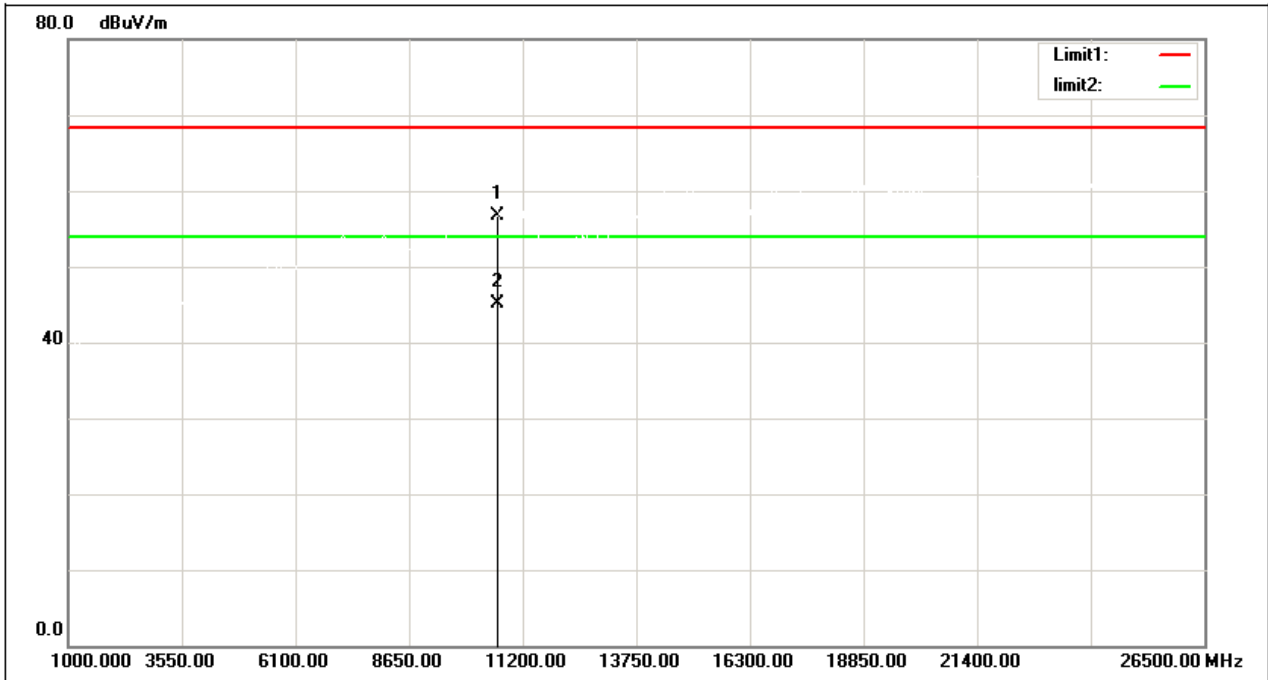
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	50.51	7.00	57.51	68.30	-10.79	peak
2	10600.000	38.21	7.00	45.21	54.00	-8.79	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz Height:150cm Degree:22°

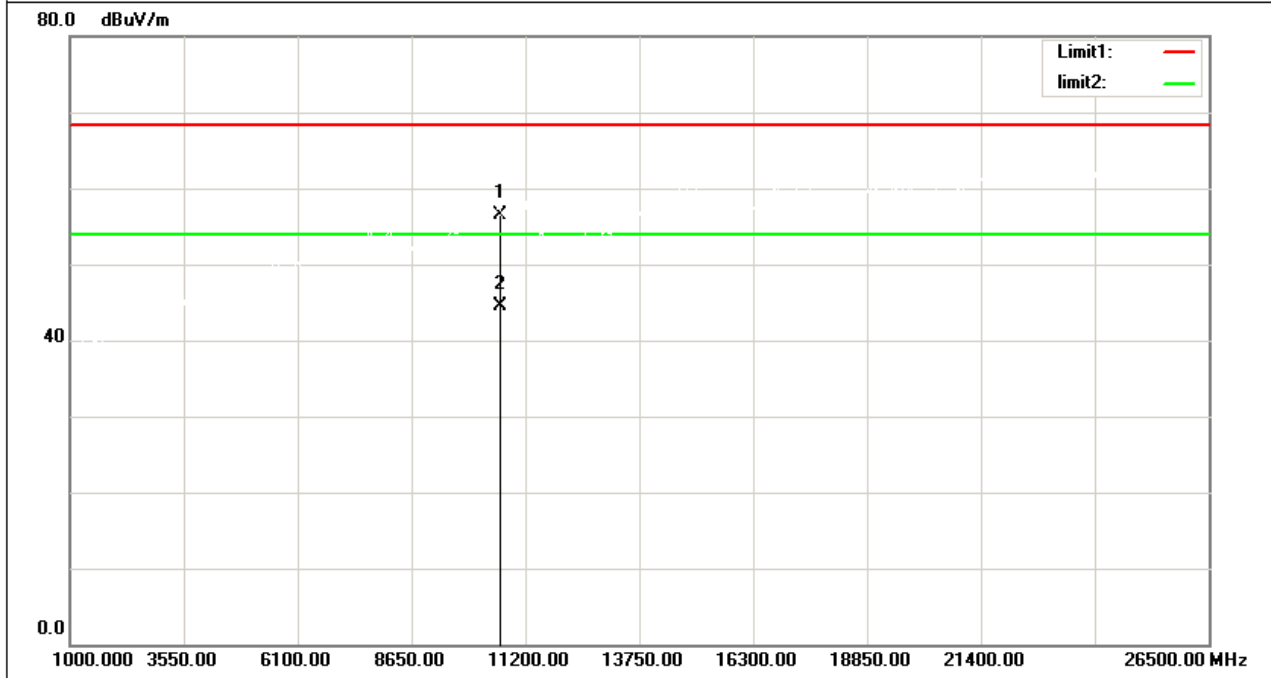
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	49.55	7.13	56.68	68.30	-11.62	peak
2	10640.000	37.99	7.13	45.12	54.00	-8.88	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT20) Mode 5320 MHz Height:150cm Degree:146°

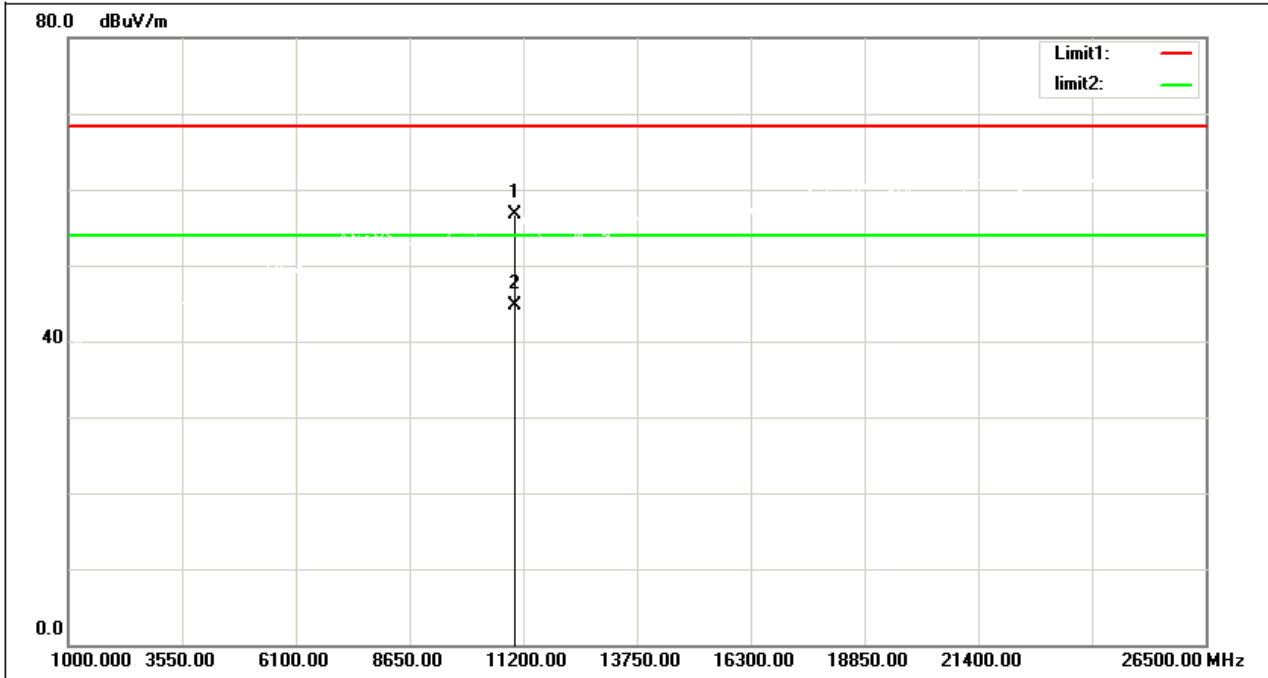
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	49.37	7.13	56.50	68.30	-11.80	peak
2	10640.000	37.46	7.13	44.59	54.00	-9.41	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz Height:150cm Degree:38°

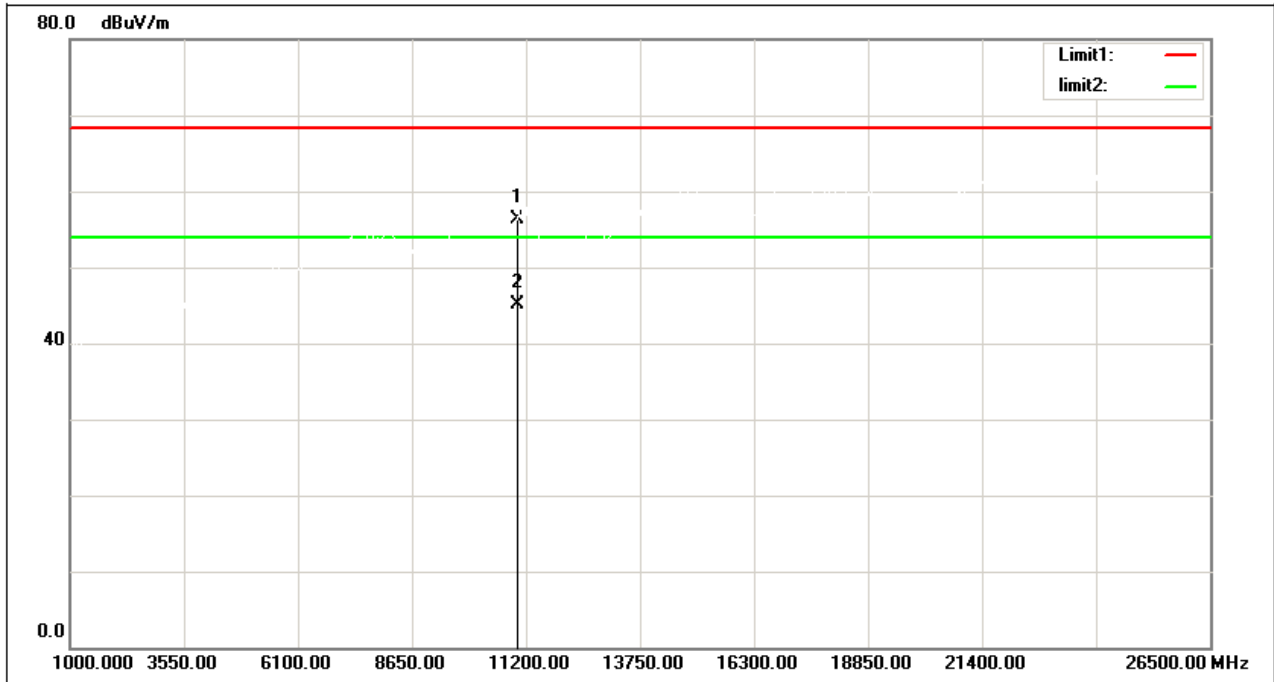
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	48.30	8.32	56.62	68.30	-11.68	peak
2	11000.000	36.32	8.32	44.64	54.00	-9.36	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5500 MHz Height:150cm Degree:164°

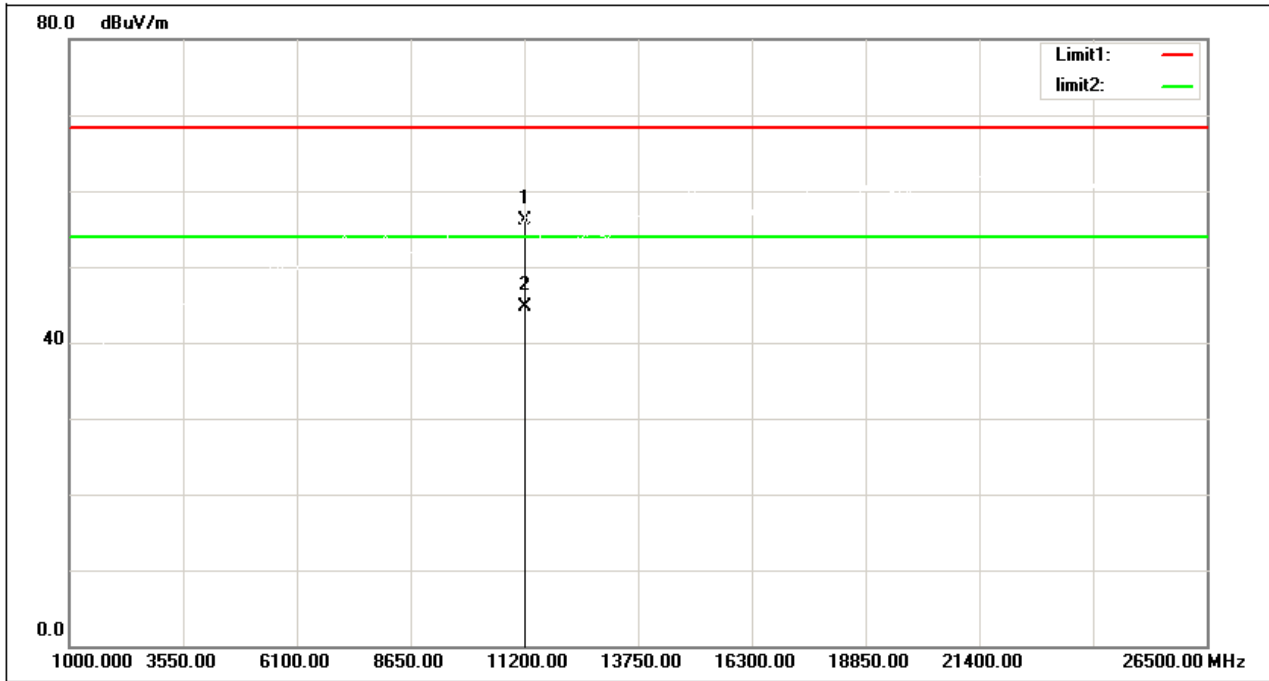
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	47.91	8.32	56.23	68.30	-12.07	peak
2	11000.000	36.86	8.32	45.18	54.00	-8.82	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5600 MHz Height:150cm Degree:23°

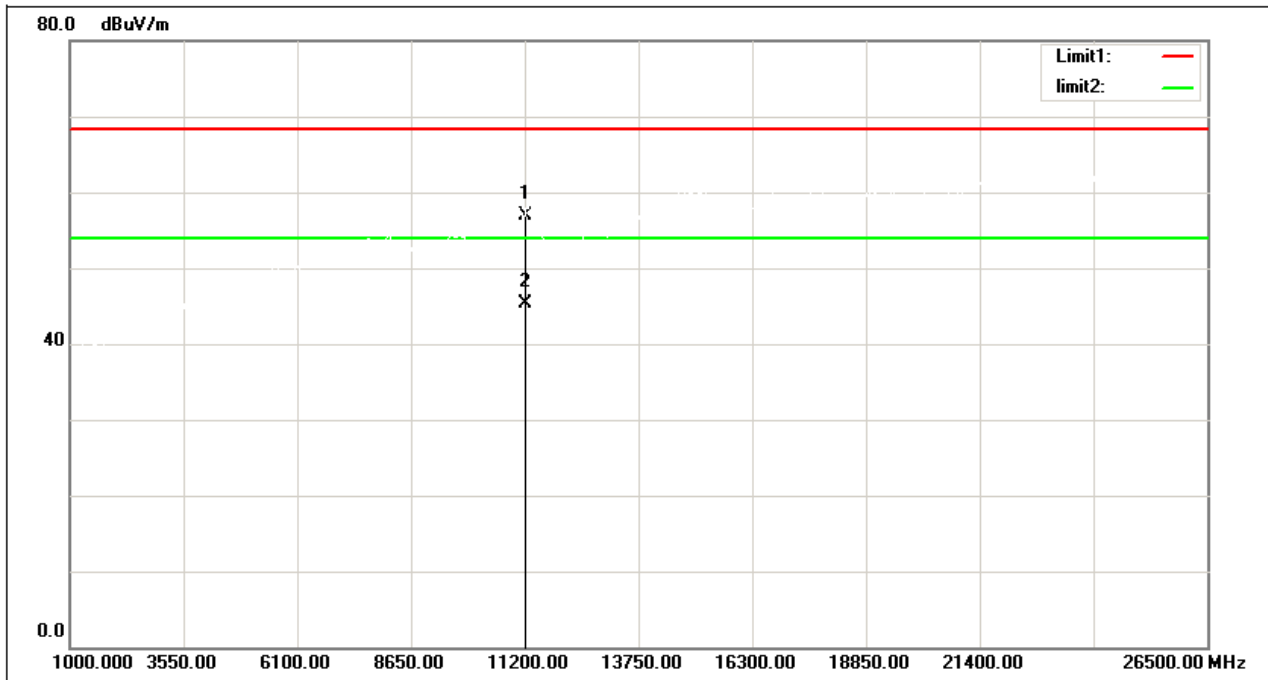
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	47.85	8.21	56.06	68.30	-12.24	peak
2	11200.000	36.55	8.21	44.76	54.00	-9.24	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5600 MHz Height:150cm Degree:151°

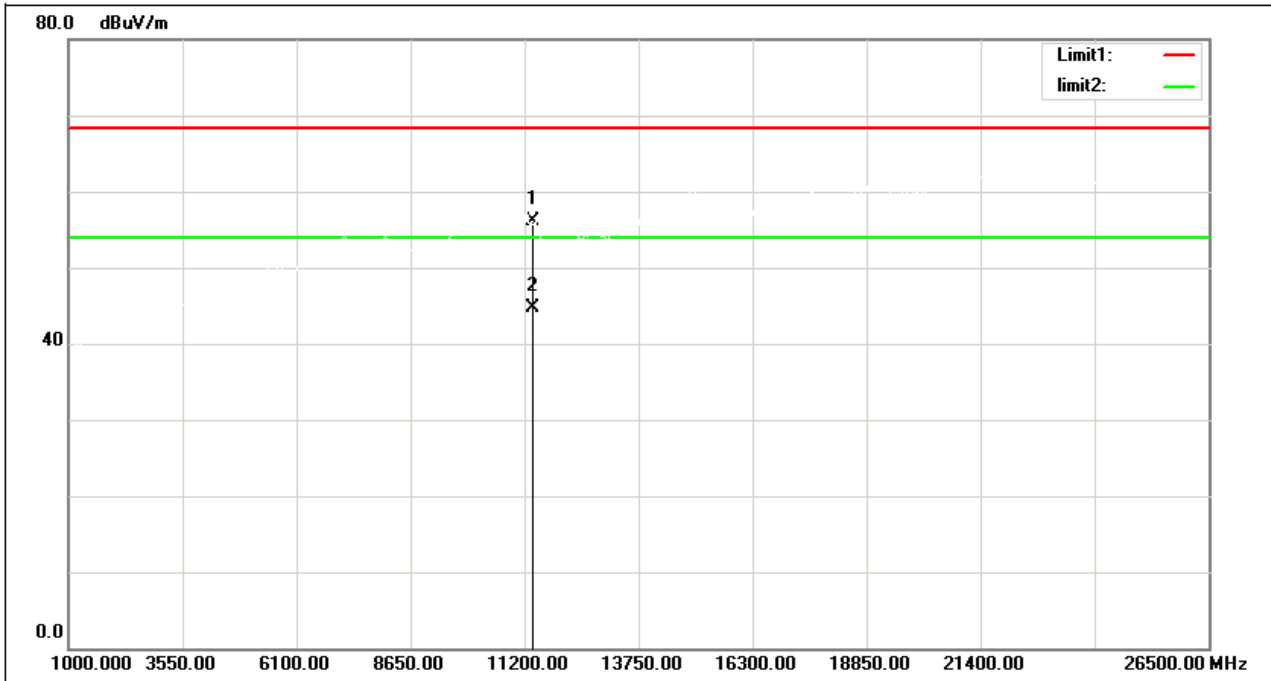
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	48.61	8.21	56.82	68.30	-11.48	peak
2	11200.000	37.14	8.21	45.35	54.00	-8.65	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz Height:150cm Degree:23°

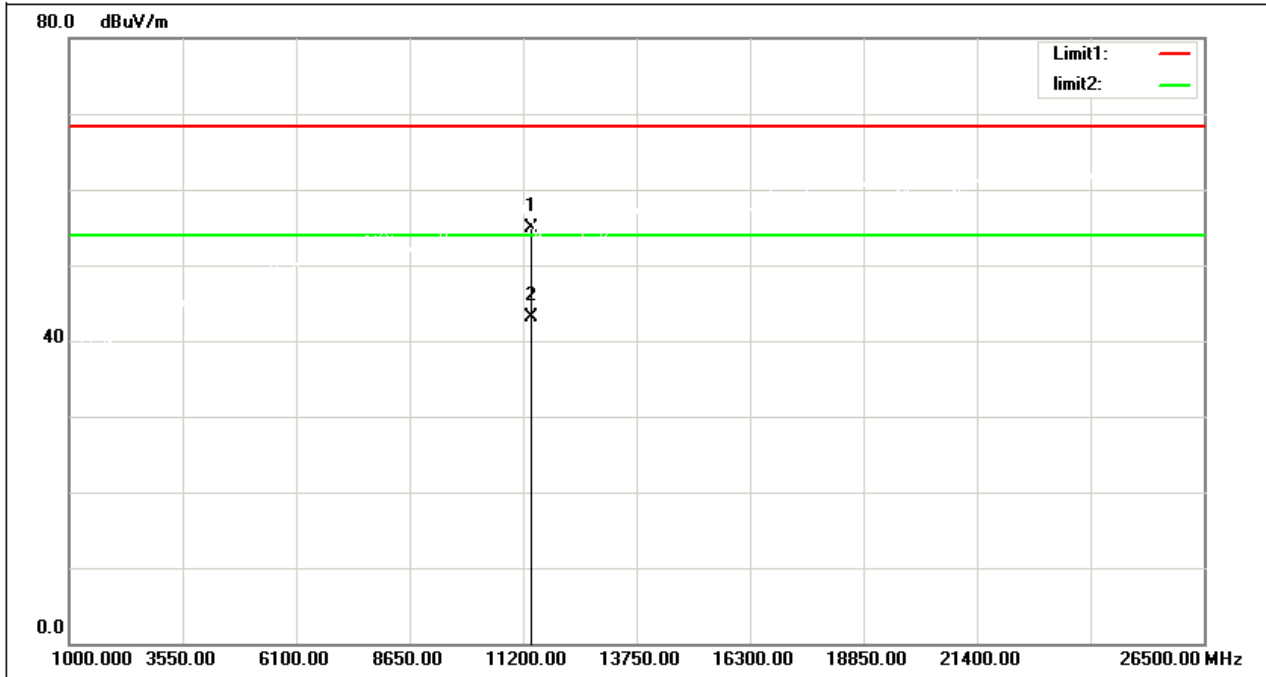
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	48.03	8.10	56.13	68.30	-12.17	peak
2	11400.000	36.64	8.10	44.74	54.00	-9.26	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT20) Mode 5700 MHz Height:150cm Degree:156°

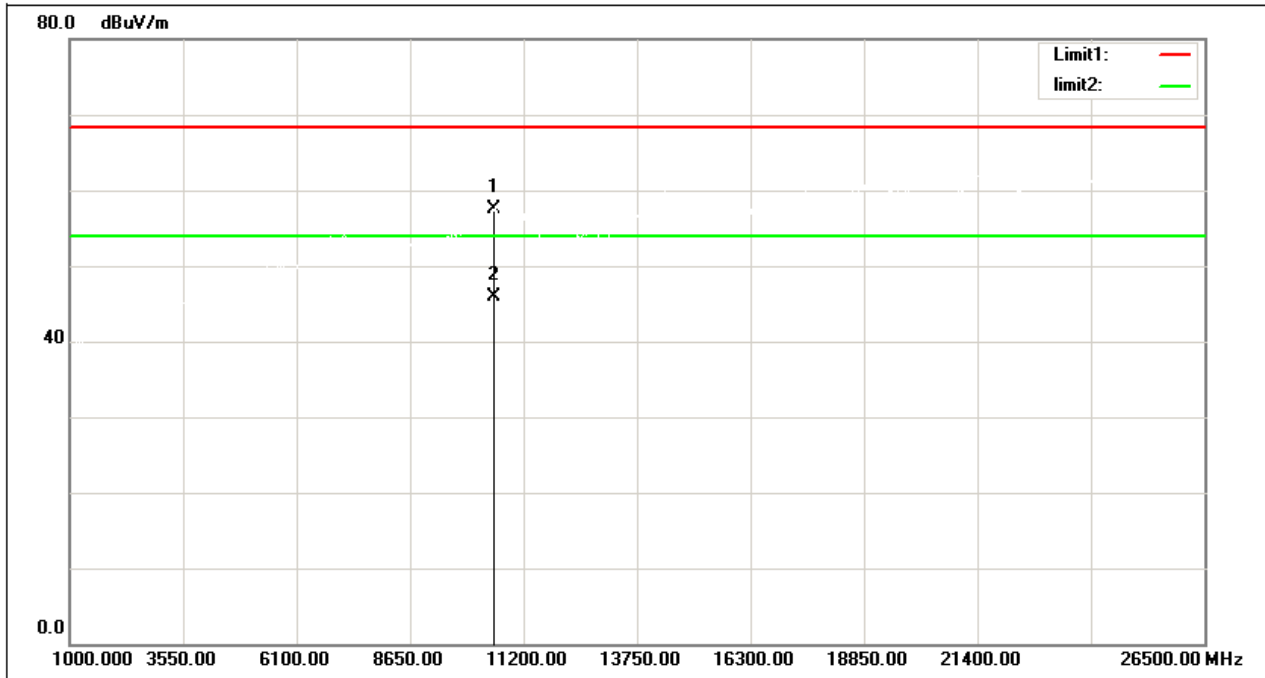
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	46.87	8.10	54.97	68.30	-13.33	peak
2	11400.000	35.09	8.10	43.19	54.00	-10.81	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 MHz Height:150cm Degree:21°

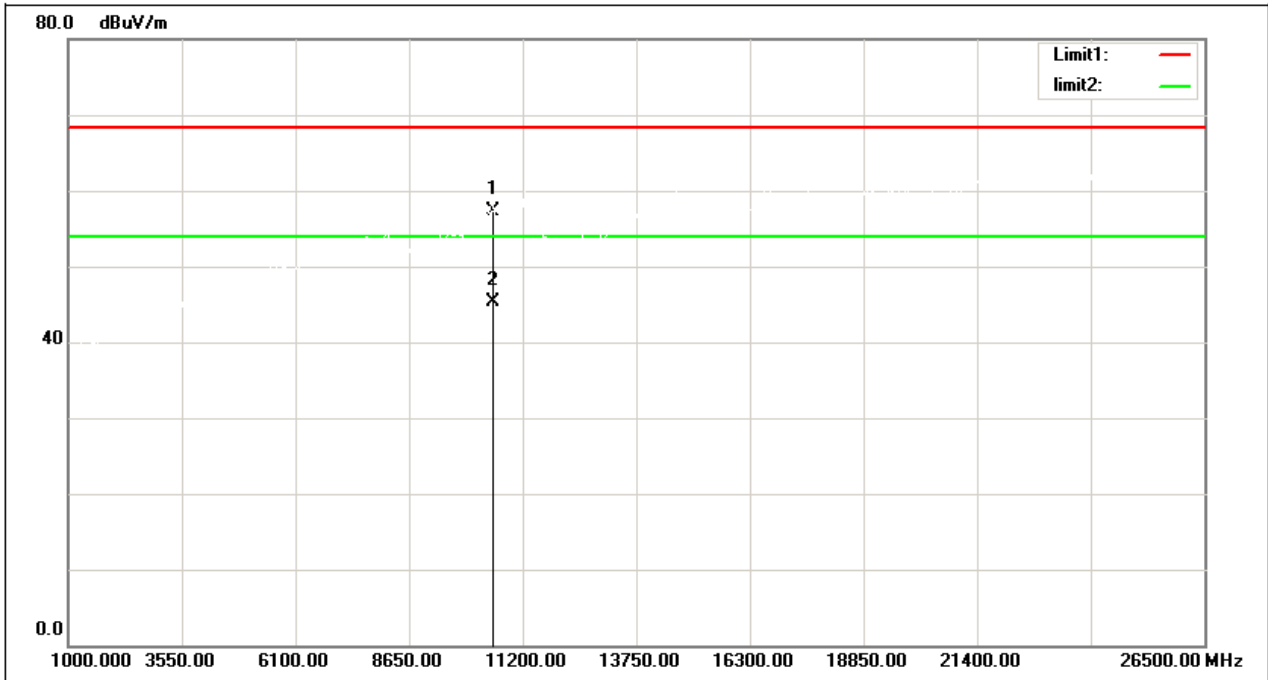
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	50.80	6.80	57.60	68.30	-10.70	peak
2	10540.000	39.01	6.80	45.81	54.00	-8.19	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5270 MHz Height:150cm Degree:157°

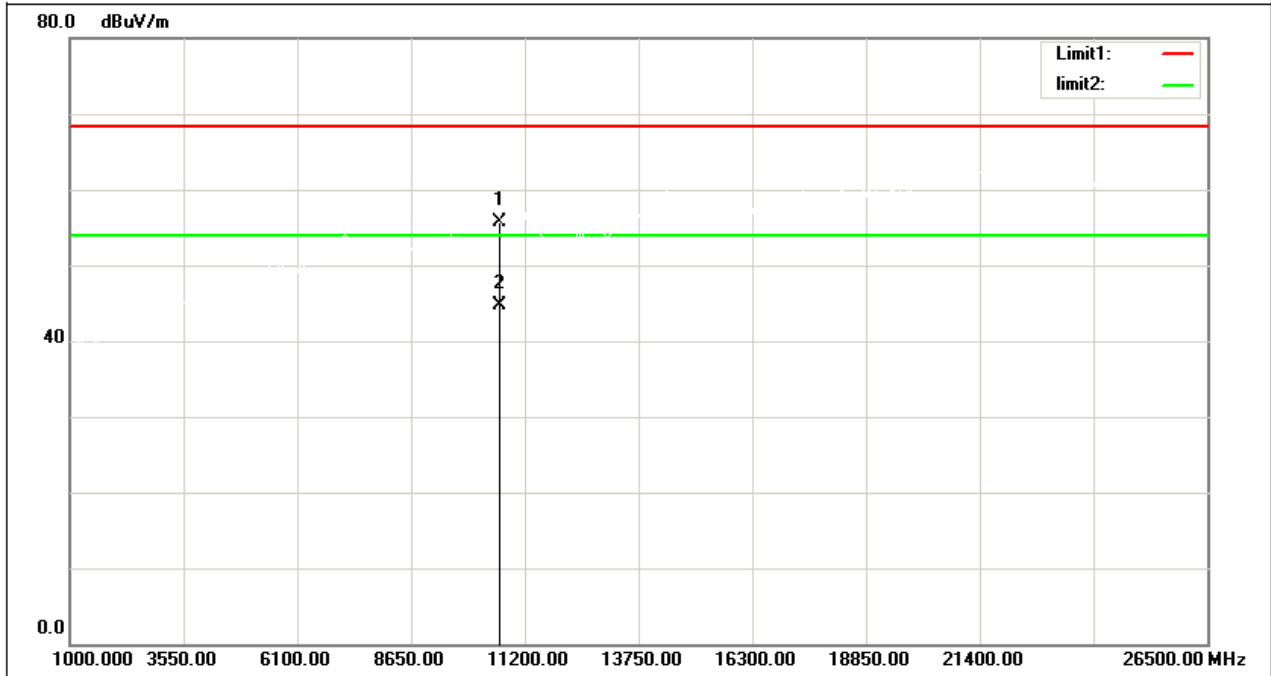
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	50.55	6.80	57.35	68.30	-10.95	peak
2	10540.000	38.59	6.80	45.39	54.00	-8.61	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz Height:150cm Degree:33°

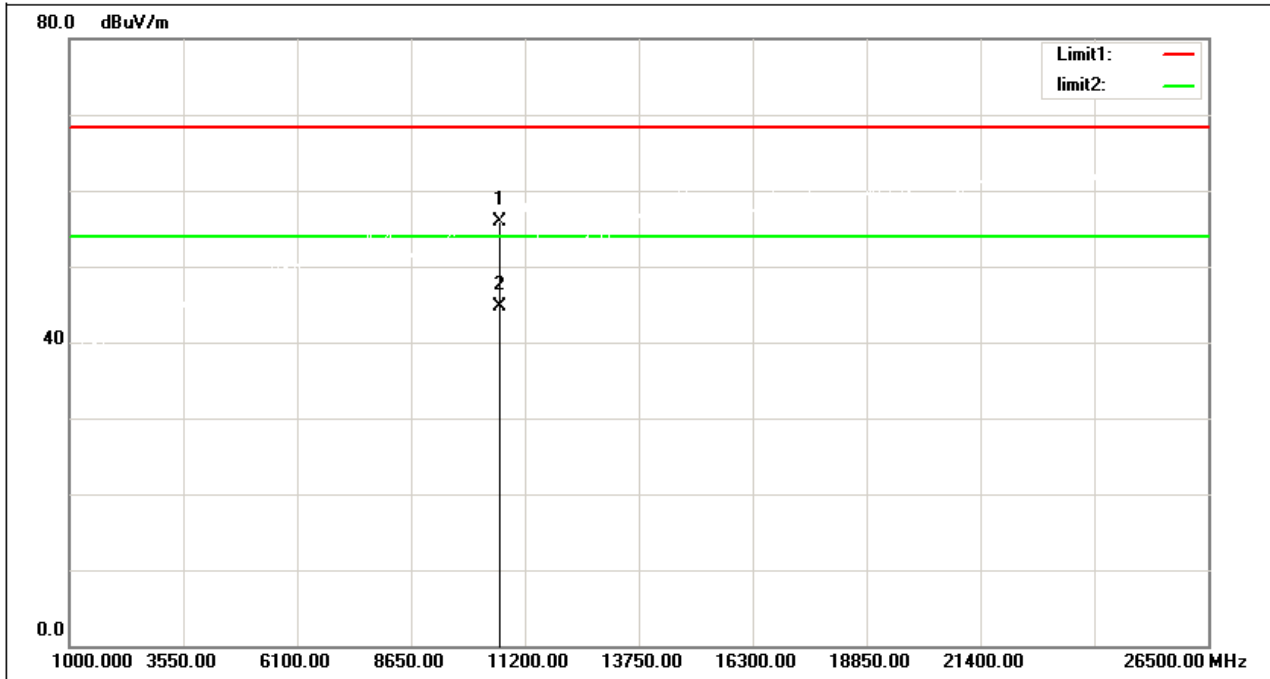
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	48.55	7.13	55.68	68.30	-12.62	peak
2	10640.000	37.60	7.13	44.73	54.00	-9.27	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX N (HT40) Mode 5310 MHz Height:150cm Degree:165°

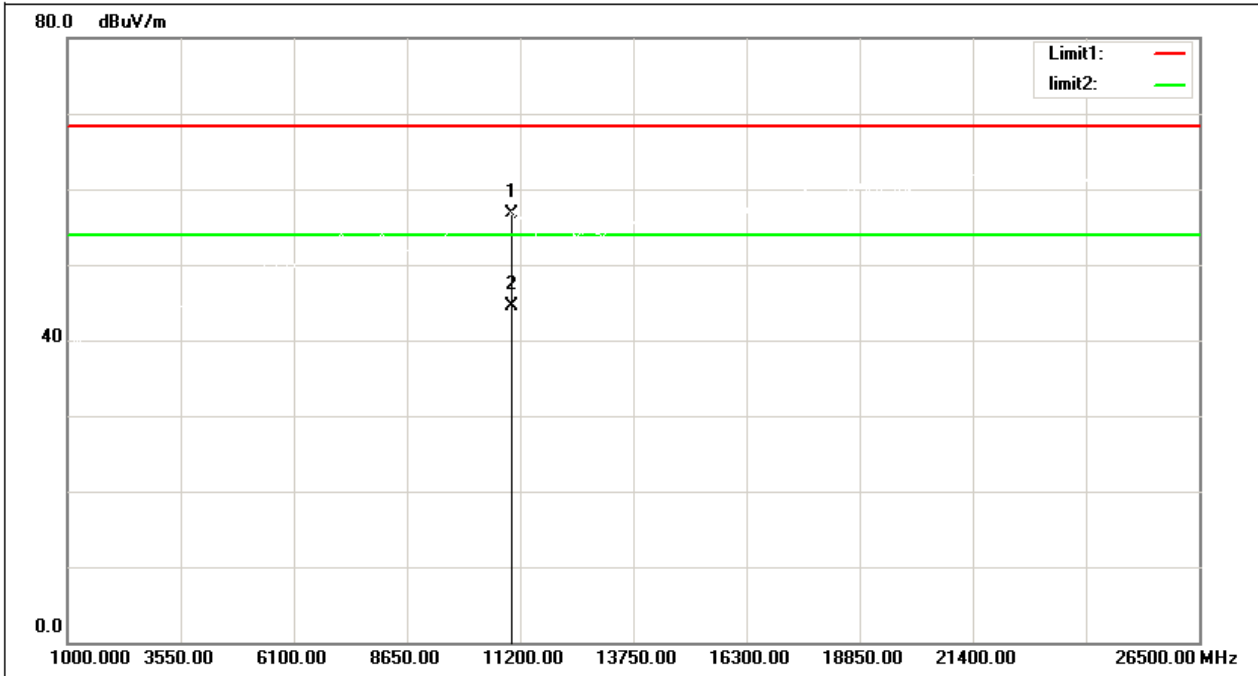
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	48.87	7.13	56.00	68.30	-12.30	peak
2	10640.000	37.59	7.13	44.72	54.00	-9.28	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz Height:150cm Degree:25°

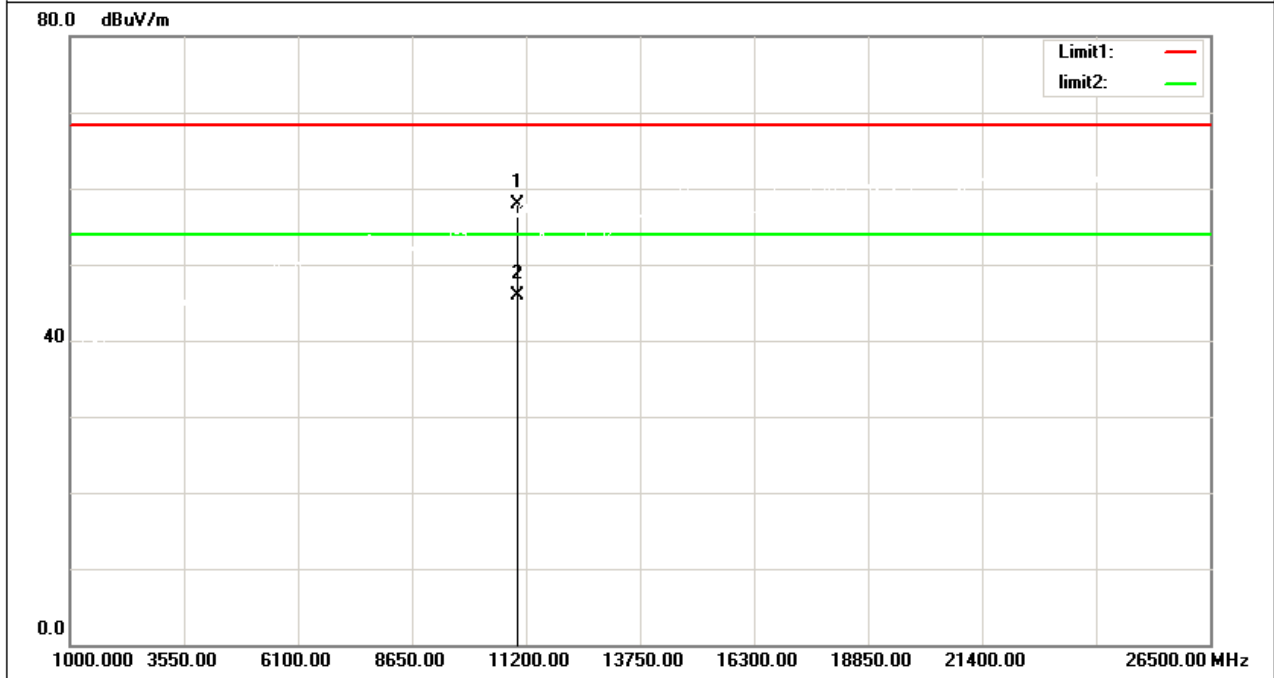
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	48.38	8.30	56.68	68.30	-11.62	peak
2	11020.000	36.16	8.30	44.46	54.00	-9.54	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz Height:150cm Degree:163°

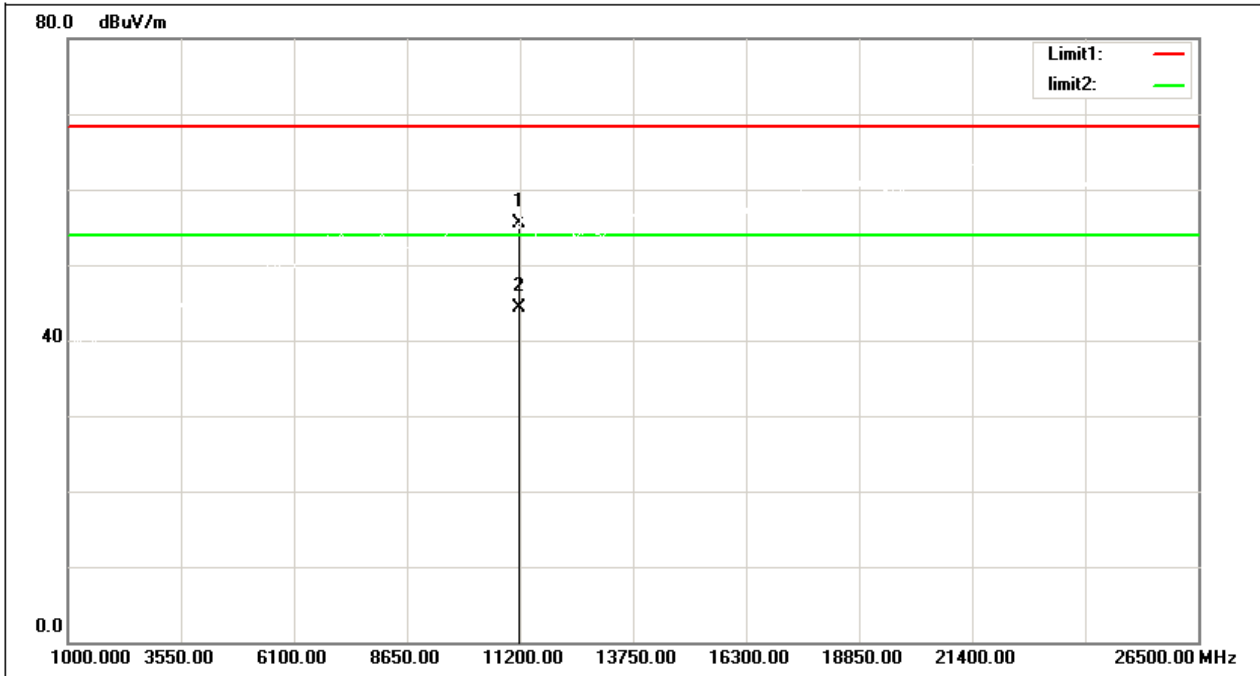
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	49.69	8.30	57.99	68.30	-10.31	peak
2	11020.000	37.57	8.30	45.87	54.00	-8.13	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5590 MHz Height:150cm Degree:14°

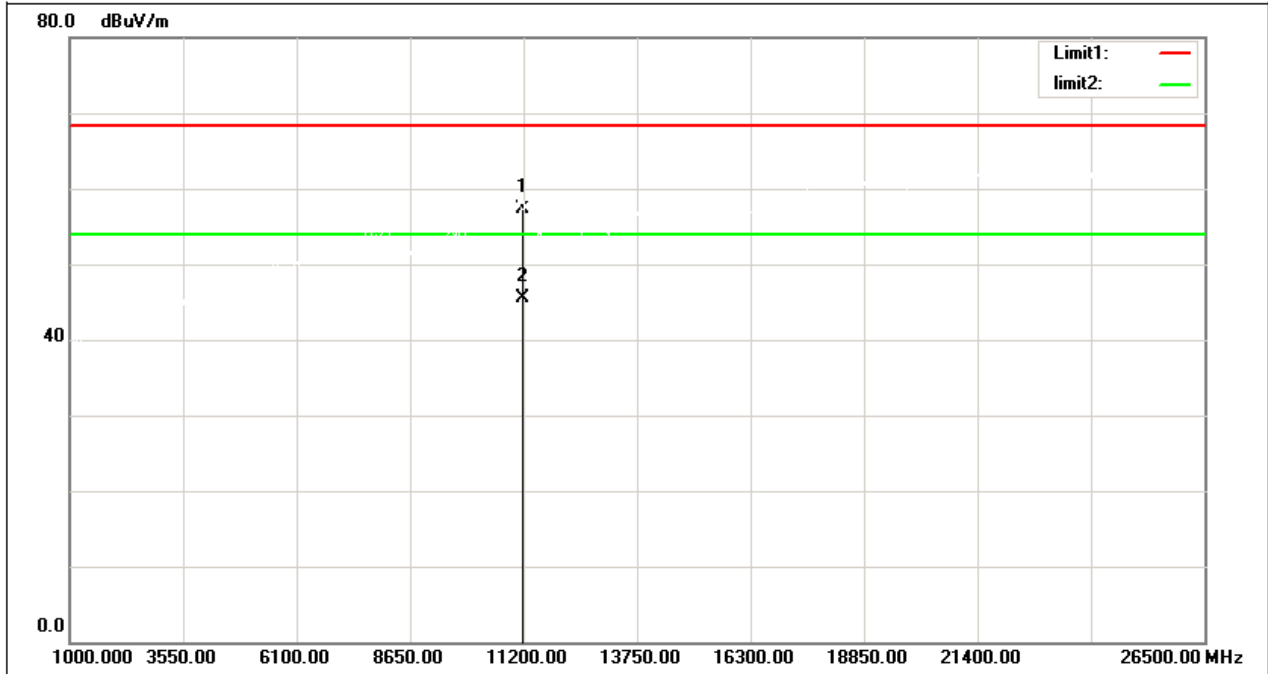
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	47.33	8.23	55.56	68.30	-12.74	peak
2	11180.000	36.04	8.23	44.27	54.00	-9.73	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5590 MHz Height:150cm Degree:163°

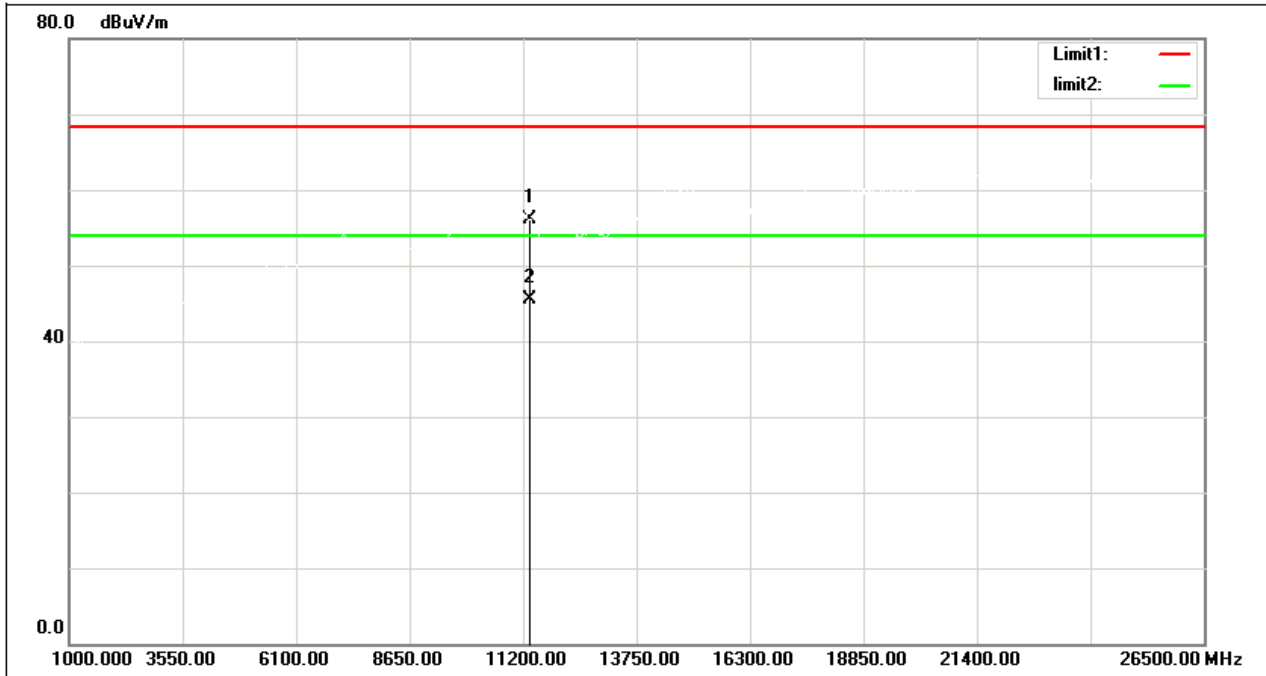
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	49.09	8.23	57.32	68.30	-10.98	peak
2	11180.000	37.34	8.23	45.57	54.00	-8.43	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz Height:150cm Degree:26°

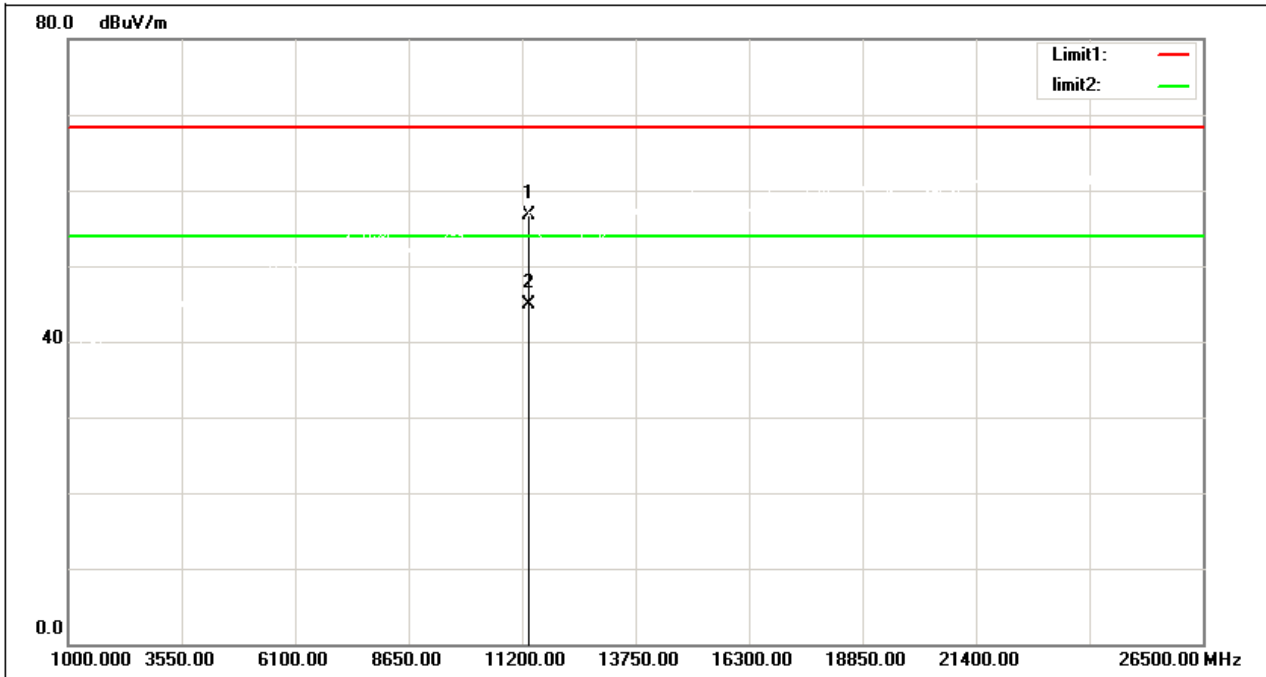
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	48.03	8.14	56.17	68.30	-12.13	peak
2	11340.000	37.45	8.14	45.59	54.00	-8.41	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5670 MHz Height:150cm Degree:149°

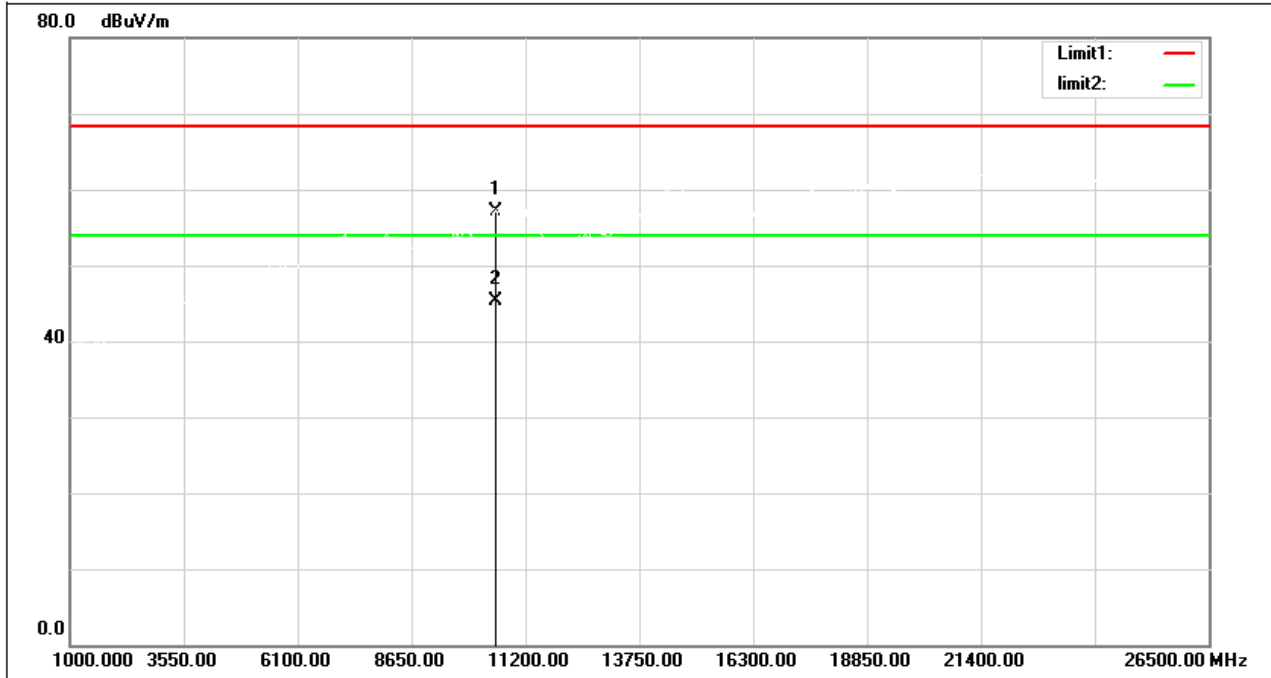
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	48.54	8.14	56.68	68.30	-11.62	peak
2	11340.000	36.71	8.14	44.85	54.00	-9.15	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz Height:150cm Degree:21°

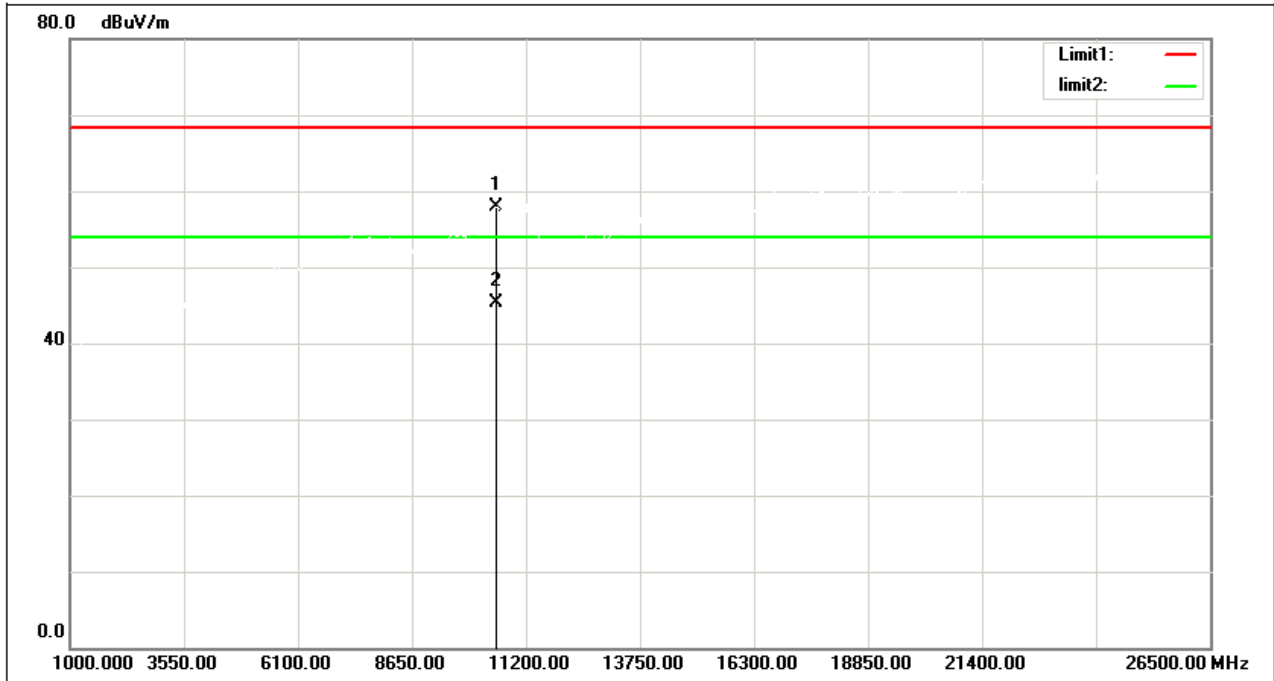
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	50.36	6.74	57.10	68.30	-11.20	peak
2	10520.000	38.60	6.74	45.34	54.00	-8.66	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5260 MHz Height:150cm Degree:149°

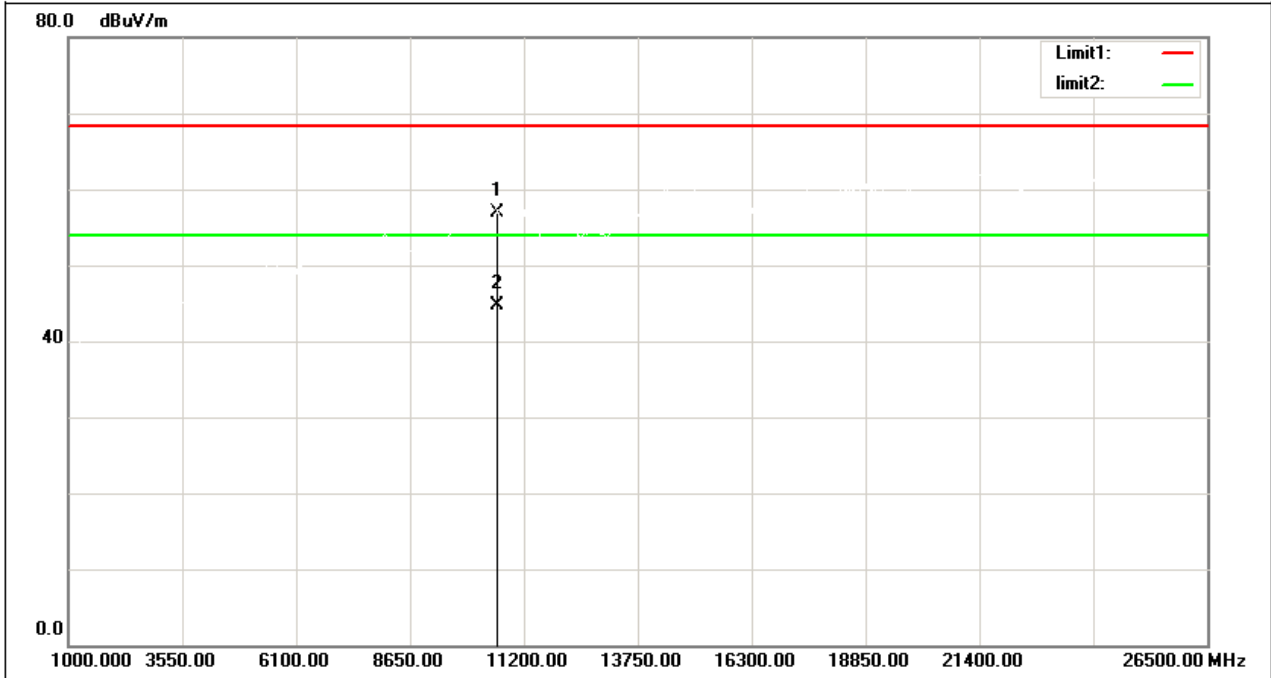
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	51.11	6.74	57.85	68.30	-10.45	peak
2	10520.000	38.65	6.74	45.39	54.00	-8.61	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5300 MHz Height:150cm Degree:35°

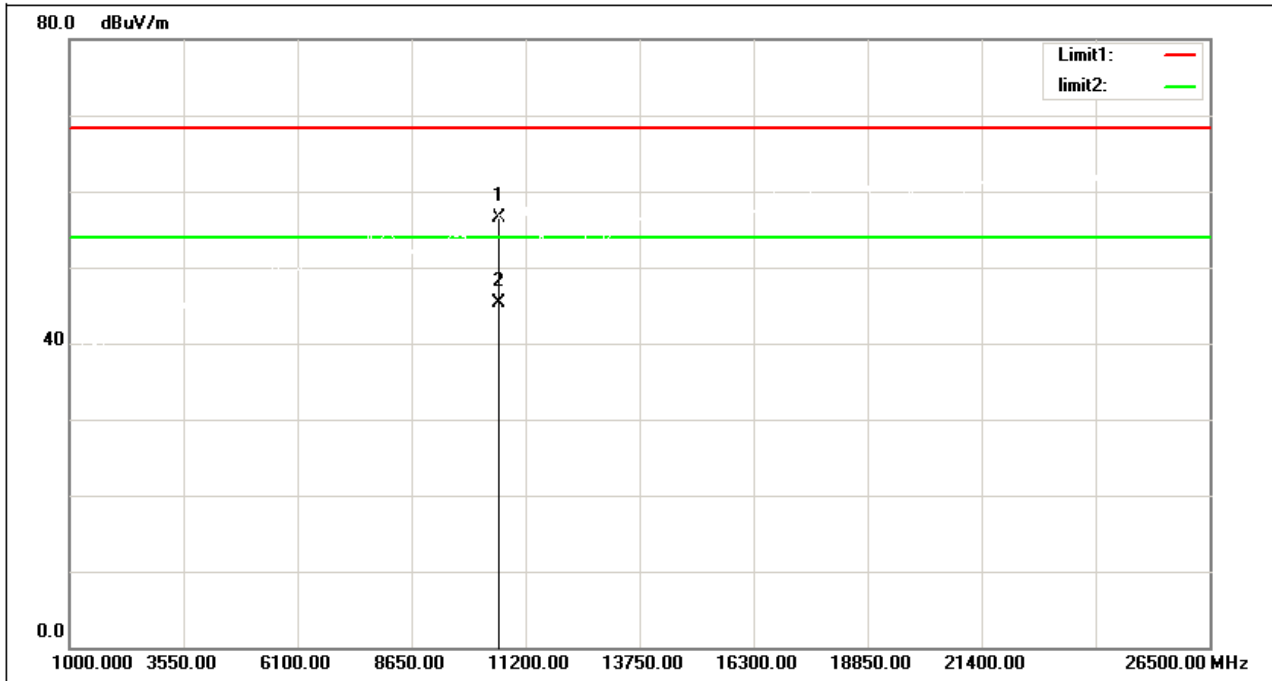
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	49.92	7.00	56.92	68.30	-11.38	peak
2	10600.000	37.78	7.00	44.78	54.00	-9.22	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5300 MHz Height:150cm Degree:163°

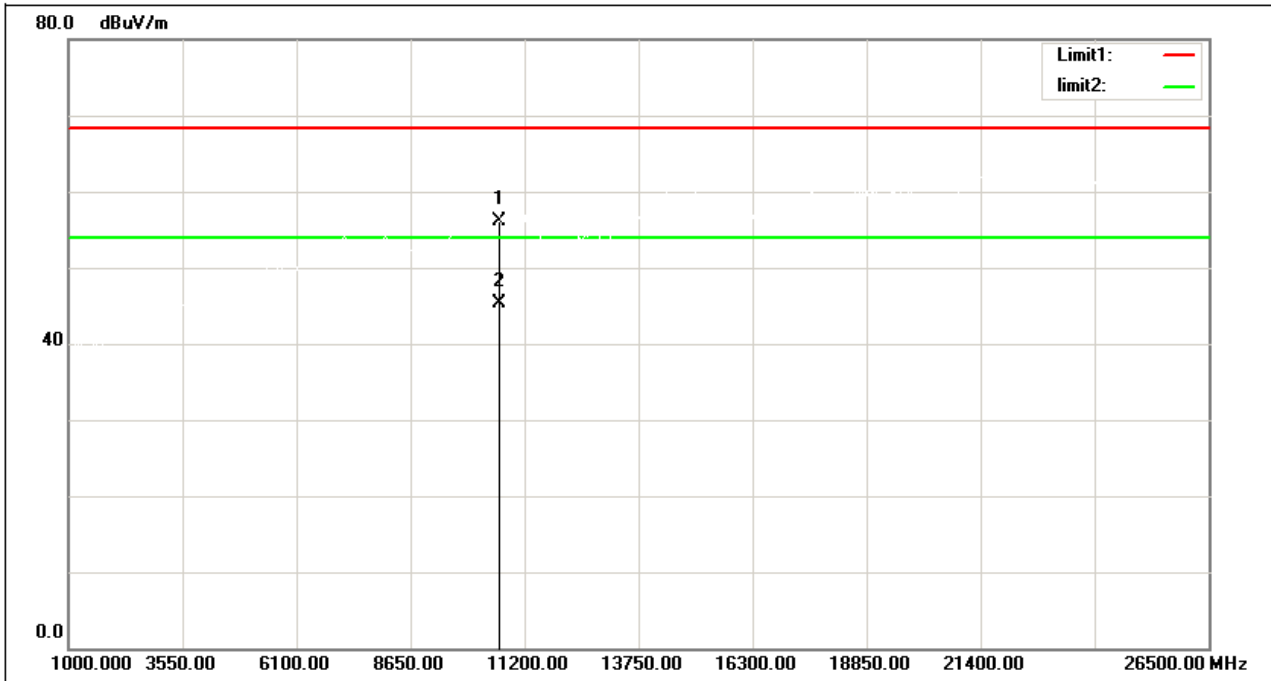
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10600.000	49.51	7.00	56.51	68.30	-11.79	peak
2	10600.000	38.29	7.00	45.29	54.00	-8.71	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz Height:150cm Degree:30°

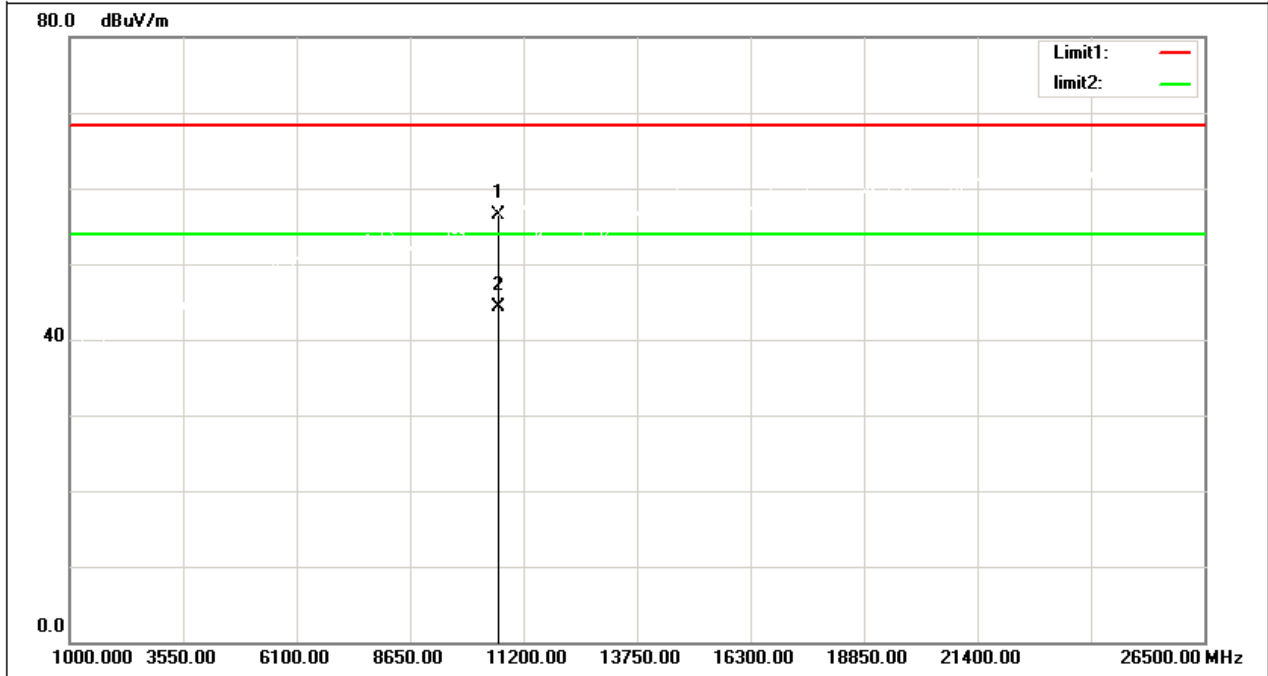
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	49.05	7.13	56.18	68.30	-12.12	peak
2	10640.000	38.25	7.13	45.38	54.00	-8.62	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT20) Mode 5320 MHz Height:150cm Degree:161°

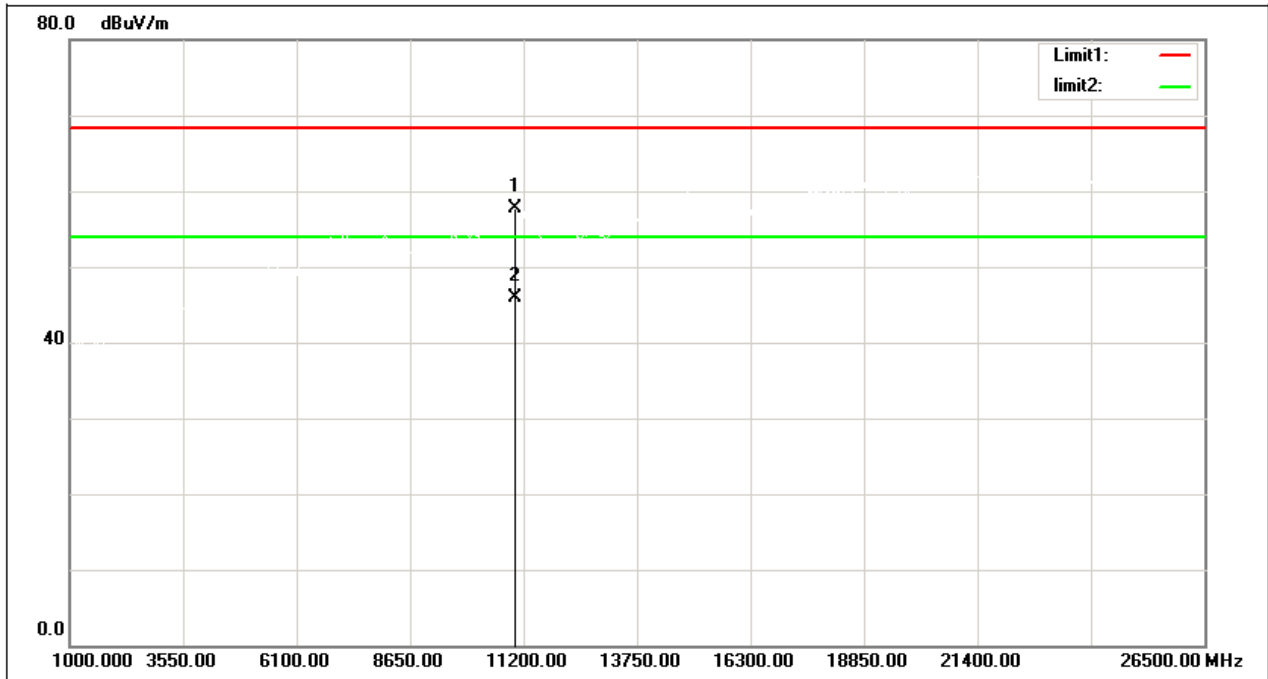
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	49.37	7.13	56.50	68.30	-11.80	peak
2	10640.000	37.21	7.13	44.34	54.00	-9.66	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz Height:150cm Degree:23°

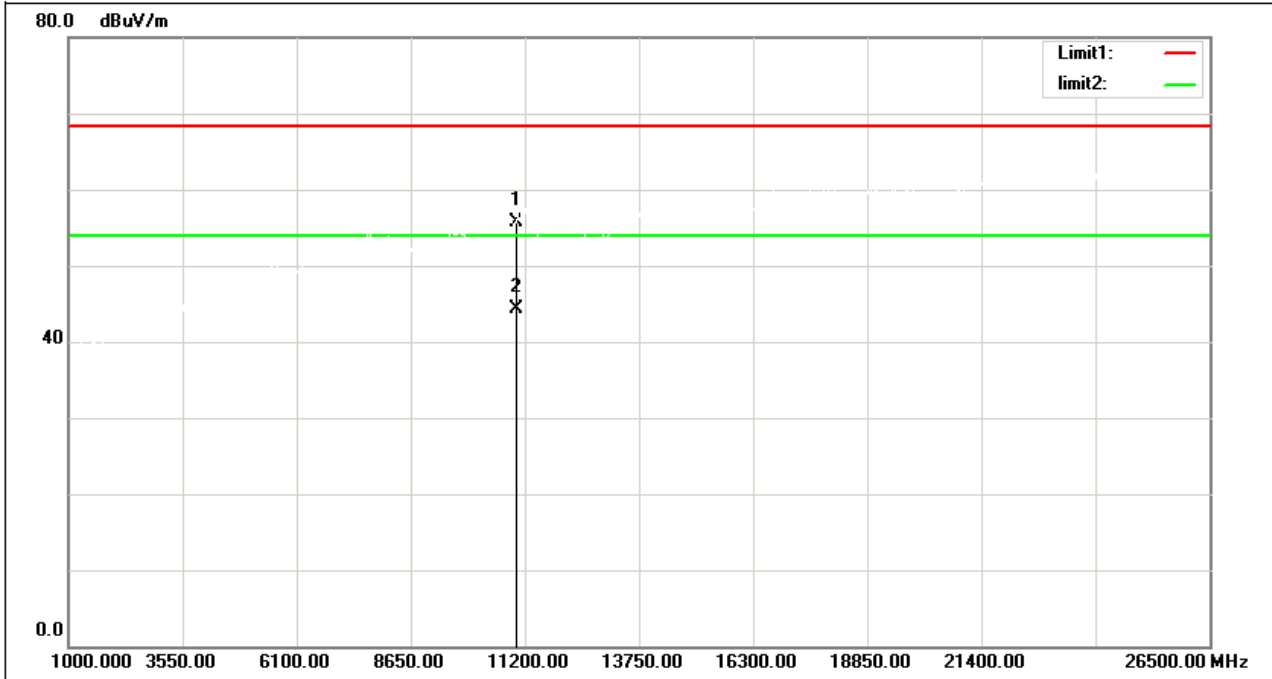
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	49.30	8.32	57.62	68.30	-10.68	peak
2	11000.000	37.50	8.32	45.82	54.00	-8.18	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5500 MHz Height:150cm Degree:163°

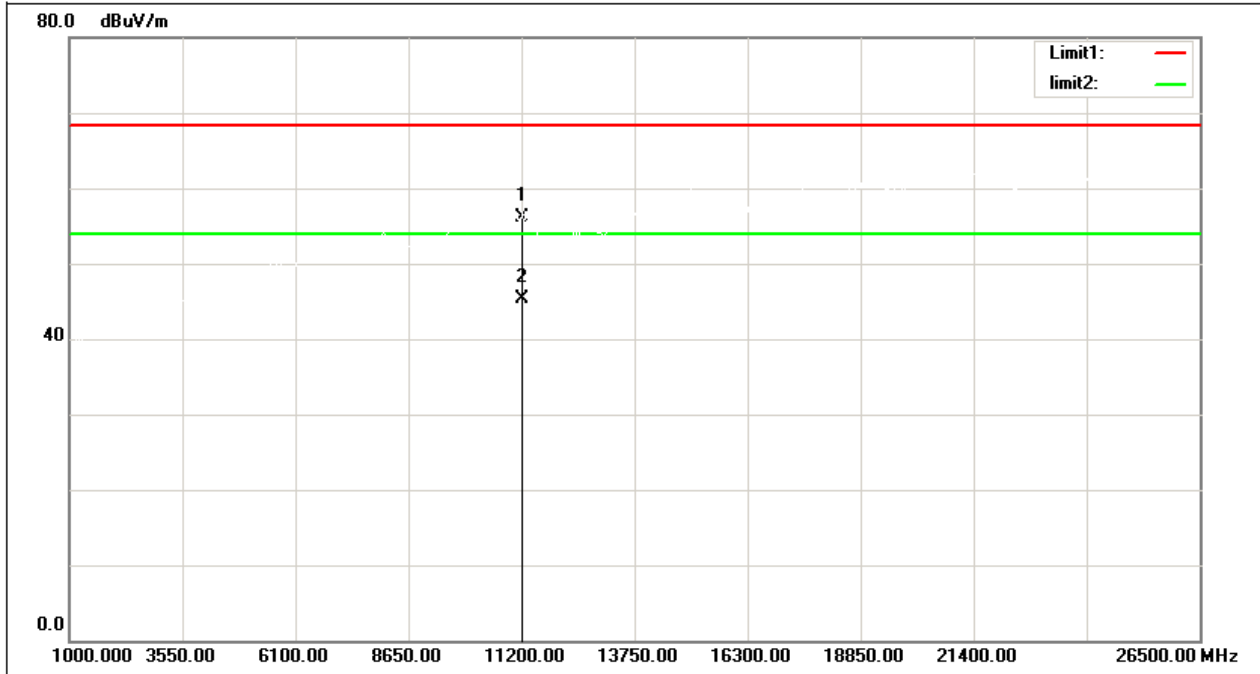
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	47.41	8.32	55.73	68.30	-12.57	peak
2	11000.000	36.07	8.32	44.39	54.00	-9.61	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5600 MHz Height:150cm Degree:45°

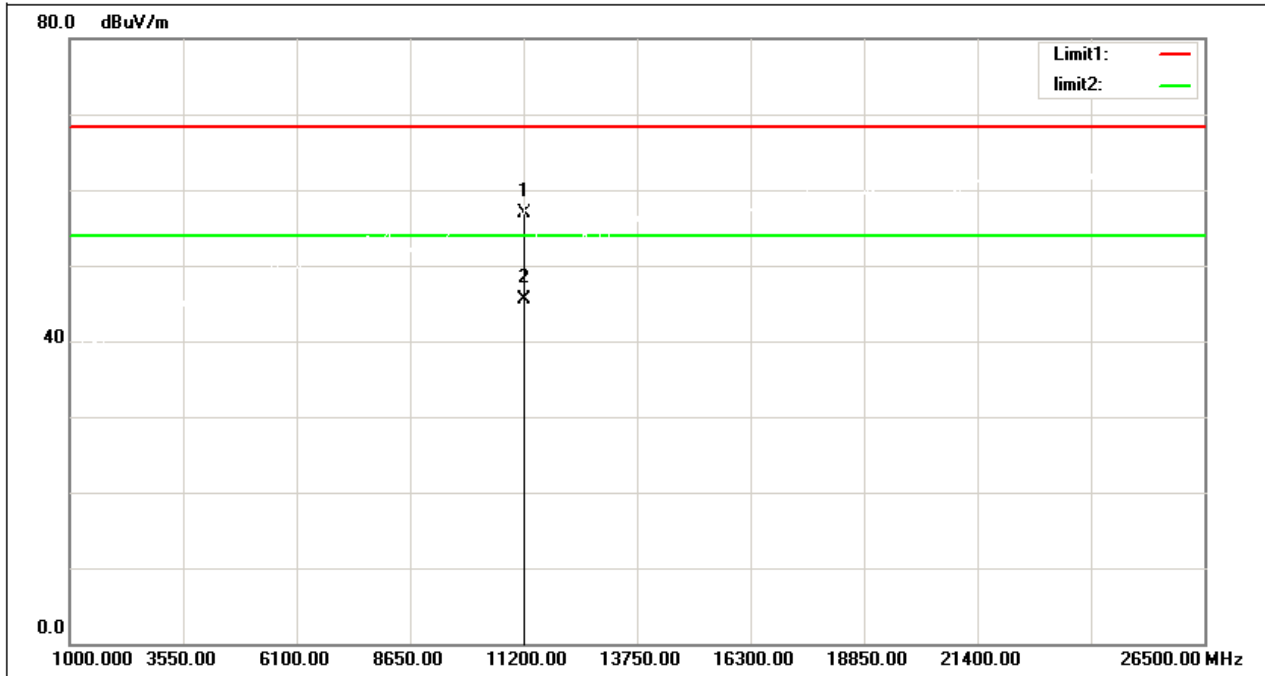
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	47.85	8.21	56.06	68.30	-12.24	peak
2	11200.000	37.06	8.21	45.27	54.00	-8.73	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5600 MHz Height:150cm Degree:166°

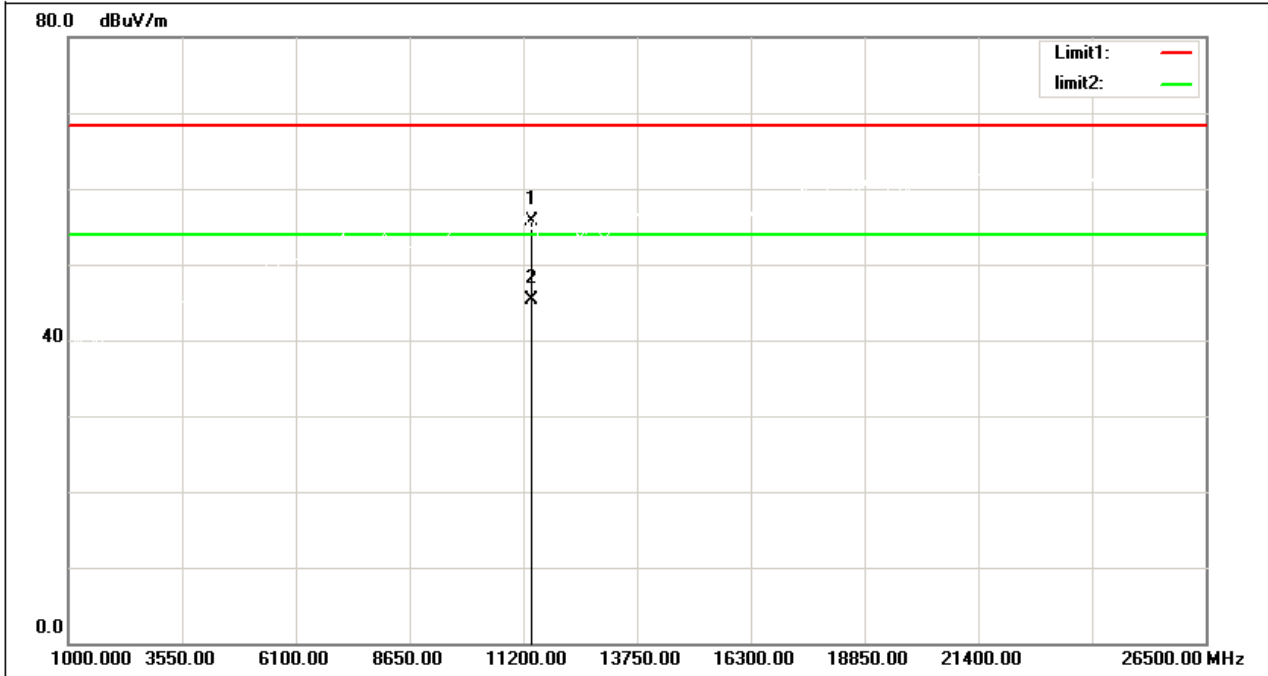
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	48.61	8.21	56.82	68.30	-11.48	peak
2	11200.000	37.25	8.21	45.46	54.00	-8.54	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz Height:150cm Degree:38°

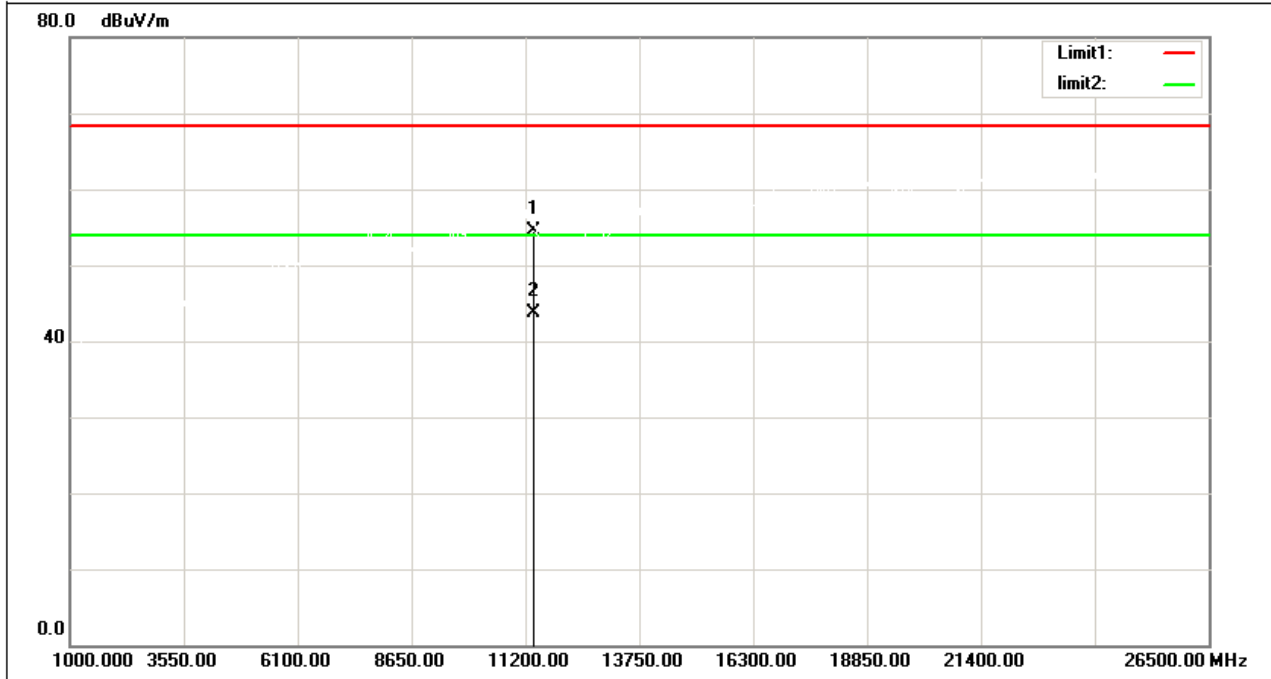
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	47.53	8.10	55.63	68.30	-12.67	peak
2	11400.000	37.29	8.10	45.39	54.00	-8.61	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT20) Mode 5700 MHz Height:150cm Degree:149°

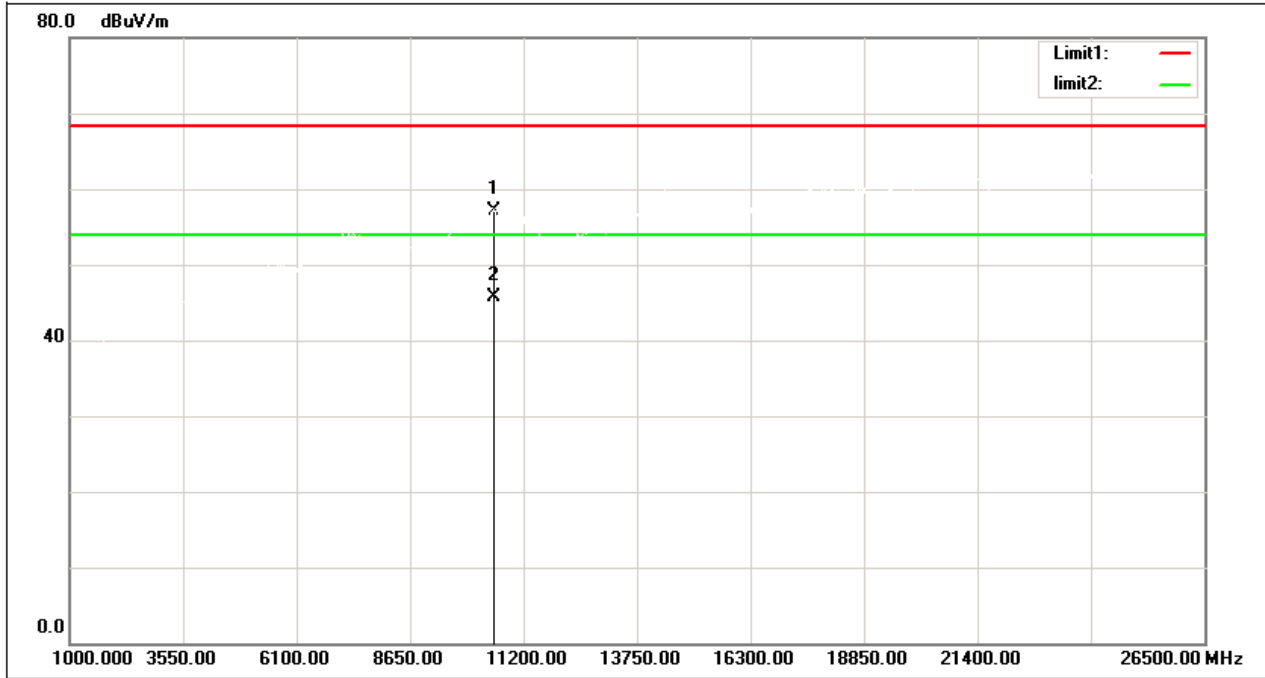
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	46.37	8.10	54.47	68.30	-13.83	peak
2	11400.000	35.59	8.10	43.69	54.00	-10.31	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5270 MHz Height:150cm Degree:32°

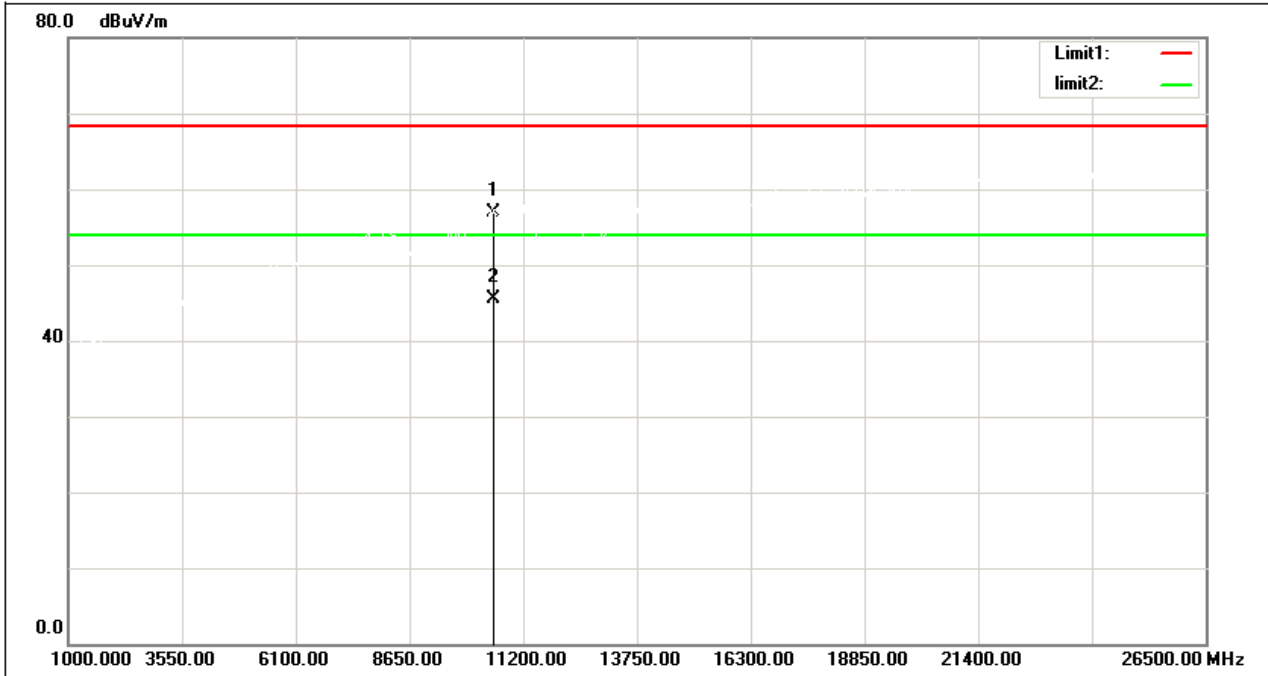
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	50.30	6.80	57.10	68.30	-11.20	peak
2	10540.000	38.91	6.80	45.71	54.00	-8.29	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5270 MHz Height:150cm Degree:164°

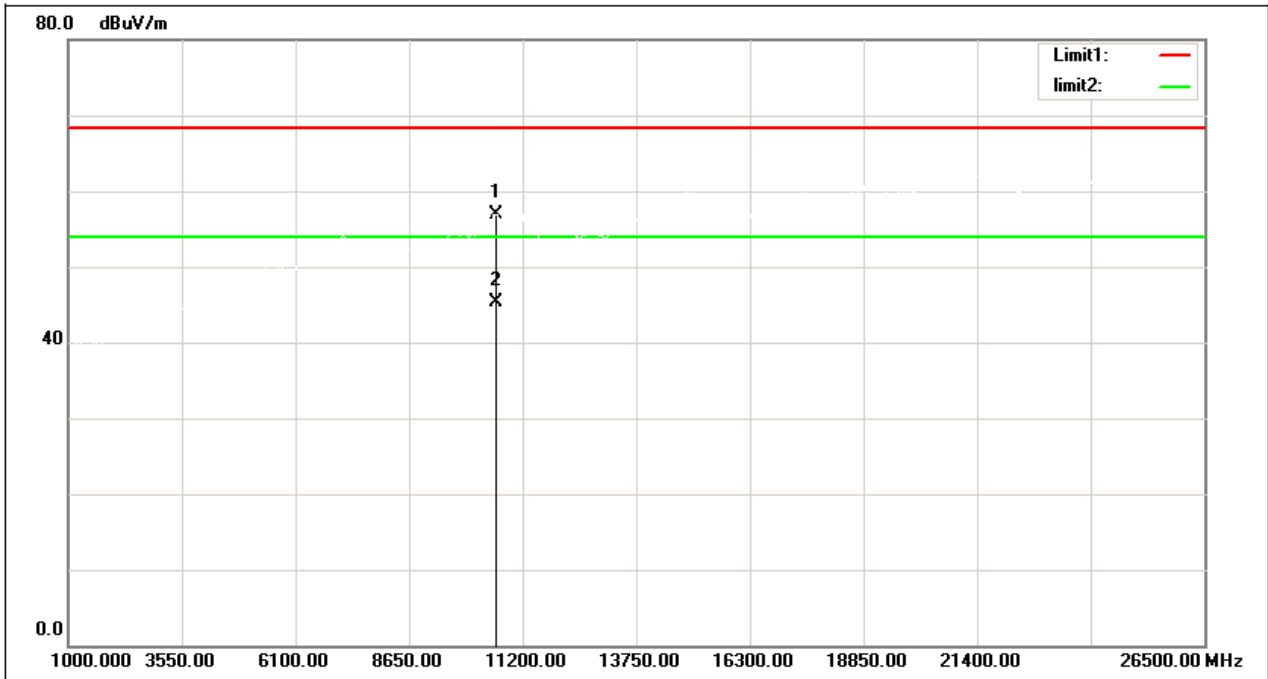
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	50.05	6.80	56.85	68.30	-11.45	peak
2	10540.000	38.73	6.80	45.53	54.00	-8.47	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz Height:150cm Degree:32°

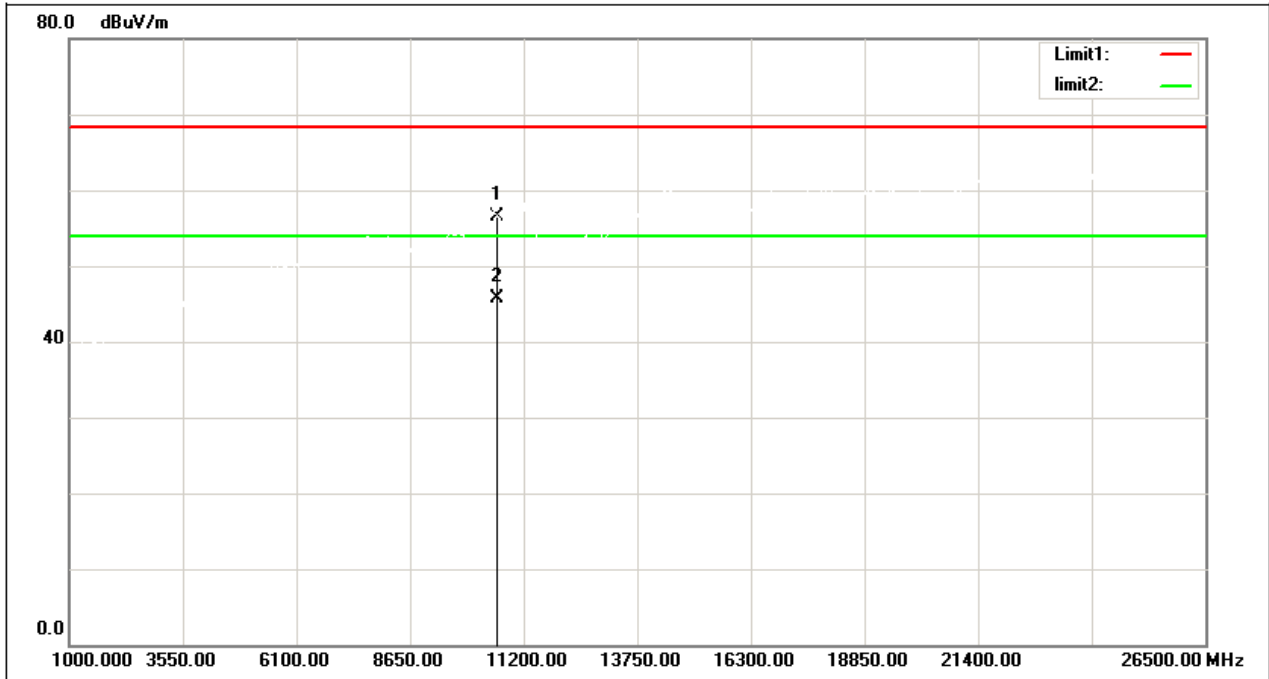
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	49.85	7.07	56.92	68.30	-11.38	peak
2	10620.000	38.29	7.07	45.36	54.00	-8.64	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT40) Mode 5310 MHz Height:150cm Degree:173°

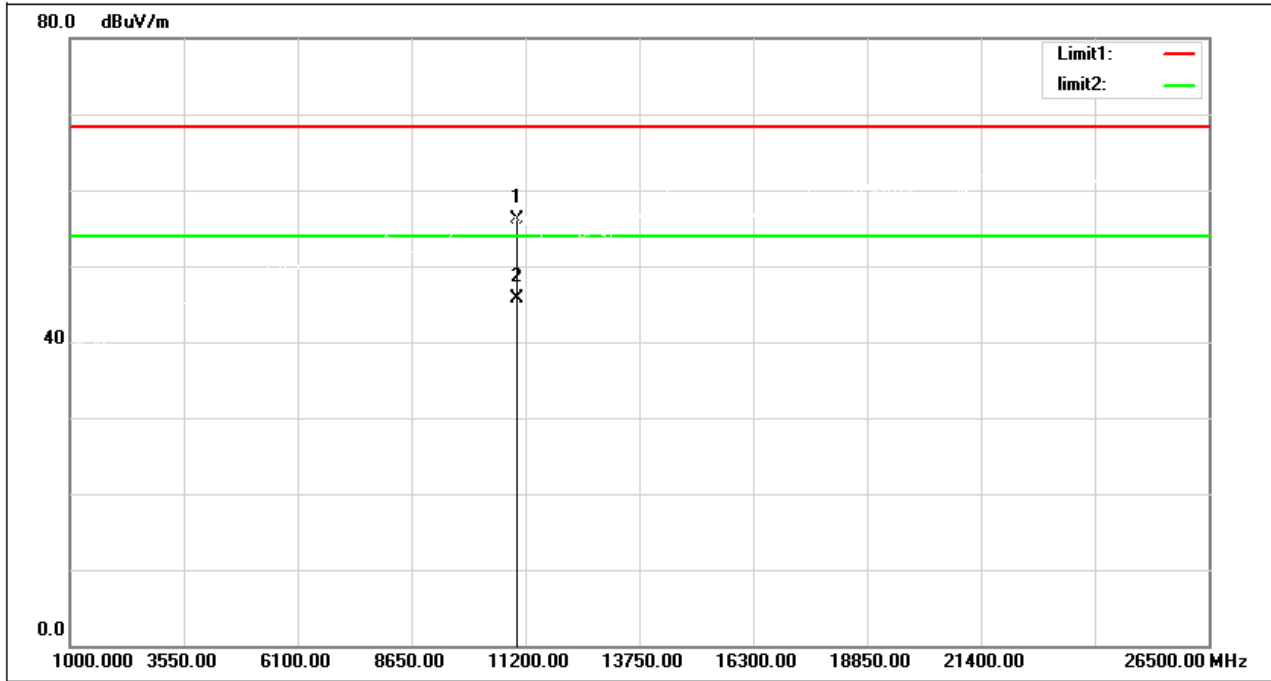
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	49.44	7.07	56.51	68.30	-11.79	peak
2	10620.000	38.66	7.07	45.73	54.00	-8.27	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz Height:150cm Degree:23°

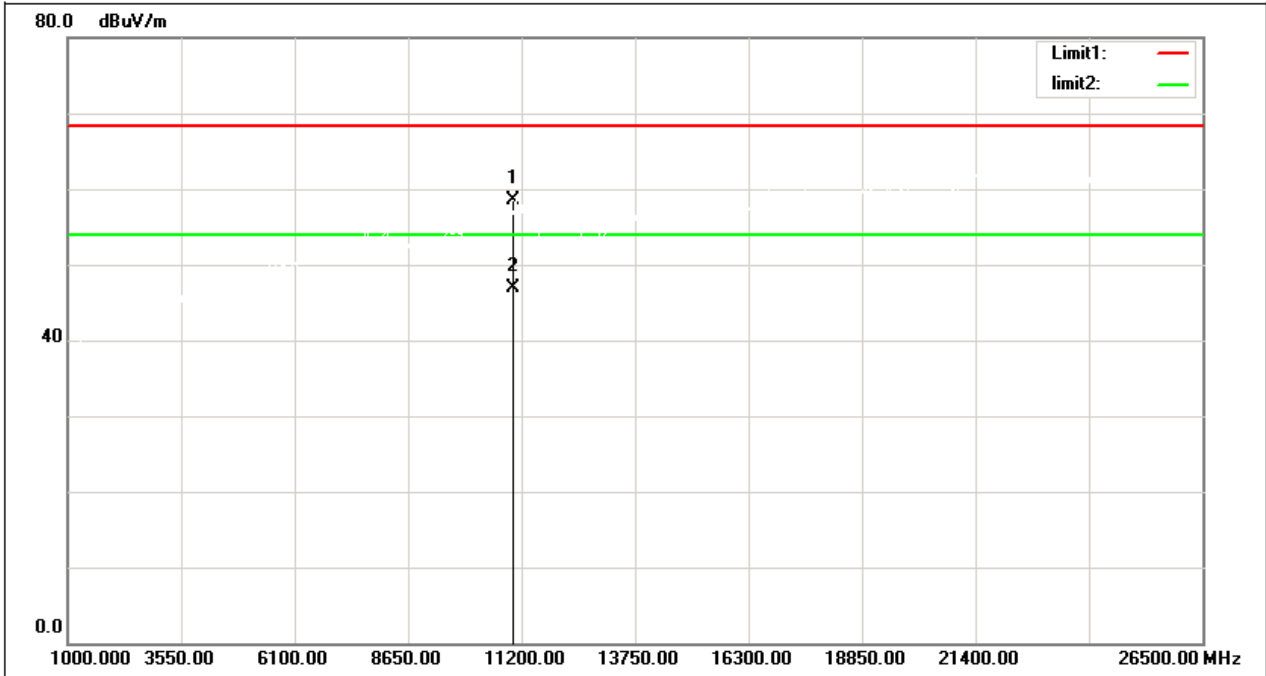
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	47.88	8.30	56.18	68.30	-12.12	peak
2	11020.000	37.37	8.30	45.67	54.00	-8.33	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5510 MHz Height:150cm Degree:163°

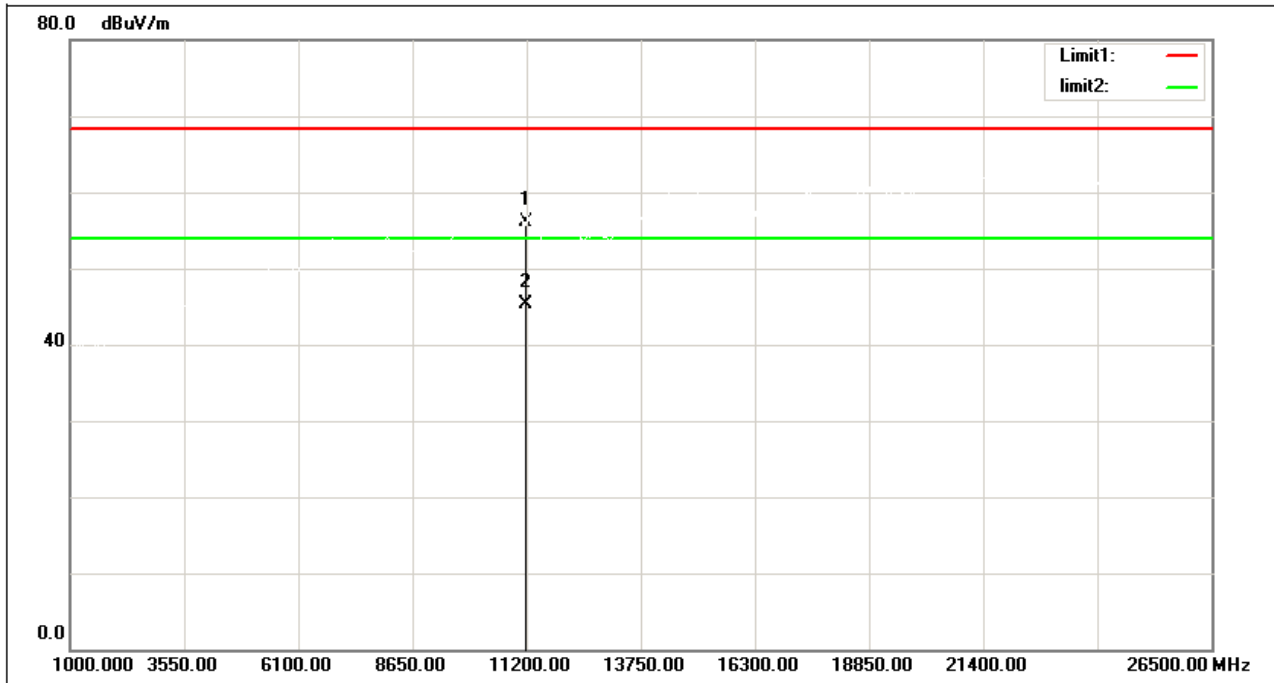
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	50.19	8.30	58.49	68.30	-9.81	peak
2	11020.000	38.54	8.30	46.84	54.00	-7.16	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5590 MHz Height:150cm Degree:34°

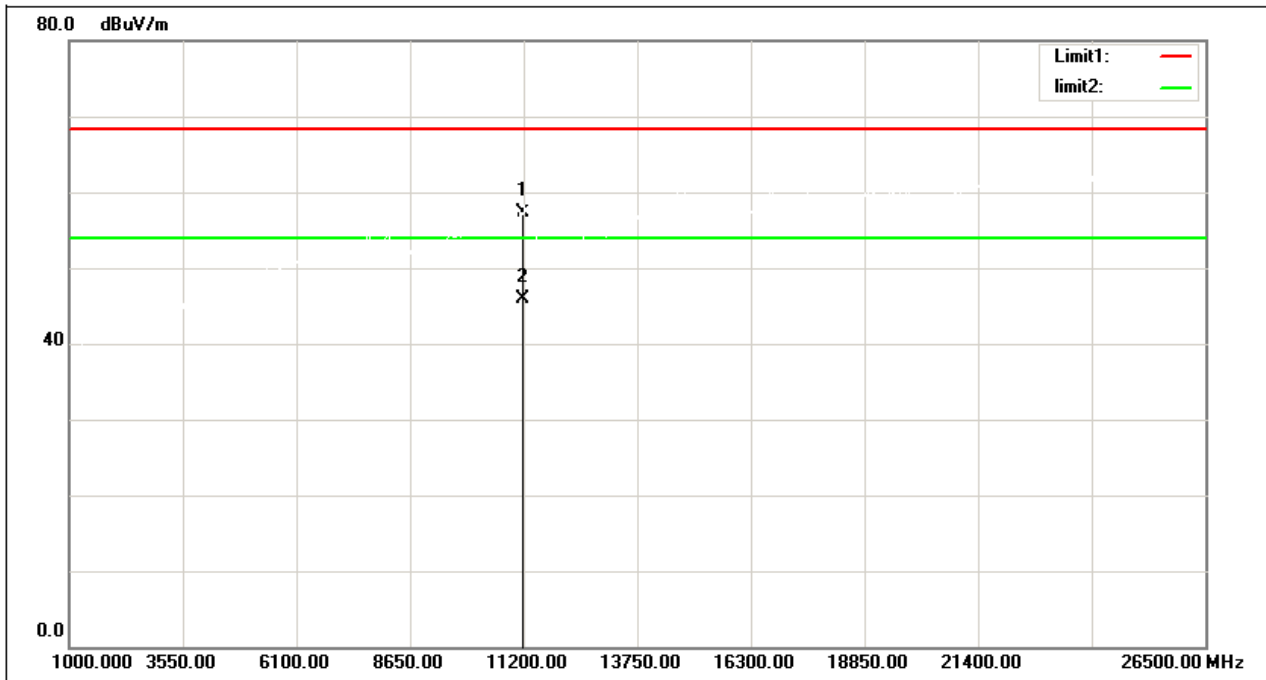
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	47.83	8.23	56.06	68.30	-12.24	peak
2	11180.000	37.16	8.23	45.39	54.00	-8.61	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5590 MHz Height:150cm Degree:162°

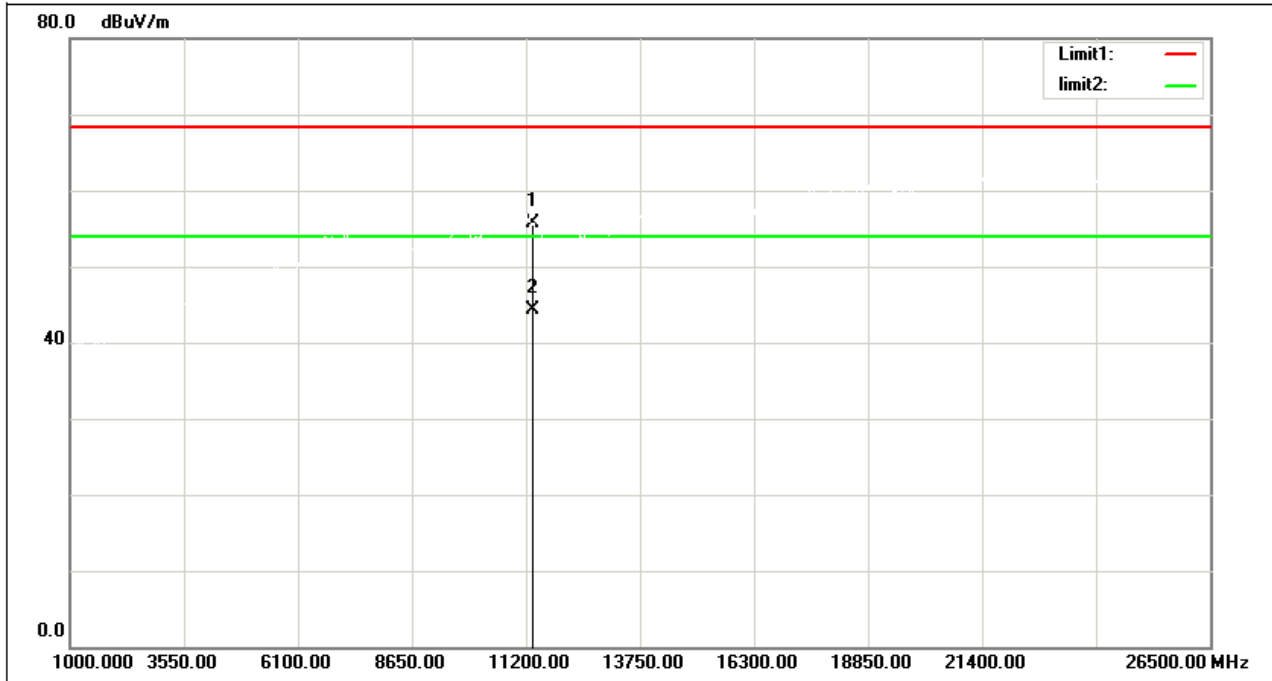
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	49.09	8.23	57.32	68.30	-10.98	peak
2	11180.000	37.61	8.23	45.84	54.00	-8.16	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz Height:150cm Degree:19°

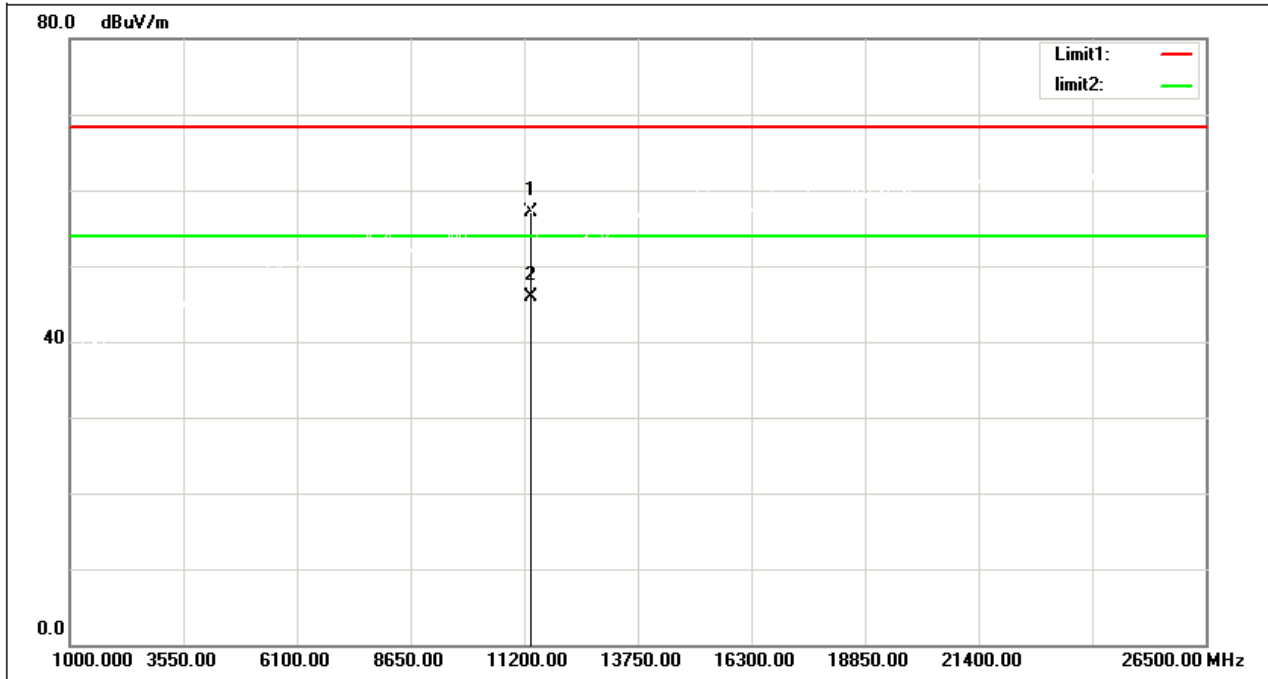
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	47.53	8.14	55.67	68.30	-12.63	peak
2	11340.000	36.14	8.14	44.28	54.00	-9.72	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT40) Mode 5670 MHz Height:150cm Degree:143°

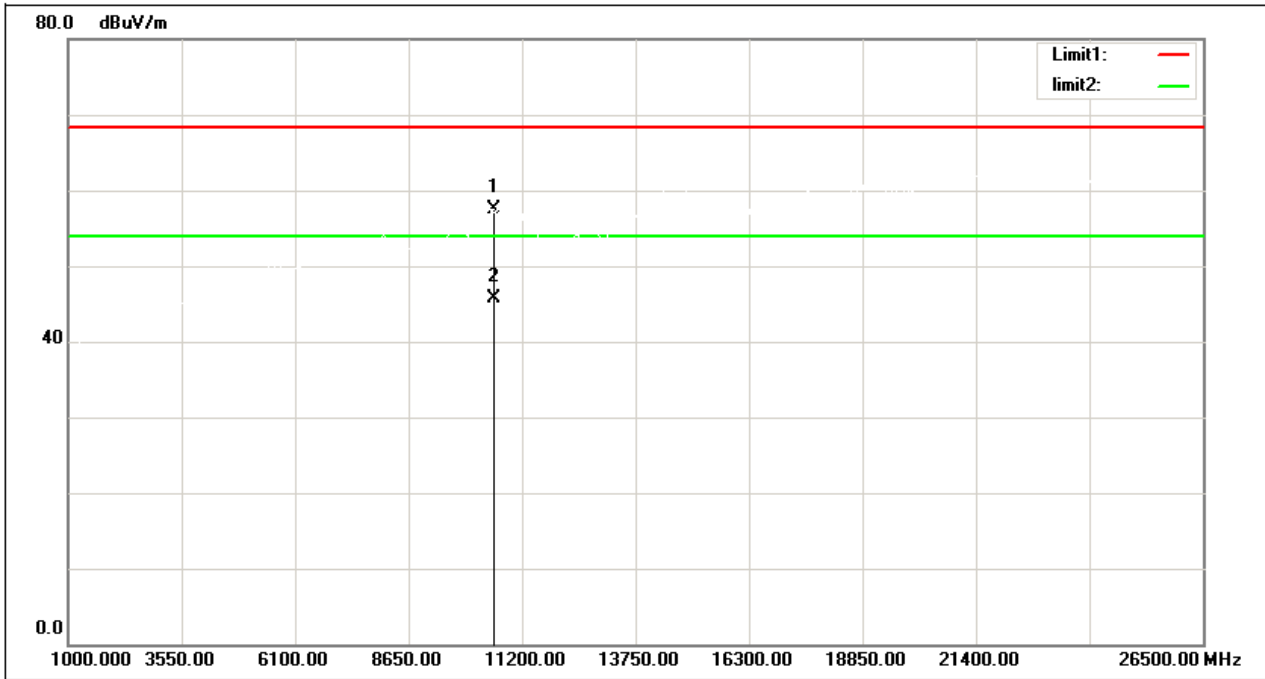
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	49.04	8.14	57.18	68.30	-11.12	peak
2	11340.000	37.75	8.14	45.89	54.00	-8.11	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz Height:150cm Degree:41°

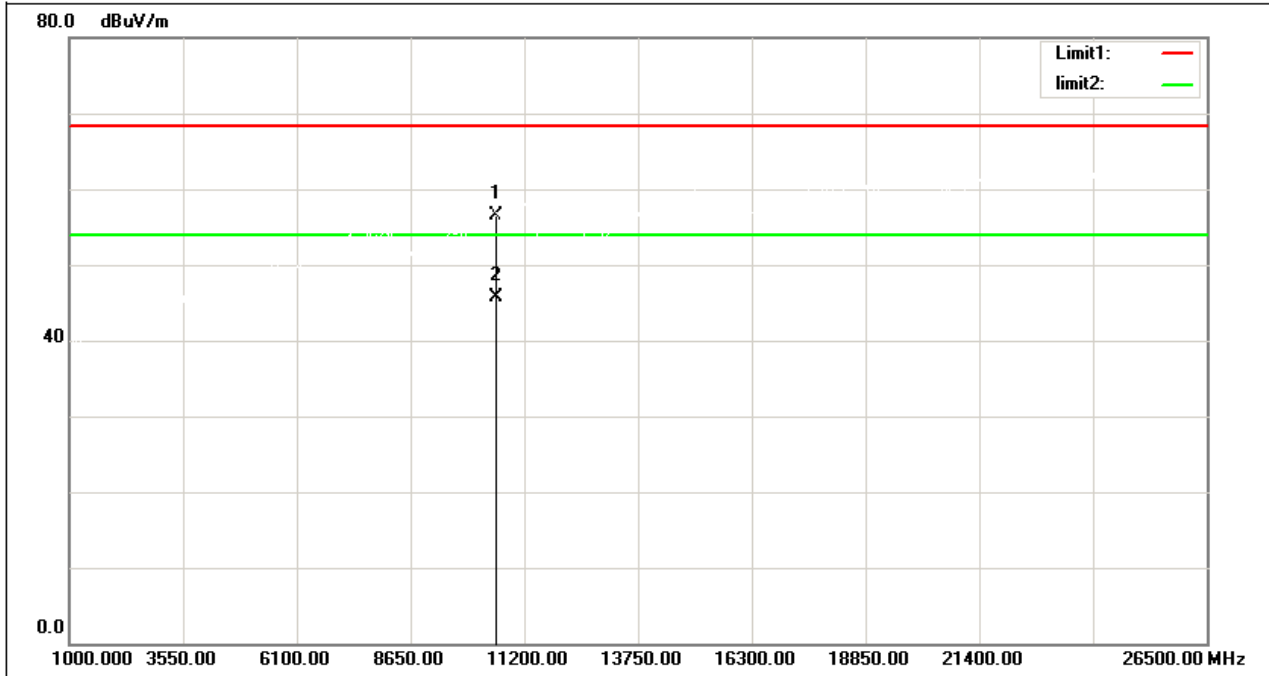
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10580.000	50.48	6.94	57.42	68.30	-10.88	peak
2	10580.000	38.82	6.94	45.76	54.00	-8.24	AVG

Orthogonal Axis	X
Test Mode	UNII-2A_TX AC (VHT80) Mode 5290 MHz Height:150cm Degree:168°

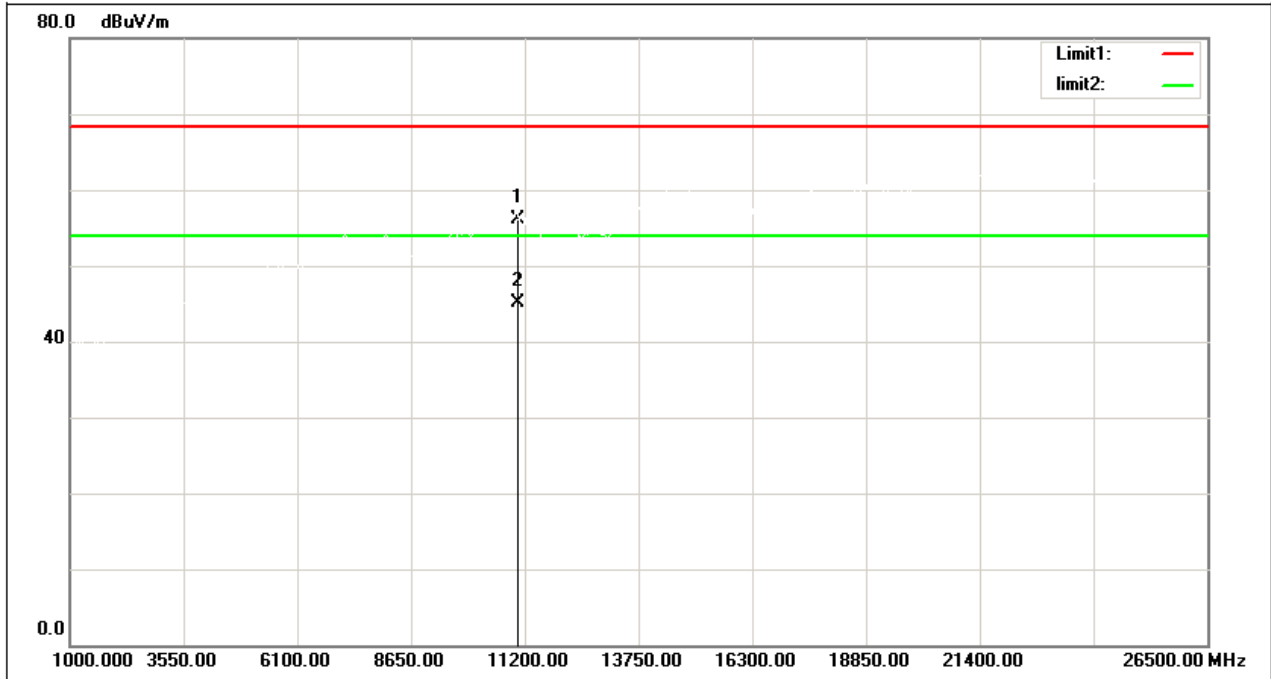
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10580.000	49.57	6.94	56.51	68.30	-11.79	peak
2	10580.000	38.70	6.94	45.64	54.00	-8.36	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz Height:150cm Degree:29°

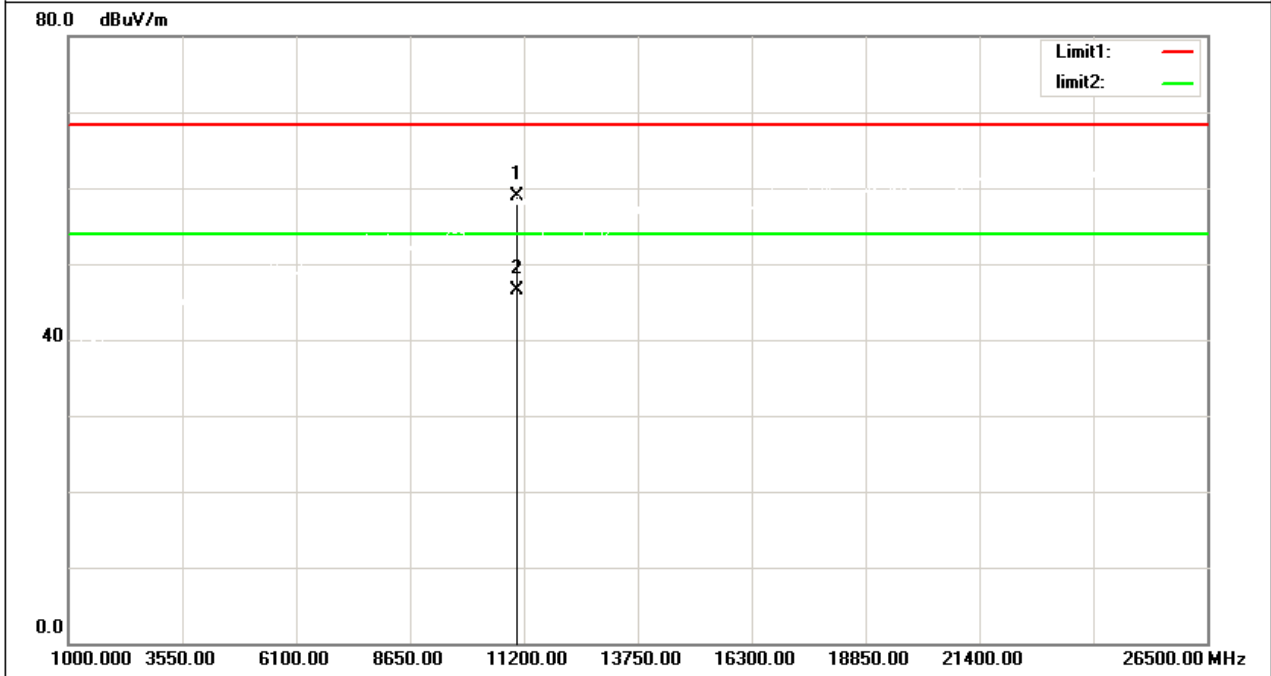
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11060.000	47.90	8.28	56.18	68.30	-12.12	peak
2	11060.000	36.85	8.28	45.13	54.00	-8.87	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5530 MHz Height:150cm Degree:162°

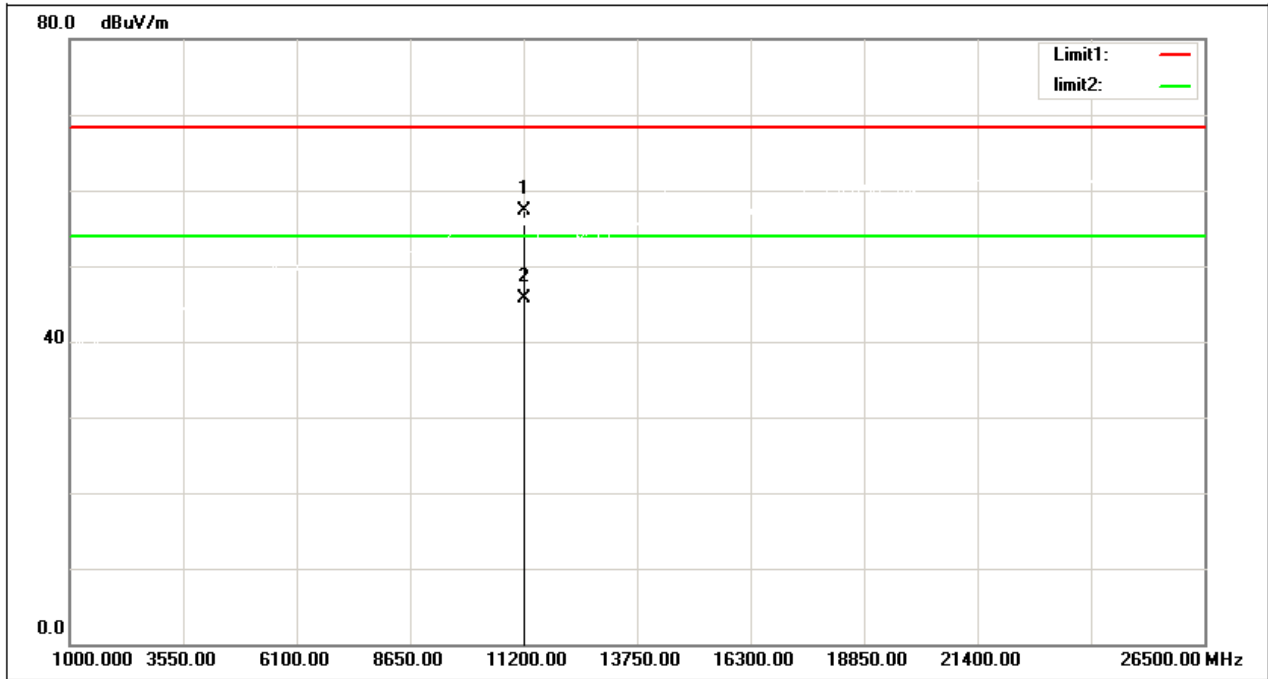
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11060.000	50.71	8.28	58.99	68.30	-9.31	peak
2	11060.000	38.31	8.28	46.59	54.00	-7.41	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz Height:150cm Degree:32°

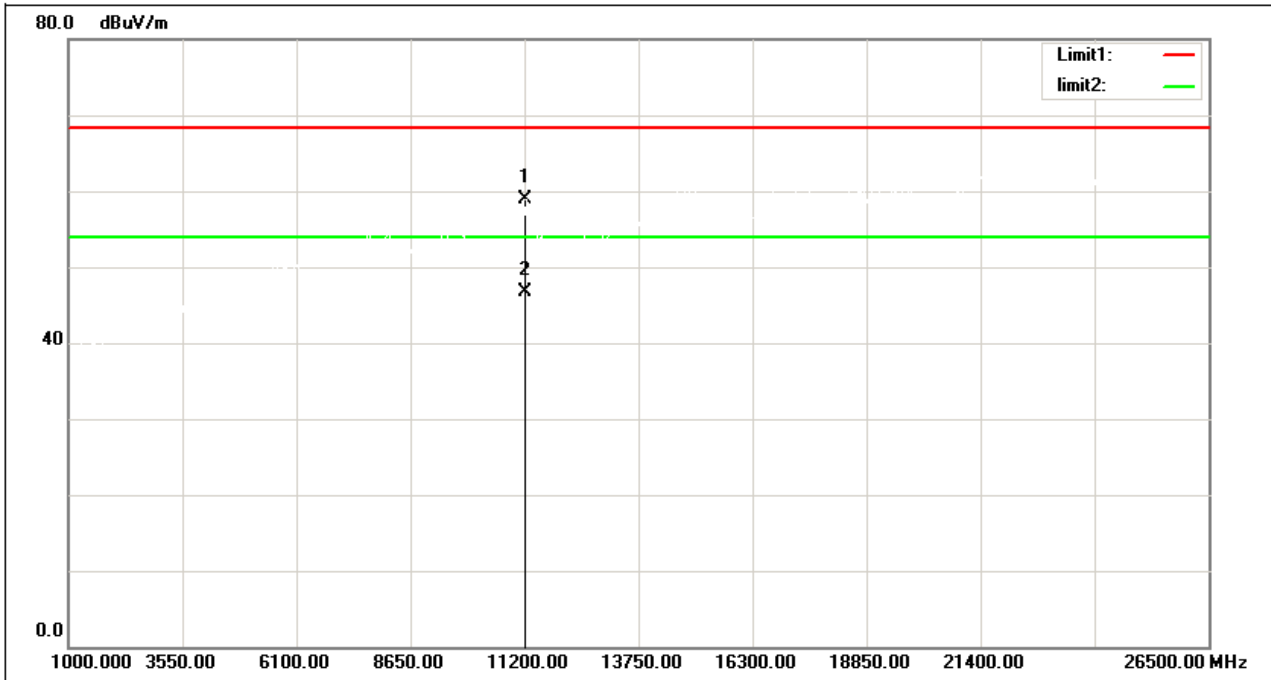
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11220.000	49.10	8.19	57.29	68.30	-11.01	peak
2	11220.000	37.44	8.19	45.63	54.00	-8.37	AVG

Orthogonal Axis	X
Test Mode	UNII-2C_TX AC (VHT80) Mode 5610 MHz Height:150cm Degree:152°

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11220.000	50.62	8.19	58.81	68.30	-9.49	peak
2	11220.000	38.49	8.19	46.68	54.00	-7.32	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

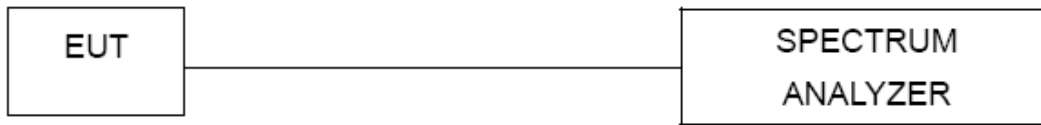
For UNII-3:

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	2022/05/28
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**

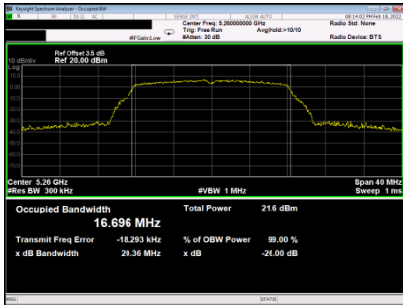
The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

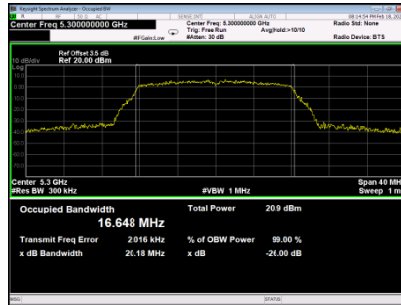
UNII-2A_TX A Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	20.36	16.696
60	5300	20.18	16.648
64	5320	19.87	16.597

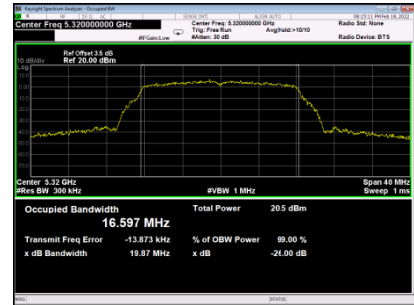
CH52



CH60



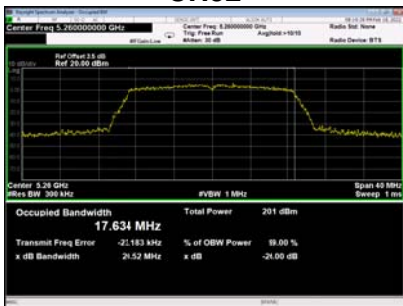
CH64



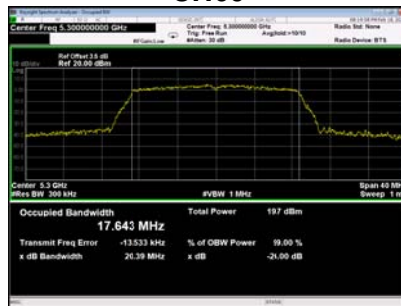
UNII-2A_TX N (HT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	20.52	17.634
60	5300	20.39	17.643
64	5320	20.30	17.635

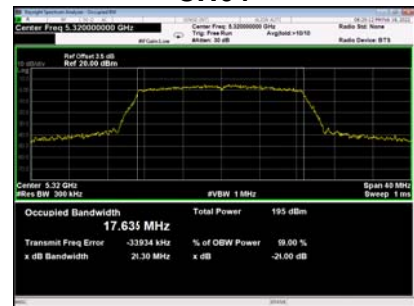
CH52



CH60



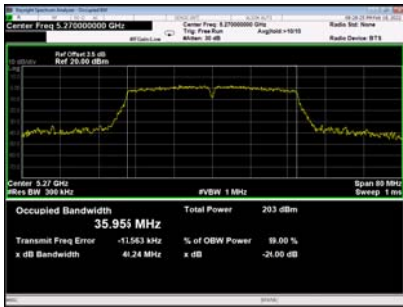
CH64



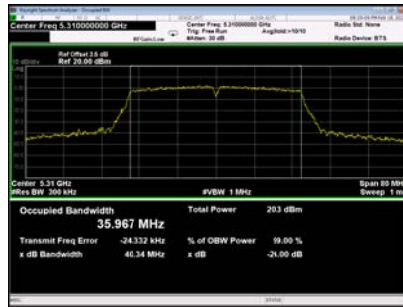
UNII-2A_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
54	5270	40.24	35.955
62	5310	40.34	35.967

CH54



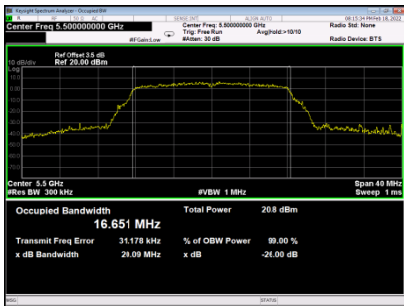
CH62



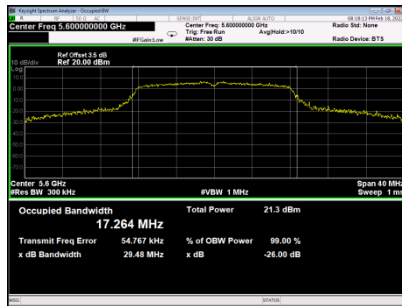
UNII-2C_TX A Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	20.09	16.651
120	5600	29.48	17.264
140	5700	20.41	16.806

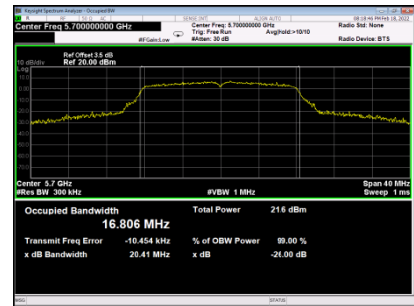
CH100



CH120



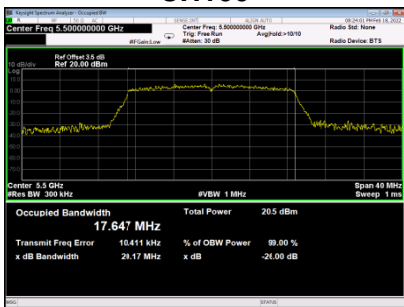
CH140



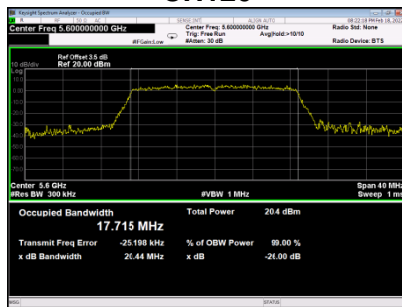
UNII-2C_TX N (HT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	20.17	17.647
120	5600	20.44	17.715
140	5700	20.07	17.658

CH100



CH120



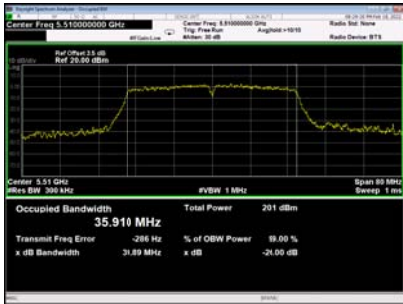
CH140



UNII-2C_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
102	5510	39.89	35.910
118	5590	61.13	36.303
134	5670	54.00	36.137

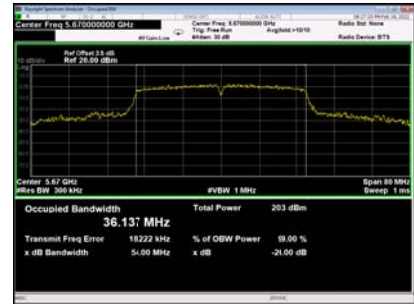
CH102



CH118



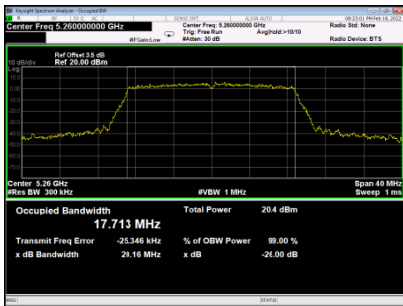
CH134



UNII-2A_TX AC (VHT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	20.16	17.713
60	5300	20.31	17.711
64	5320	20.25	17.708

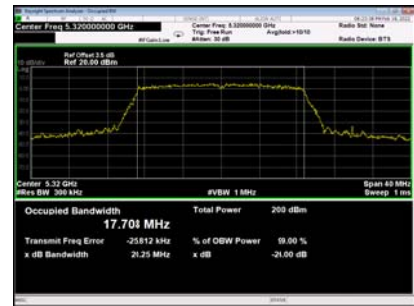
CH52



CH60



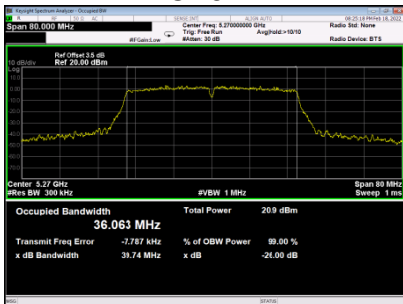
CH64



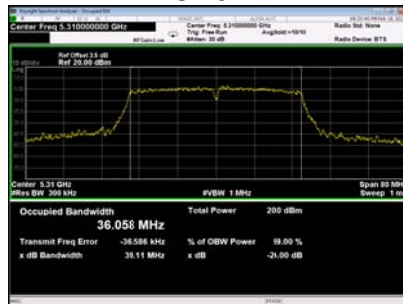
UNII-2A_TX AC (VHT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
54	5270	39.74	36.063
62	5310	39.11	36.058

CH54



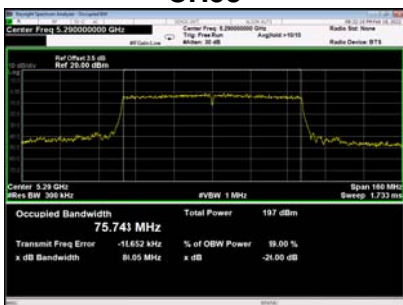
CH62



UNII-2A_TX AC (VHT80) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
58	5290	80.05	75.743

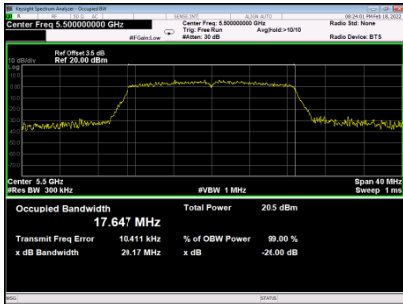
CH58



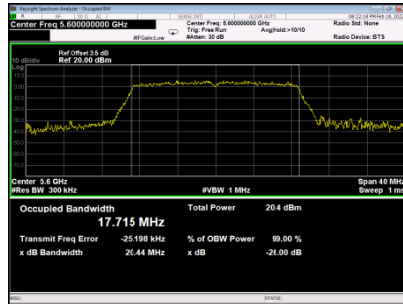
UNII-2C_TX AC (VHT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	20.17	17.647
120	5600	20.44	17.715
140	5700	20.07	17.658

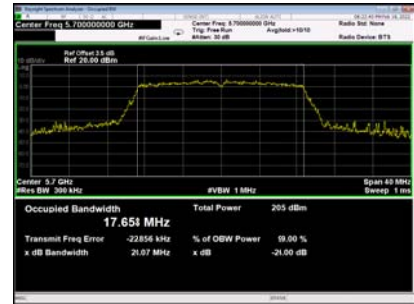
CH100



CH120



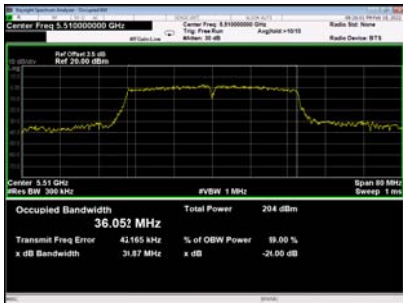
CH140



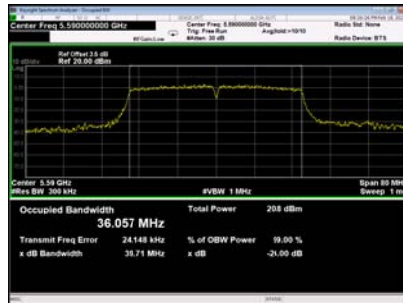
UNII-2C_TX AC (VHT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
102	5510	39.87	36.052
118	5590	39.71	36.057
134	5670	40.39	36.060

CH102



CH118



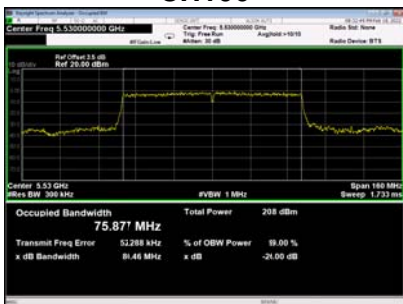
CH134



UNII-2C_TX AC (VHT80) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
106	5530	80.46	75.877
122	5610	80.00	75.609

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 $10 + 10 \log B$, dBm, whichever power is less	5150-5250
		not exceed 1.0 W or $17 + 10 \log B$, 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:

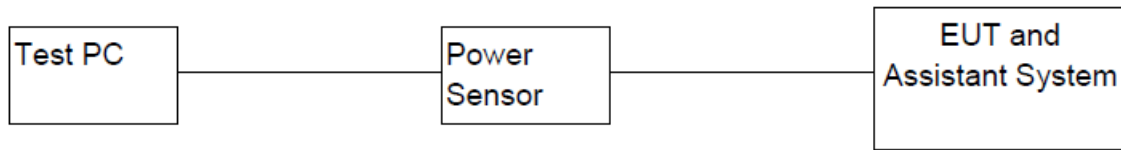
- a. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. 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.
- b. 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 $11 \text{ dBm} + 10 \log B$, where B is the 26dB Bandwidth in megahertz.
- c. EIRP Power=Output Power+Antenna Gain
MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain= $3.57\text{dBi}+3.57\text{dBi}=6.58\text{dBi}$

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	05/24/2022
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	14.69	0.00	14.69	24.00	0.25	PASS
60	5300	14.48	0.00	14.48	24.00	0.25	PASS
64	5320	14.65	0.00	14.65	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	14.80	0.00	14.80	24.00	0.25	PASS
60	5300	14.74	0.00	14.74	24.00	0.25	PASS
64	5320	14.56	0.00	14.56	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	14.44	0.00	14.44	24.00	0.25	PASS
120	5600	14.84	0.00	14.84	24.00	0.25	PASS
140	5700	14.84	0.00	14.84	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	14.82	0.00	14.82	24.00	0.25	PASS
120	5600	14.71	0.00	14.71	24.00	0.25	PASS
140	5700	14.48	0.00	14.48	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	13.55	0.00	13.55	24.00	0.25	PASS
60	5300	13.32	0.00	13.32	24.00	0.25	PASS
64	5320	13.29	0.00	13.29	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	13.79	0.00	13.79	24.00	0.25	PASS
60	5300	13.73	0.00	13.73	24.00	0.25	PASS
64	5320	13.53	0.00	13.53	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	16.68	24.00	0.25	PASS
60	5300	16.54	24.00	0.25	PASS
64	5320	16.42	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	13.29	0.00	13.29	24.00	0.25	PASS
120	5600	13.66	0.00	13.66	24.00	0.25	PASS
140	5700	13.69	0.00	13.69	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	13.83	0.00	13.83	24.00	0.25	PASS
120	5600	13.86	0.00	13.86	24.00	0.25	PASS
140	5700	13.56	0.00	13.56	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	16.58	24.00	0.25	PASS
120	5600	16.77	24.00	0.25	PASS
140	5700	16.64	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	13.74	0.00	13.74	24.00	0.25	PASS
62	5310	13.56	0.00	13.56	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	13.67	0.00	13.67	24.00	0.25	PASS
62	5310	13.84	0.00	13.84	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	16.72		24.00	0.25	PASS
62	5310	16.71		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	13.70	0.00	13.70	24.00	0.25	PASS
118	5590	13.80	0.00	13.80	24.00	0.25	PASS
134	5670	13.67	0.00	13.67	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	13.38	0.00	13.38	24.00	0.25	PASS
118	5590	13.62	0.00	13.62	24.00	0.25	PASS
134	5670	13.66	0.00	13.66	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	16.55	24.00	0.25	PASS
118	5590	16.72	24.00	0.25	PASS
134	5670	16.68	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	13.71	0.00	13.71	24.00	0.25	PASS
60	5300	13.54	0.00	13.54	24.00	0.25	PASS
64	5320	13.63	0.00	13.63	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	13.75	0.00	13.75	24.00	0.25	PASS
60	5300	13.69	0.00	13.69	24.00	0.25	PASS
64	5320	13.44	0.00	13.44	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	16.74	24.00	0.25	PASS
60	5300	16.63	24.00	0.25	PASS
64	5320	16.55	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	13.50	0.00	13.50	24.00	0.25	PASS
120	5600	13.64	0.00	13.64	24.00	0.25	PASS
140	5700	13.49	0.00	13.49	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	13.82	0.00	13.82	24.00	0.25	PASS
120	5600	13.45	0.00	13.45	24.00	0.25	PASS
140	5700	13.85	0.00	13.85	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	16.67	24.00	0.25	PASS
120	5600	16.56	24.00	0.25	PASS
140	5700	16.68	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	13.69	0.00	13.69	24.00	0.25	PASS
62	5310	13.29	0.00	13.29	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	13.69	0.00	13.69	24.00	0.25	PASS
62	5310	13.80	0.00	13.80	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	16.70	24.00	0.25	PASS
62	5310	16.56	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	13.38	0.00	13.38	24.00	0.25	PASS
118	5590	13.77	0.00	13.77	24.00	0.25	PASS
134	5670	13.51	0.00	13.51	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	13.76	0.00	13.76	24.00	0.25	PASS
118	5590	13.52	0.00	13.52	24.00	0.25	PASS
134	5670	13.67	0.00	13.67	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	16.58	24.00	0.25	PASS
118	5590	16.66	24.00	0.25	PASS
134	5670	16.60	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	13.33	0.00	13.33	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	13.38	0.00	13.38	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	16.37	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	13.15	0.00	13.15	24.00	0.25	PASS
122	5610	13.76	0.00	13.76	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	13.49	0.00	13.49	24.00	0.25	PASS
122	5610	13.70	0.00	13.70	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	16.33	24.00	0.25	PASS
122	5610	16.74	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

- 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	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	2022/05/28
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

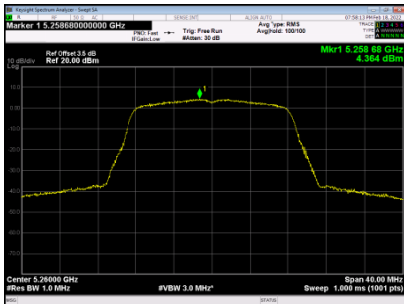
The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

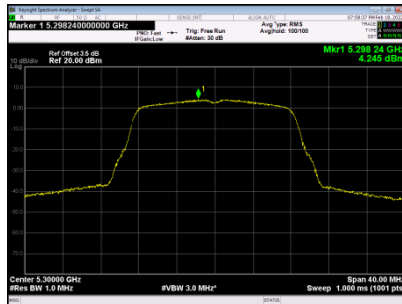
UNII-2A_TX A Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	4.364	0.00	4.364	11.00	PASS
60	5300	4.045	0.00	4.045	11.00	PASS
64	5320	4.534	0.00	4.534	11.00	PASS

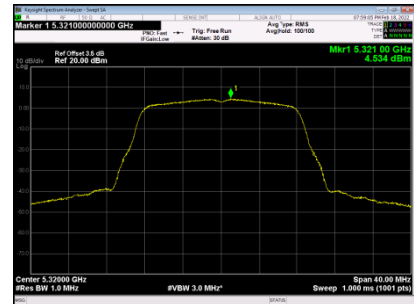
CH52



CH60



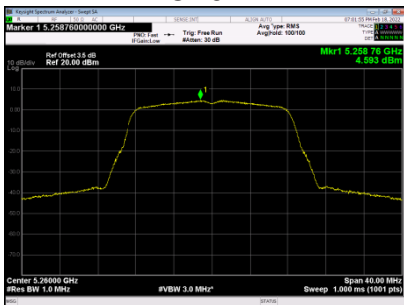
CH64



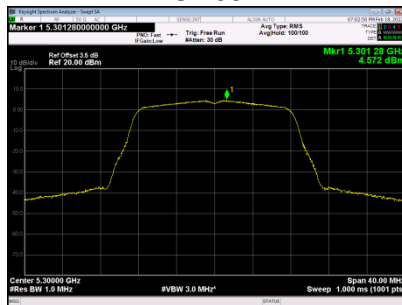
UNII-2A_TX A Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	4.593	0.00	4.593	11.00	PASS
60	5300	4.572	0.00	4.572	11.00	PASS
64	5320	4.304	0.00	4.304	11.00	PASS

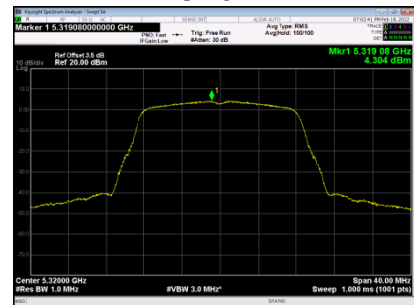
CH52



CH60



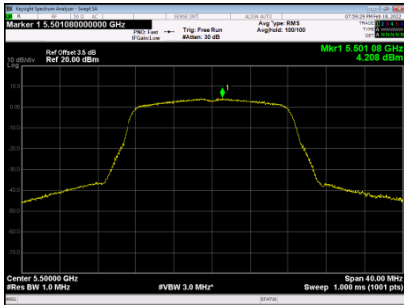
CH64



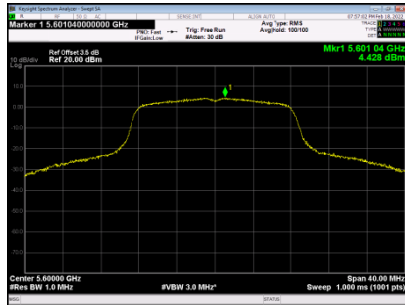
UNII-2C_TX A Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	4.208	0.00	4.208	11.00	PASS
120	5600	4.428	0.00	4.428	11.00	PASS
140	5700	4.384	0.00	4.384	11.00	PASS

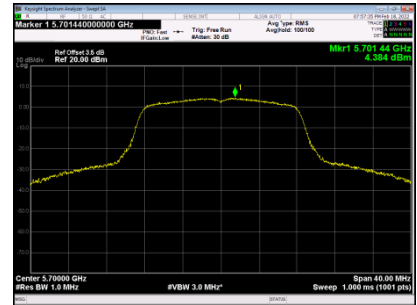
CH100



CH120



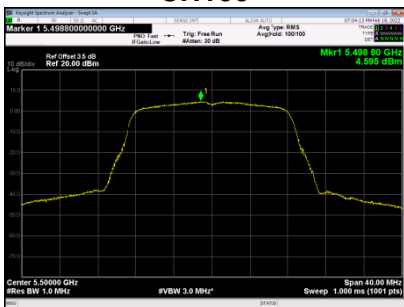
CH140



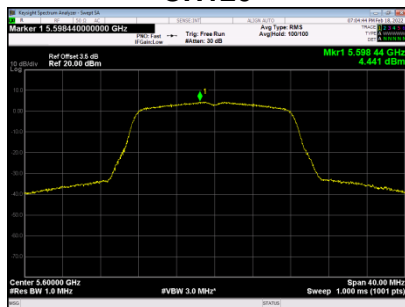
UNII-2C_TX A Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	4.595	0.00	4.595	11.00	PASS
120	5600	4.441	0.00	4.441	11.00	PASS
140	5700	4.314	0.00	4.314	11.00	PASS

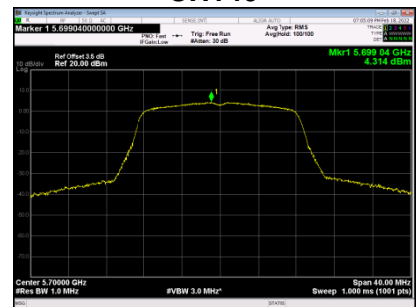
CH100



CH120



CH140



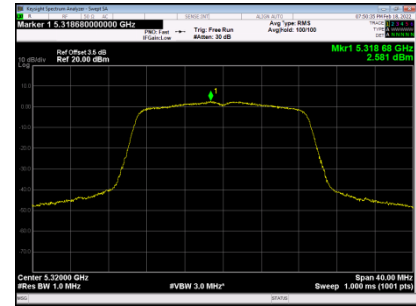
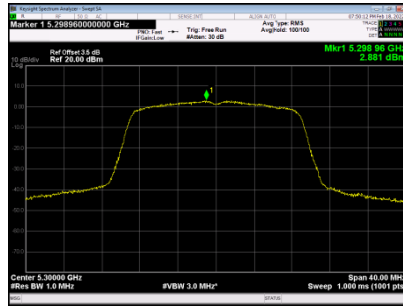
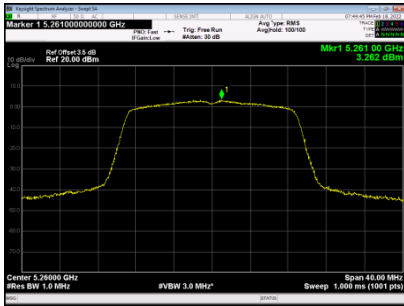
UNII-2A_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.262	0.00	3.262	11.00	PASS
60	5300	2.881	0.00	2.881	11.00	PASS
64	5320	2.581	0.00	2.581	11.00	PASS

CH52

CH60

CH64



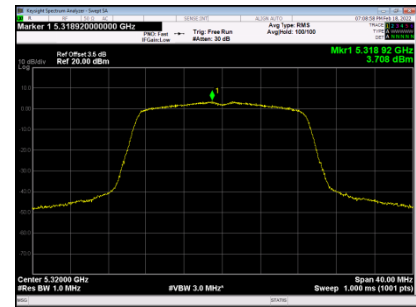
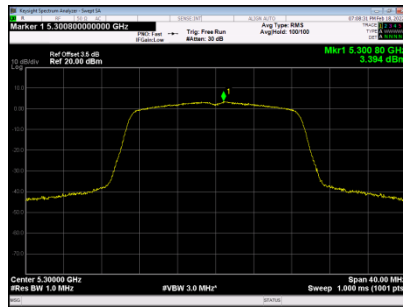
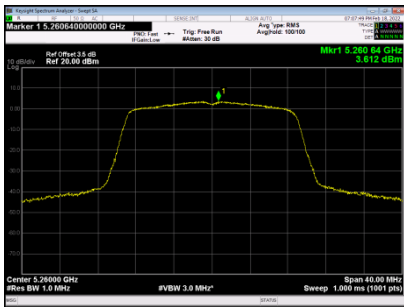
UNII-2A_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.612	0.00	3.612	11.00	PASS
60	5300	3.394	0.00	3.394	11.00	PASS
64	5320	3.708	0.00	3.708	11.00	PASS

CH52

CH60

CH64



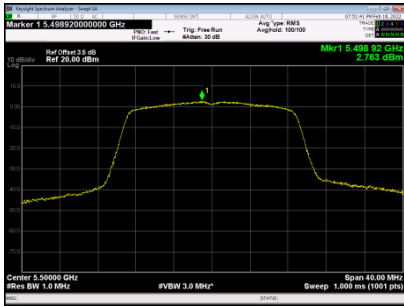
UNII-2A_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	6.451	11.00	PASS
60	5300	6.155	11.00	PASS
64	5320	6.191	11.00	PASS

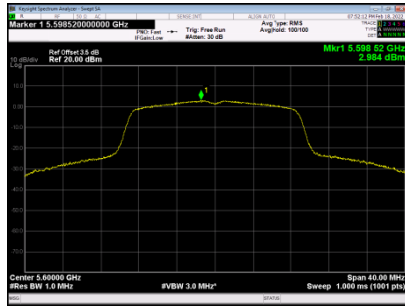
UNII-2C_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	2.763	0.00	2.763	11.00	PASS
120	5600	2.984	0.00	2.984	11.00	PASS
140	5700	3.100	0.00	3.100	11.00	PASS

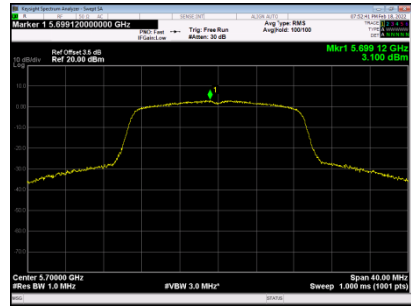
CH100



CH120



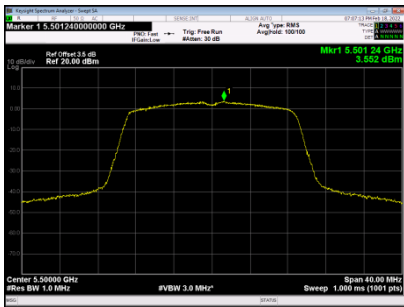
CH140



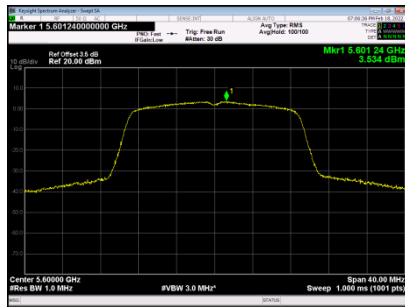
UNII-2C_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.552	0.00	3.552	11.00	PASS
120	5600	3.534	0.00	3.534	11.00	PASS
140	5700	3.508	0.00	3.508	11.00	PASS

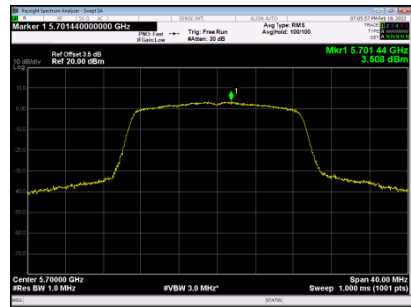
CH100



CH120



CH140



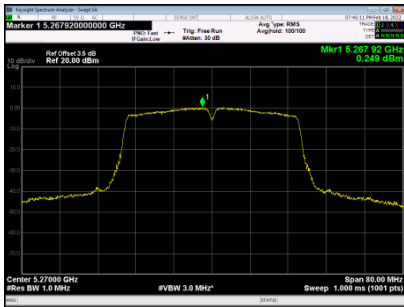
UNII-2C_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	6.186	11.00	PASS
120	5600	6.278	11.00	PASS
140	5700	6.319	11.00	PASS

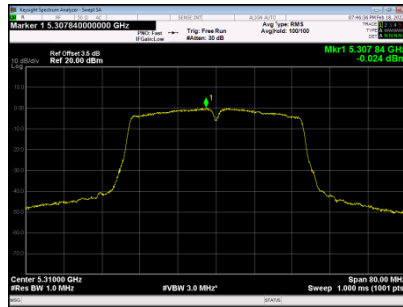
UNII-2A_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.249	0.00	0.249	11.00	PASS
62	5310	-0.024	0.00	-0.024	11.00	PASS

CH54



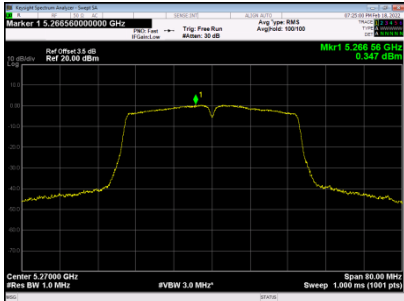
CH62



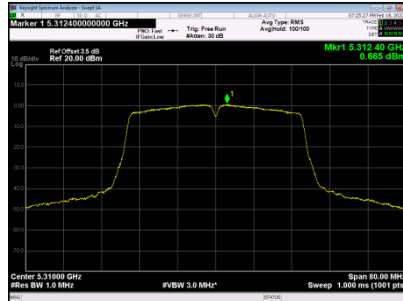
UNII-2A_TX N (HT40) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.347	0.00	0.347	11.00	PASS
62	5310	0.665	0.00	0.665	11.00	PASS

CH54



CH62



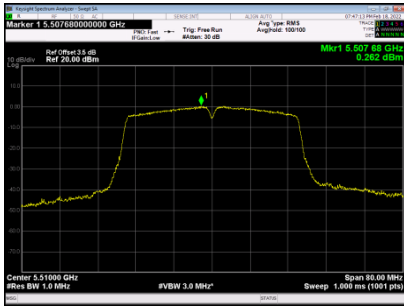
UNII-2A_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	3.309	11.00	PASS
62	5310	3.344	11.00	PASS

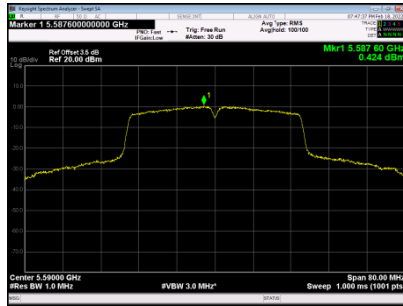
UNII-2C_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	0.262	0.00	0.262	11.00	PASS
118	5590	0.424	0.00	0.424	11.00	PASS
134	5670	0.070	0.00	0.070	11.00	PASS

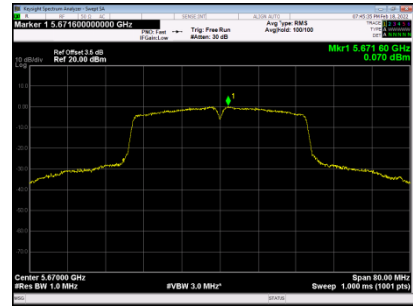
CH102



CH118



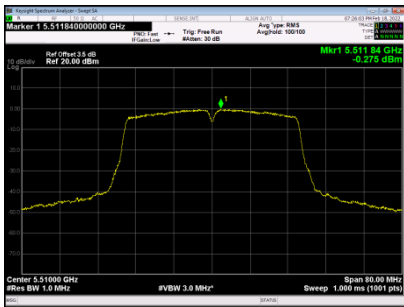
CH134



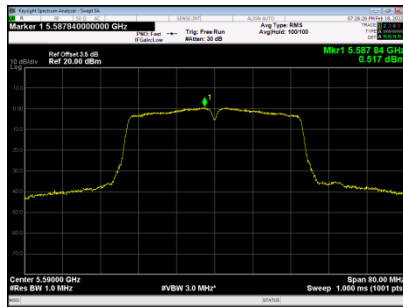
UNII-2C_TX N (HT40) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	-0.275	0.00	-0.275	11.00	PASS
118	5590	0.517	0.00	0.517	11.00	PASS
134	5670	0.376	0.00	0.376	11.00	PASS

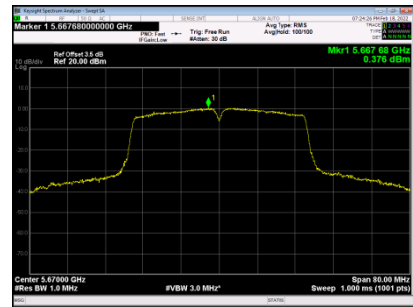
CH102



CH118



CH134



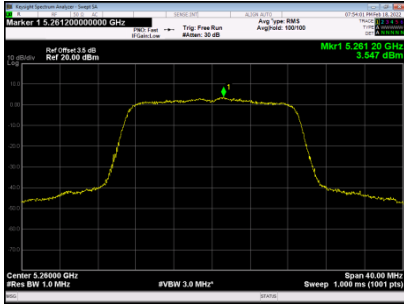
UNII-2C_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	3.012	11.00	PASS
118	5590	3.481	11.00	PASS
134	5670	3.236	11.00	PASS

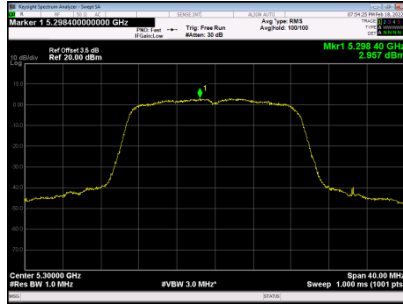
UNII-2A_TX AC (VHT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.547	0.00	3.547	11.00	PASS
60	5300	2.957	0.00	2.957	11.00	PASS
64	5320	3.225	0.00	3.225	11.00	PASS

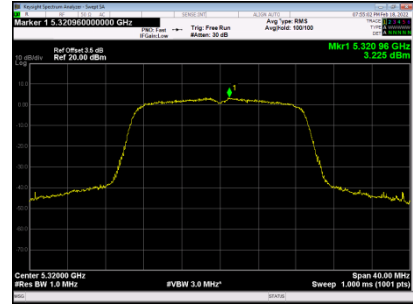
CH52



CH60



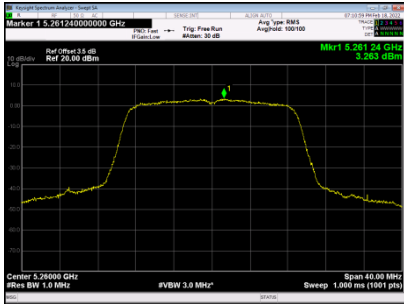
CH64



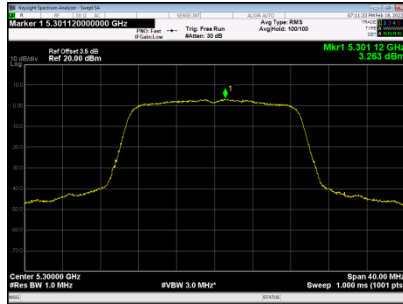
UNII-2A_TX AC (VHT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.263	0.00	3.263	11.00	PASS
60	5300	3.263	0.00	3.263	11.00	PASS
64	5320	2.966	0.00	2.966	11.00	PASS

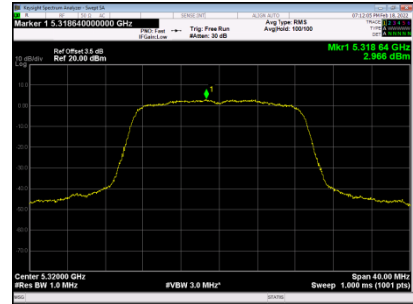
CH52



CH60



CH64



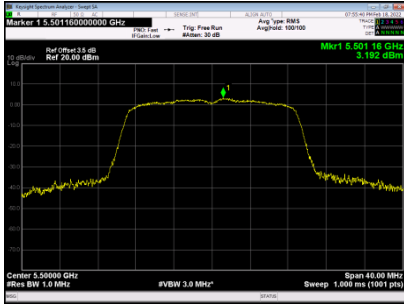
UNII-2A_TX AC (VHT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	6.418	11.00	PASS
60	5300	6.123	11.00	PASS
64	5320	6.108	11.00	PASS

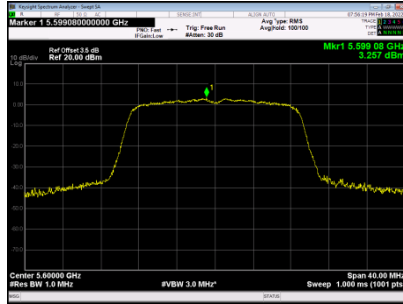
UNII-2C_TX AC (VHT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.192	0.00	3.192	11.00	PASS
120	5600	3.257	0.00	3.257	11.00	PASS
140	5700	3.258	0.00	3.258	11.00	PASS

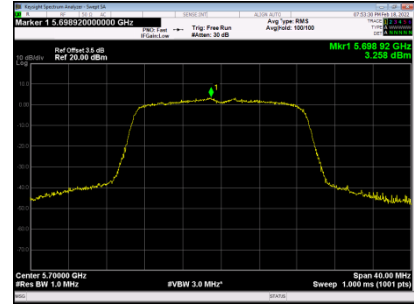
CH100



CH120



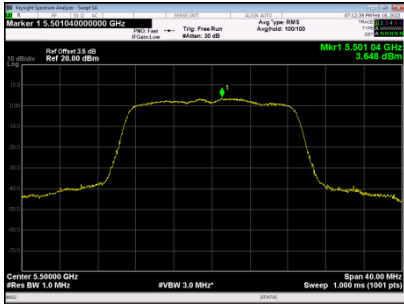
CH140



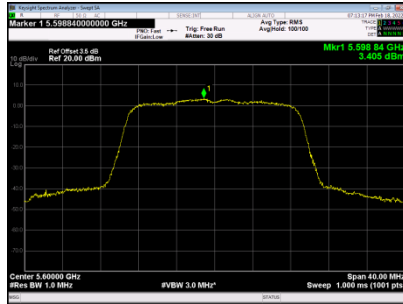
UNII-2C_TX AC (VHT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.648	0.00	3.648	11.00	PASS
120	5600	3.405	0.00	3.405	11.00	PASS
140	5700	3.529	0.00	3.529	11.00	PASS

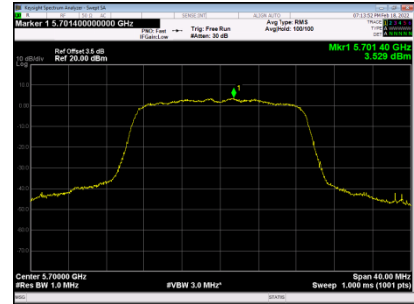
CH100



CH120



CH140



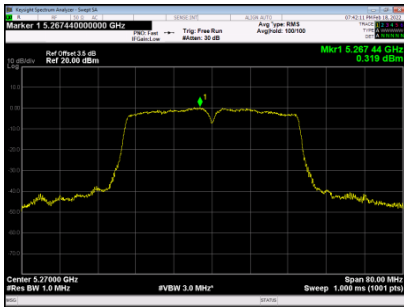
UNII-2C_TX AC (VHT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	6.436	11.00	PASS
120	5600	6.342	11.00	PASS
140	5700	6.406	11.00	PASS

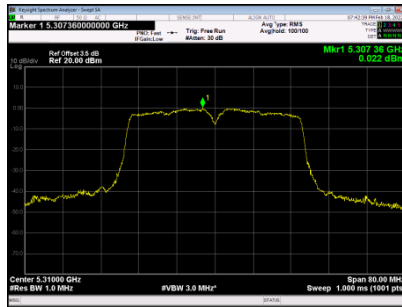
UNII-2A_TX AC (VHT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.319	0.00	0.319	11.00	PASS
62	5310	0.022	0.00	0.022	11.00	PASS

CH54



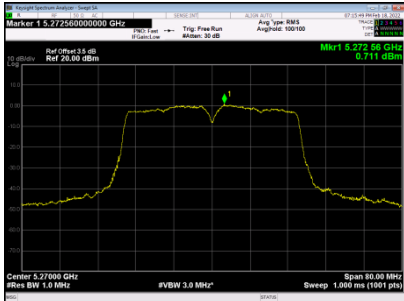
CH62



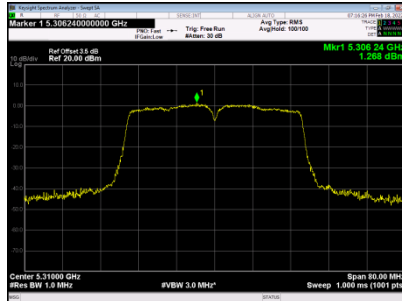
UNII-2A_TX AC (VHT40) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.711	0.00	0.711	11.00	PASS
62	5310	1.268	0.00	1.268	11.00	PASS

CH54



CH62



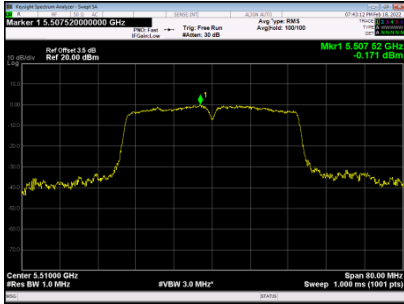
UNII-2A_TX AC (VHT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	3.530	11.00	PASS
62	5310	3.700	11.00	PASS

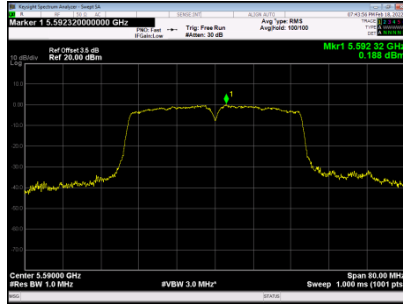
UNII-2C_TX AC (VHT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	-0.171	0.00	-0.171	11.00	PASS
118	5590	0.188	0.00	0.188	11.00	PASS
134	5670	-0.186	0.00	-0.186	11.00	PASS

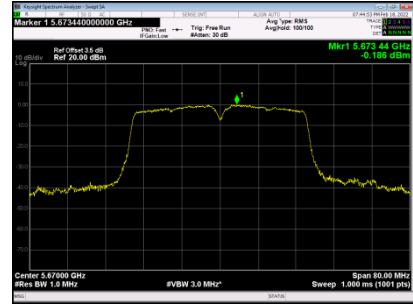
CH102



CH118



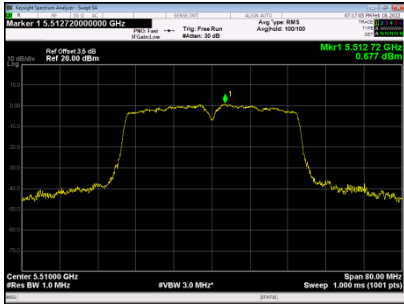
CH134



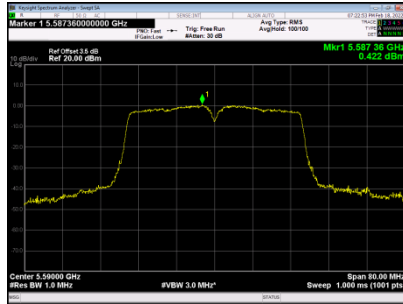
UNII-2C_TX AC (VHT40) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	0.677	0.00	0.677	11.00	PASS
118	5590	0.422	0.00	0.422	11.00	PASS
134	5670	0.555	0.00	0.555	11.00	PASS

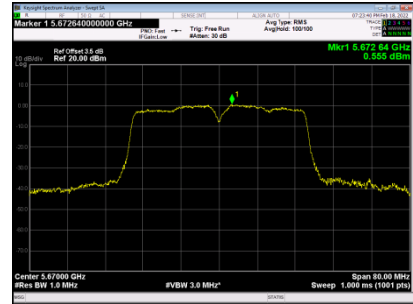
CH102



CH118



CH134



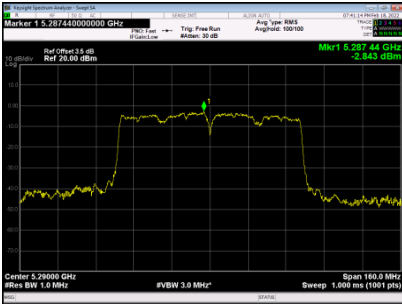
UNII-2C_TX AC (VHT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	3.284	11.00	PASS
118	5590	3.317	11.00	PASS
134	5670	3.211	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	-2.843	0.00	-2.843	11.00	PASS

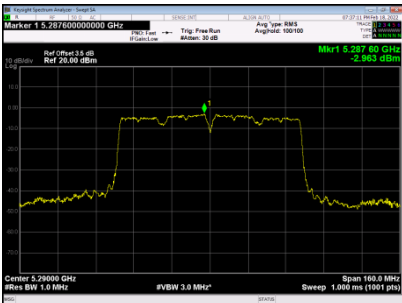
CH58



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	-2.963	0.00	-2.963	11.00	PASS

CH58



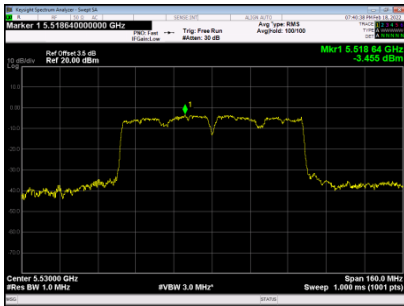
UNII-2A_TX AC (VHT80) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290	0.108	11.00	PASS

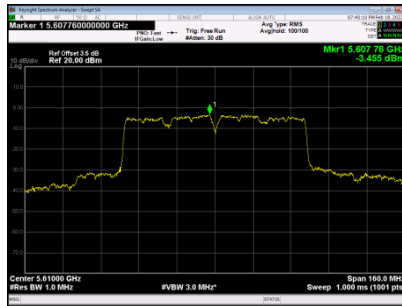
UNII-2C_TX AC (VHT80) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
106	5530	-3.455	0.00	-3.455	11.00	PASS
122	5610	-3.455	0.00	-3.455	11.00	PASS

CH106



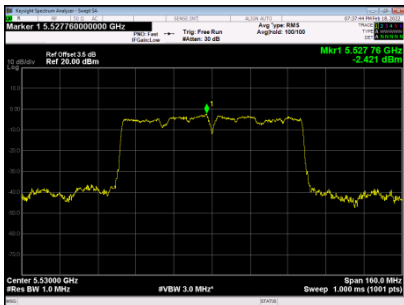
CH122



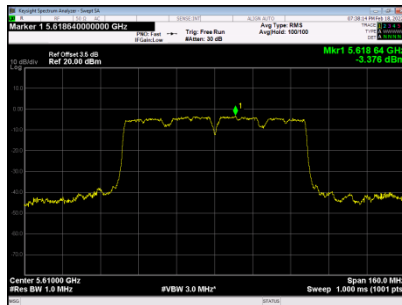
UNII-2C_TX AC (VHT80) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
106	5530	-2.421	0.00	-2.421	11.00	PASS
122	5610	-3.376	0.00	-3.376	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	0.103	11.00	PASS
122	5610	-0.405	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

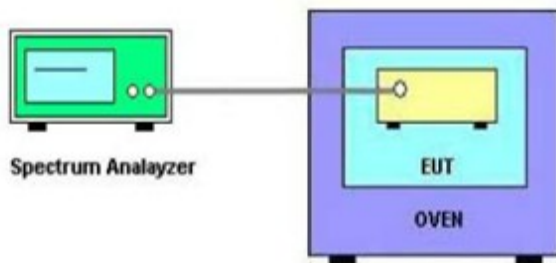
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

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	5260.0011
	25	5260.0016
	50	5260.0008
2.1V	25	5260.0010
Max. Deviation (MHz)		0.0016
Max. Deviation (ppm)		0.304

Temperature vs. Frequency Stability-UNII-2C		
Voltage	Temperature	Measurement Frequency (MHz)
3.3V	(°C)	5500
	-20	5500.0023
	25	5500.0018
	50	5500.0019
2.1V	25	5500.0020
Max. Deviation (MHz)		0.0026
Max. Deviation (ppm)		0.418

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

END OF TEST REPORT