

FCC &ISED Radio Test Report**FCC ID: 2AC23-WT541****IC:12290A- WT541****The report concerns: Original Grant**

Report Reference No. : 20EFAS12075 0341
Date Sample(s) Received : 2020-12-18
Date of Tested : 2020-12-19 to 2021-01-13
Date of issue : 2021-01-13
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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

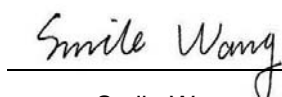
Equipment : WIFI+BT Module
Trade Mark : GSD
Model : WT54M2001
Ratings : I/P: DC 3.3V

Test Engineer:



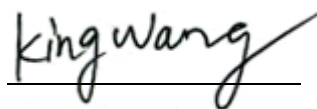
Blue Qiu

Responsible Engineer :



Smile Wang

Authorized Signatory:



King Wang

Table of Contents	Page
1 . TEST REPORT DECLARE	4
2 . SUMMARY OF TEST RESULTS	5
2.1 MEASUREMENT UNCERTAINTY	6
3 . GENERAL INFORMATION	7
3.1 GENERAL DESCRIPTION OF EUT	7
3.2 TEST MODES	10
3.3 PARAMETERS OF TEST SOFTWARE	12
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 SUPPORT UNITS	14
3.6 TEST ENVIRONMENT CONDITIONS	14
3.7 DUTY CYCLE	15
4 . AC POWER LINE CONDUCTED EMISSIONS TEST	16
4.1 LIMIT	16
4.2 TEST PROCEDURE	16
4.3 MEASUREMENT INSTRUMENTS LIST	16
4.4 TESTSETUP	17
4.5 EUT OPERATION CONDITIONS	17
4.6 TEST RESULTS	18
5 . RADIATED EMISSIONSTEST	20
5.1 LIMIT	20
5.2 TEST PROCEDURE	21
5.3 MEASUREMENT INSTRUMENTS LIST	21
5.4 TESTSETUP	22
5.5 EUT OPERATION CONDITIONS	22
5.6 TEST RESULTS - 9 KHZ to 30MHZ	23
5.7 TEST RESULTS - 30 MHz TO 1000 MHz	24
5.8 TEST RESULTS - ABOVE1000 MHz(BAND EDGE)	26
5.9 TEST RESULTS - ABOVE1000 MHz (HARMONIC)	66
6 . BANDWIDTH TEST	118
6.1 LIMIT	118
6.2 TEST PROCEDURE AND SETTING	118
6.3 MEASUREMENT INSTRUMENTS LIST	118
6.4 TEST SETUP	119

Table of Contents	Page
6.5 EUT OPERATION CONDITIONS	119
6.6 TEST RESULTS	120
7 . MAXIMUM OUTPUT POWER TEST	128
7.1 LIMIT	128
7.2 TEST PROCEDURE AND SETTING	128
7.3 MEASUREMENT INSTRUMENTS LIST	128
7.4 TEST SETUP	128
7.5 EUT OPERATION CONDITIONS	128
7.6 TEST RESULTS	129
8 . POWER SPECTRAL DENSITY TEST	140
8.1 LIMIT	140
8.2 TEST PROCEDURE AND SETTING	140
8.3 MEASUREMENT INSTRUMENTS LIST	140
8.4 TEST SETUP	140
8.5 EUT OPERATION CONDITIONS	141
8.6 TEST RESULTS	141
9 . FREQUENCY STABILITY MEASUREMENT	154
9.1 LIMIT	154
9.2 TEST PROCEDURE AND SETTING	154
9.3 MEASUREMENT INSTRUMENTS LIST	154
9.4 TEST SETUP	154
9.5 EUT OPERATION CONDITIONS	154
9.6 TEST RESULTS	155

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.75 Zhongkai Development Area, Huizhou, Guangdong, China
Factory	Hui Zhou Gaoshengda Technology Co., LTD
Address	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China
Equipment	WIFI+BT Module
Model No.	WT54M2001
Trade Mark	GSD
Standard	FCC Part15, Subpart E(15.407) RSS-247 Issue 2, Feb. 2017 RSS-Gen Issue 5, Mar. 2019 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	$\pm 0.048\text{kHz}$
Uncertainty for conducted RF Power	$\pm 0.32\text{dB}$

Note:

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	WIFI+BT Module	
Brand Name	GSD	
Test Model	WT54M2001	
Series Model	N/A	
Model Difference(s)	N/A	
Hardware Version	V1.0	
Software Version	V1.0	
PowerSource	Supplied from USB.	
Power Rating	DC 5V	
Operation Frequency Bands	UNII-1: 5150 MHz~5250 MHz UNII-2A:5250MHz~5350MHz UNII-2C:5470MHz~5725MHz UNII-3: 5725 MHz~5850 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)	
Antenna Information	Antenna Type: PIFA	Maximum Peak Gain:2.57dBi
Maximum Output Power for UNII-1 For FCC	IEEE 802.11a: 14.89dBm (0.0308W) IEEE 802.11n (HT20): 16.93dBm (0.0472 W) IEEE 802.11n (HT40): 16.53dBm (0.0415 W)	
Maximum EIRP Output Power for UNII-1 For IC	IEEE 802.11a: 17.46dBm (0.0557W) IEEE 802.11n (HT20): 22.51dBm (0.1782 W) IEEE 802.11n (HT40): 22.11dBm (0.1626 W)	
Maximum Output Power for UNII-2A UNII-2C	IEEE 802.11a: 14.93dBm (0.0311W) IEEE 802.11n (HT20): 17.07dBm (0.0465 W) IEEE 802.11n (HT40): 16.70dBm (0.0468 W)	
Maximum Output Power for UNII-3	IEEE 802.11a: 14.68dBm (0.0294 W) IEEE 802.11n (HT20): 16.86dBm (0.0465 W) IEEE 802.11n (HT40): 16.97dBm (0.0459 W)	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT has three model number of antenna, these antenna type are the same, the test was used maximum antenna gain of antenna.
3. Channel List:

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

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

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

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

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

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 / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 6	TX N (HT40) Mode / CH54, CH62 (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 A Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 12	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 13	TX N(HT20) Mode / CH52 (UNII-2A)

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 13	TX N(HT20) Mode / CH52 (UNII-2A)

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 13	TX N(HT20) Mode / CH52 (UNII-2A)

Radiated emissions test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 13	TX A Mode / CH100, CH120, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)

Conducted test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 13	TX A Mode / CH100, CH120, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH120, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode/CH102, CH110, CH134(UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)

Note:

- (1) For radiated emission below 1 GHz and AC power line conducted emissions test, the IEEE 802.11n20channel 52 is found to be the worst case and recorded.

3.2 PARAMETERS OF TEST SOFTWARE

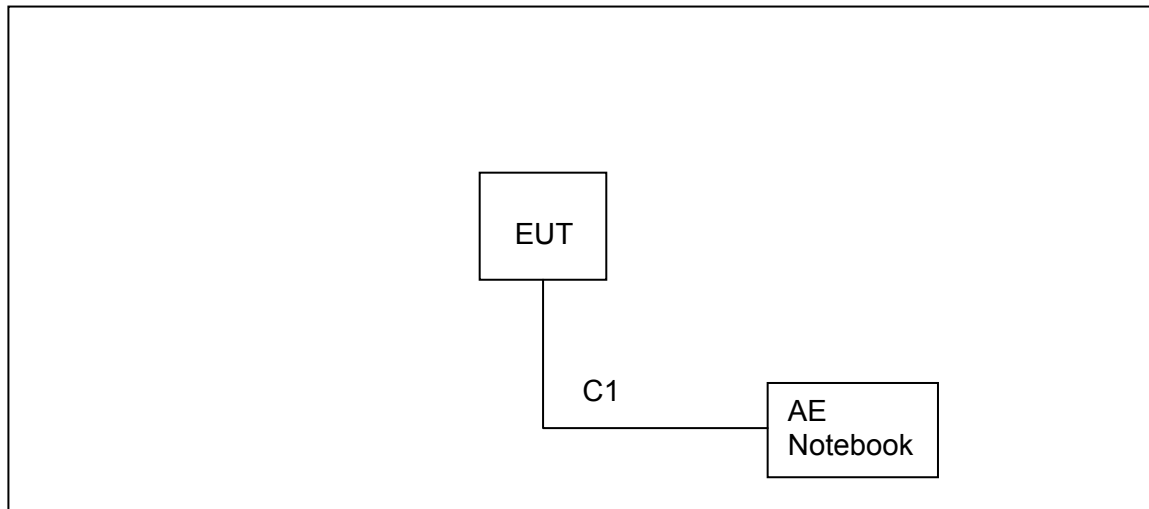
UNII-1			
Test Software	MT7668 QA Tool_Dbg Version: 0.0.1.92		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	22/25	22/23	21/24
IEEE 802.11n (HT20)	22/25	22/25	22/25
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	24/28	24/27	

UNII-2A			
Test Software	MT7668 QA Tool_Dbg Version: 0.0.1.92		
Test Frequency (MHz)	5260	5300	5320
IEEE 802.11a	22/25	20/23	20/26
IEEE 802.11n (HT20)	21/25	21/25	21/24
Test Frequency (MHz)	5270	5310	
IEEE 802.11n (HT40)	22/25	21/25	

UNII-2C			
Test Software	MT7668 QA Tool_Dbg Version: 0.0.1.92		
Test Frequency (MHz)	5500	5600	5700
IEEE 802.11a	21/26	20/23	20/23
IEEE 802.11n (HT20)	20/23	22/23	21/23
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	20/23	22/23	23/24

UNII-3			
Test Software	MT7668 QA Tool_Dbg Version: 0.0.1.92		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	22	22	22
IEEE 802.11n (HT20)	22	22	22
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	22	22	

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 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

3.5 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

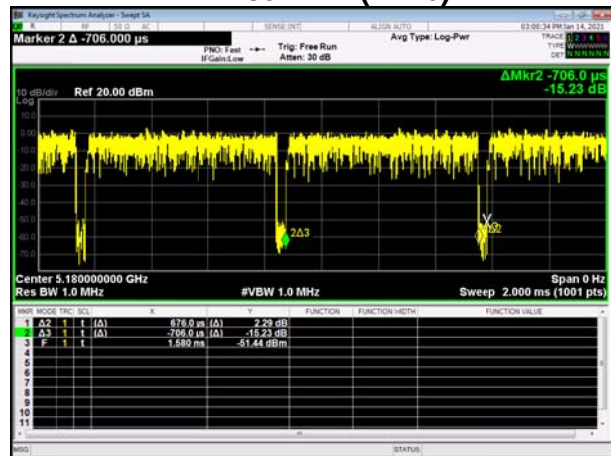
3.6 DUTY CYCLE

IEEE 802.11a



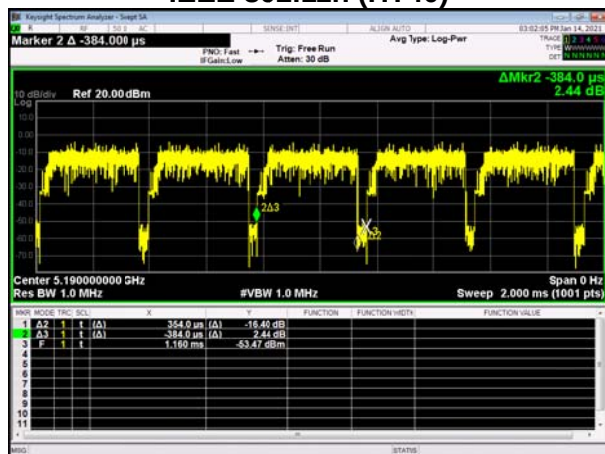
Duty cycle = 1.400ms / 1.425ms = 98.246%
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.00$

IEEE 802.11n (HT20)



Duty cycle = 0.676ms / 0.706ms = 95.751%
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.19$

IEEE 802.11n (HT40)



Duty cycle = 0.354ms / 0.384ms = 92.188%
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.35$
If duty cycle is $\geq 98\%$, duty factor is not required.
If duty cycle is $< 98\%$, duty factor shall be considered, the Duty Factor = $10 \log(1/\text{Duty cycle})$, the output power = measured power + duty factor, the result of duty factor as below table:

IEEE 802.11a	IEEE 802.11n (HT20)	IEEE 802.11n (HT40)
0.00	0.19	0.35

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 (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

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

The following table is the setting of the receiver

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

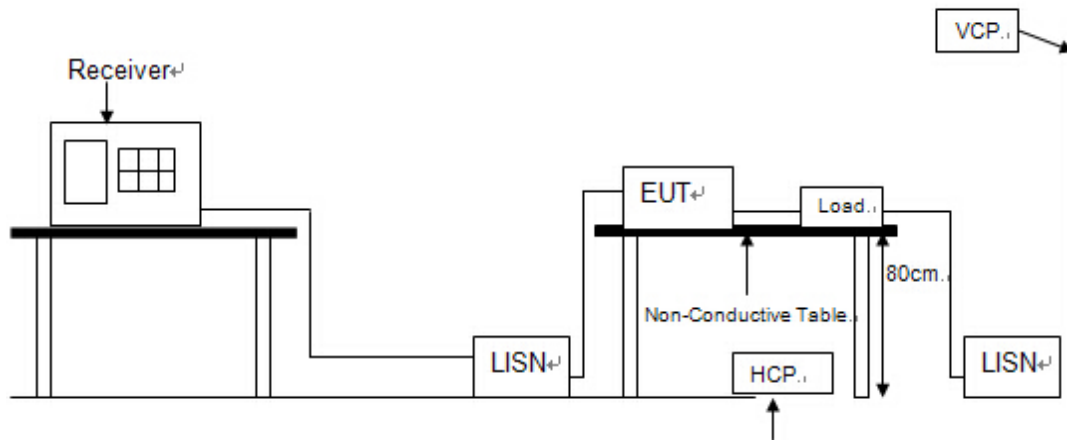
4.2 TEST PROCEDURE

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

4.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Pulse Limiter	MTS-systemtechnik	MTS-IMP-136	261115-010-0024	12/11/2020
2	EMI Test Receiver	R&S	ESCI	101308	12/11/2020
3	LISN	AFJ	LS16	16011103219	06/10/2021
4	LISN	Schwarzbeck	NSLK 8127	8127-432	12/11/2020
5	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

4.4 TESTSETUP



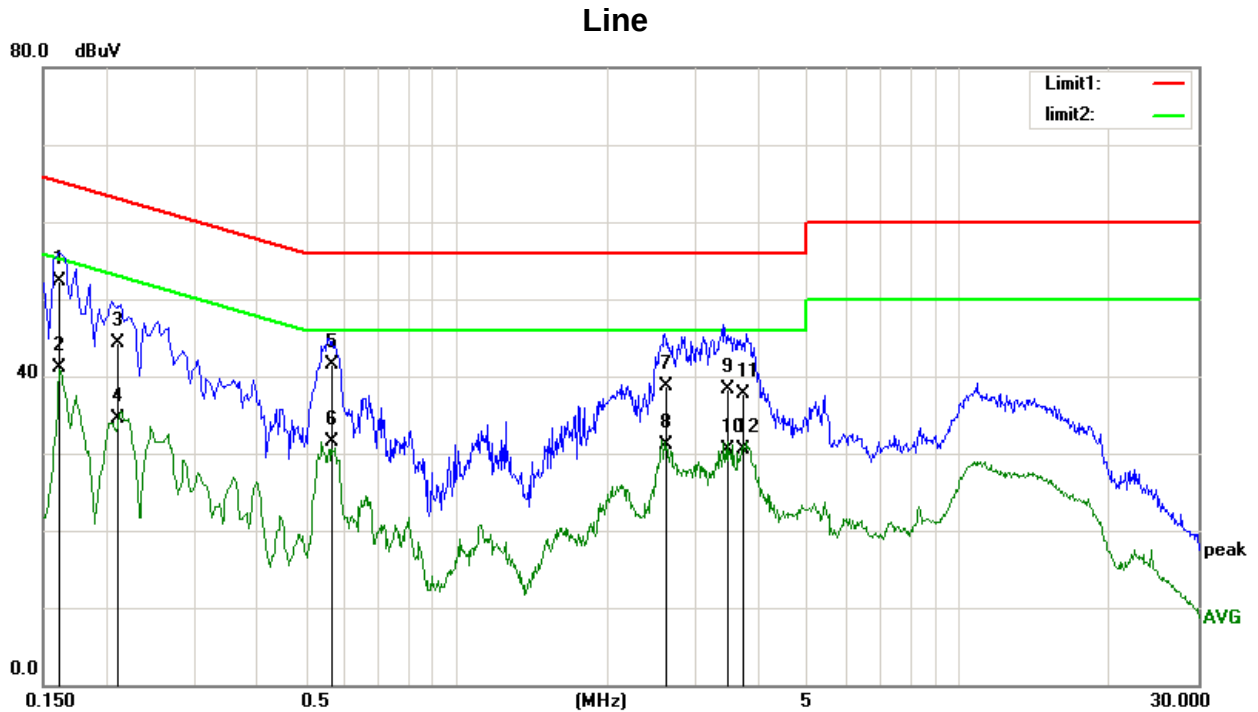
4.5 EUT OPERATION CONDITIONS

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 N(HT20) Mode / CH52 (UNII-2A)



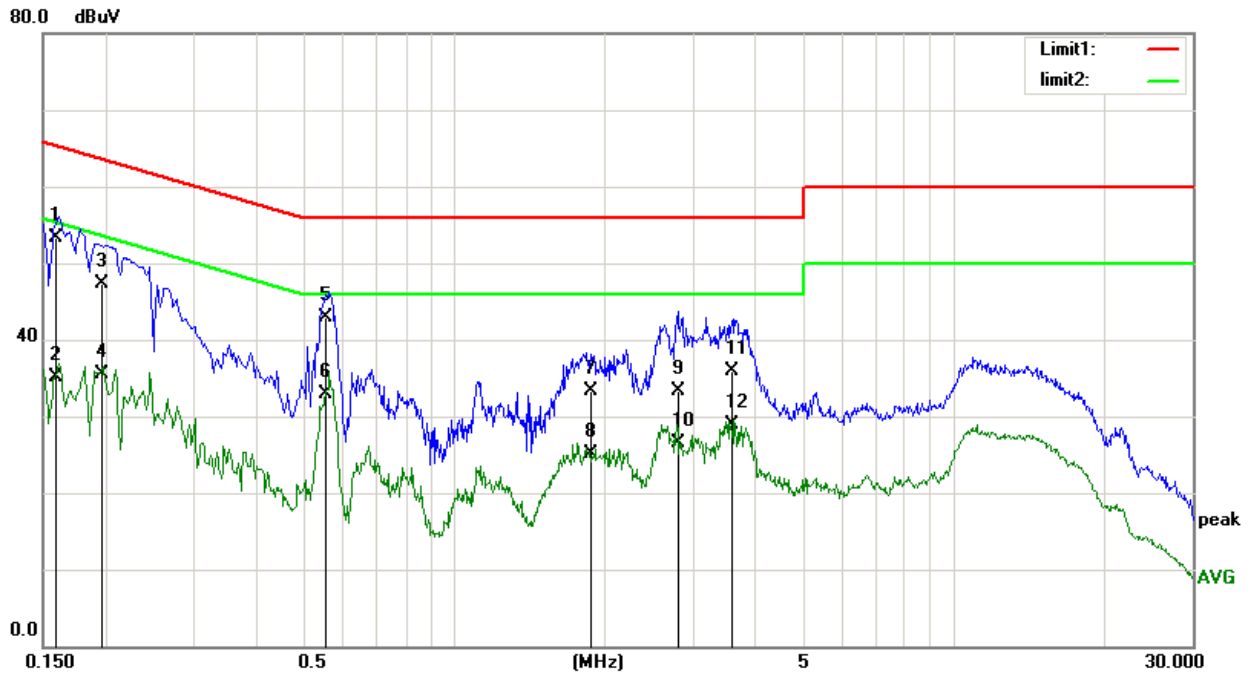
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1620	40.93	11.45	52.38	65.36	-12.98	QP
2	0.1620	29.67	11.45	41.12	55.36	-14.24	AVG
3	0.2111	33.27	11.12	44.39	63.16	-18.77	QP
4	0.2111	23.39	11.12	34.51	53.16	-18.65	AVG
5	0.5629	31.14	10.27	41.41	56.00	-14.59	QP
6	0.5629	21.31	10.27	31.58	46.00	-14.42	AVG
7	2.6295	28.46	10.22	38.68	56.00	-17.32	QP
8	2.6295	20.90	10.22	31.12	46.00	-14.88	AVG
9	3.4560	28.02	10.23	38.25	56.00	-17.75	QP
10	3.4560	20.18	10.23	30.41	46.00	-15.59	AVG
11	3.7293	27.43	10.23	37.66	56.00	-18.34	QP
12	3.7293	20.29	10.23	30.52	46.00	-15.48	AVG

REMARKS:

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

Test Mode: TX N(HT20) Mode / CH52 (UNII-2A)

Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1587	41.85	11.47	53.32	65.53	-12.21	QP
2	0.1587	23.68	11.47	35.15	55.53	-20.38	AVG
3	0.1971	36.19	11.21	47.40	63.73	-16.33	QP
4	0.1971	24.24	11.21	35.45	53.73	-18.28	AVG
5	0.5543	32.58	10.27	42.85	56.00	-13.15	QP
6	0.5543	22.70	10.27	32.97	46.00	-13.03	AVG
7	1.8870	23.06	10.22	33.28	56.00	-22.72	QP
8	1.8870	14.93	10.22	25.15	46.00	-20.85	AVG
9	2.8122	23.16	10.23	33.39	56.00	-22.61	QP
10	2.8122	16.22	10.23	26.45	46.00	-19.55	AVG
11	3.5705	25.71	10.23	35.94	56.00	-20.06	QP
12	3.5705	18.69	10.23	28.92	46.00	-17.08	AVG

Remarks:

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

5. RADIATED EMISSIONSTEST

5.1 LIMIT

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

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

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

Note:

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

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

(2) According to 15.407(b)(4)(i), all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below theband 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 orbelow 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

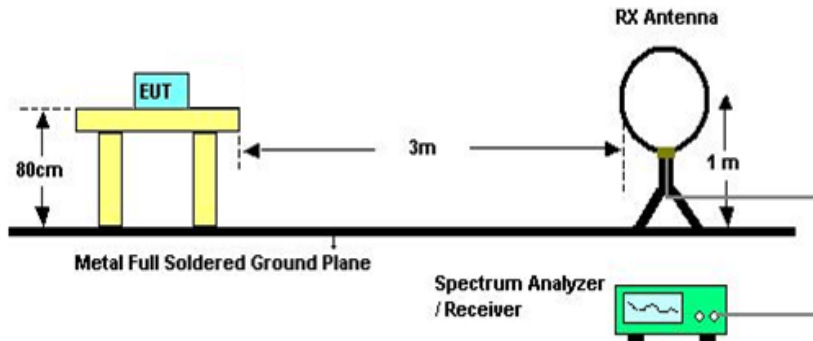
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of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

5.3 MEASUREMENT INSTRUMENTS LIST

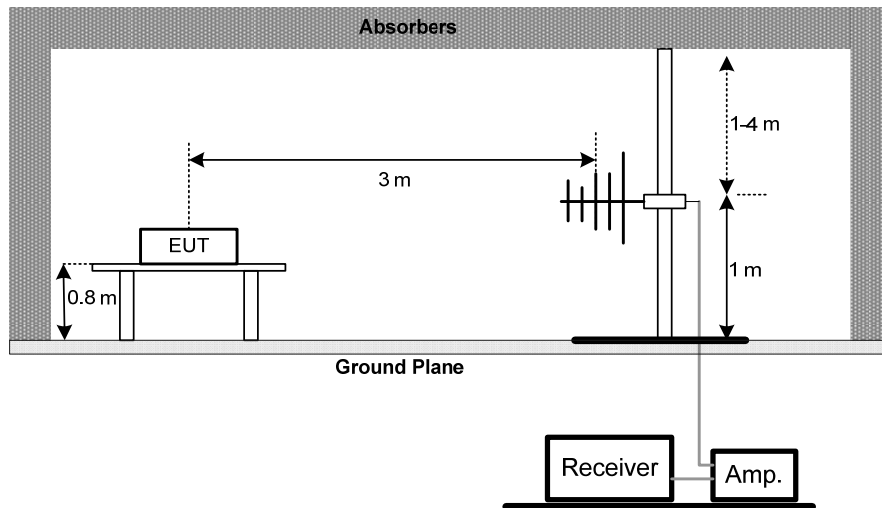
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	101307	12/12/2020
2	Spectrum Analyzer	Agilent	E4407B	US40240708	11/17/2020
3	Spectrum Analyzer	R&S	FSP	1164.4391.38	06/01/2021
4	Loop antenna	SCHWARZBECK	FMZB1519	1519-062	12/14/2020
5	Broadband antenna	SCHWARZBECK	VULB9168	VULB9168-192	03/22/2021
6	HORN ANTENNA	SCHWARZBECK	BBHA9120D	9120D 1065	04/21/2021
7	DRG Horn Antenna	A.H. Systems	SAS-574	588	06/01/2021
8	Preamplifier Amplifier	HP	8447F	3113A05680	12/11/2020
9	Preamplifier Amplifier	Aeroflex	33711-392-77150-11	97	06/01/2021
10	PRE-AMPLIFIER	CY	EMC011830	980136	12/11/2020
11	RF Cable	R&S	Test Cable 4	4	12/11/2020
12	RF Cable	R&S	Test Cable 5	5	12/11/2020
13	RF Cable	R&S	Test Cable 9	9	04/21/2021
14	RF Cable	R&S	Test Cable 10	10	12/11/2020
15	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

5.4 TESTSETUP

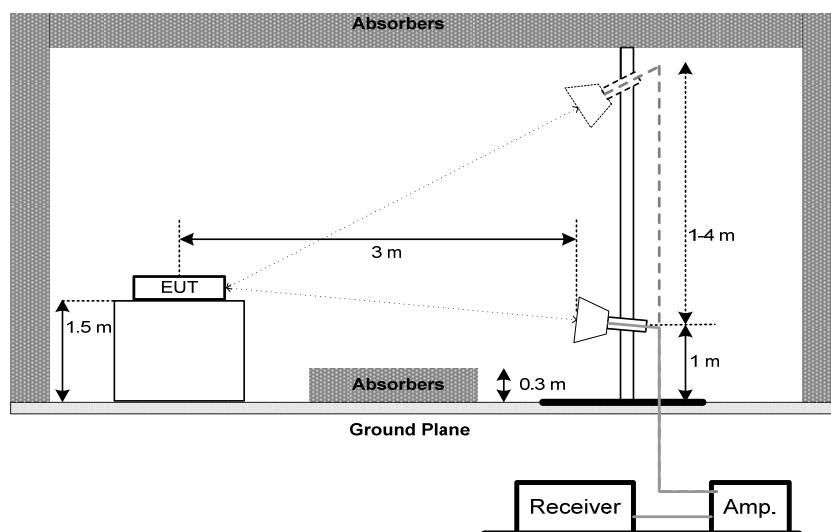
9 kHz to 30 MHz



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 N(HT20) Mode / CH52 (UNII-2A)
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Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

Note:

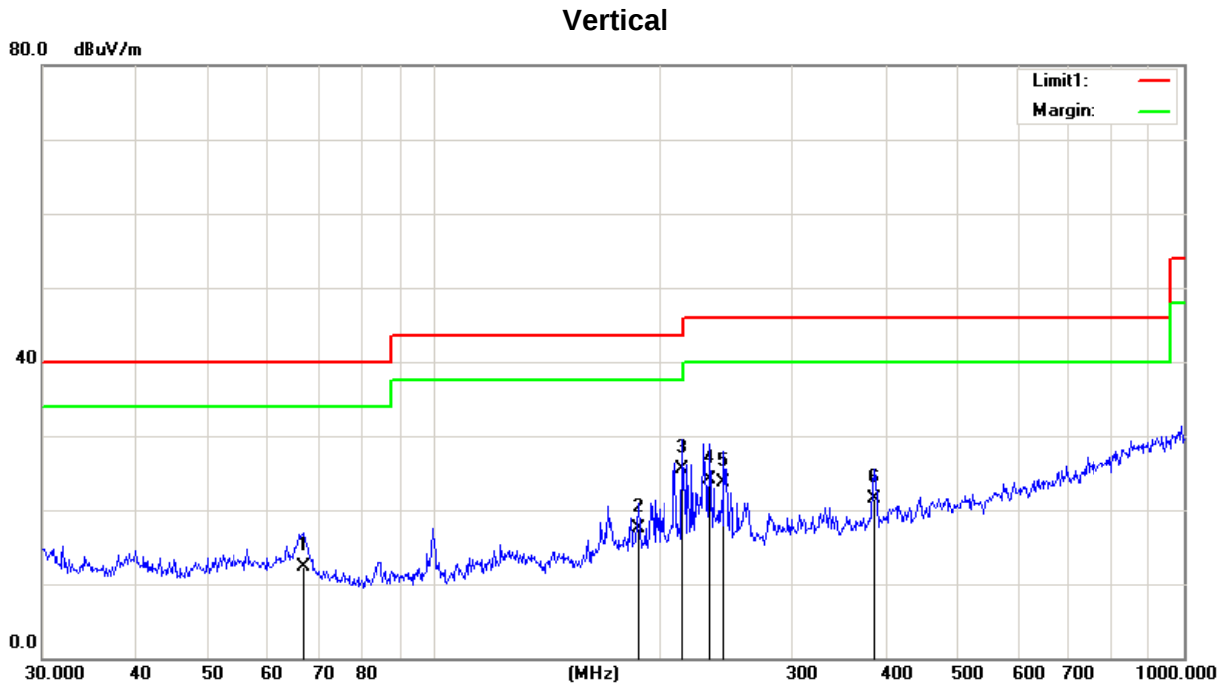
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

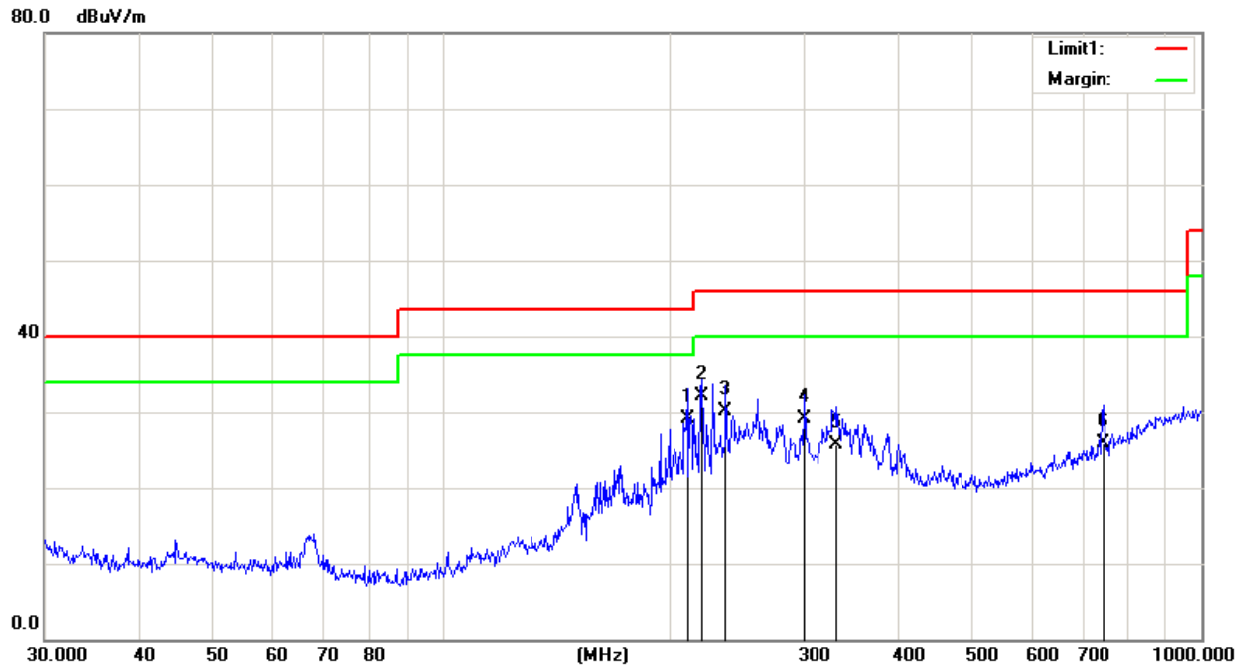
Test Mode: TX N(HT20) Mode / CH52 (UNII-2A)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	66.9669	25.63	-13.37	12.26	40.00	-27.74	QP
2	187.0958	28.66	-11.19	17.47	43.50	-26.03	QP
3	213.7634	36.25	-10.65	25.60	43.50	-17.90	QP
4	233.3487	33.09	-8.95	24.14	46.00	-21.86	QP
5	243.3772	31.78	-8.15	23.63	46.00	-22.37	QP
6	385.2805	27.49	-6.08	21.41	46.00	-24.59	QP

Test Mode: TX N(HT20) Mode / CH52 (UNII-2A)

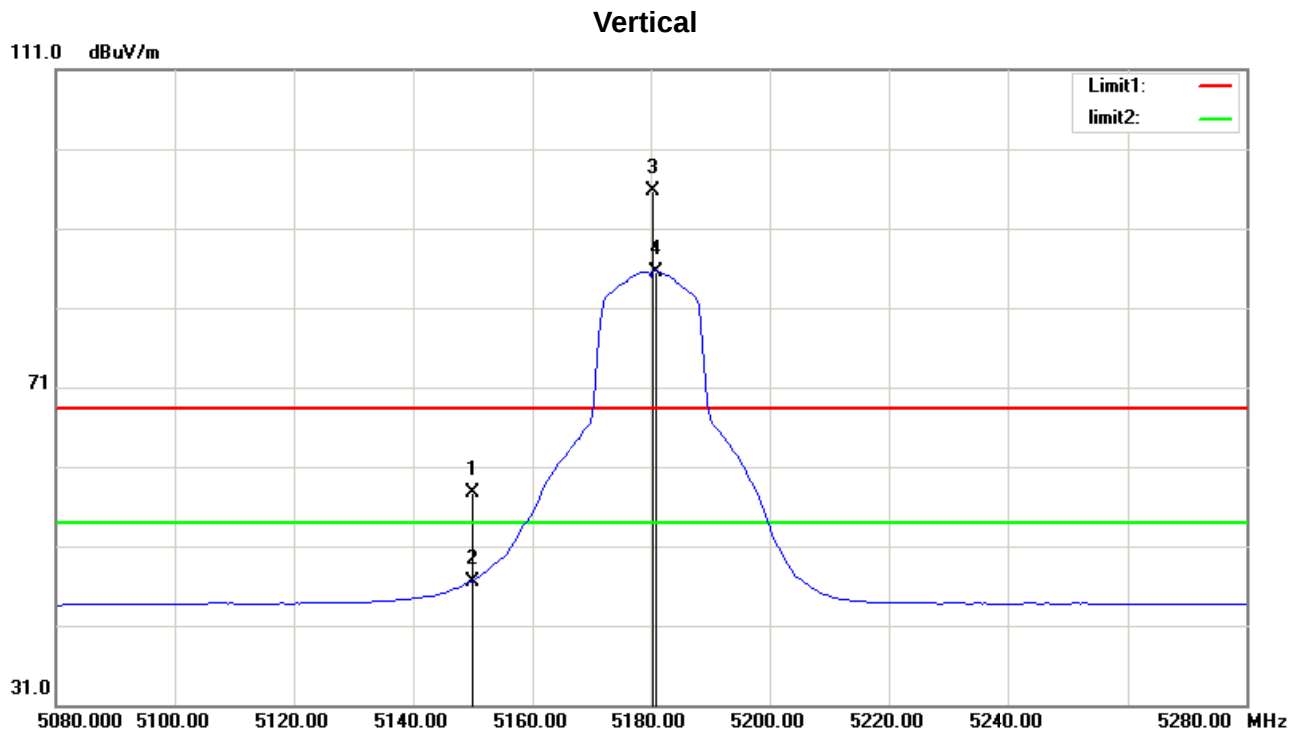
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	210.7860	38.08	-8.89	29.19	43.50	-14.31	QP
2	219.8448	40.51	-8.49	32.02	46.00	-13.98	QP
3	236.6447	37.28	-7.08	30.20	46.00	-15.80	QP
4	300.3672	35.03	-5.92	29.11	46.00	-16.89	QP
5	331.3546	34.03	-8.41	25.62	46.00	-20.38	QP
6	742.2586	25.93	-0.02	25.91	46.00	-20.09	QP

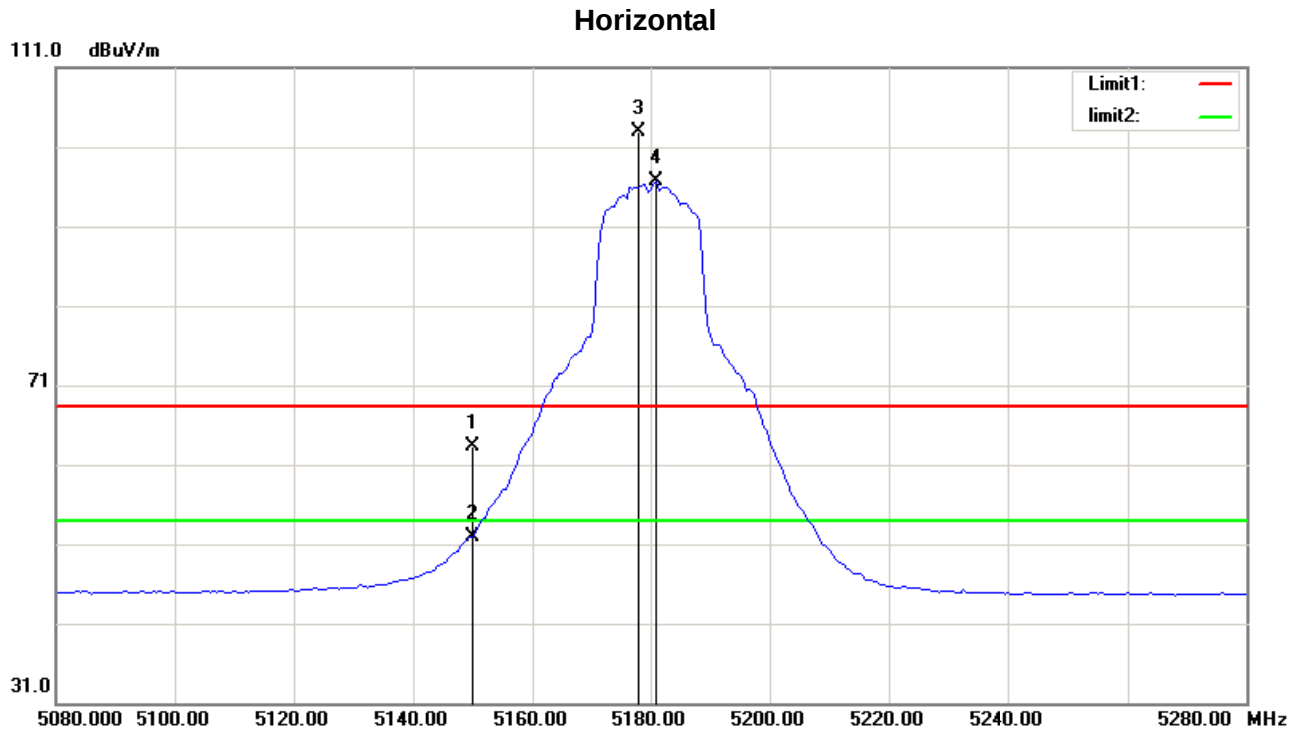
5.8 TEST RESULTS - ABOVE1000 MHz(BAND EDGE)

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz



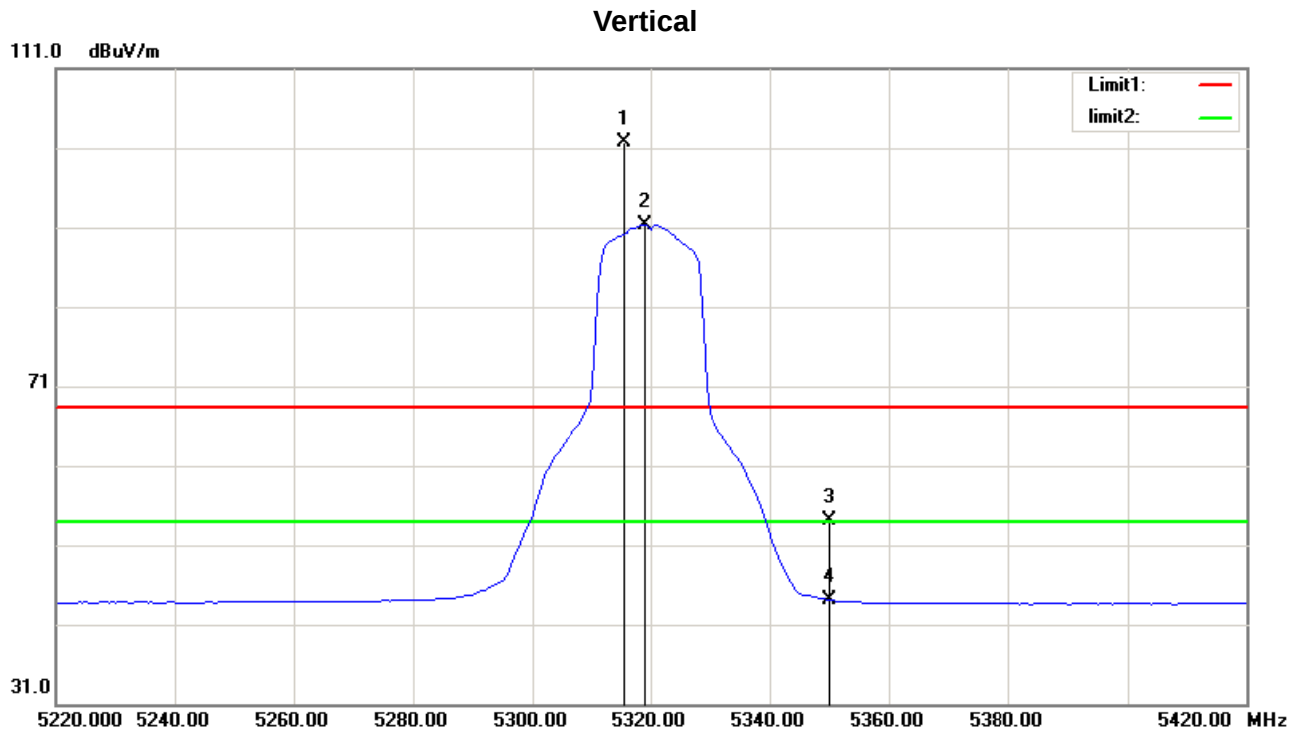
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	22.76	34.94	57.70	68.30	-10.60	peak
2	5150.000	11.65	34.94	46.59	54.00	-7.41	AVG
3	5180.500	60.59	35.02	95.61	/	/	peak
4	5181.000	50.58	35.02	85.60	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz



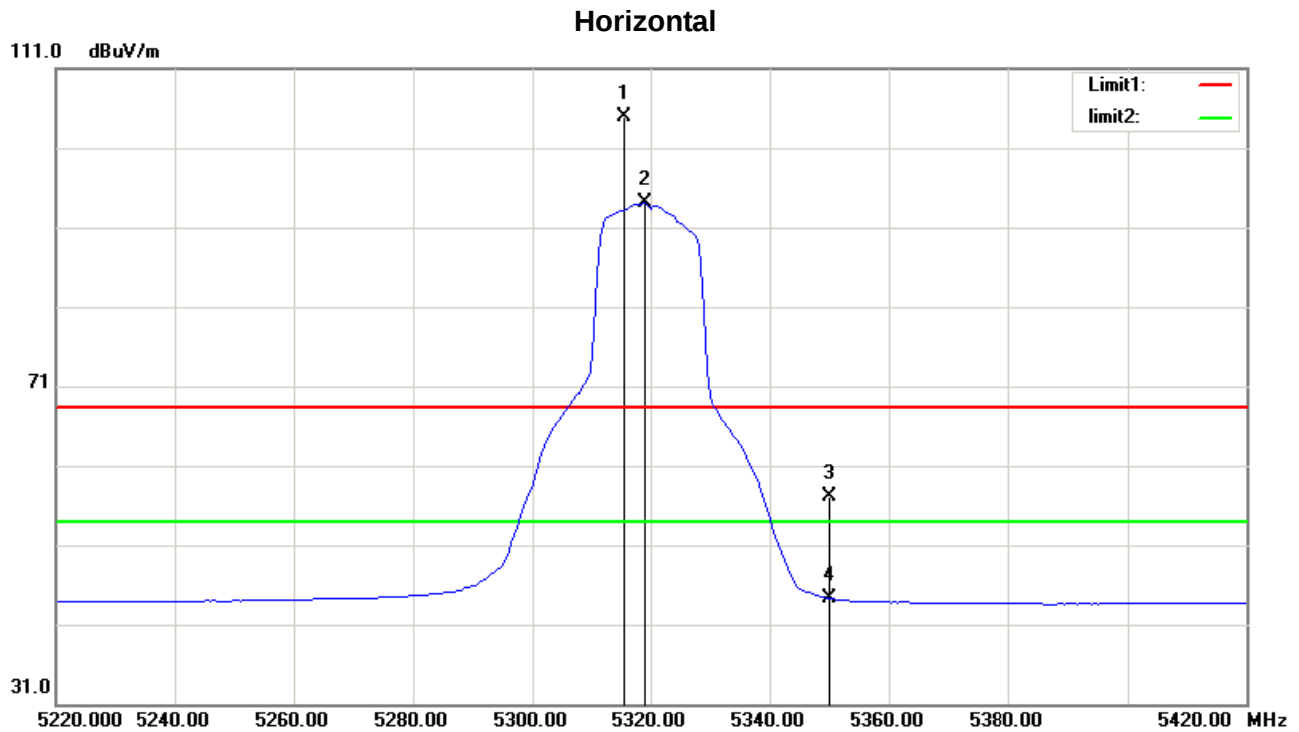
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	28.44	34.94	63.38	68.30	-4.92	peak
2	5150.000	16.90	34.94	51.84	54.00	-2.16	AVG
3	5178.000	67.93	35.02	102.95	/	/	peak
4	5181.000	61.67	35.02	96.69	/	/	AVG

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



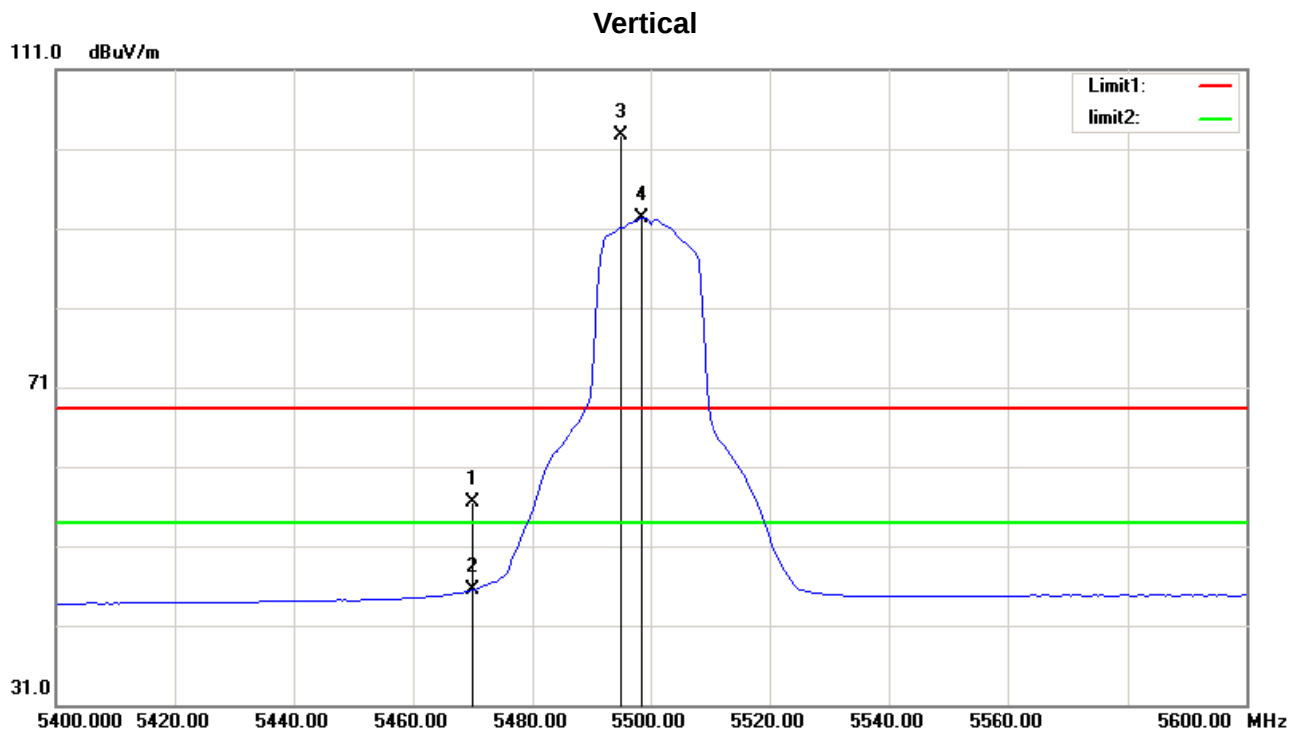
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5315.500	66.27	35.41	101.68	/	/	peak
2	5319.000	55.94	35.42	91.36	/	/	AVG
3	5350.000	18.66	35.50	54.16	68.30	-14.14	peak
4	5350.000	8.57	35.50	44.07	54.00	-9.93	AVG

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



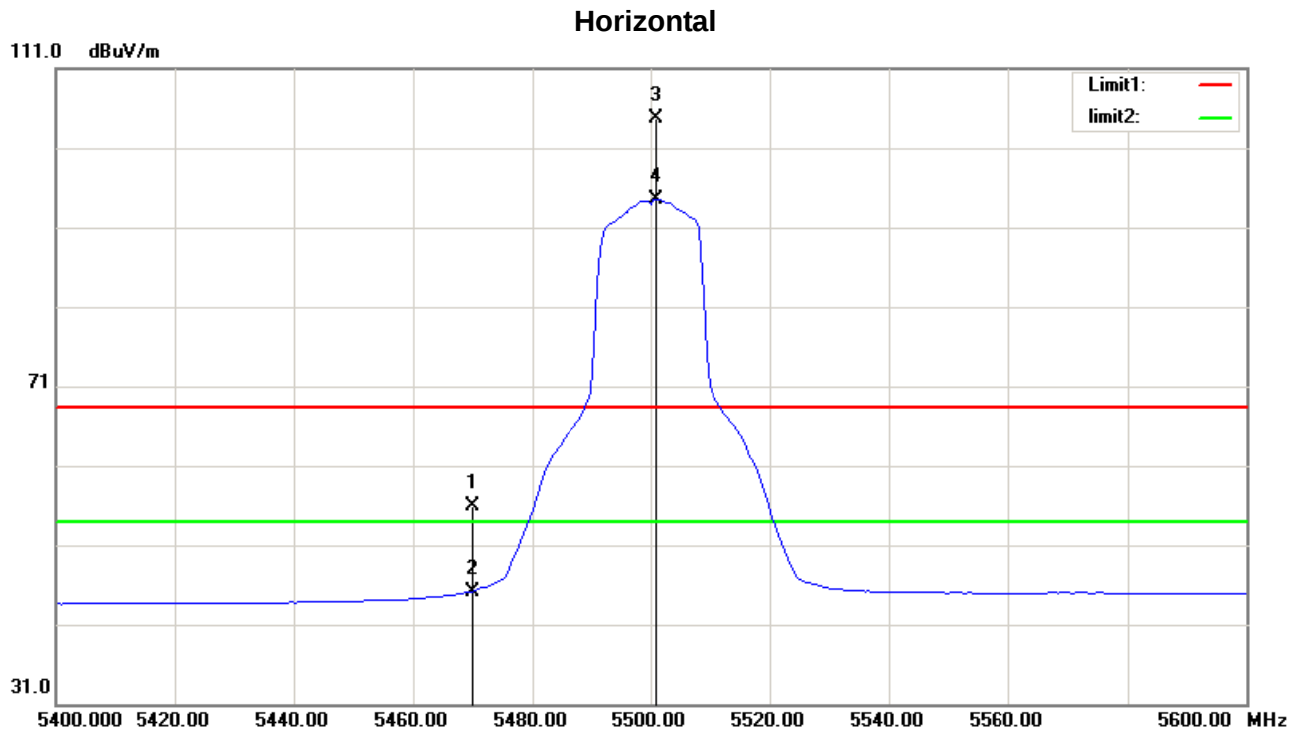
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5315.500	69.41	35.41	104.82	/	/	peak
2	5319.000	58.61	35.42	94.03	/	/	AVG
3	5350.000	21.64	35.50	57.14	68.30	-11.16	peak
4	5350.000	8.76	35.50	44.26	54.00	-9.74	AVG

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



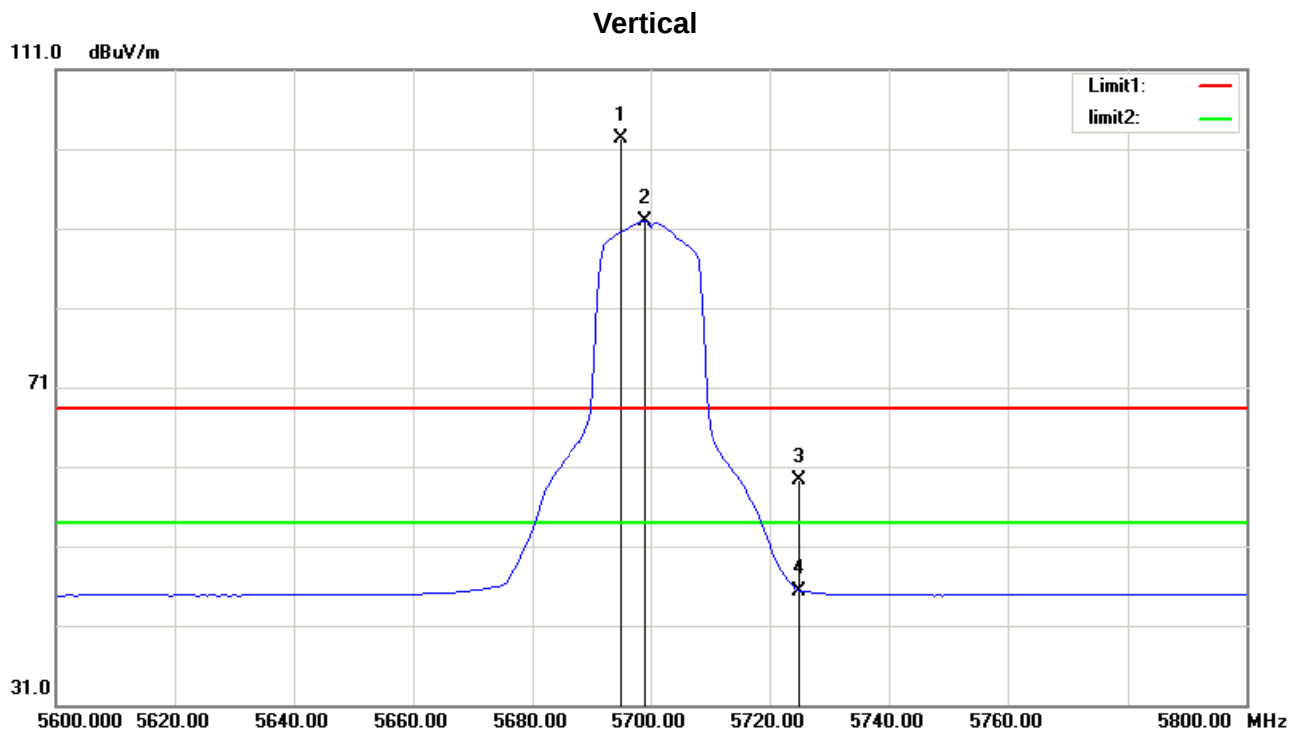
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	20.65	35.84	56.49	68.30	-11.81	peak
2	5470.000	9.61	35.84	45.45	54.00	-8.55	AVG
3	5495.000	66.70	35.91	102.61	/	/	peak
4	5498.500	56.36	35.92	92.28	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5500 MHz



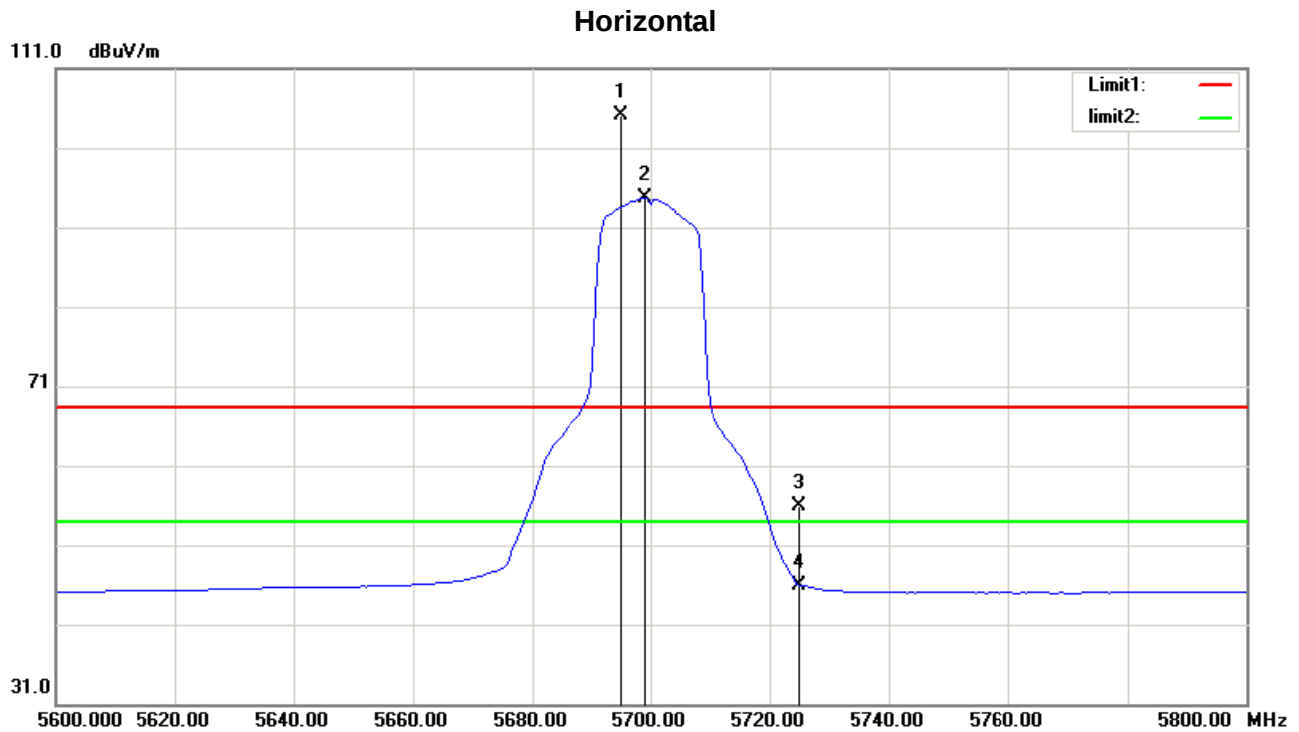
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	20.14	35.84	55.98	68.30	-12.32	peak
2	5470.000	9.34	35.84	45.18	54.00	-8.82	AVG
3	5501.000	68.75	35.93	104.68	/	/	peak
4	5501.000	58.61	35.93	94.54	/	/	AVG

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



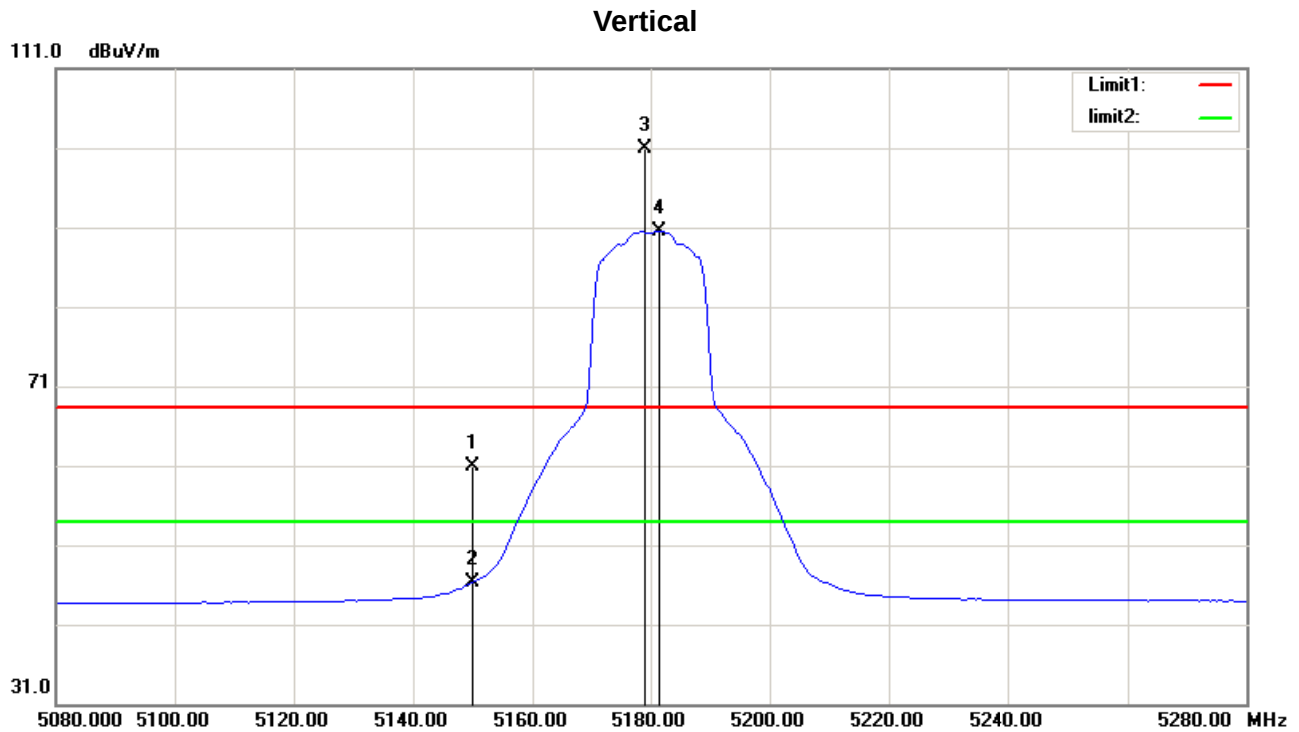
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5695.000	66.44	35.84	102.28	/	/	peak
2	5699.000	56.00	35.85	91.85	/	/	AVG
3	5725.000	23.38	35.84	59.22	68.30	-9.08	peak
4	5725.000	9.51	35.84	45.35	54.00	-8.65	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5700 MHz



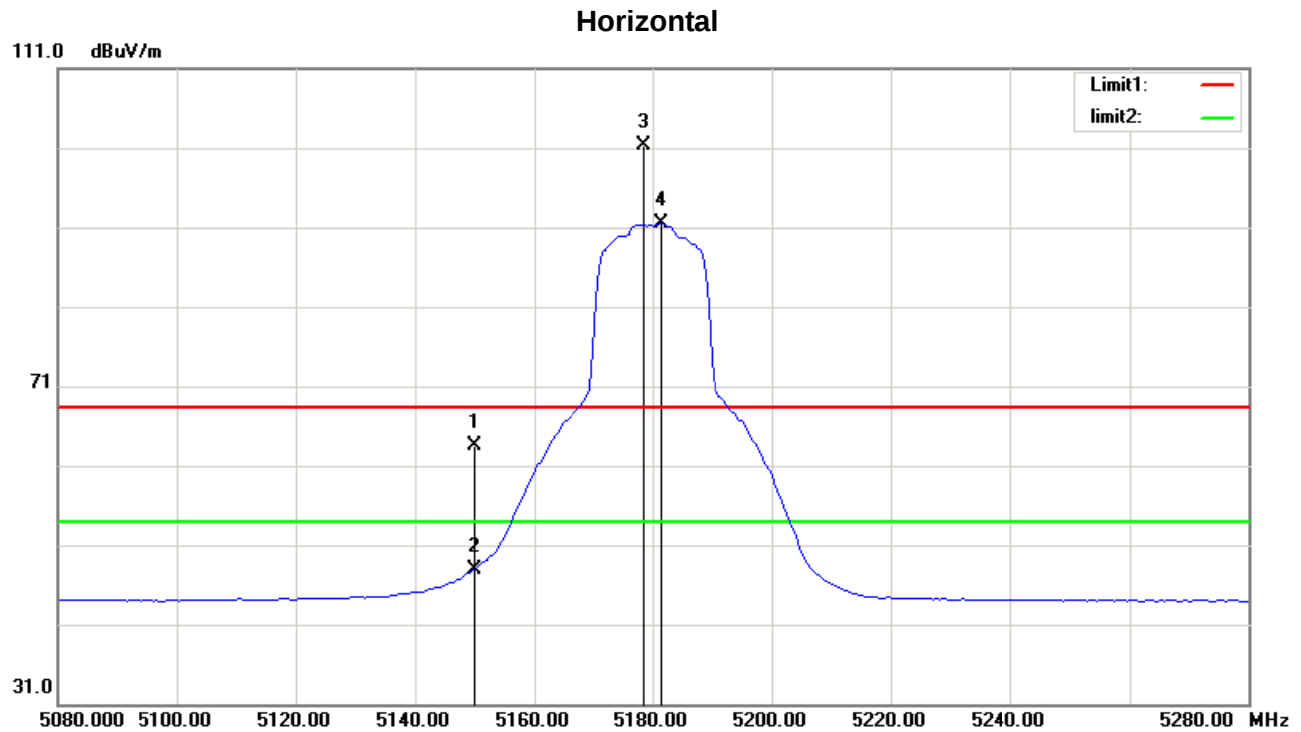
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5695.000	69.31	35.84	105.15	/	/	peak
2	5699.000	58.85	35.85	94.70	/	/	AVG
3	5725.000	20.03	35.84	55.87	68.30	-12.43	peak
4	5725.000	10.11	35.84	45.95	54.00	-8.05	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz



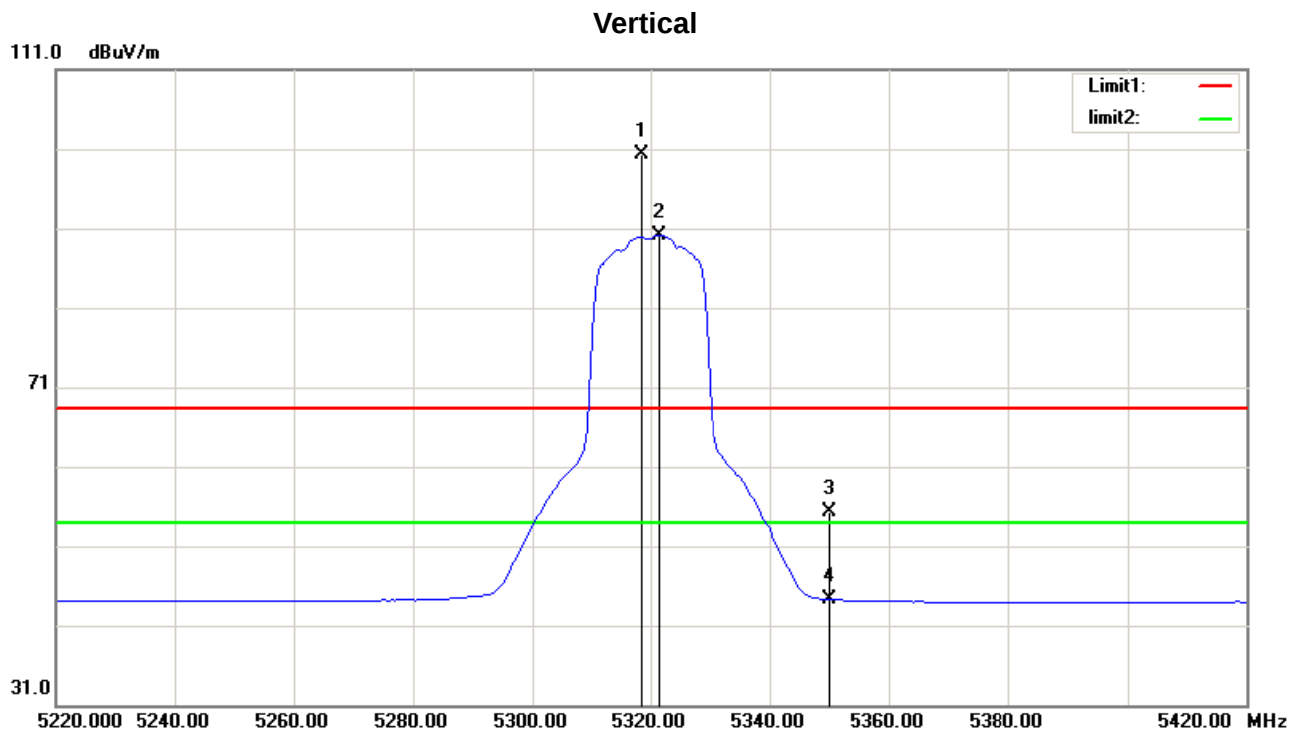
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	25.95	34.94	60.89	68.30	-7.41	peak
2	5150.000	11.28	34.94	46.22	54.00	-7.78	AVG
3	5179.000	65.81	35.02	100.83	/	/	peak
4	5181.500	55.54	35.03	90.57	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz



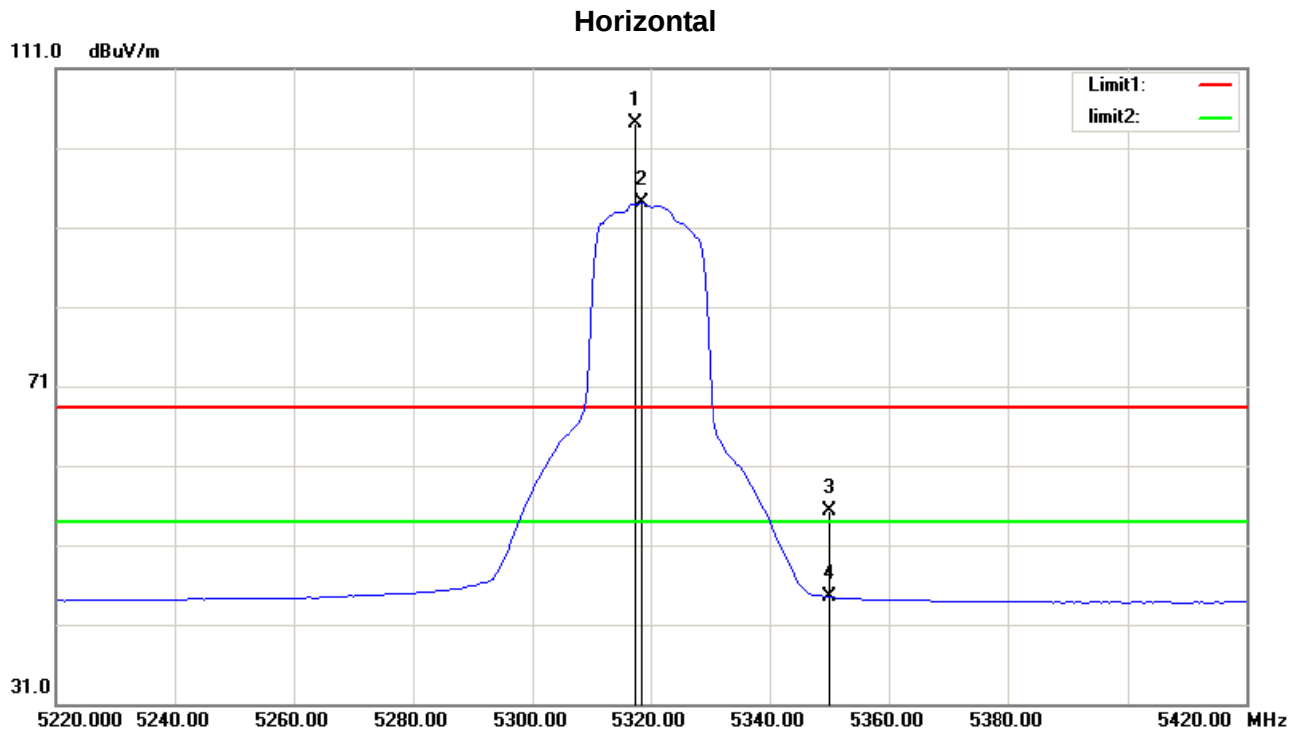
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	28.59	34.94	63.53	68.30	-4.77	peak
2	5150.000	13.03	34.94	47.97	54.00	-6.03	AVG
3	5178.500	66.33	35.02	101.35	/	/	peak
4	5181.500	56.38	35.03	91.41	/	/	AVG

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



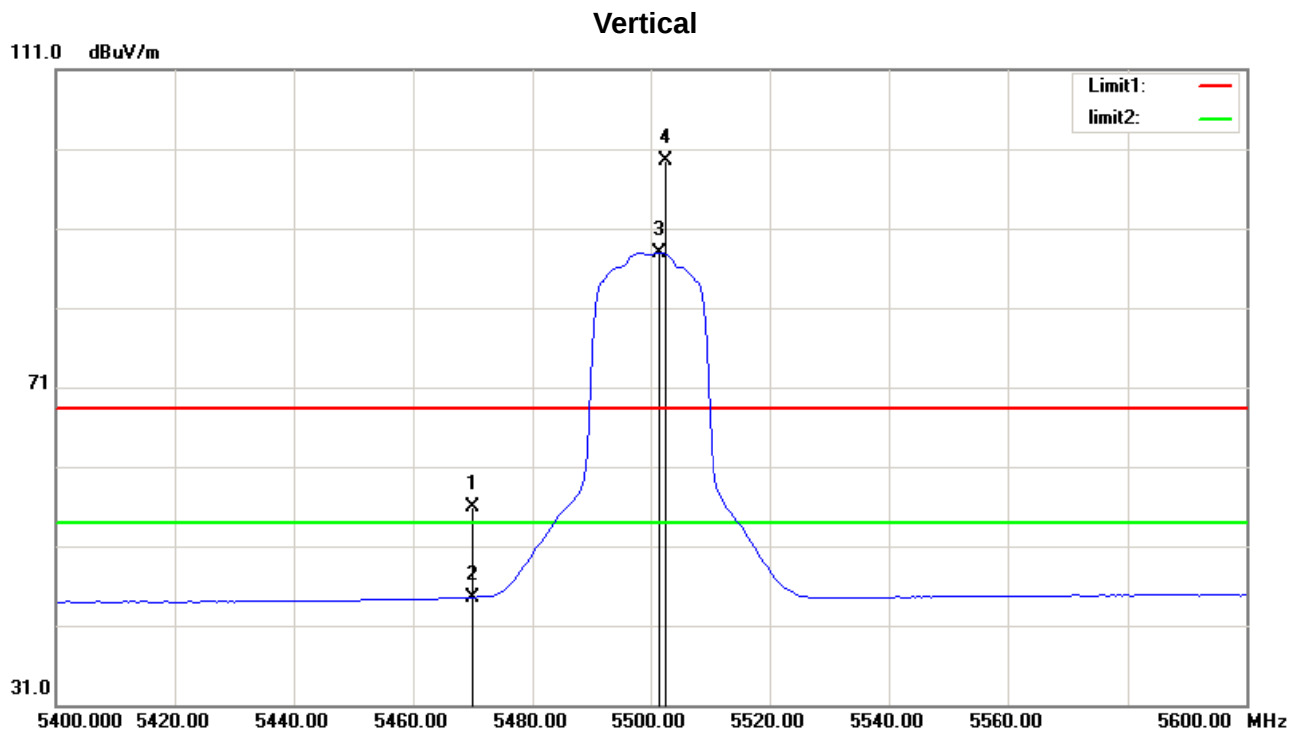
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5318.500	64.81	35.41	100.22	/	/	peak
2	5321.500	54.70	35.42	90.12	/	/	AVG
3	5350.000	19.88	35.50	55.38	68.30	-12.92	peak
4	5350.000	8.83	35.50	44.33	54.00	-9.67	AVG

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



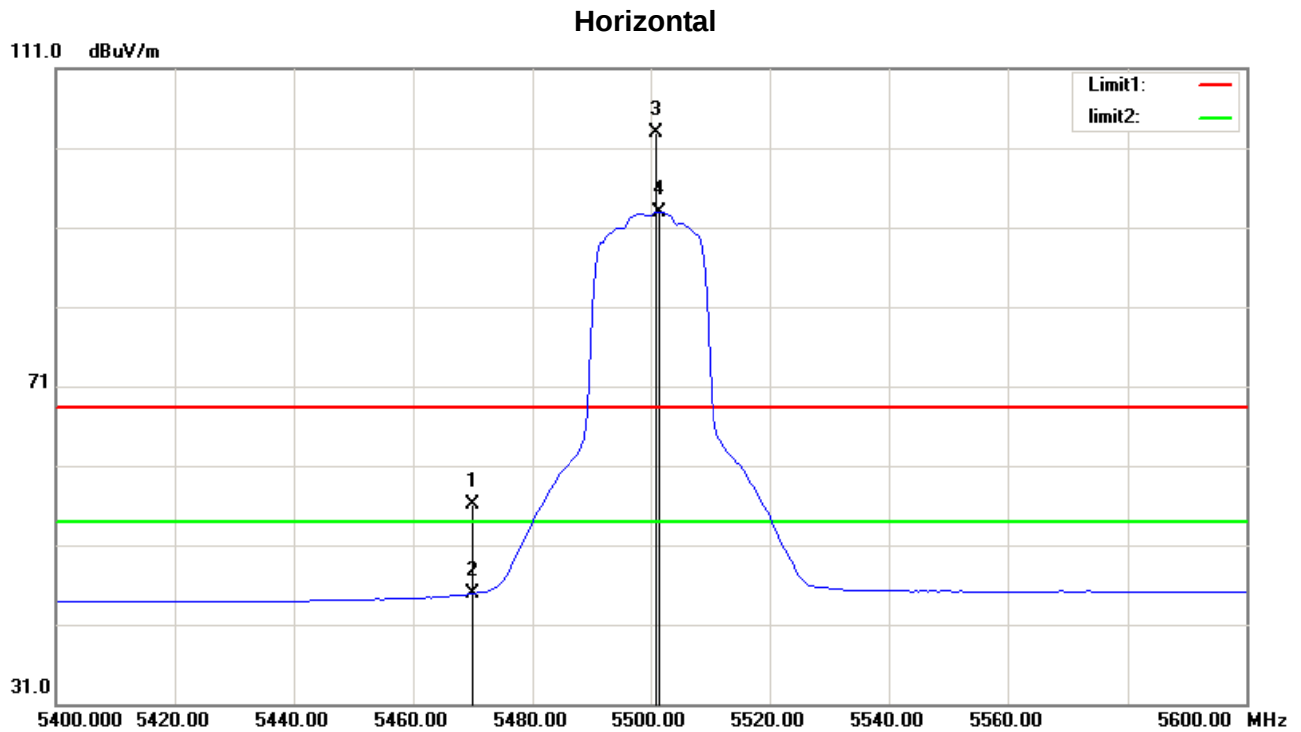
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5317.500	68.62	35.41	104.03	/	/	peak
2	5318.500	58.62	35.41	94.03	/	/	AVG
3	5350.000	19.77	35.50	55.27	68.30	-13.03	peak
4	5350.000	9.02	35.50	44.52	54.00	-9.48	AVG

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



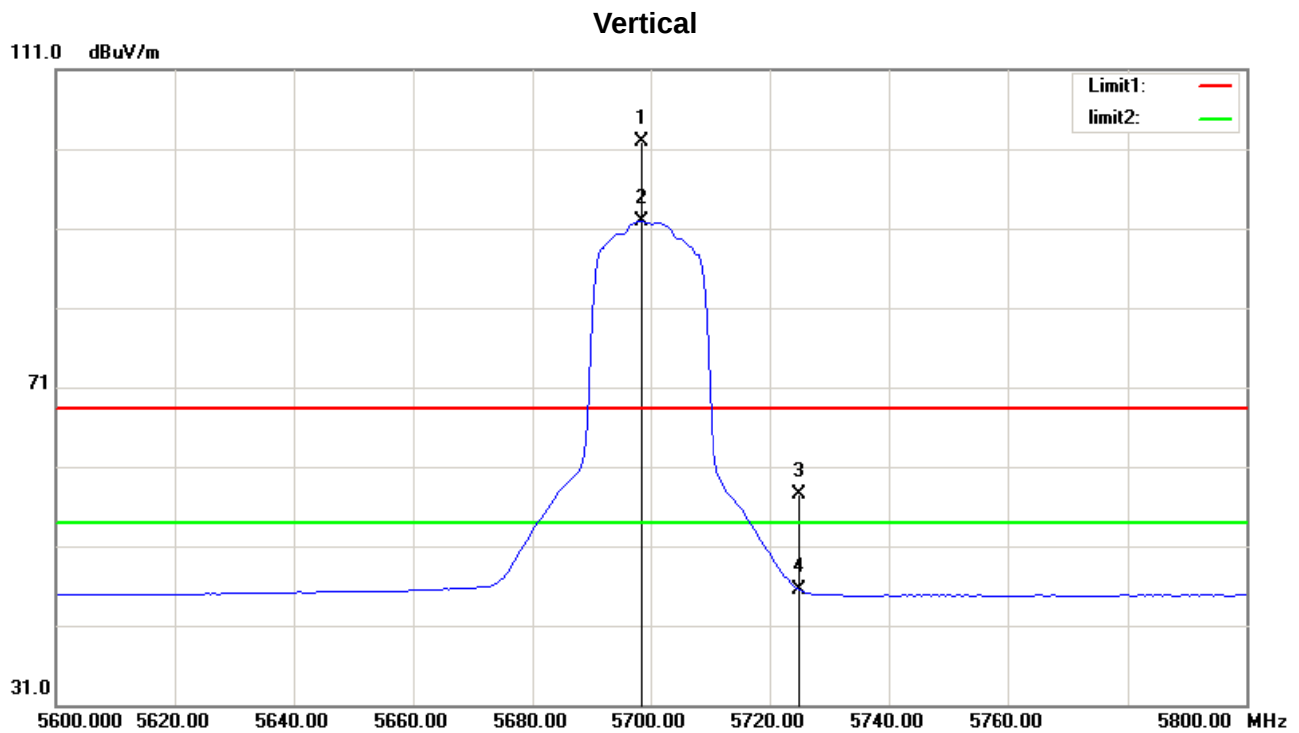
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	20.09	35.84	55.93	68.30	-12.37	peak
2	5470.000	8.73	35.84	44.57	54.00	-9.43	AVG
3	5501.500	52.02	35.93	87.95	/	/	AVG
4	5502.500	63.57	35.93	99.50	/	/	peak

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



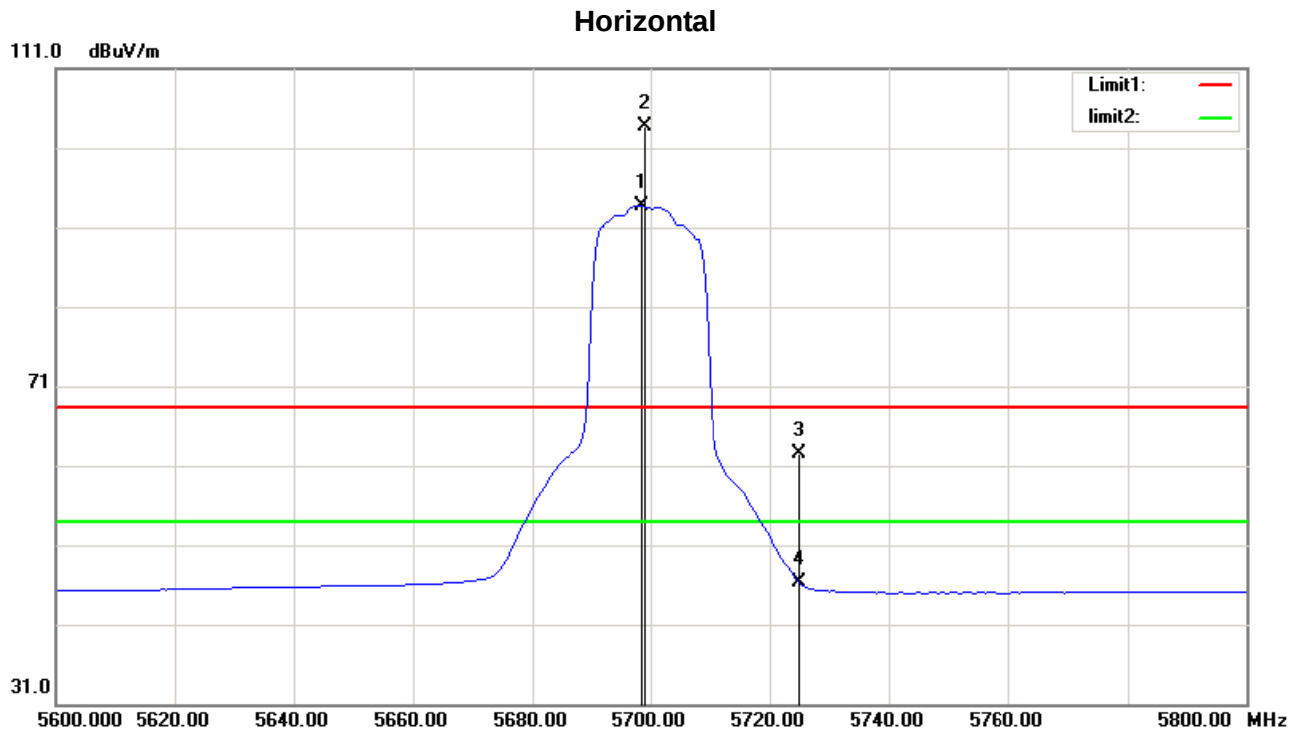
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	20.31	35.84	56.15	68.30	-12.15	peak
2	5470.000	9.05	35.84	44.89	54.00	-9.11	AVG
3	5501.000	67.07	35.93	103.00	/	/	peak
4	5501.500	56.97	35.93	92.90	/	/	AVG

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



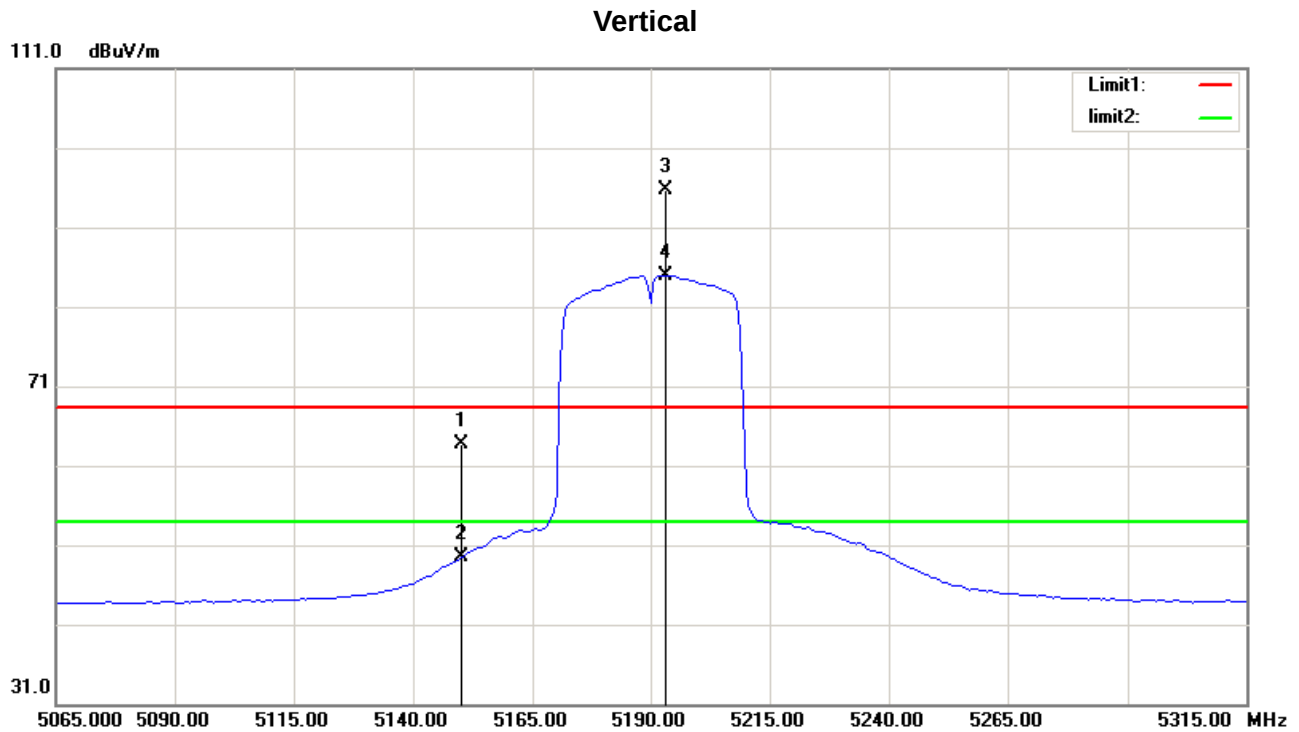
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5698.500	66.10	35.85	101.95	/	/	peak
2	5698.500	55.99	35.85	91.84	/	/	AVG
3	5725.000	21.72	35.84	57.56	68.30	-10.74	peak
4	5725.000	9.57	35.84	45.41	54.00	-8.59	AVG

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5698.500	57.92	35.85	93.77	/	/	AVG
2	5699.000	67.87	35.85	103.72	/	/	peak
3	5725.000	26.65	35.84	62.49	68.30	-5.81	peak
4	5725.000	10.39	35.84	46.23	54.00	-7.77	AVG

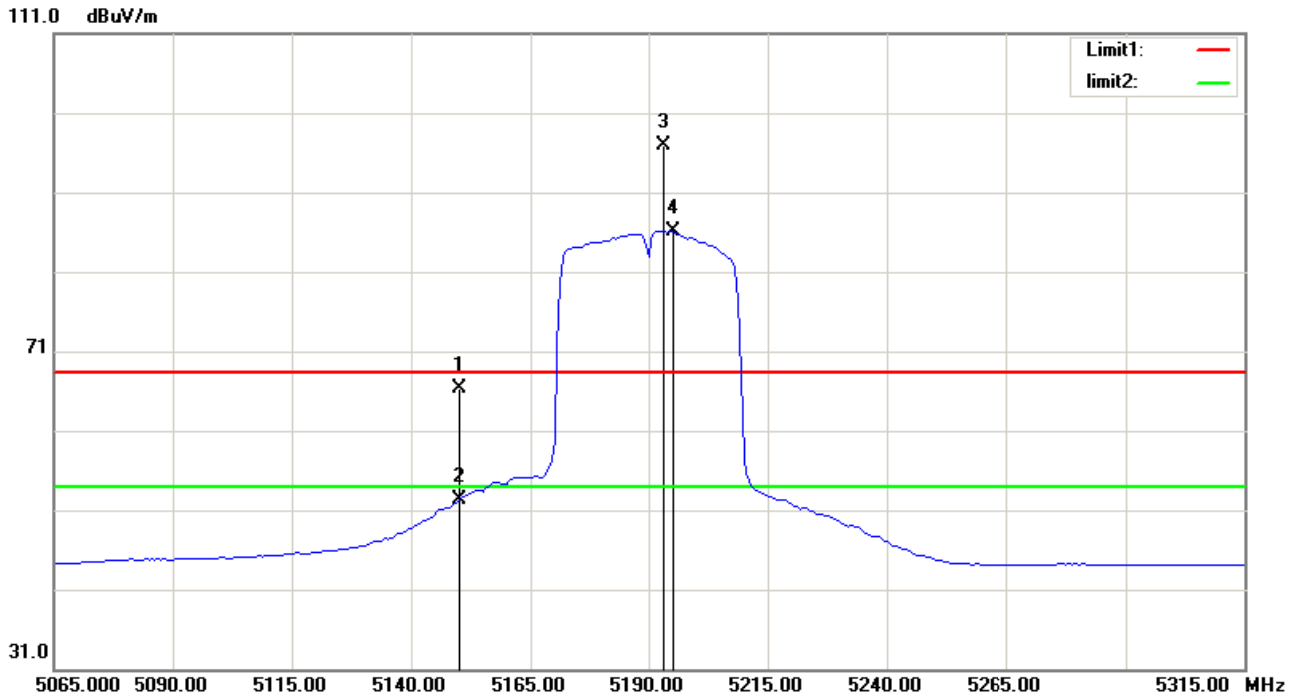
Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	28.68	34.94	63.62	68.30	-4.68	peak
2	5150.000	14.53	34.94	49.47	54.00	-4.53	AVG
3	5193.125	60.56	35.06	95.62	/	/	peak
4	5193.125	49.91	35.06	84.97	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz

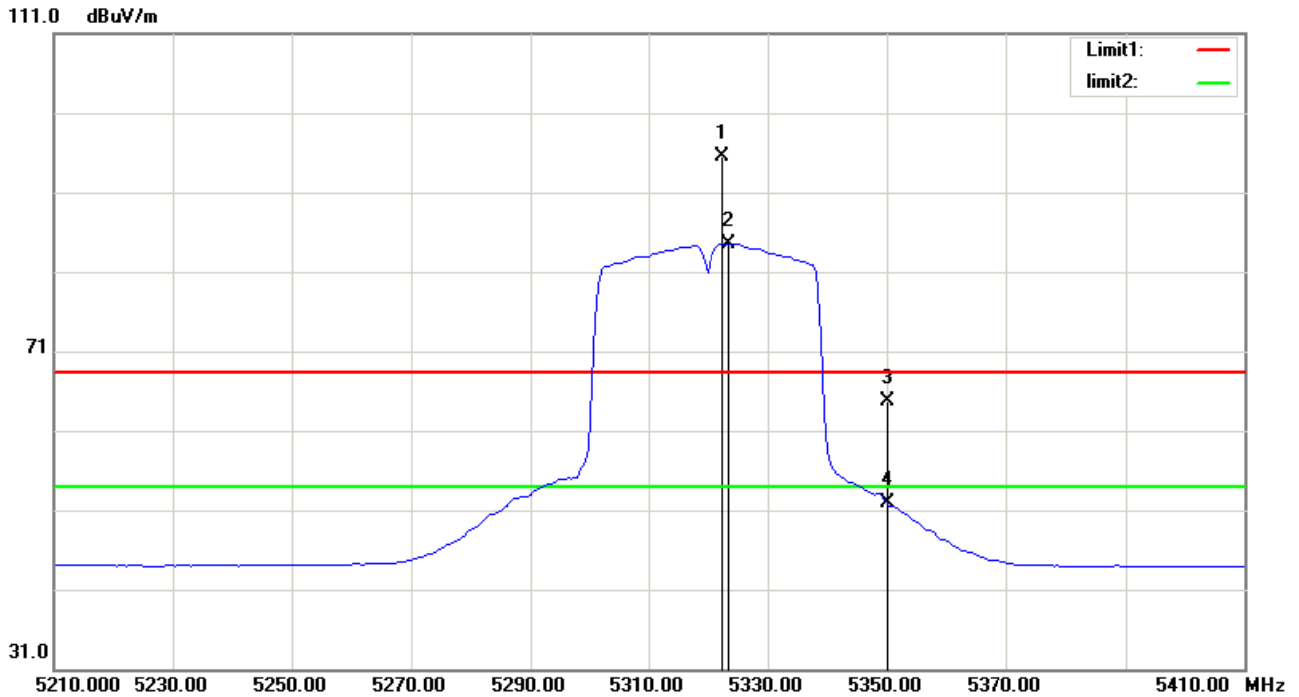
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	31.30	34.94	66.24	68.30	-2.06	peak
2	5150.000	17.37	34.94	52.31	54.00	-1.69	AVG
3	5193.125	61.94	35.06	97.00	/	/	peak
4	5195.000	51.07	35.07	86.14	/	/	AVG

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

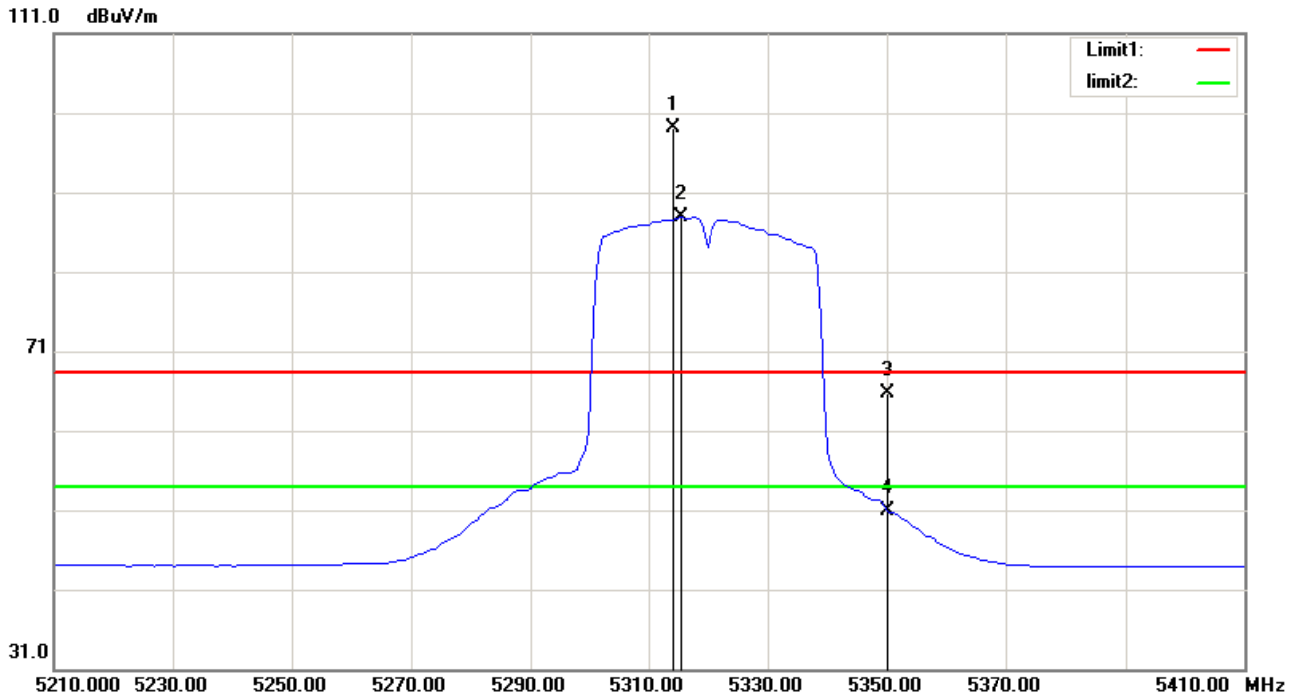
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5322.500	60.18	35.42	95.60	/	/	peak
2	5323.500	48.99	35.43	84.42	/	/	AVG
3	5350.000	29.20	35.50	64.70	68.30	-3.60	peak
4	5350.000	16.32	35.50	51.82	54.00	-2.18	AVG

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

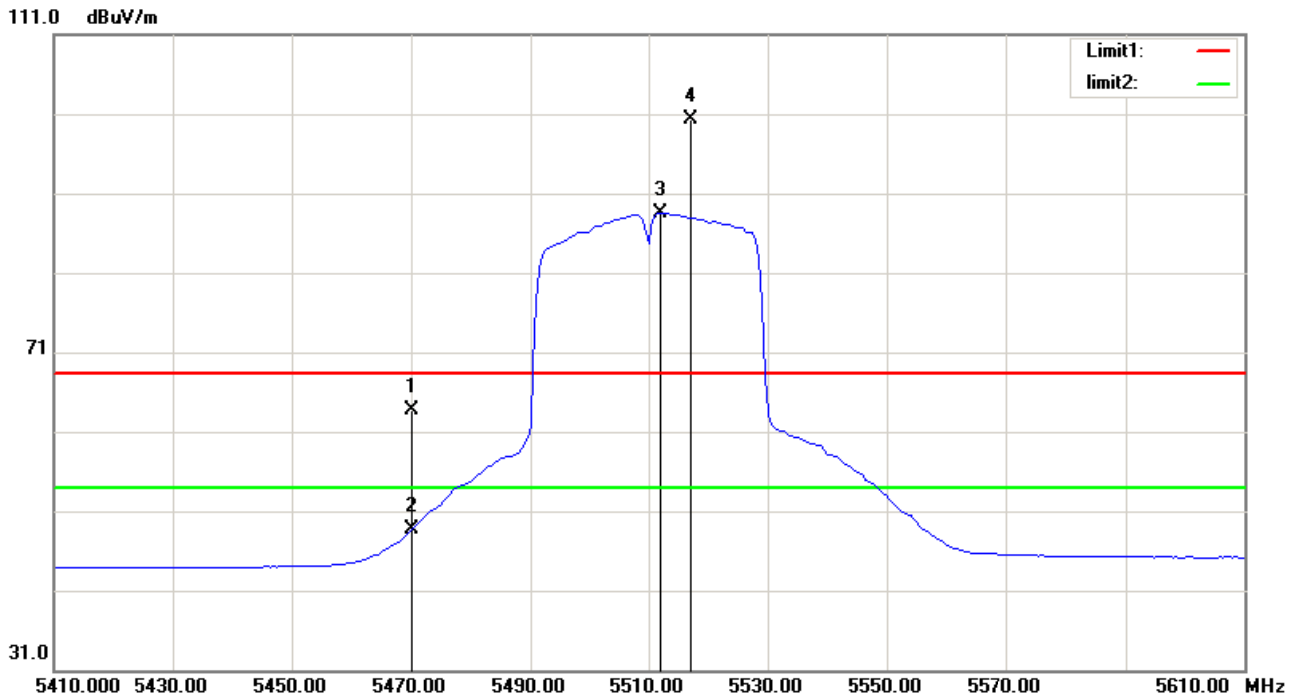
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5314.000	63.65	35.40	99.05	/	/	peak
2	5315.500	52.40	35.41	87.81	/	/	AVG
3	5350.000	30.24	35.50	65.74	68.30	-2.56	peak
4	5350.000	15.49	35.50	50.99	54.00	-3.01	AVG

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

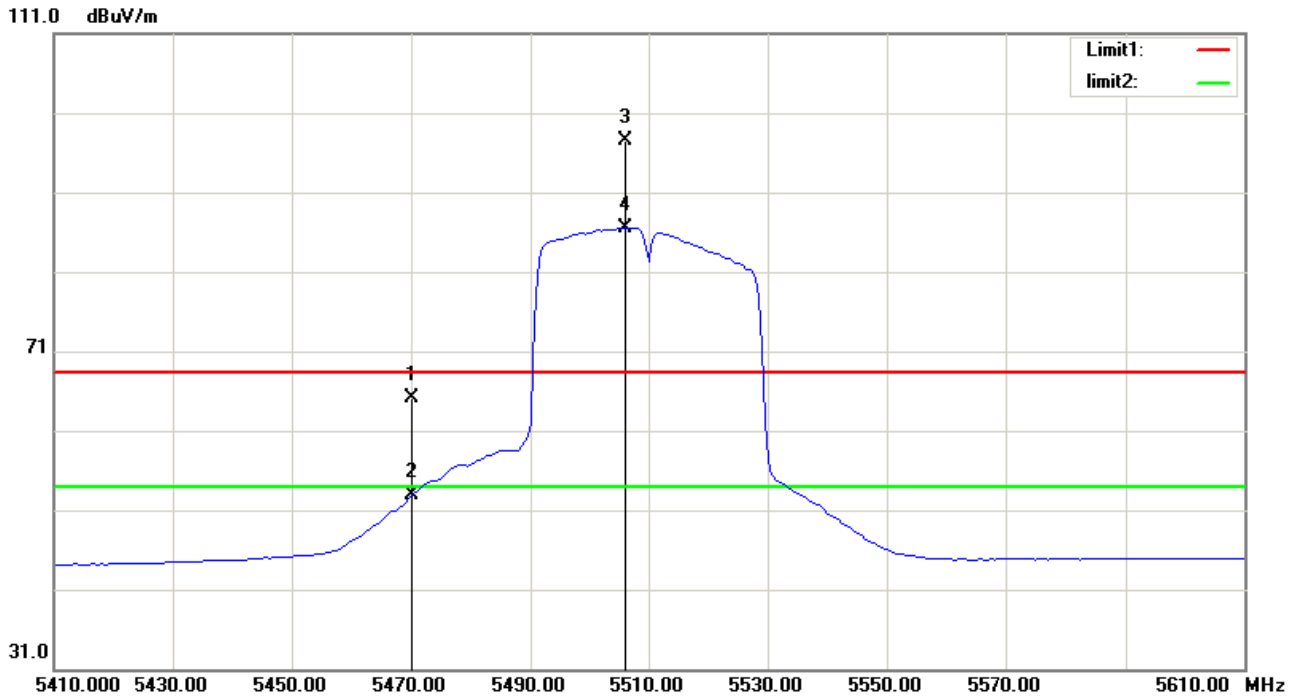
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	27.83	35.84	63.67	68.30	-4.63	peak
2	5470.000	12.89	35.84	48.73	54.00	-5.27	AVG
3	5512.000	52.53	35.92	88.45	/	/	AVG
4	5517.000	64.30	35.92	100.22	/	/	peak

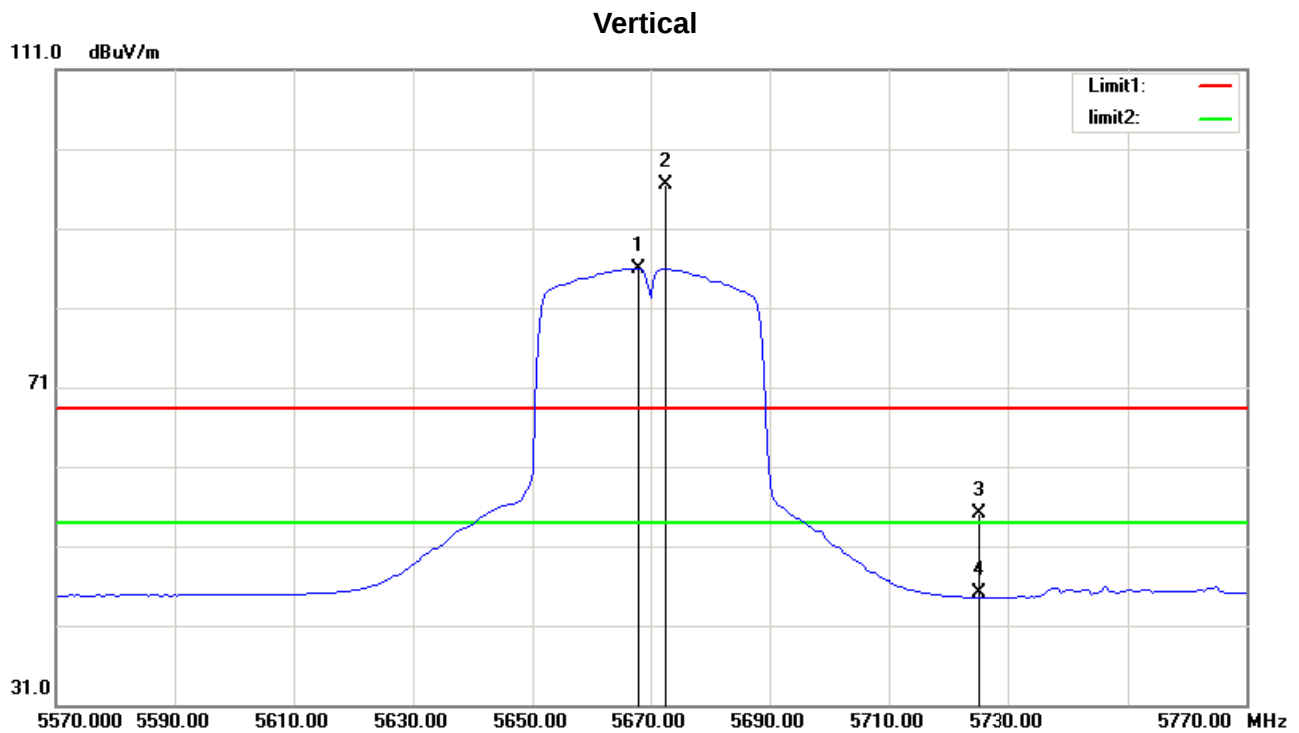
Orthogonal Axis	X
Test Mode	UNII-2C_TX N (HT40) Mode 5510 MHz

Horizontal



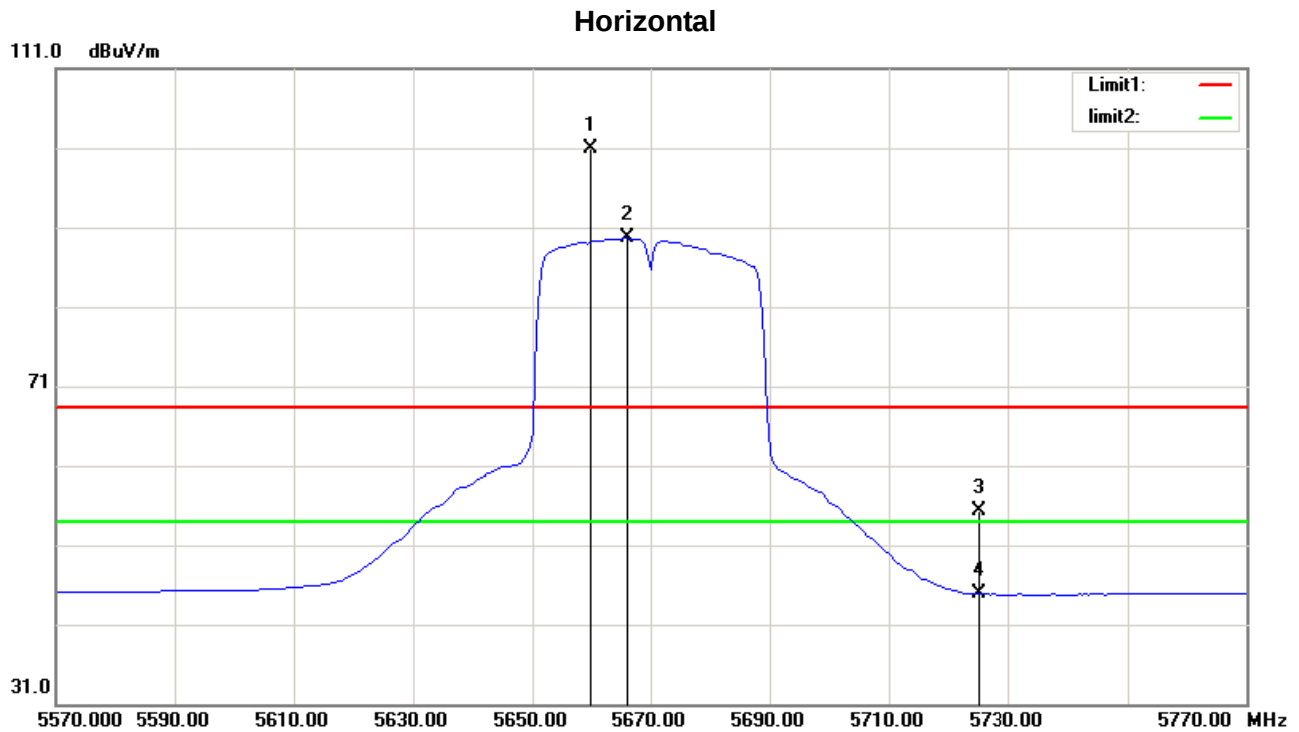
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5470.000	29.24	35.84	65.08	68.30	-3.22	peak
2	5470.000	17.07	35.84	52.91	54.00	-1.09	AVG
3	5506.000	61.62	35.93	97.55	/	/	peak
4	5506.000	50.58	35.93	86.51	/	/	AVG

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



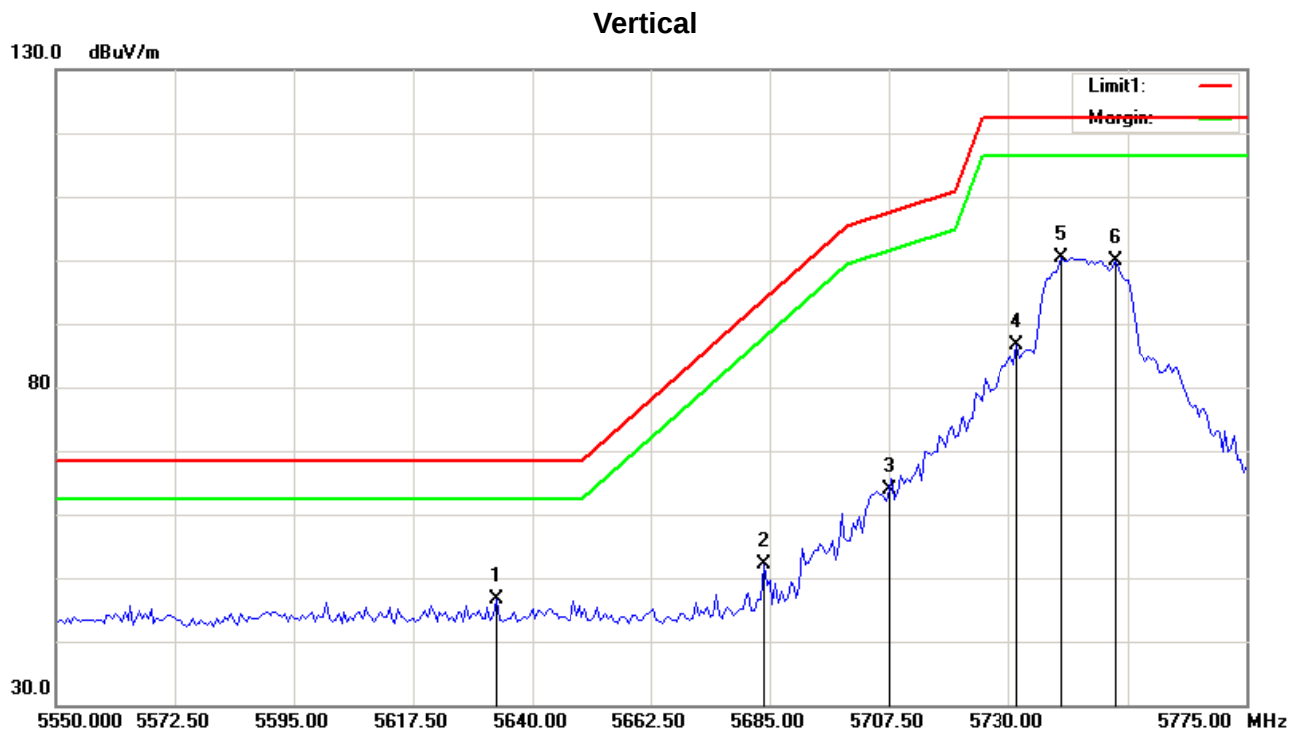
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5668.000	50.14	35.86	86.00	/	/	AVG
2	5672.500	60.64	35.86	96.50	/	/	peak
3	5725.000	19.17	35.84	55.01	68.30	-13.29	peak
4	5725.000	9.29	35.84	45.13	54.00	-8.87	AVG

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



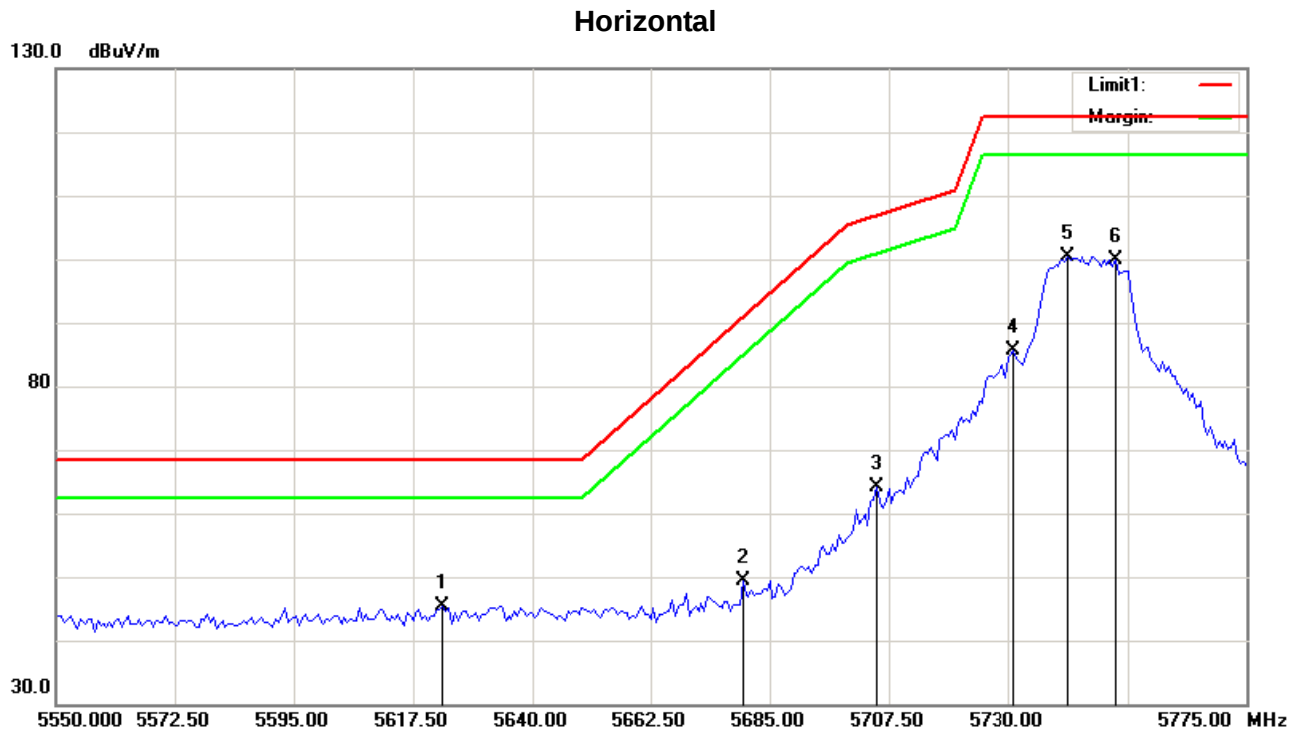
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5660.000	64.96	35.86	100.82	/	/	peak
2	5666.000	53.81	35.86	89.67	/	/	AVG
3	5725.000	19.44	35.84	55.28	68.30	-13.02	peak
4	5725.000	8.99	35.84	44.83	54.00	-9.17	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz



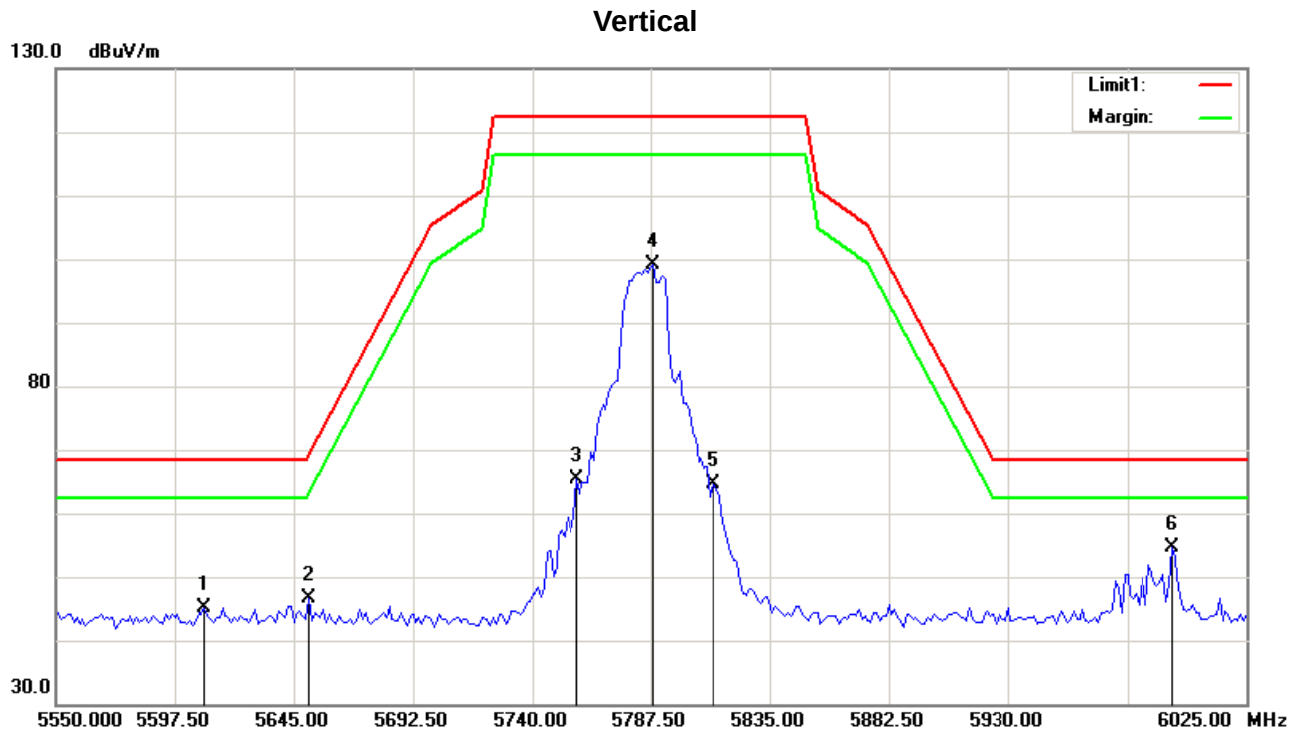
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5633.250	50.91	-4.36	46.55	68.30	-21.75	peak
2	5683.875	56.29	-4.28	52.01	93.37	-41.36	peak
3	5707.500	68.12	-4.25	63.87	107.40	-43.53	peak
4	5731.688	90.85	-4.21	86.64	122.30	-35.66	peak
5	5740.125	104.57	-4.19	100.38	122.30	-21.92	peak
6	5750.250	104.05	-4.17	99.88	122.30	-22.42	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz



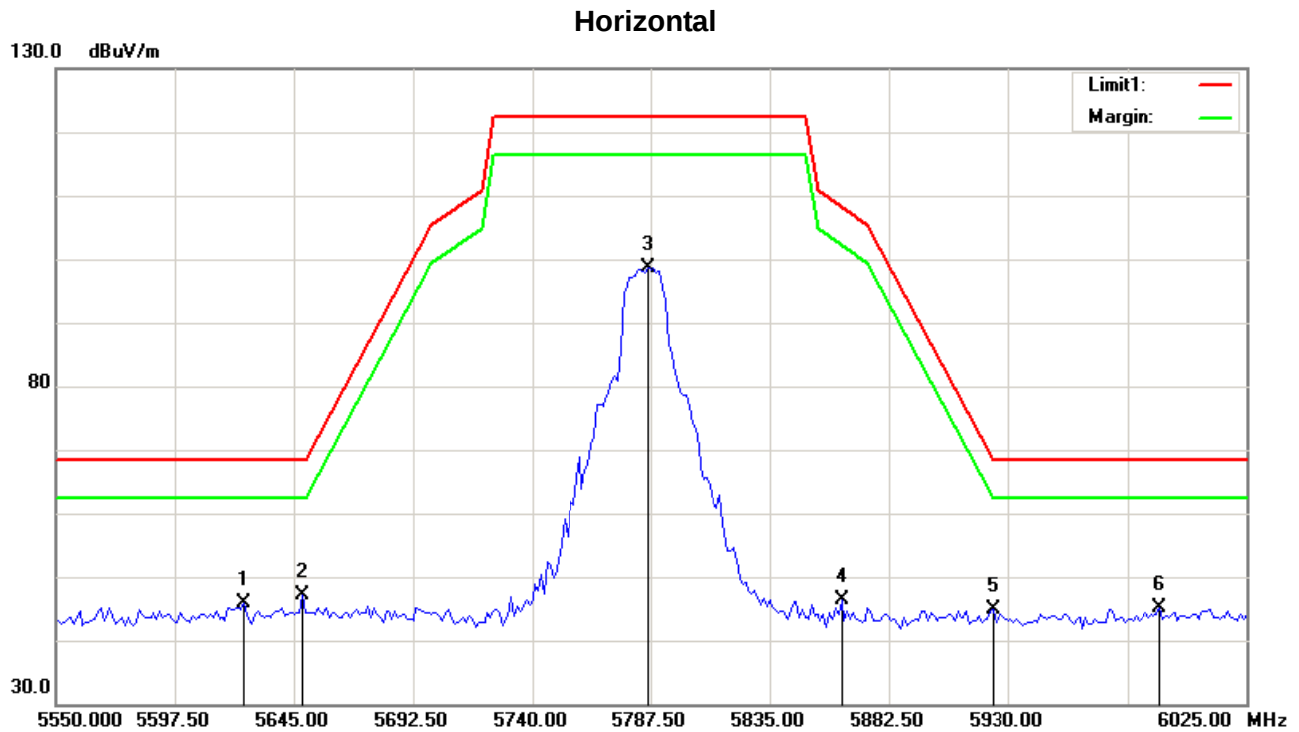
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5623.125	49.65	-4.37	45.28	68.30	-23.02	peak
2	5679.938	53.63	-4.28	49.35	90.45	-41.10	peak
3	5705.250	68.42	-4.24	64.18	106.77	-42.59	peak
4	5731.125	89.72	-4.20	85.52	122.30	-36.78	peak
5	5741.250	104.55	-4.19	100.36	122.30	-21.94	peak
6	5750.250	104.12	-4.17	99.95	122.30	-22.35	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5609.375	49.55	-4.40	45.15	68.30	-23.15	peak
2	5650.938	50.86	-4.33	46.53	68.99	-22.46	peak
3	5757.813	69.61	-4.16	65.45	122.30	-56.85	peak
4	5788.688	103.14	-4.11	99.03	122.30	-23.27	peak
5	5812.438	68.69	-4.08	64.61	122.30	-57.69	peak
6	5995.313	58.41	-3.78	54.63	68.30	-13.67	peak

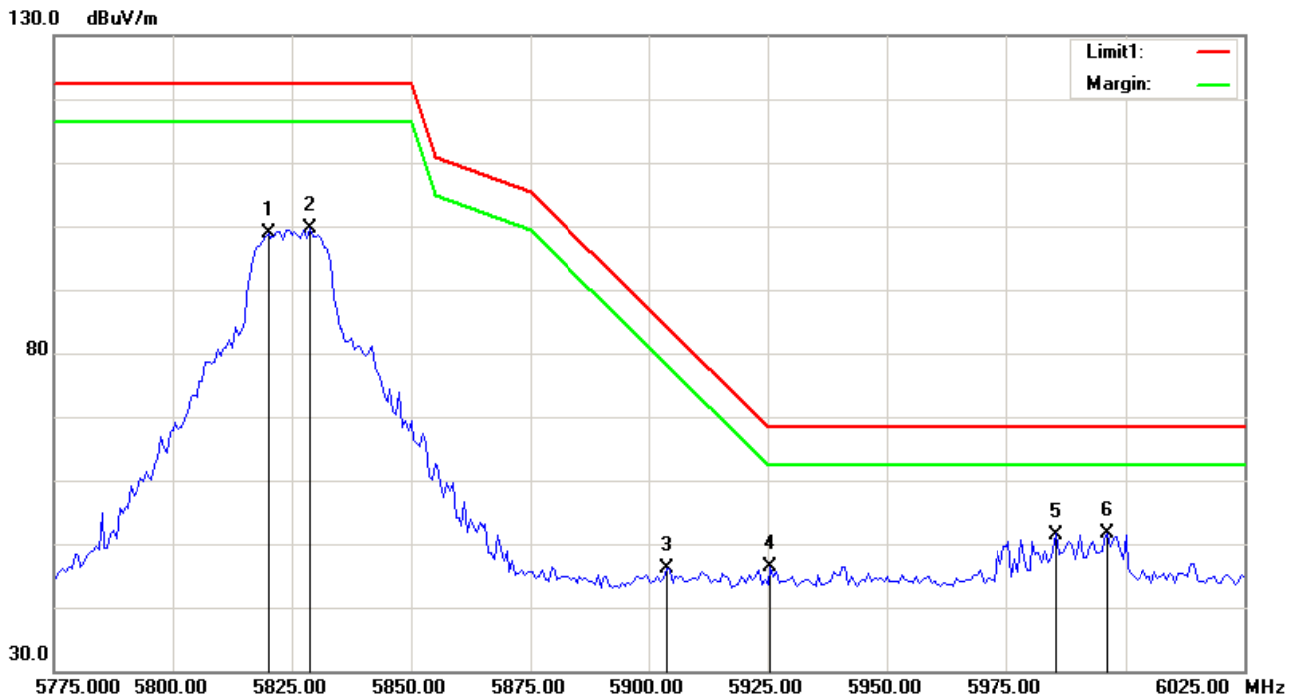
Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5624.813	50.16	-4.37	45.79	68.30	-22.51	peak
2	5648.563	51.45	-4.33	47.12	68.30	-21.18	peak
3	5786.313	102.68	-4.12	98.56	122.30	-23.74	peak
4	5863.500	50.34	-3.99	46.35	108.52	-62.17	peak
5	5924.063	48.79	-3.89	44.90	68.99	-24.09	peak
6	5990.563	48.98	-3.78	45.20	68.30	-23.10	peak

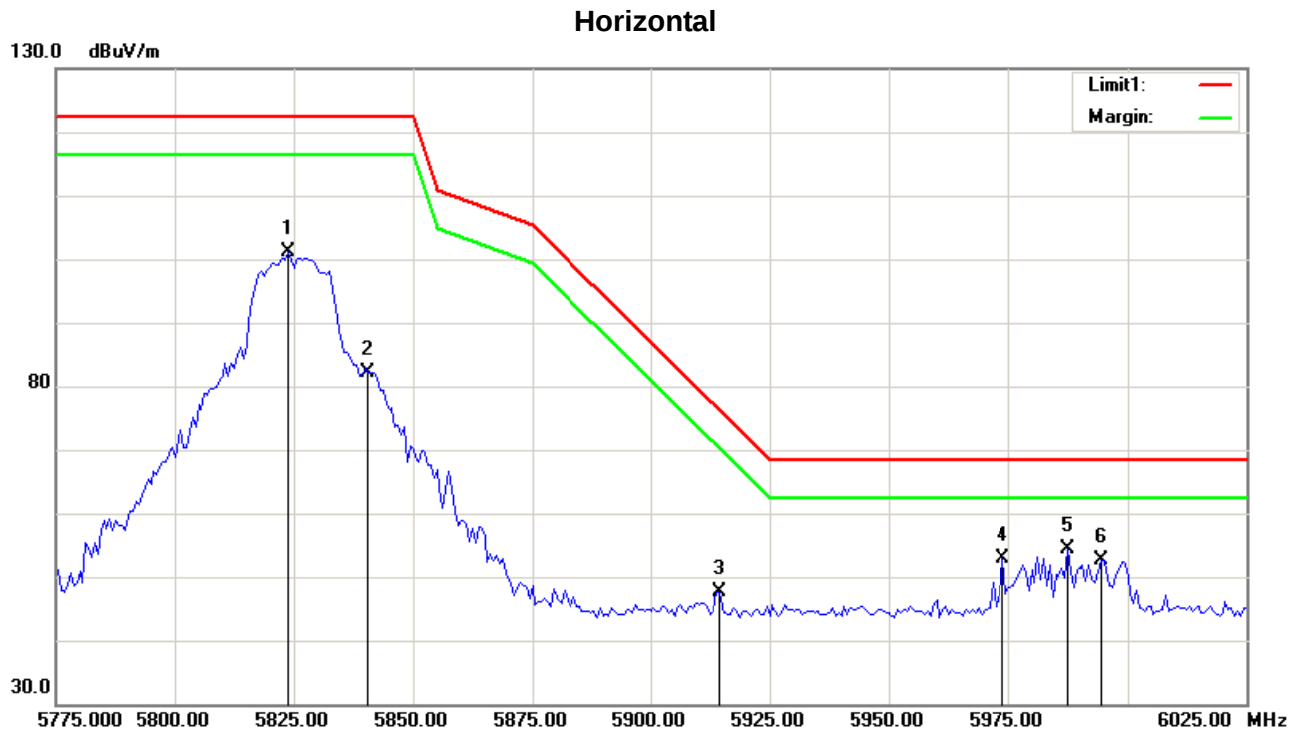
Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Vertical



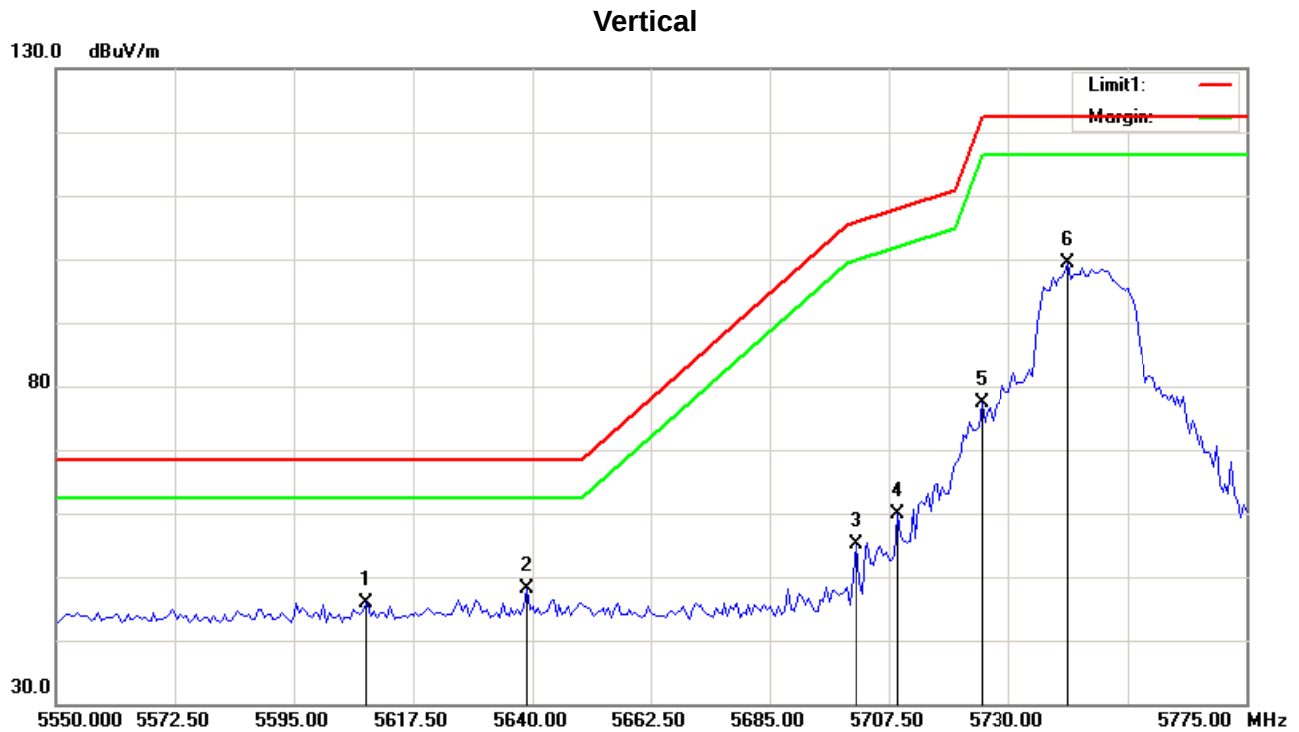
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5820.000	102.82	-4.06	98.76	122.30	-23.54	peak
2	5828.750	103.67	-4.04	99.63	122.30	-22.67	peak
3	5903.750	50.05	-3.92	46.13	84.02	-37.89	peak
4	5925.625	50.22	-3.89	46.33	68.30	-21.97	peak
5	5985.625	55.30	-3.80	51.50	68.30	-16.80	peak
6	5996.250	55.41	-3.78	51.63	68.30	-16.67	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5823.750	105.16	-4.05	101.11	122.30	-21.19	peak
2	5840.625	86.13	-4.03	82.10	122.30	-40.20	peak
3	5914.375	51.64	-3.91	47.73	76.16	-28.43	peak
4	5973.750	56.69	-3.81	52.88	68.30	-15.42	peak
5	5987.500	58.27	-3.79	54.48	68.30	-13.82	peak
6	5994.375	56.45	-3.78	52.67	68.30	-15.63	peak

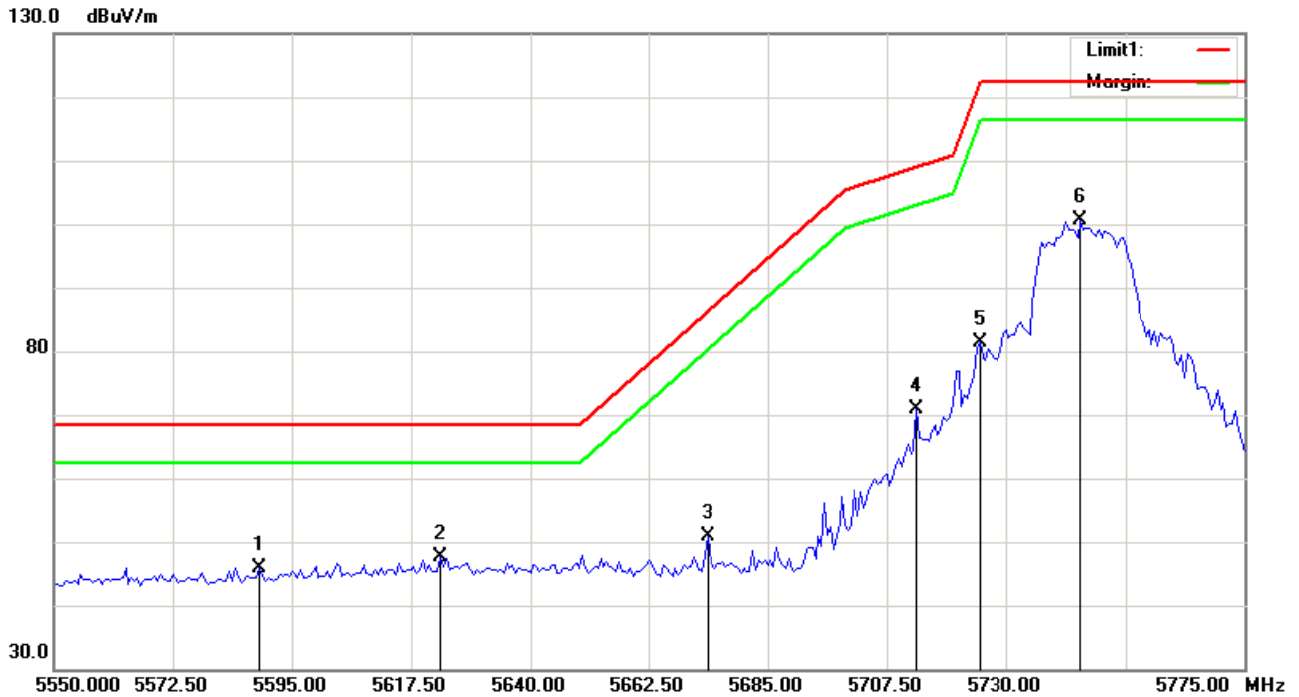
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5745 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5608.500	50.29	-4.40	45.89	68.30	-22.41	peak
2	5638.875	52.49	-4.35	48.14	68.30	-20.16	peak
3	5701.313	59.35	-4.25	55.10	105.67	-50.57	peak
4	5709.188	64.12	-4.24	59.88	107.87	-47.99	peak
5	5724.938	81.65	-4.21	77.44	122.16	-44.72	peak
6	5741.250	103.49	-4.19	99.30	122.30	-23.00	peak

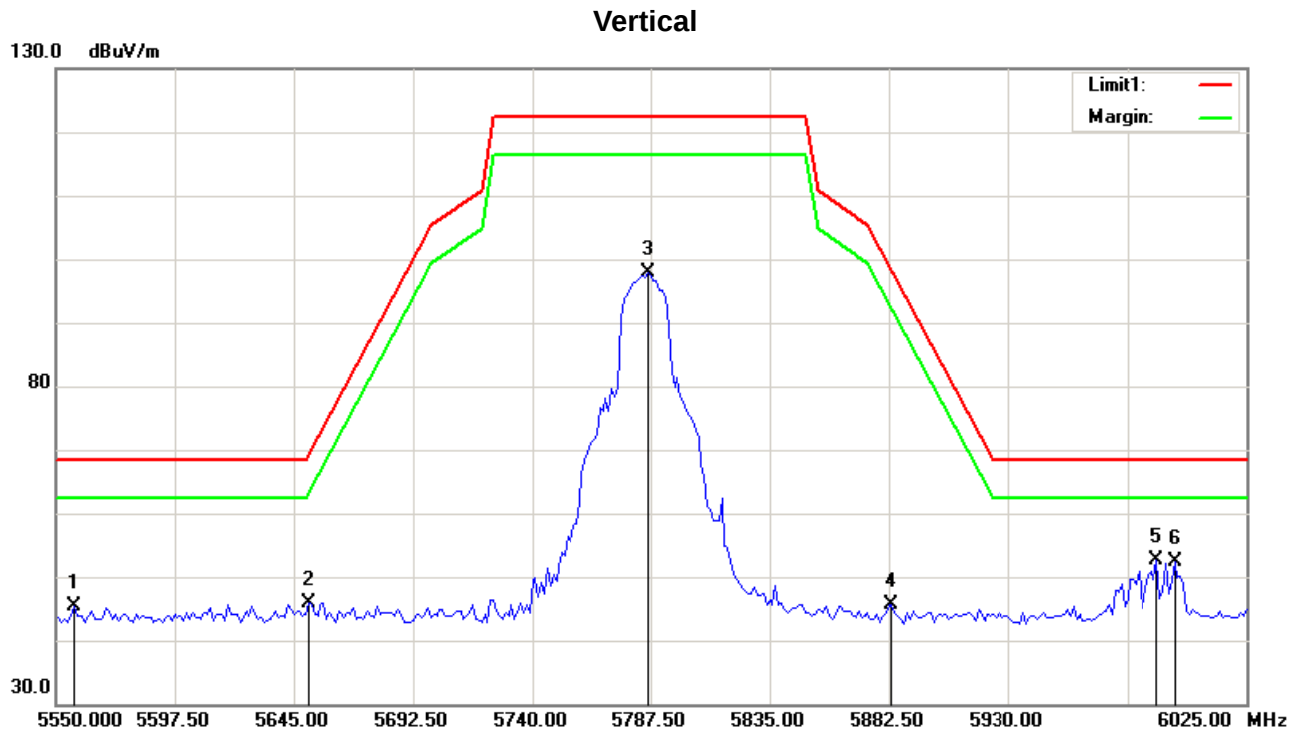
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5745 MHz

Horizontal



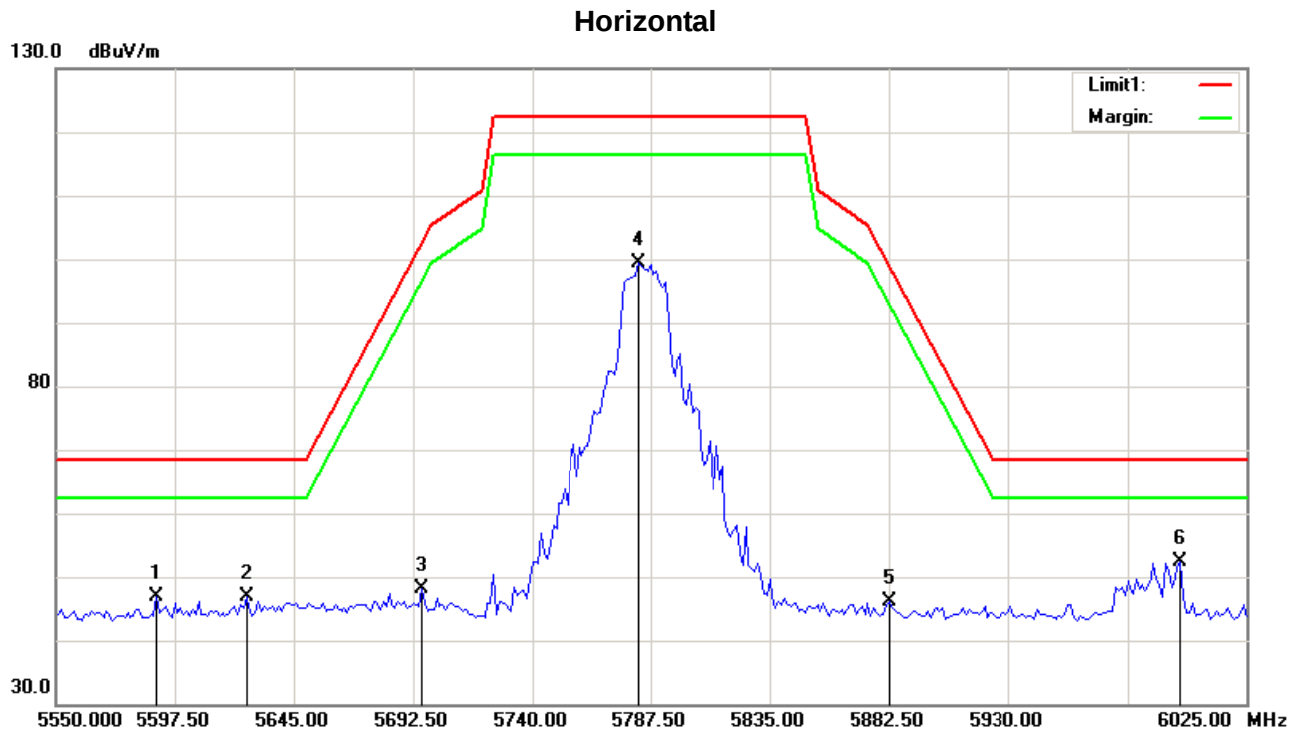
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5588.813	50.41	-4.43	45.98	68.30	-22.32	peak
2	5623.125	52.00	-4.37	47.63	68.30	-20.67	peak
3	5673.750	55.26	-4.29	50.97	85.87	-34.90	peak
4	5713.125	75.02	-4.23	70.79	108.97	-38.18	peak
5	5724.938	85.67	-4.21	81.46	122.16	-40.70	peak
6	5744.063	104.79	-4.18	100.61	122.30	-21.69	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5557.125	49.76	-4.49	45.27	68.30	-23.03	peak
2	5650.938	50.13	-4.33	45.80	68.99	-23.19	peak
3	5786.313	101.96	-4.12	97.84	122.30	-24.46	peak
4	5883.688	49.63	-3.96	45.67	98.87	-53.20	peak
5	5989.375	56.30	-3.78	52.52	68.30	-15.78	peak
6	5996.500	56.09	-3.78	52.31	68.30	-15.99	peak

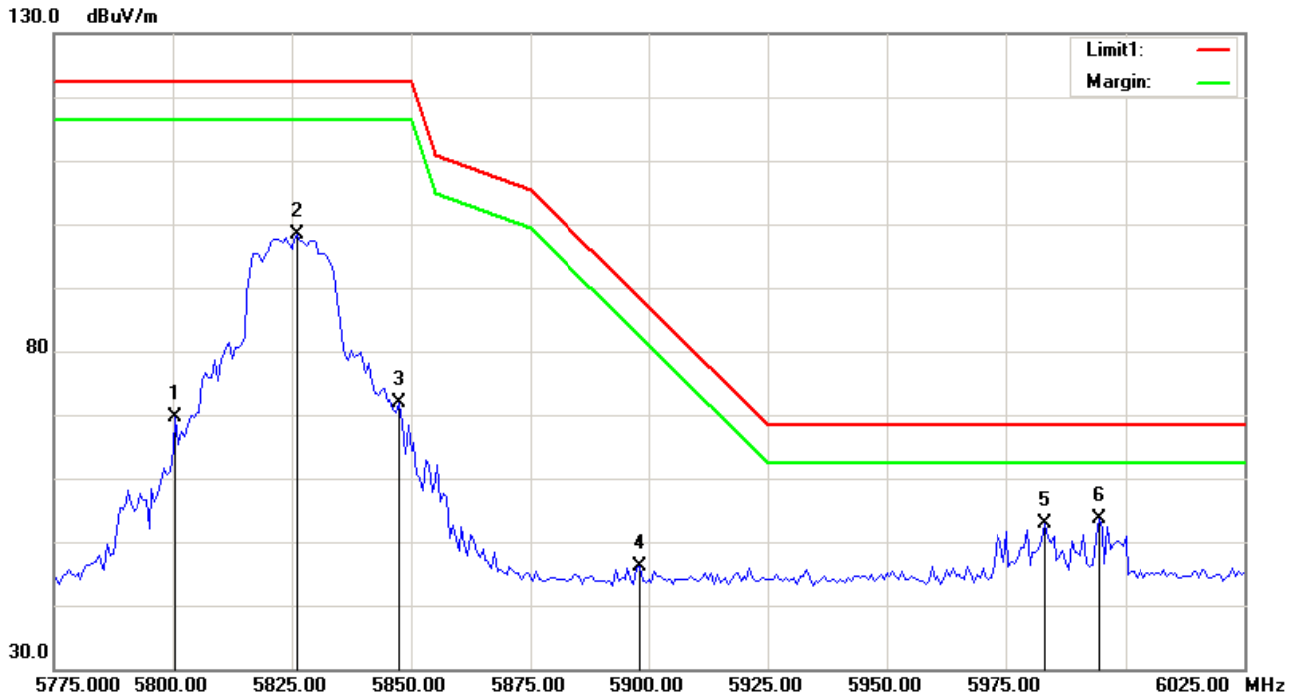
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5590.375	51.19	-4.43	46.76	68.30	-21.54	peak
2	5626.000	51.23	-4.37	46.86	68.30	-21.44	peak
3	5696.063	52.39	-4.26	48.13	102.39	-54.26	peak
4	5782.750	103.62	-4.12	99.50	122.30	-22.80	peak
5	5882.500	50.11	-3.96	46.15	99.75	-53.60	peak
6	5998.875	56.15	-3.77	52.38	68.30	-15.92	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5825 MHz

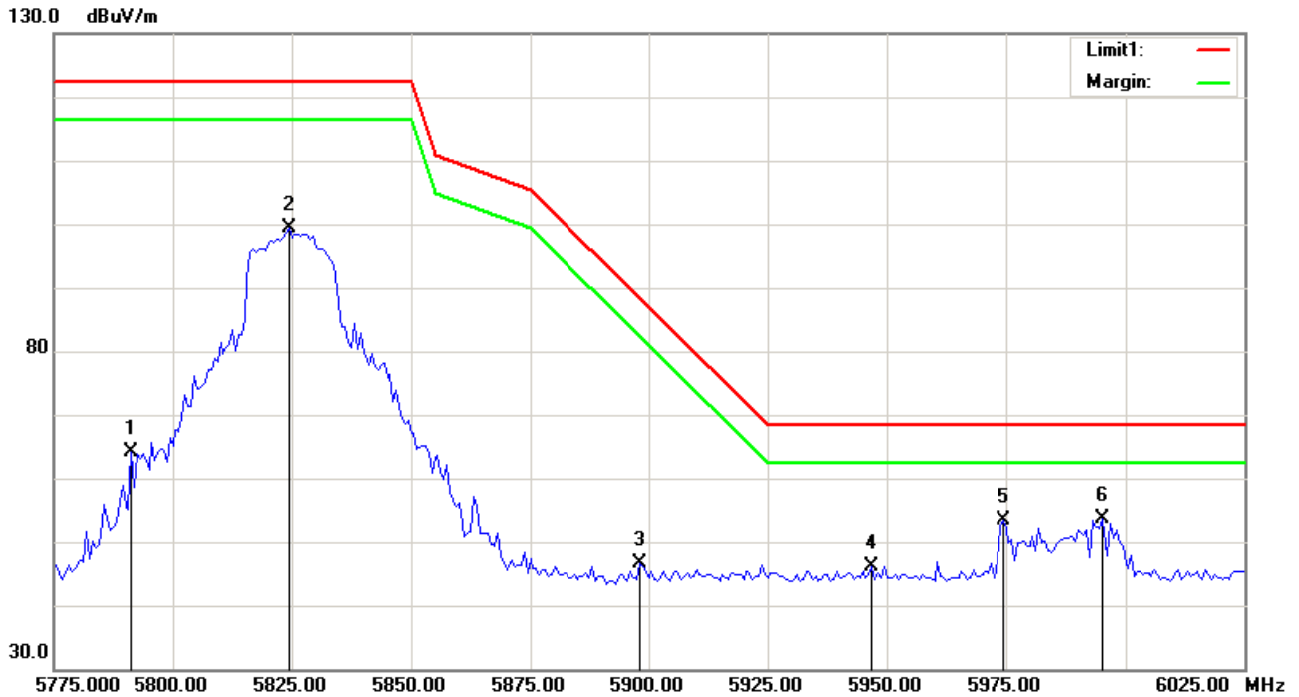
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5800.625	73.67	-4.09	69.58	122.30	-52.72	peak
2	5826.250	102.47	-4.05	98.42	122.30	-23.88	peak
3	5847.500	75.83	-4.01	71.82	122.30	-50.48	peak
4	5898.125	50.04	-3.93	46.11	88.19	-42.08	peak
5	5983.125	56.78	-3.80	52.98	68.30	-15.32	peak
6	5994.375	57.49	-3.78	53.71	68.30	-14.59	peak

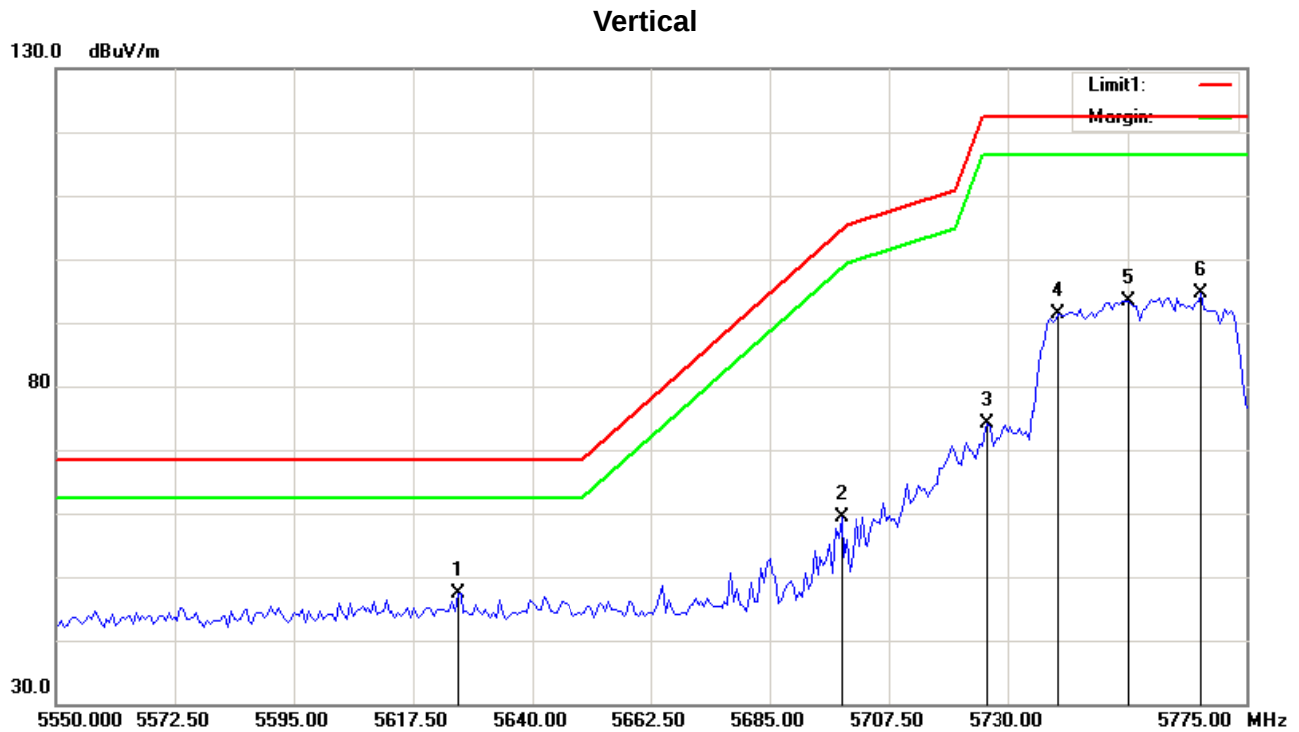
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5825 MHz

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5791.250	68.36	-4.11	64.25	122.30	-58.05	peak
2	5824.375	103.35	-4.05	99.30	122.30	-23.00	peak
3	5898.125	50.47	-3.93	46.54	88.19	-41.65	peak
4	5946.875	49.98	-3.86	46.12	68.30	-22.18	peak
5	5974.375	57.30	-3.81	53.49	68.30	-14.81	peak
6	5995.000	57.47	-3.78	53.69	68.30	-14.61	peak

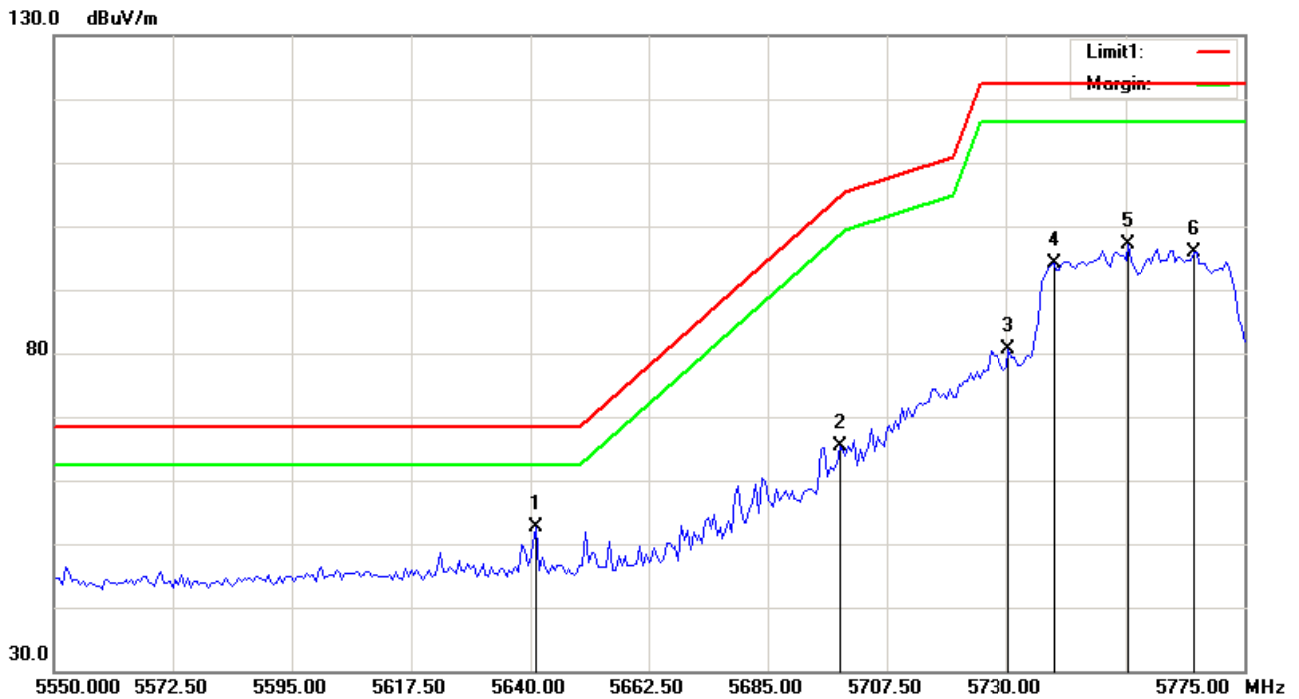
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5755 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5625.938	51.79	-4.37	47.42	68.30	-20.88	peak
2	5698.500	63.70	-4.25	59.45	104.19	-44.74	peak
3	5726.063	78.22	-4.21	74.01	122.30	-48.29	peak
4	5739.563	95.62	-4.19	91.43	122.30	-30.87	peak
5	5752.500	97.59	-4.16	93.43	122.30	-28.87	peak
6	5766.563	98.81	-4.15	94.66	122.30	-27.64	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5755 MHz

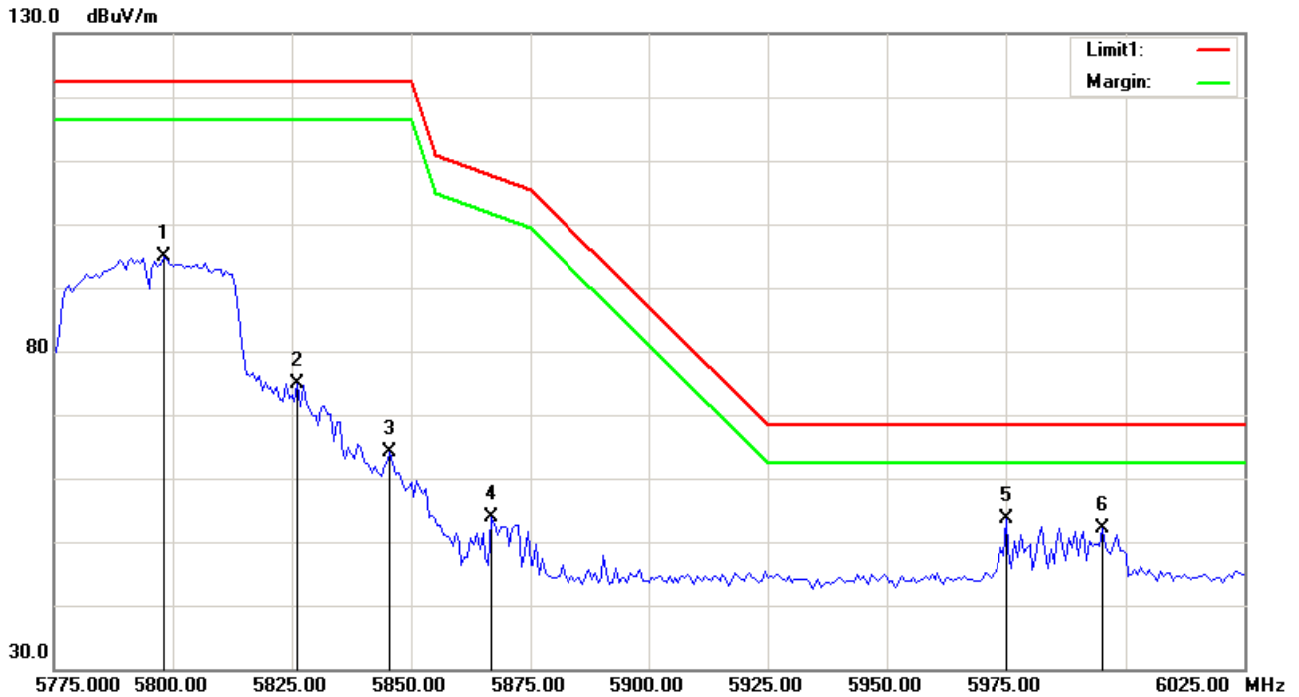
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5641.125	57.02	-4.35	52.67	68.30	-15.63	peak
2	5698.500	69.58	-4.25	65.33	104.19	-38.86	peak
3	5730.563	84.88	-4.20	80.68	122.30	-41.62	peak
4	5739.000	98.39	-4.19	94.20	122.30	-28.10	peak
5	5753.063	101.22	-4.16	97.06	122.30	-25.24	peak
6	5765.438	100.07	-4.15	95.92	122.30	-26.38	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5795 MHz

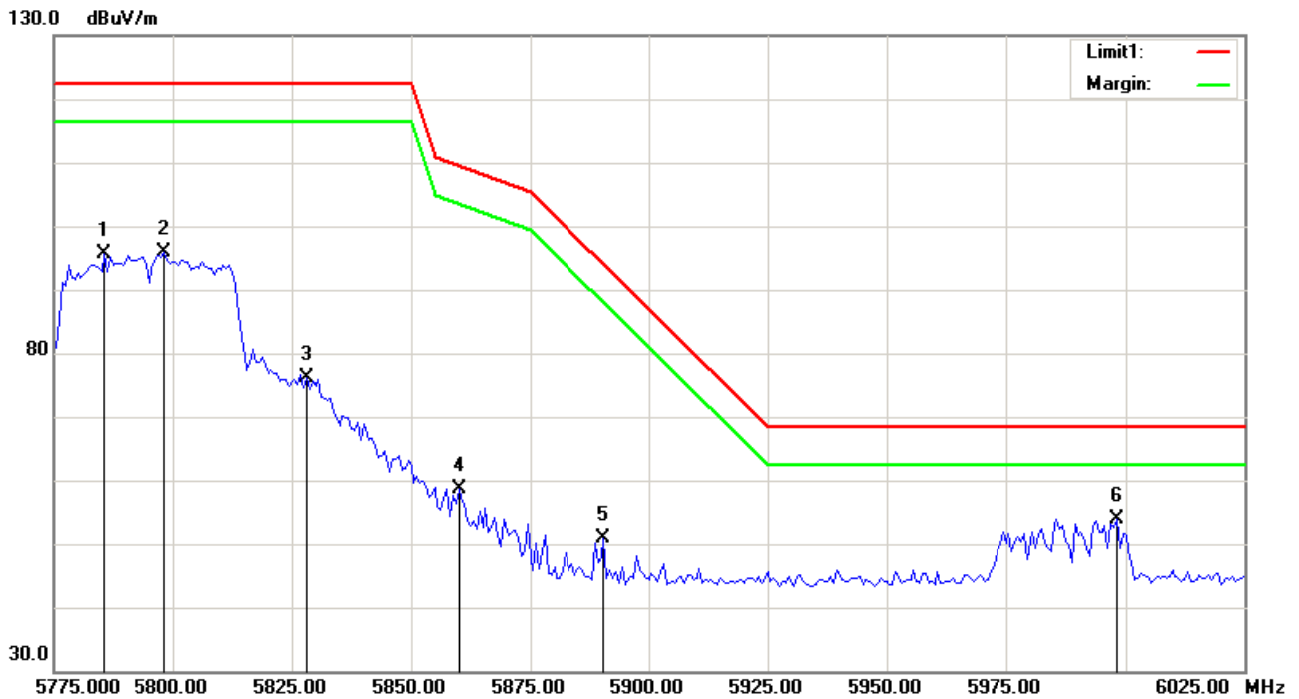
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5798.125	98.93	-4.09	94.84	122.30	-27.46	peak
2	5826.250	78.82	-4.05	74.77	122.30	-47.53	peak
3	5845.625	68.16	-4.02	64.14	122.30	-58.16	peak
4	5866.875	57.75	-3.98	53.77	107.57	-53.80	peak
5	5975.000	57.51	-3.81	53.70	68.30	-14.60	peak
6	5995.000	55.90	-3.78	52.12	68.30	-16.18	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5795 MHz

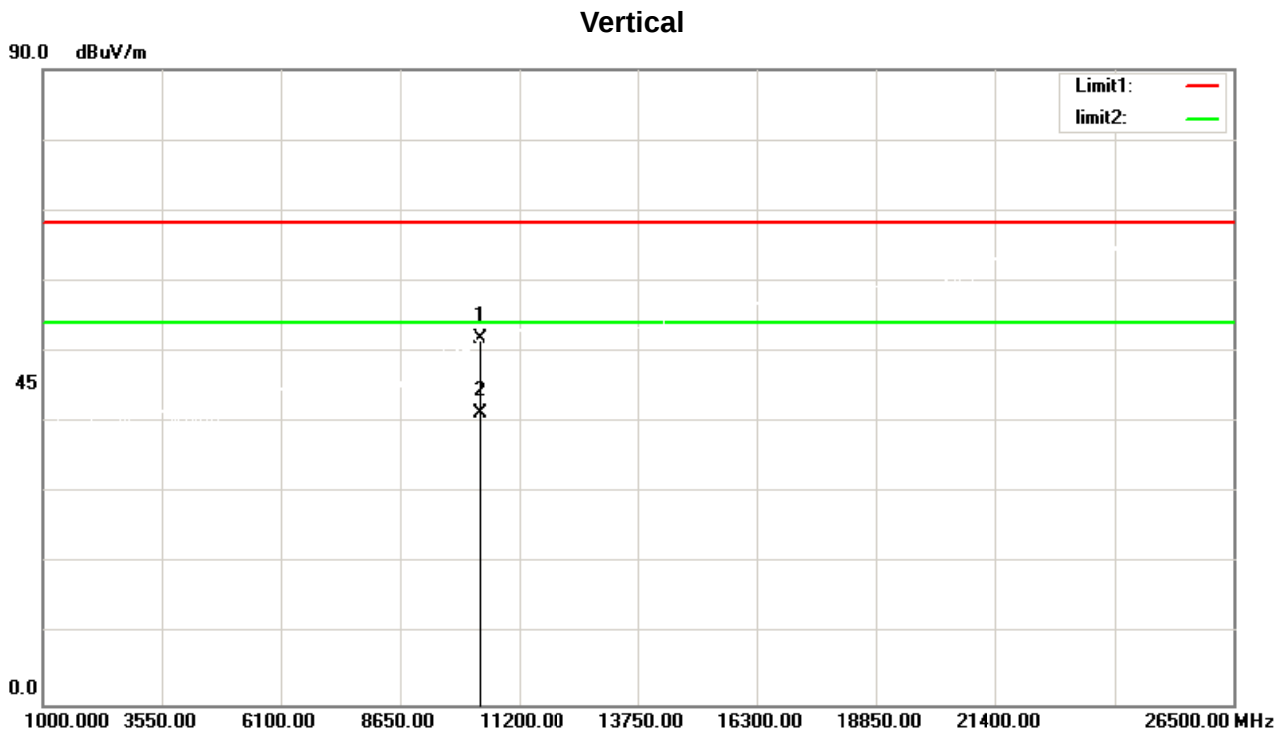
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5785.625	99.82	-4.12	95.70	122.30	-26.60	peak
2	5798.125	99.94	-4.09	95.85	122.30	-26.45	peak
3	5828.125	80.23	-4.04	76.19	122.30	-46.11	peak
4	5860.000	62.73	-4.00	58.73	109.50	-50.77	peak
5	5890.625	54.72	-3.94	50.78	93.74	-42.96	peak
6	5998.125	57.62	-3.77	53.85	68.30	-14.45	peak

5.9 TEST RESULTS - ABOVE1000 MHz (HARMONIC)

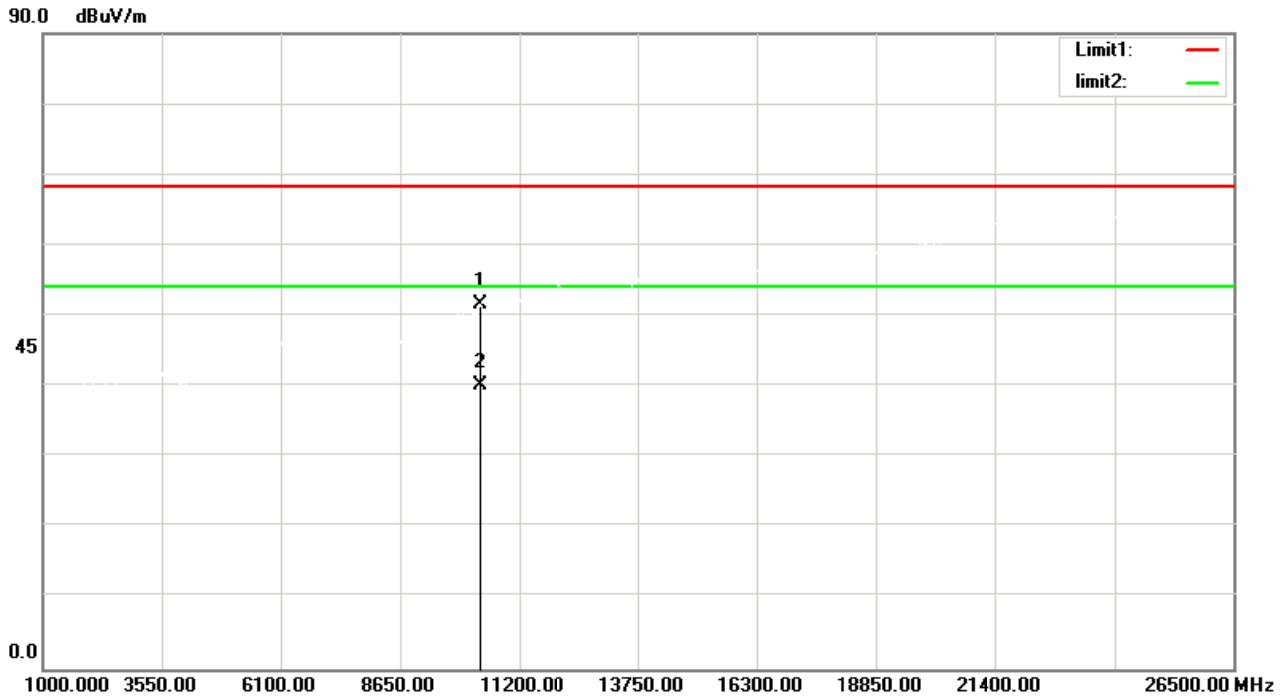
Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	45.68	6.22	51.90	68.30	-16.40	peak
2	10360.000	35.12	6.22	41.34	54.00	-12.66	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5180 MHz

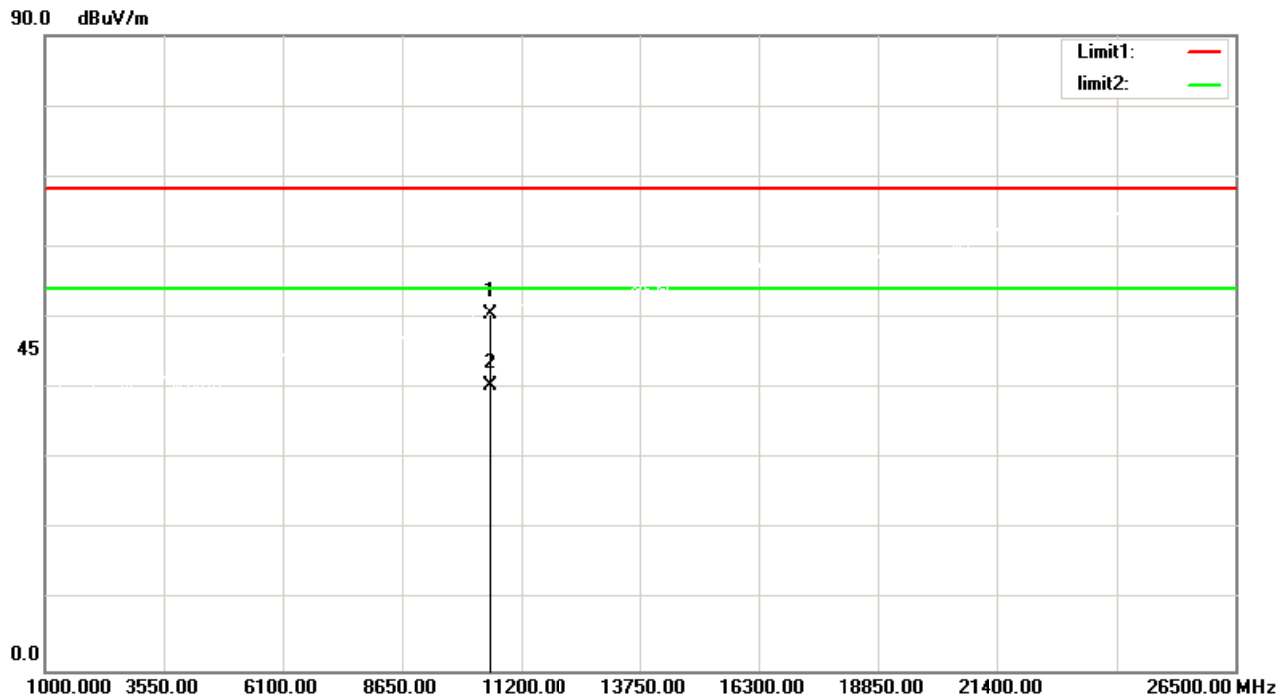
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	45.43	6.22	51.65	68.30	-16.65	peak
2	10360.000	33.88	6.22	40.10	54.00	-13.90	AVG

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

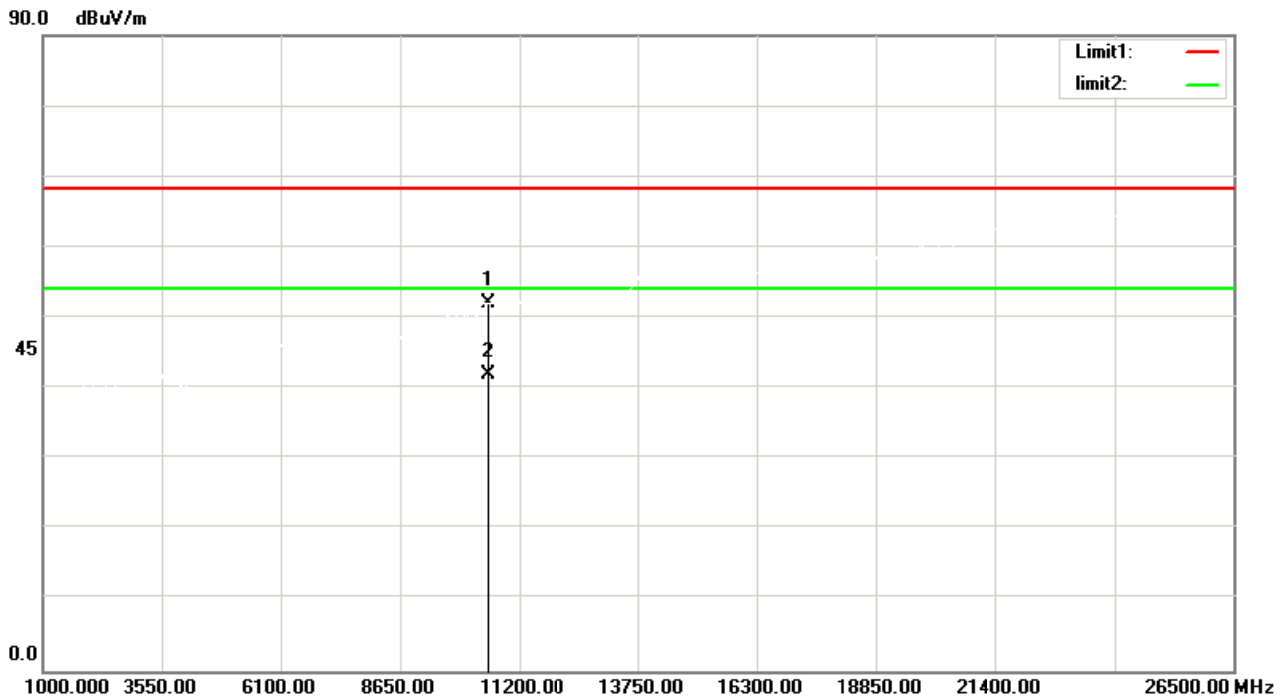
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	43.74	6.74	50.48	68.30	-17.82	peak
2	10520.000	33.56	6.74	40.30	54.00	-13.70	AVG

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

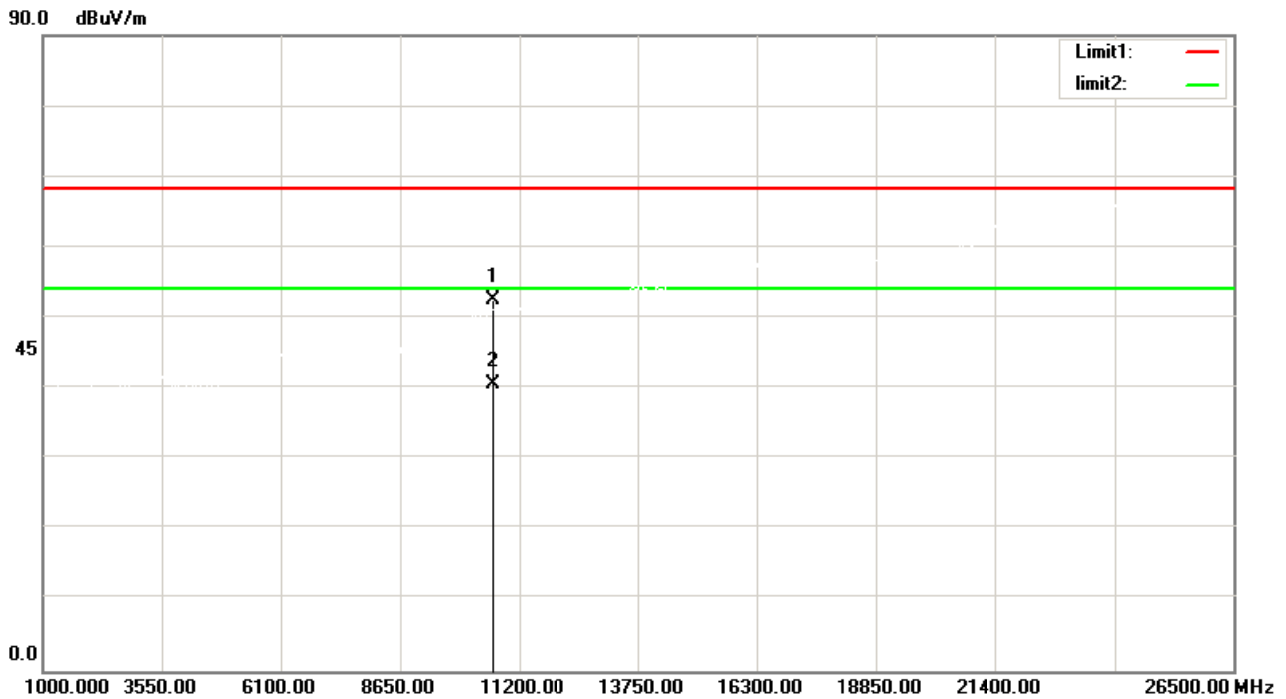
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	45.37	6.74	52.11	68.30	-16.19	peak
2	10520.000	35.18	6.74	41.92	54.00	-12.08	AVG

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

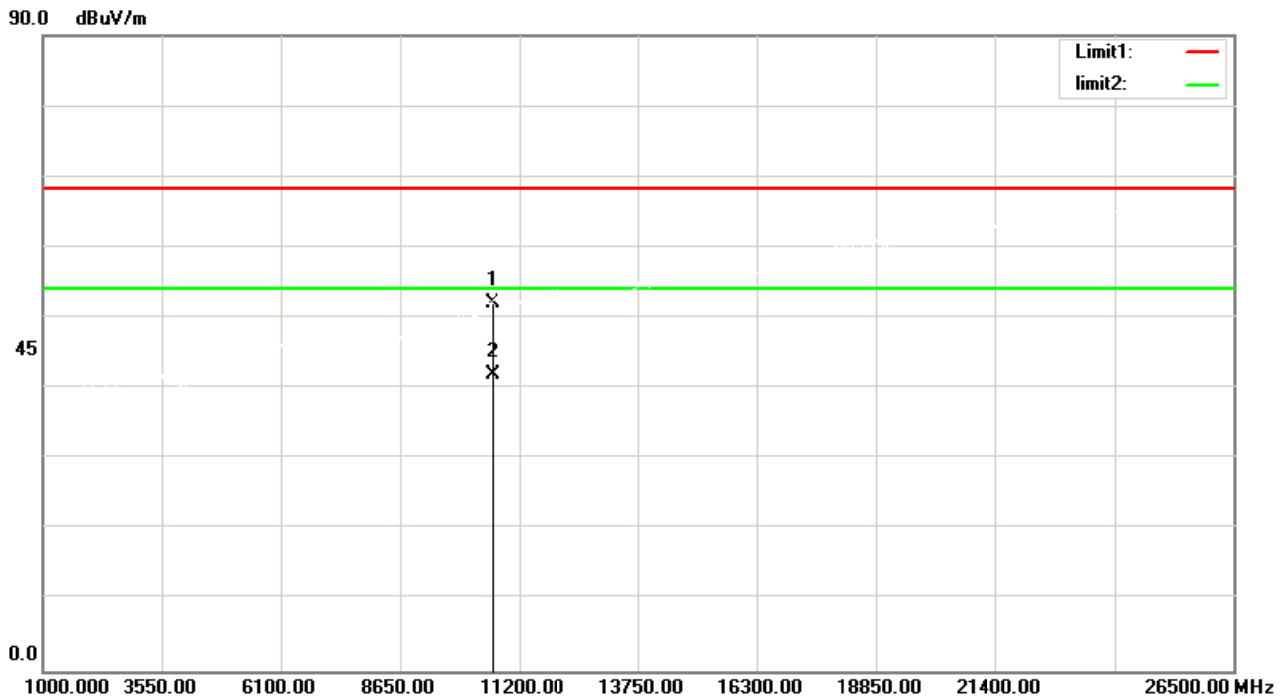
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	45.49	7.13	52.62	68.30	-15.68	peak
2	10640.000	33.44	7.13	40.57	54.00	-13.43	AVG

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

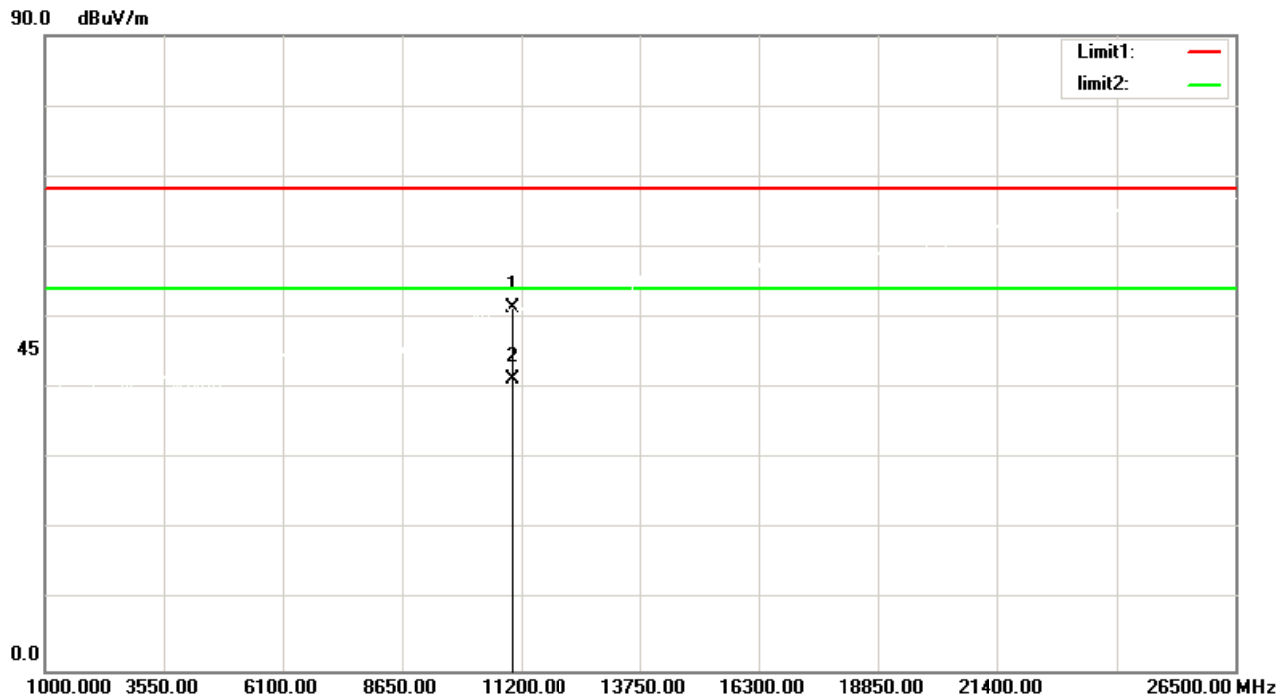
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	45.01	7.13	52.14	68.30	-16.16	peak
2	10640.000	34.72	7.13	41.85	54.00	-12.15	AVG

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

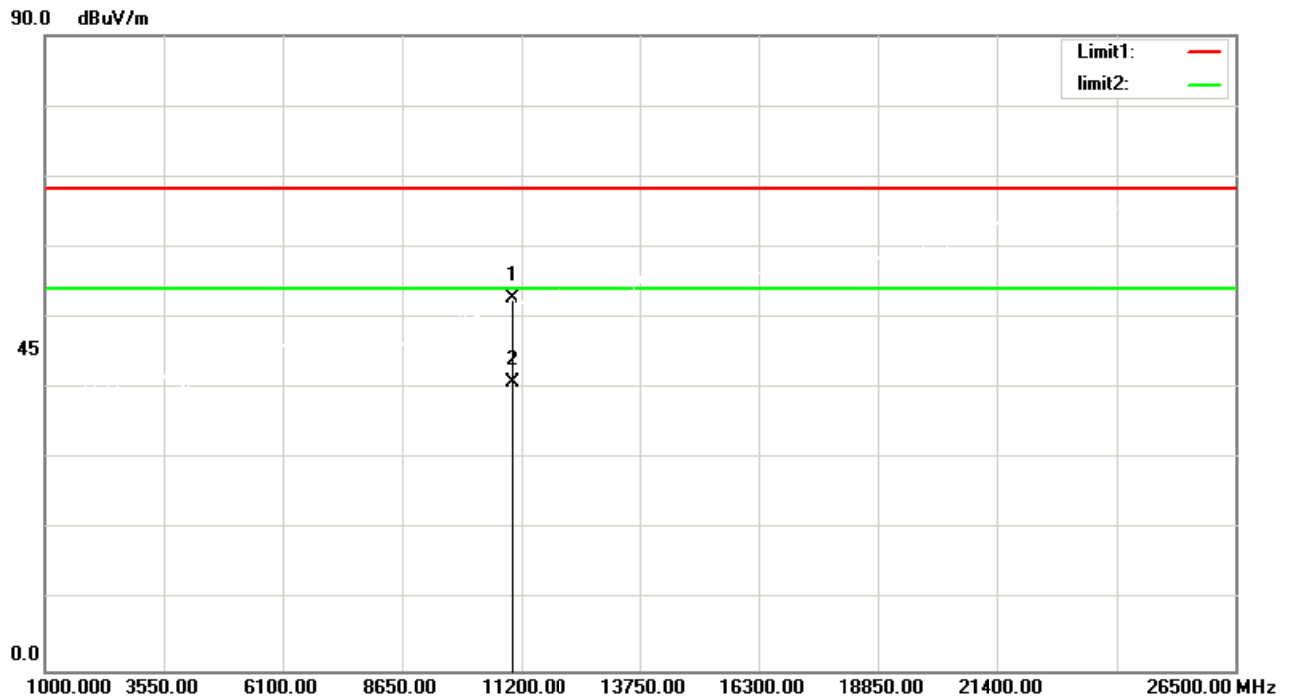
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	43.04	8.32	51.36	68.30	-16.94	peak
2	11000.000	33.04	8.32	41.36	54.00	-12.64	AVG

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

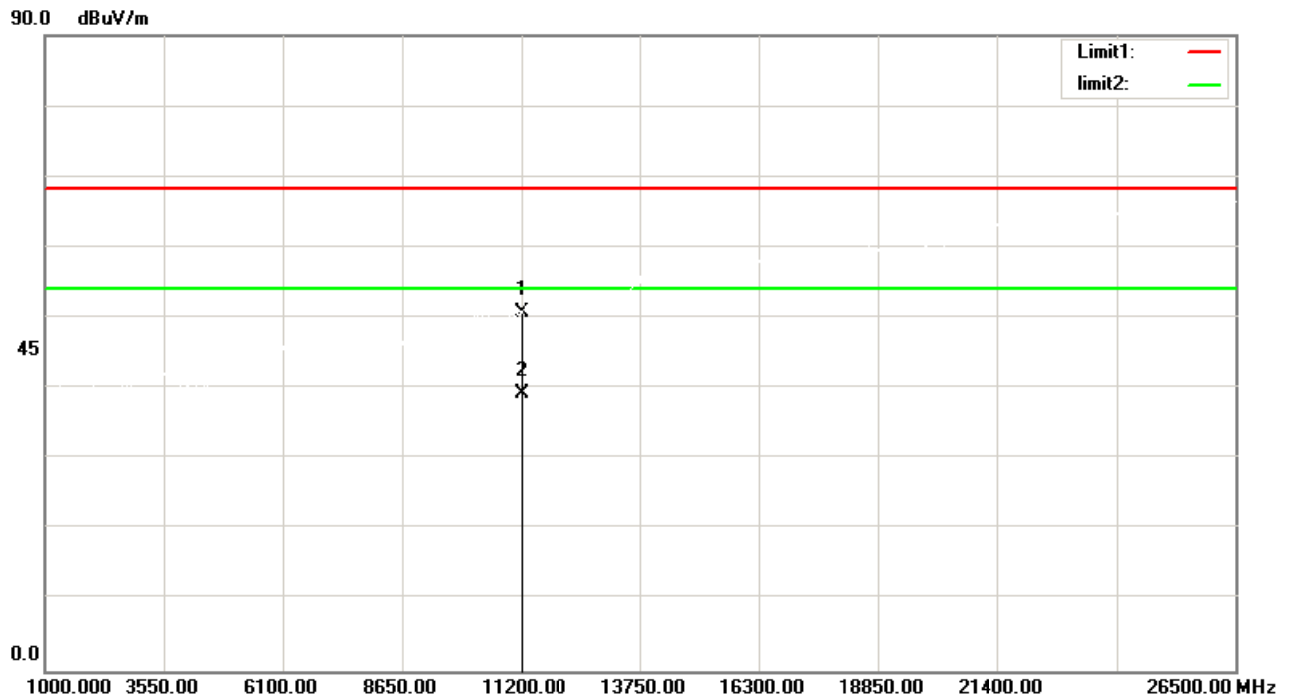
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	44.47	8.32	52.79	68.30	-15.51	peak
2	11000.000	32.47	8.32	40.79	54.00	-13.21	AVG

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

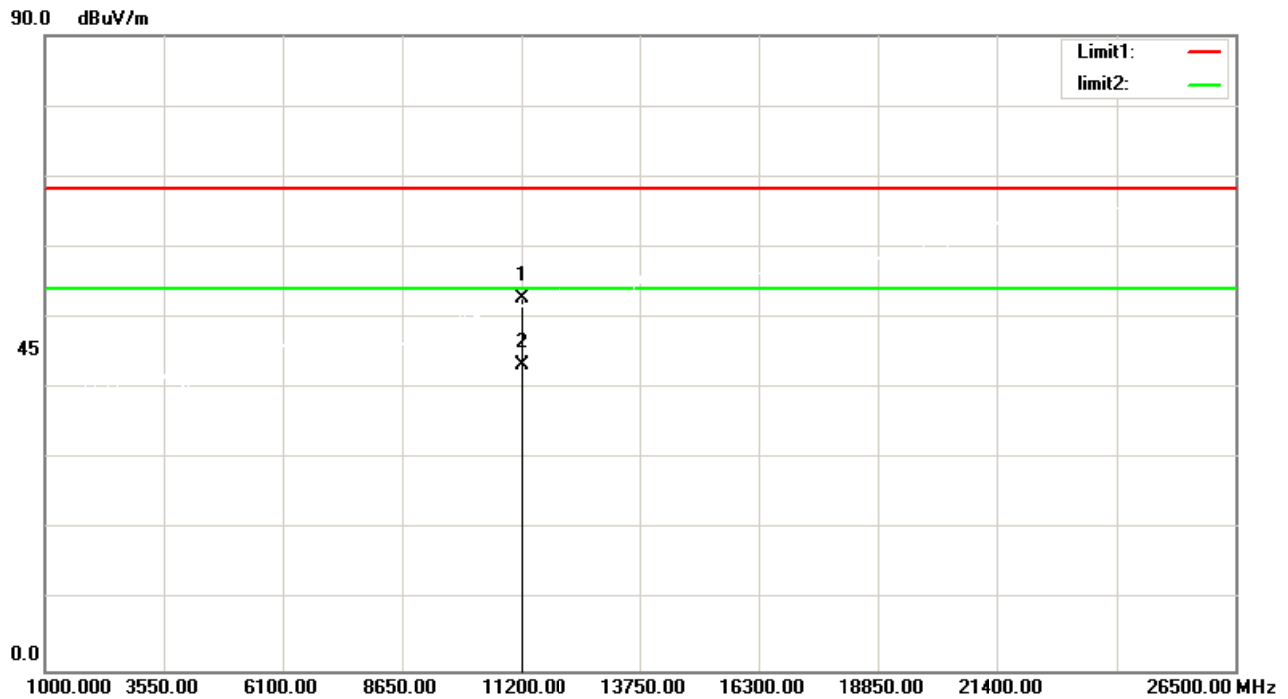
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	42.56	8.21	50.77	68.30	-17.53	peak
2	11200.000	31.15	8.21	39.36	54.00	-14.64	AVG

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

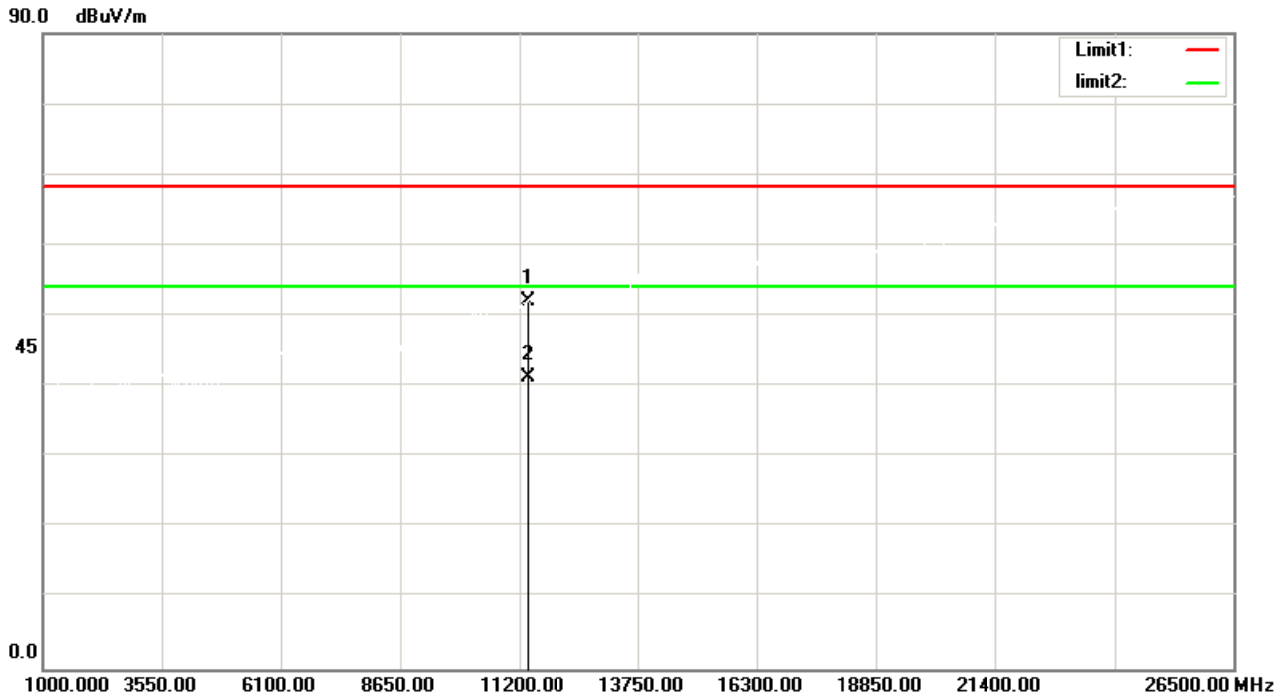
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	44.58	8.21	52.79	68.30	-15.51	peak
2	11200.000	35.10	8.21	43.31	54.00	-10.69	AVG

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

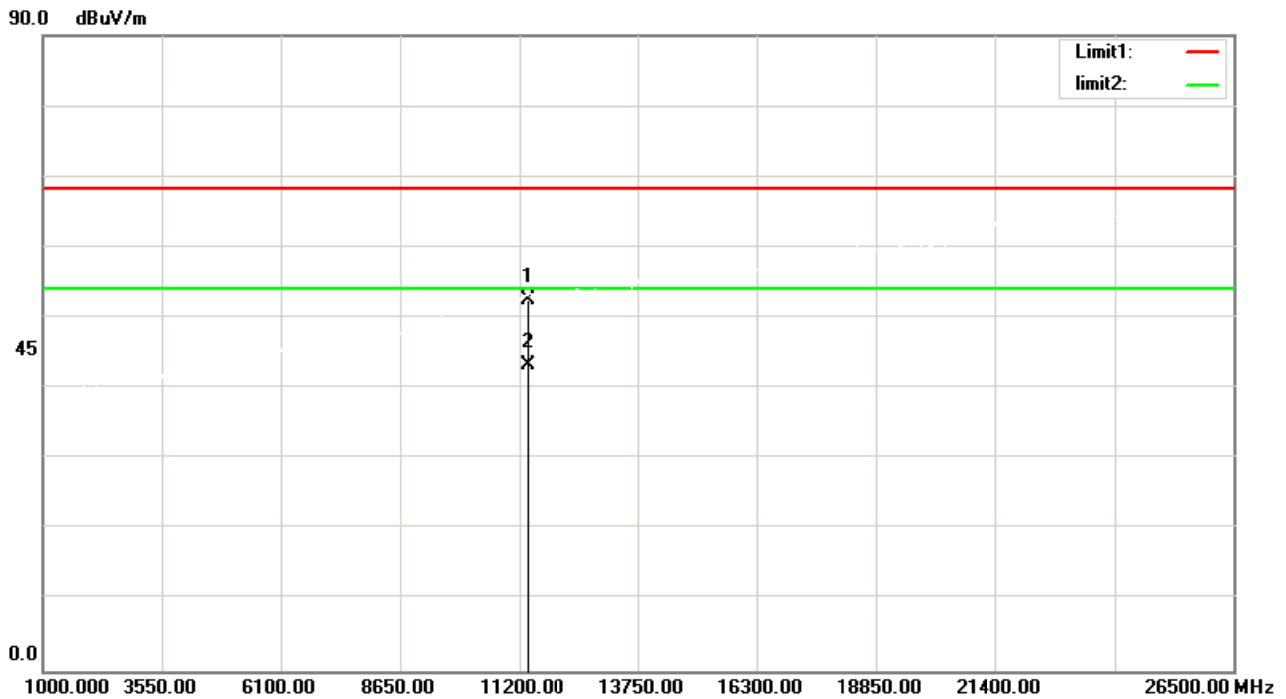
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	44.00	8.10	52.10	68.30	-16.20	peak
2	11400.000	33.20	8.10	41.30	54.00	-12.70	AVG

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

Horizontal

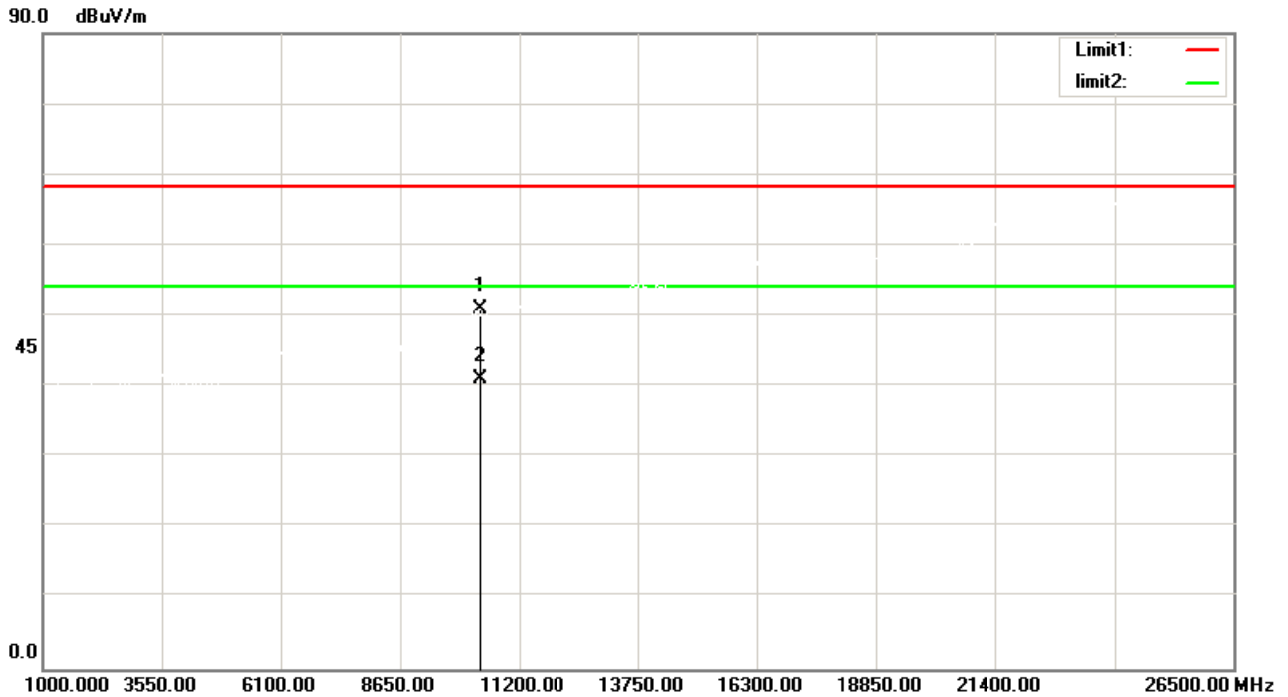


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	44.46	8.10	52.56	68.30	-15.74	peak
2	11400.000	35.10	8.10	43.20	54.00	-10.80	AVG

Report No.: 20EFAS12075 0341

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz

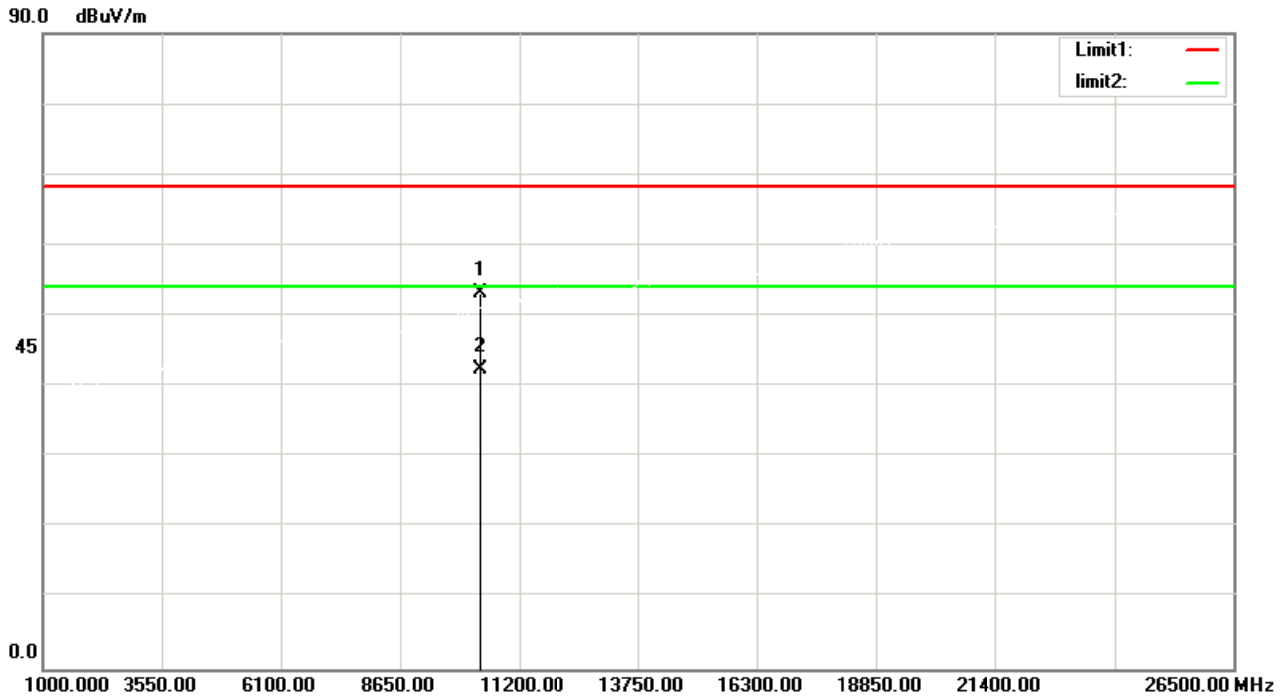
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	44.80	6.22	51.02	68.30	-17.28	peak
2	10360.000	34.92	6.22	41.14	54.00	-12.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5180 MHz

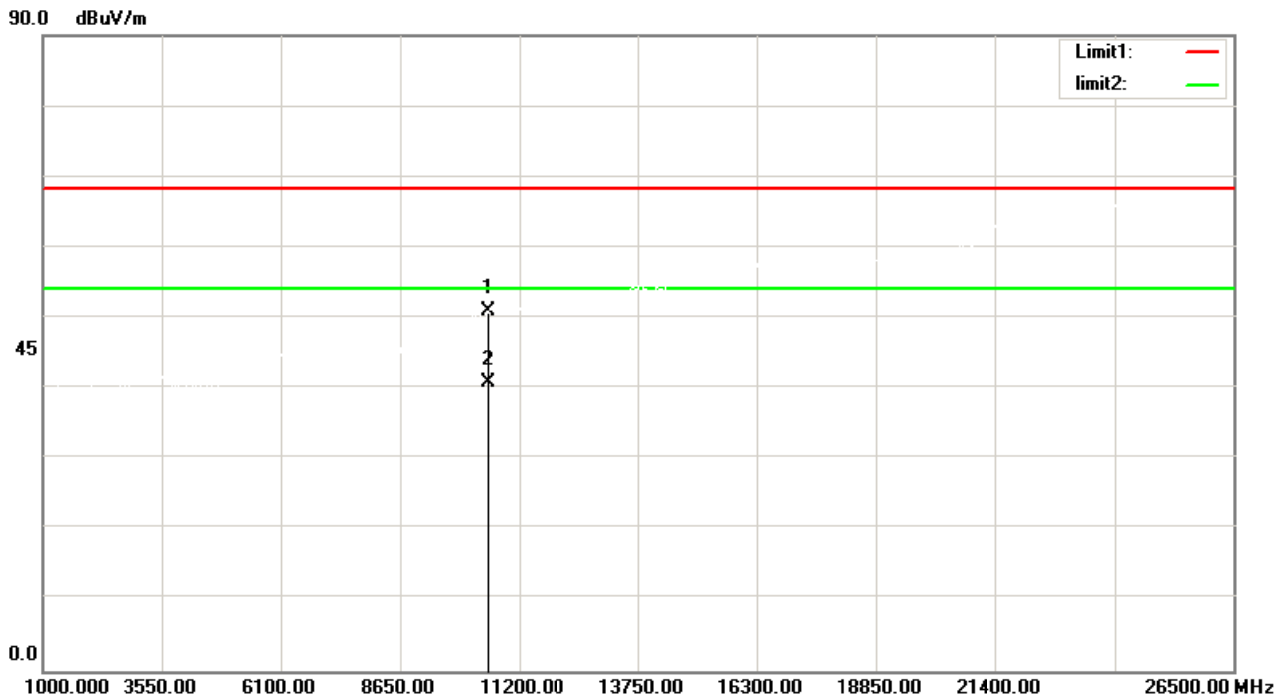
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	47.01	6.22	53.23	68.30	-15.07	peak
2	10360.000	36.13	6.22	42.35	54.00	-11.65	AVG

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

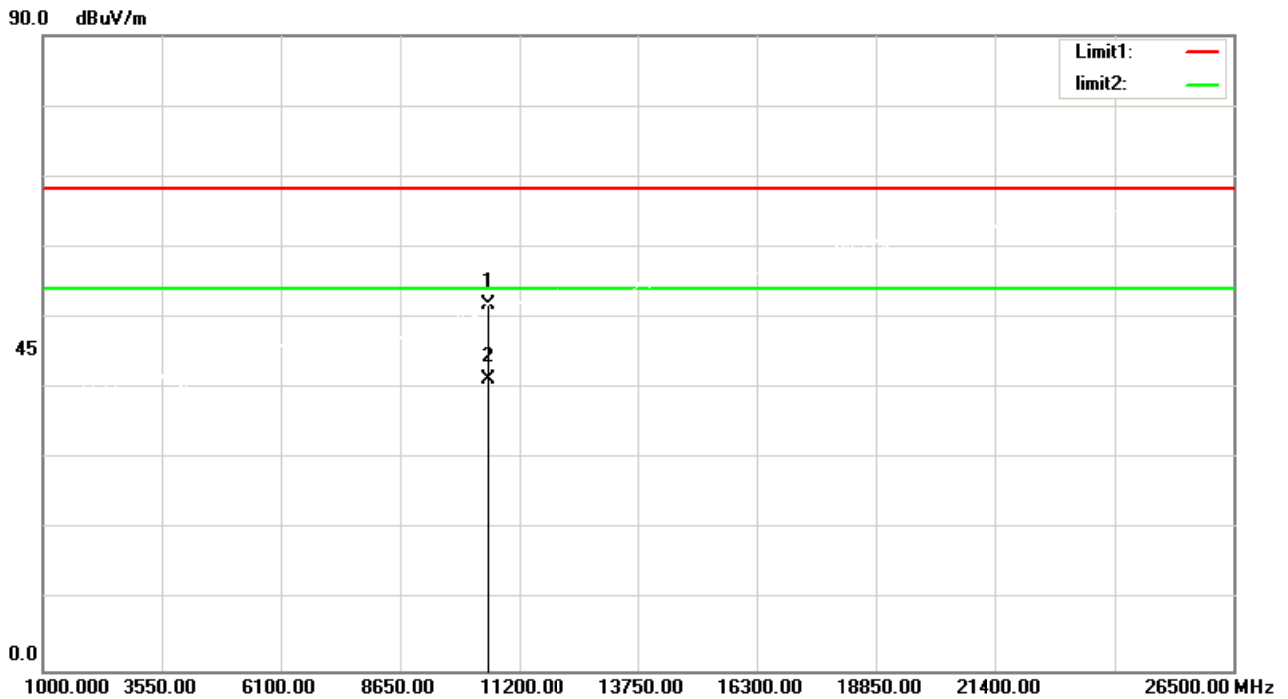
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	44.29	6.74	51.03	68.30	-17.27	peak
2	10520.000	34.01	6.74	40.75	54.00	-13.25	AVG

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

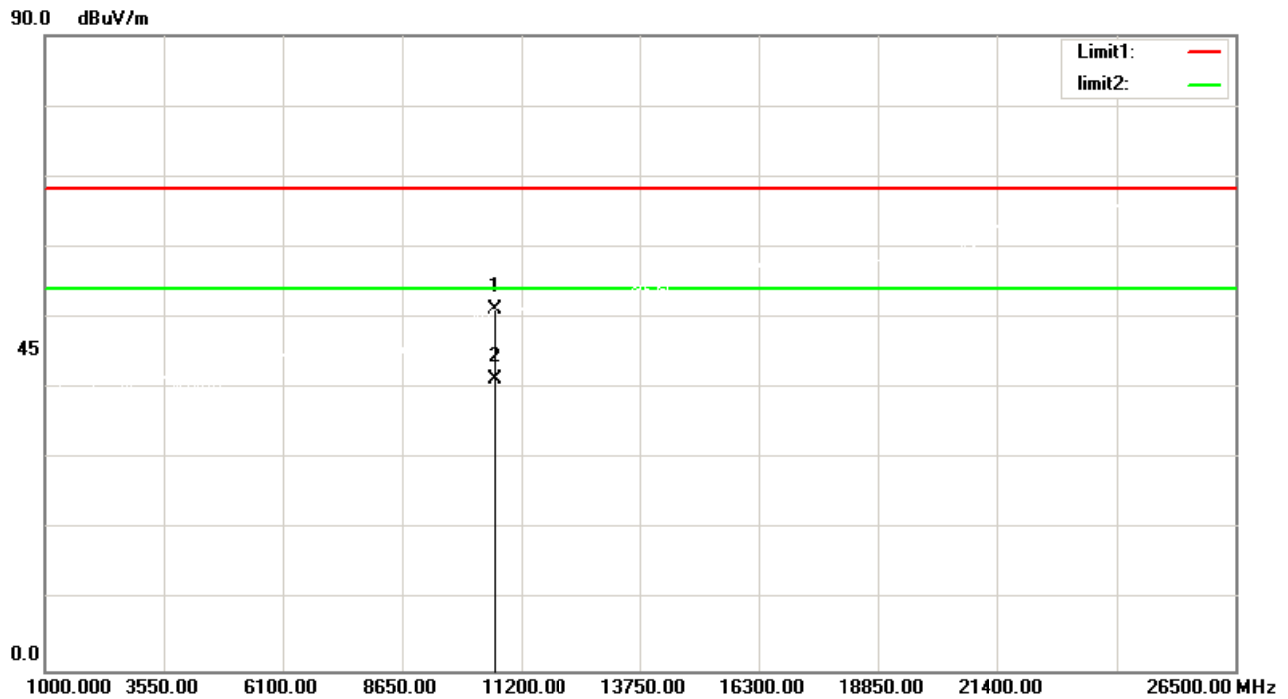
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10520.000	45.16	6.74	51.90	68.30	-16.40	peak
2	10520.000	34.51	6.74	41.25	54.00	-12.75	AVG

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

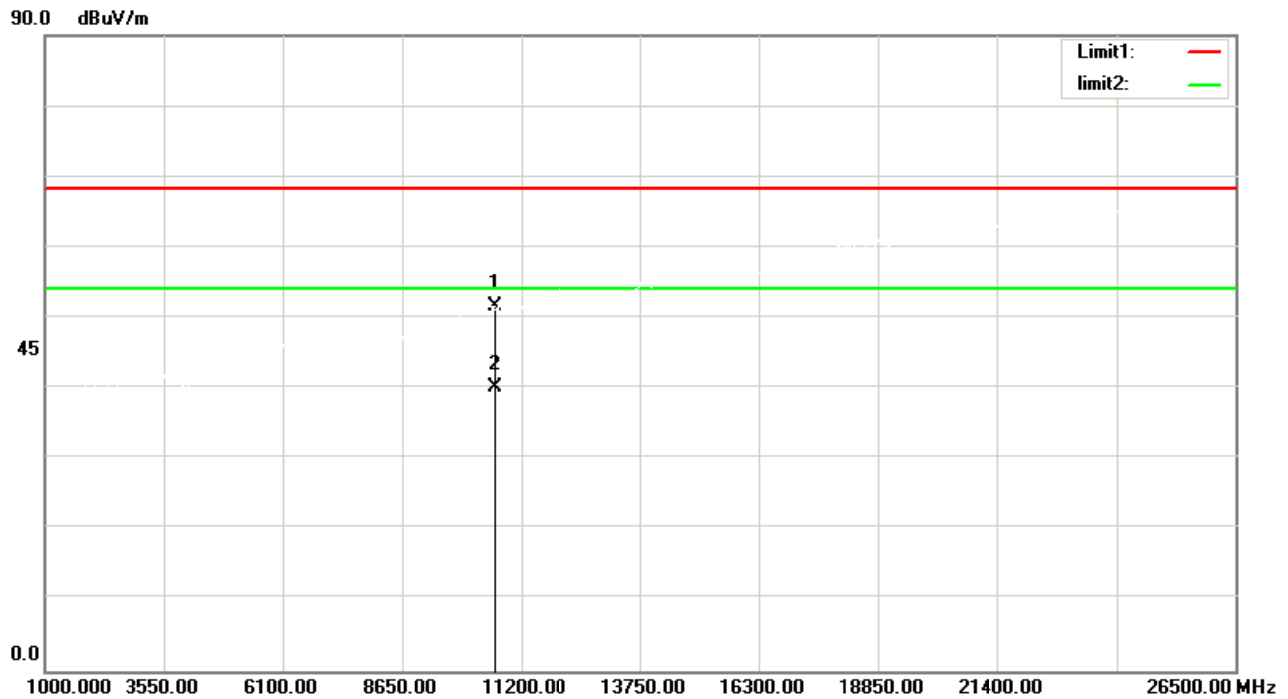
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	44.17	7.13	51.30	68.30	-17.00	peak
2	10640.000	34.25	7.13	41.38	54.00	-12.62	AVG

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

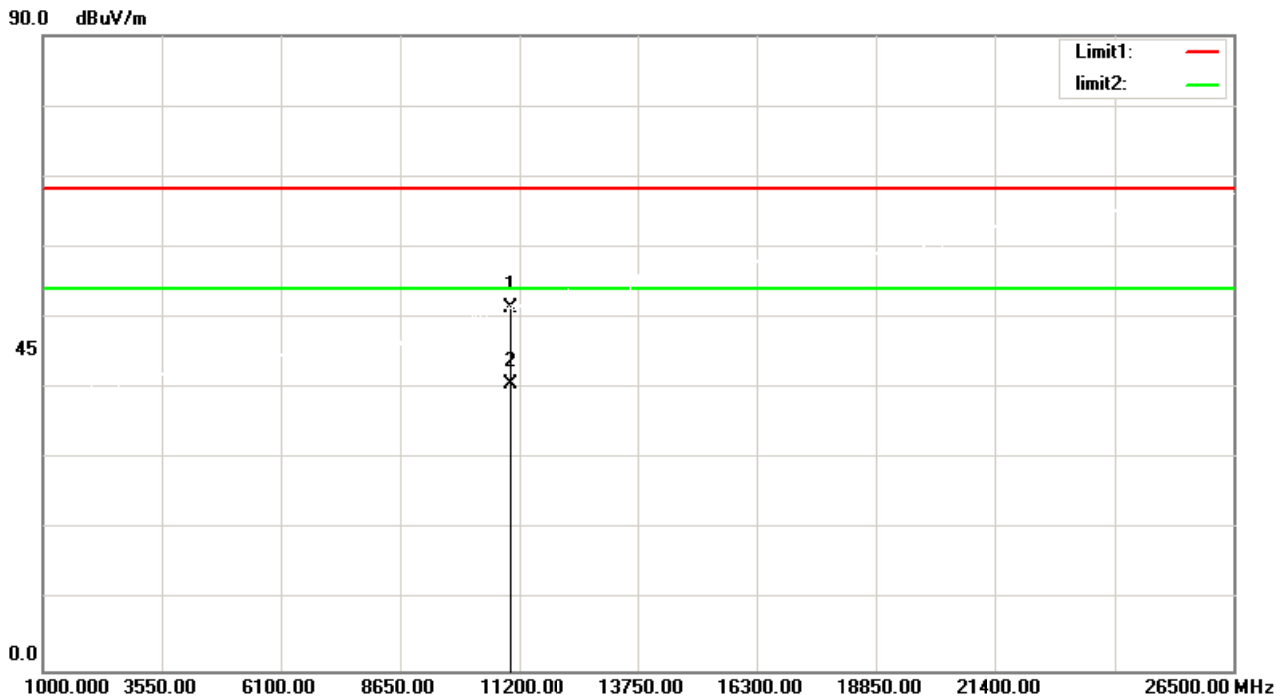
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10640.000	44.56	7.13	51.69	68.30	-16.61	peak
2	10640.000	33.11	7.13	40.24	54.00	-13.76	AVG

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

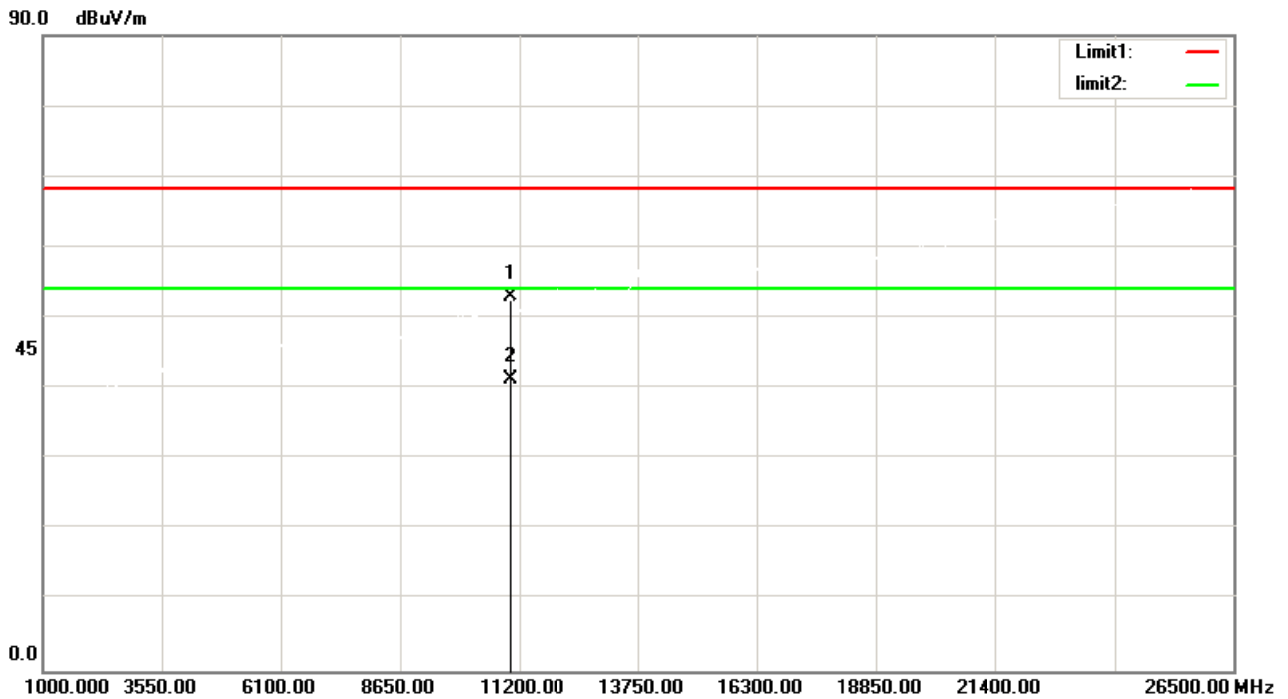
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	43.04	8.32	51.36	68.30	-16.94	peak
2	11000.000	32.29	8.32	40.61	54.00	-13.39	AVG

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

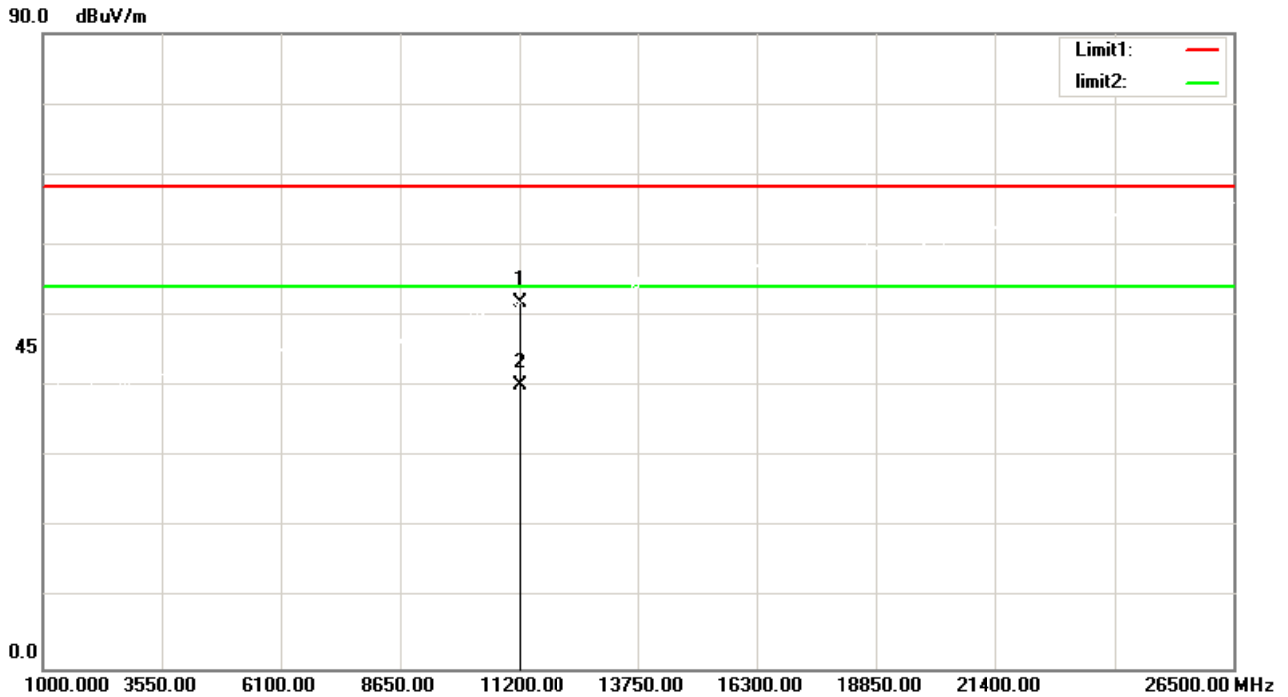
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11000.000	44.63	8.32	52.95	68.30	-15.35	peak
2	11000.000	33.04	8.32	41.36	54.00	-12.64	AVG

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

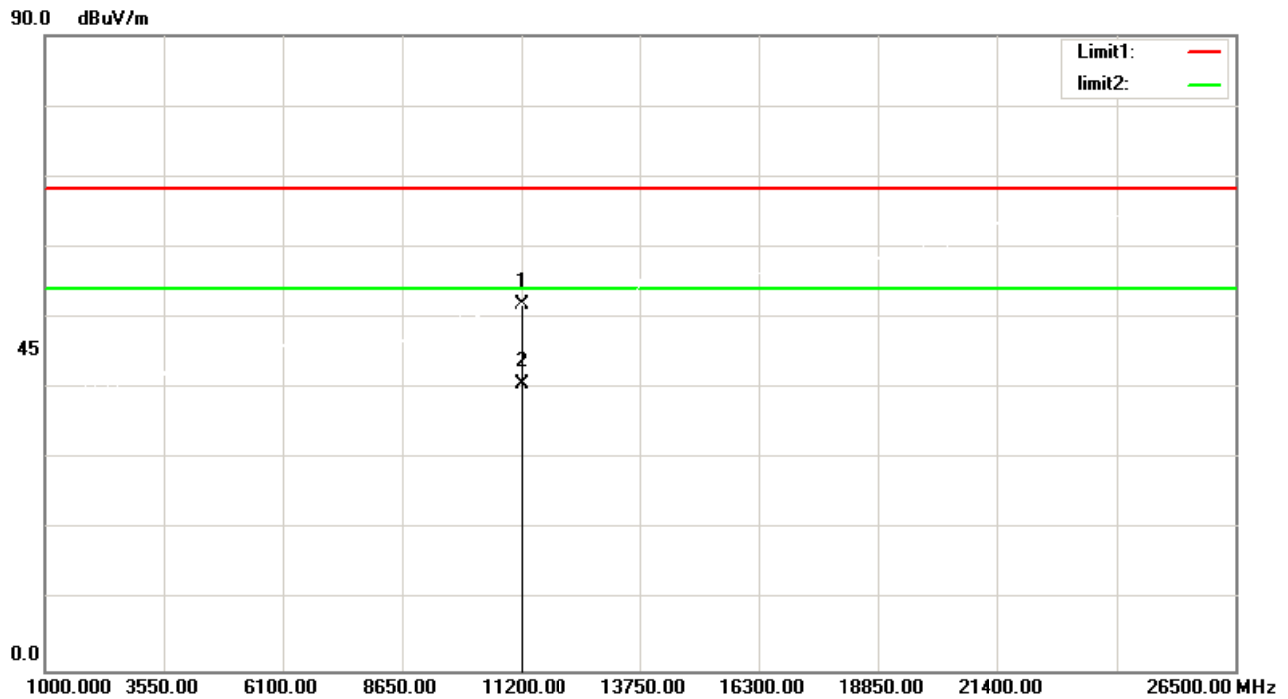
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	43.56	8.21	51.77	68.30	-16.53	peak
2	11200.000	31.89	8.21	40.10	54.00	-13.90	AVG

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

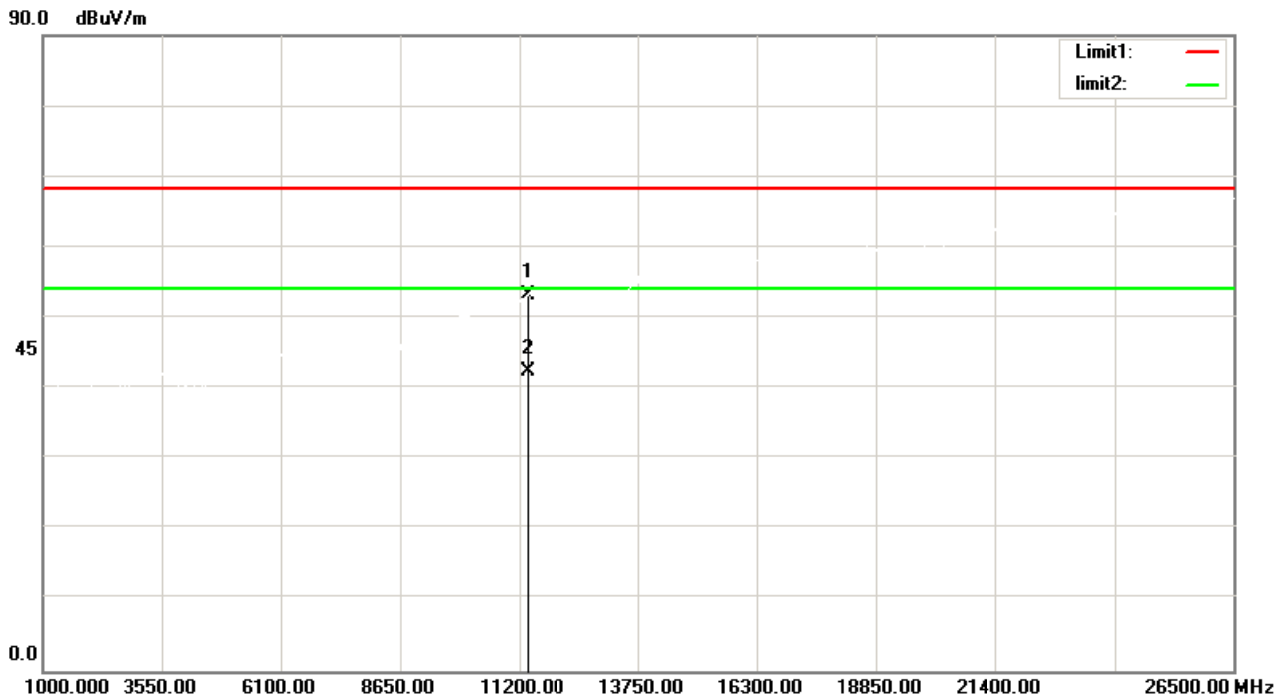
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11200.000	43.58	8.21	51.79	68.30	-16.51	peak
2	11200.000	32.36	8.21	40.57	54.00	-13.43	AVG

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

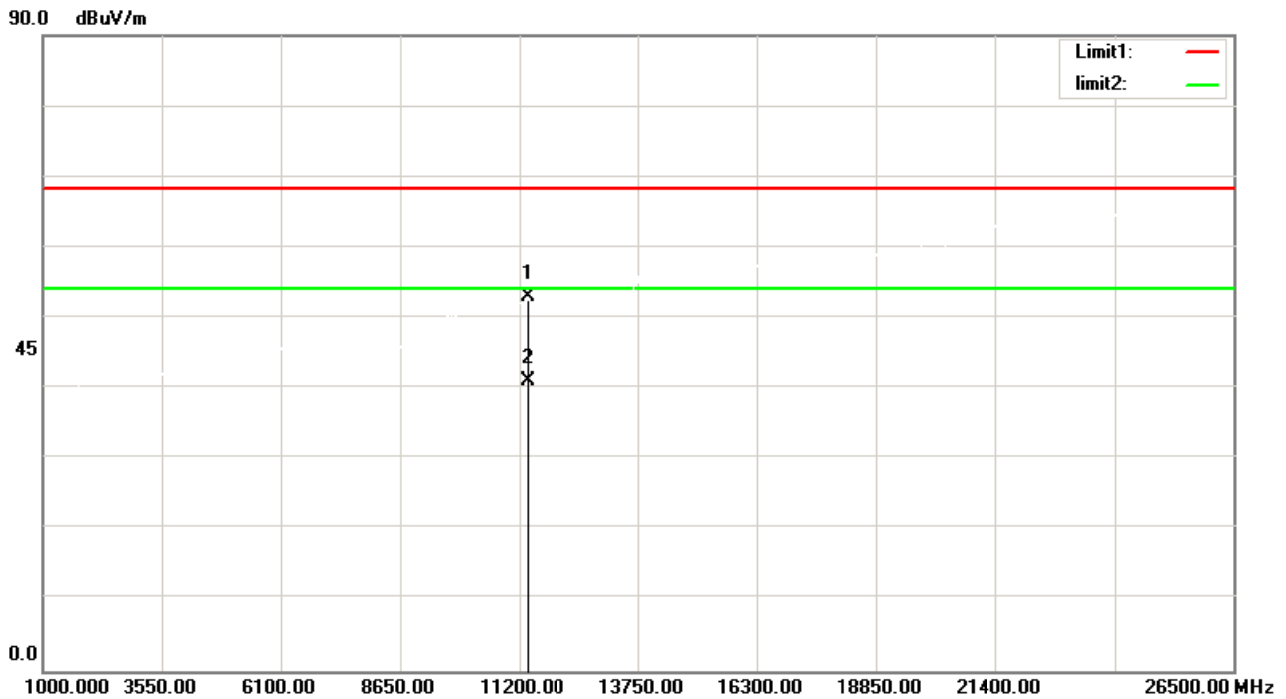
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	45.00	8.10	53.10	68.30	-15.20	peak
2	11400.000	34.24	8.10	42.34	54.00	-11.66	AVG

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

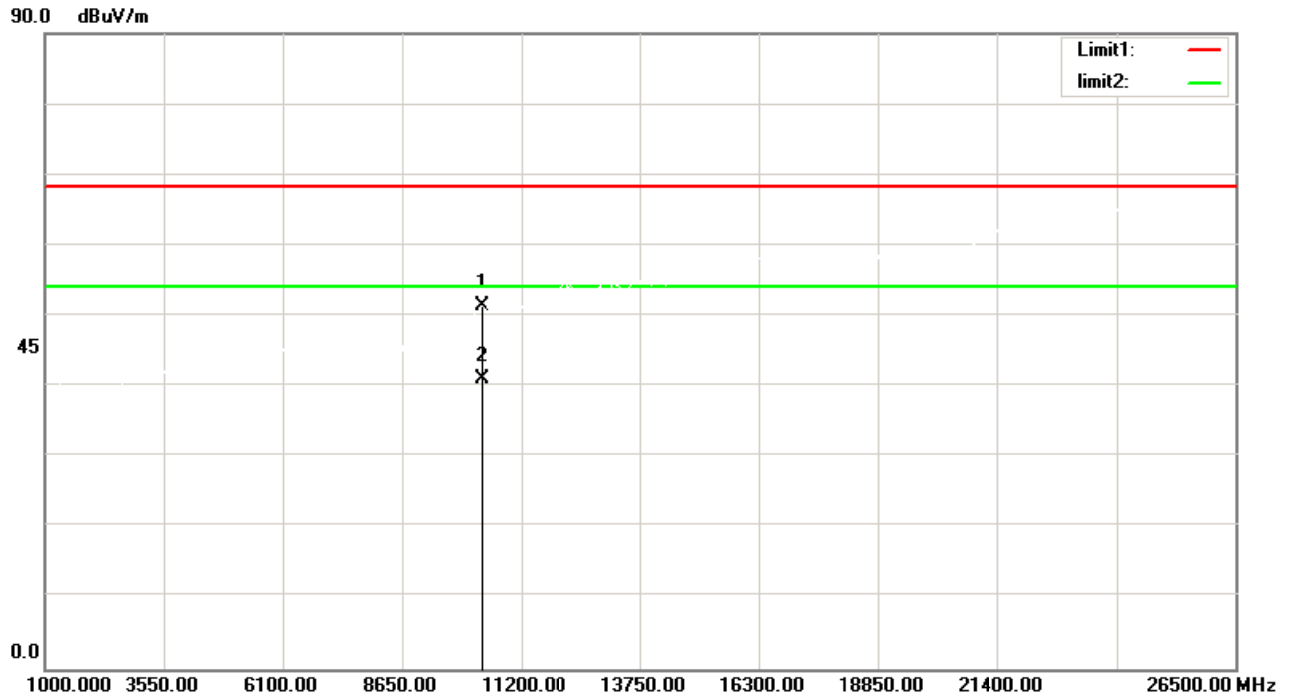
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11400.000	44.85	8.10	52.95	68.30	-15.35	peak
2	11400.000	32.93	8.10	41.03	54.00	-12.97	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz

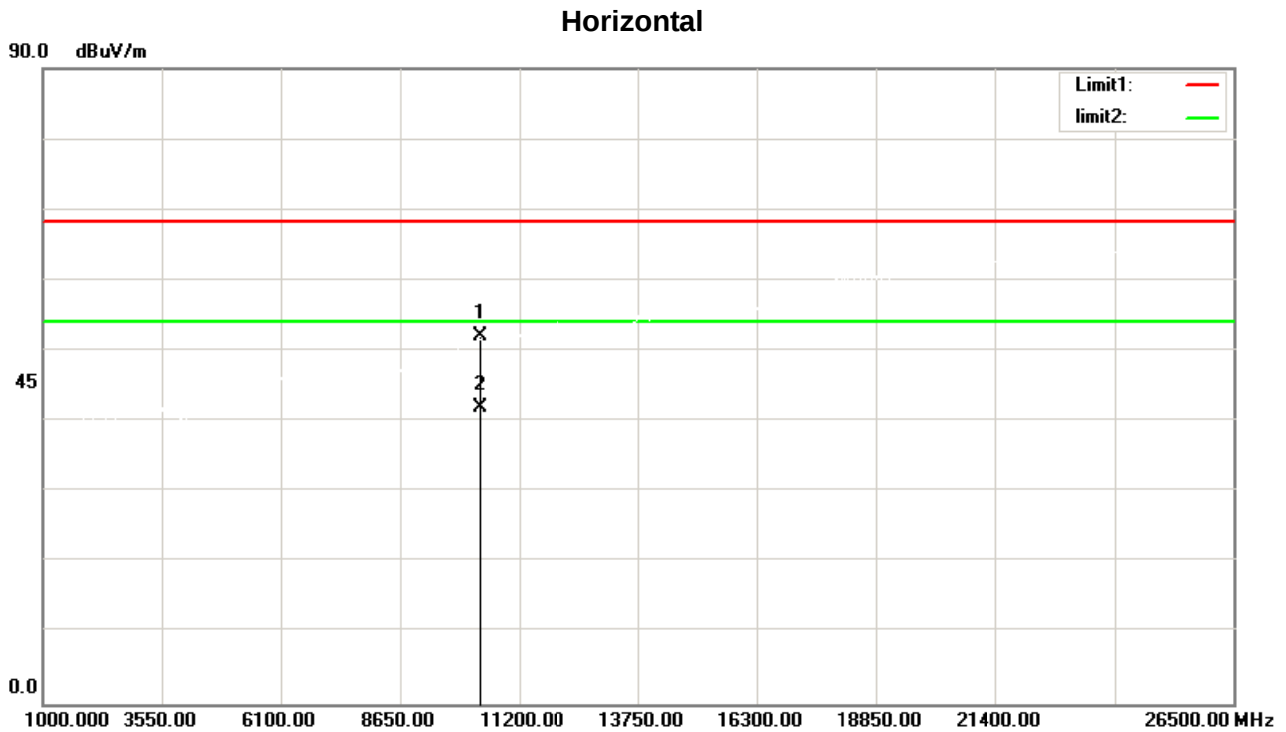
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	45.07	6.28	51.35	68.30	-16.95	peak
2	10380.000	34.82	6.28	41.10	54.00	-12.90	AVG

Report No.: 20EFAS12075 0341

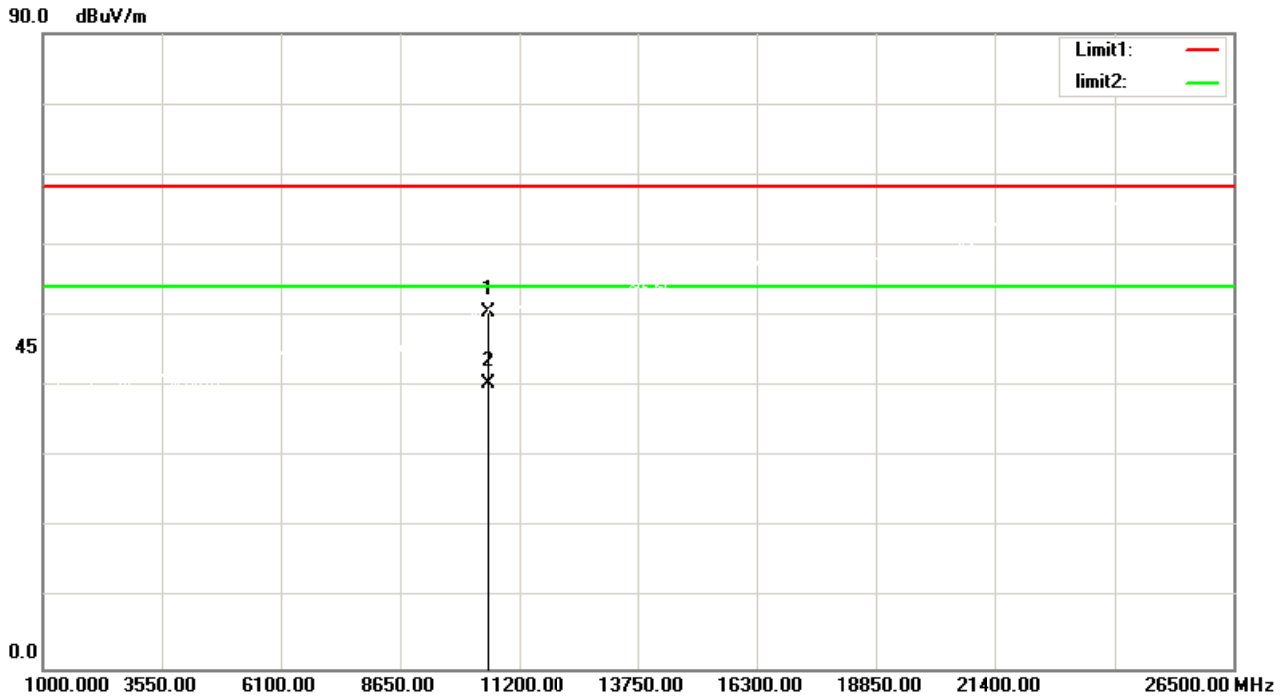
Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5190 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	45.86	6.28	52.14	68.30	-16.16	peak
2	10380.000	35.57	6.28	41.85	54.00	-12.15	AVG

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

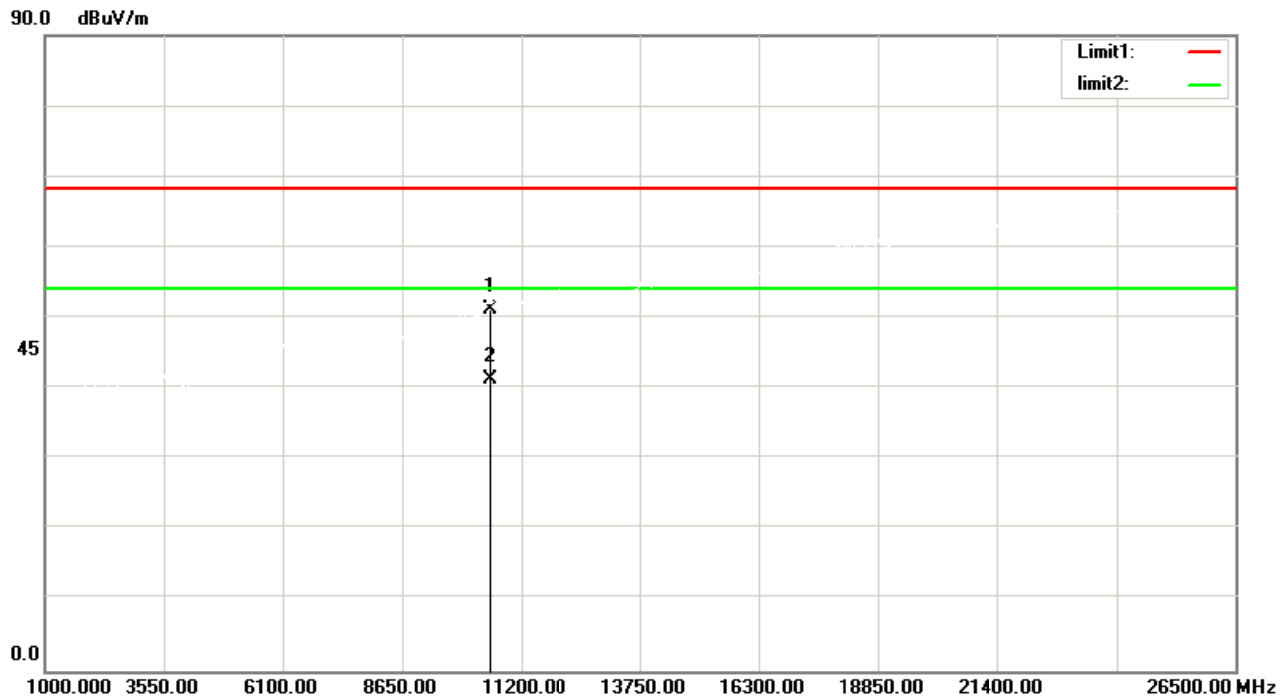
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10545.560	43.78	6.83	50.61	68.30	-17.69	peak
2	10545.560	33.51	6.83	40.34	54.00	-13.66	AVG

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

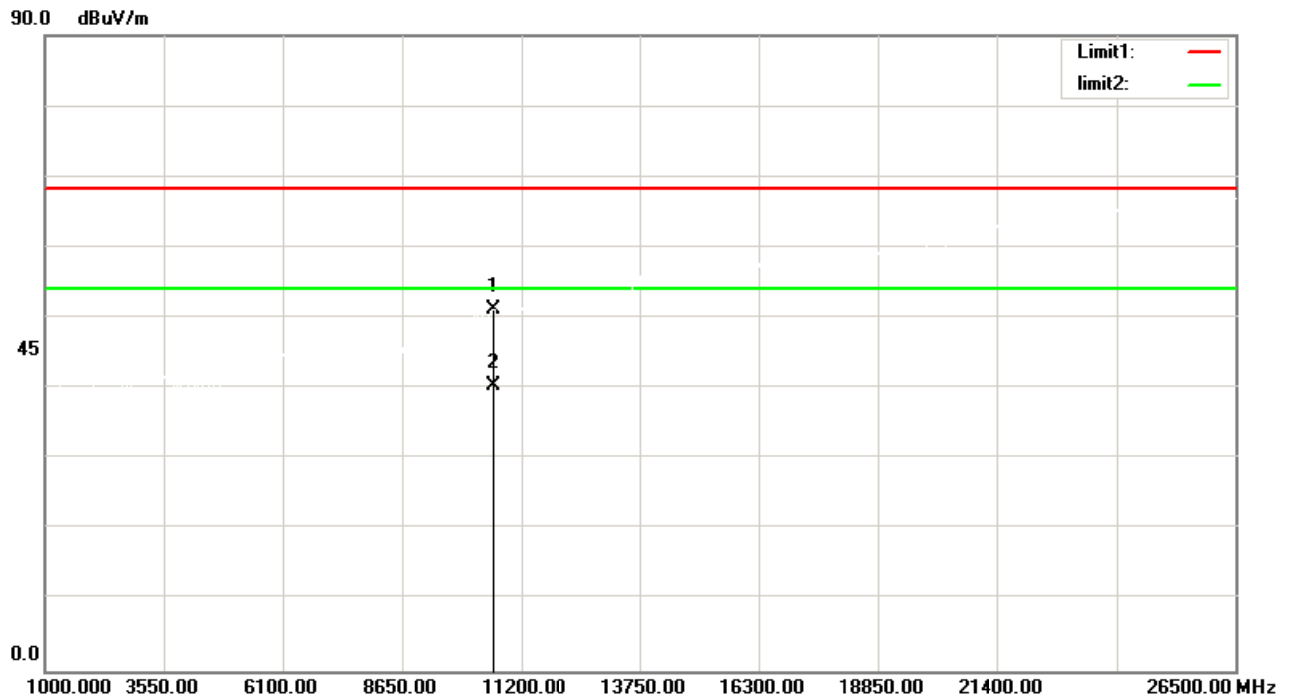
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10540.000	44.50	6.80	51.30	68.30	-17.00	peak
2	10540.000	34.53	6.80	41.33	54.00	-12.67	AVG

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

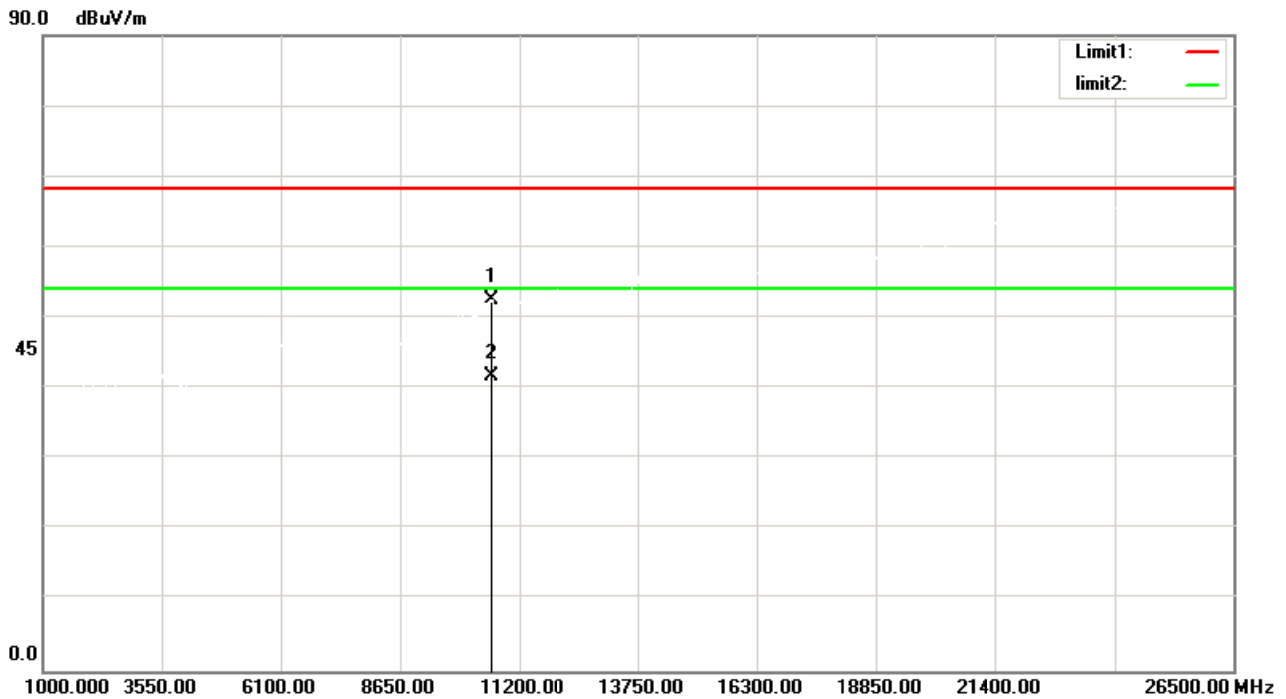
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	44.13	7.07	51.20	68.30	-17.10	peak
2	10620.000	33.30	7.07	40.37	54.00	-13.63	AVG

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

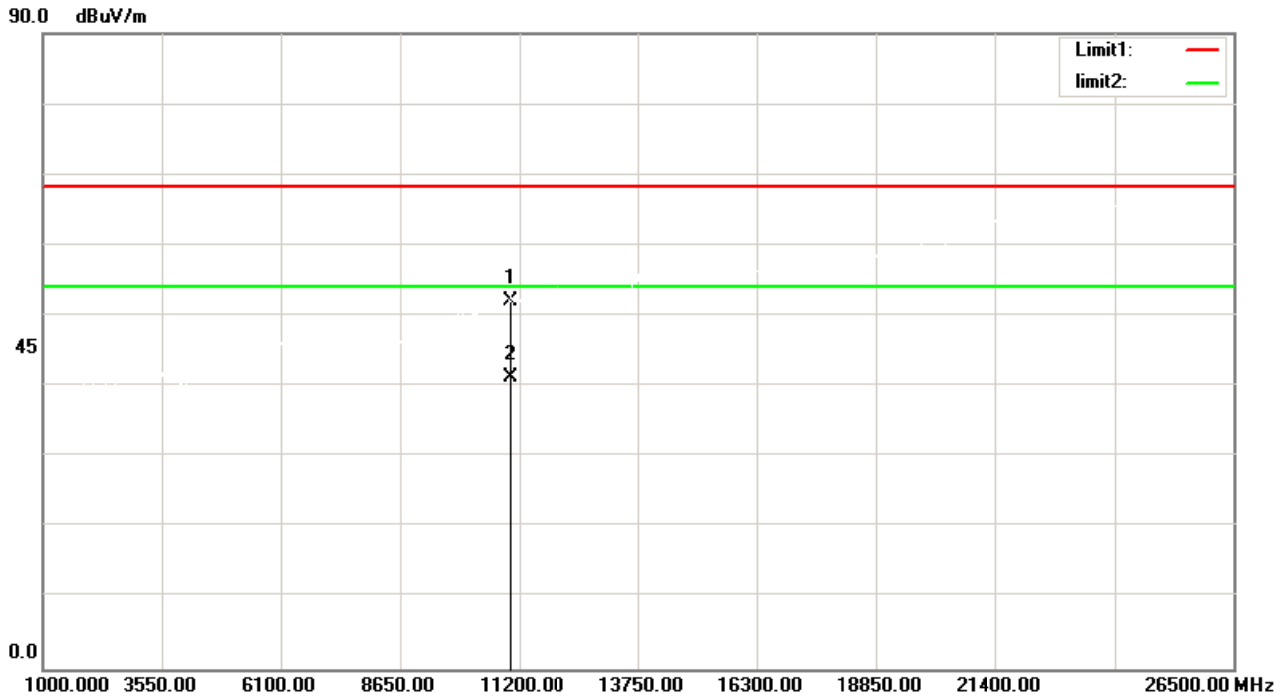
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10620.000	45.51	7.07	52.58	68.30	-15.72	peak
2	10620.000	34.67	7.07	41.74	54.00	-12.26	AVG

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

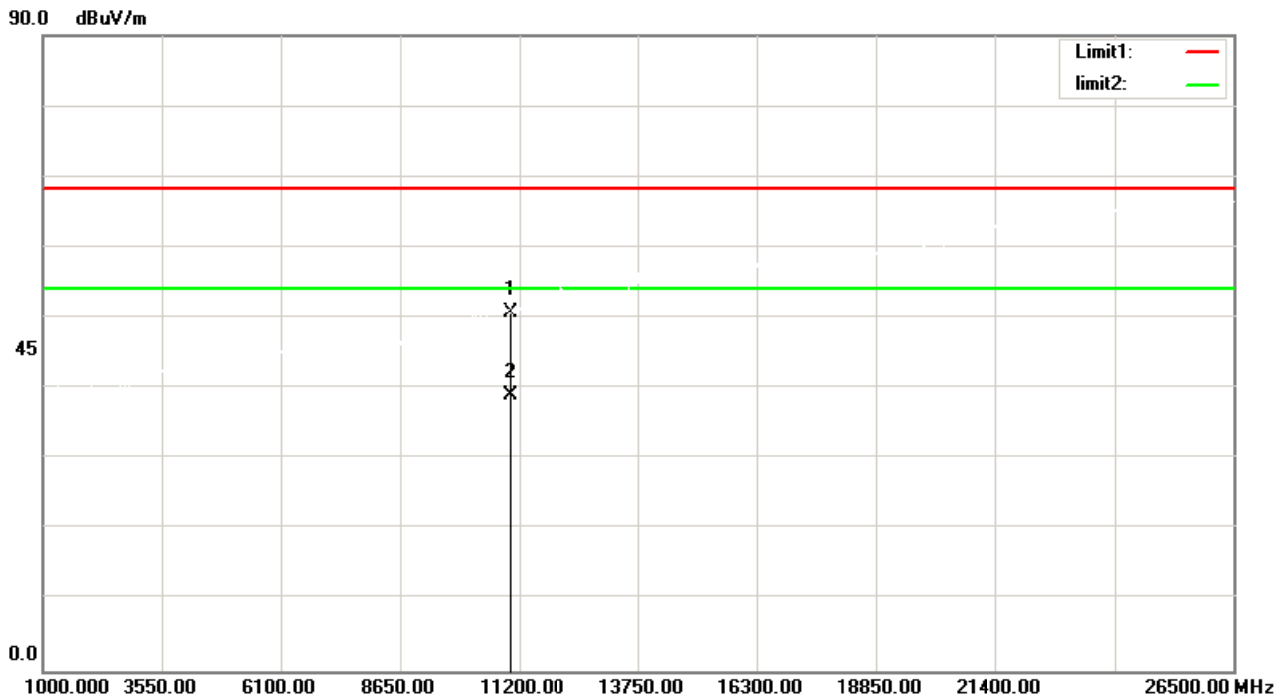
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	43.72	8.30	52.02	68.30	-16.28	peak
2	11020.000	33.07	8.30	41.37	54.00	-12.63	AVG

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

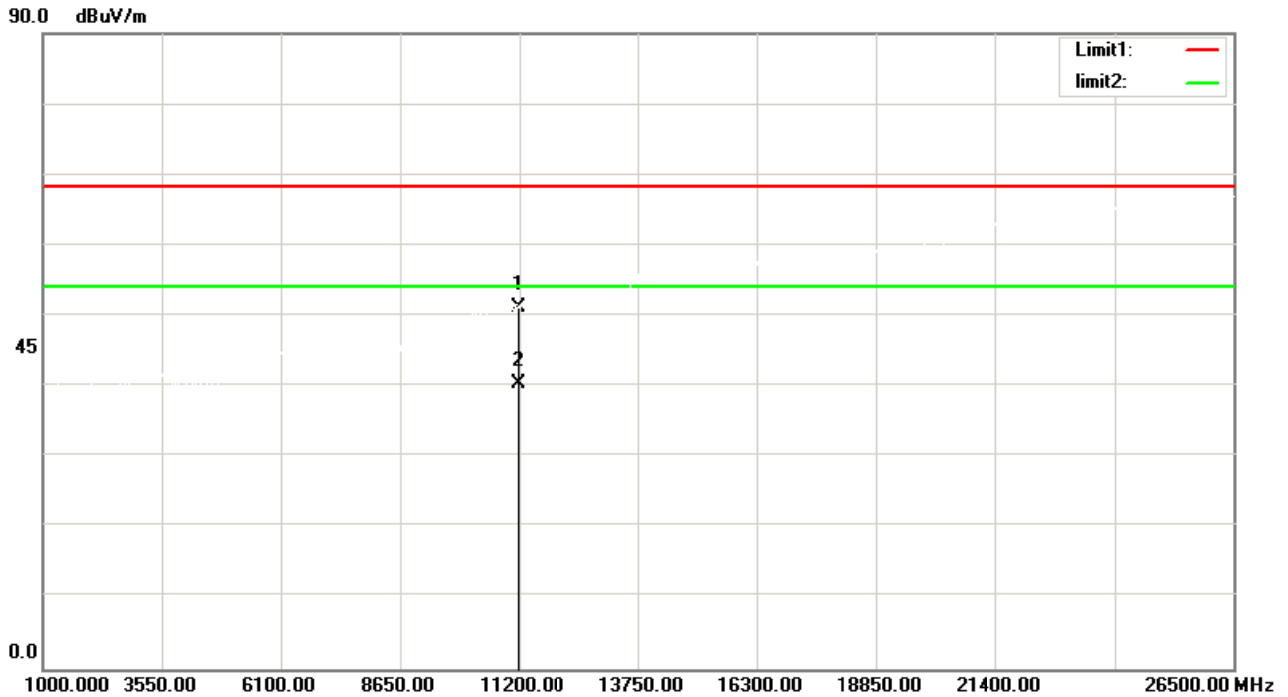
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11020.000	42.35	8.30	50.65	68.30	-17.65	peak
2	11020.000	30.76	8.30	39.06	54.00	-14.94	AVG

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

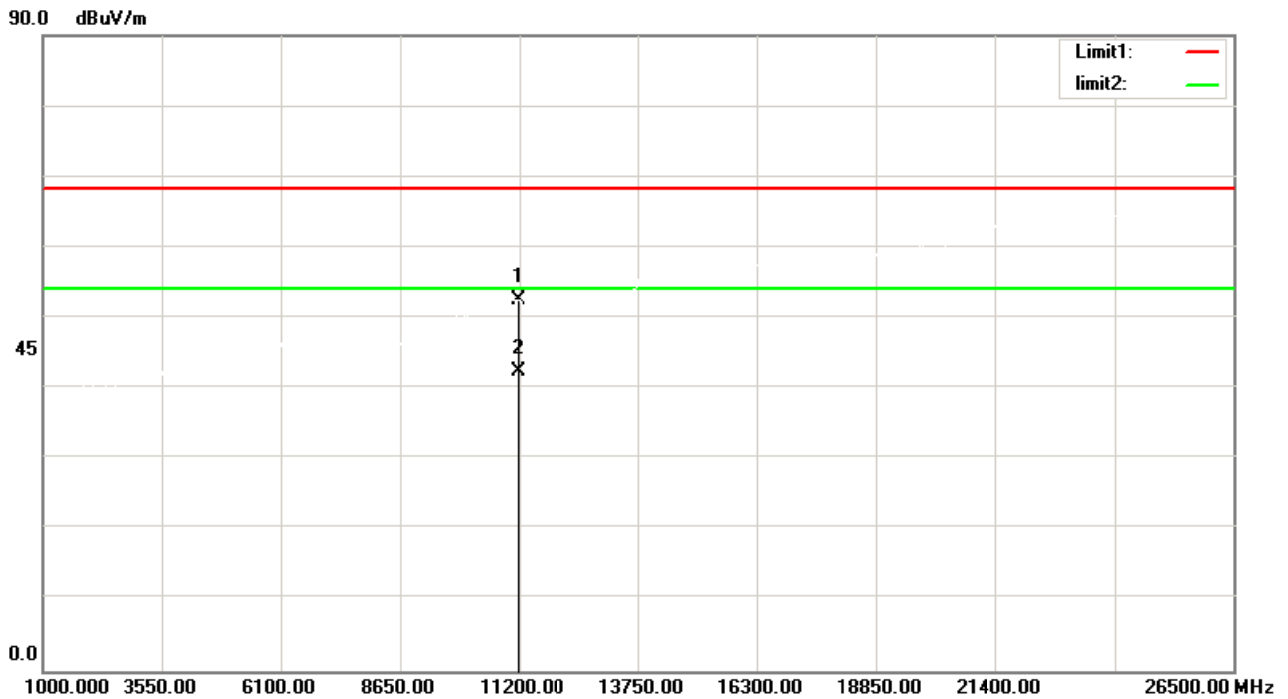
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11185.000	43.05	8.22	51.27	68.30	-17.03	peak
2	11185.000	32.28	8.22	40.50	54.00	-13.50	AVG

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

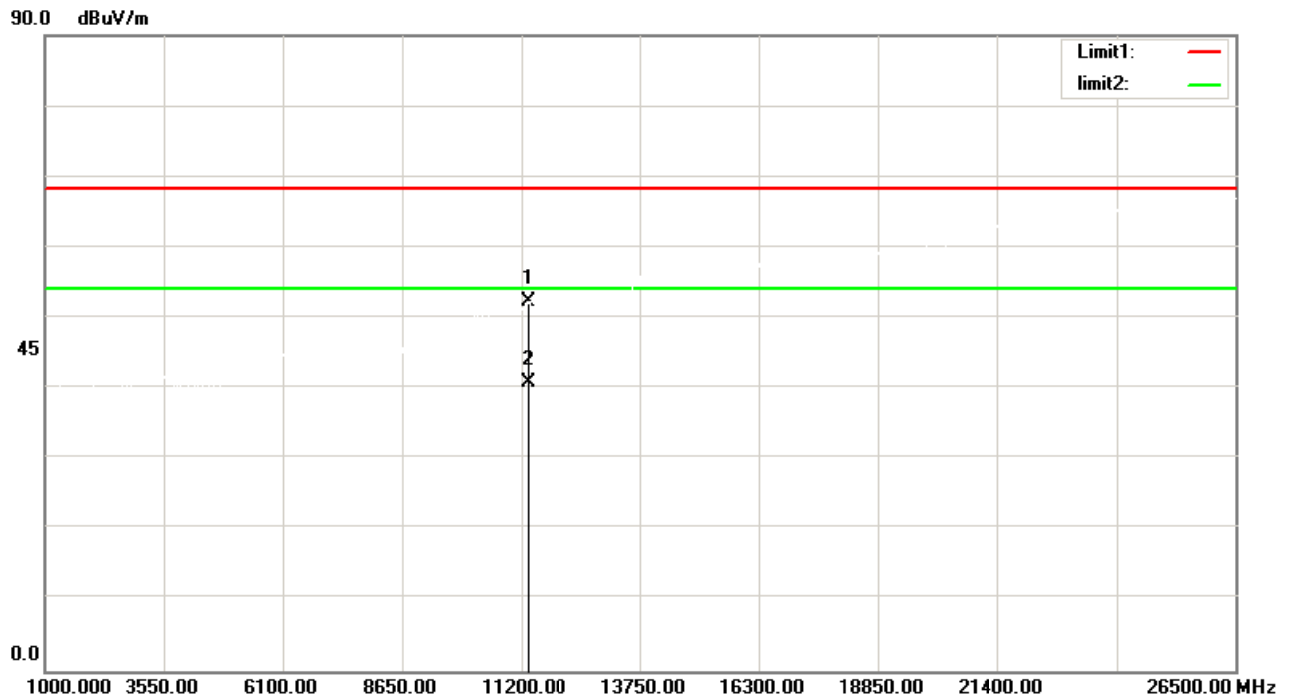
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11180.000	44.33	8.23	52.56	68.30	-15.74	peak
2	11180.000	34.16	8.23	42.39	54.00	-11.61	AVG

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

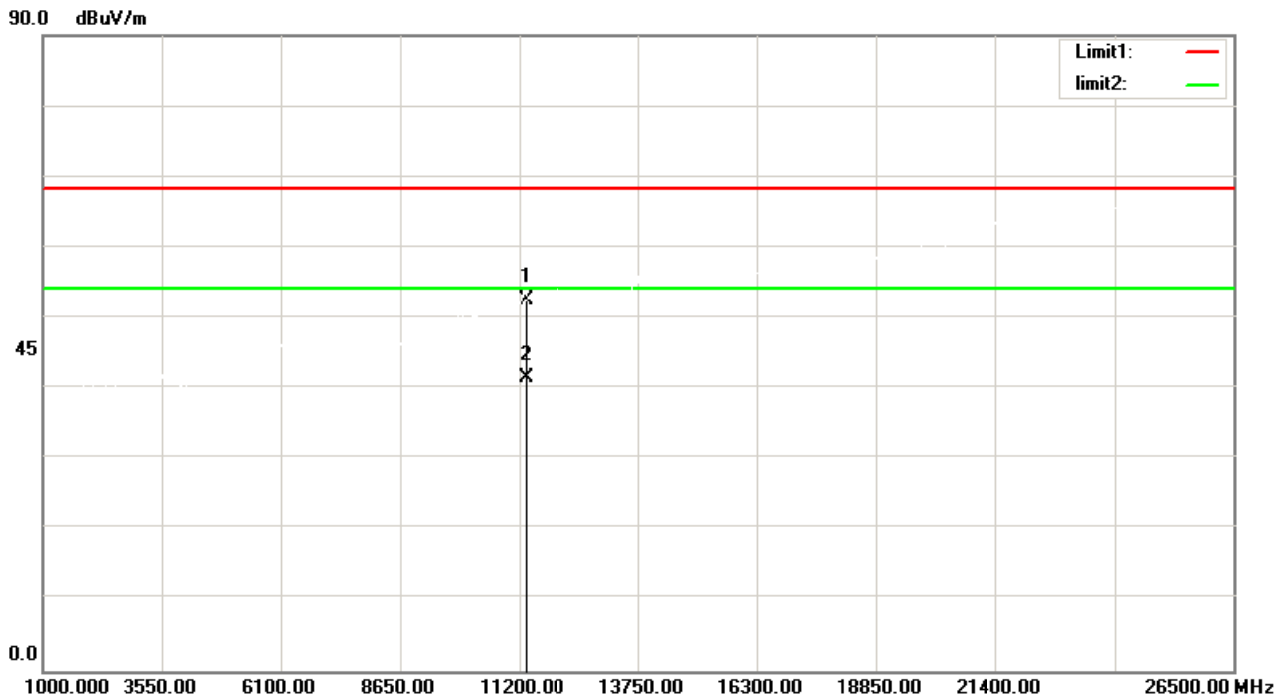
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	44.25	8.14	52.39	68.30	-15.91	peak
2	11340.000	32.77	8.14	40.91	54.00	-13.09	AVG

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

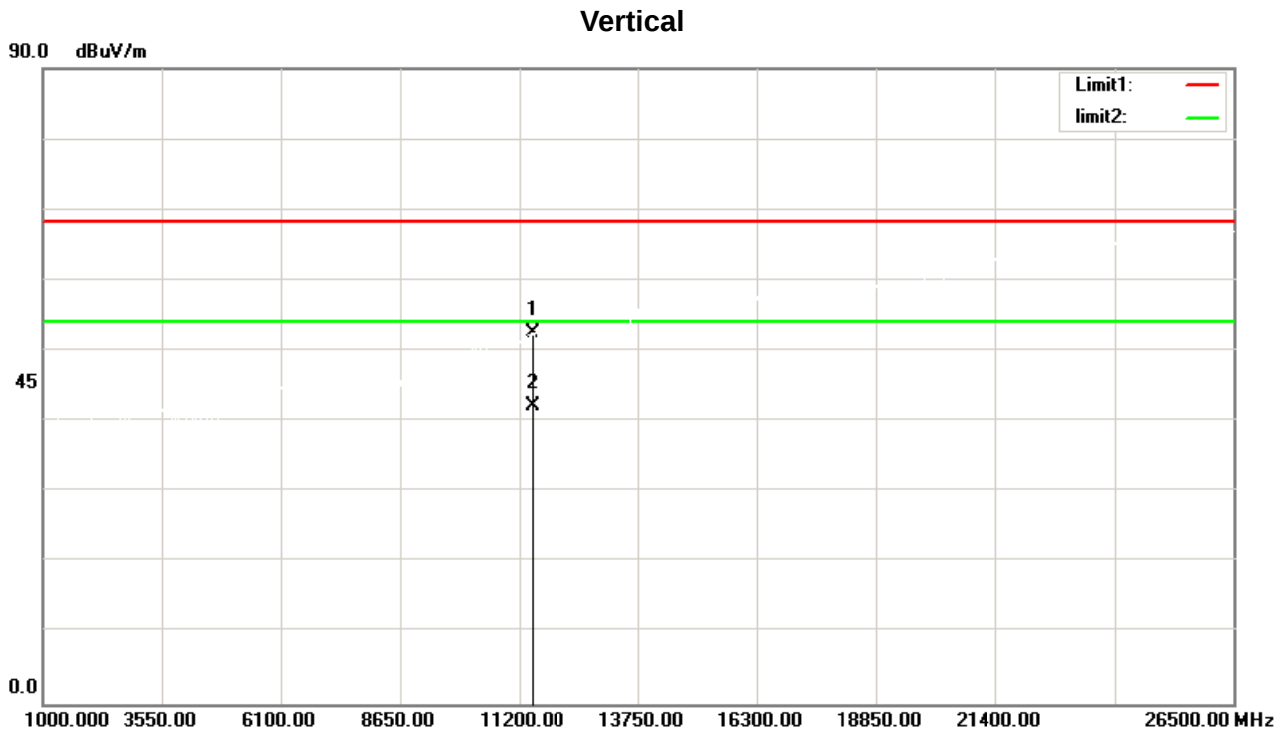
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11340.000	44.51	8.14	52.65	68.30	-15.65	peak
2	11340.000	33.31	8.14	41.45	54.00	-12.55	AVG

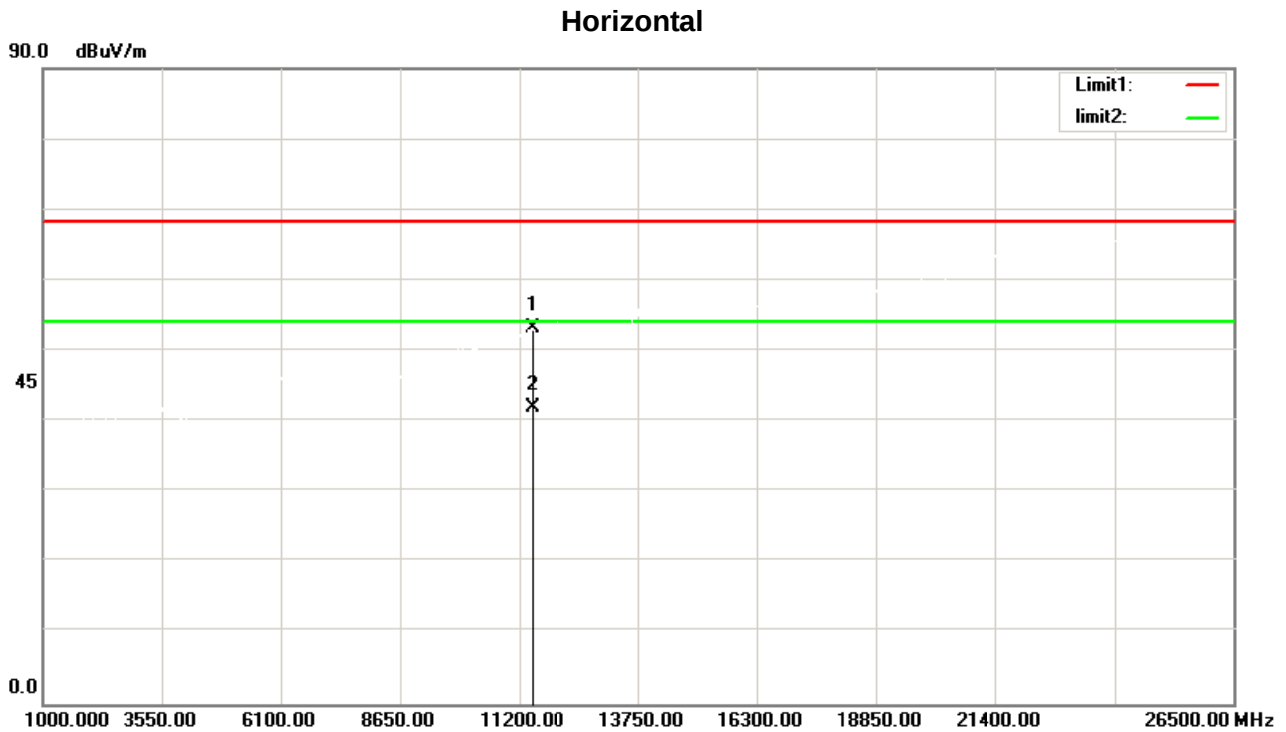
Report No.: 20EFAS12075 0341

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz



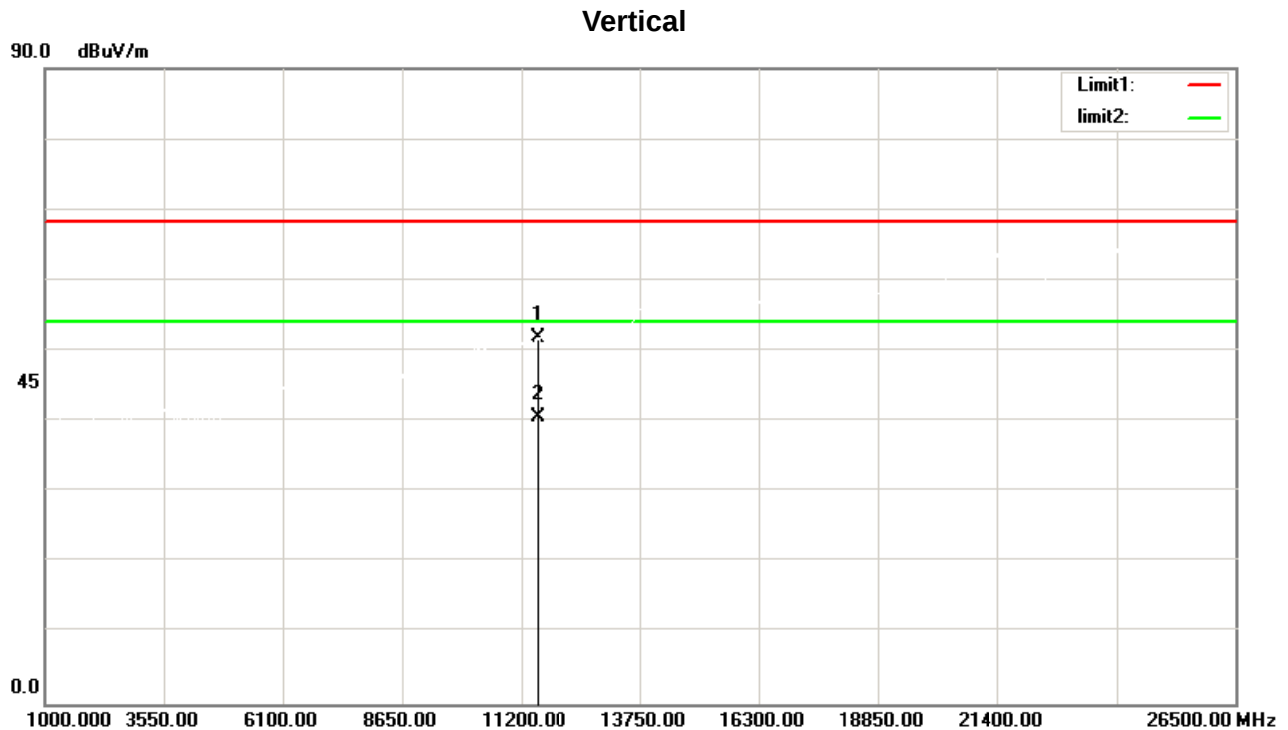
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	44.59	8.06	52.65	68.30	-15.65	peak
2	11490.000	34.24	8.06	42.30	54.00	-11.70	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz



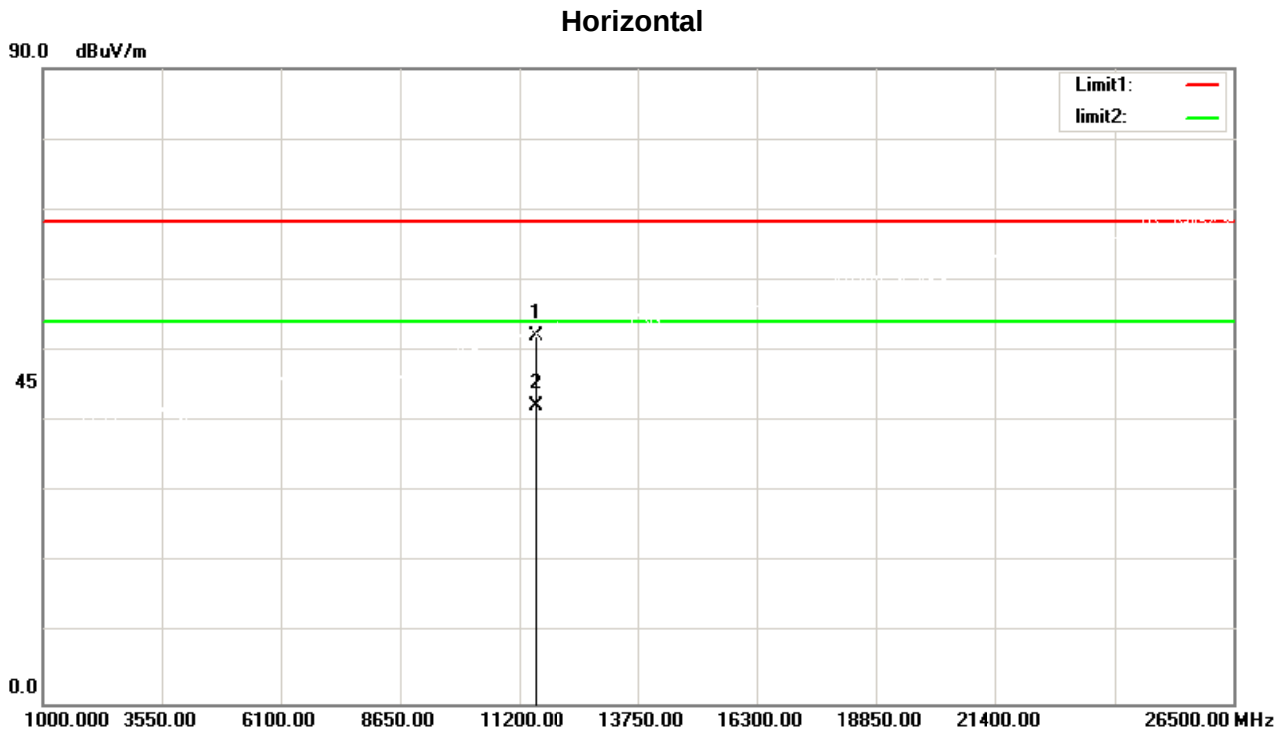
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	45.19	8.06	53.25	68.30	-15.05	peak
2	11490.000	33.95	8.06	42.01	54.00	-11.99	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	43.84	8.00	51.84	68.30	-16.46	peak
2	11570.000	32.60	8.00	40.60	54.00	-13.40	AVG

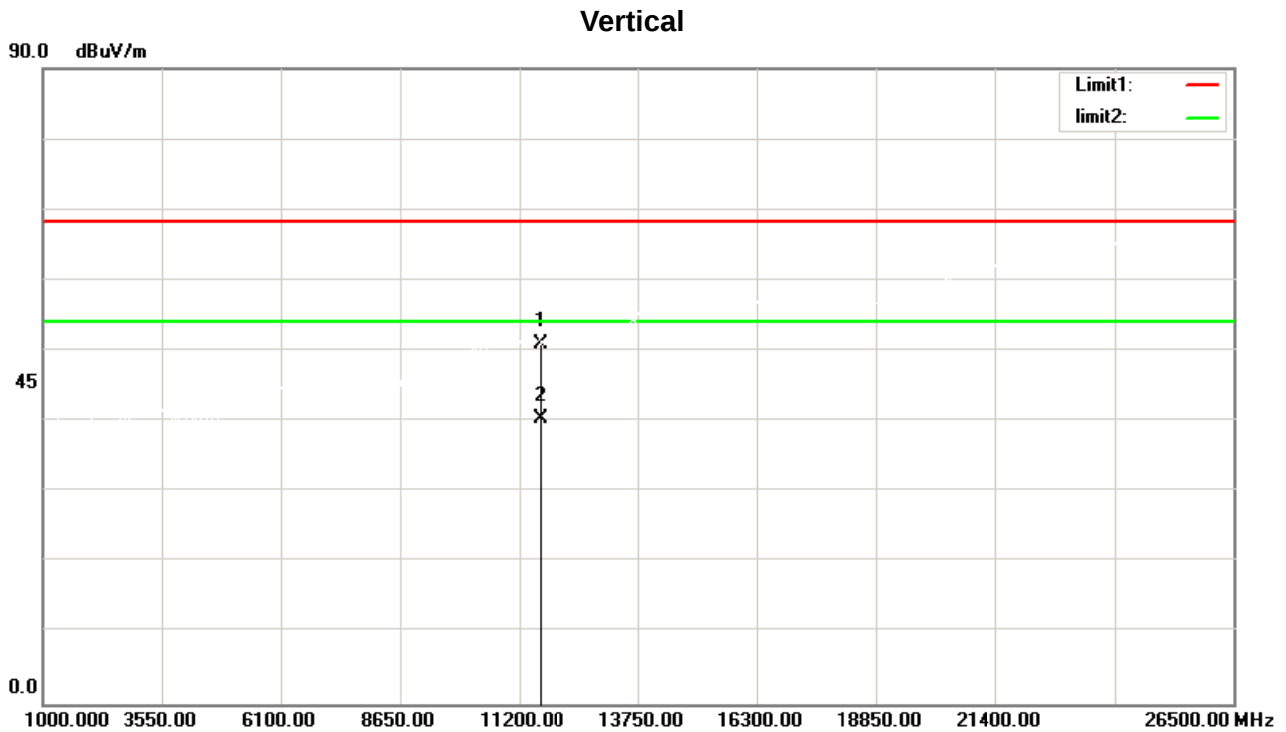
Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	44.19	8.00	52.19	68.30	-16.11	peak
2	11570.000	34.30	8.00	42.30	54.00	-11.70	AVG

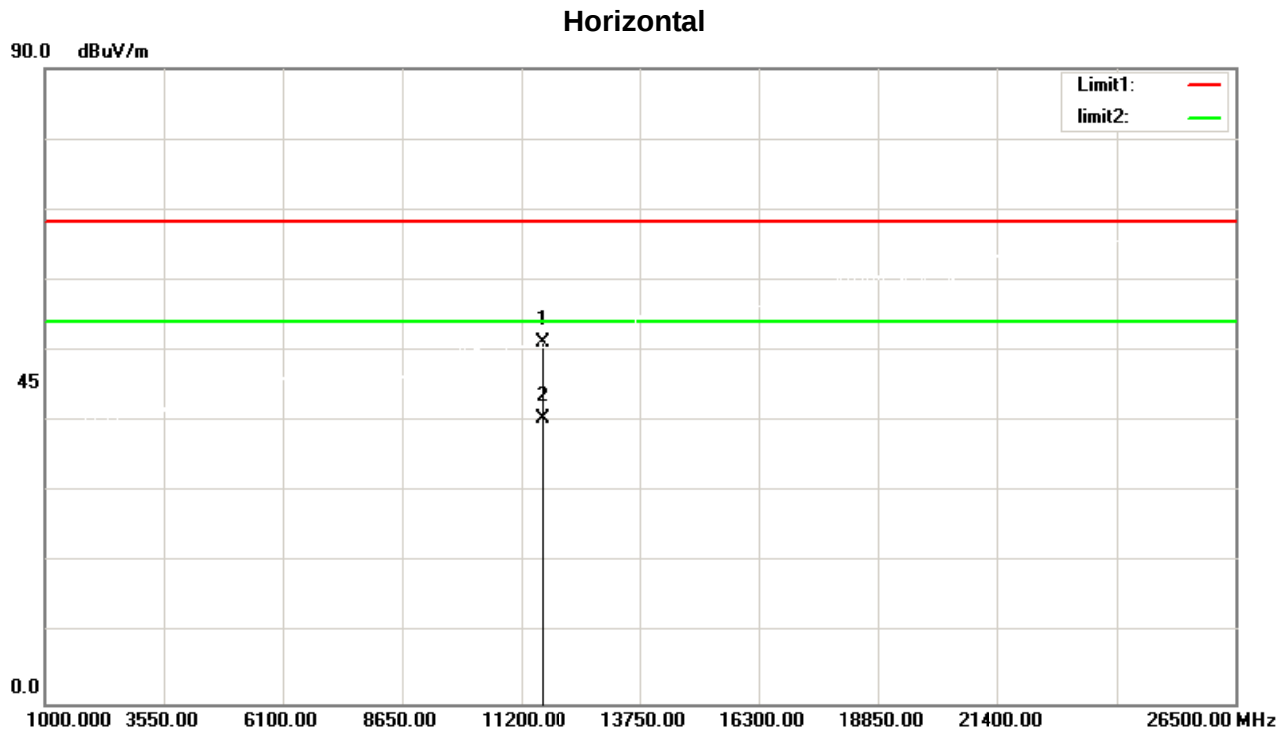
Report No.: 20EFAS12075 0341

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz



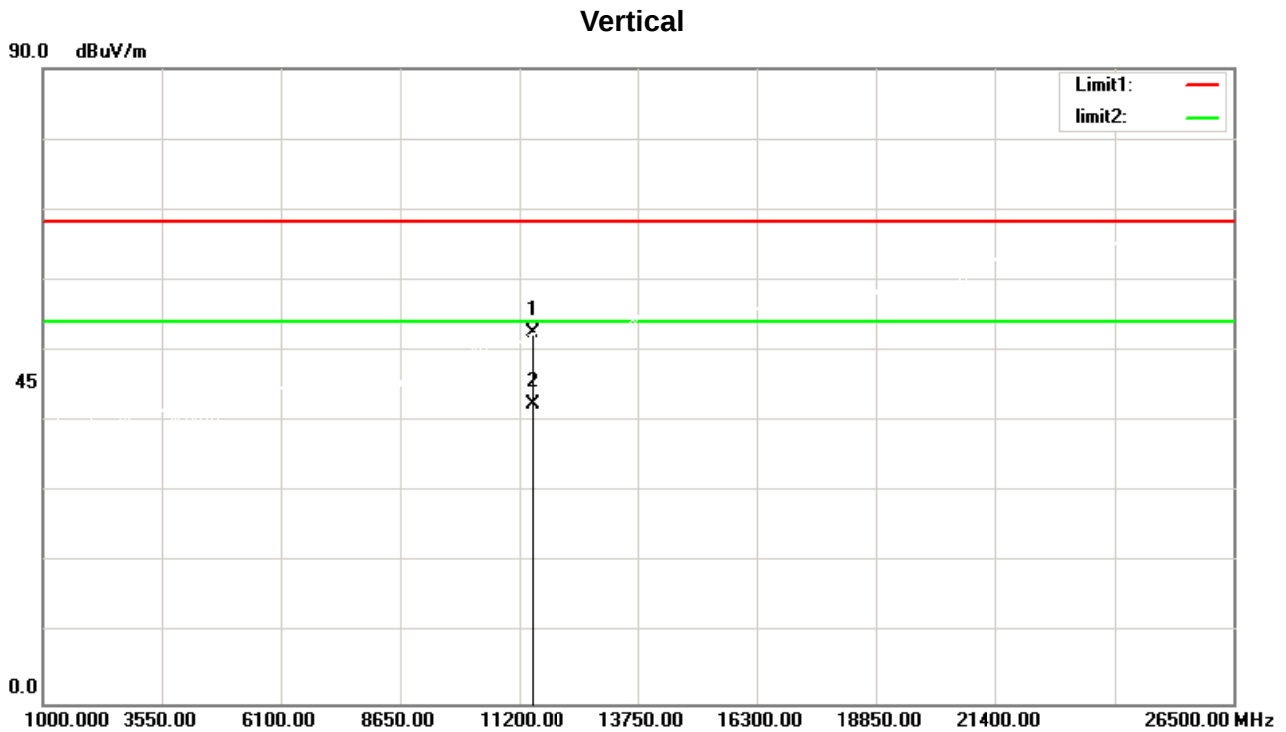
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	43.10	7.97	51.07	68.30	-17.23	peak
2	11650.000	32.40	7.97	40.37	54.00	-13.63	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz



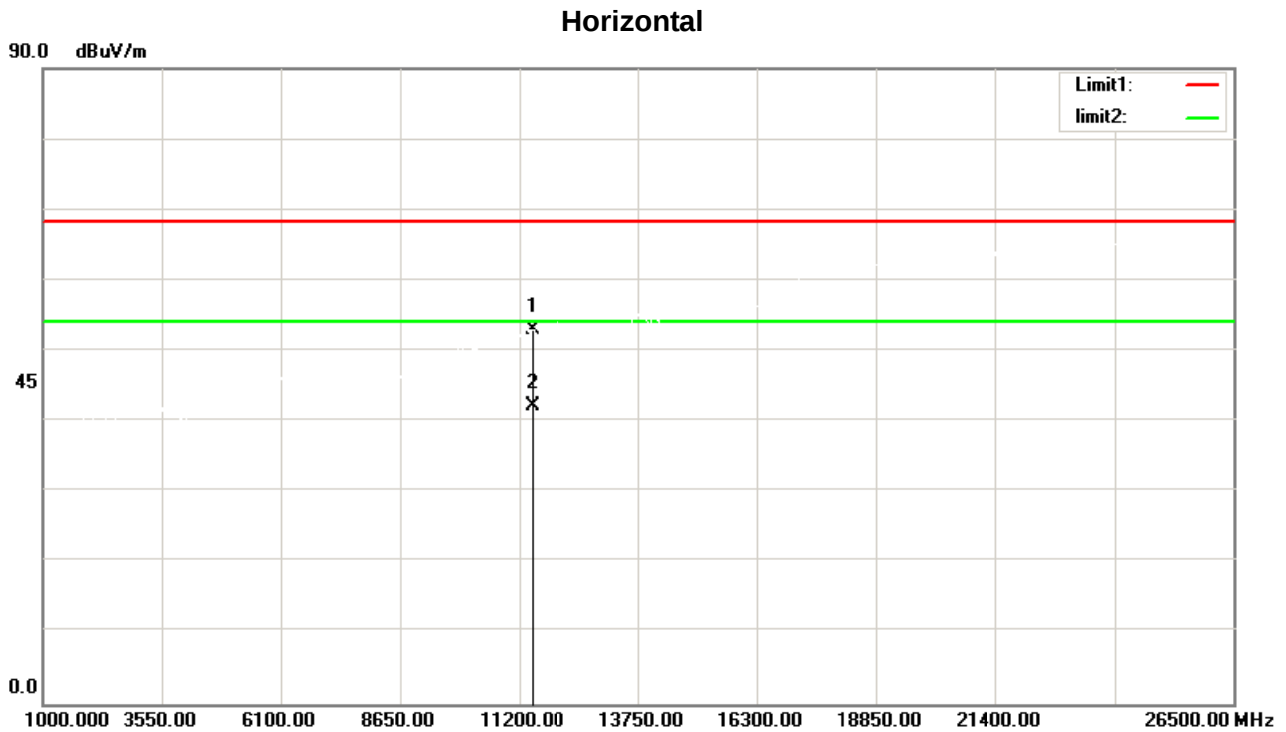
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	43.21	7.97	51.18	68.30	-17.12	peak
2	11650.000	32.33	7.97	40.30	54.00	-13.70	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5745 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	44.37	8.06	52.43	68.30	-15.87	peak
2	11490.000	34.31	8.06	42.37	54.00	-11.63	AVG

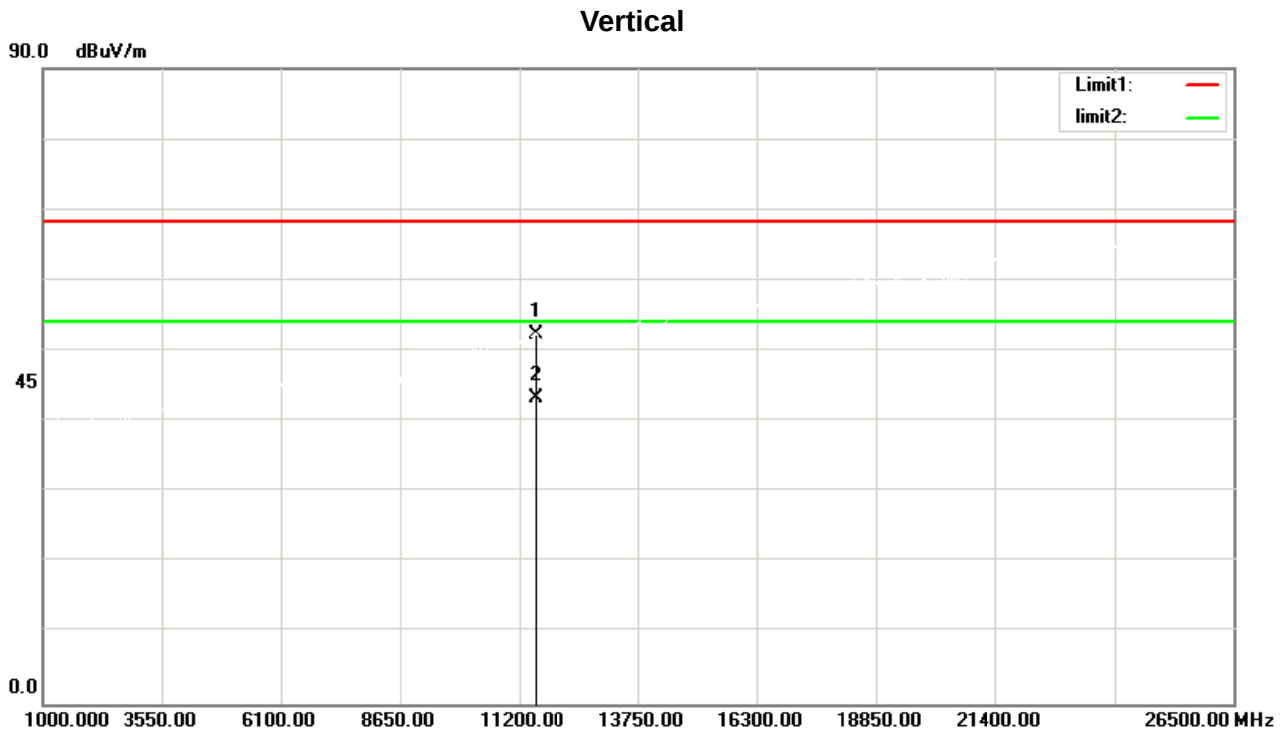
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5745 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	44.84	8.06	52.90	68.30	-15.40	peak
2	11490.000	34.19	8.06	42.25	54.00	-11.75	AVG

Report No.: 20EFAS12075 0341

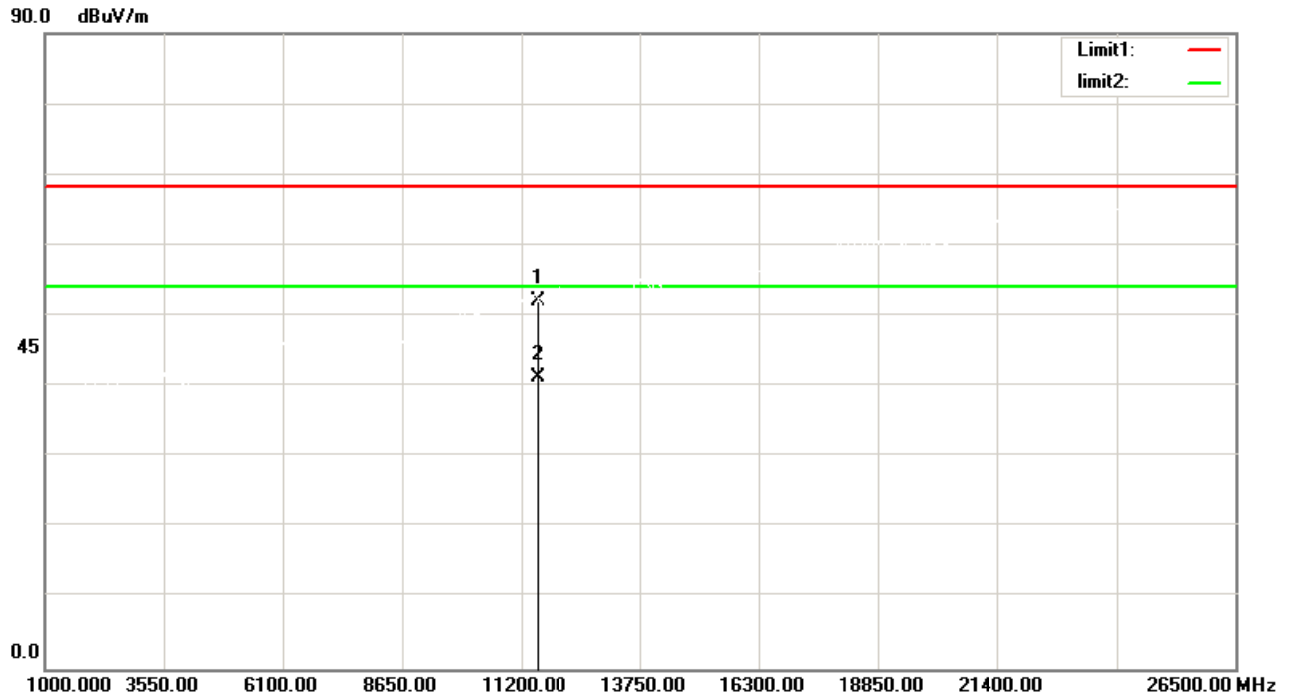
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5785 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	44.34	8.00	52.34	68.30	-15.96	peak
2	11570.000	35.20	8.00	43.20	54.00	-10.80	AVG

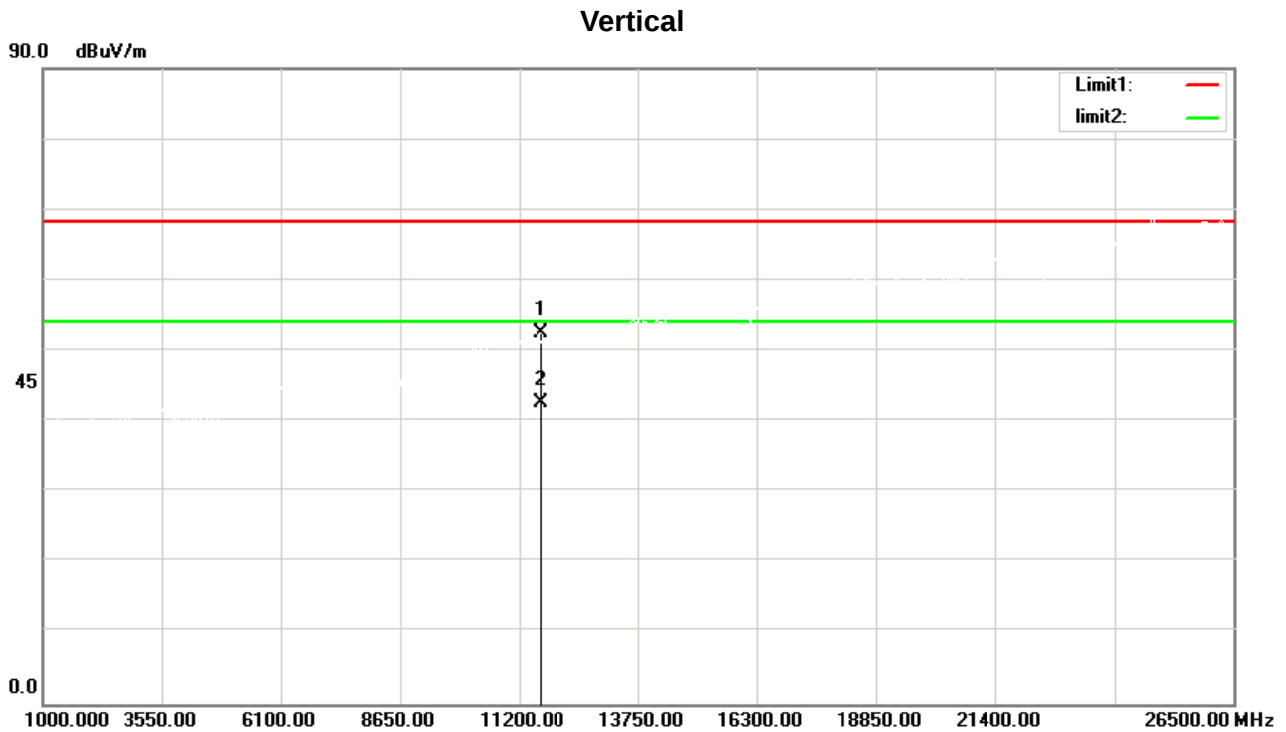
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5785 MHz

Horizontal



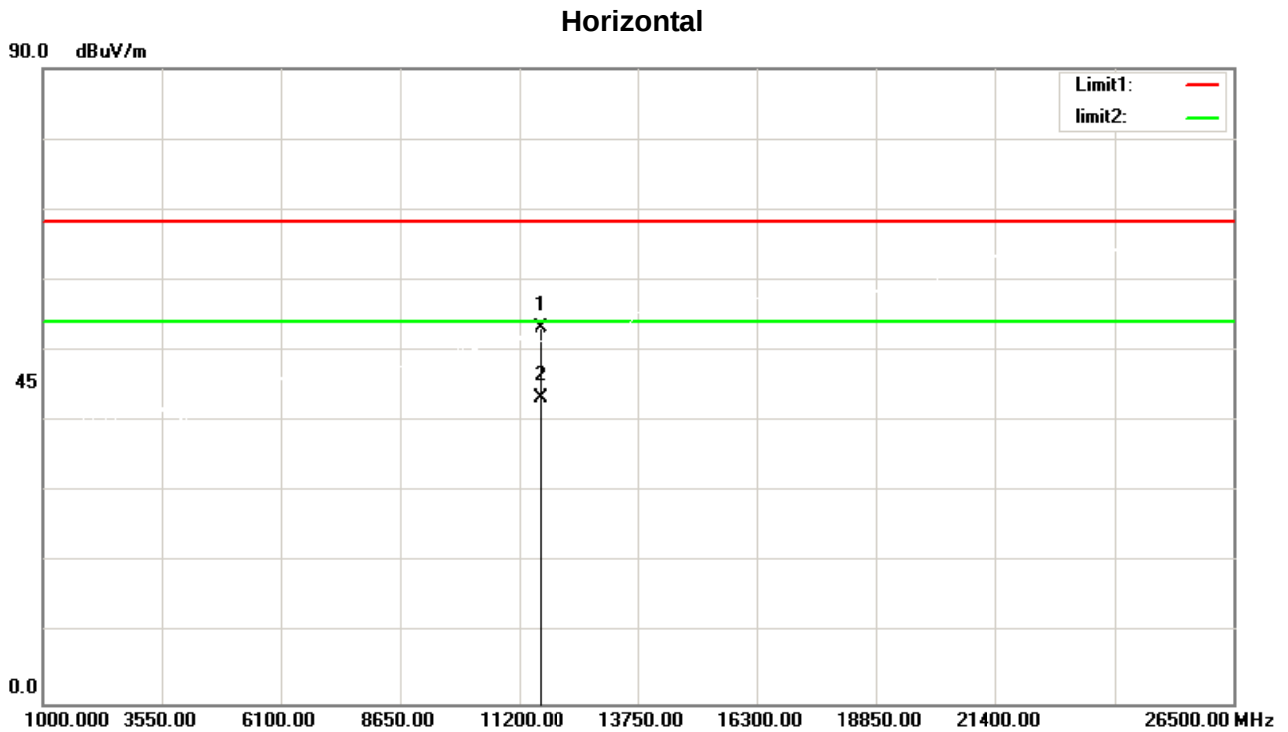
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	44.19	8.00	52.19	68.30	-16.11	peak
2	11570.000	33.34	8.00	41.34	54.00	-12.66	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5825 MHz



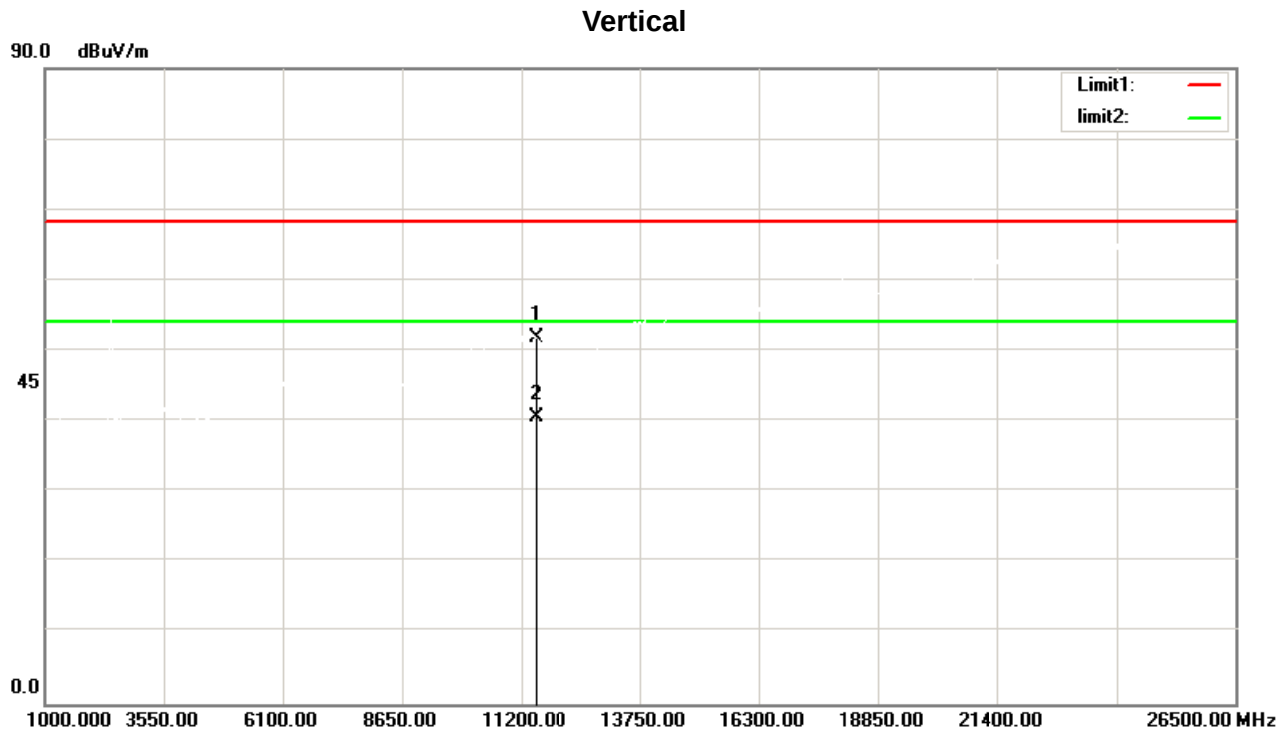
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	44.65	7.97	52.62	68.30	-15.68	peak
2	11650.000	34.56	7.97	42.53	54.00	-11.47	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5825 MHz



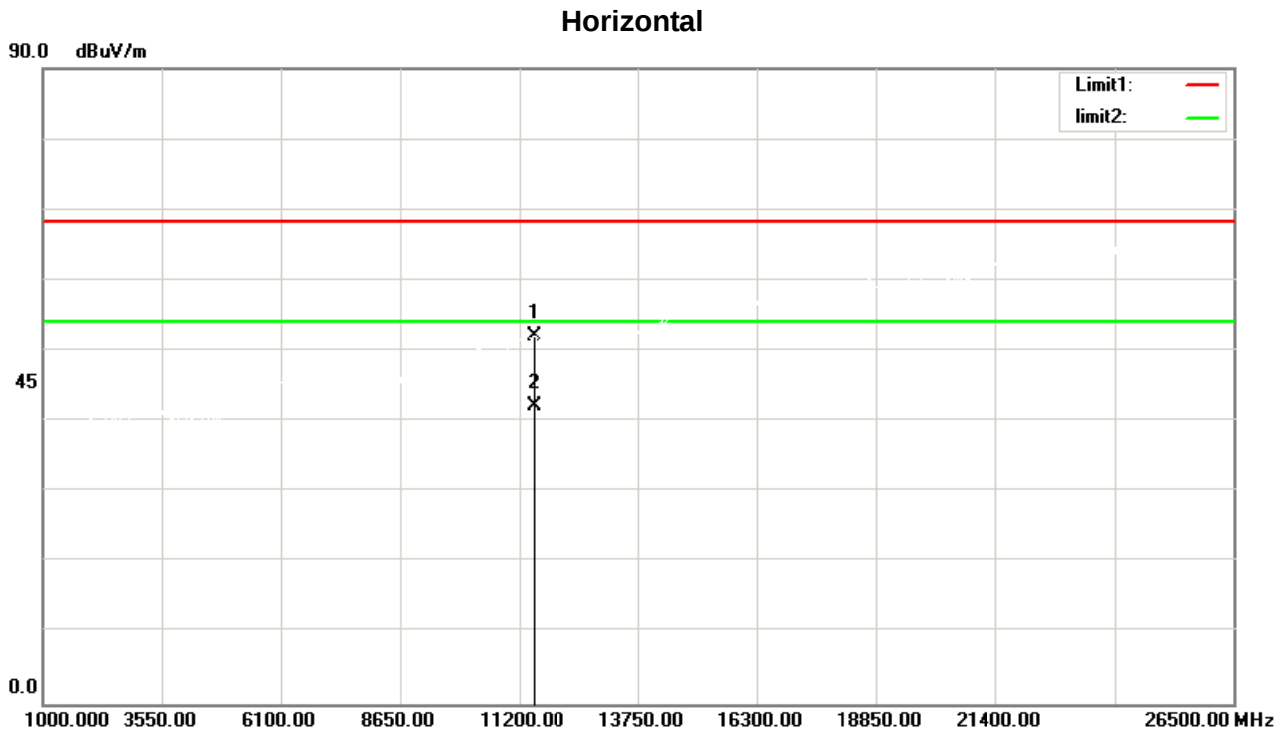
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	45.33	7.97	53.30	68.30	-15.00	peak
2	11650.000	35.23	7.97	43.20	54.00	-10.80	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5755 MHz



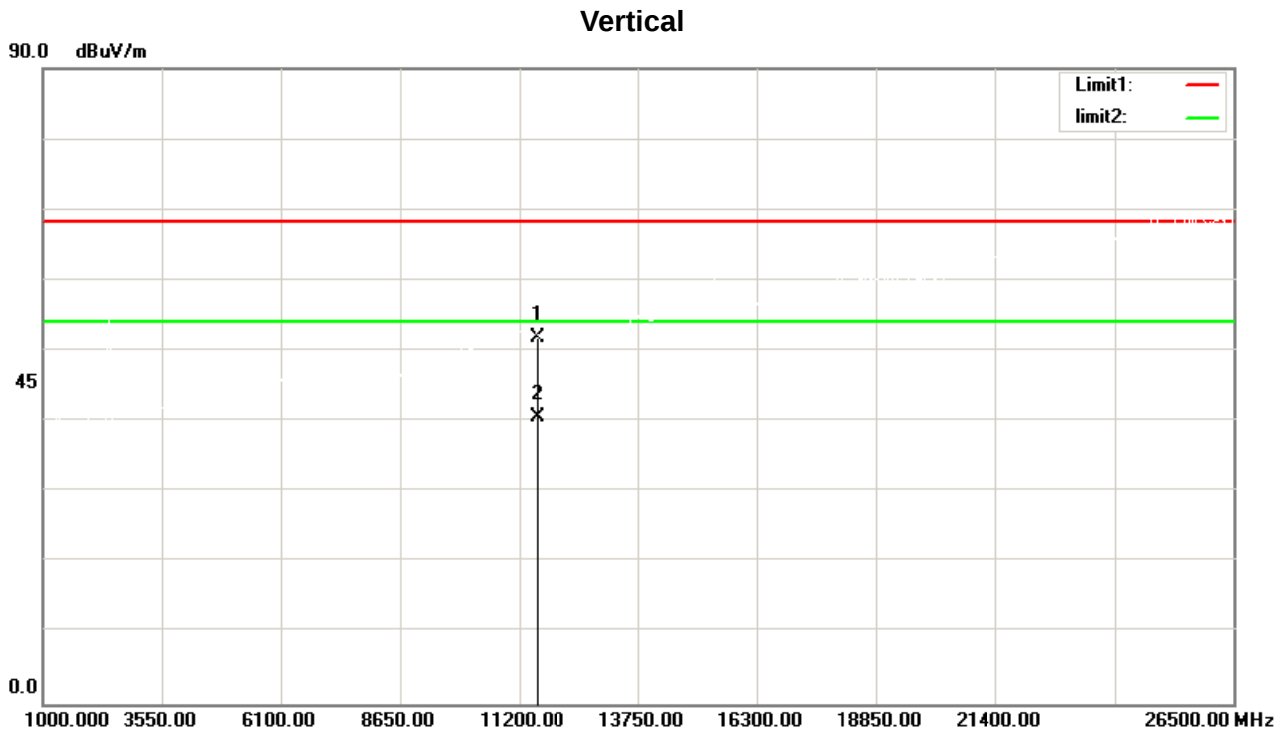
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11515.500	43.93	8.04	51.97	68.30	-16.33	peak
2	11515.500	32.58	8.04	40.62	54.00	-13.38	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5755 MHz



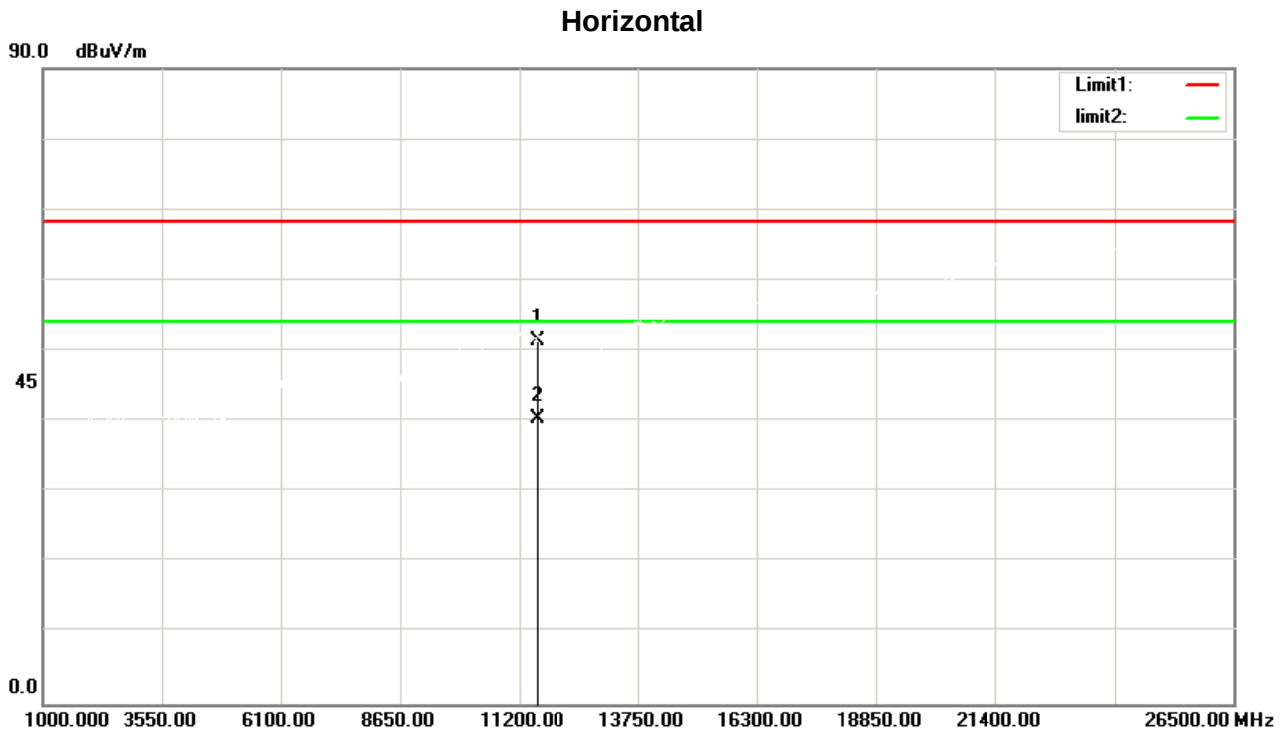
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11512.500	44.05	8.04	52.09	68.30	-16.21	peak
2	11512.500	34.26	8.04	42.30	54.00	-11.70	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5795 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	43.75	8.01	51.76	68.30	-16.54	peak
2	11590.000	32.66	8.01	40.67	54.00	-13.33	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5795 MHz



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	43.37	8.01	51.38	68.30	-16.92	peak
2	11590.000	32.37	8.01	40.38	54.00	-13.62	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 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:

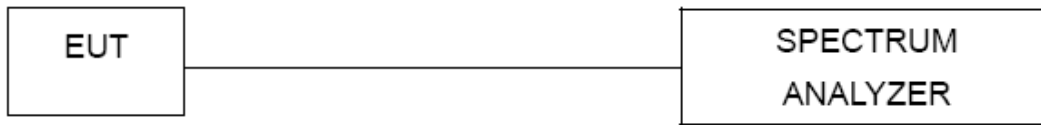
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

- 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	2021/05/24
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



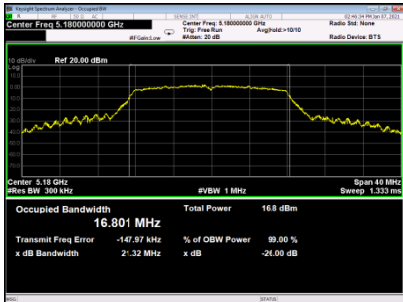
6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

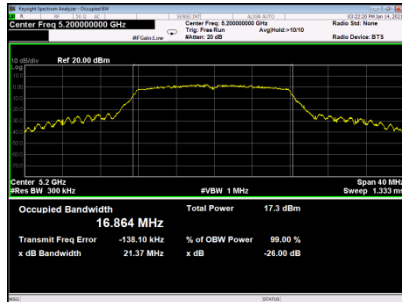
6.6 TEST RESULTS

UNII-1_TX A Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	21.32	16.801
40	5200	21.37	16.864
48	5240	20.50	16.822

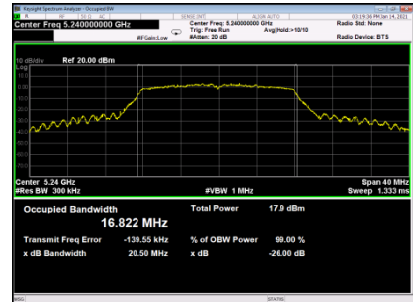
CH36



CH40

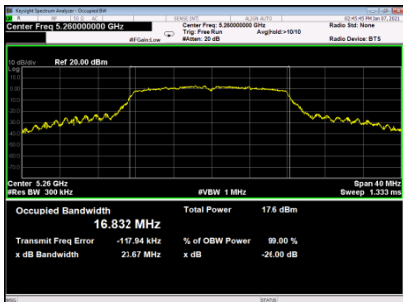


CH48

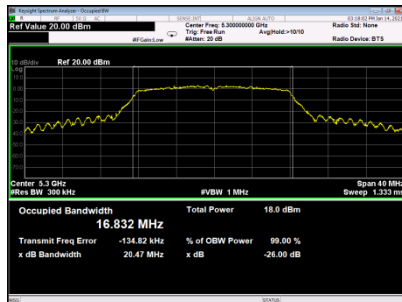


UNII-2A_TX A Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	23.67	16.832
60	5300	20.47	16.832
64	5320	24.80	16.933

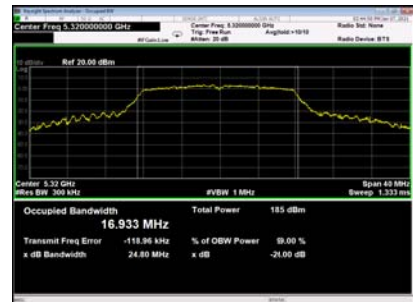
CH52



CH60



CH64



UNII-2C_TX A Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	27.52	16.991
120	5600	26.64	16.898
140	5700	22.71	17.900

CH100



CH120



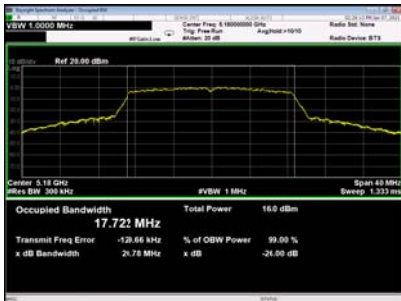
CH140



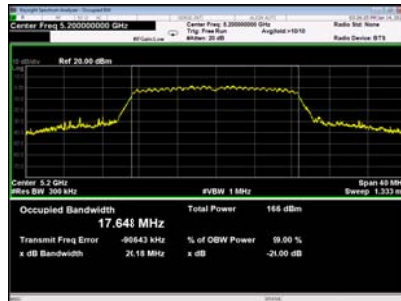
UNII-1_TX N (HT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	20.78	17.722
40	5200	20.18	17.648
48	5240	24.98	17.709

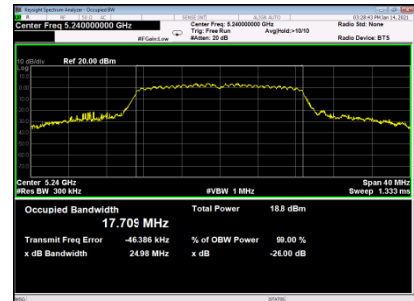
CH36



CH40



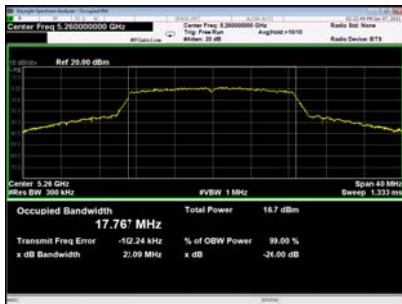
CH48



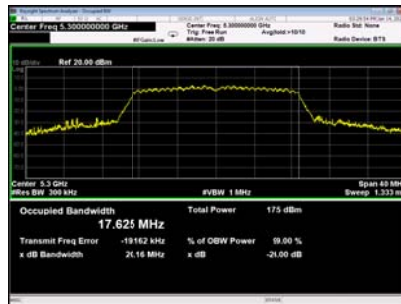
UNII-2A_TX N (HT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
52	5260	22.09	17.767
60	5300	20.16	17.625
64	5320	23.07	17.774

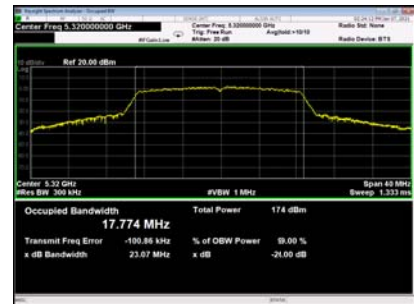
CH52



CH60



CH64



UNII-2C_TX N (HT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
100	5500	23.18	17.845
120	5600	24.28	17.812
140	5700	30.71	18.219

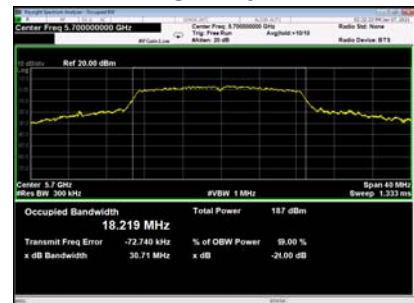
CH100



CH120



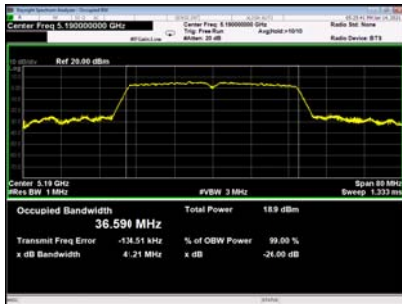
CH140



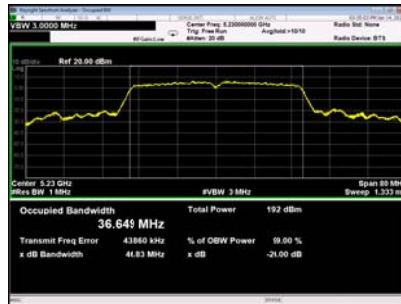
UNII-1_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
38	5190	41.21	36.590
46	5230	48.83	36.649

CH38



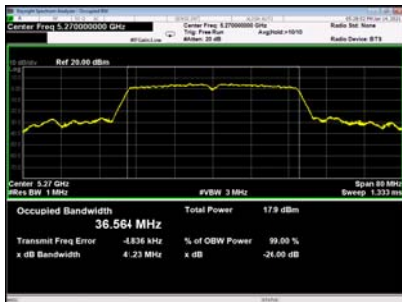
CH46



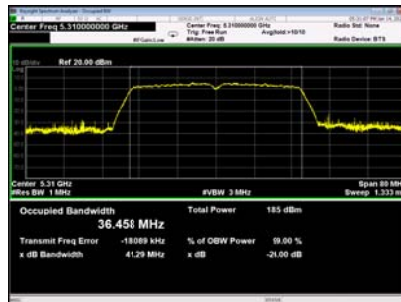
UNII-2A_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
54	5270	41.23	36.564
62	5310	41.29	36.458

CH54



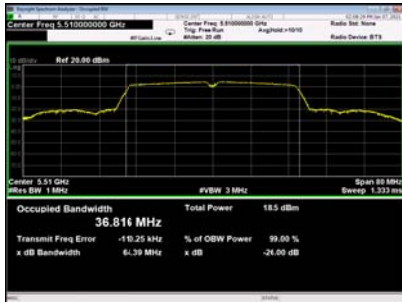
CH62



UNII-2C_TX N (HT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
102	5510	64.39	36.816
118	5590	55.54	36.785
134	5670	69.76	37.057

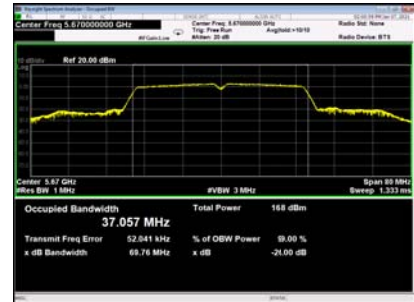
CH102



CH118

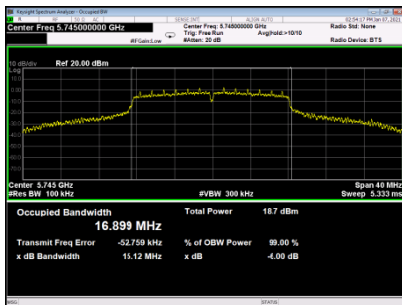


CH134

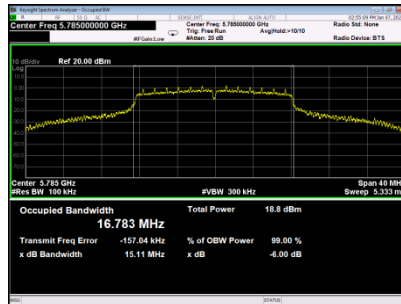


UNII-3 TX A Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	15.12	17.944	500	PASS
157	5785	15.11	17.904	500	PASS
165	5825	15.12	17.483	500	PASS

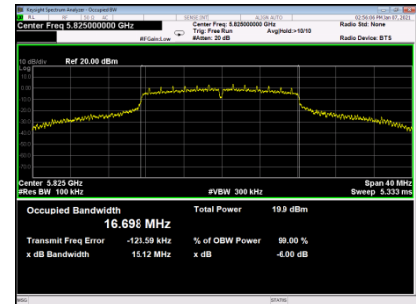
CH149
4



6 dB Bandwidth
CH157

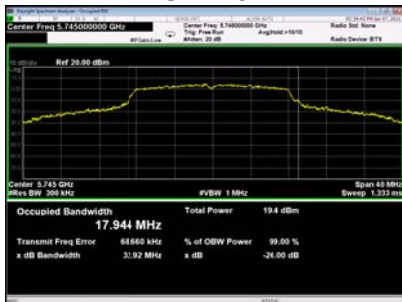


CH165



99% Emission Bandwidth
CH157

CH149



CH157

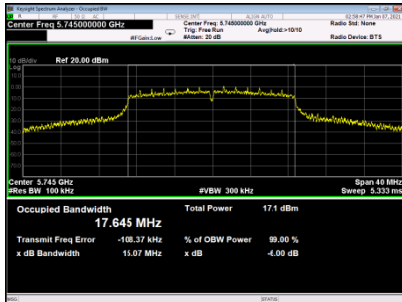


CH165

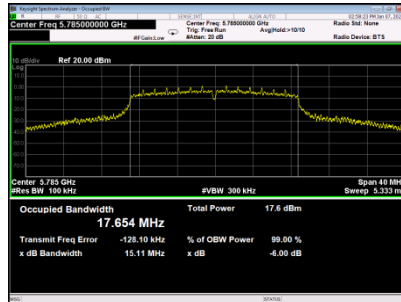


UNII-3_TX N (HT20) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	15.07	18.299	500	PASS
157	5785	15.11	18.295	500	PASS
165	5825	15.11	18.035	500	PASS

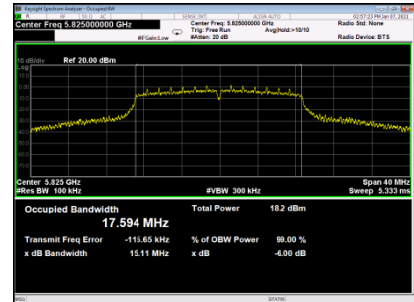
CH149



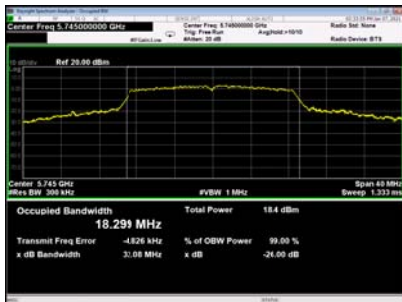
6 dB Bandwidth
CH157



CH165



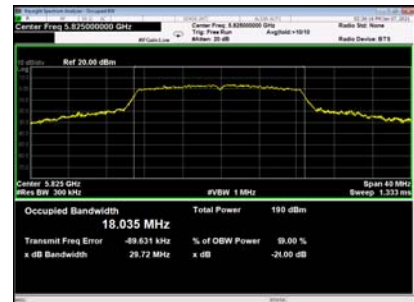
CH149



99% Emission Bandwidth
CH157



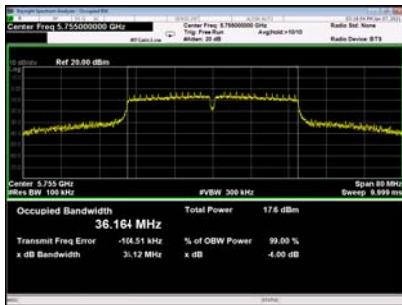
CH165



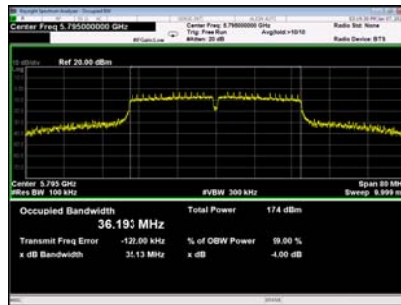
UNII-3_TX N (HT40) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
151	5755	35.12	37.312	500	PASS
159	5795	35.13	37.583	500	PASS

6 dB Bandwidth

CH151

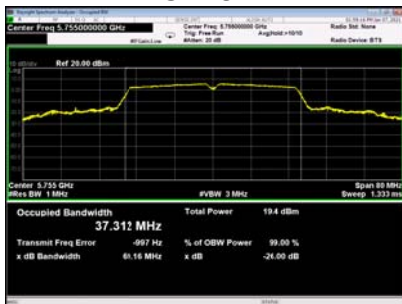


CH159



99% Emission Bandwidth

CH151



CH159



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	EIRP Output Power	not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less	5150-5250
15.407(a)	Maximum Output Power	AP device: 1 Watt (30dBm) Client device: 250mW (24dBm)	5150-5250 5250-5350 5470-5725
15.407(a) RSS-247 6.2.4.1	Maximum Output Power	1 Watt (30dBm)	5725-5850

Note:

- 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 is the 99% emission bandwidth in megahertz.

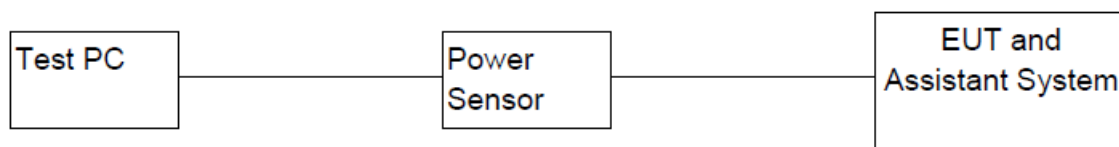
7.2 TEST PROCEDURE AND SETTING

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- 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	05/24/2021
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-1_TX A Mode_Ant 1 For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	14.75	0.00	14.75	24.00	0.25	PASS
40	5200	14.41	0.00	14.41	24.00	0.25	PASS
48	5240	14.89	0.00	14.89	24.00	0.25	PASS

UNII-1_TX A Mode_Ant 2 For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	14.43	0.00	14.43	24.00	0.25	PASS
40	5200	14.47	0.00	14.47	24.00	0.25	PASS
48	5240	14.70	0.00	14.70	24.00	0.25	PASS

UNII-1_TX A Mode_Ant 1 For IC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	EIRP + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	17.32	0.00	17.32	23.00	0.2	PASS
40	5200	16.98	0.00	16.98	23.00	0.2	PASS
48	5240	17.46	0.00	17.46	23.00	0.2	PASS

UNII-1_TX A Mode_Ant 2 For IC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	EIRP + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	17.00	0.00	17.00	23.00	0.2	PASS
40	5200	17.04	0.00	17.04	23.00	0.2	PASS
48	5240	17.27	0.00	17.27	23.00	0.2	PASS

EIRP Power=Output Power+Antenna Gain

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	14.93	0.00	14.93	24.00	0.25	PASS
60	5300	14.69	0.00	14.69	24.00	0.25	PASS
64	5320	14.79	0.00	14.79	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	14.89	0.00	14.89	24.00	0.25	PASS
60	5300	14.88	0.00	14.88	24.00	0.25	PASS
64	5320	14.53	0.00	14.53	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	14.96	0.00	14.96	24.00	0.25	PASS
120	5600	14.50	0.00	14.50	24.00	0.25	PASS
140	5700	14.59	0.00	14.59	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	14.17	0.00	14.17	24.00	0.25	PASS
120	5600	14.21	0.00	14.21	24.00	0.25	PASS
140	5700	14.72	0.00	14.72	24.00	0.25	PASS

UNII-1_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
36	5180	13.69	0.19	13.88	24.00	0.25	PASS
40	5200	13.97	0.19	14.16	24.00	0.25	PASS
48	5240	13.94	0.19	14.13	24.00	0.25	PASS

UNII-1_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
36	5180	13.76	0.19	13.95	24.00	0.25	PASS
40	5200	13.25	0.19	13.44	24.00	0.25	PASS
48	5240	13.51	0.19	13.70	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	16.93	24.00	0.25	PASS
40	5200	16.83	24.00	0.25	PASS
48	5240	16.93	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	22.51	23.00	0.2	PASS
40	5200	22.41	23.00	0.2	PASS
48	5240	22.51	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=2.57dBi+2.57dBi=5.58dBi

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	13.75	0.19	13.94	24.00	0.25	PASS
60	5300	13.84	0.19	14.03	24.00	0.25	PASS
64	5320	14.00	0.19	14.19	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	13.57	0.19	13.76	24.00	0.25	PASS
60	5300	13.57	0.19	13.76	24.00	0.25	PASS
64	5320	13.74	0.19	13.93	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	16.86	24.00	0.25	PASS
60	5300	16.91	24.00	0.25	PASS
64	5320	17.07	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	13.77	0.19	13.96	24.00	0.25	PASS
120	5600	13.24	0.19	13.43	24.00	0.25	PASS
140	5700	13.97	0.19	14.16	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	13.59	0.19	13.78	24.00	0.25	PASS
120	5600	13.52	0.19	13.71	24.00	0.25	PASS
140	5700	13.46	0.19	13.65	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	16.88	24.00	0.25	PASS
120	5600	16.58	24.00	0.25	PASS
140	5700	16.92	24.00	0.25	PASS

UNII-1_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
38	5190	13.11	0.35	13.46	24.00	0.25	PASS
46	5230	13.23	0.35	13.58	24.00	0.25	PASS

UNII-1_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
38	5190	13.22	0.35	13.57	24.00	0.25	PASS
46	5230	13.00	0.35	13.35	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	16.53	24.00	0.25	PASS
46	5230	16.48	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	22.11	23.00	0.2	PASS
46	5230	22.06	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=2.57dBi+2.57dBi=5.58dBi

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	13.39	0.35	13.74	24.00	0.25	PASS
62	5310	13.23	0.35	13.58	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	13.25	0.35	13.60	24.00	0.25	PASS
62	5310	13.34	0.35	13.69	24.00	0.25	PASS

UNII-2A_TX N (HT40) Mode_Total For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
54	5270	16.68	24.00	0.25	PASS
62	5310	16.65	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	13.44	0.35	13.79	24.00	0.25	PASS
118	5590	13.64	0.35	13.99	24.00	0.25	PASS
134	5670	13.47	0.35	13.82	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	13.41	0.35	13.76	24.00	0.25	PASS
118	5590	13.29	0.35	13.64	24.00	0.25	PASS
134	5670	13.90	0.35	14.25	24.00	0.25	PASS

UNII-2C_TX N (HT40) Mode_Total For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
102	5510	16.79	24.00	0.25	PASS
118	5590	16.83	24.00	0.25	PASS
134	5670	17.05	24.00	0.25	PASS

UNII-3_TX A Mode_Ant1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.67	0	14.67	30.00	1.00	PASS
157	5785	14.53	0	14.53	30.00	1.00	PASS
165	5825	14.68	0	14.68	30.00	1.00	PASS

UNII-3_TX A Mode_Ant2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.49	0	14.49	30.00	1.00	PASS
157	5785	14.60	0	14.60	30.00	1.00	PASS
165	5825	14.56	0	14.56	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Ant1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	13.42	0.19	13.61	30.00	1.00	PASS
157	5785	13.35	0.19	13.54	30.00	1.00	PASS
165	5825	13.44	0.19	13.63	30.00	1.00	PASS

UNII-3_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
149	5745	13.77	0.19	13.96	30.00	1.00	PASS
157	5785	13.95	0.19	14.14	30.00	1.00	PASS
165	5825	13.38	0.19	13.57	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	16.80	30.00	1.00	PASS
157	5785	16.86	30.00	1.00	PASS
165	5825	16.61	30.00	1.00	PASS

UNII-3_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
151	5755	13.70	0.35	14.05	30.00	1.00	PASS
159	5795	13.51	0.35	13.86	30.00	1.00	PASS

UNII-3_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
151	5755	13.52	0.35	13.87	30.00	1.00	PASS
159	5795	13.61	0.35	13.96	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	16.97	30.00	1.00	PASS
159	5795	16.92	30.00	1.00	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 5250-5350 5470-5725
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

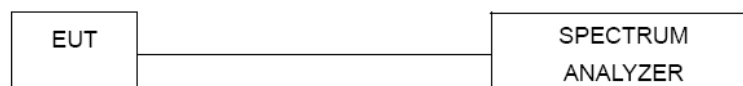
Note:

- 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 =Output Power Spectral Density +Antenna Gain
MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=3dBi+3dBi=6.01dBi

8.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2021/05/24
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

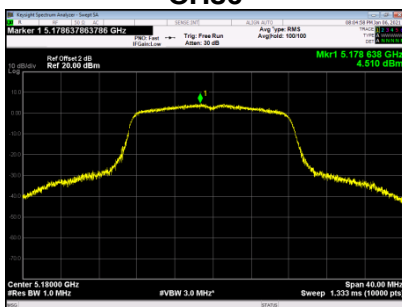
The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

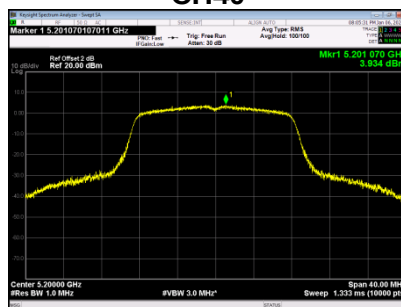
UNII-1_TX A Mode_Ant 1 For FCC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	4.510	0.00	4.510	11.00	PASS
40	5200	3.934	0.00	3.934	11.00	PASS
48	5240	4.309	0.00	4.309	11.00	PASS

UNII-1_TX A Mode_Ant 1 For IC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	EIRP Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	7.510	0.00	7.510	10.00	PASS
40	5200	6.934	0.00	6.934	10.00	PASS
48	5240	7.309	0.00	7.309	10.00	PASS

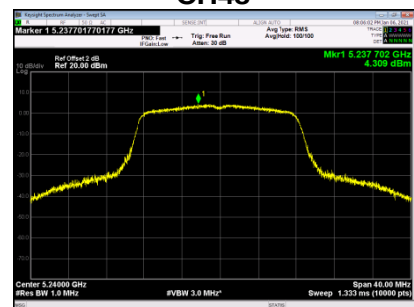
CH36



CH40



CH48



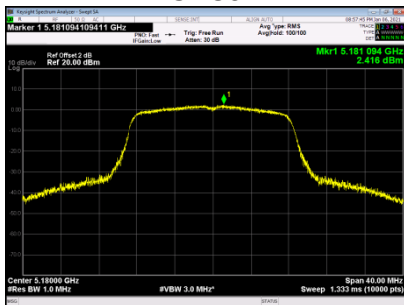
UNII-1_TX A Mode_Ant2 For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	2.416	0.00	2.416	11.00	PASS
40	5200	1.996	0.00	1.996	11.00	PASS
48	5240	2.675	0.00	2.675	11.00	PASS

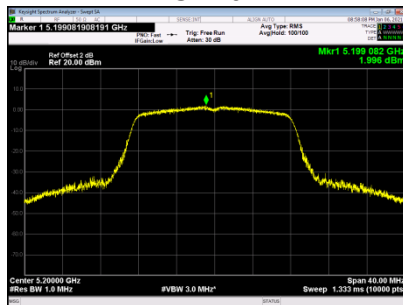
UNII-1_TX A Mode_Ant2 For IC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	EIRP Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	5.416	0.00	5.416	10.00	PASS
40	5200	4.996	0.00	4.996	10.00	PASS
48	5240	5.675	0.00	5.675	10.00	PASS

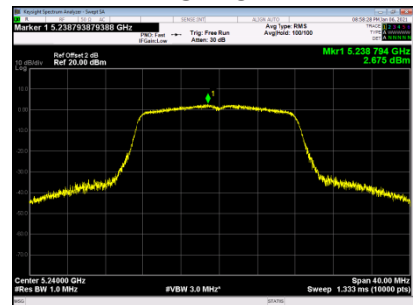
CH36



CH40



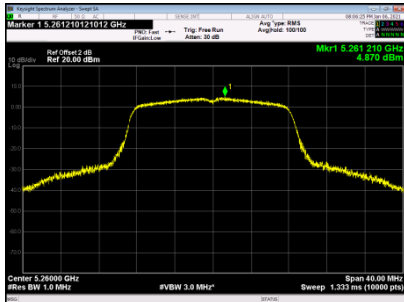
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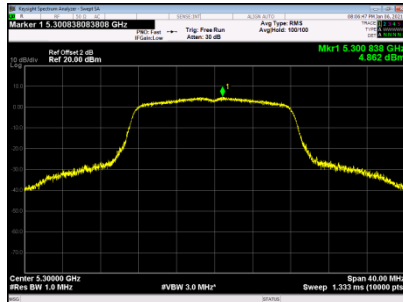
UNII-2A_TX A Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	4.870	0.00	4.870	11.00	PASS
60	5300	4.862	0.00	4.862	11.00	PASS
64	5320	5.059	0.00	5.059	11.00	PASS

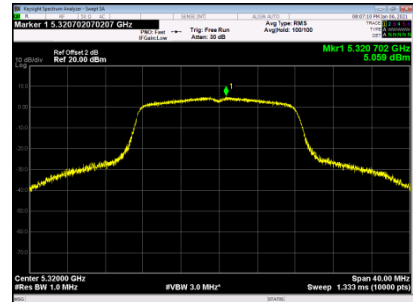
CH52



CH60



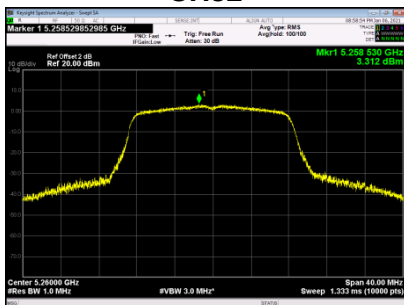
CH64



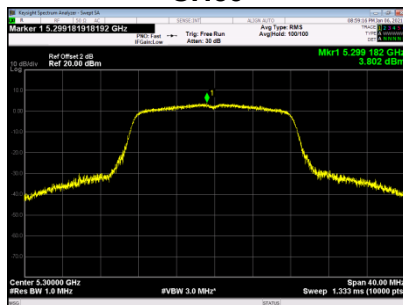
UNII-2A_TX A Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	3.312	0.00	3.312	11.00	PASS
60	5300	3.802	0.00	3.802	11.00	PASS
64	5320	3.978	0.00	3.978	11.00	PASS

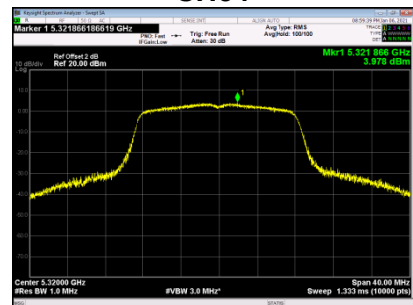
CH52



CH60



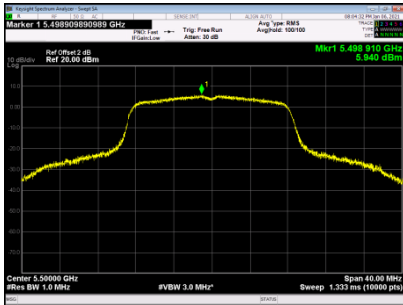
CH64



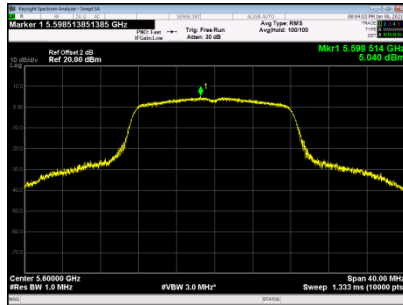
UNII-2C_TX A Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	5.940	0.00	5.940	11.00	PASS
120	5600	5.040	0.00	5.040	11.00	PASS
140	5700	5.020	0.00	5.020	11.00	PASS

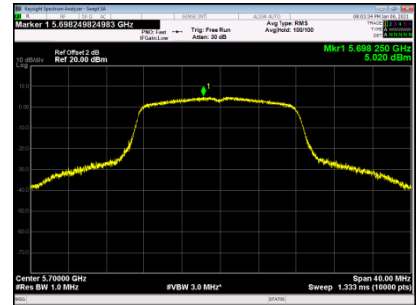
CH100



CH120



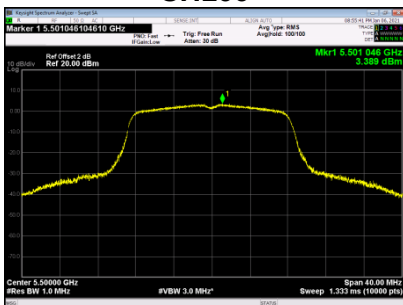
CH140



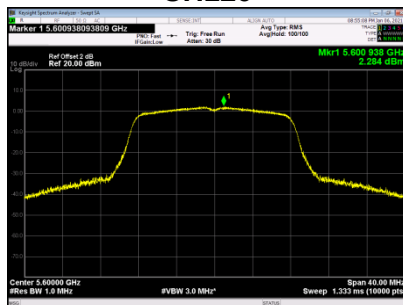
UNII-2C_TX A Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.389	0.00	3.389	11.00	PASS
120	5600	2.284	0.00	2.284	11.00	PASS
140	5700	4.525	0.00	4.525	11.00	PASS

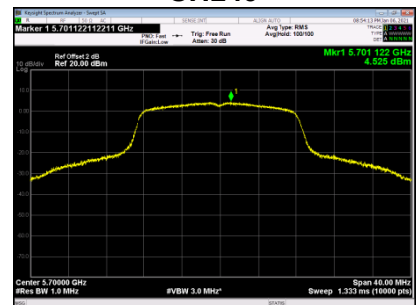
CH100



CH120



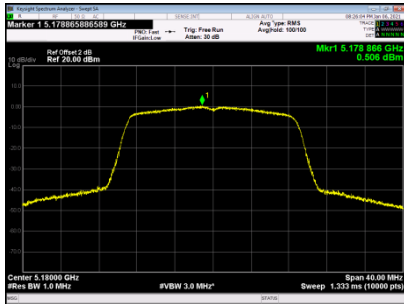
CH140



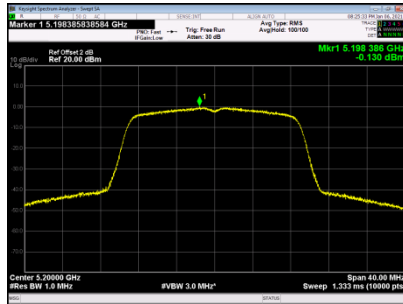
UNII-1_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	0.506	0.19	0.696	11.00	PASS
40	5200	-0.130	0.19	0.060	11.00	PASS
48	5240	0.277	0.19	0.467	11.00	PASS

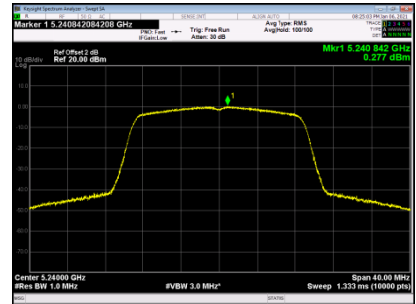
CH36



CH40



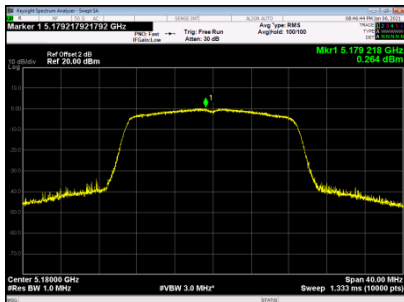
CH48



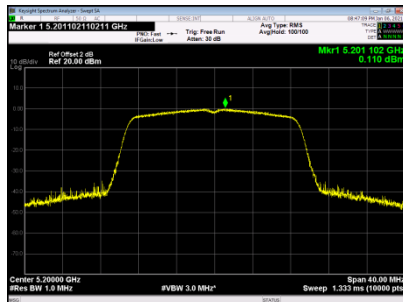
UNII-1_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	0.264	0.19	0.454	11.00	PASS
40	5200	0.110	0.19	0.300	11.00	PASS
48	5240	0.688	0.19	0.878	11.00	PASS

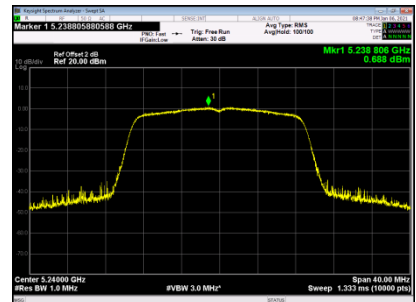
CH36



CH40



CH48



UNII-1_TX N (HT20) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	3.59	11.00	PASS
40	5200	3.19	11.00	PASS
48	5240	3.69	11.00	PASS

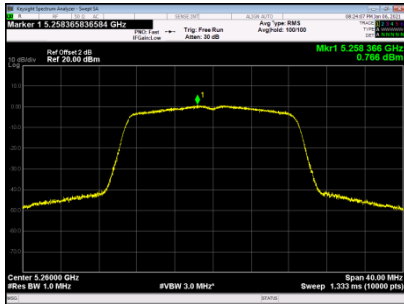
UNII-1_TX N (HT20) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	9.60	10.00	PASS
40	5200	9.20	10.00	PASS
48	5240	9.70	10.00	PASS

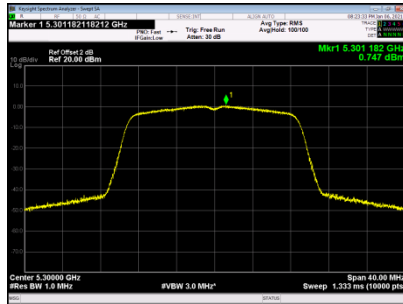
UNII-2A_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	0.766	0.19	0.956	11.00	PASS
60	5300	0.747	0.19	0.937	11.00	PASS
64	5320	0.740	0.19	0.930	11.00	PASS

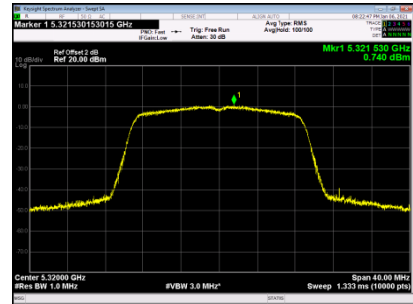
CH52



CH60



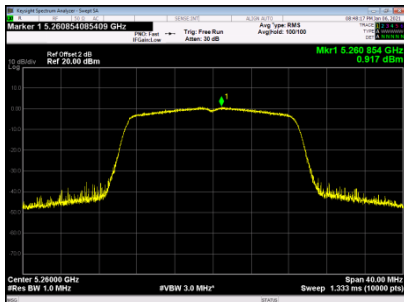
CH64



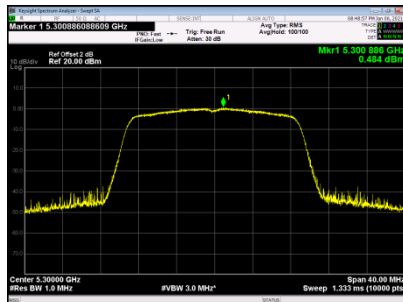
UNII-2A_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	0.917	0.19	1.107	11.00	PASS
60	5300	0.484	0.19	0.674	11.00	PASS
64	5320	0.707	0.19	0.897	11.00	PASS

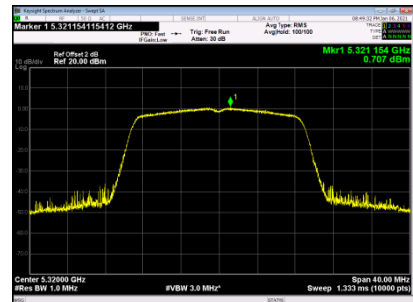
CH52



CH60



CH64



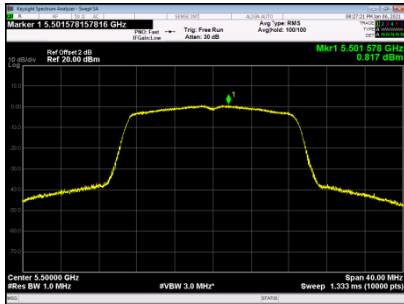
UNII-2A_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260	4.04	11.00	PASS
60	5300	3.82	11.00	PASS
64	5320	3.92	11.00	PASS

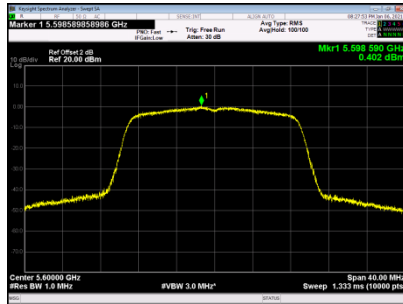
UNII-2C_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	0.817	0.19	1.007	11.00	PASS
120	5600	0.402	0.19	0.592	11.00	PASS
140	5700	0.791	0.19	0.981	11.00	PASS

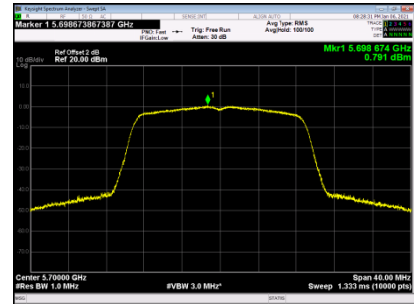
CH100



CH120



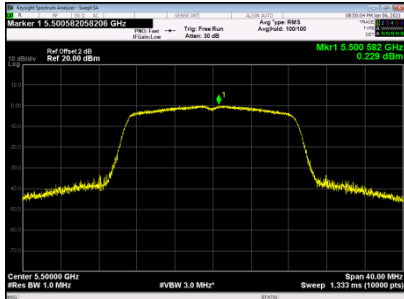
CH140



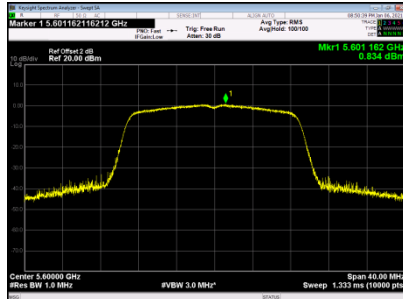
UNII-2C_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	0.229	0.19	0.419	11.00	PASS
120	5600	0.834	0.19	1.024	11.00	PASS
140	5700	0.658	0.19	0.848	11.00	PASS

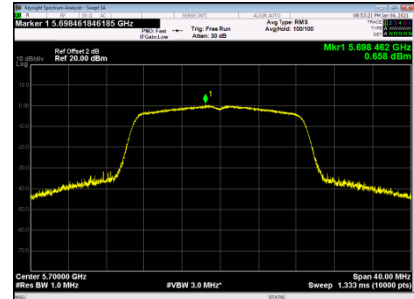
CH100



CH120



CH140



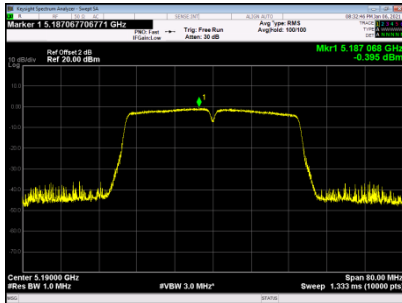
UNII-2C_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
100	5500	3.73	11.00	PASS
120	5600	3.82	11.00	PASS
140	5700	3.12	11.00	PASS

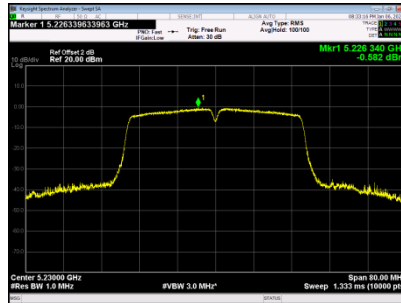
UNII-1_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-0.395	0.35	-0.045	11.00	PASS
46	5230	-0.582	0.35	-0.232	11.00	PASS

CH38



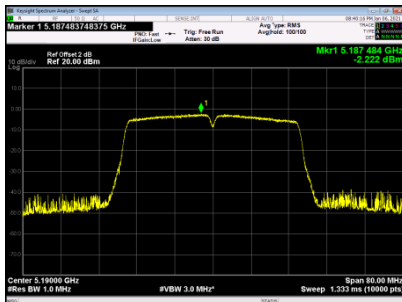
CH46



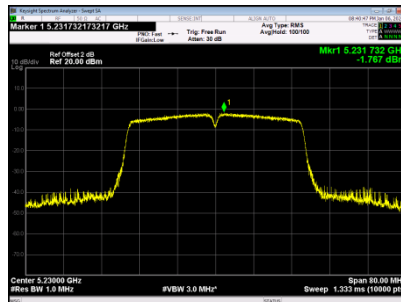
UNII-1_TX N (HT40) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-2.222	0.35	-1.872	11.00	PASS
46	5230	-1.767	0.35	-1.417	11.00	PASS

CH38



CH46



UNII-1_TX N (HT40) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	2.15	11.00	PASS
46	5230	2.23	11.00	PASS

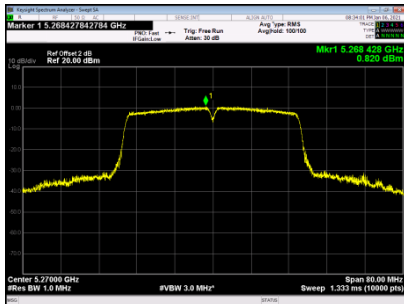
UNII-1_TX N (HT40) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	8.16	10.00	PASS
46	5230	8.24	10.00	PASS

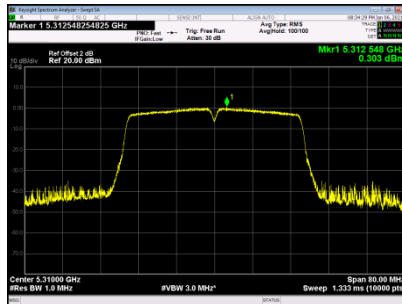
UNII-2A_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	0.820	0.35	1.170	11.00	PASS
62	5310	0.303	0.35	0.653	11.00	PASS

CH54



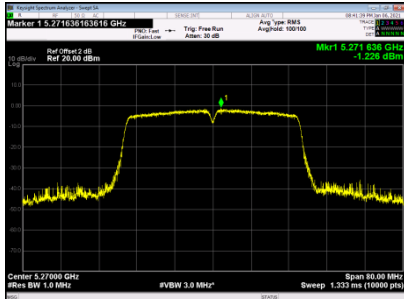
CH62



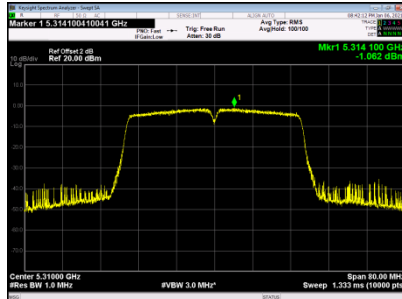
UNII-2A_TX N (HT40) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	-1.226	0.35	-0.876	11.00	PASS
62	5310	-1.065	0.35	-0.715	11.00	PASS

CH54



CH62



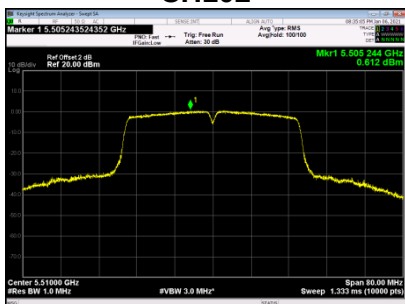
UNII-2A_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270	3.27	11.00	PASS
62	5310	3.03	11.00	PASS

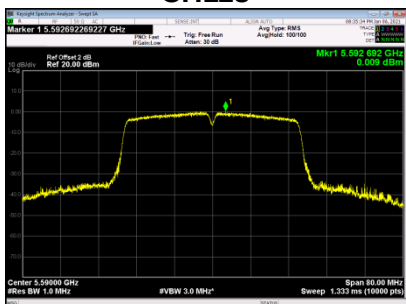
UNII-2C_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	0.612	0.35	0.962	11.00	PASS
118	5590	0.009	0.35	0.359	11.00	PASS
134	5670	-1.111	0.35	-0.761	11.00	PASS

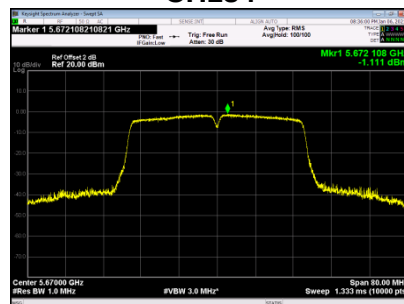
CH102



CH118



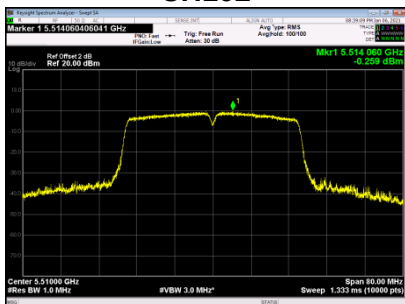
CH134



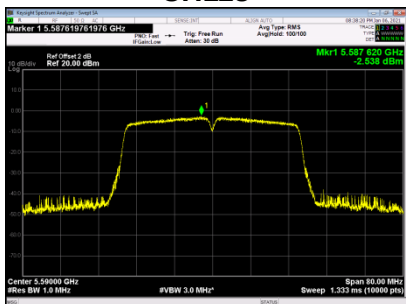
UNII-2C_TX N (HT40) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	-0.259	0.35	0.091	11.00	PASS
118	5590	-2.538	0.35	-2.188	11.00	PASS
134	5670	-3.279	0.35	-2.929	11.00	PASS

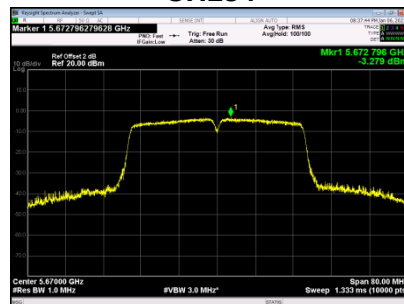
CH102



CH118



CH134



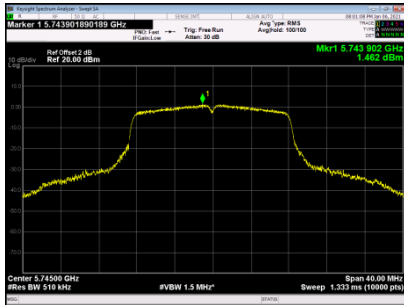
UNII-2C_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
102	5510	3.56	11.00	PASS
118	5590	2.28	11.00	PASS
134	5670	1.30	11.00	PASS

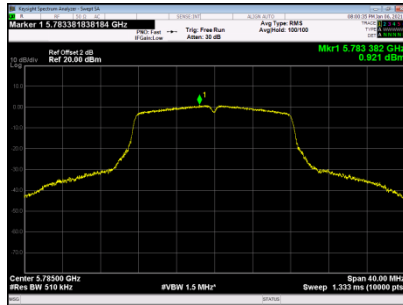
UNII-3_TX A Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	1.462	0.00	1.462	30.00	PASS
157	5785	0.921	0.00	0.921	30.00	PASS
165	5825	2.114	0.00	2.114	30.00	PASS

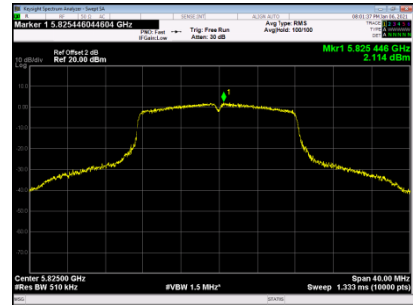
CH149



CH157



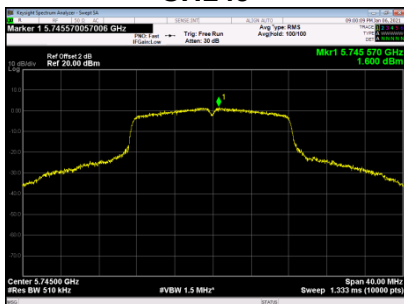
CH165



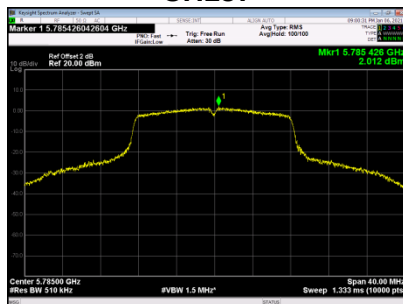
UNII-3_TX A Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	1.600	0.00	1.600	30.00	PASS
157	5785	2.012	0.00	2.012	30.00	PASS
165	5825	2.381	0.00	2.381	30.00	PASS

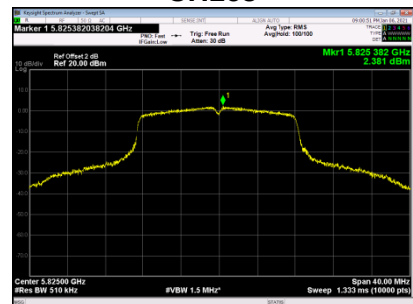
CH149



CH157



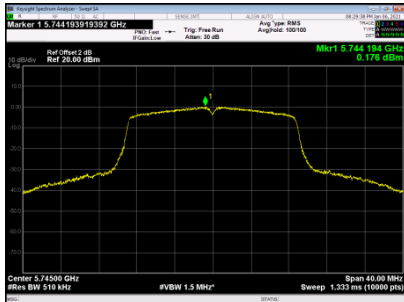
CH165



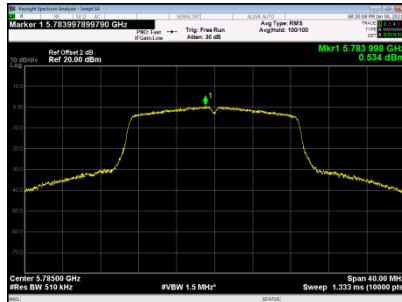
UNII-3_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	0.176	0.19	0.366	30.00	PASS
157	5785	0.534	0.19	0.724	30.00	PASS
165	5825	0.933	0.19	1.123	30.00	PASS

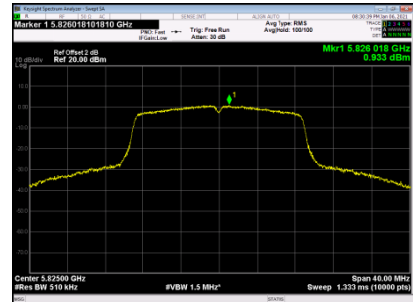
CH149



CH157



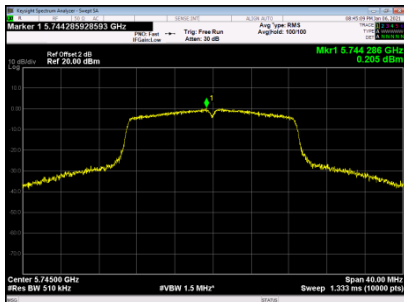
CH165



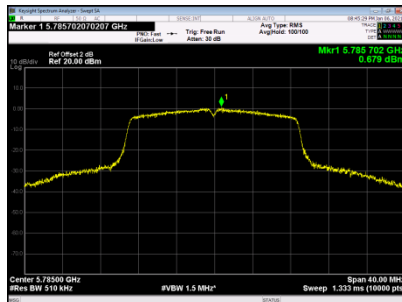
UNII-3_TX N (HT20) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	0.205	0.19	0.395	30.00	PASS
157	5785	0.679	0.19	0.869	30.00	PASS
165	5825	0.382	0.19	0.572	30.00	PASS

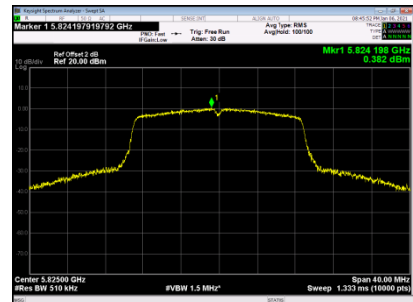
CH149



CH157



CH165



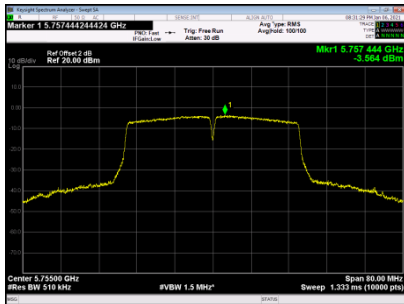
UNII-3_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	3.39	30.00	PASS
157	5785	3.81	30.00	PASS
165	5825	3.87	30.00	PASS

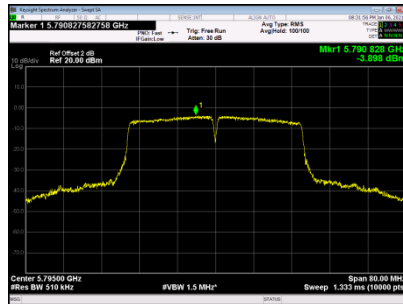
UNII-3_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-3.564	0.35	-3.214	30.00	PASS
159	5795	-3.898	0.35	-3.548	30.00	PASS

CH151



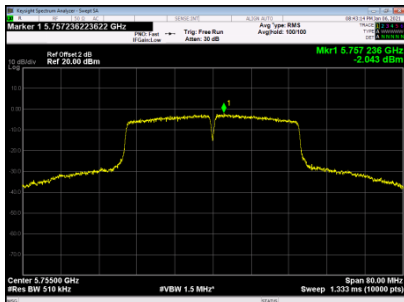
CH159



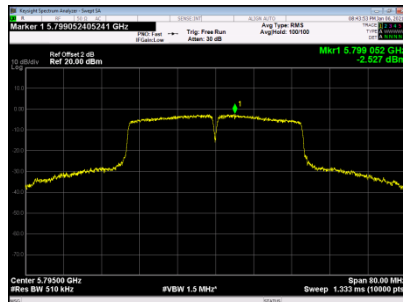
UNII-3_TX N (HT40) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-2.043	0.35	-1.693	30.00	PASS
159	5795	-2.527	0.35	-2.177	30.00	PASS

CH151



CH159



UNII-3_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	0.62	30.00	PASS
159	5795	0.20	30.00	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
			5250-5350
			5470-5725
			5725-5850

9.2 TEST PROCEDURE AND SETTING

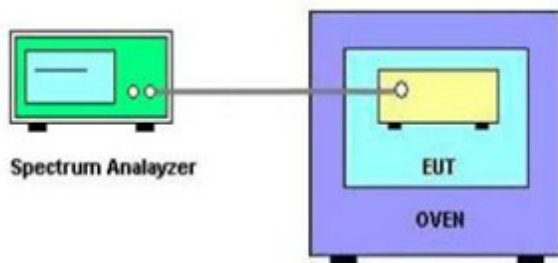
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

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	2021/05/24
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℃	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-1		
Voltage	Temperature	Measurement Frequency (MHz)
5V	(°C)	5180
	-20	5179.994
	25	5179.992
	50	5179.992
2.7V	25	5179.996
Max. Deviation (MHz)		-0.008
Max. Deviation (ppm)		-1.5

Temperature vs. Frequency Stability-UNII-2A		
Voltage	Temperature	Measurement Frequency (MHz)
5V	(°C)	5260
	-20	5260.0011
	25	5260.0014
	50	5260.0011
2.7V	25	5260.0010
Max. Deviation (MHz)		0.0014
Max. Deviation (ppm)		2.66

Temperature vs. Frequency Stability-UNII-2C		
Voltage	Temperature	Measurement Frequency (MHz)
5V	(°C)	5500
	-20	5500.0009
	25	5500.0012
	50	5500.0006
2.7V	25	5500.0011
Max. Deviation (MHz)		0.0012
Max. Deviation (ppm)		0.22

Temperature vs. Frequency Stability-UNII-3		
Voltage	Temperature	Measurement Frequency (MHz)
5V	(°C)	5745
	-20	5745.0002
	25	5745.0004
	50	5745.0001
2.7V	25	5745.0001
Max. Deviation (MHz)		0.0004
Max. Deviation (ppm)		0.69

Note: 2.7 V is the end point voltage, and products below 2.7V will cease working.

END OF TEST REPORT