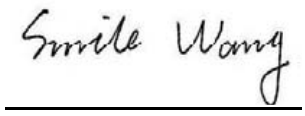
FCC &ISED Radio Test Report

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

The report concerns: Original Grant

Report Reference No. ..... :	19EFAS11026 3371
Date Sample(s) Received ..... :	2019-10-30
Date of Tested ..... :	2019-10-31 to 2019-11-12
Date of issue ..... :	2019-11-13
Testing Laboratory..... :	DongGuan ShuoXin Electronic Technology Co., Ltd.
Address ..... :	Zone A, 1F, No. 6, XinGang Road YuanGang Street, XinAn District, ChangAn Town, DongGuan City, GuangDong, China
Applicant's name ..... :	Hui Zhou Gaoshengda Technology Co., LTD
Address ..... :	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Manufacturer ..... :	Hui Zhou Gaoshengda Technology Co., LTD
Equipment ..... :	WIFI+BT Module
Trade Mark ..... :	GSD
Model ..... :	WCT5KM2301
Ratings ..... :	I/P: DC 3.3V

Responsible Engineer :



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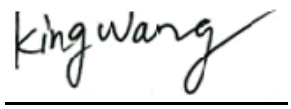
Authorized Signatory:



King Wang

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1. TEST REPORT DECLARE

Applicant	Hui Zhou Gaoshengda Technology Co., LTD
Address	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Manufacturer	Hui Zhou Gaoshengda Technology Co., LTD
Address	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Factory	Hui Zhou Gaoshengda Technology Co., LTD
Address	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Equipment	WIFI+BT Module
Model No.	WCT5KM2301
Trade Mark	GSD
Standard	FCC Part15, Subpart E(15.407) RSS-247 Issue 2, Feb. 2017 RSS-Gen Issue 5, Apr. 2018 ANSI C63.10-2013 FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01

We Declare:

The equipment described above is tested by DongGuan ShuoXin Electronic Technology Co., Ltd. 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. is assumed of full responsibility for the accuracy and completeness of these tests.

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.

2.1MEASUREMENT UNCERTAINTY

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

Note:

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	WIFI+BT Module	
Brand Name	GSD	
Test Model	WCT5KM2301	
Series Model	N/A	
Model Difference(s)	N/A	
Hardware Version	V1.0	
Software Version	V1.0	
PowerSource	Supplied from USB.	
Power Rating	DC 3.3V	
Operation Frequency Bands	UNII-1: 5150 MHz~5250 MHz 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) IEEE 802.11ac (VHT20): 2TX(Ant 1+Ant 2) IEEE 802.11ac (VHT40): 2TX(Ant 1+Ant 2) IEEE 802.11ac (VHT80): 2TX(Ant 1+Ant 2)	
Antenna Information	Antenna Type:PCB	Maximum Peak Gain: 3dBi(Ant 1) 3dBi(Ant 2
Maximum Output Power for UNII-1 For FCC	IEEE 802.11a: 15.31dBm (0.0340W) IEEE 802.11n (HT20): 16.34dBm (0.0412 W) IEEE 802.11n (HT40): 16.48dBm (0.0409 W) IEEE 802.11ac (VHT20): 17.09dBm (0.0490 W) IEEE 802.11ac (VHT40): 16.78dBm (0.0437 W) IEEE 802.11ac (VHT80): 16.61dBm (0.0388 W)	
Maximum EIRP Output Power for UNII-1 For IC	IEEE 802.11a: 18.31dBm (0.0678W) IEEE 802.11n (HT20): 19.34dBm (0.0859 W) IEEE 802.11n (HT40): 19.48dBm (0.0887 W) IEEE 802.11ac (VHT20): 20.09dBm (0.1021 W) IEEE 802.11ac (VHT40): 19.78dBm (0.0951 W) IEEE 802.11ac (VHT80): 19.61dBm (0.0914 W)	
Maximum Output Power for UNII-3	IEEE 802.11a: 16.20dBm (0.0417 W) IEEE 802.11n (HT20): 18.52dBm (0.0681 W) IEEE 802.11n (HT40): 18.38dBm (0.0633 W) IEEE 802.11ac (VHT20): 18.55dBm (0.0685 W) IEEE 802.11ac (VHT40): 18.28dBm (0.0618 W) IEEE 802.11ac (VHT80): 17.89dBm (0.0522 W)	

Note:

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

2. Channel List:

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

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

3.2 TEST MODES

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

Pretest Mode	Description
Mode 1	TX A Mode / 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 AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 13	TX AC(VHT20) Mode / CH165 (UNII-3)

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 AC(VHT20) Mode / CH165 (UNII-3)

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 13	TX AC(VHT20) Mode / CH165 (UNII-3)

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 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (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 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC (VHT80) Mode / CH155 (UNII-3)

Note:

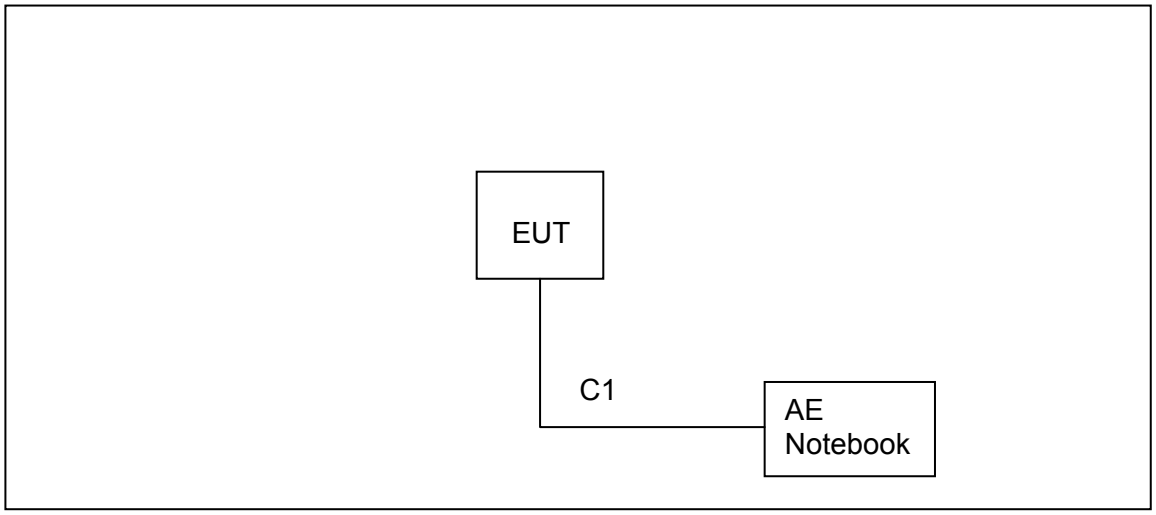
(1) For radiated emission below 1 GHz and AC power line conducted emissions test, the IEEE 802.11AC20channel 165is found to be the worst case and recorded.

3.3 PARAMETERS OF TEST SOFTWARE

UNII-1			
Test Software	MT7668 QA 0.0.1.92		
Test Frequency (MHz)	5180	5200	5240
IEEE 802.11a	1F	1F	1F
IEEE 802.11n (HT20)	1F	1F	1E
IEEE 802.11ac (VHT20)	1F	1F	1F
Test Frequency (MHz)	5190	5230	
IEEE 802.11n (HT40)	22	22	
IEEE 802.11ac (VHT40)	1E	1E	
Test Frequency (MHz)	5210		
IEEE 802.11ac (VHT80)	1F		

UNII-3			
Test Software	MT7668 QA 0.0.1.92		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	1A	1A	1A
IEEE 802.11n (HT20)	1A	1A	1A
IEEE 802.11ac (VHT20)	1A	1A	1A
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	1A	1A	
IEEE 802.11ac (VHT40)	1A	1A	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	1A		

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 SUPPORT UNITS

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

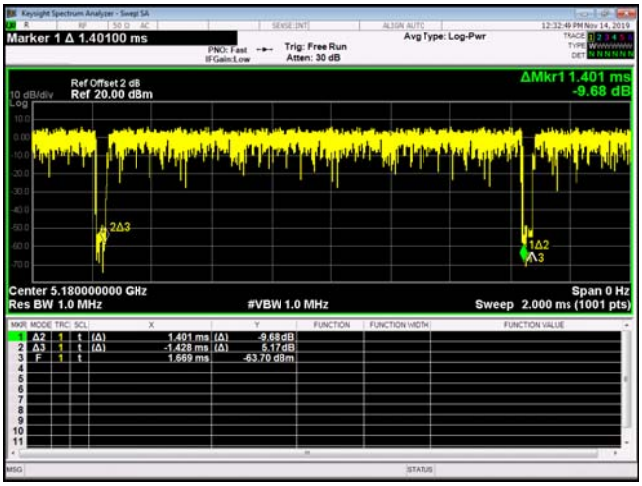
Item	Cable Type	Shielded Type	Ferrite Core	Length
C1	DC Cable	NO	NO	1m

3.6 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage
AC Power Line Conducted Emissions	25°C	53%	DC 5V
Radiated Emissions-9K-30MHz	25°C	60%	DC 5V
Radiated Emissions-30 MHz to 1GHz	24°C	68%	DC 5V
Radiated Emissions-Above 1000 MHz	24°C	68%	DC 5V
Spectrum Bandwidth	25.3°C	44.8%	DC 5V
Maximum Output Power	25.3°C	44.8%	DC 5V
Power Spectral Density	25.3°C	44.8%	DC 5V
Frequency Stability	Normal, Extreme	44.8%	Normal, Extreme

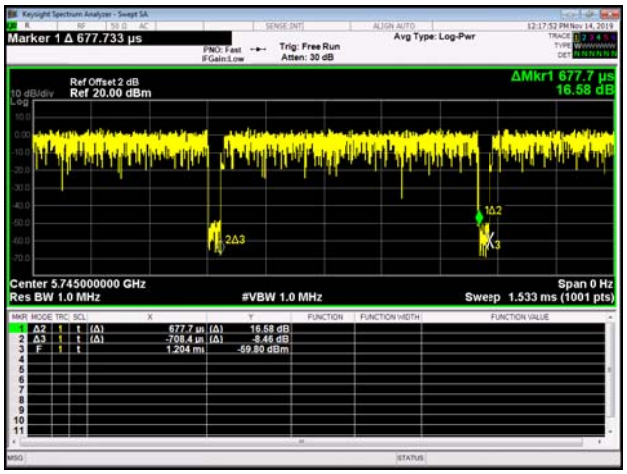
3.7 DUTY CYCLE

IEEE 802.11a



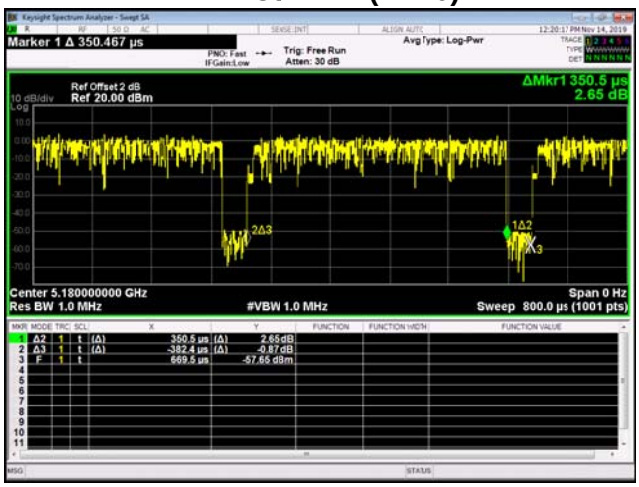
Duty cycle = 1.401ms / 1.428ms = 98.109%
Duty Factor = 10 log(1 / Duty cycle) = 0.00

IEEE 802.11n (HT20)



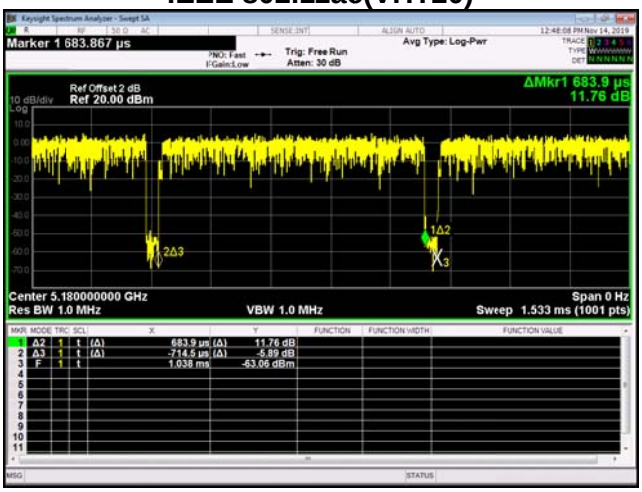
Duty cycle = 0.678 ms / 0.708ms = 95.763%
Duty Factor = 10 log(1 / Duty cycle) = 0.19

IEEE 802.11n (HT40)



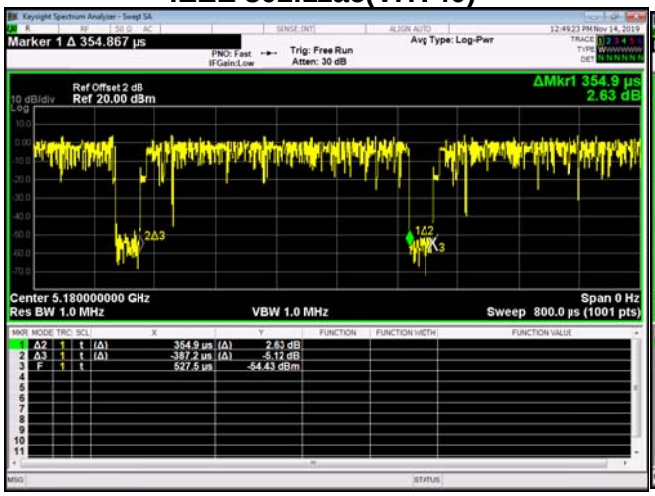
Duty cycle = 0.351ms / 0.382ms = 91.885%
Duty Factor = 10 log(1 / Duty cycle) = 0.37

IEEE 802.11ac(VHT20)



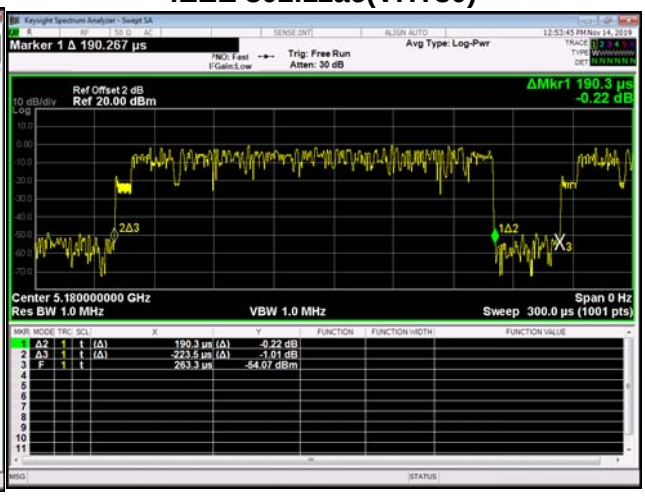
Duty cycle = 0.684ms / 0.715ms = 95.664%
Duty Factor = 10 log(1 / Duty cycle) = 0.19

IEEE 802.11ac(VHT40)



Duty cycle = 0.355ms / 0.387ms = 91.731%
Duty Factor = 10 log(1 / Duty cycle) = 0.37

IEEE 802.11ac(VHT80)



Duty cycle = 0.190ms / 0.224ms = 84.821%
Duty Factor = 10 log(1 / Duty cycle) = 0.71

If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered, the Duty Factor =10 log(1/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	0.37
IEEE 802.11ac (VHT20)	IEEE 802.11ac (VHT40)	IEEE 802.11ac (VHT80)
0.19	0.37	0.71

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

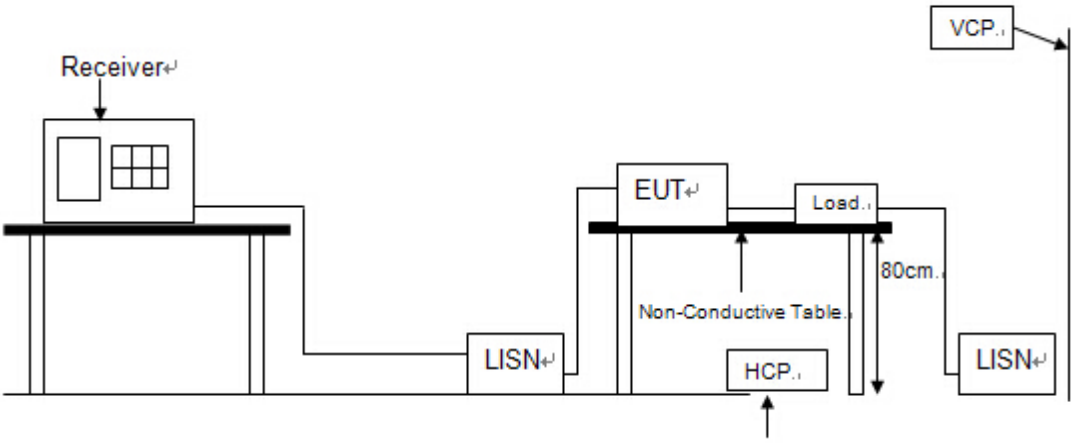
4.2 TEST PROCEDURE

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-system technik	MTS-IMP-136	261115-010-0024	12/16/2019
2	EMI Test Receiver	R&S	ESCI	101308	12/16/2019
3	LISN	AFJ	LS16	16011103219	12/16/2019
4	LISN	Schwarzbeck	NSLK 8127	8127-432	12/16/2019
5	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

4.4 TESTSETUP



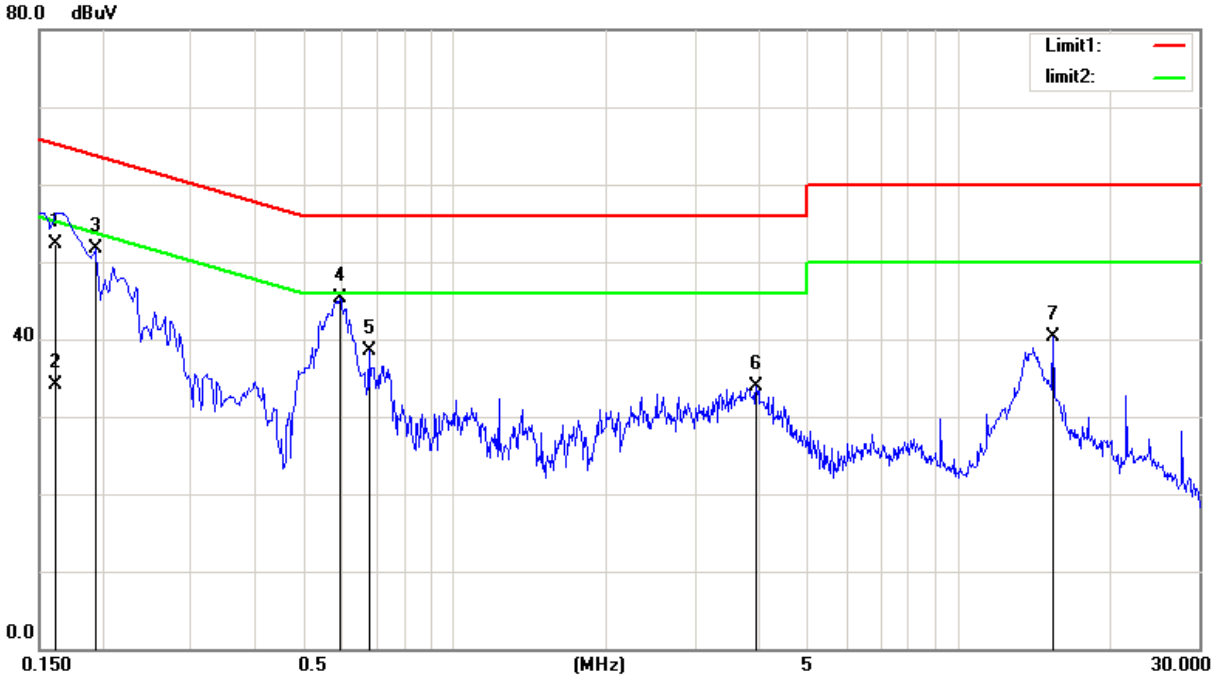
4.5 EUT OPERATION CONDITIONS

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 AC(VHT20) Mode / CH165 (UNII-3)

Line

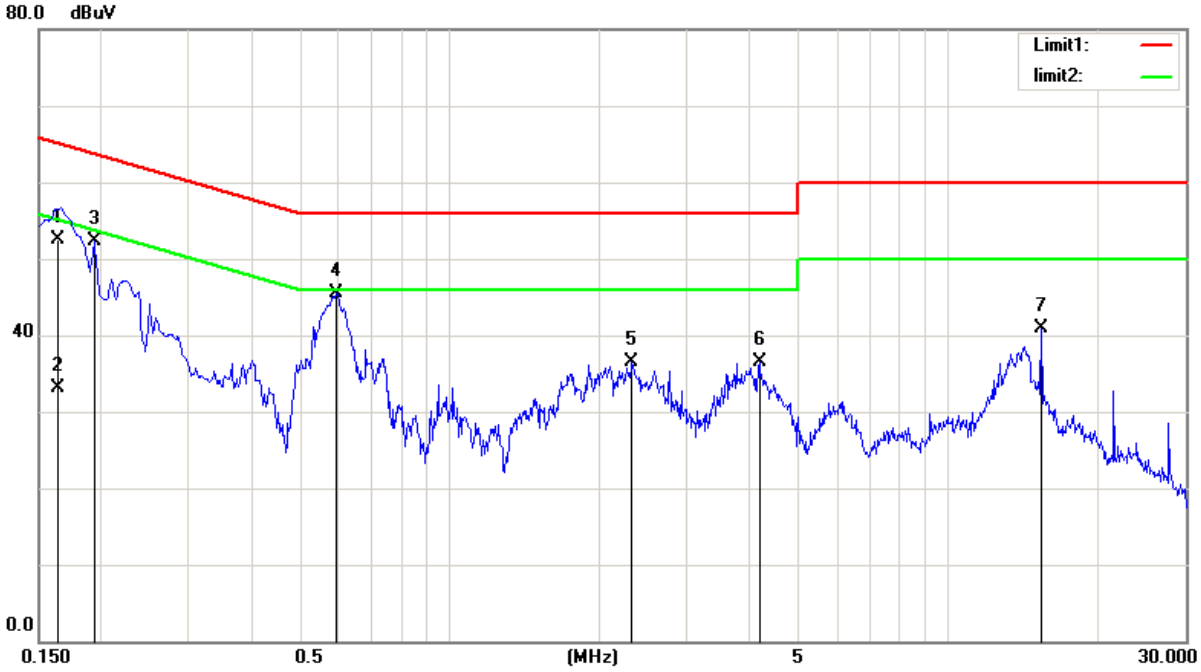


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1615	40.86	11.39	52.25	65.38	-13.13	QP
2	0.1615	22.63	11.39	34.02	55.38	-21.36	AVG
3	0.1940	40.45	11.17	51.62	63.86	-12.24	peak
4	0.5940	35.10	10.15	45.25	56.00	-10.75	peak
5	0.6780	28.45	10.13	38.58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

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

Test Mode:	TX AC(VHT20) Mode / CH165 (UNII-3)

Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1632	41.15	11.38	52.53	65.29	-12.76	QP
2	0.1632	21.74	11.38	33.12	55.29	-22.17	AVG
3	0.1940	41.20	11.17	52.37	63.86	-11.49	peak
4	0.5940	35.26	10.15	45.41	56.00	-10.59	peak
5	2.3260	26.33	10.12	36.45	56.00	-19.55	peak
6	4.1820	26.37	10.13	36.50	56.00	-19.50	peak
7	15.4180	30.67	10.17	40.84	60.00	-19.16	peak

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

5. RADIATED EMISSIONSTEST

5.1 LIMIT

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

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

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

Note:

(1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E = \frac{1000000\sqrt{30P}}{3}$ μV/m, where P is the eirp (Watts)

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

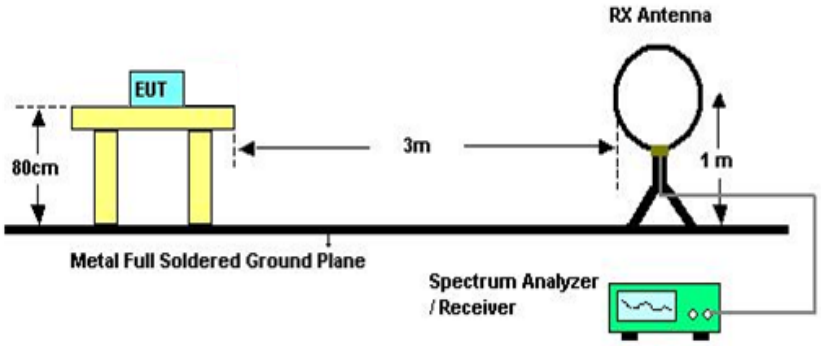
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1GHz)
i. The test result is calculated as the following:
(1) Result = Reading + Correct Factor
(2) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain + Attenuator
(3) Margin = Result - Limit

5.3 MEASUREMENT INSTRUMENTS LIST

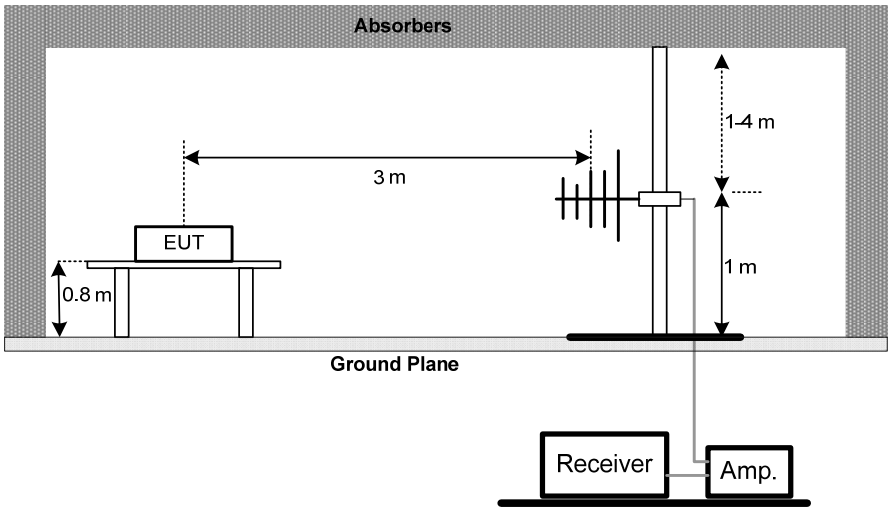
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	101307	2019/12/16
2	Spectrum Analyzer	Agilent	E4407B	US40240708	11/20/2019
3	Spectrum analyzer	R&S	FSU	1166.1660.26	2019/12/16
4	Loop antenna	TESEQ	HLA6120	20129	2019/12/16
5	Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	2019/12/16
6	Double Ridged Horn Antenna	Schwarzbeck	BBHA9120D	9120D 1065	2019/12/16
7	Horn Antenna	Schwarzbeck	BBHA 9170	9170 1248	2019/12/16
8	Pre-amplifier	A.H.	PAM-1840VH	562	2019/12/16
9	Pre-amplifier	R&S	AFS33-18002 650-30-8P-44	SEL0080	2019/12/16
10	Pre-Amplifier	HP	8449B	3274A06298	2019/12/16
11	RF Cable	R&S	R01	10403	2019/12/16
12	RF Cable	R&S	R02	10512	2019/12/16

5.4 TESTSETUP

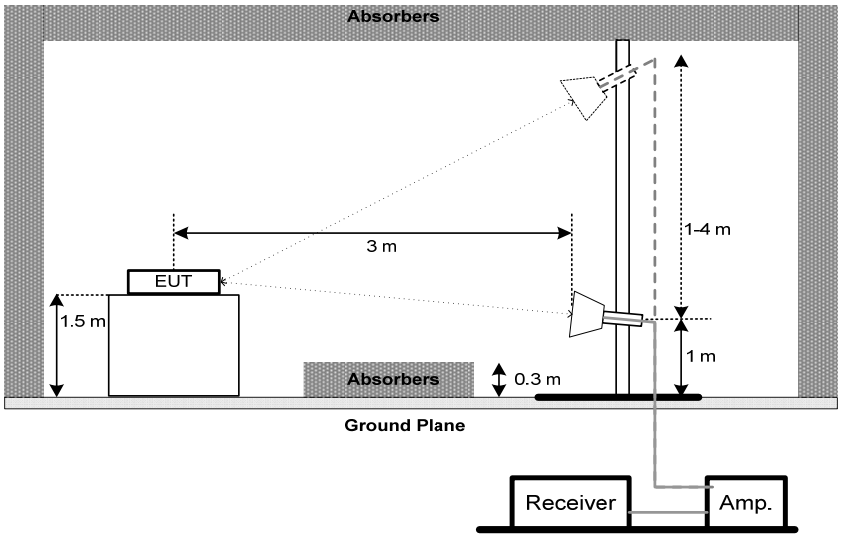
9 kHz to 30 MHz



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 AC(VHT20) Mode / CH165 (UNII-3)

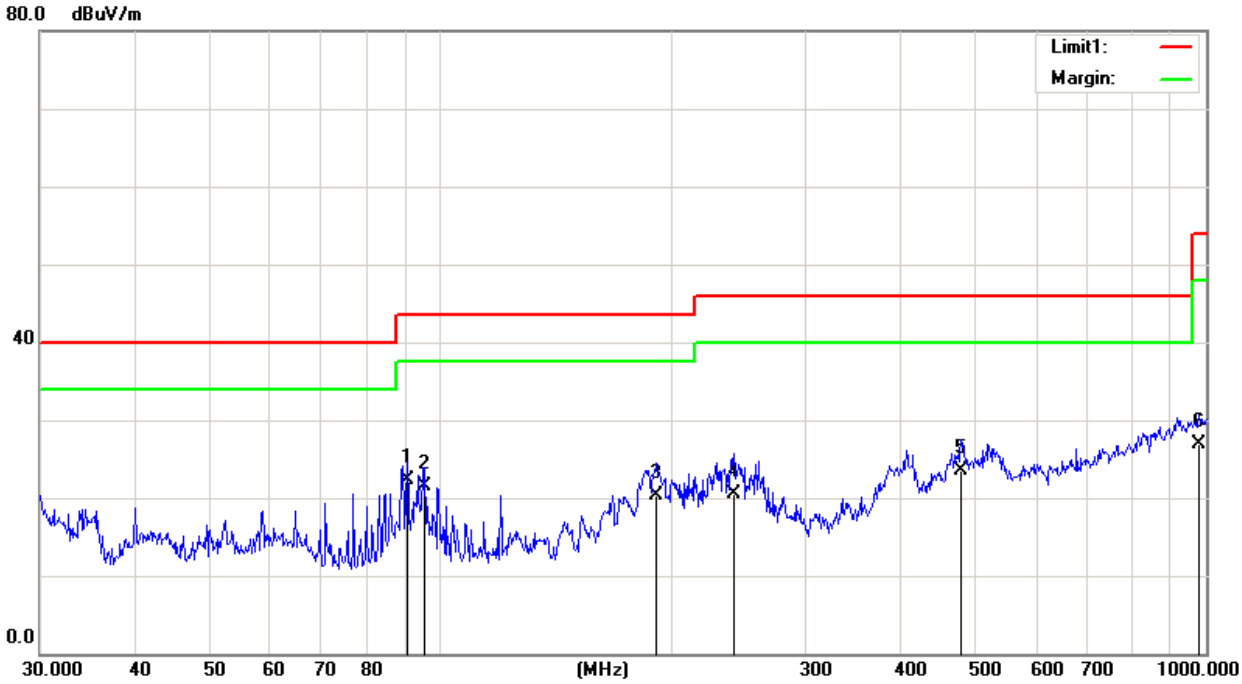
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

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 (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 AC(VHT20) Mode / CH165 (UNII-3)

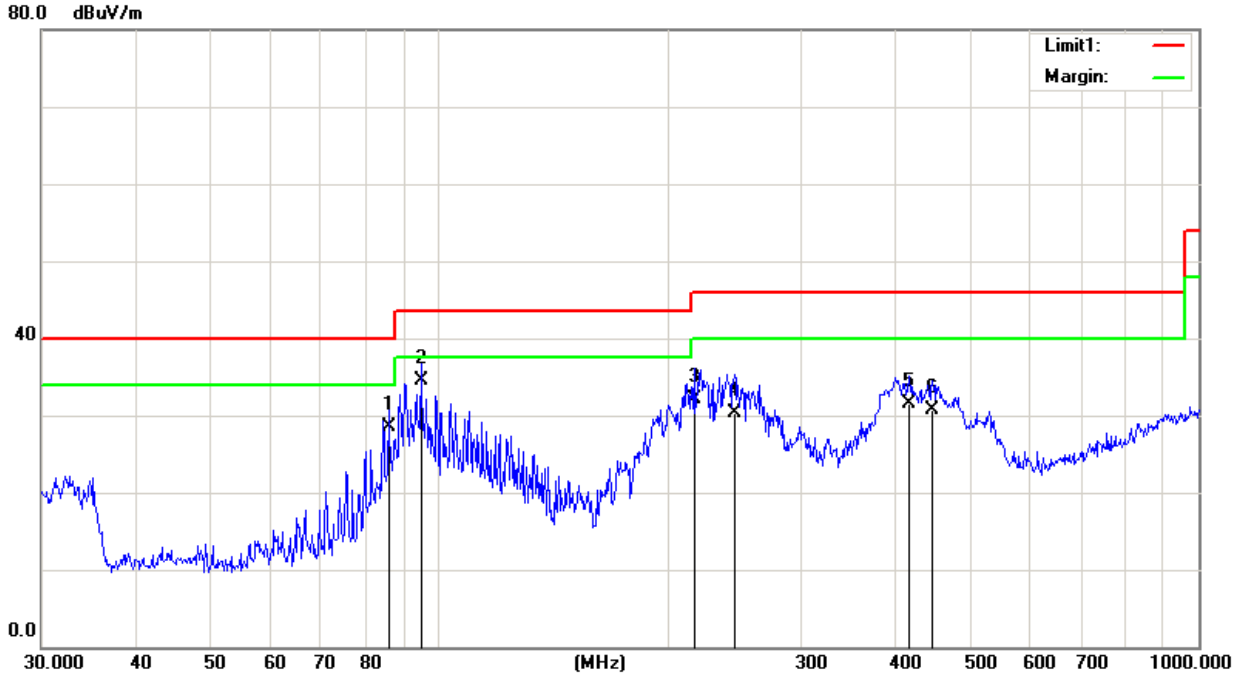
Vertical



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

Test Mode:	TX AC(VHT20) Mode / CH165 (UNII-3)

Horizontal

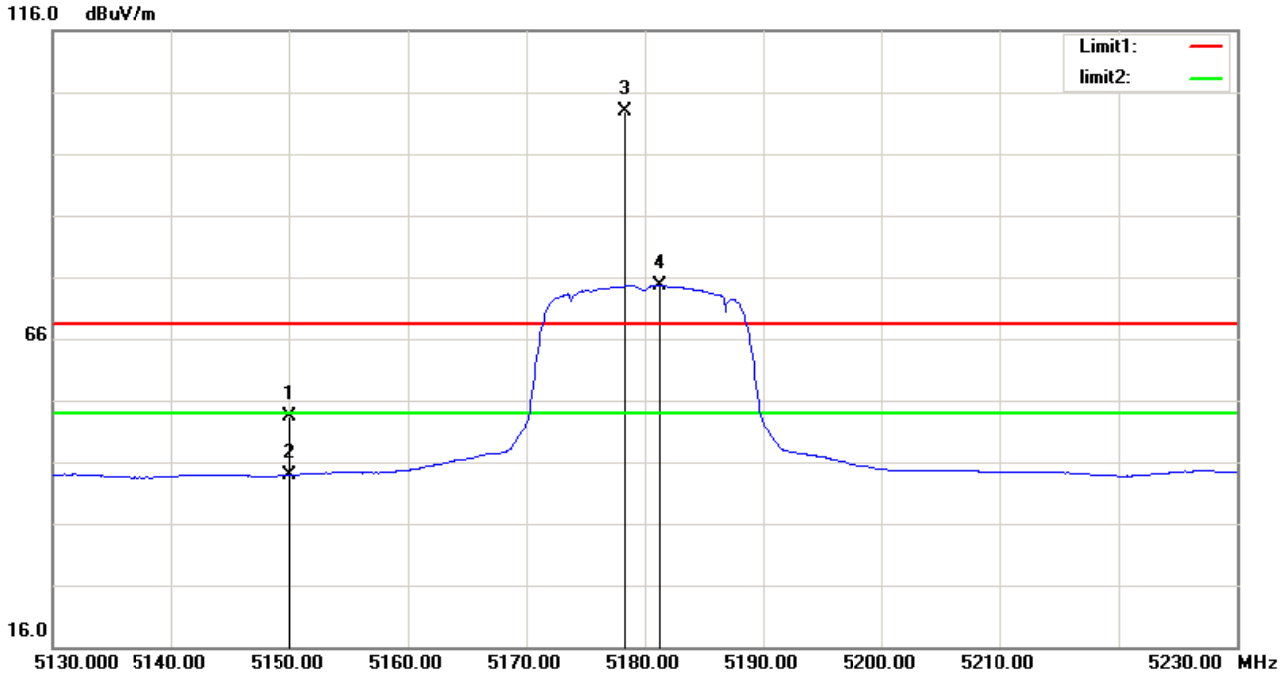


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	85.8983	45.78	-17.30	28.48	40.00	-11.52	QP
2	94.7600	51.33	-16.82	34.51	43.50	-8.99	QP
3	216.7828	41.21	-9.20	32.01	46.00	-13.99	QP
4	245.0900	36.35	-6.13	30.22	46.00	-15.78	QP
5	416.1791	38.65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

5.8 TEST RESULTS - ABOVE1000 MHz(BAND EDGE)

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

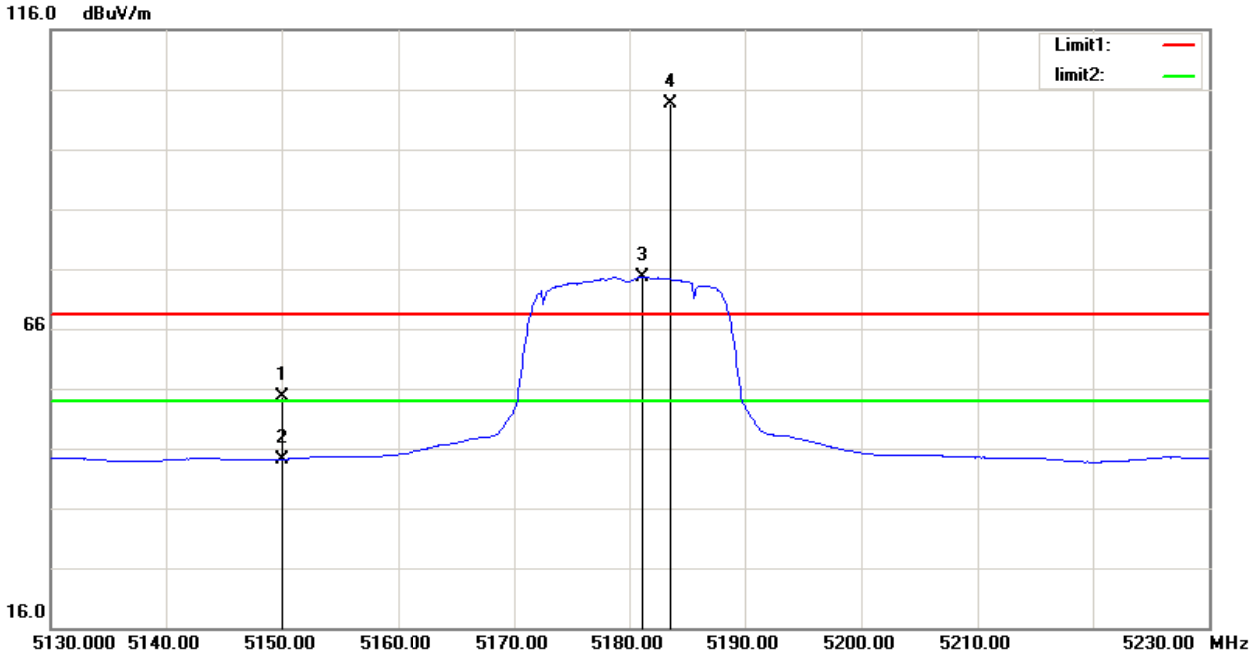
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	45.31	8.10	53.41	68.30	-14.89	peak
2	5150.000	35.72	8.10	43.82	54.00	-10.18	AVG
3	5178.397	94.68	8.24	102.92	/	/	peak
4	5181.202	66.51	8.24	74.75	/	/	AVG

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

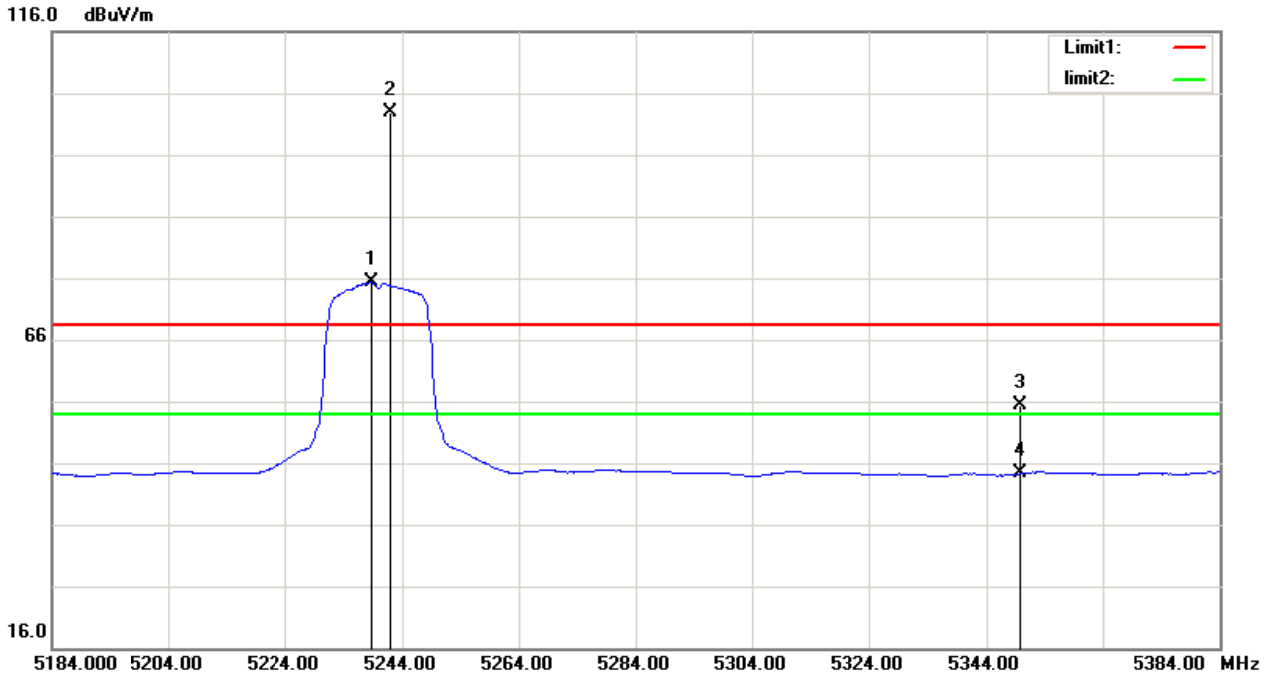
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	46.53	8.10	54.63	68.30	-13.67	peak
2	5150.000	36.11	8.10	44.21	54.00	-9.79	AVG
3	5181.102	66.45	8.24	74.69	/	/	AVG
4	5183.507	95.28	8.26	103.54	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

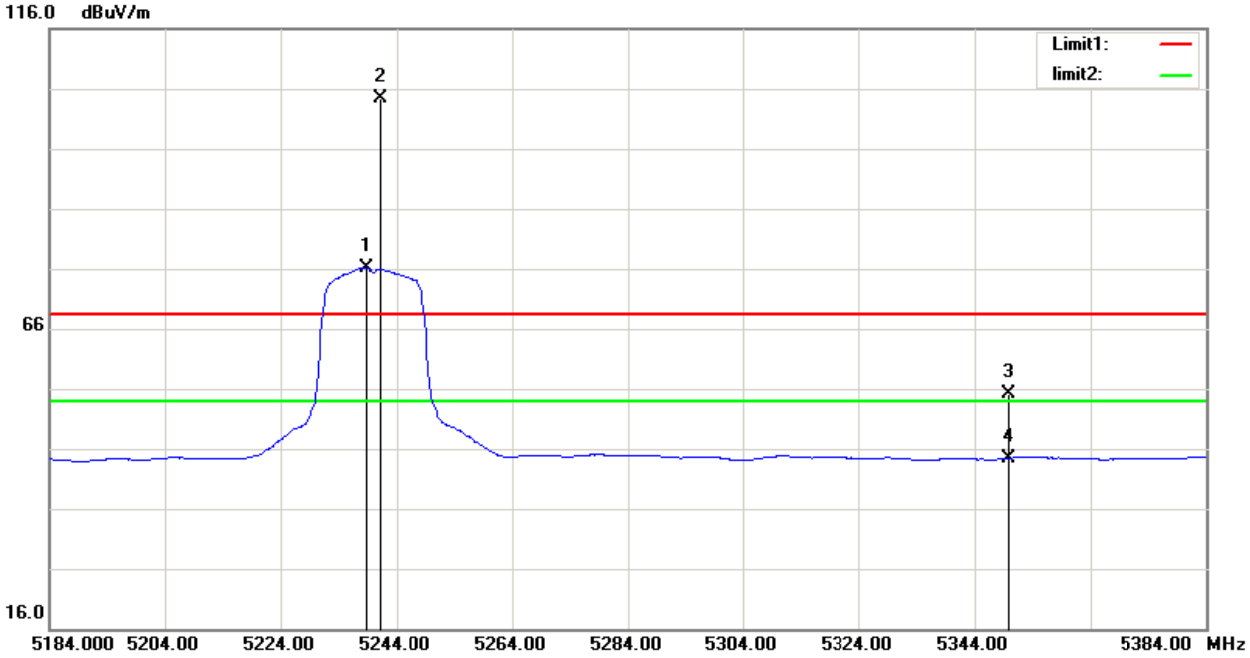
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5238.709	66.79	8.51	75.30	/	/	AVG
2	5241.916	94.42	8.53	102.95	/	/	peak
3	5350.000	46.45	9.03	55.48	68.30	-12.82	peak
4	5350.000	35.26	9.03	44.29	54.00	-9.71	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

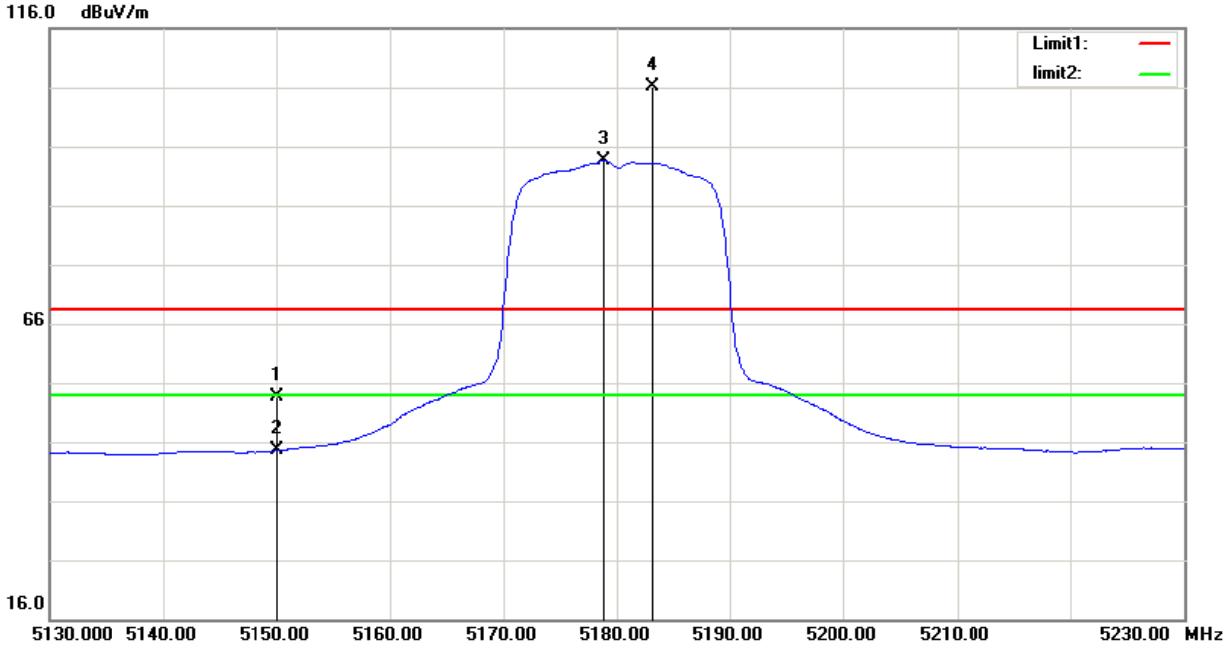
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5238.709	67.71	8.51	76.22	/	/	AVG
2	5241.315	95.84	8.53	104.37	/	/	peak
3	5350.000	45.99	9.03	55.02	68.30	-13.28	peak
4	5350.000	35.45	9.03	44.48	54.00	-9.52	AVG

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

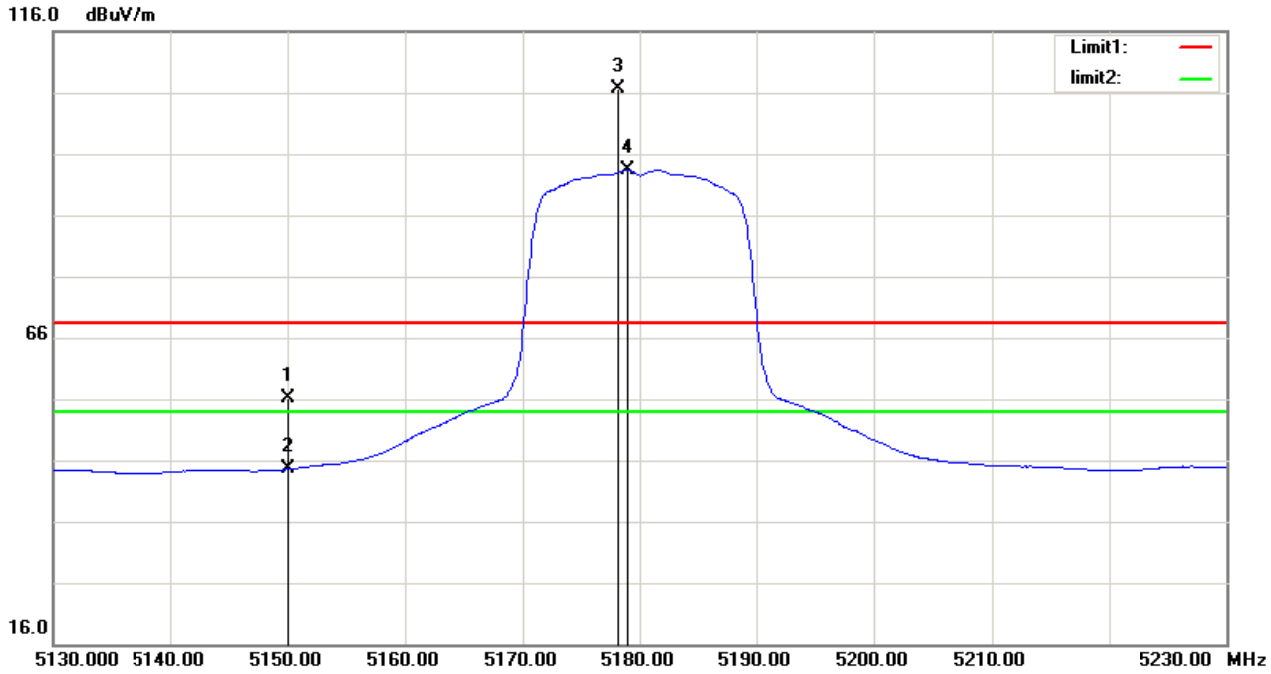
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	45.52	8.10	53.62	68.30	-14.68	peak
2	5150.000	36.42	8.10	44.52	54.00	-9.48	AVG
3	5178.898	85.42	8.24	93.66	/	/	AVG
4	5183.106	97.83	8.26	106.09	/	/	peak

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

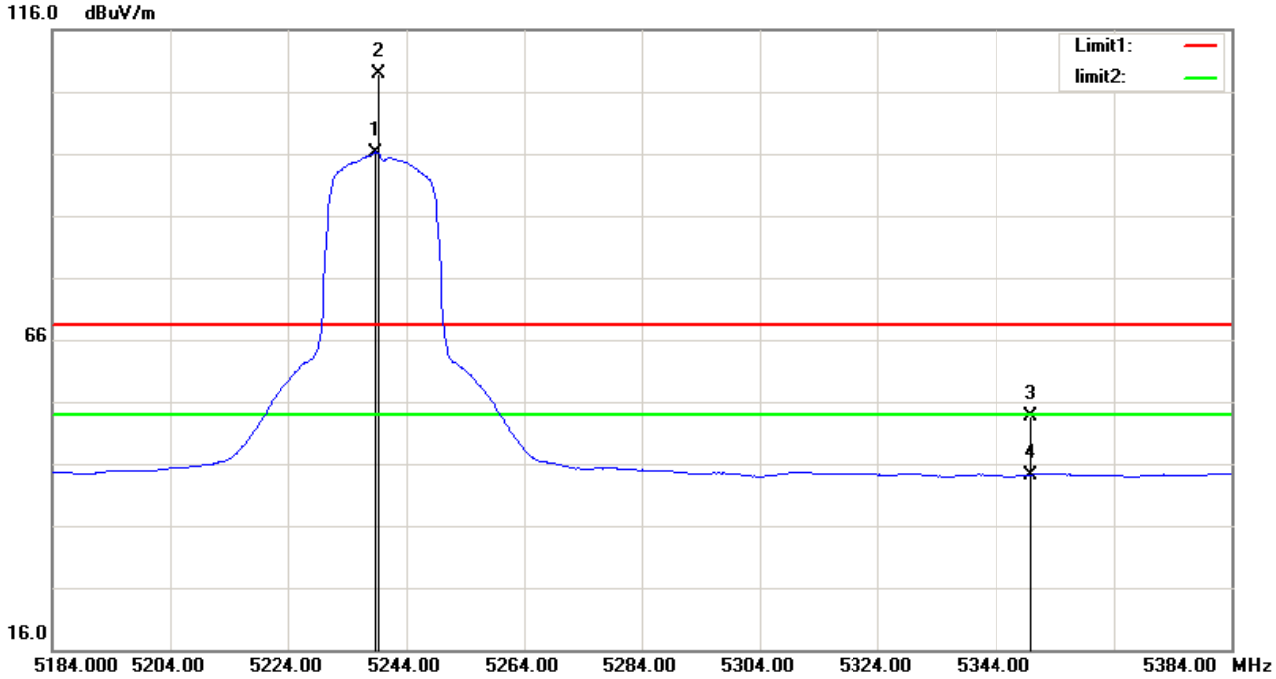
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	48.11	8.10	56.21	68.30	-12.09	peak
2	5150.000	36.45	8.10	44.55	54.00	-9.45	AVG
3	5178.196	98.32	8.24	106.56	/	/	peak
4	5178.998	85.11	8.24	93.35	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

Vertical

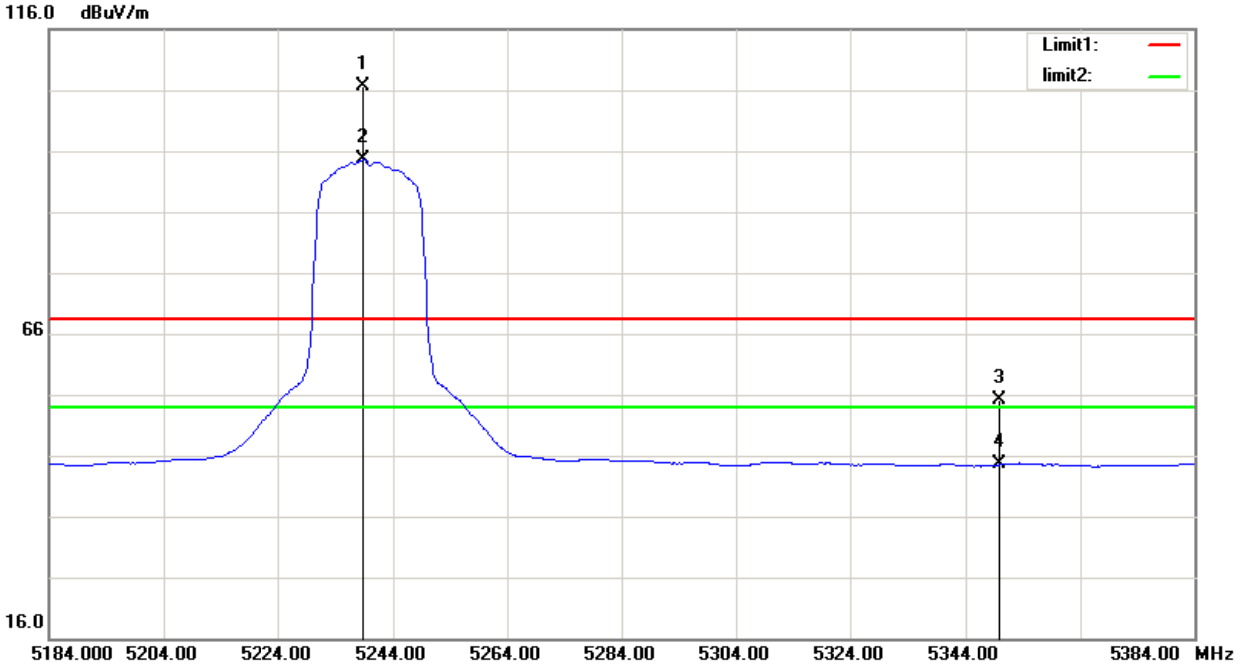


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5238.910	87.74	8.51	96.25	/	/	AVG
2	5239.311	100.38	8.52	108.90	/	/	peak
3	5350.000	44.51	9.03	53.54	68.30	-14.76	peak
4	5350.000	35.19	9.03	44.22	54.00	-9.78	AVG

.

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

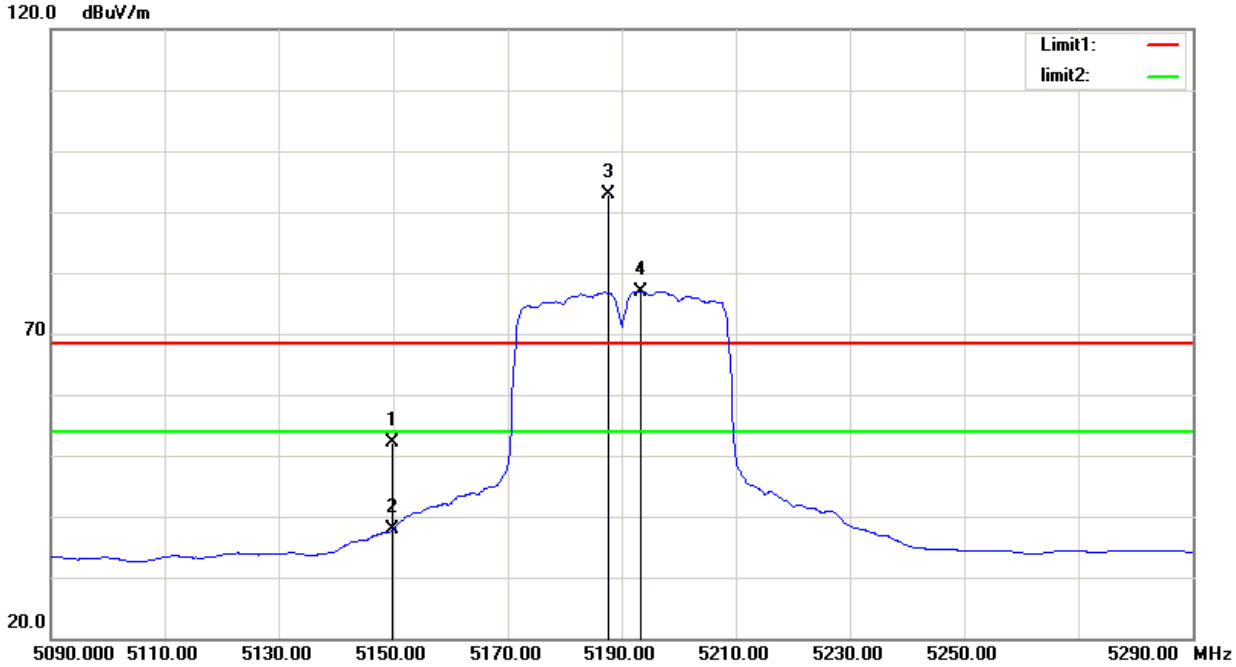
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5238.709	98.04	8.51	106.55	/	/	peak
2	5238.910	86.09	8.51	94.60	/	/	AVG
3	5350.000	46.12	9.03	55.15	68.30	-13.15	peak
4	5350.000	35.49	9.03	44.52	54.00	-9.48	AVG

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

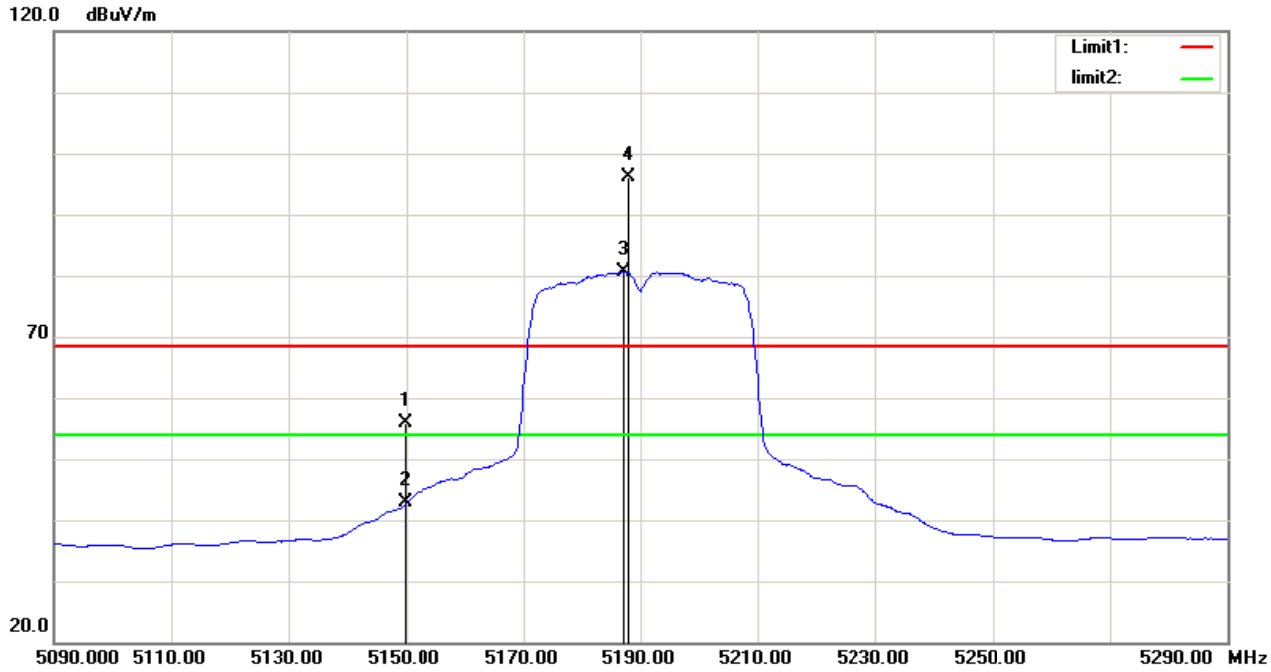
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	54.11	-1.90	52.21	68.30	-16.09	peak
2	5150.000	39.90	-1.90	38.00	54.00	-16.00	AVG
3	5187.796	94.56	-1.73	92.83	/	/	peak
4	5193.407	78.70	-1.70	77.00	/	/	AVG

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

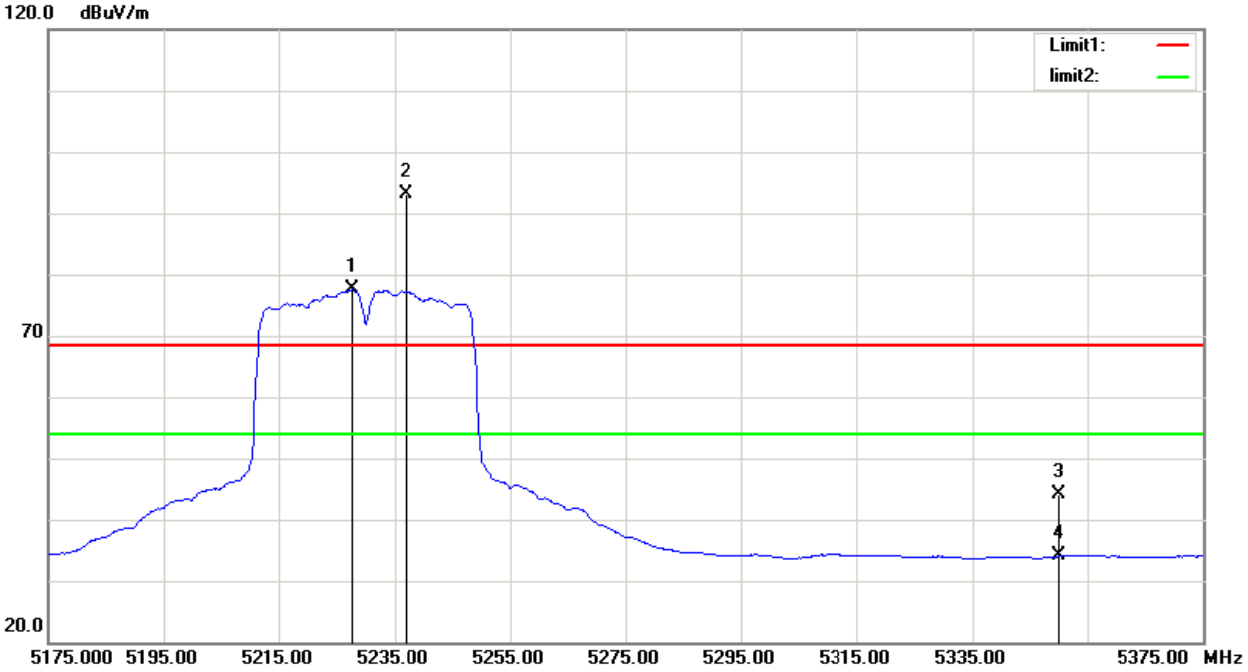
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	57.87	-1.90	55.97	68.30	-12.33	peak
2	5150.000	44.71	-1.90	42.81	54.00	-11.19	AVG
3	5187.194	82.32	-1.73	80.59	/	/	AVG
4	5187.996	97.90	-1.73	96.17	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

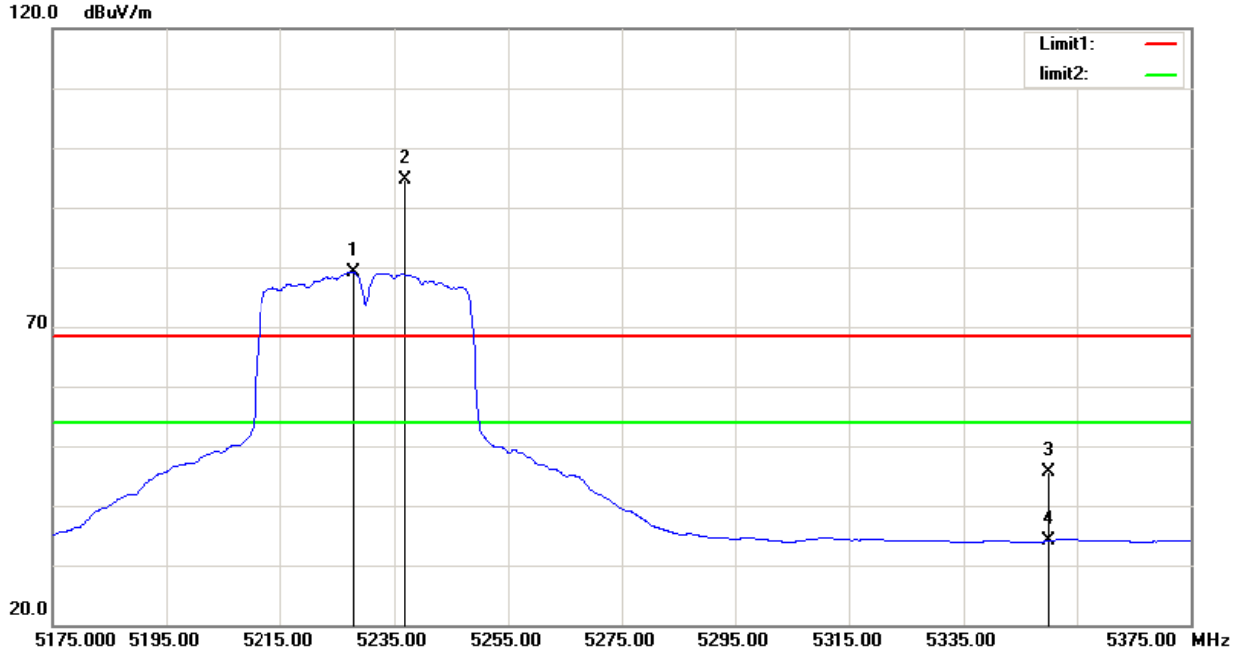
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5227.705	79.04	-1.53	77.51	/	/	AVG
2	5237.124	94.55	-1.50	93.05	/	/	peak
3	5350.000	45.07	-0.97	44.10	68.30	-24.20	peak
4	5350.000	35.03	-0.97	34.06	54.00	-19.94	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

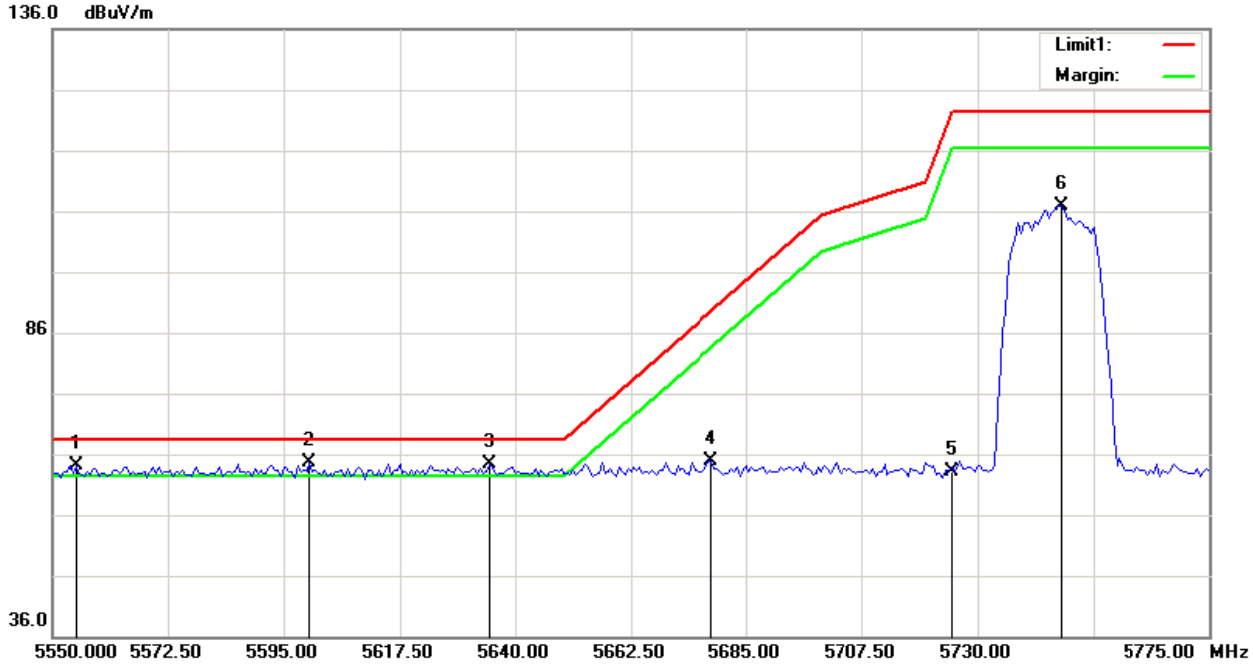
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5227.906	80.62	-1.53	79.09	/	/	AVG
2	5237.124	96.09	-1.50	94.59	/	/	peak
3	5350.000	46.63	-0.97	45.66	68.30	-22.64	peak
4	5350.000	35.12	-0.97	34.15	54.00	-19.85	AVG

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

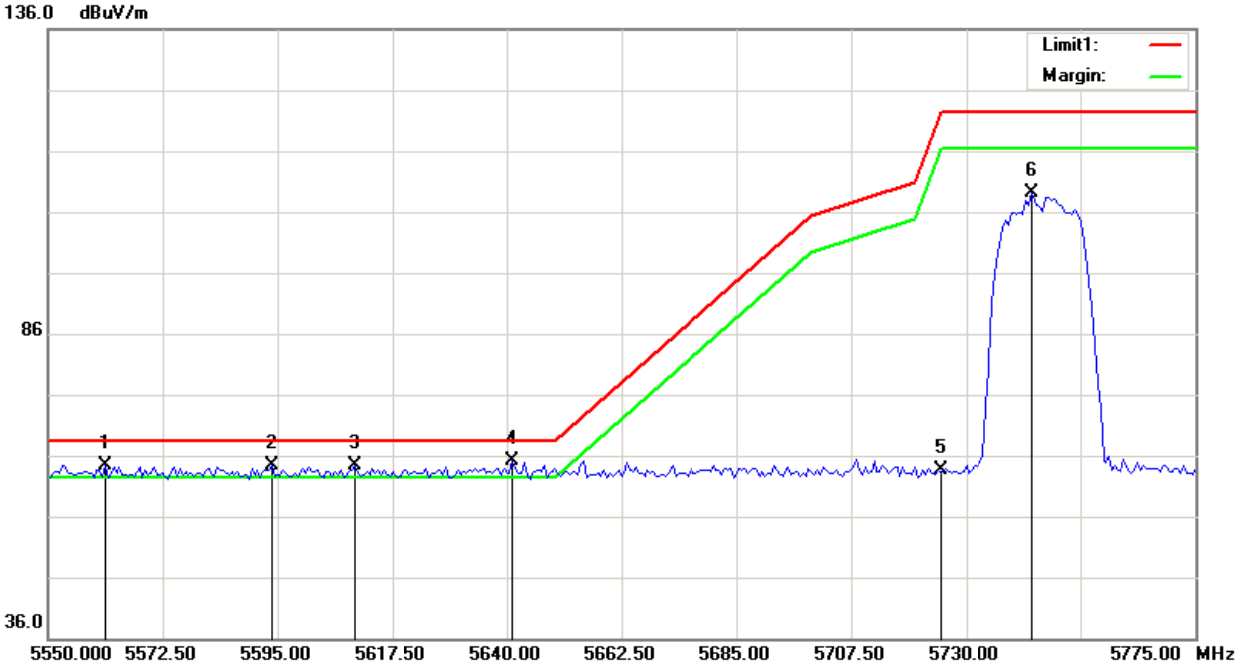
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5554.500	23.82	40.24	64.06	68.30	-4.24	peak
2	5600.063	24.35	40.26	64.61	68.30	-3.69	peak
3	5634.938	24.03	40.28	64.31	68.30	-3.99	peak
4	5678.250	24.48	40.30	64.78	89.20	-24.42	peak
5	5725.000	22.71	40.31	63.02	122.30	-59.28	peak
6	5746.313	66.61	40.32	106.93	122.30	-15.37	peak

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

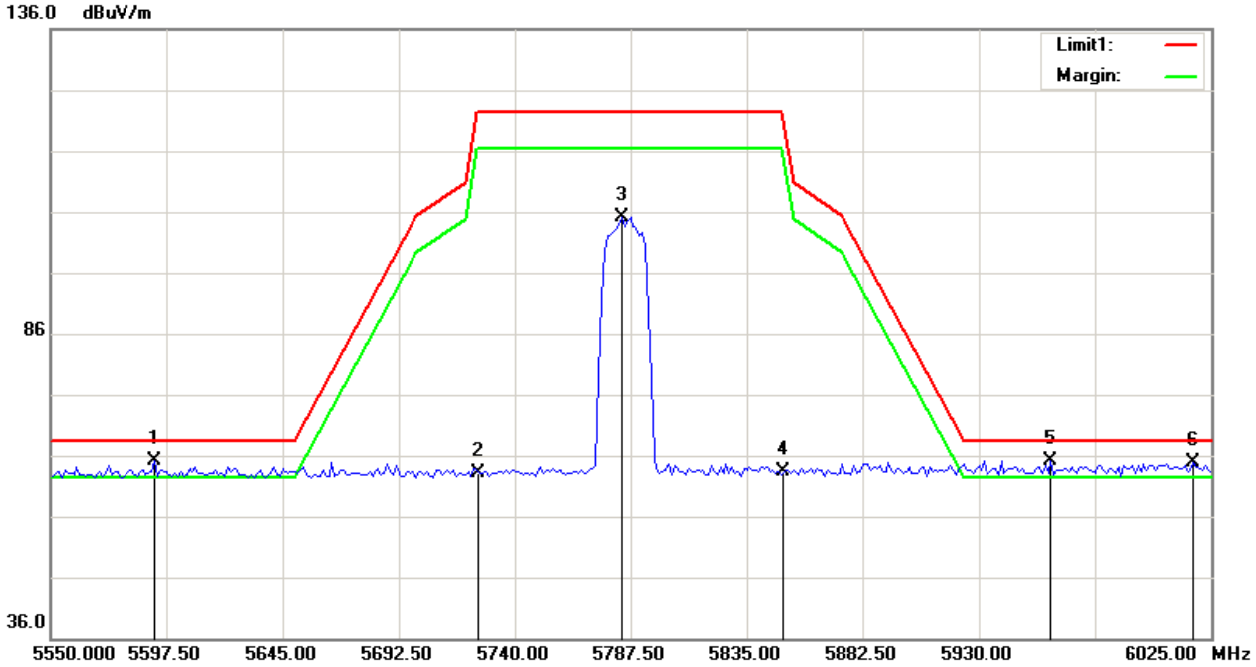
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5561.250	24.20	40.25	64.45	68.30	-3.85	peak
2	5593.875	24.16	40.26	64.42	68.30	-3.88	peak
3	5610.188	24.04	40.27	64.31	68.30	-3.99	peak
4	5641.125	24.81	40.28	65.09	68.30	-3.21	peak
5	5725.000	23.32	40.31	63.63	122.30	-58.67	peak
6	5742.938	68.83	40.32	109.15	122.30	-13.15	peak

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

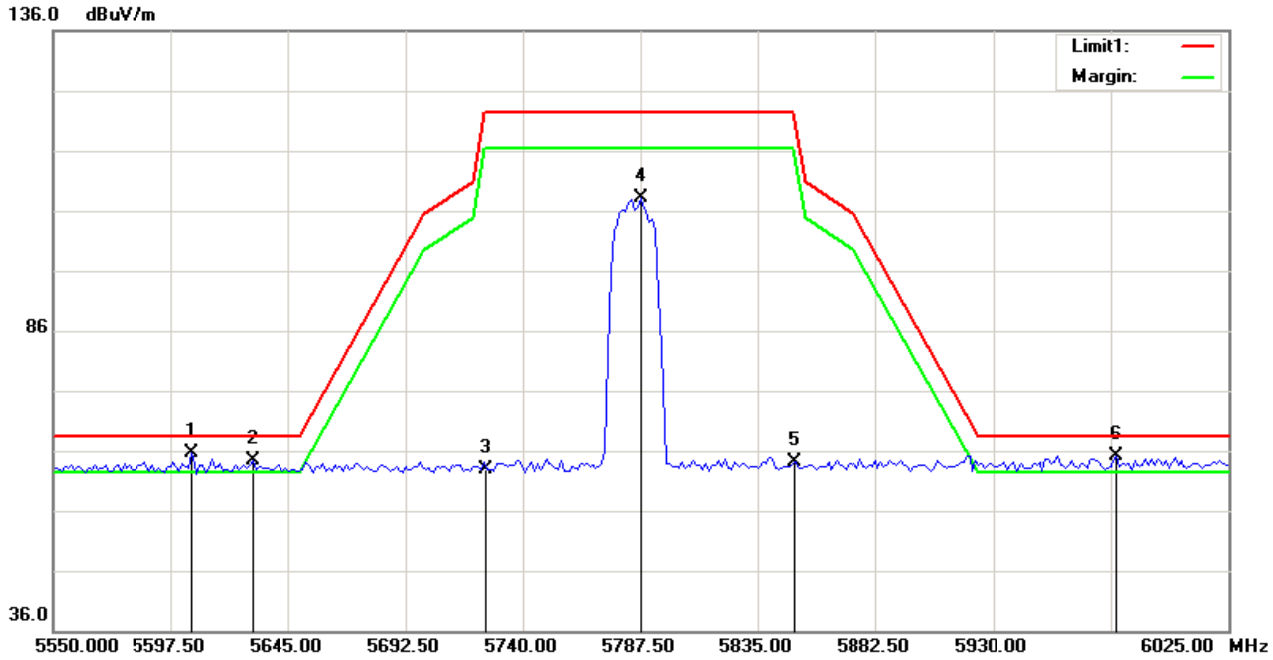
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5592.750	24.81	40.26	65.07	68.30	-3.23	peak
2	5725.000	22.70	40.31	63.01	122.30	-59.29	peak
3	5783.938	64.90	40.34	105.24	122.30	-17.06	peak
4	5850.000	23.03	40.37	63.40	122.30	-58.90	peak
5	5959.688	24.69	40.42	65.11	68.30	-3.19	peak
6	6017.875	24.40	40.52	64.92	68.30	-3.38	peak

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

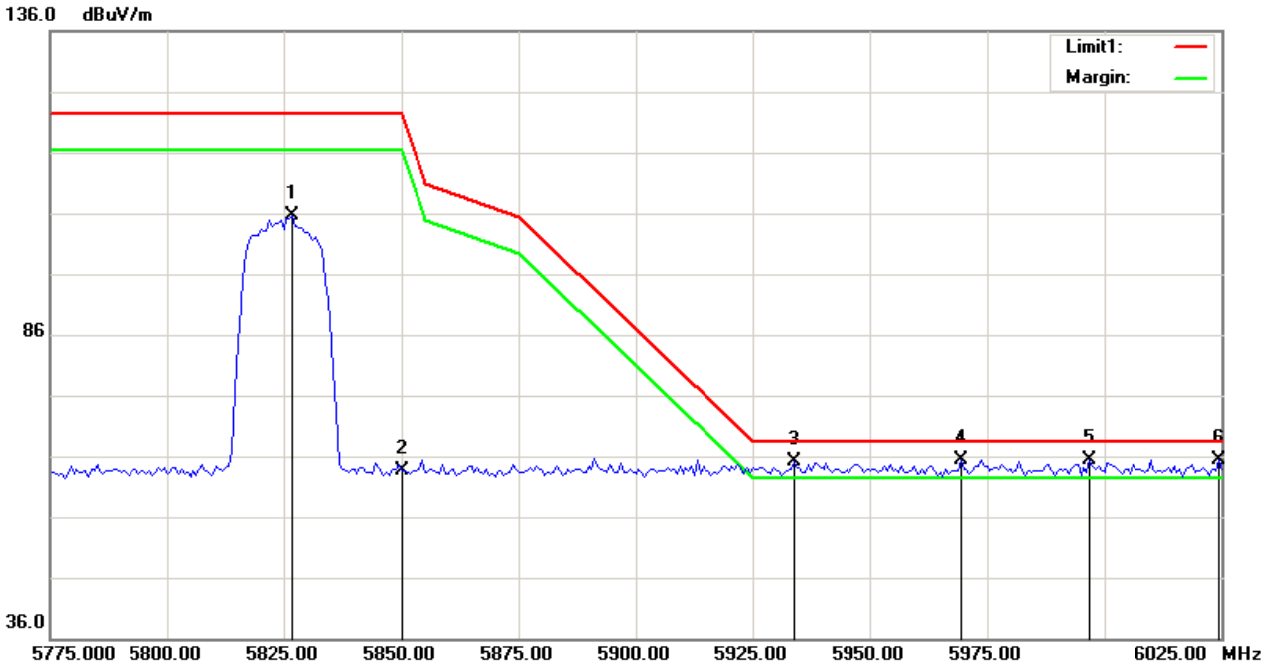
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5605.813	25.37	40.27	65.64	68.30	-2.66	peak
2	5630.750	24.16	40.28	64.44	68.30	-3.86	peak
3	5725.000	22.60	40.31	62.91	122.30	-59.39	peak
4	5787.500	67.86	40.34	108.20	122.30	-14.10	peak
5	5850.000	23.78	40.37	64.15	122.30	-58.15	peak
6	5979.875	24.81	40.42	65.23	68.30	-3.07	peak

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

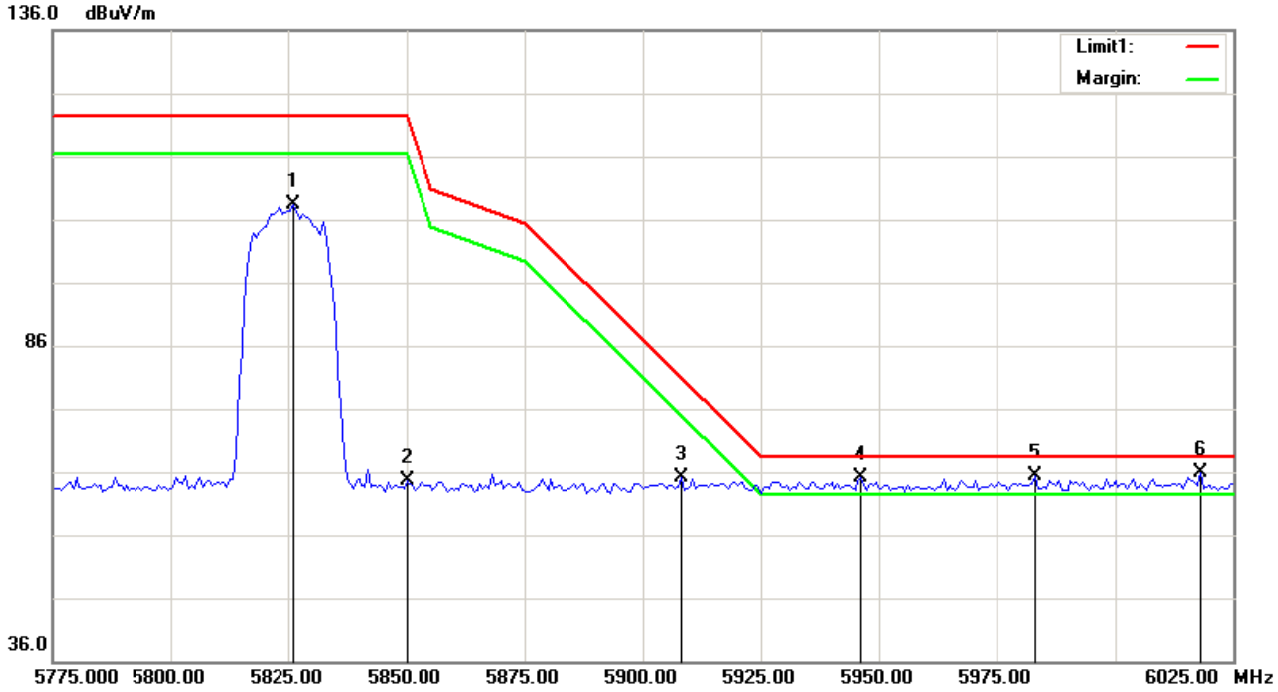
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5826.875	65.20	40.36	105.56	122.30	-16.74	peak
2	5850.000	23.30	40.37	63.67	122.30	-58.63	peak
3	5933.750	24.79	40.41	65.20	68.30	-3.10	peak
4	5969.375	25.06	40.41	65.47	68.30	-2.83	peak
5	5996.875	25.03	40.43	65.46	68.30	-2.84	peak
6	6024.375	24.72	40.56	65.28	68.30	-3.02	peak

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

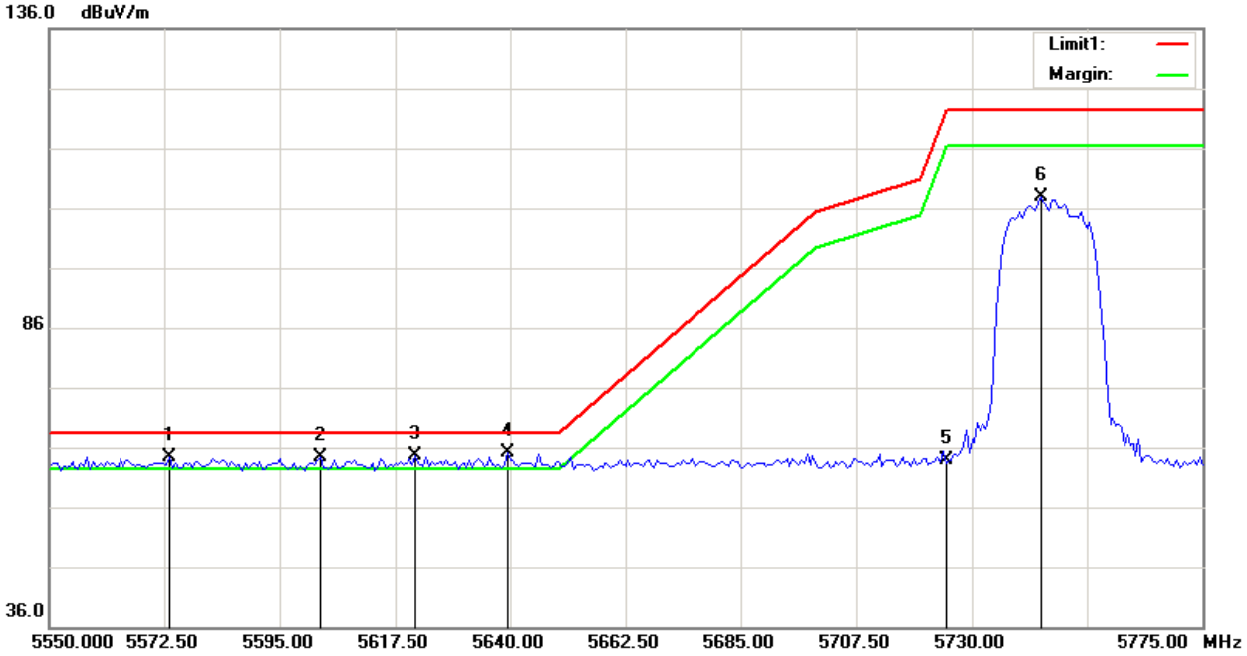
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5826.250	68.07	40.36	108.43	122.30	-13.87	peak
2	5850.000	24.19	40.37	64.56	122.30	-57.74	peak
3	5908.125	24.78	40.39	65.17	80.79	-15.62	peak
4	5946.250	24.61	40.41	65.02	68.30	-3.28	peak
5	5983.125	24.83	40.43	65.26	68.30	-3.04	peak
6	6018.125	25.44	40.52	65.96	68.30	-2.34	peak

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

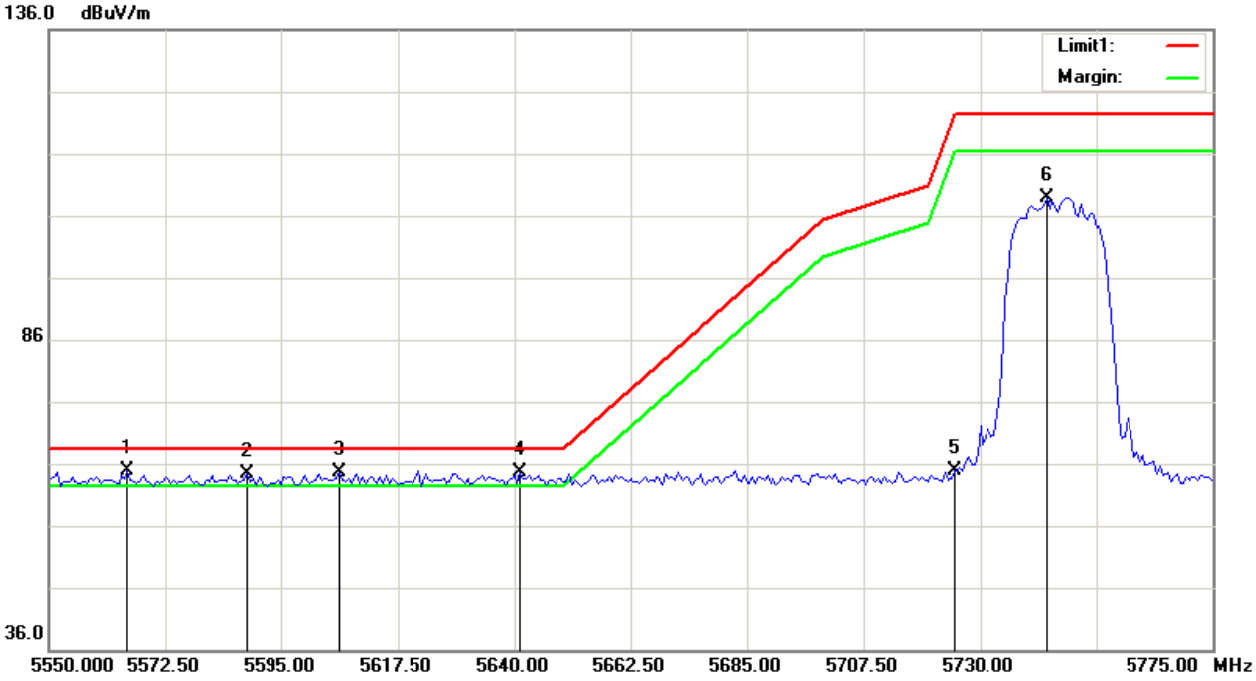
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5573.625	24.21	40.25	64.46	68.30	-3.84	peak
2	5602.875	24.08	40.26	64.34	68.30	-3.96	peak
3	5621.438	24.43	40.27	64.70	68.30	-3.60	peak
4	5639.438	24.77	40.27	65.04	68.30	-3.26	peak
5	5725.000	23.63	40.31	63.94	122.30	-58.36	peak
6	5743.500	67.44	40.32	107.76	122.30	-14.54	peak

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

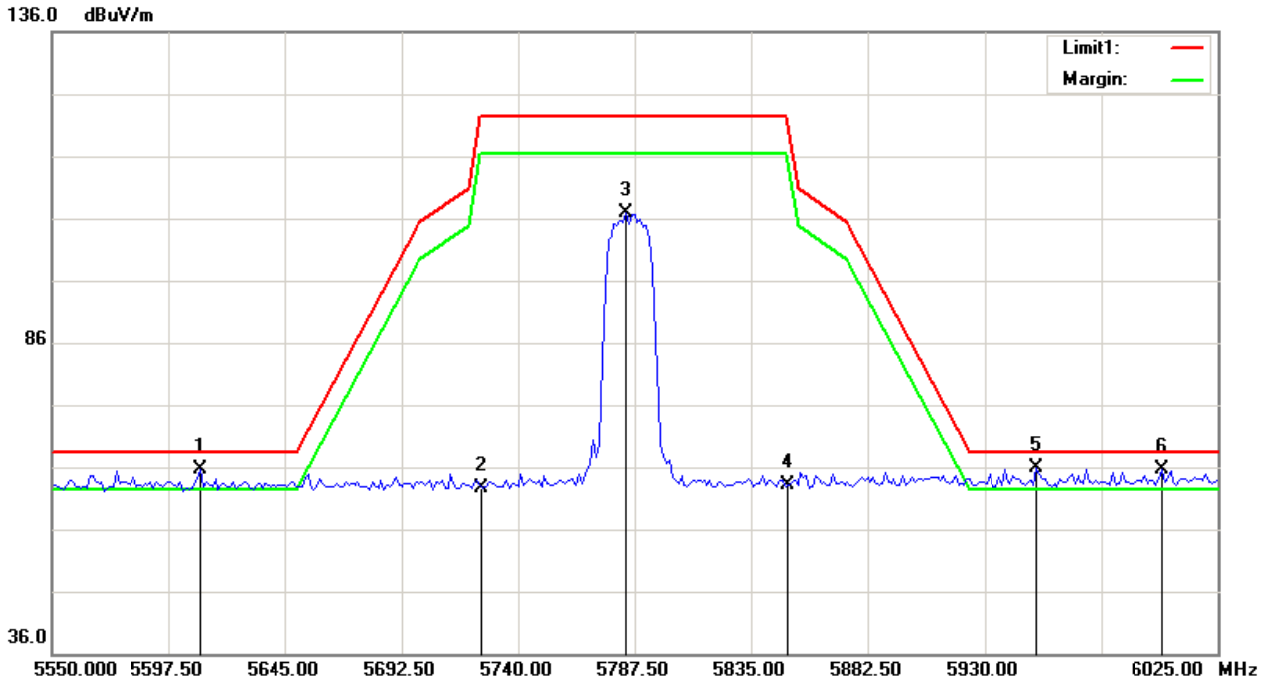
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5565.188	24.69	40.24	64.93	68.30	-3.37	peak
2	5588.250	24.09	40.25	64.34	68.30	-3.96	peak
3	5606.250	24.25	40.27	64.52	68.30	-3.78	peak
4	5641.125	24.26	40.28	64.54	68.30	-3.76	peak
5	5725.000	24.59	40.31	64.90	122.30	-57.40	peak
6	5742.938	68.65	40.32	108.97	122.30	-13.33	peak

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

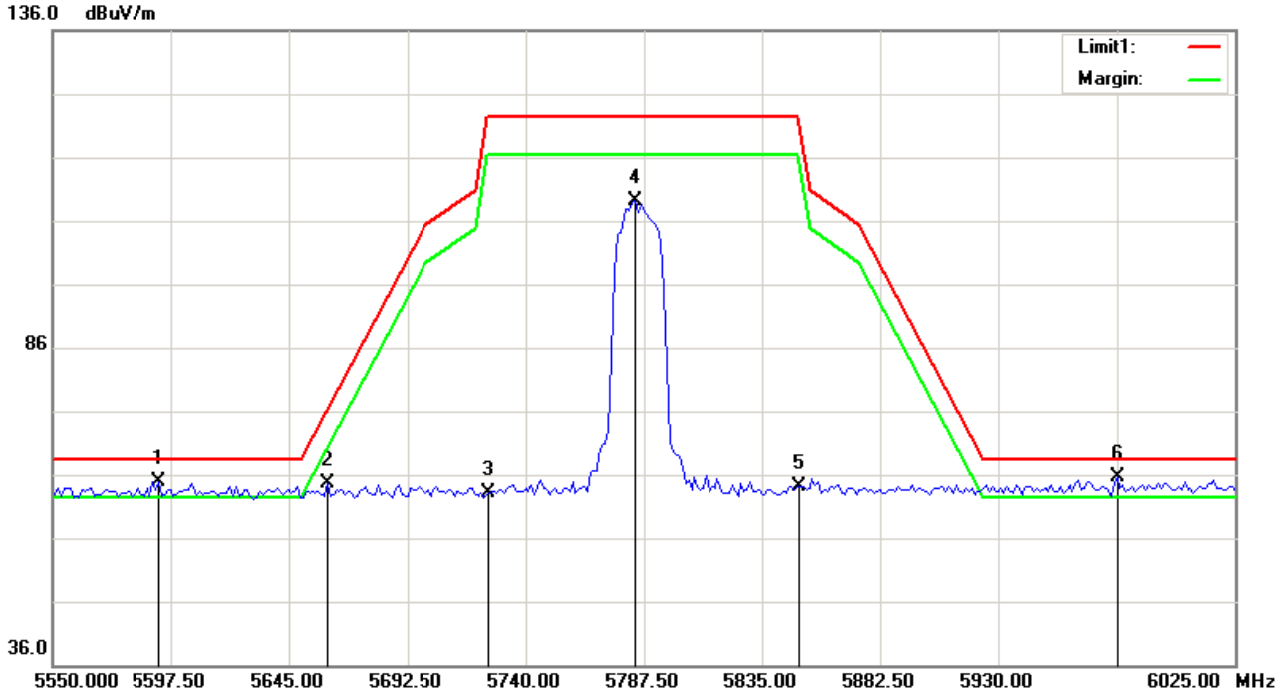
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5610.563	25.34	40.27	65.61	68.30	-2.69	peak
2	5725.000	22.42	40.31	62.73	122.30	-59.57	peak
3	5783.938	66.54	40.34	106.88	122.30	-15.42	peak
4	5850.000	22.69	40.37	63.06	122.30	-59.24	peak
5	5951.375	25.39	40.41	65.80	68.30	-2.50	peak
6	6002.438	25.25	40.44	65.69	68.30	-2.61	peak

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

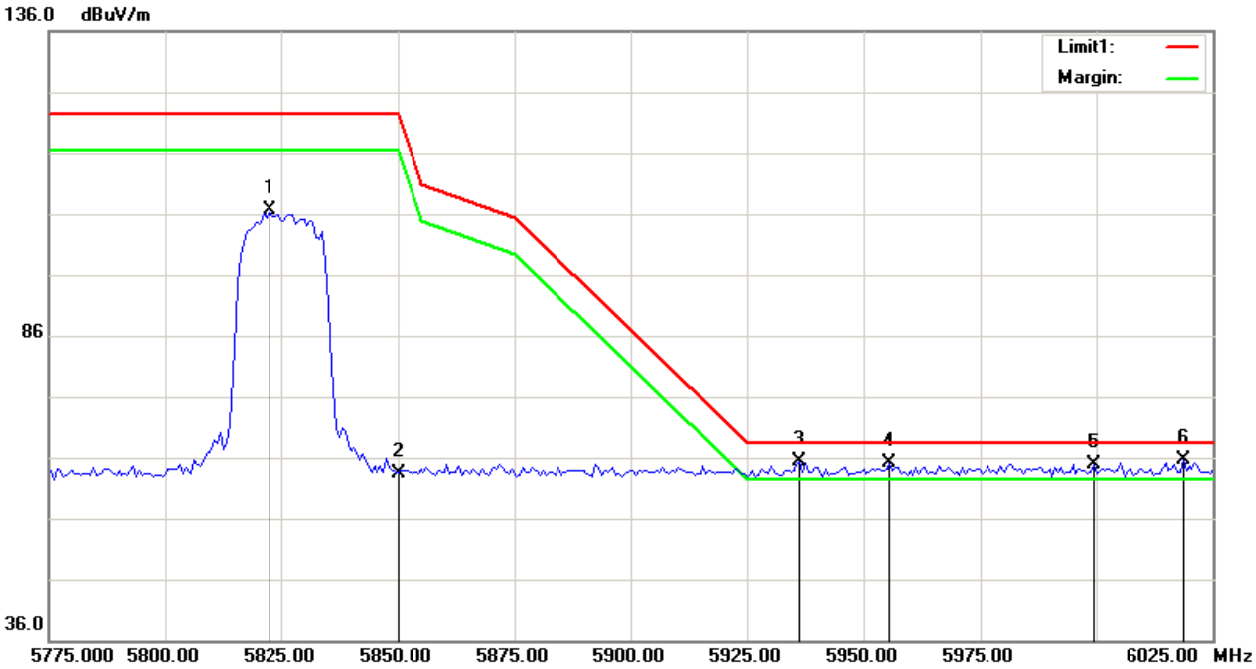
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5592.750	24.68	40.26	64.94	68.30	-3.36	peak
2	5660.438	24.41	40.29	64.70	76.02	-11.32	peak
3	5725.000	22.77	40.31	63.08	122.30	-59.22	peak
4	5783.938	68.74	40.34	109.08	122.30	-13.22	peak
5	5850.000	23.82	40.37	64.19	122.30	-58.11	peak
6	5977.500	25.13	40.42	65.55	68.30	-2.75	peak

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

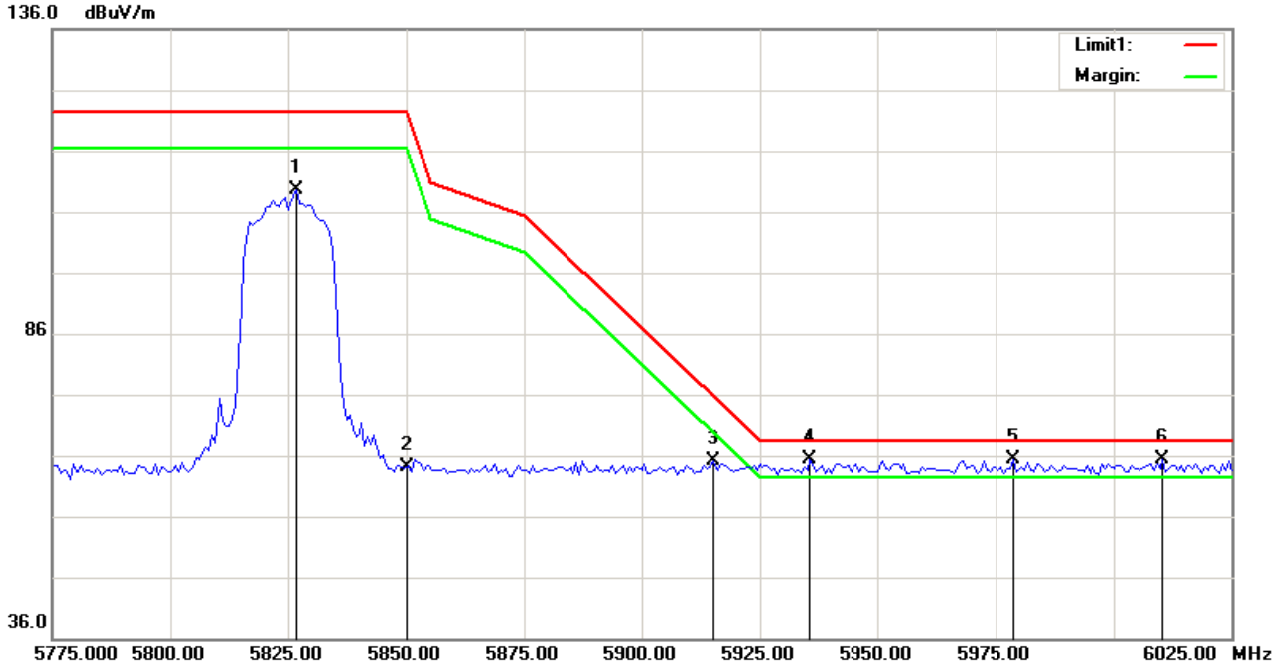
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5822.500	66.16	40.35	106.51	122.30	-15.79	peak
2	5850.000	23.00	40.37	63.37	122.30	-58.93	peak
3	5936.250	25.07	40.41	65.48	68.30	-2.82	peak
4	5955.625	24.74	40.41	65.15	68.30	-3.15	peak
5	5999.375	24.51	40.43	64.94	68.30	-3.36	peak
6	6018.750	25.14	40.52	65.66	68.30	-2.64	peak

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

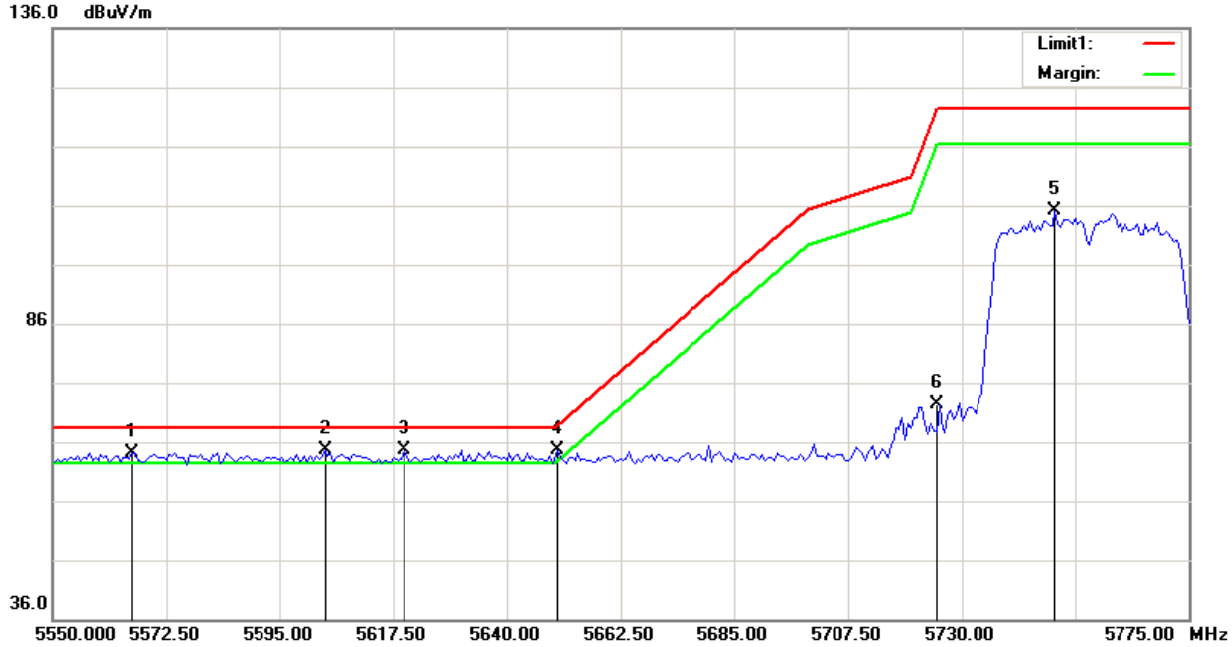
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5826.875	69.15	40.36	109.51	122.30	-12.79	peak
2	5850.000	23.66	40.37	64.03	122.30	-58.27	peak
3	5915.000	24.70	40.39	65.09	75.70	-10.61	peak
4	5935.625	24.90	40.41	65.31	68.30	-2.99	peak
5	5978.750	25.03	40.42	65.45	68.30	-2.85	peak
6	6010.625	24.85	40.49	65.34	68.30	-2.96	peak

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

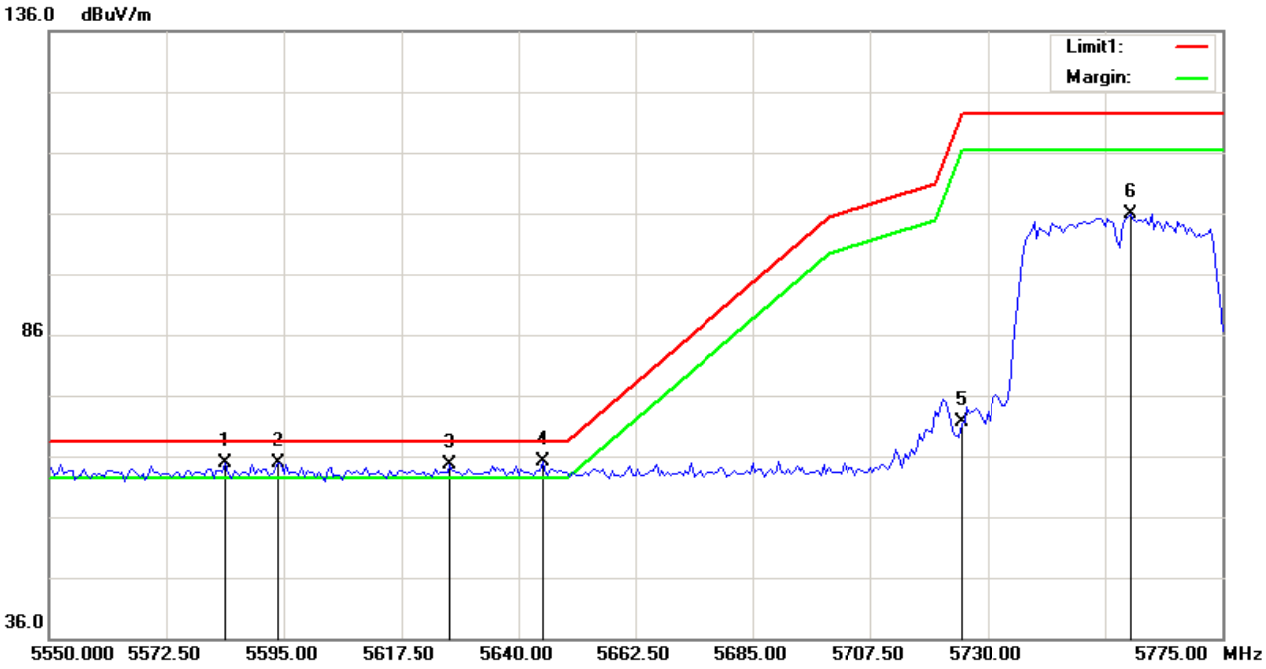
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5565.750	23.97	40.24	64.21	68.30	-4.09	peak
2	5604.000	24.32	40.27	64.59	68.30	-3.71	peak
3	5619.750	24.44	40.27	64.71	68.30	-3.59	peak
4	5650.125	24.25	40.28	64.53	68.39	-3.86	peak
5	5748.563	64.83	40.32	105.15	122.30	-17.15	peak
6	5725.000	31.95	40.31	72.26	122.30	-50.04	peak

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

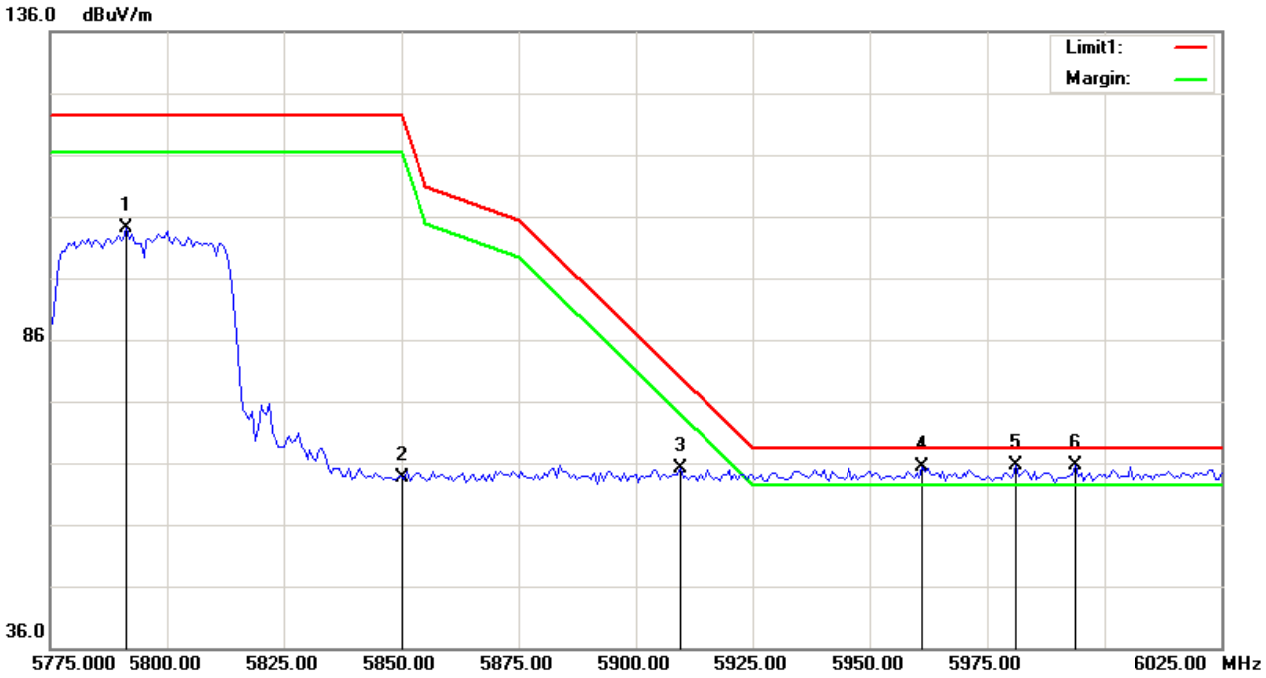
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5583.750	24.62	40.26	64.88	68.30	-3.42	peak
2	5593.875	24.70	40.26	64.96	68.30	-3.34	peak
3	5627.063	24.43	40.27	64.70	68.30	-3.60	peak
4	5644.500	24.96	40.28	65.24	68.30	-3.06	peak
5	5725.000	31.32	40.31	71.63	122.30	-50.67	peak
6	5757.563	65.62	40.33	105.95	122.30	-16.35	peak

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

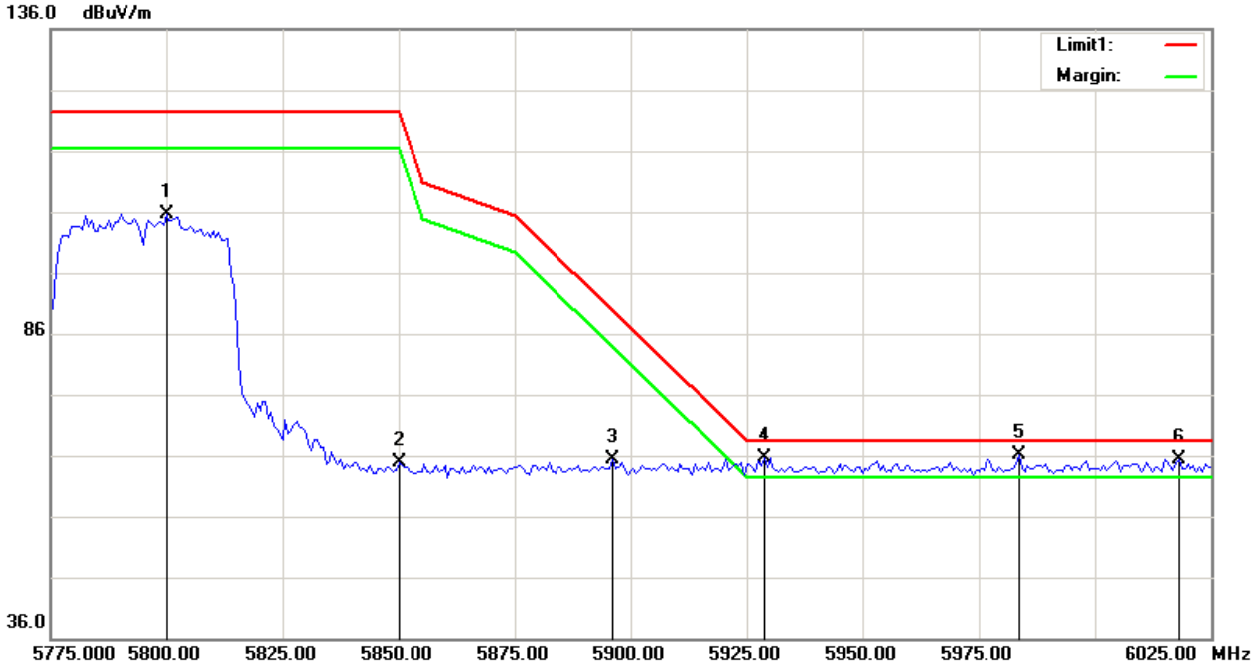
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5791.250	63.82	40.34	104.16	122.30	-18.14	peak
2	5850.000	23.31	40.37	63.68	122.30	-58.62	peak
3	5909.375	24.77	40.40	65.17	79.86	-14.69	peak
4	5961.250	25.02	40.42	65.44	68.30	-2.86	peak
5	5981.250	25.19	40.42	65.61	68.30	-2.69	peak
6	5993.750	25.17	40.42	65.59	68.30	-2.71	peak

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

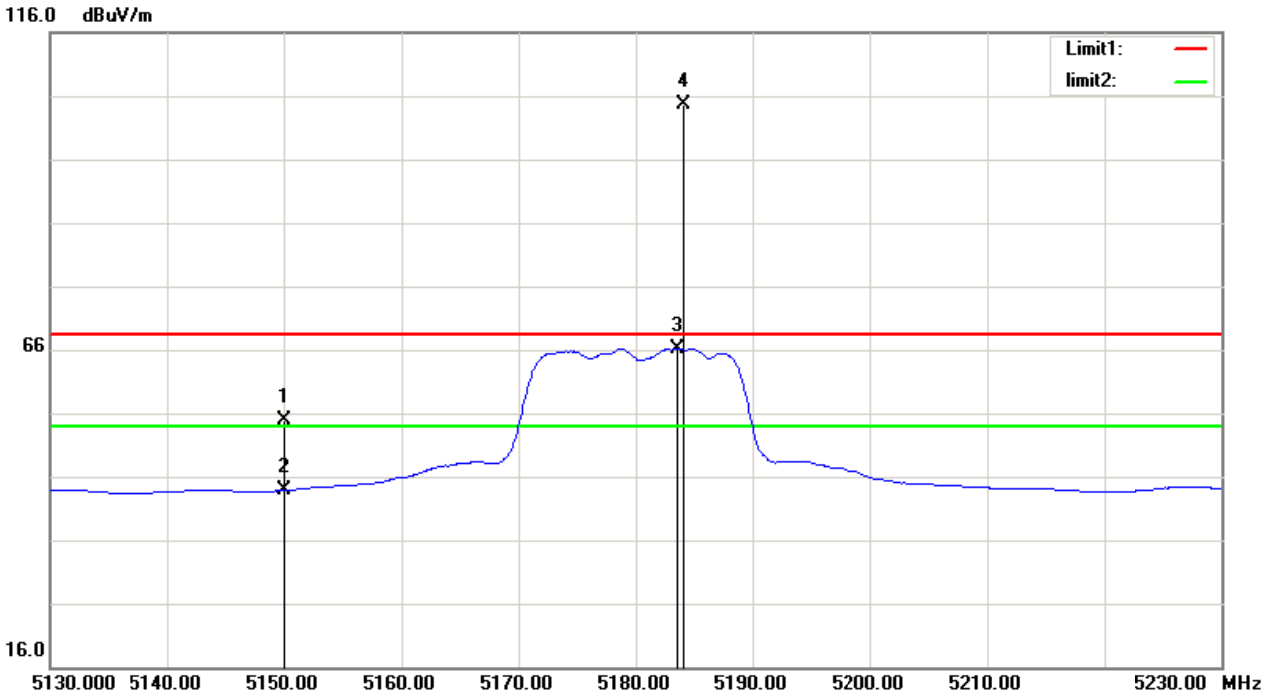
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5800.000	65.30	40.35	105.65	122.30	-16.65	peak
2	5850.000	24.63	40.37	65.00	122.30	-57.30	peak
3	5896.250	24.92	40.38	65.30	89.57	-24.27	peak
4	5928.750	25.31	40.40	65.71	68.30	-2.59	peak
5	5983.750	25.63	40.43	66.06	68.30	-2.24	peak
6	6018.125	24.83	40.52	65.35	68.30	-2.95	peak

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

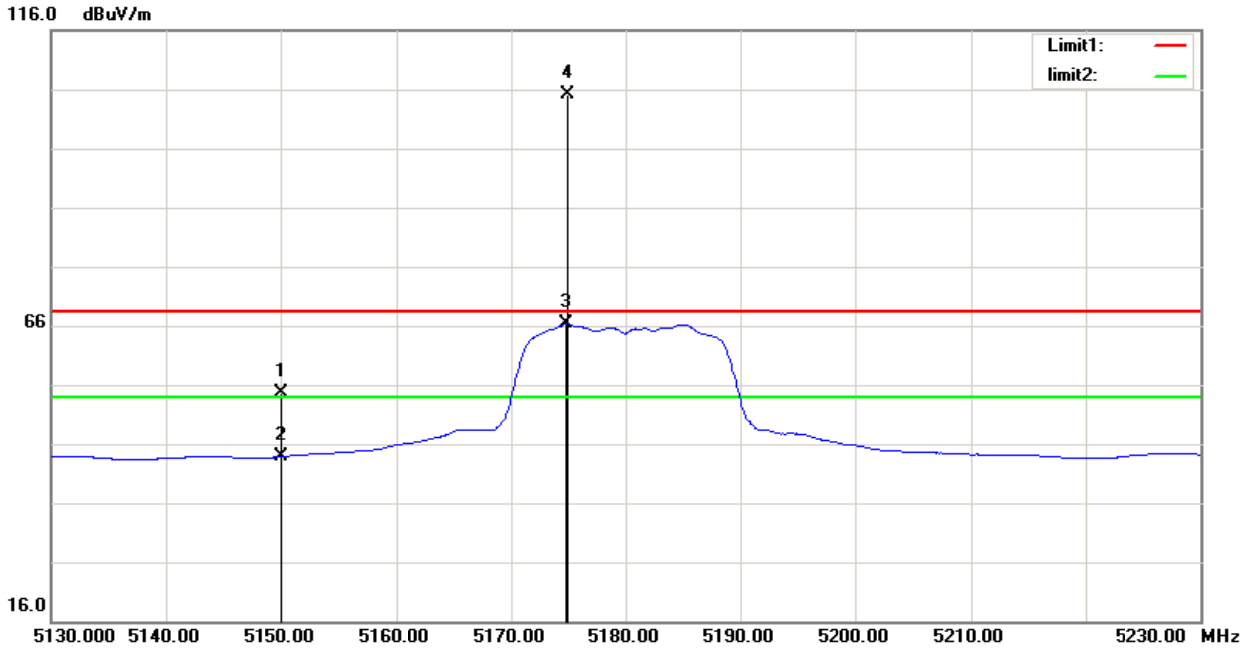
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	46.67	8.10	54.77	68.30	-13.53	peak
2	5150.000	35.72	8.10	43.82	54.00	-10.18	AVG
3	5183.507	57.95	8.26	66.21	/	/	AVG
4	5184.108	96.41	8.26	104.67	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

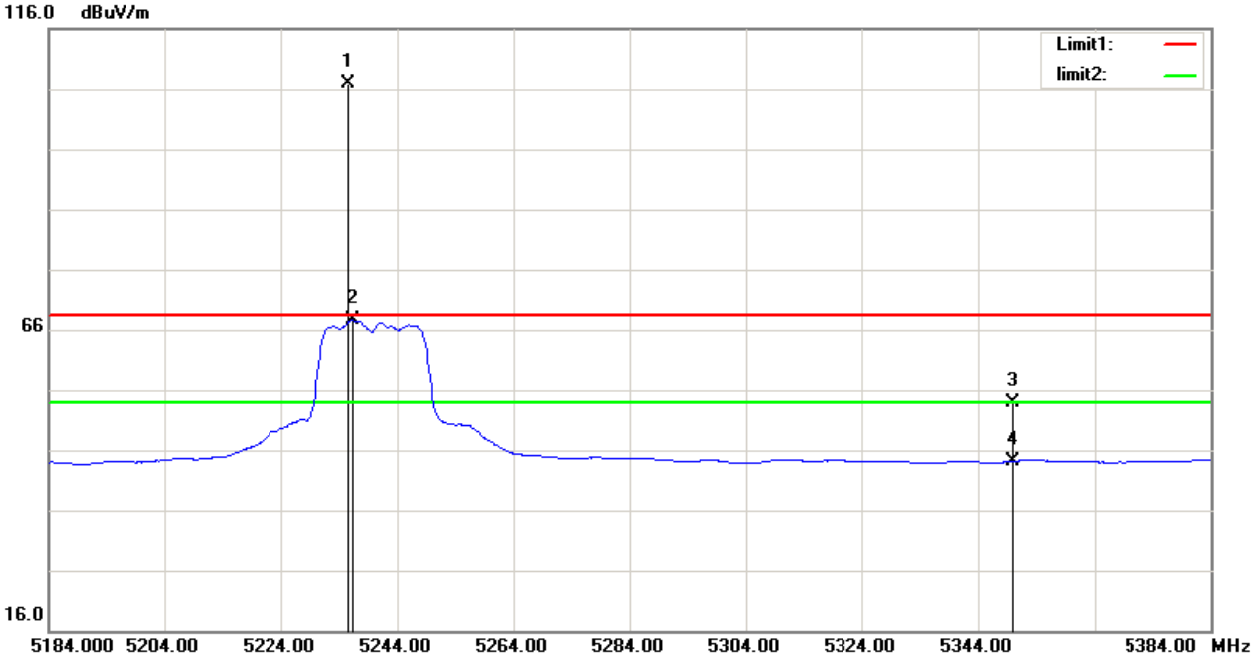
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	46.50	8.10	54.60	68.30	-13.70	peak
2	5150.000	35.73	8.10	43.83	68.30	-24.47	peak
3	5174.890	58.18	8.21	66.39	/	/	peak
4	5174.990	96.79	8.22	105.01	/	/	peak

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

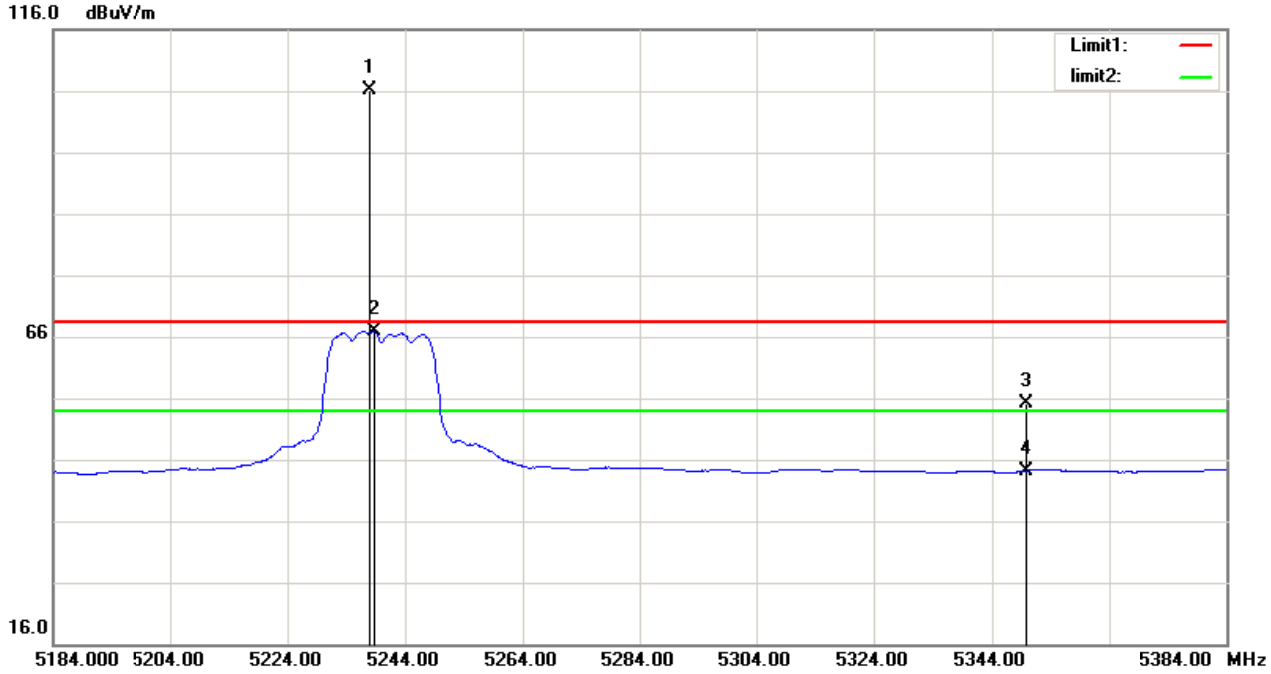
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5235.503	98.38	8.50	106.88	/	/	peak
2	5236.305	59.08	8.50	67.58	/	/	AVG
3	5350.000	44.87	9.03	53.90	68.30	-14.40	peak
4	5350.000	35.14	9.03	44.17	54.00	-9.83	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

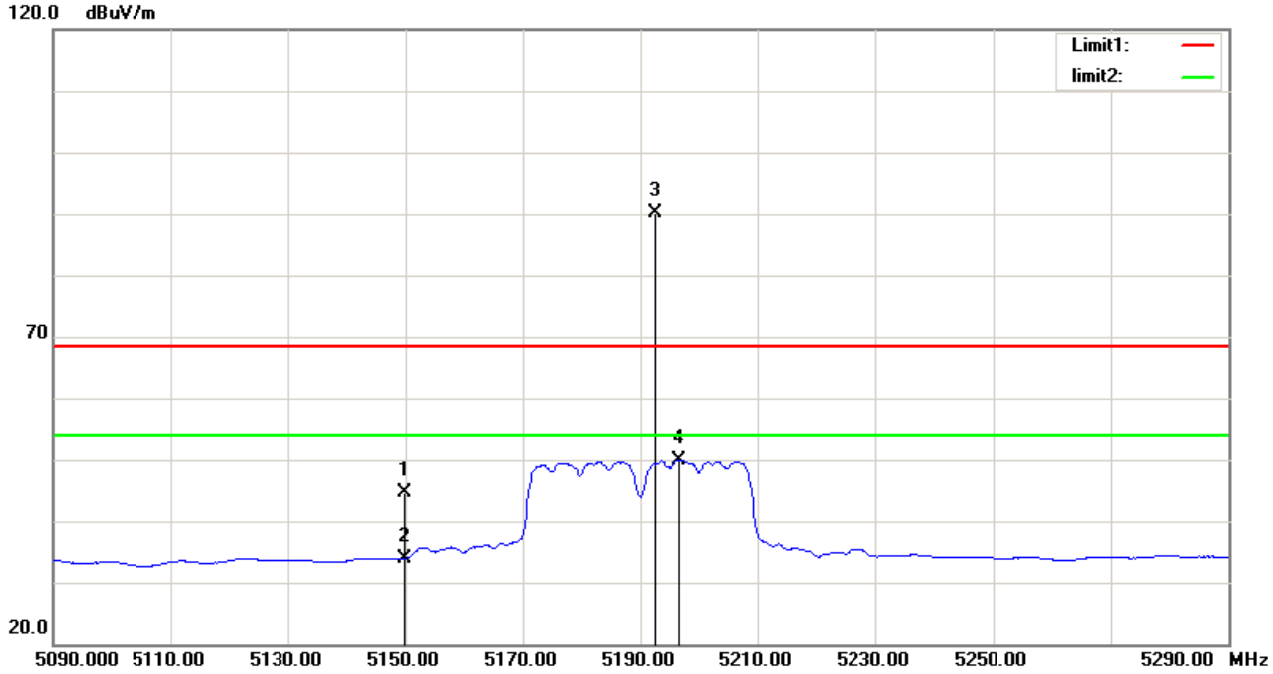
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5238.108	97.65	8.51	106.16	/	/	peak
2	5238.709	58.34	8.51	66.85	/	/	AVG
3	5350.000	46.03	9.03	55.06	68.30	-13.24	peak
4	5350.000	35.17	9.03	44.20	54.00	-9.80	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

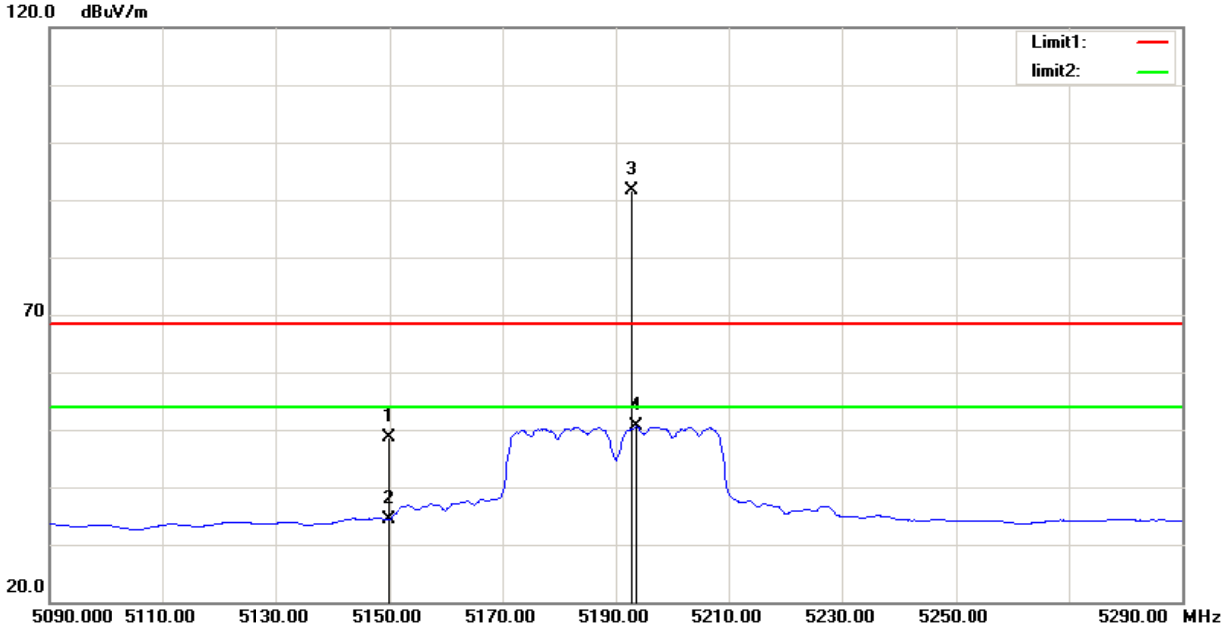
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	46.56	-1.90	44.66	68.30	-23.64	peak
2	5150.000	35.88	-1.90	33.98	54.00	-20.02	AVG
3	5192.605	91.71	-1.70	90.01	/	/	peak
4	5196.413	51.61	-1.69	49.92	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

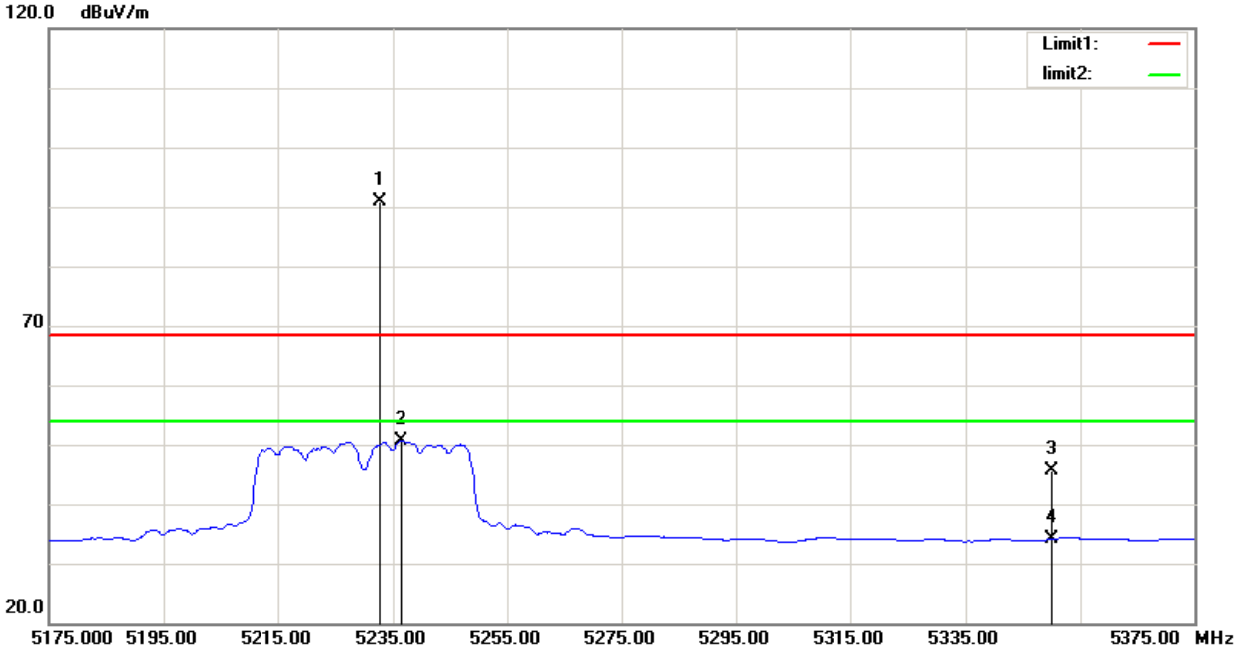
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	50.63	-1.90	48.73	68.30	-19.57	peak
2	5150.000	36.40	-1.90	34.50	54.00	-19.50	AVG
3	5192.806	93.43	-1.70	91.73	/	/	peak
4	5193.607	52.22	-1.70	50.52	/	/	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

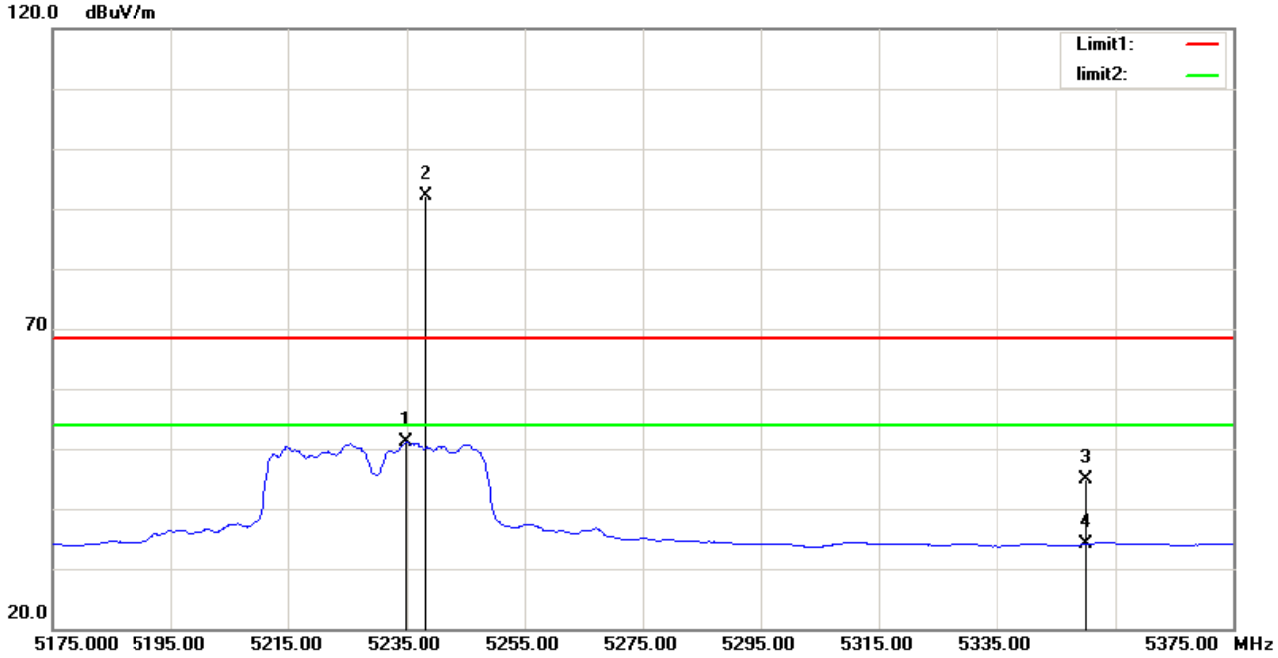
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5232.715	92.47	-1.51	90.96	/	/	peak
2	5236.523	52.20	-1.50	50.70	/	/	AVG
3	5350.000	46.57	-0.97	45.60	68.30	-22.70	peak
4	5350.000	35.13	-0.97	34.16	54.00	-19.84	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

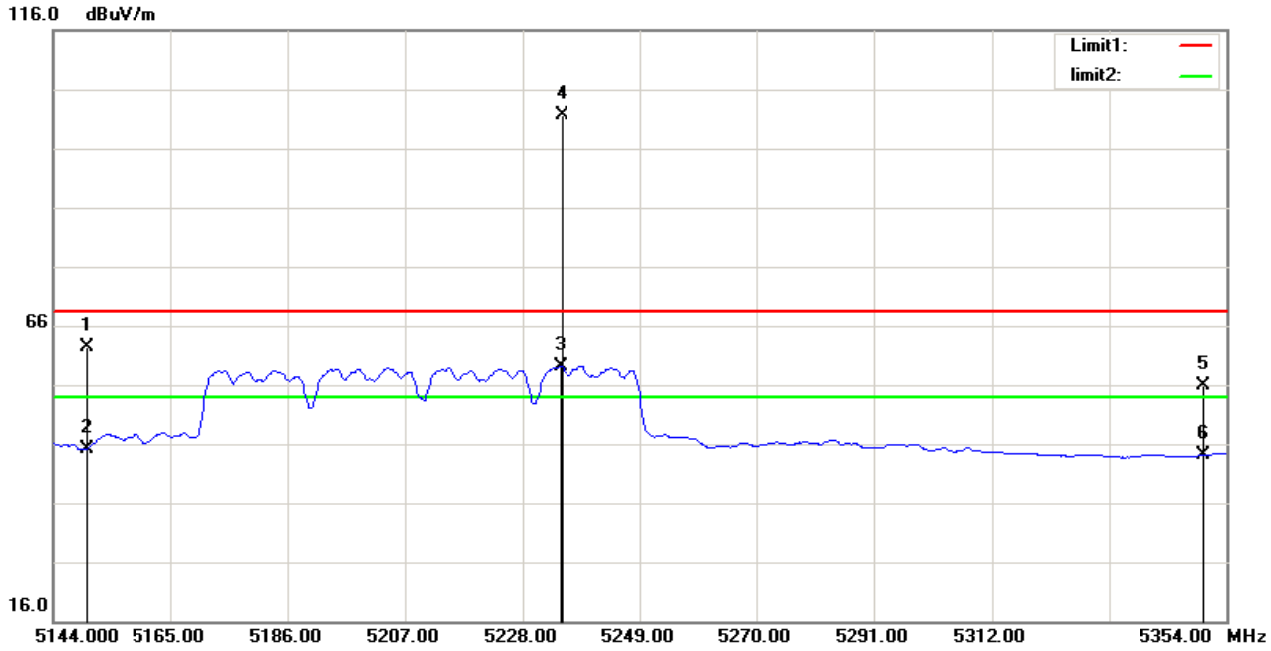
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5234.920	52.62	-1.51	51.11	/	/	AVG
2	5238.327	93.62	-1.49	92.13	/	/	peak
3	5350.000	45.93	-0.97	44.96	68.30	-23.34	peak
4	5350.000	35.11	-0.97	34.14	54.00	-19.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

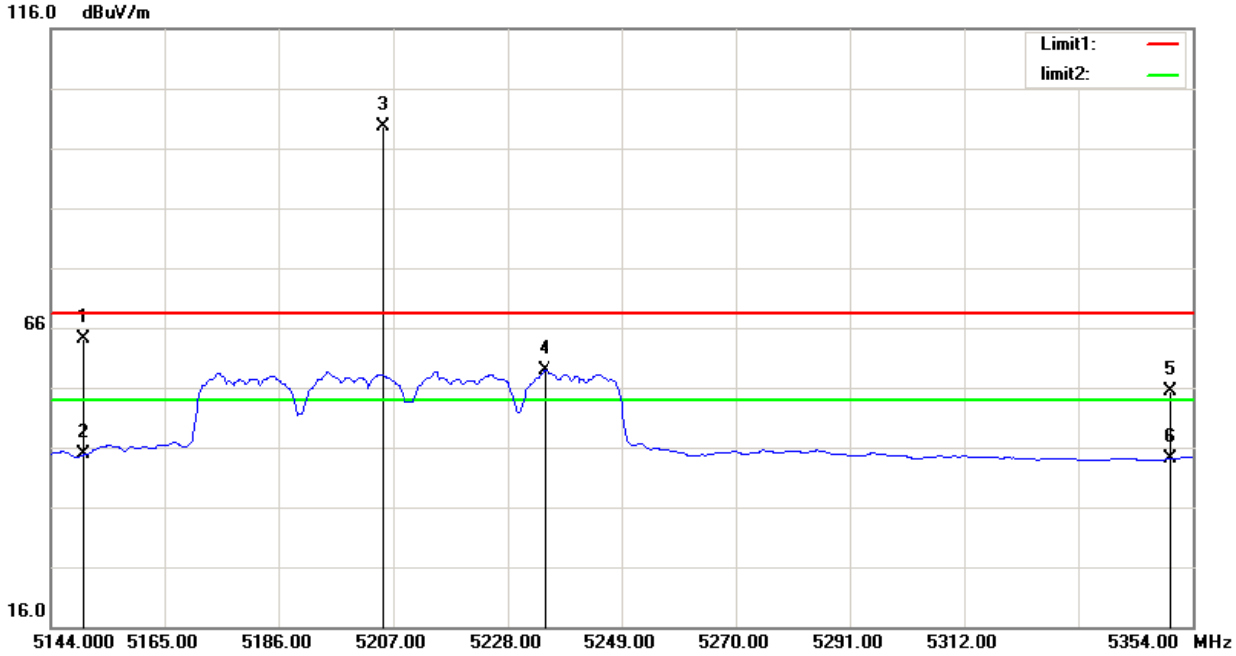
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	54.28	8.10	62.38	68.30	-5.92	peak
2	5150.000	37.15	8.10	45.25	54.00	-8.75	AVG
3	5234.902	50.76	8.49	59.25	/	/	AVG
4	5235.112	93.18	8.49	101.67	/	/	peak
5	5350.000	46.78	9.03	55.81	68.30	-12.49	peak
6	5350.000	35.08	9.03	44.11	54.00	-9.89	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

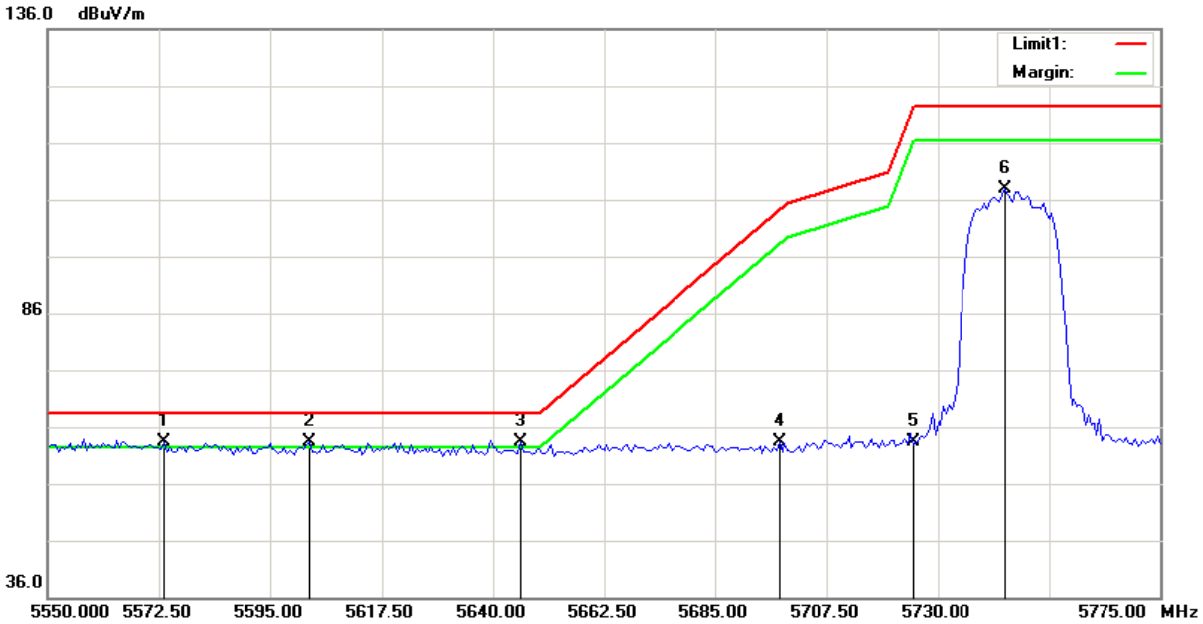
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5150.000	56.02	8.10	64.12	68.30	-4.18	peak
2	5150.000	36.66	8.10	44.76	54.00	-9.24	AVG
3	5205.232	91.28	8.36	99.64	/	/	peak
4	5234.902	50.49	8.49	58.98	/	/	AVG
5	5350.000	46.27	9.03	55.30	68.30	-13.00	peak
6	5350.000	35.05	9.03	44.08	54.00	-9.92	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

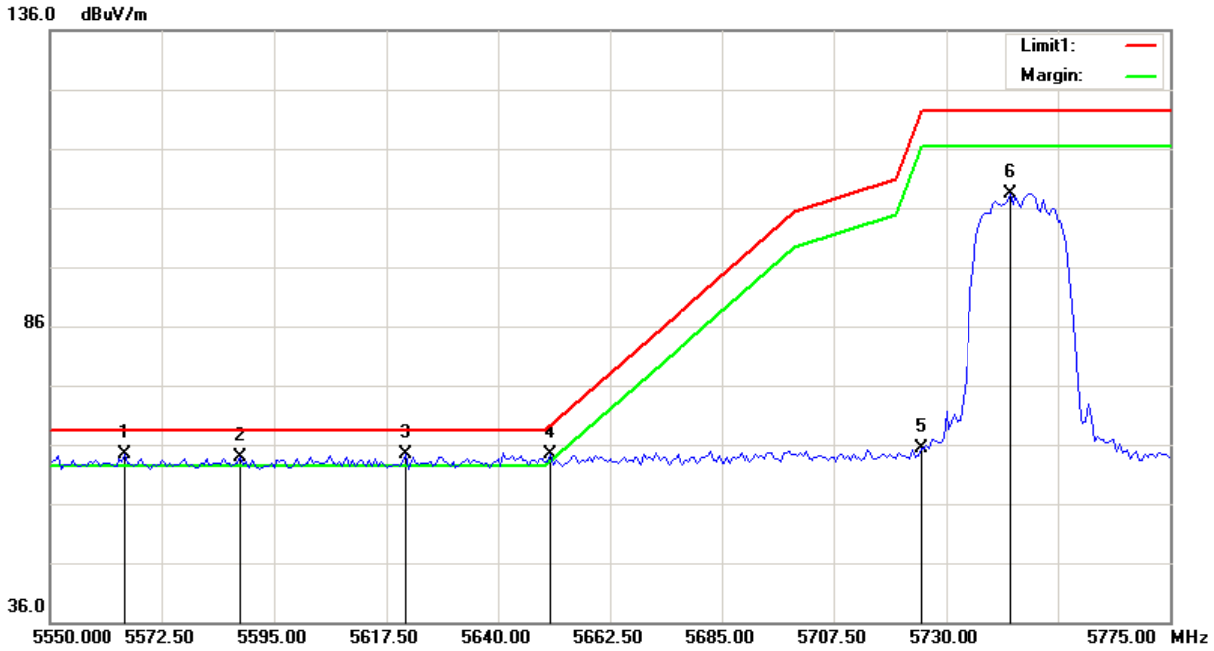
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5573.625	23.21	40.25	63.46	68.30	-4.84	peak
2	5602.875	23.08	40.26	63.34	68.30	-4.96	peak
3	5645.625	23.13	40.28	63.41	68.30	-4.89	peak
4	5697.938	23.00	40.30	63.30	103.77	-40.47	peak
5	5725.000	23.13	40.31	63.44	122.30	-58.86	peak
6	5743.500	67.44	40.32	107.76	122.30	-14.54	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

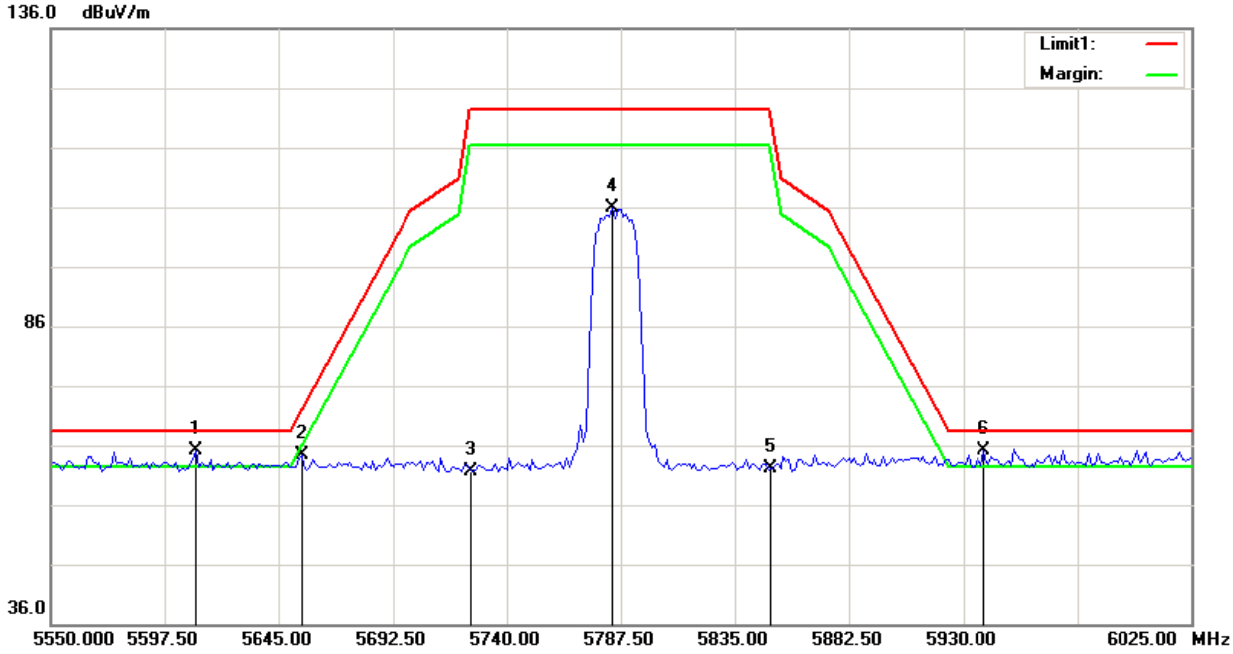
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5565.188	24.19	40.24	64.43	68.30	-3.87	peak
2	5588.250	23.59	40.25	63.84	68.30	-4.46	peak
3	5621.438	24.08	40.27	64.35	68.30	-3.95	peak
4	5650.688	24.01	40.28	64.29	68.81	-4.52	peak
5	5725.000	25.09	40.31	65.40	122.30	-56.90	peak
6	5742.938	68.15	40.32	108.47	122.30	-13.83	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

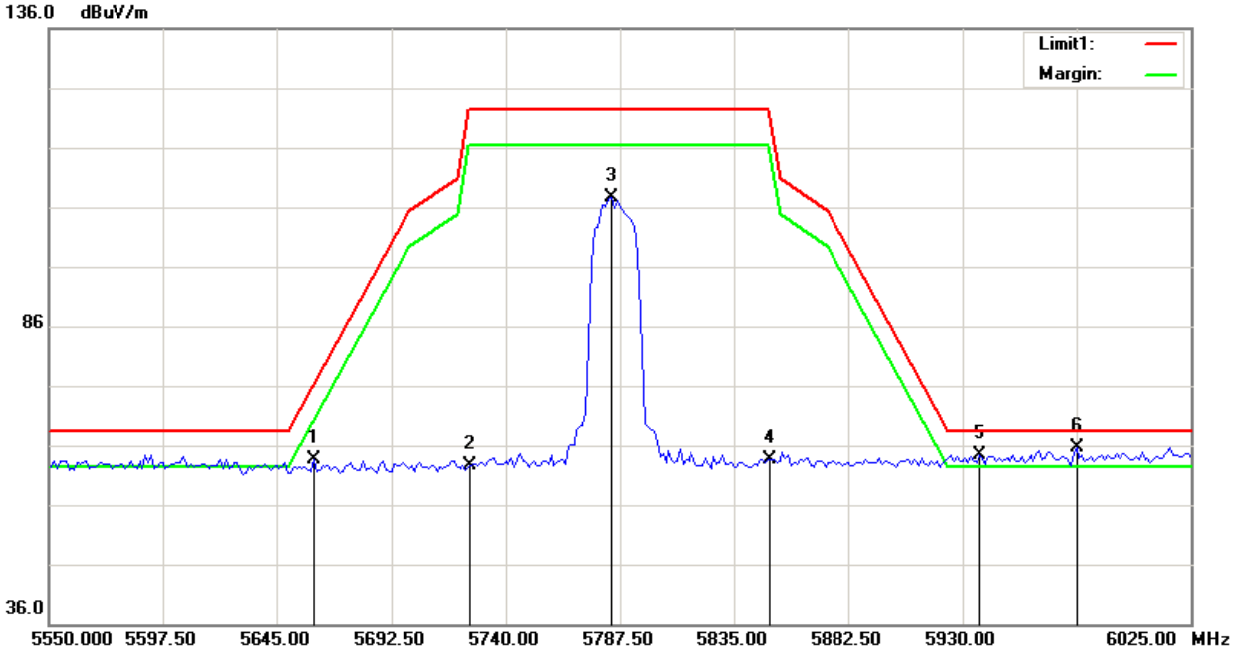
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5610.563	24.84	40.27	65.11	68.30	-3.19	peak
2	5654.500	24.03	40.29	64.32	71.63	-7.31	peak
3	5725.000	21.42	40.31	61.73	122.30	-60.57	peak
4	5783.938	65.54	40.34	105.88	122.30	-16.42	peak
5	5850.000	21.69	40.37	62.06	122.30	-60.24	peak
6	5938.313	24.71	40.40	65.11	68.30	-3.19	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

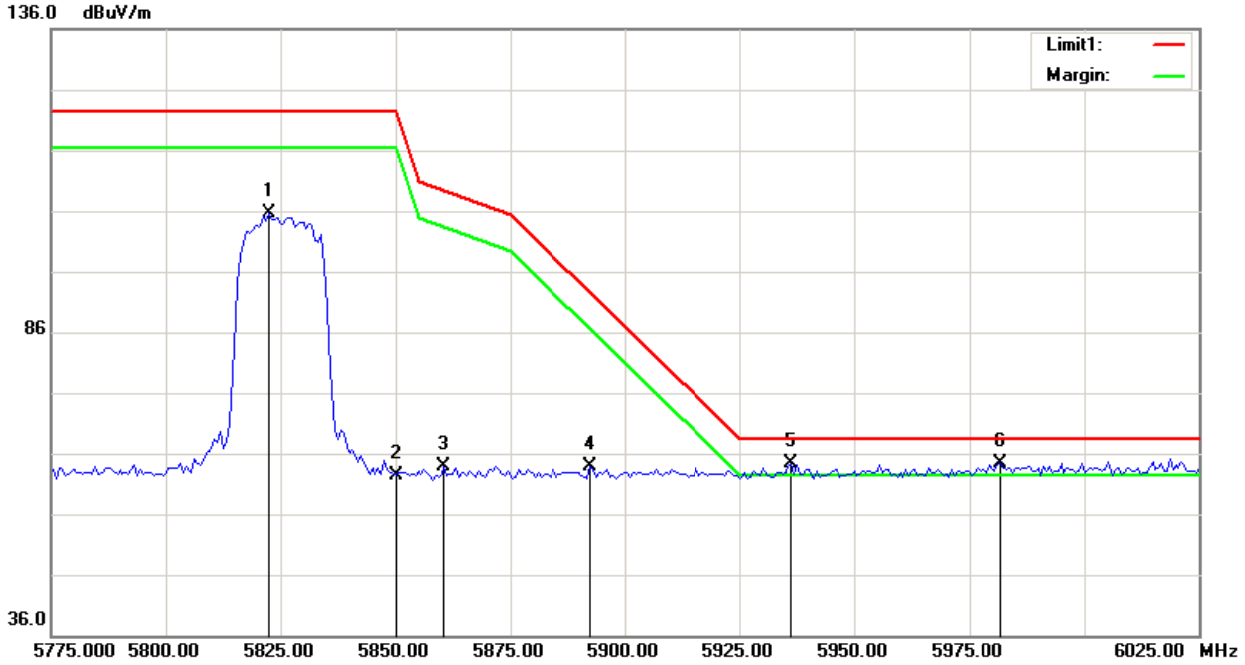
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5660.438	23.41	40.29	63.70	76.02	-12.32	peak
2	5725.000	22.27	40.31	62.58	122.30	-59.72	peak
3	5783.938	67.24	40.34	107.58	122.30	-14.72	peak
4	5850.000	23.32	40.37	63.69	122.30	-58.61	peak
5	5937.125	24.06	40.41	64.47	68.30	-3.83	peak
6	5977.500	25.13	40.42	65.55	68.30	-2.75	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

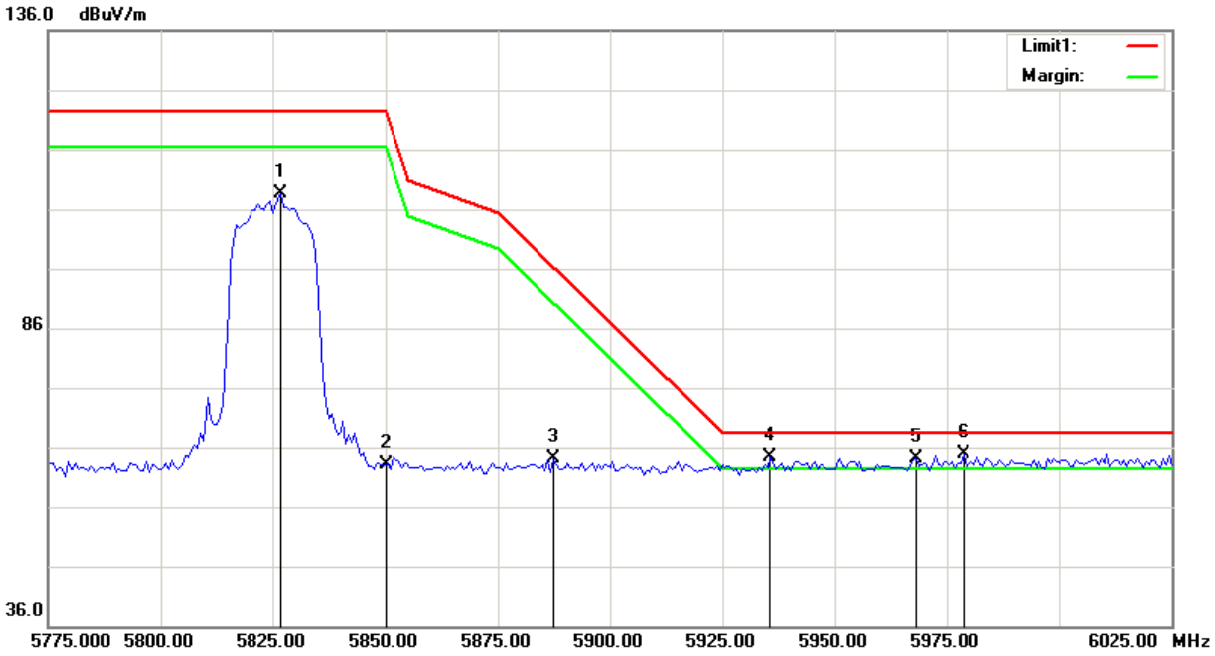
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5822.500	65.16	40.35	105.51	122.30	-16.79	peak
2	5850.000	22.00	40.37	62.37	122.30	-59.93	peak
3	5860.625	23.38	40.38	63.76	109.32	-45.56	peak
4	5892.500	23.39	40.38	63.77	92.35	-28.58	peak
5	5936.250	24.07	40.41	64.48	68.30	-3.82	peak
6	5981.875	23.95	40.42	64.37	68.30	-3.93	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

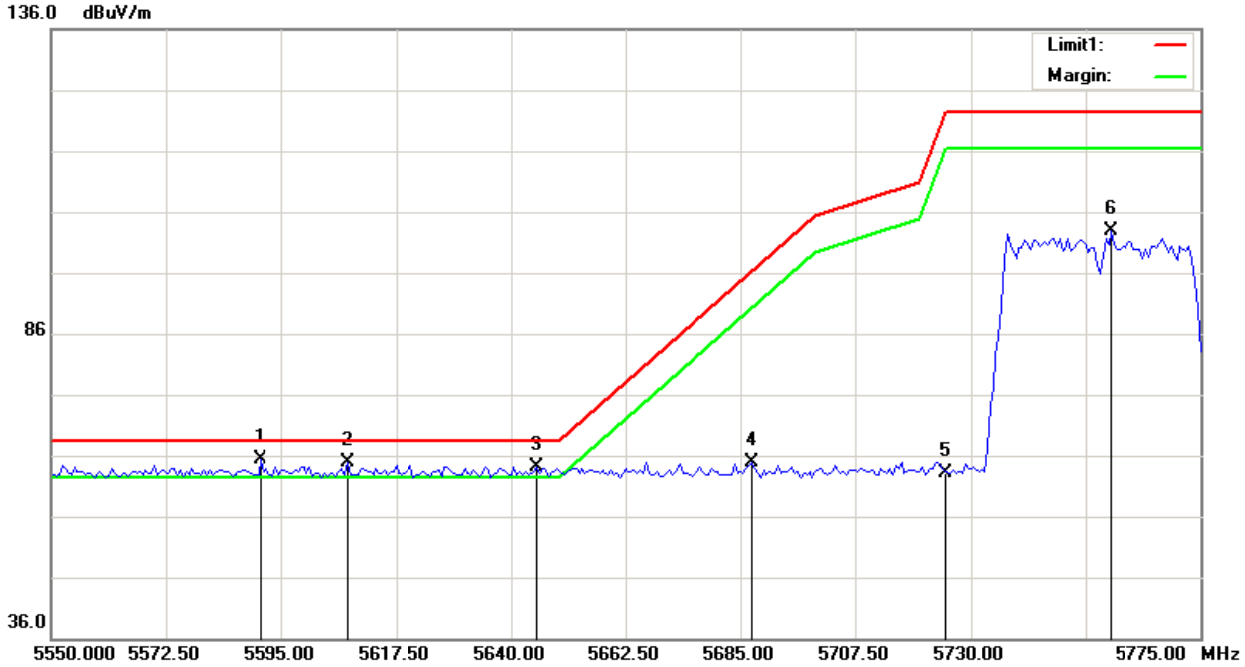
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5826.875	68.15	40.36	108.51	122.30	-13.79	peak
2	5850.000	22.66	40.37	63.03	122.30	-59.27	peak
3	5887.500	23.63	40.38	64.01	96.05	-32.04	peak
4	5935.625	23.90	40.41	64.31	68.30	-3.99	peak
5	5968.125	23.62	40.41	64.03	68.30	-4.27	peak
6	5978.750	24.53	40.42	64.95	68.30	-3.35	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

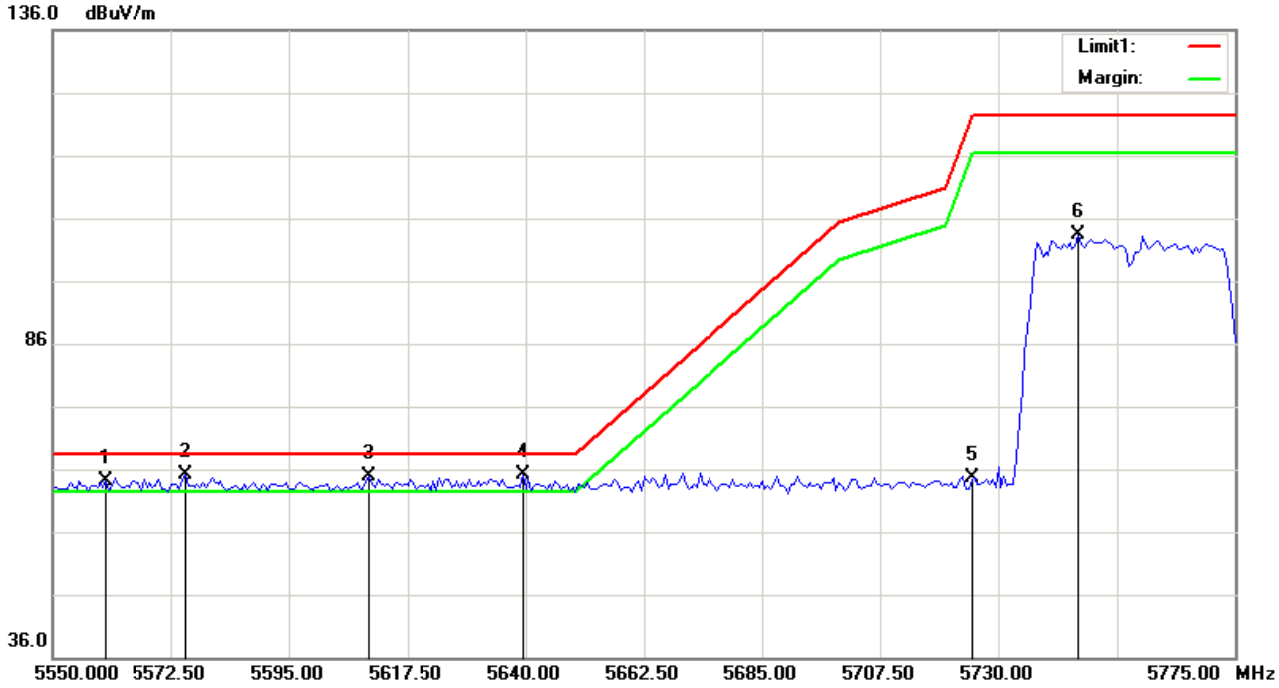
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5591.063	25.10	40.25	65.35	68.30	-2.95	peak
2	5607.938	24.58	40.27	64.85	68.30	-3.45	peak
3	5645.063	23.96	40.28	64.24	68.30	-4.06	peak
4	5687.250	24.52	40.30	64.82	95.86	-31.04	peak
5	5725.000	22.81	40.31	63.12	122.30	-59.18	peak
6	5757.563	62.50	40.33	102.83	122.30	-19.47	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

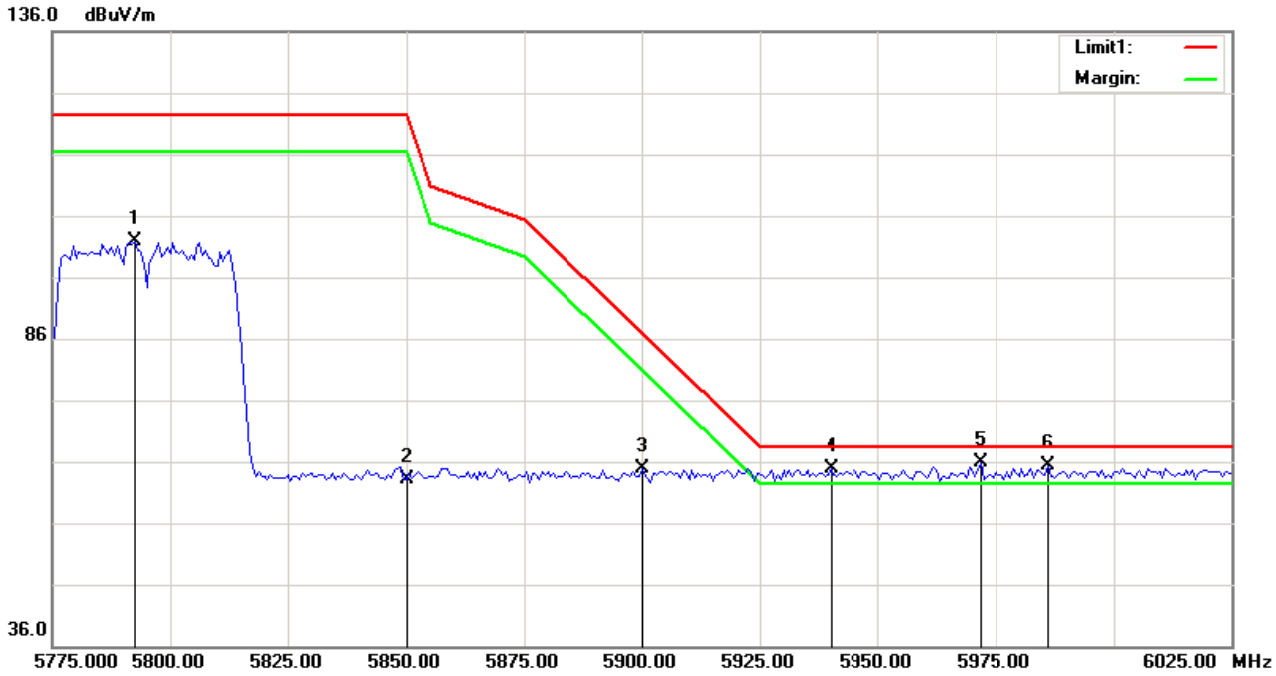
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5560.125	23.87	40.25	64.12	68.30	-4.18	peak
2	5575.313	24.99	40.25	65.24	68.30	-3.06	peak
3	5610.188	24.59	40.27	64.86	68.30	-3.44	peak
4	5639.438	24.98	40.27	65.25	68.30	-3.05	peak
5	5725.000	24.26	40.31	64.57	122.30	-57.73	peak
6	5745.188	63.04	40.32	103.36	122.30	-18.94	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

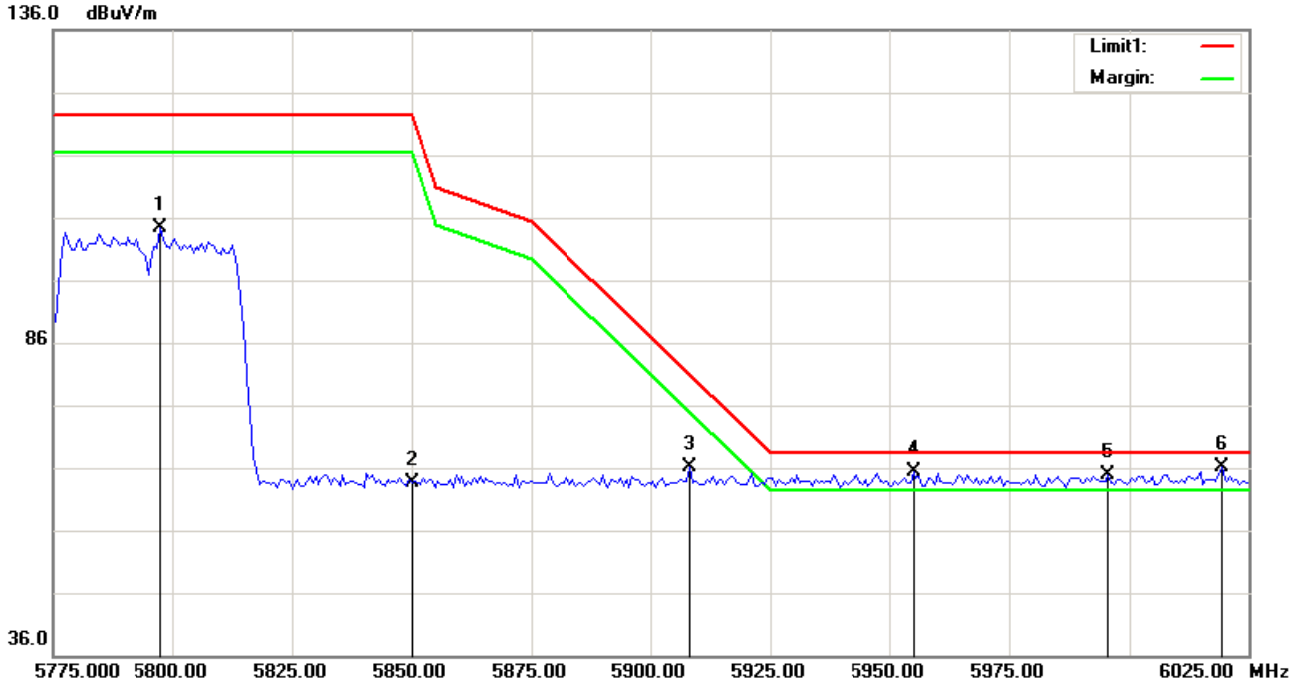
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5792.500	61.43	40.34	101.77	122.30	-20.53	peak
2	5850.000	22.84	40.37	63.21	122.30	-59.09	peak
3	5900.000	24.54	40.39	64.93	86.80	-21.87	peak
4	5940.000	24.46	40.40	64.86	68.30	-3.44	peak
5	5971.875	25.47	40.42	65.89	68.30	-2.41	peak
6	5986.250	24.88	40.43	65.31	68.30	-2.99	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

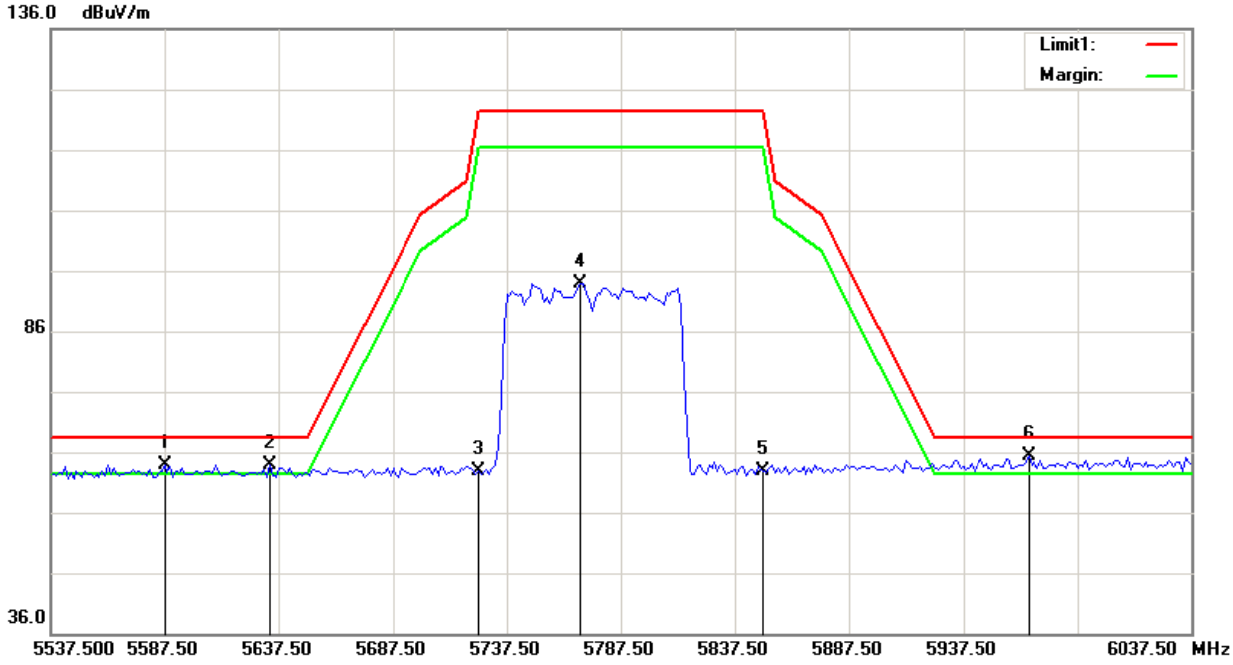
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5797.500	64.02	40.34	104.36	122.30	-17.94	peak
2	5850.000	23.21	40.37	63.58	122.30	-58.72	peak
3	5908.125	25.71	40.39	66.10	80.79	-14.69	peak
4	5955.000	24.92	40.41	65.33	68.30	-2.97	peak
5	5995.625	24.33	40.43	64.76	68.30	-3.54	peak
6	6019.375	25.49	40.53	66.02	68.30	-2.28	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

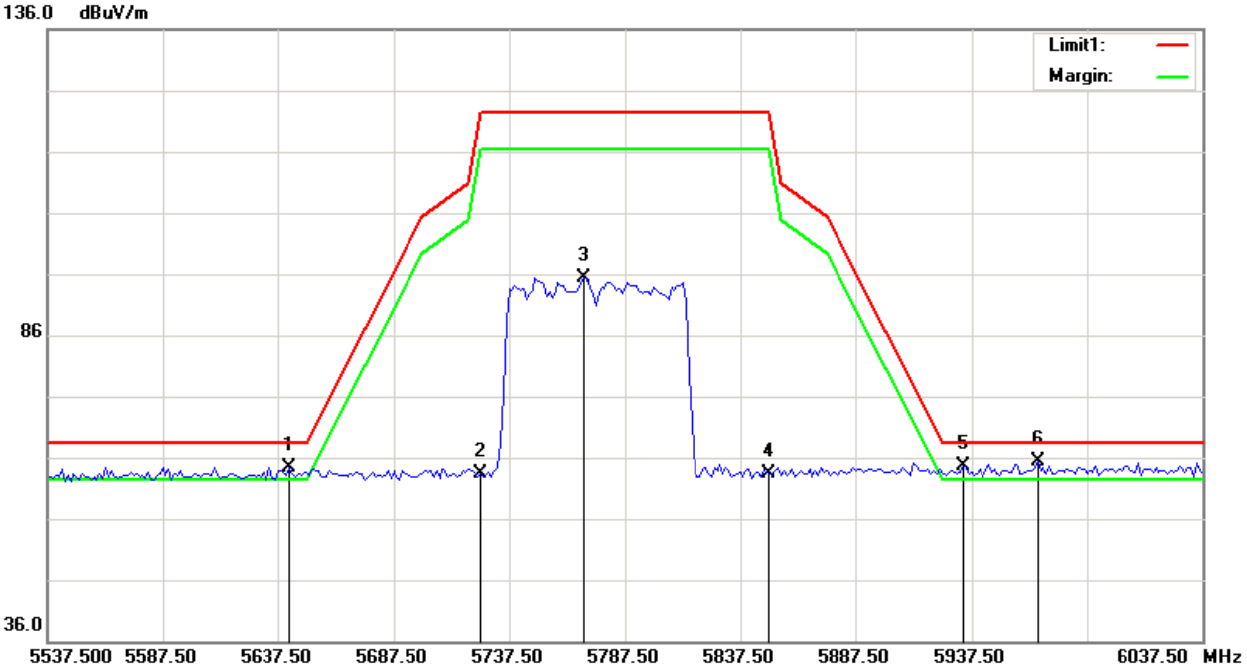
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5587.500	23.75	40.25	64.00	68.30	-4.30	peak
2	5633.750	23.56	40.28	63.84	68.30	-4.46	peak
3	5725.000	22.56	40.31	62.87	122.30	-59.43	peak
4	5770.000	53.52	40.33	93.85	122.30	-28.45	peak
5	5850.000	22.40	40.37	62.77	122.30	-59.53	peak
6	5966.250	24.86	40.41	65.27	68.30	-3.03	peak

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Horizontal

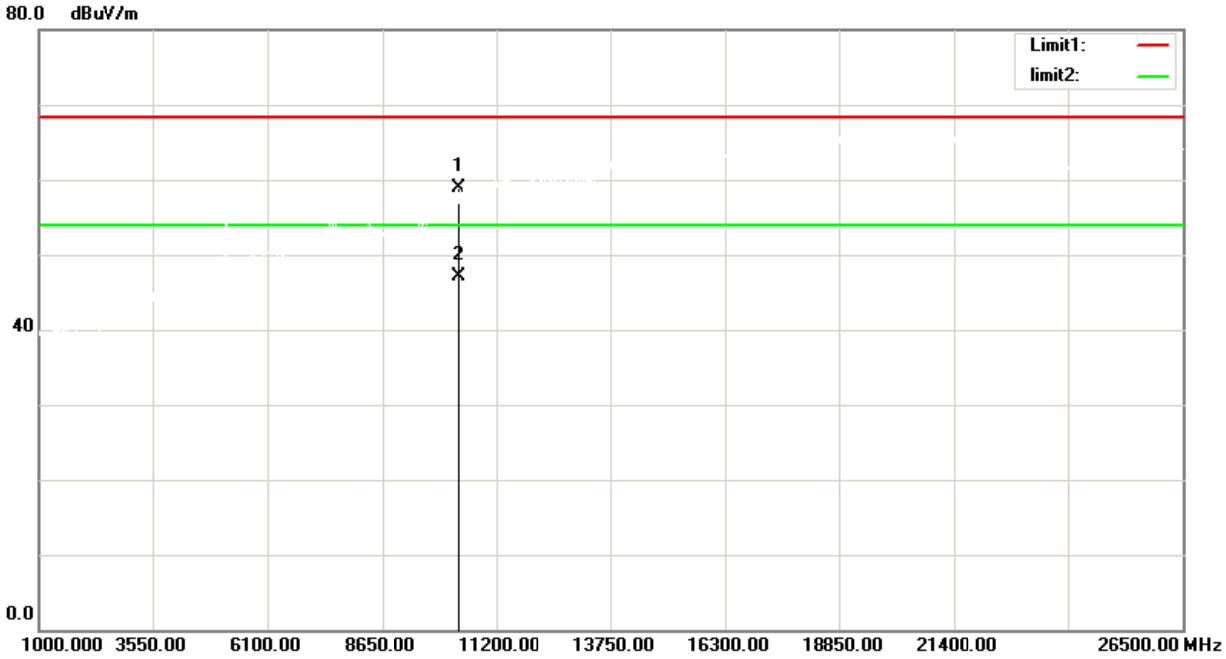


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5642.500	24.17	40.28	64.45	68.30	-3.85	peak
2	5725.000	23.06	40.31	63.37	122.30	-58.93	peak
3	5770.000	55.02	40.33	95.35	122.30	-26.95	peak
4	5850.000	22.90	40.37	63.27	122.30	-59.03	peak
5	5933.750	24.31	40.41	64.72	68.30	-3.58	peak
6	5966.250	24.86	40.41	65.27	68.30	-3.03	peak

5.9 TEST RESULTS - ABOVE1000 MHz (HARMONIC)

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

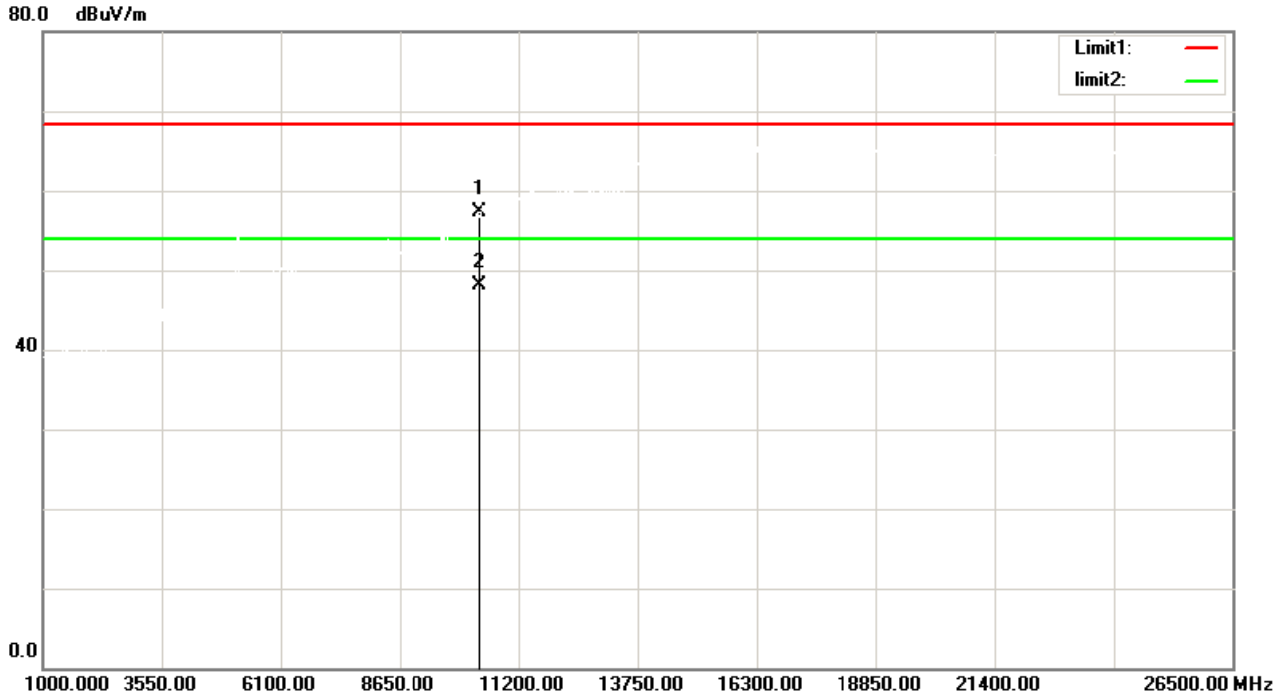
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	46.45	12.43	58.88	68.30	-9.42	peak
2	10360.000	34.70	12.43	47.13	54.00	-6.87	AVG

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

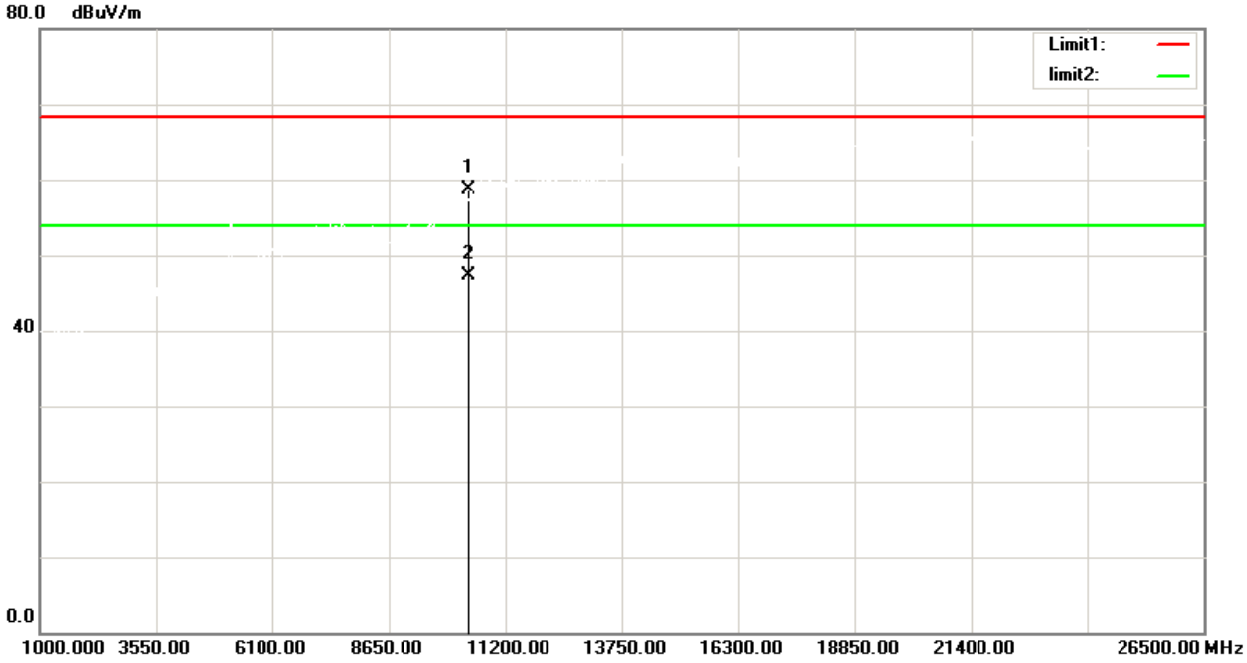
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	44.81	12.43	57.24	68.30	-11.06	peak
2	10360.000	35.70	12.43	48.13	54.00	-5.87	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 MHz

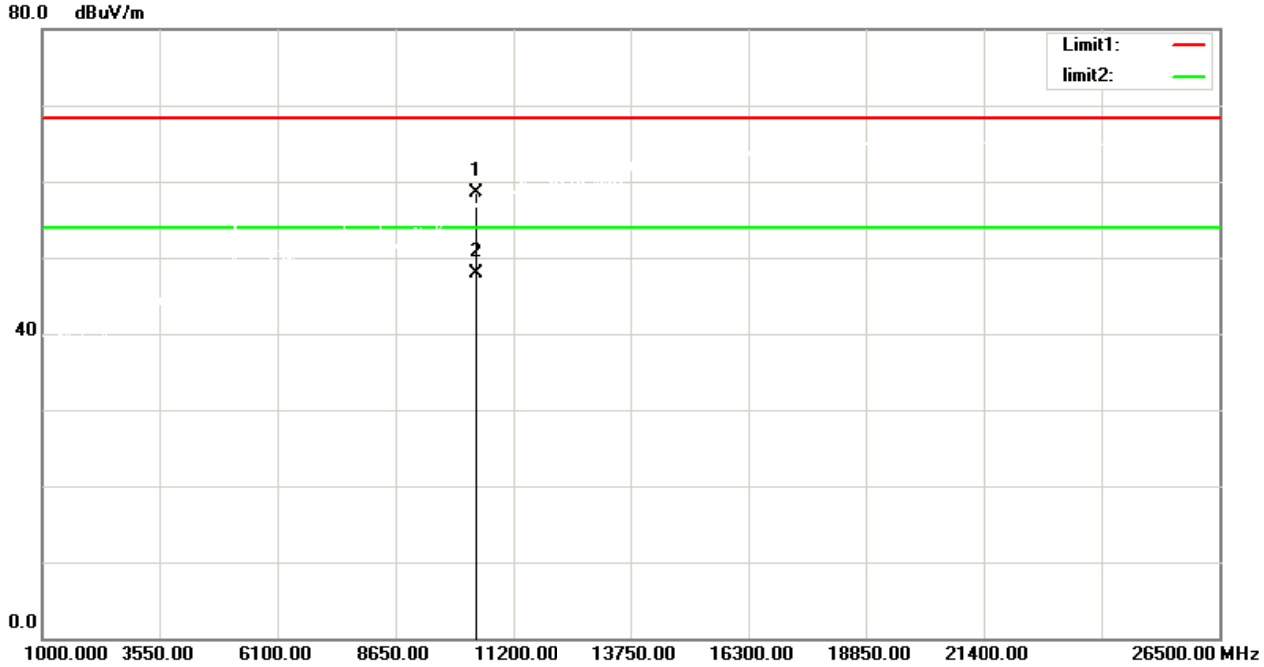
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	46.20	12.58	58.78	68.30	-9.52	peak
2	10400.000	34.76	12.58	47.34	54.00	-6.66	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5200 MHz

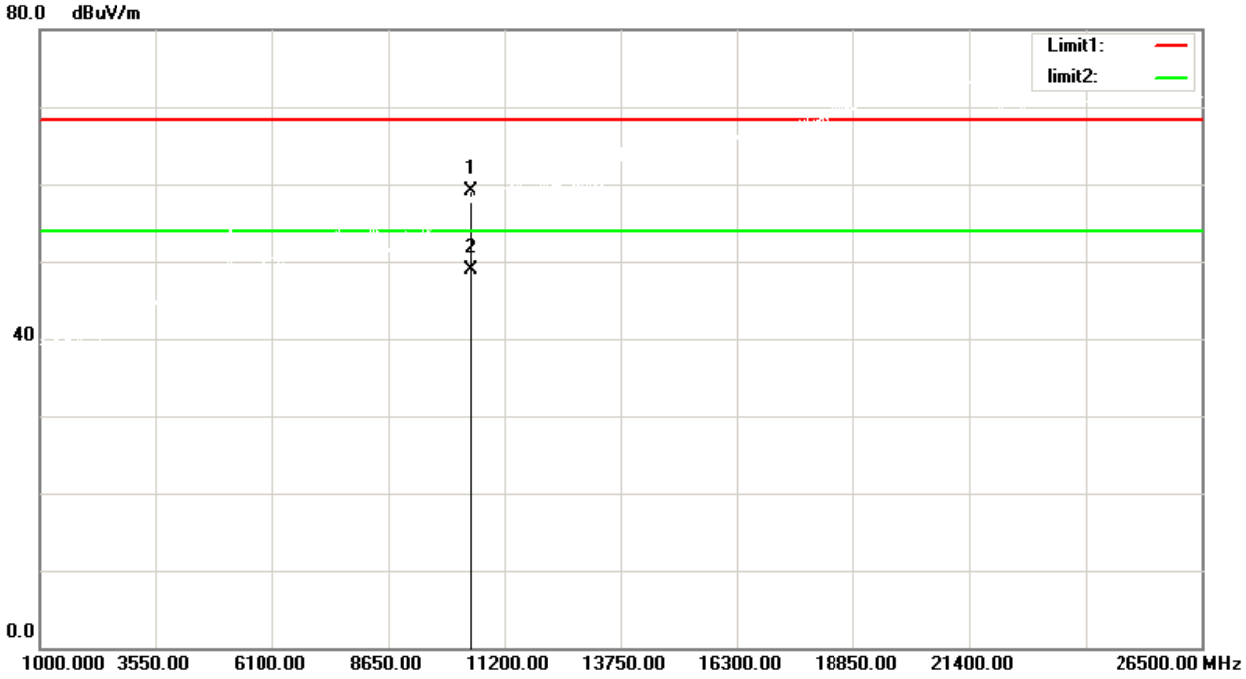
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	45.90	12.58	58.48	68.30	-9.82	peak
2	10400.000	35.23	12.58	47.81	54.00	-6.19	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

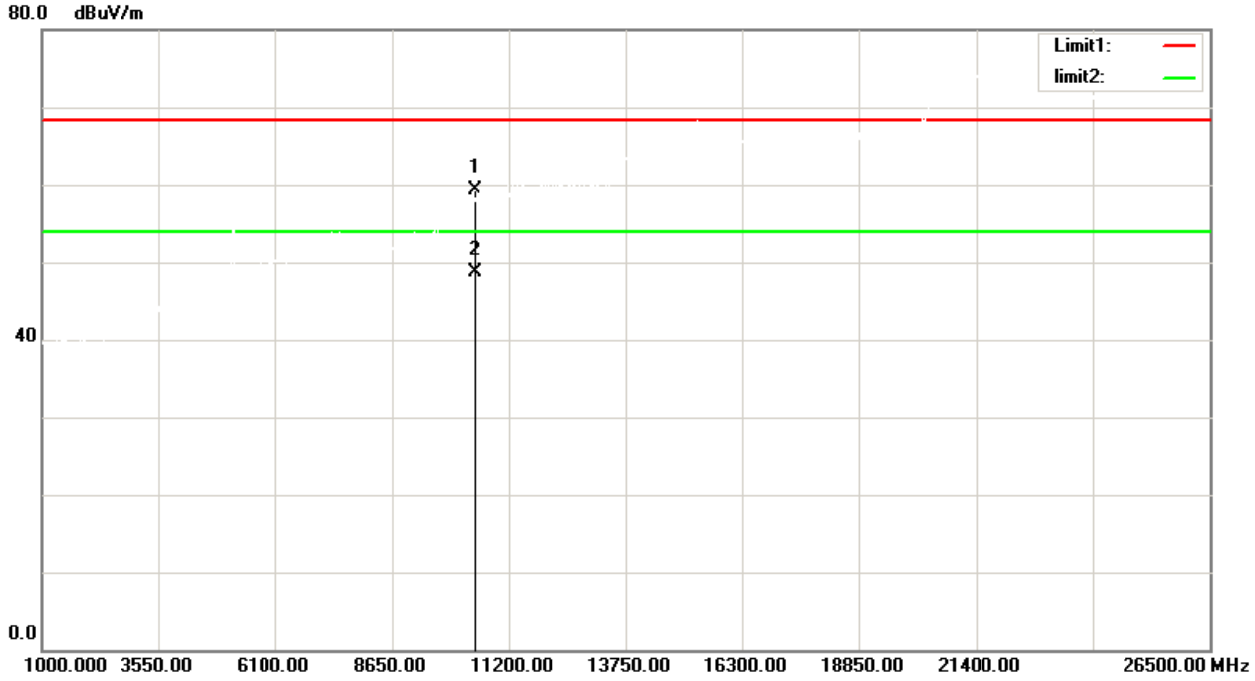
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.100	46.12	12.90	59.02	68.30	-9.28	peak
2	10480.100	35.91	12.90	48.81	54.00	-5.19	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX A Mode 5240 MHz

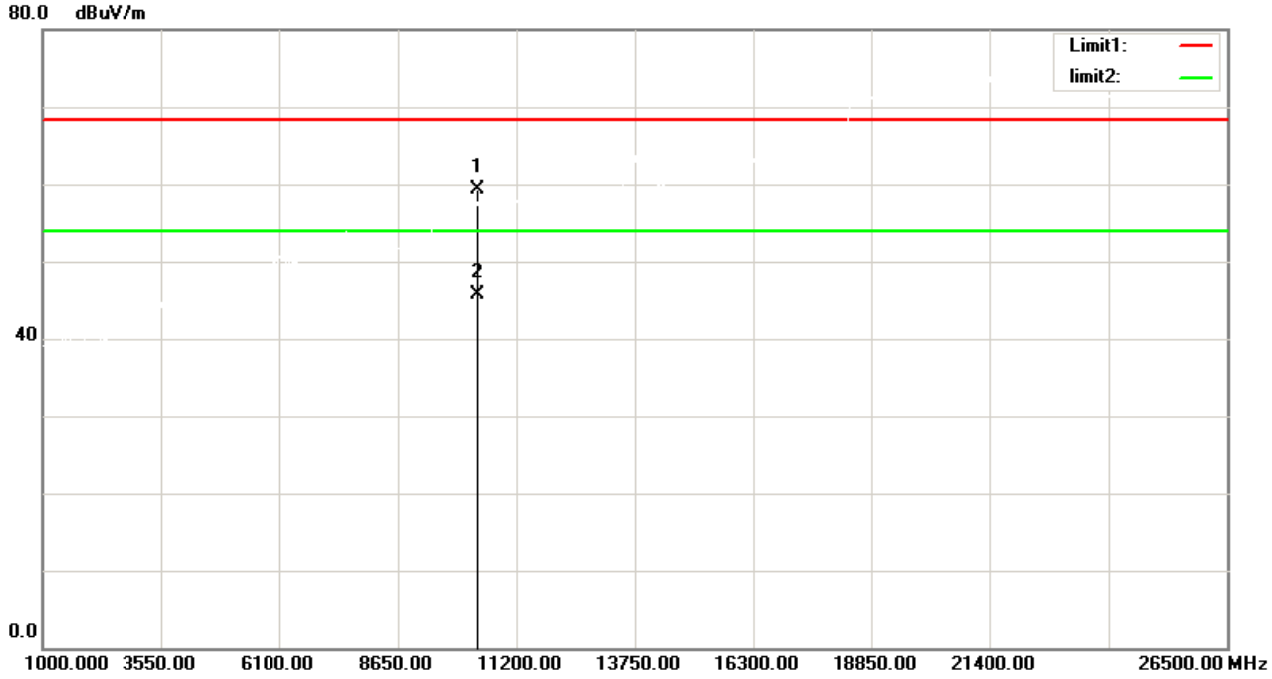
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.150	46.40	12.90	59.30	68.30	-9.00	peak
2	10480.150	35.88	12.90	48.78	54.00	-5.22	AVG

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

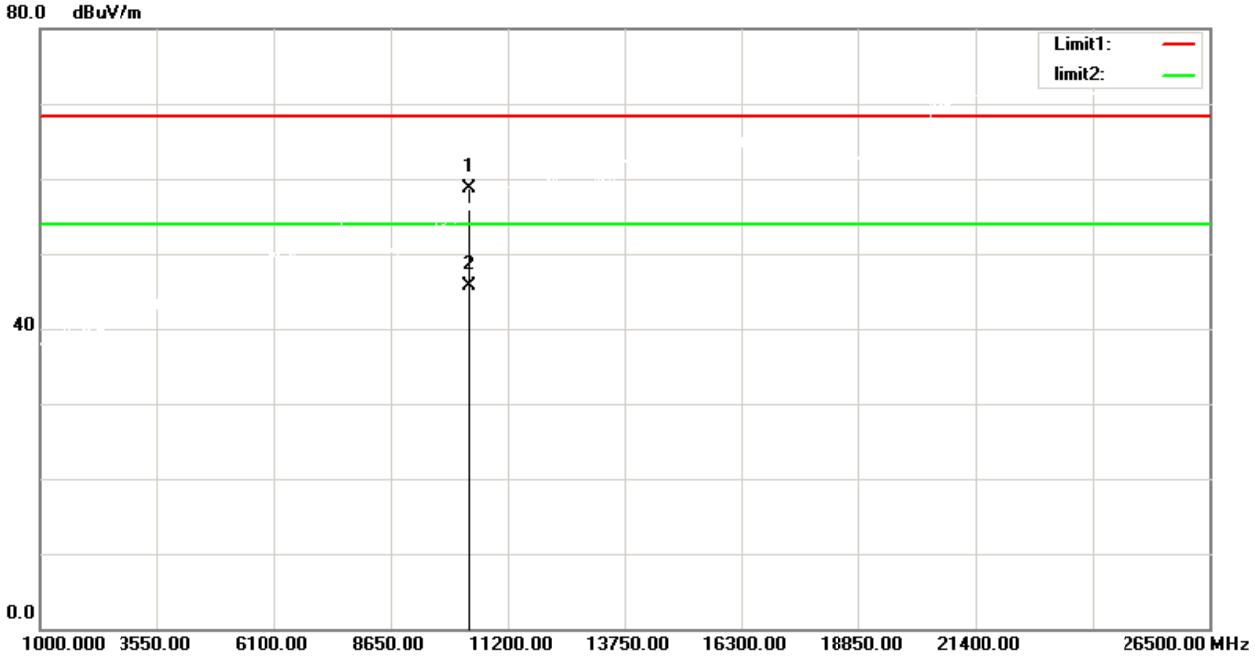
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10365.750	46.89	12.45	59.34	68.30	-8.96	peak
2	10365.750	33.17	12.45	45.62	54.00	-8.38	AVG

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

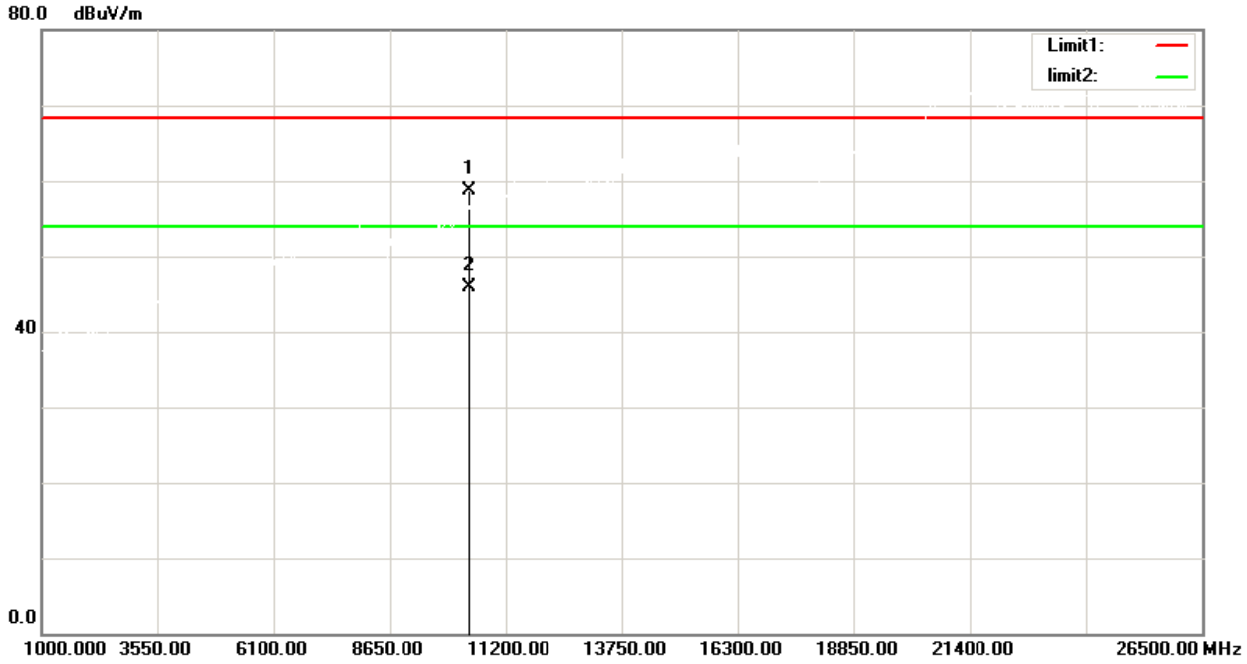
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10365.750	46.28	12.45	58.73	68.30	-9.57	peak
2	10365.750	33.22	12.45	45.67	54.00	-8.33	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5200 MHz

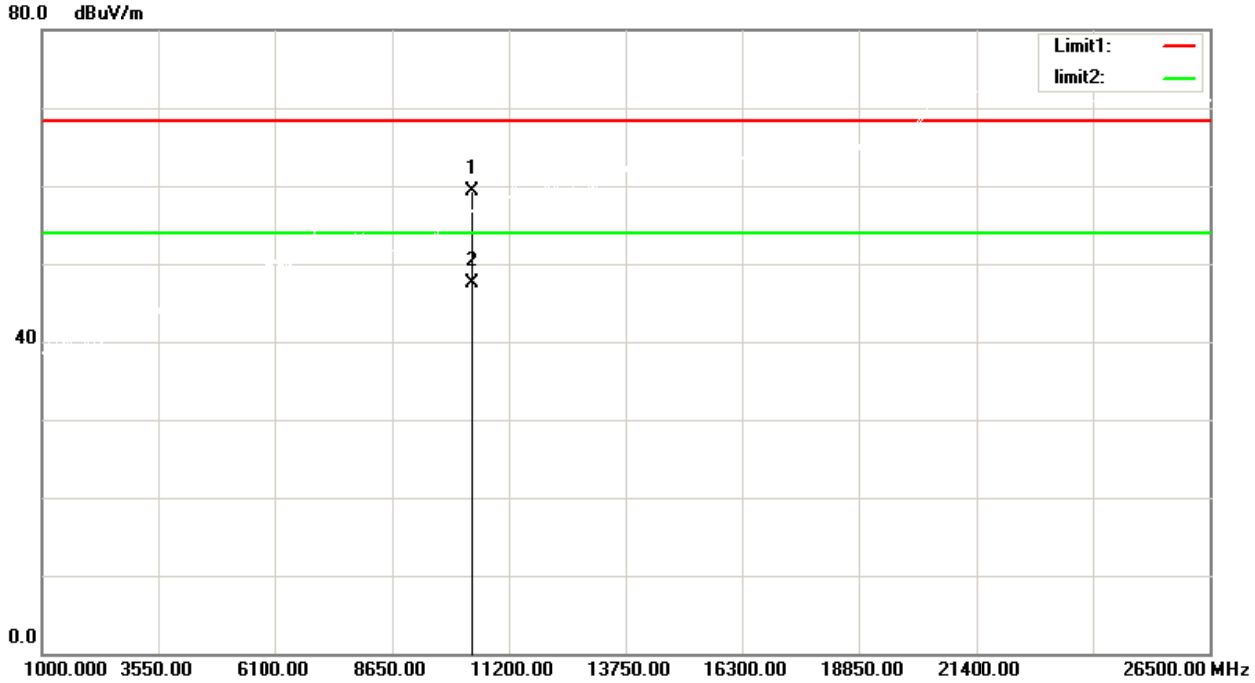
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10409.600	46.11	12.62	58.73	68.30	-9.57	peak
2	10409.600	33.35	12.62	45.97	54.00	-8.03	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5200 MHz

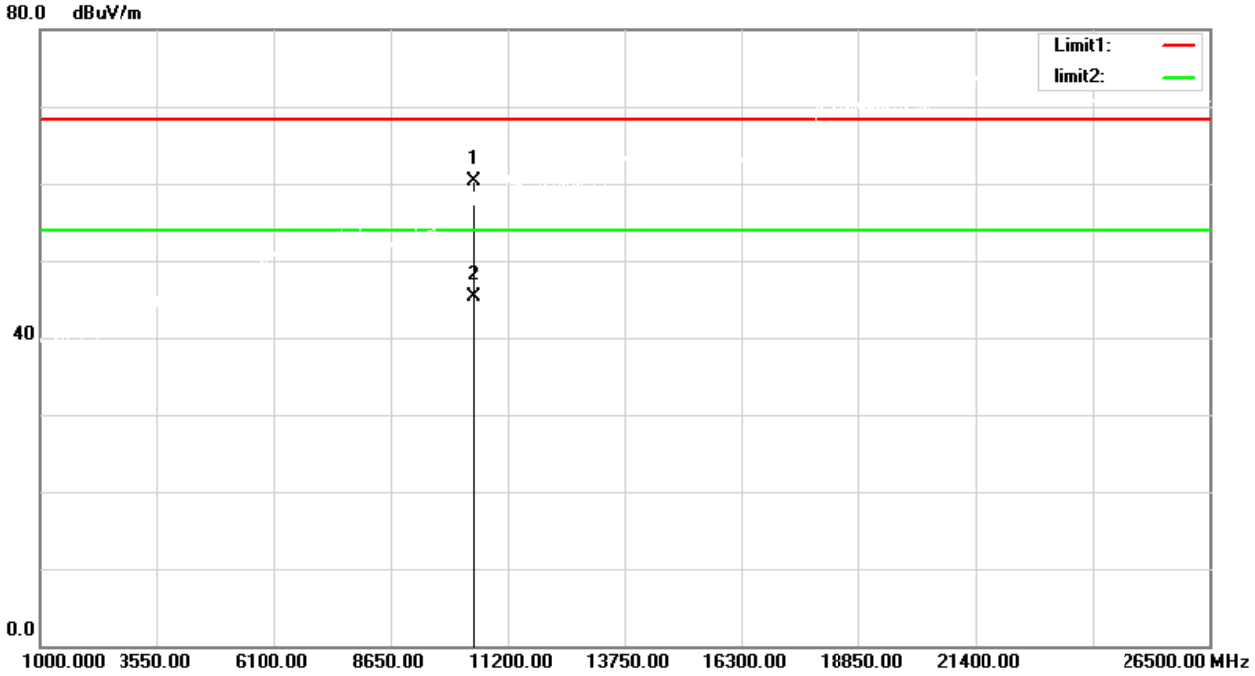
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	46.76	12.58	59.34	68.30	-8.96	peak
2	10400.000	34.98	12.58	47.56	54.00	-6.44	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

Vertical



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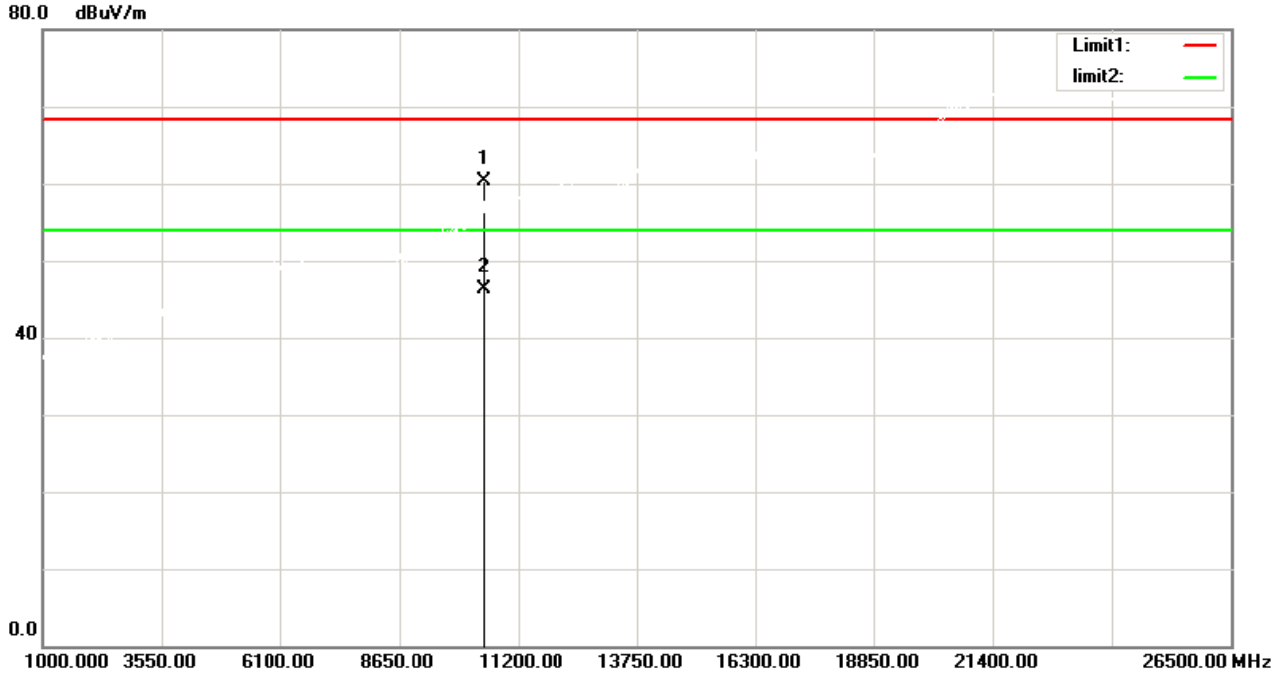
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10475.690	47.47	12.87	60.34	68.30	-7.96	peak
2	10475.690	32.50	12.87	45.37	54.00	-8.63	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT20) Mode 5240 MHz

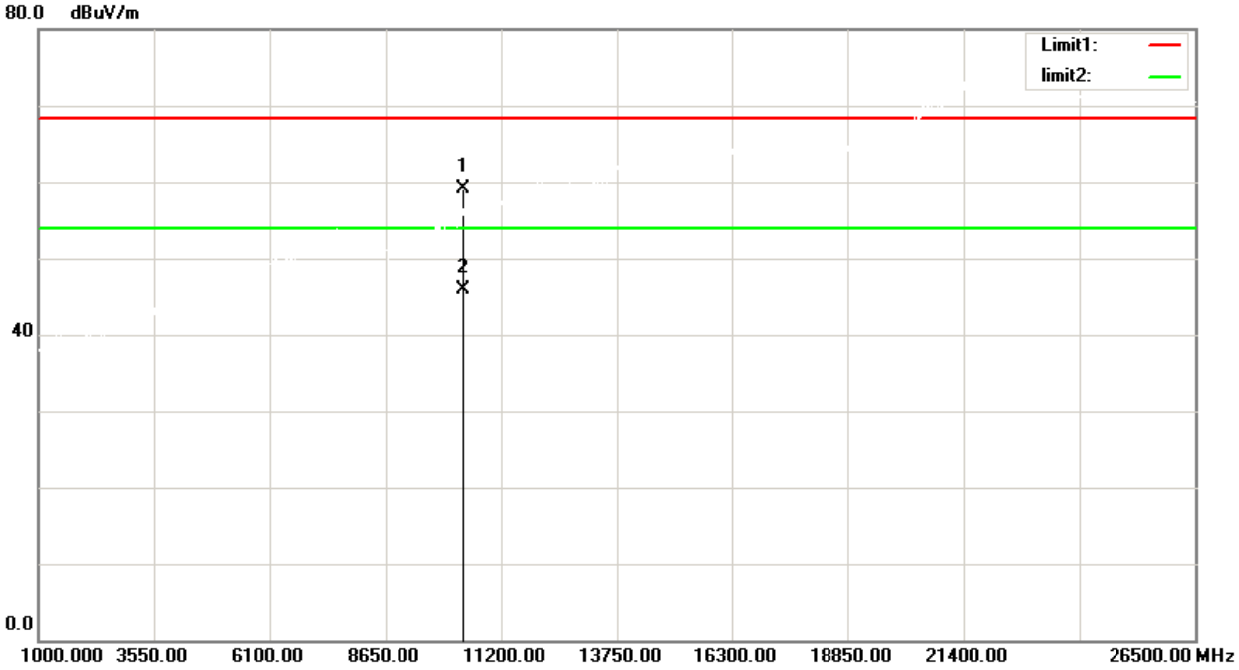
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10475.680	47.43	12.87	60.30	68.30	-8.00	peak
2	10475.680	33.51	12.87	46.38	54.00	-7.62	AVG

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

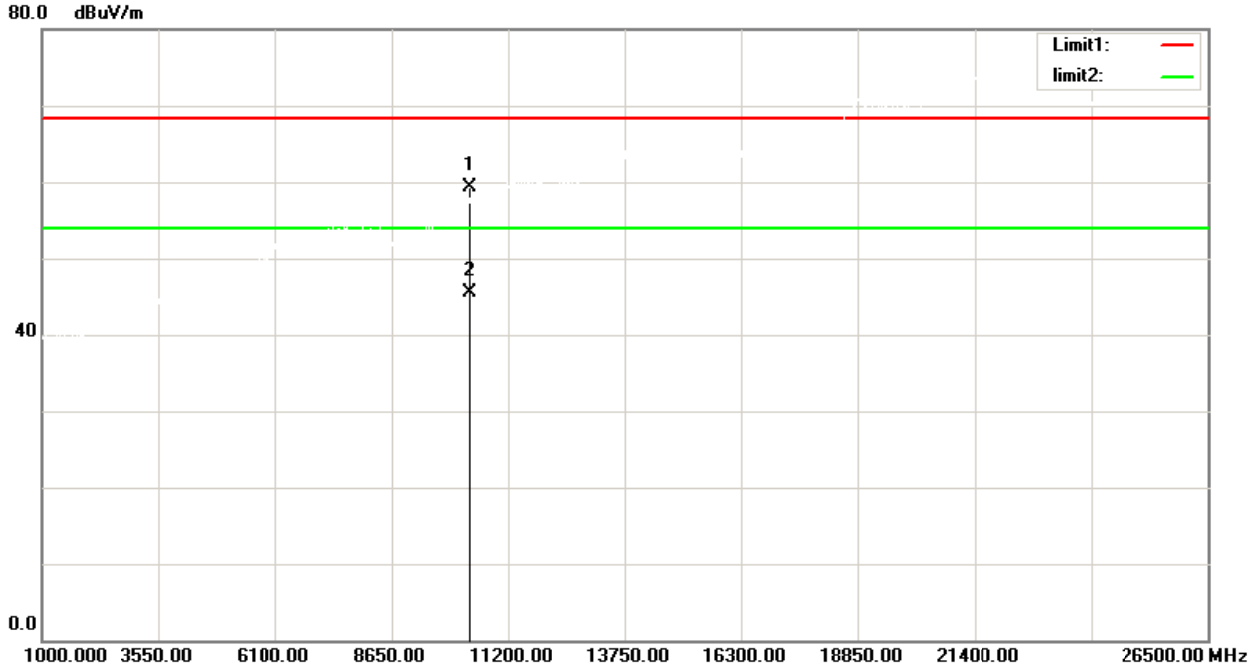
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10382.250	46.50	12.51	59.01	68.30	-9.29	peak
2	10382.250	33.34	12.51	45.85	54.00	-8.15	AVG

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

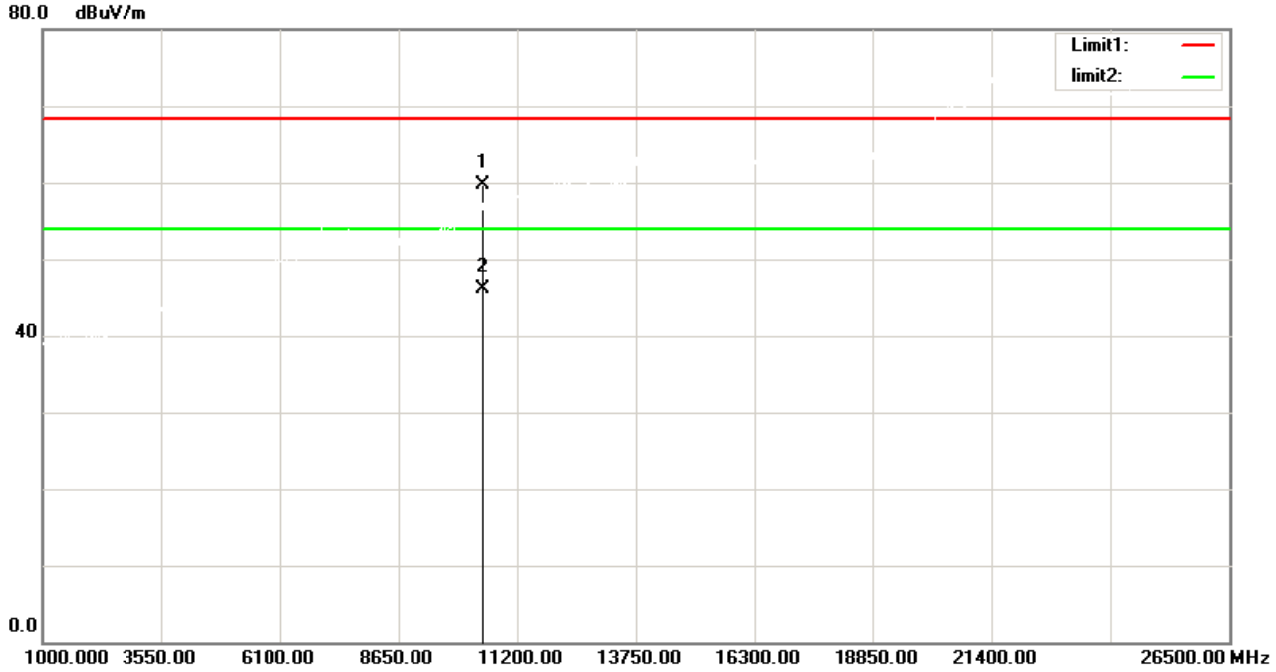
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	46.79	12.51	59.30	68.30	-9.00	peak
2	10380.000	33.02	12.51	45.53	54.00	-8.47	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

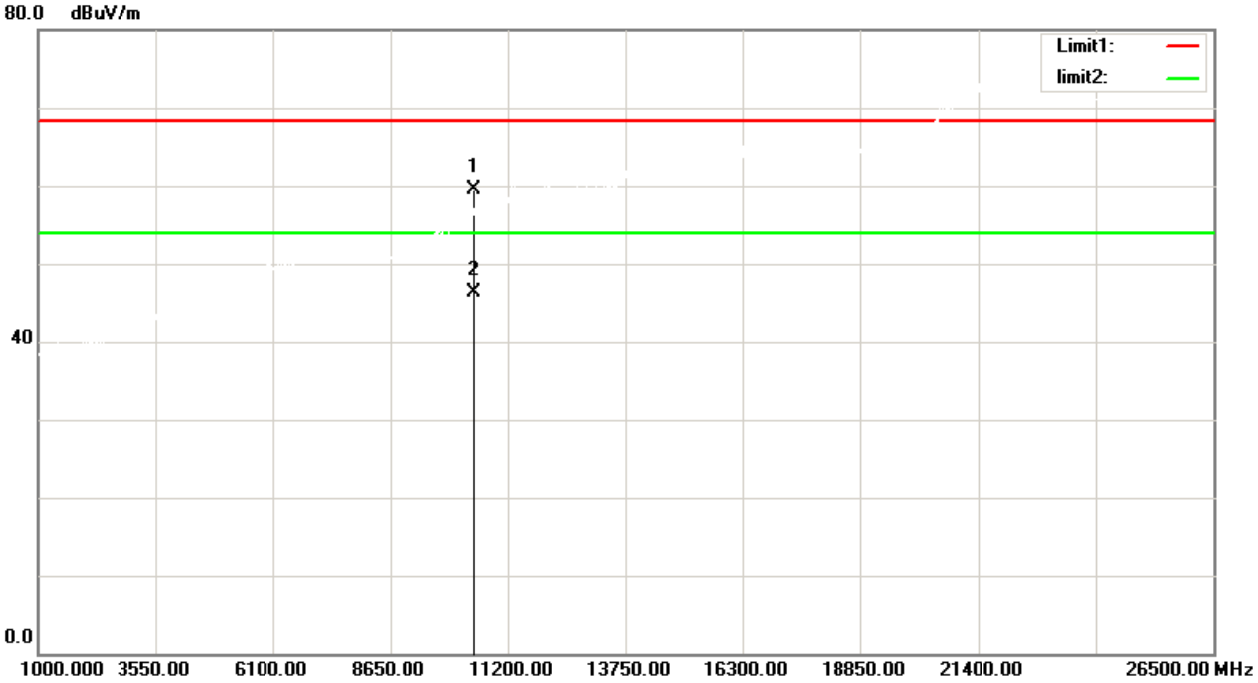
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10470.000	46.90	12.85	59.75	68.30	-8.55	peak
2	10470.000	33.29	12.85	46.14	54.00	-7.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX N (HT40) Mode 5230 MHz

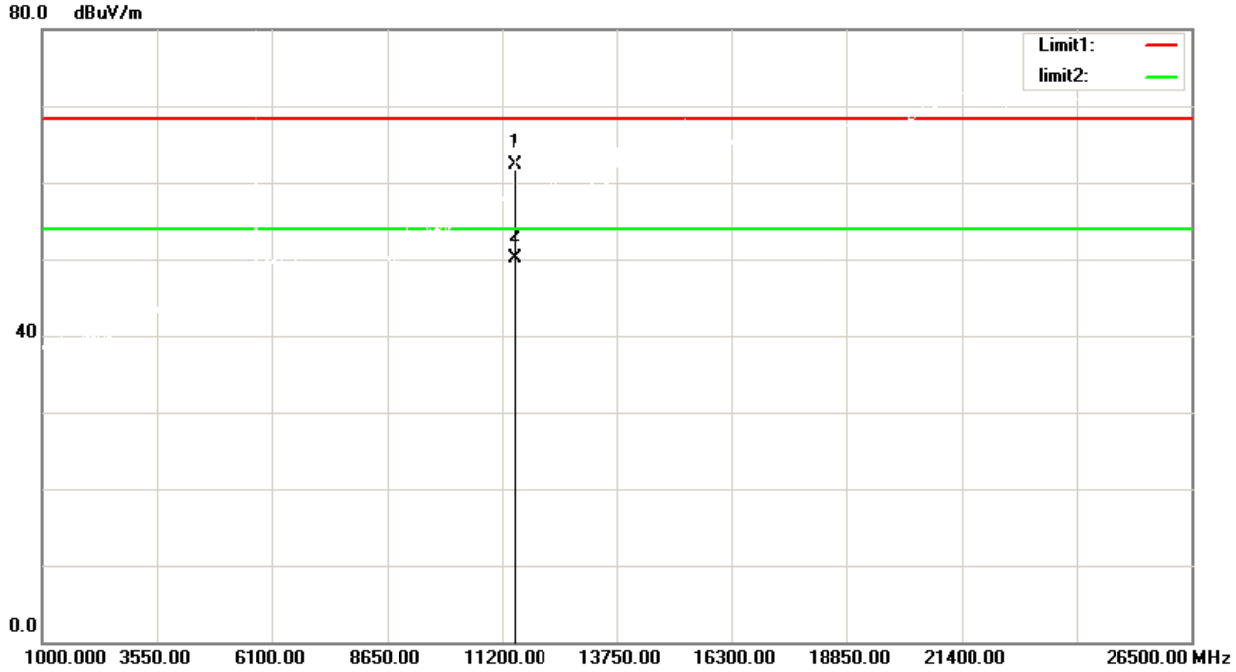
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10470.500	46.74	12.85	59.59	68.30	-8.71	peak
2	10470.500	33.54	12.85	46.39	54.00	-7.61	AVG

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

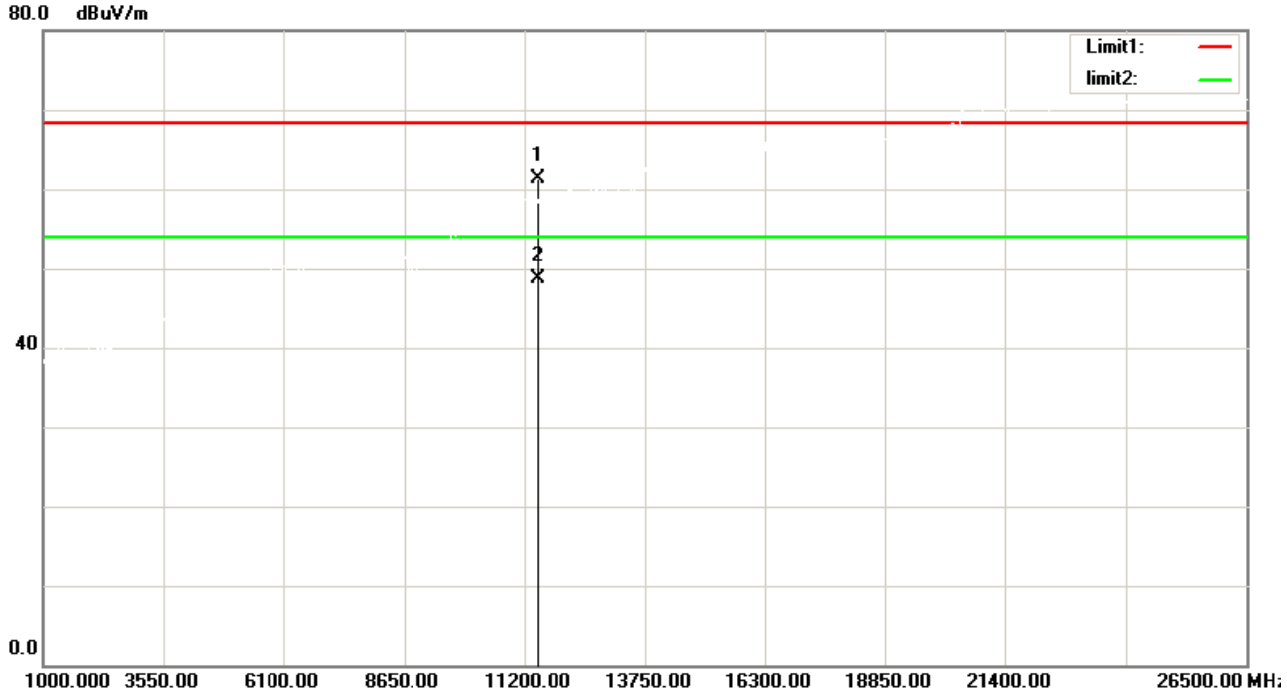
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11501.503	47.45	14.86	62.31	68.30	-5.99	peak
2	11501.503	35.19	14.86	50.05	54.00	-3.95	AVG

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

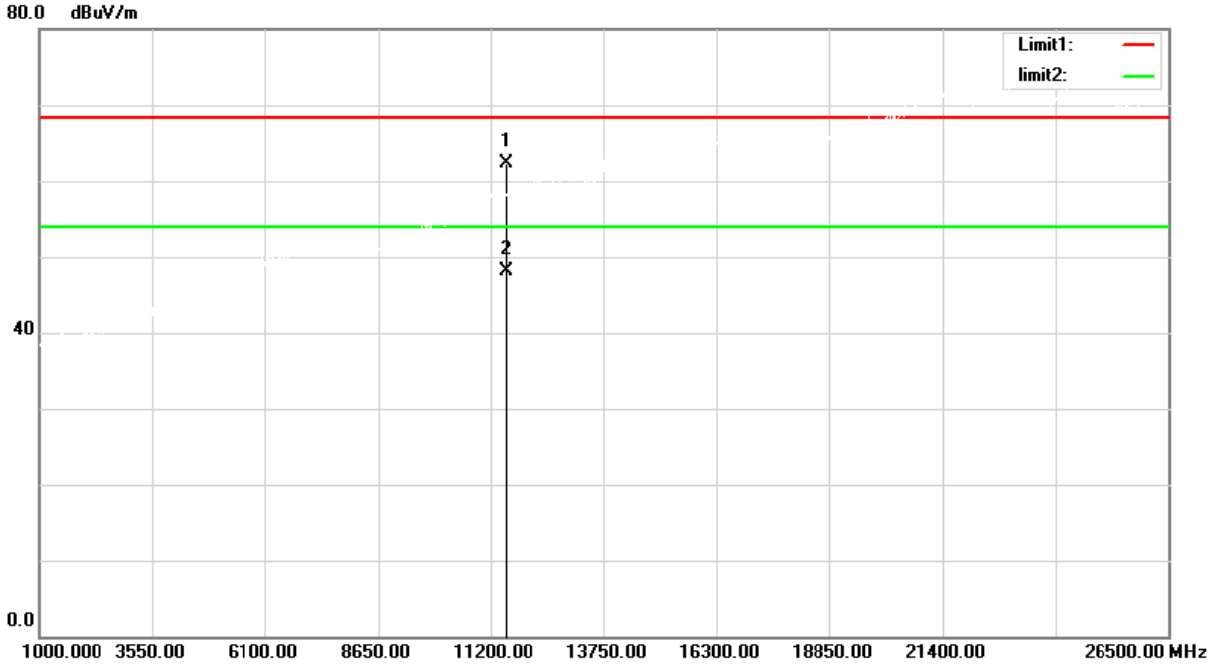
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11501.530	46.37	14.86	61.23	68.30	-7.07	peak
2	11501.530	33.92	14.86	48.78	54.00	-5.22	AVG

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

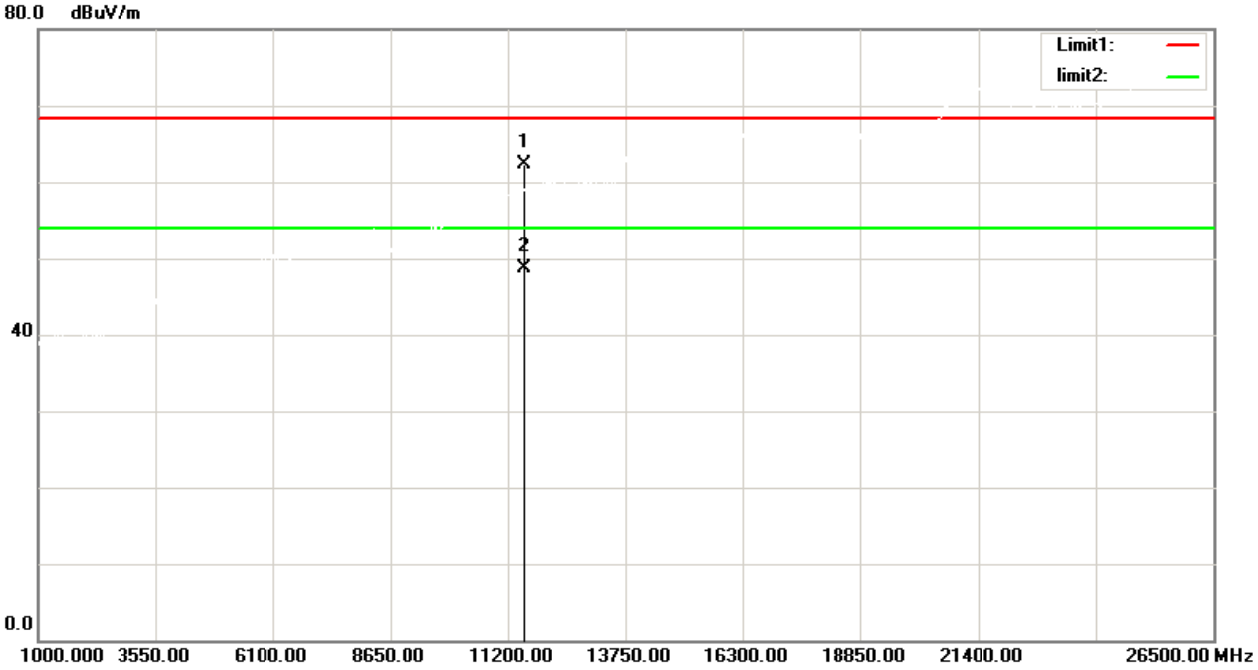
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11571.110	47.47	14.85	62.32	68.30	-5.98	peak
2	11571.110	33.29	14.85	48.14	54.00	-5.86	AVG

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

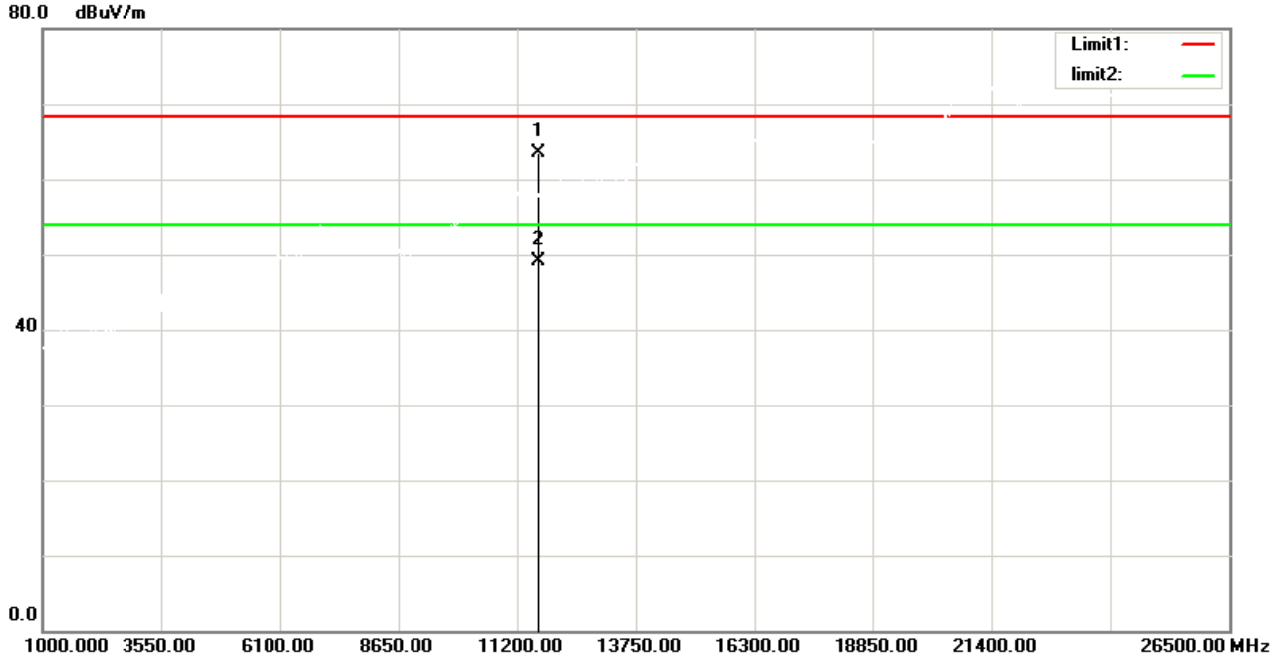
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11572.320	47.47	14.85	62.32	68.30	-5.98	peak
2	11572.320	33.88	14.85	48.73	54.00	-5.27	AVG

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

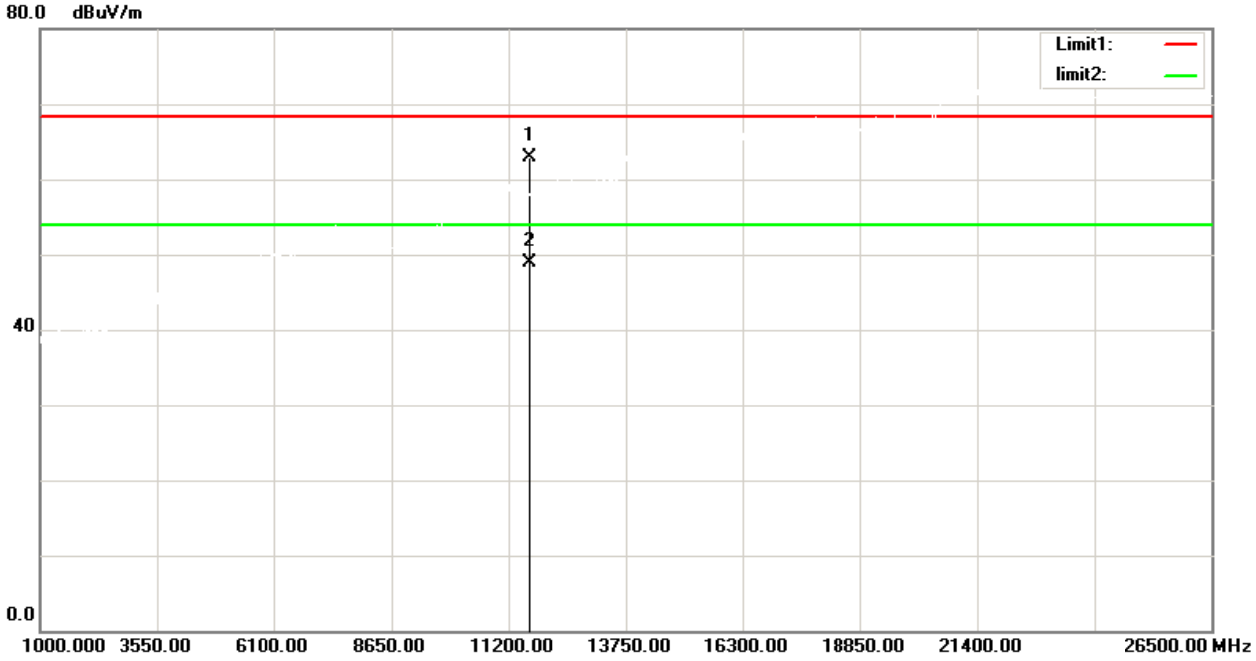
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.500	48.69	14.84	63.53	68.30	-4.77	peak
2	11650.500	34.22	14.84	49.06	54.00	-4.94	AVG

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

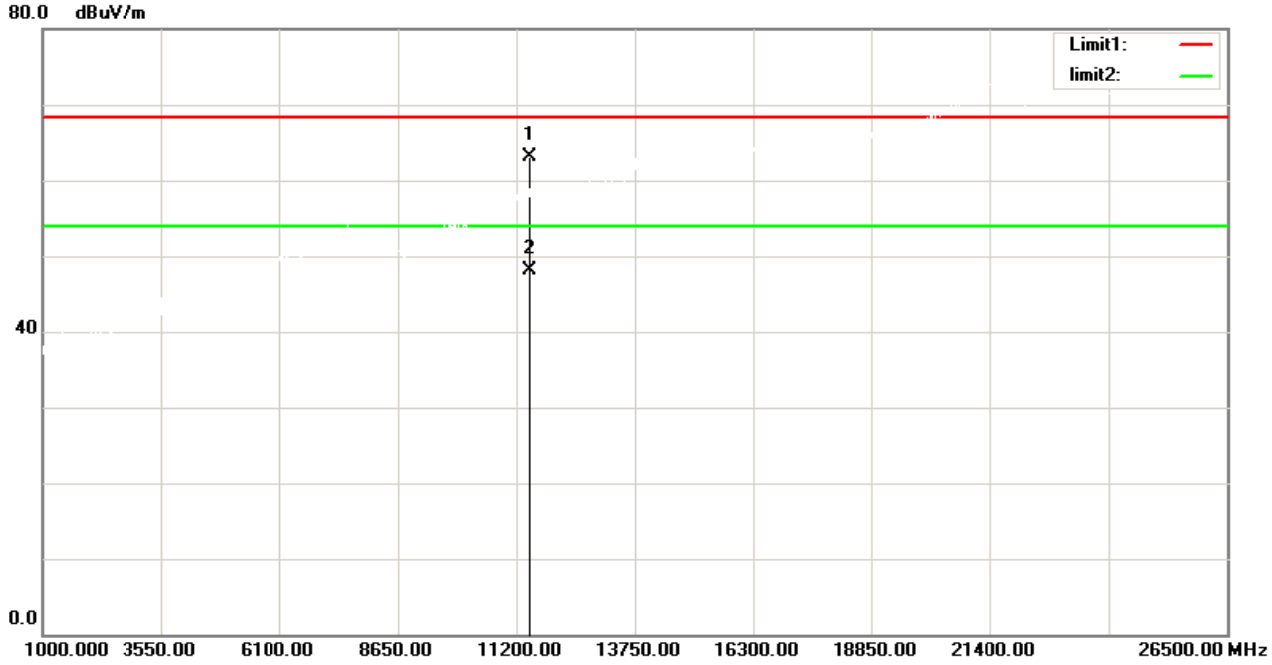
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11651.000	48.07	14.84	62.91	68.30	-5.39	peak
2	11651.000	34.09	14.84	48.93	54.00	-5.07	AVG

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

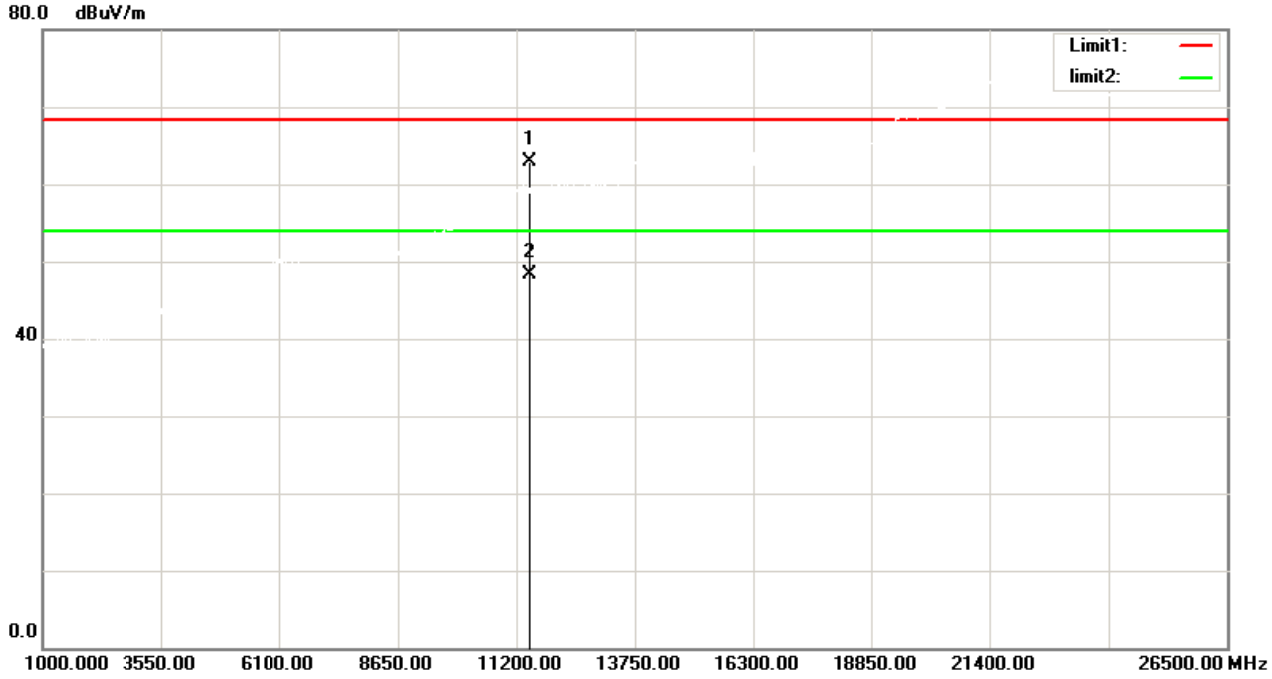
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11500.500	48.17	14.86	63.03	68.30	-5.27	peak
2	11500.500	33.28	14.86	48.14	54.00	-5.86	AVG

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

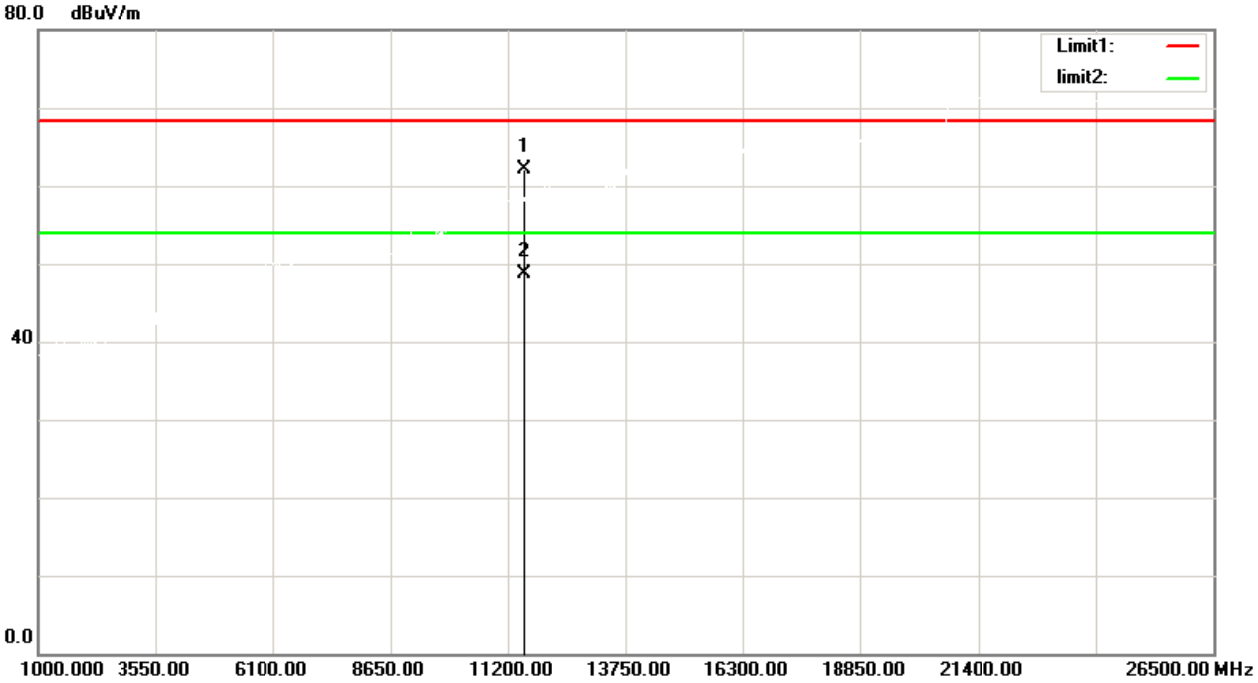
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11501.500	47.97	14.86	62.83	68.30	-5.47	peak
2	11501.500	33.38	14.86	48.24	54.00	-5.76	AVG

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

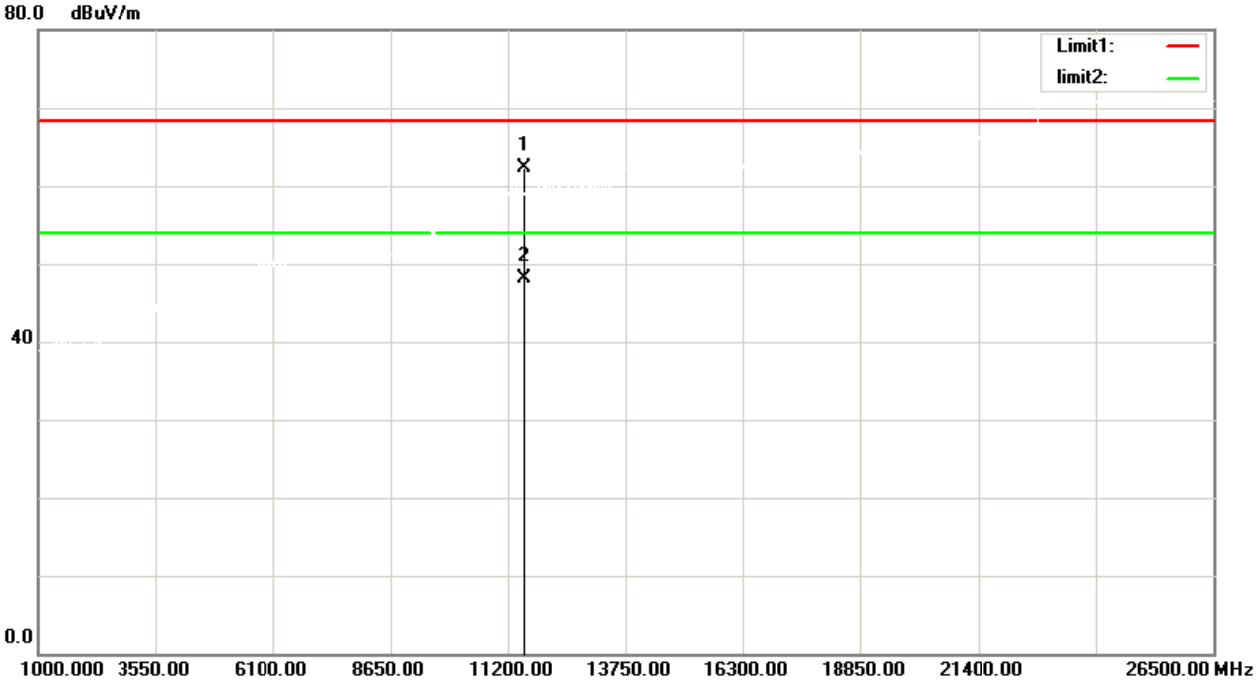
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11571.150	47.27	14.85	62.12	68.30	-6.18	peak
2	11571.150	33.82	14.85	48.67	54.00	-5.33	AVG

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

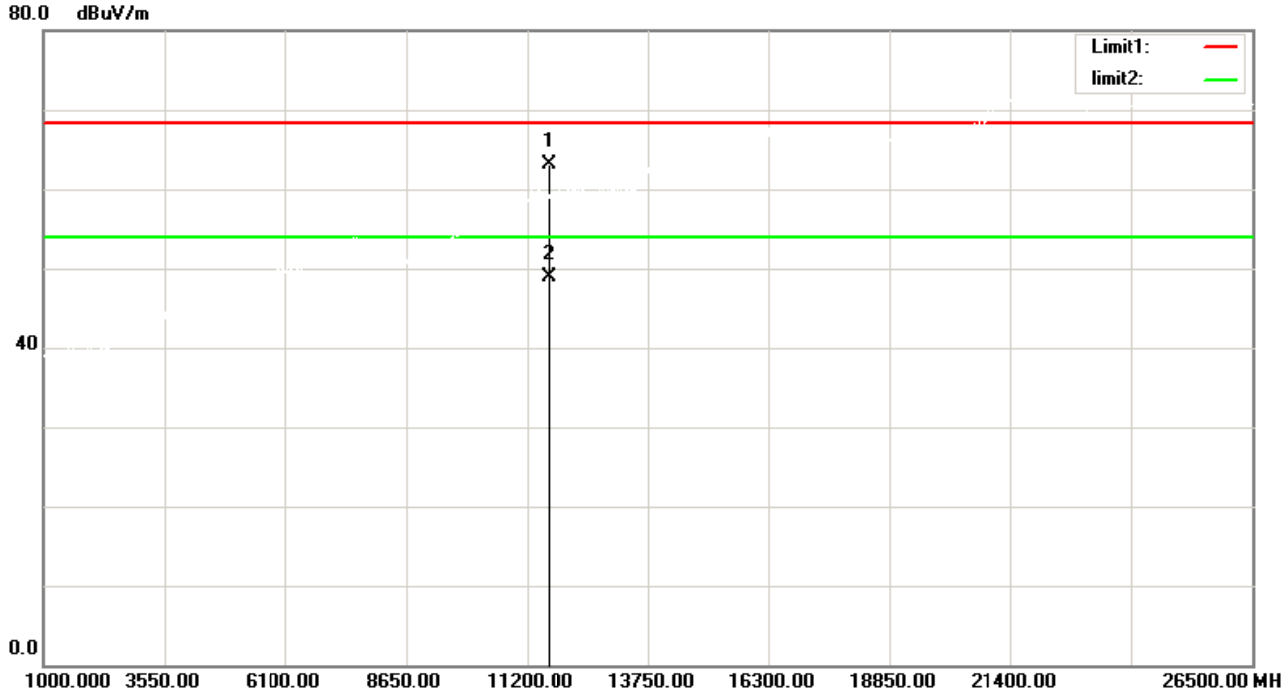
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11571.150	47.49	14.85	62.34	68.30	-5.96	peak
2	11571.150	33.27	14.85	48.12	54.00	-5.88	AVG

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

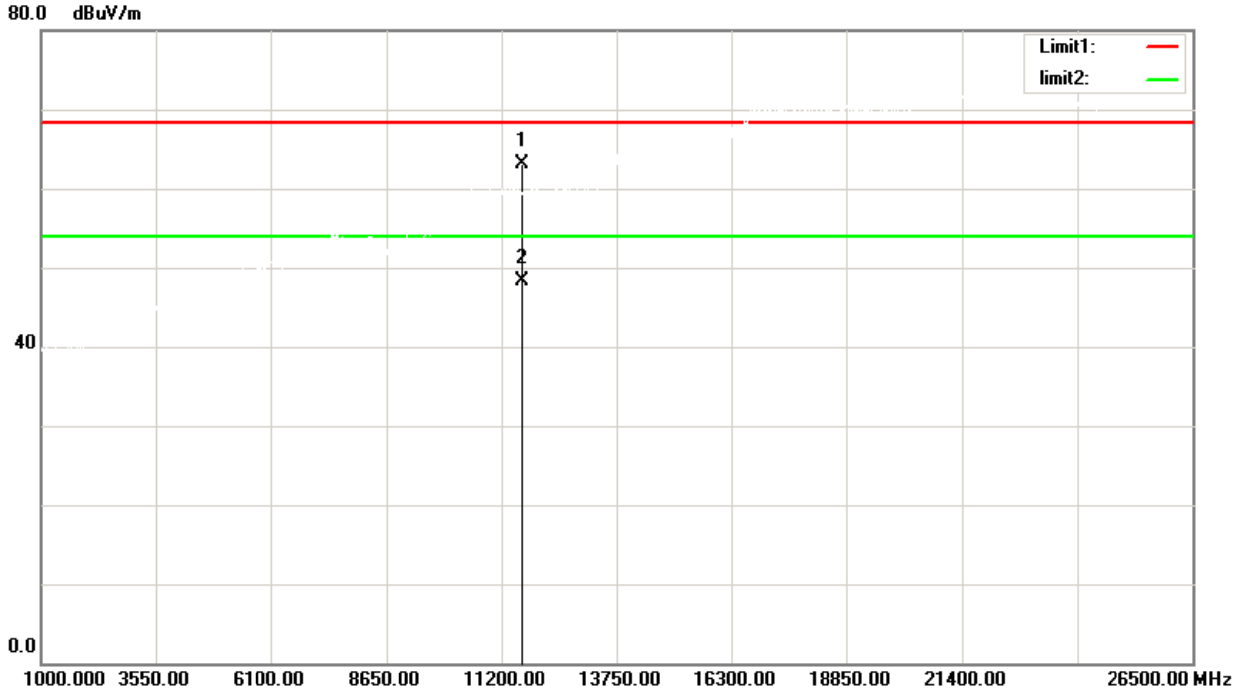
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11652.050	48.18	14.84	63.02	68.30	-5.28	peak
2	11652.050	33.97	14.84	48.81	54.00	-5.19	AVG

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

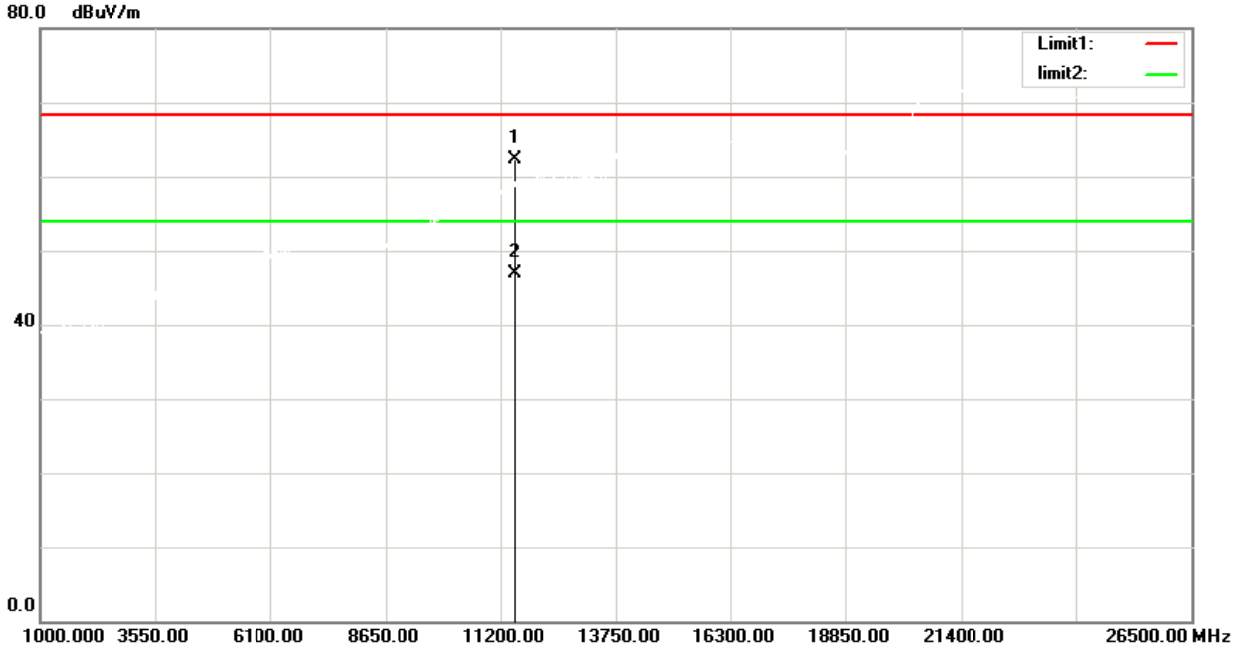
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11651.000	48.20	14.84	63.04	68.30	-5.26	peak
2	11651.000	33.44	14.84	48.28	54.00	-5.72	AVG

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

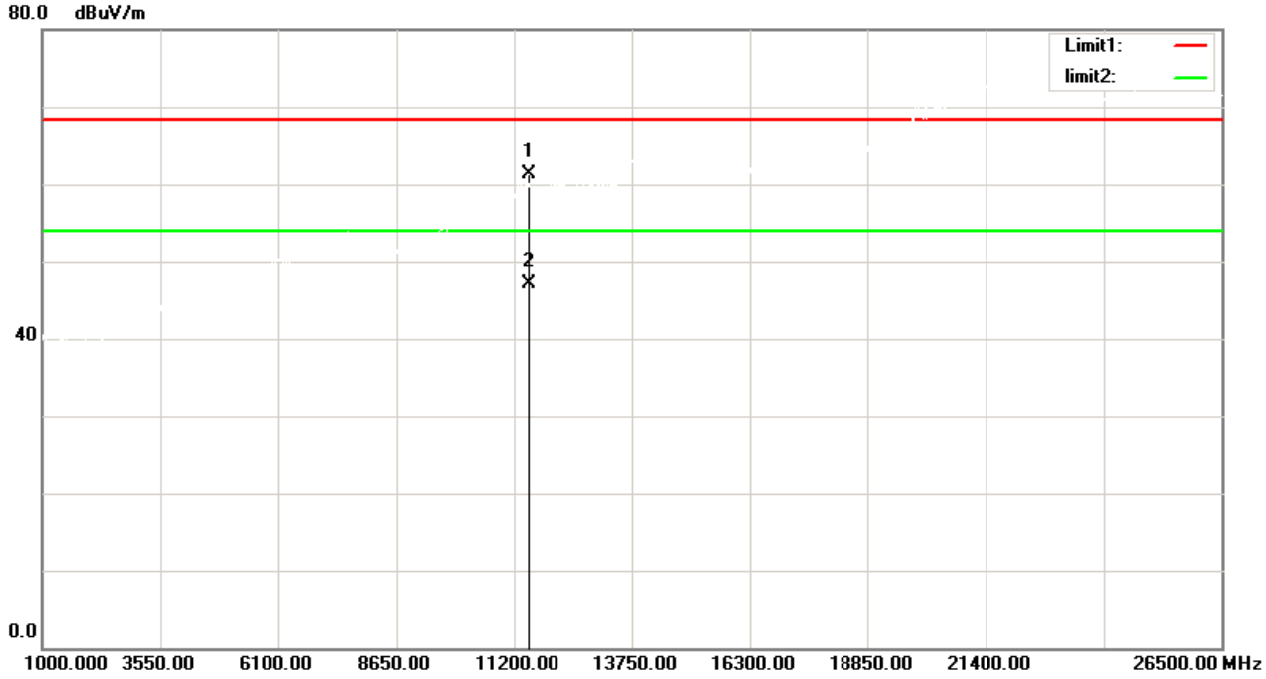
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11523.530	47.41	14.85	62.26	68.30	-6.04	peak
2	11523.530	32.15	14.85	47.00	54.00	-7.00	AVG

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

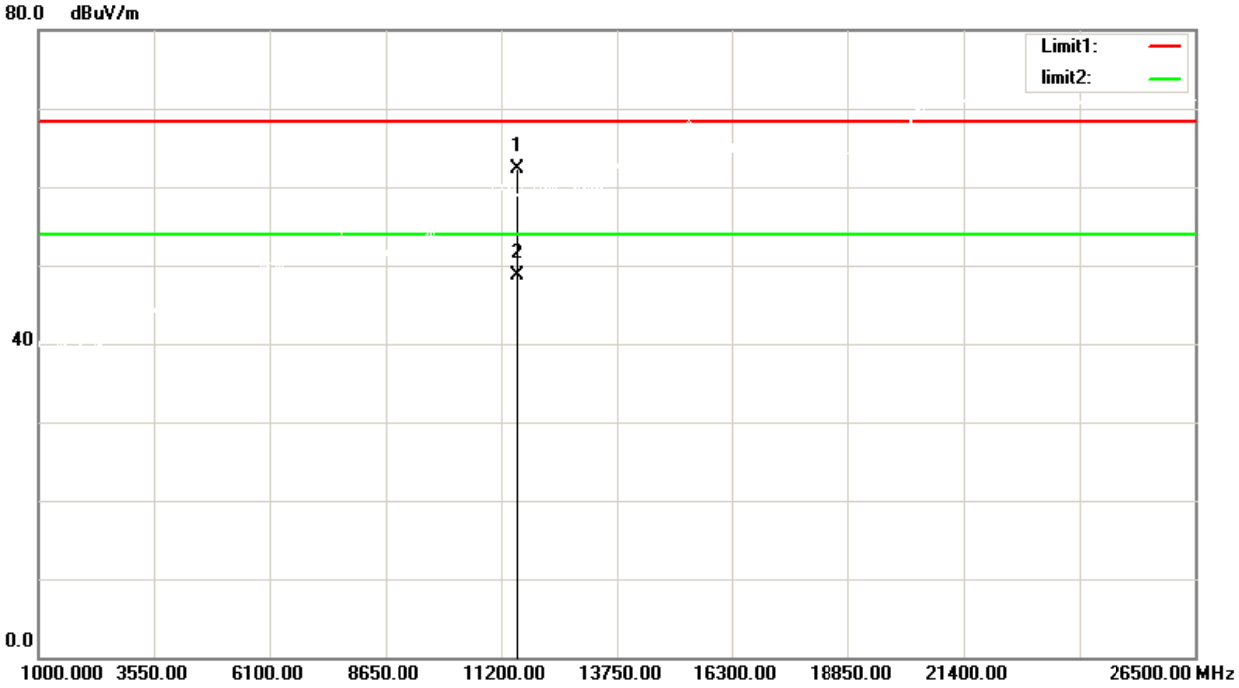
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11523.530	46.38	14.85	61.23	68.30	-7.07	peak
2	11523.530	32.29	14.85	47.14	54.00	-6.86	AVG

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

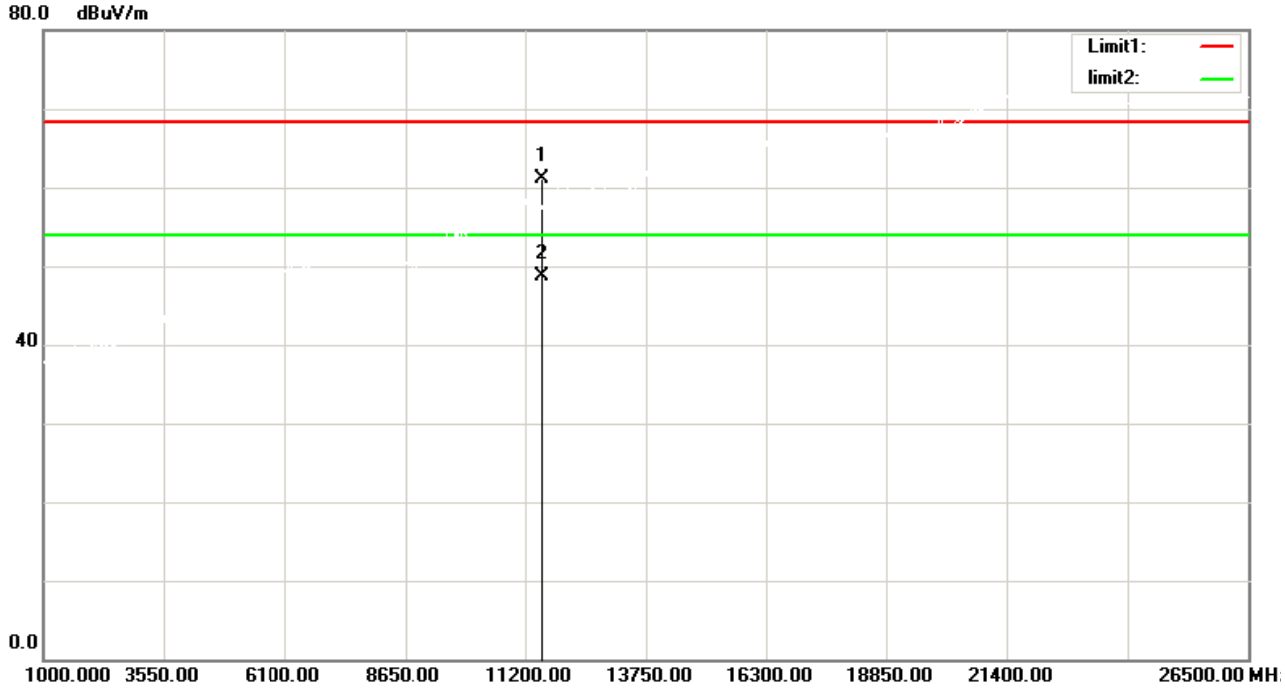
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11562.450	47.44	14.86	62.30	68.30	-6.00	peak
2	11562.450	33.76	14.86	48.62	54.00	-5.38	AVG

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

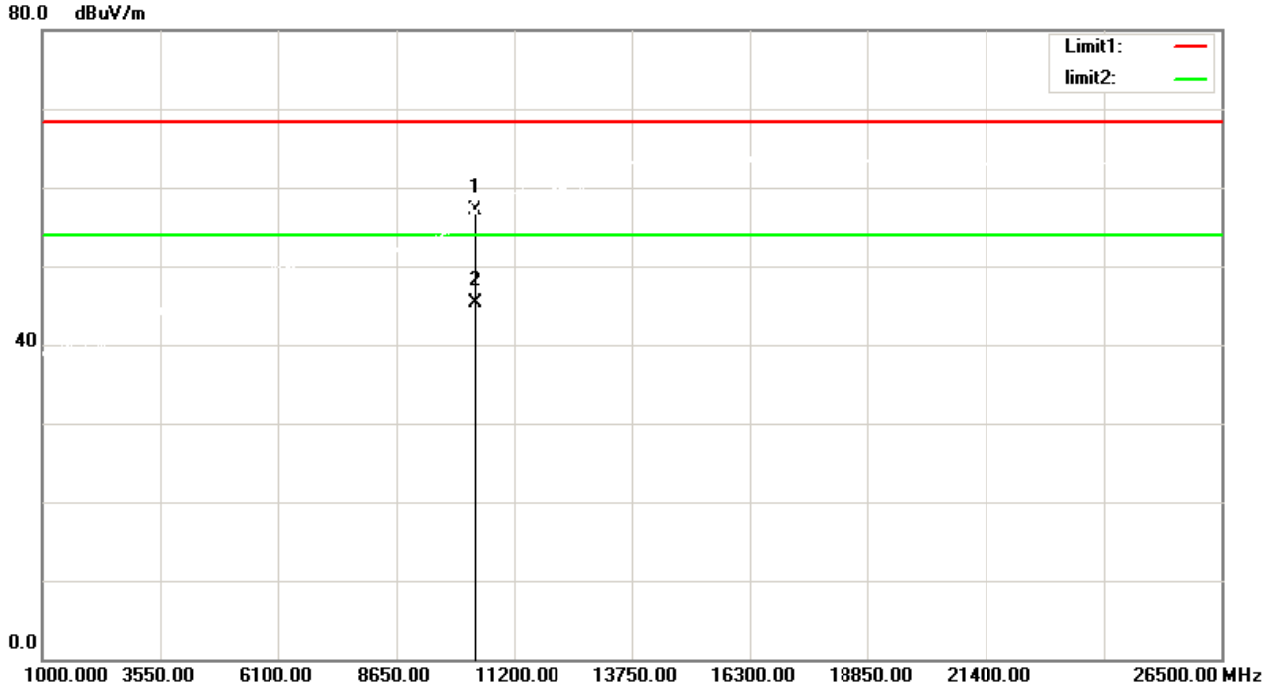
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11571.350	46.30	14.85	61.15	68.30	-7.15	peak
2	11571.350	33.90	14.85	48.75	54.00	-5.25	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

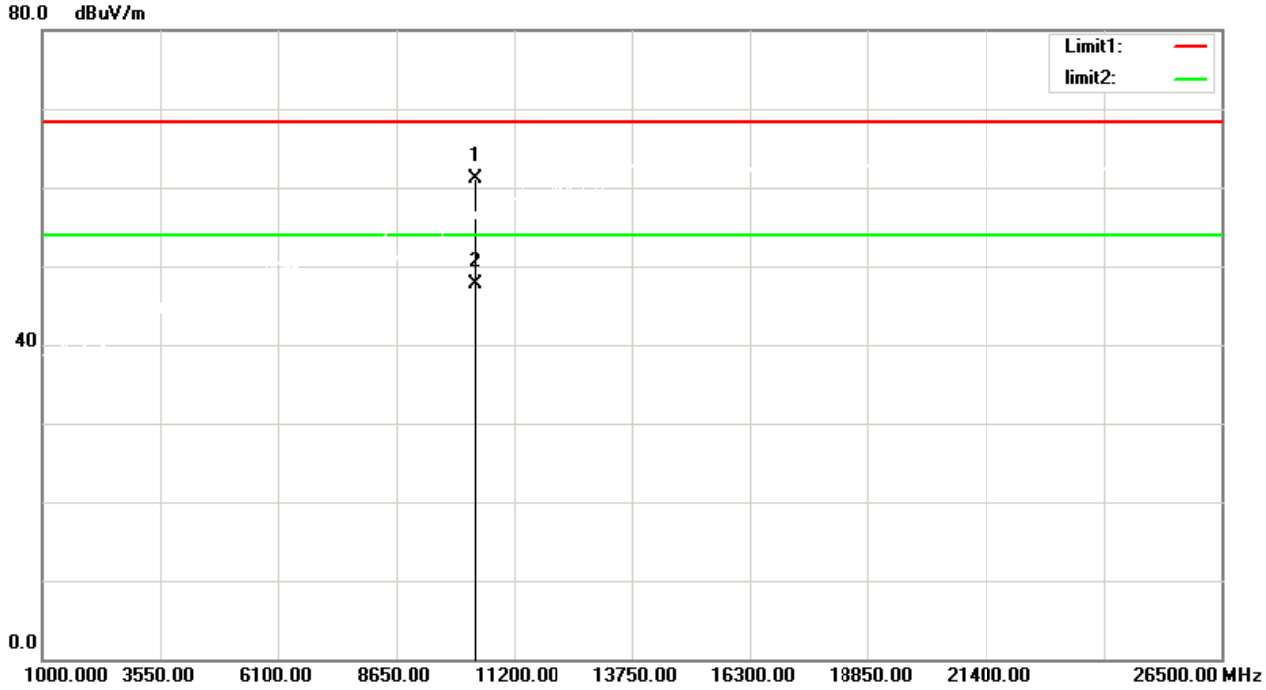
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.100	44.63	12.43	57.06	68.30	-11.24	peak
2	10360.100	32.78	12.43	45.21	54.00	-8.79	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

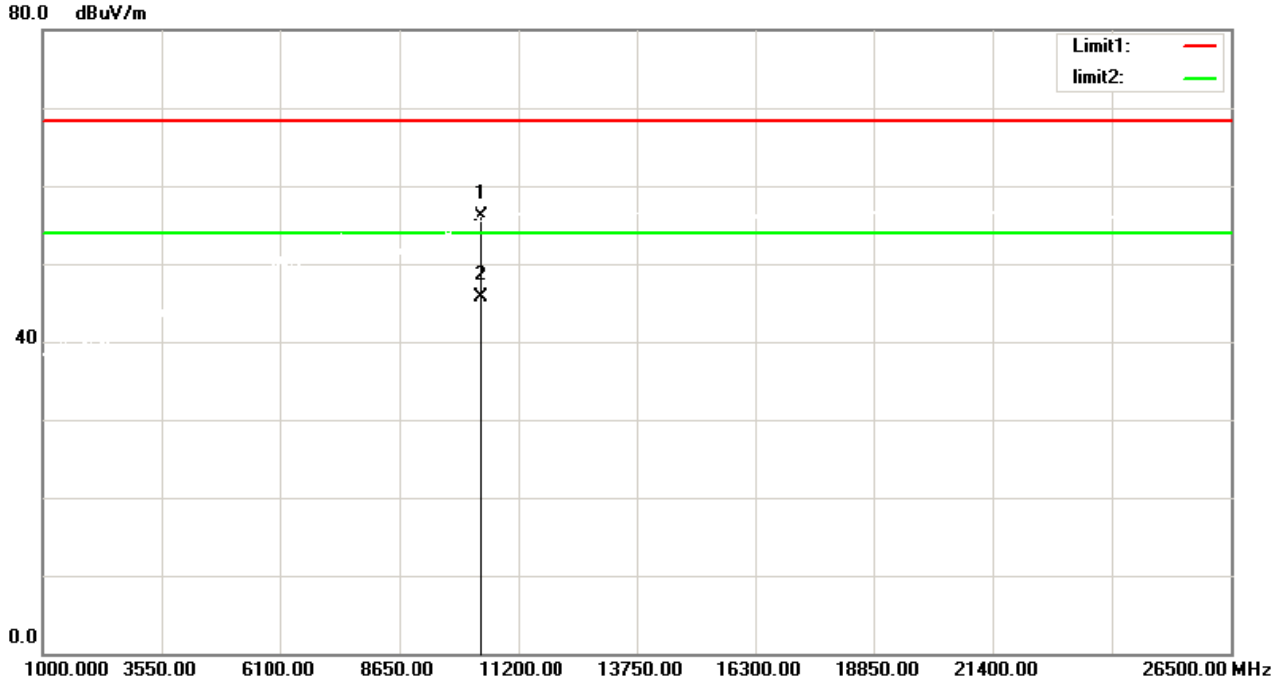
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	48.71	12.43	61.14	68.30	-7.16	peak
2	10360.000	35.37	12.43	47.80	54.00	-6.20	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5200 MHz

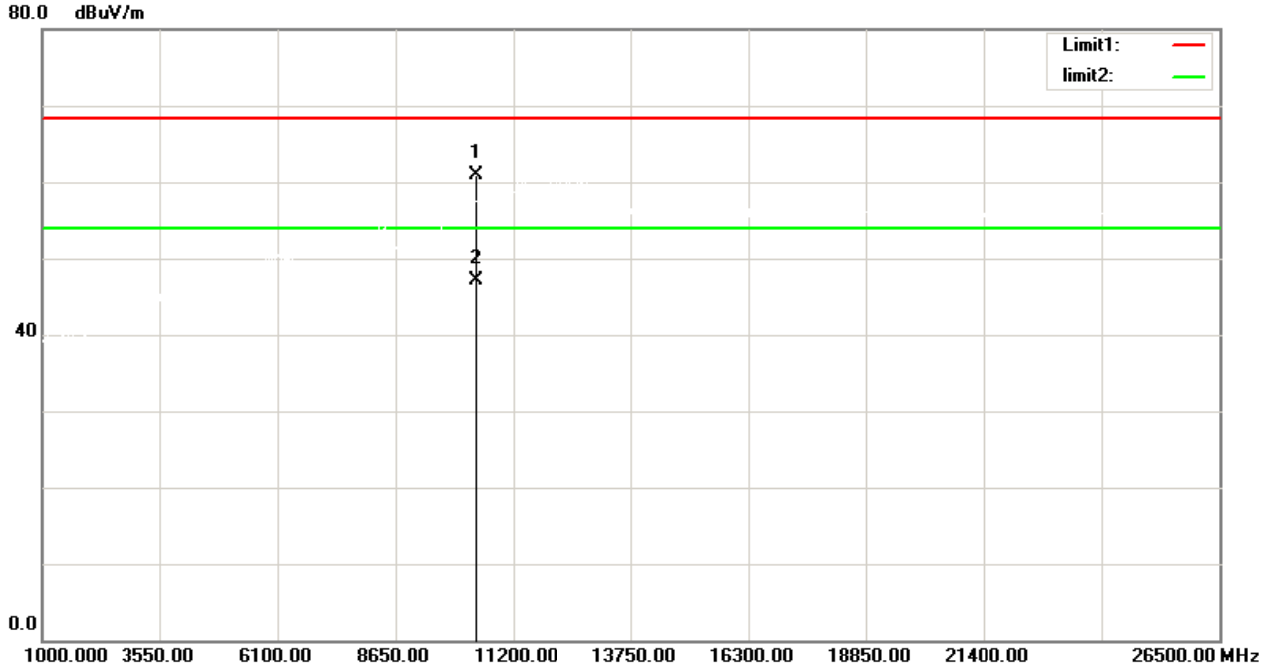
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.100	43.52	12.58	56.10	68.30	-12.20	peak
2	10400.100	33.09	12.58	45.67	54.00	-8.33	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5200 MHz

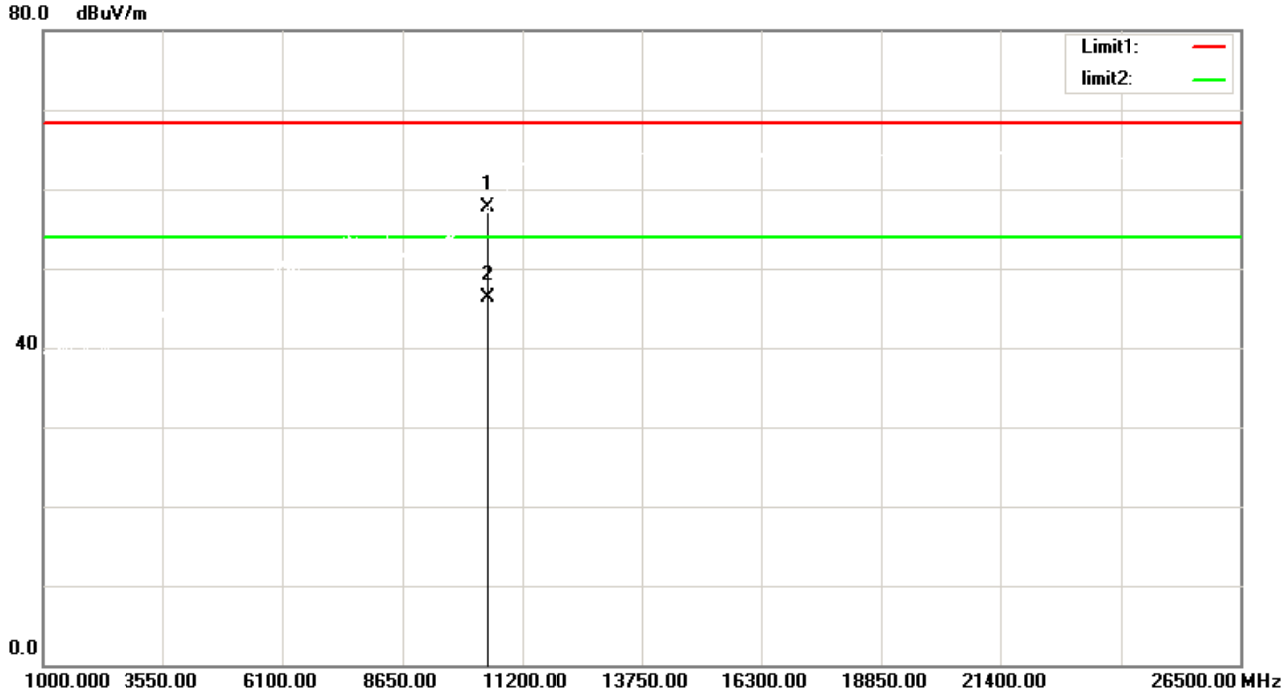
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.110	48.33	12.58	60.91	68.30	-7.39	peak
2	10400.110	34.56	12.58	47.14	54.00	-6.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

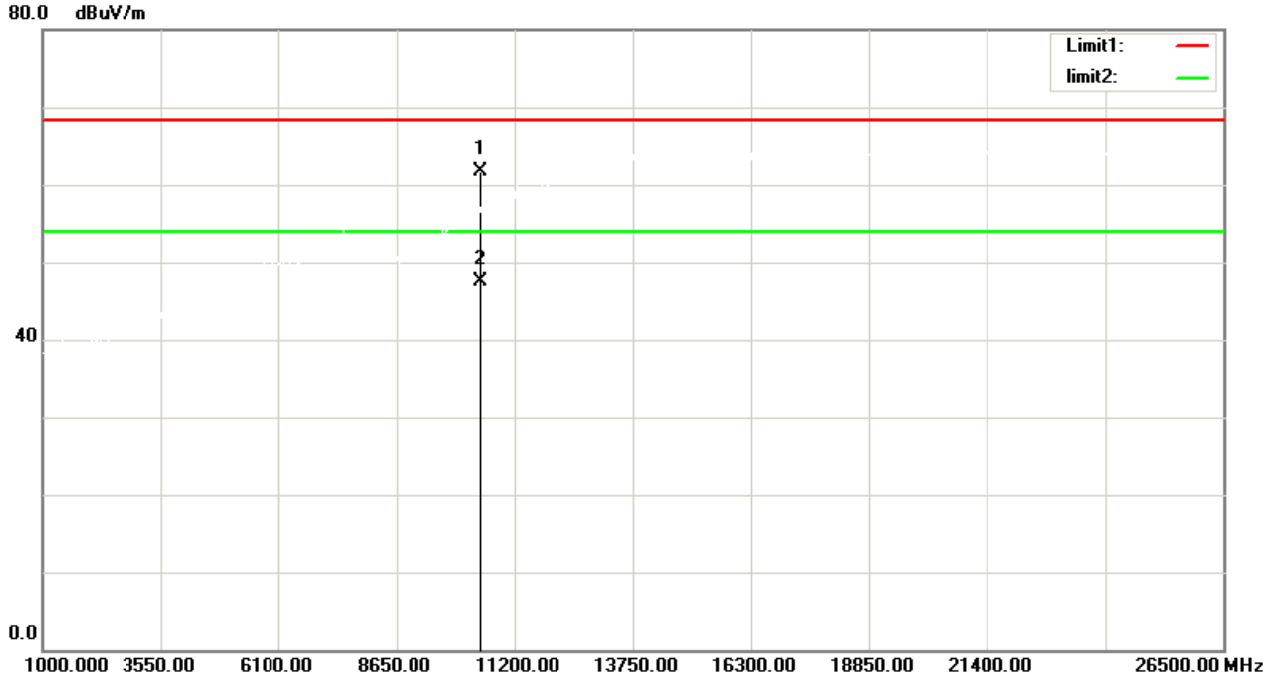
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.050	44.78	12.90	57.68	68.30	-10.62	peak
2	10480.050	33.42	12.90	46.32	54.00	-7.68	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

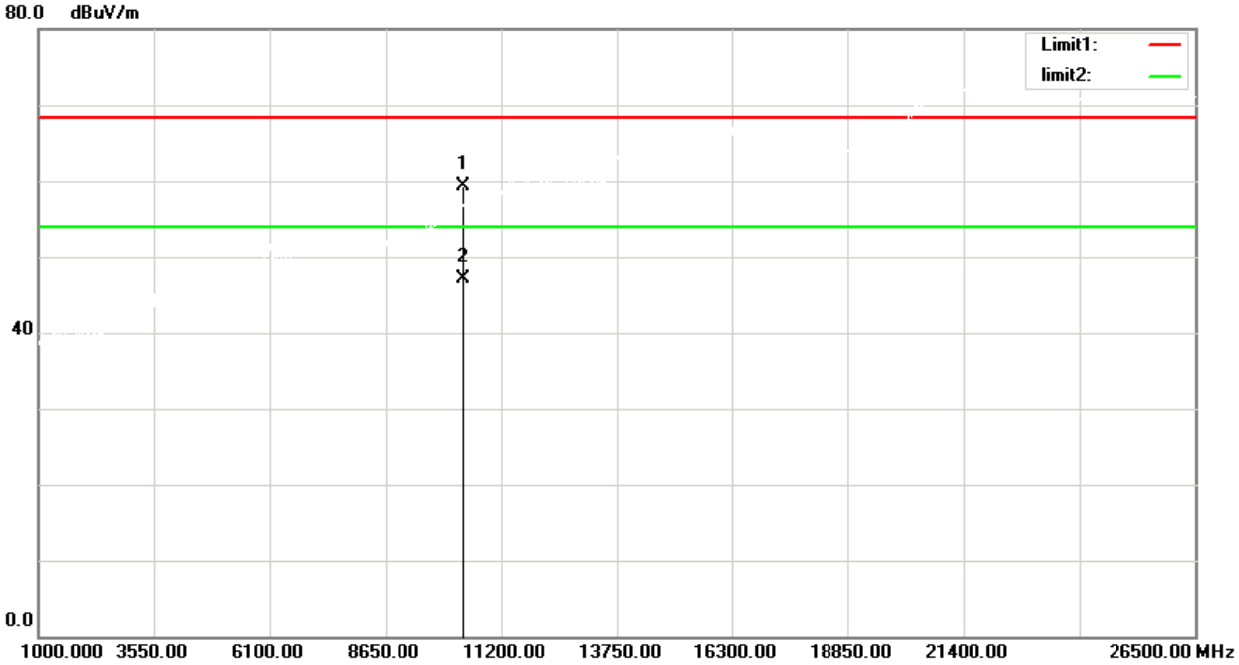
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.050	48.82	12.90	61.72	68.30	-6.58	peak
2	10480.050	34.61	12.90	47.51	54.00	-6.49	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

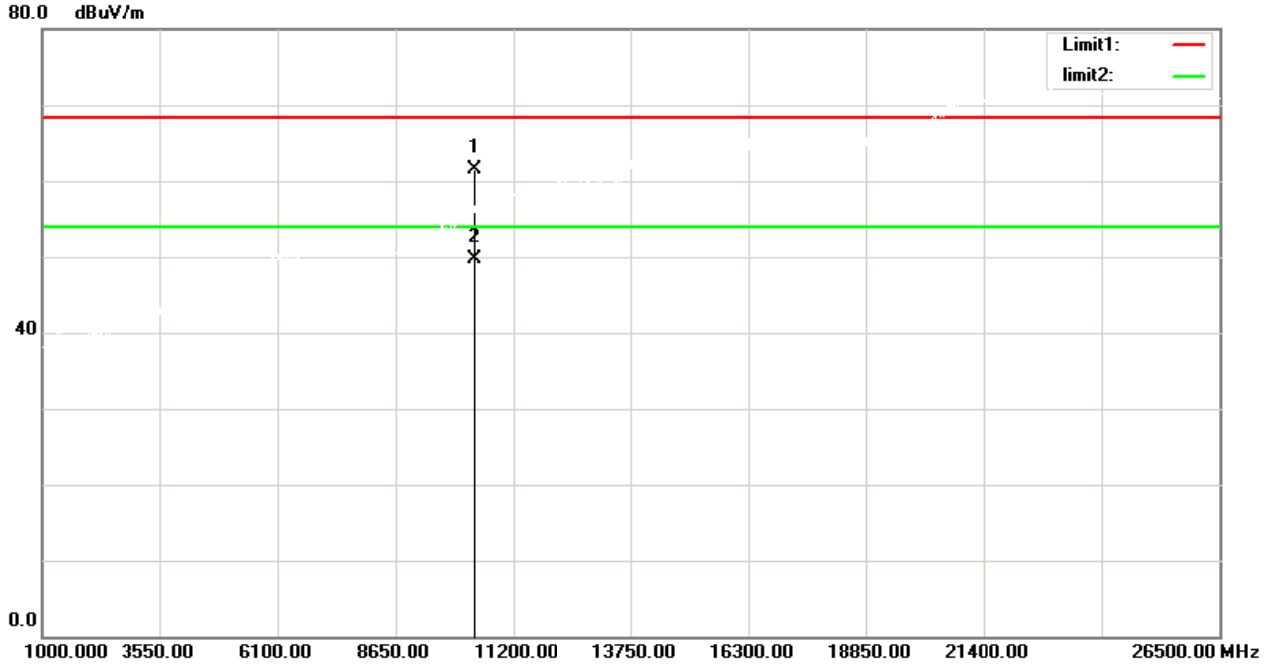
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	46.85	12.51	59.36	68.30	-8.94	peak
2	10380.000	34.63	12.51	47.14	54.00	-6.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

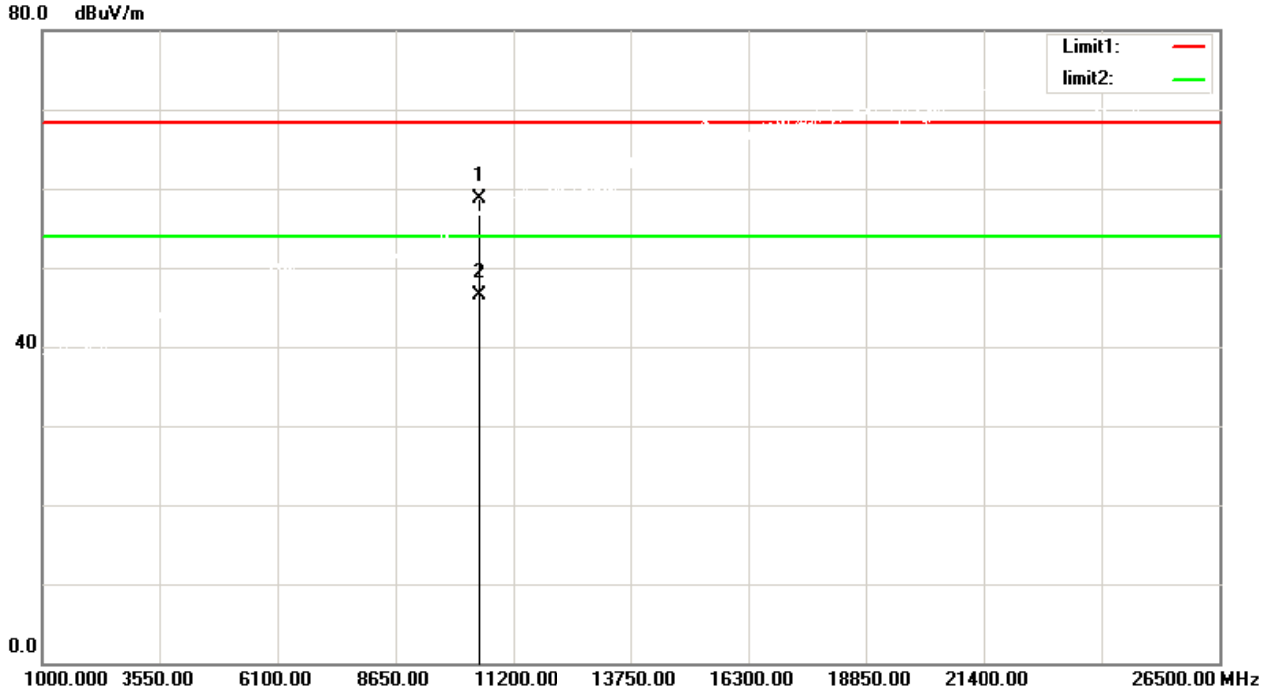
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.100	48.92	12.51	61.43	68.30	-6.87	peak
2	10380.100	37.18	12.51	49.69	54.00	-4.31	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

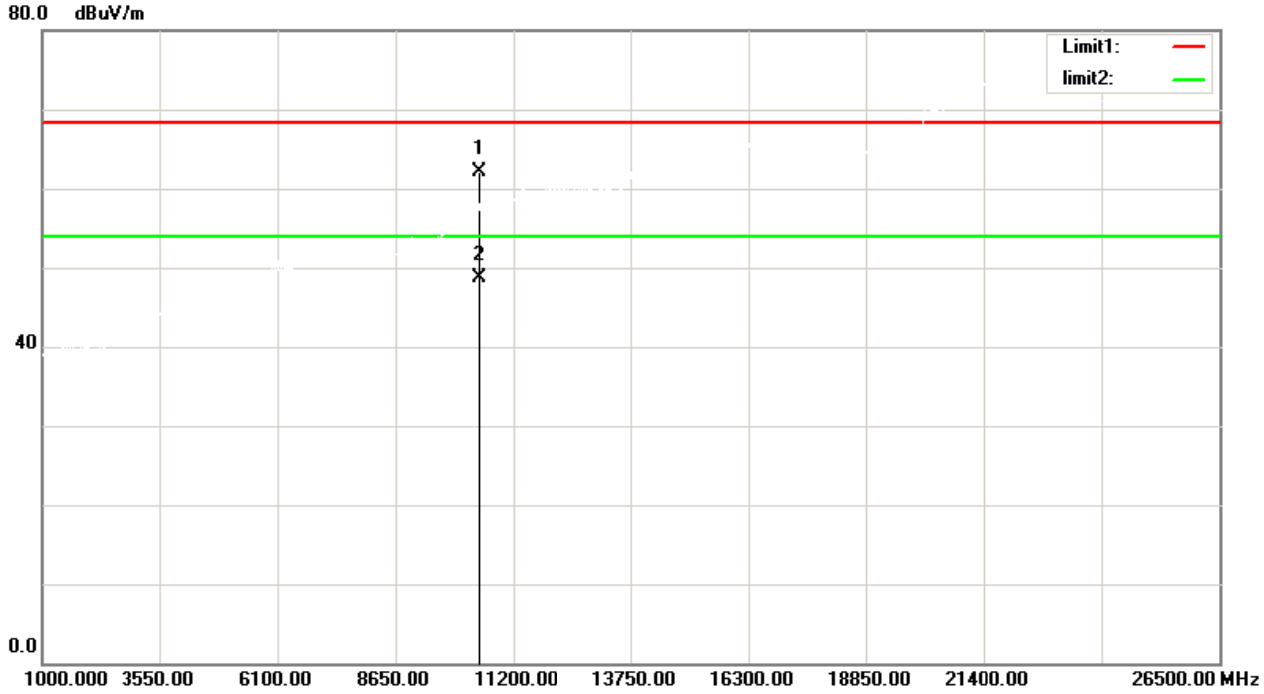
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.200	45.97	12.81	58.78	68.30	-9.52	peak
2	10460.200	33.78	12.81	46.59	54.00	-7.41	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

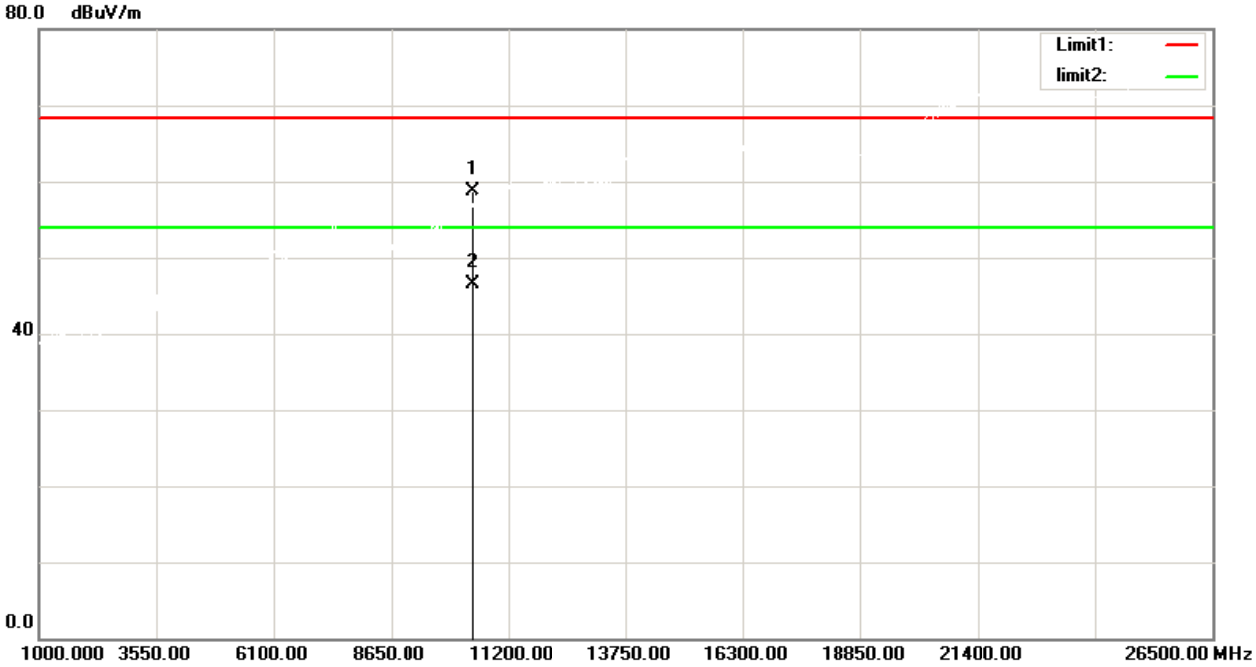
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.300	49.22	12.81	62.03	68.30	-6.27	peak
2	10460.300	35.87	12.81	48.68	54.00	-5.32	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

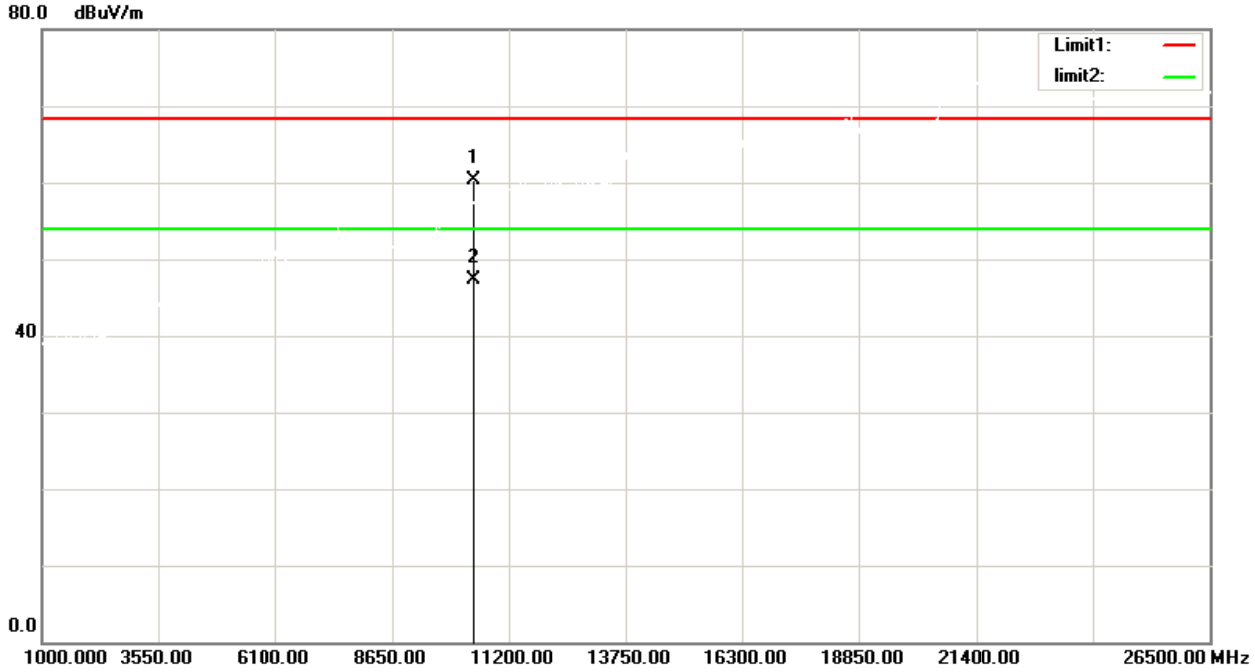
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.150	46.12	12.66	58.78	68.30	-9.52	peak
2	10420.150	33.93	12.66	46.59	54.00	-7.41	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

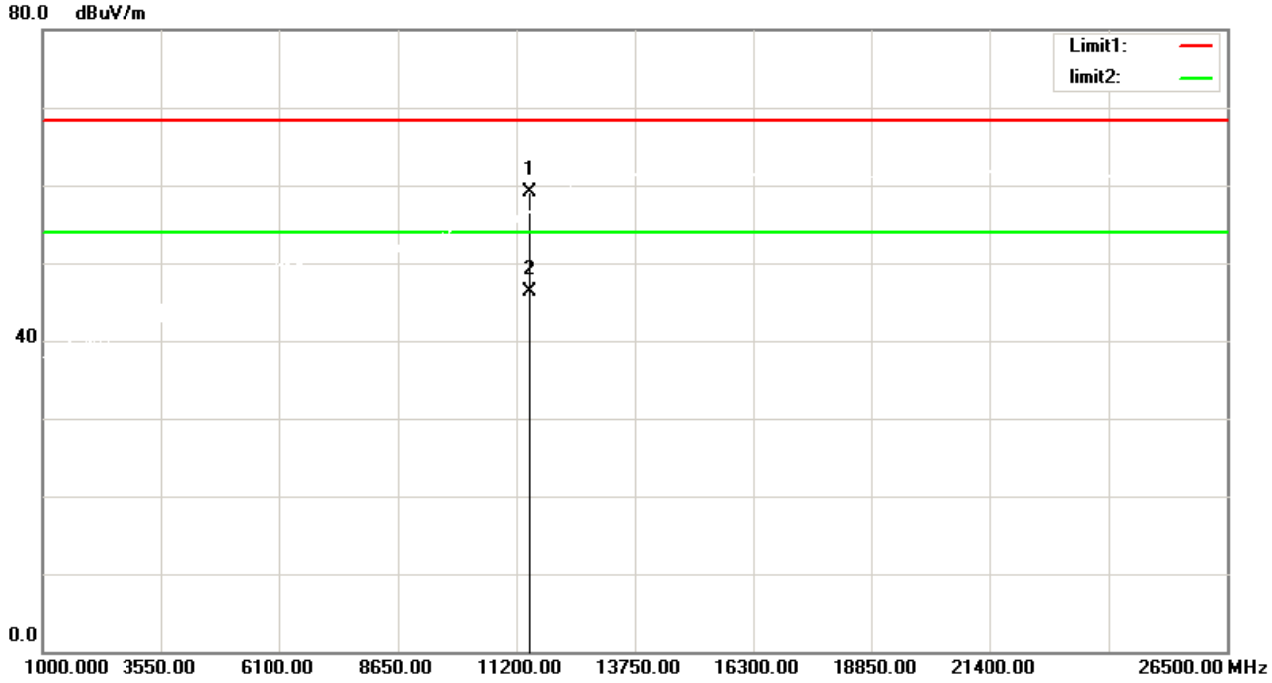
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.150	47.55	12.66	60.21	68.30	-8.09	peak
2	10420.150	34.64	12.66	47.30	54.00	-6.70	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

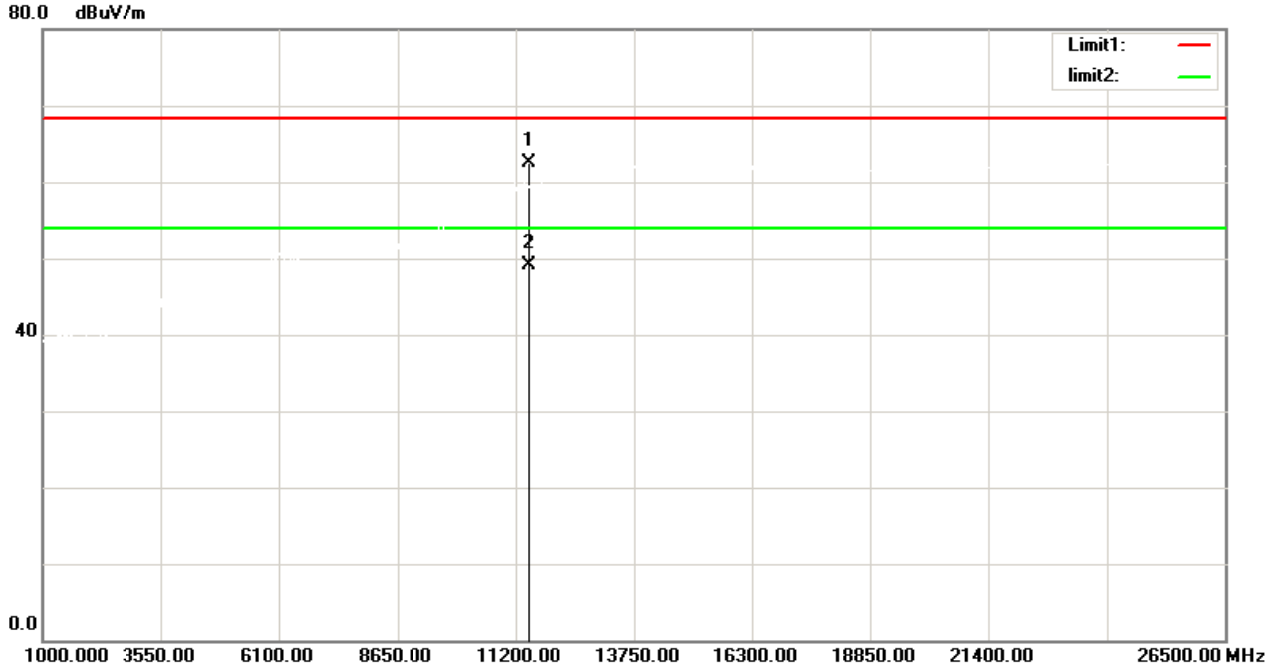
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11489.950	44.30	14.87	59.17	68.30	-9.13	peak
2	11489.950	31.52	14.87	46.39	54.00	-7.61	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

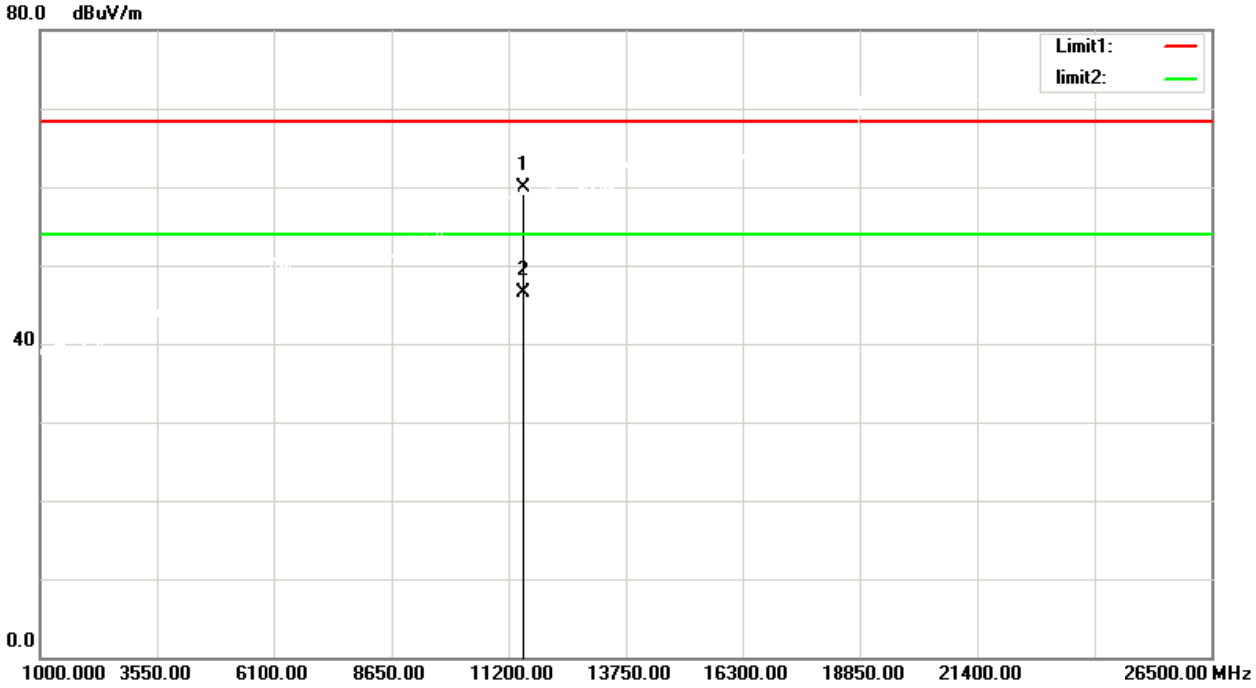
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.050	47.54	14.87	62.41	68.30	-5.89	peak
2	11490.050	34.33	14.87	49.20	54.00	-4.80	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

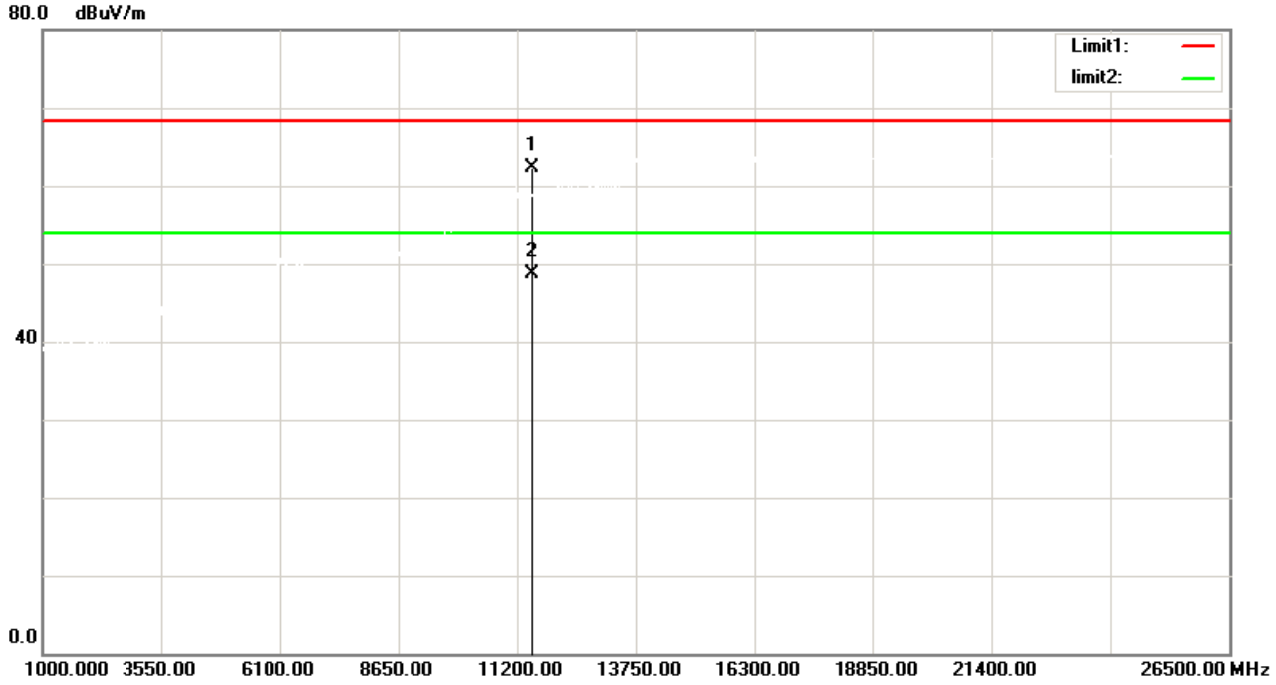
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.100	44.98	14.85	59.83	68.30	-8.47	peak
2	11510.100	31.74	14.85	46.59	54.00	-7.41	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

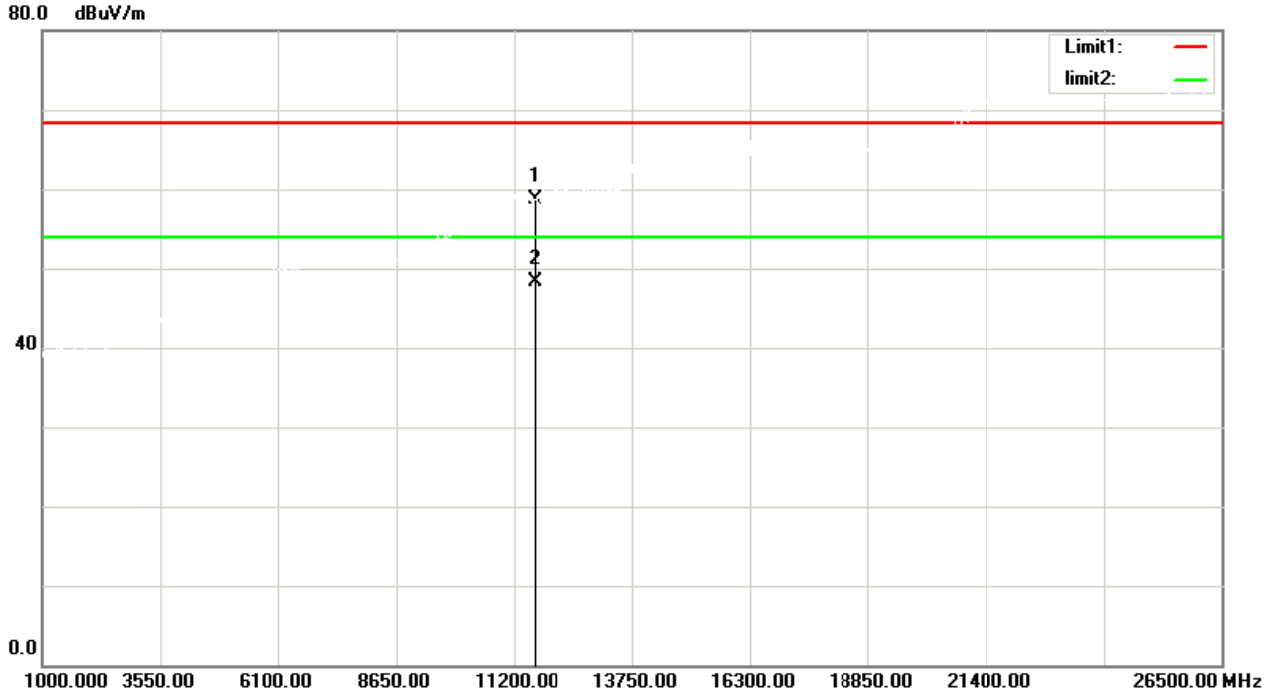
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.100	47.46	14.85	62.31	68.30	-5.99	peak
2	11510.100	33.88	14.85	48.73	54.00	-5.27	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

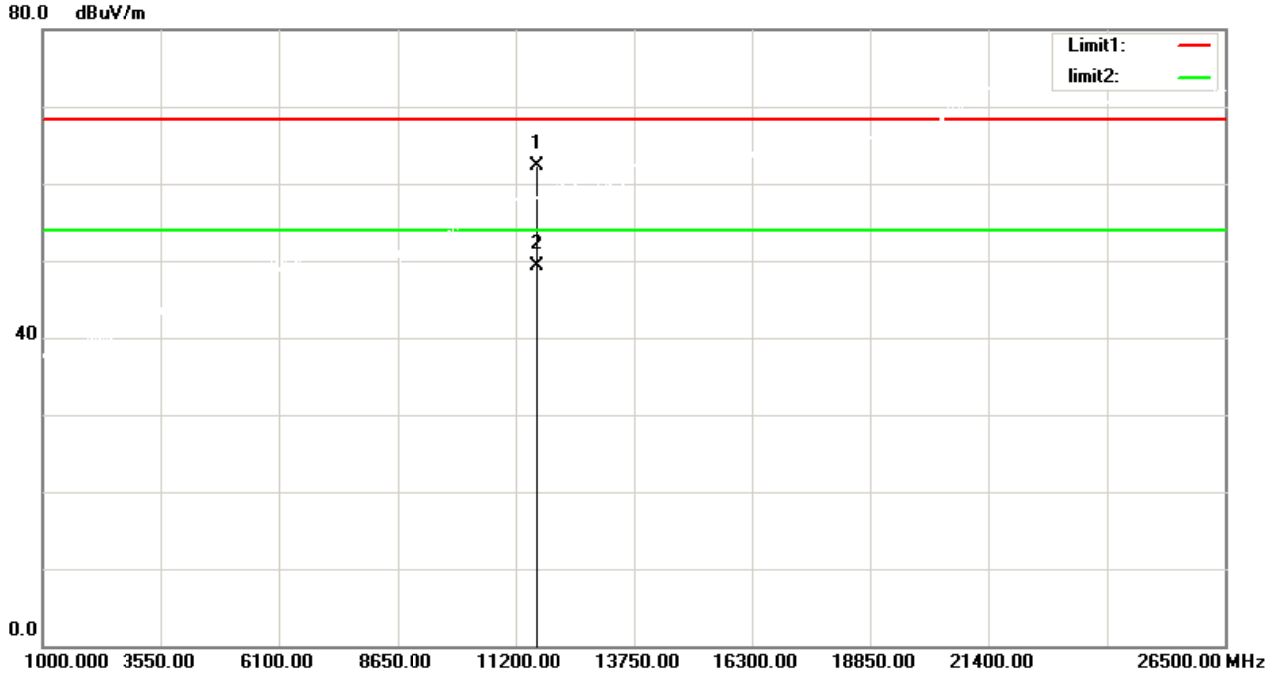
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	43.89	14.85	58.74	68.30	-9.56	peak
2	11650.000	33.55	14.85	48.40	54.00	-5.60	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

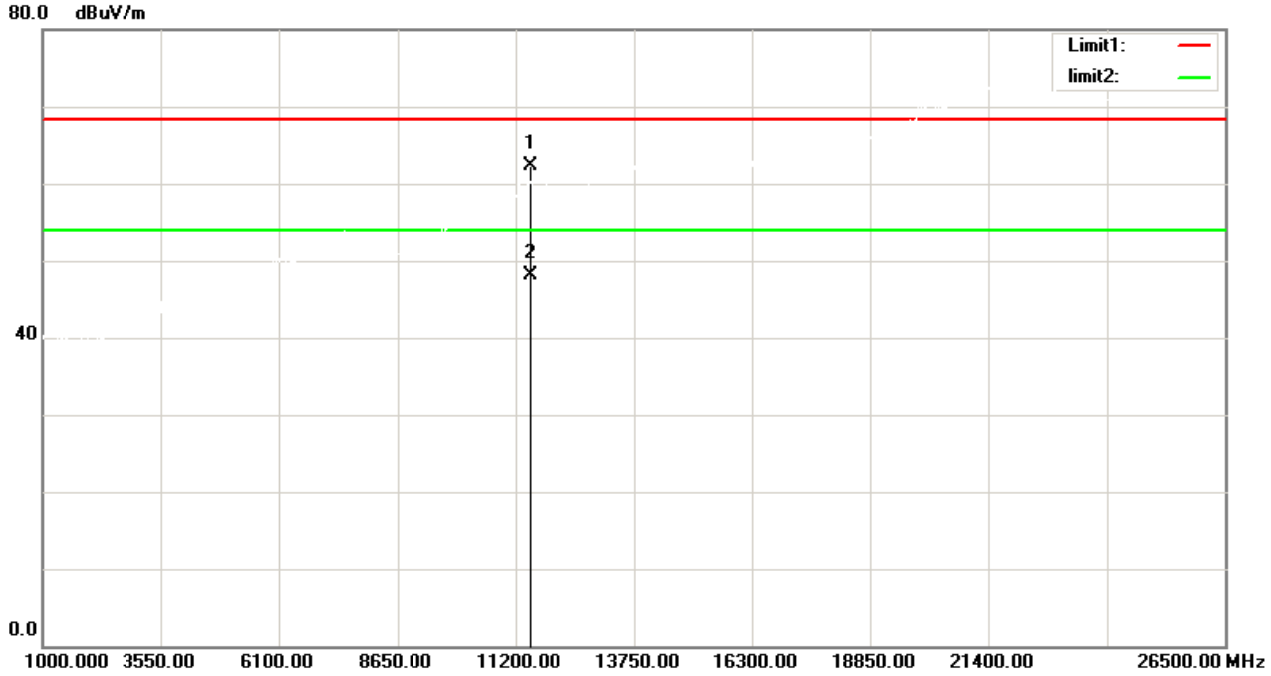
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	47.46	14.85	62.31	68.30	-5.99	peak
2	11650.000	34.45	14.85	49.30	54.00	-4.70	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

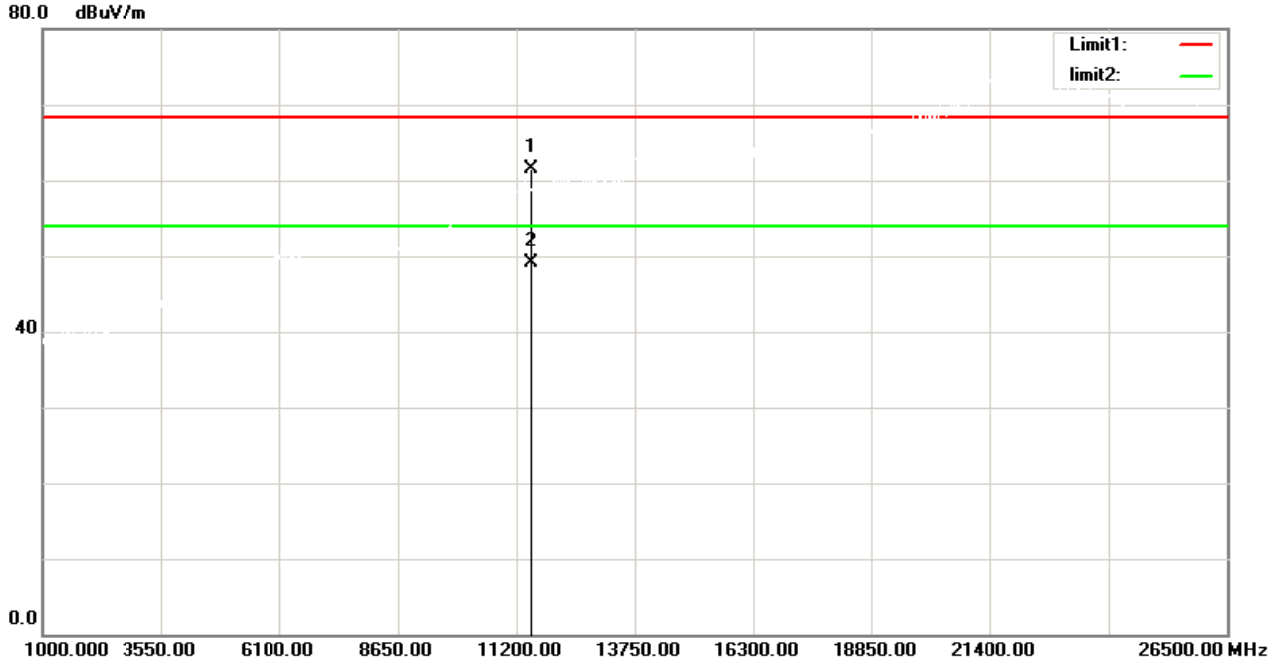
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11526.670	47.51	14.86	62.37	68.30	-5.93	peak
2	11526.670	33.15	14.86	48.01	54.00	-5.99	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

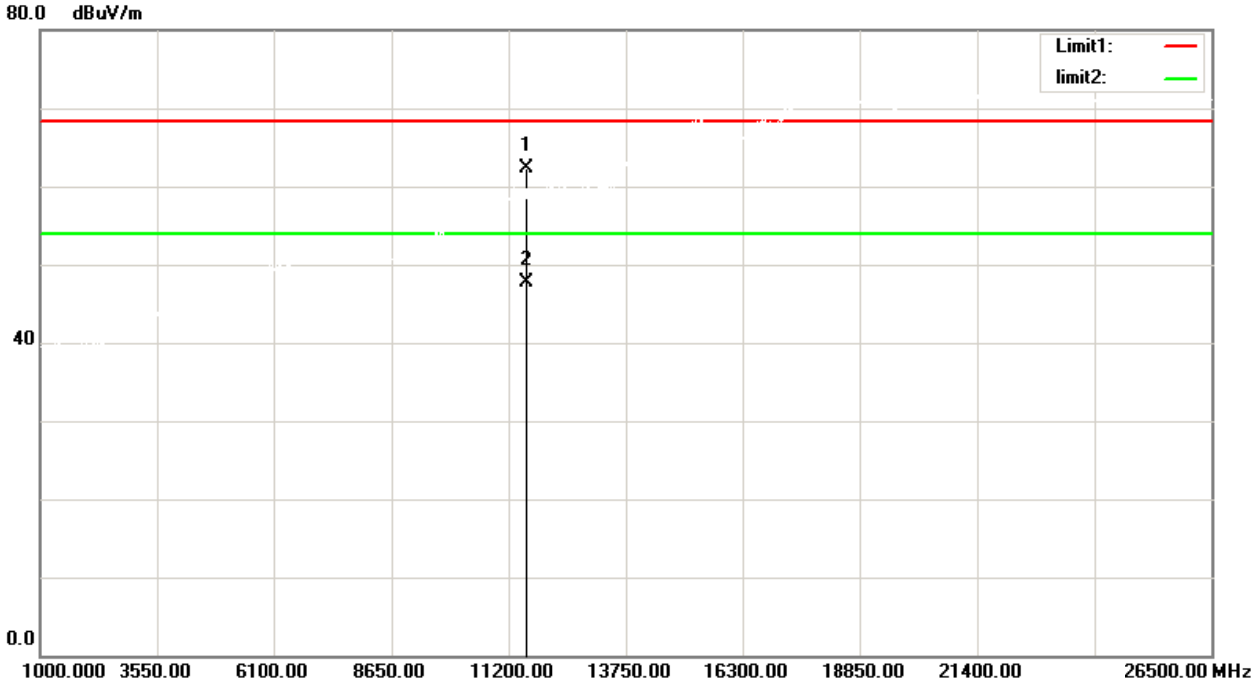
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11523.430	46.62	14.85	61.47	68.30	-6.83	peak
2	11523.430	34.17	14.85	49.02	54.00	-4.98	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

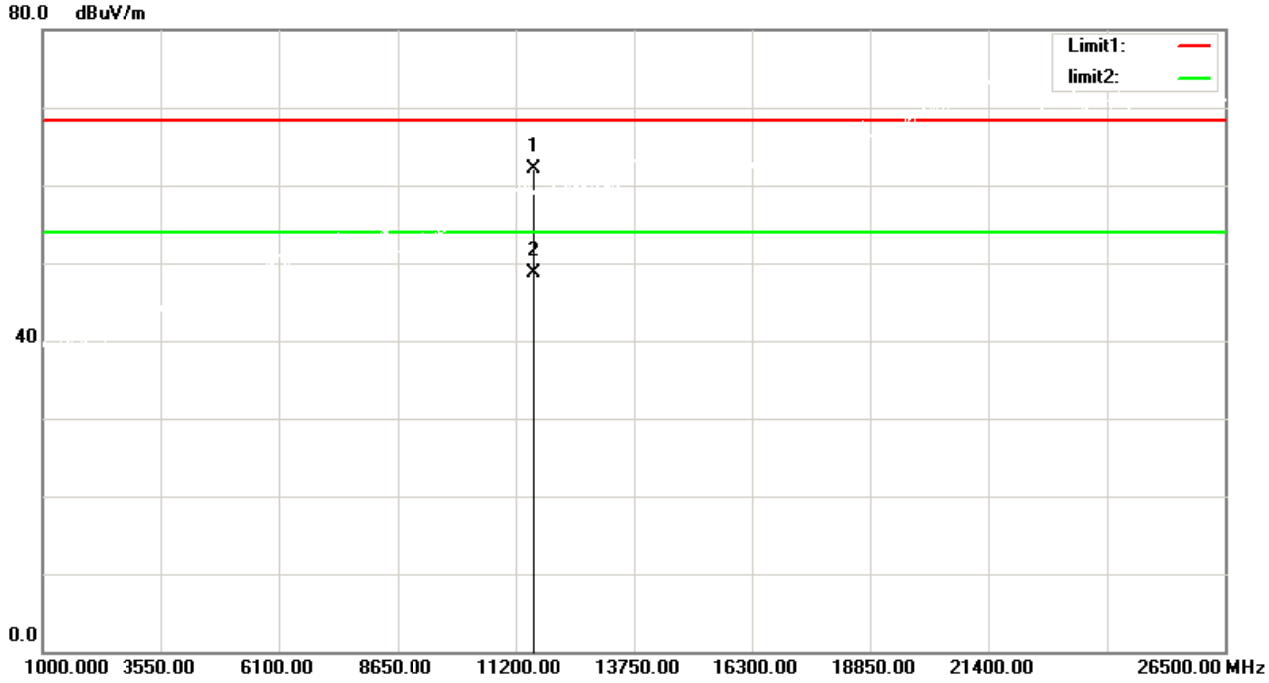
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11600.100	47.49	14.85	62.34	68.30	-5.96	peak
2	11600.100	32.90	14.85	47.75	54.00	-6.25	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

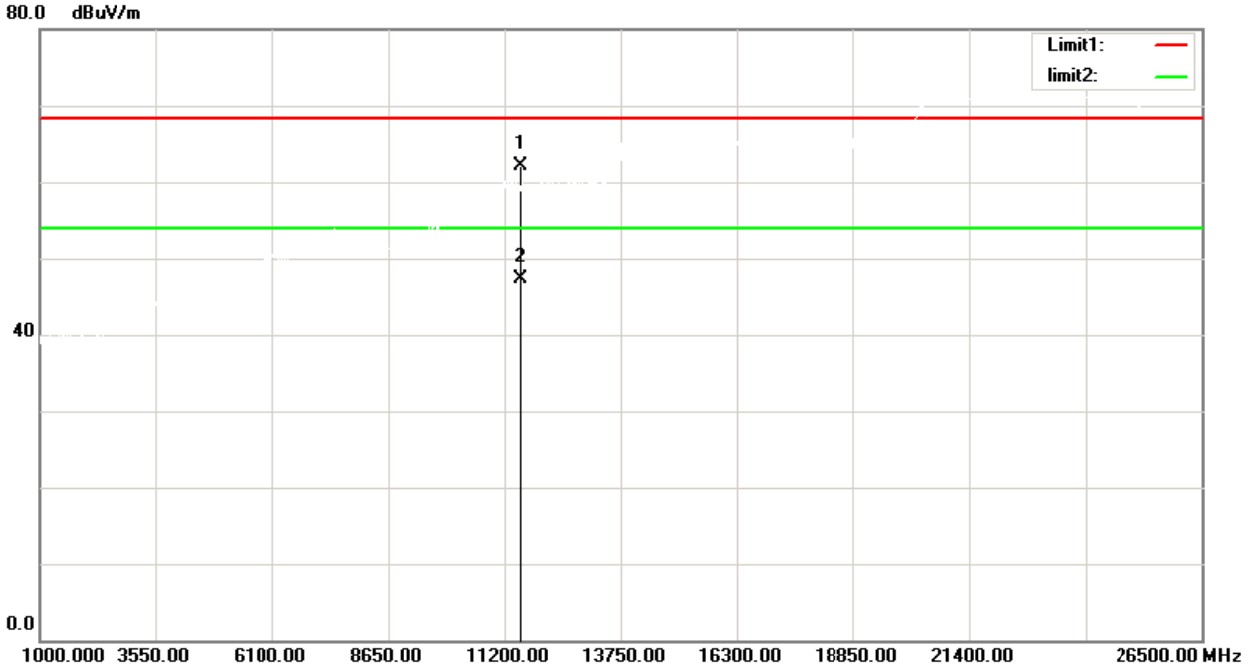
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11583.750	47.17	14.86	62.03	68.30	-6.27	peak
2	11583.750	33.86	14.86	48.72	54.00	-5.28	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

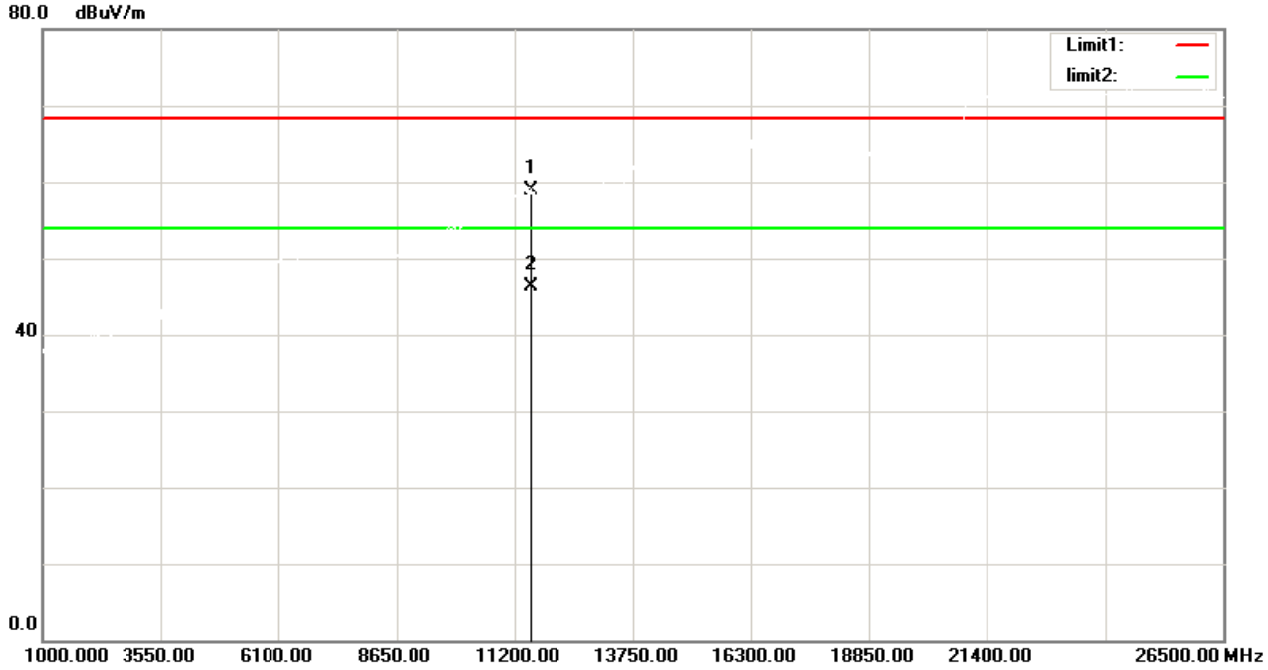
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.230	47.18	14.85	62.03	68.30	-6.27	peak
2	11550.230	32.39	14.85	47.24	54.00	-6.76	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.230	44.15	14.85	59.00	68.30	-9.30	peak
2	11550.230	31.45	14.85	46.30	54.00	-7.70	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) RSS-247 6.2.1.1 RSS-247 6.2.4.1	26 dB Bandwidth	-	5150-5250
	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:

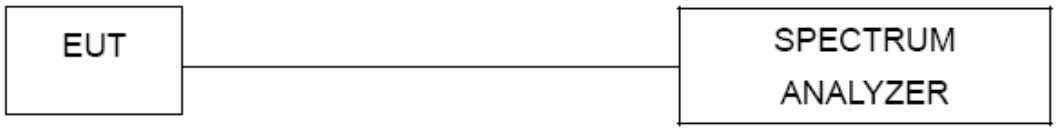
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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	2020/05/27
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2019/12/16
3	RF Cable	Mi-cable	C10-01-01-1	100309	2019/12/16

6.4 TEST SETUP



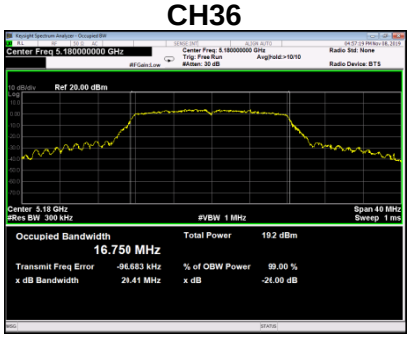
6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

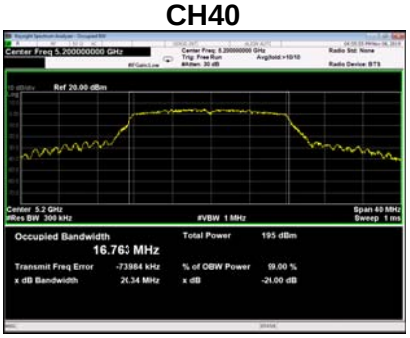
6.6 TEST RESULTS

UNII-1_TX A Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	20.41	16.750
40	5200	20.34	16.763
48	5240	20.16	16.708

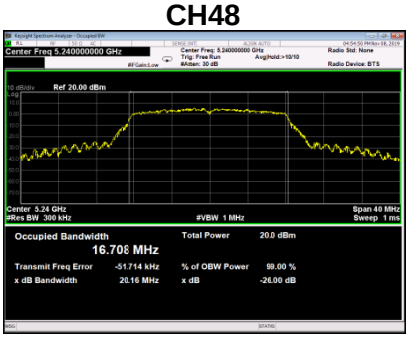
CH36



CH40

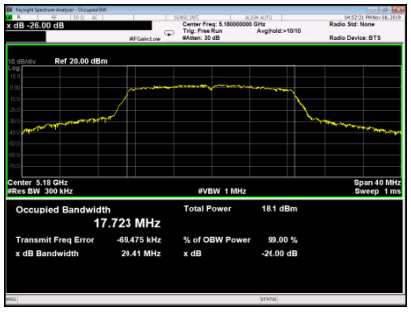


CH48

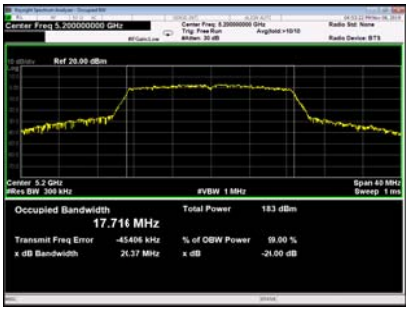


UNII-1_TX N (HT20) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	20.41	17.723
40	5200	20.37	17.716
48	5240	20.36	17.682

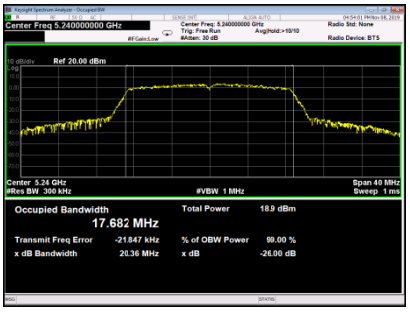
CH36



CH40

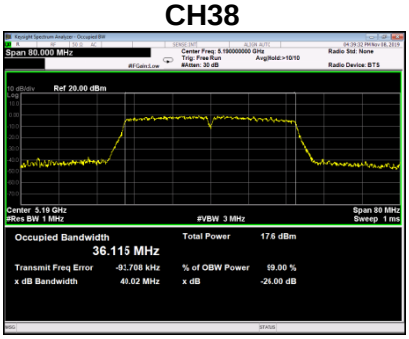


CH48

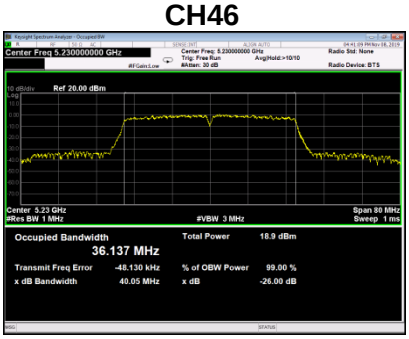


UNII-1_TX N (HT40) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
38	5190	40.02	36.115
46	5230	40.05	36.137

CH38



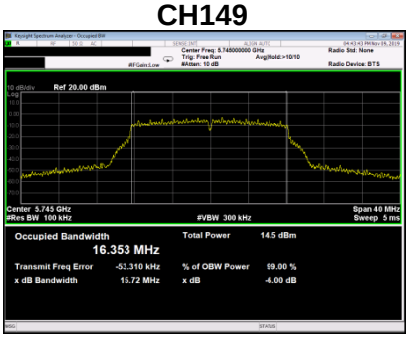
CH46



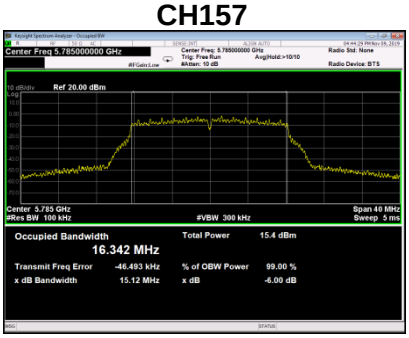
UNII-3_TX A Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	15.72	17.543	500	PASS
157	5785	15.12	17.651	500	PASS
165	5825	15.13	17.527	500	PASS

6 dB Bandwidth

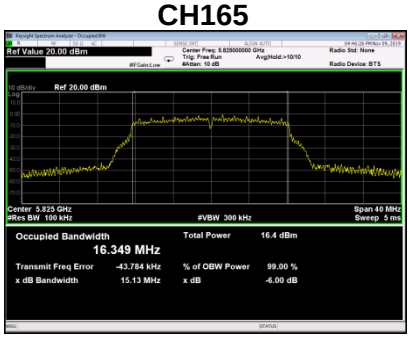
CH149



CH157

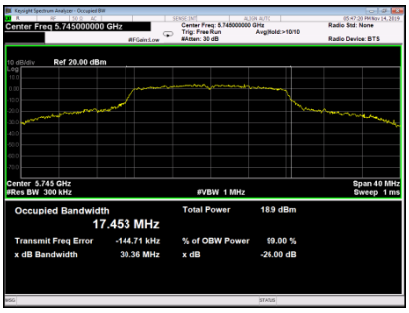


CH165

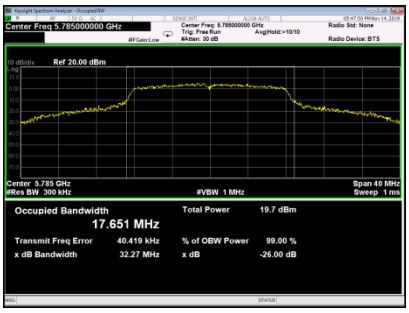


99% Emission Bandwidth

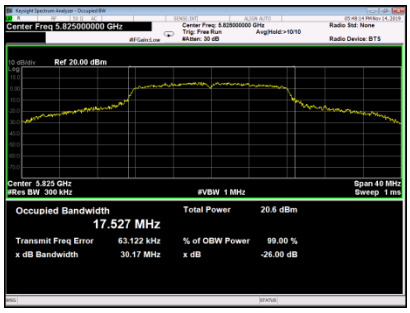
CH149



CH157



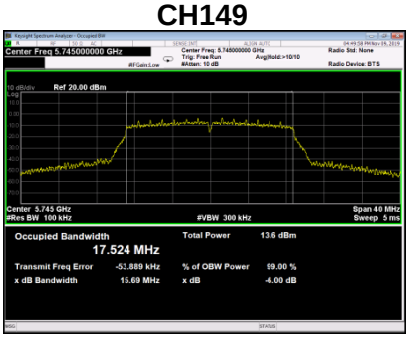
CH165



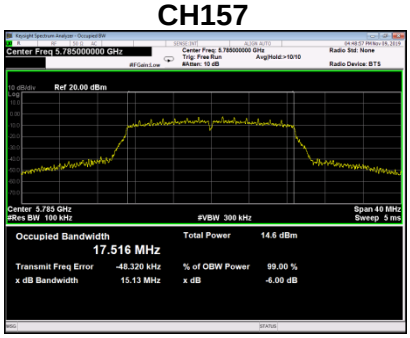
UNII-3_TX N (HT20) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	15.69	17.766	500	PASS
157	5785	15.13	17.745	500	PASS
165	5825	15.13	17.826	500	PASS

6 dB Bandwidth

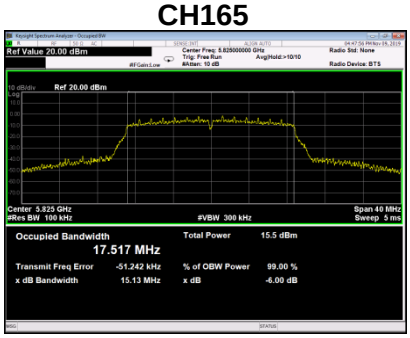
CH149



CH157

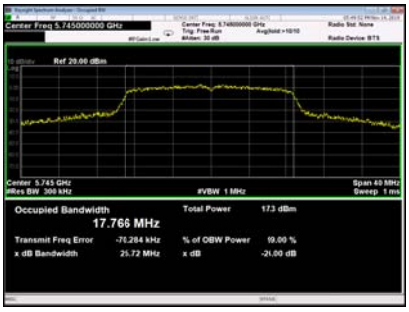


CH165



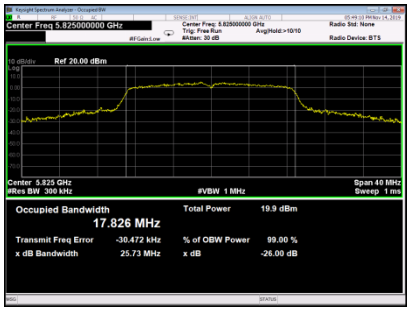
99% Emission Bandwidth

CH149



CH157

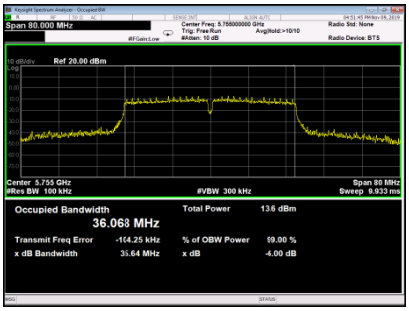
CH165



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	35.64	36.894	500	PASS
159	5795	35.16	36.794	500	PASS

6 dB Bandwidth

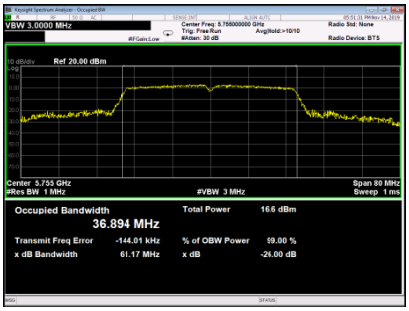
CH151



CH159

99% Emission Bandwidth

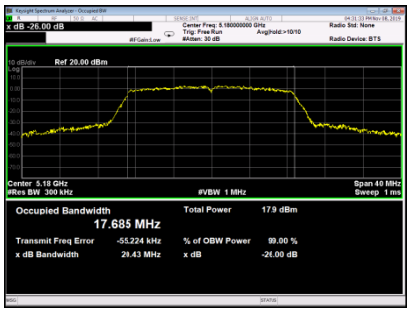
CH151



CH159

UNII-1_TX AC (VHT20) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	20.43	17.685
40	5200	20.38	17.680
48	5240	20.36	17.662

CH36

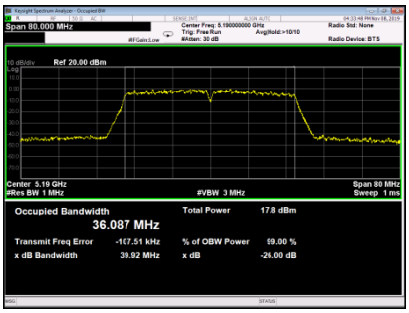


CH40

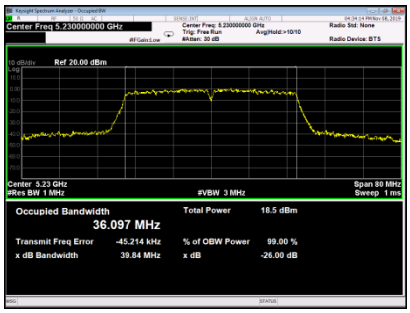
CH48

UNII-1_TX AC (VHT40) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
38	5190	39.92	36.087
46	5230	39.84	36.097

CH38

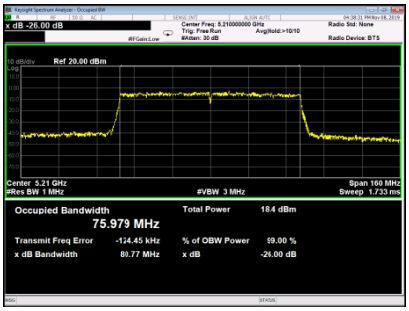


CH46



UNII-1_TX AC (VHT80) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
42	5210	80.77	75.979

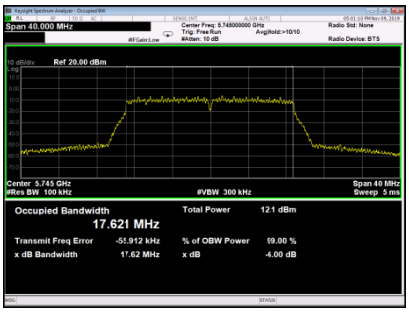
CH42



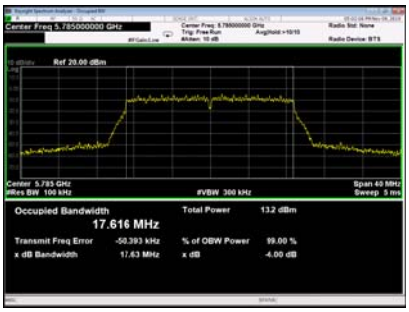
UNII-3_TX AC (VHT20) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	17.62	17.688	500	PASS
157	5785	17.63	17.755	500	PASS
165	5825	17.70	17.748	500	PASS

6 dB Bandwidth

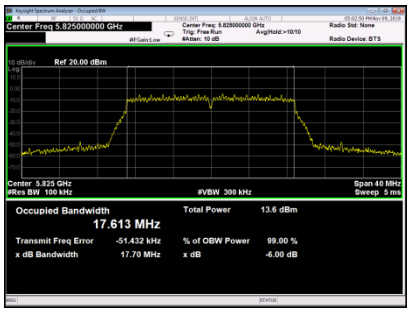
CH149



CH157

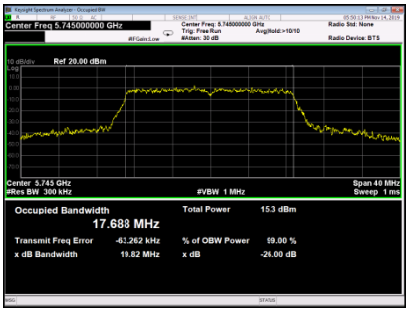


CH165

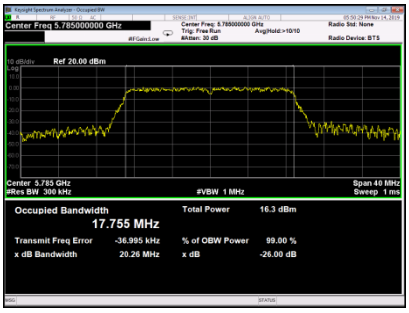


99% Emission Bandwidth

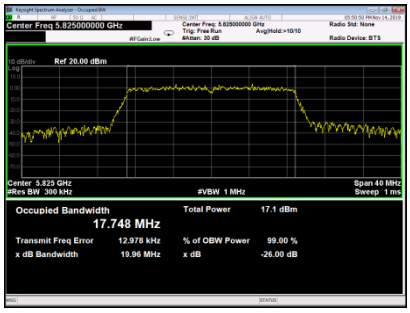
CH149



CH157



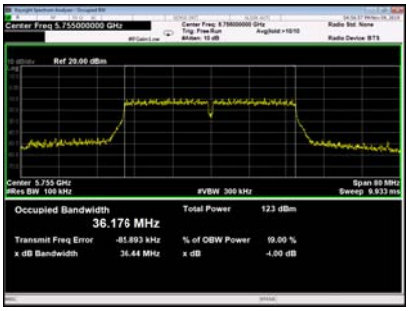
CH165



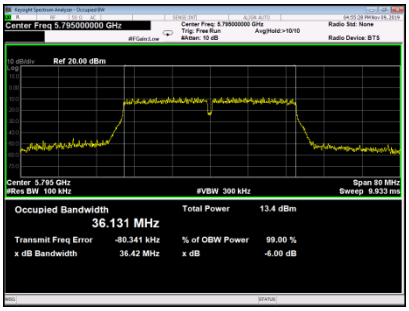
UNII-3_TX AC (VHT40) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
151	5755	36.44	36.561	500	PASS
159	5795	36.42	36.624	500	PASS

6 dB Bandwidth

CH151

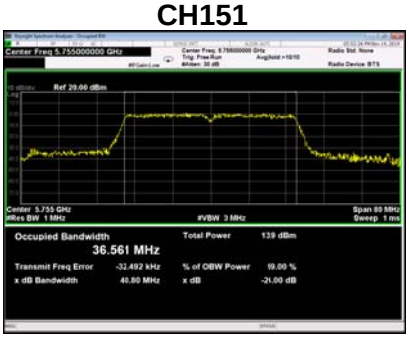


CH159

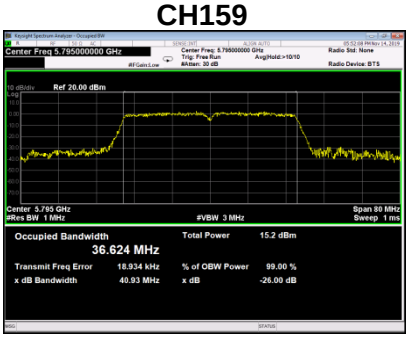


99% Emission Bandwidth

CH151

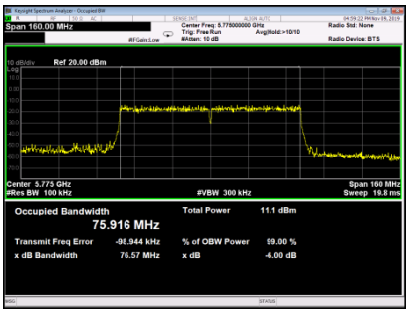


CH159

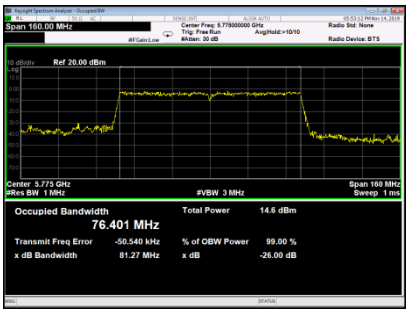


UNII-3_TX AC (VHT80) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
155	5775	76.57	76.401	500	PASS

6 dB Bandwidth
CH155



99% Emission Bandwidth
CH155



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 logB, dBm, whichever power is less	5150-5250
15.407(a)	Maximum Output Power	AP device:1 Watt (30dBm) Client device: 250mW (24dBm)	5150-5250
15.407(a) RSS-247 6.2.4.1	Maximum Output Power	1 Watt (30dBm)	5725-5850

Note:

a. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. B is the 99% emission bandwidth in megahertz.

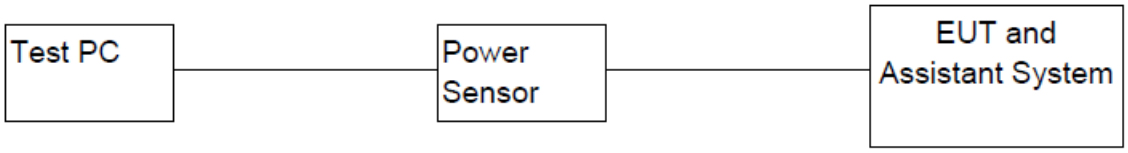
7.2 TEST PROCEDURE AND SETTING

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

7.3 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Power Sensor	KEYSIGHT	U2021XA	MY55240009	05/27/2020
2	Attenuator	Mini-Circuits	BW-S10W2	101109	12/16/2019
3	RF Cable	Micable	C10-01-01-1	100309	12/16/2019
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	14.19	0.00	14.19	24.00	0.25	PASS
40	5200	14.52	0.00	14.52	24.00	0.25	PASS
48	5240	15.31	0.00	15.31	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	13.80	0.00	13.80	24.00	0.25	PASS
40	5200	13.93	0.00	13.93	24.00	0.25	PASS
48	5240	14.53	0.00	14.53	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	14.19	0.00	17.19	23.00	0.2	PASS
40	5200	14.52	0.00	17.52	23.00	0.2	PASS
48	5240	15.31	0.00	18.31	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	13.80	0.00	16.80	23.00	0.2	PASS
40	5200	13.93	0.00	16.93	23.00	0.2	PASS
48	5240	14.53	0.00	17.53	23.00	0.2	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	13.12	0.19	13.31	24.00	0.25	PASS
40	5200	13.30	0.19	13.49	24.00	0.25	PASS
48	5240	13.55	0.19	13.74	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	13.01	0.19	13.20	24.00	0.25	PASS
40	5200	12.98	0.19	13.17	24.00	0.25	PASS
48	5240	12.25	0.19	12.44	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	16.26	24.00	0.25	PASS
40	5200	16.34	24.00	0.25	PASS
48	5240	16.15	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	19.26	23.00	0.2	PASS
40	5200	19.34	23.00	0.2	PASS
48	5240	19.15	23.00	0.2	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	12.76	0.37	13.13	24.00	0.25	PASS
46	5230	13.23	0.37	13.60	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	12.64	0.37	13.01	24.00	0.25	PASS
46	5230	12.97	0.37	13.34	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	16.08	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	19.08	23.00	0.2	PASS
46	5230	19.48	23.00	0.2	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	14.74	0	14.74	30.00	1.00	PASS
157	5785	15.74	0	15.74	30.00	1.00	PASS
165	5825	16.20	0	16.20	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	14.36	0	14.36	30.00	1.00	PASS
157	5785	15.33	0	15.33	30.00	1.00	PASS
165	5825	15.71	0	15.71	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	13.75	0.19	13.94	30.00	1.00	PASS
157	5785	14.77	0.19	14.96	30.00	1.00	PASS
165	5825	15.06	0.19	15.25	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	14.95	0.19	15.14	30.00	1.00	PASS
157	5785	15.29	0.19	15.48	30.00	1.00	PASS
165	5825	15.57	0.19	15.76	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	17.59	30.00	1.00	PASS
157	5785	18.24	30.00	1.00	PASS
165	5825	18.52	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	13.60	0.37	13.97	30.00	1.00	PASS
159	5795	14.52	0.37	14.89	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	14.95	0.37	15.32	30.00	1.00	PASS
159	5795	15.44	0.37	15.81	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	17.71	30.00	1.00	PASS
159	5795	18.38	30.00	1.00	PASS

UNII-1_TX AC (VHT20) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	12.91	0.19	13.10	24.00	0.25	PASS
40	5200	13.35	0.19	13.54	24.00	0.25	PASS
48	5240	14.02	0.19	14.21	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	12.41	0.19	12.60	24.00	0.25	PASS
40	5200	12.97	0.19	13.16	24.00	0.25	PASS
48	5240	13.75	0.19	13.94	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	15.87	24.00	0.25	PASS
40	5200	16.37	24.00	0.25	PASS
48	5240	17.09	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	18.87	23.00	0.2	PASS
40	5200	19.37	23.00	0.2	PASS
48	5240	20.09	23.00	0.2	PASS

UNII-1_TX AC (VHT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	13.02	0.37	13.39	24.00	0.25	PASS
46	5230	13.54	0.37	13.91	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	12.67	0.37	13.04	24.00	0.25	PASS
46	5230	13.25	0.37	13.62	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	16.23	24.00	0.25	PASS
46	5230	16.78	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm))	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	19.23	23.00	0.2	PASS
46	5230	19.78	23.00	0.2	PASS

UNII-1_TX AC (VHT80) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	13.01	0.71	13.72	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	12.75	0.71	13.46	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	16.61	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	19.61	23.00	0.2	PASS

UNII-3_TX AC (VHT20) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	13.62	0.19	13.81	30.00	1.00	PASS
157	5785	14.52	0.19	14.71	30.00	1.00	PASS
165	5825	15.08	0.19	15.27	30.00	1.00	PASS

UNII-3_TX AC (VHT20) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	15.00	0.19	15.19	30.00	1.00	PASS
157	5785	15.37	0.19	15.56	30.00	1.00	PASS
165	5825	15.60	0.19	15.79	30.00	1.00	PASS

UNII-3_TX AC (VHT20) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	17.57	30.00	1.00	PASS
157	5785	18.17	30.00	1.00	PASS
165	5825	18.55	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	13.64	0.37	14.01	30.00	1.00	PASS
159	5795	14.51	0.37	14.88	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	14.81	0.37	15.18	30.00	1.00	PASS
159	5795	15.25	0.37	15.62	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	17.65	30.00	1.00	PASS
159	5795	18.28	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	13.86	0.71	14.57	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	14.45	0.71	15.16	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	17.89	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
15.407(a) RSS-247 6.2.4.2	Power Spectral Density	30dBm/500kHz	5725-5850

8.2 TEST PROCEDURE ANS SETTING

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

b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	≥ 3MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

Note:

1.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.

2.The value measured with RBW=1MHz is to be added with 10log(500kHz/1MHz) 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.

8.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2020/05/27
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2019/12/16
3	RF Cable	Mi-cable	C10-01-01-1	100309	2019/12/16

8.4 TEST SETUP

8.5 EUT OPERATION CONDITIONS

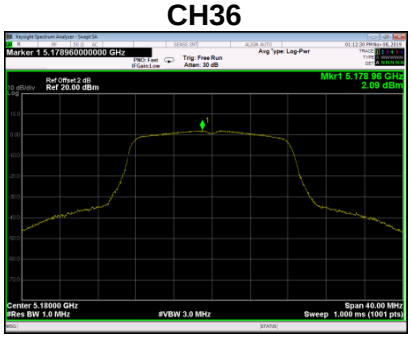
The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

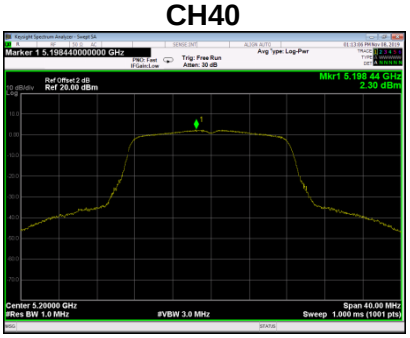
UNII-1_TX A Mode_Ant 1 For FCC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	2.09	0.00	2.09	11.00	PASS
40	5200	2.30	0.00	2.30	11.00	PASS
48	5240	3.14	0.00	3.14	11.00	PASS

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	2.09	0.00	5.09	10.00	PASS
40	5200	2.30	0.00	5.30	10.00	PASS
48	5240	3.14	0.00	6.14	10.00	PASS

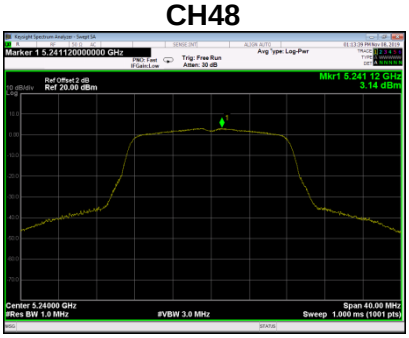
CH36



CH40



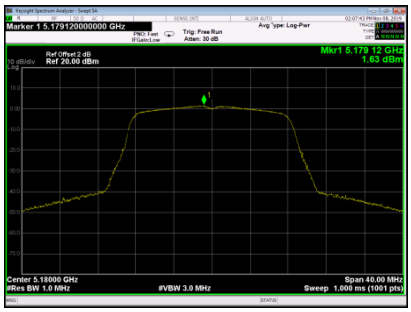
CH48



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	1.63	0.00	1.63	11.00	PASS
40	5200	1.61	0.00	1.61	11.00	PASS
48	5240	2.19	0.00	2.19	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	1.63	0.00	4.63	10.00	PASS
40	5200	1.61	0.00	4.61	10.00	PASS
48	5240	2.19	0.00	5.19	10.00	PASS

CH36



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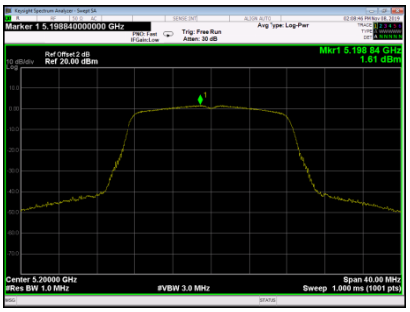

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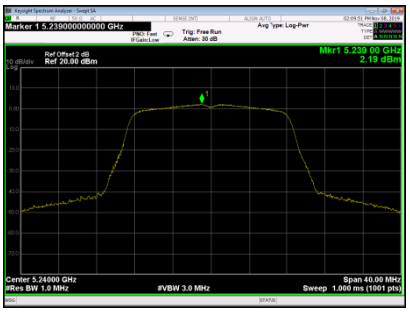
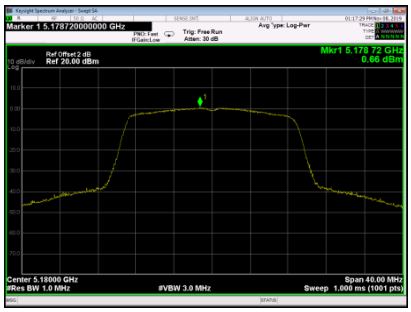


UNII-1_TX N (HT20) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	0.66	0.19	0.85	11.00	PASS
40	5200	0.97	0.19	1.16	11.00	PASS
48	5240	1.55	0.19	1.74	11.00	PASS

CH36



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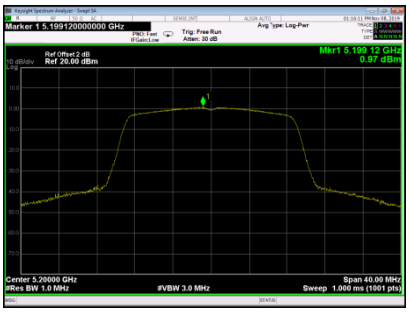

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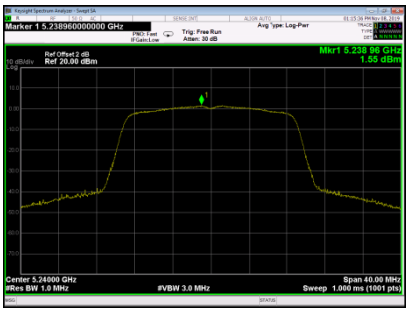
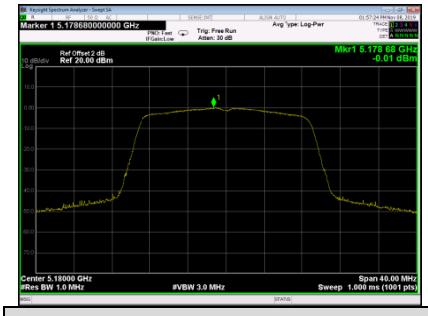


UNII-1_TX N (HT20) Mode_Ant 2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	-0.01	0.19	0.18	11.00	PASS
40	5200	0.35	0.19	0.54	11.00	PASS
48	5240	0.87	0.19	1.06	11.00	PASS

CH36



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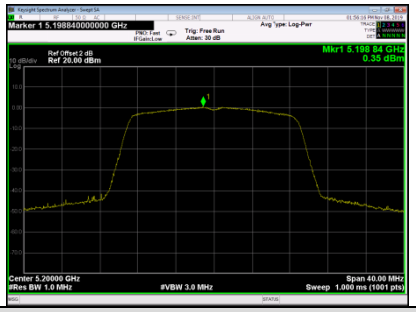
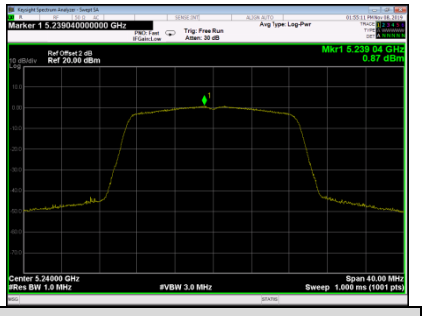


CH48

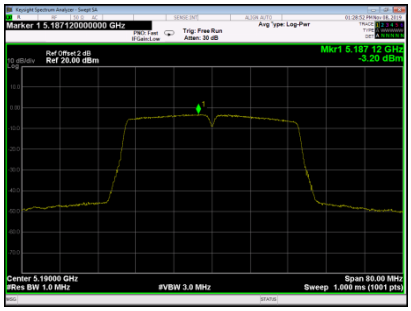


UNII-1_TX N (HT20) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	3.54	11.00	PASS
40	5200	0.54	11.00	PASS
48	5240	1.06	11.00	PASS

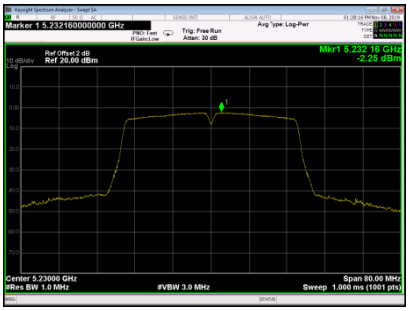
UNII-1_TX N (HT20) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	6.54	10.00	PASS
40	5200	3.54	10.00	PASS
48	5240	4.06	10.00	PASS

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	-3.20	0.37	-2.83	11.00	PASS
46	5230	-2.25	0.37	-1.88	11.00	PASS

CH38

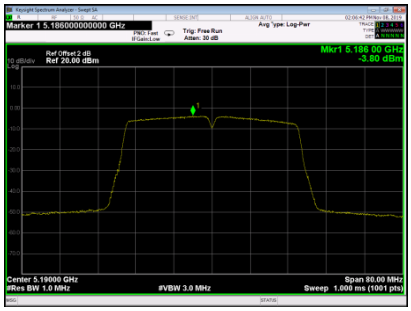


CH46



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	-3.80	0.37	-3.43	11.00	PASS
46	5230	-3.38	0.37	-3.01	11.00	PASS

CH38



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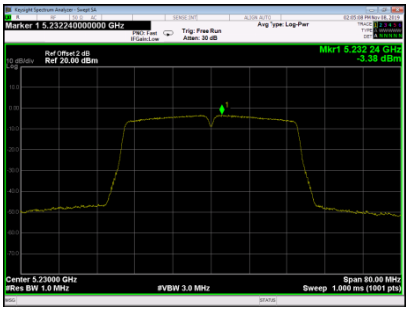
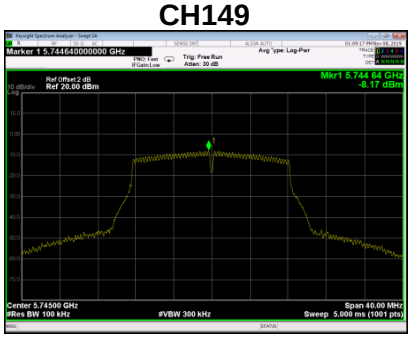


UNII-1_TX N (HT40) Mode _Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-0.11	11.00	PASS
46	5230	0.60	11.00	PASS

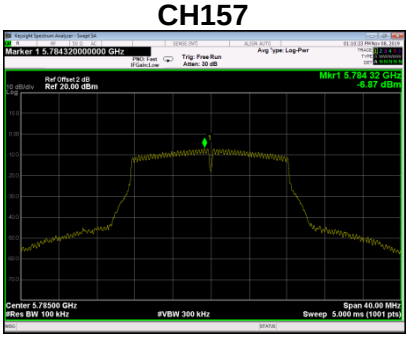
UNII-1_TX N (HT40) Mode _Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	2.89	10.00	PASS
46	5230	3.60	10.00	PASS

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	-8.17	0.00	-8.17	30.00	PASS
157	5785	-6.87	0.00	-6.87	30.00	PASS
165	5825	-2.89	0.00	-2.89	30.00	PASS

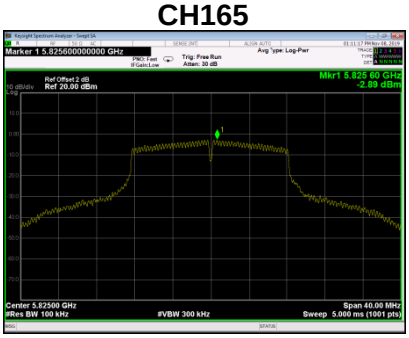
CH149



CH157

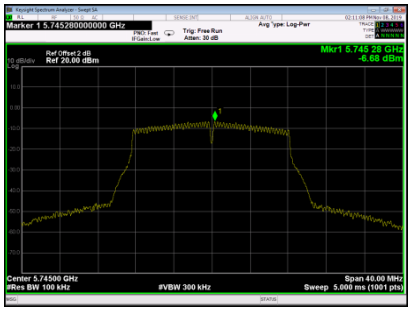


CH165

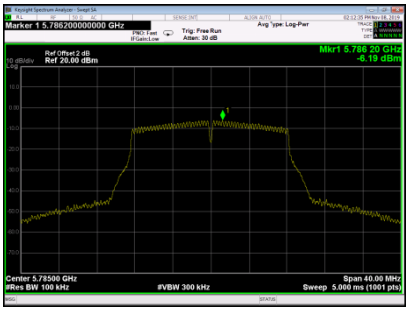


UNII-3_TX A Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-6.68	0.00	-6.68	30.00	PASS
157	5785	-6.19	0.00	-6.19	30.00	PASS
165	5825	-6.02	0.00	-6.02	30.00	PASS

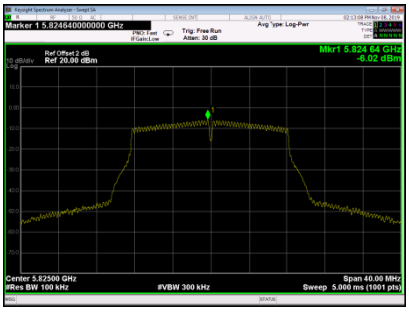
CH149



CH157

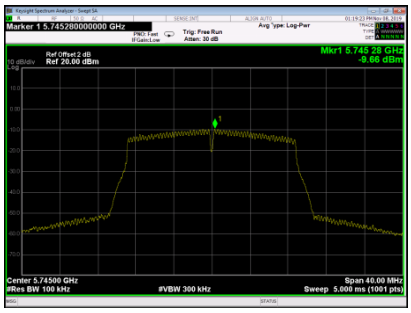


CH165



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	-9.66	0.19	-9.47	30.00	PASS
157	5785	-8.65	0.19	-8.46	30.00	PASS
165	5825	-8.02	0.19	-7.83	30.00	PASS

CH149



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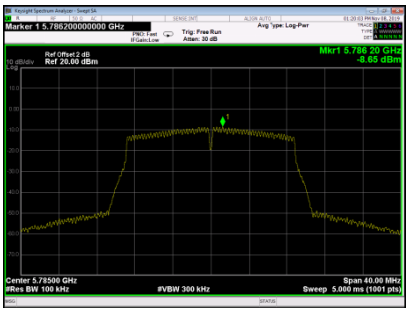
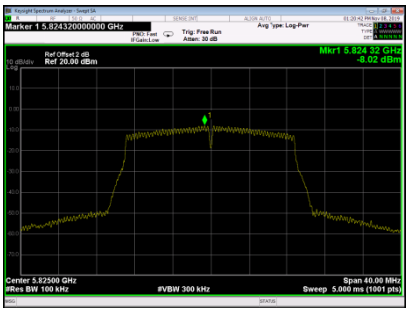
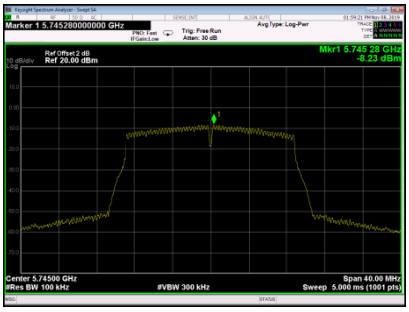


CH165

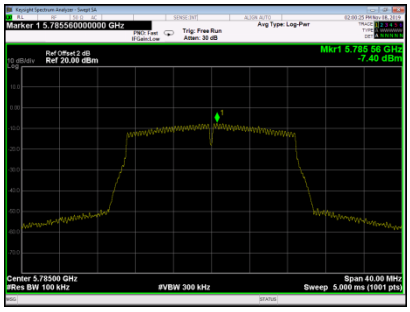


UNII-3_TX N (HT20) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-8.23	0.19	-8.04	30.00	PASS
157	5785	-7.40	0.19	-7.21	30.00	PASS
165	5825	-7.53	0.19	-7.34	30.00	PASS

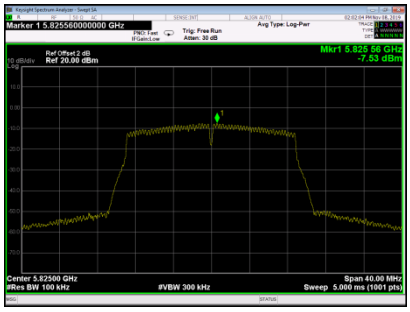
CH149



CH157



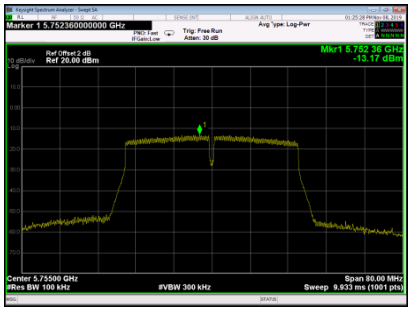
CH165



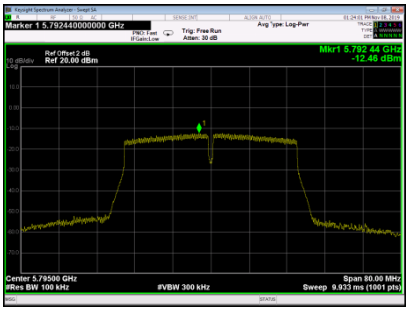
UNII-3_TX N (HT20) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-5.69	30.00	PASS
157	5785	-4.78	30.00	PASS
165	5825	-4.57	30.00	PASS

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	-13.17	0.37	-12.8	30.00	PASS
159	5795	-12.46	0.37	-12.09	30.00	PASS

CH151

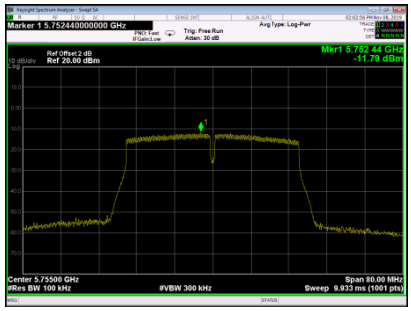


CH159

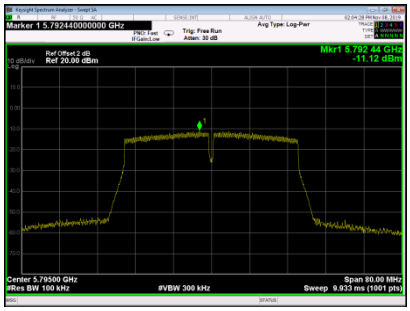


UNII-3_TX N (HT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-11.79	0.37	-11.42	30.00	PASS
159	5795	-11.12	0.37	-10.75	30.00	PASS

CH151



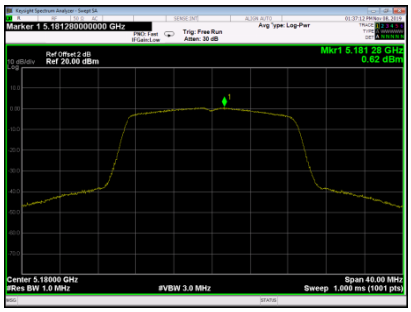
CH159



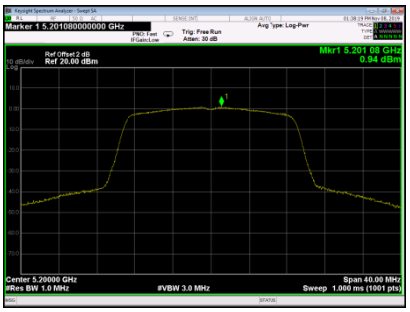
UNII-3_TX N (HT40) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-9.05	30.00	PASS
159	5795	-8.36	30.00	PASS

UNII-1_TX AC (VHT20) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	0.62	0.19	0.81	11.00	PASS
40	5200	0.94	0.19	1.13	11.00	PASS
48	5240	1.82	0.19	2.01	11.00	PASS

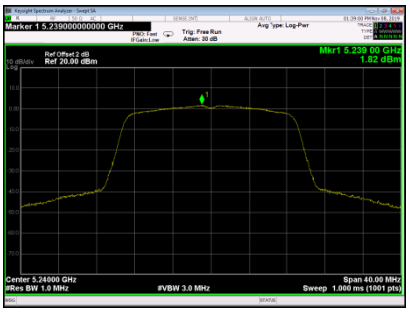
CH36



CH40

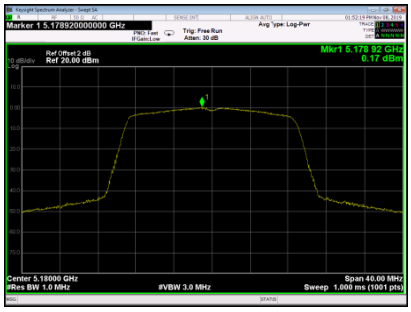


CH48

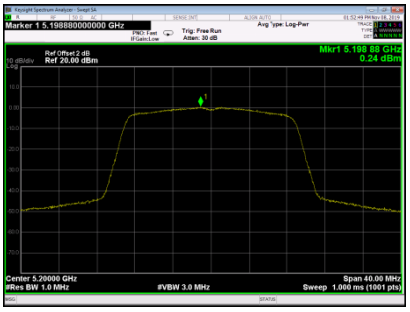


UNII-1_TX AC (VHT20) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	0.17	0.19	0.36	11.00	PASS
40	5200	0.24	0.19	0.43	11.00	PASS
48	5240	0.79	0.19	0.98	11.00	PASS

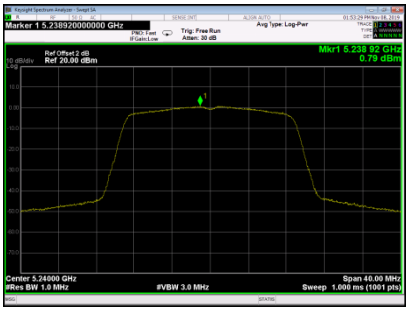
CH36



CH40



CH48

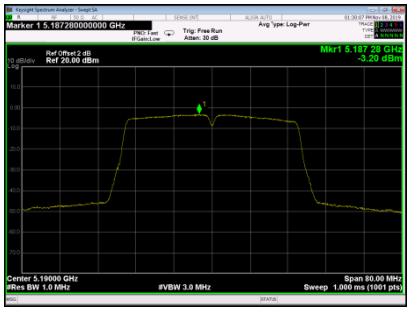


UNII-1_TX AC (VHT20) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	3.60	11.00	PASS
40	5200	3.80	11.00	PASS
48	5240	4.54	11.00	PASS

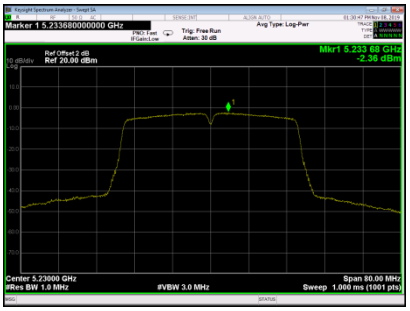
UNII-1_TX AC (VHT20) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	6.60	10.00	PASS
40	5200	6.80	10.00	PASS
48	5240	7.54	10.00	PASS

UNII-1_TX AC (VHT40) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-3.20	0.37	-2.83	11.00	PASS
46	5230	-2.36	0.37	-1.99	11.00	PASS

CH38

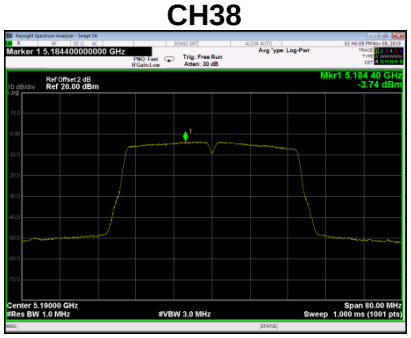


CH46

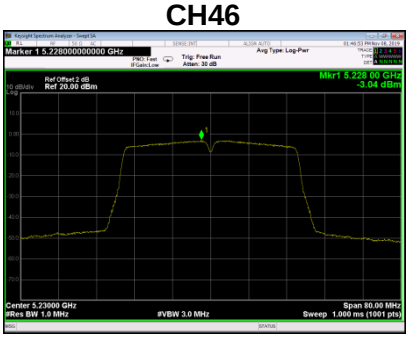


UNII-1_TX AC (VHT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-3.74	0.37	-3.37	11.00	PASS
46	5230	-3.04	0.37	-2.67	11.00	PASS

CH38



CH46

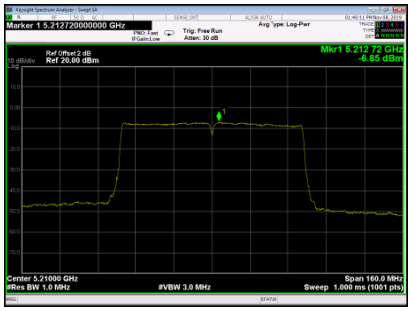


UNII-1_TX AC (VHT40) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-0.08	11.00	PASS
46	5230	0.69	11.00	PASS

UNII-1_TX AC (VHT40) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density(dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	2.92	10.00	PASS
46	5230	3.69	10.00	PASS

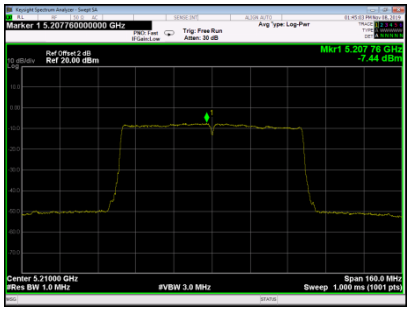
UNII-1_TX AC (VHT80) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-6.85	0.71	-6.14	11.00	PASS

CH42



UNII-1_TX AC (VHT80) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-7.44	0.71	-6.73	11.00	PASS

CH42

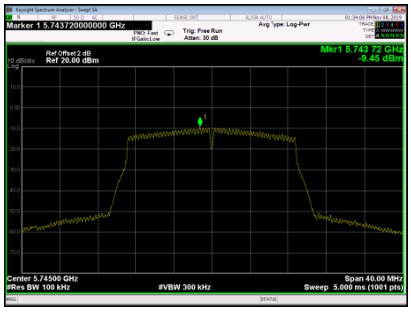


UNII-1_TX AC (VHT80) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-3.41	11.00	PASS

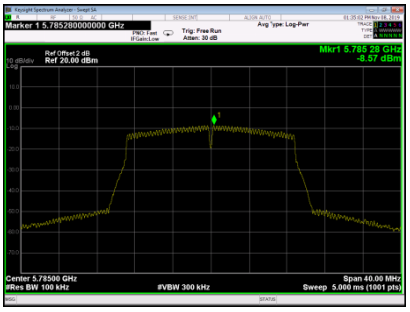
UNII-1_TX AC (VHT80) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-0.41	10.00	PASS

UNII-3_TX AC (VHT20) 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	-9.45	0.19	-9.26	30.00	PASS
157	5785	-8.57	0.19	-8.38	30.00	PASS
165	5825	-8.03	0.19	-7.84	30.00	PASS

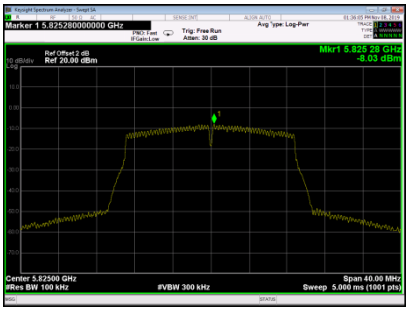
CH149



CH157

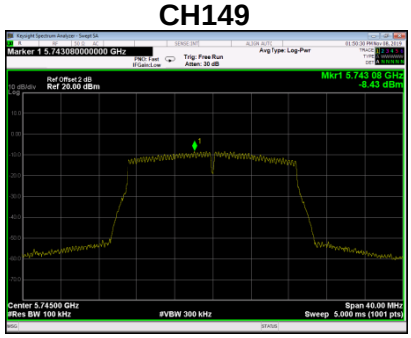


CH165

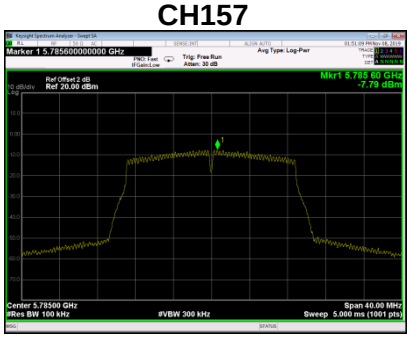


UNII-3_TX AC (VHT20) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-8.43	0.19	-8.24	30.00	PASS
157	5785	-7.79	0.19	-7.60	30.00	PASS
165	5825	-7.42	0.19	-7.23	30.00	PASS

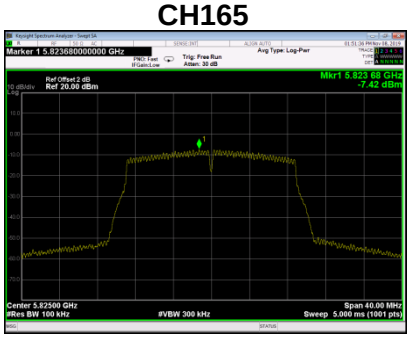
CH149



CH157



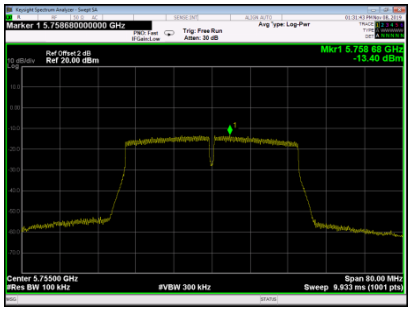
CH165



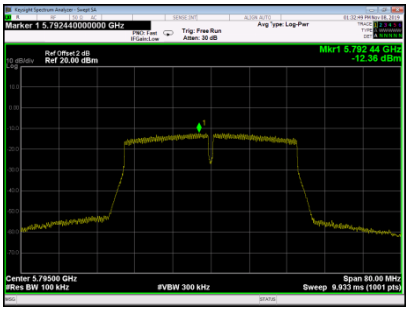
UNII-3_TX AC (VHT20) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-5.71	30.00	PASS
157	5785	-4.96	30.00	PASS
165	5825	-4.51	30.00	PASS

UNII-3_TX AC (VHT40) 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	-13.40	0.37	-13.03	30.00	PASS
159	5795	-12.36	0.37	-11.99	30.00	PASS

CH151

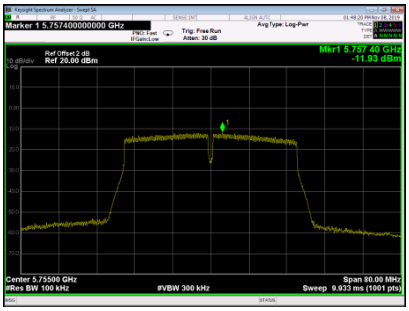


CH159

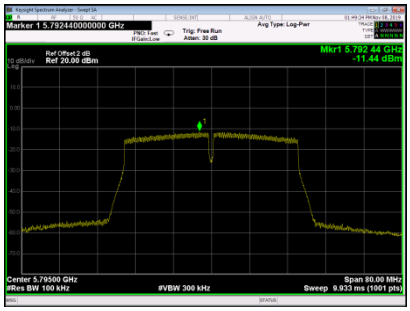


UNII-3_TX AC (VHT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-11.93	0.37	-11.56	30.00	PASS
159	5795	-11.44	0.37	-11.07	30.00	PASS

CH151



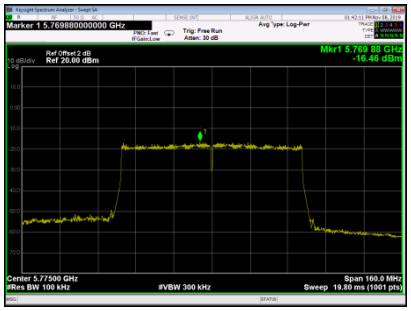
CH159



UNII-3_TX AC (VHT40) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-9.22	30.00	PASS
159	5795	-8.50	30.00	PASS

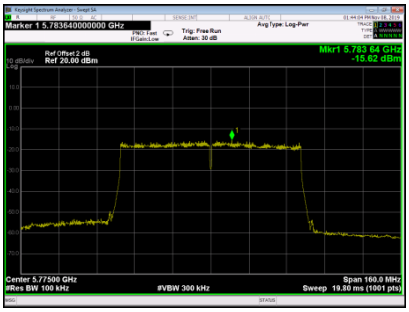
UNII-3_TX AC (VHT80) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-16.46	0.71	-15.75	30.00	PASS

CH155



UNII-3_TX AC (VHT80) 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
155	5775	-15.62	0.71	-14.91	30.00	PASS

CH155



UNII-3_TX AC (VHT80) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-12.30	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
			5725-5850

9.2 TEST PROCEDURE AND SETTING

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

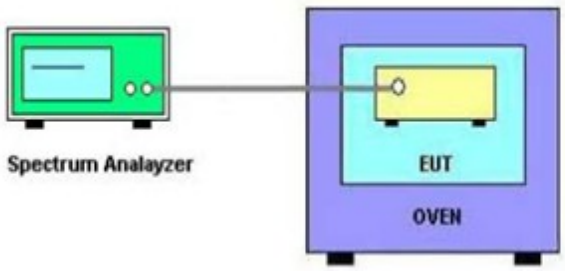
b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	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	2020/05/27
2	Attenuator	Mini-Circuits	BW-S10W2	101109	2019/12/16
3	RF Cable	Mi-cable	C10-01-01-1	100309	2019/12/16
4	Temperature conditioning	Guan Jian.HTH1000	-20-130℃	GJ1000-10D001	2019/12/16
5	DC Power Supply	G.KE	IPR-10010D	010931954	2019/12/16

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	
Voltage	Temperature	Measurement Frequency (MHz)
5V	(℃)	5180
	-20	5179.94
	25	5179.93
	50	5179.96
2.5V	25	5179.91
Max. Deviation (MHz)		-0.09
Max. Deviation (ppm)		-17.37

	Temperature vs. Frequency Stability	
Voltage	Temperature	Measurement Frequency (MHz)
5V	(℃)	5745
	-20	5744.97
	25	5744.92
	50	5744.98
2.5V	25	5745.02
Max. Deviation (MHz)		-0.08
Max. Deviation (ppm)		-13.93

Note: 2.5V is the end point voltage, and products below 2.5V will cease working.

END OF TEST REPORT