

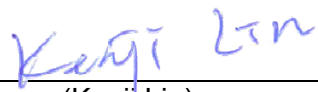
# FCC Radio Test Report

## FCC ID: RWO-RZ370251

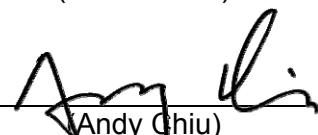
This report concerns (check one): Original Grant Class I Change Class II Change

**Project No.** : 1712C246  
**Equipment** : Gaming Router  
**Test Model** : RZ37-0251  
**Series Model** : RZ37-0251XXXX-XXXX(X: Can be 0-9, A-Z)  
**Applicant** : Razer Inc.  
**Address** : 201 3rd Street, Suite 900, San Francisco,CA  
94103,USA

**Date of Receipt** : Nov. 28, 2017  
**Date of Test** : Nov. 28, 2017 ~ Apr. 03, 2018  
**Issued Date** : Apr. 04, 2018  
**Tested by** : BTL Inc.

**Testing Engineer** :   
(Kenji Lin)

**Technical Manager** :   
(James Chiu)

**Authorized Signatory** :   
(Andy Chiu)

# **B T L I N C .**

No.18, Ln. 171, Sec. 2, Jiuzong Rd.,  
Neihu Dist., Taipei City, Taiwan (R.O.C.)  
TEL:+886-2-2657-3299 FAX: +886-2-2657-3331



Testing Laboratory  
0659

### **Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

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

**BTL's** report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **BTL-self**, extracts from the test report shall not be reproduced except in full with **BTL's** authorized written approval.

**BTL's** laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

### **Limitation**

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

<b>Table of Contents</b>	<b>Page</b>
<b>1 . CERTIFICATION</b>	<b>6</b>
<b>2 . SUMMARY OF TEST RESULTS</b>	<b>7</b>
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
<b>3 . GENERAL INFORMATION</b>	<b>9</b>
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	11
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	15
3.5 DESCRIPTION OF SUPPORT UNITS	15
<b>4 . EMC EMISSION TEST</b>	<b>16</b>
4.1 CONDUCTED EMISSION MEASUREMENT	16
4.1.1 POWER LINE CONDUCTED EMISSION	16
4.1.2 TEST PROCEDURE	16
4.1.3 DEVIATION FROM TEST STANDARD	16
4.1.4 TEST SETUP	17
4.1.5 EUT OPERATING CONDITIONS	17
4.1.6 EUT TEST CONDITIONS	17
4.1.7 TEST RESULTS	17
4.2 RADIATED EMISSION MEASUREMENT	18
4.2.1 RADIATED EMISSION LIMITS	18
4.2.2 TEST PROCEDURE	19
4.2.3 DEVIATION FROM TEST STANDARD	19
4.2.4 TEST SETUP	19
4.2.5 EUT OPERATING CONDITIONS	20
4.2.6 EUT TEST CONDITIONS	20
4.2.7 TEST RESULTS (9KHz TO 30MHz)	21
4.2.8 TEST RESULTS (30MHz TO 1000MHz)	21
4.2.9 TEST RESULTS (ABOVE 1000MHz)	21
<b>5 . 26dB SPECTRUM BANDWIDTH</b>	<b>22</b>
5.1 APPLIED PROCEDURES / LIMIT	22
5.1.1 TEST PROCEDURE	22
5.1.2 DEVIATION FROM STANDARD	22
5.1.3 TEST SETUP	22
5.1.4 EUT OPERATION CONDITIONS	22
5.1.5 EUT TEST CONDITIONS	22
5.1.6 TEST RESULTS	22

<b>Table of Contents</b>	<b>Page</b>
<b>6 . MAXIMUM CONDUCTED OUTPUT POWER</b>	<b>23</b>
<b>6.1 APPLIED PROCEDURES / LIMIT</b>	<b>23</b>
6.1.1 TEST PROCEDURE	23
6.1.2 DEVIATION FROM STANDARD	23
6.1.3 TEST SETUP	23
6.1.4 EUT OPERATION CONDITIONS	23
6.1.5 EUT TEST CONDITIONS	23
6.1.6 TEST RESULTS	23
<b>7 . POWER SPECTRAL DENSITY TEST</b>	<b>24</b>
<b>7.1 APPLIED PROCEDURES / LIMIT</b>	<b>24</b>
8.1.1 TEST PROCEDURE	24
7.1.1 DEVIATION FROM STANDARD	25
7.1.2 TEST SETUP	25
7.1.3 EUT OPERATION CONDITIONS	25
7.1.4 EUT TEST CONDITIONS	25
7.1.5 TEST RESULTS	25
<b>8 . FREQUENCY STABILITY MEASUREMENT</b>	<b>26</b>
<b>8.1 APPLIED PROCEDURES / LIMIT</b>	<b>26</b>
8.1.1 TEST PROCEDURE	26
8.1.2 DEVIATION FROM STANDARD	26
8.1.3 TEST SETUP	26
8.1.4 EUT OPERATION CONDITIONS	26
8.1.5 EUT TEST CONDITIONS	26
8.1.6 TEST RESULTS	26
<b>9 . MEASUREMENT INSTRUMENTS LIST</b>	<b>27</b>
<b>10 . EUT TEST PHOTOS</b>	<b>29</b>
<b>APPENDIX A - CONDUCTED EMISSION</b>	<b>33</b>
<b>APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)</b>	<b>36</b>
<b>APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)</b>	<b>41</b>
<b>APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)</b>	<b>54</b>
<b>APPENDIX E - BANDWIDTH</b>	<b>179</b>
<b>APPENDIX F - MAXIMUM OUTPUT POWER</b>	<b>356</b>
<b>APPENDIX G - POWER SPECTRAL DENSITY</b>	<b>401</b>
<b>APPENDIX H - FREQUENCY STABILITY</b>	<b>602</b>

### REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1712C246	Original Issue.	Apr. 04, 2018

## 1. CERTIFICATION

Equipment : Gaming Router  
Brand Name : RAZER  
Test Model : RZ37-0251  
Series Model : RZ37-0251XXXX-XXXX (X: Can be 0-9, A-Z)  
Applicant : Razer Inc.  
Manufacturer : Razer (Asia-Pacific) Pte.,Ltd  
Address : 514 Chai Chee Lane #07-01 ~ 06 Singapore 469029, Tel: +65 6505 2188  
Factory : RAZER TECHNOLOGY AND DEVELOPMENT (SHENZHEN) CO., LTD  
Address : East Wing, 3rd Floor, Block 2, Phase 1 of Vision Shenzhen Business Park Keji  
South Road, Hi-Tech Industrial Park, Shenzhen 518057, China  
Date of Test : Nov. 28, 2017 ~ Apr. 03, 2018  
Test Sample : Engineering Sample  
Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1712C246) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

**Test results included in this report is only for RLAN 5GHz UNII-1 and UNII-2A part.**

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)			
Standard(s) Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.407(a)	26dB Spectrum Bandwidth	PASS	
15.407(a)	Maximum Conducted Output Power	PASS	
15.407(a)	Power Spectral Density	PASS	
15.407(a)	Radiated Emissions	PASS	
15.407(b)	Band Edge Emissions	PASS	
15.407(g)	Frequency Stability	PASS	

**NOTE:**

(1) "N/A" denotes test is not applicable in this test report.

## 2.1 TEST FACILITY

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

### Conducted emission Test:

**C05:** (VCCI RN: C-4742; FCC RN:965108; FCC DN:TW0659)  
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

### Radiated emission Test (Below 1 GHz):

**CB11:** (VCCI RN: R-4260; FCC RN:949005; FCC DN:TW0659; IC Assigned Code:20088)  
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

### Radiated emission Test (Above 1 GHz):

**CB11:** (VCCI RN: G-868; FCC RN:949005; FCC DN:TW0659; IC Assigned Code:20088)  
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

## 2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor)  $k=1.96$  or  $k=2$  (which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %,  $U=2xUc(y)$ .

The BTL measurement uncertainty as below table:

### A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)
C05	CISPR	150 kHz ~ 30MHz	2.68

### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)
CB11 (3m)	CISPR	9kHz ~ 150kHz	4.00
		150kHz ~ 30MHz	4.00

Test Site	Method	Measurement Frequency Range	Ant.	U,(dB)
CB11 (3m)	CISPR	30MHz ~ 200MHz	V	3.06
		30MHz ~ 200MHz	H	2.58
		200MHz ~ 1,000MHz	V	3.50
		200MHz ~ 1,000MHz	H	3.10

Test Site	Method	Measurement Frequency Range	Ant.	U,(dB)
CB11 (3m)	CISPR	1GHz ~ 6GHz	V	4.14
		1GHz ~ 6GHz	H	4.14
		6GHz ~ 18GHz	V	5.34
		6GHz ~ 18GHz	H	5.34

Test Site	Method	Measurement Frequency Range	U,(dB)
CB11 (1m)	CISPR	18 ~ 26.5 GHz	4.80
		26.5 ~ 40 GHz	5.28

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



### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Gaming Router	
Brand Name	RAZER	
Test Model	RZ37-0251	
Series Model	RZ37-0251XXXX-XXXX (X: Can be 0-9, A-Z)	
Model Difference	It is the same as the basic model and X is used to define which country it is for under the same family series.	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-2A: 5250-5350MHz
	Modulation Type	802.11a:OFDM 802.11n:OFDM 802.11ac:OFDM
	Bit Rate of Transmitter	Up to 1.733Gbps
Output Power Non Beamforming	Output Power (Max.)for UNII-1	802.11a:26.07dBm 802.11n (20M): 26.37dBm 802.11n (40M): 27.48dBm 802.11ac (20M): 26.36dBm 802.11ac (40M): 25.58dBm 802.11ac (80M): 24.13dBm
	Output Power (Max.)for UNII-2A	802.11a: 19.83dBm 802.11n (20M): 19.88dBm 802.11n (40M): 23.04dBm 802.11ac (20M): 19.85dBm 802.11ac (40M): 21.71dBm 802.11ac (80M): 22.90dBm
Output Power Beamforming	Output Power (Max.)for UNII-1	802.11a: 25.91dBm 802.11n (20M): 26.124dBm 802.11n (40M): 27.29dBm 802.11ac (20M): 26.15dBm 802.11ac (40M): 26.75dBm 802.11ac (80M): 24.00dBm
	Output Power (Max.)for UNII-2A	802.11a: 19.69dBm 802.11n (20M): 19.68dBm 802.11n (40M): 22.25dBm 802.11ac (20M): 19.64dBm 802.11ac (40M): 22.19dBm 802.11ac (80M): 22.14dBm
Power Source	Supplied from adapter. Brand / Model: APD / WA-36A12R	
Power Rating	Input:100-240V ~50-60Hz, 0.9A Max Output: 12V ---3A	

**Note:**

- For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2. Channel List:

802.11a 802.11n 20MHz 802.11ac 20MHz		802.11n 40MHz 802.11ac 40MHz		802.11ac 80MHz	
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				

802.11a 802.11n 20MHz 802.11ac 20MHz		802.11n 40MHz 802.11ac 40MHz		802.11ac 80MHz	
UNII-2A		UNII-2A		UNII-2A	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

3. Antenna Specification:

Ant. No.	Ant. Brand	Ant. Model	Ant. Type	Ant. Gain (dBi)
5	LYNwave	N/A	Internal Antenna	3.27
6	LYNwave	N/A	Internal Antenna	3.05
7	LYNwave	N/A	Internal Antenna	3.47
8	LYNwave	N/A	Internal Antenna	3.86

In MIMO Ant. 5~8			
	5150	5250	5350
Gain (dBi)	1.22	1.19	1.71

Note:

The EUT incorporates a MIMO function. Physically, the EUT provides four completed transmitters and receivers (4T4R), all transmit signals are completely correlated.

**For without beamforming(CDD function):**

Directional gain=Gain+10log(N<sub>Ant</sub>/N<sub>ss</sub>)=1.71+10log(4/1)=7.73, so the UNII-1 power density limie is 17-7.73+6= 15.27, the UNII-2A power density limie is 11-7.73+6= 9.27

**For with beamforming**

so the UNII-1 power limit is 30-7.73+6=28.27, power density limie is 17-7.73+6= 15.27, the UNII-2A power limit is 24-7.73+6=22.27, power density limie is 11-7.73+6= 9.27

Remark:When antenna gain is larger than 6dBi, for every 1 dBi increase in gain, the power and power density limit are reduced by 1 dBm.

### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N40 Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC40 Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC80 Mode / CH58 (UNII-2A)
Mode 13	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 13	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N40 Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC40 Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC80 Mode / CH58 (UNII-2A)

Note:

- (1) For radiated below 1GHz test, the 802.11a mode is found to be the worst case and recorded.
- (2) For radiated the Non Beamforming and Beamforming were tested, the Non Beamforming is the worst case and included in the test report.

### 3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product

#### Non-Beamforming

UNII-1			
Test Software Version	QRCT		
Frequency (MHz)	5180	5200	5240
A Mode	19	18.5	19
N20 Mode	19.5	19	19.5
AC20 Mode	19.5	19	19.5
Frequency (MHz)	5190	5230	
N40 Mode	19	21	
AC40 Mode	19	20.5	
Frequency (MHz)	5210		
AC80 Mode	17.5		

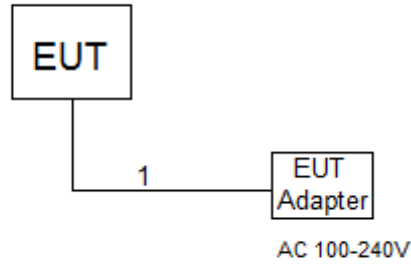
UNII-2A			
Test Software Version	QRCT		
Frequency (MHz)	5260	5300	5320
A Mode	13.5	13.5	13.5
N20 Mode	14	14	14
AC20 Mode	14	14	14
Frequency (MHz)	5270	5310	
N40 Mode	17.5	17	
AC40 Mode	17.5	17	
Frequency (MHz)	5290		
AC80 Mode	17		

### Beamforming

UNII-1			
Test Software Version	QRCT		
Frequency (MHz)	5180	5200	5240
A Mode	19	18.5	19
N20 Mode	19.5	19	19.5
AC20 Mode	19.5	19	19.5
Frequency (MHz)	5190	5230	/
N40 Mode	19	21	/
AC40 Mode	19	20.5	/
Frequency (MHz)	5210	/	/
AC80 Mode	17.5	/	/

UNII-2A			
Test Software Version	QRCT		
Frequency (MHz)	5260	5300	5320
A Mode	13.5	13.5	13.5
N20 Mode	14	14	14
AC20 Mode	14	14	14
Frequency (MHz)	5270	5310	/
N40 Mode	16.5	16.5	/
AC40 Mode	16.5	16.5	/
Frequency (MHz)	5290	/	/
AC80 Mode	16.5	/	/

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



### 3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.8m	Power Cable

## 4. EMC EMISSION TEST

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

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.

#### 4.1.2 TEST PROCEDURE

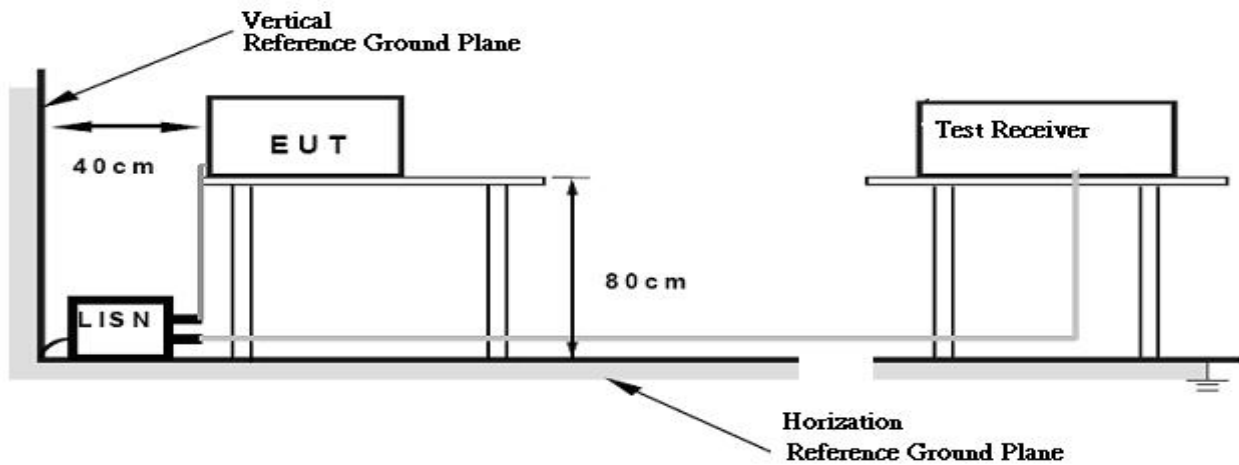
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation



#### 4.1.4 TEST SETUP



#### 4.1.5 EUT OPERATING 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 mode.

#### 4.1.6 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 53%    Test Voltage: AC 120V/60Hz

#### 4.1.7 TEST RESULTS

Please refer to the Appendix A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “ \* ” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150kHz to 30MHz.

## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 RADIATED EMISSION LIMITS

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

Frequencies (MHz)	Field Strength (micровolts/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

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3

Note:

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

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

#### 4.2.2 TEST PROCEDURE

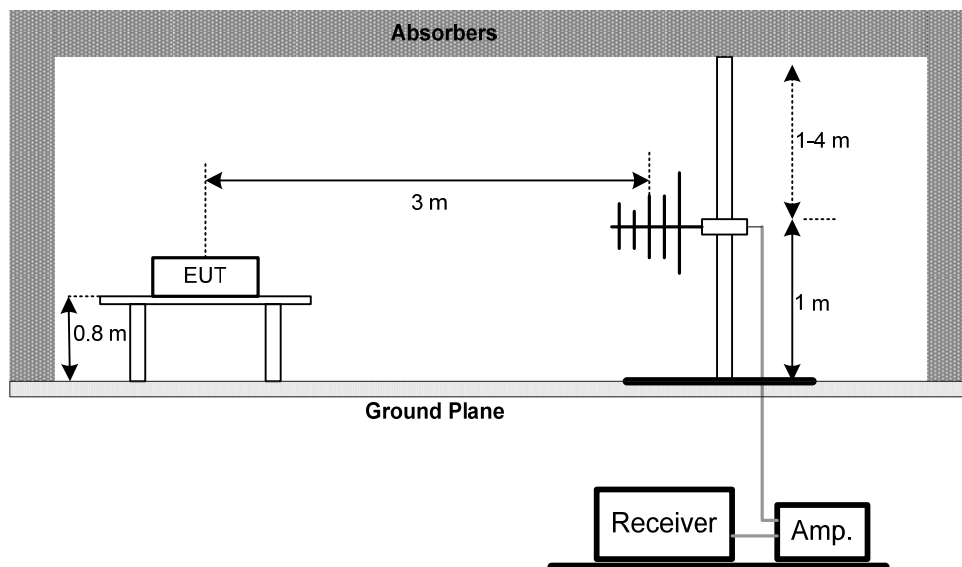
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance 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. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

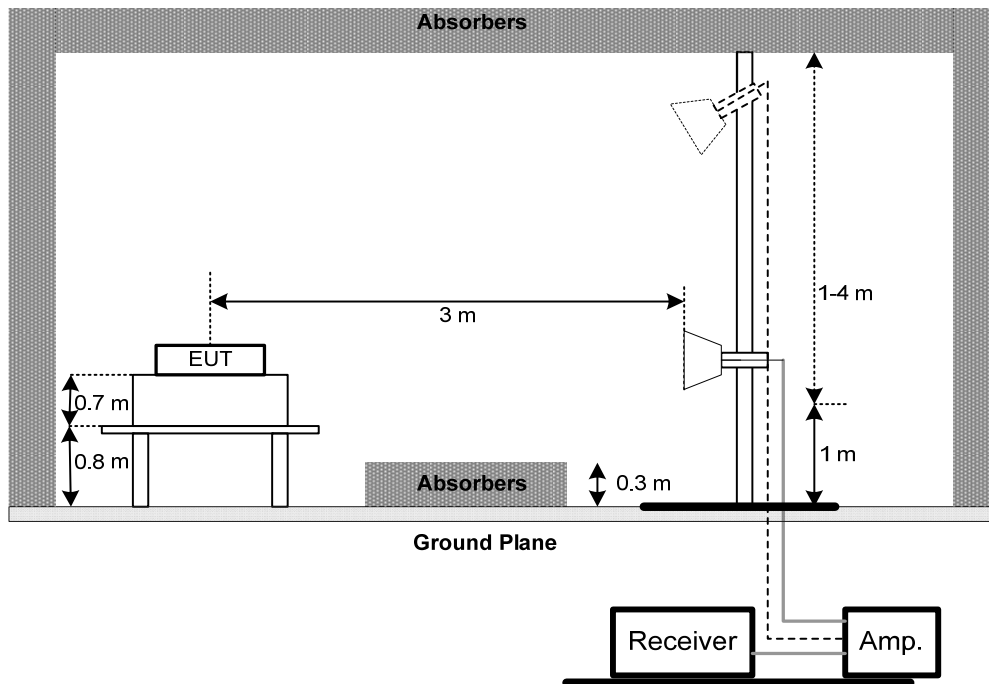
No deviation

#### 4.2.4 TEST SETUP

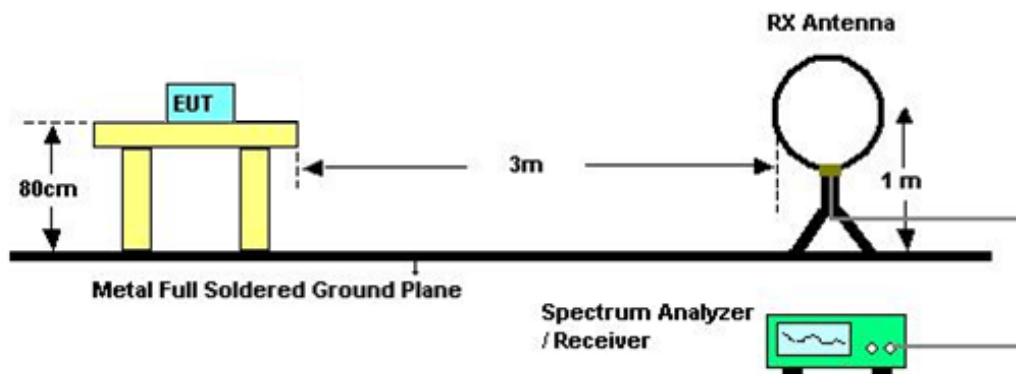
(A)Radiated Emission Test Set-Up Frequency Below 1GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



(C) Radiated emissions below 30MHz



**4.2.5 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

**4.2.6 EUT TEST CONDITIONS**

Temperature: 25°C    Relative Humidity: 60%    Test Voltage: AC 120V/60Hz

#### **4.2.7 TEST RESULTS (9KHz TO 30MHz)**

Please refer to the Appendix B

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor =  $40 \log (\text{specific distance} / \text{test distance})$  (dB);
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

#### **4.2.8 TEST RESULTS (30MHz TO 1000MHz)**

Please refer to the Appendix C.

#### **4.2.9 TEST RESULTS (ABOVE 1000MHz)**

Please refer to the Appendix D.

Remark:

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

## 5. 26dB SPECTRUM BANDWIDTH

### 5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Bandwidth	26 dB Bandwidth	5150-5250	PASS
	26 dB Bandwidth	5250-5350	PASS

#### 5.1.1 TEST PROCEDURE

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

b.

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

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

#### 5.1.2 DEVIATION FROM STANDARD

No deviation.

#### 5.1.3 TEST SETUP



#### 5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 5.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 60%    Test Voltage: AC 120V/60Hz

#### 5.1.6 TEST RESULTS

Please refer to the Appendix E.

## 6. MAXIMUM CONDUCTED OUTPUT POWER

### 6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Conducted Output Power	Fixed:1 Watt (30dBm) Mobile and portable: 250mW (24dBm)	5150-5250	PASS
	250mW (24dBm) or 11 dBm + 10log B(See Note)	5250-5350	PASS

Note: The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26 dB emission bandwidth in megahertz.

#### 6.1.1 TEST PROCEDURE

- 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 KDB 789033 D02.

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP



#### 6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 6.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 60%    Test Voltage: AC 120V/60Hz

#### 6.1.6 TEST RESULTS

Please refer to the Appendix F.

## 7. POWER SPECTRAL DENSITY TEST

### 7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	Other than Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250	PASS
	11dBm/MHz	5250-5350	PASS

#### 8.1.1 TEST PROCEDURE

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

b.

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

Note:

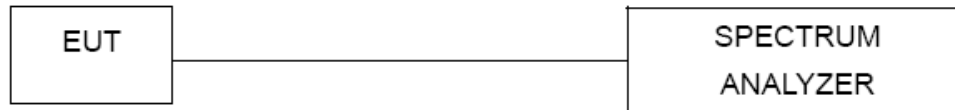
- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01r02, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
- The value measured with RBW=1MHz is to be added with  $10\log(500\text{kHz}/1\text{MHz})$  which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.



### 7.1.1 DEVIATION FROM STANDARD

No deviation.

### 7.1.2 TEST SETUP



### 7.1.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

### 7.1.4 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 60%    Test Voltage: AC 120V/60Hz

### 7.1.5 TEST RESULTS

Please refer to the Appendix H.

## 8. FREQUENCY STABILITY MEASUREMENT

### 8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Frequency Stability	Specified in the user's manual	5150-5250	PASS
		5250-5350	PASS

#### 8.1.1 TEST PROCEDURE

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

b.

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

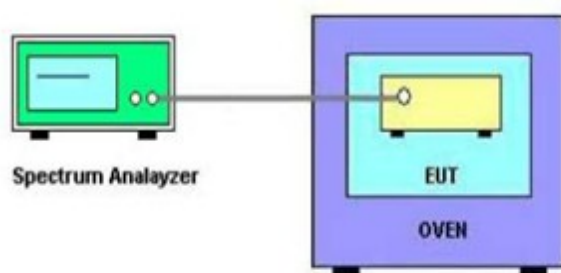
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. User manual temperature is 0°C~45°C.

#### 8.1.2 DEVIATION FROM STANDARD

No deviation.

#### 8.1.3 TEST SETUP



#### 8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 8.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: AC 120V/60Hz

#### 8.1.6 TEST RESULTS

Please refer to the Appendix I.

## 9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	Jan. 24, 2019
2	Test Cable	TIMES	CFD300-NL	C02	Jun. 12, 2018
3	EMI Test Receiver	R&S	ESR7	101433	Dec. 07, 2018
4	Power Dividers	HP	11636A	8103	May 02, 2018
5	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jul. 28, 2018
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 18, 2018
3	Horn Antenna	Schwarzbeck	BBHA 9120	9120D-1333	May 18, 2018
4	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 14, 2018
5	Pre-Amplifier	Agilent	8449B	3008A01714	Apr. 12, 2018
6	Test Cable	LMR	LMR-400	01(10M)	May 10, 2018
7	Test Cable	LMR	LMR-400	01(3M)	May 10, 2018
8	Test Cable	Harbour industries	27478LL142	1M	May 10, 2018
9	Test Cable	Harbour industries	27478LL142	3M	May 10, 2018
10	Test Cable	AISI	S104-SMAP-1	8M	May 10, 2018
11	Spectrum Analyzer	Agilent	N9020A	MY51160196	Aug. 01, 2018
12	EMI Test Receiver	R&S	ESCI	100080	May 10, 2018
13	Measurement Software	Farad	EZ EMC (Version NB-03A)	N/A	N/A

Spectrum Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 15, 2019

Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	May 17, 2018
2	Power Meter Sensor	Anritsu	MA2491A	034138	May 17, 2018

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 15, 2019

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 15, 2019
2	Precision Oven Tester	HOLINK	H-T-1F-D	BA03101701	May 22, 2018

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

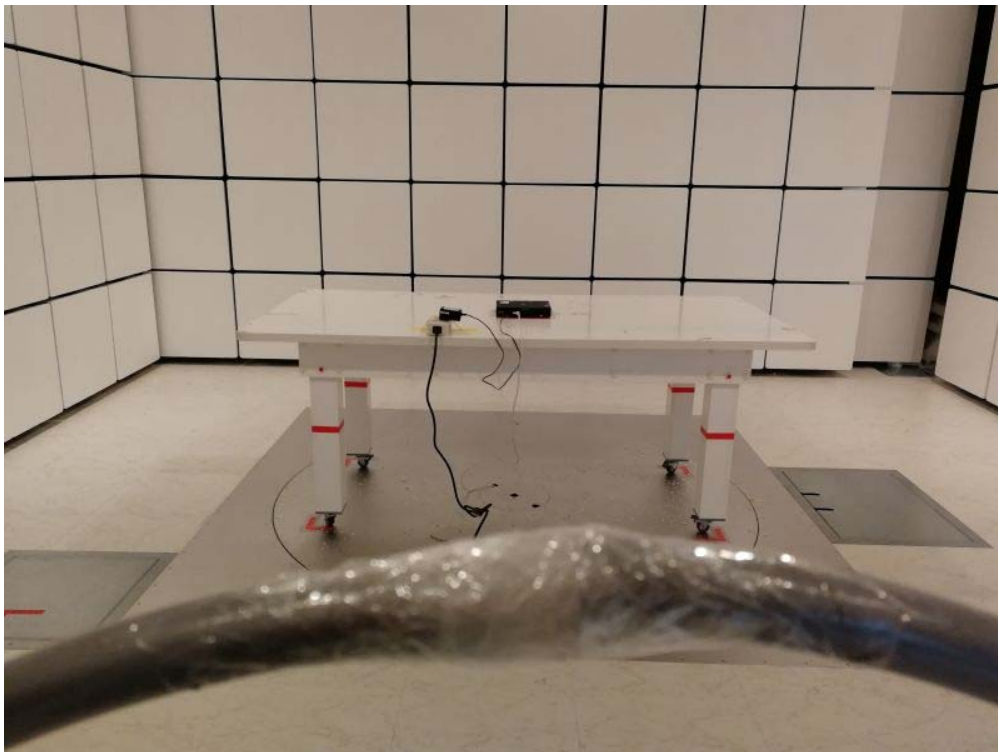
## 10. EUT TEST PHOTOS

### Conducted Measurement Photos



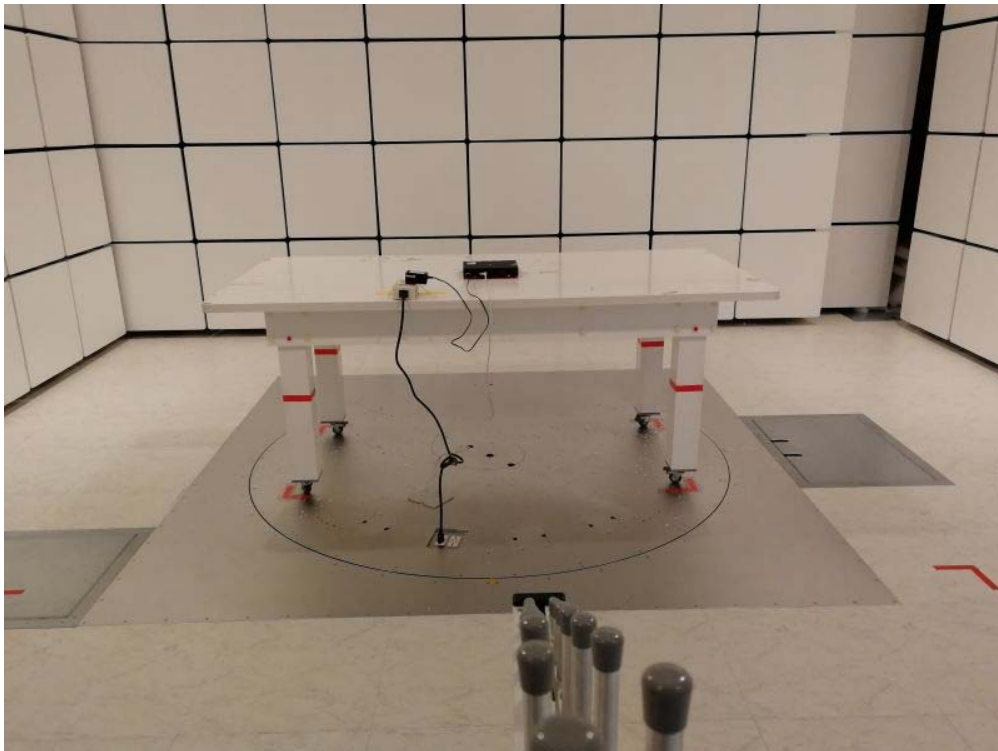
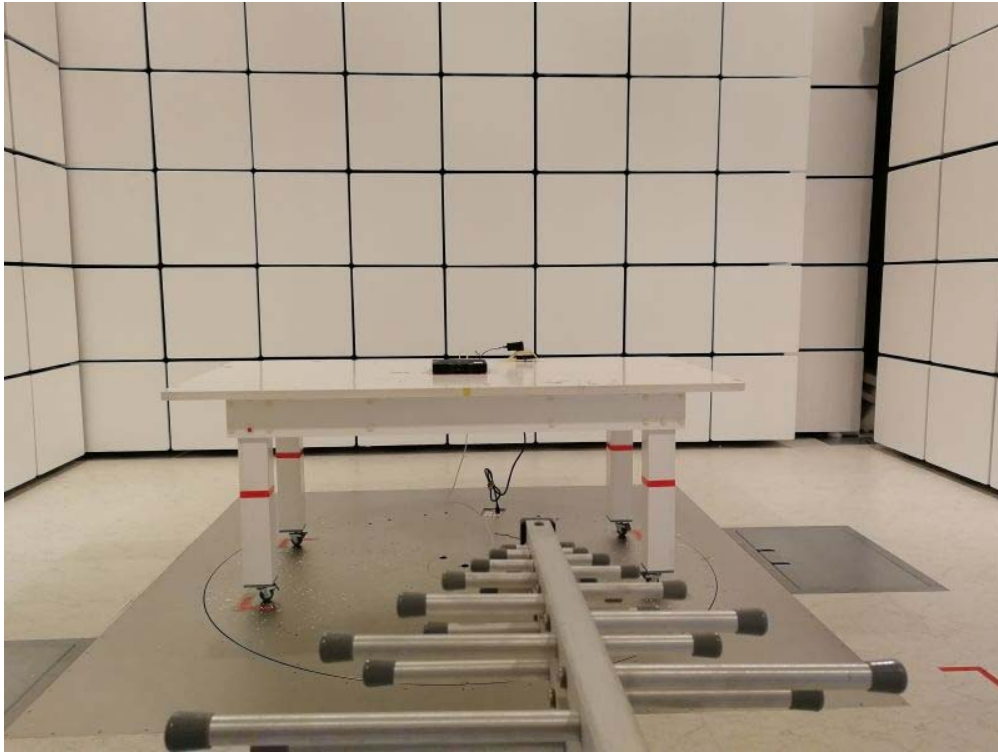
## Radiated Measurement Photos

9KHz to 30MHz



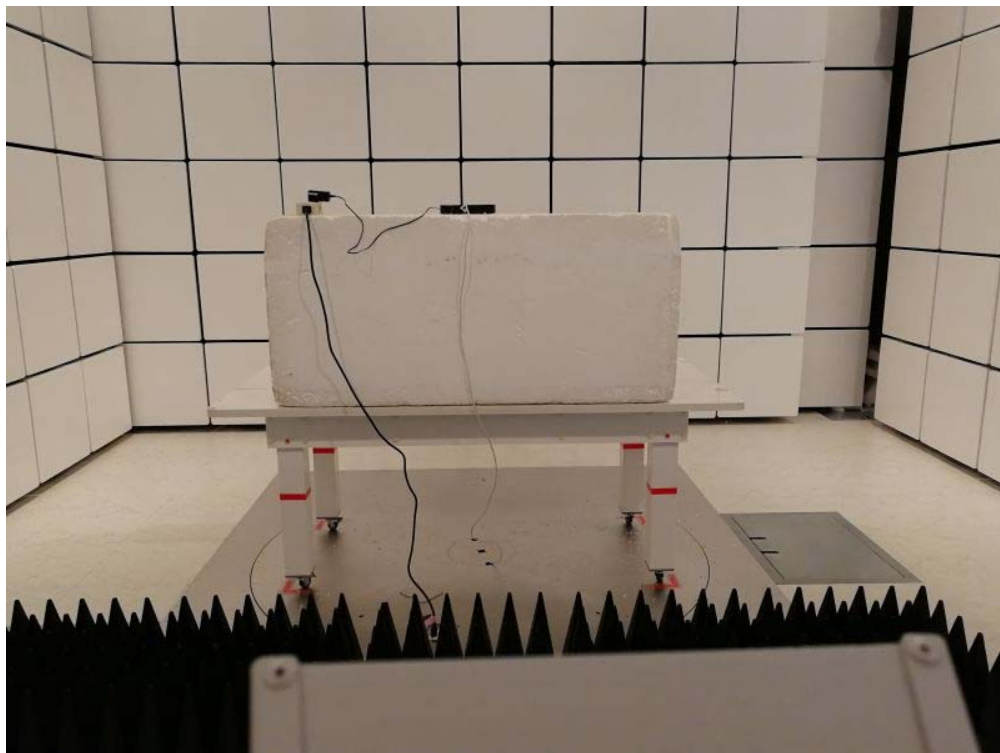
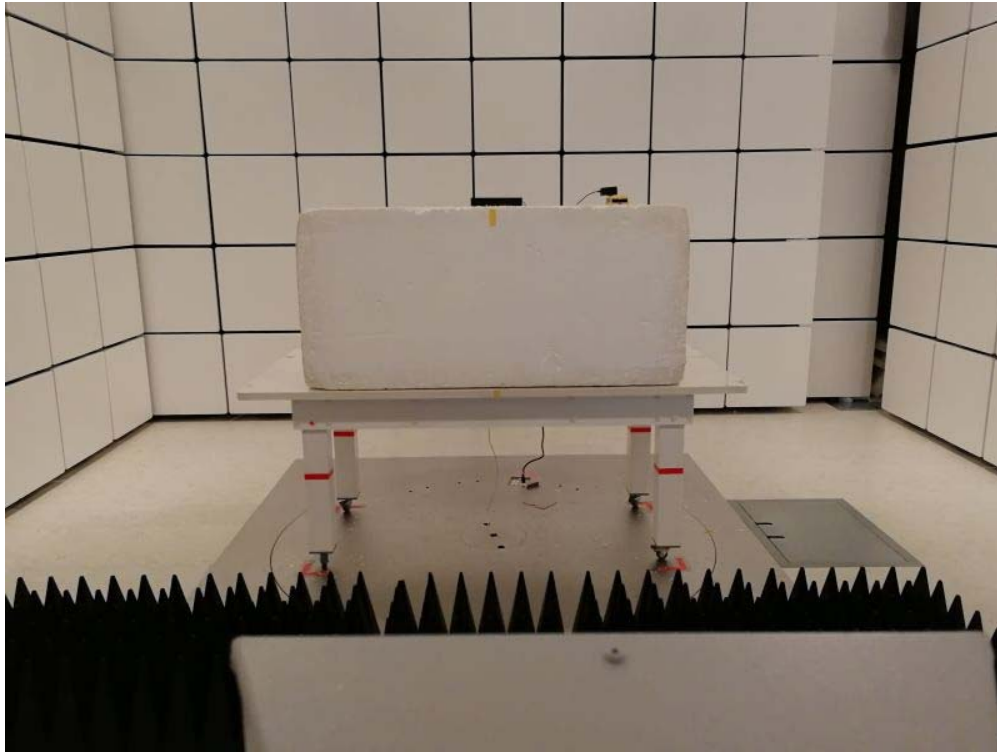
## Radiated Measurement Photos

30MHz to 1000MHz



### Radiated Measurement Photos

#### Above 1000MHz

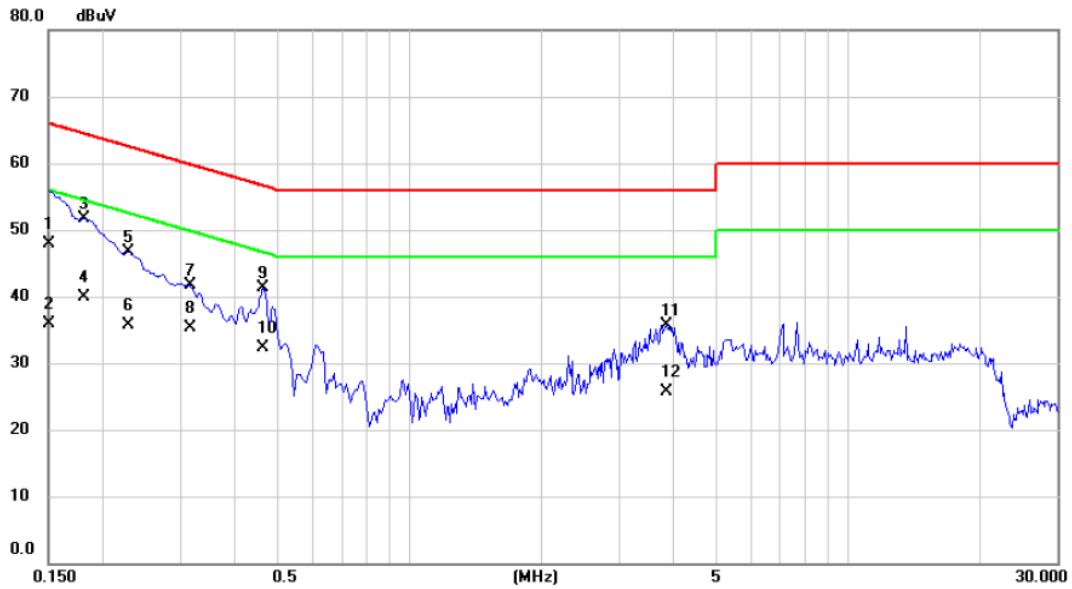




## APPENDIX A - CONDUCTED EMISSION

Test Mode: TX Mode

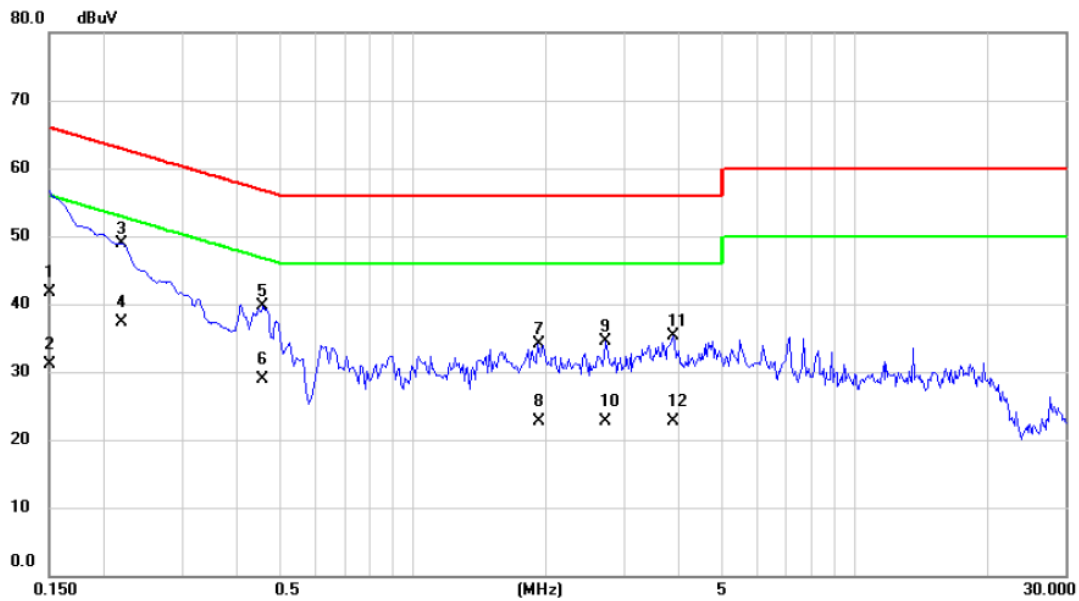
### Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	38.23	9.73	47.96	66.00	-18.04	QP	
2		0.1500	26.26	9.73	35.99	56.00	-20.01	AVG	
3	*	0.1814	41.93	9.72	51.65	64.42	-12.77	peak	
4		0.1814	30.17	9.72	39.89	54.42	-14.53	AVG	
5		0.2283	37.01	9.72	46.73	62.51	-15.78	peak	
6		0.2283	25.97	9.72	35.69	52.51	-16.82	AVG	
7		0.3150	31.99	9.73	41.72	59.84	-18.12	peak	
8		0.3150	25.54	9.73	35.27	49.84	-14.57	AVG	
9		0.4635	31.48	9.74	41.22	56.63	-15.41	peak	
10		0.4635	22.47	9.74	32.21	46.63	-14.42	AVG	
11		3.8480	26.00	9.80	35.80	56.00	-20.20	peak	
12		3.8480	15.87	9.80	25.67	46.00	-20.33	AVG	

Test Mode: TX Mode

### Neutral

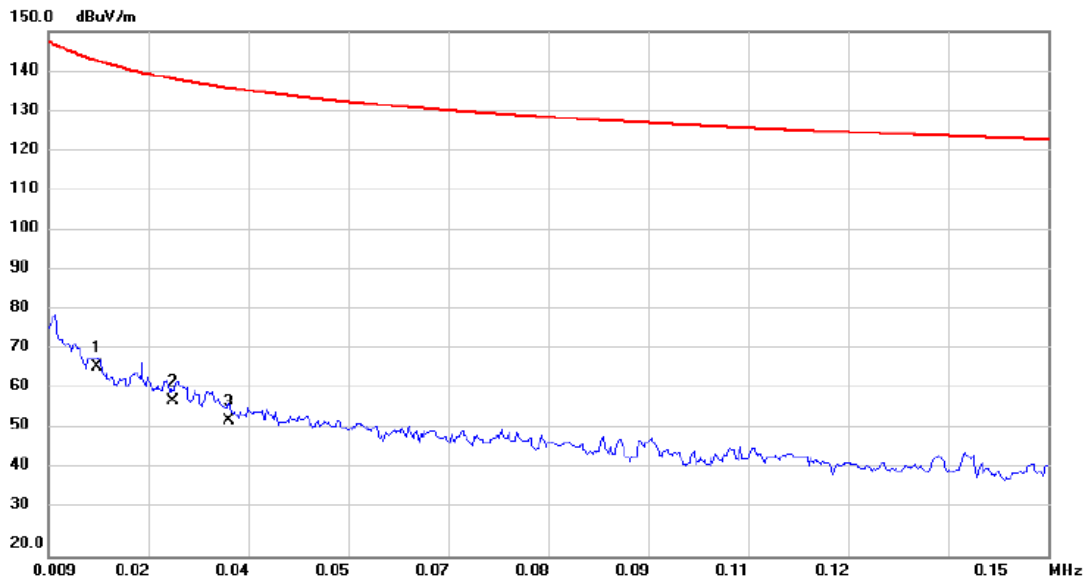


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	32.14	9.65	41.79	66.00	-24.21	QP	
2		0.1500	21.43	9.65	31.08	56.00	-24.92	AVG	
3	*	0.2184	39.28	9.66	48.94	62.88	-13.94	peak	
4		0.2184	27.65	9.66	37.31	52.88	-15.57	AVG	
5		0.4577	30.03	9.68	39.71	56.73	-17.02	peak	
6		0.4577	19.23	9.68	28.91	46.73	-17.82	AVG	
7		1.9217	24.40	9.71	34.11	56.00	-21.89	peak	
8		1.9217	12.96	9.71	22.67	46.00	-23.33	AVG	
9		2.7317	24.71	9.73	34.44	56.00	-21.56	peak	
10		2.7317	13.03	9.73	22.76	46.00	-23.24	AVG	
11		3.8840	25.61	9.76	35.37	56.00	-20.63	peak	
12		3.8840	12.89	9.76	22.65	46.00	-23.35	AVG	

## APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode: TX Mode

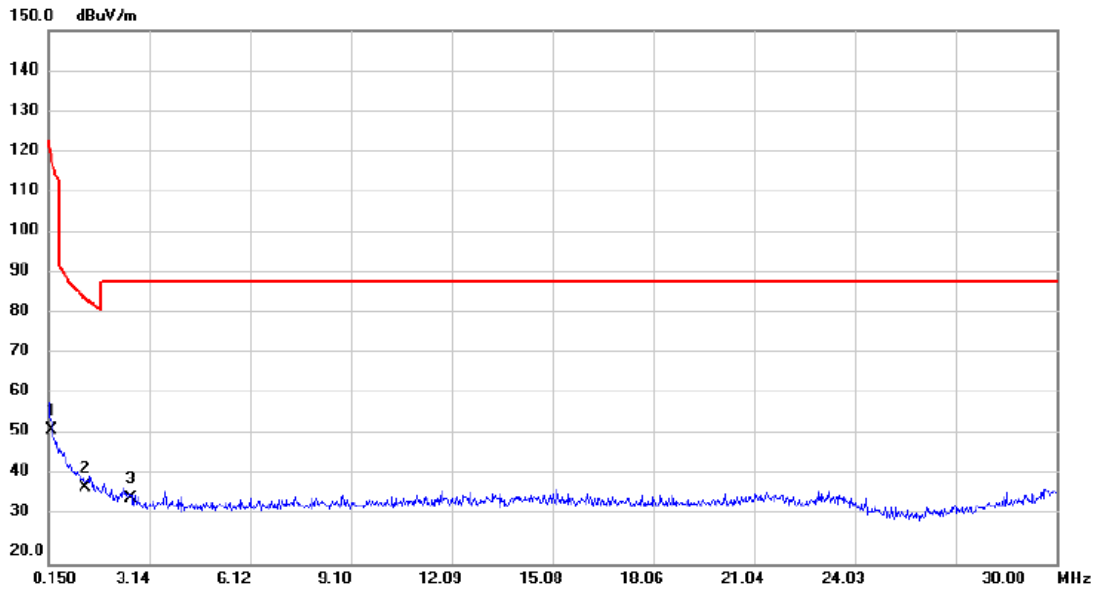
**Ant 0°**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0158	-8.14	74.96	66.82	142.71	-75.89	AVG	
2		0.0265	-12.12	70.78	58.66	138.22	-79.56	AVG	
3		0.0345	-14.85	68.55	53.70	135.93	-82.23	AVG	

Test Mode: TX Mode

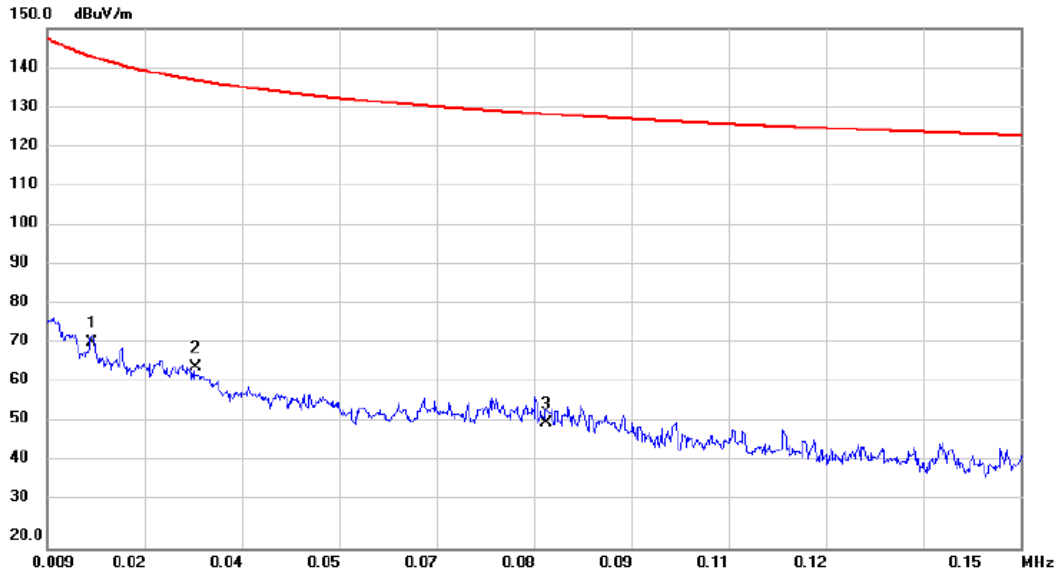
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2341	1.50	51.14	52.64	119.30	-66.66	AVG	
2	*	1.2291	-2.32	40.85	38.53	84.90	-46.37	QP	
3		2.6082	-2.64	38.57	35.93	88.63	-52.70	QP	

Test Mode: TX Mode

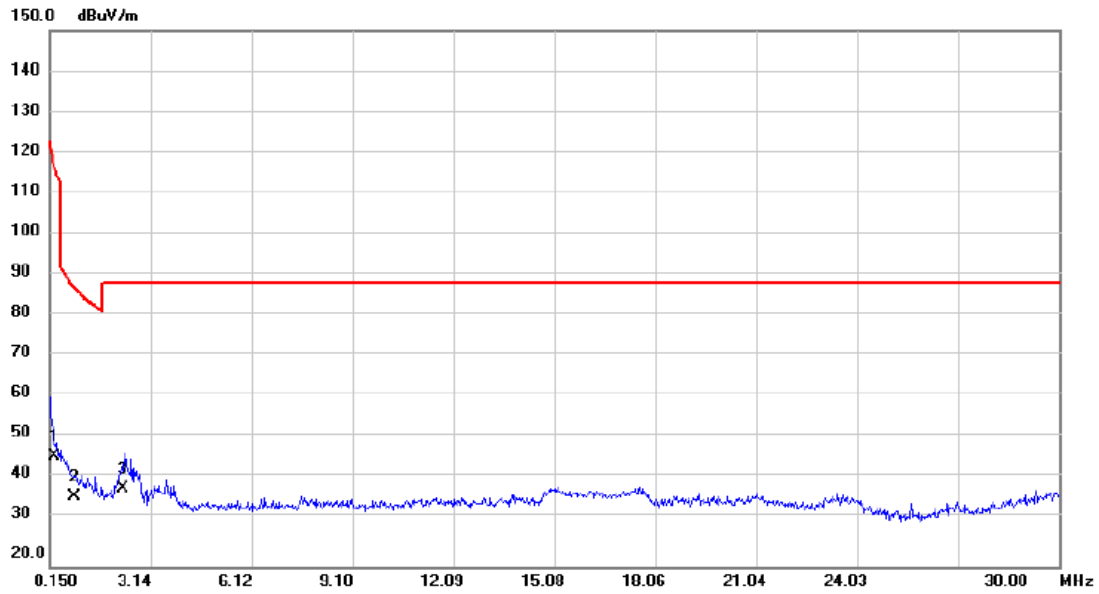
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	0.0154	-3.68	75.21	71.53	142.93	-71.40	AVG	
2		0.0306	-4.40	69.72	65.32	136.97	-71.65	AVG	
3		0.0812	-8.99	60.19	51.20	128.49	-77.29	AVG	

Test Mode: TX Mode

Ant 90°

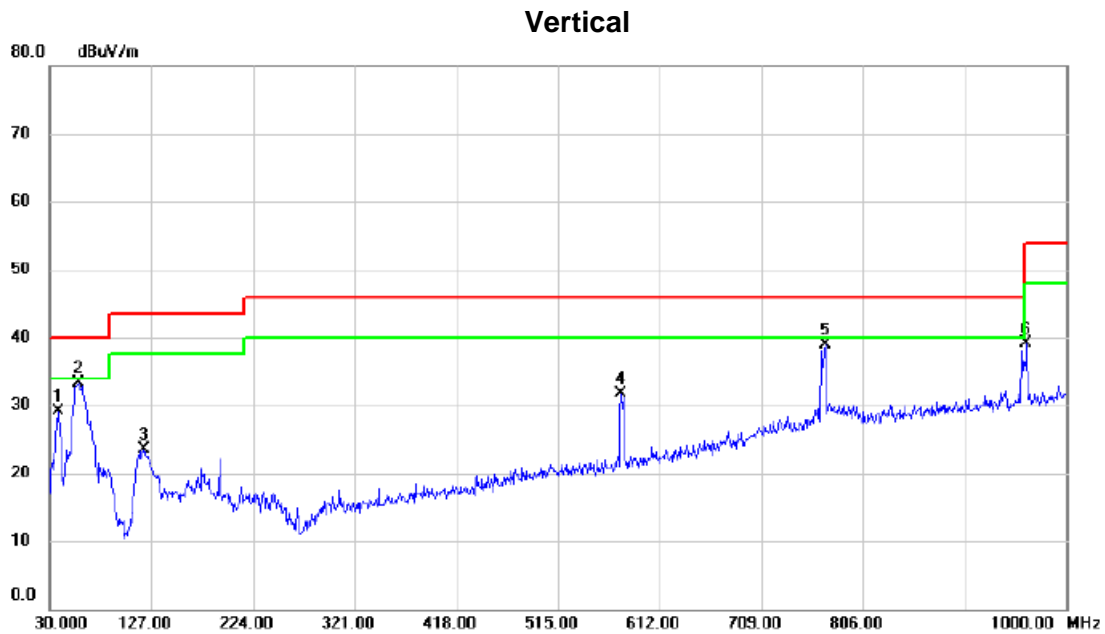


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2830	-2.52	49.48	46.96	117.66	-70.70	AVG	
2		0.8892	-4.68	41.85	37.17	87.71	-50.54	QP	
3	*	2.3213	0.32	38.78	39.10	88.63	-49.53	QP	



## APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)

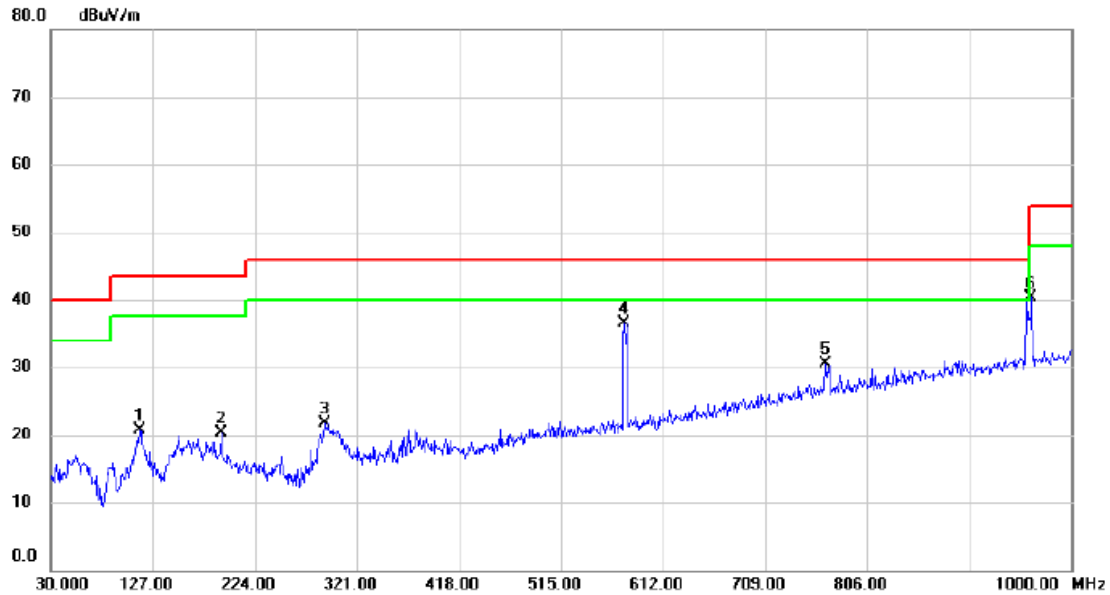
Test Mode: UNII-1/TX A Mode 5180MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		37.760	64.63	-35.54	29.09	40.00	-10.91	peak	
2	*	57.160	66.84	-33.52	33.32	40.00	-6.68	peak	
3		120.210	52.47	-28.98	23.49	43.50	-20.01	peak	
4		575.140	52.31	-20.63	31.68	46.00	-14.32	peak	
5		770.110	55.05	-16.17	38.88	46.00	-7.12	peak	
6		962.170	51.50	-12.40	39.10	54.00	-14.90	peak	

Test Mode: UNII-1/TX A Mode 5180MHz

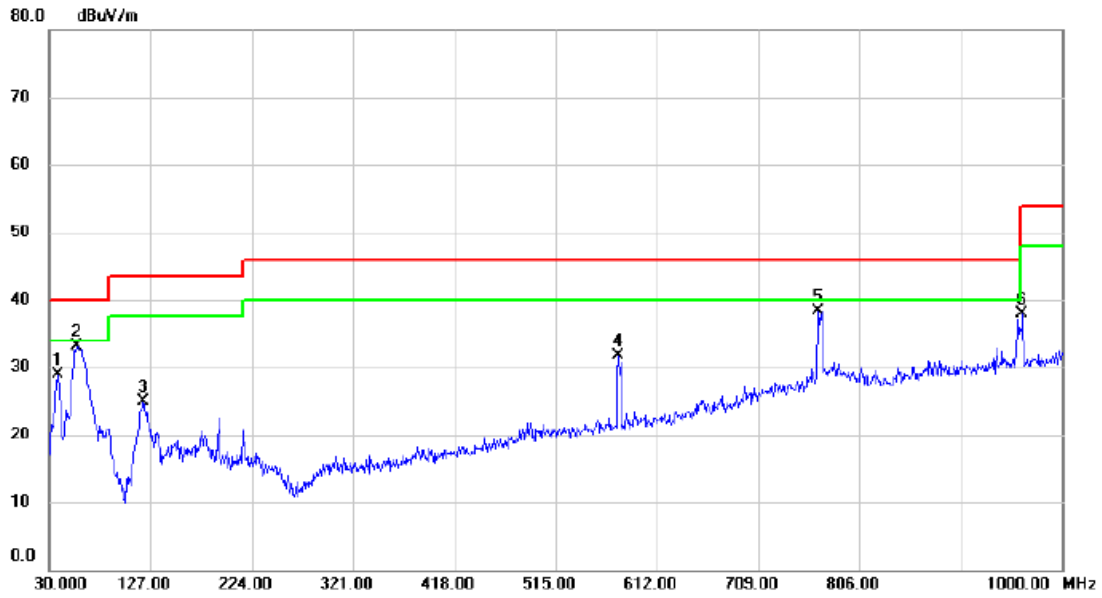
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		114.390	50.16	-29.53	20.63	43.50	-22.87	peak	
2		191.990	50.09	-29.78	20.31	43.50	-23.19	peak	
3		290.930	49.95	-28.15	21.80	46.00	-24.20	peak	
4	*	575.140	57.20	-20.63	36.57	46.00	-9.43	peak	
5		766.230	46.85	-16.31	30.54	46.00	-15.46	peak	
6		962.170	52.61	-12.40	40.21	54.00	-13.79	peak	

Test Mode: UNII-1/TX A Mode 5200MHz

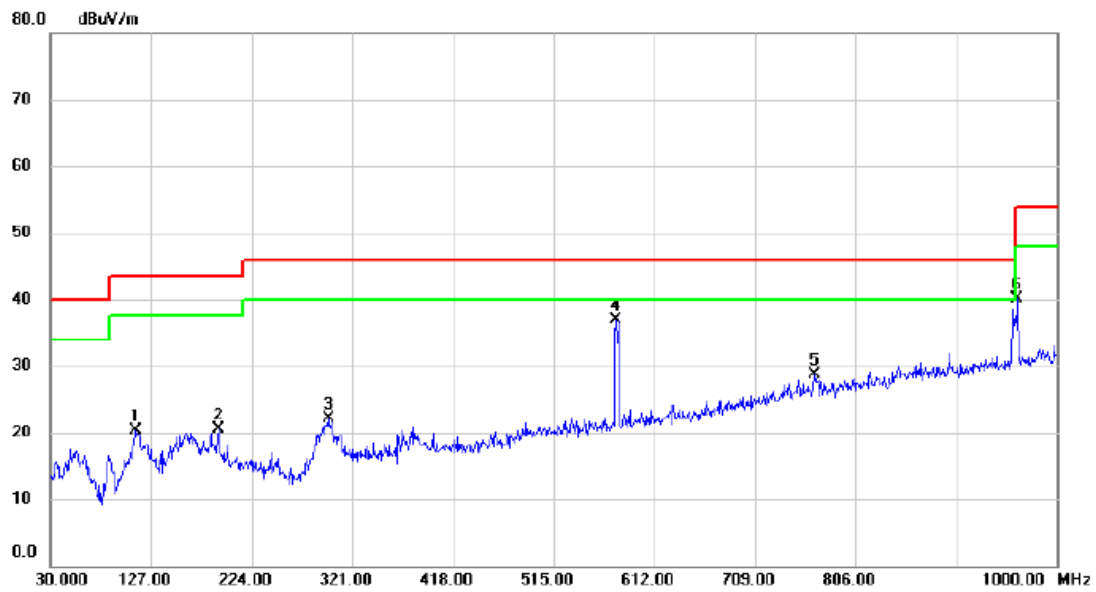
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	64.87	-36.05	28.82	40.00	-11.18	peak	
2	*	56.190	66.41	-33.33	33.08	40.00	-6.92	peak	
3		120.210	53.88	-28.98	24.90	43.50	-18.60	peak	
4		575.140	52.34	-20.63	31.71	46.00	-14.29	peak	
5		766.230	54.57	-16.31	38.26	46.00	-7.74	peak	
6		962.170	50.40	-12.40	38.00	54.00	-16.00	peak	

Test Mode: UNII-1/TX A Mode 5200MHz

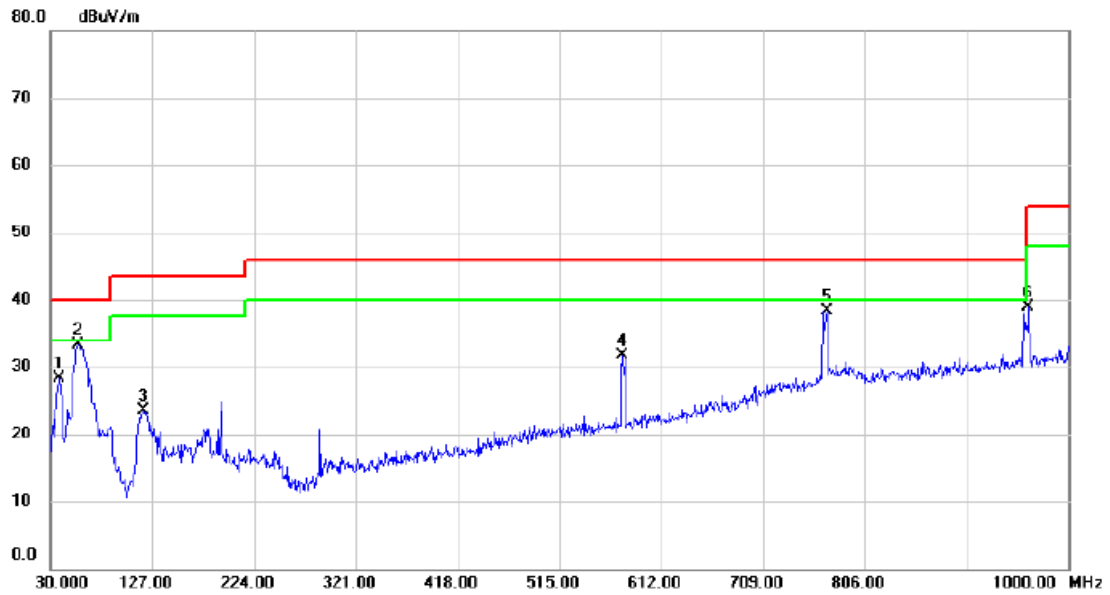
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		111.480	50.07	-29.81	20.26	43.50	-23.24	peak	
2		191.990	50.20	-29.78	20.42	43.50	-23.08	peak	
3		297.720	50.20	-28.03	22.17	46.00	-23.83	peak	
4	*	575.140	57.49	-20.63	36.86	46.00	-9.14	peak	
5		766.230	44.94	-16.31	28.63	46.00	-17.37	peak	
6		962.170	52.50	-12.40	40.10	54.00	-13.90	peak	

Test Mode: UNII-1/TX A Mode 5240MHz

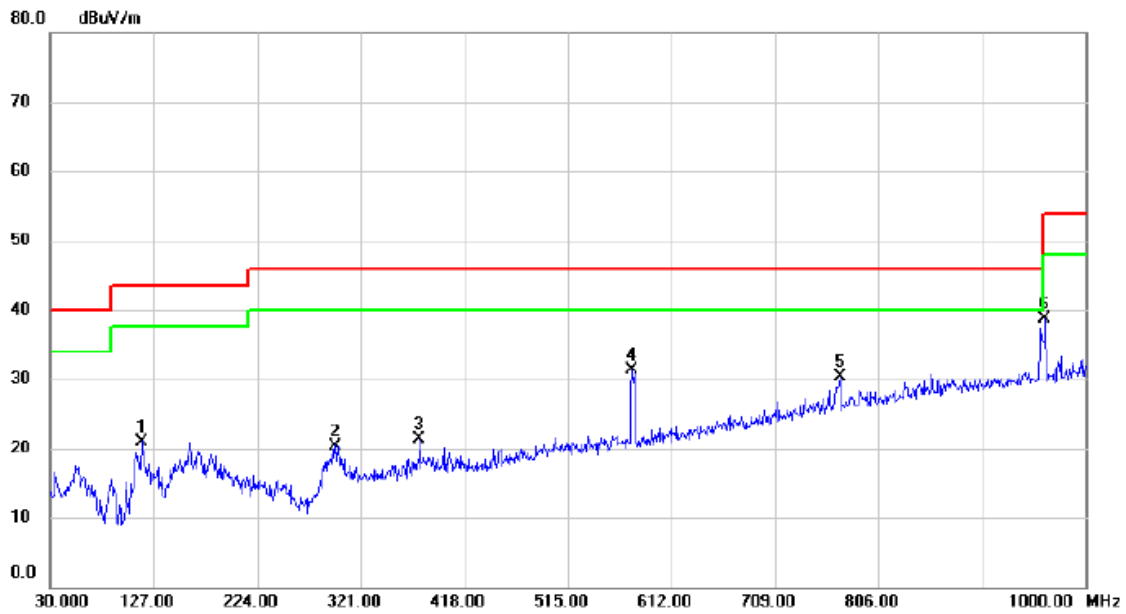
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	64.44	-36.05	28.39	40.00	-11.61	peak	
2	*	56.190	66.70	-33.33	33.37	40.00	-6.63	peak	
3		118.270	52.59	-29.13	23.46	43.50	-20.04	peak	
4		575.140	52.34	-20.63	31.71	46.00	-14.29	peak	
5		770.110	54.52	-16.17	38.35	46.00	-7.65	peak	
6		962.170	51.25	-12.40	38.85	54.00	-15.15	peak	

Test Mode: UNII-1/TX A Mode 5240MHz

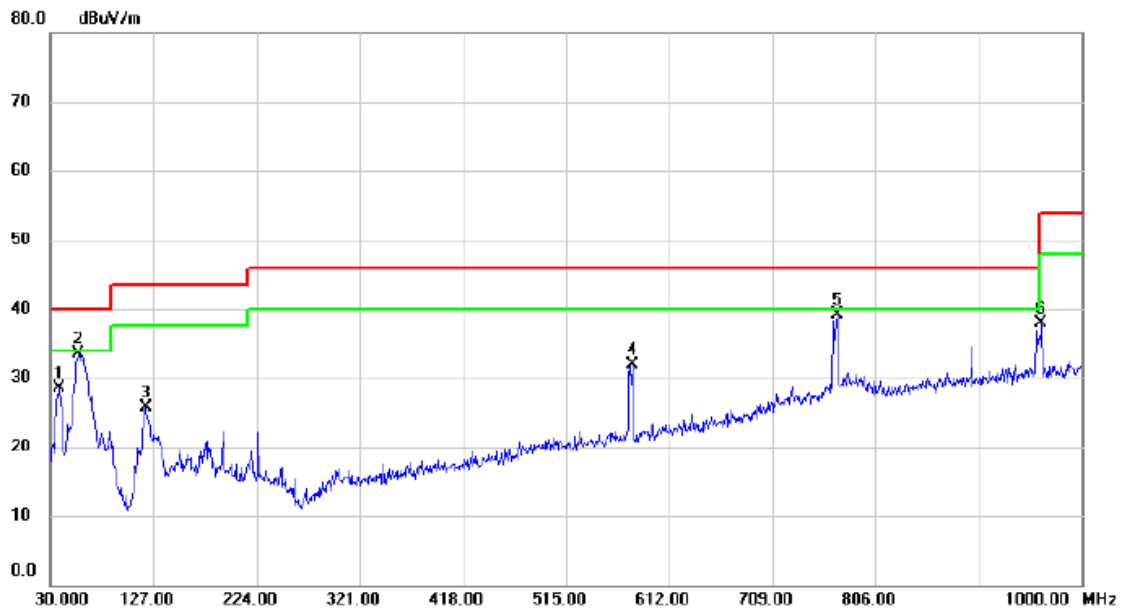
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		115.360	50.43	-29.43	21.00	43.50	-22.50	peak	
2		296.750	48.45	-28.05	20.40	46.00	-25.60	peak	
3		376.290	45.67	-24.44	21.23	46.00	-24.77	peak	
4	*	575.140	51.88	-20.63	31.25	46.00	-14.75	peak	
5		770.110	46.42	-16.17	30.25	46.00	-15.75	peak	
6		962.170	51.02	-12.40	38.62	54.00	-15.38	peak	

Test Mode: UNII-2A/TX A Mode 5260MHz

Vertical

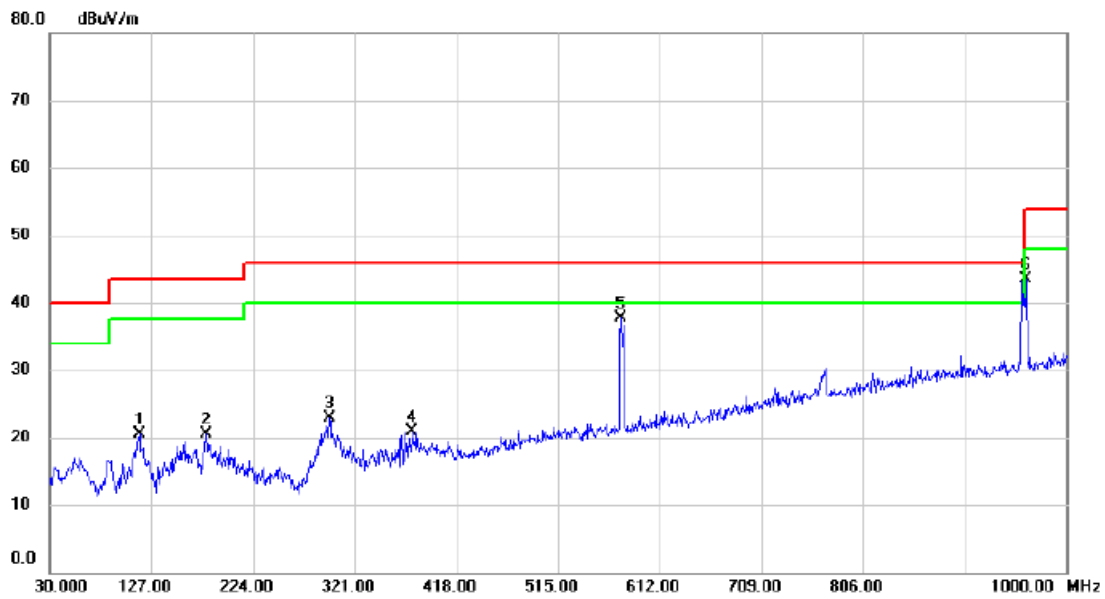


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	64.50	-36.05	28.45	40.00	-11.55	peak	
2	*	56.190	66.82	-33.33	33.49	40.00	-6.51	peak	
3		119.240	54.77	-29.05	25.72	43.50	-17.78	peak	
4		577.080	52.49	-20.58	31.91	46.00	-14.09	peak	
5		770.110	55.33	-16.17	39.16	46.00	-6.84	peak	
6		962.170	50.36	-12.40	37.96	54.00	-16.04	peak	



Test Mode: UNII-2A/TX A Mode 5260MHz

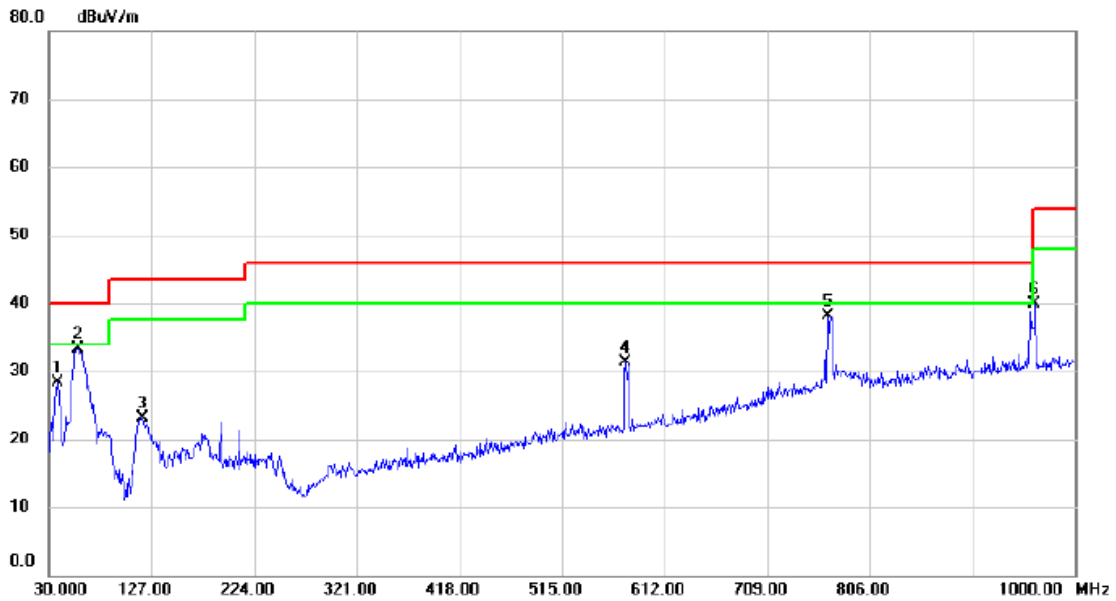
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		115.360	49.93	-29.43	20.50	43.50	-23.00	peak	
2		179.380	50.97	-30.55	20.42	43.50	-23.08	peak	
3		296.750	51.01	-28.05	22.96	46.00	-23.04	peak	
4		376.290	45.43	-24.44	20.99	46.00	-25.01	peak	
5	*	575.140	58.25	-20.63	37.62	46.00	-8.38	peak	
6		962.170	55.83	-12.40	43.43	54.00	-10.57	peak	

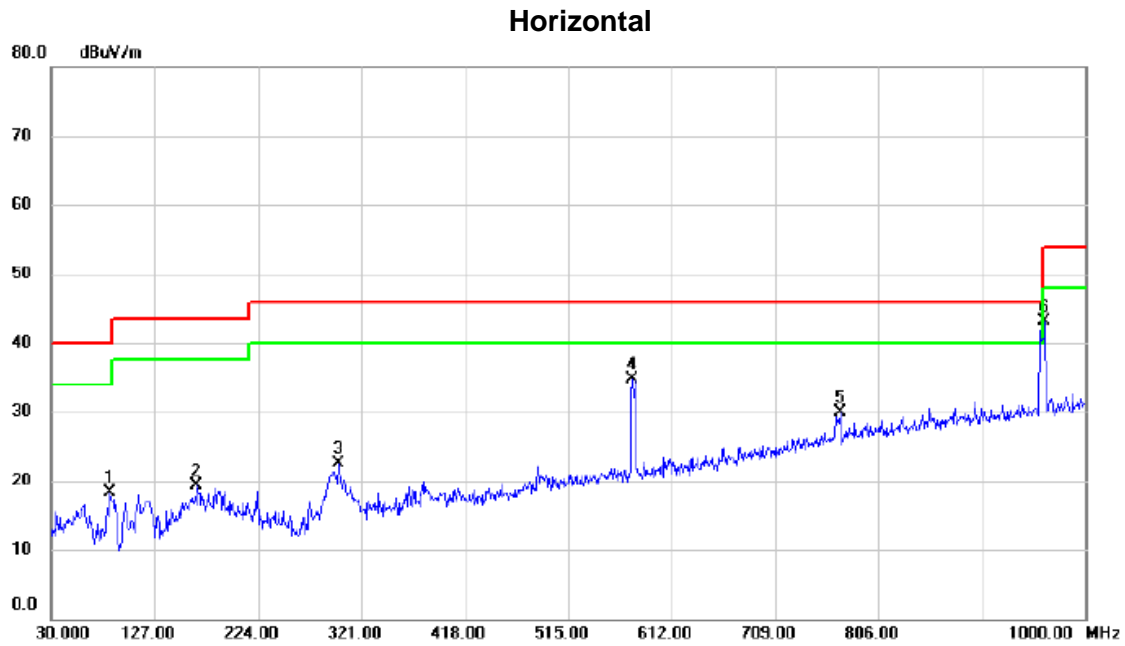
Test Mode: UNII-2A/TX A Mode 5300MHz

**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		37.760	63.78	-35.54	28.24	40.00	-11.76	peak	
2	*	58.130	67.06	-33.72	33.34	40.00	-6.66	peak	
3		118.270	52.19	-29.13	23.06	43.50	-20.44	peak	
4		575.140	51.85	-20.63	31.22	46.00	-14.78	peak	
5		766.230	54.45	-16.31	38.14	46.00	-7.86	peak	
6		962.170	52.23	-12.40	39.83	54.00	-14.17	peak	

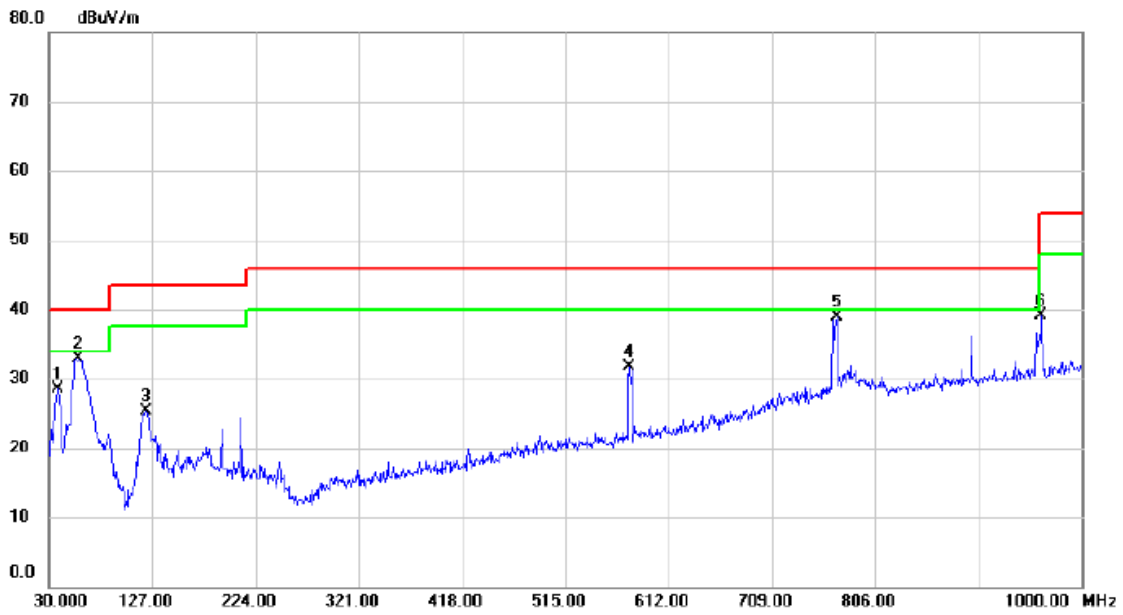
Test Mode: UNII-2A/TX A Mode 5300MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		85.290	47.97	-29.61	18.36	40.00	-21.64	peak	
2		166.770	47.65	-28.44	19.21	43.50	-24.29	peak	
3		299.660	50.57	-27.99	22.58	46.00	-23.42	peak	
4		575.140	55.43	-20.63	34.80	46.00	-11.20	peak	
5		770.110	46.06	-16.17	29.89	46.00	-16.11	peak	
6 *		962.170	55.56	-12.40	43.16	54.00	-10.84	peak	

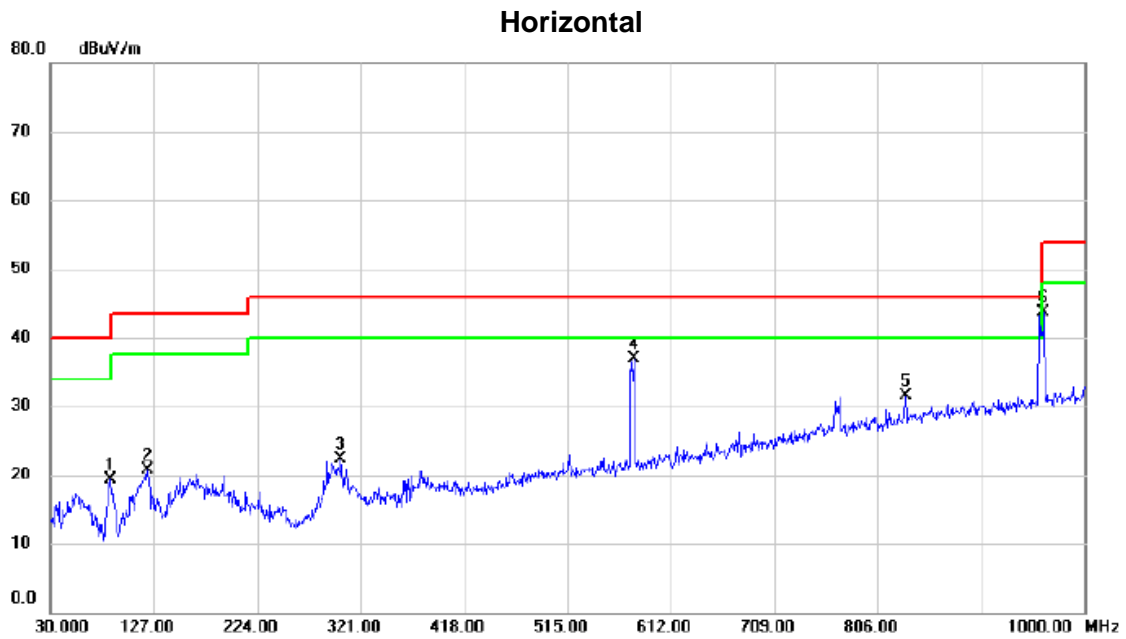
Test Mode: UNII-2A/TX A Mode 5320MHz

**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		38.730	64.56	-36.05	28.51	40.00	-11.49	peak	
2	*	57.160	66.50	-33.52	32.98	40.00	-7.02	peak	
3		121.180	54.36	-29.04	25.32	43.50	-18.18	peak	
4		575.140	52.28	-20.63	31.65	46.00	-14.35	peak	
5		770.110	55.13	-16.17	38.96	46.00	-7.04	peak	
6		962.170	51.46	-12.40	39.06	54.00	-14.94	peak	

Test Mode: UNII-2A/TX A Mode 5320MHz

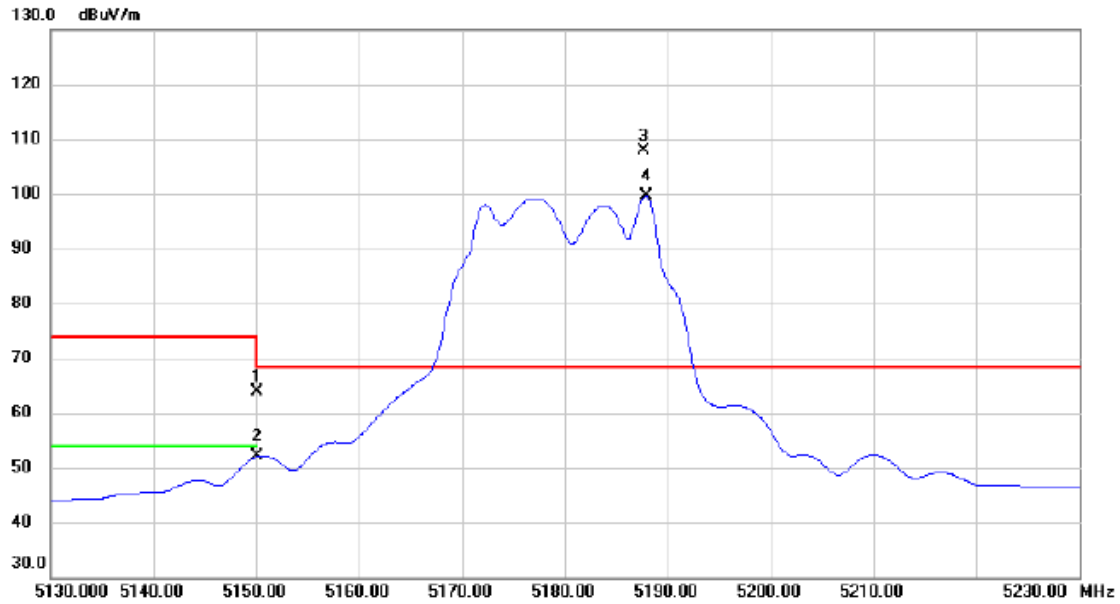


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		86.260	48.79	-29.58	19.21	40.00	-20.79	peak	
2		121.180	49.73	-29.04	20.69	43.50	-22.81	peak	
3		302.570	50.13	-27.87	22.26	46.00	-23.74	peak	
4	*	577.080	57.47	-20.58	36.89	46.00	-9.11	peak	
5		832.190	46.14	-14.60	31.54	46.00	-14.46	peak	
6		962.170	56.13	-12.40	43.73	54.00	-10.27	peak	

## APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

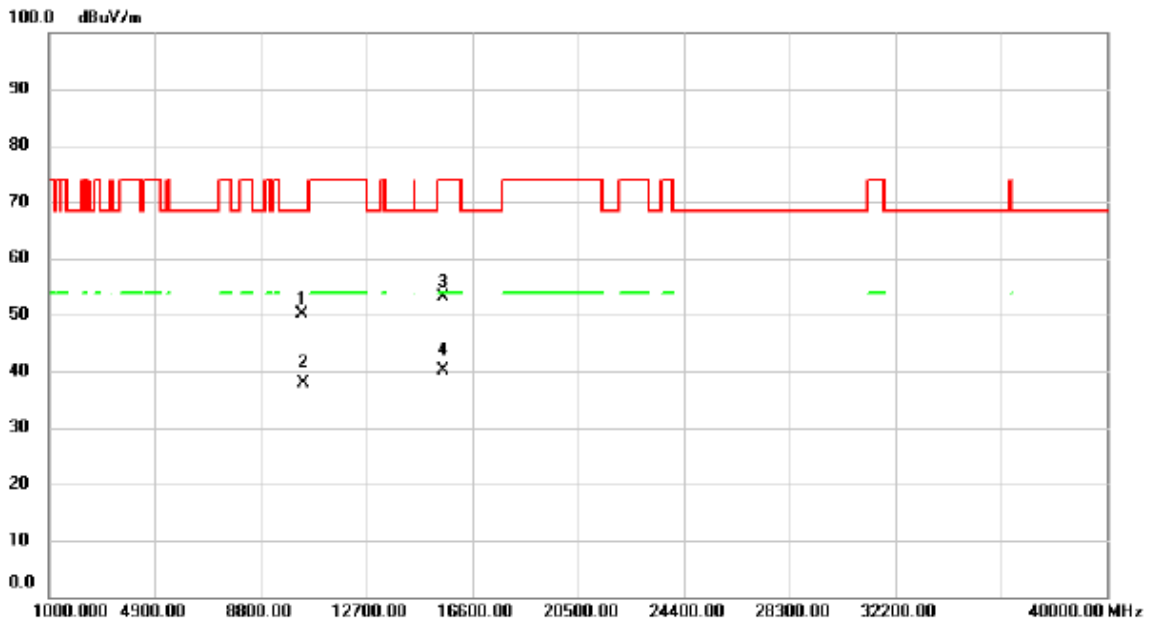
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	25.93	38.01	63.94	74.00	-10.06	peak	
2		5150.000	14.04	38.01	52.05	54.00	-1.95	AVG	
3	*	5187.700	69.87	38.06	107.93	68.30	39.63	peak	No Limit
4	X	5187.900	61.54	38.06	99.60	68.30	31.30	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

### Vertical

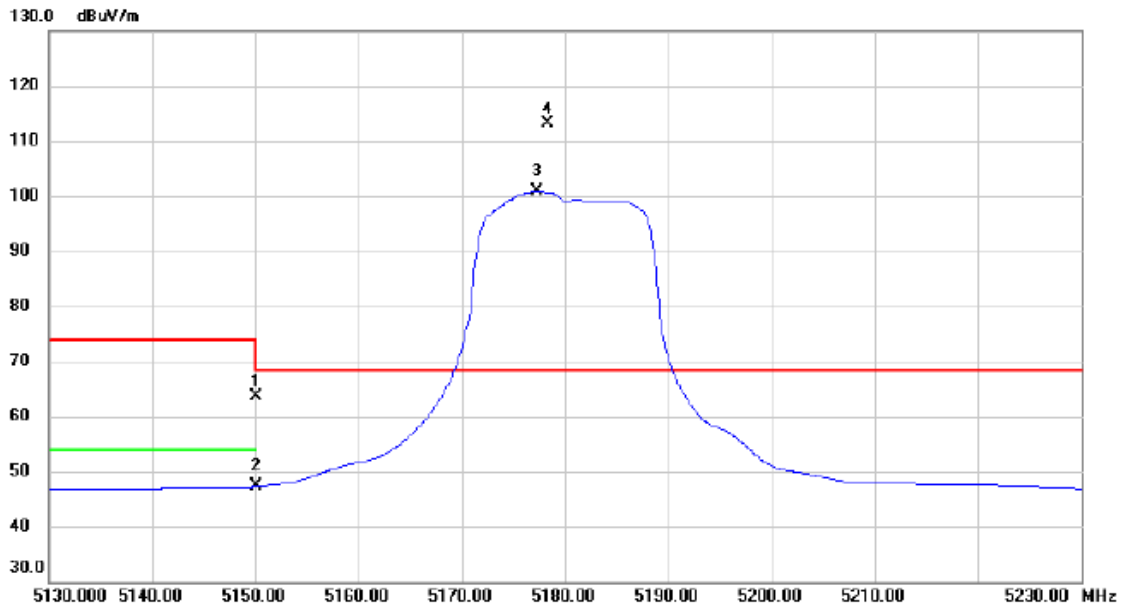


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		10358.16	49.18	1.04	50.22	68.30	-18.08	peak	
2		10364.19	36.87	1.05	37.92	68.30	-30.38	AVG	
3		15538.46	50.84	2.31	53.15	74.00	-20.85	peak	
4	*	15542.95	37.84	2.30	40.14	54.00	-13.86	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

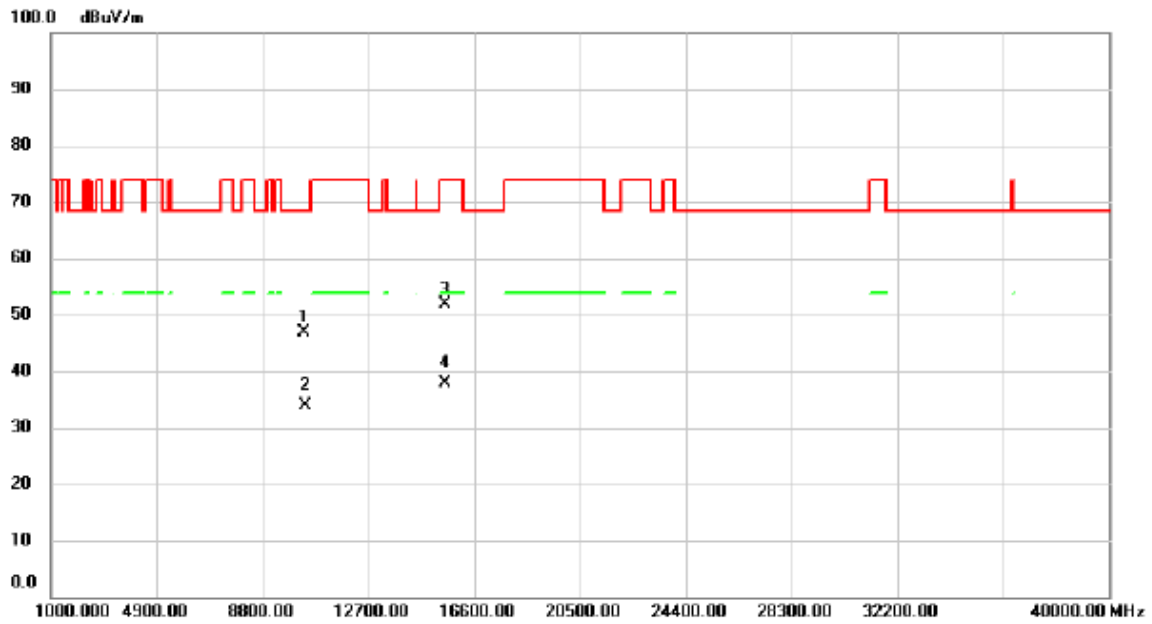
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	25.57	38.01	63.58	74.00	-10.42	peak	
2		5150.000	9.30	38.01	47.31	54.00	-6.69	AVG	
3	X	5177.300	62.79	38.05	100.84	68.30	32.54	AVG	No Limit
4	*	5178.400	75.13	38.05	113.18	68.30	44.88	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

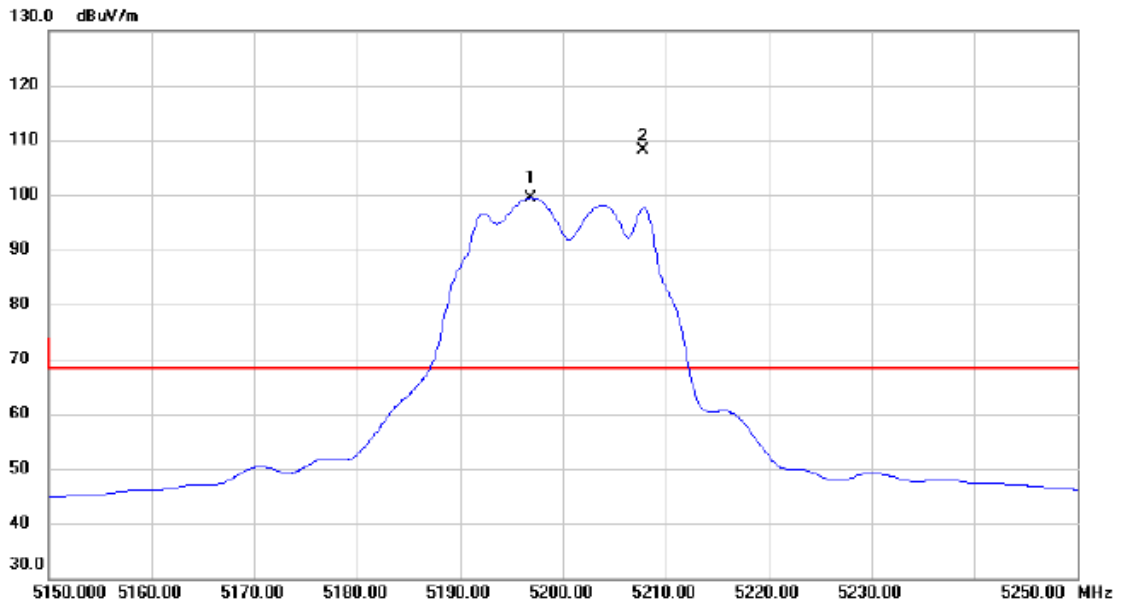
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10358.14	45.90	1.04	46.94	68.30	-21.36	peak	
2		10362.13	32.90	1.04	33.94	68.30	-34.36	AVG	
3		15538.56	49.69	2.31	52.00	74.00	-22.00	peak	
4	*	15538.62	35.66	2.31	37.97	54.00	-16.03	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

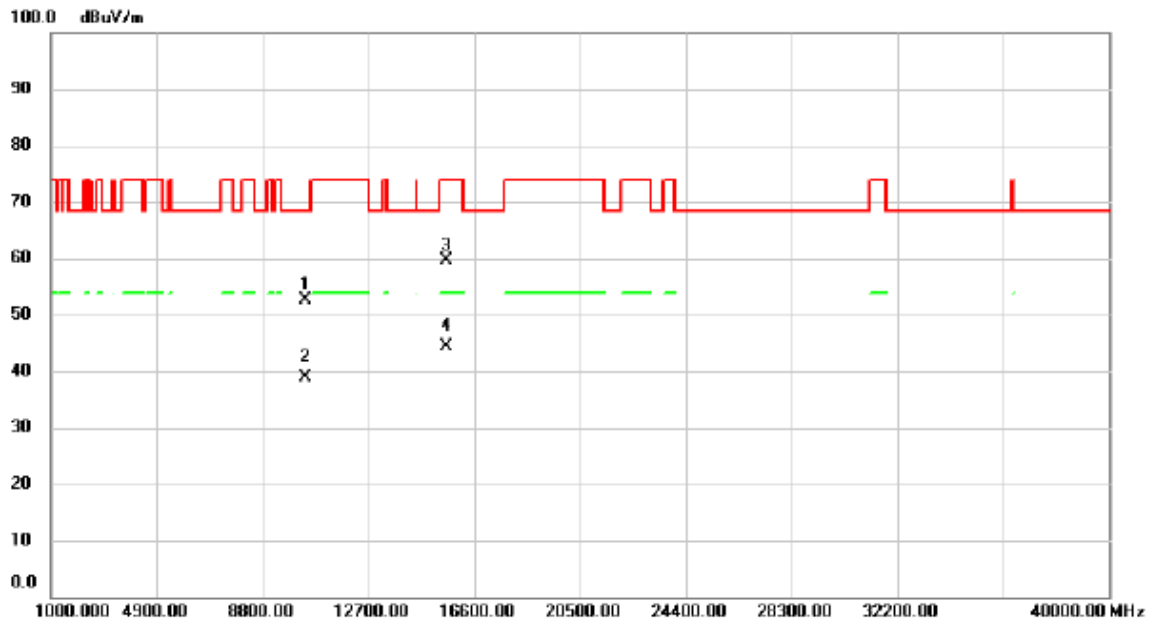
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5196.800	61.42	38.08	99.50	68.30	31.20	AVG	No Limit
2	*	5207.800	69.93	38.09	108.02	68.30	39.72	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

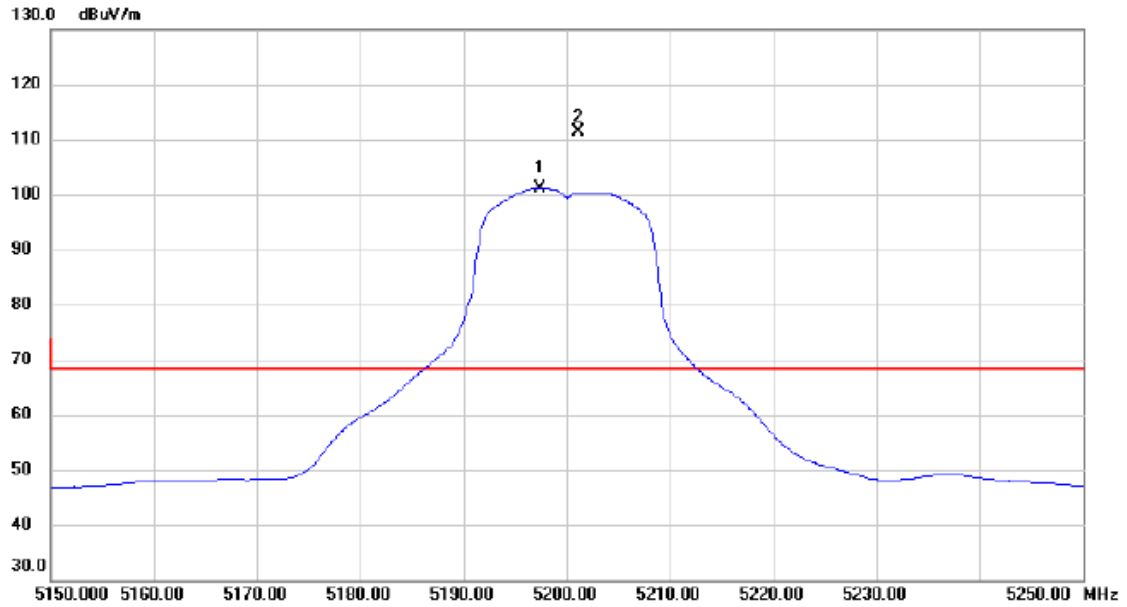
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10399.19	51.54	1.11	52.65	68.30	-15.65	peak	
2		10399.54	37.78	1.11	38.89	68.30	-29.41	AVG	
3		15598.37	57.33	2.21	59.54	74.00	-14.46	peak	
4	*	15602.88	42.07	2.20	44.27	54.00	-9.73	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

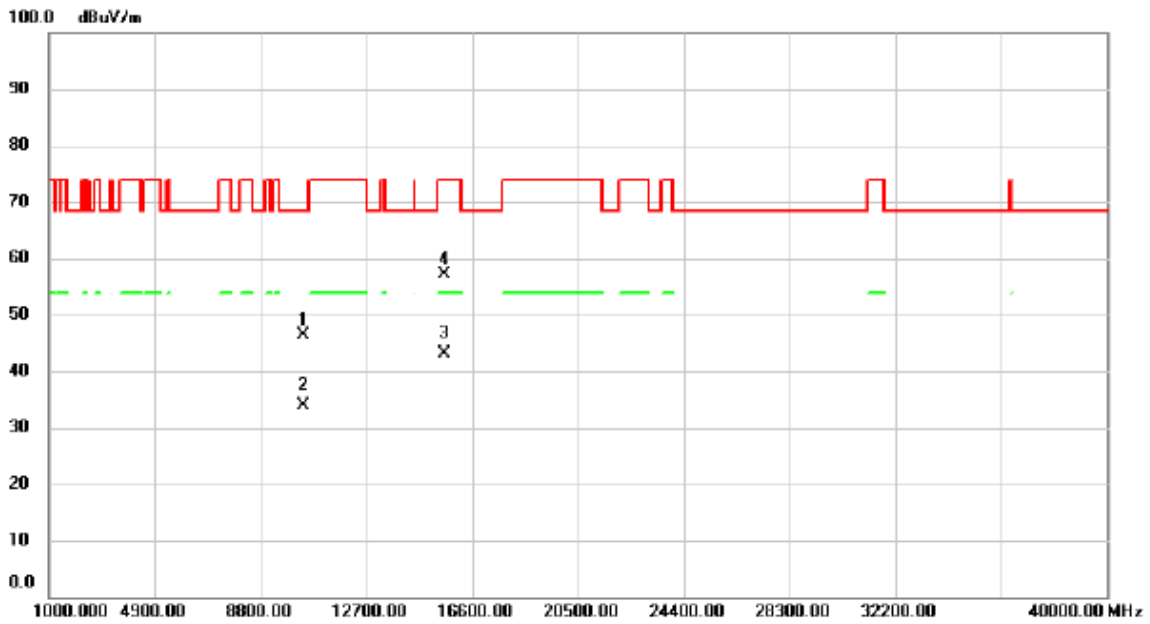
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5197.400	63.03	38.08	101.11	68.30	32.81	AVG	No Limit
2	*	5201.200	73.21	38.08	111.29	68.30	42.99	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

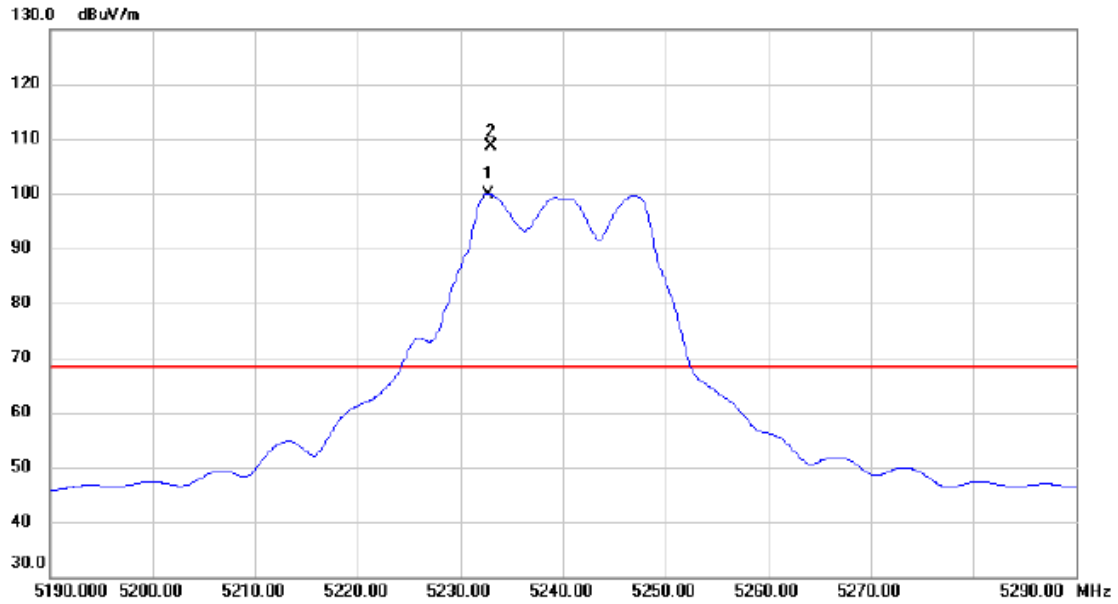
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10399.02	45.23	1.11	46.34	68.30	-21.96	peak	
2		10401.56	32.88	1.11	33.99	68.30	-34.31	AVG	
3	*	15597.21	40.86	2.21	43.07	54.00	-10.93	AVG	
4		15598.12	54.92	2.21	57.13	74.00	-16.87	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

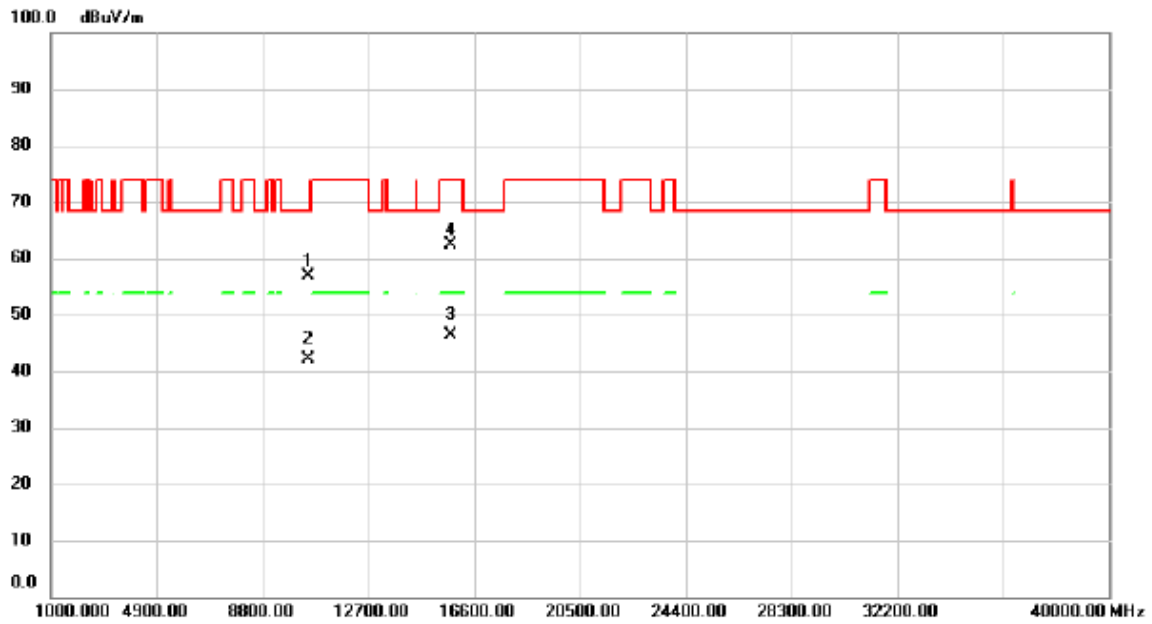
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5232.700	61.82	38.13	99.95	68.30	31.65	AVG	No Limit
2	*	5233.000	70.50	38.13	108.63	68.30	40.33	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

### Vertical

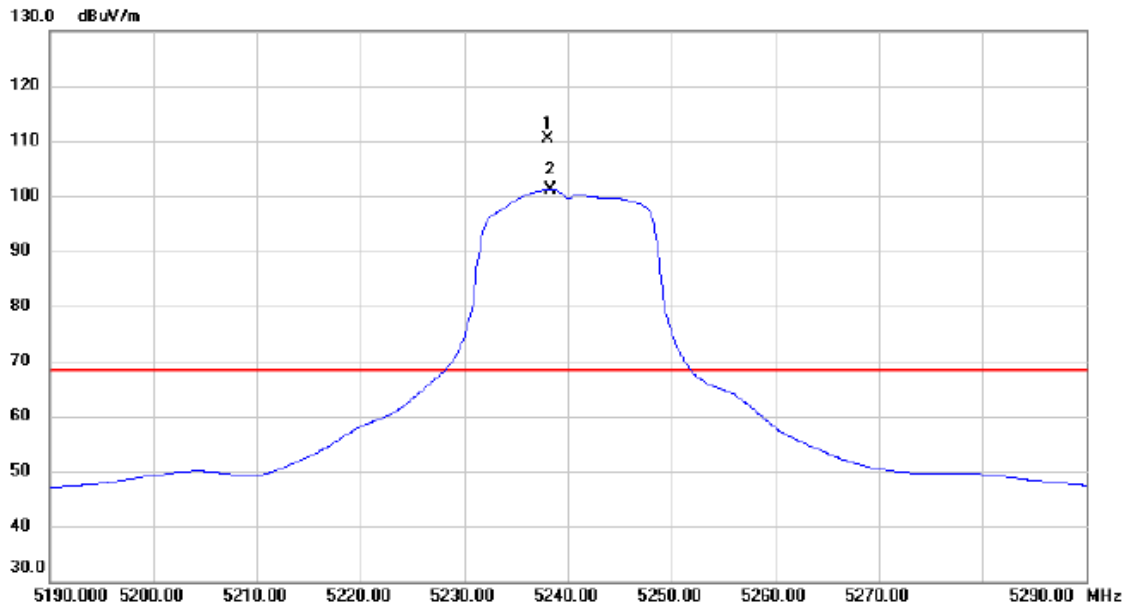


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10478.53	55.57	1.24	56.81	68.30	-11.49	peak	
2		10480.29	40.88	1.25	42.13	68.30	-26.17	AVG	
3	*	15718.96	44.37	2.01	46.38	54.00	-7.62	AVG	
4		15721.05	60.27	1.99	62.26	74.00	-11.74	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

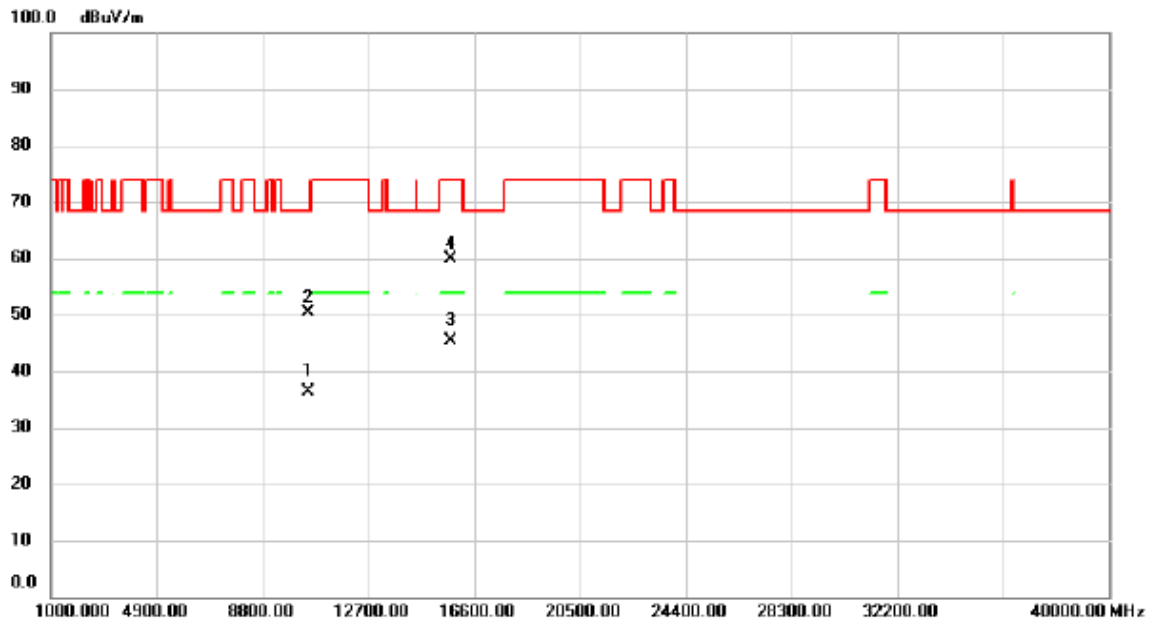
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5238.000	72.19	38.13	110.32	68.30	42.02	peak	No Limit
2	X	5238.400	62.95	38.13	101.08	68.30	32.78	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

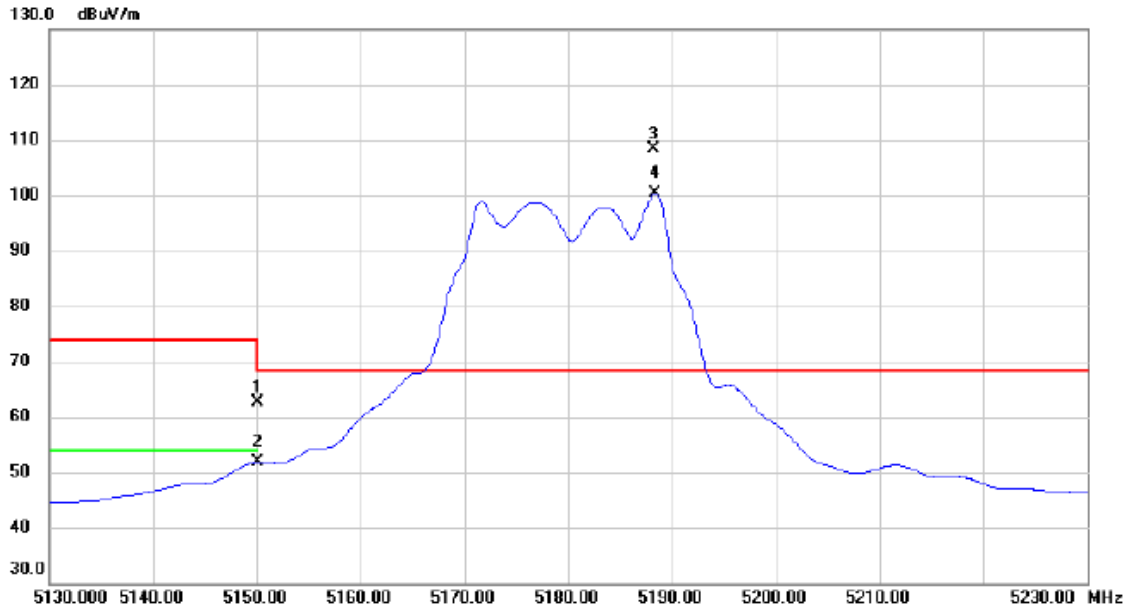
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10479.56	35.24	1.24	36.48	68.30	-31.82	AVG	
2		10481.13	49.16	1.24	50.40	68.30	-17.90	peak	
3	*	15718.05	43.45	2.01	45.46	54.00	-8.54	AVG	
4		15721.21	58.01	1.99	60.00	74.00	-14.00	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

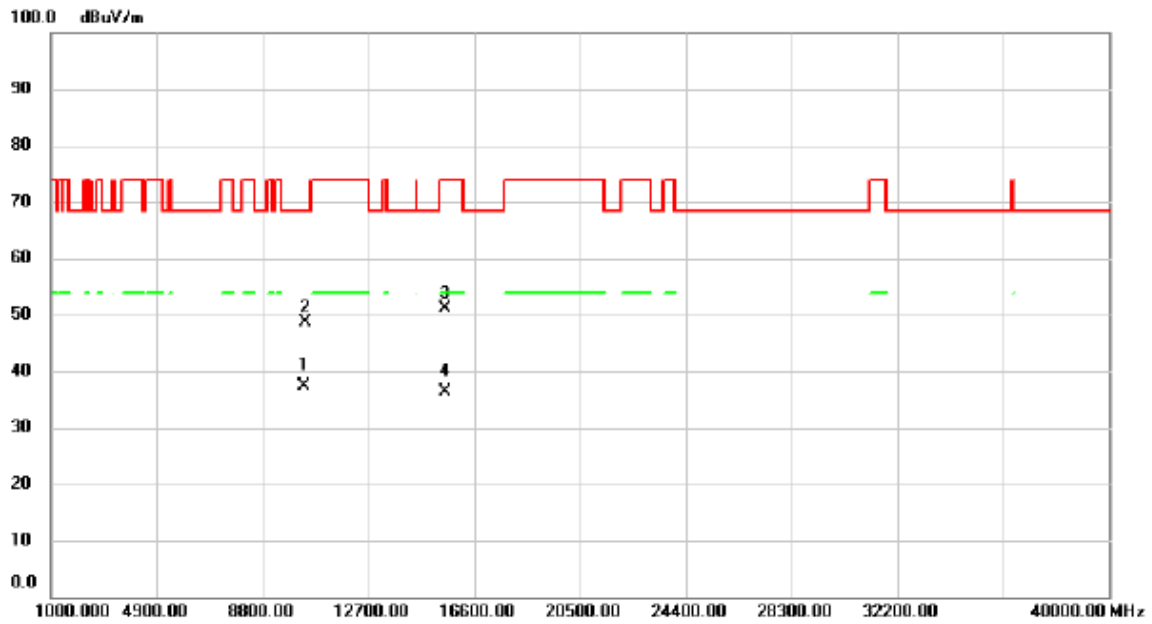
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	24.53	38.01	62.54	74.00	-11.46	peak	
2		5150.000	13.83	38.01	51.84	54.00	-2.16	AVG	
3	*	5188.200	70.42	38.06	108.48	68.30	40.18	peak	No Limit
4	X	5188.400	62.29	38.06	100.35	68.30	32.05	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

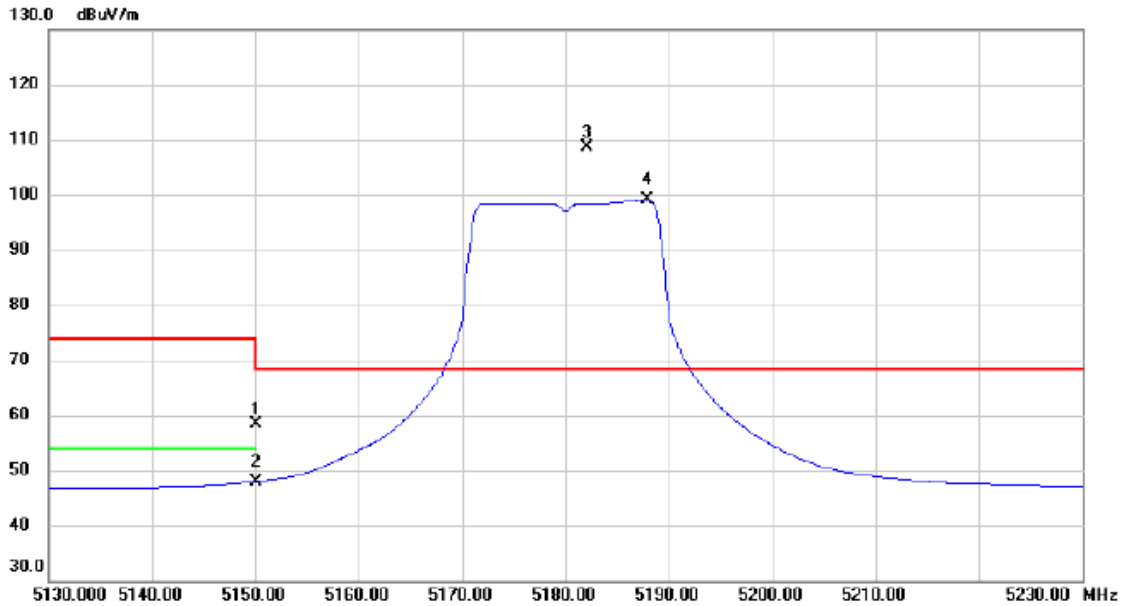
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10359.02	36.31	1.04	37.35	68.30	-30.95	AVG	
2		10361.28	47.62	1.04	48.66	68.30	-19.64	peak	
3		15537.12	48.85	2.31	51.16	74.00	-22.84	peak	
4	*	15539.16	34.15	2.31	36.46	54.00	-17.54	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

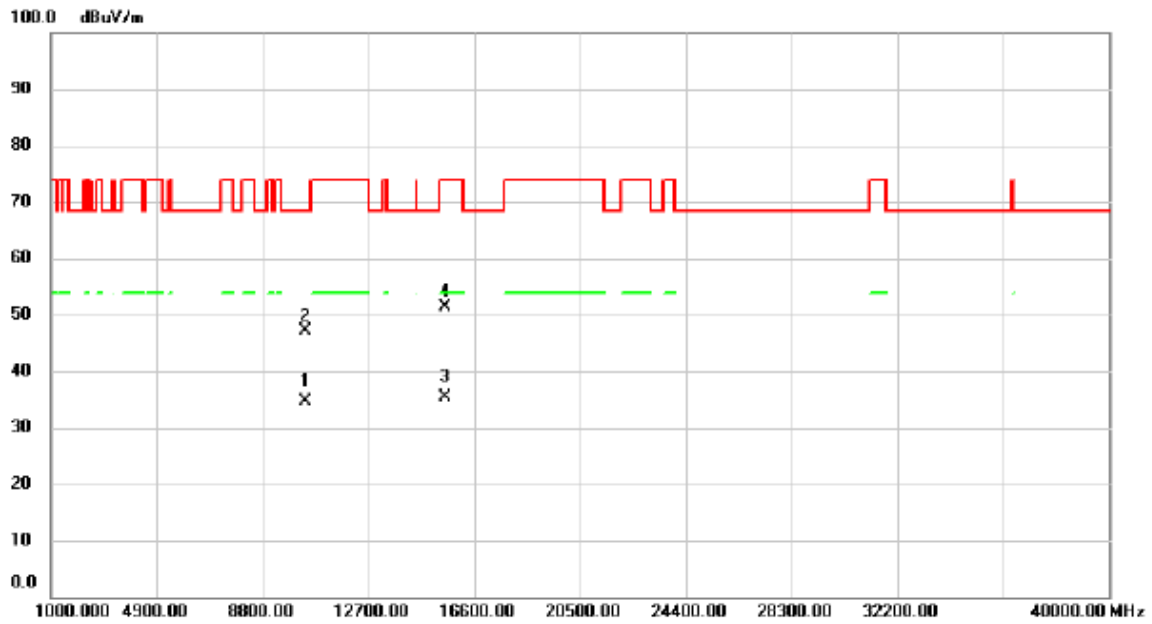
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	20.46	38.01	58.47	74.00	-15.53	peak	
2		5150.000	9.97	38.01	47.98	54.00	-6.02	AVG	
3	*	5182.000	70.52	38.06	108.58	68.30	40.28	peak	No Limit
4	X	5187.900	61.05	38.06	99.11	68.30	30.81	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

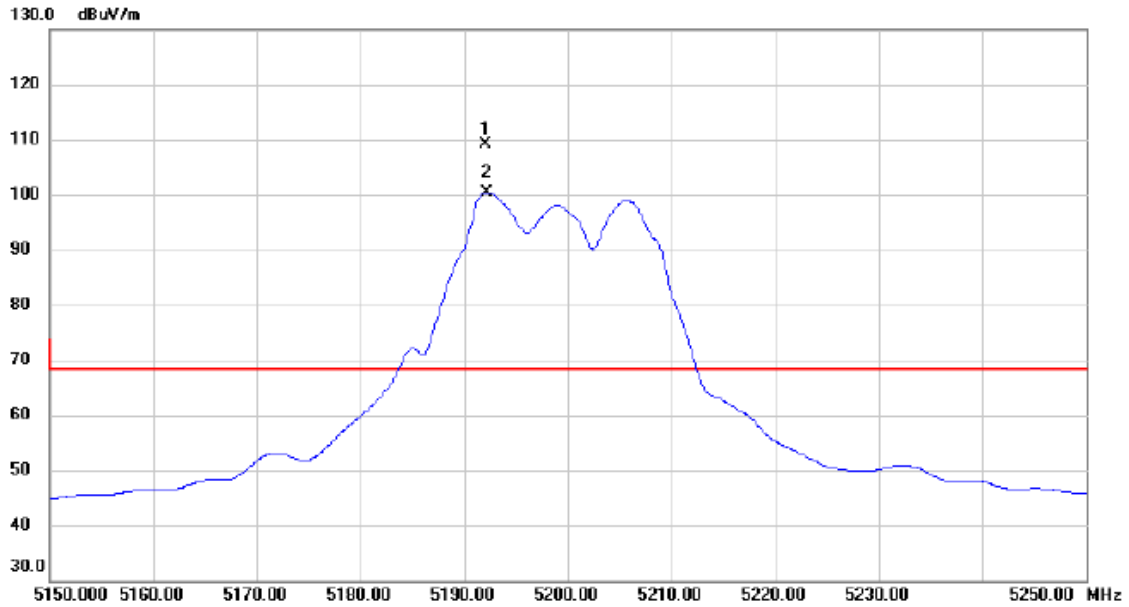
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10360.14	33.67	1.04	34.71	68.30	-33.59	AVG	
2		10362.08	46.09	1.04	47.13	68.30	-21.17	peak	
3	*	15538.02	32.99	2.31	35.30	54.00	-18.70	AVG	
4		15542.43	49.15	2.30	51.45	74.00	-22.55	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

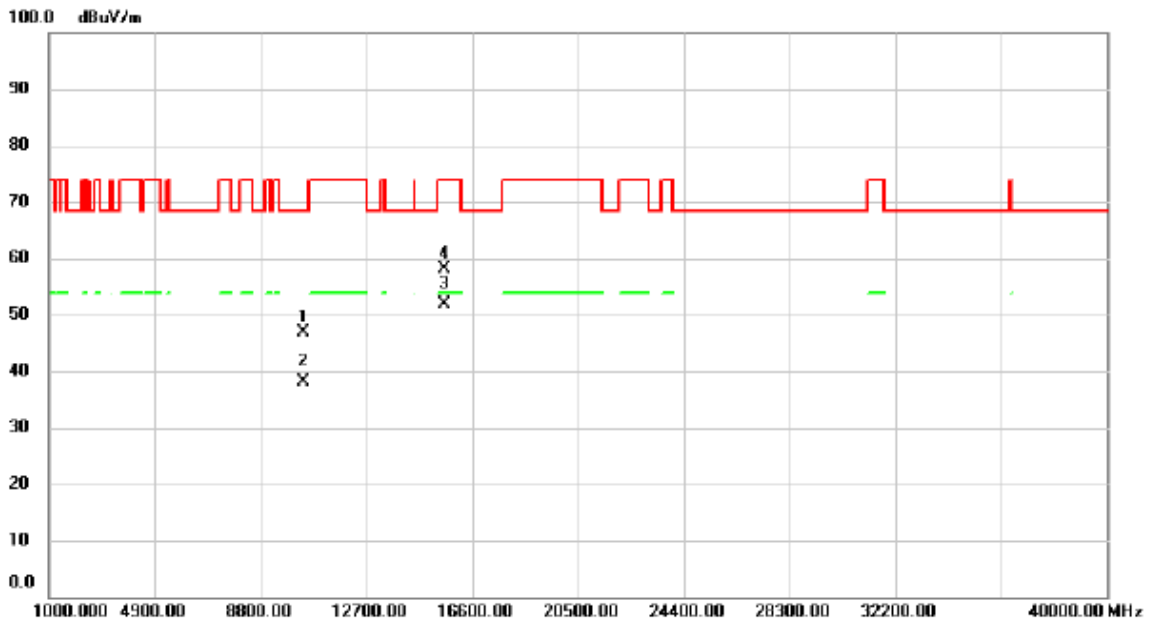
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5192.100	71.14	38.07	109.21	68.30	40.91	peak	No Limit
2	X	5192.200	62.38	38.07	100.45	68.30	32.15	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

### Vertical

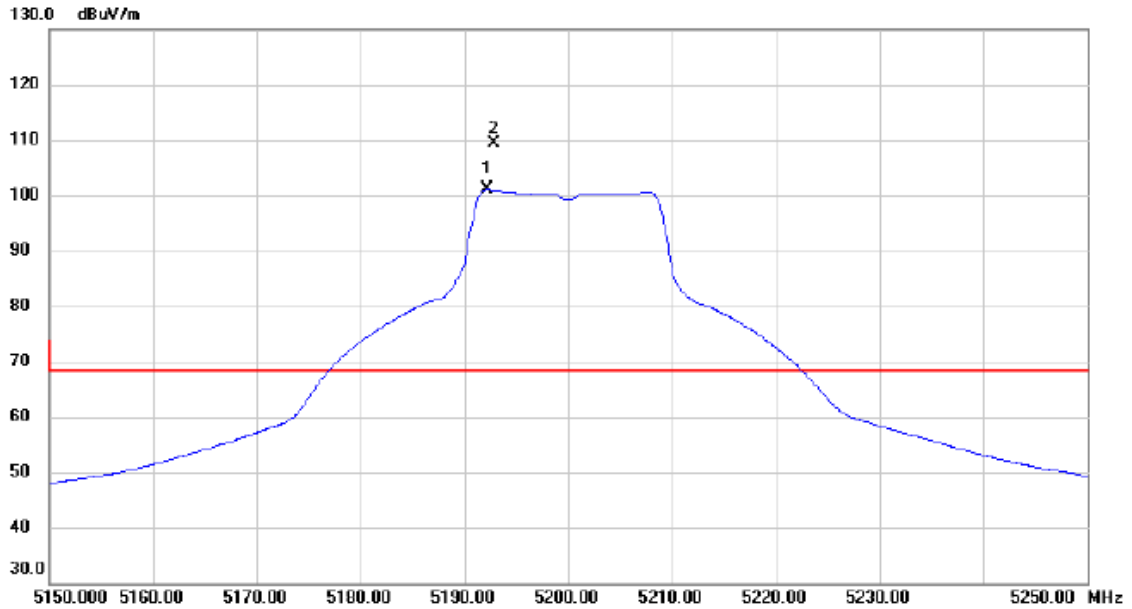


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10398.13	45.81	1.10	46.91	68.30	-21.39	peak	
2		10402.11	36.98	1.11	38.09	68.30	-30.21	AVG	
3	*	15599.17	49.70	2.21	51.91	54.00	-2.09	AVG	
4		15605.05	55.87	2.19	58.06	74.00	-15.94	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

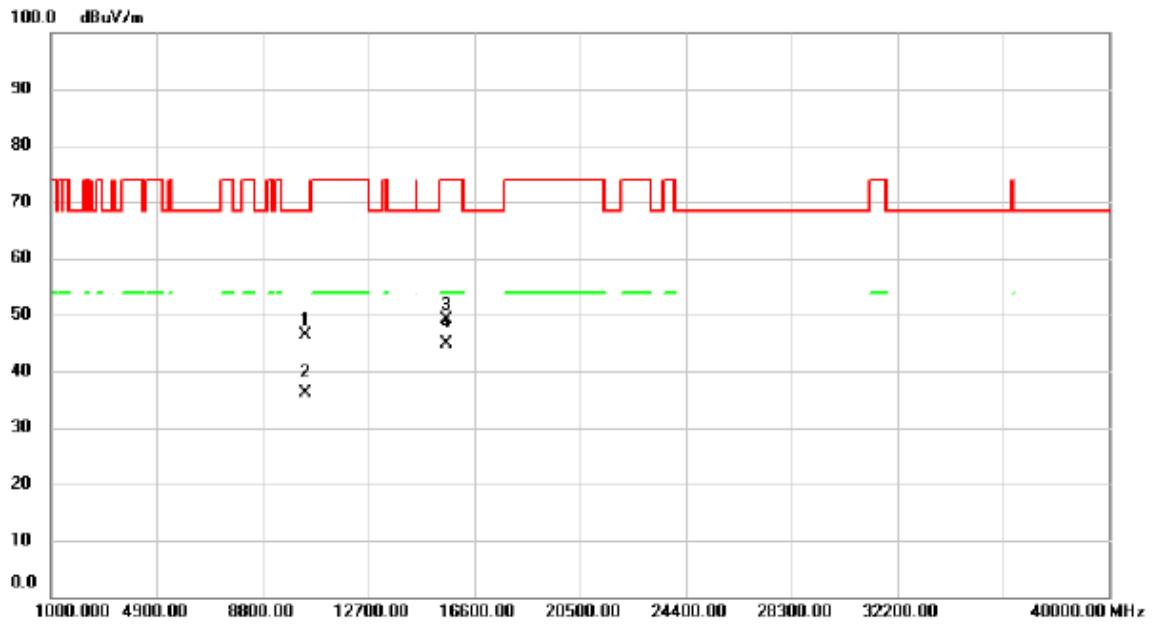
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5192.200	63.00	38.07	101.07	68.30	32.77	AVG	No Limit
2	*	5192.900	71.32	38.07	109.39	68.30	41.09	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

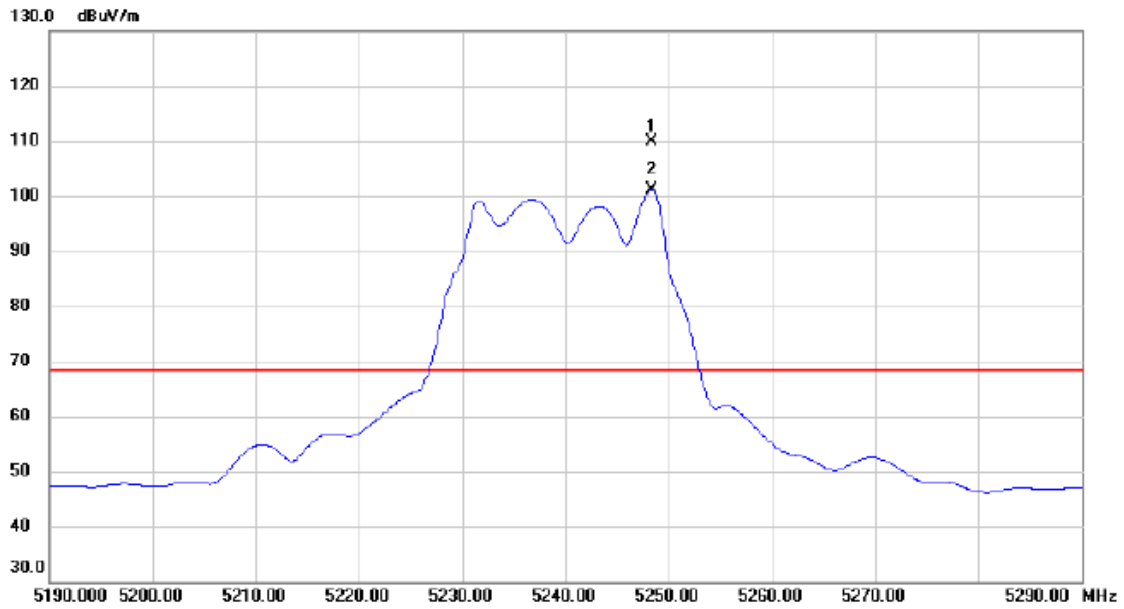
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10399.97	45.30	1.11	46.41	68.30	-21.89	peak	
2		10402.64	34.98	1.11	36.09	68.30	-32.21	AVG	
3		15601.42	46.80	2.21	49.01	74.00	-24.99	peak	
4	*	15602.05	42.63	2.20	44.83	54.00	-9.17	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

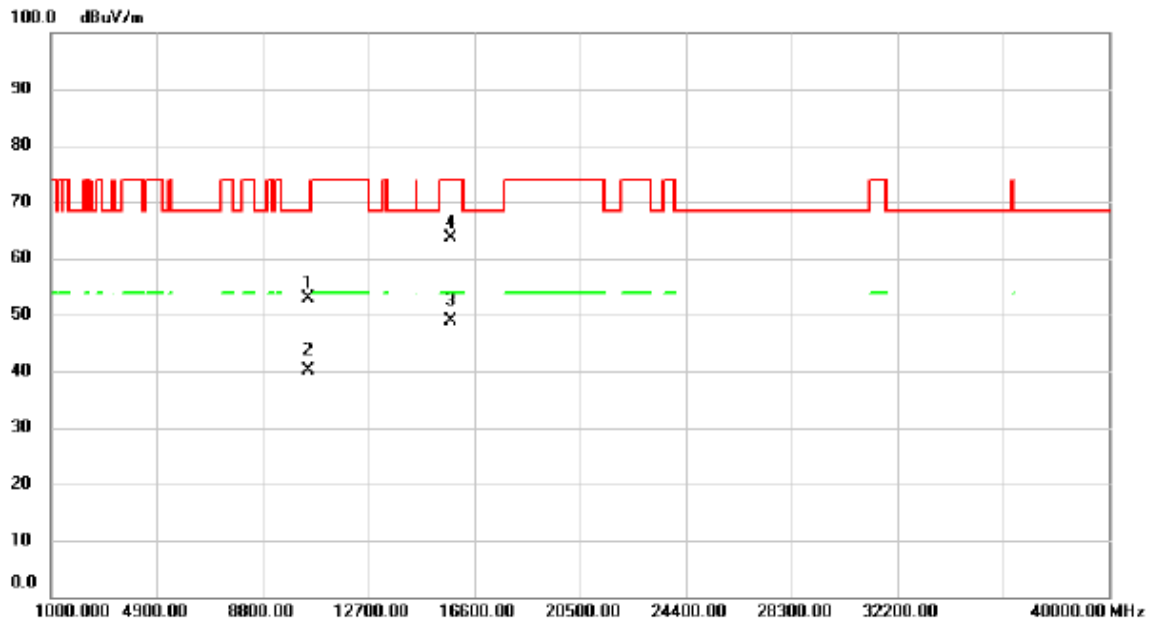
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5248.400	71.72	38.15	109.87	68.30	41.57	peak	No Limit
2	X	5248.400	63.05	38.15	101.20	68.30	32.90	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

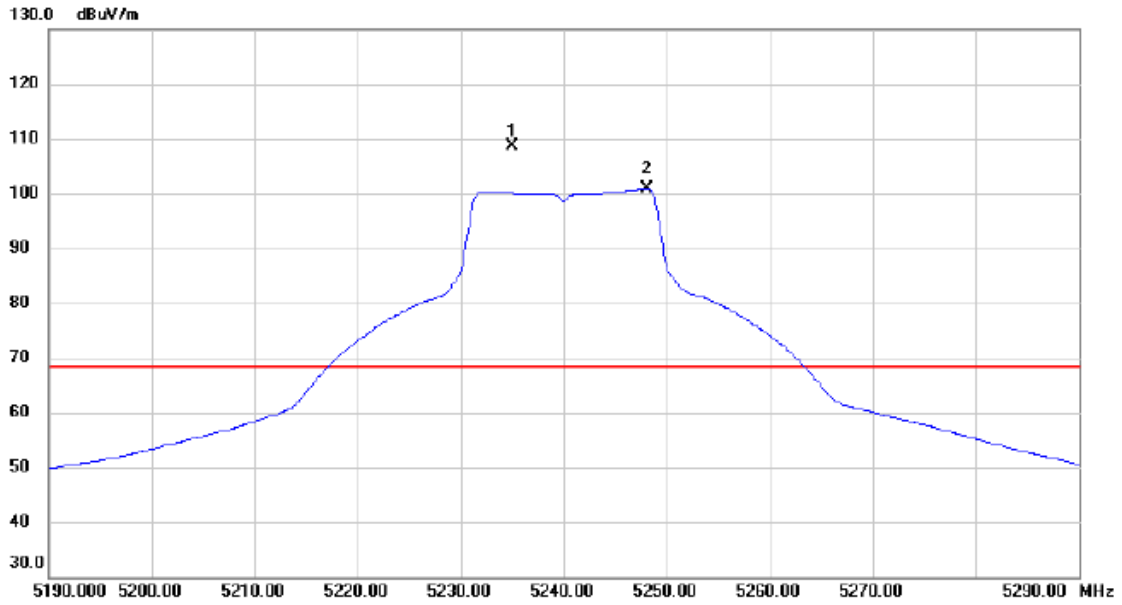
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10479.05	51.68	1.24	52.92	68.30	-15.38	peak	
2		10482.17	38.89	1.24	40.13	68.30	-28.17	AVG	
3	*	15721.84	46.90	1.99	48.89	54.00	-5.11	AVG	
4		15723.55	61.76	1.99	63.75	74.00	-10.25	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

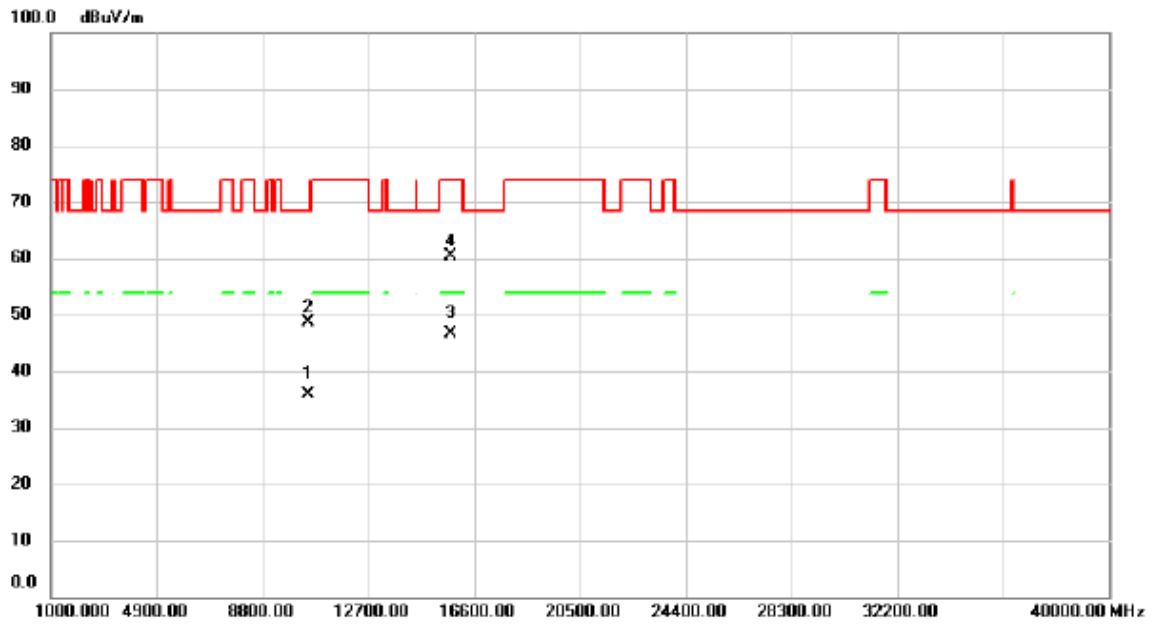
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5235.000	70.60	38.13	108.73	68.30	40.43	peak	No Limit
2	X	5248.000	62.83	38.15	100.98	68.30	32.68	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

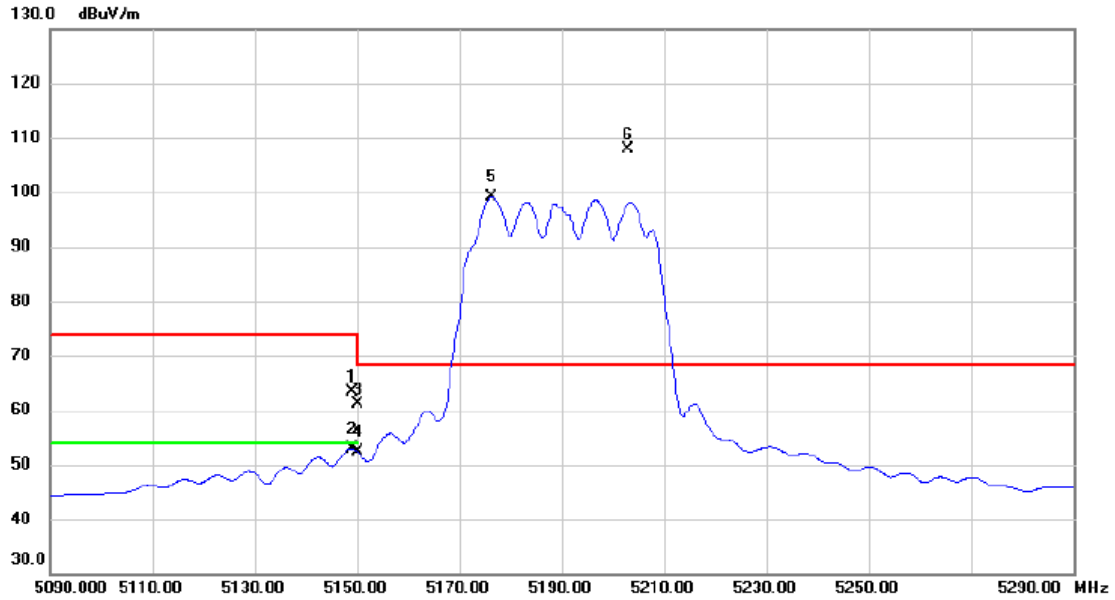
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10481.32	34.70	1.24	35.94	68.30	-32.36	AVG	
2		10482.05	47.31	1.24	48.55	68.30	-19.75	peak	
3	*	15721.83	44.64	1.99	46.63	54.00	-7.37	AVG	
4		15723.06	58.43	1.99	60.42	74.00	-13.58	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

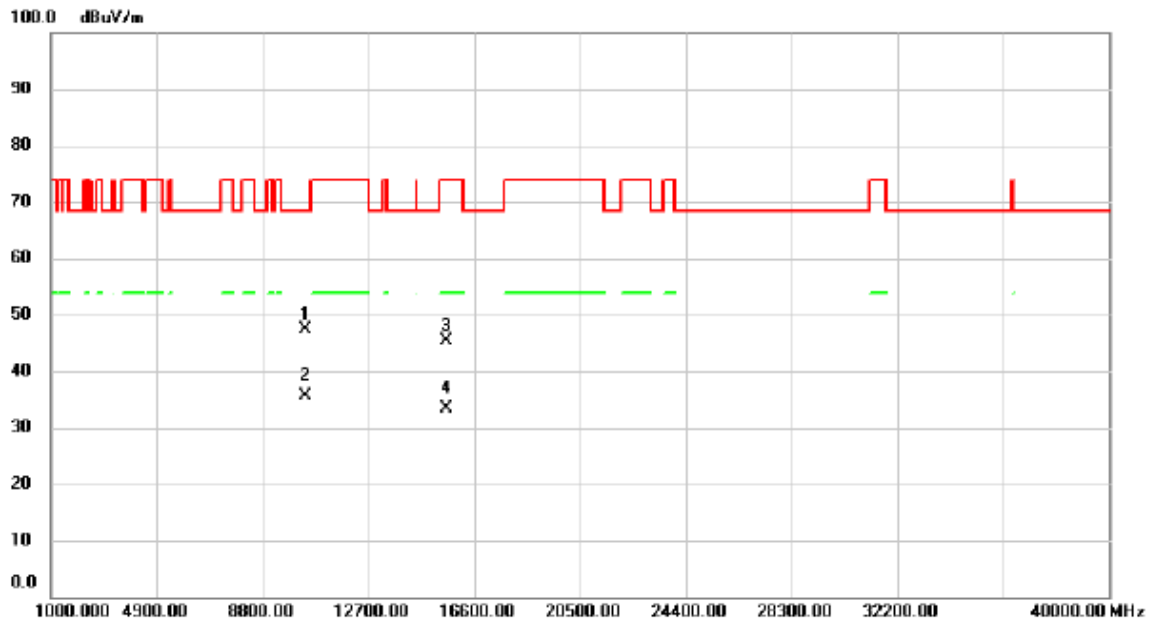
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5149.000	25.47	38.01	63.48	74.00	-10.52	peak	
2		5149.000	14.94	38.01	52.95	54.00	-1.05	AVG	
3		5150.000	23.03	38.01	61.04	74.00	-12.96	peak	
4		5150.000	14.45	38.01	52.46	54.00	-1.54	AVG	
5	X	5176.400	61.06	38.05	99.11	68.30	30.81	AVG	No Limit
6	*	5202.800	69.87	38.08	107.95	68.30	39.65	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

### Vertical

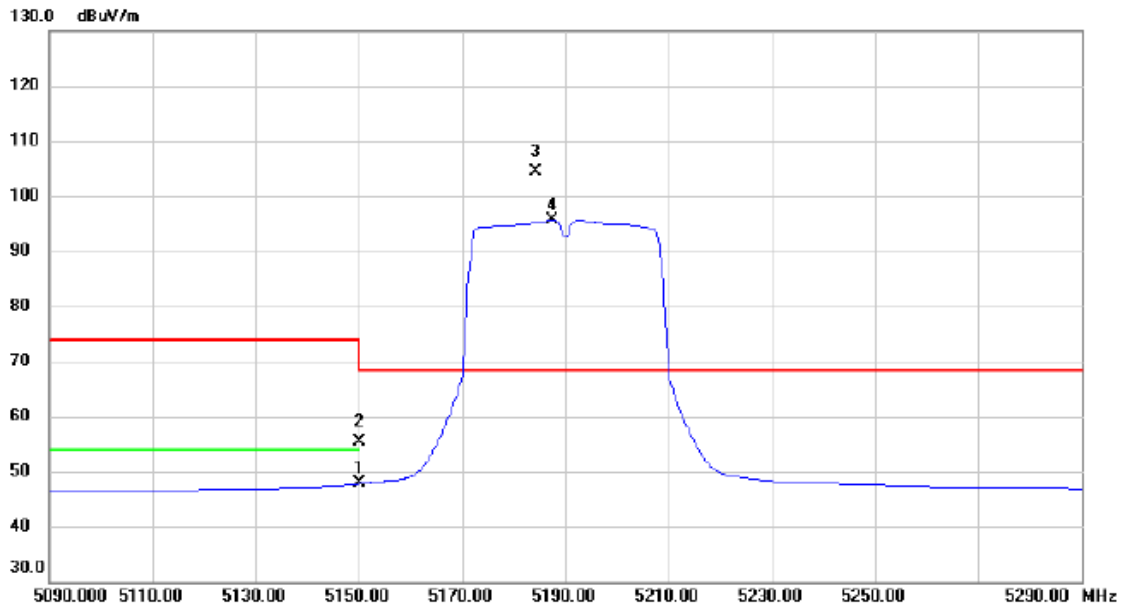


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10381.42	46.19	1.07	47.26	68.30	-21.04	peak	
2		10382.68	34.64	1.07	35.71	68.30	-32.59	AVG	
3		15568.49	43.01	2.26	45.27	74.00	-28.73	peak	
4	*	15569.11	31.14	2.26	33.40	54.00	-20.60	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

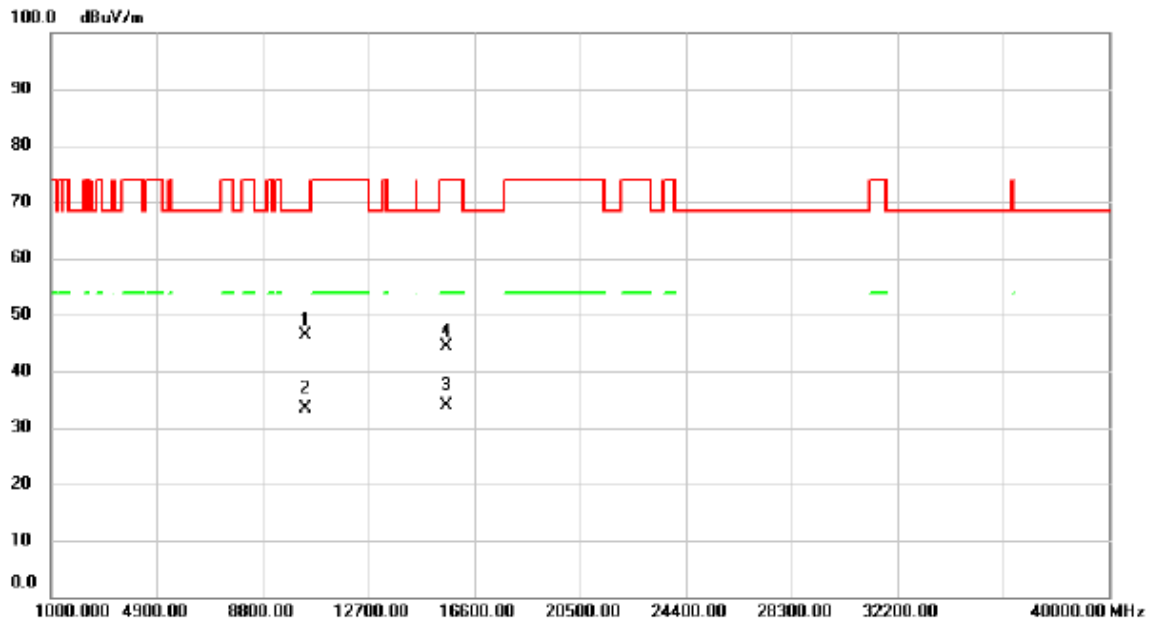
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	9.75	38.01	47.76	74.00	-26.24	peak	
2	X	5150.000	17.47	38.01	55.48	54.00	1.48	AVG	
3	*	5184.200	66.34	38.06	104.40	68.30	36.10	AVG	No Limit
4	X	5187.400	57.56	38.06	95.62	68.30	27.32	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

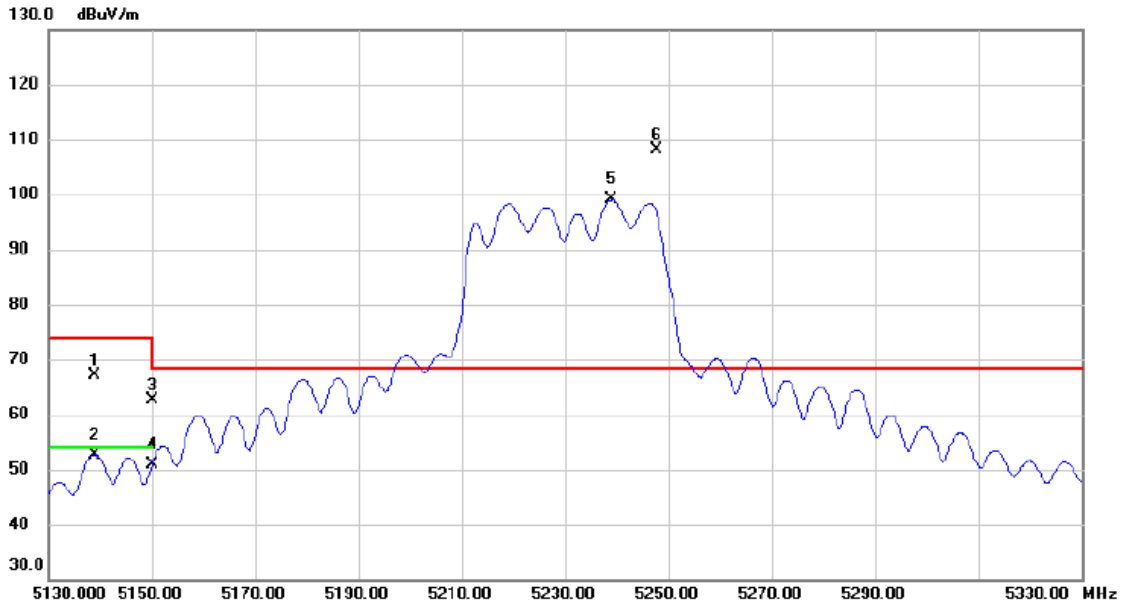
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10378.31	45.39	1.06	46.45	68.30	-21.85	peak	
2		10381.04	32.20	1.07	33.27	68.30	-35.03	AVG	
3	*	15571.04	31.67	2.25	33.92	54.00	-20.08	AVG	
4		15572.27	42.12	2.25	44.37	74.00	-29.63	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

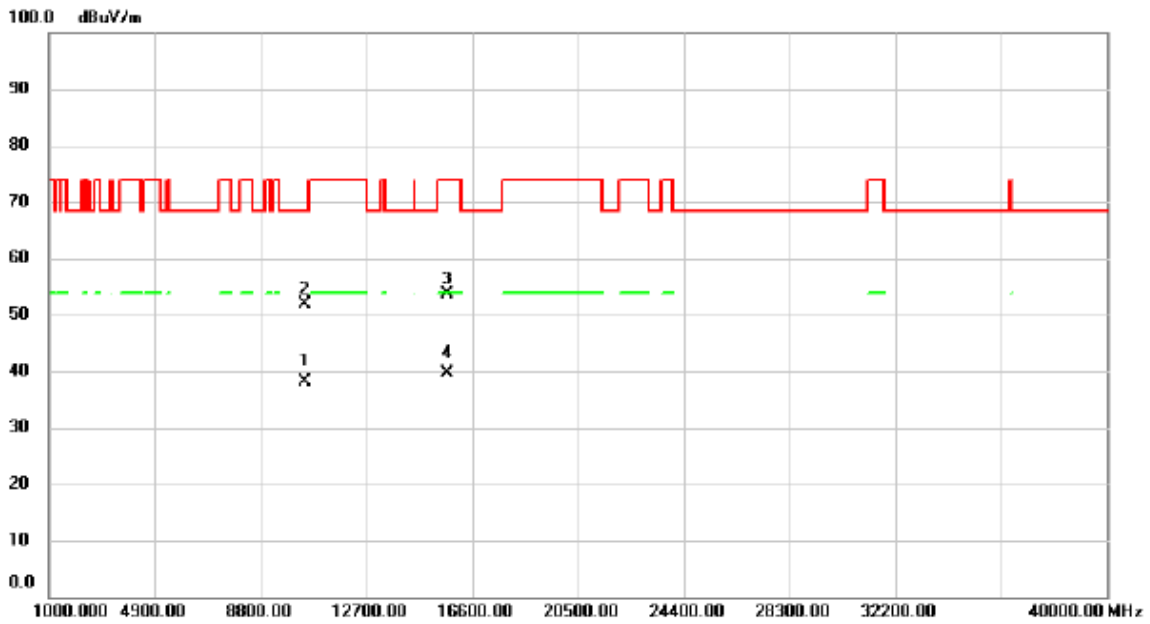
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5139.000	29.06	37.99	67.05	74.00	-6.95	peak	
2		5139.000	14.71	37.99	52.70	54.00	-1.30	AVG	
3	X	5150.000	24.68	38.01	62.69	74.00	-11.31	peak	
4		5150.000	12.78	38.01	50.79	54.00	-3.21	AVG	
5	X	5239.000	60.90	38.13	99.03	68.30	30.73	AVG	No Limit
6	*	5247.600	69.98	38.15	108.13	68.30	39.83	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

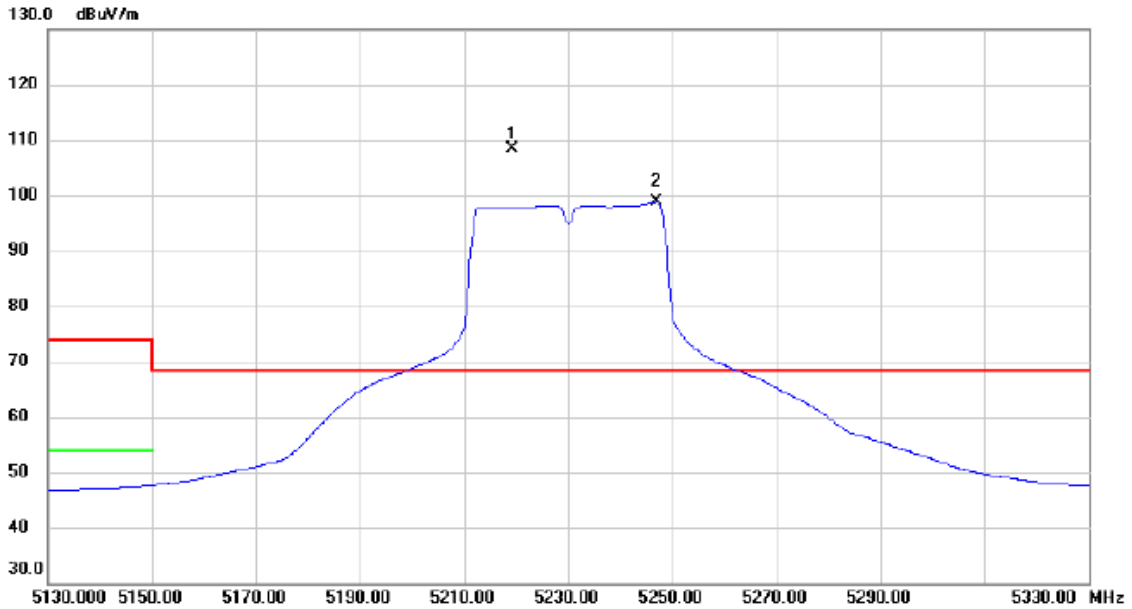
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10460.83	36.91	1.20	38.11	68.30	-30.19	AVG	
2		10462.76	50.71	1.21	51.92	68.30	-16.38	peak	
3		15690.93	51.62	2.05	53.67	74.00	-20.33	peak	
4	*	15693.61	37.62	2.04	39.66	54.00	-14.34	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

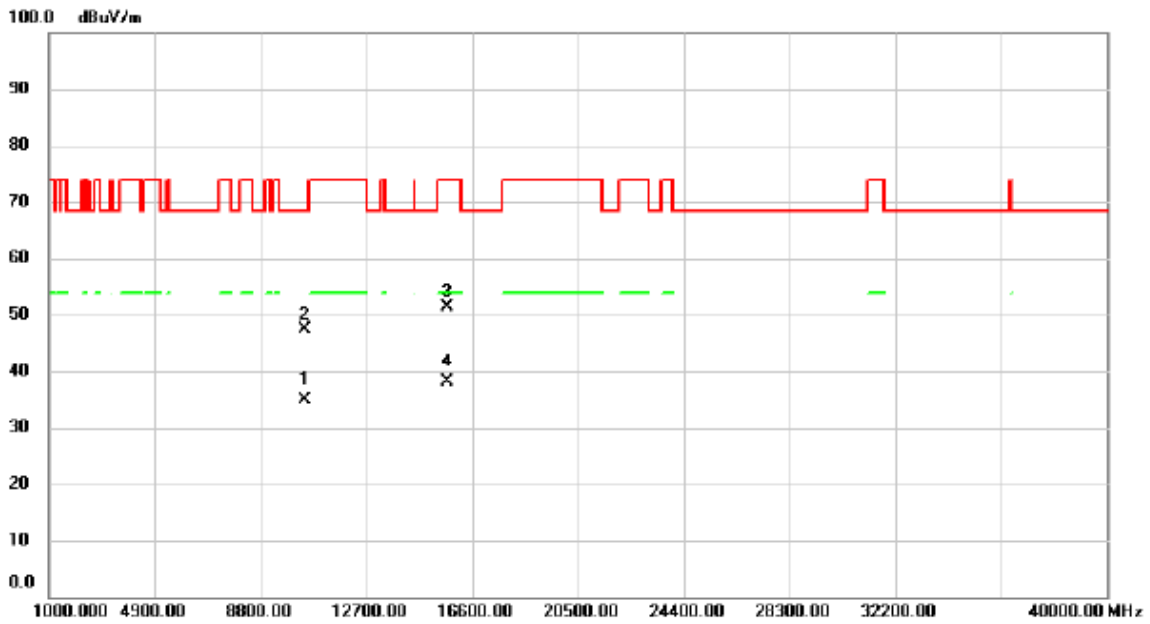
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5219.200	70.27	38.11	108.38	68.30	40.08	peak	No Limit
2	X	5247.000	60.62	38.15	98.77	68.30	30.47	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

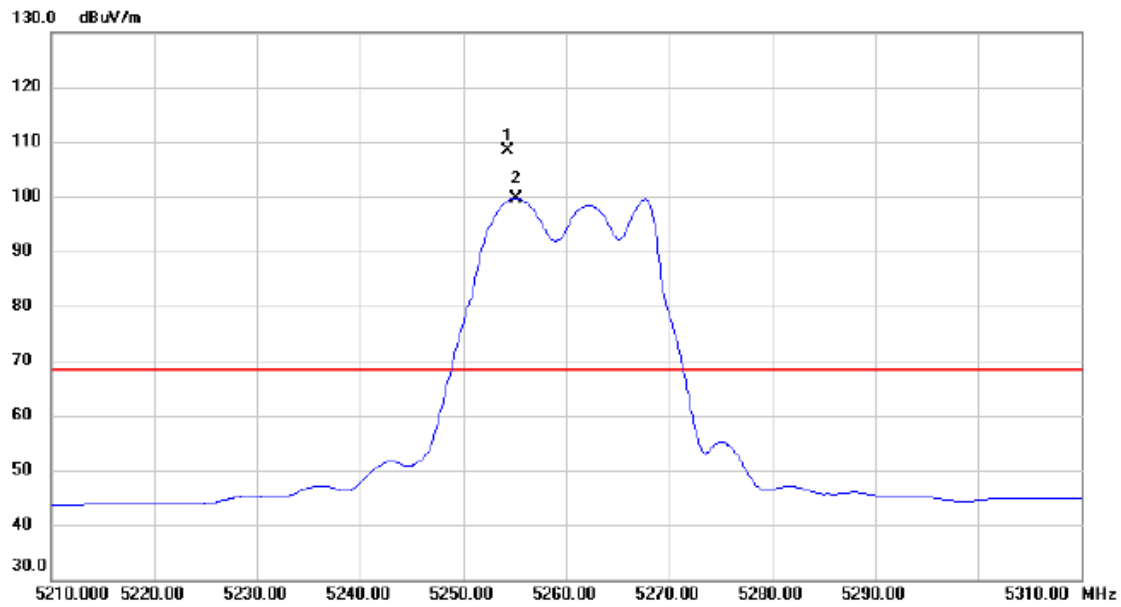
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10461.42	33.75	1.20	34.95	68.30	-33.35	AVG	
2		10462.57	46.19	1.21	47.40	68.30	-20.90	peak	
3		15686.43	49.43	2.06	51.49	74.00	-22.51	peak	
4	*	15690.01	36.16	2.05	38.21	54.00	-15.79	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

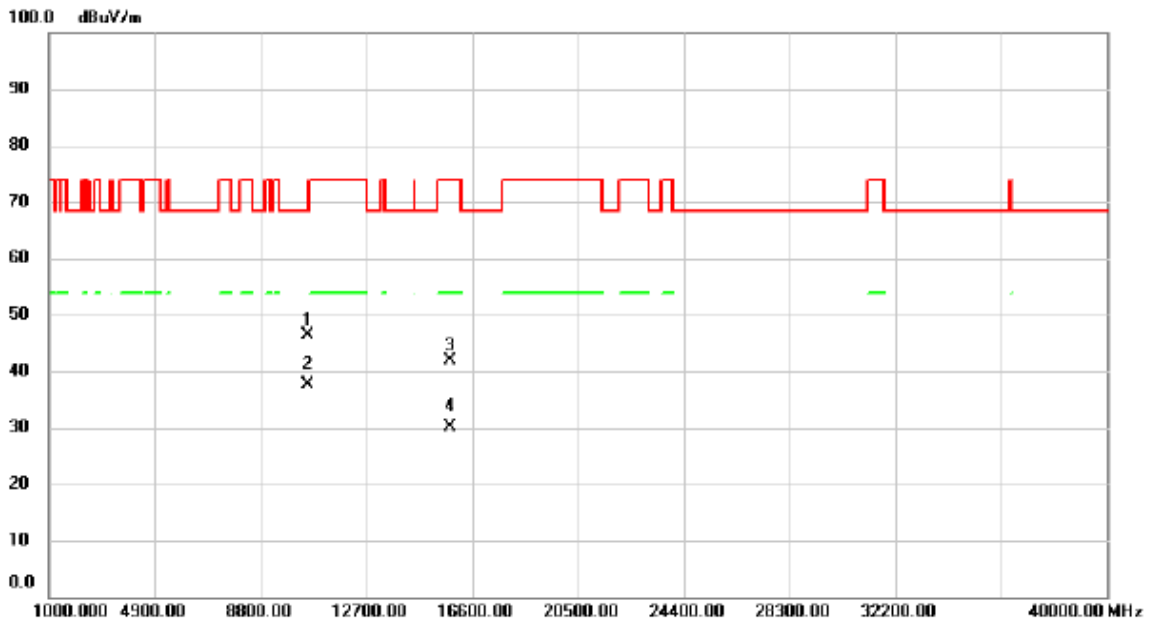
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5254.300	70.14	38.15	108.29	68.30	39.99	peak	No Limit
2	X	5255.100	61.52	38.15	99.67	68.30	31.37	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

### Vertical

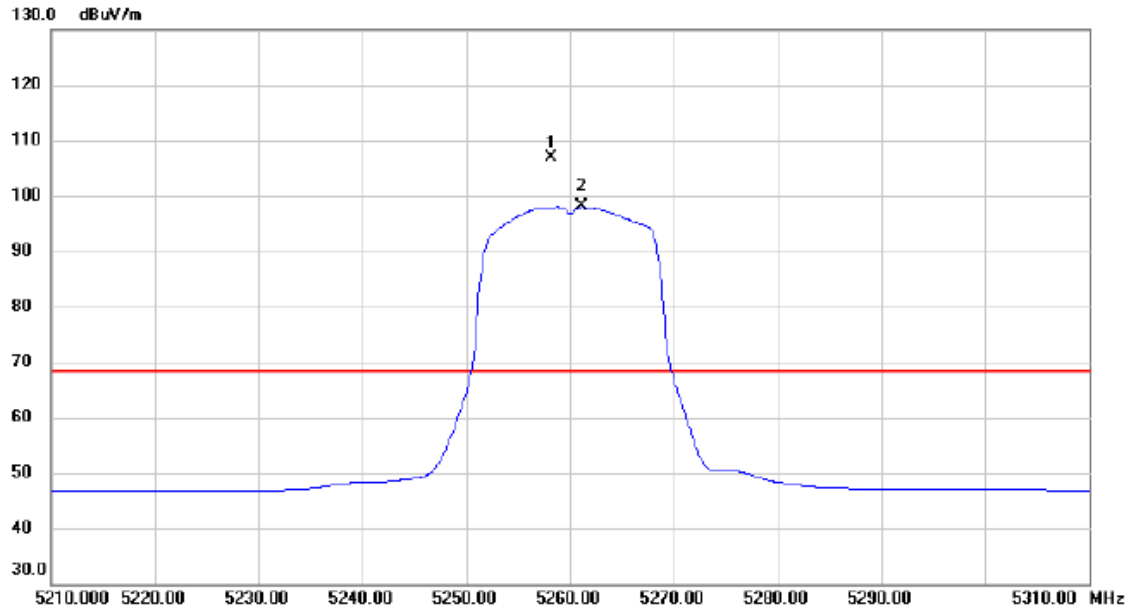


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	10517.42	45.02	1.30	46.32	68.30	-21.98	peak	
2		10521.53	36.25	1.30	37.55	68.30	-30.75	AVG	
3		15784.11	39.88	1.89	41.77	74.00	-32.23	peak	
4		15785.19	28.20	1.89	30.09	54.00	-23.91	AVG	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

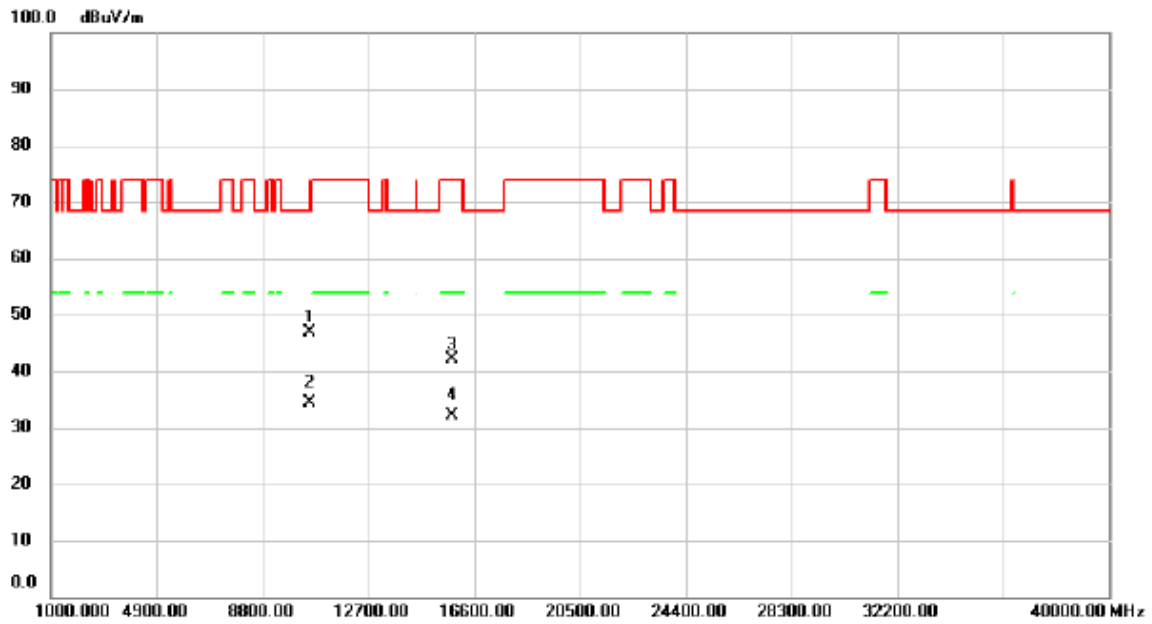
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	5258.200	68.60	38.16	106.76	68.30	38.46	peak	No Limit
2	X	5261.200	59.84	38.17	98.01	68.30	29.71	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5260MHz

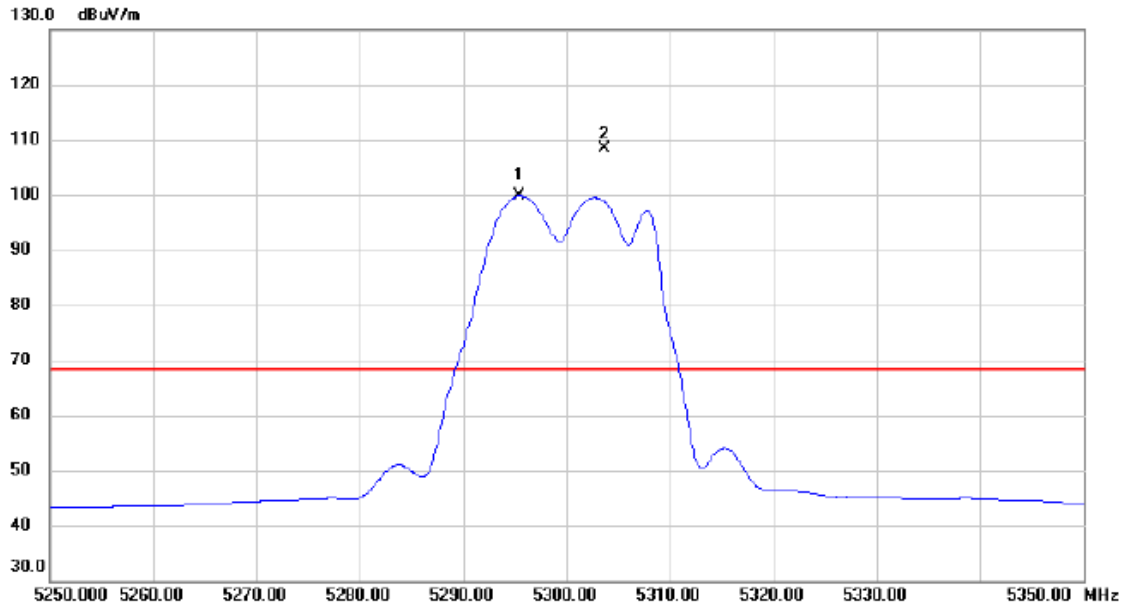
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10521.54	45.68	1.30	46.98	68.30	-21.32	peak	
2		10524.03	33.06	1.32	34.38	68.30	-33.92	AVG	
3		15781.53	40.23	1.89	42.12	74.00	-31.88	peak	
4		15782.04	30.25	1.89	32.14	54.00	-21.86	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

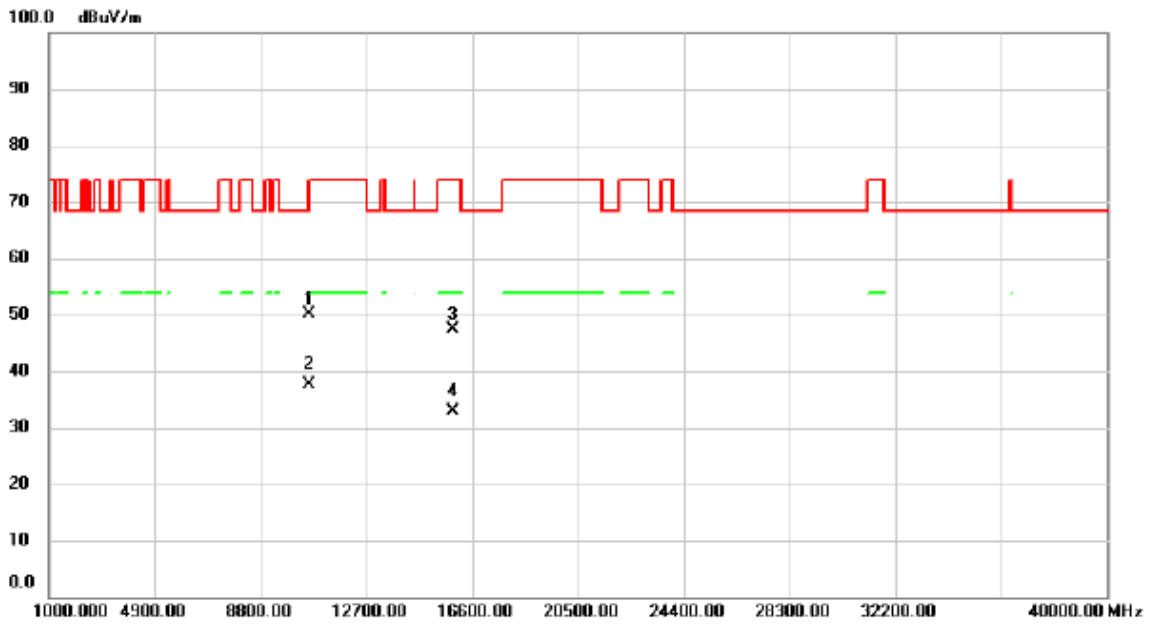
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5295.400	61.56	38.22	99.78	68.30	31.48	AVG	No Limit
2	*	5303.600	70.22	38.22	108.44	68.30	40.14	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

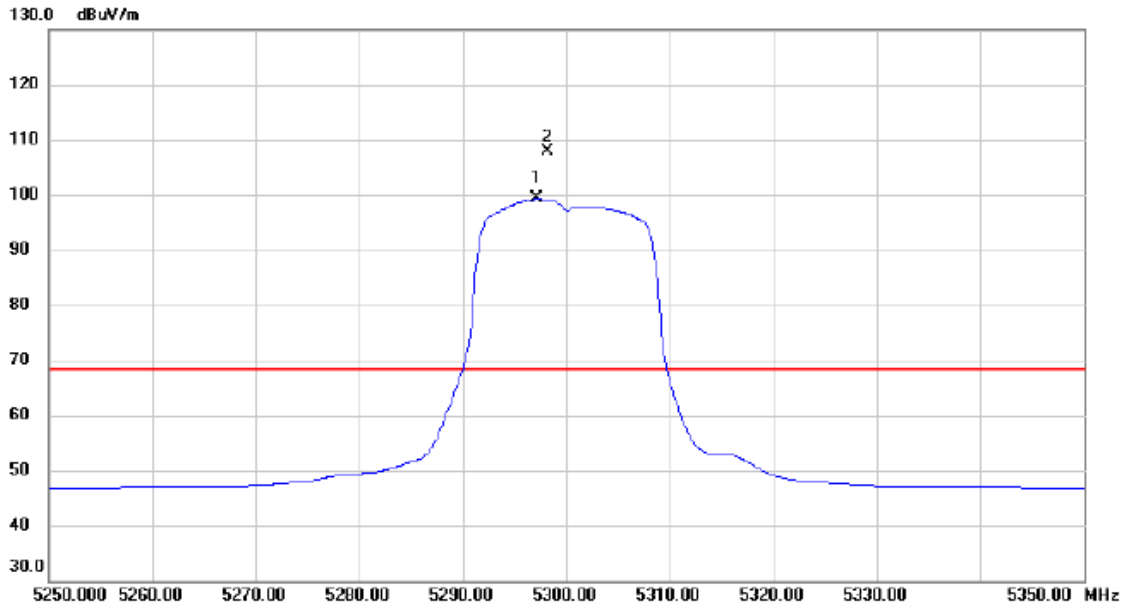
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10597.14	48.61	1.45	50.06	68.30	-18.24	peak	
2		10599.63	36.12	1.46	37.58	68.30	-30.72	AVG	
3		15902.19	45.70	1.69	47.39	74.00	-26.61	peak	
4		15904.84	31.26	1.68	32.94	54.00	-21.06	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

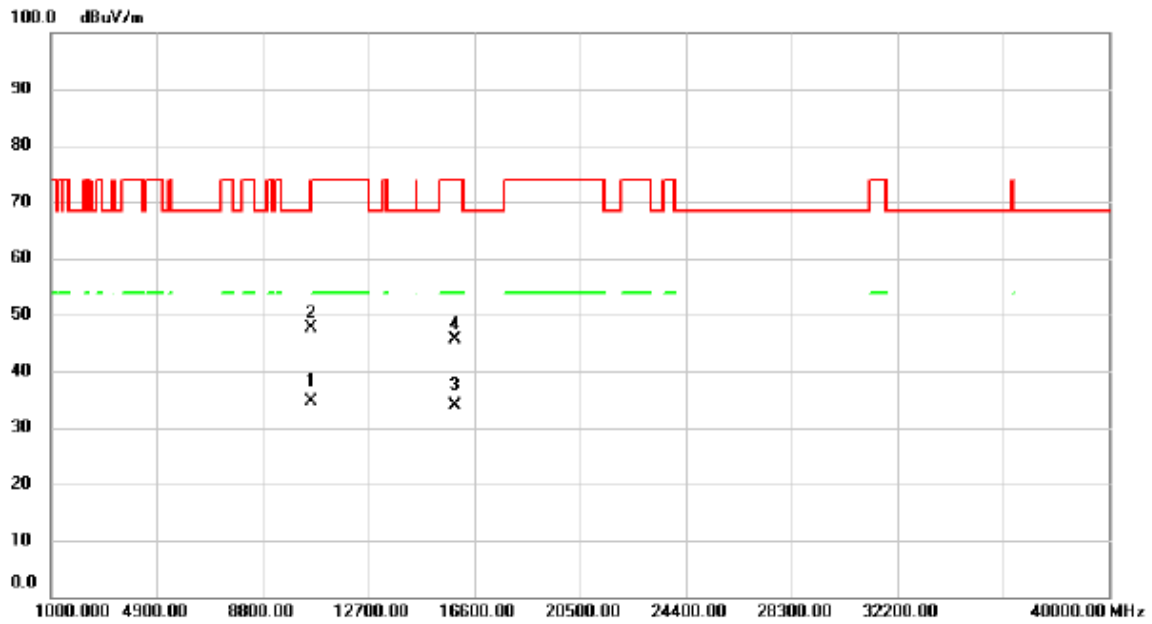
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5297.200	61.05	38.22	99.27	68.30	30.97	AVG	No Limit
2	*	5298.200	69.71	38.22	107.93	68.30	39.63	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5300MHz

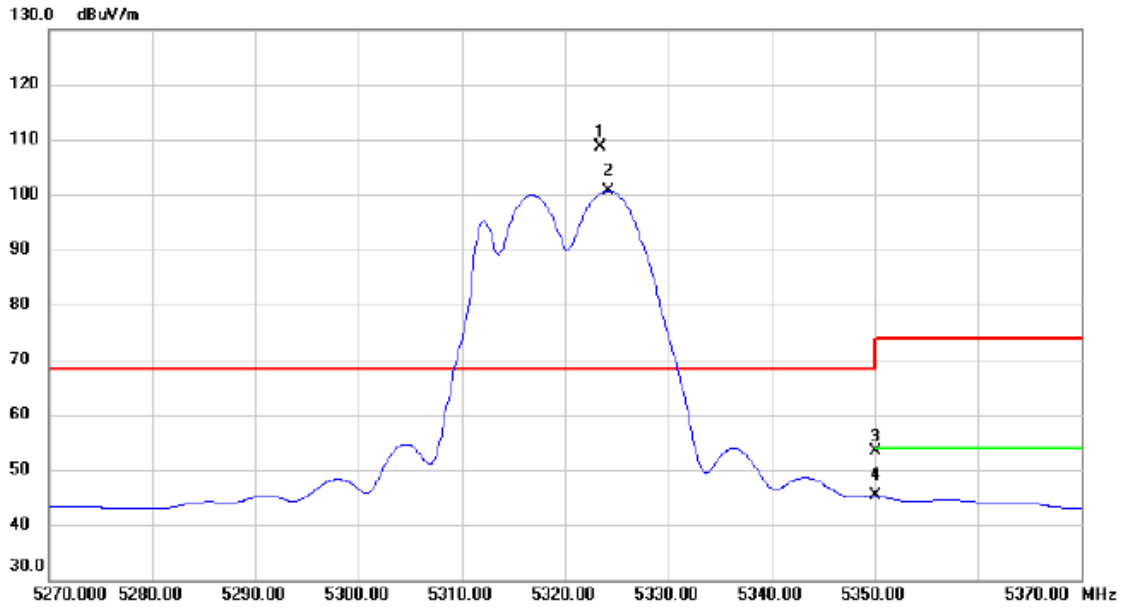
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10599.42	33.26	1.46	34.72	68.30	-33.58	AVG	
2		10602.47	46.21	1.46	47.67	74.00	-26.33	peak	
3	*	15899.04	32.28	1.69	33.97	54.00	-20.03	AVG	
4		15901.03	43.94	1.69	45.63	74.00	-28.37	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

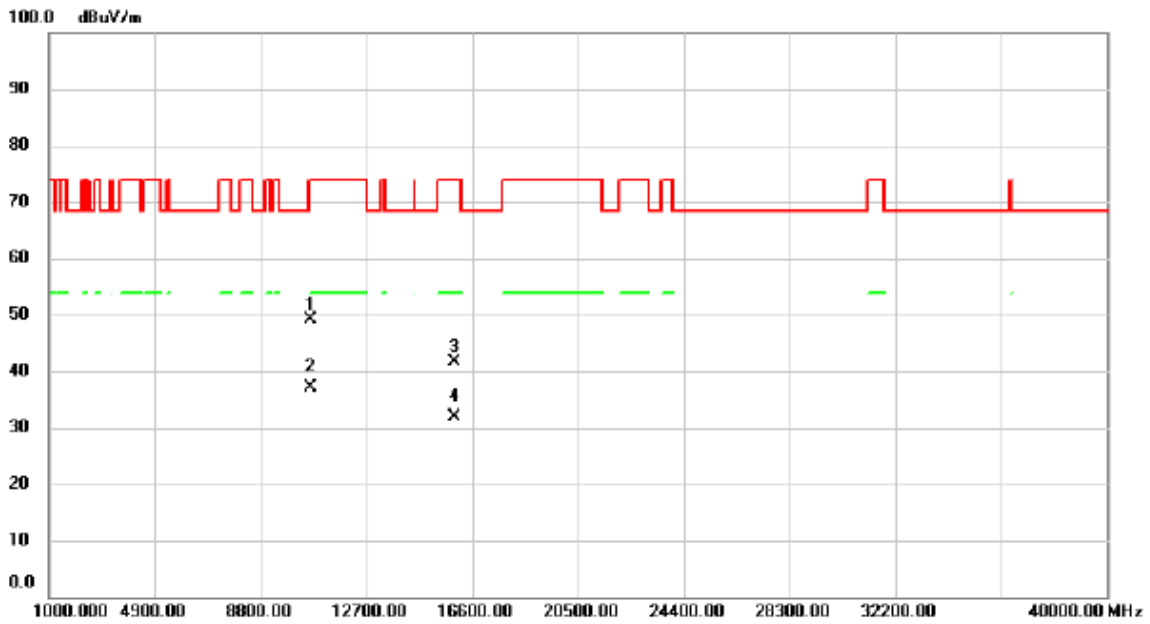
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5323.400	70.44	38.25	108.69	68.30	40.39	peak	No Limit
2	X	5324.200	62.43	38.25	100.68	68.30	32.38	AVG	No Limit
3		5350.000	15.21	38.29	53.50	68.30	-14.80	peak	
4		5350.000	6.97	38.29	45.26	54.00	-8.74	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

### Vertical

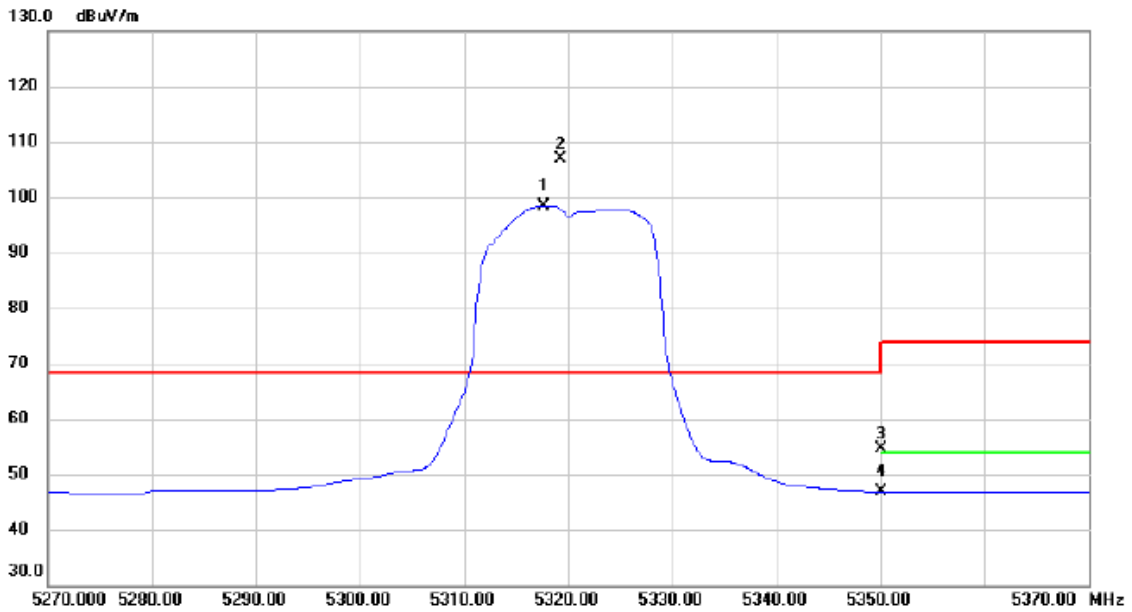


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10638.16	47.65	1.52	49.17	74.00	-24.83	peak	
2	*	10642.94	35.53	1.53	37.06	54.00	-16.94	AVG	
3		15958.66	40.10	1.60	41.70	74.00	-32.30	peak	
4		15959.68	30.31	1.60	31.91	54.00	-22.09	AVG	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

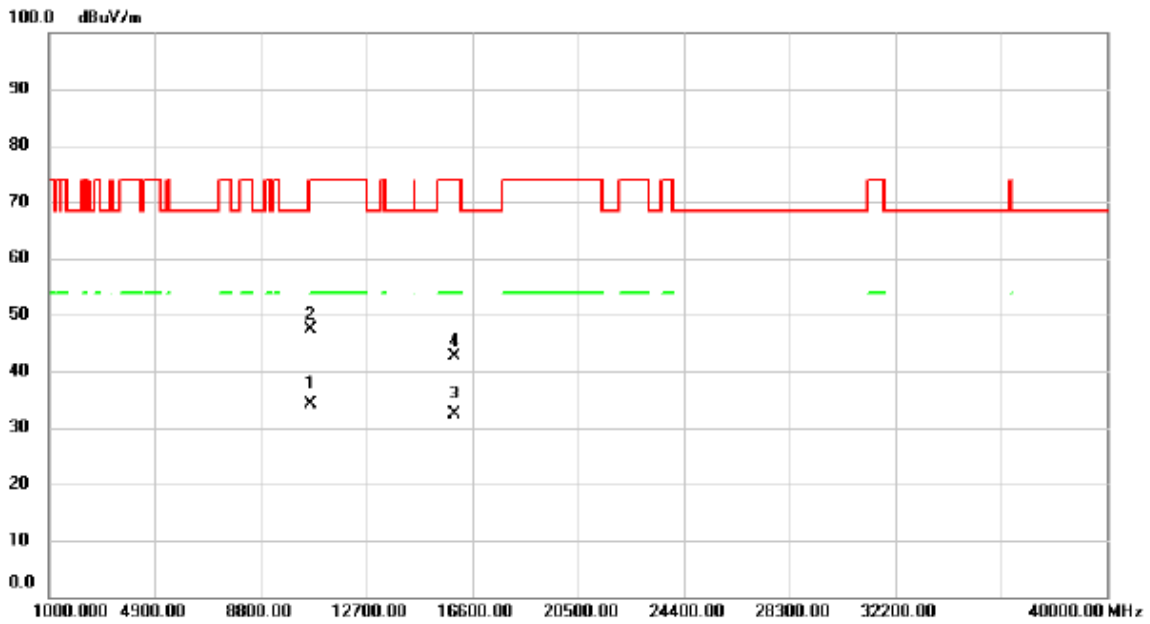
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5317.600	60.26	38.24	98.50	68.30	30.20	AVG	No Limit
2	*	5319.300	68.74	38.25	106.99	68.30	38.69	peak	No Limit
3		5350.000	16.43	38.29	54.72	68.30	-13.58	peak	
4		5350.000	8.65	38.29	46.94	54.00	-7.06	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX A Mode 5320MHz

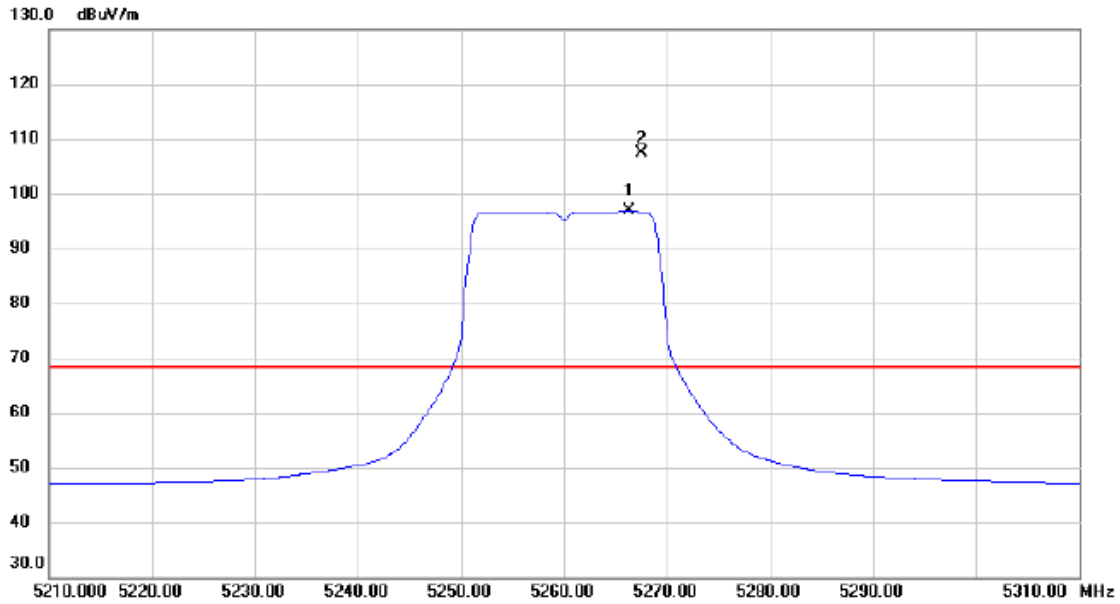
**Horizontal**



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	10637.31	32.54	1.52	34.06	54.00	-19.94	AVG	
2		10641.43	45.95	1.53	47.48	74.00	-26.52	peak	
3		15958.03	30.84	1.60	32.44	54.00	-21.56	AVG	
4		15962.64	41.00	1.59	42.59	74.00	-31.41	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

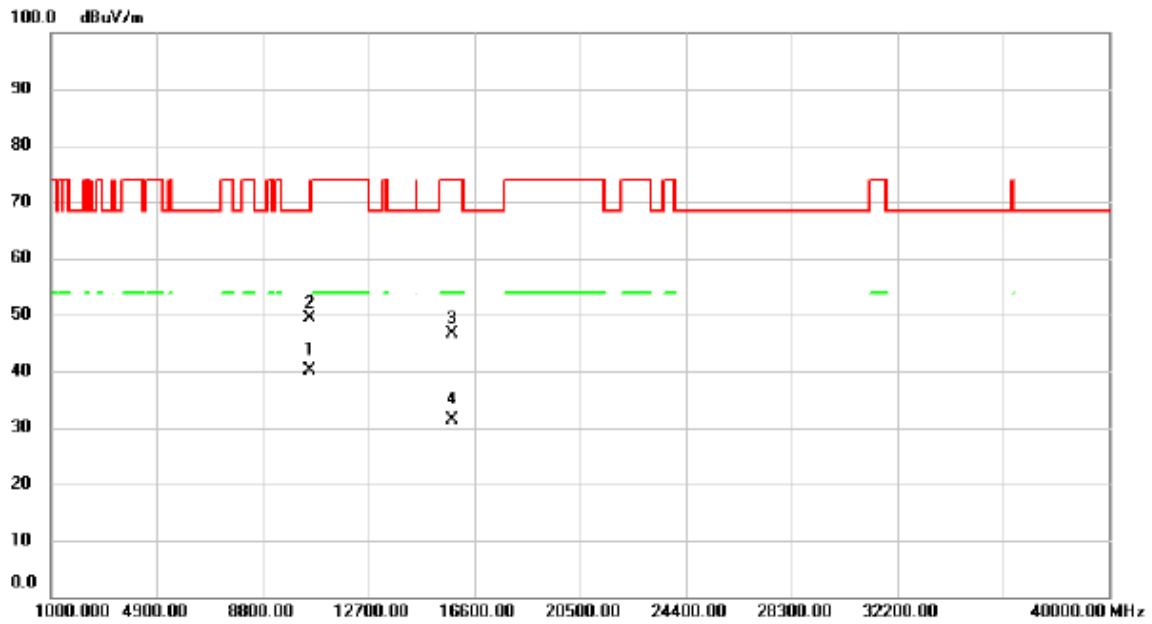
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5266.400	58.63	38.17	96.80	68.30	28.50	AVG	No Limit
2	*	5267.500	69.24	38.17	107.41	68.30	39.11	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

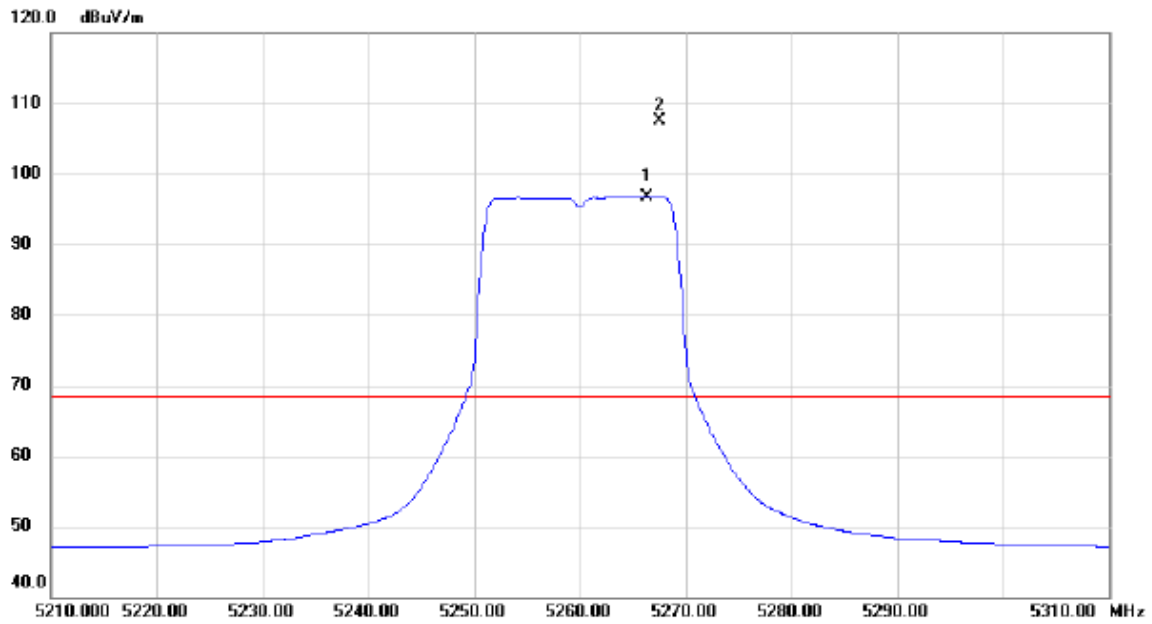
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10518.03	38.84	1.30	40.14	68.30	-28.16	AVG	
2	*	10521.27	48.15	1.30	49.45	68.30	-18.85	peak	
3		15779.73	44.64	1.90	46.54	74.00	-27.46	peak	
4		15781.54	29.43	1.89	31.32	54.00	-22.68	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

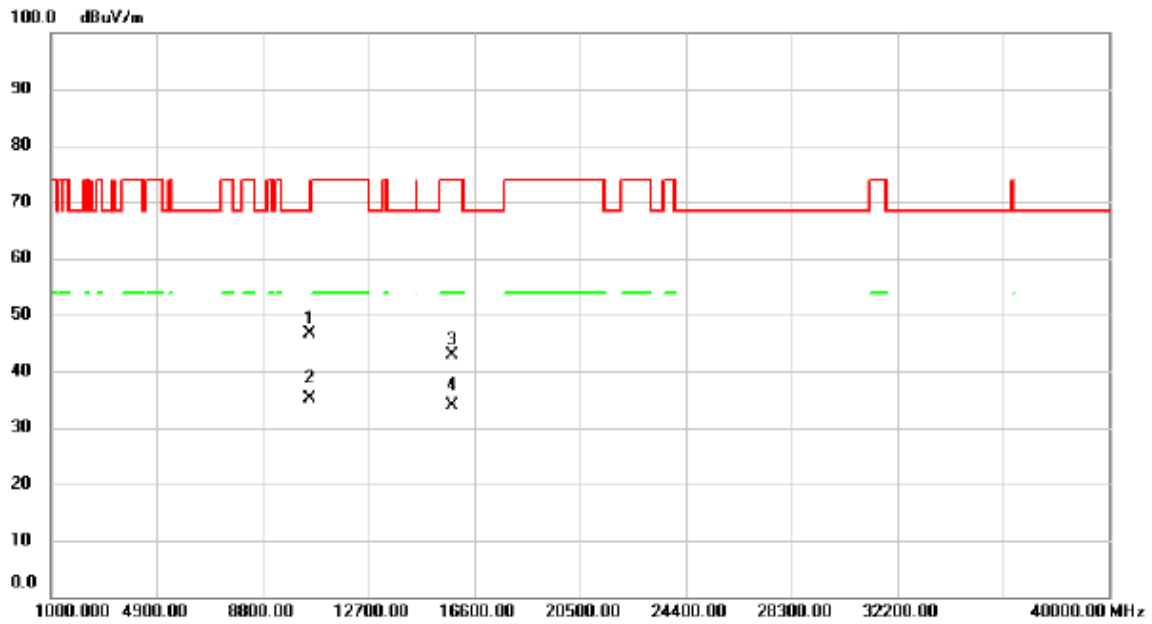
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	5266.400	57.23	39.57	96.80	68.30	28.50	AVG	No Limit
2	*	5267.500	67.84	39.57	107.41	68.30	39.11	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5260MHz

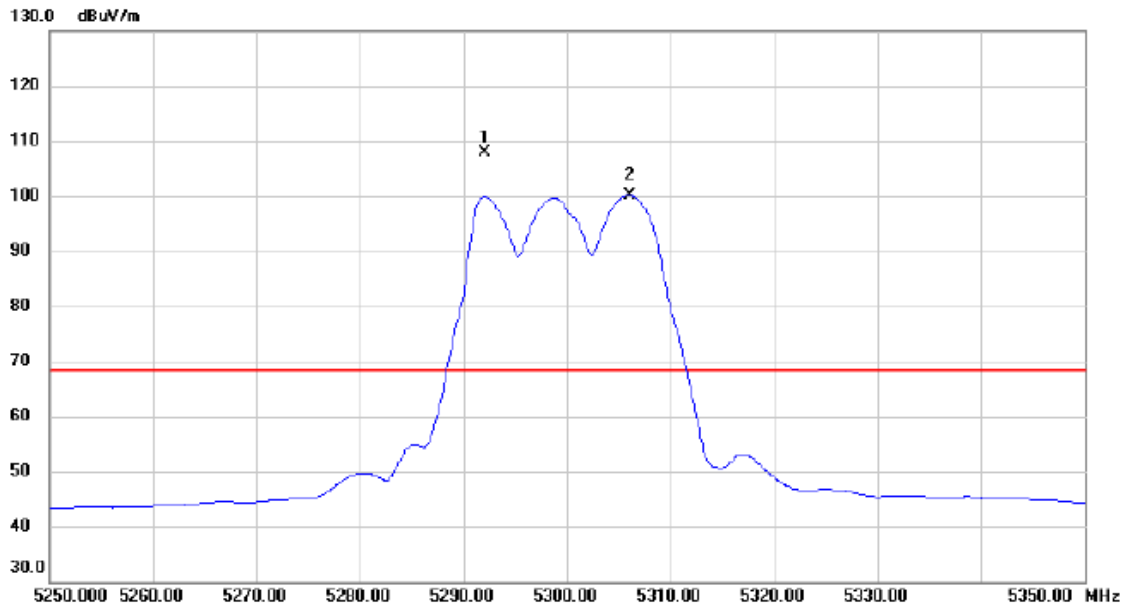
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10518.64	45.45	1.30	46.75	68.30	-21.55	peak	
2		10521.04	33.80	1.30	35.10	68.30	-33.20	AVG	
3		15777.99	40.92	1.91	42.83	74.00	-31.17	peak	
4	*	15780.02	31.91	1.90	33.81	54.00	-20.19	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

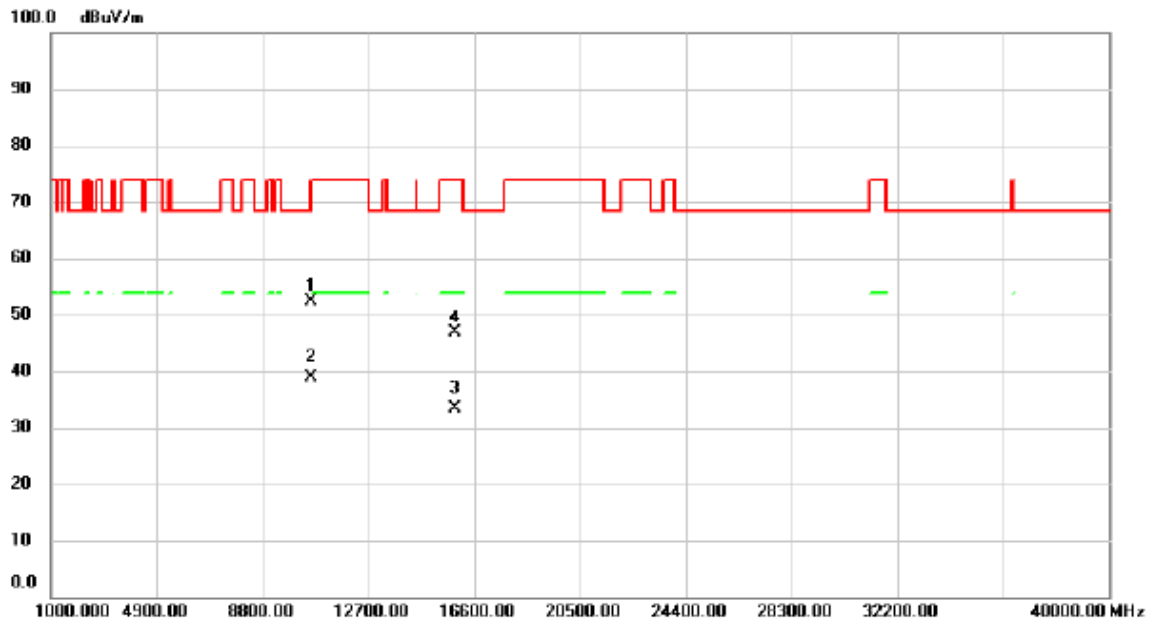
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	5292.000	69.79	38.21	108.00	68.30	39.70	peak	No Limit
2	X	5306.000	61.90	38.22	100.12	68.30	31.82	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

### Vertical

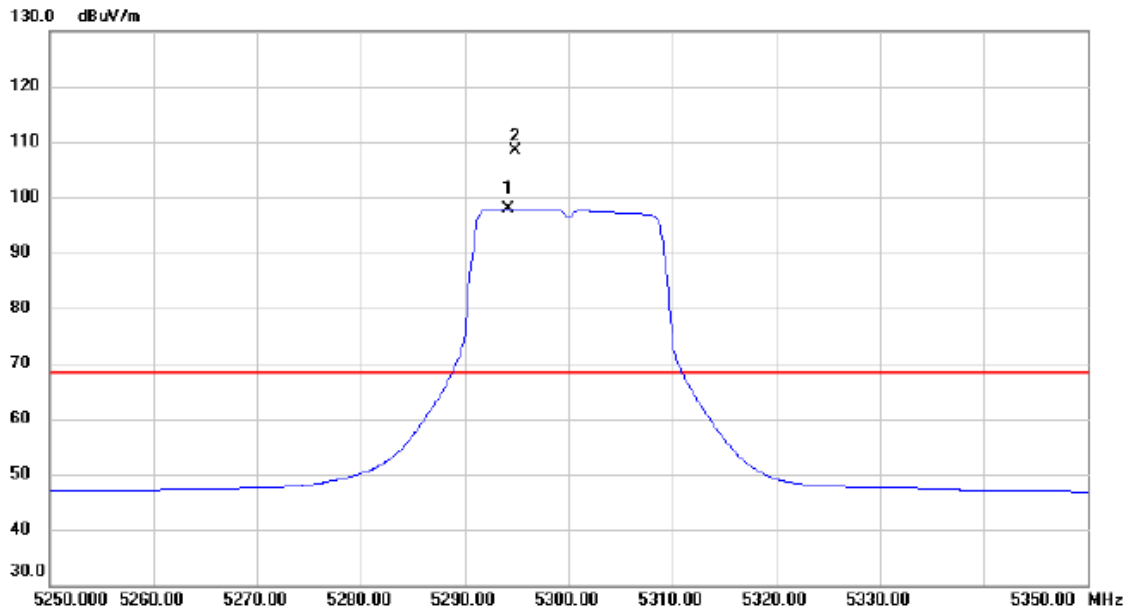


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10601.09	50.80	1.46	52.26	74.00	-21.74	peak	
2	*	10603.23	37.50	1.46	38.96	54.00	-15.04	AVG	
3		15900.94	31.62	1.69	33.31	54.00	-20.69	AVG	
4		15901.76	45.28	1.69	46.97	74.00	-27.03	peak	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

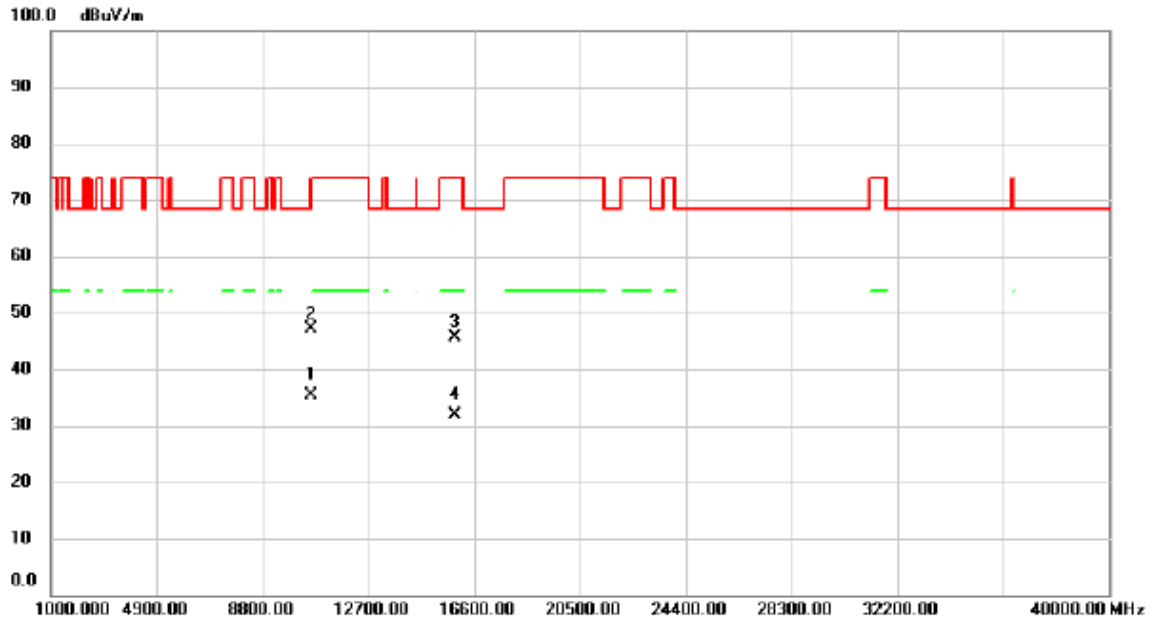
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5294.200	59.72	38.22	97.94	68.30	29.64	AVG	No Limit
2	*	5294.800	70.17	38.22	108.39	68.30	40.09	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5300MHz

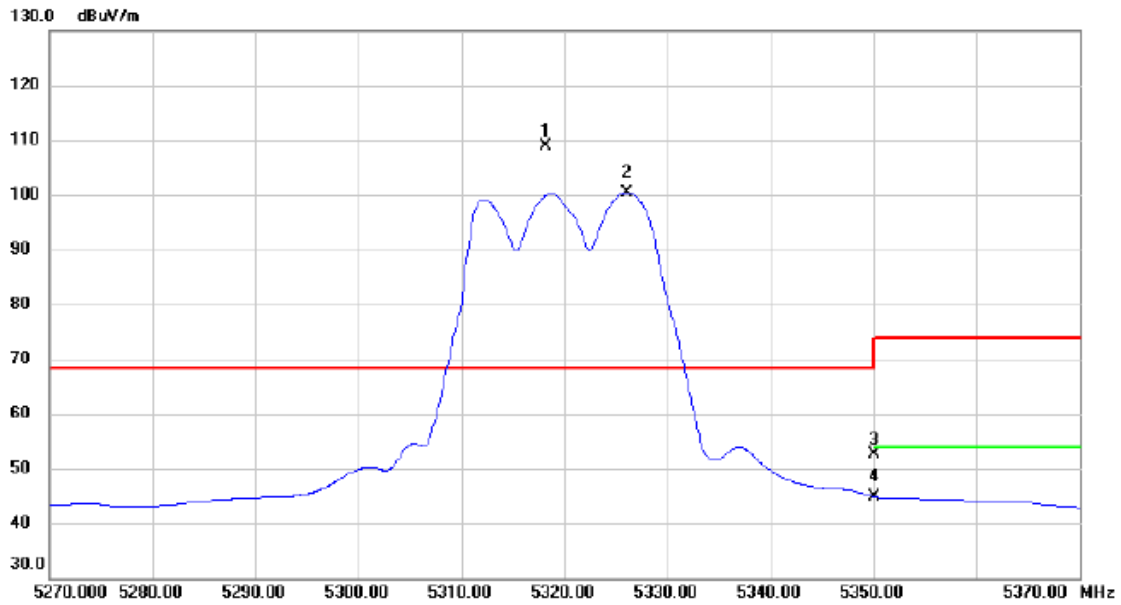
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10601.31	34.00	1.46	35.46	54.00	-18.54	AVG	
2		10602.59	45.75	1.46	47.21	74.00	-26.79	peak	
3		15897.01	43.98	1.71	45.69	74.00	-28.31	peak	
4		15898.77	30.20	1.69	31.89	54.00	-22.11	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

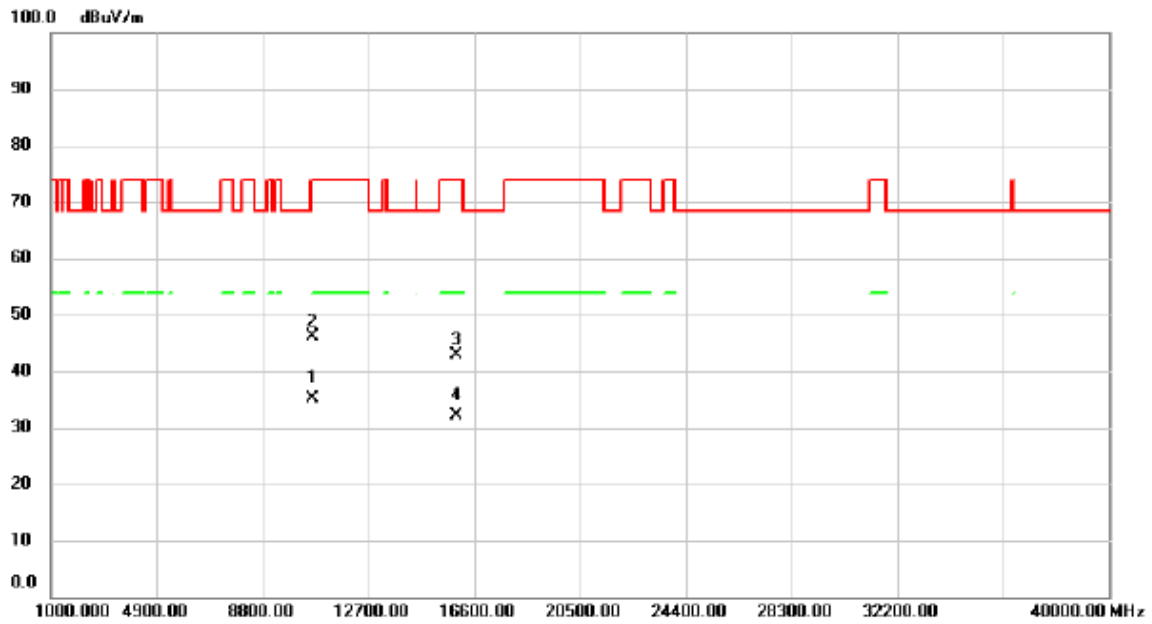
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5318.200	70.65	38.24	108.89	68.30	40.59	peak	No Limit
2	X	5326.100	62.13	38.26	100.39	68.30	32.09	AVG	No Limit
3		5350.000	14.39	38.29	52.68	68.30	-15.62	peak	
4		5350.000	6.65	38.29	44.94	54.00	-9.06	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

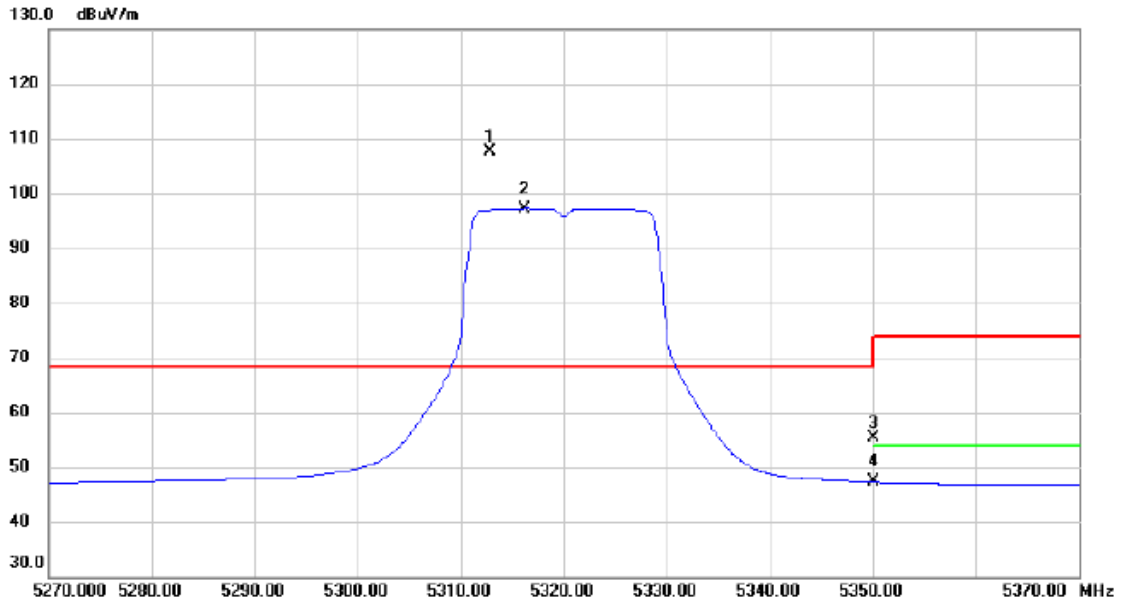
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10639.58	33.60	1.53	35.13	54.00	-18.87	AVG	
2		10642.14	44.65	1.53	46.18	74.00	-27.82	peak	
3		15956.94	41.25	1.60	42.85	74.00	-31.15	peak	
4		15958.26	30.46	1.60	32.06	54.00	-21.94	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

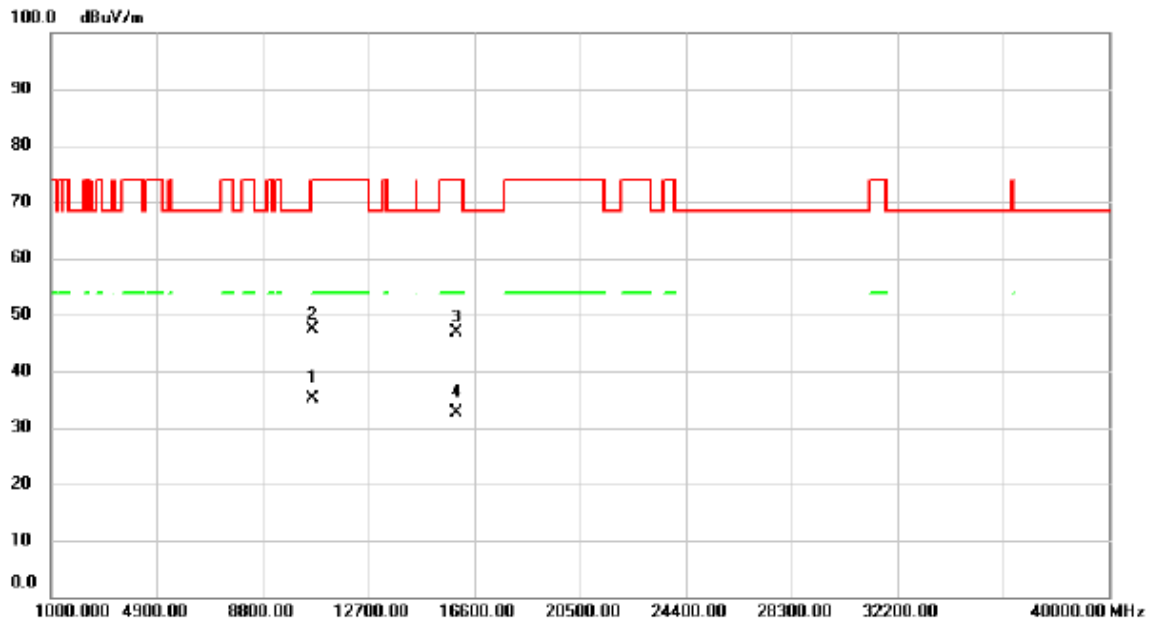
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5312.800	69.50	38.24	107.74	68.30	39.44	peak	No Limit
2	X	5316.200	59.01	38.24	97.25	68.30	28.95	AVG	No Limit
3		5350.000	17.20	38.29	55.49	68.30	-12.81	peak	
4		5350.000	9.01	38.29	47.30	54.00	-6.70	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N20 Mode 5320MHz

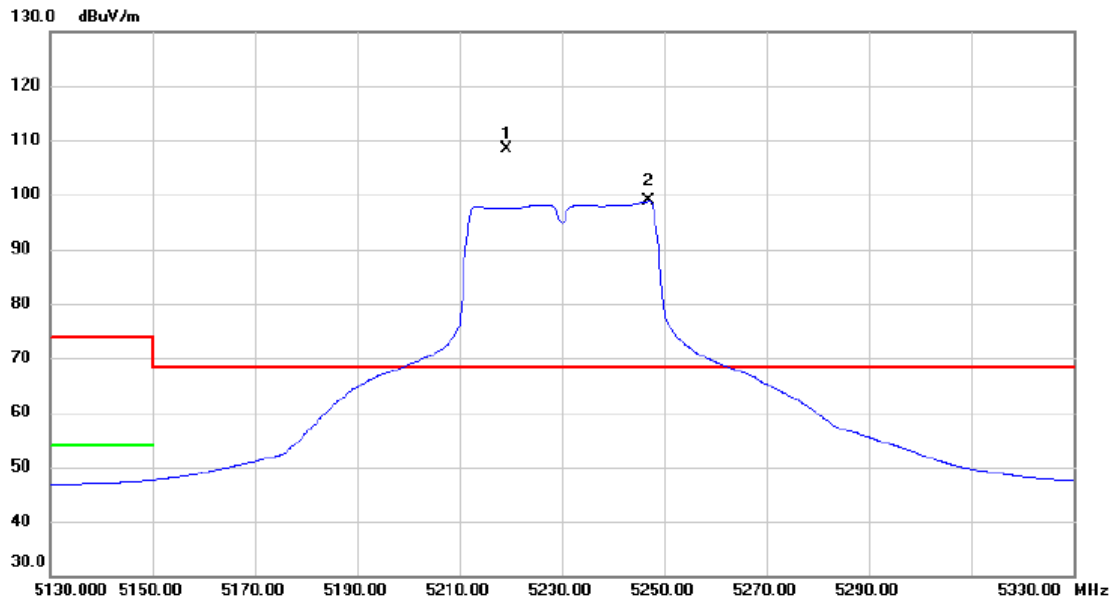
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10637.58	33.52	1.52	35.04	54.00	-18.96	AVG	
2		10638.12	45.97	1.52	47.49	74.00	-26.51	peak	
3		15957.04	45.39	1.60	46.99	74.00	-27.01	peak	
4		15963.09	31.03	1.59	32.62	54.00	-21.38	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

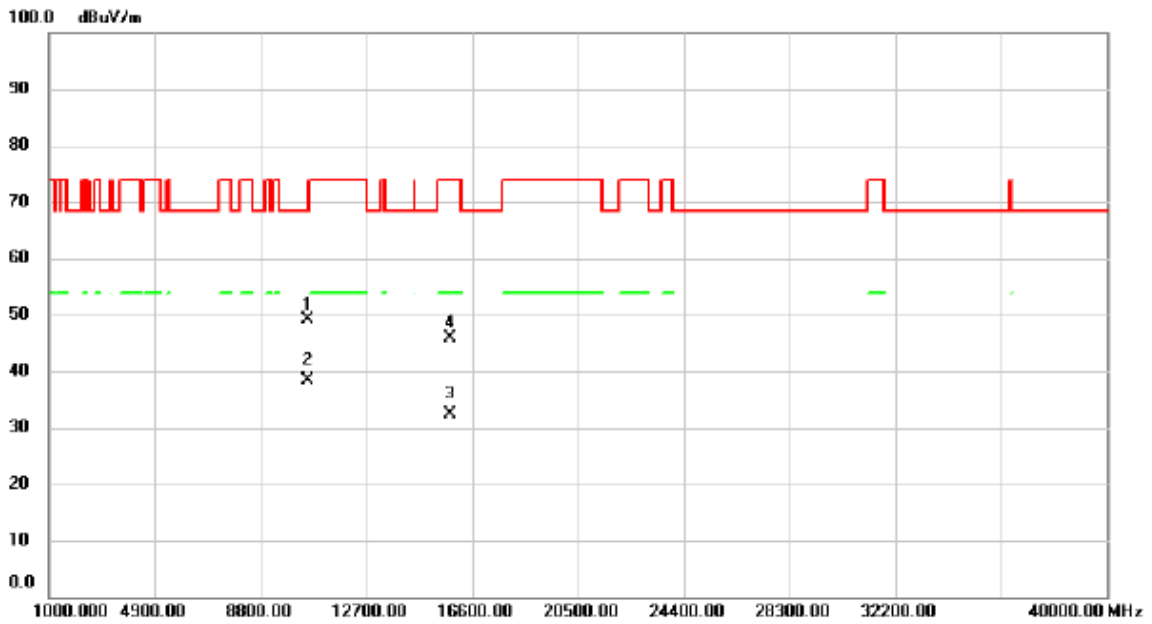
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5219.200	70.27	38.11	108.38	68.30	40.08	peak	No Limit
2	X	5247.000	60.62	38.15	98.77	68.30	30.47	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

### Vertical

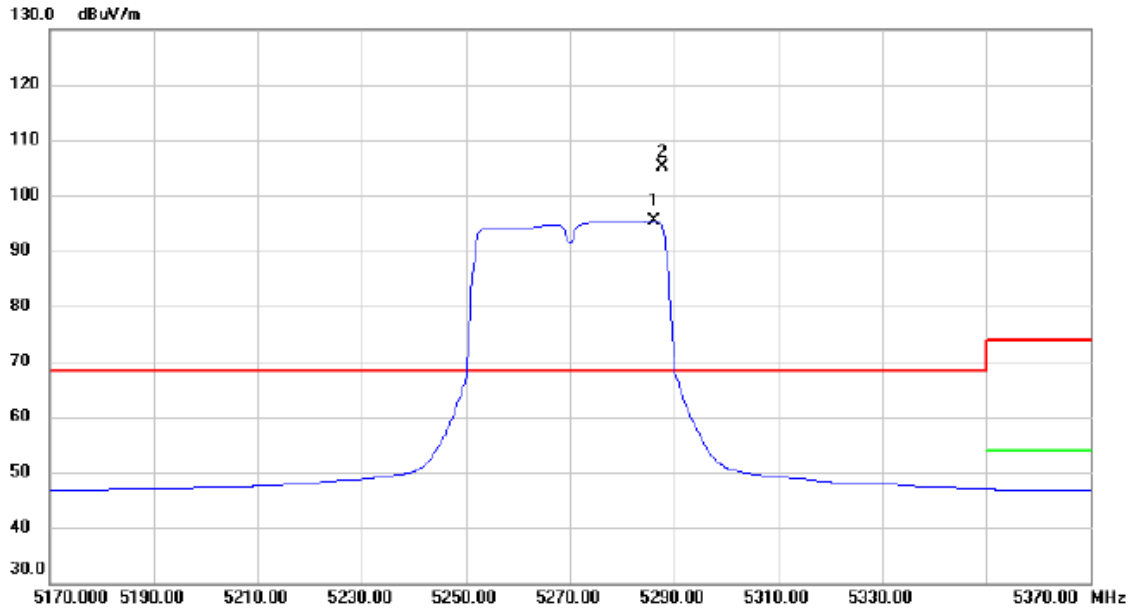


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10535.12	47.72	1.34	49.06	68.30	-19.24	peak	
2		10541.77	37.10	1.36	38.46	68.30	-29.84	AVG	
3		15809.99	30.52	1.85	32.37	54.00	-21.63	AVG	
4		15812.41	44.01	1.84	45.85	74.00	-28.15	peak	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

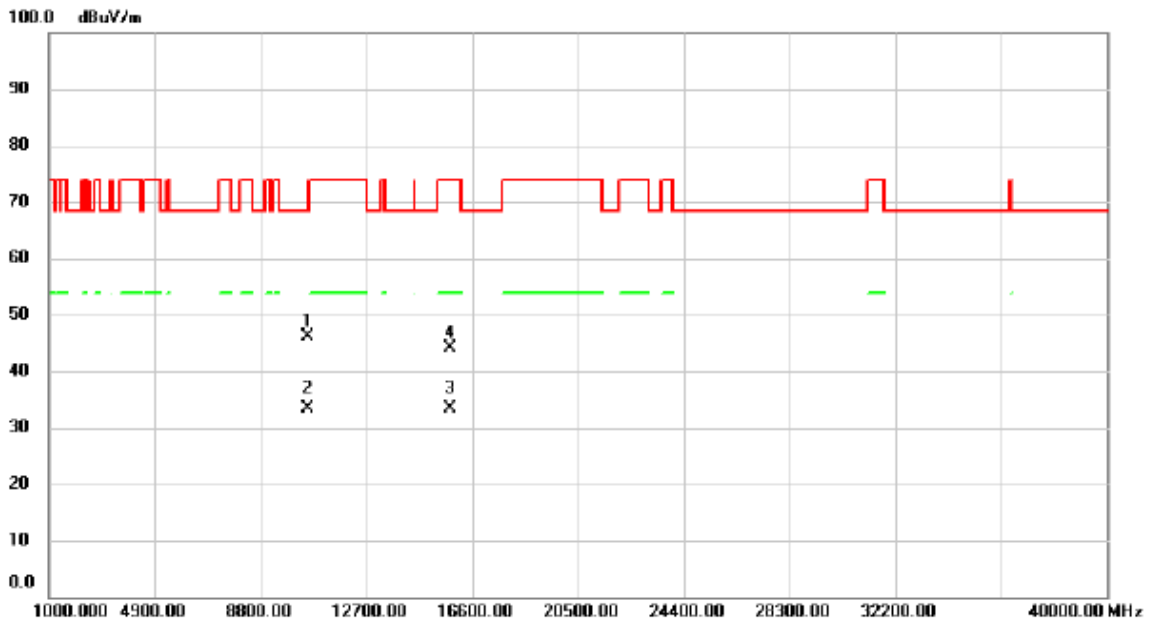
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5286.200	57.07	38.20	95.27	68.30	26.97	AVG	No Limit
2	*	5287.800	66.84	38.20	105.04	68.30	36.74	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5270MHz

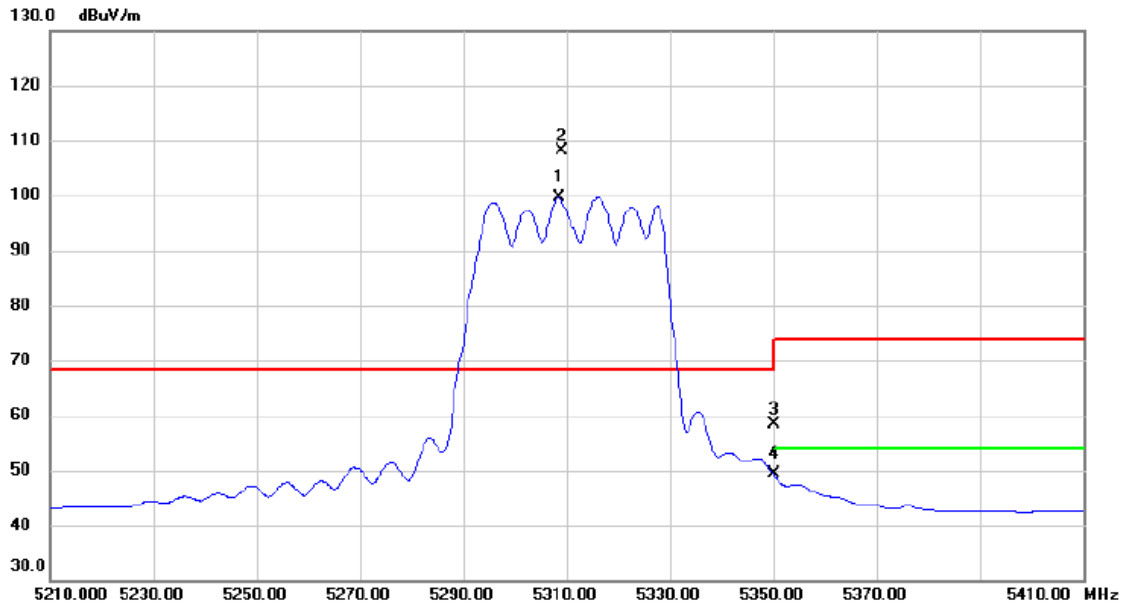
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10538.12	44.90	1.34	46.24	68.30	-22.06	peak	
2		10543.04	32.14	1.36	33.50	68.30	-34.80	AVG	
3	*	15809.13	31.60	1.85	33.45	54.00	-20.55	AVG	
4		15811.56	42.32	1.85	44.17	74.00	-29.83	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

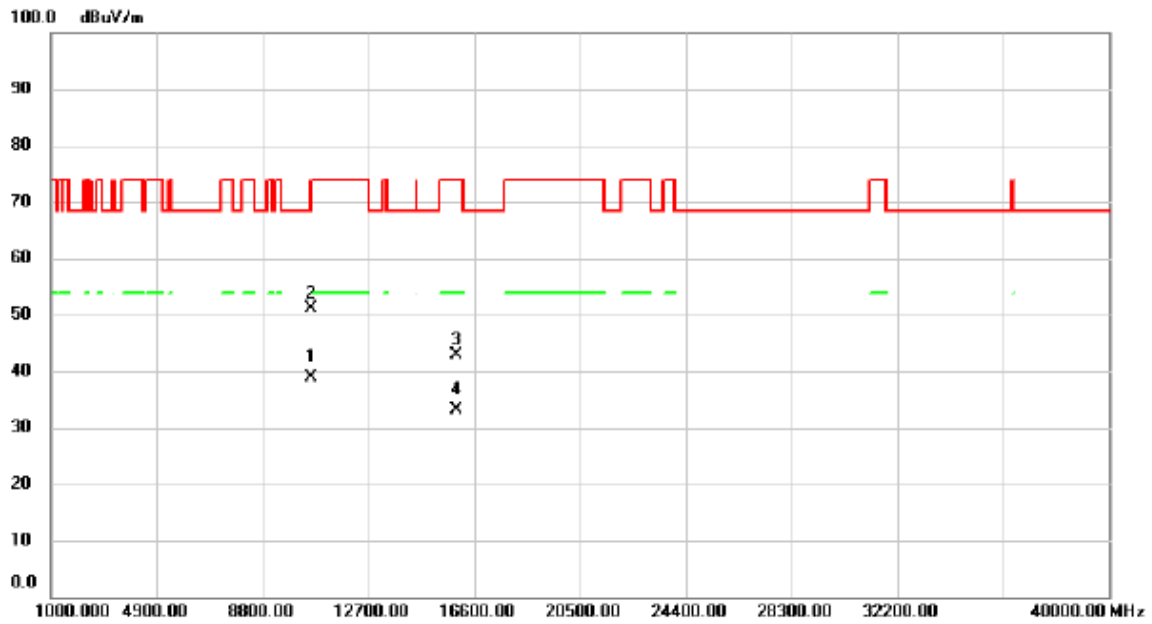
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5308.600	61.44	38.24	99.68	68.30	31.38	AVG	No Limit
2	*	5309.000	70.01	38.24	108.25	68.30	39.95	peak	No Limit
3		5350.000	20.00	38.29	58.29	68.30	-10.01	peak	
4		5350.000	11.02	38.29	49.31	54.00	-4.69	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

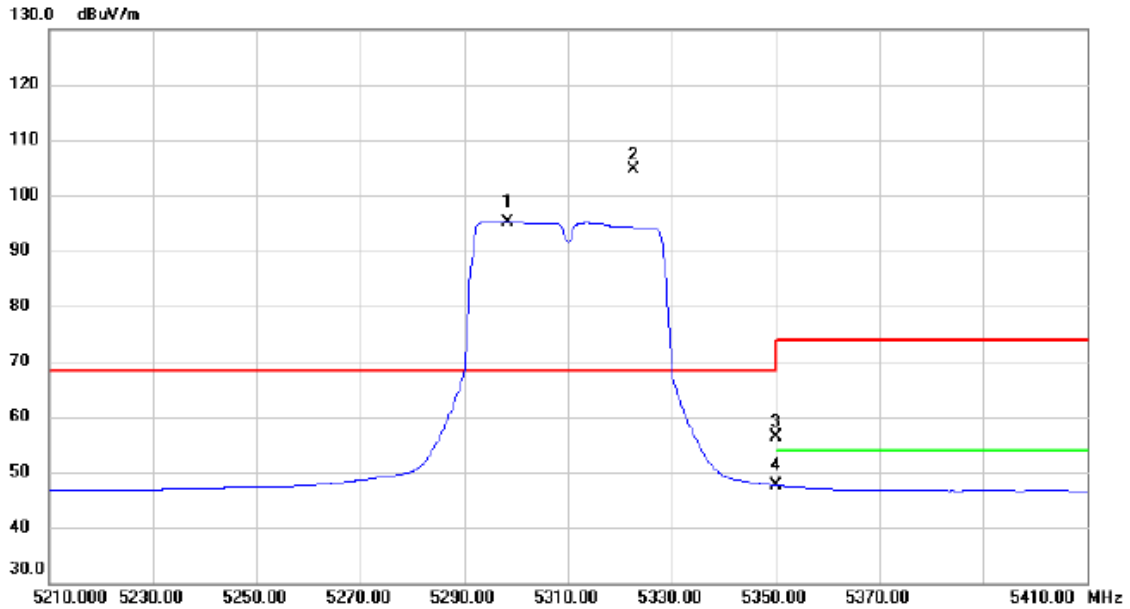
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10619.08	37.31	1.49	38.80	54.00	-15.20	AVG	
2		10619.64	49.75	1.49	51.24	74.00	-22.76	peak	
3		15931.04	41.14	1.64	42.78	74.00	-31.22	peak	
4		15932.68	31.48	1.64	33.12	54.00	-20.88	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

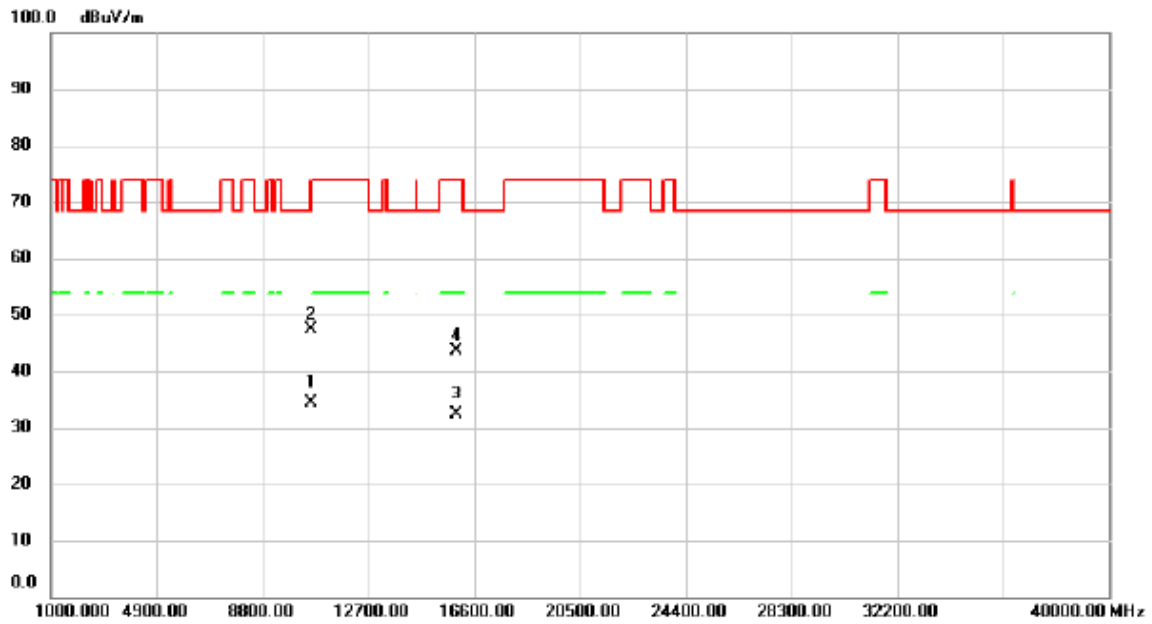
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5298.400	56.94	38.22	95.16	68.30	26.86	AVG	No Limit
2	*	5322.600	66.40	38.25	104.65	68.30	36.35	peak	No Limit
3		5350.000	18.20	38.29	56.49	68.30	-11.81	peak	
4		5350.000	9.36	38.29	47.65	54.00	-6.35	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX N40 Mode 5310MHz

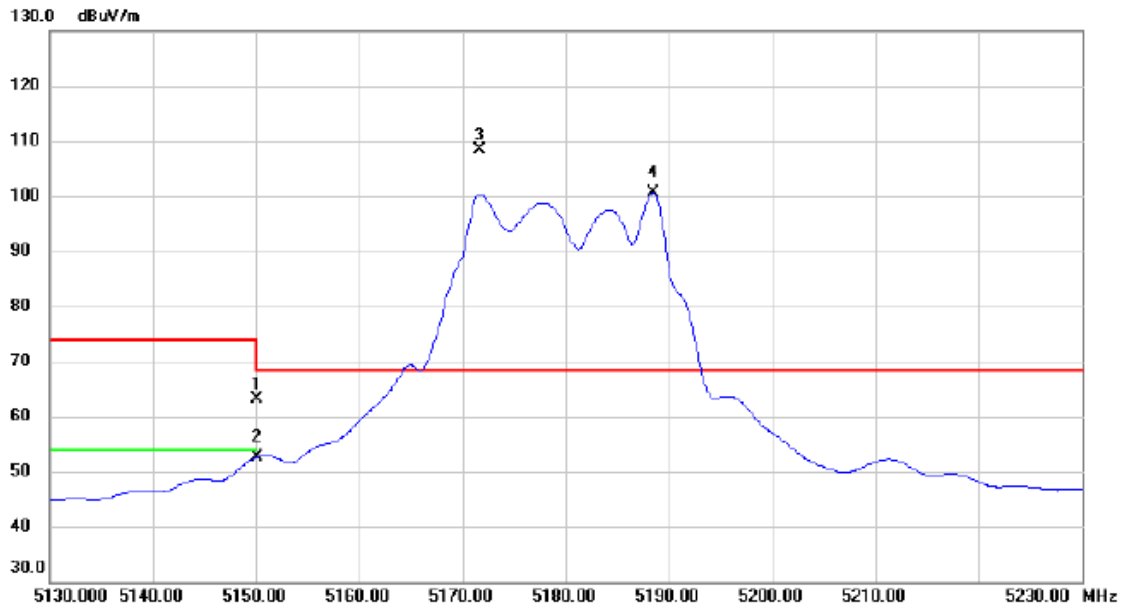
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10618.45	33.00	1.49	34.49	54.00	-19.51	AVG	
2		10619.02	45.88	1.49	47.37	74.00	-26.63	peak	
3		15931.21	30.85	1.64	32.49	54.00	-21.51	AVG	
4		15932.50	41.93	1.64	43.57	74.00	-30.43	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

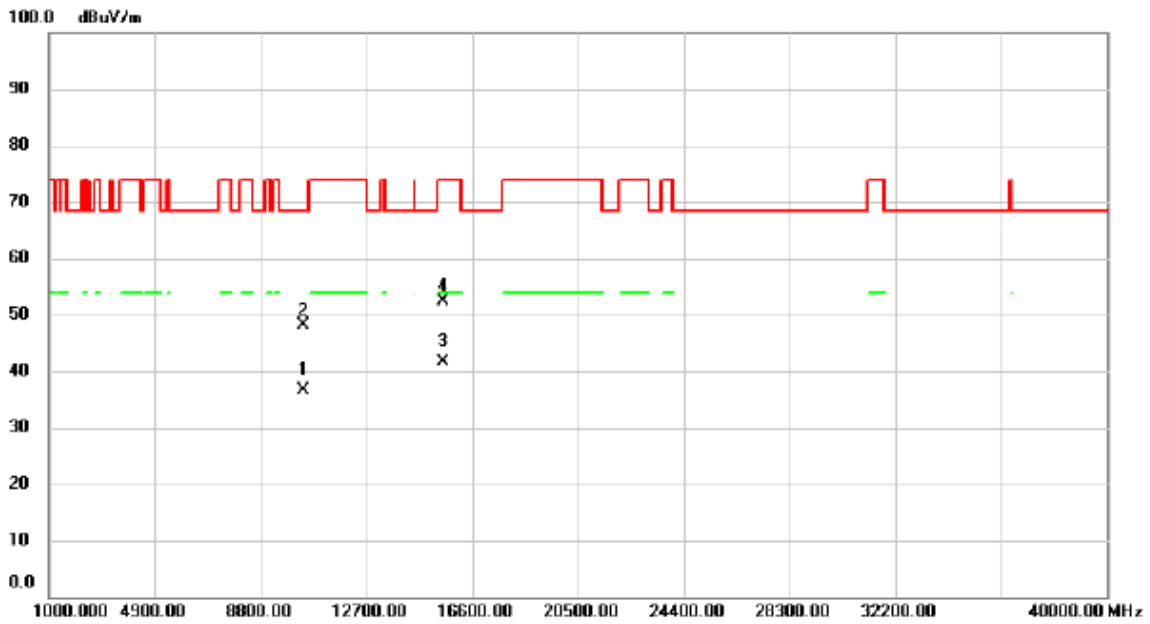
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	25.21	38.01	63.22	74.00	-10.78	peak	
2		5150.000	14.61	38.01	52.62	54.00	-1.38	AVG	
3	*	5171.600	70.27	38.04	108.31	68.30	40.01	peak	No Limit
4	X	5188.500	62.52	38.06	100.58	68.30	32.28	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

### Vertical

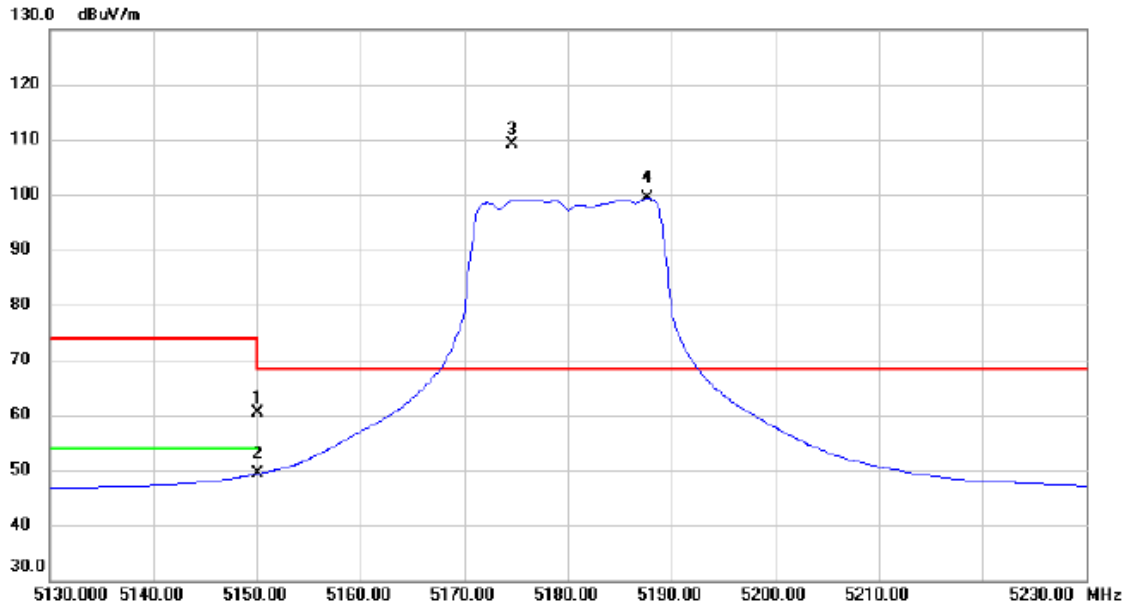


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10361.65	35.56	1.04	36.60	68.30	-31.70	AVG	
2		10362.04	47.21	1.04	48.25	68.30	-20.05	peak	
3	*	15538.41	39.20	2.31	41.51	54.00	-12.49	AVG	
4		15539.66	49.97	2.31	52.28	74.00	-21.72	peak	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

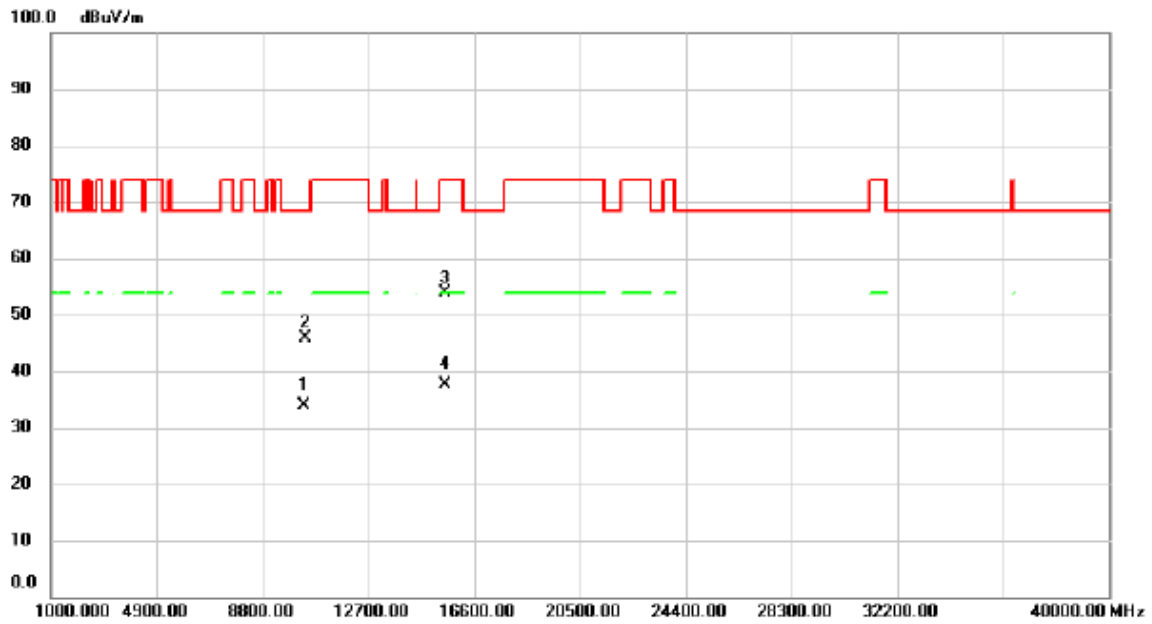
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	22.42	38.01	60.43	74.00	-13.57	peak	
2		5150.000	11.32	38.01	49.33	54.00	-4.67	AVG	
3	*	5174.600	71.03	38.04	109.07	68.30	40.77	peak	No Limit
4	X	5187.700	61.23	38.06	99.29	68.30	30.99	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5180MHz

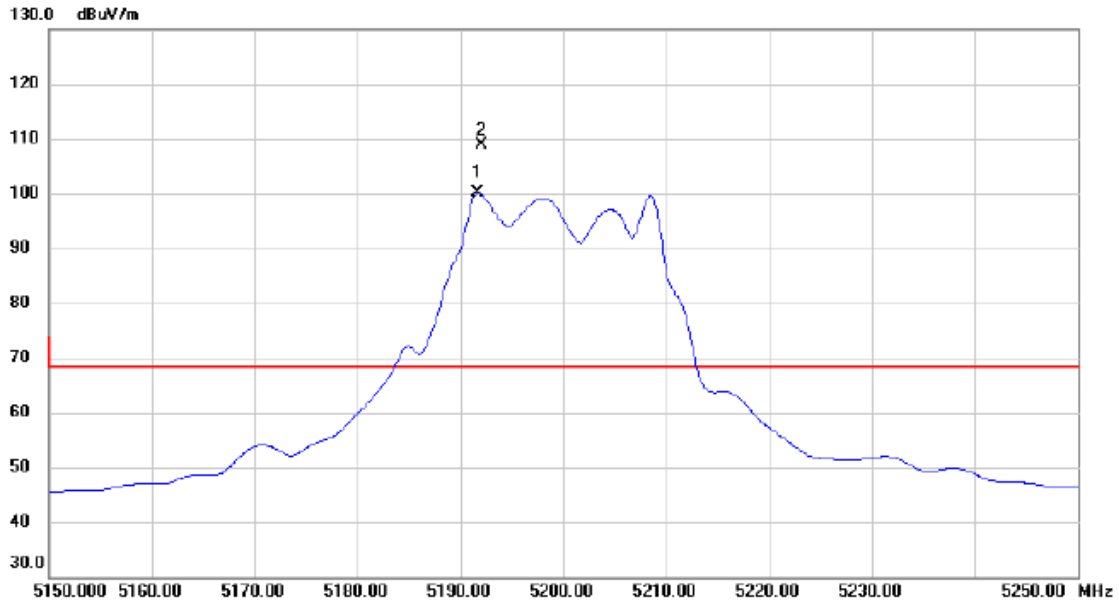
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10358.64	32.88	1.04	33.92	68.30	-34.38	AVG	
2		10361.31	44.88	1.04	45.92	68.30	-22.38	peak	
3		15541.52	51.47	2.30	53.77	74.00	-20.23	peak	
4	*	15544.75	35.25	2.29	37.54	54.00	-16.46	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

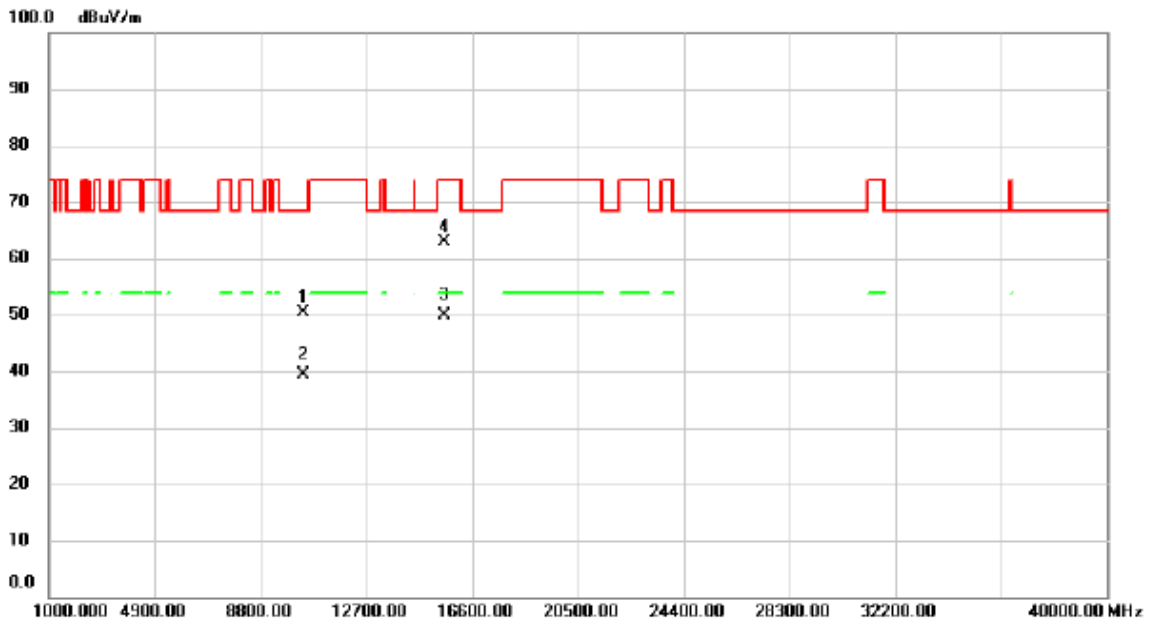
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5191.700	61.97	38.07	100.04	68.30	31.74	AVG	No Limit
2	*	5192.000	70.87	38.07	108.94	68.30	40.64	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

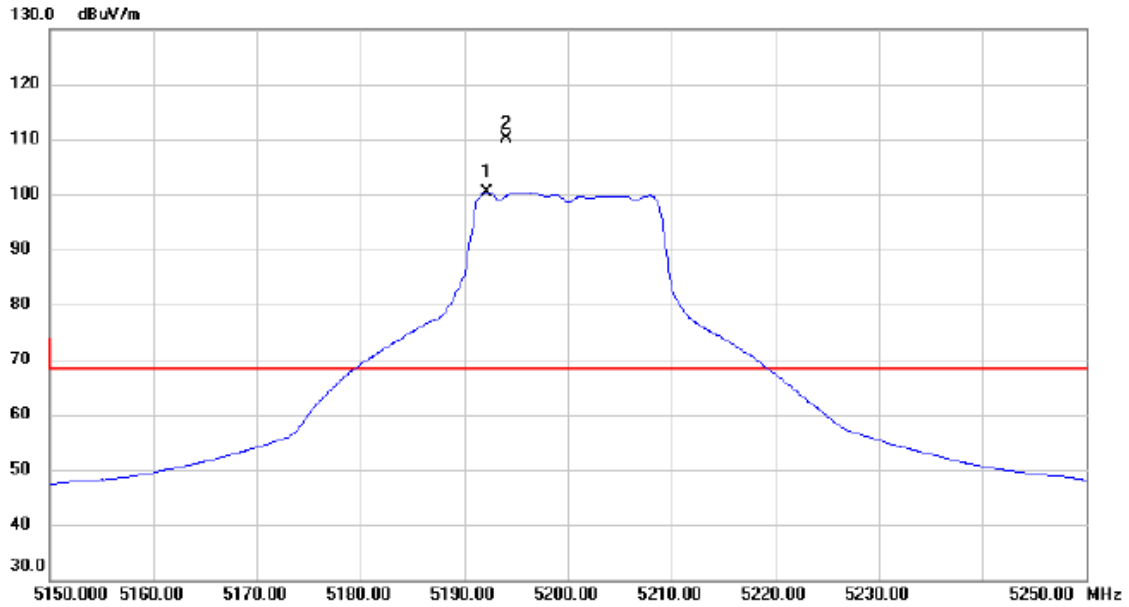
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10398.07	49.21	1.10	50.31	68.30	-17.99	peak	
2		10399.28	38.20	1.11	39.31	68.30	-28.99	AVG	
3	*	15601.70	47.72	2.21	49.93	54.00	-4.07	AVG	
4		15604.04	60.72	2.19	62.91	74.00	-11.09	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

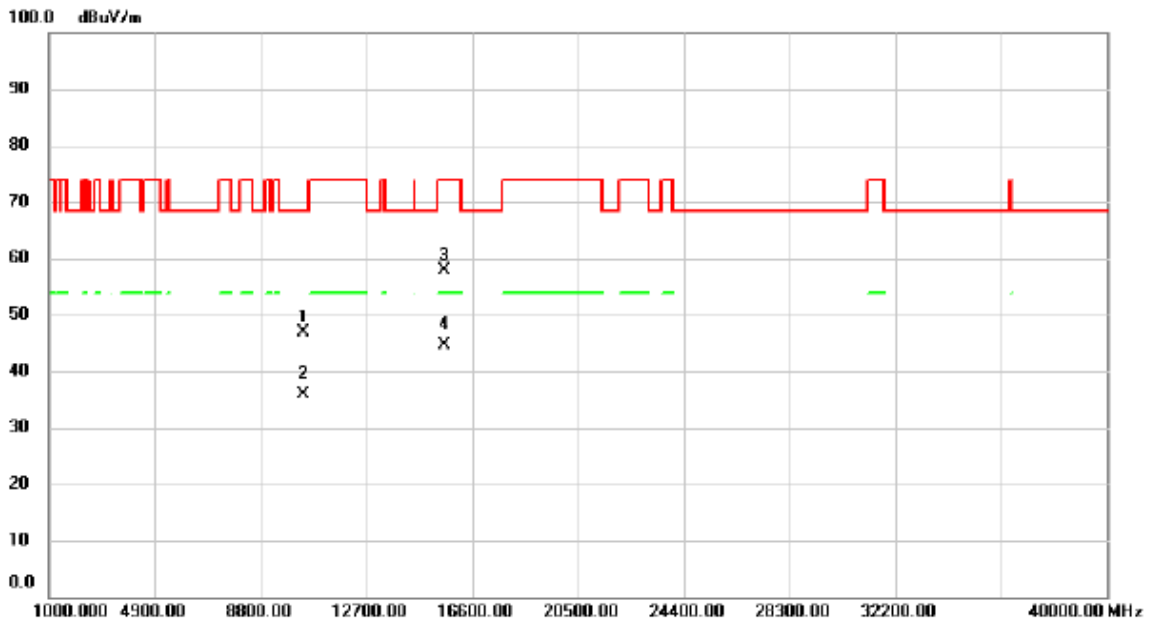
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5192.200	62.20	38.07	100.27	68.30	31.97	AVG	No Limit
2	*	5194.100	71.98	38.08	110.06	68.30	41.76	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5200MHz

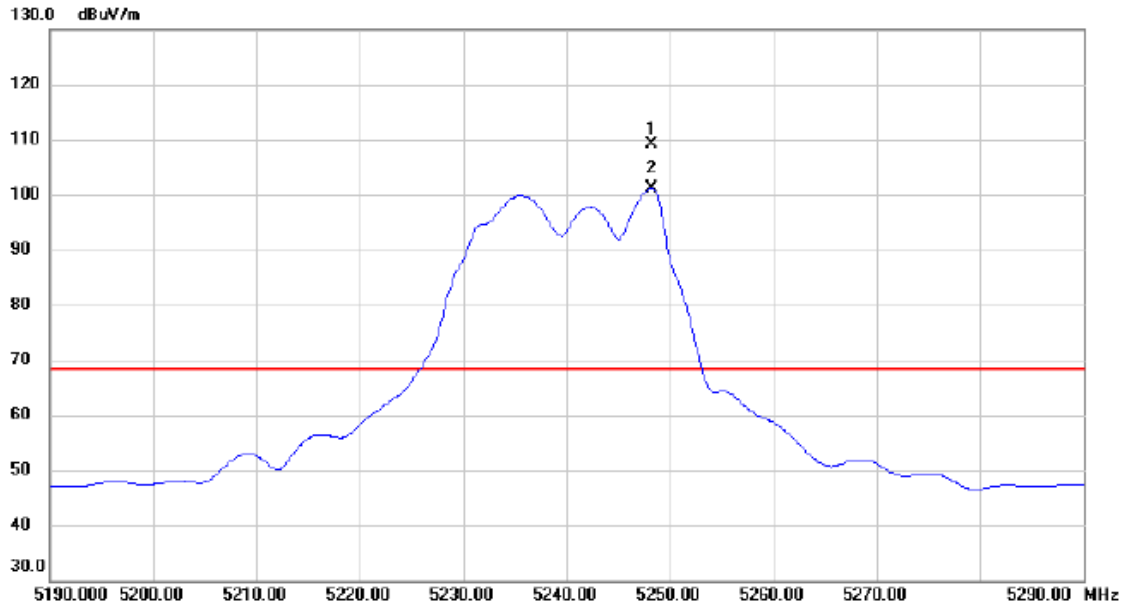
**Horizontal**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10401.68	45.82	1.11	46.93	68.30	-21.37	peak	
2		10403.41	34.68	1.11	35.79	68.30	-32.51	AVG	
3		15600.08	55.65	2.21	57.86	74.00	-16.14	peak	
4	*	15602.17	42.51	2.20	44.71	54.00	-9.29	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

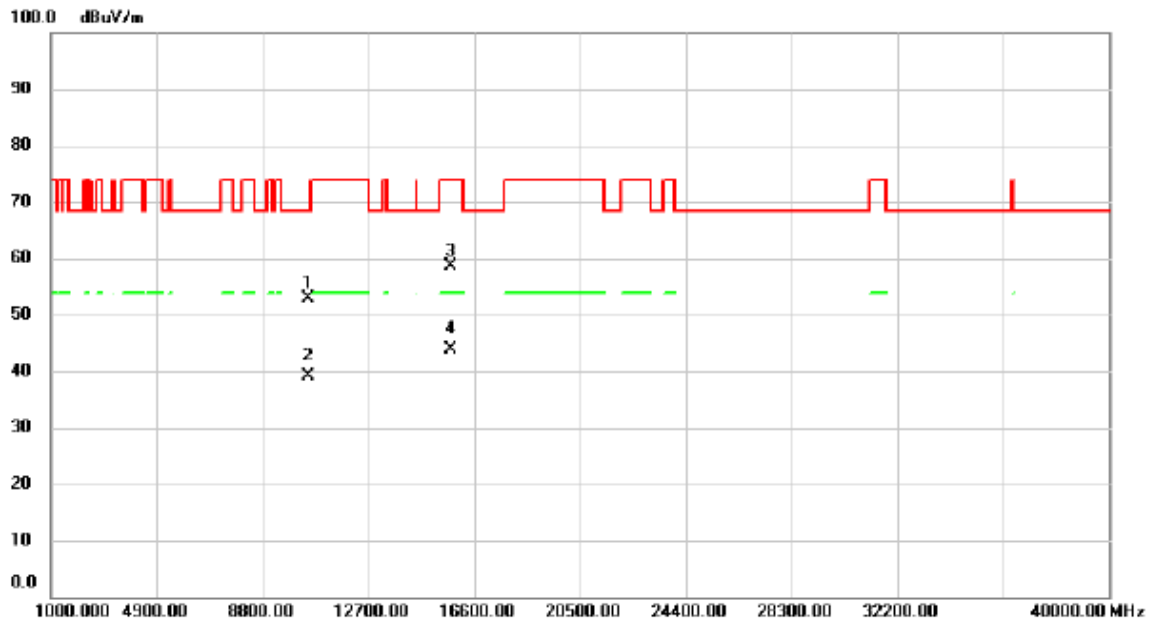
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5248.200	70.99	38.15	109.14	68.30	40.84	peak	No Limit
2	X	5248.200	63.09	38.15	101.24	68.30	32.94	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

### Vertical

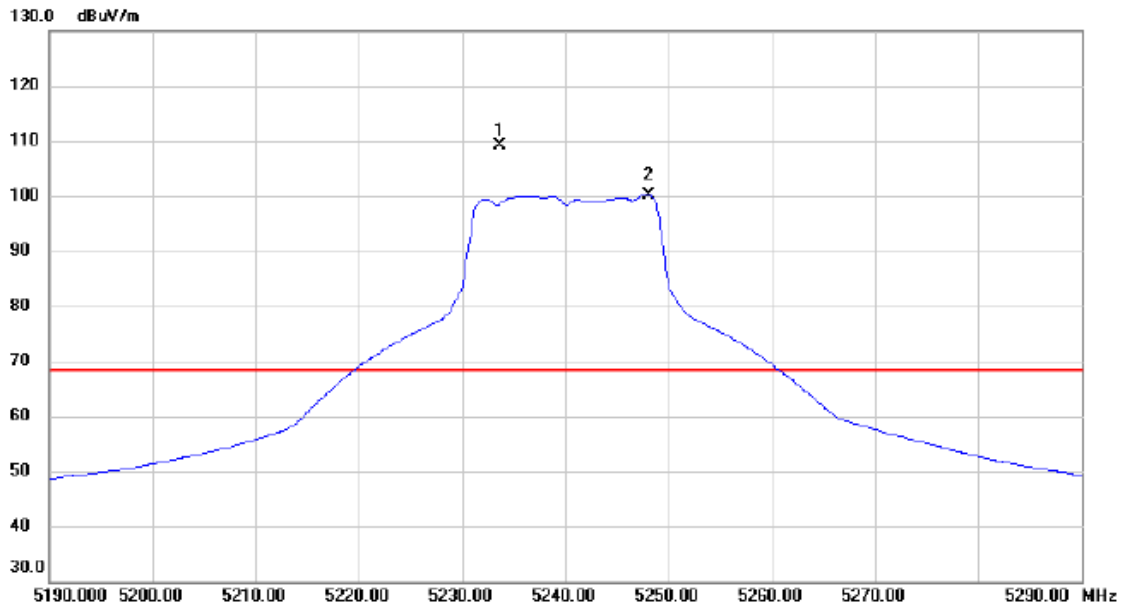


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10475.91	51.71	1.23	52.94	68.30	-15.36	peak	
2		10477.33	37.86	1.24	39.10	68.30	-29.20	AVG	
3		15721.21	56.66	1.99	58.65	74.00	-15.35	peak	
4	*	15723.09	42.01	1.99	44.00	54.00	-10.00	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

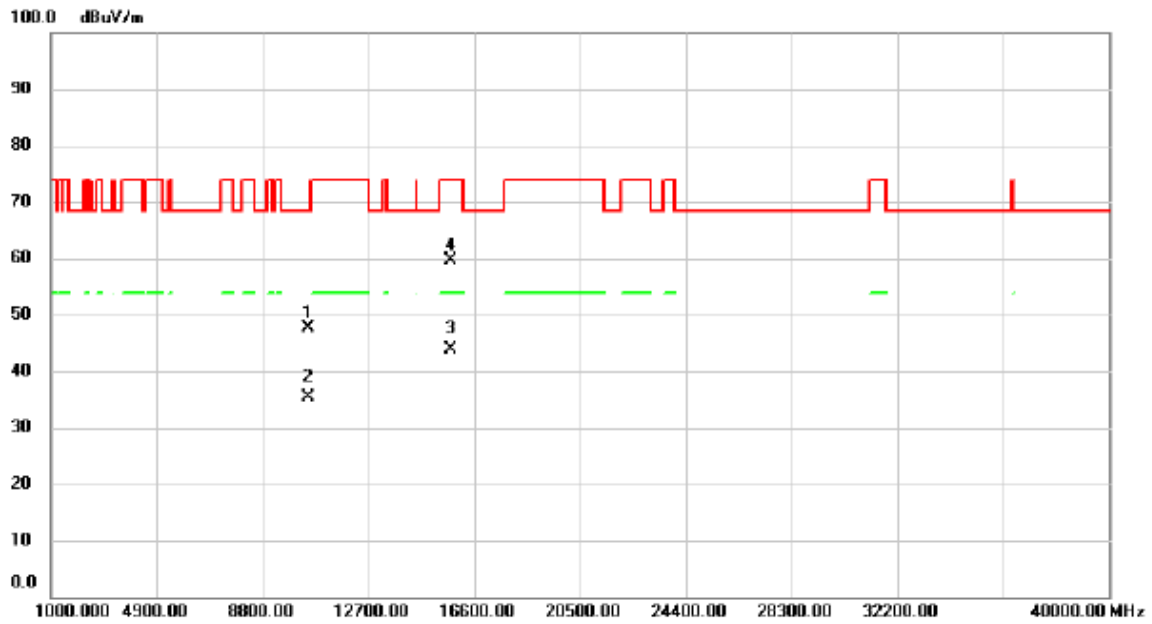
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5233.700	71.08	38.13	109.21	68.30	40.91	peak	No Limit
2	X	5248.000	62.07	38.15	100.22	68.30	31.92	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC20 Mode 5240MHz

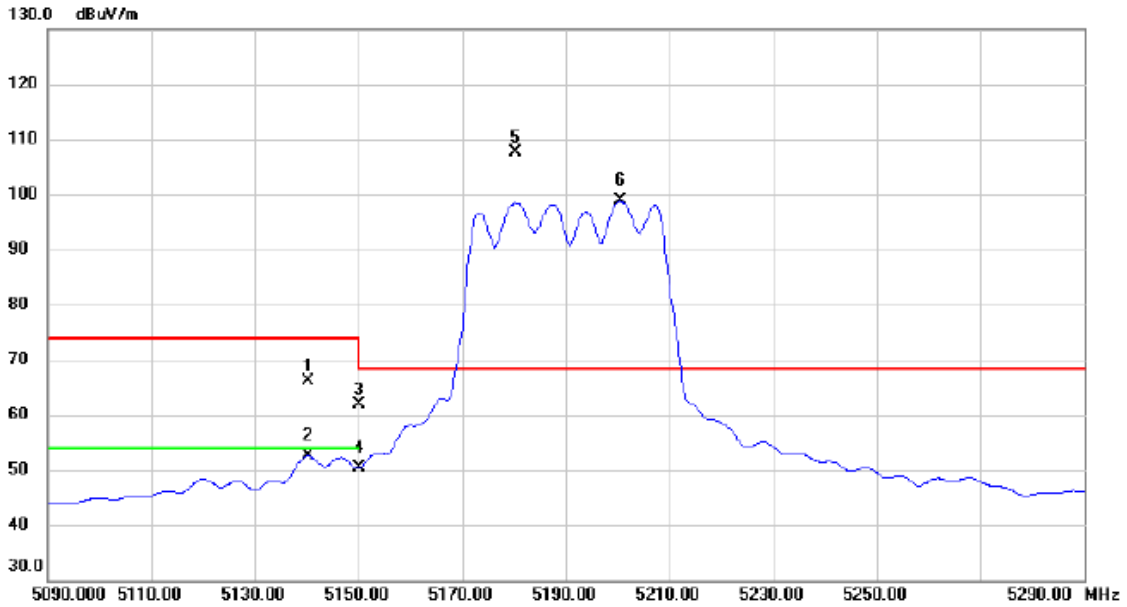
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10478.45	46.44	1.24	47.68	68.30	-20.62	peak	
2		10480.08	34.17	1.25	35.42	68.30	-32.88	AVG	
3	*	15718.51	41.91	2.01	43.92	54.00	-10.08	AVG	
4		15718.68	57.72	2.01	59.73	74.00	-14.27	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

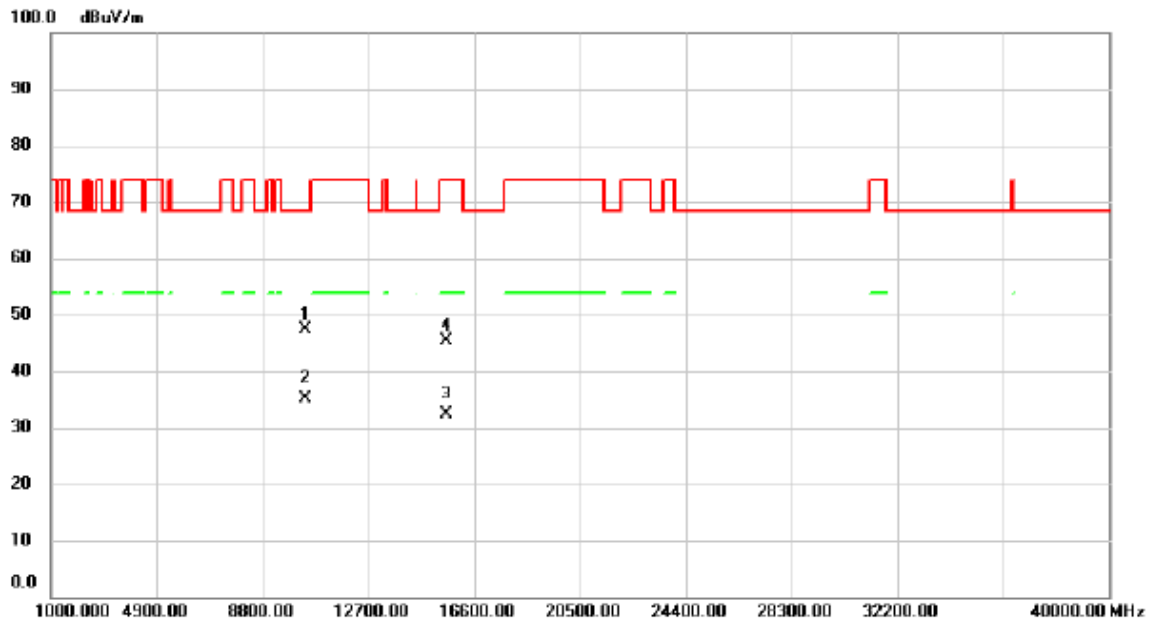
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5140.200	28.08	37.99	66.07	74.00	-7.93	peak	
2		5140.200	14.53	37.99	52.52	54.00	-1.48	AVG	
3		5150.000	23.81	38.01	61.82	74.00	-12.18	peak	
4		5150.000	12.37	38.01	50.38	54.00	-3.62	AVG	
5	*	5180.200	69.69	38.05	107.74	68.30	39.44	peak	No Limit
6	X	5200.600	60.68	38.08	98.76	68.30	30.46	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

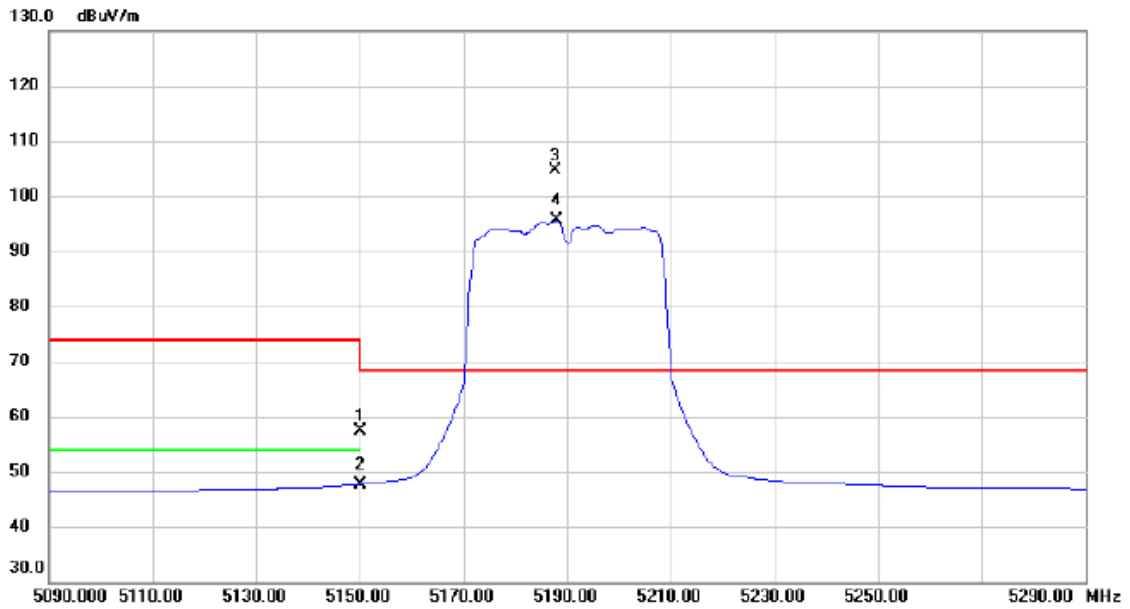
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10379.57	46.37	1.06	47.43	68.30	-20.87	peak	
2		10381.69	34.11	1.07	35.18	68.30	-33.12	AVG	
3		15567.42	30.06	2.26	32.32	54.00	-21.68	AVG	
4		15568.97	43.21	2.26	45.47	74.00	-28.53	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

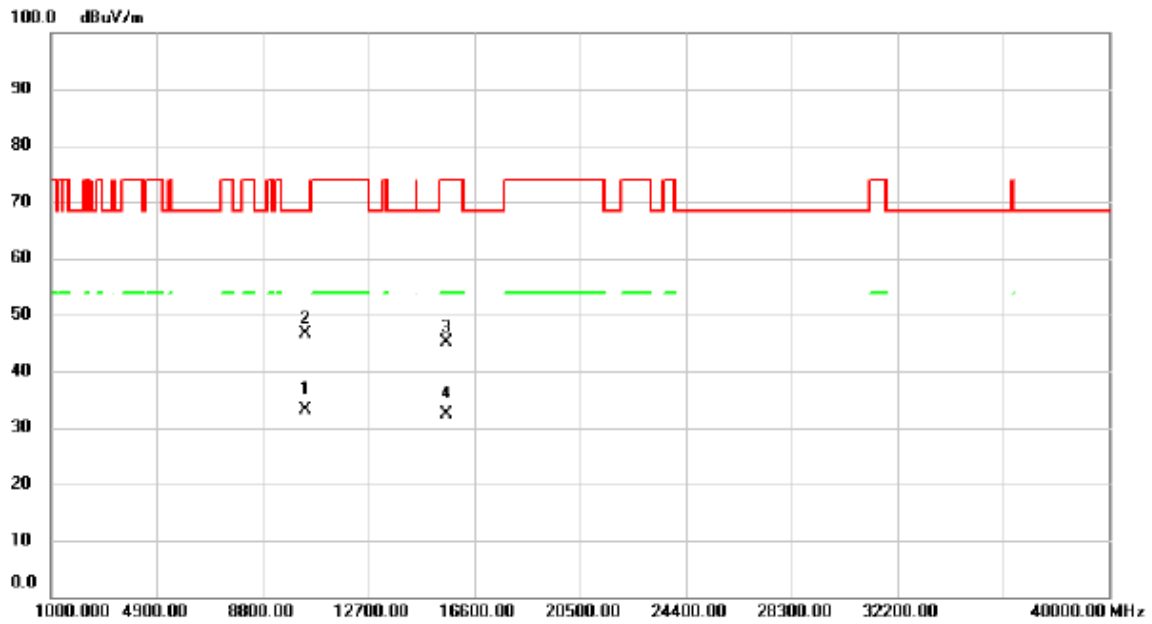
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	19.43	38.01	57.44	74.00	-16.56	peak	
2		5150.000	9.73	38.01	47.74	54.00	-6.26	AVG	
3	*	5187.800	66.54	38.06	104.60	68.30	36.30	peak	No Limit
4	X	5188.000	57.49	38.06	95.55	68.30	27.25	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5190MHz

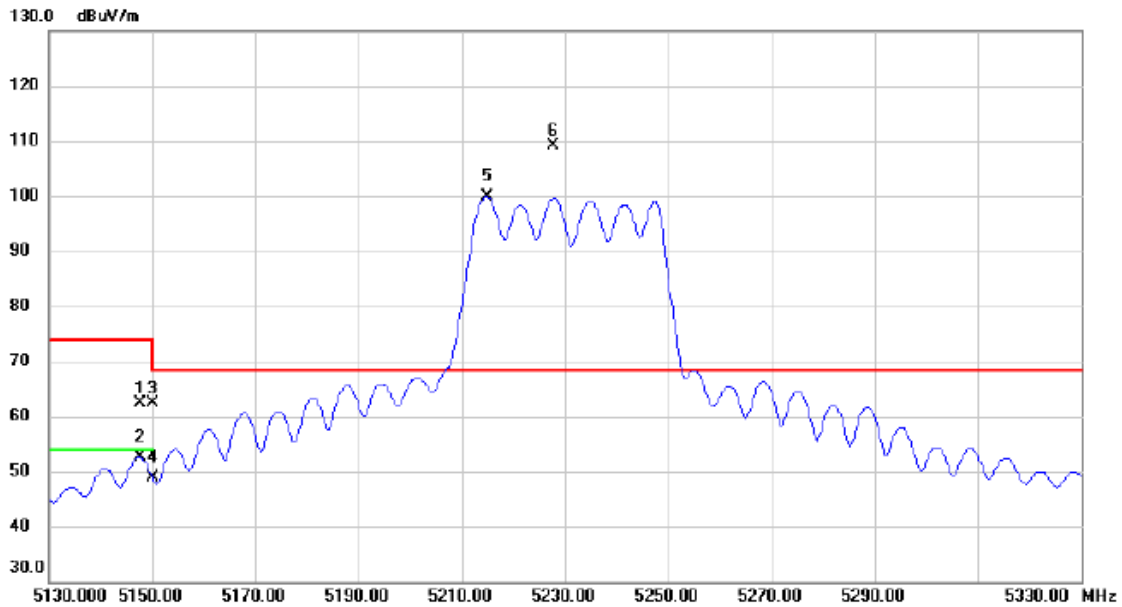
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10381.18	32.15	1.07	33.22	68.30	-35.08	AVG	
2		10383.04	45.54	1.07	46.61	68.30	-21.69	peak	
3		15568.53	42.81	2.26	45.07	74.00	-28.93	peak	
4	*	15569.11	30.21	2.26	32.47	54.00	-21.53	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

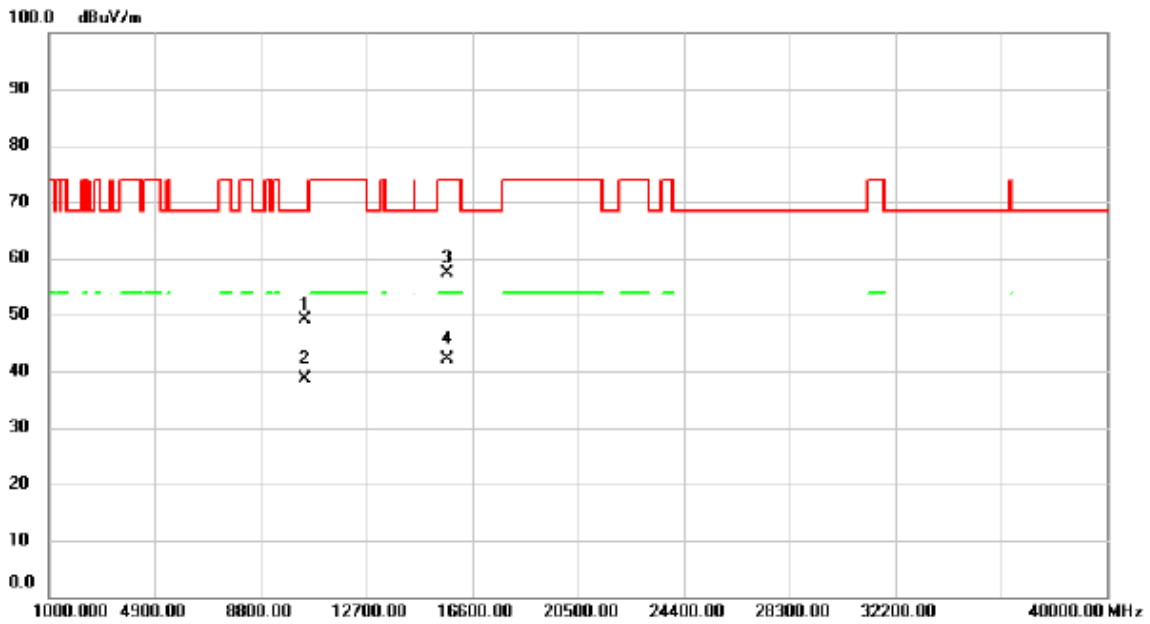
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5147.600	24.46	38.01	62.47	74.00	-11.53	peak	
2		5147.600	14.56	38.01	52.57	54.00	-1.43	AVG	
3		5150.000	24.45	38.01	62.46	74.00	-11.54	peak	
4		5150.000	10.93	38.01	48.94	54.00	-5.06	AVG	
5	X	5214.800	61.73	38.10	99.83	68.30	31.53	AVG	No Limit
6	*	5227.800	71.04	38.12	109.16	68.30	40.86	peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

### Vertical

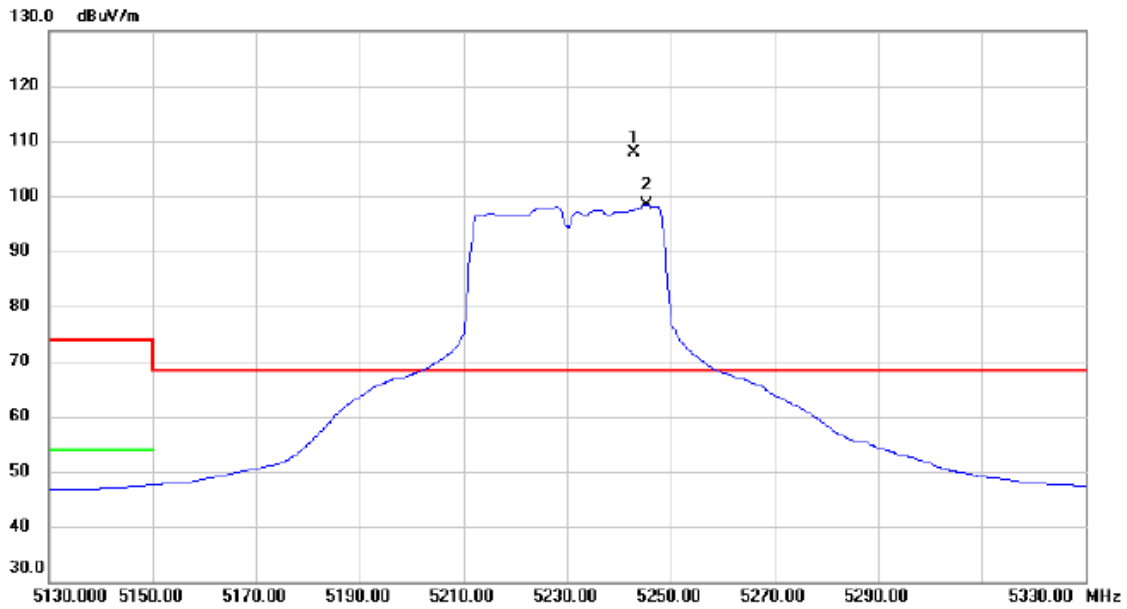


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		10458.32	48.00	1.20	49.20	68.30	-19.10	peak	
2		10461.43	37.44	1.20	38.64	68.30	-29.66	AVG	
3		15688.25	55.39	2.06	57.45	74.00	-16.55	peak	
4	*	15692.07	40.04	2.04	42.08	54.00	-11.92	AVG	



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

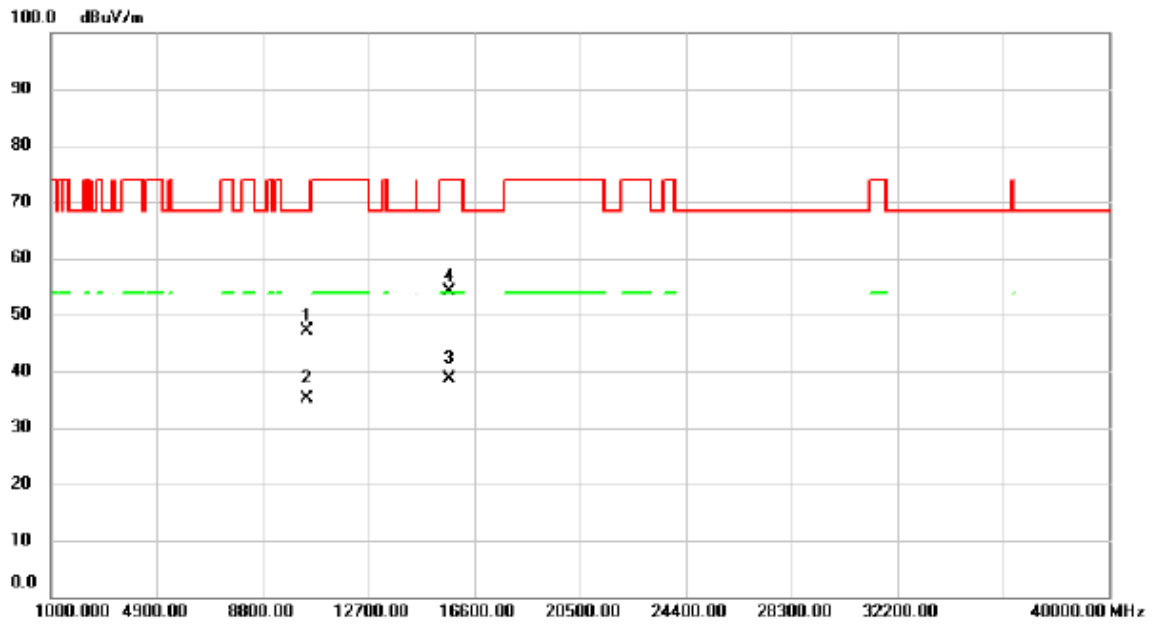
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5242.800	69.79	38.14	107.93	68.30	39.63	peak	No Limit
2	X	5245.400	60.22	38.15	98.37	68.30	30.07	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC40 Mode 5230MHz

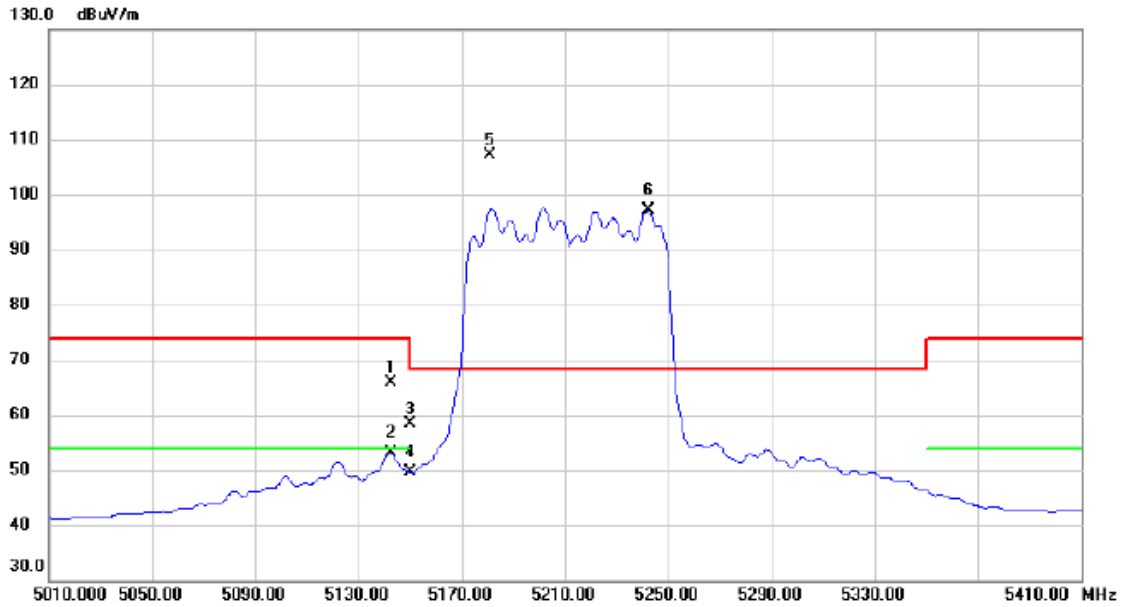
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10459.17	45.95	1.20	47.15	68.30	-21.15	peak	
2		10462.41	33.95	1.21	35.16	68.30	-33.14	AVG	
3	*	15691.06	36.70	2.05	38.75	54.00	-15.25	AVG	
4		15691.14	52.20	2.05	54.25	74.00	-19.75	peak	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

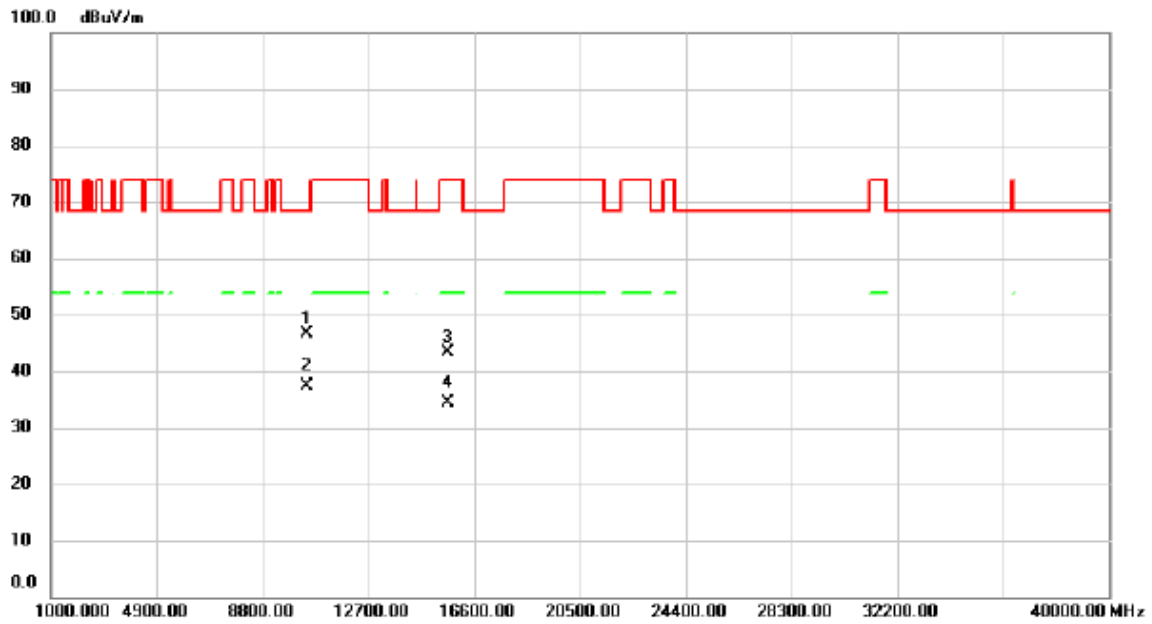
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5142.400	27.90	38.00	65.90	74.00	-8.10	peak	
2		5142.400	15.04	38.00	53.04	54.00	-0.96	AVG	
3		5150.000	20.34	38.01	58.35	74.00	-15.65	peak	
4		5150.000	11.67	38.01	49.68	54.00	-4.32	AVG	
5	*	5181.200	69.11	38.05	107.16	68.30	38.86	peak	No Limit
6	X	5242.000	58.90	38.14	97.04	68.30	28.74	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

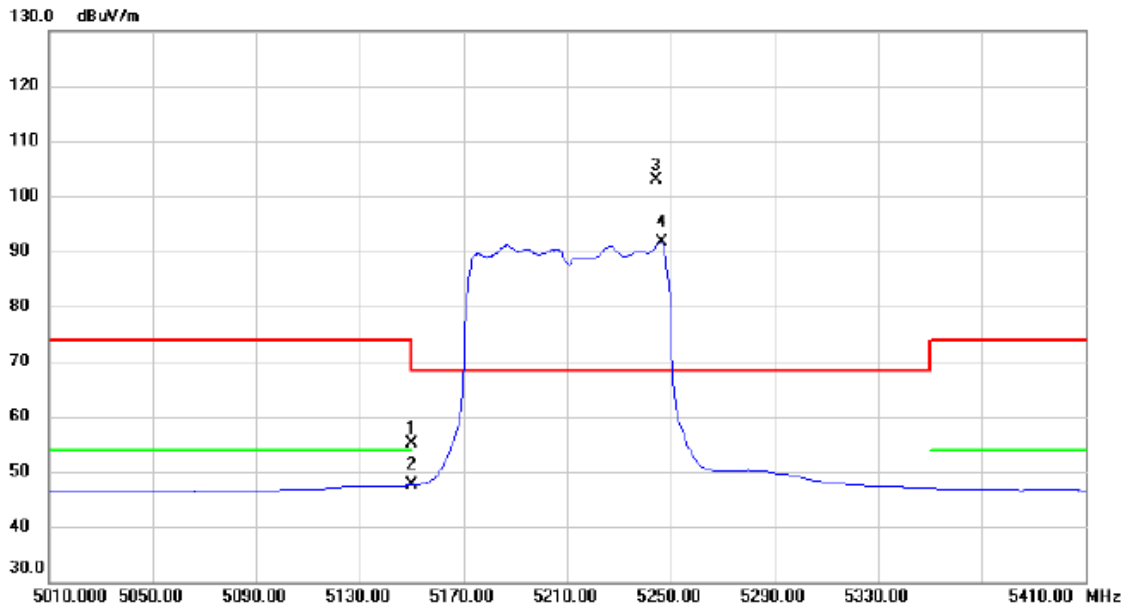
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10417.13	45.55	1.13	46.68	68.30	-21.62	peak	
2		10424.58	36.16	1.14	37.30	68.30	-31.00	AVG	
3		15629.08	41.12	2.16	43.28	74.00	-30.72	peak	
4	*	15631.90	32.15	2.16	34.31	54.00	-19.69	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

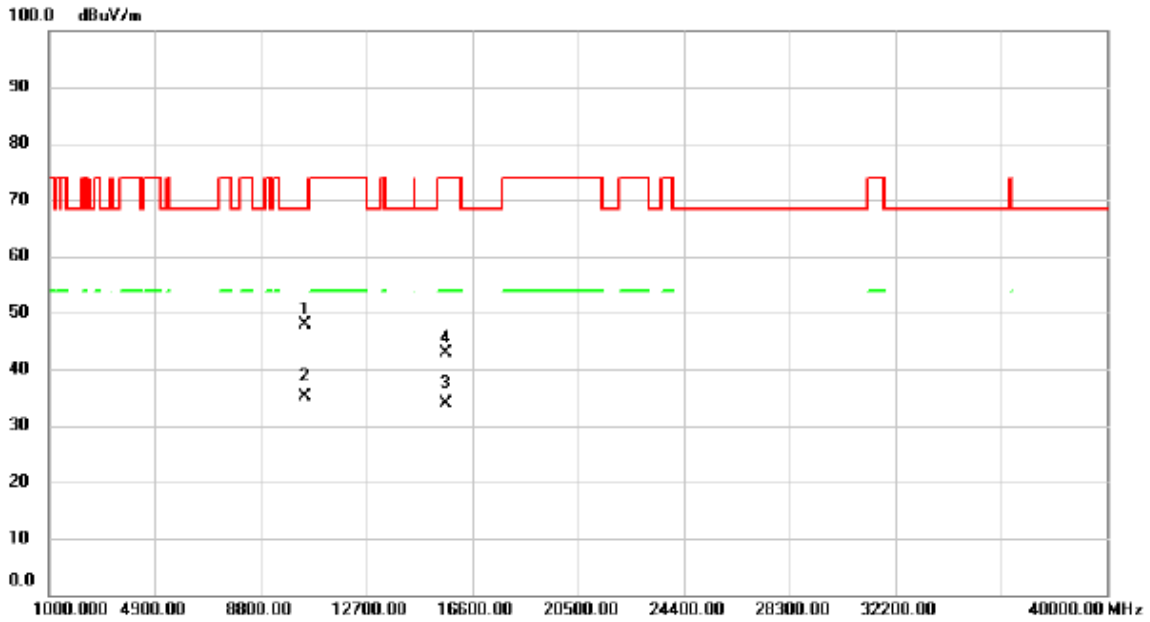
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5150.000	17.01	38.01	55.02	74.00	-18.98	peak	
2		5150.000	9.61	38.01	47.62	54.00	-6.38	AVG	
3	*	5244.400	64.62	38.15	102.77	68.30	34.47	peak	No Limit
4	X	5246.400	53.44	38.15	91.59	68.30	23.29	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-1/ TX AC80 Mode 5210MHz

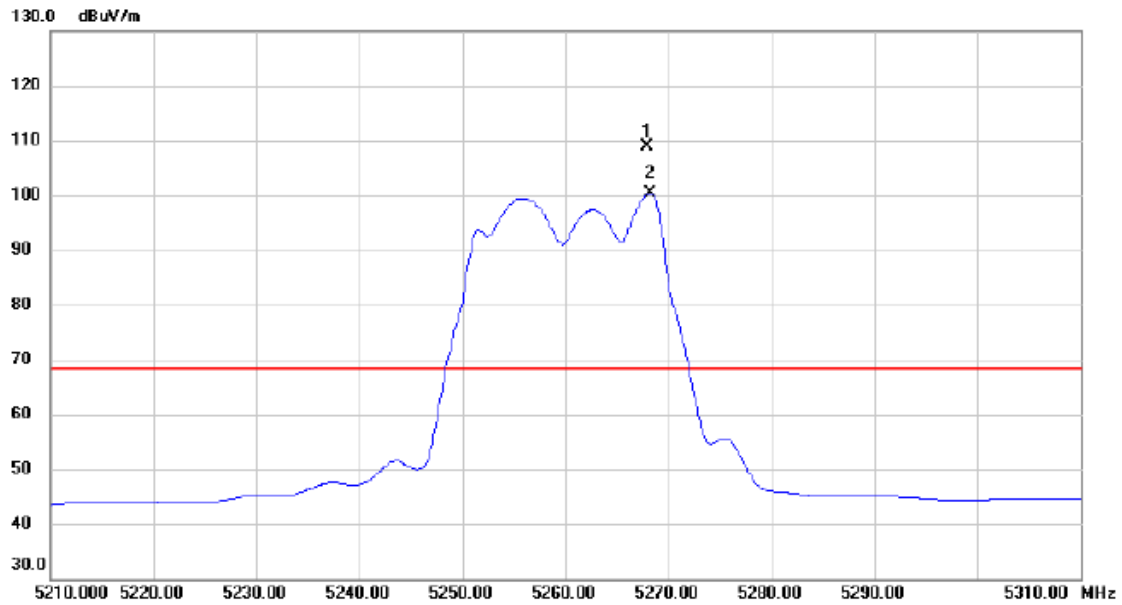
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10417.07	46.85	1.13	47.98	68.30	-20.32	peak	
2		10422.05	33.88	1.14	35.02	68.30	-33.28	AVG	
3	*	15631.46	31.82	2.16	33.98	54.00	-20.02	AVG	
4		15632.17	40.81	2.16	42.97	74.00	-31.03	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5260MHz

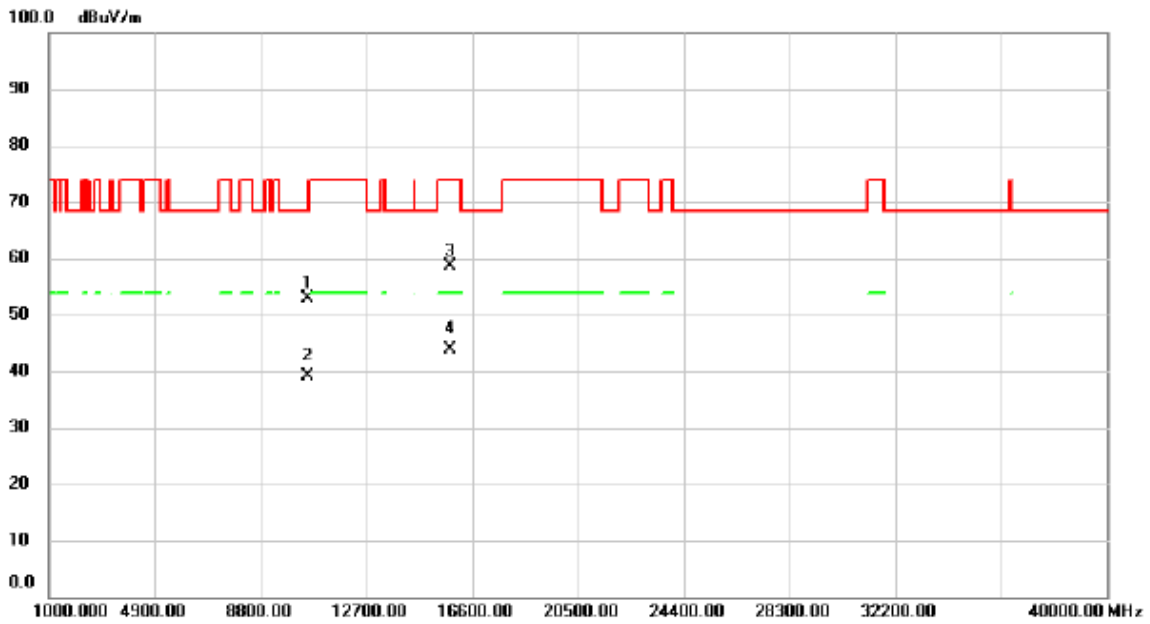
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5267.900	70.75	38.17	108.92	68.30	40.62	peak	No Limit
2	X	5268.200	62.29	38.17	100.46	68.30	32.16	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5260MHz

### Vertical

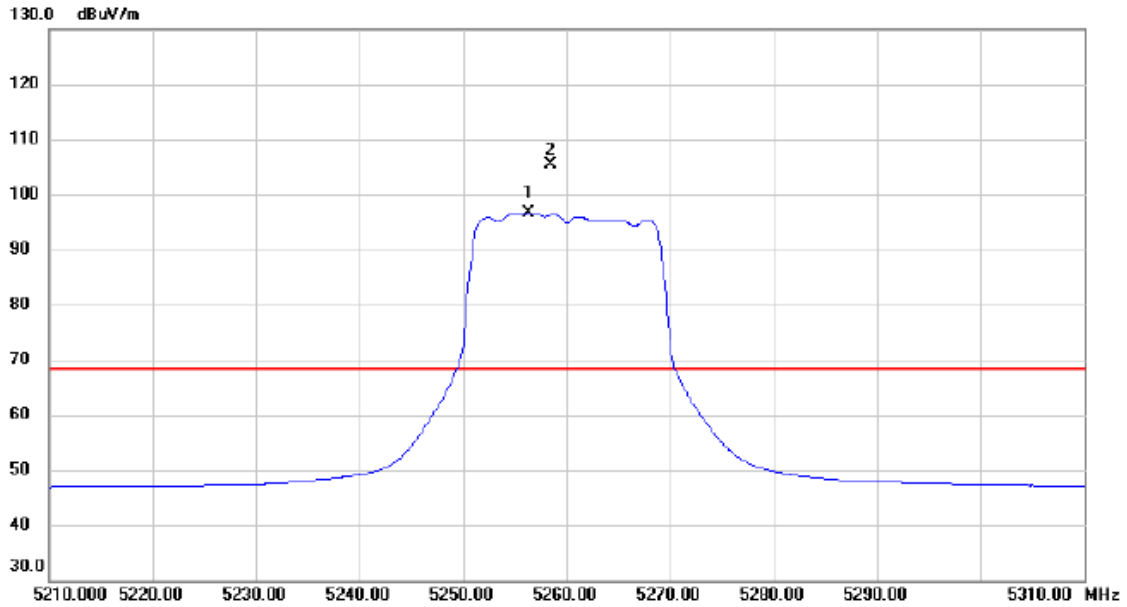


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10518.54	51.64	1.30	52.94	68.30	-15.36	peak	
2		10521.99	37.80	1.30	39.10	68.30	-29.20	AVG	
3		15779.41	56.74	1.91	58.65	74.00	-15.35	peak	
4	*	15781.93	42.11	1.89	44.00	54.00	-10.00	AVG	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5260MHz

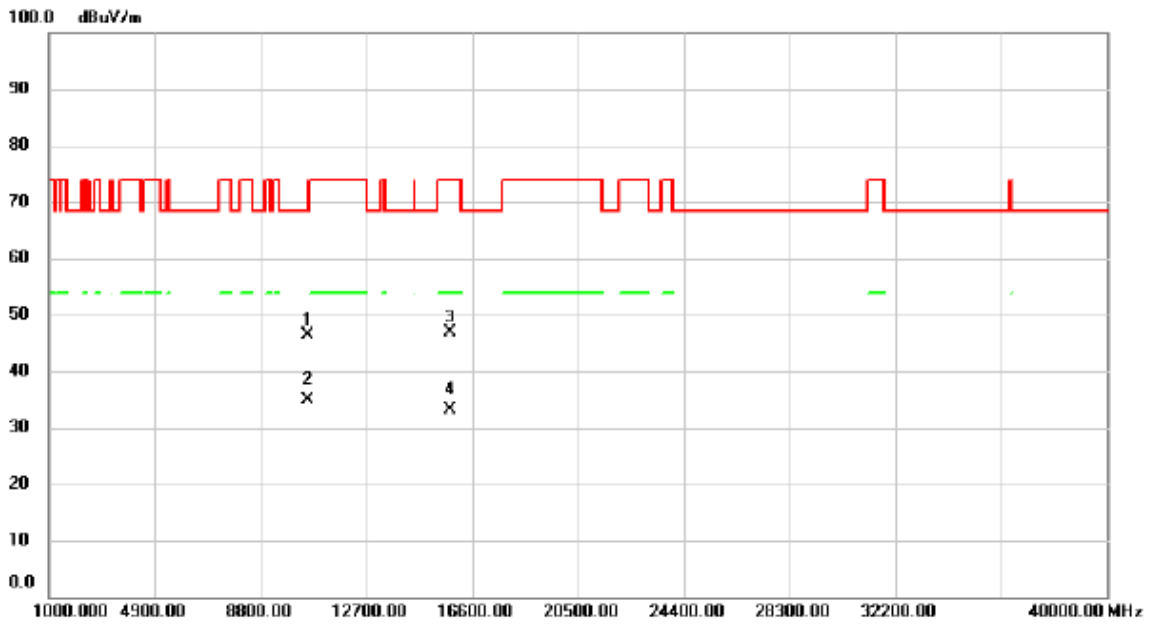
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5256.400	58.36	38.16	96.52	68.30	28.22	AVG	No Limit
2	*	5258.500	67.33	38.17	105.50	68.30	37.20	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5260MHz

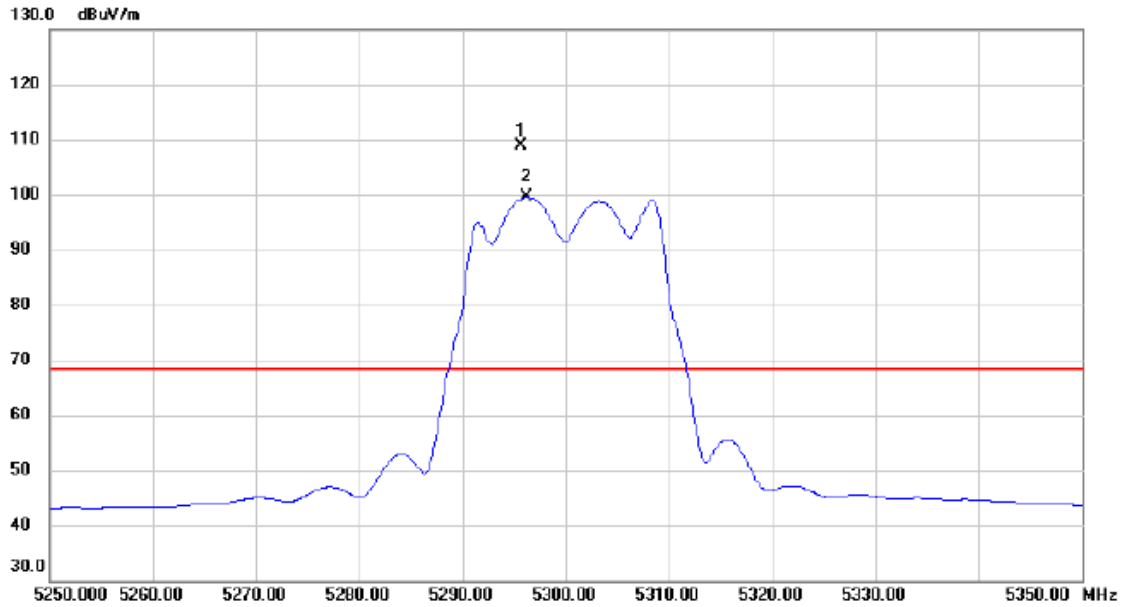
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10522.05	45.16	1.30	46.46	68.30	-21.84	peak	
2		10523.16	33.55	1.32	34.87	68.30	-33.43	AVG	
3		15778.31	44.91	1.91	46.82	74.00	-27.18	peak	
4	*	15780.04	31.31	1.90	33.21	54.00	-20.79	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5300MHz

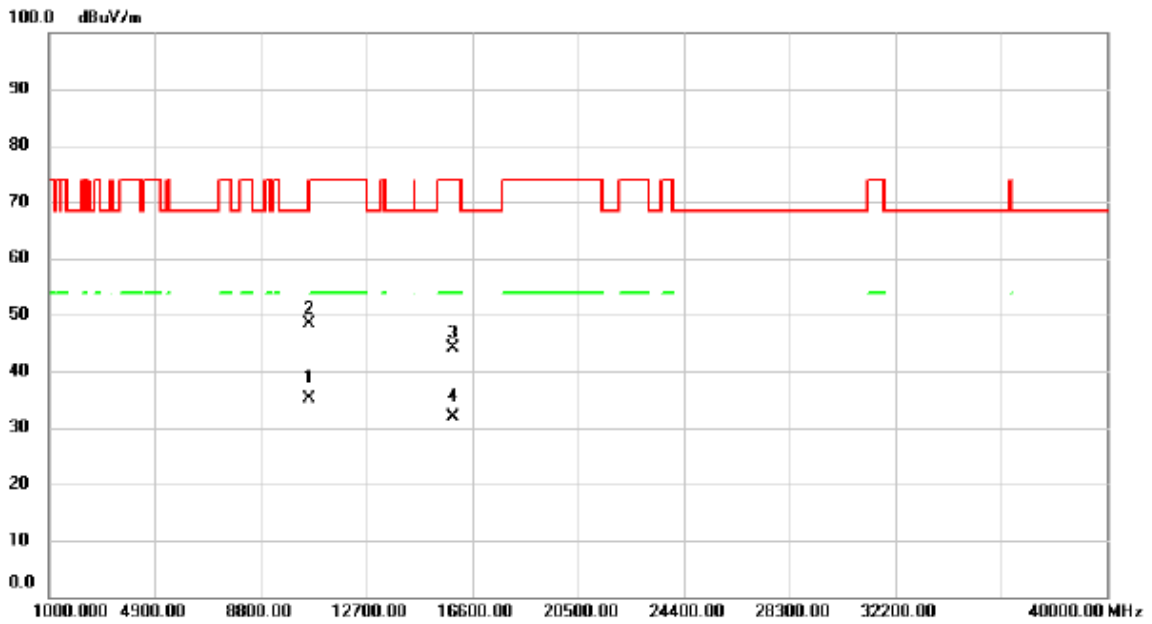
**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5295.700	70.60	38.22	108.82	68.30	40.52	peak	No Limit
2	X	5296.200	61.34	38.22	99.56	68.30	31.26	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5300MHz

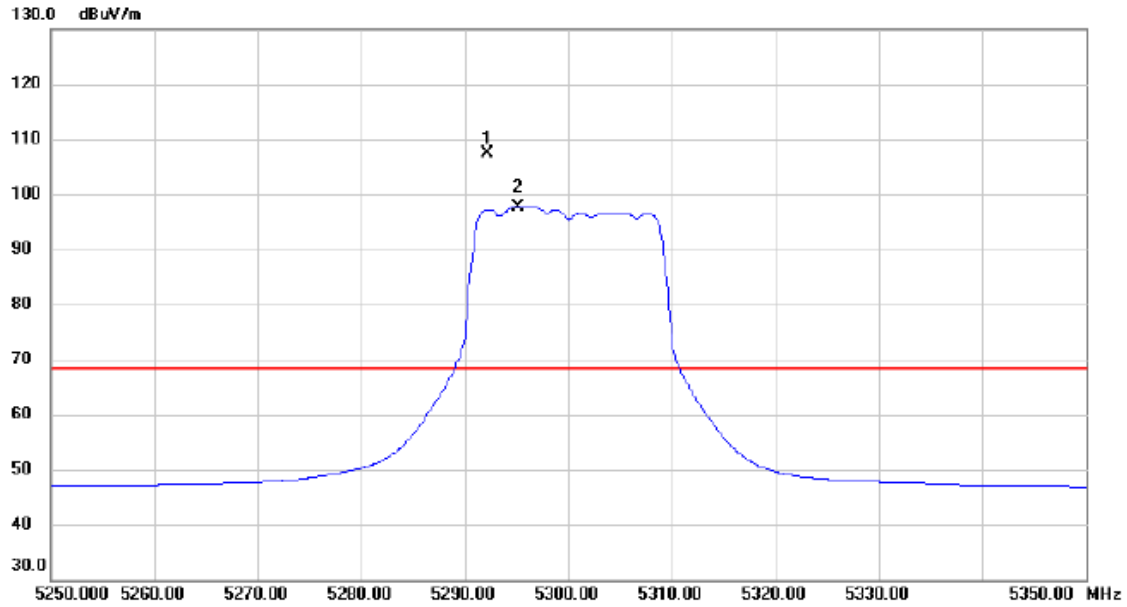
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10601.23	33.64	1.46	35.10	54.00	-18.90	AVG	
2		10605.99	46.92	1.46	48.38	74.00	-25.62	peak	
3		15898.01	42.35	1.70	44.05	74.00	-29.95	peak	
4		15903.68	30.25	1.69	31.94	54.00	-22.06	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5300MHz

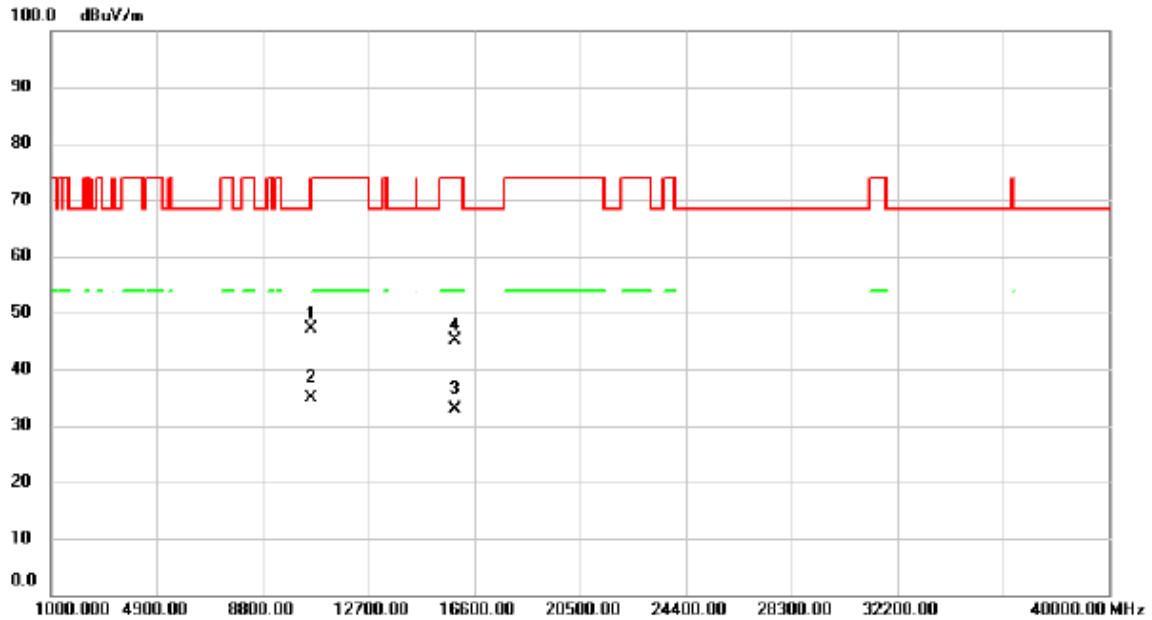
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5292.200	69.23	38.21	107.44	68.30	39.14	peak	No Limit
2	X	5295.100	59.46	38.22	97.68	68.30	29.38	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5300MHz

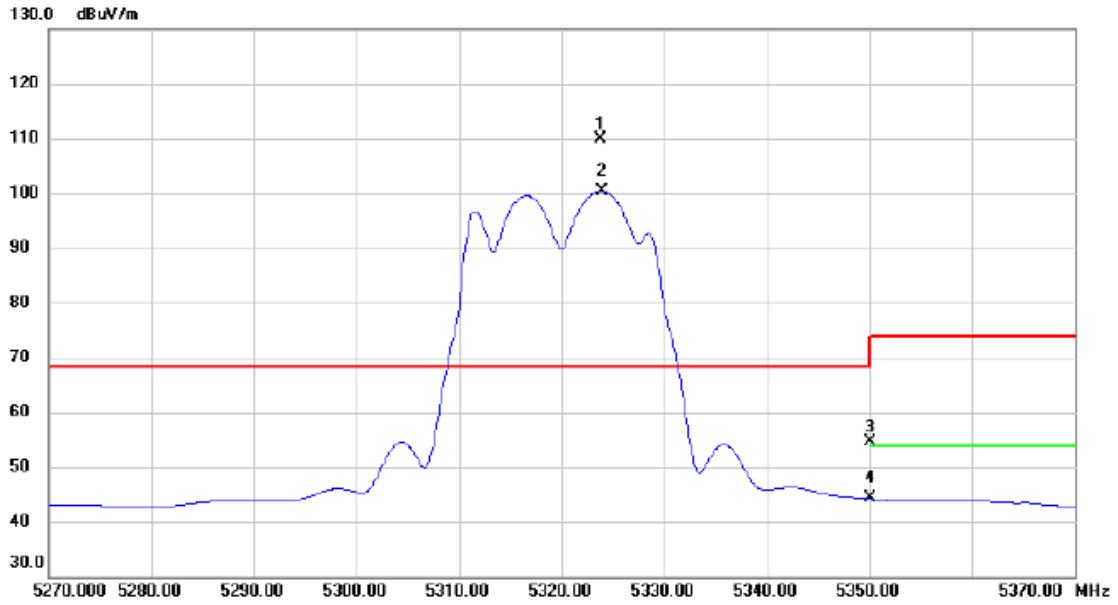
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10599.07	45.57	1.46	47.03	68.30	-21.27	peak	
2	*	10601.15	33.36	1.46	34.82	54.00	-19.18	AVG	
3		15901.93	31.15	1.69	32.84	54.00	-21.16	AVG	
4		15902.68	43.36	1.69	45.05	74.00	-28.95	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5320MHz

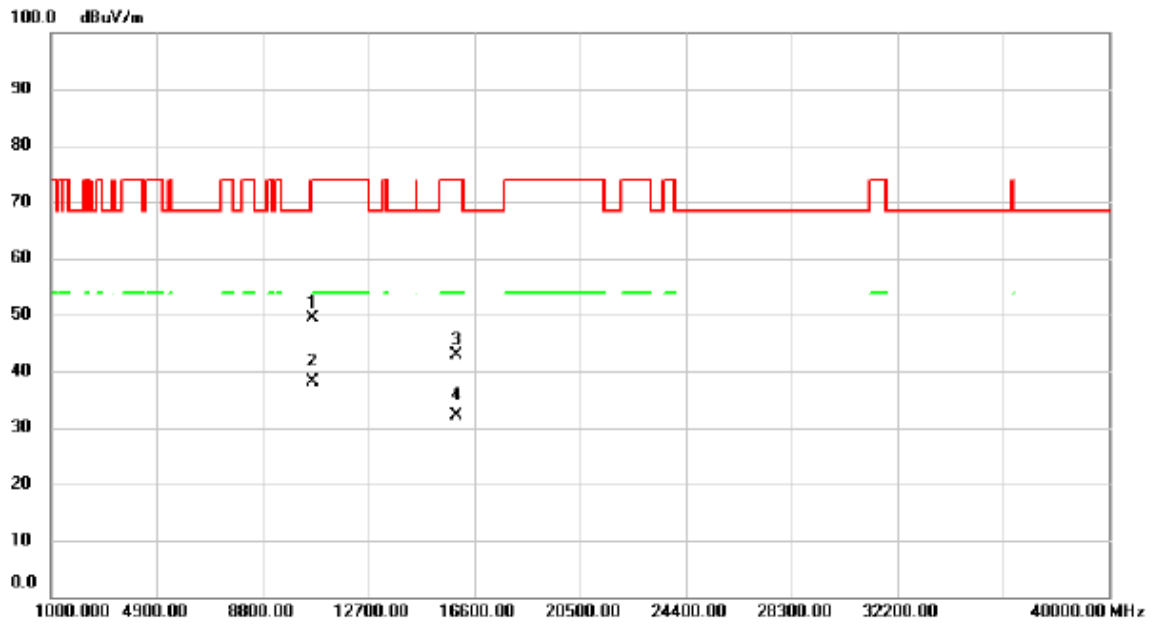
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5323.800	71.53	38.25	109.78	68.30	41.48	peak	No Limit
2	X	5323.900	62.17	38.25	100.42	68.30	32.12	AVG	No Limit
3		5350.000	16.43	38.29	54.72	68.30	-13.58	peak	
4		5350.000	6.00	38.29	44.29	54.00	-9.71	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5320MHz

### Vertical

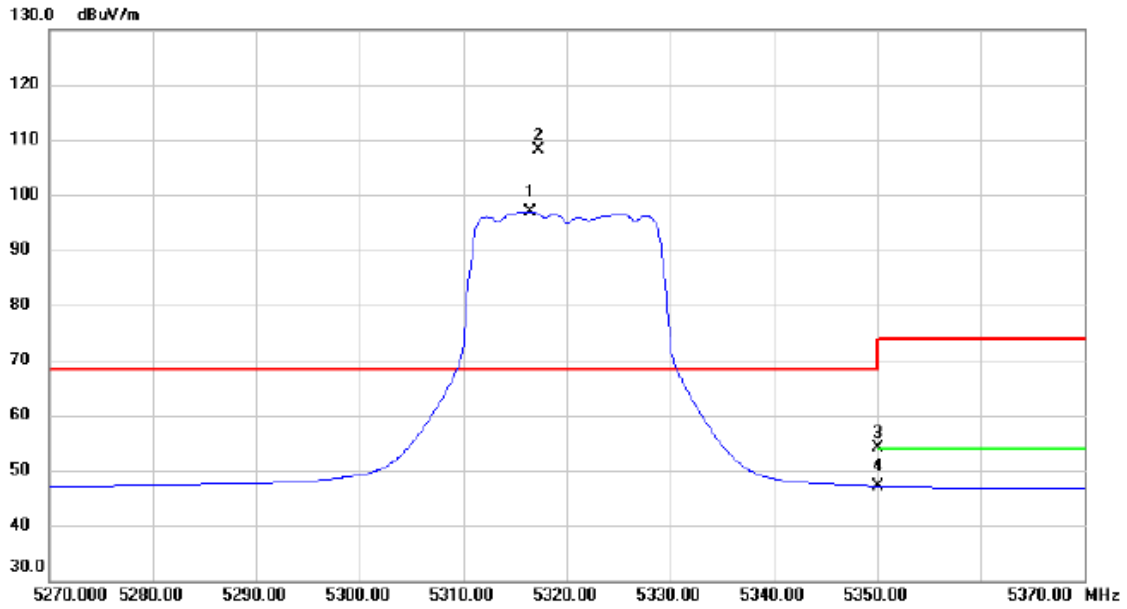


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10642.25	47.74	1.53	49.27	74.00	-24.73	peak	
2	*	10643.19	36.58	1.53	38.11	54.00	-15.89	AVG	
3		15958.77	41.23	1.60	42.83	74.00	-31.17	peak	
4		15959.63	30.54	1.60	32.14	54.00	-21.86	AVG	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5320MHz

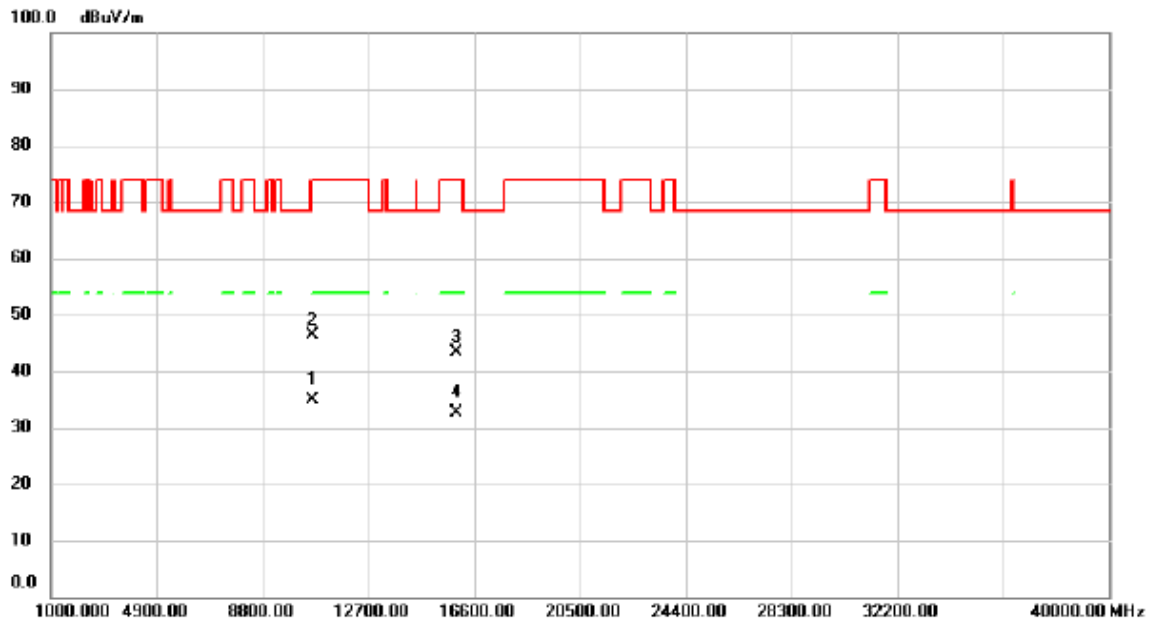
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5316.500	58.67	38.24	96.91	68.30	28.61	AVG	No Limit
2	*	5317.300	69.88	38.24	108.12	68.30	39.82	peak	No Limit
3		5350.000	15.77	38.29	54.06	68.30	-14.24	peak	
4		5350.000	8.89	38.29	47.18	54.00	-6.82	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC20 Mode 5320MHz

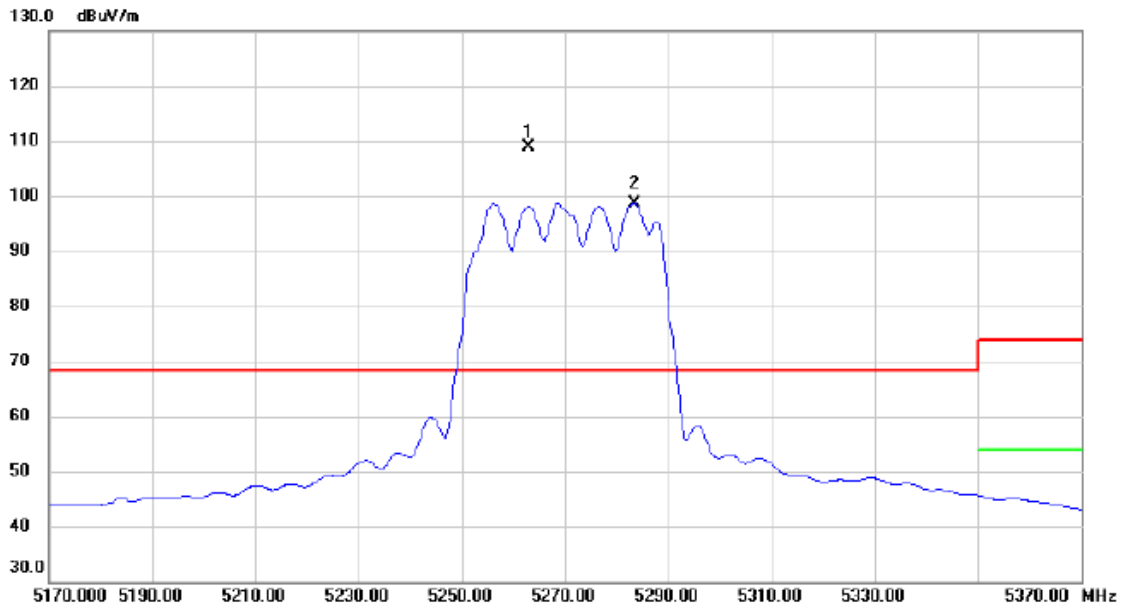
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	10639.29	33.27	1.53	34.80	54.00	-19.20	AVG	
2		10641.13	44.82	1.53	46.35	74.00	-27.65	peak	
3		15958.11	41.84	1.60	43.44	74.00	-30.56	peak	
4		15959.96	31.11	1.59	32.70	54.00	-21.30	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5270MHz

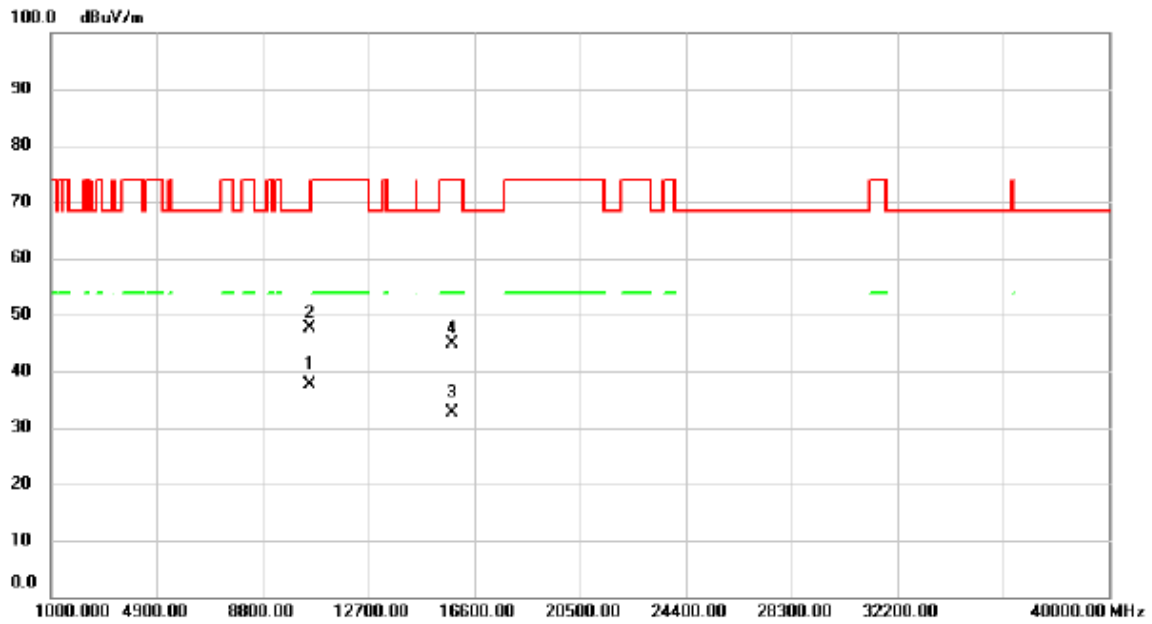
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5263.000	70.69	38.17	108.86	68.30	40.56	peak	No Limit
2	X	5283.400	60.43	38.20	98.63	68.30	30.33	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5270MHz

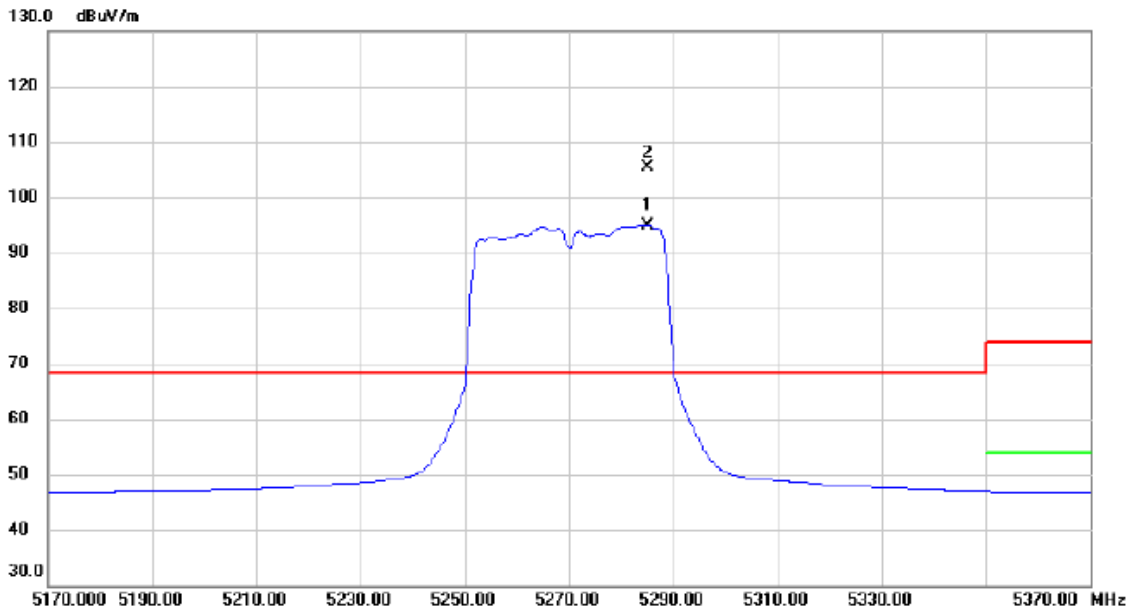
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10538.65	36.35	1.34	37.69	68.30	-30.61	AVG	
2	*	10542.18	46.21	1.36	47.57	68.30	-20.73	peak	
3		15810.93	30.77	1.85	32.62	54.00	-21.38	AVG	
4		15812.08	43.15	1.84	44.99	74.00	-29.01	peak	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5270MHz

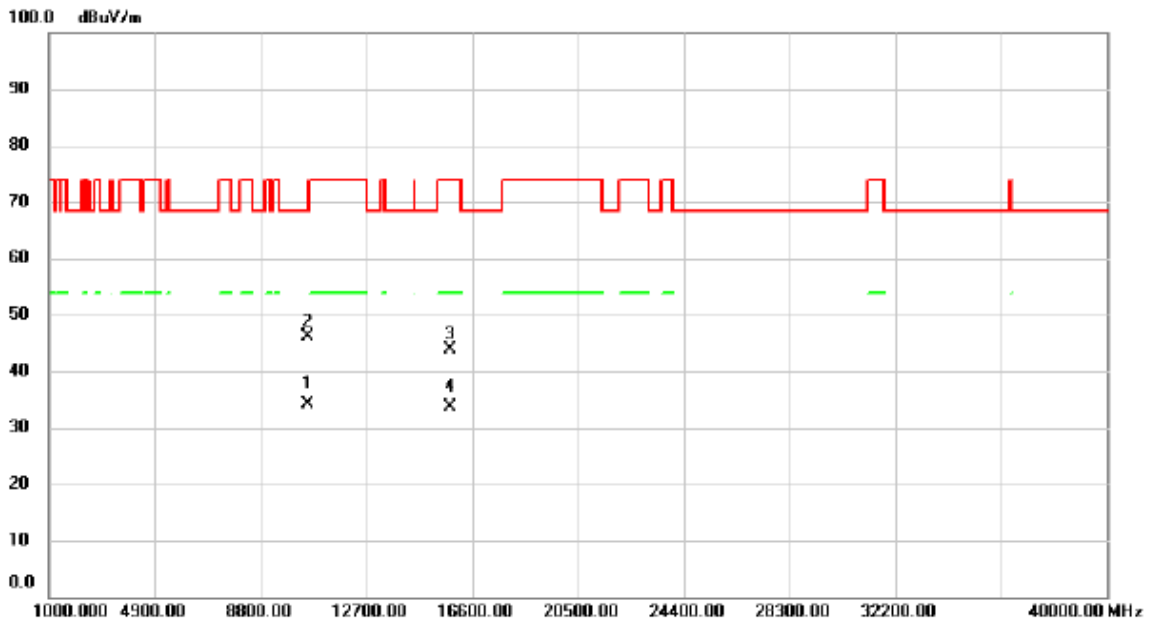
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5285.000	56.76	38.20	94.96	68.30	26.66	AVG	No Limit
2	*	5285.200	67.07	38.20	105.27	68.30	36.97	peak	No Limit

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5270MHz

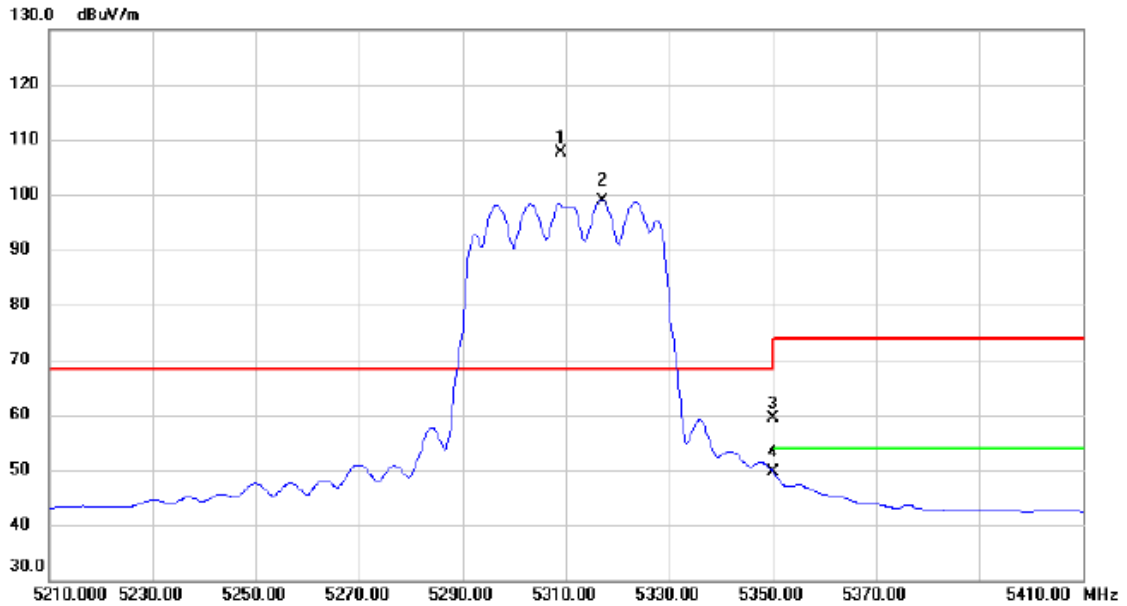
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10539.03	32.78	1.34	34.12	68.30	-34.18	AVG	
2		10541.01	44.75	1.35	46.10	68.30	-22.20	peak	
3		15807.19	41.94	1.86	43.80	74.00	-30.20	peak	
4	*	15812.07	31.67	1.84	33.51	54.00	-20.49	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5310MHz

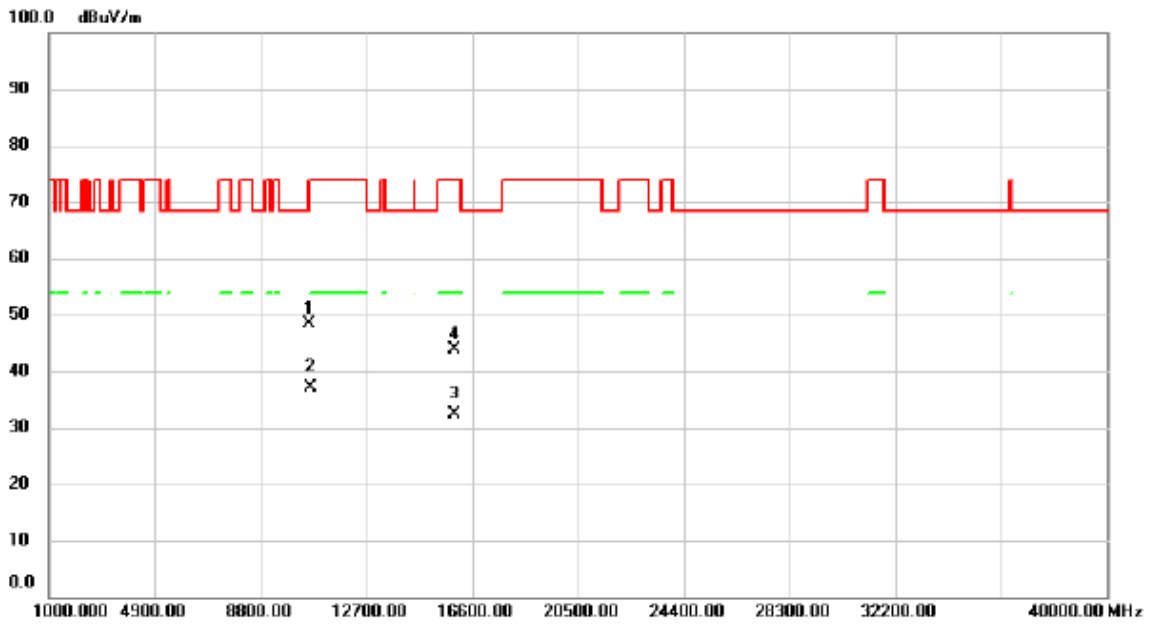
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5309.000	69.32	38.24	107.56	68.30	39.26	peak	No Limit
2	X	5317.000	60.72	38.24	98.96	68.30	30.66	AVG	No Limit
3		5350.000	21.13	38.29	59.42	68.30	-8.88	peak	
4		5350.000	11.45	38.29	49.74	54.00	-4.26	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5310MHz

**Vertical**

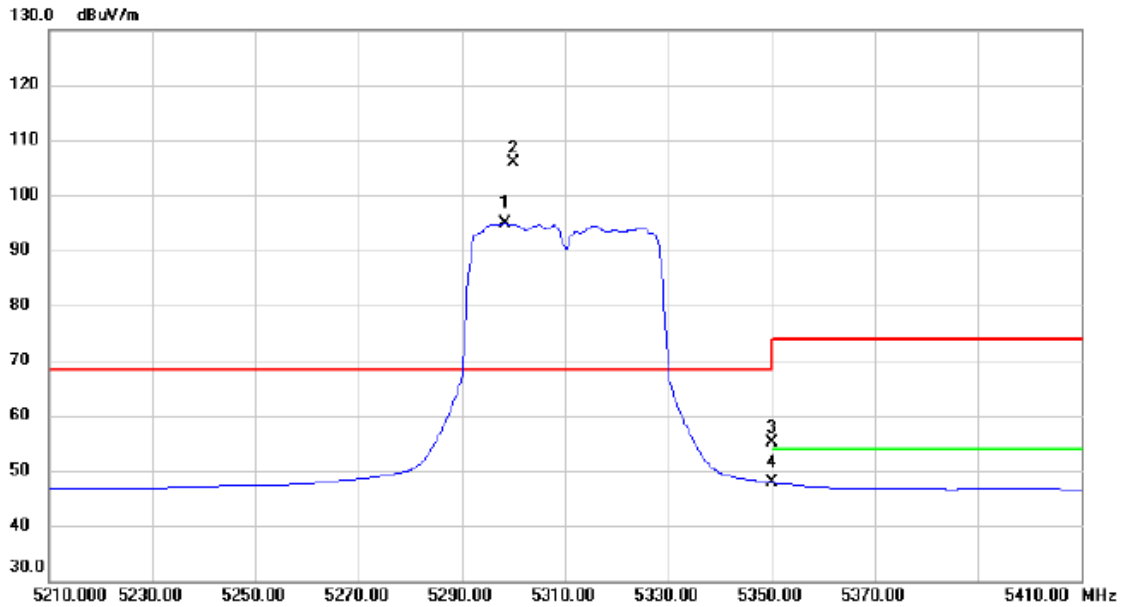


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10617.41	46.85	1.49	48.34	74.00	-25.66	peak	
2	*	10621.23	35.69	1.50	37.19	54.00	-16.81	AVG	
3		15928.31	30.64	1.65	32.29	54.00	-21.71	AVG	
4		15932.13	42.20	1.64	43.84	74.00	-30.16	peak	



Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5310MHz

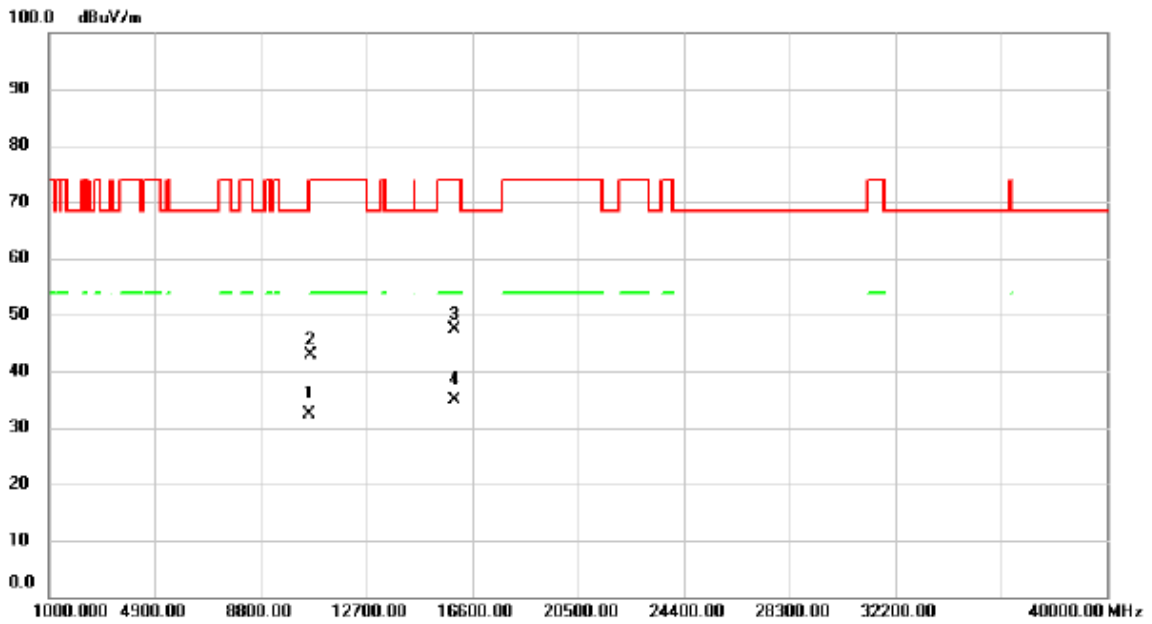
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	5298.400	56.54	38.22	94.76	68.30	26.46	AVG	No Limit
2	*	5300.000	67.62	38.22	105.84	68.30	37.54	peak	No Limit
3		5350.000	16.88	38.29	55.17	68.30	-13.13	peak	
4		5350.000	9.54	38.29	47.83	54.00	-6.17	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC40 Mode 5310MHz

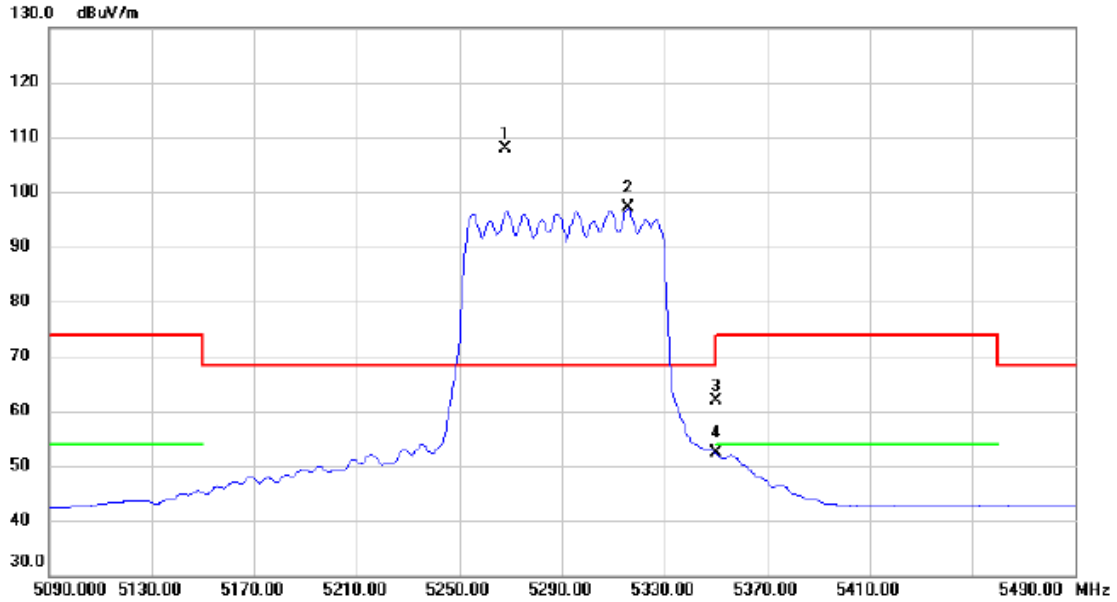
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10618.13	30.97	1.49	32.46	54.00	-21.54	AVG	
2		10620.02	41.36	1.49	42.85	74.00	-31.15	peak	
3		15929.80	45.82	1.64	47.46	74.00	-26.54	peak	
4	*	15931.19	33.16	1.64	34.80	54.00	-19.20	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC80 Mode 5290MHz

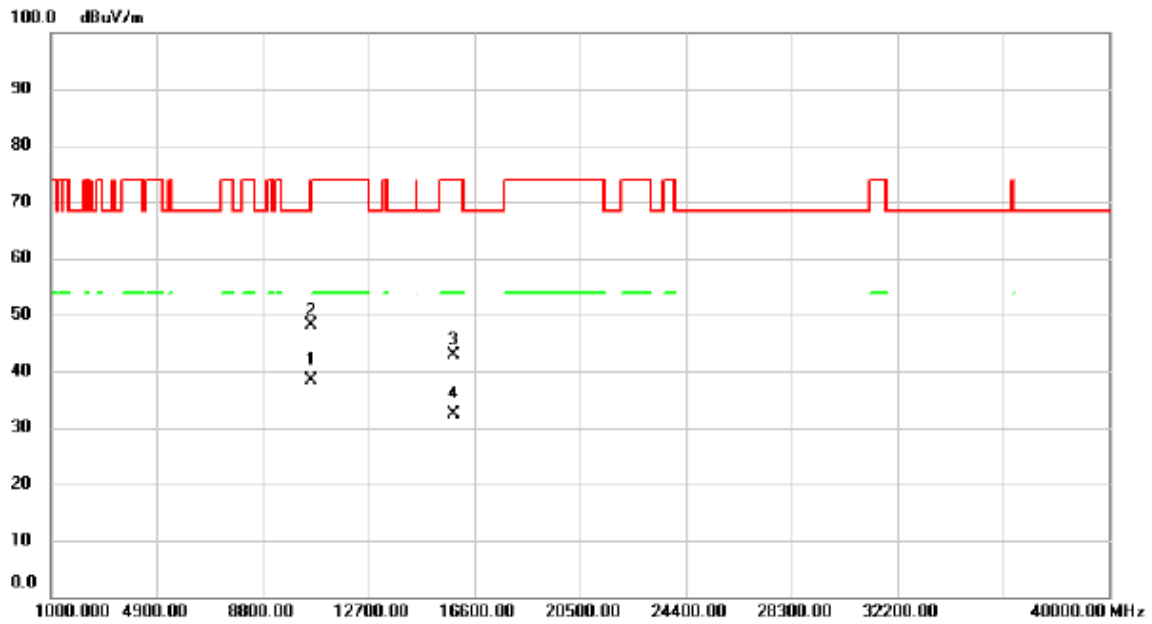
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5268.000	69.80	38.17	107.97	68.30	39.67	peak	No Limit
2	X	5316.000	58.84	38.24	97.08	68.30	28.78	AVG	No Limit
3		5350.000	23.59	38.29	61.88	68.30	-6.42	peak	
4		5350.000	14.00	38.29	52.29	54.00	-1.71	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC80 Mode 5290MHz

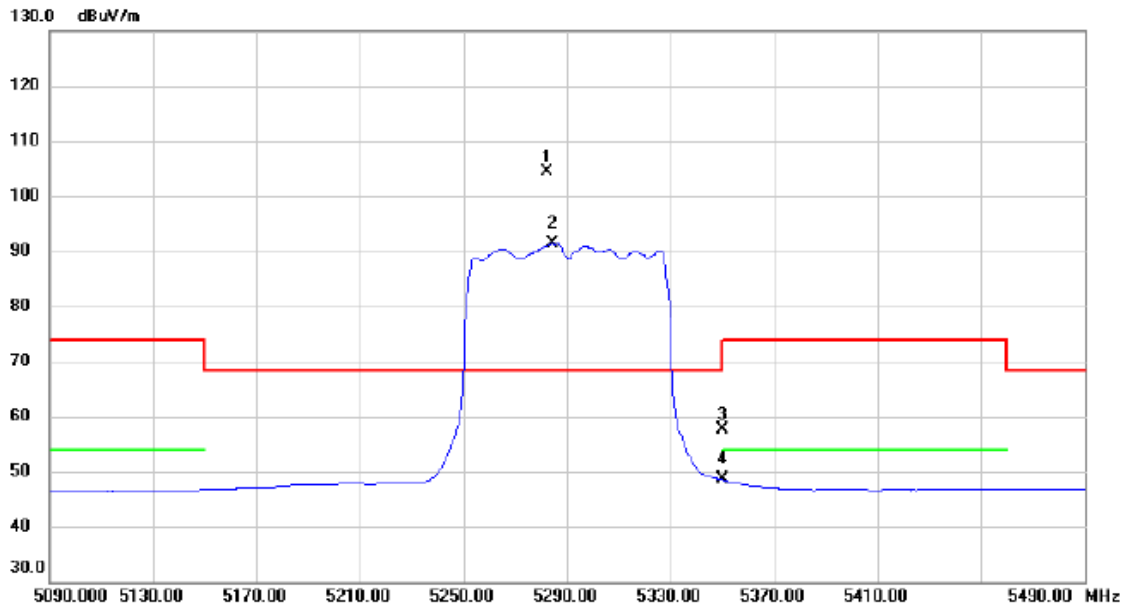
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10581.86	37.00	1.42	38.42	68.30	-29.88	AVG	
2	*	10582.53	46.83	1.42	48.25	68.30	-20.05	peak	
3		15868.14	41.15	1.74	42.89	74.00	-31.11	peak	
4		15869.06	30.76	1.74	32.50	54.00	-21.50	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC80 Mode 5290MHz

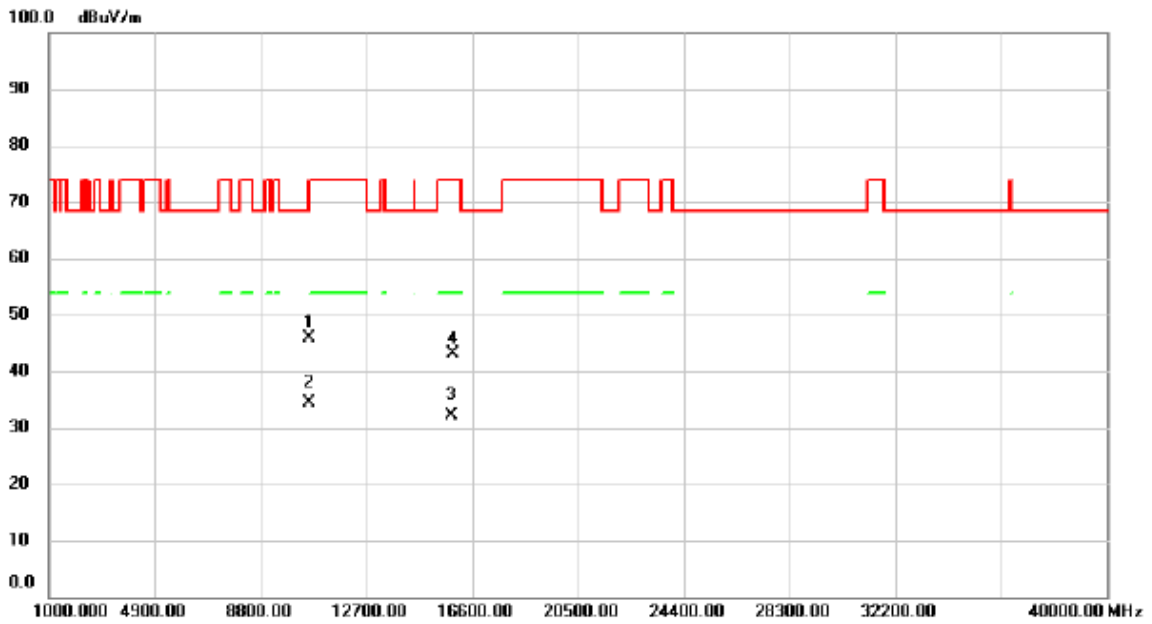
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5282.400	66.25	38.20	104.45	68.30	36.15	peak	No Limit
2	X	5284.400	53.14	38.20	91.34	68.30	23.04	AVG	No Limit
3		5350.000	19.24	38.29	57.53	68.30	-10.77	peak	
4		5350.000	10.23	38.29	48.52	54.00	-5.48	AVG	

Orthogonal Axis :	X
Test Mode :	UNII-2A/ TX AC80 Mode 5290MHz

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		10579.21	44.37	1.42	45.79	68.30	-22.51	peak	
2		10581.46	32.84	1.42	34.26	68.30	-34.04	AVG	
3	*	15871.52	30.44	1.74	32.18	54.00	-21.82	AVG	
4		15873.70	41.43	1.73	43.16	74.00	-30.84	peak	

### Non Beamforming

#### TX A Mode\_DUTY CYCLE

Duty cycle: TX 5180MHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

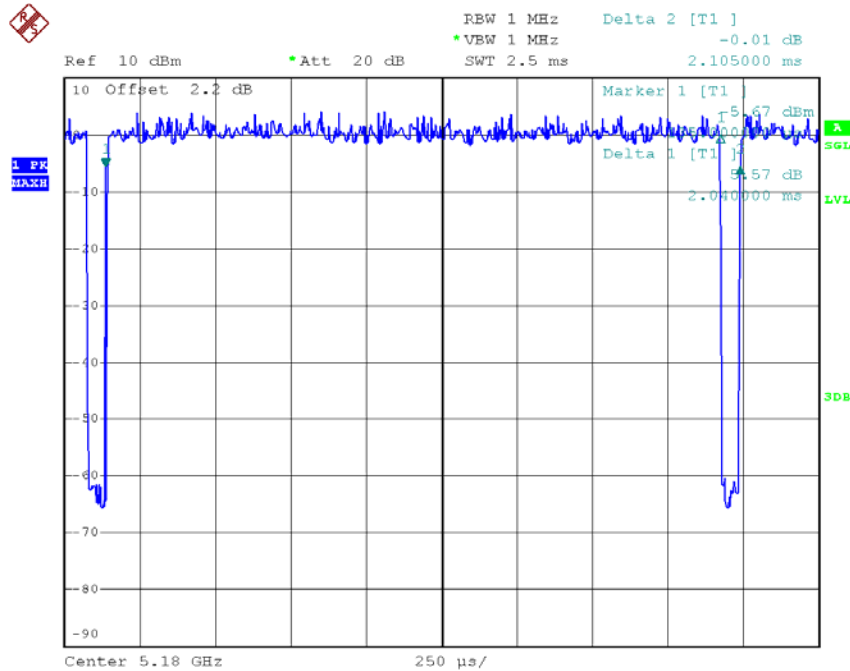
$T_{\text{ON}}$ : 2.04 msec

$T_{\text{Total}}$ : 2.105 msec

Duty cycle: 96.912114%

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0.14



Date: 7.FEB.2018 16:49:11

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### TX N20 Mode\_DUTY CYCLE

Duty cycle: TX 5180MHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

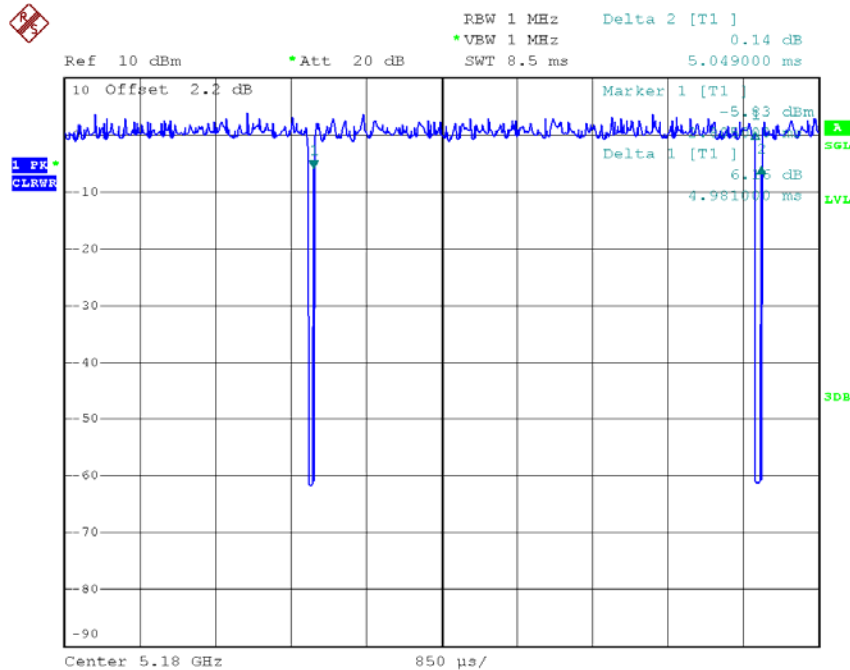
$T_{\text{ON}}$ : 4.981 msec

$T_{\text{Total}}$ : 5.049 msec

Duty cycle: 98.6531987%

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0.06



Date: 7.FEB.2018 16:50:01

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor



**TX N40 Mode\_DUTY CYCLE**

Duty cycle: TX 5190MHz

Duty cycle =  $T_{ON} / T_{Total}$

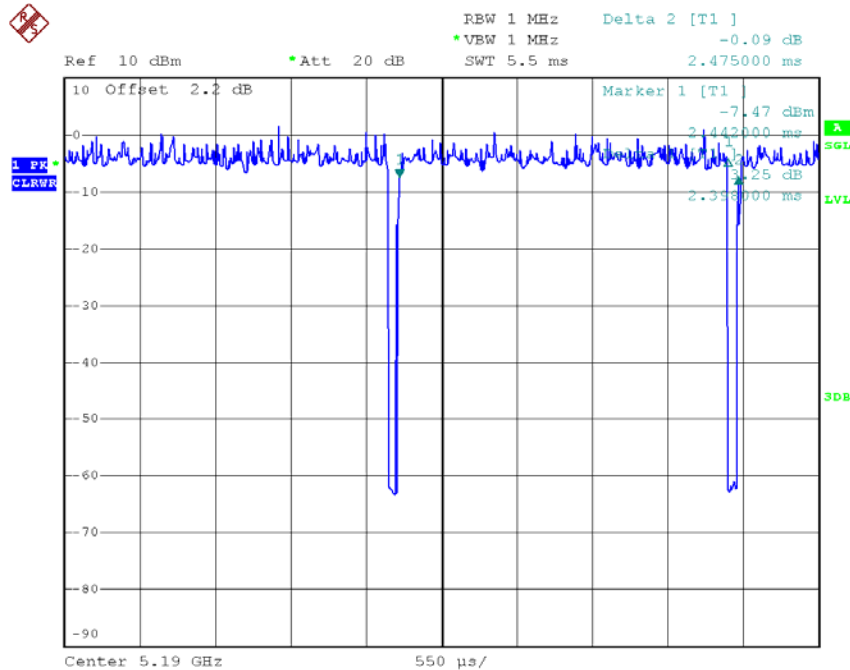
$T_{ON}$ : 2.398 msec

$T_{Total}$ : 2.475 msec

Duty cycle: 96.8888889%

Duty Factor =  $10 \log(1/Duty \ cycle)$

Duty Factor = 0.14



Date: 7.FEB.2018 16:50:52

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### TX AC20 Mode\_DUTY CYCLE

Duty cycle: TX 5180MHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

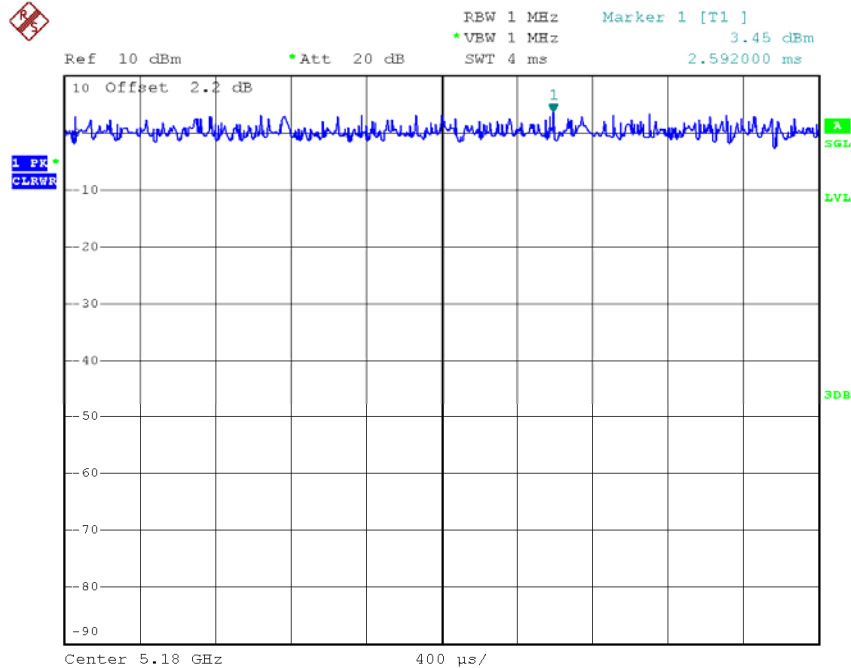
$T_{\text{ON}}$ : 1 msec

$T_{\text{Total}}$ : 1 msec

Duty cycle: 100.00%

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0.00



Date: 7.FEB.2018 16:50:19

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### TX AC40 Mode\_DUTY CYCLE

Duty cycle: TX 5190MHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

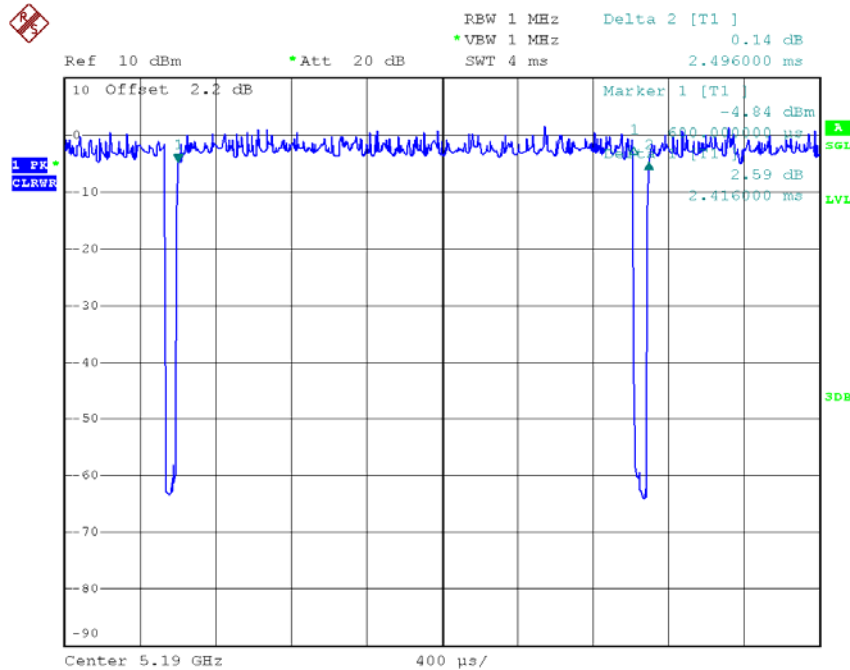
$T_{\text{ON}}$ : 2.416 msec

$T_{\text{Total}}$ : 2.496 msec

Duty cycle: 96.7948718%

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0.14



Date: 7.FEB.2018 16:51:15

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

**TX AC80 Mode\_DUTY CYCLE**

Duty cycle: TX 5210MHz

Duty cycle =  $T_{ON} / T_{Total}$

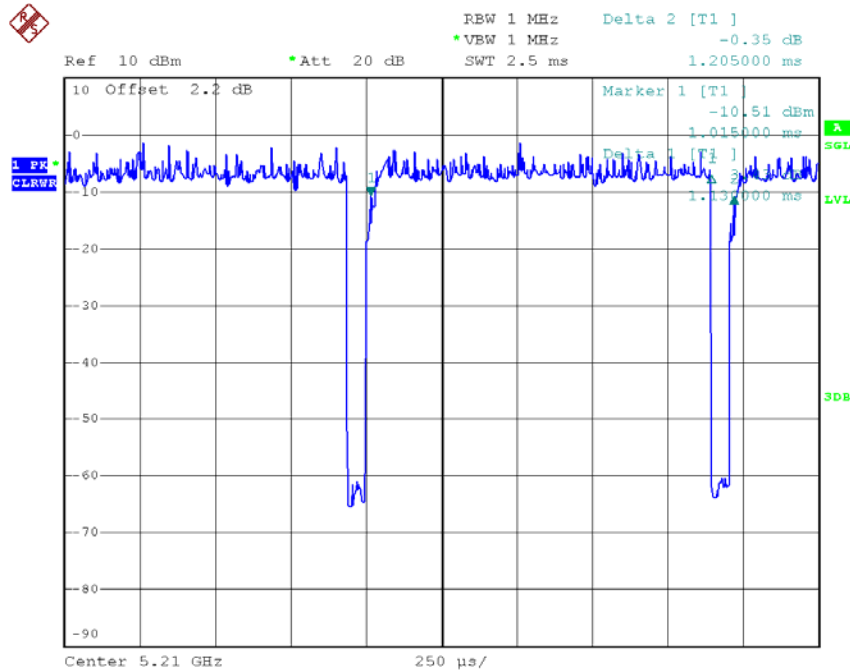
$T_{ON}$ : 1.13 msec

$T_{Total}$ : 1.205msec

Duty cycle: 93.7759336%

Duty Factor =  $10 \log(1/Duty \ cycle)$

Duty Factor = 0.28



Date: 7.FEB.2018 16:51:32

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### Beamforming

#### TX A Mode\_DUTY CYCLE

Duty cycle: TX 5180MHz

Duty cycle =  $T_{ON} / T_{Total}$

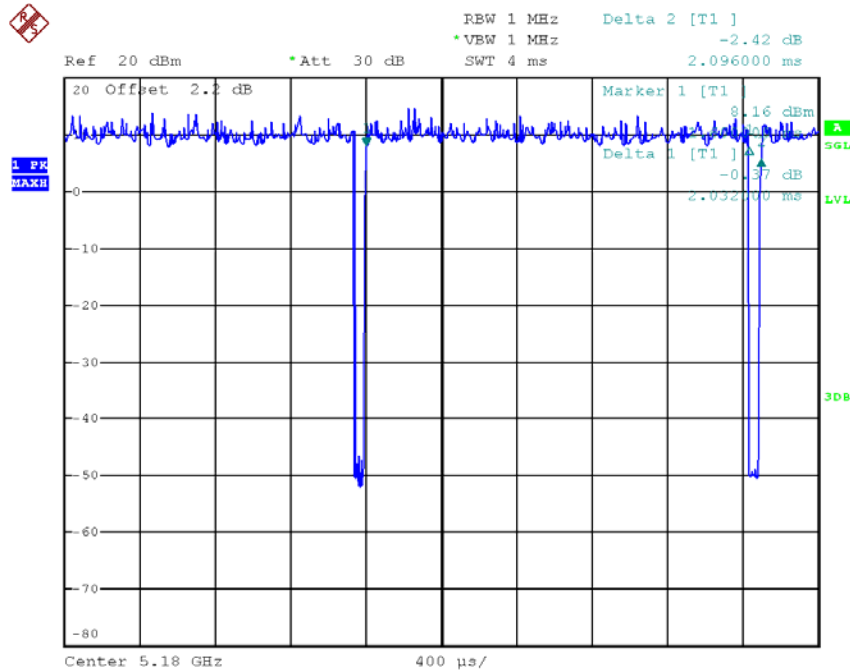
$T_{ON}$ : 2.032 msec

$T_{Total}$ : 2.096 msec

Duty cycle: 96.9465649%

Duty Factor =  $10 \log(1/\text{Duty cycle})$

Duty Factor = 0.13



Date: 1.FEB.2018 16:57:53

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as  
 Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### TX N20 Mode\_DUTY CYCLE

Duty cycle: TX 5180MHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

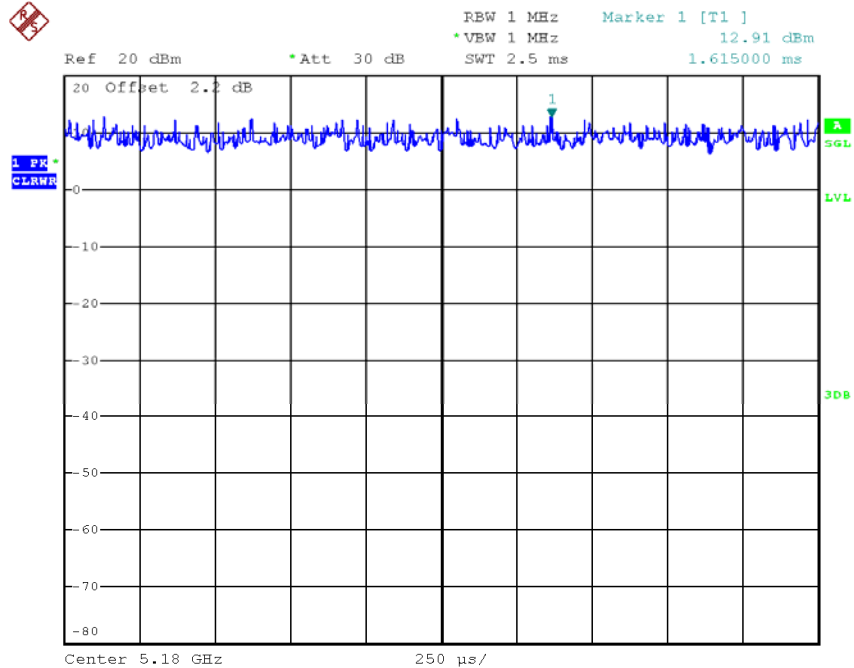
$T_{\text{ON}}$ : 1 msec

$T_{\text{Total}}$ : 1 msec

Duty cycle: 100%

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0



Date: 1.FEB.2018 16:59:28

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

**TX N40 Mode\_DUTY CYCLE**

Duty cycle: TX 5190MHz

Duty cycle =  $T_{ON} / T_{Total}$

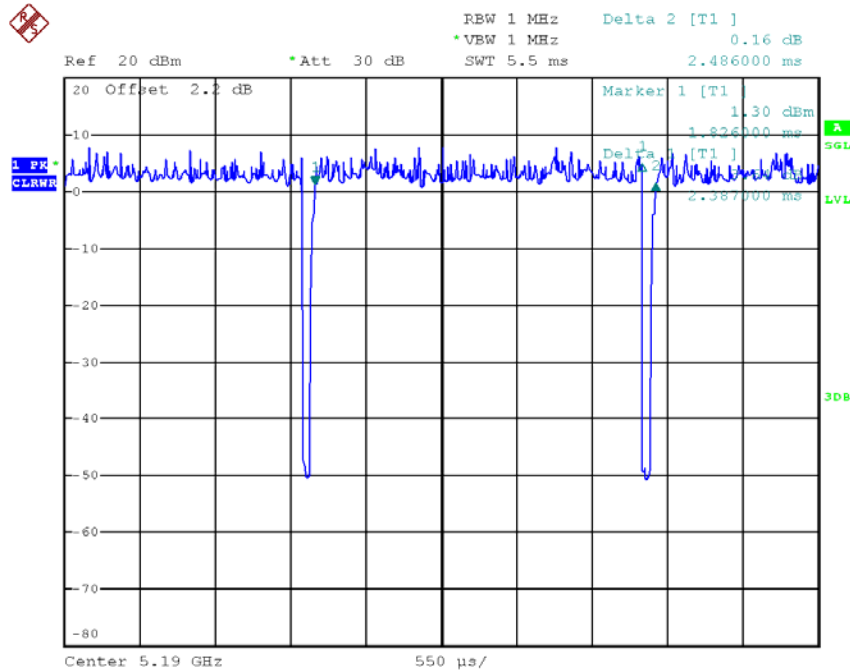
$T_{ON}$ : 2.387 msec

$T_{Total}$ : 2.486 msec

Duty cycle: 96.0176991%

Duty Factor =  $10 \log(1/Duty \ cycle)$

Duty Factor = 0.18



Date: 1.FEB.2018 17:47:37

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor

### TX AC20 Mode\_DUTY CYCLE

Duty cycle: TX 5180MHz

$$\text{Duty cycle} = T_{\text{ON}} / T_{\text{Total}}$$

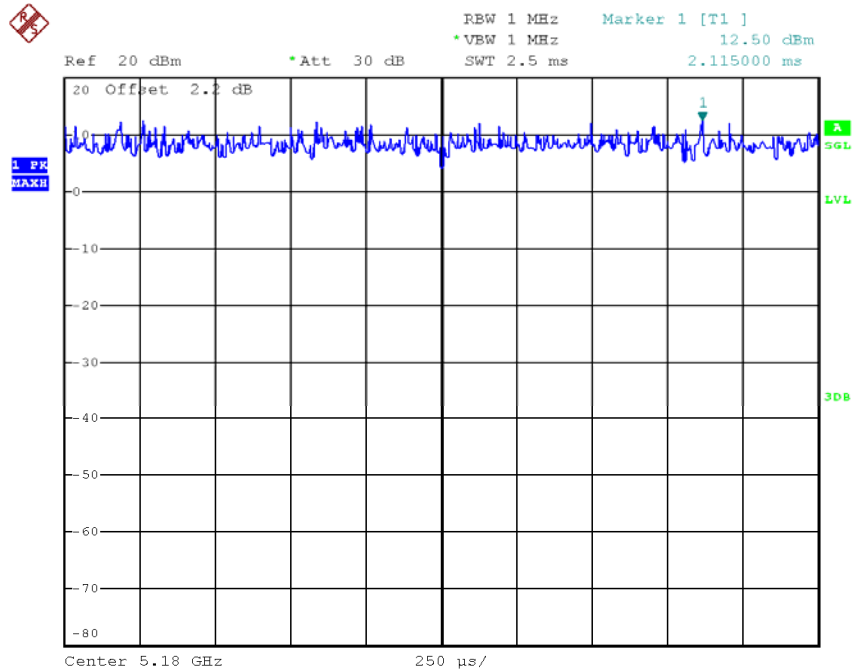
$T_{\text{ON}}$ : 1 msec

$T_{\text{Total}}$ : 1 msec

Duty cycle: 100.00%

$$\text{Duty Factor} = 10 \log(1/\text{Duty cycle})$$

Duty Factor = 0.00



Date: 1.FEB.2018 17:47:01

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be calculated as  
 Output Power = Measured power + Duty factor  
 Power Spectral Density = Measured density + Duty factor



**TX AC40 Mode\_DUTY CYCLE**

Duty cycle: TX 5190MHz

Duty cycle =  $T_{ON} / T_{Total}$

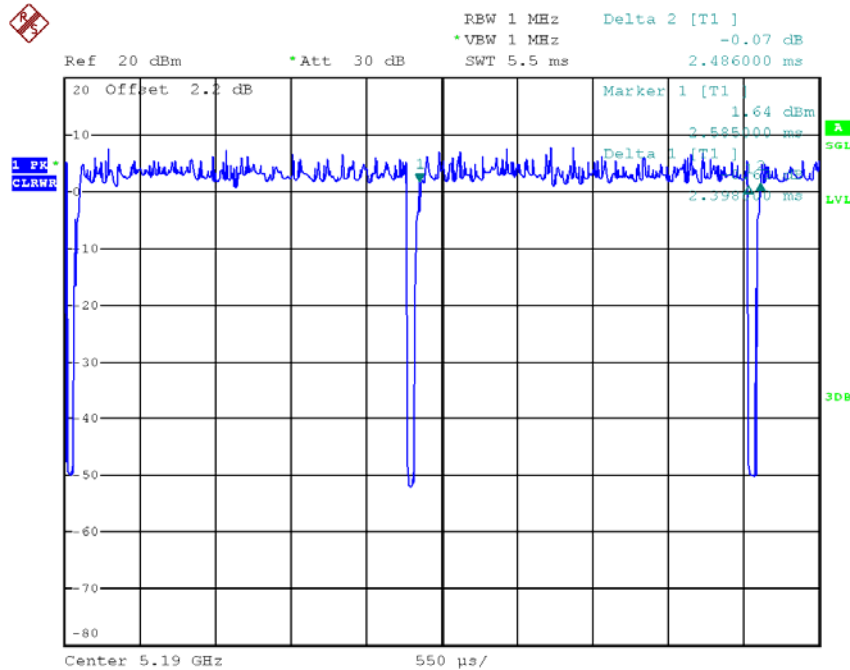
$T_{ON}$ : 2.398 msec

$T_{Total}$ : 2.486 msec

Duty cycle: 96.4601%

Duty Factor =  $10 \log(1/Duty \text{ cycle})$

Duty Factor = 0.16



Date: 1.FEB.2018 17:48:20

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be cacluated as Output Power = Measured power + Ducy factor  
 Power Spectral Density = Measured density + Duty factor

**TX AC80 Mode\_DUTY CYCLE**

Duty cycle: TX 5210MHz

Duty cycle =  $T_{ON} / T_{Total}$

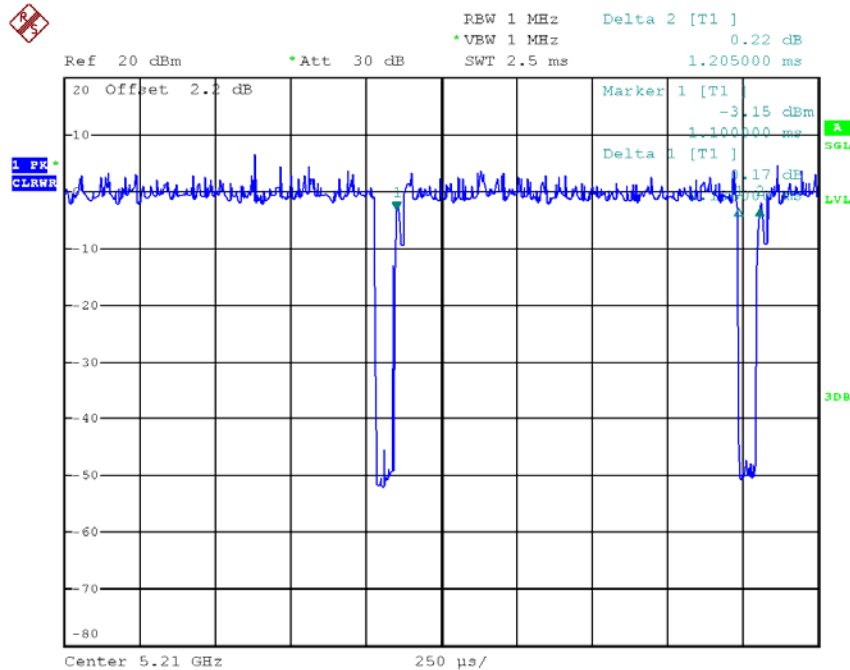
$T_{ON}$ : 1.135 msec

$T_{Total}$ : 1.205msec

Duty cycle: 0.941908714%

Duty Factor =  $10 \log(1/Duty \text{ cycle})$

Duty Factor = 0.26



Date: 1.FEB.2018 17:00:21

Note: The EUT was programmed to be in countinously transmitting mode and the transmit duty cycle is not less than 98 %, so, the output power and power density should be cacluated as Output Power = Measured power + Ducusy factor  
 Power Spectral Density = Measured density + Duty factor

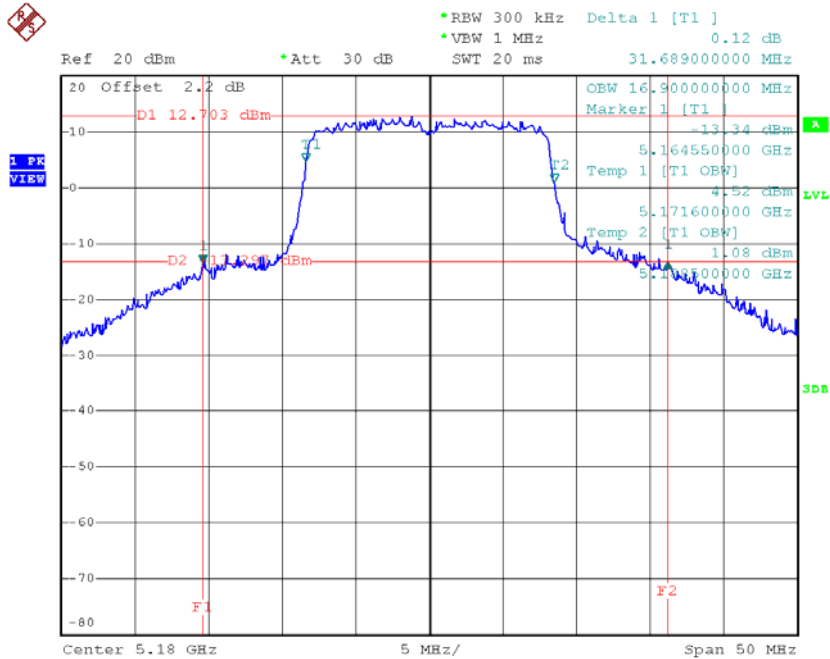
## APPENDIX E - BANDWIDTH

### Non Beamforming

**Test Mode: UNII-1/TX A Mode\_CH36/CH40/CH48\_Ant 5**

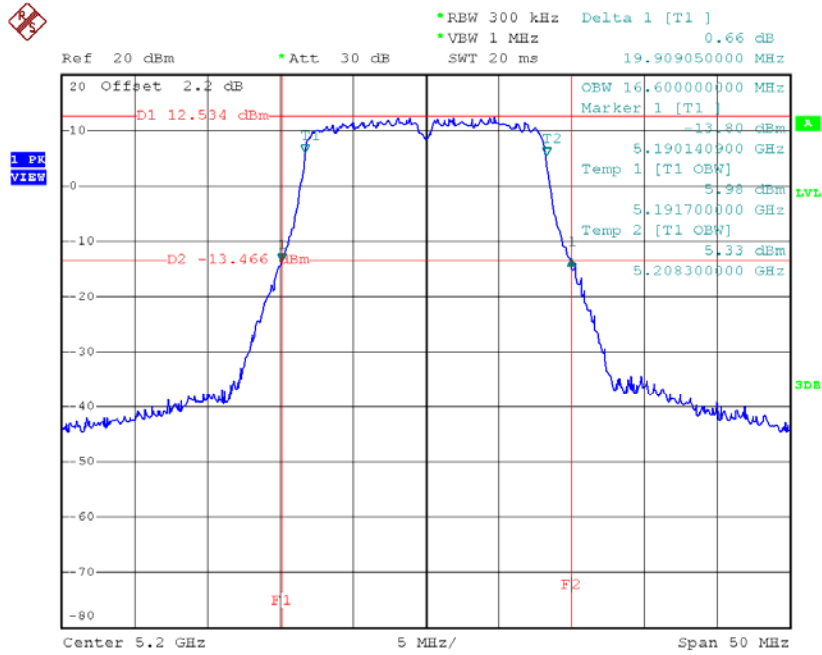
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	31.69	16.90
CH40	5200	19.91	16.60
CH48	5240	20.35	16.50

#### TX CH36



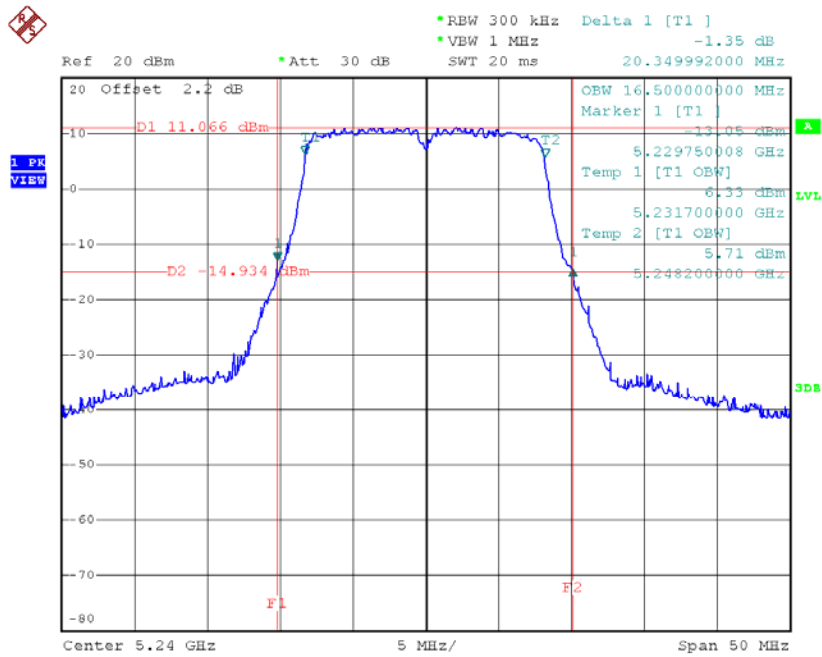
Date: 2.MAR.2018 18:59:24

**TX CH40**



Date: 2.MAR.2018 18:59:55

**TX CH48**

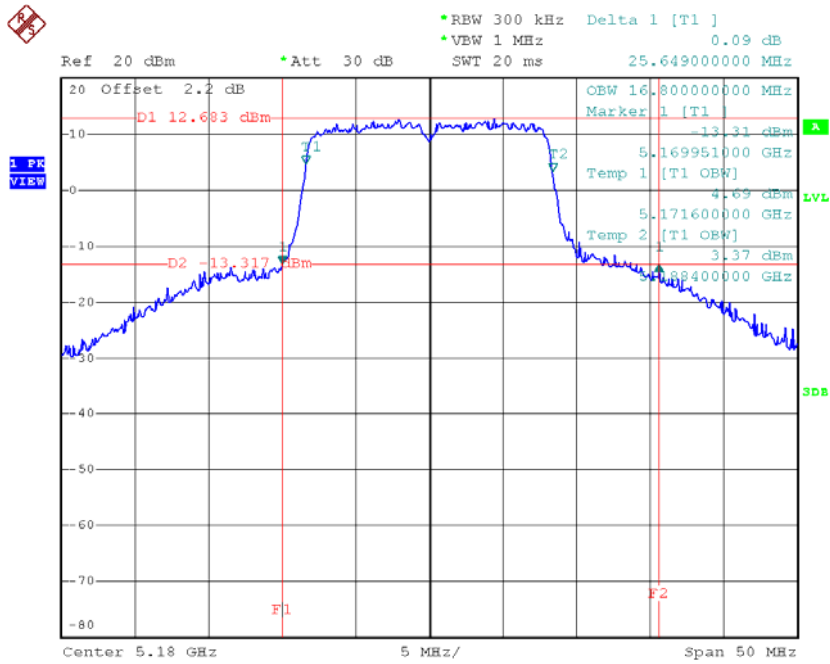


Date: 2.MAR.2018 19:03:15

**Test Mode: UNII-1/TX A Mode\_CH36/CH40/CH48\_Ant 6**

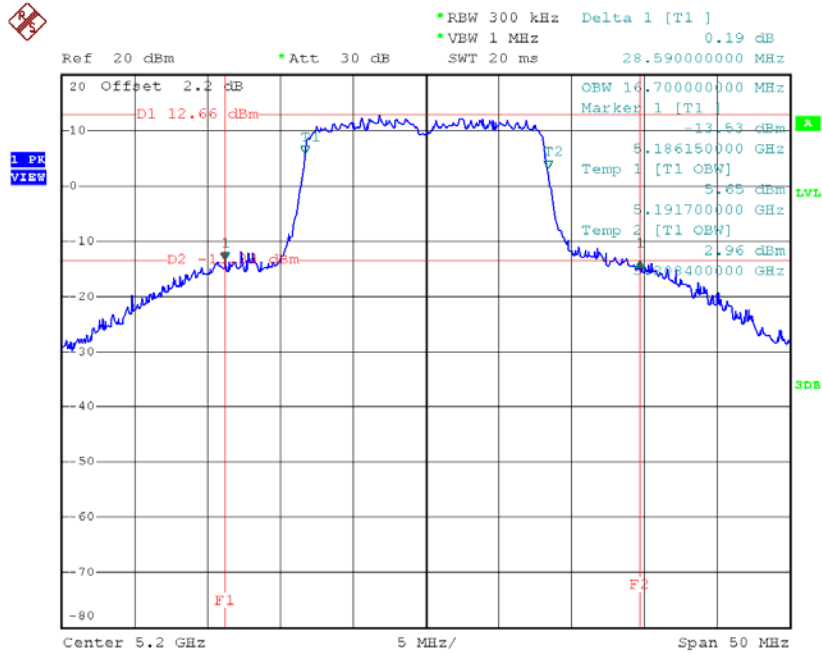
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	25.65	16.80
CH40	5200	28.59	16.70
CH48	5240	20.89	16.50

**TX CH36**



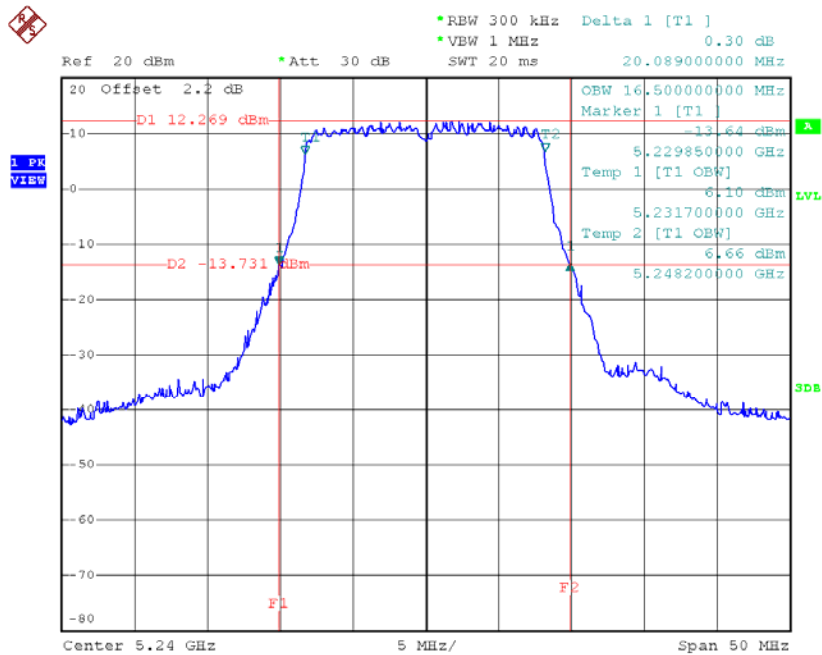
Date: 2.MAR.2018 18:59:03

### TX CH40



Date: 2.MAR.2018 19:00:20

### TX CH48

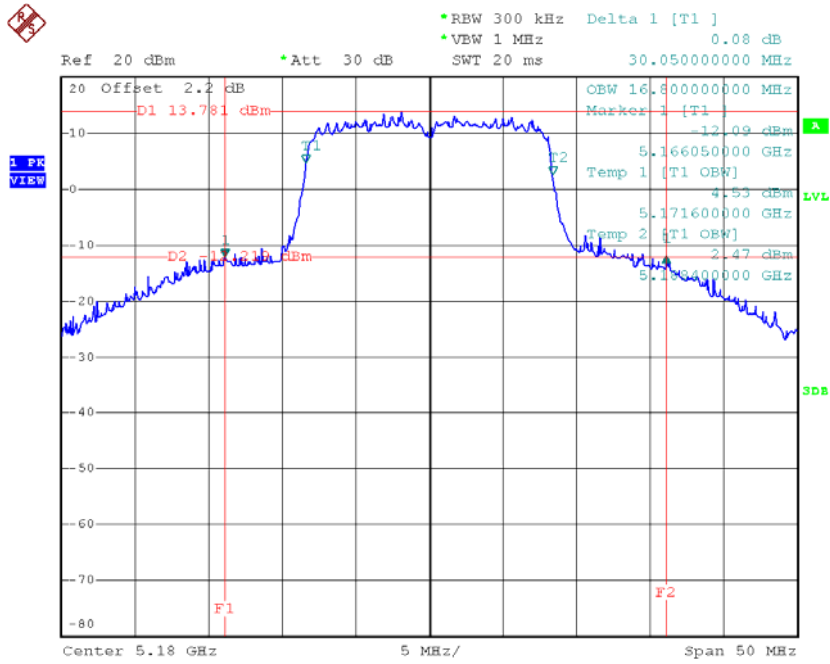


Date: 2.MAR.2018 19:02:46

**Test Mode: UNII-1/TX A Mode\_CH36/CH40/CH48\_Ant 7**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	30.05	16.80
CH40	5200	19.45	16.50
CH48	5240	20.20	16.50

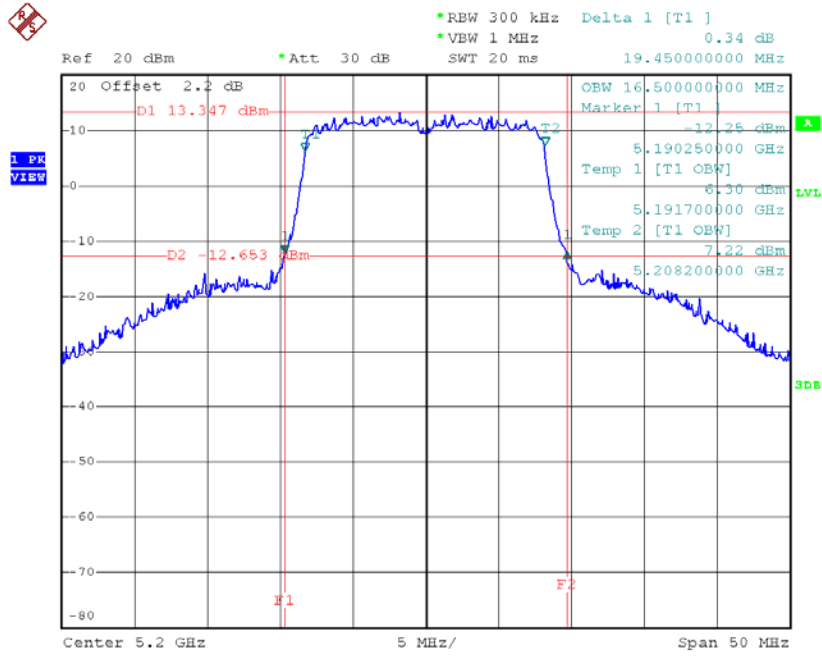
**TX CH36**



Date: 2.MAR.2018 18:58:36

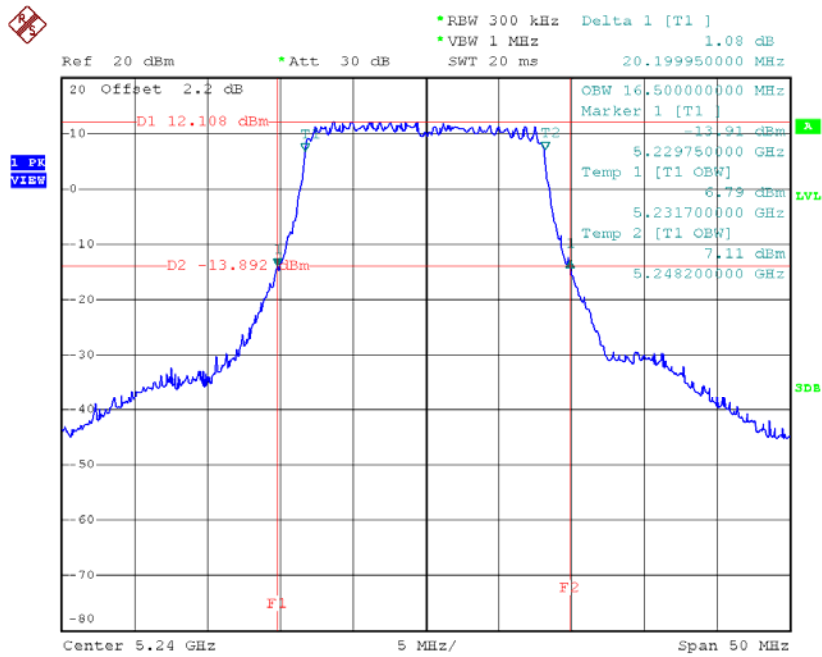


**TX CH40**



Date: 2.MAR.2018 19:00:49

**TX CH48**

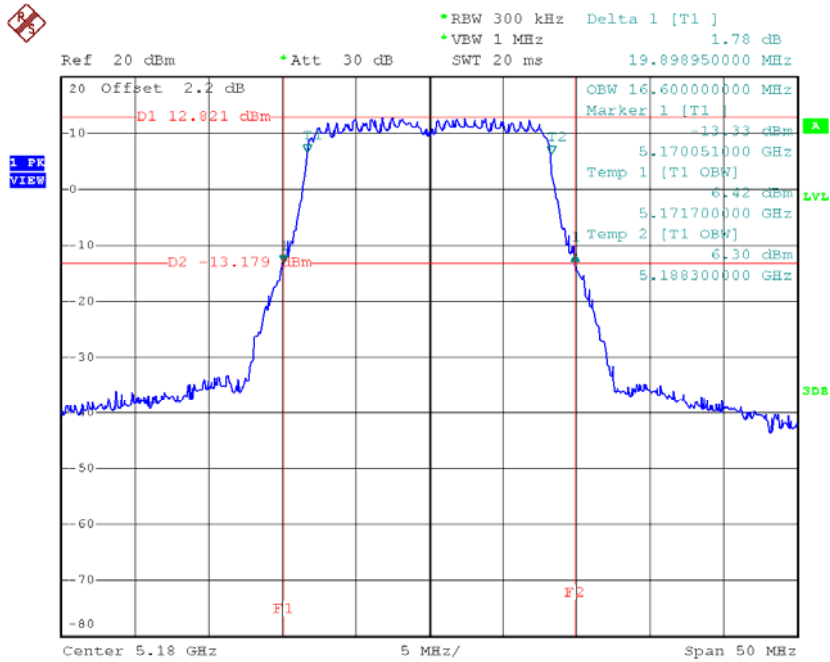


Date: 2.MAR.2018 19:02:17

**Test Mode: UNII-1/TX A Mode\_CH36/CH40/CH48\_Ant 8**

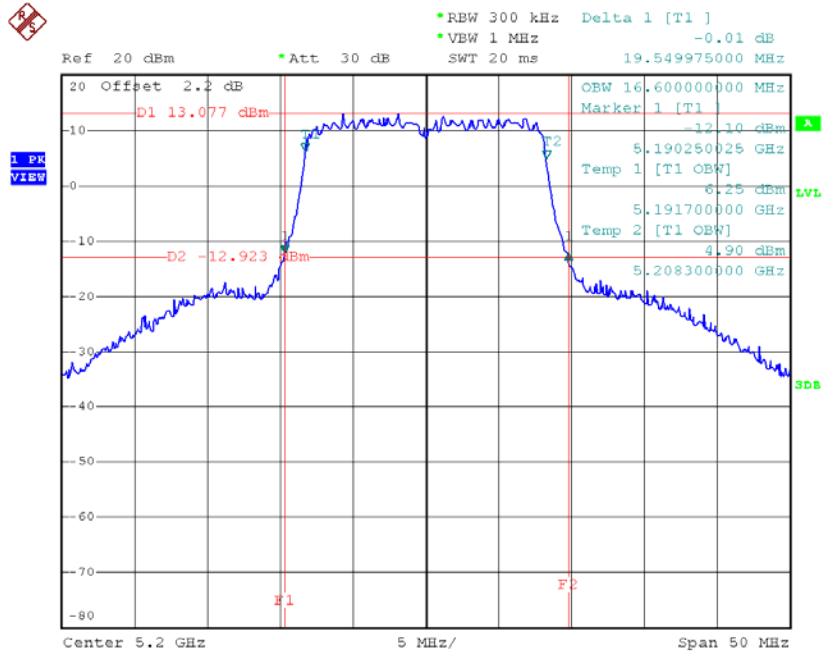
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	19.90	16.60
CH40	5200	19.55	16.60
CH48	5240	19.79	16.50

**TX CH36**



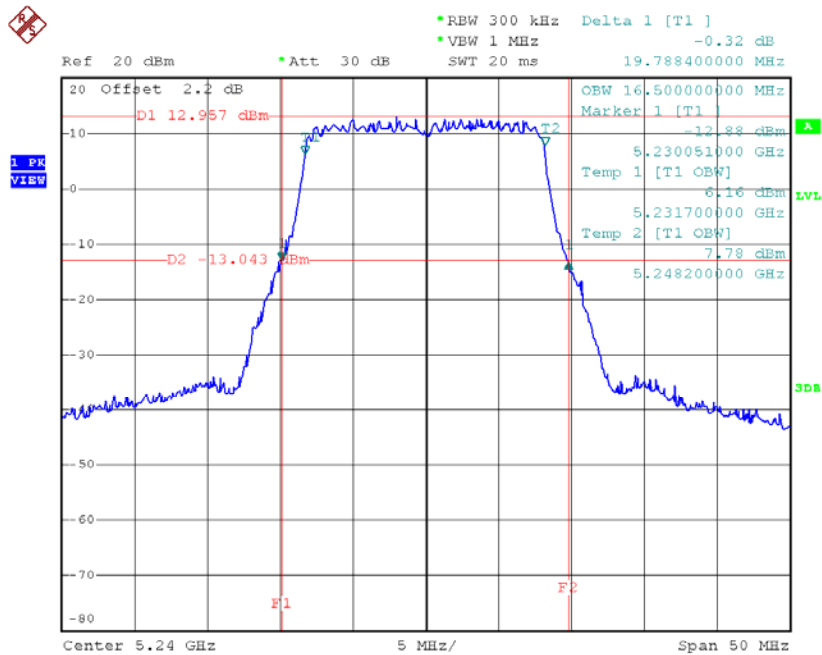
Date: 2.MAR.2018 18:58:08

**TX CH40**



Date: 2.MAR.2018 19:01:18

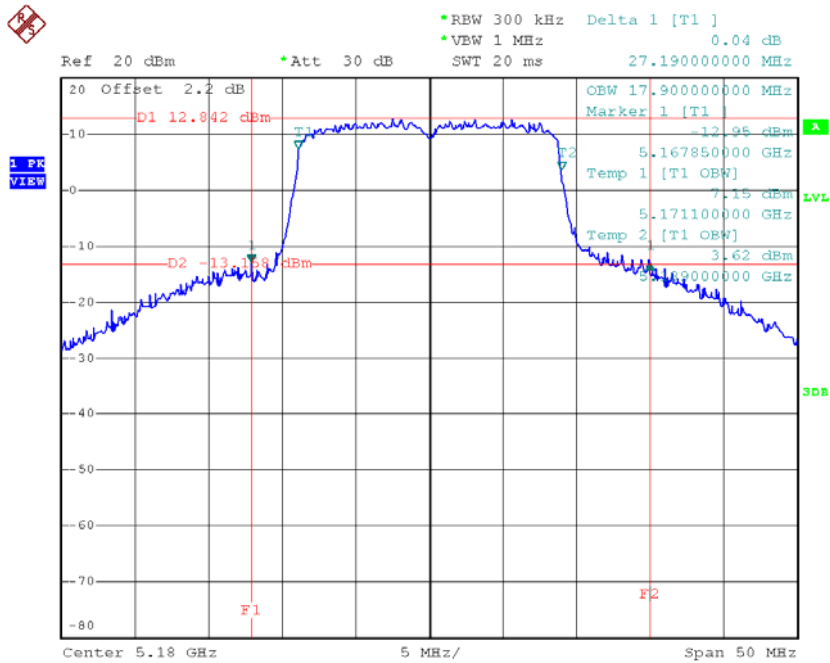
**TX CH48**



Date: 2.MAR.2018 19:01:49

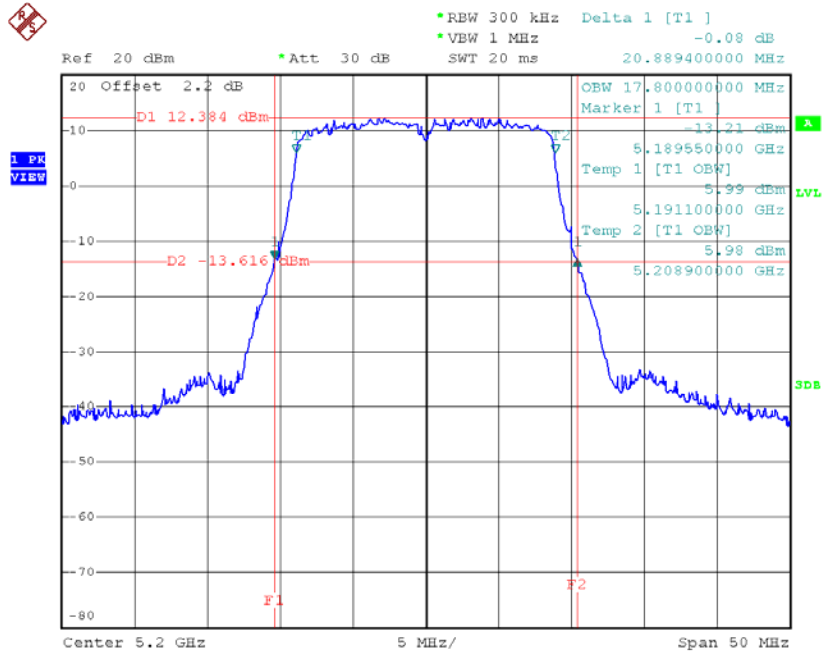
**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48\_Ant 5**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	27.19	17.90
CH40	5200	20.89	17.80
CH48	5240	21.00	17.70

**TX CH36**


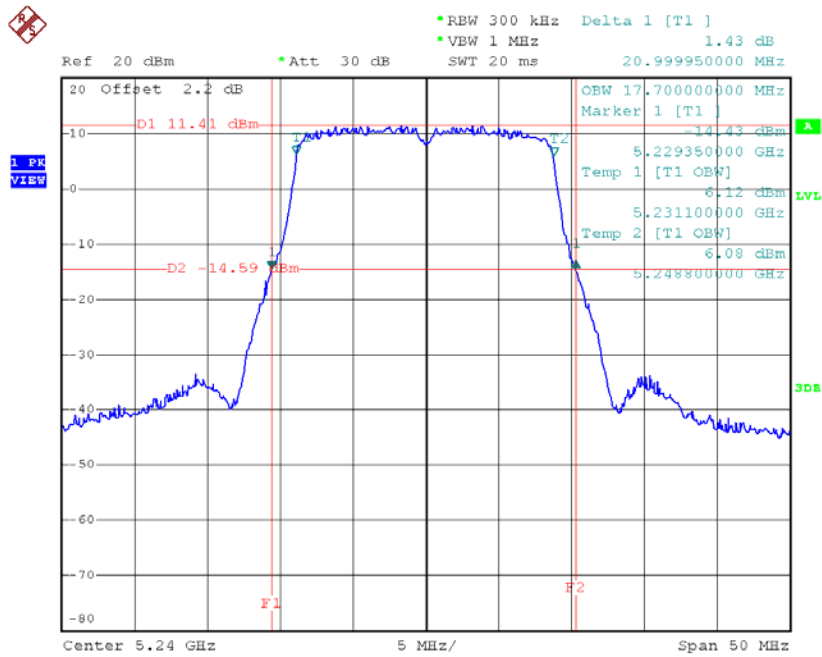
Date: 2.MAR.2018 15:31:18

**TX CH40**



Date: 2.MAR.2018 15:41:38

**TX CH48**

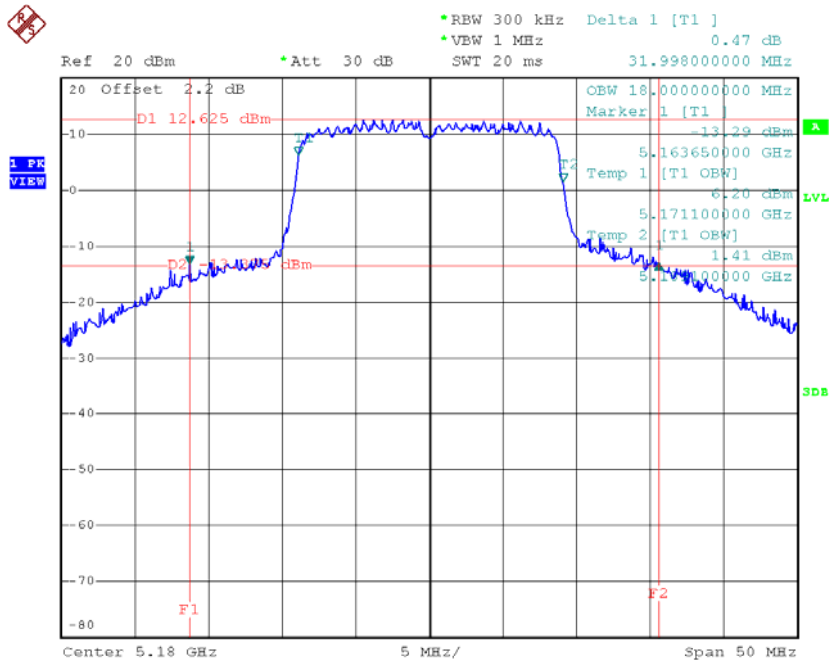


Date: 2.MAR.2018 15:42:48

**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48\_Ant 6**

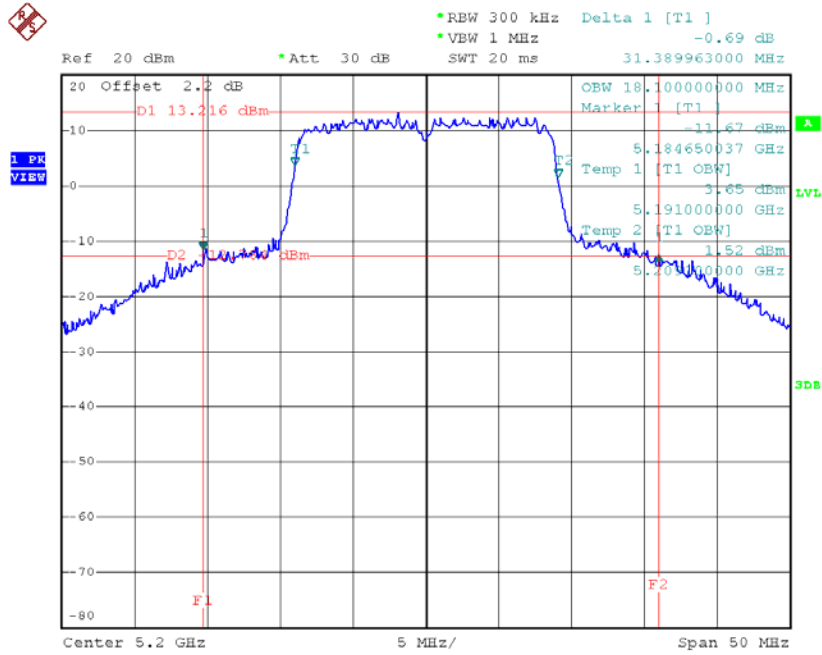
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	32.00	18.00
CH40	5200	31.39	18.10
CH48	5240	21.25	17.70

**TX CH36**



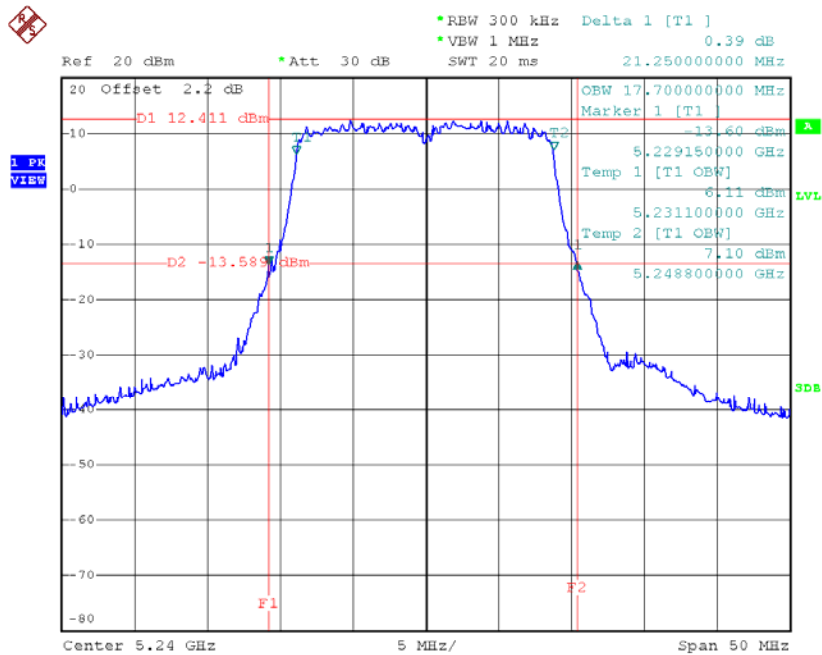
Date: 2.MAR.2018 15:30:41

### TX CH40



Date: 2.MAR.2018 15:39:00

### TX CH48

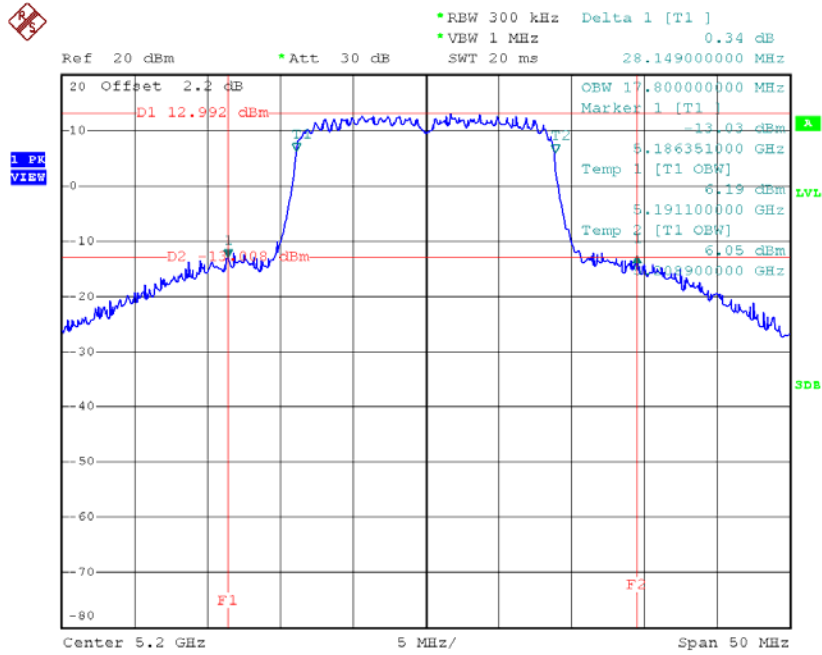


Date: 2.MAR.2018 15:43:24



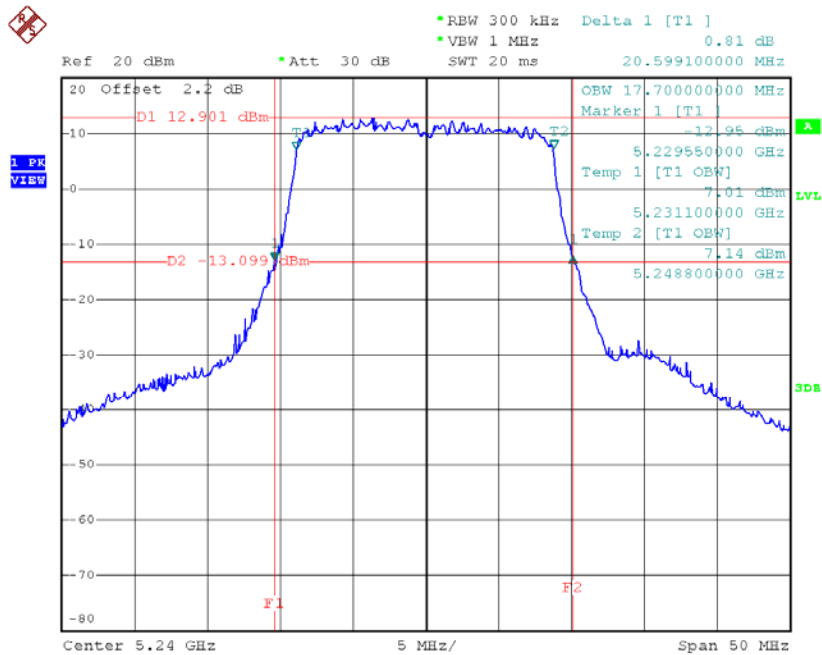


### TX CH40



Date: 2.MAR.2018 15:39:34

### TX CH48

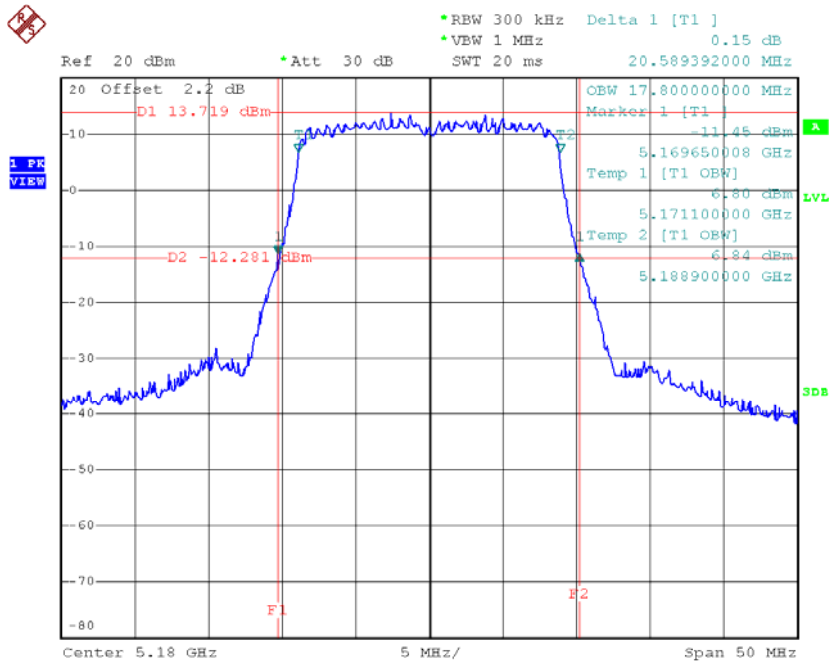


Date: 2.MAR.2018 15:44:02

**Test Mode: UNII-1/TX N20 Mode\_CH36/CH40/CH48\_Ant 8**

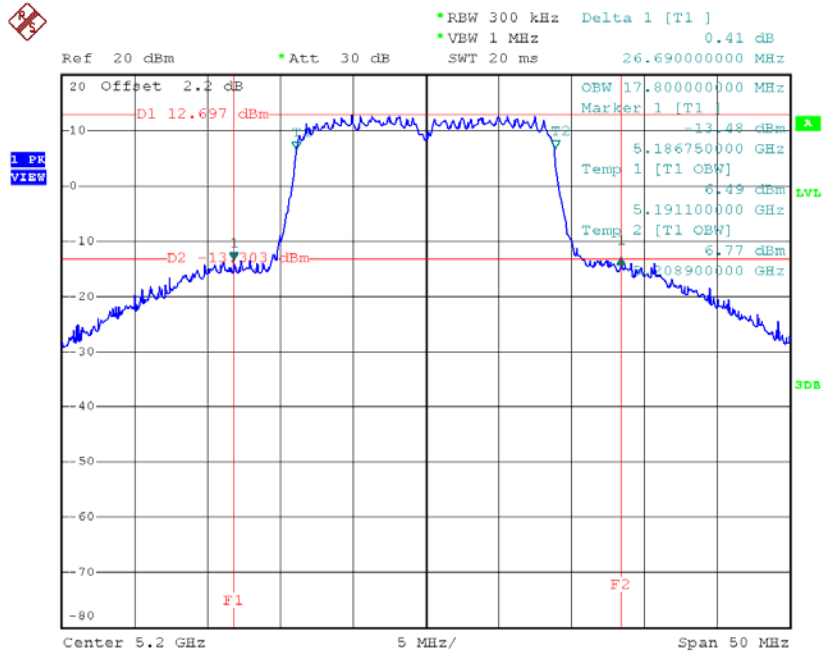
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	20.59	17.80
CH40	5200	26.69	17.80
CH48	5240	20.75	17.70

**TX CH36**



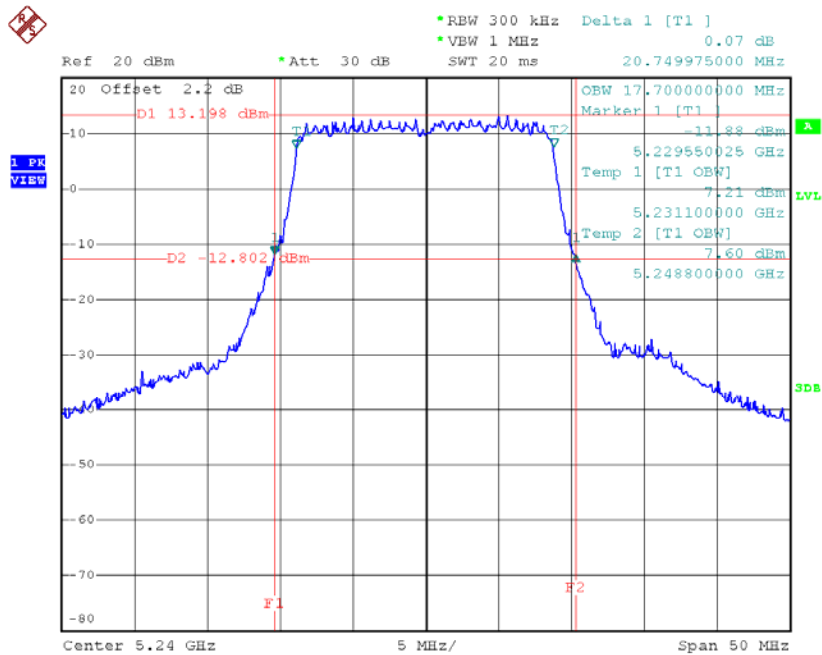
Date: 2.MAR.2018 15:29:40

**TX CH40**



Date: 2.MAR.2018 15:40:48

**TX CH48**

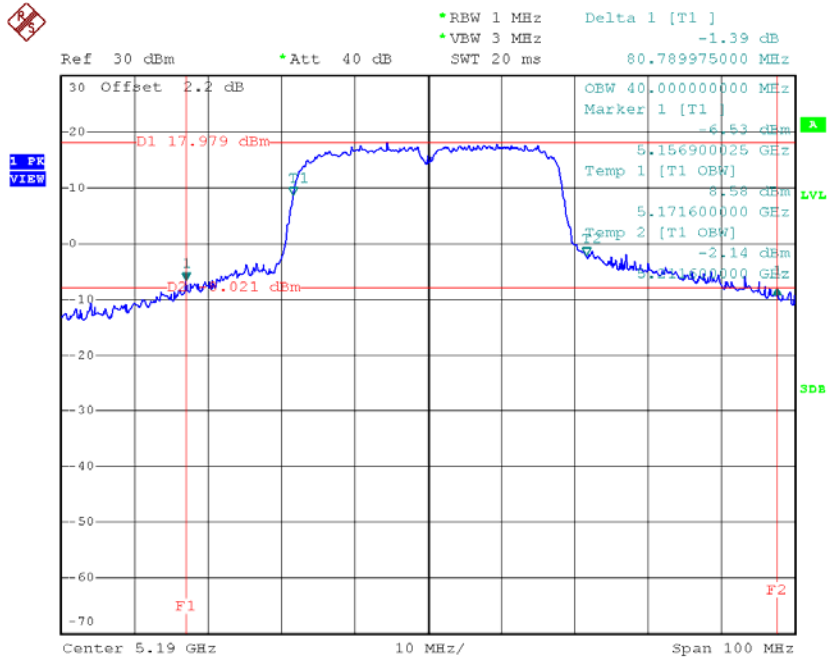


Date: 2.MAR.2018 15:44:41

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_Ant 5**

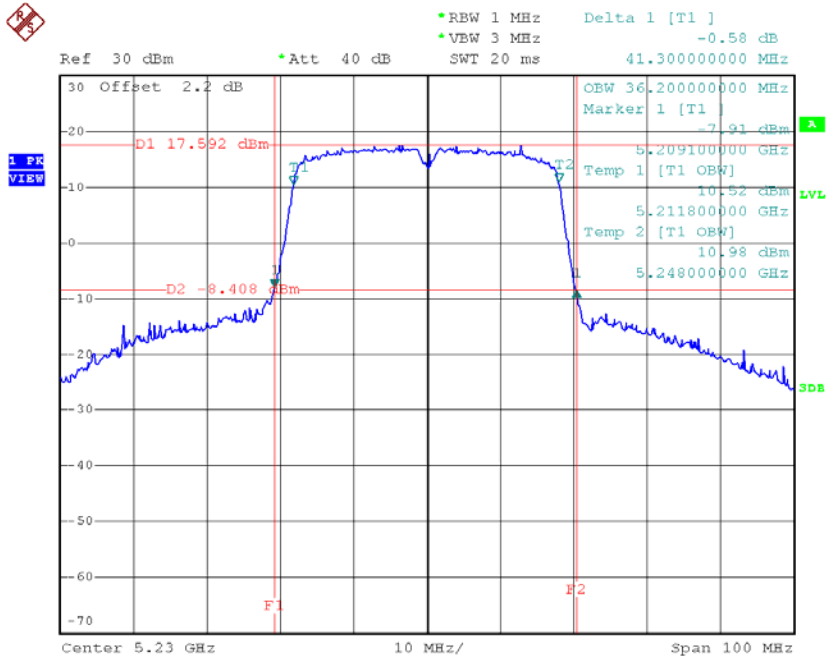
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	80.79	40.00
CH46	5230	41.30	36.20

**TX CH38**



Date: 2.MAR.2018 18:01:36

**TX CH46**

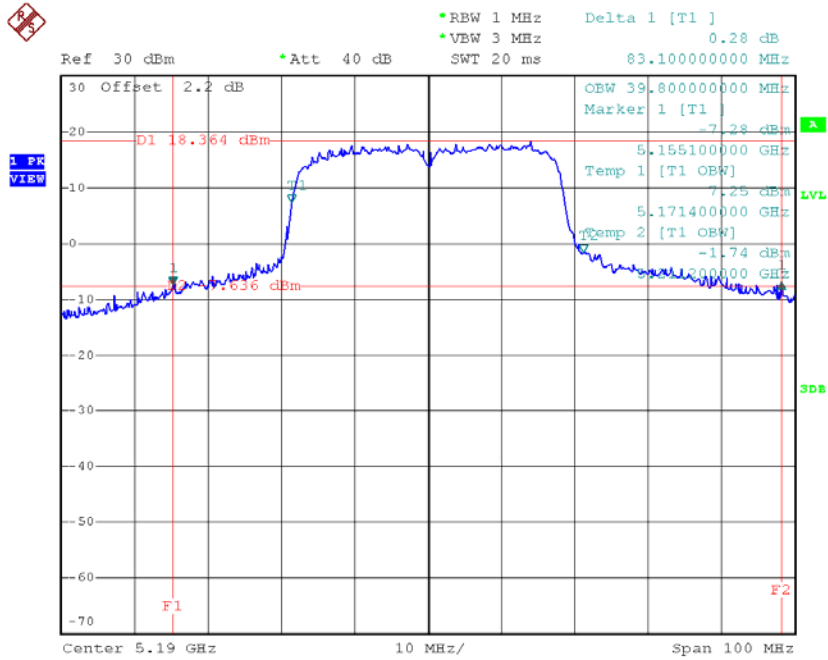


Date: 2.MAR.2018 18:08:54

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_Ant 6**

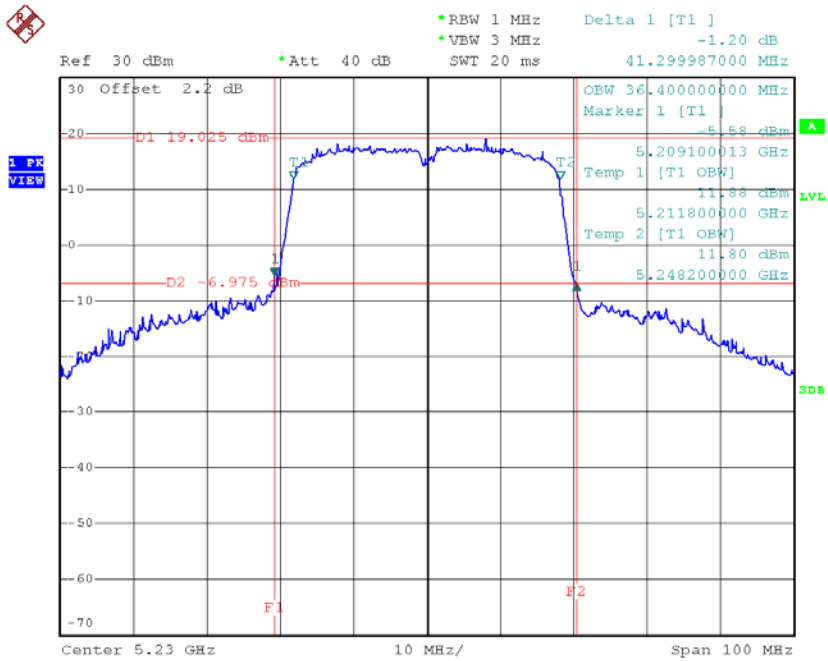
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	83.10	39.80
CH46	5230	41.30	36.40

**TX CH38**



Date: 2.MAR.2018 18:03:17

**TX CH46**



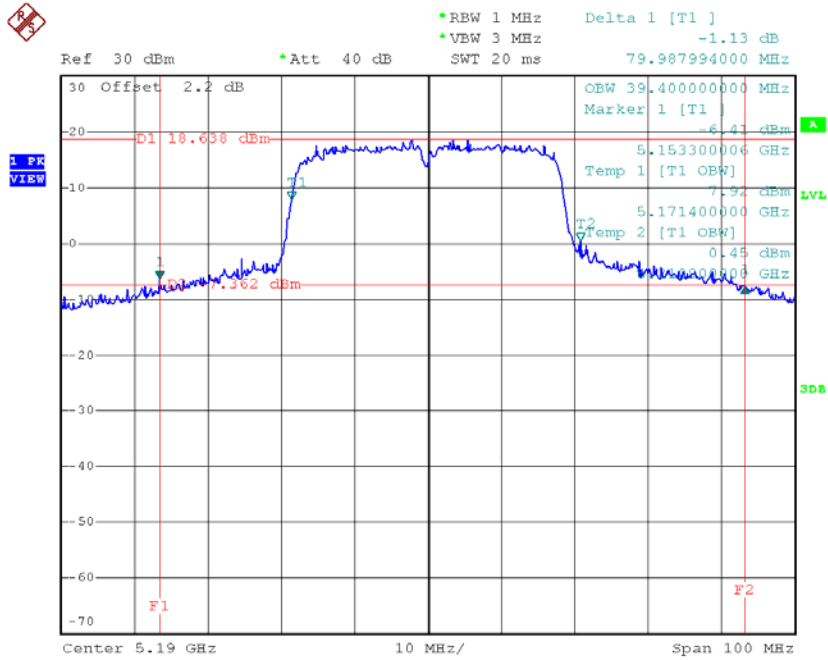
Date: 2.MAR.2018 18:08:13

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_Ant 7**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	79.99	39.40
CH46	5230	41.80	36.60

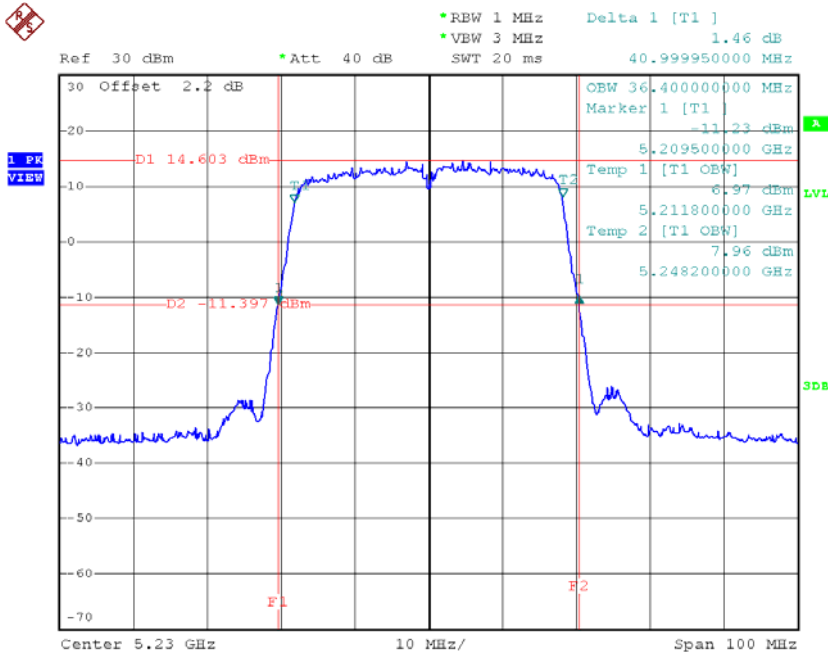


**TX CH38**



Date: 2.MAR.2018 18:04:06

**TX CH46**

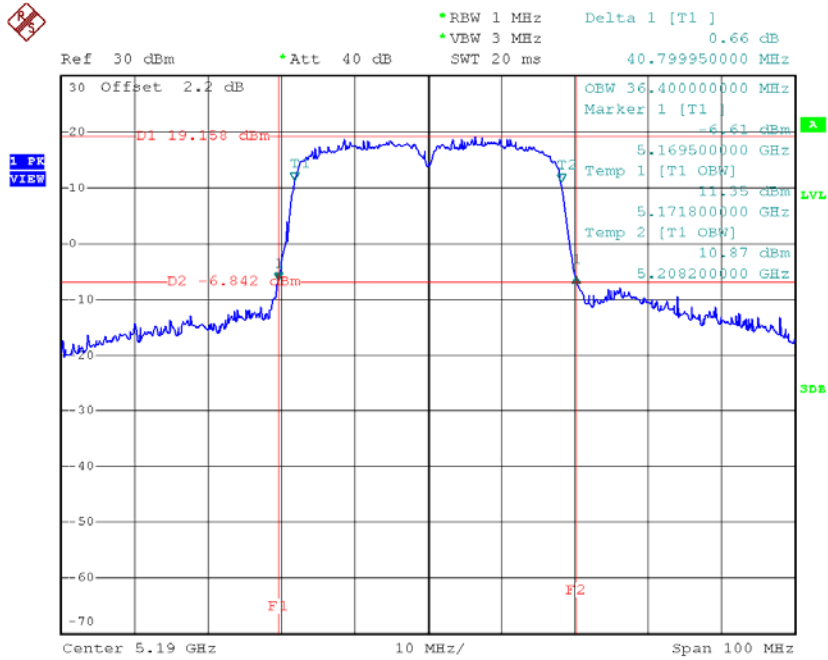


Date: 8.FEB.2018 08:35:17

**Test Mode: UNII-1/TX N40 Mode\_CH38/CH46\_Ant 8**

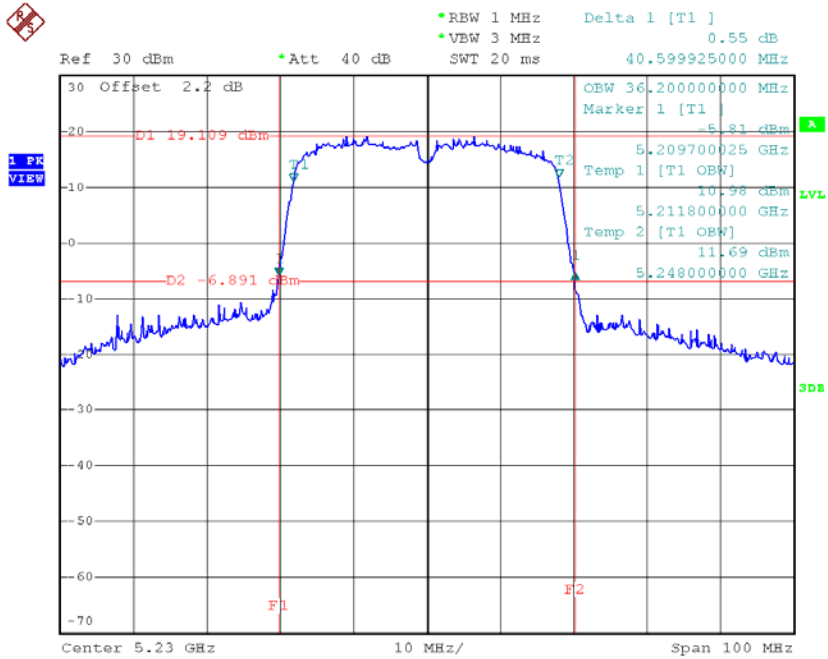
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	40.80	36.40
CH46	5230	40.59	36.20

**TX CH38**



Date: 2.MAR.2018 18:05:45

**TX CH46**



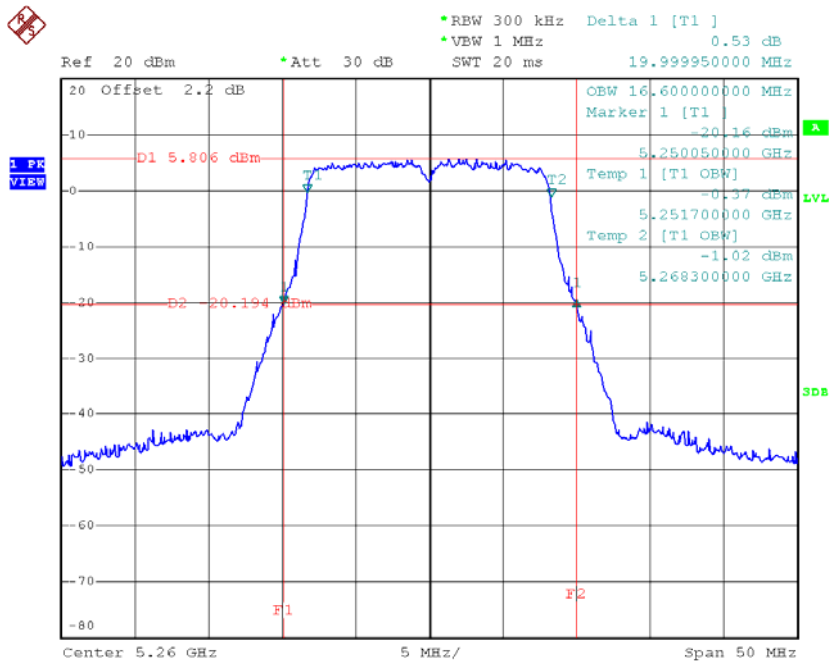
Date: 2.MAR.2018 18:06:52

**Test Mode: UNII-2A/TX A Mode\_CH52/CH60/CH64\_Ant 5**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power Limit Calculation (dBm)	99Lim% Occupied Bandwidth (MHz)
CH52	5260	20.00	24.00	16.60
CH60	5300	20.09	24.00	16.50
CH64	5320	19.89	23.99	16.60

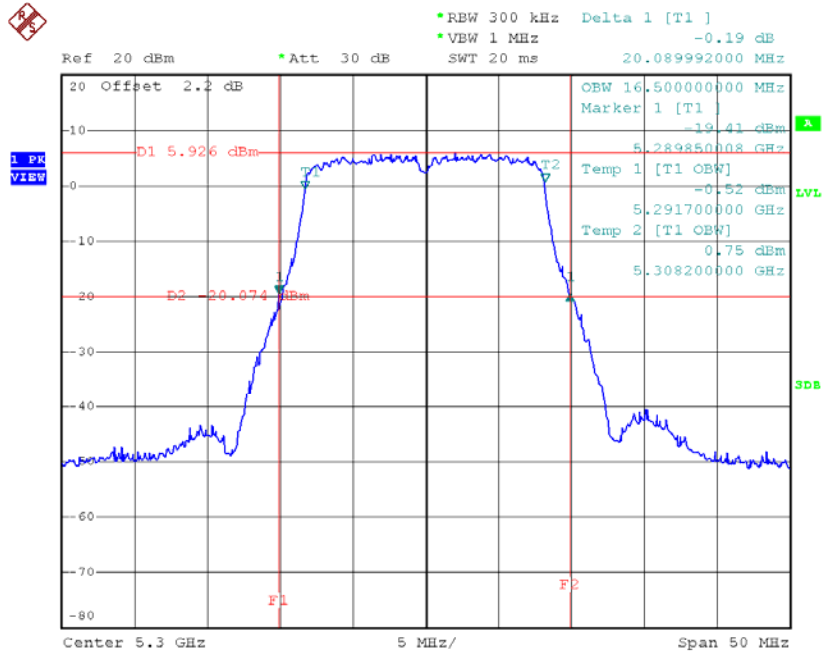
Note: The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26 dB emission bandwidth in megahertz.

**TX CH52**



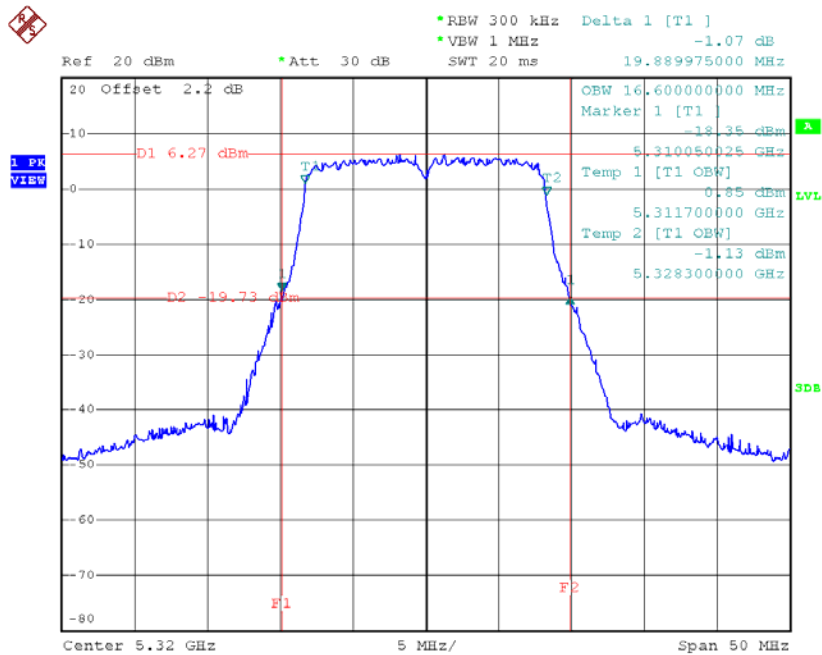
Date: 2.MAR.2018 19:03:51

**TX CH60**



Date: 2.MAR.2018 20:04:07

**TX CH64**

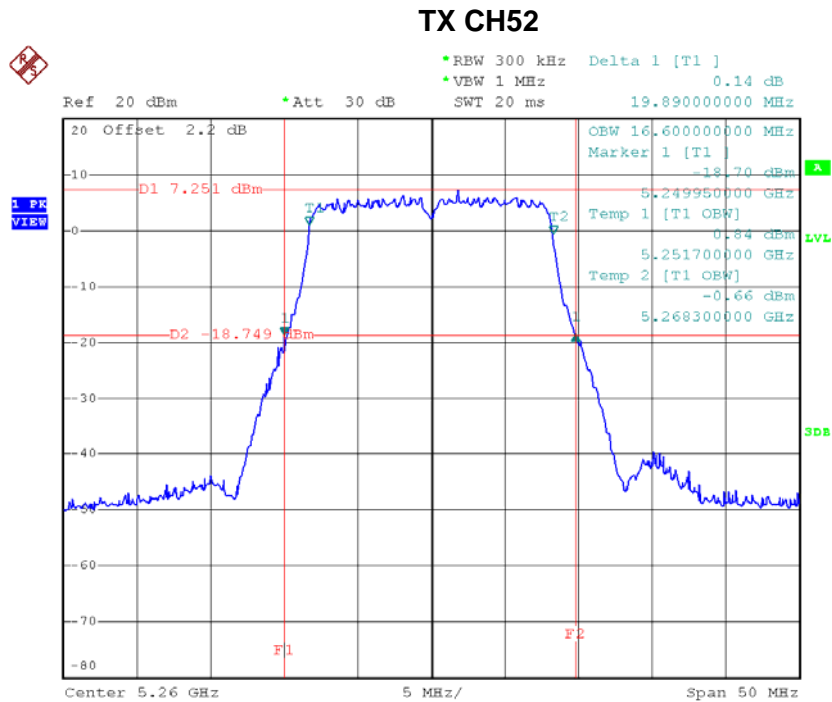


Date: 2.MAR.2018 20:06:24

**Test Mode: UNII-2A/TX A Mode\_CH52/CH60/CH64\_Ant 6**

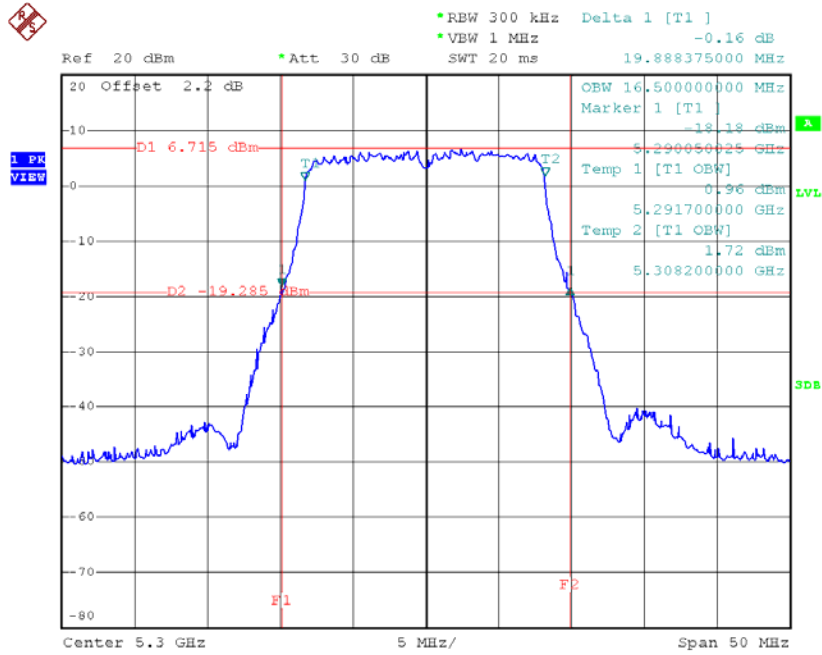
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power Limit Calculation (dBm)	99% Occupied Bandwidth (MHz)
CH52	5260	19.89	23.99	16.60
CH60	5300	19.89	23.99	16.50
CH64	5320	20.00	24.00	16.60

Note: The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26 dB emission bandwidth in megahertz.



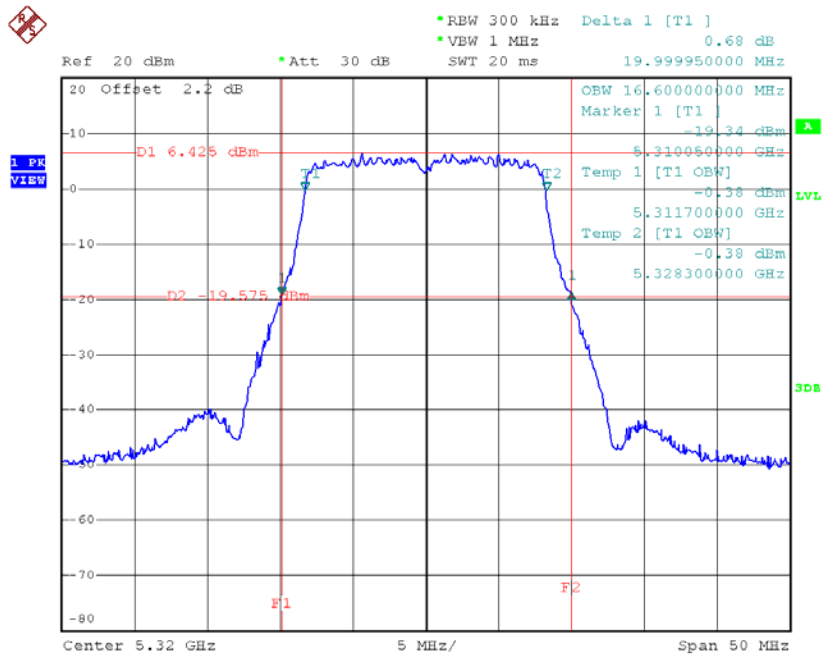
Date: 2.MAR.2018 19:04:18

**TX CH60**



Date: 2.MAR.2018 20:03:37

**TX CH64**



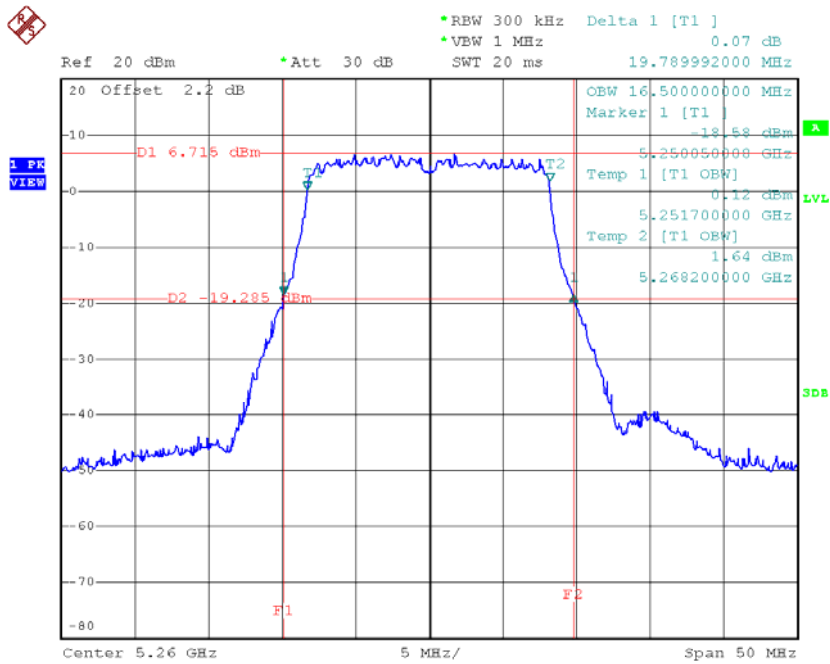
Date: 2.MAR.2018 20:06:52

**Test Mode: UNII-2A/TX A Mode\_CH52/CH60/CH64\_Ant 7**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power Limit Calculation (dBm)	99% Occupied Bandwidth (MHz)
CH52	5260	19.79	23.96	16.50
CH60	5300	19.65	23.93	16.50
CH64	5320	19.89	23.99	16.60

Note: The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26 dB emission bandwidth in megahertz.

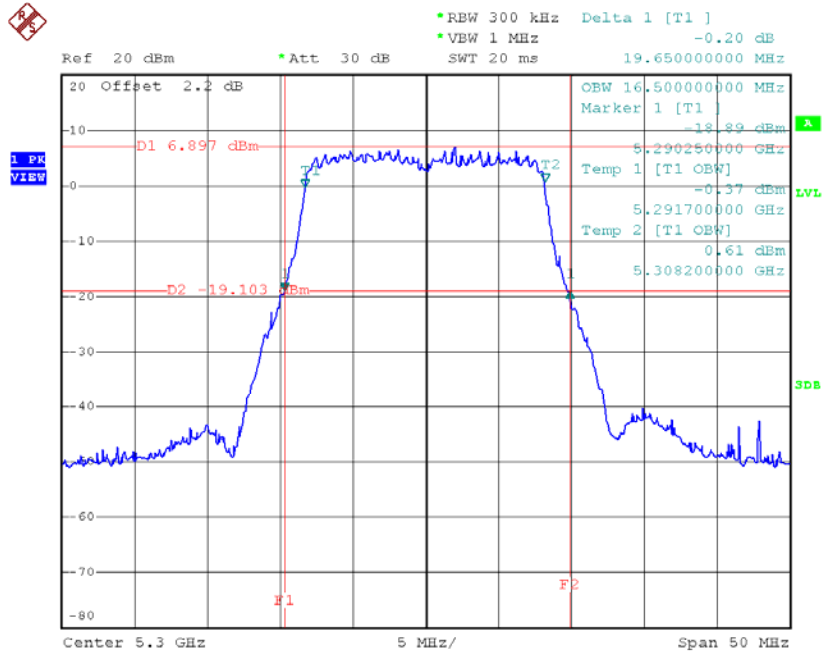
**TX CH52**



Date: 2.MAR.2018 19:04:46

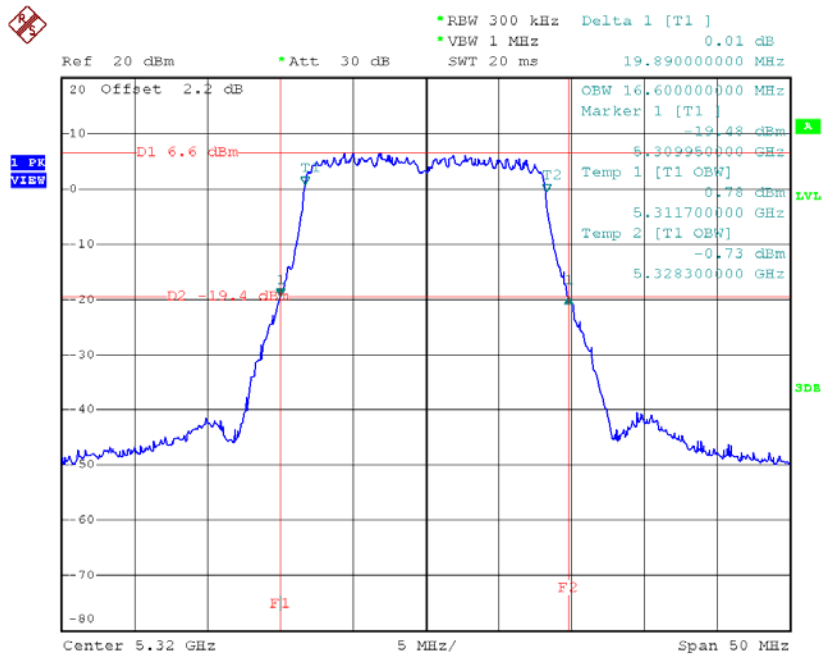


**TX CH60**



Date: 2.MAR.2018 20:03:08

**TX CH64**



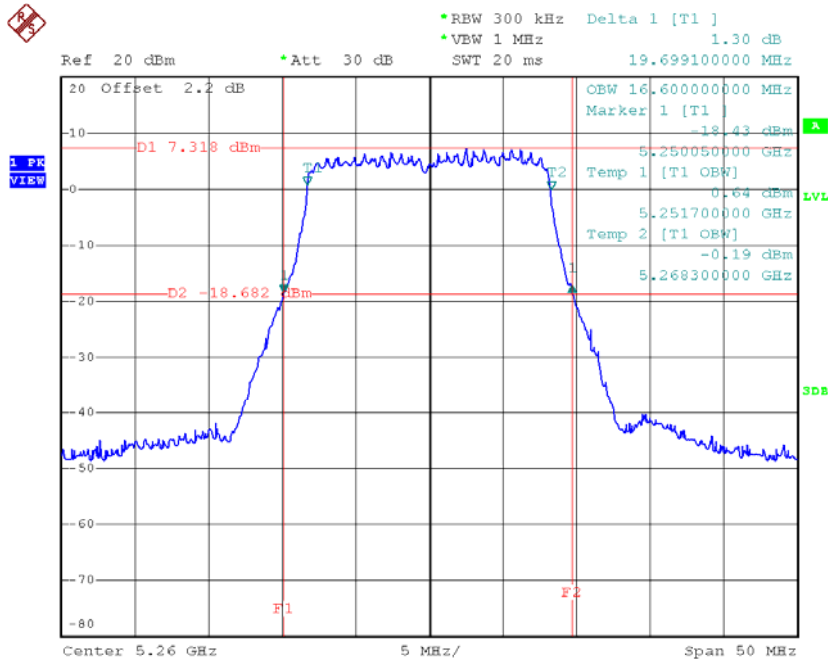
Date: 2.MAR.2018 20:07:20

**Test Mode: UNII-2A/TX A Mode\_CH52/CH60/CH64\_Ant 8**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power Limit Calculation (dBm)	99% Occupied Bandwidth (MHz)
CH52	5260	19.70	23.94	16.60
CH60	5300	19.69	23.94	16.50
CH64	5320	20.10	24.00	16.50

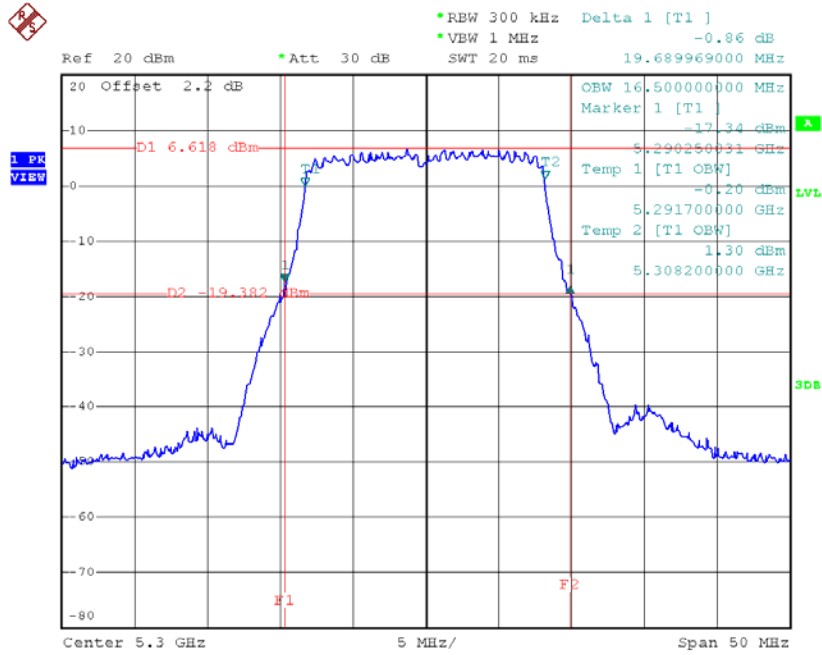
Note: The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26 dB emission bandwidth in megahertz.

**TX CH52**



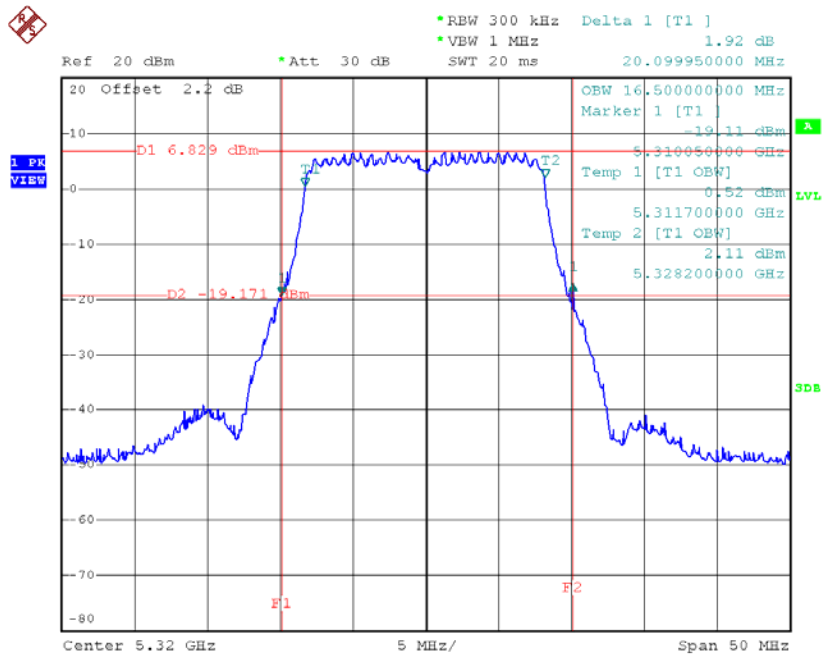
Date: 2.MAR.2018 19:05:13

### TX CH60



Date: 2.MAR.2018 20:02:36

### TX CH64

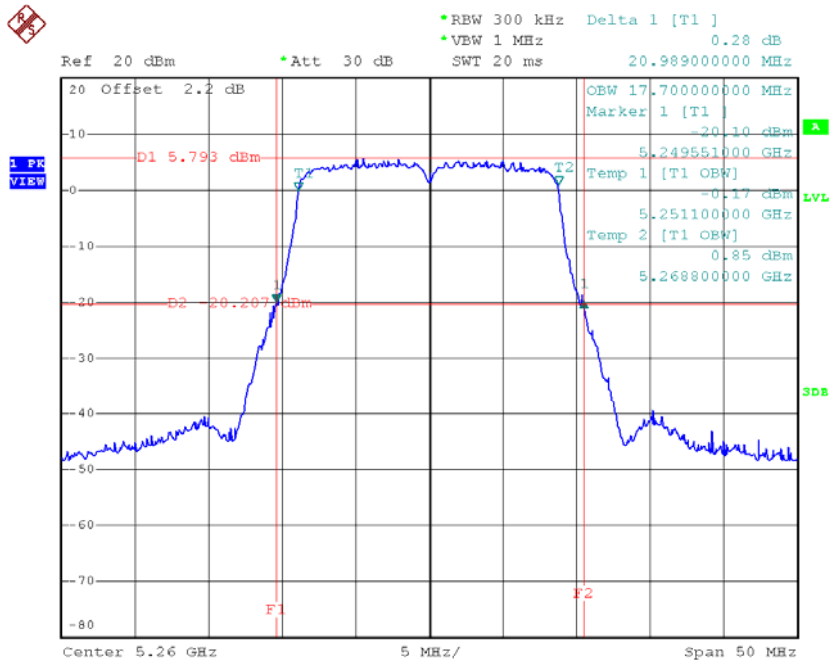


Date: 2.MAR.2018 20:07:48

**Test Mode: UNII-2A/TX N20 Mode\_CH52/CH60/CH64\_Ant 5**

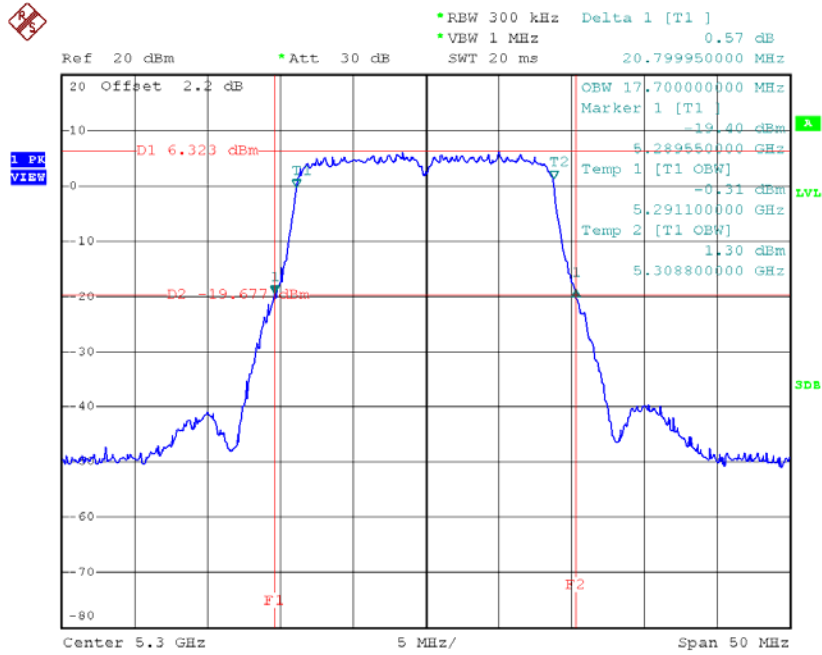
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	20.99	17.70
CH60	5300	20.80	17.70
CH64	5320	20.70	17.80

**TX CH52**



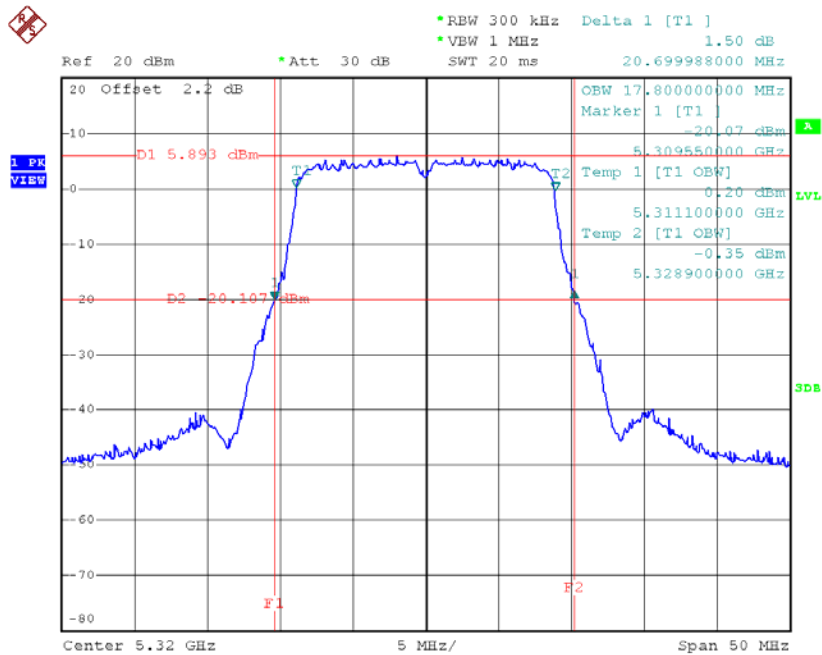
Date: 2.MAR.2018 15:47:42

**TX CH60**



Date: 2.MAR.2018 15:51:49

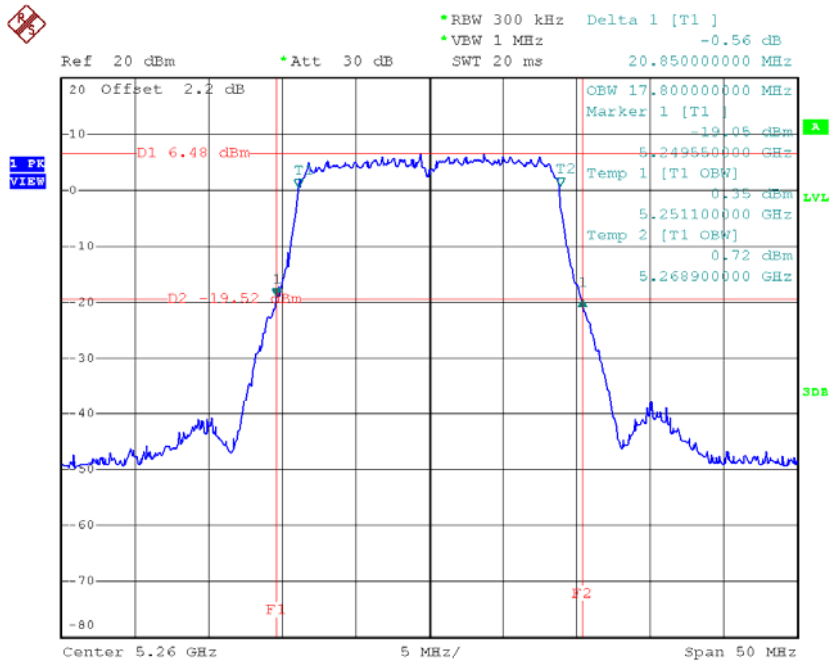
**TX CH64**



Date: 2.MAR.2018 15:52:54

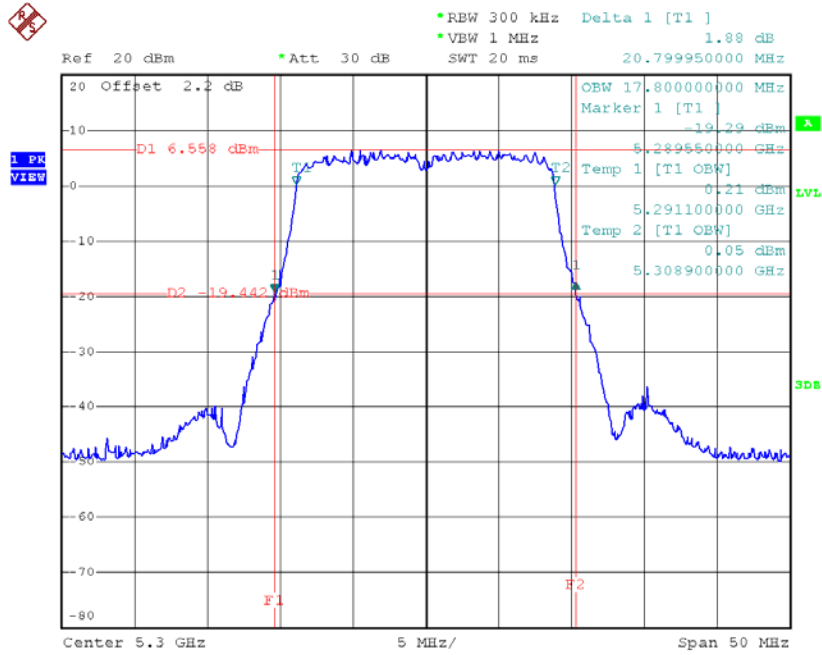
**Test Mode: UNII-2A/TX N20 Mode\_CH52/CH60/CH64\_Ant 6**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	20.85	17.80
CH60	5300	20.80	17.80
CH64	5320	20.79	17.70

**TX CH52**


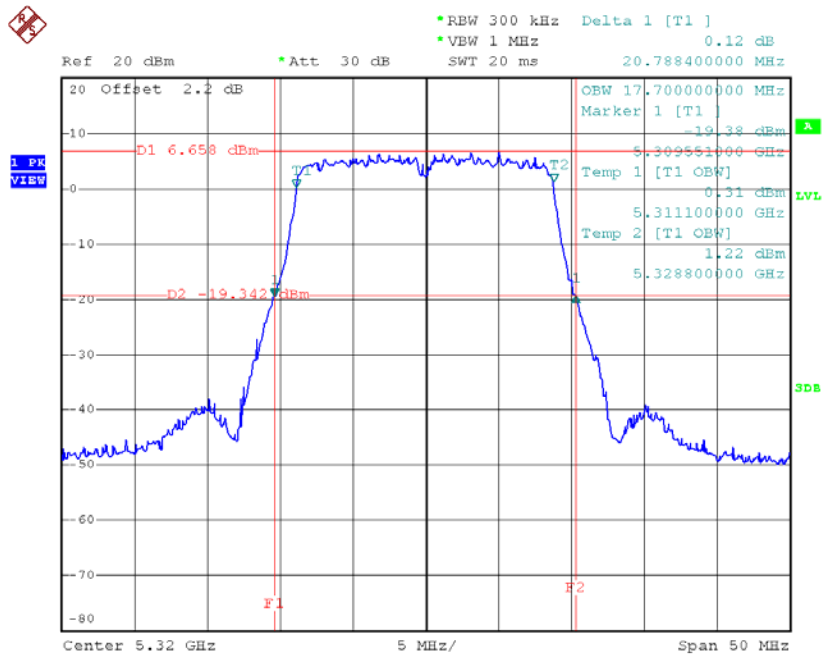
Date: 2.MAR.2018 15:47:06

### TX CH60



Date: 2.MAR.2018 15:51:12

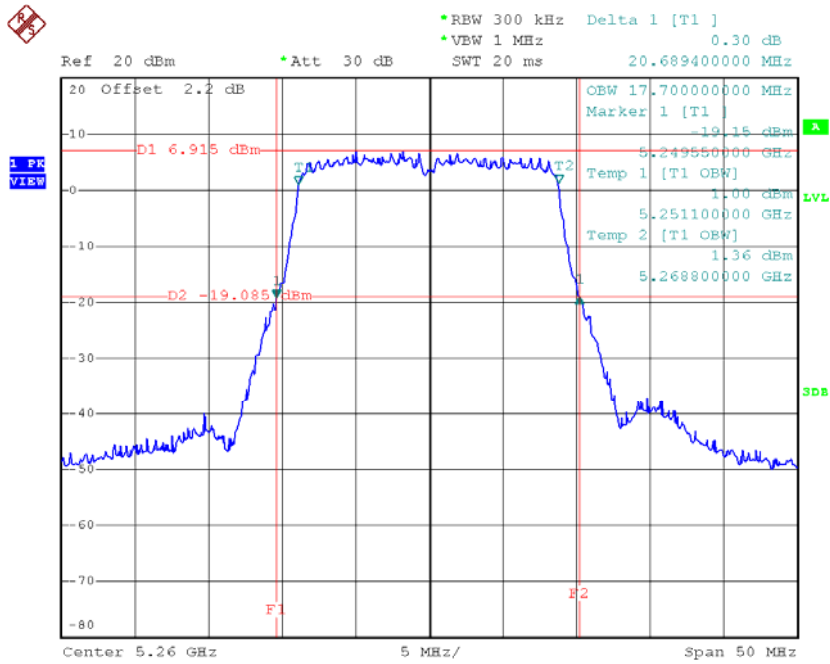
### TX CH64



Date: 2.MAR.2018 15:53:31

**Test Mode: UNII-2A/TX N20 Mode\_CH52/CH60/CH64\_Ant 7**

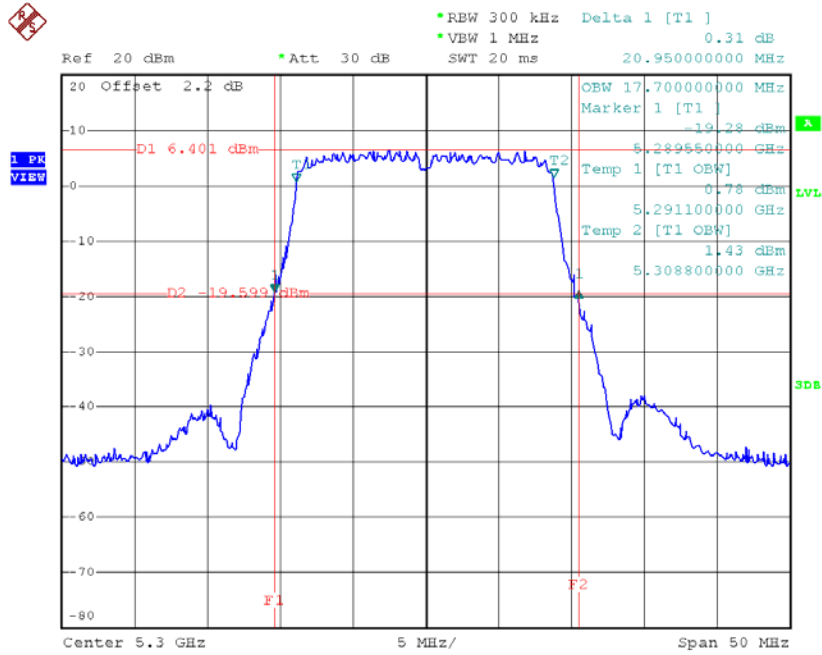
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	20.69	17.70
CH60	5300	20.95	17.70
CH64	5320	20.59	17.70

**TX CH52**


Date: 2.MAR.2018 15:46:30

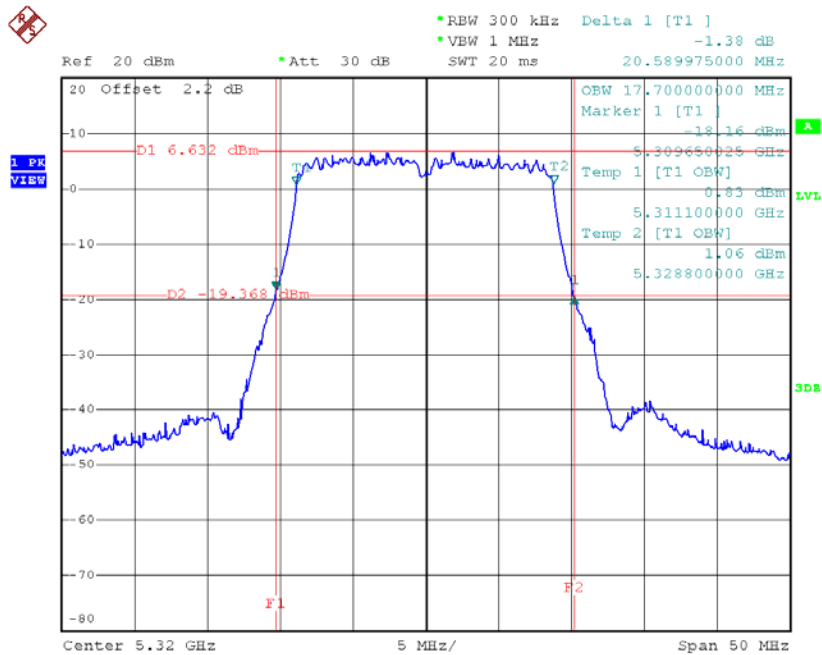


### TX CH60



Date: 2.MAR.2018 15:50:34

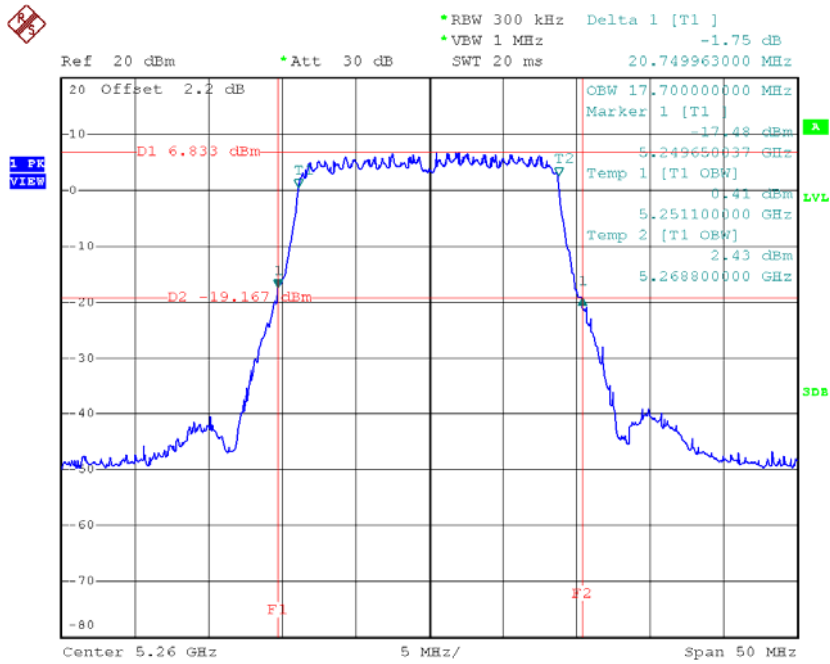
### TX CH64



Date: 2.MAR.2018 15:54:08

**Test Mode: UNII-2A/TX N20 Mode\_CH52/CH60/CH64\_Ant 8**

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	20.75	17.70
CH60	5300	20.60	17.70
CH64	5320	20.75	17.70

**TX CH52**


Date: 2.MAR.2018 15:45:54