

FCC Radio Test Report

FCC ID: 2AG7N-MA-WIFI-AZ-V1

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

Project No. : 1512C237
Equipment : MA_WiFi
Model Name : MA_WiFi
Applicant : ST Electronics (Info-Security) Pte Ltd
Address : 100 Jurong East Street 21 ST Electronics Jurong
East Building Singapore 609602

Date of Receipt : Dec. 24, 2015
Date of Test : Dec. 24, 2015 ~ Jan. 27, 2016
Issued Date : Jan. 28, 2016
Tested by : BTL Inc.

Testing Engineer : Shawn Xiao
(Shawn Xiao)

Technical Manager : David Mao
(David Mao)

Authorized Signatory : Steven Lu
(Steven Lu)

B T L I N C .

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan,
Guangdong, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

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 the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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.

Table of Contents	Page
1 . CERTIFICATION	7
2 . SUMMARY OF TEST RESULTS	8
2.1 TEST FACILITY	9
2.2 MEASUREMENT UNCERTAINTY	9
3 . GENERAL INFORMATION	10
3.1 GENERAL DESCRIPTION OF EUT	10
3.2 DESCRIPTION OF TEST MODES	12
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 DESCRIPTION OF SUPPORT UNITS	14
4 . EMC EMISSION TEST	15
4.1 CONDUCTED EMISSION MEASUREMENT	15
4.1.1 POWER LINE CONDUCTED EMISSION	15
4.1.2 TEST PROCEDURE	15
4.1.3 DEVIATION FROM TEST STANDARD	15
4.1.4 TEST SETUP	16
4.1.5 EUT OPERATING CONDITIONS	16
4.1.6 EUT TEST CONDITIONS	16
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	17
4.2.1 RADIATED EMISSION LIMITS	17
4.2.2 TEST PROCEDURE	18
4.2.3 DEVIATION FROM TEST STANDARD	18
4.2.4 TEST SETUP	18
4.2.5 EUT OPERATING CONDITIONS	19
4.2.6 EUT TEST CONDITIONS	19
4.2.7 TEST RESULTS (9K TO 30MHz)	20
4.2.8 TEST RESULTS (30 TO 1000 MHz)	20
4.2.9 TEST RESULTS (ABOVE 1000 MHz)	20
5 . 26dB SPECTRUM BANDWIDTH	21
5.1 APPLIED PROCEDURES / LIMIT	21
5.1.1 TEST PROCEDURE	21
5.1.2 DEVIATION FROM STANDARD	21
5.1.3 TEST SETUP	21
5.1.4 EUT OPERATION CONDITIONS	21
5.1.5 EUT TEST CONDITIONS	21
5.1.6 TEST RESULTS	21
6 . MAXIMUM CONDUCTED OUTPUT POWER	22

Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	22
6.1.1 TEST PROCEDURE	22
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
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	24
7.1 APPLIED PROCEDURES / LIMIT	24
7.1.1 TEST PROCEDURE	24
7.1.2 DEVIATION FROM STANDARD	24
7.1.3 TEST SETUP	24
7.1.4 EUT OPERATION CONDITIONS	24
7.1.5 EUT TEST CONDITIONS	24
7.1.6 TEST RESULTS	24
8 . POWER SPECTRAL DENSITY TEST	25
8.1 APPLIED PROCEDURES / LIMIT	25
8.1.1 TEST PROCEDURE	25
8.1.1 DEVIATION FROM STANDARD	26
8.1.2 TEST SETUP	26
8.1.3 EUT OPERATION CONDITIONS	26
8.1.4 EUT TEST CONDITIONS	26
8.1.5 TEST RESULTS	26
9 . FREQUENCY STABILITY MEASUREMENT	27
9.1 APPLIED PROCEDURES / LIMIT	27
9.1.1 TEST PROCEDURE	27
9.1.2 DEVIATION FROM STANDARD	27
9.1.3 TEST SETUP	27
9.1.4 EUT OPERATION CONDITIONS	28
9.1.5 EUT TEST CONDITIONS	28
9.1.6 TEST RESULTS	28
10 . MEASUREMENT INSTRUMENTS LIST	29
11 . EUT TEST PHOTOS	31
ATTACHMENT A - CONDUCTED EMISSION	34
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	35
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	37
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	50
ATTACHMENT E - BANDWIDTH	118

Table of Contents

Page

ATTACHMENT F - MAXIMUM OUTPUT POWER	131
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	136
ATTACHMENT H - POWER SPECTRAL DENSITY	147
ATTACHMENT I - FREQUENCY STABILITY	172

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1512C237	Original Issue.	Jan. 28, 2016

1. CERTIFICATION

Equipment : MA_WiFi
Brand Name : N/A
Model Name : MA_WiFi
Applicant : ST Electronics (Info-Security) Pte Ltd
Date of Test : Jan. 28, 2016 ~ Jan. 28, 2016
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.10-2013
FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r01

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-2-1512C237) 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).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E			
Standard(s) Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	N/A	NOTE (1)
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	
15.203	Antenna Requirements	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 is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China. 523792
BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{CISPR} requirement.

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

A. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)
DG-CB03 (3m)	CISPR	9KHz ~ 30MHz	V	3.79
		9KHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	H	4.06

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)
DG-CB03 (3m)	CISPR	1GHz ~ 18GHz	V	3.12
		1GHz ~ 18GHz	H	3.68
		18GHz ~ 40GHz	V	4.15
		18GHz ~ 40GHz	H	4.14

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	MA_WiFi	
Brand Name	N/A	
Model Name	MA_WiFi	
Mode Different	N/A	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	300Mbps
Power Source	Supplied from DC power source.	
Power Rating	DC 5V	
Output Power	Output Power (Max.)for UNII-1	802.11a: 13.84dBm 802.11n 20MHz: 13.42dBm 802.11n 40MHz: 12.85dBm
	Output Power (Max.)for UNII-3	802.11a: 14.09dBm 802.11n 20MHz: 13.93dBm 802.11n 40MHz: 13.08dBm

Note:

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

UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190
40	5200	46	5230
44	5220		
48	5240		

UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755
153	5765	159	5795
157	5785		
161	5805		
165	5825		

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	WALSIN	ST MA_WIFI(AZ)	Chip	N/A	4
2	WALSIN	ST MA_WIFI(AZ)	Chip	N/A	4

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = GANT, that is Directional gain=4.
2. ANT 1 for 1TX was found to be the worst case and recorded.

4.

Operating Mode	1TX	2TX
TX Mode		
802.11a	V (ANT 1)	-
802.11n (20MHz)	-	V (ANT 1+ANT 2)
802.11n (40MHz)	-	V (ANT 1+ANT 2)

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 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 A Mode / CH149,CH157,CH165 (UNII-3)
Mode 5	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 6	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 7	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 7	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 A Mode / CH149,CH157,CH165 (UNII-3)
Mode 5	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 6	TX N40 Mode / CH151,CH159 (UNII-3)

Note:

(1) For radiated below 1GHz test, the 802.11a mode is found to be the worst case and recorded.

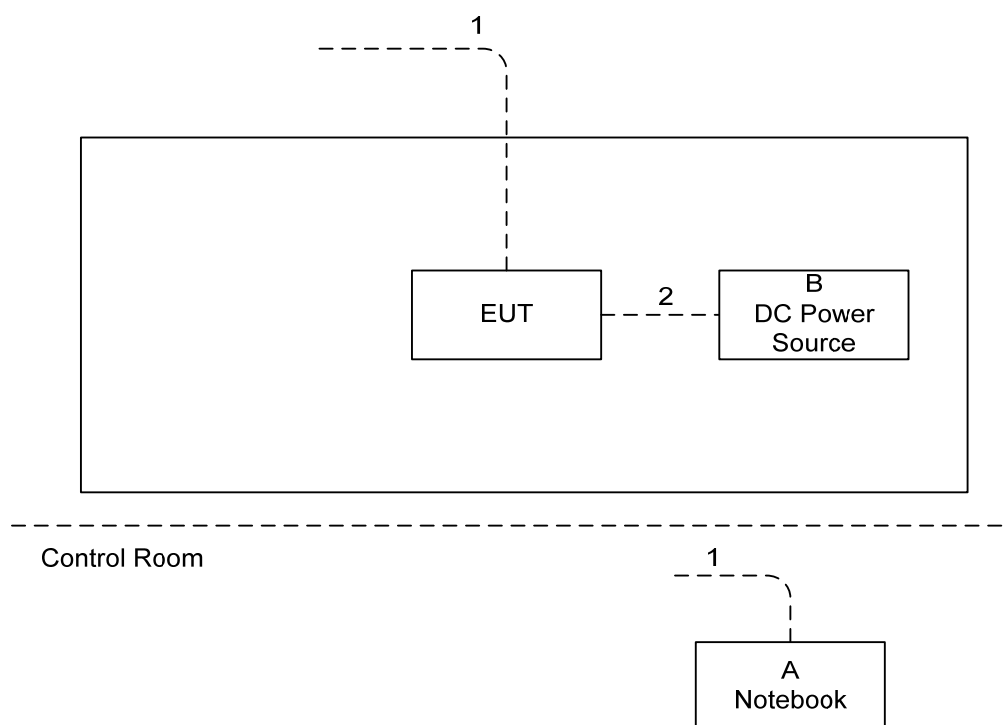
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

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

UNII-1			
Test Software Version	artgui		
Frequency (MHz)	5180	5200	5240
A Mode	15	14	13
N20 Mode	13.5	13	13
Frequency (MHz)	5190	5230	
N40 Mode	12	11.5	

UNII-3			
Test Software Version	artgui		
Frequency (MHz)	5745	5785	5825
A Mode	12	13	13
N20 Mode	8	9.5	11
Frequency (MHz)	5755	5795	
N40 Mode	7.5	8.5	

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.
A	Notebook	Lenovo	H2510	DOC	SS07999198
B	DC Power Source	N/A	DPC-3030DN	N/A	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	10m	RJ-45 Cable
2	NO	NO	1.2m	Data 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.

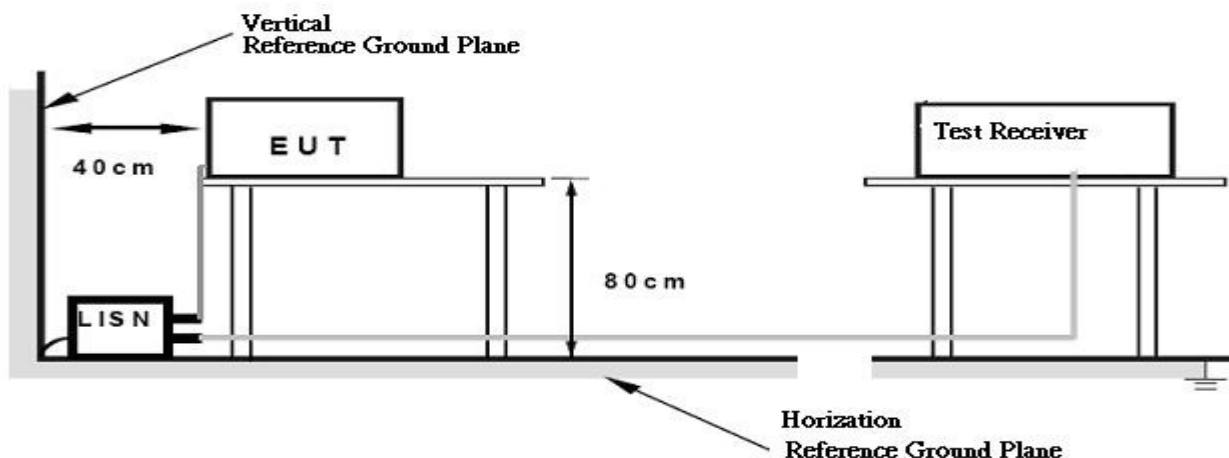
4.1.2 TEST PROCEDURE

- 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: N/A Relative Humidity: N/A Test Voltage: N/A

4.1.7 TEST RESULTS

Please refer to the Attachment 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 (micorvolts/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

Note:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
5470-5725	-27	68.3
5725-5850	-27 (beyond 10MHz of the band edge)	68.3
	-17 (within 10 MHz of band edge)	78.3

Note: 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

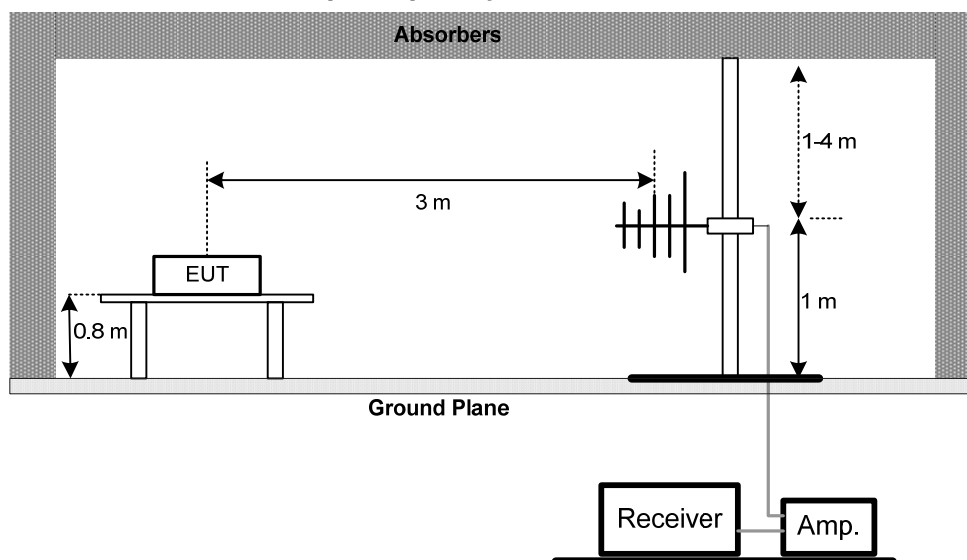
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, 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.
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

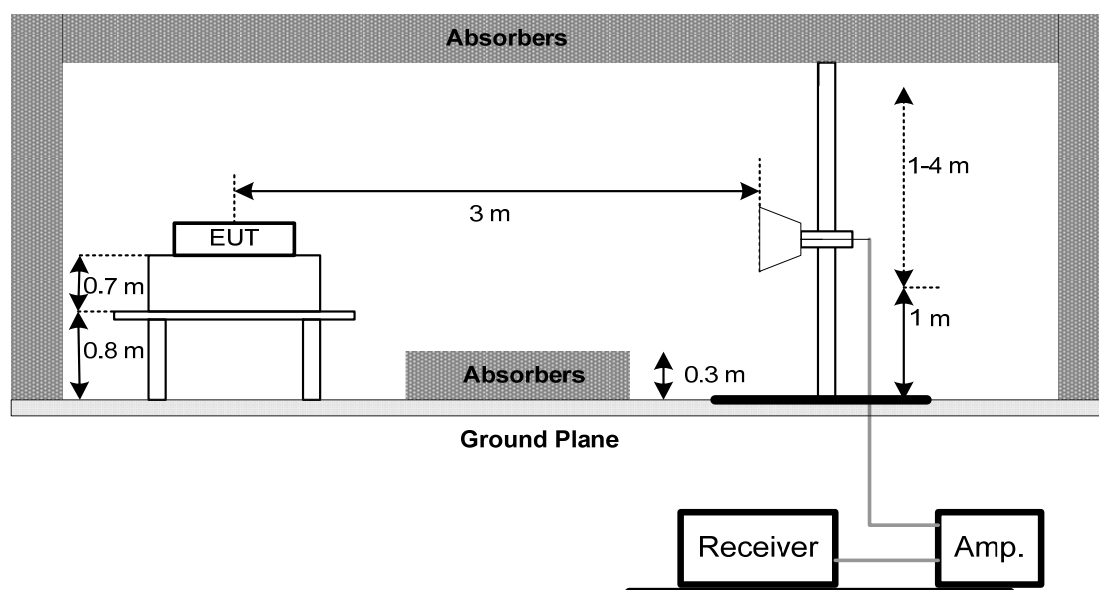
No deviation

4.2.4 TEST SETUP

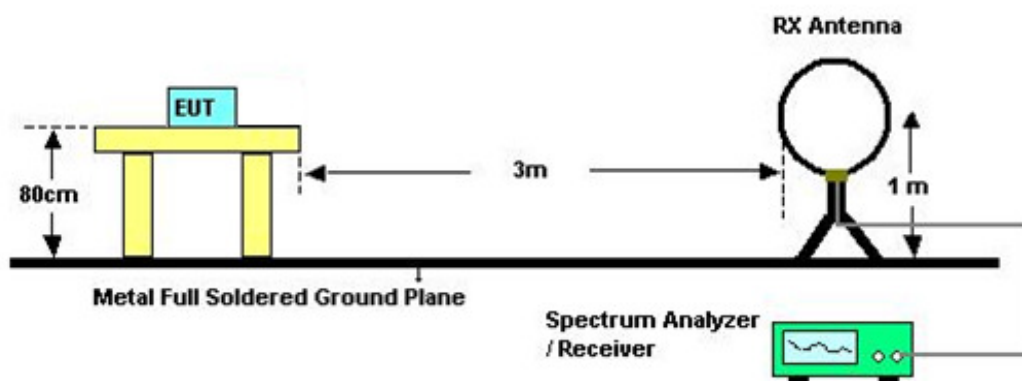
(A) Radiated Emission Test Set-Up Frequency Below 1GHz



(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: 22°C Relative Humidity: 56% Test Voltage: DC 5V

4.2.7 TEST RESULTS (9K TO 30MHz)

Please refer to the Attachment 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 (30 TO 1000 MHz)

Please refer to the Attachment C.

Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120kHz ; SPA setting in RBW=120kHz, VBW =120kHz, Swp. Time = 0.3 sec./MHz ◦
- (2) 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 ◦
- (3) Measuring frequency range from 30MHz to 1000MHz ◦
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦

4.2.9 TEST RESULTS (ABOVE 1000 MHz)

Please refer to the Attachment D.

Remark:

- (1) Spectrum Setting: 30MHz – 1000MHz , RBW= 100kHz, VBW=100kHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』 . Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (4) Data of measurement within this frequency range shown “ * ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axes:
“X” - denotes Laid on Table ; “Y” - denotes Vertical Stand ; “Z” - denotes Side Stand
- (7) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.
- (8) 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
	Minimum 500kHz 6dB Bandwidth	5725-5850	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
VBW	1000 kHz
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: 22°C Relative Humidity: 56% Test Voltage: DC 5V

5.1.6 TEST RESULTS

Please refer to the Attachment 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
	1 Watt (30dBm)	5725-5850	PASS
Note: The maximum e.i.r.p at anyelevation angle above 30 degrees as measured from the horizon must not exceed 125mW(21dBm)			

6.1.1 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
-

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	$\geq$ 3MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

- 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: 22°C Relative Humidity: 56% Test Voltage: DC 5V

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Antenna conducted Spurious Emission	-27dBm/MHz	5150-5250	PASS
	Below -17dBm/MHz within 10MHz of band edge, below -27dBm/MHz beyond 10MHz of the band edge	5725-5850	PASS

7.1.1 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
RBW	1000kHz
VBW	1000kHz
Trace	Max Hold
Sweep Time	Auto

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 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.

7.1.5 EUT TEST CONDITIONS

Temperature: 22°C Relative Humidity: 56% Test Voltage: DC 5V

7.1.6 TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	Other then Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250	PASS
	30dBm/500kHz	5725-5850	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	Max Hold
Sweep Time	Auto

Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01, 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.

8.1.1 DEVIATION FROM STANDARD

No deviation.

8.1.2 TEST SETUP



8.1.3 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.

8.1.4 EUT TEST CONDITIONS

Temperature: 22°C Relative Humidity: 56% Test Voltage: DC 5V

8.1.5 TEST RESULTS

Please refer to the Attachment H.

9. FREQUENCY STABILITY MEASUREMENT

9.1 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
		5725-5850	PASS

9.1.1 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

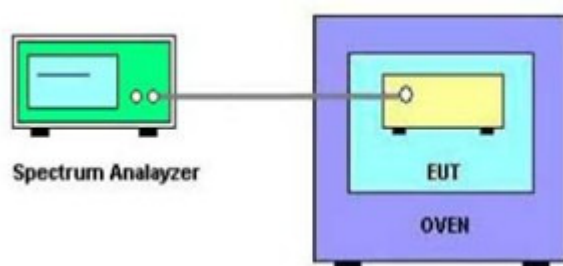
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. User manual temperature is 0°C~50°C.

9.1.2 DEVIATION FROM STANDARD

No deviation.

9.1.3 TEST SETUP



9.1.4 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.

9.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: DC 5V

9.1.6 TEST RESULTS

Please refer to the Attachment I.

10. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Mar. 28, 2016
2	LISN	R&S	ENV216	101447	Mar. 28, 2016
3	Test Cable	N/A	C_17	N/A	Mar. 13, 2016
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 28, 2016
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 28, 2016
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 28, 2016
2	Amplifier	HP	8447D	2944A09673	Nov. 09, 2016
3	Receiver	AGILENT	N9038A	MY52130039	Oct. 11, 2016
4	Test Cable	emci	LMR-400(30MH z-1GHz)	C-01	Jun. 28, 2016
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	Mar. 28, 2016
7	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2016
8	Receiver	AGILENT	N9038A	MY52130039	Oct. 11, 2016
9	Test Cable	emci	EMC104-SM-S M-10000(1GHz- 26.5GHz)	C-68	Jun. 28, 2016
10	Controller	CT	SC100	N/A	N/A
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Mar. 28, 2016
12	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 28, 2016
13	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 07, 2016
14	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	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	100185	Oct. 11, 2016

Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	power Meter	ANRITSU	ML2495A	1128009	Mar. 28, 2016
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 28, 2016

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016
2	Const Temp. & Humidity Chamber	Giant Force	ITH-225-20-S	IAB0309-001	Dec. 04, 2016

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

11. EUT TEST PHOTOS

Radiated Measurement Photos

9kHz to 30MHz



Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode: N/A

Note: "N/A" denotes test is not applicable to this device.

ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode:	TX MODE
------------	---------

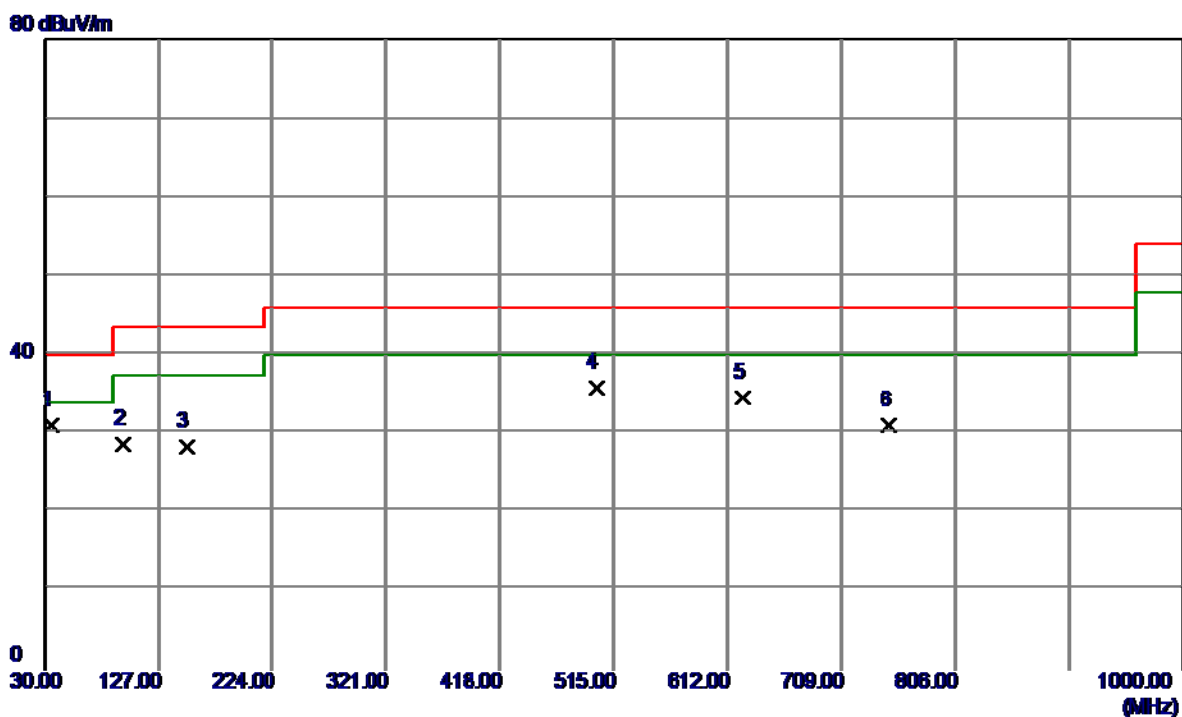
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0113	0°	13.44	24.8510	38.2900	126.5427	-88.2527	AVG
0.0113	0°	14.21	24.8510	39.0610	146.5427	-107.4817	PEAK
0.0274	0°	6.70	23.8313	30.5313	118.8492	-88.3179	AVG
0.0274	0°	8.09	23.8313	31.9213	138.8492	-106.9279	PEAK
0.0359	0°	3.18	23.2930	26.4730	116.5023	-90.0293	AVG
0.0359	0°	5.48	23.2930	28.7730	136.5023	-107.7293	PEAK
0.0576	0°	1.13	22.2480	23.3780	112.3958	-89.0178	AVG
0.0576	0°	2.43	22.2480	24.6780	132.3958	-107.7178	PEAK
0.5083	0°	19.38	19.8266	39.2066	73.4818	-34.2753	QP
1.9516	0°	23.68	19.5048	43.1848	69.5400	-26.3552	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0121	90°	13.12	24.3000	37.4200	125.9485	-88.5285	AVG
0.0121	90°	14.58	24.3000	38.8800	145.9485	-107.0685	PEAK
0.0264	90°	7.35	23.8947	31.2447	119.1721	-87.9275	AVG
0.0264	90°	8.87	23.8947	32.7647	139.1721	-106.4075	PEAK
0.0432	90°	5.21	22.8307	28.0407	114.8945	-86.8539	AVG
0.0432	90°	6.17	22.8307	29.0007	134.8945	-105.8939	PEAK
0.0576	90°	1.44	22.2480	23.6880	112.3958	-88.7078	AVG
0.0576	90°	2.78	22.2480	25.0280	132.3958	-107.3678	PEAK
0.6214	90°	22.13	20.1885	42.3185	71.7368	-29.4183	QP
2.0537	90°	24.45	19.4678	43.9178	69.5400	-25.6222	QP

ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

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

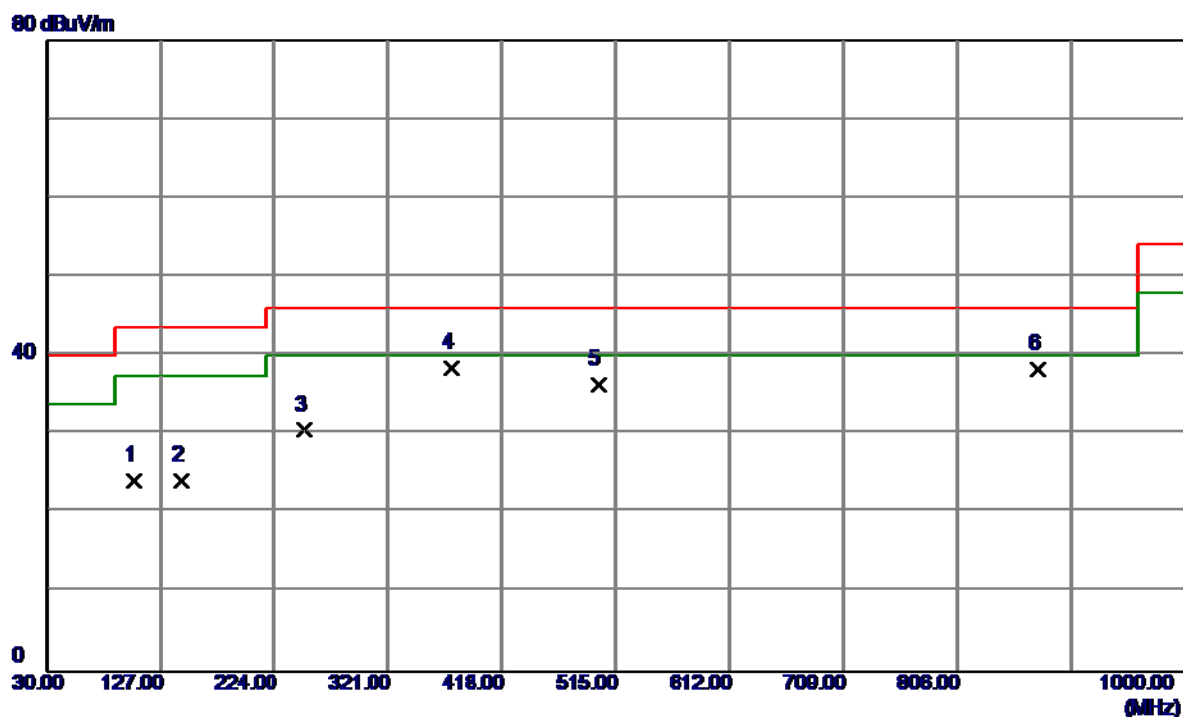
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.8200	42.35	-11.38	30.97	40.00	-9.03	Peak	
2	96.9300	46.49	17.85	28.64	43.50	14.86	Peak	
3	151.2500	46.48	-18.20	28.28	43.50	-15.22	Peak	
4	500.4500	44.14	-8.28	35.86	46.00	-10.14	Peak	
5	624.6100	40.43	-5.93	34.50	46.00	-11.50	Peak	
6	749.7400	35.10	-4.10	31.00	46.00	-15.00	Peak	

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

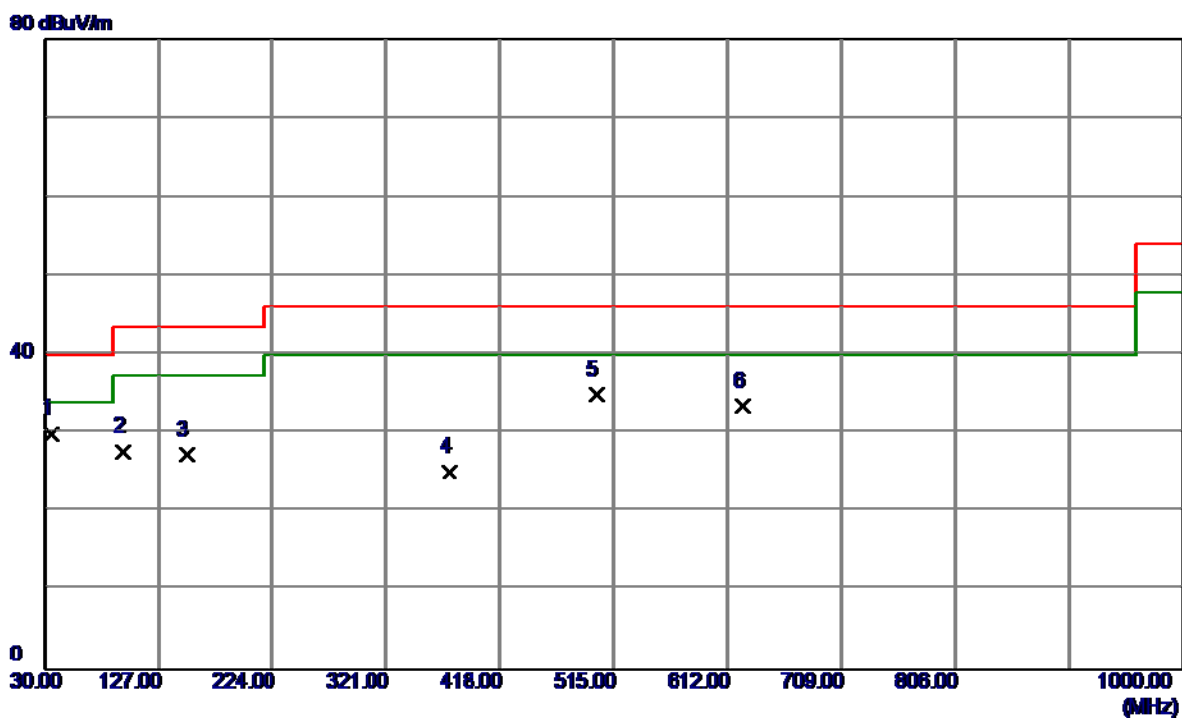
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	104.6900	42.11	-17.92	24.19	43.50	-19.31	Peak	
2	145.4299	42.52	-18.42	24.10	43.50	-19.40	Peak	
3	250.1900	43.62	-13.10	30.52	46.00	-15.48	Peak	
4	375.3200	48.02	-9.69	38.33	46.00	-7.67	Peak	
5	500.4500	44.57	-8.28	36.29	46.00	-9.71	Peak	
6	874.8700	40.59	-2.30	38.29	46.00	-7.71	Peak	

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

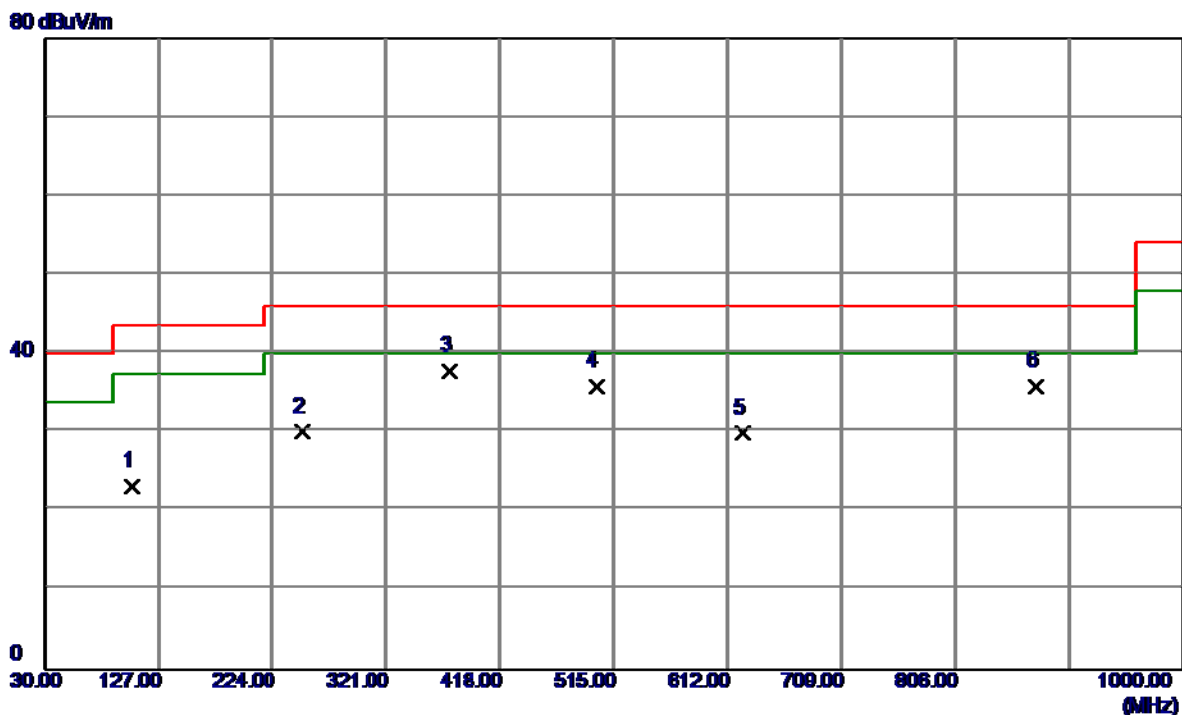
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.8200	41.35	-11.38	29.97	40.00	-10.03	Peak	
2	96.9300	45.49	-17.85	27.64	43.50	-15.86	Peak	
3	151.2500	45.48	-18.20	27.28	43.50	-16.22	Peak	
4	375.3200	34.87	-9.69	25.18	46.00	-20.82	Peak	
5	500.4500	43.14	-8.28	34.86	46.00	-11.14	Peak	
6	624.6100	39.43	-5.93	33.50	46.00	-12.50	Peak	

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

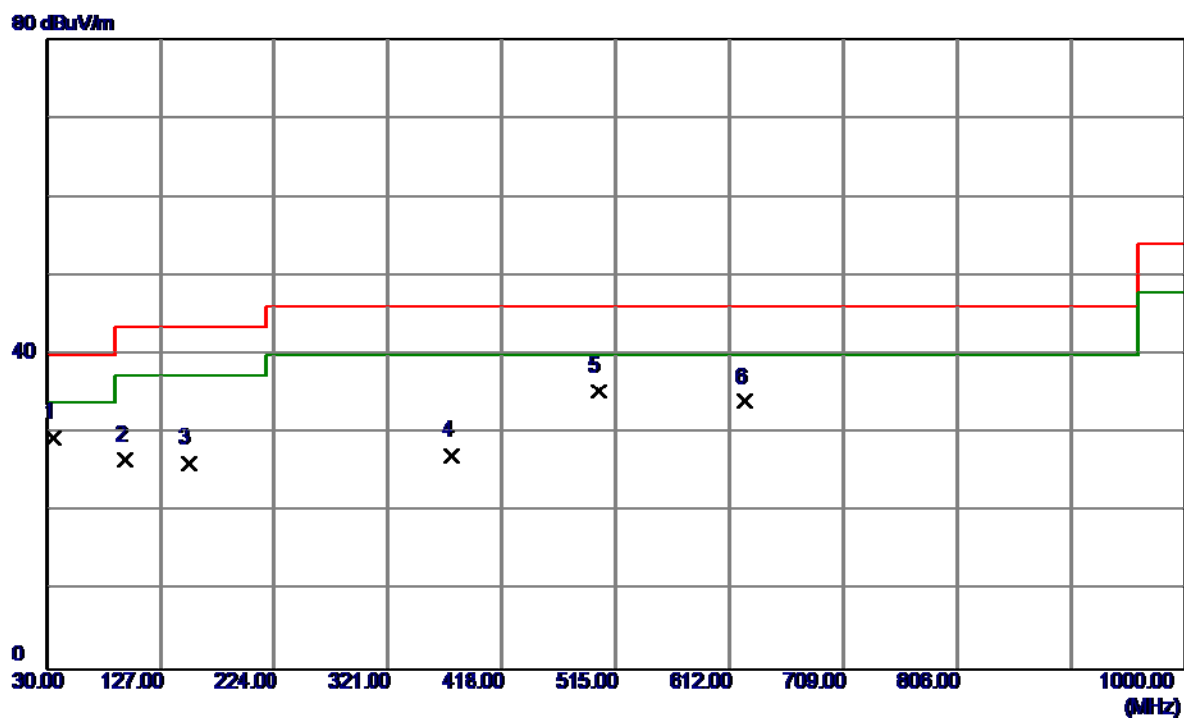
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	104.6900	41.11	-17.92	23.19	43.50	-20.31	Peak	
2	250.1900	43.12	-13.10	30.02	46.00	-15.98	Peak	
3	375.3200	47.52	-9.69	37.83	46.00	-8.17	Peak	
4	500.4500	44.07	-8.28	35.79	46.00	-10.21	Peak	
5	624.6100	35.83	-5.93	29.90	46.00	-16.10	Peak	
6	874.8700	38.09	-2.30	35.79	46.00	-10.21	Peak	

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

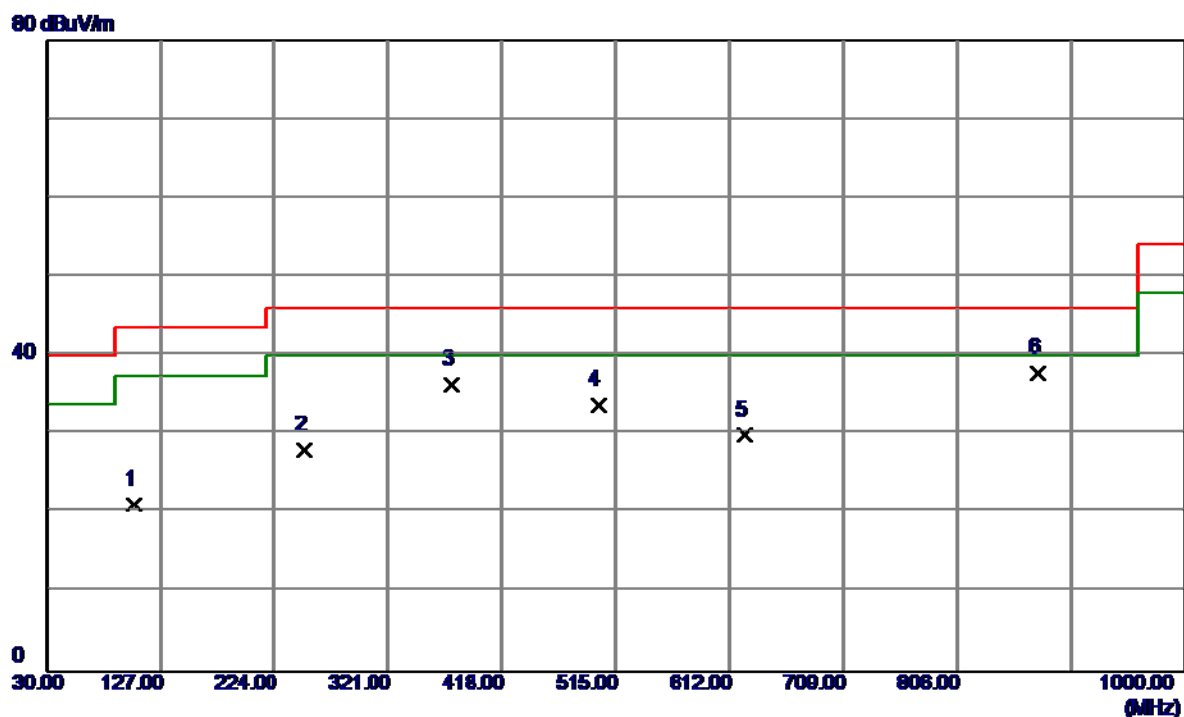
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.8200	40.85	-11.38	29.47	40.00	-10.53	Peak	
2	96.9300	44.49	-17.85	26.64	43.50	-16.86	Peak	
3	151.2500	44.48	-18.20	26.28	43.50	-17.22	Peak	
4	375.3200	36.87	-9.69	27.18	46.00	-18.82	Peak	
5	500.4500	43.64	-8.28	35.36	46.00	-10.64	Peak	
6	624.6100	39.93	-5.93	34.00	46.00	-12.00	Peak	

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

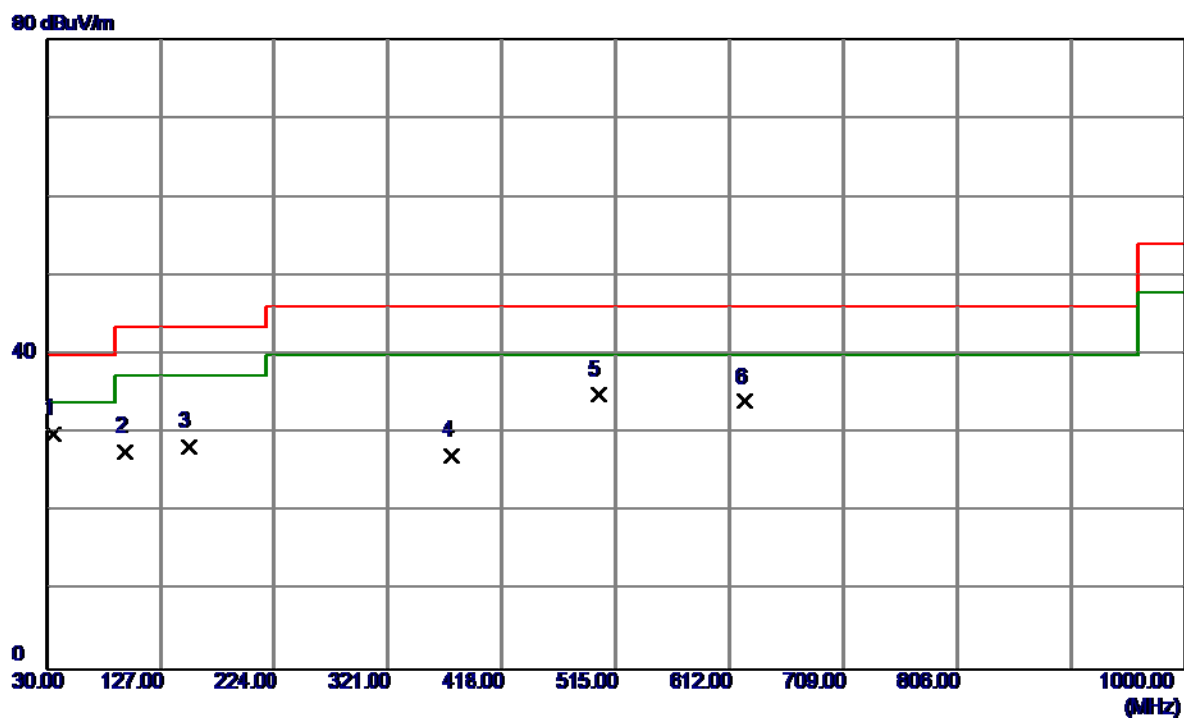
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	104.6900	39.11	-17.92	21.19	43.50	-22.31	Peak	
2	250.1900	41.12	-13.10	28.02	46.00	-17.98	Peak	
3	375.3200	46.02	-9.69	36.33	46.00	-9.67	Peak	
4	500.4500	42.07	-8.28	33.79	46.00	-12.21	Peak	
5	624.6100	35.83	-5.93	29.90	46.00	-16.10	Peak	
6	874.8700	40.09	-2.30	37.79	46.00	-8.21	Peak	

Test Mode: UNII-3/TX A Mode 5745MHz

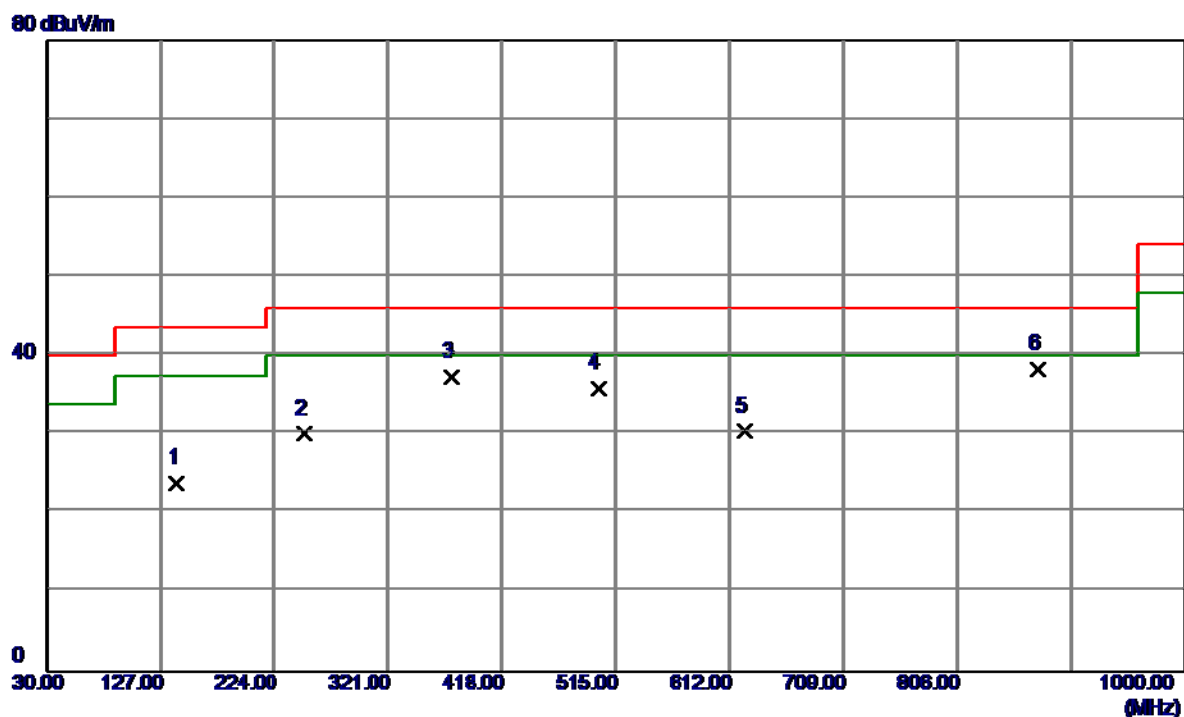
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.8200	41.35	-11.38	29.97	40.00	-10.03	Peak	
2	96.9300	45.49	-17.85	27.64	43.50	-15.86	Peak	
3	151.2500	46.48	-18.20	28.28	43.50	-15.22	Peak	
4	375.3200	36.87	-9.69	27.18	46.00	-18.82	Peak	
5	500.4500	43.14	-8.28	34.86	46.00	-11.14	Peak	
6	624.6100	39.93	-5.93	34.00	46.00	-12.00	Peak	

Test Mode: UNII-3/TX A Mode 5745MHz

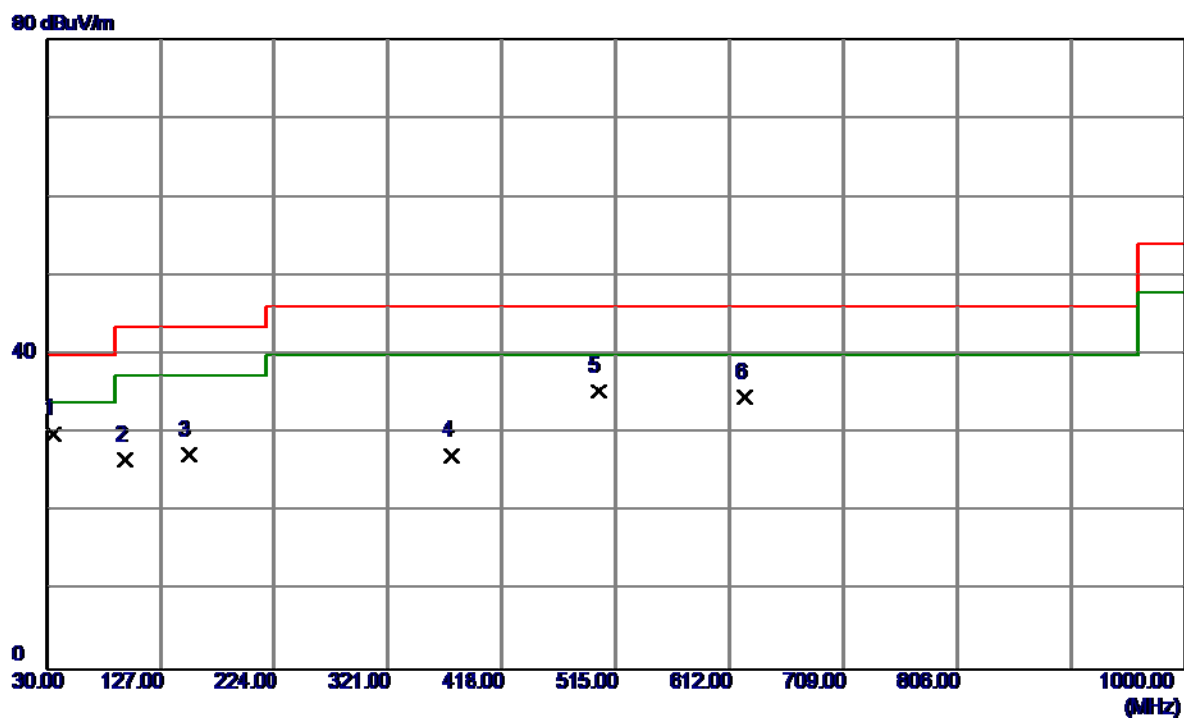
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	141.5500	42.49	-18.61	23.88	43.50	-19.62	Peak	
2	250.1900	43.12	-13.10	30.02	46.00	-15.98	Peak	
3	375.3200	47.02	-9.69	37.33	46.00	-8.67	Peak	
4	500.4500	44.07	-8.28	35.79	46.00	-10.21	Peak	
5	624.6100	36.33	-5.93	30.40	46.00	-15.60	Peak	
6	874.8700	40.59	-2.30	38.29	46.00	-7.71	Peak	

Test Mode: UNII-3/TX A Mode 5785MHz

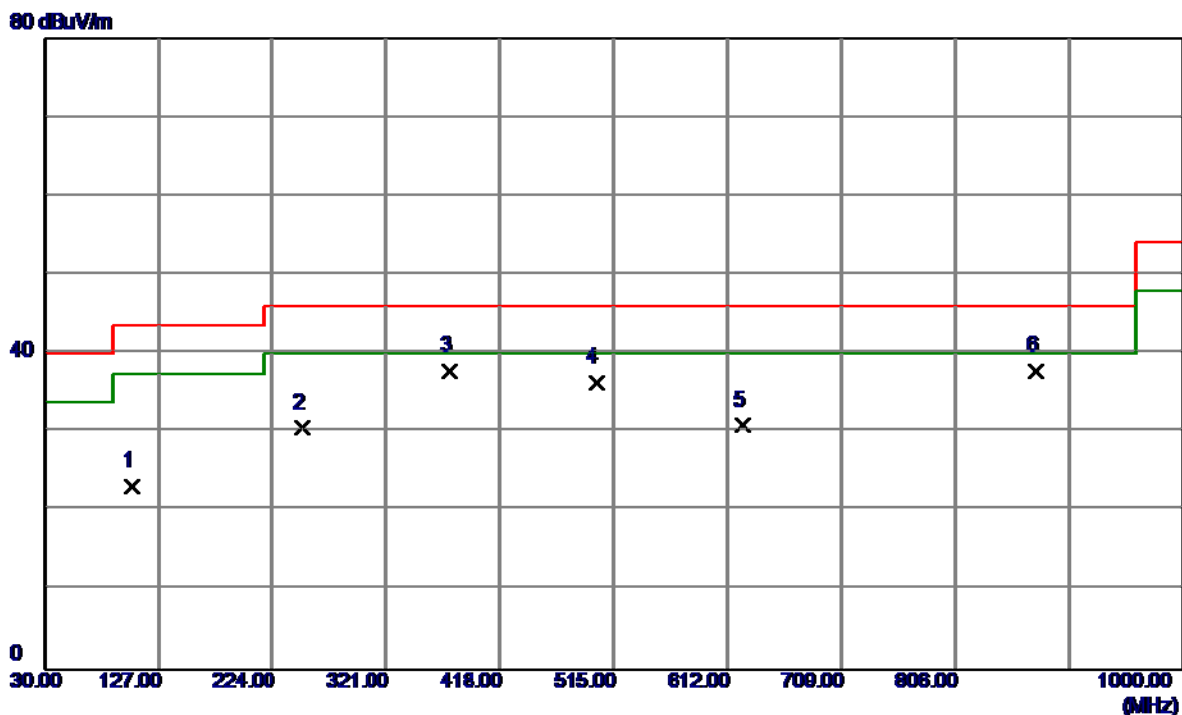
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.8200	41.35	-11.38	29.97	40.00	-10.03	Peak	
2	96.9300	44.49	-17.85	26.64	43.50	-16.86	Peak	
3	151.2500	45.48	-18.20	27.28	43.50	-16.22	Peak	
4	375.3200	36.87	-9.69	27.18	46.00	-18.82	Peak	
5	500.4500	43.64	-8.28	35.36	46.00	-10.64	Peak	
6	624.6100	40.43	-5.93	34.50	46.00	-11.50	Peak	

Test Mode: UNII-3/TX A Mode 5785MHz

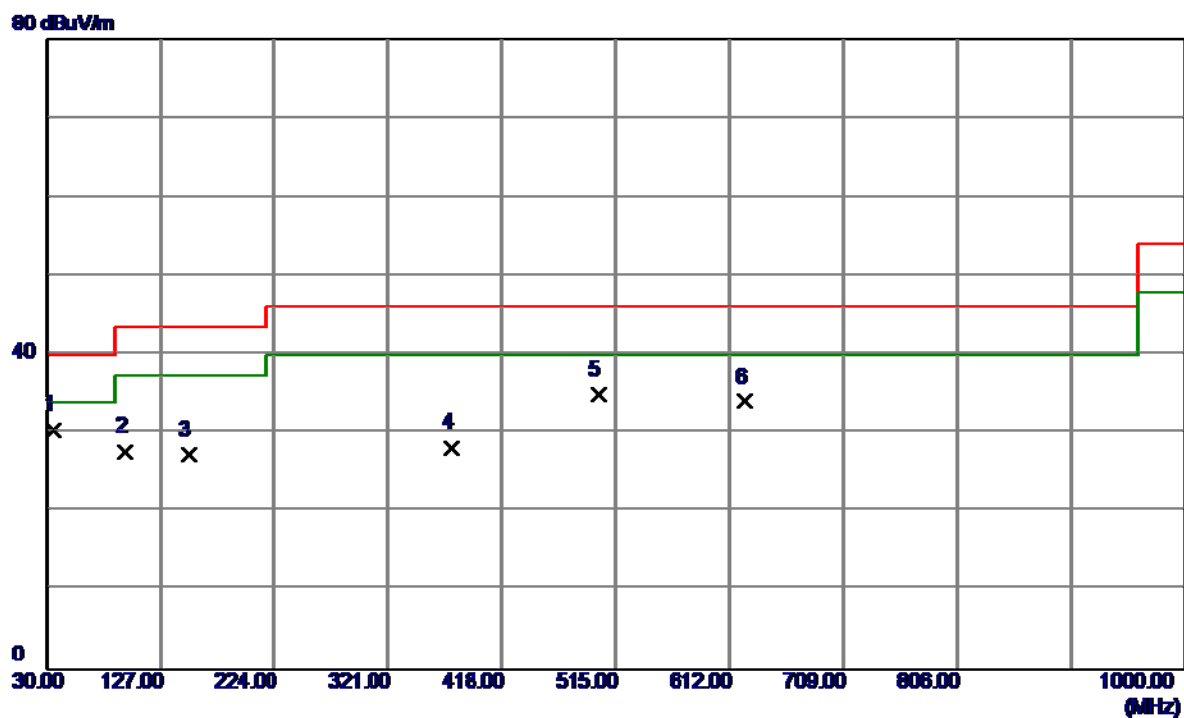
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	104.6900	41.11	-17.92	23.19	43.50	-20.31	Peak	
2	250.1900	43.62	-13.10	30.52	46.00	-15.48	Peak	
3	375.3200	47.52	-9.69	37.83	46.00	-8.17	Peak	
4	500.4500	44.57	-8.28	36.29	46.00	-9.71	Peak	
5	624.6100	36.83	-5.93	30.90	46.00	-15.10	Peak	
6	874.8700	40.09	-2.30	37.79	46.00	-8.21	Peak	

Test Mode: UNII-3/TX A Mode 5825MHz

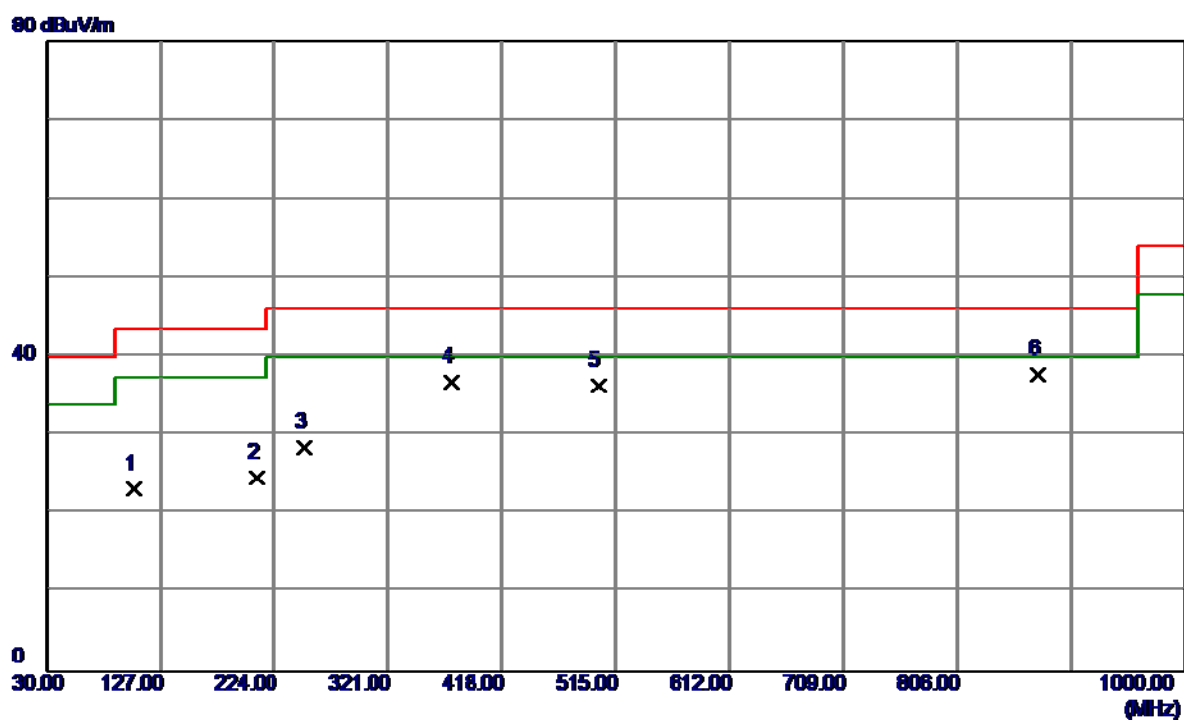
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.8200	41.85	-11.38	30.47	40.00	-9.53	Peak	
2	96.9300	45.49	-17.85	27.64	43.50	-15.86	Peak	
3	151.2500	45.48	-18.20	27.28	43.50	-16.22	Peak	
4	375.3200	37.87	-9.69	28.18	46.00	-17.82	Peak	
5	500.4500	43.14	-8.28	34.86	46.00	-11.14	Peak	
6	624.6100	39.93	-5.93	34.00	46.00	-12.00	Peak	

Test Mode: UNII-3/TX A Mode 5825MHz

Horizontal



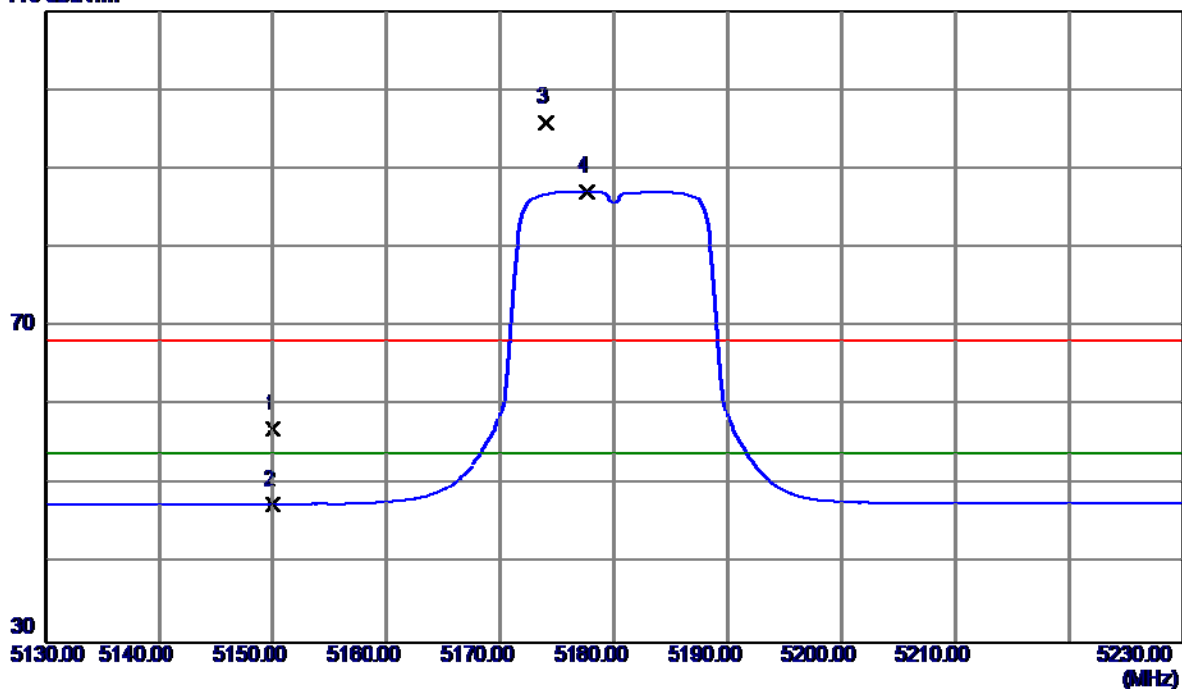
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	104.6900	41.11	-17.92	23.19	43.50	-20.31	Peak	
2	208.4800	40.19	-15.55	24.64	43.50	-18.86	Peak	
3	250.1900	41.62	-13.10	28.52	46.00	-17.48	Peak	
4	375.3200	46.52	-9.69	36.83	46.00	-9.17	Peak	
5	500.4500	44.57	-8.28	36.29	46.00	-9.71	Peak	
6	874.8700	40.09	-2.30	37.79	46.00	-8.21	Peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

Vertical

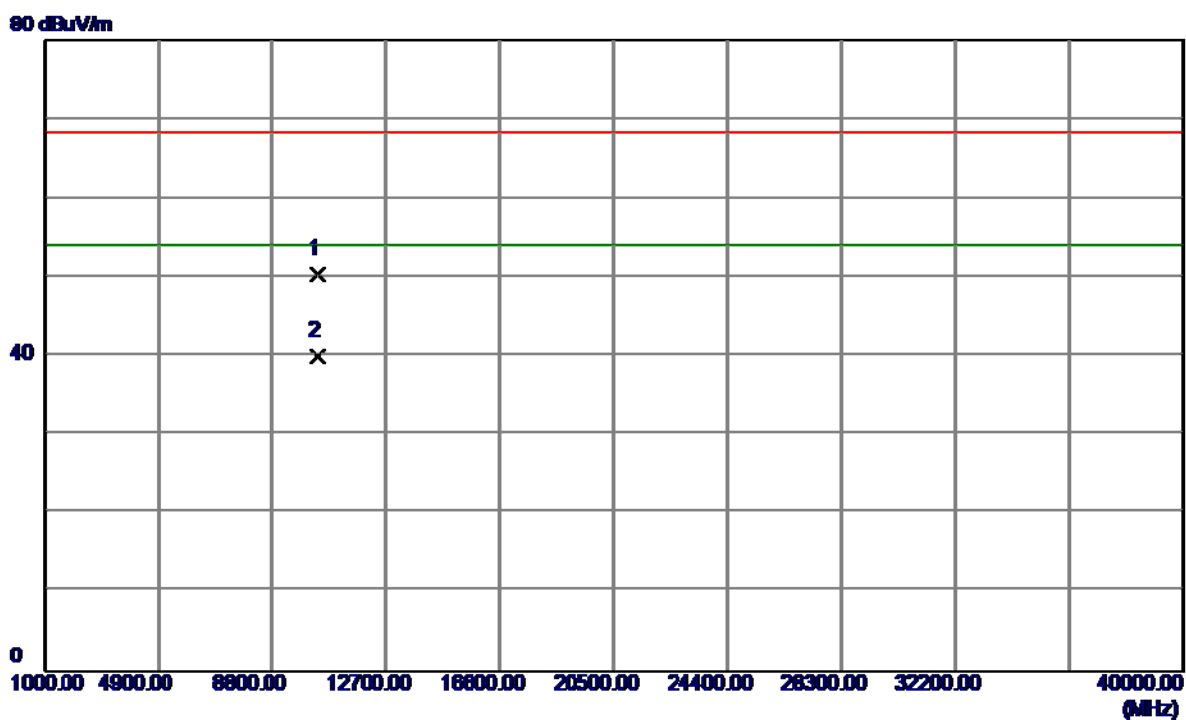
110 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	19.19	37.89	57.08	68.30	-11.22	Peak	
2	5150.0000	9.59	37.89	47.48	54.00	-6.52	AVG	
3	5174.0000	57.86	38.00	95.86	68.30	27.56	Peak	No Limit
4	5177.7000	49.17	38.02	87.19	54.00	33.19	AVG	No Limit

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

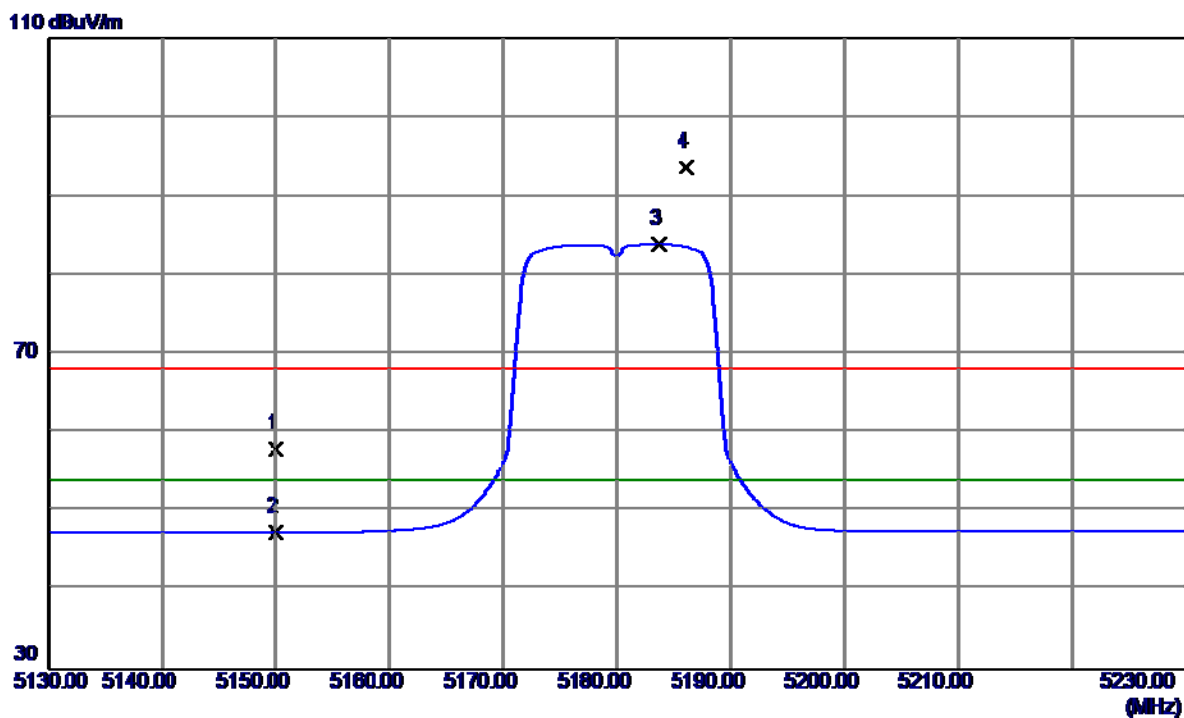
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10361.0000	36.12	14.33	50.45	68.30	-17.85	Peak	
2	10361.0000	25.60	14.33	39.93	54.00	-14.07	AVG	

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

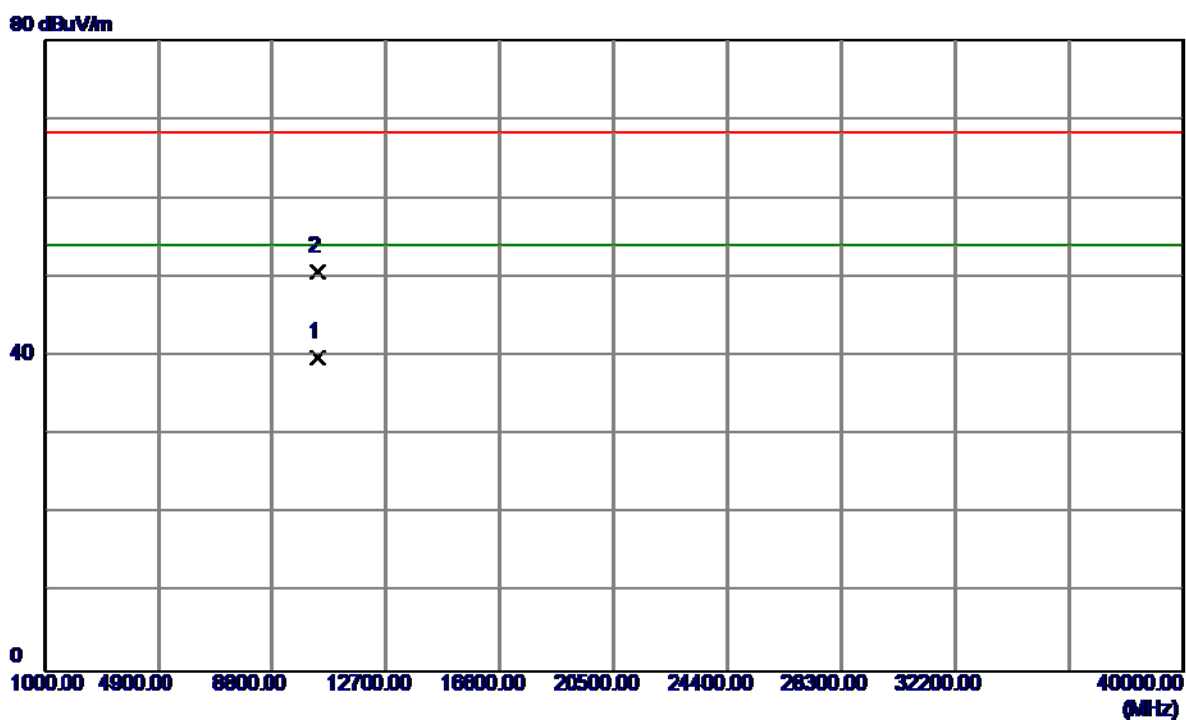
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.11	37.89	58.00	68.30	-10.30	Peak	
2	5150.0000	9.55	37.89	47.44	54.00	-6.56	AVG	
3	5183.7000	45.88	38.04	83.92	54.00	29.92	AVG	No Limit
4	5186.1000	55.68	38.05	93.73	68.30	25.43	Peak	No Limit

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

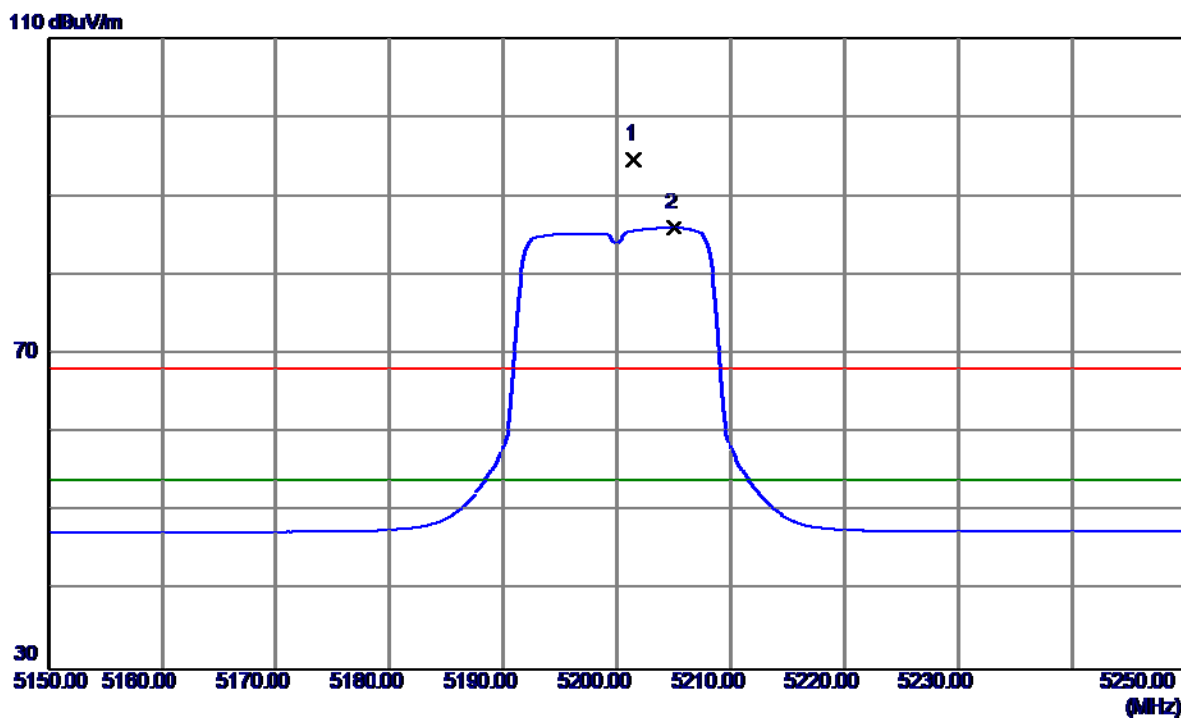
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10359.9000	25.54	14.33	39.87	54.00	-14.13	AVG	
2	10359.8600	36.41	14.33	50.74	68.30	-17.56	Peak	

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

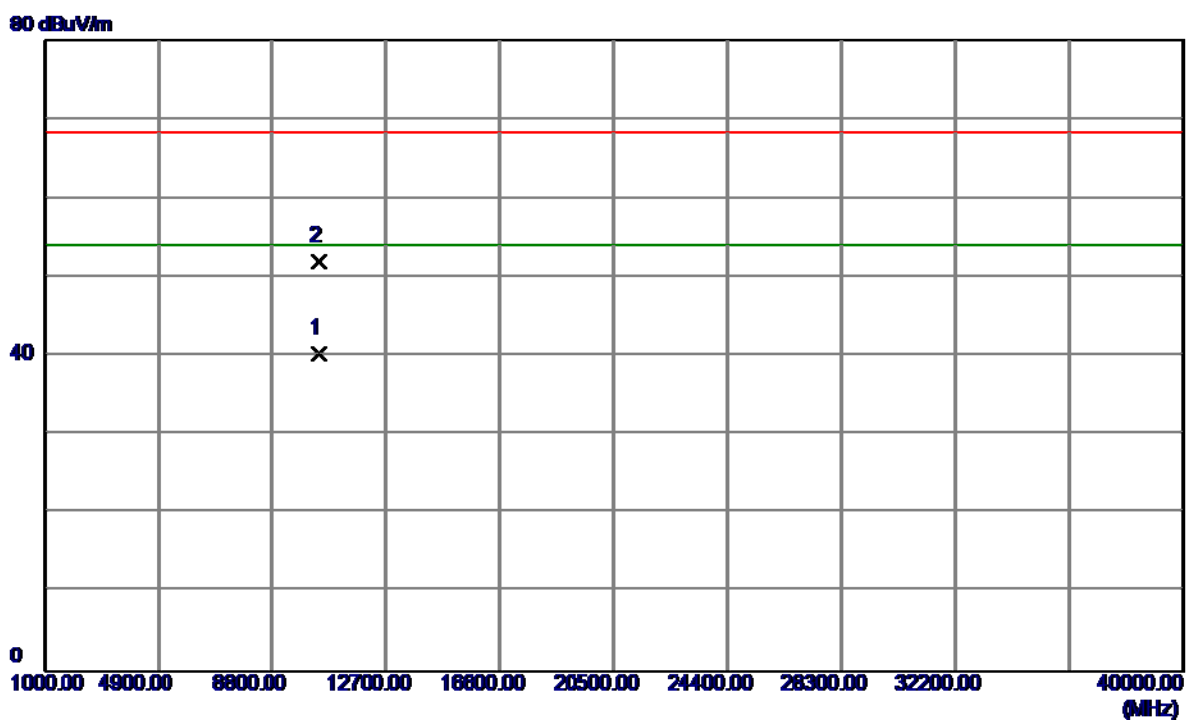
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5201.5000	56.52	38.12	94.64	68.30	26.34	Peak	No Limit
2	5205.0000	47.88	38.14	86.02	54.00	32.02	AVG	No Limit

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

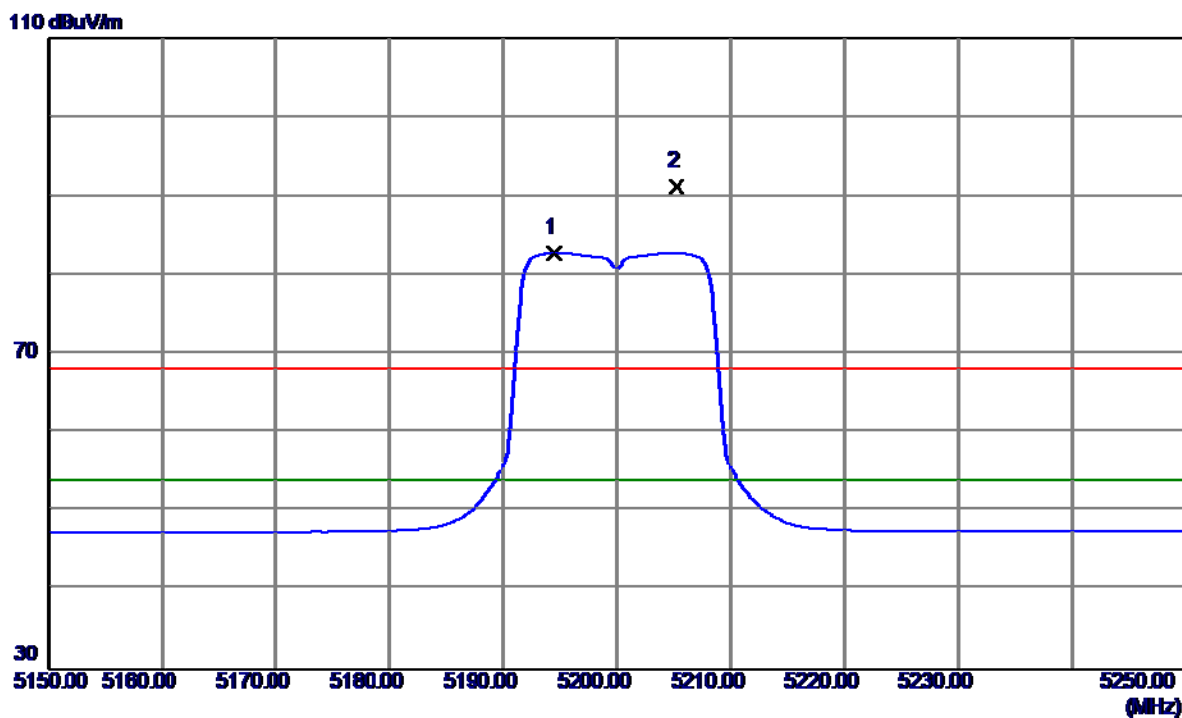
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10398.1000	25.86	14.40	40.26	54.00	-13.74	AVG	
2	10401.1000	37.57	14.41	51.98	68.30	-16.32	Peak	

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

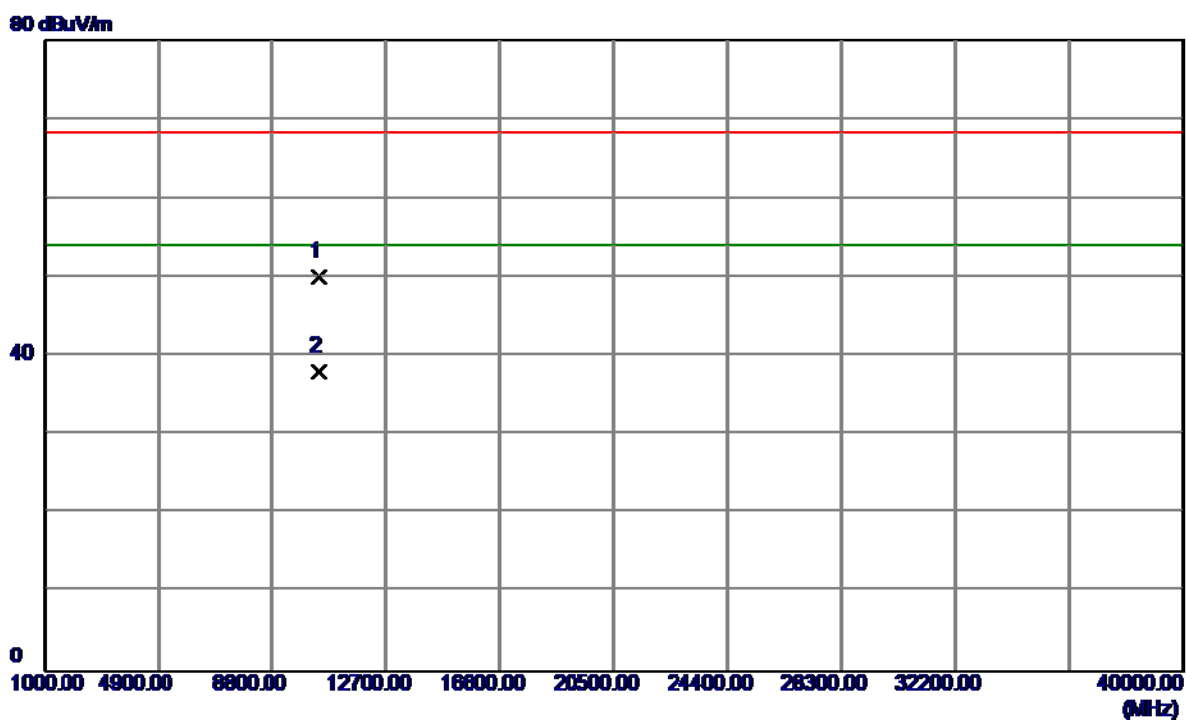
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5194.4000	44.78	38.09	82.87	54.00	28.87	AVG	No Limit
2	5205.2000	53.07	38.14	91.21	68.30	22.91	Peak	No Limit

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

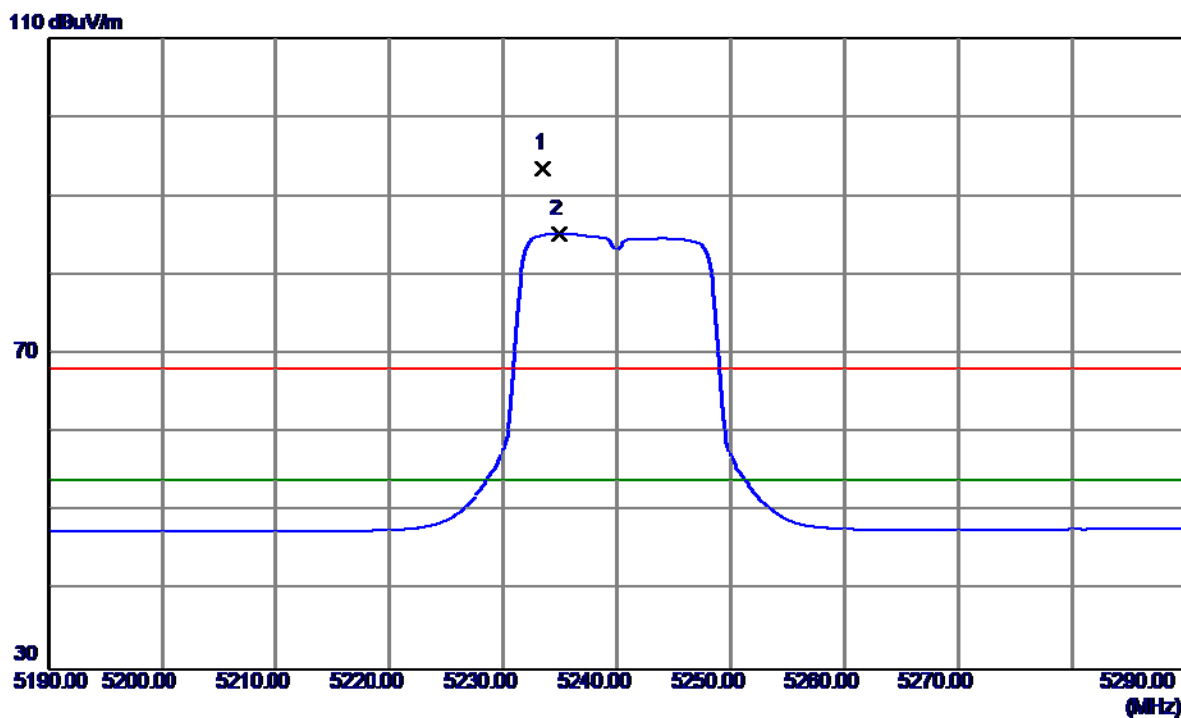
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10400.4000	35.73	14.40	50.13	68.30	-18.17	Peak	
2	10400.4500	23.68	14.40	38.08	54.00	-15.92	AVG	

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

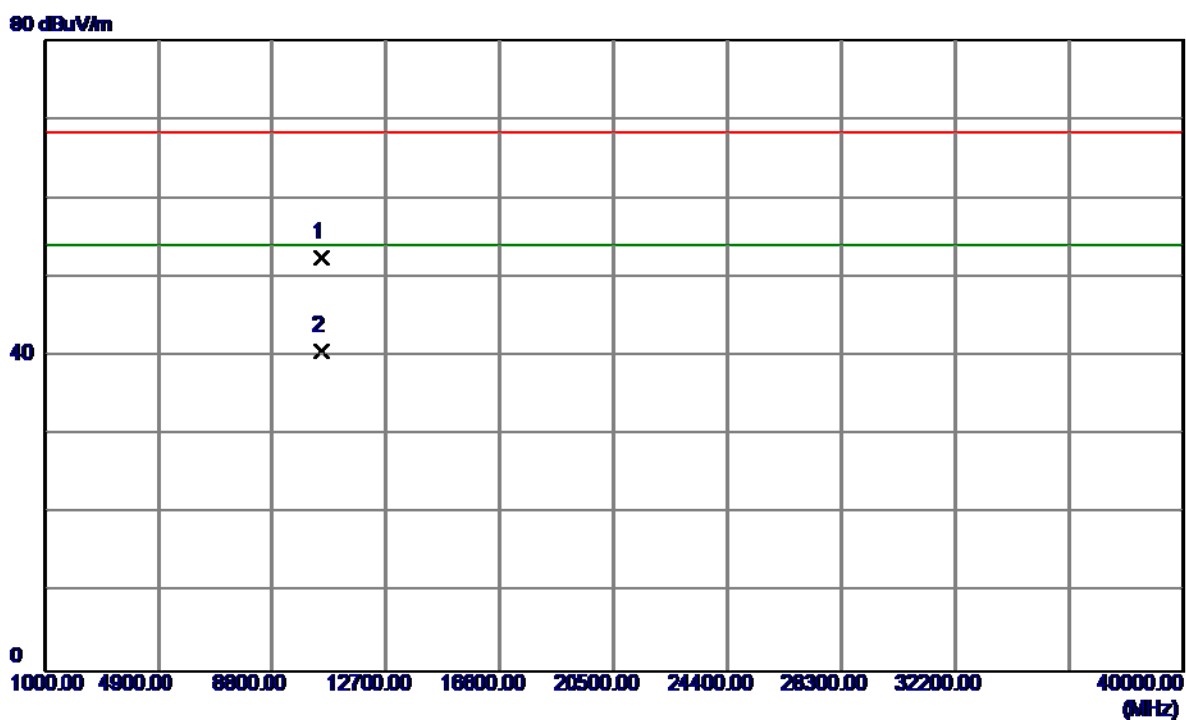
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5233.5000	55.29	38.26	93.55	68.30	25.25	Peak	No Limit
2	5234.9000	46.99	38.27	85.26	54.00	31.26	AVG	No Limit

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

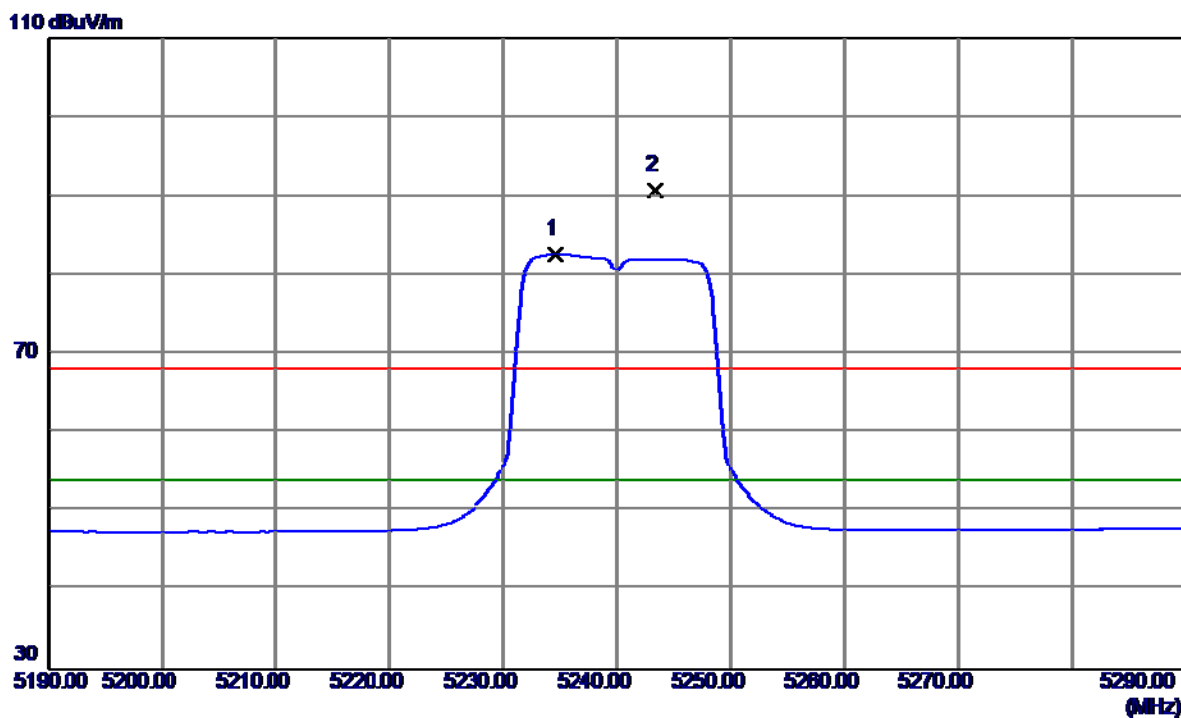
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10478.5000	37.97	14.56	52.53	68.30	-15.77	Peak	
2	10480.9000	26.11	14.56	40.67	54.00	-13.33	AVG	

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

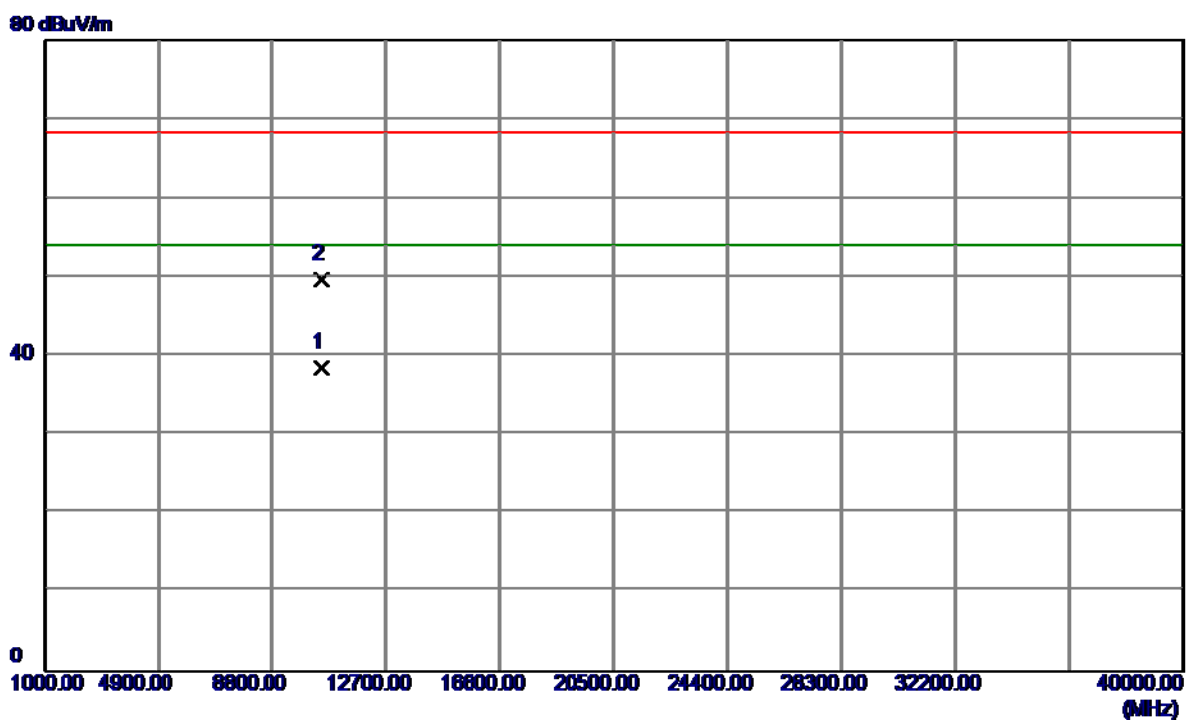
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5234.6000	44.39	38.27	82.66	54.00	28.66	AVG	No Limit
2	5243.3000	52.56	38.31	90.87	68.30	22.57	Peak	No Limit

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

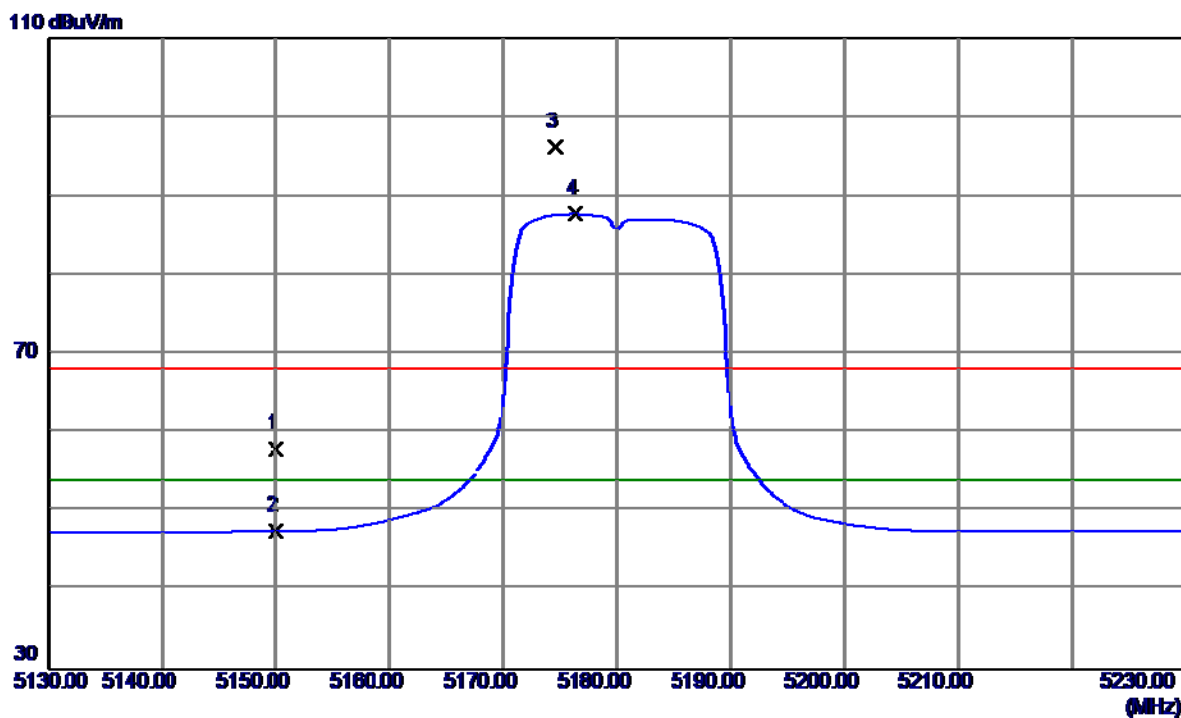
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10479.4000	24.04	14.56	38.60	54.00	-15.40	AVG	
2	10481.5000	35.13	14.56	49.69	68.30	-18.61	Peak	

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

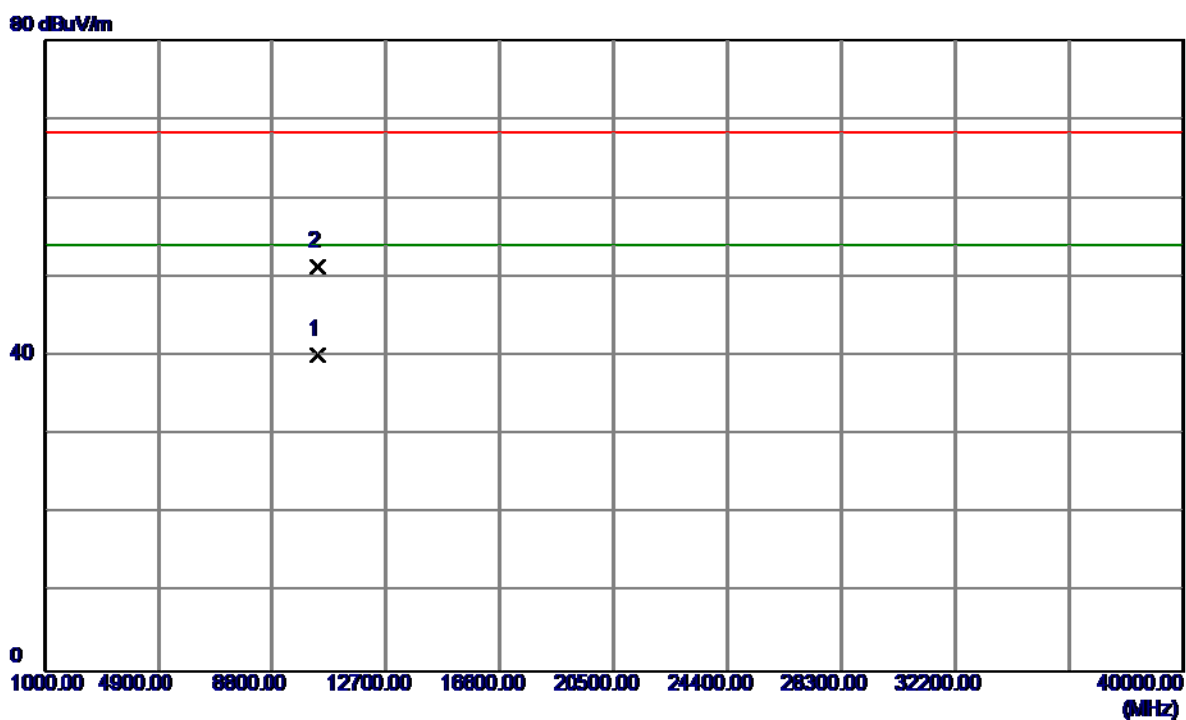
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	20.05	37.89	57.94	68.30	-10.36	Peak	
2	5150.0000	9.66	37.89	47.55	54.00	-6.45	AVG	
3	5174.6000	58.20	38.00	96.20	68.30	27.90	Peak	No Limit
4	5176.3000	49.69	38.01	87.70	54.00	33.70	AVG	No Limit

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

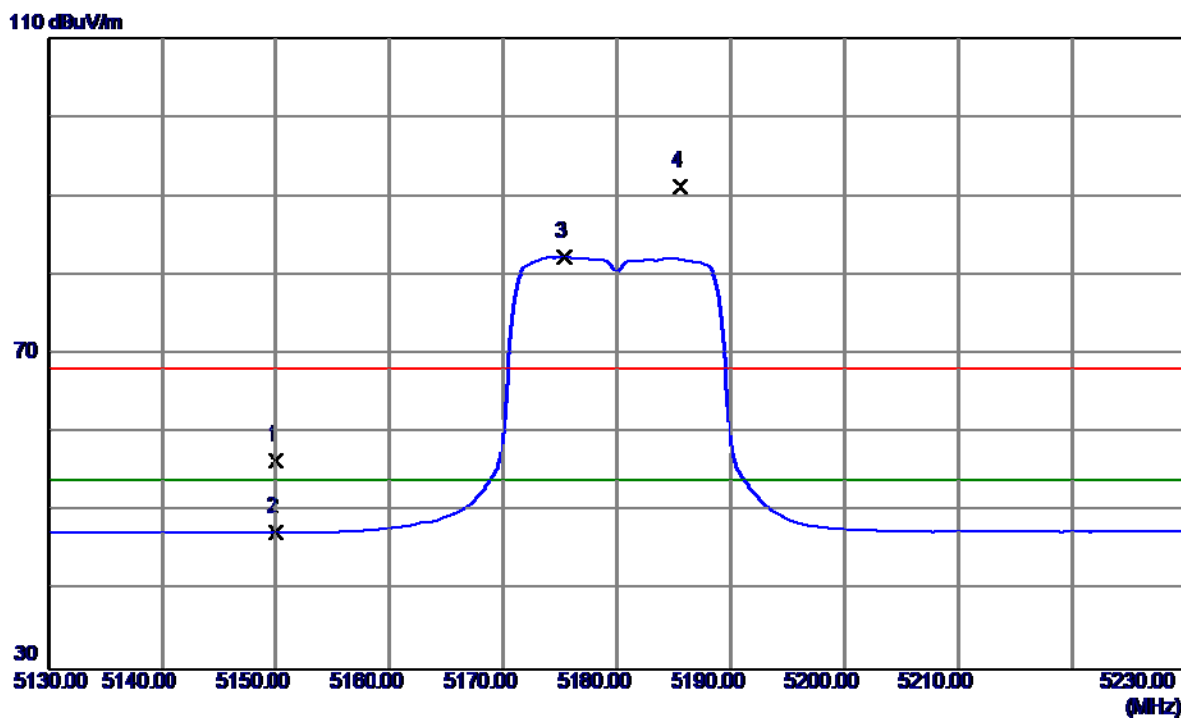
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10359.0000	25.80	14.32	40.12	54.00	-13.88	AVG	
2	10361.2000	36.98	14.33	51.31	68.30	-16.99	Peak	

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

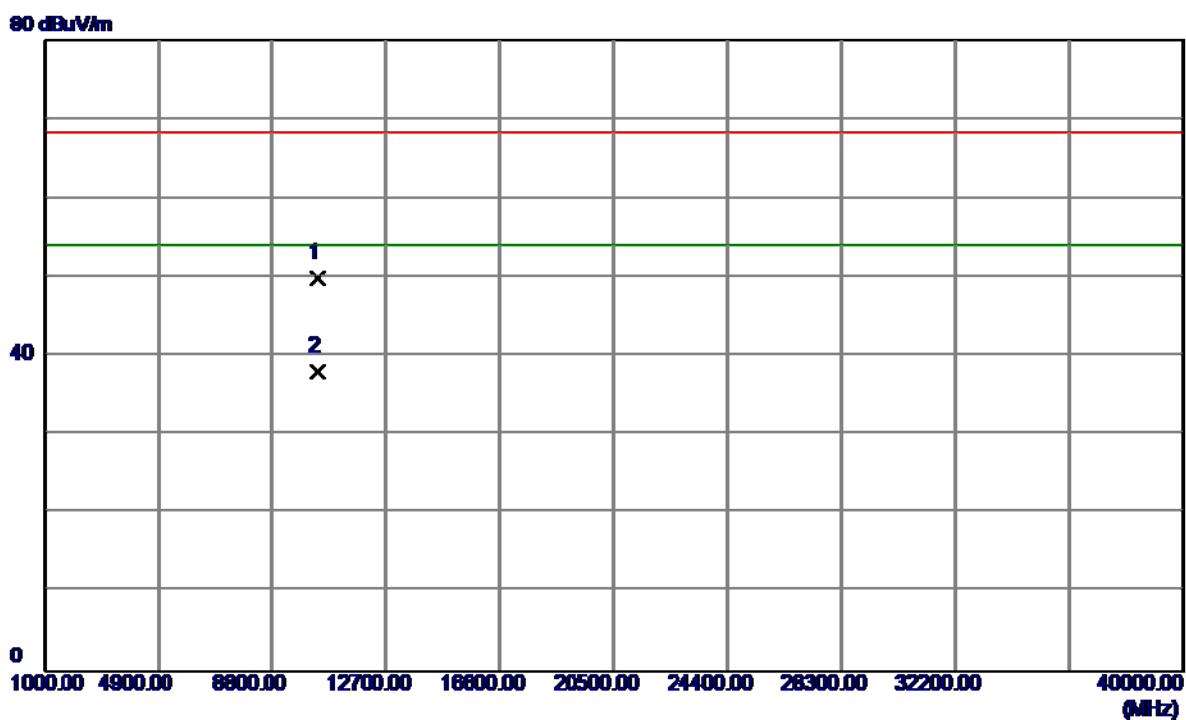
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	18.69	37.89	56.58	68.30	-11.72	Peak	
2	5150.0000	9.54	37.89	47.43	54.00	-6.57	AVG	
3	5175.3000	44.35	38.00	82.35	54.00	28.35	AVG	No Limit
4	5185.6000	53.22	38.05	91.27	68.30	22.97	Peak	No Limit

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

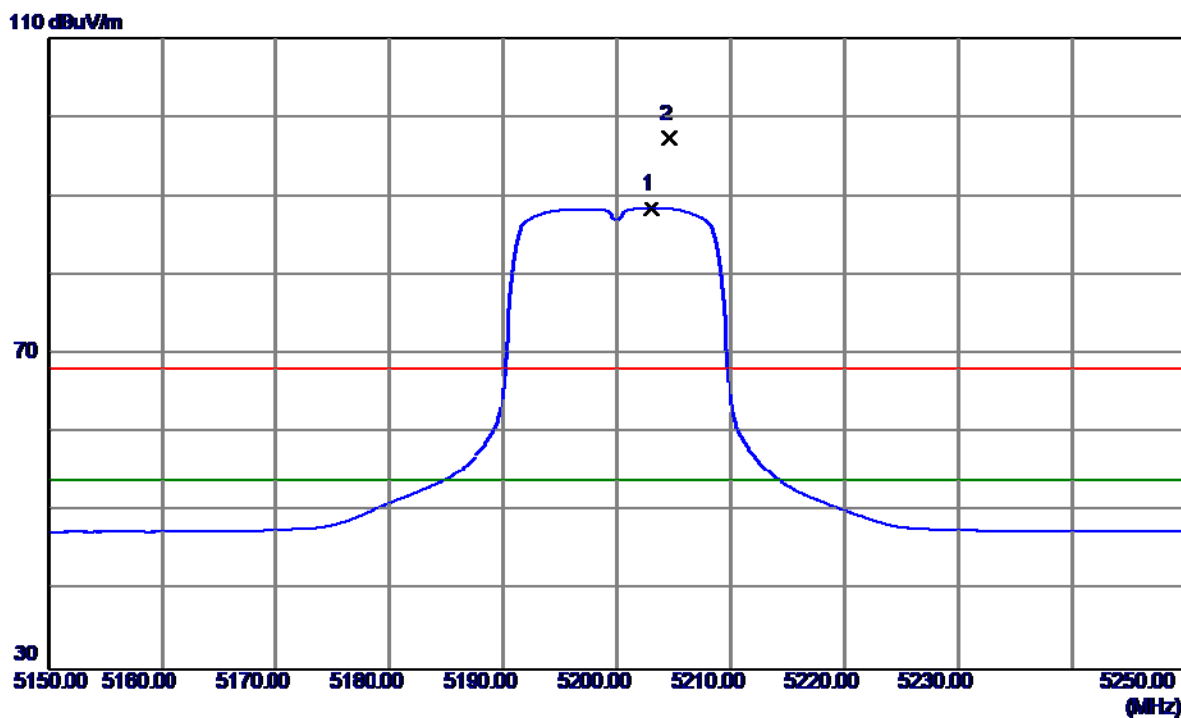
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10360.6000	35.64	14.33	49.97	68.30	-18.33	Peak	
2	10360.7000	23.73	14.33	38.06	54.00	-15.94	AVG	

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

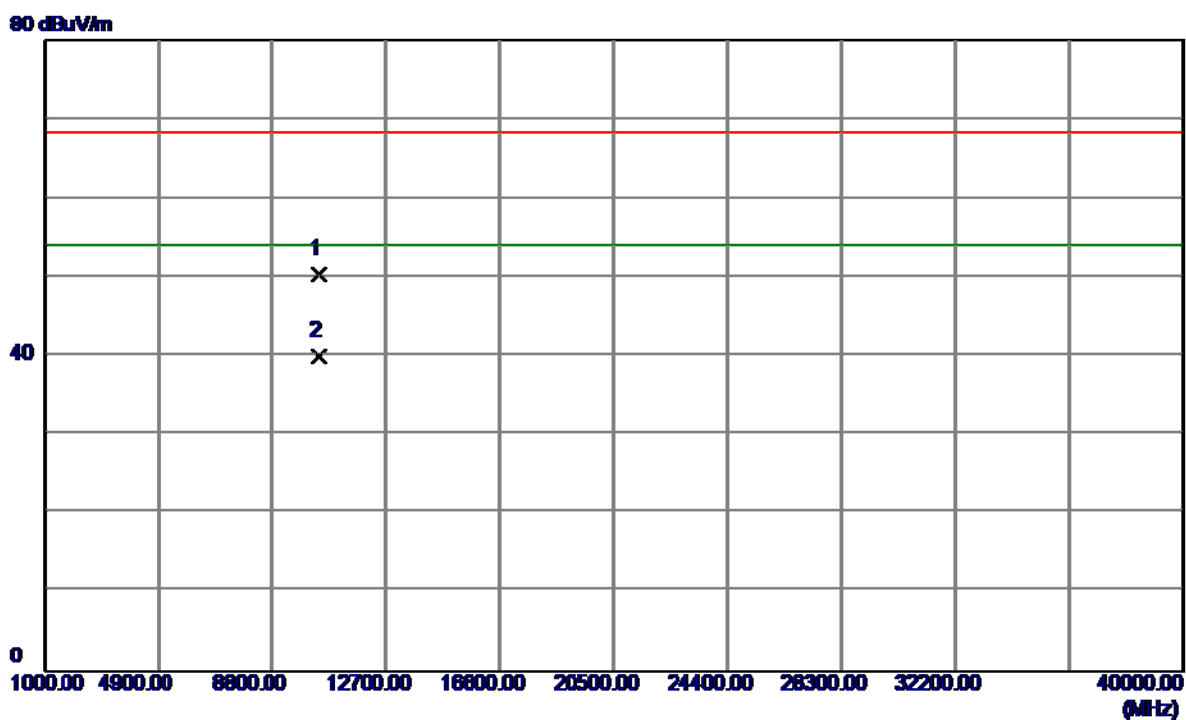
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5203.0000	50.32	38.13	88.45	54.00	34.45	AVG	No Limit
2	5204.6000	59.15	38.13	97.28	68.30	28.98	Peak	No Limit

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

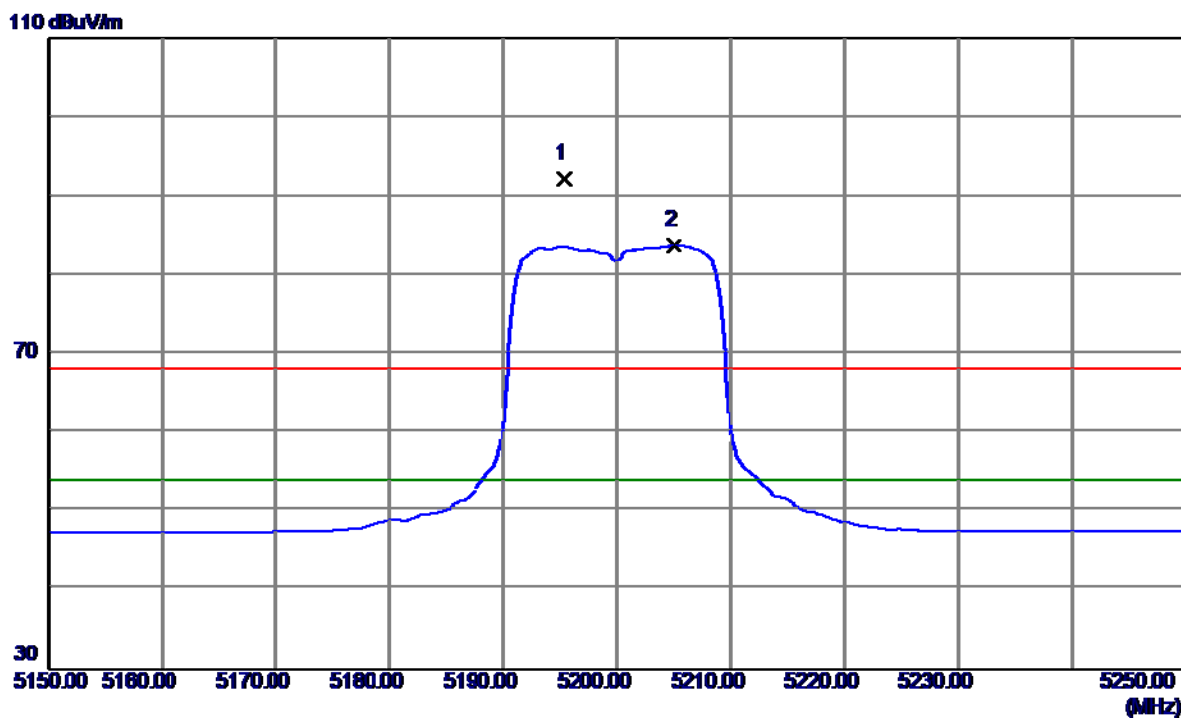
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10400.8000	35.94	14.41	50.35	68.30	-17.95	Peak	
2	10401.1000	25.58	14.41	39.99	54.00	-14.01	AVG	

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

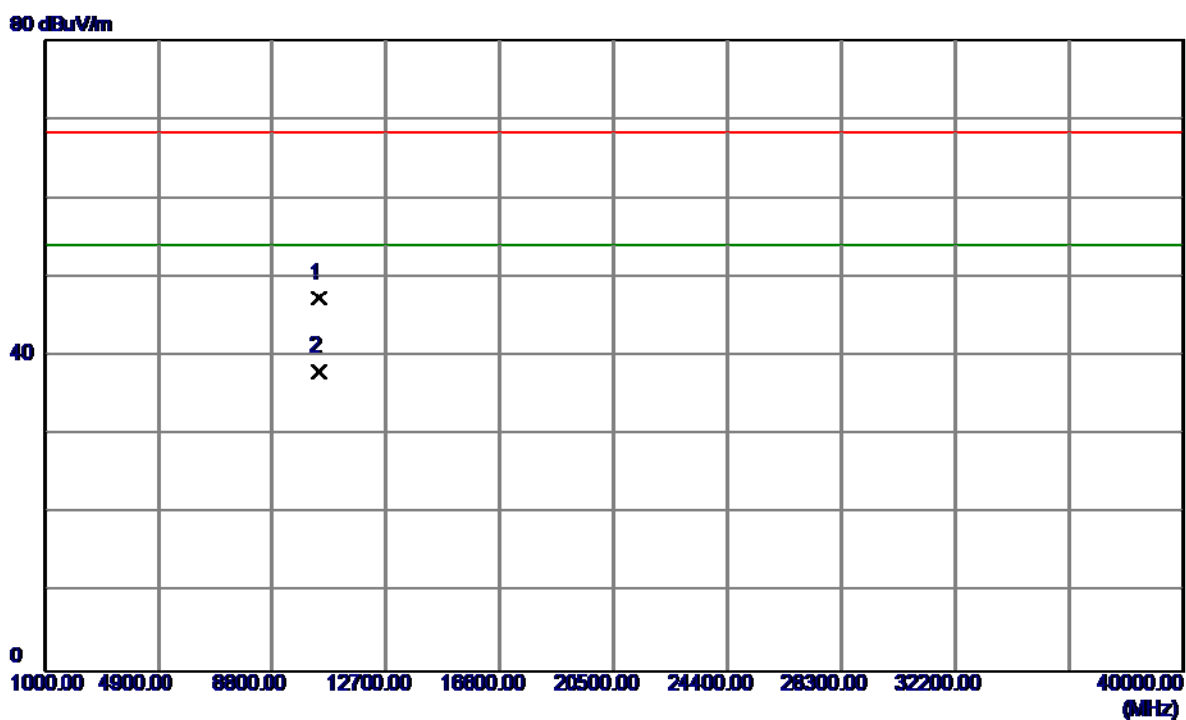
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5195.3000	54.19	38.09	92.28	68.30	23.98	Peak	No Limit
2	5205.0000	45.60	38.14	83.74	54.00	29.74	AVG	No Limit

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

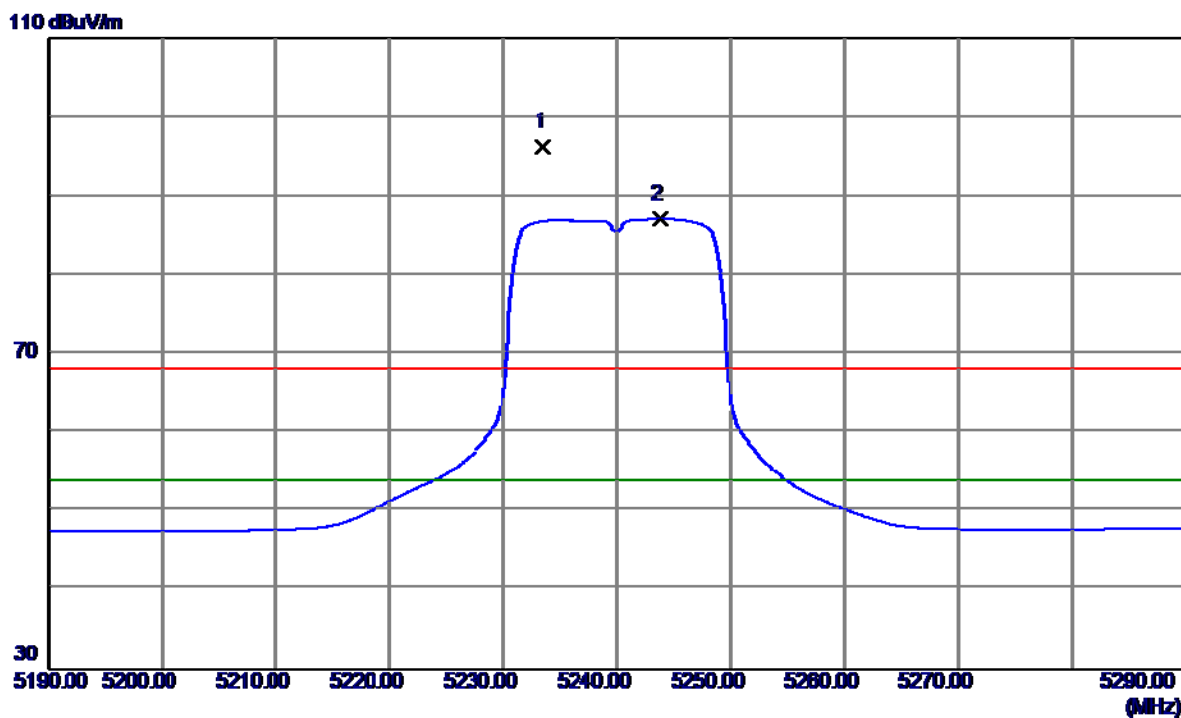
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10399.9000	33.03	14.40	47.43	68.30	-20.87	Peak	
2	10400.9000	23.70	14.41	38.11	54.00	-15.89	AVG	

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

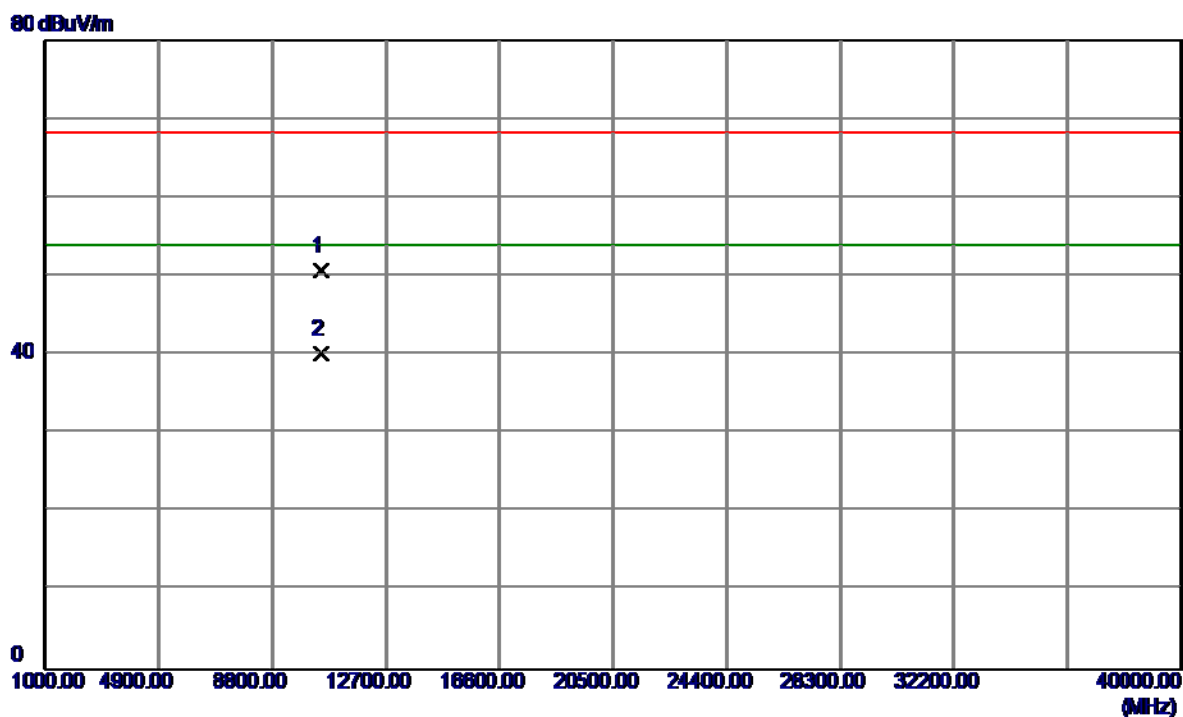
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5233.5000	57.93	38.26	96.19	68.30	27.89	Peak	No Limit
2	5243.8000	48.77	38.31	87.08	54.00	33.08	AVG	No Limit

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

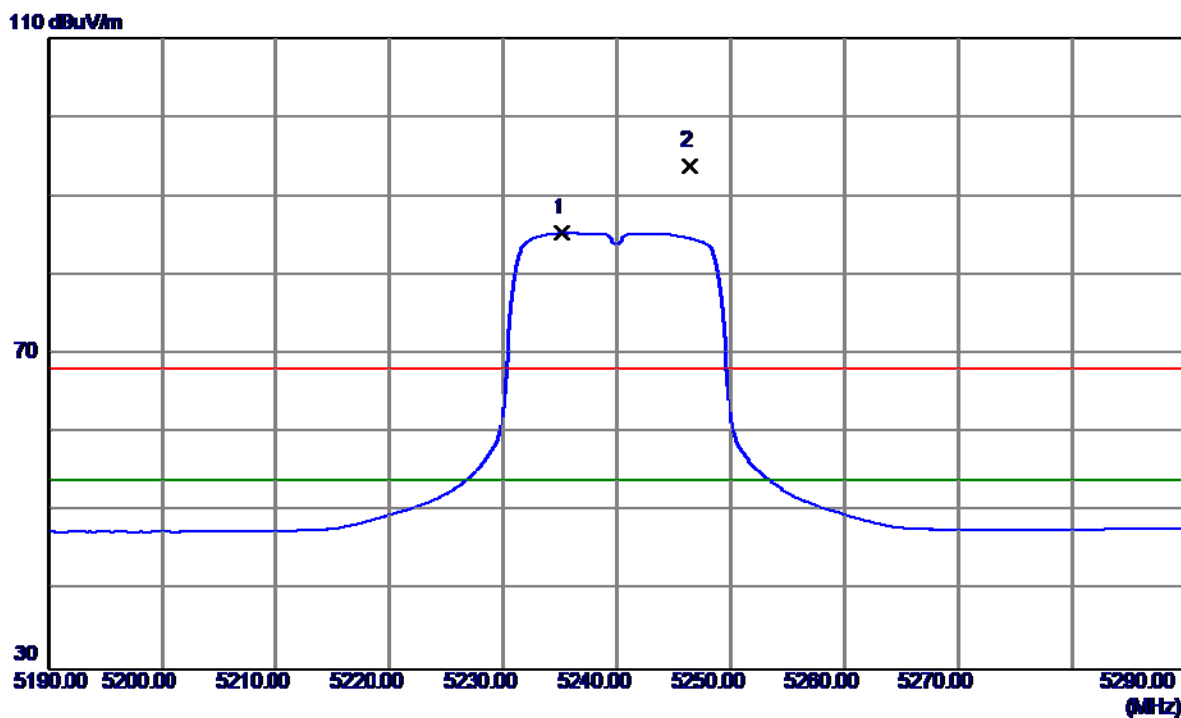
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10480.5000	36.12	14.56	50.68	68.30	-17.62	Peak	
2	10481.0000	25.67	14.56	40.23	54.00	-13.77	AVG	

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

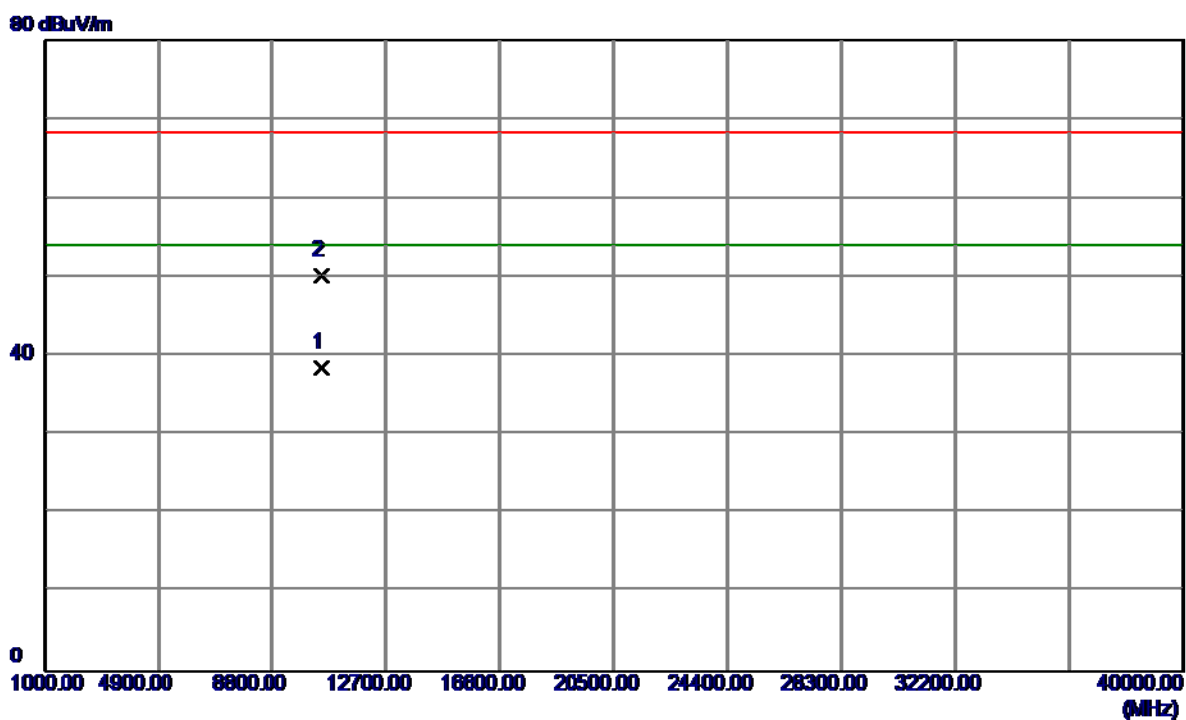
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5235.1000	47.02	38.27	85.29	54.00	31.29	AVG	No Limit
2	5246.4000	55.53	38.32	93.85	68.30	25.55	Peak	No Limit

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

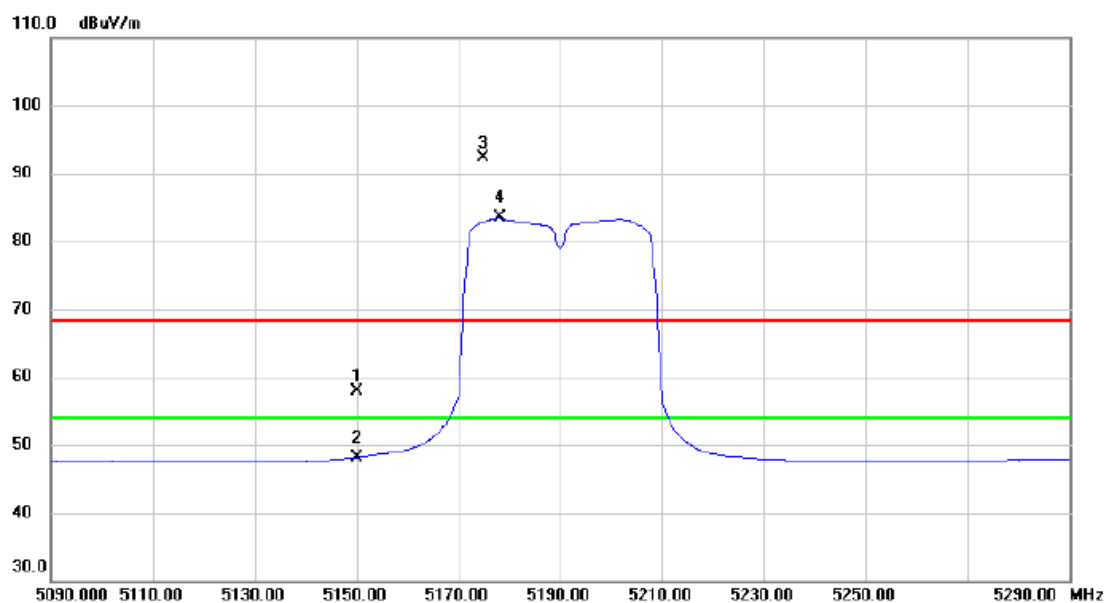
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10479.4000	24.05	14.56	38.61	54.00	-15.39	AVG	
2	10479.9000	35.66	14.56	50.22	68.30	-18.08	Peak	

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

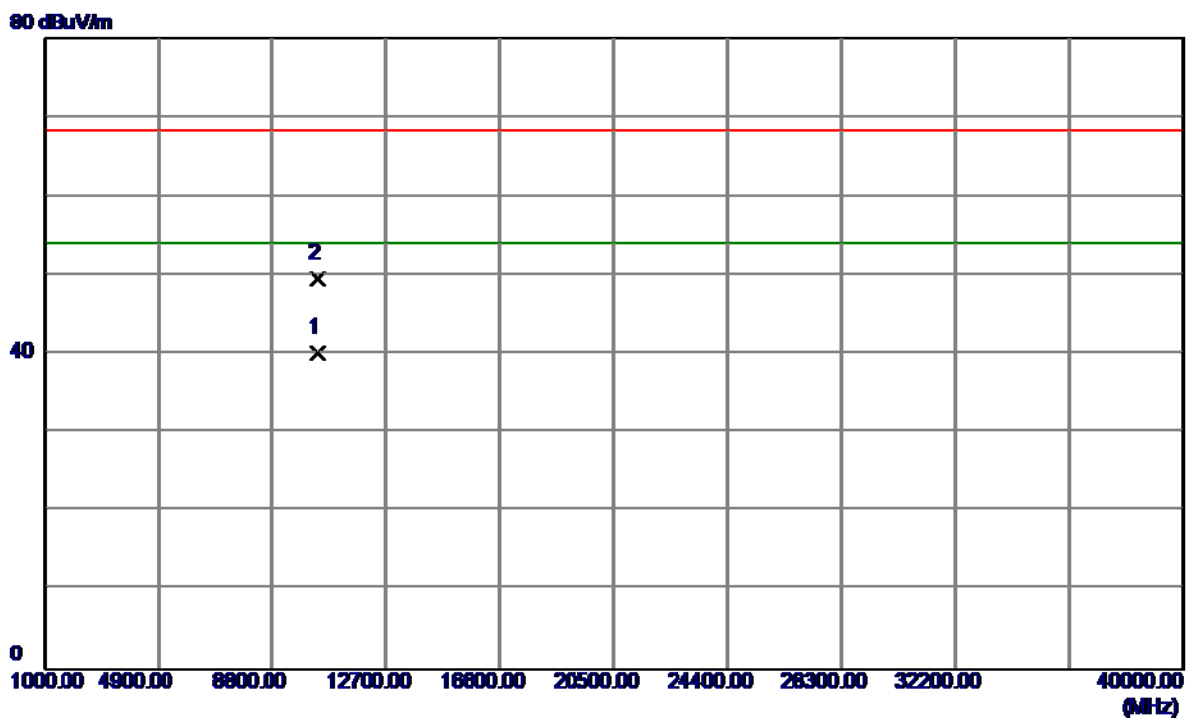
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	19.98	37.89	57.87	68.30	-10.43	peak	
2		5150.000	10.30	37.89	48.19	54.00	-5.81	AVG	
3	X	5175.000	54.28	38.00	92.28	68.30	23.98	peak	No Limit
4	*	5178.000	45.40	38.02	83.42	54.00	29.42	AVG	No Limit

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

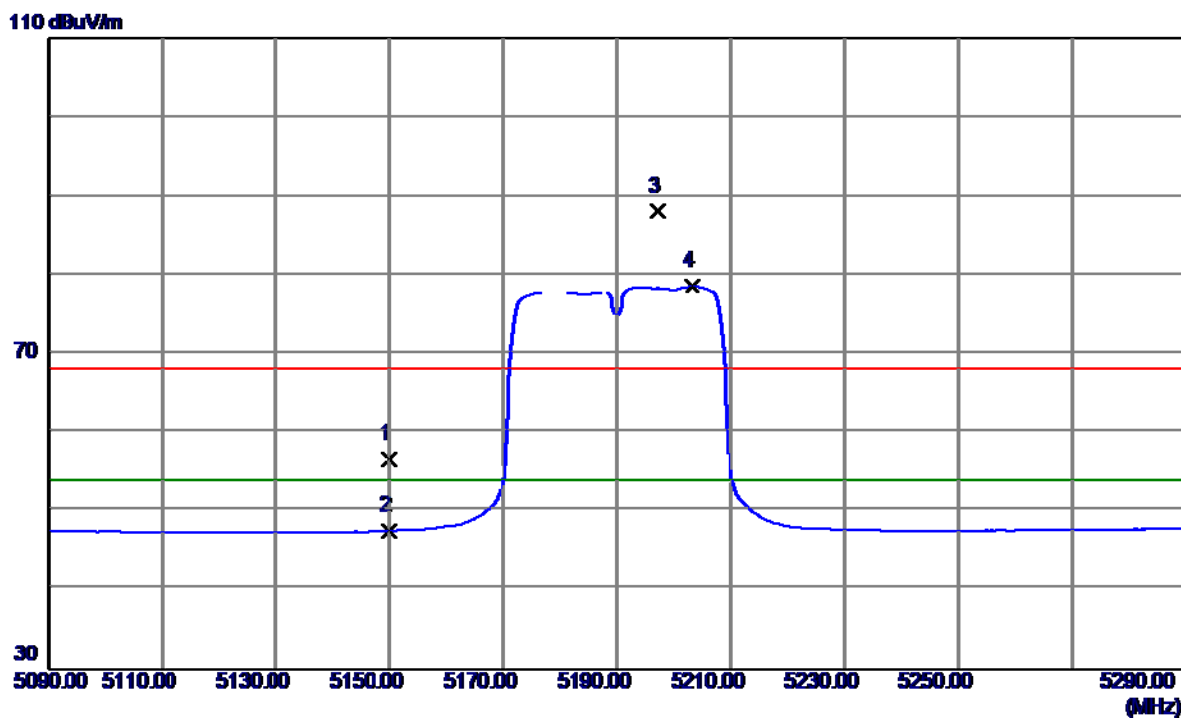
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10378.9000	25.78	14.36	40.14	54.00	-13.86	AVG	
2	10379.8000	35.18	14.36	49.54	68.30	-18.76	Peak	

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

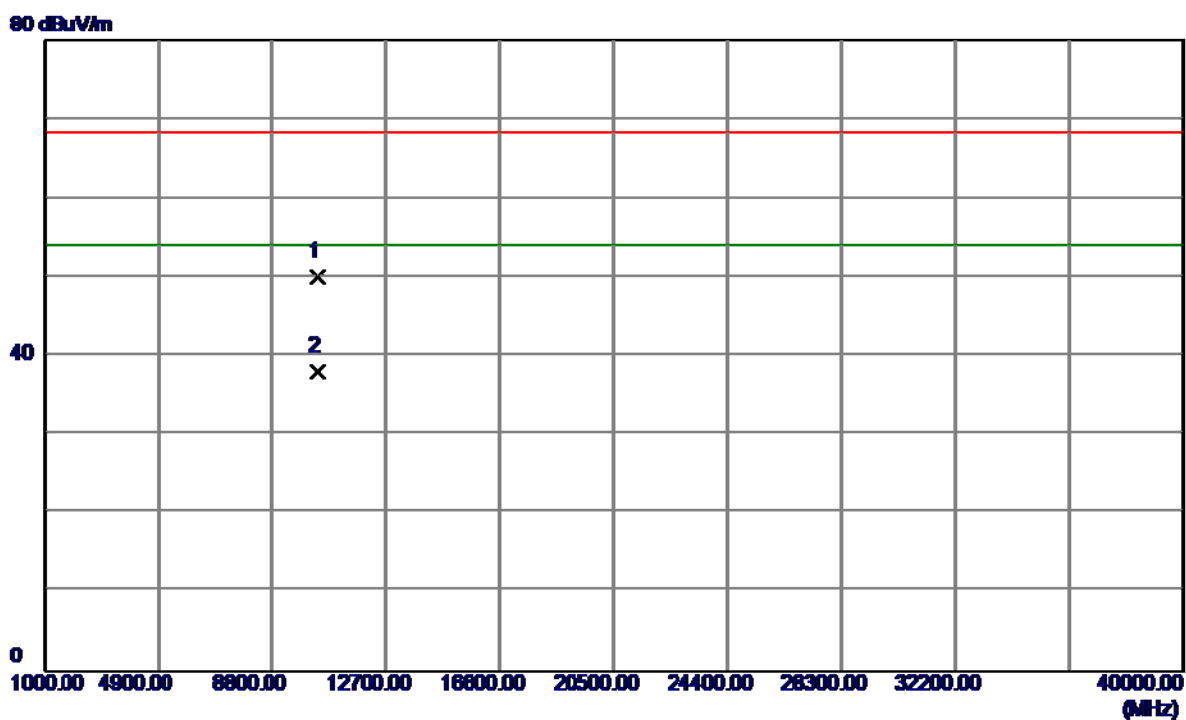
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5150.0000	18.80	37.89	56.69	68.30	-11.61	Peak	
2	5150.0000	9.76	37.89	47.65	54.00	-6.35	AVG	
3	5197.2000	49.98	38.10	88.08	68.30	19.78	Peak	No Limit
4	5203.4000	40.48	38.13	78.61	54.00	24.61	AVG	No Limit

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

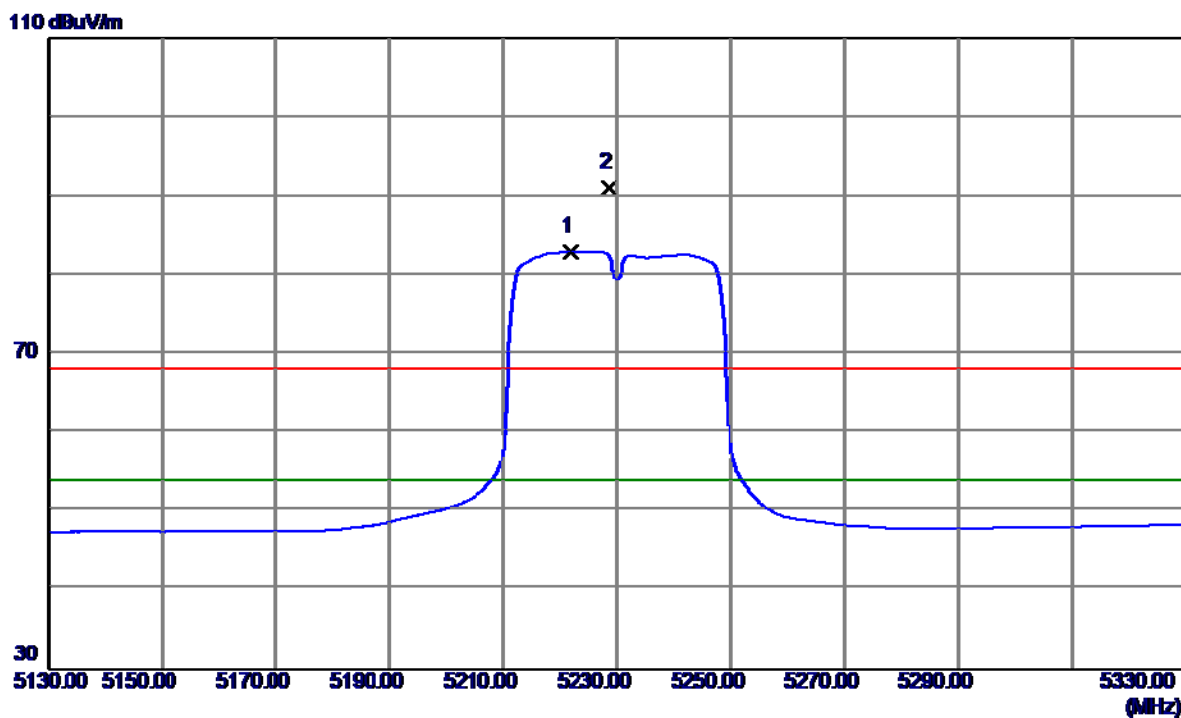
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10379.2000	35.74	14.36	50.10	68.30	-18.20	Peak	
2	10379.2000	23.73	14.36	38.09	54.00	-15.91	AVG	

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

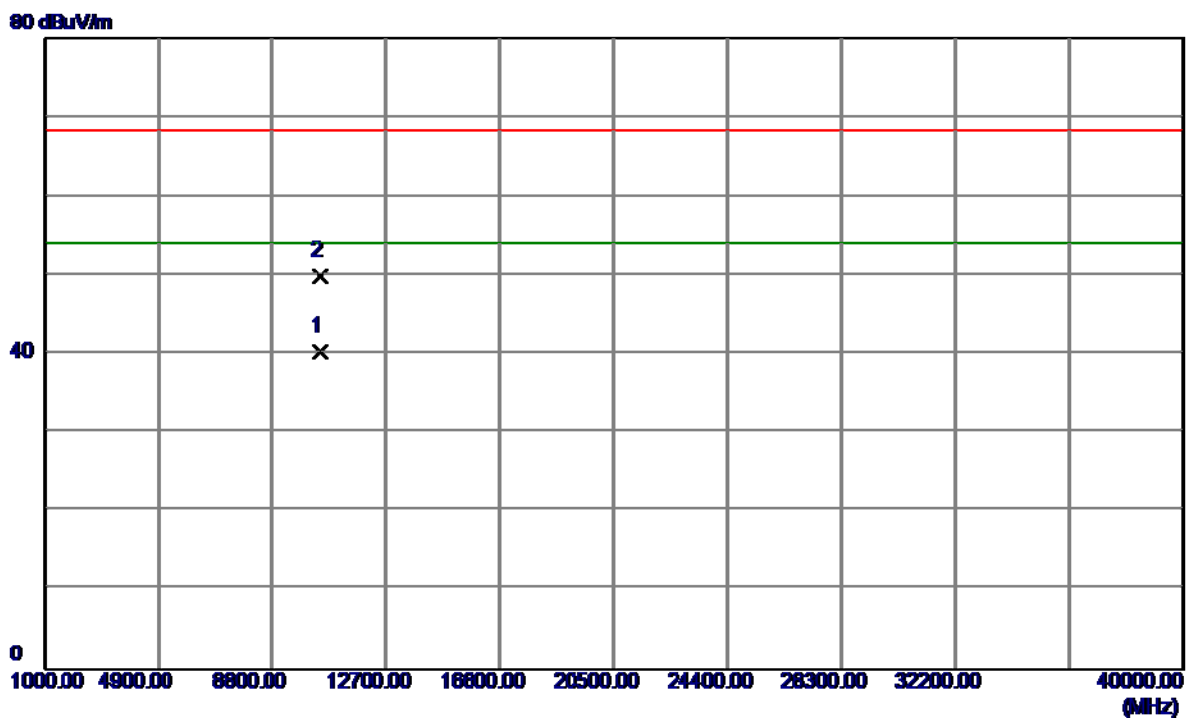
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5221.8000	44.78	38.21	82.99	54.00	28.99	AVG	No Limit
2	5228.6000	52.92	38.24	91.16	68.30	22.86	Peak	No Limit

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

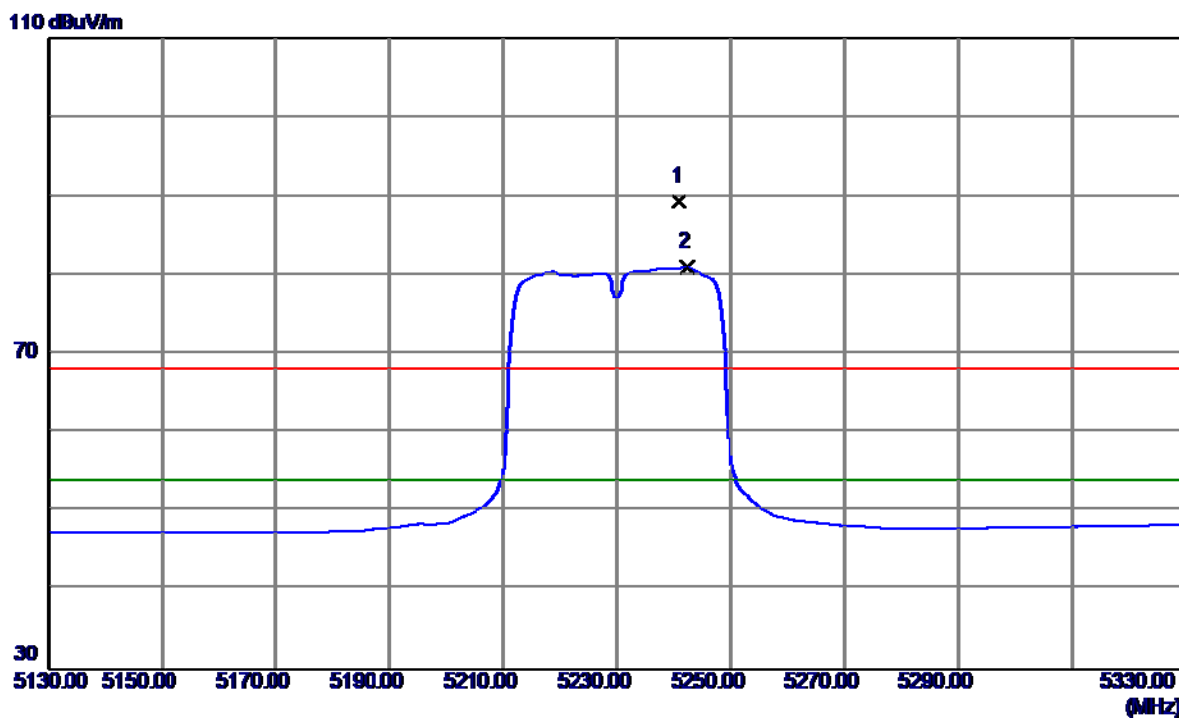
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10459.4000	25.78	14.52	40.30	54.00	-13.70	AVG	
2	10460.0000	35.38	14.52	49.90	68.30	-18.40	Peak	

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

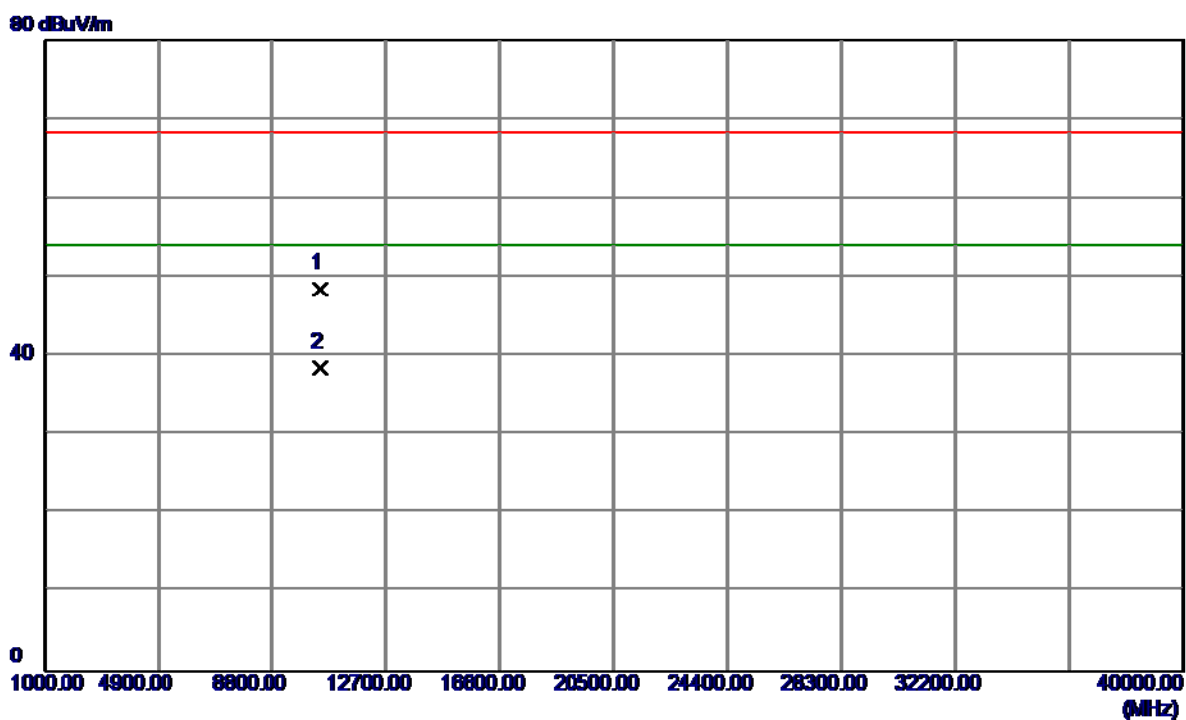
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5241.0000	51.11	38.30	89.41	68.30	21.11	Peak	No Limit
2	5242.4000	42.72	38.30	81.02	54.00	27.02	AVG	No Limit

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

Horizontal

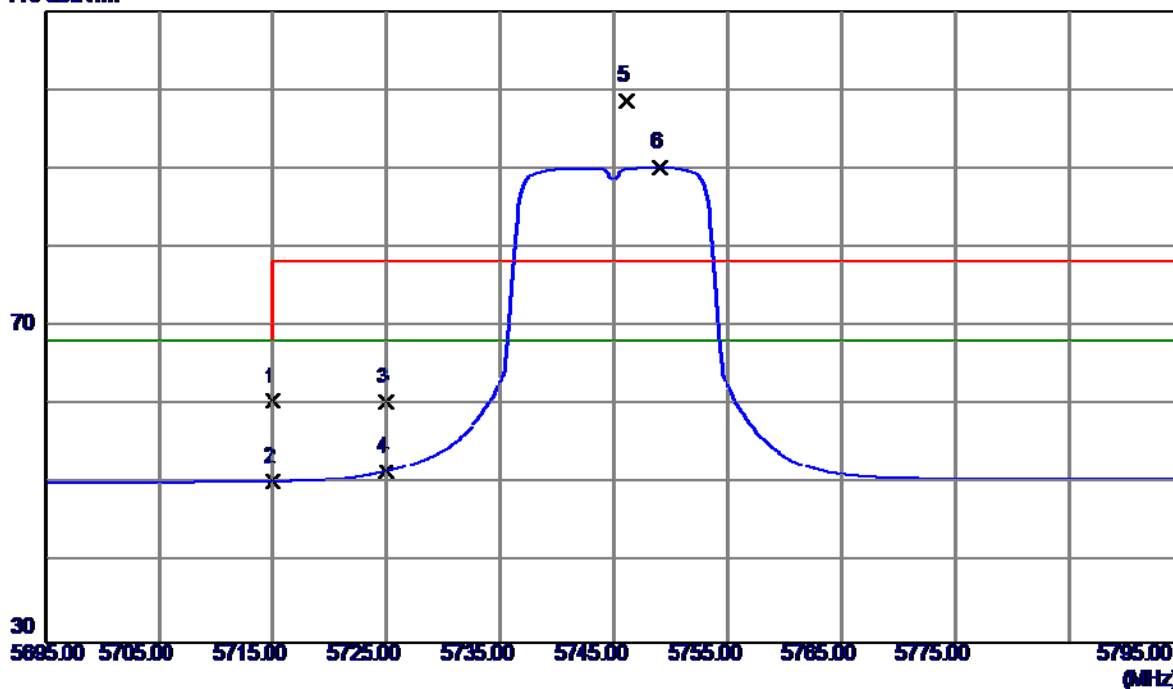


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	10459.7000	34.04	14.52	48.56	68.30	-19.74	Peak	
2	10461.0000	23.98	14.52	38.50	54.00	-15.50	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

Vertical

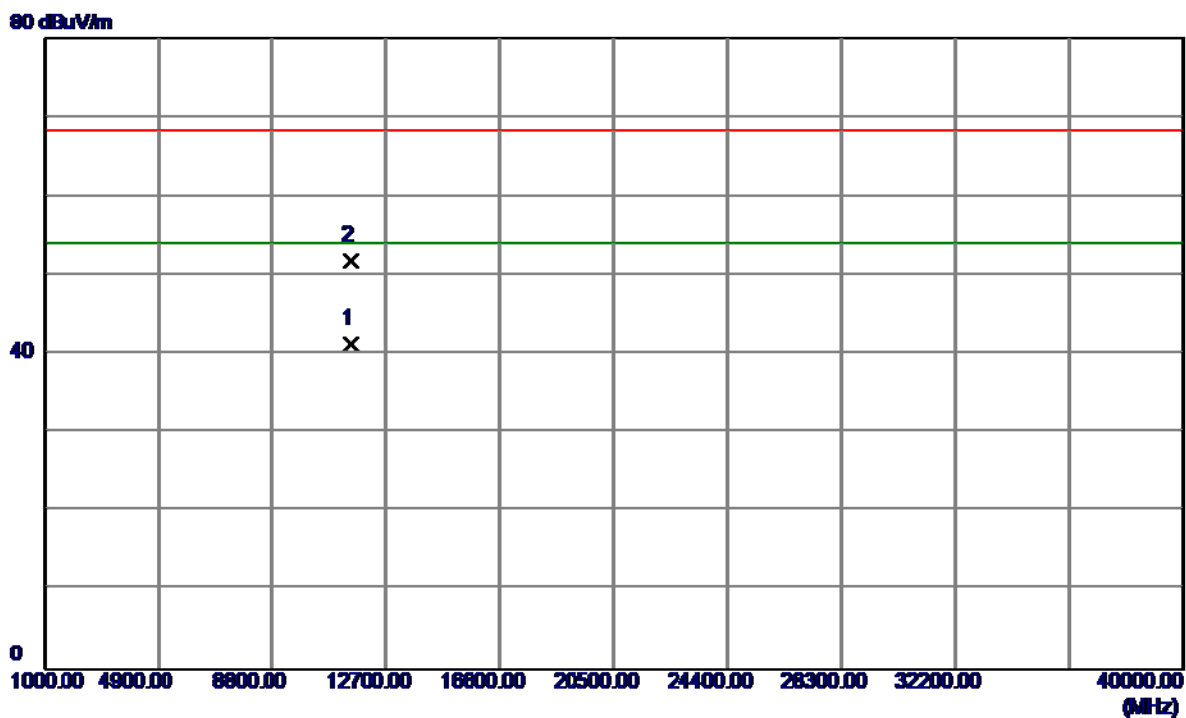
110 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	19.94	40.54	60.48	68.30	-7.82	Peak	
2	5715.0000	9.81	40.54	50.35	68.30	-17.95	AVG	
3	5725.0000	19.82	40.59	60.41	78.30	-17.89	Peak	
4	5725.0000	11.05	40.59	51.64	68.30	-16.66	AVG	
5	5746.1000	57.94	40.70	98.64	78.30	20.34	Peak	No Limit
6	5749.0000	49.45	40.71	90.16	68.30	21.86	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

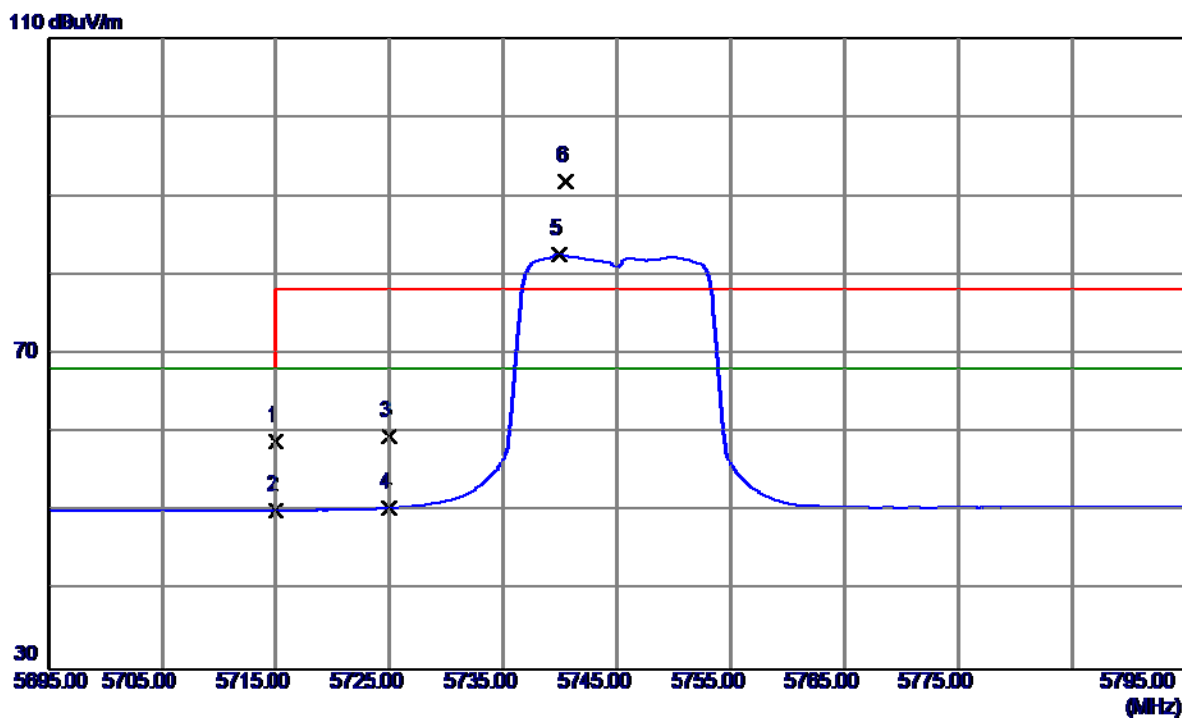
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11486.8000	25.76	15.52	41.28	54.00	-12.72	AVG	
2	11489.9000	36.31	15.52	51.83	68.30	-16.47	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

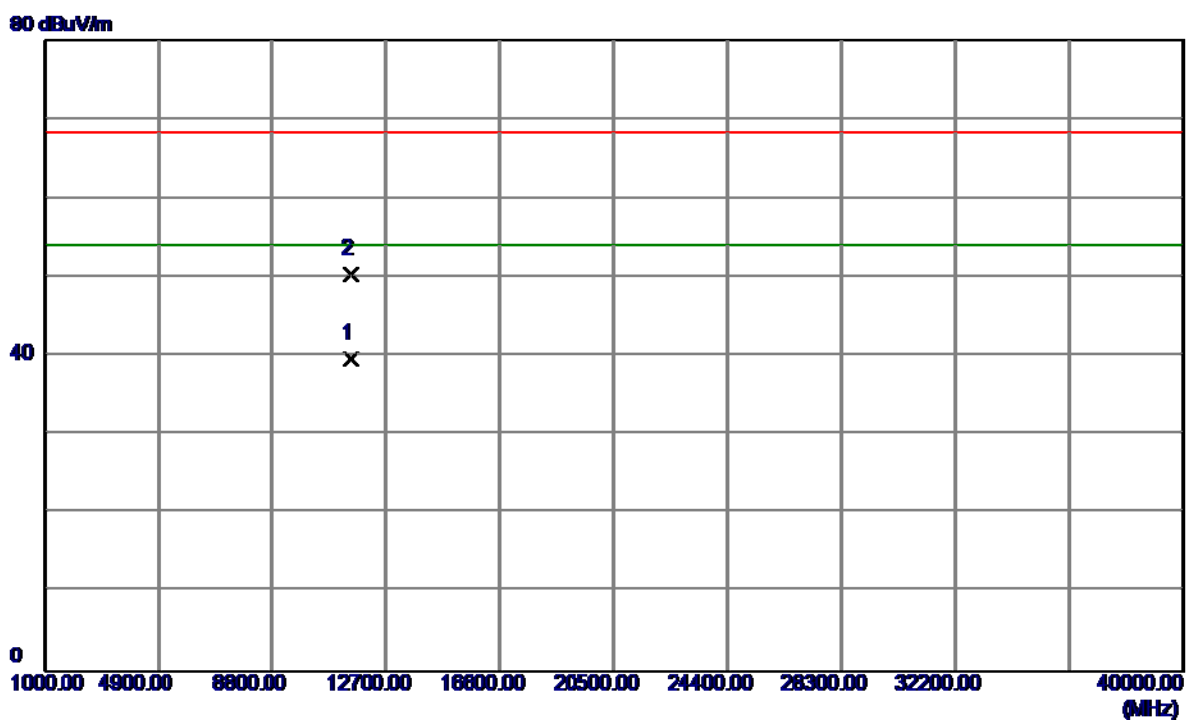
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	18.43	40.54	58.97	68.30	-9.33	Peak	
2	5715.0000	9.68	40.54	50.22	68.30	-18.08	AVG	
3	5725.0000	18.99	40.59	59.58	78.30	-18.72	Peak	
4	5725.0000	9.90	40.59	50.49	68.30	-17.81	AVG	
5	5739.9000	41.98	40.67	82.65	68.30	14.35	AVG	No Limit
6	5740.4000	51.22	40.67	91.89	78.30	13.59	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

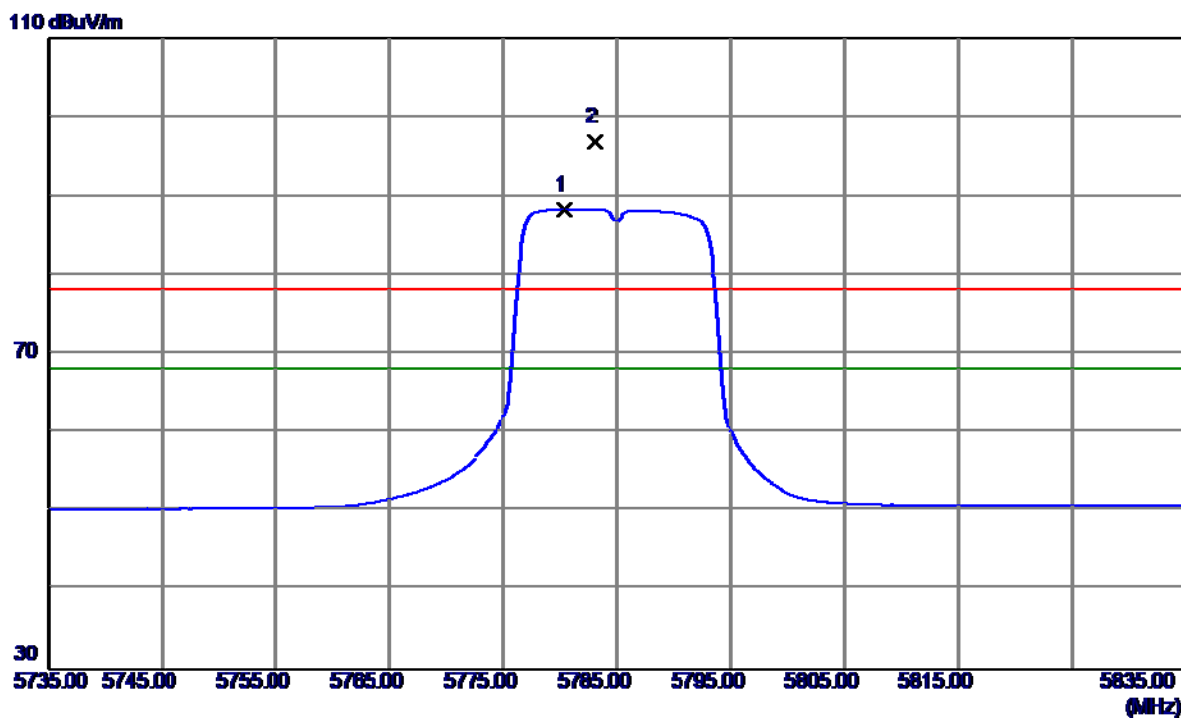
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11489.0000	24.15	15.52	39.67	54.00	-14.33	AVG	
2	11490.7000	34.82	15.52	50.34	68.30	-17.96	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

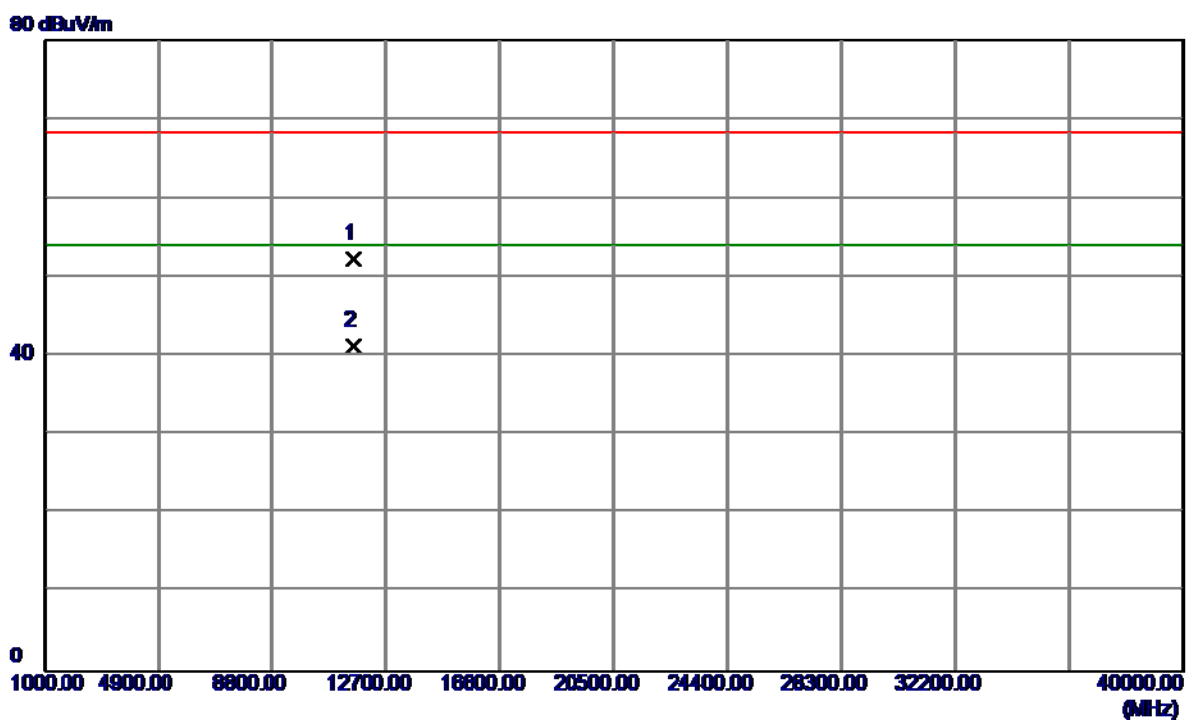
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5780.3000	47.43	40.88	88.31	68.30	20.01	AVG	No Limit
2	5783.1000	55.97	40.89	96.86	78.30	18.56	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

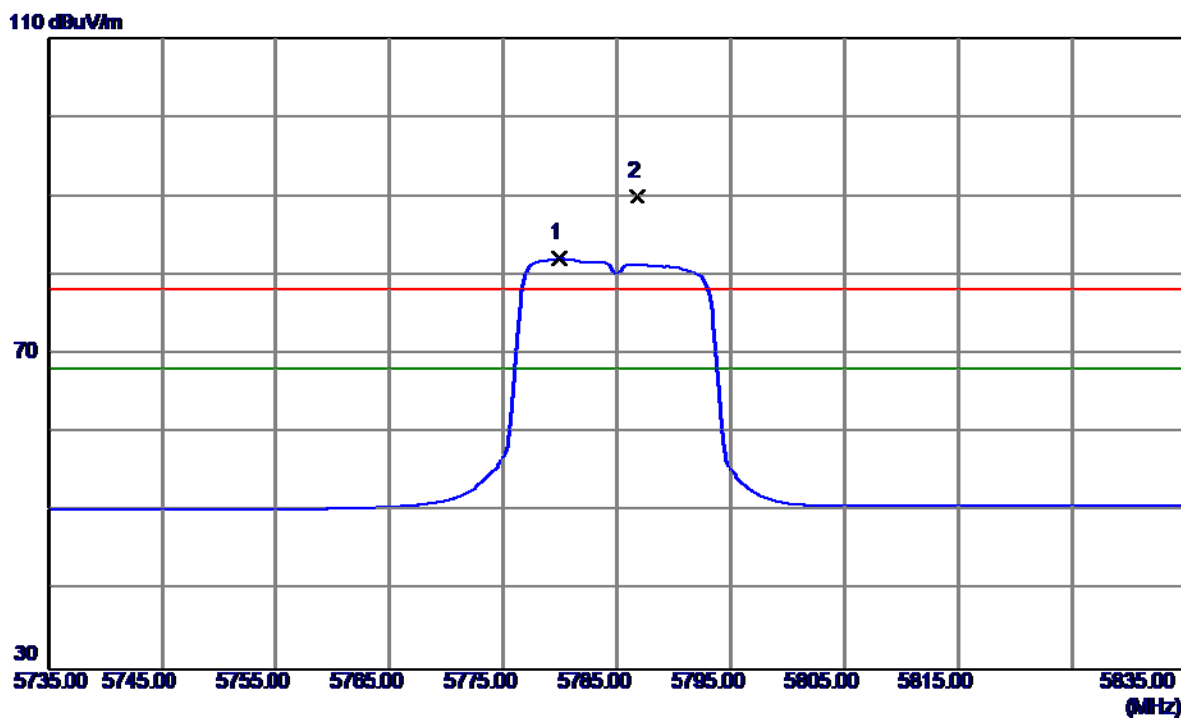
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11569.2000	36.82	15.55	52.37	68.30	-15.93	Peak	
2	11570.2000	25.67	15.55	41.22	54.00	-12.78	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

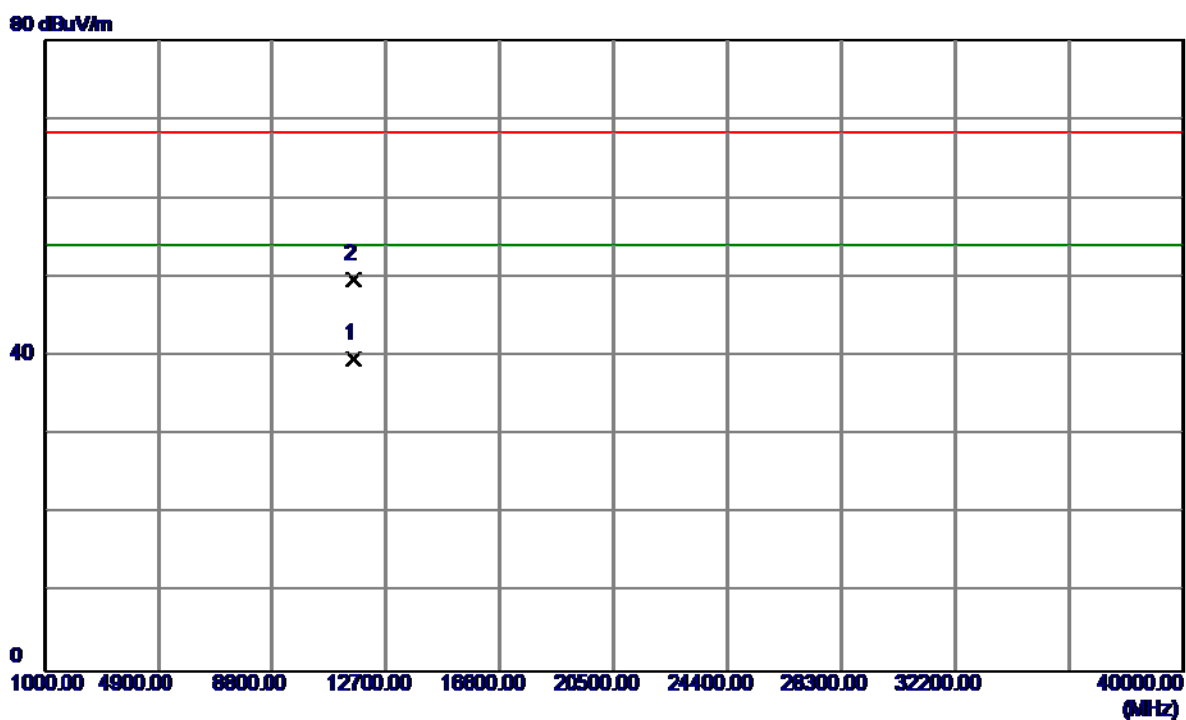
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5779.9000	41.25	40.87	82.12	68.30	13.82	AVG	No Limit
2	5786.8000	49.08	40.91	89.99	78.30	11.69	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

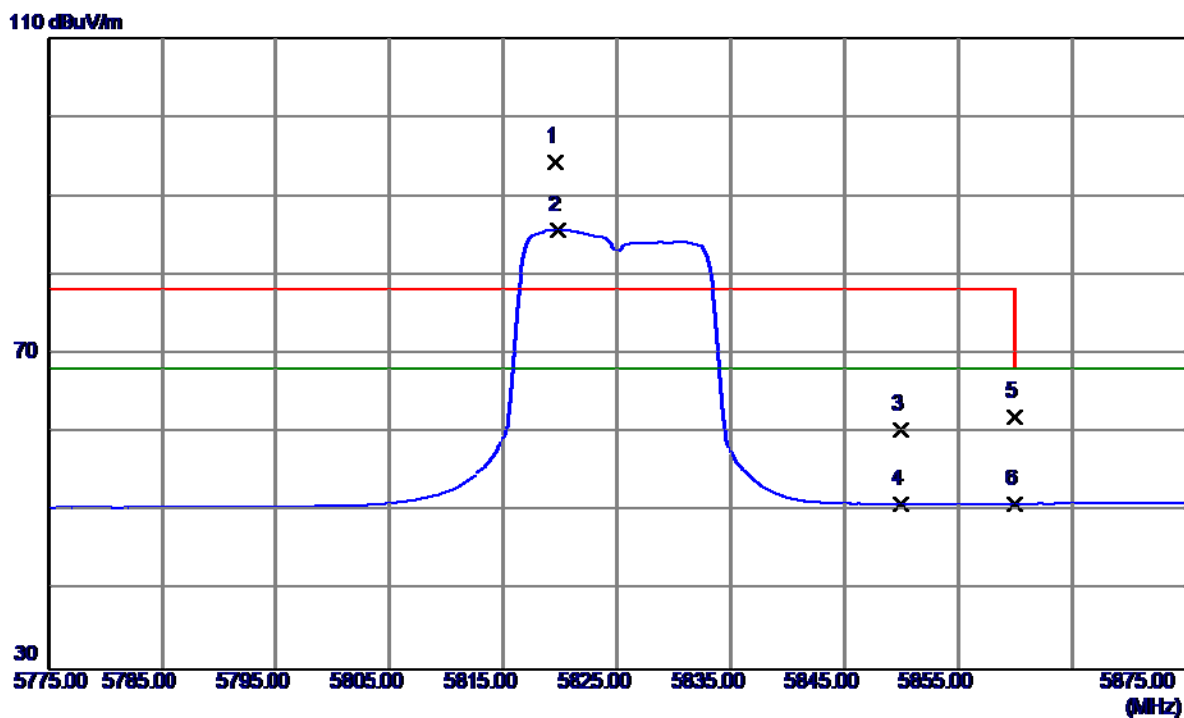
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11569.3000	24.10	15.55	39.65	54.00	-14.35	AVG	
2	11570.0000	34.19	15.55	49.74	68.30	-18.56	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

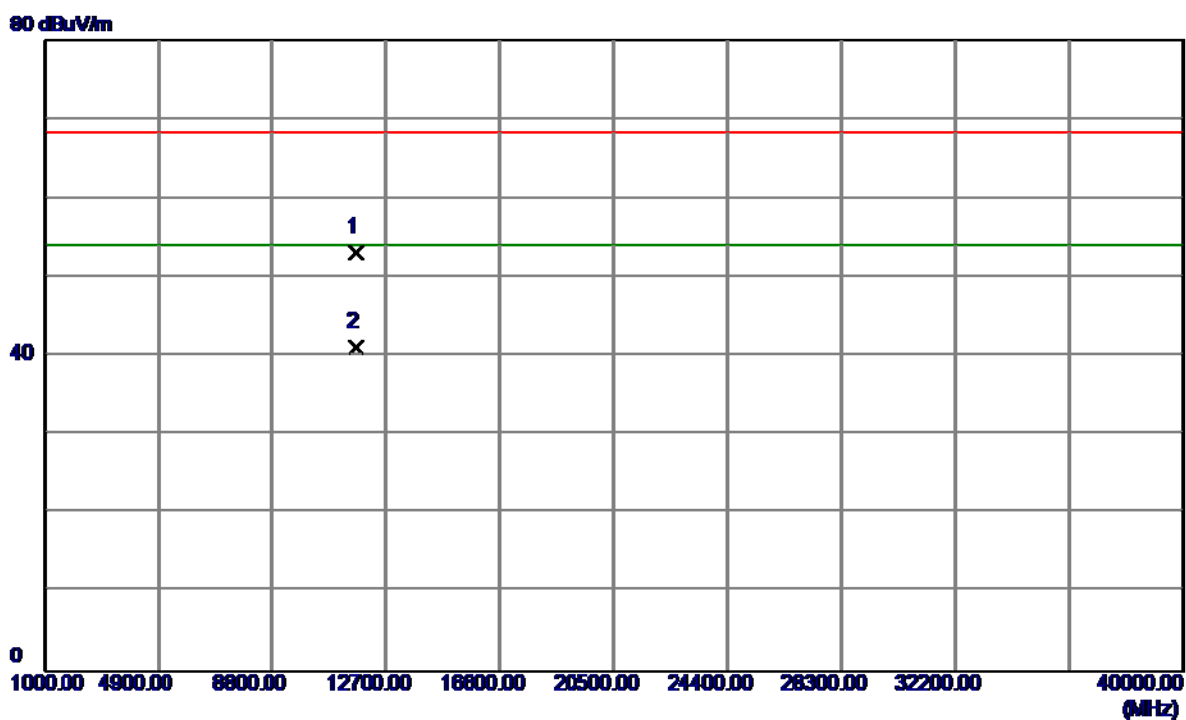
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5819.6000	53.17	41.08	94.25	78.30	15.95	Peak	No Limit
2	5819.8000	44.65	41.08	85.73	68.30	17.43	AVG	No Limit
3	5850.0000	19.20	41.23	60.43	78.30	-17.87	Peak	
4	5850.0000	9.72	41.23	50.95	68.30	-17.35	AVG	
5	5860.0000	20.73	41.28	62.01	78.30	-16.29	Peak	
6	5860.0000	9.74	41.28	51.02	68.30	-17.28	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

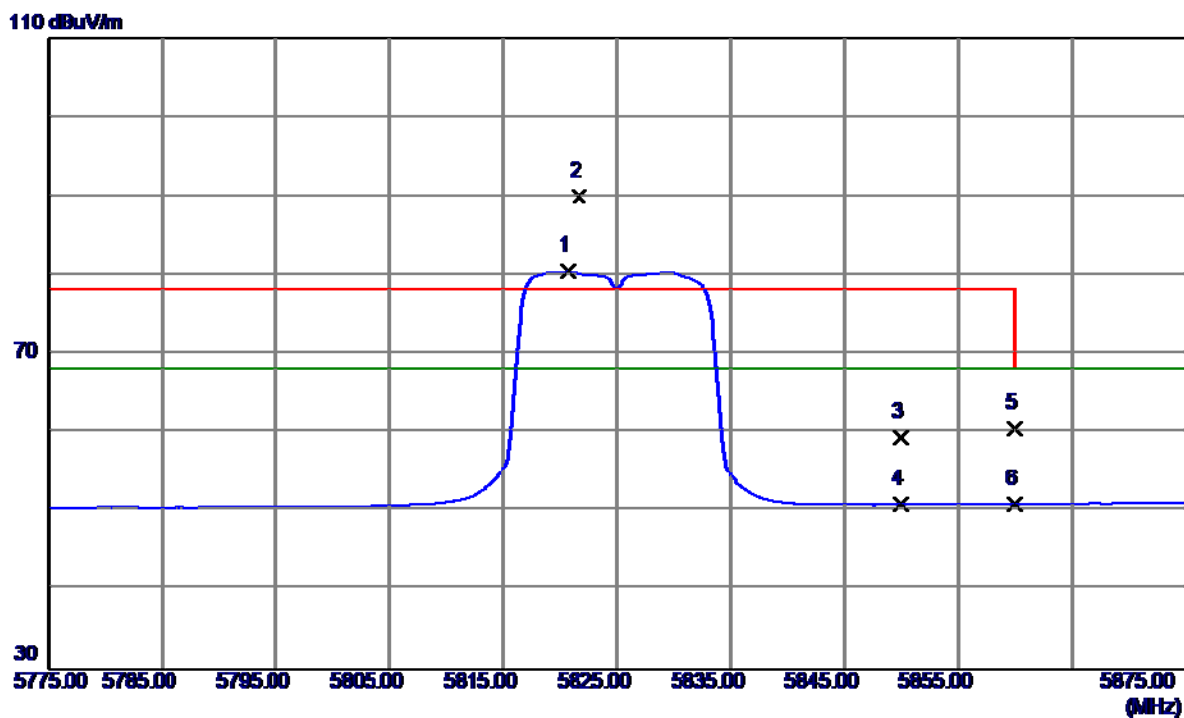
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11647.6000	37.59	15.58	53.17	68.30	-15.13	Peak	
2	11650.5199	25.51	15.58	41.09	54.00	-12.91	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

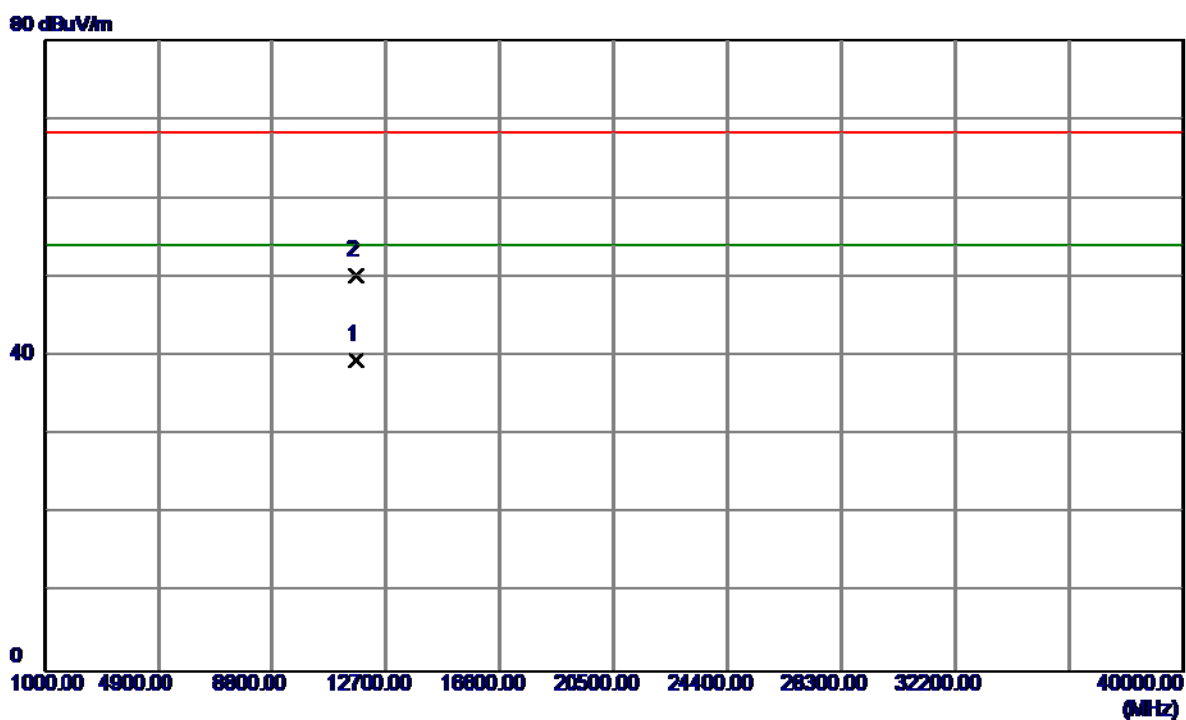
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5820.7000	39.42	41.08	80.50	68.30	12.20	AVG	No Limit
2	5821.7000	48.88	41.09	89.97	78.30	11.67	Peak	No Limit
3	5850.0000	18.20	41.23	59.43	78.30	-18.87	Peak	
4	5850.0000	9.67	41.23	50.90	68.30	-17.40	AVG	
5	5860.0000	19.24	41.28	60.52	78.30	-17.78	Peak	
6	5860.0000	9.70	41.28	50.98	68.30	-17.32	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

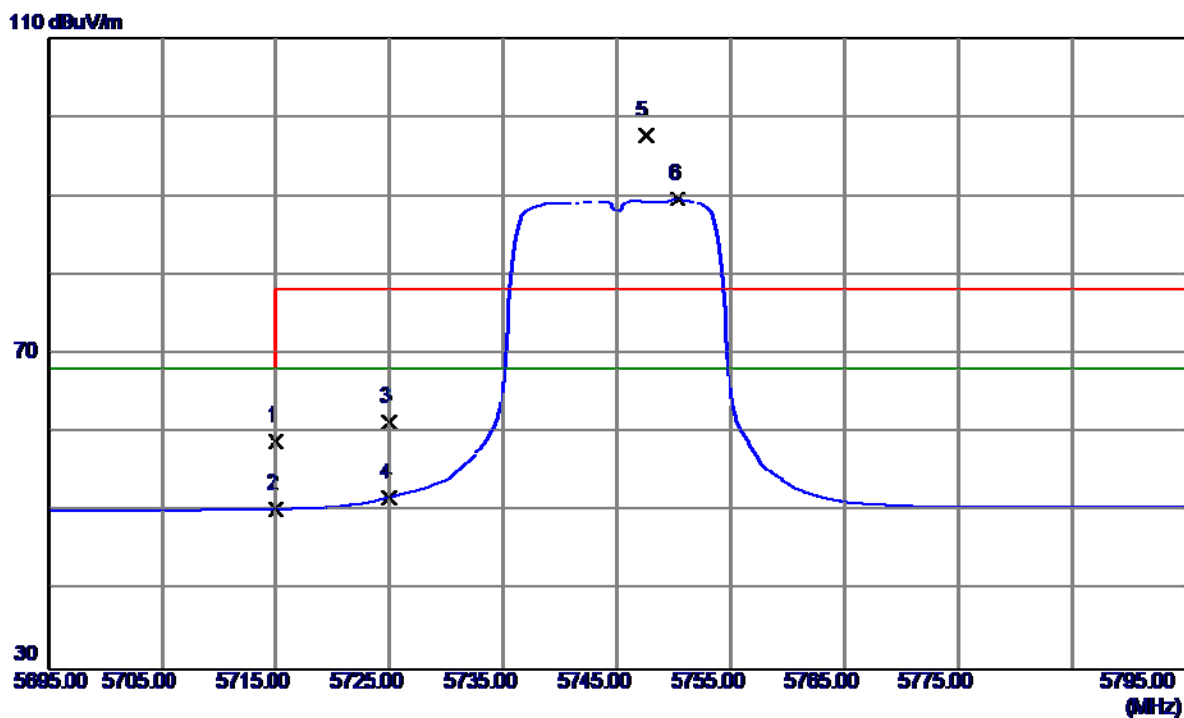
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11651.0000	23.87	15.58	39.45	54.00	-14.55	AVG	
2	11652.5000	34.60	15.58	50.18	68.30	-18.12	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

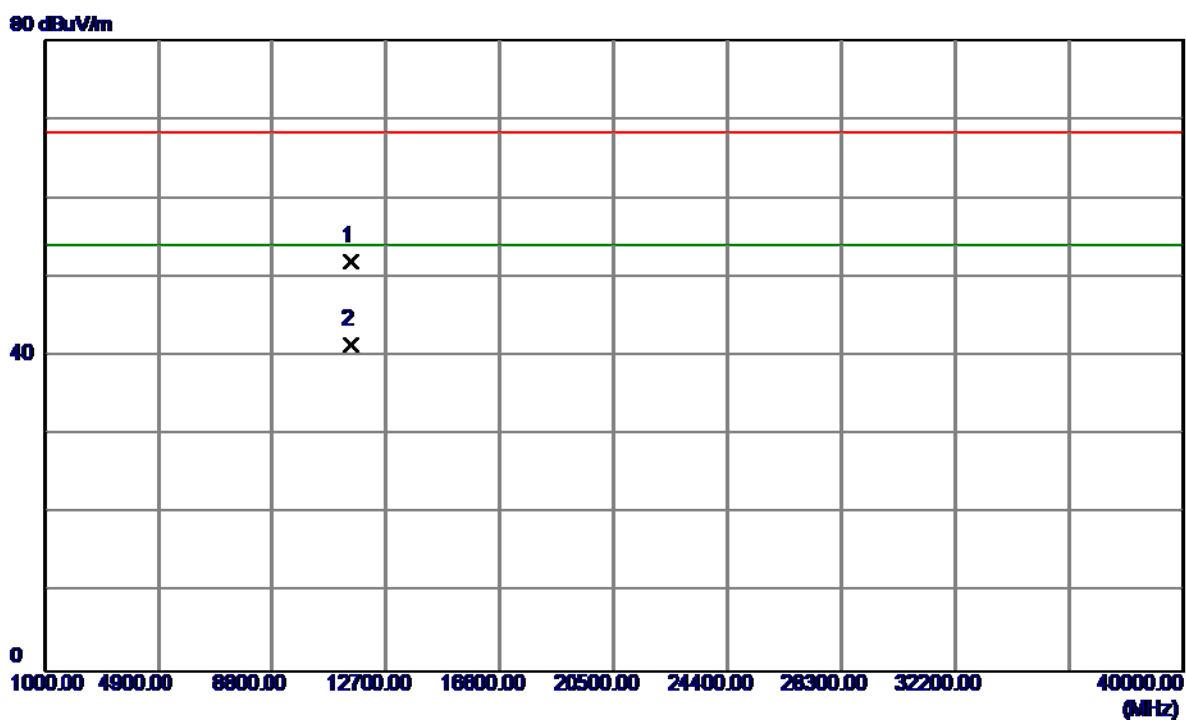
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	18.47	40.54	59.01	68.30	-9.29	Peak	
2	5715.0000	9.81	40.54	50.35	68.30	-17.95	AVG	
3	5725.0000	20.72	40.59	61.31	78.30	-16.99	Peak	
4	5725.0000	11.23	40.59	51.82	68.30	-16.48	AVG	
5	5747.5000	56.99	40.71	97.70	78.30	19.40	Peak	No Limit
6	5750.3000	48.94	40.72	89.66	68.30	21.36	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

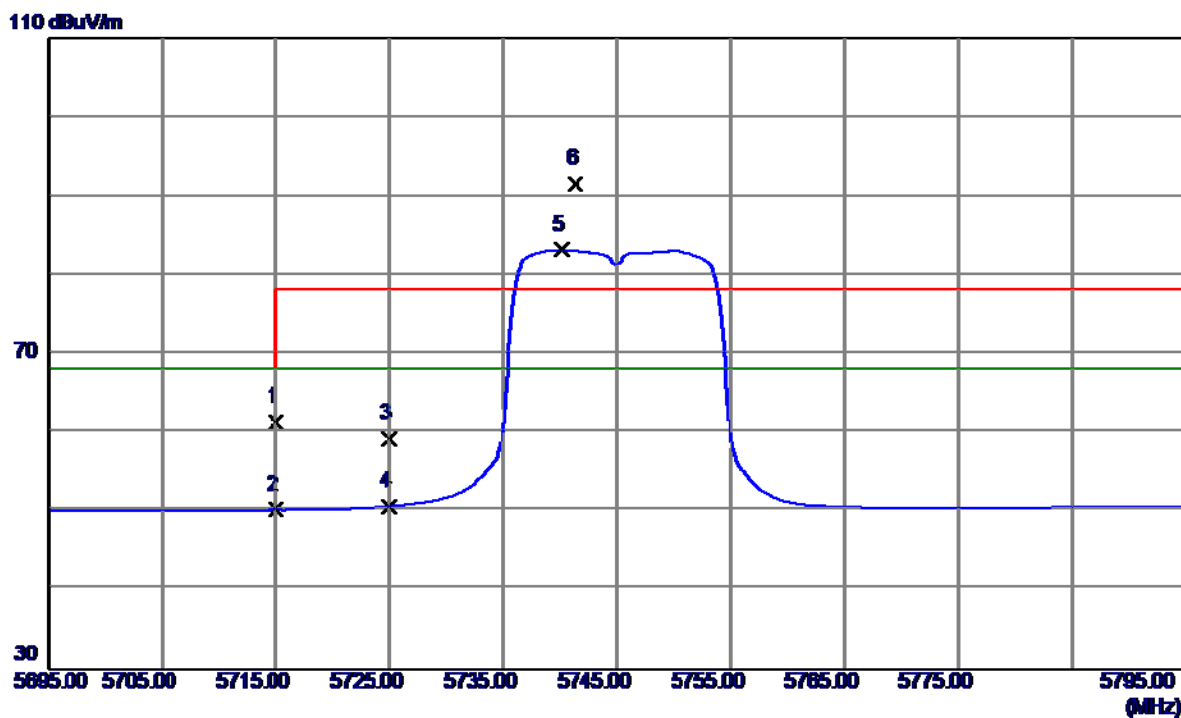
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11489.4000	36.53	15.52	52.05	68.30	-16.25	Peak	
2	11490.5700	25.93	15.52	41.45	54.00	-12.55	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

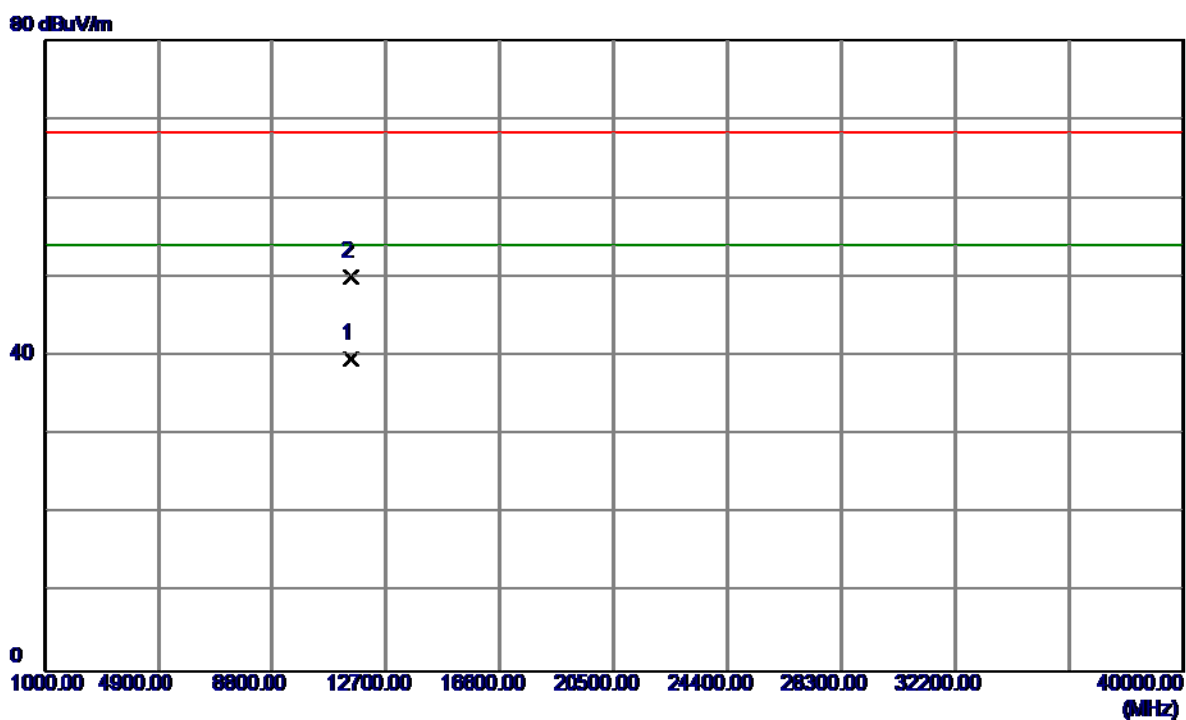
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	20.86	40.54	61.40	68.30	-6.90	Peak	
2	5715.0000	9.70	40.54	50.24	68.30	-18.06	AVG	
3	5725.0000	18.68	40.59	59.27	78.30	-19.03	Peak	
4	5725.0000	10.11	40.59	50.70	68.30	-17.60	AVG	
5	5740.1000	42.53	40.67	83.20	68.30	14.90	AVG	No Limit
6	5741.3000	50.92	40.68	91.60	78.30	13.30	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

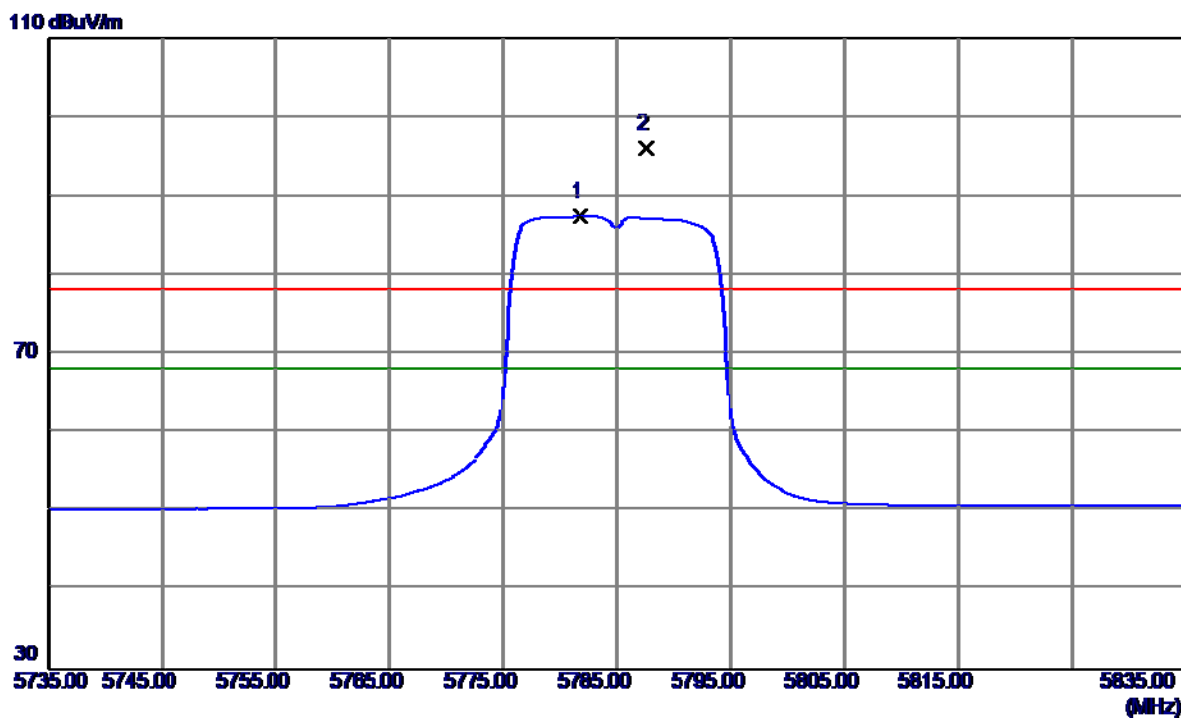
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11488.9000	24.16	15.52	39.68	54.00	-14.32	AVG	
2	11489.1000	34.51	15.52	50.03	68.30	-18.27	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

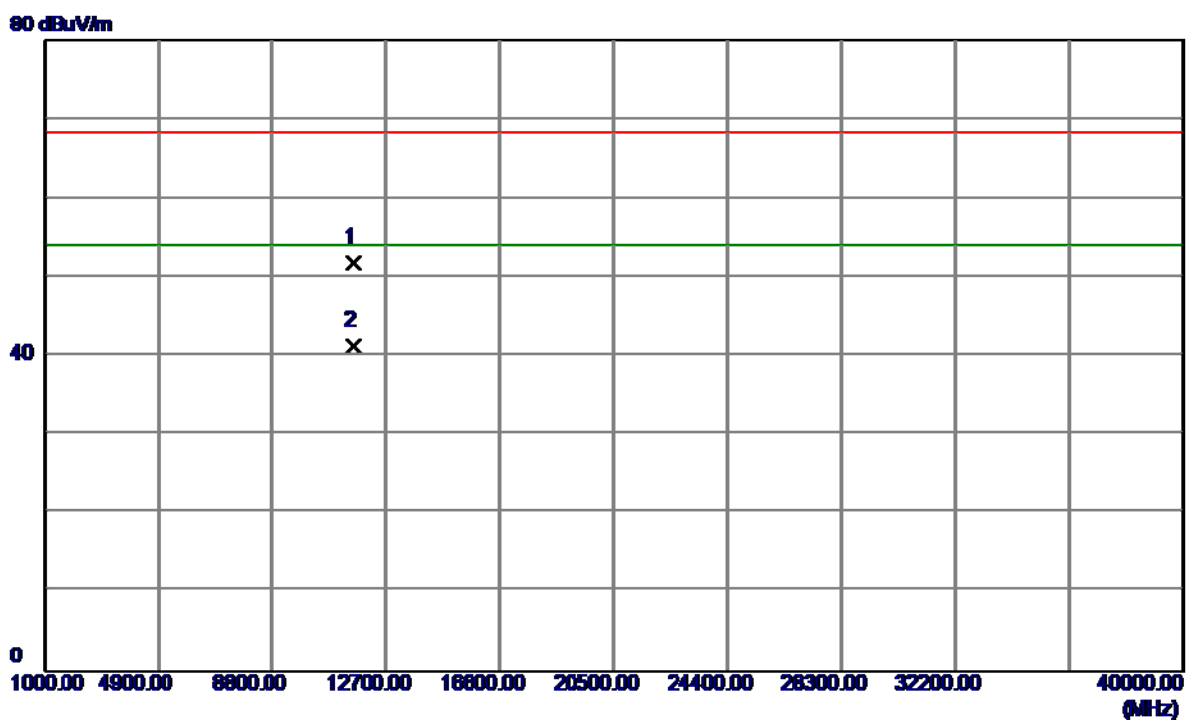
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5781.8000	46.62	40.88	87.50	68.30	19.20	AVG	No Limit
2	5787.6000	55.09	40.91	96.00	78.30	17.70	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

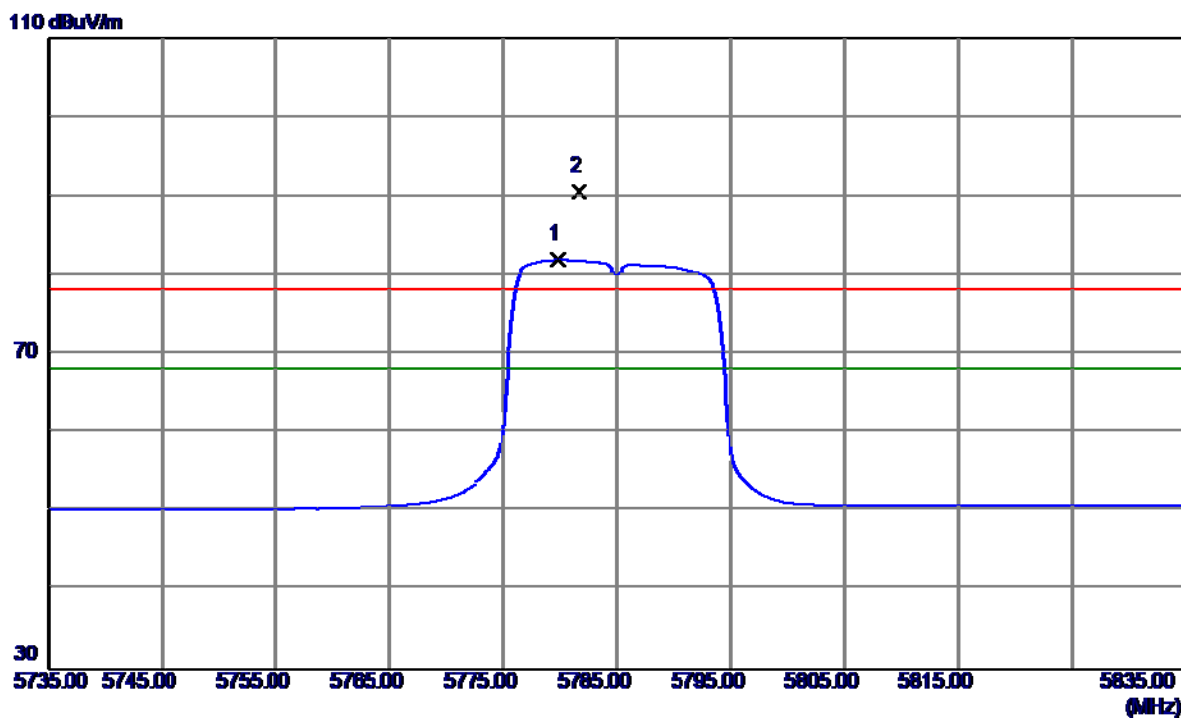
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11569.6000	36.33	15.55	51.88	68.30	-16.42	Peak	
2	11570.3400	25.68	15.55	41.23	54.00	-12.77	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

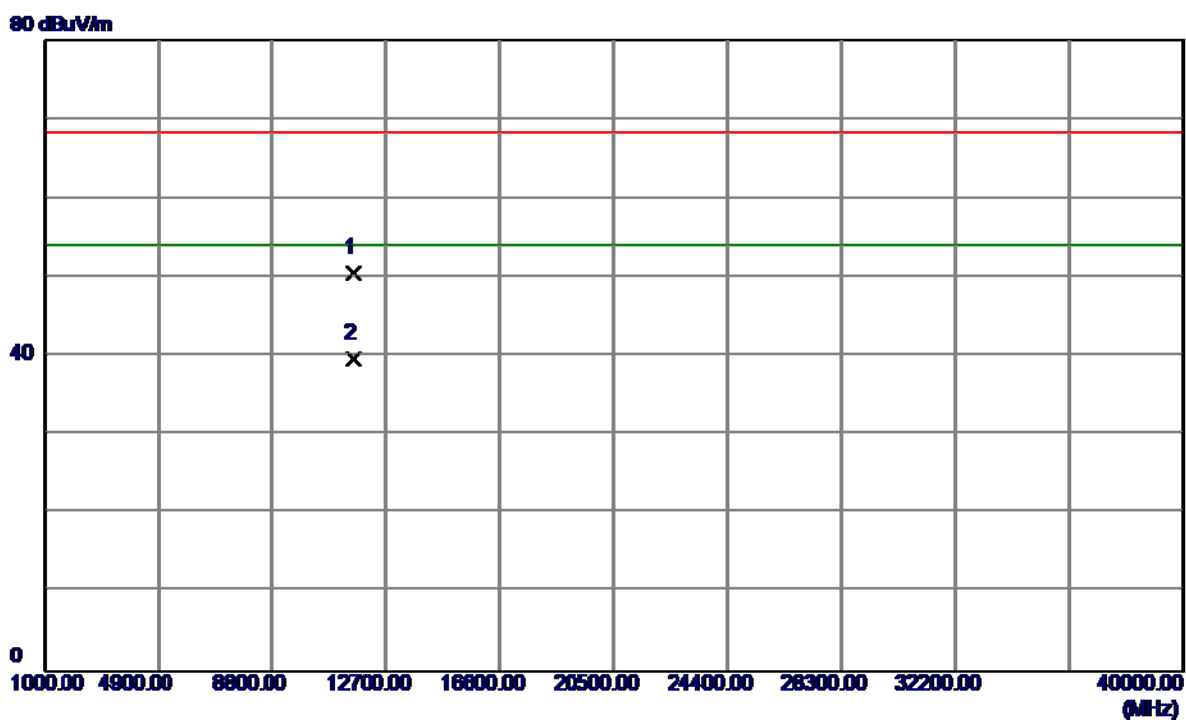
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5779.8000	41.10	40.87	81.97	68.30	13.67	AVG	No Limit
2	5781.7000	49.81	40.88	90.69	78.30	12.39	Peak	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

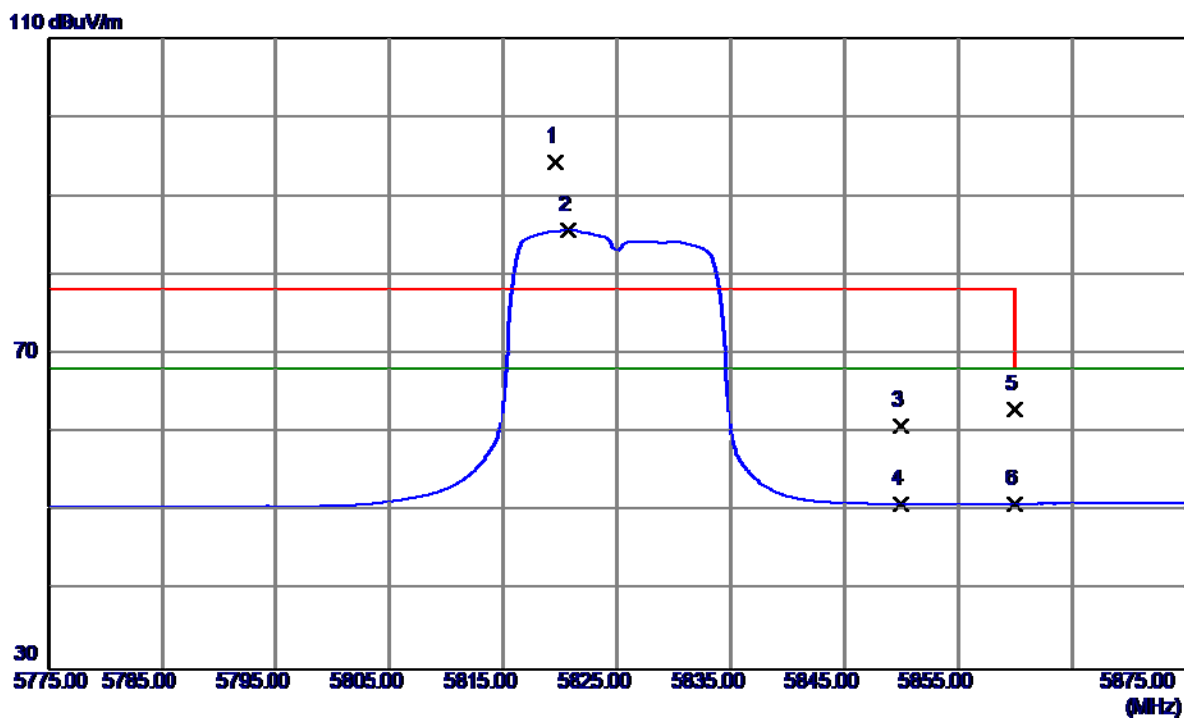
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11569.6000	34.99	15.55	50.54	68.30	-17.76	Peak	
2	11571.6000	24.12	15.55	39.67	54.00	-14.33	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

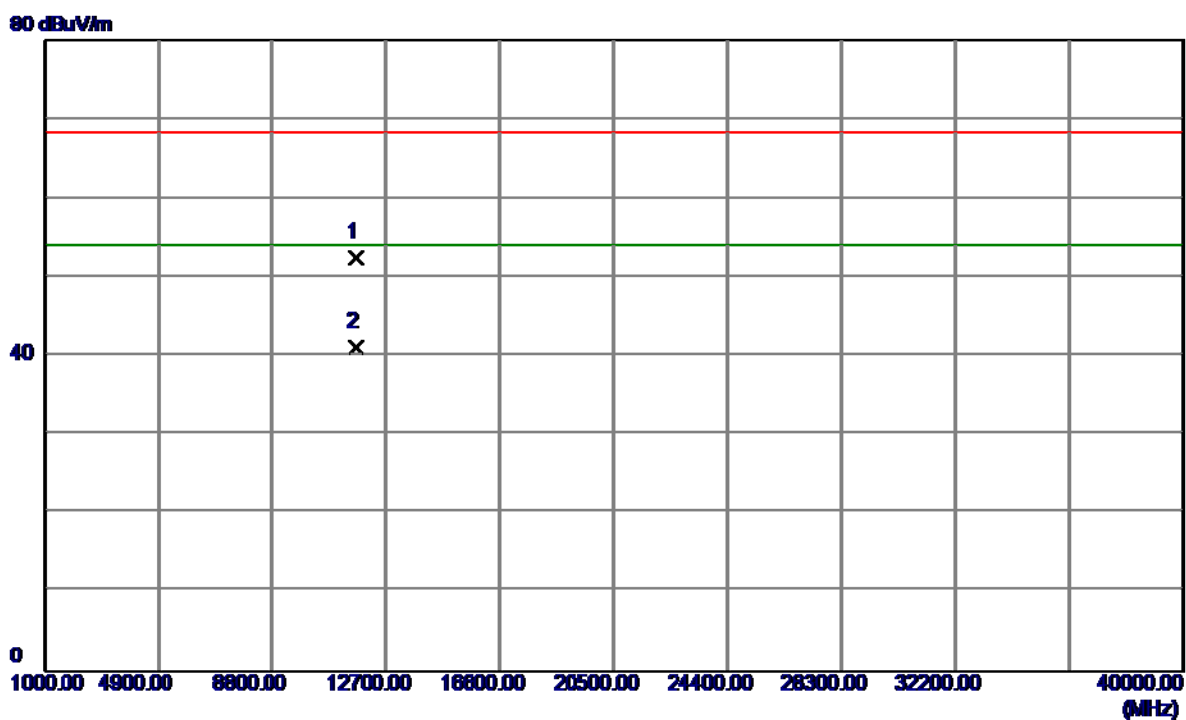
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5819.6000	53.27	41.08	94.35	78.30	16.05	Peak	No Limit
2	5820.7000	44.63	41.08	85.71	68.30	17.41	AVG	No Limit
3	5850.0000	19.72	41.23	60.95	78.30	-17.35	Peak	
4	5850.0000	9.76	41.23	50.99	68.30	-17.31	AVG	
5	5860.0000	21.70	41.28	62.98	78.30	-15.32	Peak	
6	5860.0000	9.74	41.28	51.02	68.30	-17.28	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

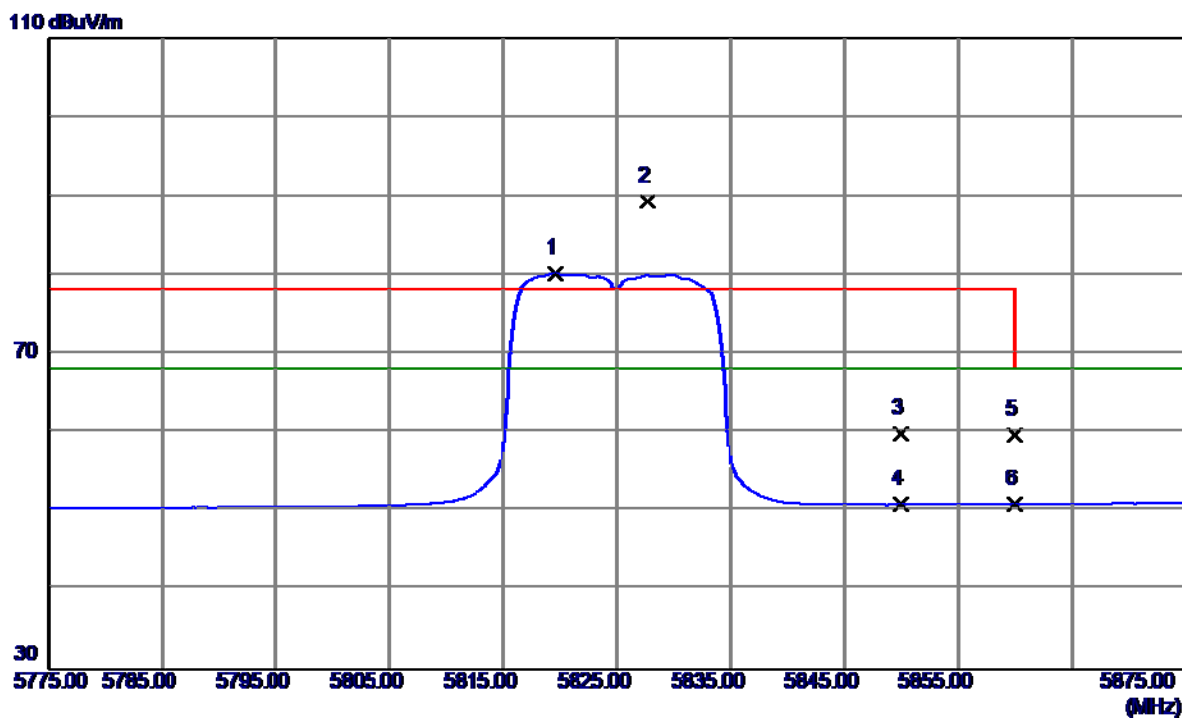
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11648.4000	36.90	15.58	52.48	68.30	-15.82	Peak	
2	11650.1000	25.53	15.58	41.11	54.00	-12.89	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

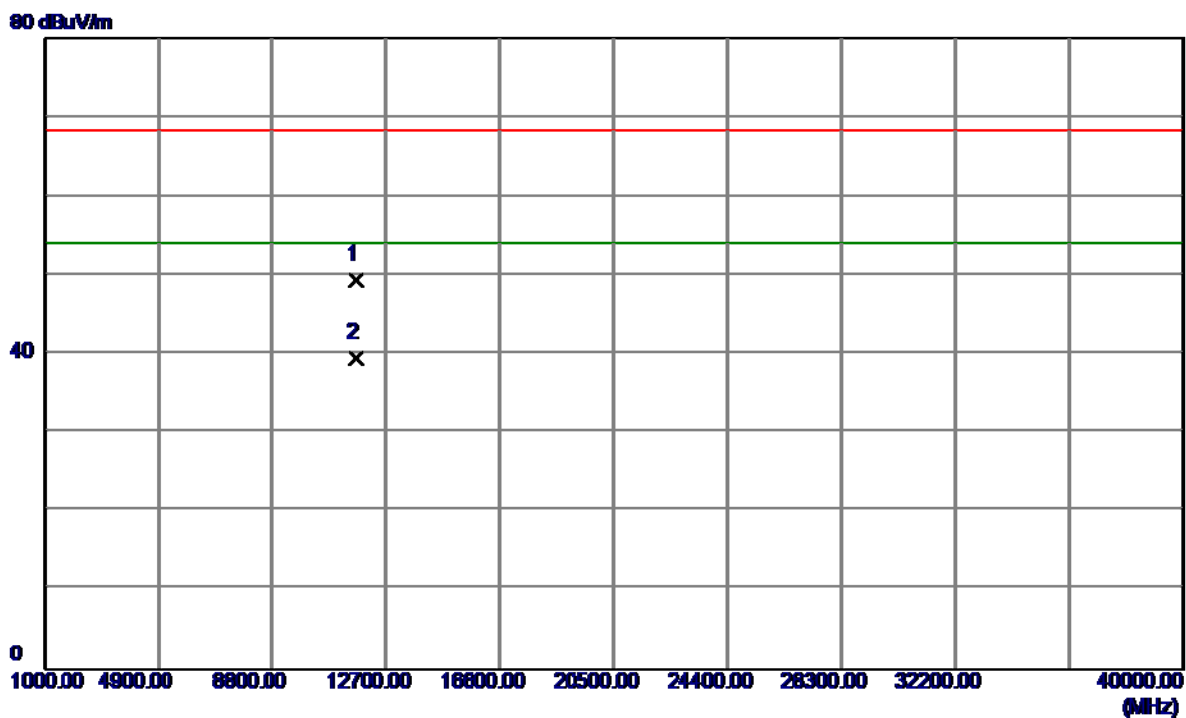
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5819.6000	39.24	41.08	80.32	68.30	12.02	AVG	No Limit
2	5827.7000	48.22	41.12	89.34	78.30	11.04	Peak	No Limit
3	5850.0000	18.76	41.23	59.99	78.30	-18.31	Peak	
4	5850.0000	9.69	41.23	50.92	68.30	-17.38	AVG	
5	5860.0000	18.55	41.28	59.83	78.30	-18.47	Peak	
6	5860.0000	9.71	41.28	50.99	68.30	-17.31	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz

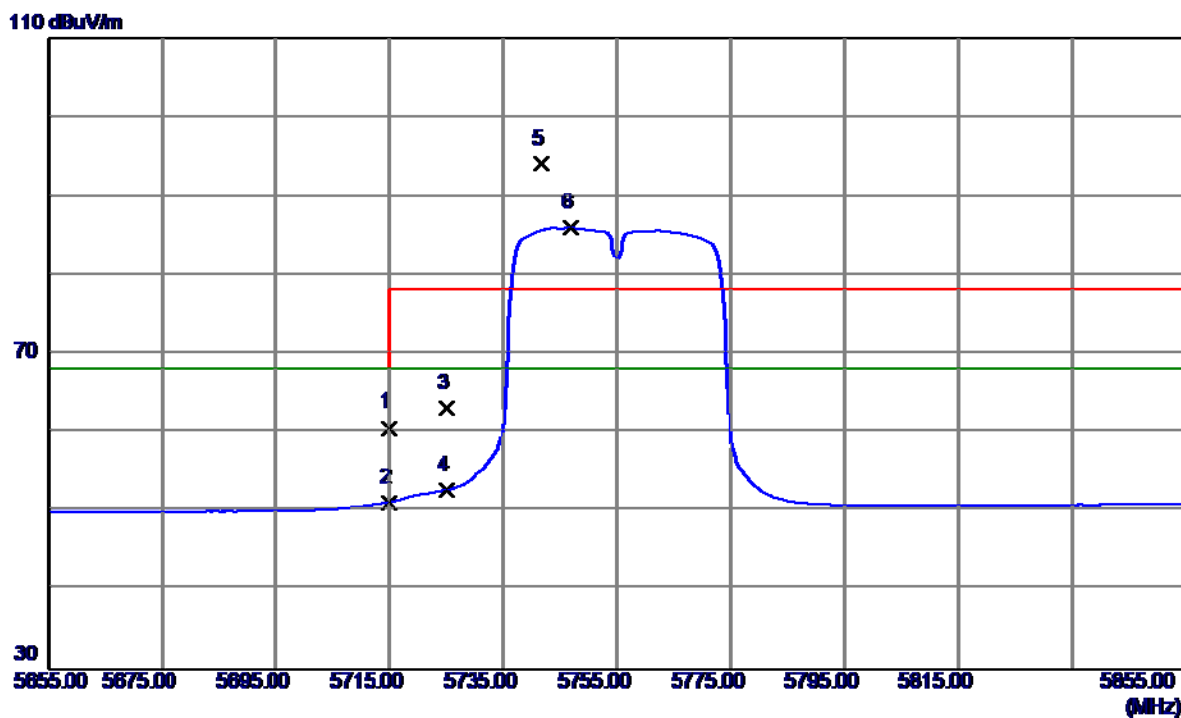
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11649.4000	33.84	15.58	49.42	68.30	-18.88	Peak	
2	11649.4000	23.89	15.58	39.47	54.00	-14.53	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

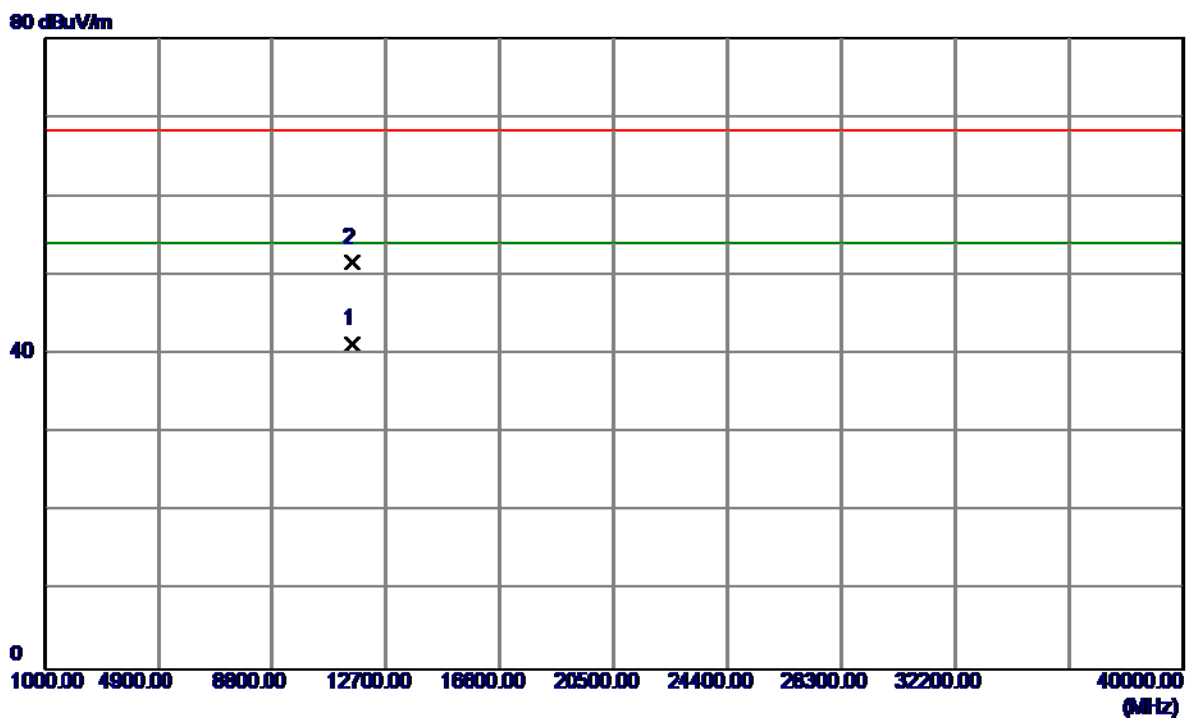
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	20.10	40.54	60.64	68.30	-7.66	Peak	
2	5715.0000	10.64	40.54	51.18	68.30	-17.12	AVG	
3	5725.0000	22.52	40.59	63.11	78.30	-15.19	Peak	
4	5725.0000	12.14	40.59	52.73	68.30	-15.57	AVG	
5	5741.6000	53.40	40.68	94.08	78.30	15.78	Peak	No Limit
6	5746.8000	45.24	40.70	85.94	68.30	17.64	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

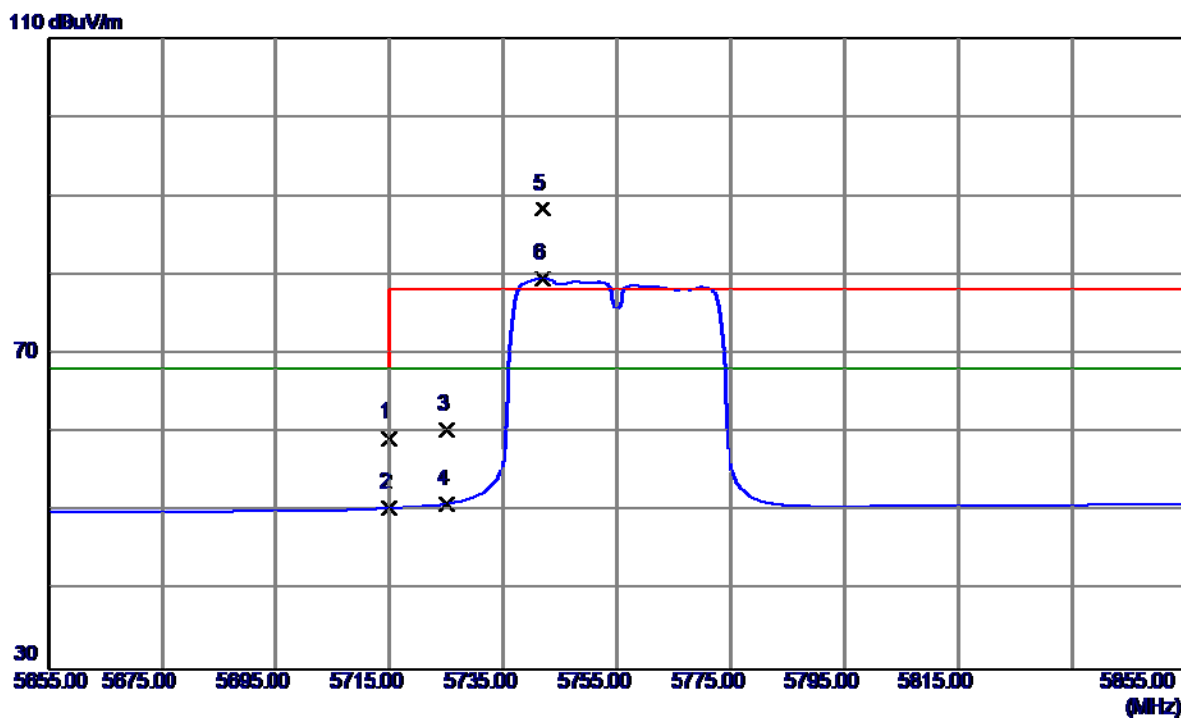
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11508.8000	25.78	15.52	41.30	54.00	-12.70	AVG	
2	11511.0000	36.08	15.52	51.60	68.30	-16.70	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

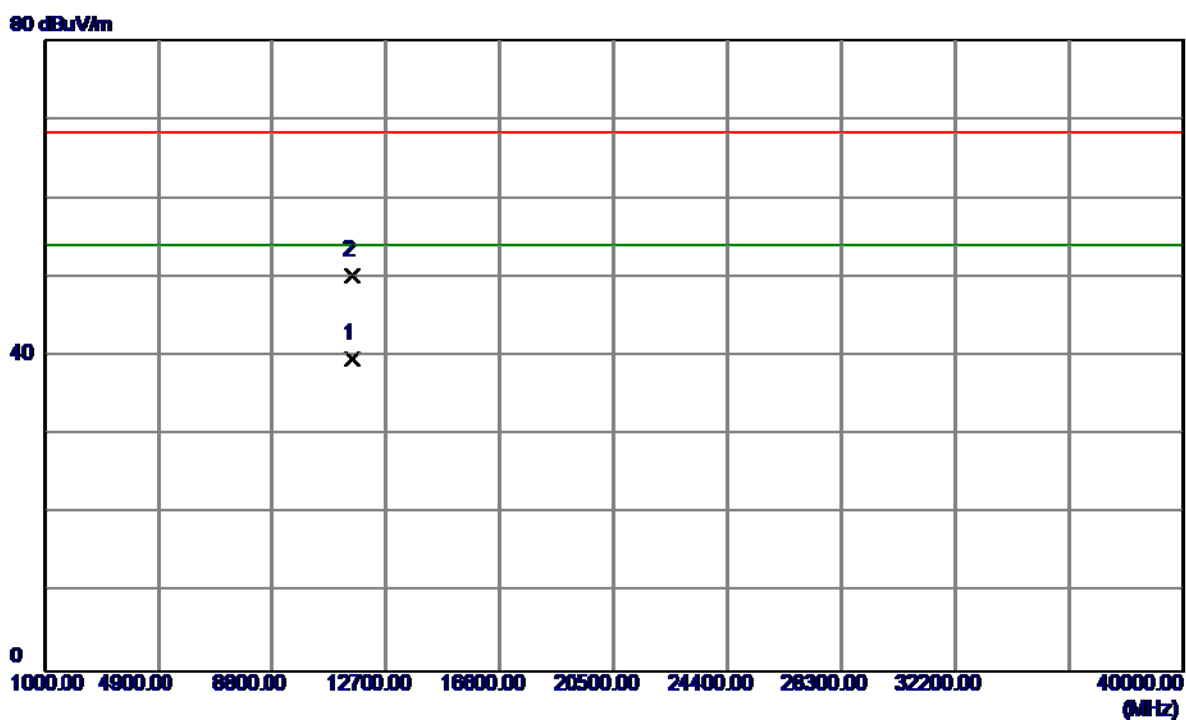
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5715.0000	18.82	40.54	59.36	68.30	-8.94	Peak	
2	5715.0000	9.92	40.54	50.46	68.30	-17.84	AVG	
3	5725.0000	19.82	40.59	60.41	78.30	-17.89	Peak	
4	5725.0000	10.44	40.59	51.03	68.30	-17.27	AVG	
5	5741.8000	47.79	40.68	88.47	78.30	10.17	Peak	No Limit
6	5741.8000	38.92	40.68	79.60	68.30	11.30	AVG	No Limit

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5755MHz

Horizontal

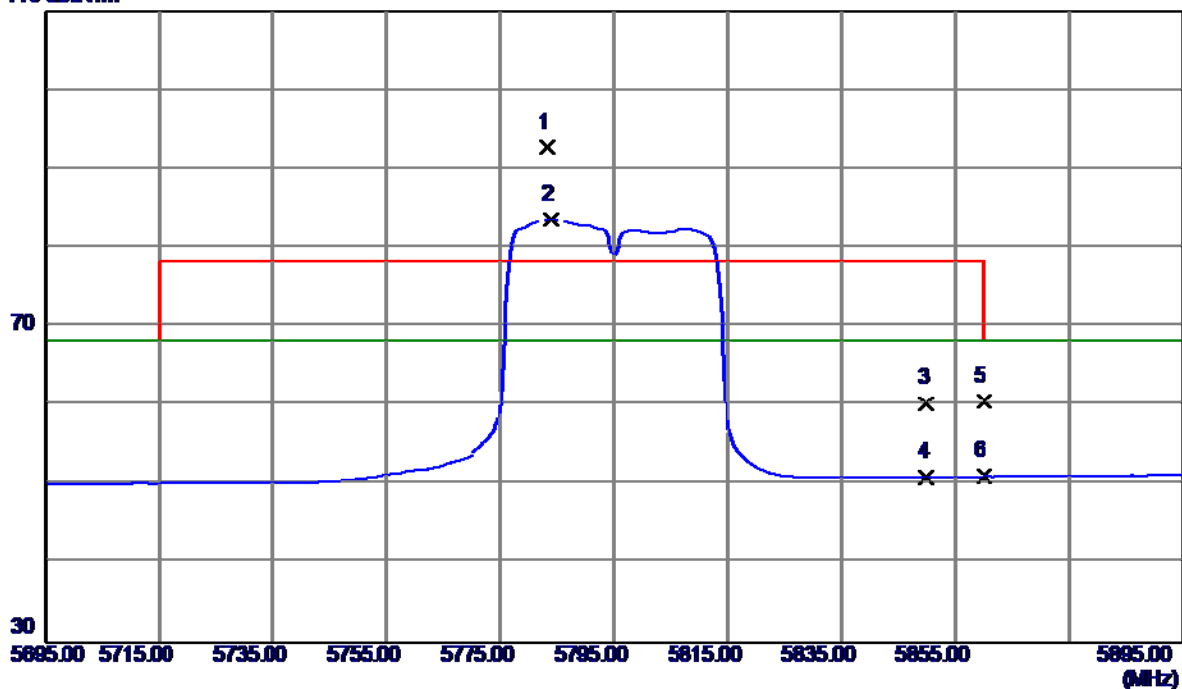


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11510.8000	24.12	15.52	39.64	54.00	-14.36	AVG	
2	11509.1000	34.73	15.52	50.25	68.30	-18.05	Peak	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

Vertical

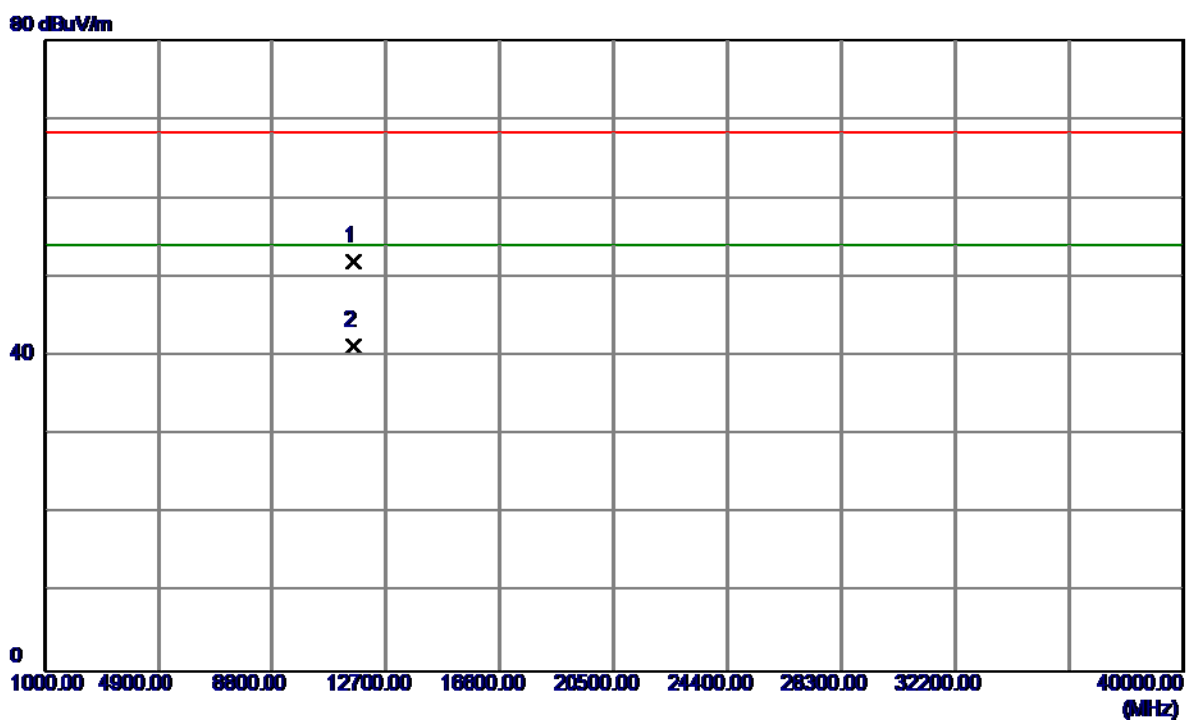
110 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5783.2000	51.76	40.89	92.65	78.30	14.35	Peak	No Limit
2	5783.8000	42.74	40.89	83.63	68.30	15.33	AVG	No Limit
3	5850.0000	19.09	41.23	60.32	78.30	-17.98	Peak	
4	5850.0000	9.73	41.23	50.96	68.30	-17.34	AVG	
5	5860.0000	19.22	41.28	60.50	78.30	-17.80	Peak	
6	5860.0000	9.77	41.28	51.05	68.30	-17.25	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

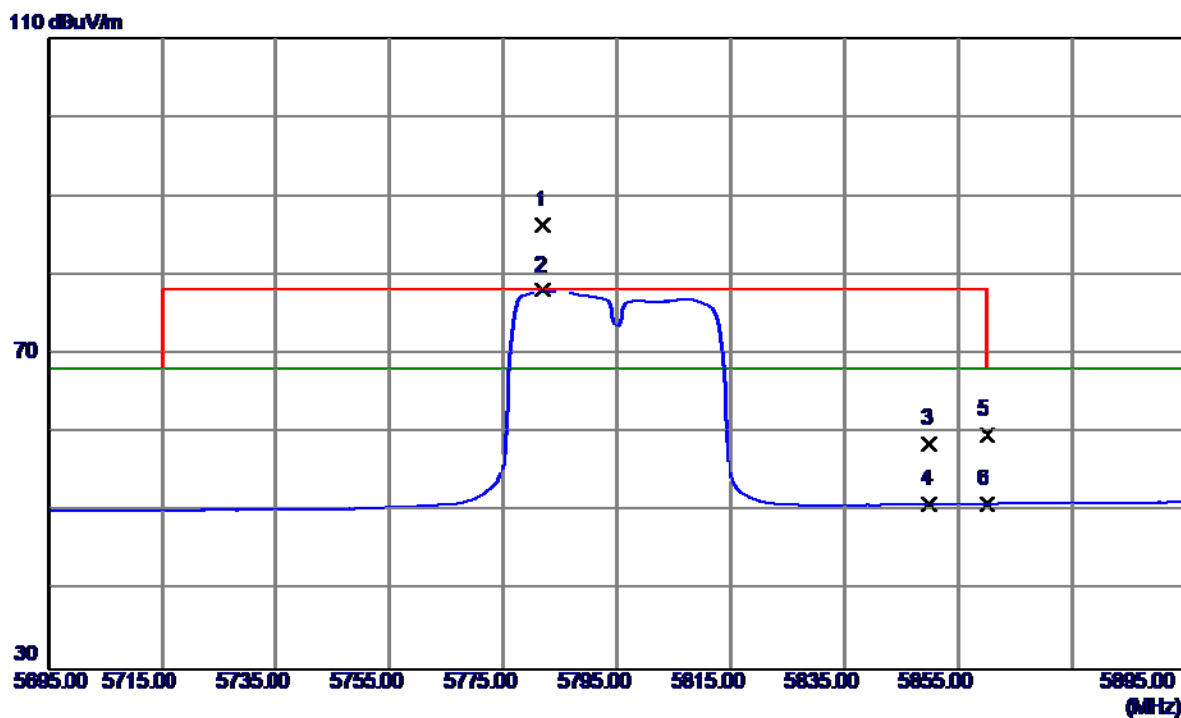
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11589.4000	36.40	15.55	51.95	68.30	-16.35	Peak	
2	11590.9000	25.71	15.55	41.26	54.00	-12.74	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

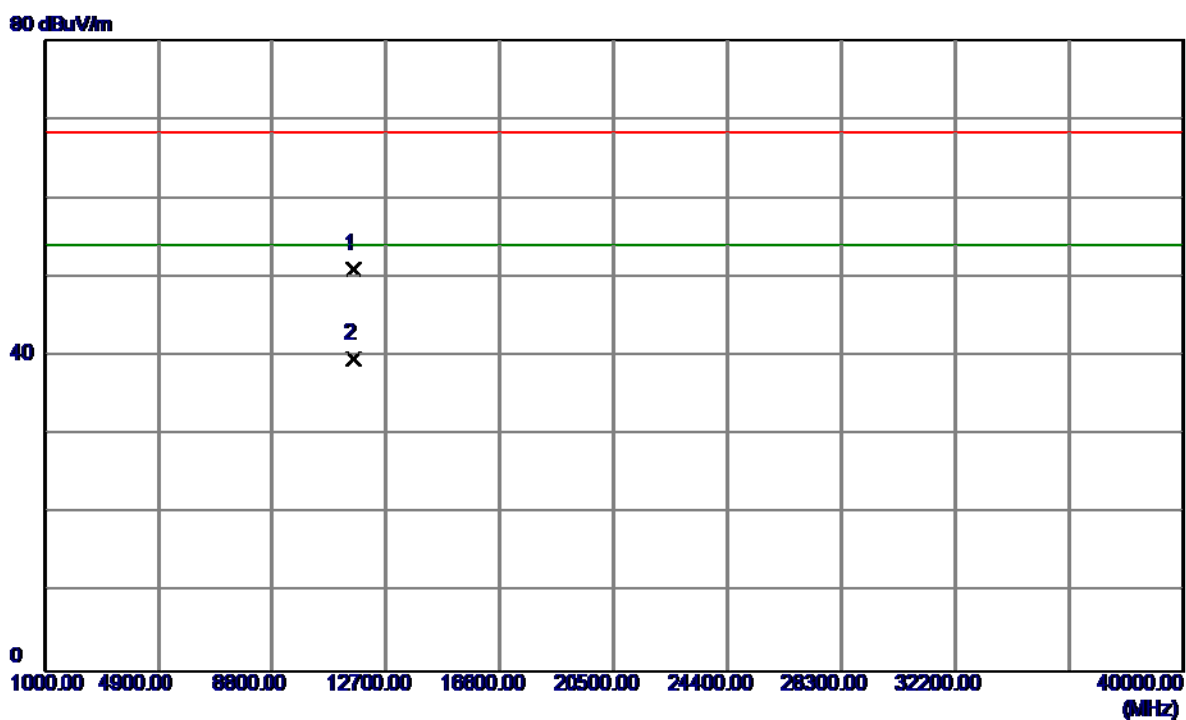
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	5782.0000	45.48	40.88	86.36	78.30	8.06	Peak	No Limit
2	5782.0000	37.20	40.88	78.08	68.30	9.78	AVG	No Limit
3	5850.0000	17.43	41.23	58.66	78.30	-19.64	Peak	
4	5850.0000	9.72	41.23	50.95	68.30	-17.35	AVG	
5	5860.0000	18.47	41.28	59.75	78.30	-18.55	Peak	
6	5860.0000	9.74	41.28	51.02	68.30	-17.28	AVG	

Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	11589.4000	35.43	15.55	50.98	68.30	-17.32	Peak	
2	11590.5000	24.18	15.55	39.73	54.00	-14.27	AVG	

TX A Mode_DUTY CYCLE

Duty cycle: TX DUTYMHz

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

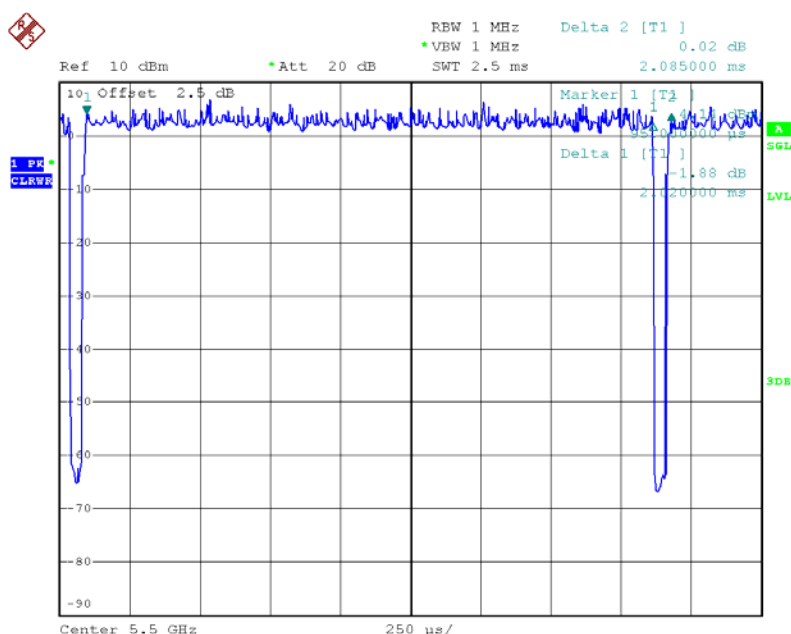
T_{ON} : 2.02 msec

T_{Total} : 2.08 msec

Duty cycle: 97.12%

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

Duty Factor = 0.13



Date: 6.JAN.2016 16:52:03

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is 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 DUTYMHz

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

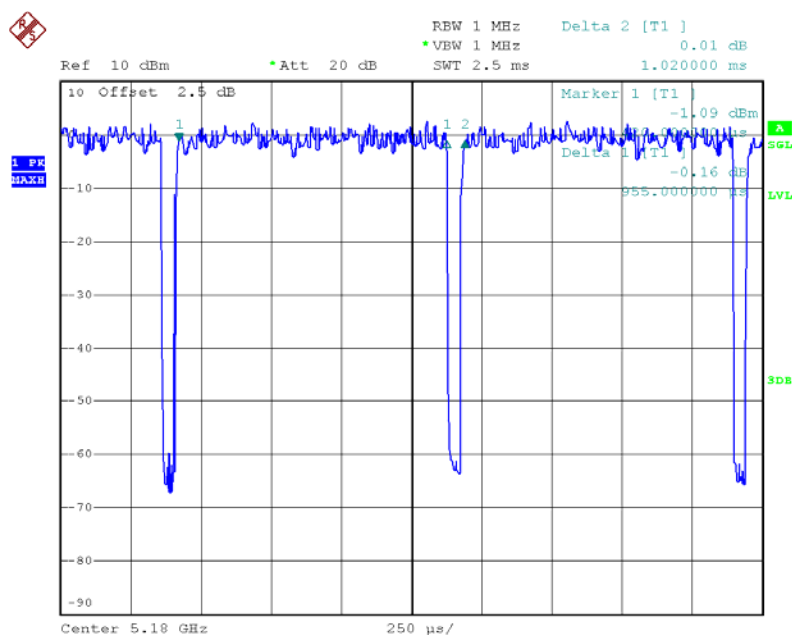
T_{ON} : 0.96 msec

T_{Total} : 1.02 msec

Duty cycle: 94.12%

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

Duty Factor = 0.26



Date: 6.JAN.2016 18:40:59

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is 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 DUTYMHz

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

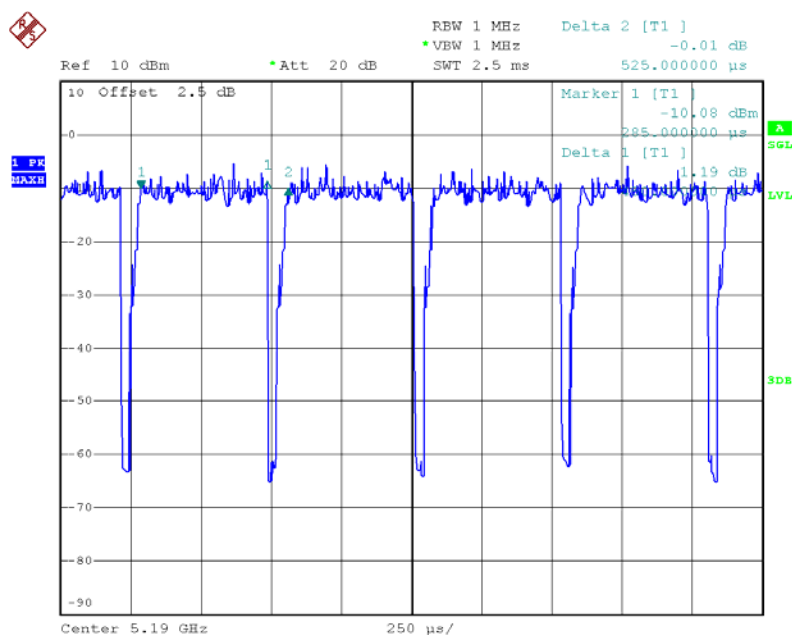
T_{ON} : 0.45 msec

T_{Total} : 0.52 msec

Duty cycle: 86.54%

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

Duty Factor = 0.63



Date: 6.JAN.2016 19:25:40

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is less than 98 %, so, the output power and power density should be calculated as

Output Power = Measured power + Duty factor

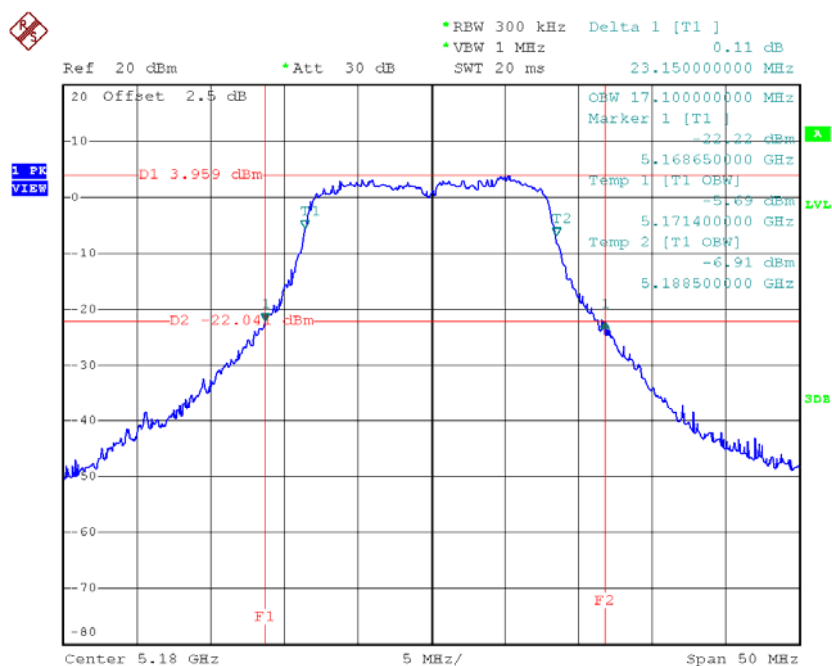
Power Spectral Density = Measured density + Duty factor

ATTACHMENT E - BANDWIDTH

Test Mode: UNII-1/TX A Mode_CH36/CH40/CH48

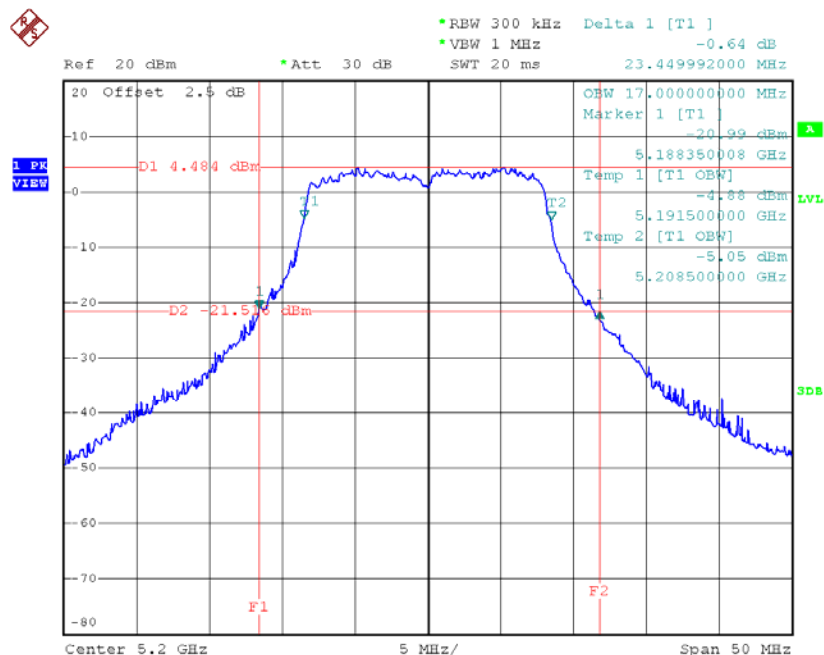
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	23.15	17.10
CH40	5200	23.45	17.00
CH48	5240	22.79	17.10

TX CH36



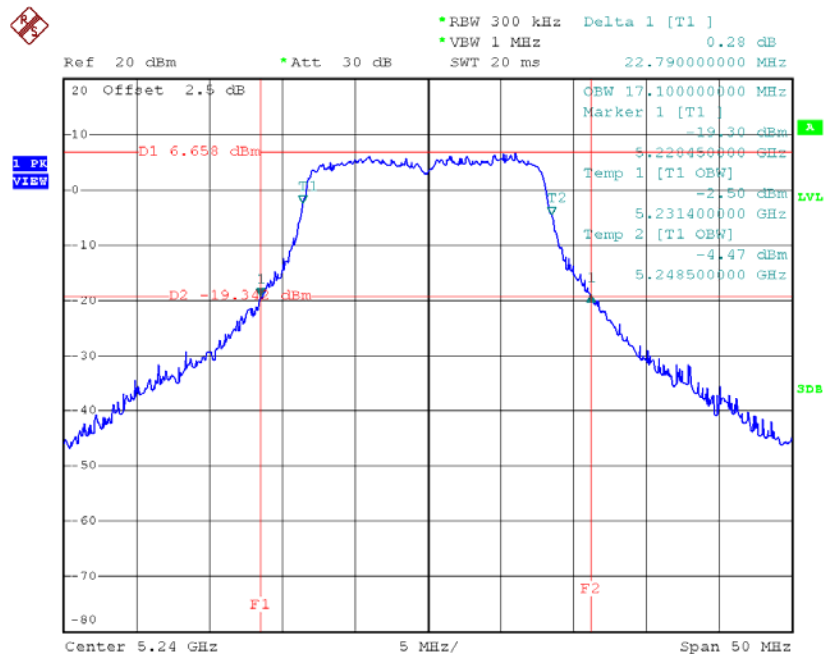
Date: 6.JAN.2016 16:27:55

TX CH40



Date: 6.JAN.2016 16:34:19

TX CH48

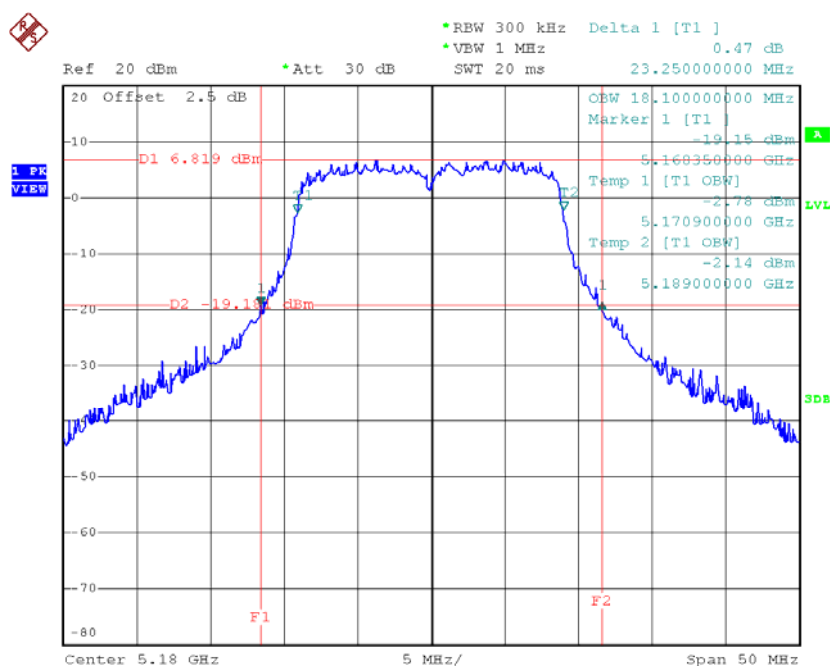


Date: 6.JAN.2016 16:35:29

Test Mode: UNII-1/TX N20 Mode_CH36/CH40/CH48

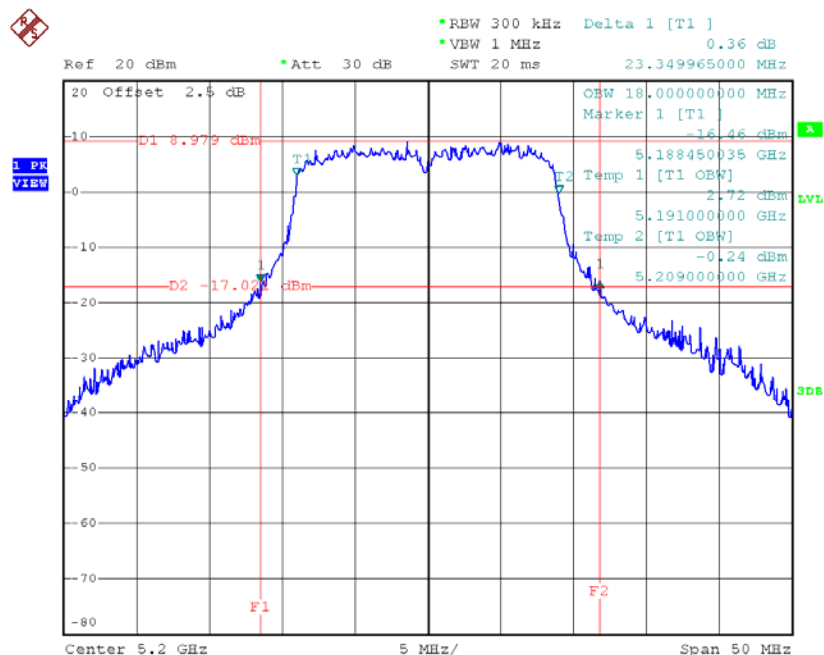
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	23.25	18.10
CH40	5200	23.35	18.00
CH48	5240	24.10	18.10

TX CH36



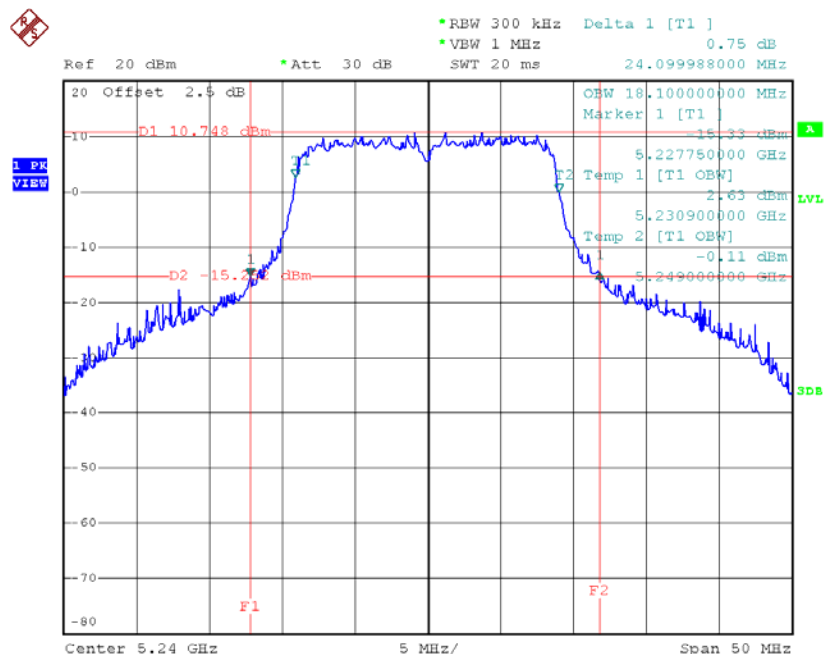
Date: 6.JAN.2016 17:02:29

TX CH40



Date: 6.JAN.2016 17:04:08

TX CH48

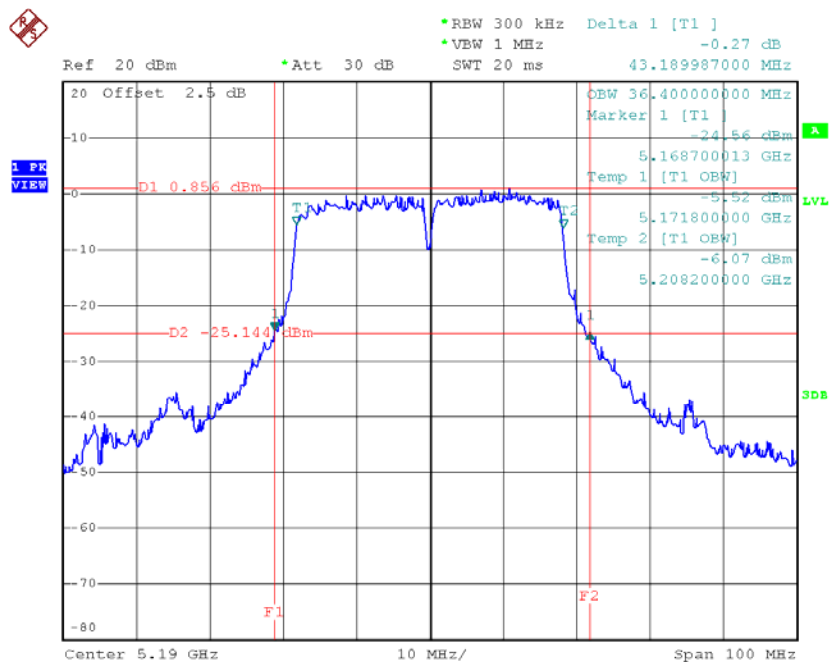


Date: 6.JAN.2016 17:05:21

Test Mode: UNII-1/TX N40 Mode_CH38/CH46

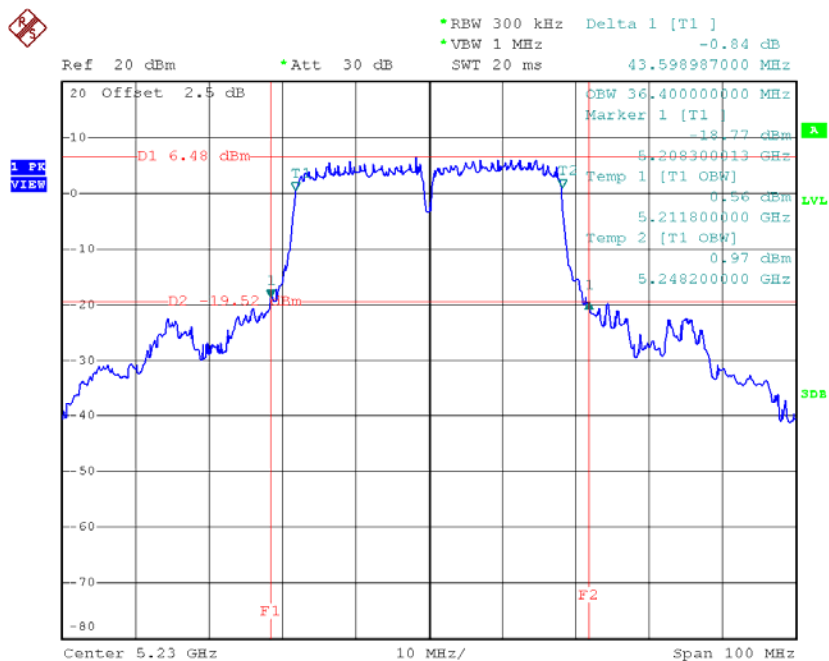
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	43.19	36.40
CH46	5230	43.60	36.40

TX CH38



Date: 6.JAN.2016 17:29:19

TX CH46

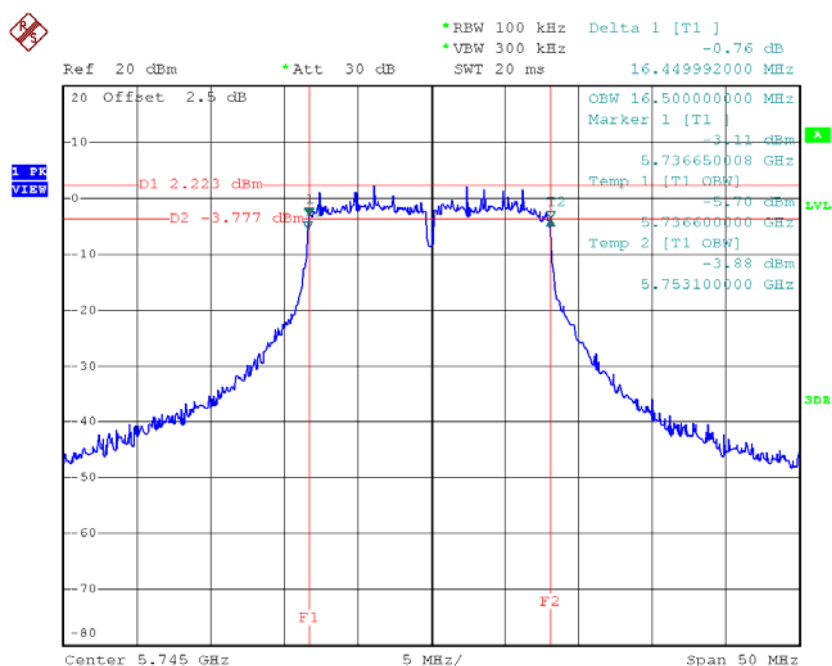


Date: 6.JAN.2016 17:31:49

Test Mode: UNII-3/ TX A Mode_CH149/CH157/CH165

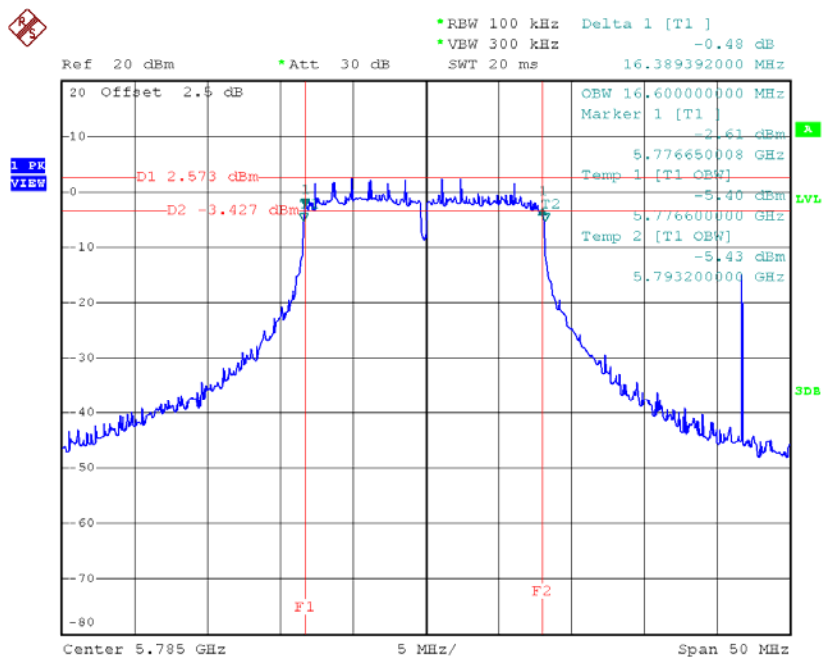
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH149	5745	16.45	16.50	>=500
CH157	5785	16.39	16.60	>=500
CH165	5825	16.45	16.50	>=500

TX CH 149



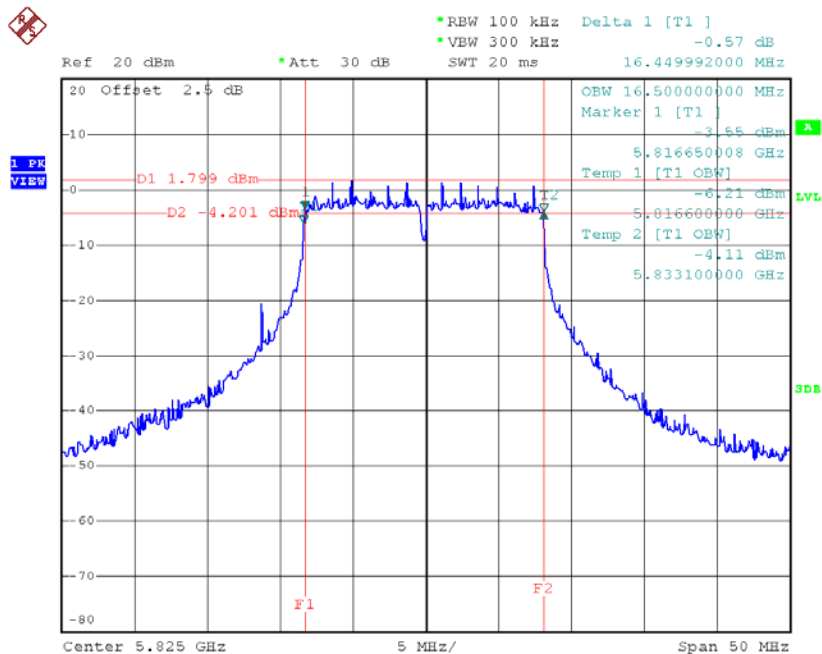
Date: 6.JAN.2016 16:57:02

TX CH 157



Date: 6.JAN.2016 16:58:26

TX CH 165

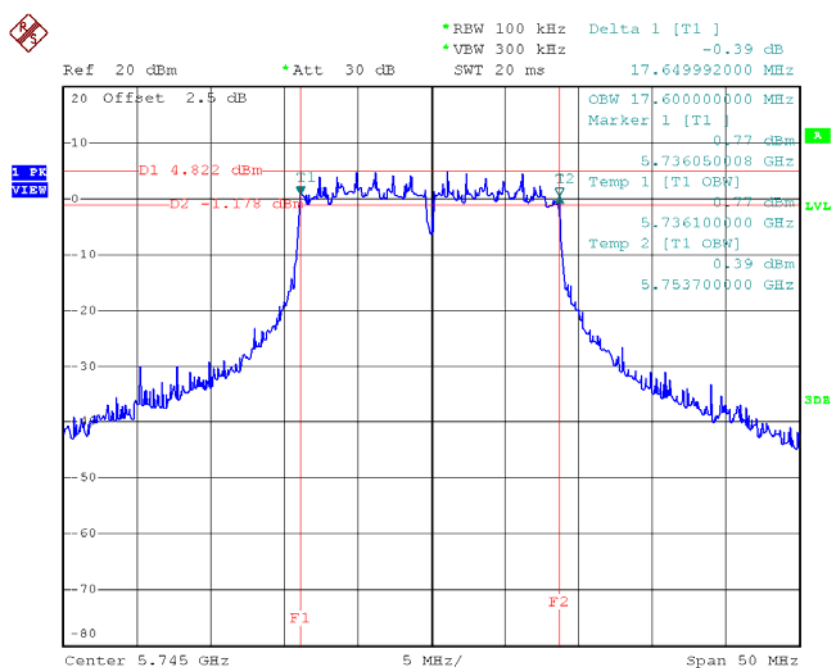


Date: 6.JAN.2016 17:00:08

Test Mode: UNII-3/ TX N20 Mode_CH149/CH157/CH165

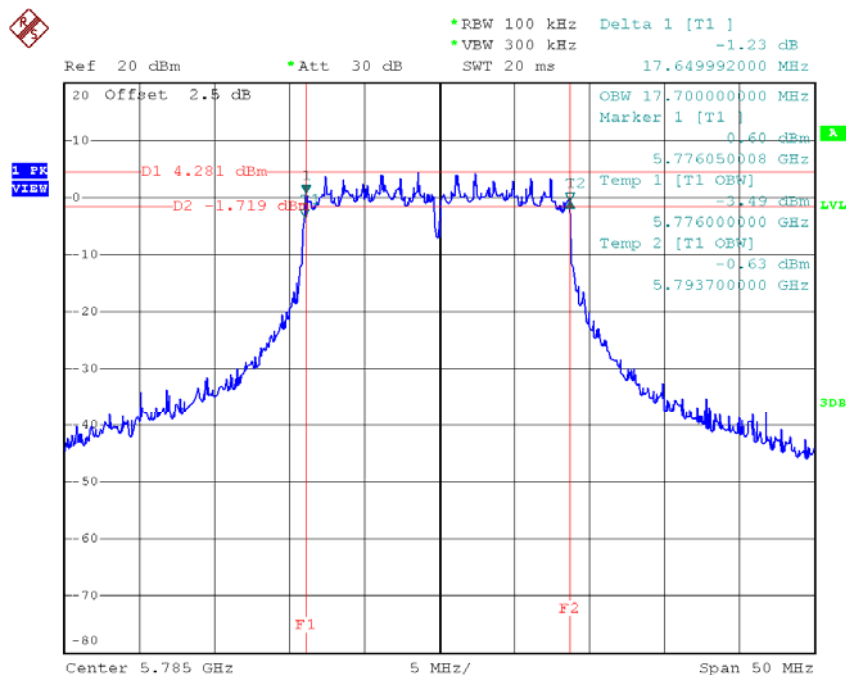
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH149	5745	17.65	17.60	>=500
CH157	5785	17.65	17.70	>=500
CH165	5825	17.65	17.70	>=500

TX CH 149



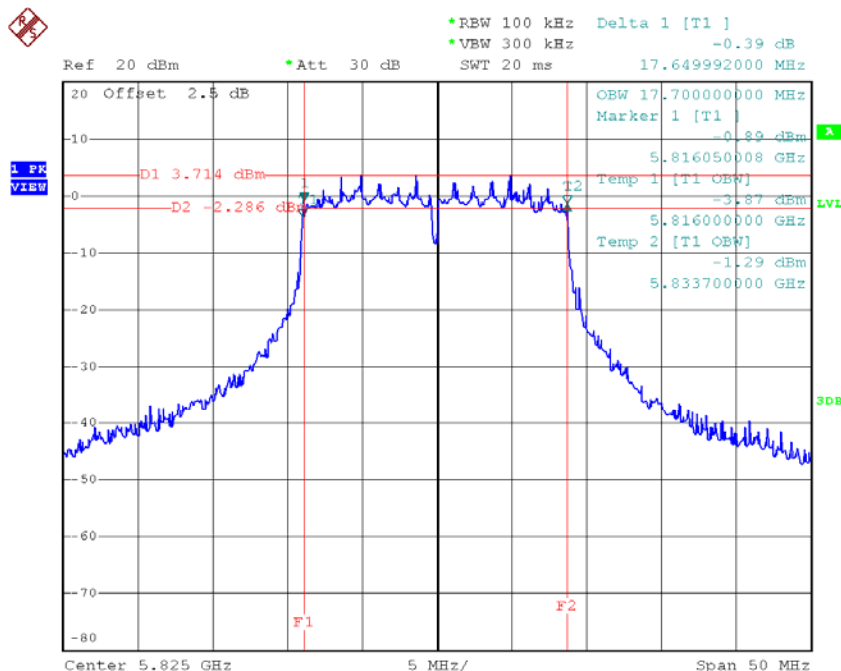
Date: 6.JAN.2016 17:21:01

TX CH 157



Date: 6.JAN.2016 17:22:37

TX CH 165

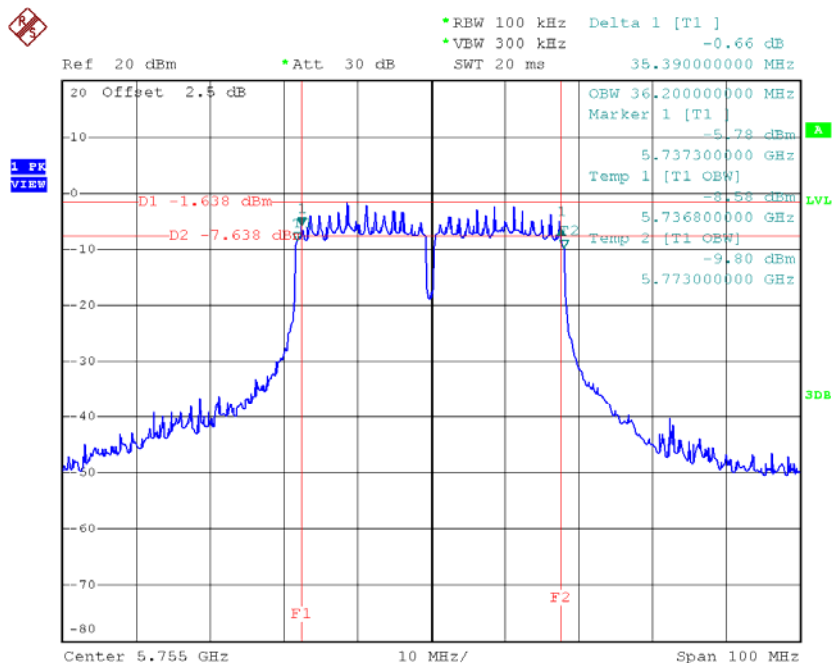


Date: 6.JAN.2016 17:24:05

Test Mode: UNII-3/ TX N40 Mode_CH151/CH159

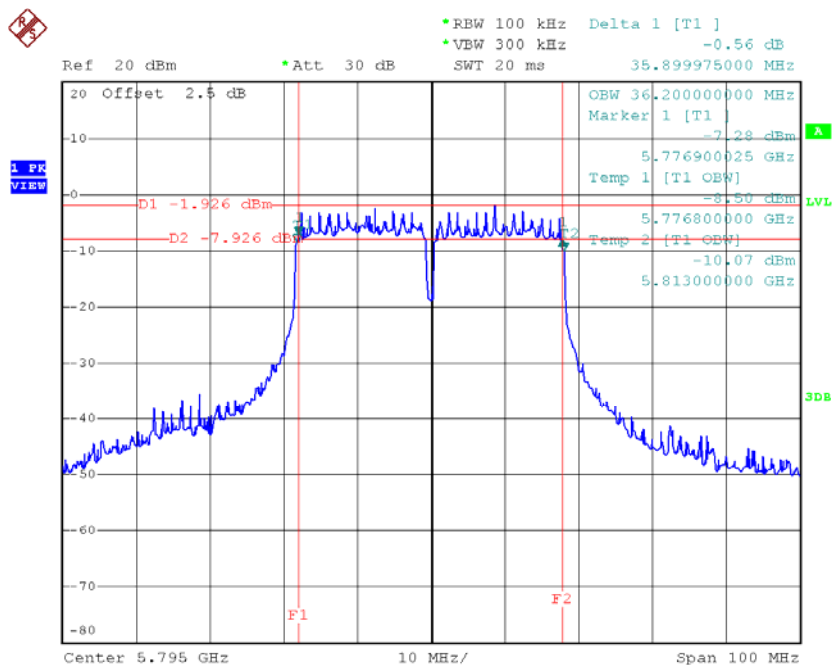
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (kHz)
CH151	5755	35.39	36.20	>=500
CH159	5795	35.90	36.20	>=500

TX CH 151



Date: 6.JAN.2016 18:13:31

TX CH 159



Date: 6.JAN.2016 18:24:47

ATTACHMENT F - MAXIMUM OUTPUT POWER

Test Mode: UNII-1/TX A Mode

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	13.66	0.13	13.79	24.00	0.25
CH40	5200	13.64	0.13	13.77	24.00	0.25
CH48	5240	13.71	0.13	13.84	24.00	0.25

Test Mode: UNII-1/TX N20 Mode_ANT 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	11.76	0.26	12.02	24.00	0.25
CH40	5200	11.51	0.26	11.77	24.00	0.25
CH48	5240	11.69	0.26	11.95	24.00	0.25

Test Mode: UNII-1/TX N20 Mode_ANT 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	7.48	0.26	7.74	24.00	0.25
CH40	5200	7.87	0.26	8.13	24.00	0.25
CH48	5240	7.76	0.26	8.02	24.00	0.25

Test Mode: UNII-1/TX N20 Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	13.40	24.00	0.25
CH40	5200	13.33	24.00	0.25
CH48	5240	13.42	24.00	0.25

Test Mode: UNII-1/TX N40 Mode_ANT 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	10.72	0.63	11.35	24.00	0.25
CH46	5230	10.64	0.63	11.27	24.00	0.25

Test Mode: UNII-1/TX N40 Mode_ANT 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	6.46	0.63	7.09	24.00	0.25
CH46	5230	7.05	0.63	7.68	24.00	0.25

Test Mode: UNII-1/TX N40 Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	12.73	24.00	0.25
CH46	5230	12.85	24.00	0.25

Test Mode: UNII-3/ TX A Mode

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	13.91	0.13	14.04	30.00	1.00
CH157	5785	13.96	0.13	14.09	30.00	1.00
CH165	5825	13.69	0.13	13.82	30.00	1.00

Test Mode: UNII-3/TX N20 Mode_ANT 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	11.67	0.26	11.93	30.00	1.00
CH157	5785	11.74	0.26	12.00	30.00	1.00
CH165	5825	11.67	0.26	11.93	30.00	1.00

Test Mode: UNII-3/TX N20 Mode_ANT 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	6.65	0.26	6.91	30.00	1.00
CH157	5785	8.56	0.26	8.82	30.00	1.00
CH165	5825	9.36	0.26	9.62	30.00	1.00

Test Mode: UNII-3/TX N20 Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	13.12	30.00	1.00
CH157	5785	13.70	30.00	1.00
CH165	5825	13.93	30.00	1.00

Test Mode: UNII-3/ TX N40 Mode_ANT 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	10.92	0.63	11.55	30.00	1.00
CH159	5795	10.52	0.63	11.15	30.00	1.00

Test Mode: UNII-3/ TX N40 Mode_ANT 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power + Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	7.04	0.63	7.67	30.00	1.00
CH159	5795	8.01	0.63	8.64	30.00	1.00

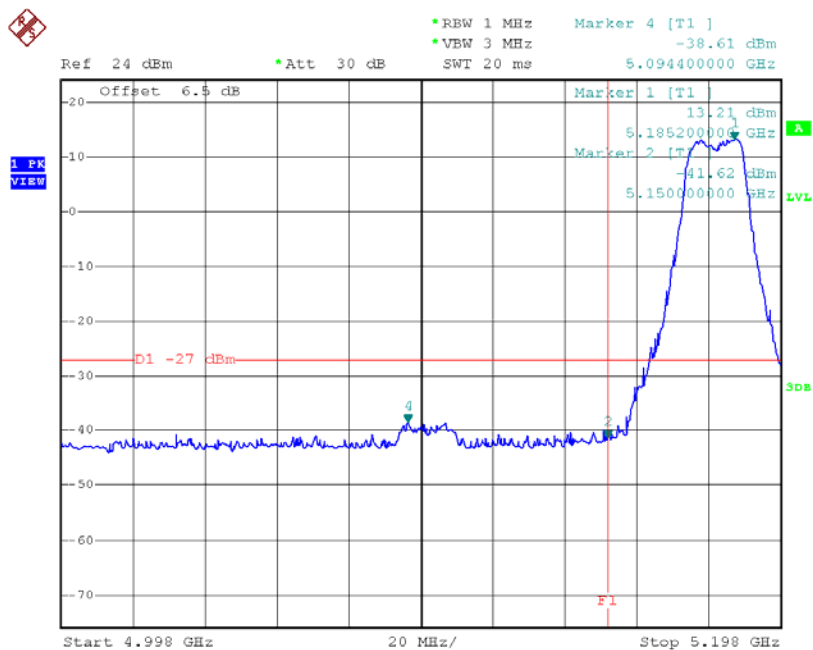
Test Mode: UNII-3/ TX N40 Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	13.04	30.00	1.00
CH159	5795	13.08	30.00	1.00

ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

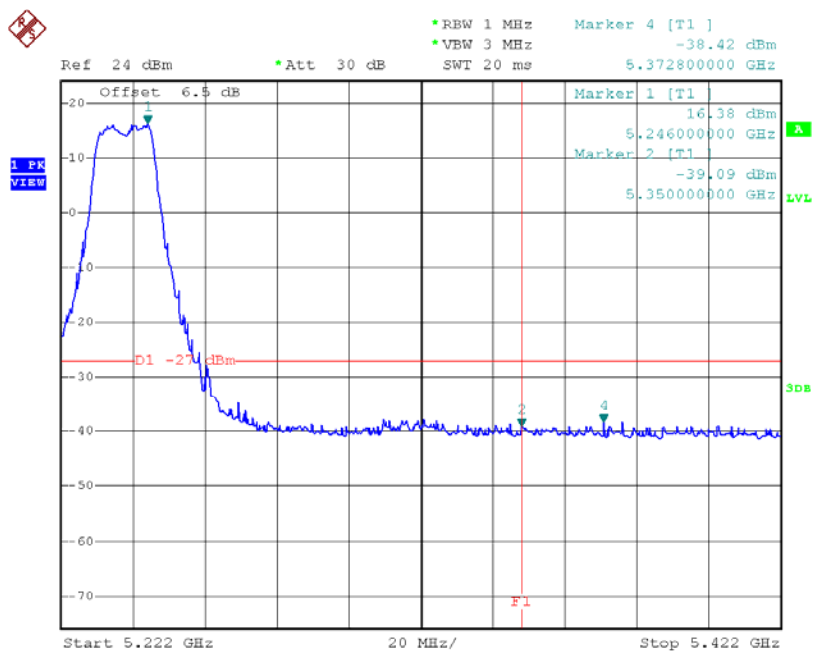
Test Mode: UNII-1/TX A Mode

TX mode CH36



Date: 6.JAN.2016 16:28:13

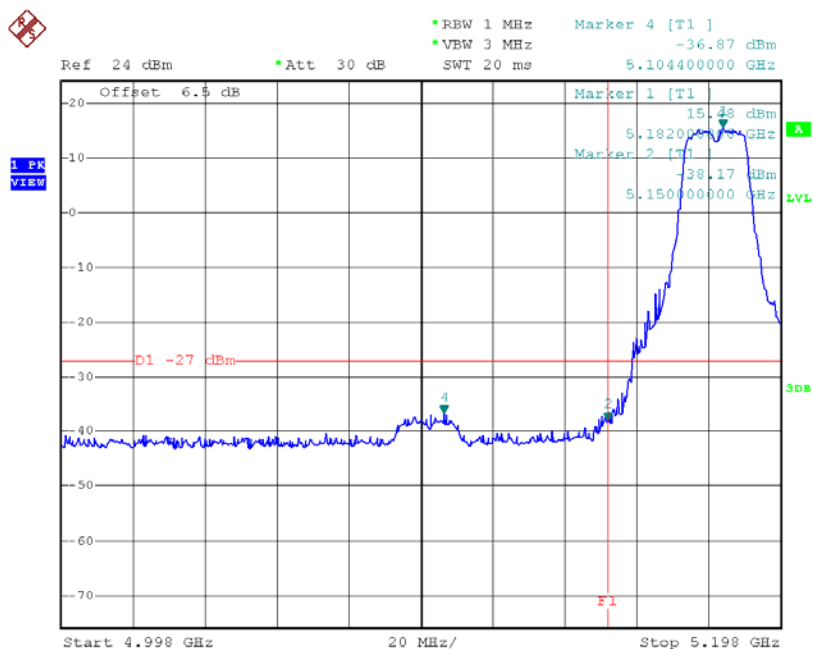
TX mode CH48



Date: 6.JAN.2016 16:35:46

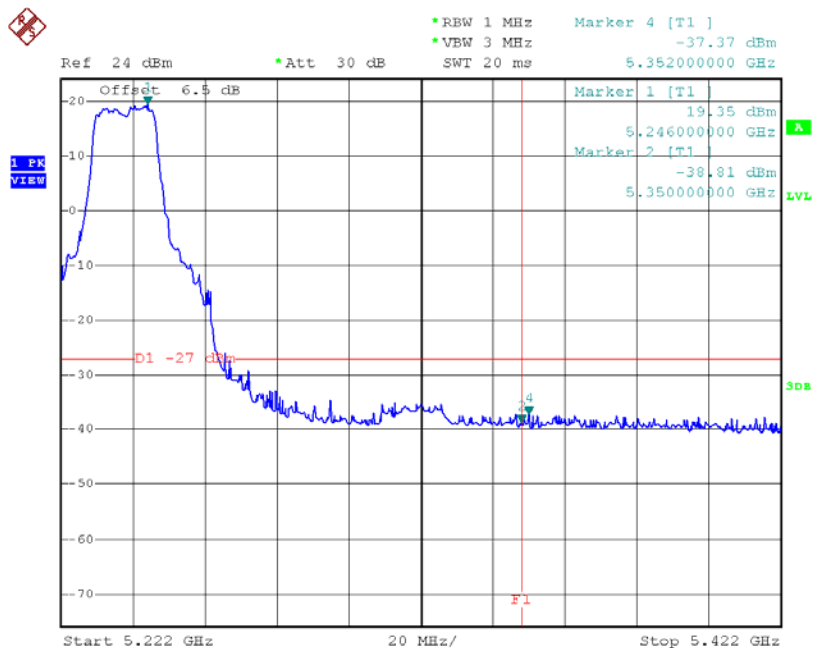
Test Mode: UNII-1/TX N20 Mode_ANT 1

TX mode CH36



Date: 6.JAN.2016 17:02:46

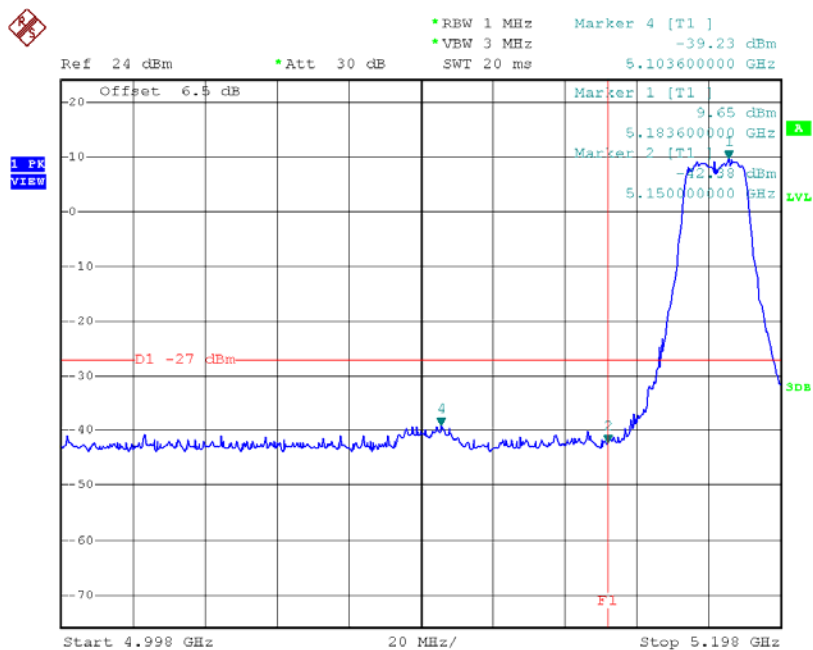
TX mode CH48



Date: 6.JAN.2016 17:05:38

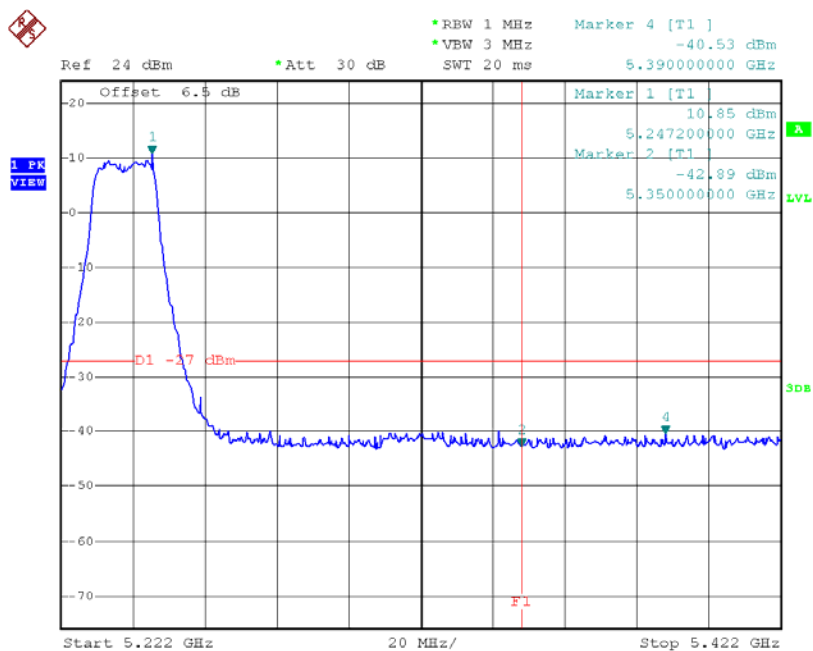
Test Mode: UNII-1/TX N20 Mode_ANT 2

TX mode CH36



Date: 6.JAN.2016 18:40:54

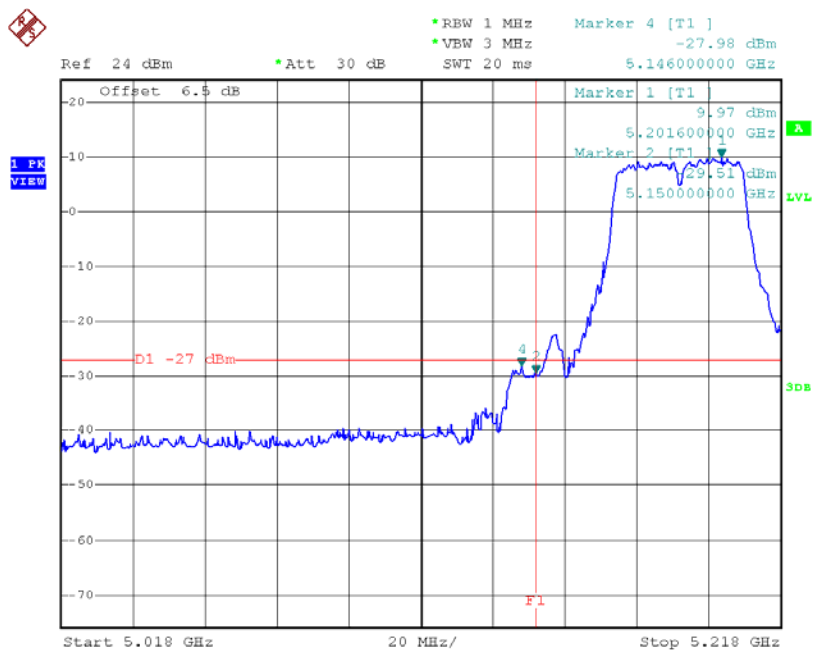
TX mode CH48



Date: 6.JAN.2016 18:43:29

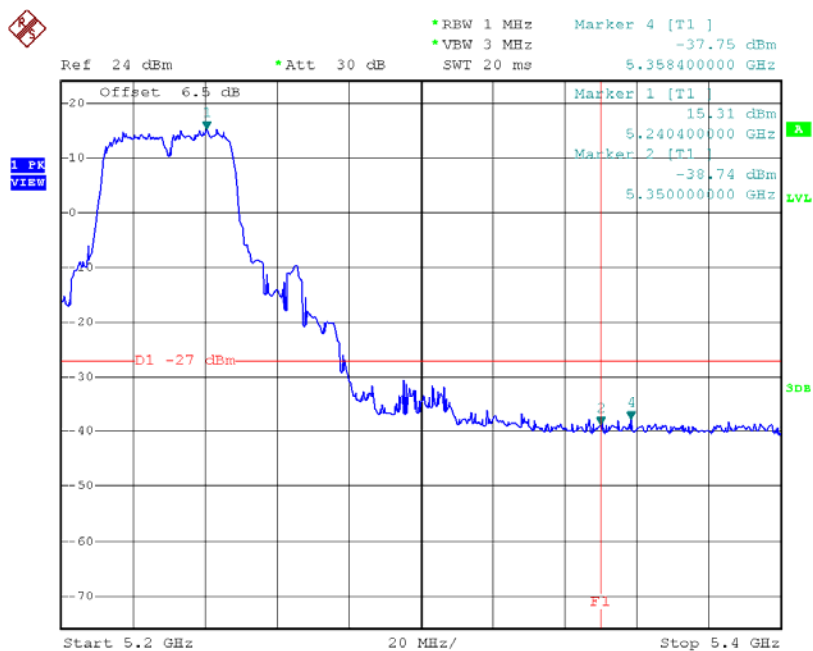
Test Mode: UNII-1/TX N40 Mode_ANT 1

TX mode CH38



Date: 6.JAN.2016 17:28:03

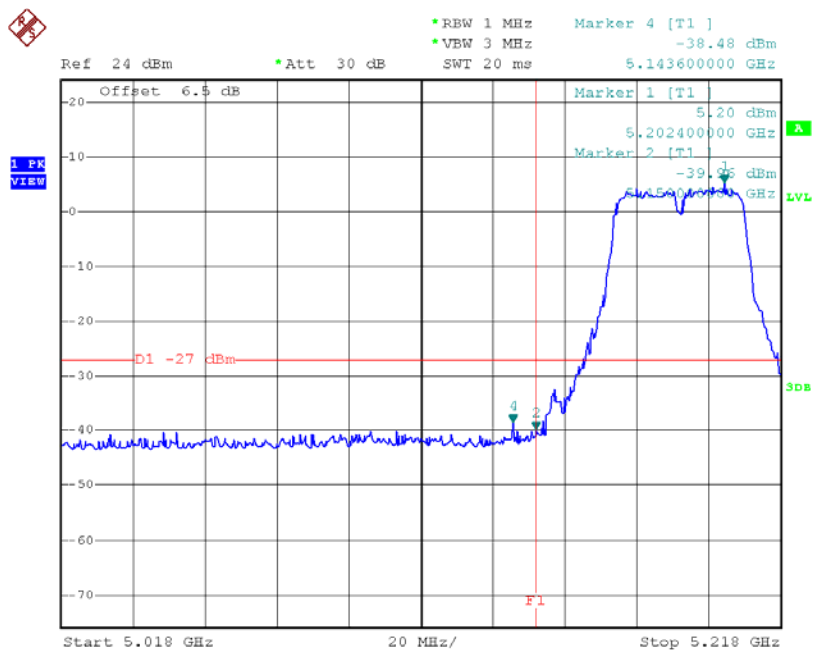
TX mode CH46



Date: 6.JAN.2016 17:32:06

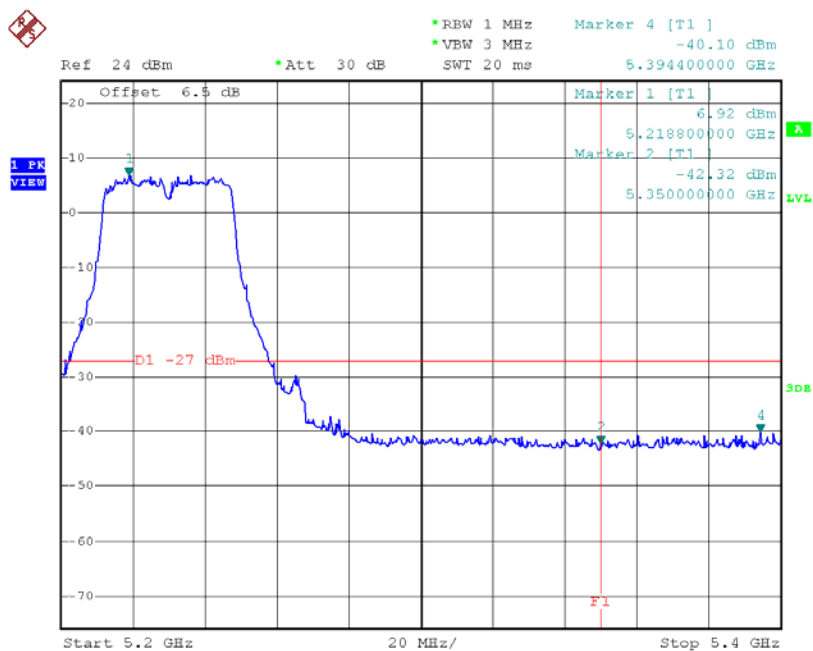
Test Mode:	UNII-1/TX N40 Mode_ANT 2
------------	--------------------------

TX mode CH38



Date: 6.JAN.2016 19:25:35

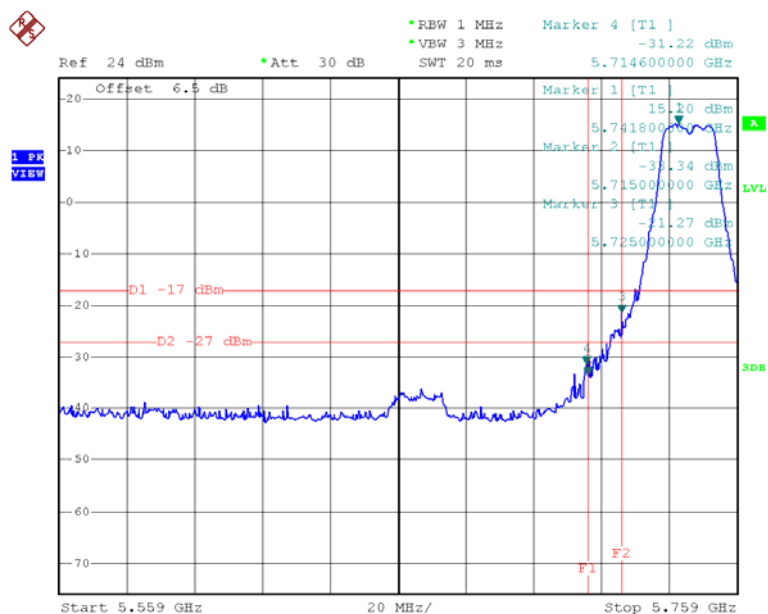
TX mode CH46



Date: 6.JAN.2016 19:27:28

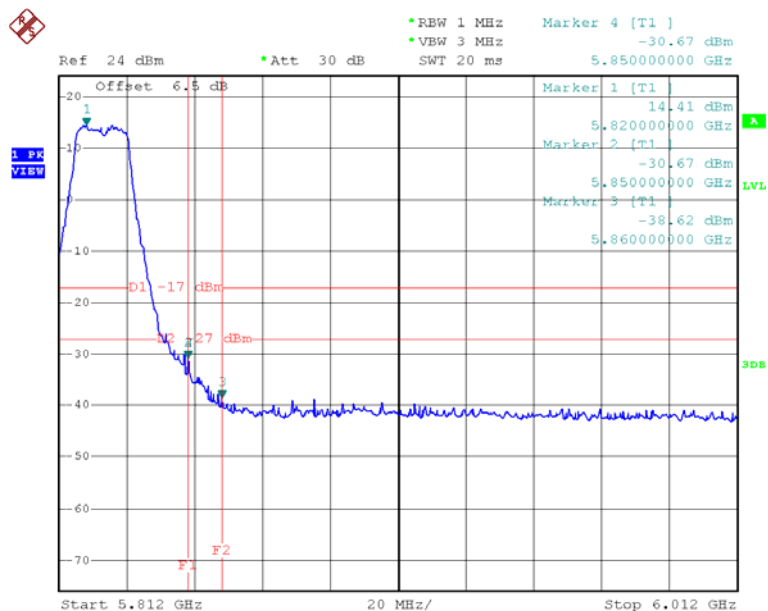
Test Mode: UNII-3/TX A Mode

TX A Mode CH149



Date: 6.JAN.2016 16:57:10

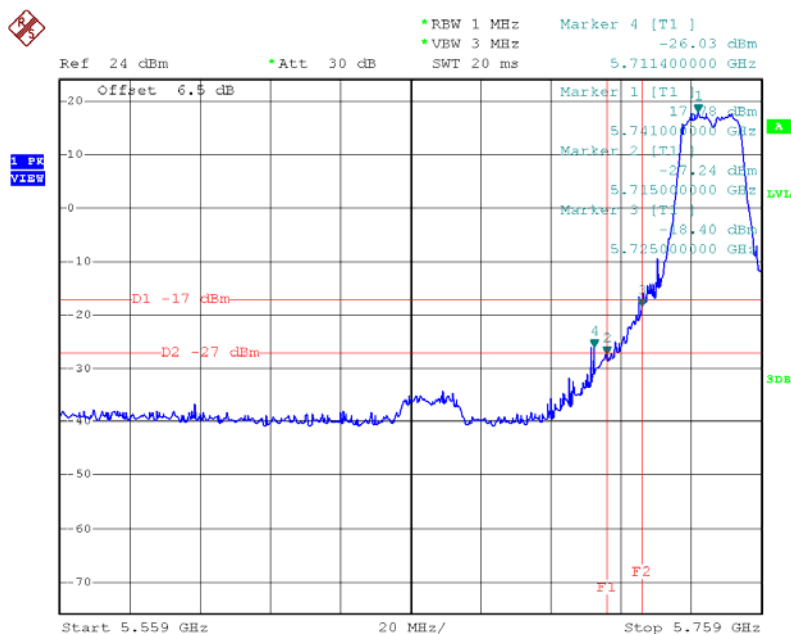
TX A Mode CH165



Date: 6.JAN.2016 17:00:26

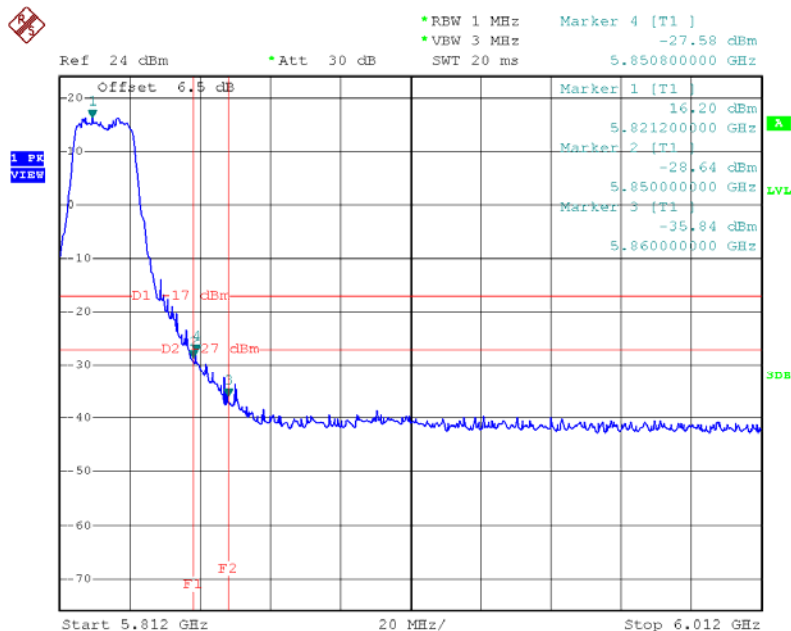
Test Mode: UNII-3/TX N20 Mode_ANT 1

TX HT20 mode CH149



Date: 6.JAN.2016 17:21:25

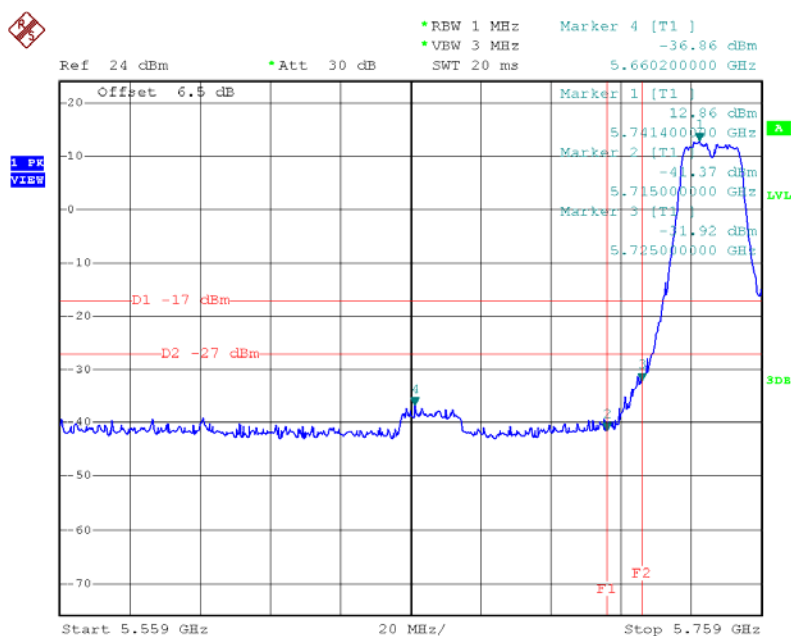
TX HT20 mode CH165



Date: 6.JAN.2016 17:24:22

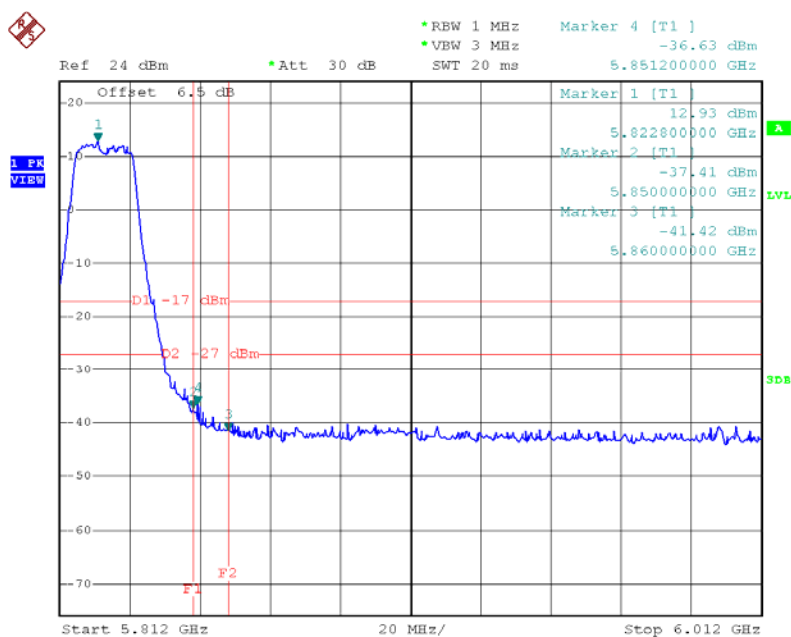
Test Mode: UNII-3/TX N20 Mode_ANT 2

TX HT20 mode CH149



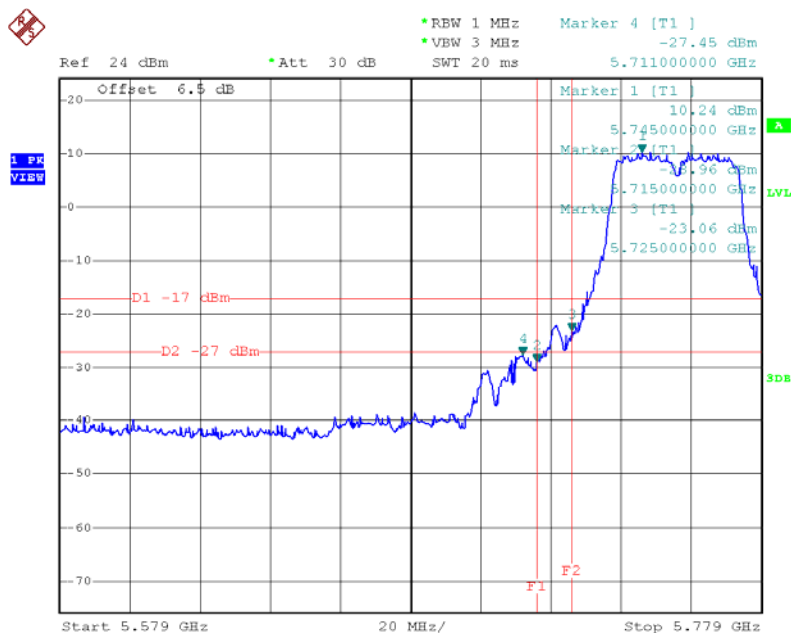
Date: 6.JAN.2016 19:19:22

X HT20 mode CH165



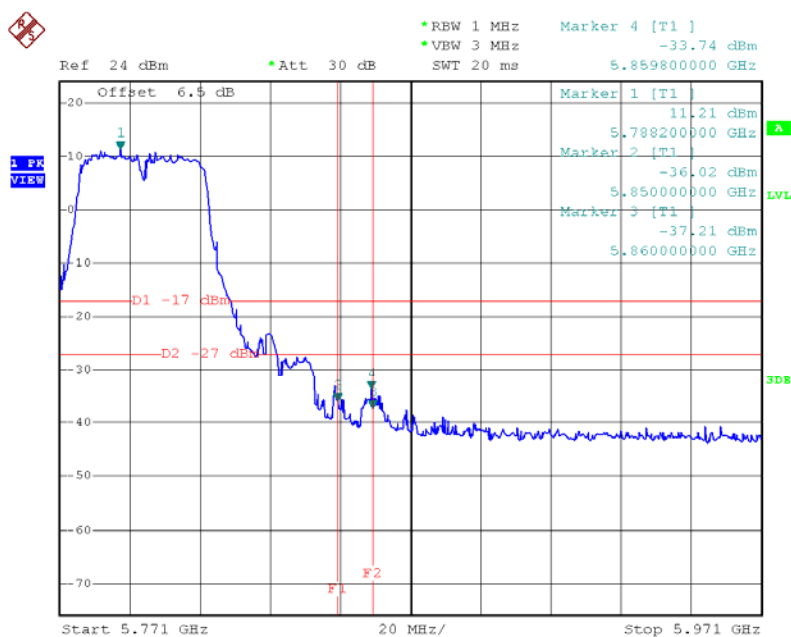
Test Mode: UNII-3/TX N40 Mode_ANT 1

UNII-3/TX HT40 mode CH151



Date: 6.JAN.2016 18:12:23

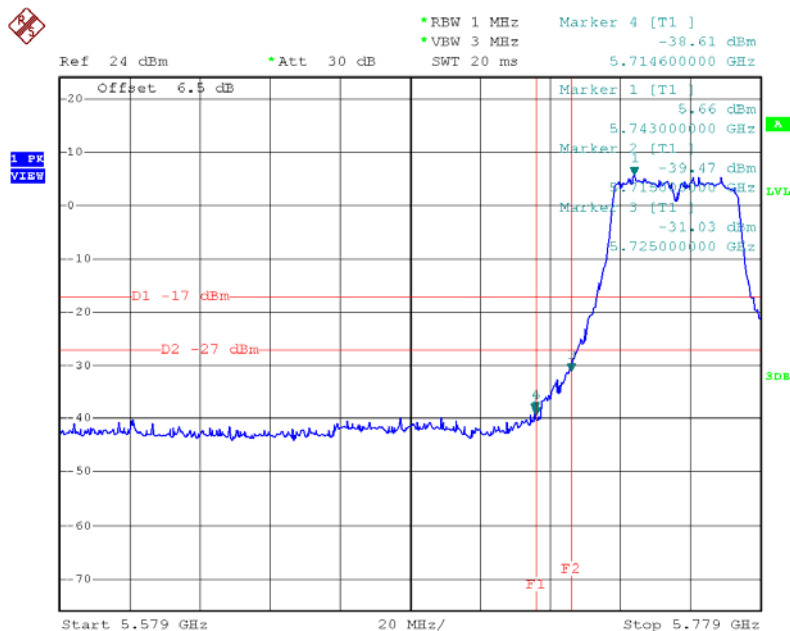
UNII-3/TX HT40 mode CH159



Date: 6.JAN.2016 18:23:17

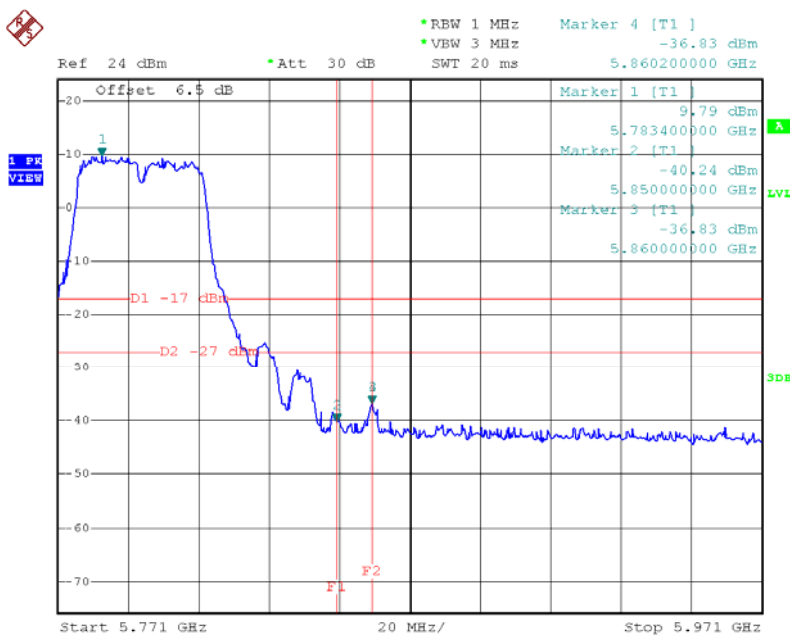
Test Mode: UNII-3/TX N40 Mode_ANT 2

TX HT40 mode CH151



Date: 6.JAN.2016 19:37:38

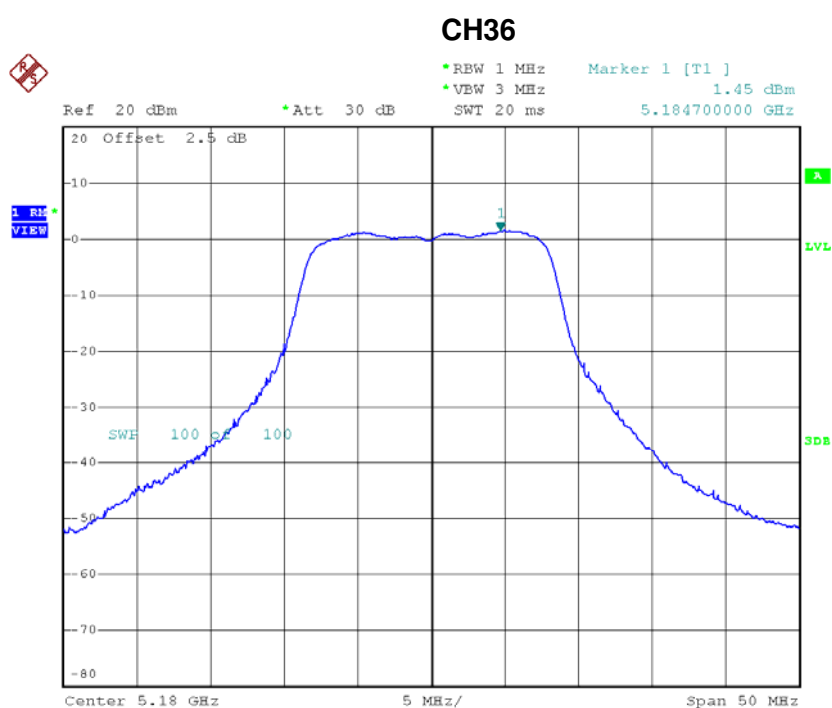
HT40 mode CH159



ATTACHMENT H - POWER SPECTRAL DENSITY

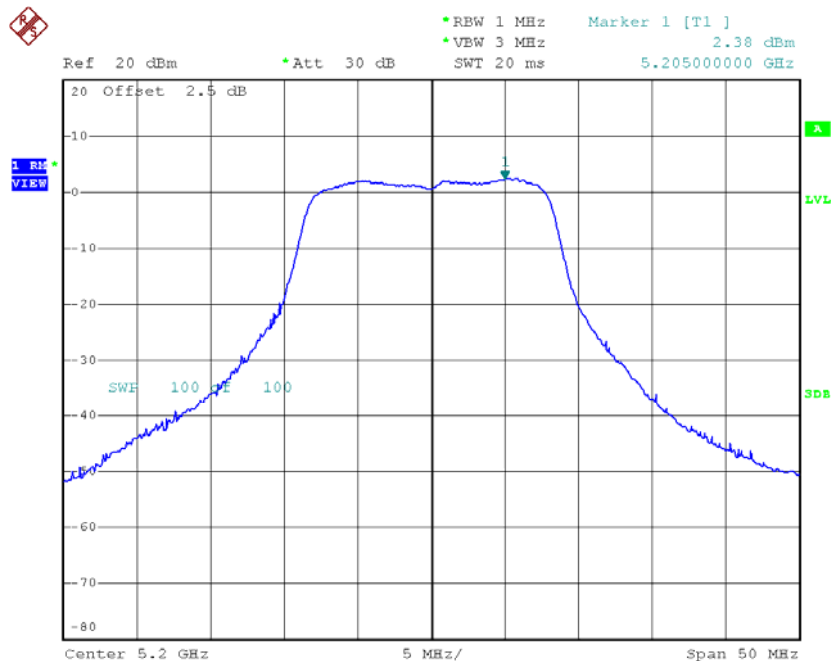
Test Mode: UNII-1/ TX A Mode_CH36/CH40/CH48

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	1.45	0.13	1.58	11.00
CH40	5200	2.38	0.13	2.51	11.00
CH48	5240	4.40	0.13	4.53	11.00



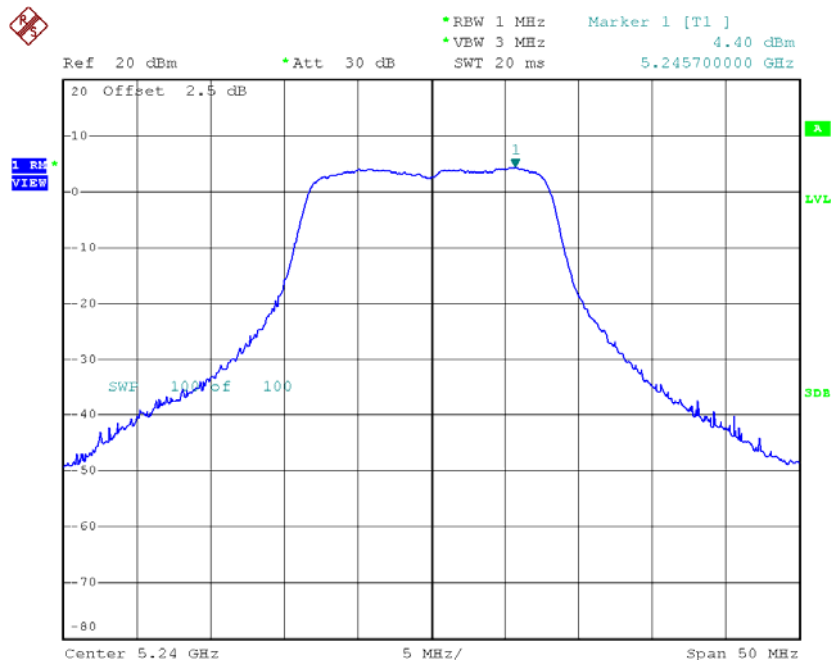
Date: 6.JAN.2016 16:28:05

CH40



Date: 6.JAN.2016 16:34:29

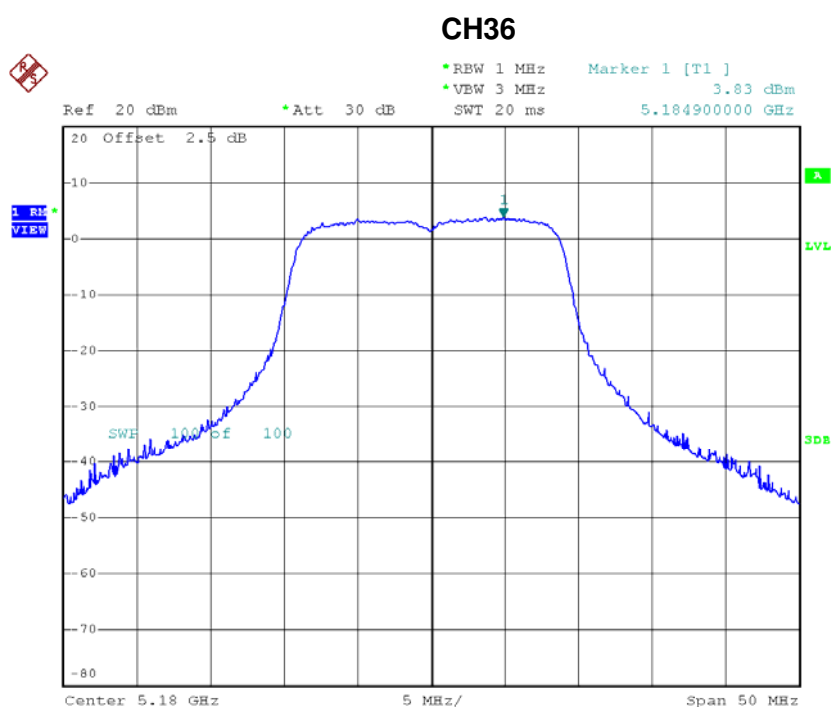
CH48



Date: 6.JAN.2016 16:35:38

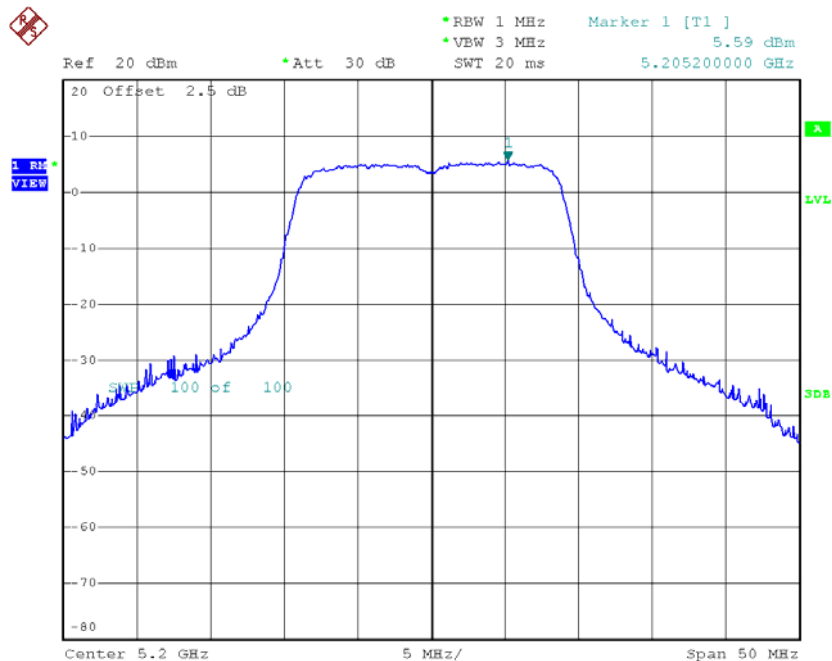
Test Mode: UNII-1/TX N20 Mode_CH36/CH40/CH48_ANT 1

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	3.83	0.26	4.09	11.00
CH40	5200	5.59	0.26	5.85	11.00
CH48	5240	7.83	0.26	8.09	11.00



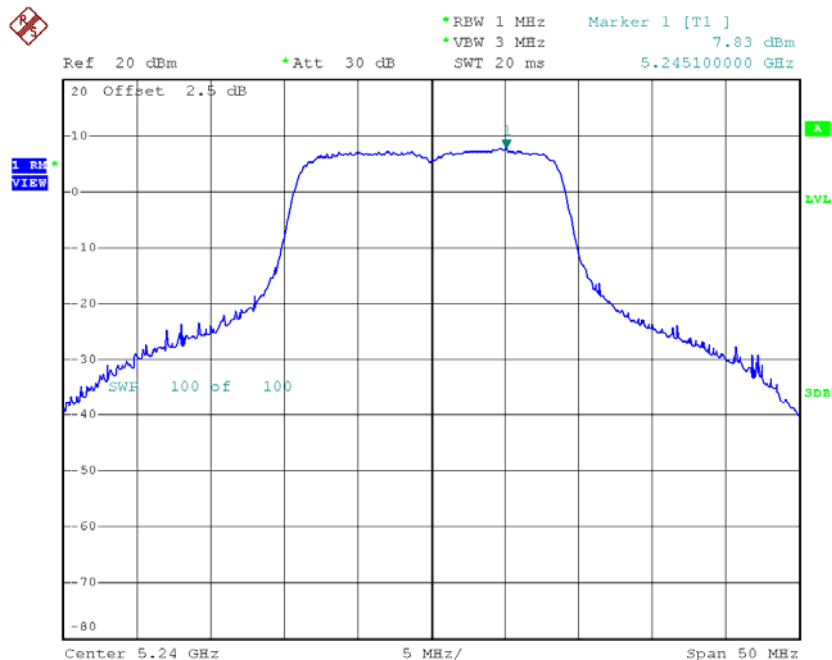
Date: 6.JAN.2016 17:02:38

CH40



Date: 6.JAN.2016 17:04:17

CH48

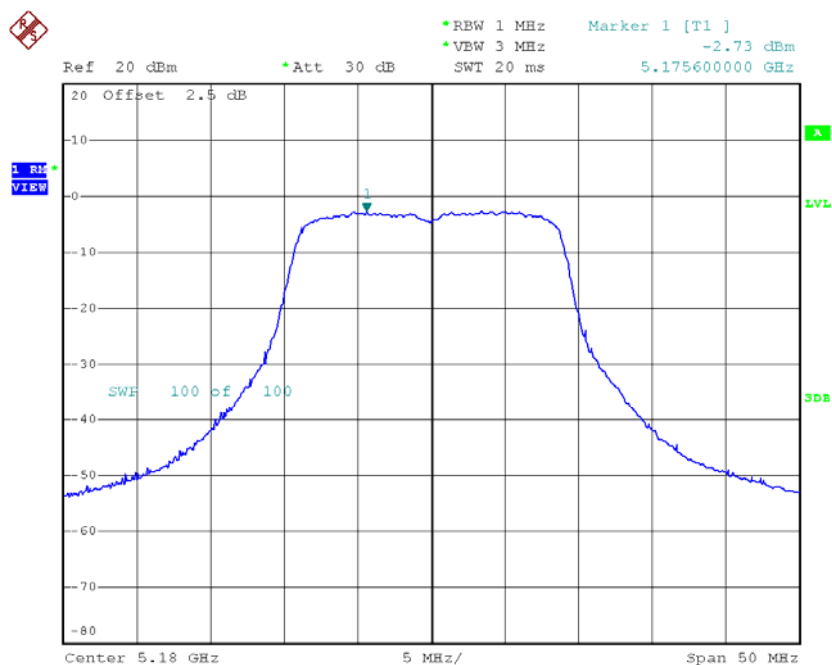


Date: 6.JAN.2016 17:05:31

Test Mode: UNII-1/TX N20 Mode_CH36/CH40/CH48_ANT 2

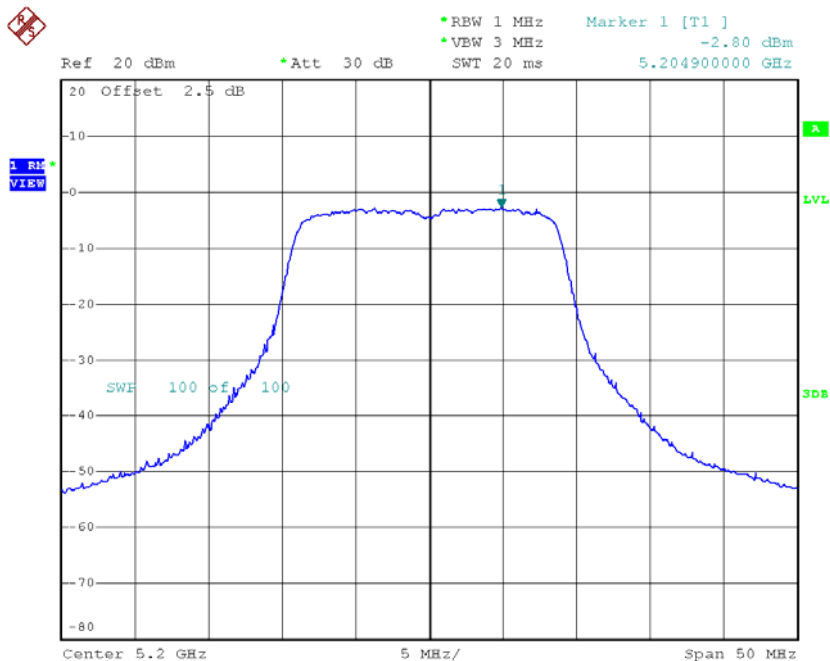
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	-2.73	0.26	-2.47	11.00
CH40	5200	-2.80	0.26	-2.54	11.00
CH48	5240	-2.32	0.26	-2.06	11.00

CH36



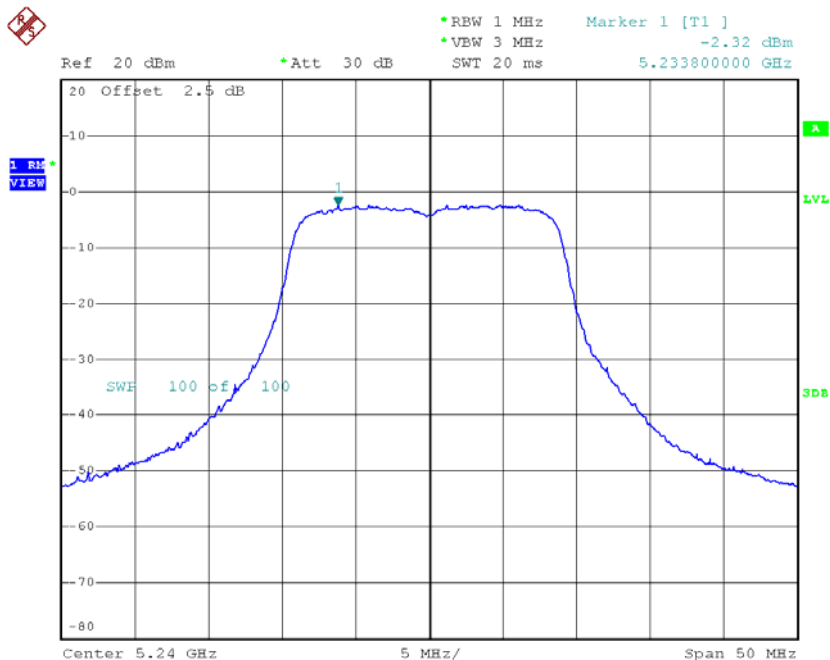
Date: 6.JAN.2016 18:40:46

CH40



Date: 6.JAN.2016 18:42:13

CH48



Date: 6.JAN.2016 18:43:21

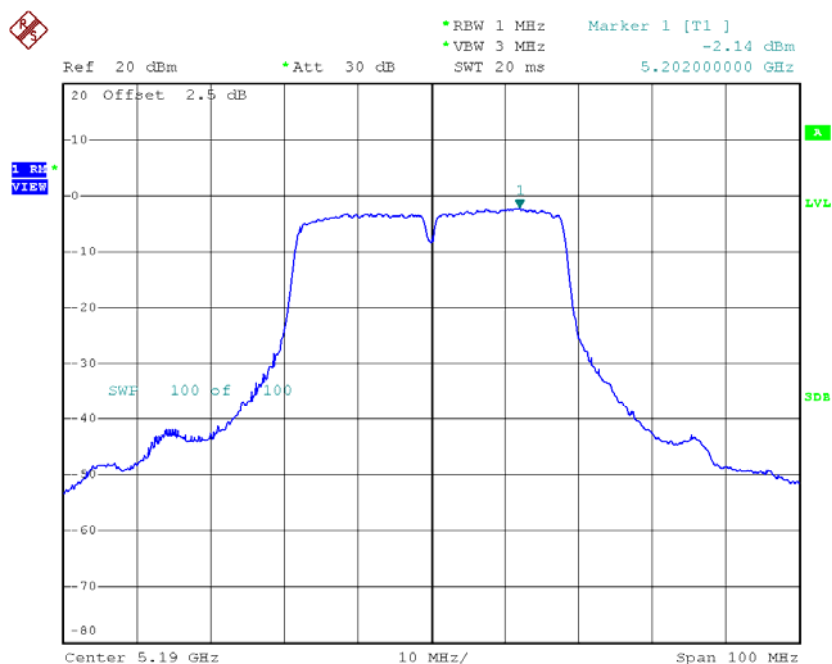
Test Mode: UNII-1/TX N20 Mode_CH36/CH40/CH48_Total

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	4.96	0.26	4.96	11.00
CH40	5200	6.44	0.26	6.44	11.00
CH48	5240	8.49	0.26	8.49	11.00

Test Mode: UNII-1/TX N40 Mode_CH38/CH46_ANT 1

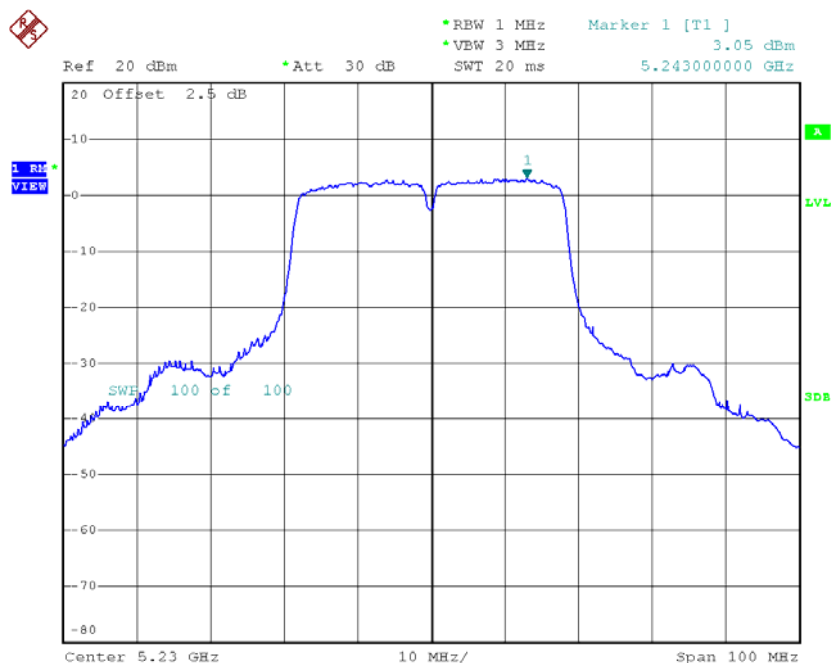
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH38	5190	-2.14	0.63	-1.51	11.00
CH46	5230	3.05	0.63	3.68	11.00

CH38



Date: 6.JAN.2016 17:29:28

CH46

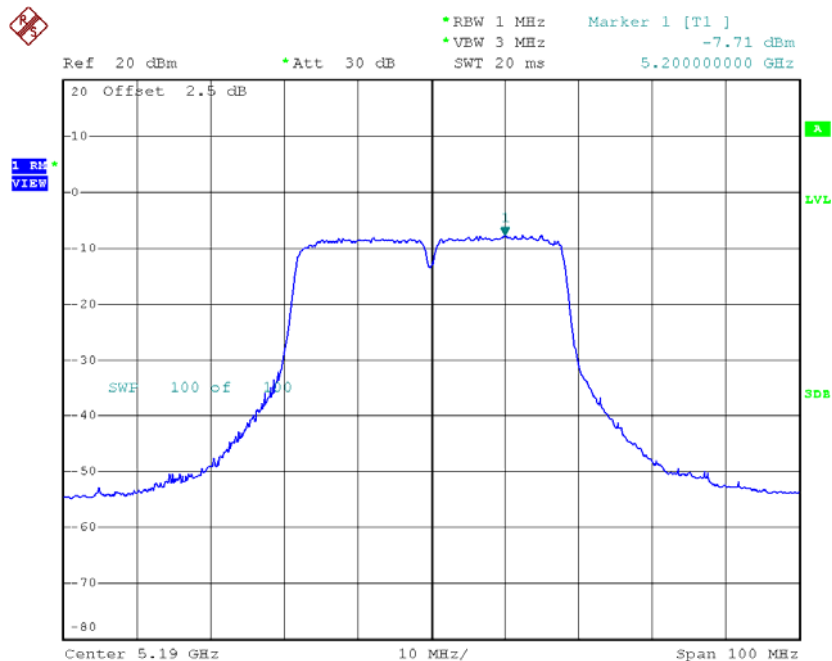


Date: 6.JAN.2016 17:31:58

Test Mode: UNII-1/TX N40 Mode_CH38/CH46_ANT 2

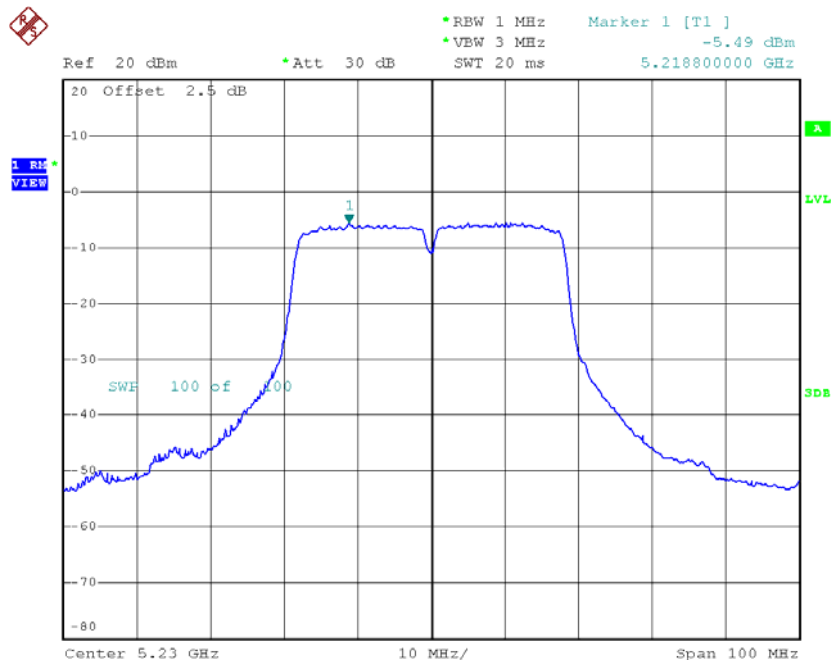
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH38	5190	-7.71	0.63	-7.08	11.00
CH46	5230	-5.49	0.63	-4.86	11.00

CH38



Date: 6.JAN.2016 19:25:26

CH46



Date: 6.JAN.2016 19:27:19

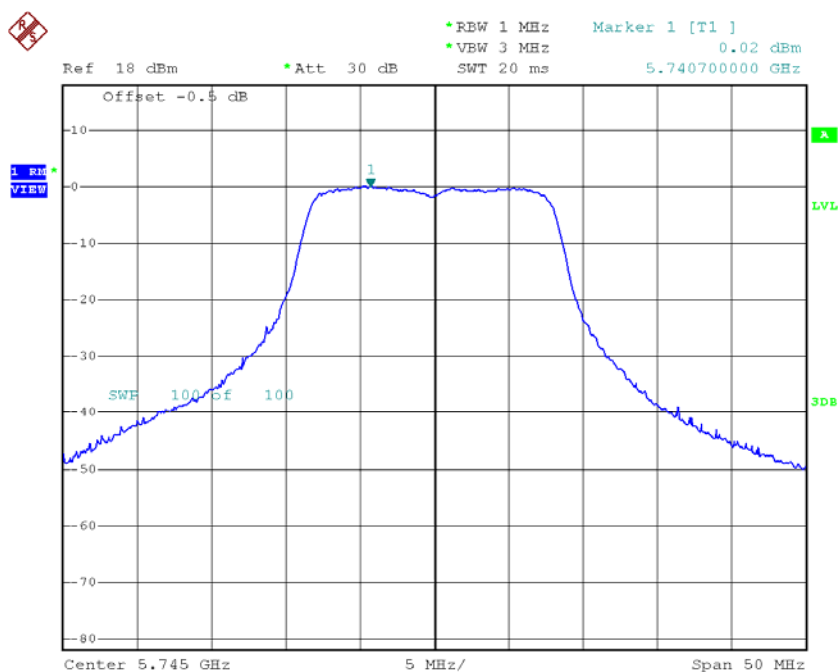
Test Mode: UNII-1/TX N40 Mode_CH38/CH46_Total

Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH38	5190	-0.45	0.63	-0.45	11.00
CH46	5230	4.25	0.63	4.25	11.00

Test Mode: UNII-3/TX A Mode_CH149/CH157/CH165

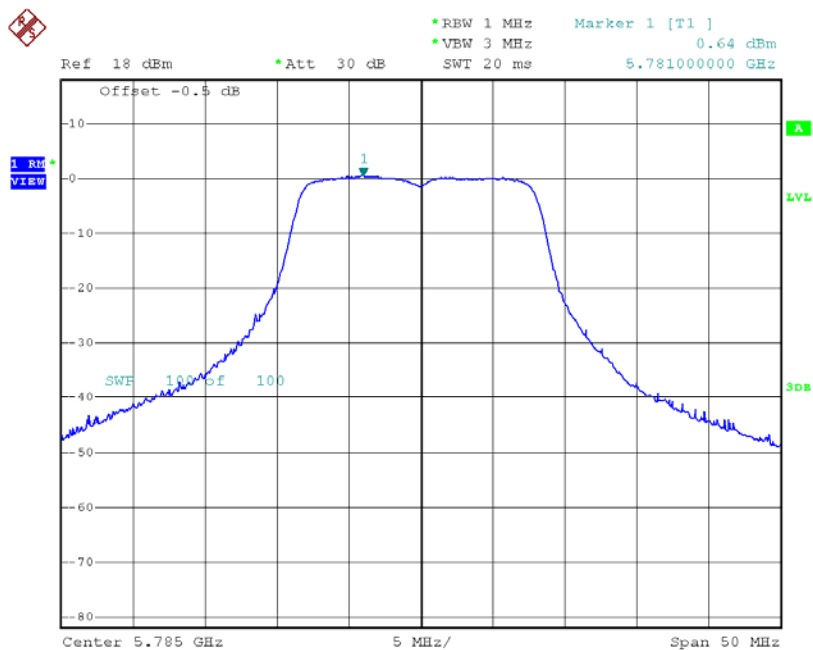
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	0.02	0.13	0.15	30.00
CH157	5785	0.64	0.13	0.77	30.00
CH165	5825	-0.67	0.13	-0.54	30.00

TX CH149



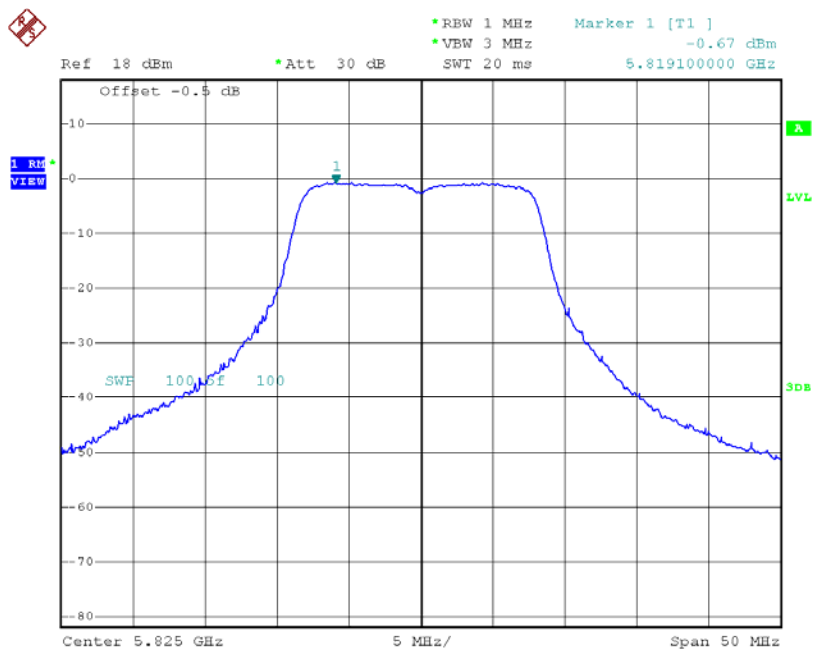
Date: 6.JAN.2016 16:56:30

TX CH157



Date: 6.JAN.2016 16:58:35

TX CH165

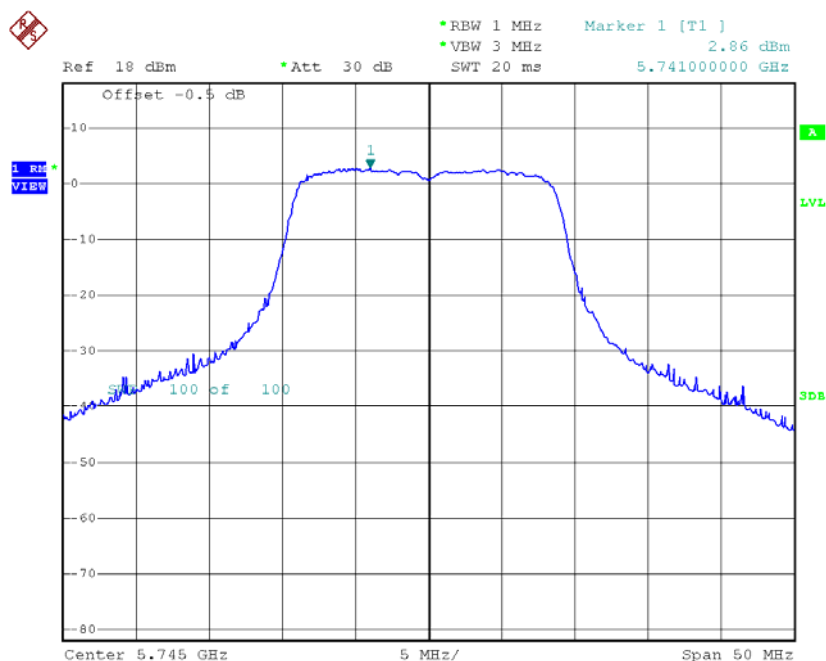


Date: 6.JAN.2016 17:00:18

Test Mode: UNII-3/ TX N20 Mode_CH149/CH157/CH165_ANT 1

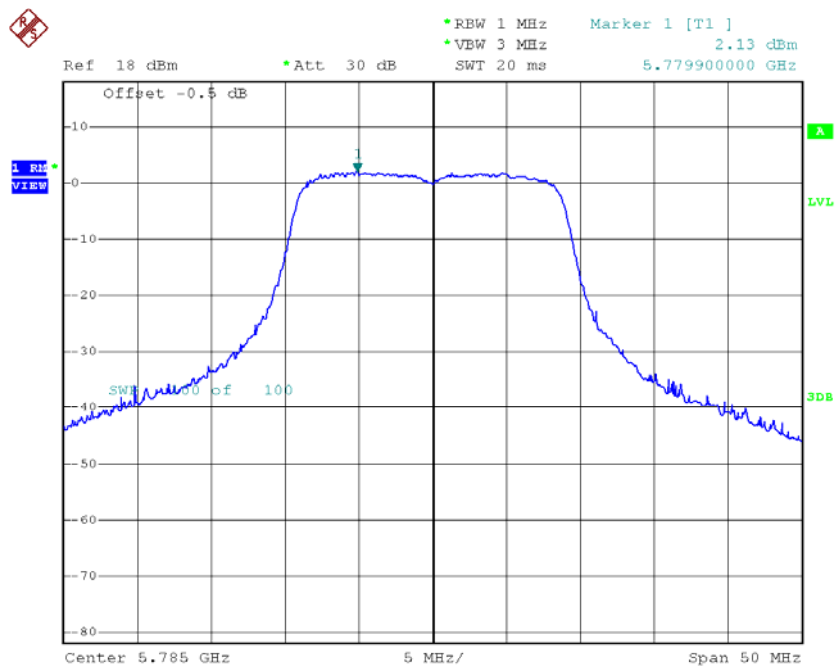
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	2.86	0.26	3.12	30.00
CH157	5785	2.13	0.26	2.39	30.00
CH165	5825	1.15	0.26	1.41	30.00

TX CH149



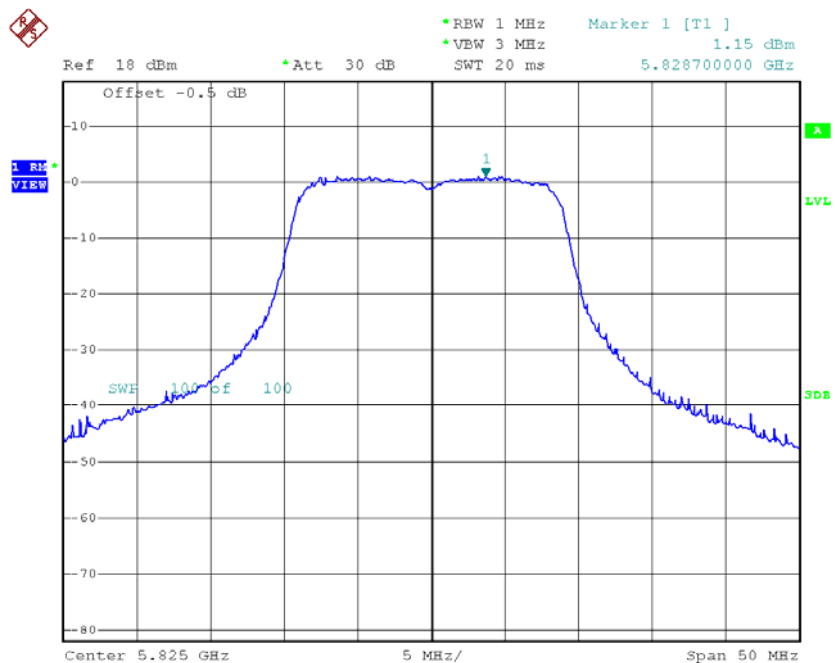
Date: 6.JAN.2016 17:21:11

TX CH157



Date: 6.JAN.2016 17:22:46

TX CH165

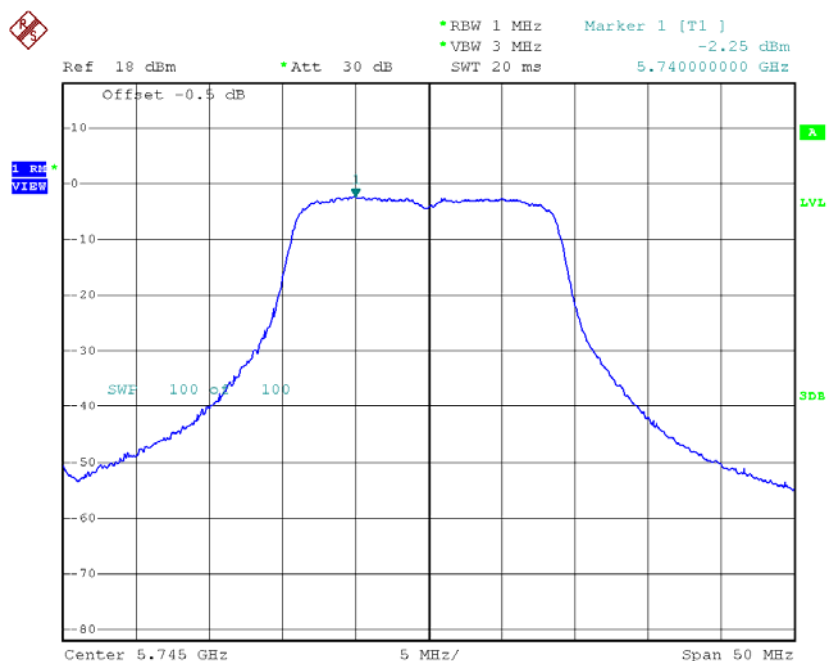


Date: 6.JAN.2016 17:24:14

Test Mode: UNII-3/ TX N20 Mode_CH149/CH157/CH165_ANT 2

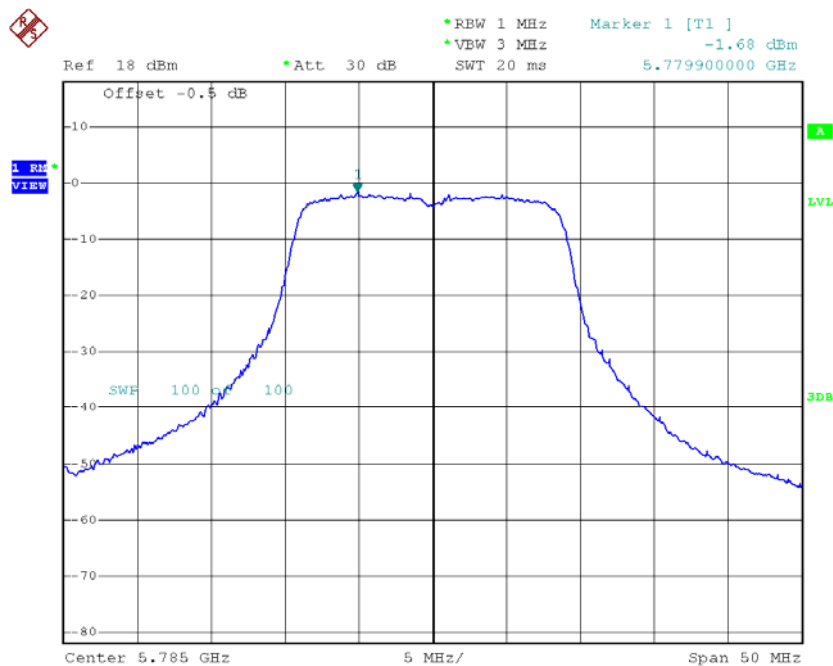
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	-2.25	0.26	-1.99	30.00
CH157	5785	-1.68	0.26	-1.42	30.00
CH165	5825	-2.31	0.26	-2.05	30.00

TX CH149



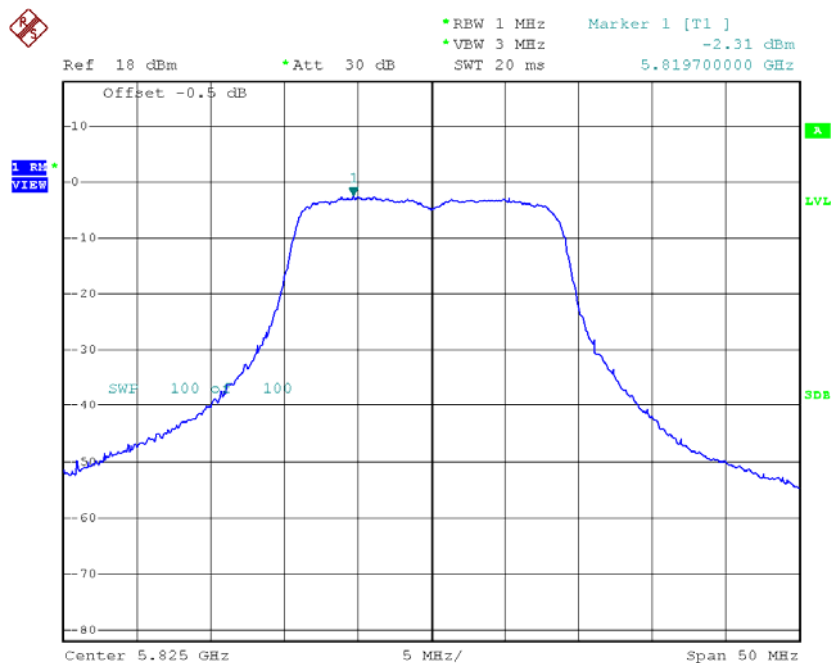
Date: 6.JAN.2016 19:19:14

TX CH157



Date: 6.JAN.2016 19:20:52

TX CH165



Date: 6.JAN.2016 19:22:16

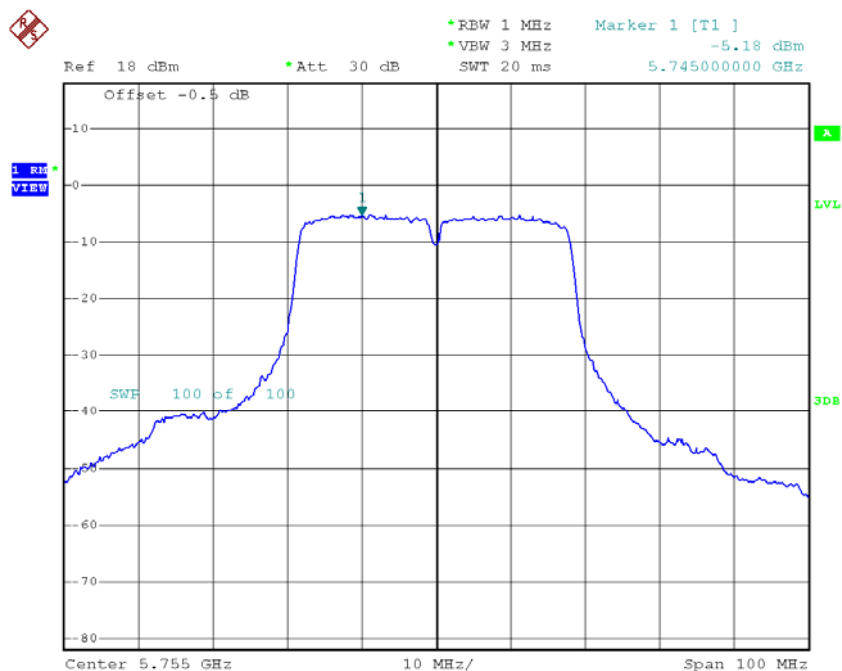
Test Mode: UNII-3/ TX N20 Mode_CH149/CH157/CH165_Total

Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	4.29	0.26	4.29	30.00
CH157	5785	3.90	0.26	3.90	30.00
CH165	5825	3.03	0.26	3.03	30.00

Test Mode: UNII-3/ TX N40 Mode_CH151/CH159_ANT 1

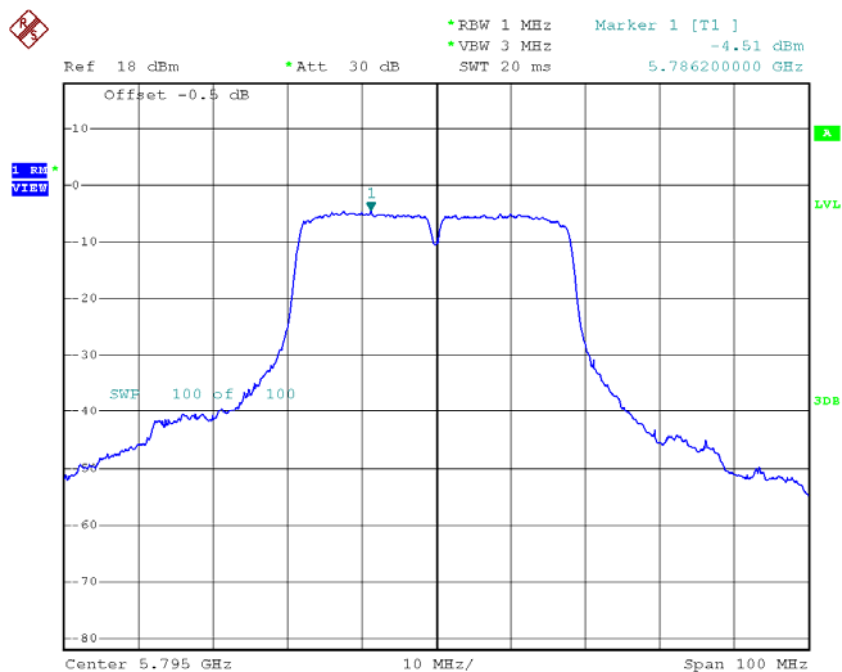
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-5.18	0.63	-4.55	30.00
CH159	5795	-4.51	0.63	-3.88	30.00

TX CH151



Date: 6.JAN.2016 18:13:40

TX CH159

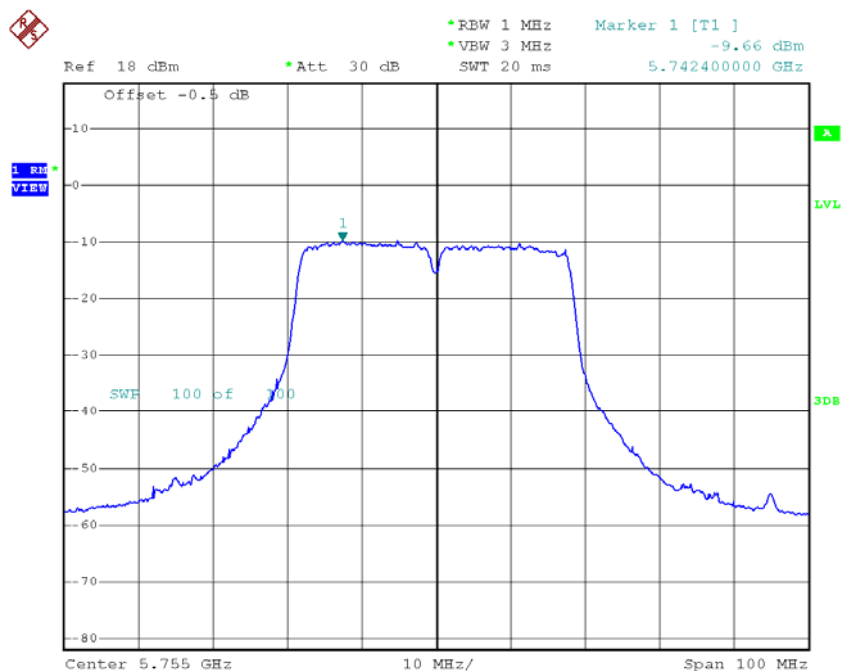


Date: 6.JAN.2016 18:24:57

Test Mode: UNII-3/ TX N40 Mode_CH151/CH159_ANT 2

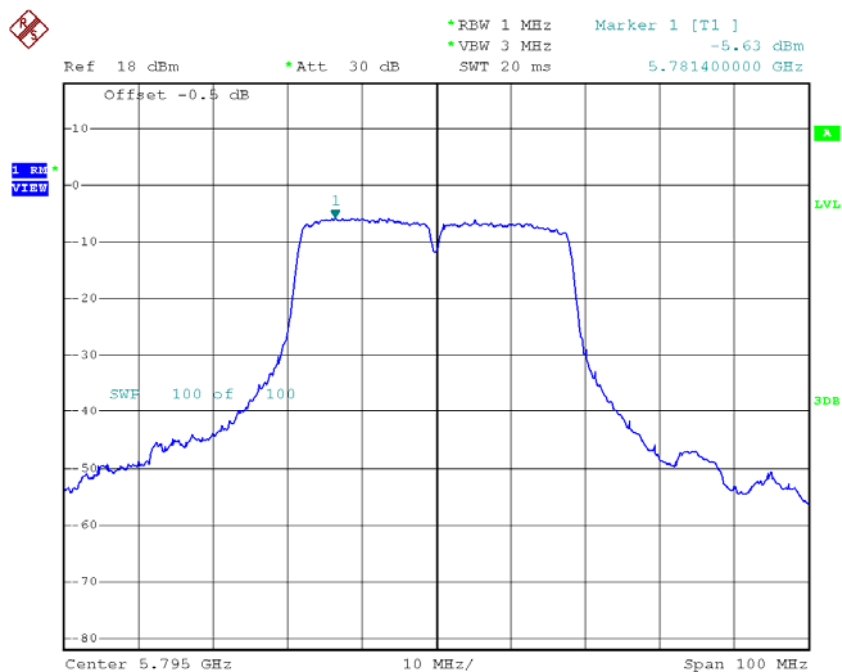
Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-9.66	0.63	-9.03	30.00
CH159	5795	-5.63	0.63	-5.00	30.00

TX CH151



Date: 6.JAN.2016 19:37:30

TX CH159



Date: 6.JAN.2016 19:39:22

Test Mode: UNII-3/ TX N40 Mode_CH151/CH159_Total

Channel	Frequency (MHz)	Power Density (dBm/500kHz)	Duty Factor (dBm/MHz)	Power Density + Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-3.23	0.63	-3.23	30.00
CH159	5795	-1.39	0.63	-1.39	30.00

ATTACHMENT I - FREQUENCY STABILITY

Test Mode:	UNII-1
-------------------	---------------

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5180.0000
132	5179.9000
120	5179.9012
108	5179.9048
Max. Deviation (MHz)	0.1000
Max. Deviation (ppm)	19.3050

Temperature vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(°C)	5180.0000
0	5179.9084
5	5179.9124
15	5179.9164
25	5179.9208
35	5179.9224
45	5179.9248
50	5179.9260
Max. Deviation (MHz)	0.0916
Max. Deviation (ppm)	17.6834

Test Mode:	UNII-3
-------------------	---------------

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5745.0000
132	5744.9128
120	5744.9132
108	5744.9130
Max. Deviation (MHz)	0.0872
Max. Deviation (ppm)	15.1784

Temperature vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(°C)	5745.0000
0	5744.9223
5	5744.9228
15	5744.9235
25	5744.9225
35	5744.9230
45	5744.9233
50	5744.9238
Max. Deviation (MHz)	0.0777
Max. Deviation (ppm)	13.5248