FCC Radio Test Report

FCC ID: YVR-DC-W50

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

Project No.	:	1412005
Equipment	:	Wireless Docking
Model Name	:	DC-W50
Applicant	:	Lumens Digital Optics Inc.
Address	:	5F,No.35,Sintai Rd.,Jhubei City,Hsinchu County 302,Taiwan

Date of Receipt	:	Dec. 11, 2014
Date of Test	:	Dec. 11, 2014 ~Jan. 13, 2015
Issued Date	:	Jan. 14, 2015
Tested by	:	BTL Inc.

Testing Engineer : (Josh Lin)

Technical Manager : (Jeff Yang)

Authorized Signatory : (Andy Chiu)

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Declaration

BTLrepresents 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.

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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.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2- 1412005	Original Issue.	Jan. 14, 2015

1. CERTIFICATION

Equipment	:	Wireless Docking
Brand Name	:	Lumens
Model Name	:	DC-W50
Applicant	:	Lumens Digital Optics Inc.
Date of Test	:	Dec. 11, 2014 ~Jan. 13, 2015
Test Sample	:	ENGINEERING SAMPLE
Standard(s)	:	FCC Part15, Subpart E(15.407) / ANSI C63.4: 2009 FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

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- 1412005) 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 FCC	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.407(a)	26dB Spectrum Bandwidth	PASS	
15.407(a)	Maximum Conducted Output Power	PASS	
15.407(a)	Power Spectral Density	PASS	
15.407(a)	Radiated Emissions	PASS	
15.407(b)	Band Edge Emissions	PASS	
15.407(g)	Frequency Stability	PASS	
15.203	Antenna Requirements	PASS	

NOTE:

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

(2) FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

2.1TEST FACILITY

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

Conducted emission Test:

C02: FCC RN: 614388; FCC DN: TW1054
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Below 1 GHz):

CB08: FCC RN: 614388; FCC DN: TW1054
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Above 1 GHz):

CB08: FCC RN: 614388; FCC DN: TW1054
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

2.2MEASUREMENT UNCERTAINTY

The measurement uncertainty is not specified by Canada Industry for reference only.
The reported uncertainty of measurement **y** ± **U**, where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**,providing a level of confidence of approximately **95**%.
The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

A. Conducted emission test:

Test Site	Measurement Frequency Range	U,(dB)	NOTE
C02	150 kHz ~ 30 MHz	2.59	

B. Radiated emission test:

Test Site	Item	Measurement Frequency Range		Uncertainty	NOTE
CB08	Radiated emission at 3m	Horizontal Polarization	30 - 200MHz	3.35 dB	
			200 - 1000MHz	3.11 dB	
			1 - 18GHz	3.97 dB	
			18 - 40GHz	4.01 dB	
		Vertical Polarization	30 - 200MHz	3.22 dB	
			200 - 1000MHz	3.24 dB	
			1 - 18GHz	4.05 dB	
			18 - 40GHz	4.04 dB	

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.
Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR}, as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB
Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

It can be seen that our U_{lab} values are smaller than U_{CISPR}.
If U_{lab} is less than or equal to U_{CISPR}, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{CISPR}, then:

- compliance is deemed to occur if no measured disturbance level, increased by (U_{lab} - U_{CISPR}), exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by (U_{lab} - U_{CISPR}), exceeds the disturbance limit.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Docking	
Brand Name	Lumens	
Model Name	DC-W50	
Mode Different	N/A	
Product Description	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	450Mbps
	Output Power (Max.)for UNII-1	802.11a: 20.67dBm 802.11n (20M): 20.77dBm 802.11n (40M): 21.03dBm
	Output Power (Max.)for UNII-3	802.11a: 21.02dBm 802.11n (20M): 20.86dBm 802.11n (40M): 21.21dBm
Power Source	1# DC Voltage supplied from AC/DC adapter. 2# Battery supplied. Brand/Model: RPC/18650-2S2P	
Power Rating	1# I/P: AC100-240V , 1A, 47-63Hz O/P: DC 12V, 3A 2# 4400mAh 8.4V	

Note:

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

2. Channel List:

802.11a 802.11n 20MHz		802.11n 40MHz	
UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190
40	5200	46	5230
44	5220		
48	5240		

802.11a 802.11n 20MHz		802.11n 40MHz	
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)	Note
2	RainSun	AN14-000024-B	Internal	N/A	0	TX/RX

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: For radiated below 1G test, the 802.11a mode CH40 is found to be the worst case and recorded.

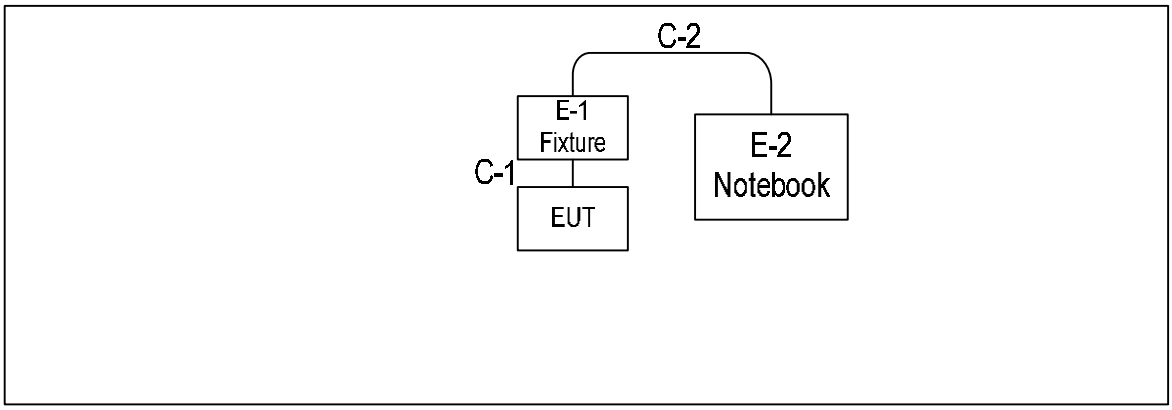
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	ipop v3.32		
Frequency (MHz)	5180	5200	5240
A Mode	19	20	20
N20 Mode	20	20	20
Frequency (MHz)	5190	5230	
N40 Mode	16	20	

UNII-3			
Test Software Version	ipop v3.32		
Frequency (MHz)	5745	5785	5825
A Mode	20	20	20
N20 Mode	18	20	20
Frequency (MHz)	5755	5795	
N40 Mode	16	20	

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/IC	Series No.	Note
E-1	Fixture Board	N/A	N/A	N/A	N/A	
E-2	Notebook	DELL	D620	DOC	7T390 A03	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	0.1M	DATA Cable
C-2	YES	NO	1.2M	RS232 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.

(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
Margin Level = Measurement Value – Limit Value

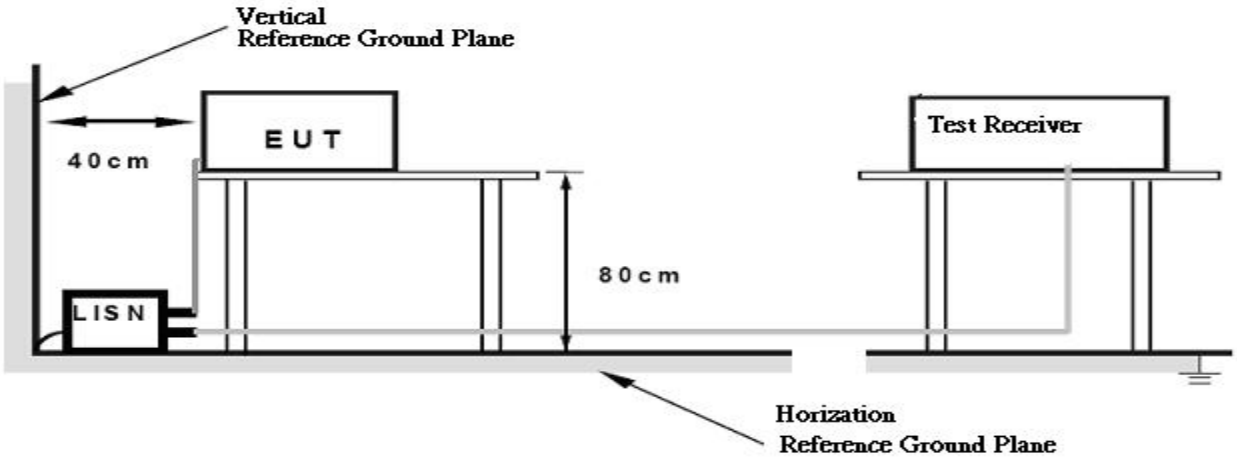
4.1.2 TEST PROCEDURE

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: 24°C Relative Humidity: 59% Test Voltage: AC 120V/60Hz

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

20dBc in any 100 kHz bandwidth outside the operating frequency band. 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
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: $E = \frac{1000000\sqrt{30P}}{3}$ μV/m, where P is the eirp (Watts)

4.2.2 TEST PROCEDURE

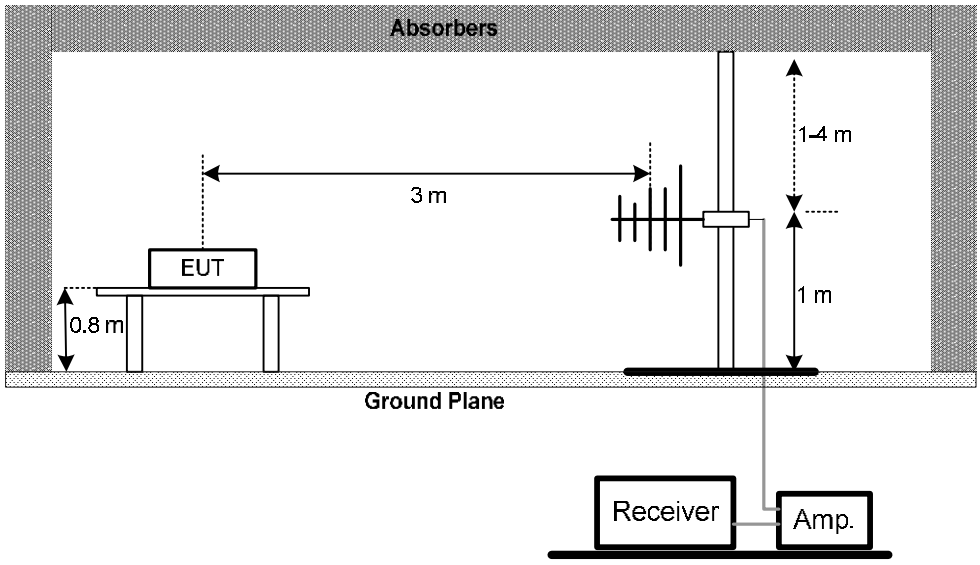
a. The measuring distance of at 3m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 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.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

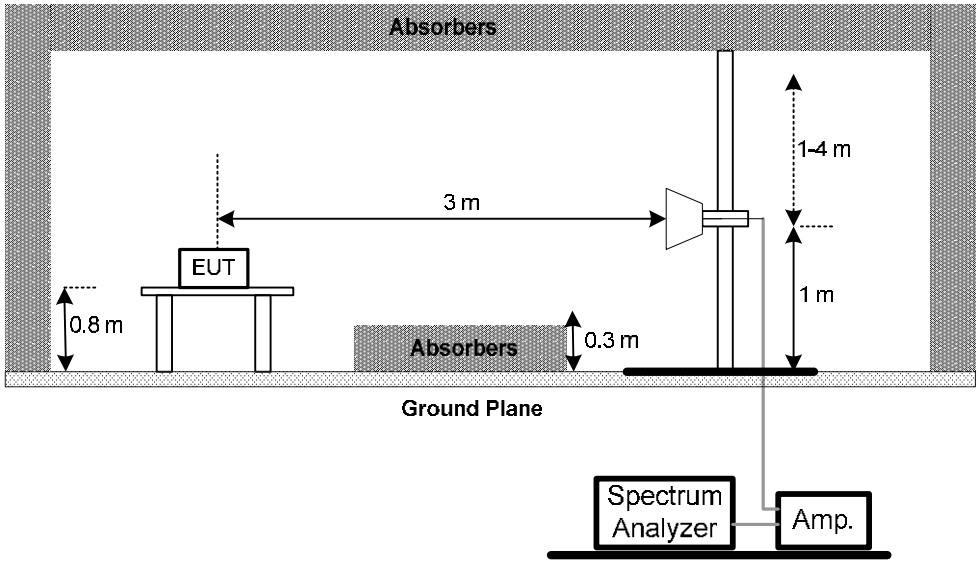
No deviation

4.2.4 TEST SETUP

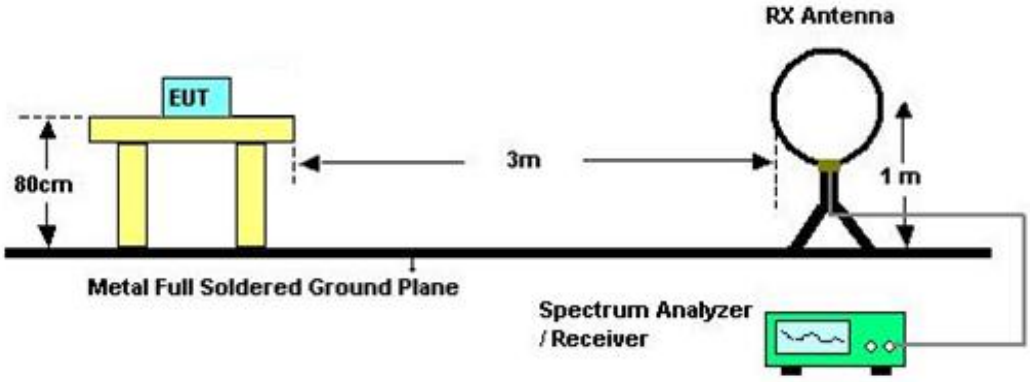
(A) Radiated Emission Test Set-Up Frequency30 - 1000MHz



(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: 26°C Relative Humidity: 60% Test Voltage: AC 120V/60Hz

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 (specific distance / test distance) (dB);
(3) Limit line = specific limits (dBuV) + distance extrapolation factor.

4.2.8 TEST RESULTS (BETWEEN 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: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

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

6.1.1 TEST PROCEDURE

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

b.

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

c. Test was performed in accordance with method of KDB 789033 D02.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

6.1.4 EUT OPERATION CONDITIONS

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

6.1.5 EUT TEST CONDITIONS

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

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,

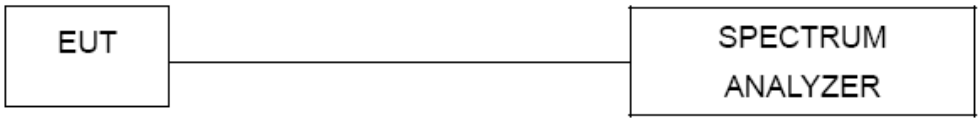
b.

Spectrum Parameter	Setting
Attenuation	Auto
RBW	1000kHz
VBW	3000kHz
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: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

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

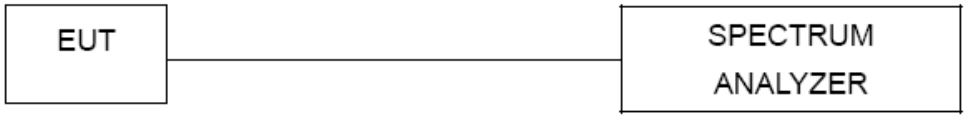
Note:

1. 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.
2. The value measured with RBW=1MHz is to be added with 10log(500kHz/1MHz) which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.

8.1.1 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: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

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

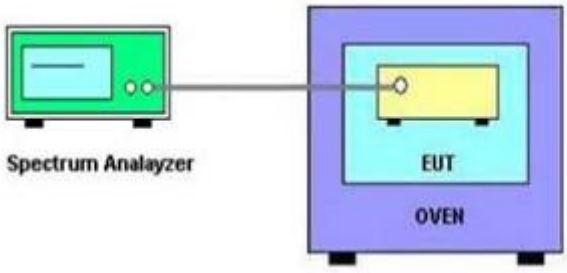
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

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: AC 120V/60Hz

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	R&S	ENV216	101050	Jan. 15, 2015
2	Test Cable	TIMES	CFD300-NL	C01	Jun. 15, 2015
3	EMI Test Receiver	R&S	ESCI	100082	Apr. 13, 2015
4	Measurement Software	EZ	EZ_EMC (Version NB-02A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 14, 2015
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 15, 2015
4	Microflex Cable	Harbour industries	27478LL142	1m	May. 12, 2015
5	Microflex Cable	EMC	S104-SMA	8m	May. 12, 2015
6	Microflex Cable	Harbour industries	27478LL142	3m	May. 12, 2015
7	Test Cable	LMR	LMR-400	12m	May. 13, 2015
8	Test Cable	LMR	LMR-400	3m	May. 13, 2015
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 17, 2015
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jul. 10, 2015
11	Preamplifier With Adaptor	EMC	EMC2654045	980030	Feb. 17, 2015
12	Horn Antenna	Schwarzbeck	BBHA 9170	340	Nov. 13, 2015

Spectrum Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	Aug. 8, 2015
2	Power Meter Sensor	Anritsu	MA2411B	1126001	Aug. 8, 2015

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

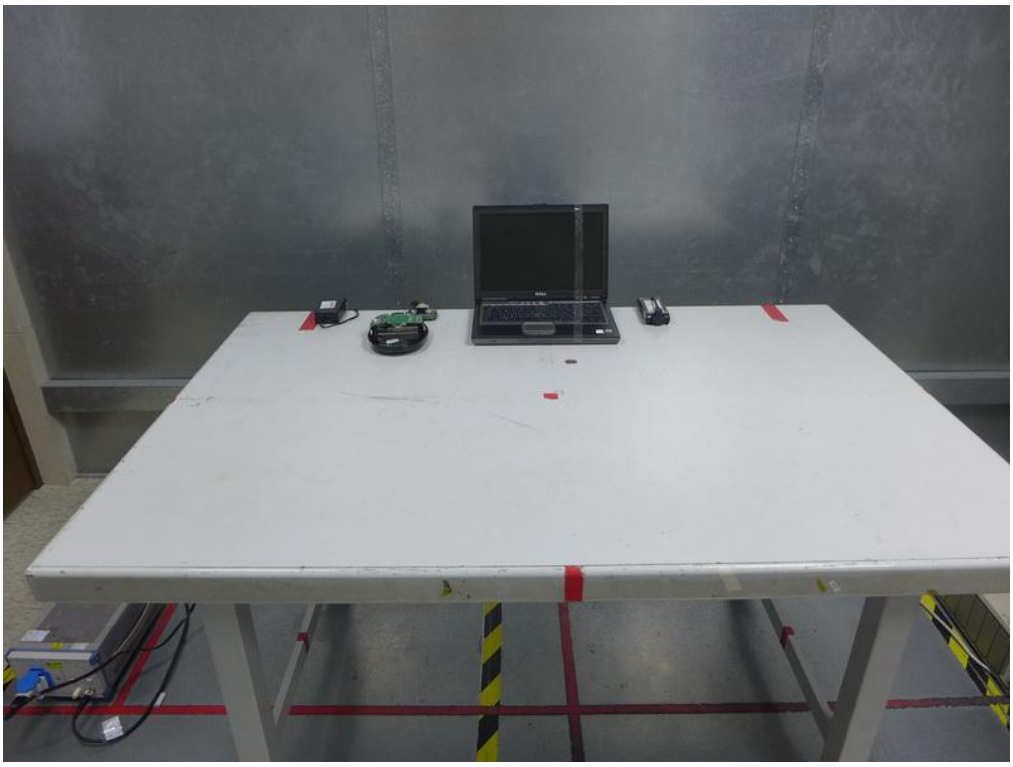
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

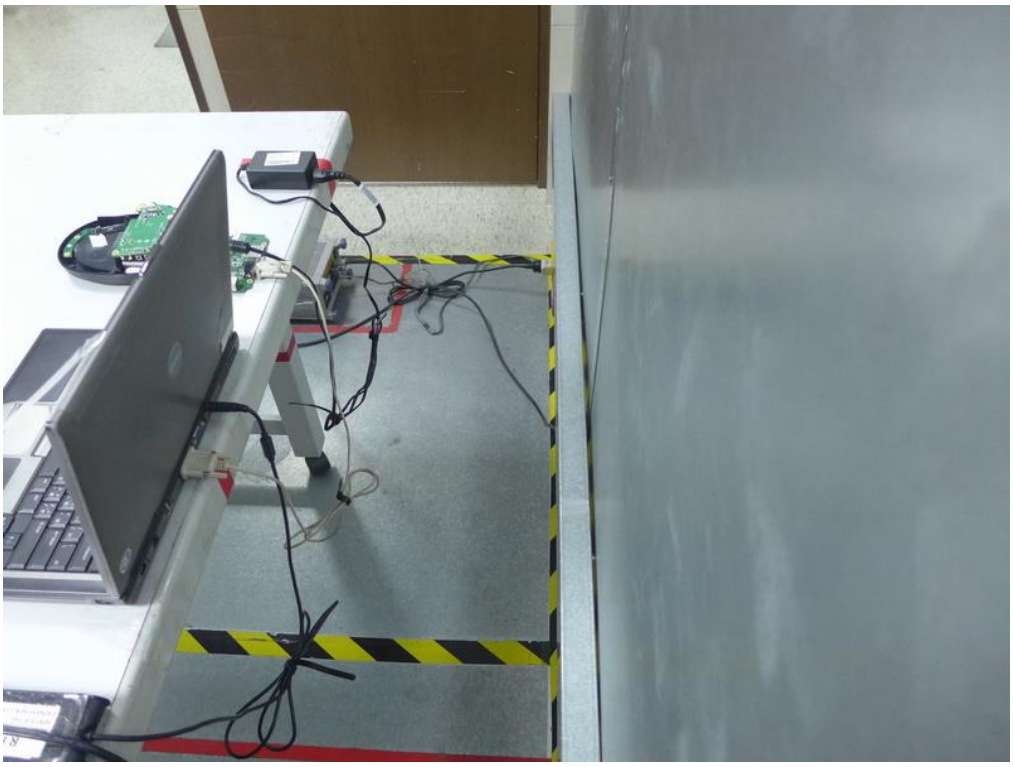
Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

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

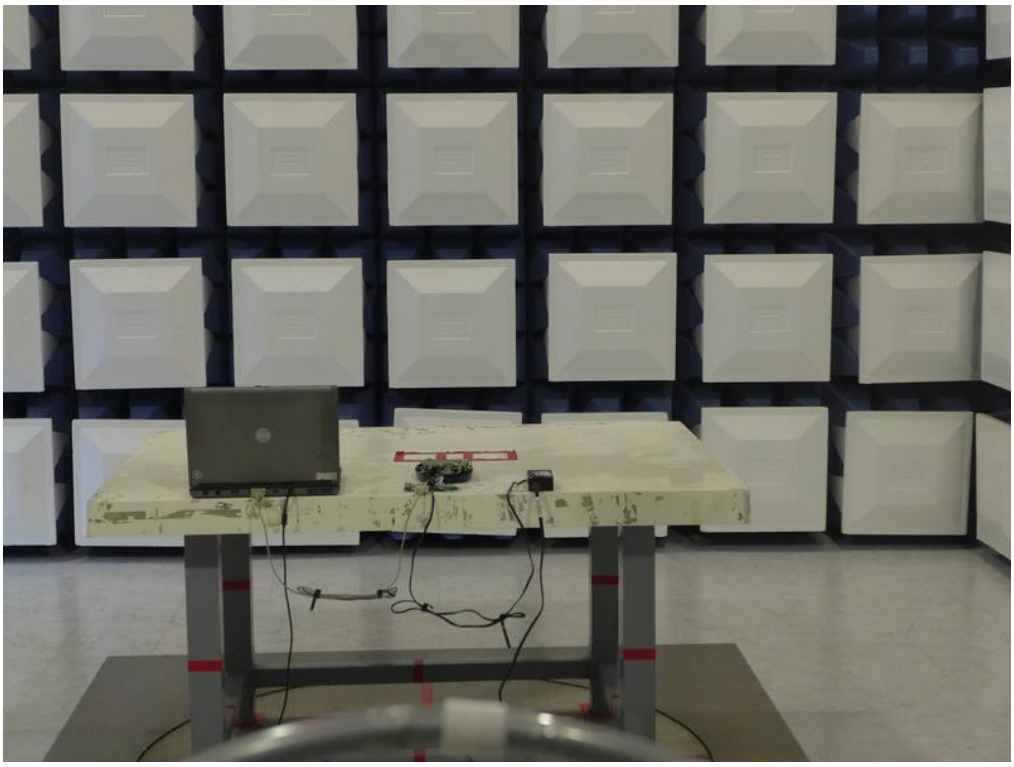
Conducted Measurement Photos





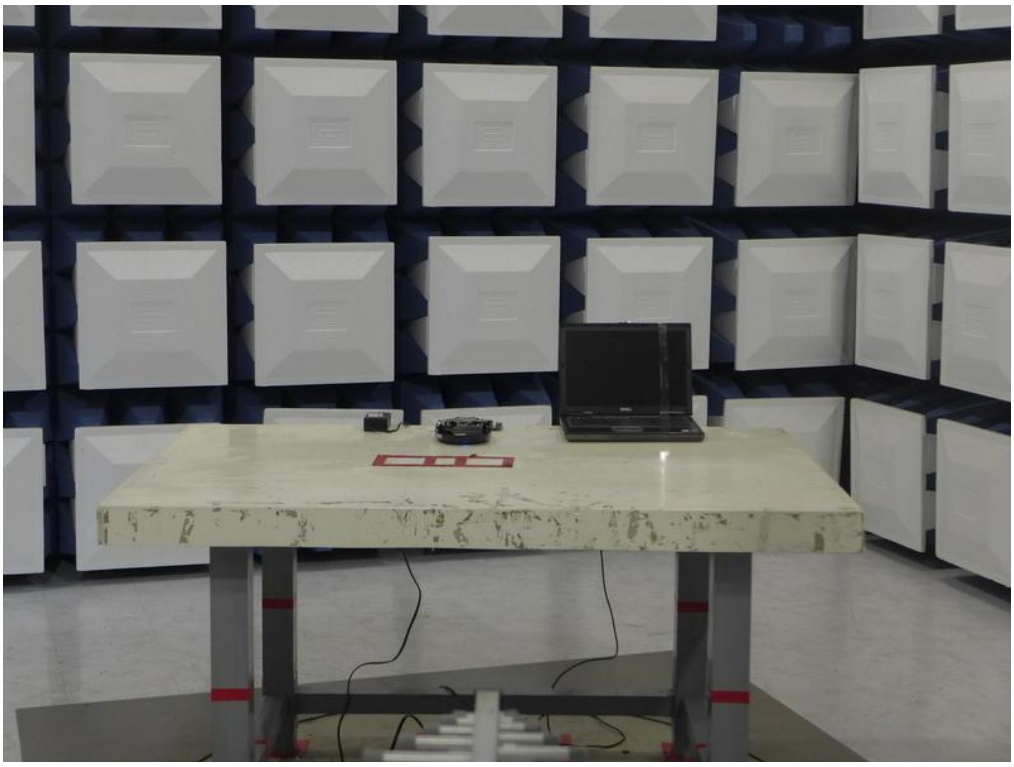
Radiated Measurement Photos

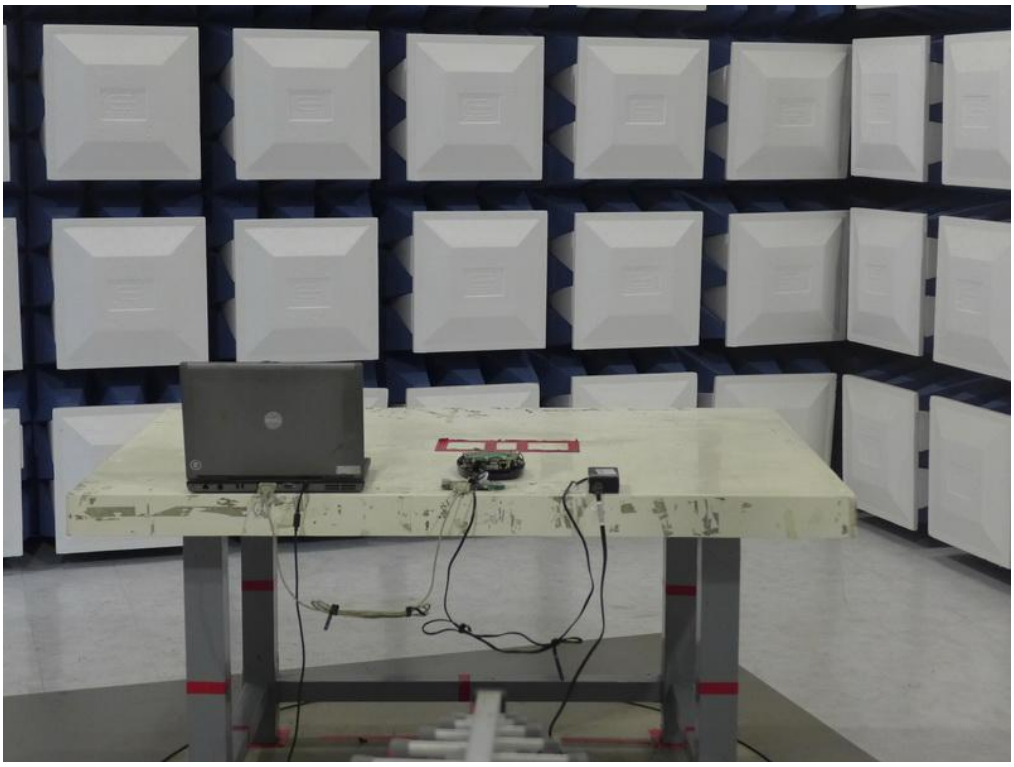
9KHz to 30MHz



Radiated Measurement Photos

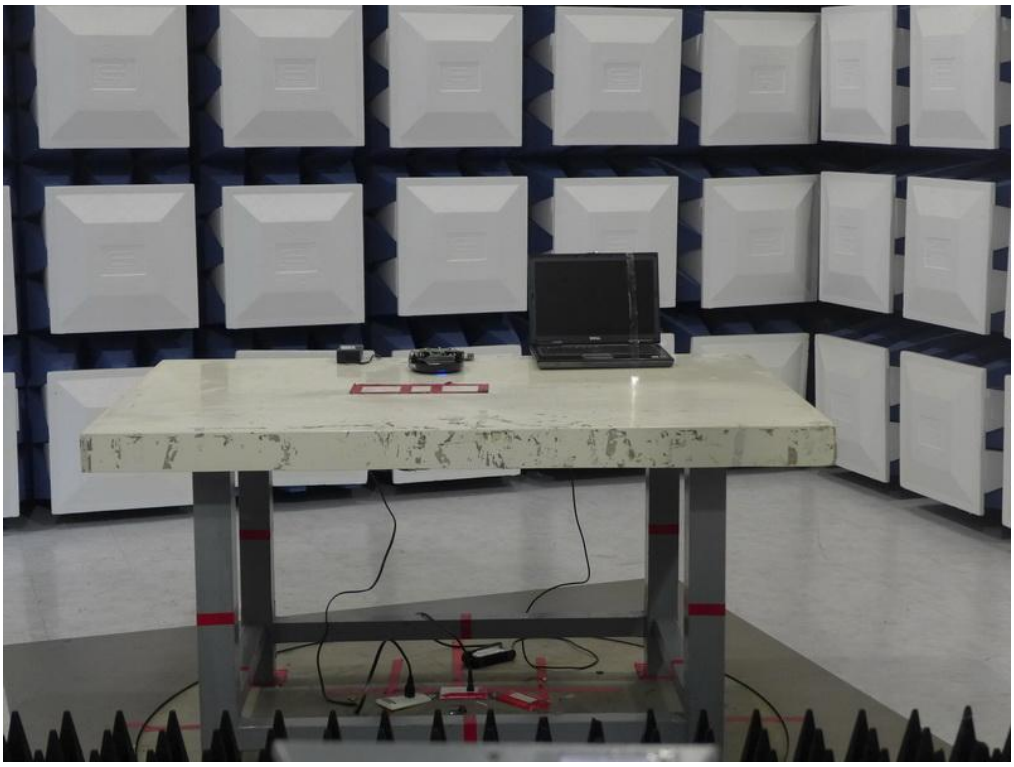
30MHz to 1000MHz

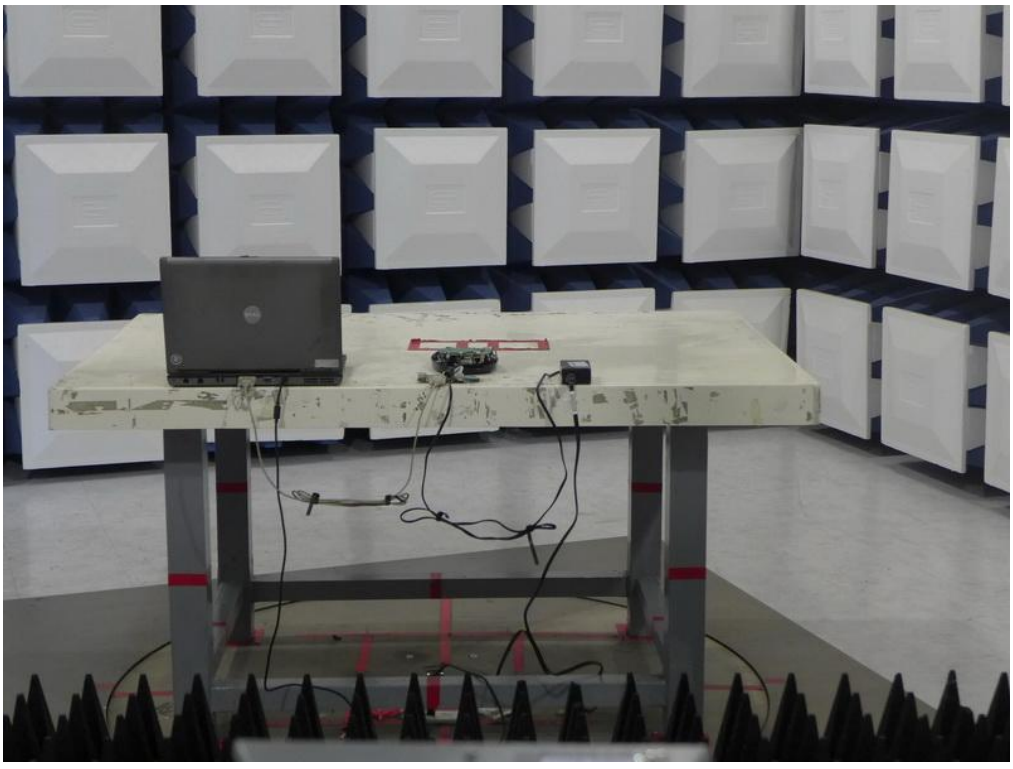




Radiated Measurement Photos

Above 1000MHz





ATTACHMENT A - CONDUCTED EMISSION

Test Mode:	TX MODE

Line

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1518	41.17	9.65	50.82	65.90	-15.08	peak	
2		0.1940	40.50	9.65	50.15	63.86	-13.71	peak	
3		0.2326	36.50	9.68	46.18	62.35	-16.17	peak	
4	*	0.3508	35.62	9.82	45.44	58.94	-13.50	peak	
5		0.4611	31.66	9.95	41.61	56.67	-15.06	peak	
6		0.6348	28.76	9.79	38.55	56.00	-17.45	peak	

Note：The test result has included the cable loss.

Test Mode:	TX MODE

Neutral

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1624	39.10	9.64	48.74	65.34	-16.60	peak	
2		0.1975	39.74	9.64	49.38	63.71	-14.33	peak	
3		0.2569	38.07	9.64	47.71	61.53	-13.82	peak	
4		0.3059	36.78	9.65	46.43	60.08	-13.65	peak	
5	*	0.4898	33.27	9.67	42.94	56.17	-13.23	peak	
6		0.6348	29.48	9.68	39.16	56.00	-16.84	peak	

Note：The test result has included the cable loss.

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

Test Mode:	TX Mode

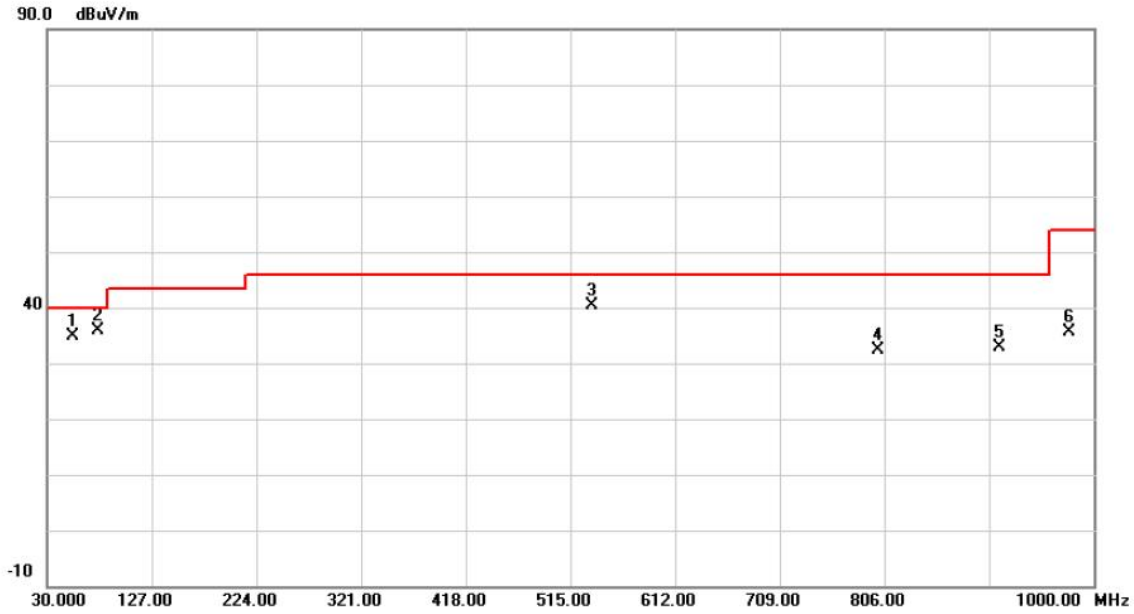
Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.2510	0°	45.96	11.41	57.37	79.61	-22.24	AVG
0.2510	0°	52.48	11.41	63.89	99.61	-35.72	PK
0.3750	0°	38.72	11.14	49.86	76.12	-26.26	AVG
0.3750	0°	45.60	11.14	56.74	96.12	-39.38	PK
0.4330	0°	40.50	11.18	51.68	74.87	-23.20	AVG
0.4330	0°	48.45	11.18	59.63	94.87	-35.25	PK
0.7550	0°	43.48	11.30	54.78	90.55	-35.77	QP
0.7710	0°	40.22	11.33	51.55	69.86	-18.31	QP
1.3500	0°	39.78	11.52	51.30	65.00	-13.69	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.2510	90°	45.09	11.41	56.50	79.61	-23.11	AVG
0.2510	90°	52.49	11.41	63.90	99.61	-35.71	PK
0.3750	90°	39.43	11.14	50.57	76.12	-25.55	AVG
0.3750	90°	45.48	11.14	56.62	96.12	-39.50	PK
0.4330	90°	40.16	11.18	51.34	74.87	-23.54	AVG
0.4330	90°	47.43	11.18	58.61	94.87	-36.27	PK
0.7550	90°	43.52	11.30	54.82	90.55	-35.73	QP
0.7710	90°	40.15	11.33	51.48	69.86	-18.38	QP
1.3500	90°	39.88	11.52	51.40	65.00	-13.59	QP

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

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

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		53.2800	54.90	-20.06	34.84	40.00	-5.16	peak	
2	*	76.5600	57.54	-21.61	35.93	40.00	-4.07	peak	
3		534.4000	53.50	-13.01	40.49	46.00	-5.51	peak	
4		800.1800	41.25	-8.92	32.33	46.00	-13.67	peak	
5		912.7000	43.04	-10.12	32.92	46.00	-13.08	peak	
6		976.7200	44.56	-9.00	35.56	54.00	-18.44	peak	

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

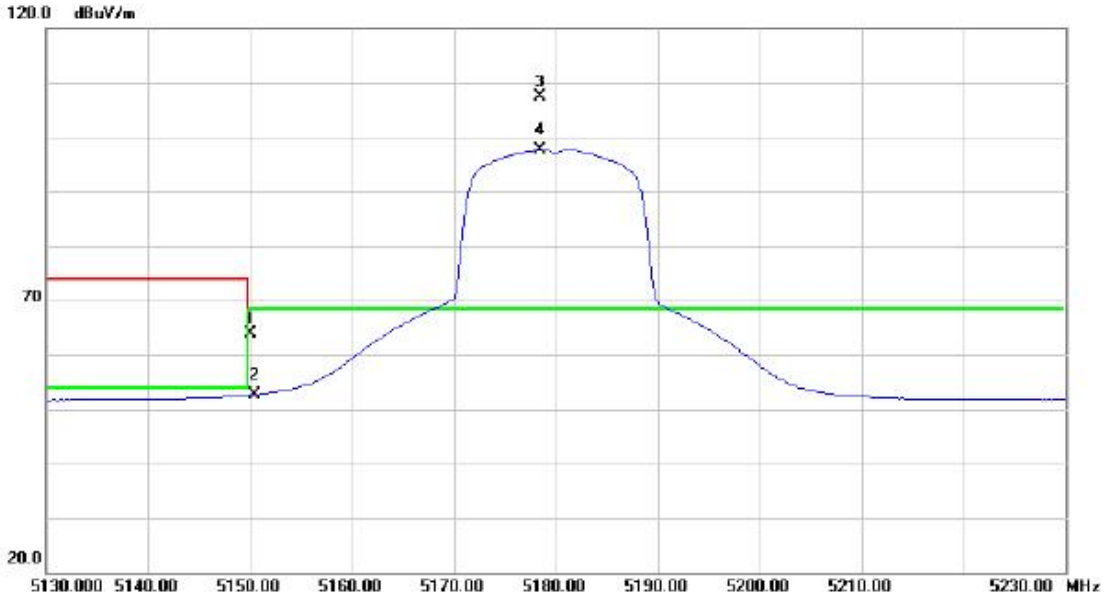
Horizontal

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		136.7000	56.69	-25.33	31.36	43.50	-12.14	peak	
2		171.6200	55.81	-24.78	31.03	43.50	-12.47	peak	
3	*	487.8400	52.14	-13.01	39.13	46.00	-6.87	peak	
4		800.1800	44.38	-7.16	37.22	46.00	-8.78	peak	
5		912.7000	40.42	-3.43	36.99	46.00	-9.01	peak	
6		976.7200	46.42	-3.46	42.96	54.00	-11.04	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

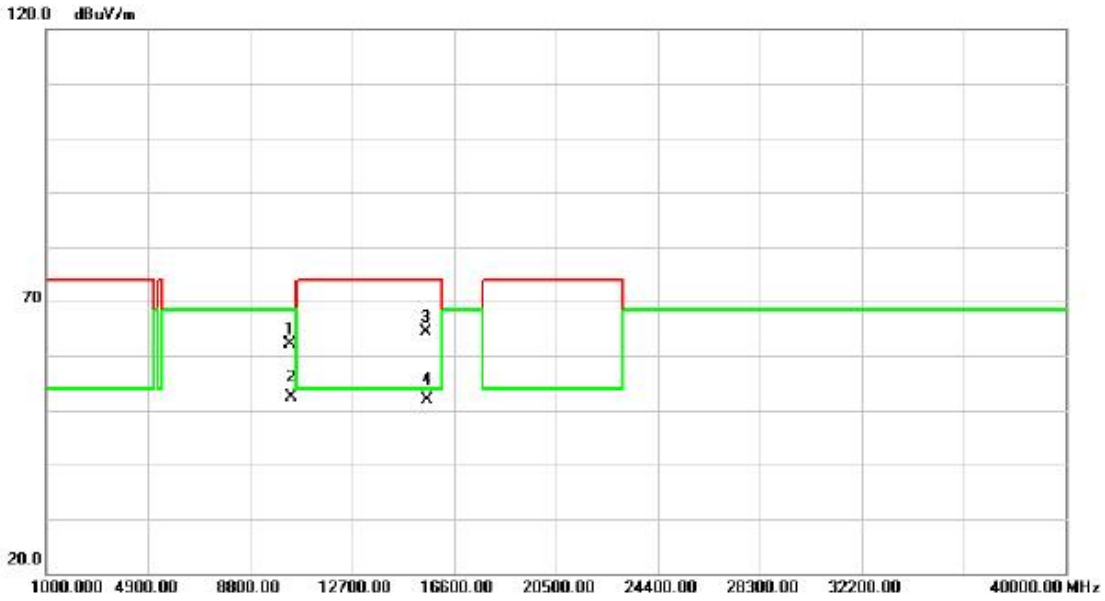
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	26.22	37.74	63.96	68.30	-4.34	peak	
2		5150.000	14.87	37.74	52.61	54.00	-1.39	AVG	
3	*	5178.400	69.49	37.83	107.32	68.30	39.02	peak	NO LIMIT
4	X	5178.400	59.92	37.83	97.75	68.30	29.45	AVG	NO LIMIT

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

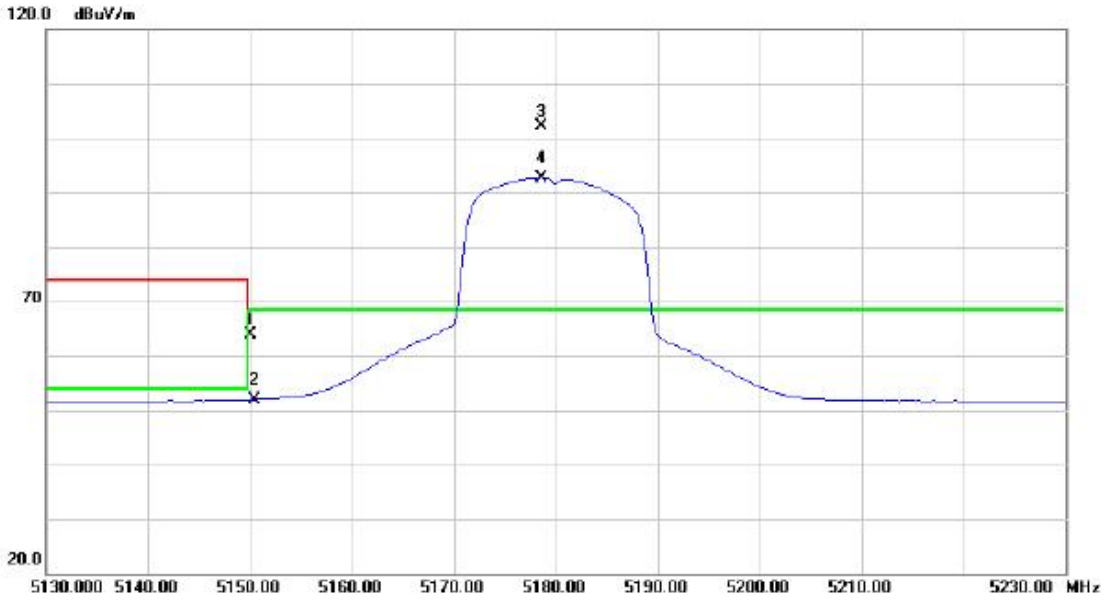
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10350.32	44.44	17.69	62.13	68.30	-6.17	peak	
2		10350.32	34.70	17.69	52.39	68.30	-15.91	AVG	
3		15539.04	45.16	19.31	64.47	74.00	-9.53	peak	
4	*	15539.04	32.53	19.31	51.84	54.00	-2.16	AVG	

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

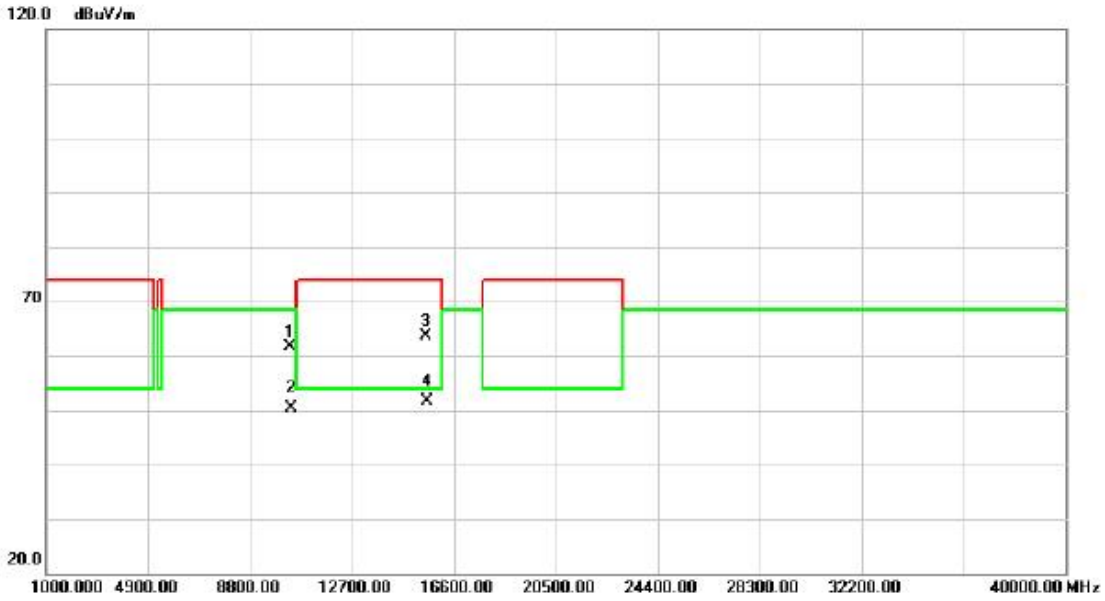
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	26.24	37.74	63.98	68.30	-4.32	peak	
2		5150.000	14.22	37.74	51.96	54.00	-2.04	AVG	
3	*	5178.600	64.40	37.83	102.23	68.30	33.93	peak	NO LIMIT
4	X	5178.600	54.92	37.83	92.75	68.30	24.45	AVG	NO LIMIT

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

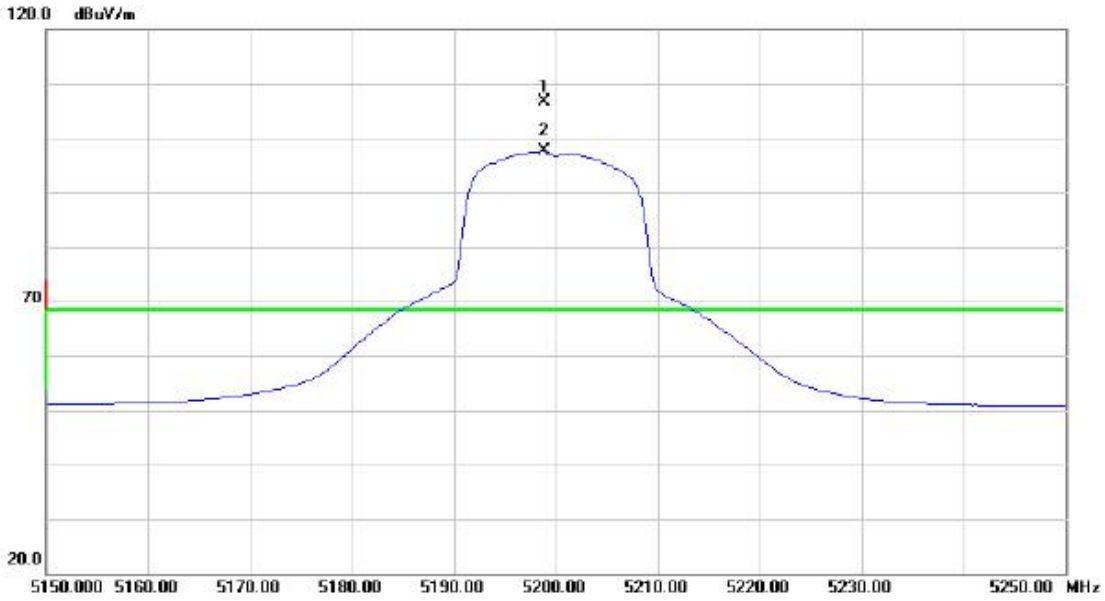
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10355.76	43.96	17.71	61.67	68.30	-6.63	peak	
2		10355.76	32.69	17.71	50.40	68.30	-17.90	AVG	
3		15536.88	44.24	19.30	63.54	74.00	-10.46	peak	
4	*	15536.88	32.44	19.30	51.74	54.00	-2.26	AVG	

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

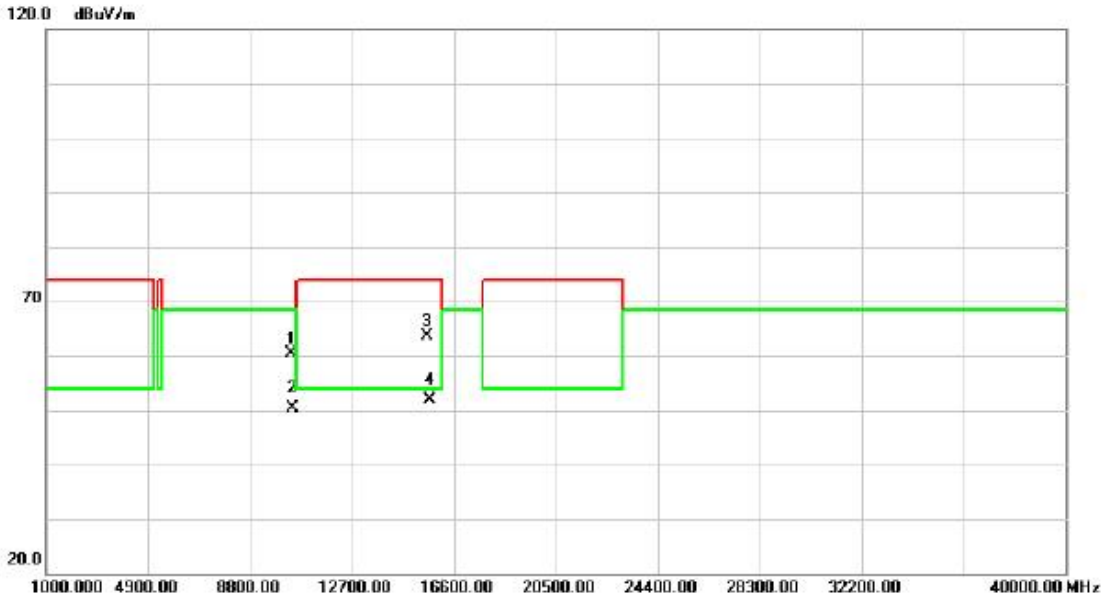
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5198.800	68.71	37.91	106.62	68.30	38.32	peak	NO LIMIT
2	X	5198.800	59.61	37.91	97.52	68.30	29.22	AVG	NO LIMIT

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

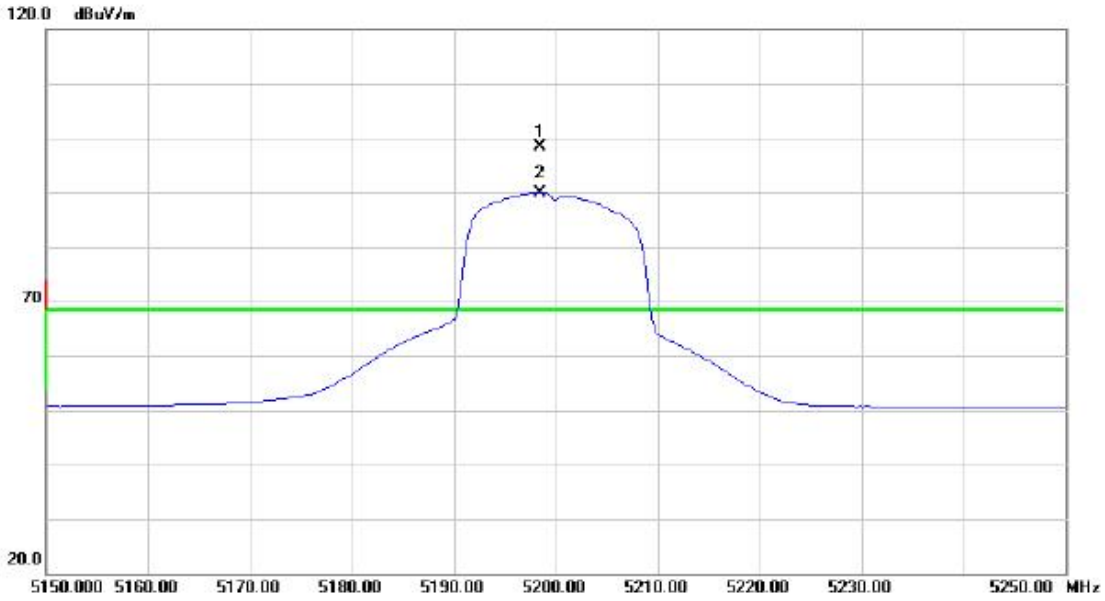
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10401.95	42.57	17.93	60.50	68.30	-7.80	peak	
2		10401.95	32.51	17.93	50.44	68.30	-17.86	AVG	
3		15602.33	44.43	19.32	63.75	74.00	-10.25	peak	
4	*	15602.33	32.44	19.32	51.76	54.00	-2.24	AVG	

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

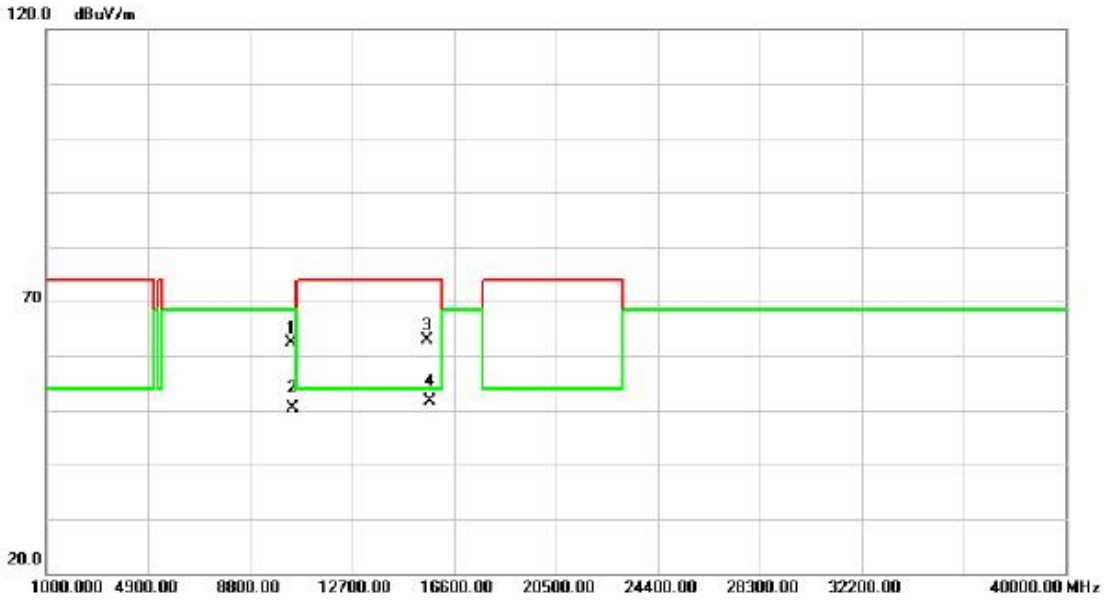
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5198.400	60.39	37.91	98.30	68.30	30.00	peak	NO LIMIT
2	X	5198.400	51.97	37.91	89.88	68.30	21.58	AVG	NO LIMIT

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

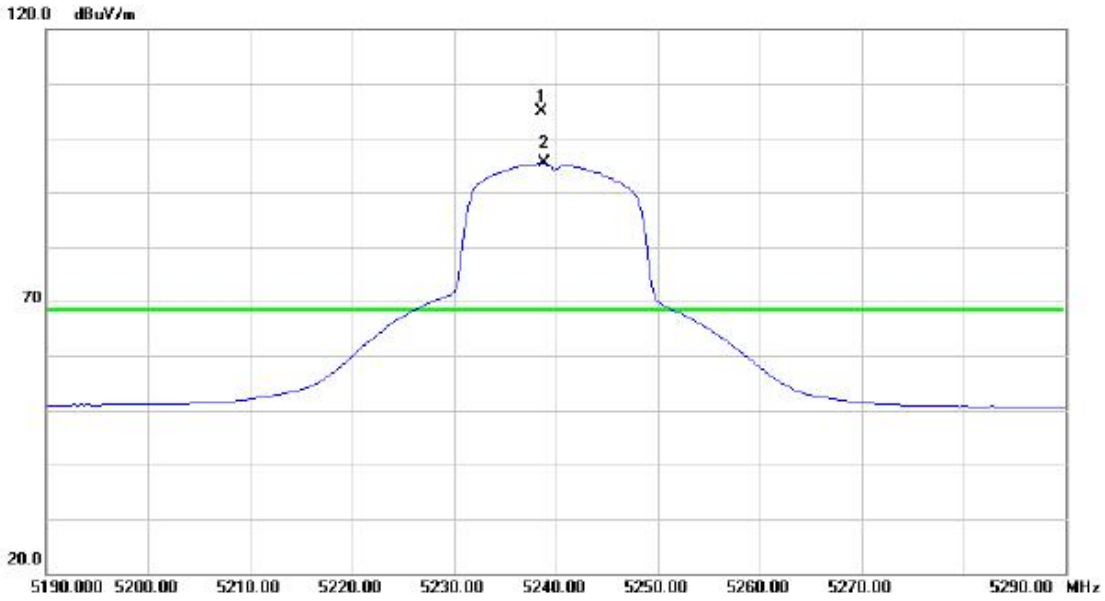
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10401.53	44.45	17.93	62.38	68.30	-5.92	peak	
2		10401.53	32.46	17.93	50.39	68.30	-17.91	AVG	
3		15602.32	43.66	19.32	62.98	74.00	-11.02	peak	
4	*	15602.32	32.36	19.32	51.68	54.00	-2.32	AVG	

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

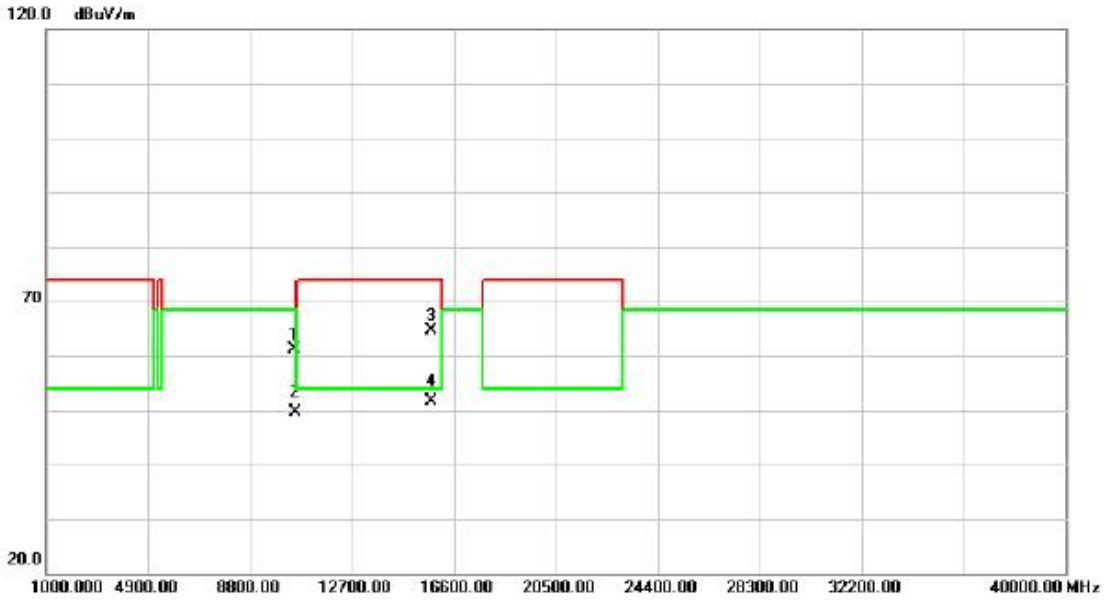
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5238.600	66.76	38.05	104.81	68.30	36.51	peak	NO LIMIT
2	X	5238.600	57.30	38.05	95.35	68.30	27.05	AVG	NO LIMIT

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

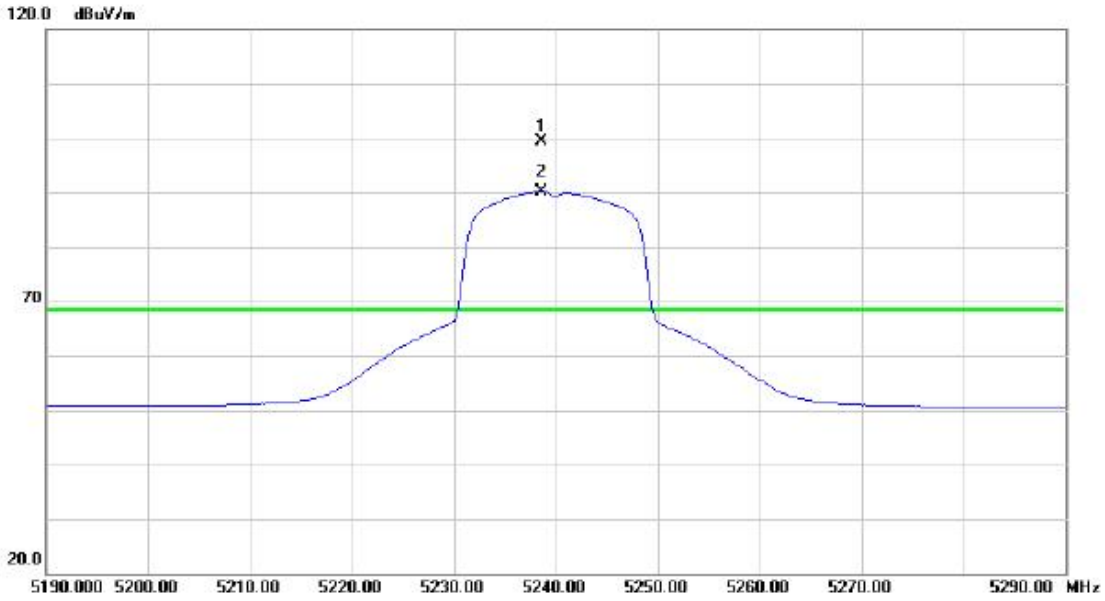
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10479.34	42.74	18.29	61.03	68.30	-7.27	peak	
2		10479.34	31.32	18.29	49.61	68.30	-18.69	AVG	
3		15720.12	45.23	19.36	64.59	74.00	-9.41	peak	
4	*	15720.12	32.31	19.36	51.67	54.00	-2.33	AVG	

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

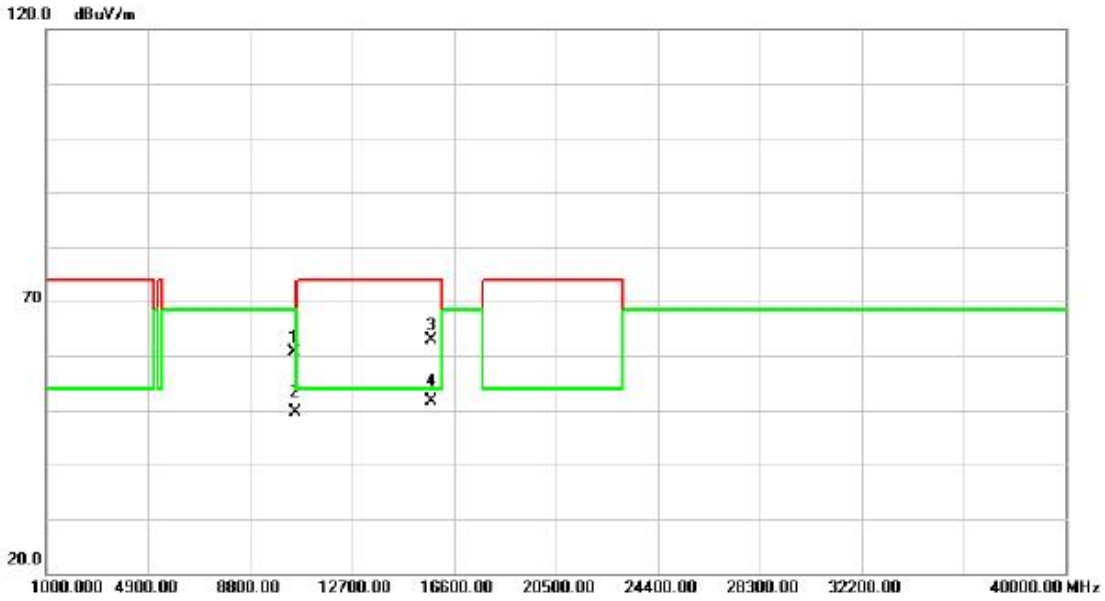
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5238.600	61.44	38.05	99.49	68.30	31.19	peak	NO LIMIT
2	X	5238.600	52.09	38.05	90.14	68.30	21.84	AVG	NO LIMIT

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

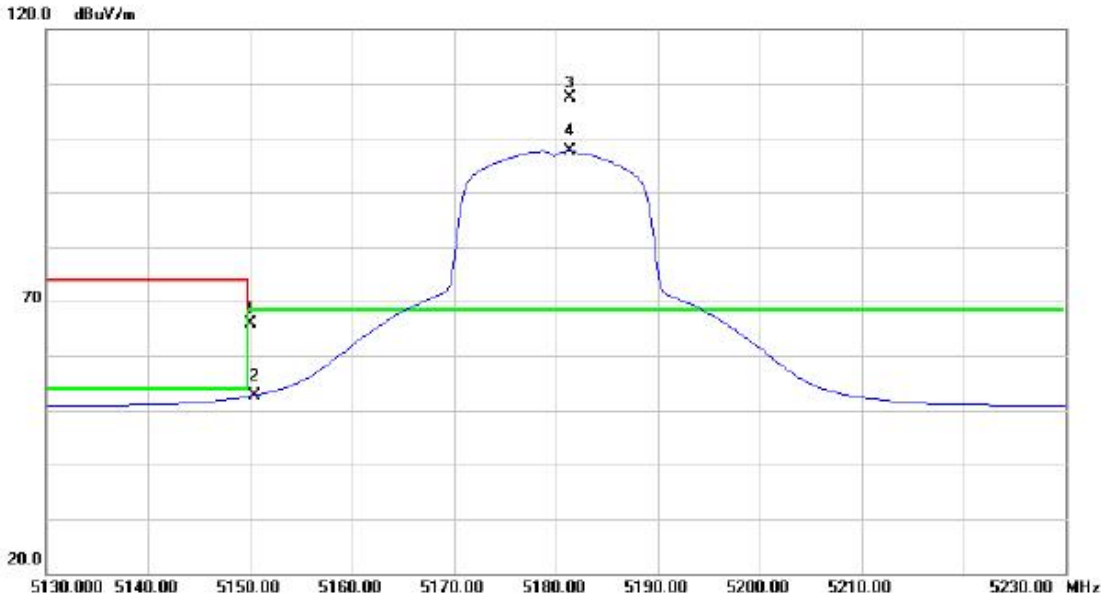
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10480.28	42.36	18.29	60.65	68.30	-7.65	peak	
2		10480.28	31.31	18.29	49.60	68.30	-18.70	AVG	
3		15722.32	43.57	19.37	62.94	74.00	-11.06	peak	
4	*	15722.32	32.36	19.37	51.73	54.00	-2.27	AVG	

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

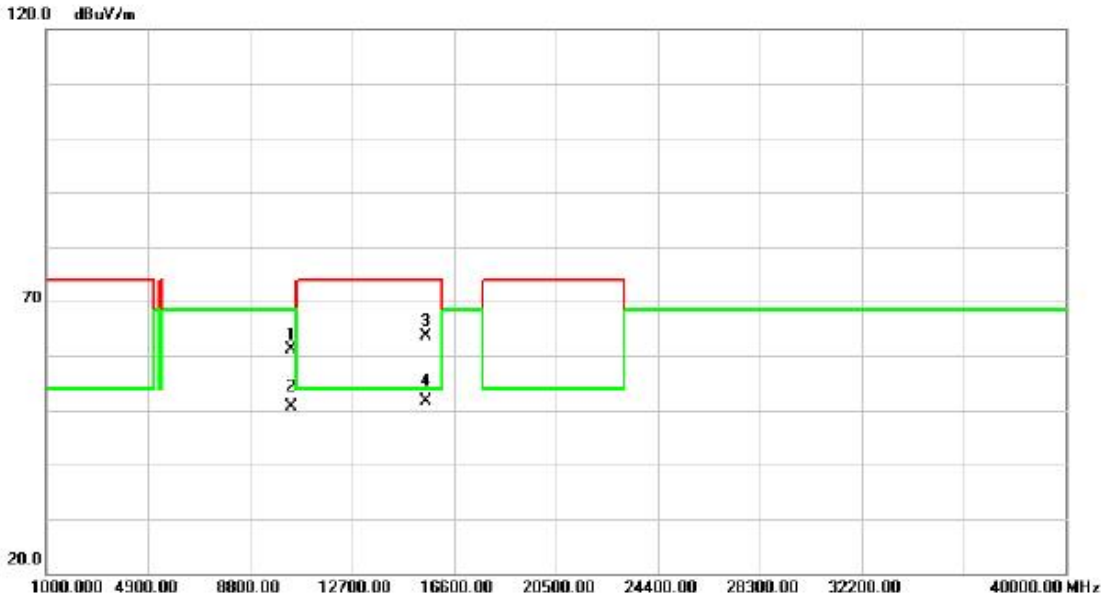
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	28.20	37.74	65.94	68.30	-2.36	peak	
2		5150.000	14.91	37.74	52.65	54.00	-1.35	AVG	
3	*	5181.400	69.47	37.85	107.32	68.30	39.02	peak	NO LIMIT
4	X	5181.400	59.70	37.85	97.55	68.30	29.25	AVG	NO LIMIT

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

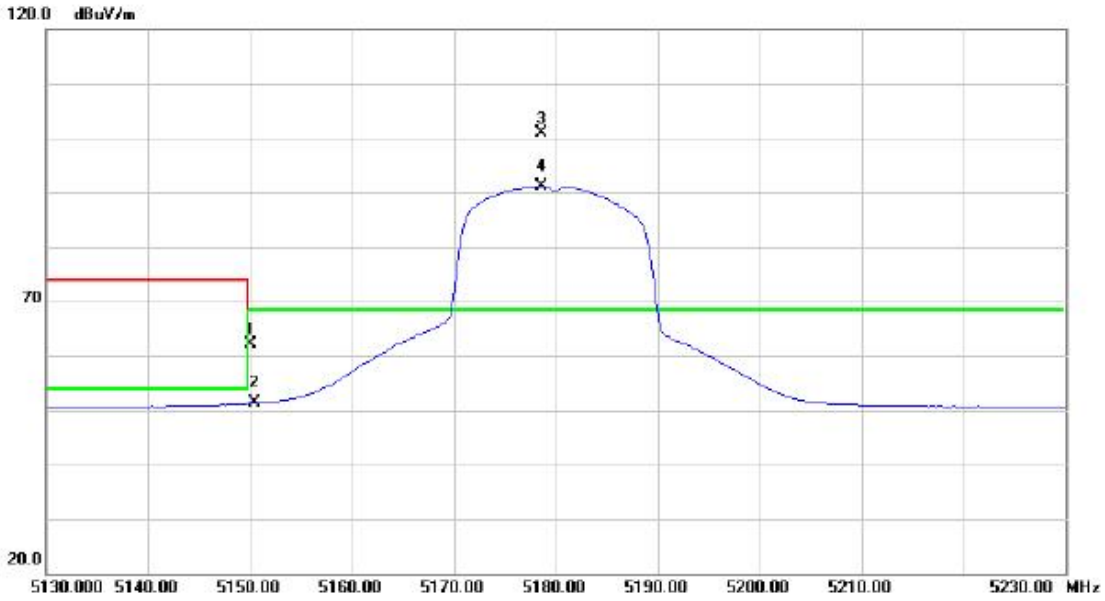
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10362.00	43.51	17.74	61.25	68.30	-7.05	peak	
2		10362.00	32.99	17.74	50.73	68.30	-17.57	AVG	
3		15542.49	44.35	19.30	63.65	74.00	-10.35	peak	
4	*	15542.49	32.38	19.30	51.68	54.00	-2.32	AVG	

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

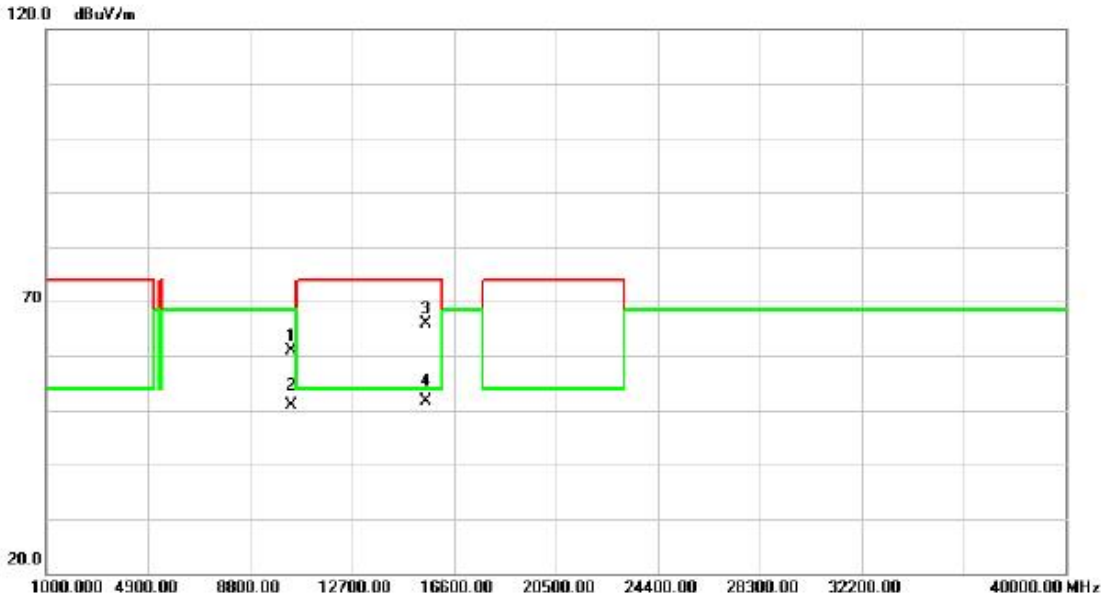
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	24.41	37.74	62.15	68.30	-6.15	peak	
2		5150.000	13.52	37.74	51.26	54.00	-2.74	AVG	
3	*	5178.600	63.03	37.83	100.86	68.30	32.56	peak	NO LIMIT
4	X	5178.600	53.34	37.83	91.17	68.30	22.87	AVG	NO LIMIT

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

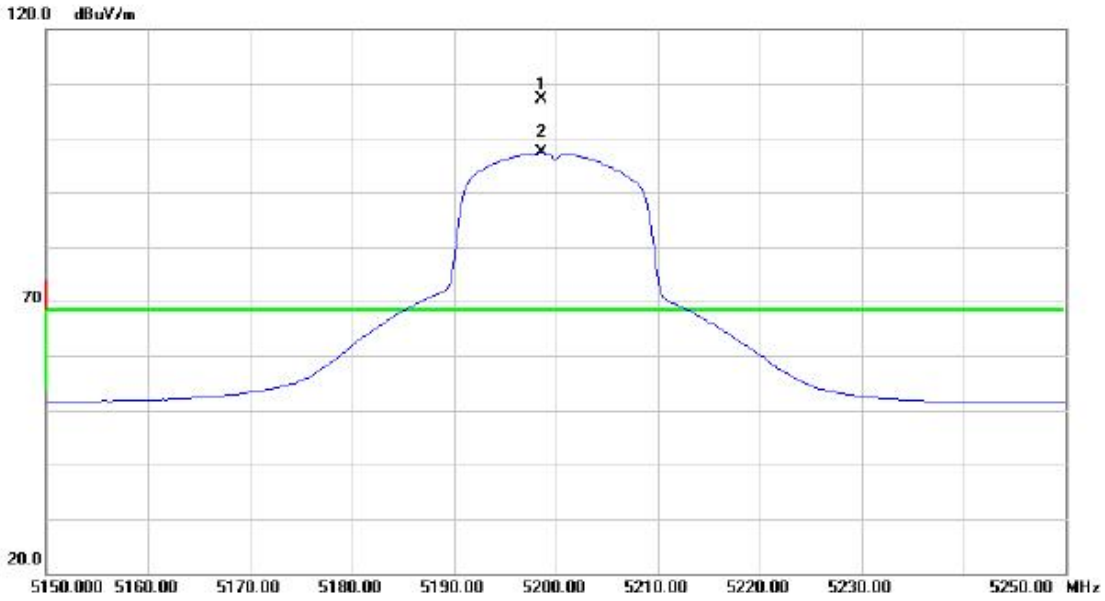
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10361.78	43.08	17.74	60.82	68.30	-7.48	peak	
2		10361.78	33.03	17.74	50.77	68.30	-17.53	AVG	
3		15542.49	46.60	19.30	65.90	74.00	-8.10	peak	
4	*	15542.49	32.33	19.30	51.63	54.00	-2.37	AVG	

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

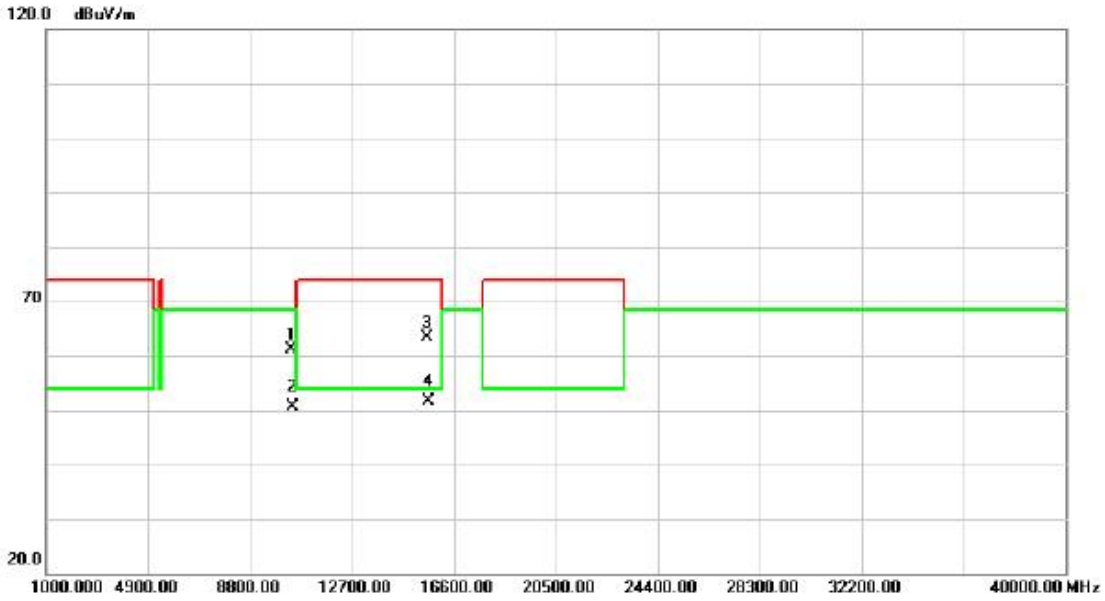
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5198.600	69.23	37.91	107.14	68.30	38.84	peak	NO LIMIT
2	X	5198.600	59.37	37.91	97.28	68.30	28.98	AVG	NO LIMIT

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

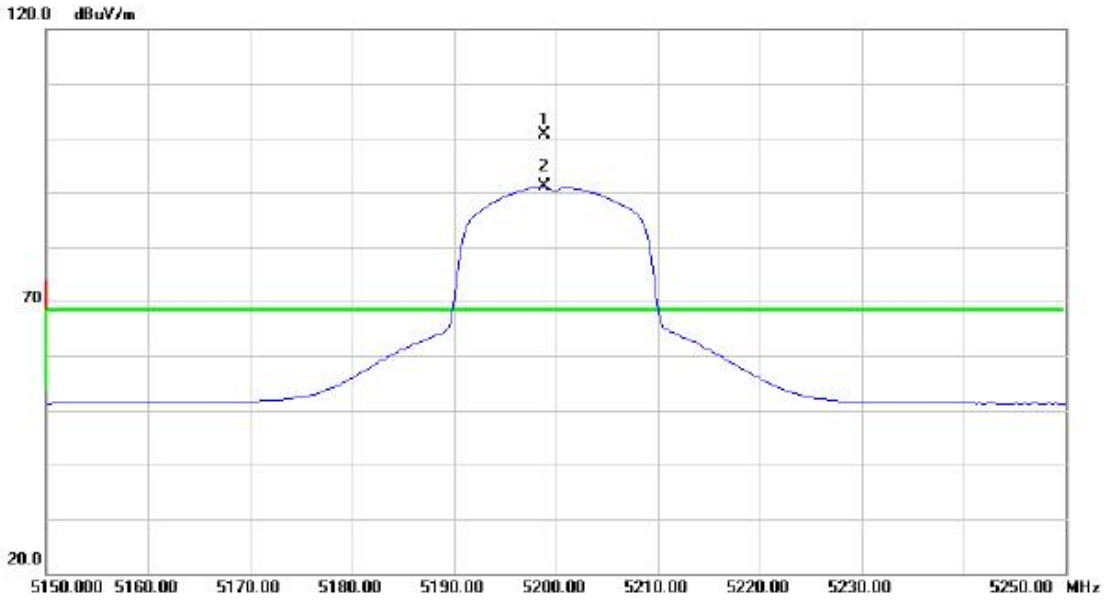
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10402.49	43.27	17.93	61.20	68.30	-7.10	peak	
2		10402.49	32.81	17.93	50.74	68.30	-17.56	AVG	
3		15602.25	44.16	19.32	63.48	74.00	-10.52	peak	
4	*	15602.25	32.36	19.32	51.68	54.00	-2.32	AVG	

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

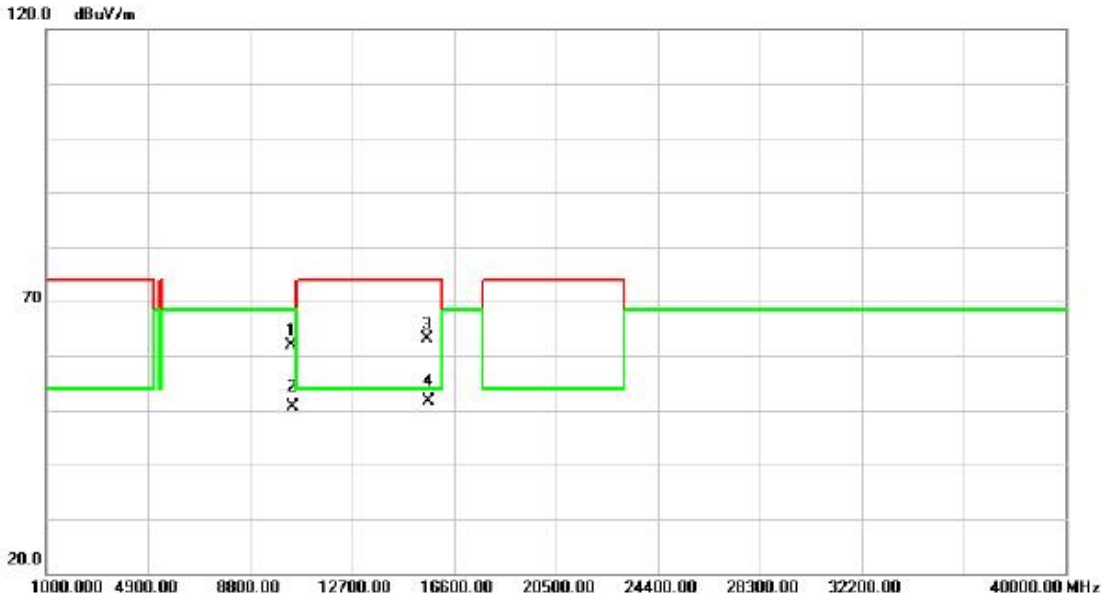
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5198.800	62.81	37.91	100.72	68.30	32.42	peak	NO LIMIT
2	X	5198.800	53.13	37.91	91.04	68.30	22.74	AVG	NO LIMIT

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

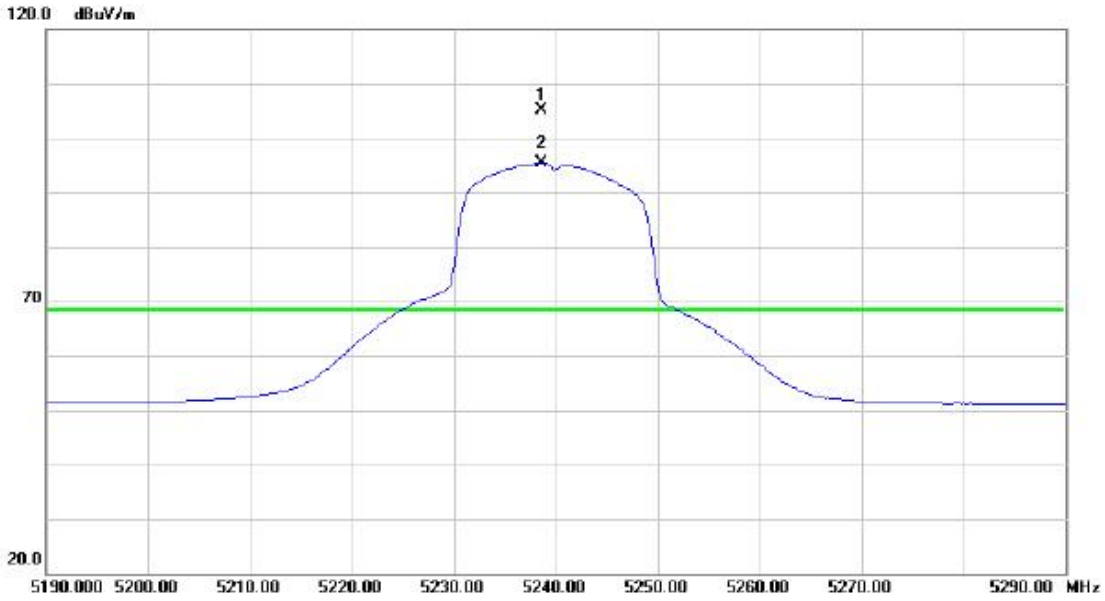
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10402.43	43.88	17.93	61.81	68.30	-6.49	peak	
2		10402.43	32.80	17.93	50.73	68.30	-17.57	AVG	
3		15602.41	43.81	19.32	63.13	74.00	-10.87	peak	
4	*	15602.41	32.34	19.32	51.66	54.00	-2.34	AVG	

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

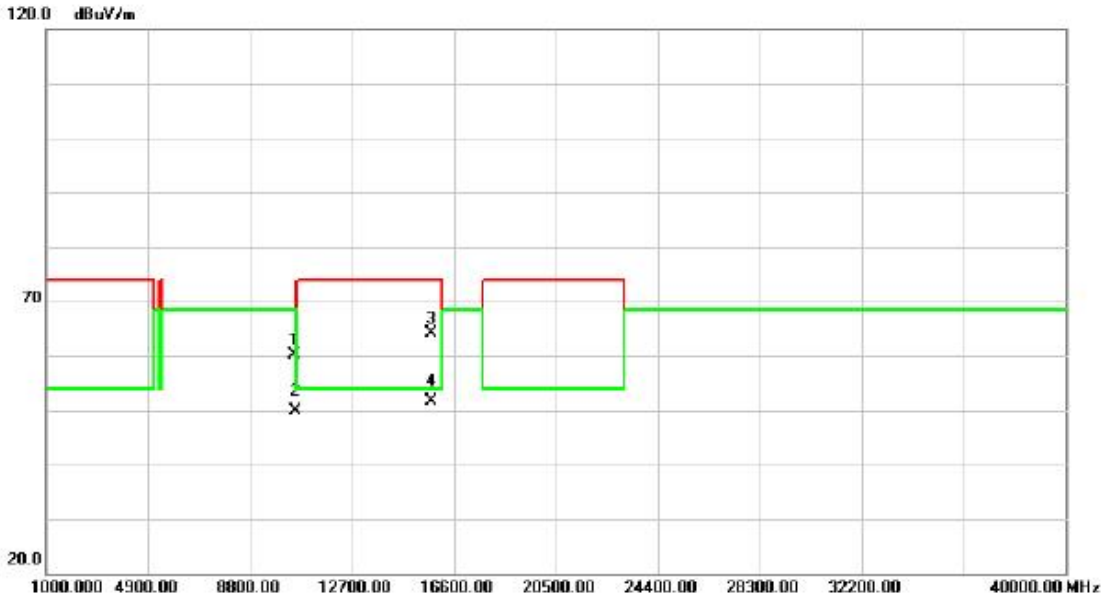
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5238.600	66.99	38.05	105.04	68.30	36.74	peak	NO LIMIT
2	X	5238.600	57.29	38.05	95.34	68.30	27.04	AVG	NO LIMIT

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

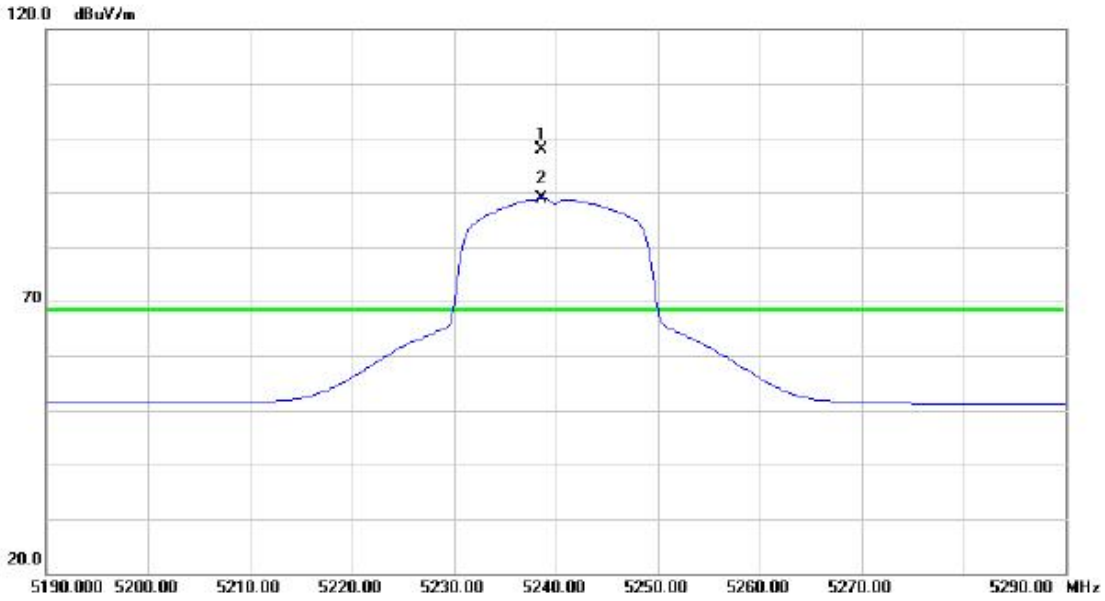
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10482.32	41.87	18.30	60.17	68.30	-8.13	peak	
2		10482.32	31.70	18.30	50.00	68.30	-18.30	AVG	
3		15722.45	44.64	19.37	64.01	74.00	-9.99	peak	
4	*	15722.45	32.34	19.37	51.71	54.00	-2.29	AVG	

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

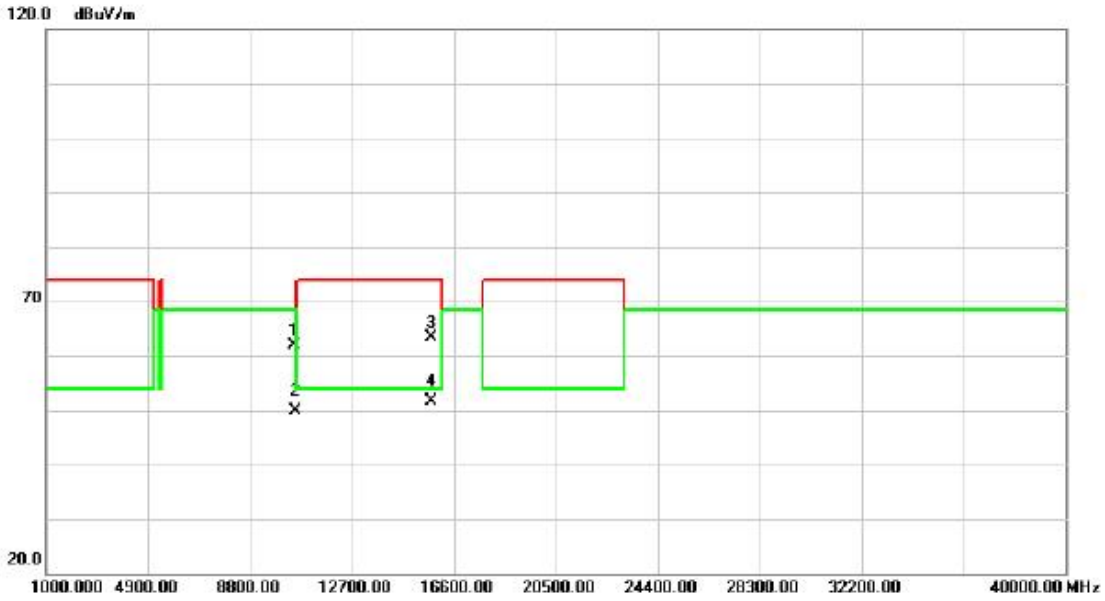
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5238.600	59.86	38.05	97.91	68.30	29.61	peak	NO LIMIT
2	X	5238.600	50.82	38.05	88.87	68.30	20.57	AVG	NO LIMIT

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

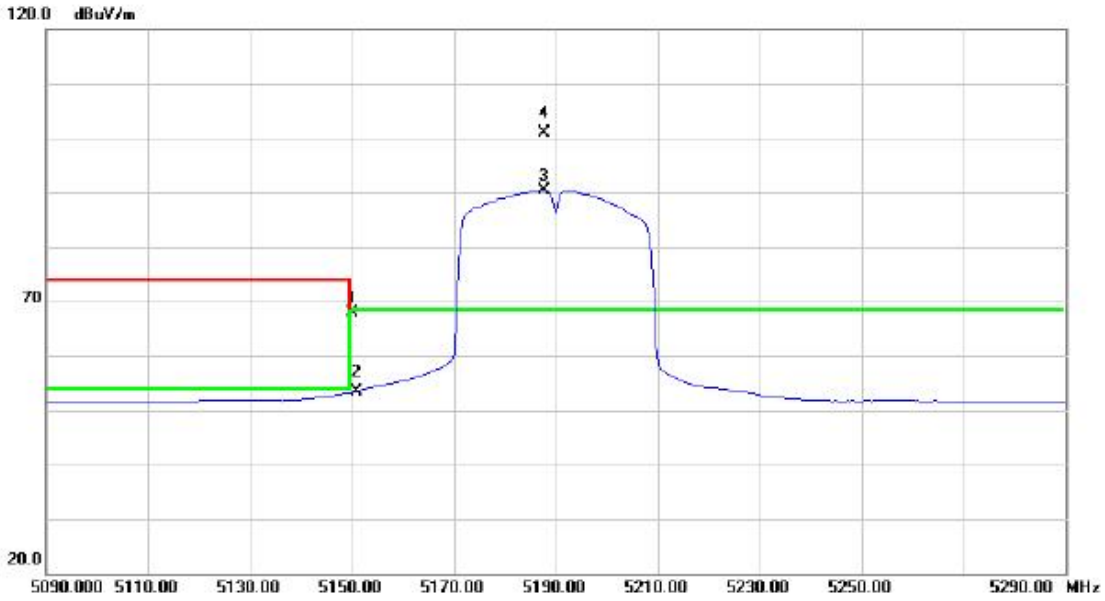
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10482.41	43.46	18.30	61.76	68.30	-6.54	peak	
2		10482.41	31.70	18.30	50.00	68.30	-18.30	AVG	
3		15722.49	43.92	19.37	63.29	74.00	-10.71	peak	
4	*	15722.49	32.36	19.37	51.73	54.00	-2.27	AVG	

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

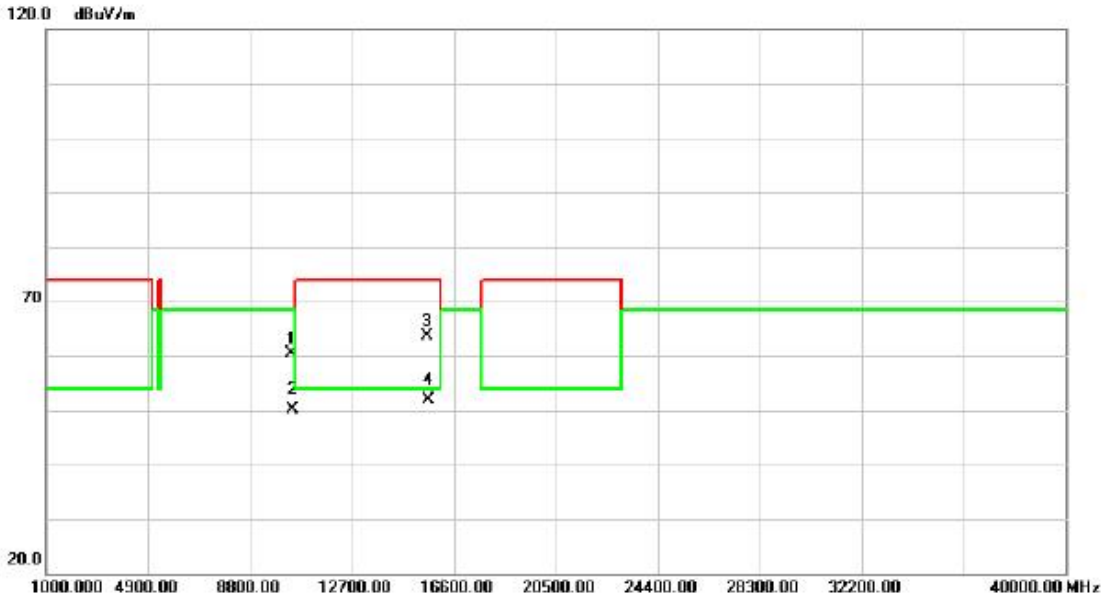
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	30.17	37.74	67.91	68.30	-0.39	peak	
2		5150.000	15.55	37.74	53.29	54.00	-0.71	AVG	
3	X	5187.600	52.54	37.87	90.41	68.30	22.11	peak	NO LIMIT
4	*	5187.600	63.01	37.87	100.88	68.30	32.58	AVG	NO LIMIT

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

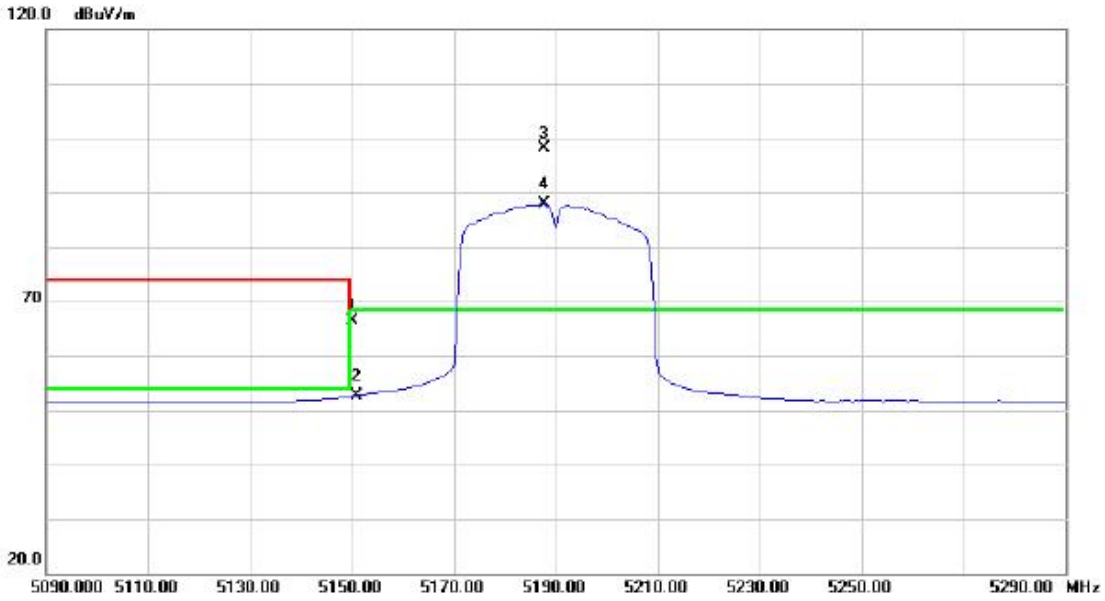
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10380.35	42.61	17.83	60.44	68.30	-7.86	peak	
2		10380.35	32.28	17.83	50.11	68.30	-18.19	AVG	
3		15571.38	44.39	19.31	63.70	74.00	-10.30	peak	
4	*	15571.38	32.55	19.31	51.86	54.00	-2.14	AVG	

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

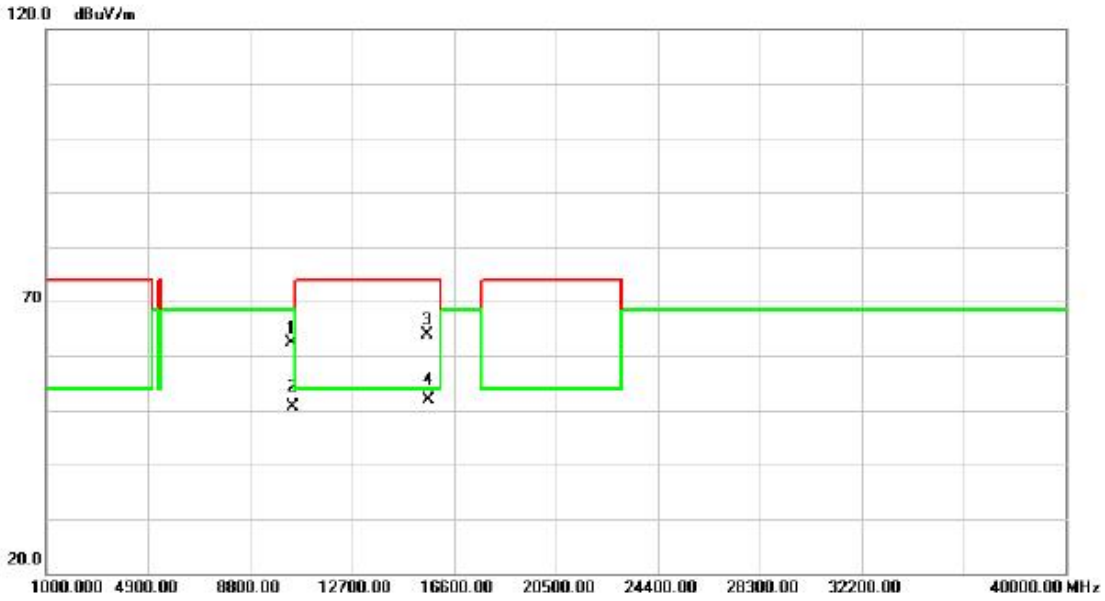
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	28.55	37.74	66.29	68.30	-2.01	peak	
2		5150.000	14.84	37.74	52.58	54.00	-1.42	AVG	
3	*	5187.600	60.33	37.87	98.20	68.30	29.90	peak	NO LIMIT
4	X	5187.600	49.92	37.87	87.79	68.30	19.49	AVG	NO LIMIT

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

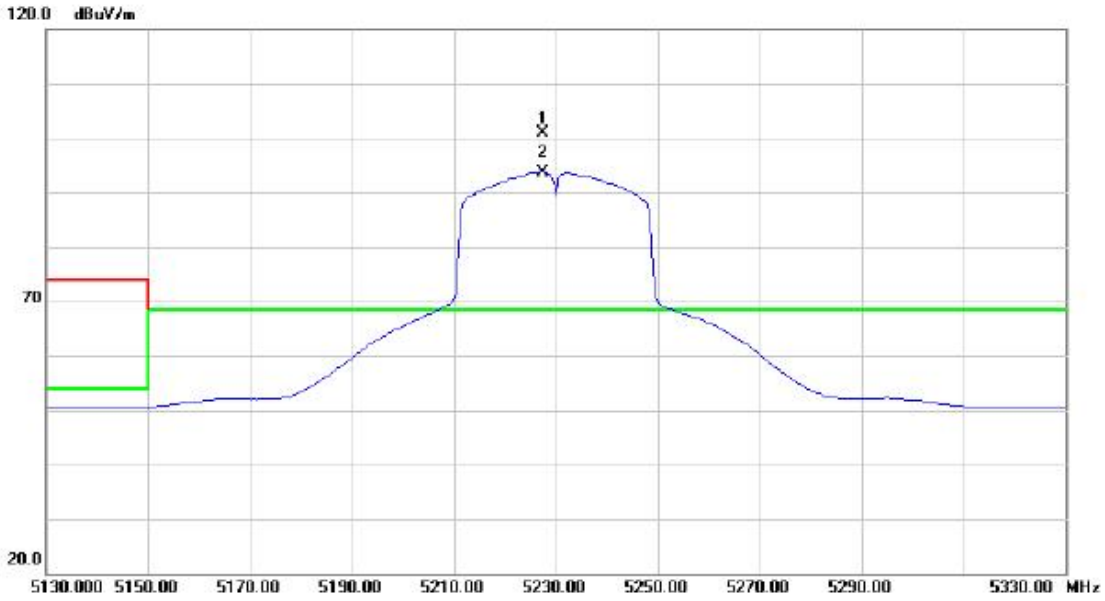
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10380.30	44.56	17.83	62.39	68.30	-5.91	peak	
2		10380.30	32.76	17.83	50.59	68.30	-17.71	AVG	
3		15570.24	44.68	19.31	63.99	74.00	-10.01	peak	
4	*	15570.24	32.48	19.31	51.79	54.00	-2.21	AVG	

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

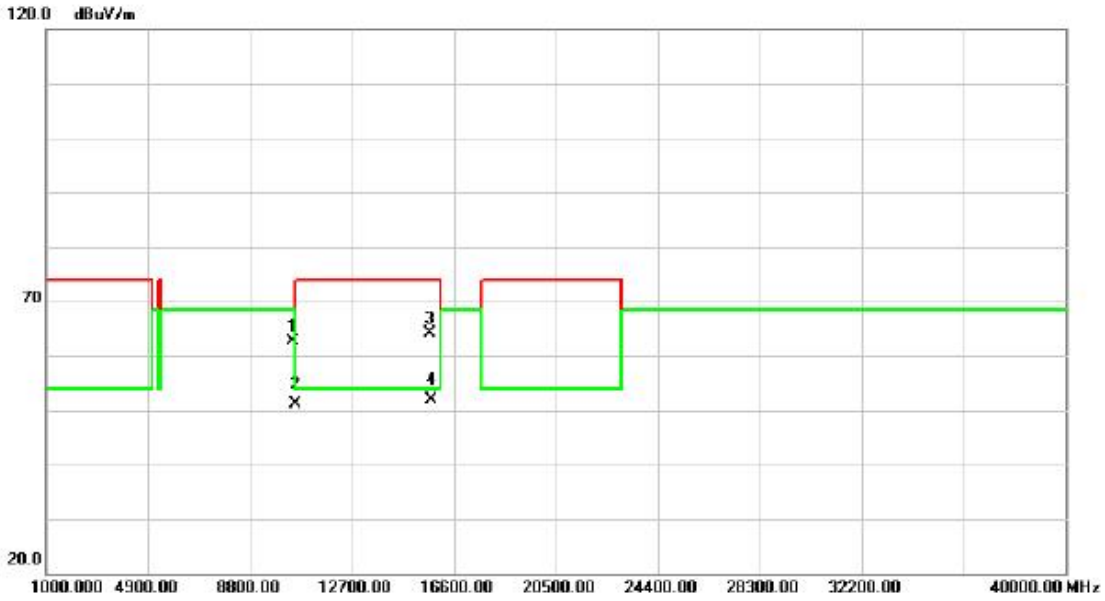
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5227.500	62.88	38.00	100.88	68.30	32.58	peak	NO LIMIT
2	X	5227.500	55.75	38.00	93.75	68.30	25.45	AVG	NO LIMIT

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

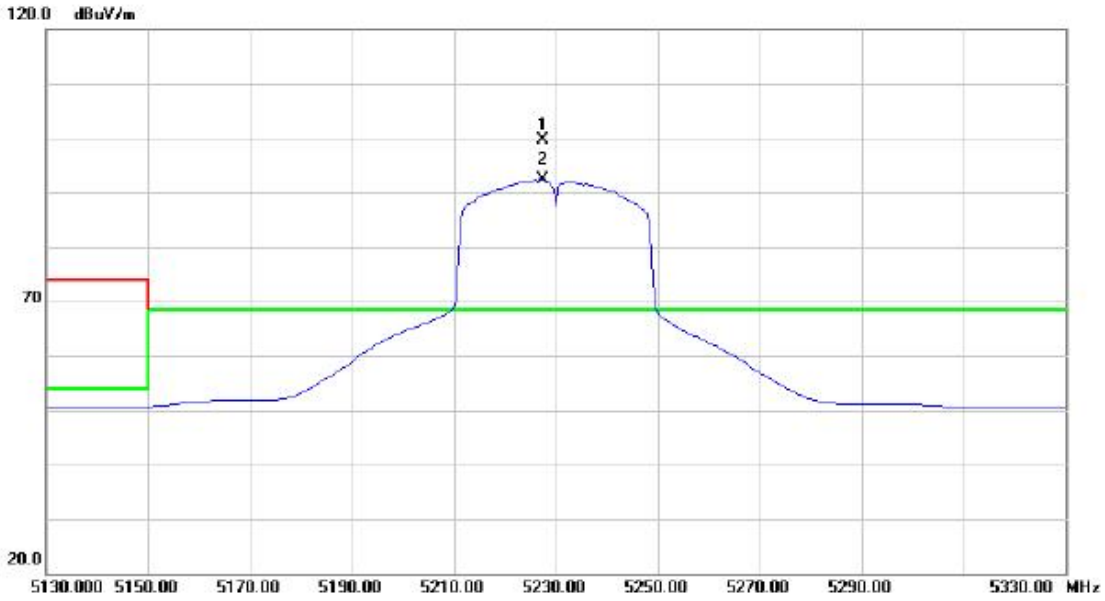
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10461.31	44.38	18.21	62.59	68.30	-5.71	peak	
2		10461.31	32.82	18.21	51.03	68.30	-17.27	AVG	
3		15690.00	44.71	19.35	64.06	74.00	-9.94	peak	
4	*	15690.00	32.57	19.35	51.92	54.00	-2.08	AVG	

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

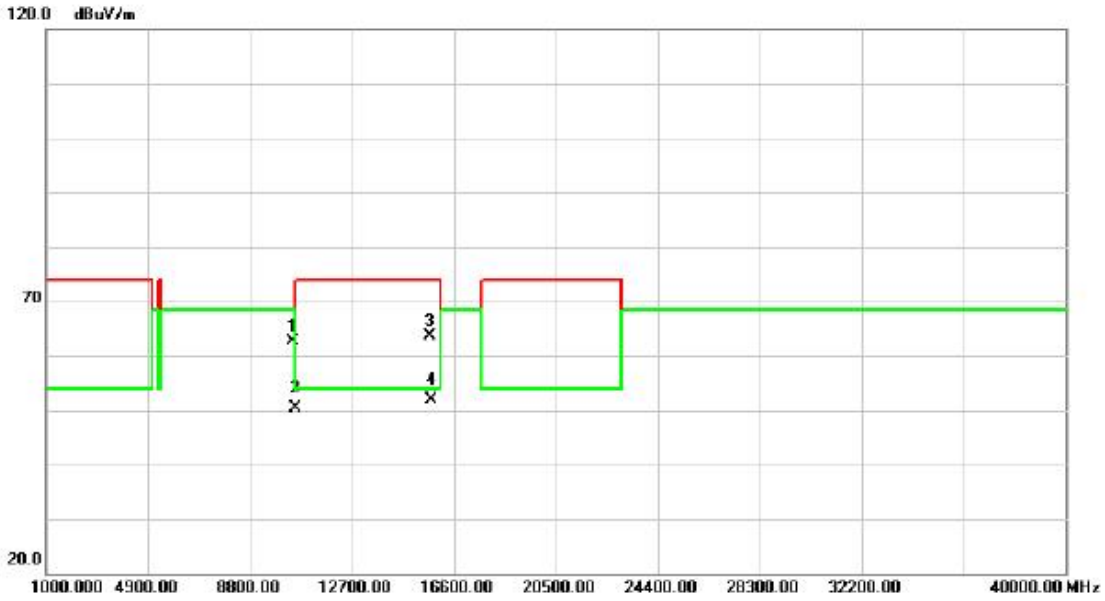
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5227.500	61.75	38.00	99.75	68.30	31.45	peak	NO LIMIT
2	X	5227.500	54.32	38.00	92.32	68.30	24.02	AVG	NO LIMIT

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

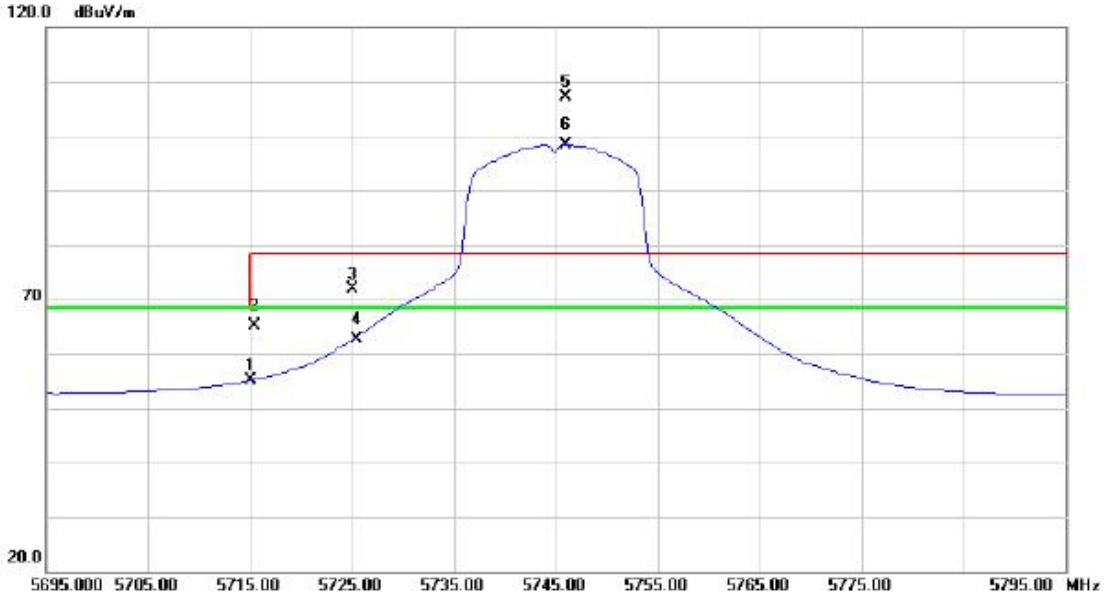
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10460.37	44.39	18.21	62.60	68.30	-5.70	peak	
2		10460.37	32.19	18.21	50.40	68.30	-17.90	AVG	
3		15691.46	44.26	19.36	63.62	74.00	-10.38	peak	
4	*	15691.46	32.49	19.36	51.85	54.00	-2.15	AVG	

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

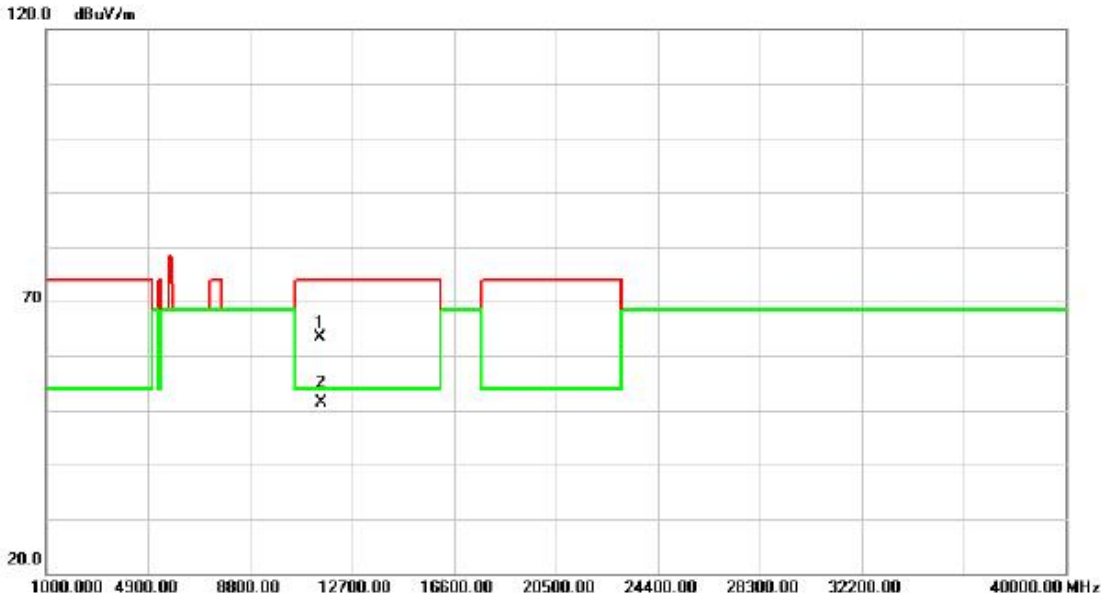
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	15.67	39.43	55.10	68.30	-13.20	peak	
2		5715.000	25.65	39.43	65.08	68.30	-3.22	AVG	
3		5725.000	32.51	39.45	71.96	78.30	-6.34	peak	
4		5725.000	23.07	39.45	62.52	68.30	-5.78	AVG	
5	X	5746.000	67.65	39.50	107.15	78.30	28.85	peak	NO LIMIT
6	*	5746.000	58.86	39.50	98.36	68.30	30.06	AVG	NO LIMIT

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

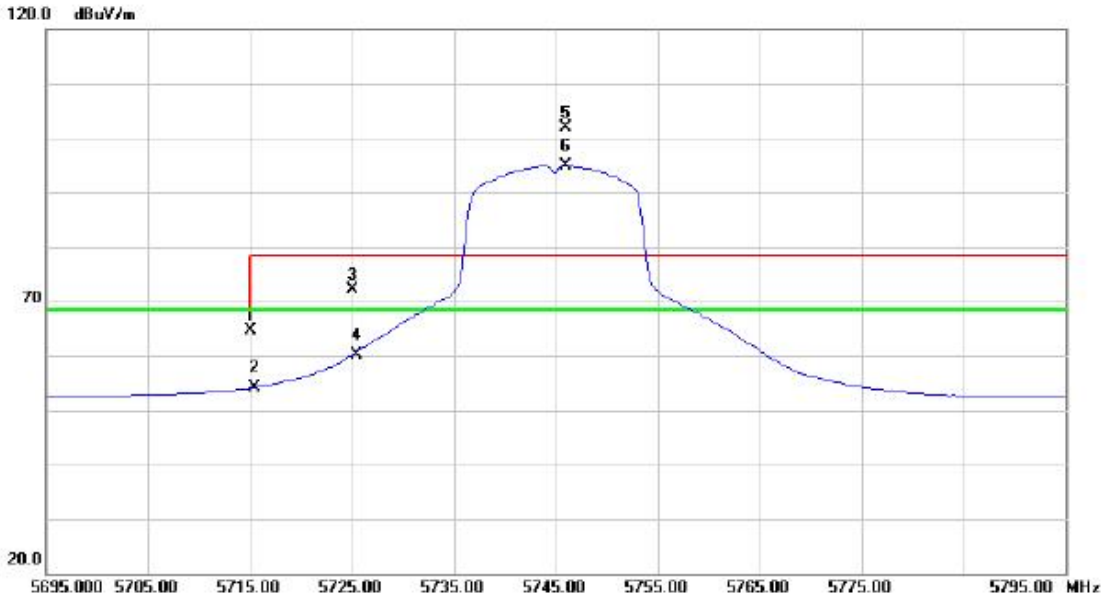
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	43.15	20.34	63.49	74.00	-10.51	peak	
2	*	11490.00	31.02	20.34	51.36	54.00	-2.64	AVG	

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

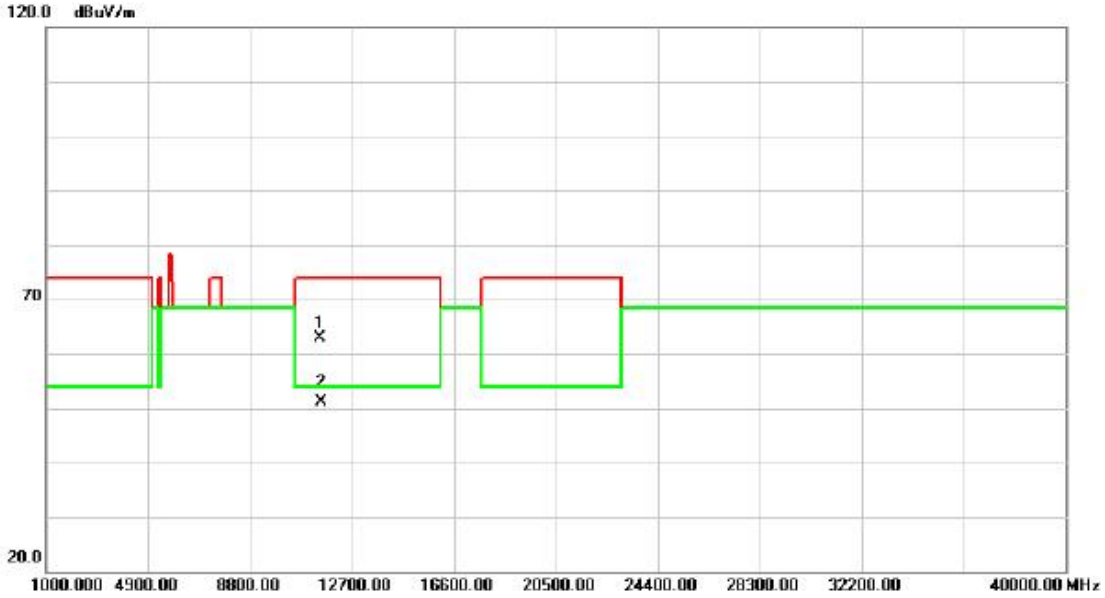
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	25.27	39.43	64.70	68.30	-3.60	peak	
2		5715.000	14.59	39.43	54.02	68.30	-14.28	AVG	
3		5725.000	32.69	39.45	72.14	78.30	-6.16	peak	
4		5725.000	20.57	39.45	60.02	68.30	-8.28	AVG	
5	X	5746.000	62.35	39.50	101.85	78.30	23.55	peak	NO LIMIT
6	*	5746.000	55.34	39.50	94.84	68.30	26.54	AVG	NO LIMIT

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

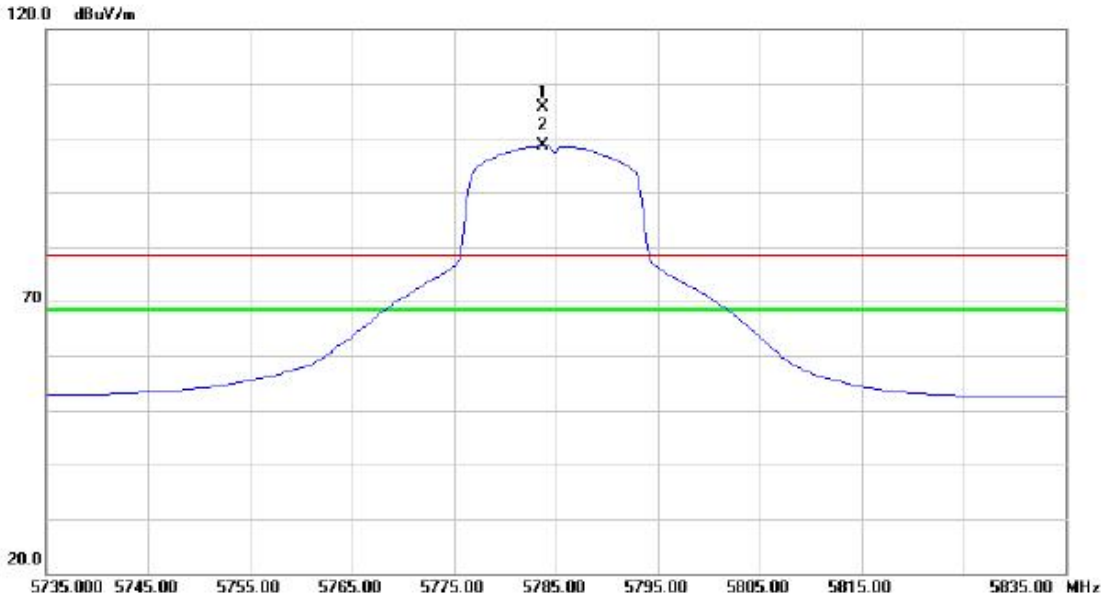
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11491.25	42.62	20.34	62.96	74.00	-11.04	peak	
2	*	11491.25	30.86	20.34	51.20	54.00	-2.80	AVG	

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

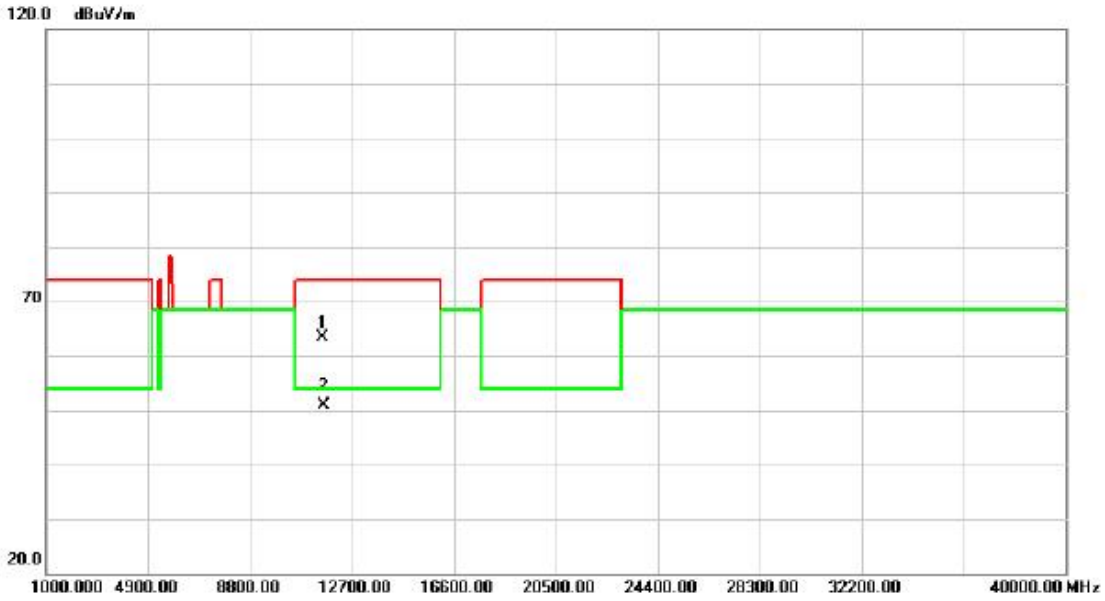
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5783.750	66.00	39.58	105.58	78.30	27.28	peak	NO LIMIT
2	*	5783.750	59.04	39.58	98.62	68.30	30.32	AVG	NO LIMIT

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

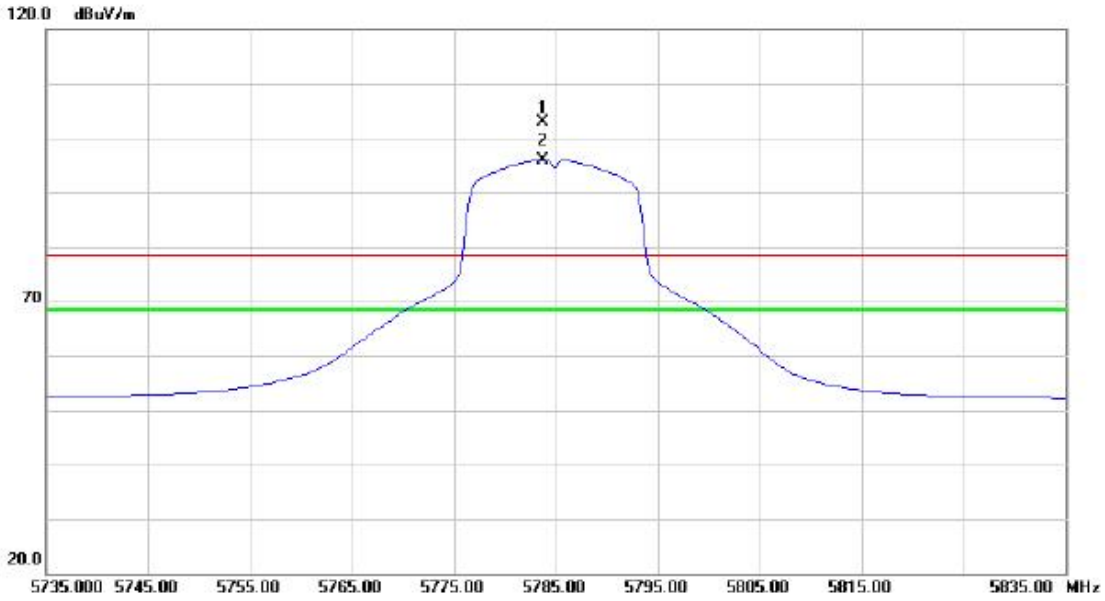
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11571.20	42.93	20.42	63.35	74.00	-10.65	peak	
2	*	11571.20	30.48	20.42	50.90	54.00	-3.10	AVG	

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

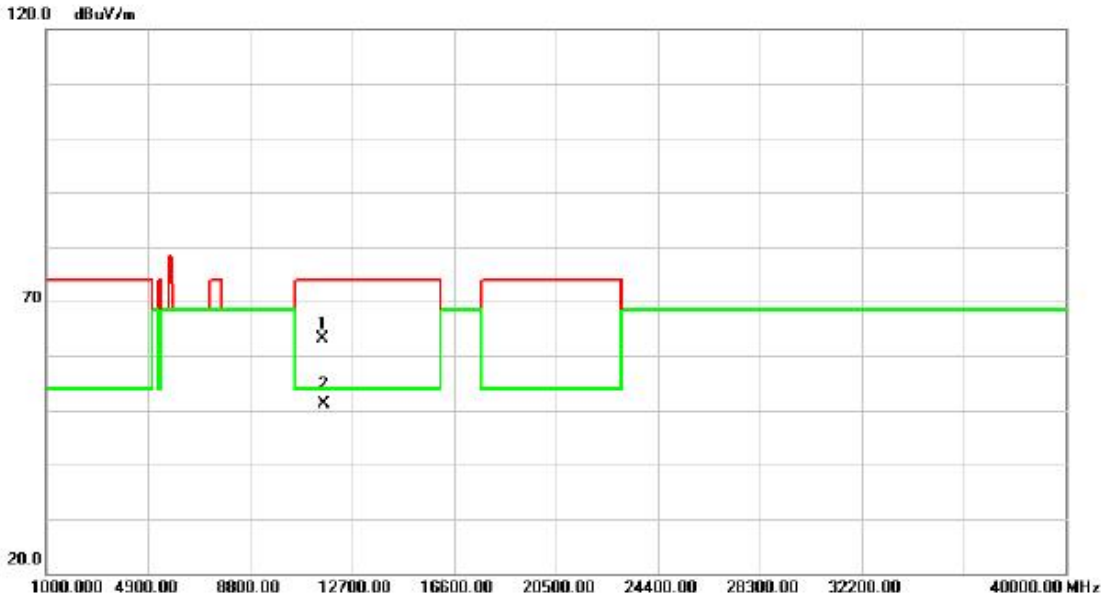
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5783.750	63.33	39.58	102.91	78.30	24.61	peak	NO LIMIT
2	*	5783.750	56.38	39.58	95.96	68.30	27.66	AVG	NO LIMIT

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

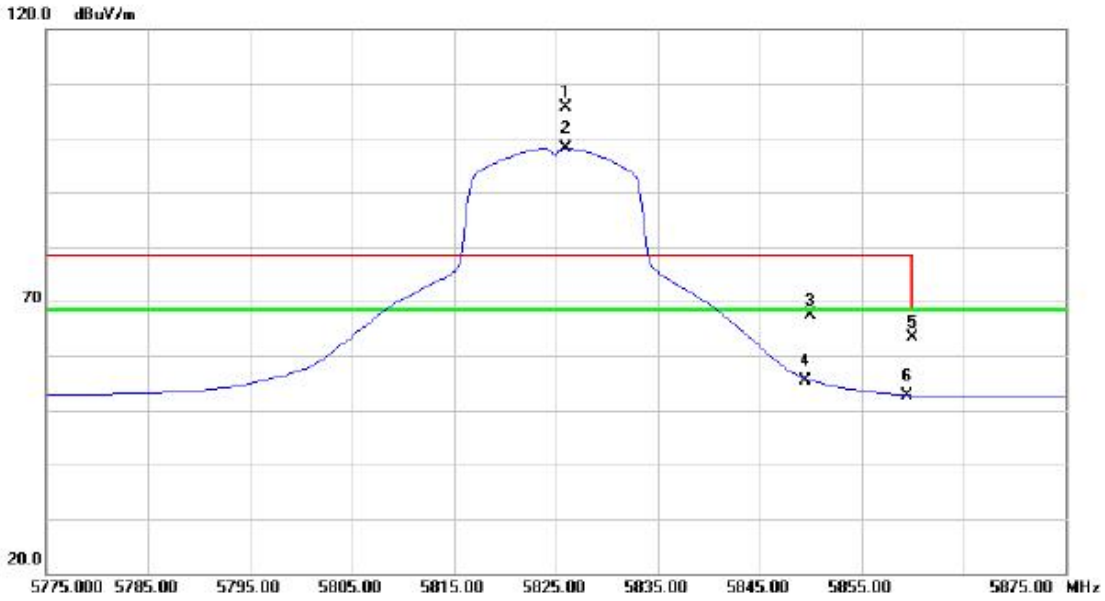
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.34	42.66	20.42	63.08	74.00	-10.92	peak	
2	*	11570.34	30.73	20.42	51.15	54.00	-2.85	AVG	

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

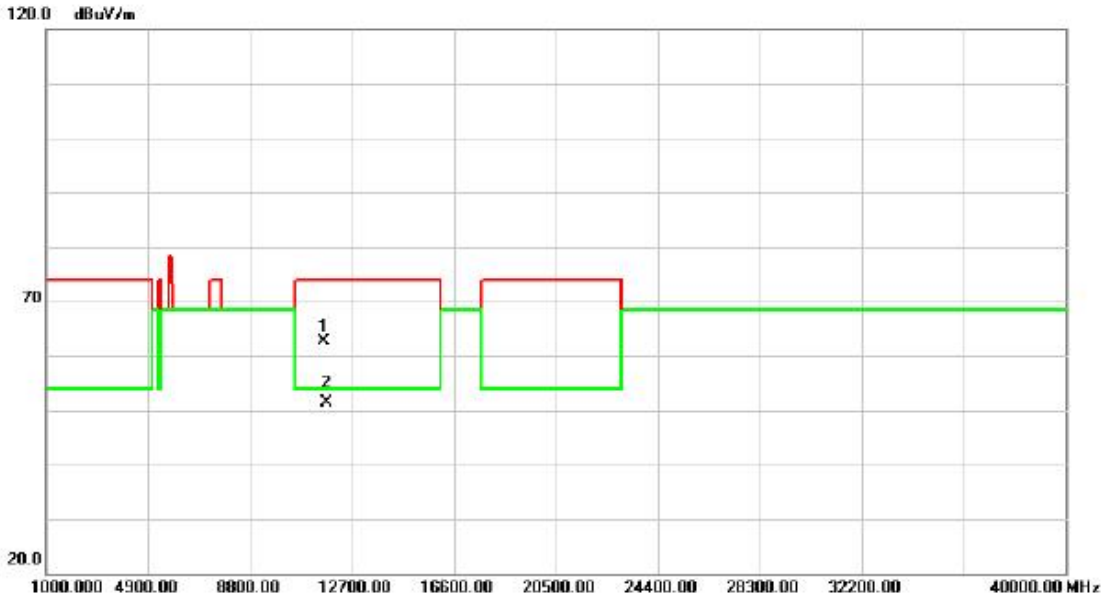
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5826.000	65.90	39.68	105.58	78.30	27.28	peak	NO LIMIT
2	*	5826.000	58.42	39.68	98.10	68.30	29.80	AVG	NO LIMIT
3		5850.000	27.69	39.73	67.42	78.30	-10.88	peak	
4		5850.000	15.74	39.73	55.47	68.30	-12.83	AVG	
5		5860.000	23.67	39.76	63.43	68.30	-4.87	peak	
6		5860.000	12.98	39.76	52.74	68.30	-15.56	AVG	

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

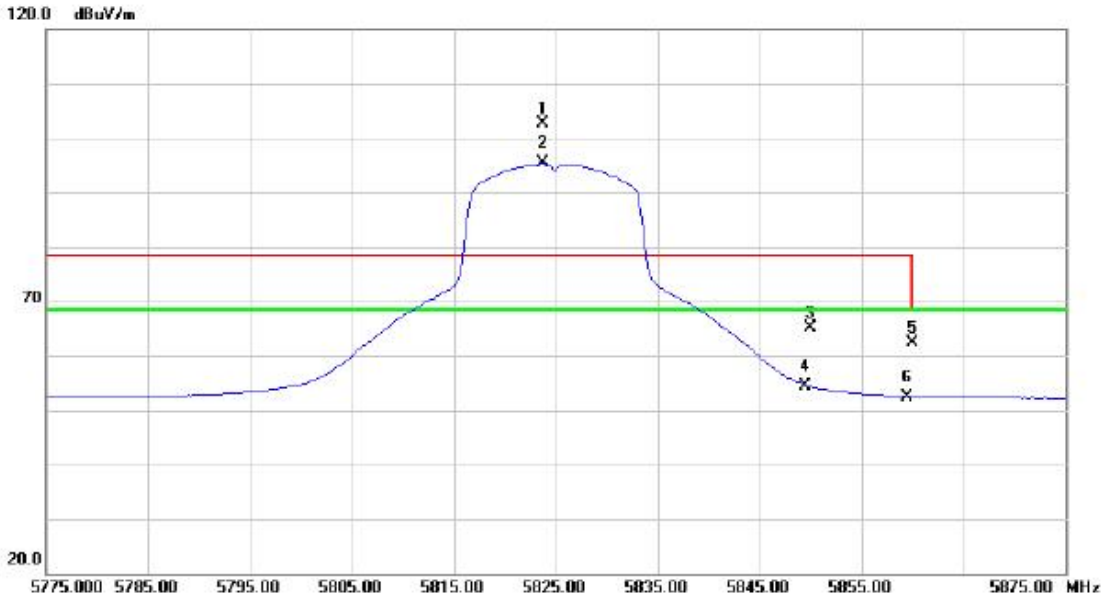
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.34	42.17	20.52	62.69	74.00	-11.31	peak	
2	*	11650.34	30.86	20.52	51.38	54.00	-2.62	AVG	

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

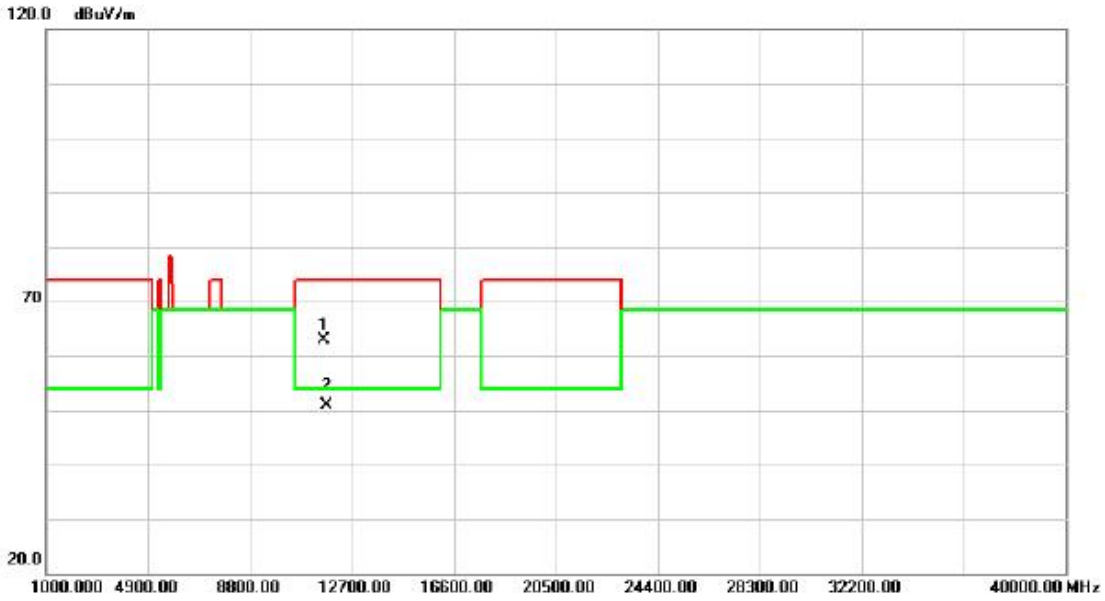
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5823.750	62.95	39.67	102.62	78.30	24.32	peak	NO LIMIT
2	*	5823.750	55.63	39.67	95.30	68.30	27.00	AVG	NO LIMIT
3		5850.000	25.41	39.73	65.14	78.30	-13.16	peak	
4		5850.000	14.55	39.73	54.28	68.30	-14.02	AVG	
5		5860.000	22.52	39.76	62.28	68.30	-6.02	peak	
6		5860.000	12.74	39.76	52.50	68.30	-15.80	AVG	

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

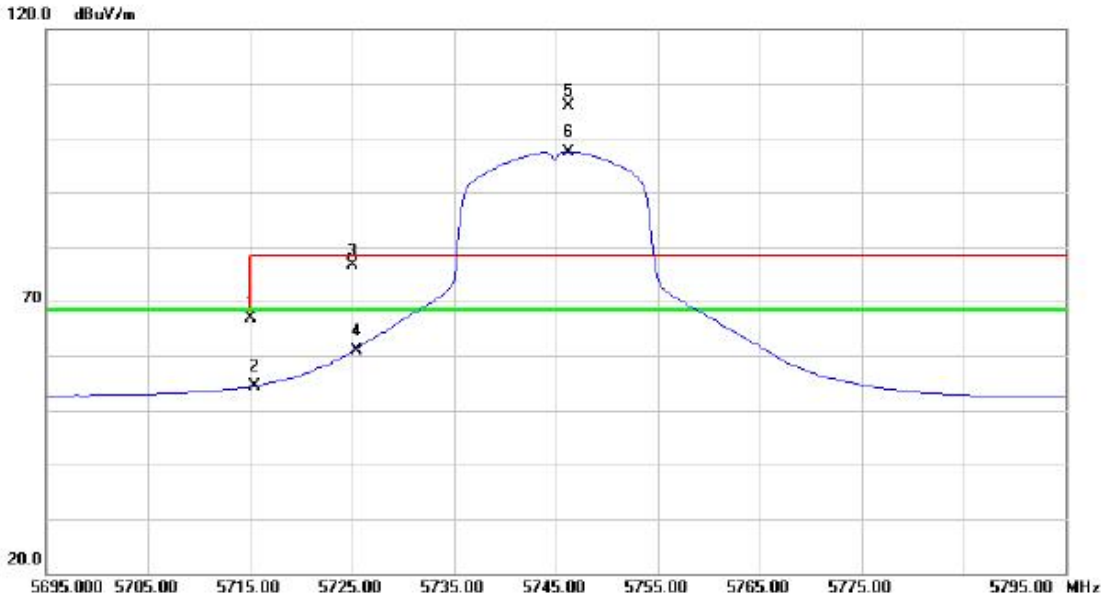
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.39	42.48	20.52	63.00	74.00	-11.00	peak	
2	*	11650.39	30.48	20.52	51.00	54.00	-3.00	AVG	

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

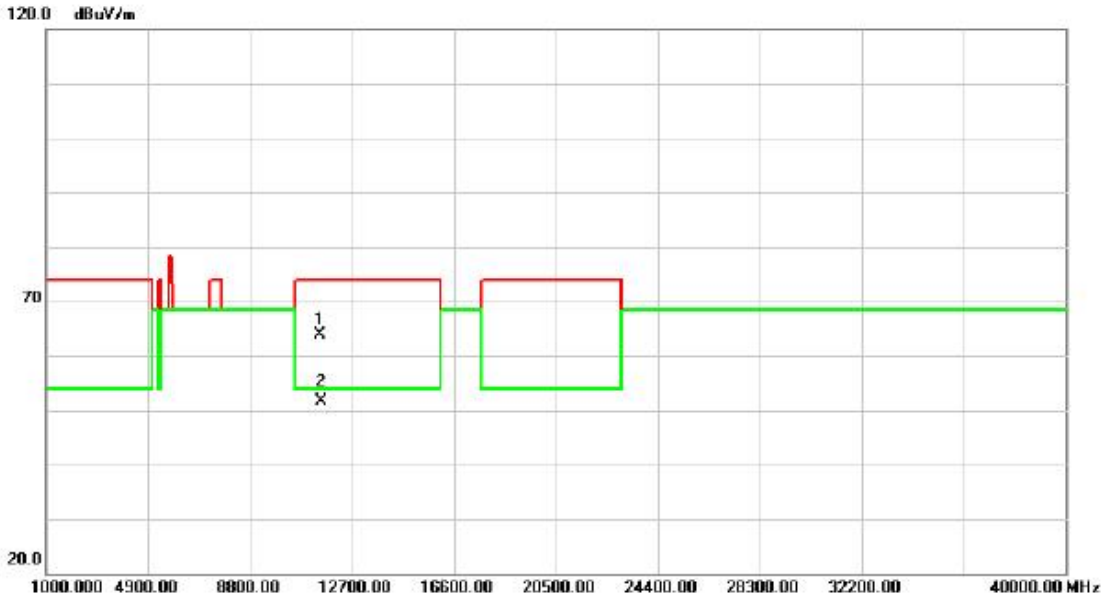
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	27.54	39.43	66.97	68.30	-1.33	peak	
2		5715.000	14.93	39.43	54.36	68.30	-13.94	AVG	
3		5725.000	37.24	39.45	76.69	78.30	-1.61	peak	
4		5725.000	21.40	39.45	60.85	68.30	-7.45	AVG	
5	X	5746.250	66.35	39.50	105.85	78.30	27.55	peak	NO LIMIT
6	*	5746.250	57.98	39.50	97.48	68.30	29.18	AVG	NO LIMIT

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

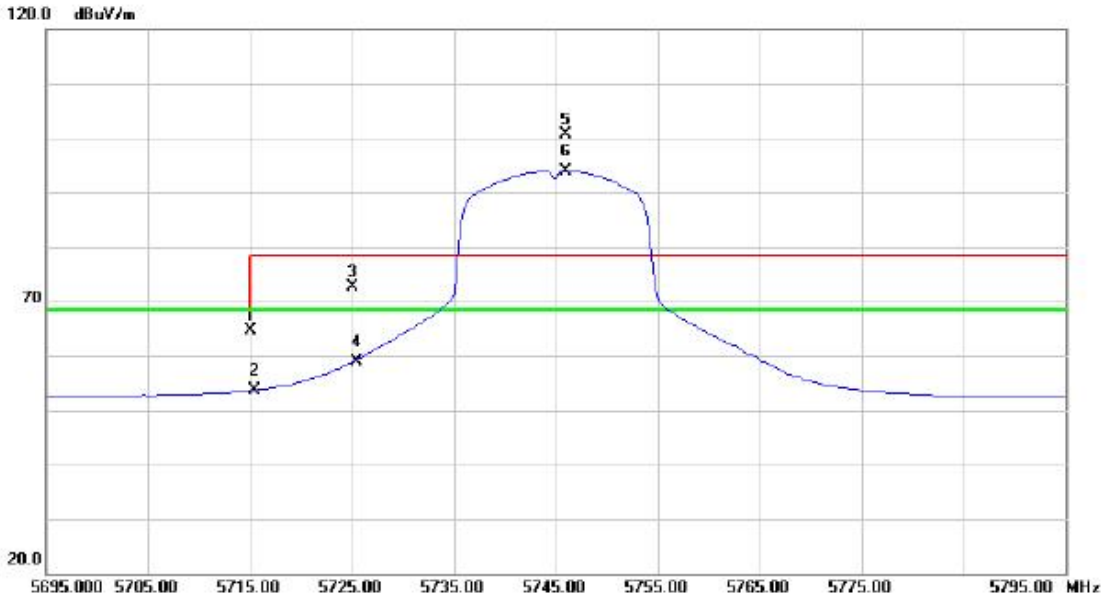
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	43.45	20.34	63.79	74.00	-10.21	peak	
2	*	11490.00	31.18	20.34	51.52	54.00	-2.48	AVG	

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

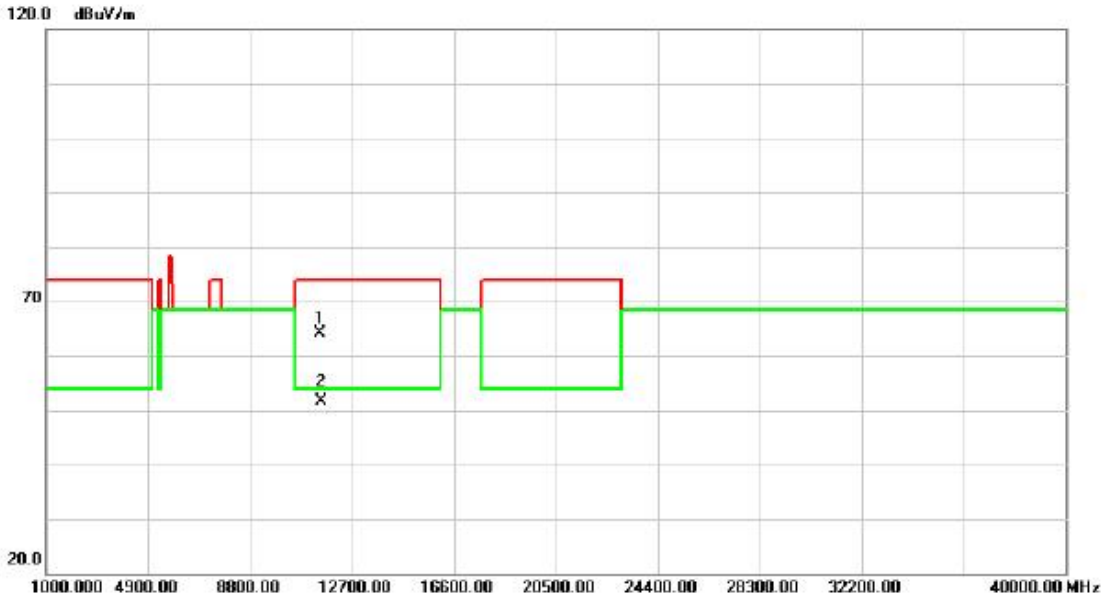
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	25.21	39.43	64.64	68.30	-3.66	peak	
2		5715.000	14.14	39.43	53.57	68.30	-14.73	AVG	
3		5725.000	33.20	39.45	72.65	78.30	-5.65	peak	
4		5725.000	19.34	39.45	58.79	68.30	-9.51	AVG	
5	X	5746.000	61.22	39.50	100.72	78.30	22.42	peak	NO LIMIT
6	*	5746.000	54.48	39.50	93.98	68.30	25.68	AVG	NO LIMIT

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

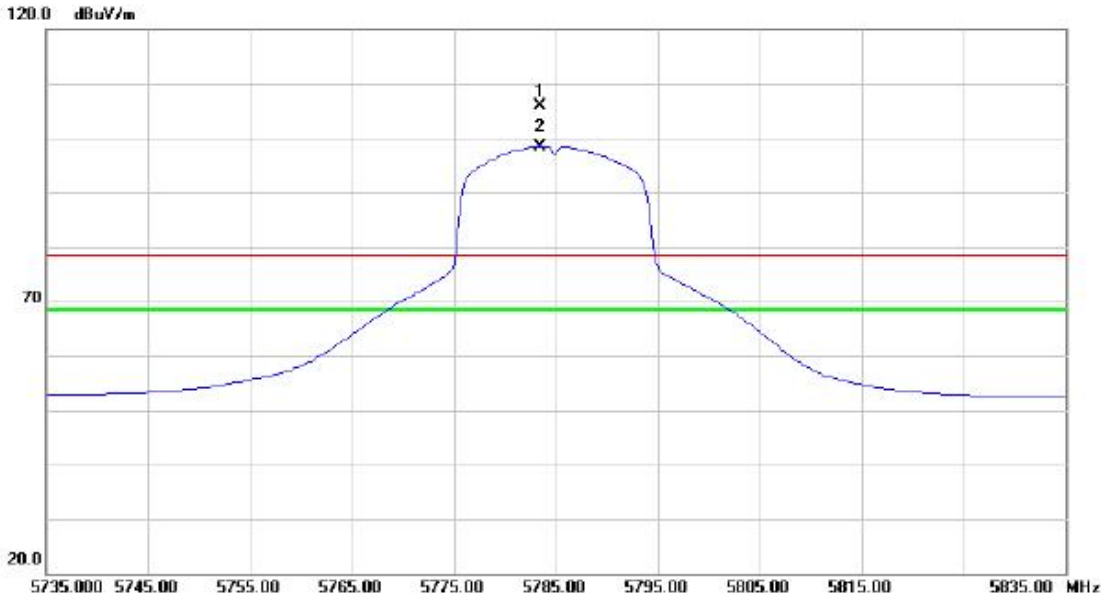
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11491.34	43.83	20.34	64.17	74.00	-9.83	peak	
2	*	11491.34	31.18	20.34	51.52	54.00	-2.48	AVG	

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

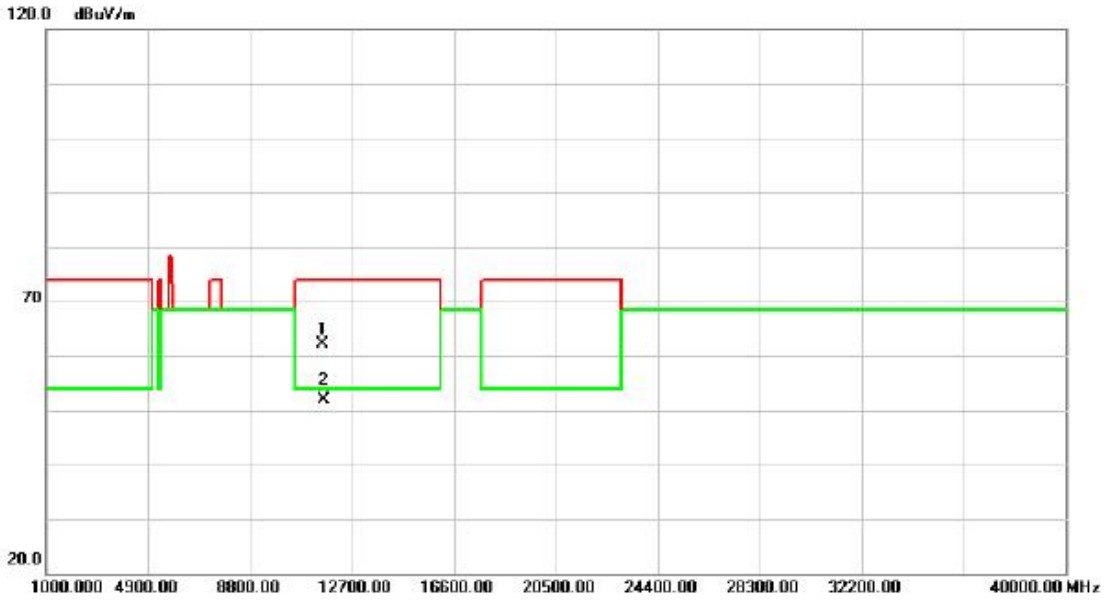
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5783.500	66.33	39.58	105.91	78.30	27.61	peak	NO LIMIT
2	*	5783.500	58.89	39.58	98.47	68.30	30.17	AVG	NO LIMIT

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

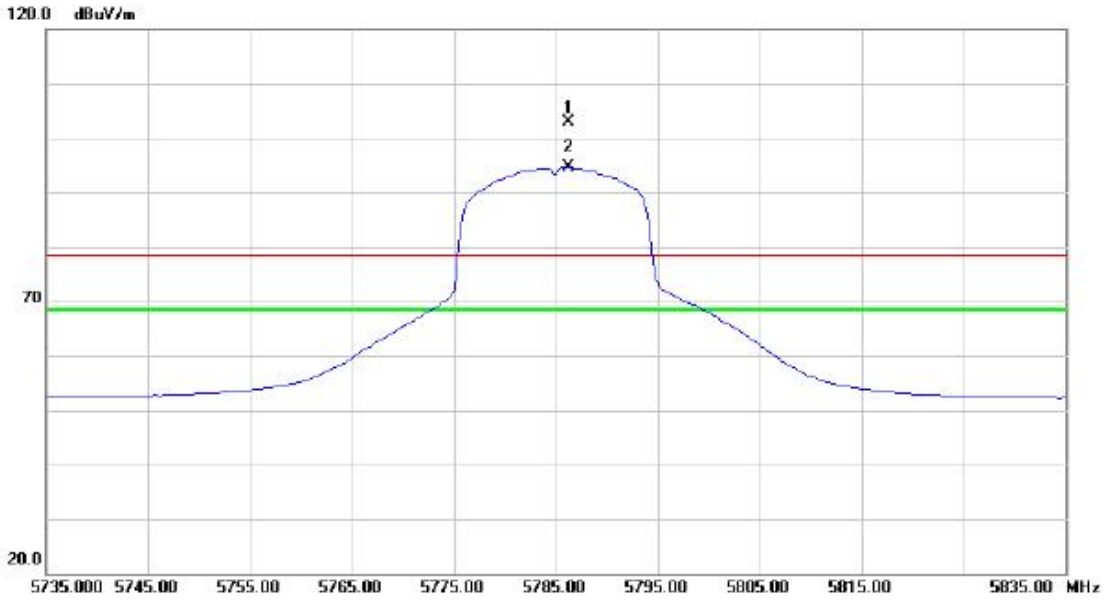
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.38	41.64	20.42	62.06	74.00	-11.94	peak	
2	*	11570.38	31.56	20.42	51.98	54.00	-2.02	AVG	

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

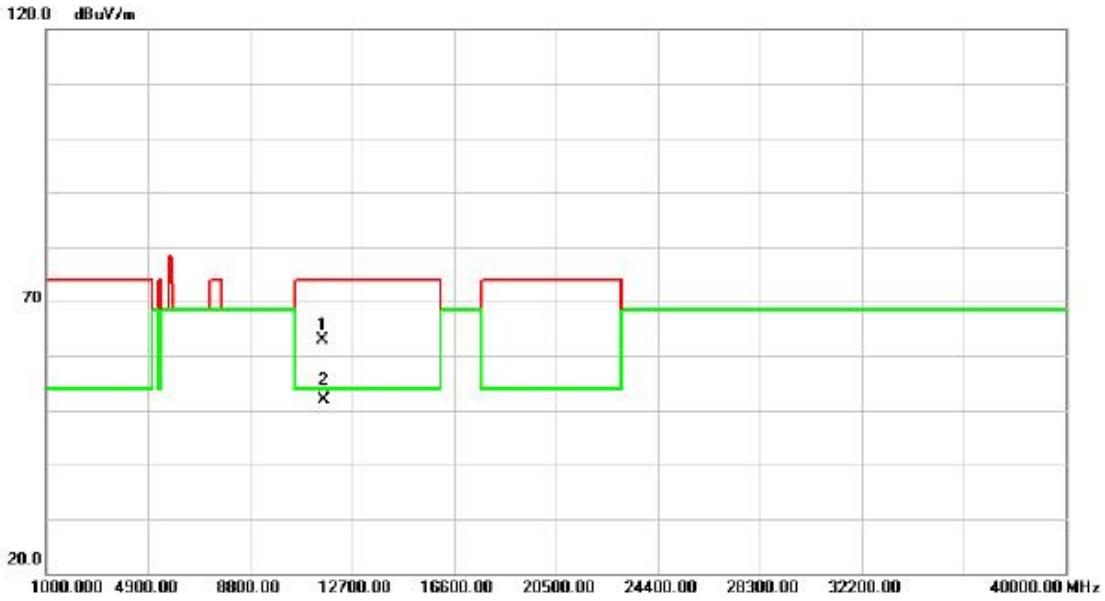
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5786.250	63.22	39.60	102.82	78.30	24.52	peak	NO LIMIT
2	*	5786.250	54.99	39.60	94.59	68.30	26.29	AVG	NO LIMIT

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

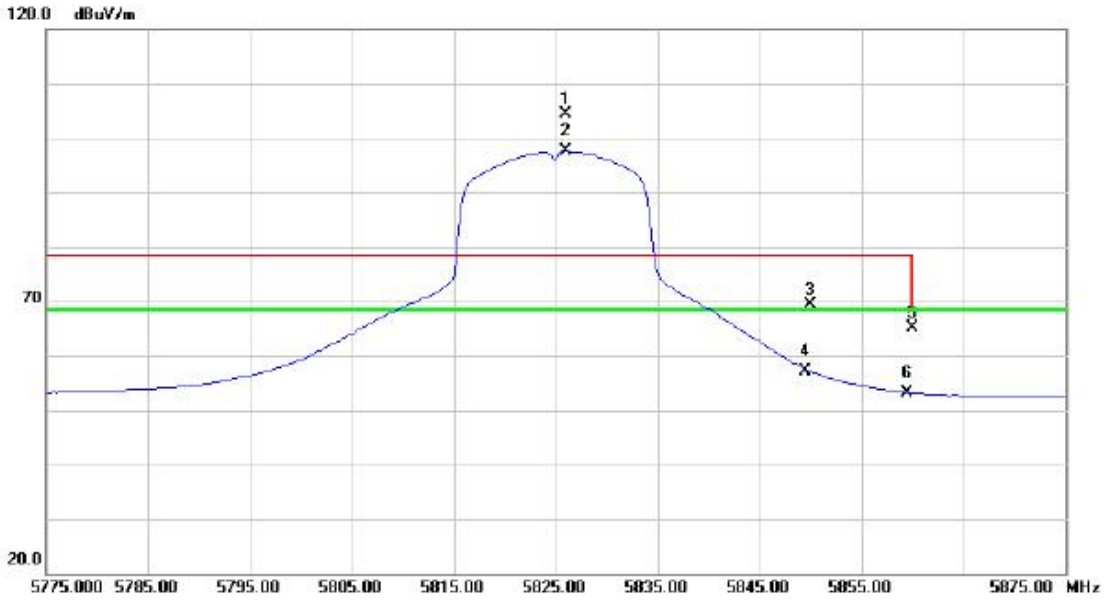
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.83	42.34	20.42	62.76	74.00	-11.24	peak	
2	*	11570.83	31.47	20.42	51.89	54.00	-2.11	AVG	

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

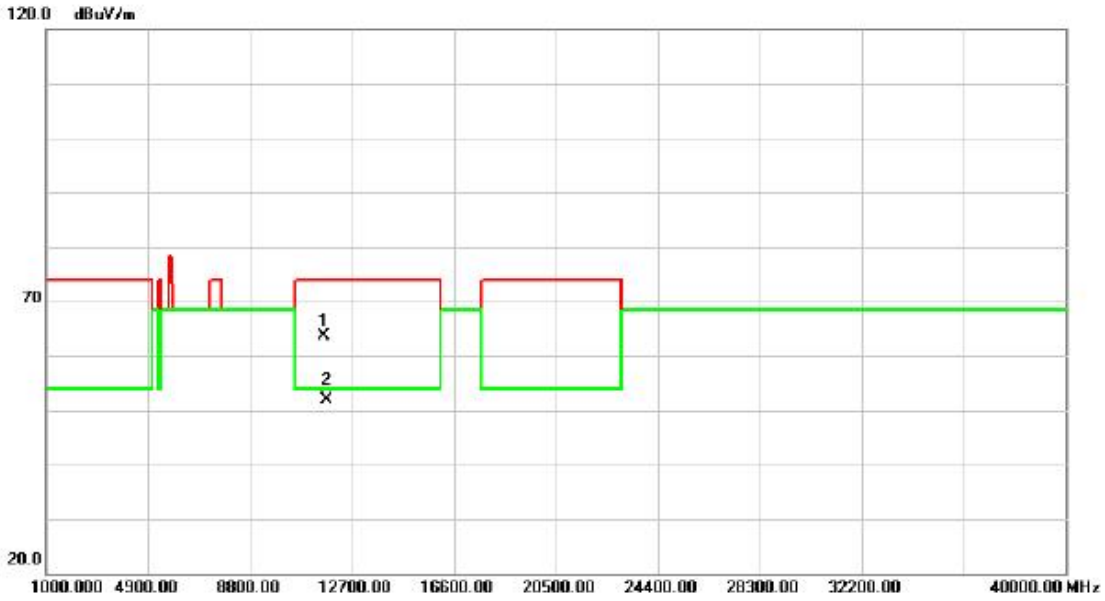
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5826.000	64.76	39.68	104.44	78.30	26.14	peak	NO LIMIT
2	*	5826.000	57.87	39.68	97.55	68.30	29.25	AVG	NO LIMIT
3		5850.000	29.69	39.73	69.42	78.30	-8.88	peak	
4		5850.000	17.47	39.73	57.20	68.30	-11.10	AVG	
5		5860.000	25.45	39.76	65.21	68.30	-3.09	peak	
6		5860.000	13.42	39.76	53.18	68.30	-15.12	AVG	

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

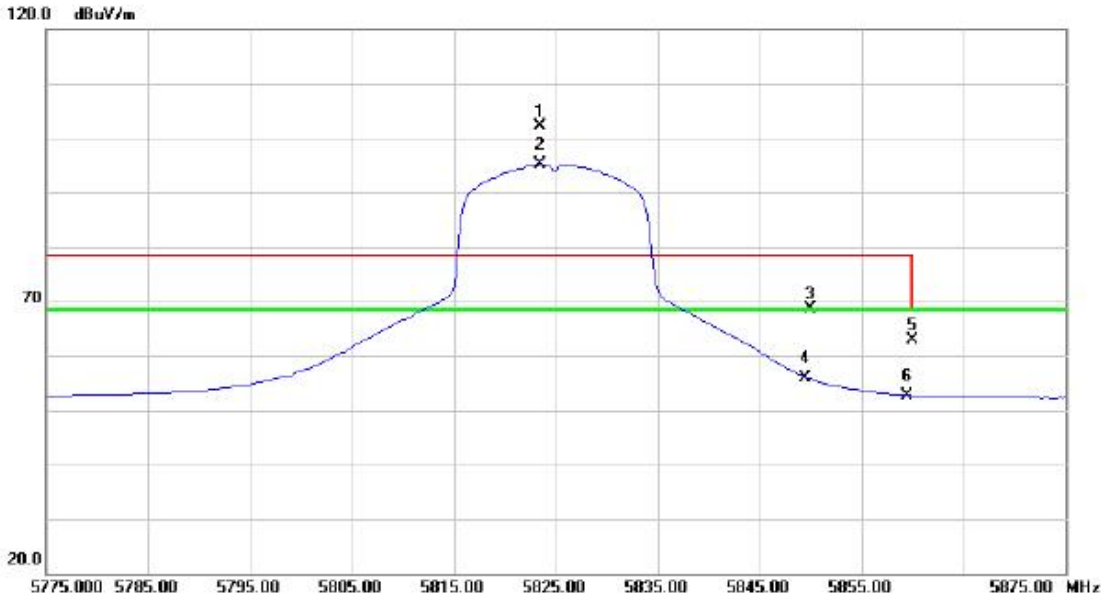
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.37	43.18	20.52	63.70	74.00	-10.30	peak	
2	*	11650.37	31.39	20.52	51.91	54.00	-2.09	AVG	

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

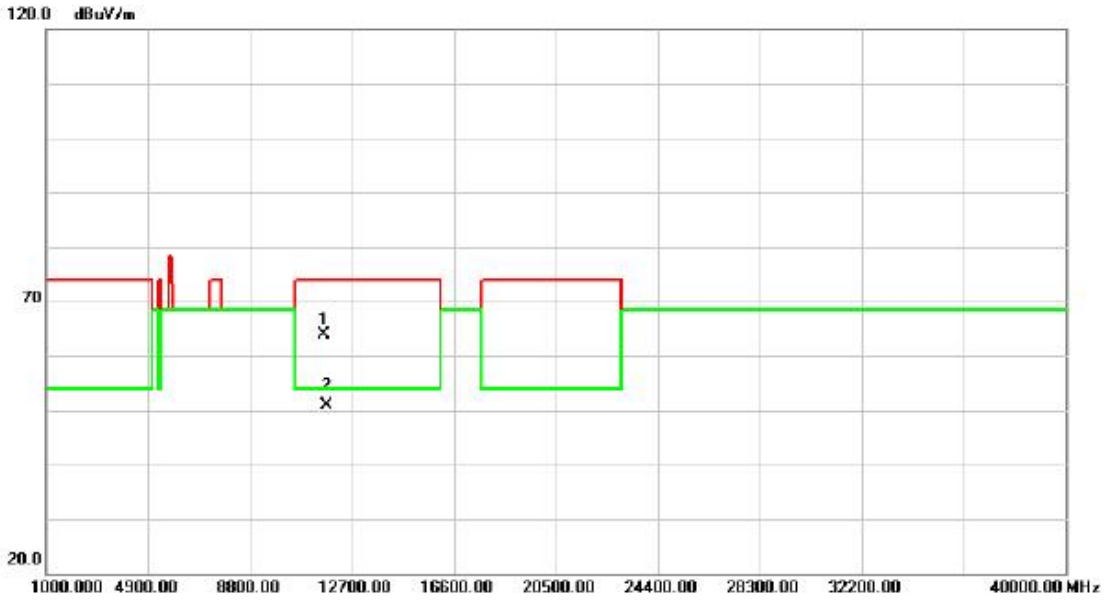
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5823.500	62.52	39.67	102.19	78.30	23.89	peak	NO LIMIT
2	*	5823.500	55.41	39.67	95.08	68.30	26.78	AVG	NO LIMIT
3		5850.000	29.01	39.73	68.74	78.30	-9.56	peak	
4		5850.000	16.12	39.73	55.85	68.30	-12.45	AVG	
5		5860.000	23.11	39.76	62.87	68.30	-5.43	peak	
6		5860.000	12.92	39.76	52.68	68.30	-15.62	AVG	

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

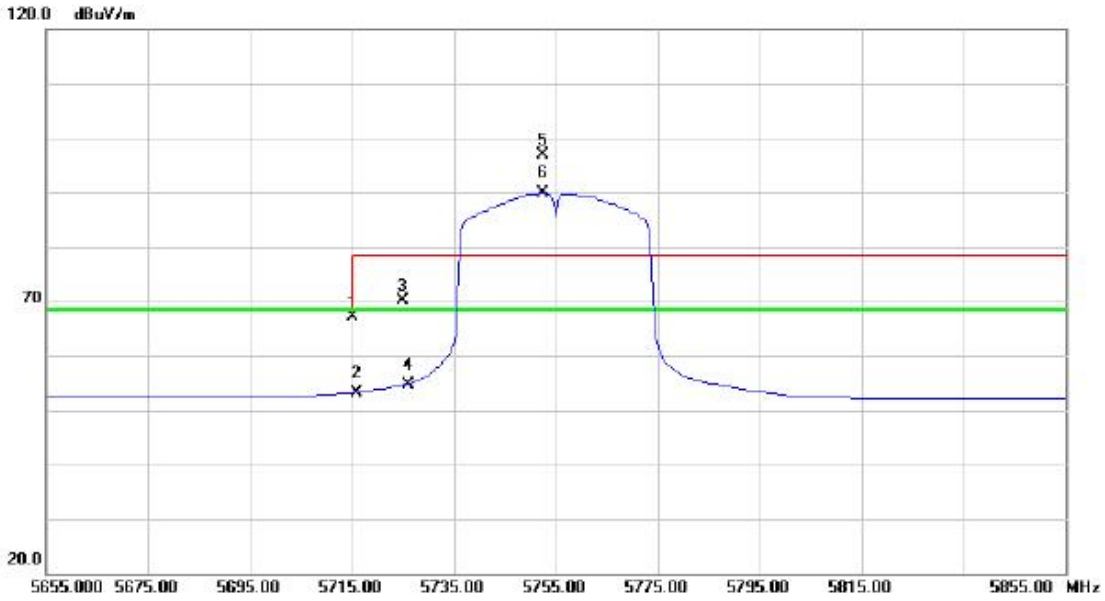
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.82	43.38	20.52	63.90	74.00	-10.10	peak	
2	*	11650.82	30.28	20.52	50.80	54.00	-3.20	AVG	

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

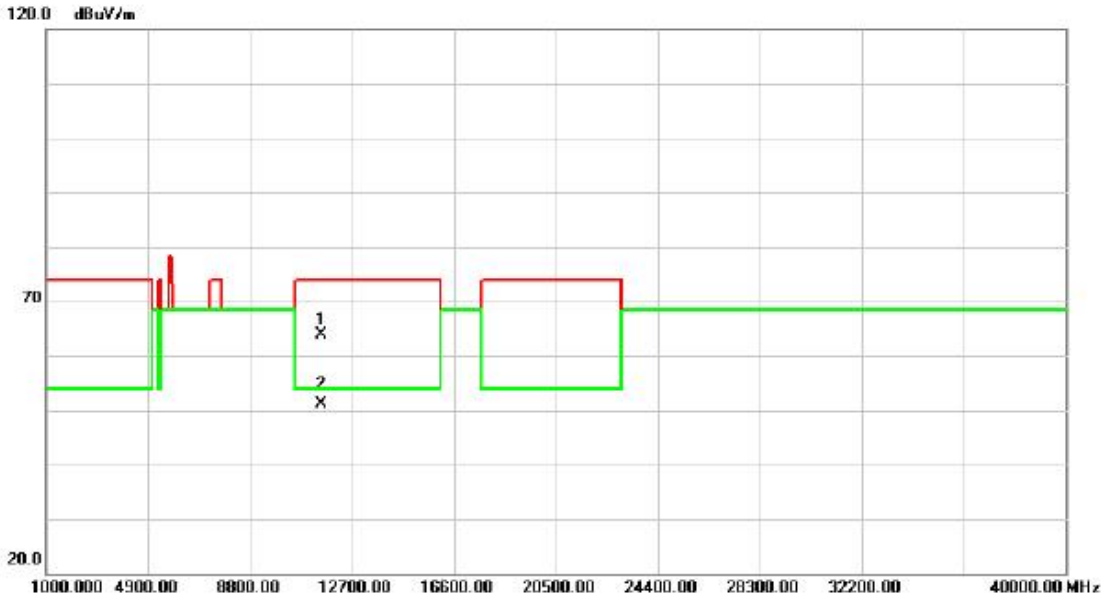
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	27.71	39.43	67.14	68.30	-1.16	peak	
2		5715.000	13.82	39.43	53.25	68.30	-15.05	AVG	
3		5725.000	30.62	39.45	70.07	78.30	-8.23	peak	
4		5725.000	15.13	39.45	54.58	68.30	-13.72	AVG	
5	X	5752.500	57.42	39.51	96.93	78.30	18.63	peak	NO LIMIT
6	*	5752.500	50.34	39.51	89.85	68.30	21.55	AVG	NO LIMIT

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

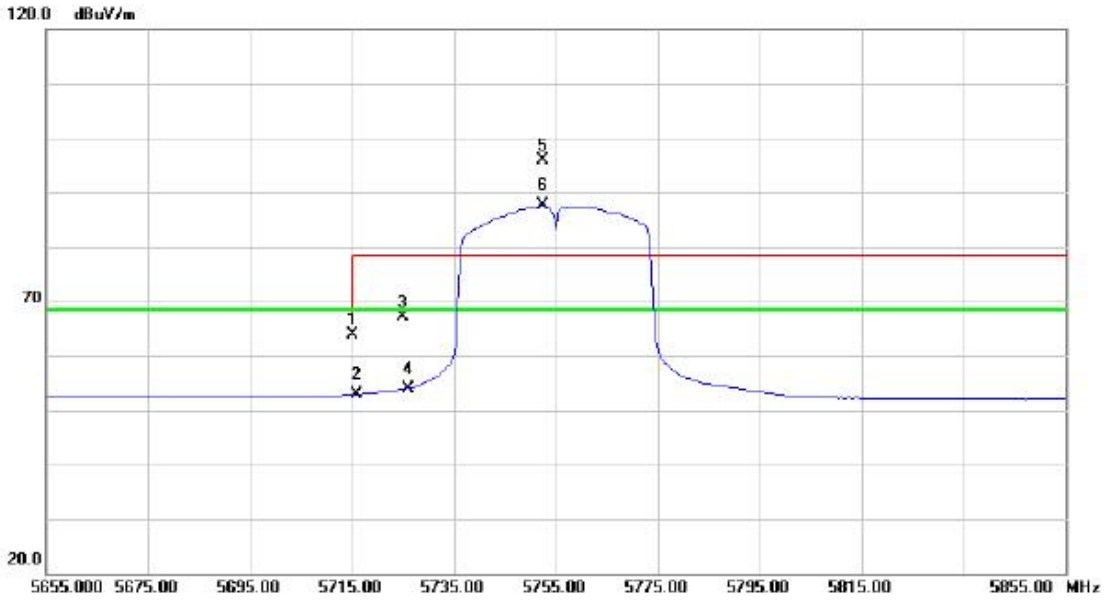
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11511.21	43.45	20.35	63.80	74.00	-10.20	peak	
2	*	11511.21	30.83	20.35	51.18	54.00	-2.82	AVG	

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

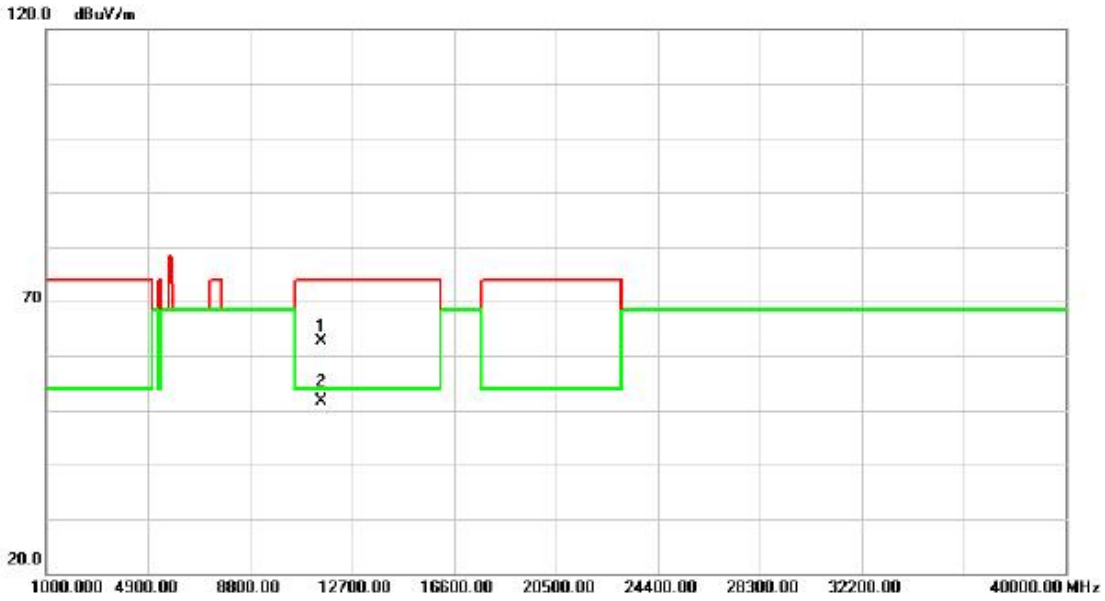
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	24.52	39.43	63.95	68.30	-4.35	peak	
2		5715.000	13.39	39.43	52.82	68.30	-15.48	AVG	
3		5725.000	27.73	39.45	67.18	78.30	-11.12	peak	
4		5725.000	14.40	39.45	53.85	68.30	-14.45	AVG	
5	X	5752.500	56.36	39.51	95.87	78.30	17.57	peak	NO LIMIT
6	*	5752.500	48.00	39.51	87.51	68.30	19.21	AVG	NO LIMIT

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

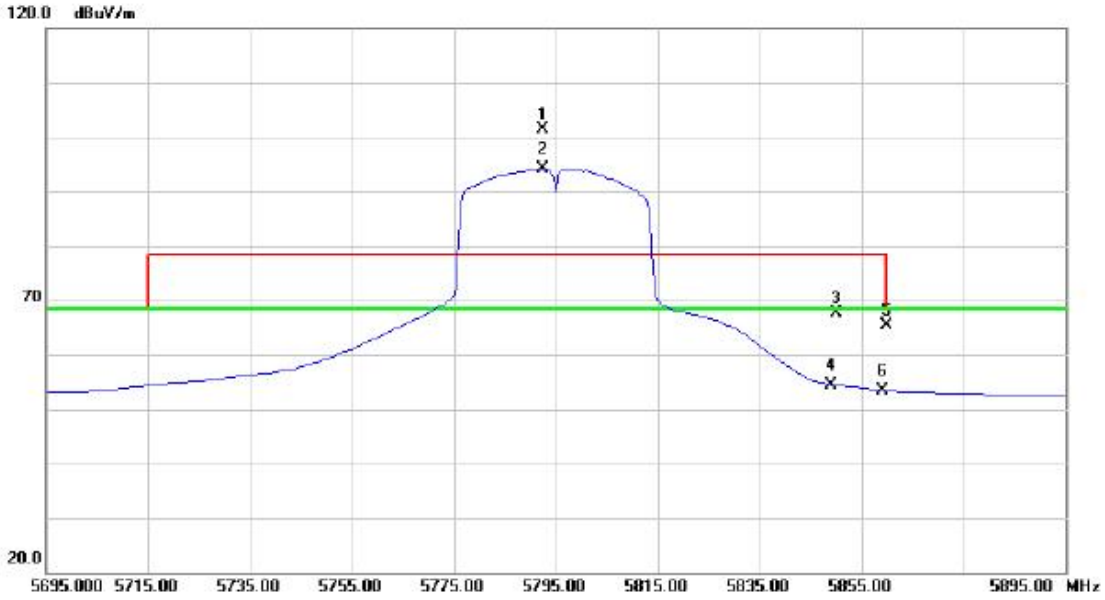
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11511.24	42.18	20.35	62.53	74.00	-11.47	peak	
2	*	11511.24	31.29	20.35	51.64	54.00	-2.36	AVG	

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

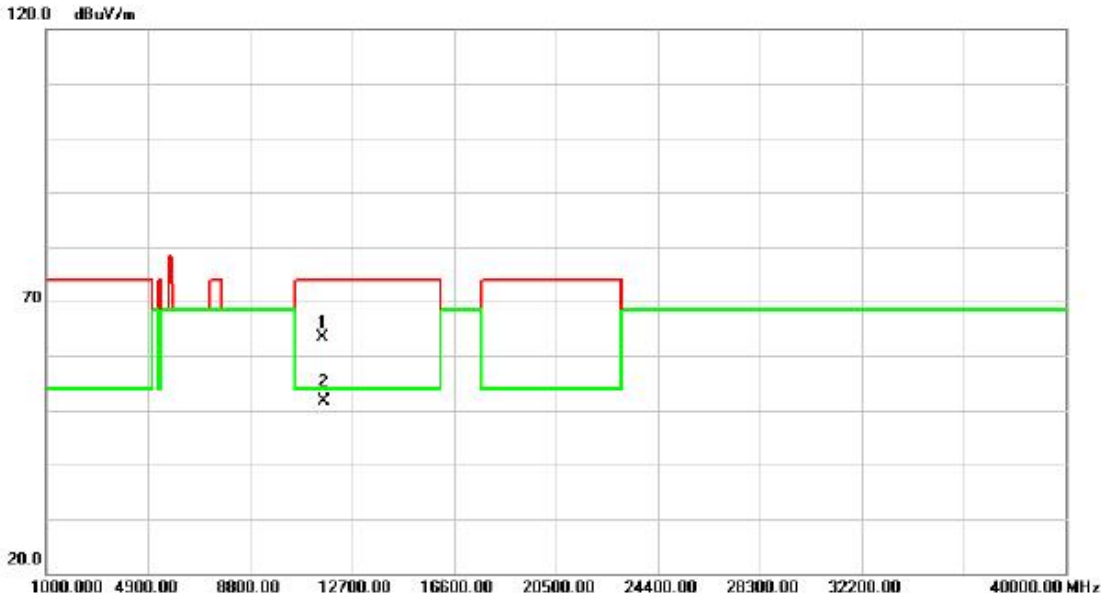
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5792.500	61.80	39.61	101.41	78.30	23.11	peak	NO LIMIT
2	*	5792.500	54.58	39.61	94.19	68.30	25.89	AVG	NO LIMIT
3		5850.000	27.78	39.73	67.51	78.30	-10.79	peak	
4		5850.000	14.66	39.73	54.39	68.30	-13.91	AVG	
5		5860.000	25.67	39.76	65.43	68.30	-2.87	peak	
6		5860.000	13.69	39.76	53.45	68.30	-14.85	AVG	

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

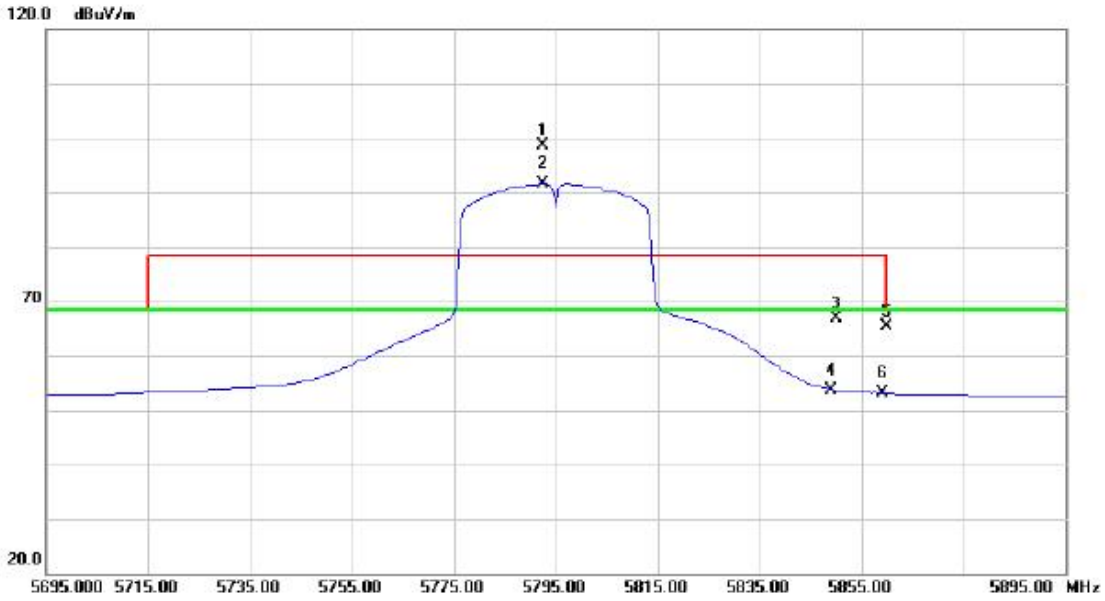
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.23	43.02	20.44	63.46	74.00	-10.54	peak	
2	*	11590.23	31.18	20.44	51.62	54.00	-2.38	AVG	

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

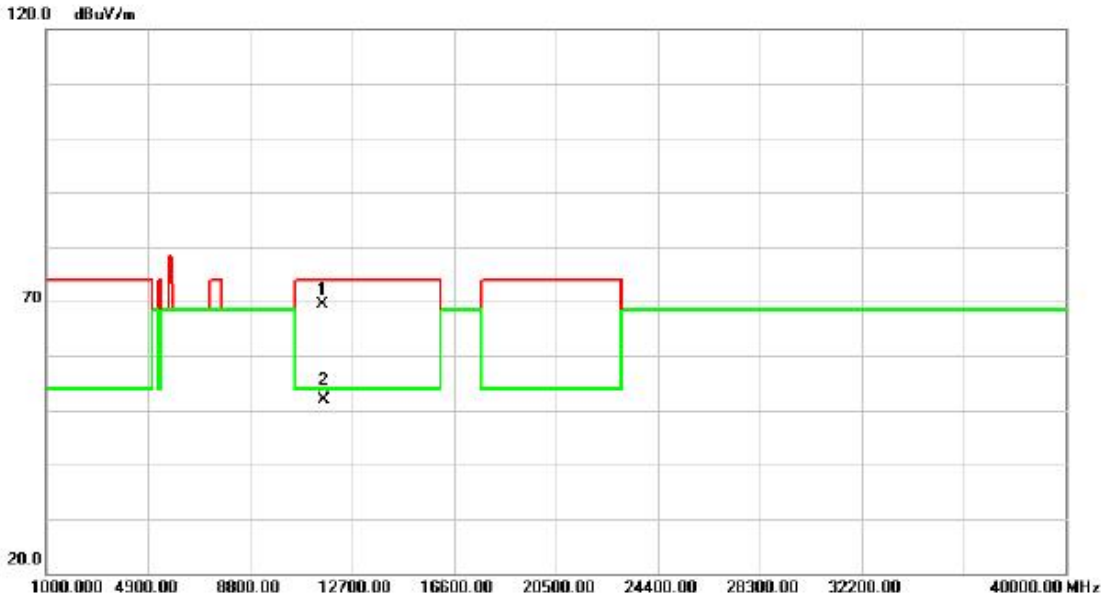
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5792.500	58.99	39.61	98.60	78.30	20.30	peak	NO LIMIT
2	*	5792.500	52.00	39.61	91.61	68.30	23.31	AVG	NO LIMIT
3		5850.000	27.13	39.73	66.86	78.30	-11.44	peak	
4		5850.000	13.96	39.73	53.69	68.30	-14.61	AVG	
5		5860.000	25.54	39.76	65.30	68.30	-3.00	peak	
6		5860.000	13.33	39.76	53.09	68.30	-15.21	AVG	

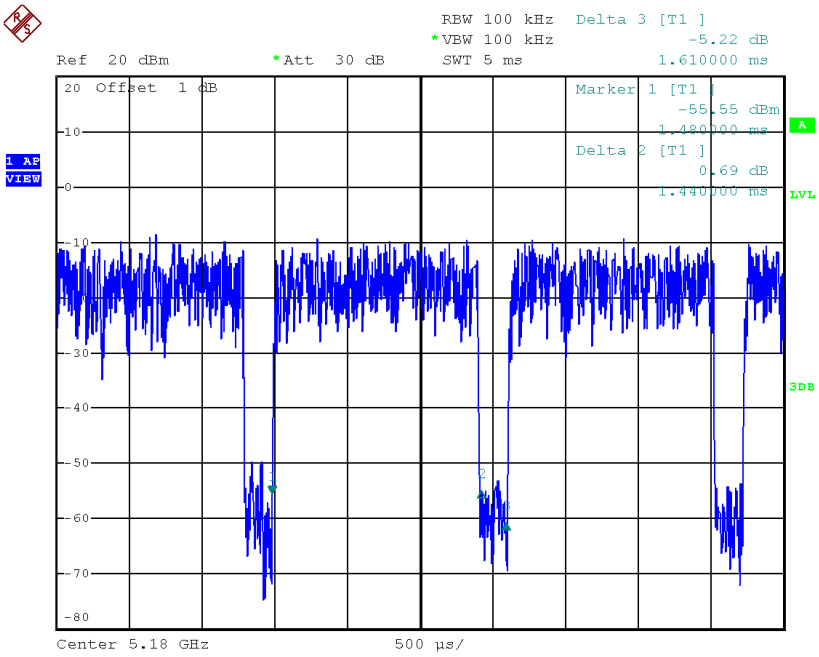
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N40 Mode 5795MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11591.32	48.83	20.45	69.28	74.00	-4.72	peak	
2	*	11591.32	31.38	20.45	51.83	54.00	-2.17	AVG	

TX A Mode_DUTY CYCLE



Date: 9.JAN.2015 15:33:06

Duty cycle: TX 5180MHz

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

T_{ON}: 1.44 msec

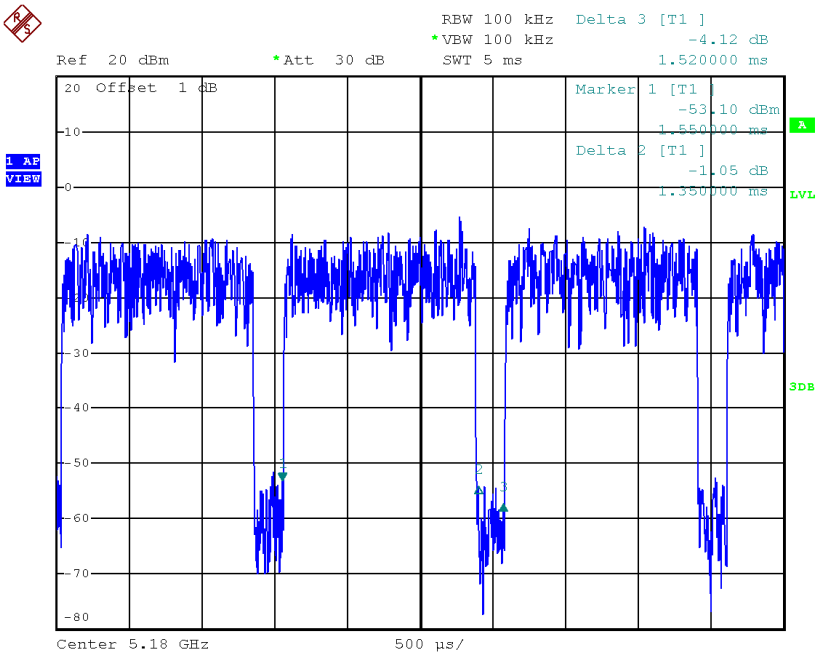
T_{Total}: 1.61 msec

Duty cycle: 0.894

Duty Factor = 10 log(1/Duty cycle)

Duty Factor = 0.48

TX N20 Mode_DUTY CYCLE



Date: 9.JAN.2015 15:35:14

Duty cycle: TX 5180MHz

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

T_{ON}: 1.35 msec

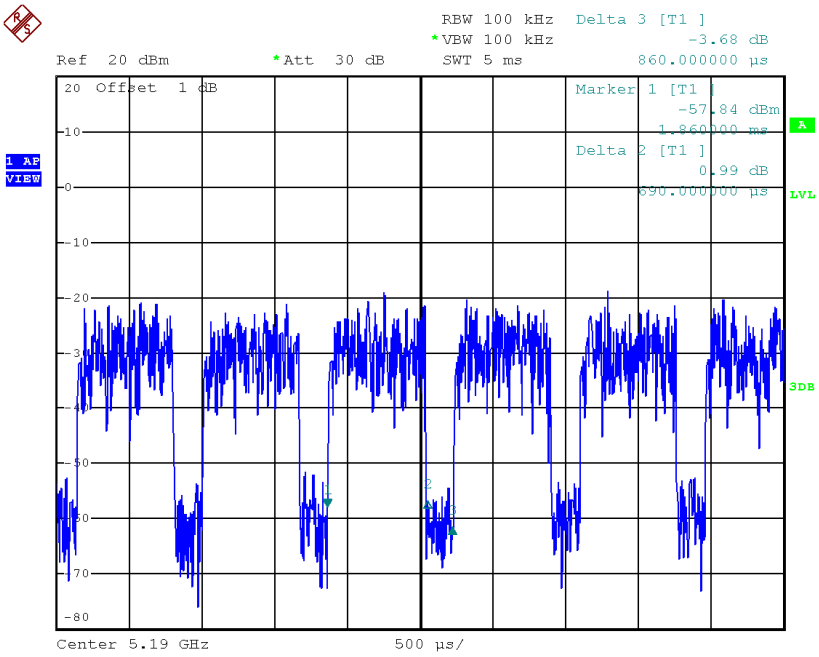
T_{Total}: 1.52 msec

Duty cycle: 0.888

Duty Factor = 10 log(1/Duty cycle)

Duty Factor = 0.52

TX N40 Mode_DUTY CYCLE



Date: 9.JAN.2015 15:36:21

Duty cycle: TX 5190MHz

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

T_{ON}: 0.69 msec

T_{Total}: 0.86 msec

Duty cycle: 0.802

Duty Factor = 10 log(1/Duty cycle)

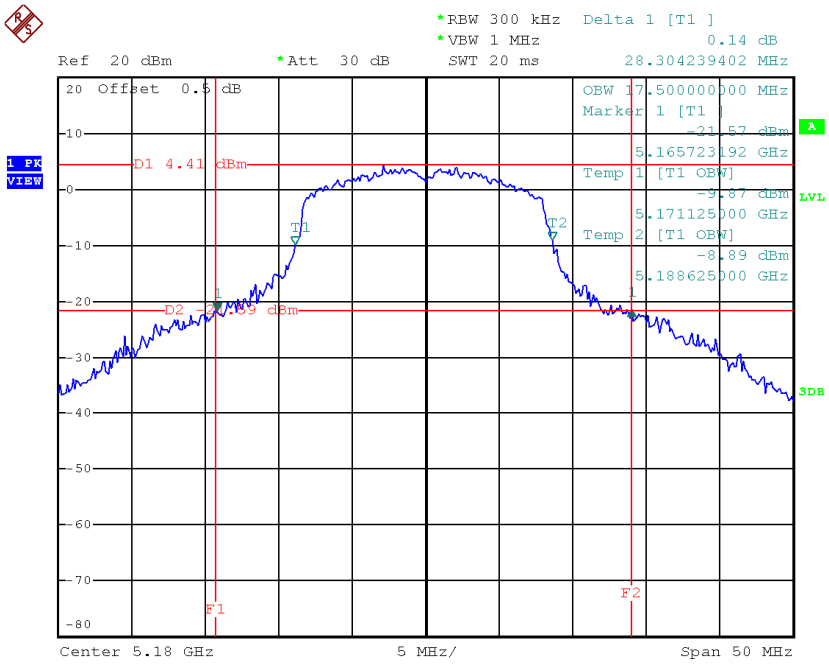
Duty Factor = 0.96

ATTACHMENT E - BANDWIDTH

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

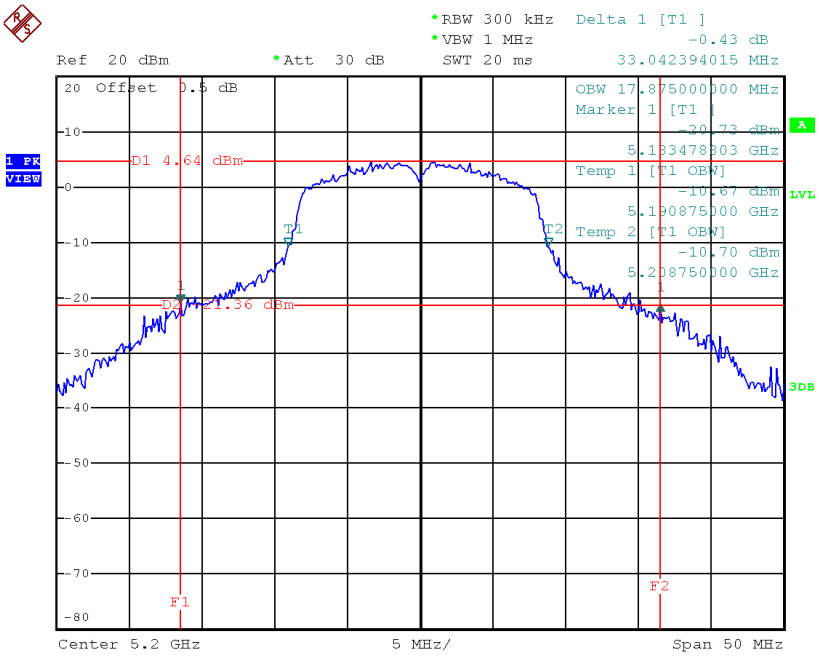
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	28.30	17.50
CH40	5200	33.04	17.88
CH48	5240	32.29	18.50

TX CH36



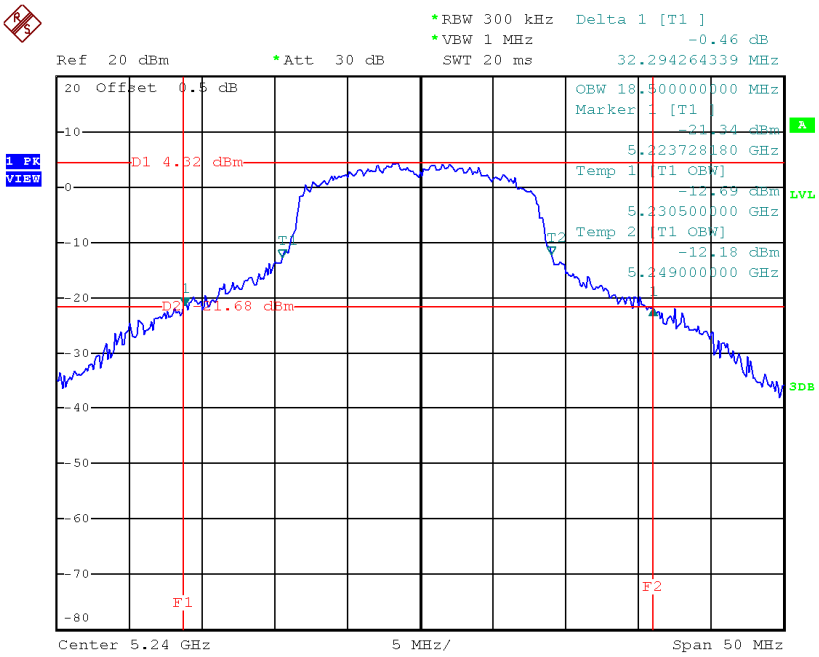
Date: 9.JAN.2015 11:46:35

TX CH40



Date: 9.JAN.2015 11:50:21

TX CH48

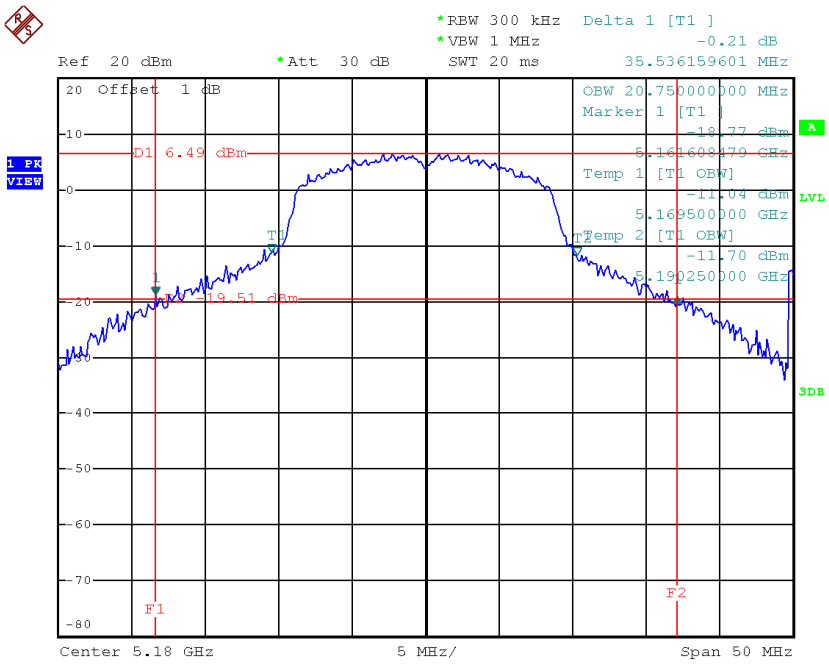


Date: 9.JAN.2015 11:51:56

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

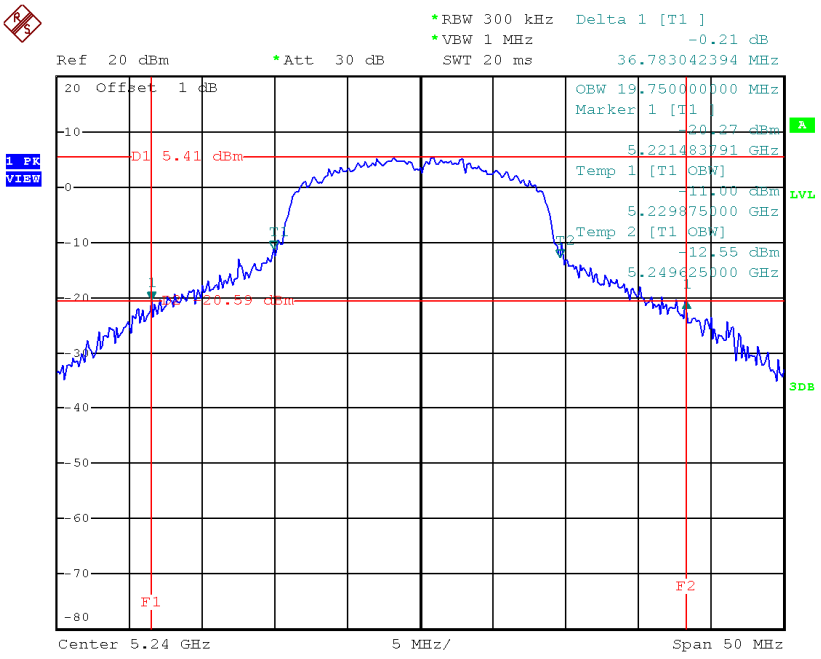
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH36	5180	35.54	20.75
CH40	5200	35.79	20.00
CH48	5240	36.78	19.75

TX CH36



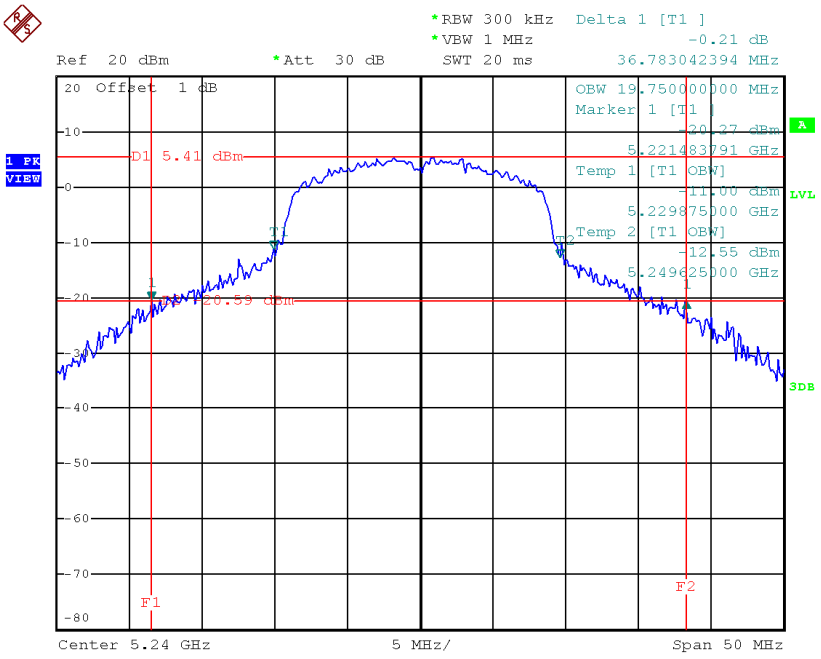
Date: 9.JAN.2015 13:41:52

TX CH40



Date: 9.JAN.2015 13:43:52

TX CH48

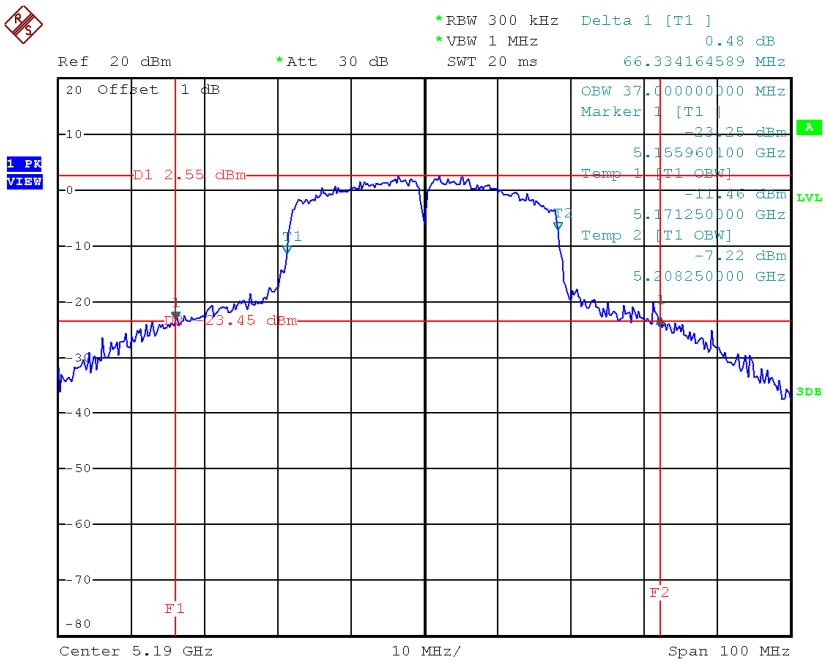


Date: 9.JAN.2015 13:43:52

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

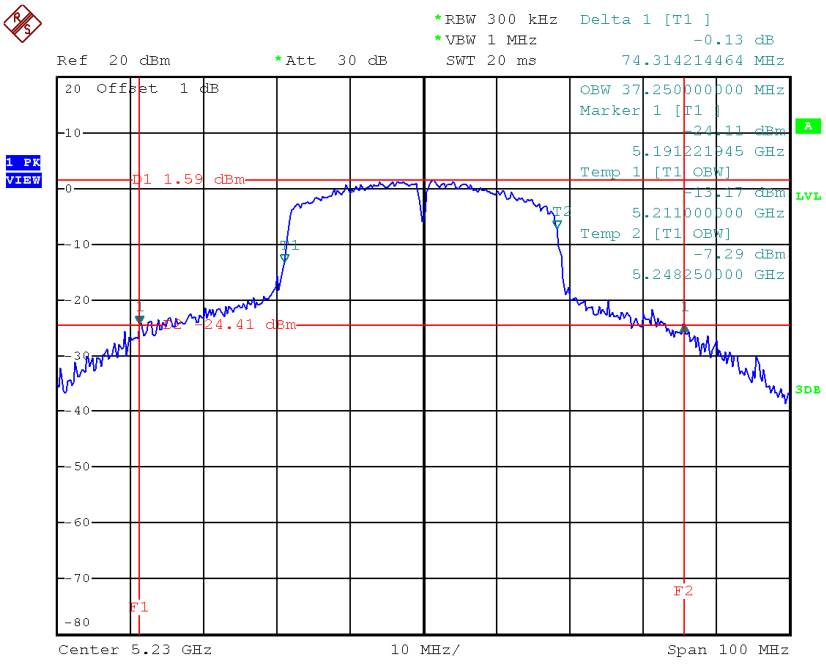
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH38	5190	66.33	37.00
CH46	5230	74.31	37.25

TX CH38



Date: 9.JAN.2015 13:50:06

TX CH46

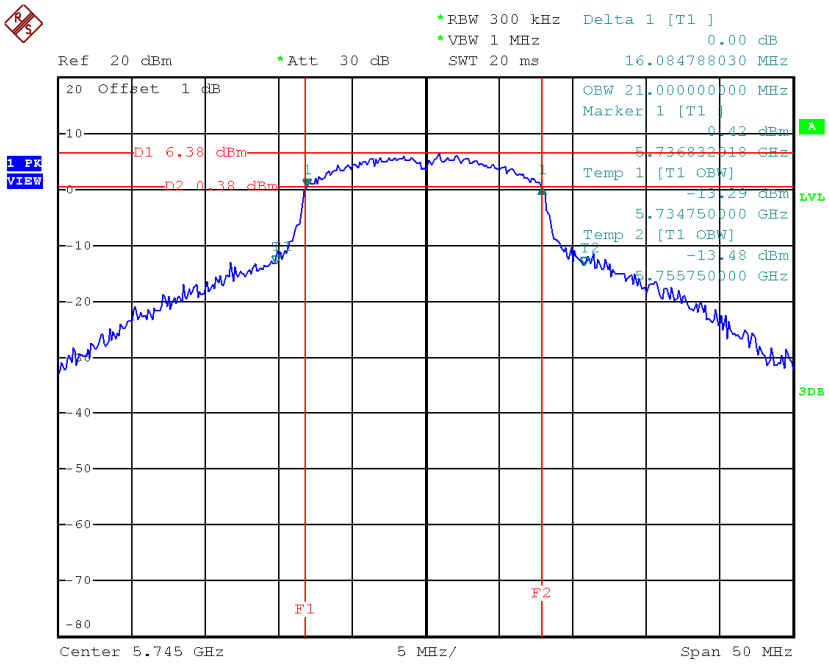


Date: 9.JAN.2015 13:51:25

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

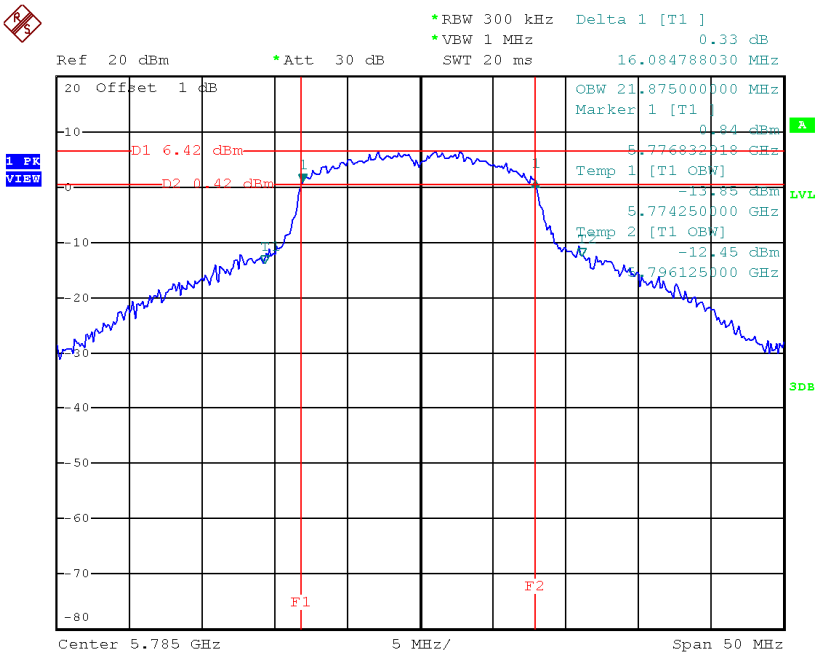
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (KHz)
CH149	5745	16.08	21.00	>=500
CH157	5785	16.08	21.88	>=500
CH165	5825	16.08	21.25	>=500

TX CH 149



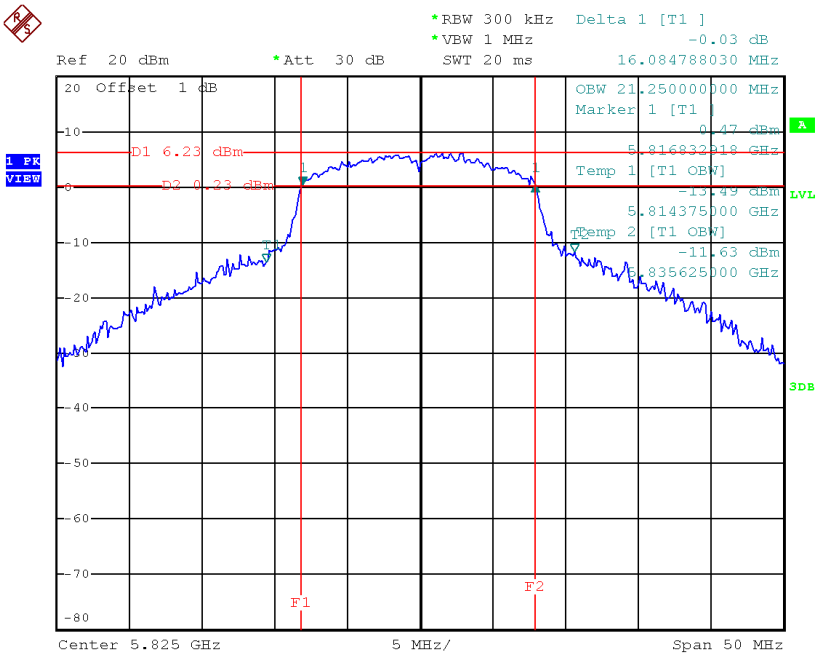
Date: 9.JAN.2015 12:29:18

TX CH 157



Date: 9.JAN.2015 12:30:43

TX CH 165

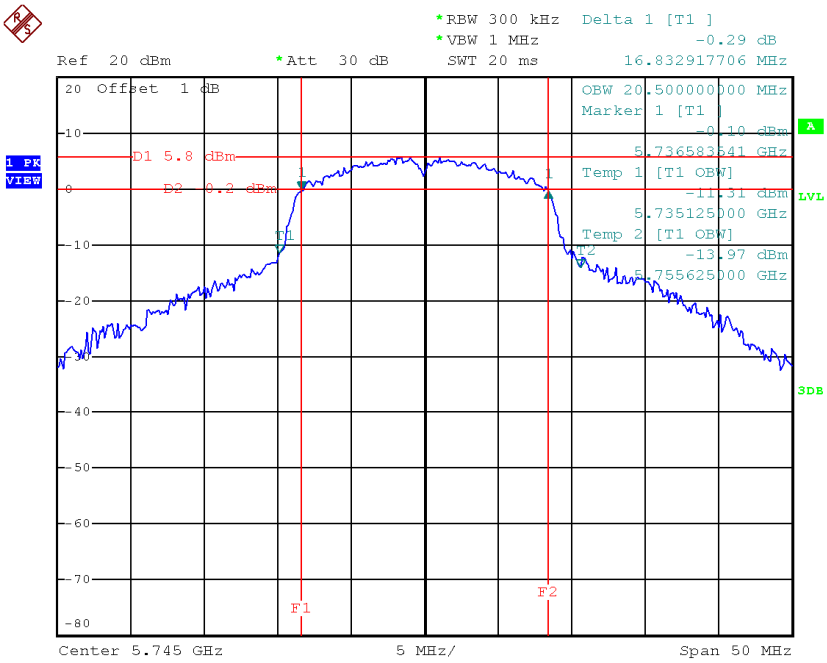


Date: 9.JAN.2015 12:28:25

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

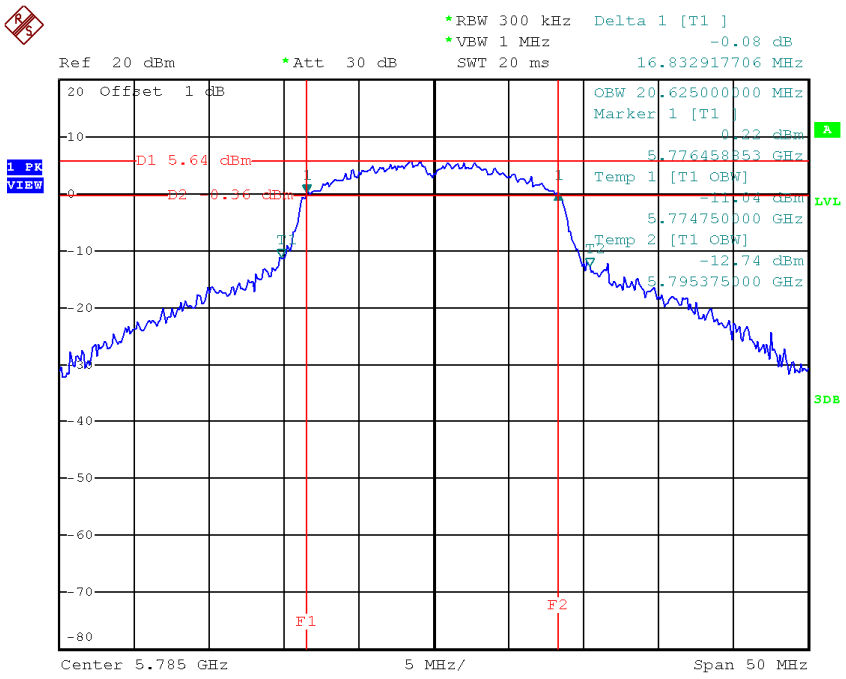
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (KHz)
CH149	5745	16.83	20.50	>=500
CH157	5785	16.83	20.63	>=500
CH165	5825	16.71	21.63	>=500

TX CH 149



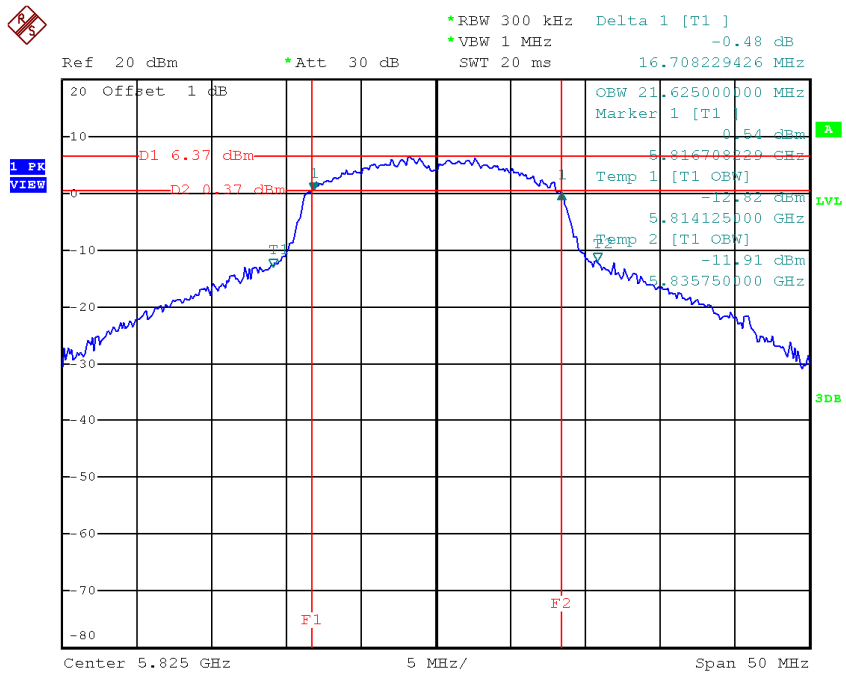
Date: 9.JAN.2015 13:45:14

TX CH 157



Date: 9.JAN.2015 13:46:11

TX CH 165

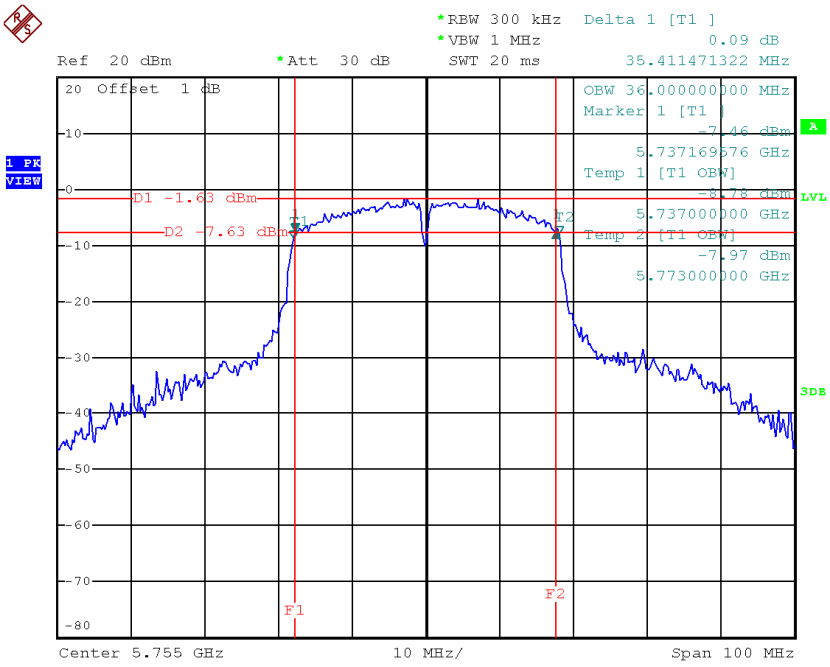


Date: 9.JAN.2015 13:47:55

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

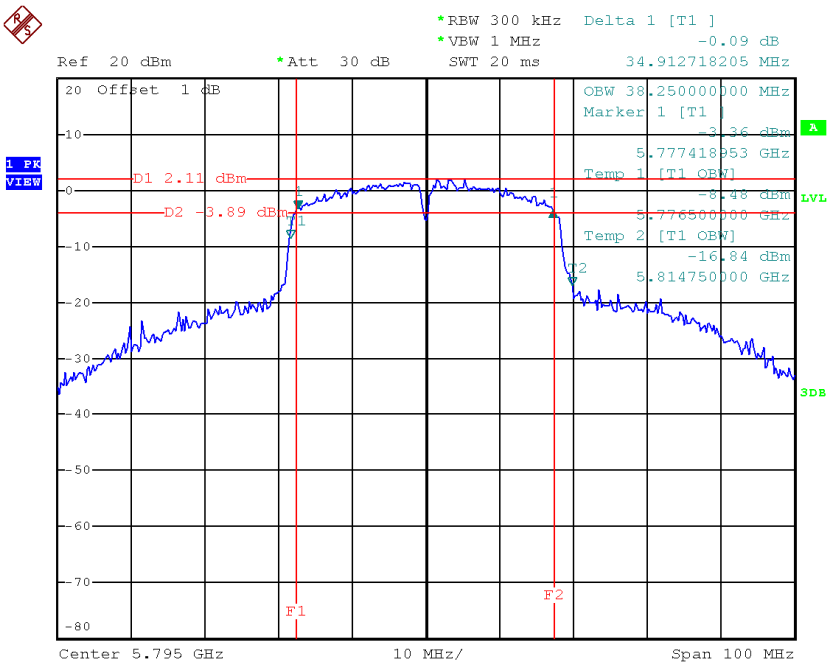
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (KHz)
CH151	5755	35.41	36.00	>=500
CH159	5795	34.91	38.25	>=500

TX CH 151



Date: 9.JAN.2015 13:53:28

TX CH 159



Date: 9.JAN.2015 13:56:09

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	20.19	0.48	20.67	24.00	0.25
CH40	5200	20.15	0.48	20.63	24.00	0.25
CH48	5240	20.08	0.48	20.56	24.00	0.25

Test Mode: UNII-1/TX N20 Mode

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power+Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH36	5180	20.25	0.52	20.77	24.00	0.25
CH40	5200	20.23	0.52	20.75	24.00	0.25
CH48	5240	20.10	0.52	20.62	24.00	0.25

Test Mode: UNII-1/TX N40 Mode

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power+Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH38	5190	19.75	0.96	20.71	24.00	0.25
CH46	5230	20.07	0.96	21.03	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	20.54	0.48	21.02	30.00	1.00
CH157	5785	20.35	0.48	20.83	30.00	1.00
CH165	5825	20.22	0.48	20.70	30.00	1.00

Test Mode: UNII-3/TX N20 Mode

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power+Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH149	5745	20.34	0.52	20.86	30.00	1.00
CH157	5785	20.32	0.52	20.84	30.00	1.00
CH165	5825	20.26	0.52	20.78	30.00	1.00

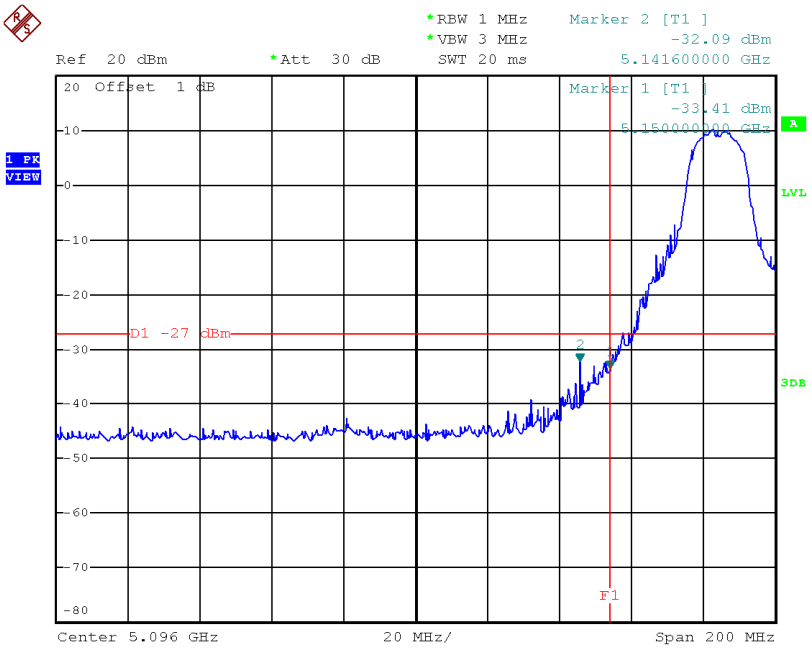
Test Mode: UNII-3/ TX N40 Mode

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dBm)	Output Power+Duty Factor (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	18.95	0.96	19.91	30.00	1.00
CH159	5795	20.25	0.96	21.21	30.00	1.00

ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

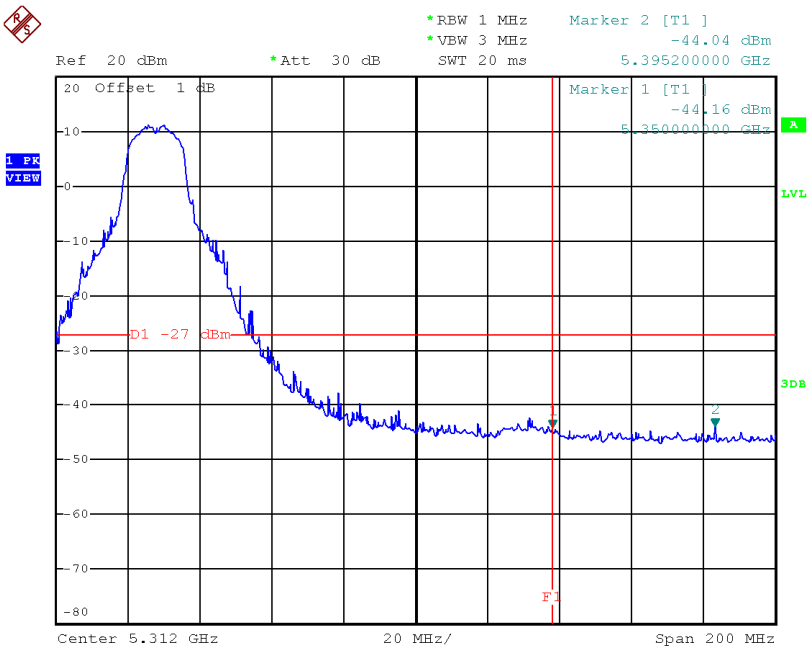
Test Mode:	UNII-1/TX A Mode

TX mode CH36



Date: 9.JAN.2015 14:26:30

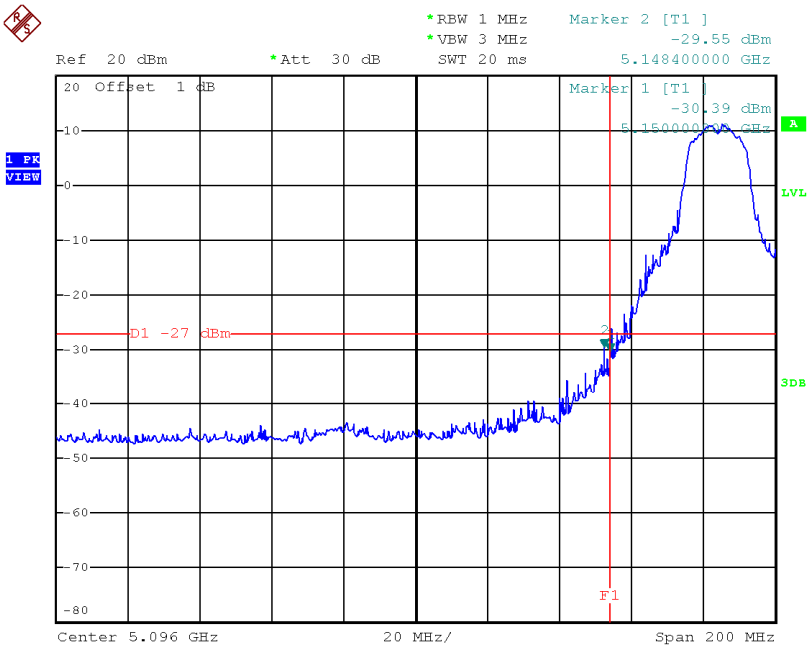
TX mode CH48



Date: 9.JAN.2015 14:29:49

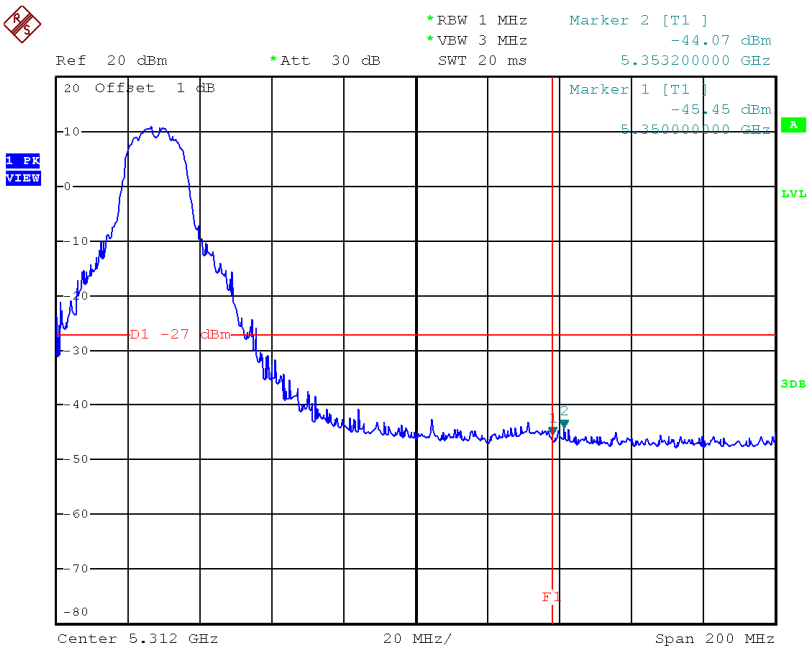
Test Mode:	UNII-1/TX N20 Mode

TX mode CH36



Date: 9.JAN.2015 14:37:51

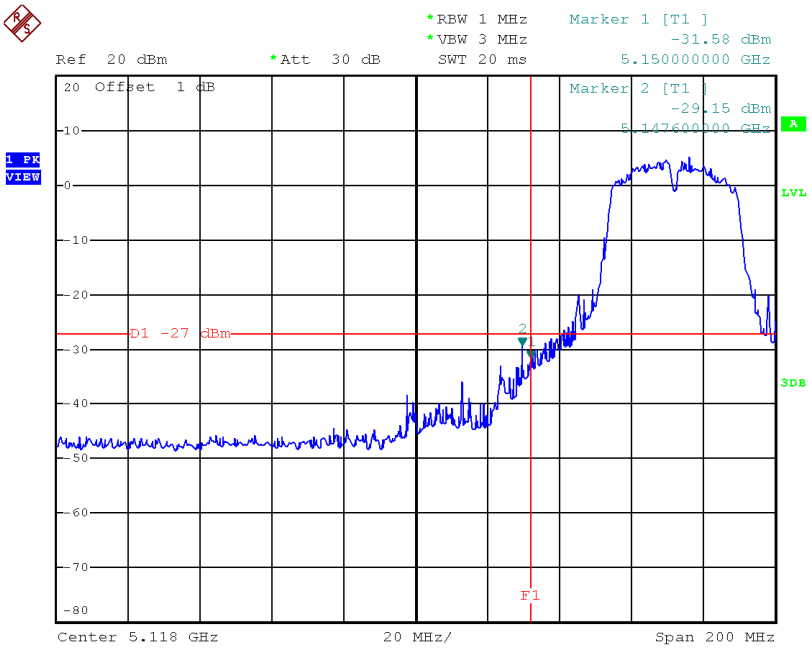
TX mode CH48



Date: 9.JAN.2015 14:39:22

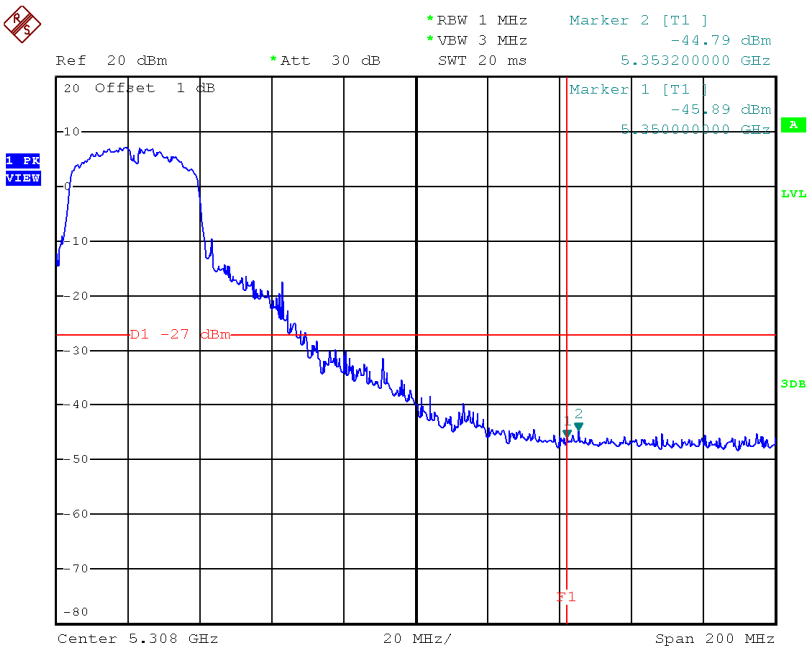
Test Mode:	UNII-1/TX N40 Mode

TX mode CH38



Date: 9.JAN.2015 14:45:41

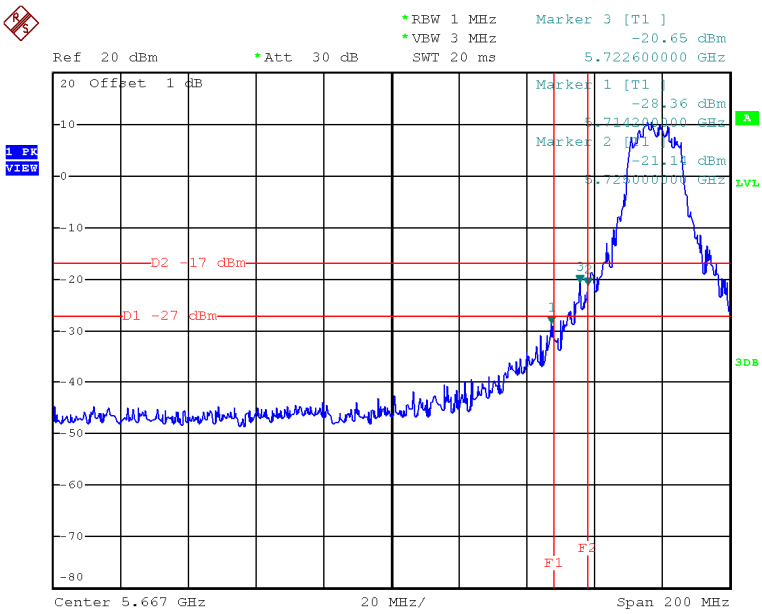
TX mode CH46



Date: 9.JAN.2015 14:47:08

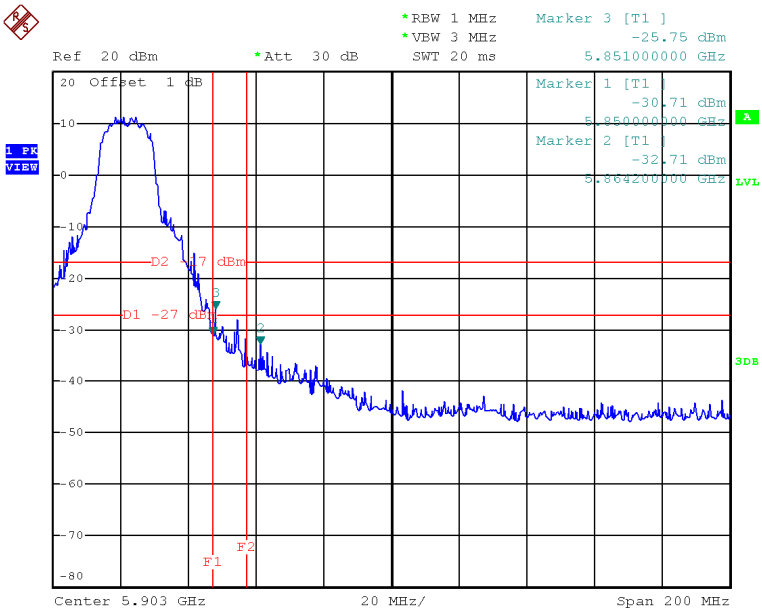
Test Mode:	UNII-3/TX A Mode

TX A Mode CH149



Date: 9.JAN.2015 16:22:49

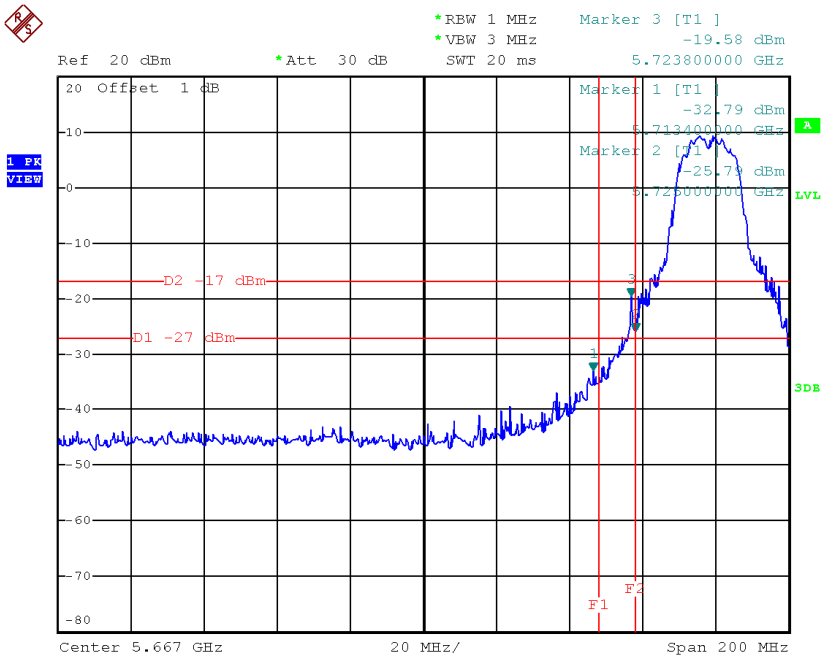
TX A Mode CH165



Date: 9.JAN.2015 16:25:30

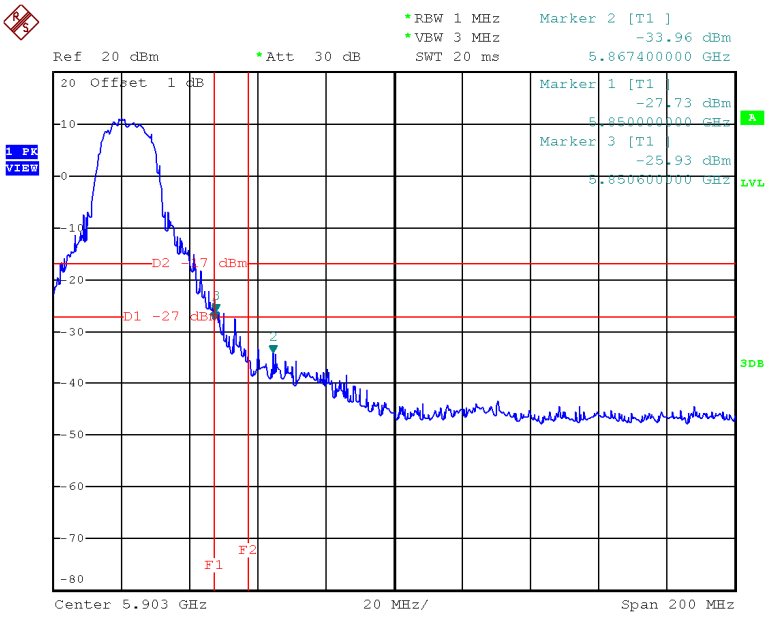
Test Mode:	UNII-3/TX N20 Mode

TX HT20 mode CH149



Date: 9.JAN.2015 16:29:12

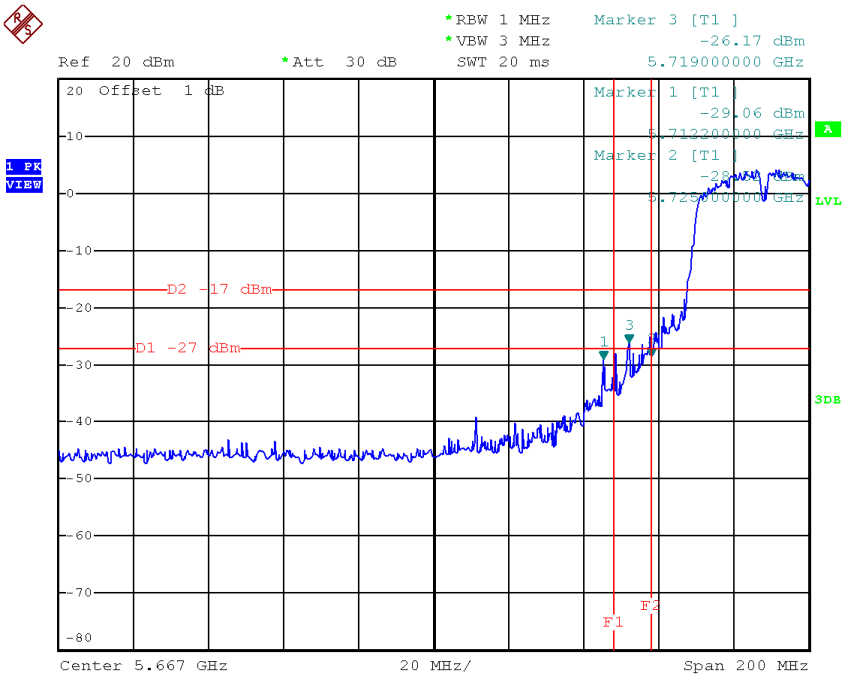
TX HT20 mode CH165



Date: 9.JAN.2015 16:27:08

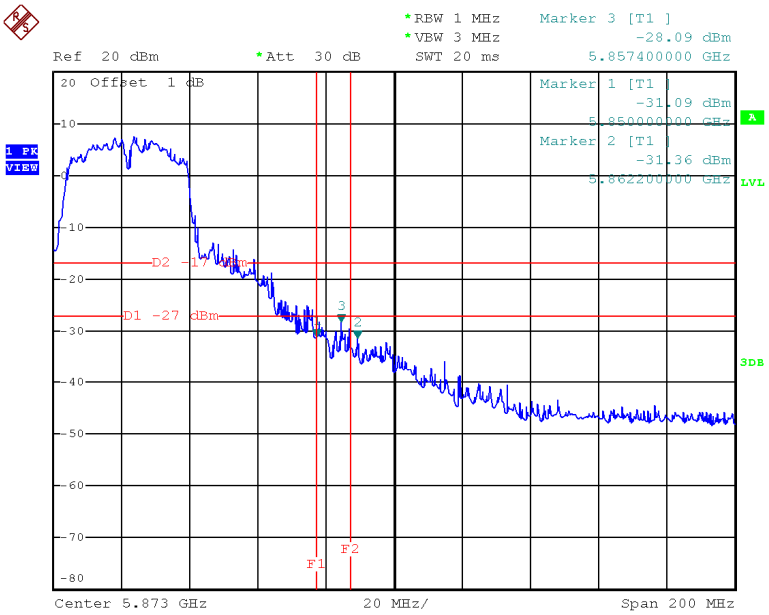
Test Mode:	UNII-3/TX N40 Mode

UNII-3/TX HT40 mode CH151



Date: 9.JAN.2015 16:31:01

UNII-3/TX HT40 mode CH159



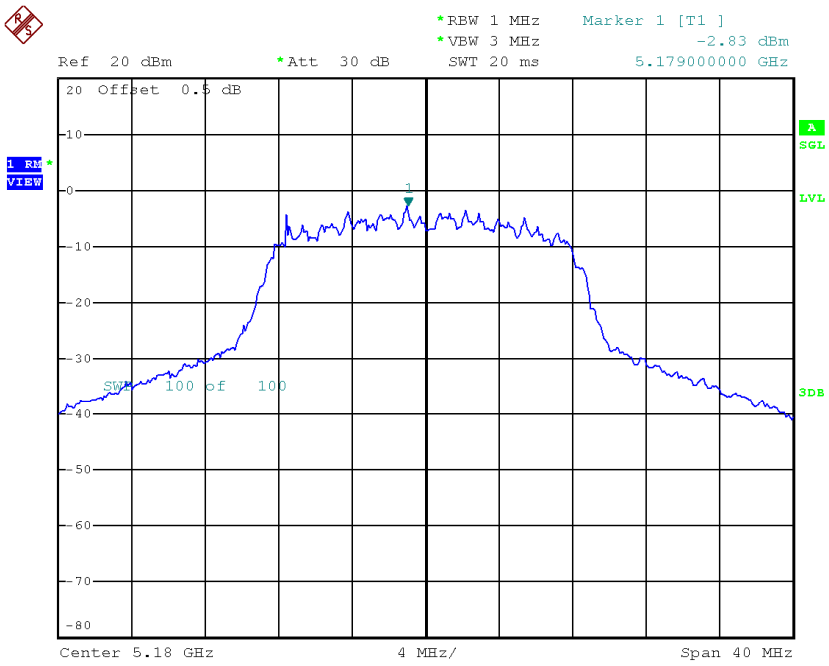
Date: 9.JAN.2015 16:32:45

ATTACHMENT H - POWER SPECTRAL DENSITY

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

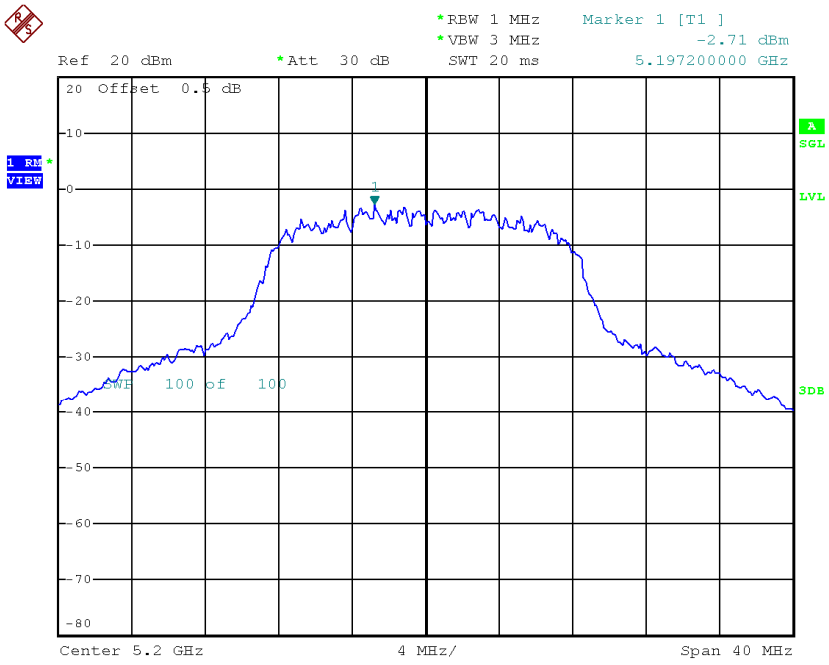
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density+Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	-2.83	0.48	-2.35	11.00
CH40	5200	-2.71	0.48	-2.23	11.00
CH48	5240	-1.22	0.48	-0.74	11.00

CH36



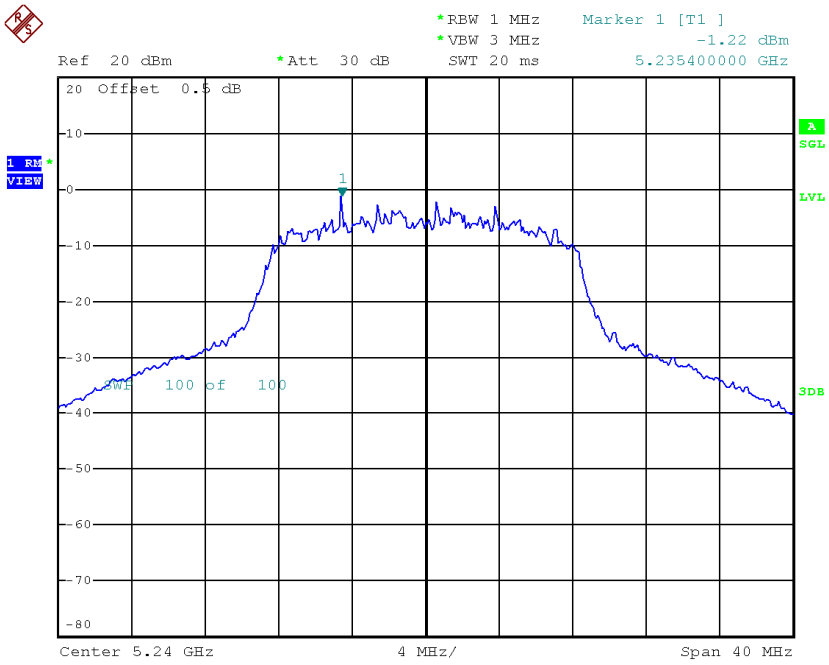
Date: 9.JAN.2015 11:48:45

CH40



Date: 9.JAN.2015 11:50:41

CH48

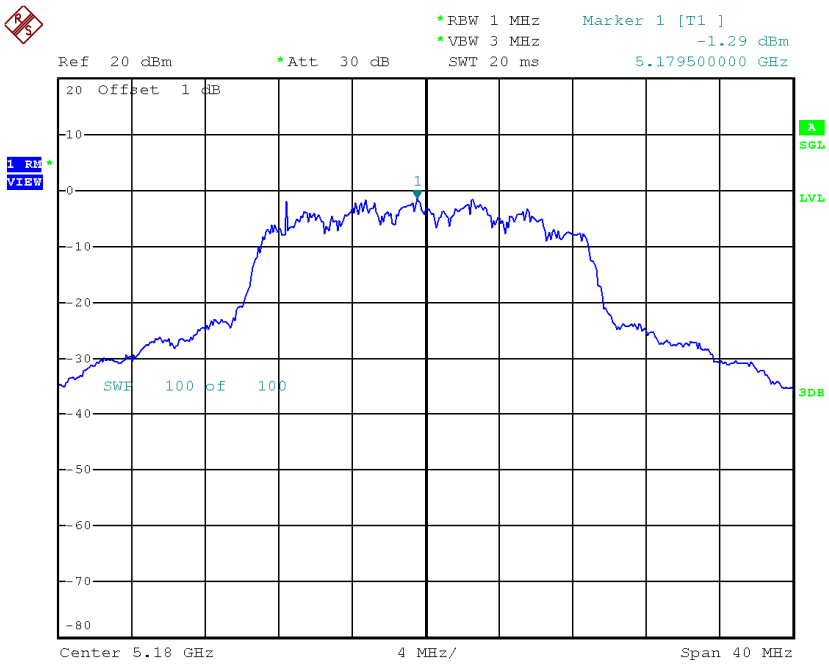


Date: 9.JAN.2015 11:52:16

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

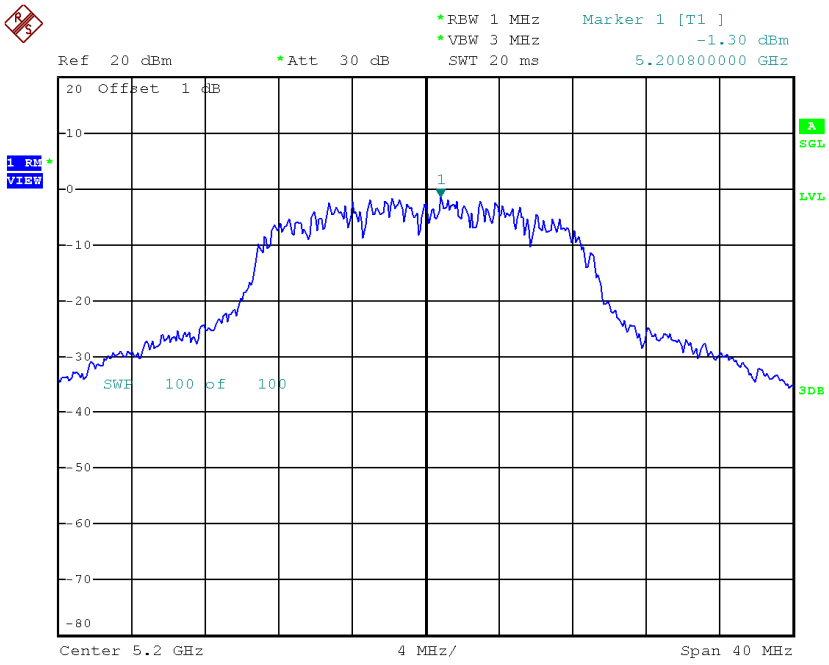
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density+Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH36	5180	-1.29	0.52	-0.77	11.00
CH40	5200	-1.30	0.52	-0.78	11.00
CH48	5240	0.16	0.52	0.68	11.00

CH36



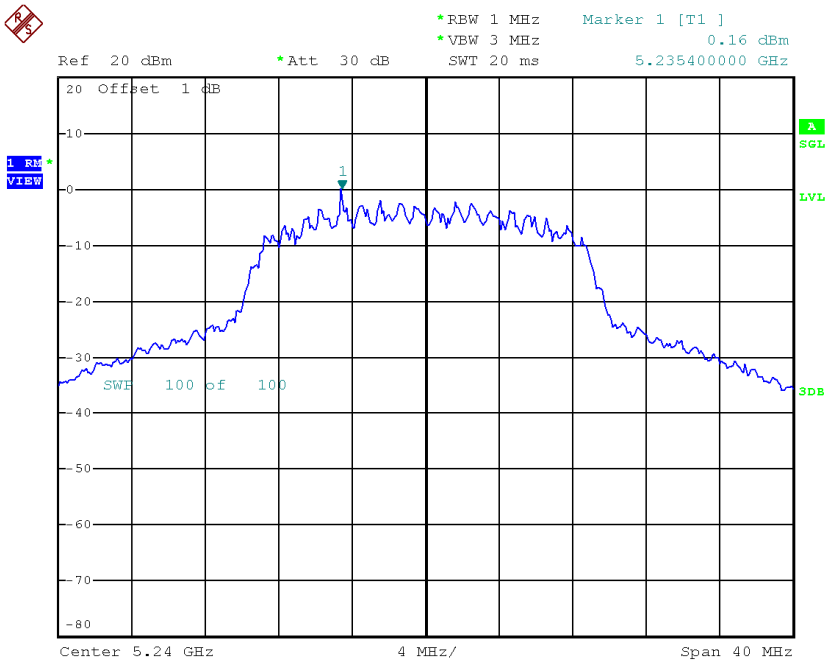
Date: 9.JAN.2015 13:42:11

CH40



Date: 9.JAN.2015 13:43:09

CH48

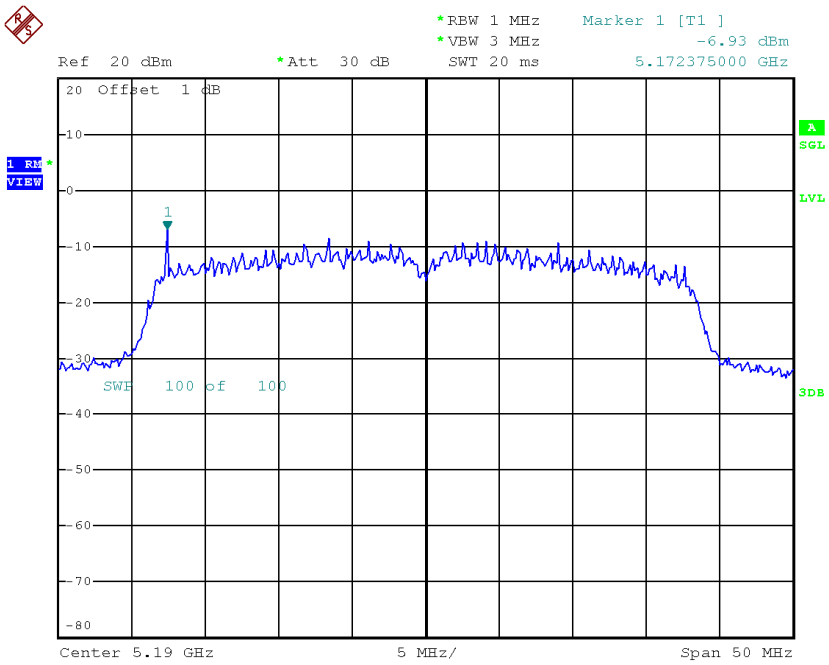


Date: 9.JAN.2015 13:44:13

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

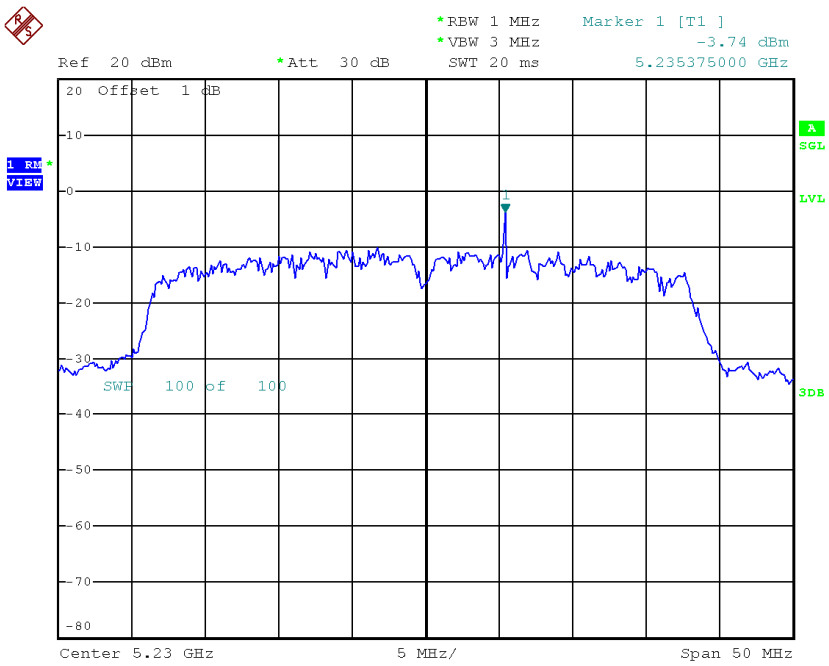
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density+Duty Factor (dBm/MHz)	Limit (dBm/MHz)
CH38	5190	-6.93	0.96	-5.97	11.00
CH46	5230	-3.74	0.96	-2.78	11.00

CH38



Date: 9.JAN.2015 13:50:29

CH46

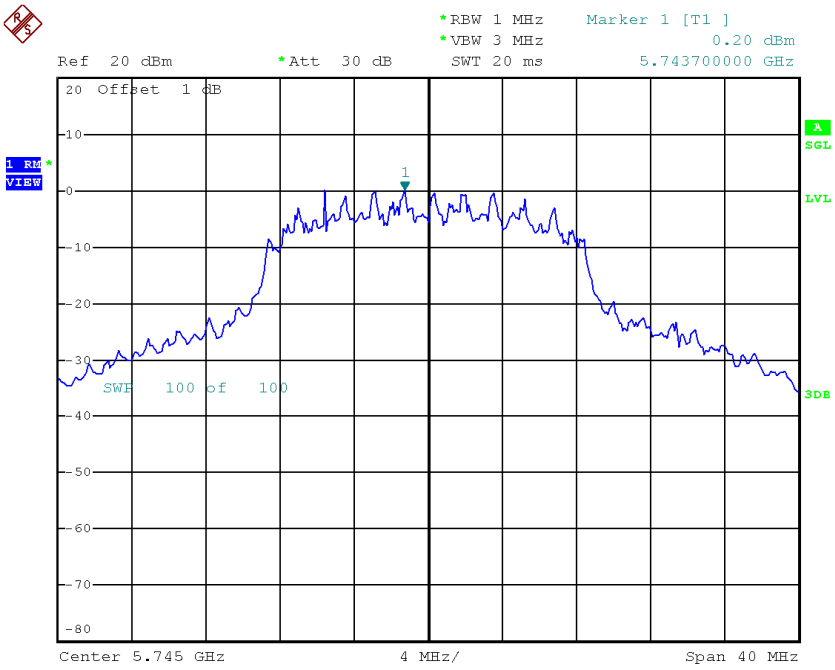


Date: 9.JAN.2015 13:51:46

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

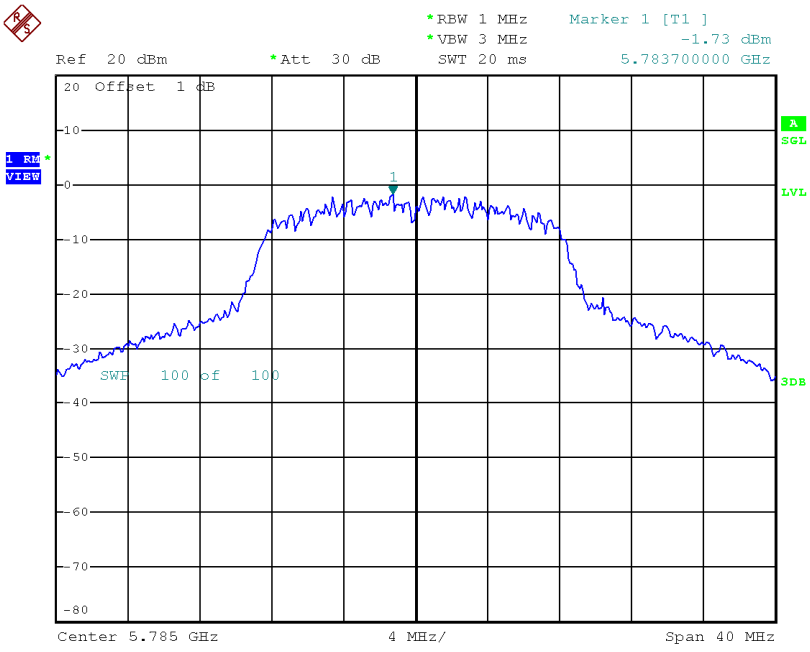
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density+Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	0.20	0.48	0.68	30.00
CH157	5785	-1.73	0.48	-1.25	30.00
CH165	5825	2.82	0.48	3.30	30.00

TX CH149



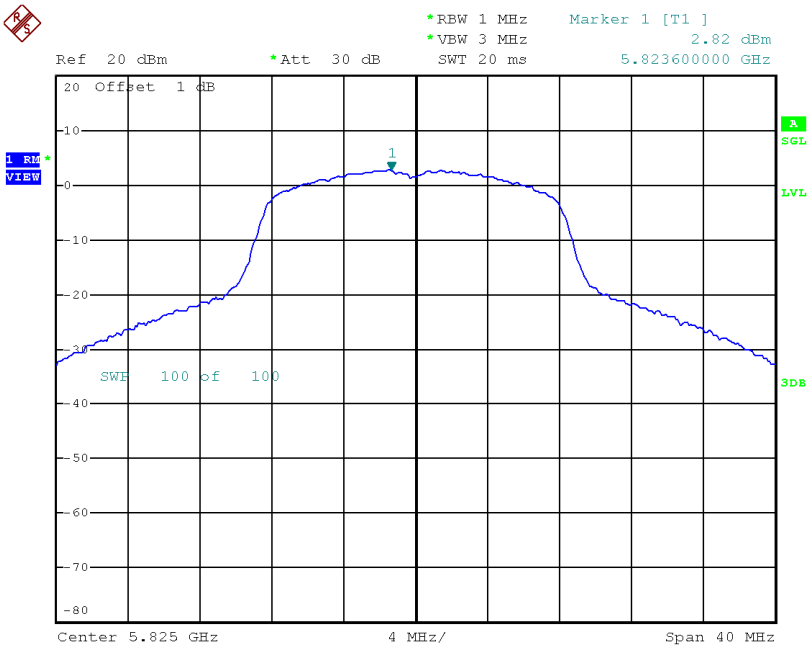
Date: 9.JAN.2015 12:29:41

TX CH157



Date: 9.JAN.2015 12:31:03

TX CH165

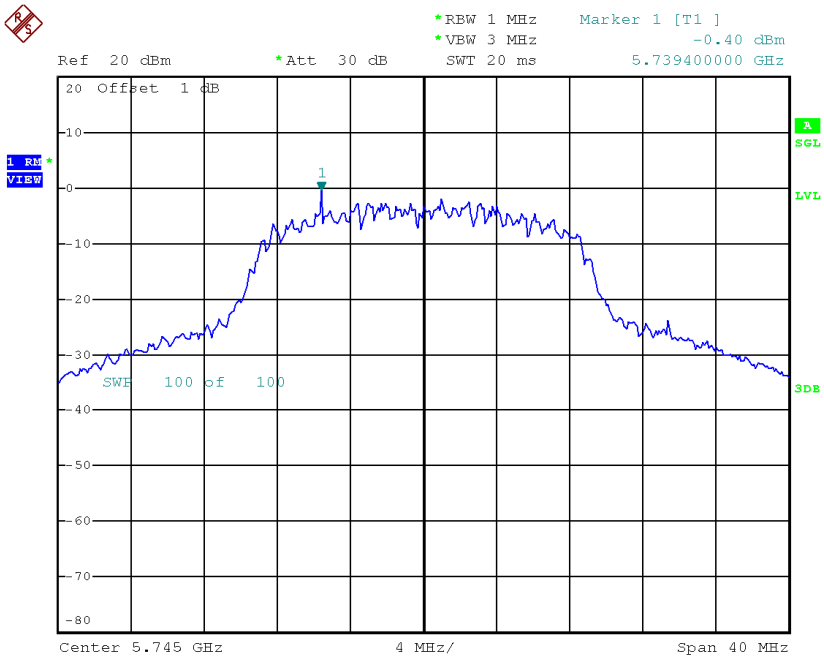


Date: 9.JAN.2015 12:28:45

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

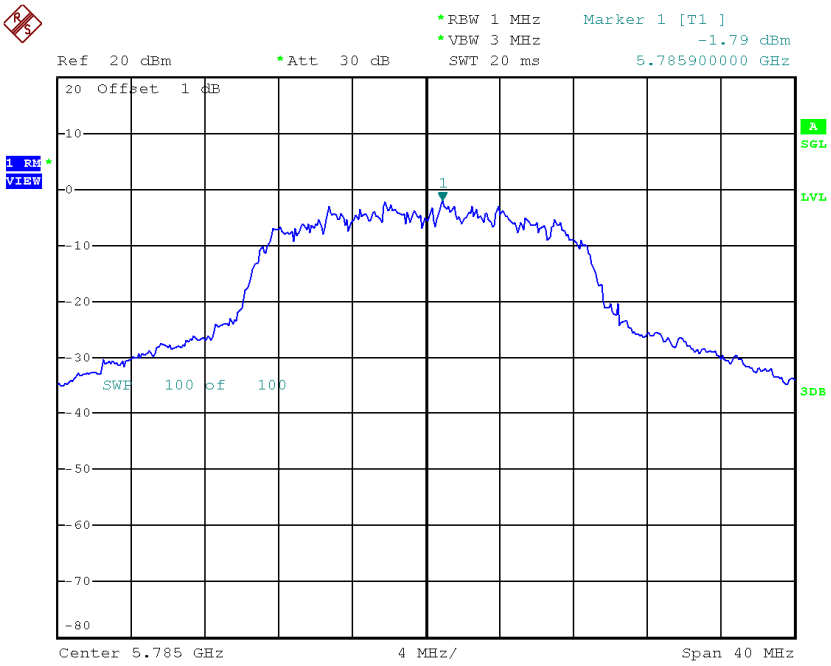
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density+Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH149	5745	-0.40	0.52	0.12	30.00
CH157	5785	-1.79	0.52	-1.27	30.00
CH165	5825	0.36	0.52	0.88	30.00

TX CH149



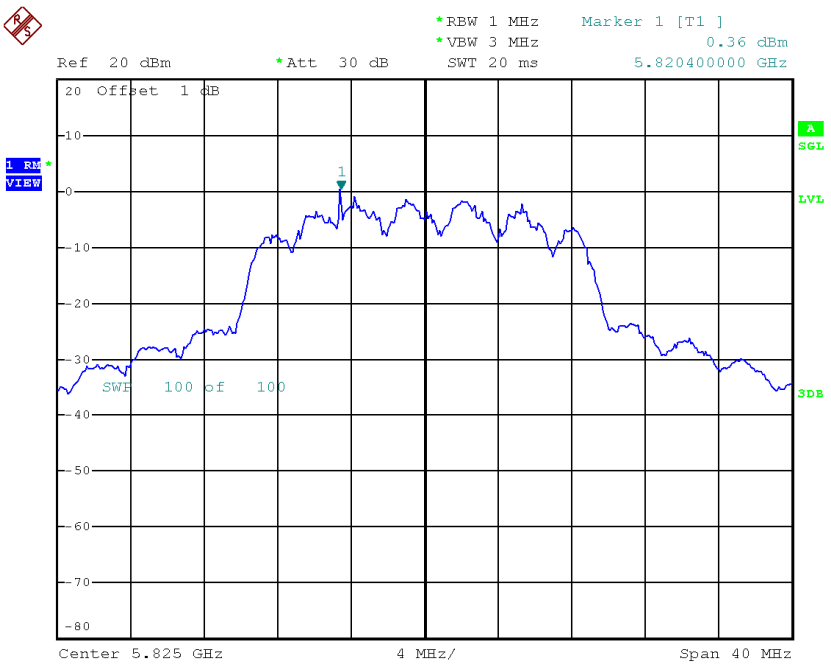
Date: 9.JAN.2015 13:45:32

TX CH157



Date: 9.JAN.2015 13:46:29

TX CH165

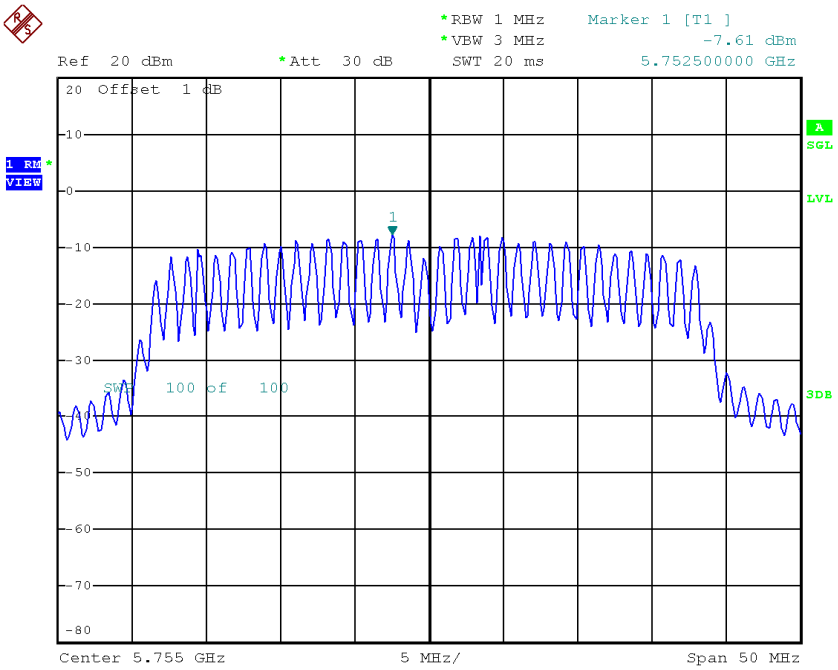


Date: 9.JAN.2015 13:48:18

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

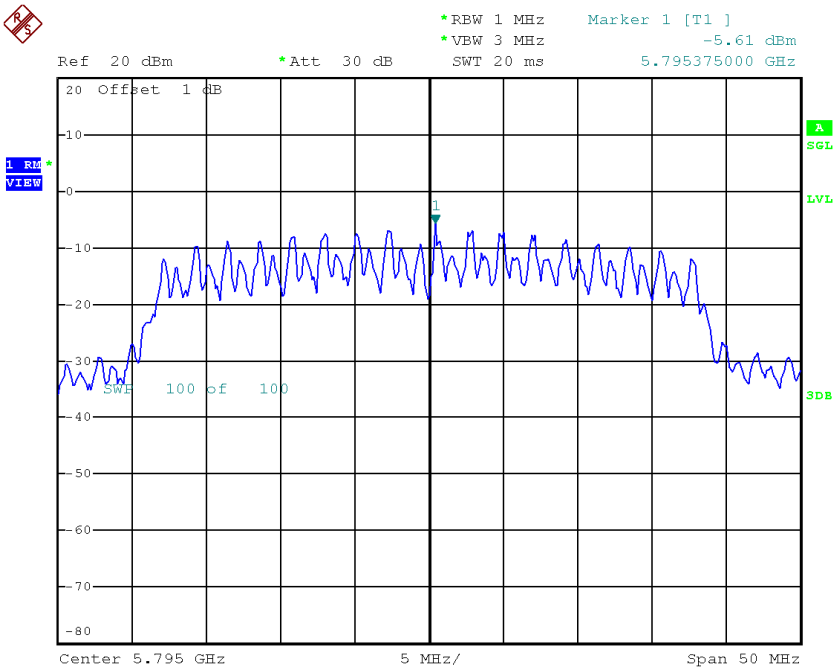
Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dBm/MHz)	Power Density+Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)
CH151	5755	-7.61	0.96	-6.65	30.00
CH159	5795	-5.61	0.96	-4.65	30.00

TX CH151



Date: 9.JAN.2015 13:54:55

TX CH159



Date: 9.JAN.2015 13:56:30

ATTACHMENT I - FREQUENCY STABILITY

Test Mode:	UNII-1

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5180.0000
132	5180.0150
120	5180.0430
108	5180.0290
Max. Deviation (MHz)	0.0430
Max. Deviation (ppm)	8.3012

Temperature vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(℃)	5180.0000
-5	5180.0019
5	5180.0135
15	5180.0121
25	5180.0090
35	5180.0029
45	5180.0081
50	5180.0251
Max. Deviation (MHz)	0.0251
Max. Deviation (ppm)	4.8456

Test Mode:	UNII-3

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5745.0000
132	5745.0160
120	5745.0210
108	5745.0100
Max. Deviation (MHz)	0.0210
Max. Deviation (ppm)	3.6554

Temperature vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(℃)	5745.0000
-5	5745.0087
5	5745.0105
15	5745.0087
25	5745.0019
35	5745.0021
45	5745.0134
50	5745.0257
Max. Deviation (MHz)	0.0257
Max. Deviation (ppm)	4.4735