

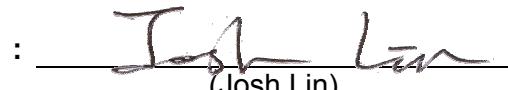
FCC Radio Test Report

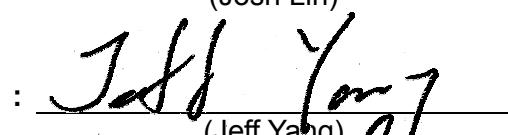
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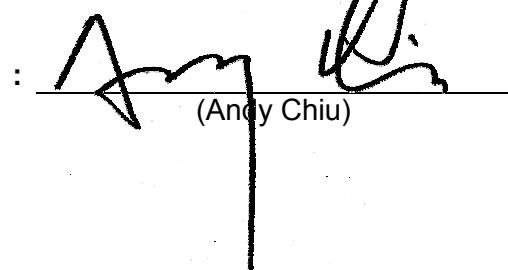
This report concerns (check one): Original Grant Class II Change

Project No. : 1410101
Equipment : Access Point
Model Name : APL26-0B3
Applicant : Dell Inc.
Address : One Dell Way Round Rock, Texas 78682 United States

Date of Receipt : Oct. 20, 2014
Date of Test : Oct. 20, 2014 ~ Nov. 20, 2014
Issued Date : Nov. 21, 2014
Tested by : BTL Inc.

Testing Engineer : 
(Josh Lin)

Technical Manager : 
(Jeff Yang)

Authorized Signatory : 
(Andy Chiu)

B T L I N C .

B1, No.37, Lane 365, Yang Guang St.,
Nei-Hu District, Taipei City 114, Taiwan.

TEL: +886-2-2657-3299 FAX: +886-2-2657-3331

Declaration

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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-2-1410101	Original Issue.	Nov. 21, 2014

1. CERTIFICATION

Equipment : Access Point
Brand Name : DELL
Model Name : APL26-0B3
Applicant : Dell Inc.
Date of Test : Oct. 20, 2014 ~ Nov. 20, 2014
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-2-1410101) 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
FCC			
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.

2.1 TEST FACILITY

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

Conducted emission Test:

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

Radiated emission Test (Below 1 GHz):

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

Radiated emission Test (Above 1 GHz):

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

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty is not specified by Canada Industry for reference only.

The reported uncertainty of measurement $y \pm U$, 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	Access Point	
Brand Name	DELL	
Model Name	APL26-0B3	
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: 18.48dBm 802.11n (20M): 18.52dBm 802.11n (40M): 18.24dBm
	Output Power (Max.)for UNII-3	802.11a: 18.17dBm 802.11n (20M): 18.55dBm 802.11n (40M): 18.63dBm
Power Source	Supplied from PoE.	
Power Rating	DC 48V 0.6A	

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	Part NO.	Antenna Type	Connector	Gain (dBi)	Note
4	M.gear	C147-510905B	Dipole	Reversed TNC	5.89	TX/RX
5	M.gear	C147-510905B	Dipole	Reversed TNC	5.89	TX/RX
6	M.gear	C147-510905B	Dipole	Reversed TNC	5.89	TX/RX

(1) Note: The EUT incorporates a MIMO function. Physically, the EUT provides three completed three transmitters and three receivers (3T3R). All transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=5.89.

4.

Operating Mode	TX Mode	3TX
	802.11a	V (ANT 4 + ANT 5+ANT 6)
	802.11n (20MHz)	V (ANT 4 + ANT 5+ANT 6)
	802.11n (40MHz)	V (ANT 4 + ANT 5+ANT 6)

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)

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

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.

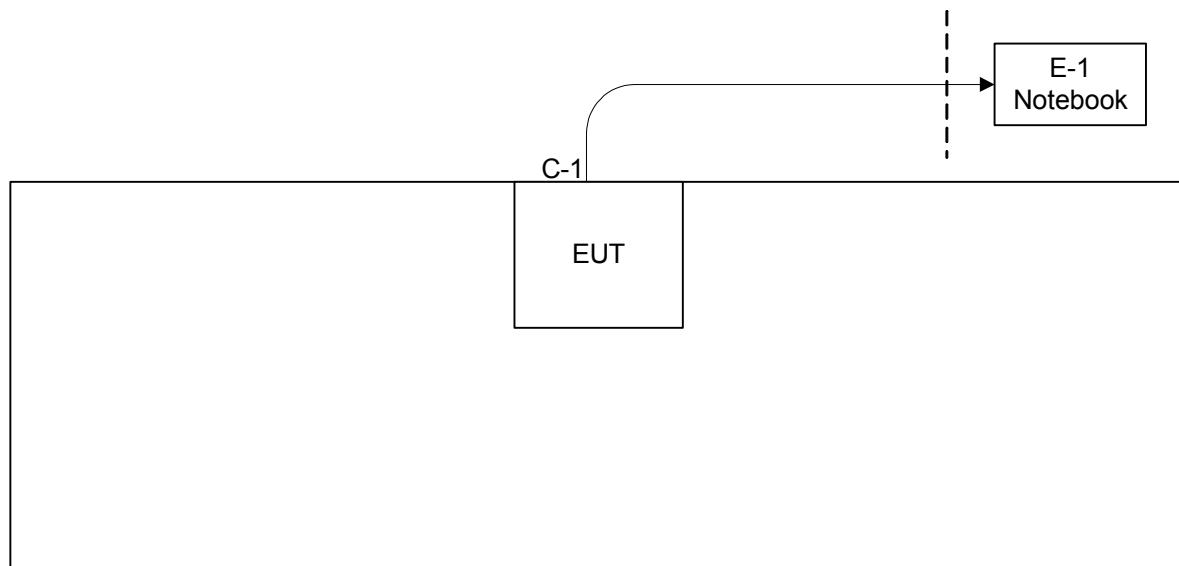
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	RT		
Frequency (MHz)	5180	5200	5240
A Mode	14.5	14	14.5
N20 Mode	14.5	14.5	14.5
Frequency (MHz)	5190	5230	
N40 Mode	9	14	

UNII-3			
Test Software Version	ART		
Frequency (MHz)	5745	5785	5825
A Mode	13	13.5	14
N20 Mode	13	14	14
Frequency (MHz)	5755	5795	
N40 Mode	13.5	13.5	

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/IC	Series No.	Note
E-1	Notebook PC	DELL	PP18L	DOC	PF329 A01	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10m	RJ-45 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:

$$\text{Measurement Value} = \text{Reading Level} + \text{Correct Factor}$$

$$\text{Correct Factor} = \text{Insertion Loss} + \text{Cable Loss} + \text{Attenuator Factor(if use)}$$

$$\text{Margin Level} = \text{Measurement Value} - \text{Limit Value}$$

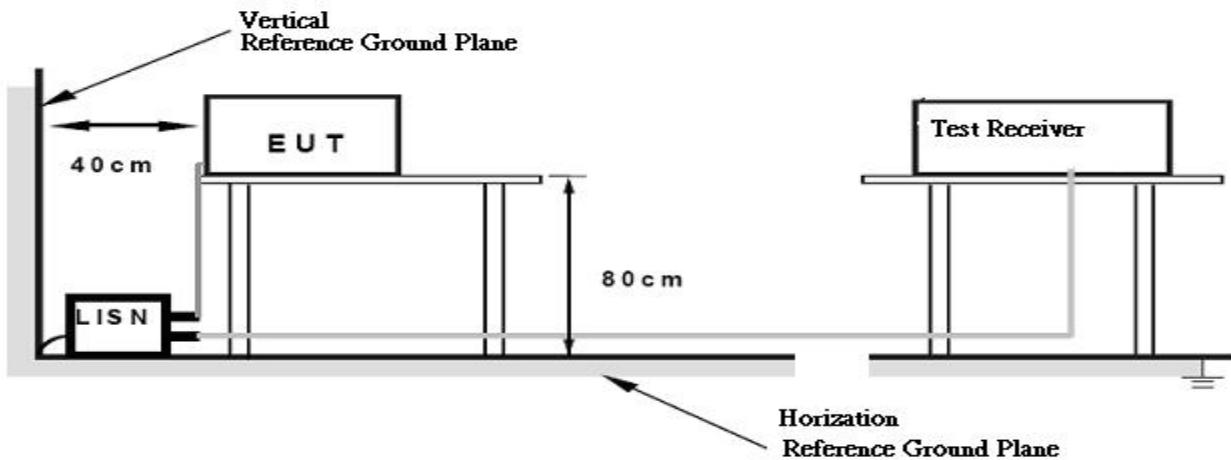
4.1.2 TEST PROCEDURE

- 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: 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

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 (microvolt/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 (dB μ V/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: $E = \frac{1000000\sqrt{30P}}{3}$ μ V/m, where P is the eirp (Watts)

4.2.2 TEST PROCEDURE

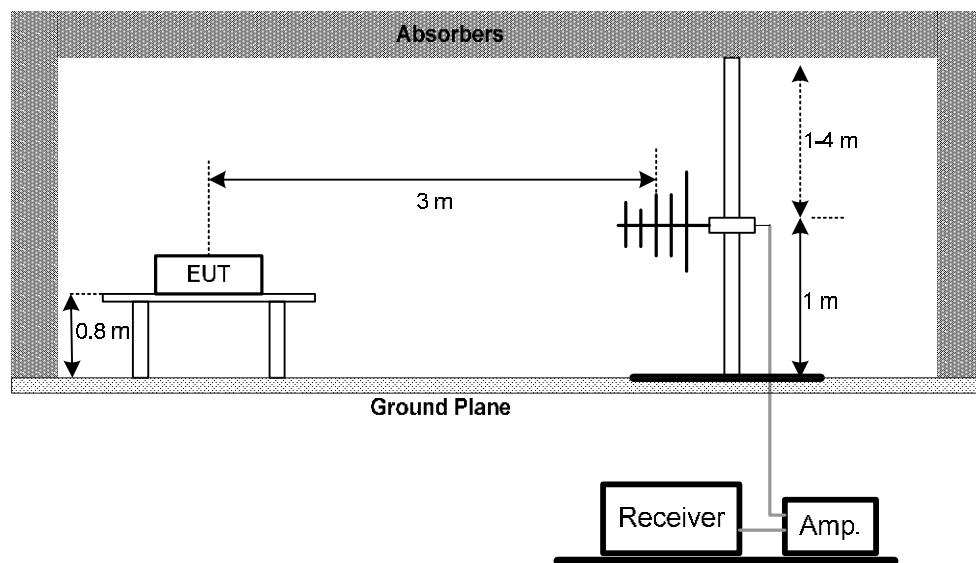
- a. The measuring distance of at 3m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 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.

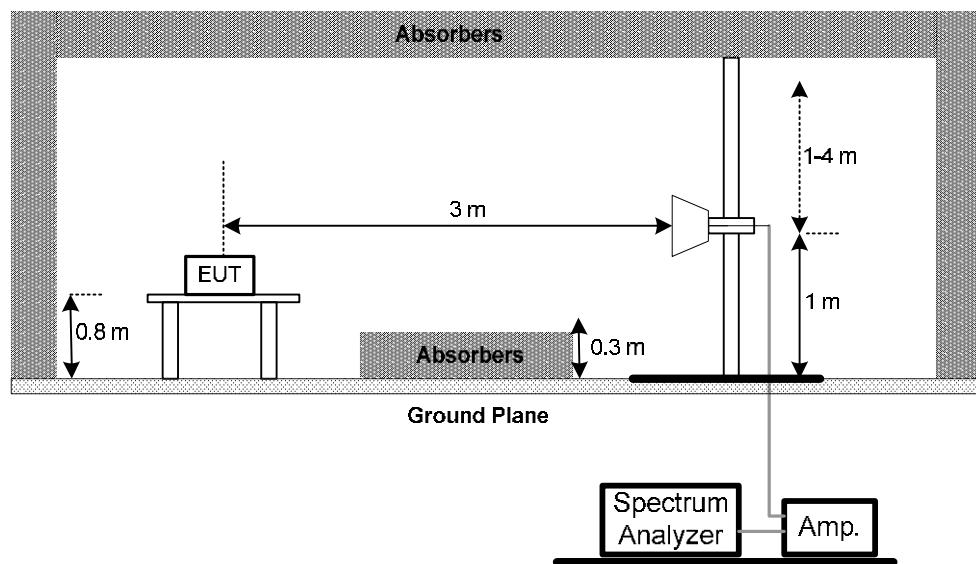
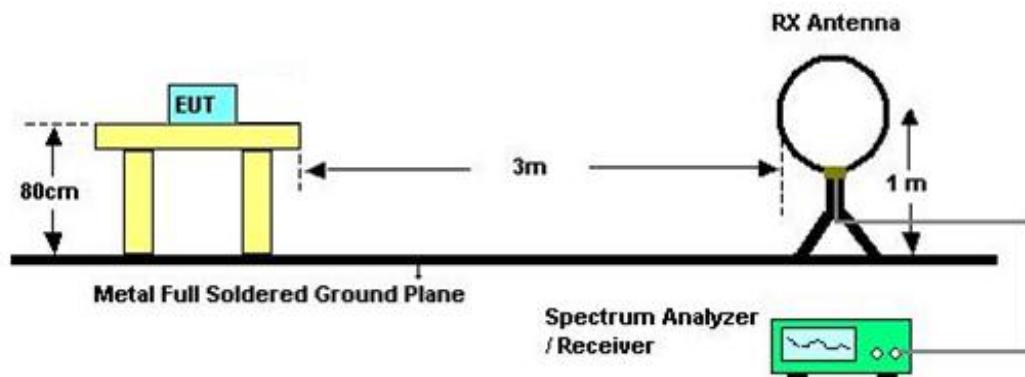
4.2.3 DEVIATION FROM TEST STANDARD

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: 25°C Relative Humidity: 55% Test Voltage: DC 48V

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 (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: DC 48V

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	$\geq 3\text{MHz}$.
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: DC 48V

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,

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: 25°C Relative Humidity: 55% Test Voltage: DC 48V

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	\geq 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 $10\log(500\text{kHz}/1\text{MHz})$ 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: 25°C Relative Humidity: 55% Test Voltage: DC 48V

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,

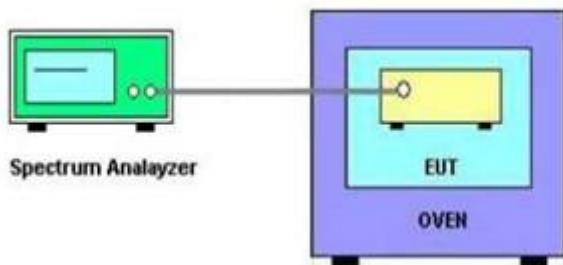
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

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 48V

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	100087	Nov. 23, 2014
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	July. 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

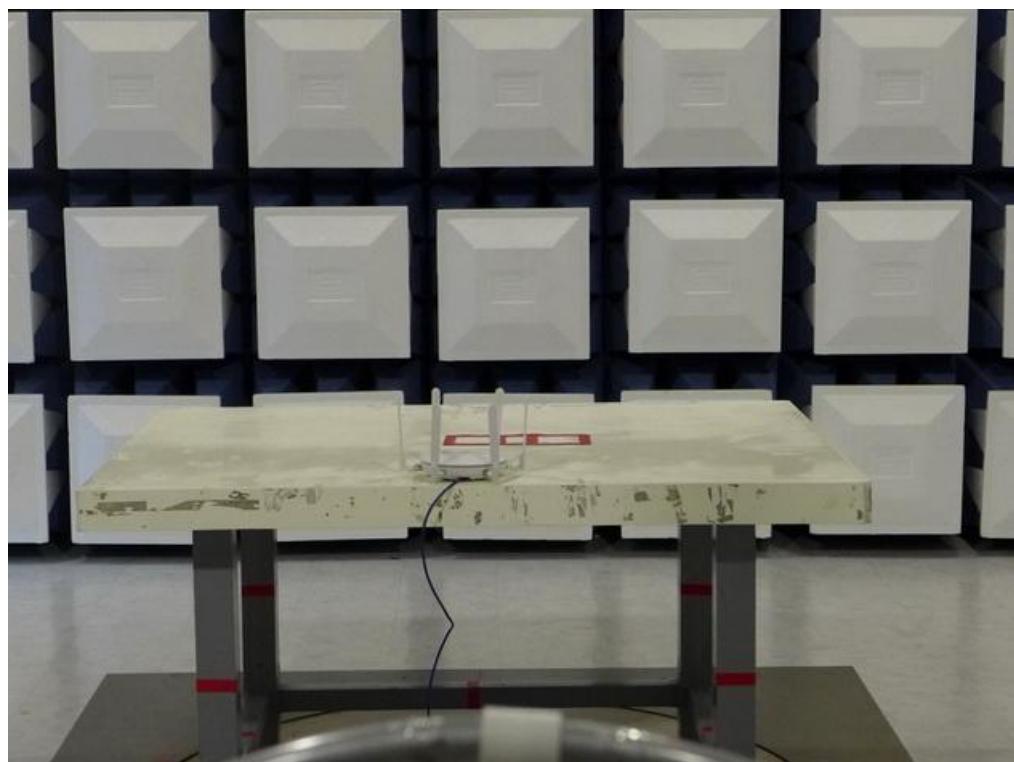
Remark: "N/A" denotes no model name, serial no. or calibration specified.

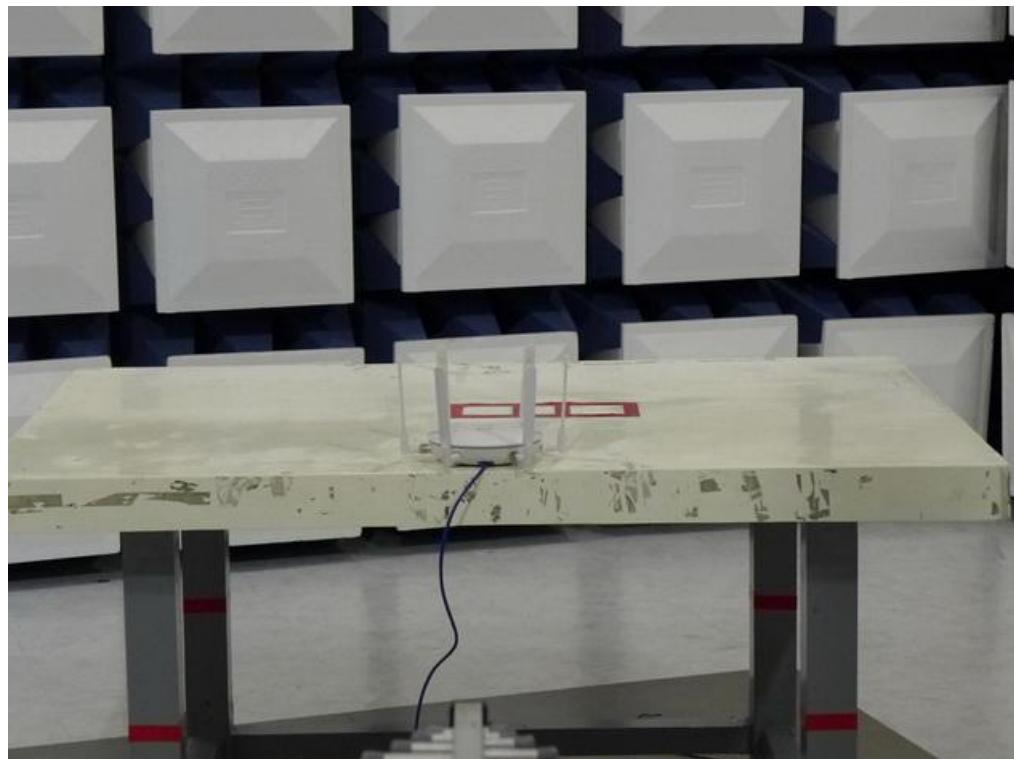
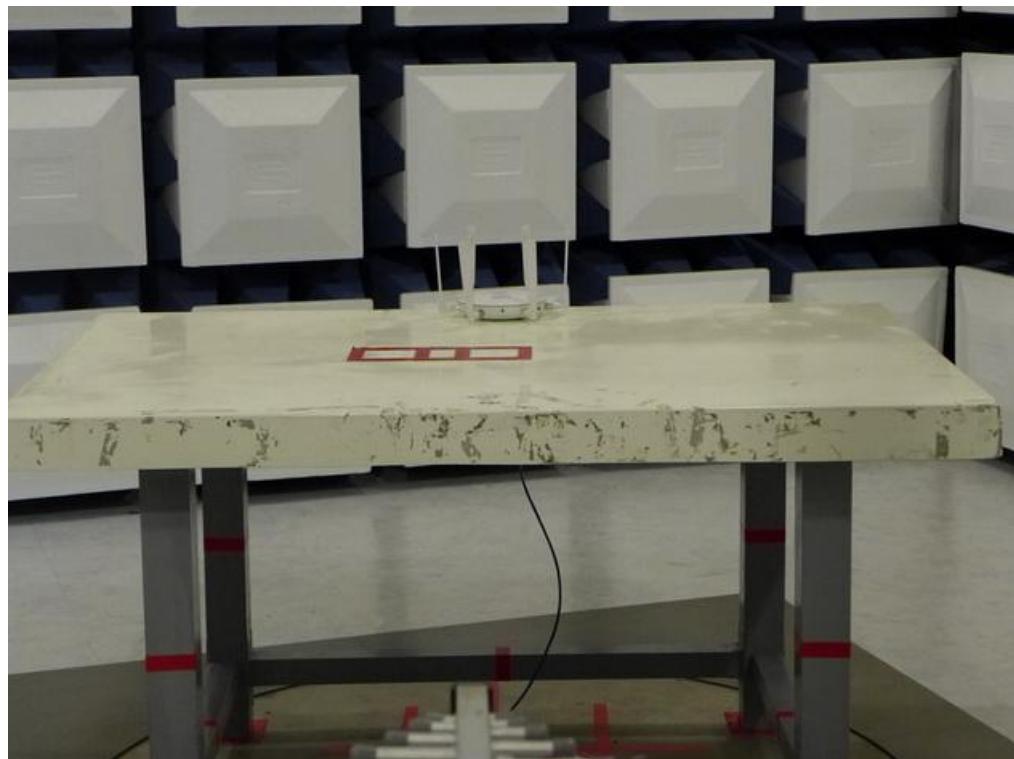
All calibration period of equipment list is one year.

11. EUT TEST PHOTOS

Radiated Measurement Photos

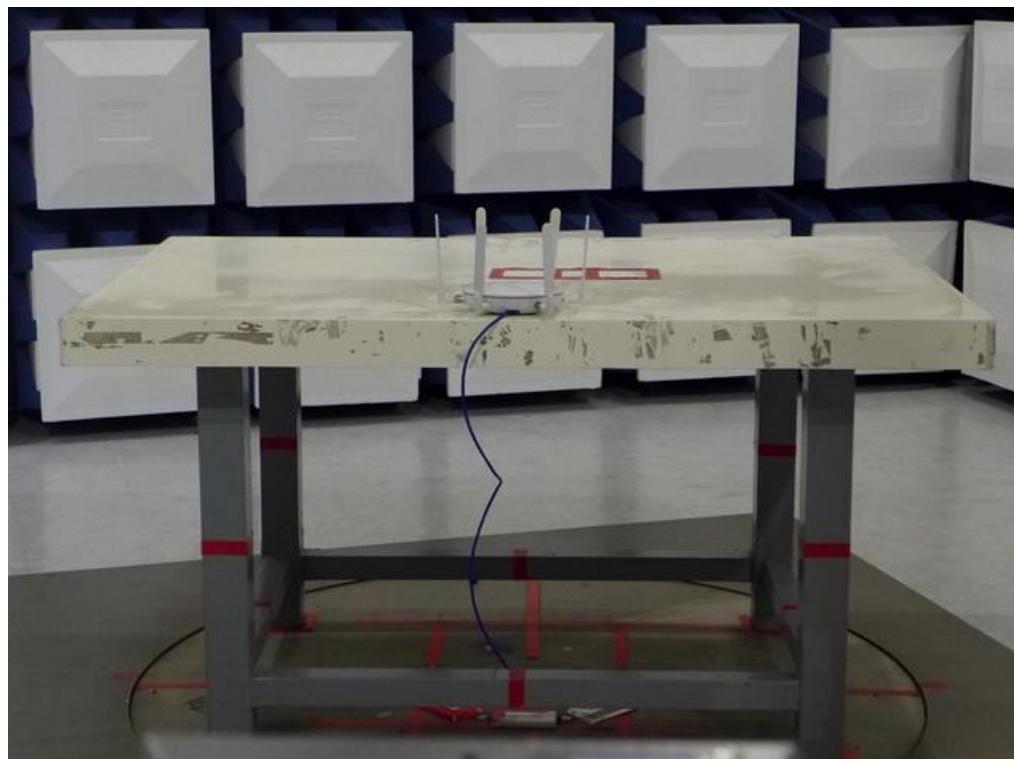
9kHz to 30MHz



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)

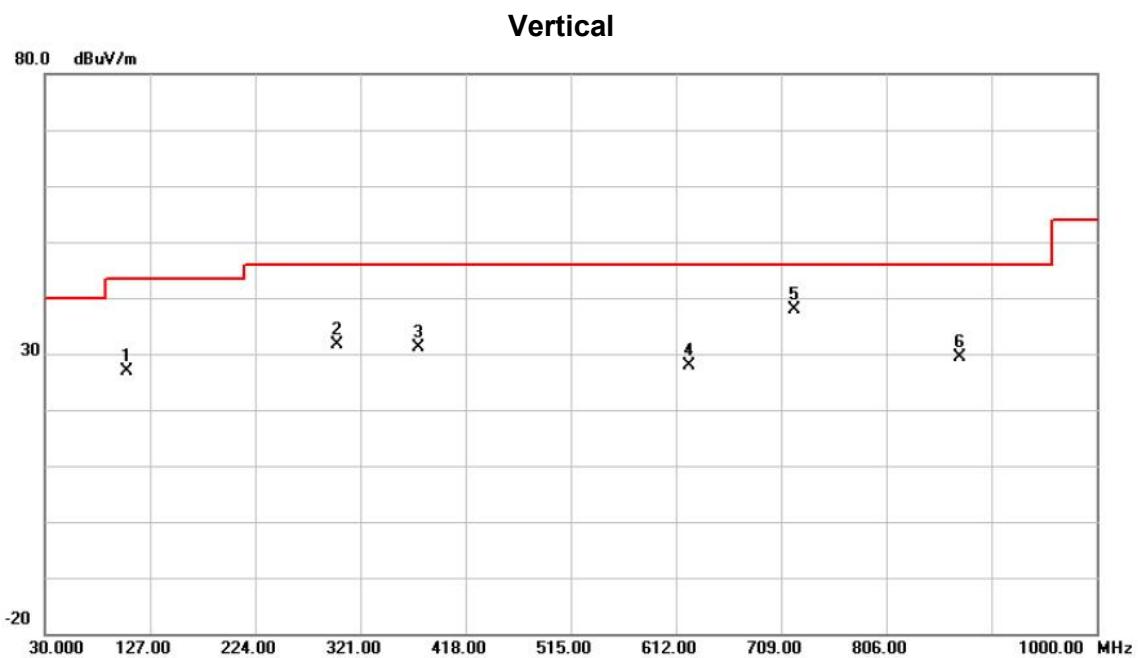
Test Mode: TX Mode

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.1578	0°	56.30	12.00	68.30	103.64	-35.34	PK
0.3120	0°	39.63	11.10	50.73	77.72	-26.99	AVG
0.3120	0°	47.88	11.10	58.98	97.72	-38.74	PK
0.5460	0°	57.35	11.24	68.59	72.86	-4.27	AVG
0.0318	0°	35.60	11.24	46.84	92.86	-46.02	PK
0.6890	0°	59.35	11.30	70.65	70.84	-0.19	AVG
0.0429	0°	42.20	11.30	53.50	90.84	-37.34	PK
0.9200	0°	38.34	11.39	49.73	68.33	-18.60	QP
1.3360	0°	36.51	11.52	48.03	65.09	-17.06	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.1563	90°	50.26	12.01	62.27	83.73	-21.45	AVG
0.1563	90°	61.33	12.01	73.34	103.73	-30.38	PK
0.3145	90°	40.31	11.10	51.41	77.65	-26.24	AVG
0.3145	90°	47.25	11.10	58.35	97.65	-39.30	PK
0.5520	90°	57.35	11.24	68.59	72.77	-4.17	AVG
0.0318	90°	36.24	11.24	47.48	92.77	-45.28	PK
0.0429	90°	40.48	11.30	51.78	90.58	-38.80	PK
0.9230	90°	38.69	11.39	50.08	68.30	-18.22	QP
1.3350	90°	36.15	11.52	47.67	65.09	-17.42	QP

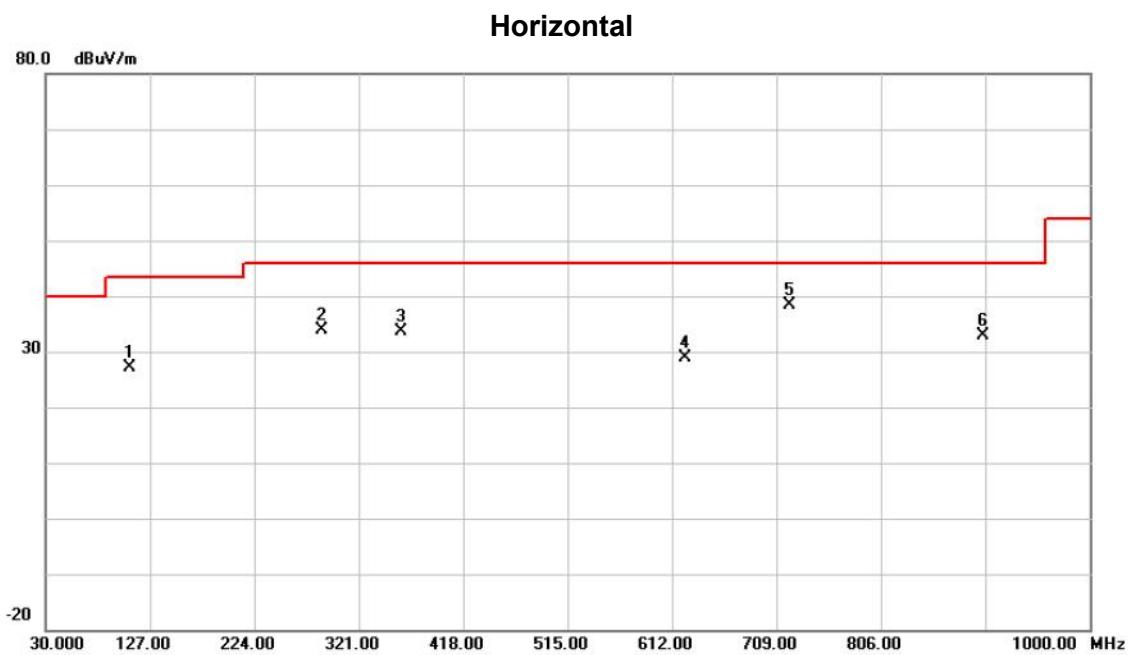
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

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



No.	Mk.	Reading		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV				dB	Detector
1	105.1750	45.04	-18.04	27.00	43.50	-16.50	peak	
2	299.1750	45.18	-13.51	31.67	46.00	-14.33	peak	
3	374.3500	42.89	-11.74	31.15	46.00	-14.85	peak	
4	624.1250	35.07	-7.19	27.88	46.00	-18.12	peak	
5	* 721.1250	43.03	-5.25	37.78	46.00	-8.22	peak	
6	873.9000	32.73	-3.36	29.37	46.00	-16.63	peak	

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

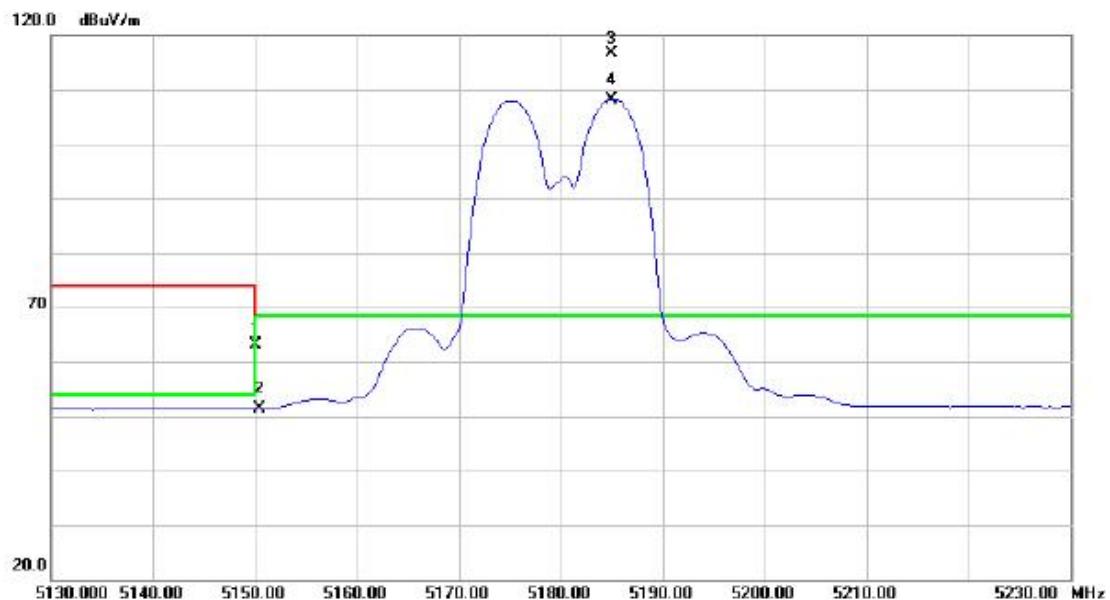


No.	Mk.	Reading		Correct Factor	Measure-ment		Limit	Over	Detector	Comment
		Freq.	Level		dBuV	dB	dBuV/m	dB		
1	107.6000	44.78	-17.68	27.10	27.10	27.10	43.50	-16.40	peak	
2	287.0500	47.69	-13.77	33.92	33.92	33.92	46.00	-12.08	peak	
3	359.8000	45.73	-12.08	33.65	33.65	33.65	46.00	-12.35	peak	
4	624.1250	36.14	-7.19	28.95	28.95	28.95	46.00	-17.05	peak	
5	*	721.1250	43.75	-5.25	38.50	38.50	46.00	-7.50	peak	
6		900.5750	35.59	-2.82	32.77	32.77	46.00	-13.23	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

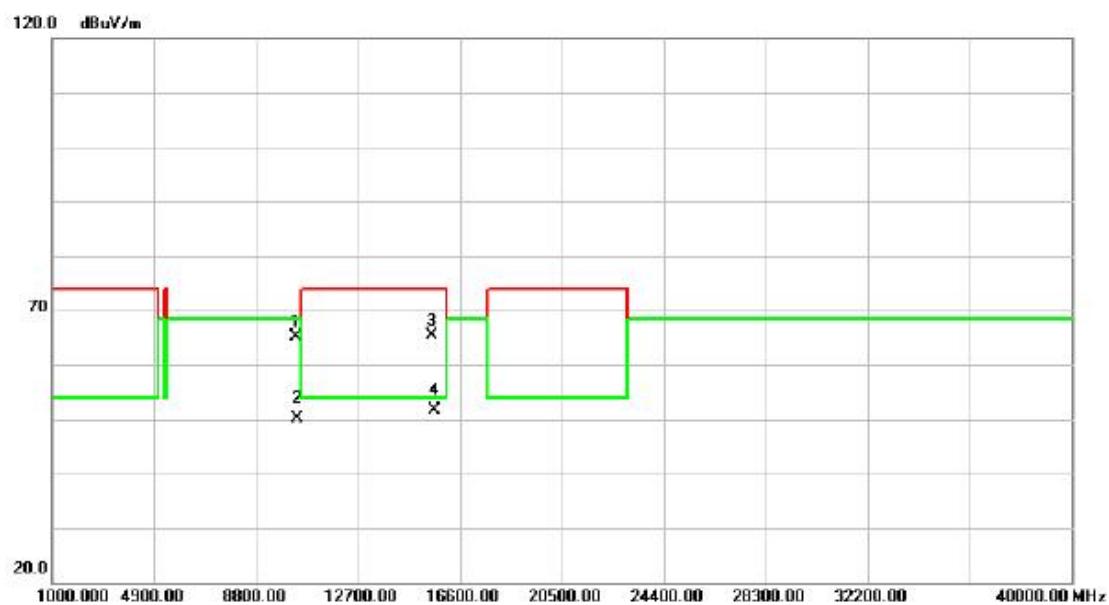
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

Vertical



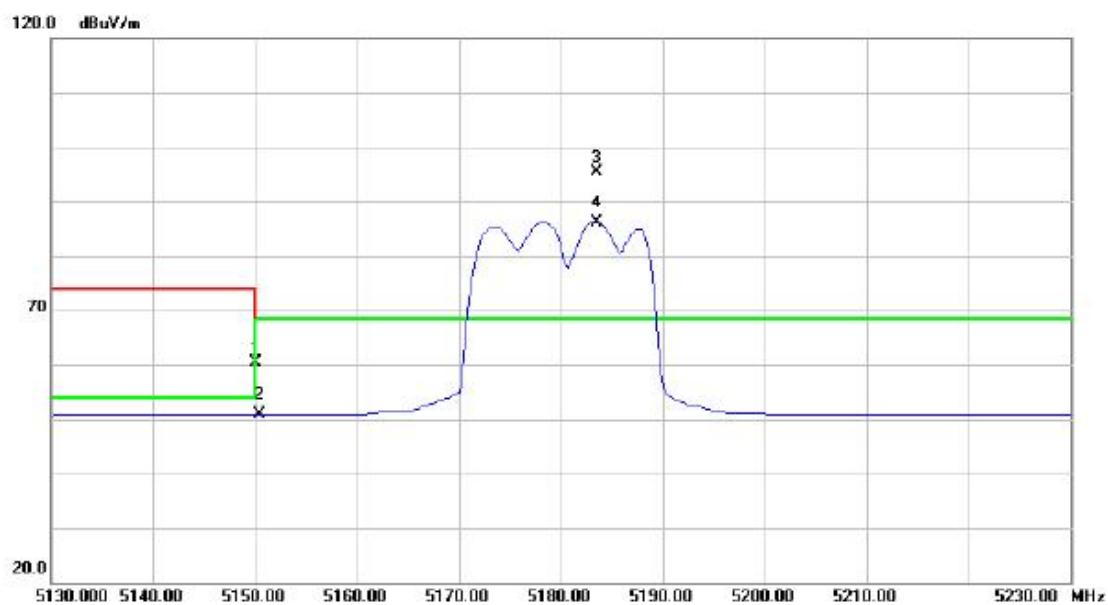
No. Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
		dBuV	dB	dBuV/m	dB	Detector	
1	5150.000	25.35	37.74	63.09	68.30	-5.21	peak
2	5150.000	13.72	37.74	51.46	54.00	-2.54	AVG
3	*	78.81	37.86	116.67	68.30	48.37	peak no limit
4	X	70.28	37.86	108.14	68.30	39.84	AVG no limit

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

Vertical

No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV/m	dB			
1		10359.45	47.31	17.74	65.05	68.30	-3.25	peak	
2		10359.45	32.29	17.74	50.03	68.30	-18.27	AVG	
3		15540.16	46.16	19.30	65.46	74.00	-8.54	peak	
4	*	15540.16	32.34	19.30	51.64	54.00	-2.36	AVG	

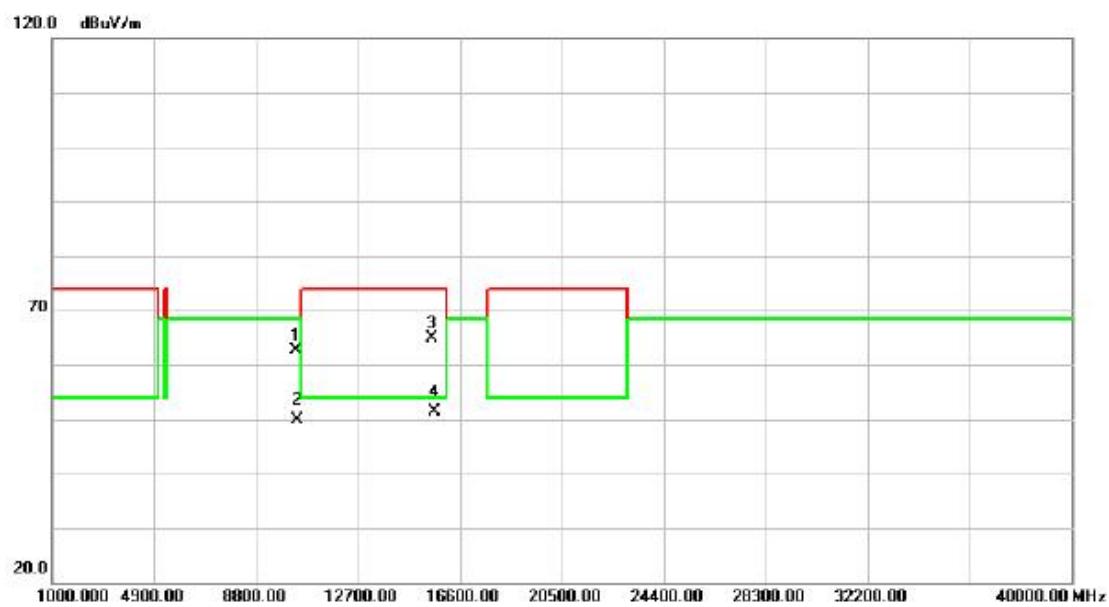
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

Horizontal

No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor dB	ment dBuV/m				
1		5150.000	22.68	37.74	60.42	68.30	-7.88	peak	
2		5150.000	13.08	37.74	50.82	54.00	-3.18	AVG	
3	*	5183.500	57.49	37.85	95.34	68.30	27.04	peak	no limit
4	X	5183.500	48.39	37.85	86.24	68.30	17.94	AVG	no limit

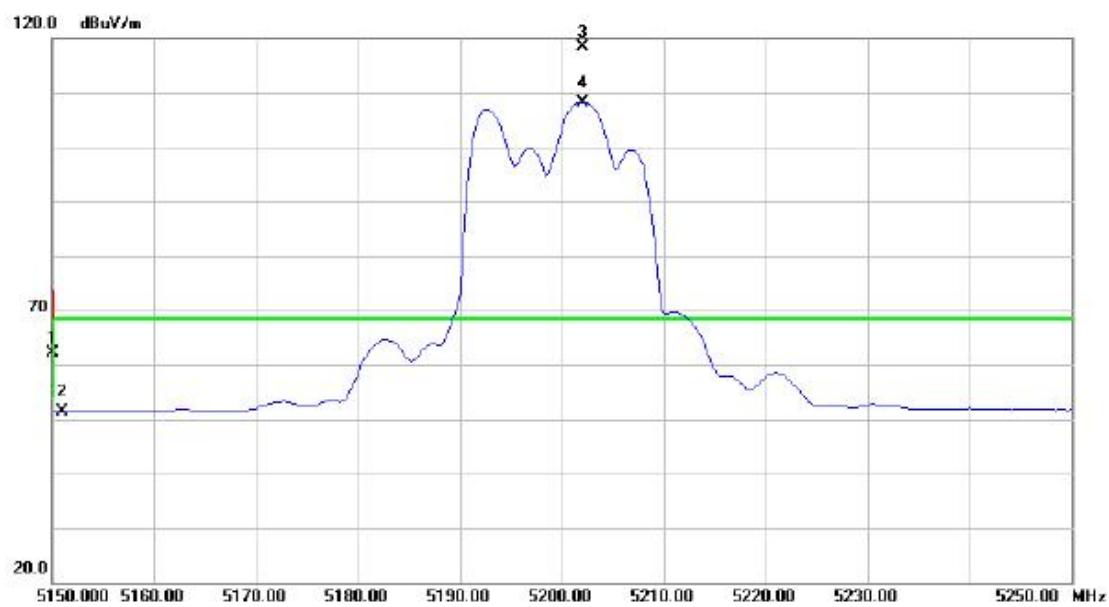
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

Horizontal



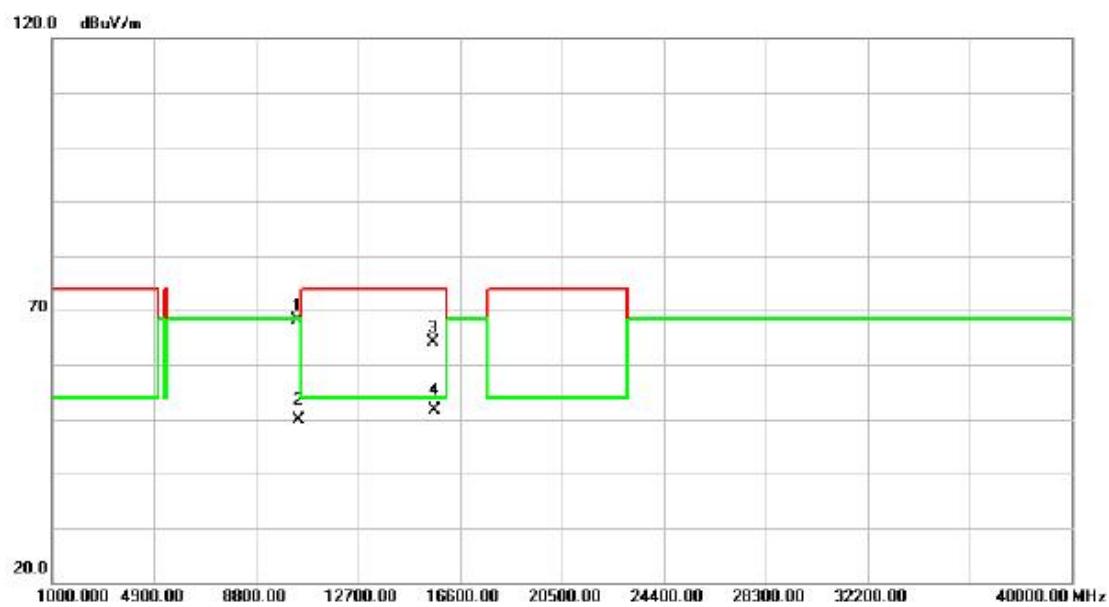
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		10359.20	44.96	17.73	62.69	68.30	-5.61	peak
2		10359.20	32.05	17.73	49.78	68.30	-18.52	AVG
3		15539.99	45.65	19.30	64.95	74.00	-9.05	peak
4	*	15539.99	32.15	19.30	51.45	54.00	-2.55	AVG

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

Vertical

No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dB				
1		5150.000	24.39	37.74	62.13	68.30	-6.17	peak	
2		5150.000	13.67	37.74	51.41	54.00	-2.59	AVG	
3	*	5202.000	80.45	37.92	118.37	68.30	50.07	peak	no limit
4	X	5202.000	70.33	37.92	108.25	68.30	39.95	AVG	no limit

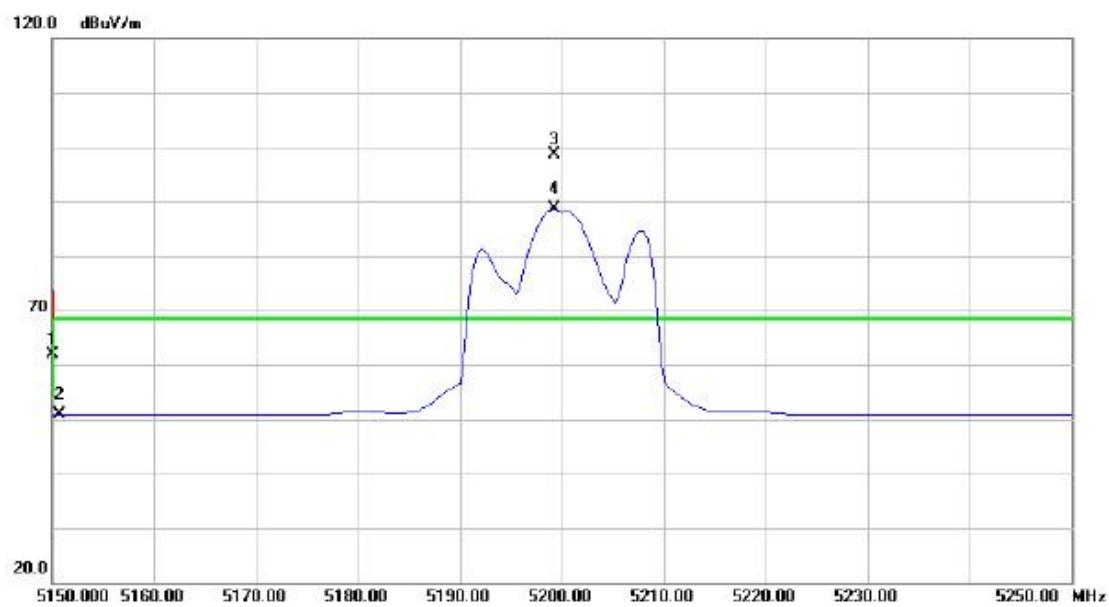
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

Vertical

No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV/m	dB			
1	*	10400.77	50.20	17.92	68.12	68.30	-0.18	peak	
2		10400.77	32.08	17.92	50.00	68.30	-18.30	AVG	
3		15600.57	44.84	19.32	64.16	74.00	-9.84	peak	
4		15600.57	32.27	19.32	51.59	54.00	-2.41	AVG	

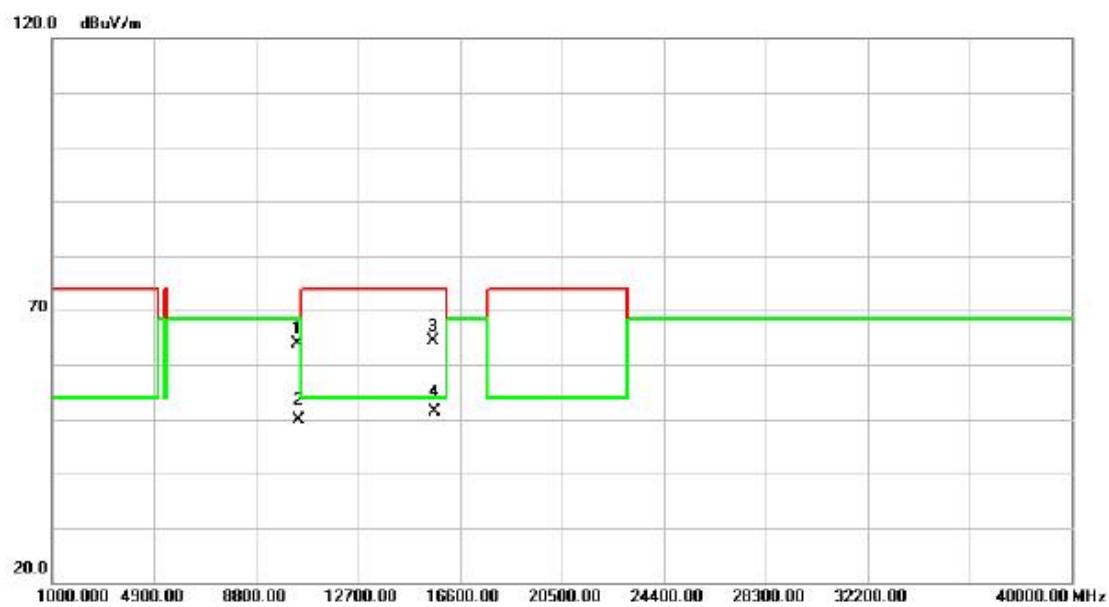
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

Horizontal



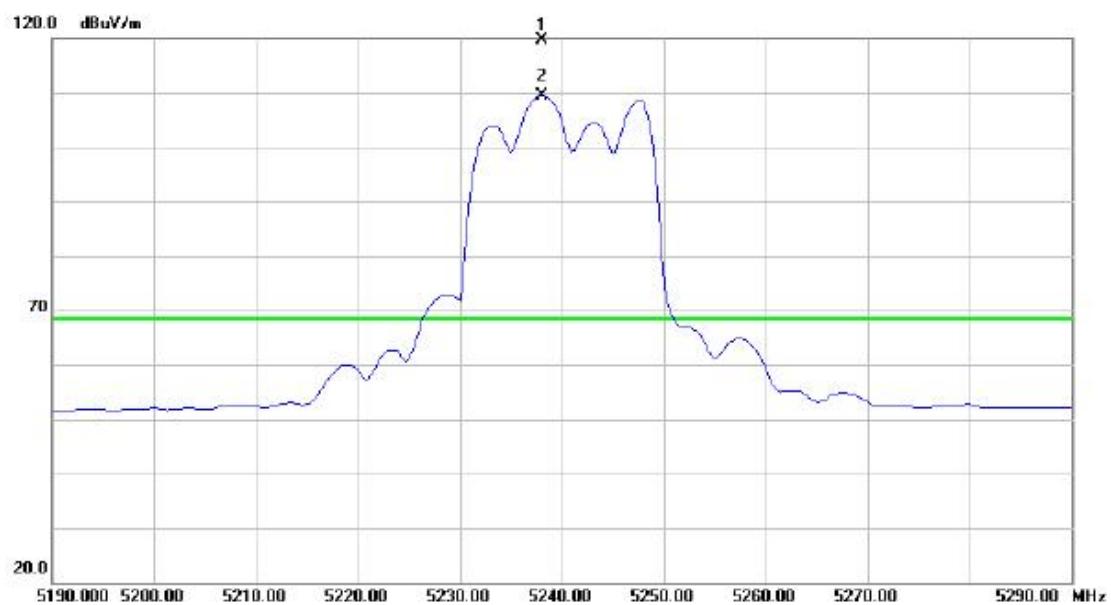
No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dBuV/m				
1		5150.000	24.12	37.74	61.86	68.30	-6.44	peak	
2		5150.000	13.11	37.74	50.85	54.00	-3.15	AVG	
3	*	5199.250	60.77	37.91	98.68	68.30	30.38	peak	no limit
4	X	5199.250	50.60	37.91	88.51	68.30	20.21	AVG	no limit

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

Horizontal

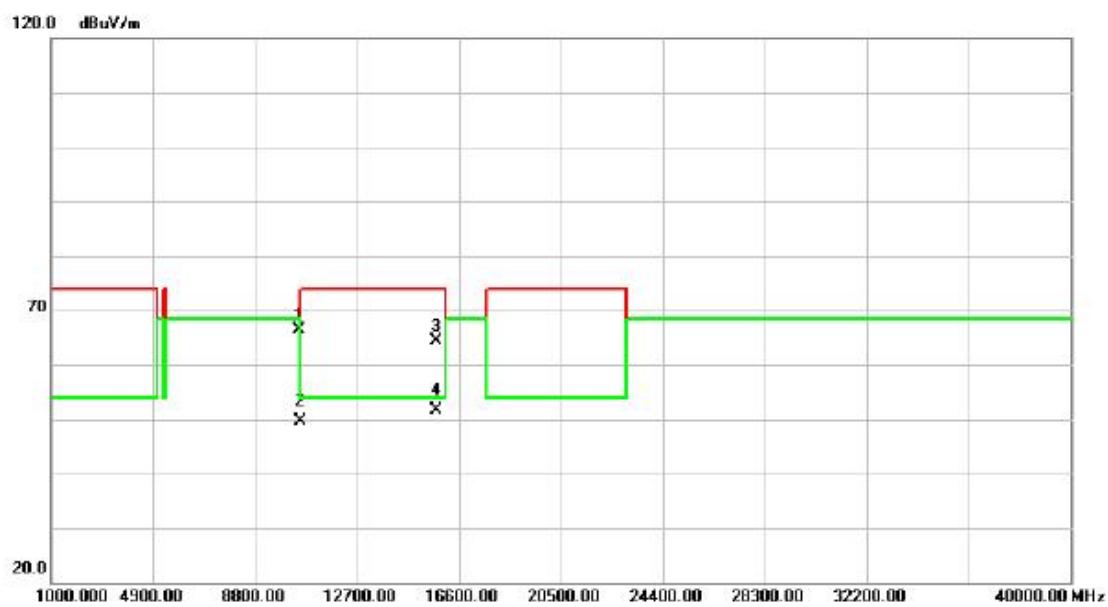
No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV/m	dB			
1		10401.20	45.88	17.93	63.81	68.30	-4.49	peak	
2		10401.20	31.88	17.93	49.81	68.30	-18.49	AVG	
3		15603.80	45.17	19.32	64.49	74.00	-9.51	peak	
4	*	15603.80	32.18	19.32	51.50	54.00	-2.50	AVG	

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

Vertical

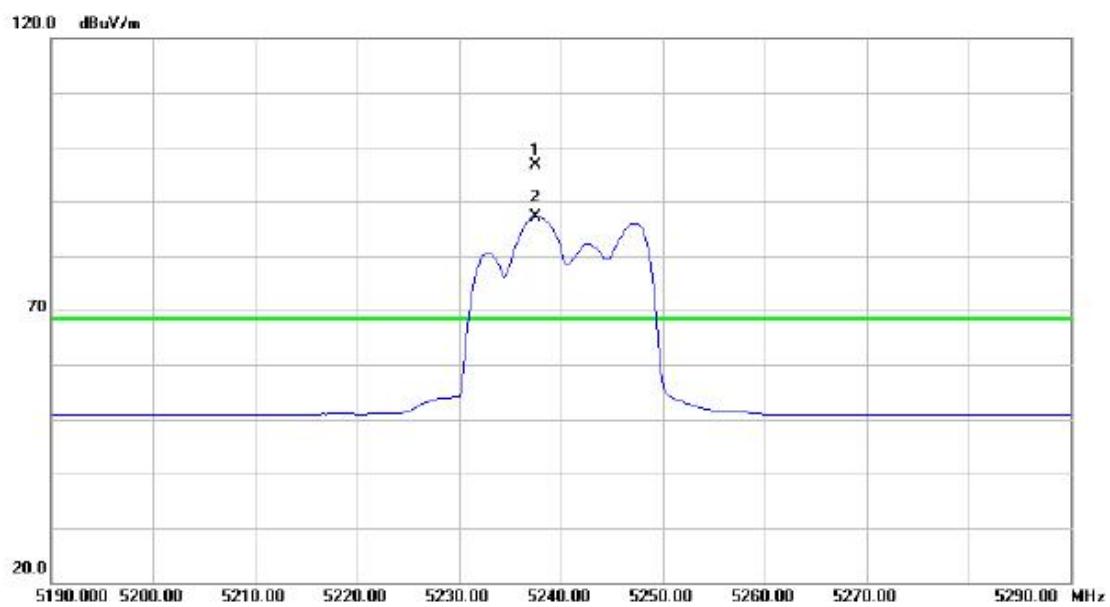
No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	
1	*	5238.000	81.51	38.05	119.56	68.30	51.26	peak no limit
2	X	5238.000	71.25	38.05	109.30	68.30	41.00	AVG no limit

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

Vertical

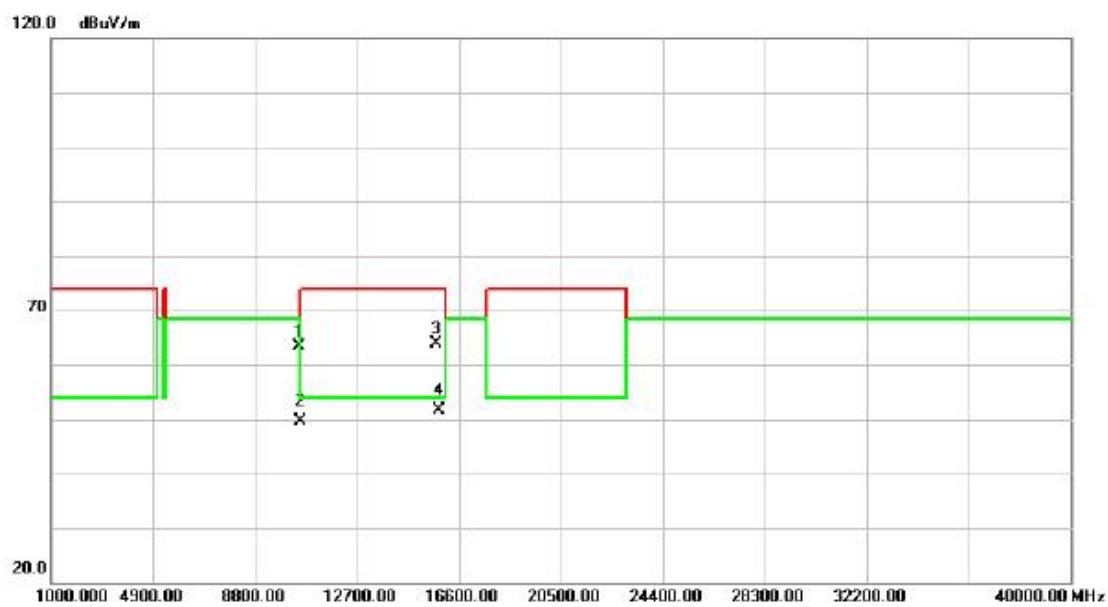
No.	Mk.	Freq.	Reading	Correct Factor	Measure-	Limit	Over	Detector	Comment
			Level		ment				
1	*	10481.17	47.98	18.30	66.28	68.30	-2.02	peak	
2		10481.17	31.43	18.30	49.73	68.30	-18.57	AVG	
3		15719.75	45.12	19.36	64.48	74.00	-9.52	peak	
4		15719.75	32.25	19.36	51.61	54.00	-2.39	AVG	

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

Horizontal

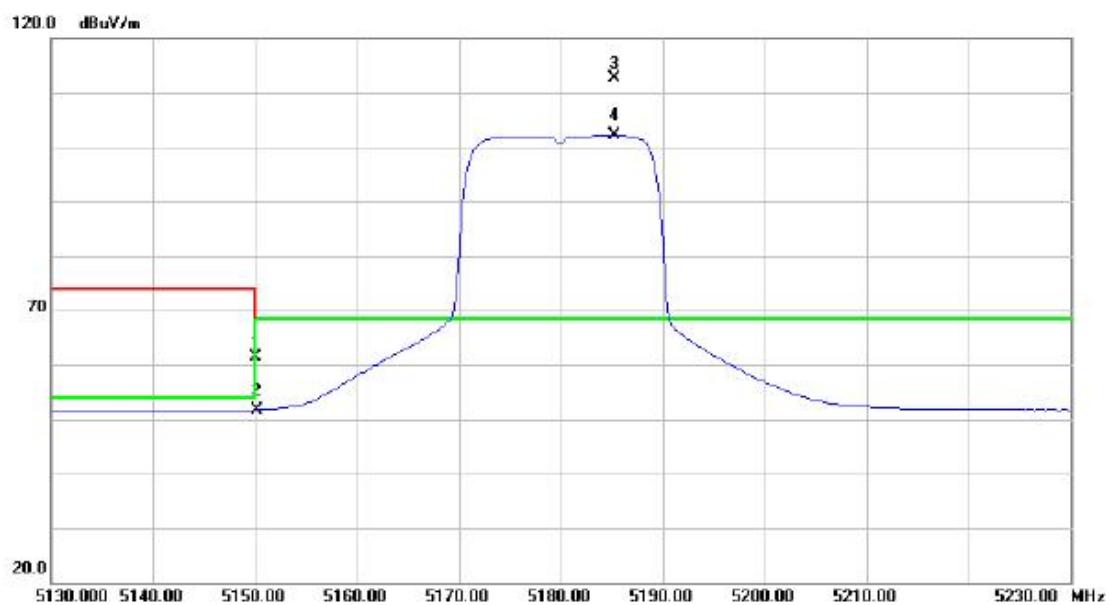
No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor dB	ment dBuV/m				
1	*	5237.500	58.54	38.05	96.59	68.30	28.29	peak	no limit
2	X	5237.500	49.05	38.05	87.10	68.30	18.80	AVG	no limit

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		10483.27	45.01	18.31	63.32	68.30	-4.98	peak
2		10483.27	31.20	18.31	49.51	68.30	-18.79	AVG
3		15722.60	44.44	19.37	63.81	74.00	-10.19	peak
4	*	15722.60	32.27	19.37	51.64	54.00	-2.36	AVG

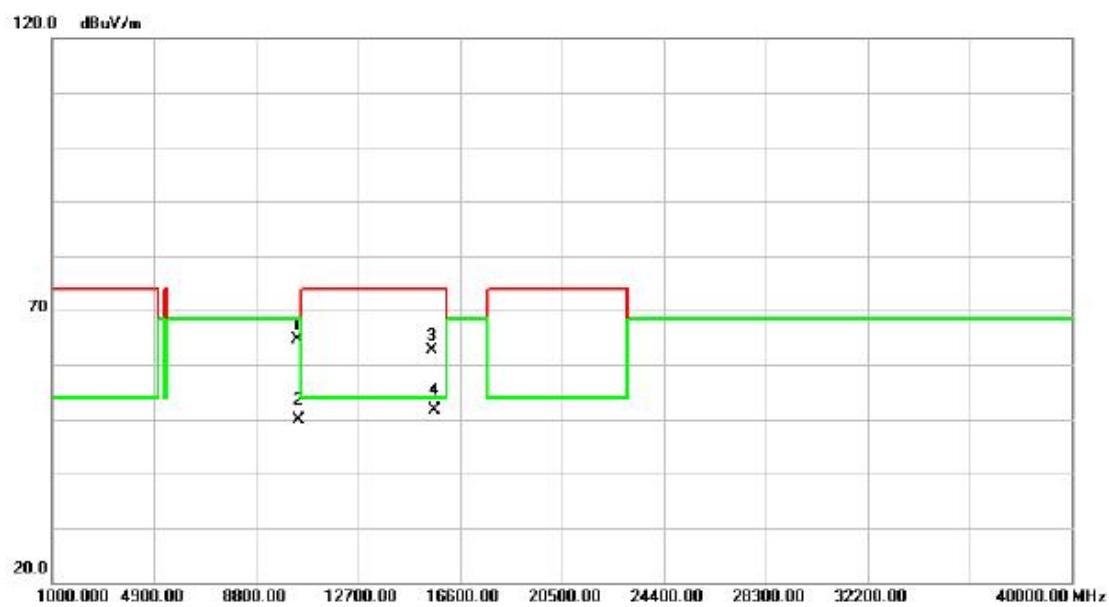
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		5150.000	23.72	37.74	61.46	68.30	-6.84	peak	
2		5150.000	14.00	37.74	51.74	54.00	-2.26	AVG	
3	*	5185.250	74.78	37.86	112.64	68.30	44.34	peak	no limit
4	X	5185.250	64.28	37.86	102.14	68.30	33.84	AVG	no limit

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

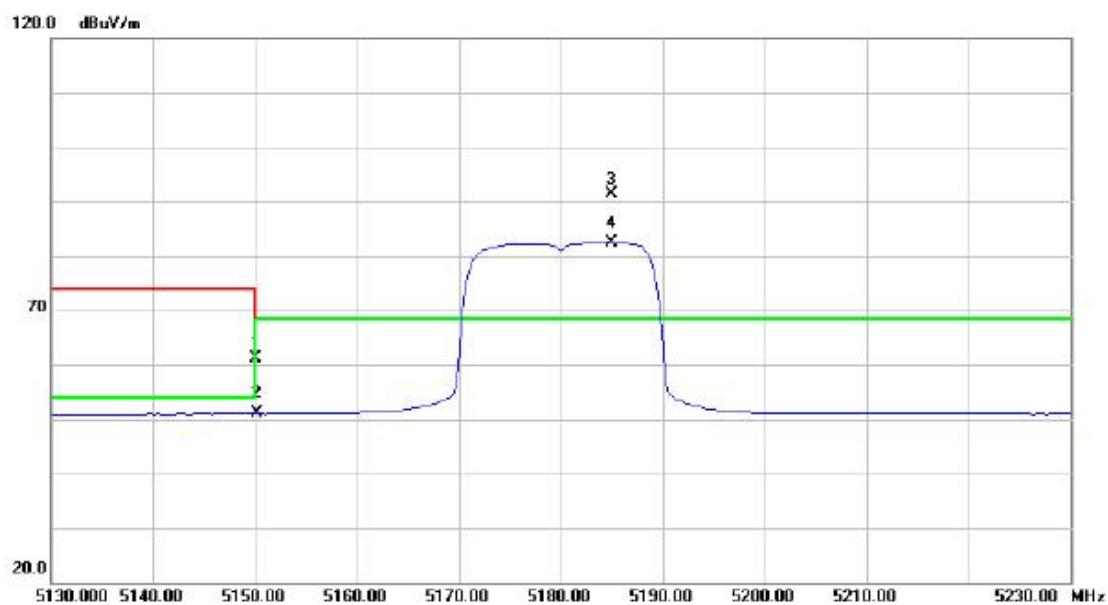
Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		10361.47	46.90	17.74	64.64	68.30	-3.66	peak	
2		10361.47	32.11	17.74	49.85	68.30	-18.45	AVG	
3		15540.40	43.23	19.30	62.53	74.00	-11.47	peak	
4	*	15540.40	32.45	19.30	51.75	54.00	-2.25	AVG	

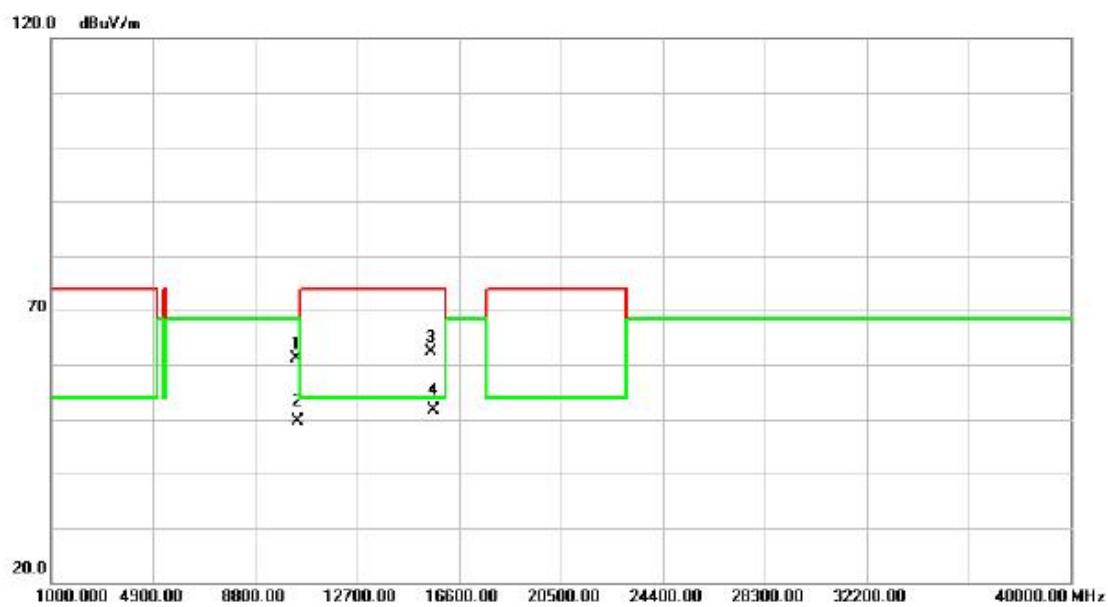
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

Horizontal



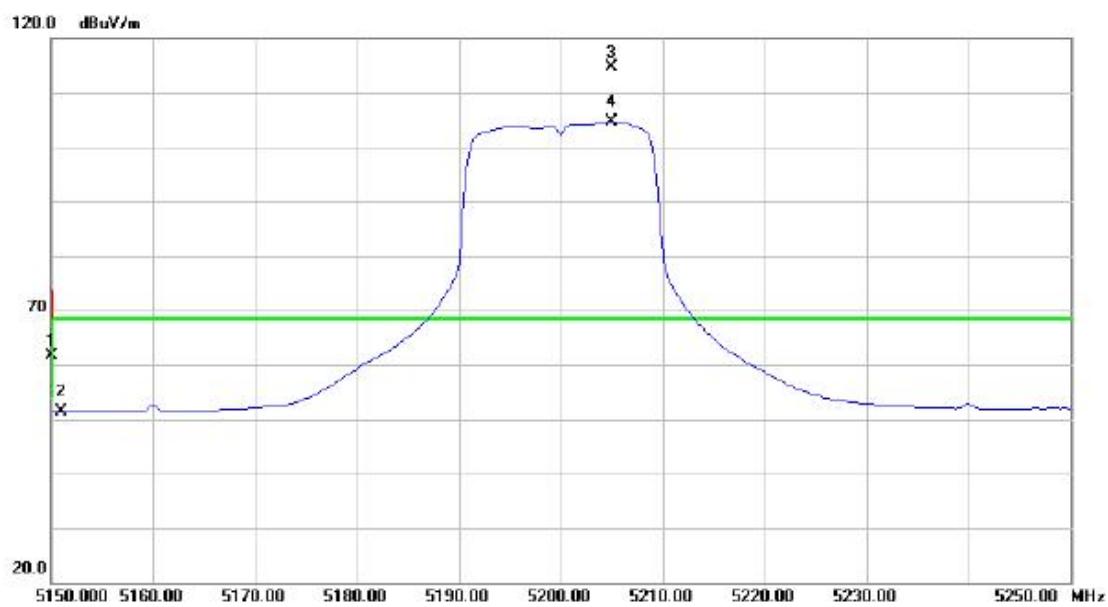
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		5150.000	23.48	37.74	61.22	68.30	-7.08	peak	
2		5150.000	13.29	37.74	51.03	54.00	-2.97	AVG	
3	*	5185.000	53.64	37.86	91.50	68.30	23.20	peak	no limit
4	X	5185.000	44.64	37.86	82.50	68.30	14.20	AVG	no limit

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		10360.08	43.40	17.74	61.14	68.30	-7.16	peak
2		10360.08	31.91	17.74	49.65	68.30	-18.65	AVG
3		15540.51	42.98	19.30	62.28	74.00	-11.72	peak
4	*	15540.51	32.44	19.30	51.74	54.00	-2.26	AVG

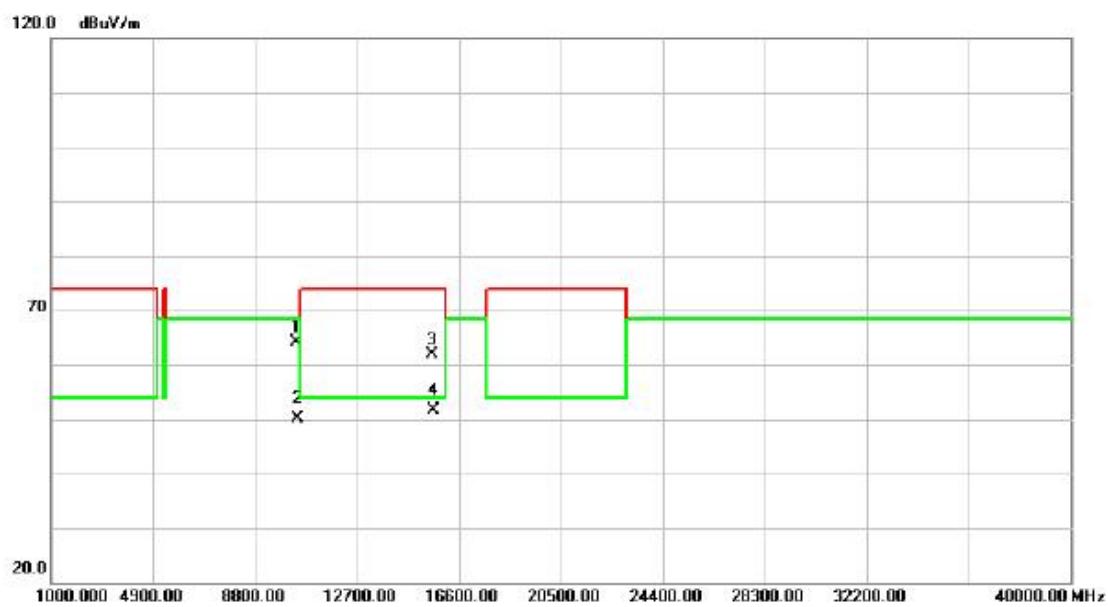
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

Vertical

No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dBuV/m				
1		5150.000	23.77	37.74	61.51	68.30	-6.79	peak	
2		5150.000	13.55	37.74	51.29	54.00	-2.71	AVG	
3	*	5205.000	76.80	37.93	114.73	68.30	46.43	peak	no limit
4	X	5205.000	66.64	37.93	104.57	68.30	36.27	AVG	no limit

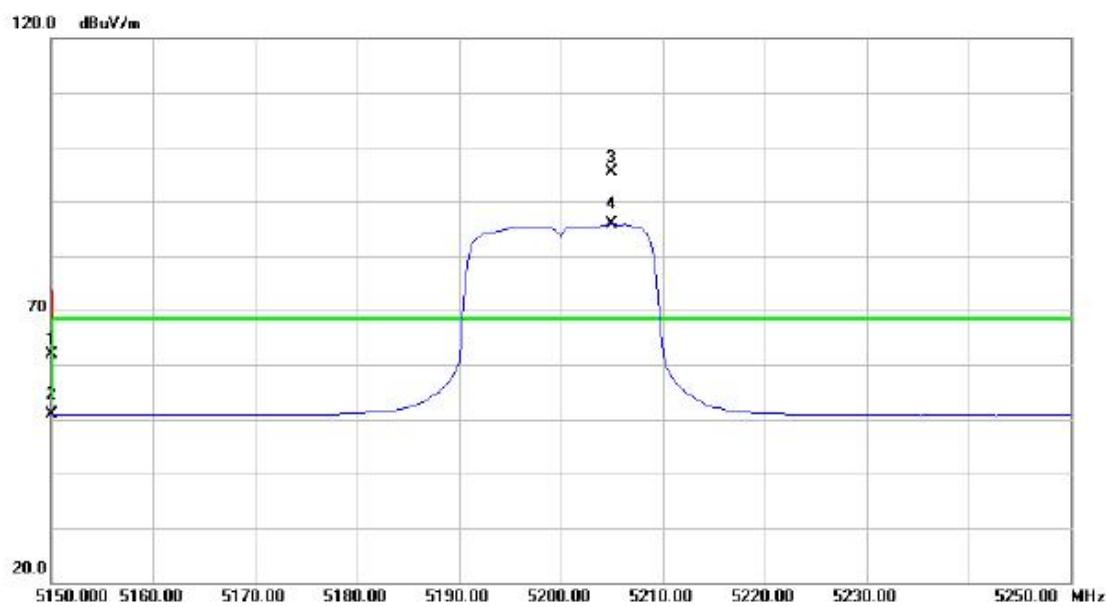
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz

Vertical



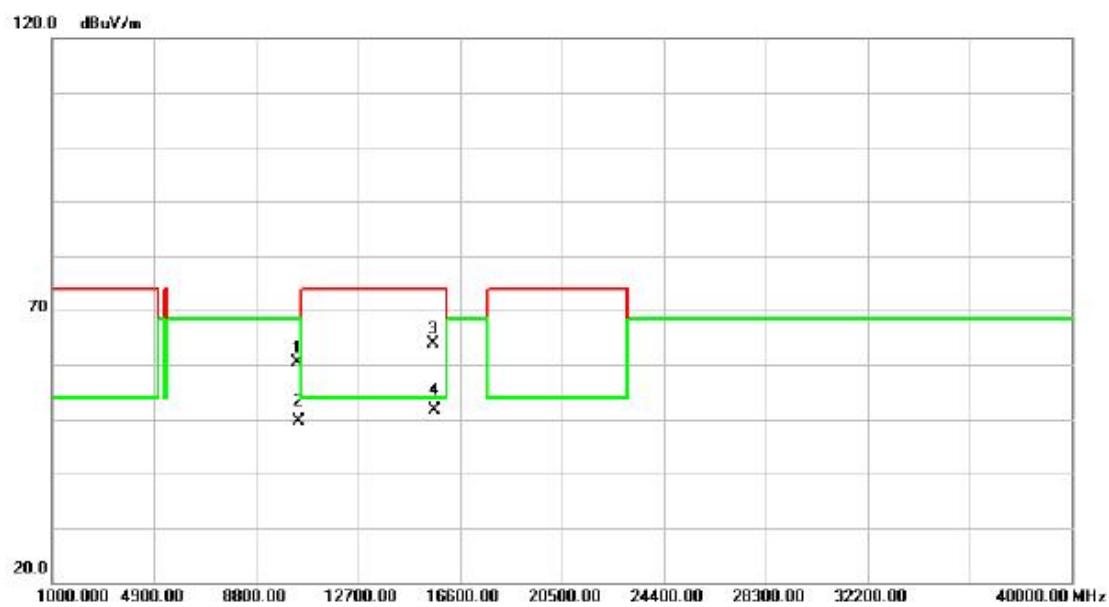
No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
MHz			dBuV	dB	dBuV/m	dB			
1		10401.21	46.09	17.93	64.02	68.30	-4.28	peak	
2		10401.21	32.17	17.93	50.10	68.30	-18.20	AVG	
3		15599.50	42.55	19.32	61.87	74.00	-12.13	peak	
4	*	15599.50	32.24	19.32	51.56	54.00	-2.44	AVG	

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

Horizontal

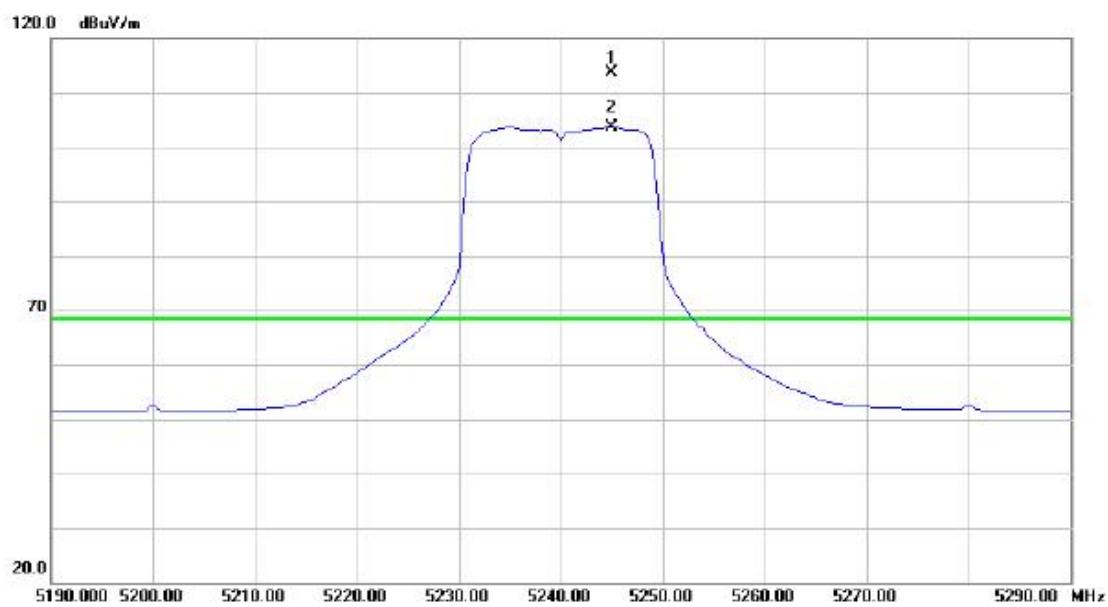
No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dBuV/m				
1		5150.000	24.20	37.74	61.94	68.30	-6.36	peak	
2		5150.000	13.07	37.74	50.81	54.00	-3.19	AVG	
3	*	5205.000	57.36	37.93	95.29	68.30	26.99	peak	no limit
4	X	5205.000	47.88	37.93	85.81	68.30	17.51	AVG	no limit

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

Horizontal

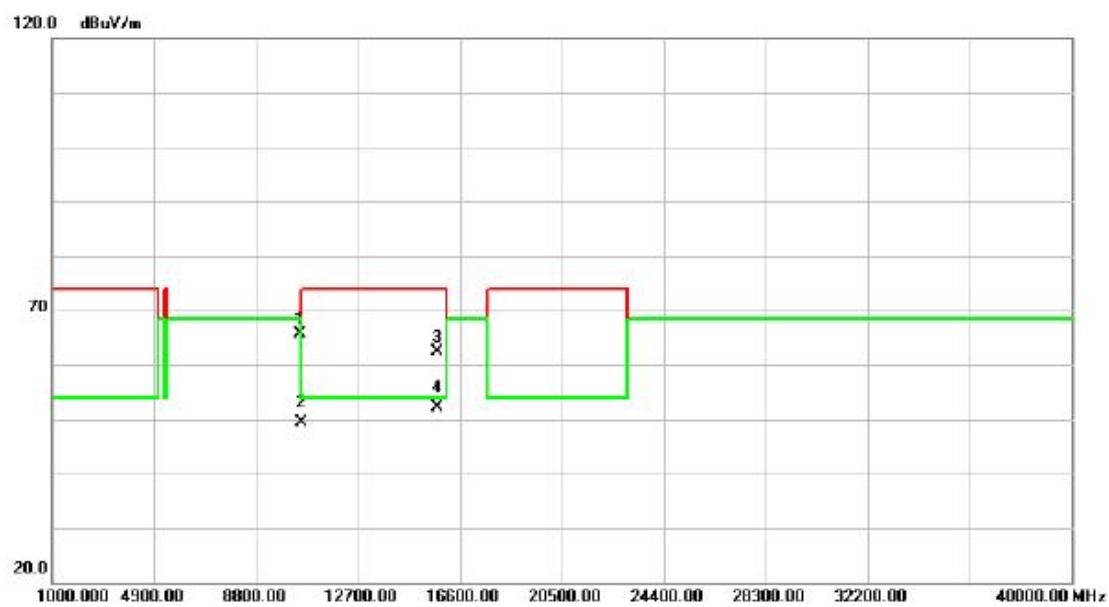
No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Comment
			Level					
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1		10398.97	42.55	17.92	60.47	68.30	-7.83	peak
2		10398.97	31.81	17.92	49.73	68.30	-18.57	AVG
3		15600.42	44.45	19.32	63.77	74.00	-10.23	peak
4	*	15600.55	32.25	19.32	51.57	54.00	-2.43	AVG

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

Vertical

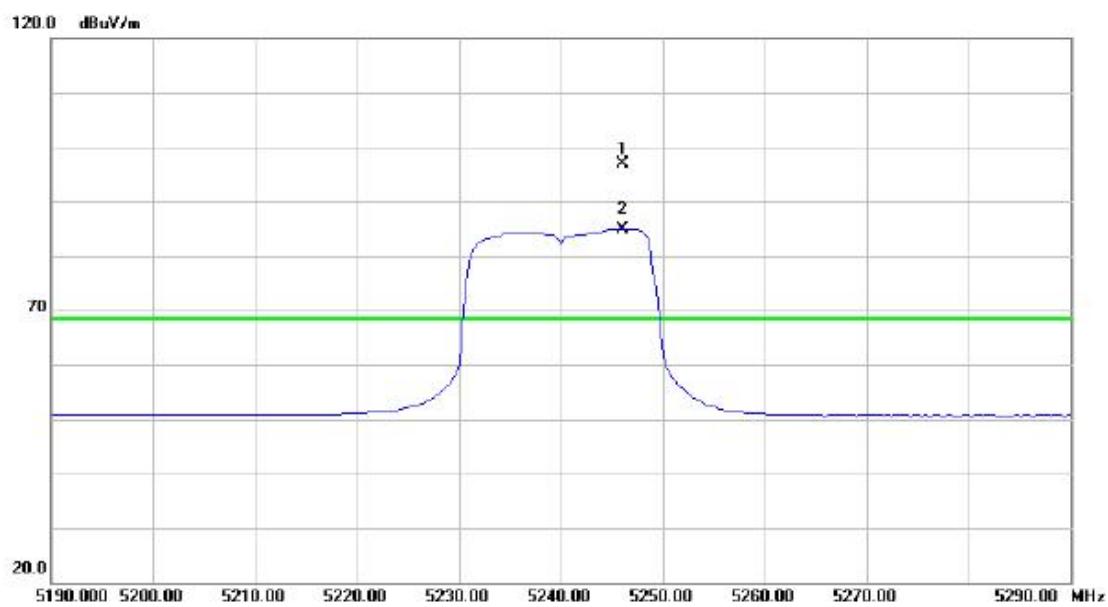
No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	
1	*	5245.000	75.60	38.06	113.66	68.30	45.36	peak no limit
2	X	5245.000	65.57	38.06	103.63	68.30	35.33	AVG no limit

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

Vertical

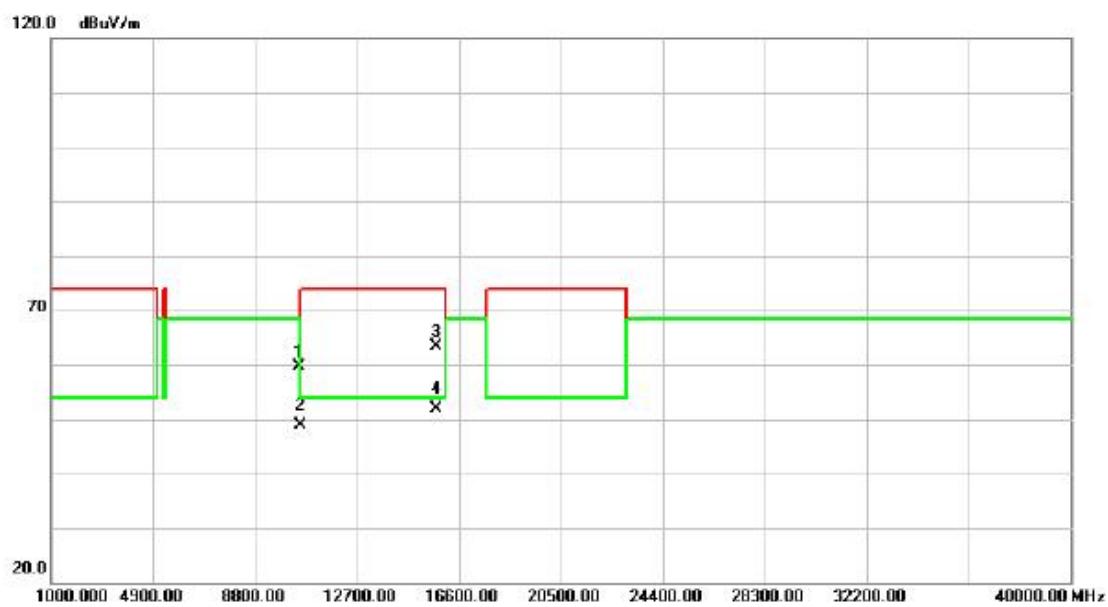
No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Comment
			Level					
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		10478.70	47.30	18.29	65.59	68.30	-2.71	peak
2		10478.70	30.99	18.29	49.28	68.30	-19.02	AVG
3		15719.82	42.94	19.36	62.30	74.00	-11.70	peak
4	*	15719.82	32.77	19.36	52.13	54.00	-1.87	AVG

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	*	5246.000	58.77	38.08	96.85	68.30	28.55	peak	no limit
2	X	5246.000	46.85	38.08	84.93	68.30	16.63	AVG	no limit

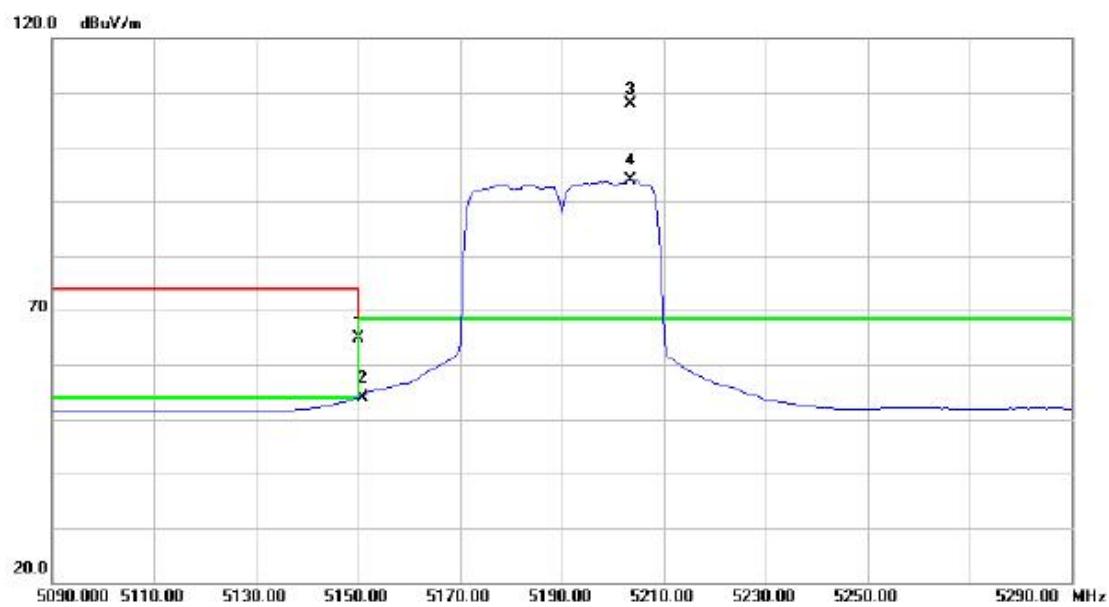
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV/m	dB			
1		10480.58	41.36	18.29	59.65	68.30	-8.65	peak	
2		10480.58	30.61	18.29	48.90	68.30	-19.40	AVG	
3		15720.63	43.94	19.37	63.31	74.00	-10.69	peak	
4	*	15720.63	32.55	19.37	51.92	54.00	-2.08	AVG	

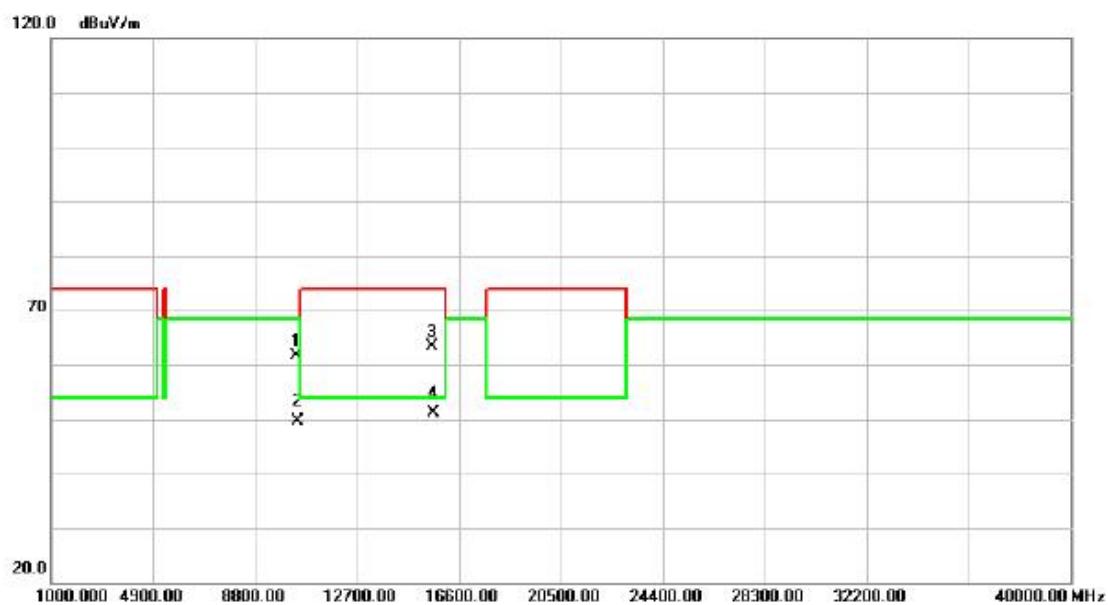
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

Vertical



No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dB				
1		5150.000	27.20	37.74	64.94	68.30	-3.36	peak	
2		5150.000	16.10	37.74	53.84	54.00	-0.16	AVG	
3	*	5203.500	69.90	37.92	107.82	68.30	39.52	peak	no limit
4	X	5203.500	55.89	37.92	93.81	68.30	25.51	AVG	no limit

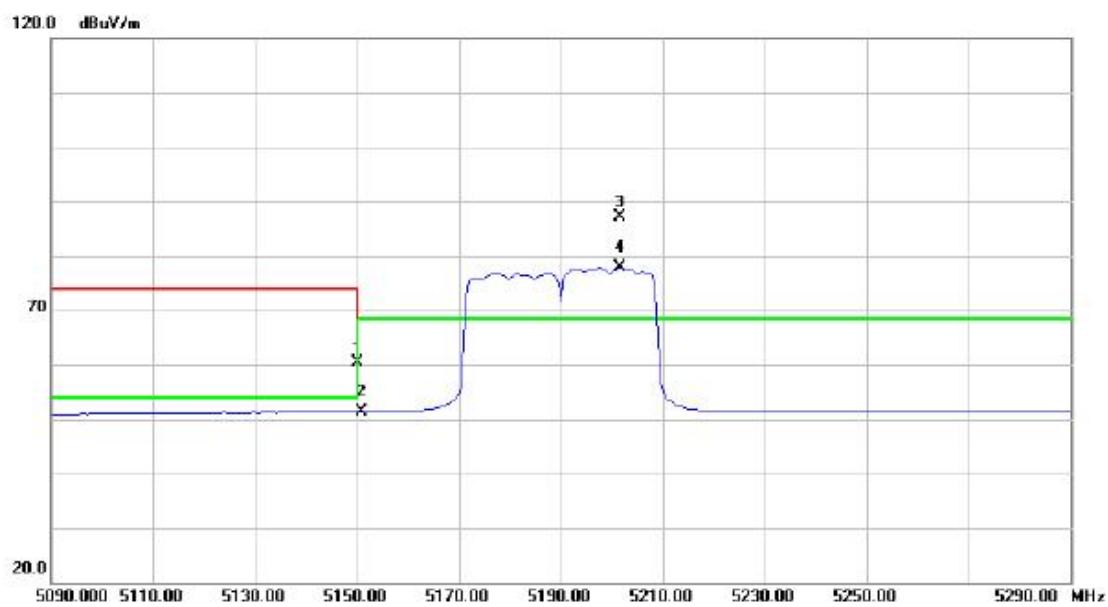
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

Vertical

No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		10380.42	43.78	17.83	61.61	68.30	-6.69	peak	
2		10380.42	31.85	17.83	49.68	68.30	-18.62	AVG	
3		15570.17	43.99	19.31	63.30	74.00	-10.70	peak	
4	*	15570.17	31.75	19.31	51.06	54.00	-2.94	AVG	

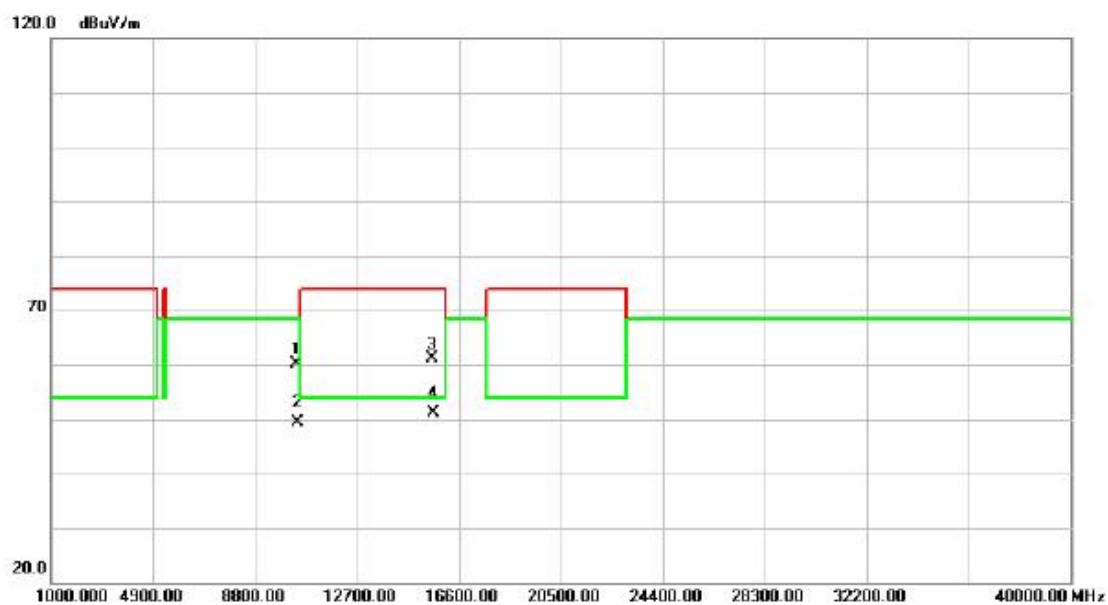
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz

Horizontal



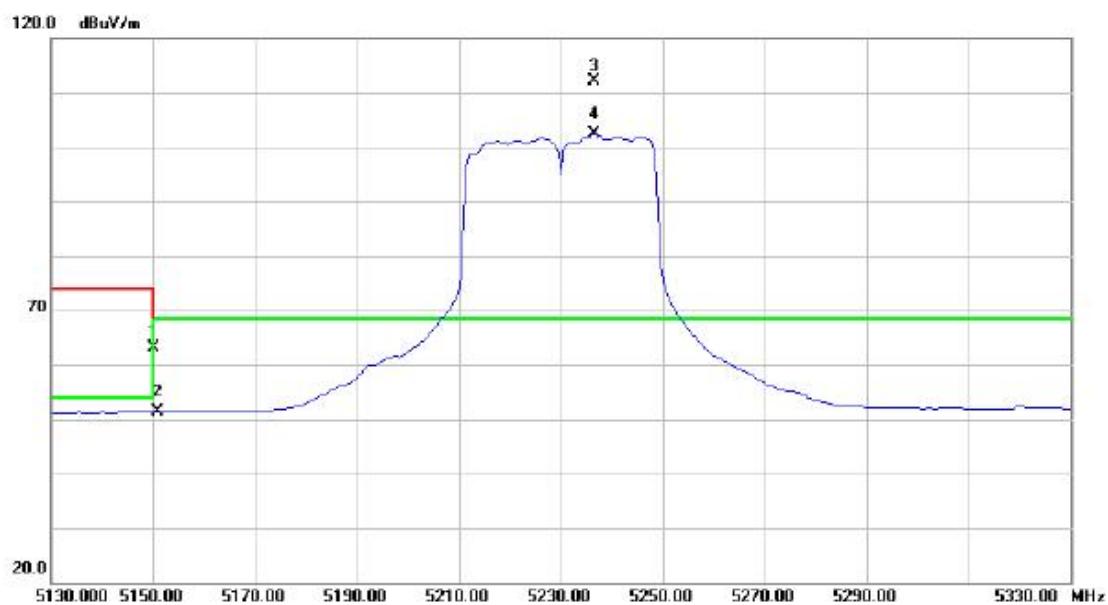
No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dB				
1		5150.000	22.53	37.74	60.27	68.30	-8.03	peak	
2		5150.000	13.65	37.74	51.39	54.00	-2.61	AVG	
3	*	5201.500	49.20	37.92	87.12	68.30	18.82	peak	no limit
4	X	5201.500	39.86	37.92	77.78	68.30	9.48	AVG	no limit

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level						
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		10380.30	42.26	17.83	60.09	68.30	-8.21	peak	
2		10380.30	31.56	17.83	49.39	68.30	-18.91	AVG	
3		15570.50	41.92	19.31	61.23	74.00	-12.77	peak	
4	*	15570.50	31.77	19.31	51.08	54.00	-2.92	AVG	

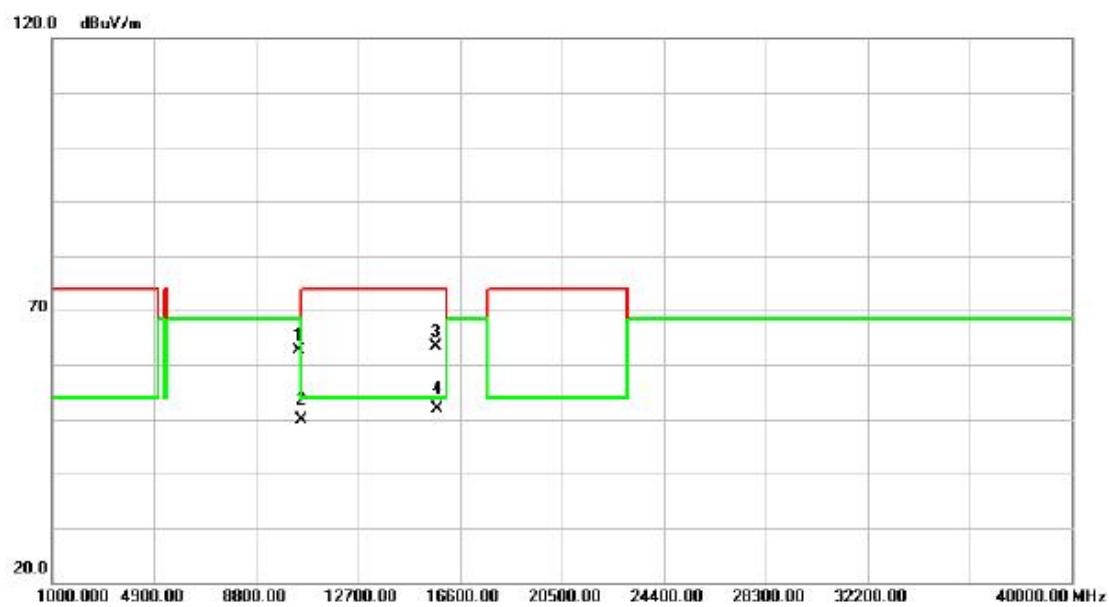
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		5150.000	25.30	37.74	63.04	68.30	-5.26	peak	
2		5150.000	13.53	37.74	51.27	54.00	-2.73	AVG	
3	*	5236.500	74.20	38.03	112.23	68.30	43.93	peak	no limit
4	X	5236.500	64.38	38.03	102.41	68.30	34.11	AVG	no limit

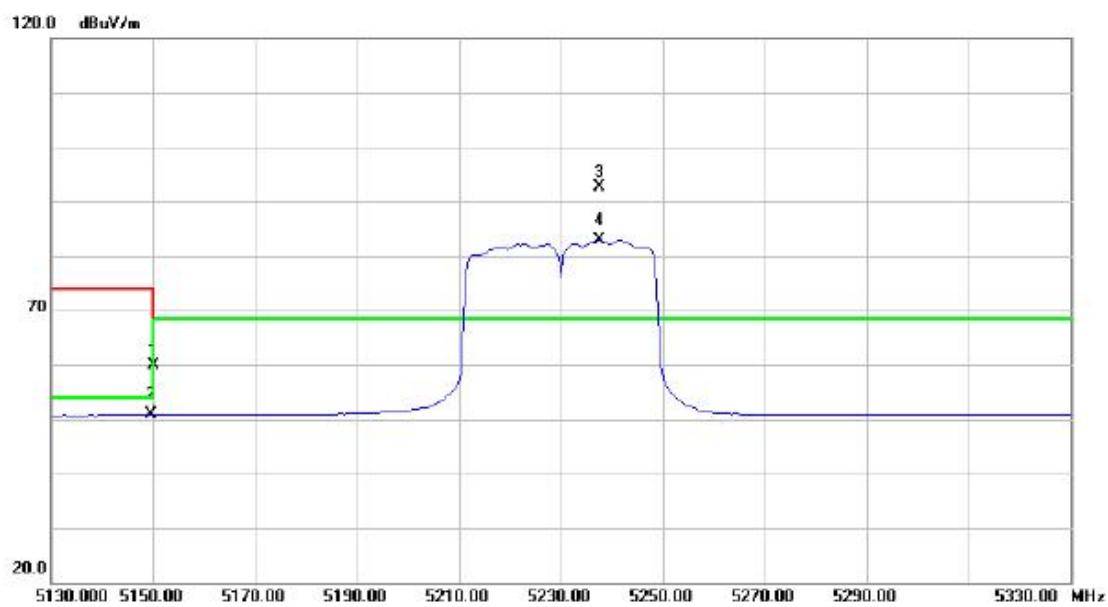
Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

Vertical



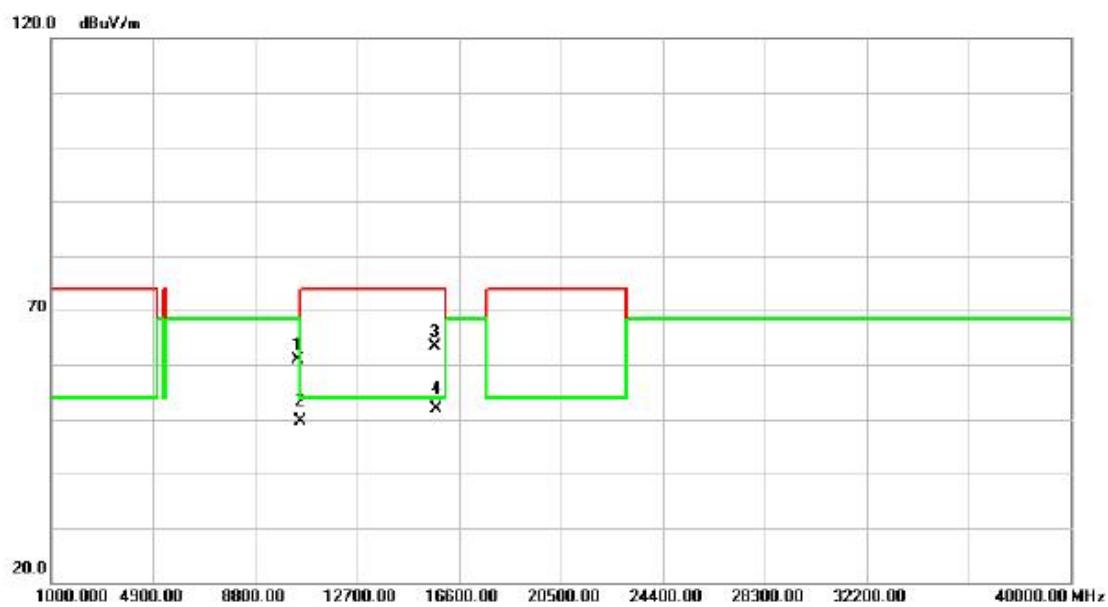
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		10459.42	44.48	18.20	62.68	68.30	-5.62	peak	
2		10459.42	31.60	18.20	49.80	68.30	-18.50	AVG	
3		15690.26	43.91	19.35	63.26	74.00	-10.74	peak	
4	*	15690.26	32.47	19.35	51.82	54.00	-2.18	AVG	

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

Horizontal

No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level dBuV	Factor	ment dBuV/m				
1		5150.000	22.10	37.74	59.84	68.30	-8.46	peak	
2		5150.000	13.04	37.74	50.78	54.00	-3.22	AVG	
3	*	5237.500	54.57	38.05	92.62	68.30	24.32	peak	no limit
4	X	5237.500	44.86	38.05	82.91	68.30	14.61	AVG	no limit

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

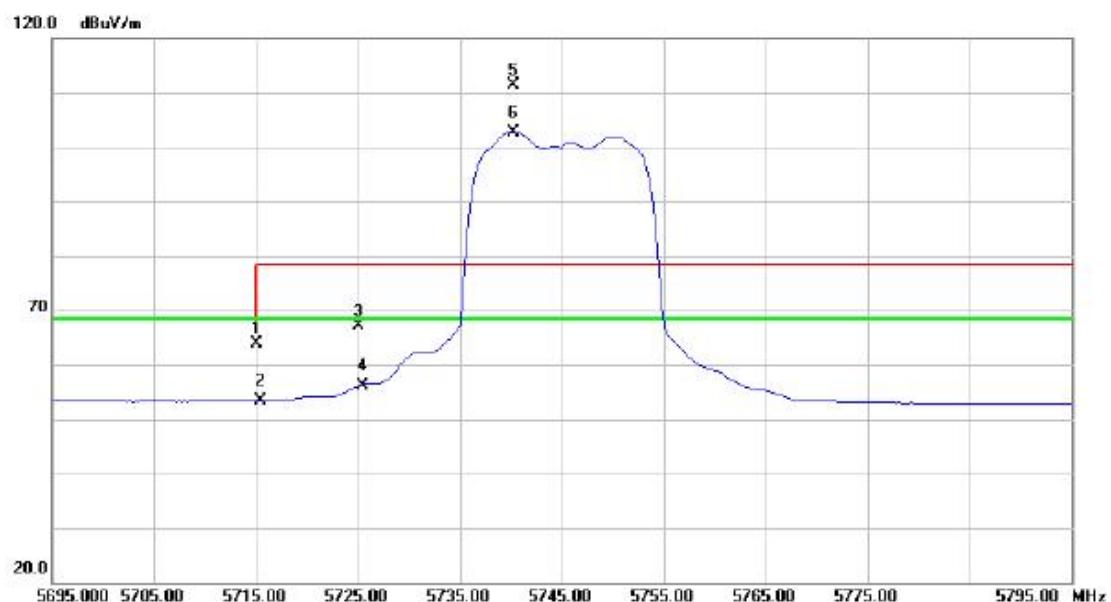
Horizontal

No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	Comment
			Level					
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1		10459.78	42.61	18.20	60.81	68.30	-7.49	peak
2		10459.78	31.38	18.20	49.58	68.30	-18.72	AVG
3		15689.72	44.14	19.35	63.49	74.00	-10.51	peak
4	*	15689.72	32.43	19.35	51.78	54.00	-2.22	AVG

Orthogonal Axis: X

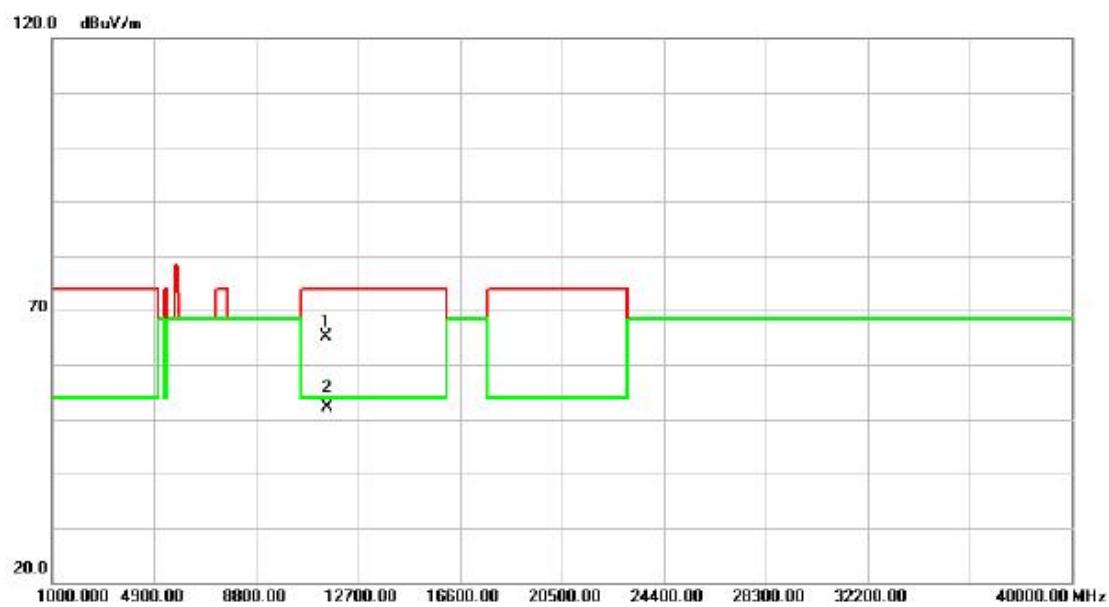
Test Mode: UNII-3/TX A Mode 5745MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		5715.000	24.50	39.43	63.93	68.30	-4.37	peak	
2		5715.000	13.94	39.43	53.37	68.30	-14.93	AVG	
3		5725.000	27.60	39.45	67.05	78.30	-11.25	peak	
4		5725.000	16.60	39.45	56.05	68.30	-12.25	AVG	
5	X	5740.250	71.96	39.49	111.45	78.30	33.15	peak	no limit
6	*	5740.250	63.21	39.49	102.70	68.30	34.40	AVG	no limit

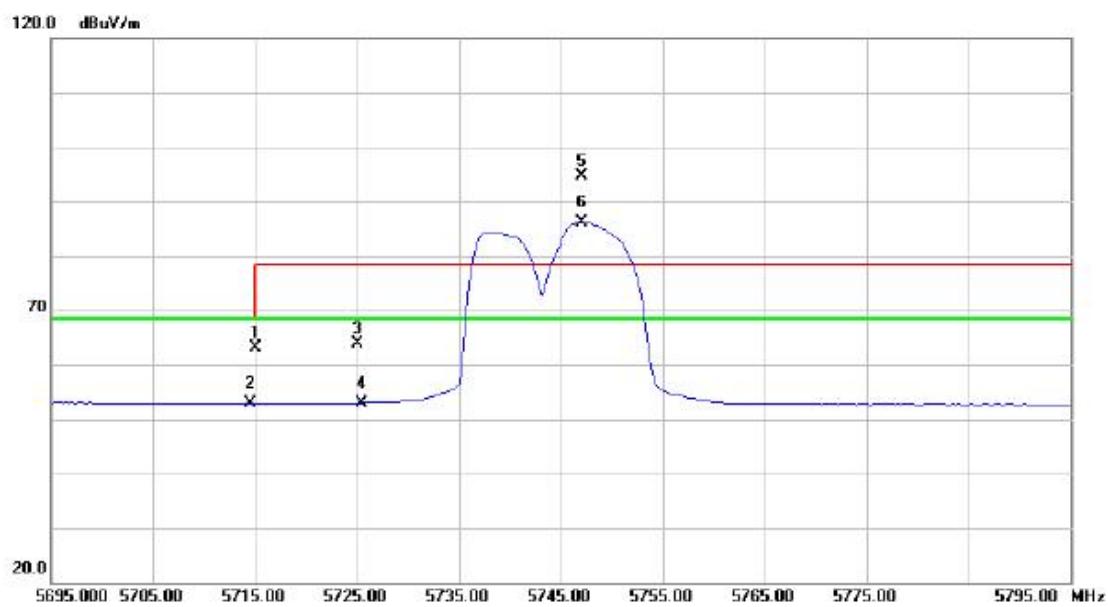
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1		11490.45	44.79	20.34	65.13	74.00	-8.87	peak
2	*	11490.45	31.91	20.34	52.25	54.00	-1.75	AVG

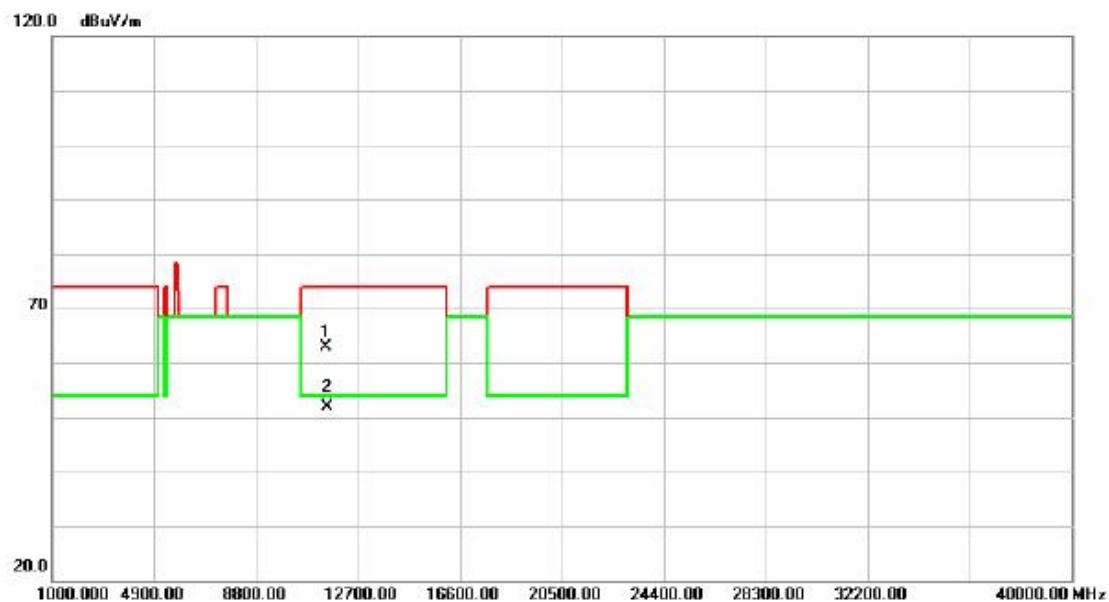
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

Horizontal



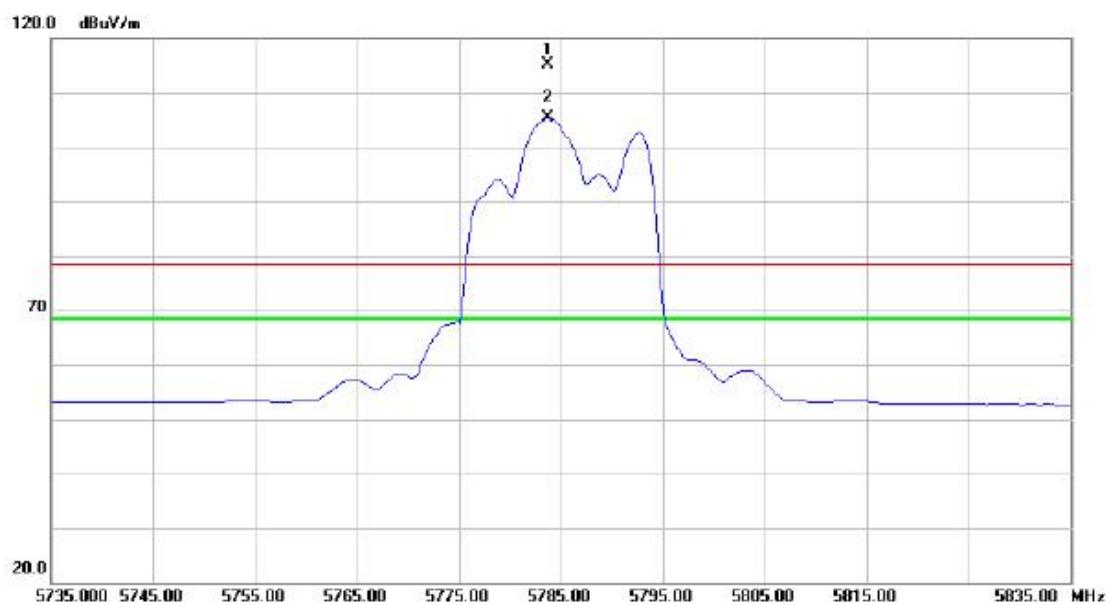
No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	
1		5715.000	23.76	39.43	63.19	68.30	-5.11	peak
2		5715.000	13.48	39.43	52.91	68.30	-15.39	AVG
3		5725.000	24.35	39.45	63.80	78.30	-14.50	peak
4		5725.000	13.52	39.45	52.97	68.30	-15.33	AVG
5	X	5747.000	55.20	39.50	94.70	78.30	16.40	peak no limit
6	*	5747.000	46.71	39.50	86.21	68.30	17.91	AVG no limit

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

Horizontal

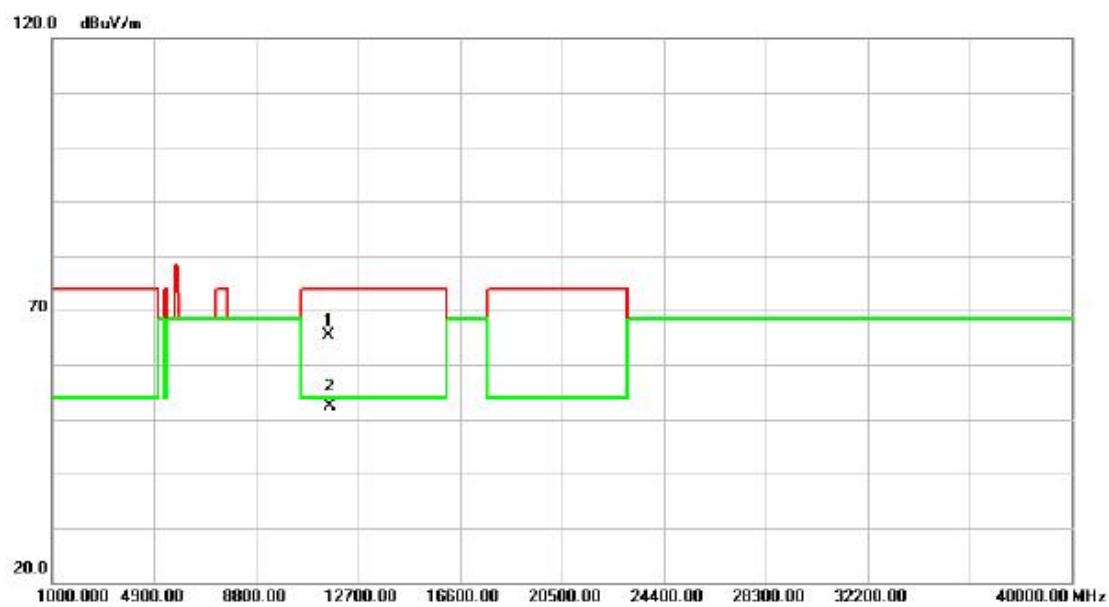
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1		11490.14	42.66	20.34	63.00	74.00	-11.00	peak
2	*	11490.14	31.58	20.34	51.92	54.00	-2.08	AVG

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

Vertical

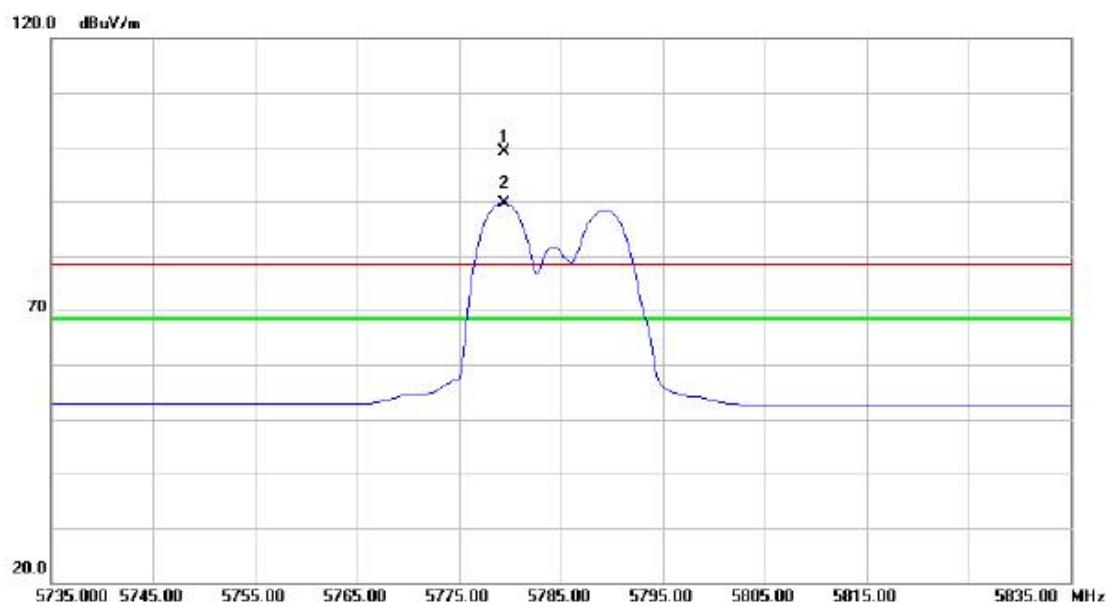
No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	
1	X	5783.750	75.46	39.58	115.04	78.30	36.74	peak no limit
2	*	5783.750	65.68	39.58	105.26	68.30	36.96	AVG no limit

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

Vertical

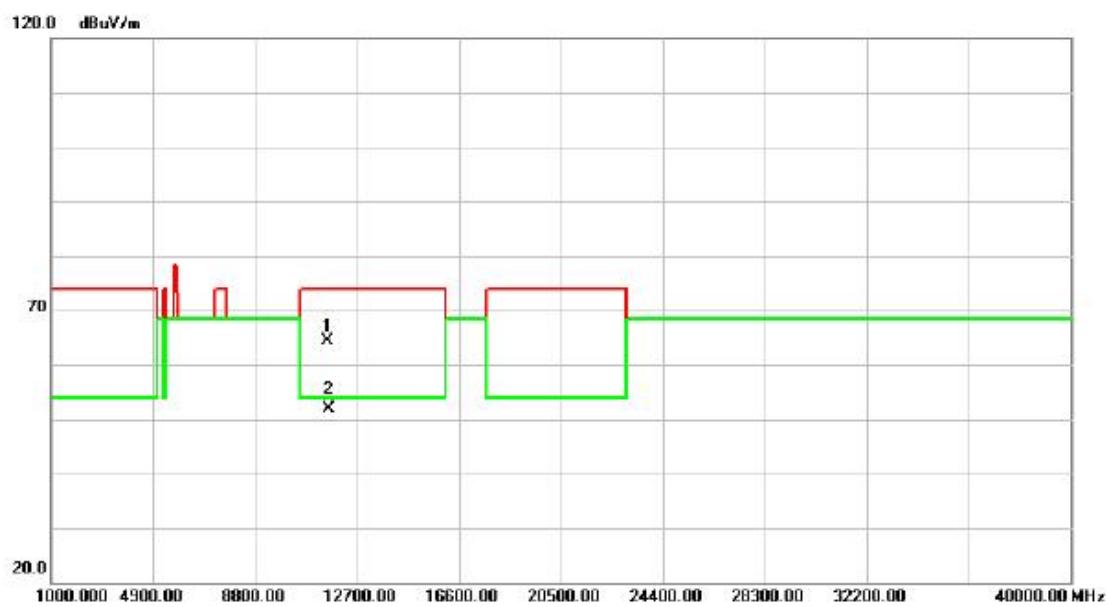
No.	Mk.	Freq. MHz	Reading	Correct	Measure-	Limit	Over
			Level dBuV	Factor dB	ment dBuV/m		
1		11570.05	44.96	20.42	65.38	74.00	-8.62 peak
2	*	11570.05	31.91	20.42	52.33	54.00	-1.67 AVG

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	5779.500	59.52	39.57	99.09	78.30	20.79	peak	no limit
2	*	5779.500	49.99	39.57	89.56	68.30	21.26	AVG	no limit

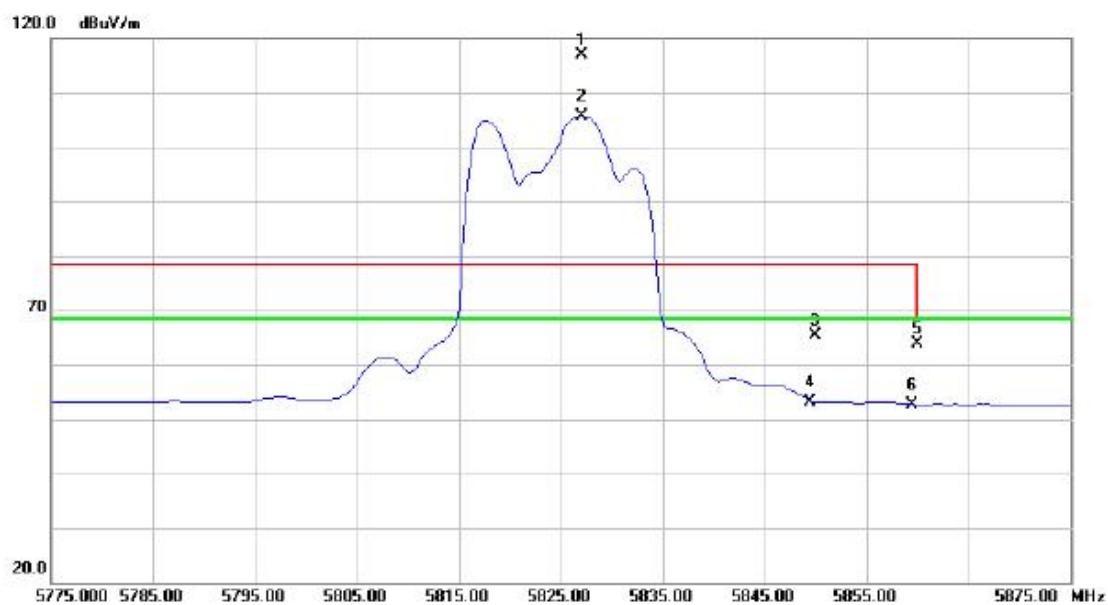
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.05	43.96	20.42	64.38	74.00	-9.62	peak	
2	*	11570.05	31.48	20.42	51.90	54.00	-2.10	AVG	

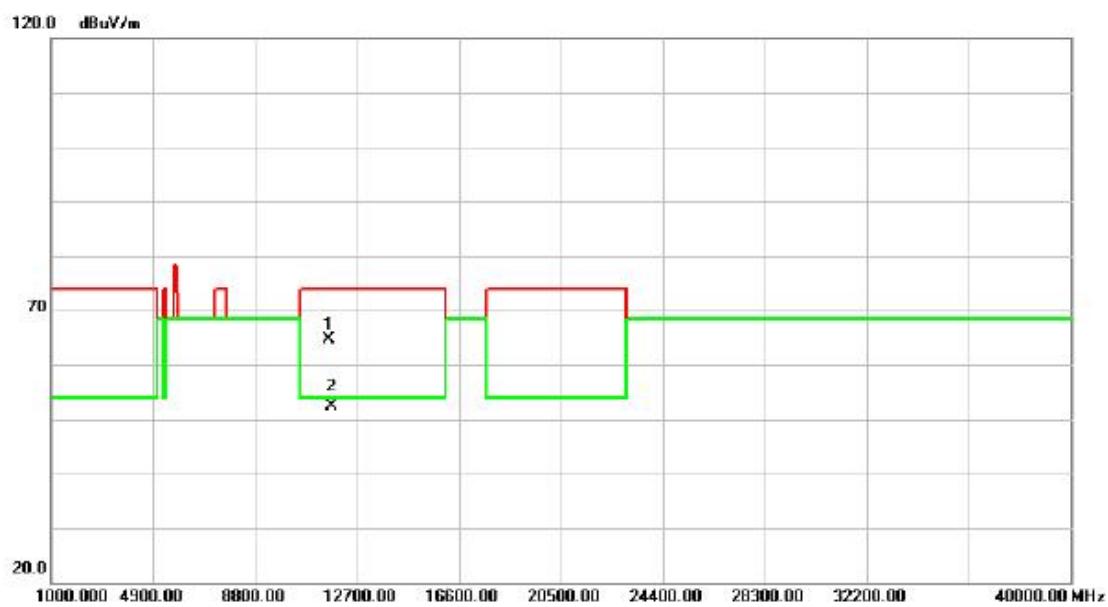
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	5827.000	77.10	39.68	116.78	78.30	38.48	peak	no limit
2	X	5827.000	66.07	39.68	105.75	68.30	37.45	AVG	no limit
3		5850.000	25.58	39.73	65.31	78.30	-12.99	peak	
4		5850.000	13.36	39.73	53.09	68.30	-15.21	AVG	
5		5860.000	24.20	39.76	63.96	68.30	-4.34	peak	
6		5860.000	12.96	39.76	52.72	68.30	-15.58	AVG	

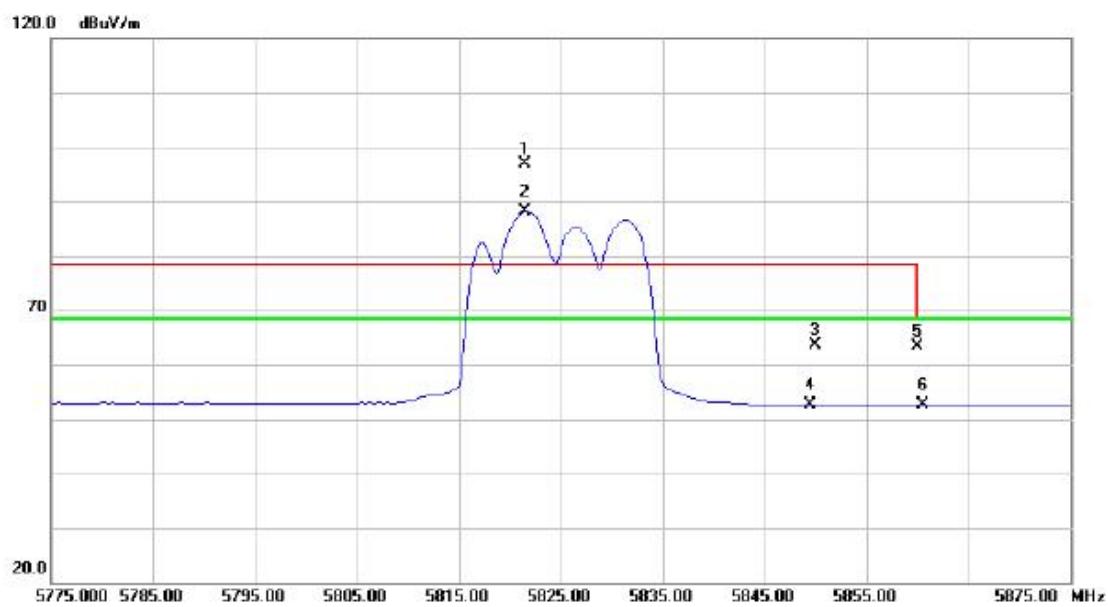
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1		11650.03	44.04	20.52	64.56	74.00	-9.44	peak
2	*	11650.03	31.97	20.52	52.49	54.00	-1.51	AVG

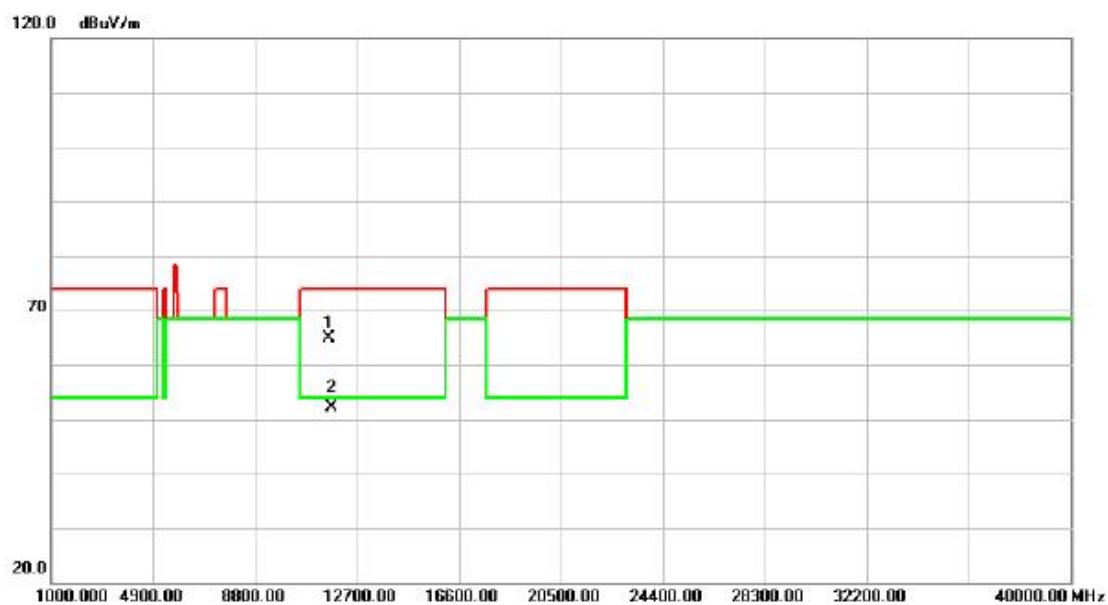
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
			dBuV	dB	dBuV/m	dB	Detector	
1	X	5821.500	57.20	39.67	96.87	78.30	18.57	peak no limit
2	*	5821.500	48.46	39.67	88.13	68.30	19.83	AVG no limit
3		5850.000	23.85	39.73	63.58	78.30	-14.72	peak
4		5850.000	12.93	39.73	52.66	68.30	-15.64	AVG
5		5860.000	23.74	39.76	63.50	68.30	-4.80	peak
6		5860.000	12.90	39.76	52.66	68.30	-15.64	AVG

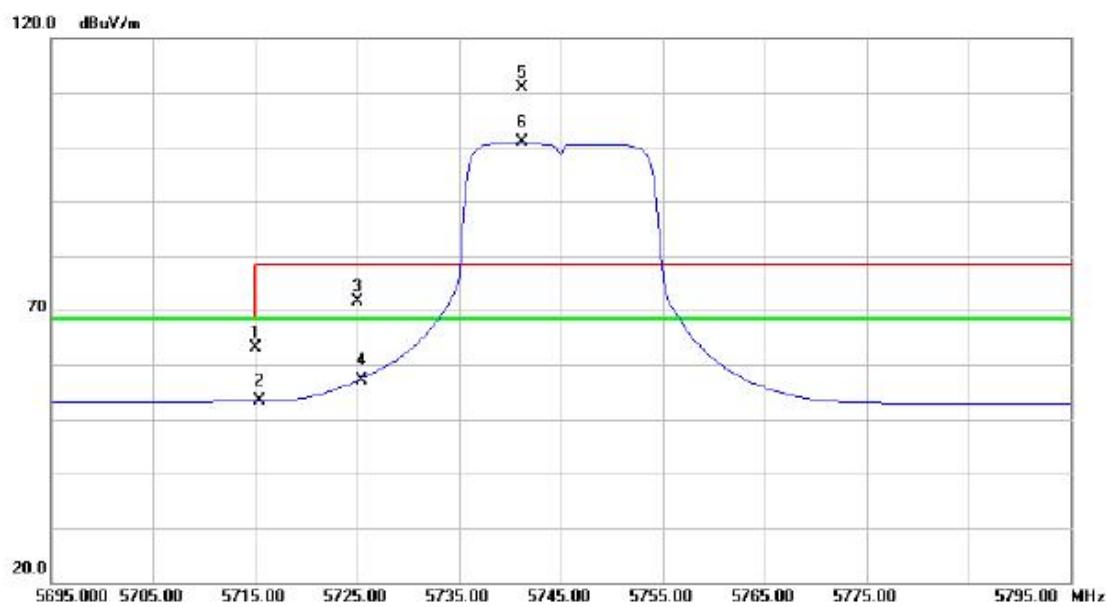
Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11649.92	44.46	20.50	64.96	74.00	-9.04	peak	
2	*	11649.92	31.73	20.50	52.23	54.00	-1.77	AVG	

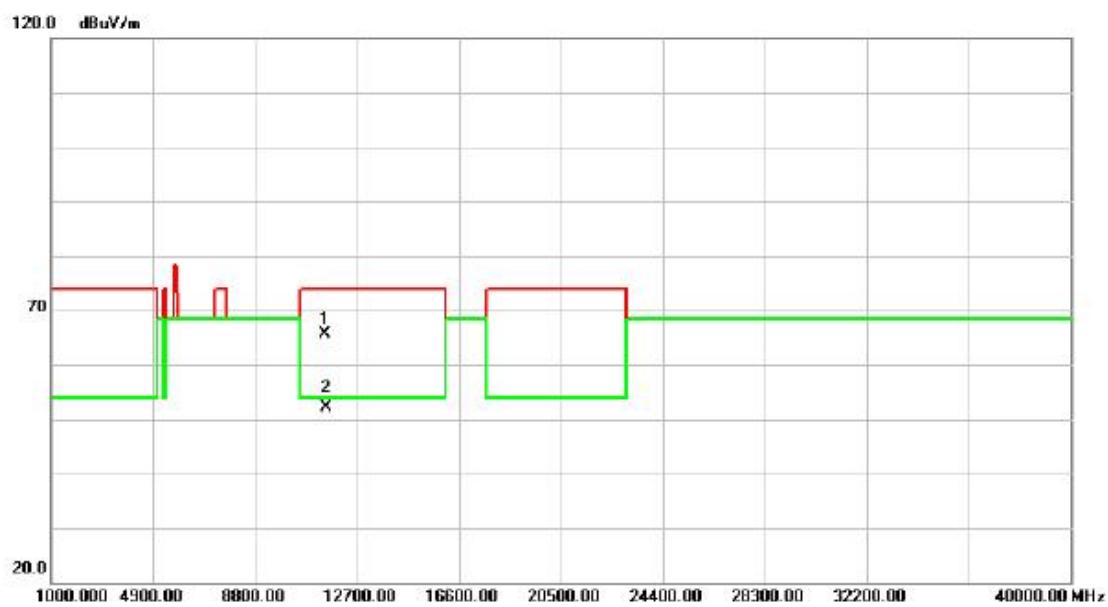
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		5715.000	23.59	39.43	63.02	68.30	-5.28	peak	
2		5715.000	13.96	39.43	53.39	68.30	-14.91	AVG	
3		5725.000	32.30	39.45	71.75	78.30	-6.55	peak	
4		5725.000	17.67	39.45	57.12	68.30	-11.18	AVG	
5	X	5741.250	71.32	39.49	110.81	78.30	32.51	peak	no limit
6	*	5741.250	61.39	39.49	100.88	68.30	32.58	AVG	no limit

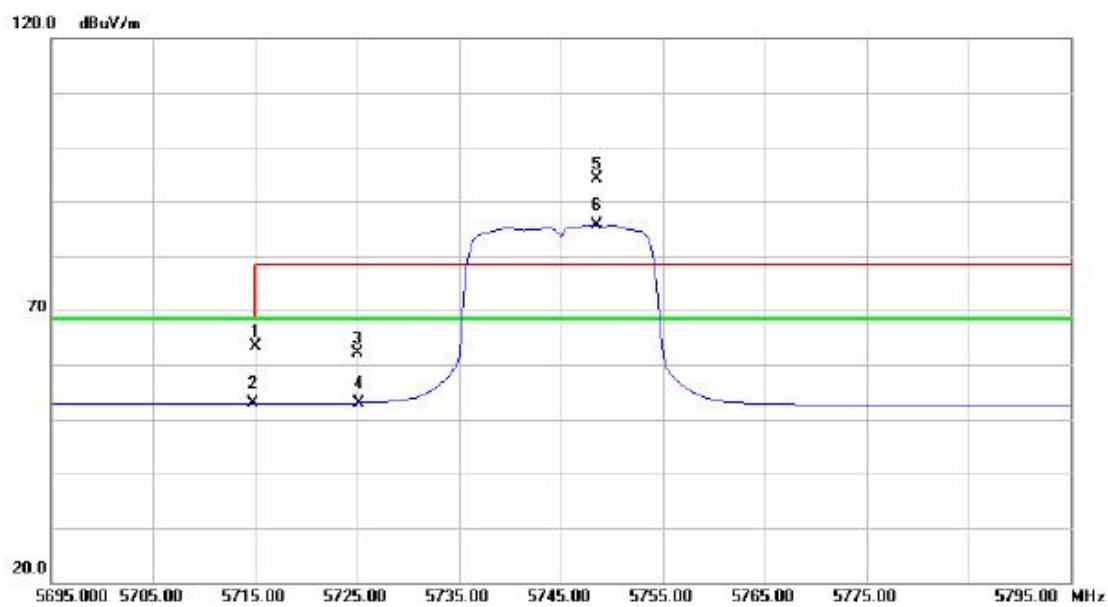
Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1		11491.08	45.30	20.34	65.64	74.00	-8.36	peak
2	*	11491.08	31.72	20.34	52.06	54.00	-1.94	AVG

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

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
MHz		dBuV	dB	dBuV/m	dBuV/m	dB			
1		5715.000	23.83	39.43	63.26	68.30	-5.04	peak	
2		5715.000	13.41	39.43	52.84	68.30	-15.46	AVG	
3		5725.000	22.80	39.45	62.25	78.30	-16.05	peak	
4		5725.000	13.55	39.45	53.00	68.30	-15.30	AVG	
5	X	5748.500	54.65	39.51	94.16	78.30	15.86	peak	no limit
6	*	5748.500	46.14	39.51	85.65	68.30	17.35	AVG	no limit