

FCC Radio Test Report

FCC ID: 2AFG6-RK3288

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

Project No. : 1509C262
Equipment : Android Main Board
Model Name : B.RK3288.1
Applicant : Guangzhou Shirui Electronics Co.,Ltd
Address : 192Kezhu Road, Sciencetech Park, Guangzhou
Economic & Technology Development
District, Guangzhou, Guangdong, China

Date of Receipt : Sep. 21, 2015
Date of Test : Sep. 21, 2015 ~ Nov. 17, 2015
Issued Date : Nov. 18, 2015
Tested by : BTL Inc.

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Declaration

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1509C262	Original Issue.	Nov. 18, 2015

1. CERTIFICATION

Equipment : Android Main Board
Brand Name : seewo
Model Name : B.RK3288.1
Applicant : Guangzhou Shirui Electronics Co.,Ltd
Manufacturer : Guangzhou Shirui Electronics Co.,Ltd
Address : 192Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology
Development District, Guangzhou, Guangdong, China
Date of Test : Sep. 21, 2015 ~ Nov. 17, 2015
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C: 2014 (15.247) / ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1509C262) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the WIFI 2.4GHz part.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C: 2014				
Standard(s)	Section	Test Item	Judgment	Remark
	15.207	Conducted Emission	PASS	
	15.247(d)	Antenna conducted Spurious Emission	PASS	
	15.247(a)(2)	6dB Bandwidth	PASS	
	15.247(b)(3)	Peak Output Power	PASS	
	15.247(e)	Power Spectral Density	PASS	
	15.203	Antenna Requirement	PASS	
	15.209/15.205	Transmitter Radiated Emissions	PASS	

NOTE:

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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.
BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

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

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

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 KHz ~ 30MHz	2.32

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9KHz~30MHz	V	3.79
		9KHz~30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	H	4.06
		1GHz~18GHz	V	3.12
		1GHz~18GHz	H	3.68
		18GHz~40GHz	V	4.15
		18GHz~40GHz	H	4.14

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Android Main Board	
Brand Name	seewo	
Model Name	B.RK3288.1	
Model Difference	N/A	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 150 Mbps
	Output Power (Max.)	802.11b: 14.30dBm 802.11g: 21.83dBm 802.11n(20MHz): 20.02dBm 802.11n(40MHz): 19.87dBm
Power Source	Supplied from system.	
Power Rating	I/P:12V~20V 1500mA	

Note:

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

CH01 – CH11 for 802.11b, 802.11g, 802.11n(20MHz) CH03 – CH11 for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Table for Filed Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Dipole	N/A	2.55

3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	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 5	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09

Note:

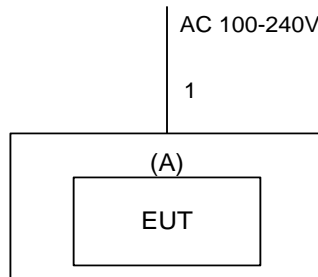
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (6.5Mbps)
 802.11n HT40 mode : BPSK (13.5Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

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 power parameters of WLAN

Test software version	RFTEST TOOL		
Frequency (MHz)	2412	2437	2462
802.11b	N/A	N/A	N/A
802.11g	N/A	N/A	N/A
802.11n (20MHz)	N/A	N/A	N/A
Frequency	2422	2437	2452
802.11n (40MHz)	N/A	N/A	N/A

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
A	Android Module	seewo	SA02	N/A	N/A

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

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150KHz-30MHz)

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15 -0.5	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	60	50

Note:

- (1) The limit of " * " decreases with the logarithm of the frequency
- (2) 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

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

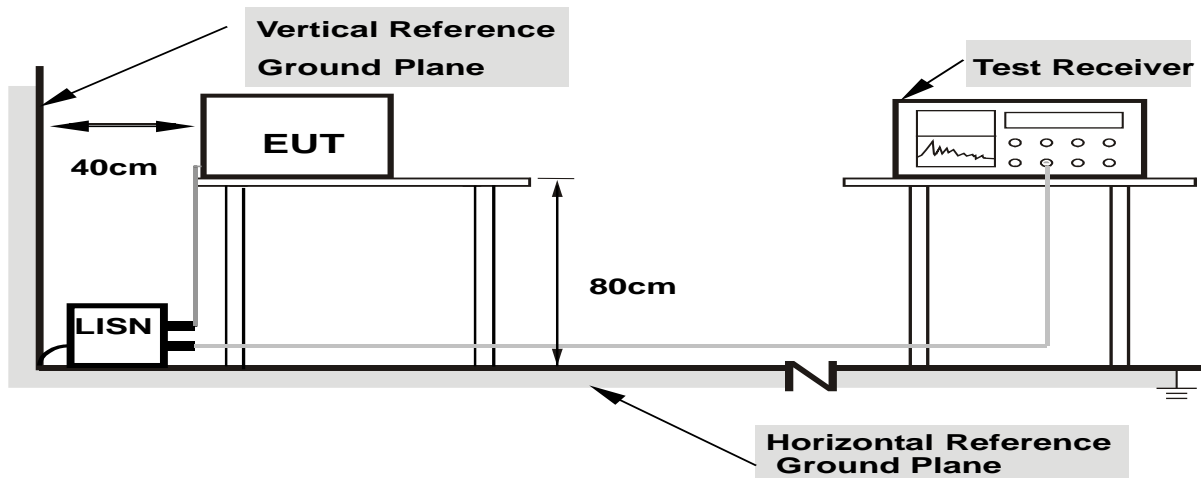
4.1.2 TEST PROCEDURE

- 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



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

The EUT was placed on the test table and programmed in normal function.

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Attachment A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

LIMITS OF RADIATED EMISSION MEASUREMENT (9KHz-1000MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency (MHz)	(dBuV/m) (at 3 meters)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
 Margin Level = Measurement Value - Limit Value

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

4.2.2 TEST PROCEDURE

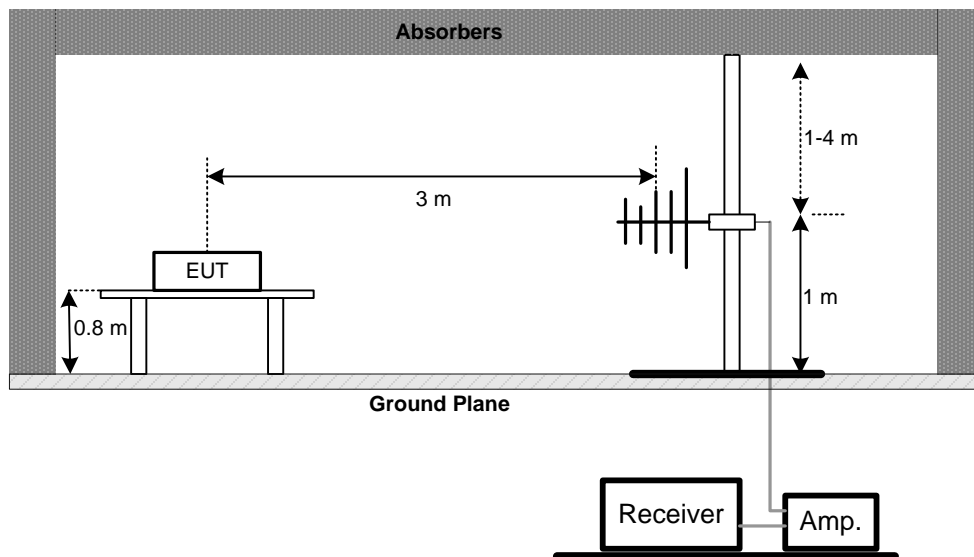
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- f. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- g. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

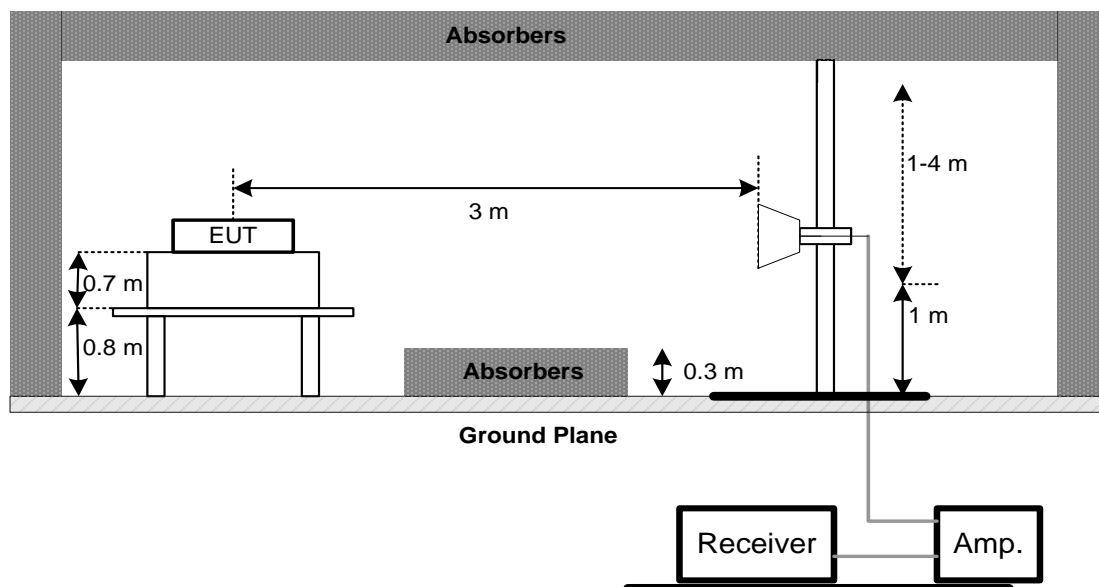
No deviation

4.2.4 TEST SETUP

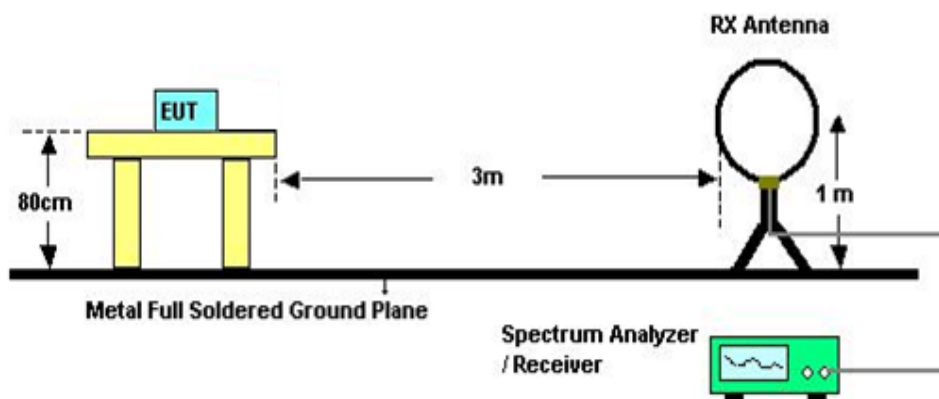
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For Radiated Emissions Below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ 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 (30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

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

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	2400-2483.5	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 Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

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 PEAK CONDUCTED OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	2400-2483.5	PASS

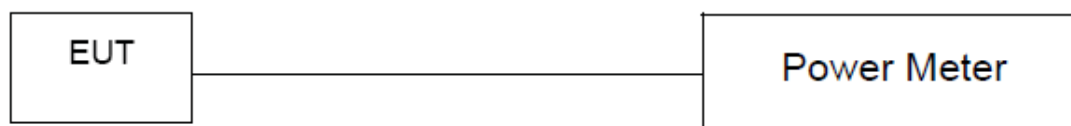
6.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance v03r03.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

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

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

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 Setting: RBW= 100KHz, VBW=300KHz, Sweep time = Auto.
- c. Offset=antenna gain+cable loss

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

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 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

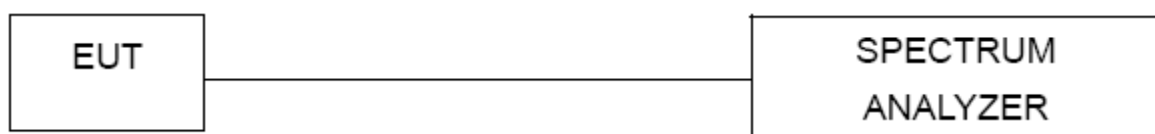
8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW=3KHz, VBW=10KHz, Sweep time = Auto.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Attachment H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	699837	0052765	Mar. 28, 2016
2	LISN	R&S	ENV216	101447	Mar. 28, 2016
3	Test Cable	emci	RG223(9KHz-30 MHz)	C_17	Mar. 13, 2016
4	EMI Test Receiver	R&S	ESCS30	826547/022	Mar. 28, 2016
5	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 28, 2016
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Mar. 28, 2016

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 28, 2016
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 28, 2016

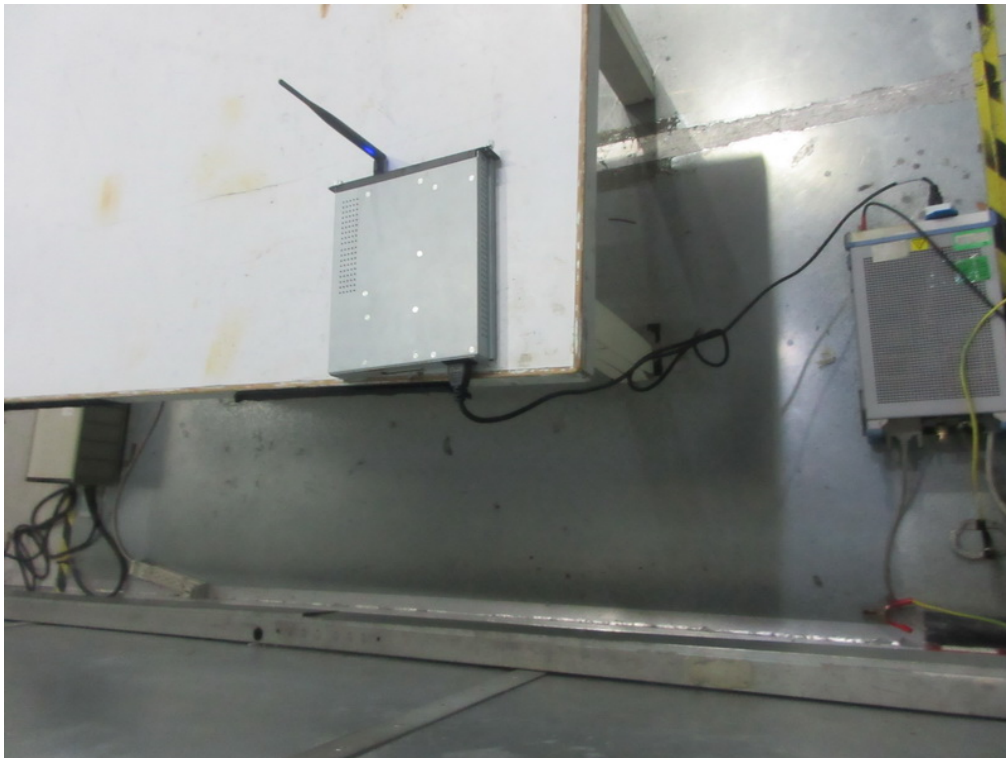
Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Mar. 28, 2016

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Mar. 28, 2016

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

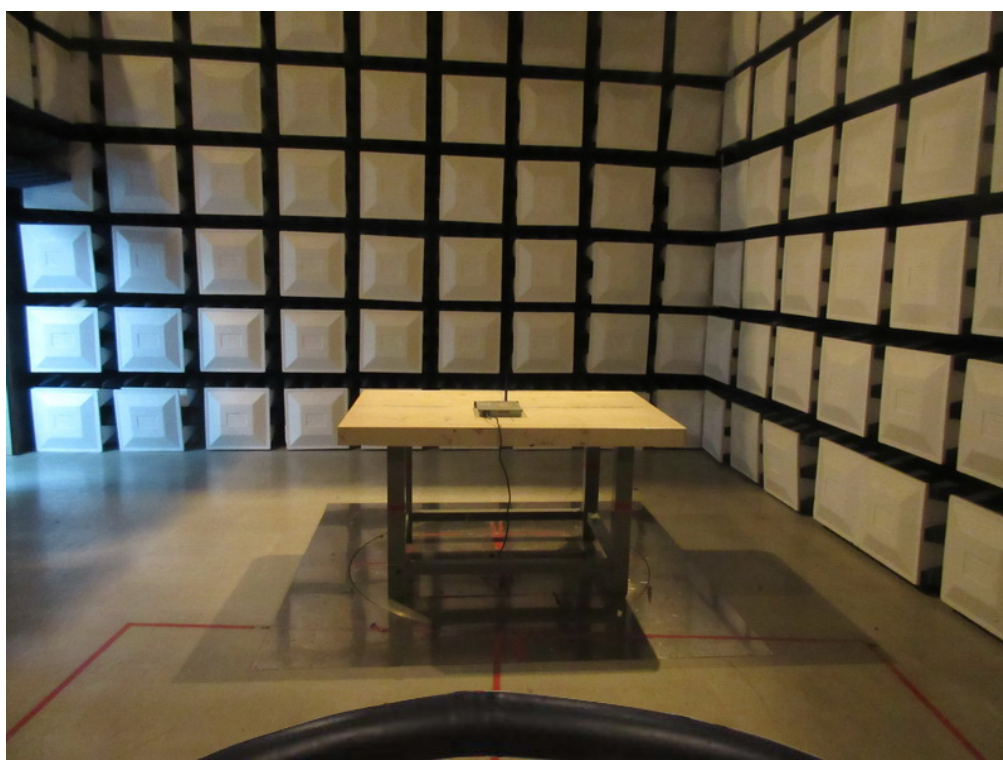
10. EUT TEST PHOTO

Conducted Measurement Photos



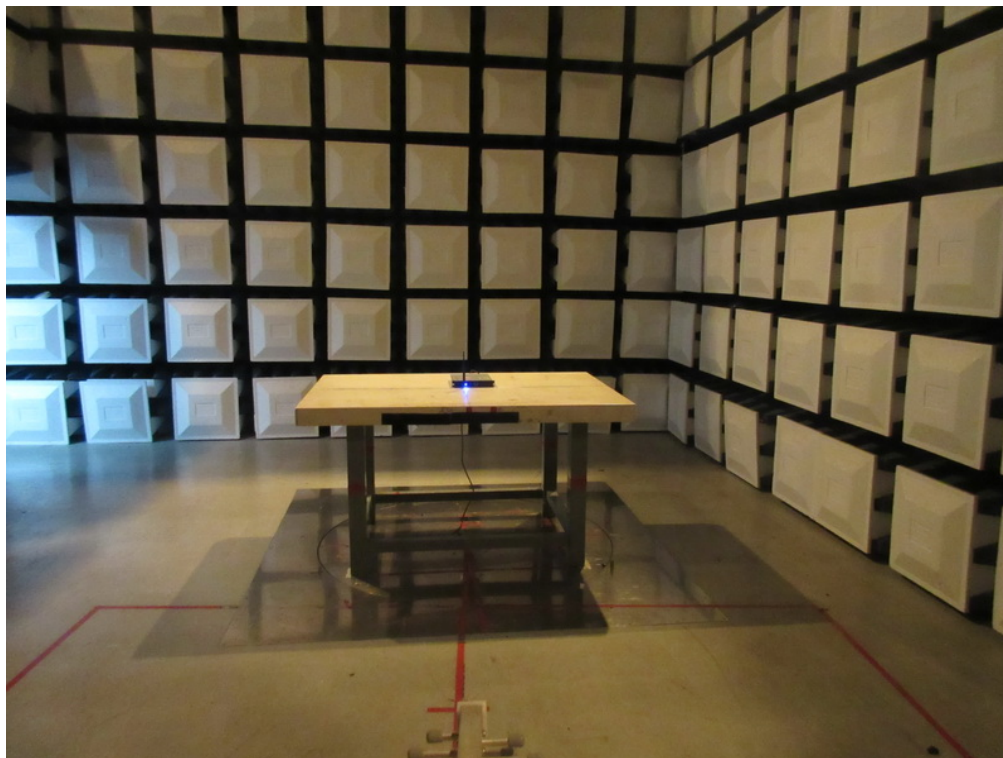
Radiated Measurement Photos

9KHz to 30MHz



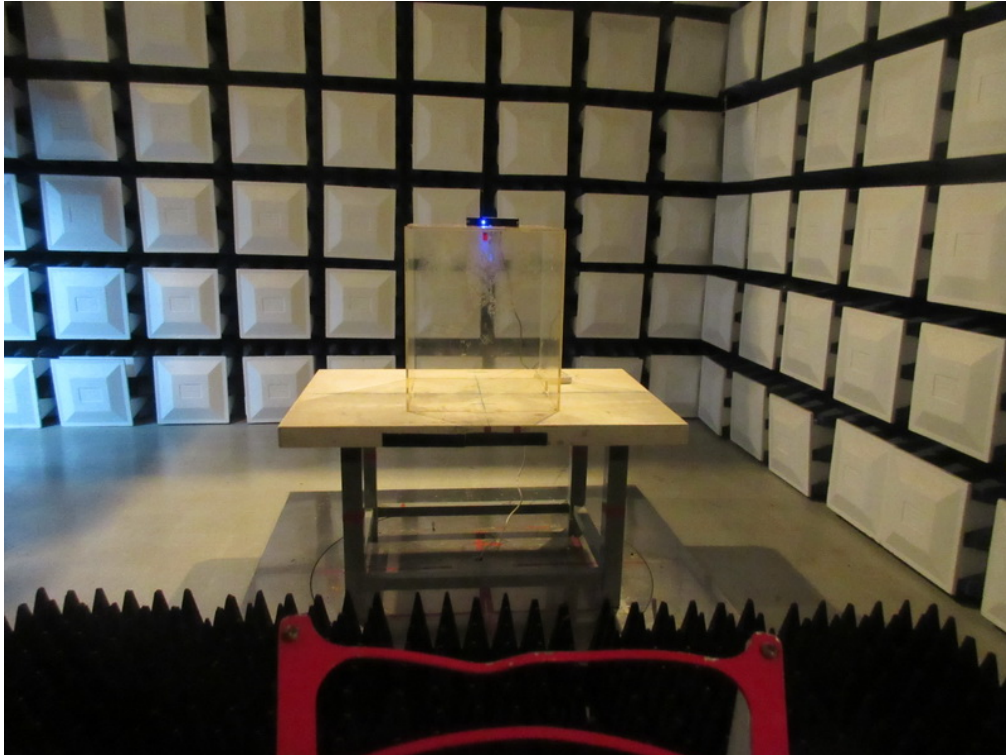
Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

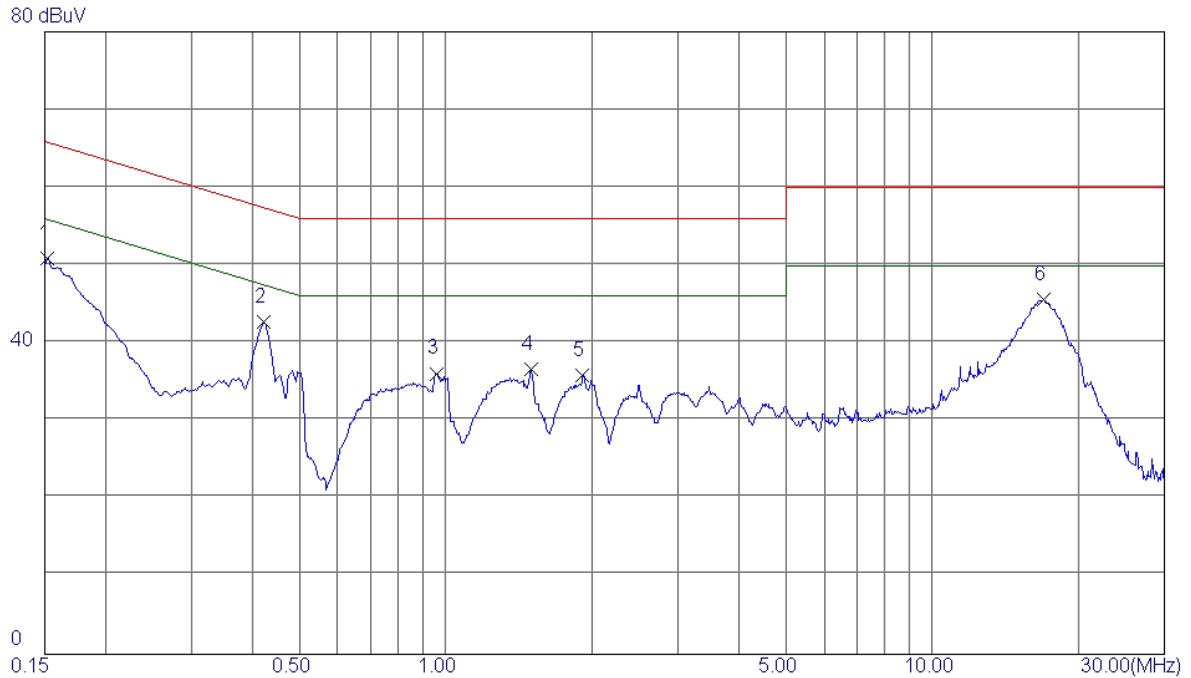
Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode : TX Mode

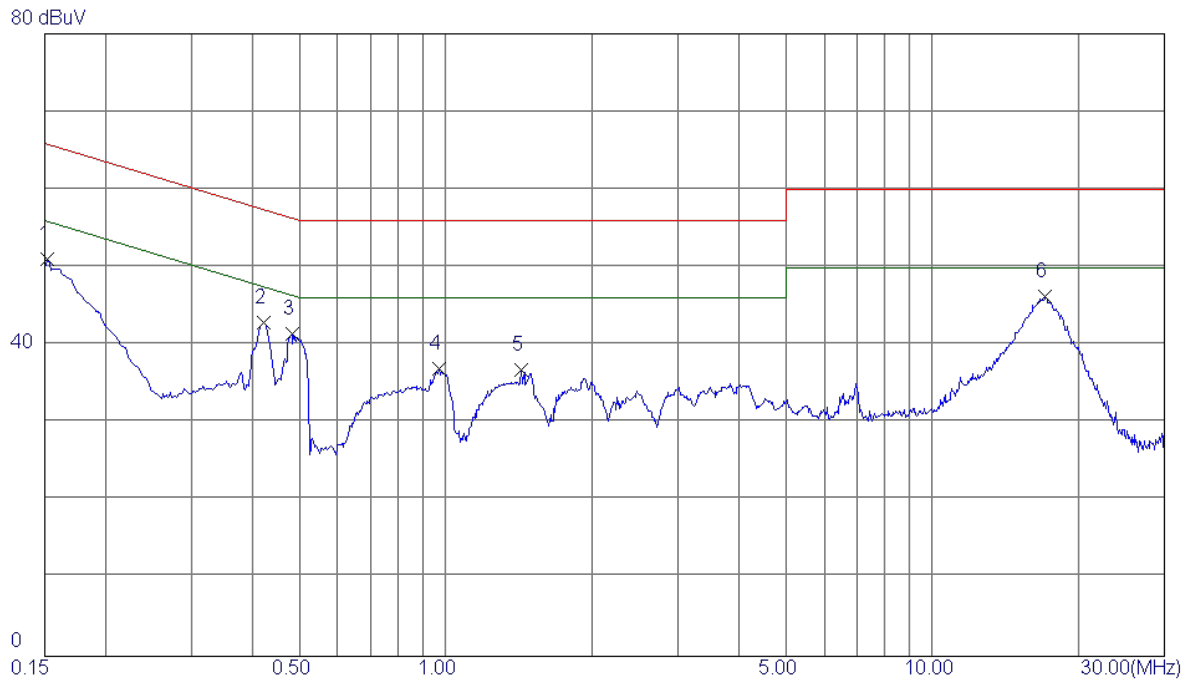
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1522	41.25	9.68	50.93	65.88	-14.95	Peak	
2	0.4222	32.84	9.81	42.65	57.40	-14.75	Peak	
3	0.9577	26.11	9.97	36.08	56.00	-19.92	Peak	
4	1.4955	26.70	9.92	36.62	56.00	-19.38	Peak	
5	1.9095	25.92	9.87	35.79	56.00	-20.21	Peak	
6	16.9238	35.28	10.32	45.60	60.00	-14.40	Peak	

Test Mode : TX Mode

Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1522	41.38	9.60	50.98	65.88	-14.90	Peak	
2	0.4222	33.20	9.63	42.83	57.40	-14.57	Peak	
3	0.4830	31.79	9.65	41.44	56.29	-14.85	Peak	
4	0.9690	27.13	9.78	36.91	56.00	-19.09	Peak	
5	1.4303	27.02	9.82	36.84	56.00	-19.16	Peak	
6	17.0633	35.96	10.27	46.23	60.00	-13.77	Peak	

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

Test Mode:	TX B MODE CHANNEL 01
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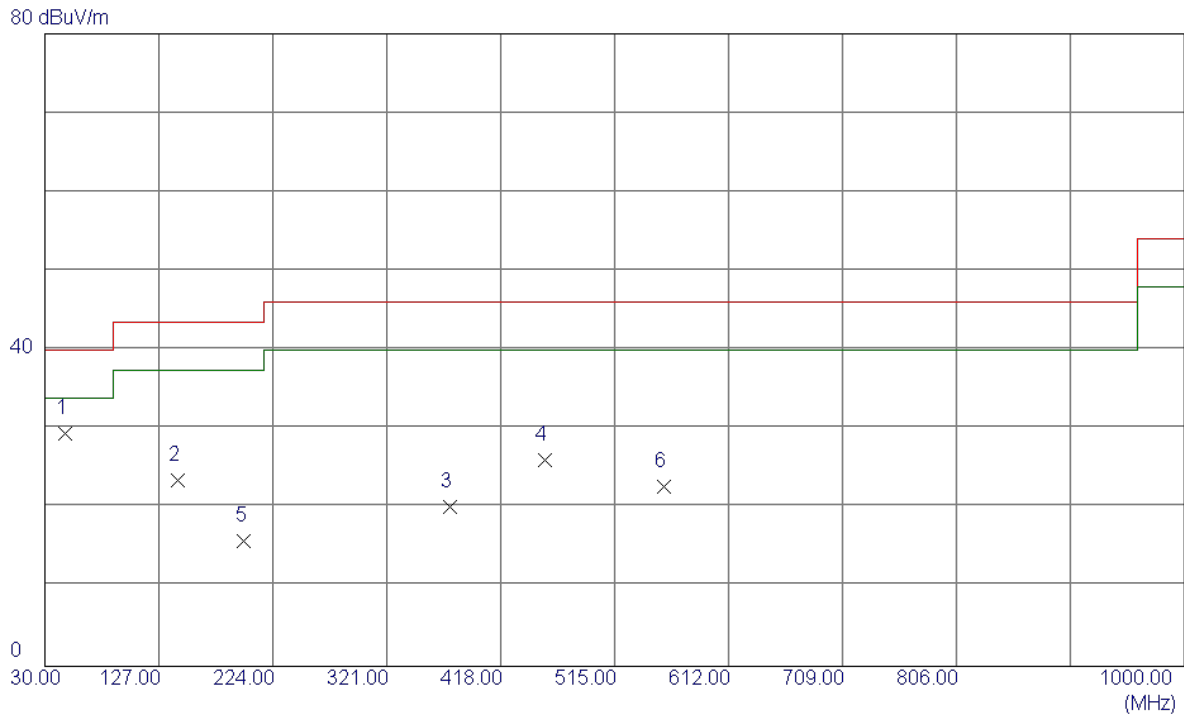
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0128	0°	13.52	24.7560	38.2760	125.4600	-87.1840	AVG
0.0128	0°	14.67	24.7560	39.4260	145.4600	-106.0340	PEAK
0.0297	0°	6.92	23.6857	30.6057	118.1491	-87.5434	AVG
0.0297	0°	8.42	23.6857	32.1057	138.1491	-106.0434	PEAK
0.0375	0°	3.45	23.1917	26.6417	116.1236	-89.4819	AVG
0.0375	0°	5.73	23.1917	28.9217	136.1236	-107.2019	PEAK
0.0593	0°	1.42	22.2140	23.6340	112.1431	-88.5091	AVG
0.0593	0°	2.91	22.2140	25.1240	132.1431	-107.0191	PEAK
0.512	0°	19.44	19.8384	39.2784	73.4188	-34.1404	QP
1.9567	0°	24.46	19.5043	43.9643	69.5400	-25.5757	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0137	90°	13.27	24.3000	37.5700	124.8698	-87.2998	AVG
0.0137	90°	14.91	24.3000	39.2100	144.8698	-105.6598	PEAK
0.0288	90°	7.44	23.7427	31.1827	118.4164	-87.2337	AVG
0.0288	90°	9.03	23.7427	32.7727	138.4164	-105.6437	PEAK
0.0457	90°	5.37	22.6723	28.0423	114.4059	-86.3636	AVG
0.0457	90°	6.43	22.6723	29.1023	134.4059	-105.3036	PEAK
0.0593	90°	1.73	22.2140	23.9440	112.1431	-88.1991	AVG
0.0593	90°	2.91	22.2140	25.1240	132.1431	-107.0191	PEAK
0.623	90°	22.27	20.1936	42.4636	71.7145	-29.2509	QP
2.0519	90°	24.36	19.4689	43.8289	69.5400	-25.7111	QP

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

Test Mode: TX B MODE CHANNEL 01

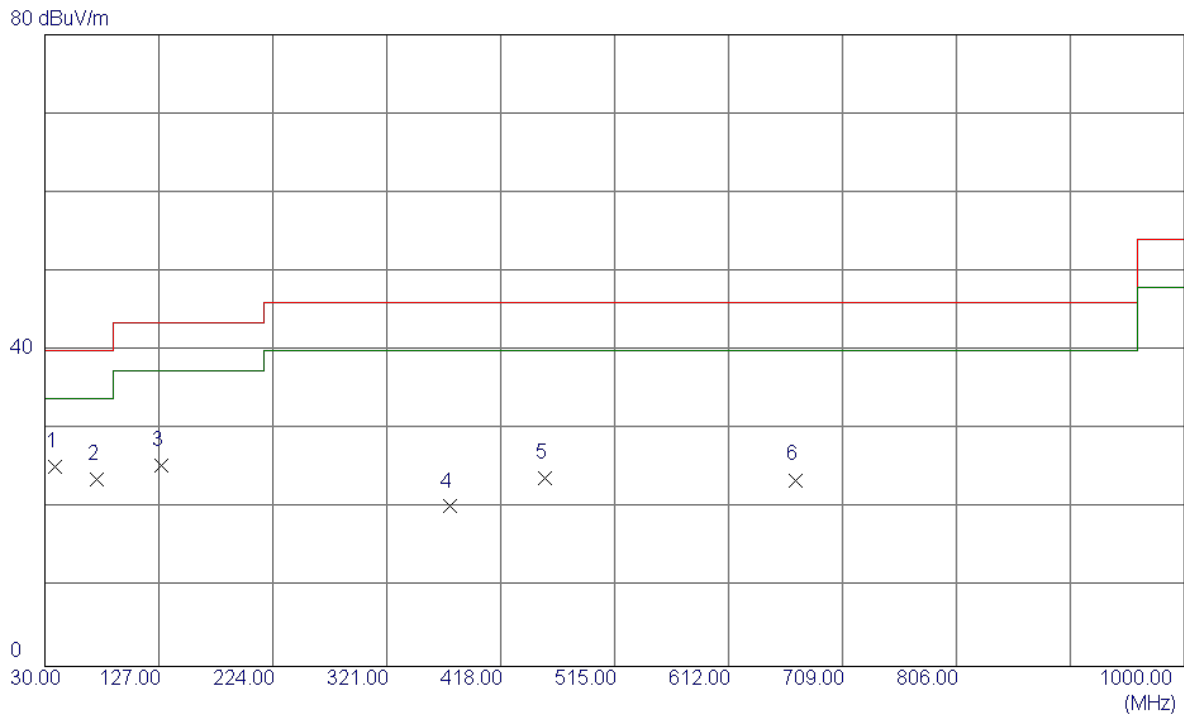
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	47.4600	43.07	-13.62	29.45	40.00	-10.55	Peak	
2	143.4900	37.29	-13.71	23.58	43.50	-19.92	Peak	
3	375.3200	30.47	-10.32	20.15	46.00	-25.85	Peak	
4	455.8300	34.30	-8.28	26.02	46.00	-19.98	Peak	
5	199.7500	30.92	-15.13	15.79	43.50	-27.71	Peak	
6	556.7100	28.19	-5.51	22.68	46.00	-23.32	Peak	

Test Mode: TX B MODE CHANNEL 01

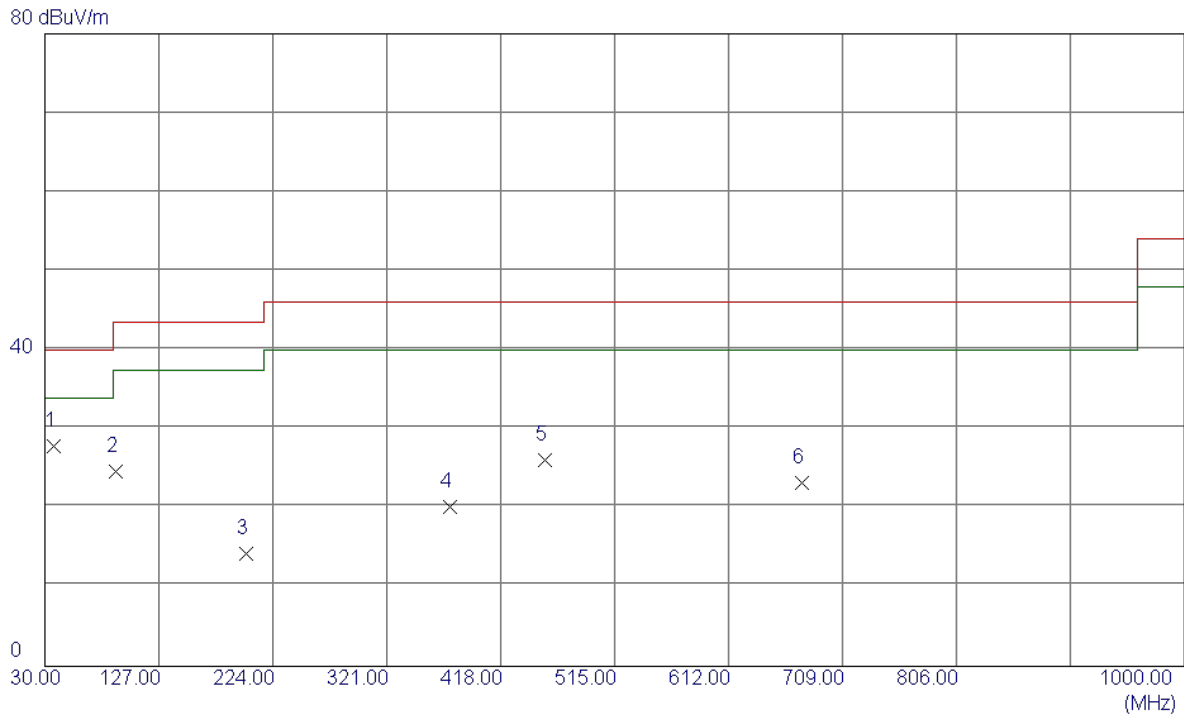
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	38.7300	39.35	-14.09	25.26	40.00	-14.74	Peak	
2	74.6200	39.97	-16.23	23.74	40.00	-16.26	Peak	
3	128.9400	38.60	-13.18	25.42	43.50	-18.08	Peak	
4	375.3200	30.56	-10.32	20.24	46.00	-25.76	Peak	
5	455.8300	32.06	-8.28	23.78	46.00	-22.22	Peak	
6	669.2300	28.36	-4.76	23.60	46.00	-22.40	Peak	

Test Mode: TX B MODE CHANNEL 06

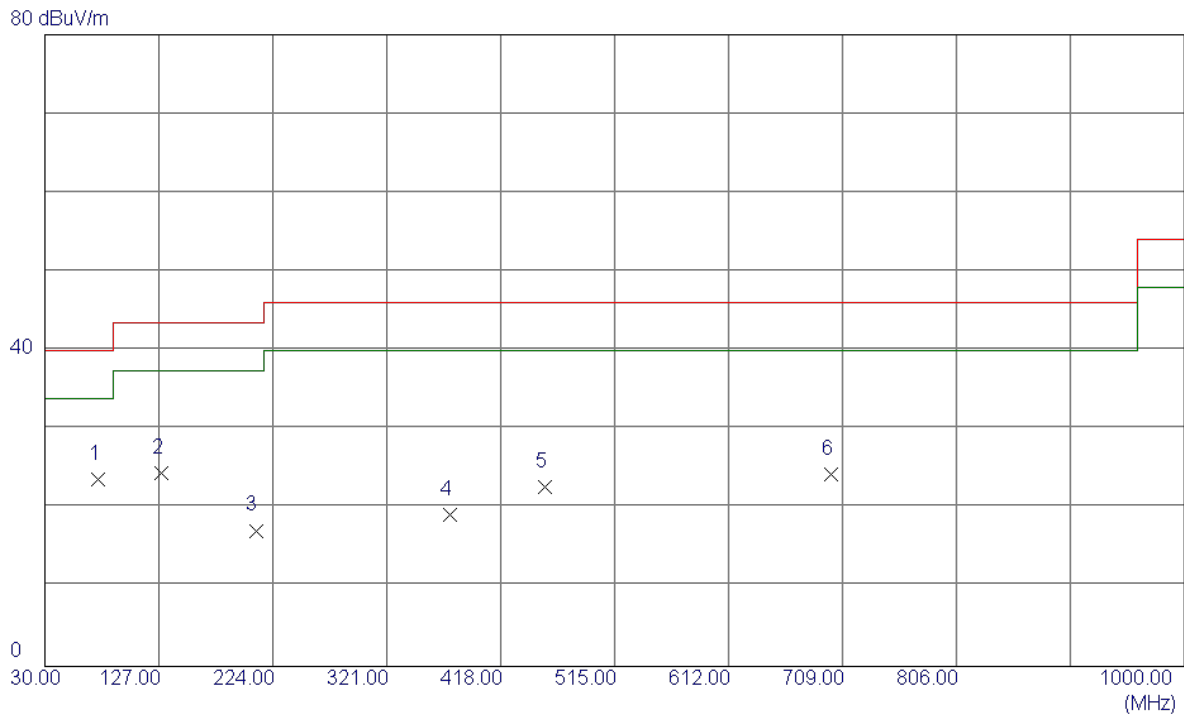
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	37.7599	41.99	-14.17	27.82	40.00	-12.18	Peak	
2	90.1400	41.43	-16.85	24.58	43.50	-18.92	Peak	
3	201.6900	29.28	-15.09	14.19	43.50	-29.31	Peak	
4	375.3200	30.47	-10.32	20.15	46.00	-25.85	Peak	
5	455.8300	34.30	-8.28	26.02	46.00	-19.98	Peak	
6	674.0800	27.90	-4.67	23.23	46.00	-22.77	Peak	

Test Mode: TX B MODE CHANNEL 06

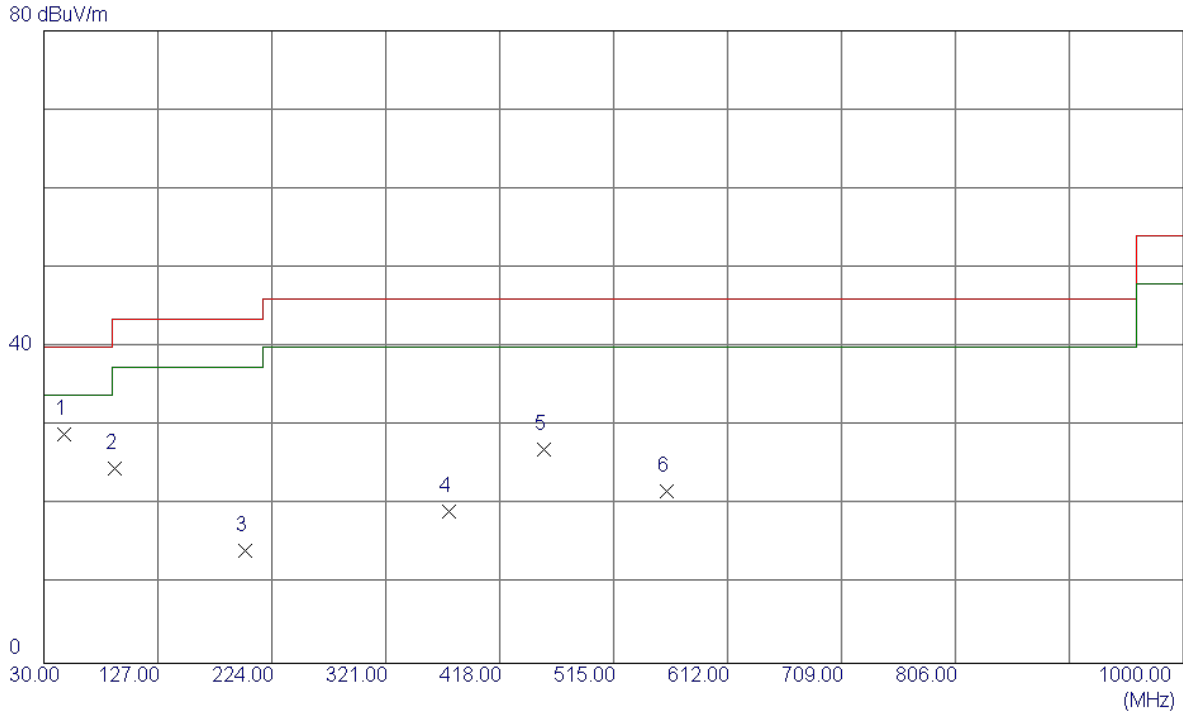
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	75.5899	39.93	-16.31	23.62	40.00	-16.38	Peak	
2	128.9400	37.60	-13.18	24.42	43.50	-19.08	Peak	
3	209.4500	32.06	-14.86	17.20	43.50	-26.30	Peak	
4	375.3200	29.56	-10.32	19.24	46.00	-26.76	Peak	
5	455.8300	31.06	-8.28	22.78	46.00	-23.22	Peak	
6	699.3000	28.48	-4.21	24.27	46.00	-21.73	Peak	

Test Mode: TX B MODE CHANNEL 11

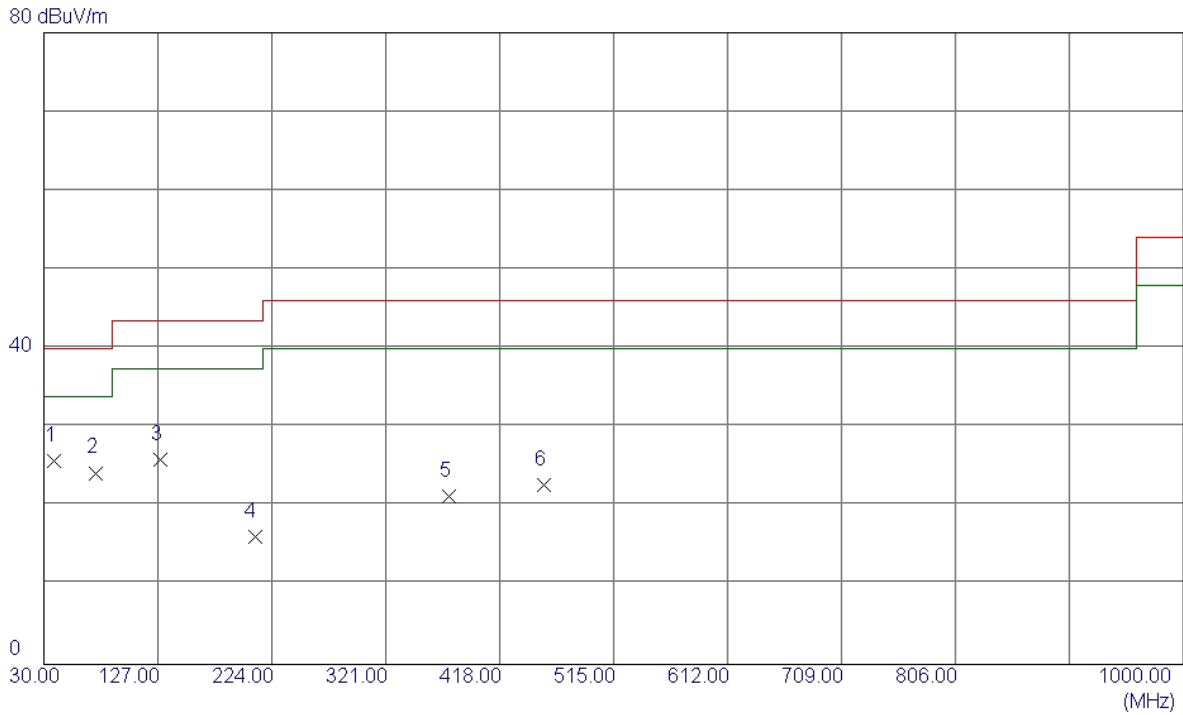
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	47.4600	42.57	-13.62	28.95	40.00	-11.05	Peak	
2	90.1400	41.43	-16.85	24.58	43.50	-18.92	Peak	
3	201.6900	29.28	-15.09	14.19	43.50	-29.31	Peak	
4	375.3200	29.47	-10.32	19.15	46.00	-26.85	Peak	
5	455.8300	35.30	-8.28	27.02	46.00	-18.98	Peak	
6	560.5900	27.44	-5.72	21.72	46.00	-24.28	Peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal

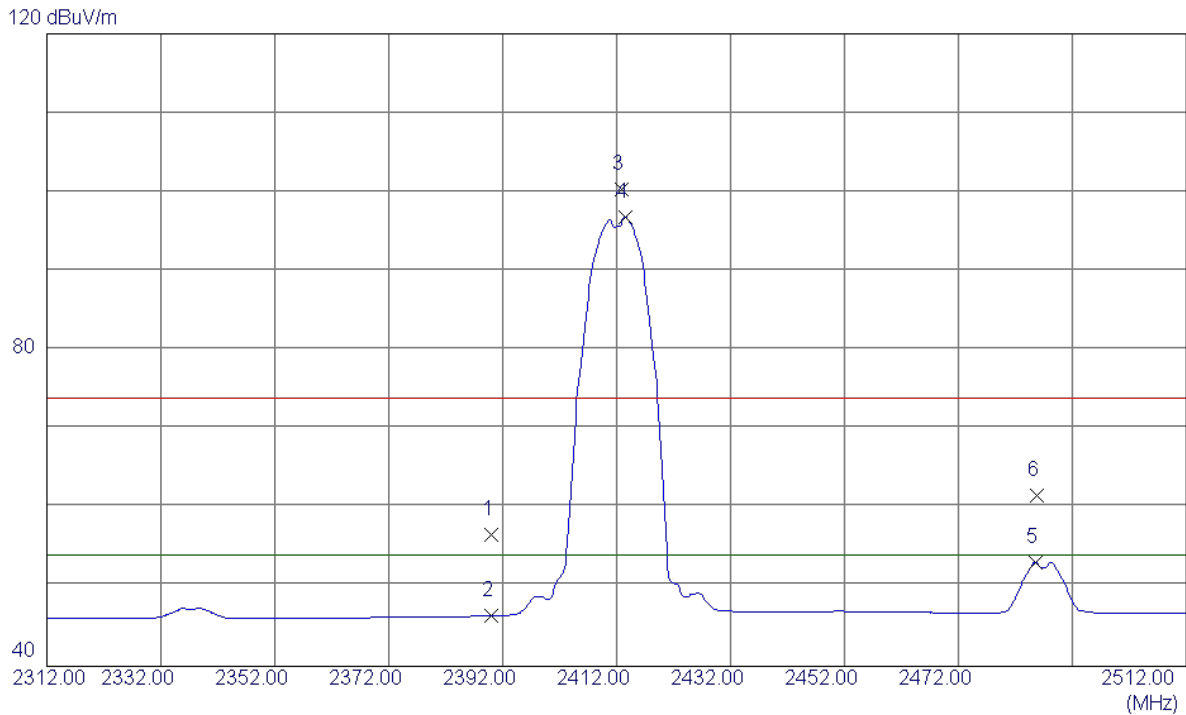


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	38.7300	39.85	-14.09	25.76	40.00	-14.24	Peak	
2	74.6200	40.47	-16.23	24.24	40.00	-15.76	Peak	
3	128.9400	39.10	-13.18	25.92	43.50	-17.58	Peak	
4	209.4500	31.06	-14.86	16.20	43.50	-27.30	Peak	
5	375.3200	31.56	-10.32	21.24	46.00	-24.76	Peak	
6	455.8300	31.06	-8.28	22.78	46.00	-23.22	Peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

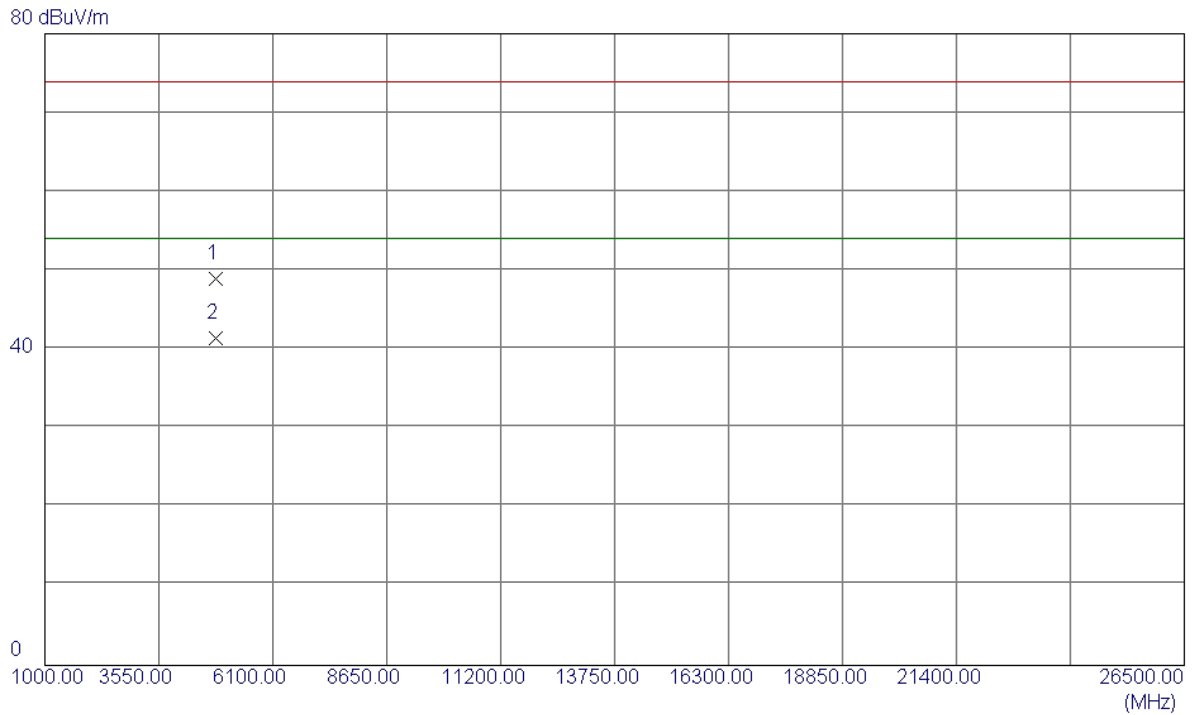
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	23.90	32.68	56.58	74.00	-17.42	Peak	
2	2390.0000	13.73	32.68	46.41	54.00	-7.59	AVG	
3	2412.8000	67.58	32.71	100.29	74.00	26.29	Peak	No Limit
4	2413.6000	64.16	32.71	96.87	54.00	42.87	AVG	No Limit
5	2485.6000	20.36	32.81	53.17	54.00	-0.83	AVG	
6	2485.8000	28.79	32.81	61.60	74.00	-12.40	Peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

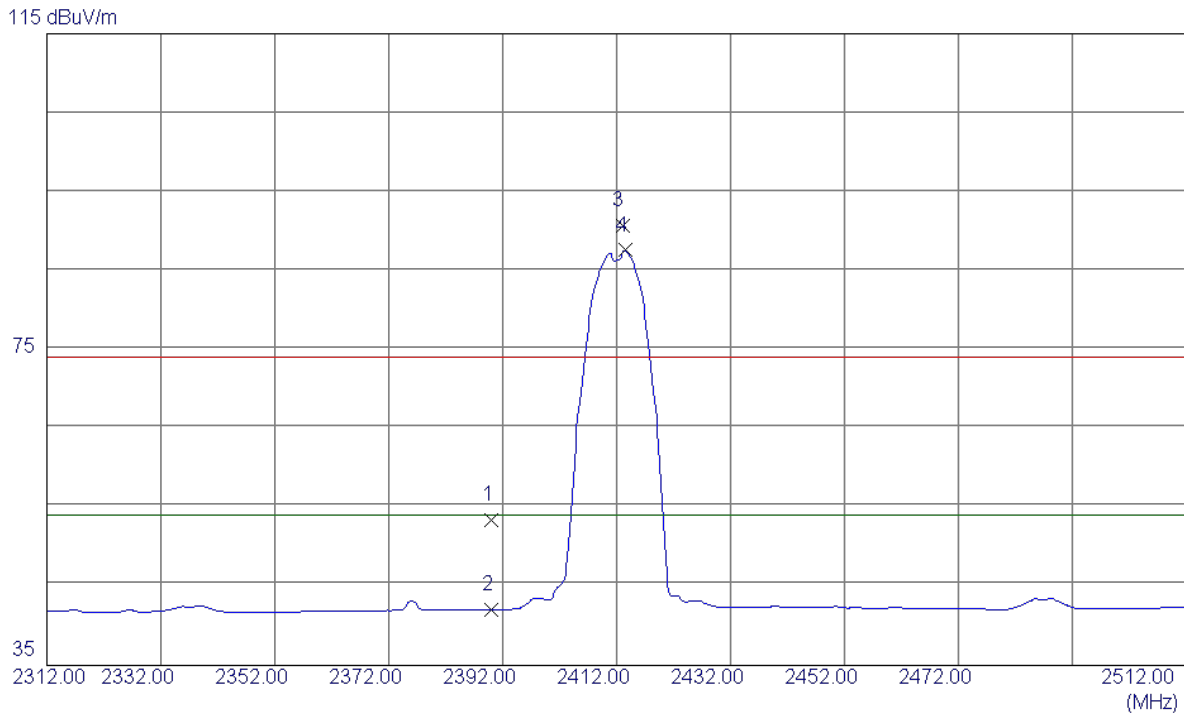
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.8600	43.07	5.87	48.94	74.00	-25.06	Peak	
2	4824.0000	35.60	5.87	41.47	54.00	-12.53	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

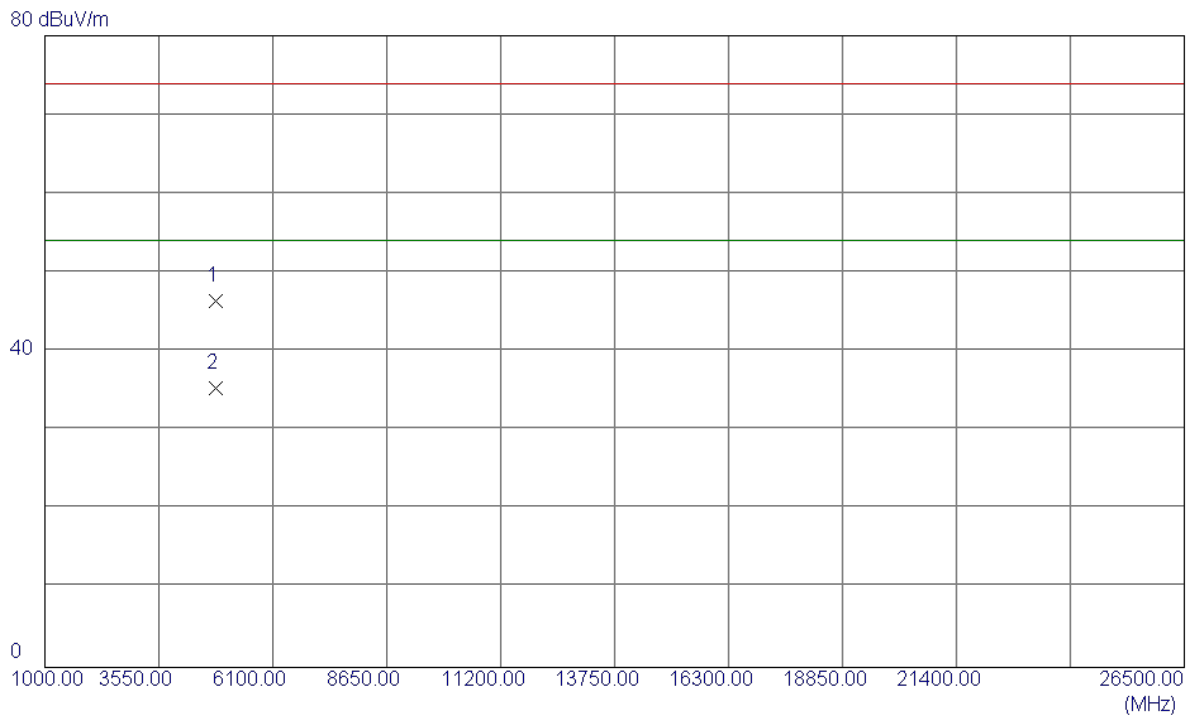
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	20.71	32.68	53.39	74.00	-20.61	Peak	
2	2390.0000	9.41	32.68	42.09	54.00	-11.91	AVG	
3	2413.0000	58.00	32.71	90.71	74.00	16.71	Peak	No Limit
4	2413.6000	54.85	32.71	87.56	54.00	33.56	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

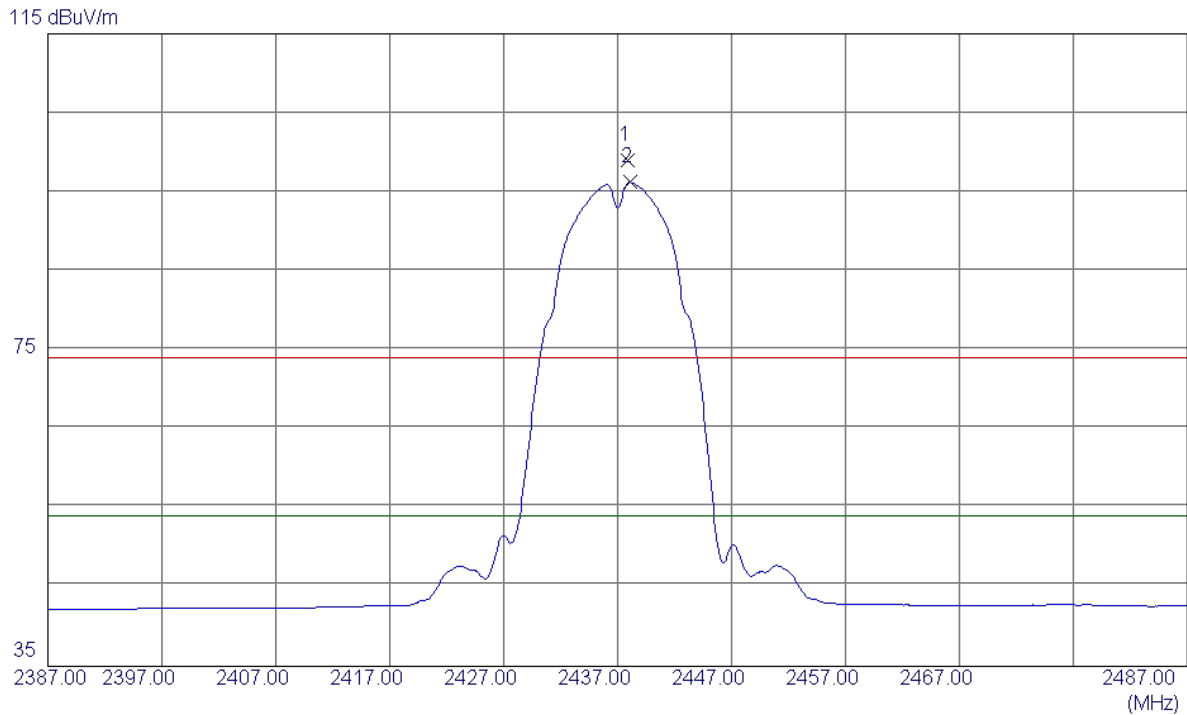
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9800	40.59	5.87	46.46	74.00	-27.54	Peak	
2	4824.0000	29.50	5.87	35.37	54.00	-18.63	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

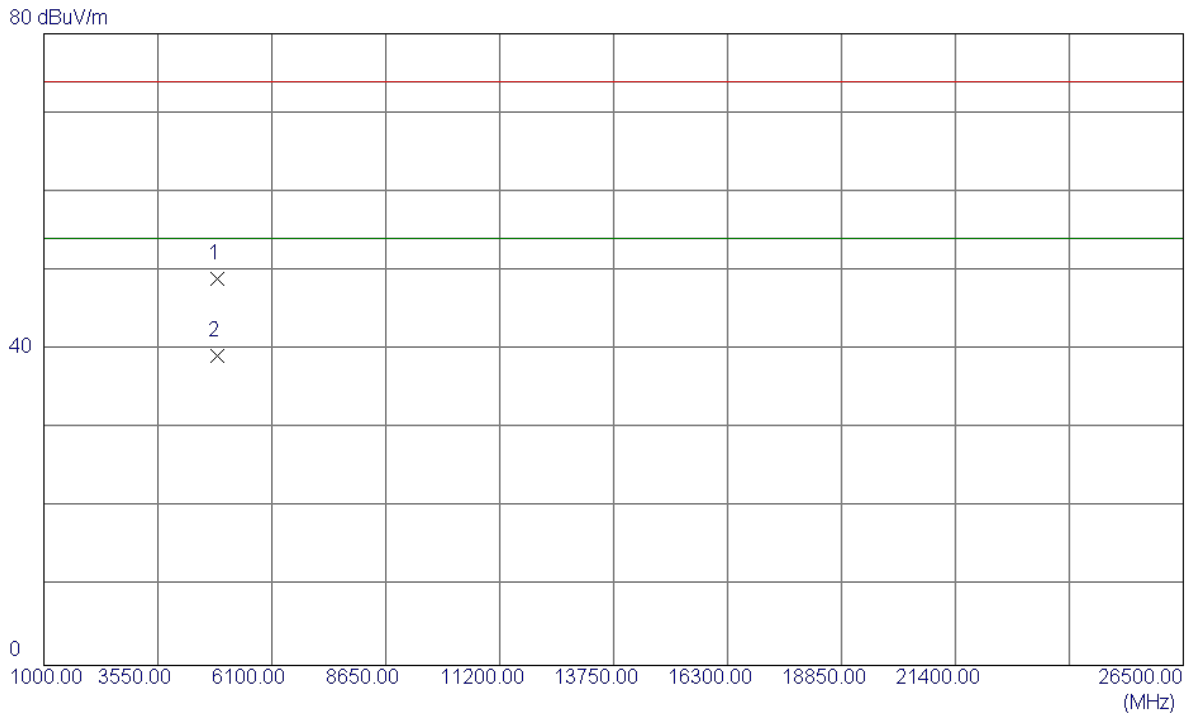
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2437.9000	66.24	32.74	98.98	74.00	24.98	Peak	No Limit
2	2438.1000	63.47	32.74	96.21	54.00	42.21	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

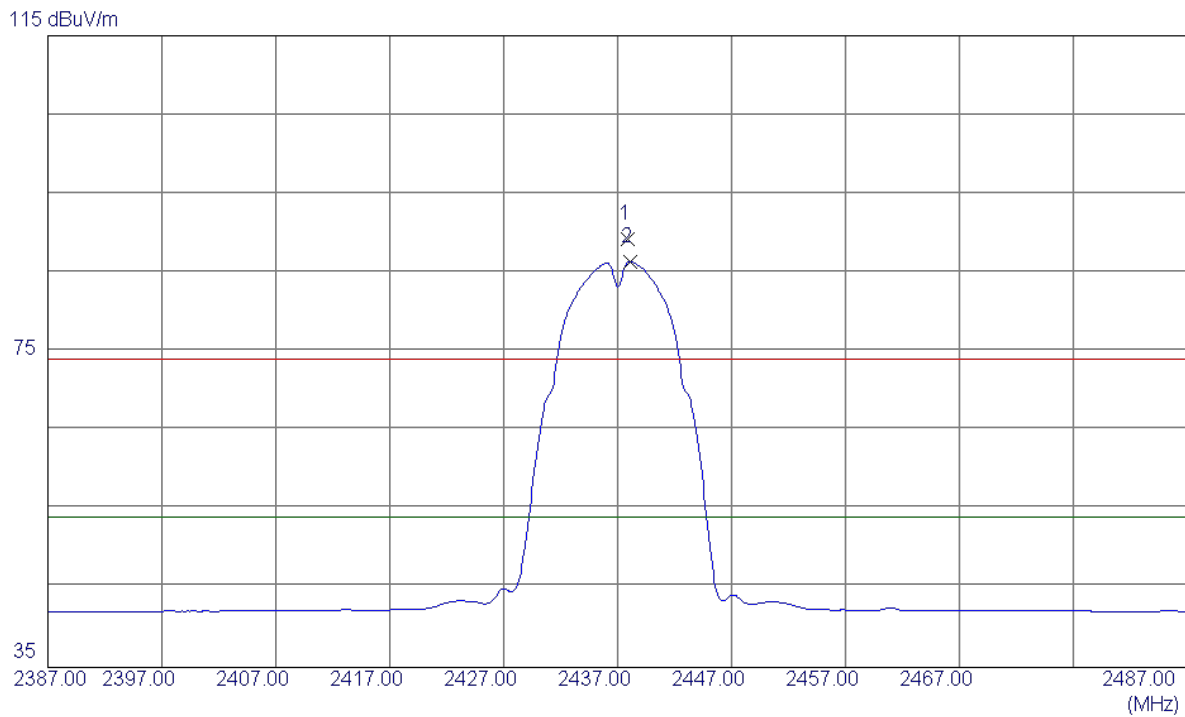
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.0000	42.96	6.00	48.96	74.00	-25.04	Peak	
2	4874.0000	33.15	6.00	39.15	54.00	-14.85	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

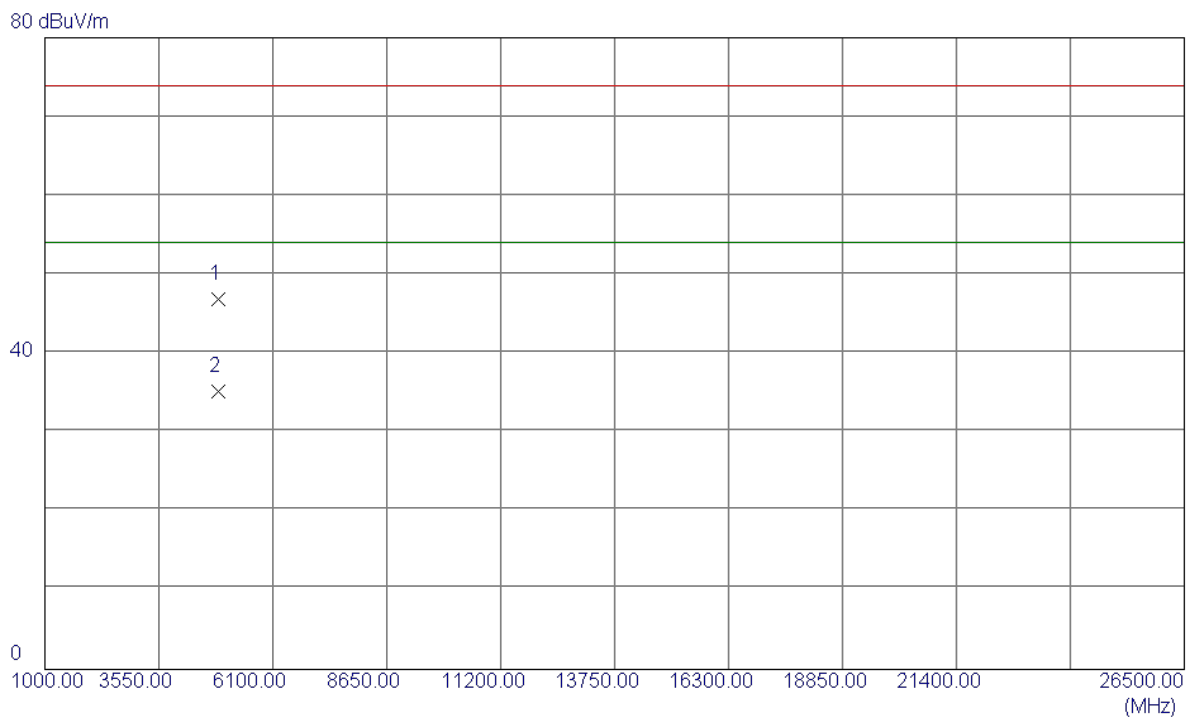
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2437.9000	56.54	32.74	89.28	74.00	15.28	Peak	No Limit
2	2438.1000	53.69	32.74	86.43	54.00	32.43	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

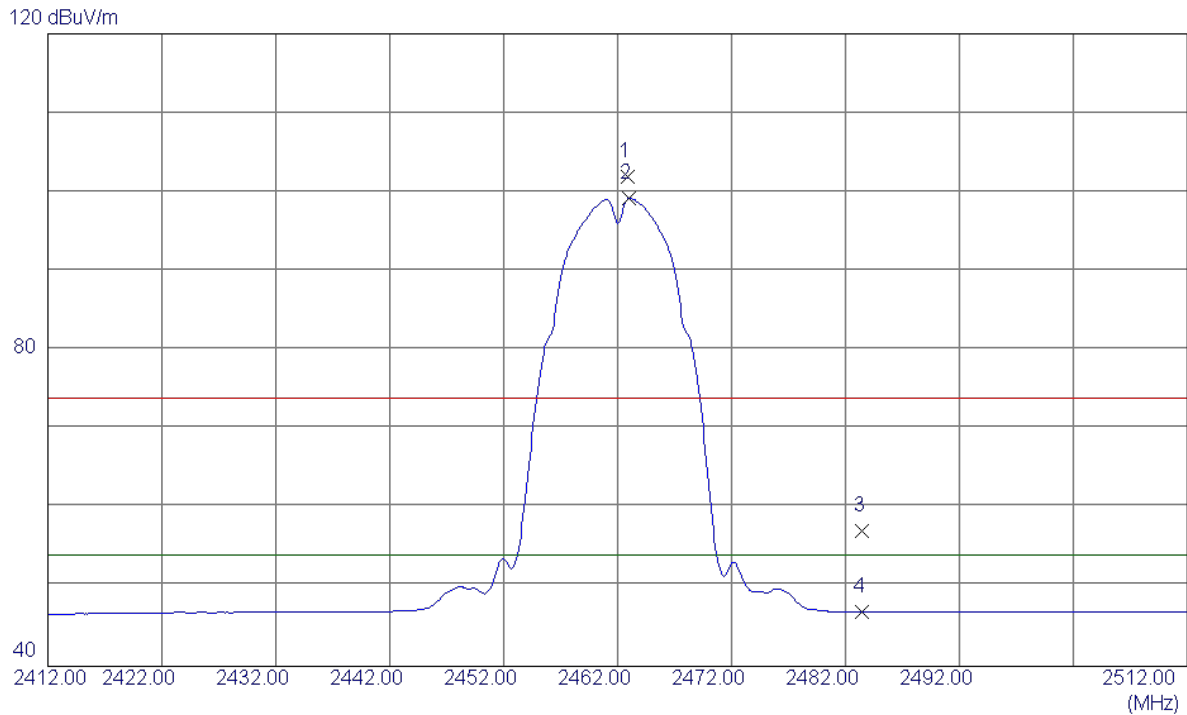
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9400	40.88	6.00	46.88	74.00	-27.12	Peak	
2	4873.9800	29.16	6.00	35.16	54.00	-18.84	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

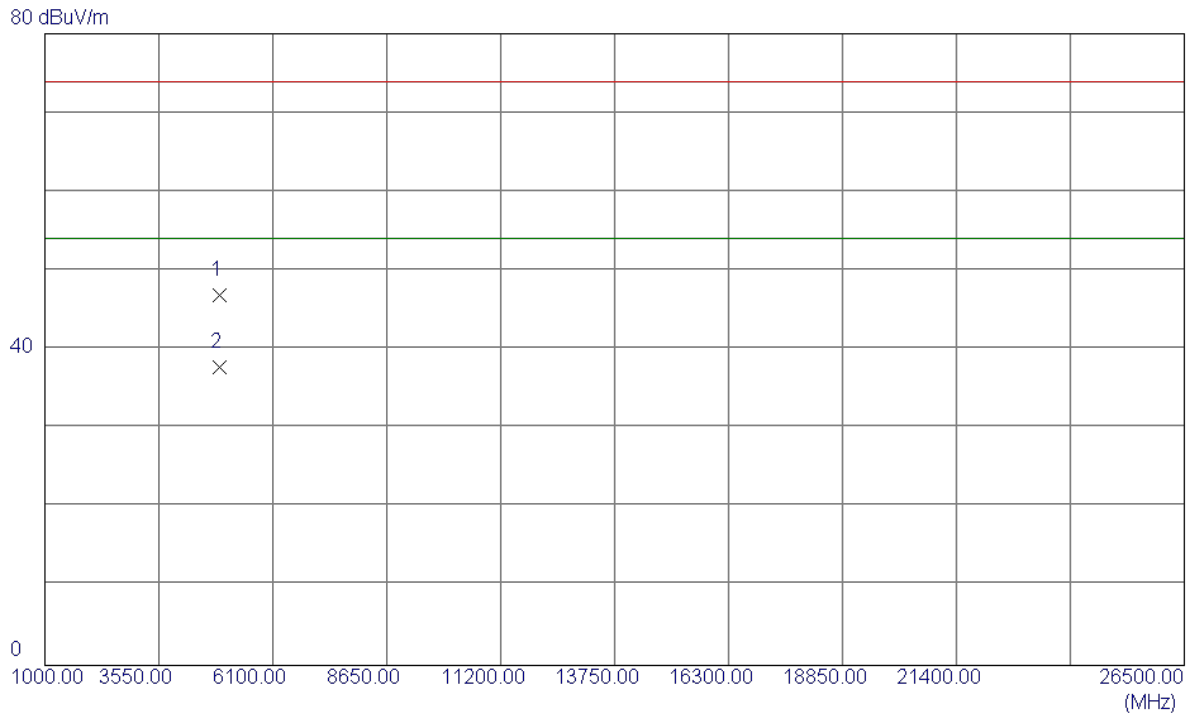
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2462.9000	69.21	32.78	101.99	74.00	27.99	Peak	No Limit
2	2463.0000	66.44	32.78	99.22	54.00	45.22	AVG	No Limit
3	2483.5000	24.33	32.81	57.14	74.00	-16.86	Peak	
4	2483.5000	14.05	32.81	46.86	54.00	-7.14	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

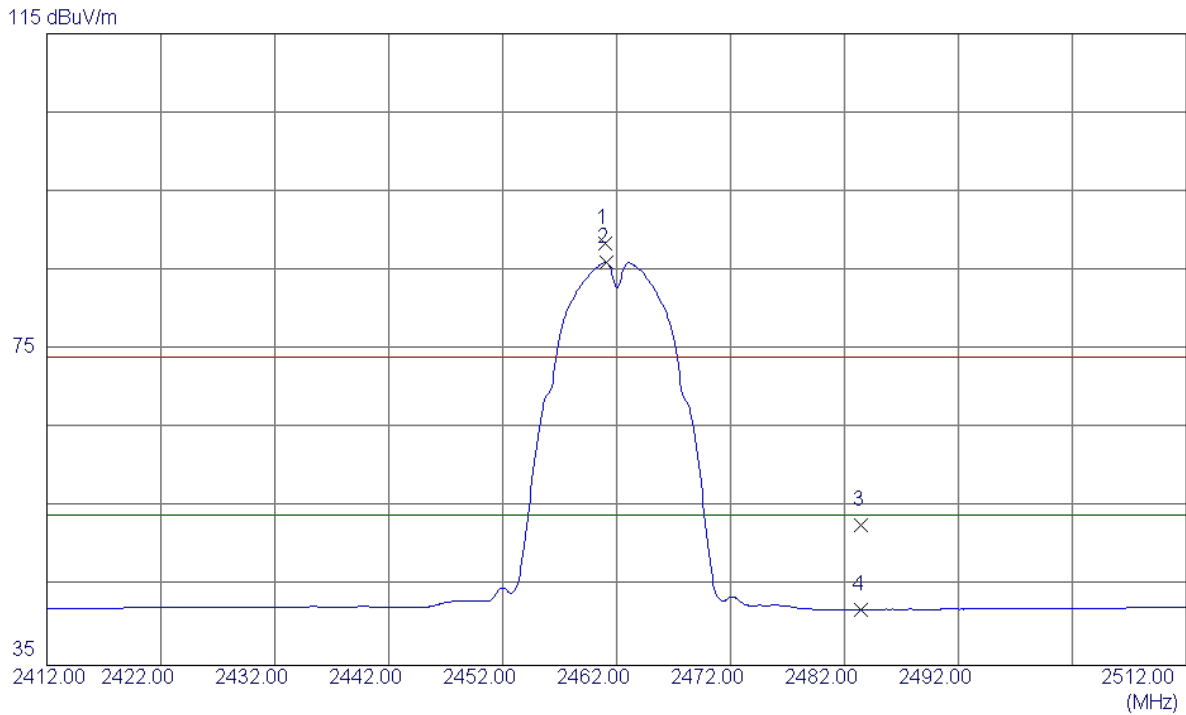
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.9400	40.71	6.14	46.85	74.00	-27.15	Peak	
2	4924.0000	31.56	6.14	37.70	54.00	-16.30	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

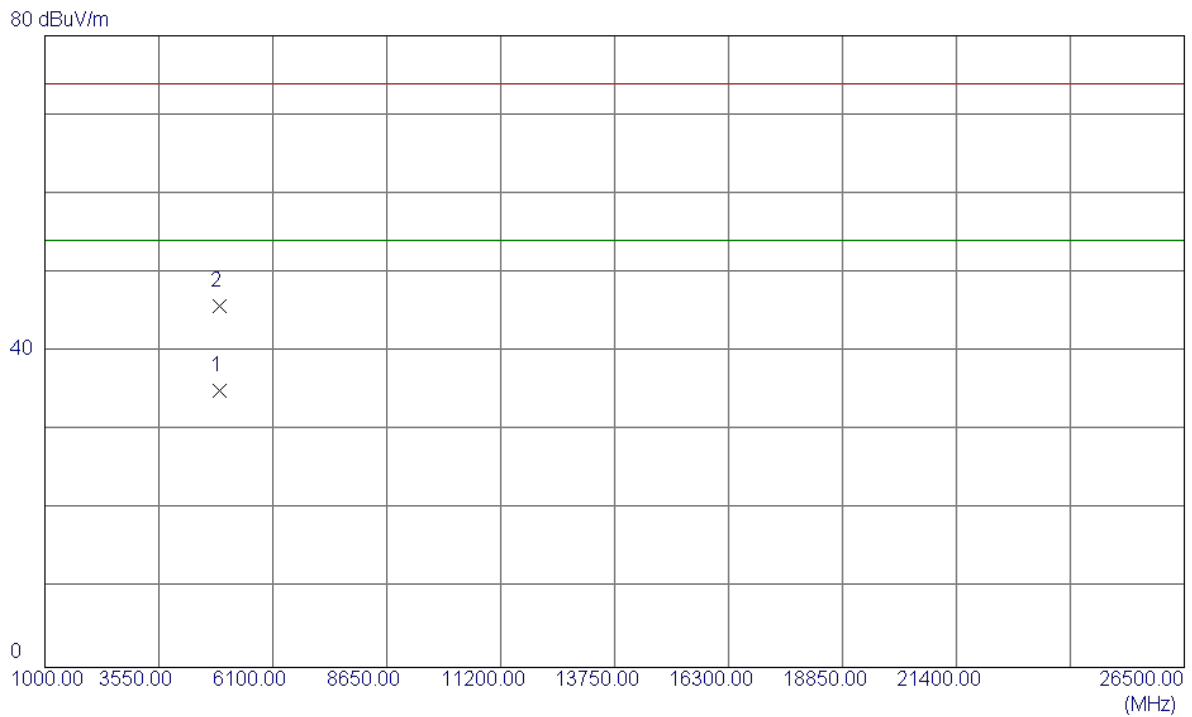
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.0000	55.70	32.78	88.48	74.00	14.48	Peak	No Limit
2	2461.1000	53.25	32.78	86.03	54.00	32.03	AVG	No Limit
3	2483.5000	19.97	32.81	52.78	74.00	-21.22	Peak	
4	2483.5000	9.28	32.81	42.09	54.00	-11.91	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

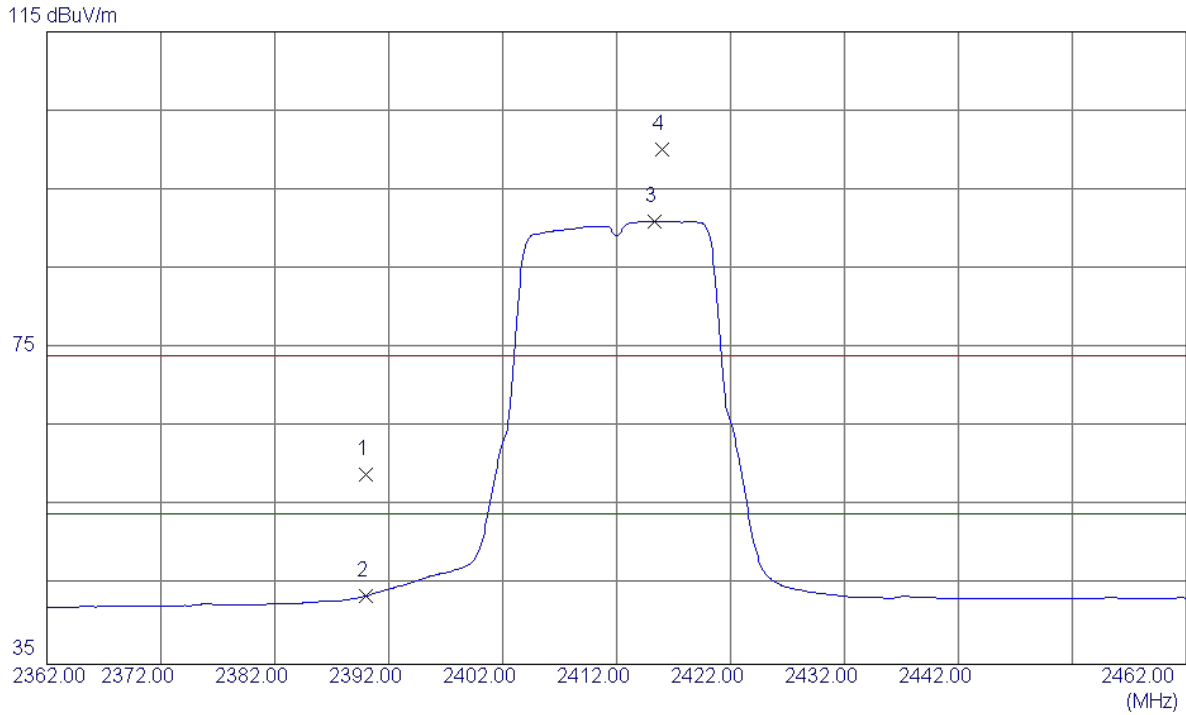
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.9800	28.89	6.14	35.03	54.00	-18.97	AVG	
2	4924.0200	39.68	6.14	45.82	74.00	-28.18	Peak	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

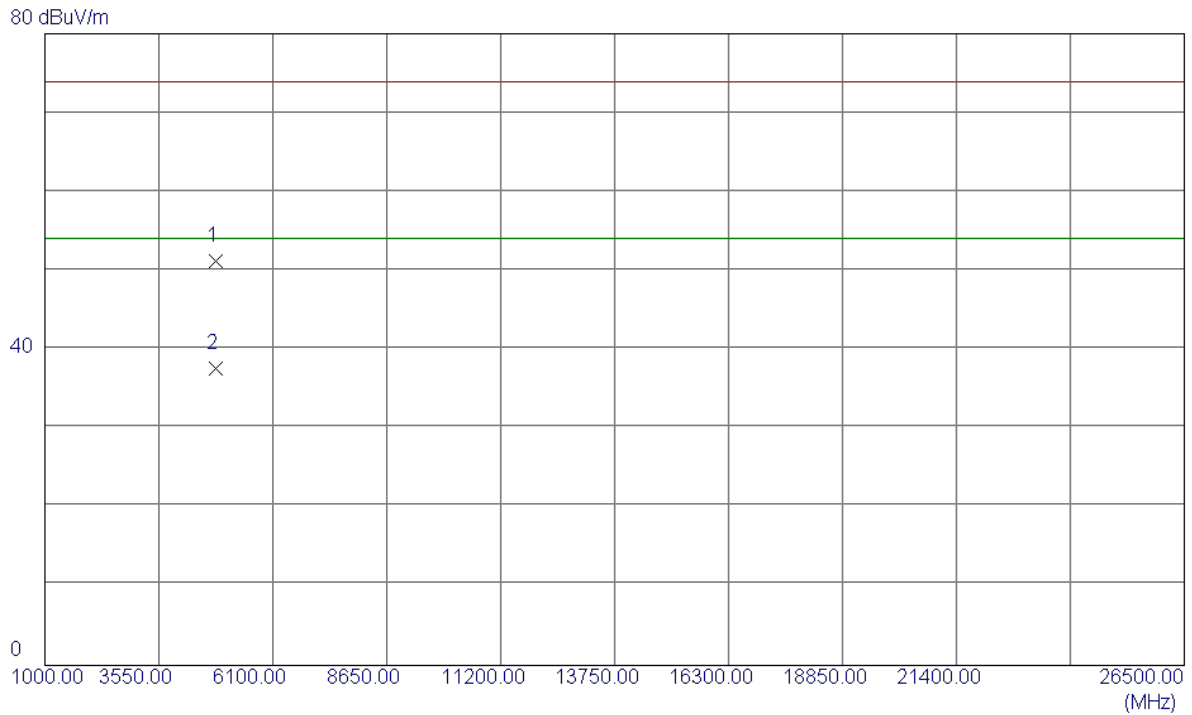
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.37	32.68	59.05	74.00	-14.95	Peak	
2	2390.0000	10.95	32.68	43.63	54.00	-10.37	AVG	
3	2415.3000	58.35	32.71	91.06	54.00	37.06	AVG	No Limit
4	2416.0000	67.37	32.71	100.08	74.00	26.08	Peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

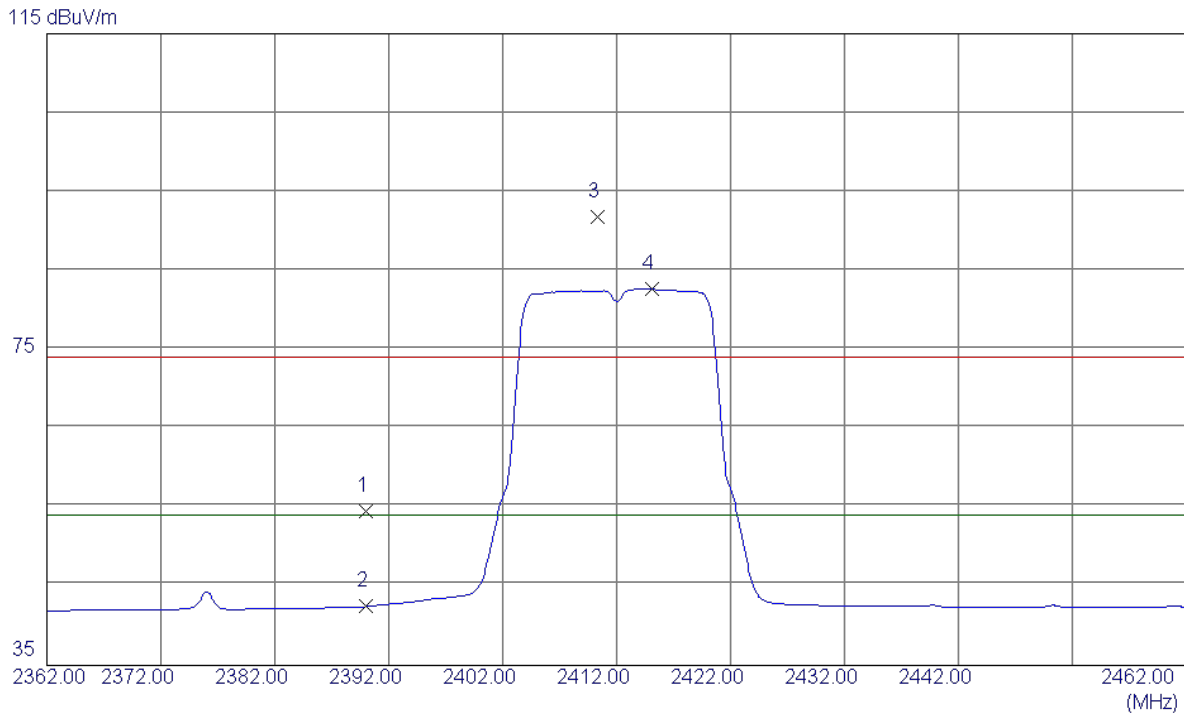
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4826.0900	45.29	5.88	51.17	74.00	-22.83	Peak	
2	4826.2700	31.65	5.88	37.53	54.00	-16.47	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

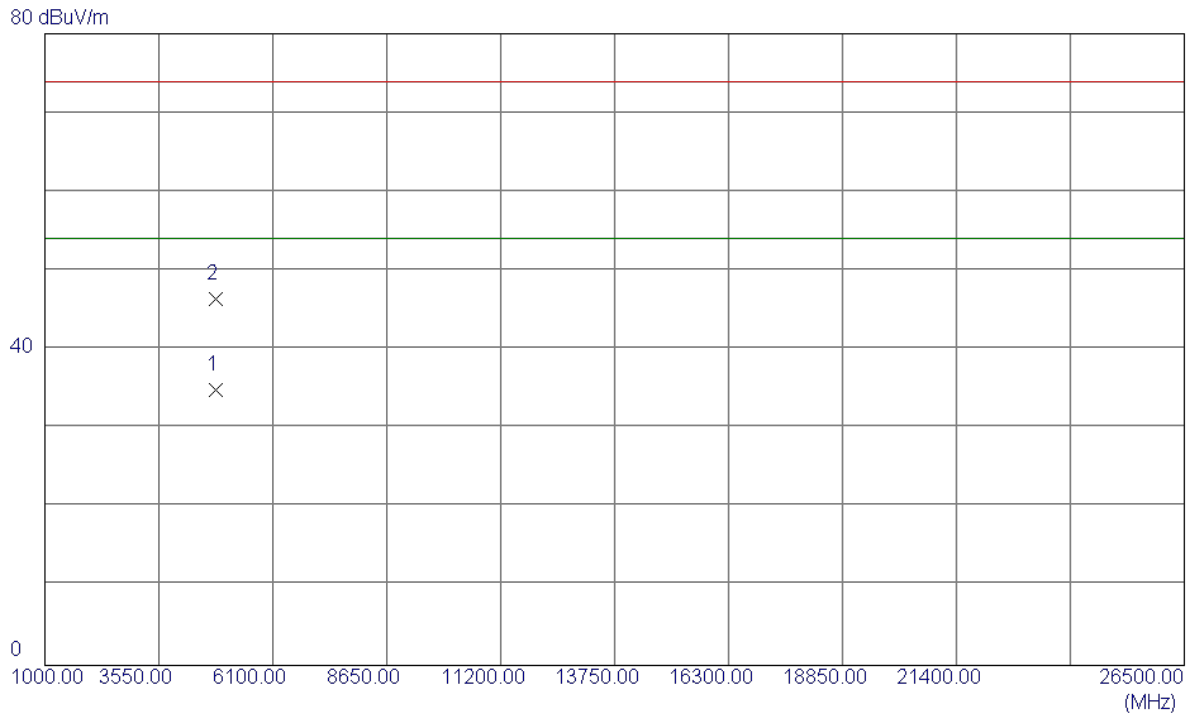
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	21.90	32.68	54.58	74.00	-19.42	Peak	
2	2390.0000	9.77	32.68	42.45	54.00	-11.55	AVG	
3	2410.3000	59.11	32.71	91.82	74.00	17.82	Peak	No Limit
4	2415.1000	49.92	32.71	82.63	54.00	28.63	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

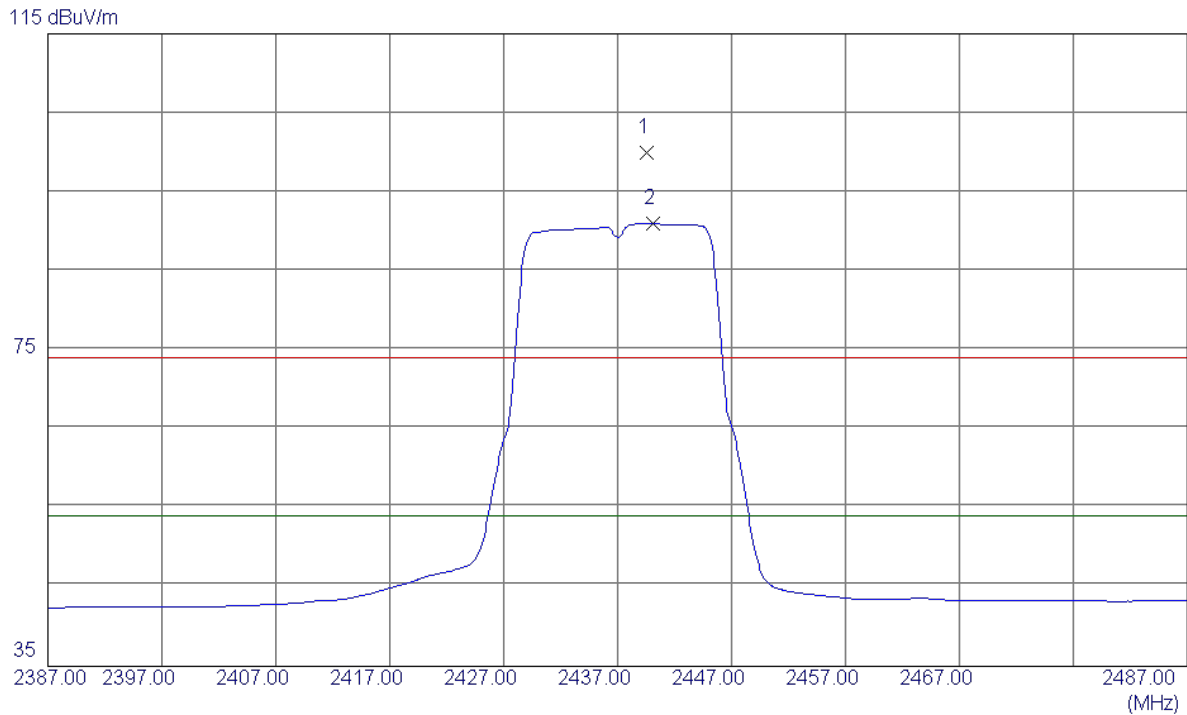
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9800	28.97	5.87	34.84	54.00	-19.16	AVG	
2	4824.0099	40.48	5.87	46.35	74.00	-27.65	Peak	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

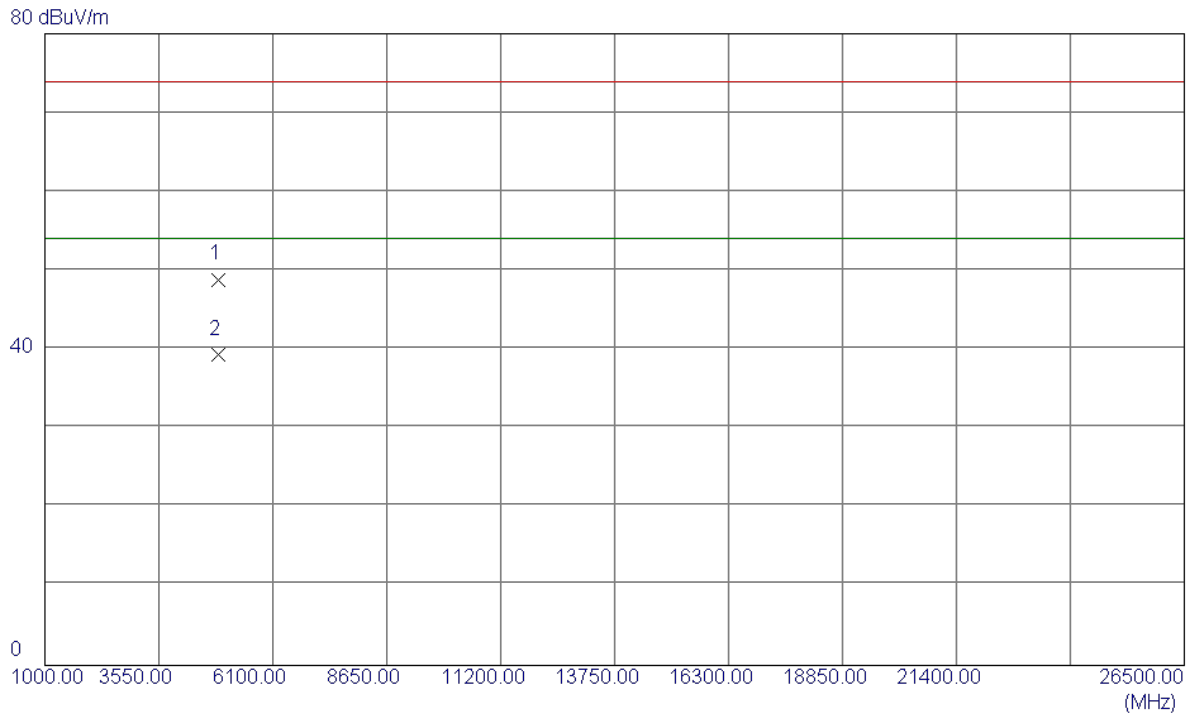
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2439.6000	67.15	32.75	99.90	74.00	25.90	Peak	No Limit
2	2440.1000	58.25	32.75	91.00	54.00	37.00	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

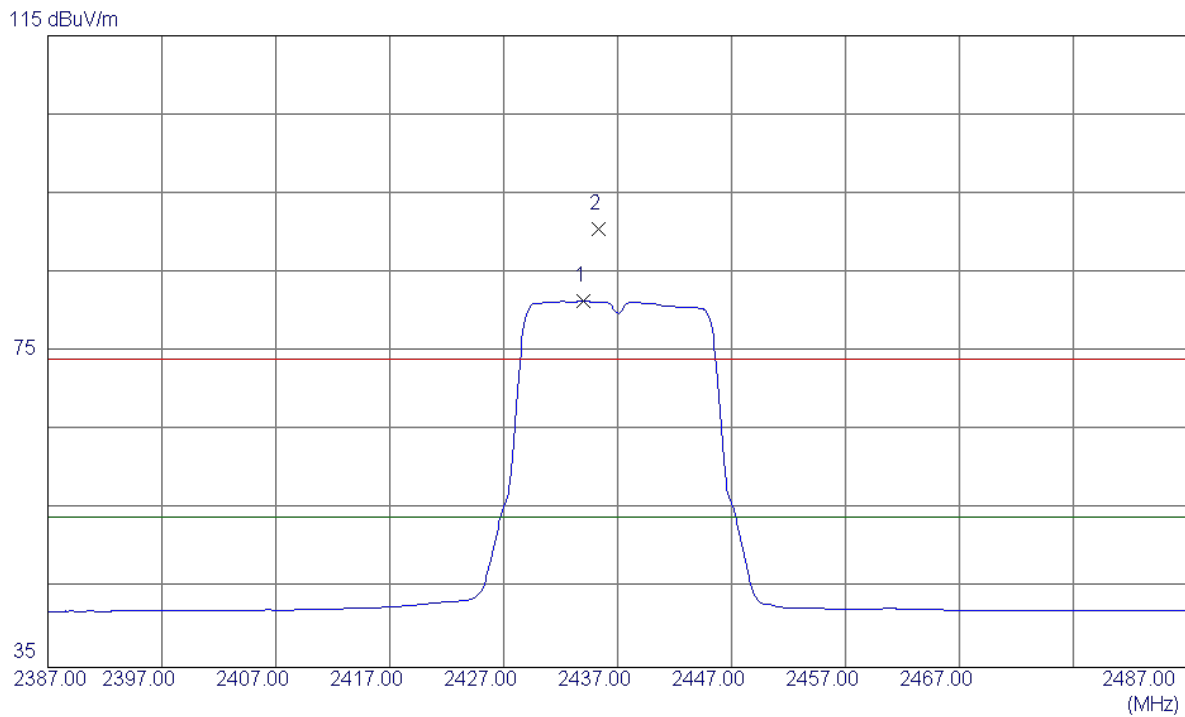
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1000	42.88	6.00	48.88	74.00	-25.12	Peak	
2	4874.3200	33.31	6.00	39.31	54.00	-14.69	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

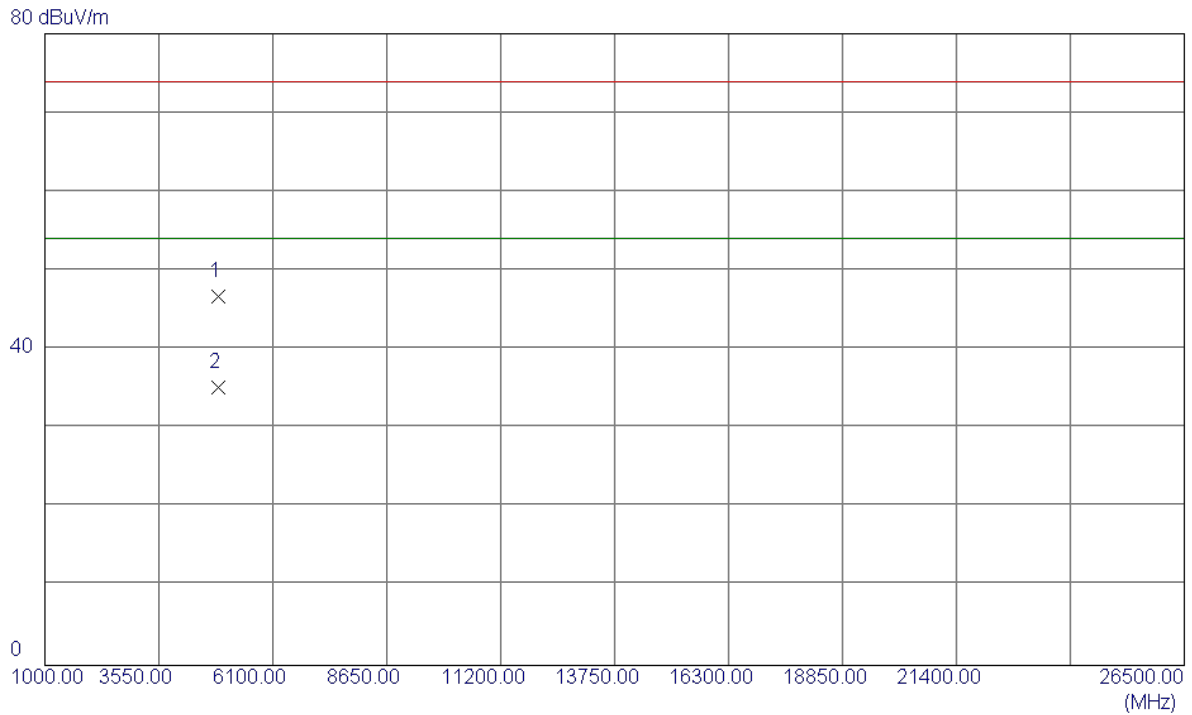
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.0000	48.61	32.74	81.35	54.00	27.35	AVG	No Limit
2	2435.3000	57.72	32.74	90.46	74.00	16.46	Peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

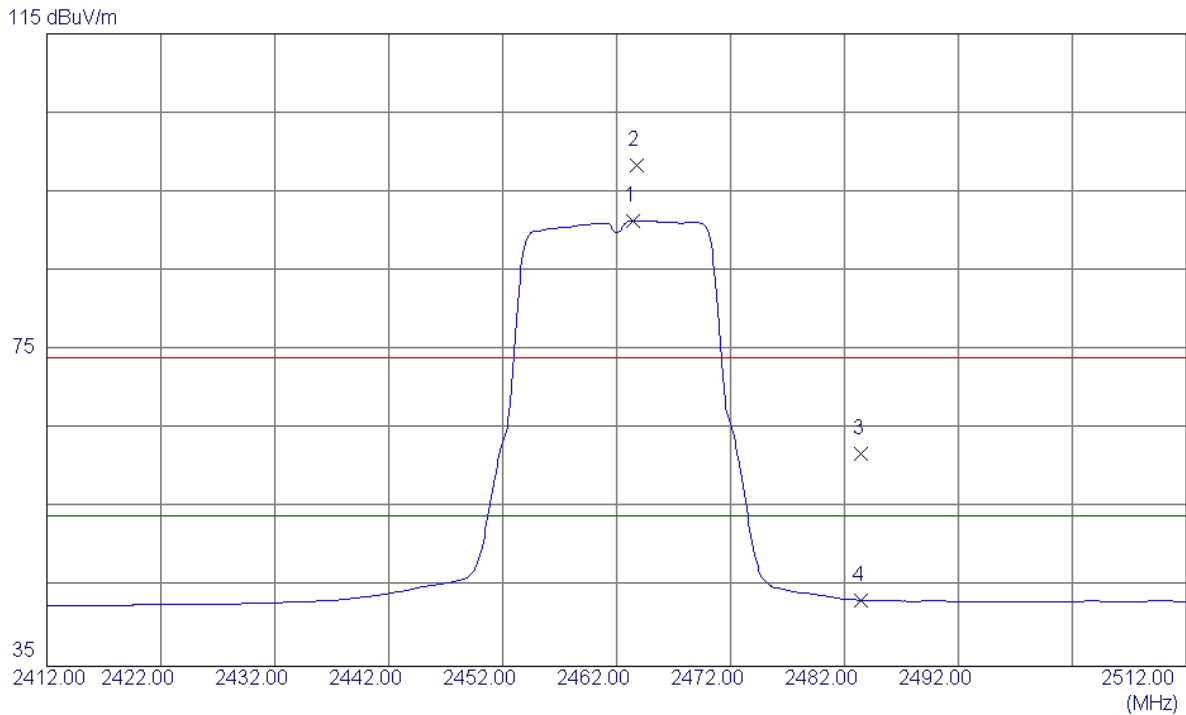
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.6700	40.76	6.00	46.76	74.00	-27.24	Peak	
2	4873.8800	29.25	6.00	35.25	54.00	-18.75	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

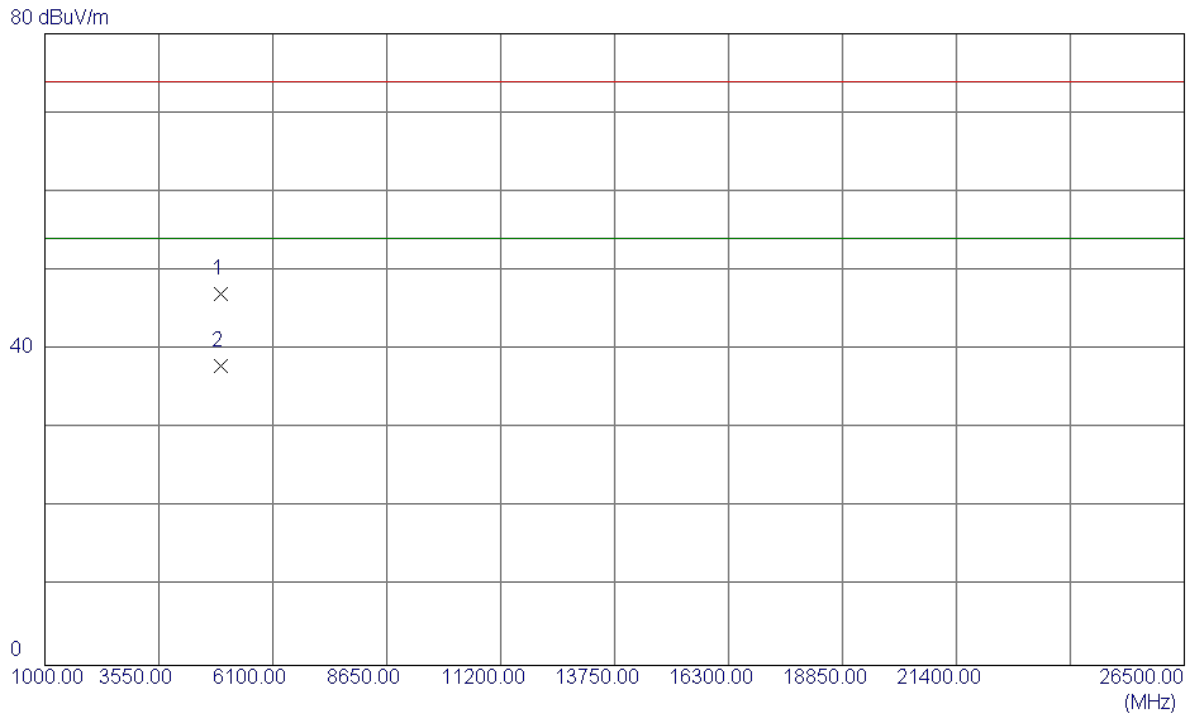
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2463.4000	58.56	32.78	91.34	54.00	37.34	AVG	No Limit
2	2463.8000	65.52	32.78	98.30	74.00	24.30	Peak	No Limit
3	2483.5000	29.05	32.81	61.86	74.00	-12.14	Peak	
4	2483.5000	10.55	32.81	43.36	54.00	-10.64	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

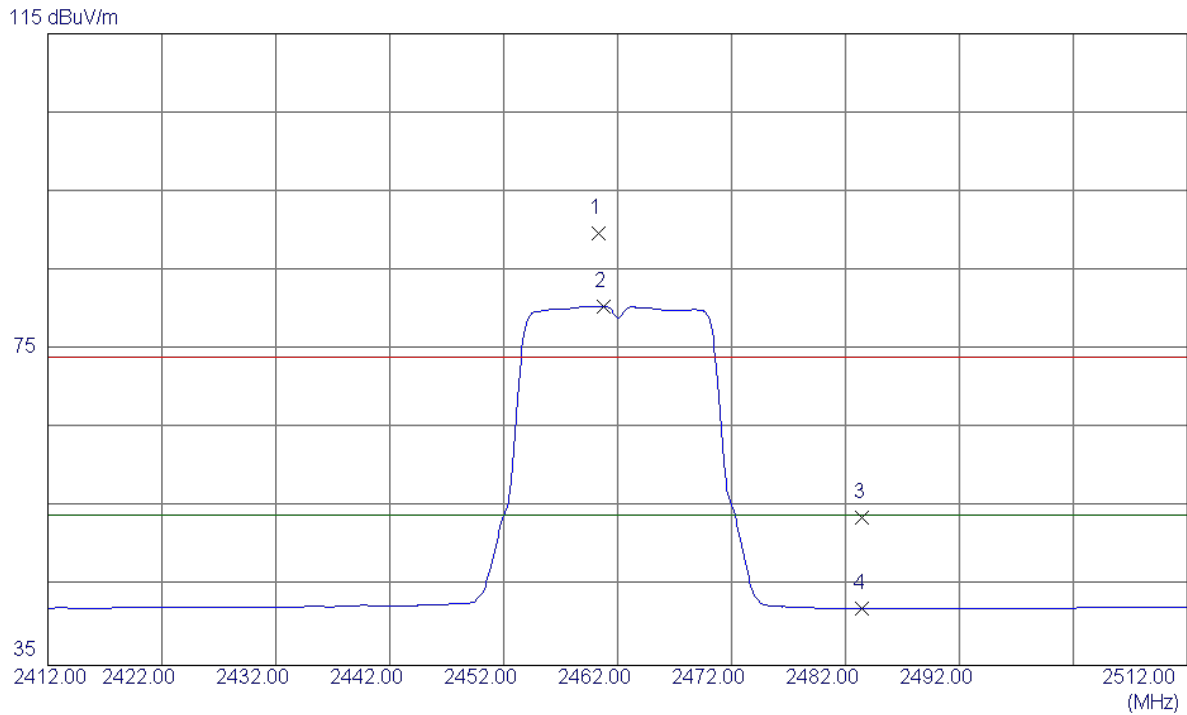
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.3400	40.95	6.14	47.09	74.00	-26.91	Peak	
2	4924.6200	31.77	6.14	37.91	54.00	-16.09	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

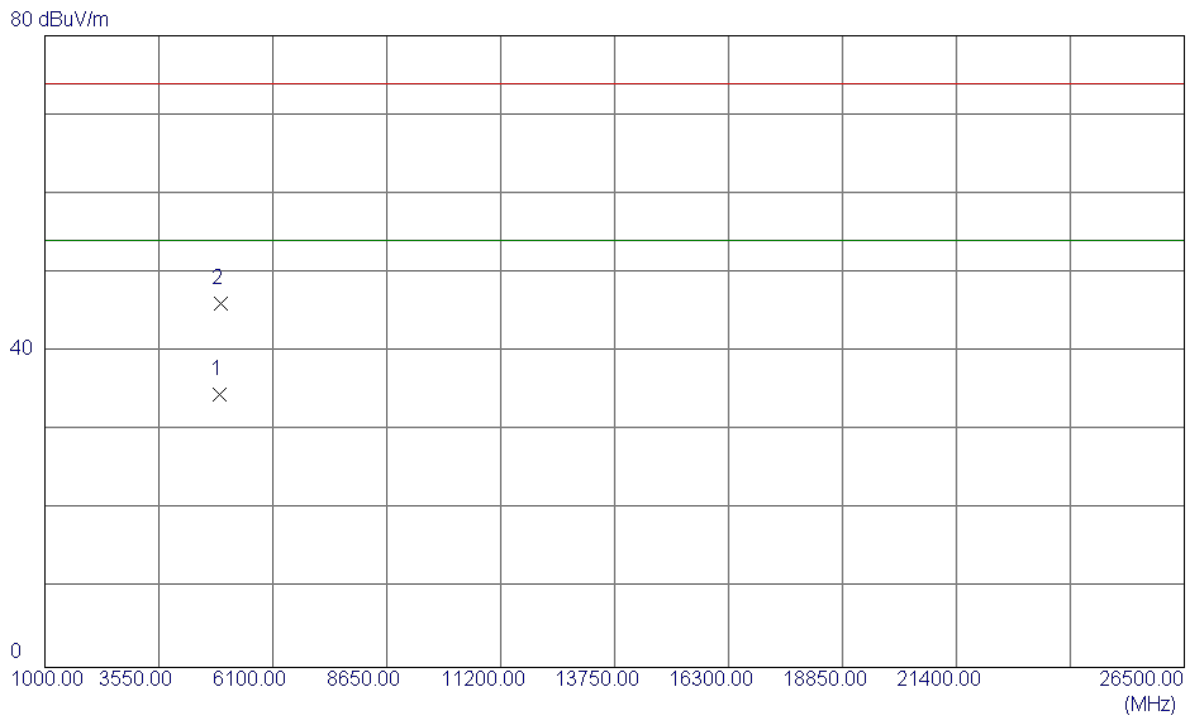
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.3000	56.89	32.78	89.67	74.00	15.67	Peak	No Limit
2	2460.8000	47.64	32.78	80.42	54.00	26.42	AVG	No Limit
3	2483.5000	20.91	32.81	53.72	74.00	-20.28	Peak	
4	2483.5000	9.39	32.81	42.20	54.00	-11.80	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

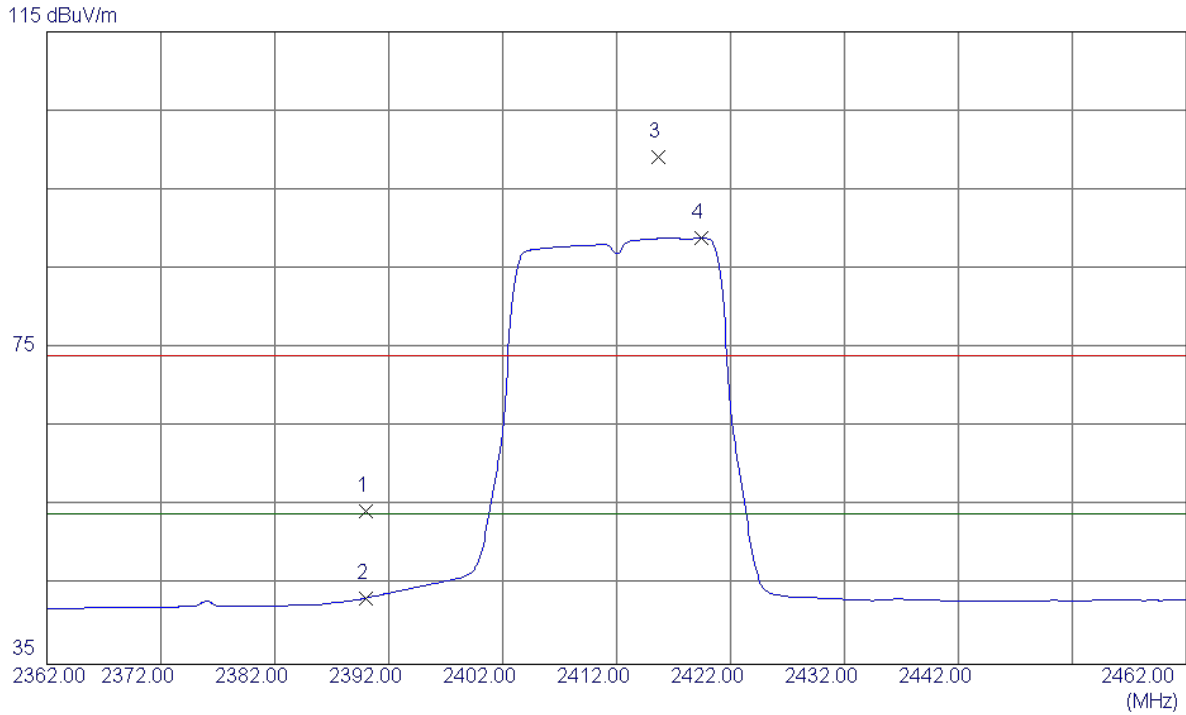
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.6300	28.37	6.14	34.51	54.00	-19.49	AVG	
2	4924.3100	39.87	6.14	46.01	74.00	-27.99	Peak	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHz

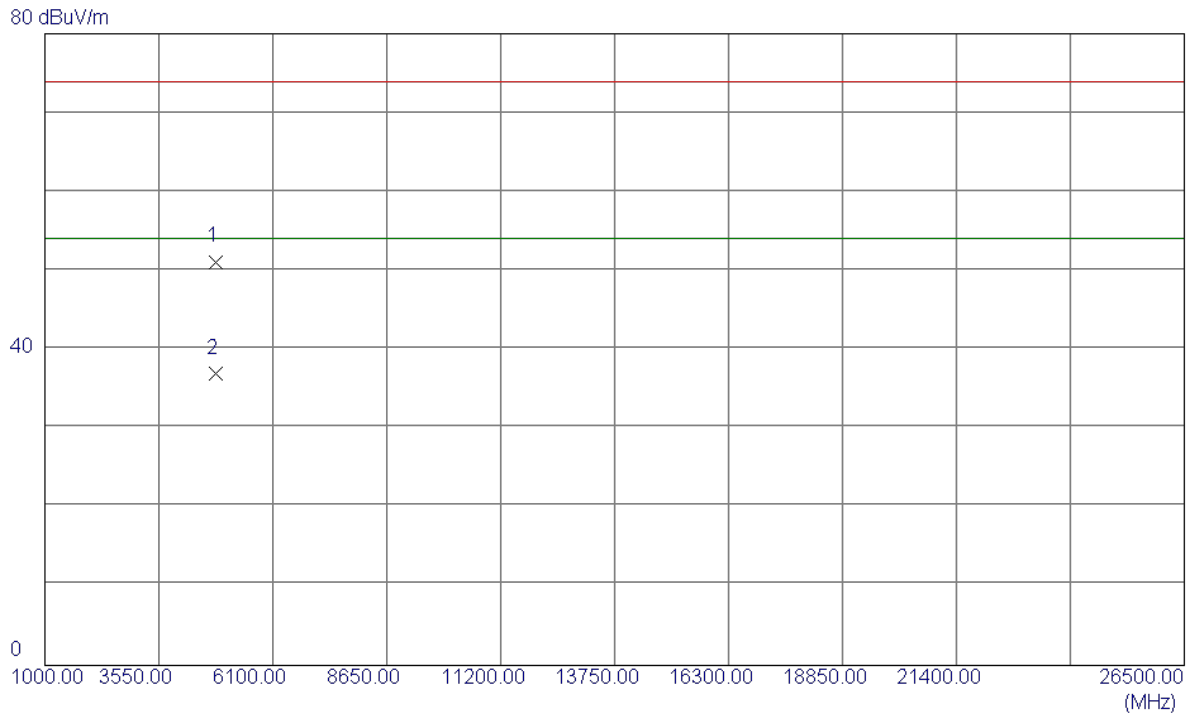
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	21.70	32.68	54.38	74.00	-19.62	Peak	
2	2390.0000	10.71	32.68	43.39	54.00	-10.61	AVG	
3	2415.7000	66.39	32.71	99.10	74.00	25.10	Peak	No Limit
4	2419.4000	56.17	32.72	88.89	54.00	34.89	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHz

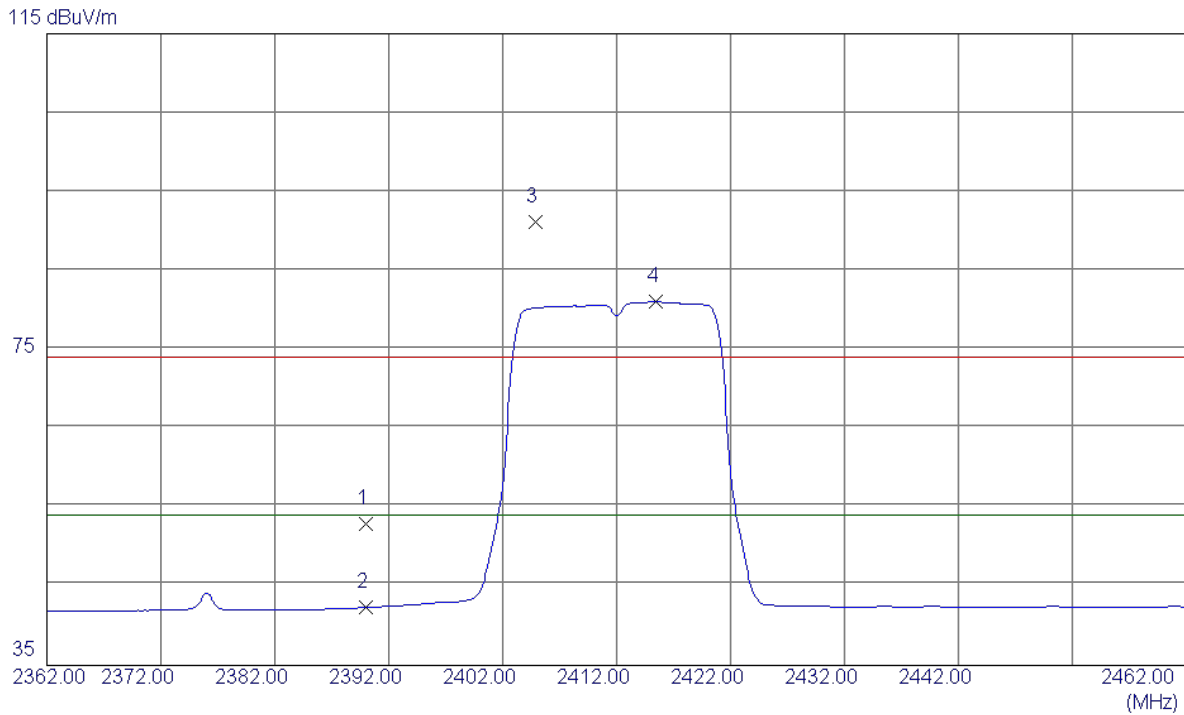
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.3300	45.25	5.87	51.12	74.00	-22.88	Peak	
2	4825.1000	31.12	5.87	36.99	54.00	-17.01	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHz

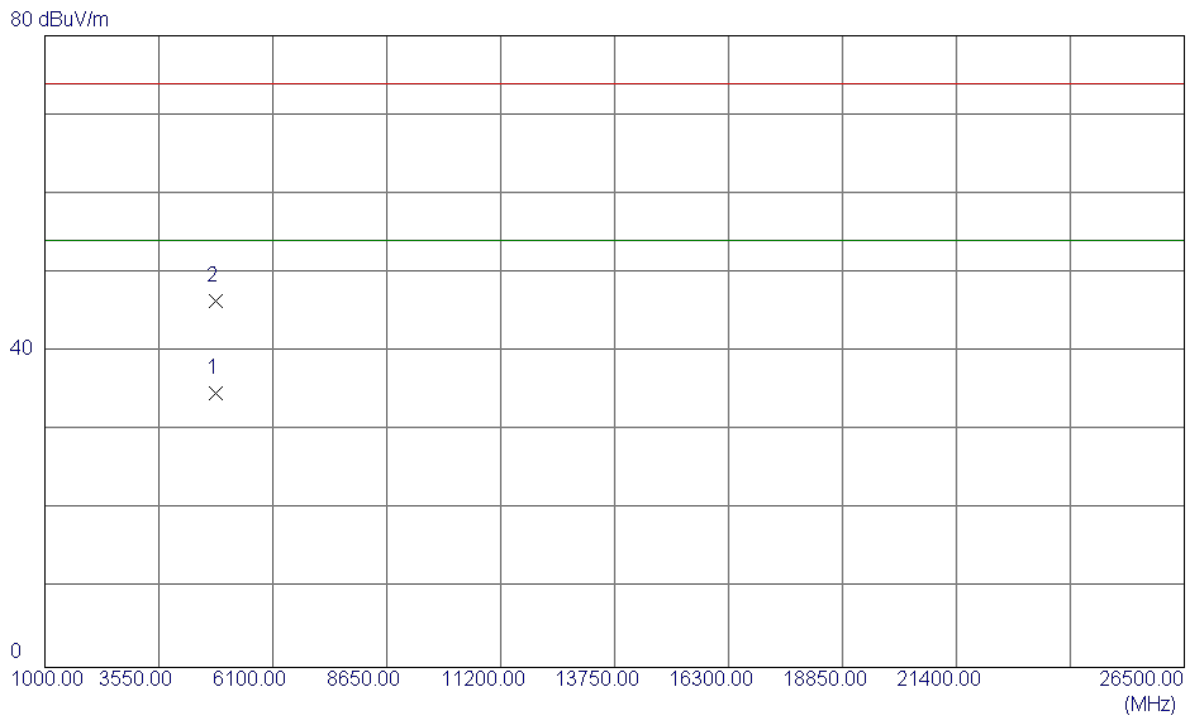
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	20.19	32.68	52.87	74.00	-21.13	Peak	
2	2390.0000	9.65	32.68	42.33	54.00	-11.67	AVG	
3	2404.9000	58.50	32.70	91.20	74.00	17.20	Peak	No Limit
4	2415.5000	48.31	32.71	81.02	54.00	27.02	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHz

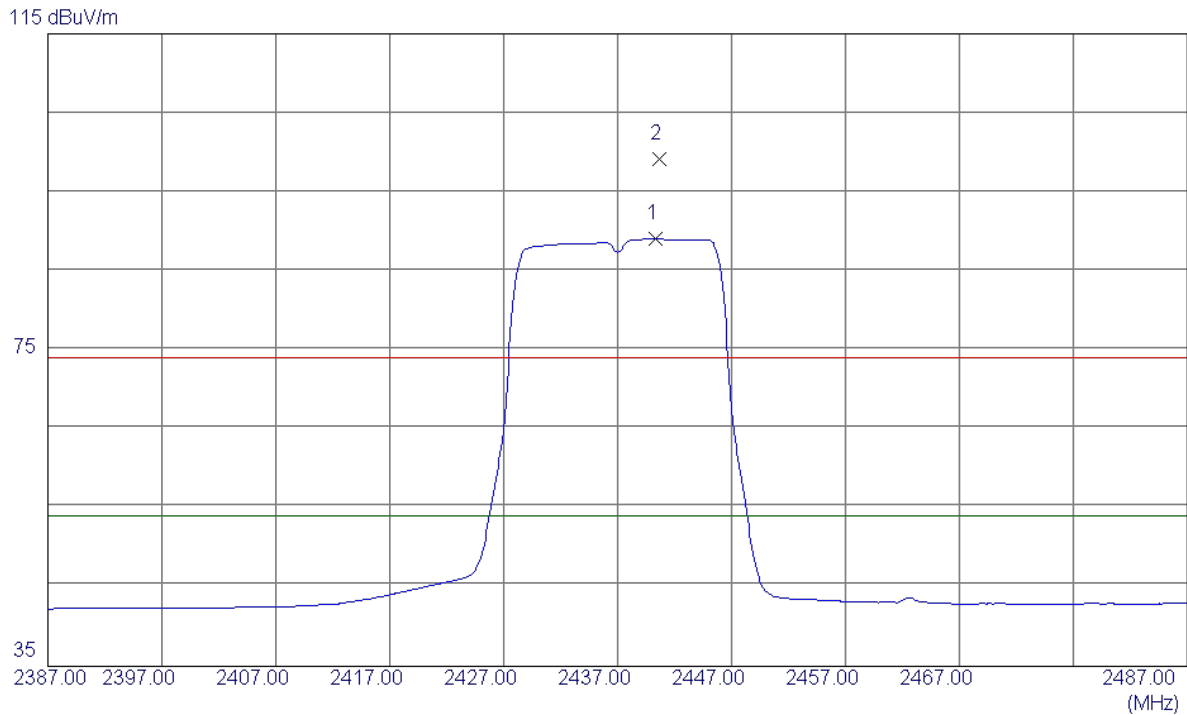
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.1100	28.83	5.87	34.70	54.00	-19.30	AVG	
2	4824.3100	40.52	5.87	46.39	74.00	-27.61	Peak	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

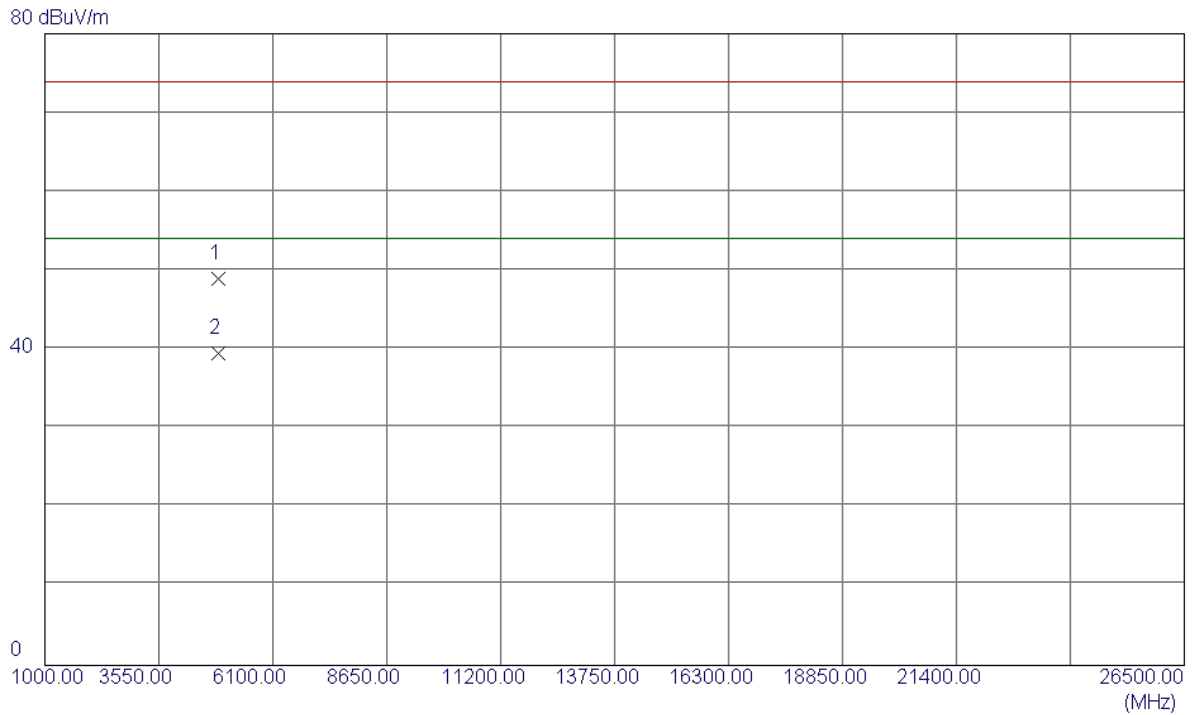
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2440.3000	56.28	32.75	89.03	54.00	35.03	AVG	No Limit
2	2440.7000	66.36	32.75	99.11	74.00	25.11	Peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

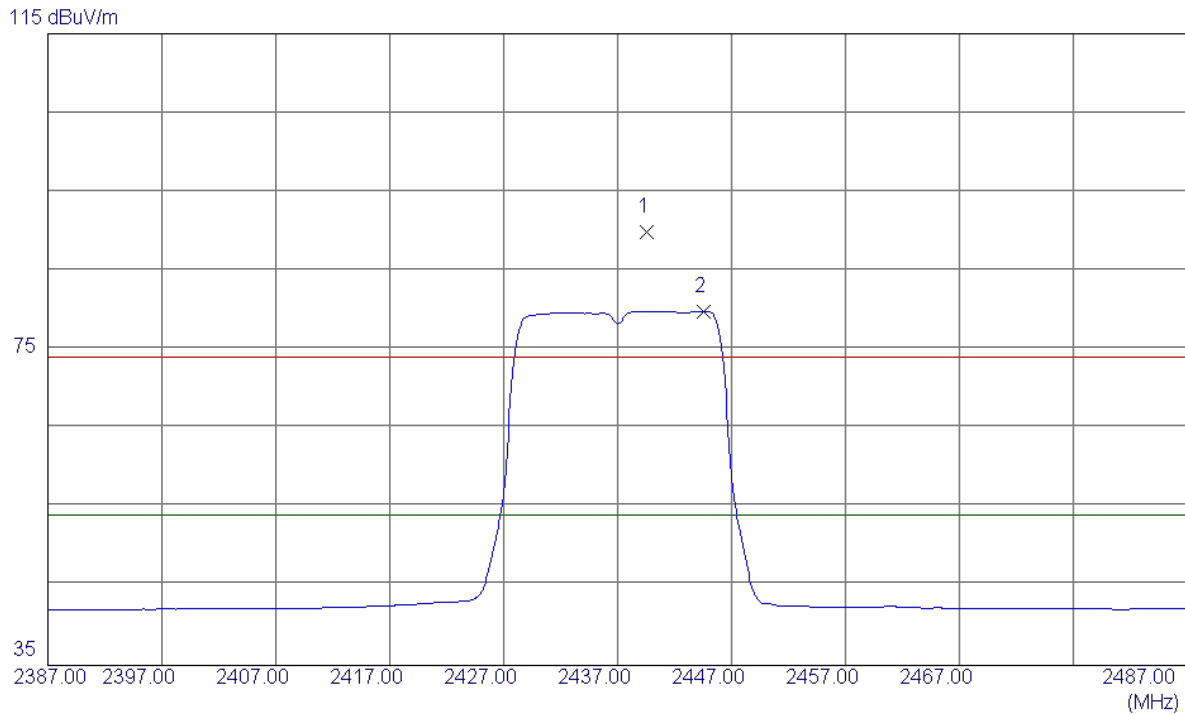
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1400	42.93	6.00	48.93	74.00	-25.07	Peak	
2	4874.6000	33.54	6.01	39.55	54.00	-14.45	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

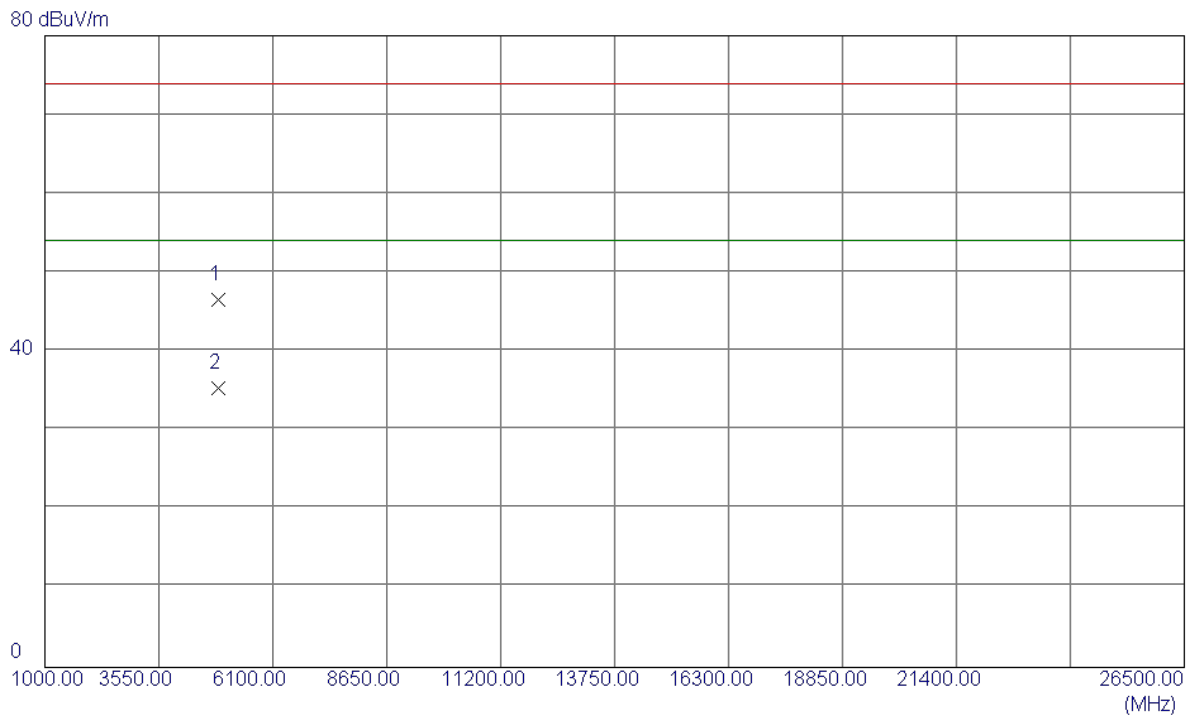
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2439.6000	57.19	32.75	89.94	74.00	15.94	Peak	No Limit
2	2444.6000	47.09	32.75	79.84	54.00	25.84	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

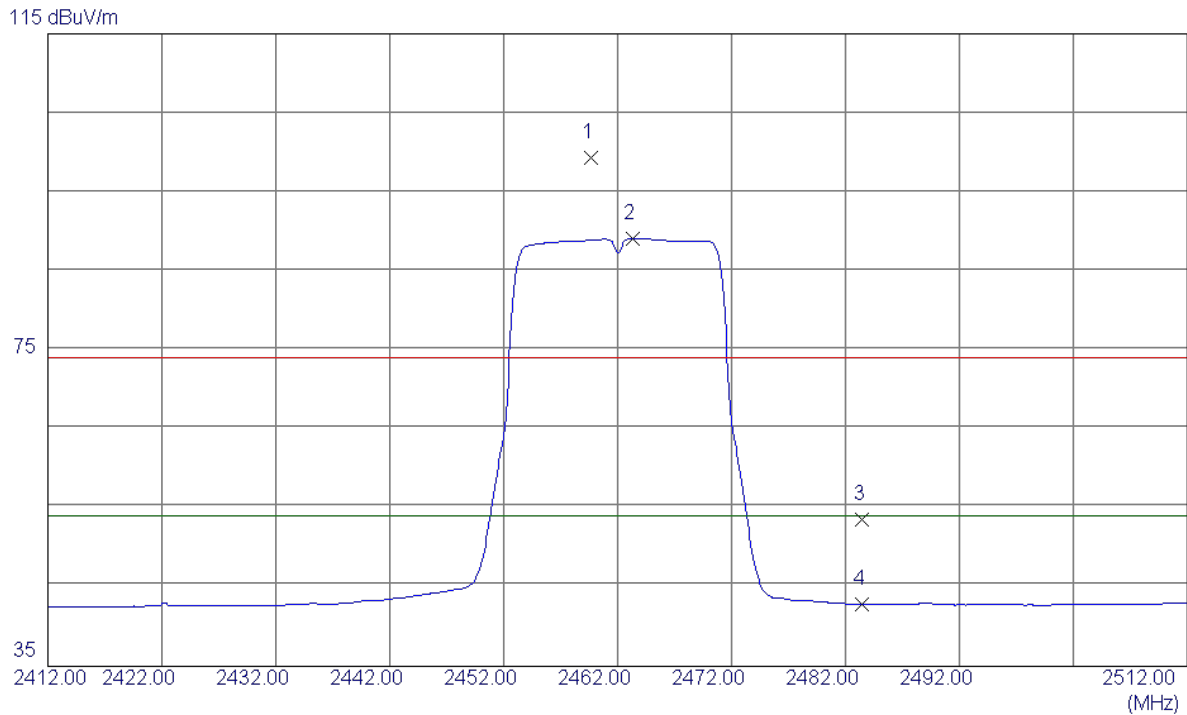
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9300	40.63	6.00	46.63	74.00	-27.37	Peak	
2	4874.6100	29.33	6.01	35.34	54.00	-18.66	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

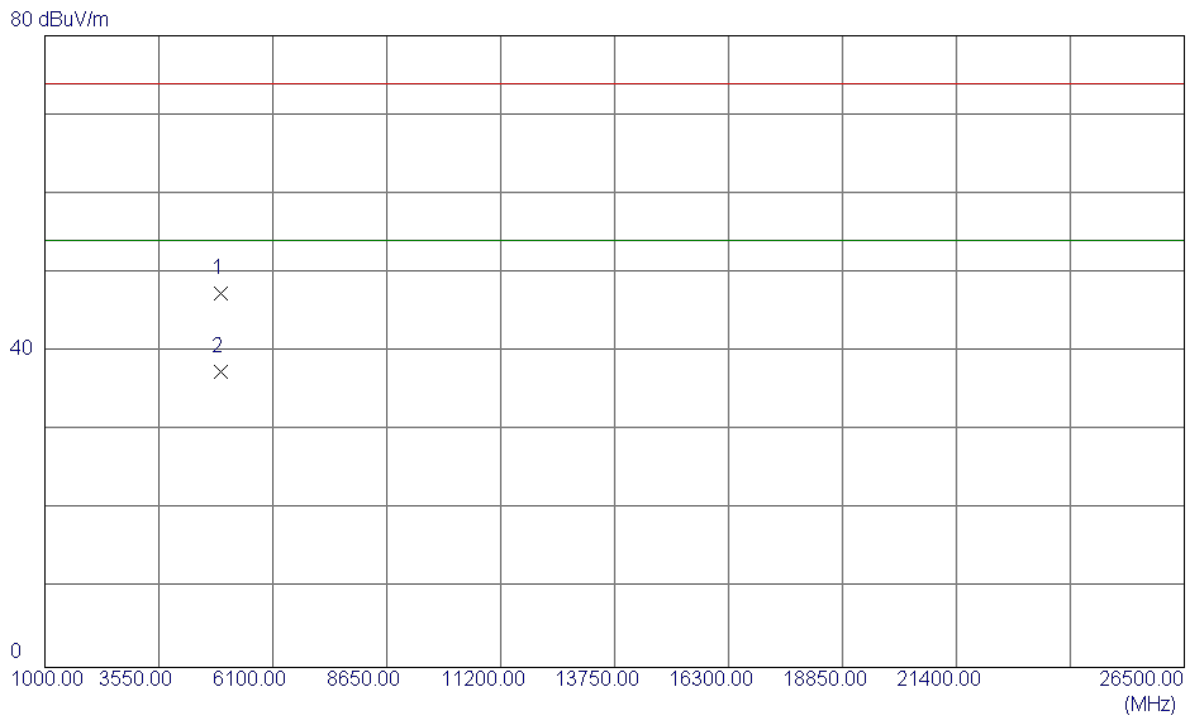
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.7000	66.58	32.77	99.35	74.00	25.35	Peak	No Limit
2	2463.3000	56.33	32.78	89.11	54.00	35.11	AVG	No Limit
3	2483.5000	20.70	32.81	53.51	74.00	-20.49	Peak	
4	2483.5000	10.03	32.81	42.84	54.00	-11.16	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

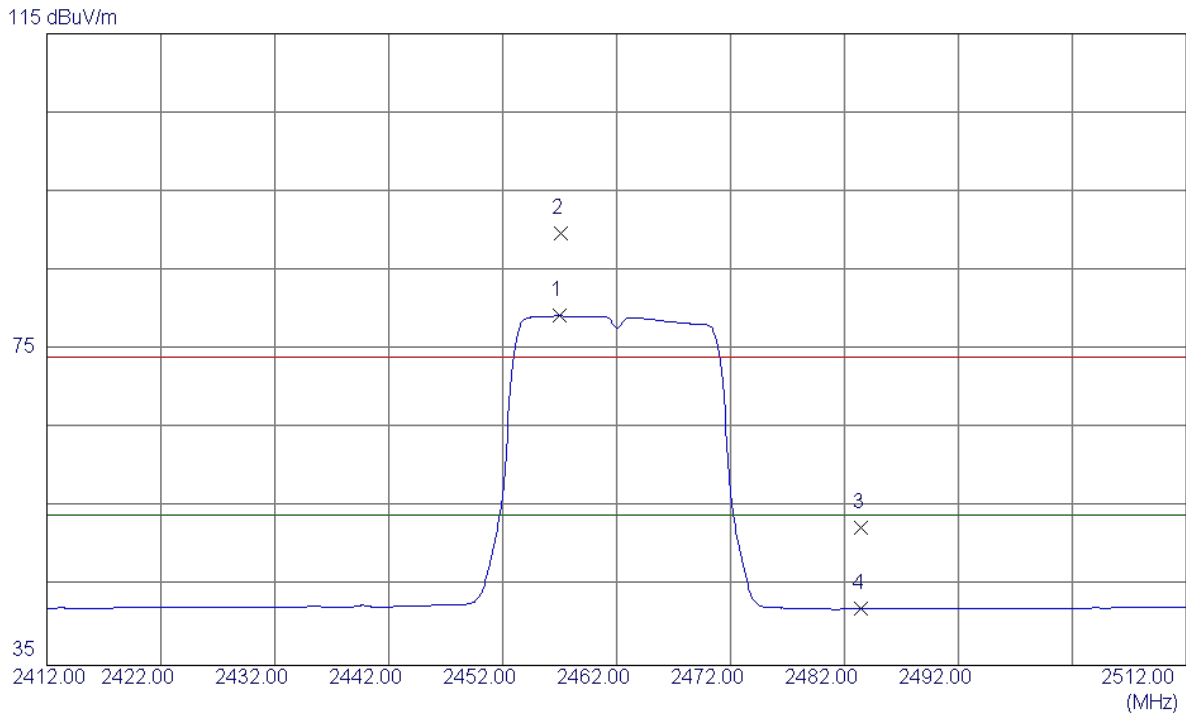
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.5200	41.16	6.14	47.30	74.00	-26.70	Peak	
2	4924.5500	31.23	6.14	37.37	54.00	-16.63	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

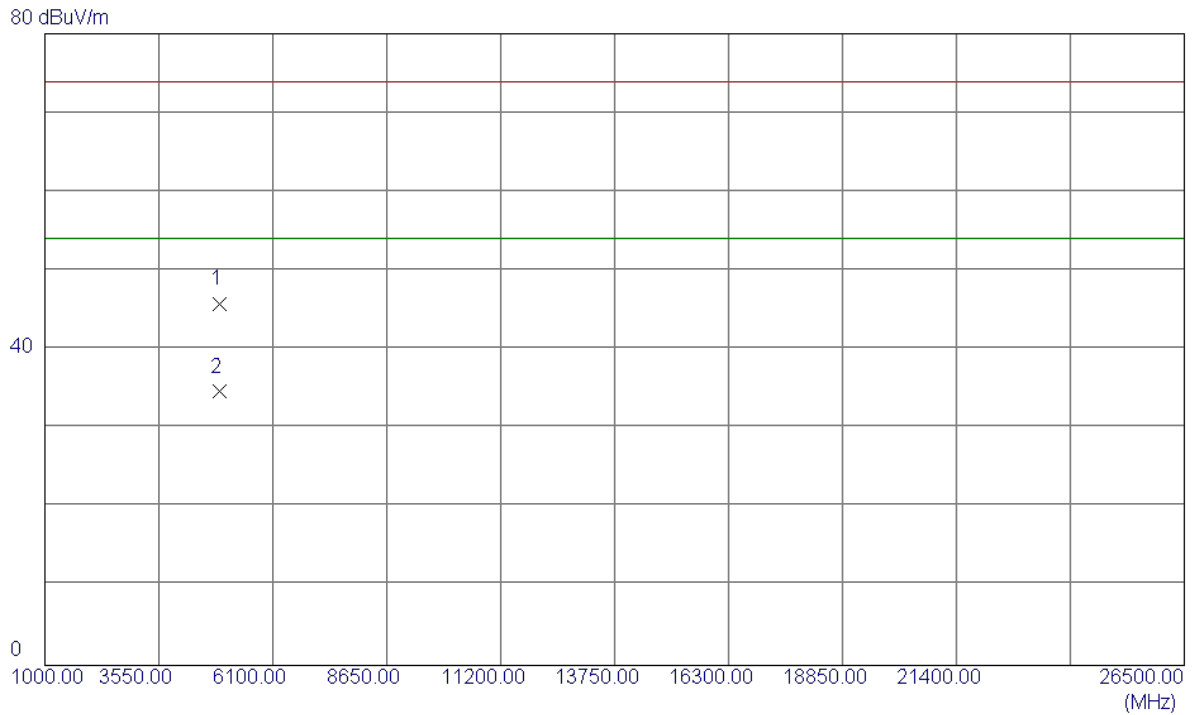
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2457.0000	46.48	32.77	79.25	54.00	25.25	AVG	No Limit
2	2457.1000	56.96	32.77	89.73	74.00	15.73	Peak	No Limit
3	2483.5000	19.63	32.81	52.44	74.00	-21.56	Peak	
4	2483.5000	9.32	32.81	42.13	54.00	-11.87	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

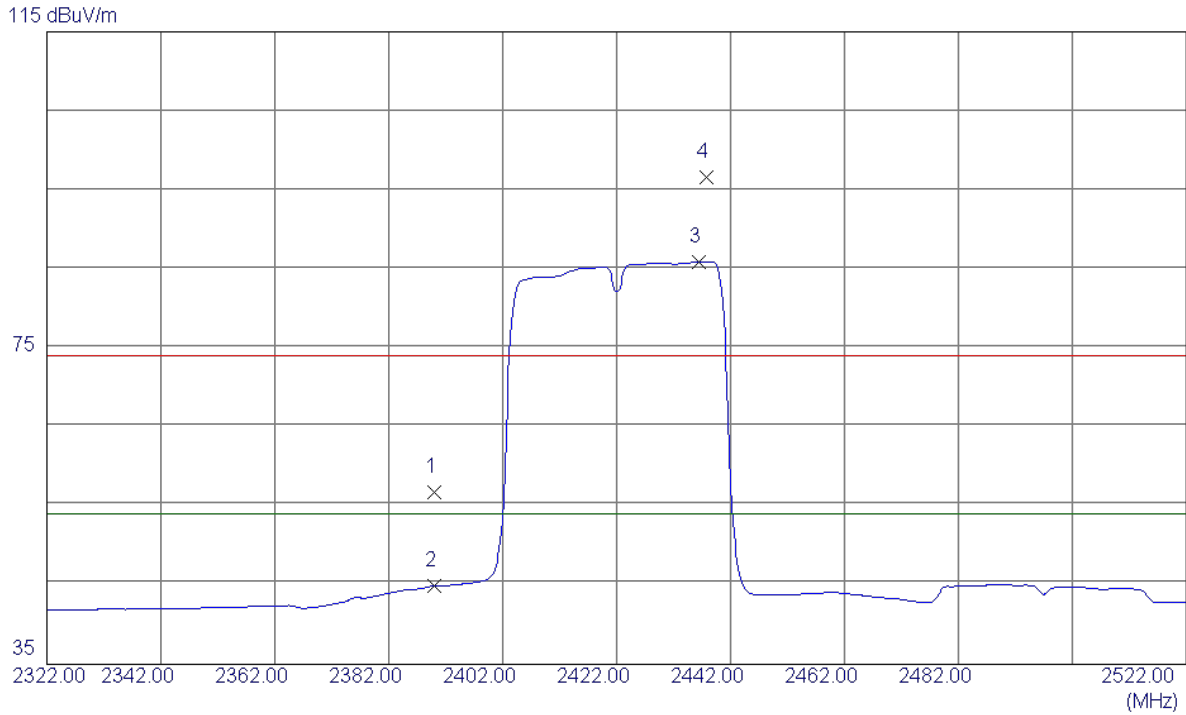
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.7000	39.55	6.14	45.69	74.00	-28.31	Peak	
2	4923.8500	28.50	6.14	34.64	54.00	-19.36	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

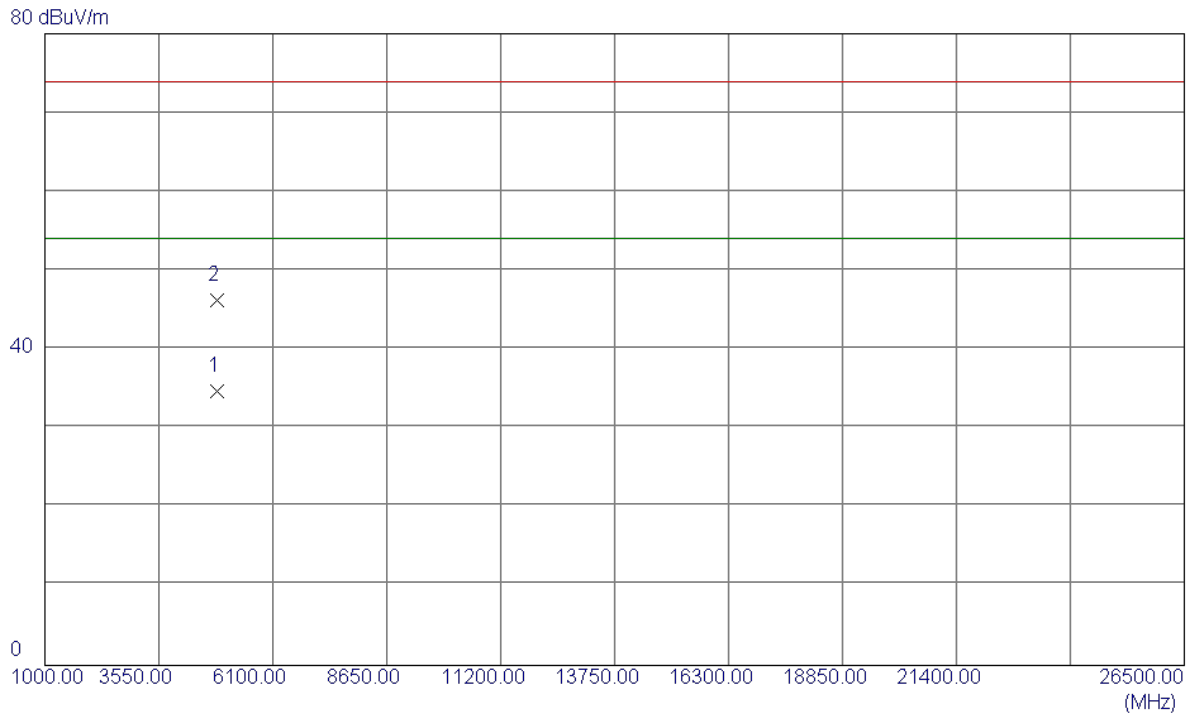
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.13	32.68	56.81	74.00	-17.19	Peak	
2	2390.0000	12.26	32.68	44.94	54.00	-9.06	AVG	
3	2436.4000	53.17	32.74	85.91	54.00	31.91	AVG	No Limit
4	2437.8000	63.87	32.74	96.61	74.00	22.61	Peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

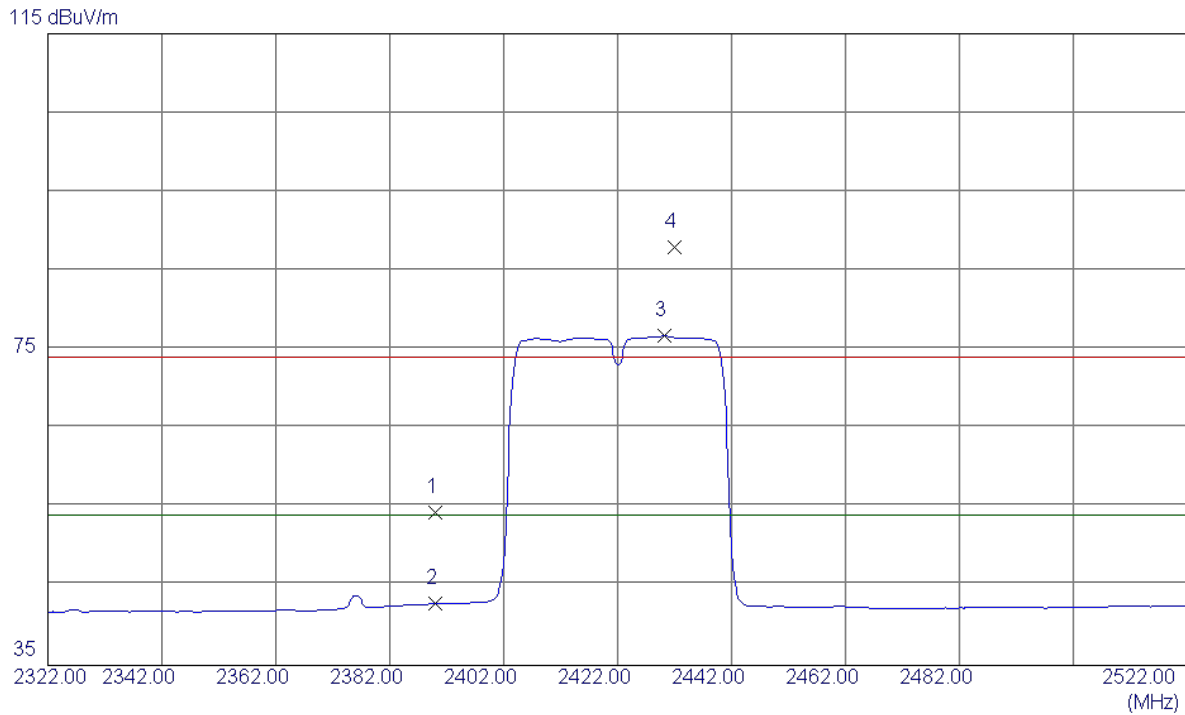
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.8800	28.84	5.92	34.76	54.00	-19.24	AVG	
2	4843.9400	40.33	5.92	46.25	74.00	-27.75	Peak	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

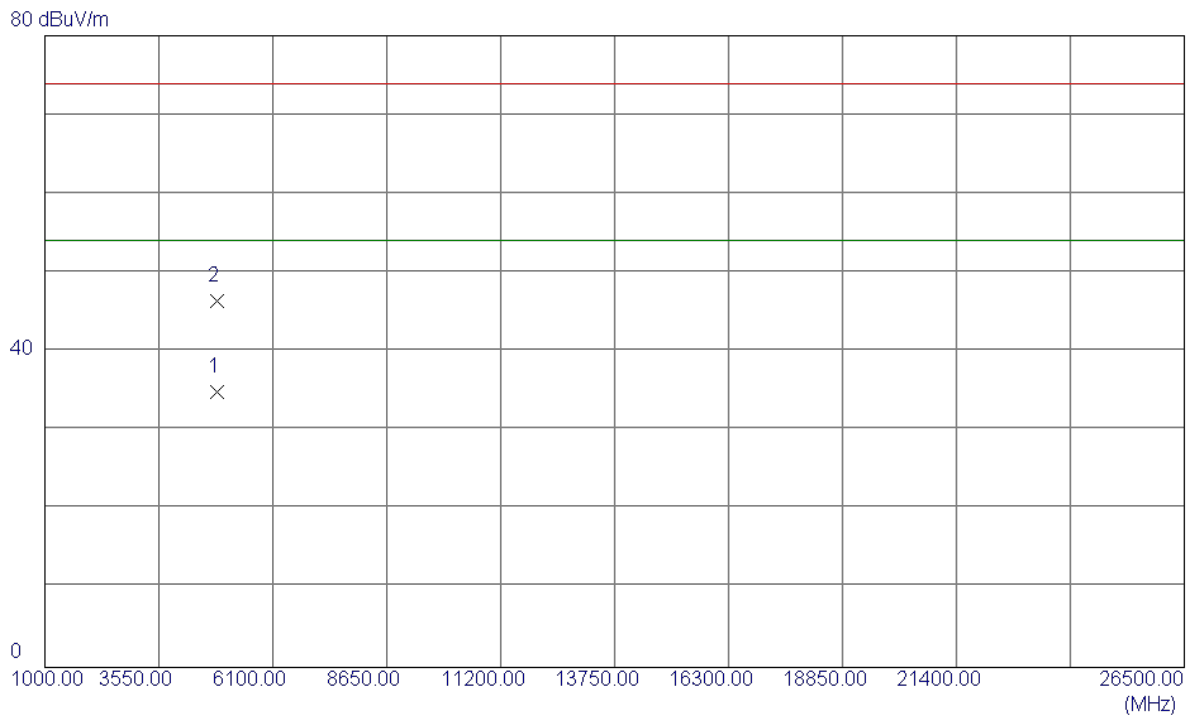
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	21.75	32.68	54.43	74.00	-19.57	Peak	
2	2390.0000	10.11	32.68	42.79	54.00	-11.21	AVG	
3	2430.2000	43.99	32.73	76.72	54.00	22.72	AVG	No Limit
4	2432.0000	55.25	32.74	87.99	74.00	13.99	Peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

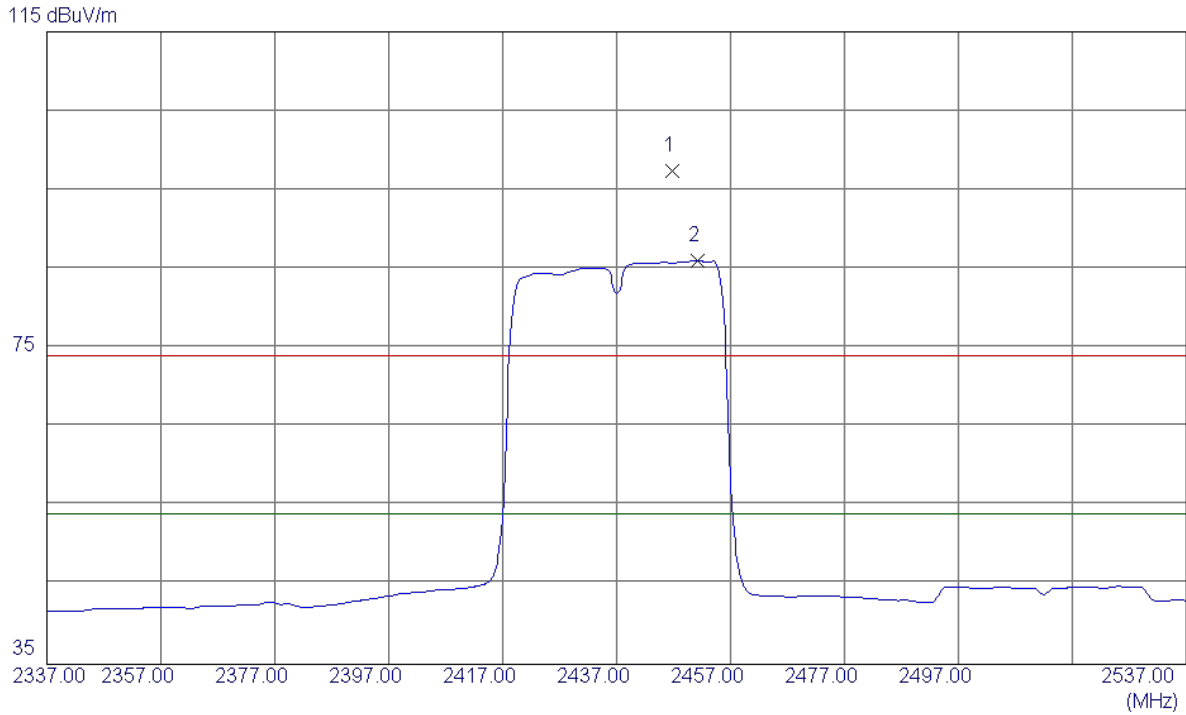
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.6500	28.93	5.92	34.85	54.00	-19.15	AVG	
2	4843.8600	40.43	5.92	46.35	74.00	-27.65	Peak	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

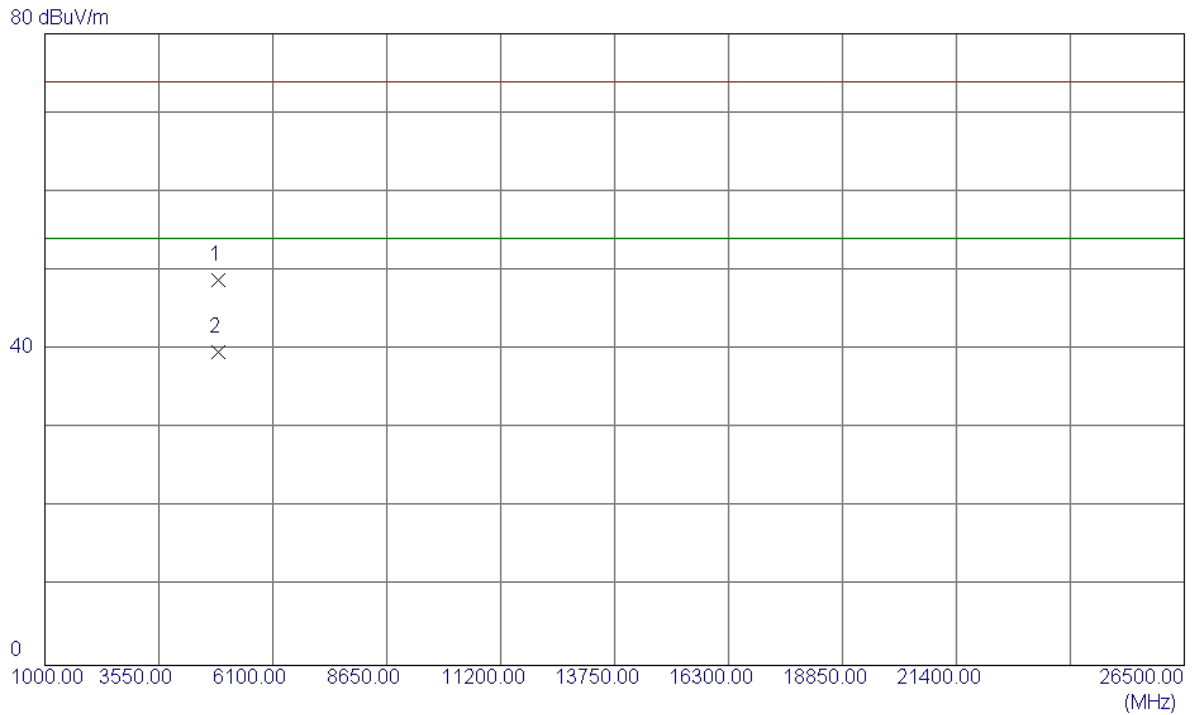
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2446.8000	64.62	32.76	97.38	74.00	23.38	Peak	No Limit
2	2451.2000	53.26	32.76	86.02	54.00	32.02	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

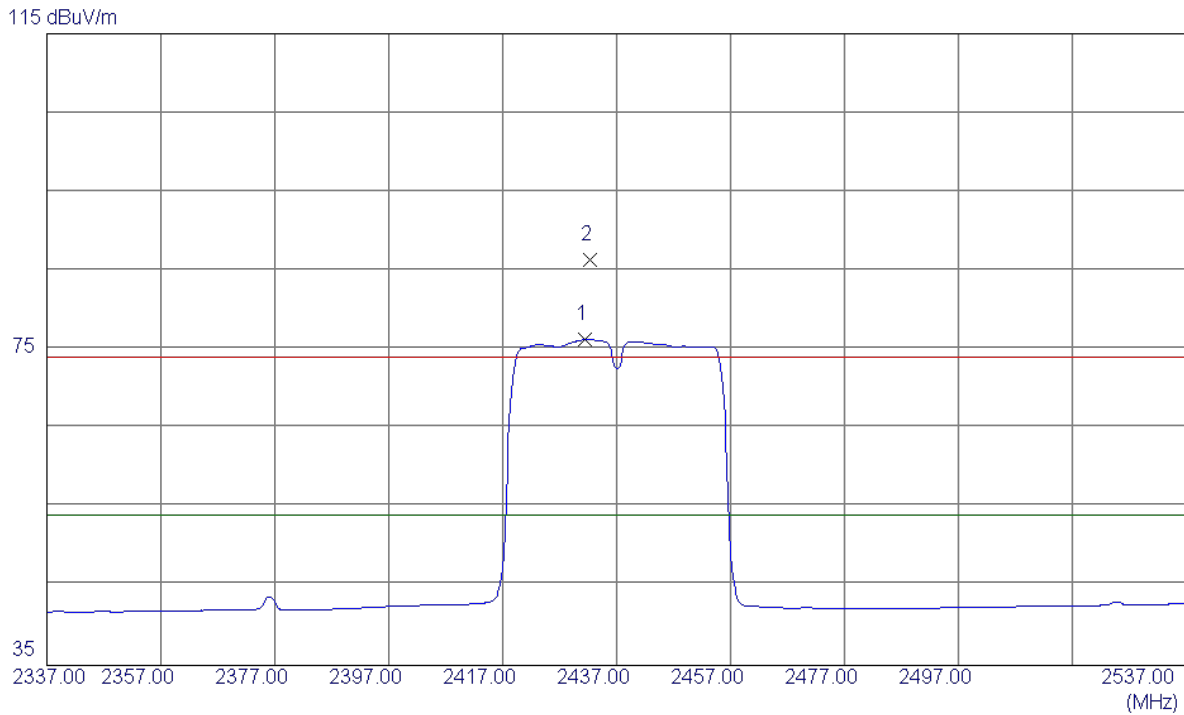
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.3500	42.77	6.00	48.77	74.00	-25.23	Peak	
2	4873.3800	33.63	6.00	39.63	54.00	-14.37	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

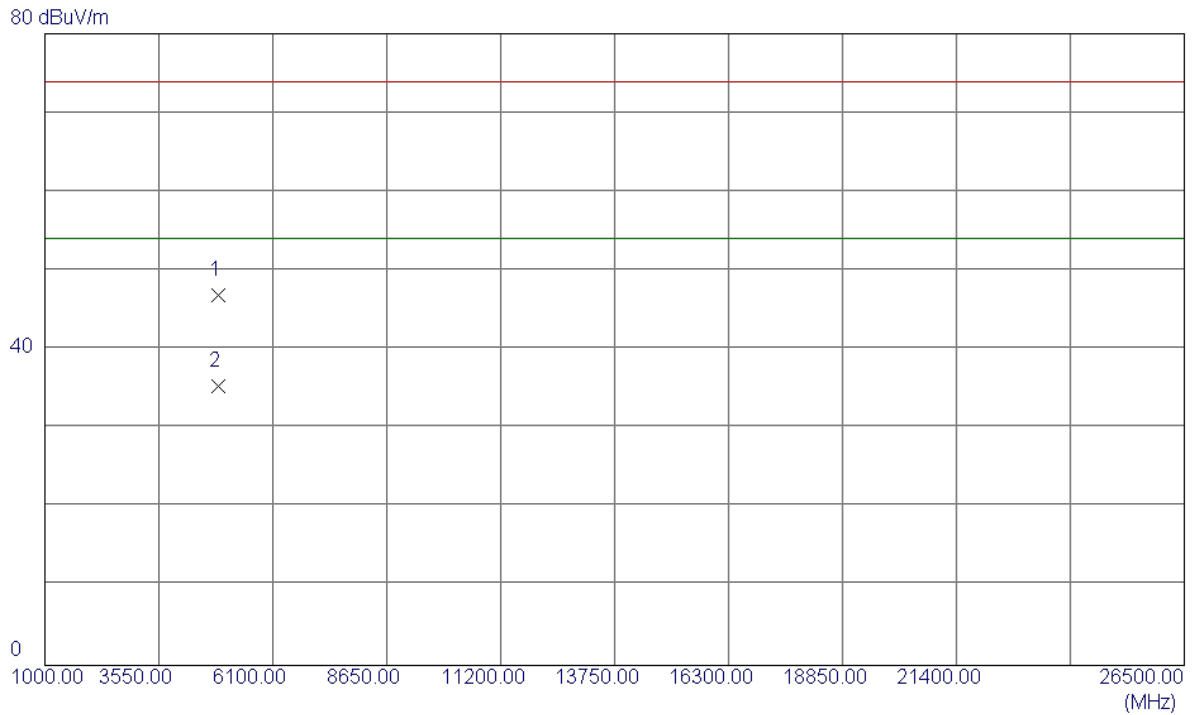
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2431.4000	43.52	32.74	76.26	54.00	22.26	AVG	No Limit
2	2432.4000	53.69	32.74	86.43	74.00	12.43	Peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

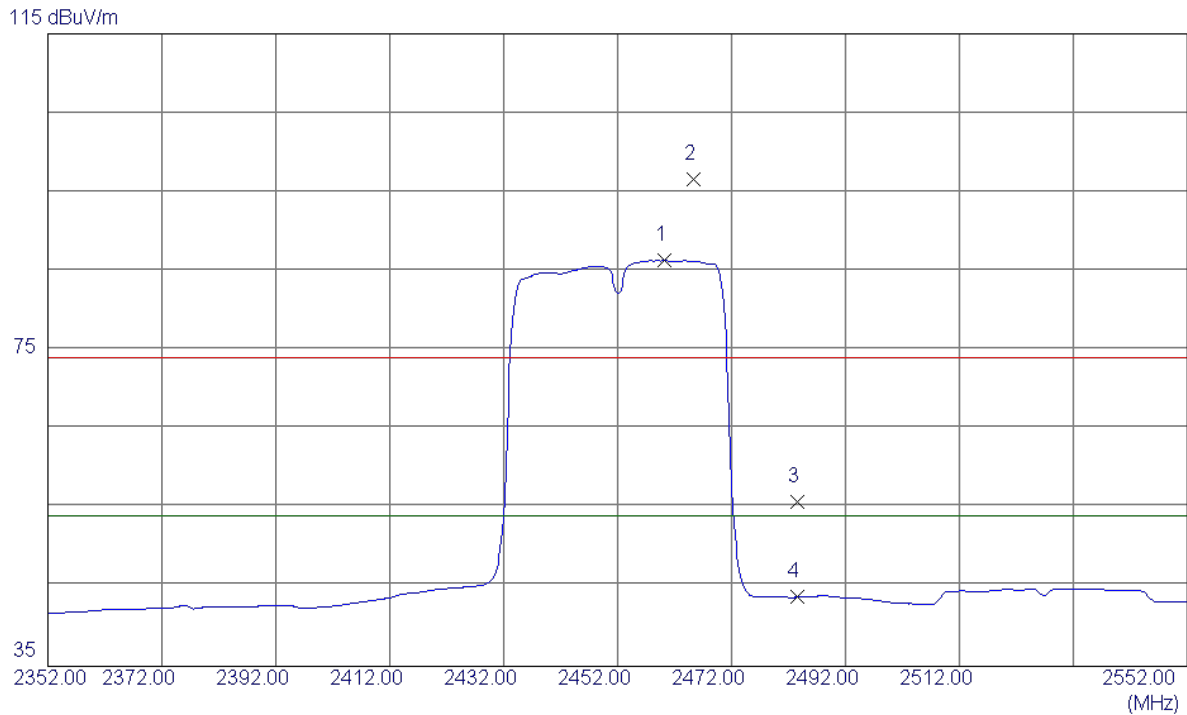
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.3900	40.94	6.00	46.94	74.00	-27.06	Peak	
2	4875.2799	29.42	6.01	35.43	54.00	-18.57	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

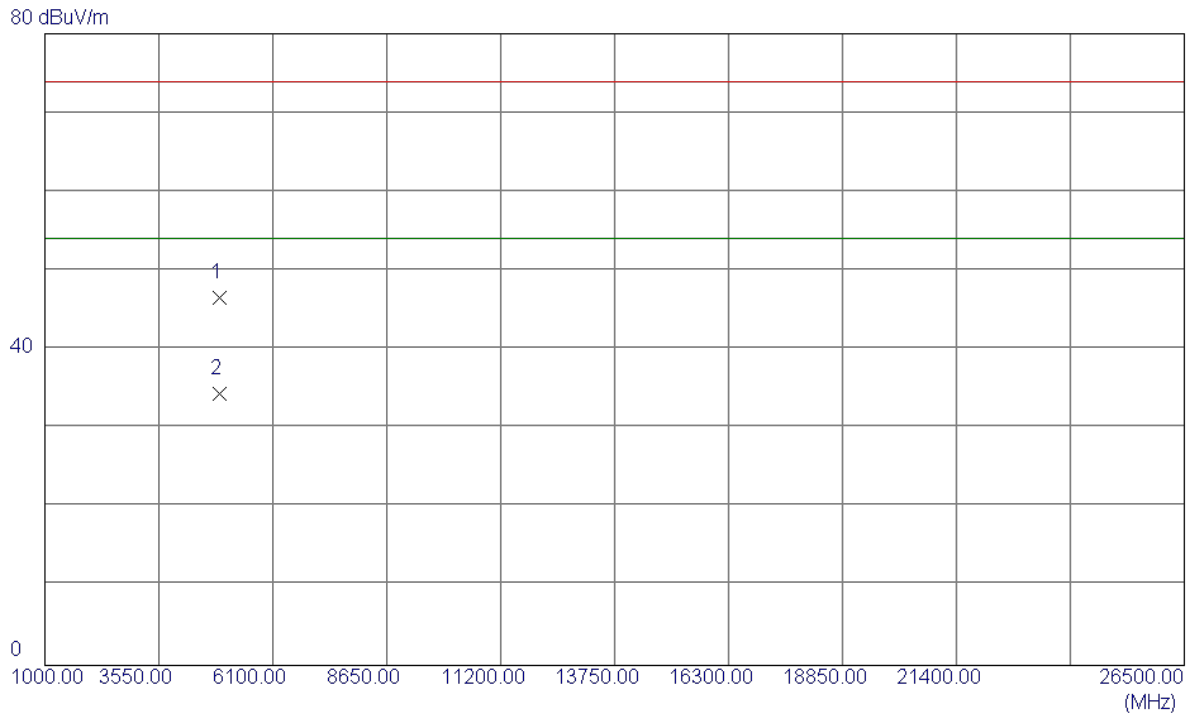
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.2000	53.53	32.78	86.31	54.00	32.31	AVG	No Limit
2	2465.4000	63.79	32.78	96.57	74.00	22.57	Peak	No Limit
3	2483.5000	23.00	32.81	55.81	74.00	-18.19	Peak	
4	2483.5000	10.94	32.81	43.75	54.00	-10.25	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

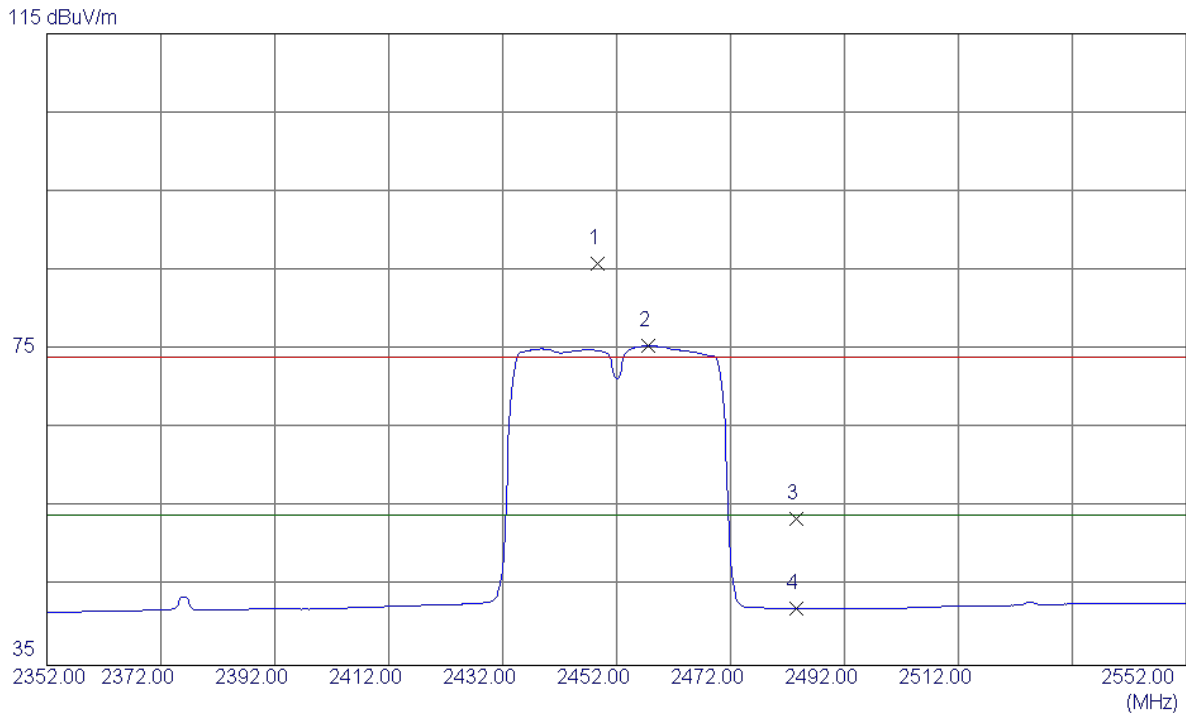
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4903.8100	40.43	6.08	46.51	74.00	-27.49	Peak	
2	4904.0299	28.30	6.08	34.38	54.00	-19.62	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

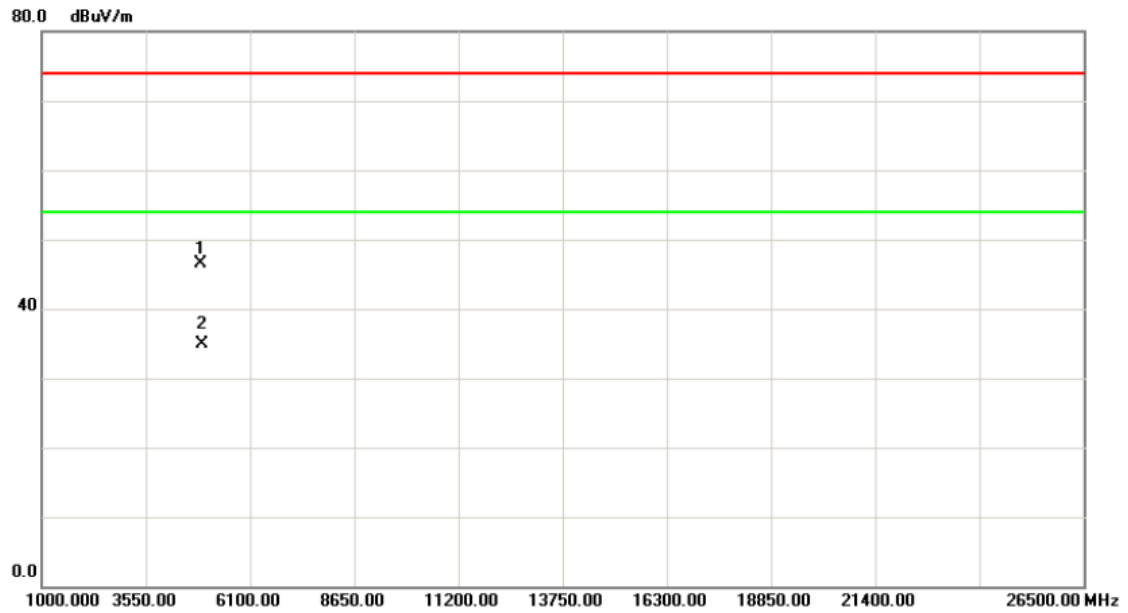
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2448.6000	53.17	32.76	85.93	74.00	11.93	Peak	No Limit
2	2457.6000	42.70	32.77	75.47	54.00	21.47	AVG	No Limit
3	2483.5000	20.81	32.81	53.62	74.00	-20.38	Peak	
4	2483.5000	9.41	32.81	42.22	54.00	-11.78	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

Horizontal



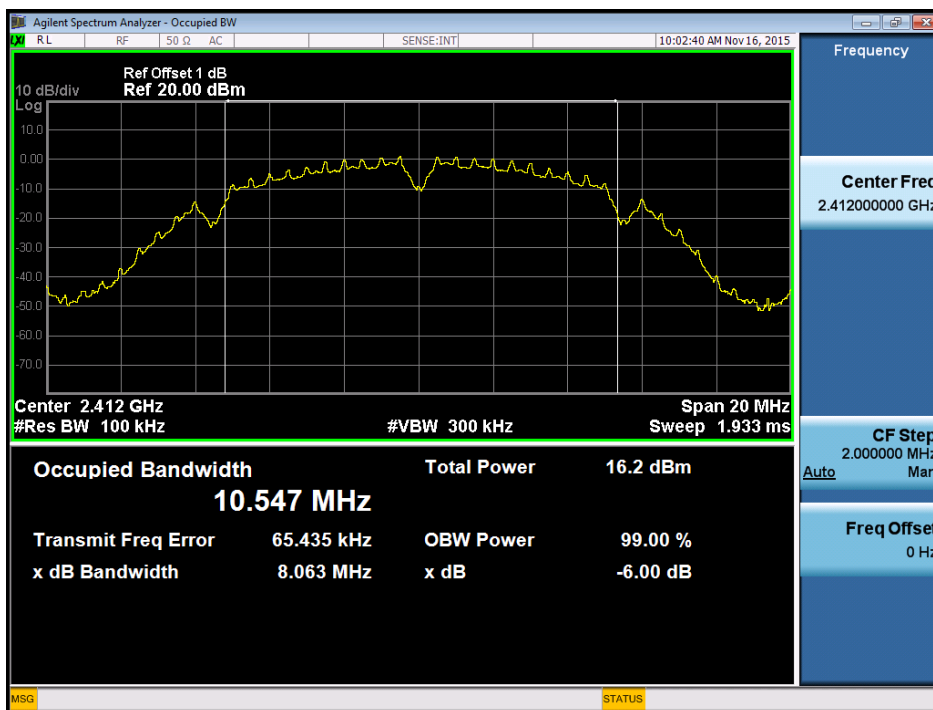
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4903.930	40.37	6.09	46.46	74.00	-27.54	peak	
2	*	4904.720	28.85	6.09	34.94	54.00	-19.06	AVG	

ATTACHMENT E - BANDWIDTH

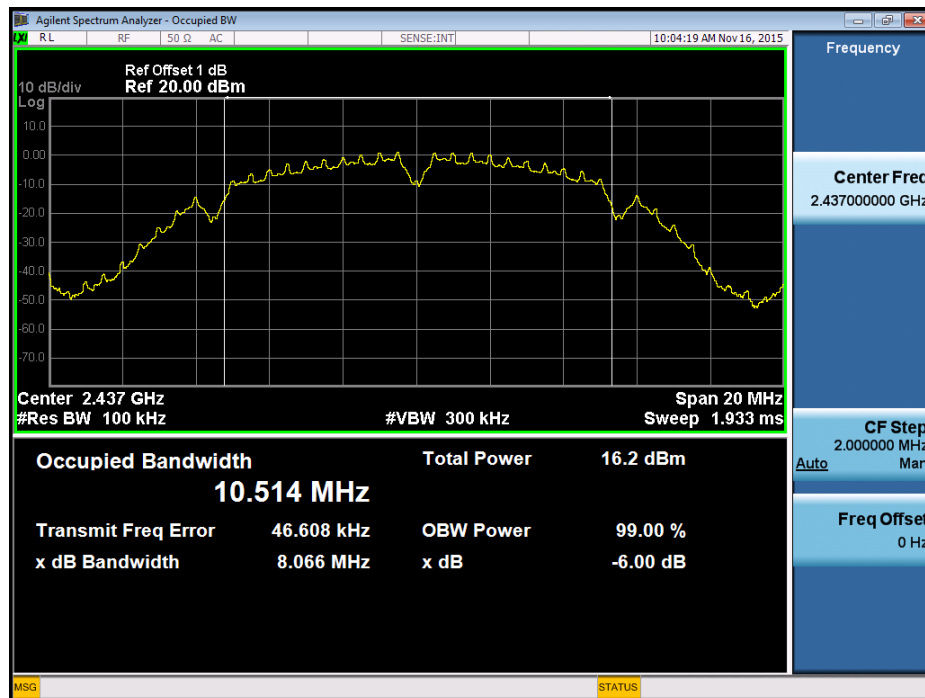
Test Mode : TX B Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	8.06	10.55	500	Complies
2437	8.07	10.51	500	Complies
2462	8.05	10.67	500	Complies

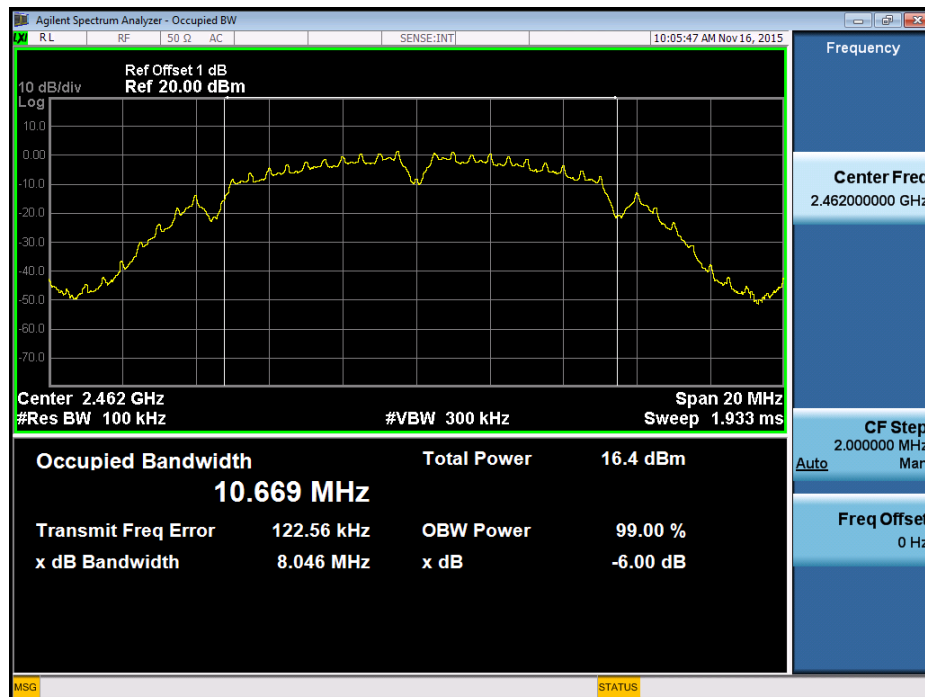
TX CH01



TX CH06



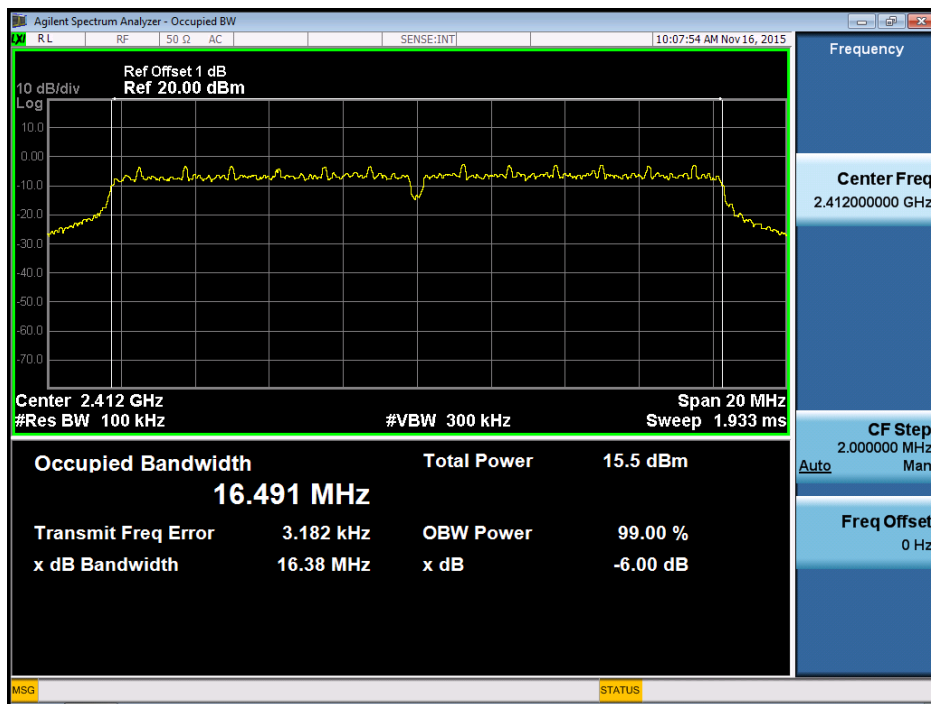
TX CH11



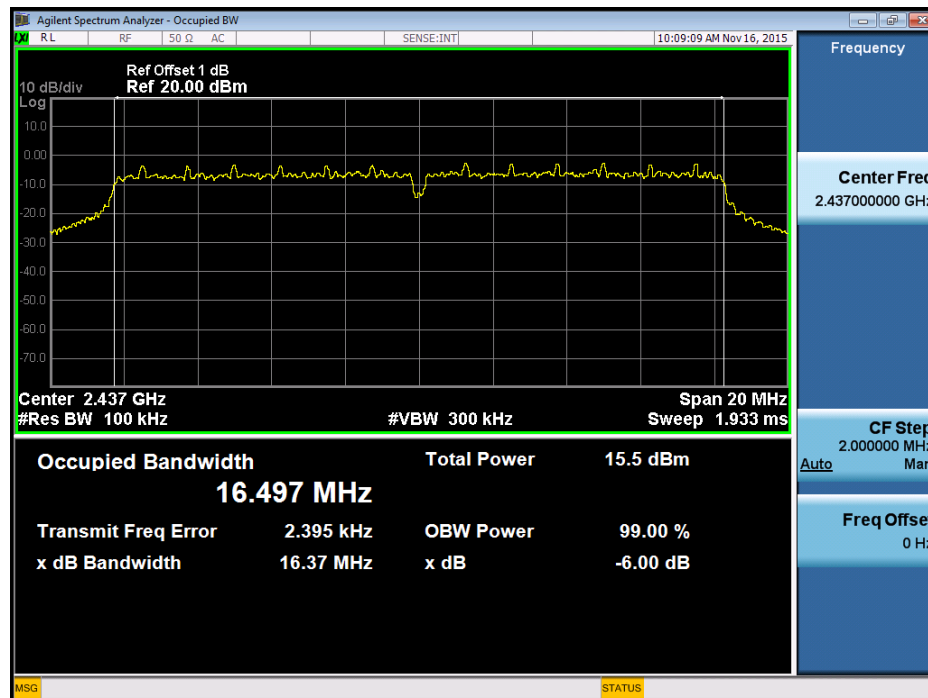
Test Mode: TX G Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.38	16.49	500	Complies
2437	16.37	16.50	500	Complies
2462	16.39	16.49	500	Complies

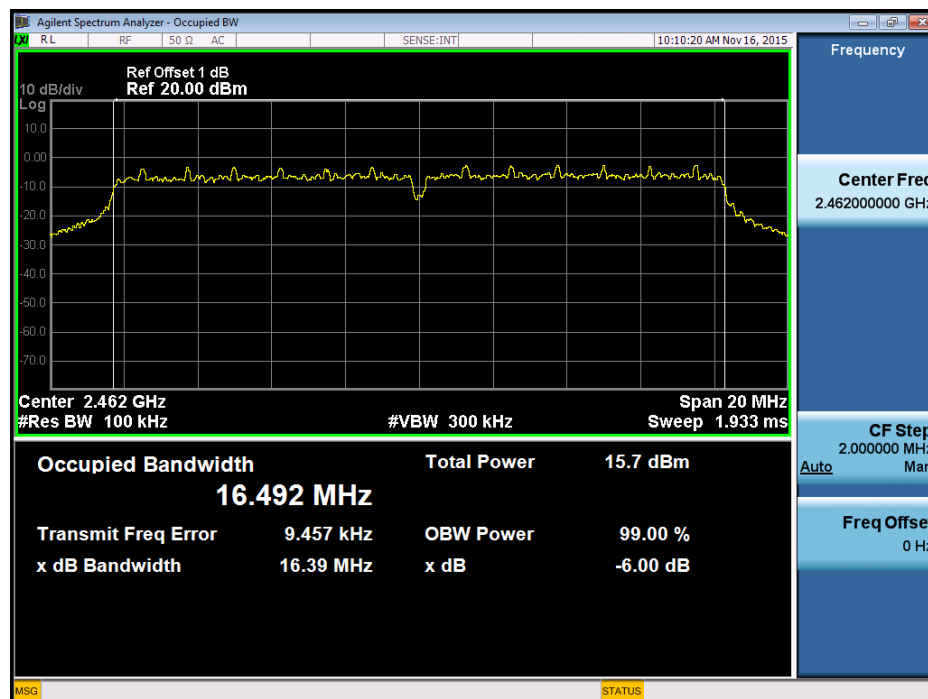
TX CH01



TX CH06



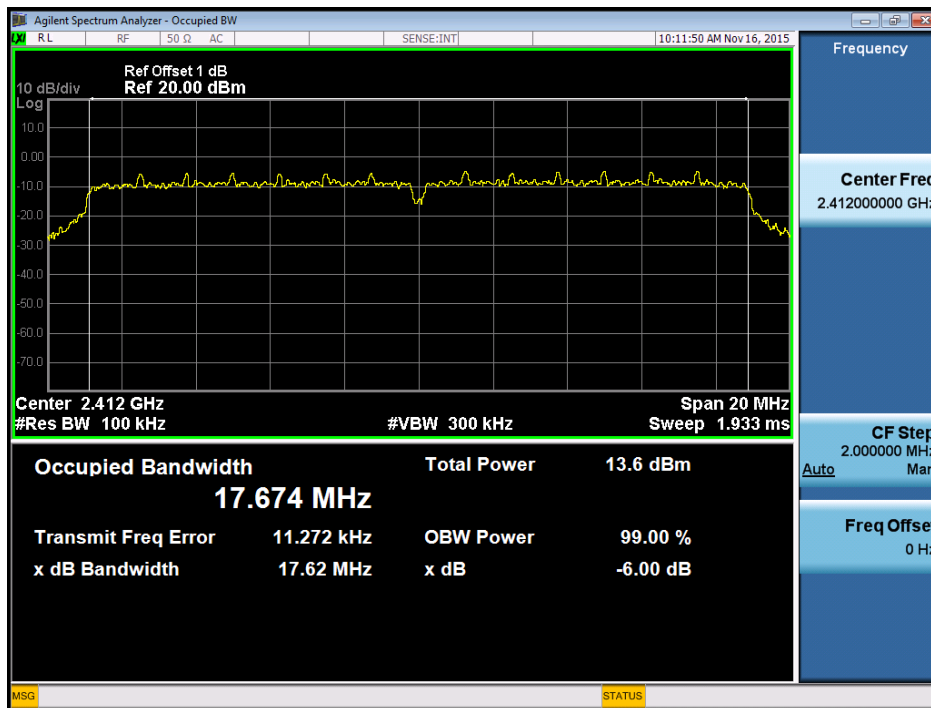
TX CH11



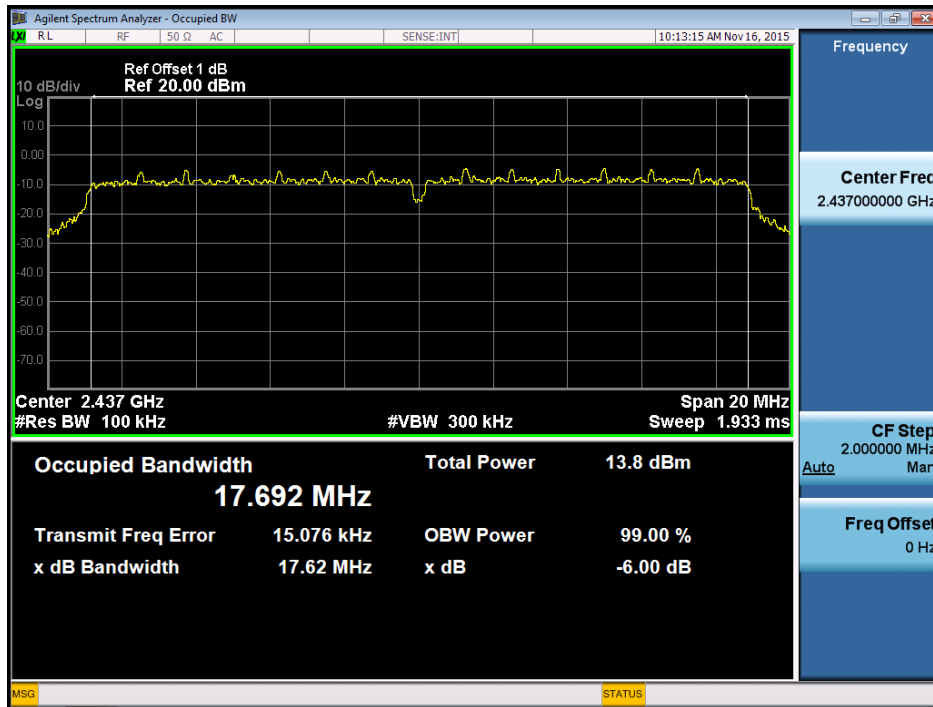
Test Mode : TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.62	17.67	500	Complies
2437	17.62	17.69	500	Complies
2462	17.63	17.68	500	Complies

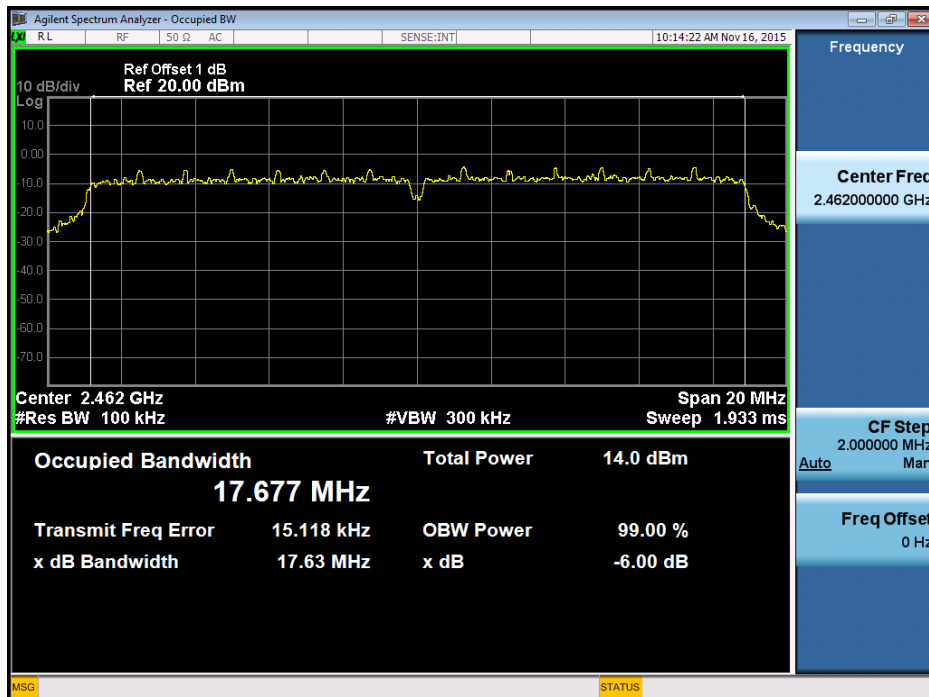
TX CH01



TX CH06



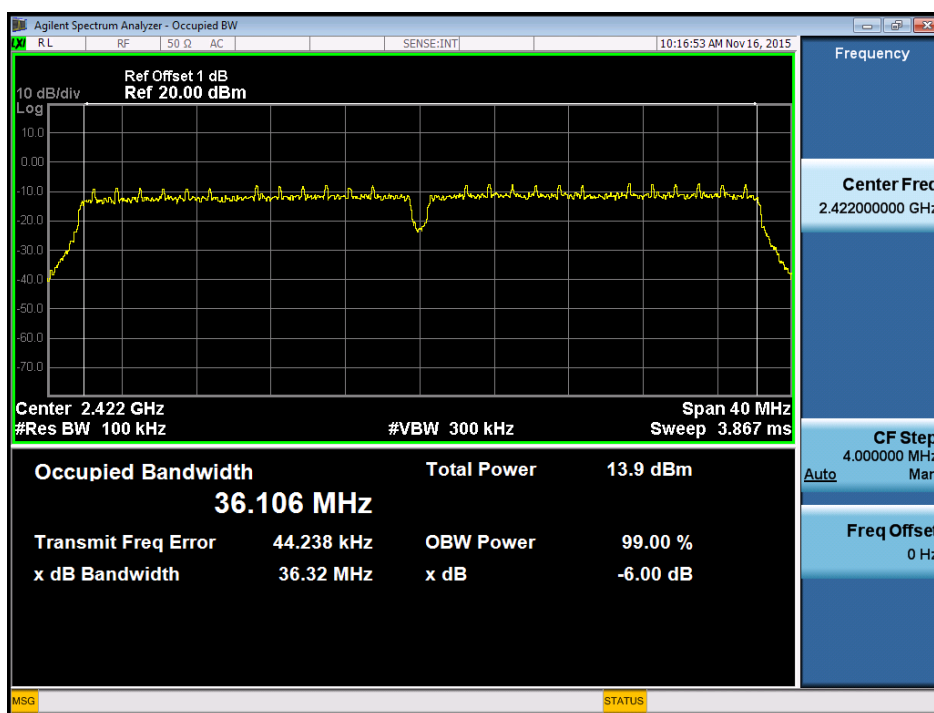
TX CH11



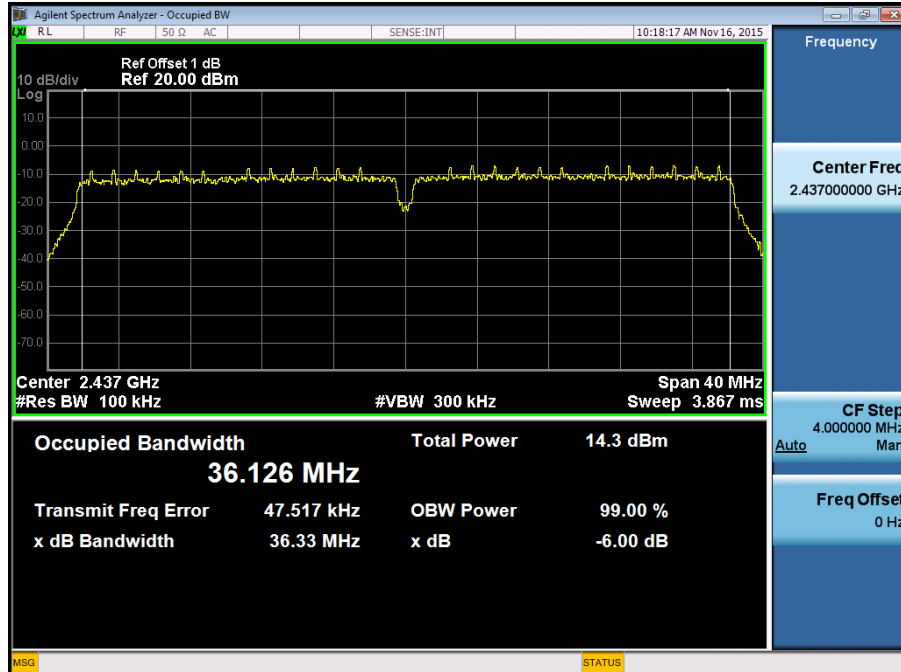
Test Mode : TX N-40MHz Mode_CH03/06/09

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.32	36.11	500	Complies
2437	36.33	36.13	500	Complies
2452	36.07	36.13	500	Complies

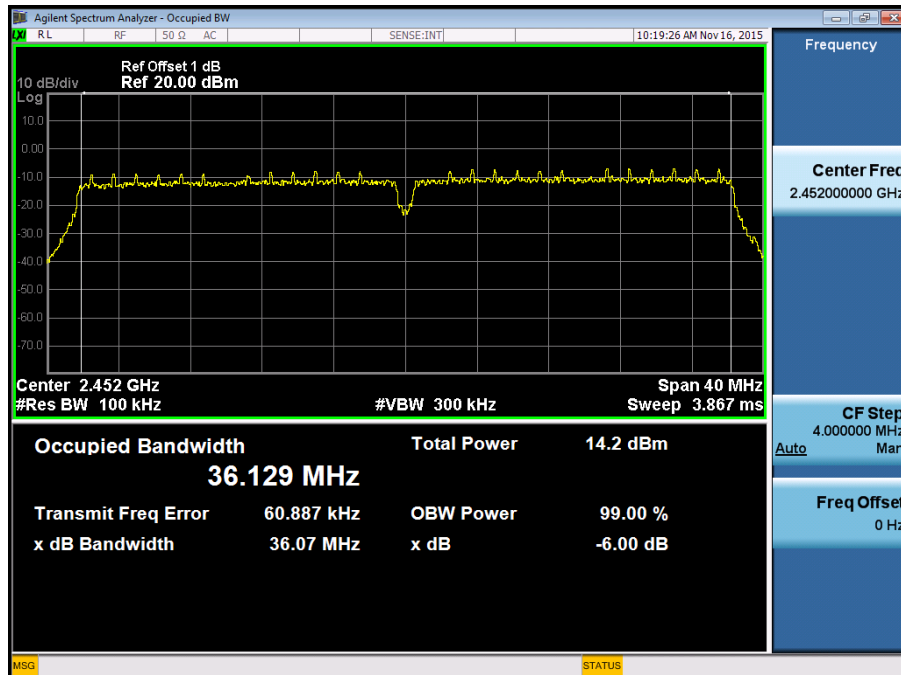
TX CH03



TX CH06



TX CH09



ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	13.35	0.02	30.00	1.00	Complies
2437	14.14	0.03	30.00	1.00	Complies
2462	14.30	0.03	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.88	0.12	30.00	1.00	Complies
2437	21.68	0.15	30.00	1.00	Complies
2462	21.83	0.15	30.00	1.00	Complies

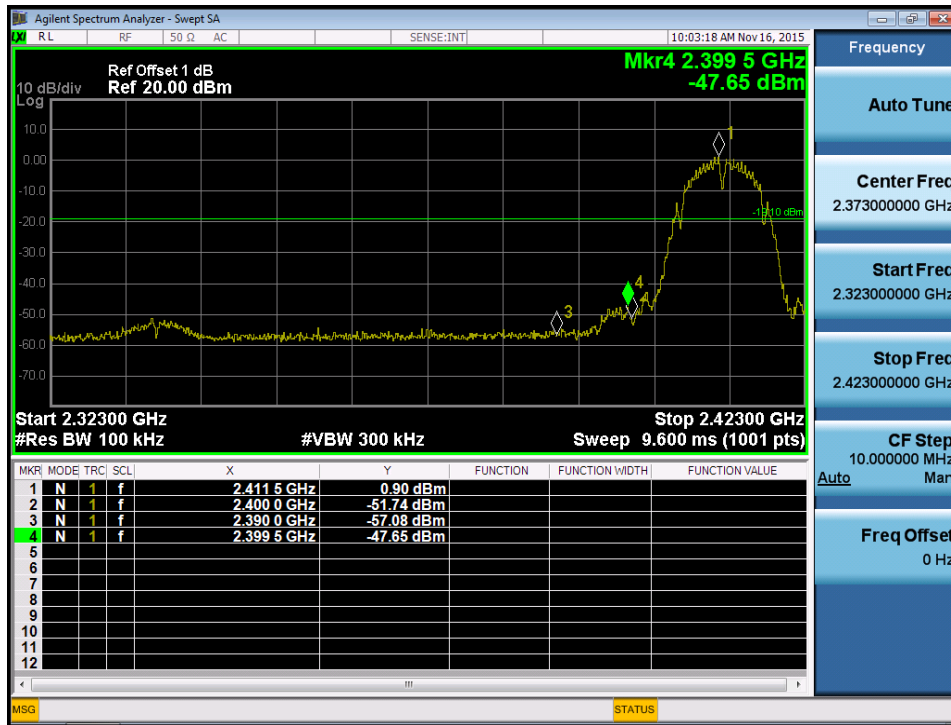
Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.52	0.07	30.00	1.00	Complies
2437	19.89	0.10	30.00	1.00	Complies
2462	20.02	0.10	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	19.27	0.08	30.00	1.00	Complies
2437	19.87	0.10	30.00	1.00	Complies
2452	19.67	0.09	30.00	1.00	Complies

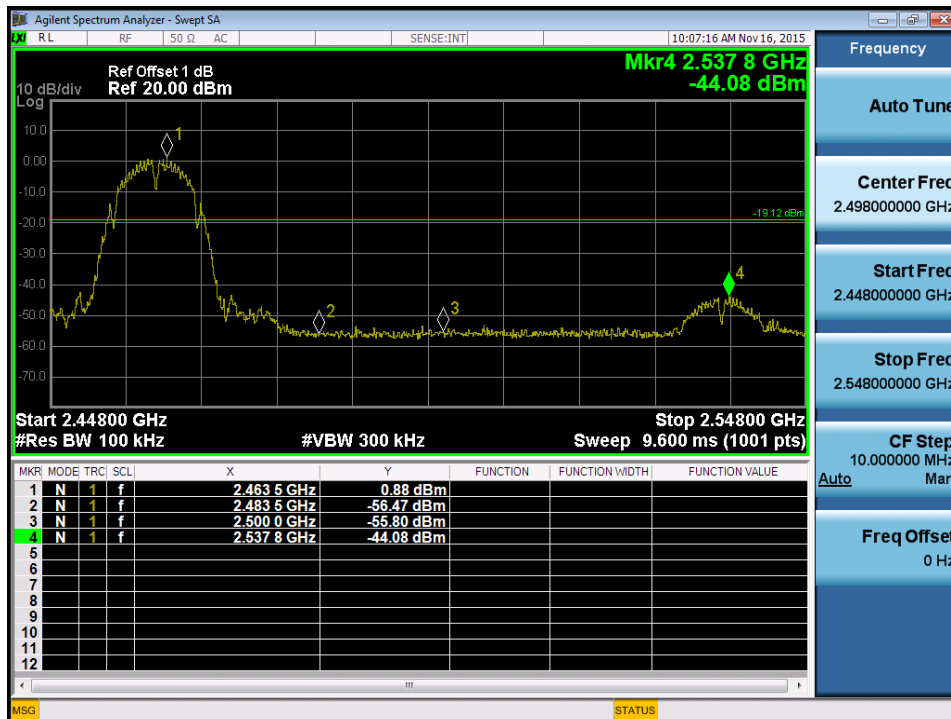
**ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS
EMISSION**

Test Mode : TX B Mode

TX B mode CH01



TX B mode CH11



TX B mode CH01 (10 Harmonic of the frequency)



TX B mode CH06 (10 Harmonic of the frequency)

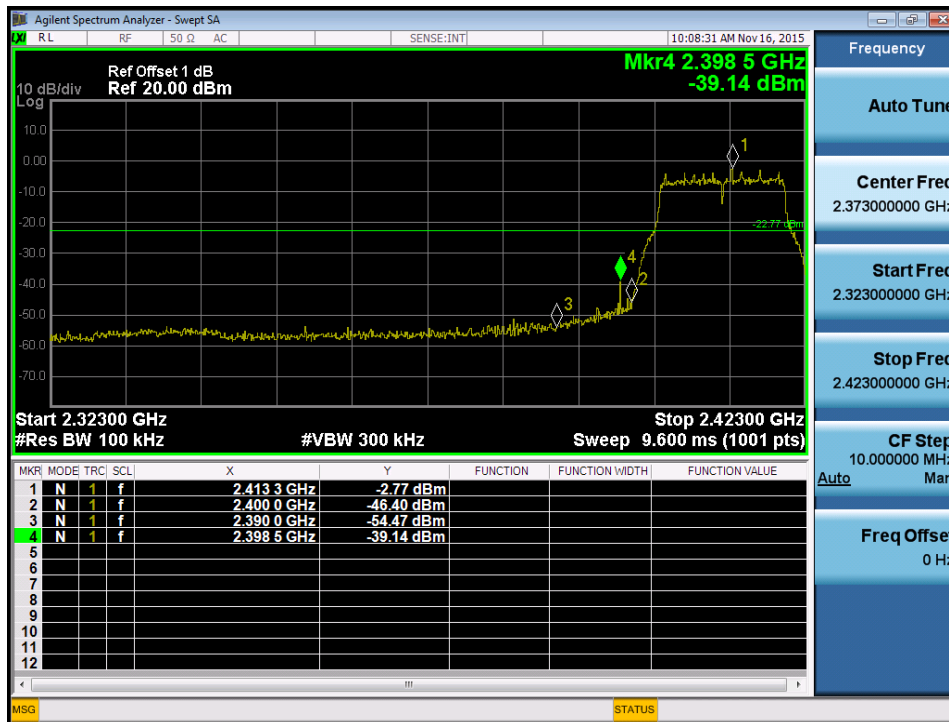


TX B mode CH11 (10 Harmonic of the frequency)

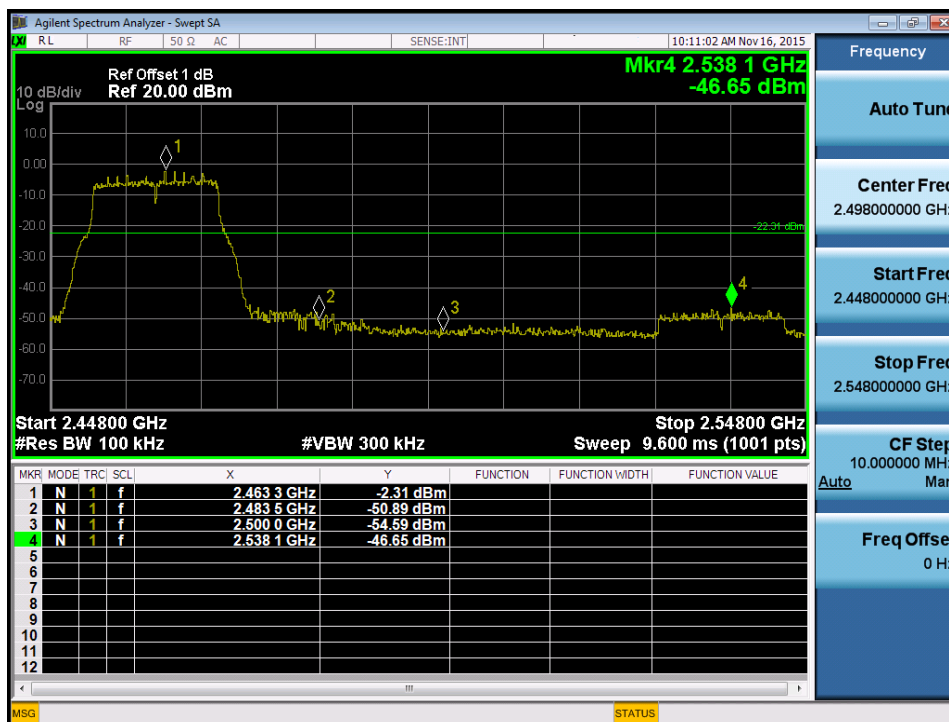


Test Mode : TX G Mode

TX G mode CH01



TX G mode CH11



TX G mode CH01 (10 Harmonic of the frequency)



TX G mode CH06 (10 Harmonic of the frequency)

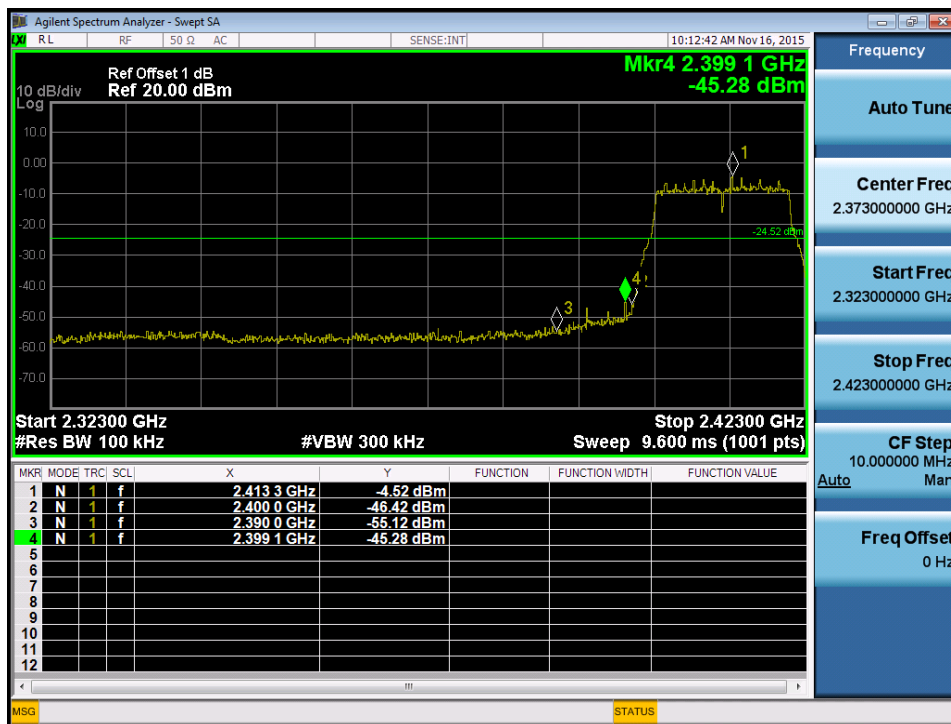


TX G mode CH11 (10 Harmonic of the frequency)

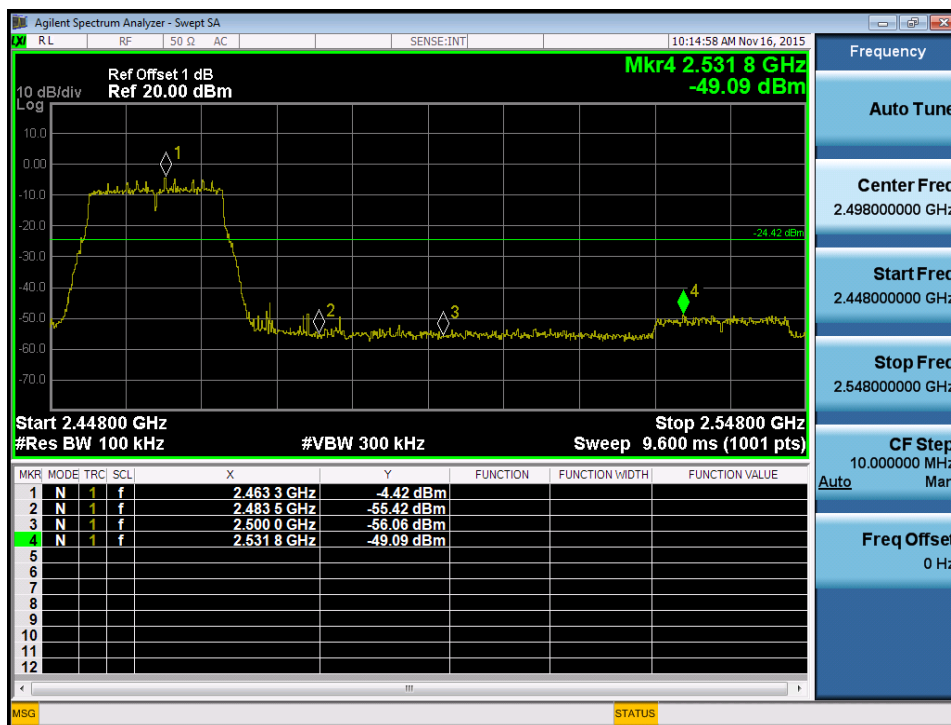


Test Mode : TX N-20M Mode

TX HT20 mode CH01



TX HT20 mode CH11



TX HT20 mode CH01 (10 Harmonic of the frequency)



TX HT20 mode CH06 (10 Harmonic of the frequency)

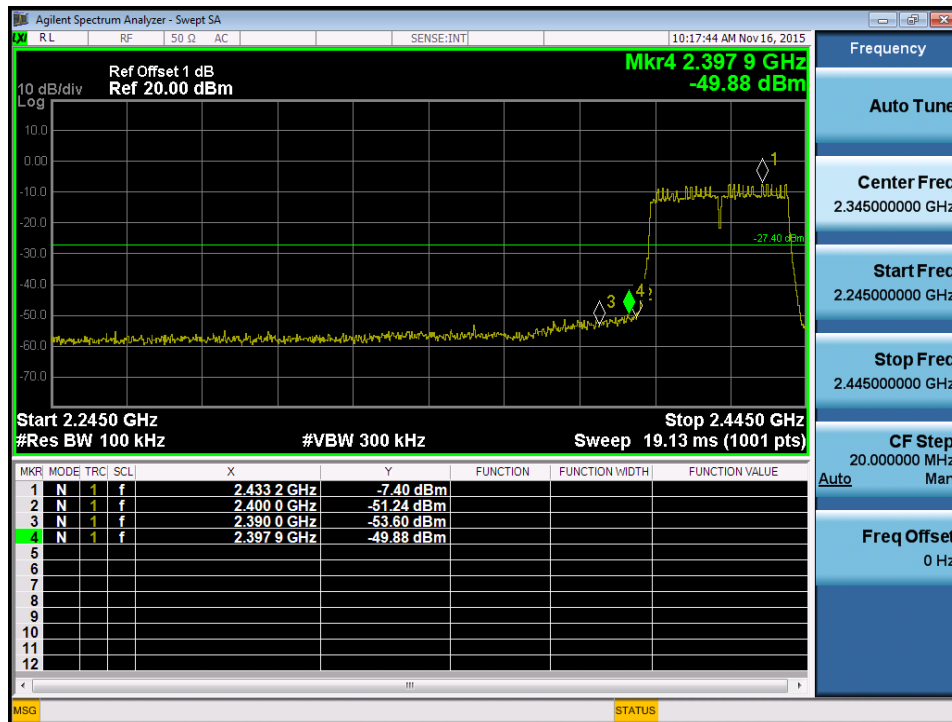


TX HT20 mode CH11 (10 Harmonic of the frequency)

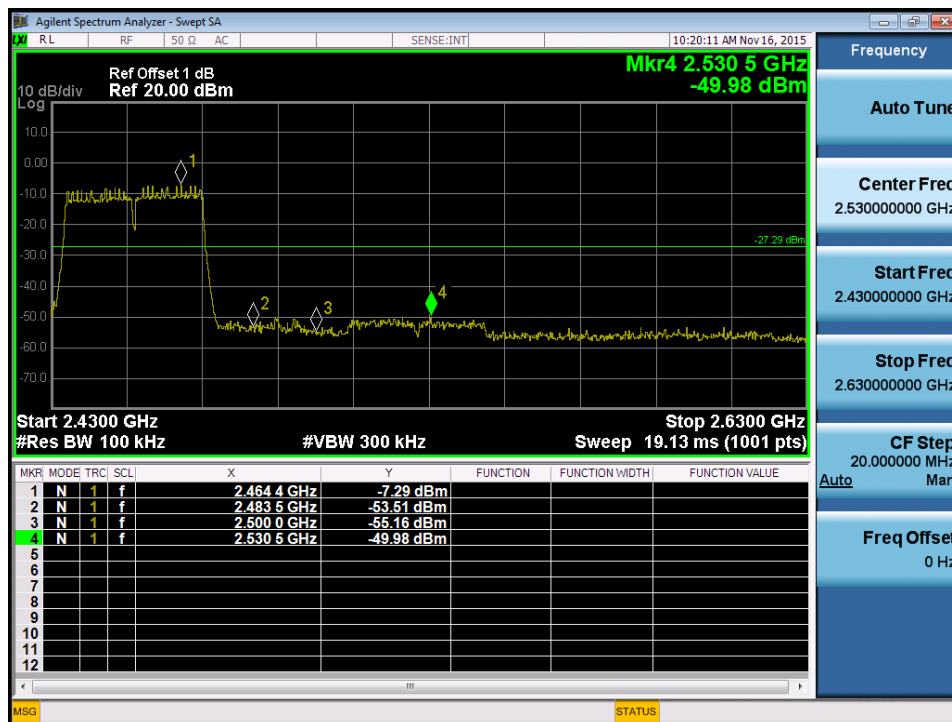


Test Mode : TX N-40M Mode

TX HT40 mode CH03



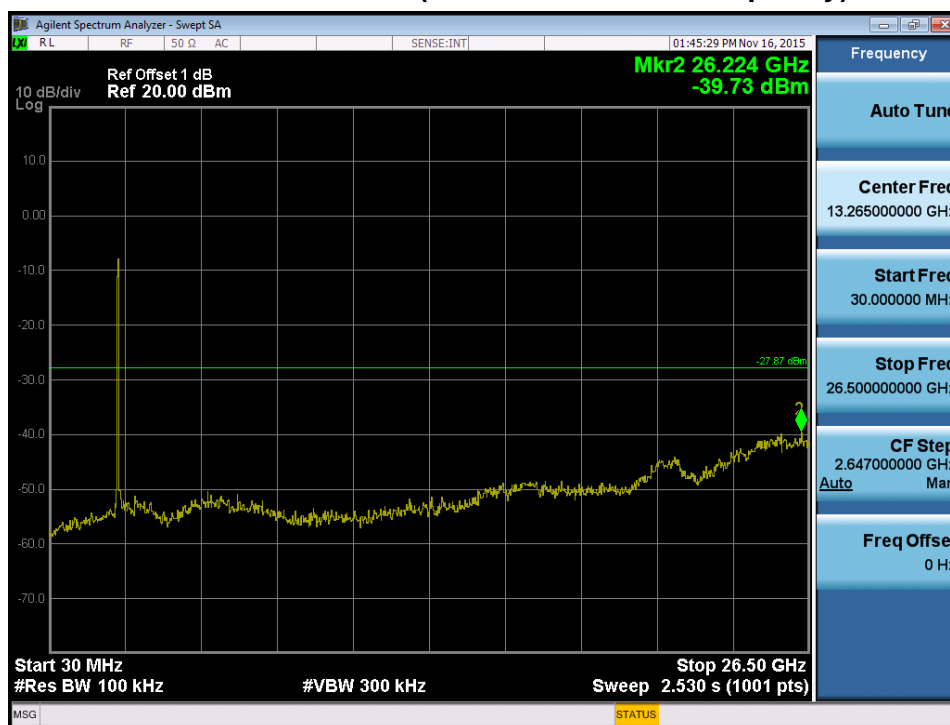
TX HT40 mode CH09



TX HT40 mode CH03 (10 Harmonic of the frequency)



TX HT40 mode CH06 (10 Harmonic of the frequency)



TX HT40 mode CH09 (10 Harmonic of the frequency)

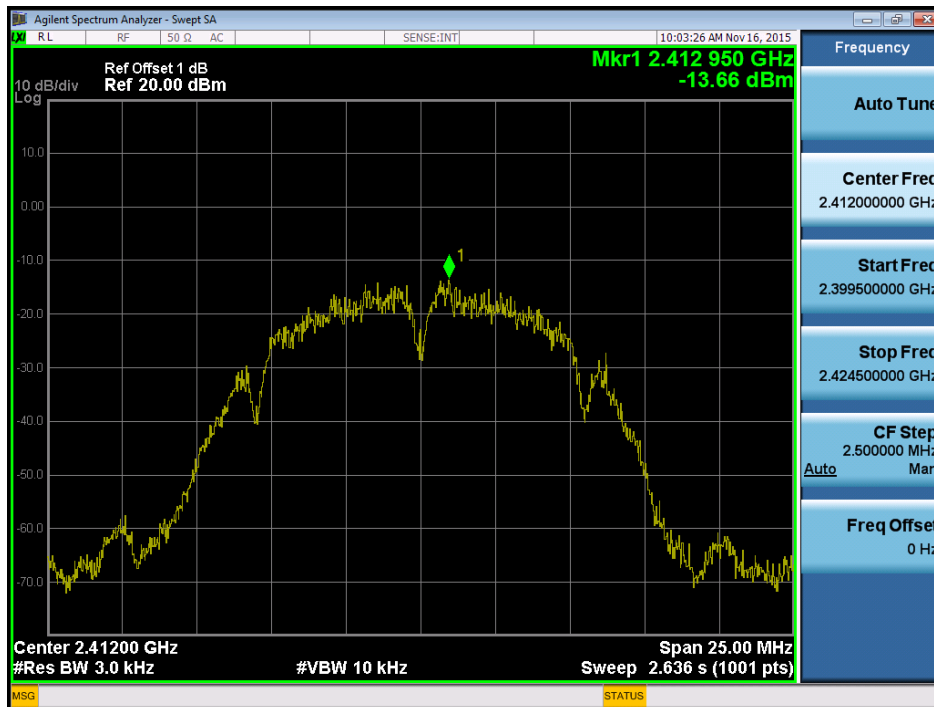


ATTACHMENT H - POWER SPECTRAL DENSITY

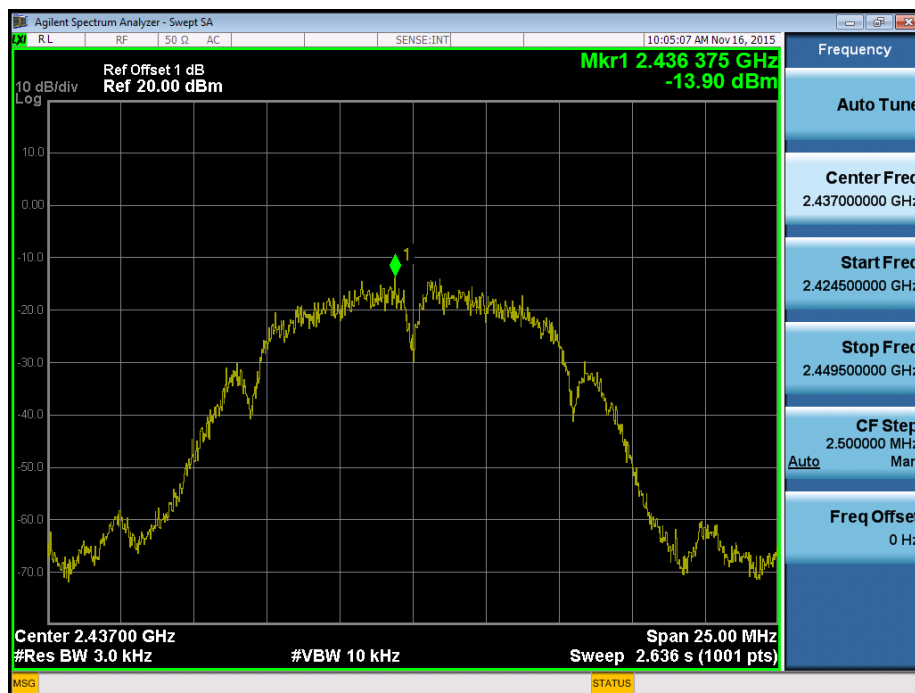
Test Mode :TX B Mode_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-13.66	0.04	8.00	Complies
2437	-13.90	0.04	8.00	Complies
2462	-13.72	0.04	8.00	Complies

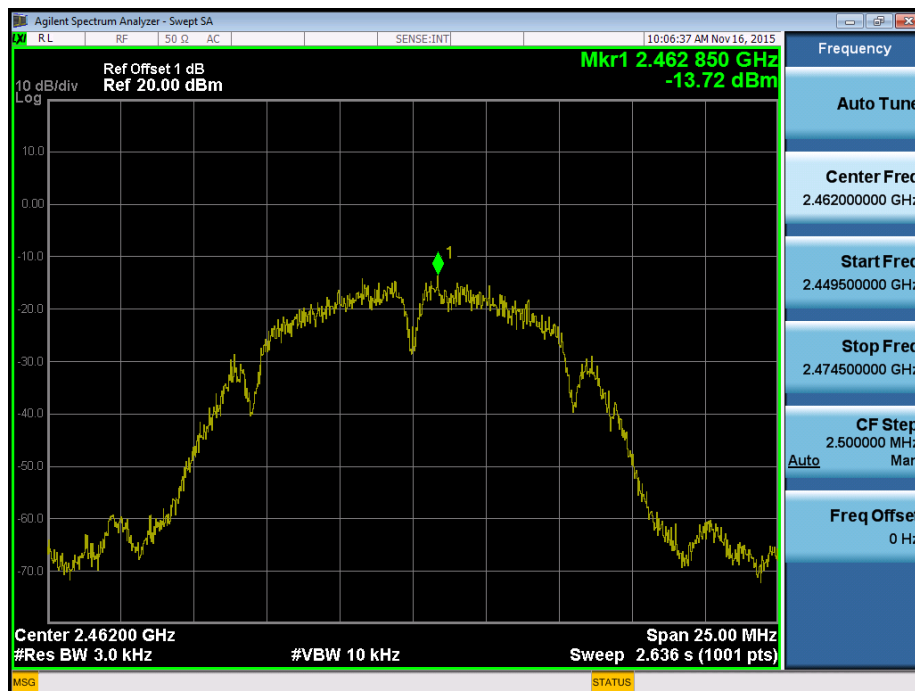
TX CH01



TX CH06



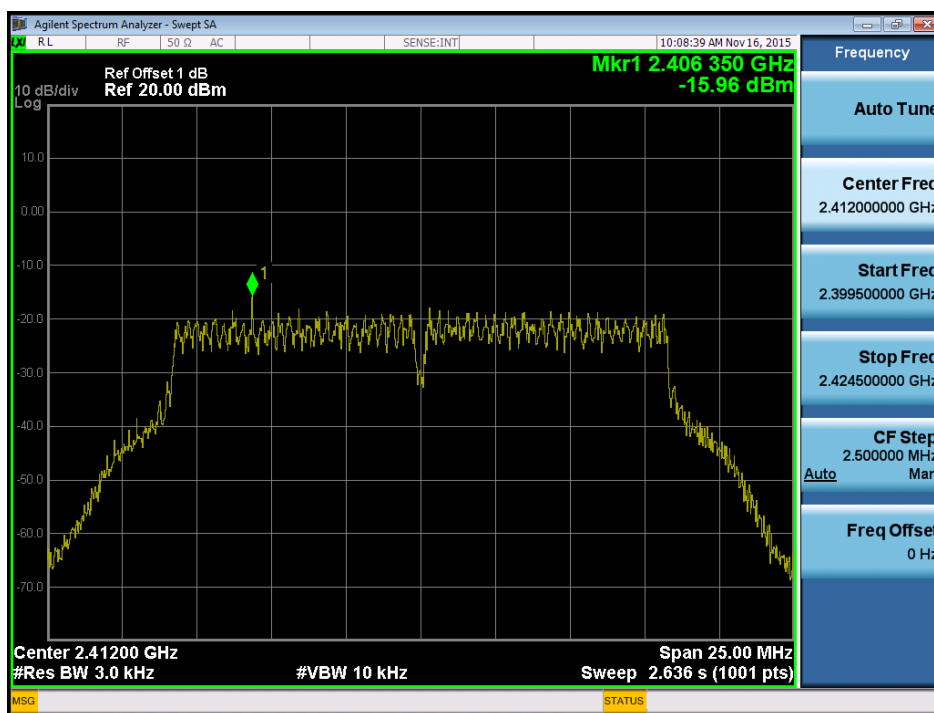
TX CH11



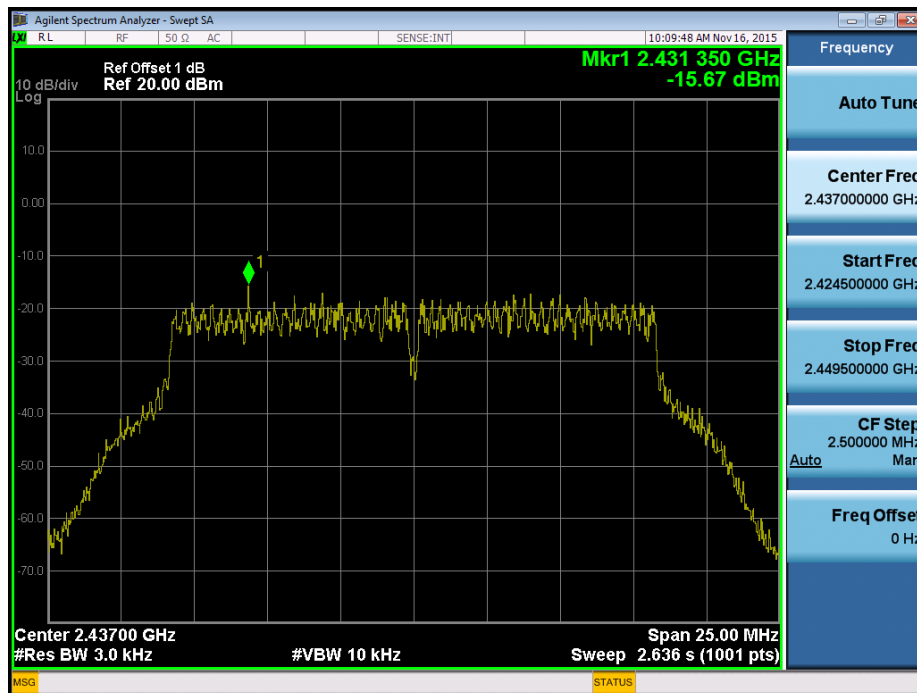
Test Mode :TX G Mode_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-15.96	0.03	8.00	Complies
2437	-15.67	0.03	8.00	Complies
2462	-16.38	0.02	8.00	Complies

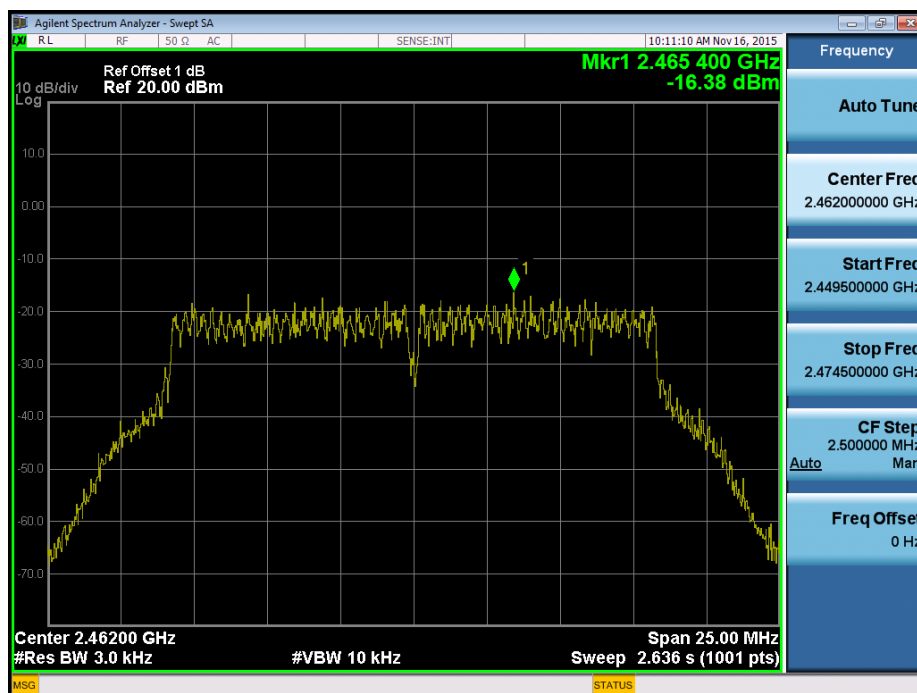
TX CH01



TX CH06



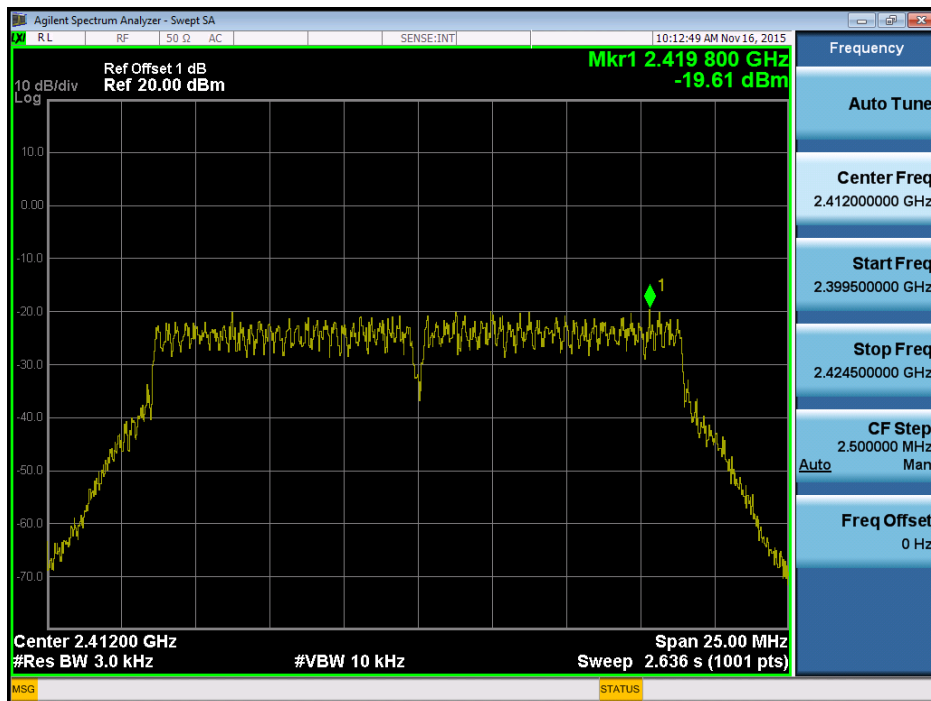
TX CH11



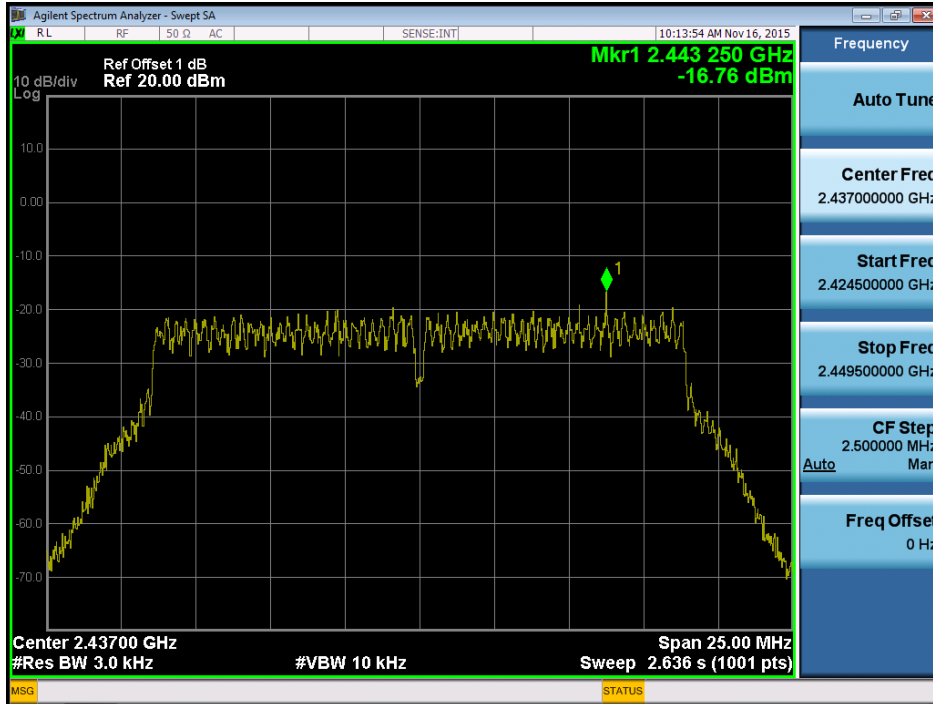
Test Mode : TX N-20M Mode_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-19.61	0.01	8.00	Complies
2437	-16.76	0.02	8.00	Complies
2462	-18.36	0.01	8.00	Complies

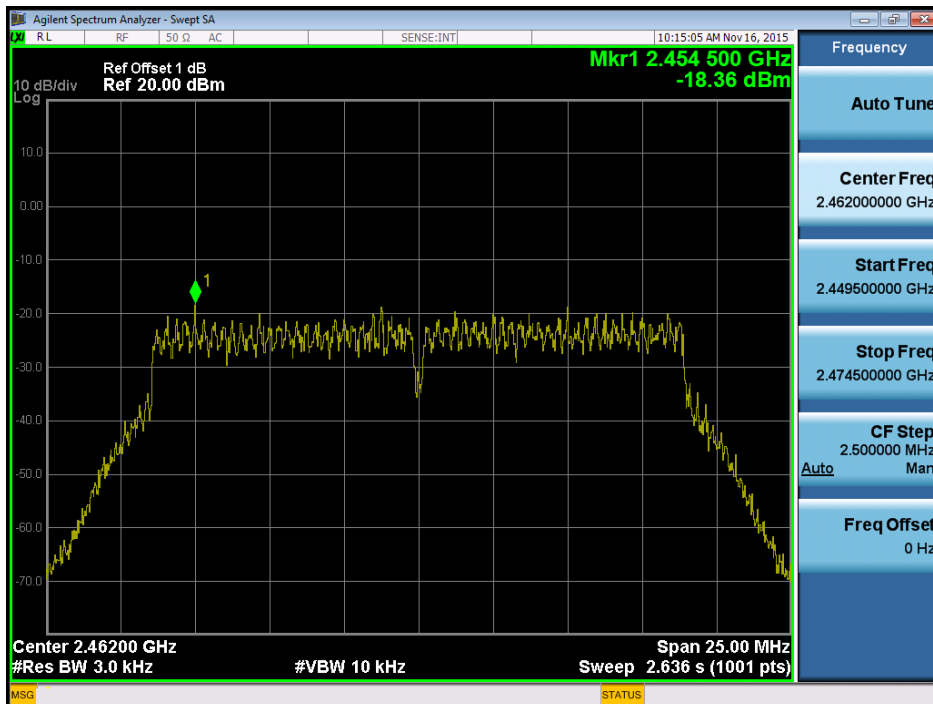
TX CH01



TX CH06



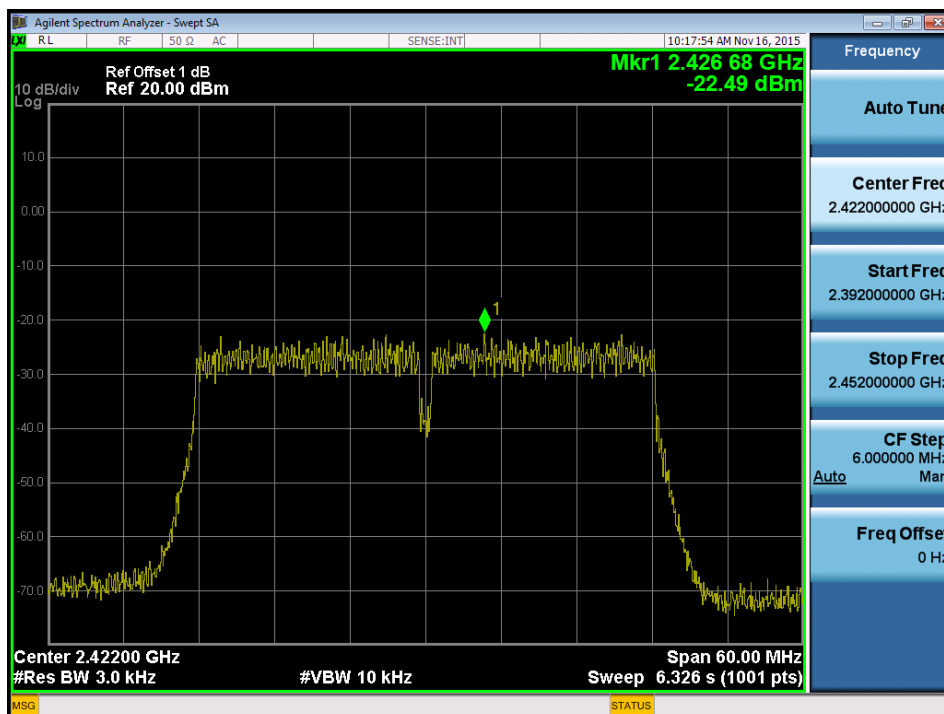
TX CH11



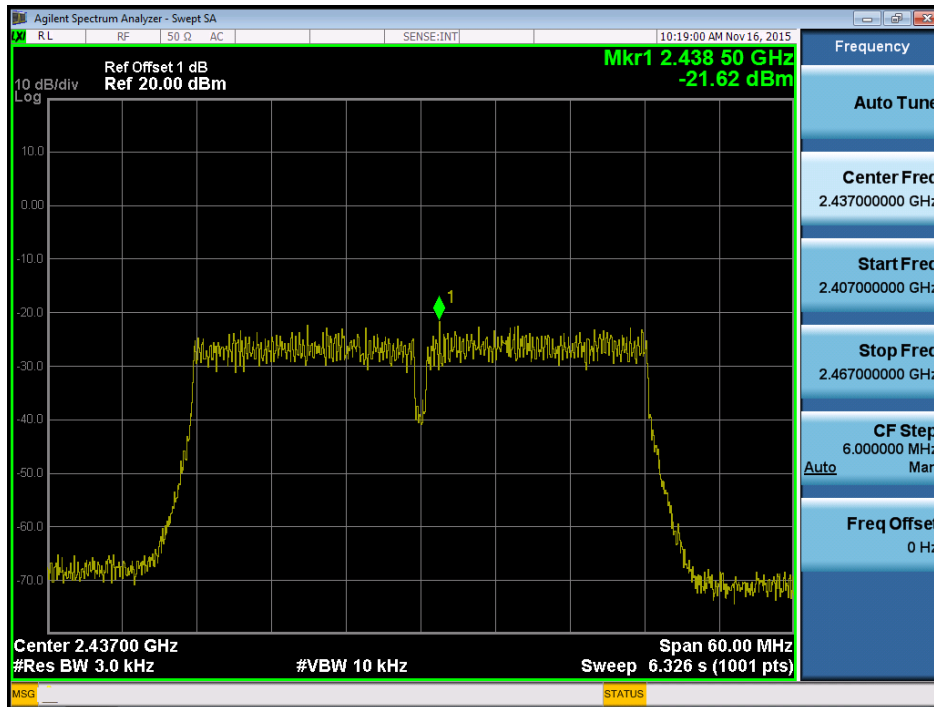
Test Mode : TX N-40M Mode_CH03/06/09

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-22.49	0.01	8.00	Complies
2437	-21.62	0.01	8.00	Complies
2452	-21.93	0.01	8.00	Complies

TX CH03



TX CH06



TX CH09

