

FCC Radio Test Report

FCC ID: 2AC23-WT38M2001

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

Project No. : 1708C160A
Equipment : WIFI+BT Module
Test Model : WT38M2001T
Series Model : N/A
Applicant : Hui Zhou Gaoshengda Technology Co.,LTD
Address : NO.75 Zhongkai Development Area,Huizhou,Guangdong

Date of Receipt : Oct. 11, 2017
Date of Test : Oct. 11, 2017 ~ Nov. 28, 2017
Issued Date : Nov. 29, 2017
Tested by : BTL Inc.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1708C160A	Original Issue.	Nov. 29, 2017

1. CERTIFICATION

Equipment : WIFI+BT Module
Brand Name : GSD
Test Model : WT38M2001T
Series Model : N/A
Applicant : Hui Zhou Gaoshengda Technology Co.,LTD
Manufacturer : Hui Zhou Gaoshengda Technology Co.,LTD
Address : NO.75 Zhongkai Development Area,Huizhou,Guangdong
Factory : Hui Zhou Gaoshengda Technology Co.,LTD
Address : NO.75 Zhongkai Development Area,Huizhou,Guangdong
Date of Test : Oct. 11, 2017 ~ Nov. 28, 2017
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C:(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-3-1708C160A) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP 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):

Applied Standard(s): FCC Part15 (15.247) , Subpart C			
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	
15.247(d)/ 15.205/ 15.209	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: 854385

BTL's designation number for FCC: CN5020

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_{cisp} 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	WIFI+BT Module		
Brand Name	GSD		
Test Model	WT38M2001T		
Series Model	N/A		
Model Difference	NA		
Product Description	Operation Frequency	2412~2472 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 300 Mbps	
	Output Power (Max.)	802.11b: 20.71dBm 802.11g: 26.85dBm 802.11n(20MHz): 26.29dBm 802.11n(40MHz): 26.24dBm	
	Output Power (Max.) for CH12-13	802.11b: 20.48dBm 802.11g: 23.45dBm 802.11n(20MHz): 26.11dBm 802.11n(40MHz): 25.70dBm	
Power Source	DC 5V		

Note:

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

2. Channel List:

CH01 - CH11 for 802.11b, 802.11g, 802.11n(20MHz) CH03 - CH09 for 802.11n(40MHz) CH12 - CH13 for 802.11b, 802.11g, 802.11n(20MHz) CH10 – CH11 for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452	13	2472
02	2417	06	2437	10	2457		
03	2422	07	2442	11	2462		
04	2427	08	2447	12	2467		

3. Table for Filed Antenna

Group 1

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	GSD	N/A	Internal	N/A	3.53	N/A
2	GSD	N/A	Internal	N/A	3.59	N/A

Group 2

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	GSD	N/A	Internal	N/A	3.30	N/A
2	GSD	N/A	Internal	N/A	3.50	N/A

Note:

1. Group 1 and Group 2 are same type antenna, Group 1 is recorded as the worst case since which gain is higher than Group 1.
2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, **Direction gain = G_{ANT}**, that is Directional gain=3.59.

4.

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

ANT 1 for 1TX was found to be the worst case and recorded

3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11/12/13
Mode 2	TX G MODE CHANNEL 01/06/11/12/13
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11/12/13
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09/10/11
Mode 5	Normal Link

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	Normal Link

For Radiated Test	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11/12/13
Mode 2	TX G MODE CHANNEL 01/06/11/12/13
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11/12/13
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09/10/11

For Band Edge Test	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11/12/13
Mode 2	TX G MODE CHANNEL 01/06/11/12/13
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11/12/13
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09/10/11

6dB Spectrum Bandwidth	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11/12/13
Mode 2	TX G MODE CHANNEL 01/06/11/12/13
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11/12/13
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09/10/11

Maximum Conducted Output Power	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11/12/13
Mode 2	TX G MODE CHANNEL 01/06/11/12/13
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11/12/13
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09/10/11

Power Spectral Density	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11/12/13
Mode 2	TX G MODE CHANNEL 01/06/11/12/13
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11/12/13
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09/10/11

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 (13Mbps)
 802.11n HT40 mode : BPSK (27Mbps)
 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

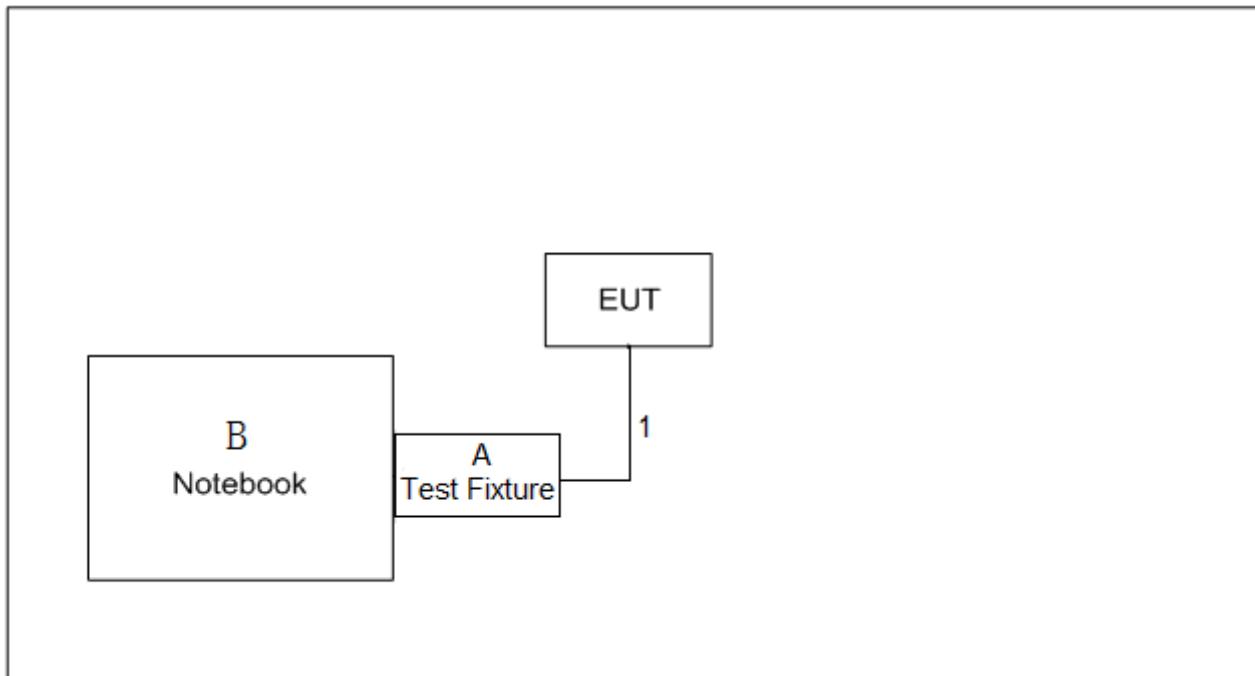
During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

Test software version	MT7662UQA		
Frequency (MHz)	2412	2437	2462
802.11b	1A	1A	1A
802.11g	1B	1C	18
802.11n (20MHz)	11/10	11/10	11/10
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	11/10	11/10	11/10

For CH12-13:

Test software version	QA	
Frequency (MHz)	2467	2472
802.11b	1A	13
802.11g	12	0D
802.11n (20MHz)	11/10	08/08
Frequency (MHz)	2457	2462
802.11n (40MHz)	11/10	08/08

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	Test Fixture	N/A	N/A	N/A	N/A
B	Notebook	Dell	DCSM	DOC	G7K832X

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	20cm	Data 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 <input type="checkbox"/>
0.15 -0.50	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

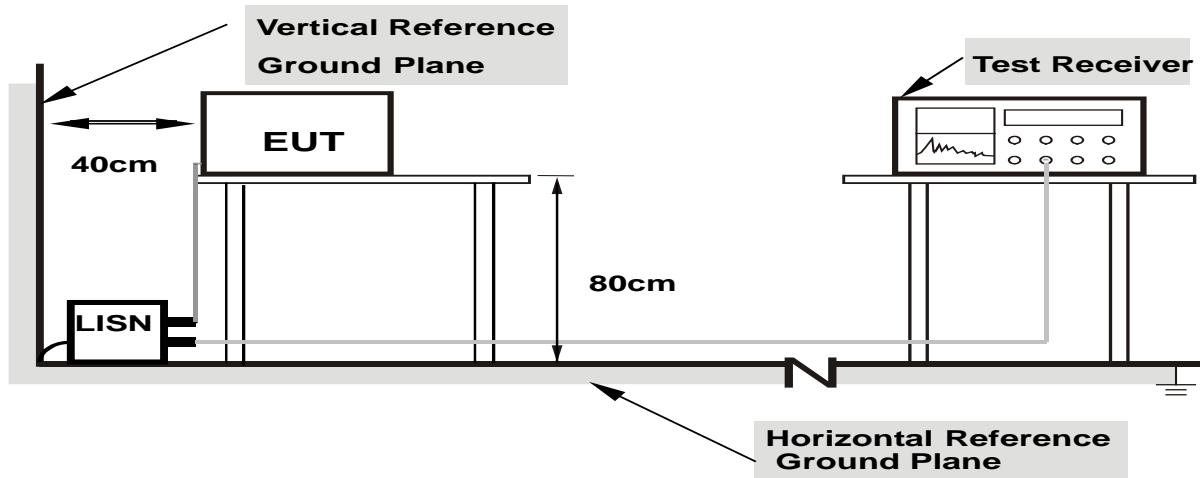
4.1.2 TEST PROCEDURE

- 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 equipment 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 cm 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 Appendix 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

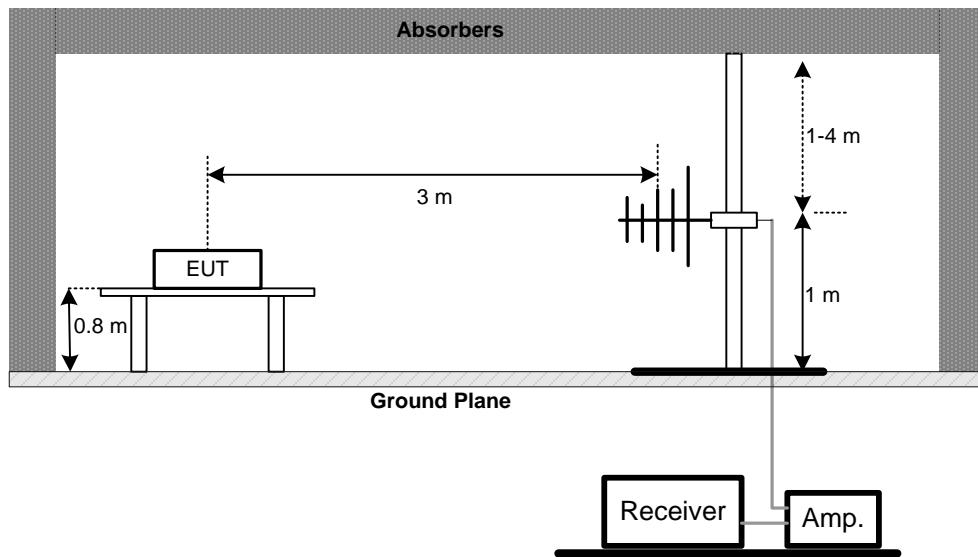
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of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

4.2.3 DEVIATION FROM TEST STANDARD

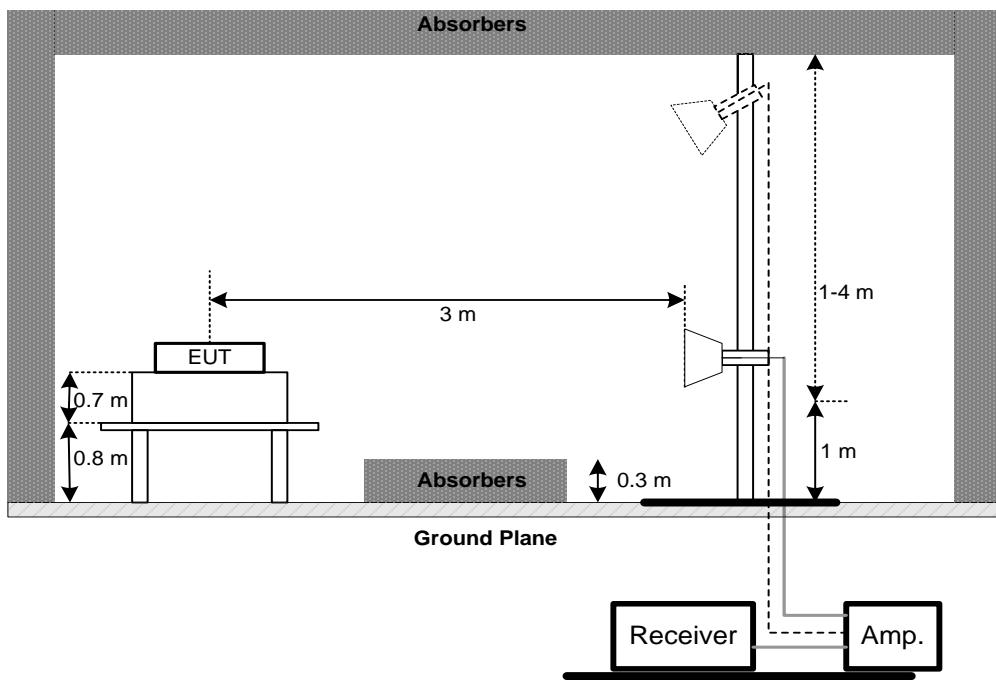
No deviation

4.2.4 TEST SETUP

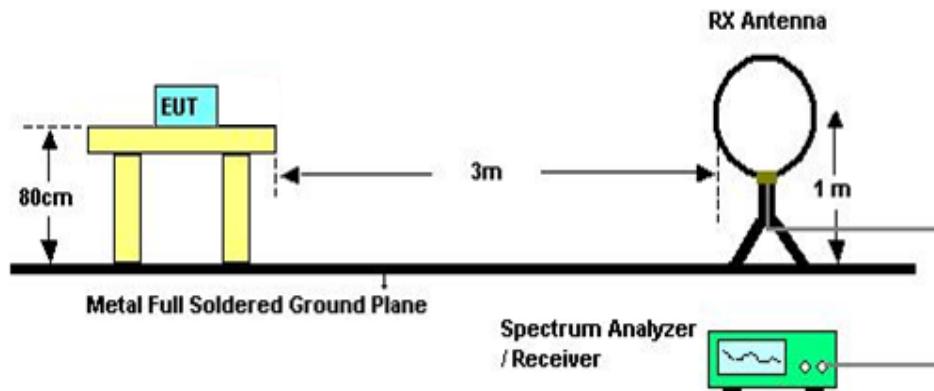
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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 Appendix B

Remark:

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

4.2.8 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the Appendix C.

4.2.9 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the Appendix D.

Remark:

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

5. 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

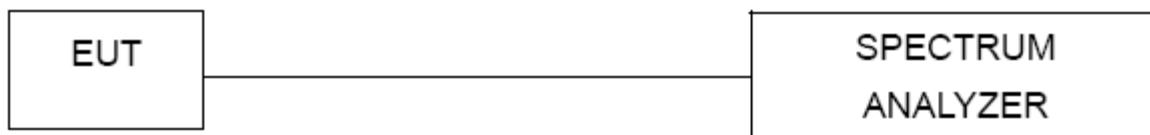
5.1.1 TEST PROCEDURE

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

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance and FCC KDB 662911 D01 Multiple Transmitter Output.

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 Appendix 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 Appendix 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 Appendix H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2018
2	LISN	EMCO	3816/2	52765	Mar. 26, 2018
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 26, 2018
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 26, 2018
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Oct. 19, 2018

Radiated Emission Below 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 26, 2018
2	Amplifier	HP	8447D	2944A09673	Oct. 19, 2018
3	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
4	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	Jun. 26, 2018
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	Antenna	EM	EM-6876-1	230	Mar. 06, 2018

Radiated Emission Above 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 26, 2018
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 08, 2018
3	Amplifier	Agilent	8449B	3008A02274	May. 16, 2018
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
5	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
6	Antenna	EM	EM-6876-1	230	Mar. 06, 2018
7	Controller	CT	SC100	N/A	N/A
8	Controller	MF	MF-7802	MF780208416	N/A
9	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018
10	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Peak Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	ANRITSU	ML2495A	1128009	Mar. 26, 2018
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 26, 2018

Antenna Conducted Spurious Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

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

All calibration period of equipment list is one year.

10. EUT TEST PHOTO**Conducted Measurement Photos**

Radiated Measurement Photos

9KHz to 30MHz



Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

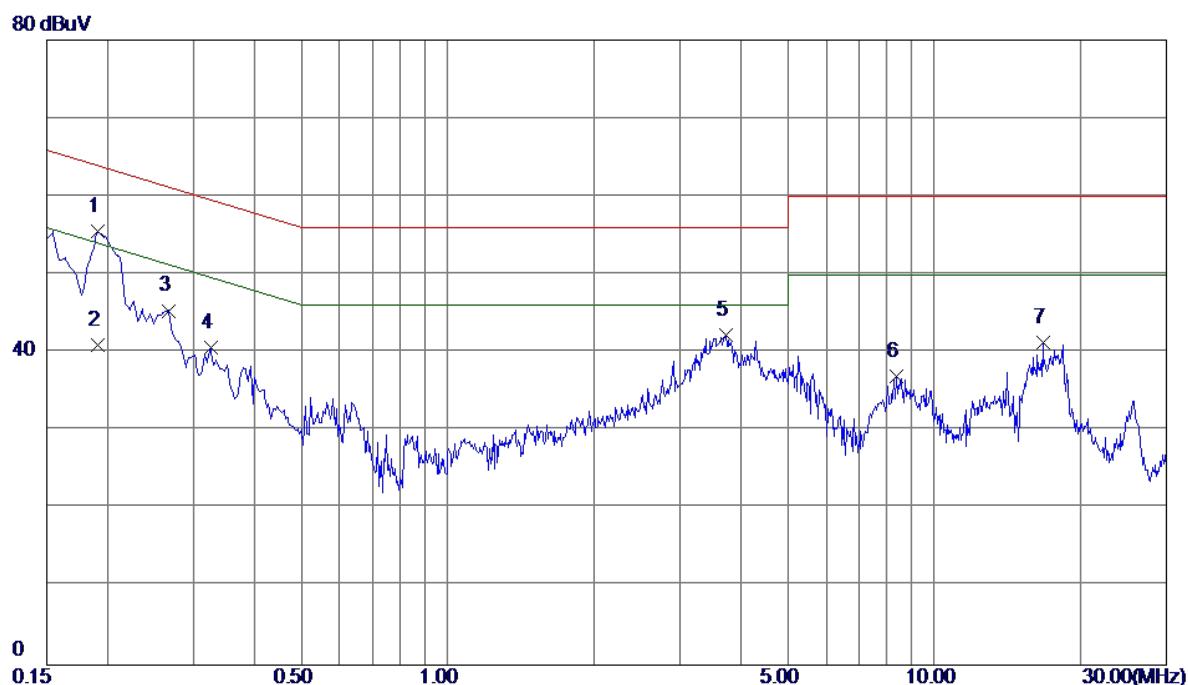
Above 1000MHz



APPENDIX A - CONDUCTED EMISSION

Test Mode : Normal Link

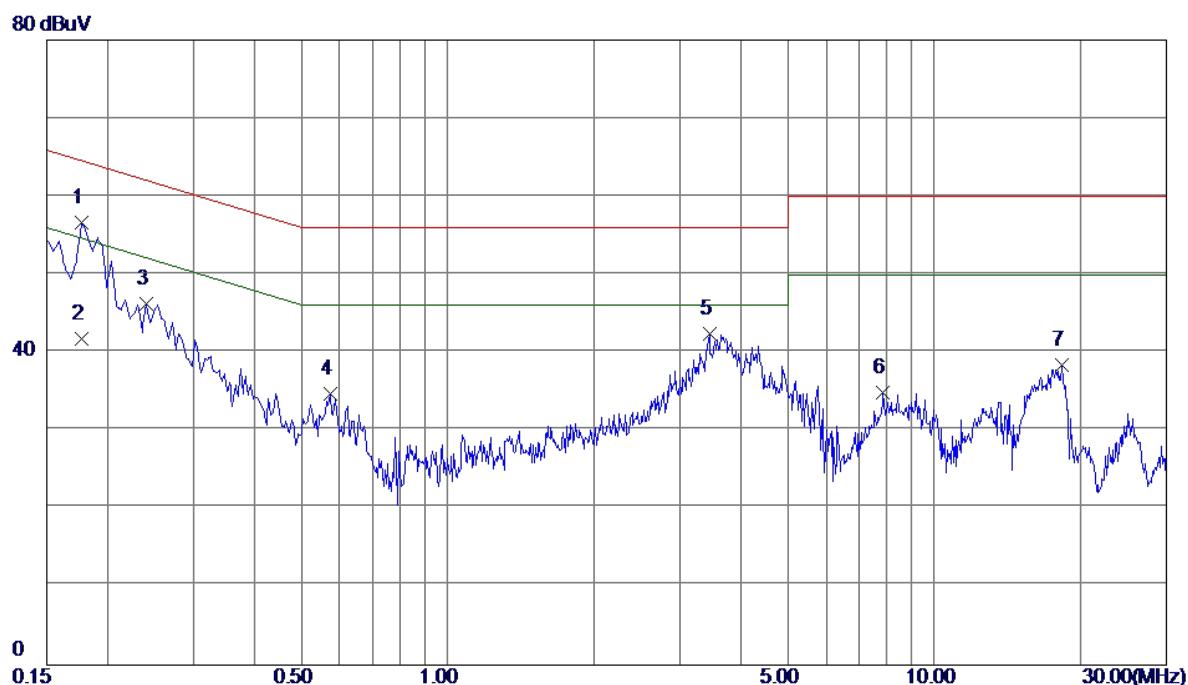
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1905	45.86	9.73	55.59	64.01	-8.42	Peak	
2	0.1905	31.30	9.73	41.03	54.01	-12.98	AVG	
3	0.2670	35.64	9.72	45.36	61.21	-15.85	Peak	
4	0.3255	30.92	9.74	40.66	59.57	-18.91	Peak	
5	3.7275	32.43	9.86	42.29	56.00	-13.71	Peak	
6	8.3535	27.00	9.99	36.99	60.00	-23.01	Peak	
7	16.7460	30.99	10.26	41.25	60.00	-18.75	Peak	

Test Mode : Normal Link

Neutral

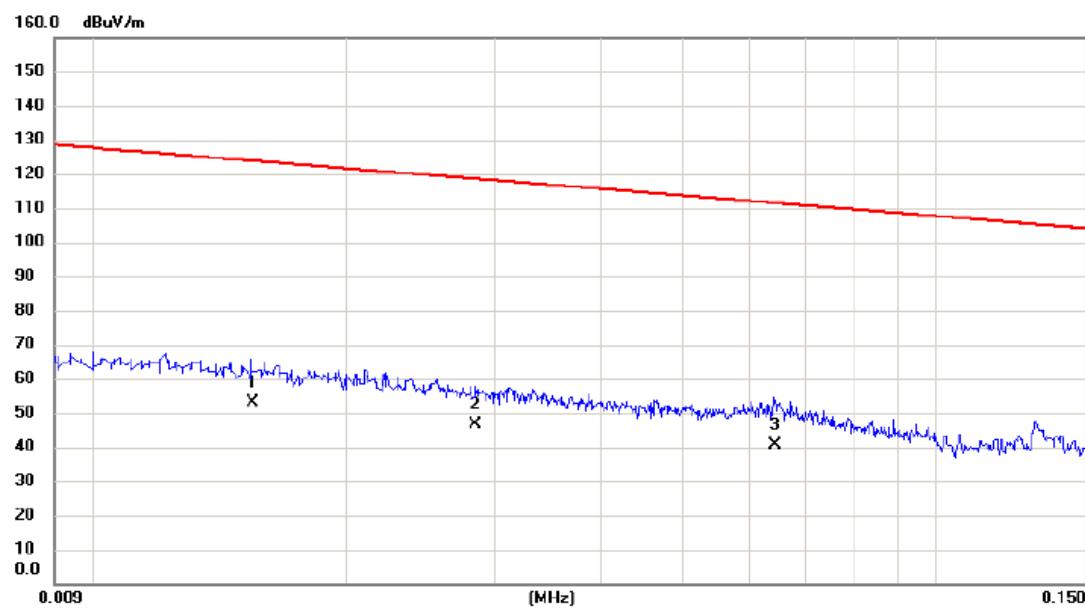


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1770	47.06	9.64	56.70	64.63	-7.93	Peak	
2	0.1770	32.06	9.64	41.70	54.63	-12.93	Avg	
3	0.2400	36.55	9.64	46.19	62.10	-15.91	Peak	
4	0.5730	25.02	9.66	34.68	56.00	-21.32	Peak	
5	3.4530	32.66	9.77	42.43	56.00	-13.57	Peak	
6	7.8540	25.02	9.91	34.93	60.00	-25.07	Peak	
7	18.2850	28.07	10.34	38.41	60.00	-21.59	Peak	

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

Test Mode: TX Mode

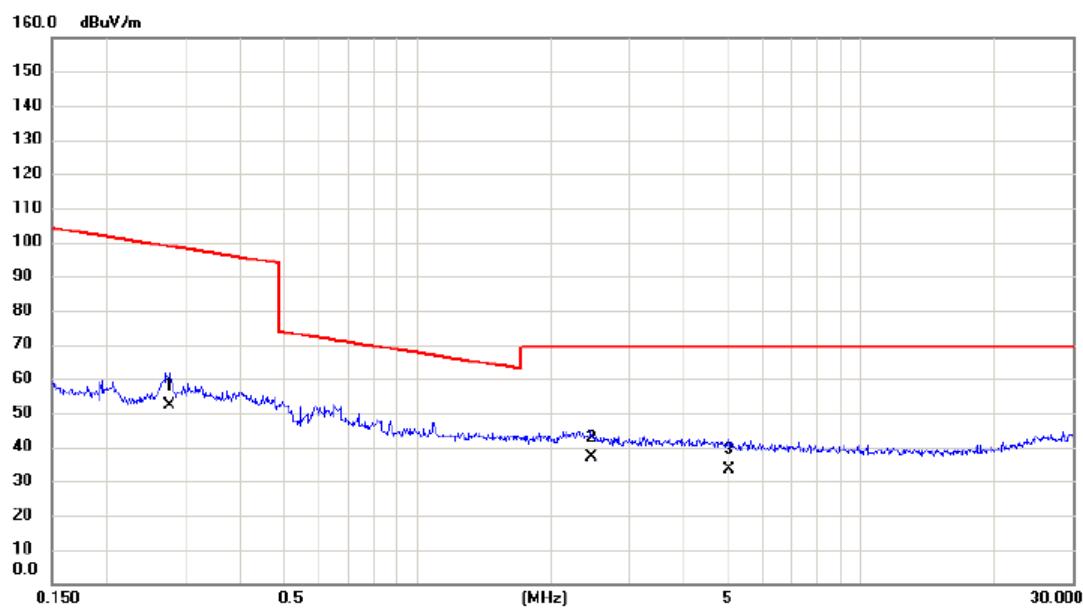
Ant 0°



No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Margin	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB	
1	*	0.0155	33.00	20.20	53.20	123.80	-70.60	AVG
2		0.0284	27.08	19.37	46.45	118.54	-72.09	AVG
3		0.0643	22.06	18.44	40.50	111.44	-70.94	AVG

Test Mode: TX Mode

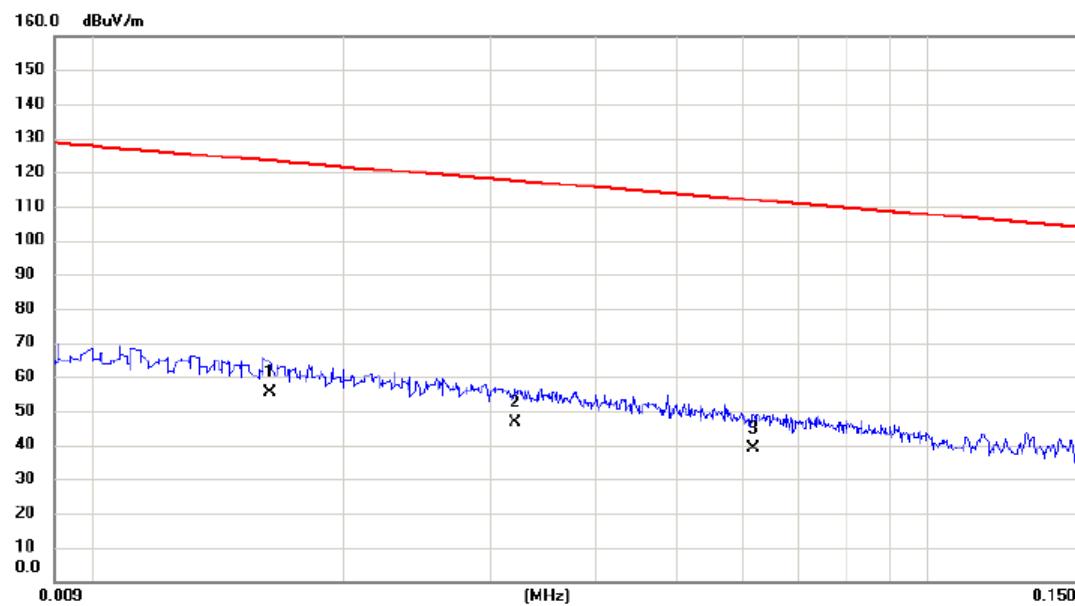
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1		0.2760	35.40	16.64	52.04	98.79	-46.75	AVG
2	*	2.4606	21.52	15.38	36.90	69.54	-32.64	QP
3		5.0312	19.12	14.37	33.49	69.54	-36.05	QP

Test Mode: TX Mode

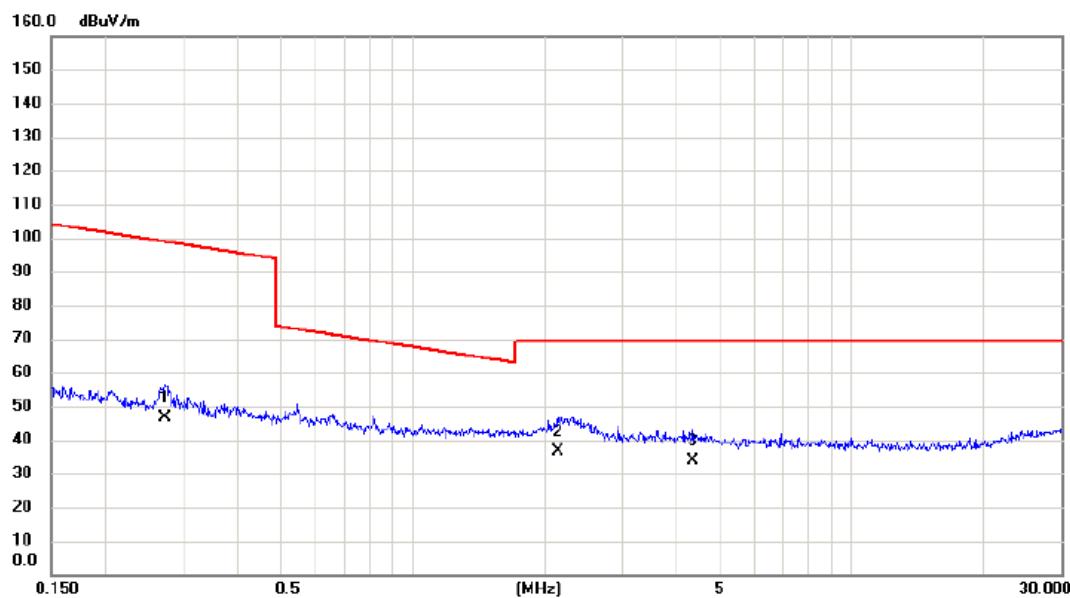
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0163	35.50	20.10	55.60	123.36	-67.76	AVG
2		0.0320	27.22	19.26	46.48	117.50	-71.02	AVG
3		0.0618	20.59	18.49	39.08	111.79	-72.71	AVG

Test Mode: TX Mode

Ant 90°

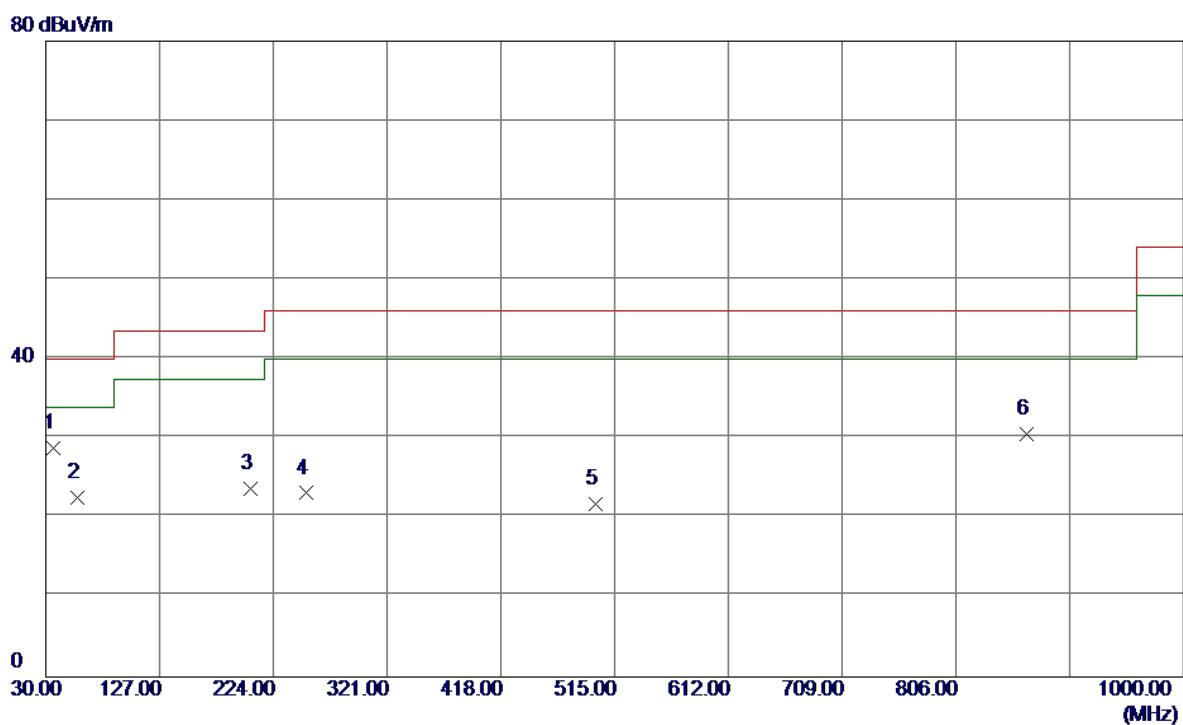


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1		0.2730	29.99	16.64	46.63	98.88	-52.25	AVG
2	*	2.1440	21.31	15.47	36.78	69.54	-32.76	QP
3		4.3376	19.16	14.76	33.92	69.54	-35.62	QP

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

Test Mode: TX B MODE CHANNEL 01

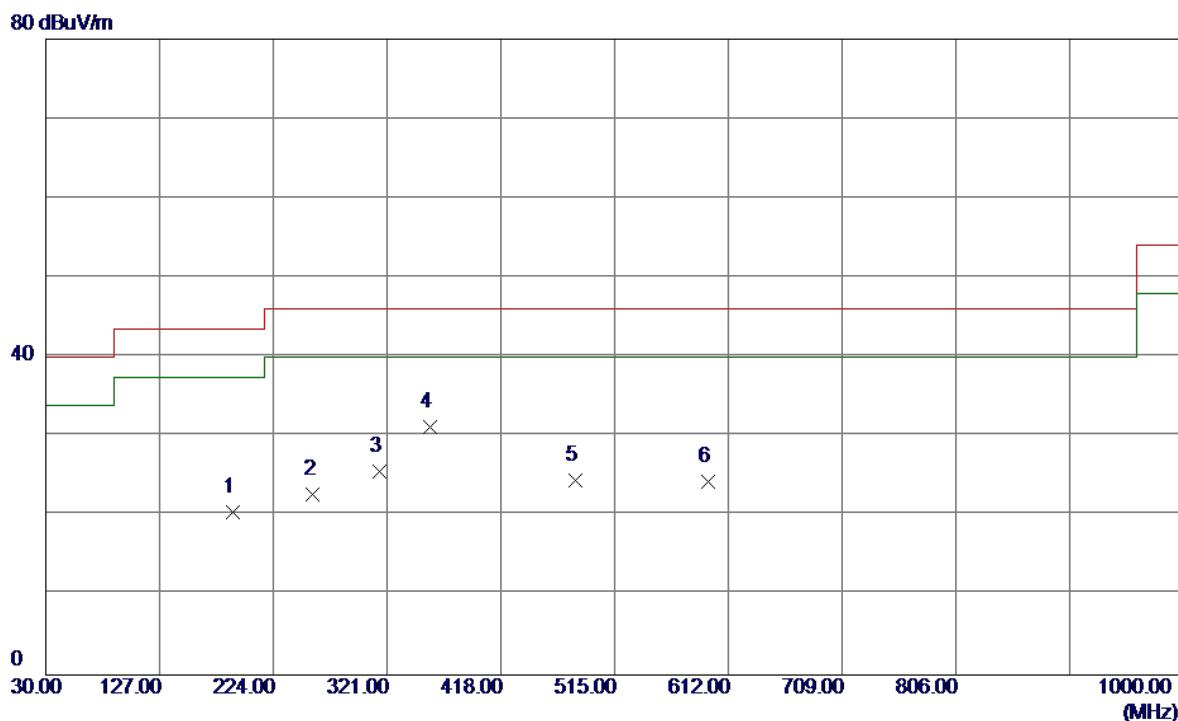
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	36.7900	43.17	-14.41	28.76	40.00	-11.24	Peak	
2	57.1600	36.53	-14.04	22.49	40.00	-17.51	Peak	
3	204.6000	37.48	-13.85	23.63	43.50	-19.87	Peak	
4	252.1300	38.18	-15.06	23.12	46.00	-22.88	Peak	
5	498.5100	30.53	-8.76	21.77	46.00	-24.23	Peak	
6	866.1400	30.17	0.33	30.50	46.00	-15.50	Peak	

Test Mode: TX B MODE CHANNEL 01

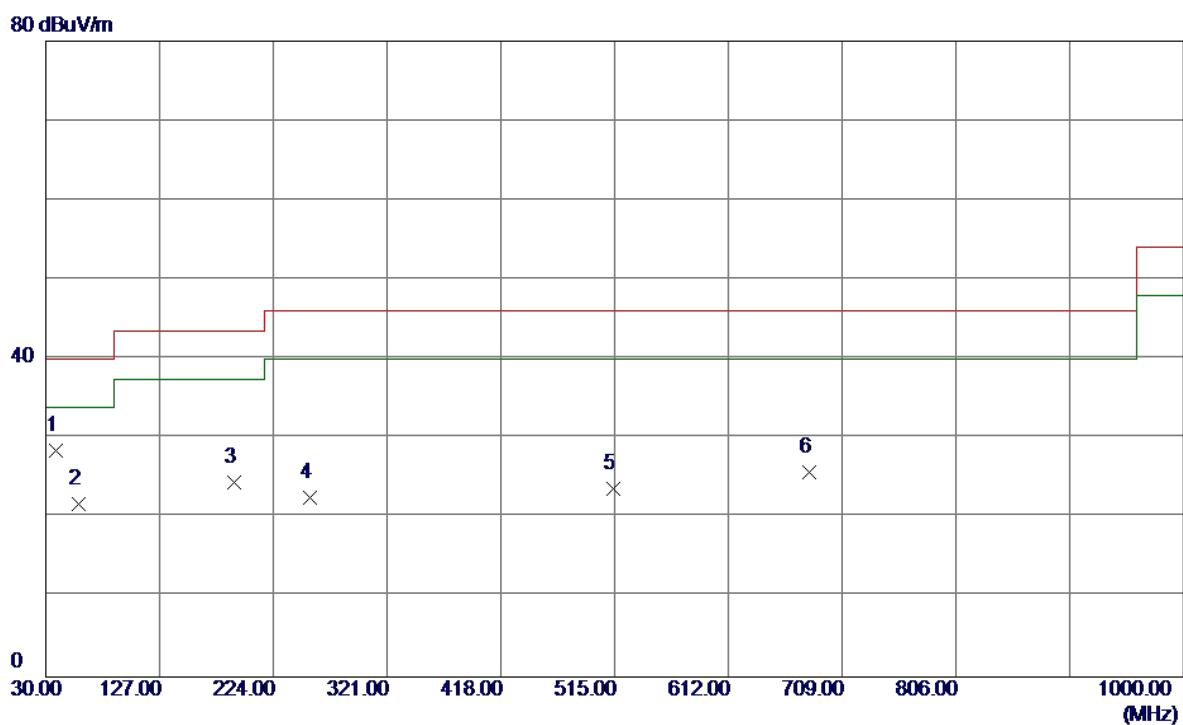
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	189.0800	33.22	-12.77	20.45	43.50	-23.05	Peak	
2	257.9500	38.33	-15.54	22.79	46.00	-23.21	Peak	
3	314.2100	38.11	-12.58	25.53	46.00	-20.47	Peak	
4 *	357.8599	43.07	-11.86	31.21	46.00	-14.79	Peak	
5	482.0200	33.61	-9.16	24.45	46.00	-21.55	Peak	
6	594.5400	30.88	-6.56	24.32	46.00	-21.68	Peak	

Test Mode: TX B MODE CHANNEL 06

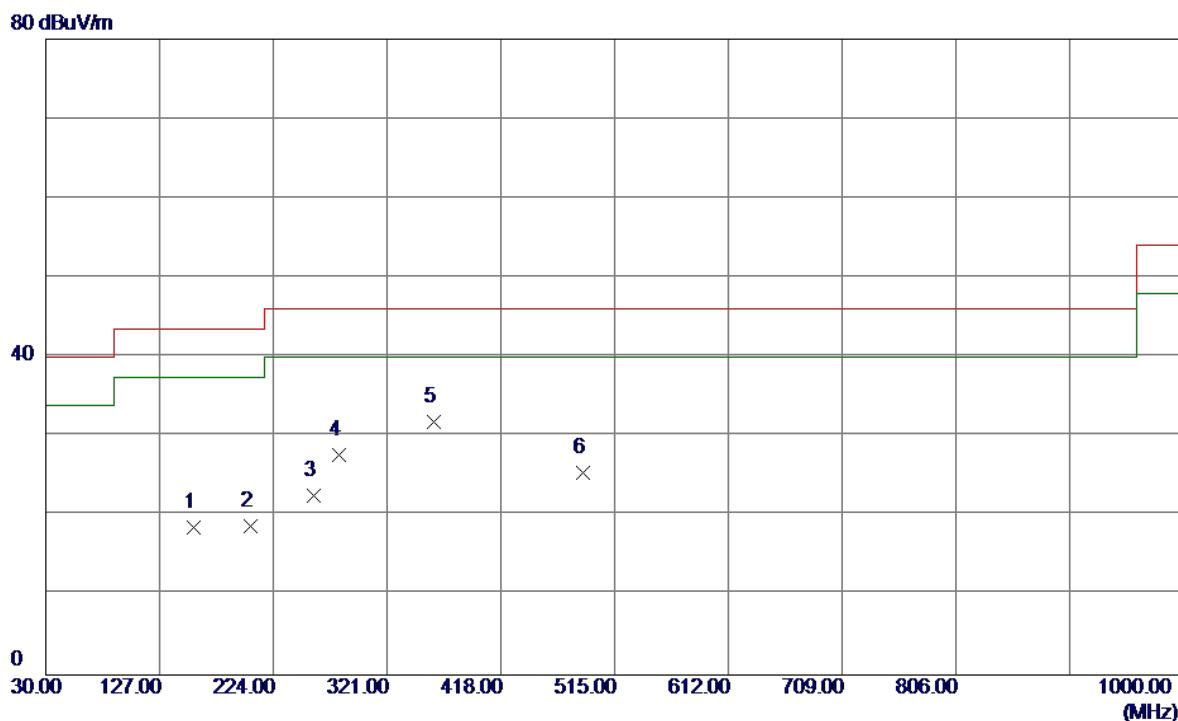
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dB	Margin Detector	Comment	
							Detector	Comment
1 *	38.7300	42.68	-14.16	28.52	40.00	-11.48	Peak	
2	58.1300	35.89	-14.13	21.76	40.00	-18.24	Peak	
3	191.0200	37.37	-12.94	24.43	43.50	-19.07	Peak	
4	255.0400	37.89	-15.30	22.59	46.00	-23.41	Peak	
5	514.0300	32.07	-8.44	23.63	46.00	-22.37	Peak	
6	680.8700	30.33	-4.53	25.80	46.00	-20.20	Peak	

Test Mode: TX B MODE CHANNEL 06

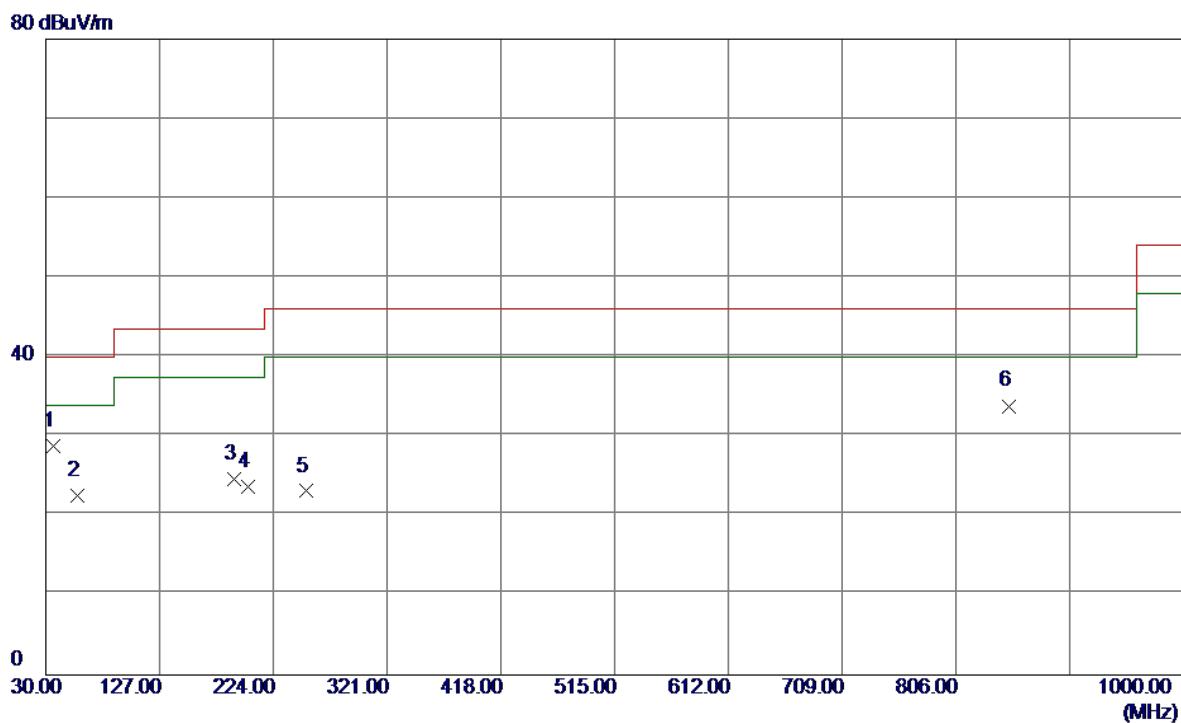
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit Level dBuV/m	Margin dB	Detector	Comment
1	156.1000	31.73	-13.16	18.57	43.50	-24.93	Peak	
2	204.6000	32.64	-13.85	18.79	43.50	-24.71	Peak	
3	258.9200	38.14	-15.62	22.52	46.00	-23.48	Peak	
4	280.2600	42.37	-14.76	27.61	46.00	-18.39	Peak	
5 *	360.7700	43.62	-11.83	31.79	46.00	-14.21	Peak	
6	487.8400	34.42	-9.02	25.40	46.00	-20.60	Peak	

Test Mode: TX B MODE CHANNEL 11

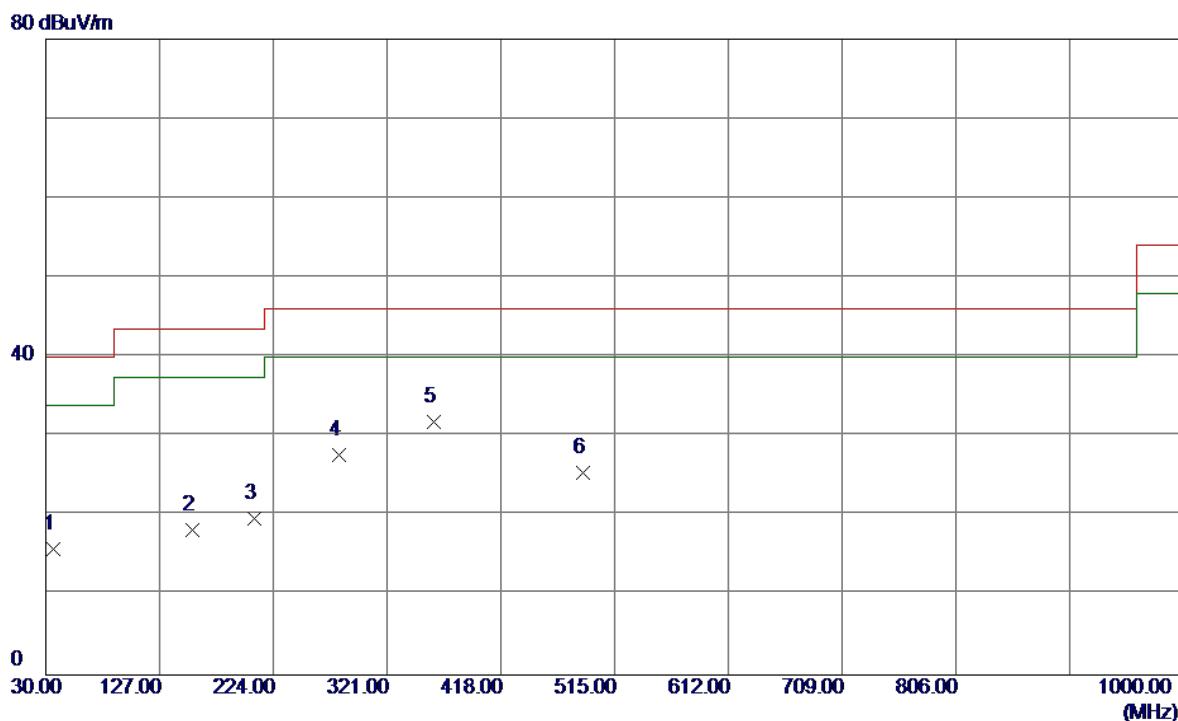
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dB	Margin Detector	Comment	
							Detector	Comment
1 *	36.7900	43.17	-14.41	28.76	40.00	-11.24	Peak	
2	57.1600	36.53	-14.04	22.49	40.00	-17.51	Peak	
3	191.0200	37.62	-12.94	24.68	43.50	-18.82	Peak	
4	202.6600	37.45	-13.81	23.64	43.50	-19.86	Peak	
5	252.1300	38.18	-15.06	23.12	46.00	-22.88	Peak	
6	851.5900	33.81	0.03	33.84	46.00	-12.16	Peak	

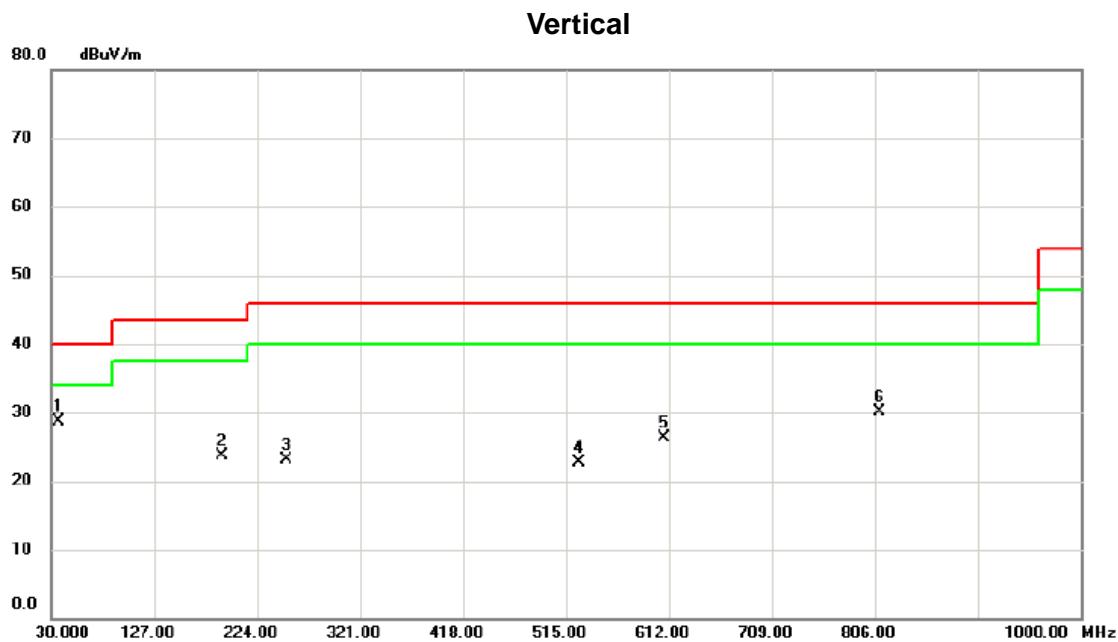
Test Mode: TX B MODE CHANNEL 11

Horizontal



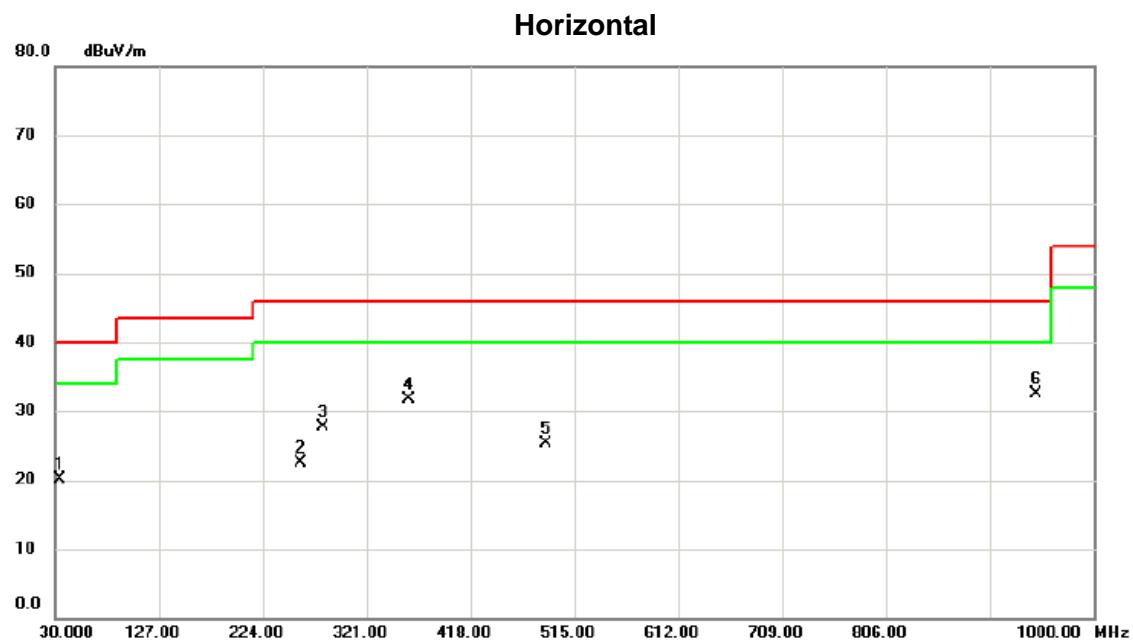
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m dB	Margin Detector	Comment
1	36.7900	30.28	-14.41	15.87	40.00	-24.13	Peak
2	155.1300	31.43	-13.22	18.21	43.50	-25.29	Peak
3	207.5100	33.63	-13.92	19.71	43.50	-23.79	Peak
4	280.2600	42.37	-14.76	27.61	46.00	-18.39	Peak
5 *	360.7700	43.62	-11.83	31.79	46.00	-14.21	Peak
6	487.8400	34.42	-9.02	25.40	46.00	-20.60	Peak

Test Mode: TX B MODE CHANNEL 12



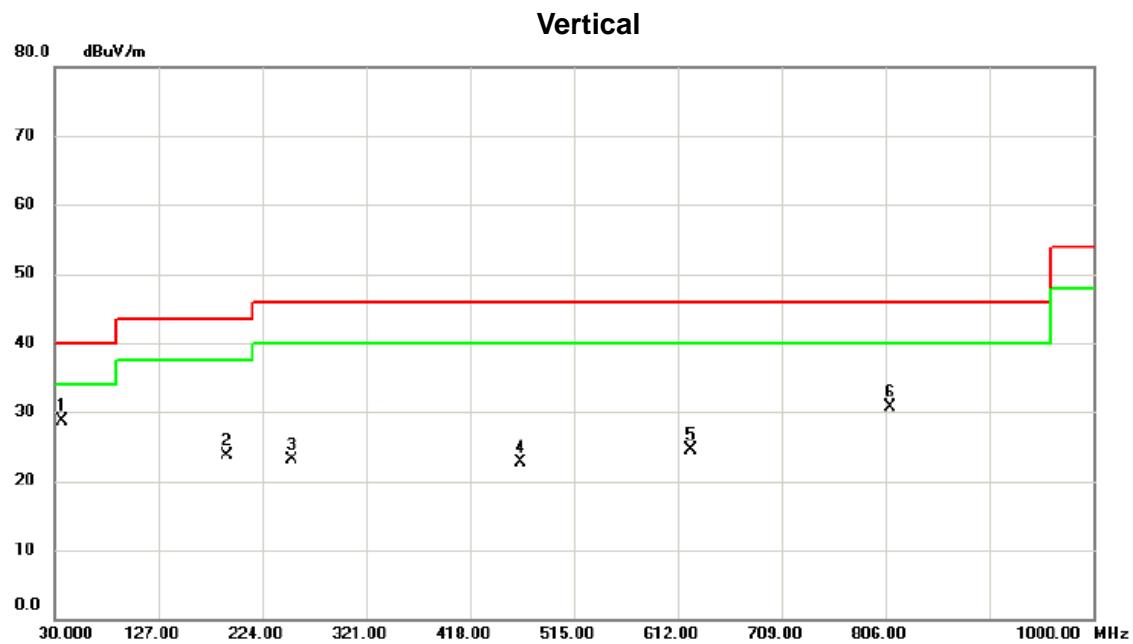
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	36.790	43.17	-14.41	28.76	40.00	-11.24	peak	
2		191.020	36.66	-12.94	23.72	43.50	-19.78	peak	
3		252.130	38.18	-15.06	23.12	46.00	-22.88	peak	
4		527.610	30.84	-8.16	22.68	46.00	-23.32	peak	
5		607.150	32.68	-6.29	26.39	46.00	-19.61	peak	
6		809.880	31.29	-1.09	30.20	46.00	-15.80	peak	

Test Mode: TX B MODE CHANNEL 12



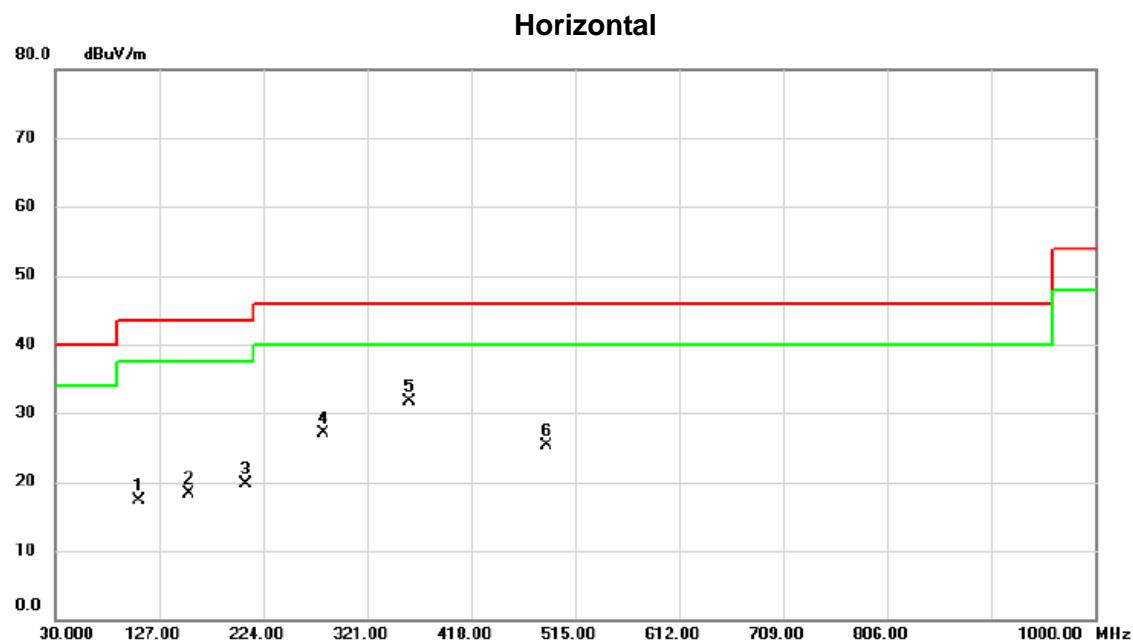
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		33.880	34.88	-14.73	20.15	40.00	-19.85	peak	
2		258.920	38.14	-15.62	22.52	46.00	-23.48	peak	
3		280.260	42.37	-14.76	27.61	46.00	-18.39	peak	
4		360.770	43.62	-11.83	31.79	46.00	-14.21	peak	
5		487.840	34.42	-9.02	25.40	46.00	-20.60	peak	
6 *		946.650	30.47	1.94	32.41	46.00	-13.59	peak	

Test Mode: TX B MODE CHANNEL 13



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	36.790	43.17	-14.41	28.76	40.00	-11.24	peak	
2		191.020	36.66	-12.94	23.72	43.50	-19.78	peak	
3		252.130	38.18	-15.06	23.12	46.00	-22.88	peak	
4		465.530	32.35	-9.57	22.78	46.00	-23.22	peak	
5		623.640	30.38	-5.97	24.41	46.00	-21.59	peak	
6		809.880	31.79	-1.09	30.70	46.00	-15.30	peak	

Test Mode: TX B MODE CHANNEL 13



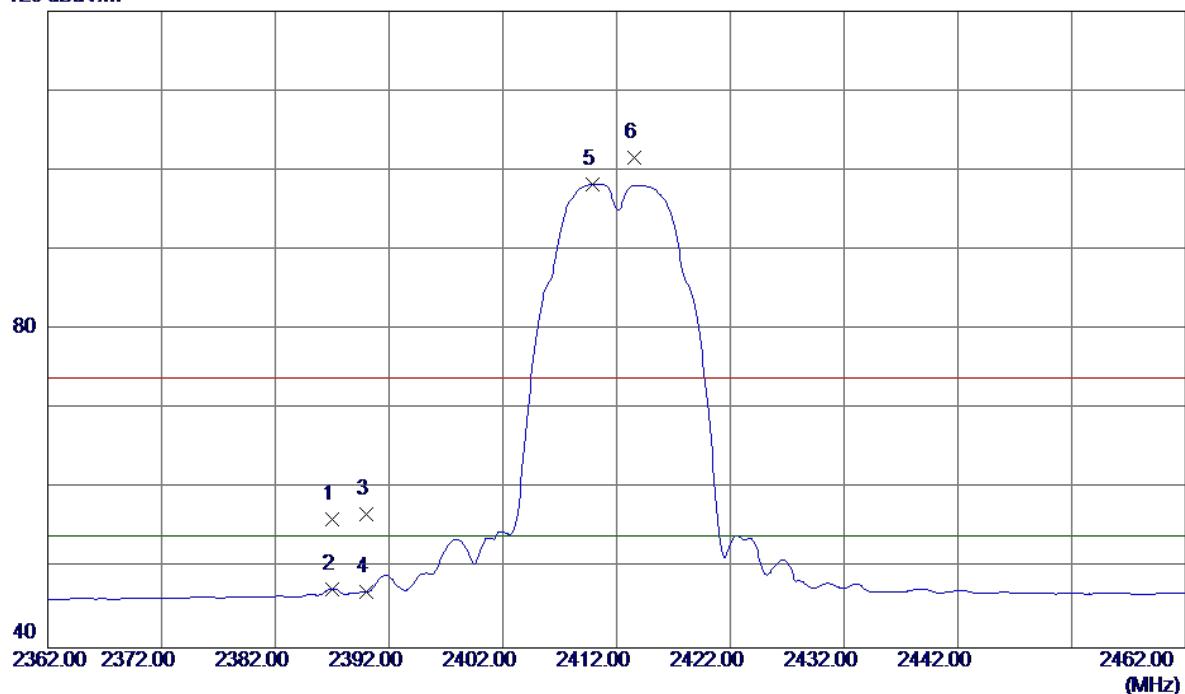
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		107.600	33.80	-16.50	17.30	43.50	-26.20	peak	
2		155.130	31.42	-13.21	18.21	43.50	-25.29	peak	
3		207.510	33.64	-13.93	19.71	43.50	-23.79	peak	
4		280.260	41.87	-14.76	27.11	46.00	-18.89	peak	
5 *		360.770	43.62	-11.83	31.79	46.00	-14.21	peak	
6		487.840	34.42	-9.02	25.40	46.00	-20.60	peak	

APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

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

Vertical

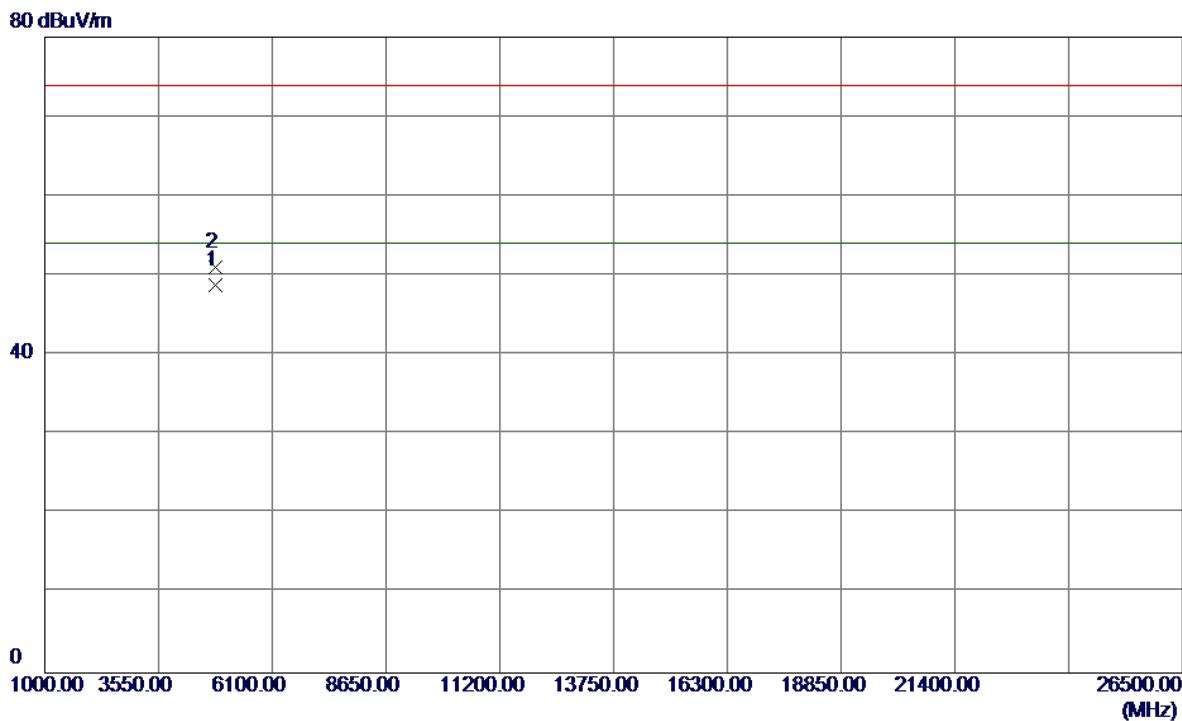
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2387.0000	23.09	33.05	56.14	74.00	-17.86	Peak	
2	2387.0000	14.36	33.05	47.41	54.00	-6.59	AVG	
3	2390.0000	23.75	33.06	56.81	74.00	-17.19	Peak	
4	2390.0000	14.00	33.06	47.06	54.00	-6.94	AVG	
5 *	2409.9000	65.18	33.13	98.31	54.00	44.31	AVG	No Limit
6	2413.6000	68.48	33.15	101.63	74.00	27.63	Peak	No Limit

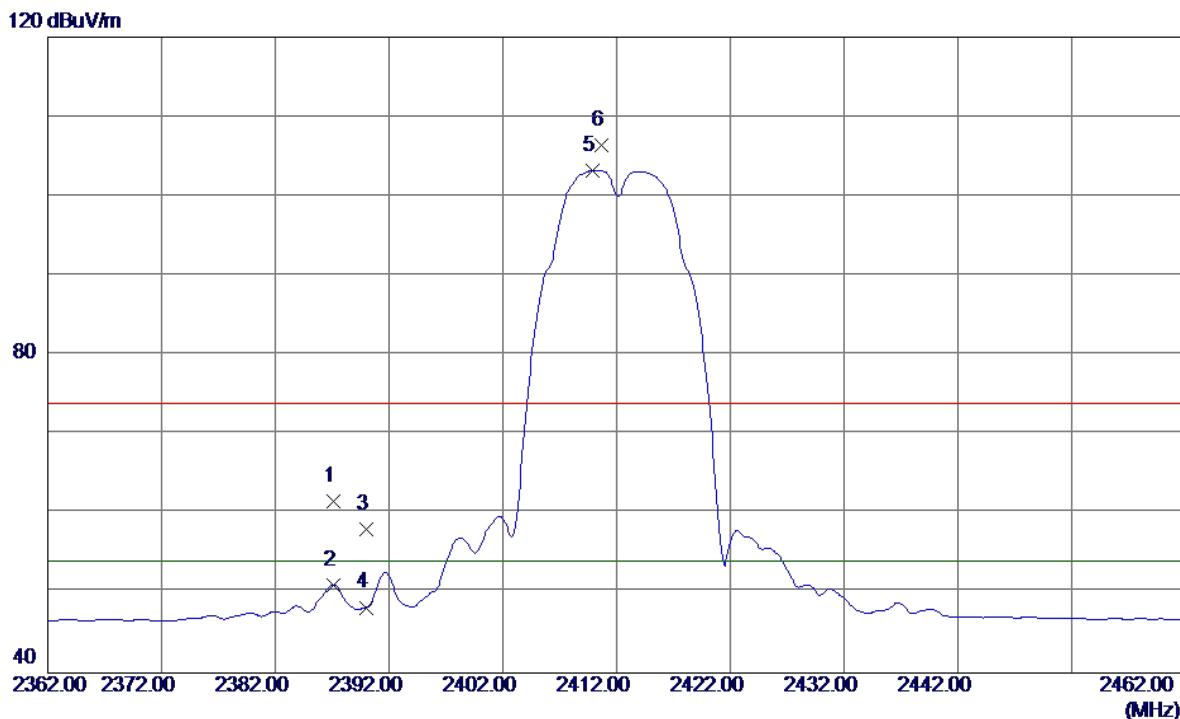
Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

Vertical



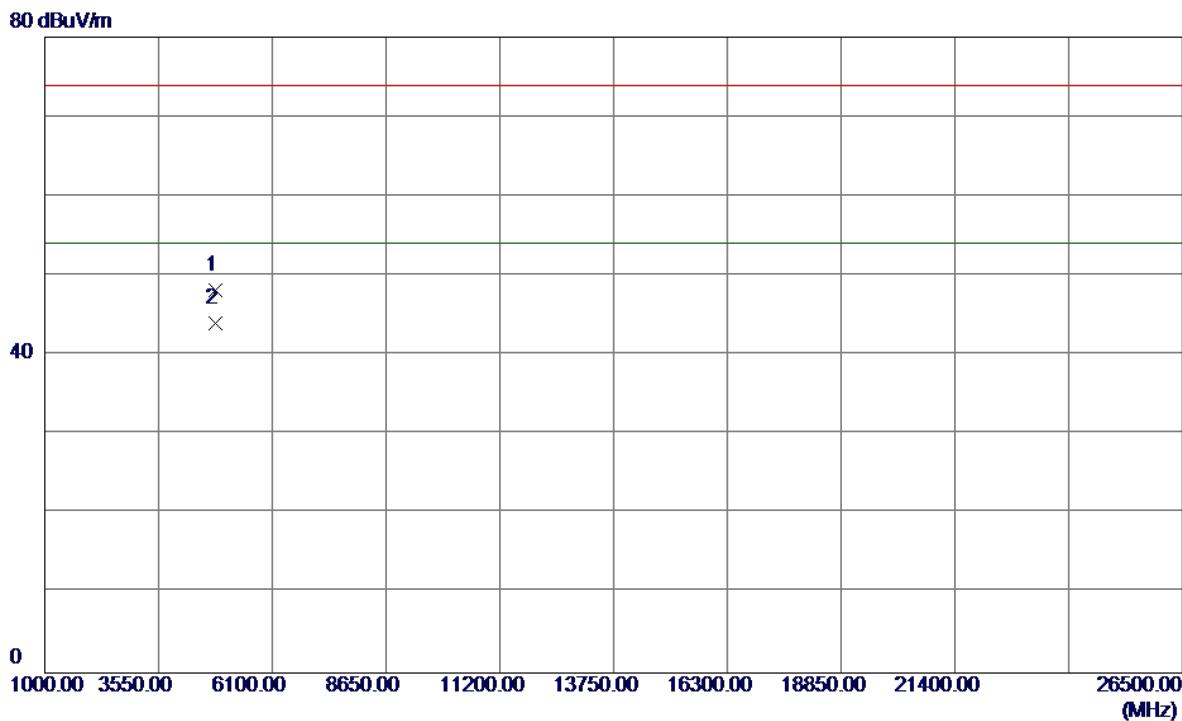
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.1400	42.19	6.66	48.85	54.00	-5.15	AVG	
2	4824.2140	44.36	6.66	51.02	74.00	-22.98	Peak	

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	2387.1000	28.52	33.05	61.57	74.00	-12.43	Peak	
2	2387.1000	18.02	33.05	51.07	54.00	-2.93	AVG	
3	2390.0000	24.99	33.06	58.05	74.00	-15.95	Peak	
4	2390.0000	15.18	33.06	48.24	54.00	-5.76	AVG	
5 *	2409.9000	70.10	33.13	103.23	54.00	49.23	AVG	No Limit
6	2410.7000	73.28	33.13	106.41	74.00	32.41	Peak	No Limit

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

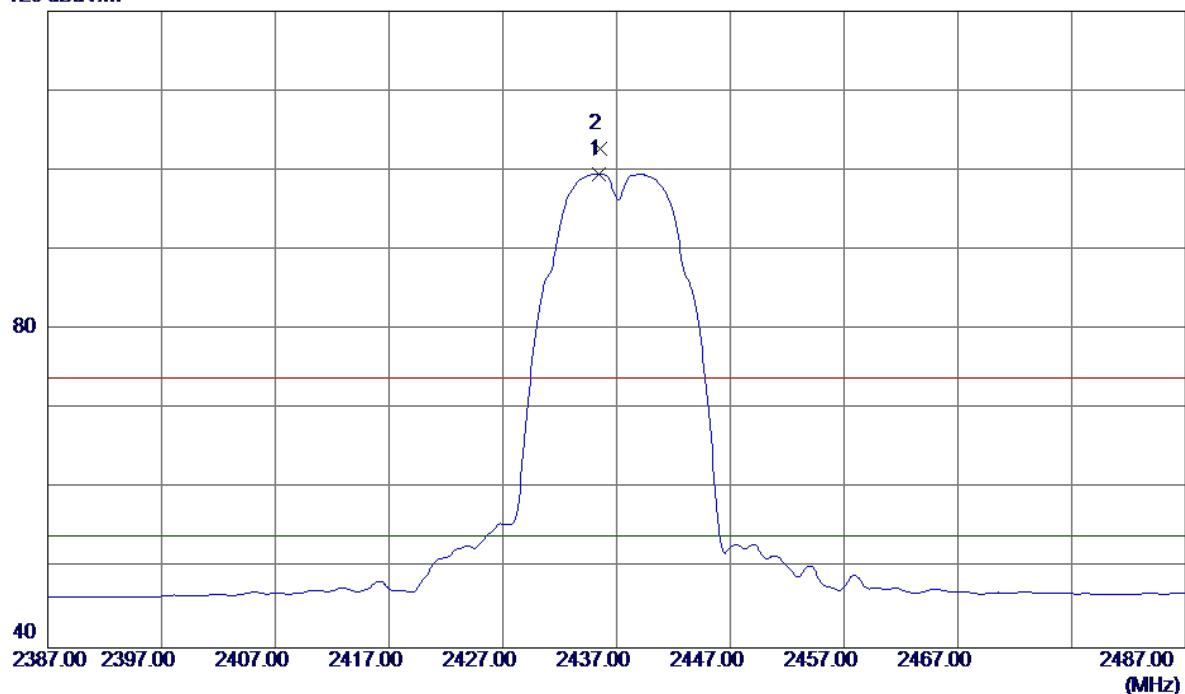
Horizontal

No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.1260	41.54	6.66	48.20	74.00	-25.80	Peak	
2 *	4824.1360	37.38	6.66	44.04	54.00	-9.96	AVG	

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

Vertical

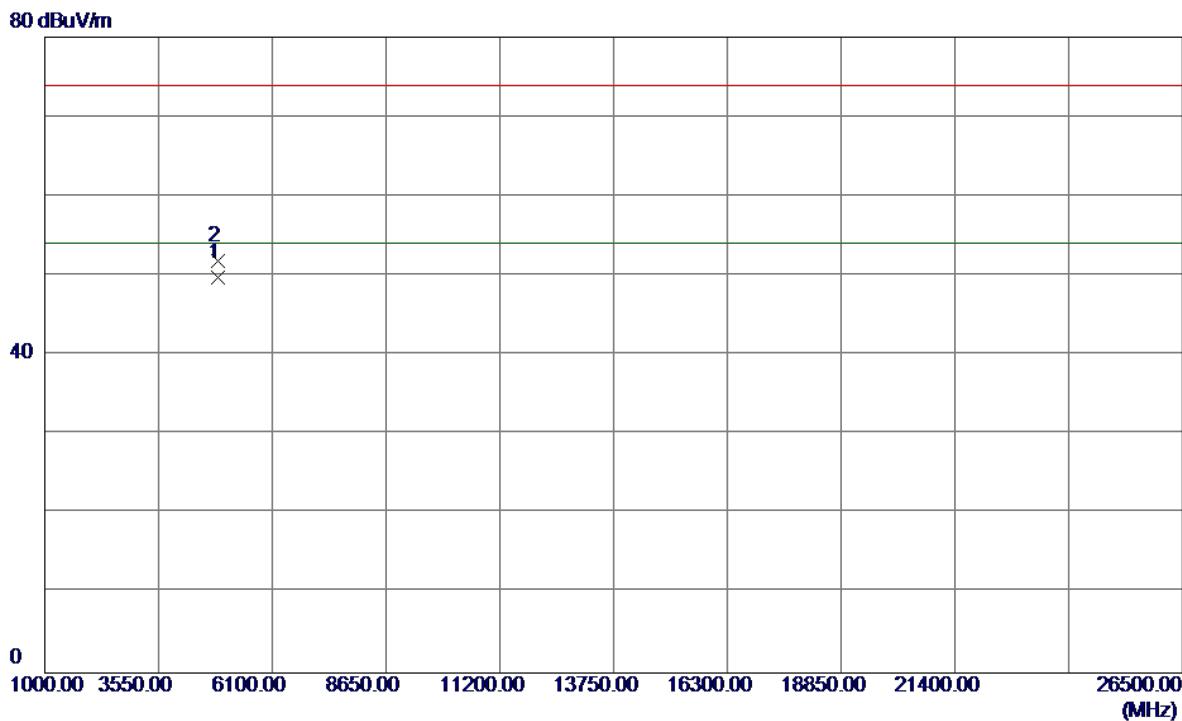
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2435.4000	66.29	33.23	99.52	54.00	45.52	AVG	No Limit
2	2435.5000	69.49	33.23	102.72	74.00	28.72	Peak	No Limit

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

Vertical



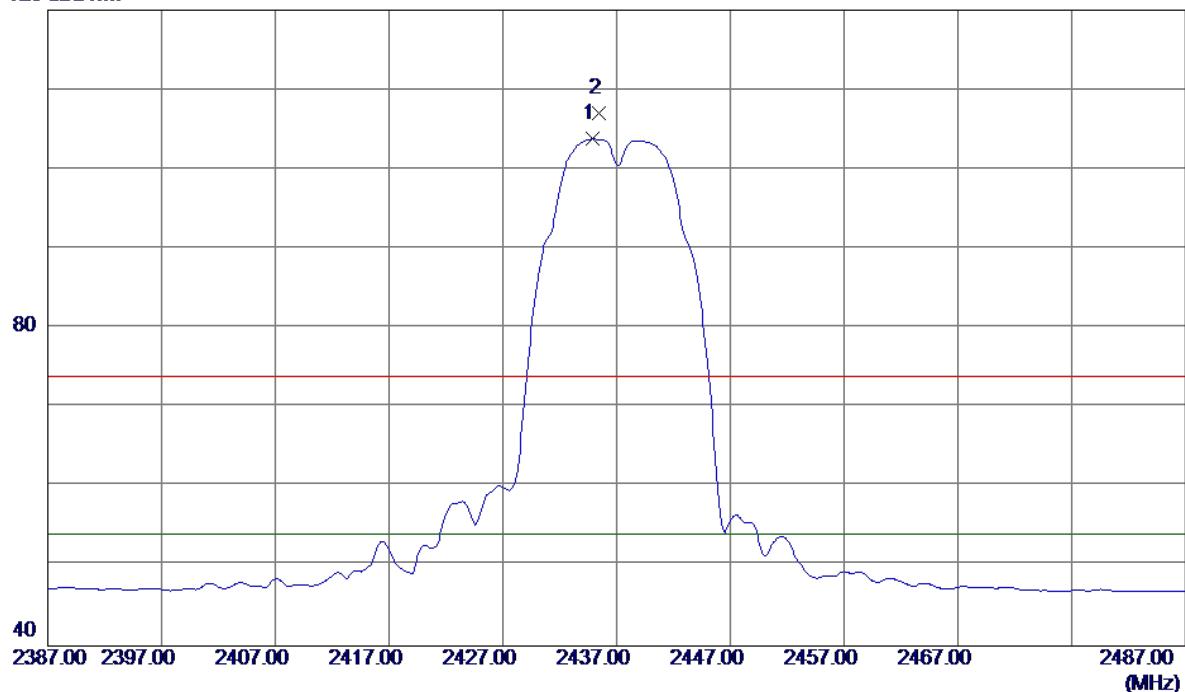
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.1340	42.93	6.84	49.77	54.00	-4.23	AVG	
2	4874.2639	45.02	6.84	51.86	74.00	-22.14	Peak	

Orthogonal Axis : X

Test Mode : TX B MODE 2437MHz

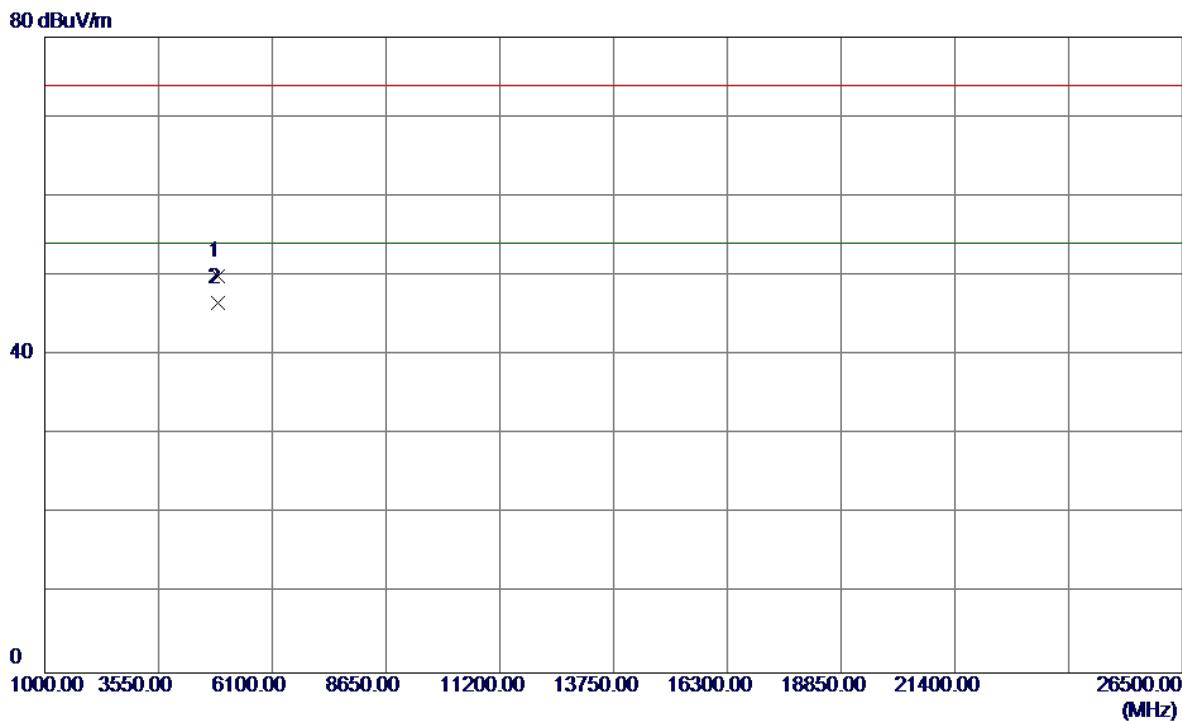
Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2434.9000	70.56	33.23	103.79	54.00	49.79	AVG	No Limit
2	2435.4000	73.82	33.23	107.05	74.00	33.05	Peak	No Limit

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

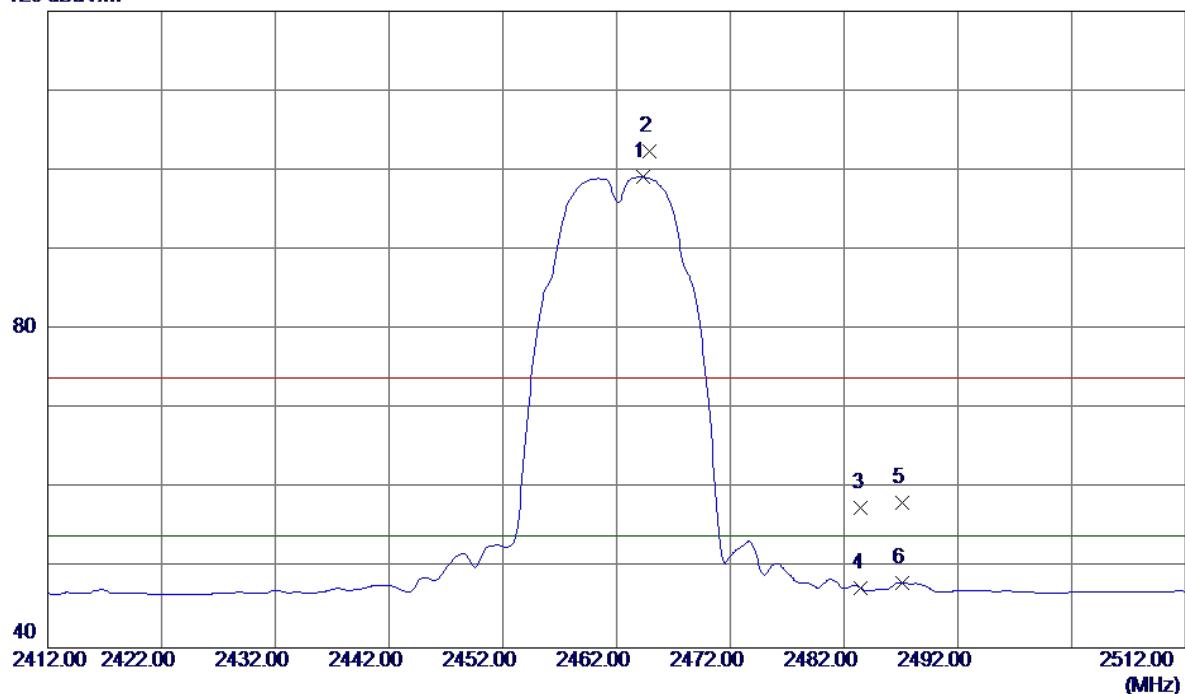
Horizontal

No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1400	43.11	6.84	49.95	74.00	-24.05	Peak	
2 *	4874.2639	39.79	6.84	46.63	54.00	-7.37	AVG	

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

Vertical

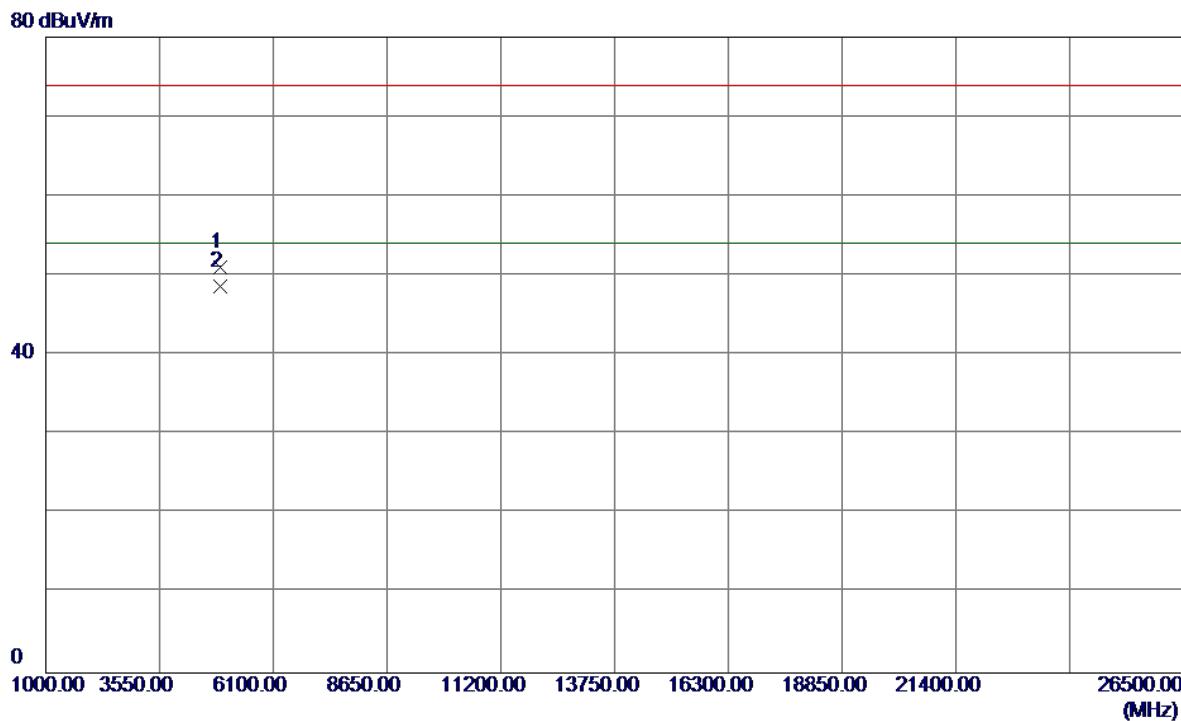
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2464.3000	65.84	33.34	99.18	54.00	45.18	AVG	No Limit
2	2464.9000	69.01	33.34	102.35	74.00	28.35	Peak	No Limit
3	2483.5000	24.19	33.41	57.60	74.00	-16.40	Peak	
4	2483.5000	14.11	33.41	47.52	54.00	-6.48	AVG	
5	2487.1000	24.85	33.42	58.27	74.00	-15.73	Peak	
6	2487.1000	14.81	33.42	48.23	54.00	-5.77	AVG	

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

Vertical



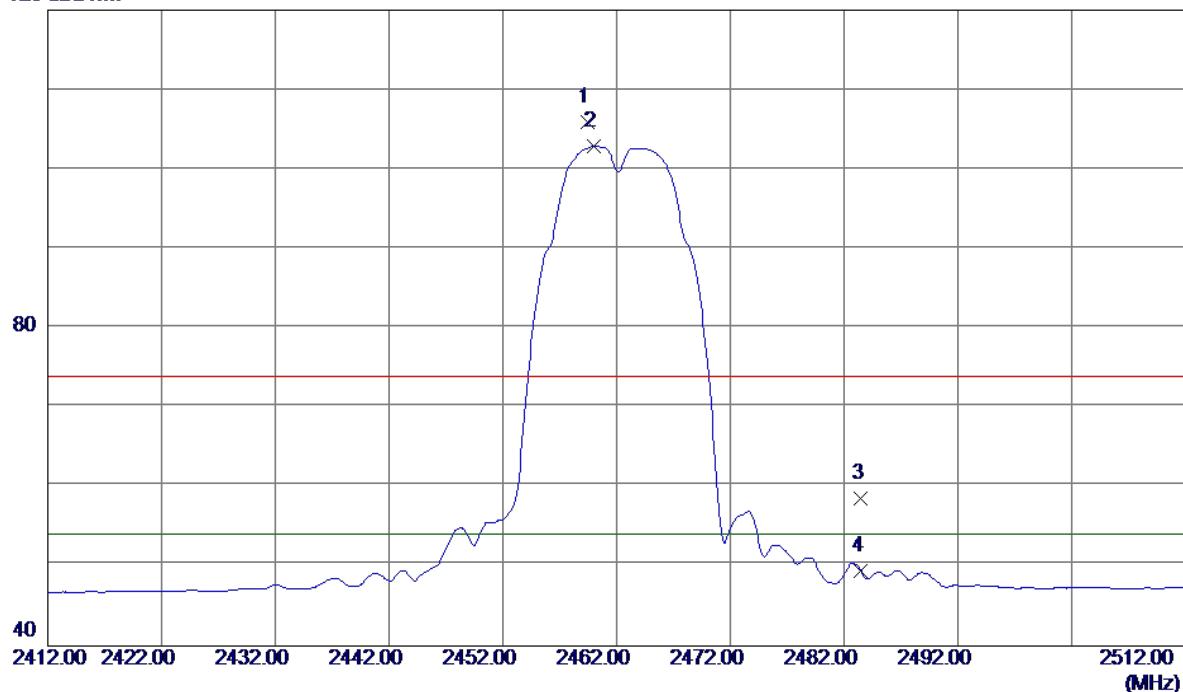
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.1100	44.08	7.02	51.10	74.00	-22.90	Peak	
2 *	4924.1660	41.63	7.02	48.65	54.00	-5.35	AVG	

Orthogonal Axis : X

Test Mode : TX B MODE 2462MHz

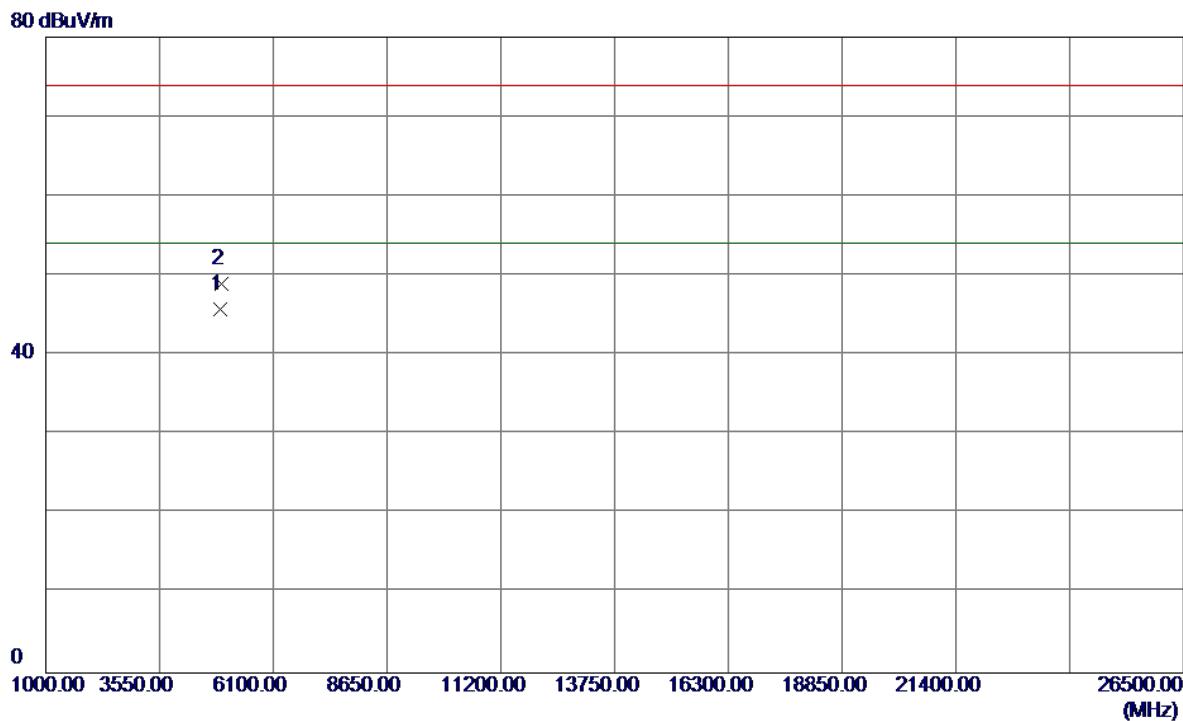
Horizontal

120 dBuV/m



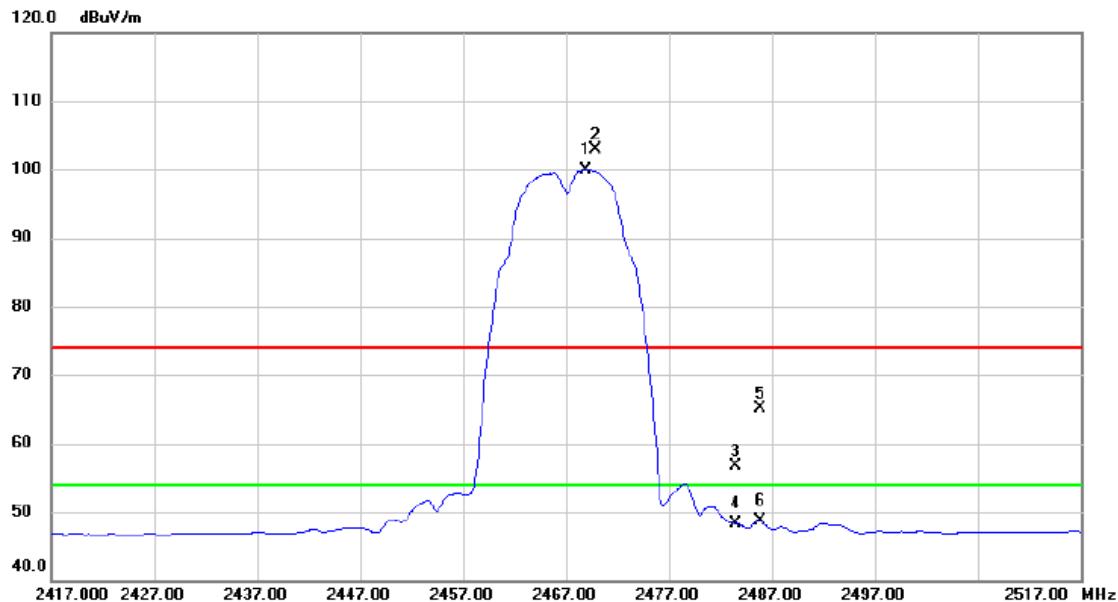
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.4000	72.57	33.32	105.89	74.00	31.89	Peak	No Limit
2 *	2460.0000	69.52	33.32	102.84	54.00	48.84	AVG	No Limit
3	2483.5000	25.16	33.41	58.57	74.00	-15.43	Peak	
4	2483.5000	15.99	33.41	49.40	54.00	-4.60	AVG	

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

Horizontal

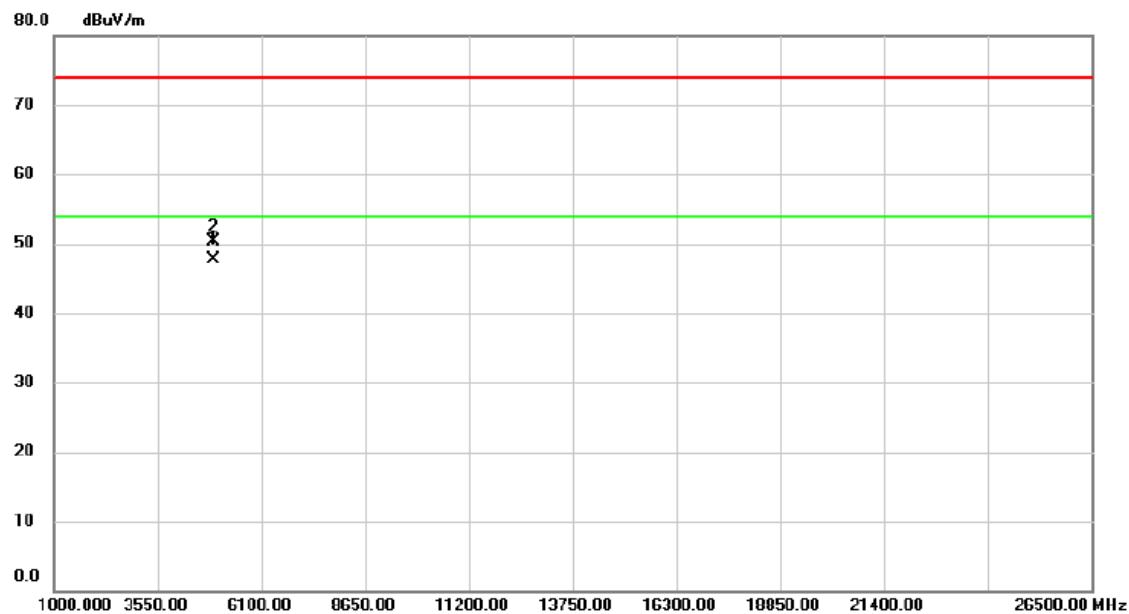
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.1660	38.70	7.02	45.72	54.00	-8.28	AVG	
2	4924.2440	41.97	7.02	48.99	74.00	-25.01	Peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2467MHz

Vertical

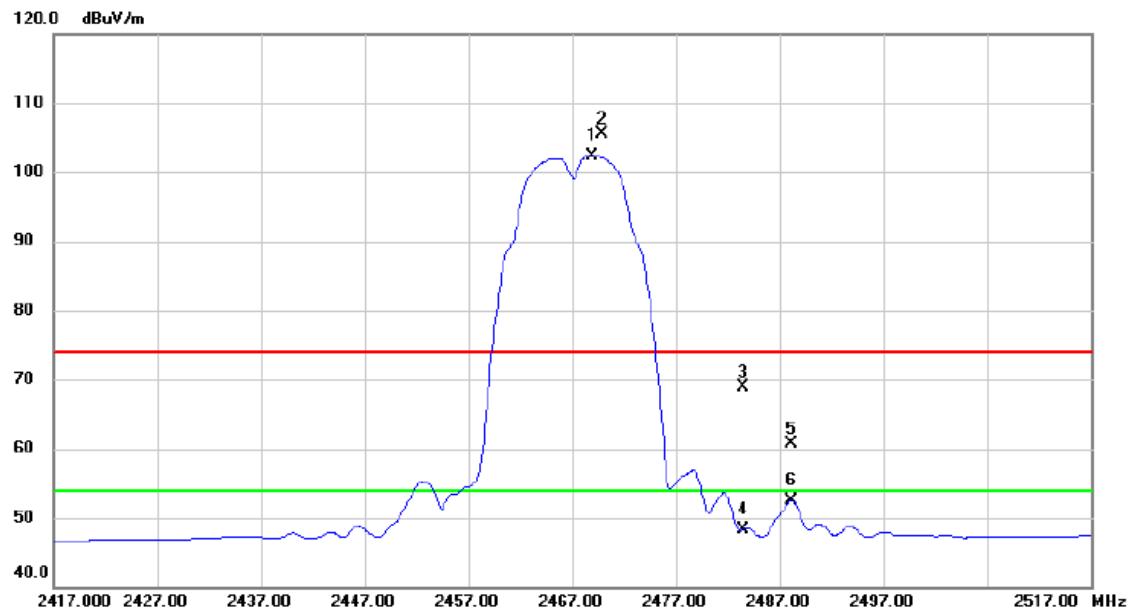
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1	*	2468.900	66.51	33.35	99.86	54.00	45.86	AVG No Limit
2	X	2469.800	69.65	33.35	103.00	74.00	29.00	peak No Limit
3		2483.500	23.37	33.41	56.78	74.00	-17.22	peak
4		2483.500	14.98	33.41	48.39	54.00	-5.61	AVG
5		2485.800	31.67	33.41	65.08	74.00	-8.92	peak
6		2485.800	15.28	33.41	48.69	54.00	-5.31	AVG

Orthogonal Axis :	X
Test Mode :	TX B MODE 2467MHz

Vertical

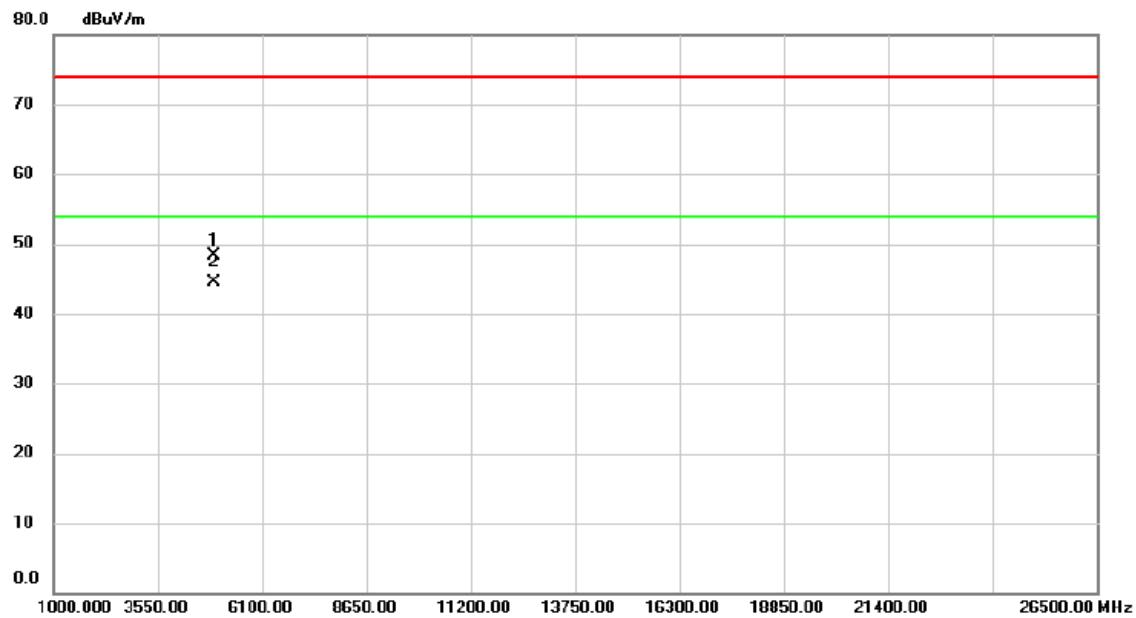
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4934.150	40.59	7.05	47.64	54.00	-6.36	AVG	
2		4934.194	43.21	7.05	50.26	74.00	-23.74	peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2467MHz

Horizontal

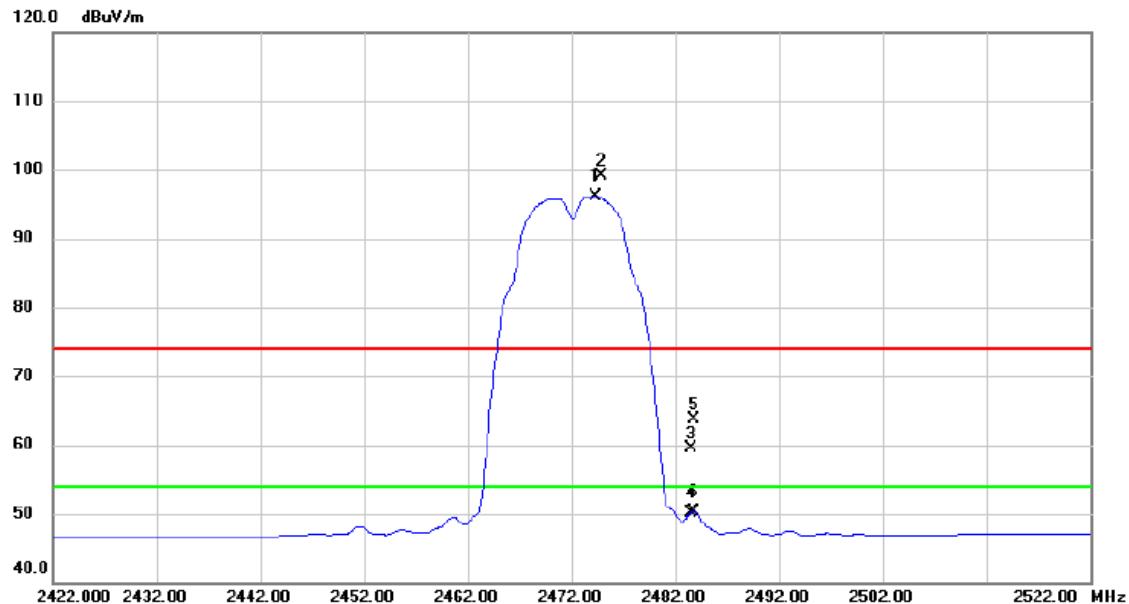
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1	*	2468.900	68.99	33.35	102.34	54.00	48.34	AVG No Limit
2	X	2469.900	72.06	33.36	105.42	74.00	31.42	peak No Limit
3		2483.500	35.44	33.41	68.85	74.00	-5.15	peak
4		2483.500	14.93	33.41	48.34	54.00	-5.66	AVG
5		2488.200	27.35	33.43	60.78	74.00	-13.22	peak
6		2488.200	19.10	33.43	52.53	54.00	-1.47	AVG

Orthogonal Axis :	X
Test Mode :	TX B MODE 2467MHz

Horizontal

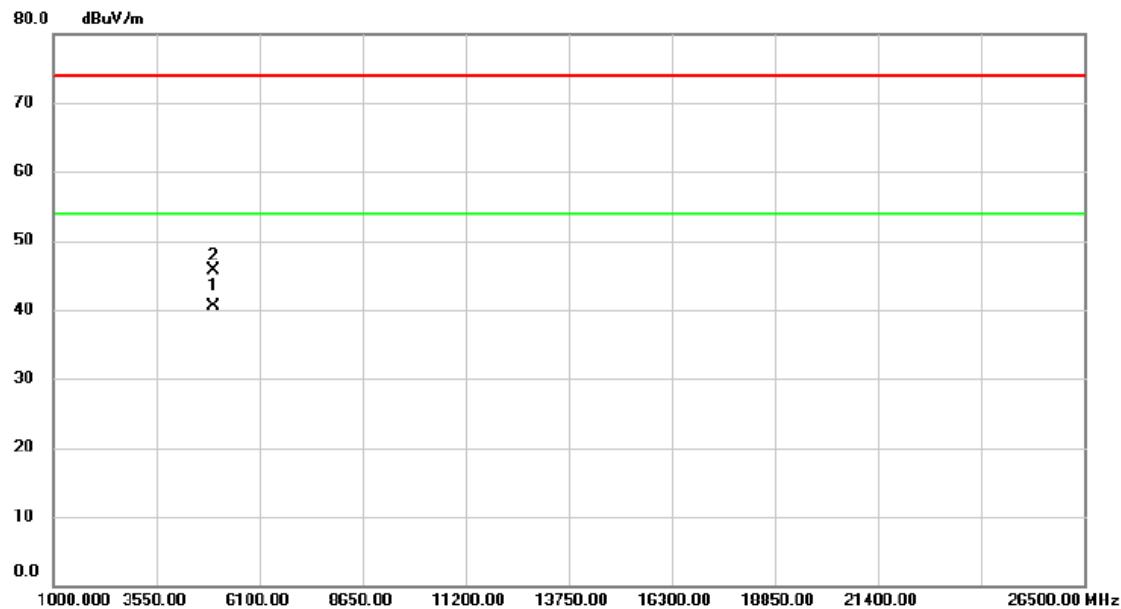
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1		4934.110	41.17	7.05	48.22	74.00	-25.78	peak
2 *		4934.184	37.48	7.05	44.53	54.00	-9.47	AVG

Orthogonal Axis :	X
Test Mode :	TX B MODE 2472MHz

Vertical

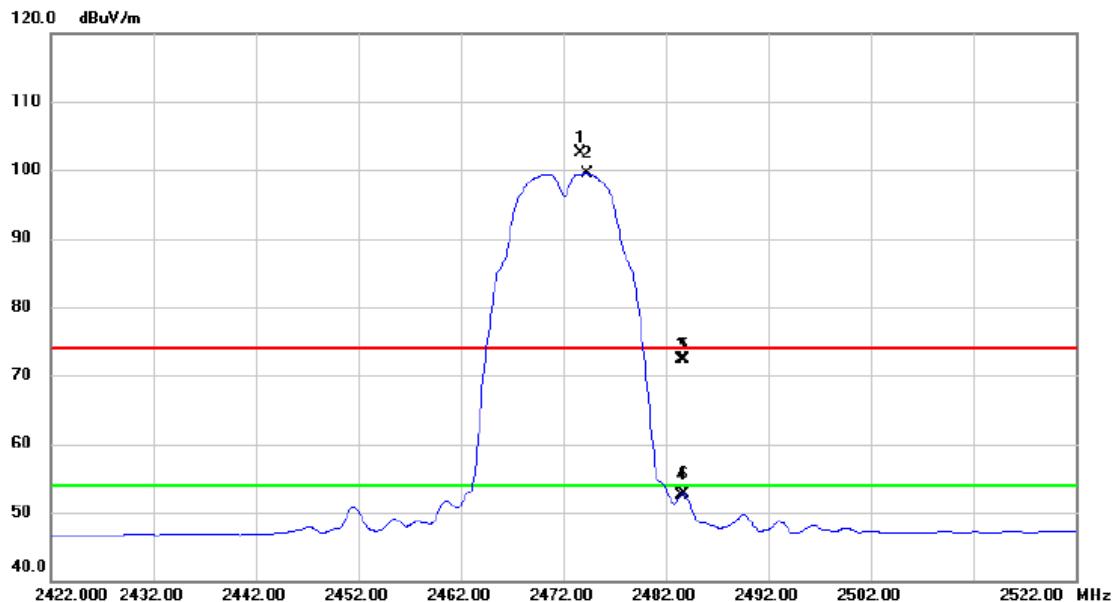
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2474.300	62.65	33.37	96.02	54.00	42.02	AVG	No Limit
2	X	2474.900	65.80	33.37	99.17	74.00	25.17	peak	No Limit
3		2483.500	26.06	33.41	59.47	74.00	-14.53	peak	
4		2483.500	16.76	33.41	50.17	54.00	-3.83	AVG	
5		2483.800	30.33	33.41	63.74	74.00	-10.26	peak	
6		2483.800	16.97	33.41	50.38	54.00	-3.62	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2472MHz

Vertical

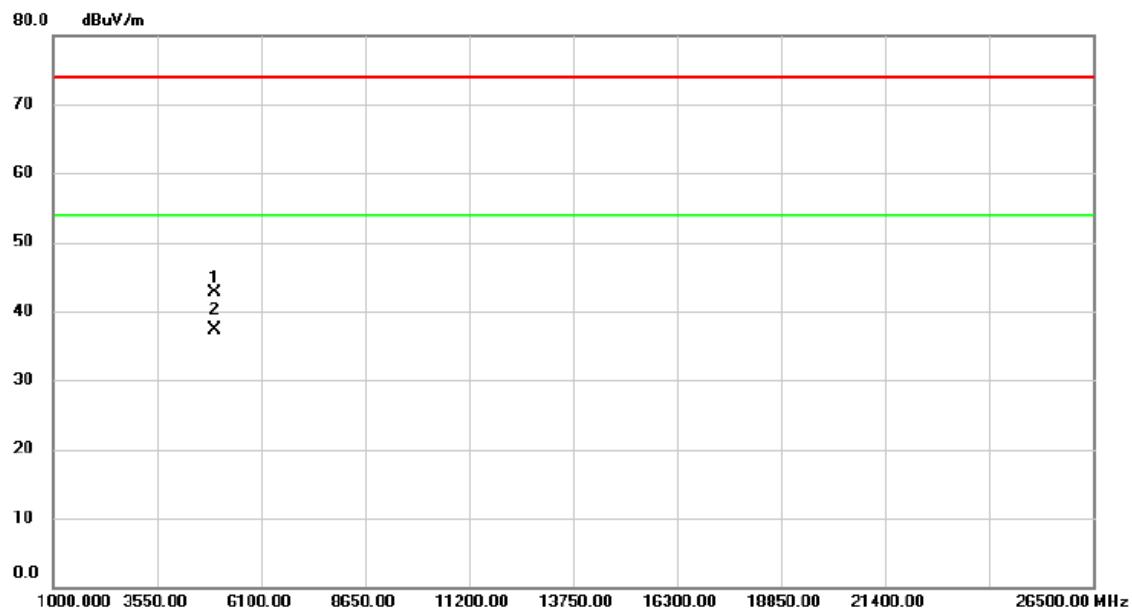
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4944.154	33.41	7.09	40.50	54.00	-13.50	AVG	
2		4944.276	38.55	7.09	45.64	74.00	-28.36	peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2472MHz

Horizontal

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin	
							Detector	Comment
1	X	2473.700	69.22	33.37	102.59	74.00	28.59	peak No Limit
2	*	2474.300	66.04	33.37	99.41	54.00	45.41	AVG No Limit
3		2483.500	38.90	33.41	72.31	74.00	-1.69	peak
4		2483.500	19.02	33.41	52.43	54.00	-1.57	AVG
5		2483.800	38.89	33.41	72.30	74.00	-1.70	peak
6		2483.800	19.28	33.41	52.69	54.00	-1.31	AVG

Orthogonal Axis :	X
Test Mode :	TX B MODE 2472MHz

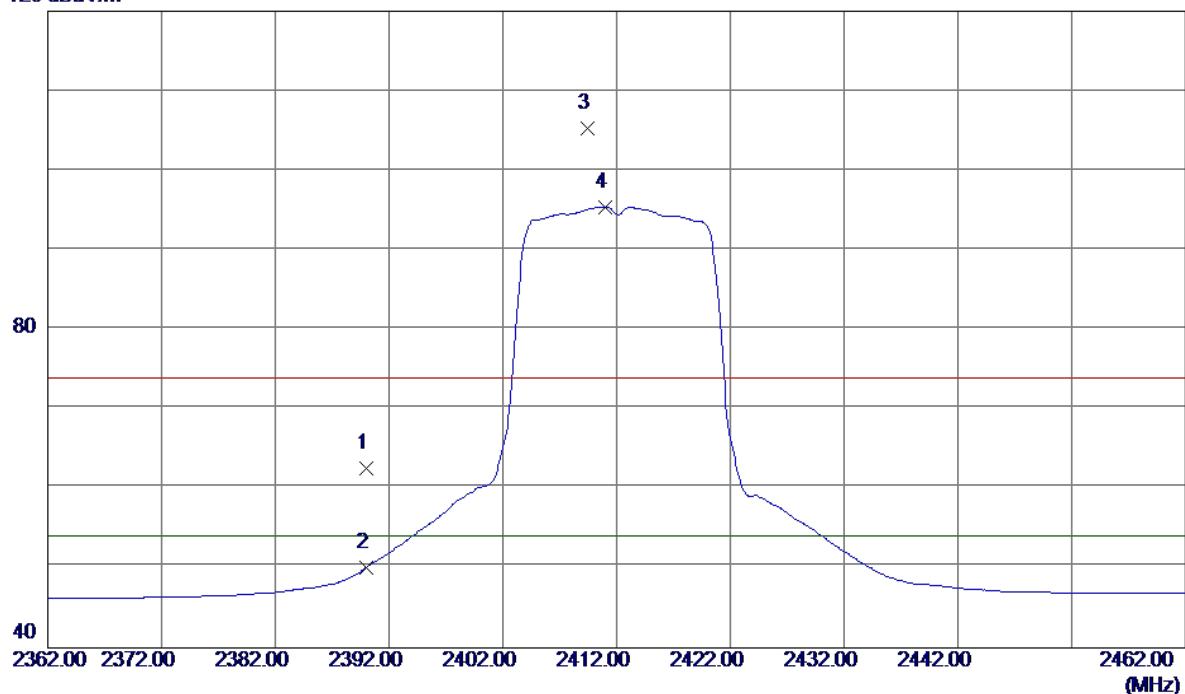
Horizontal

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4944.088	35.54	7.09	42.63	74.00	-31.37	peak	
2 *		4944.176	30.13	7.09	37.22	54.00	-16.78	AVG	

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

Vertical

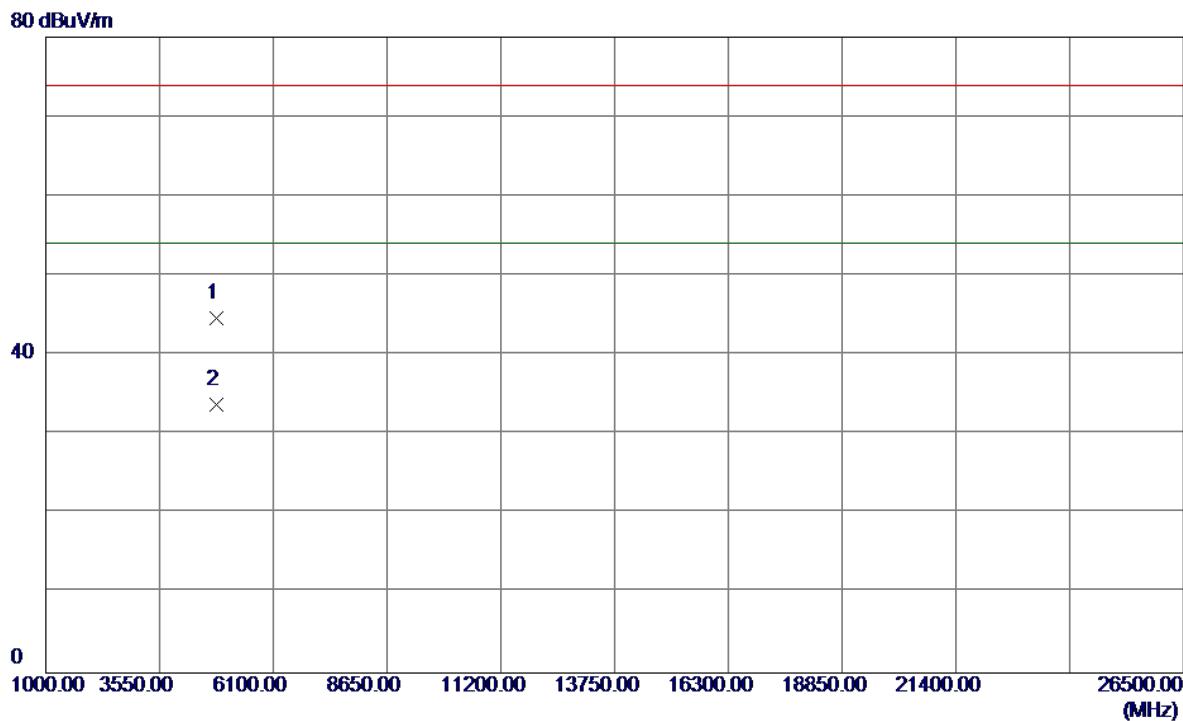
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	29.44	33.06	62.50	74.00	-11.50	Peak	
2	2390.0000	17.07	33.06	50.13	54.00	-3.87	AVG	
3	2409.4000	72.15	33.13	105.28	74.00	31.28	Peak	No Limit
4 *	2411.0000	62.28	33.14	95.42	54.00	41.42	AVG	No Limit

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

Vertical

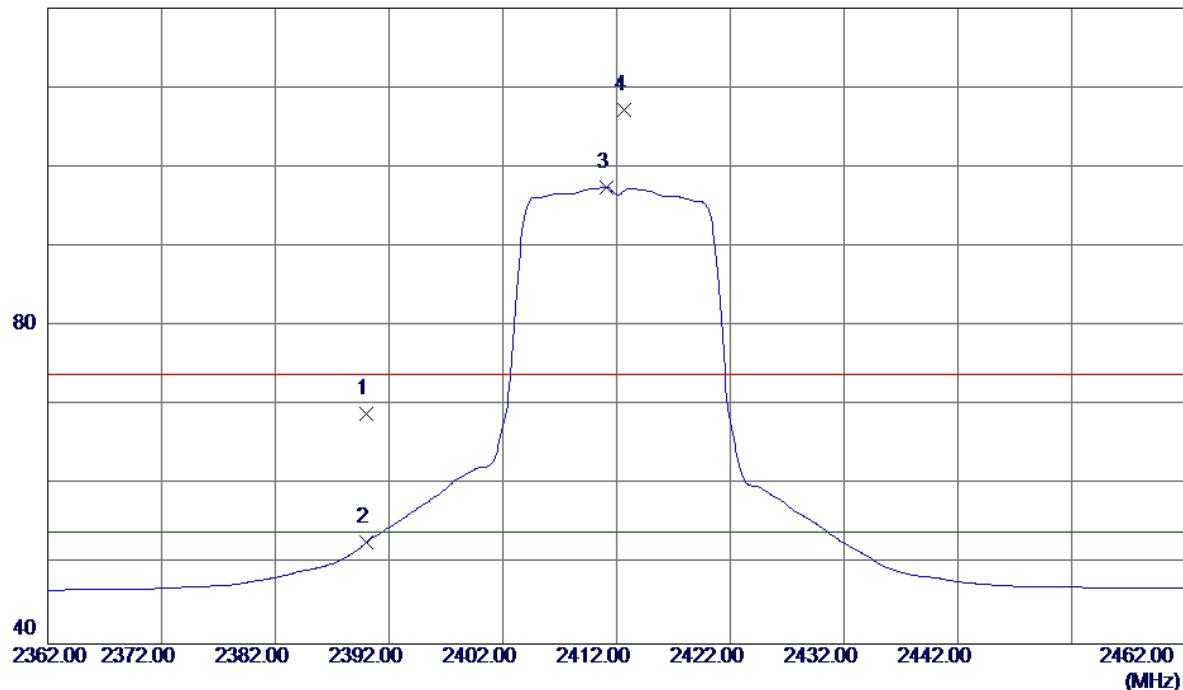


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4826.1000	37.94	6.67	44.61	74.00	-29.39	Peak	
2 *	4826.9000	27.14	6.67	33.81	54.00	-20.19	AVG	

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

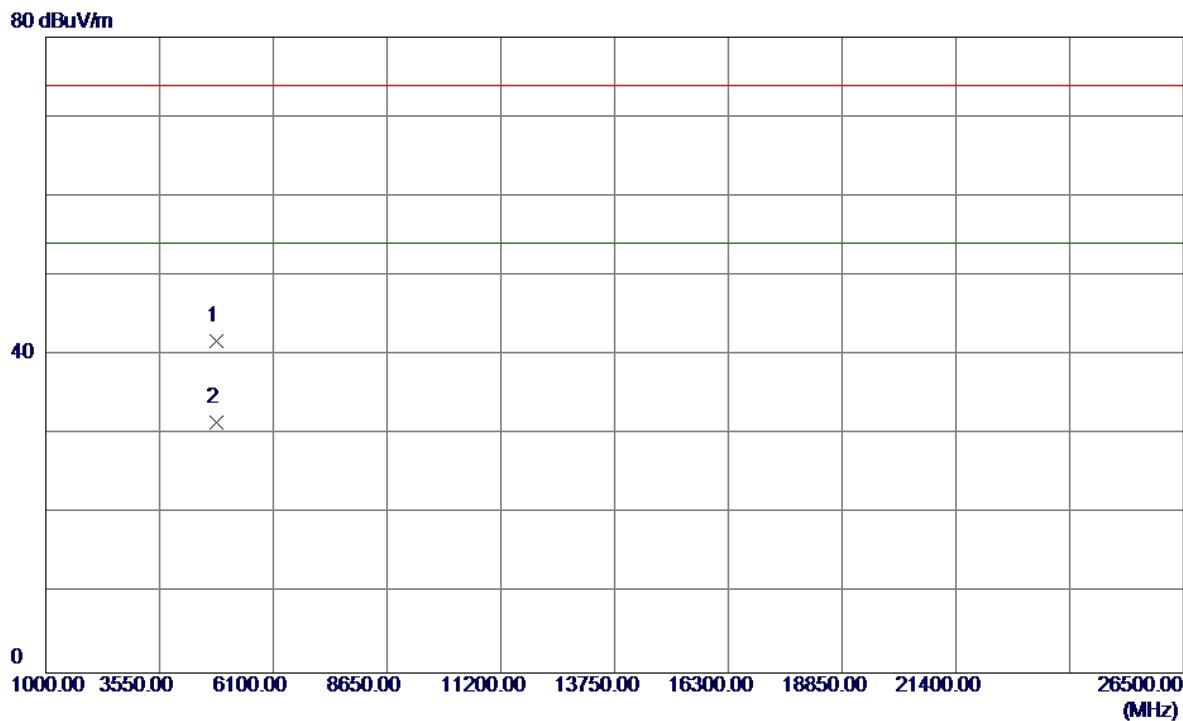
Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	35.91	33.06	68.97	74.00	-5.03	Peak	
2	2390.0000	19.72	33.06	52.78	54.00	-1.22	AVG	
3 *	2411.1000	64.29	33.14	97.43	54.00	43.43	AVG	No Limit
4	2412.7000	74.11	33.14	107.25	74.00	33.25	Peak	No Limit

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

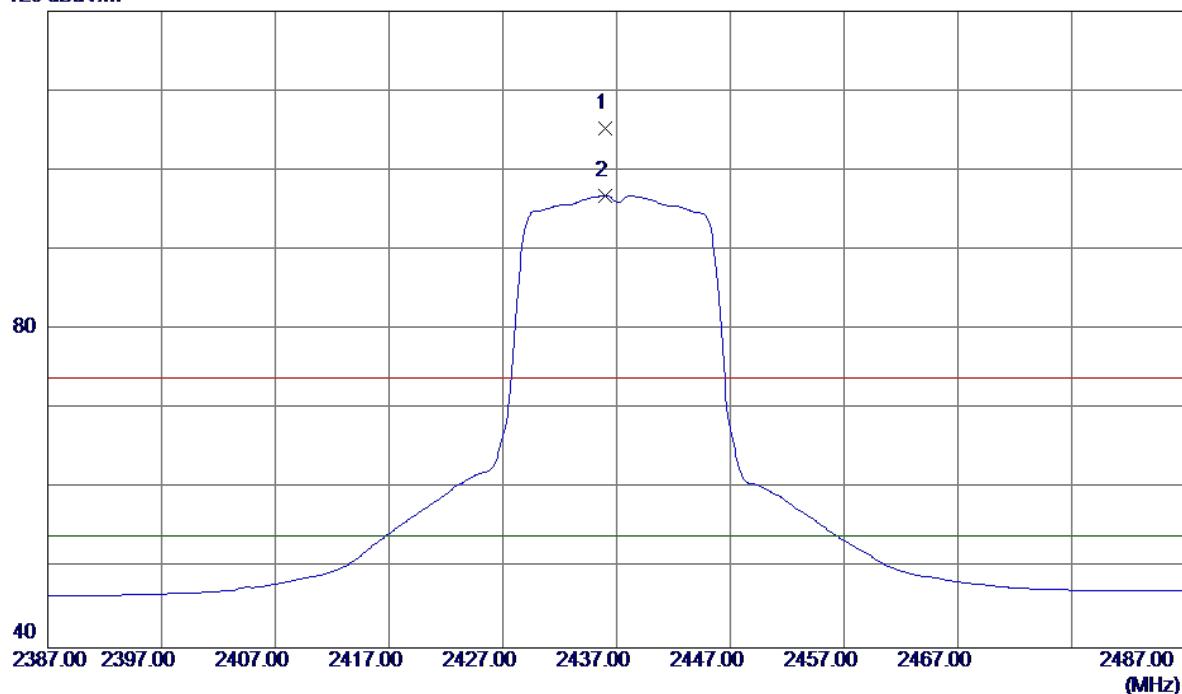
Horizontal

No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.4500	35.06	6.66	41.72	74.00	-32.28	Peak	
2 *	4825.9000	24.82	6.66	31.48	54.00	-22.52	AVG	

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

Vertical

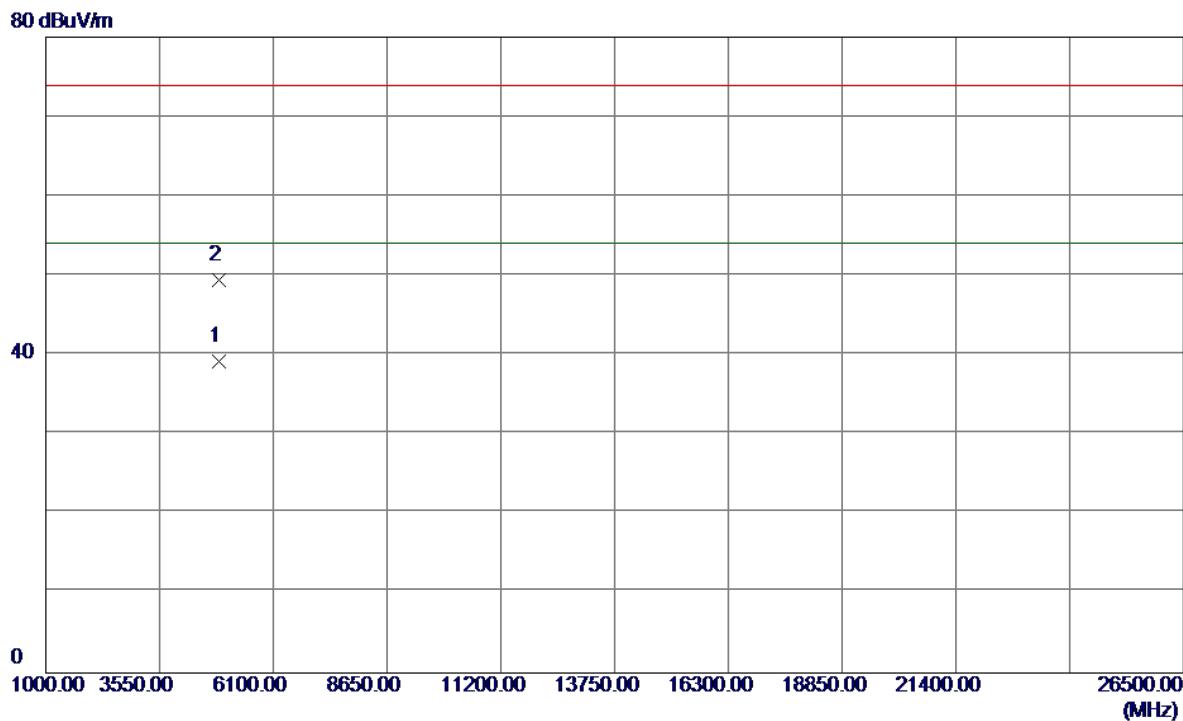
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.0000	72.12	33.23	105.35	74.00	31.35	Peak	No Limit
2 *	2436.0000	63.60	33.23	96.83	54.00	42.83	AVG	No Limit

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

Vertical



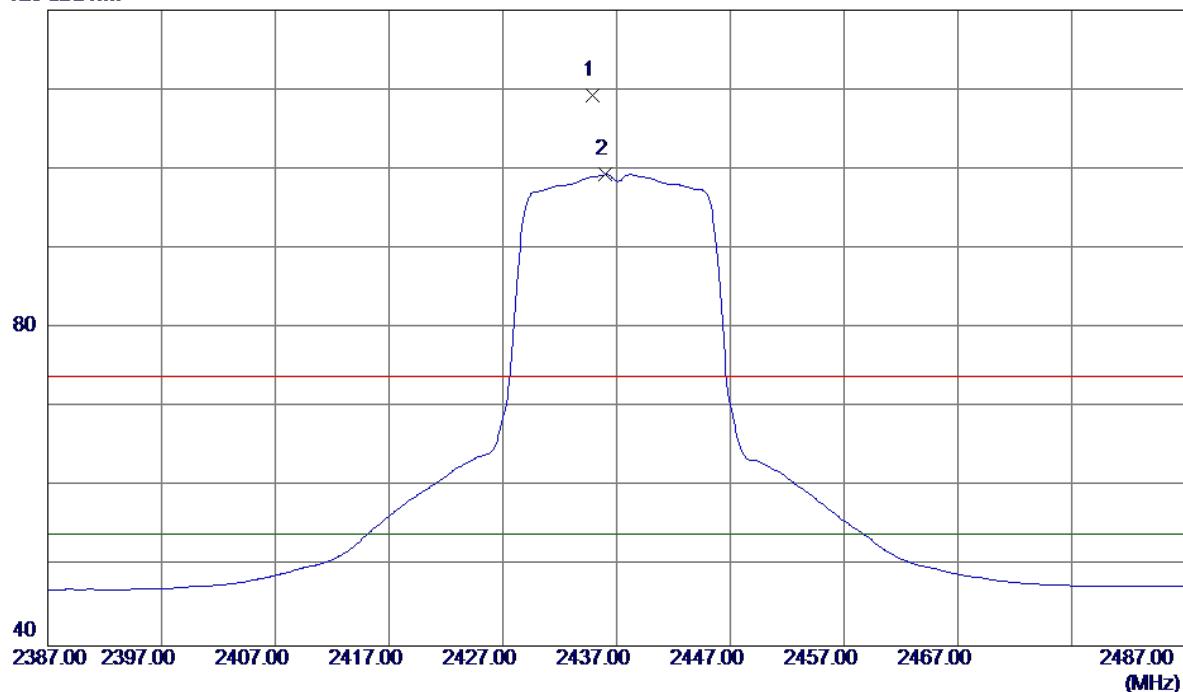
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4876.2500	32.29	6.85	39.14	54.00	-14.86	AVG	
2	4878.4000	42.63	6.85	49.48	74.00	-24.52	Peak	

Orthogonal Axis : X

Test Mode : TX G MODE 2437MHz

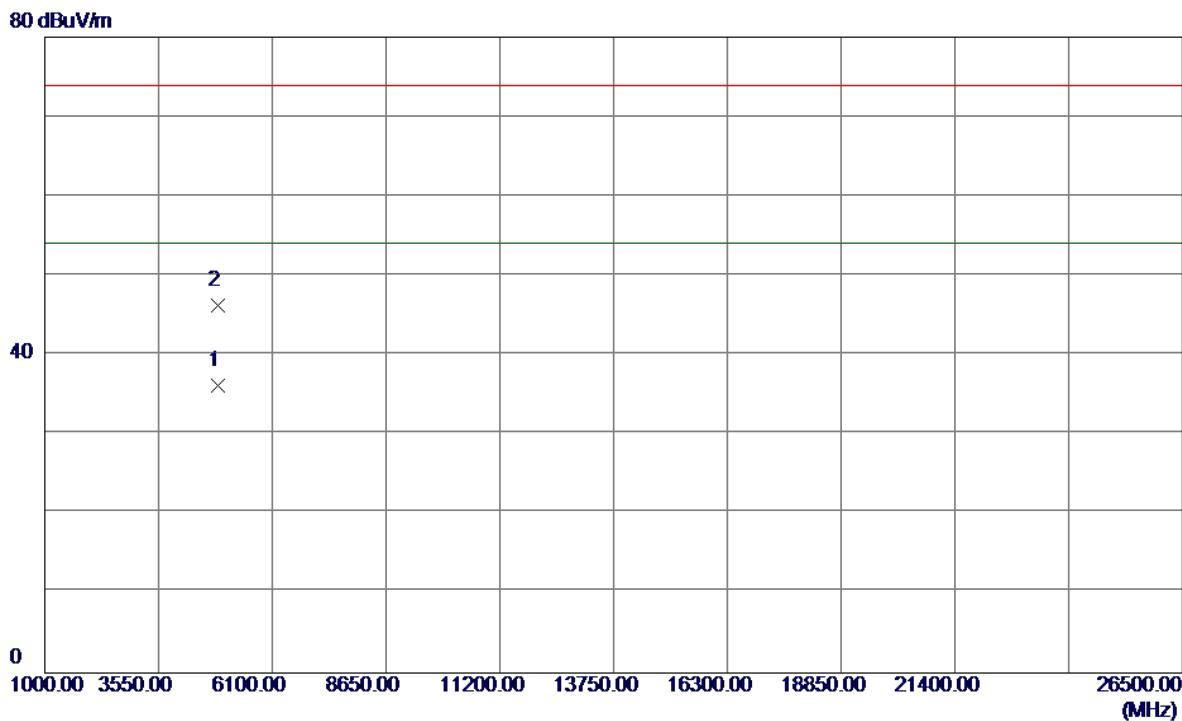
Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.9000	76.00	33.23	109.23	74.00	35.23	Peak	No Limit
2 *	2436.0000	66.07	33.23	99.30	54.00	45.30	AVG	No Limit

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

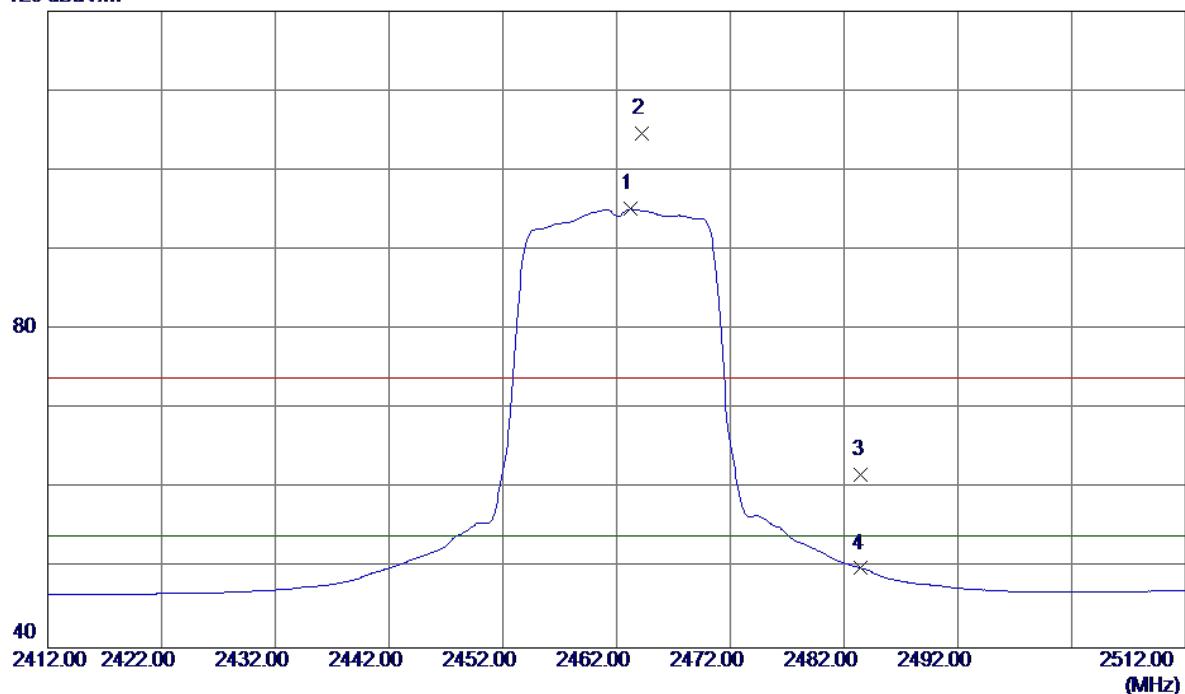
Horizontal

No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4875.2000	29.26	6.84	36.10	54.00	-17.90	AVG	
2	4877.7500	39.41	6.85	46.26	74.00	-27.74	Peak	

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

Vertical

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2463.2000	61.80	33.33	95.13	54.00	41.13	AVG	No Limit
2	2464.2000	71.34	33.34	104.68	74.00	30.68	Peak	No Limit
3	2483.5000	28.40	33.41	61.81	74.00	-12.19	Peak	
4	2483.5000	16.59	33.41	50.00	54.00	-4.00	AVG	

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

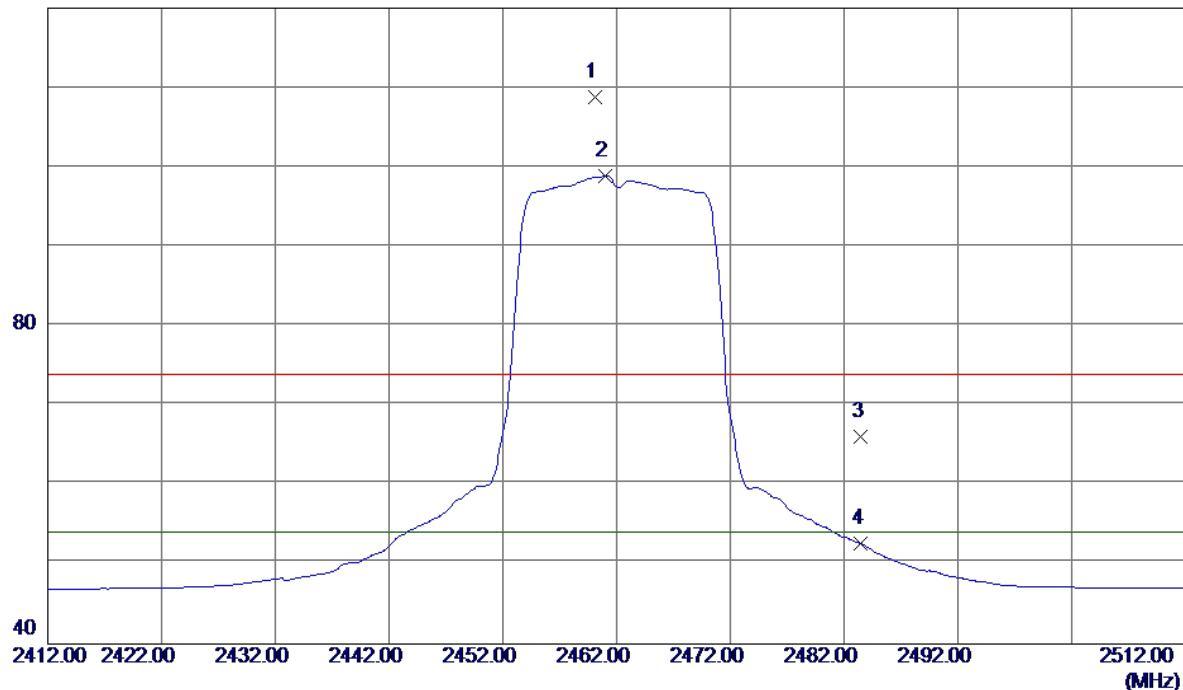
Vertical**80 dBuV/m**

No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4918.1500	41.10	7.00	48.10	74.00	-25.90	Peak	
2 *	4924.3500	31.01	7.02	38.03	54.00	-15.97	AVG	

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

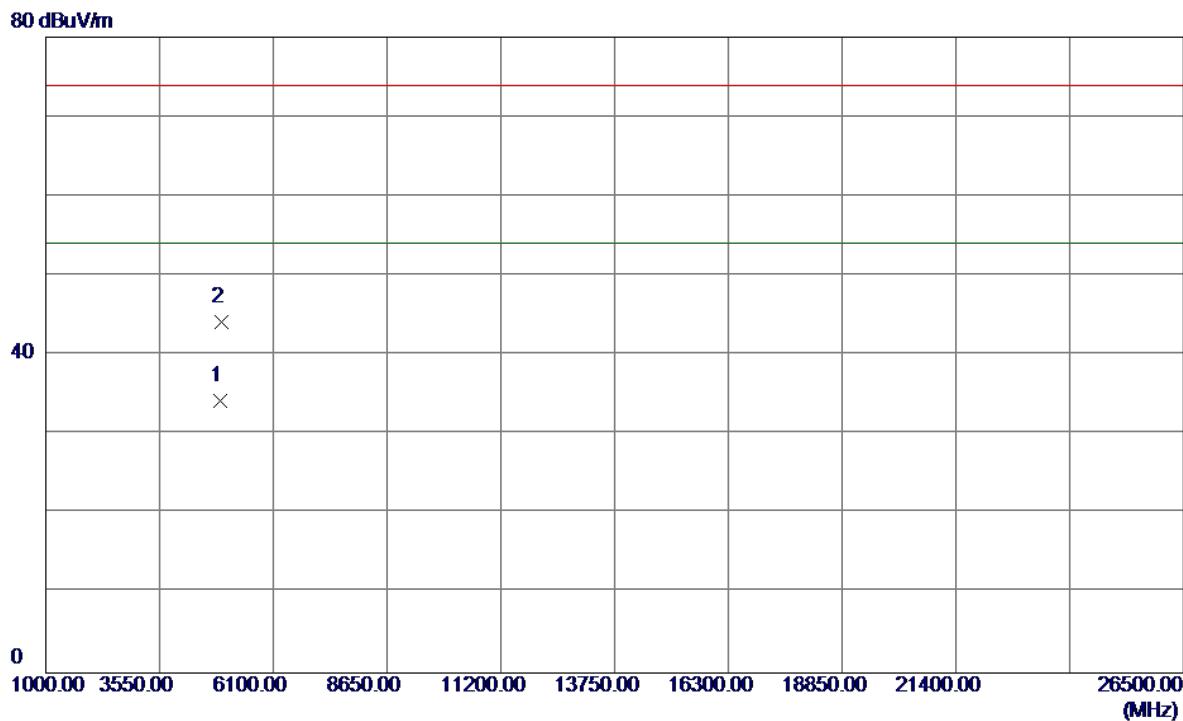
Horizontal

120 dBuV/m



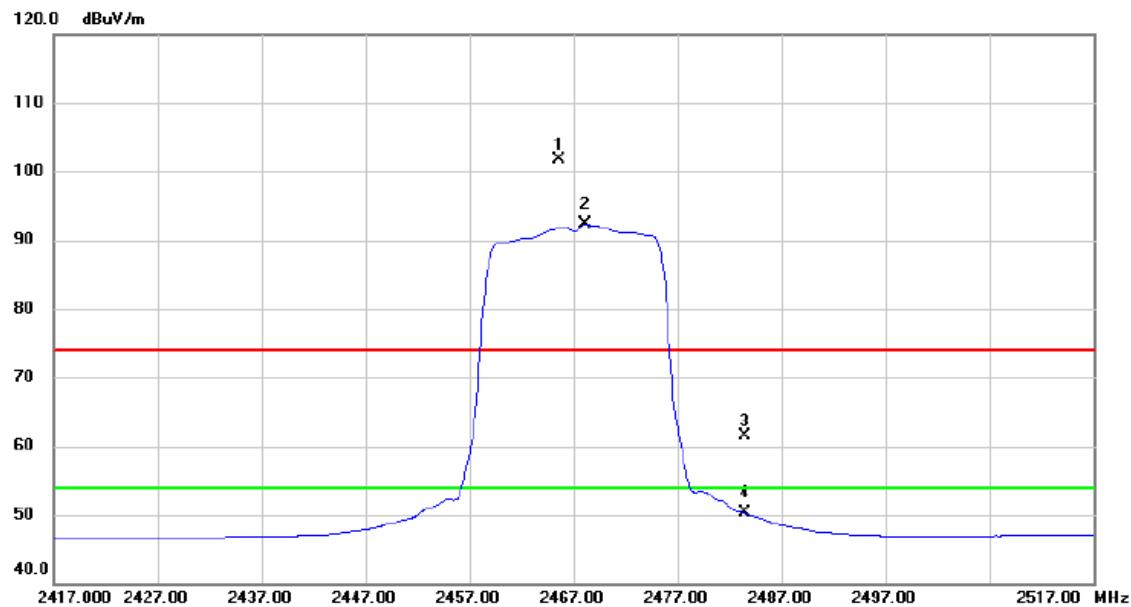
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.1000	75.42	33.32	108.74	74.00	34.74	Peak	No Limit
2 *	2461.0000	65.52	33.32	98.84	54.00	44.84	AVG	No Limit
3	2483.5000	32.69	33.41	66.10	74.00	-7.90	Peak	
4	2483.5000	19.19	33.41	52.60	54.00	-1.40	AVG	

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

Horizontal

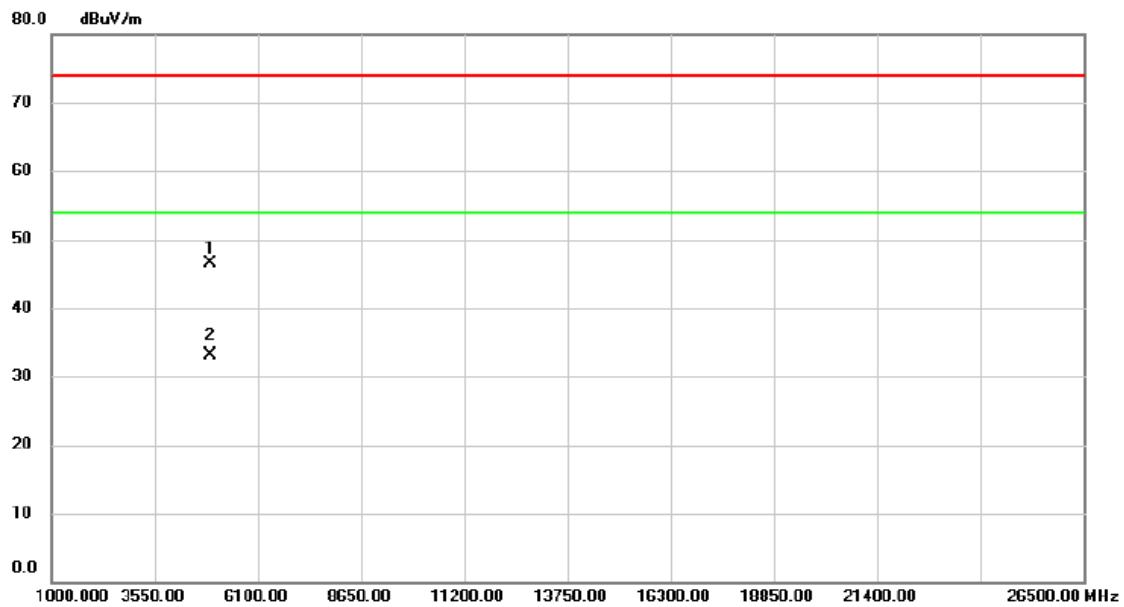
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.1500	27.21	7.01	34.22	54.00	-19.78	AVG	
2	4925.8500	37.16	7.02	44.18	74.00	-29.82	Peak	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2467MHz

Vertical

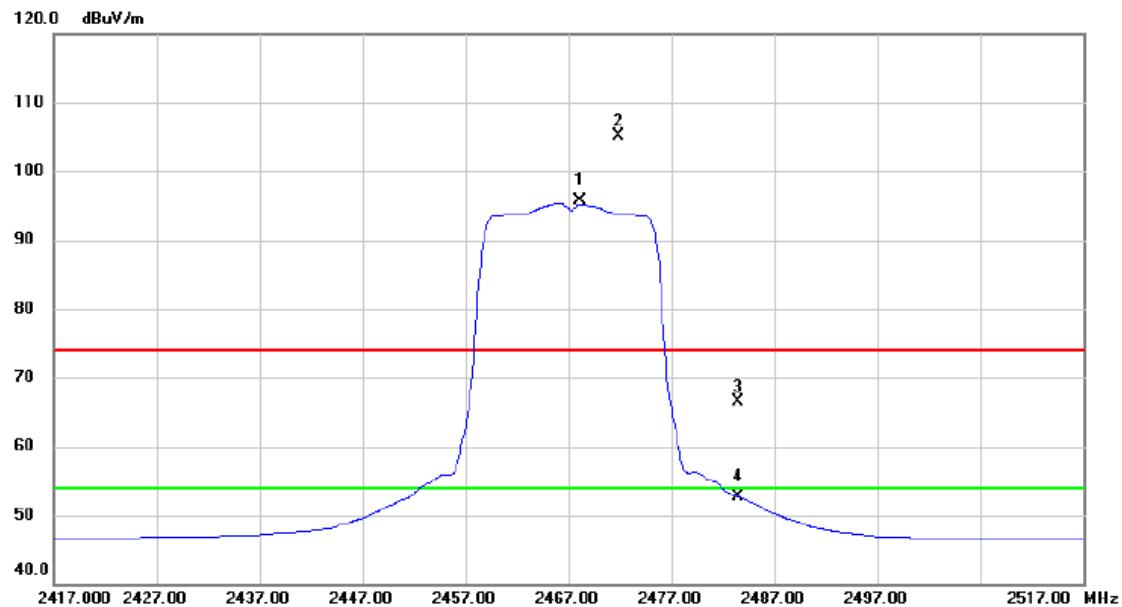
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	X	2465.600	68.39	33.34	101.73	74.00	27.73	peak No Limit
2	*	2468.200	58.91	33.35	92.26	54.00	38.26	AVG No Limit
3		2483.500	28.04	33.41	61.45	74.00	-12.55	peak
4		2483.500	16.83	33.41	50.24	54.00	-3.76	AVG

Orthogonal Axis :	X
Test Mode :	TX G MODE 2467MHz

Vertical

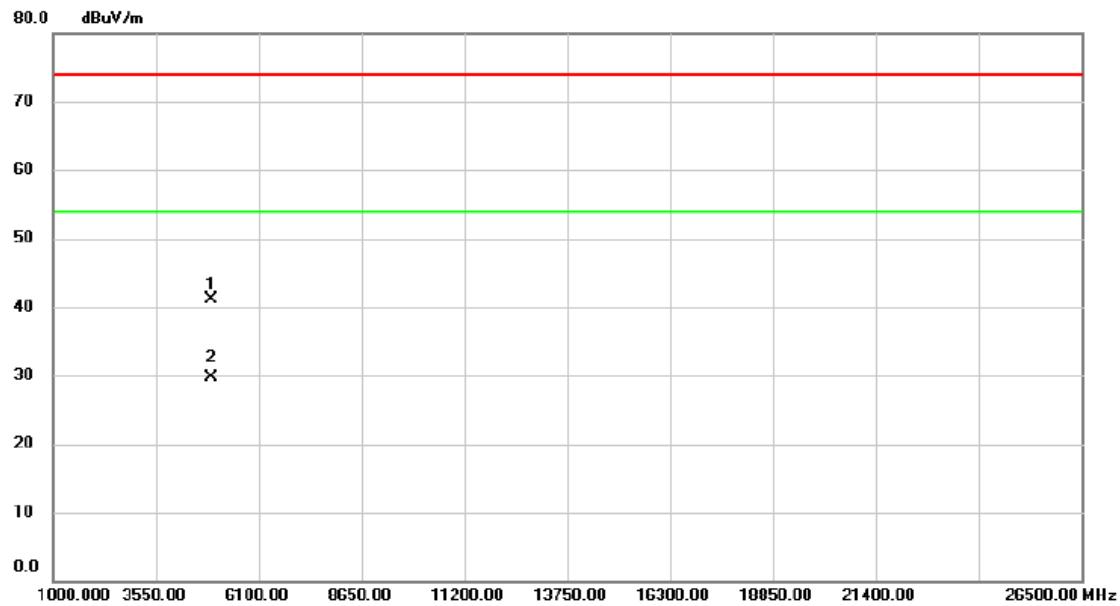
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4931.830	39.42	7.05	46.47	74.00	-27.53	peak	
2 *		4932.940	25.97	7.05	33.02	54.00	-20.98	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2467MHz

Horizontal

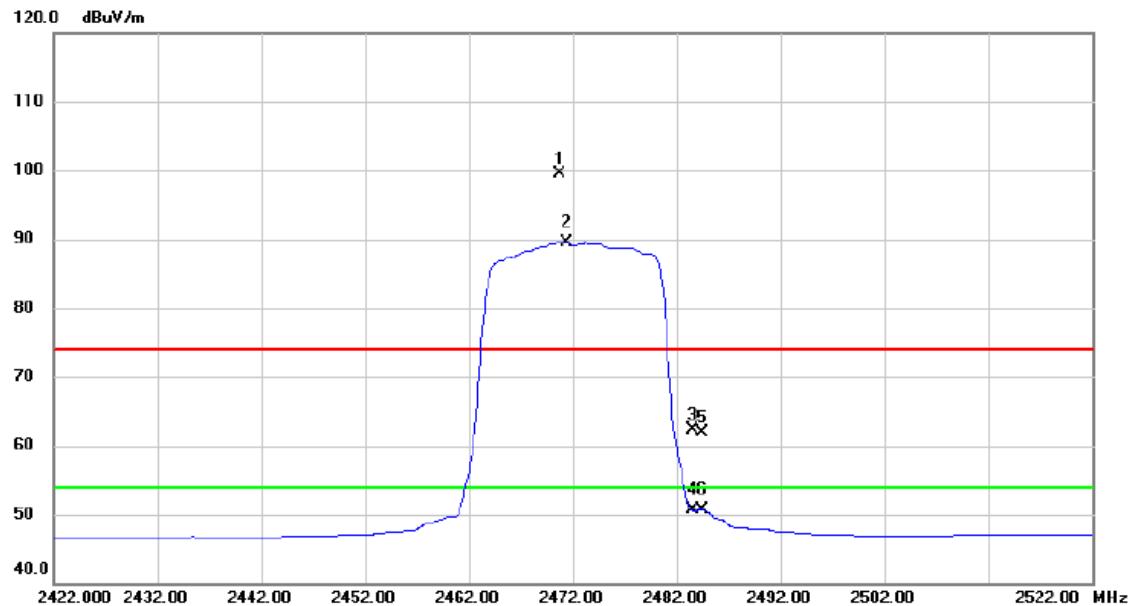
No.	Mk.	Freq. MHz	Reading Level dB _{BuV}	Correct Factor dB	Measure- ment dB _{BuV/m}	Limit dB	Margin Detector	Comment
1	*	2468.200	62.30	33.35	95.65	54.00	41.65	AVG No Limit
2	X	2471.800	71.71	33.37	105.08	74.00	31.08	peak No Limit
3		2483.500	33.11	33.41	66.52	74.00	-7.48	peak
4		2483.500	19.36	33.41	52.77	54.00	-1.23	AVG

Orthogonal Axis :	X
Test Mode :	TX G MODE 2467MHz

Horizontal

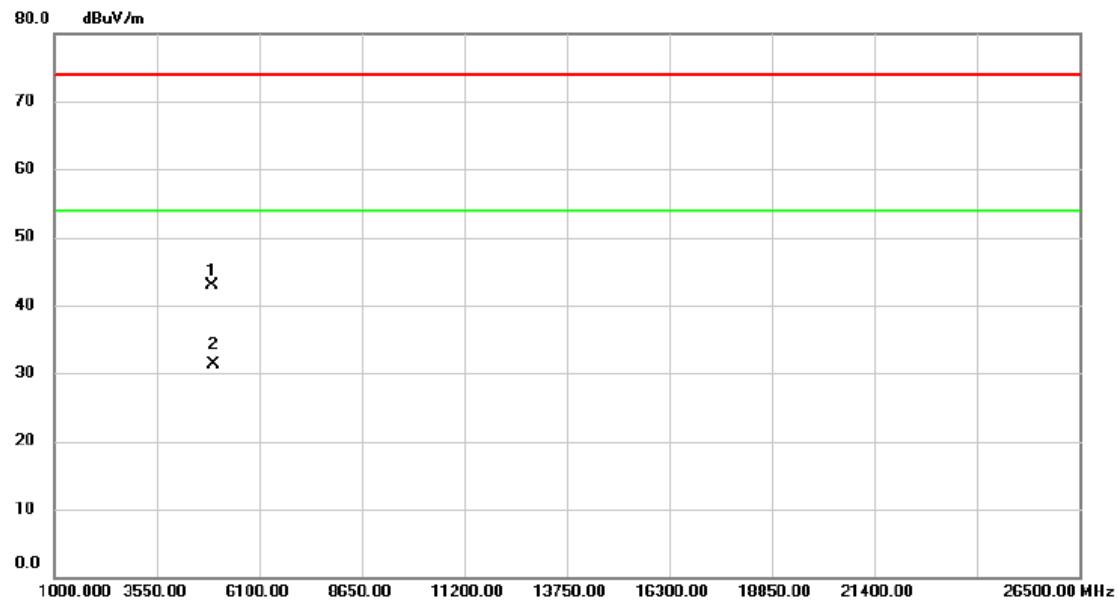
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4931.685	33.98	7.05	41.03	74.00	-32.97	peak	
2 *		4934.045	22.71	7.05	29.76	54.00	-24.24	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2472MHz

Vertical

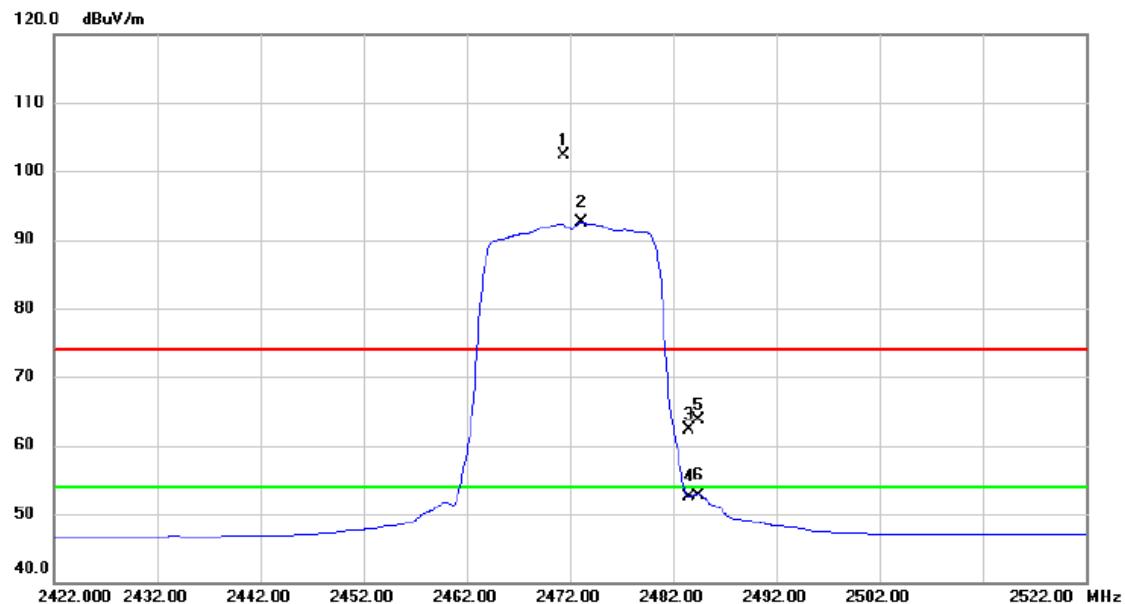
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2470.700	66.22	33.36	99.58	74.00	25.58	peak	No Limit
2	*	2471.400	56.13	33.37	89.50	54.00	35.50	AVG	No Limit
3		2483.500	28.94	33.41	62.35	74.00	-11.65	peak	
4		2483.500	17.25	33.41	50.66	54.00	-3.34	AVG	
5		2484.400	28.40	33.41	61.81	74.00	-12.19	peak	
6		2484.400	17.31	33.41	50.72	54.00	-3.28	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2472MHz

Vertical

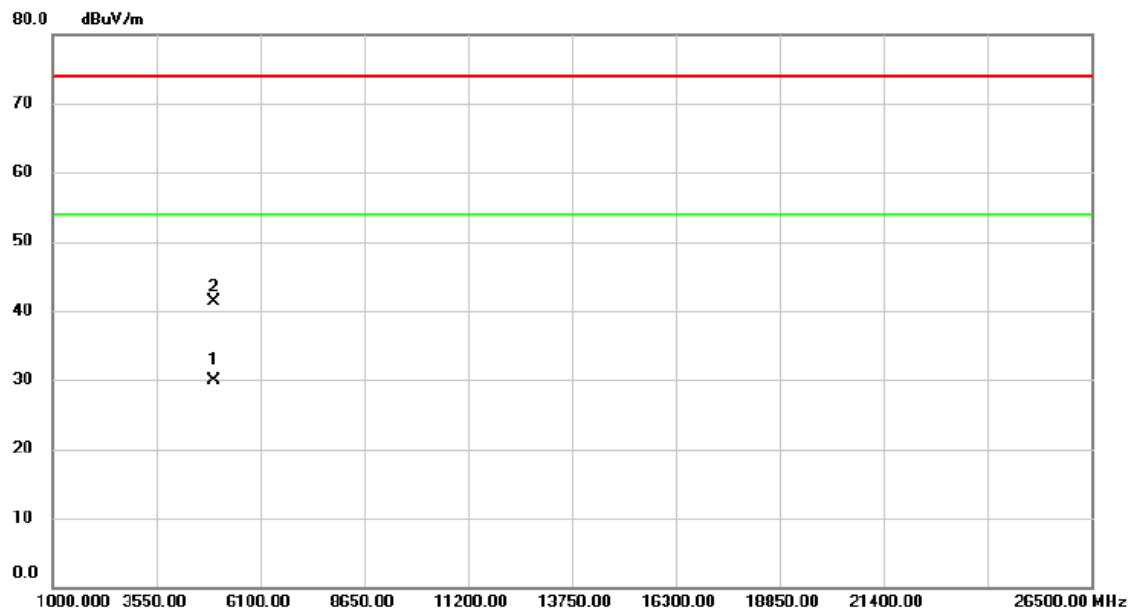
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1		4942.930	35.80	7.09	42.89	74.00	-31.11	peak
2 *		4944.180	24.13	7.09	31.22	54.00	-22.78	AVG

Orthogonal Axis :	X
Test Mode :	TX G MODE 2472MHz

Horizontal

No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Margin	Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2471.400	68.91	33.37	102.28	74.00	28.28	peak	No Limit
2	*	2473.100	59.12	33.37	92.49	54.00	38.49	AVG	No Limit
3		2483.500	28.98	33.41	62.39	74.00	-11.61	peak	
4		2483.500	19.06	33.41	52.47	54.00	-1.53	AVG	
5		2484.500	30.39	33.41	63.80	74.00	-10.20	peak	
6		2484.500	19.39	33.41	52.80	54.00	-1.20	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2472MHz

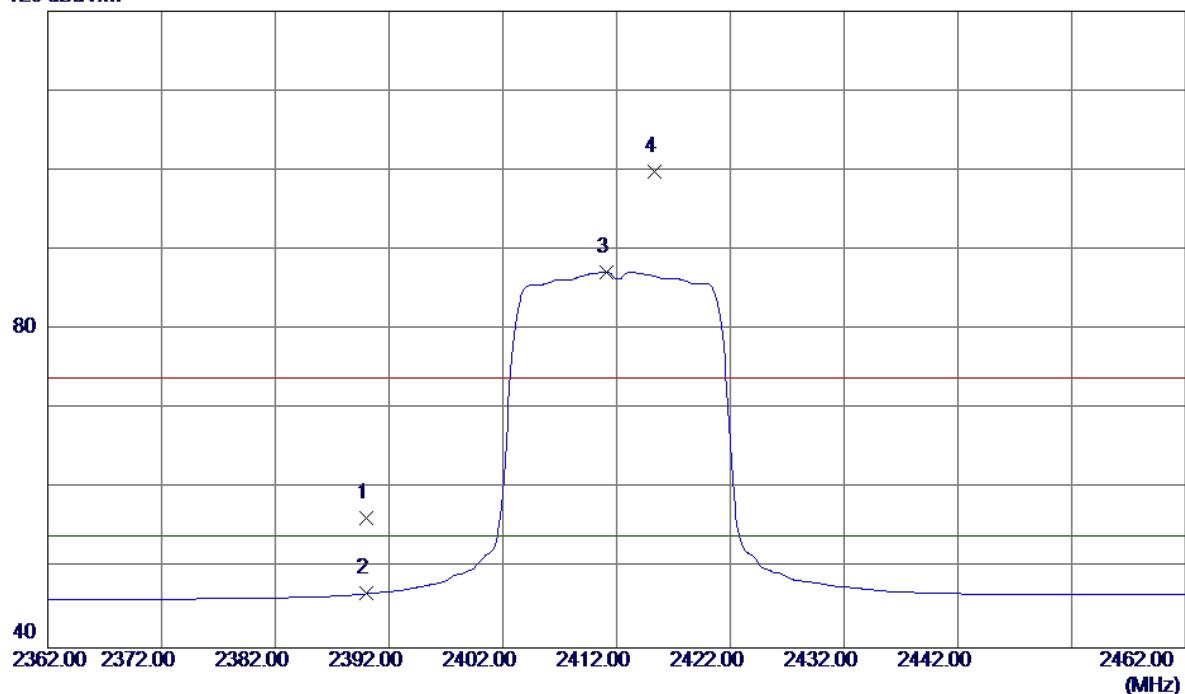
Horizontal

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	4944.080	22.72	7.09	29.81	54.00	-24.19	AVG
2		4945.905	34.20	7.09	41.29	74.00	-32.71	peak

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

Vertical

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	23.31	33.06	56.37	74.00	-17.63	Peak	
2	2390.0000	13.76	33.06	46.82	54.00	-7.18	AVG	
3 *	2411.1000	54.13	33.14	87.27	54.00	33.27	AVG	No Limit
4	2415.3000	66.63	33.15	99.78	74.00	25.78	Peak	No Limit

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2412MHz

Vertical

80 dBuV/m



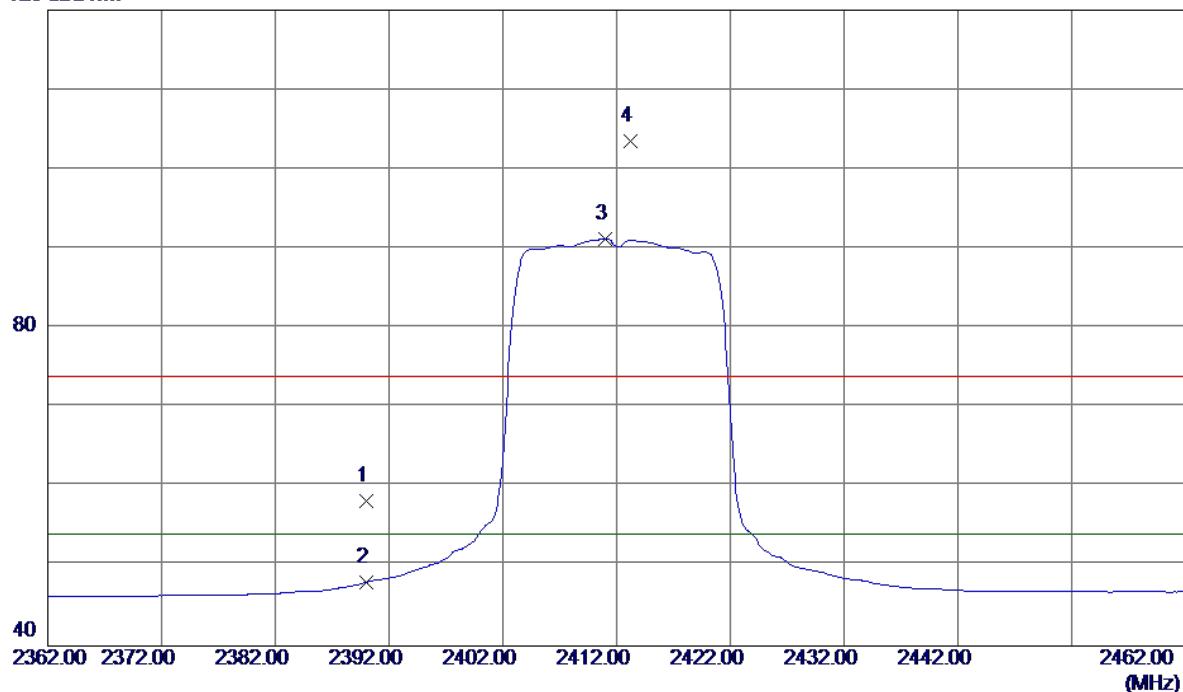
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.0000	25.17	6.66	31.83	54.00	-22.17	AVG	
2	4826.1500	35.63	6.67	42.30	74.00	-31.70	Peak	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2412MHz

Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.24	33.06	58.30	74.00	-15.70	Peak	
2	2390.0000	14.96	33.06	48.02	54.00	-5.98	AVG	
3 *	2411.0000	58.11	33.14	91.25	54.00	37.25	AVG	No Limit
4	2413.2000	70.38	33.14	103.52	74.00	29.52	Peak	No Limit

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2412MHz

Horizontal

80 dBuV/m

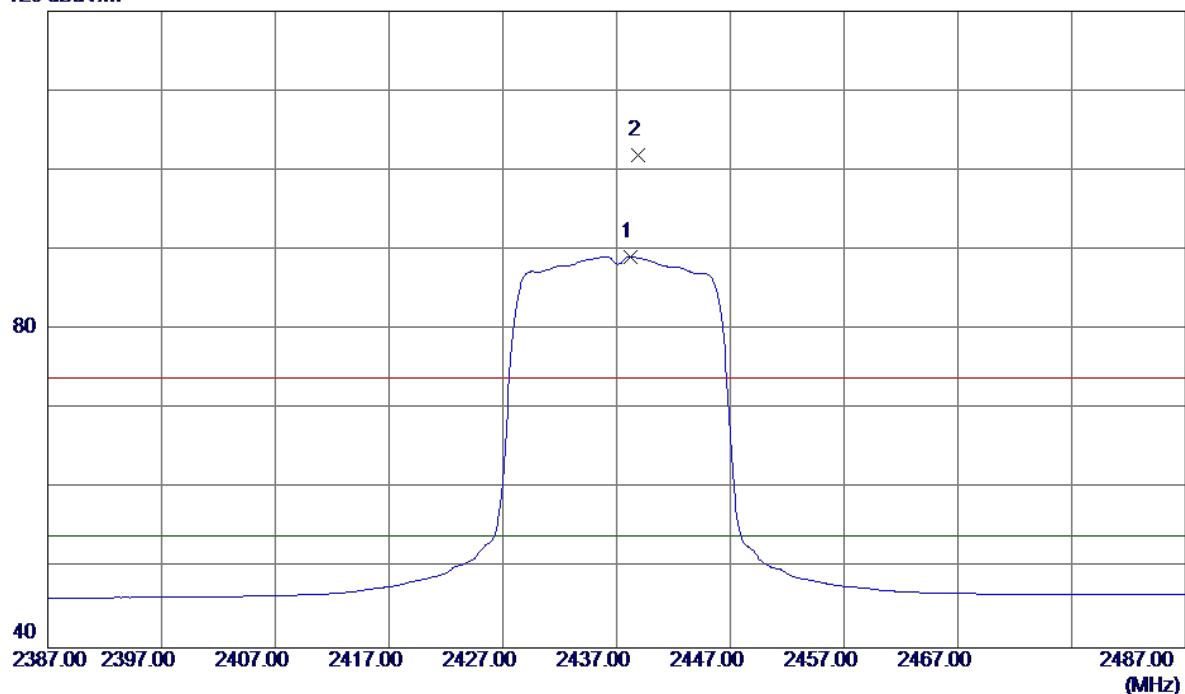


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.3500	23.55	6.66	30.21	54.00	-23.79	AVG	
2	4825.1500	34.54	6.66	41.20	74.00	-32.80	Peak	

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

Vertical

120 dBuV/m



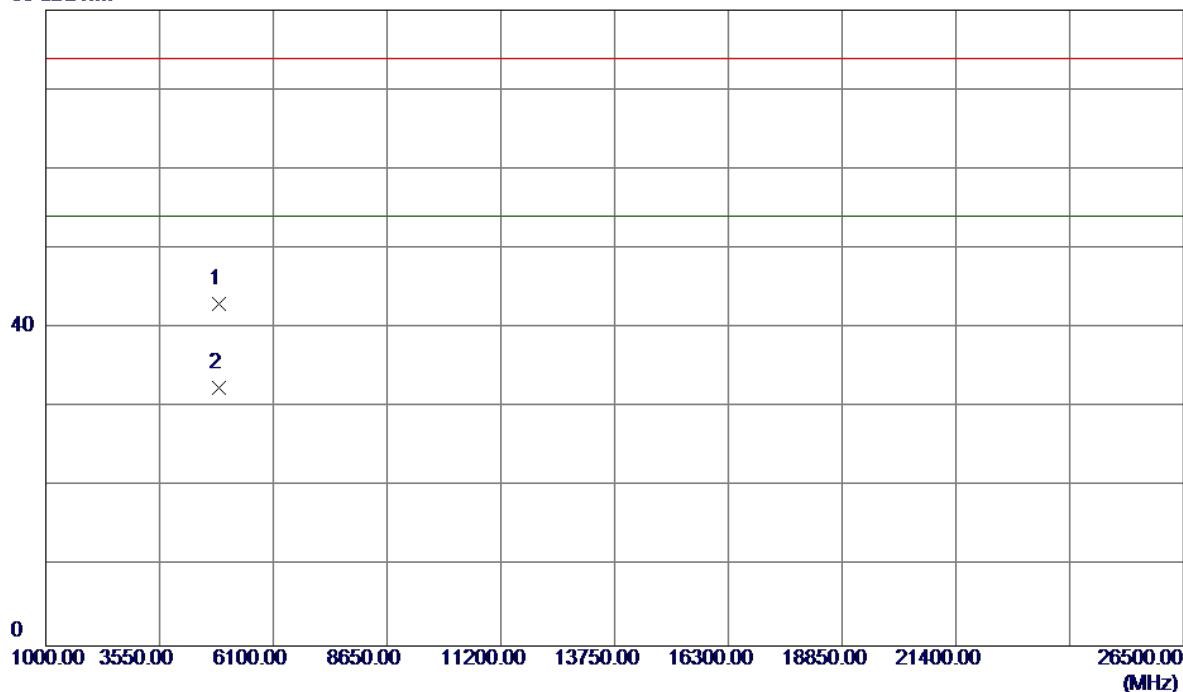
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2438.2000	55.94	33.24	89.18	54.00	35.18	AVG	No Limit
2	2438.9000	68.66	33.24	101.90	74.00	27.90	Peak	No Limit

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2437MHz

Vertical

80 dBuV/m



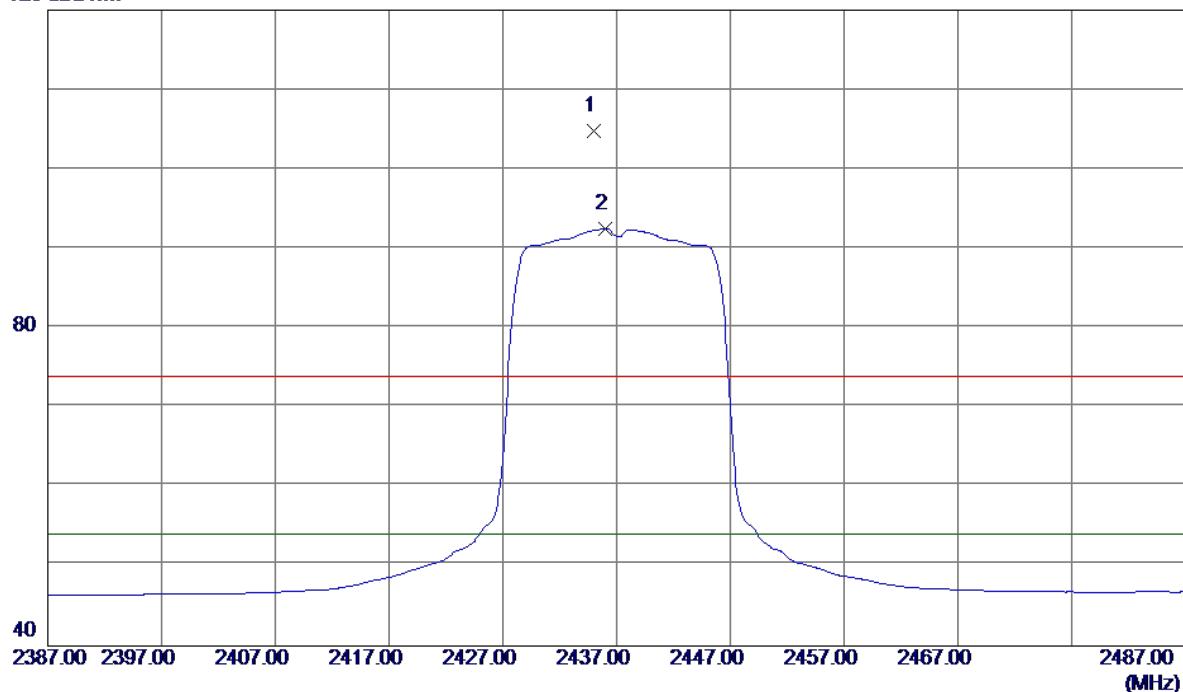
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.1500	36.27	6.83	43.10	74.00	-30.90	Peak	
2 *	4873.9000	25.57	6.84	32.41	54.00	-21.59	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2437MHz

Horizontal

120 dBuV/m



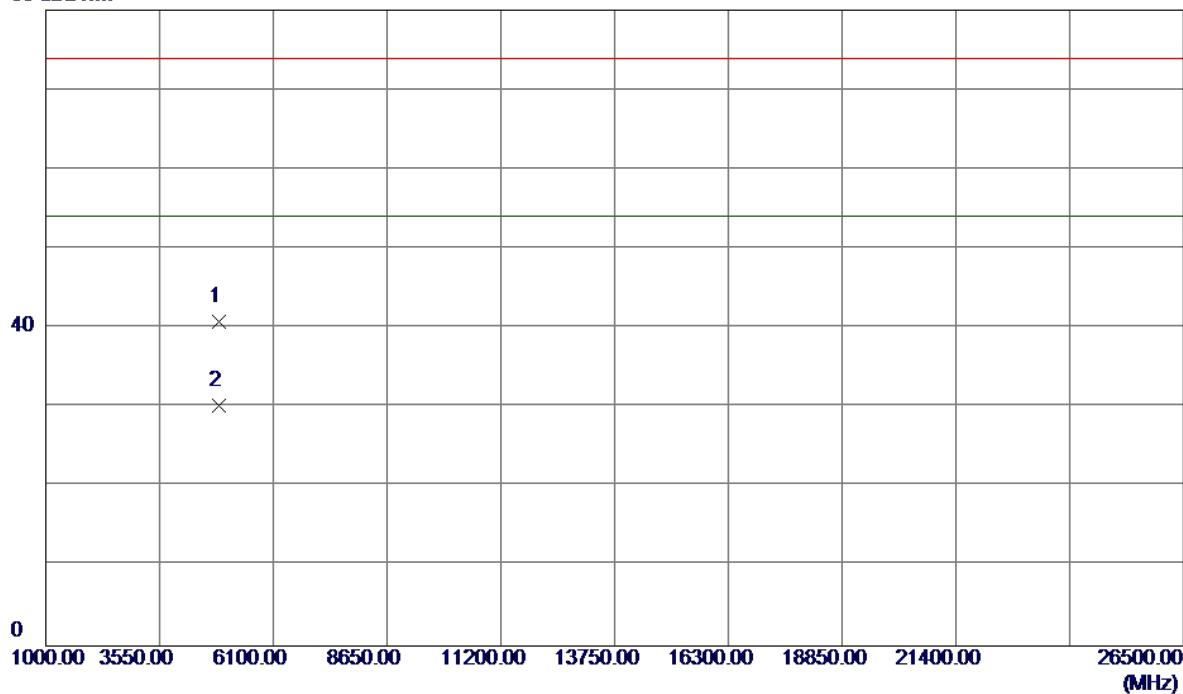
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.000	71.60	33.23	104.83	74.00	30.83	Peak	No Limit
2 *	2436.000	59.27	33.23	92.50	54.00	38.50	AVG	No Limit

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2437MHz

Horizontal

80 dBuV/m

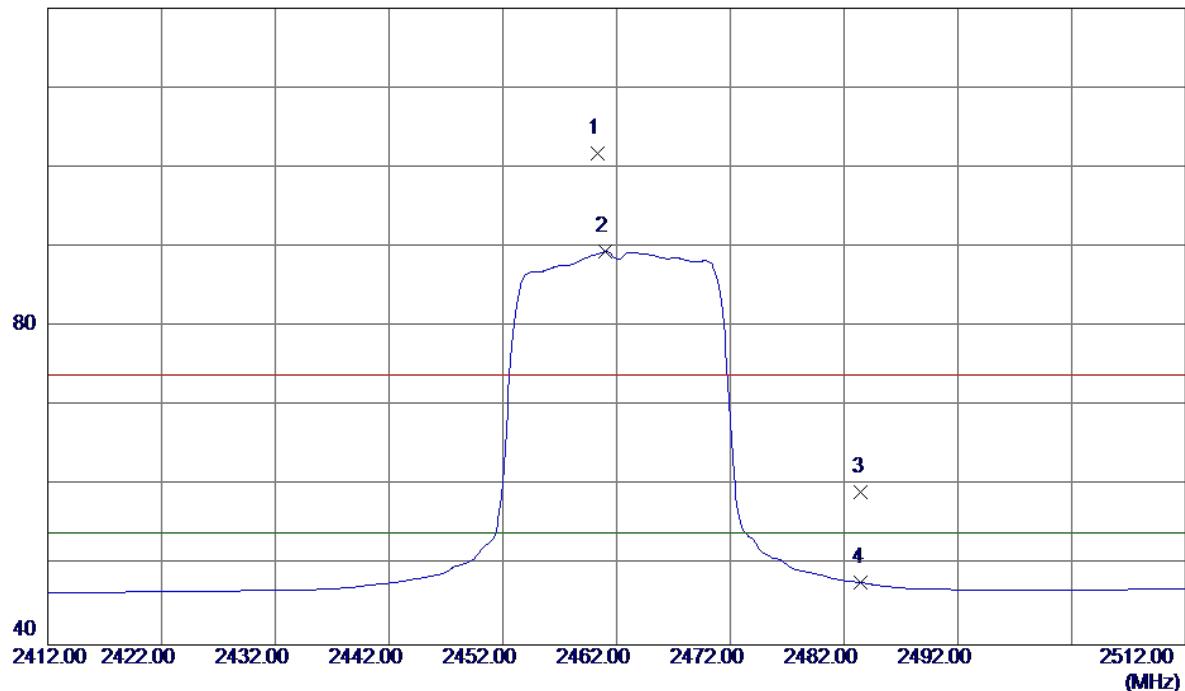


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.0000	34.00	6.83	40.83	74.00	-33.17	Peak	
2 *	4875.5000	23.46	6.84	30.30	54.00	-23.70	AVG	

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

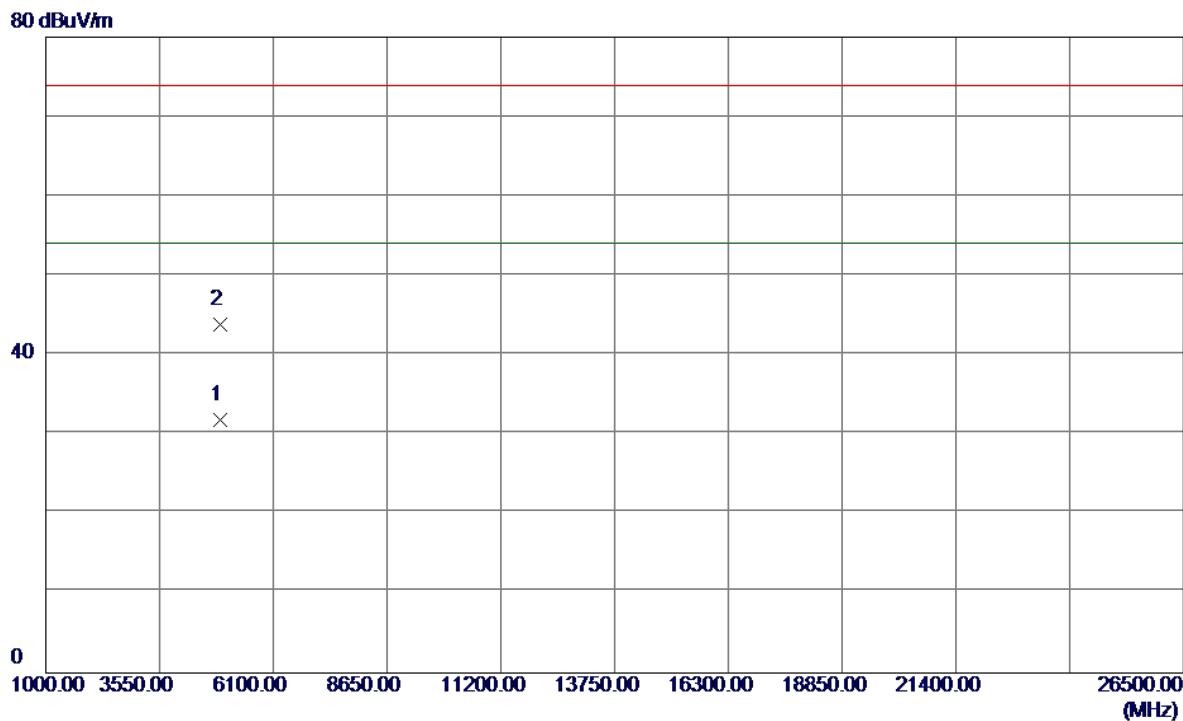
Vertical

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.3000	68.41	33.32	101.73	74.00	27.73	Peak	No Limit
2 *	2461.0000	56.07	33.32	89.39	54.00	35.39	AVG	No Limit
3	2483.5000	25.73	33.41	59.14	74.00	-14.86	Peak	
4	2483.5000	14.42	33.41	47.83	54.00	-6.17	AVG	

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

Vertical

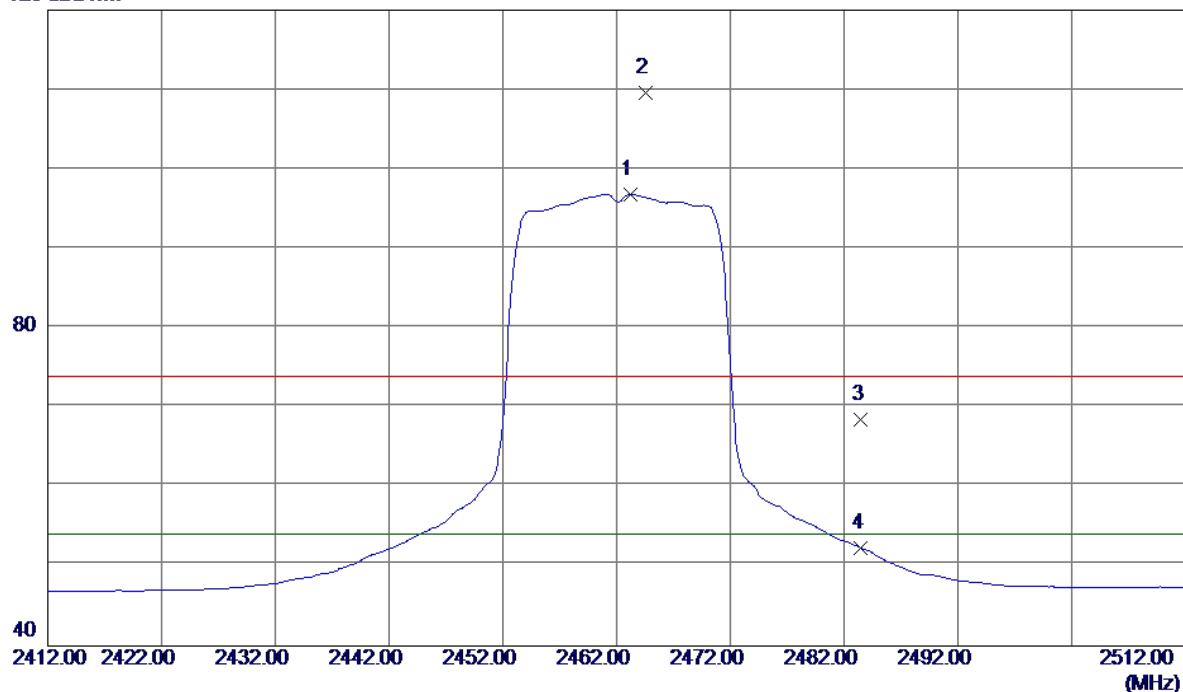
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4922.7500	24.78	7.01	31.79	54.00	-22.21	AVG	
2	4924.1000	36.81	7.02	43.83	74.00	-30.17	Peak	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2463.2000	63.50	33.33	96.83	54.00	42.83	AVG	No Limit
2	2464.6000	76.19	33.34	109.53	74.00	35.53	Peak	No Limit
3	2483.5000	35.00	33.41	68.41	74.00	-5.59	Peak	
4	2483.5000	18.93	33.41	52.34	54.00	-1.66	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

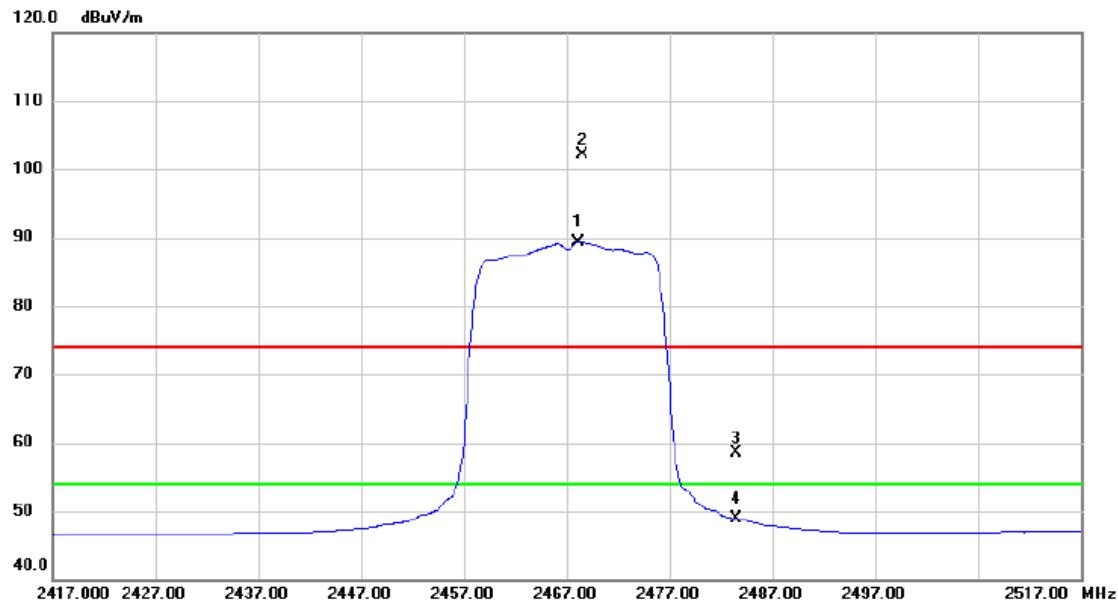
Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4922.2500	33.30	7.01	40.31	74.00	-33.69	Peak	
2 *	4924.2000	23.76	7.02	30.78	54.00	-23.22	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2467MHz

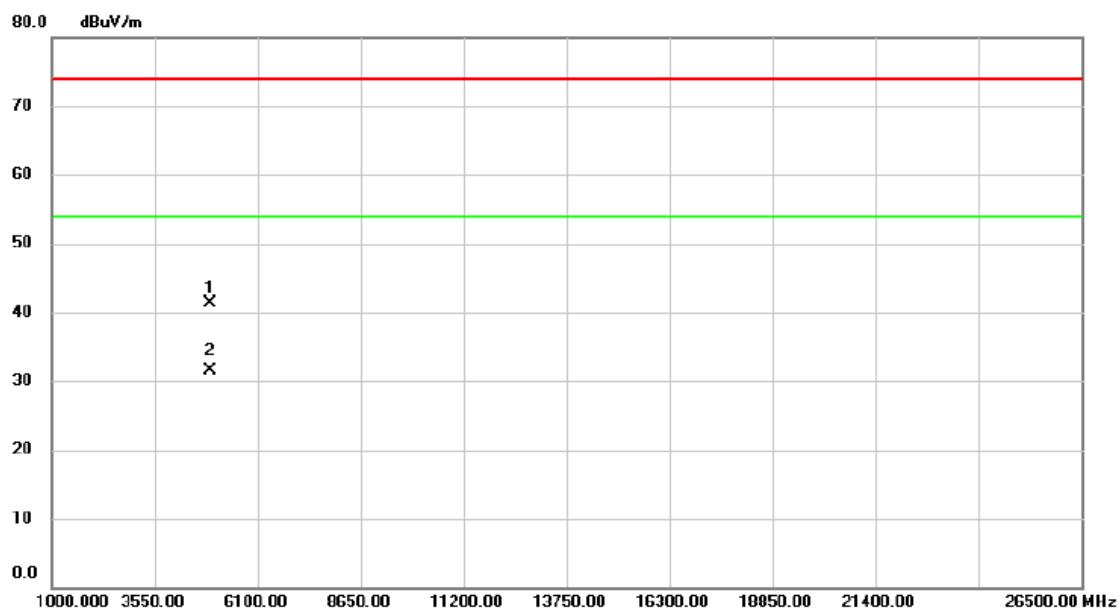
Vertical

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2468.200	55.98	33.35	89.33	54.00	35.33	AVG	No Limit
2	X	2468.500	68.67	33.35	102.02	74.00	28.02	peak	No Limit
3		2483.500	25.15	33.41	58.56	74.00	-15.44	peak	
4		2483.500	15.46	33.41	48.87	54.00	-5.13	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2467MHz

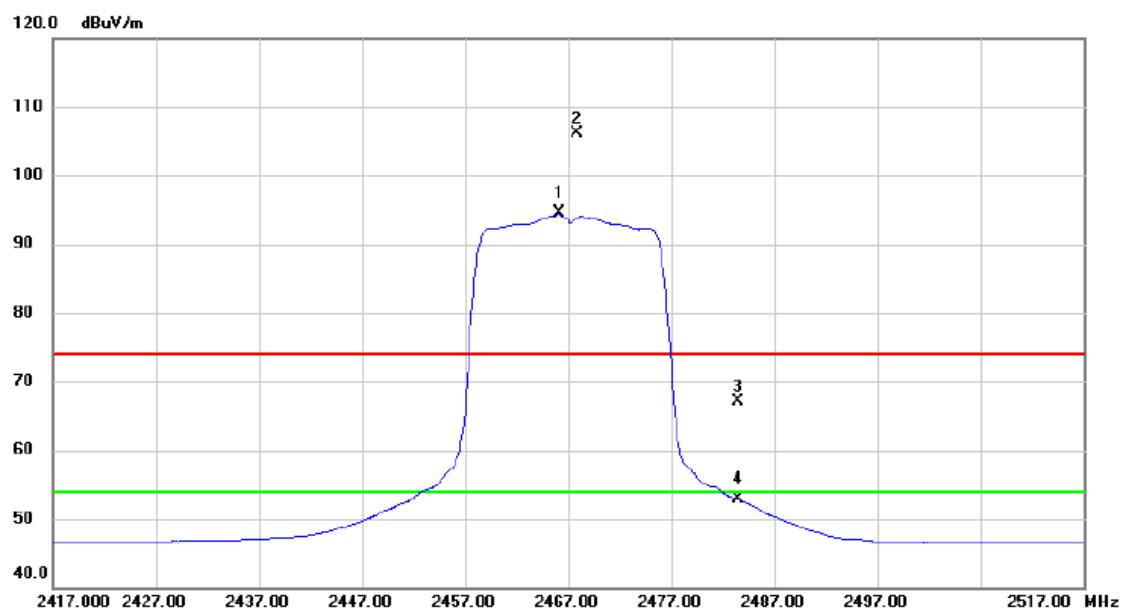
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4933.950	34.25	7.05	41.30	74.00	-32.70	peak	
2 *		4934.300	24.51	7.05	31.56	54.00	-22.44	Avg	

Orthogonal Axis : X

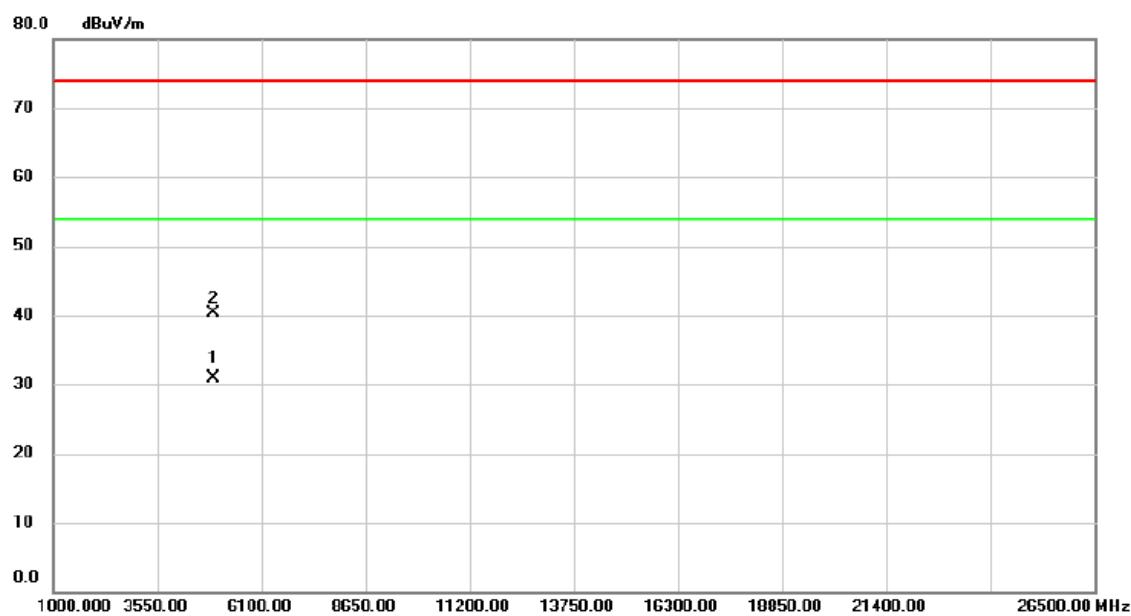
Test Mode : TX N-20M MODE 2467MHz

Horizontal

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin dB	Detector	Comment
1	*	2466.100	61.07	33.34	94.41	54.00	40.41	AVG	No Limit
2	X	2467.800	72.69	33.35	106.04	74.00	32.04	peak	No Limit
3		2483.500	33.79	33.41	67.20	74.00	-6.80	peak	
4		2483.500	19.47	33.41	52.88	54.00	-1.12	AVG	

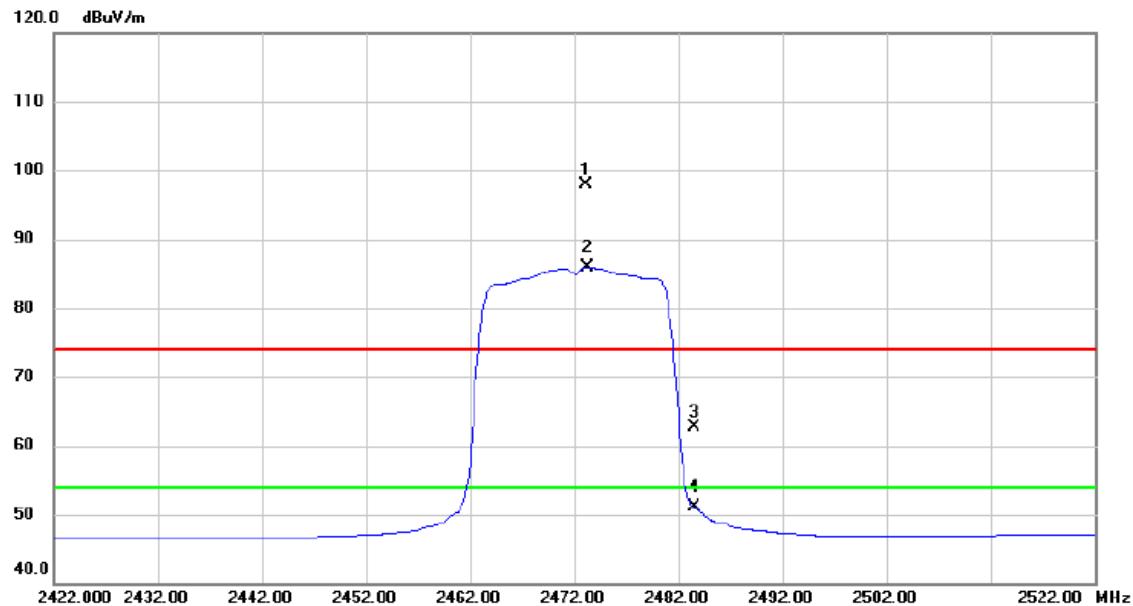
Orthogonal Axis : X

Test Mode : TX N-20M MODE 2467MHz

Horizontal

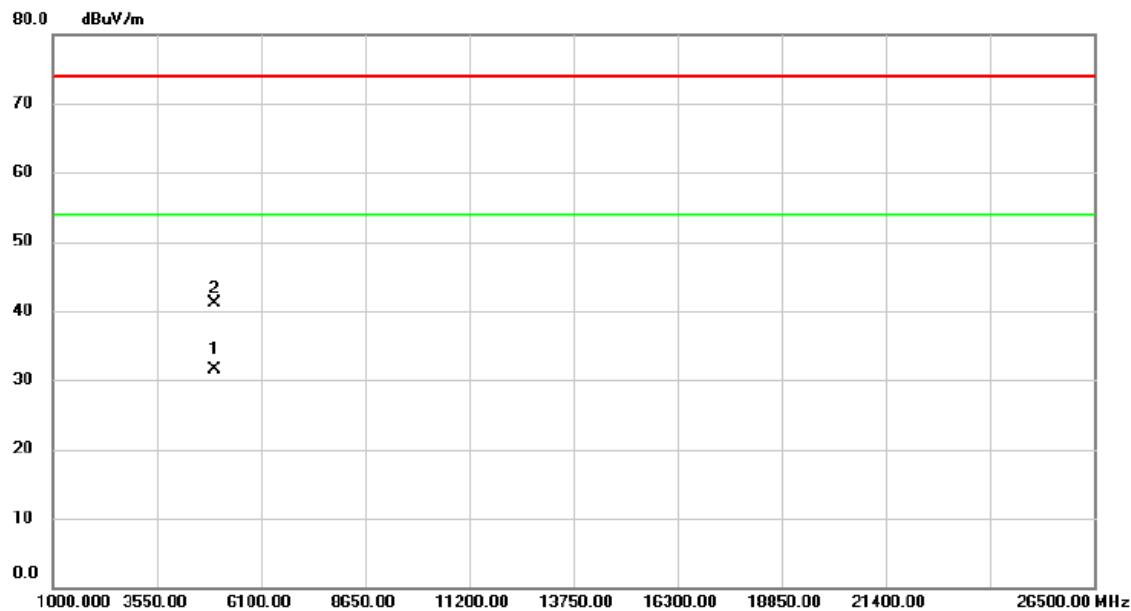
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	4934.250	23.81	7.05	30.86	54.00	-23.14	AVG
2		4935.700	33.15	7.06	40.21	74.00	-33.79	peak

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2472MHz

Vertical

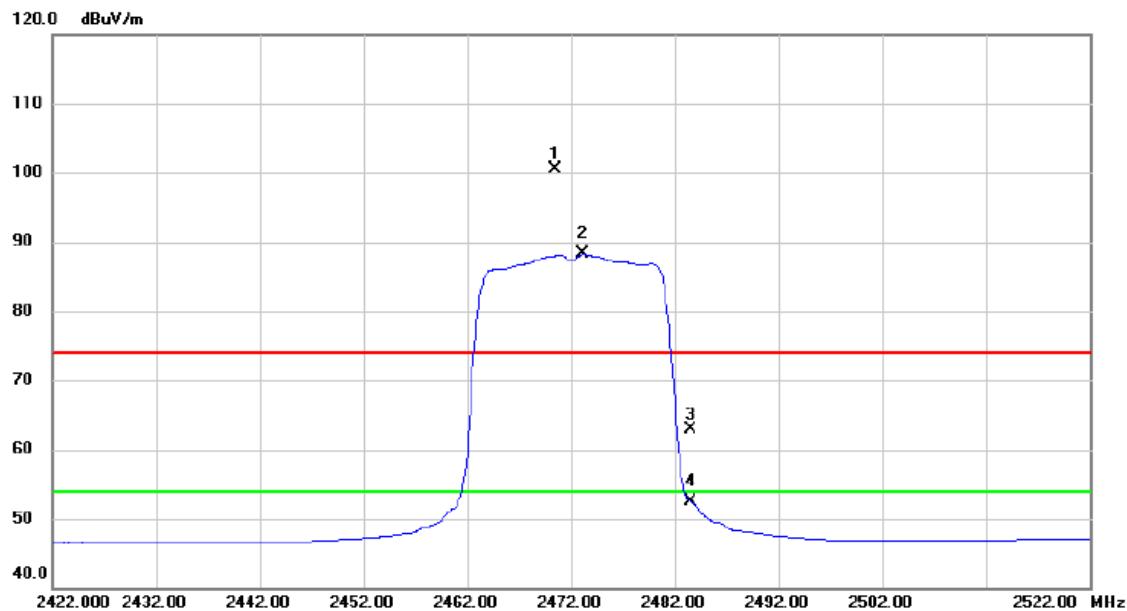
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1	X	2473.100	64.57	33.37	97.94	74.00	23.94	peak No Limit
2	*	2473.300	52.62	33.37	85.99	54.00	31.99	AVG No Limit
3		2483.500	29.28	33.41	62.69	74.00	-11.31	peak
4		2483.500	17.67	33.41	51.08	54.00	-2.92	AVG

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2472MHz

Vertical

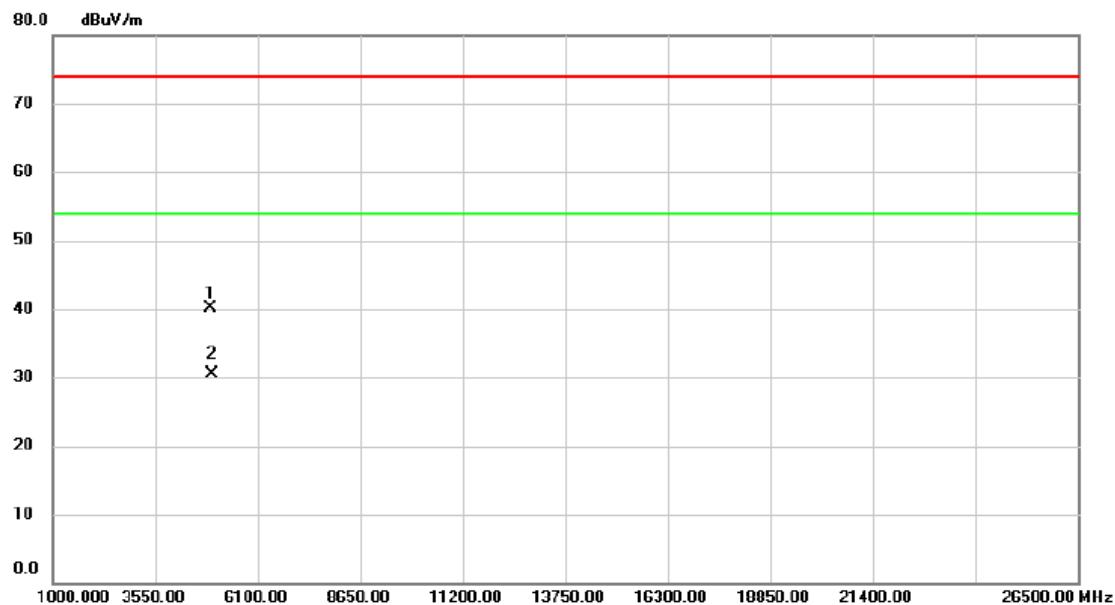
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4944.200	24.32	7.09	31.41	54.00	-22.59	AVG	
2		4944.250	34.02	7.09	41.11	74.00	-32.89	peak	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2472MHz

Horizontal

No.	Mk.	Freq. MHz	Reading Level dB _{uV}	Correct Factor dB	Measure- ment dB _{uV/m}	Limit dB _{uV/m}	Margin dB	Detector	Comment
1	X	2470.500	67.11	33.36	100.47	74.00	26.47	peak	No Limit
2	*	2473.200	54.85	33.37	88.22	54.00	34.22	AVG	No Limit
3		2483.500	29.54	33.41	62.95	74.00	-11.05	peak	
4		2483.500	19.15	33.41	52.56	54.00	-1.44	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2472MHz

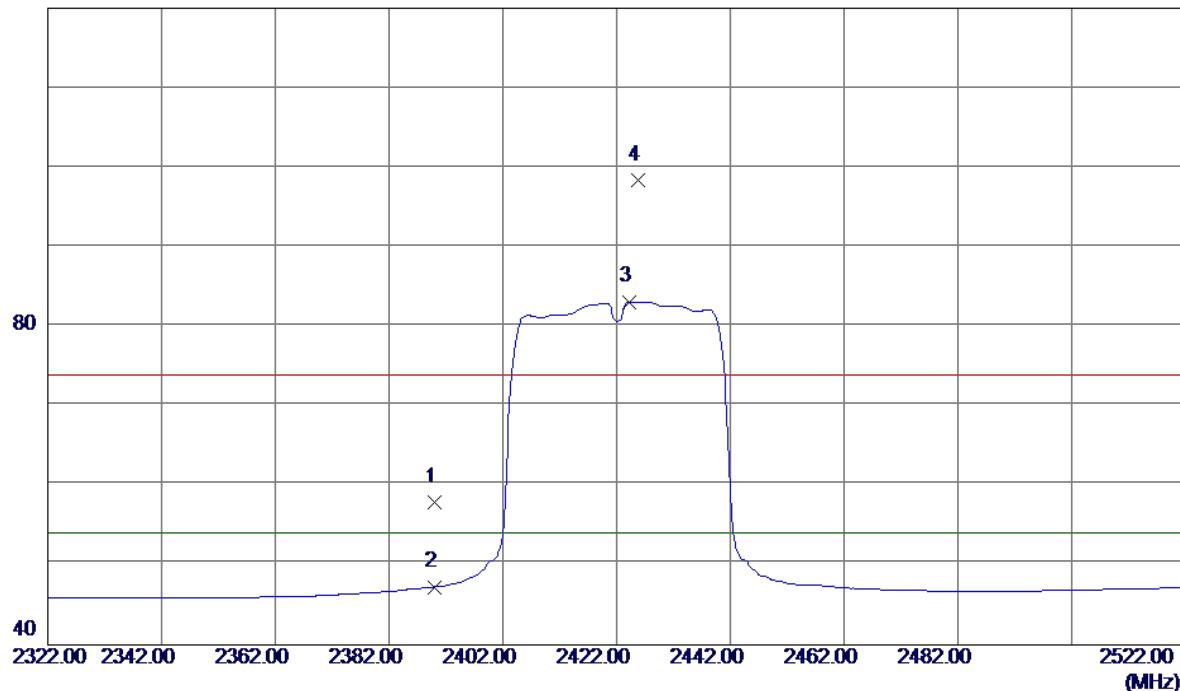
Horizontal

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4940.350	32.94	7.07	40.01	74.00	-33.99	peak	
2 *		4944.150	23.50	7.09	30.59	54.00	-23.41	AVG	

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

Vertical

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.86	33.06	57.92	74.00	-16.08	Peak	
2	2390.0000	14.22	33.06	47.28	54.00	-6.72	AVG	
3 *	2424.2000	49.94	33.18	83.12	54.00	29.12	AVG	No Limit
4	2425.8000	65.23	33.19	98.42	74.00	24.42	Peak	No Limit

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2422MHz

Vertical

80 dBuV/m



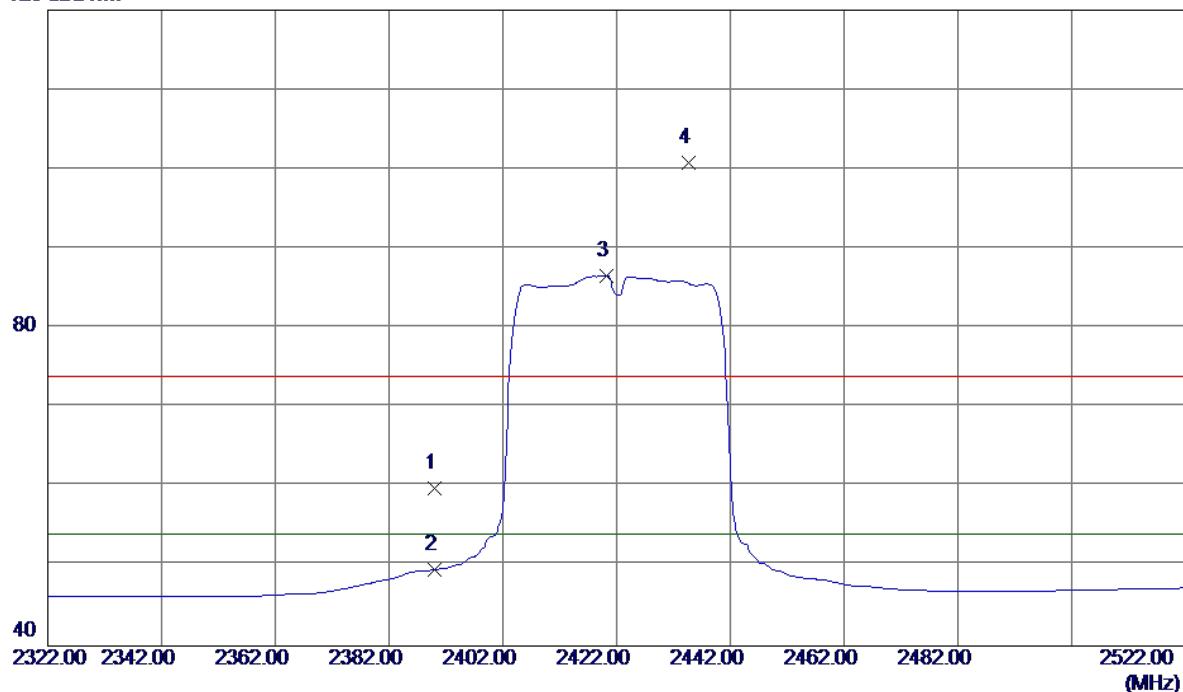
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4844.1000	23.89	6.73	30.62	54.00	-23.38	AVG	
2	4858.2500	34.54	6.78	41.32	74.00	-32.68	Peak	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2422MHz

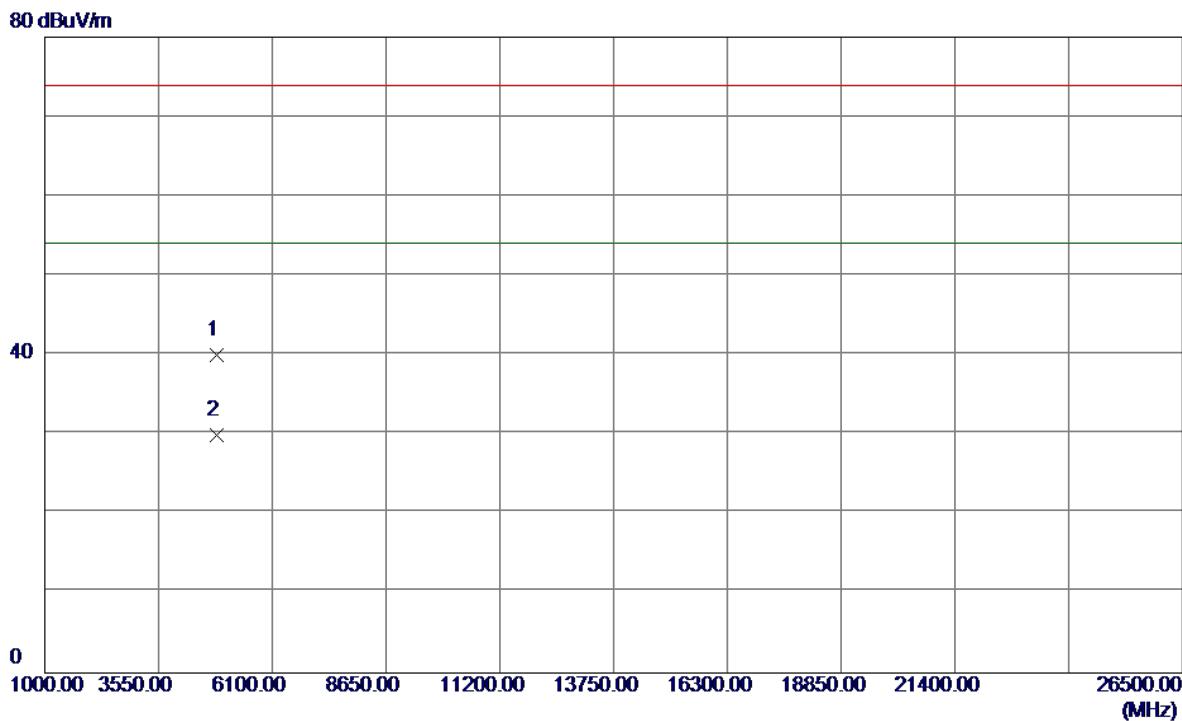
Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.72	33.06	59.78	74.00	-14.22	Peak	
2	2390.0000	16.55	33.06	49.61	54.00	-4.39	AVG	
3 *	2420.2000	53.43	33.17	86.60	54.00	32.60	AVG	No Limit
4	2434.6000	67.58	33.22	100.80	74.00	26.80	Peak	No Limit

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

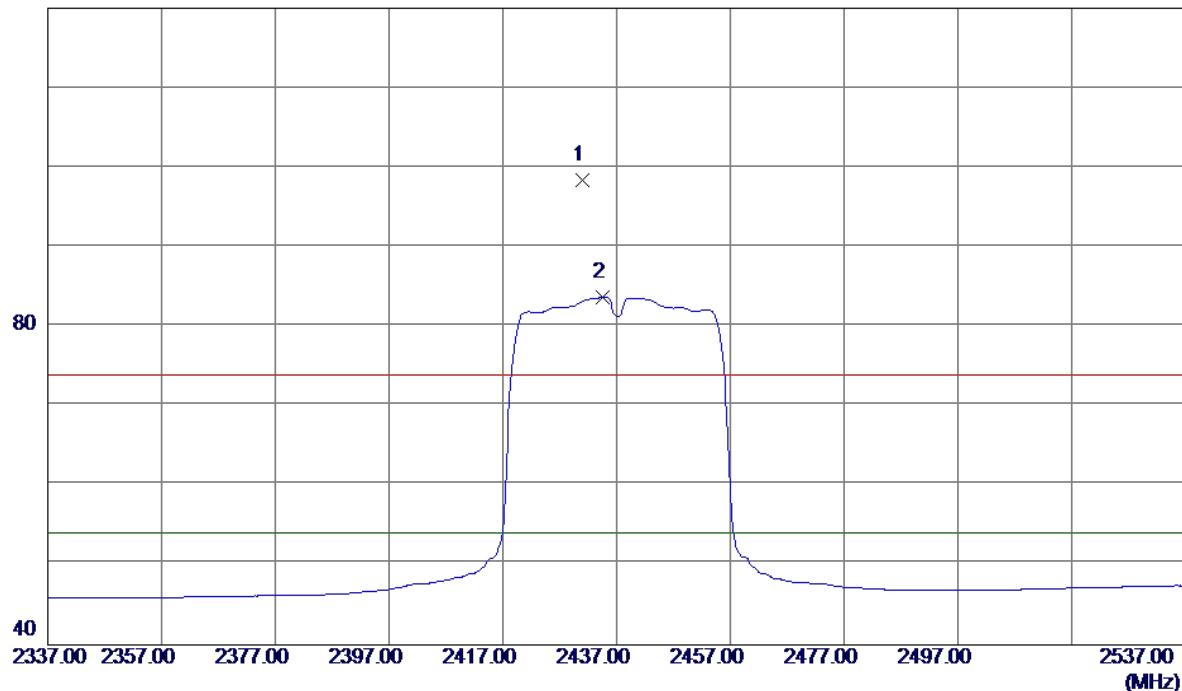
Horizontal

No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4841.4000	33.21	6.72	39.93	74.00	-34.07	Peak	
2 *	4844.0000	23.23	6.73	29.96	54.00	-24.04	AVG	

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

Vertical

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2431.0000	65.18	33.21	98.39	74.00	24.39	Peak	No Limit
2 *	2434.6000	50.42	33.22	83.64	54.00	29.64	AVG	No Limit

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2437MHz

Vertical

80 dBuV/m



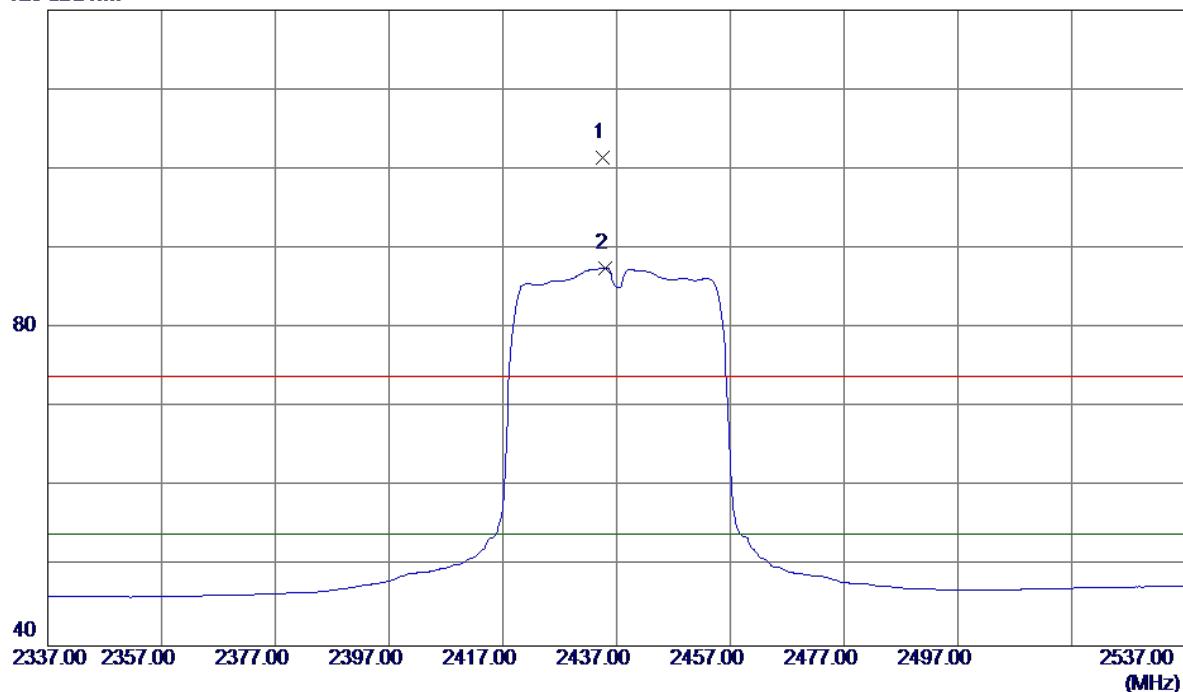
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.4100	35.90	6.83	42.73	74.00	-31.27	Peak	
2 *	4873.9950	24.37	6.84	31.21	54.00	-22.79	AVG	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2437MHz

Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.6000	68.28	33.22	101.50	74.00	27.50	Peak	No Limit
2 *	2435.0000	54.35	33.23	87.58	54.00	33.58	AVG	No Limit

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2437MHz

Horizontal

80 dBuV/m

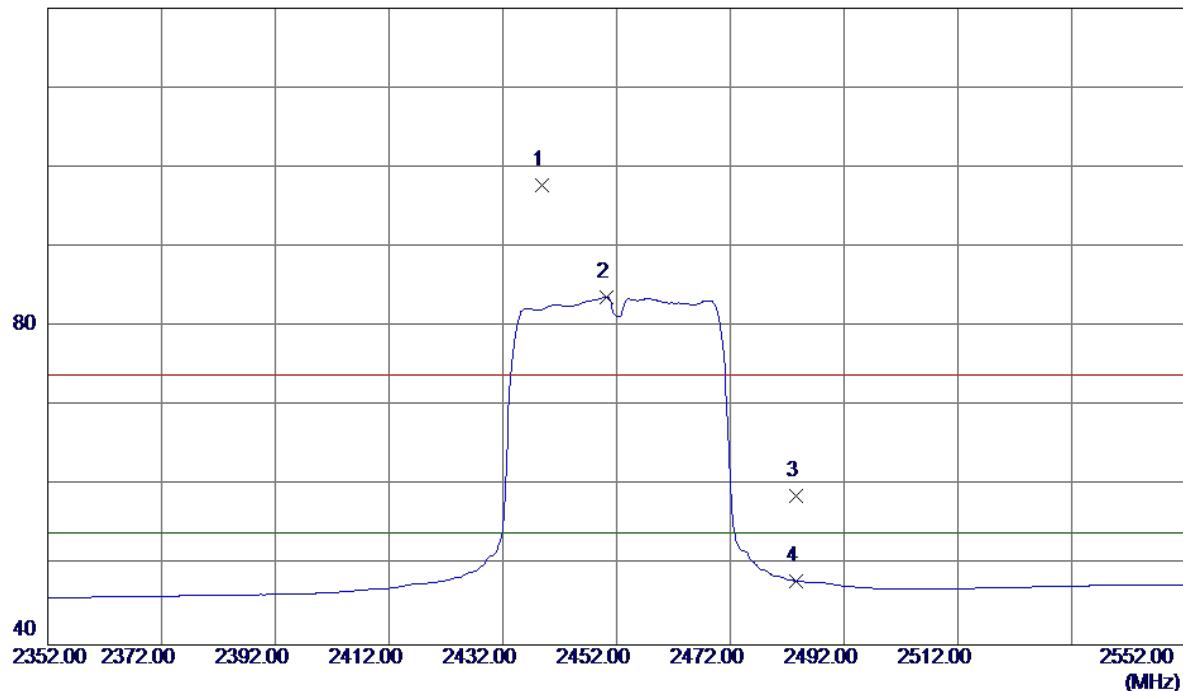


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.4000	35.13	6.84	41.97	74.00	-32.03	Peak	
2 *	4875.3950	23.68	6.84	30.52	54.00	-23.48	AVG	

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

Vertical

120 dBuV/m



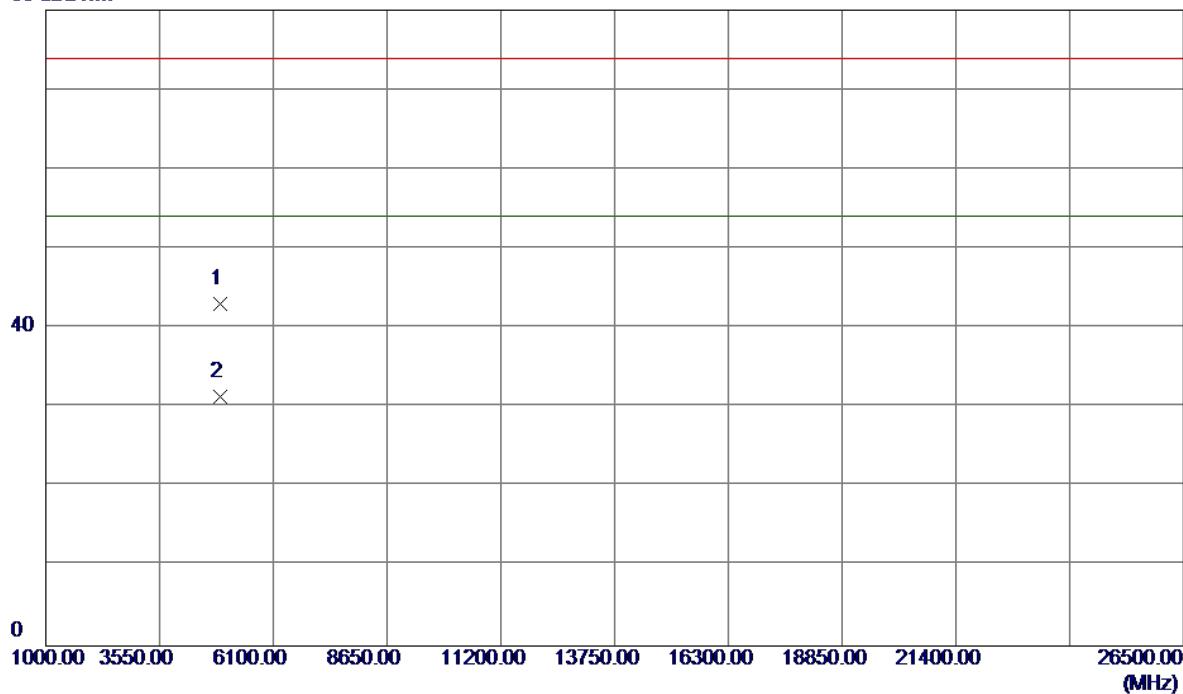
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2438.8000	64.46	33.24	97.70	74.00	23.70	Peak	No Limit
2 *	2450.2000	50.40	33.28	83.68	54.00	29.68	AVG	No Limit
3	2483.5000	25.37	33.41	58.78	74.00	-15.22	Peak	
4	2483.5000	14.64	33.41	48.05	54.00	-5.95	AVG	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2452MHz

Vertical

80 dBuV/m



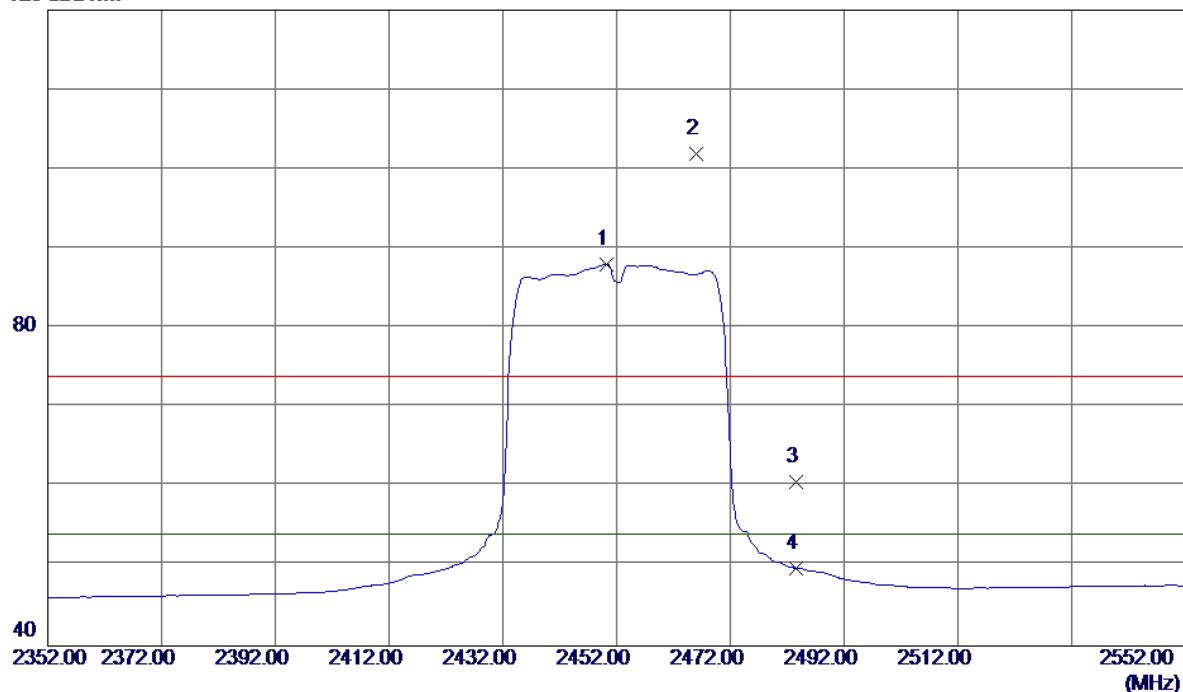
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4902.7750	36.06	6.94	43.00	74.00	-31.00	Peak	
2 *	4904.1950	24.37	6.95	31.32	54.00	-22.68	AVG	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2452MHz

Horizontal

120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2450.2000	54.74	33.28	88.02	54.00	34.02	AVG	No Limit
2	2466.0000	68.60	33.34	101.94	74.00	27.94	Peak	No Limit
3	2483.5000	27.16	33.41	60.57	74.00	-13.43	Peak	
4	2483.5000	16.39	33.41	49.80	54.00	-4.20	AVG	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2452MHz

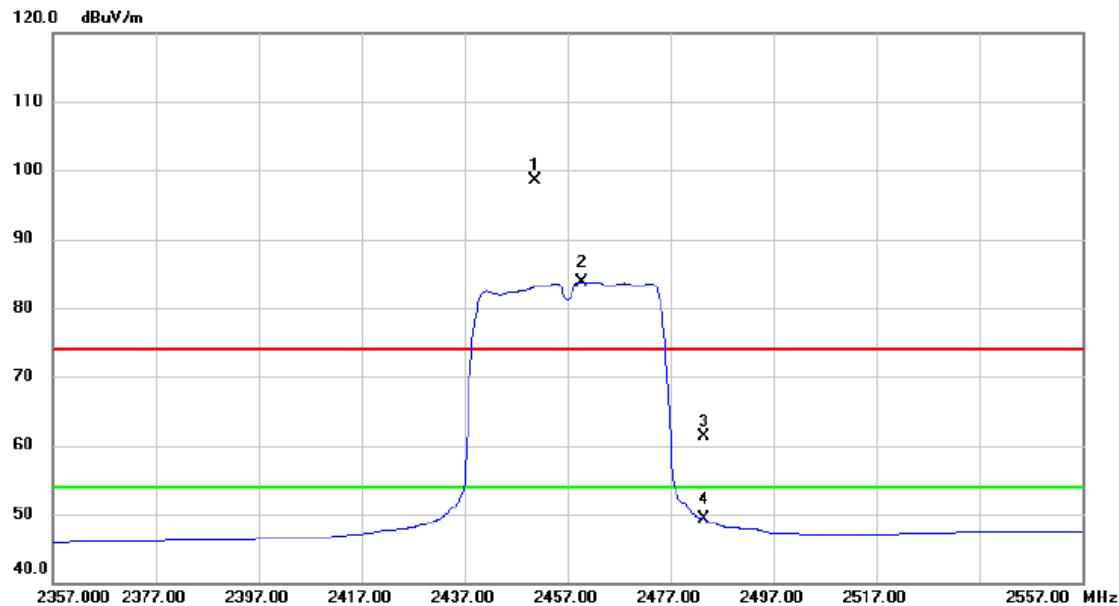
Horizontal

80 dBuV/m



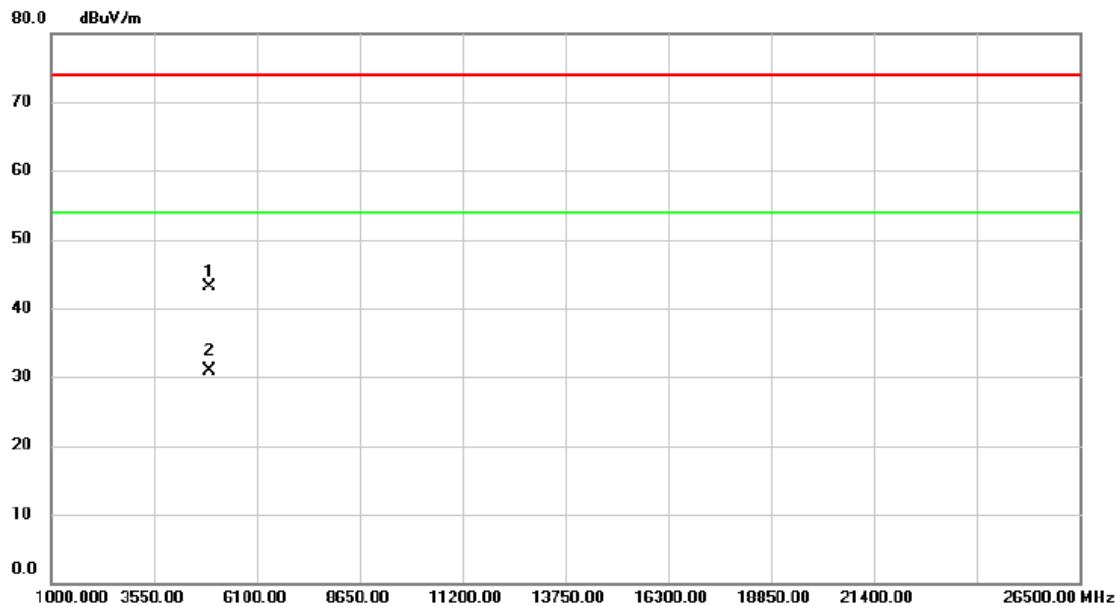
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4904.1650	34.42	6.95	41.37	74.00	-32.63	Peak	
2 *	4904.2100	23.06	6.95	30.01	54.00	-23.99	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2457MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2450.800	65.20	33.28	98.48	74.00	24.48	peak	No Limit
2	*	2459.800	50.48	33.32	83.80	54.00	29.80	AVG	No Limit
3		2483.500	27.93	33.41	61.34	74.00	-12.66	peak	
4		2483.500	15.92	33.41	49.33	54.00	-4.67	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2457MHz

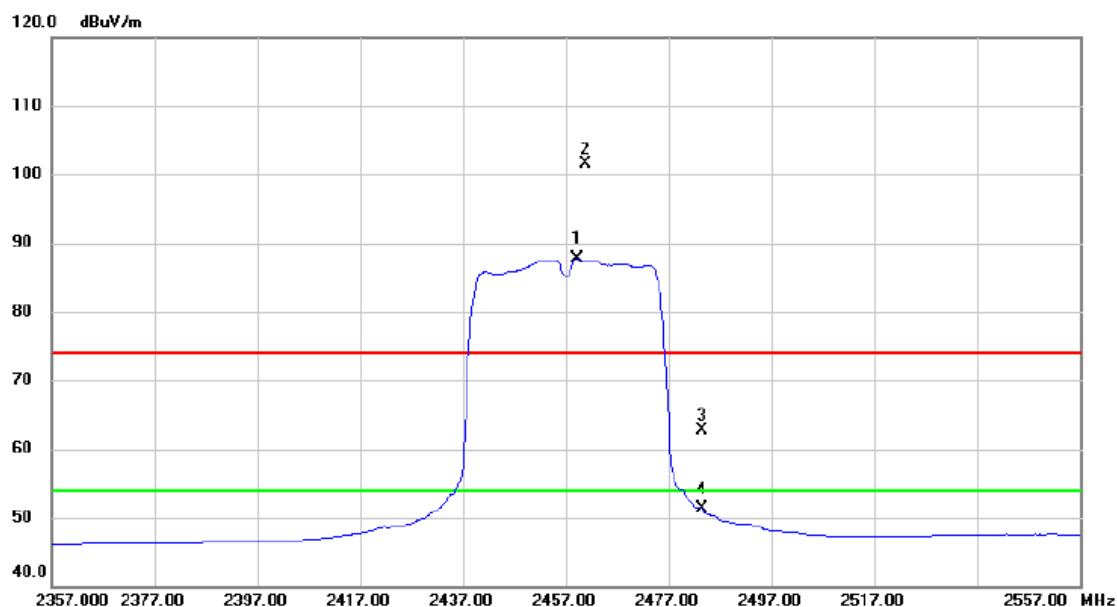
Vertical

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1		4912.340	36.03	6.98	43.01	74.00	-30.99	peak
2 *		4914.065	23.98	6.99	30.97	54.00	-23.03	AVG

Orthogonal Axis : X

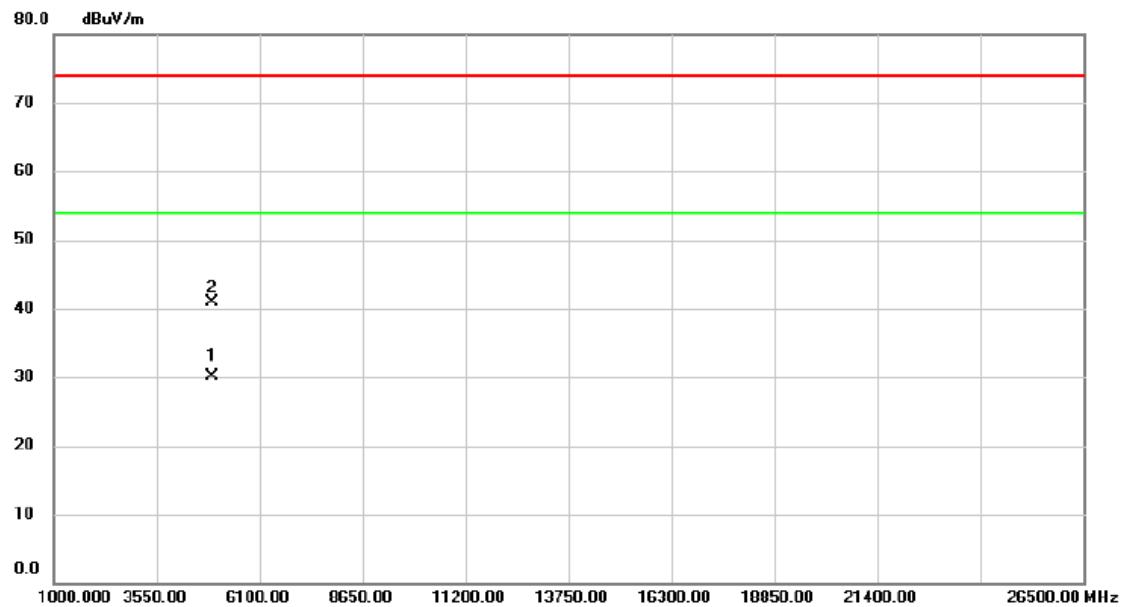
Test Mode : TX N-40M MODE 2457MHz

Horizontal



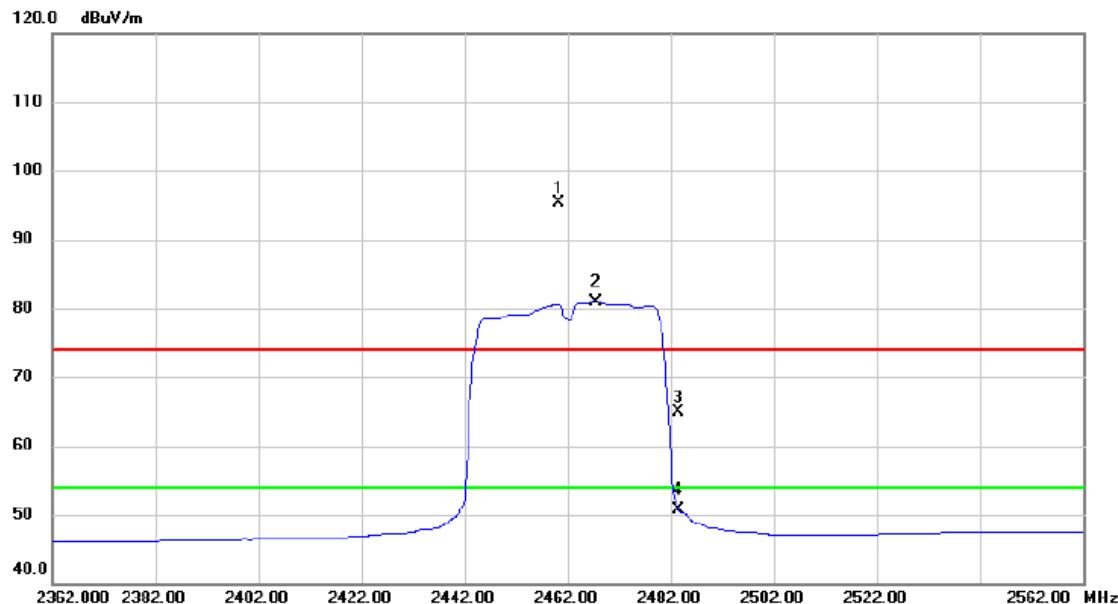
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1	*	2459.200	54.32	33.31	87.63	54.00	33.63	AVG No Limit
2	X	2460.800	68.13	33.32	101.45	74.00	27.45	peak No Limit
3		2483.500	29.37	33.41	62.78	74.00	-11.22	peak
4		2483.500	17.79	33.41	51.20	54.00	-2.80	AVG

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2457MHz

Horizontal

No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Margin	Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4913.495	23.16	6.98	30.14	54.00	-23.86	AVG	
2		4916.345	33.89	6.99	40.88	74.00	-33.12	peak	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2462MHz

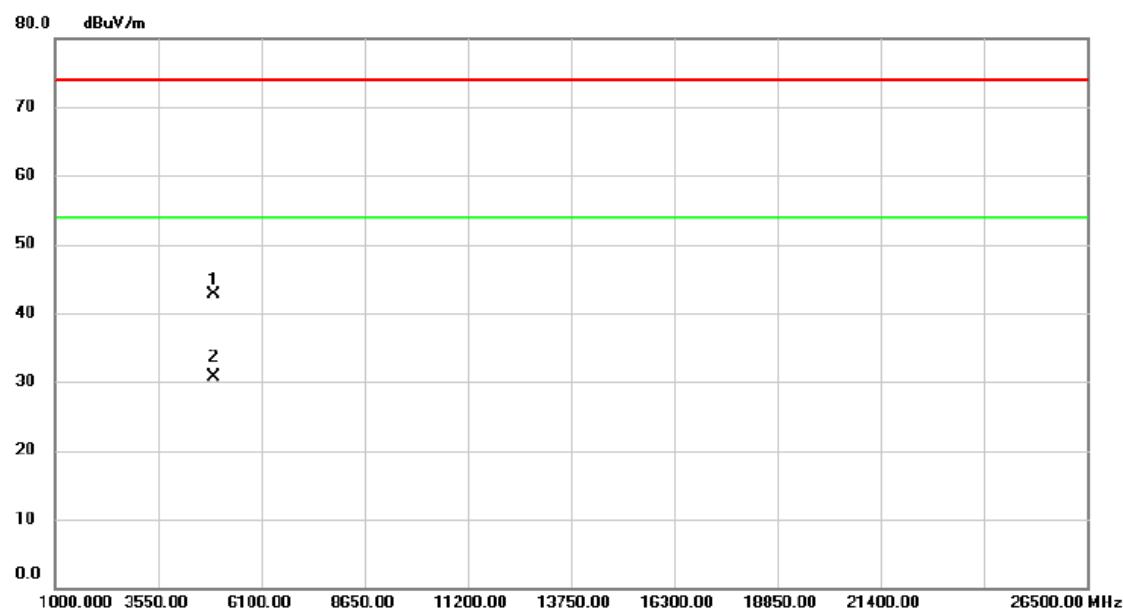
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dB _{UV}	dB	dB _{UV} /m	dB _{UV} /m	dB	Detector Comment
1	X	2460.200	62.02	33.32	95.34	74.00	21.34	peak No Limit
2	*	2467.600	47.59	33.35	80.94	54.00	26.94	AVG No Limit
3		2483.500	31.44	33.41	64.85	74.00	-9.15	peak
4		2483.500	17.33	33.41	50.74	54.00	-3.26	AVG

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2462MHz

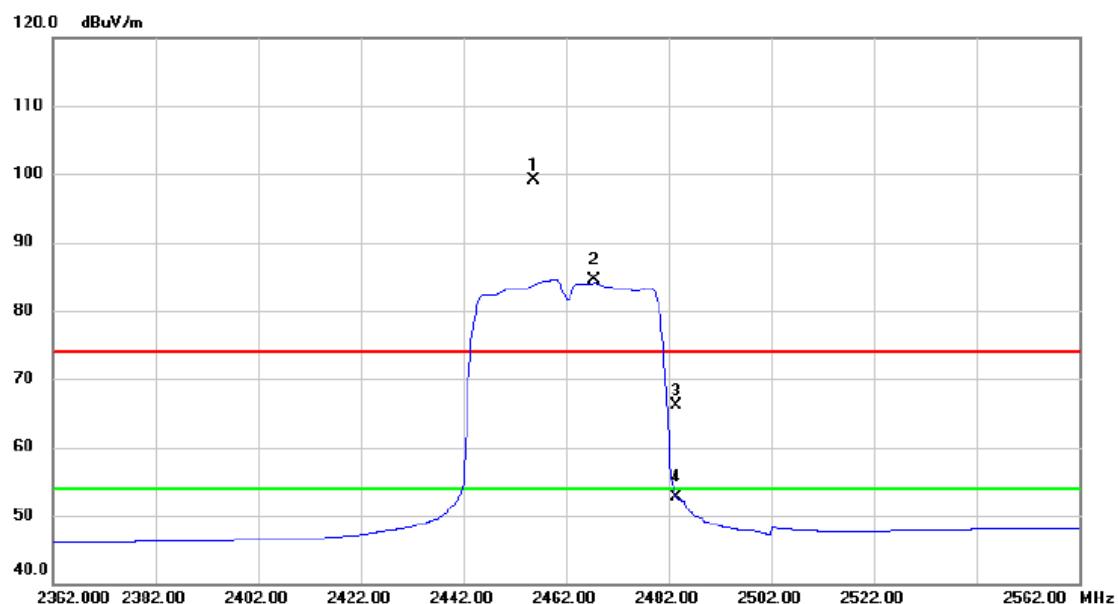
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4923.765	35.59	7.02	42.61	74.00	-31.39	peak	
2 *		4923.940	23.65	7.02	30.67	54.00	-23.33	AVG	

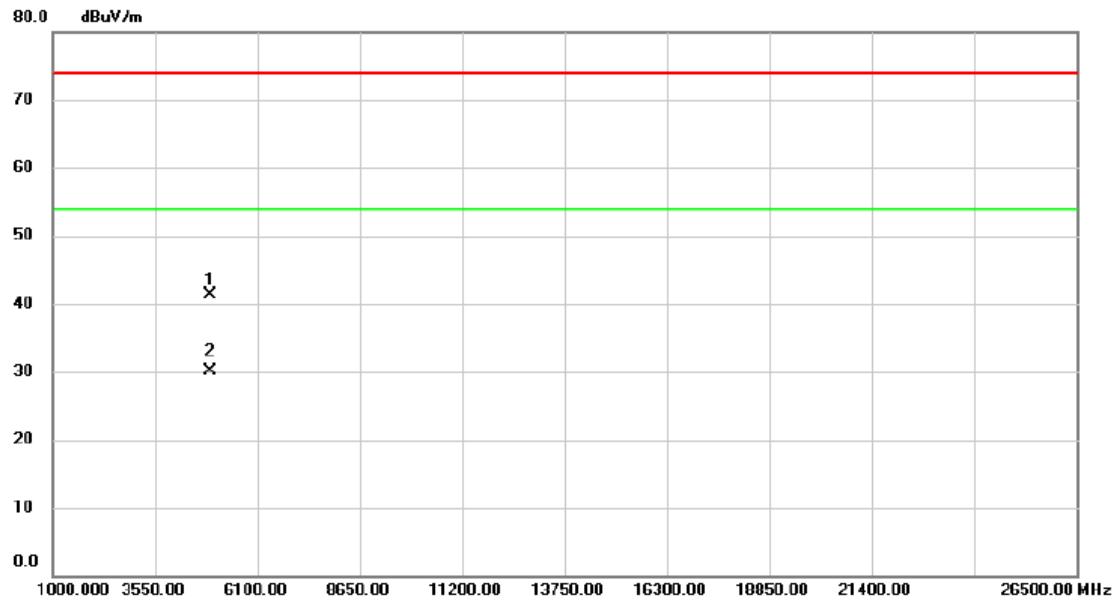
Orthogonal Axis : X

Test Mode : TX N-40M MODE 2462MHz

Horizontal

No.	Mk.	Freq. MHz	Reading Level dB _{UV}	Correct Factor	Measure- ment dB _{UV/m}	Limit dB	Margin	Detector	Comment
1	X	2455.800	65.78	33.31	99.09	74.00	25.09	peak	No Limit
2	*	2467.600	51.17	33.35	84.52	54.00	30.52	AVG	No Limit
3		2483.500	32.79	33.41	66.20	74.00	-7.80	peak	
4		2483.500	19.34	33.41	52.75	54.00	-1.25	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2462MHz

Horizontal

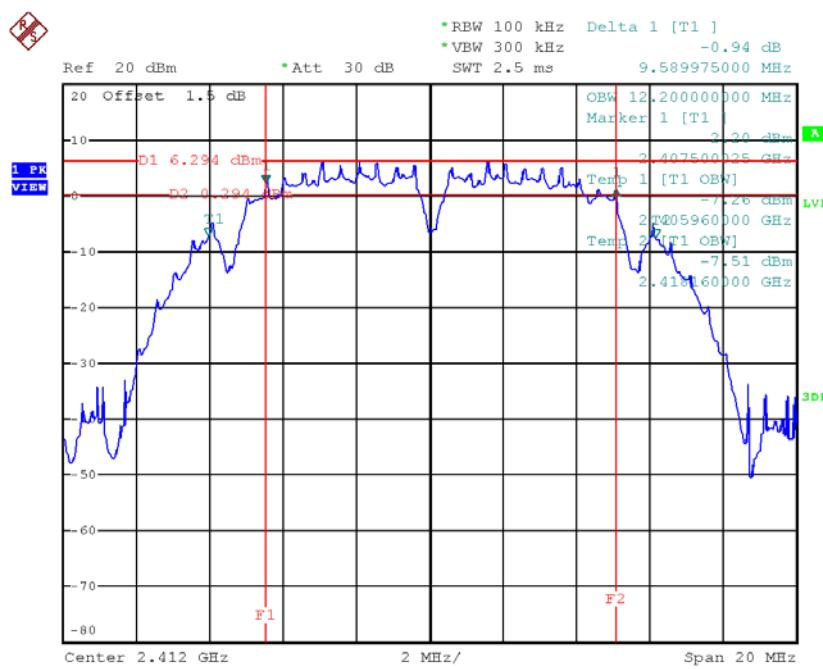
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1		4923.000	34.31	7.02	41.33	74.00	-32.67	peak
2 *		4924.110	23.13	7.02	30.15	54.00	-23.85	AVG

APPENDIX E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

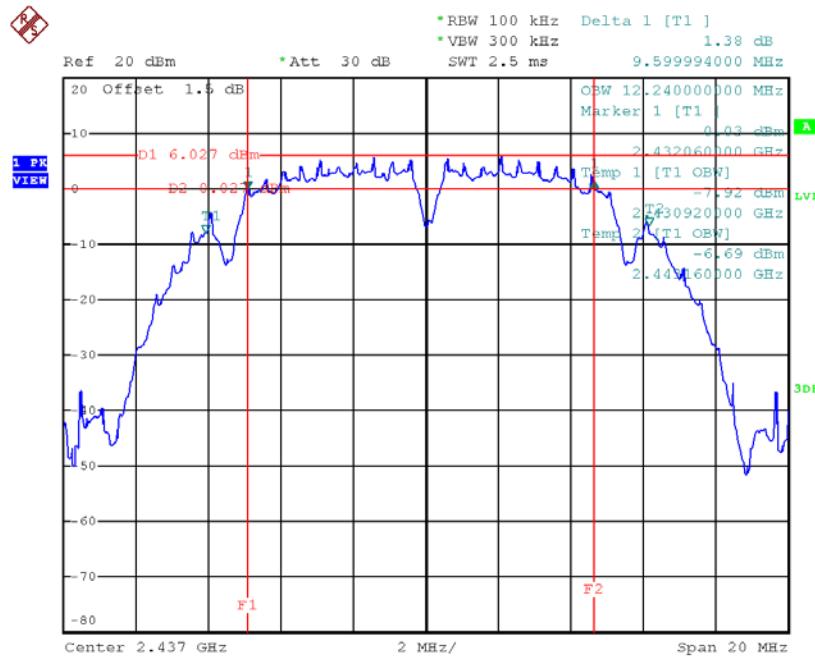
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	9.59	12.2	500	Complies
2437	9.60	12.24	500	Complies
2462	9.61	12.24	500	Complies

TX CH01



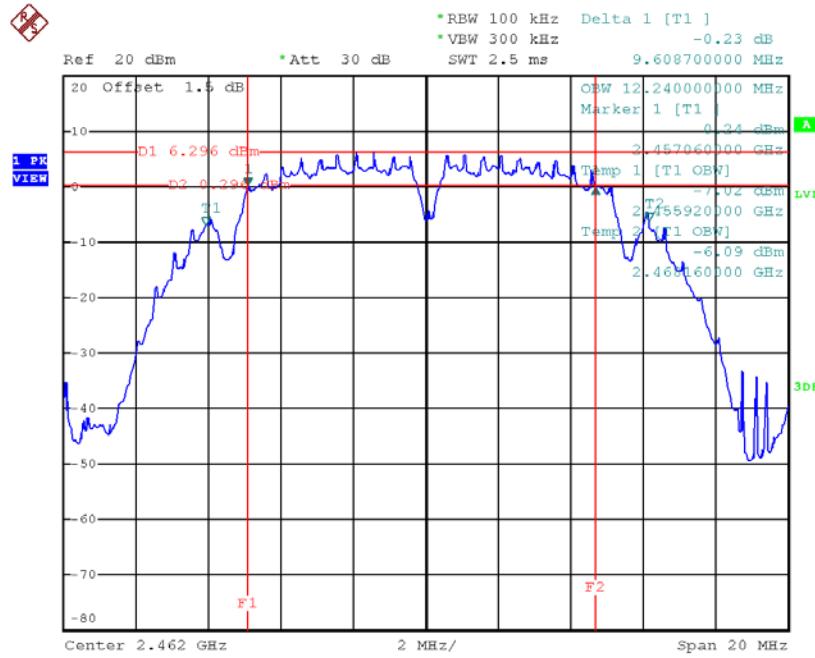
Date: 21.OCT.2017 10:44:47

TX CH06



Date: 21.OCT.2017 10:47:40

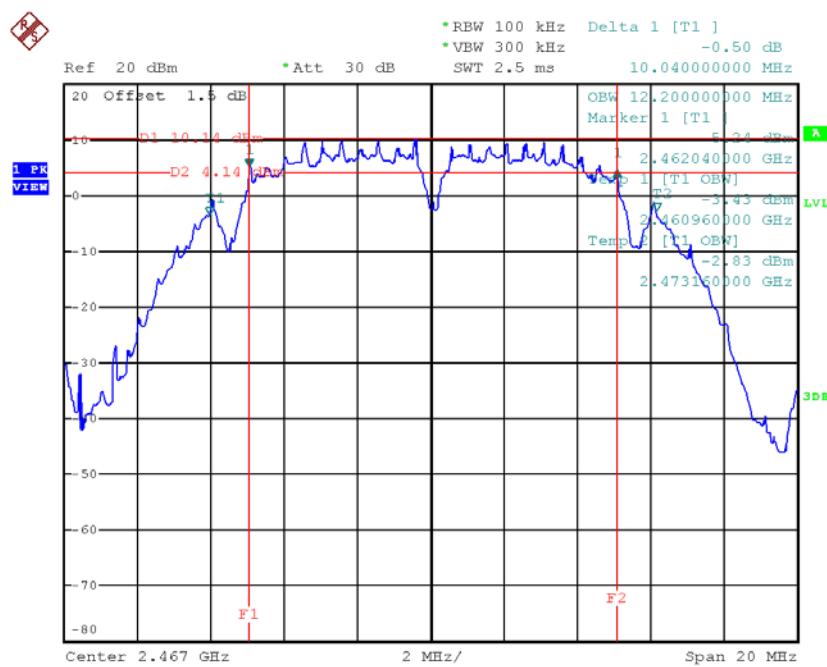
TX CH11



Date: 21.OCT.2017 10:48:57

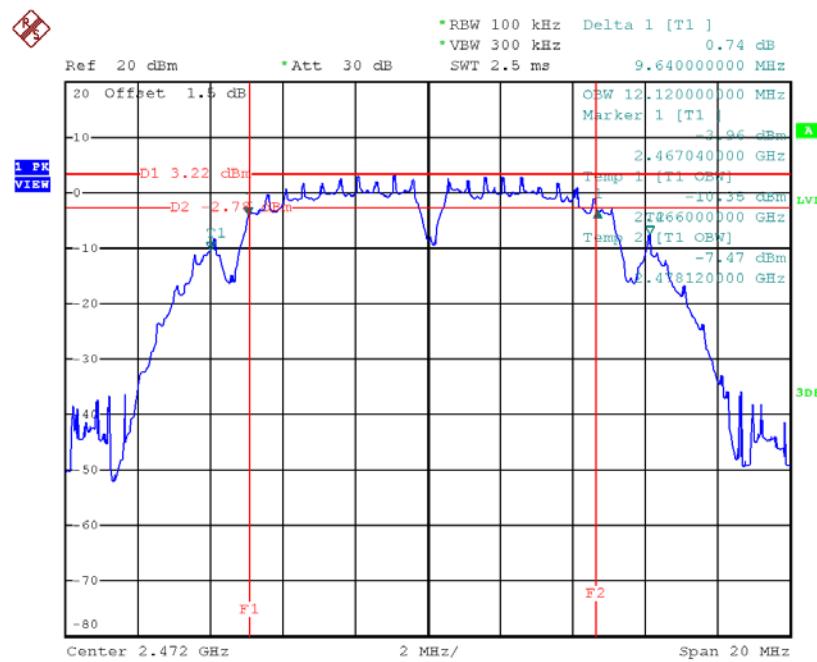
Test Mode : TX B Mode_CH12/13

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2467	10.04	12.20	500	Complies
2472	9.64	12.12	500	Complies

TX CH12


Date: 21.OCT.2017 14:10:57

TX CH13

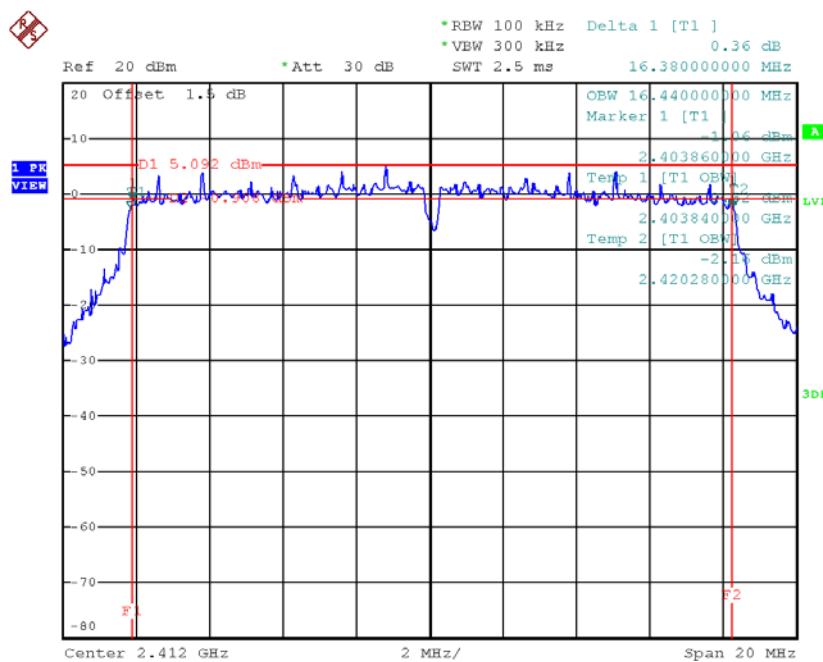


Date: 21.OCT.2017 14:18:04

Test Mode: TX G Mode_CH01/06/11

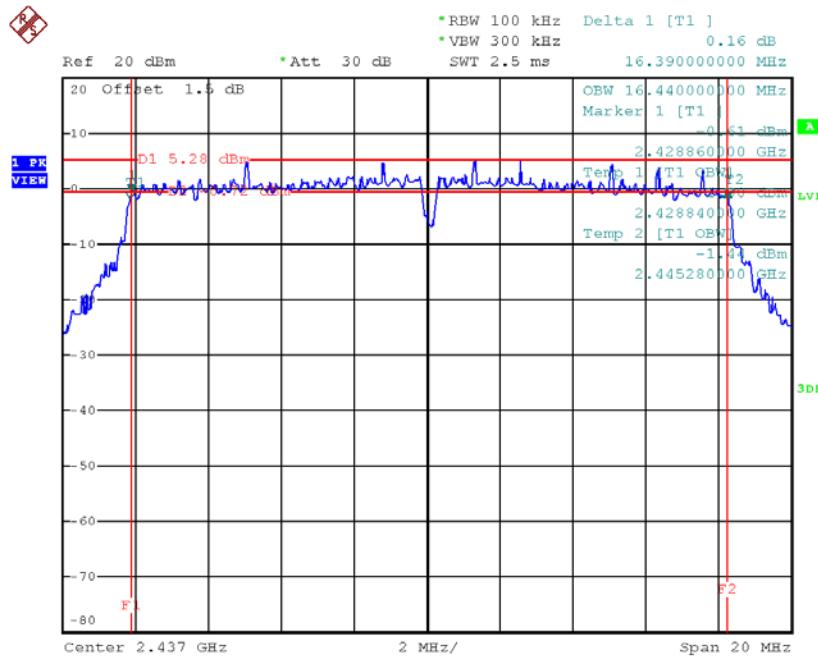
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.38	16.44	500	Complies
2437	16.39	16.44	500	Complies
2462	16.12	16.48	500	Complies

TX CH01



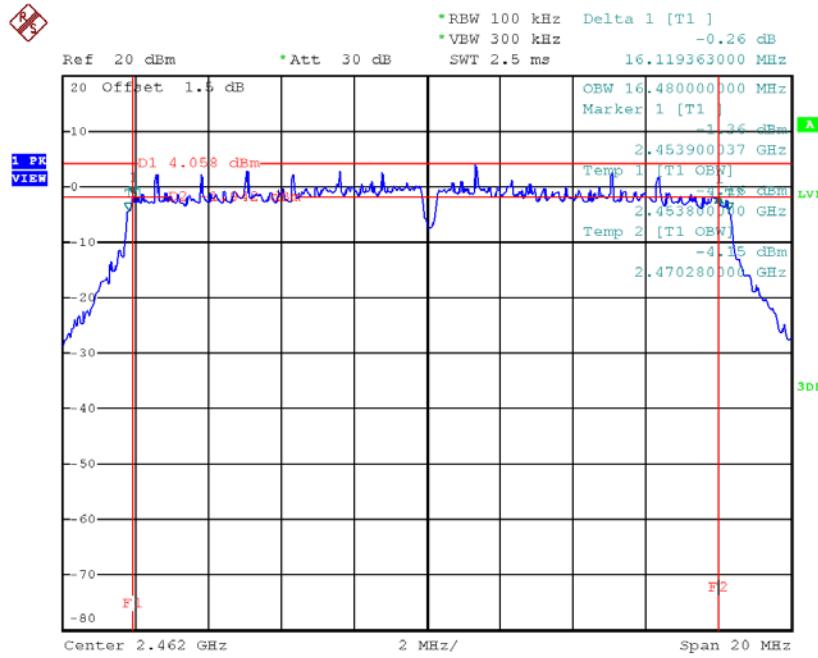
Date: 21.OCT.2017 10:50:52

TX CH06



Date: 21.OCT.2017 10:52:14

TX CH11

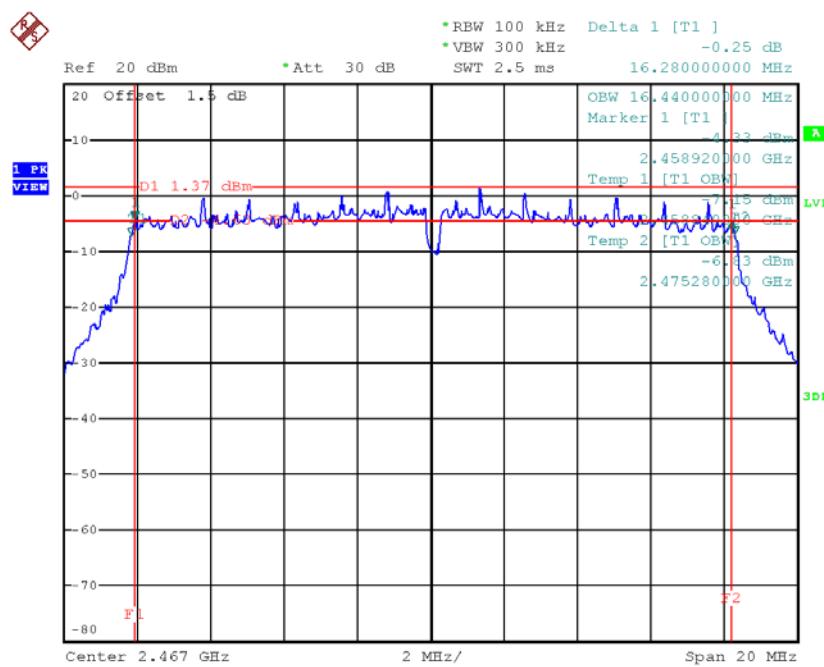


Date: 21.OCT.2017 10:53:28

Test Mode : TX G Mode_CH12/13

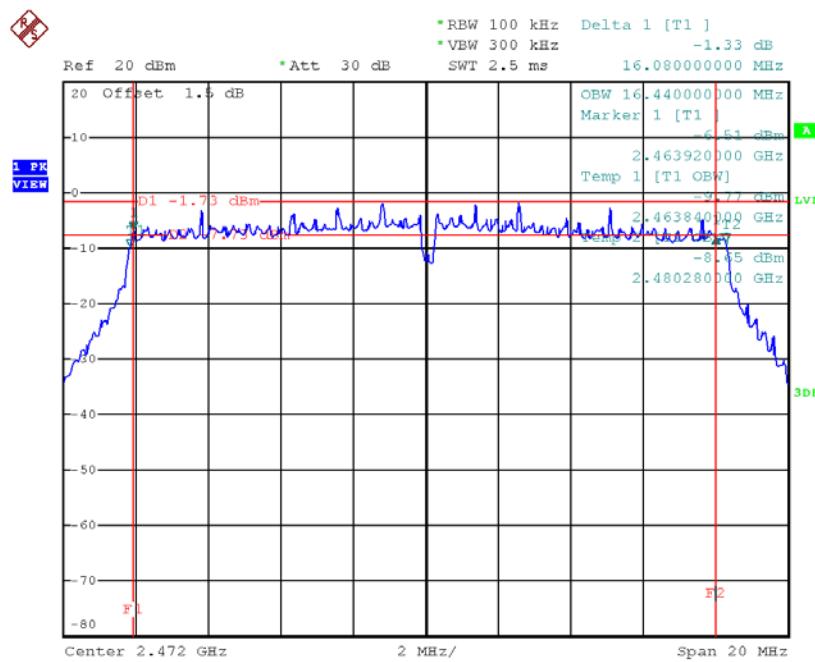
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2467	16.28	16.44	500	Complies
2472	16.08	16.44	500	Complies

TX CH12



Date: 21.OCT.2017 14:29:48

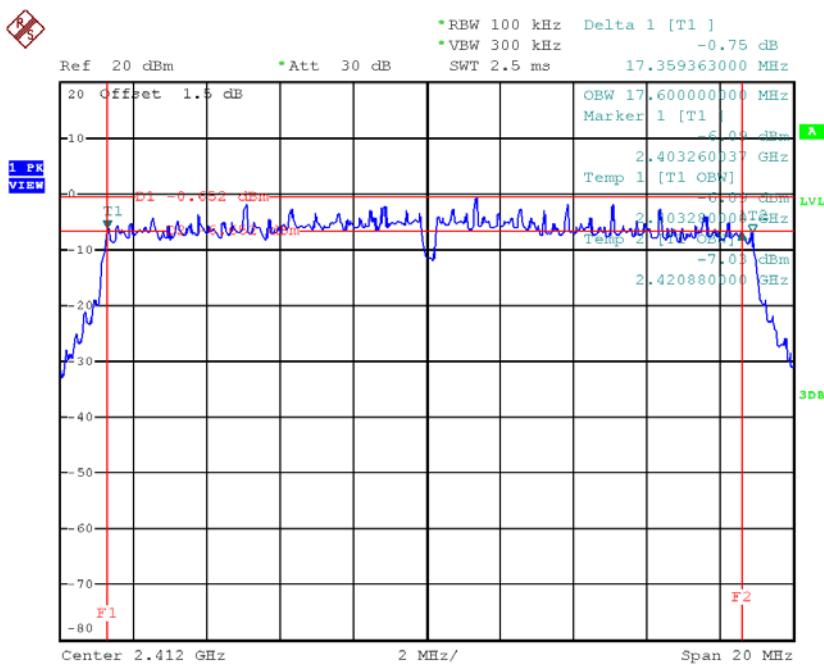
TX CH13



Date: 21.OCT.2017 14:34:33

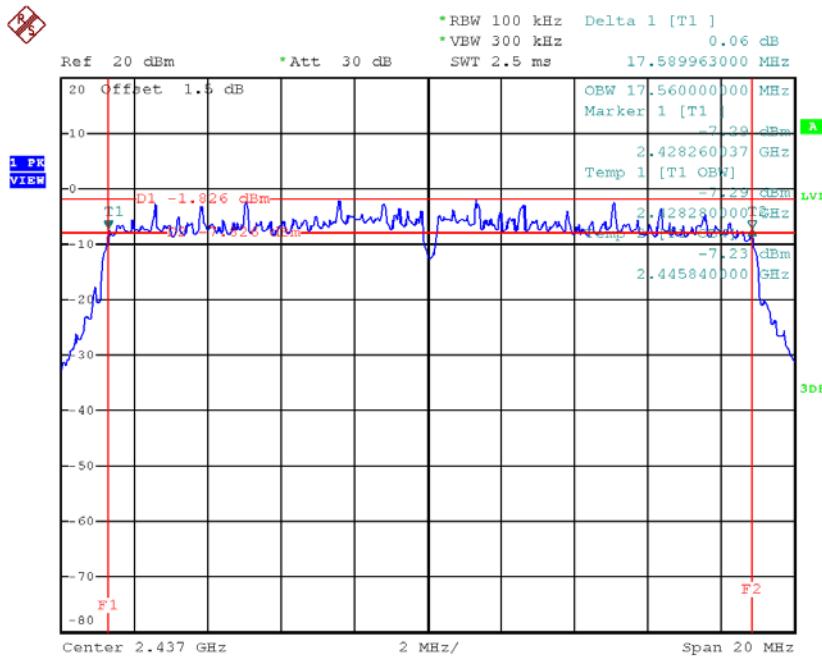
Test Mode : TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.36	17.60	500	Complies
2437	17.59	17.56	500	Complies
2462	17.63	17.60	500	Complies

TX CH01


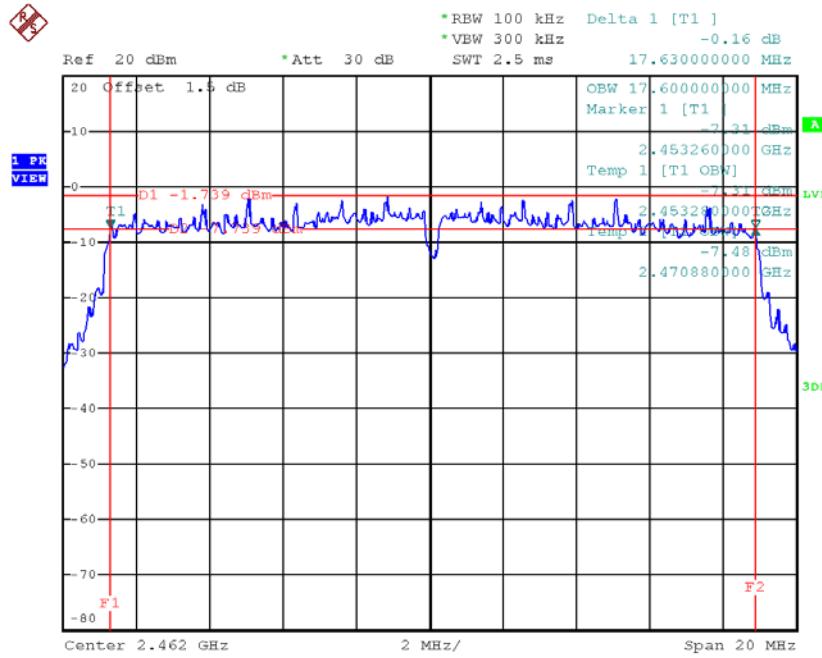
Date: 21.OCT.2017 10:55:24

TX CH06



Date: 21.OCT.2017 10:56:50

TX CH11

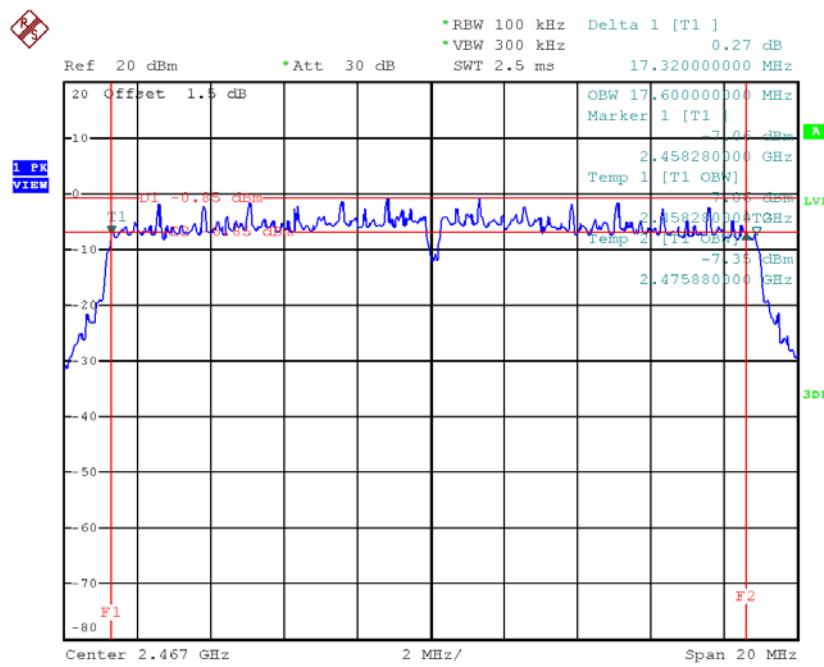


Date: 21.OCT.2017 10:57:52

Test Mode : TX N-20MHz Mode_CH12/13

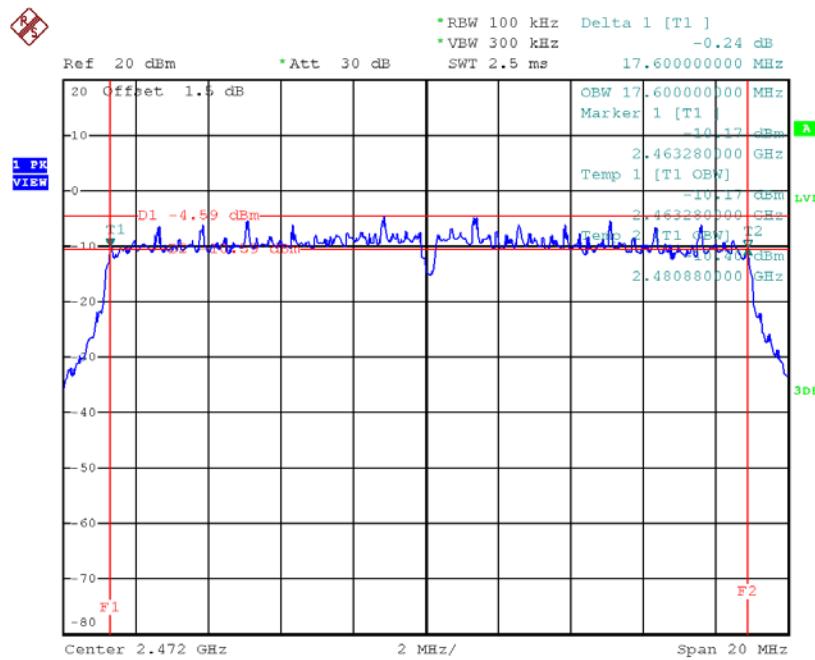
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2467	17.32	17.60	500	Complies
2472	17.60	17.60	500	Complies

TX CH12



Date: 21.OCT.2017 14:39:29

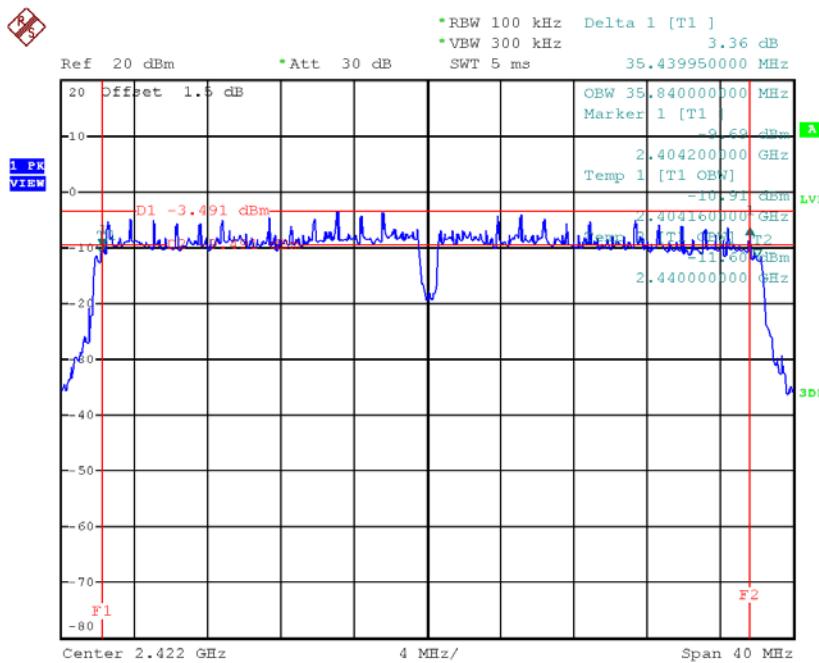
TX CH13



Date: 21.OCT.2017 14:45:07

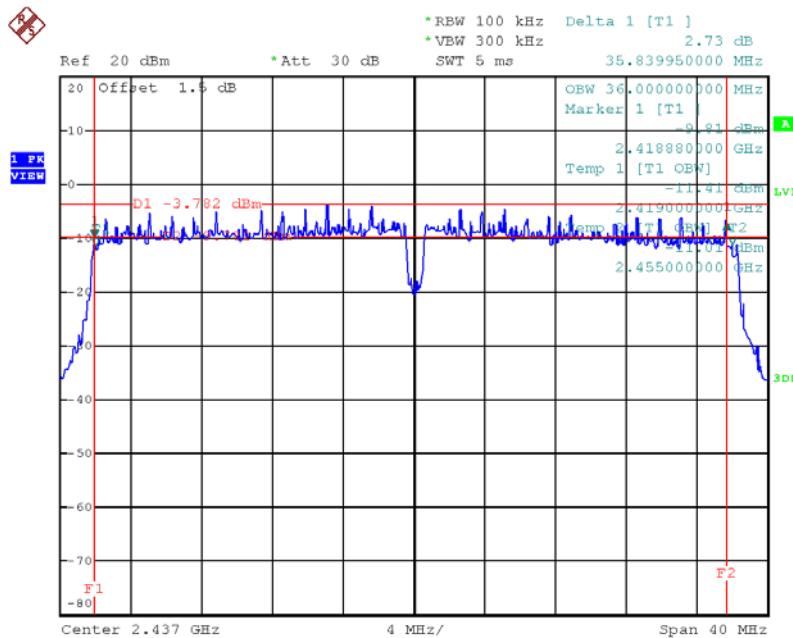
Test Mode : TX N-40MHz Mode_CH03/06/09

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.44	35.84	500	Complies
2437	35.84	36.00	500	Complies
2452	35.24	36.00	500	Complies

TX CH03


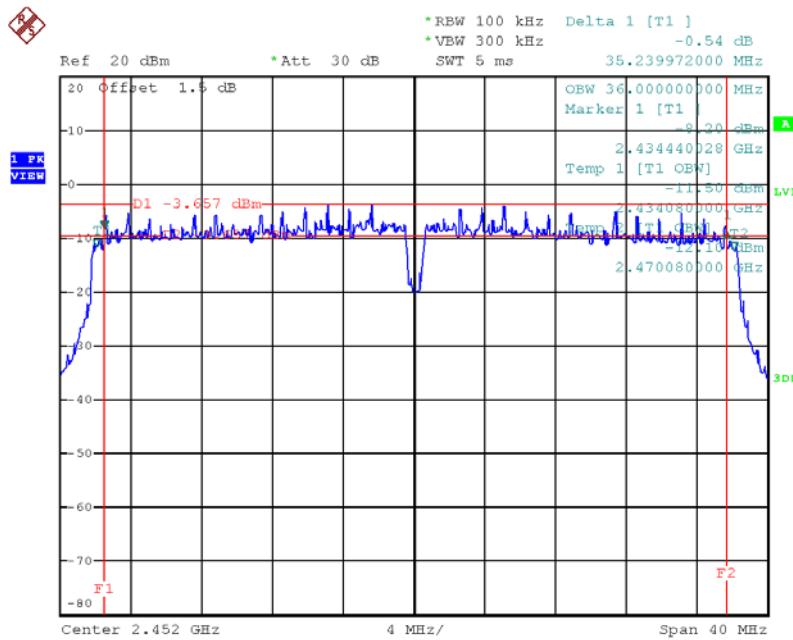
Date: 21.OCT.2017 10:59:19

TX CH06



Date: 21.OCT.2017 11:00:30

TX CH09

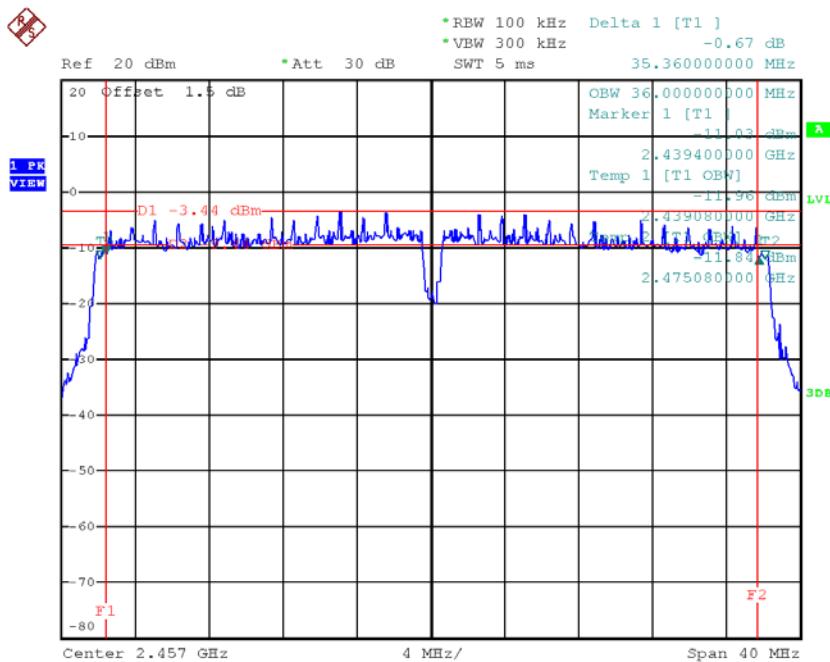


Date: 21.OCT.2017 11:01:34

Test Mode : TX N-40MHz Mode_CH10/11

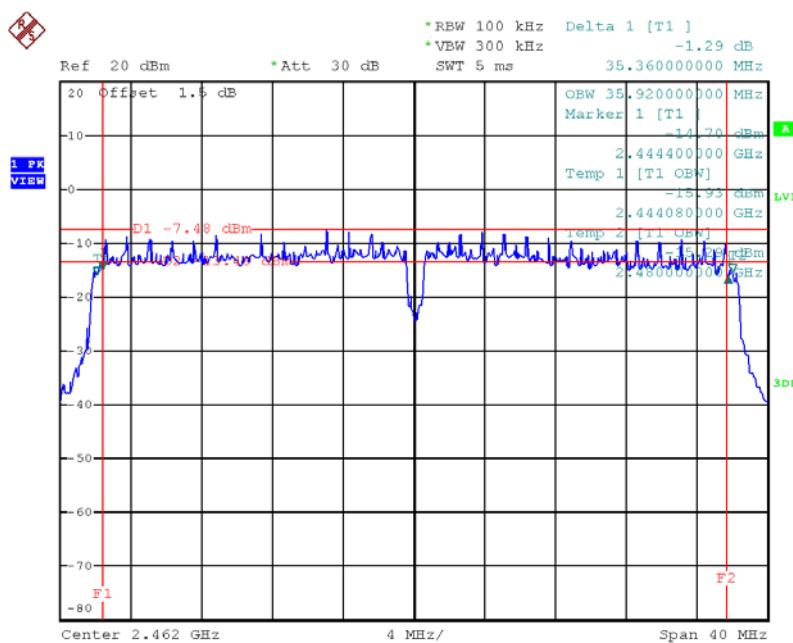
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2457	35.36	36.00	500	Complies
2462	35.36	35.92	500	Complies

TX CH10



Date: 21.OCT.2017 14:49:26

TX CH11



Date: 21.OCT.2017 14:56:26

APPENDIX 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	20.71	0.12	30.00	1.00	Complies
2437	20.65	0.12	30.00	1.00	Complies
2462	20.61	0.12	30.00	1.00	Complies

Test Mode :TX B Mode_CH12/13

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2467	20.48	0.1117	30.00	1.00	Complies
2472	17.10	0.0513	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	26.85	0.48	30.00	1.00	Complies
2437	26.76	0.47	30.00	1.00	Complies
2462	26.08	0.41	30.00	1.00	Complies

Test Mode :TX G Mode_CH12/13

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2467	23.45	0.2213	30.00	1.00	Complies
2472	21.72	0.1486	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	23.11	0.20	30.00	1.00	Complies
2437	23.12	0.21	30.00	1.00	Complies
2462	22.57	0.18	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	23.44	0.22	30.00	1.00	Complies
2437	22.94	0.20	30.00	1.00	Complies
2462	23.48	0.22	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	26.29	0.43	30.00	1.00	Complies
2437	26.04	0.40	30.00	1.00	Complies
2462	26.06	0.40	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH12/13_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2467	22.84	0.1923	30.00	1.00	Complies
2472	12.50	0.0178	30.00	1.00	Complies

Test Mode :TX N20 Mode_ CH12/13_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2467	23.34	0.2158	30.00	1.00	Complies
2472	13.05	0.0202	30.00	1.00	Complies

Test Mode :TX N20 Mode_ CH12/13_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2467	26.11	0.4081	30.00	1.00	Complies
2472	15.79	0.0380	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	22.94	0.20	30.00	1.00	Complies
2437	23.08	0.20	30.00	1.00	Complies
2452	23.24	0.21	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	23.09	0.20	30.00	1.00	Complies
2437	23.37	0.22	30.00	1.00	Complies
2452	22.96	0.20	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	26.03	0.40	30.00	1.00	Complies
2437	26.24	0.42	30.00	1.00	Complies
2452	26.11	0.41	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH10/11_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2457	22.25	0.1679	30.00	1.00	Complies
2462	13.50	0.0224	30.00	1.00	Complies

Test Mode :TX N40 Mode_ CH10/11_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2457	23.08	0.2032	30.00	1.00	Complies
2462	11.71	0.0148	30.00	1.00	Complies

Test Mode :TX N40 Mode_ CH10/11_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2457	25.70	0.3711	30.00	1.00	Complies
2462	15.71	0.0372	30.00	1.00	Complies