

FCC Radio Test Report

FCC ID: 2ADBM-LS9-AC11DBT

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

Project No. : 1602C104
Equipment : media/audio streaming module
Model Name : LS9-AC11DBT
Applicant : Libre Wireless Technologies Inc
Address : 5405 Alton Parkway, Suite A-563, Irvine, CA 92604,
USA

Date of Receipt : Mar. 01, 2016
Date of Test : Mar. 01, 2016 ~ Mar. 15, 2016
Issued Date : Mar. 16, 2016
Tested by : BTL Inc.

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For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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

Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	22
6.1.1 TEST PROCEDURE	22
6.1.2 DEVIATION FROM STANDARD	22
6.1.3 TEST SETUP	22
6.1.4 EUT OPERATION CONDITIONS	22
6.1.5 EUT TEST CONDITIONS	22
6.1.6 TEST RESULTS	22
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	23
7.1 APPLIED PROCEDURES / LIMIT	23
7.1.1 TEST PROCEDURE	23
7.1.2 DEVIATION FROM STANDARD	23
7.1.3 TEST SETUP	23
7.1.4 EUT OPERATION CONDITIONS	23
7.1.5 EUT TEST CONDITIONS	23
7.1.6 TEST RESULTS	23
8 . POWER SPECTRAL DENSITY TEST	24
8.1 APPLIED PROCEDURES / LIMIT	24
8.1.1 TEST PROCEDURE	24
8.1.2 DEVIATION FROM STANDARD	24
8.1.3 TEST SETUP	24
8.1.4 EUT OPERATION CONDITIONS	24
8.1.5 EUT TEST CONDITIONS	24
8.1.6 TEST RESULTS	24
9 . MEASUREMENT INSTRUMENTS LIST	25
10 . EUT TEST PHOTO	27
ATTACHMENT A - CONDUCTED EMISSION	31
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	34
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	36
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	43
ATTACHMENT E - BANDWIDTH	92
ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER	101
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	103
ATTACHMENT H - POWER SPECTRAL DENSITY	116

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1602C104	Original Issue.	Mar. 16, 2016

1. CERTIFICATION

Equipment : media/audio streaming module
Brand Name : Libre Sync
Model Name : LS9-AC11DBT
Applicant : Libre Wireless Technologies Inc
Manufacturer : #1 Shenzhen Zowee Technology Co., Ltd
 #2 Hansong (Nanjing) Technology Ltd.
Address : #1 NO.5 Zowee technology building, Science & Technology industrial park of
 privately owned enterprises, Pingshan, Xili, Nanshan district, Shenzhen,
 China.
 #2 8th Kangping Road, Jiangning Economy and Technology Development Zone,
 Nanjing, 211106, China.
Date of Test : Mar. 01, 2016 ~ Mar. 15, 2016
Test Sample : Engineering Sample
Standard(s) : FCC Part 15, 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-3-1602C104) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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	
15.209/15.205		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	media/audio streaming module	
Brand Name	Libre Sync	
Model Name	LS9-AC11DBT	
OEM Model	WMBG2CDWX-LW(for factory: Shenzhen Zowee Technology Co., Ltd) 00-06040-01(for factory: Hansong (Nanjing) Technology Ltd.)	
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 300 Mbps
	Output Power (Max.)	802.11b: 16.79dBm 802.11g: 15.43dBm 802.11n(20MHz): 14.69dBm 802.11n(40MHz): 13.82dBm
Power Source	Supplied from system.	
Power Rating	EUT I/P:DC 3.3V	

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.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Libre Sync	N/A	Dipole	N/A	4

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
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

For Band Edge 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

6dB Spectrum Bandwidth	
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

Maximum Conducted Output Power	
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

Power Spectral Density	
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:

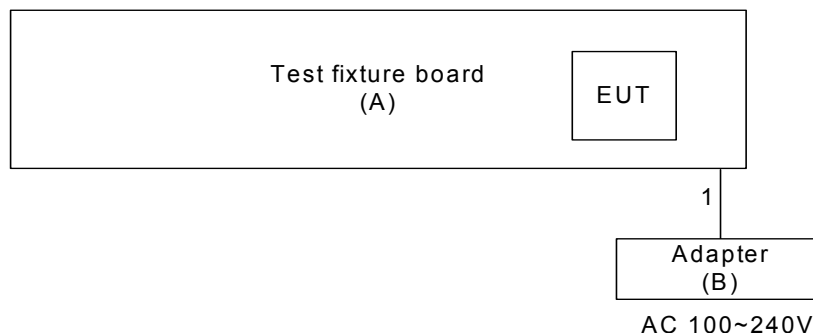
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (6.5Mbps)
 802.11n HT40 mode : BPSK (13.5Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) 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	DutApi_w8887_BrdigeEth		
Frequency (MHz)	2412	2437	2462
802.11b	16	16	16
802.11g	14	15	13
802.11n (20MHz)	14	14	13
Frequency	2422	2437	2452
802.11n (40MHz)	12	14	11

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



Ground plane
(Remote System)

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 board	N/A	N/A	N/A	N/A
B	Adapter	Vonhk	KSAFE0900270W1US	VER	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.45	Power Cable

Note:

- (1) For detachable type I/O cable should be specified the length in m in 『Length』 column.

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 -0.50	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

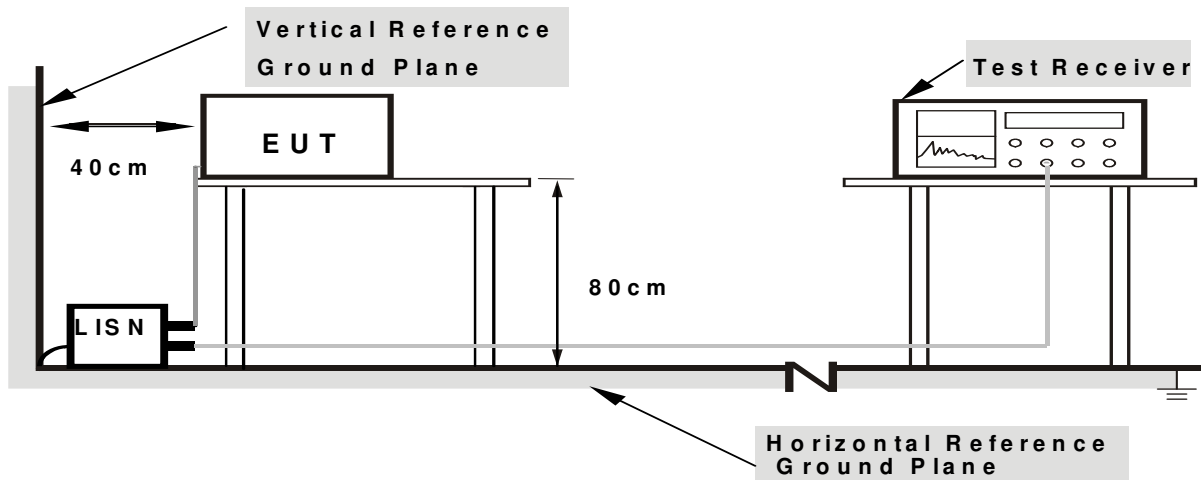
4.1.2 TEST PROCEDURE

- 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 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 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 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

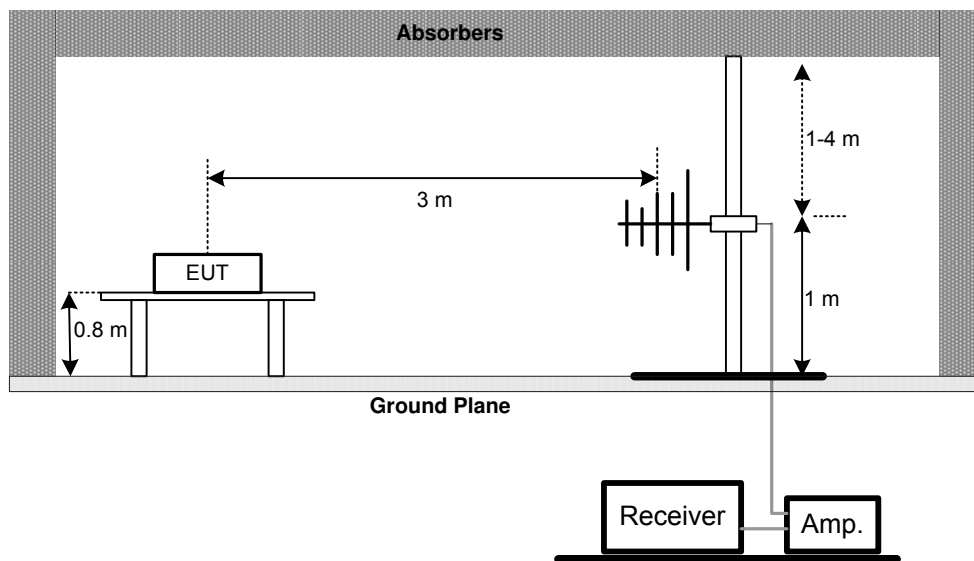
- a. The measuring distance of at 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of at 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 1.5 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted 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. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

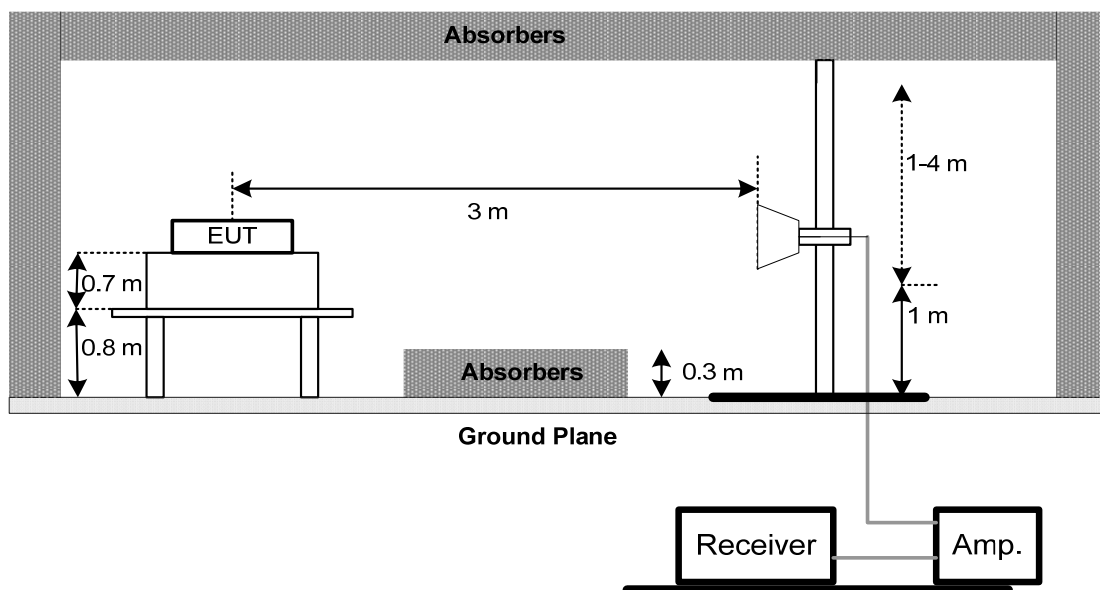
No deviation

4.2.4 TEST SETUP

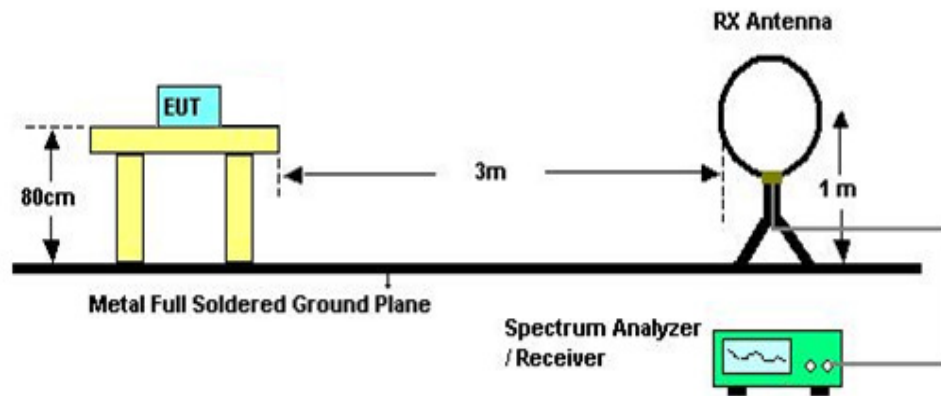
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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 v03r04.

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	3816/2	00052765	Mar. 28, 2016
2	LISN	R&S	ENV216	101447	Mar. 28, 2016
3	Test Cable	emci	RG223(9KHz-30 MHz)	C_17	Mar. 12, 2017
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 28, 2016
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 28, 2016
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 28, 2016
2	Amplifier	HP	8447D	2944A09673	Nov. 09, 2016
3	Receiver	AGILENT	N9038A	MY52130039	Oct. 11, 2016
4	Test Cable	emci	LMR-400(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	Controller	CT	SC100	N/A	N/A
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Mar. 28, 2016
13	Microwave Pre-amplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 28, 2016
14	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	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 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	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

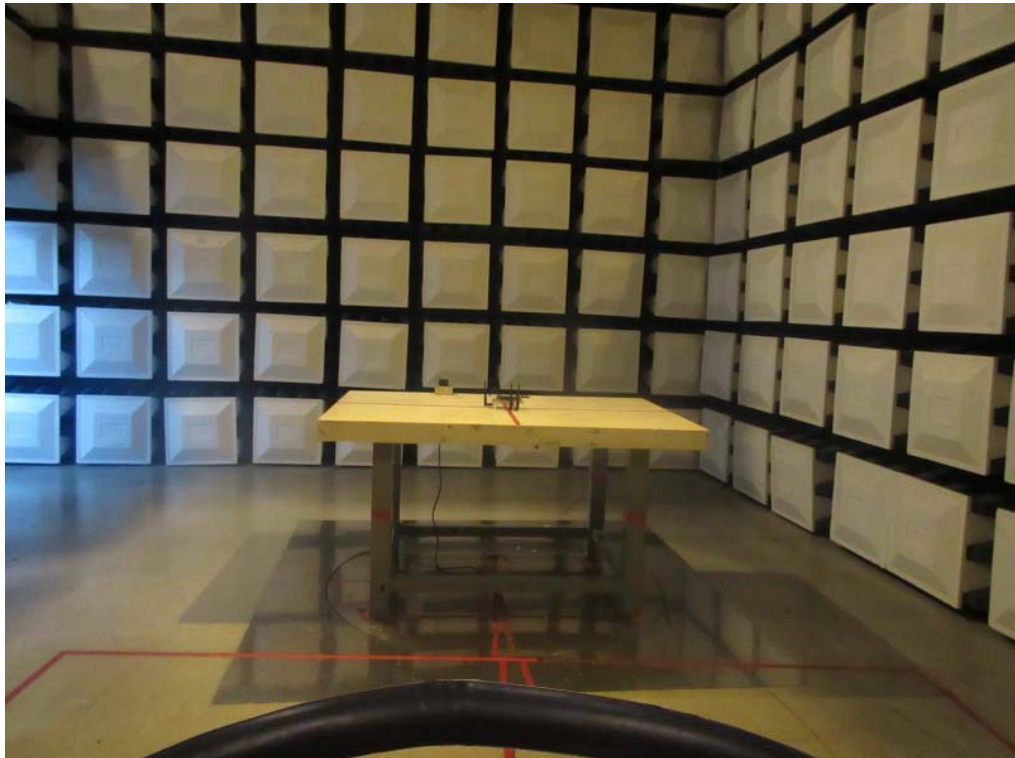
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

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

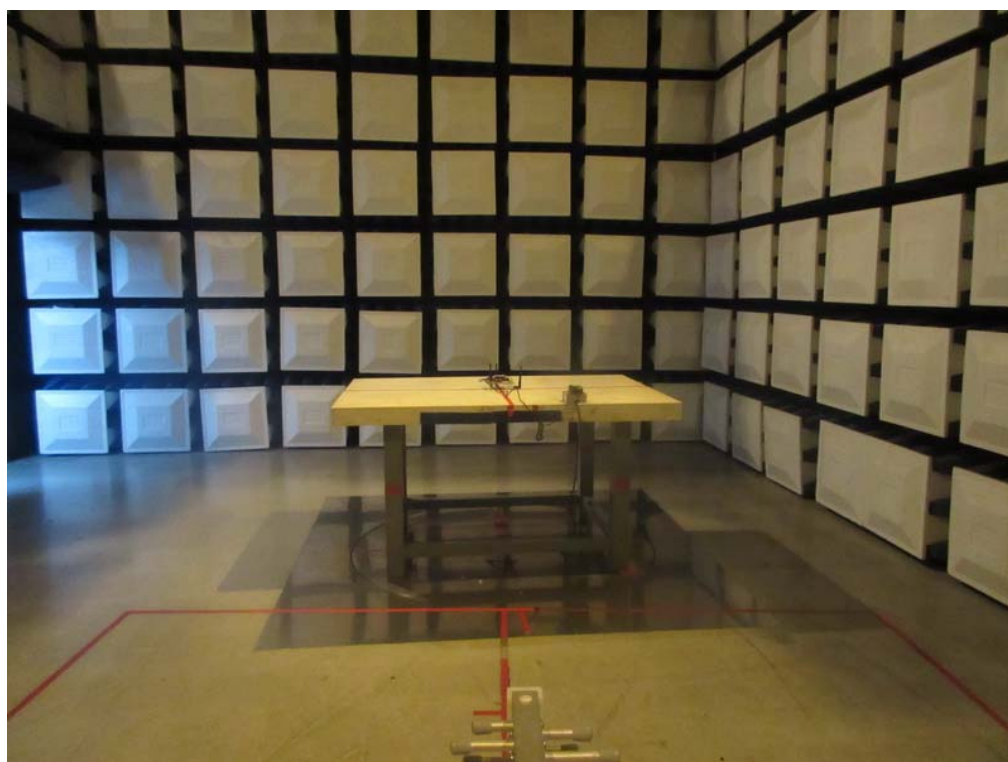
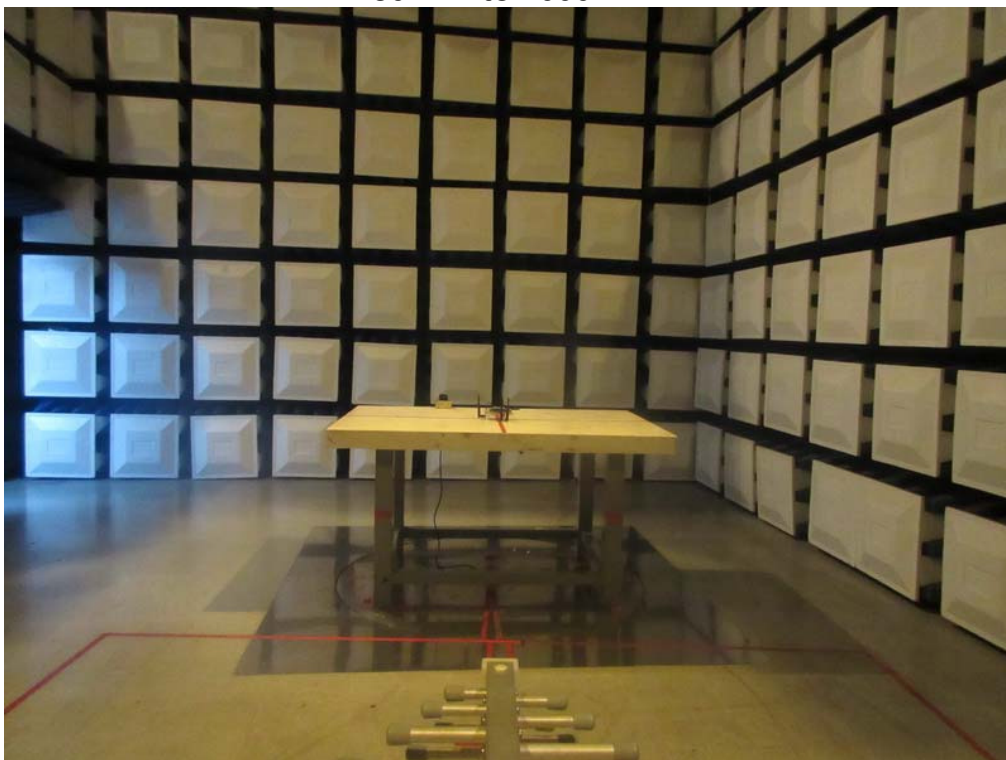
Conducted Measurement Photos



Radiated Measurement Photos**9KHz to 30MHz**

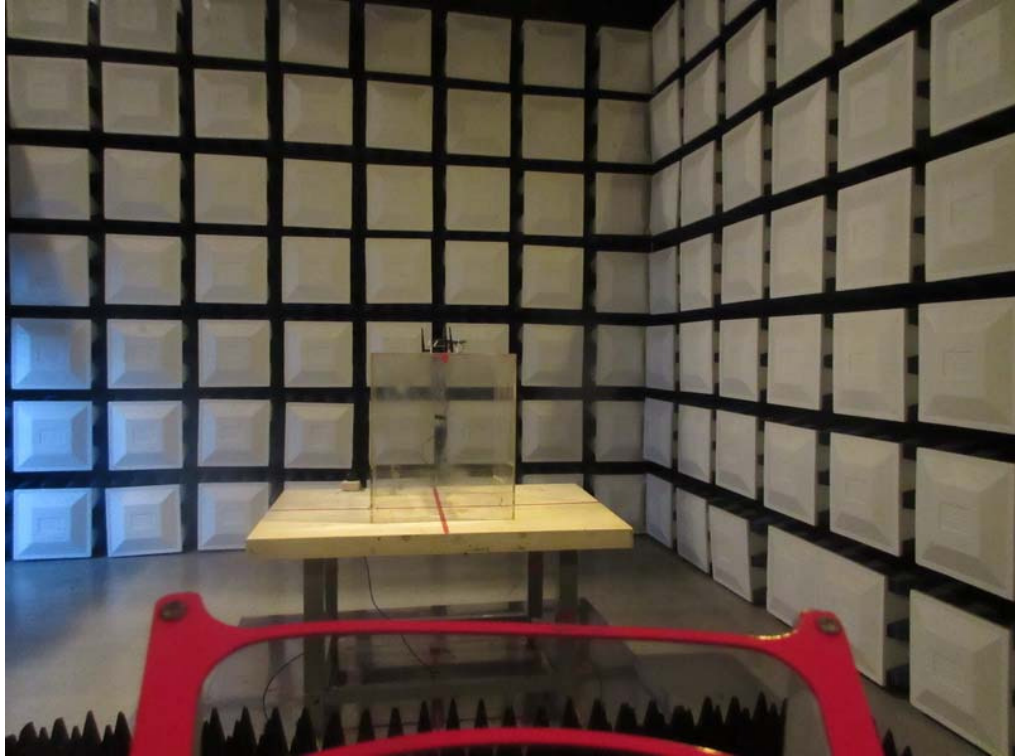
Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

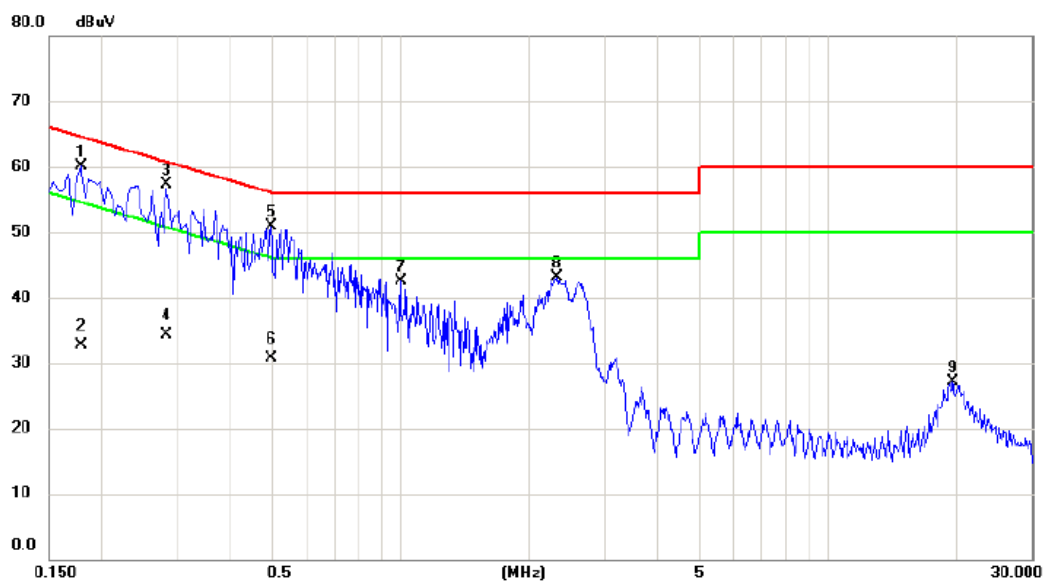
Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode : TX Mode

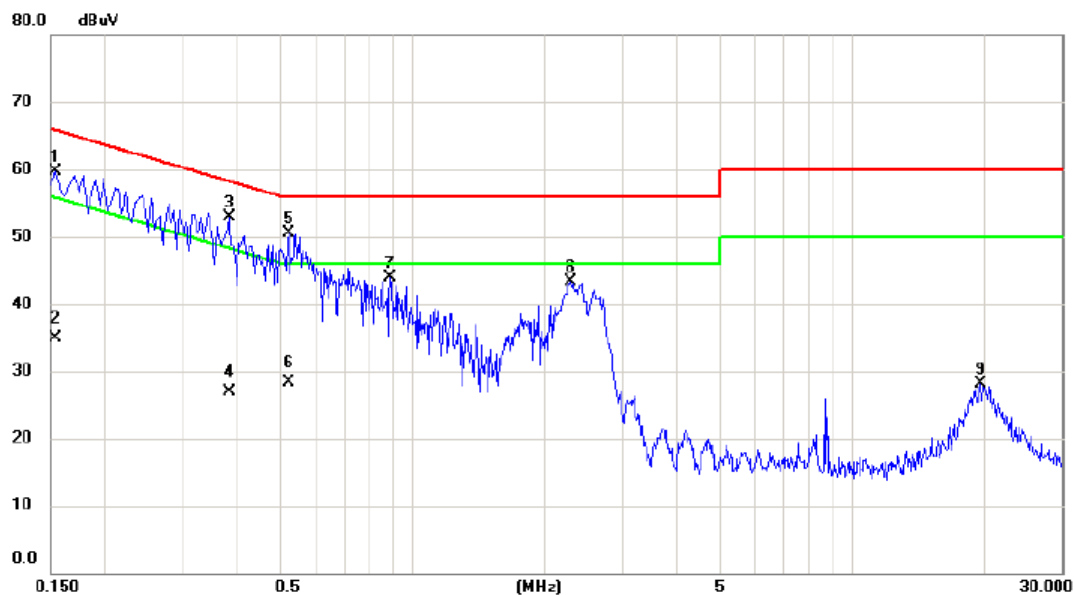
Line



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1780	50.55	9.56	60.11	64.58	-4.47	peak	
2	0.1780	23.06	9.56	32.62	54.58	-21.96	AVG	
3 *	0.2820	47.60	9.63	57.23	60.76	-3.53	peak	
4	0.2820	24.59	9.63	34.22	50.76	-16.54	AVG	
5	0.4980	41.15	9.68	50.83	56.03	-5.20	peak	
6	0.4980	21.11	9.68	30.79	46.03	-15.24	AVG	
7	0.9980	32.66	9.80	42.46	56.00	-13.54	peak	
8	2.3220	33.15	9.97	43.12	56.00	-12.88	peak	
9	19.6220	17.30	9.85	27.15	60.00	-32.85	peak	

Test Mode : TX Mode

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1540	50.14	9.49	59.63	65.78	-6.15	peak	
2		0.1540	25.33	9.49	34.82	55.78	-20.96	AVG	
3	*	0.3820	43.32	9.53	52.85	58.24	-5.39	peak	
4		0.3820	17.37	9.53	26.90	48.24	-21.34	AVG	
5		0.5220	40.85	9.56	50.41	56.00	-5.59	peak	
6		0.5220	18.79	9.56	28.35	46.00	-17.65	AVG	
7		0.8860	34.32	9.58	43.90	56.00	-12.10	peak	
8		2.2820	33.58	9.74	43.32	56.00	-12.68	peak	
9		19.5060	18.16	9.97	28.13	60.00	-31.87	peak	

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

Test Mode:	TX B MODE CHANNEL 01
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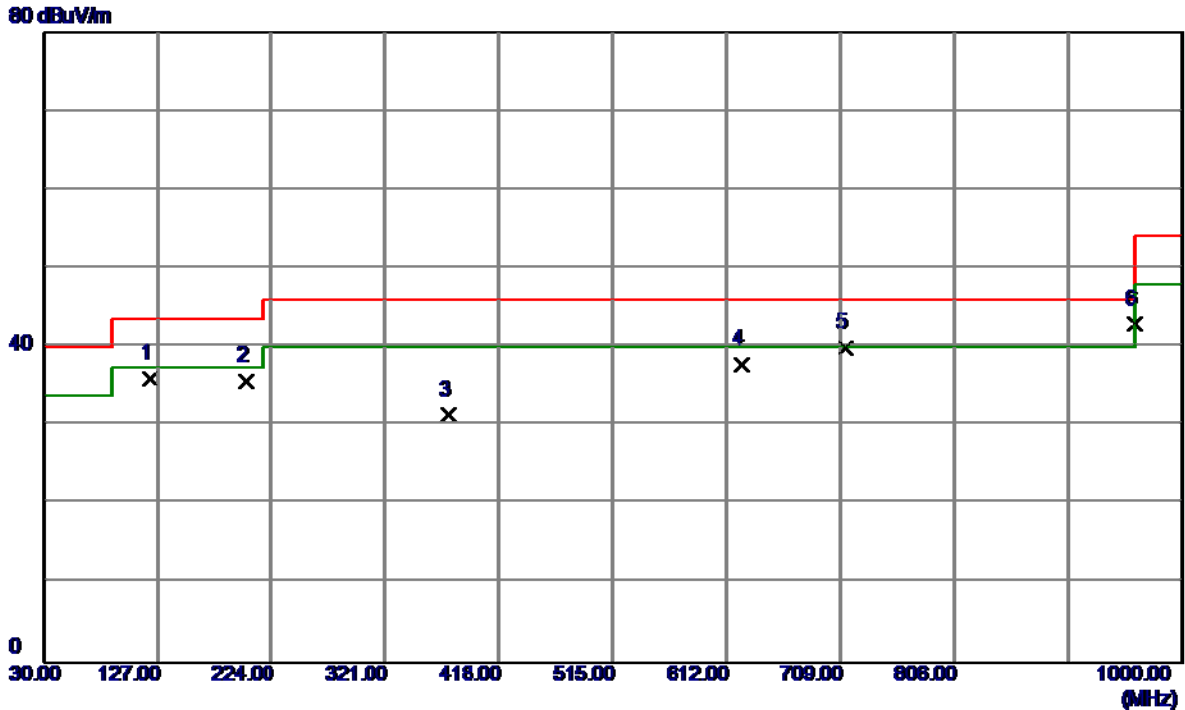
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.00943	0°	13.11	24.9694	38.0794	128.1140	-90.0346	AVG
0.00943	0°	15.13	24.9694	40.0994	148.1140	-108.0146	PEAK
0.026	0°	7.34	23.9200	31.2600	119.3048	-88.0448	AVG
0.026	0°	8.89	23.9200	32.8100	139.3048	-106.4948	PEAK
0.0341	0°	5.41	23.4070	28.8170	116.9491	-88.1321	AVG
0.0341	0°	6.27	23.4070	29.6770	136.9491	-107.2721	PEAK
0.0433	0°	1.6	22.8243	24.4243	114.8745	-90.4501	AVG
0.0433	0°	2.97	22.8243	25.7943	134.8745	-109.0801	PEAK
0.495	0°	22.32	19.8120	42.1320	73.7121	-31.5801	QP
1.7131	0°	24.43	19.5287	43.9587	69.5400	-25.5813	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.00947	90°	13.38	24.3000	37.6800	128.0772	-90.3972	AVG
0.00947	90°	14.3	24.3000	38.6000	148.0772	-109.4772	PEAK
0.0227	90°	6.8	24.1290	30.9290	120.4837	-89.5547	AVG
0.0227	90°	8.11	24.1290	32.2390	140.4837	-108.2447	PEAK
0.0318	90°	3.24	23.5527	26.7927	117.5557	-90.7630	AVG
0.0318	90°	5.61	23.5527	29.1627	137.5557	-108.3930	PEAK
0.043	90°	1.24	22.8433	24.0833	114.9349	-90.8515	AVG
0.043	90°	2.61	22.8433	25.4533	134.9349	-109.4815	PEAK
0.4922	90°	19.55	19.8187	39.3687	73.7614	-34.3927	QP
1.7164	90°	23.86	19.5284	43.3884	69.5400	-26.1516	QP

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

Test Mode: TX B MODE CHANNEL 01

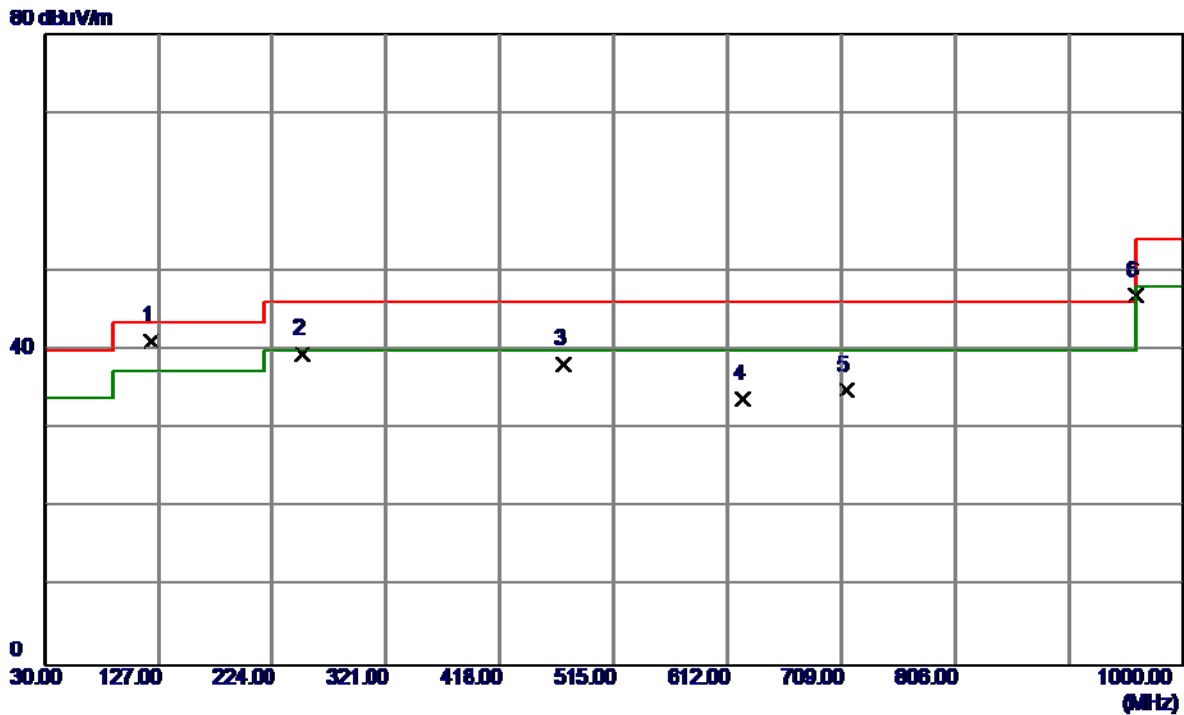
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	120.2100	51.07	-15.03	36.04	43.50	-7.46	Peak	
2	202.6600	51.34	-15.69	35.65	43.50	-7.85	Peak	
3	375.3200	41.13	-9.78	31.35	46.00	-14.65	Peak	
4	624.6100	42.47	-4.77	37.70	46.00	-8.30	Peak	
5	712.8800	43.16	-3.33	39.83	46.00	-6.17	Peak	
6	960.2300	41.01	1.83	42.84	54.00	-11.16	Peak	

Test Mode: TX B MODE CHANNEL 01

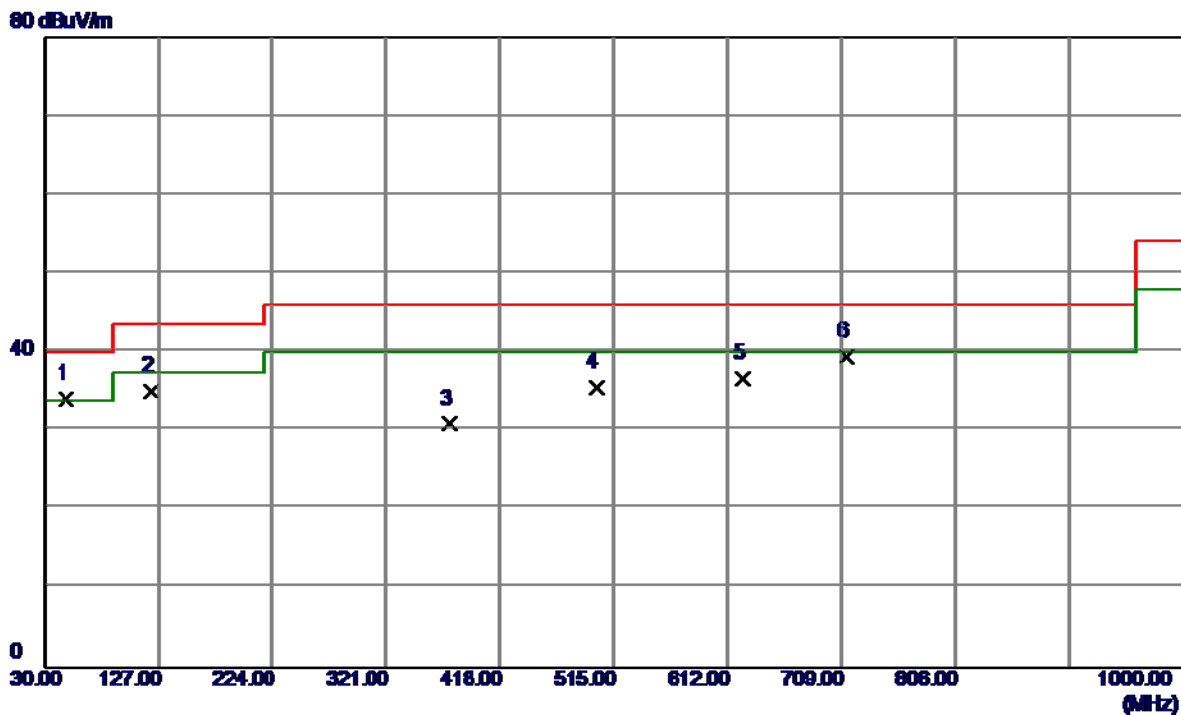
Horizontal



No.	Freq. MHz	Keading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	120.2100	56.18	-15.03	41.15	43.50	-2.35	Peak	
2	250.1900	52.87	-13.37	39.50	46.00	-6.50	Peak	
3	472.3200	45.76	-7.48	38.28	46.00	-7.72	Peak	
4	624.6100	38.48	-4.77	33.71	46.00	-12.29	Peak	
5	712.8800	38.14	-3.33	34.81	46.00	-11.19	Peak	
6	960.2300	45.00	1.83	46.83	54.00	-7.17	Peak	

Test Mode: TX B MODE CHANNEL 06

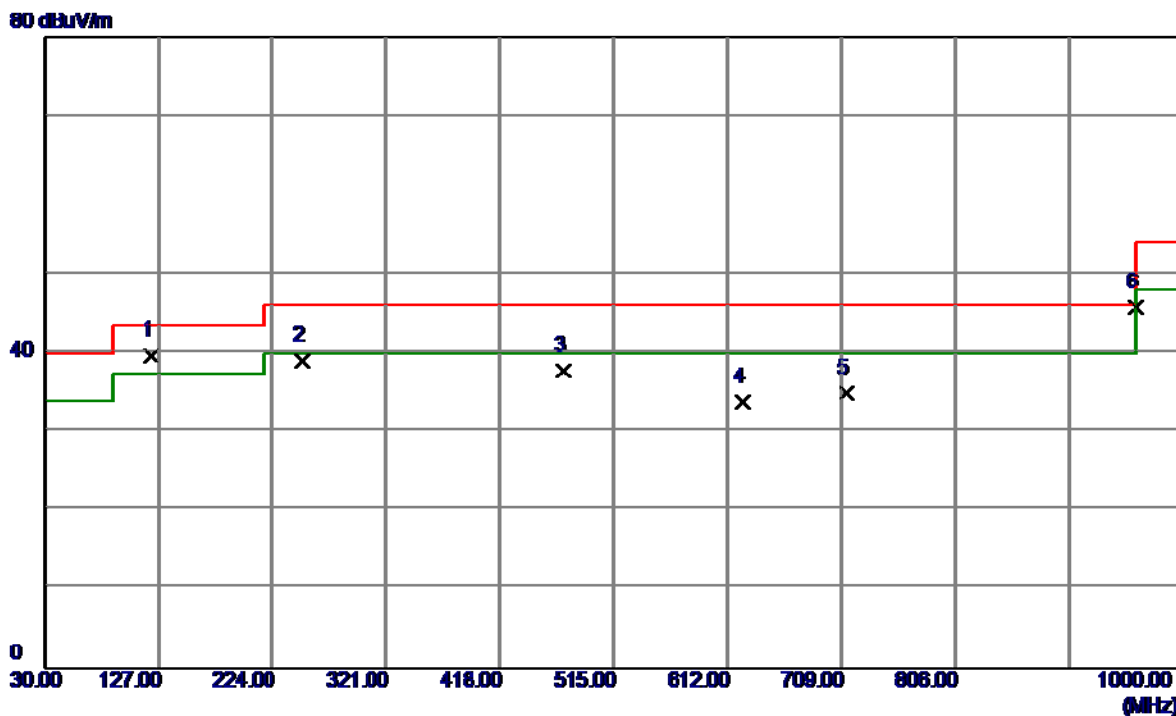
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	48.4300	47.36	-13.23	34.13	40.00	-5.87	Peak	
2	120.2100	50.07	-15.03	35.04	43.50	-8.46	Peak	
3	375.3200	40.63	-9.78	30.85	46.00	-15.15	Peak	
4	500.4500	42.69	-7.15	35.54	46.00	-10.46	Peak	
5	624.6100	41.47	-4.77	36.70	46.00	-9.30	Peak	
6	712.8800	42.66	-3.33	39.33	46.00	-6.67	Peak	

Test Mode: TX B MODE CHANNEL 06

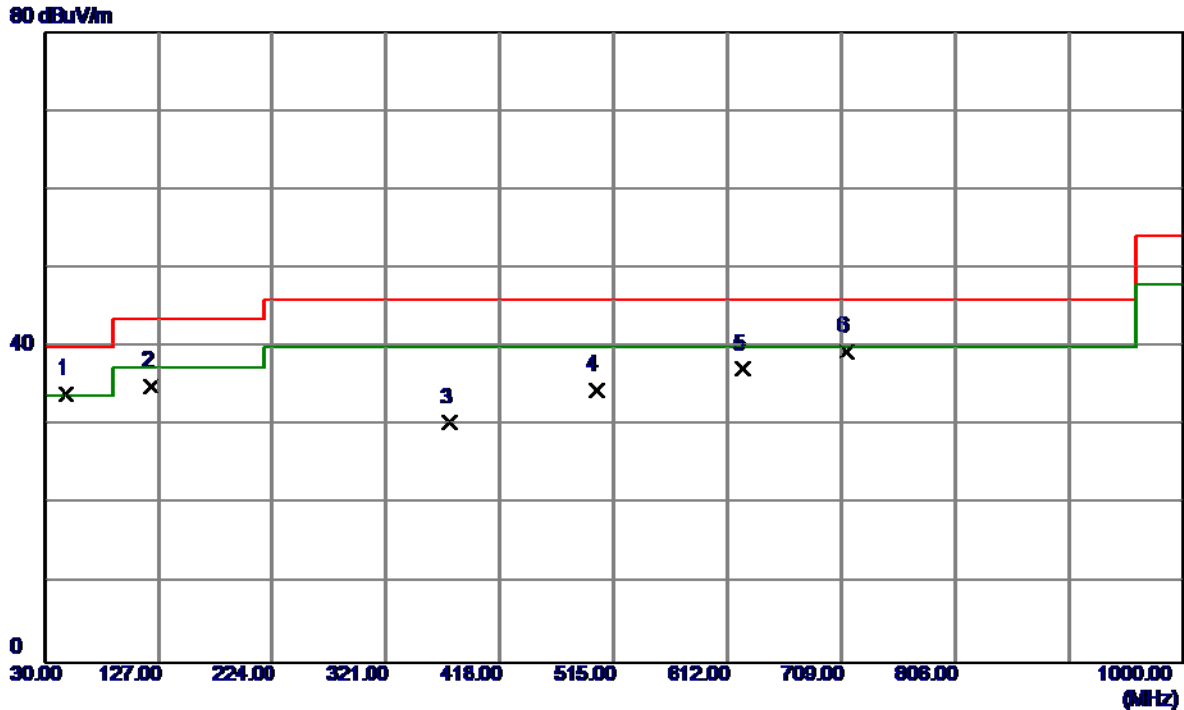
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	120.2100	54.68	-15.03	39.65	43.50	-3.85	Peak	
2	250.1900	52.37	-13.37	39.00	46.00	-7.00	Peak	
3	472.3200	45.26	-7.48	37.78	46.00	-8.22	Peak	
4	624.6100	38.48	-4.77	33.71	46.00	-12.29	Peak	
5	712.8800	38.14	-3.33	34.81	46.00	-11.19	Peak	
6	960.2300	44.00	1.83	45.83	54.00	-8.17	Peak	

Test Mode: TX B MODE CHANNEL 11

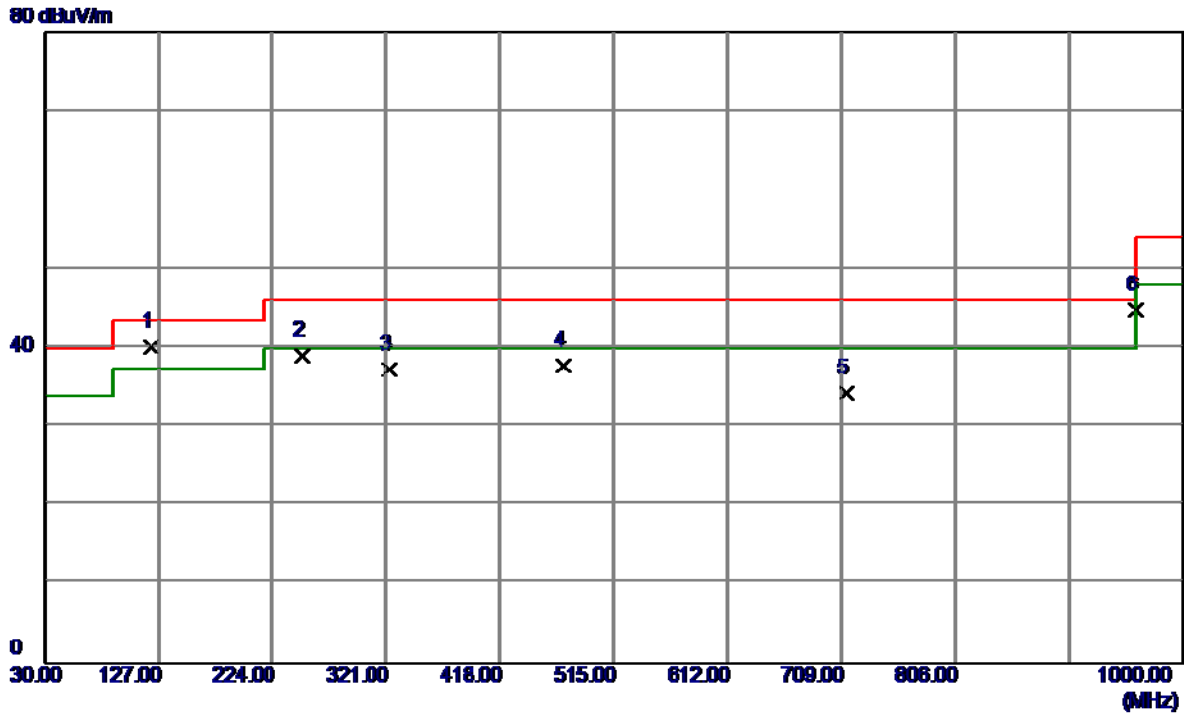
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	48.4300	47.36	-13.23	34.13	40.00	-5.87	Peak	
2	120.2100	50.07	-15.03	35.04	43.50	-8.46	Peak	
3	375.3200	40.13	-9.78	30.35	46.00	-15.65	Peak	
4	500.4500	41.69	-7.15	34.54	46.00	-11.46	Peak	
5	624.6100	41.97	-4.77	37.20	46.00	-8.80	Peak	
6	712.8800	42.66	-3.33	39.33	46.00	-6.67	Peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal

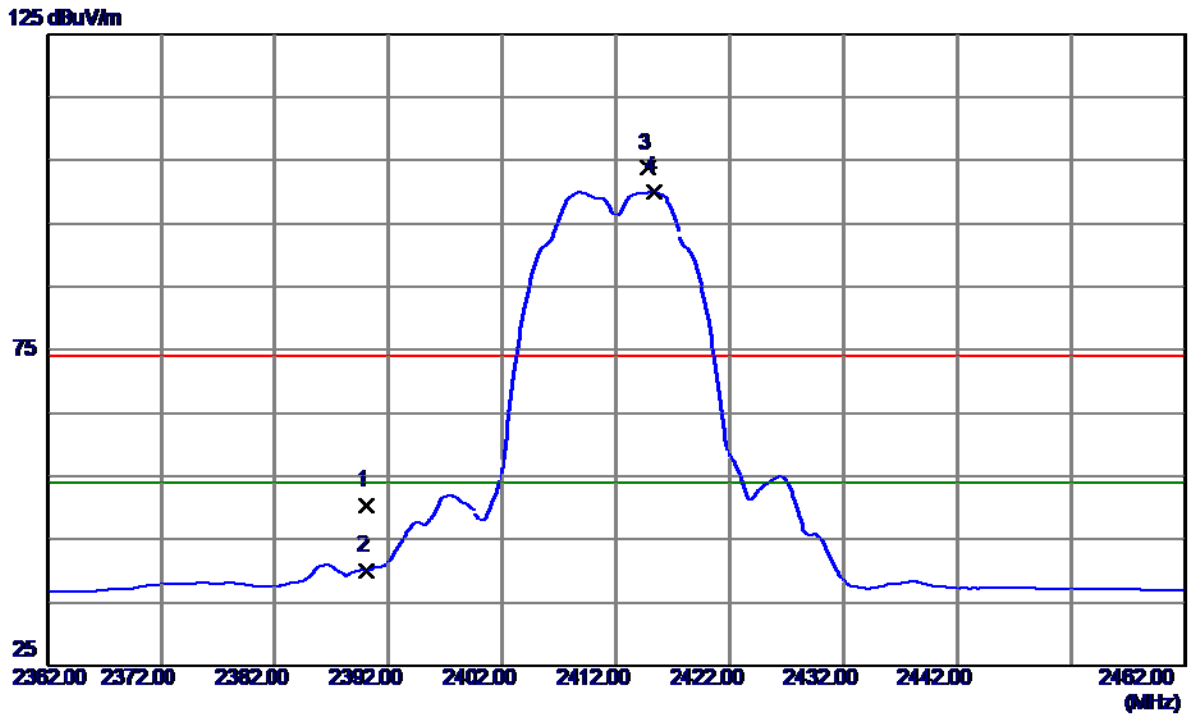


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	120.2100	55.18	-15.03	40.15	43.50	-3.35	Peak	
2	250.1900	52.37	-13.37	39.00	46.00	-7.00	Peak	
3	323.9100	48.21	-10.89	37.32	46.00	-8.68	Peak	
4	472.3200	45.26	-7.48	37.78	46.00	-8.22	Peak	
5	712.8800	37.64	-3.33	34.31	46.00	-11.69	Peak	
6	960.2300	43.00	1.83	44.83	54.00	-9.17	Peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

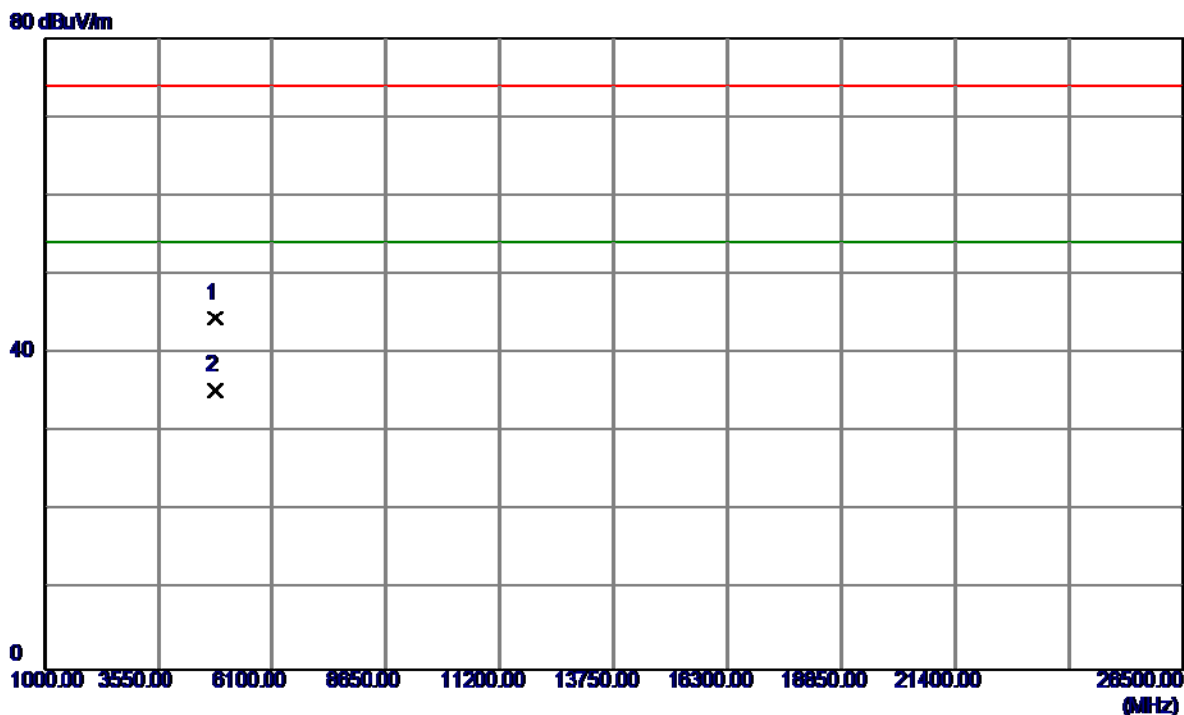
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	16.11	34.23	50.34	74.00	-23.66	Peak	
2	2390.0000	5.82	34.23	40.05	54.00	-13.95	AVG	
3	2414.8000	69.33	34.38	103.71	74.00	29.71	Peak	No Limit
4	2415.3000	65.58	34.38	99.96	54.00	45.96	AVG	No Limit

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

Vertical

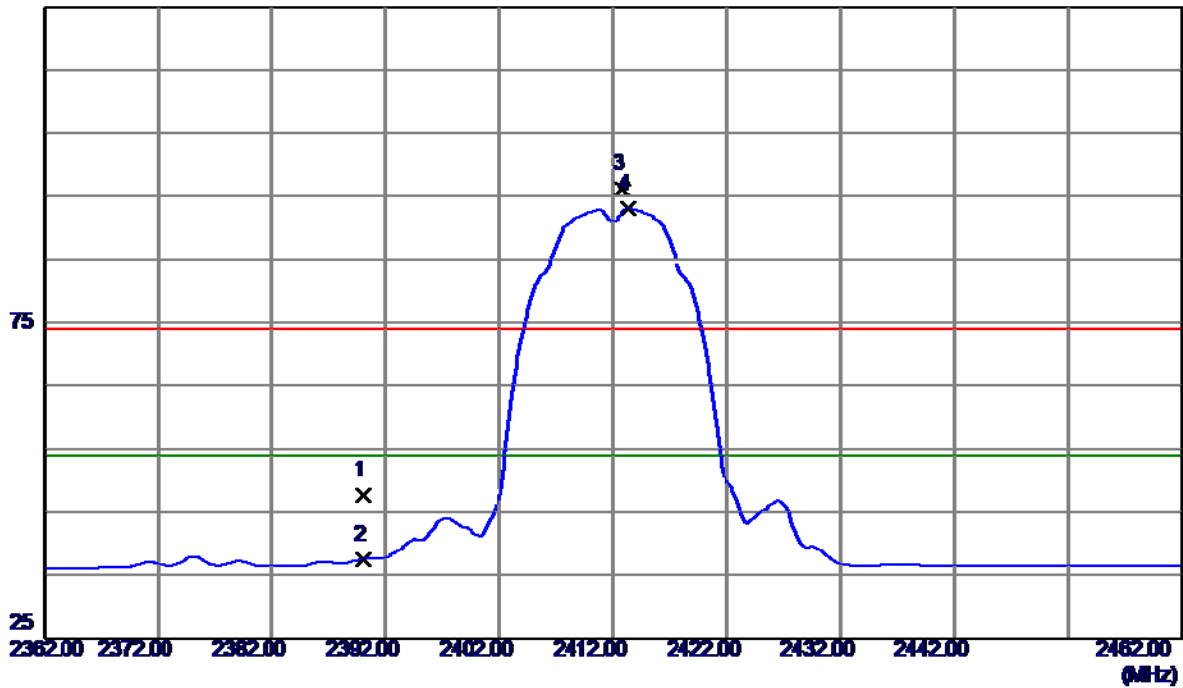


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9100	41.52	3.00	44.52	74.00	-29.48	Peak	
2	4823.9800	32.36	3.00	35.36	54.00	-18.64	AVG	

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

Horizontal

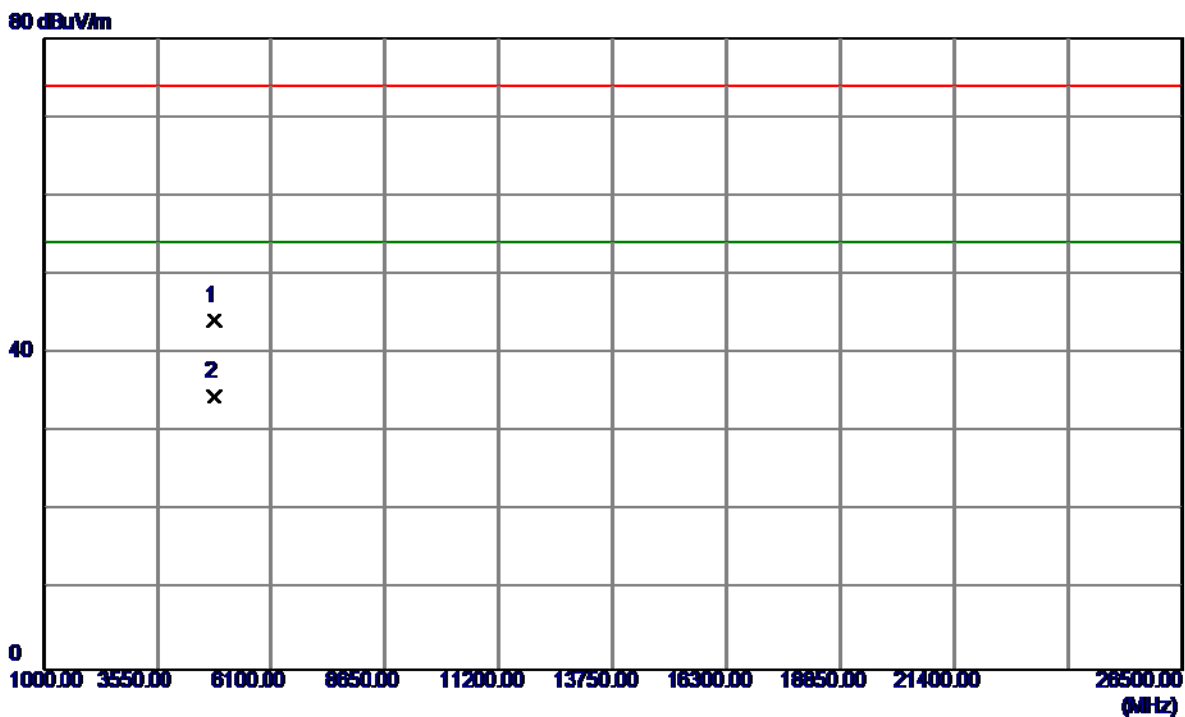
125 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	13.46	34.23	47.69	74.00	-26.31	Peak	
2	2390.0000	3.22	34.23	37.45	54.00	-16.55	AVG	
3	2412.8000	61.85	34.36	96.21	74.00	22.21	Peak	No Limit
4	2413.3000	58.68	34.37	93.05	54.00	39.05	AVG	No Limit

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

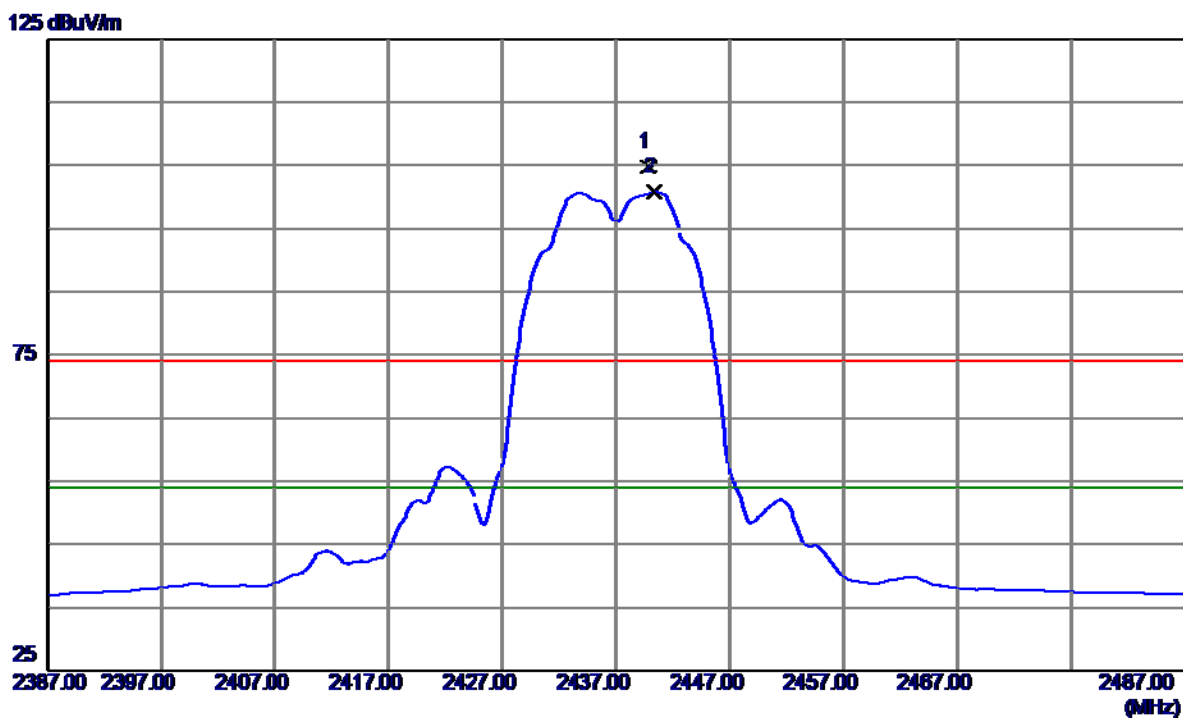
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9100	41.20	3.00	44.20	74.00	-29.80	Peak	
2	4824.0600	31.59	3.00	34.59	54.00	-19.41	AVG	

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

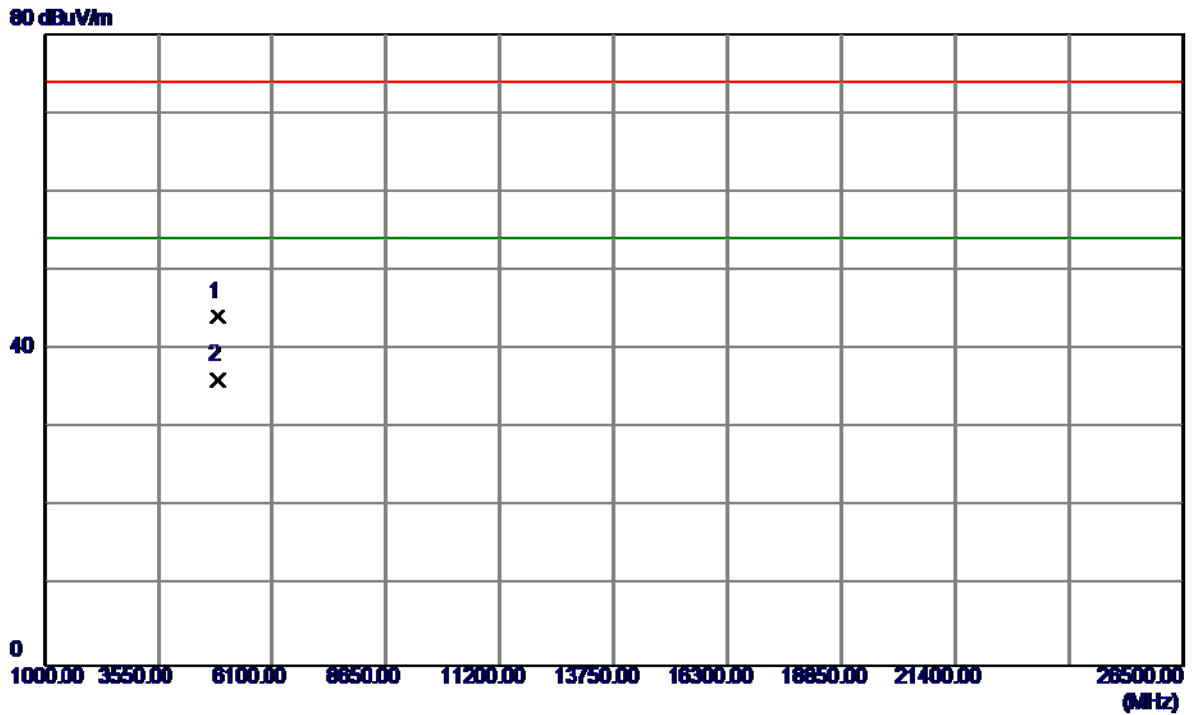
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2439.8000	70.27	34.52	104.79	74.00	30.79	Peak	No Limit
2	2440.3000	66.21	34.52	100.73	54.00	46.73	AVG	No Limit

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

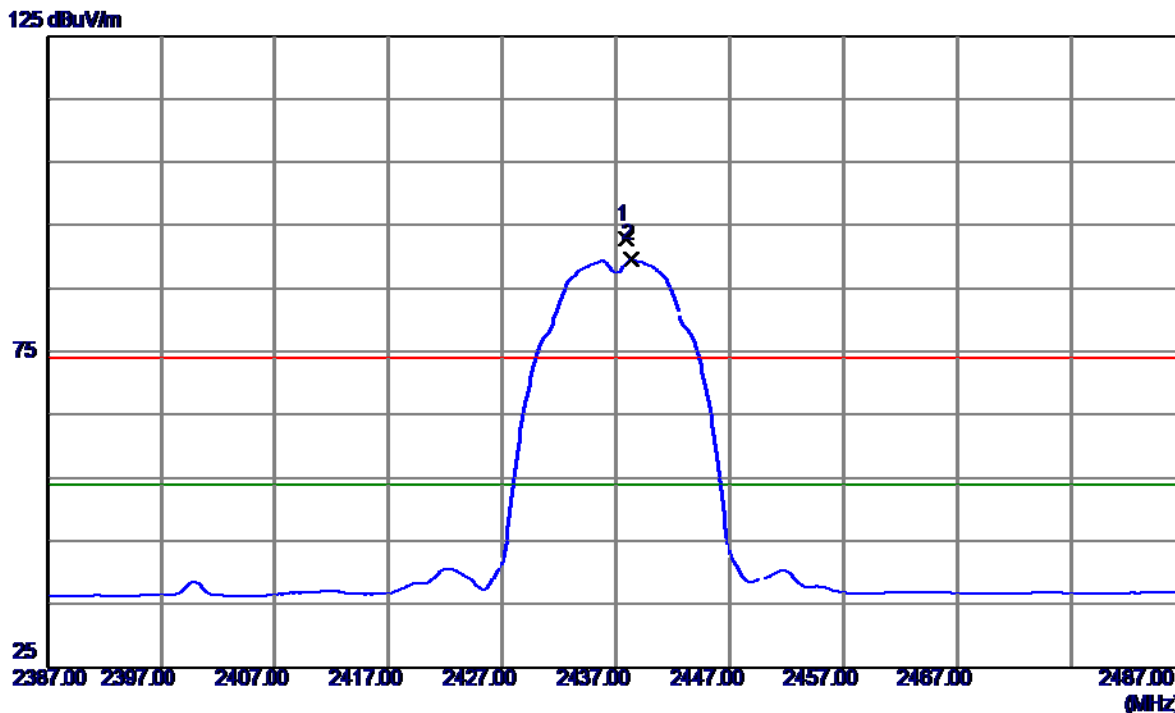
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9200	41.16	3.03	44.19	74.00	-29.81	Peak	
2	4873.9800	33.18	3.03	36.21	54.00	-17.79	AVG	

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

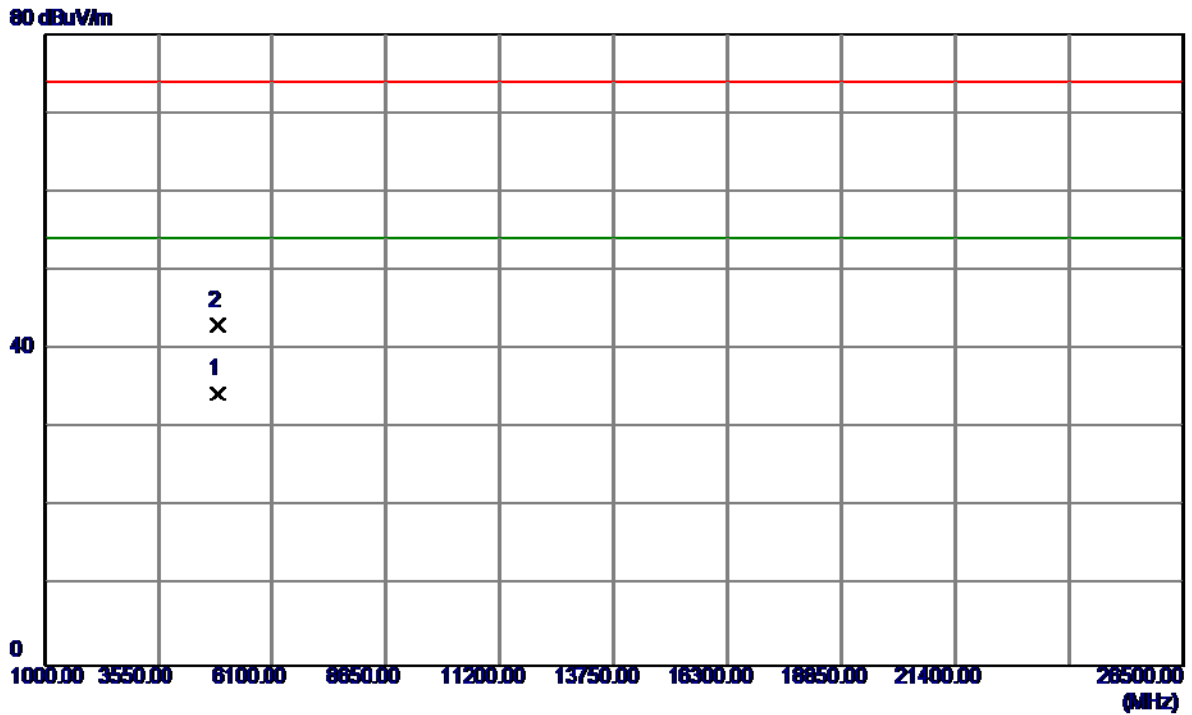
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2437.9000	58.30	34.51	92.81	74.00	18.81	Peak	No Limit
2	2438.3000	55.01	34.51	89.52	54.00	35.52	AVG	No Limit

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

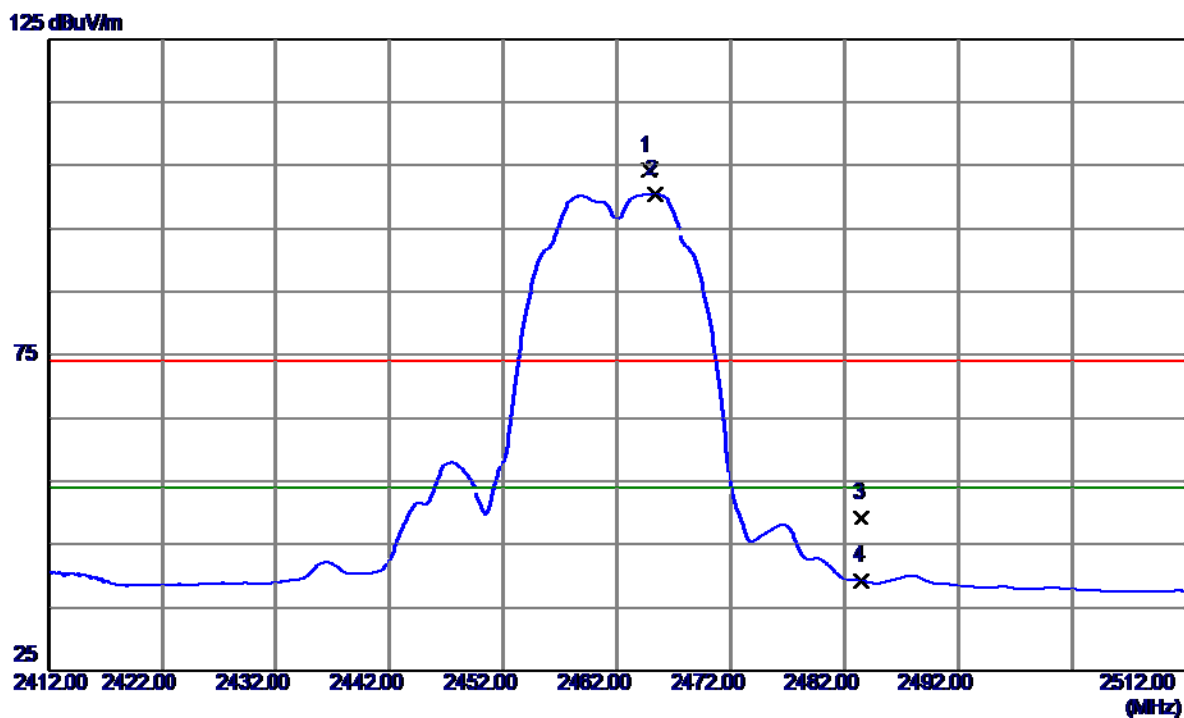
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9200	31.36	3.03	34.39	54.00	-19.61	AVG	
2	4874.0800	40.08	3.03	43.11	74.00	-30.89	Peak	

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

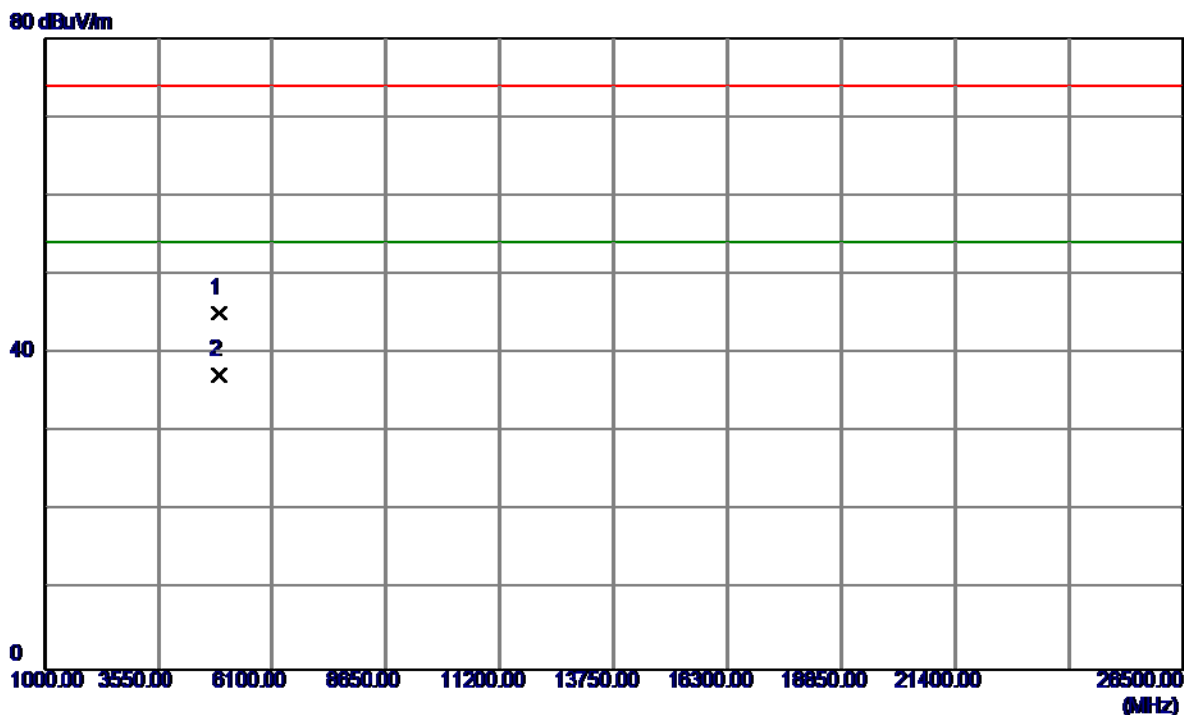
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2464.8000	69.48	34.67	104.15	74.00	30.15	Peak	No Limit
2	2465.3000	65.80	34.67	100.47	54.00	46.47	AVG	No Limit
3	2483.5000	14.37	34.77	49.14	74.00	-24.86	Peak	
4	2483.5000	4.47	34.77	39.24	54.00	-14.76	AVG	

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

Vertical

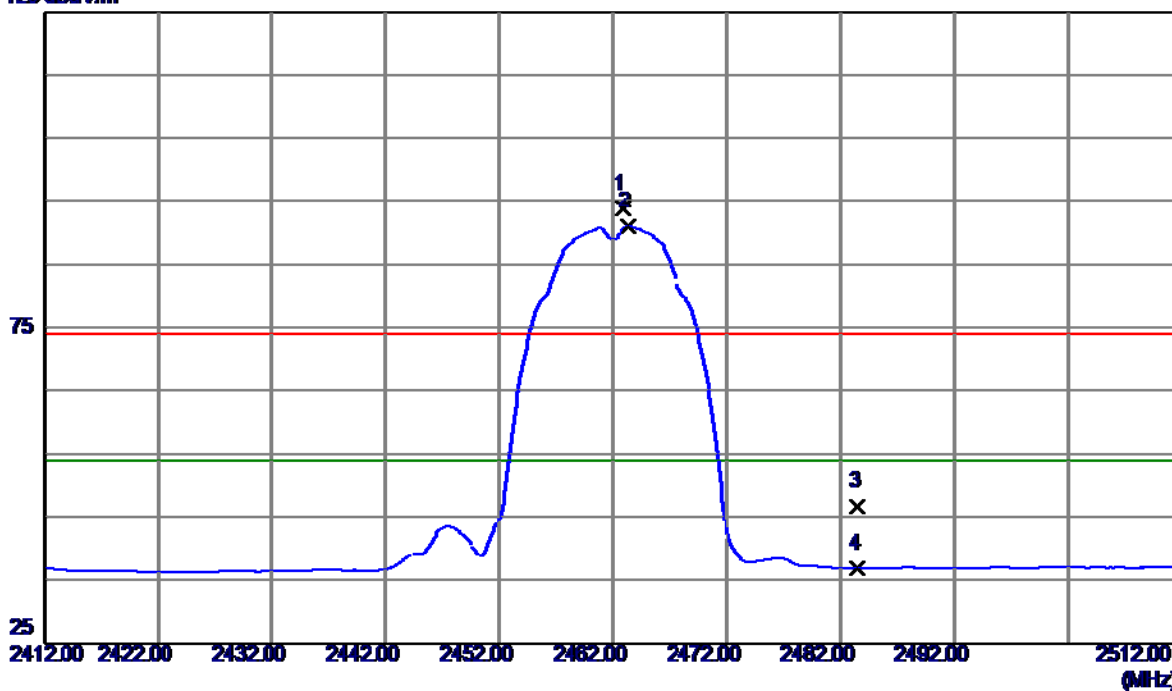


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.9300	42.12	3.05	45.17	74.00	-28.83	Peak	
2	4923.9600	34.25	3.05	37.30	54.00	-16.70	AVG	

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

Horizontal

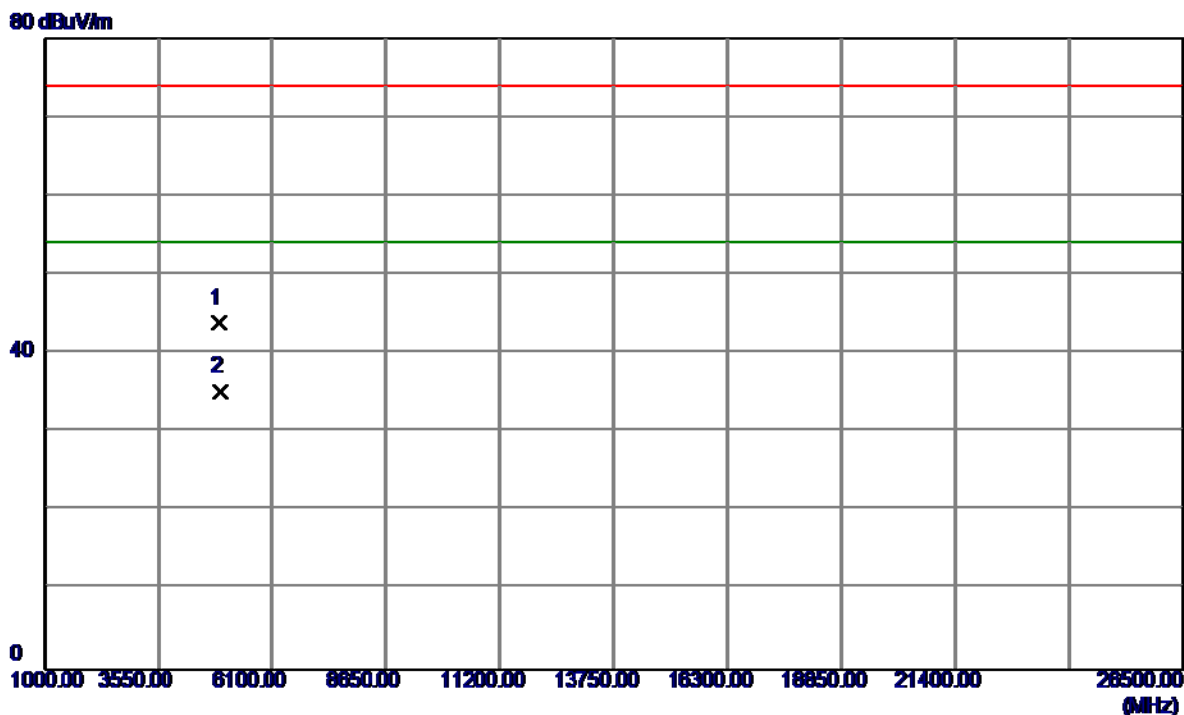
125 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2462.9000	59.21	34.65	93.86	74.00	19.86	Peak	No Limit
2	2463.3000	56.37	34.66	91.03	54.00	37.03	AVG	No Limit
3	2483.5000	11.75	34.77	46.52	74.00	-27.48	Peak	
4	2483.5000	2.07	34.77	36.84	54.00	-17.16	AVG	

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

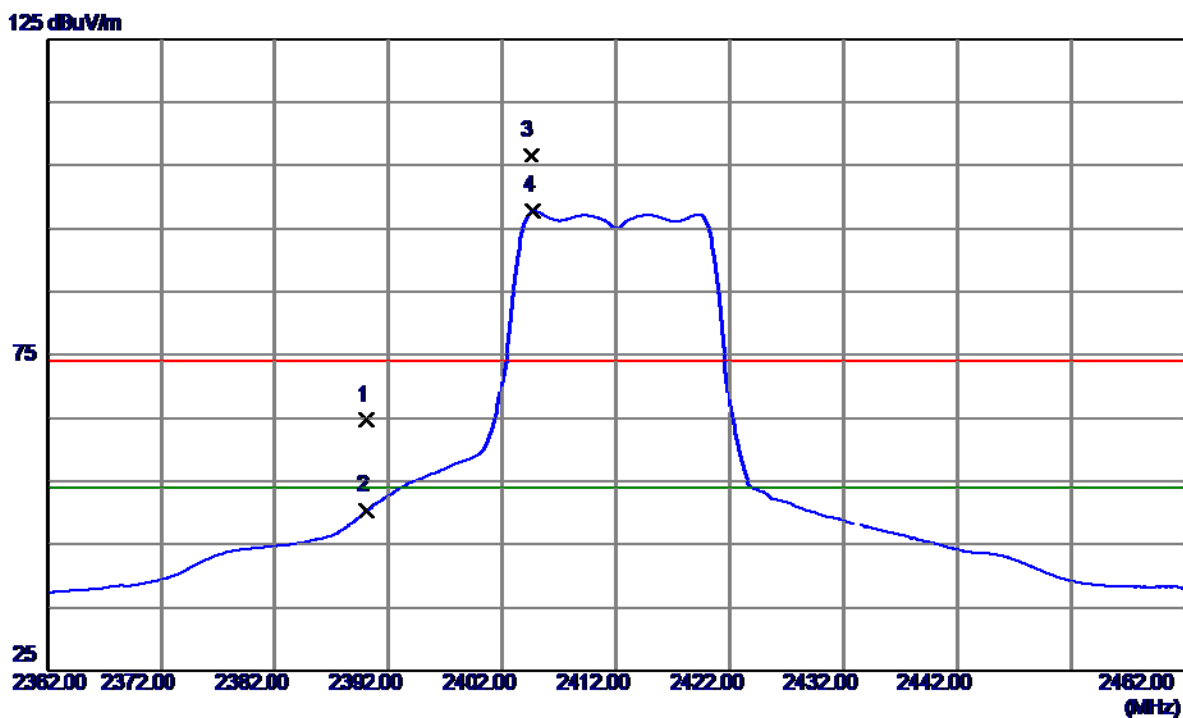
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.4000	40.87	3.05	43.92	74.00	-30.08	Peak	
2	4924.5000	32.19	3.05	35.24	54.00	-18.76	AVG	

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

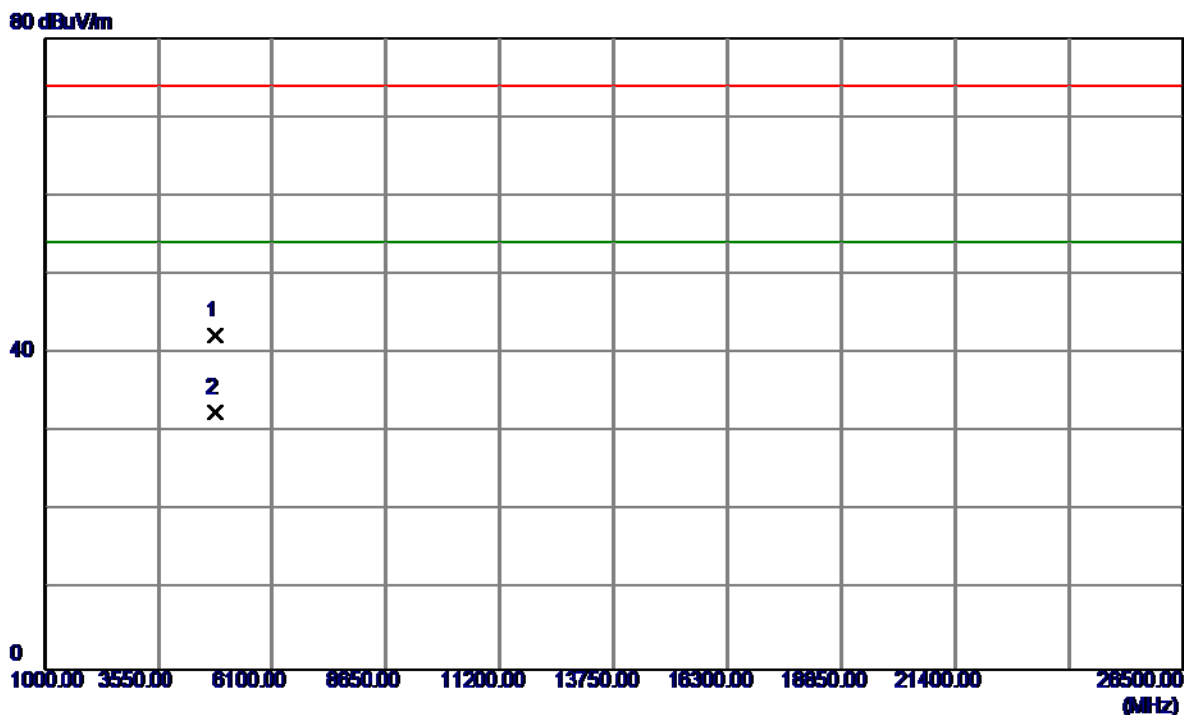
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	30.47	34.23	64.70	74.00	-9.30	Peak	
2	2390.0000	16.10	34.23	50.33	54.00	-3.67	AVG	
3	2404.5000	72.36	34.32	106.68	74.00	32.68	Peak	No Limit
4	2404.7000	63.45	34.32	97.77	54.00	43.77	AVG	No Limit

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

Vertical

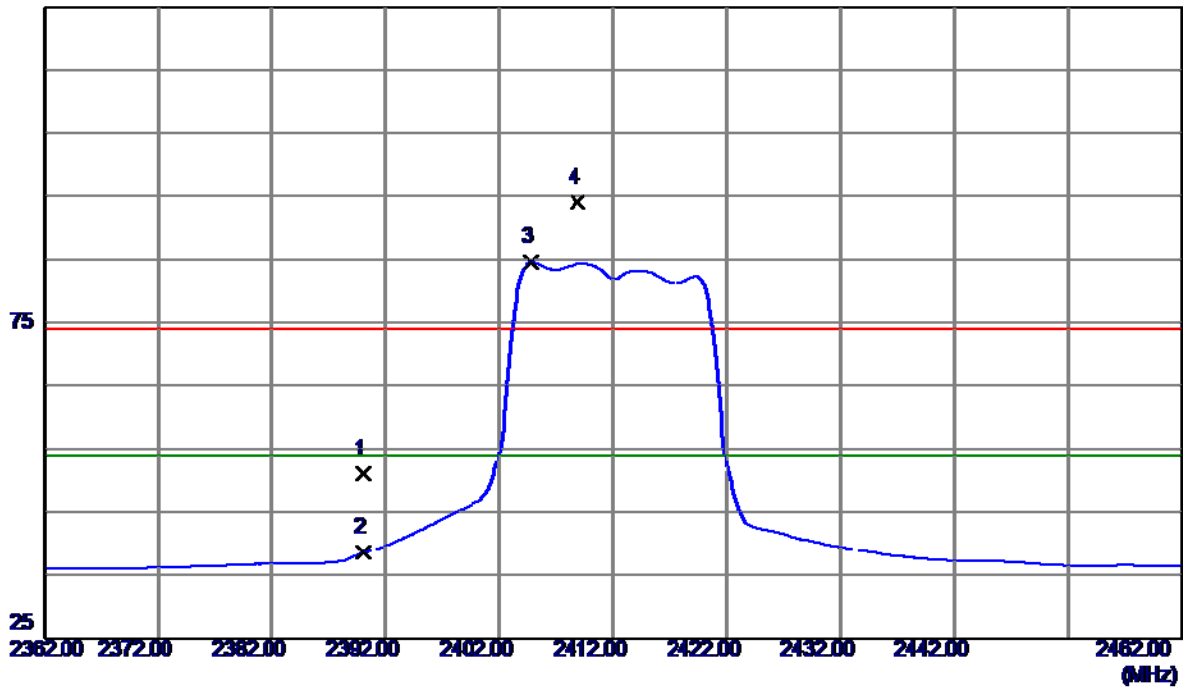


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9100	39.24	3.00	42.24	74.00	-31.76	Peak	
2	4823.9800	29.50	3.00	32.50	54.00	-21.50	AVG	

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

Horizontal

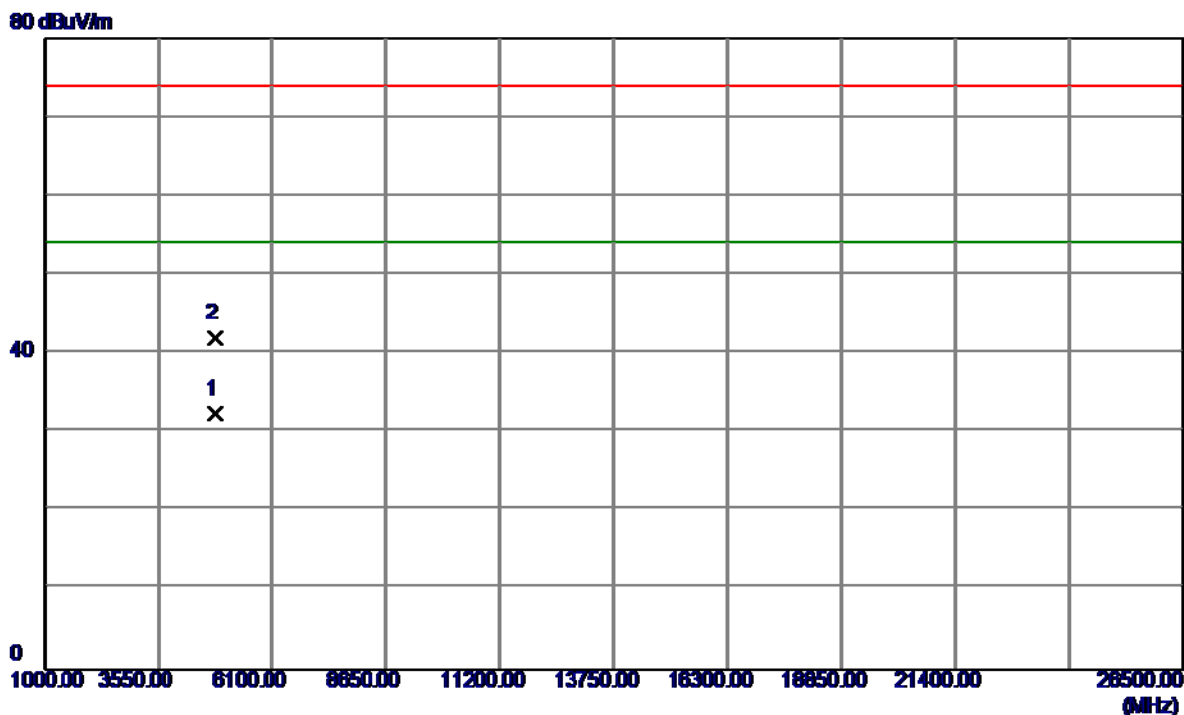
125 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	16.78	34.23	51.01	74.00	-22.99	Peak	
2	2390.0000	4.29	34.23	38.52	54.00	-15.48	AVG	
3	2404.8000	50.24	34.32	84.56	54.00	30.56	AVG	No Limit
4	2408.9000	59.62	34.34	93.96	74.00	19.96	Peak	No Limit

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

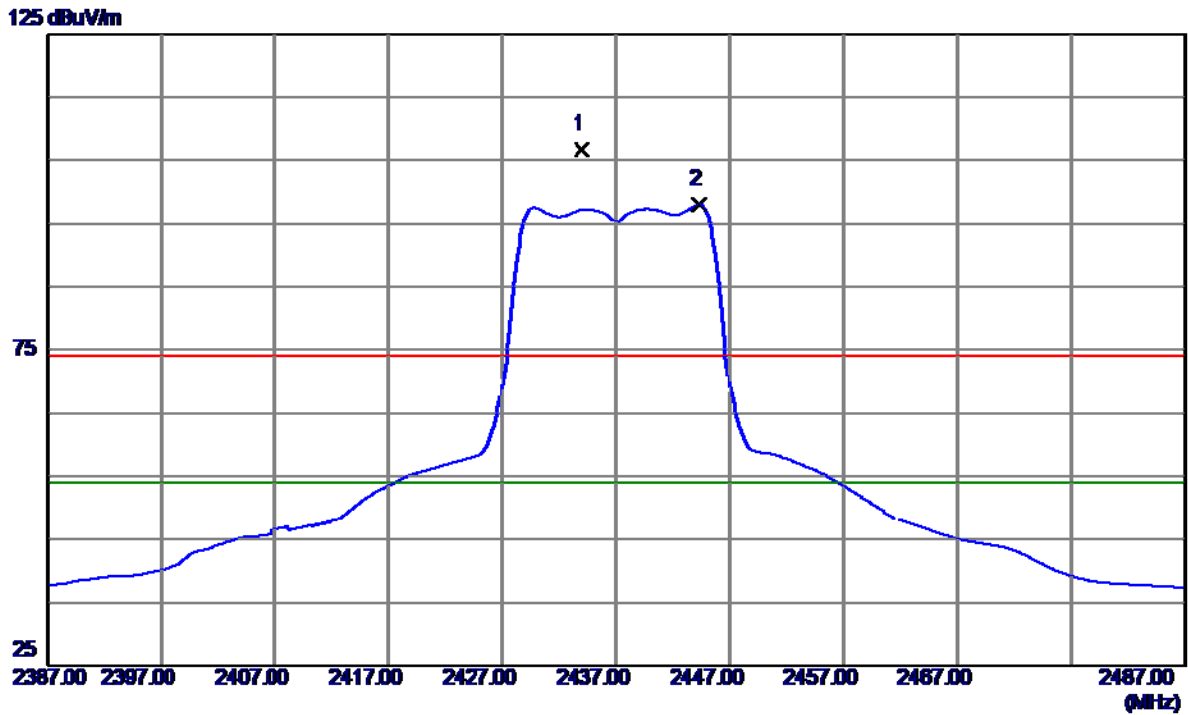
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9600	29.37	3.00	32.37	54.00	-21.63	AVG	
2	4824.0000	38.87	3.00	41.87	74.00	-32.13	Peak	

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

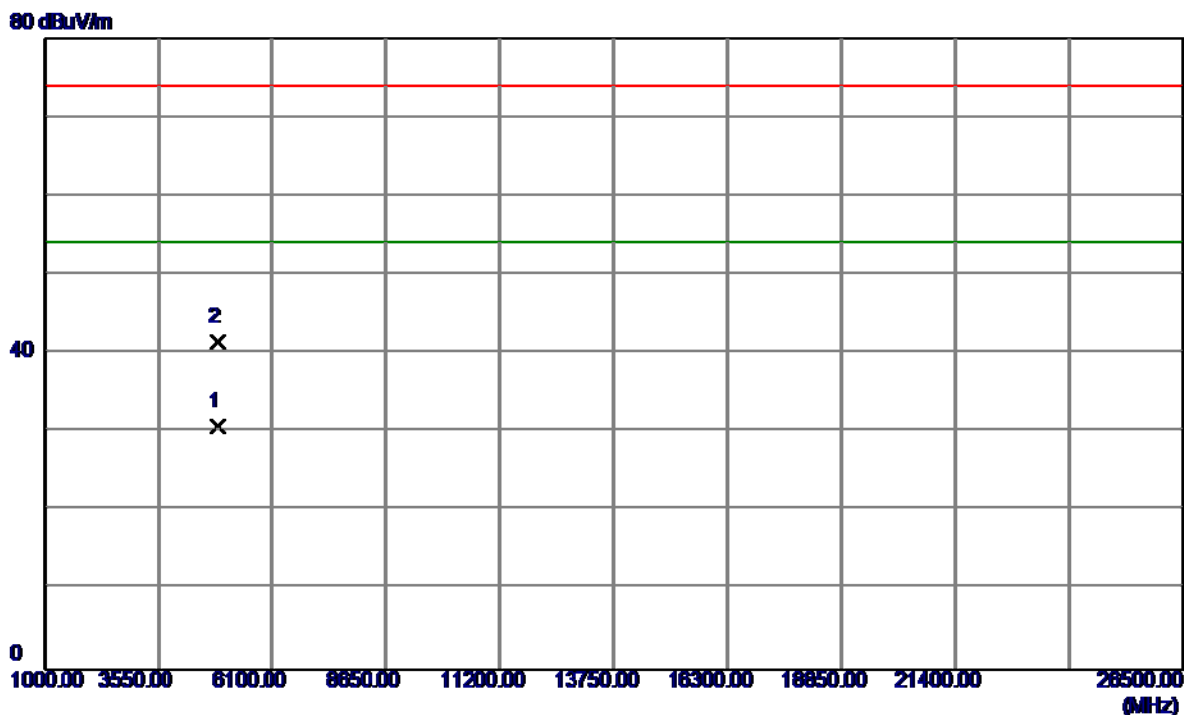
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.0000	72.25	34.49	106.74	74.00	32.74	Peak	No Limit
2	2444.3000	63.40	34.55	97.95	54.00	43.95	AVG	No Limit

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

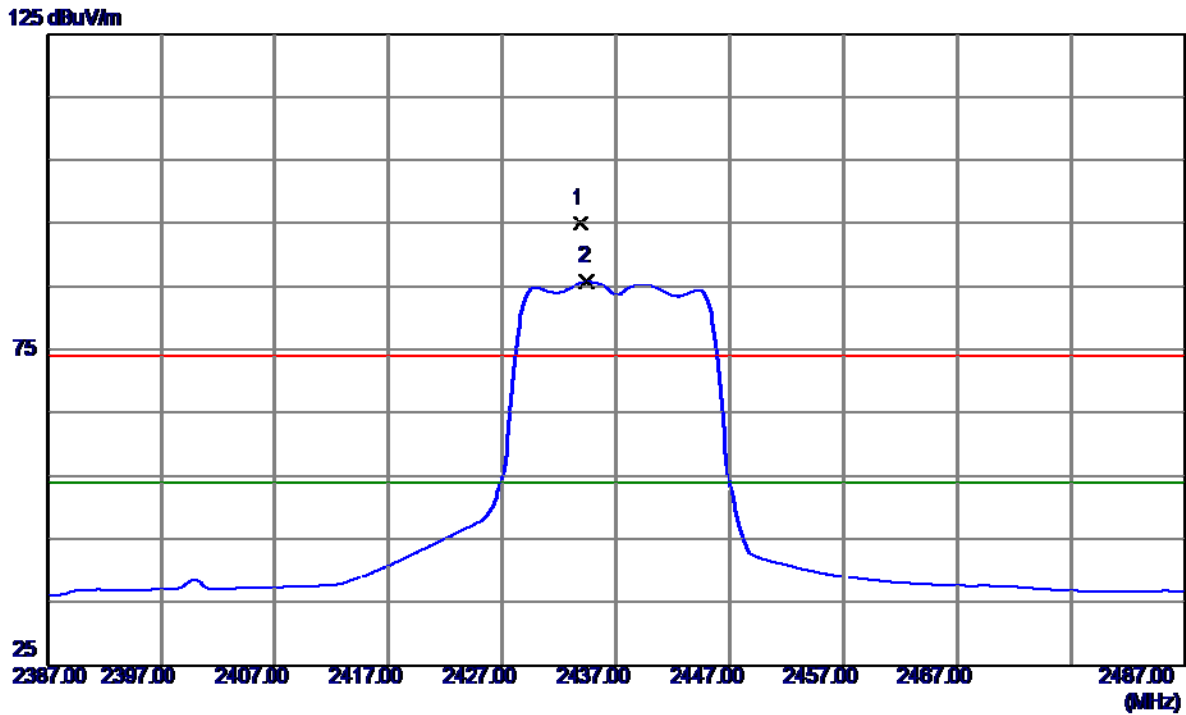
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1000	27.64	3.03	30.67	54.00	-23.33	AVG	
2	4875.2200	38.40	3.03	41.43	74.00	-32.57	Peak	

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

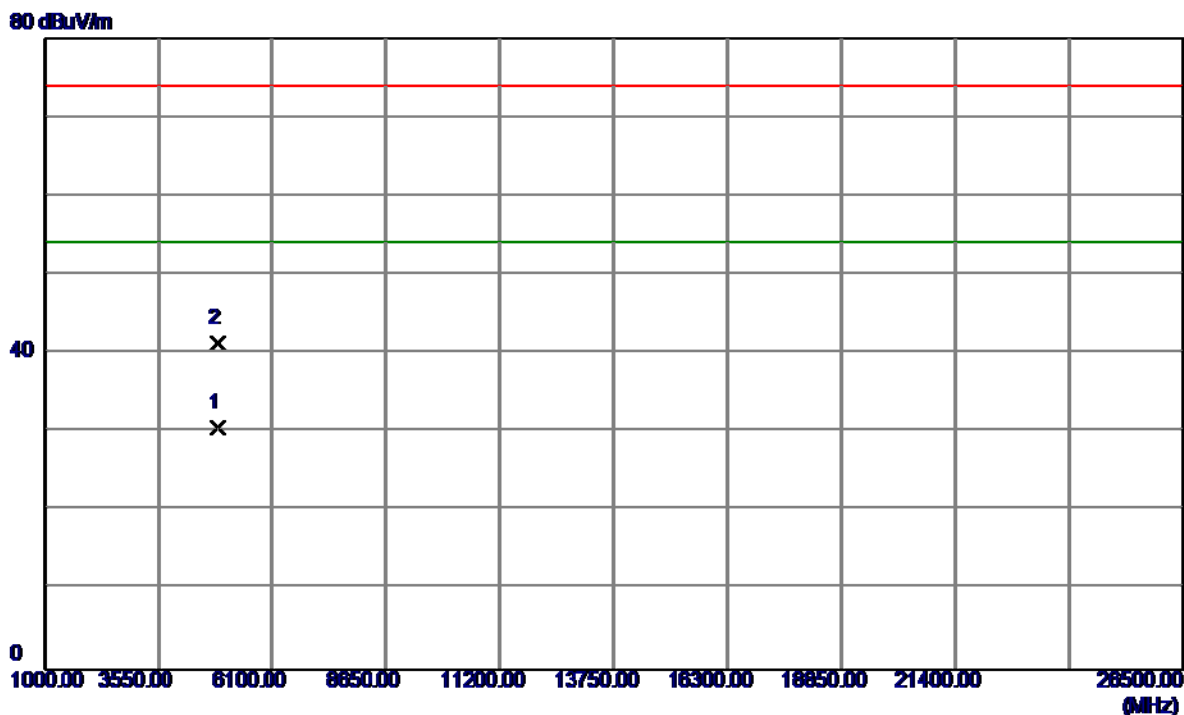
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2433.9000	60.48	34.49	94.97	74.00	20.97	Peak	No Limit
2	2434.5000	51.23	34.49	85.72	54.00	31.72	AVG	No Limit

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

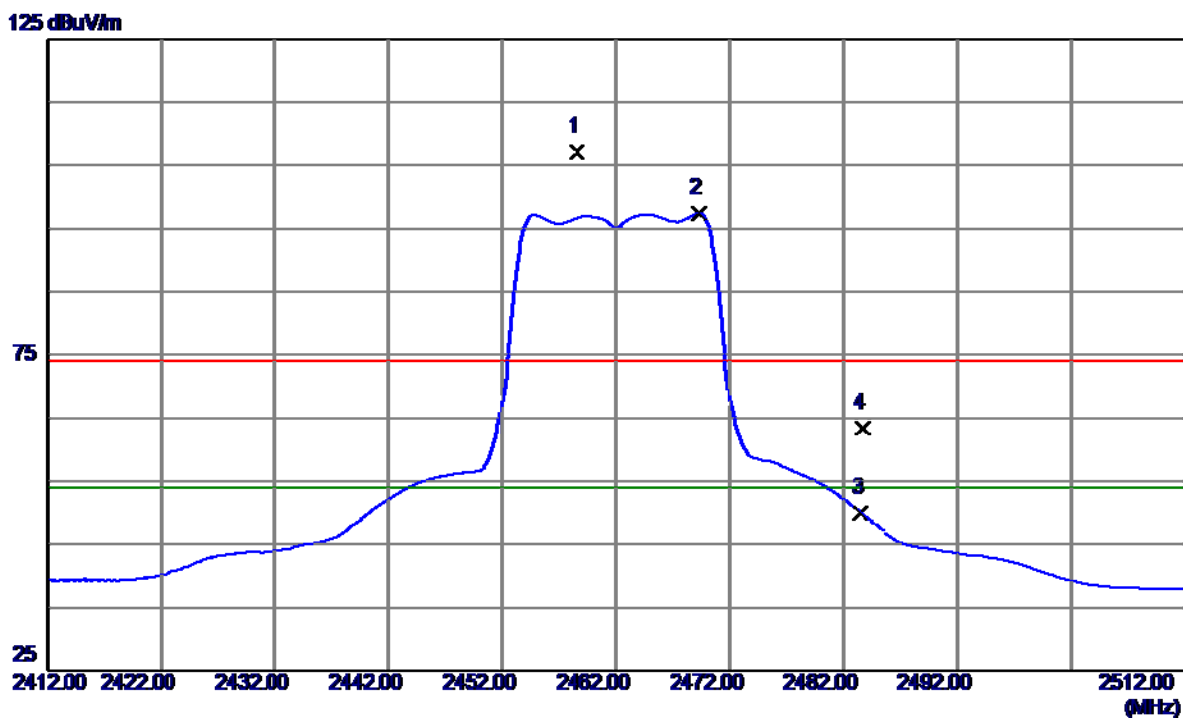
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9600	27.51	3.03	30.54	54.00	-23.46	AVG	
2	4874.0800	38.32	3.03	41.35	74.00	-32.65	Peak	

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

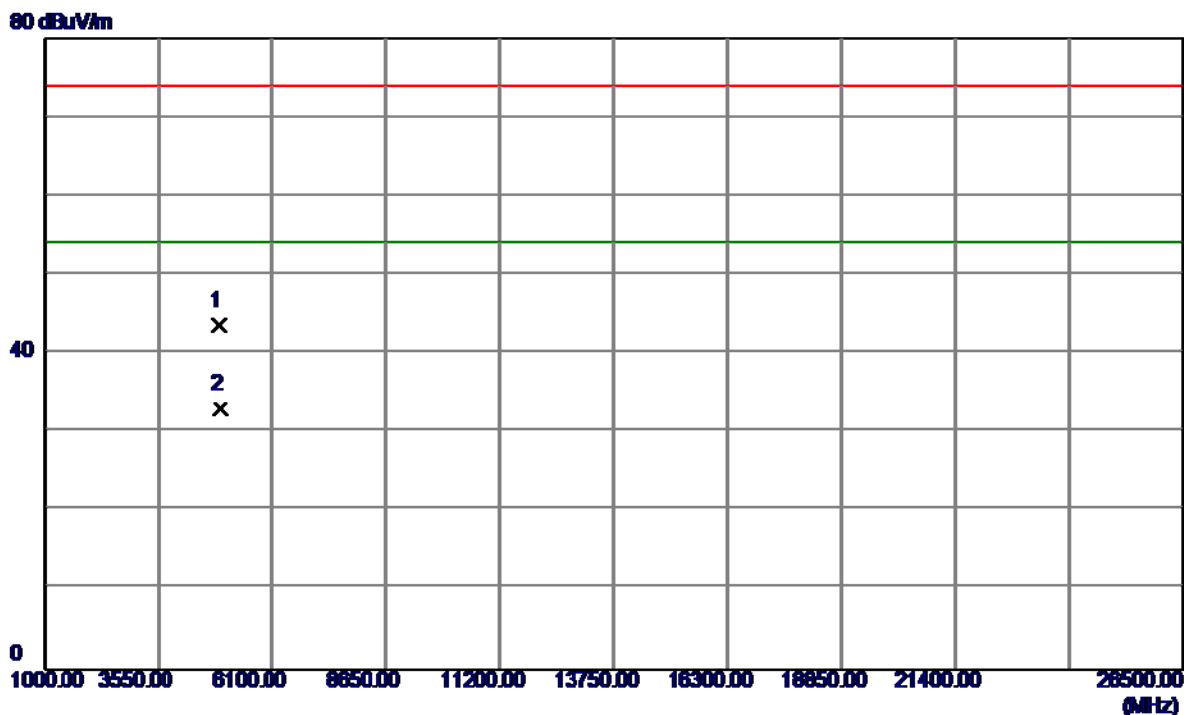
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2458.6000	72.60	34.63	107.23	74.00	33.23	Peak	No Limit
2	2469.3000	62.77	34.69	97.46	54.00	43.46	AVG	No Limit
3	2483.5000	15.30	34.77	50.07	54.00	-3.93	AVG	
4	2483.7000	28.69	34.78	63.47	74.00	-10.53	Peak	

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

Vertical

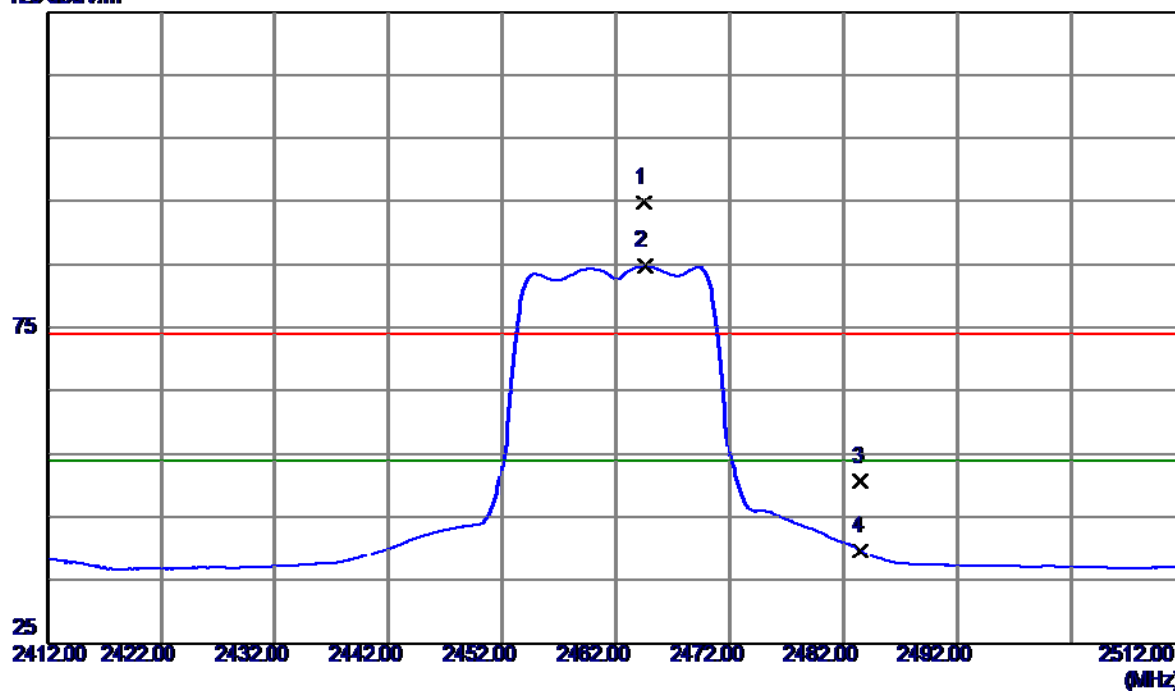


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.5000	40.44	3.05	43.49	74.00	-30.51	Peak	
2	4924.5000	29.98	3.05	33.03	54.00	-20.97	AVG	

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

Horizontal

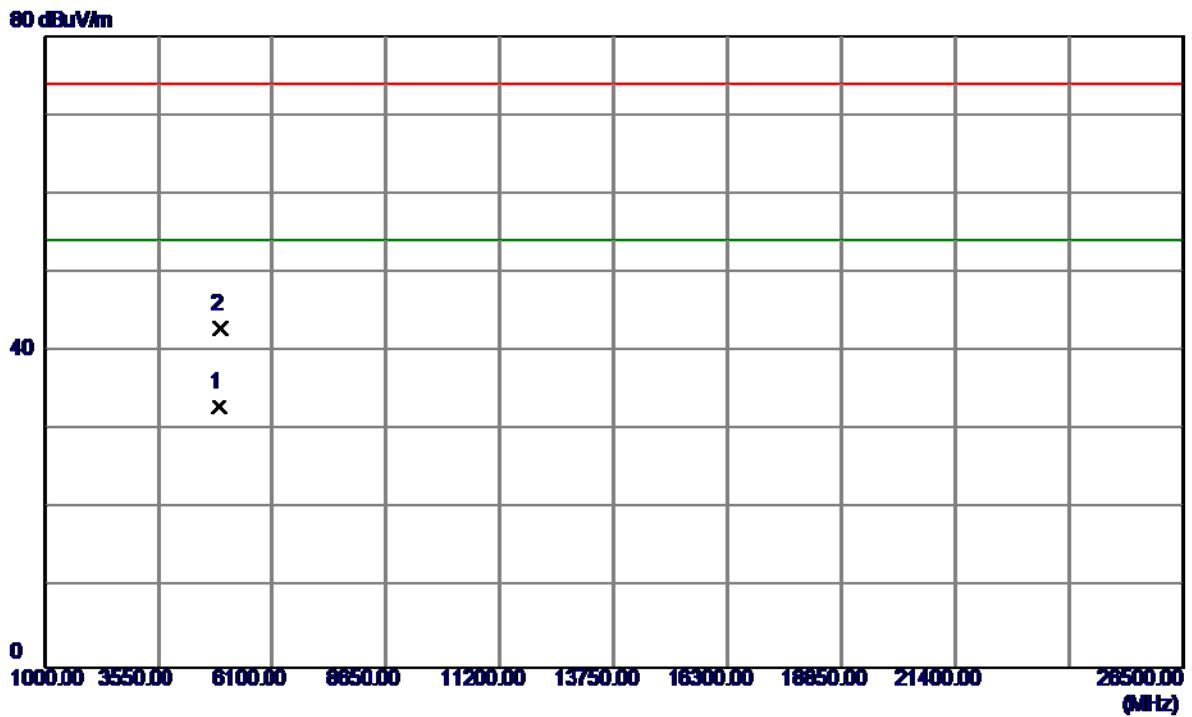
125 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2464.4000	60.23	34.66	94.89	74.00	20.89	Peak	No Limit
2	2464.5000	50.05	34.66	84.71	54.00	30.71	AVG	No Limit
3	2483.5000	15.85	34.77	50.62	74.00	-23.38	Peak	
4	2483.5000	4.81	34.77	39.58	54.00	-14.42	AVG	

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

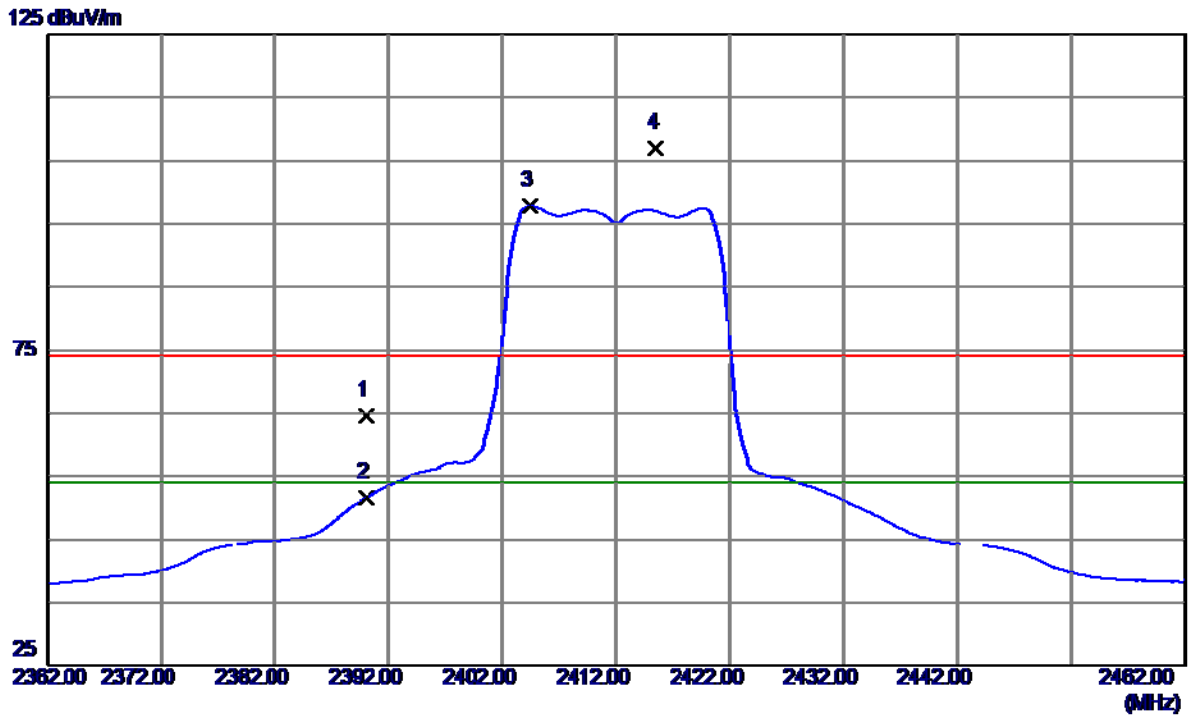
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.5000	29.89	3.05	32.94	54.00	-21.06	AVG	
2	4924.5000	39.77	3.05	42.82	74.00	-31.18	Peak	

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

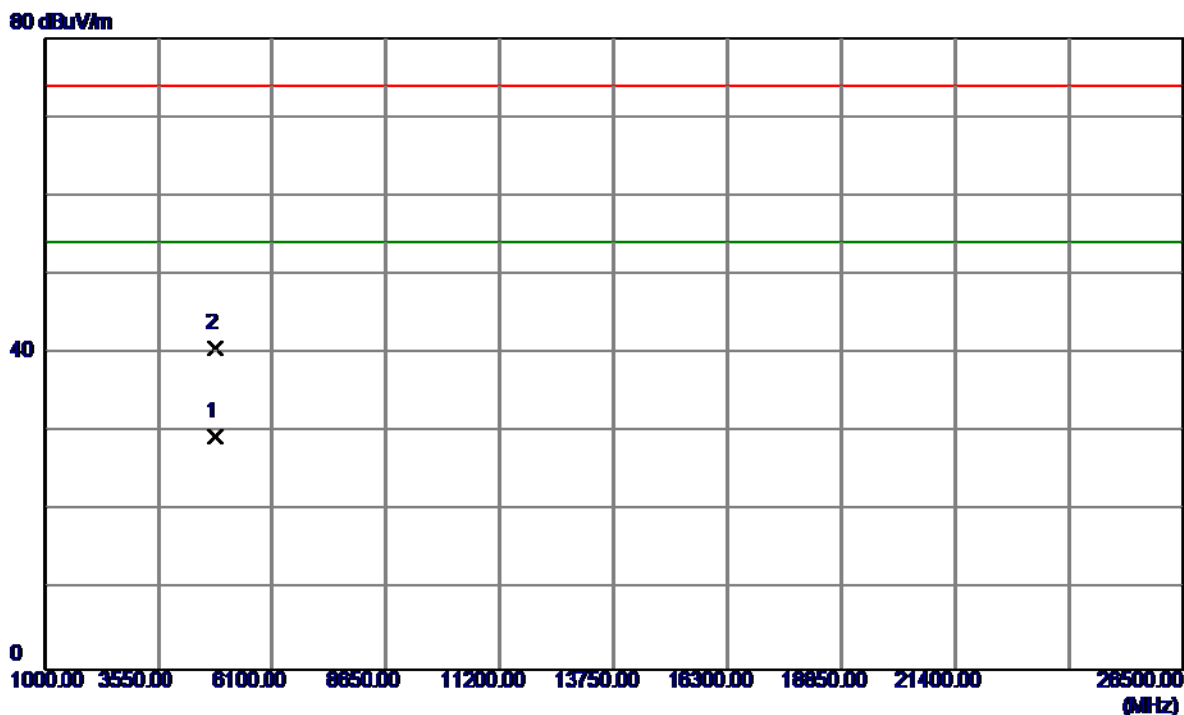
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	30.37	34.23	64.60	74.00	-9.40	Peak	
2	2390.0000	17.38	34.23	51.61	54.00	-2.39	AVG	
3	2404.4000	63.46	34.32	97.78	54.00	43.78	AVG	No Limit
4	2415.5000	72.58	34.38	106.96	74.00	32.96	Peak	No Limit

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

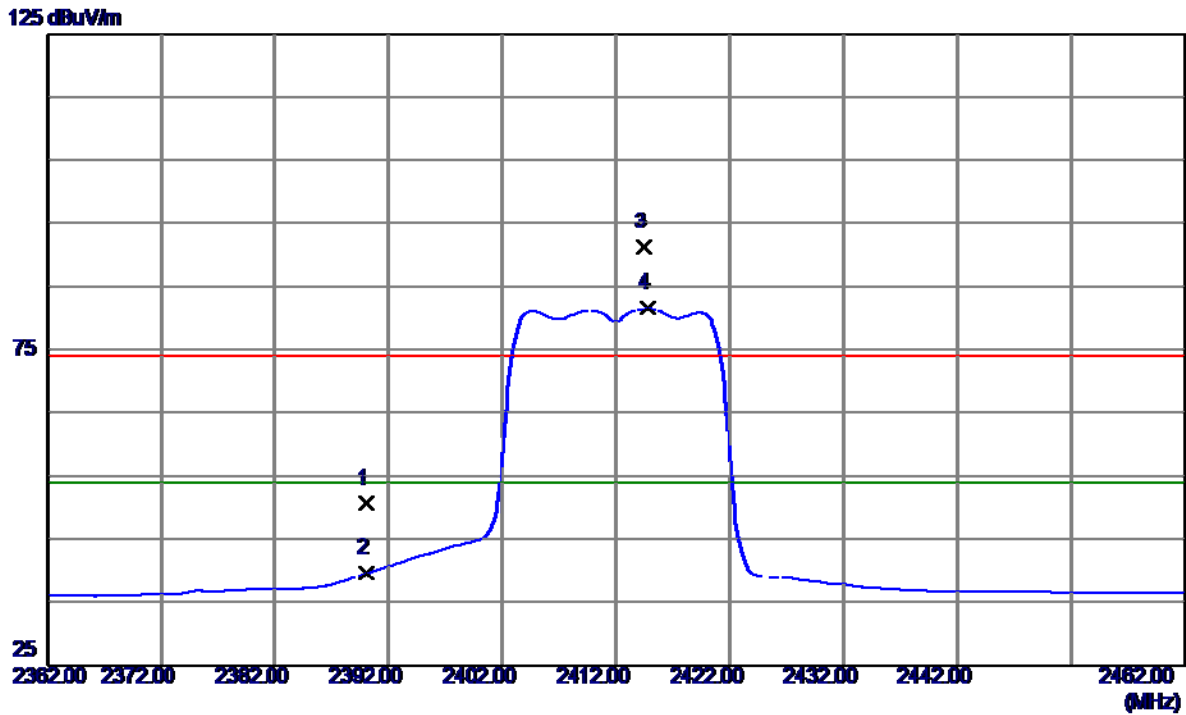
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.8600	26.40	3.00	29.40	54.00	-24.60	AVG	
2	4824.1000	37.67	3.00	40.67	74.00	-33.33	Peak	

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

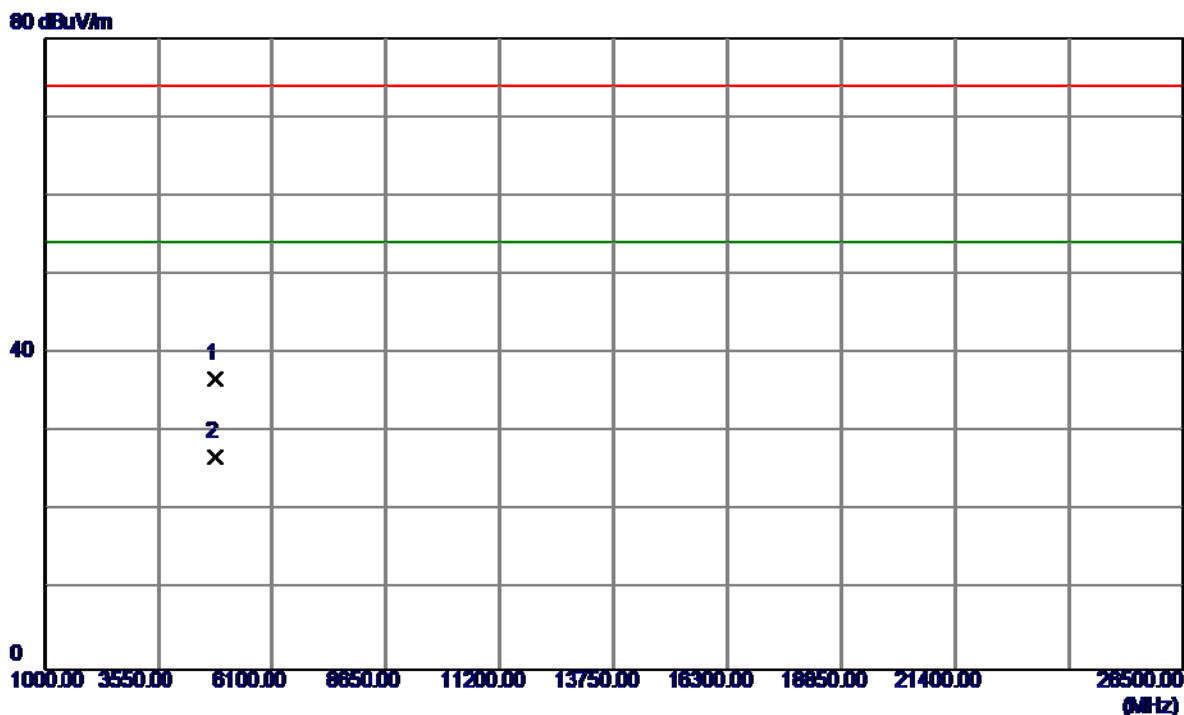
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	16.40	34.23	50.63	74.00	-23.37	Peak	
2	2390.0000	5.35	34.23	39.58	54.00	-14.42	AVG	
3	2414.4000	56.88	34.37	91.25	74.00	17.25	Peak	No Limit
4	2414.8000	47.20	34.38	81.58	54.00	27.58	AVG	No Limit

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

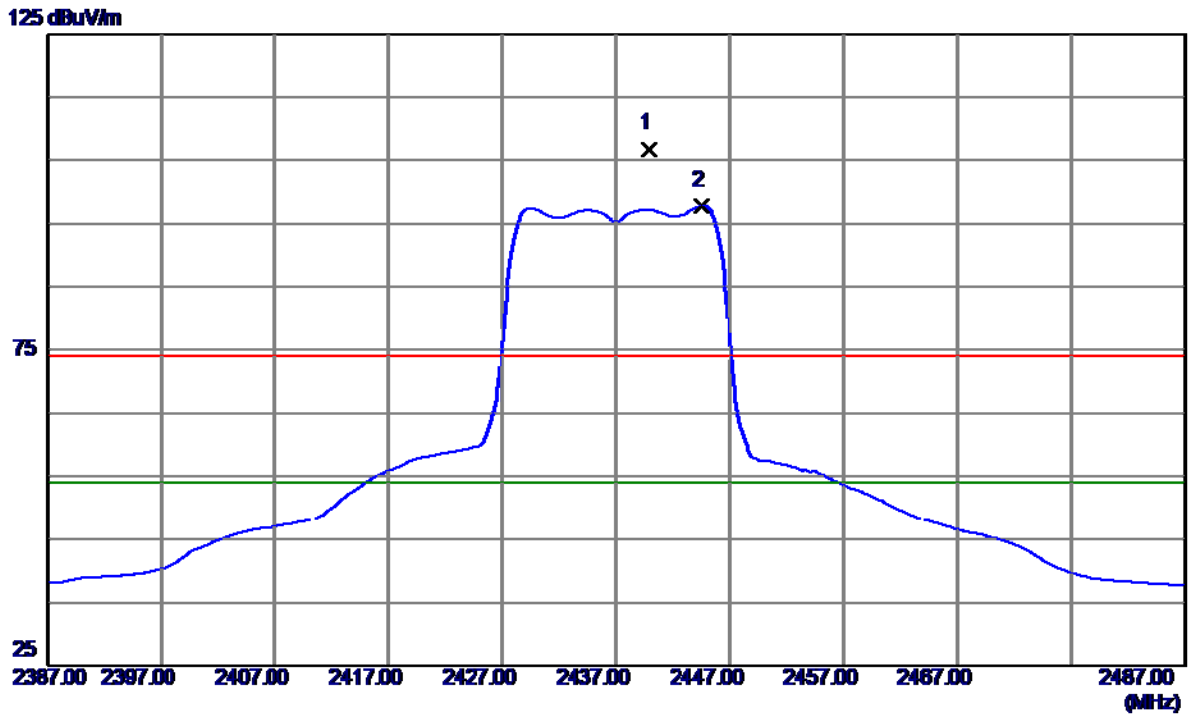
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9200	33.82	3.00	36.82	74.00	-37.18	Peak	
2	4823.9600	23.92	3.00	26.92	54.00	-27.08	AVG	

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

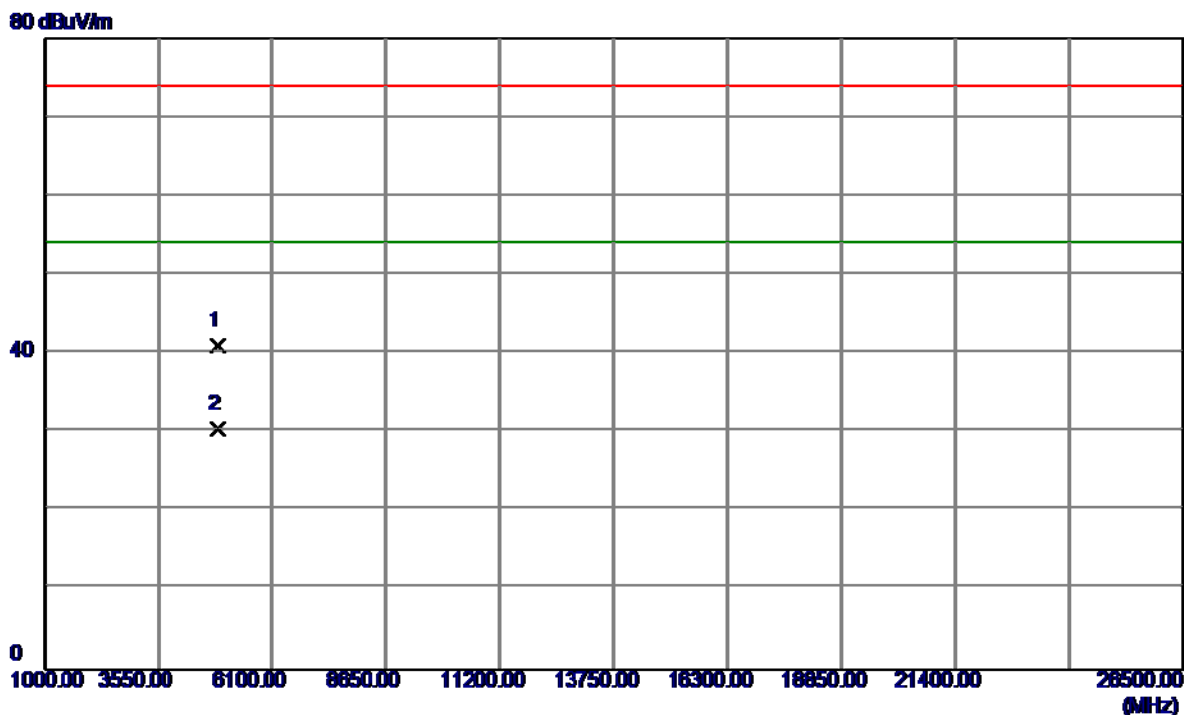
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2439.9000	72.38	34.52	106.90	74.00	32.90	Peak	No Limit
2	2444.6000	63.33	34.55	97.88	54.00	43.88	AVG	No Limit

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

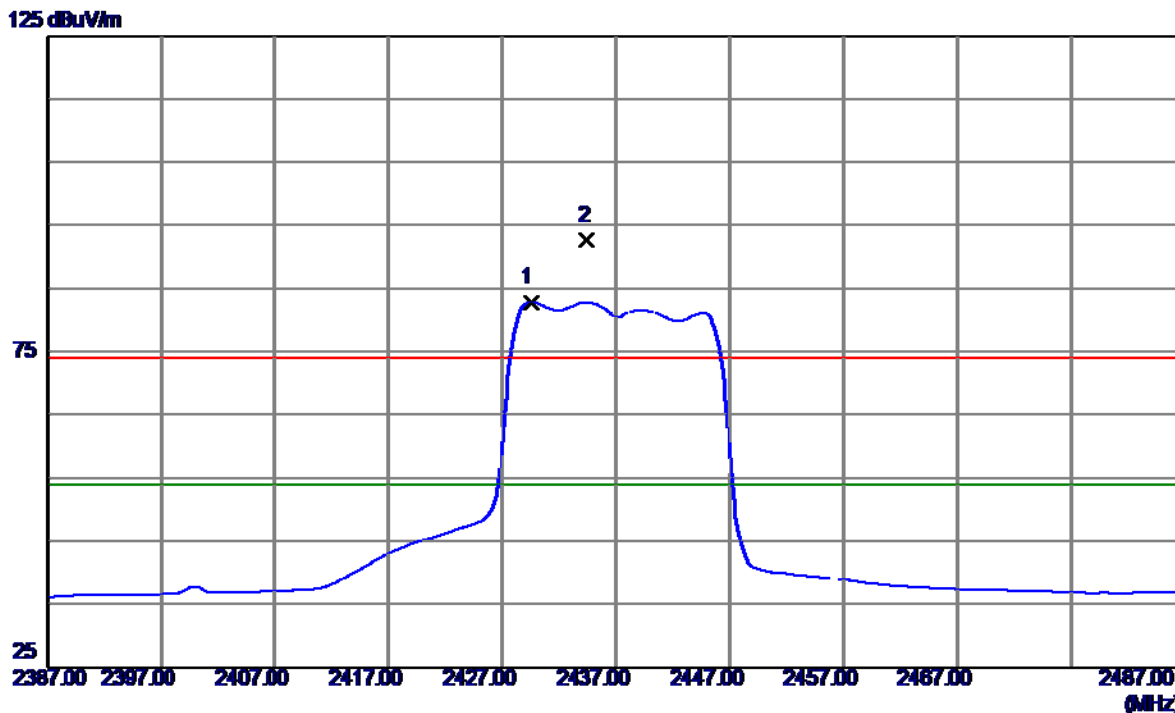
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.5800	37.86	3.03	40.89	74.00	-33.11	Peak	
2	4873.9200	27.32	3.03	30.35	54.00	-23.65	AVG	

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

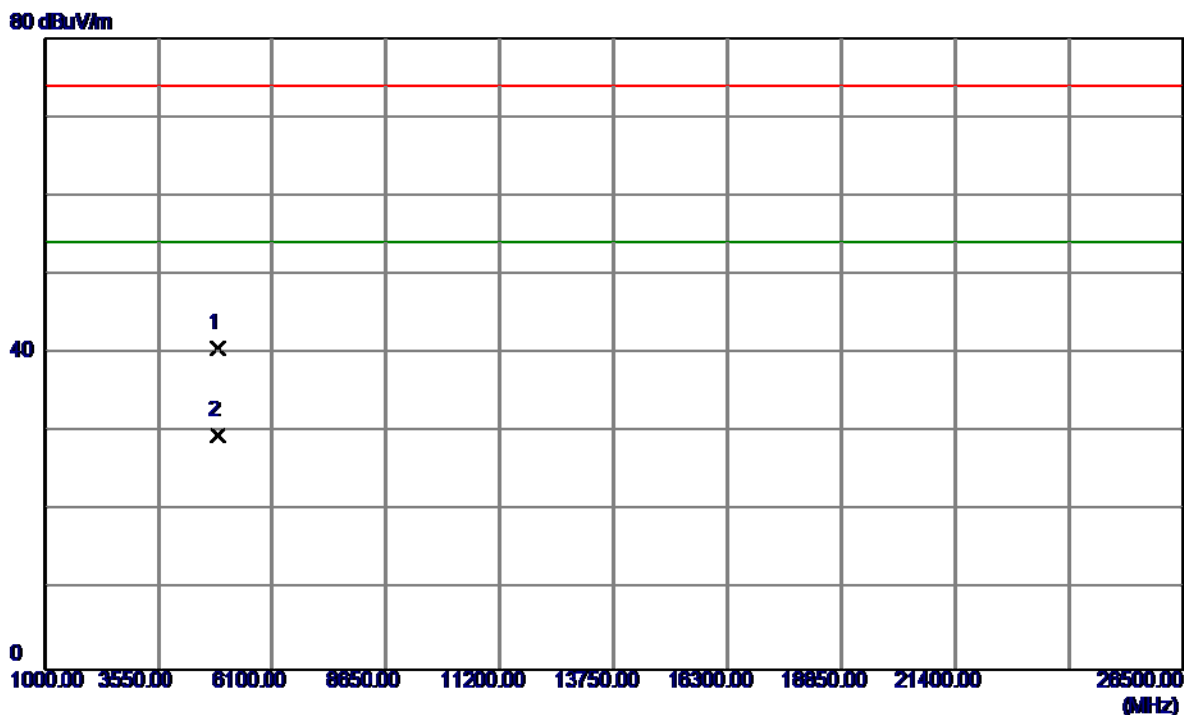
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2429.5000	48.41	34.46	82.87	54.00	28.87	AVG	No Limit
2	2434.5000	58.19	34.49	92.68	74.00	18.68	Peak	No Limit

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

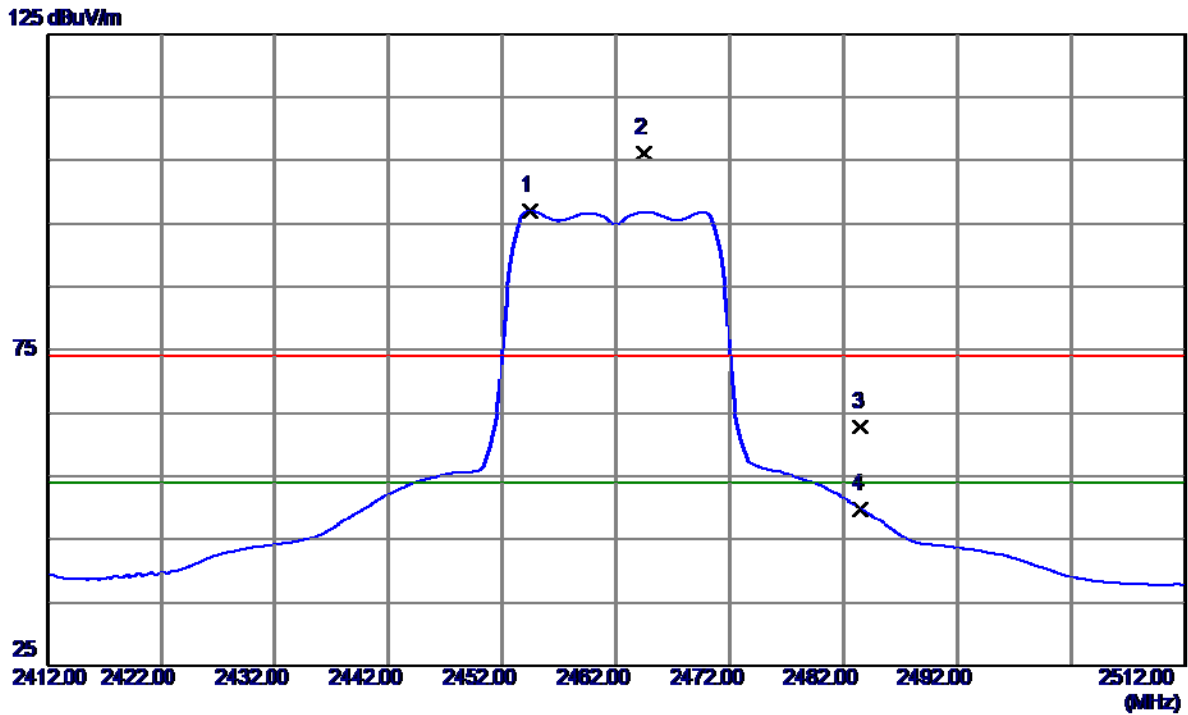
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.9000	37.68	3.03	40.71	74.00	-33.29	Peak	
2	4873.3000	26.53	3.03	29.56	54.00	-24.44	AVG	

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

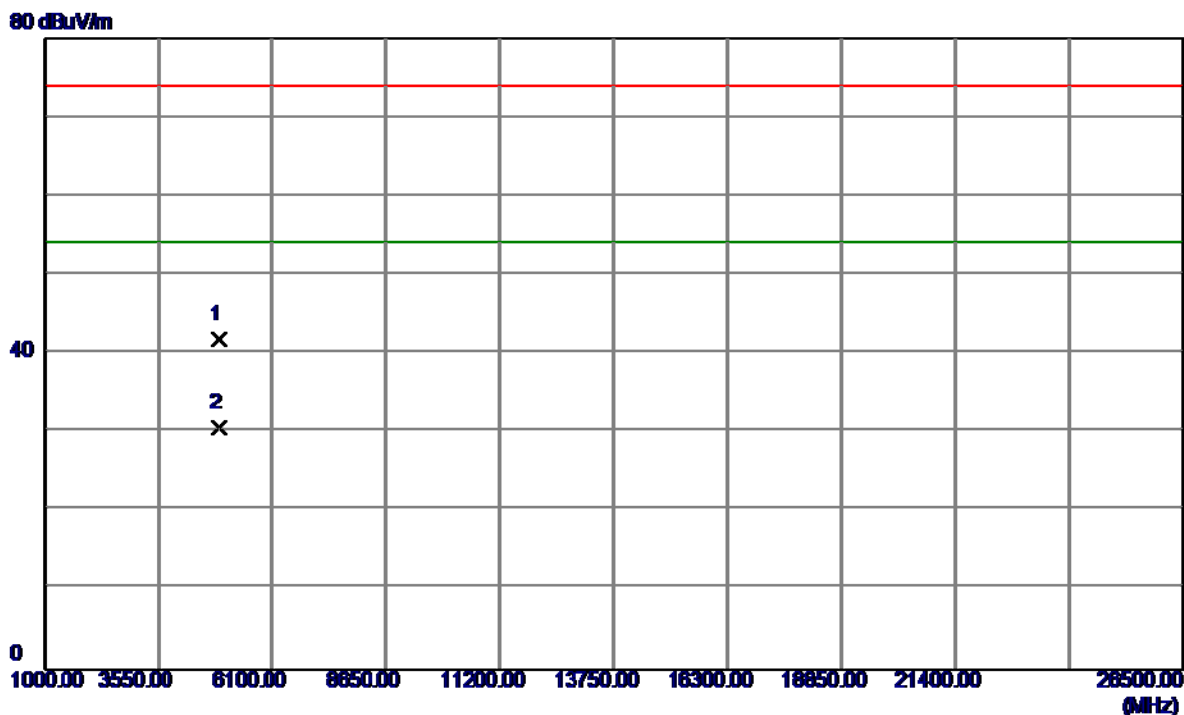
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2454.4000	62.41	34.61	97.02	54.00	43.02	AVG	No Limit
2	2464.4000	71.52	34.66	106.18	74.00	32.18	Peak	No Limit
3	2483.5000	28.06	34.77	62.83	74.00	-11.17	Peak	
4	2483.5000	15.08	34.77	49.85	54.00	-4.15	AVG	

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

Vertical

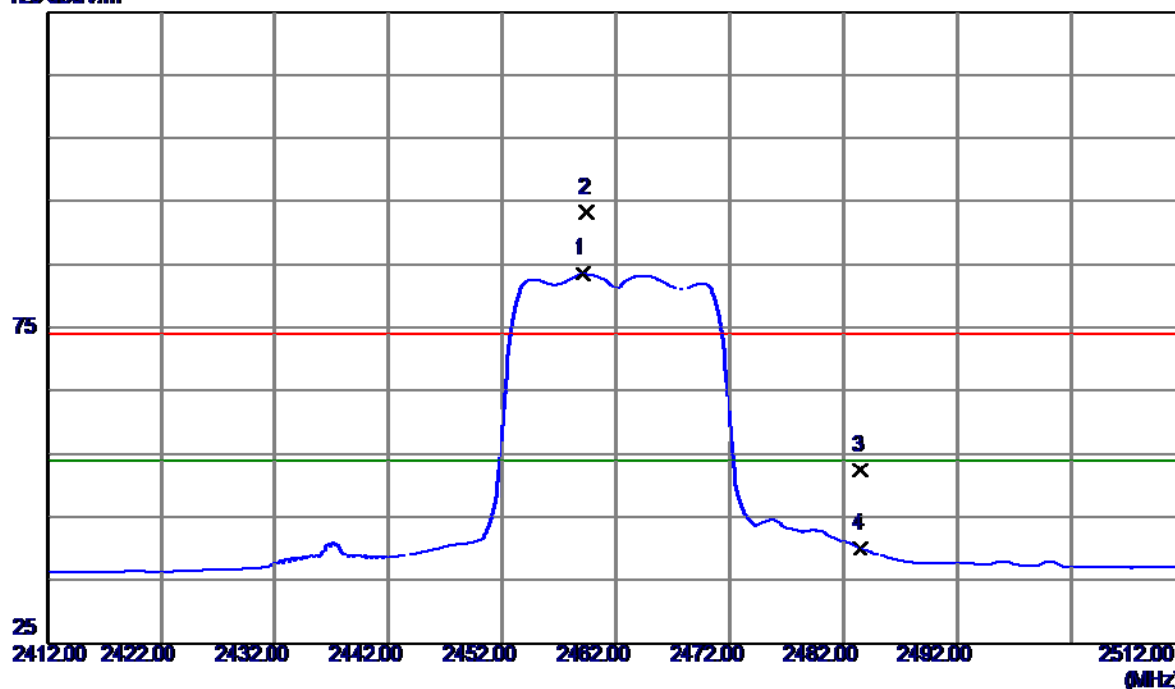


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.2000	38.72	3.05	41.77	74.00	-32.23	Peak	
2	4923.5000	27.55	3.05	30.60	54.00	-23.40	AVG	

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

Horizontal

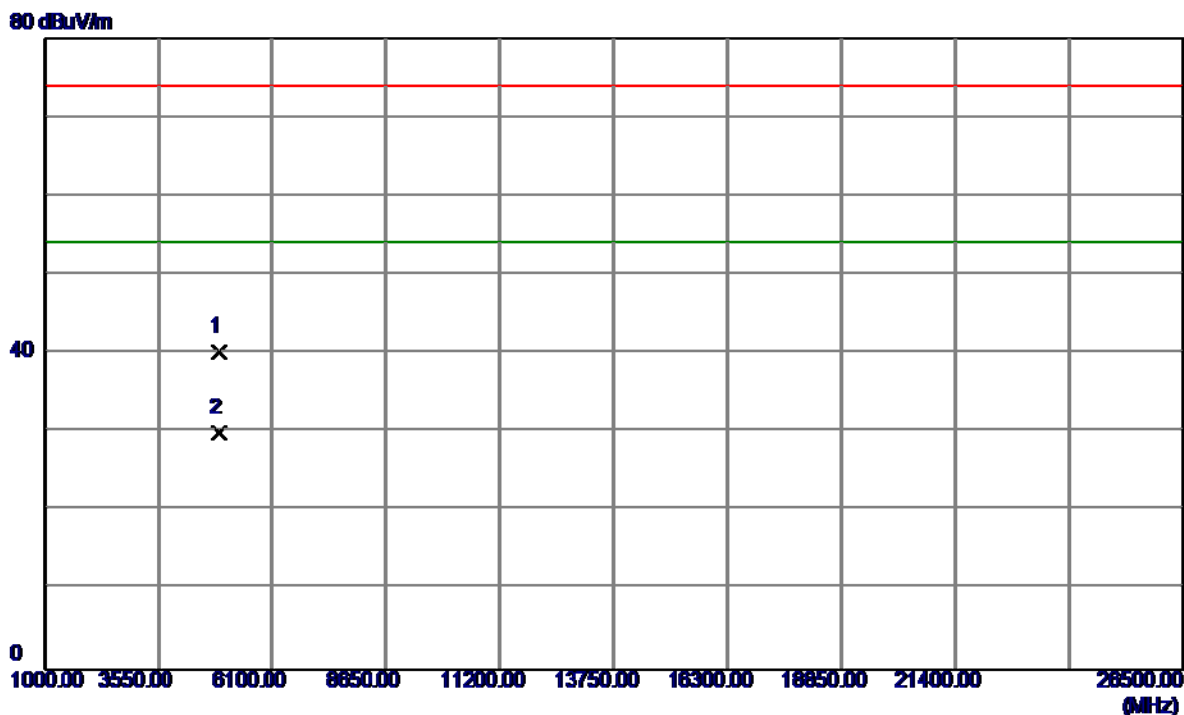
125 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.1000	48.90	34.63	83.53	54.00	29.53	AVG	No Limit
2	2459.5000	58.58	34.64	93.22	74.00	19.22	Peak	No Limit
3	2483.5000	17.54	34.77	52.31	74.00	-21.69	Peak	
4	2483.5000	5.16	34.77	39.93	54.00	-14.07	AVG	

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

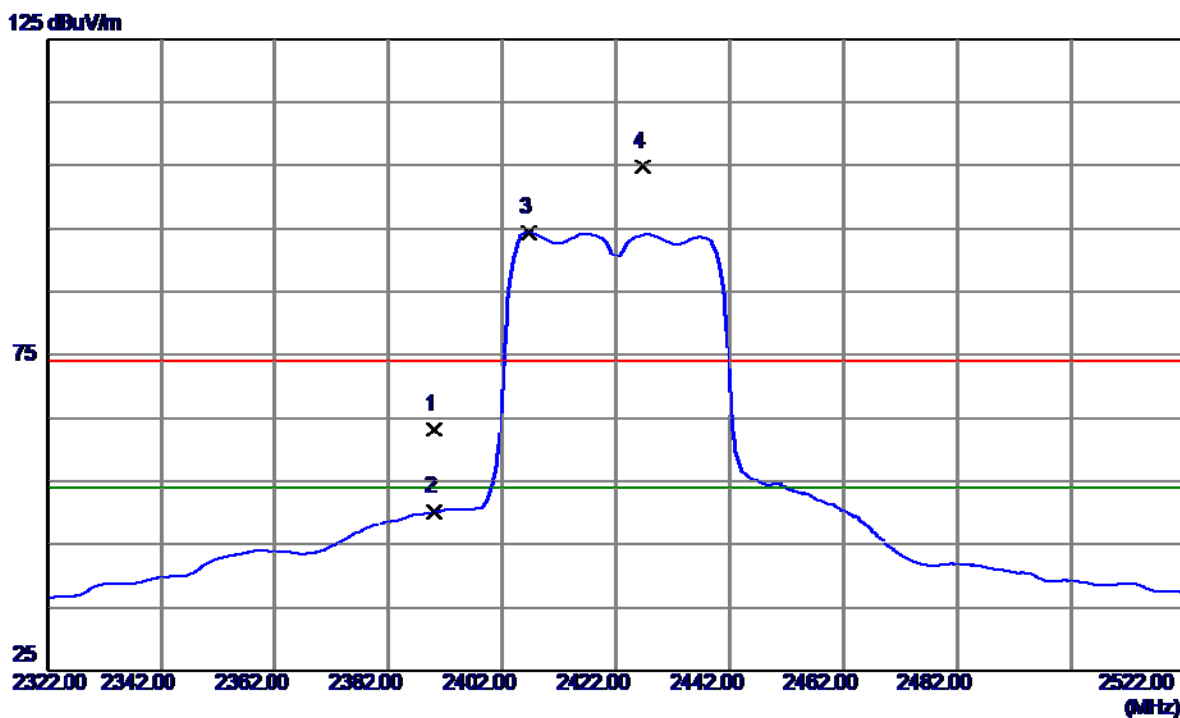
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.1000	37.08	3.05	40.13	74.00	-33.87	Peak	
2	4923.4900	26.93	3.05	29.98	54.00	-24.02	AVG	

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

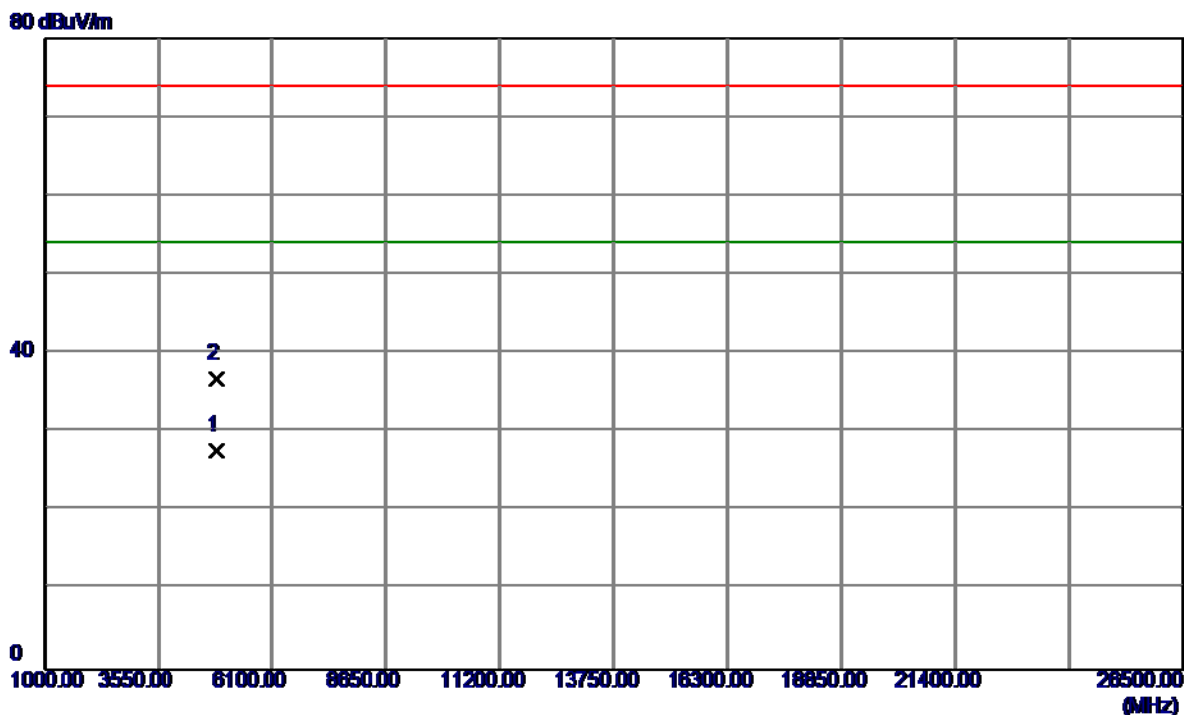
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	28.98	34.23	63.21	74.00	-10.79	Peak	
2	2390.0000	15.93	34.23	50.16	54.00	-3.84	AVG	
3	2406.6000	60.04	34.33	94.37	54.00	40.37	AVG	No Limit
4	2426.6000	70.27	34.44	104.71	74.00	30.71	Peak	No Limit

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

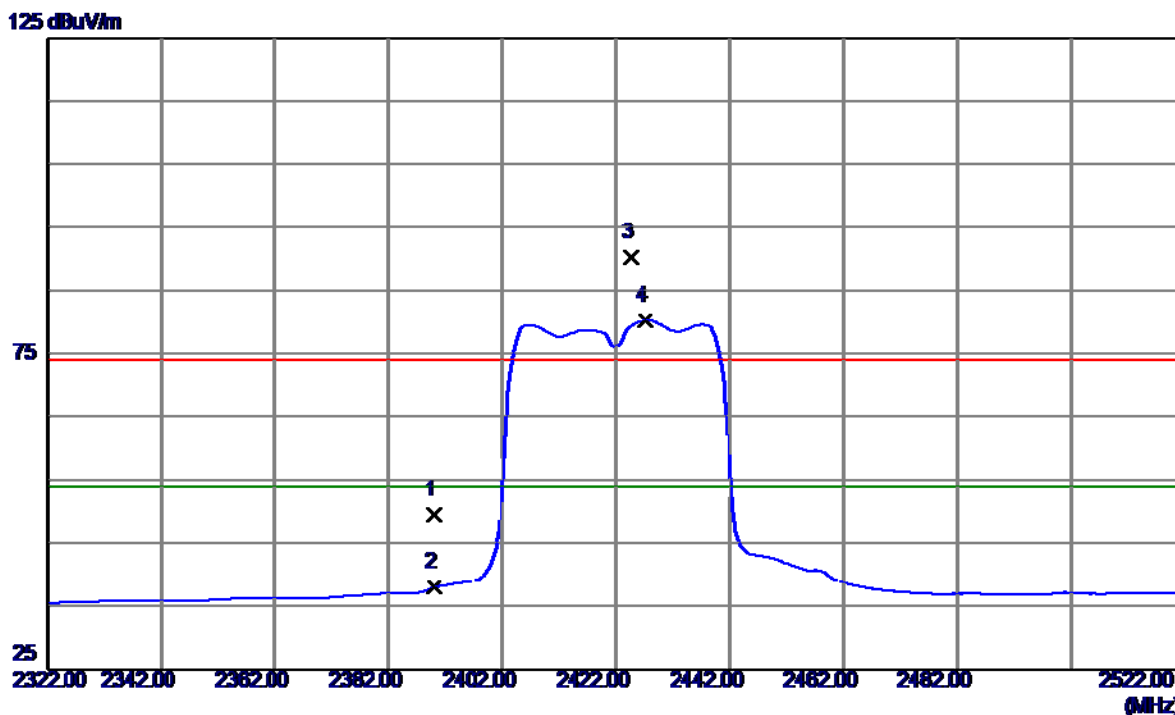
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.5400	24.69	3.01	27.70	54.00	-26.30	AVG	
2	4843.9200	33.85	3.01	36.86	74.00	-37.14	Peak	

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

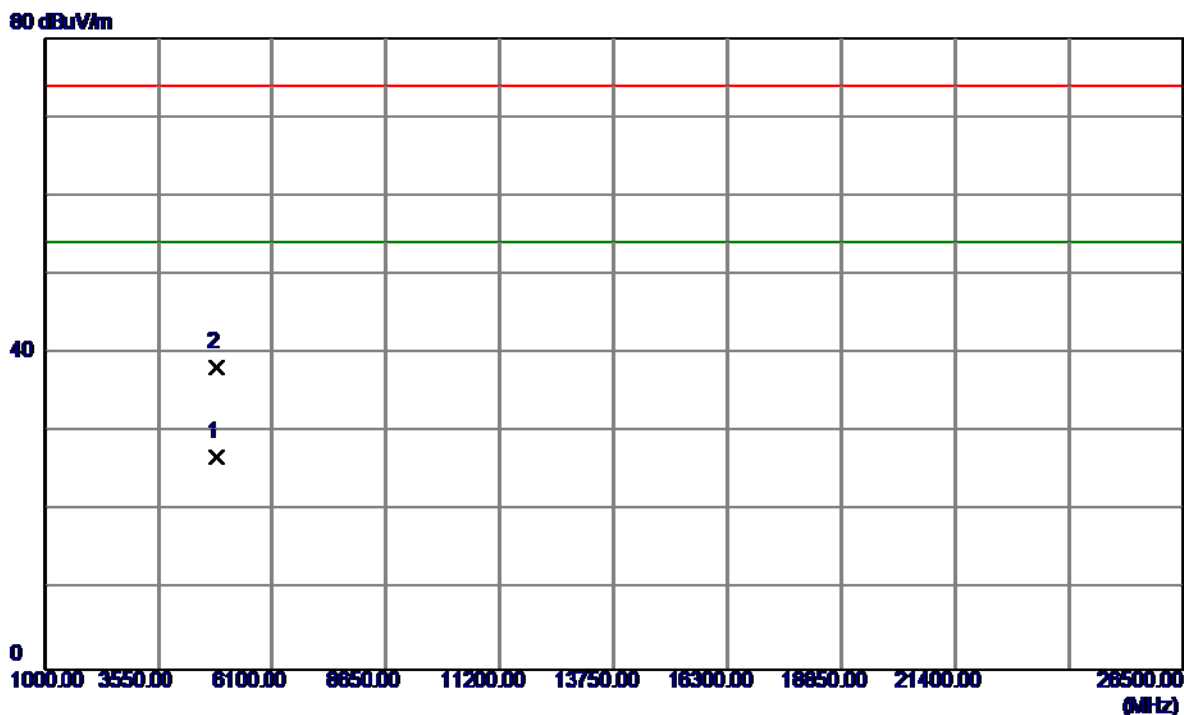
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	15.23	34.23	49.46	74.00	-24.54	Peak	
2	2390.0000	3.70	34.23	37.93	54.00	-16.07	AVG	
3	2424.6000	55.78	34.43	90.21	74.00	16.21	Peak	No Limit
4	2427.2000	45.75	34.45	80.20	54.00	26.20	AVG	No Limit

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

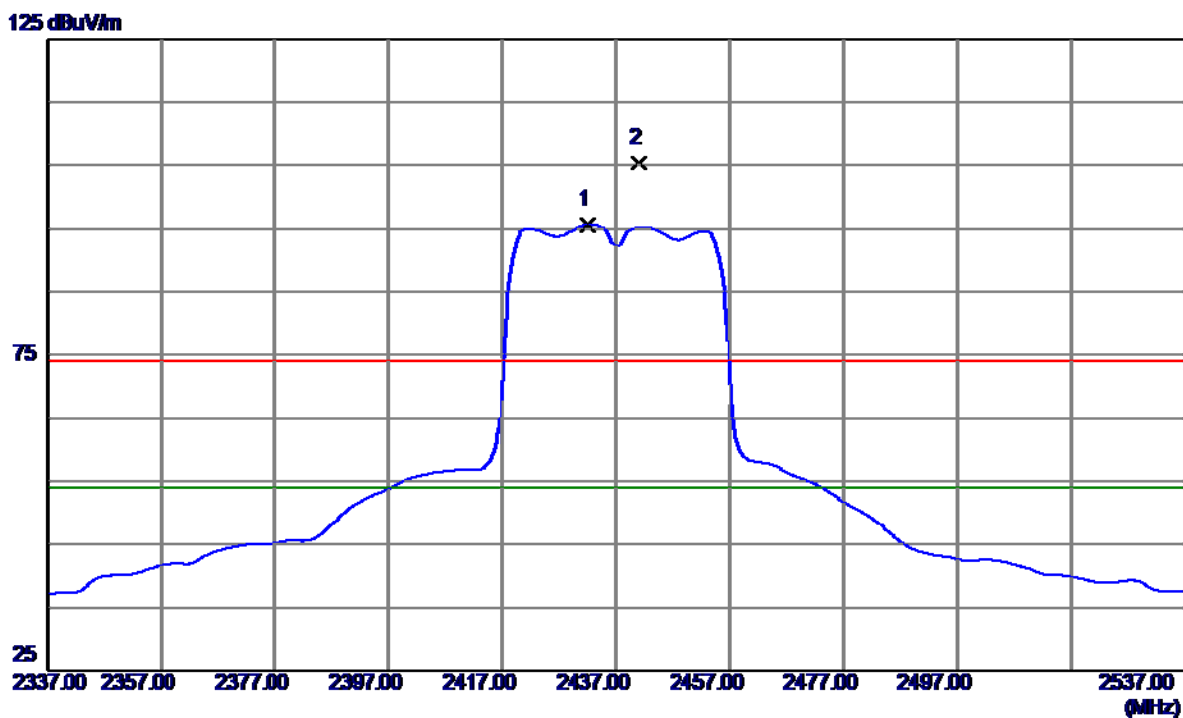
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.1000	23.89	3.01	26.90	54.00	-27.10	AVG	
2	4844.0000	35.16	3.01	38.17	74.00	-35.83	Peak	

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

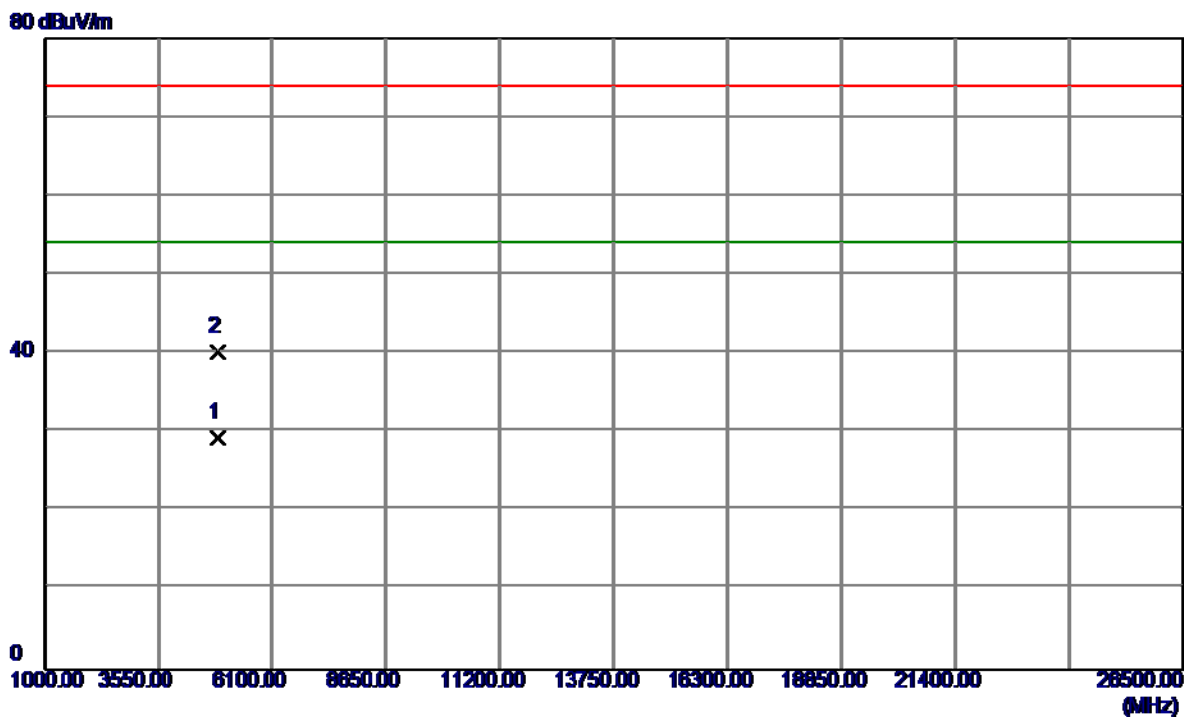
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2432.2000	61.15	34.48	95.63	54.00	41.63	AVG	No Limit
2	2441.0000	70.85	34.53	105.38	74.00	31.38	Peak	No Limit

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

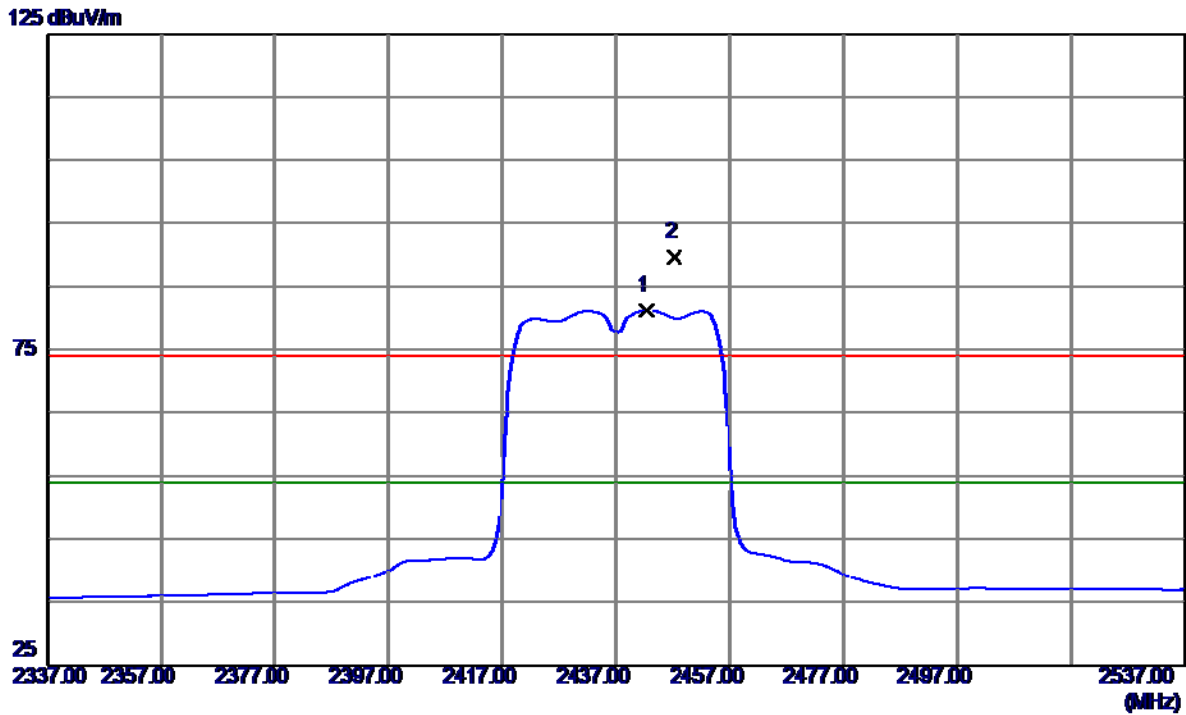
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.7599	26.21	3.03	29.24	54.00	-24.76	AVG	
2	4873.8300	37.15	3.03	40.18	74.00	-33.82	Peak	

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

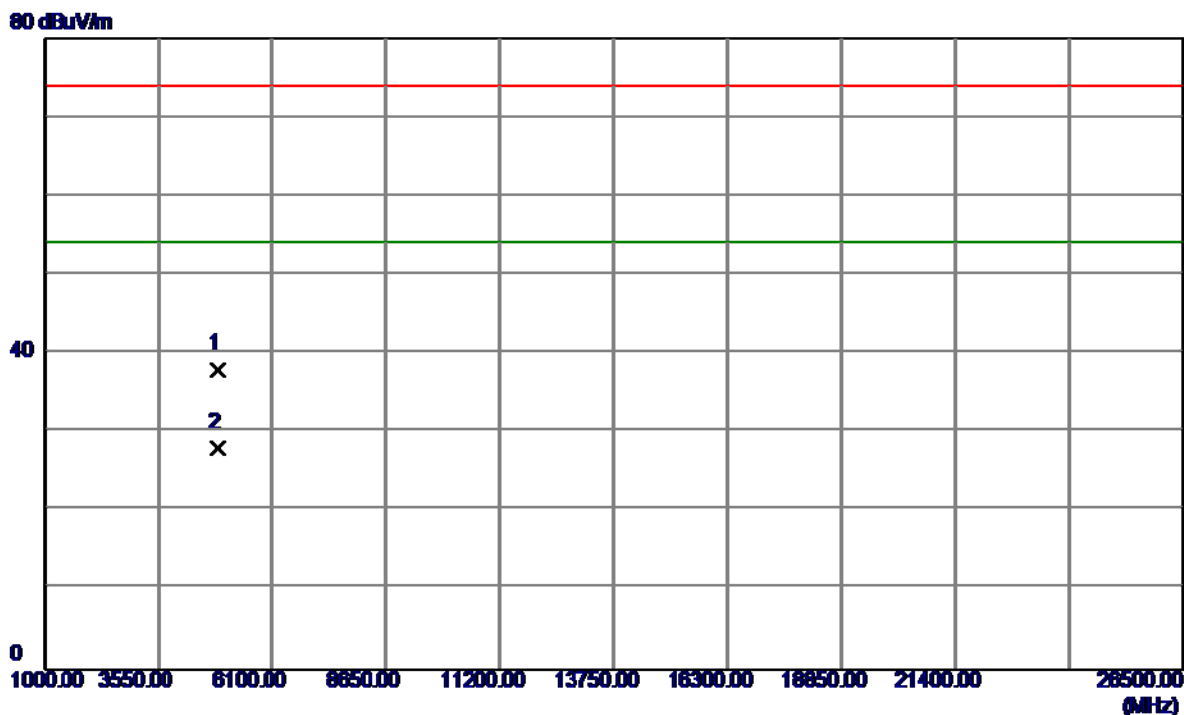
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2442.4000	46.58	34.54	81.12	54.00	27.12	AVG	No Limit
2	2447.2000	55.13	34.56	89.69	74.00	15.69	Peak	No Limit

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

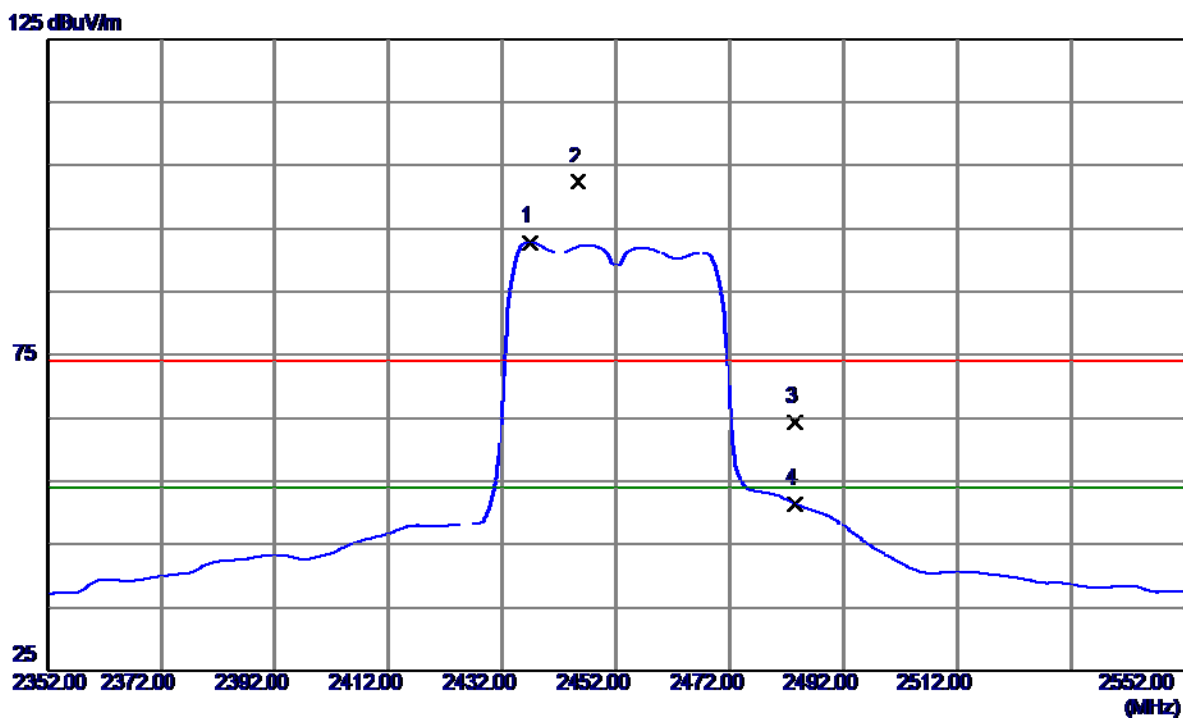
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.8300	34.97	3.03	38.00	74.00	-36.00	Peak	
2	4873.9000	25.01	3.03	28.04	54.00	-25.96	AVG	

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

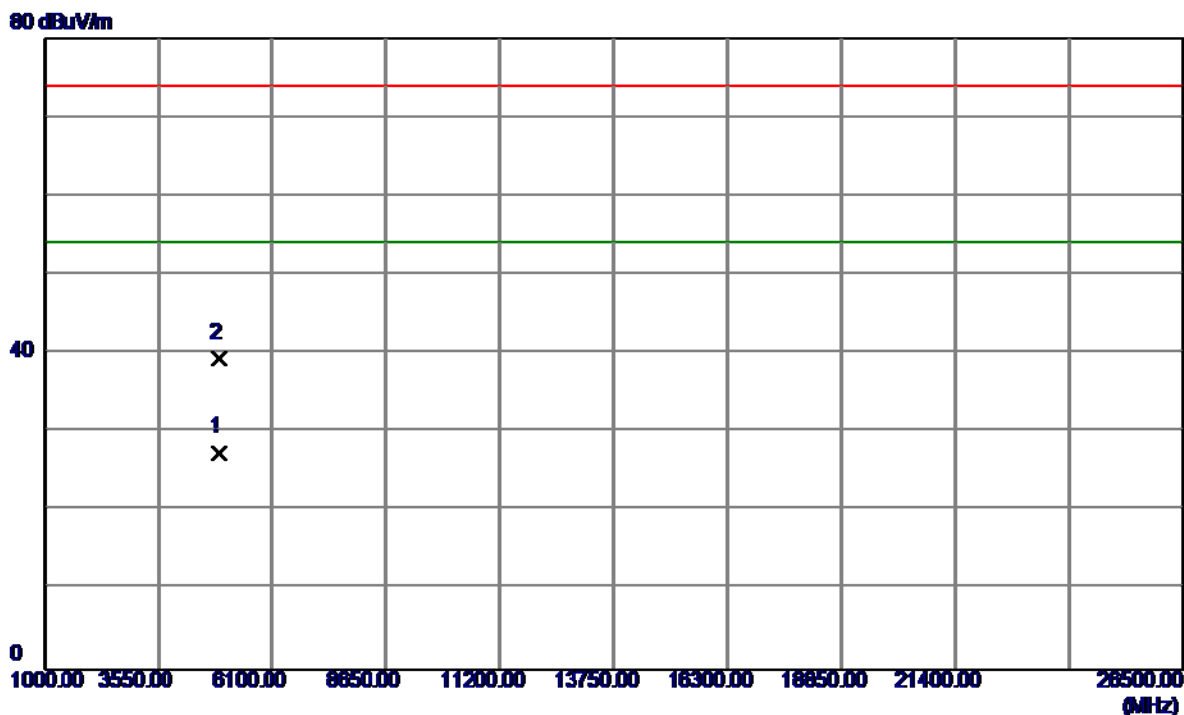
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.8000	58.40	34.50	92.90	54.00	38.90	AVG	No Limit
2	2445.4000	67.93	34.55	102.48	74.00	28.48	Peak	No Limit
3	2483.5000	29.66	34.77	64.43	74.00	-9.57	Peak	
4	2483.5000	16.69	34.77	51.46	54.00	-2.54	AVG	

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

Vertical

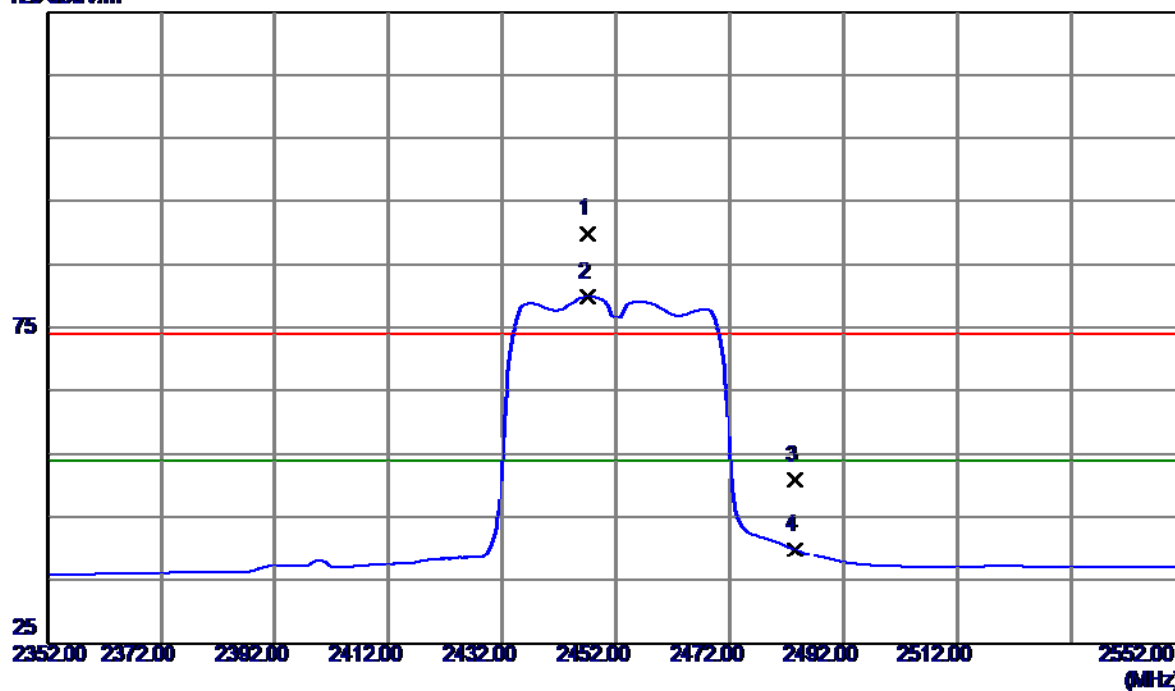


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4903.5000	24.40	3.04	27.44	54.00	-26.56	AVG	
2	4904.0000	36.34	3.04	39.38	74.00	-34.62	Peak	

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

Horizontal

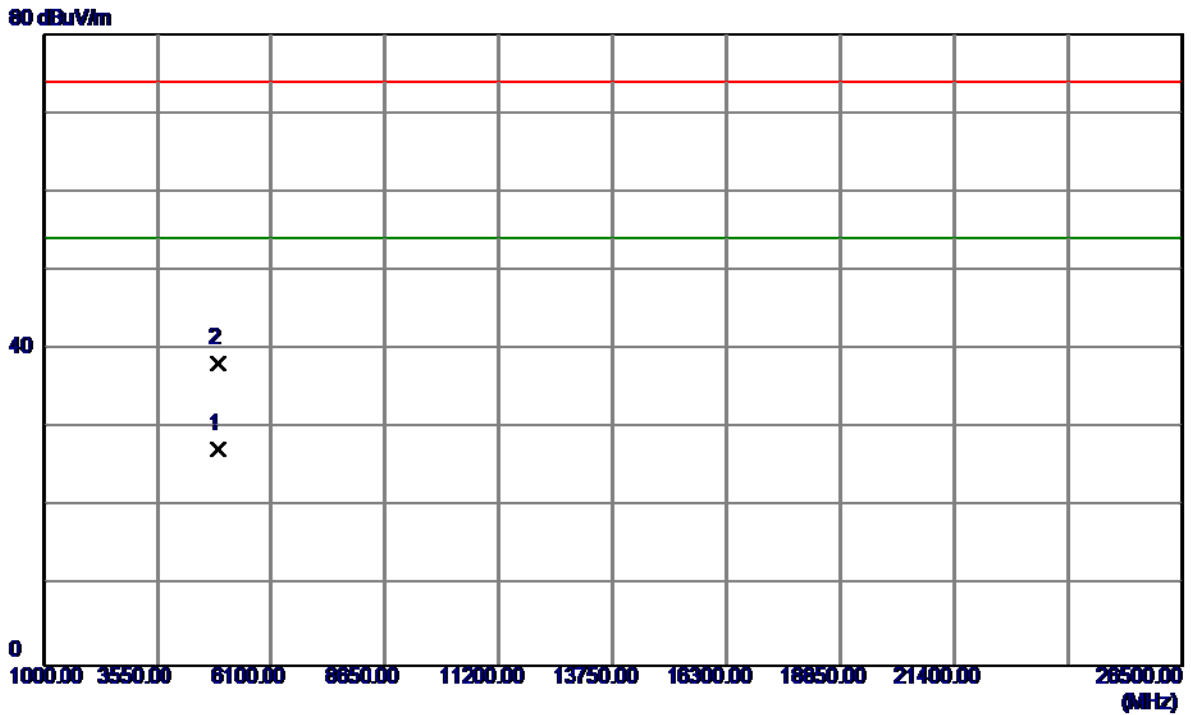
125 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2447.2000	55.28	34.56	89.84	74.00	15.84	Peak	No Limit
2	2447.2000	45.22	34.56	79.78	54.00	25.78	AVG	No Limit
3	2483.5000	15.99	34.77	50.76	74.00	-23.24	Peak	
4	2483.5000	4.99	34.77	39.76	54.00	-14.24	AVG	

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

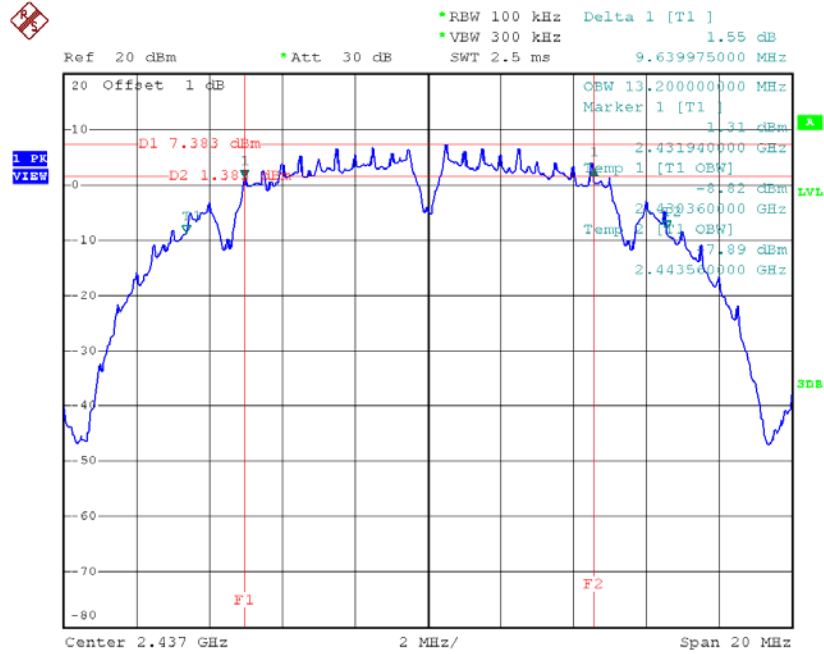
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4903.8100	24.34	3.04	27.38	54.00	-26.62	AVG	
2	4903.9400	35.19	3.04	38.23	74.00	-35.77	Peak	

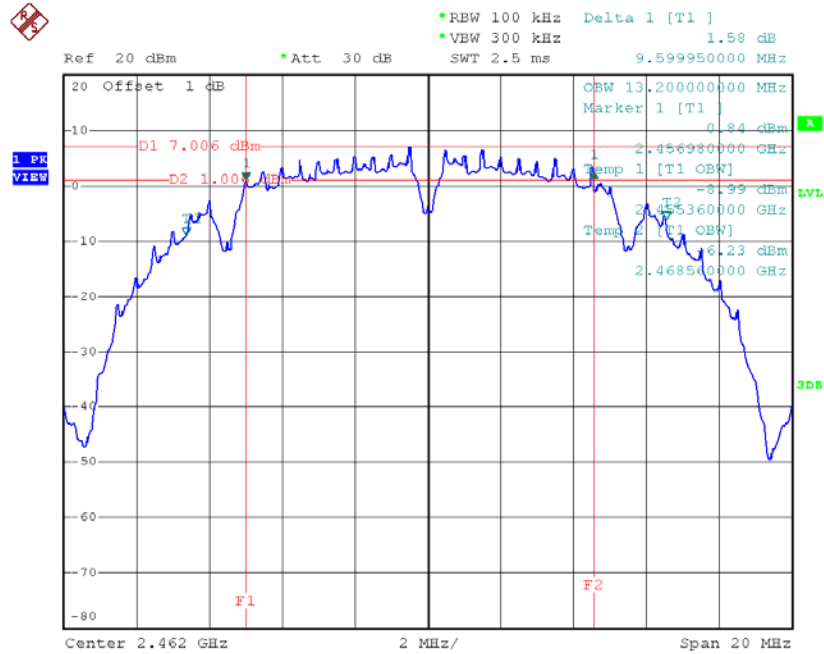
ATTACHMENT E - BANDWIDTH

TX CH06



Date: 4.MAR.2016 14:04:01

TX CH11

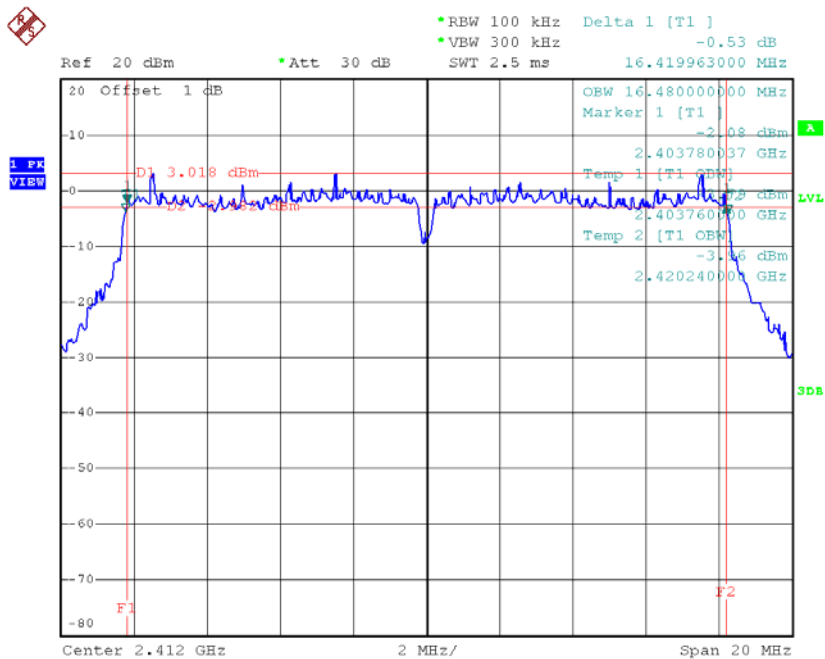


Date: 4.MAR.2016 14:05:28

Test Mode: TX G Mode_CH01/06/11

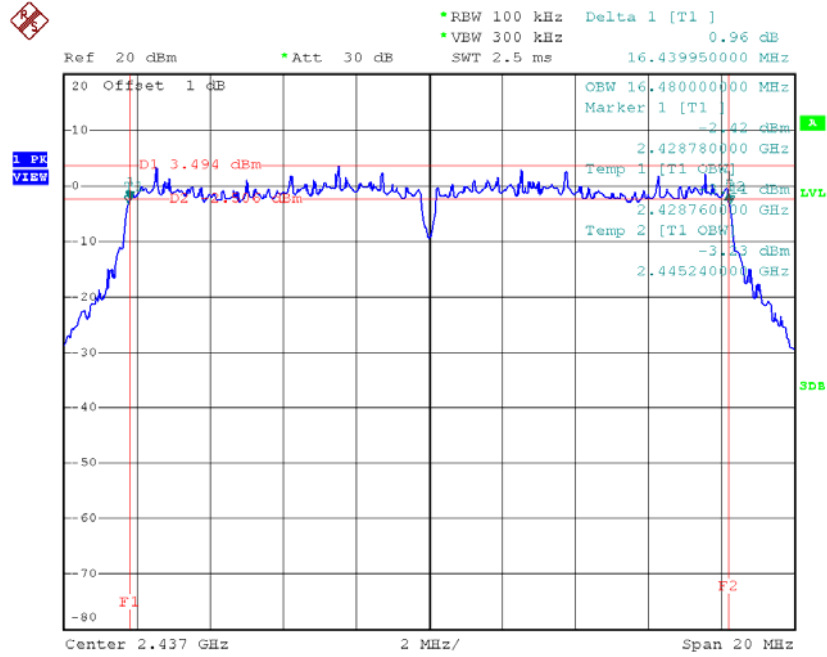
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.42	16.48	500	Complies
2437	16.44	16.48	500	Complies
2462	16.43	16.48	500	Complies

TX CH01



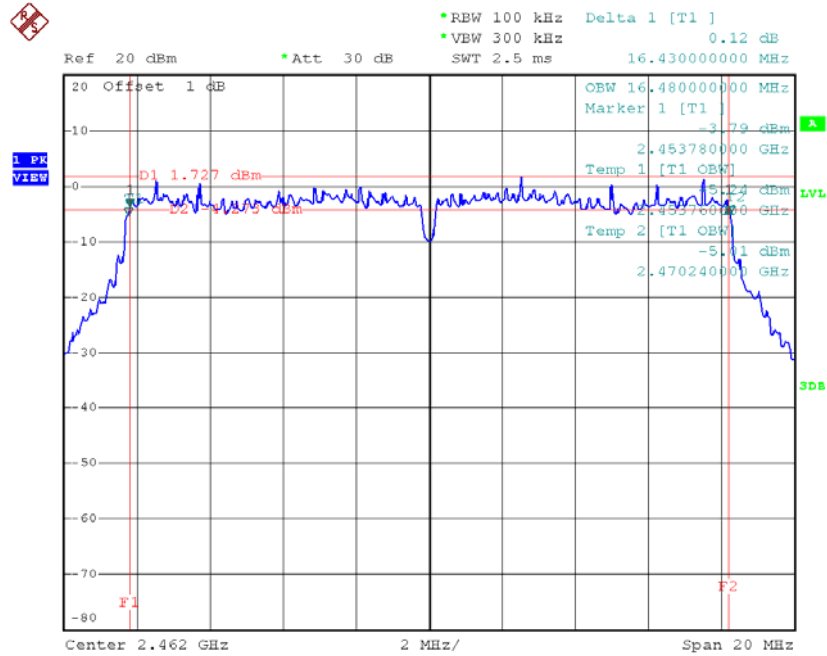
Date: 4.MAR.2016 14:07:22

TX CH06



Date: 4.MAR.2016 14:09:36

TX CH11

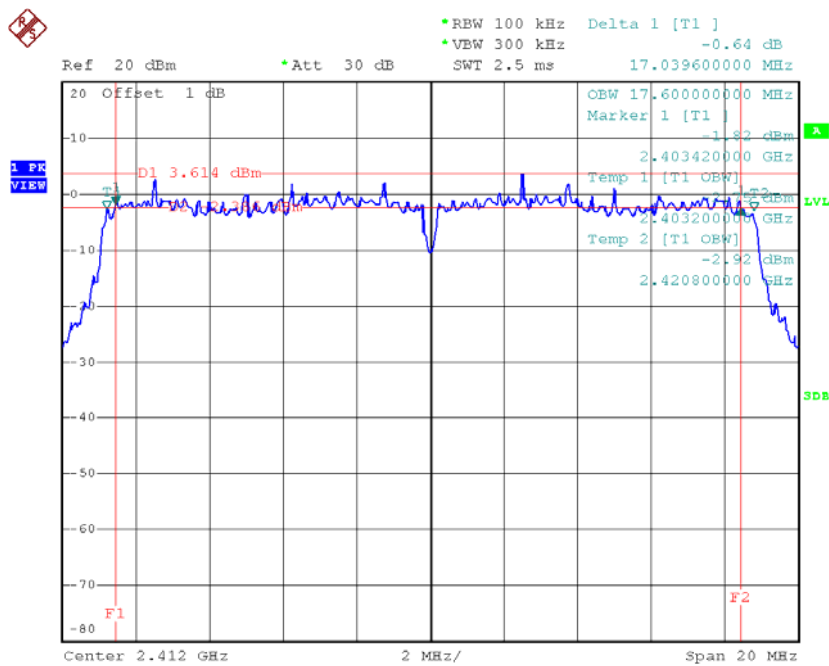


Date: 4.MAR.2016 14:11:22

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

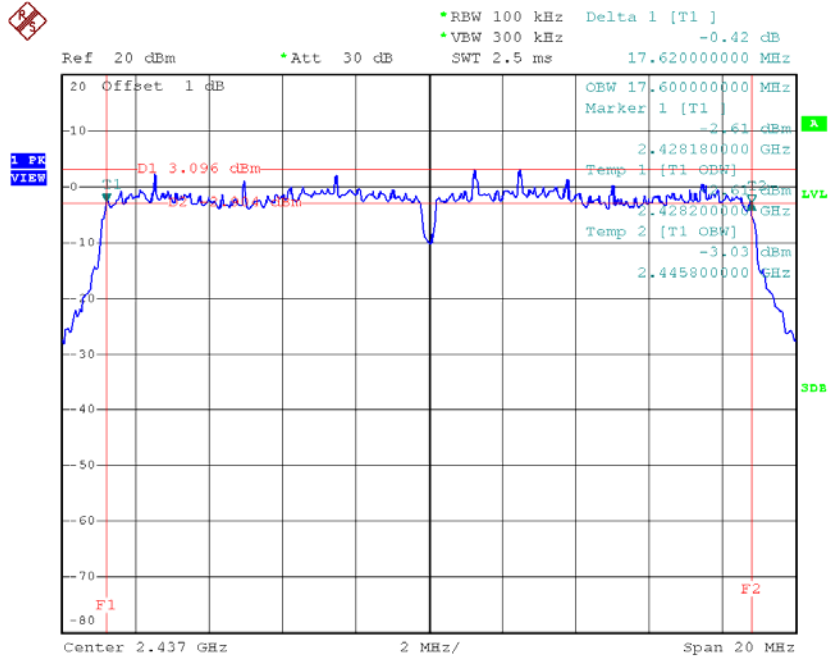
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.04	17.60	500	Complies
2437	17.62	17.60	500	Complies
2462	17.07	17.60	500	Complies

TX CH01



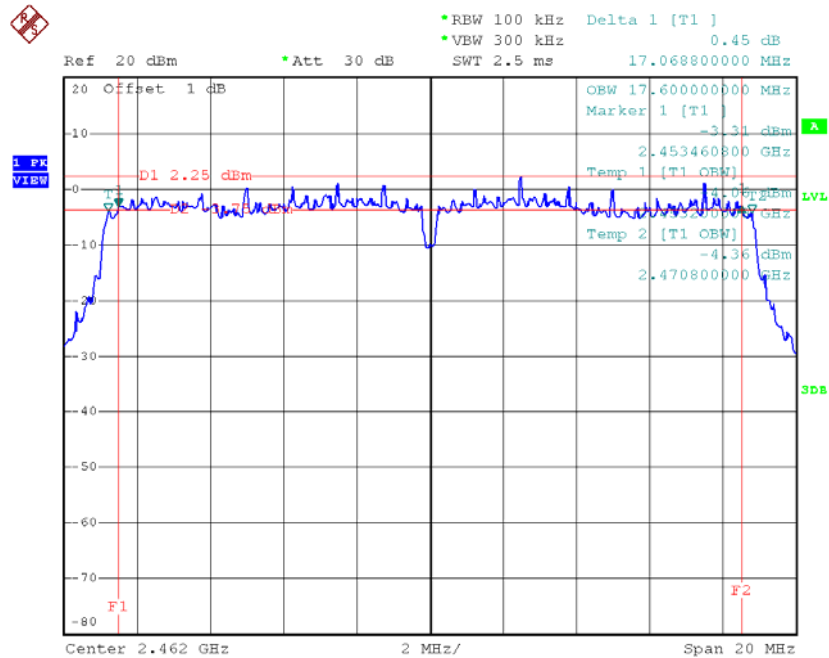
Date: 4.MAR.2016 14:13:42

TX CH06



Date: 4.MAR.2016 14:14:50

TX CH11

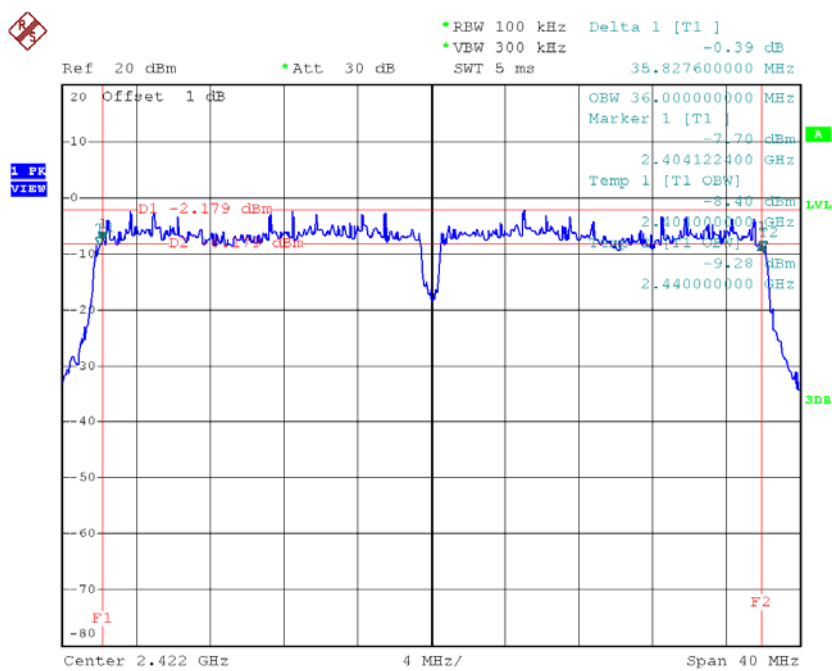


Date: 4.MAR.2016 14:16:04

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

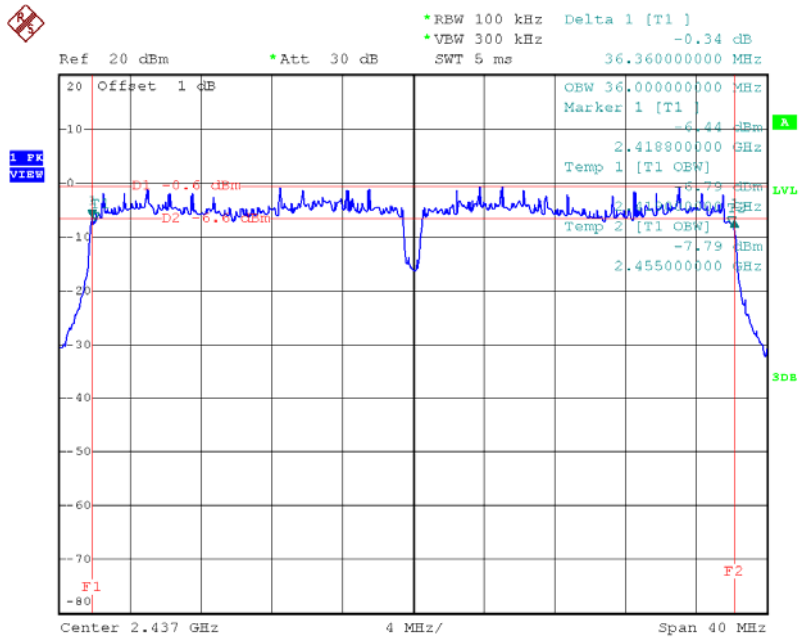
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.83	36.00	500	Complies
2437	36.36	36.00	500	Complies
2452	36.07	36.08	500	Complies

TX CH03



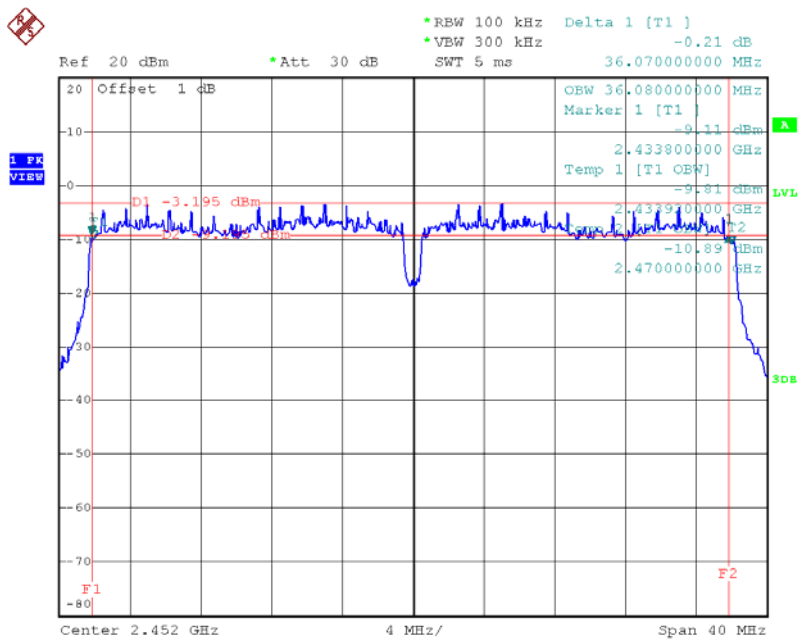
Date: 4.MAR.2016 14:22:14

TX CH06



Date: 4.MAR.2016 14:25:35

TX CH09



Date: 4.MAR.2016 14:26:51

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	16.79	0.05	30.00	1.00	Complies
2437	16.47	0.04	30.00	1.00	Complies
2462	16.33	0.04	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	14.67	0.03	30.00	1.00	Complies
2437	15.43	0.03	30.00	1.00	Complies
2462	13.54	0.02	30.00	1.00	Complies

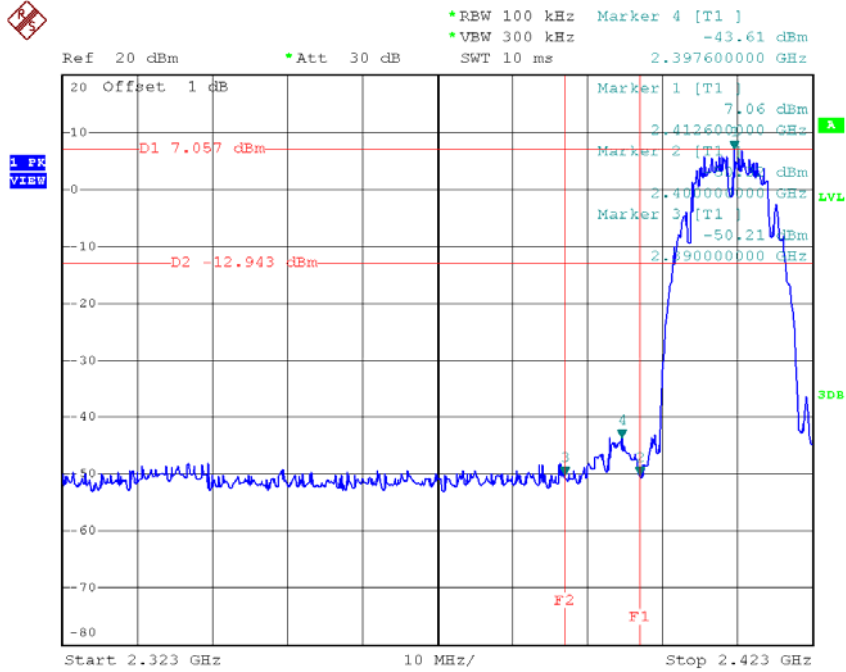
Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	14.69	0.03	30.00	1.00	Complies
2437	14.41	0.03	30.00	1.00	Complies
2462	13.48	0.02	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	12.43	0.02	30.00	1.00	Complies
2437	13.82	0.02	30.00	1.00	Complies
2452	10.96	0.01	30.00	1.00	Complies

ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

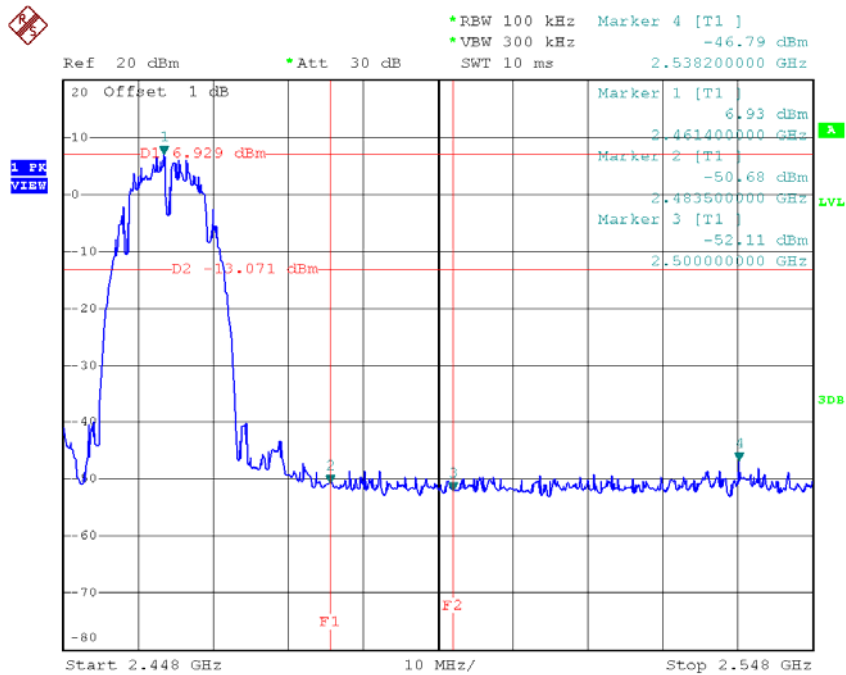
Test Mode : TX B Mode

TX B mode CH01



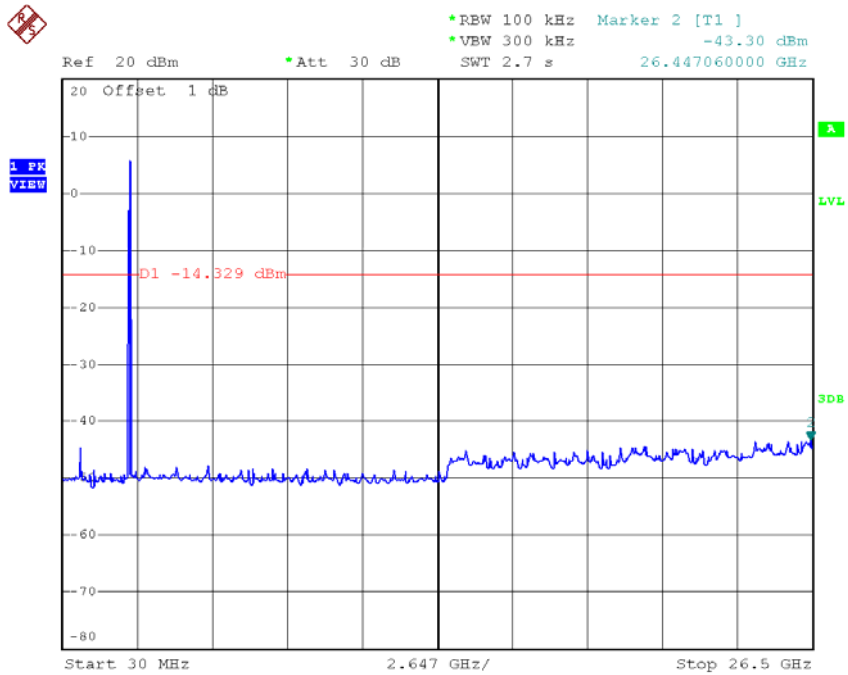
Date: 4.MAR.2016 14:02:53

TX B mode CH11



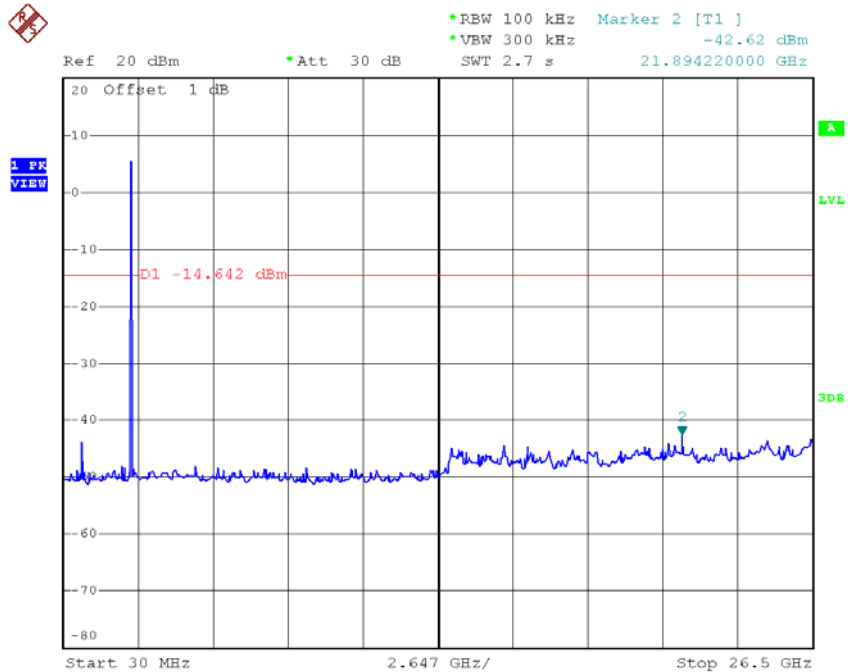
Date: 4.MAR.2016 14:05:50

TX B mode CH01 (10 Harmonic of the frequency)



Date: 4.MAR.2016 14:02:45

TX B mode CH06 (10 Harmonic of the frequency)

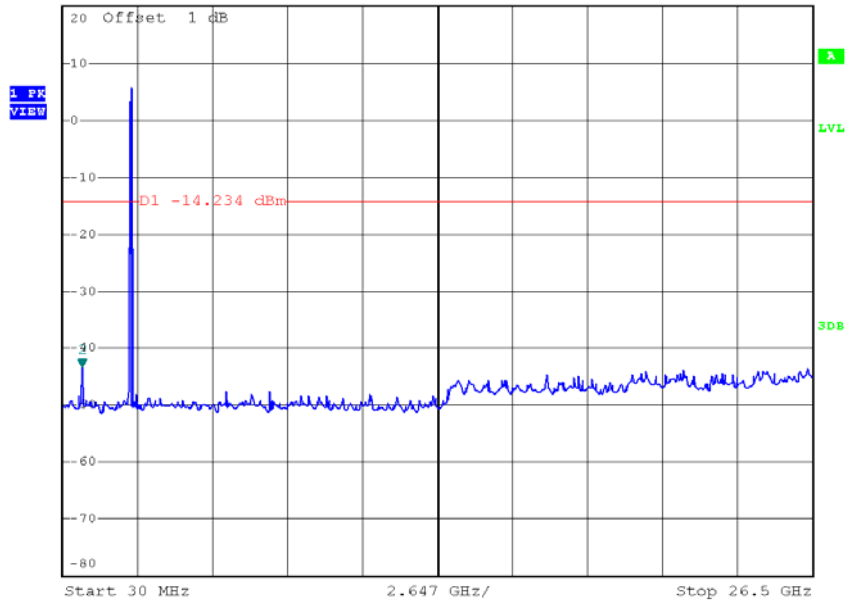


Date: 4.MAR.2016 14:04:14

TX B mode CH11 (10 Harmonic of the frequency)



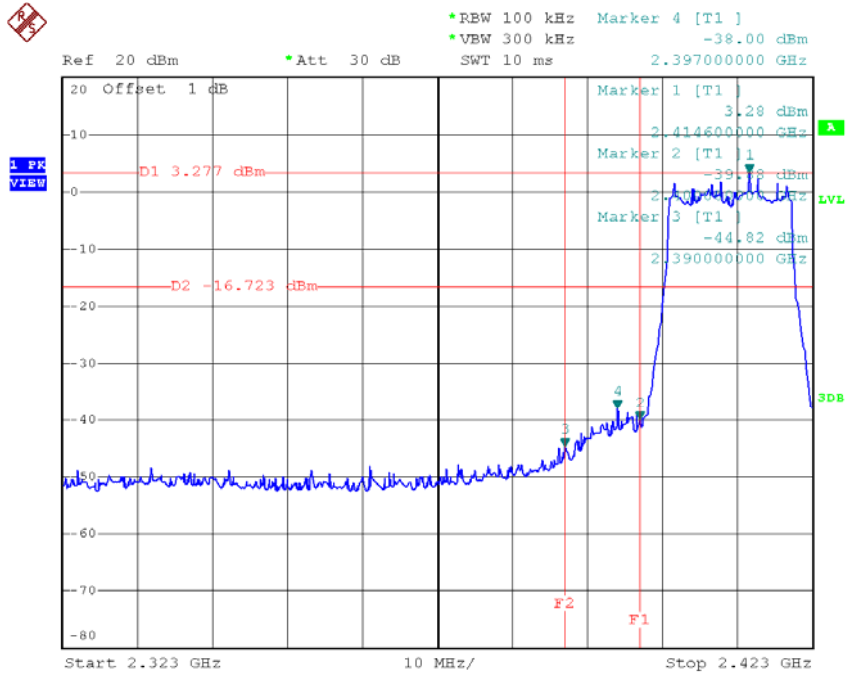
*REW 100 kHz Marker 2 [T1]
 *VBW 300 kHz -43.33 dBm
 Ref 20 dBm Att 30 dB SWT 2.7 s 718.22000000 MHz



Date: 4.MAR.2016 14:05:42

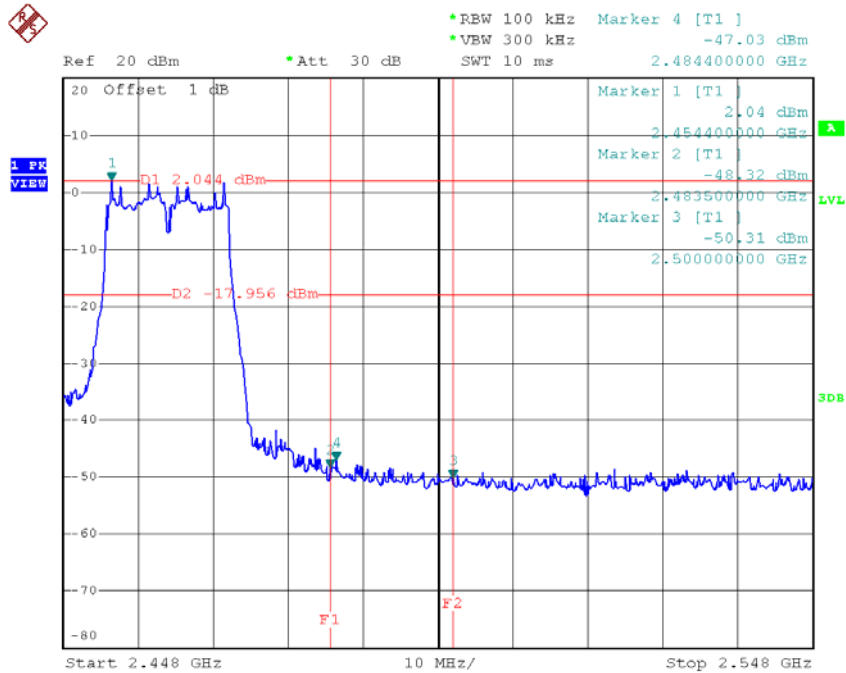
Test Mode : TX G Mode

TX G mode CH01



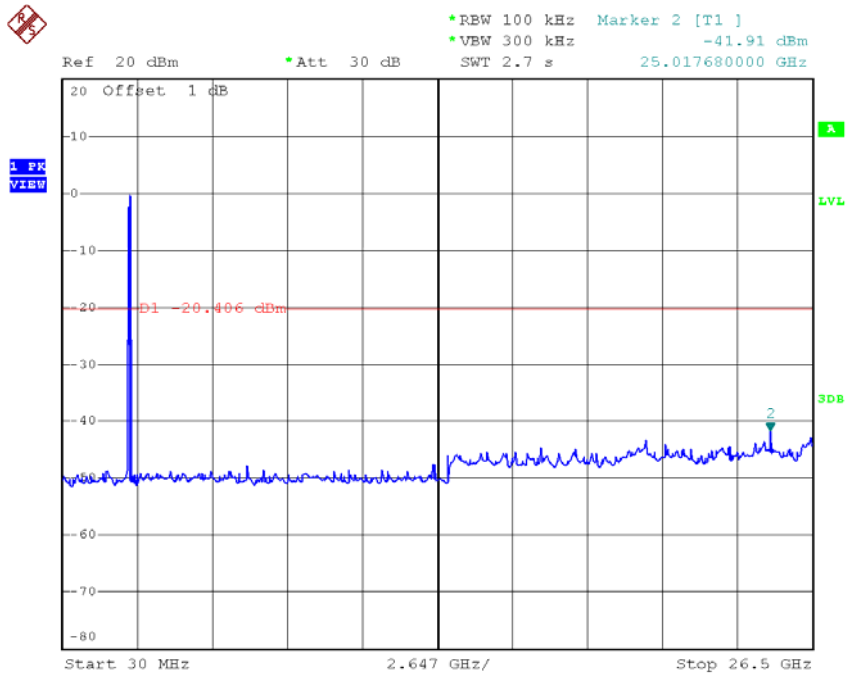
Date: 4.MAR.2016 14:07:44

TX G mode CH11



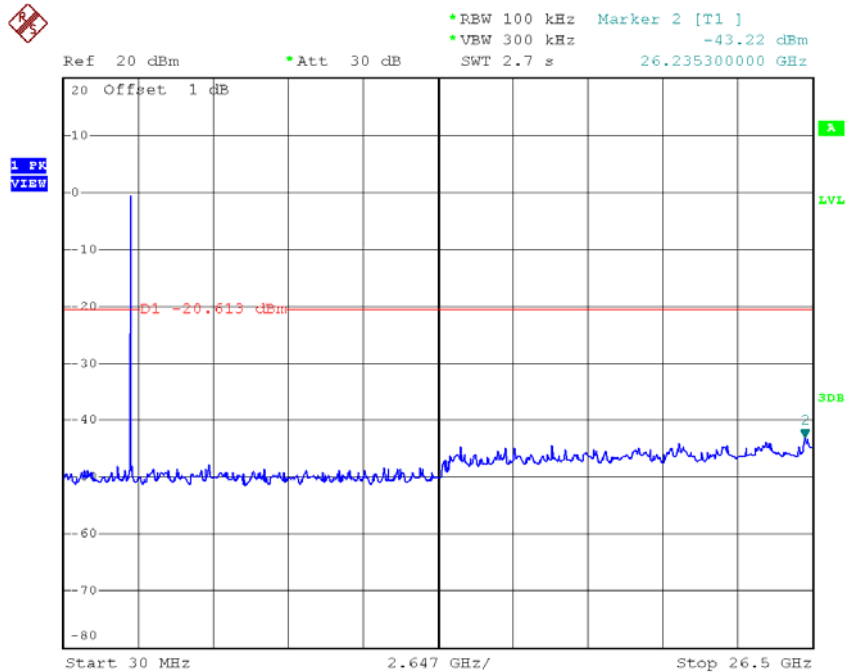
Date: 4.MAR.2016 14:11:44

TX G mode CH01 (10 Harmonic of the frequency)



Date: 4.MAR.2016 14:07:36

TX G mode CH06 (10 Harmonic of the frequency)

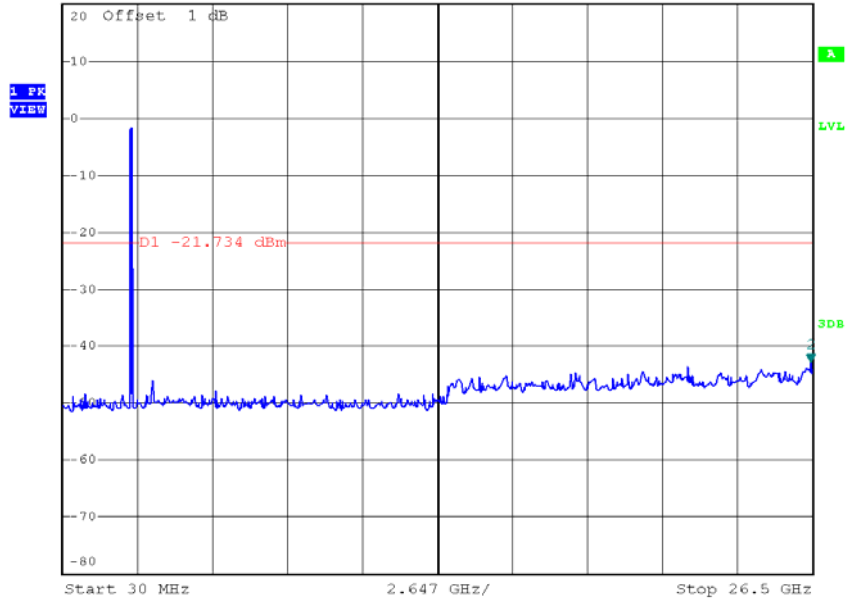


Date: 4.MAR.2016 14:09:50

TX G mode CH11 (10 Harmonic of the frequency)



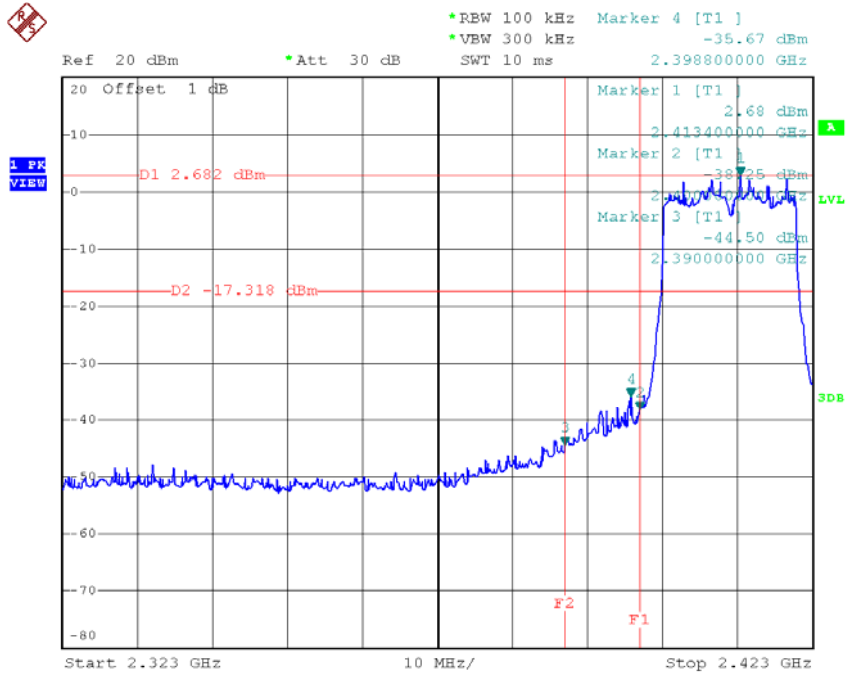
Ref 20 dBm *Att 30 dB *REW 100 kHz Marker 2 [T1]
*VBW 300 kHz -42.83 dBm
SWT 2.7 s 26.447060000 GHz



Date: 4.MAR.2016 14:11:36

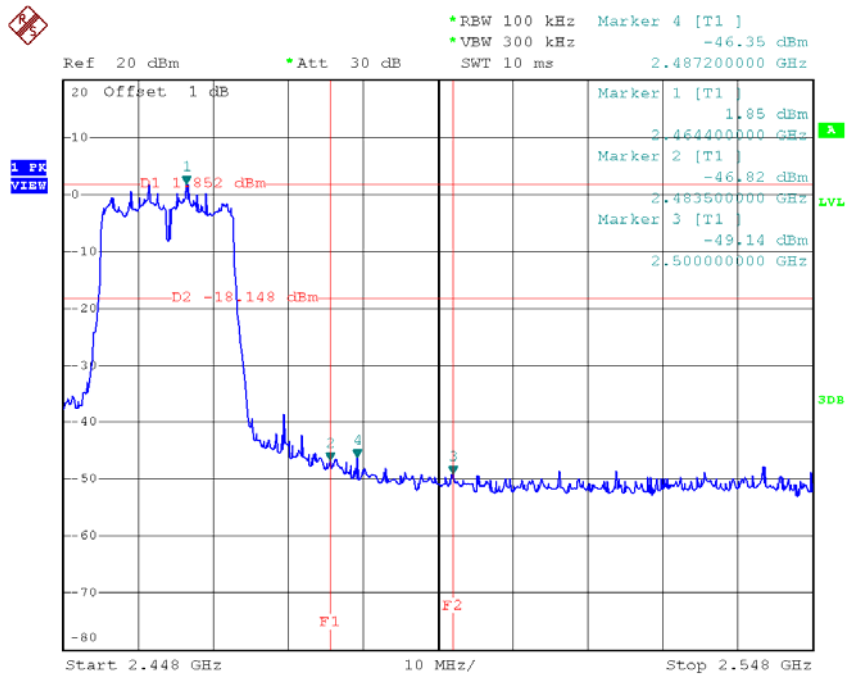
Test Mode : TX N-20M Mode

TX HT20 mode CH01



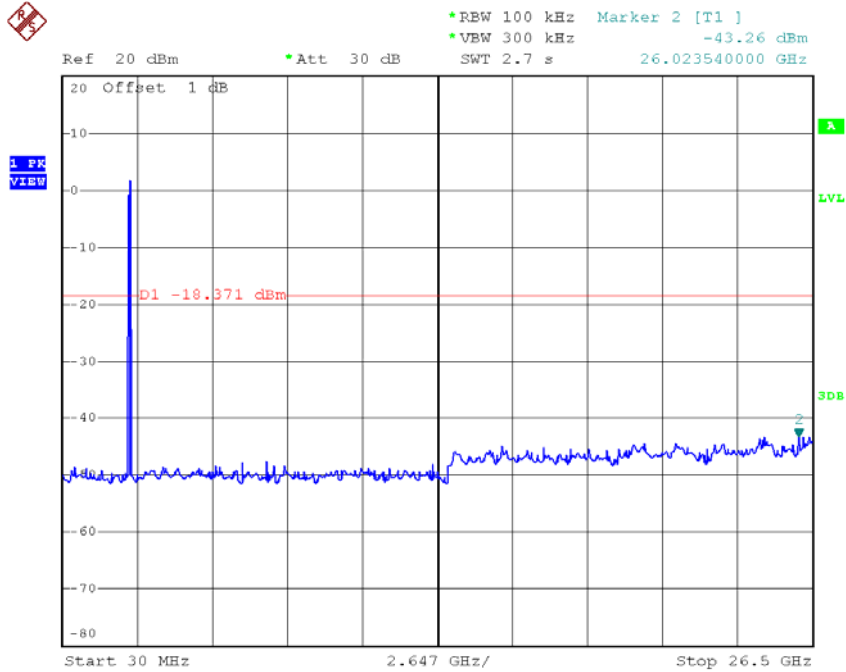
Date: 4.MAR.2016 14:14:04

TX HT20 mode CH11



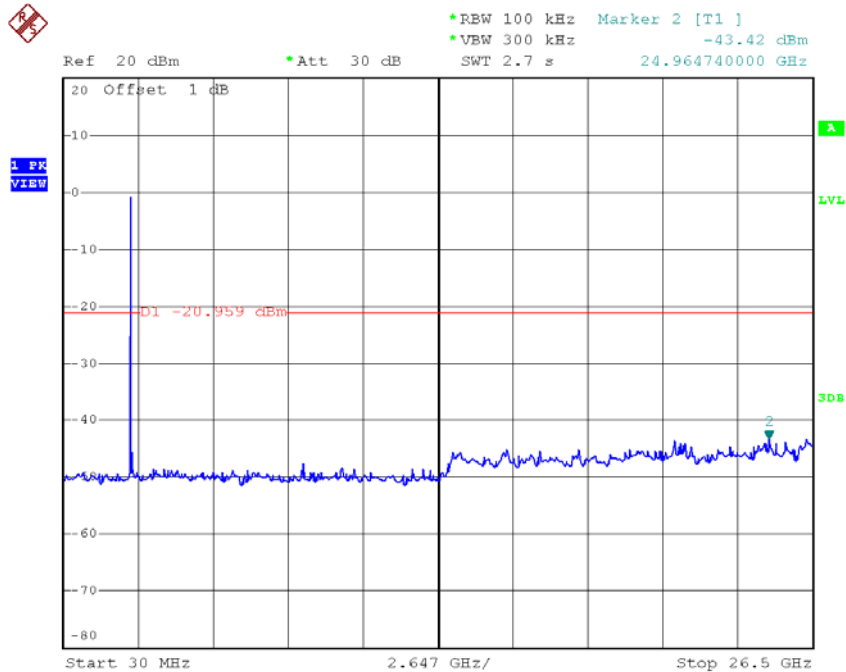
Date: 4.MAR.2016 14:16:26

TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 4.MAR.2016 14:13:57

TX HT20 mode CH06 (10 Harmonic of the frequency)

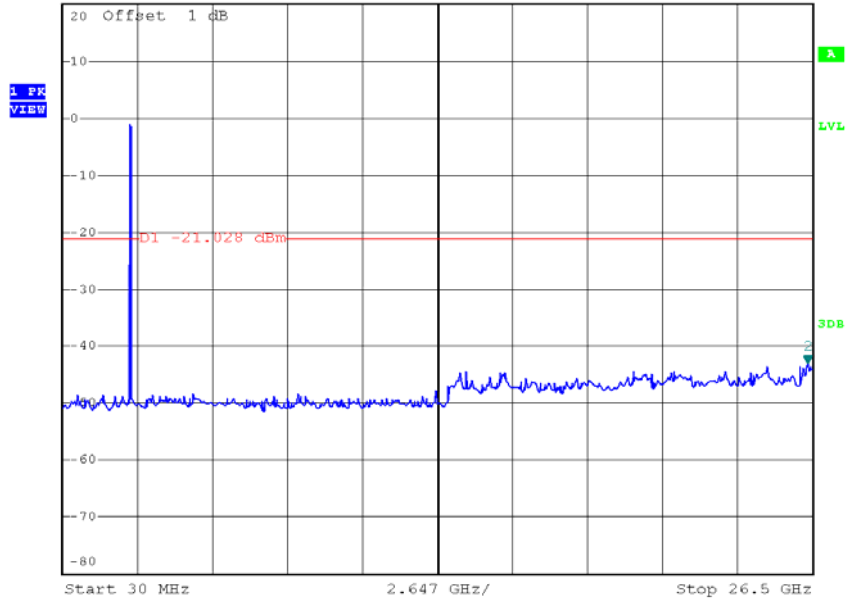


Date: 4.MAR.2016 14:15:04

TX HT20 mode CH11 (10 Harmonic of the frequency)



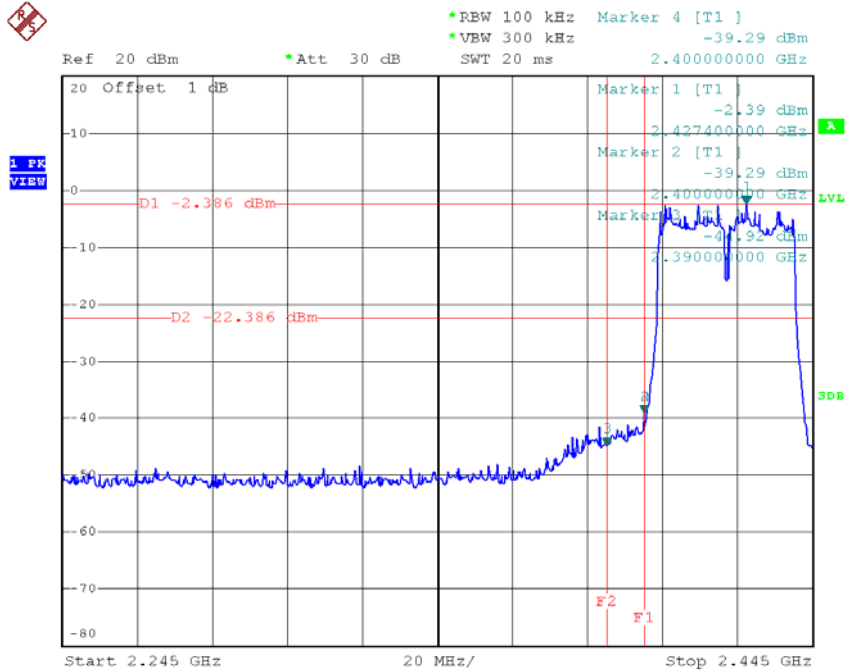
Ref 20 dBm Att 30 dB *REW 100 kHz Marker 2 [T1]
*VBW 300 kHz -43.25 dBm
SWT 2.7 s 26.341180000 GHz



Date: 4.MAR.2016 14:16:19

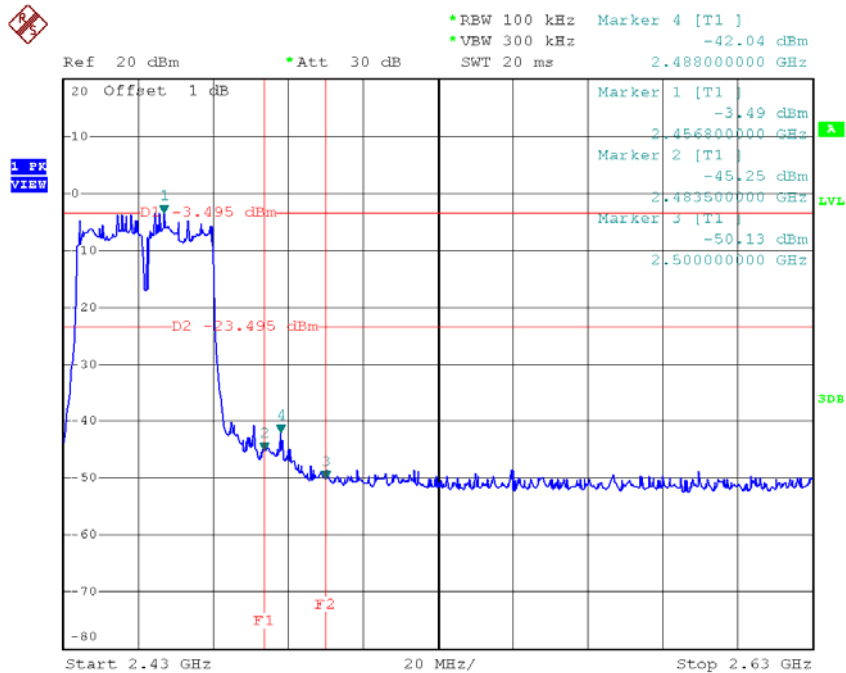
Test Mode : TX N-40M Mode

TX HT40 mode CH03



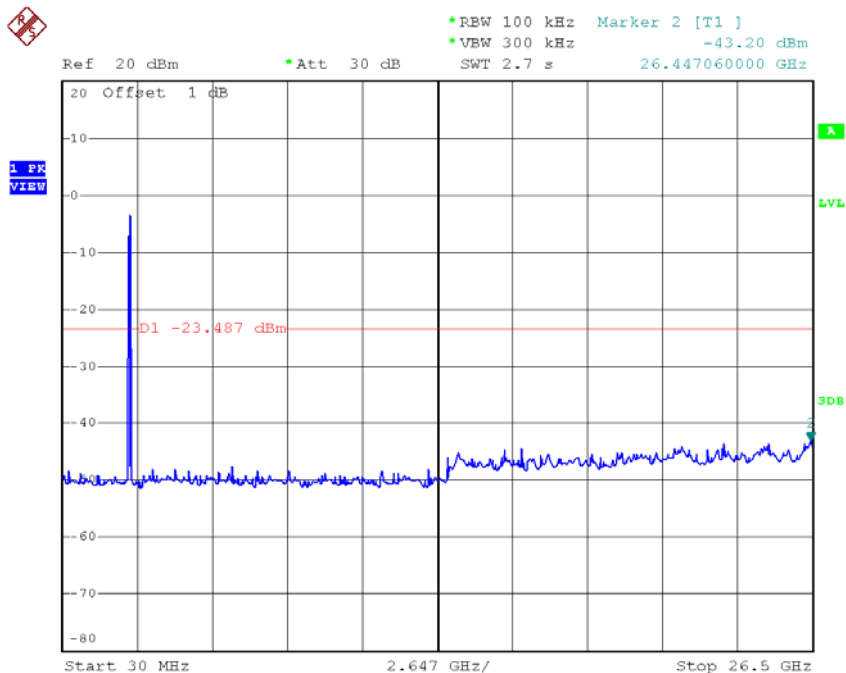
Date: 4.MAR.2016 14:22:36

TX HT40 mode CH09



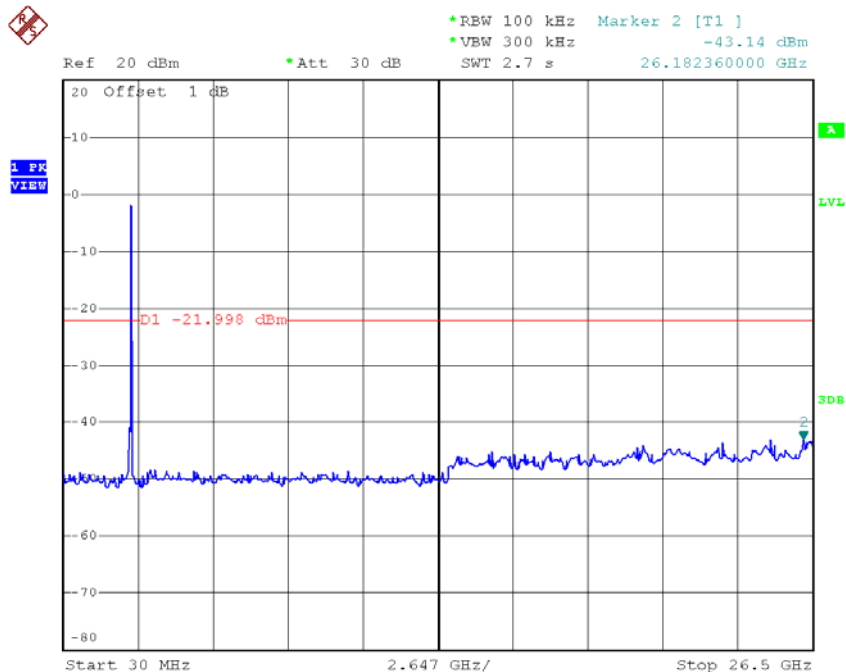
Date: 4.MAR.2016 14:27:12

TX HT40 mode CH03 (10 Harmonic of the frequency)



Date: 4.MAR.2016 14:22:28

TX HT40 mode CH06 (10 Harmonic of the frequency)



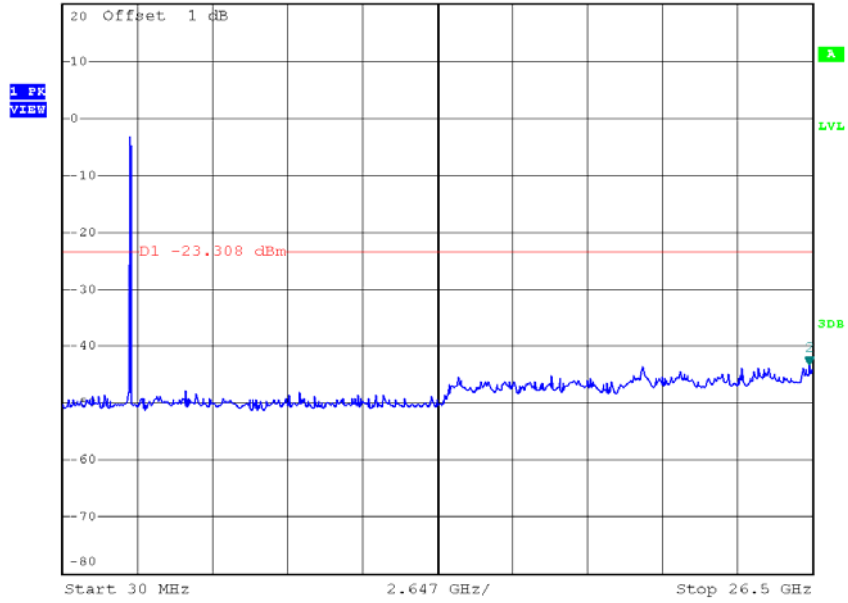
Date: 4.MAR.2016 14:25:50

TX HT40 mode CH09 (10 Harmonic of the frequency)



*REW 100 kHz Marker 2 [T1]
*VBW 300 kHz -43.42 dBm

Ref 20 dBm Att 30 dB SWT 2.7 s 26.394120000 GHz



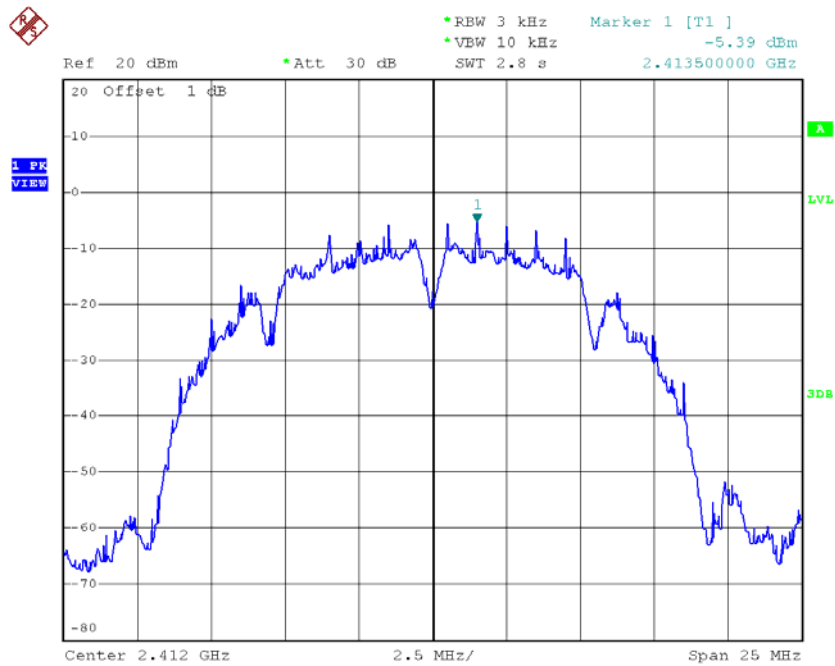
Date: 4.MAR.2016 14:27:05

ATTACHMENT H - POWER SPECTRAL DENSITY

Test Mode :TX B Mode_CH01/06/11

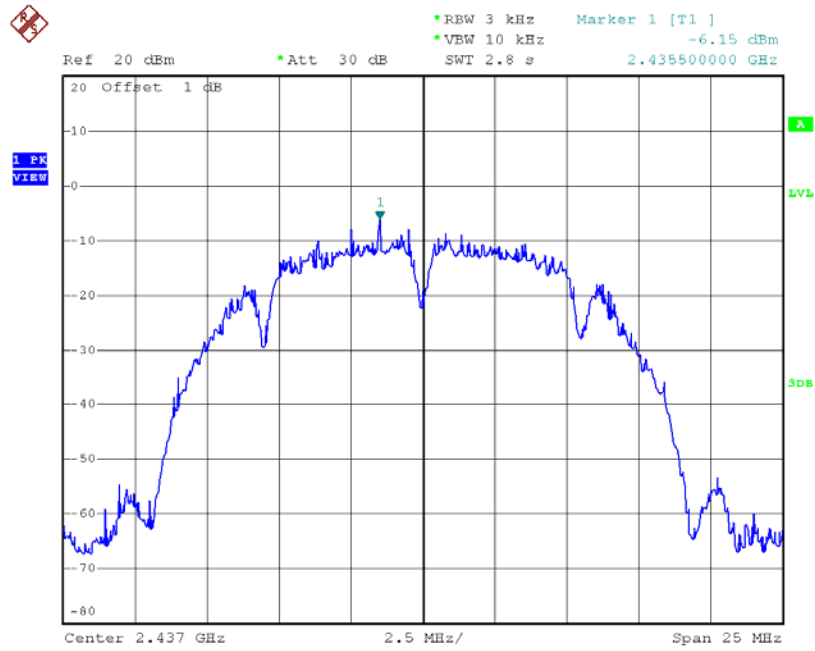
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-5.39	0.29	8.00	Complies
2437	-6.15	0.24	8.00	Complies
2462	-5.50	0.28	8.00	Complies

TX CH01



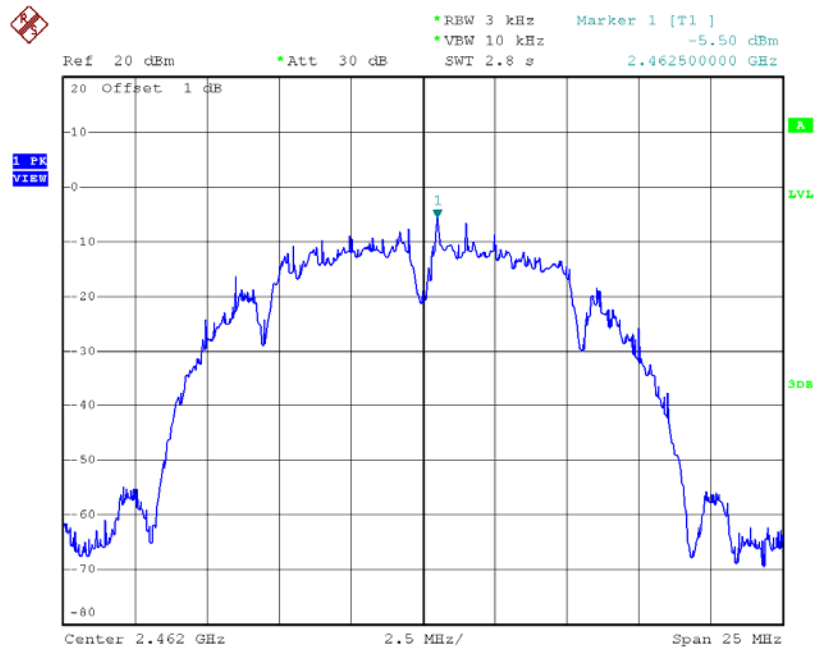
Date: 4.MAR.2016 14:03:02

TX CH06



Date: 4.MAR.2016 14:04:23

TX CH11

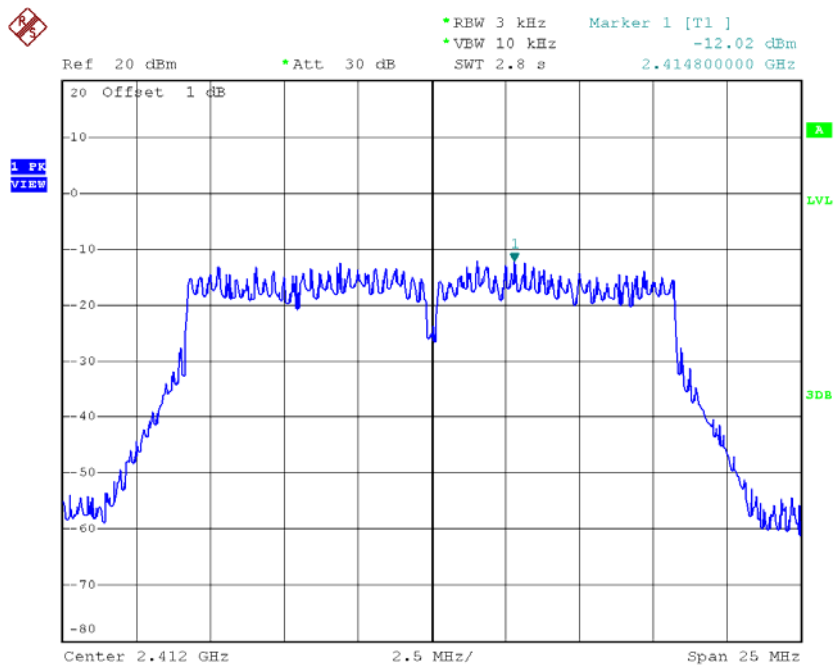


Date: 4.MAR.2016 14:05:59

Test Mode :TX G Mode_CH01/06/11

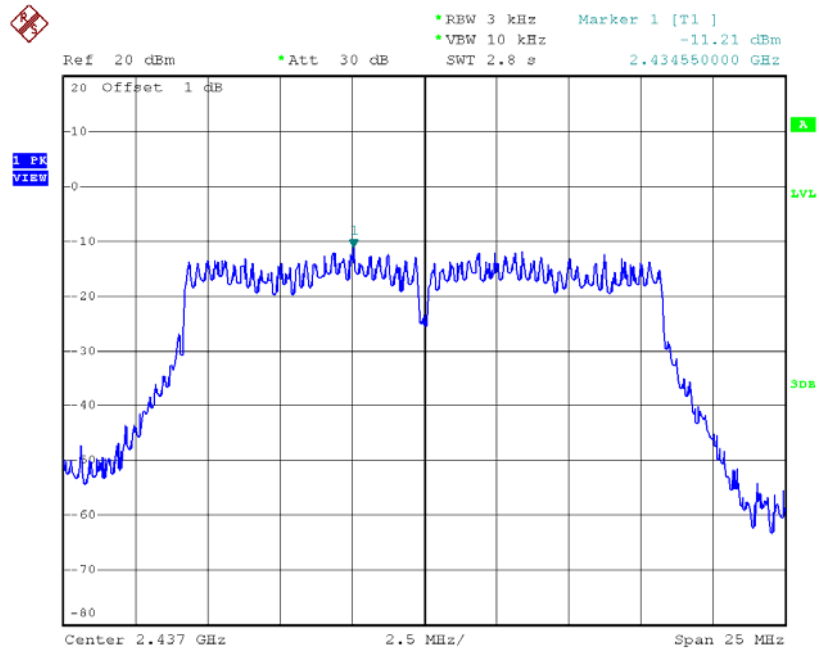
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-12.02	0.06	8.00	Complies
2437	-11.21	0.08	8.00	Complies
2462	-13.18	0.05	8.00	Complies

TX CH01



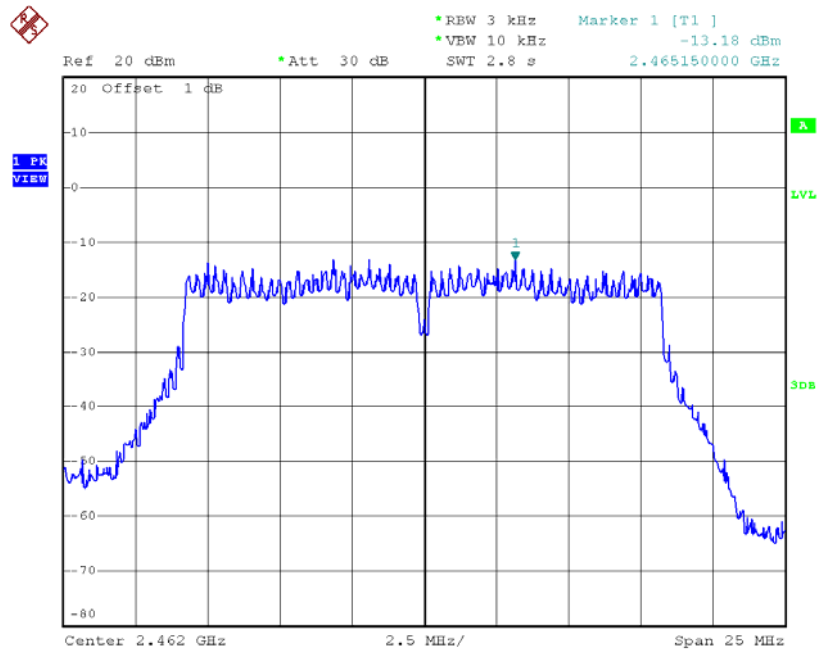
Date: 4.MAR.2016 14:07:53

TX CH06



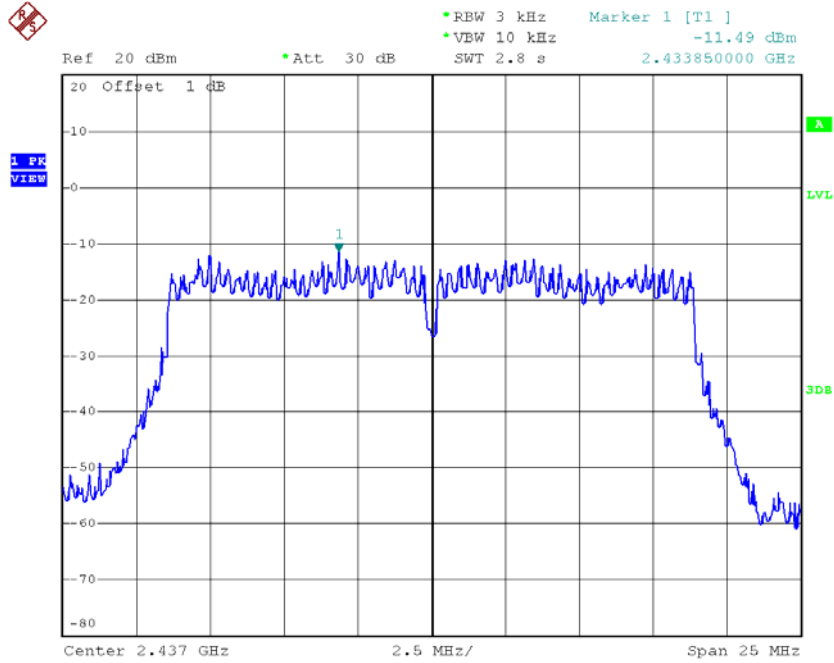
Date: 4.MAR.2016 14:09:59

TX CH11



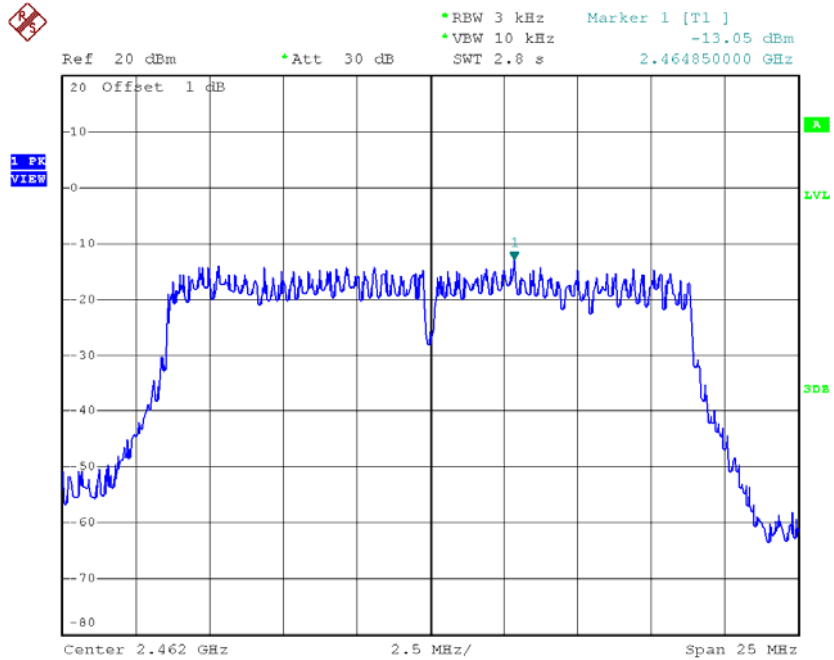
Date: 4.MAR.2016 14:11:53

TX CH06



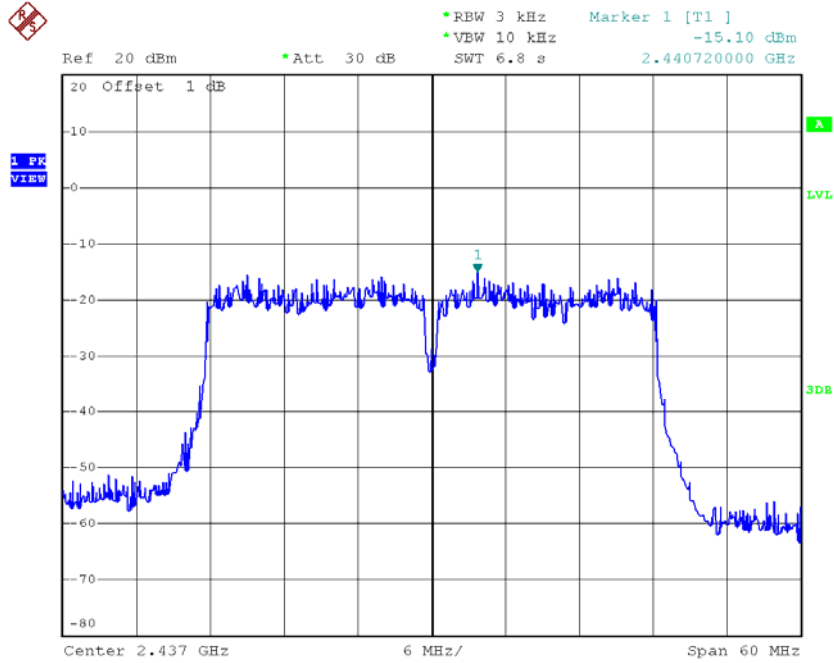
Date: 4.MAR.2016 14:15:13

TX CH11



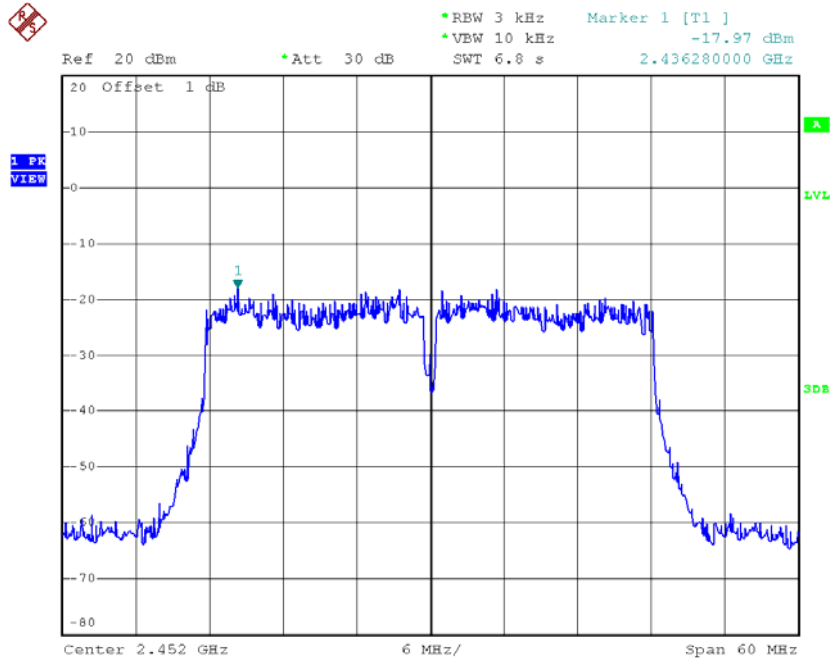
Date: 4.MAR.2016 14:16:35

TX CH06



Date: 4.MAR.2016 14:26:02

TX CH09



Date: 4.MAR.2016 14:27:24