

FCC Radio Test Report

FCC ID: T58SEC112H

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

Project No. : 1503C202B
Equipment : 960P HD Wireless Dome IP Camera/4CH Wireless IP Camera & NVR Security Kit
Model Name : SEC112, SEK204D, SEK204W
Applicant : NETIS SYSTEMS CO., LTD
Address : 4F&5F R&D Building, Oriental Cyberport, High-Tech Industrial Park, Nanshan, Shenzhen, China.

Date of Receipt : Jul. 31, 2015
Date of Test : Jul. 31, 2015 ~ Aug. 24, 2015
Issued Date : Aug. 25, 2015
Tested by : BTL Inc.

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

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Limit ation

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

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1503C202B	Original Issue.	Aug. 25, 2015

1. CERTIFICATION

Equipment : 960P HD Wireless Dome IP Camera/4CH Wireless IP Camera & NVR Security Kit
Brand Name : netis
Model Name : SEC112, SEK204D, SEK204W
Applicant : NETIS SYSTEMS CO., LTD
Manufacturer : Shenzhen Netcore Industrial Ltd.
Address : 4F&5F R&D Building, Oriental Cyberport, High-Tech Industrial Park, Nanshan, Shenzhen, China.
Factory : Dongguan City Netcore Network Technology Co.,Ltd.
Address : No.10-1,Sankeng Road,Qinghutou,Tangxia Town,Dongguan City
Date of Test : Jul. 31, 2015 ~ Aug. 24, 2015
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C: 2014 (15.247) /ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1503C202B) 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: 2014				
Standard(s) Section		Test Item	Judgment	Remark
15.207		Conducted Emission	PASS	
15.247(d)		Antenna conducted Spurious Emission	PASS	
15.247(a)(2)		6dB Bandwidth	PASS	
15.247(b)(3)		Peak Output Power	PASS	
15.247(e)		Power Spectral Density	PASS	
15.203		Antenna Requirement	PASS	
15.209/15.205		Transmitter Radiated Emissions	PASS	

NOTE:

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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

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

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

A. Conducted Measurement:

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

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant.	U, (dB)	Note
DG-CB03 (3m)	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	960P HD Wireless Dome IP Camera/4CH Wireless IP Camera & NVR Security Kit	
Brand Name	netis	
Model Name	SEC112, SEK204D, SEK204W	
Model Difference	1. SEK204D is suit models, including the SEC112 and SEV204 camera. Model SEV204 Please refer to BTL-FCCP-1-1503C201A. 2. The model name is different for SEK204D and SEK204W.	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 150 Mbps
	Output Power (Max.)	802.11b: 17.17dBm 802.11g: 21.20dBm 802.11n(20MHz): 21.44dBm 802.11n(40MHz): 21.34dBm
PowerSource	DC voltage supplied from AC/DC Adapter. Brand/ Model: tenpao/ NT12V1AUL	
Power Rating	I/P: 100-240V~ 50/60Hz 0.3A O/P: DC 12V 1A	

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)							
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	P/N	Antenna Type	Connector	Gain (dBi)	Note
1		RF21S00002A	Dipole	SMA	5.19	2.4G

3.2 DESCRIPTION OF TEST MODES

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

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

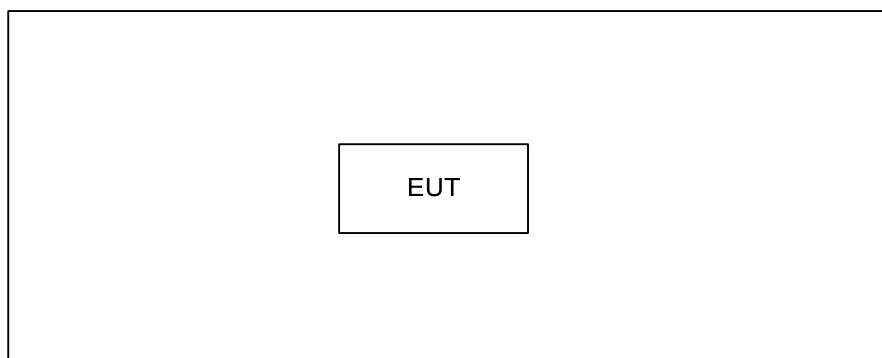
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (6.5Mbps)
802.11n HT40mode : BPSK (13.5Mbps)
For radiated emission tests, the highest output powers were set for final test.
- (3) For 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	MP_Kit_RTL11n_8188EUS_USB		
Frequency (MHz)	2412	2437	2462
802.11b	45	46	45
802.11g	57	57	56
802.11n (20MHz)	58	57	56
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	59	59	58

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.	Note
-	-	-	-	-	-	

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	-

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 (dBμV)	
	Quasi-peak	Average
0.15 -0.	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

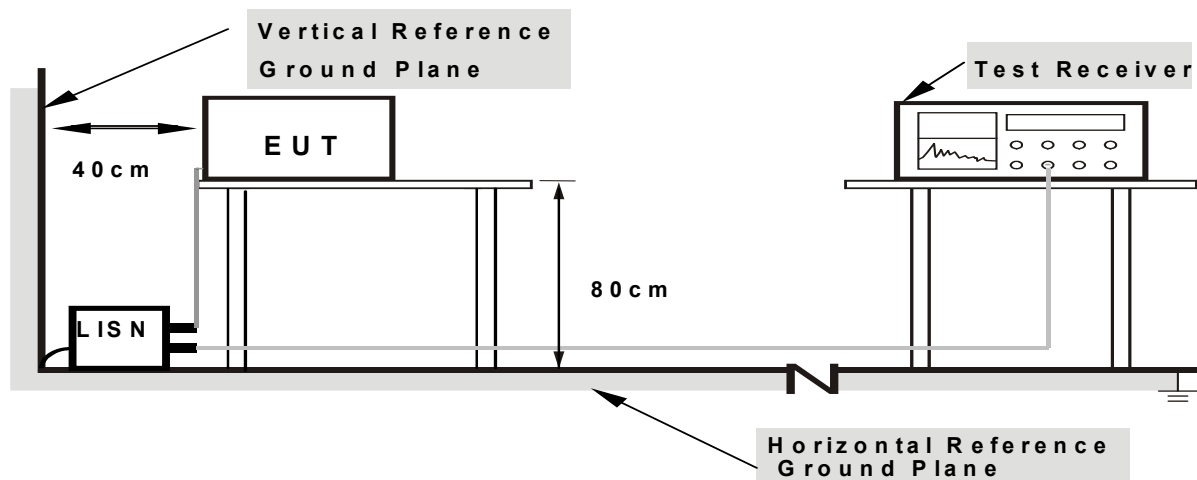
4.1.2 TEST PROCEDURE

- 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 groundplane 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 TESTSET UP



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

4.1.5EUT OPERATING CONDITIONS

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

4.1.6EUT TEST CONDITIONS

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

4.1.7TEST 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 15C47.
- (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 TESTPROCEDURE

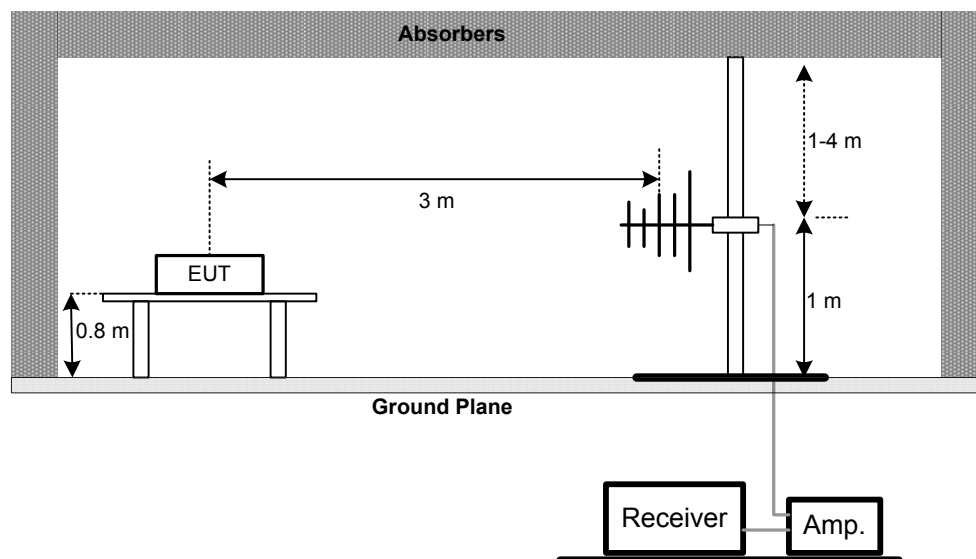
- The measuring distance of at 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance 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)
- 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.
- 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.
- 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.

4.2.3DEVIATIONFROMTESTSTANDARD

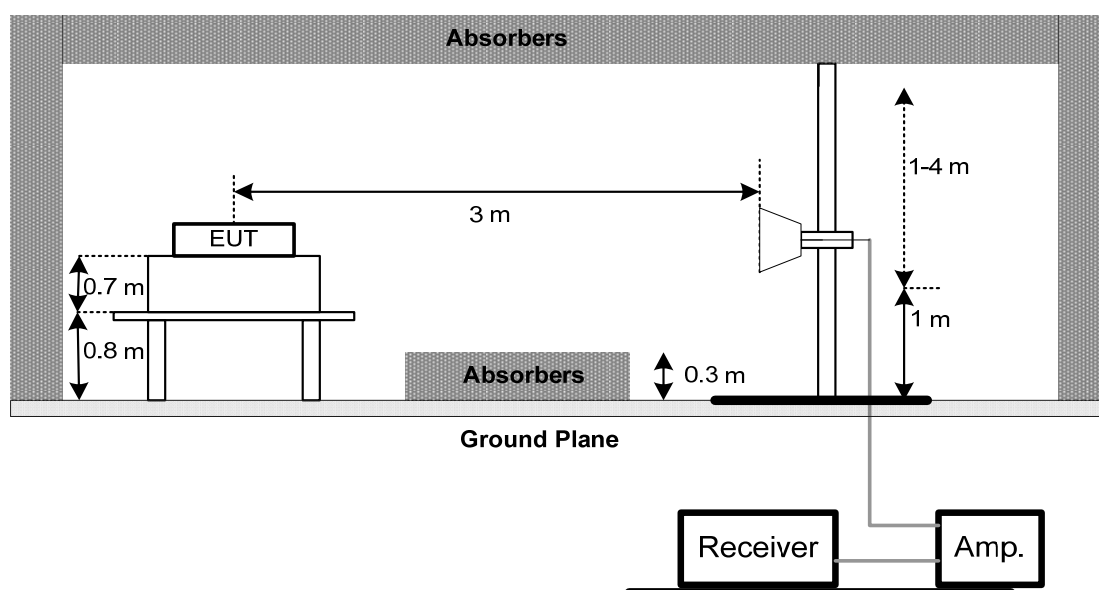
No deviation

4.2.4 TESTSET UP

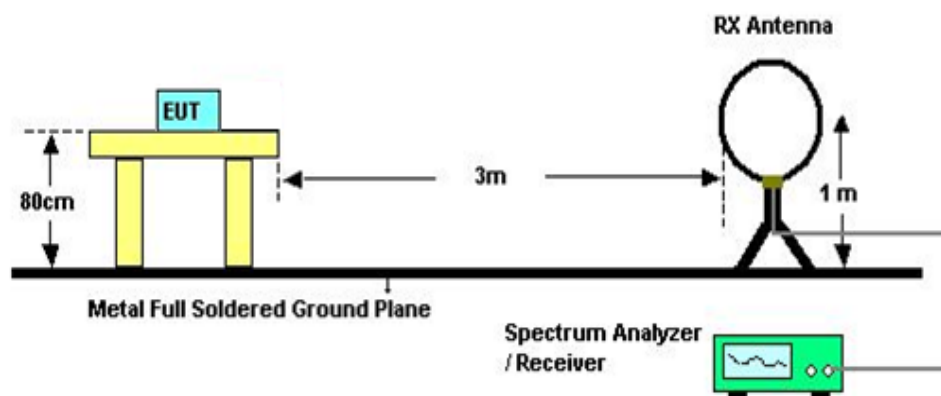
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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(30MHZTO 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

5.1APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	2400-2483.5	PASS

5.1.1TEST 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.

5.1.2DEVIATION FROM STANDARD

No deviation.

5.1.3TEST SETUP



5.1.4EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.1.5EUT TEST CONDITIONS

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

5.1.6TEST 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

- 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 558074D01 DTS Meas Guidance v03r03.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7.ANTENNA CONDUCTED SPURIOUS EMISSION

7.1APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum ordigitally 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 thatcontains 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.

7.1.1TEST 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 = Auto.
- Offset=antenna gain+cable loss

7.1.2DEVIATION FROM STANDARD

No deviation.

7.1.3TEST SETUP



7.1.4EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.1.5EUT TEST CONDITIONS

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

7.1.6TEST 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

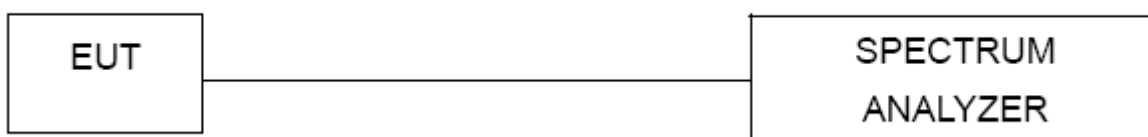
8.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- 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	N/A	C_17	N/A	Mar.13, 2016
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. 17, 2015
3	Receiver	AGILENT	N9038A	MY52130039	Sep. 30, 2015
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2016
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	Mar. 28, 2016
7	Amplifier	Agilent	8449B	3008A02274	Nov. 02, 2015
8	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 29, 2016
9	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Mar. 28, 2016
10	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 28, 2016
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Aug. 15, 2016
12	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015

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	Nov. 02, 2015

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015

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



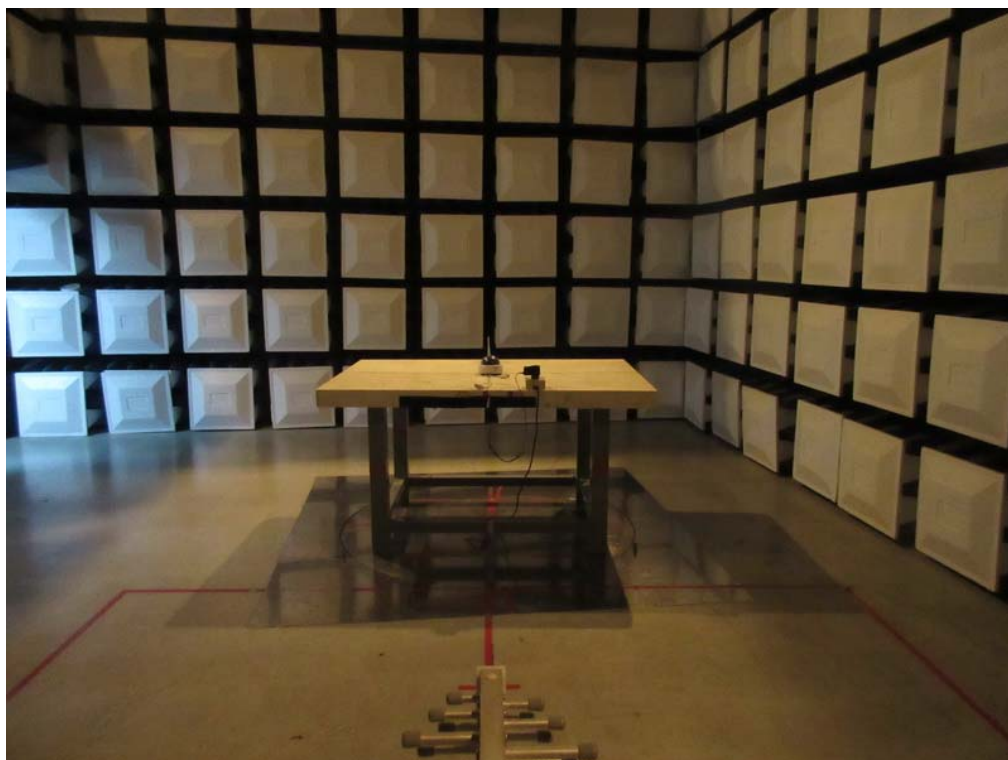
Radiated Measurement Photos

9KHz to 30MHz



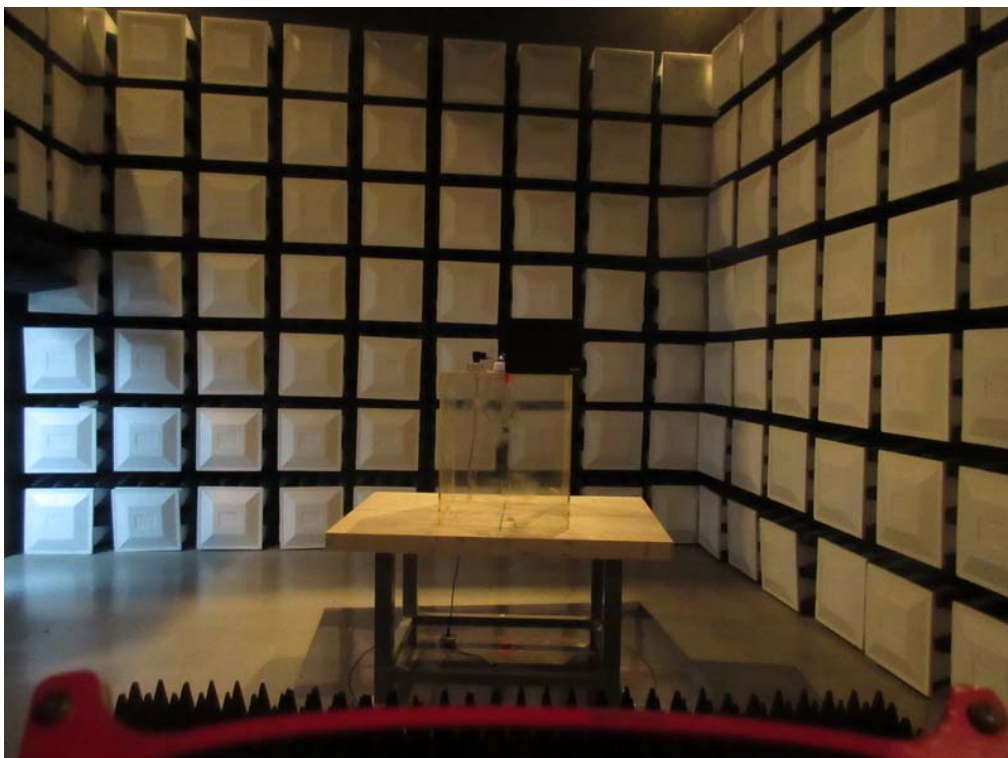
Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

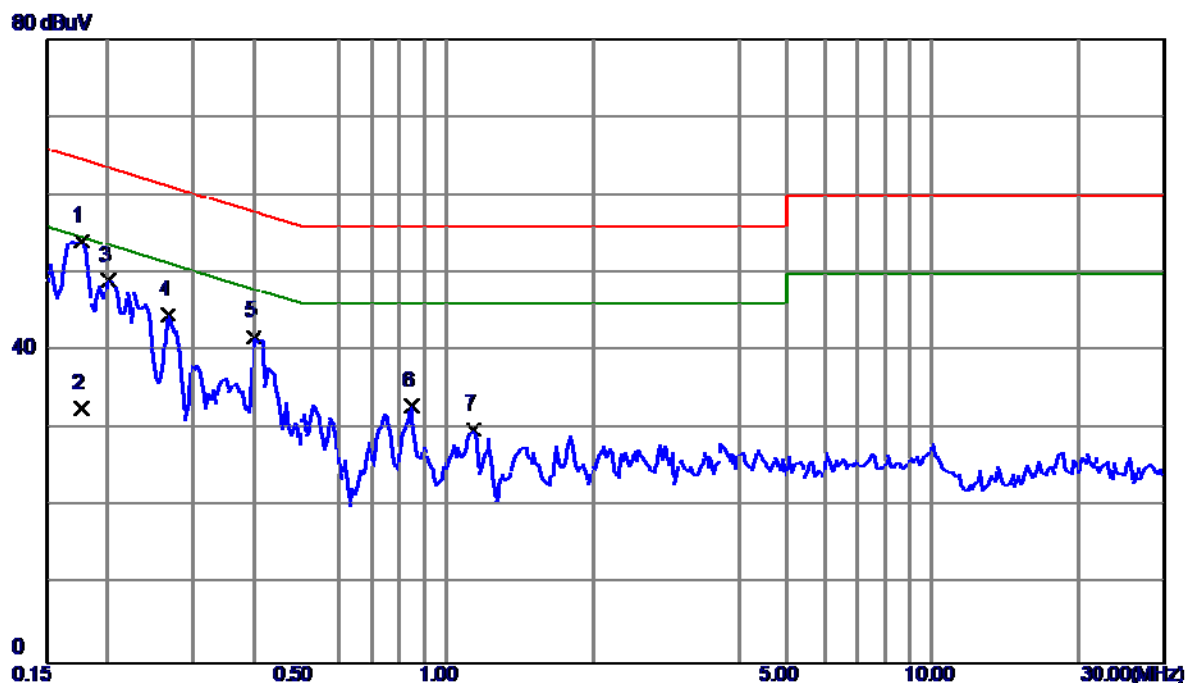
Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode :	Normal Link
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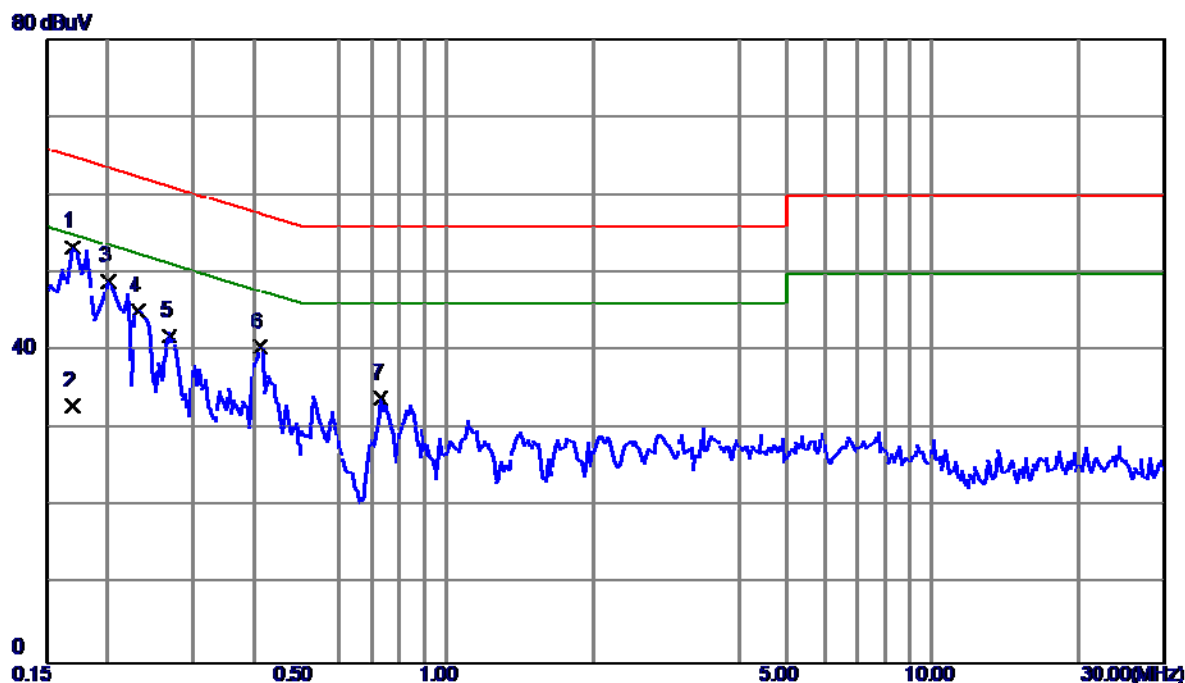
Line



No.	Freq.	Reading	Correct	Measure	Limit	Over		
	MHz	Level	Factor	ment			Detector	Comment
1	0.1773	44.52	9.56	54.08	64.61	-10.53	Peak	
2	0.1773	23.10	9.56	32.66	54.61	-21.95	AVG	
3	0.2008	39.47	9.57	49.04	63.58	-14.54	Peak	
4	0.2672	35.03	9.62	44.65	61.20	-16.55	Peak	
5	0.4000	32.16	9.68	41.84	57.85	-16.01	Peak	
6	0.8453	23.19	9.76	32.95	56.00	-23.05	Peak	
7	1.1344	20.12	9.81	29.93	56.00	-26.07	Peak	

Test Mode :	Normal Link
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Neutral



No.	Freq.	Reading	Correct	Measure	Limit	Over		
	MHz	Level	Factor	ment				
		dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1695	43.88	9.48	53.36	64.98	-11.62	Peak	
2	0.1695	23.50	9.48	32.98	54.98	-22.00	AVG	
3	0.2008	39.39	9.50	48.89	63.58	-14.69	Peak	
4	0.2320	35.63	9.51	45.14	62.38	-17.24	Peak	
5	0.2686	32.47	9.52	41.99	61.16	-19.17	Peak	
6	0.4117	30.97	9.53	40.50	57.61	-17.11	Peak	
7	0.7320	24.36	9.54	33.90	56.00	-22.10	Peak	

ATTACHMENTB -RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode:	TX B MODE CHANNEL 01
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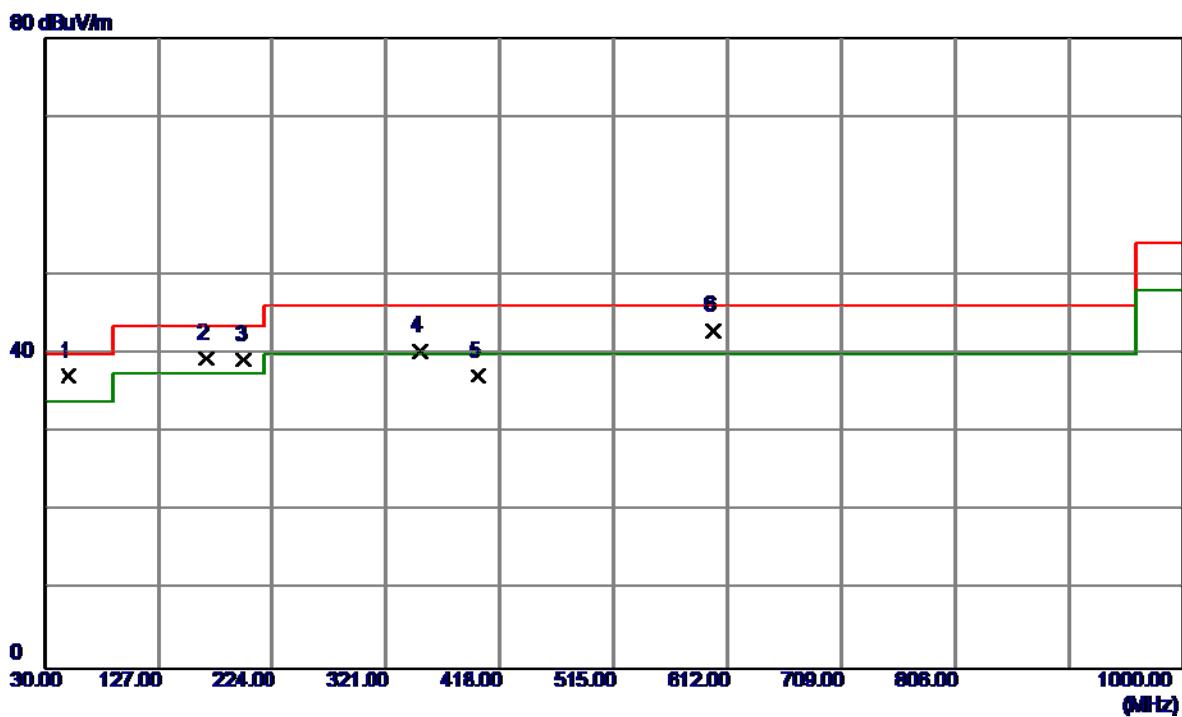
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0098	0°	13.41	24.9460	38.3560	127.7797	-89.4237	AVG
0.0098	0°	14.28	24.9460	39.2260	147.7797	-108.5537	PEAK
0.0285	0°	6.73	23.7617	30.4917	118.5073	-88.0157	AVG
0.0285	0°	8.12	23.7617	31.8817	138.5073	-106.6257	PEAK
0.0369	0°	3.17	23.2297	26.3997	116.2637	-89.8640	AVG
0.0369	0°	5.58	23.2297	28.8097	136.2637	-107.4540	PEAK
0.0584	0°	1.16	22.2320	23.3920	112.2760	-88.8840	AVG
0.0584	0°	2.53	22.2320	24.7620	132.2760	-107.5140	PEAK
0.5096	0°	19.36	19.8307	39.1907	73.4596	-34.2689	QP
1.9524	0°	23.71	19.5048	43.2148	69.5400	-26.3252	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0125	90°	13.16	24.3000	37.4600	125.6660	-88.2060	AVG
0.0125	90°	14.89	24.3000	39.1900	145.6660	-106.4760	PEAK
0.0268	90°	7.28	23.8693	31.1493	119.0415	-87.8922	AVG
0.0268	90°	8.94	23.8693	32.8093	139.0415	-106.2322	PEAK
0.0435	90°	5.23	22.8117	28.0417	114.8344	-86.7928	AVG
0.0435	90°	6.19	22.8117	29.0017	134.8344	-105.8328	PEAK
0.0584	90°	1.54	22.2320	23.7720	112.2760	-88.5040	AVG
0.0584	90°	2.86	22.2320	25.0920	132.2760	-107.1840	PEAK
0.6218	90°	22.17	20.1898	42.3598	71.7312	-29.3715	QP
2.0547	90°	24.56	19.4672	44.0272	69.5400	-25.5128	QP

ATTACHMENTC -RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode: TX B MODE CHANNEL 01

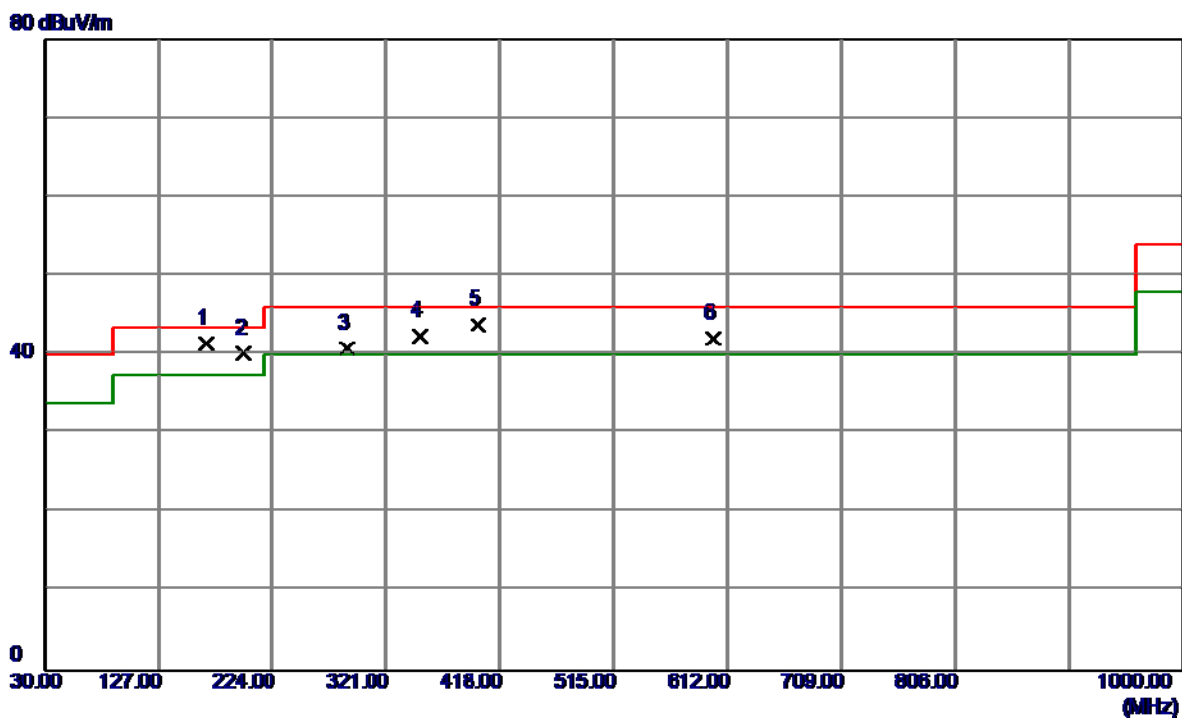
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	50.3700	49.62	-12.48	37.14	40.00	-2.86	QP	
2	167.7400	50.73	-11.38	39.35	43.50	-4.15	Peak	
3	199.7500	52.75	-13.56	39.19	43.50	-4.31	Peak	
4	350.1000	50.28	-9.92	40.36	46.00	-5.64	Peak	
5	399.5700	44.39	-7.29	37.10	46.00	-8.90	Peak	
6	600.3600	47.45	-4.62	42.83	46.00	-3.17	Peak	

Test Mode:	TX B MODE CHANNEL 01
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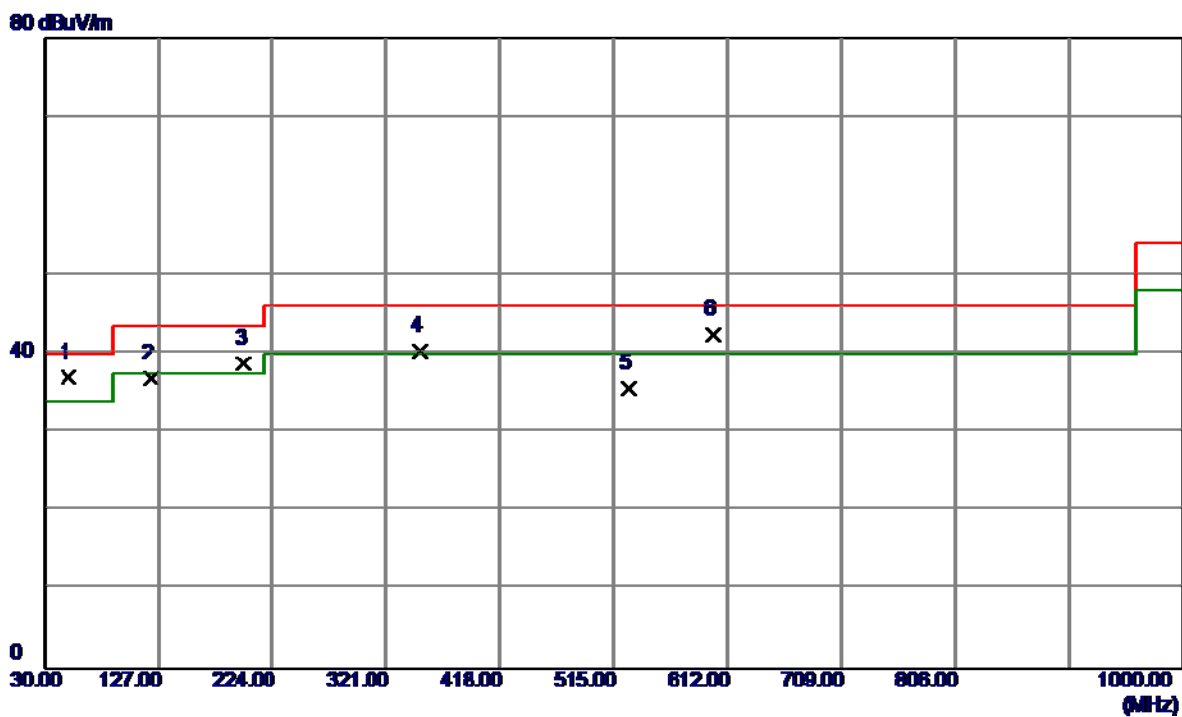
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	167.7400	52.87	-11.38	41.49	43.50	-2.01	QP	
2	199.7500	53.73	-13.56	40.17	43.50	-3.33	Peak	
3	288.0200	50.92	-10.07	40.85	46.00	-5.15	Peak	
4	350.1000	52.36	-9.92	42.44	46.00	-3.56	Peak	
5	399.5700	51.13	-7.29	43.84	46.00	-2.16	QP	
6	600.3600	46.75	-4.62	42.13	46.00	-3.87	QP	

Test Mode:	TX B MODE CHANNEL 06
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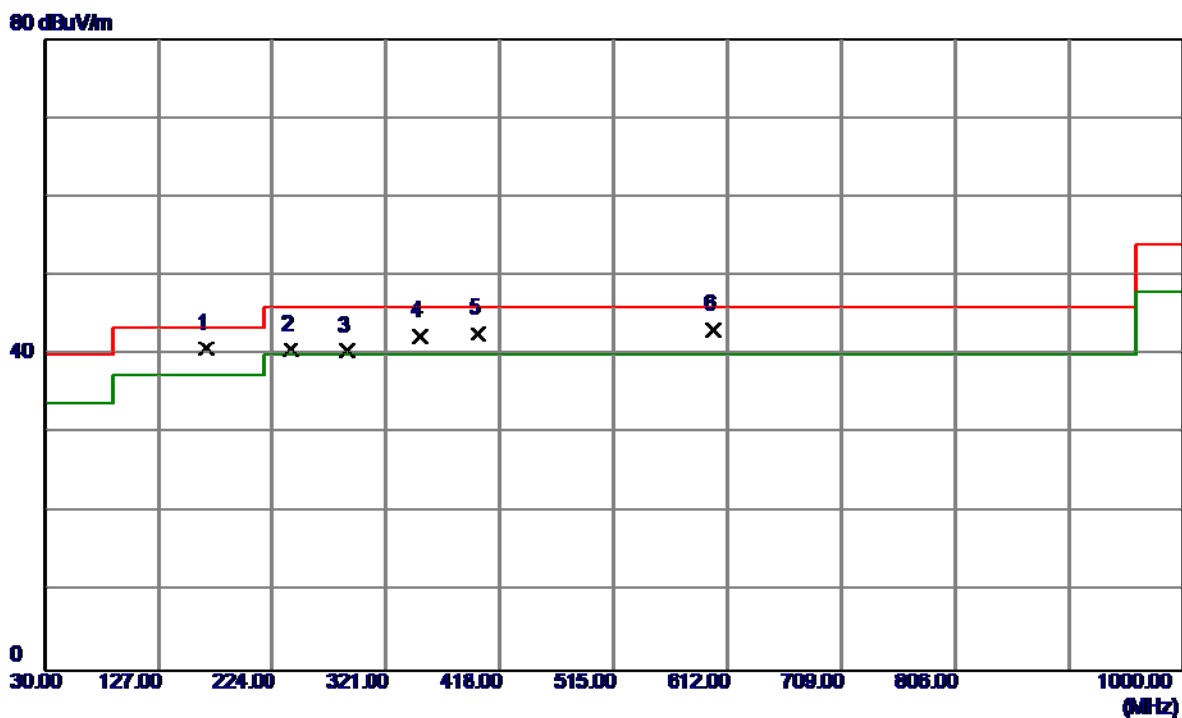
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	50.3700	49.42	-12.48	36.94	40.00	-3.06	QP	
2	120.2100	49.30	-12.54	36.76	43.50	-6.74	Peak	
3	199.7500	52.25	-13.56	38.69	43.50	-4.81	Peak	
4	350.1000	50.28	-9.92	40.36	46.00	-5.64	Peak	
5	527.6100	41.44	-5.86	35.58	46.00	-10.42	Peak	
6	600.3600	46.95	-4.62	42.33	46.00	-3.67	Peak	

Test Mode:	TX B MODE CHANNEL 06
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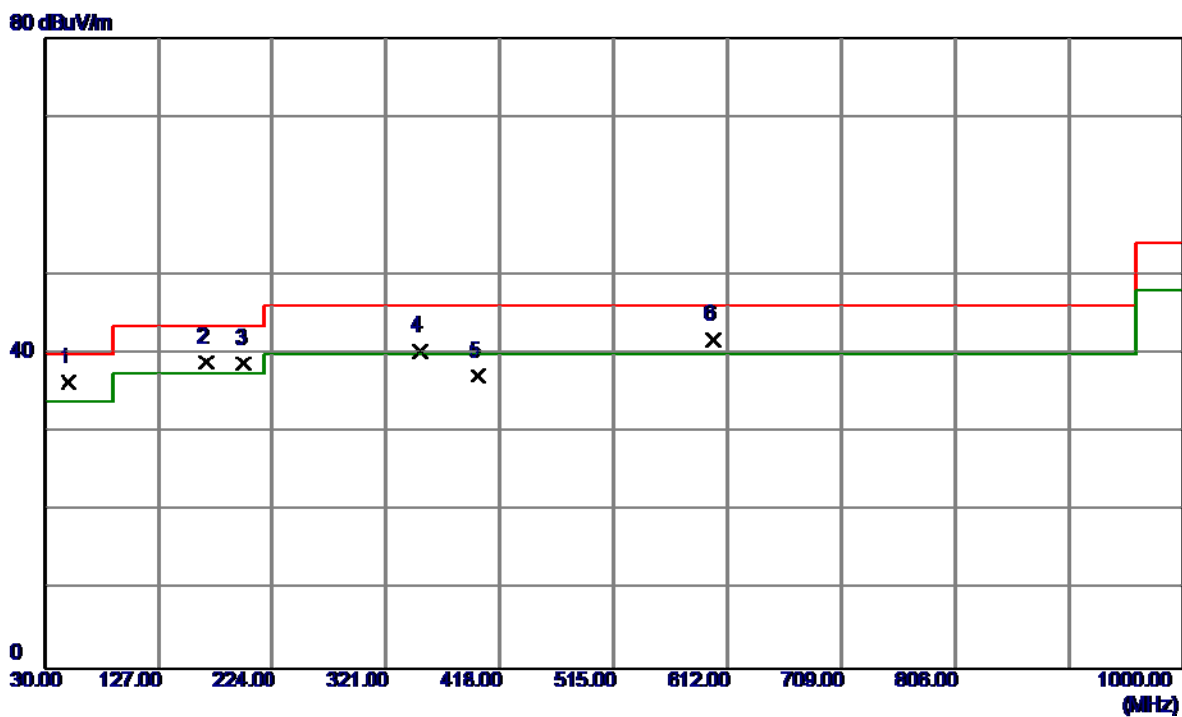
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Over		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	167.7400	52.13	-11.38	40.75	43.50	-2.75	QP	
2	240.4900	53.10	-12.41	40.69	46.00	-5.31	Peak	
3	288.0200	50.58	-10.07	40.51	46.00	-5.49	Peak	
4	350.1000	52.26	-9.92	42.34	46.00	-3.66	Peak	
5	399.5700	49.97	-7.29	42.68	46.00	-3.32	QP	
6	600.3600	47.88	-4.62	43.26	46.00	-2.74	Peak	

Test Mode:	TX B MODE CHANNEL 11
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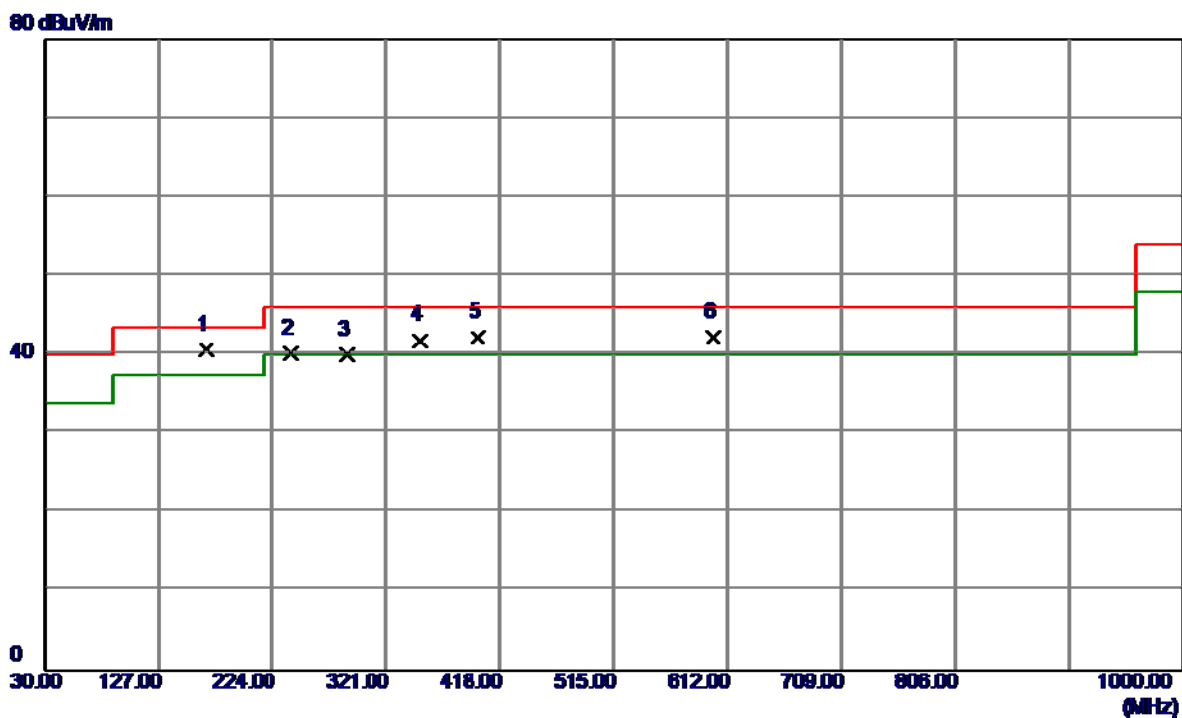
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	50.3700	48.75	-12.48	36.27	40.00	-3.73	QP	
2	167.7400	50.23	-11.38	38.85	43.50	-4.65	Peak	
3	199.7500	52.25	-13.56	38.69	43.50	-4.81	Peak	
4	350.1000	50.28	-9.92	40.36	46.00	-5.64	Peak	
5	399.5700	44.39	-7.29	37.10	46.00	-8.90	Peak	
6	600.3600	46.45	-4.62	41.83	46.00	-4.17	Peak	

Test Mode:	TX B MODE CHANNEL 11
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Horizontal

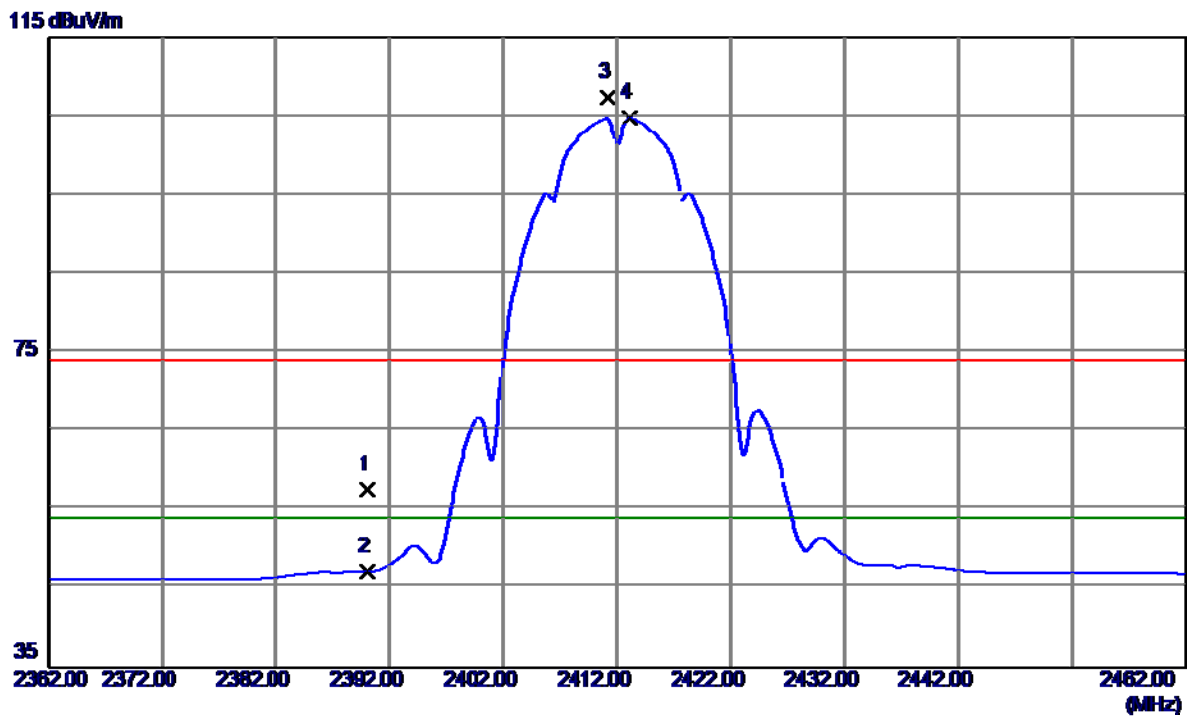


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	167.7400	52.01	-11.38	40.63	43.50	-2.87	QP	
2	240.4900	52.60	-12.41	40.19	46.00	-5.81	Peak	
3	288.0200	50.08	-10.07	40.01	46.00	-5.99	Peak	
4	350.1000	51.76	-9.92	41.84	46.00	-4.16	Peak	
5	399.5700	49.55	-7.29	42.26	46.00	-3.74	QP	
6	600.3600	46.80	-4.62	42.18	46.00	-3.82	QP	

ATTACHMENTD -RADIATED EMISSION (ABOVE 1000MHZ)

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

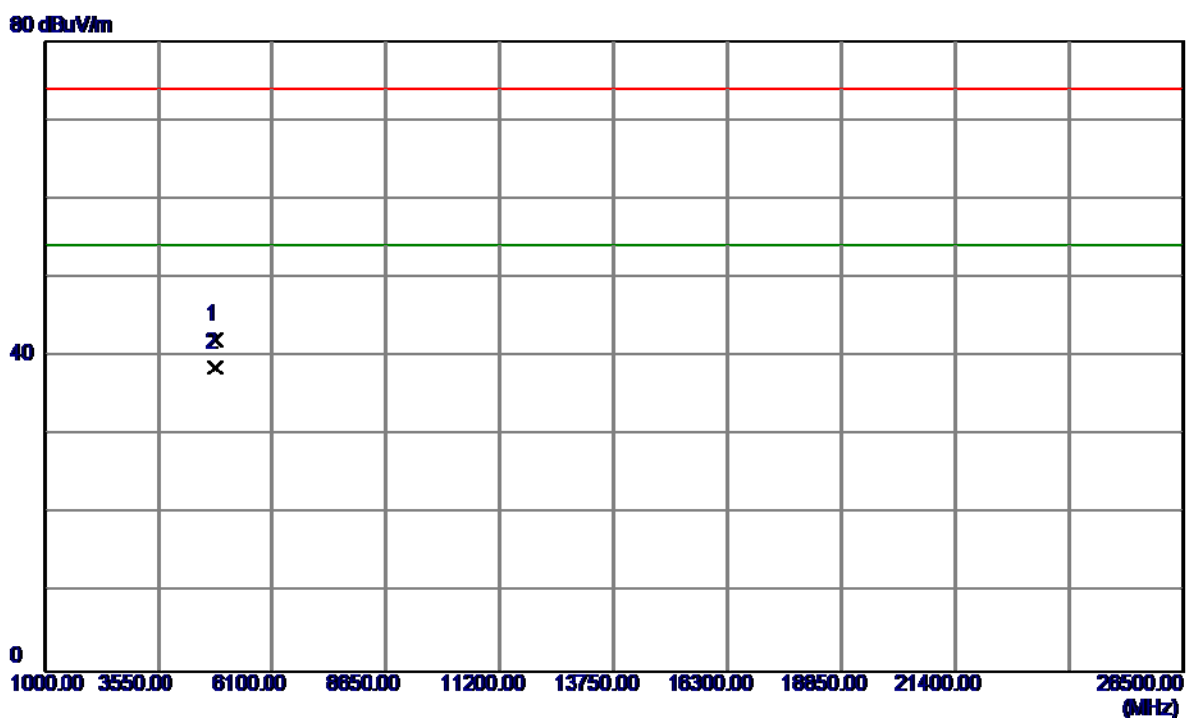
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	23.39	34.23	57.62	74.00	-16.38	Peak	
2	2390.0000	12.99	34.23	47.22	54.00	-6.78	AVG	
3	2411.2000	73.04	34.35	107.39	74.00	33.39	Peak	NO LIMIT
4	2413.1000	70.40	34.37	104.77	54.00	50.77	AVG	NO LIMIT

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

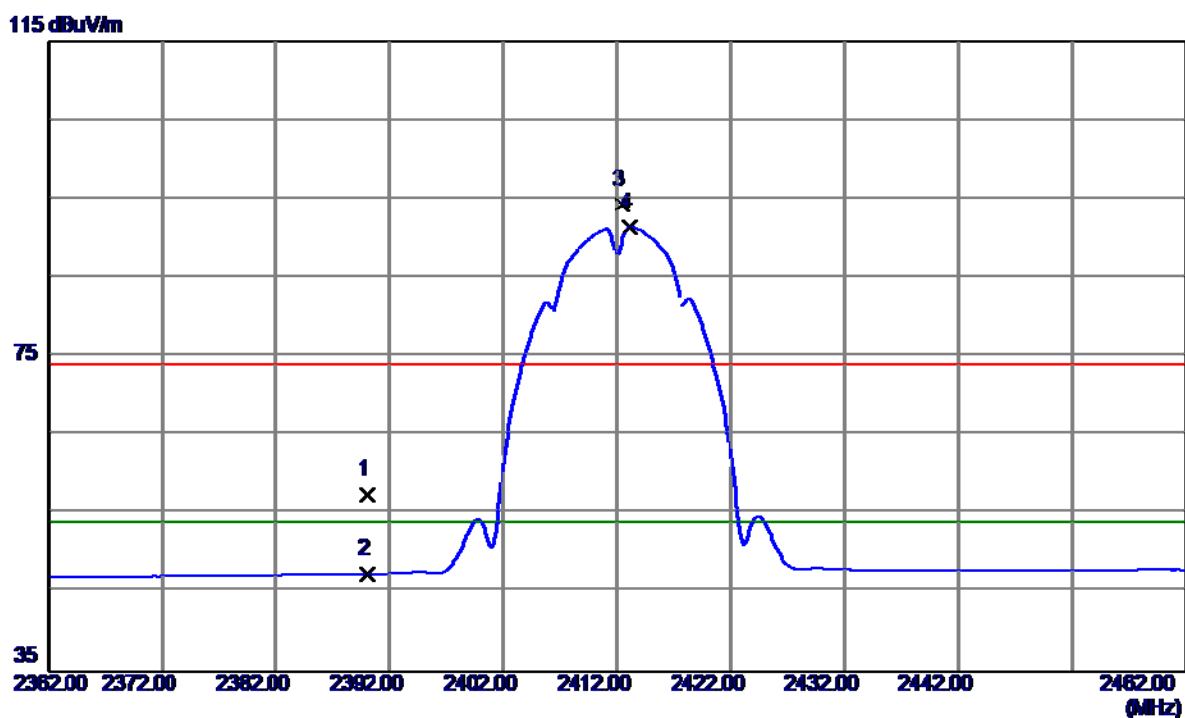
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4823.9900	39.10	3.00	42.10	74.00	-31.90	Peak	
2	4824.0200	35.55	3.00	38.55	54.00	-15.45	AVG	

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

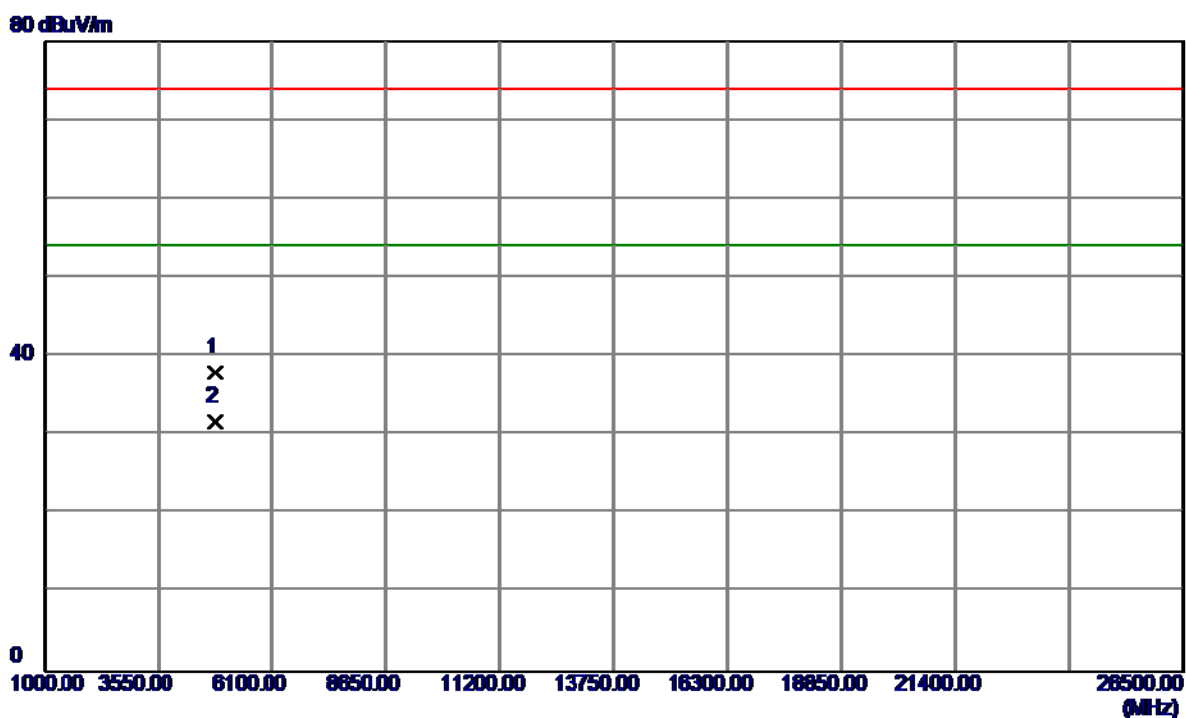
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	23.24	34.23	57.47	74.00	-16.53	Peak	
2	2390.0000	13.10	34.23	47.33	54.00	-6.67	AVG	
3	2412.4000	59.81	34.36	94.17	74.00	20.17	Peak	NO LIMIT
4	2413.1000	57.01	34.37	91.38	54.00	37.38	AVG	NO LIMIT

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

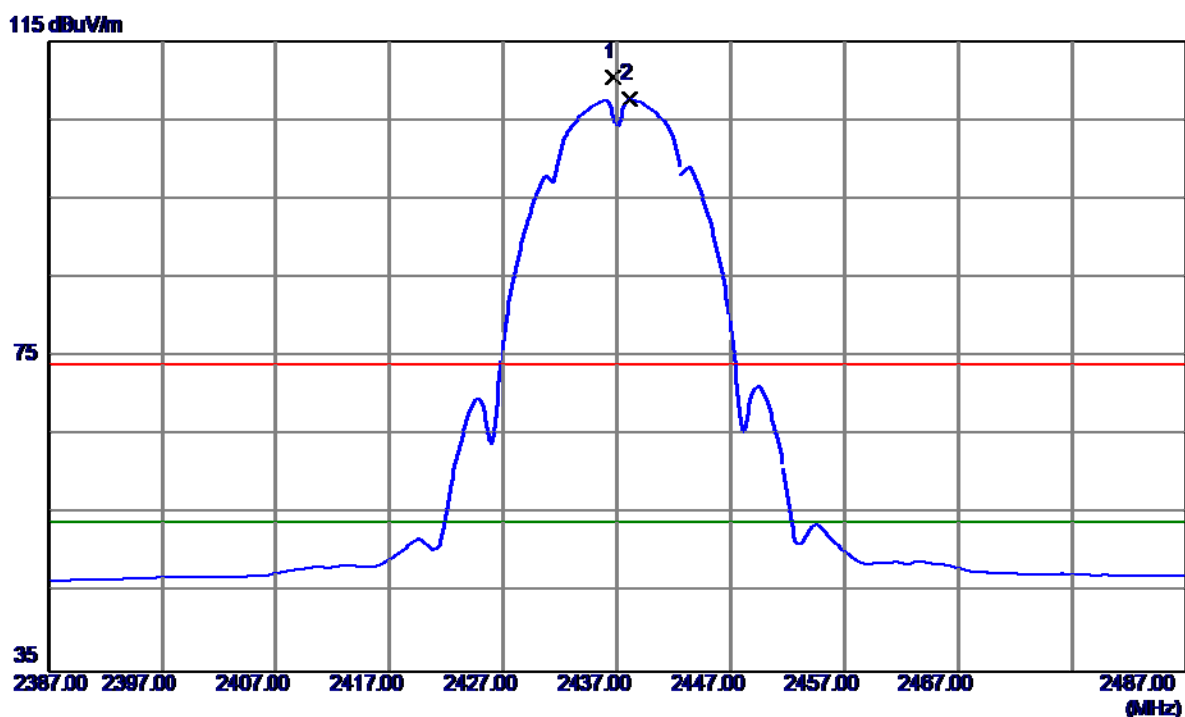
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4823.9200	34.98	3.00	37.98	74.00	-36.02	Peak	
2	4824.0200	28.73	3.00	31.73	54.00	-22.27	AVG	

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

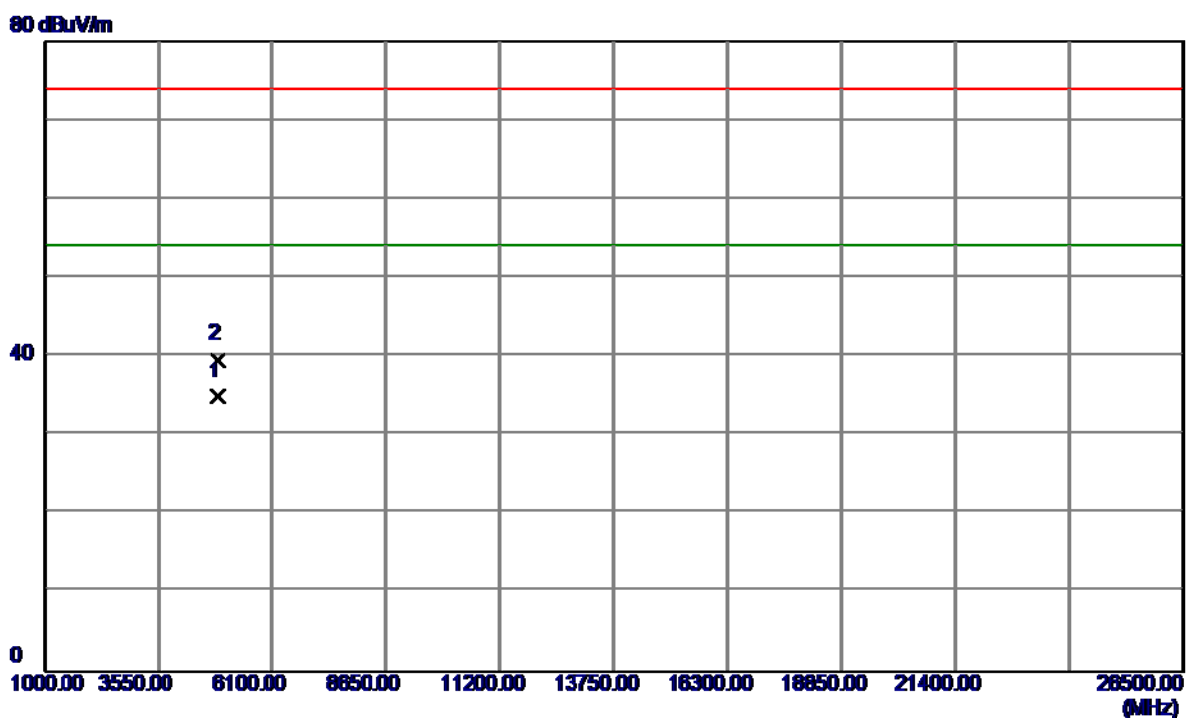
Vertical



No.	Freq.	Reading	Correct	Measure	Limit	Over		
	MHz	dBuV/m	Factor	ment	dBuV/m	dB	Detector	Comment
1	2436.7000	75.84	34.50	110.34	74.00	36.34	Peak	NO LIMIT
2	2438.1000	73.09	34.51	107.60	54.00	53.60	AVG	NO LIMIT

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

Vertical

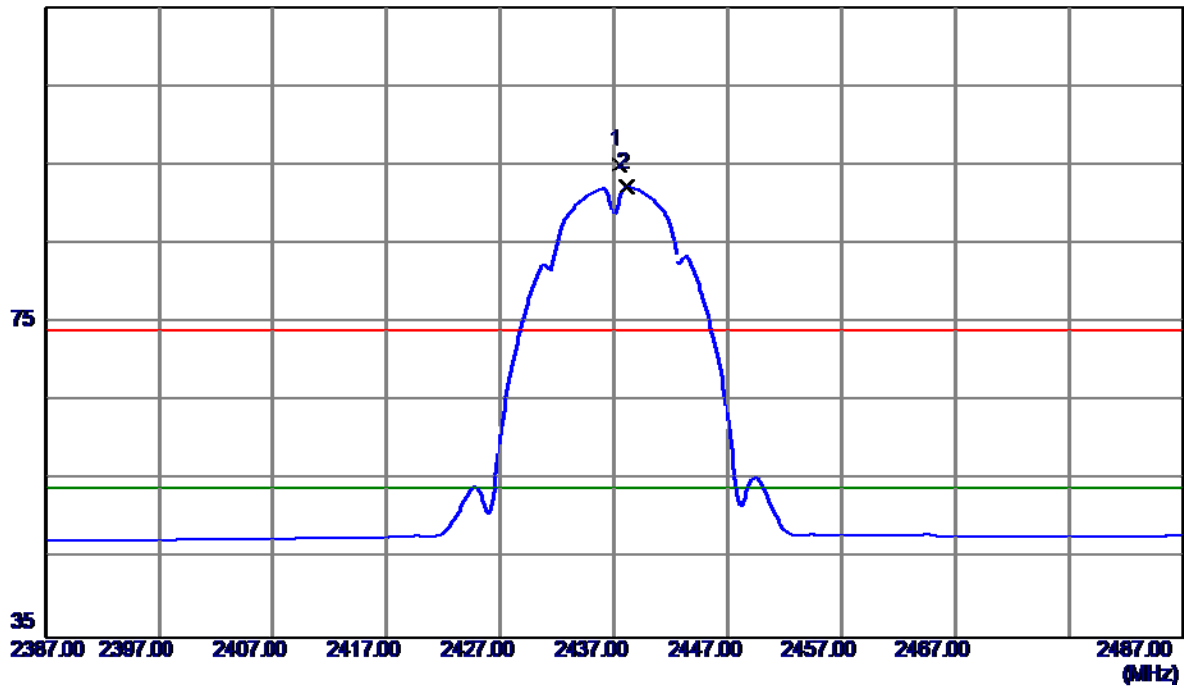


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0099	31.83	3.03	34.86	54.00	-19.14	AVG	
2	4874.1500	36.57	3.03	39.60	74.00	-34.40	Peak	

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

Horizontal

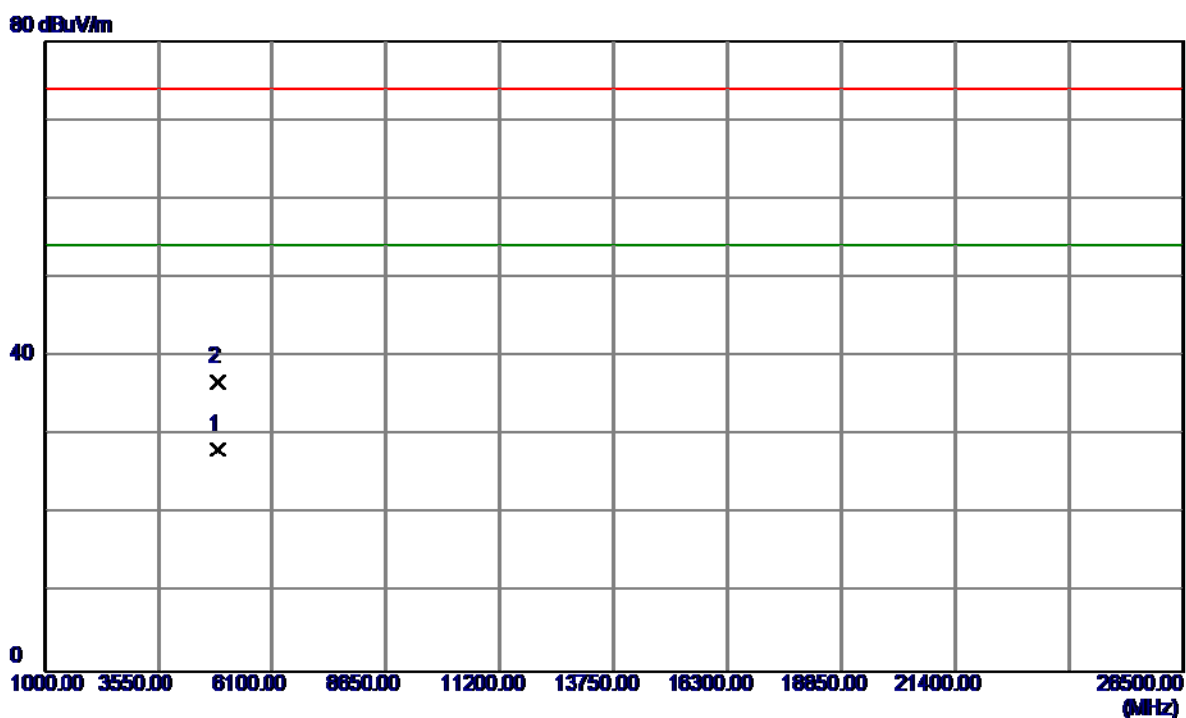
115 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2437.4000	60.45	34.51	94.96	74.00	20.96	Peak	NO LIMIT
2	2438.1000	57.59	34.51	92.10	54.00	38.10	AVG	NO LIMIT

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

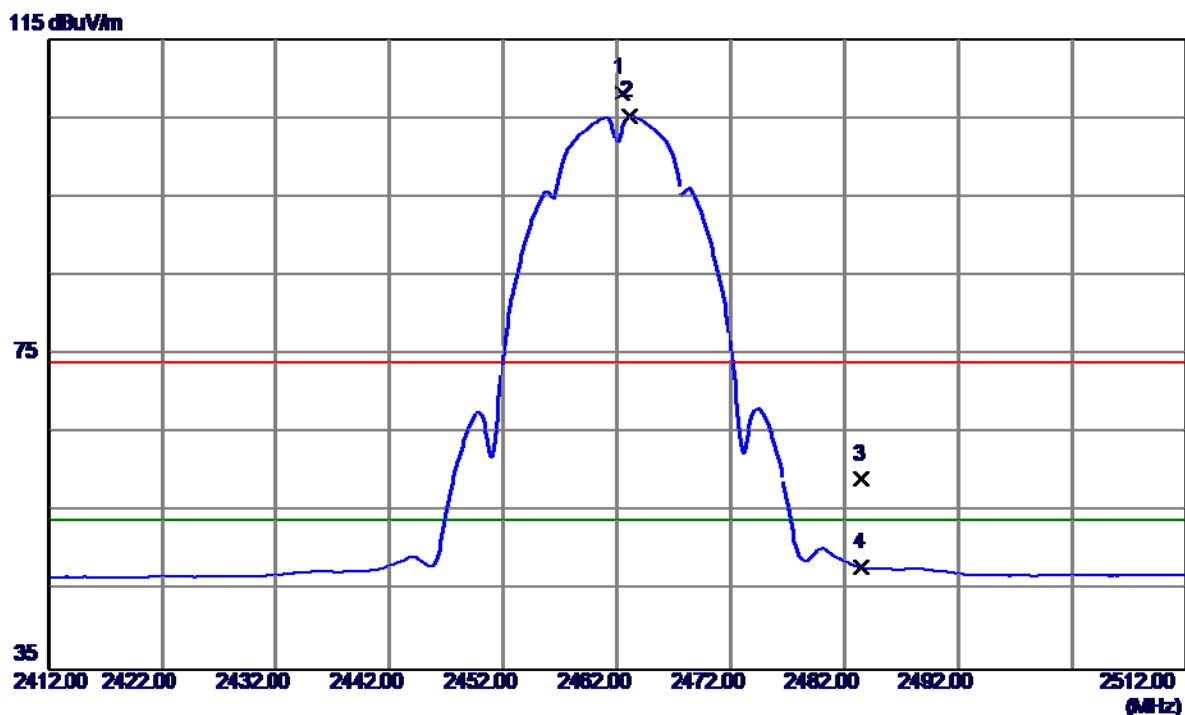
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0299	25.19	3.03	28.22	54.00	-25.78	AVG	
2	4874.0900	33.69	3.03	36.72	74.00	-37.28	Peak	

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

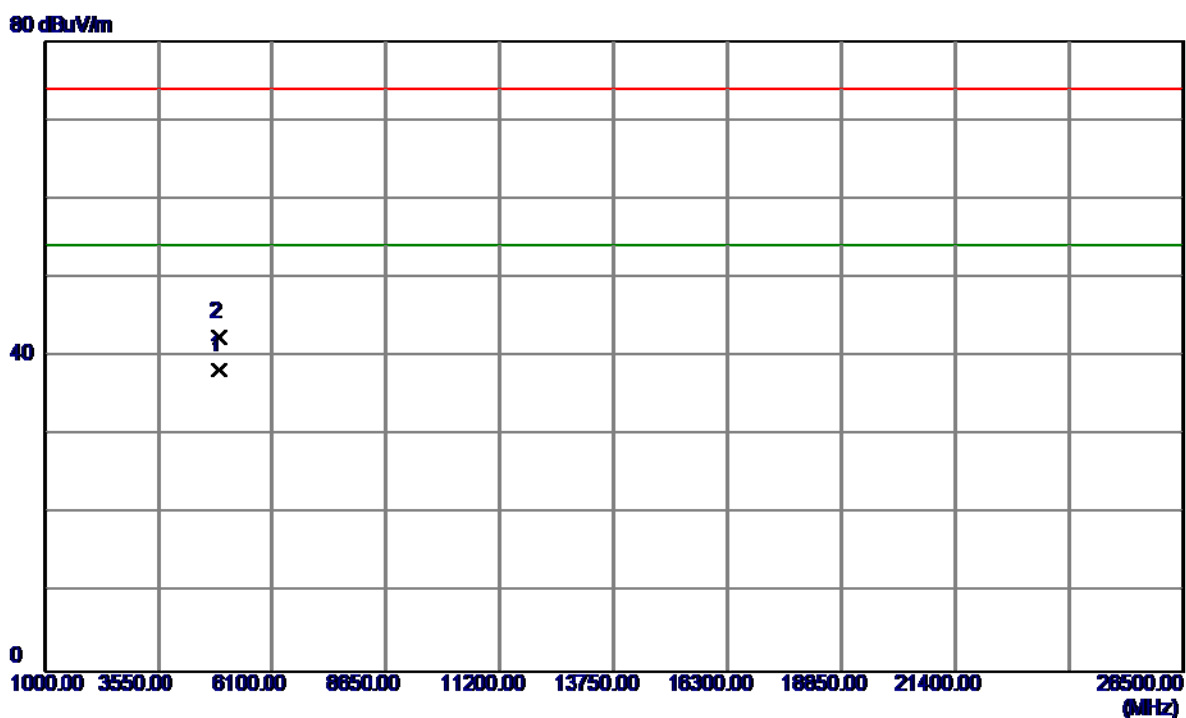
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2462.4000	73.42	34.65	108.07	74.00	34.07	Peak	NO LIMIT
2	2463.1000	70.64	34.66	105.30	54.00	51.30	AVG	NO LIMIT
3	2483.5000	24.41	34.77	59.18	74.00	-14.82	Peak	
4	2483.5000	13.12	34.77	47.89	54.00	-6.11	AVG	

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

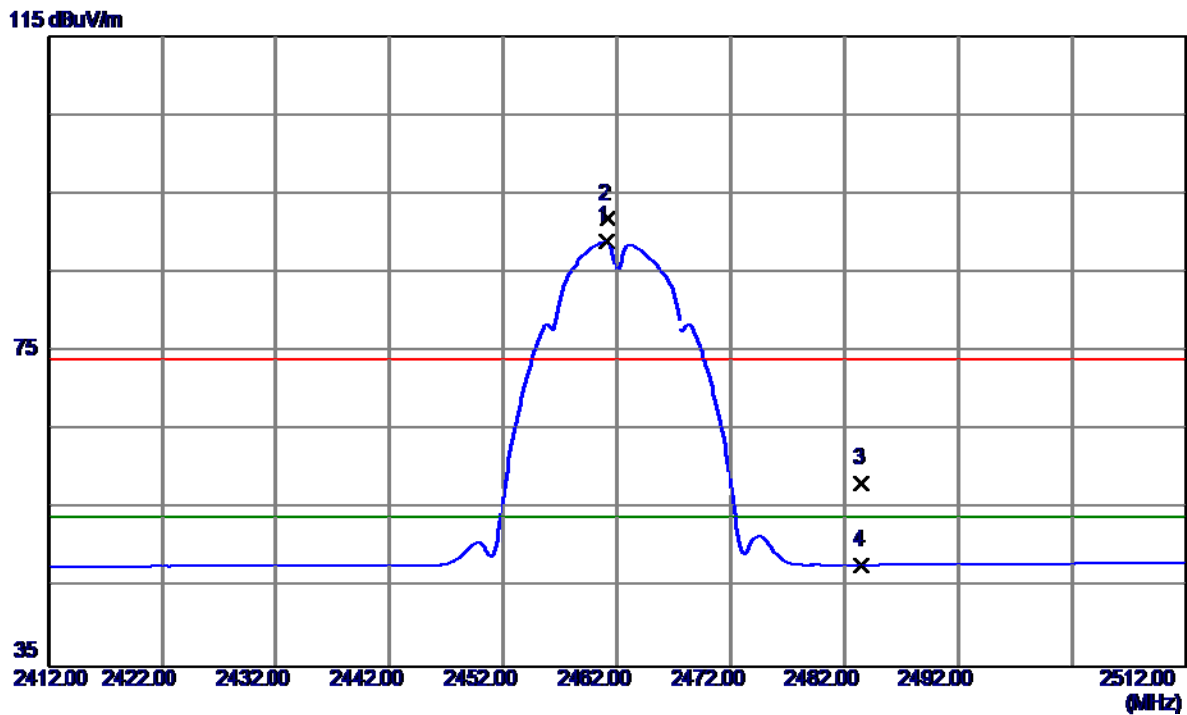
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4924.0299	35.25	3.05	38.30	54.00	-15.70	AVG	
2	4924.0600	39.32	3.05	42.37	74.00	-31.63	Peak	

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

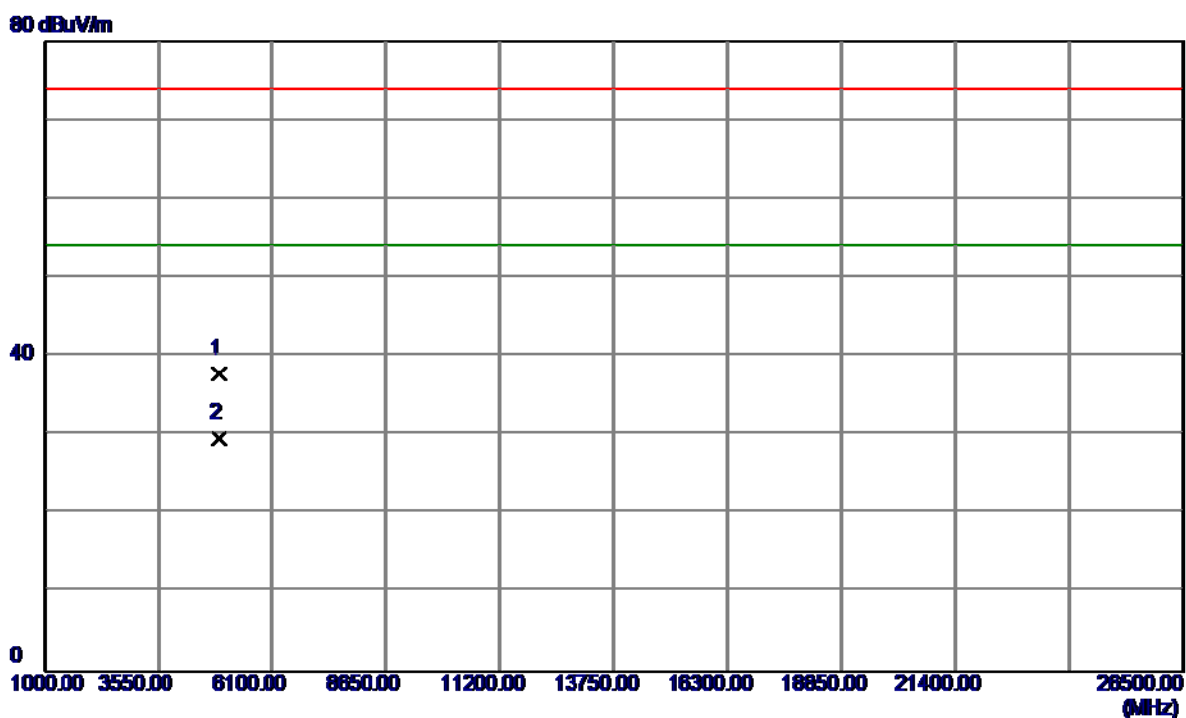
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2461.1000	54.28	34.64	88.92	54.00	34.92	AVG	NO LIMIT
2	2461.2000	57.10	34.64	91.74	74.00	17.74	Peak	NO LIMIT
3	2483.5000	23.44	34.77	58.21	74.00	-15.79	Peak	
4	2483.5000	13.10	34.77	47.87	54.00	-6.13	AVG	

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

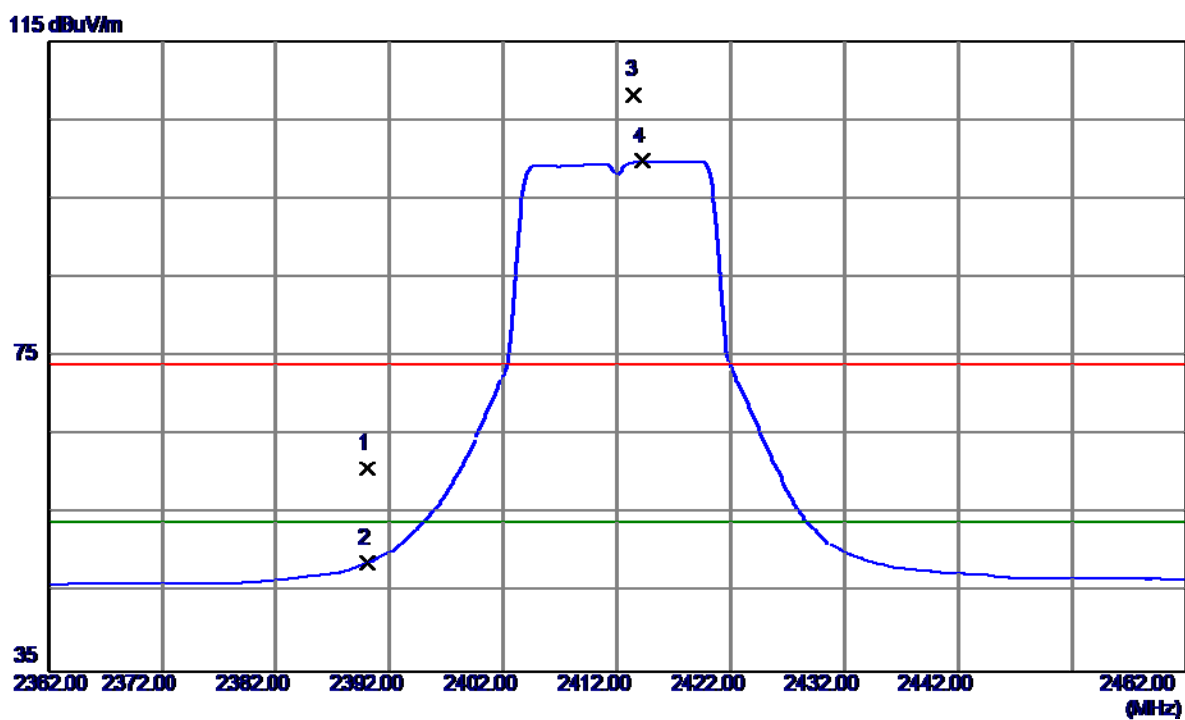
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4923.9900	34.65	3.05	37.70	74.00	-36.30	Peak	
2	4924.0299	26.52	3.05	29.57	54.00	-24.43	AVG	

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

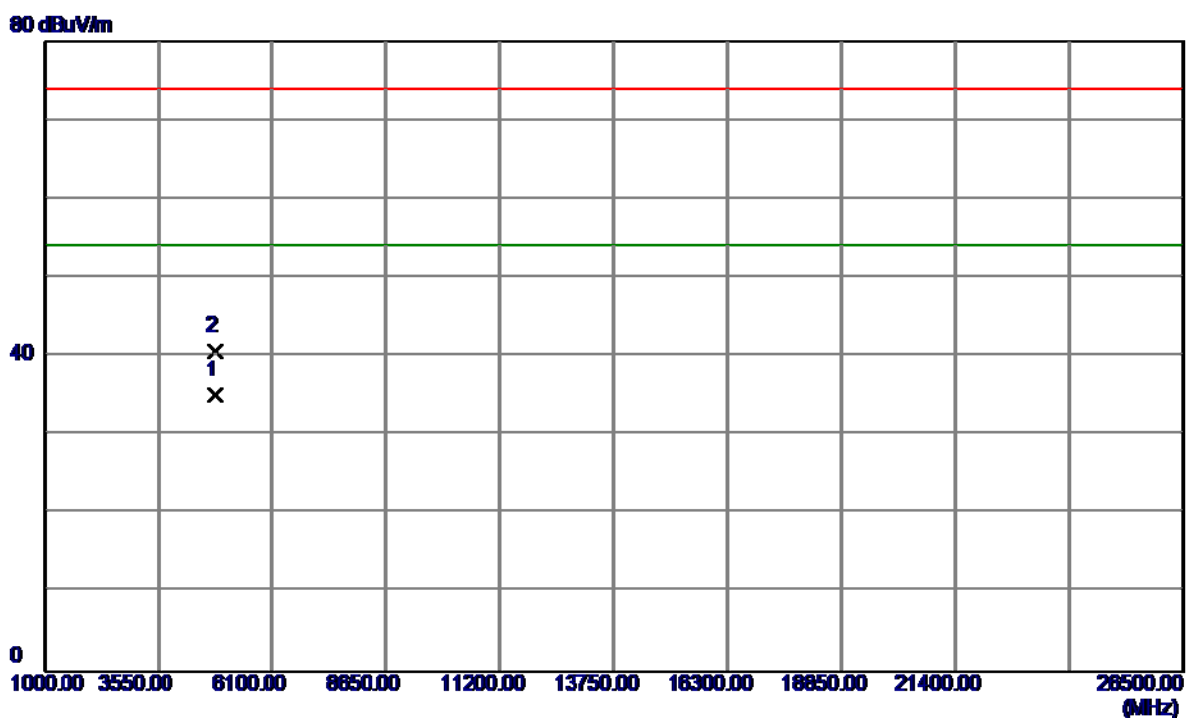
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	26.55	34.23	60.78	74.00	-13.22	Peak	
2	2390.0000	14.53	34.23	48.76	54.00	-5.24	AVG	
3	2413.5000	73.74	34.37	108.11	74.00	34.11	Peak	NO LIMIT
4	2414.2000	65.35	34.37	99.72	54.00	45.72	AVG	NO LIMIT

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

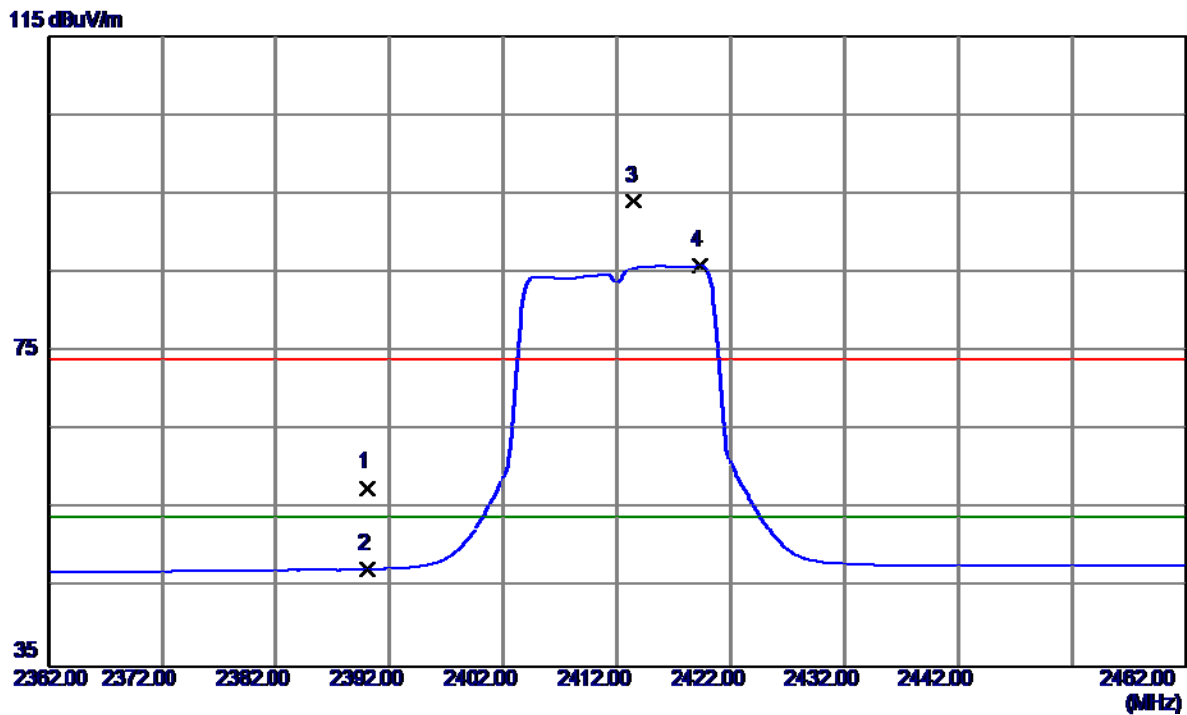
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4824.0299	32.09	3.00	35.09	54.00	-18.91	AVG	
2	4824.0600	37.67	3.00	40.67	74.00	-33.33	Peak	

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

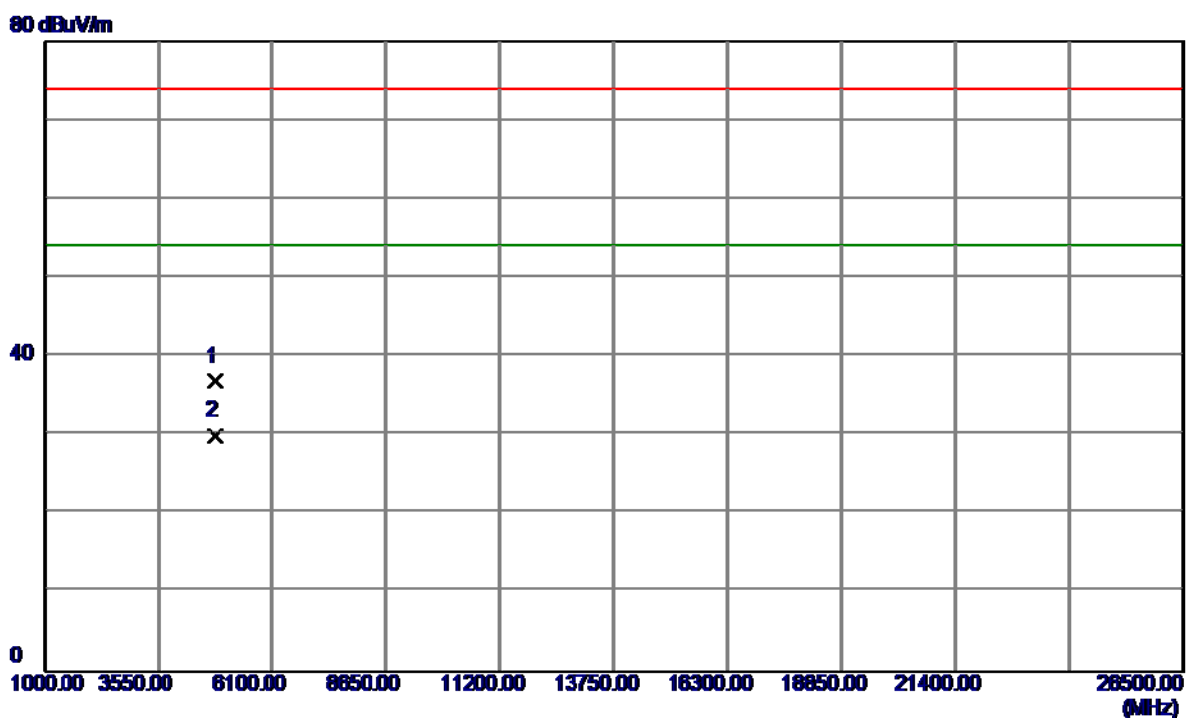
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	23.41	34.23	57.64	74.00	-16.36	Peak	
2	2390.0000	13.10	34.23	47.33	54.00	-6.67	AVG	
3	2413.5000	59.70	34.37	94.07	74.00	20.07	Peak	NO LIMIT
4	2419.3000	51.43	34.40	85.83	54.00	31.83	AVG	NO LIMIT

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

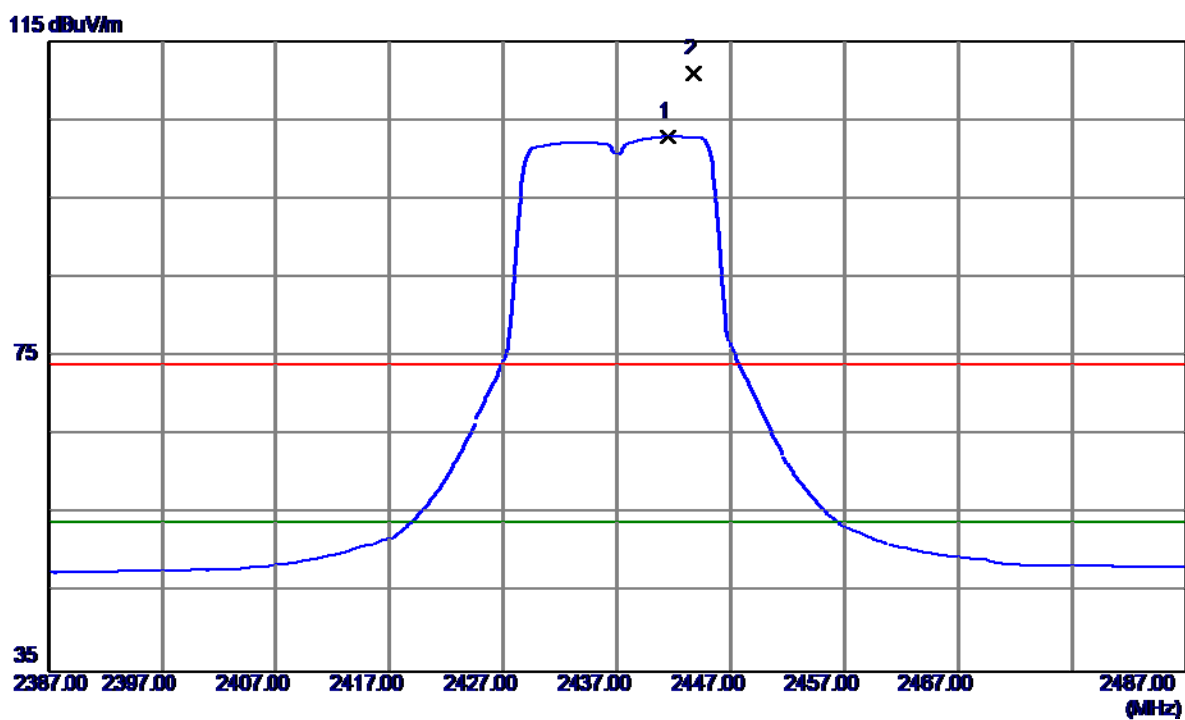
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4823.8300	33.85	3.00	36.85	74.00	-37.15	Peak	
2	4824.0299	26.95	3.00	29.95	54.00	-24.05	AVG	

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

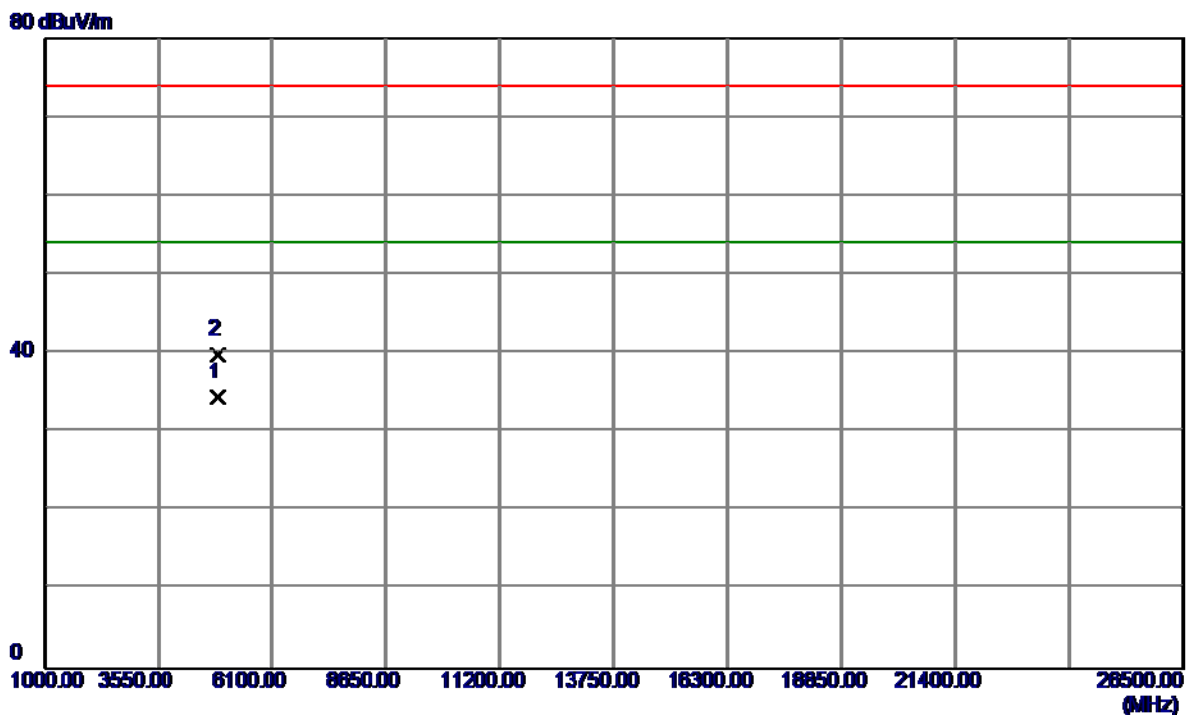
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2441.4000	68.30	34.53	102.83	54.00	48.83	AVG	NO LIMIT
2	2443.8000	76.37	34.54	110.91	74.00	36.91	Peak	NO LIMIT

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

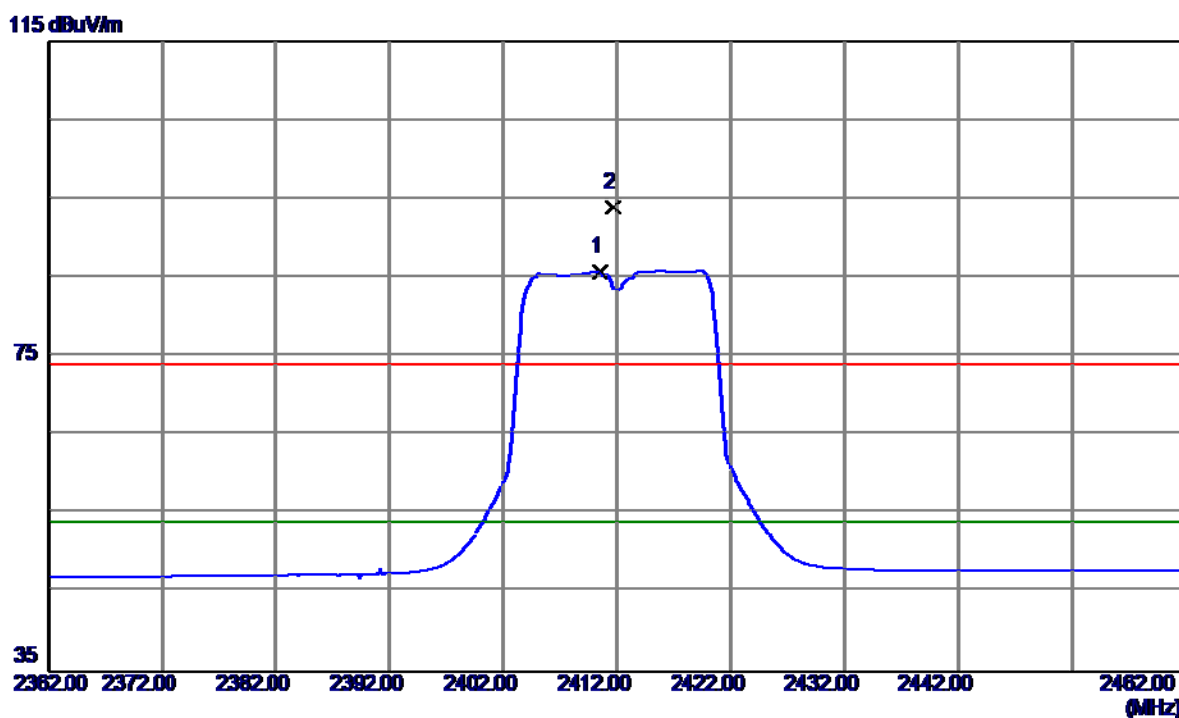
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0299	31.36	3.03	34.39	54.00	-19.61	AVG	
2	4874.2400	36.88	3.03	39.91	74.00	-34.09	Peak	

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

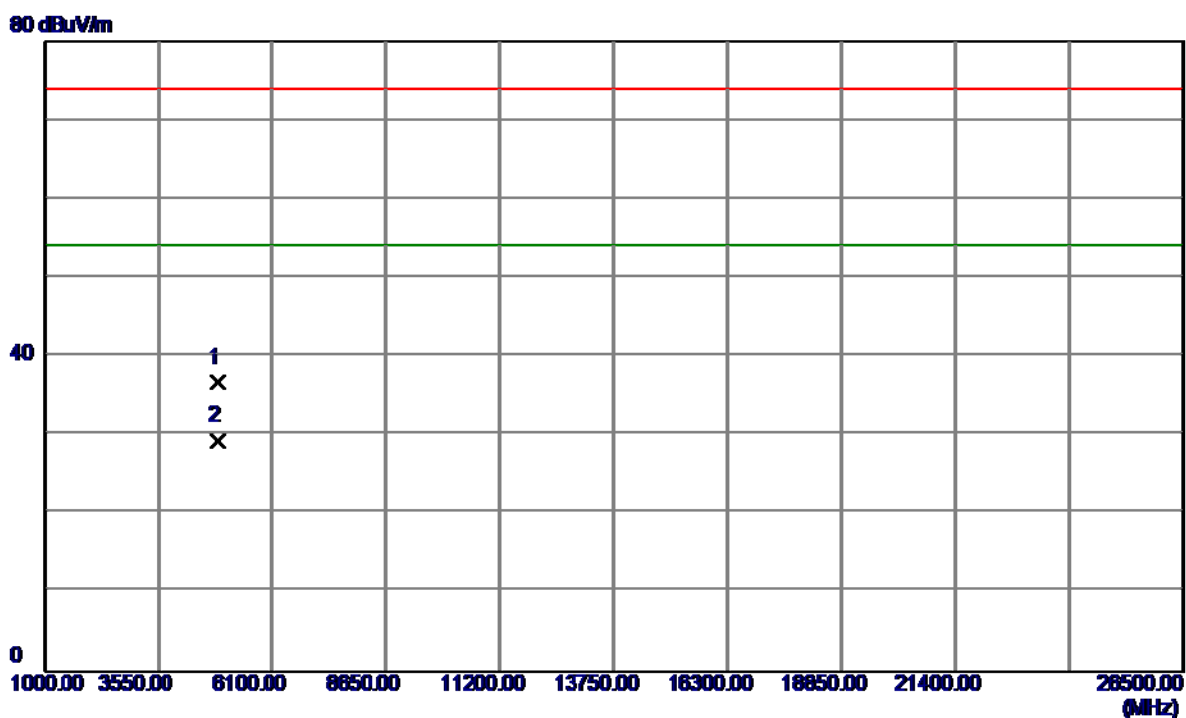
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2410.6000	51.39	34.35	85.74	54.00	31.74	AVG	NO LIMIT
2	2411.7000	59.46	34.36	93.82	74.00	19.82	Peak	NO LIMIT

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

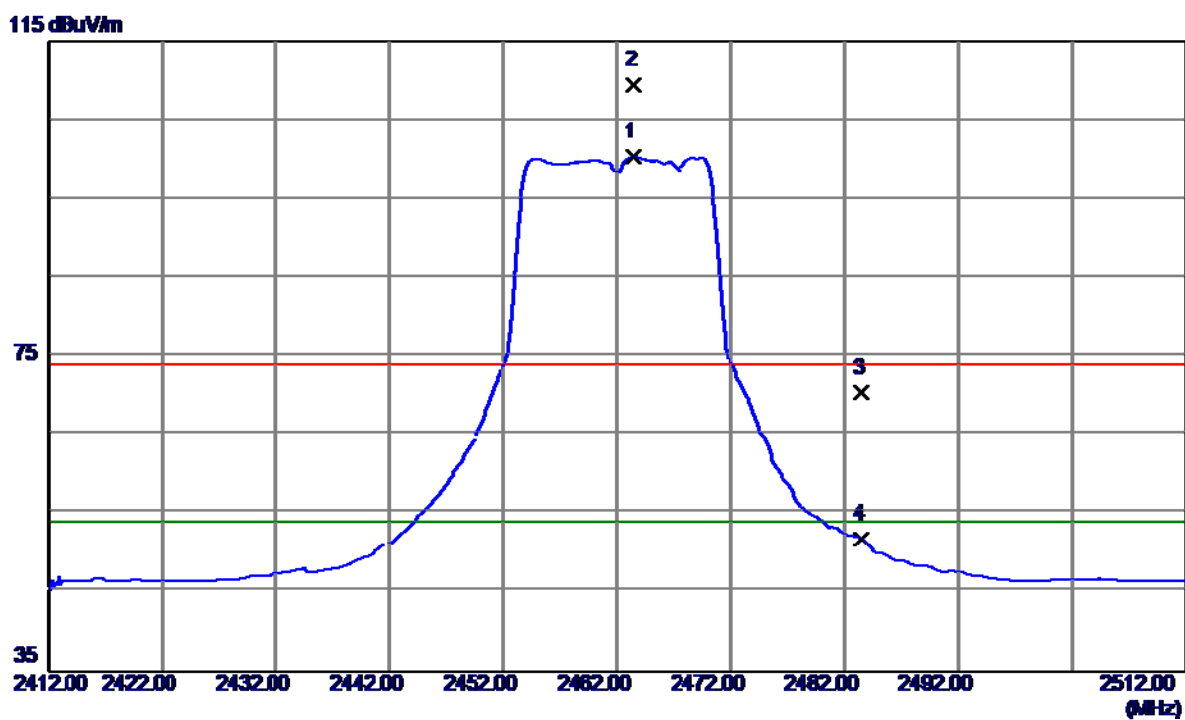
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4873.8000	33.65	3.03	36.68	74.00	-37.32	Peak	
2	4874.0299	26.20	3.03	29.23	54.00	-24.77	AVG	

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

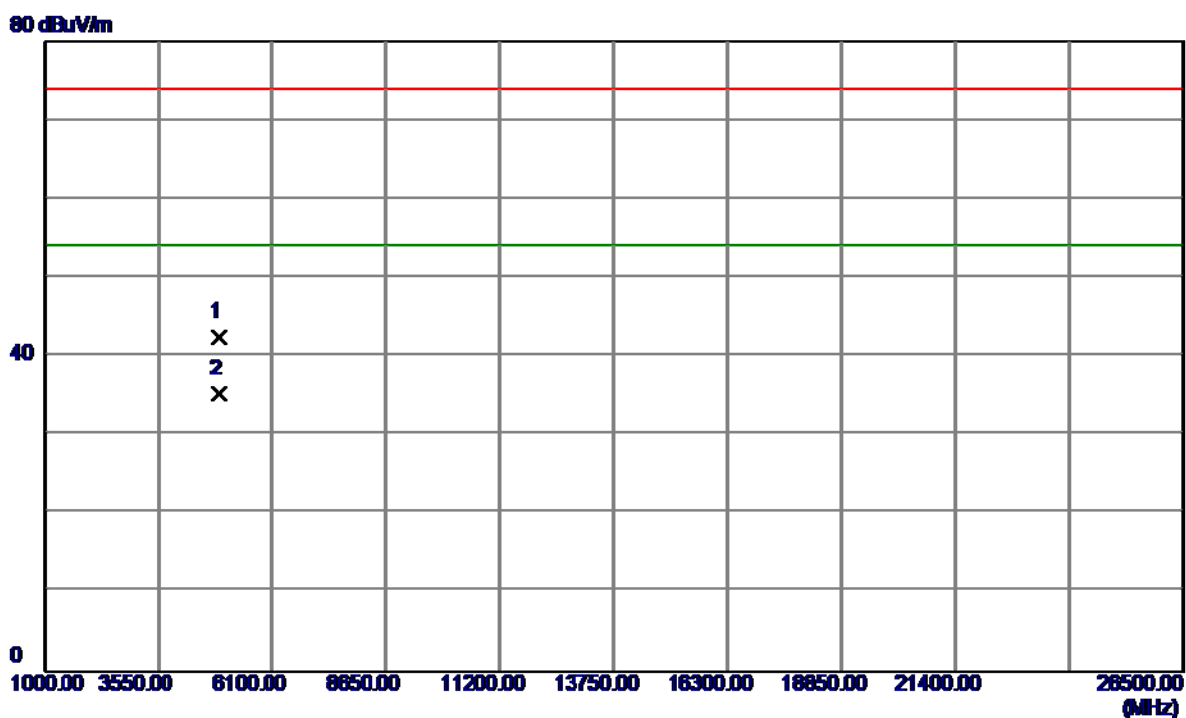
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2463.4000	65.63	34.66	100.29	54.00	46.29	AVG	NO LIMIT
2	2463.5000	74.78	34.66	109.44	74.00	35.44	Peak	NO LIMIT
3	2483.5000	35.59	34.77	70.36	74.00	-3.64	Peak	
4	2483.5000	17.01	34.77	51.78	54.00	-2.22	AVG	

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

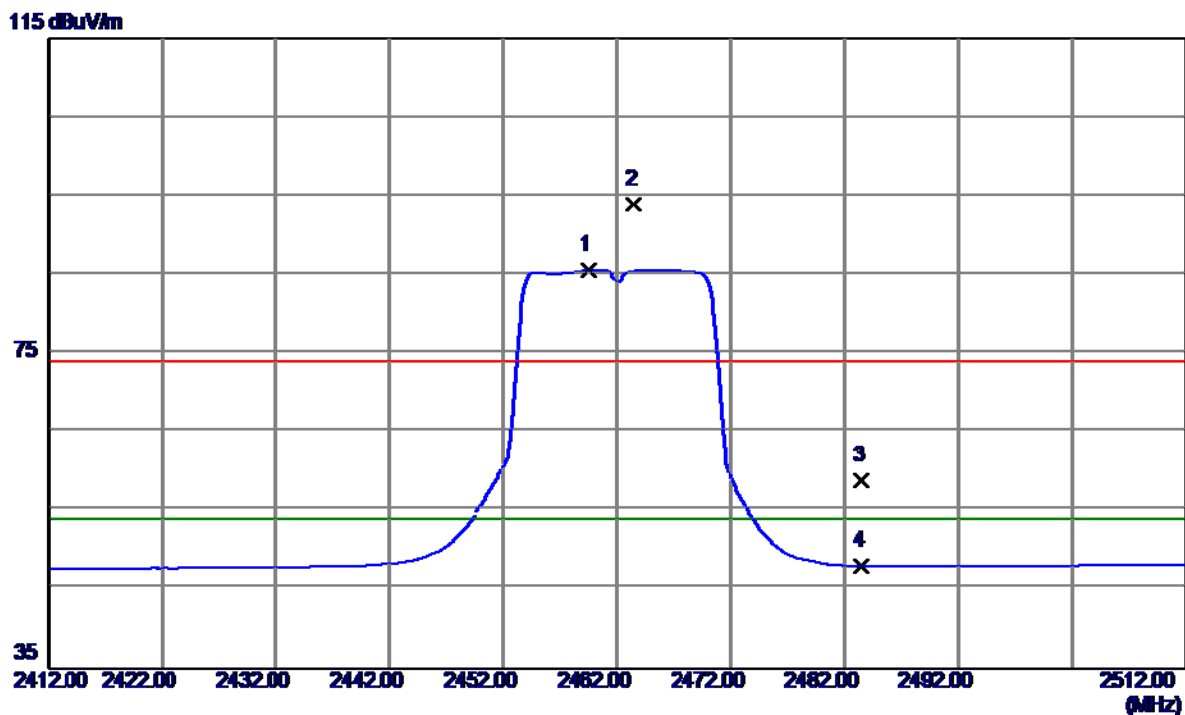
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4923.8800	39.37	3.05	42.42	74.00	-31.58	Peak	
2	4924.0299	32.12	3.05	35.17	54.00	-18.83	AVG	

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

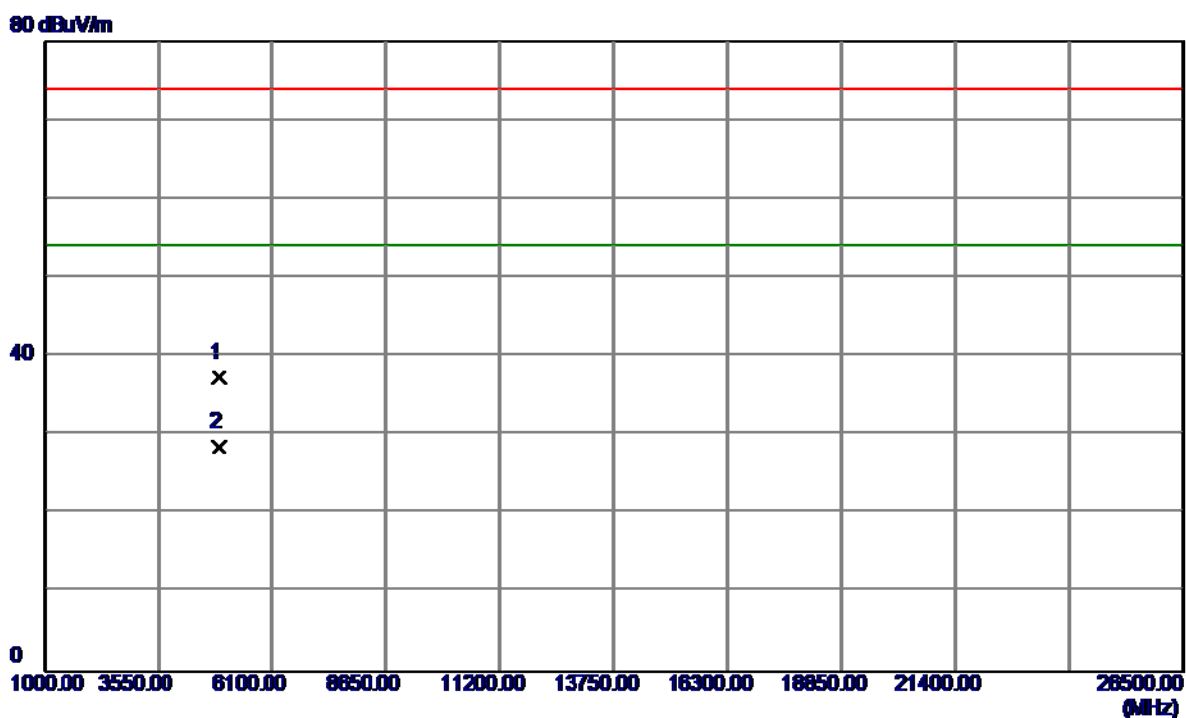
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2459.6000	50.96	34.64	85.60	54.00	31.60	AVG	NO LIMIT
2	2463.5000	59.29	34.66	93.95	74.00	19.95	Peak	NO LIMIT
3	2483.5000	24.01	34.77	58.78	74.00	-15.22	Peak	
4	2483.5000	13.19	34.77	47.96	54.00	-6.04	AVG	

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

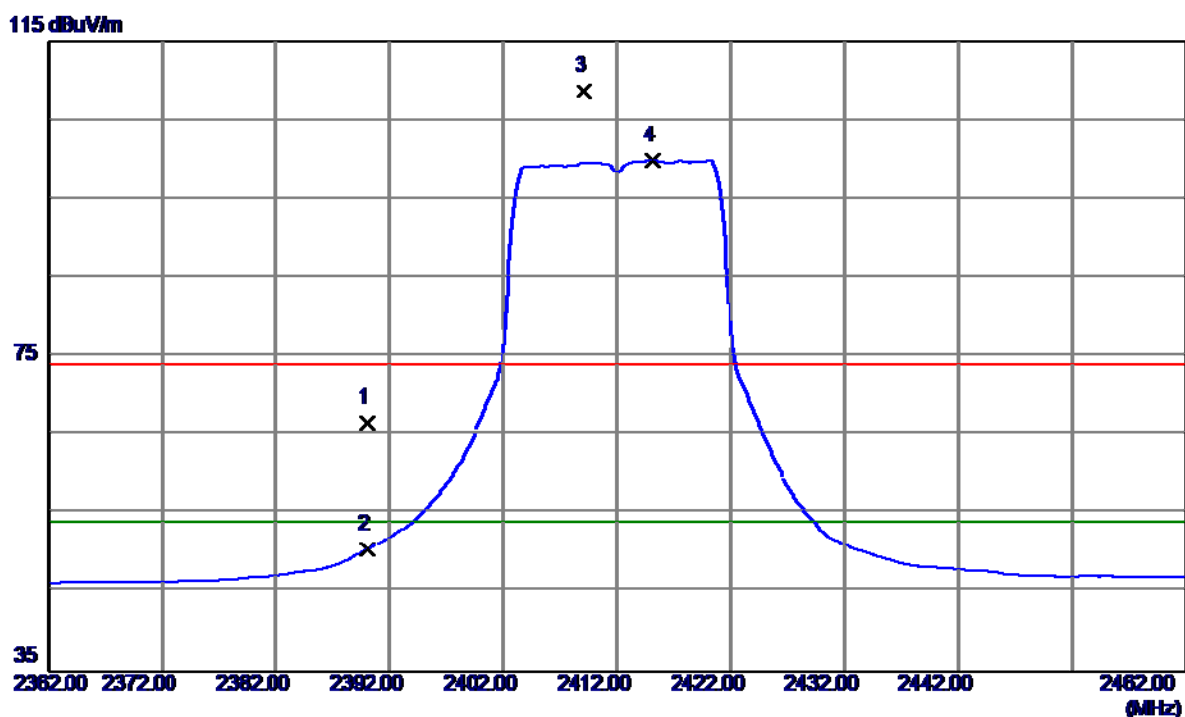
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4923.8800	34.30	3.05	37.35	74.00	-36.65	Peak	
2	4924.0299	25.49	3.05	28.54	54.00	-25.46	AVG	

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

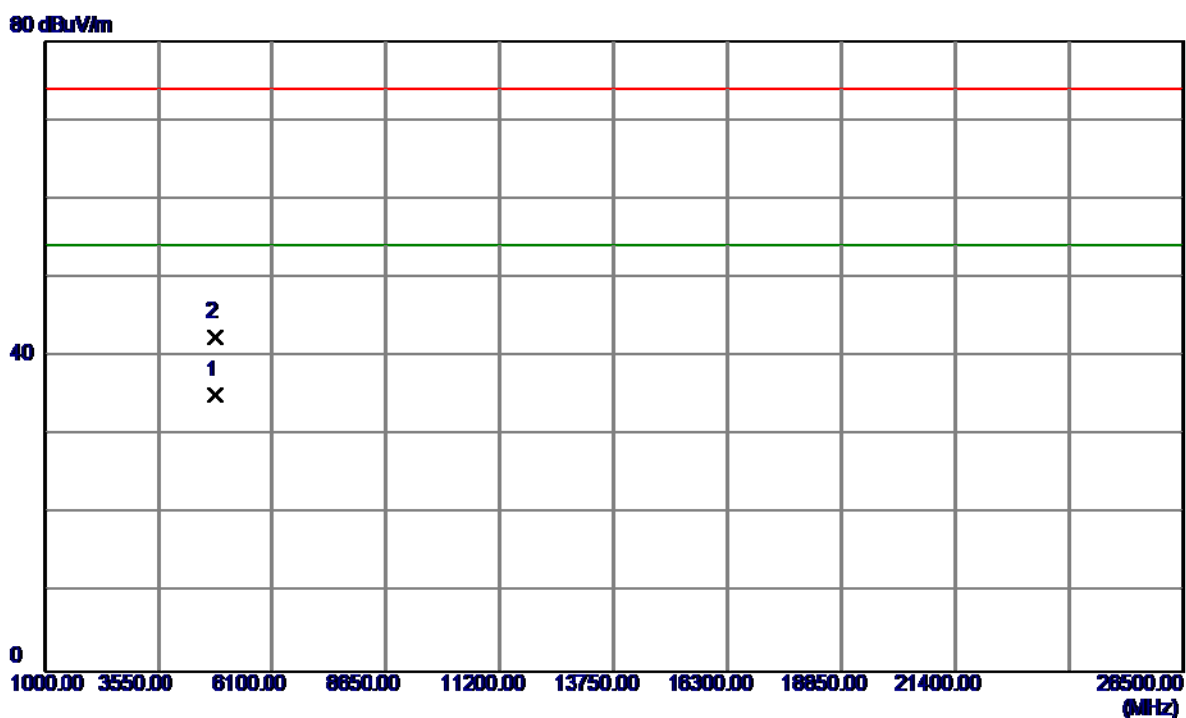
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	32.32	34.23	66.55	74.00	-7.45	Peak	
2	2390.0000	16.33	34.23	50.56	54.00	-3.44	AVG	
3	2409.1000	74.28	34.34	108.62	74.00	34.62	Peak	NO LIMIT
4	2415.1000	65.49	34.38	99.87	54.00	45.87	AVG	NO LIMIT

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

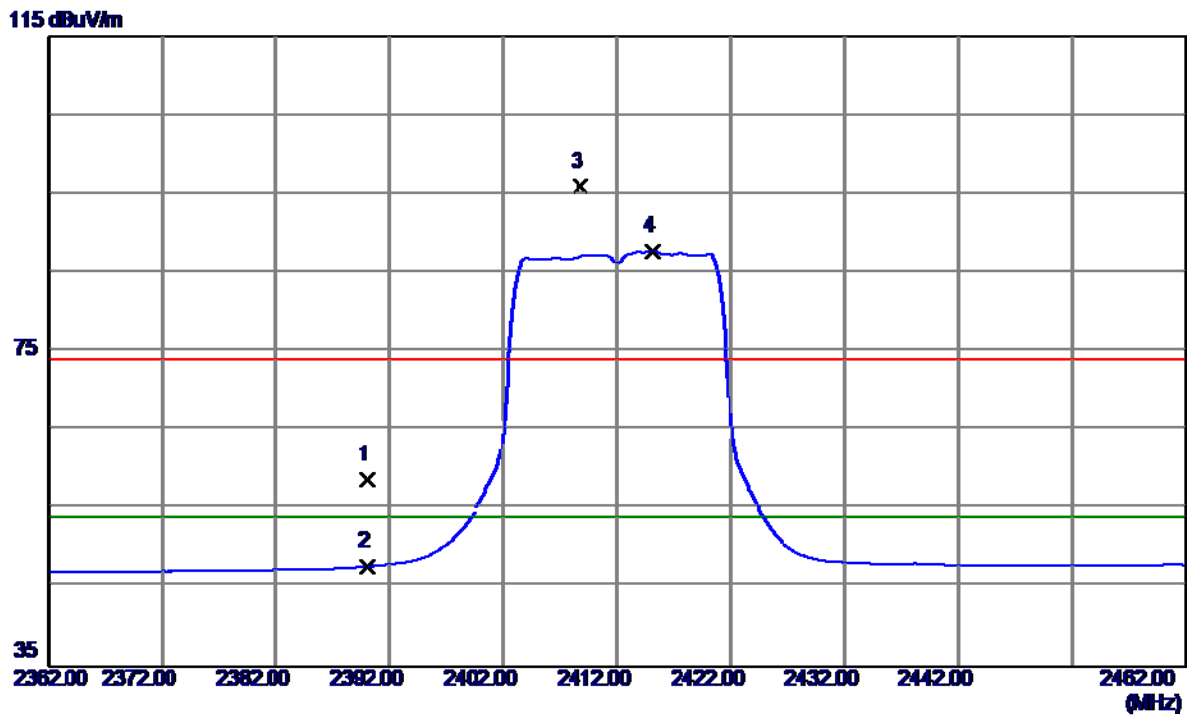
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4824.0299	31.97	3.00	34.97	54.00	-19.03	AVG	
2	4824.1100	39.44	3.00	42.44	74.00	-31.56	Peak	

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

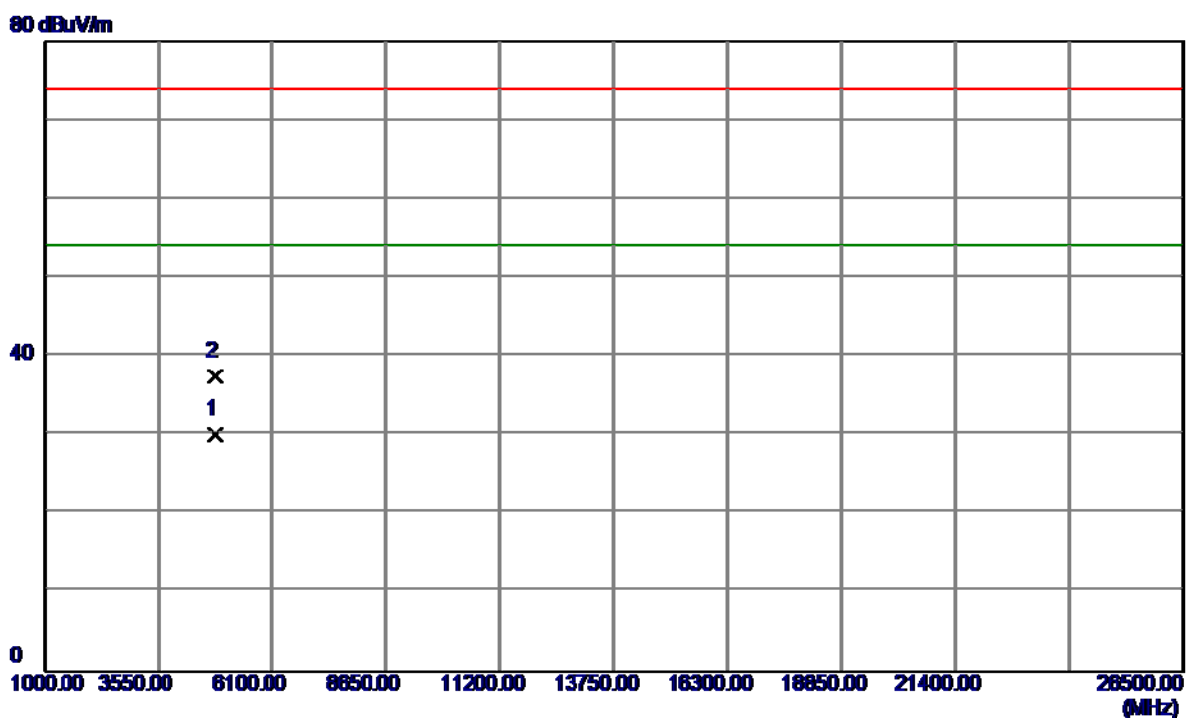
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	24.43	34.23	58.66	74.00	-15.34	Peak	
2	2390.0000	13.43	34.23	47.66	54.00	-6.34	AVG	
3	2408.8000	61.54	34.34	95.88	74.00	21.88	Peak	NO LIMIT
4	2415.1000	53.32	34.38	87.70	54.00	33.70	AVG	NO LIMIT

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

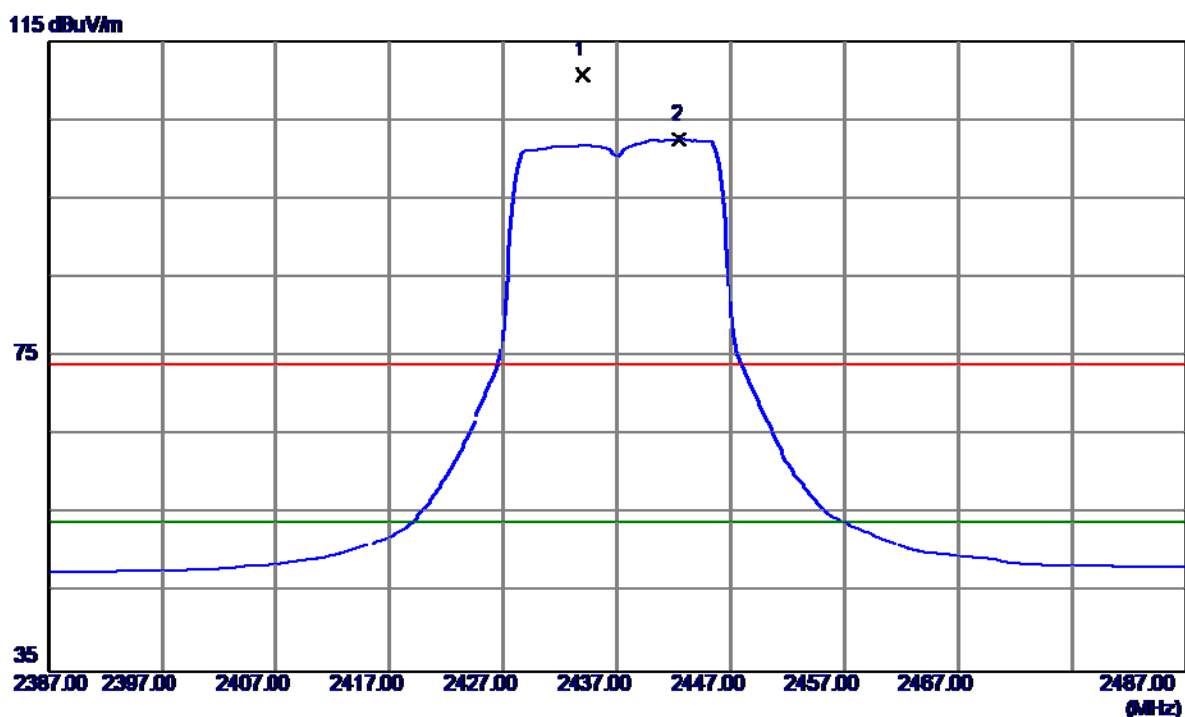
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4824.0299	27.12	3.00	30.12	54.00	-23.88	AVG	
2	4824.0500	34.40	3.00	37.40	74.00	-36.60	Peak	

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

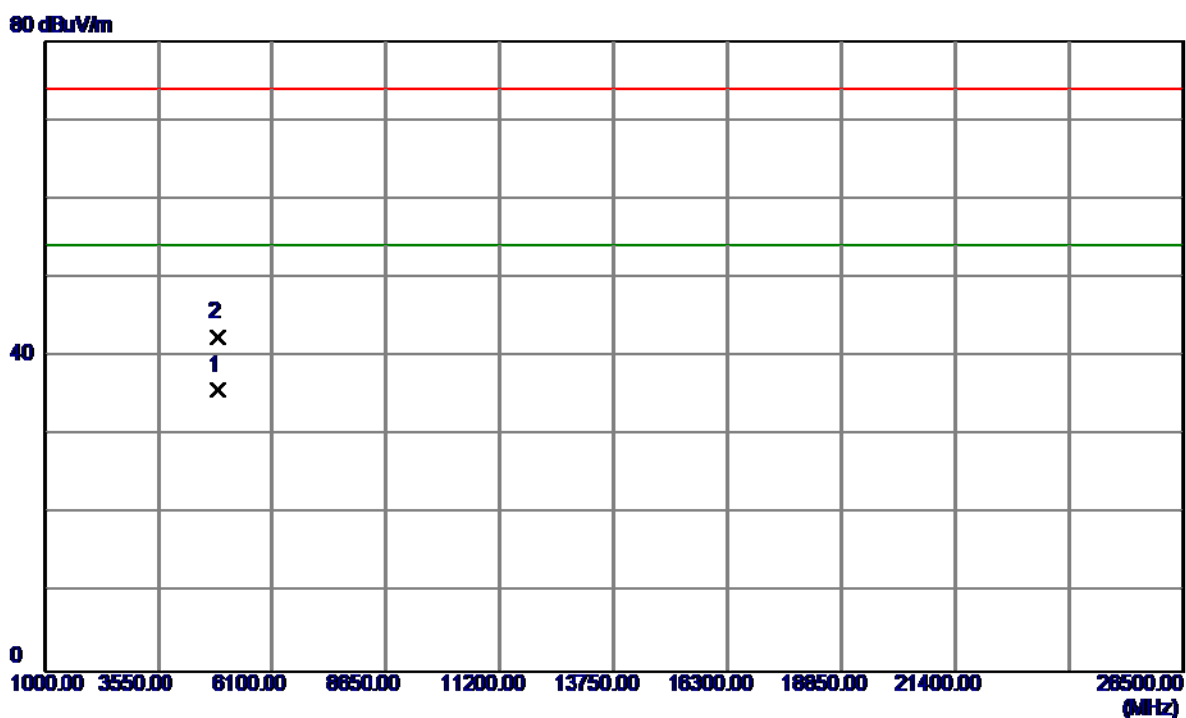
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2434.0000	76.18	34.49	110.67	74.00	36.67	Peak	NO LIMIT
2	2442.5000	68.02	34.54	102.56	54.00	48.56	AVG	NO LIMIT

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

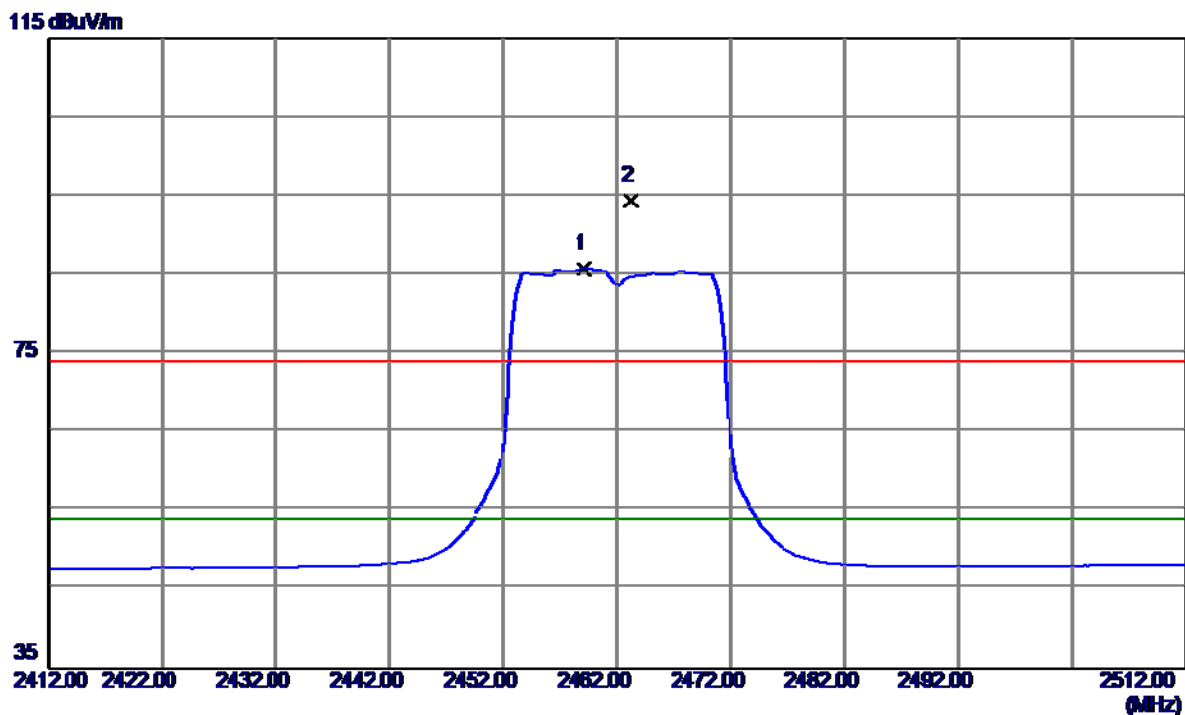
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0299	32.71	3.03	35.74	54.00	-18.26	AVG	
2	4874.0600	39.41	3.03	42.44	74.00	-31.56	Peak	

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

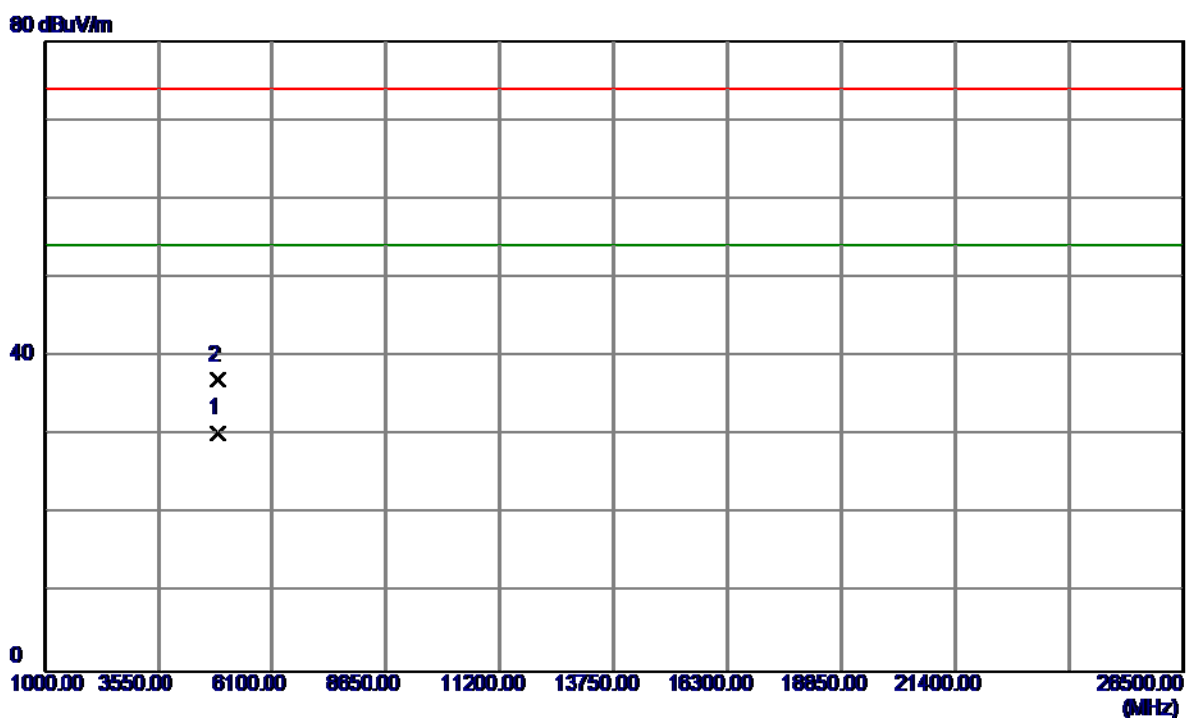
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2459.1000	51.11	34.63	85.74	54.00	31.74	AVG	NO LIMIT
2	2463.2000	59.70	34.66	94.36	74.00	20.36	Peak	NO LIMIT

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

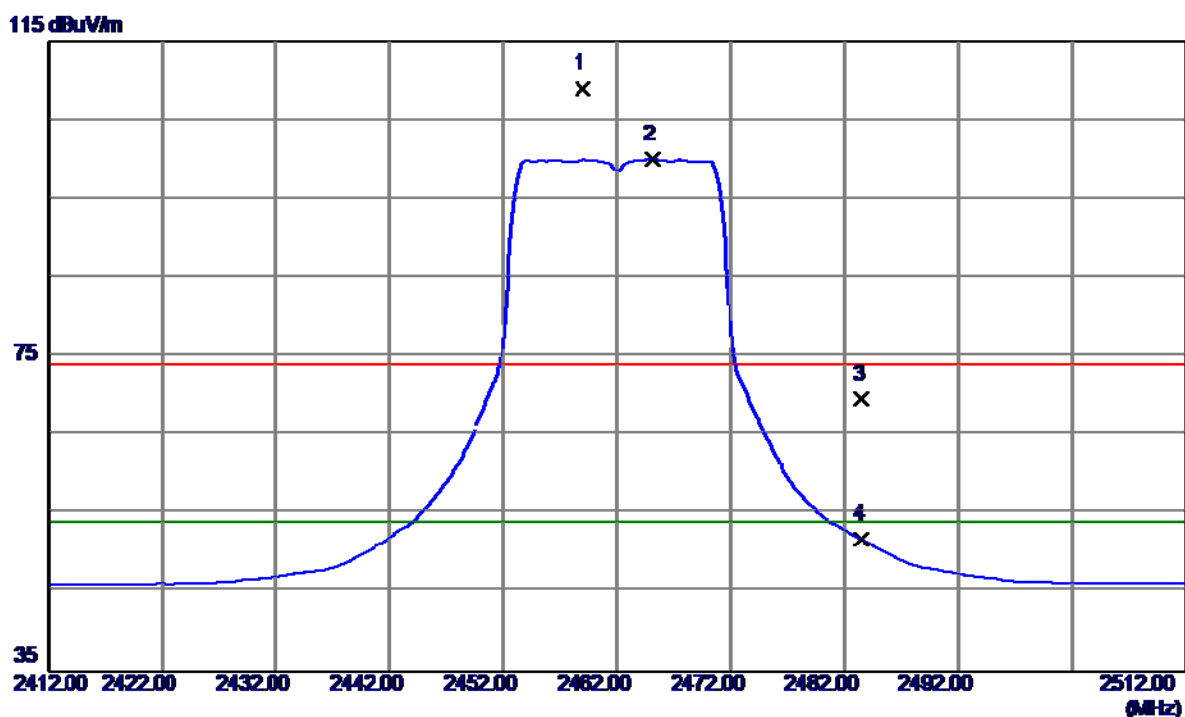
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0299	27.17	3.03	30.20	54.00	-23.80	AVG	
2	4874.1800	33.86	3.03	36.89	74.00	-37.11	Peak	

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

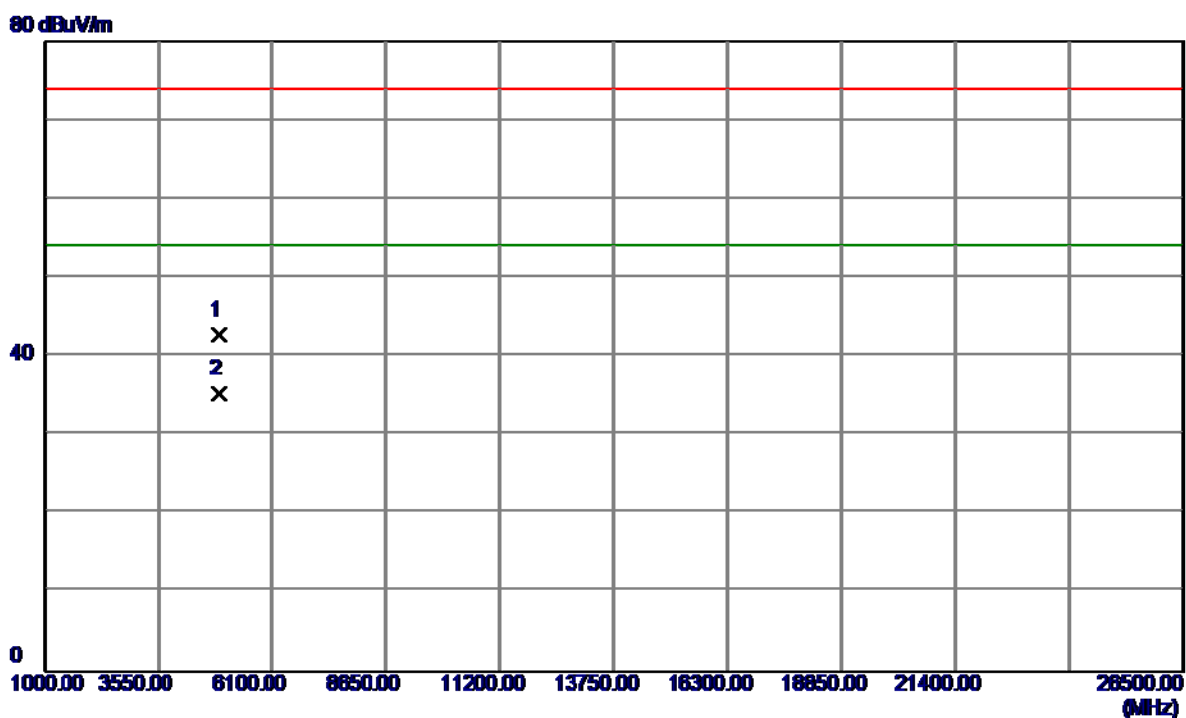
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2459.0000	74.35	34.63	108.98	74.00	34.98	Peak	NO LIMIT
2	2465.1000	65.36	34.67	100.03	54.00	46.03	AVG	NO LIMIT
3	2483.5000	34.82	34.77	69.59	74.00	-4.41	Peak	
4	2483.5000	16.98	34.77	51.75	54.00	-2.25	AVG	

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

Vertical

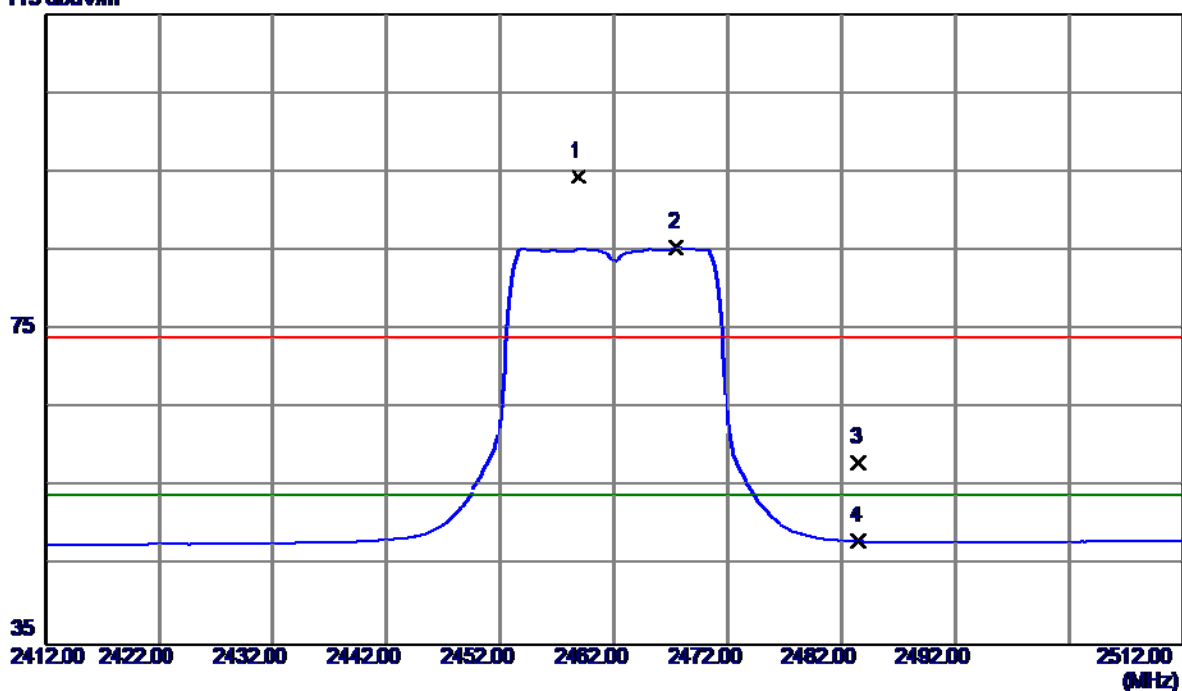


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4923.9800	39.59	3.05	42.64	74.00	-31.36	Peak	
2	4924.0299	32.12	3.05	35.17	54.00	-18.83	AVG	

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

Horizontal

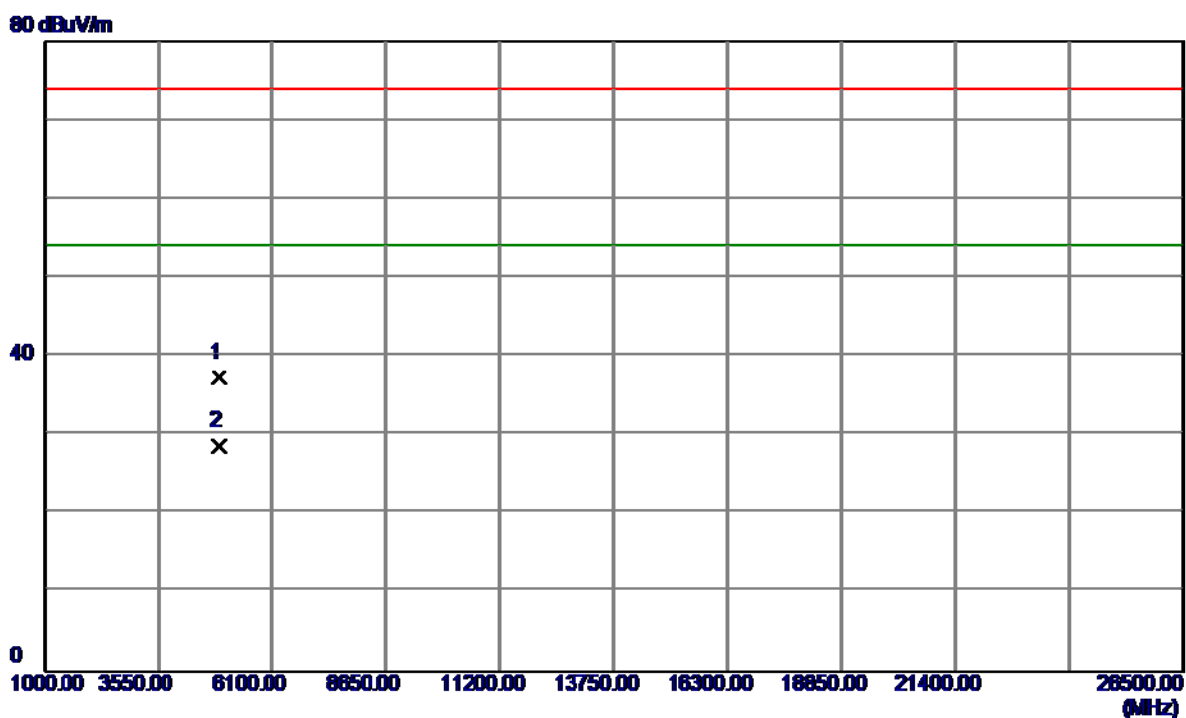
115 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2458.9000	59.73	34.63	94.36	74.00	20.36	Peak	NO LIMIT
2	2467.5000	50.71	34.68	85.39	54.00	31.39	AVG	NO LIMIT
3	2483.5000	23.33	34.77	58.10	74.00	-15.90	Peak	
4	2483.5000	13.28	34.77	48.05	54.00	-5.95	AVG	

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

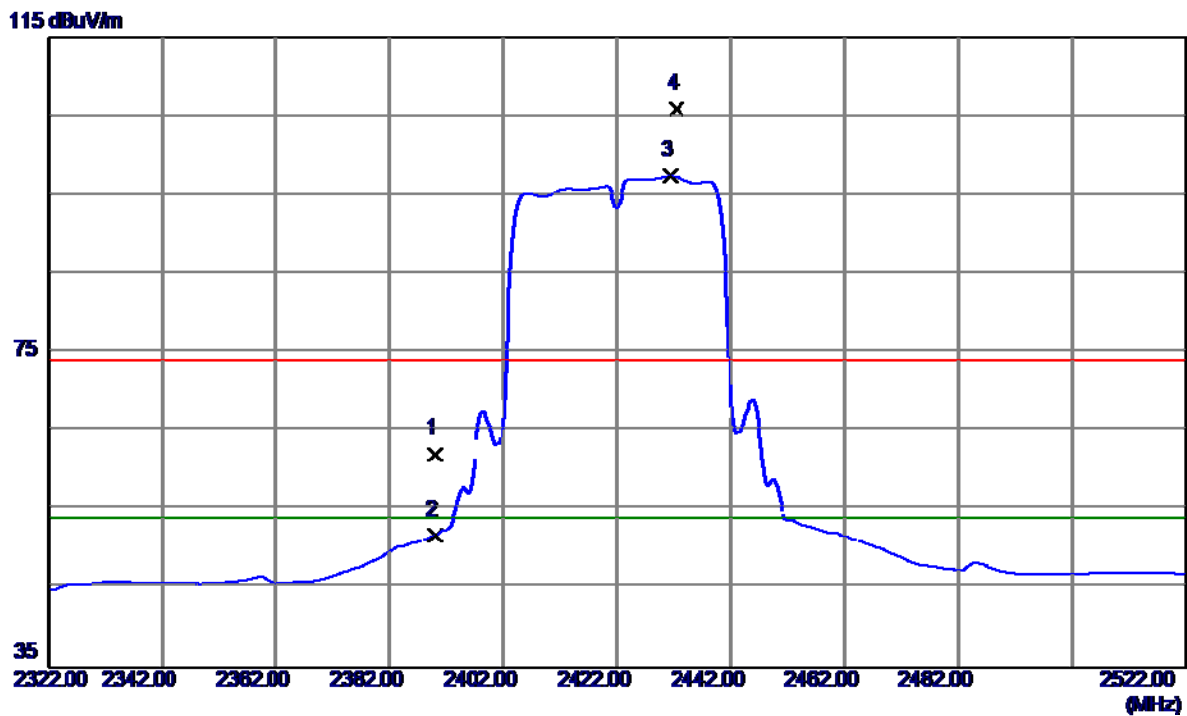
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4923.9600	34.16	3.05	37.21	74.00	-36.79	Peak	
2	4924.0299	25.64	3.05	28.69	54.00	-25.31	AVG	

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

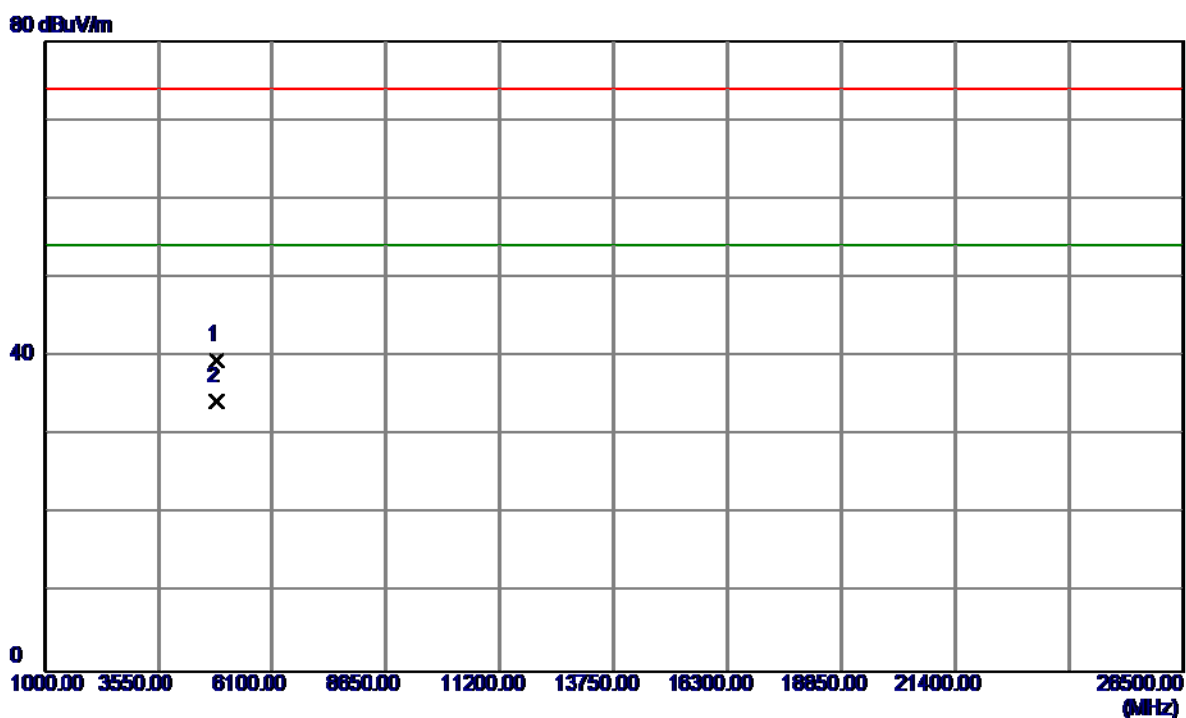
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	27.89	34.23	62.12	74.00	-11.88	Peak	
2	2390.0000	17.59	34.23	51.82	54.00	-2.18	AVG	
3	2431.4000	62.87	34.47	97.34	54.00	43.34	AVG	NO LIMIT
4	2432.4000	71.44	34.48	105.92	74.00	31.92	Peak	NO LIMIT

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

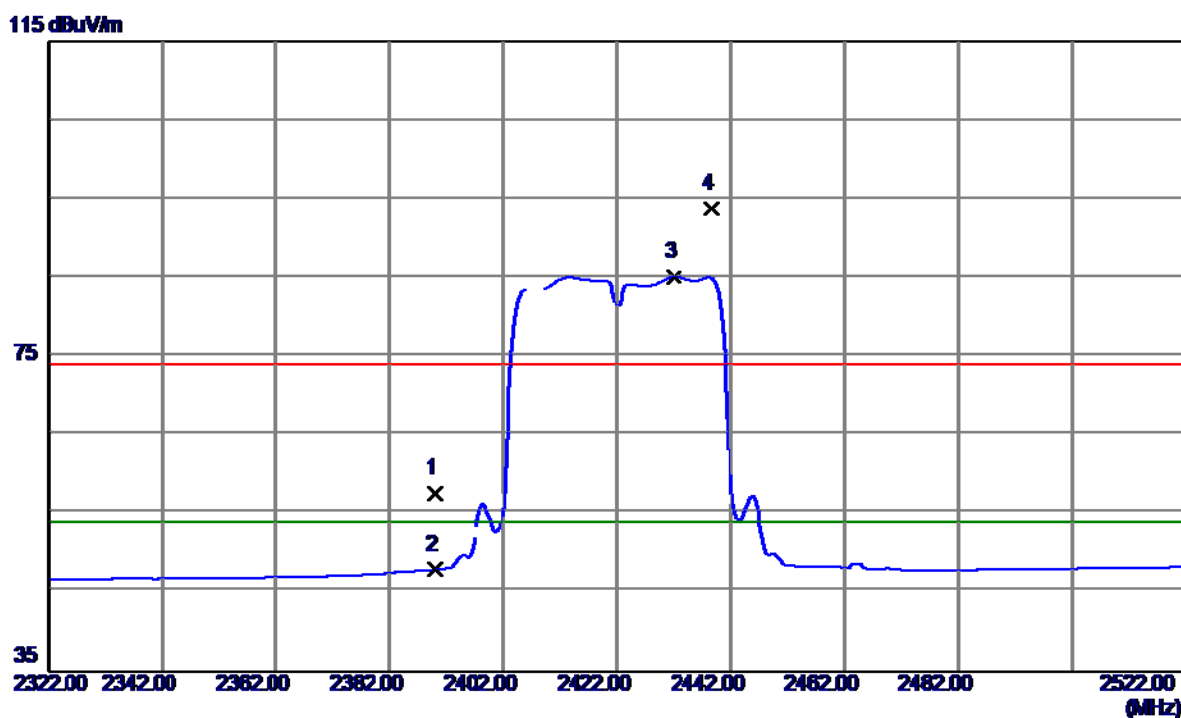
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4844.0200	36.56	3.01	39.57	74.00	-34.43	Peak	
2	4844.0299	31.24	3.01	34.25	54.00	-19.75	AVG	

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

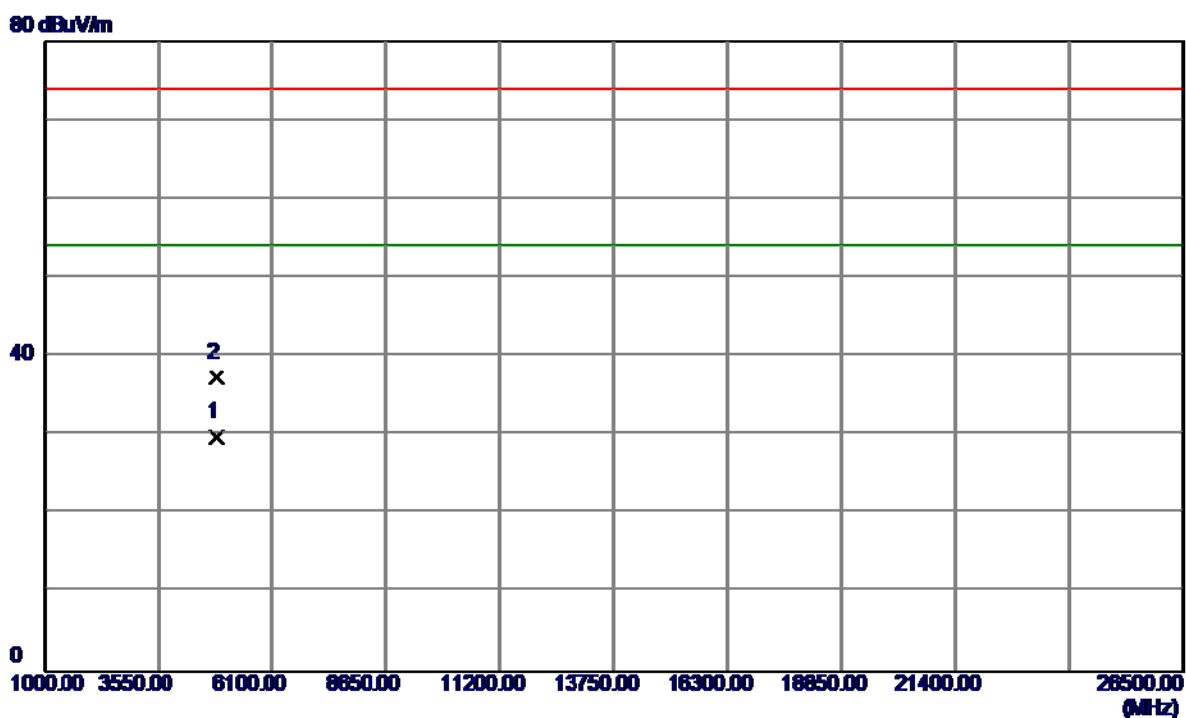
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.0000	23.27	34.23	57.50	74.00	-16.50	Peak	
2	2390.0000	13.65	34.23	47.88	54.00	-6.12	AVG	
3	2432.0000	50.62	34.48	85.10	54.00	31.10	AVG	NO LIMIT
4	2438.6000	59.24	34.51	93.75	74.00	19.75	Peak	NO LIMIT

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

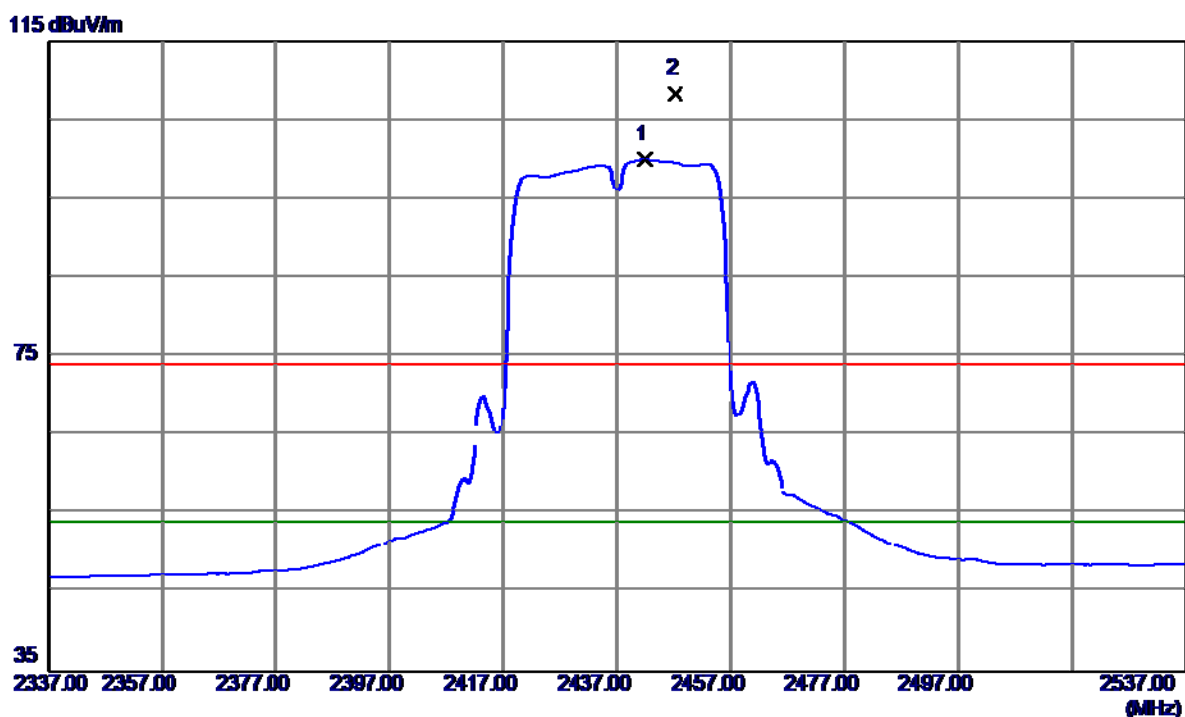
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4844.0299	26.72	3.01	29.73	54.00	-24.27	AVG	
2	4844.1800	34.33	3.01	37.34	74.00	-36.66	Peak	

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

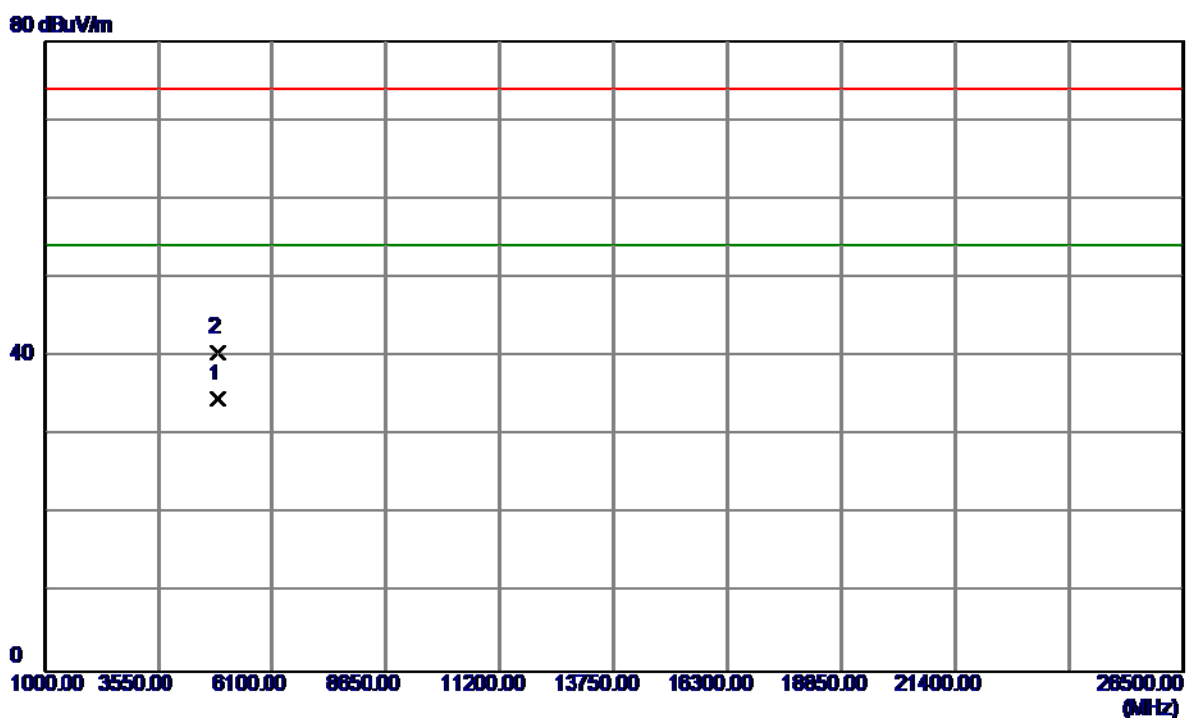
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2441.8000	65.39	34.53	99.92	54.00	45.92	AVG	NO LIMIT
2	2447.2000	73.79	34.56	108.35	74.00	34.35	Peak	NO LIMIT

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

Vertical

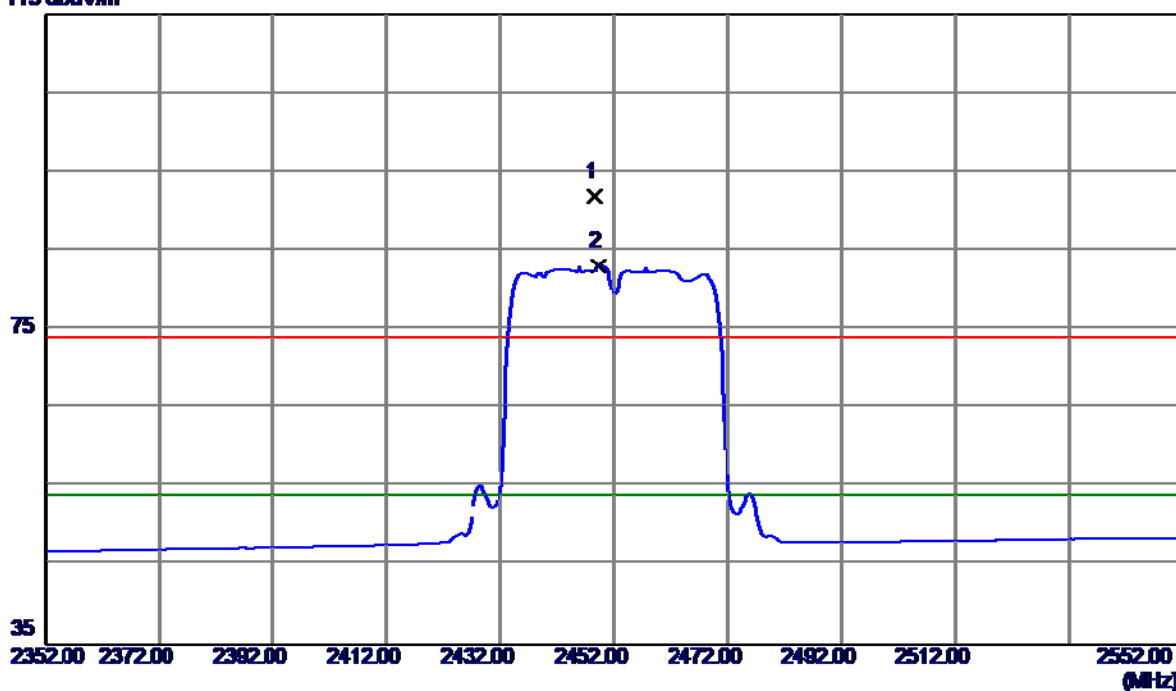


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0299	31.49	3.03	34.52	54.00	-19.48	AVG	
2	4874.0700	37.38	3.03	40.41	74.00	-33.59	Peak	

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

Horizontal

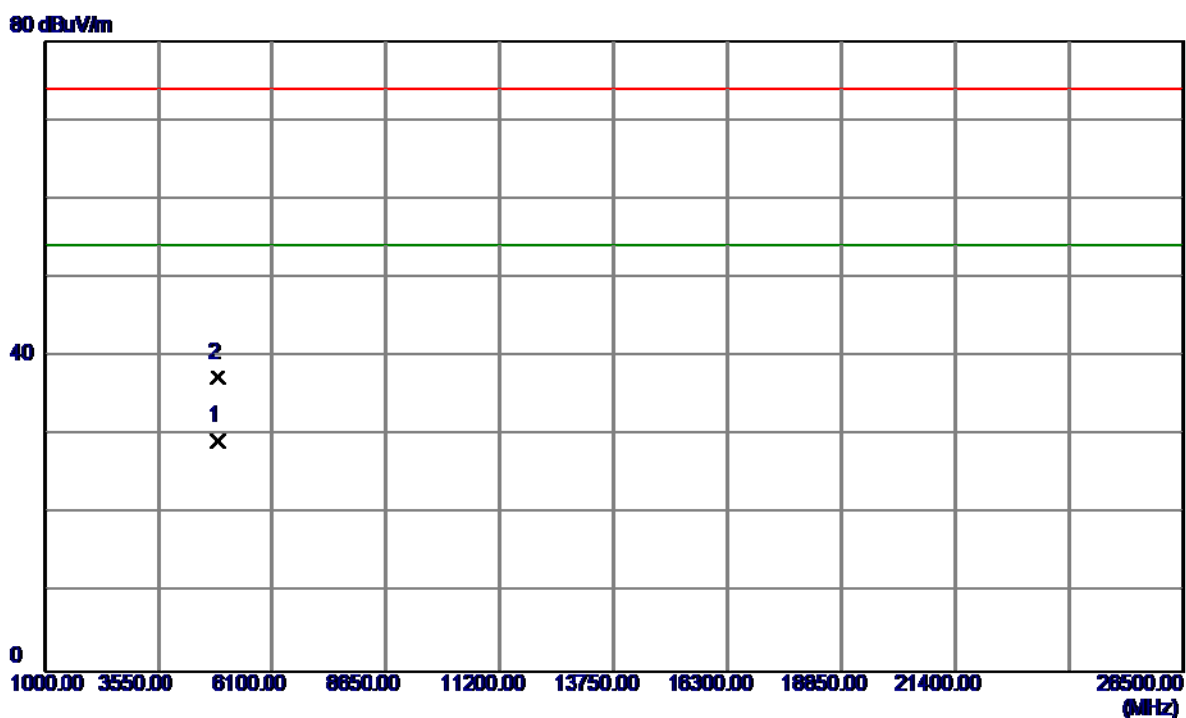
115 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2448.7000	57.22	34.57	91.79	74.00	17.79	Peak	NO LIMIT
2	2449.4000	48.38	34.58	82.96	54.00	28.96	AVG	NO LIMIT

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

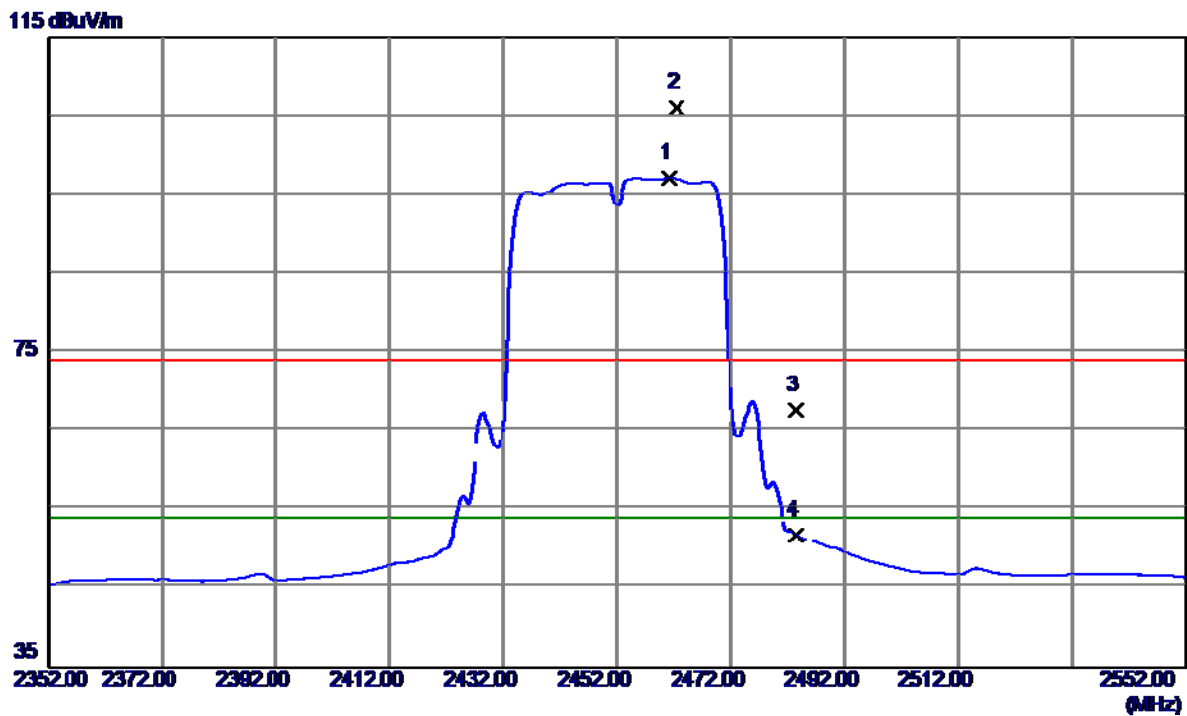
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.0299	26.24	3.03	29.27	54.00	-24.73	AVG	
2	4874.2400	34.25	3.03	37.28	74.00	-36.72	Peak	

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

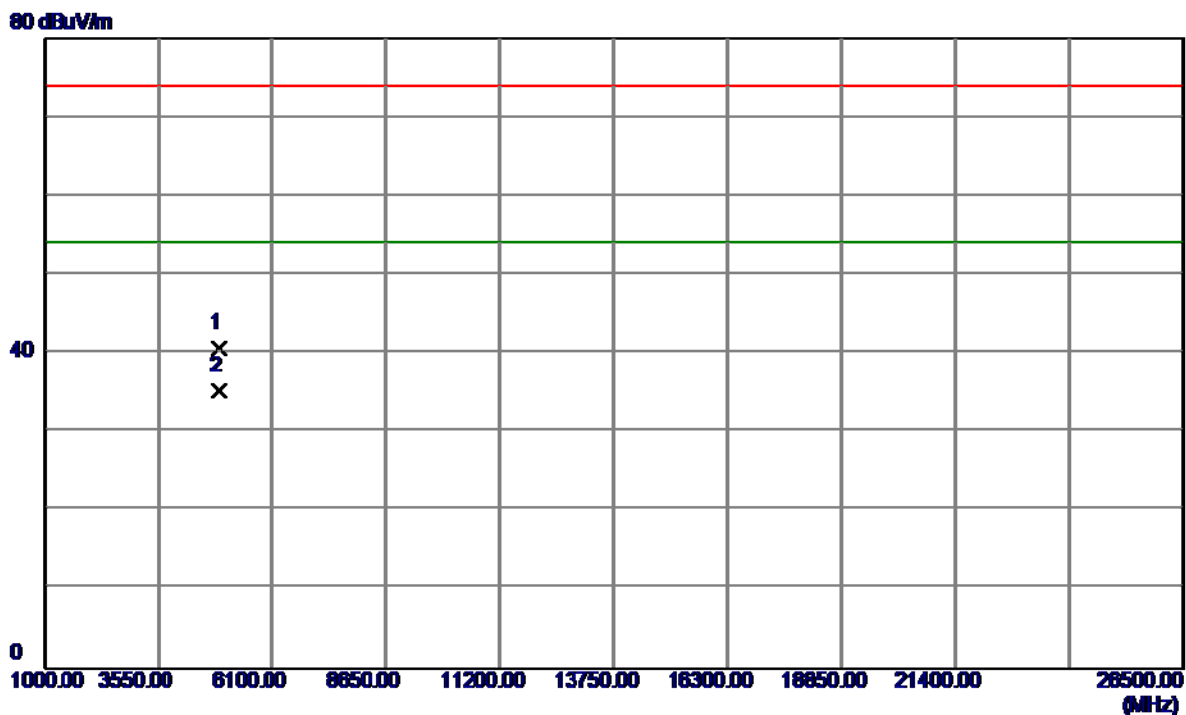
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2461.2000	62.44	34.64	97.08	54.00	43.08	AVG	NO LIMIT
2	2462.4000	71.36	34.65	106.01	74.00	32.01	Peak	NO LIMIT
3	2483.5000	32.90	34.77	67.67	74.00	-6.33	Peak	
4	2483.5000	17.07	34.77	51.84	54.00	-2.16	AVG	

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

Vertical

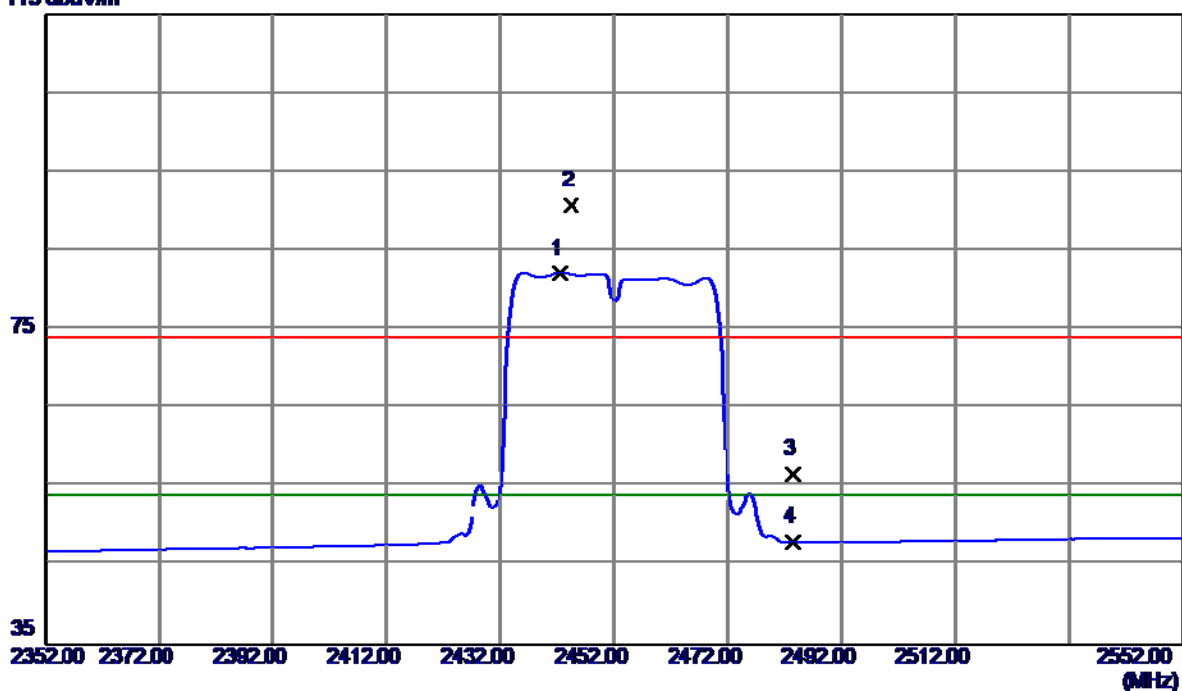


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4904.0099	37.61	3.04	40.65	74.00	-33.35	Peak	
2	4904.0299	32.12	3.04	35.16	54.00	-18.84	AVG	

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

Horizontal

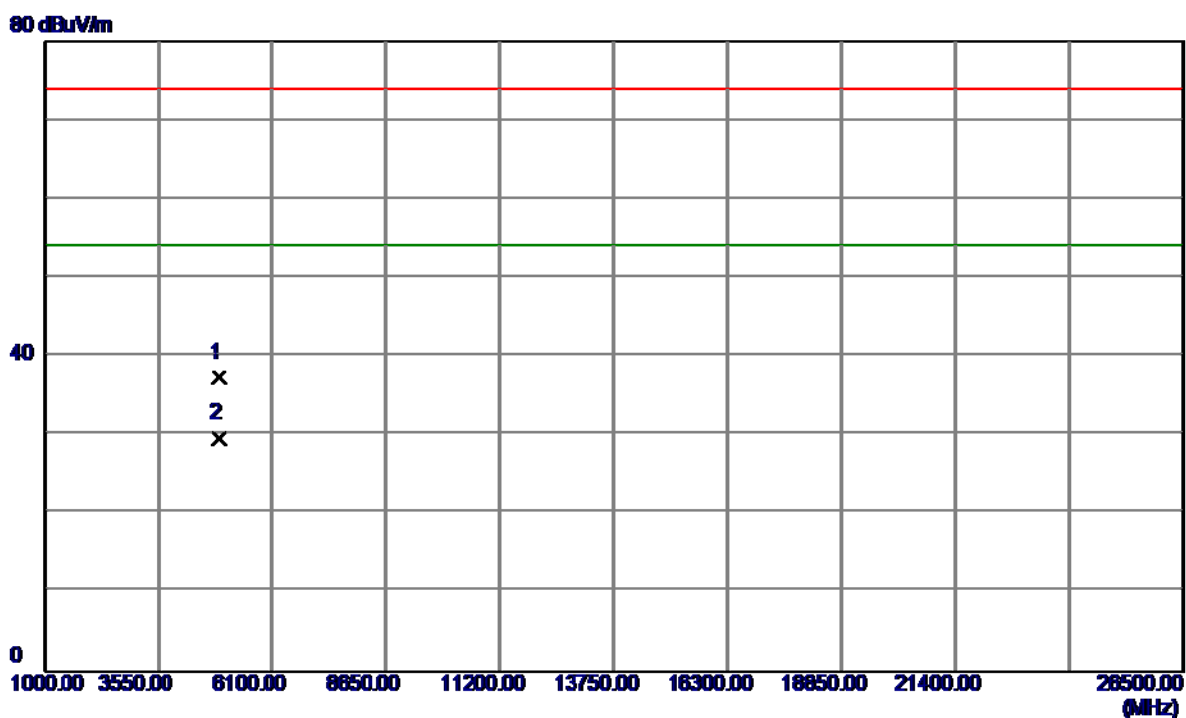
115 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2442.4000	47.55	34.54	82.09	54.00	28.09	AVG	NO LIMIT
2	2444.4000	56.20	34.55	90.75	74.00	16.75	Peak	NO LIMIT
3	2483.5000	21.90	34.77	56.67	74.00	-17.33	Peak	
4	2483.5000	13.17	34.77	47.94	54.00	-6.06	AVG	

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

Horizontal



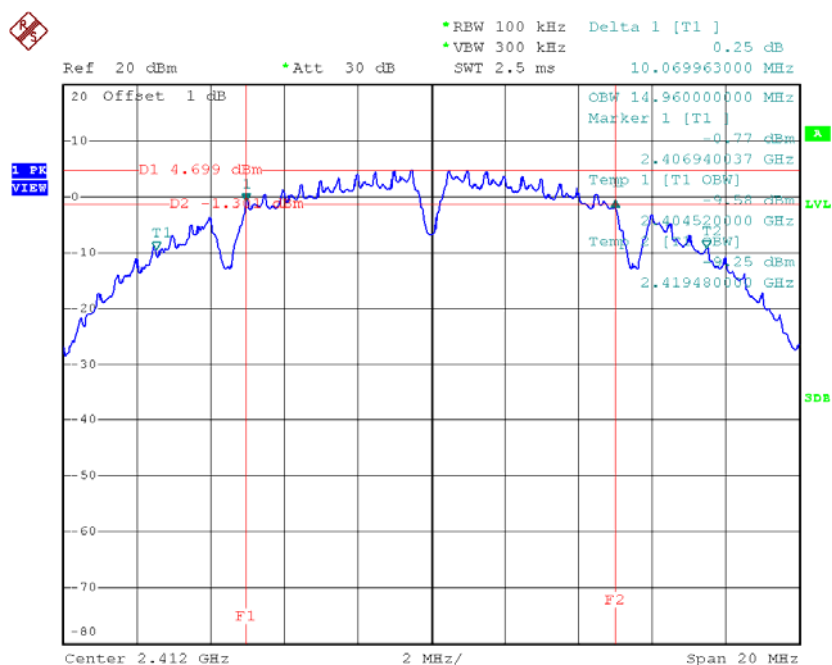
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4903.9700	34.30	3.04	37.34	74.00	-36.66	Peak	
2	4904.0299	26.59	3.04	29.63	54.00	-24.37	AVG	

ATTACHMENTE - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

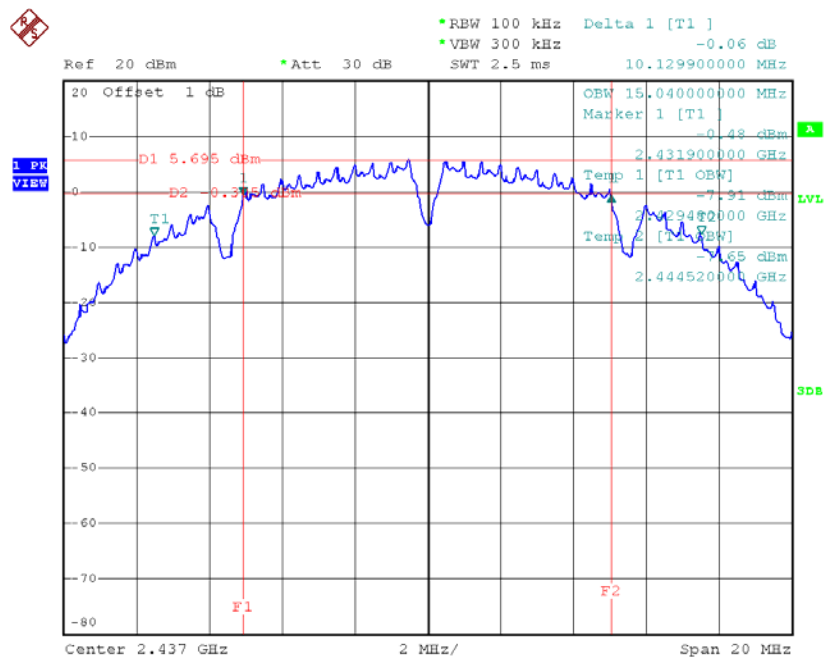
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.07	14.96	500	Complies
2437	10.13	15.04	500	Complies
2462	10.10	14.96	500	Complies

TX CH01



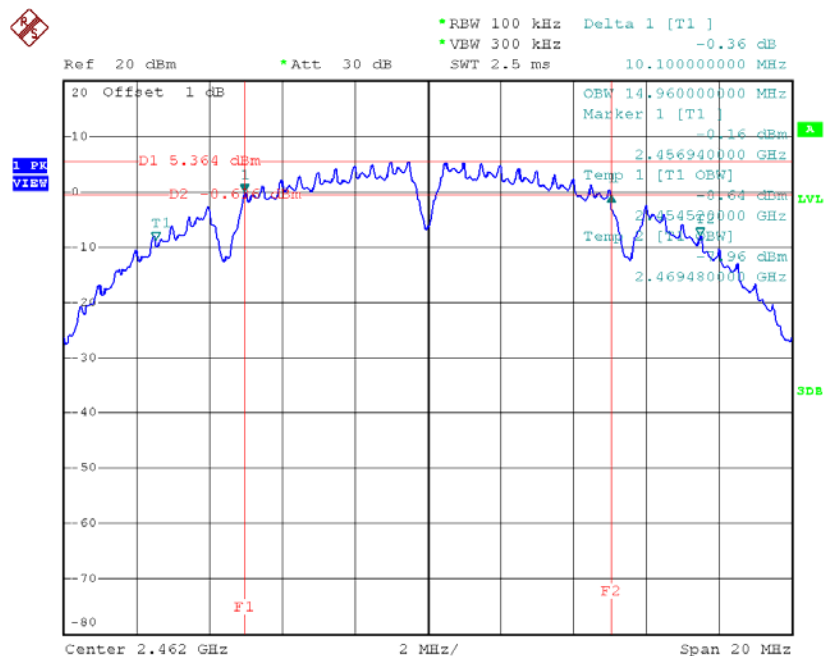
Date: 20.AUG.2015 16:06:22

TX CH06



Date: 20.AUG.2015 16:08:12

TX CH11

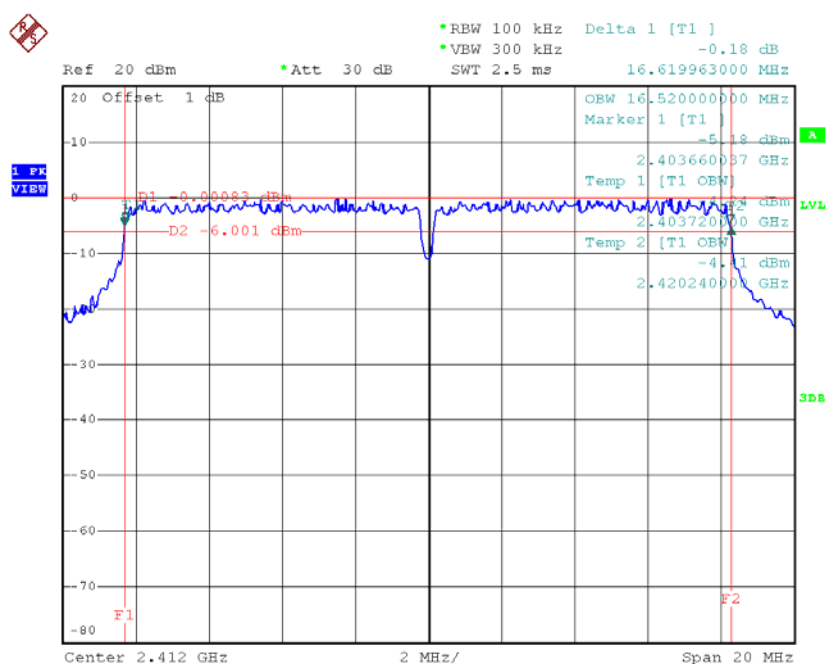


Date: 20.AUG.2015 16:10:49

Test Mode: TX G Mode_CH01/06/11

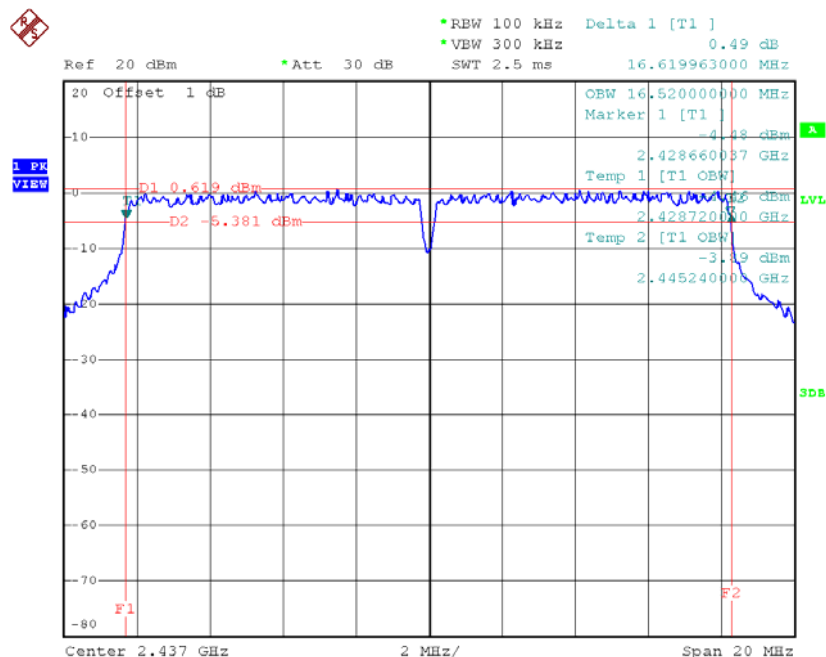
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.62	16.52	500	Complies
2437	16.62	16.52	500	Complies
2462	16.62	16.52	500	Complies

TX CH01



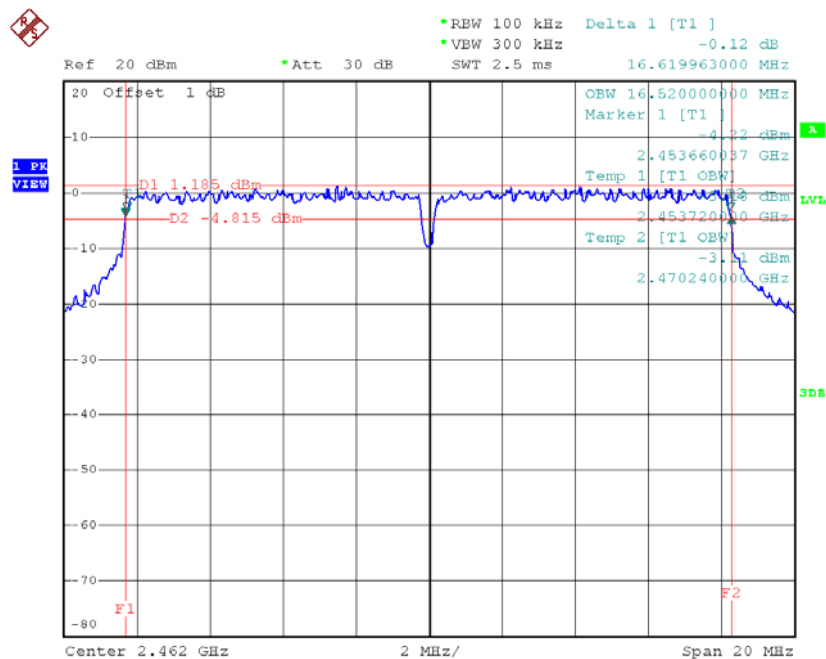
Date: 20.AUG.2015 16:15:06

TX CH06



Date: 20.AUG.2015 16:16:25

TX CH11

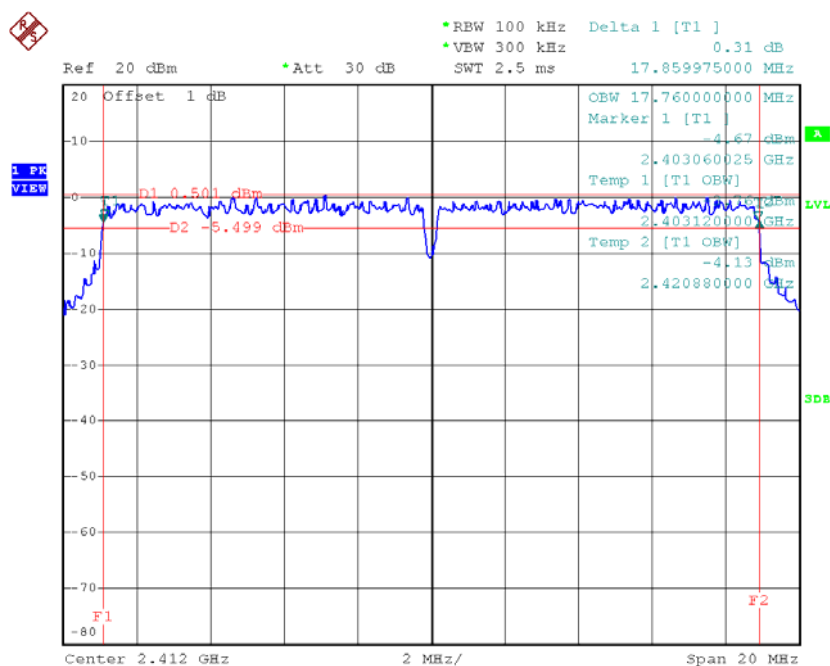


Date: 20.AUG.2015 16:17:39

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

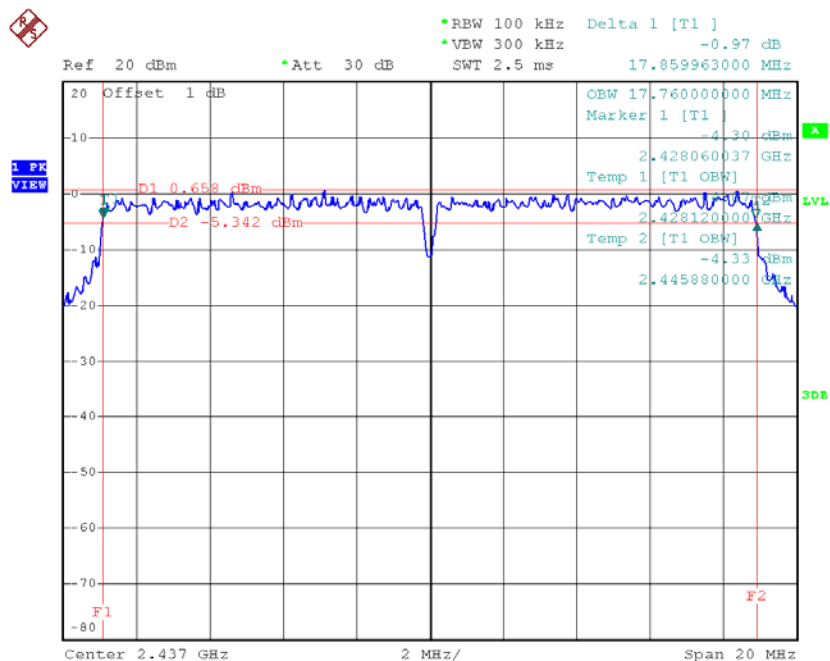
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.86	17.76	500	Complies
2437	17.86	17.76	500	Complies
2462	17.92	17.76	500	Complies

TX CH01



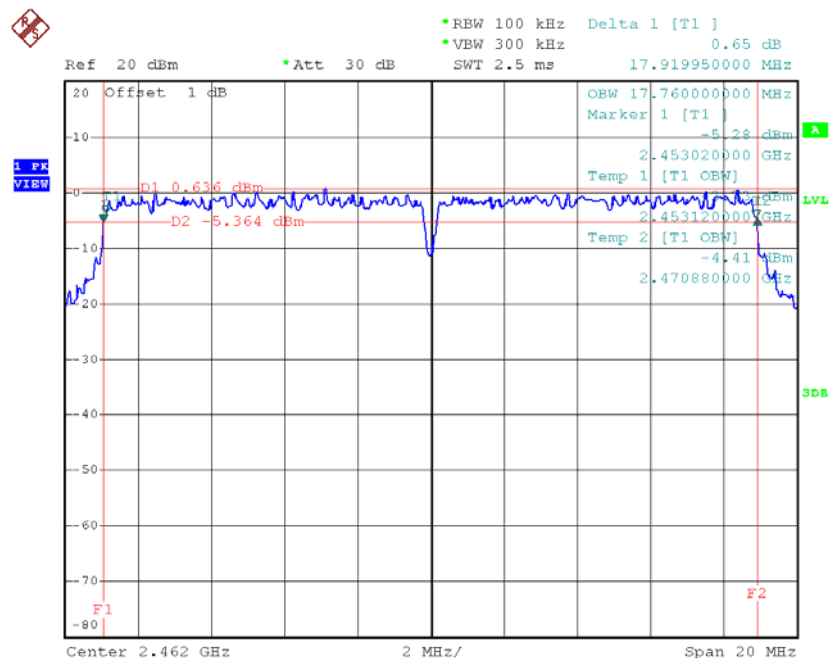
Date: 20.AUG.2015 16:19:41

TX CH06



Date: 20.AUG.2015 16:20:52

TX CH11

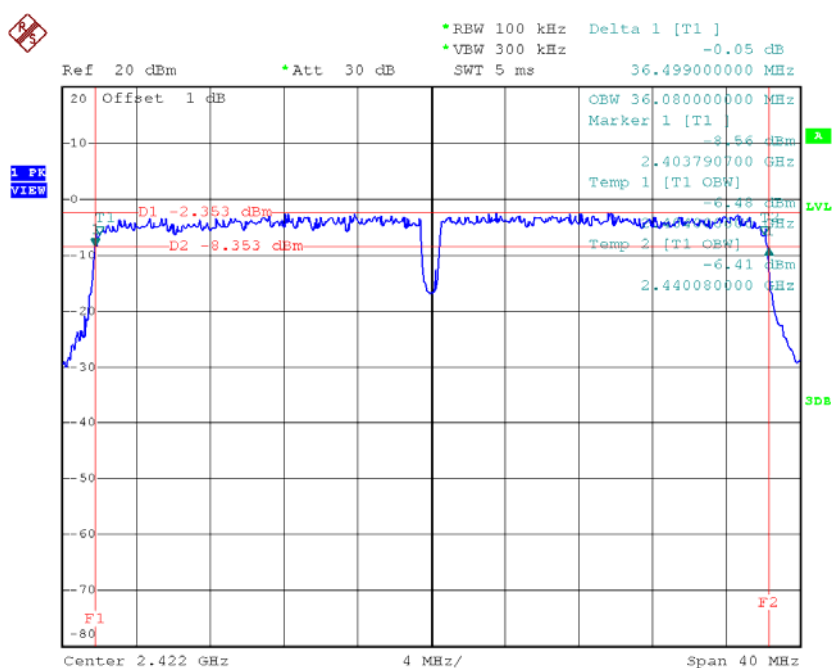


Date: 20.AUG.2015 16:21:59

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

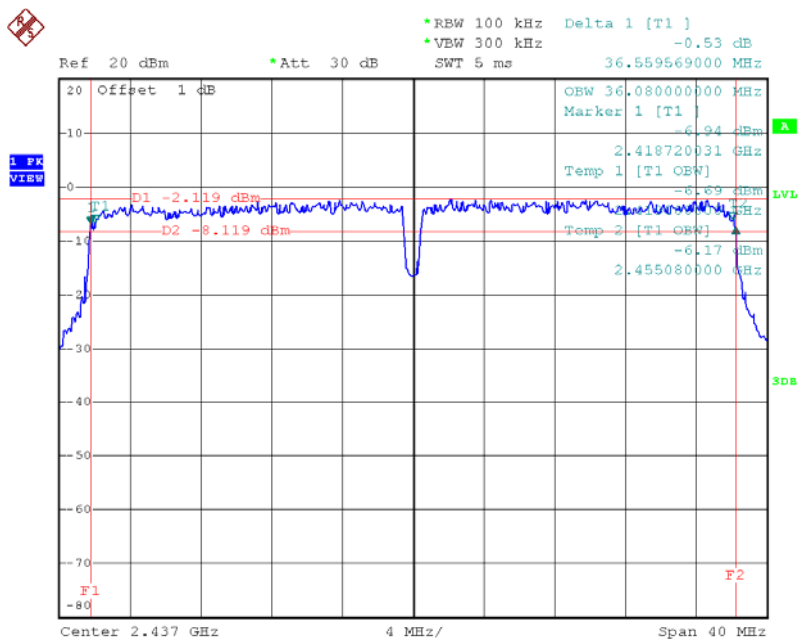
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.50	36.08	500	Complies
2437	36.56	36.08	500	Complies
2452	36.55	36.08	500	Complies

TX CH03



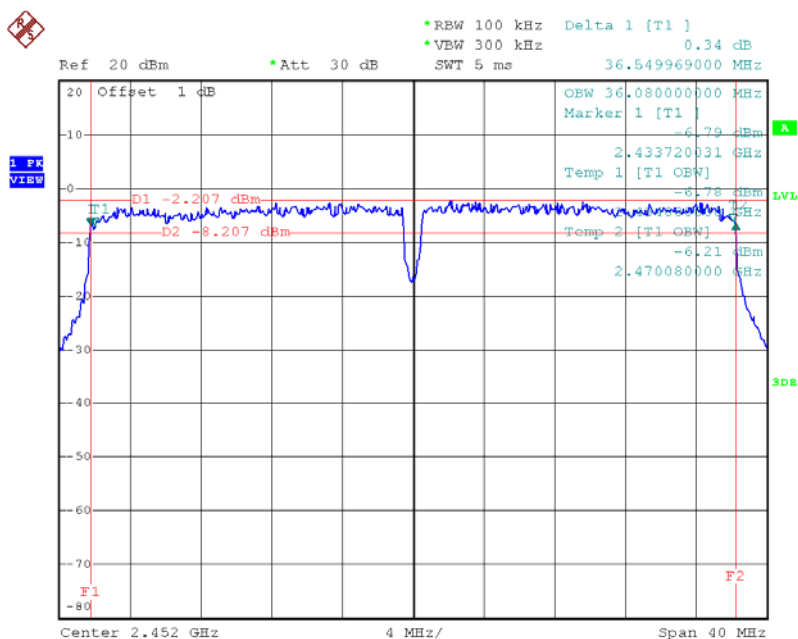
Date: 20.AUG.2015 16:28:43

TX CH06



Date: 20.AUG.2015 16:30:01

TX CH09



Date: 20.AUG.2015 16:31:04

ATTACHMENTF– 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	16.84	0.05	30.00	1.00	Complies
2437	17.17	0.05	30.00	1.00	Complies
2462	17.12	0.05	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.93	0.12	30.00	1.00	Complies
2437	21.20	0.13	30.00	1.00	Complies
2462	21.17	0.13	30.00	1.00	Complies

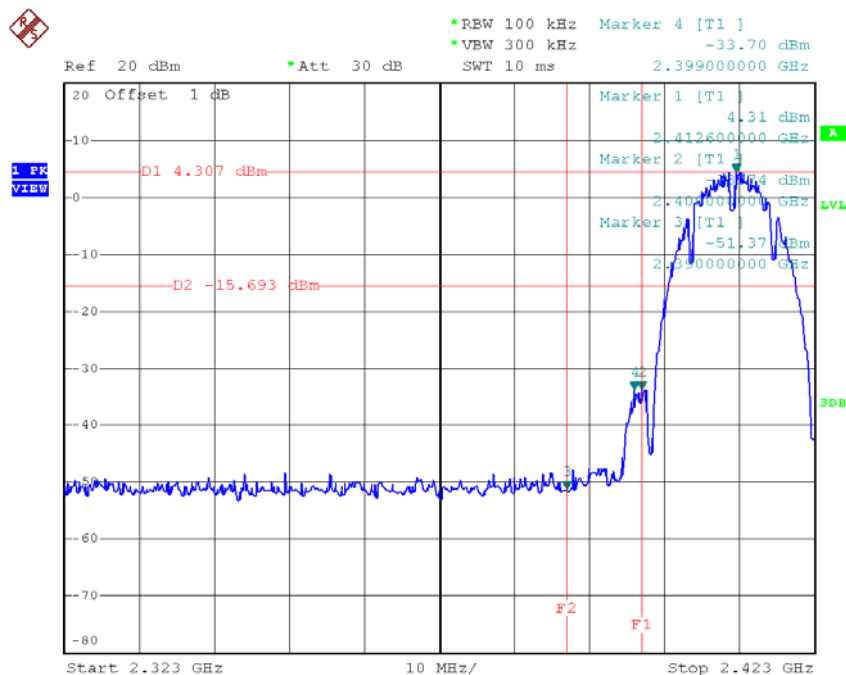
Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.26	0.13	30.00	1.00	Complies
2437	21.25	0.13	30.00	1.00	Complies
2462	21.44	0.14	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	21.17	0.13	30.00	1.00	Complies
2437	21.30	0.13	30.00	1.00	Complies
2452	21.34	0.14	30.00	1.00	Complies

ATTACHMENTG - ANTENNA CONDUCTED SPURIOUS EMISSION

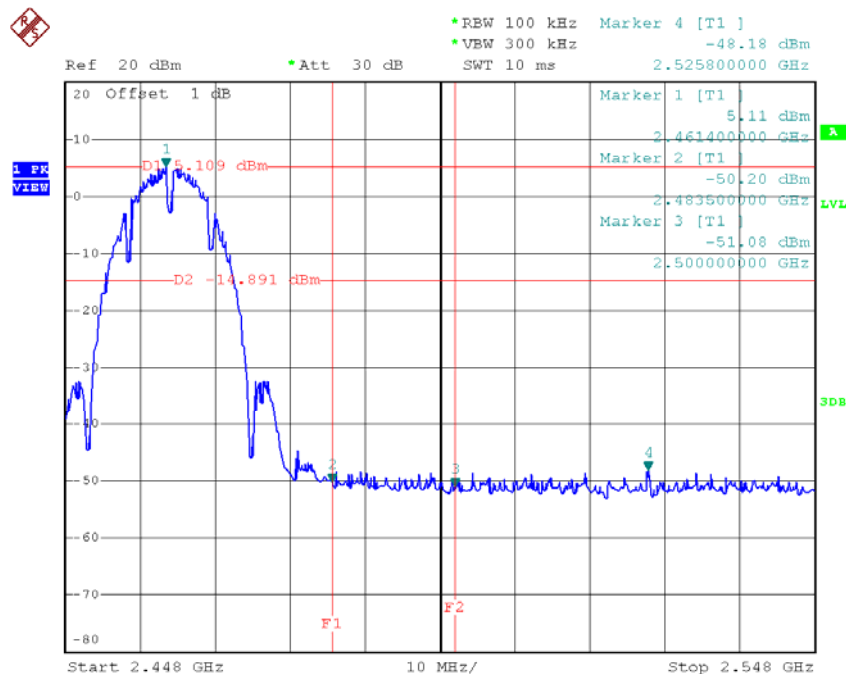
Test Mode :	TX B Mode
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TX B mode CH01



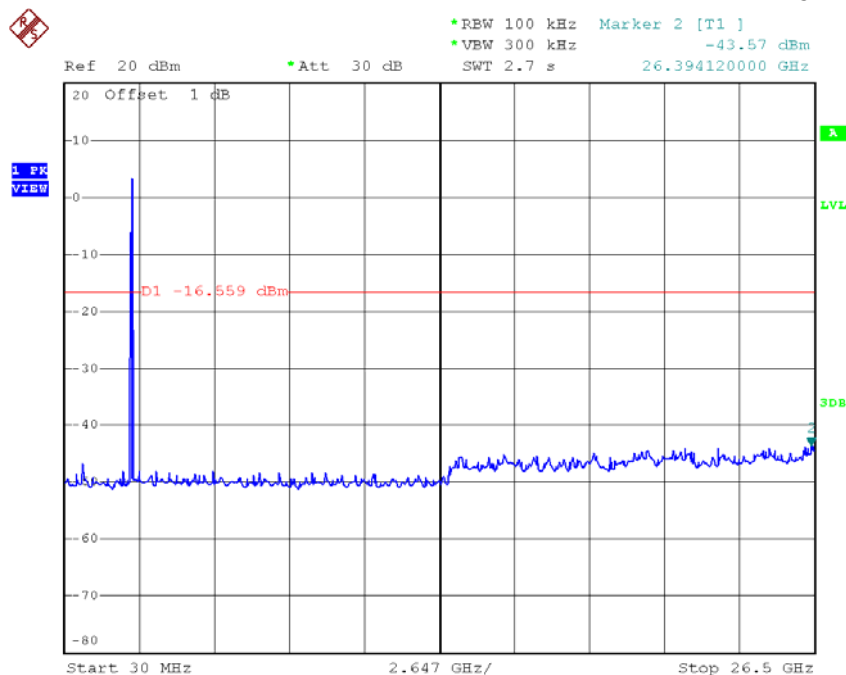
Date: 20.AUG.2015 16:06:44

TX B modeCH11



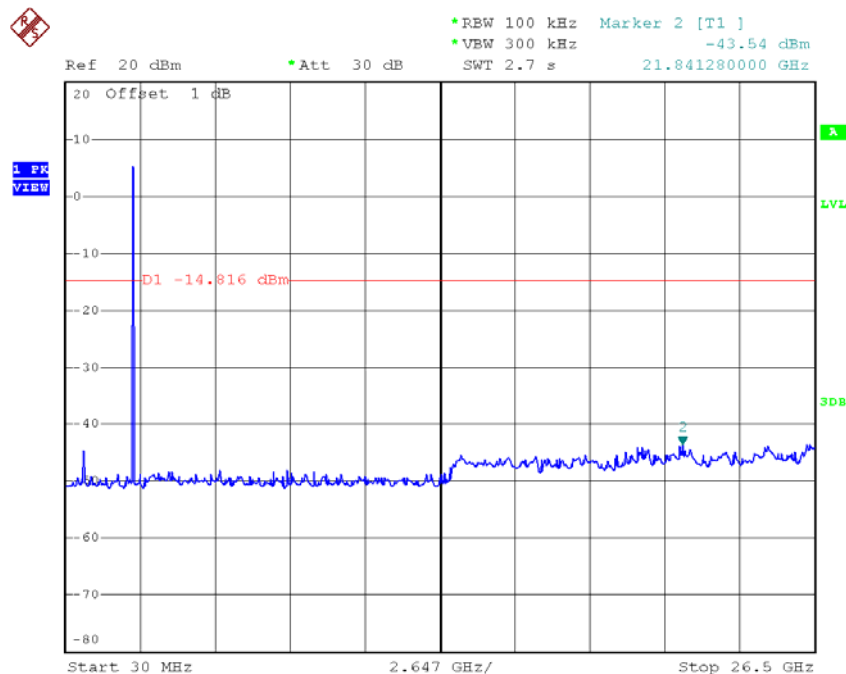
Date: 20.AUG.2015 16:11:10

TX B mode CH01 (10 Harmonic of the frequency)



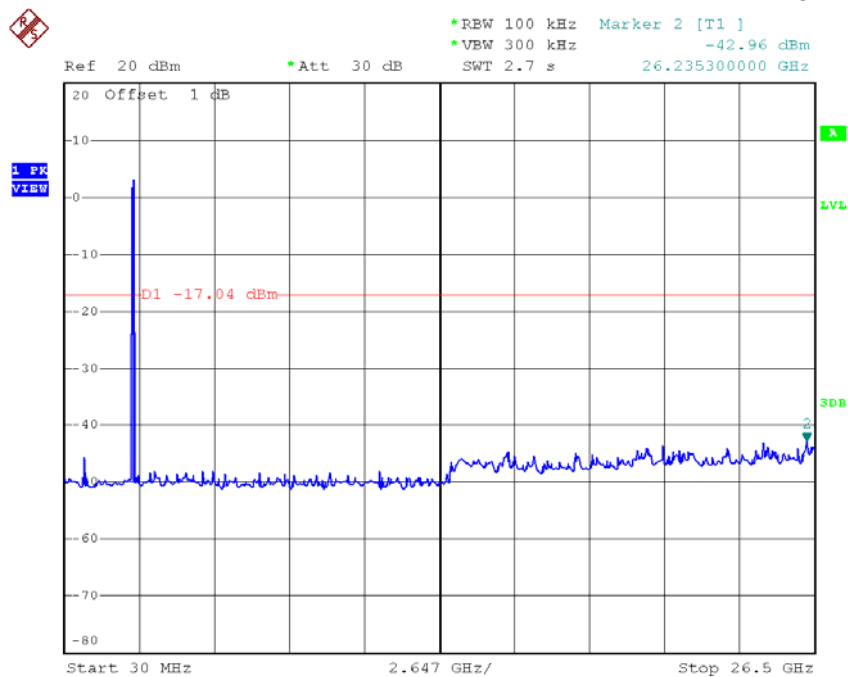
Date: 20.AUG.2015 16:06:36

TX B mode CH06 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:08:26

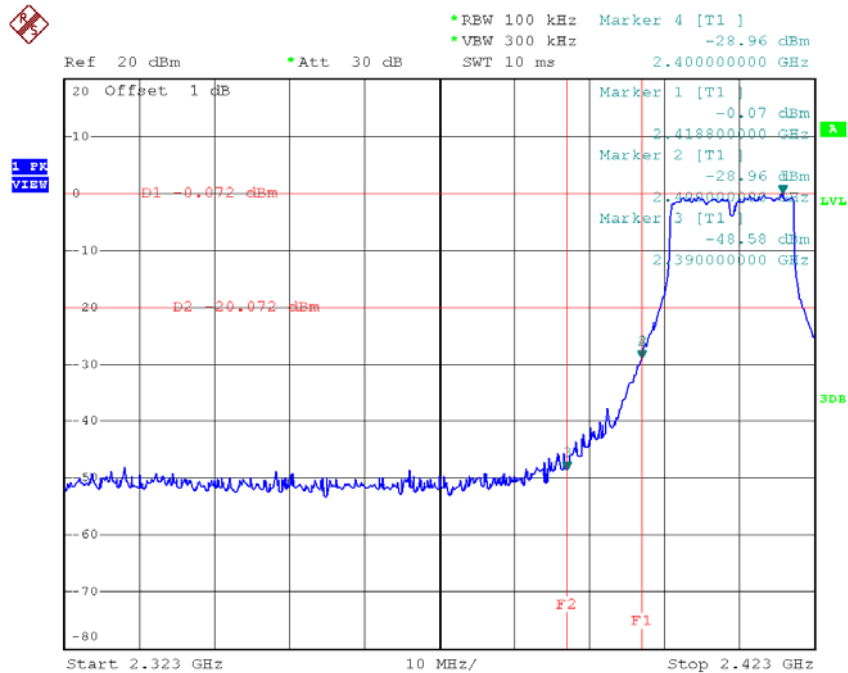
TX B mode CH11 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:11:02

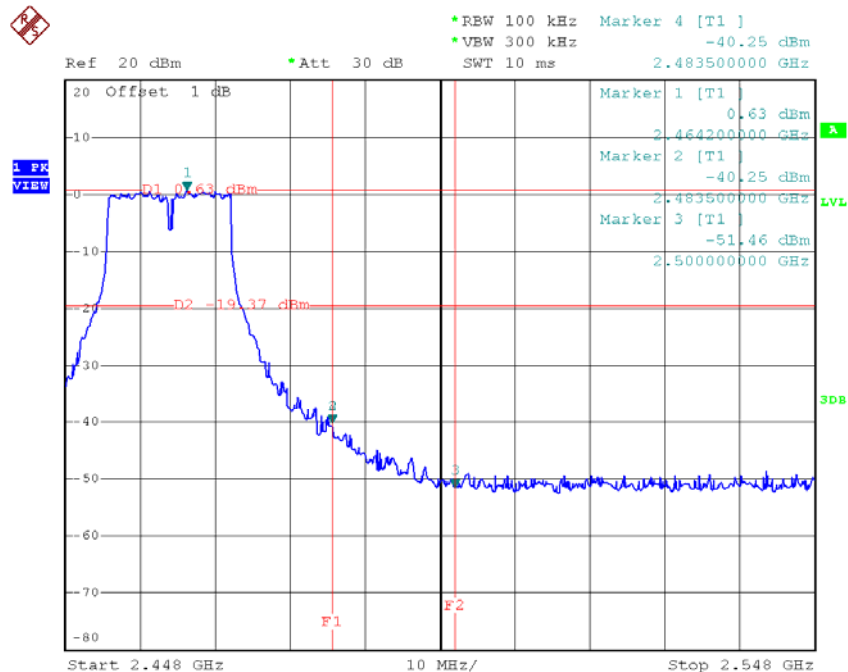
Test Mode :	TX G Mode
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TX G mode CH01



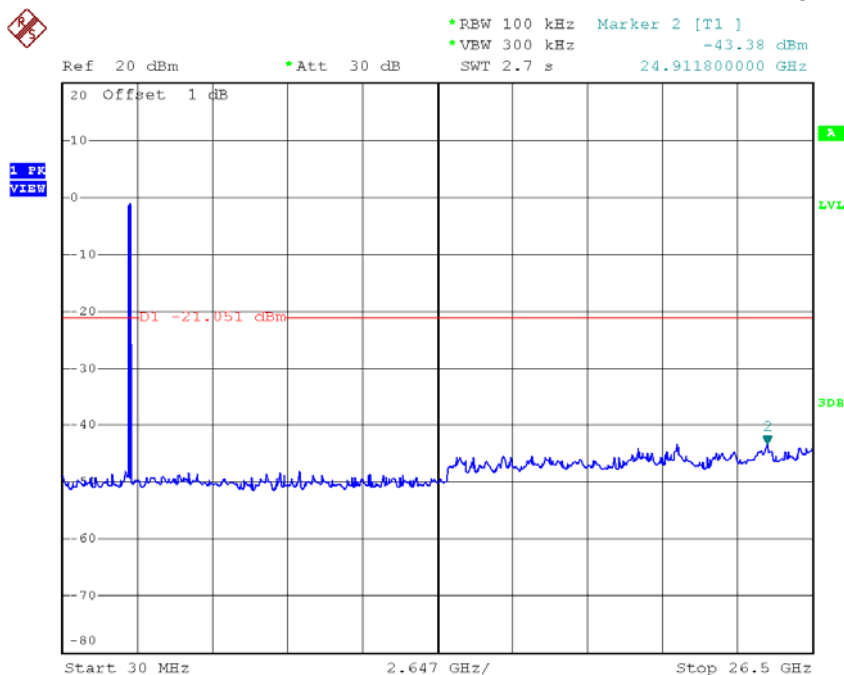
Date: 20.AUG.2015 16:15:28

TX G mode CH11



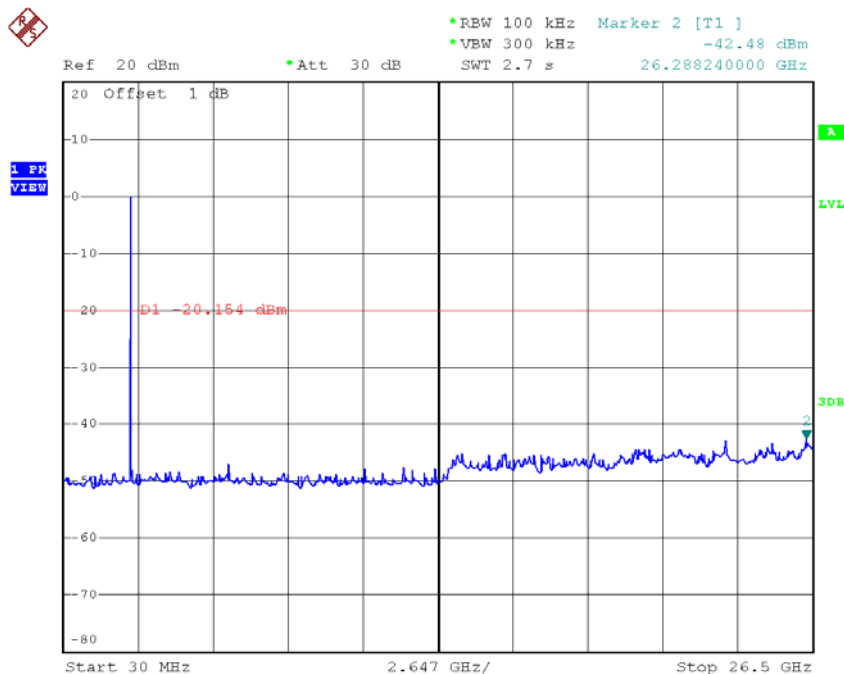
Date: 20.AUG.2015 16:18:00

TX G mode CH01 (10 Harmonic of the frequency)



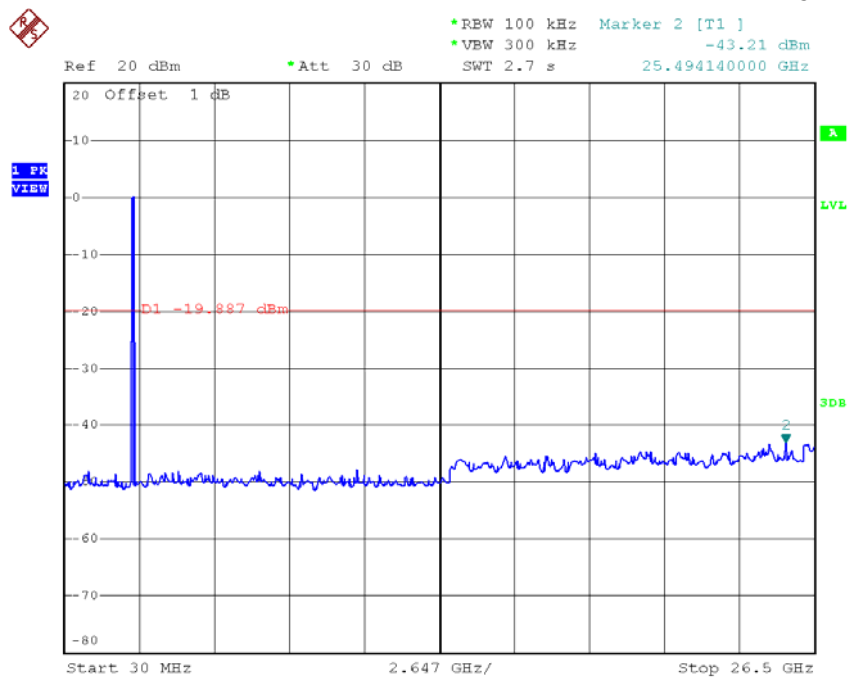
Date: 20.AUG.2015 16:15:20

TX G mode CH06 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:16:39

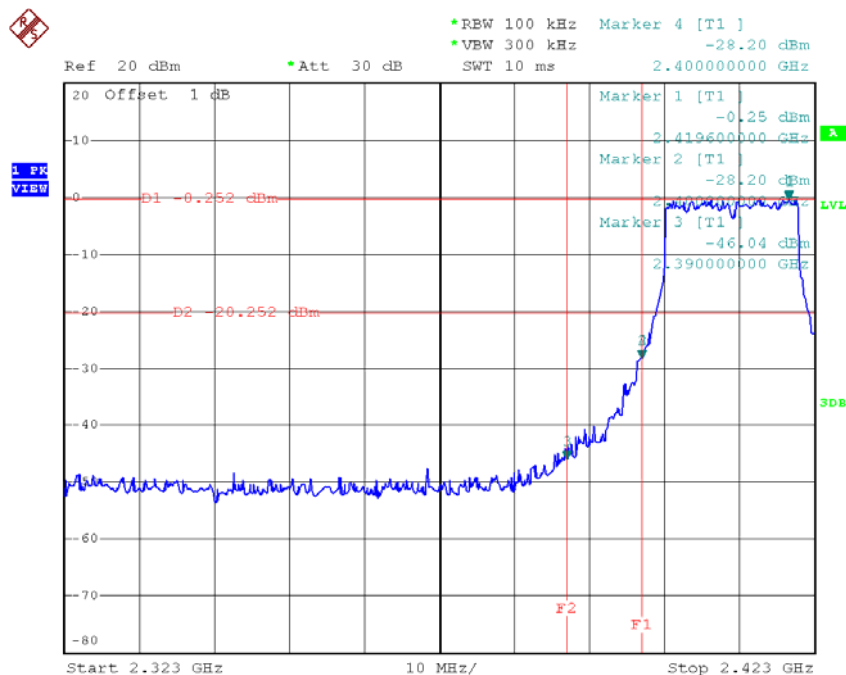
TX G mode CH11 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:17:53

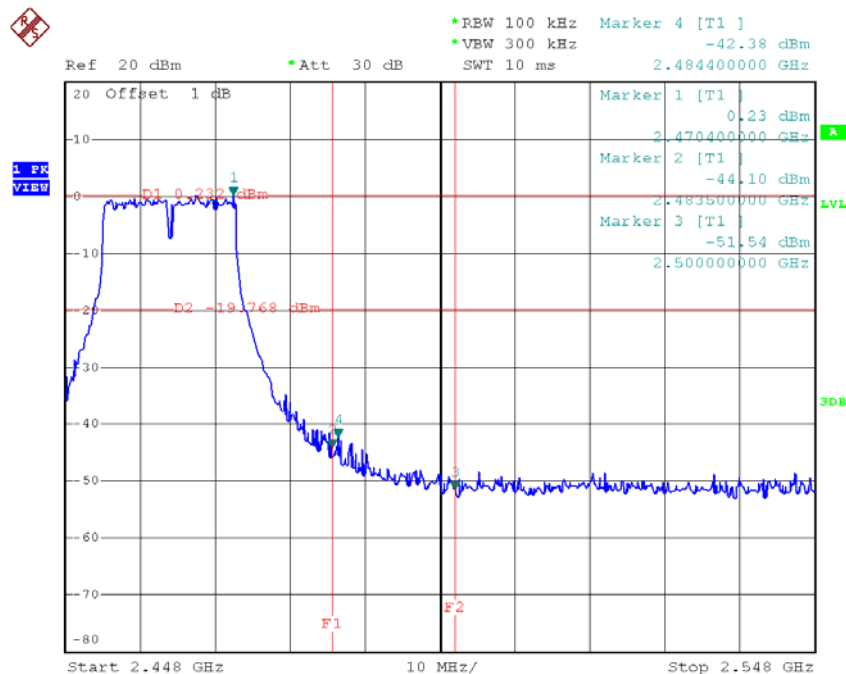
Test Mode :	TX N-20M Mode
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TX HT20 mode CH01



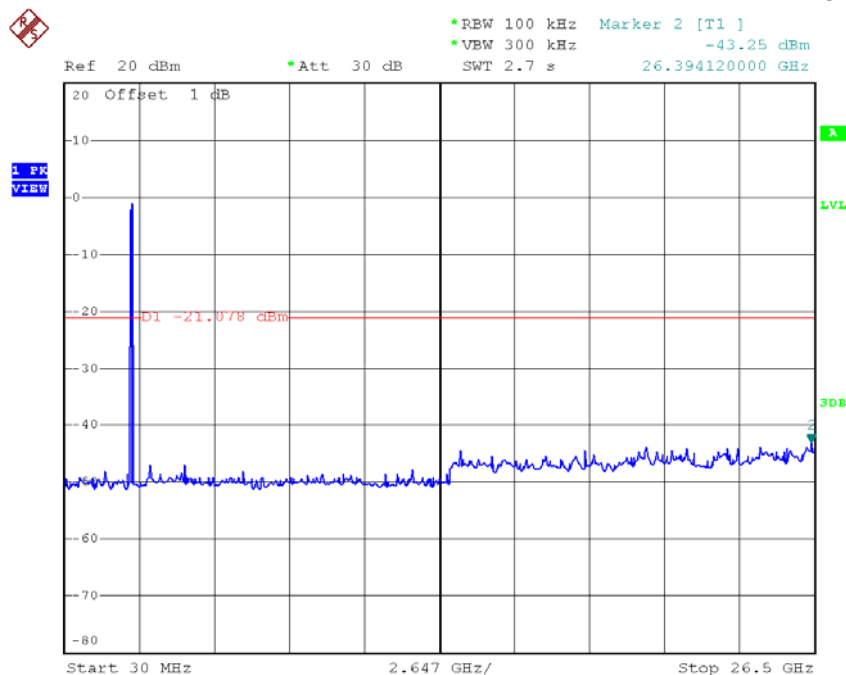
Date: 20.AUG.2015 16:20:03

TX HT20 mode CH11



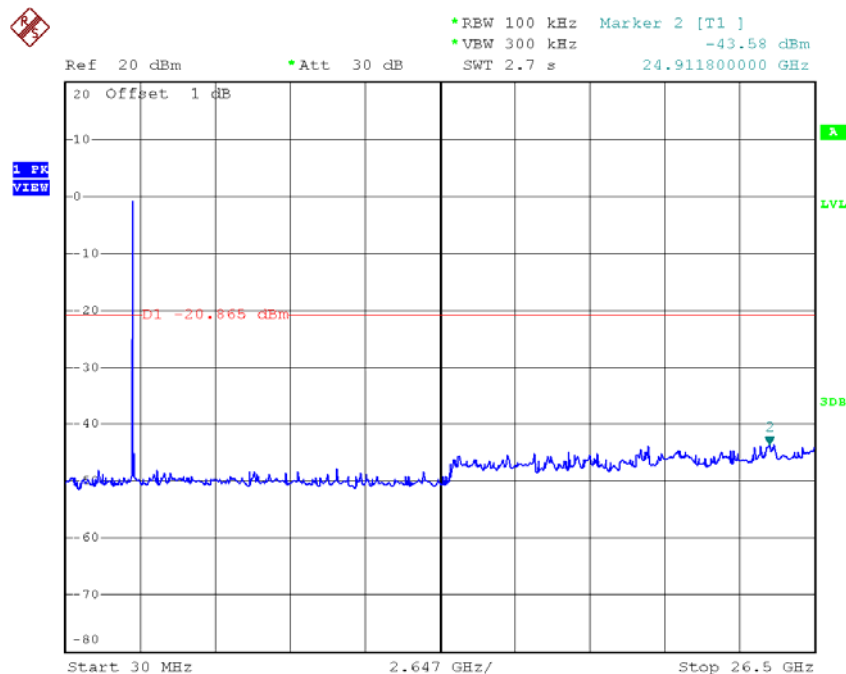
Date: 20.AUG.2015 16:22:21

TX HT20 mode CH01 (10 Harmonic of the frequency)



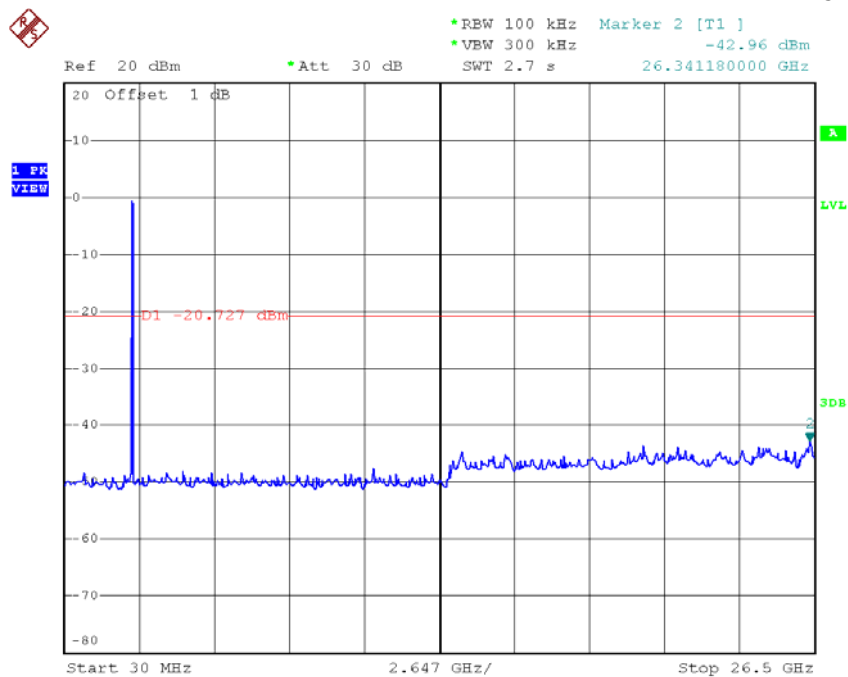
Date: 20.AUG.2015 16:19:55

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:21:06

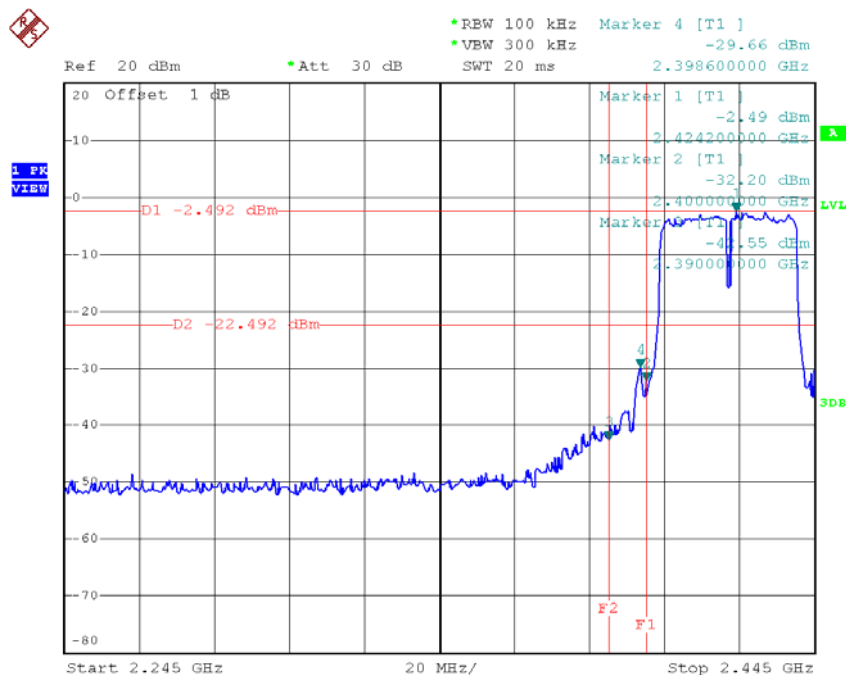
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:22:13

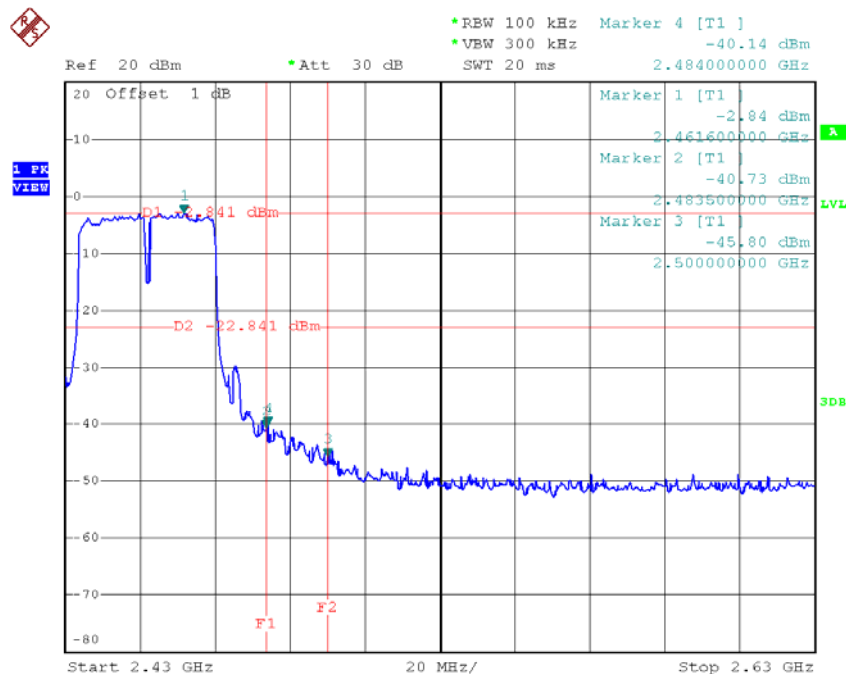
Test Mode :	TX N-40M Mode
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TX HT40 mode CH03



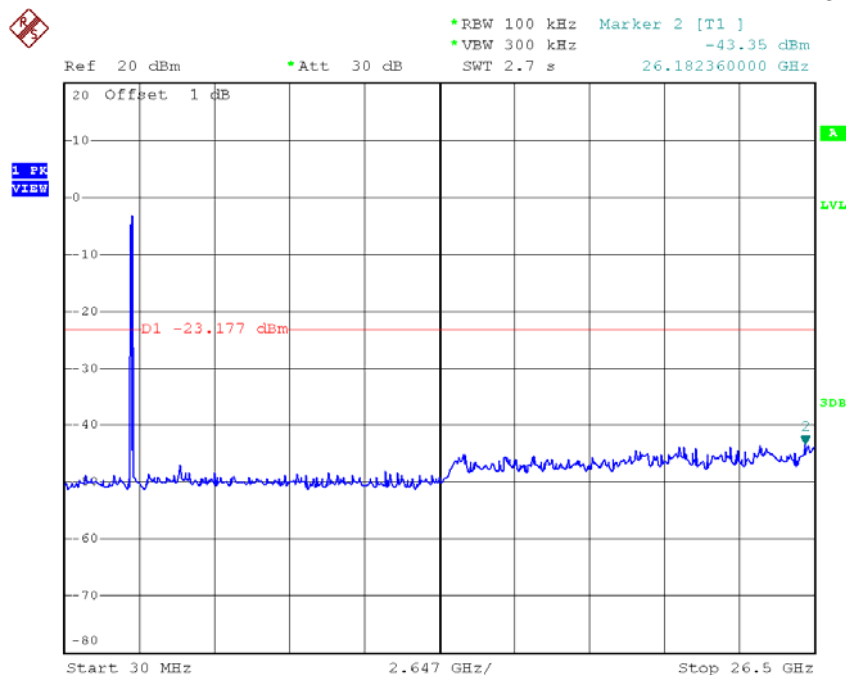
Date: 20.AUG.2015 16:29:05

TX HT40 mode CH09



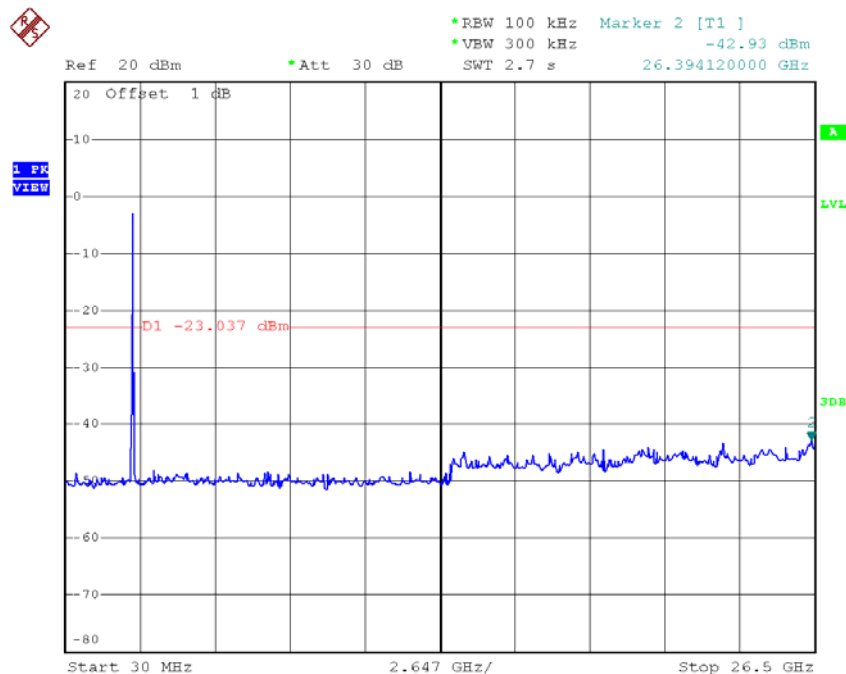
Date: 20.AUG.2015 16:31:26

TX HT40 mode CH03 (10 Harmonic of the frequency)



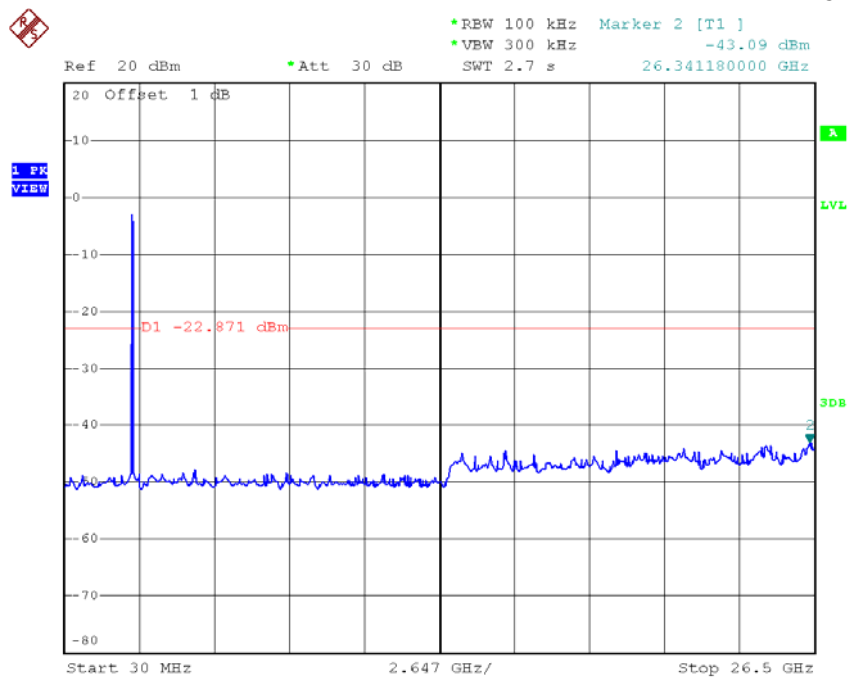
Date: 20.AUG.2015 16:28:58

TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 20.AUG.2015 16:30:14

TX HT40 mode CH09 (10 Harmonic of the frequency)



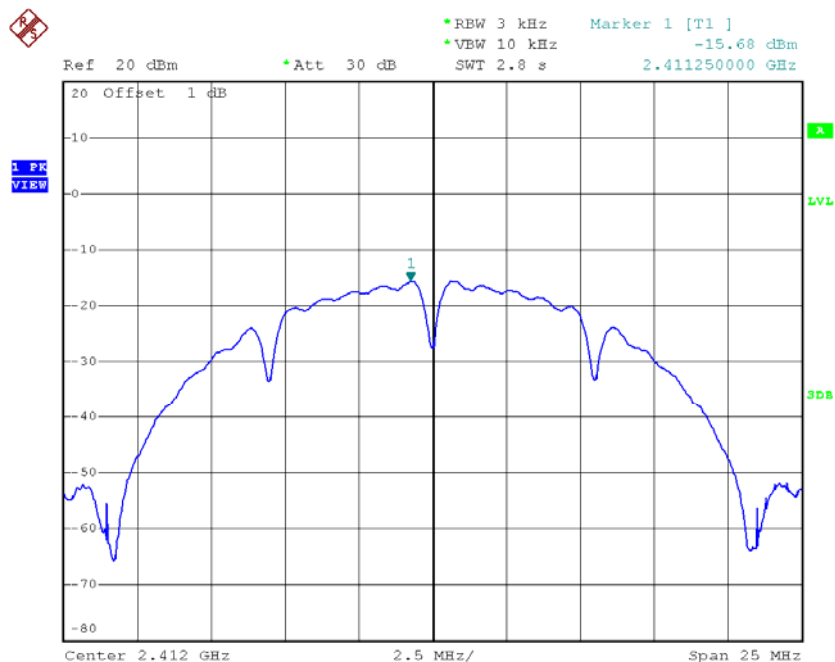
Date: 20.AUG.2015 16:31:18

ATTACHMENTH - POWER SPECTRAL DENSITY

Test Mode :TX B Mode_CH01/06/11

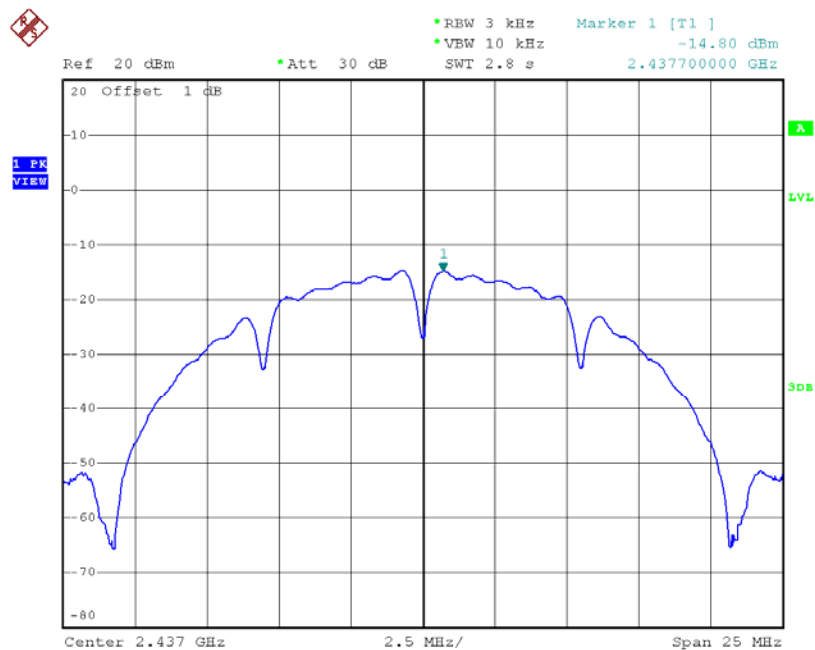
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-15.68	0.03	8.00	Complies
2437	-14.80	0.03	8.00	Complies
2462	-14.39	0.04	8.00	Complies

TX CH01



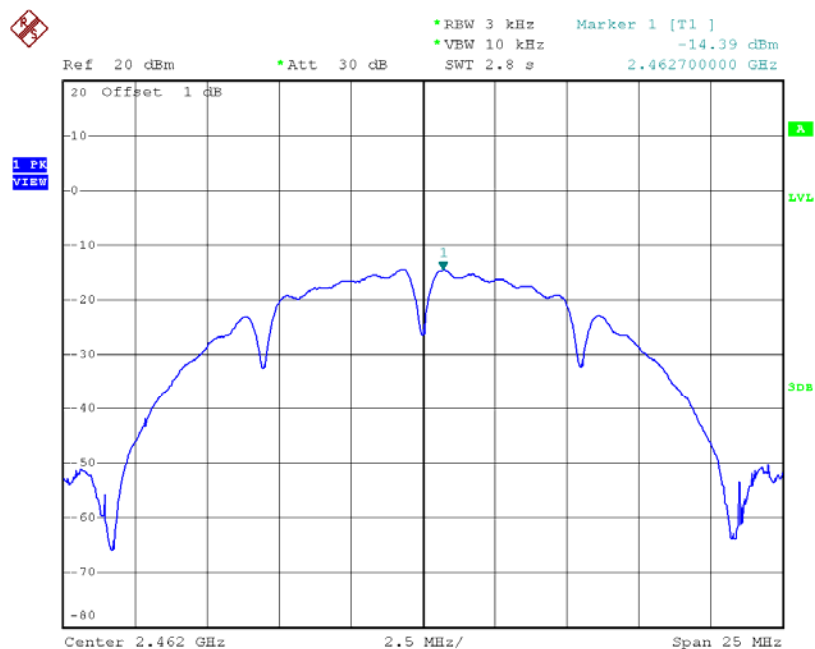
Date: 20.AUG.2015 16:06:53

TX CH06



Date: 20.AUG.2015 16:08:35

TX CH11

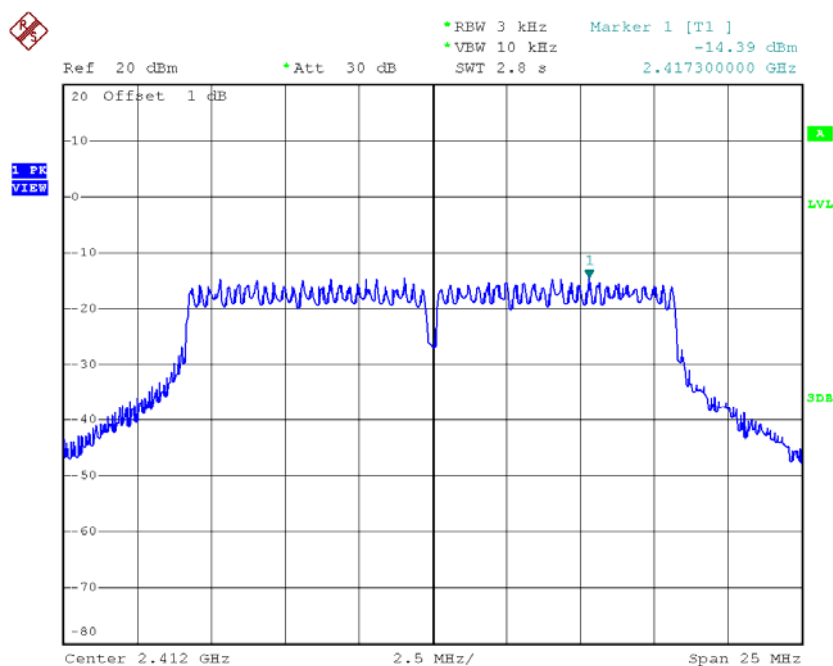


Date: 20.AUG.2015 16:12:52

Test Mode :TX G Mode_CH01/06/11

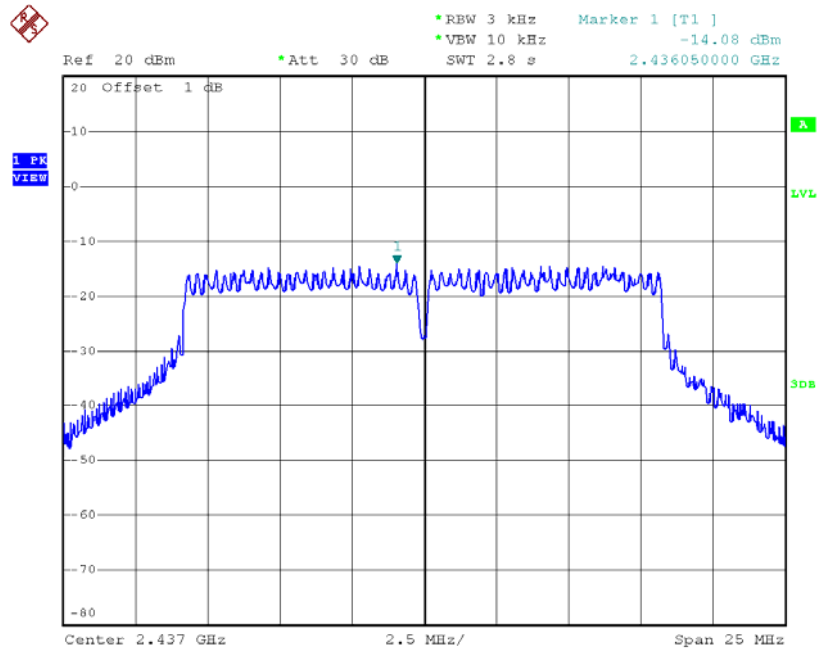
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-14.39	0.04	8.00	Complies
2437	-14.08	0.04	8.00	Complies
2462	-13.65	0.04	8.00	Complies

TX CH01



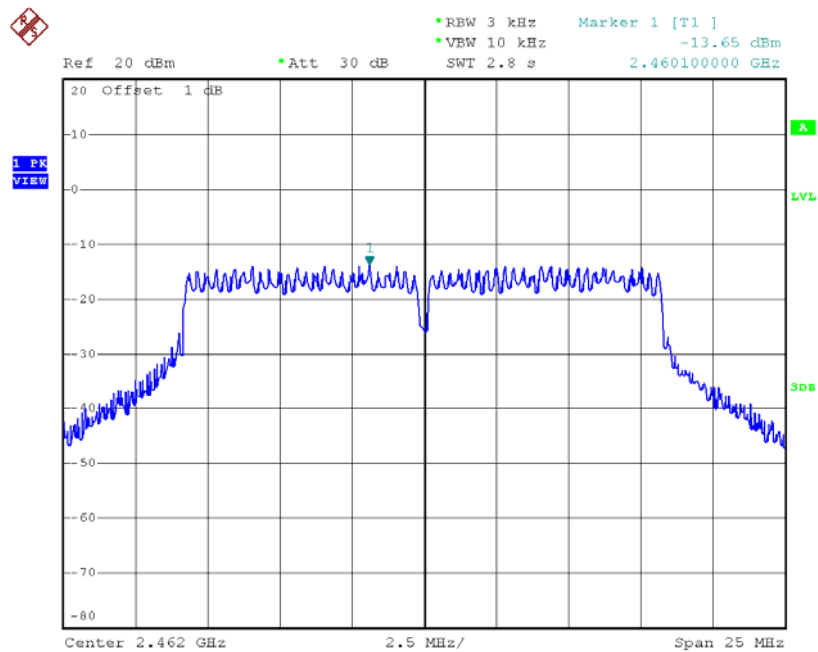
Date: 20.AUG.2015 16:15:37

TX CH06



Date: 20.AUG.2015 16:16:49

TX CH11

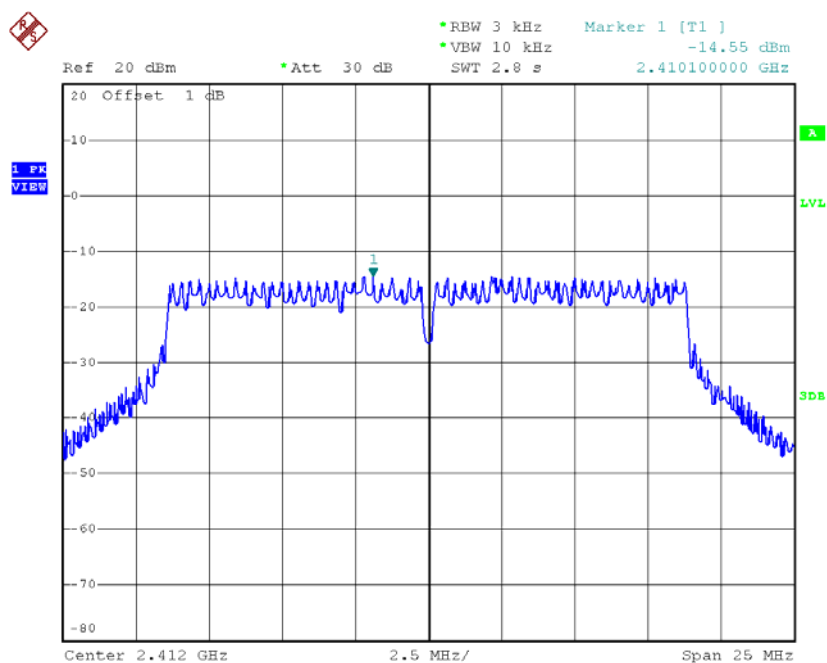


Date: 20.AUG.2015 16:18:10

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

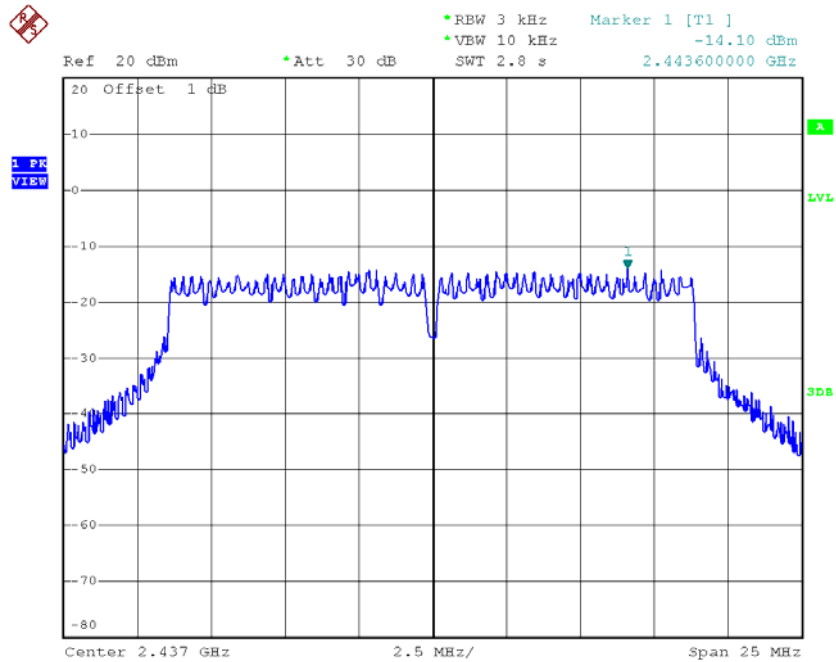
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-14.55	0.04	8.00	Complies
2437	-14.10	0.04	8.00	Complies
2462	-14.24	0.04	8.00	Complies

TX CH01



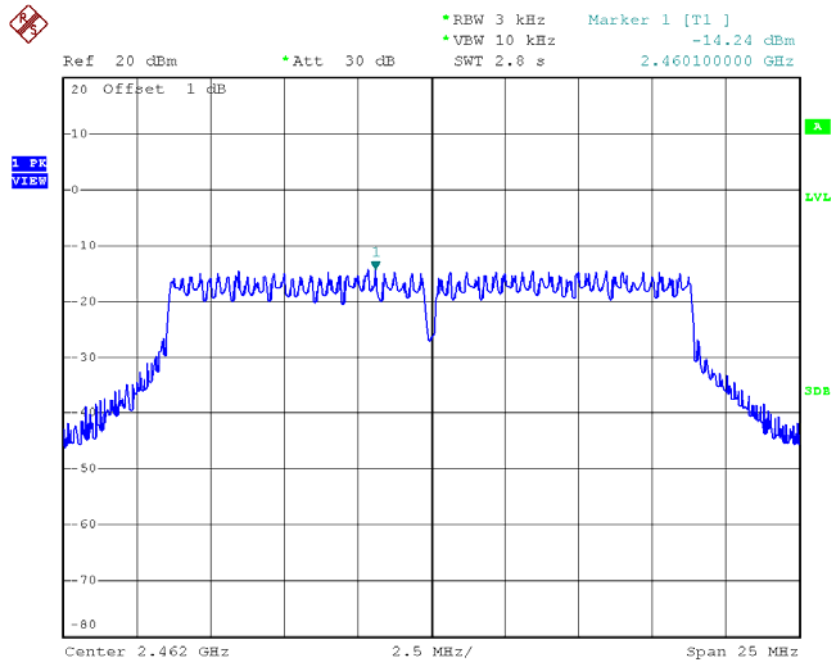
Date: 20.AUG.2015 16:20:12

TX CH06



Date: 20.AUG.2015 16:21:15

TX CH11

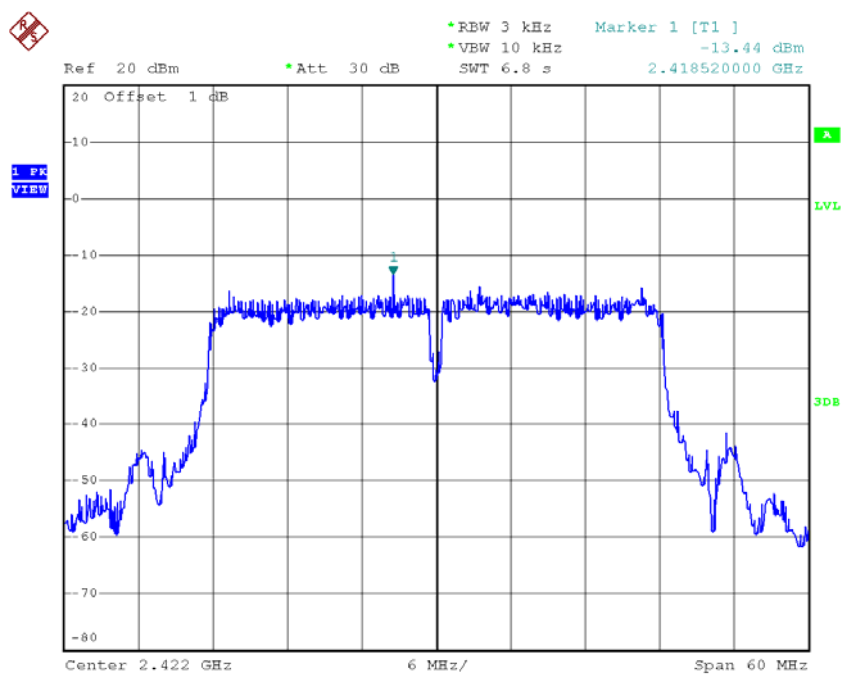


Date: 20.AUG.2015 16:22:30

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

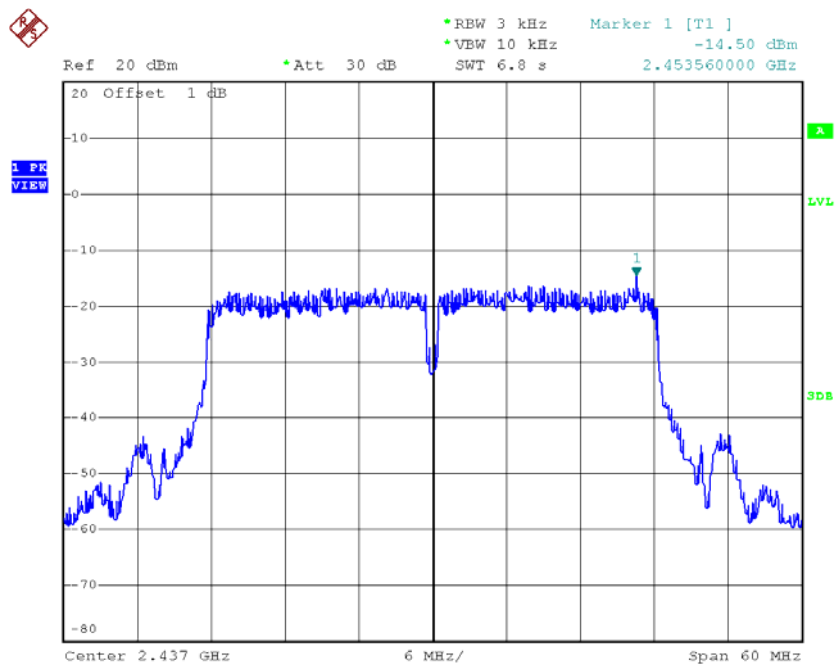
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-13.44	0.05	8.00	Complies
2437	-14.50	0.04	8.00	Complies
2452	-15.39	0.03	8.00	Complies

TX CH03



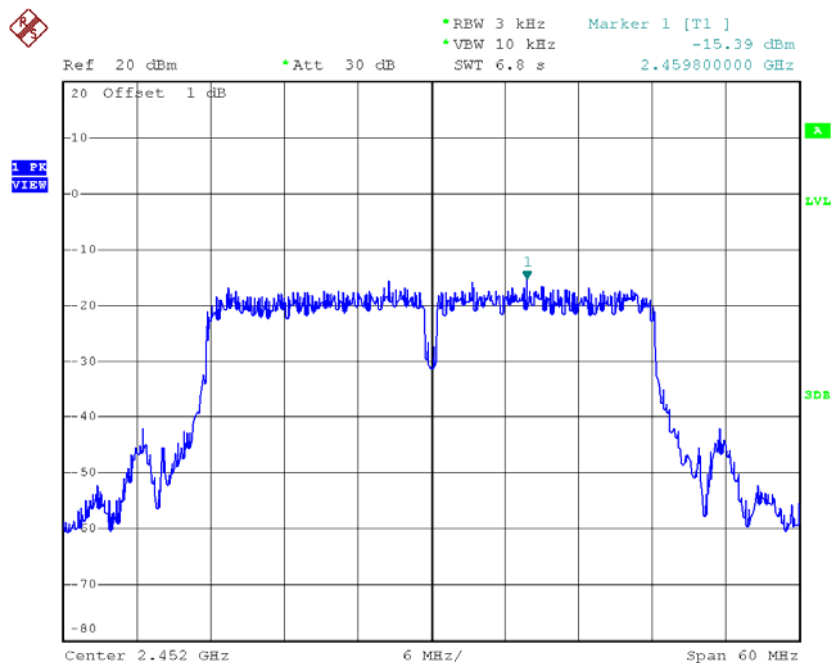
Date: 20.AUG.2015 16:29:18

TX CH06



Date: 20.AUG.2015 16:30:26

TX CH09



Date: 20.AUG.2015 16:31:38