FCC Radio Test Report

FCC ID: KA2IR608A1

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

Project No.	:	1605C154
Equipment	:	Wireless N 150 Home Router
Model Name	:	DIR-608
Applicant	:	D-Link Corporation
Address	:	17595 Mt. Herrmann , Fountain Valley,California, United States

Date of Receipt	:	May 19, 2016
Date of Test	:	May 19, 2016 ~ May 27, 2016
Issued Date	:	May 30, 2016
Tested by	:	BTL Inc.

Testing Engineer : Shawn Xiao
(Shawn Xiao)

Technical Manager : David Mao
(David Mao)

Authorized Signatory : Steven Lu
(Steven Lu)

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 standards traceable to international standard(s) and/or national standard(s).

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Limitation

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

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1605C154	Original Issue.	May 30, 2016

1. CERTIFICATION

Equipment	:	Wireless N 150 Home Router
Brand Name	:	D-Link
Model Name	:	DIR-608
Applicant	:	D-Link Corporation
Manufacturer	:	D-Link Corporation
Address	:	17595 Mt. Herrmann , Fountain Valley,California, United States
Factory	:	1. Taicang T&W Electronics Co.,Ltd. 2. Shenzhen Gongjin Electronics Co.,Ltd.
Address	:	1. Jiangnan Road 89, Loudong Street , Taicang ,Jiangsu, 215412,P.R.China 2. No 2&3 Buildings, Mingwei Factory Area, Songgang Road West,No. A Building, 1#Songgang Road Songgang Sub-District,Shenzhen,Guangdong, 518105,P.R.China
Date of Test	:	May 19, 2016 ~ May 27, 2016
Test Sample	:	Engineering Sample
Standard(s)	:	FCC Part15, Subpart C:(15.247) / ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1605C154) 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 **FCC**	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 ± 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	Wireless N 150 Home Router	
Brand Name	D-Link	
Model Name	DIR-608	
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 150Mbps
	Output Power (Max.)	802.11b: 24.71dBm 802.11g: 25.49dBm 802.11n(20MHz): 25.31dBm 802.11n(40MHz): 20.26dBm
Power Source	DC voltage supplied from AC/DC adapter. Model: S06A12-120A050-C4	
Power Rating	I/P: 100-240V~ 50/60Hz max 0.3A O/P: 12V⎓0.5A	

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 – 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	D-Link	N/A	Dipole	N/A	5

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	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 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.

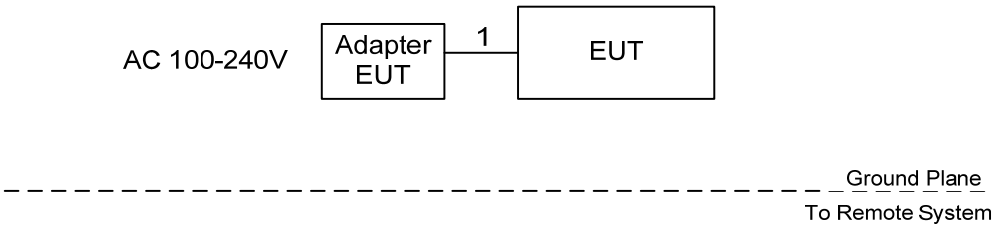
(4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

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	N/A		
Frequency (MHz)	2412	2437	2462
802.11b	47	49	36
802.11g	54	56	47
802.11n (20MHz)	50	56	46
Frequency	2422	2437	2452
802.11n (40MHz)	46	44	40

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.
-	-	-	-	-	-

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

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	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

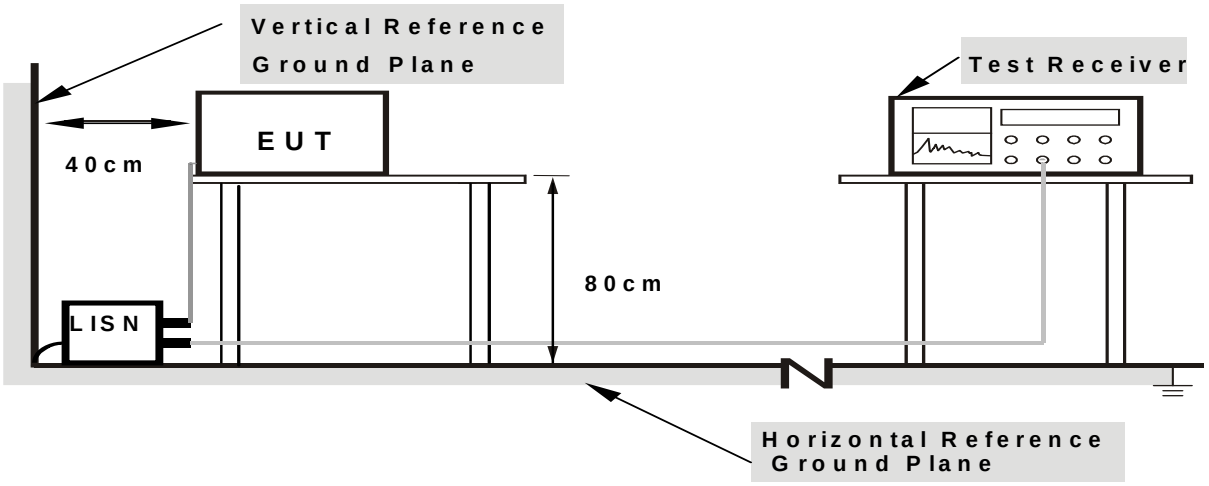
4.1.2 TEST PROCEDURE

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 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

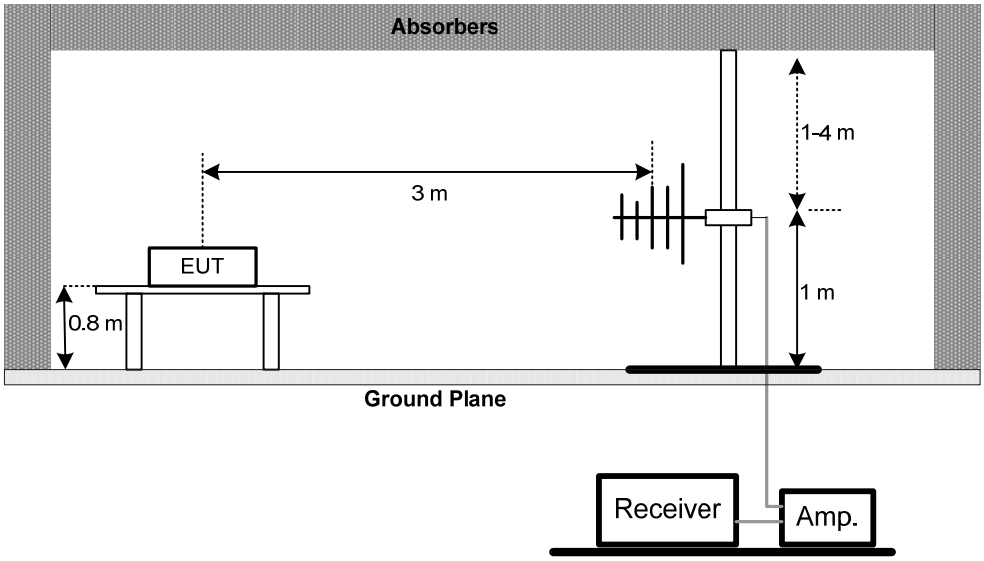
a. The measuring distance of at 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance 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. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. 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)
h. 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)
i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

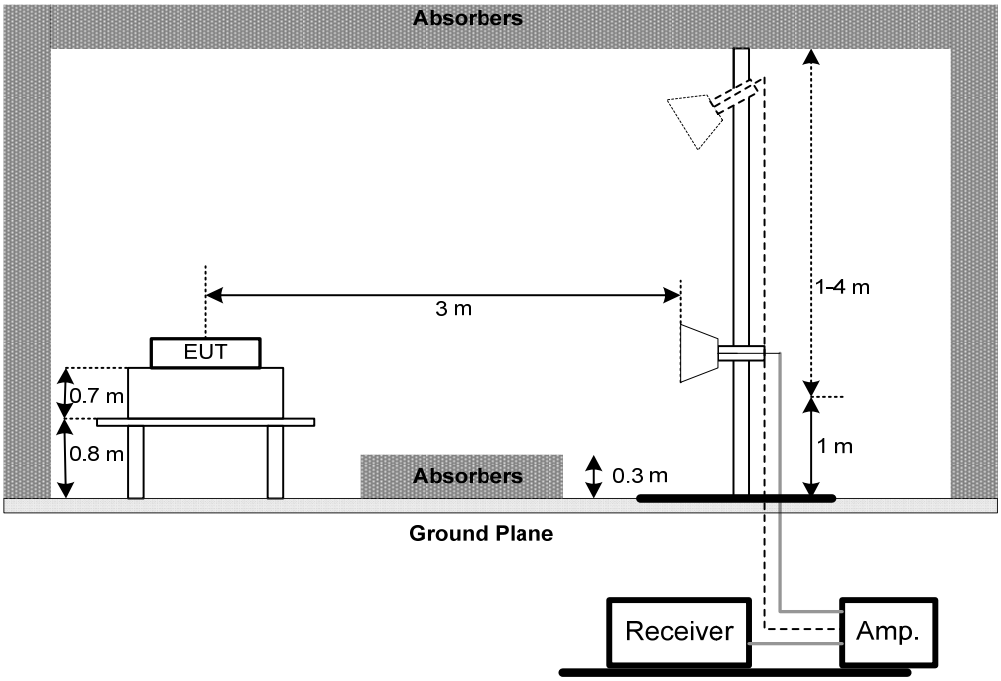
No deviation

4.2.4 TEST SETUP

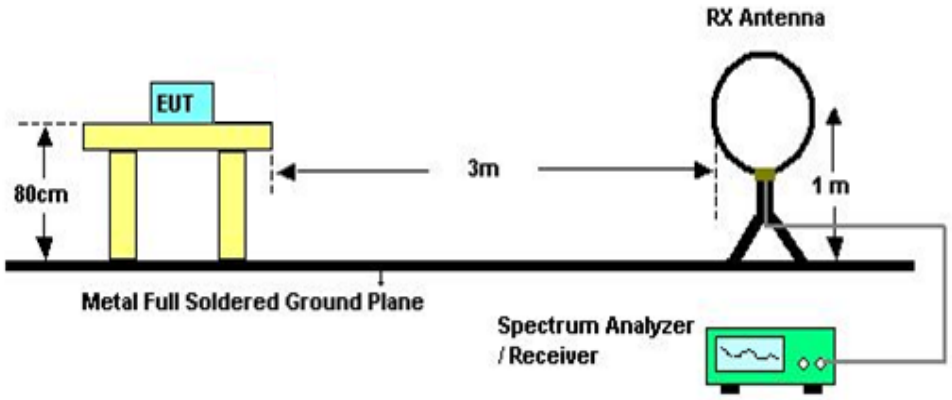
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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 (specific distance / 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

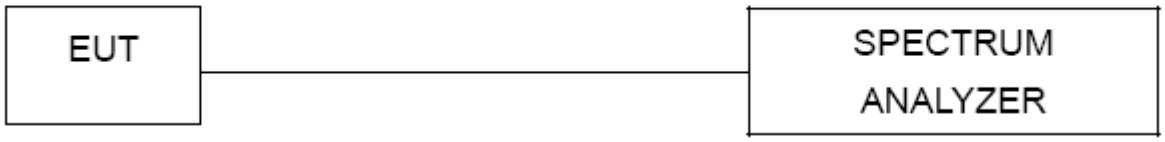
5.1.1 TEST PROCEDURE

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

6.1APPLIED 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

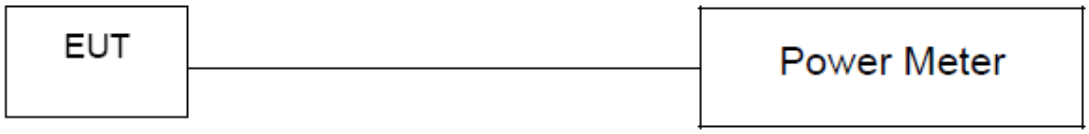
6.1.1TEST PROCEDURE

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 558074D01 DTS Meas Guidance v03r05.

6.1.2DEVIATION FROM STANDARD

No deviation.

6.1.3TEST SETUP



6.1.4EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5EUT TEST CONDITIONS

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

6.1.6TEST 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.

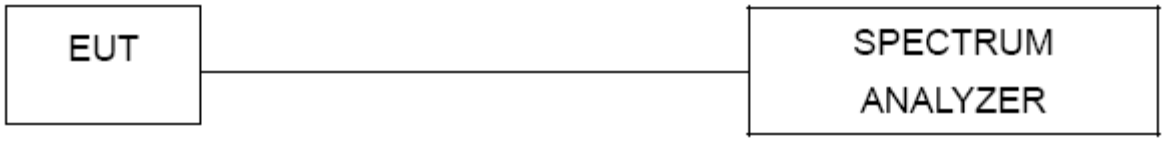
7.1.1 TEST PROCEDURE

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

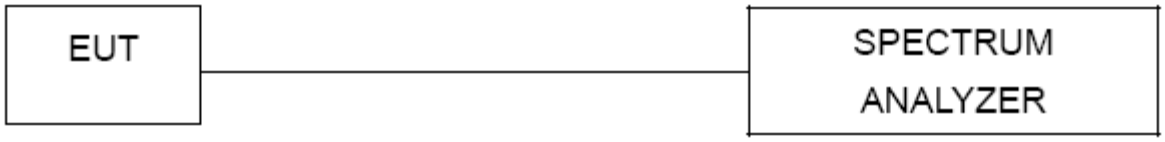
8.1.1 TEST PROCEDURE

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	0052765	Mar. 27, 2017
2	LISN	R&S	ENV216	101447	Mar. 27, 2017
3	Test Cable	emci	RG223(9KHz -30MHz)	C_17	Mar. 10, 2017
4	EMI Test Receiver	R&S	ESCI	100382	Mar. 27, 2017
5	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 27, 2017
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. 27, 2017
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	Control	CT	SC100	N/A	N/A
6	Position Control	MF	MF-7802	MF780208416	N/A
7	Antenna	ETS	3115	00075789	Mar. 27, 2017
8	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2016
9	Receiver	AGILENT	N9038A	MY52130039	Oct. 11, 2016
10	Test Cable	emci	EMC104-SM-SM-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	Apr. 23, 2017
13	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 27, 2017
14	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 07, 2016
15	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	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	Oct. 26, 2016
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Oct. 26, 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

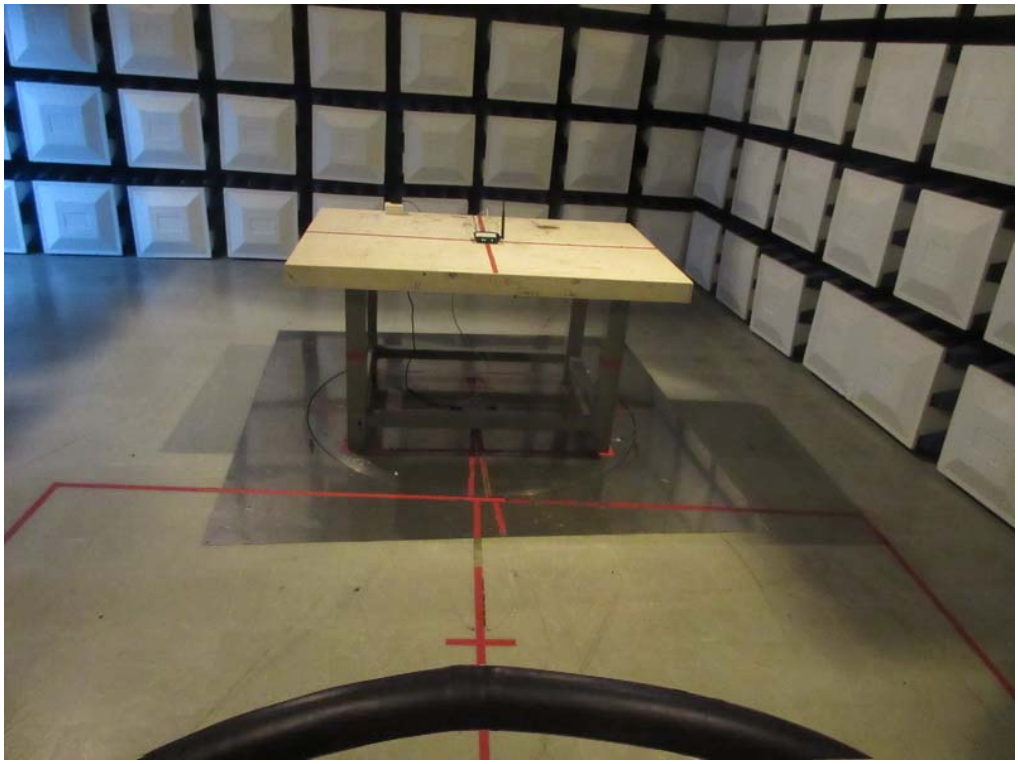
Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

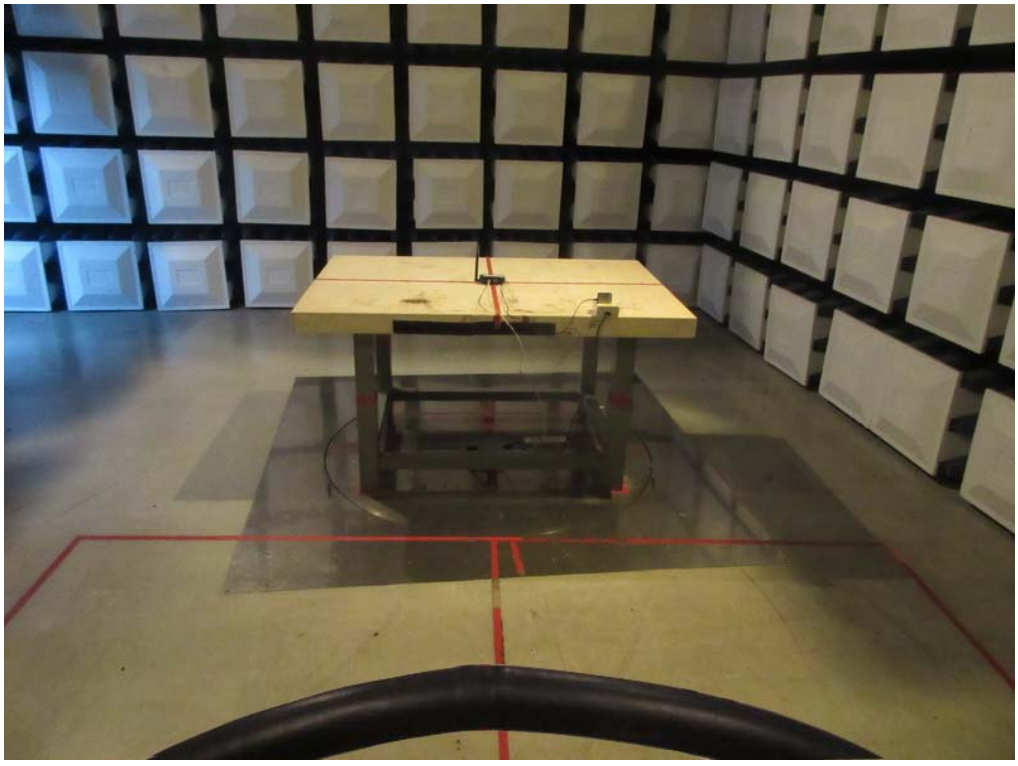
10. EUT TEST PHOTO

Conducted Measurement Photos

Radiated Measurement Photos

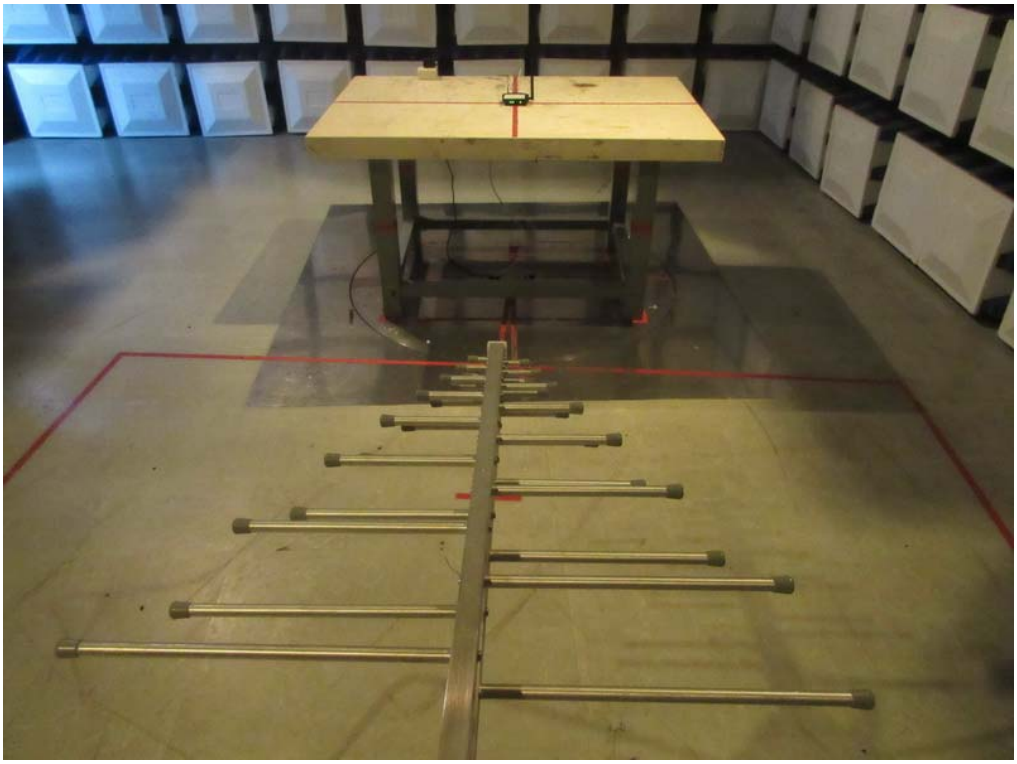
9KHz to 30MHz

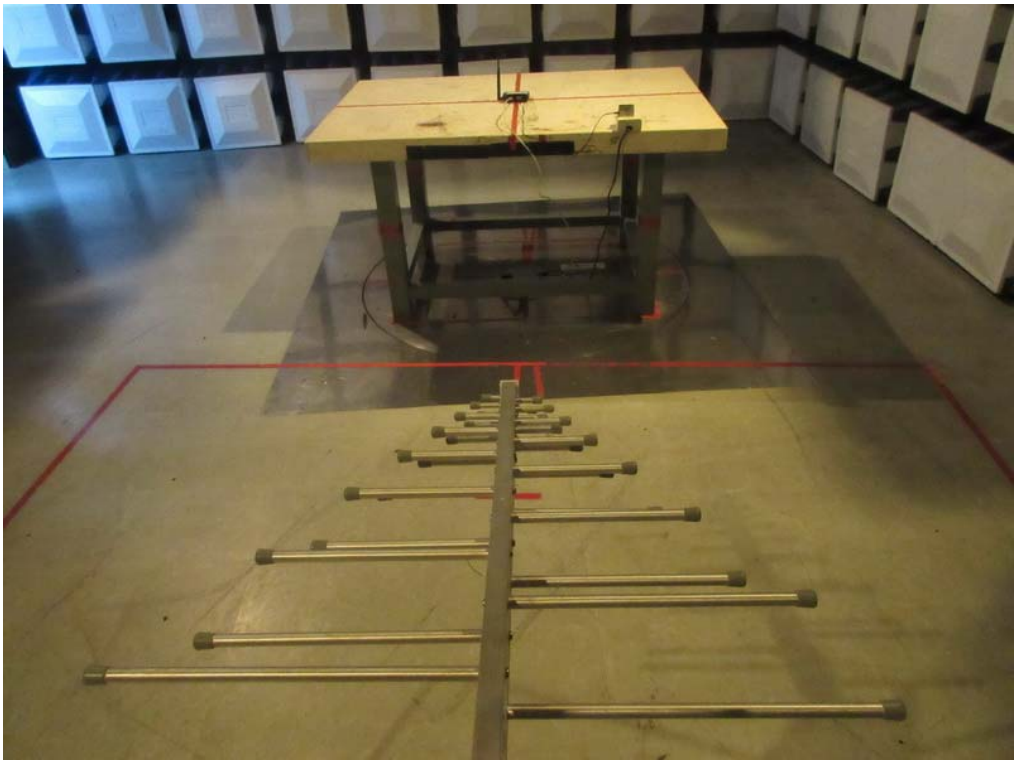




Radiated Measurement Photos

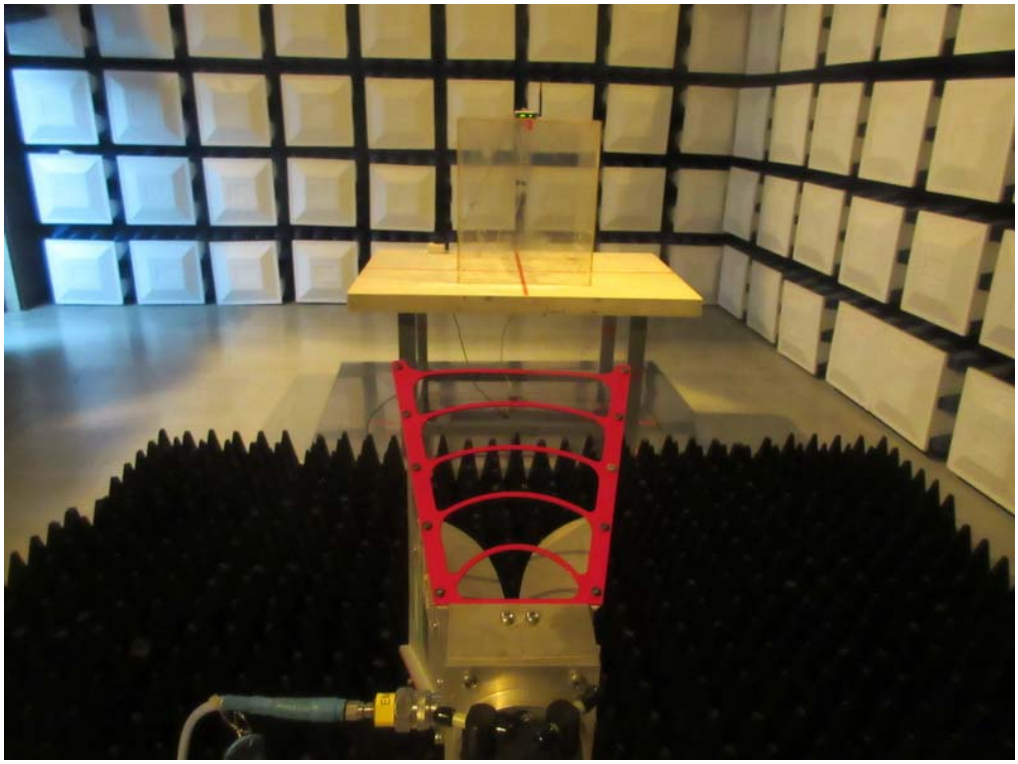
30MHz to 1000MHz

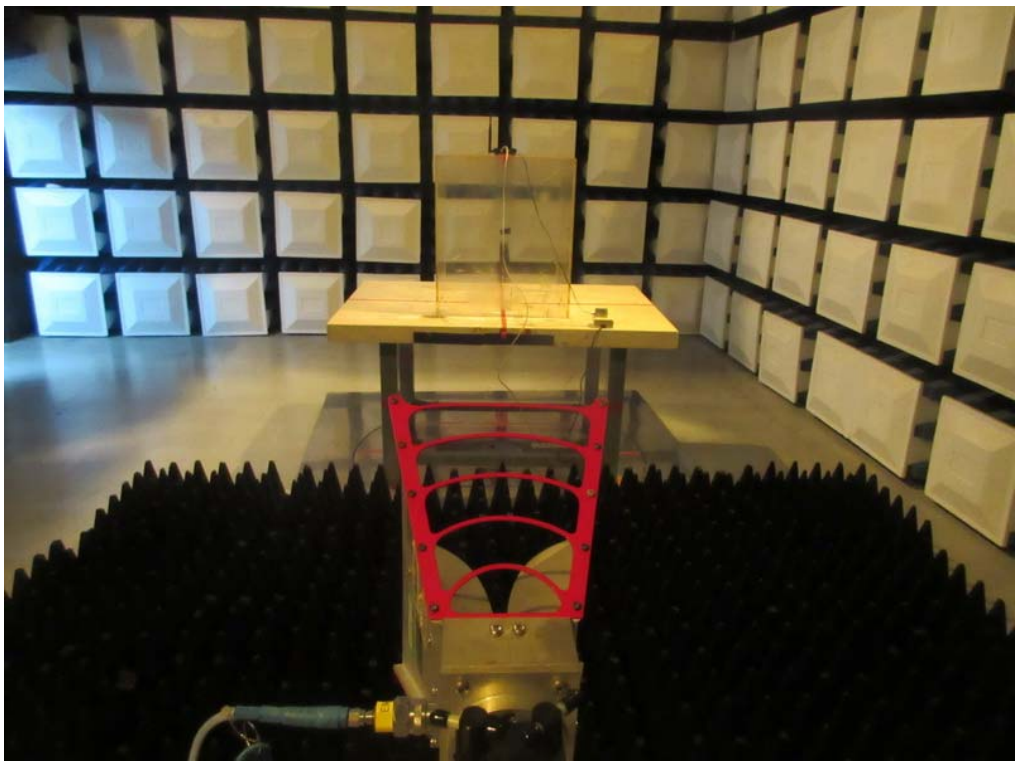




Radiated Measurement Photos

Above 1000MHz

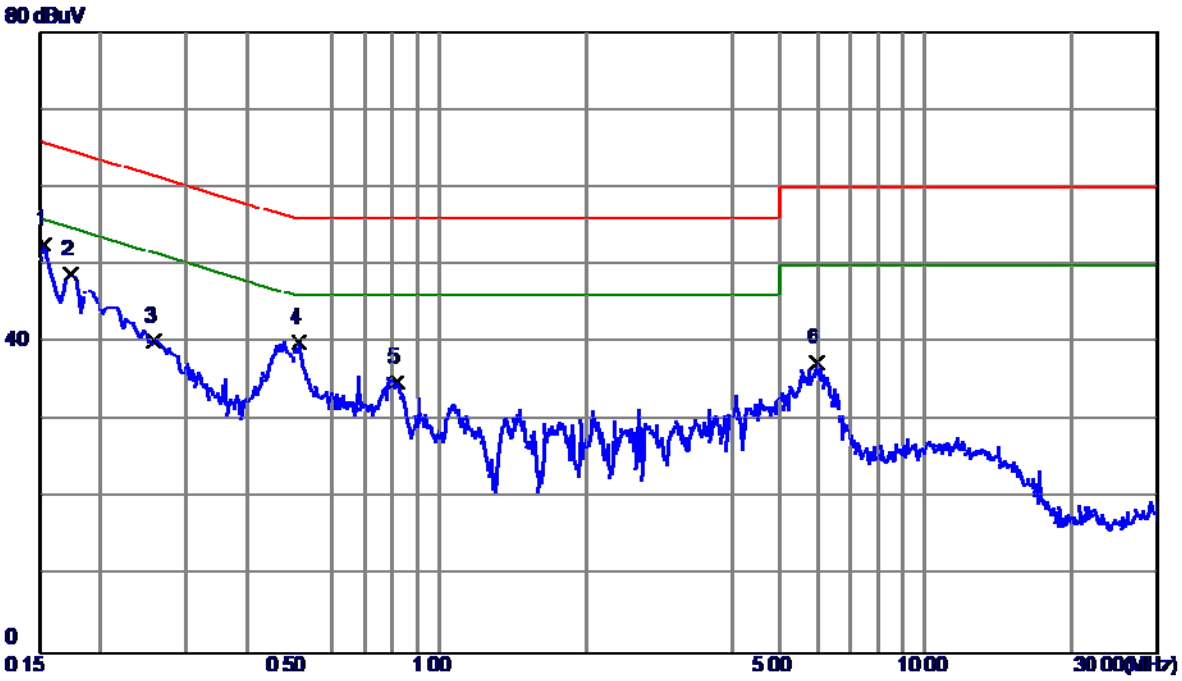




ATTACHMENT A - CONDUCTED EMISSION

Test Mode :	Normal Link

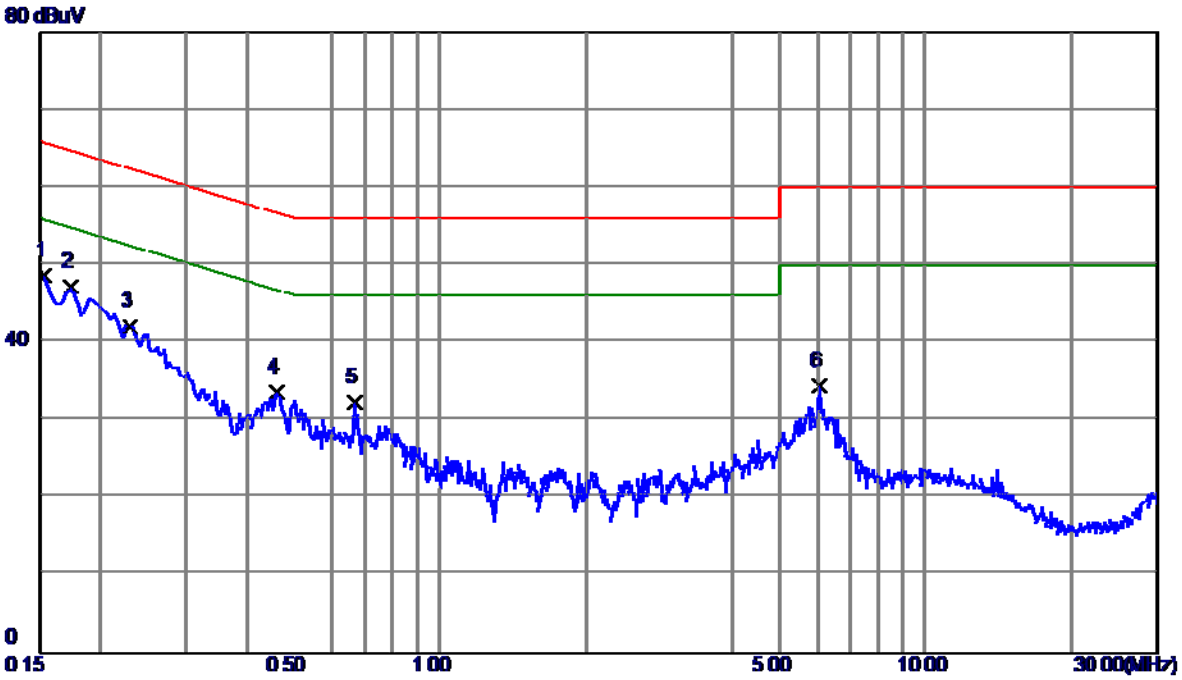
Line



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1539	43.09	9.52	52.61	65.79	-13.18	Peak	
2	0.1740	39.23	9.52	48.75	64.77	-16.02	Peak	
3	0.2580	30.70	9.53	40.23	61.50	-21.27	Peak	
4	0.5140	30.40	9.64	40.04	56.00	-15.96	Peak	
5	0.8180	25.19	9.75	34.94	56.00	-21.06	Peak	
6	5.9860	27.36	10.07	37.43	60.00	-22.57	Peak	

Test Mode :	Normal Link

Neutral



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1539	39.16	9.50	48.66	65.79	-17.13	Peak	
2	0.1740	37.77	9.44	47.21	64.77	-17.56	Peak	
3	0.2300	32.54	9.53	42.07	62.45	-20.38	Peak	
4	0.4620	24.15	9.44	33.59	56.66	-23.07	Peak	
5	0.6700	22.80	9.45	32.25	56.00	-23.75	Peak	
6	6.0460	24.43	9.97	34.40	60.00	-25.60	Peak	

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

Test Mode:	TX B MODE CHANNEL 01

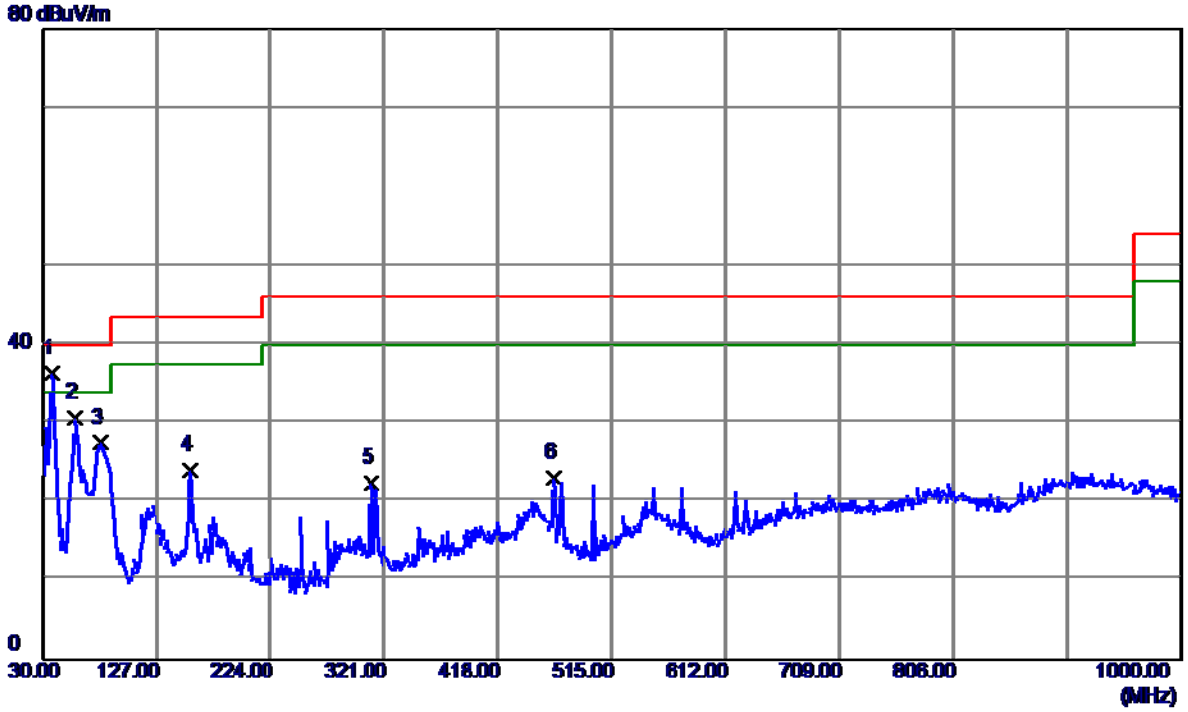
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0107	0°	12.89	24.8890	37.7790	127.0165	-89.2375	AVG
0.0107	0°	14.17	24.8890	39.0590	147.0165	-107.9575	PEAK
0.0283	0°	6.32	23.7743	30.0943	118.5685	-88.4742	AVG
0.0283	0°	8.29	23.7743	32.0643	138.5685	-106.5042	PEAK
0.0365	0°	3.17	23.2550	26.4250	116.3584	-89.9334	AVG
0.0365	0°	5.56	23.2550	28.8150	136.3584	-107.5434	PEAK
0.058	0°	1.06	22.2400	23.3000	112.3357	-89.0357	AVG
0.058	0°	2.38	22.2400	24.6200	132.3357	-107.7157	PEAK
0.6794	0°	18.32	20.3741	38.6941	70.9617	-32.2676	QP
2.9028	0°	22.76	18.9583	41.7183	69.5400	-27.8217	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0122	90°	13.15	24.3000	37.4500	125.8770	-88.4270	AVG
0.0122	90°	14.87	24.3000	39.1700	145.8770	-106.7070	PEAK
0.0263	90°	7.26	23.9010	31.1610	119.2051	-88.0441	AVG
0.0263	90°	8.9	23.9010	32.8010	139.2051	-106.4041	PEAK
0.0431	90°	5.21	22.8370	28.0470	114.9147	-86.8677	AVG
0.0431	90°	6.17	22.8370	29.0070	134.9147	-105.9077	PEAK
0.058	90°	1.5	22.2400	23.7400	112.3357	-88.5957	AVG
0.058	90°	2.82	22.2400	25.0600	132.3357	-107.2757	PEAK
0.6212	90°	22.14	20.1878	42.3278	71.7396	-29.4118	QP
2.0544	90°	24.52	19.4674	43.9874	69.5400	-25.5526	QP

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

Test Mode:	TX B MODE CHANNEL 01

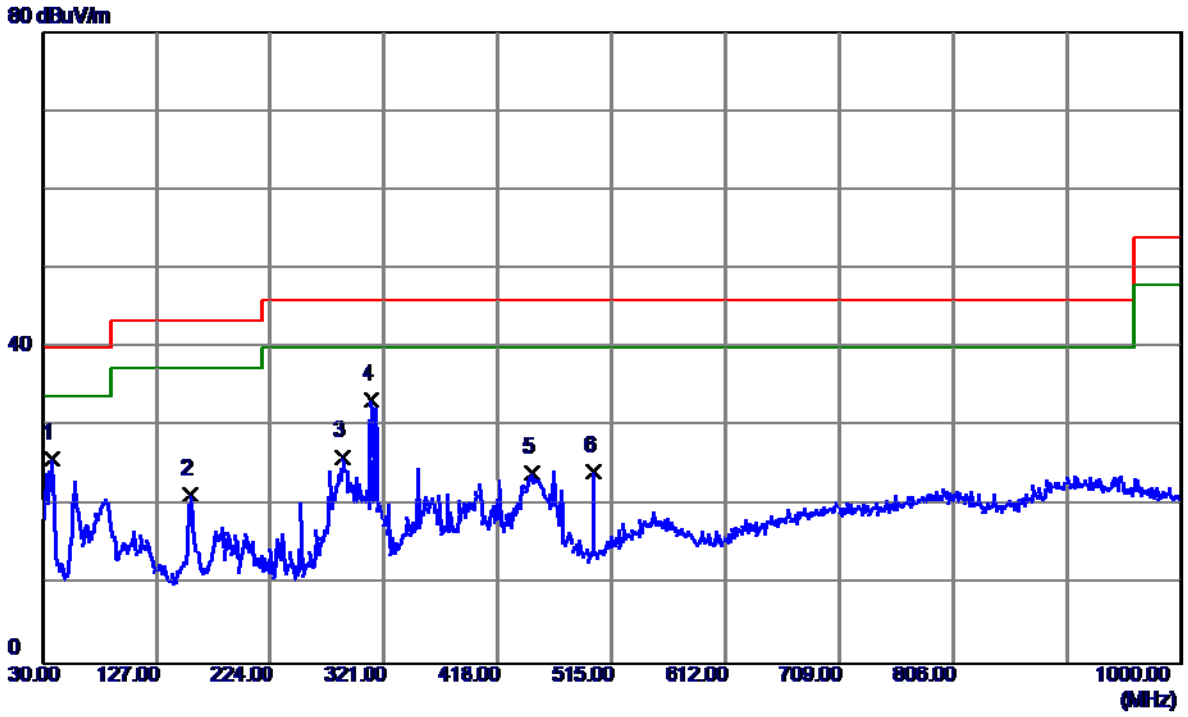
Vertical



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	37.7599	51.25	-14.89	36.36	40.00	-3.64	Peak	
2	58.1300	45.57	-14.80	30.77	40.00	-9.23	Peak	
3	79.9550	44.71	-17.16	27.55	40.00	-12.45	Peak	
4	156.1000	38.00	-14.06	23.94	43.50	-19.56	Peak	
5	310.3299	35.42	-12.99	22.43	46.00	-23.57	Peak	
6	465.5300	35.20	-12.10	23.10	46.00	-22.90	Peak	

Test Mode:	TX B MODE CHANNEL 01

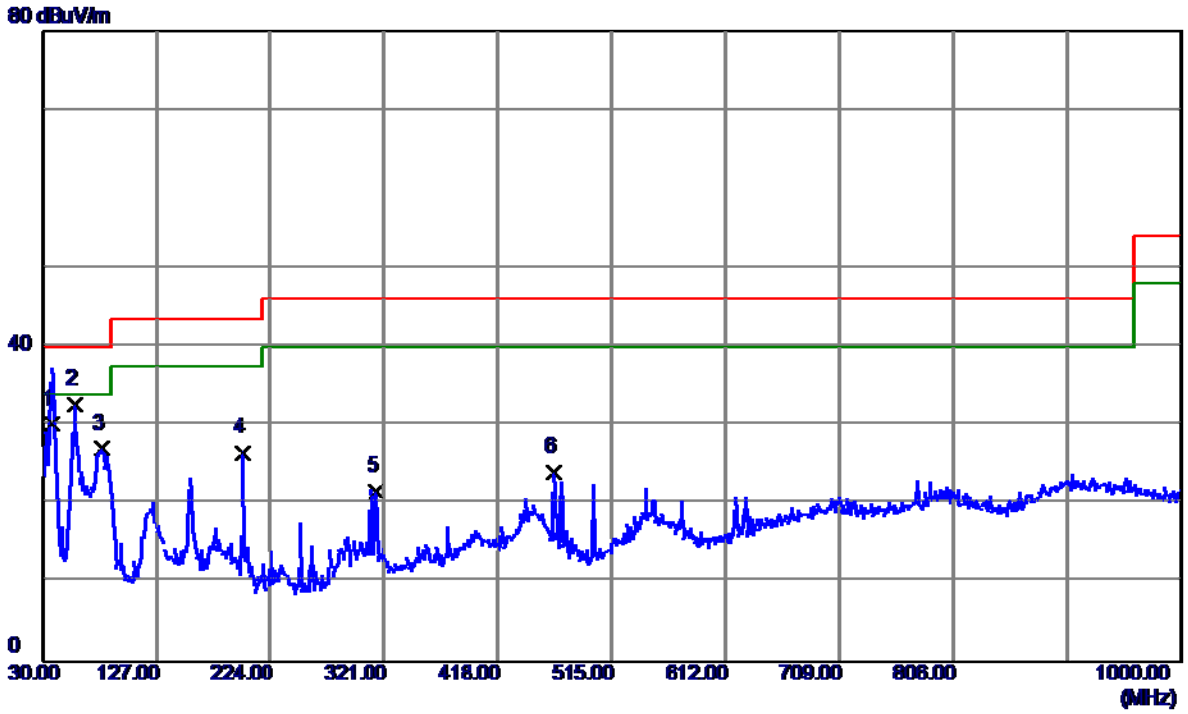
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	37.2750	40.78	-14.79	25.99	40.00	-14.01	Peak	
2	156.1000	35.56	-14.06	21.50	43.50	-22.00	Peak	
3	285.5950	40.21	-14.05	26.16	46.00	-19.84	Peak	
4 *	310.3299	46.46	-12.99	33.47	46.00	-12.53	Peak	
5	446.6150	35.62	-11.44	24.18	46.00	-21.82	Peak	
6	499.9650	37.88	-13.49	24.39	46.00	-21.61	Peak	

Test Mode:	TX B MODE CHANNEL 06

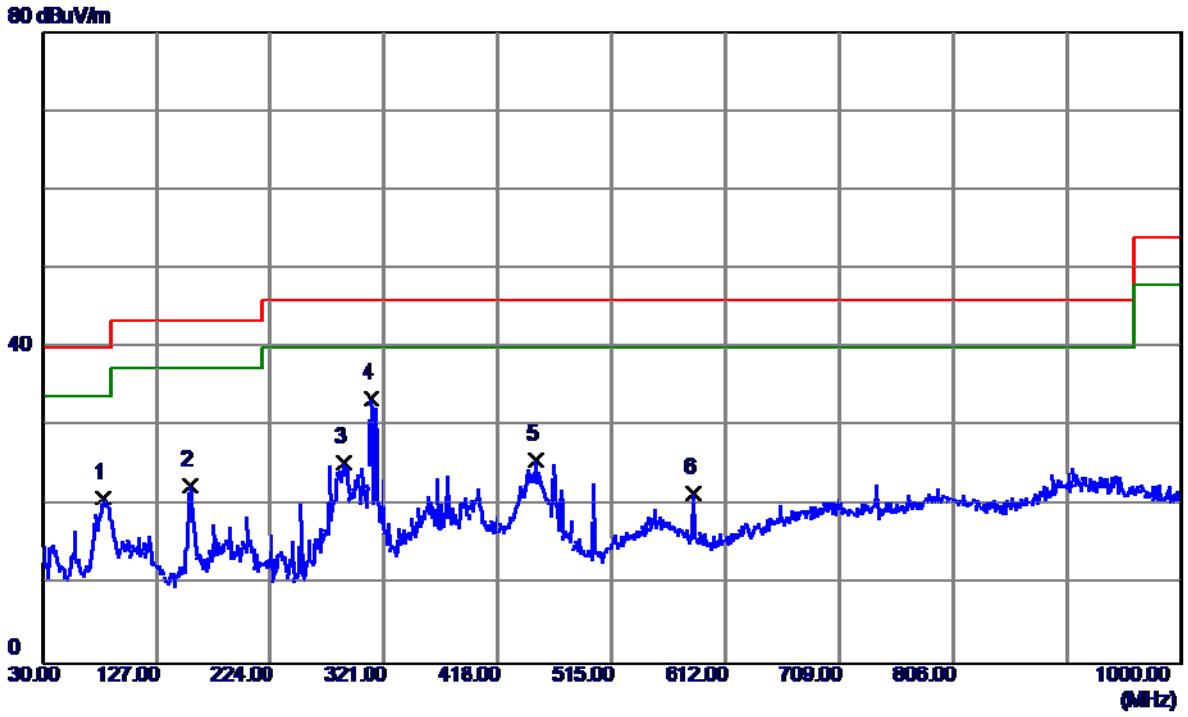
Vertical



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	37.2750	44.95	-14.79	30.16	40.00	-9.84	QP	
2 *	57.6450	47.30	-14.70	32.60	40.00	-7.40	Peak	
3	80.9250	44.39	-17.41	26.98	40.00	-13.02	Peak	
4	200.7200	42.81	-16.33	26.48	43.50	-17.02	Peak	
5	314.6950	34.78	-13.11	21.67	46.00	-24.33	Peak	
6	465.5300	36.17	-12.10	24.07	46.00	-21.93	Peak	

Test Mode:	TX B MODE CHANNEL 06

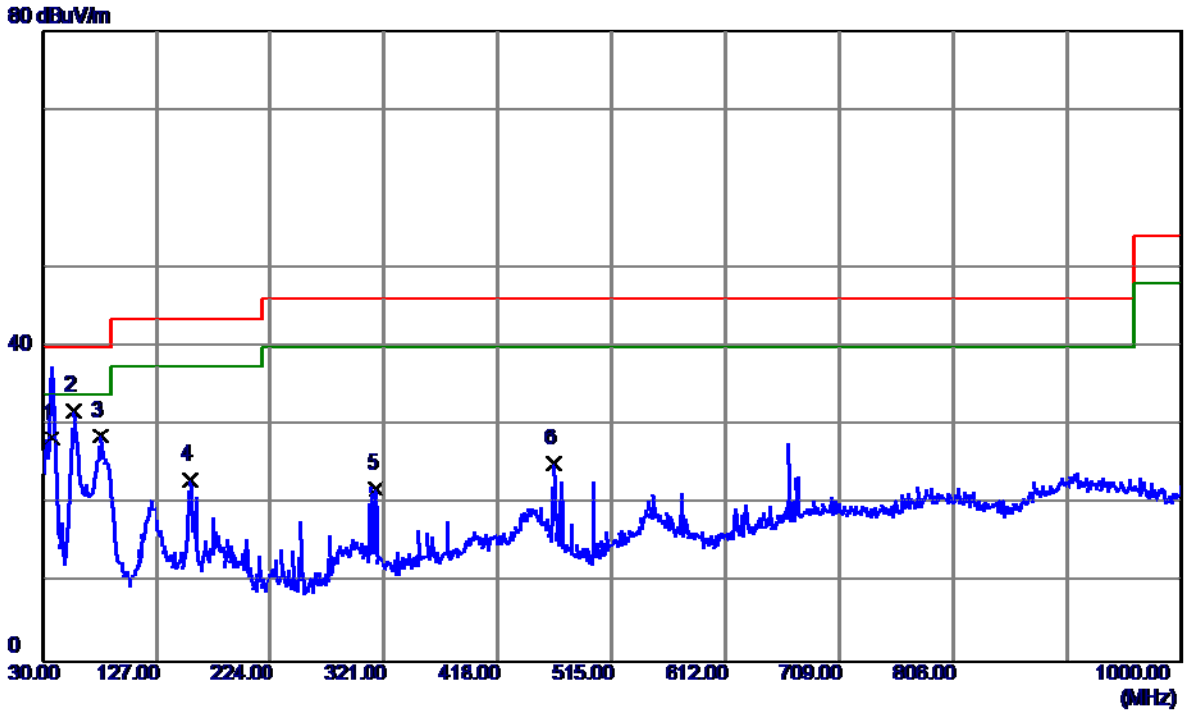
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	81.4100	38.44	-17.55	20.89	40.00	-19.11	Peak	
2	156.1000	36.61	-14.06	22.55	43.50	-20.95	Peak	
3	286.5650	39.49	-13.98	25.51	46.00	-20.49	Peak	
4 *	310.3299	46.53	-12.99	33.54	46.00	-12.46	Peak	
5	450.0100	37.22	-11.48	25.74	46.00	-20.26	Peak	
6	584.8400	32.15	-10.55	21.60	46.00	-24.40	Peak	

Test Mode:	TX B MODE CHANNEL 11

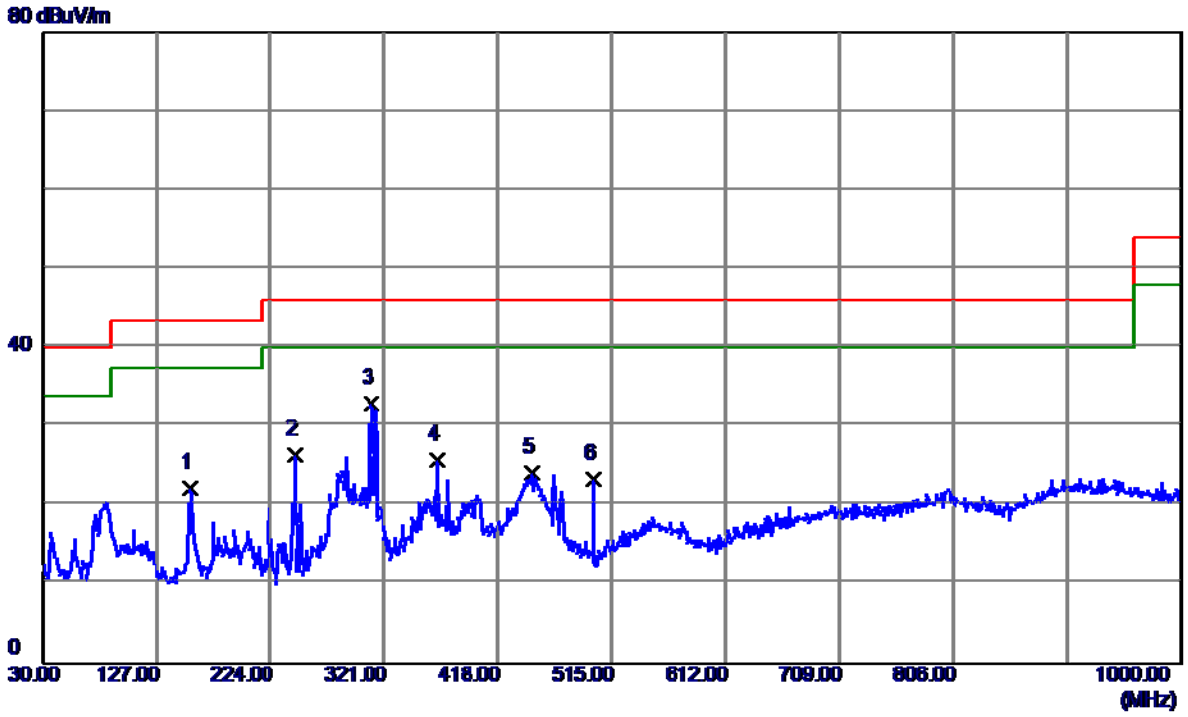
Vertical



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	37.7599	43.28	-14.89	28.39	40.00	-11.61	QP	
2 *	57.1600	46.36	-14.55	31.81	40.00	-8.19	Peak	
3	79.4700	45.80	-17.21	28.59	40.00	-11.41	Peak	
4	156.1000	37.16	-14.06	23.10	43.50	-20.40	Peak	
5	314.6950	35.04	-13.11	21.93	46.00	-24.07	Peak	
6	465.5300	37.20	-12.10	25.10	46.00	-20.90	Peak	

Test Mode:	TX B MODE CHANNEL 11

Horizontal

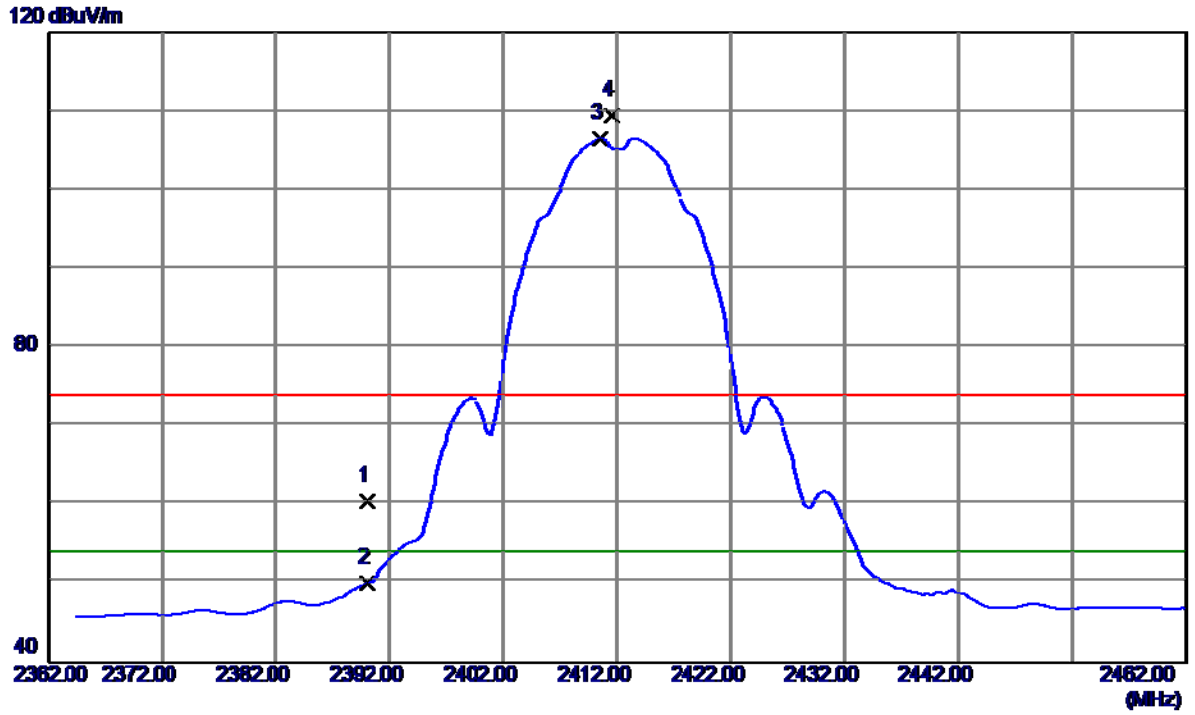


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	156.1000	36.24	-14.06	22.18	43.50	-21.32	Peak	
2	245.3400	42.52	-16.19	26.33	46.00	-19.67	Peak	
3 *	310.3299	45.93	-12.99	32.94	46.00	-13.06	Peak	
4	366.5900	38.75	-13.05	25.70	46.00	-20.30	Peak	
5	446.6150	35.58	-11.44	24.14	46.00	-21.86	Peak	
6	499.9650	36.82	-13.49	23.33	46.00	-22.67	Peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

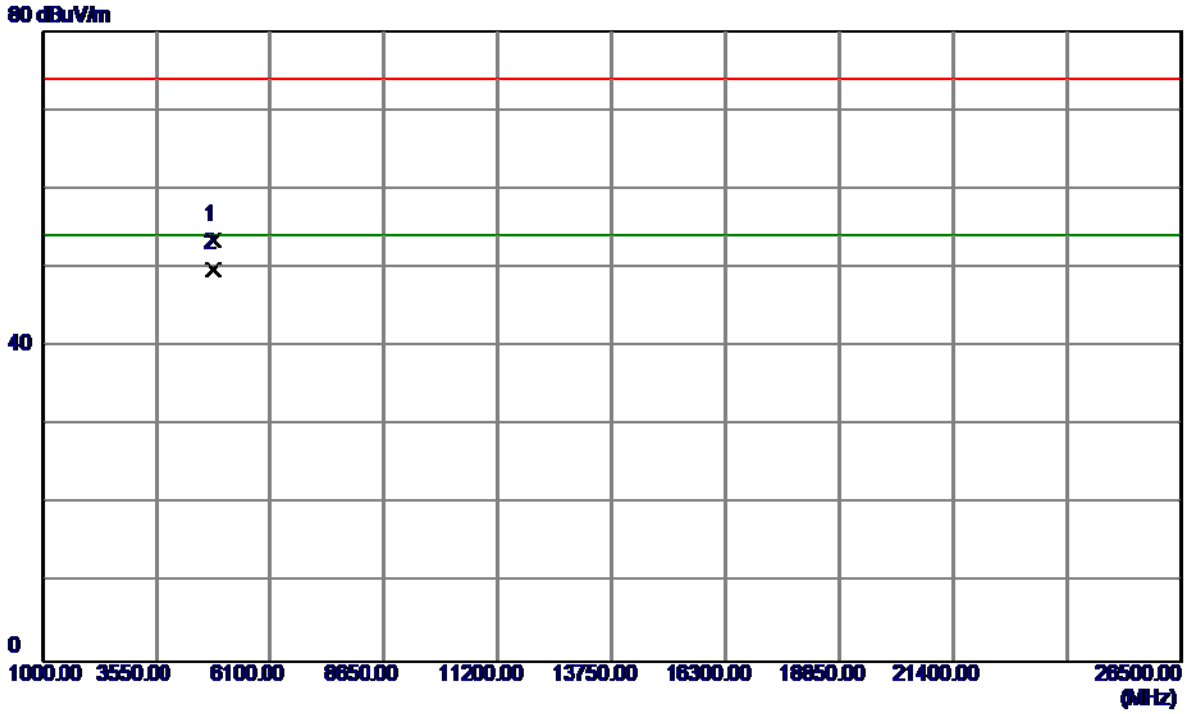
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	27.67	32.77	60.44	74.00	-13.56	Peak	
2	2390.0000	17.36	32.77	50.13	54.00	-3.87	AVG	
3 *	2410.6000	73.63	32.85	106.48	54.00	52.48	AVG	NO LIMIT
4	2411.6000	76.59	32.86	109.45	74.00	35.45	Peak	NO LIMIT

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

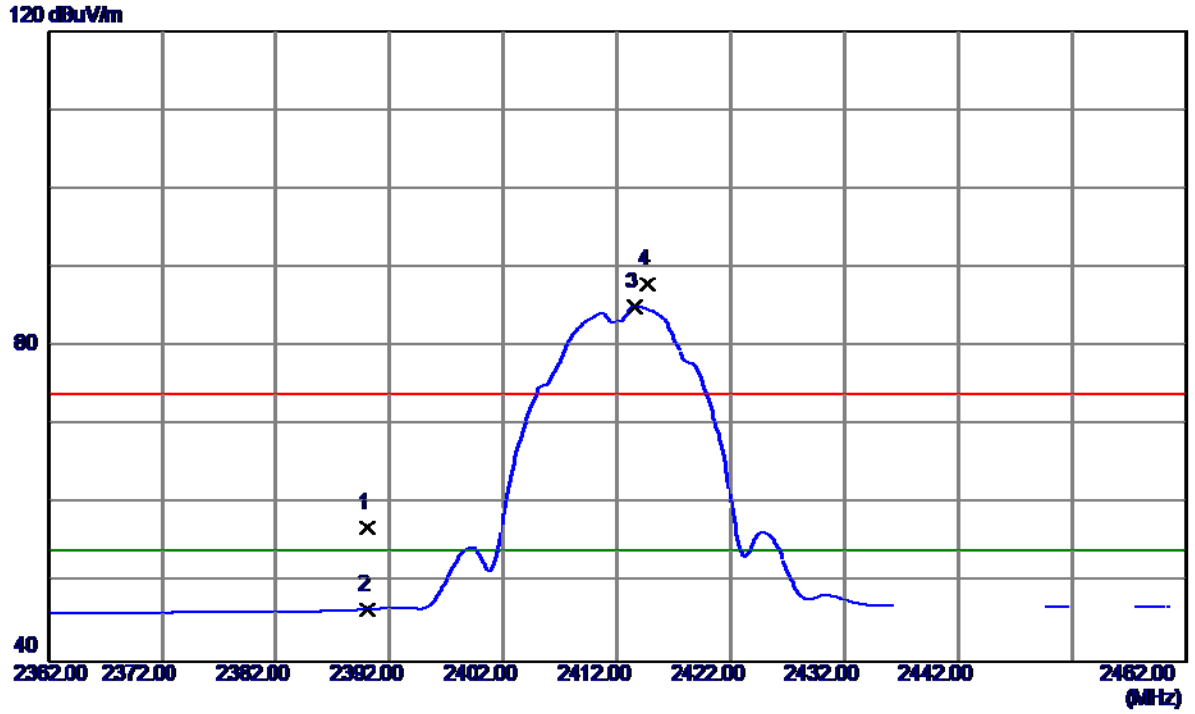
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.8700	48.69	4.69	53.38	74.00	-20.62	Peak	
2 *	4823.9300	45.15	4.69	49.84	54.00	-4.16	AVG	

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

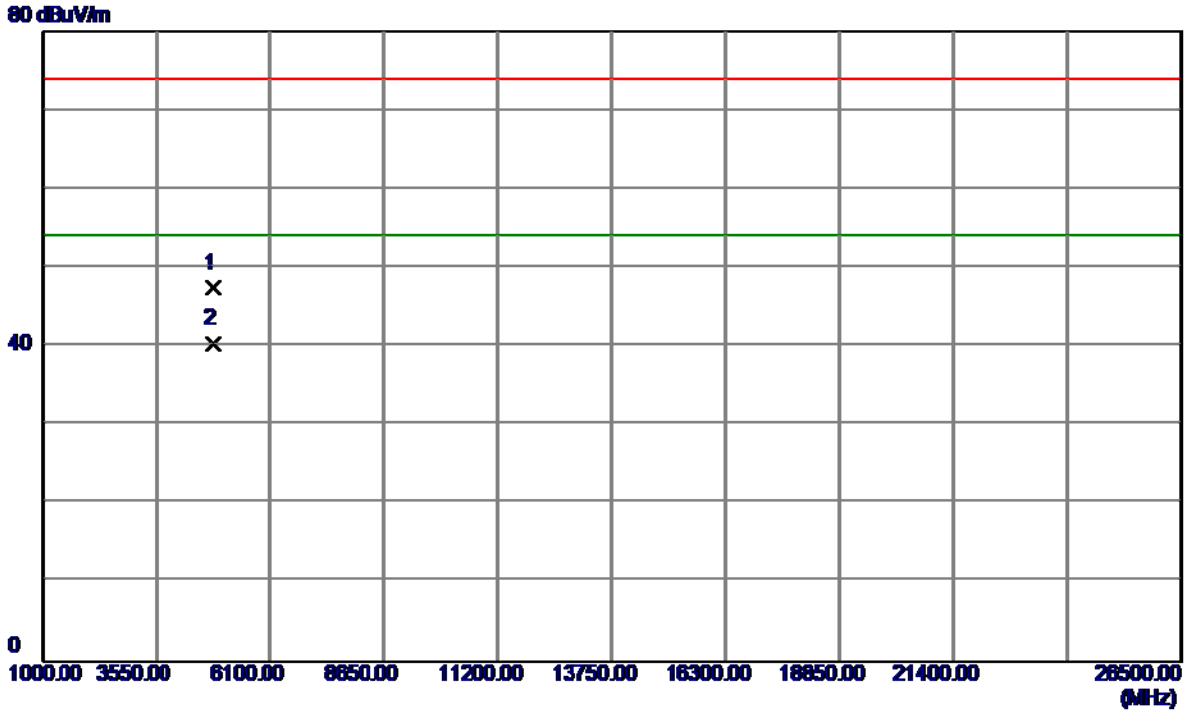
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	24.13	32.77	56.90	74.00	-17.10	Peak	
2	2390.0000	13.75	32.77	46.52	54.00	-7.48	AVG	
3 *	2413.6000	52.17	32.86	85.03	54.00	31.03	AVG	NO LIMIT
4	2414.6500	54.98	32.87	87.85	74.00	13.85	Peak	NO LIMIT

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

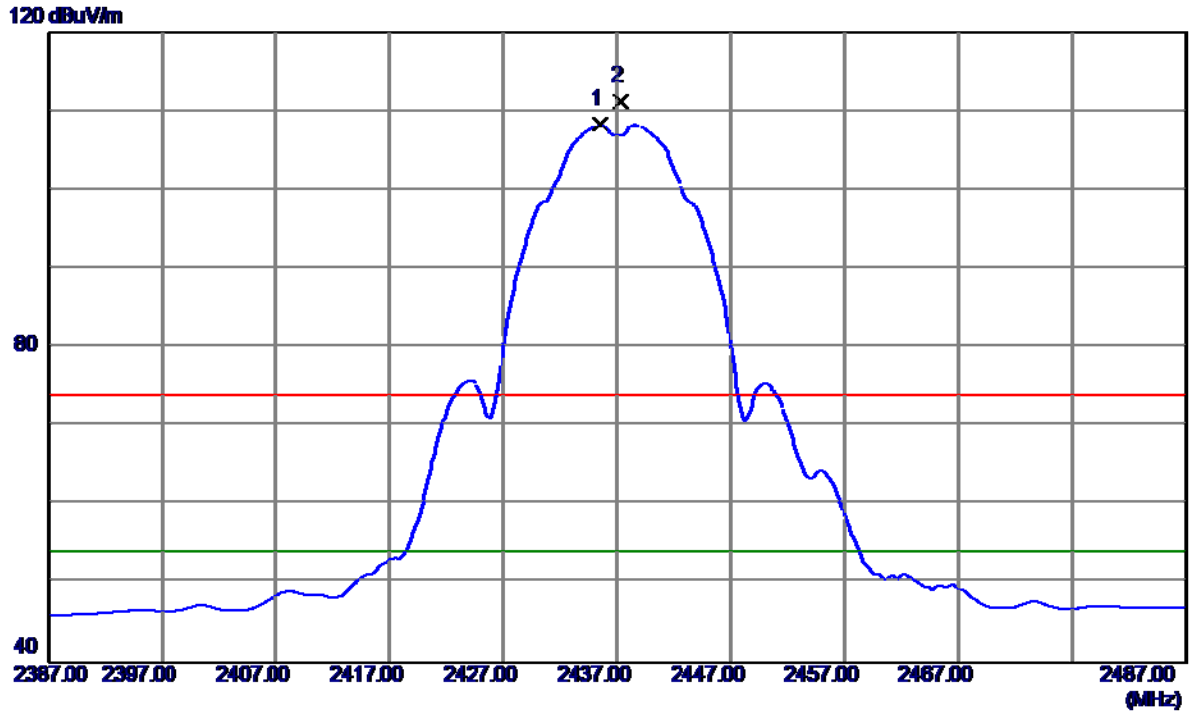
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.7550	42.64	4.69	47.33	74.00	-26.67	Peak	
2 *	4823.9300	35.62	4.69	40.31	54.00	-13.69	AVG	

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

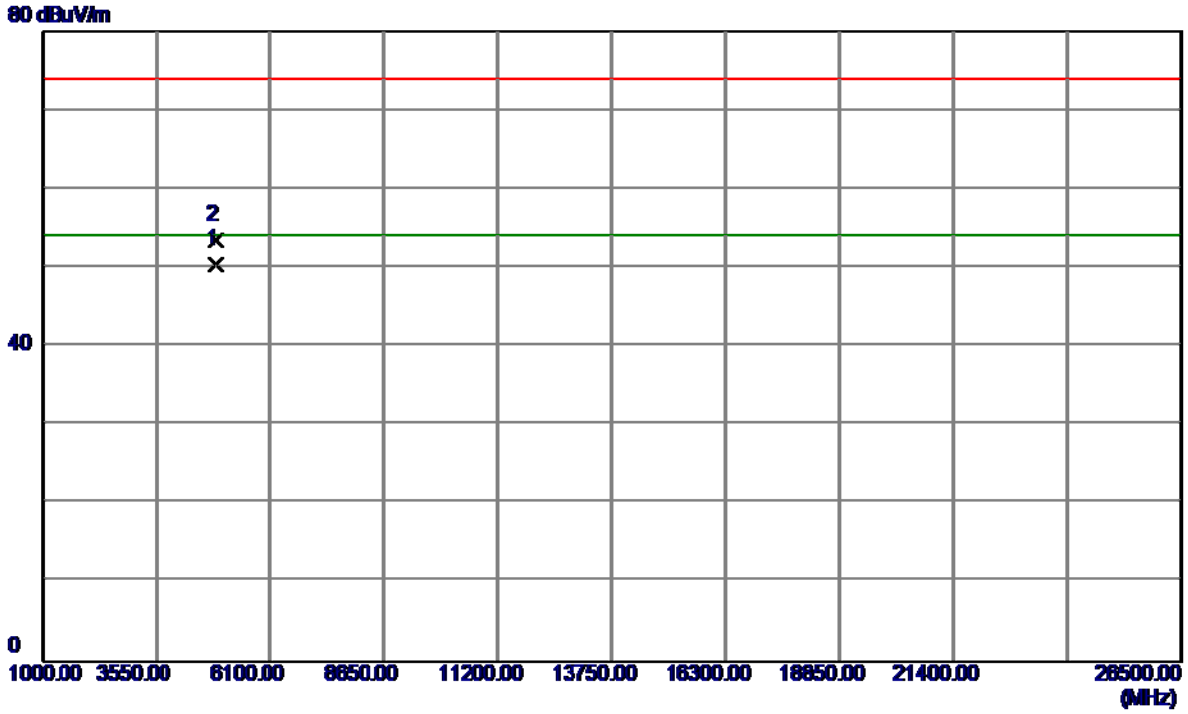
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2435.6000	75.30	32.95	108.25	54.00	54.25	AVG	NO LIMIT
2	2437.3500	78.26	32.96	111.22	74.00	37.22	Peak	NO LIMIT

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

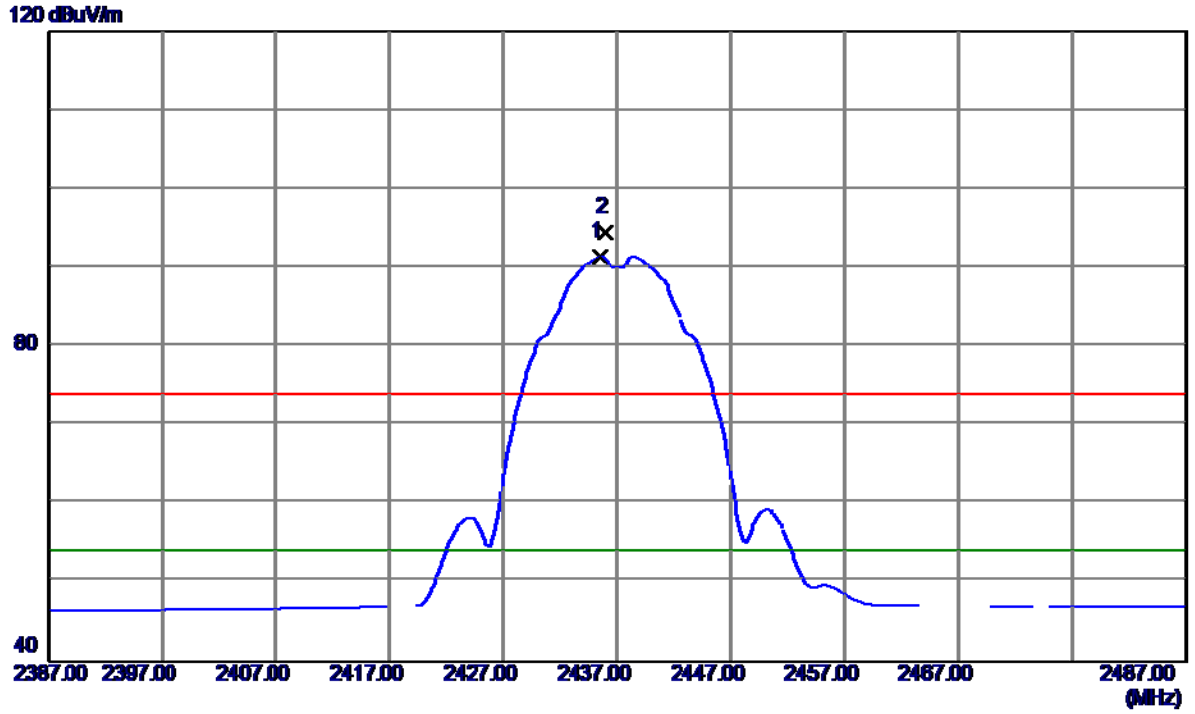
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873.9300	45.51	4.89	50.40	54.00	-3.60	AVG	
2	4874.0600	48.56	4.89	53.45	74.00	-20.55	Peak	

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

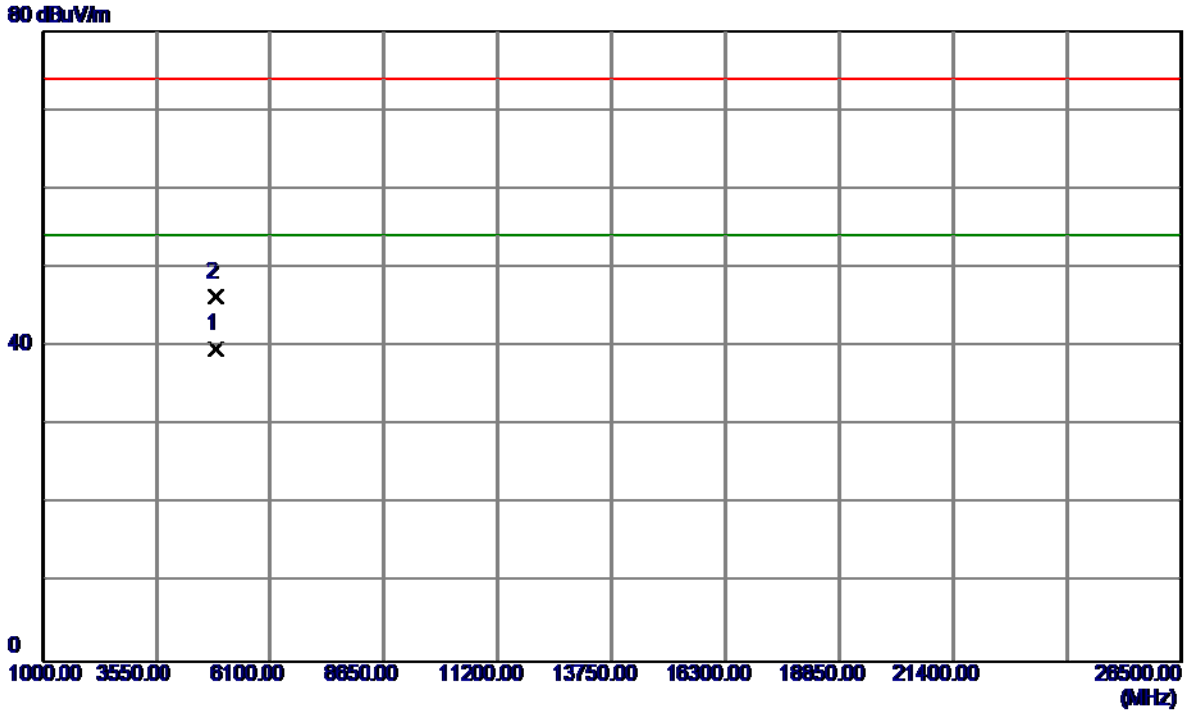
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2435.6000	58.42	32.95	91.37	54.00	37.37	AVG	NO LIMIT
2	2436.0500	61.42	32.96	94.38	74.00	20.38	Peak	NO LIMIT

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

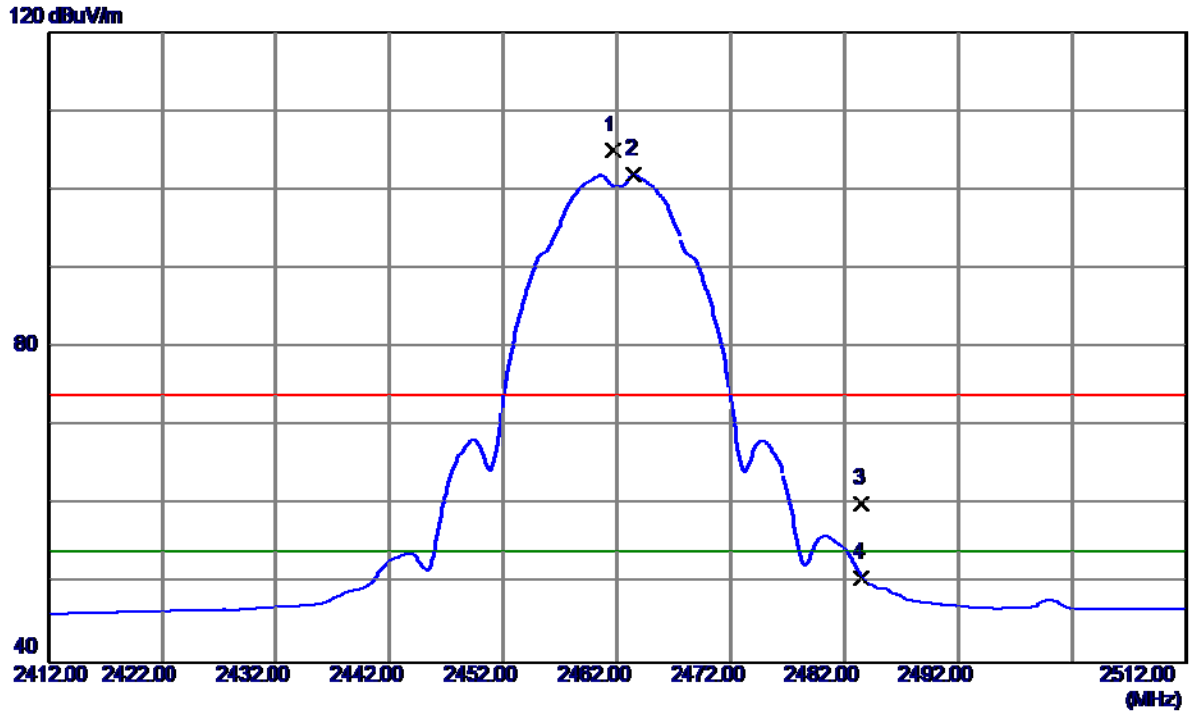
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873.9450	34.80	4.89	39.69	54.00	-14.31	AVG	
2	4874.1050	41.33	4.89	46.22	74.00	-27.78	Peak	

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

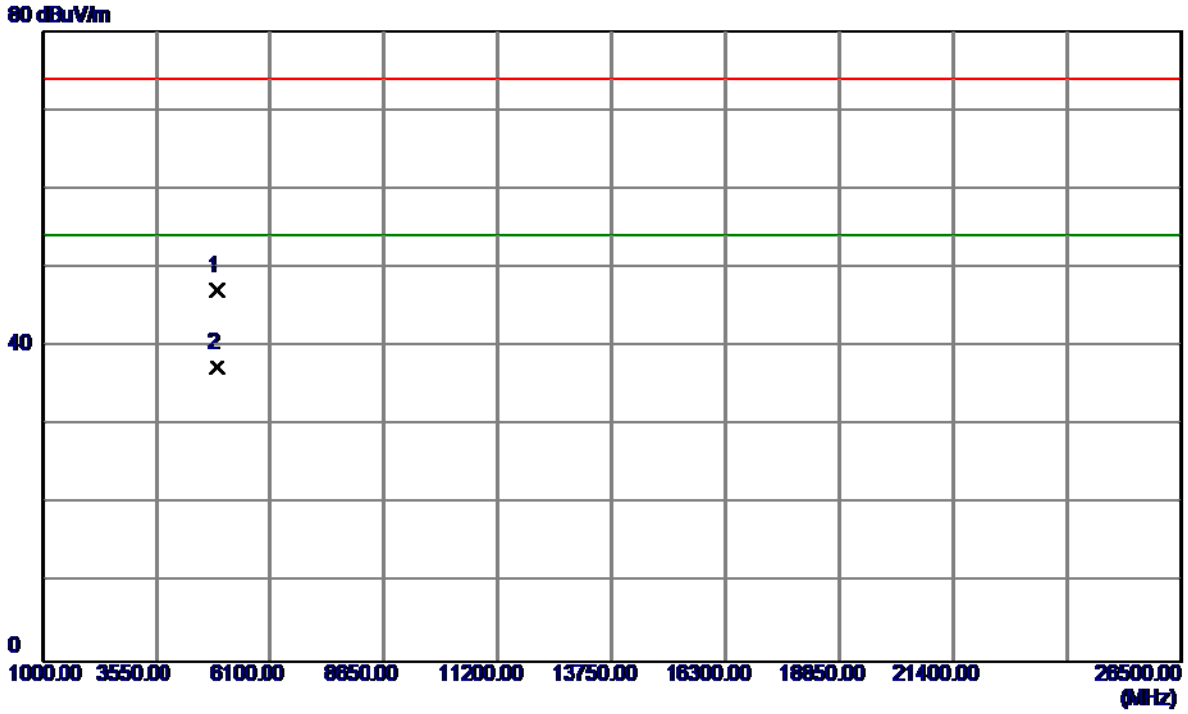
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2461.6500	71.93	33.06	104.99	74.00	30.99	Peak	NO LIMIT
2 *	2463.5000	68.81	33.07	101.88	54.00	47.88	AVG	NO LIMIT
3	2483.5000	26.95	33.15	60.10	74.00	-13.90	Peak	
4	2483.5000	17.57	33.15	50.72	54.00	-3.28	AVG	

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

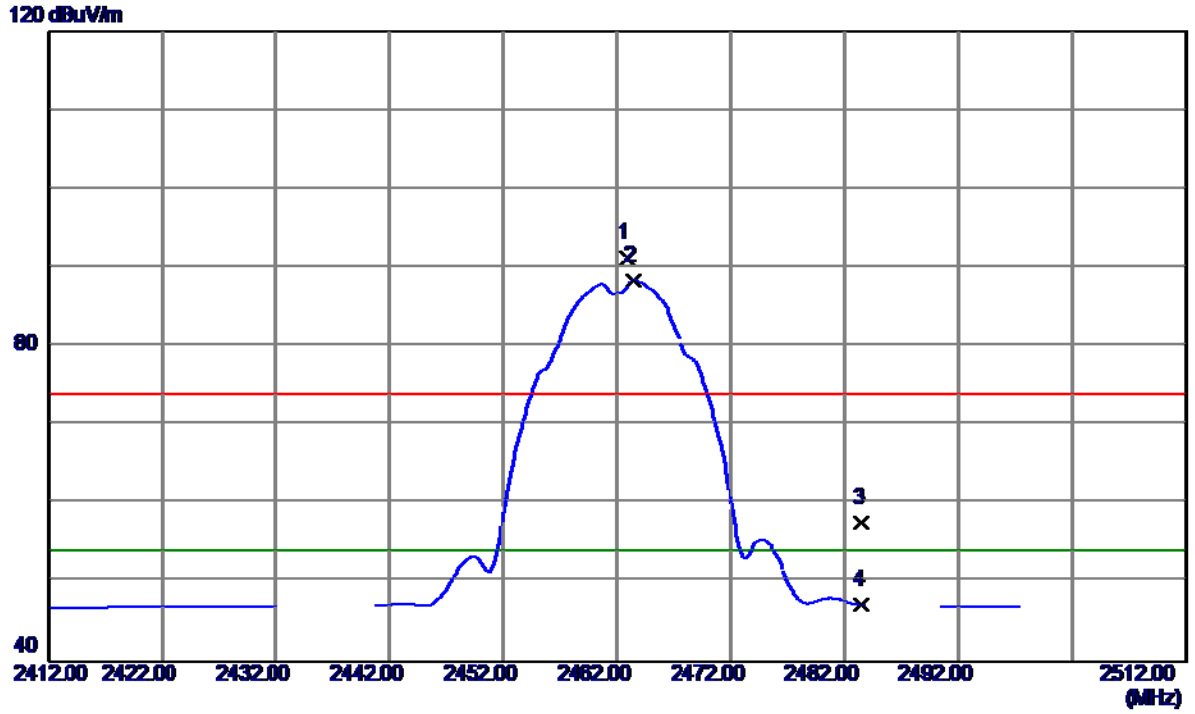
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.8420	41.95	5.08	47.03	74.00	-26.97	Peak	
2 *	4923.9220	32.14	5.08	37.22	54.00	-16.78	AVG	

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

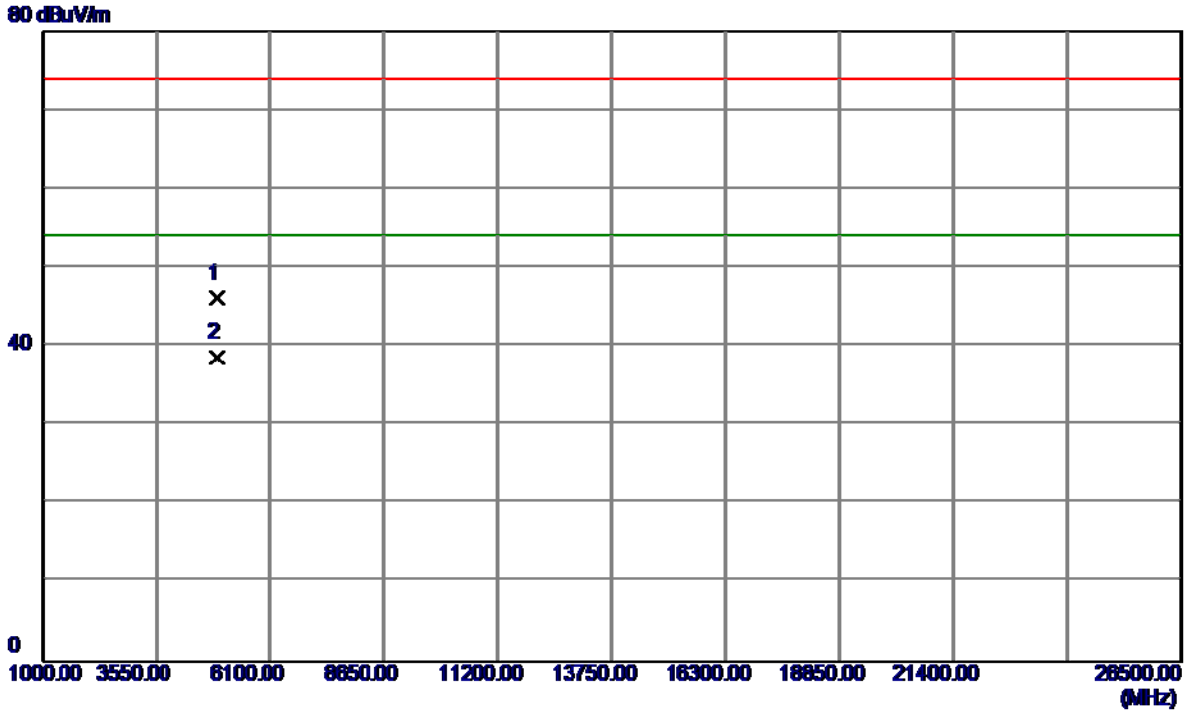
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2462.8500	58.10	33.07	91.17	74.00	17.17	Peak	NO LIMIT
2 *	2463.4500	55.21	33.07	88.28	54.00	34.28	AVG	NO LIMIT
3	2483.5000	24.42	33.15	57.57	74.00	-16.43	Peak	
4	2483.5000	13.99	33.15	47.14	54.00	-6.86	AVG	

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

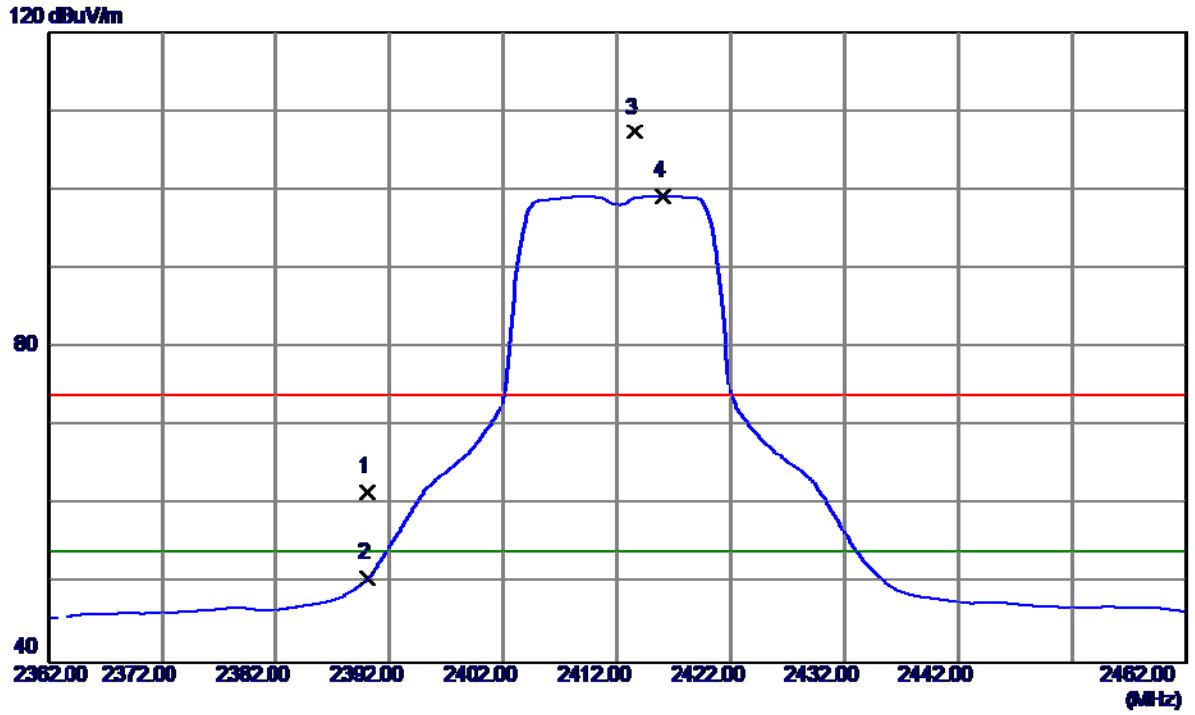
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.6600	41.03	5.08	46.11	74.00	-27.89	Peak	
2 *	4923.9300	33.42	5.08	38.50	54.00	-15.50	AVG	

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

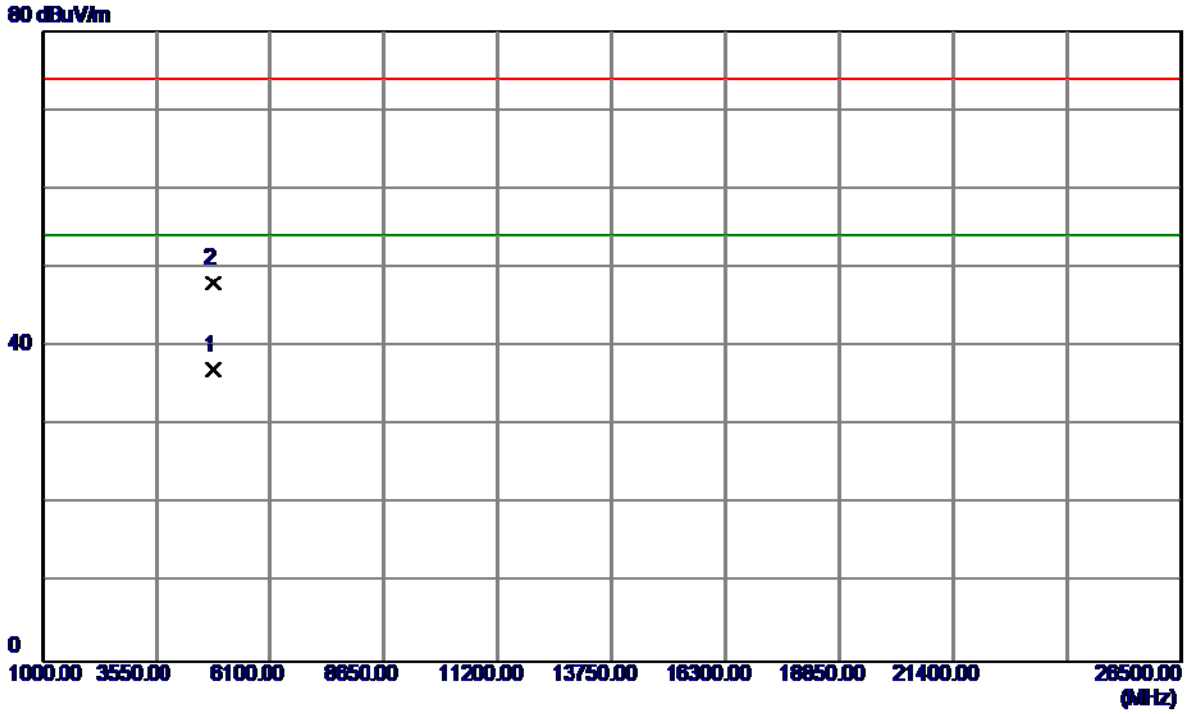
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	28.87	32.77	61.64	74.00	-12.36	Peak	
2	2390.0000	17.93	32.77	50.70	54.00	-3.30	AVG	
3	2413.5500	74.42	32.86	107.28	74.00	33.28	Peak	NO LIMIT
4 *	2416.0000	66.39	32.87	99.26	54.00	45.26	AVG	NO LIMIT

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

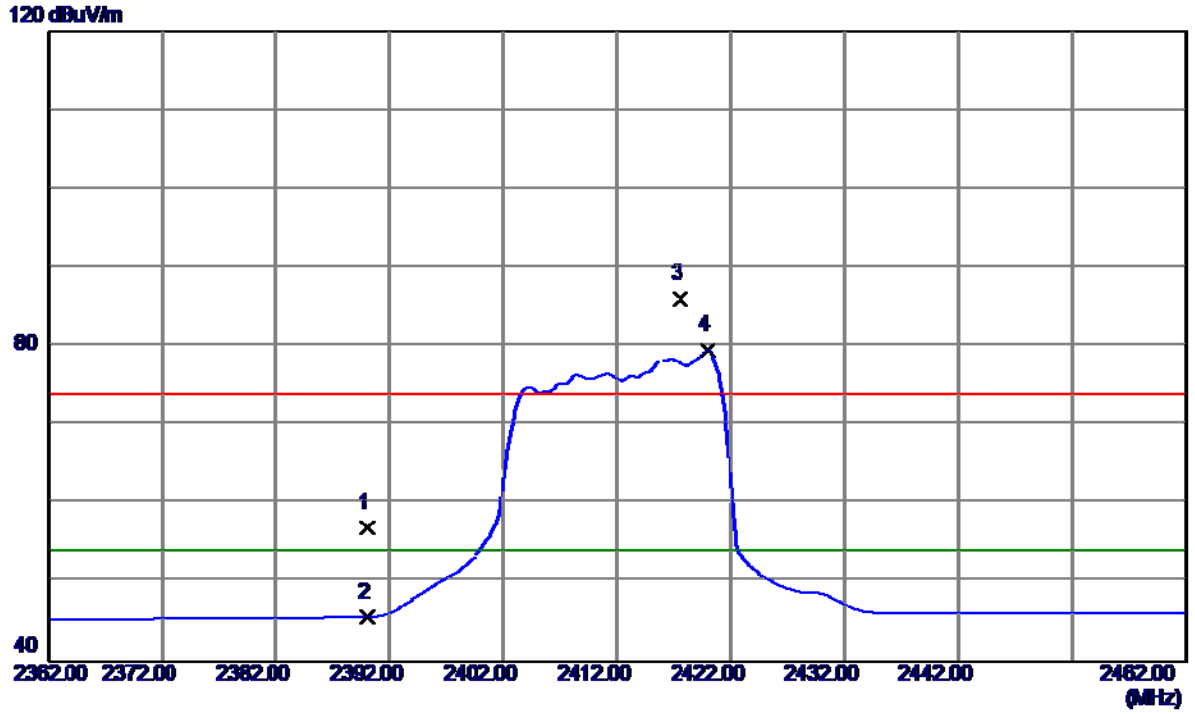
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823.9220	32.24	4.69	36.93	54.00	-17.07	AVG	
2	4825.0170	43.32	4.70	48.02	74.00	-25.98	Peak	

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

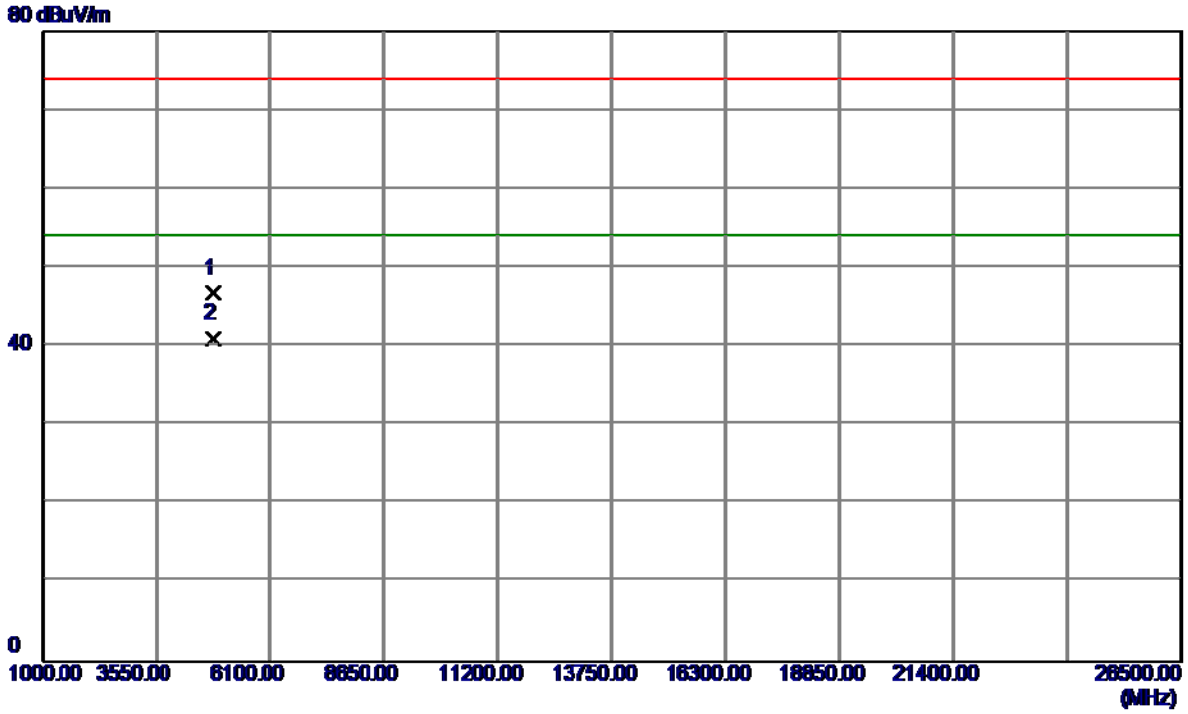
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	24.20	32.77	56.97	74.00	-17.03	Peak	
2	2390.0000	12.84	32.77	45.61	54.00	-8.39	AVG	
3	2417.5500	53.12	32.88	86.00	74.00	12.00	Peak	NO LIMIT
4 *	2420.0000	46.60	32.89	79.49	54.00	25.49	AVG	NO LIMIT

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

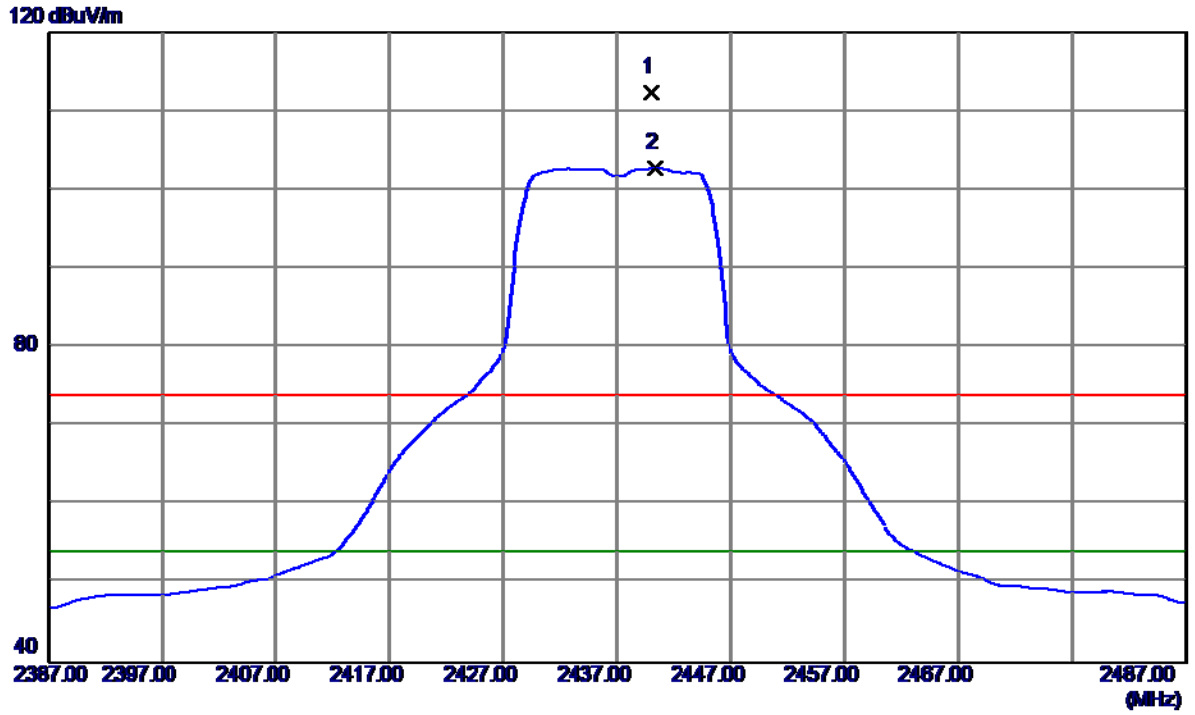
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.8200	41.98	4.69	46.67	74.00	-27.33	Peak	
2 *	4823.9800	36.20	4.69	40.89	54.00	-13.11	AVG	

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

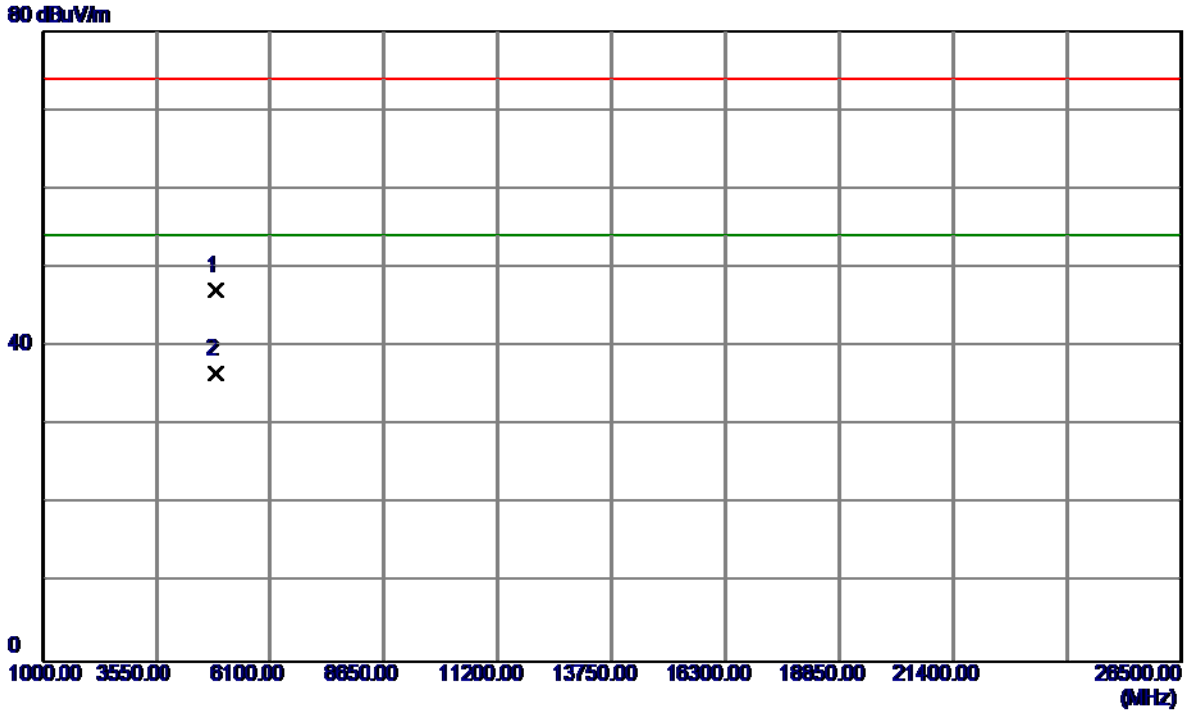
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2440.0000	79.35	32.97	112.32	74.00	38.32	Peak	NO LIMIT
2 *	2440.3500	69.74	32.97	102.71	54.00	48.71	AVG	NO LIMIT

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

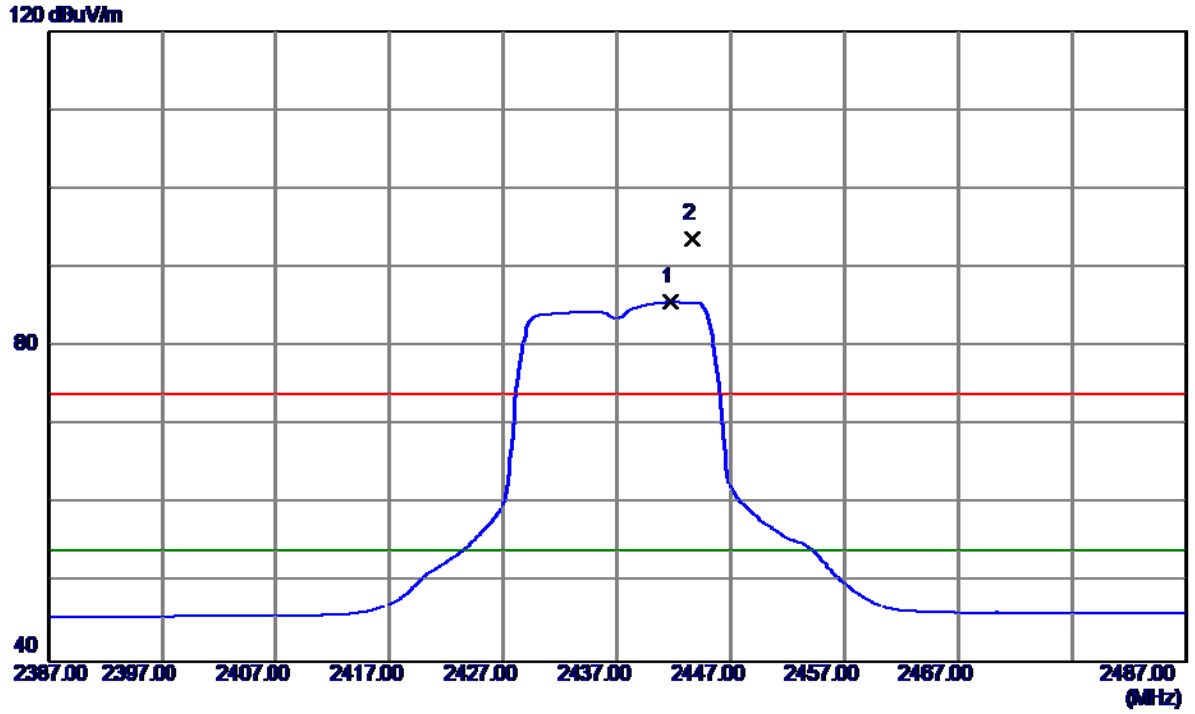
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.8350	42.13	4.89	47.02	74.00	-26.98	Peak	
2 *	4873.9450	31.66	4.89	36.55	54.00	-17.45	AVG	

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

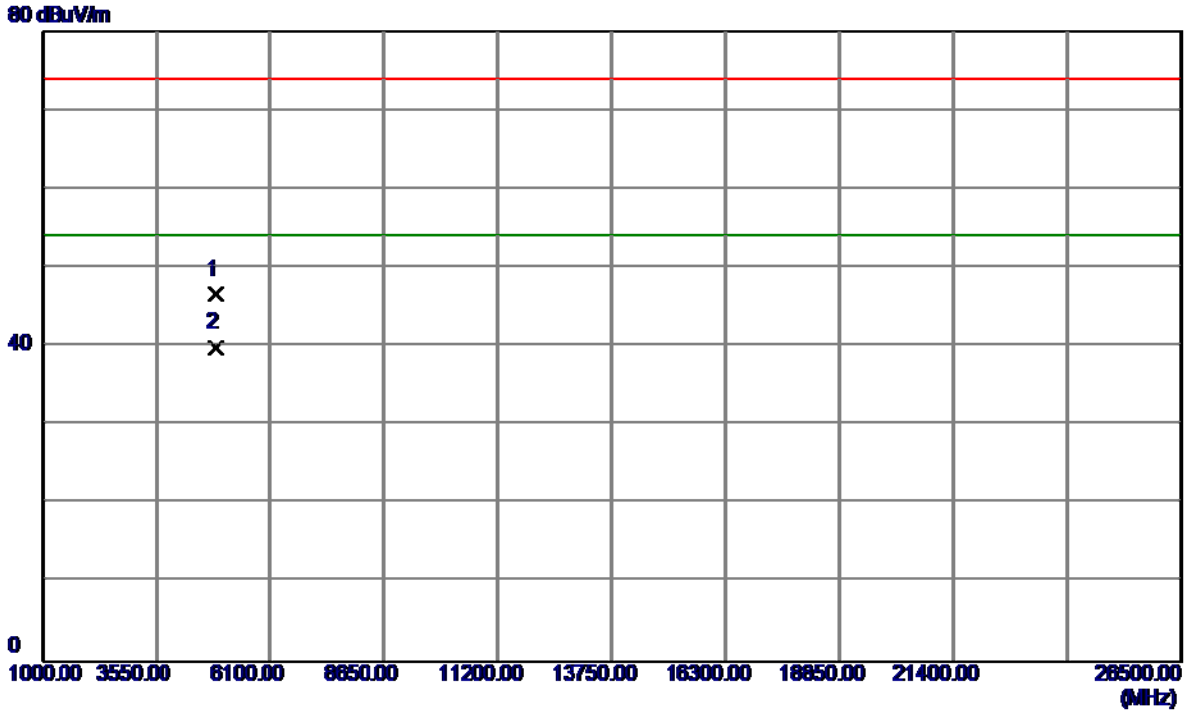
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2441.7000	52.56	32.98	85.54	54.00	31.54	AVG	NO LIMIT
2	2443.7000	60.57	32.99	93.56	74.00	19.56	Peak	NO LIMIT

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

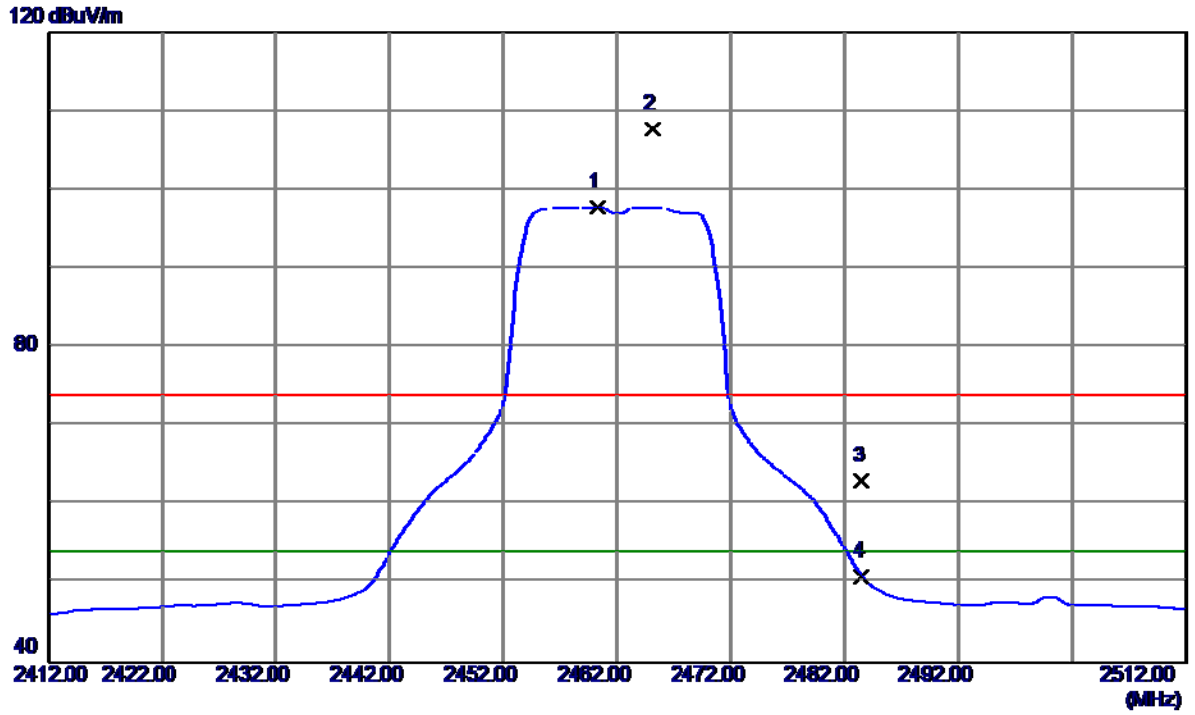
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.7200	41.62	4.89	46.51	74.00	-27.49	Peak	
2 *	4873.9400	34.96	4.89	39.85	54.00	-14.15	AVG	

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

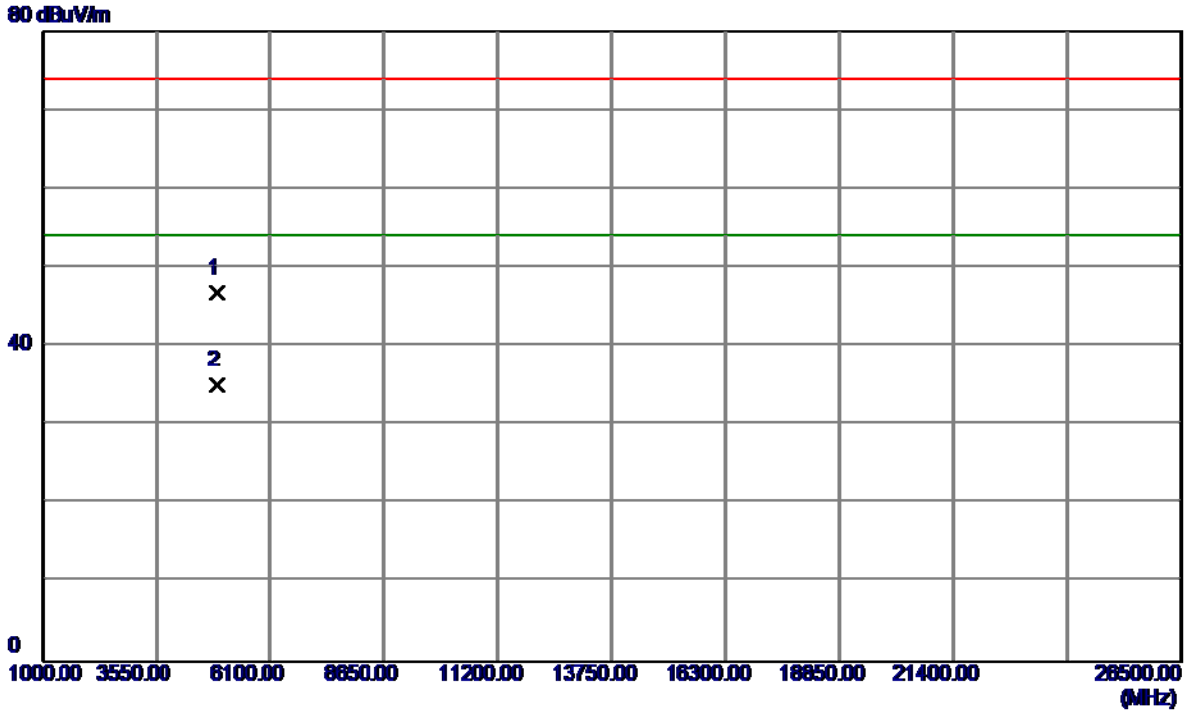
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2460.3500	64.74	33.06	97.80	54.00	43.80	AVG	NO LIMIT
2	2465.1000	74.62	33.08	107.70	74.00	33.70	Peak	NO LIMIT
3	2483.5000	29.96	33.15	63.11	74.00	-10.89	Peak	
4	2483.5000	17.73	33.15	50.88	54.00	-3.12	AVG	

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

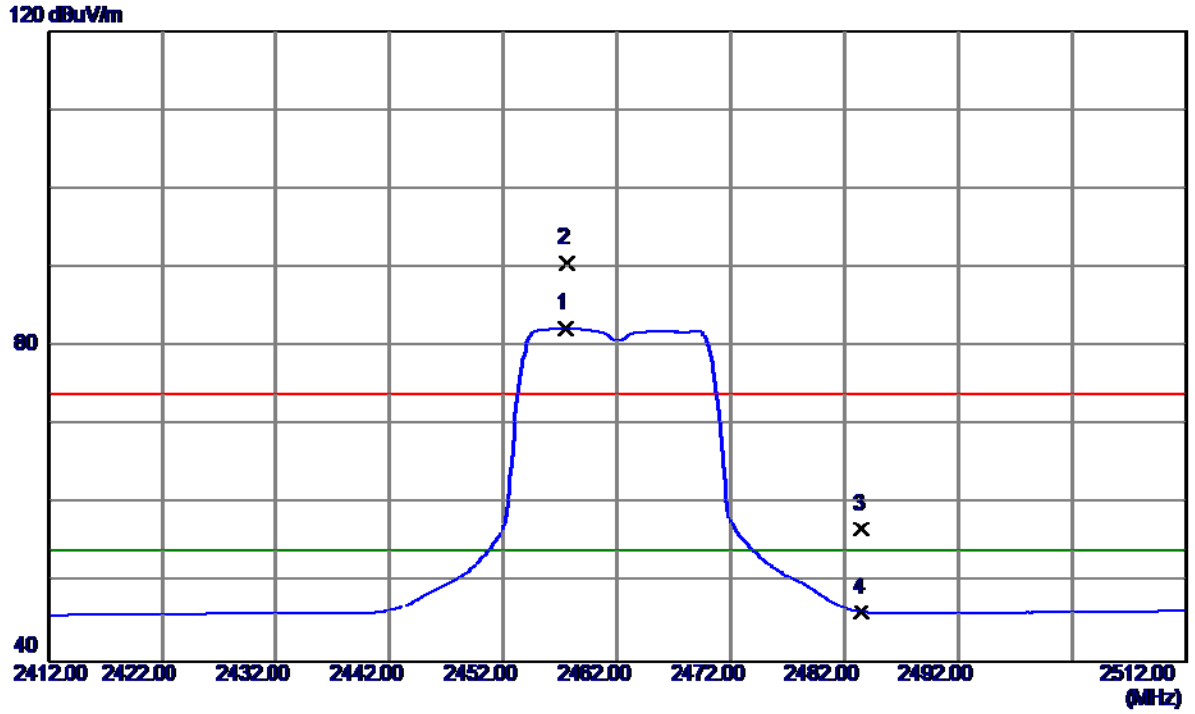
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.7000	41.61	5.08	46.69	74.00	-27.31	Peak	
2 *	4923.9080	30.01	5.08	35.09	54.00	-18.91	AVG	

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

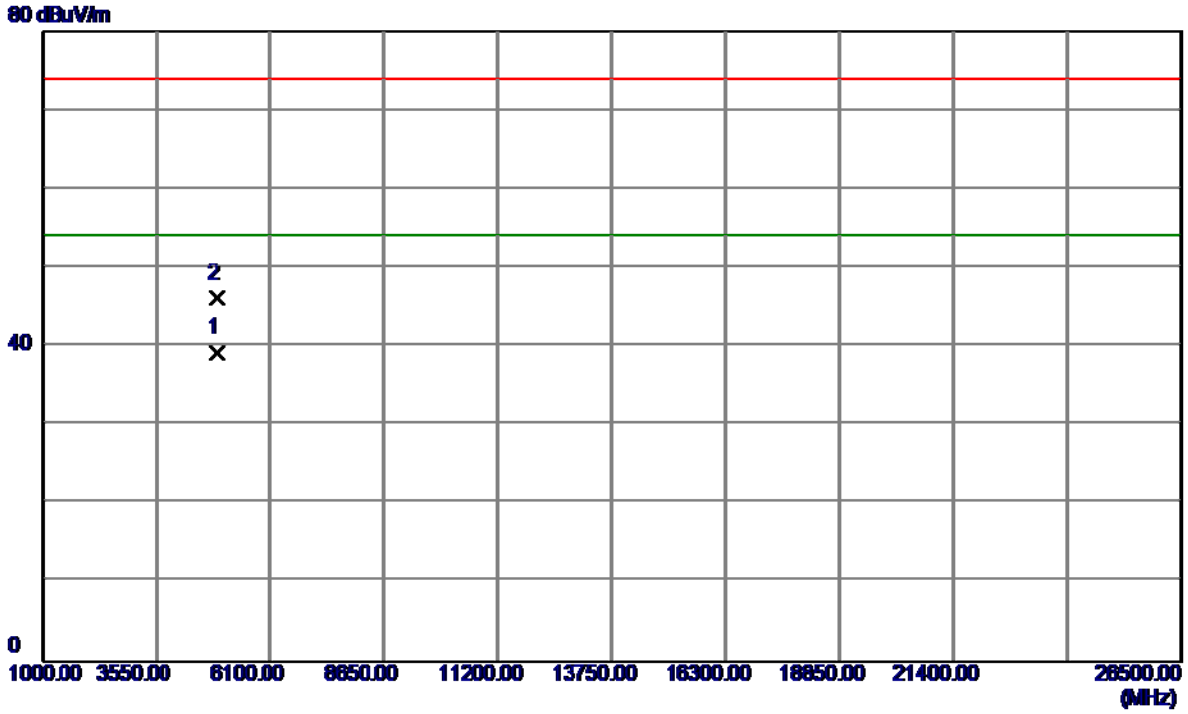
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2457.4000	49.19	33.04	82.23	54.00	28.23	AVG	NO LIMIT
2	2457.5500	57.46	33.05	90.51	74.00	16.51	Peak	NO LIMIT
3	2483.5000	23.67	33.15	56.82	74.00	-17.18	Peak	
4	2483.5000	13.06	33.15	46.21	54.00	-7.79	AVG	

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

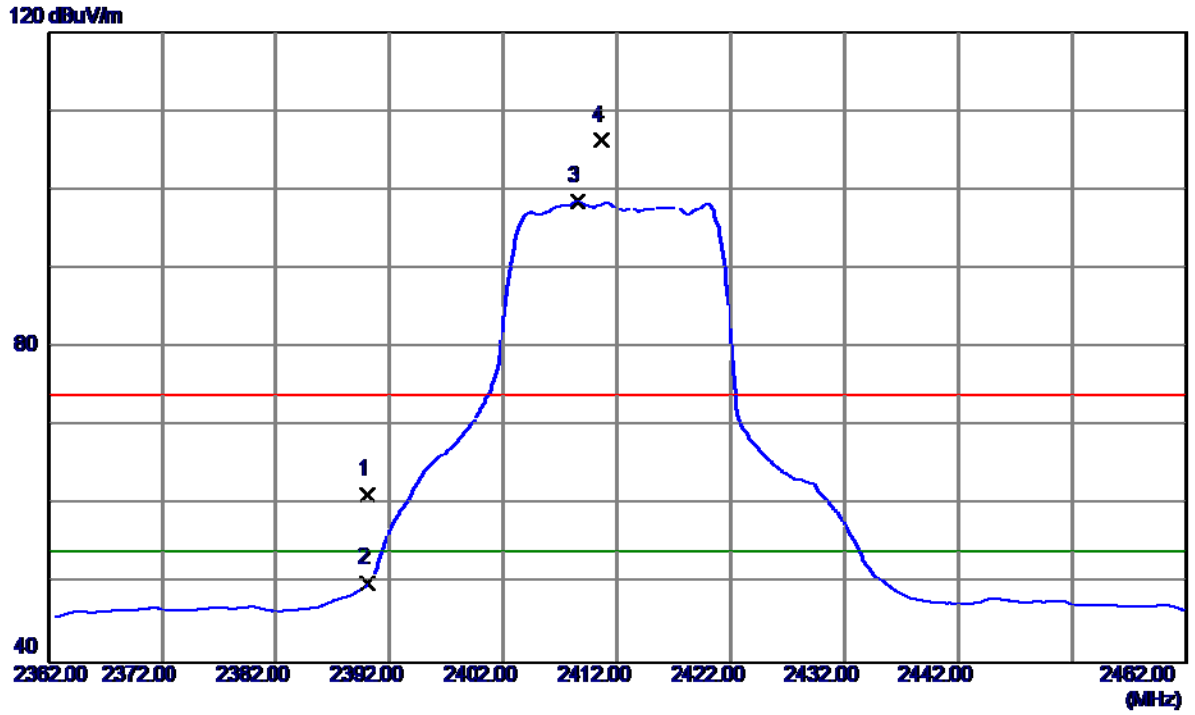
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923.9400	34.05	5.08	39.13	54.00	-14.87	AVG	
2	4924.1100	41.00	5.08	46.08	74.00	-27.92	Peak	

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

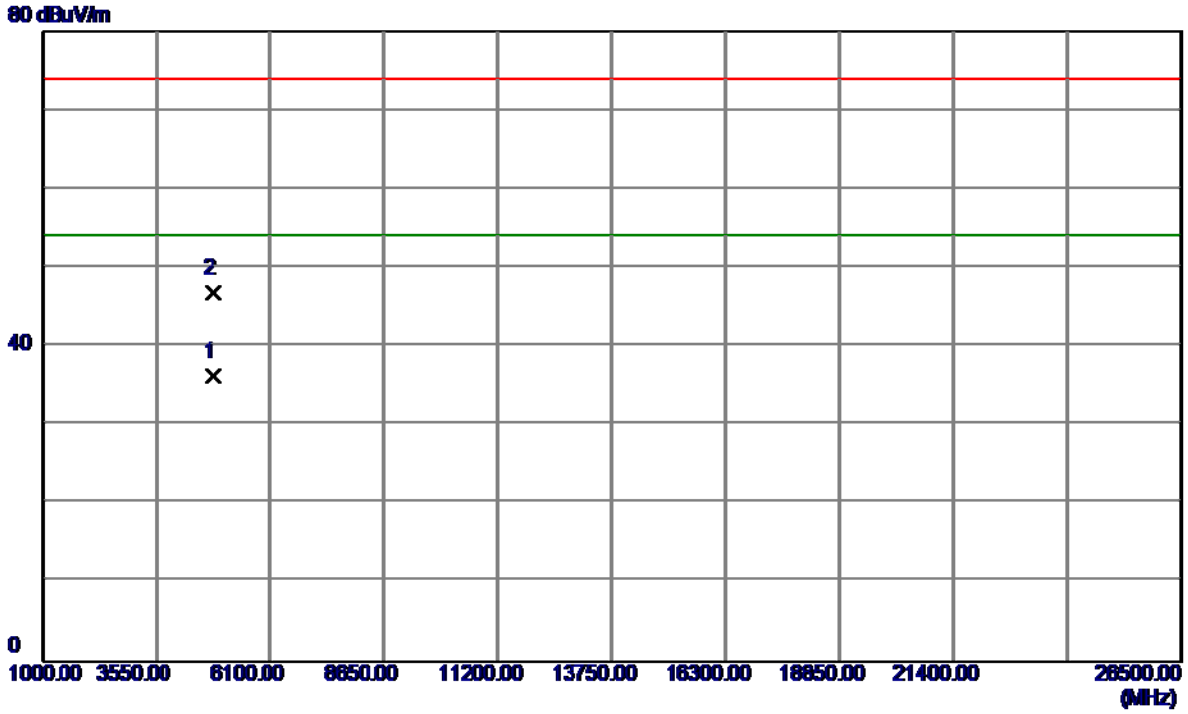
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	28.55	32.77	61.32	74.00	-12.68	Peak	
2	2390.0000	17.34	32.77	50.11	54.00	-3.89	AVG	
3 *	2408.5000	65.67	32.84	98.51	54.00	44.51	AVG	NO LIMIT
4	2410.7000	73.43	32.85	106.28	74.00	32.28	Peak	NO LIMIT

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

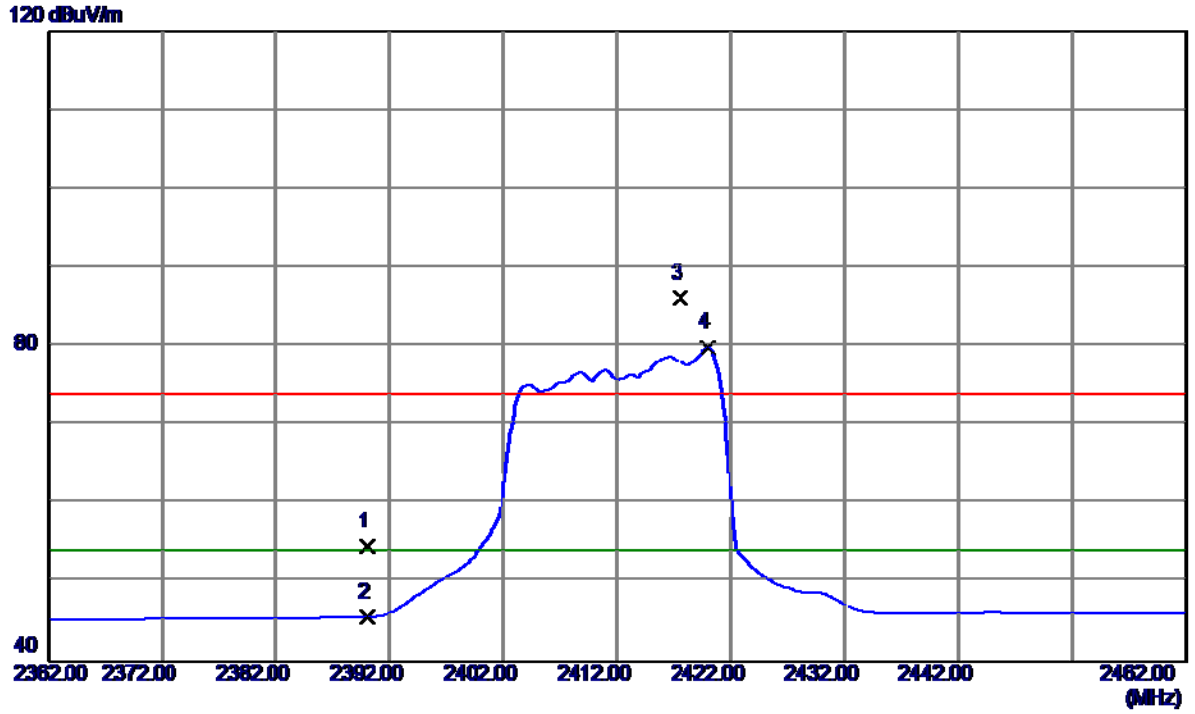
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823.9430	31.47	4.69	36.16	54.00	-17.84	AVG	
2	4824.1250	42.08	4.69	46.77	74.00	-27.23	Peak	

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

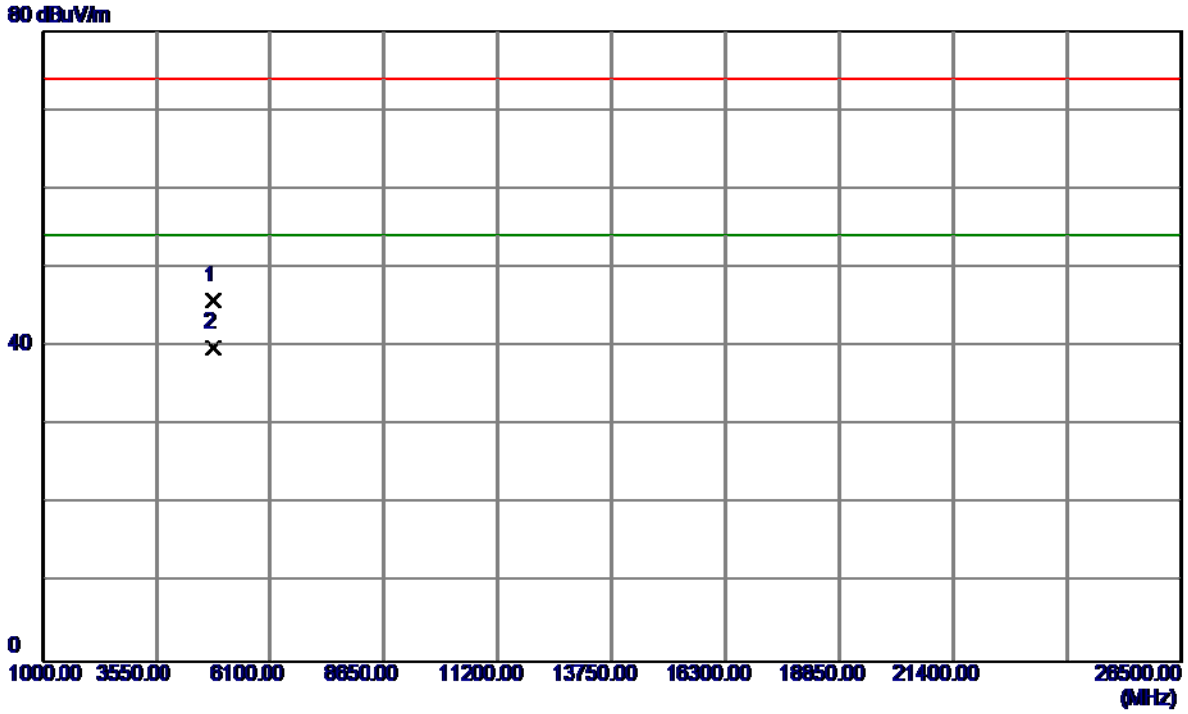
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	21.73	32.77	54.50	74.00	-19.50	Peak	
2	2390.0000	12.87	32.77	45.64	54.00	-8.36	AVG	
3	2417.6000	53.21	32.88	86.09	74.00	12.09	Peak	NO LIMIT
4 *	2420.0000	46.95	32.89	79.84	54.00	25.84	AVG	NO LIMIT

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

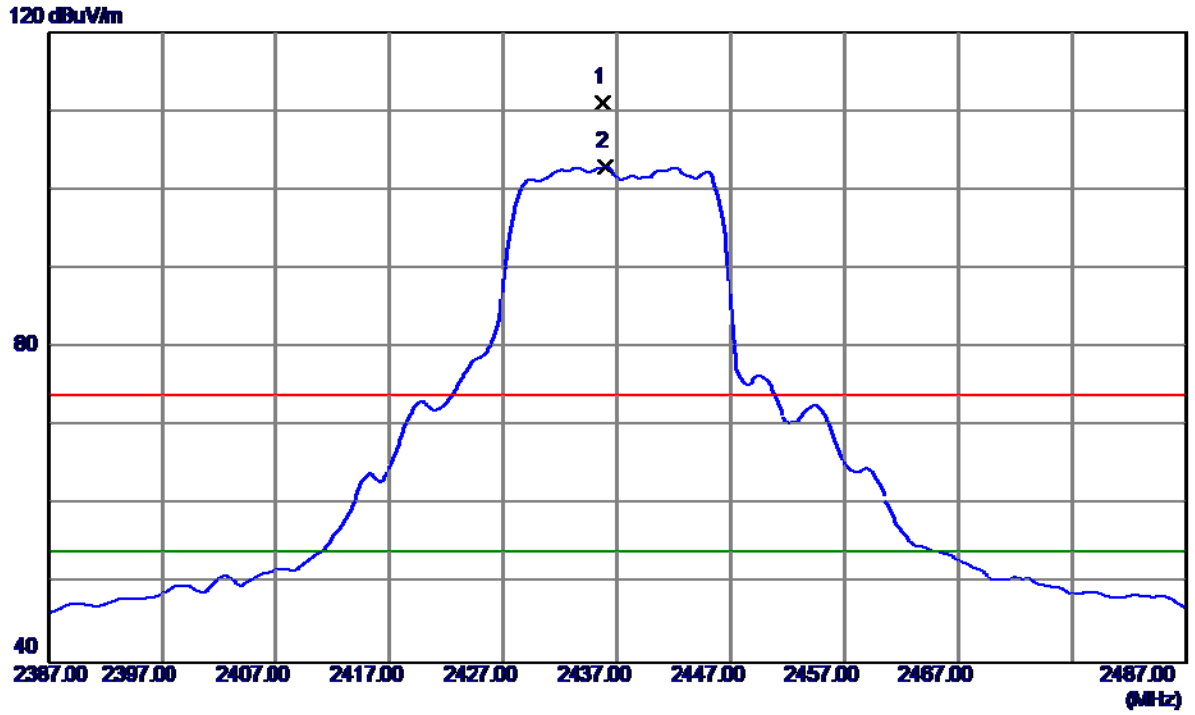
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.8700	41.01	4.69	45.70	74.00	-28.30	Peak	
2 *	4823.9400	35.22	4.69	39.91	54.00	-14.09	AVG	

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

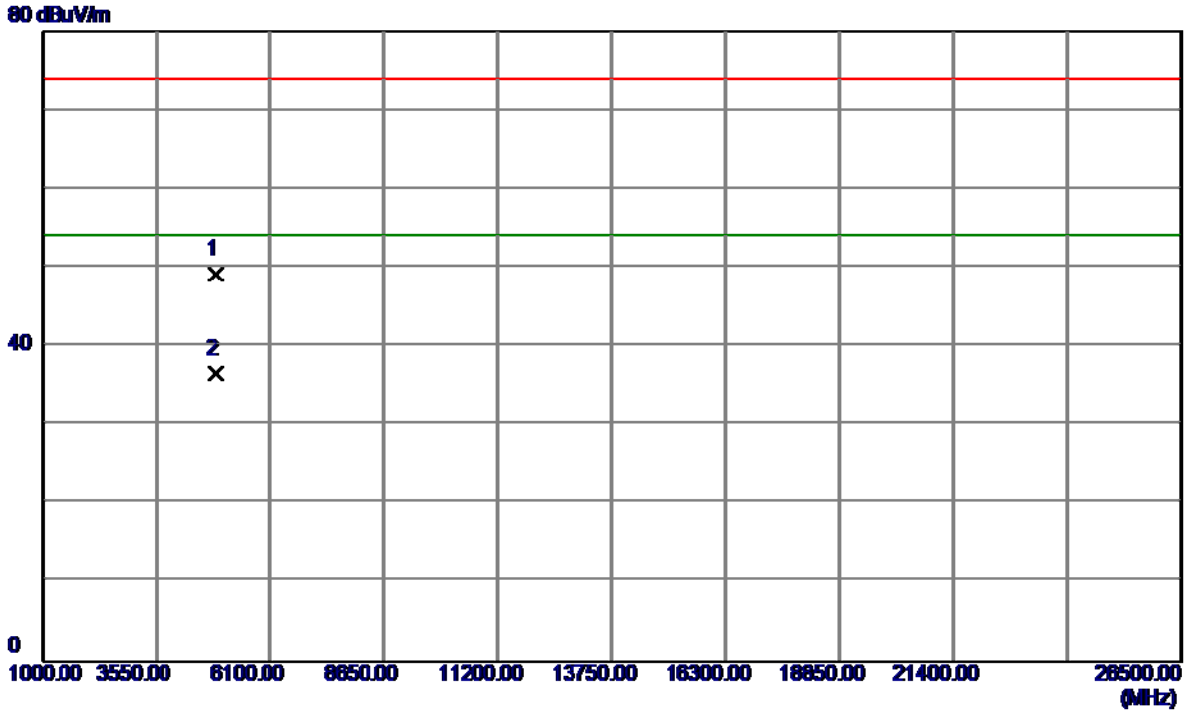
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2435.7500	78.07	32.96	111.03	74.00	37.03	Peak	NO LIMIT
2 *	2436.0000	69.96	32.96	102.92	54.00	48.92	AVG	NO LIMIT

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

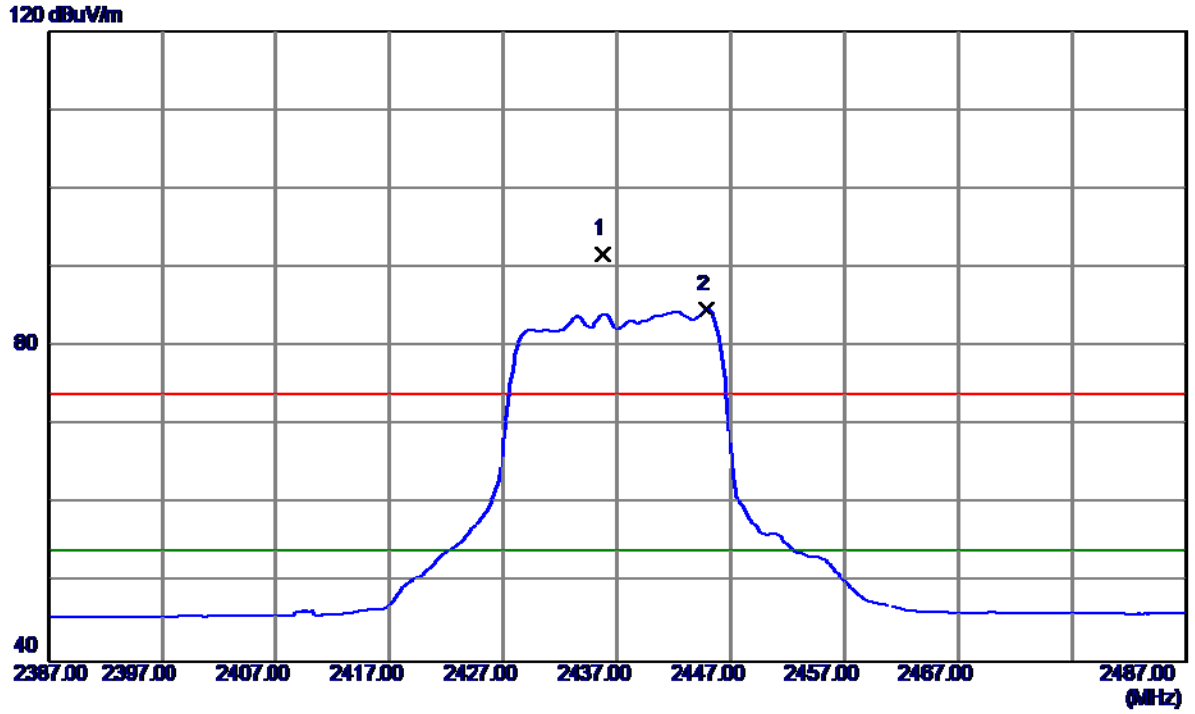
Vertical



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.8450	44.24	4.89	49.13	74.00	-24.87	Peak	
2 *	4873.9320	31.62	4.89	36.51	54.00	-17.49	AVG	

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

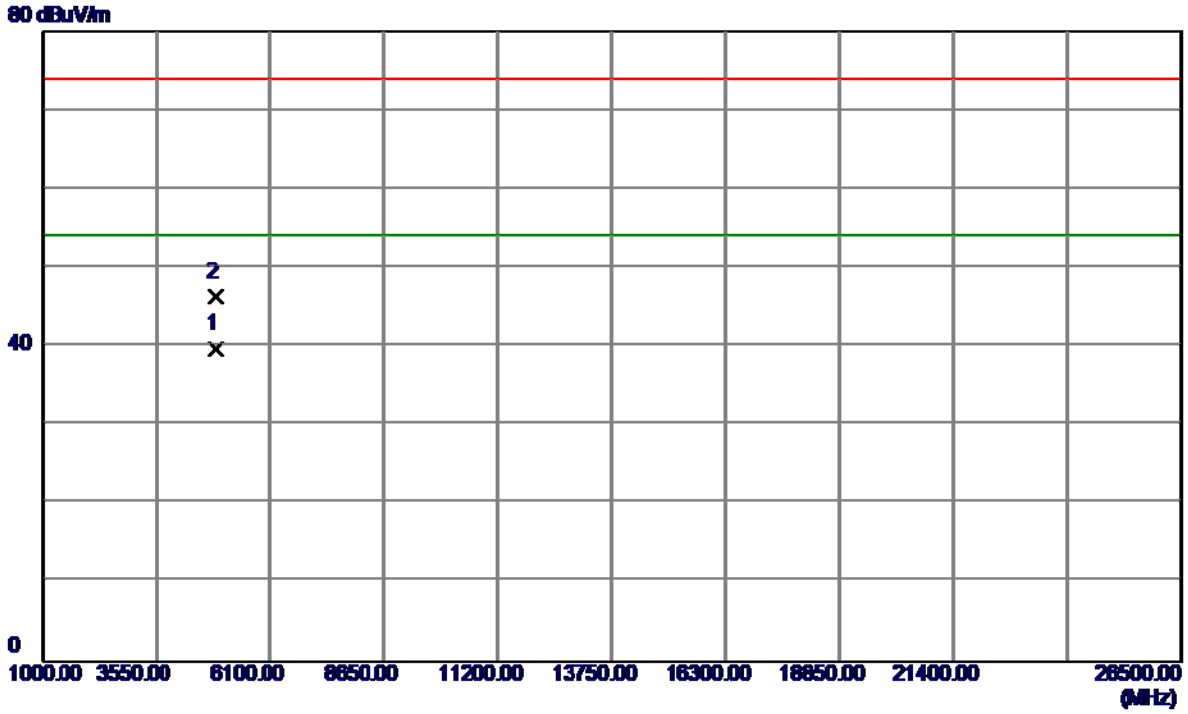
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2435.7500	58.78	32.96	91.74	74.00	17.74	Peak	NO LIMIT
2 *	2444.9000	51.68	32.99	84.67	54.00	30.67	AVG	NO LIMIT

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

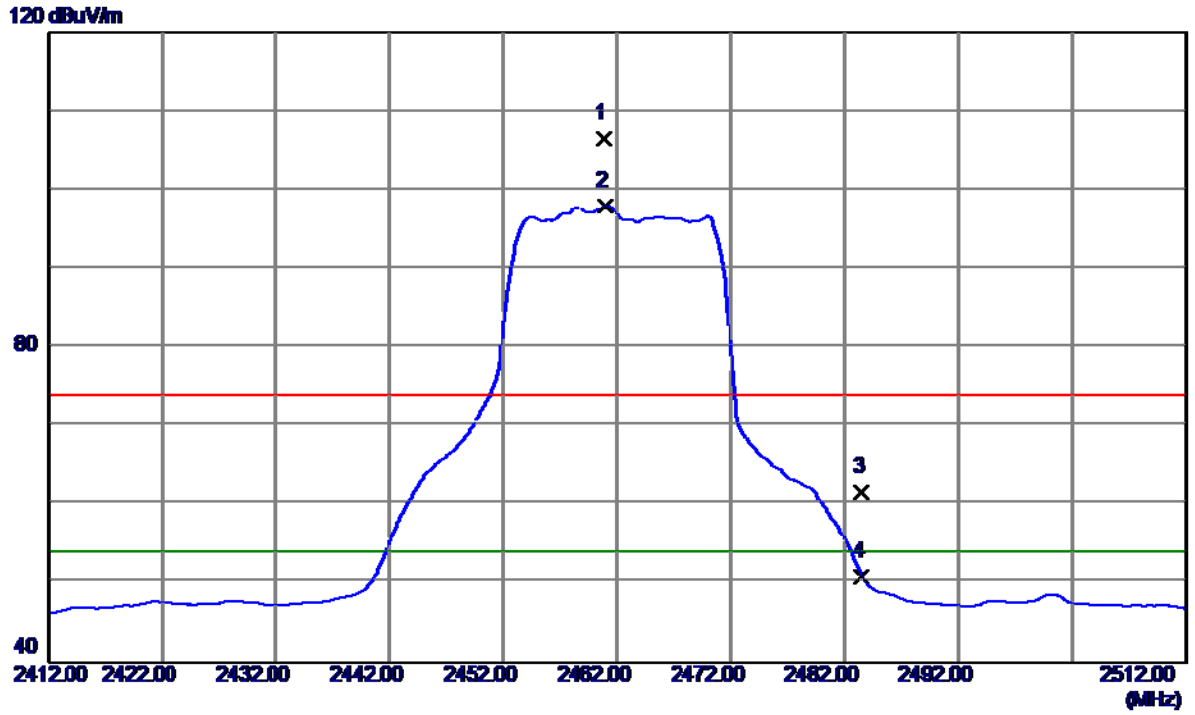
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873.9400	34.87	4.89	39.76	54.00	-14.24	AVG	
2	4874.0200	41.31	4.89	46.20	74.00	-27.80	Peak	

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

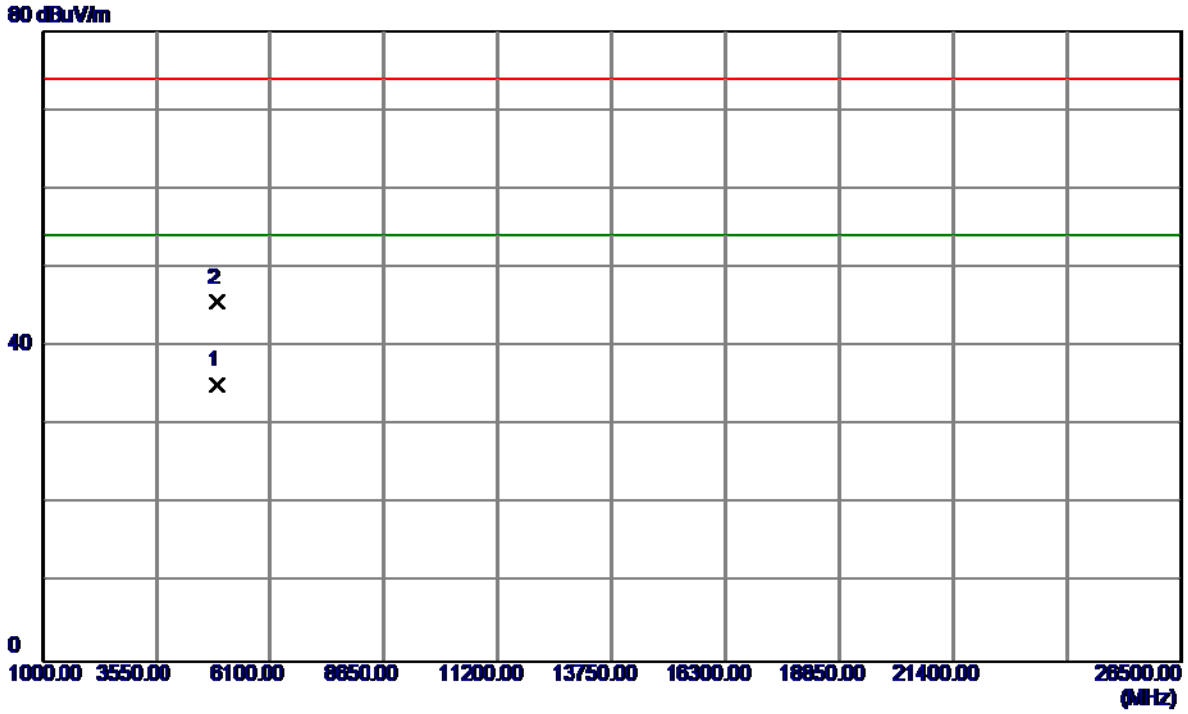
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460.9000	73.42	33.06	106.48	74.00	32.48	Peak	NO LIMIT
2 *	2461.0000	64.87	33.06	97.93	54.00	43.93	AVG	NO LIMIT
3	2483.5000	28.42	33.15	61.57	74.00	-12.43	Peak	
4	2483.5000	17.75	33.15	50.90	54.00	-3.10	AVG	

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

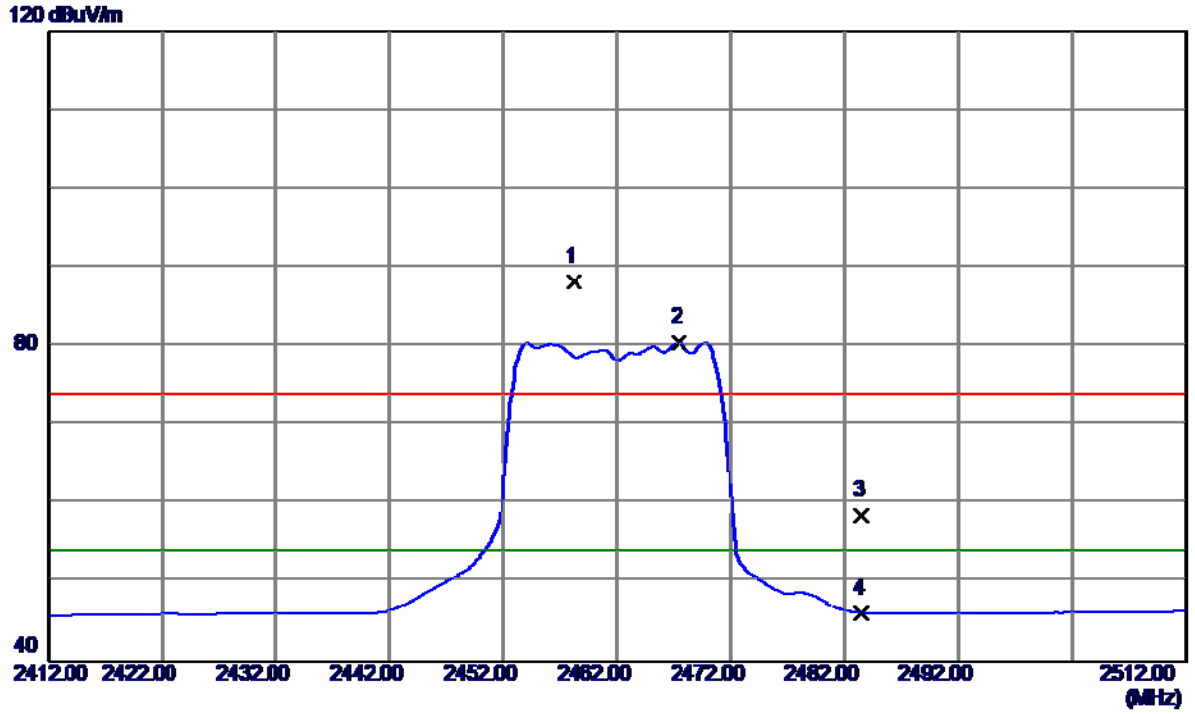
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923.9000	29.93	5.08	35.01	54.00	-18.99	AVG	
2	4924.1500	40.44	5.08	45.52	74.00	-28.48	Peak	

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

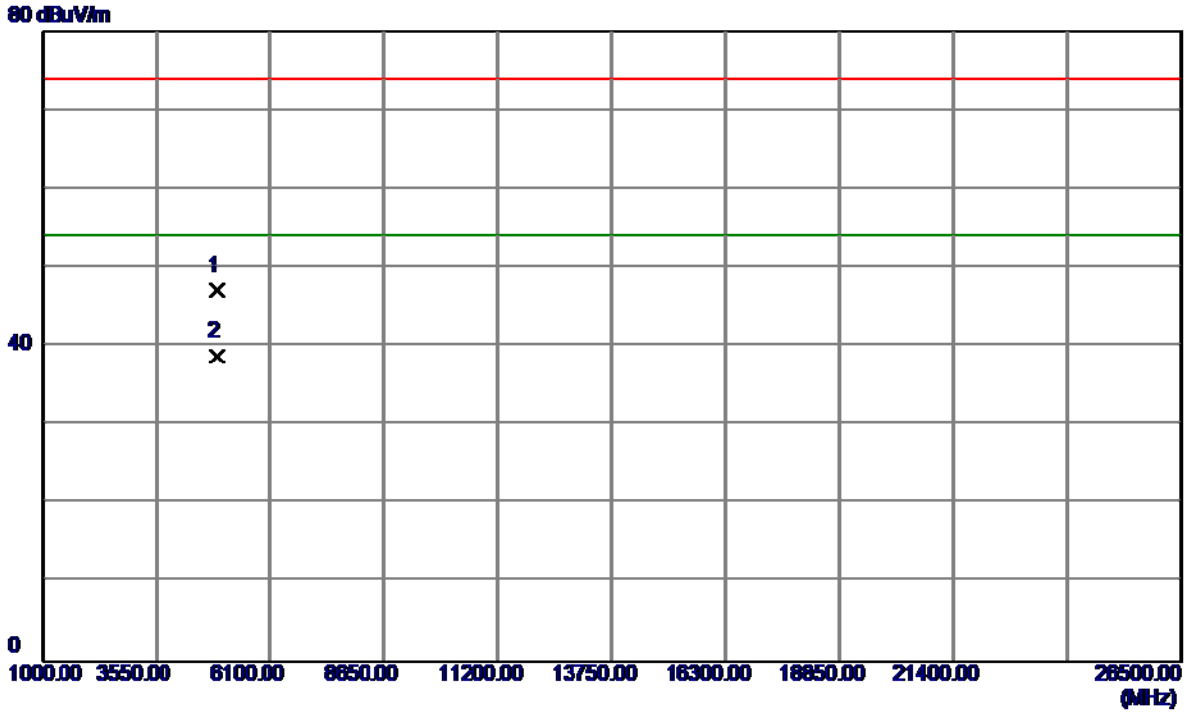
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2458.2000	55.06	33.05	88.11	74.00	14.11	Peak	NO LIMIT
2 *	2467.5000	47.44	33.09	80.53	54.00	26.53	AVG	NO LIMIT
3	2483.5000	25.47	33.15	58.62	74.00	-15.38	Peak	
4	2483.5000	12.99	33.15	46.14	54.00	-7.86	AVG	

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

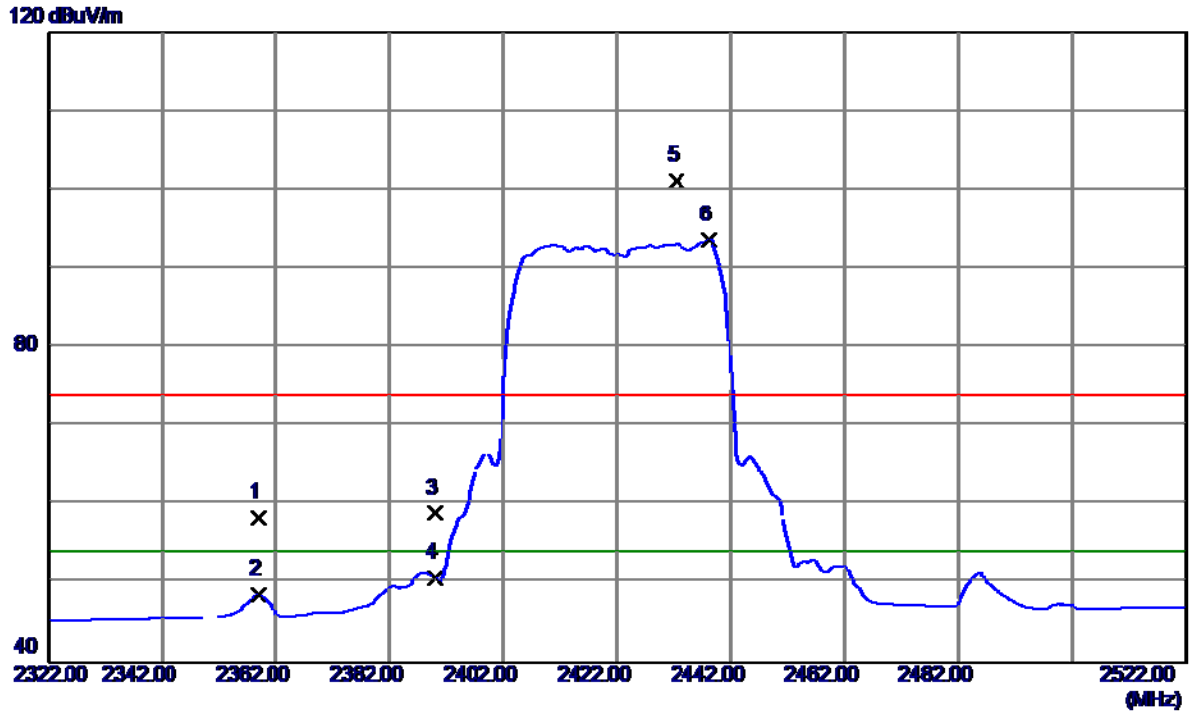
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.9000	41.98	5.08	47.06	74.00	-26.94	Peak	
2 *	4924.1100	33.58	5.08	38.66	54.00	-15.34	AVG	

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

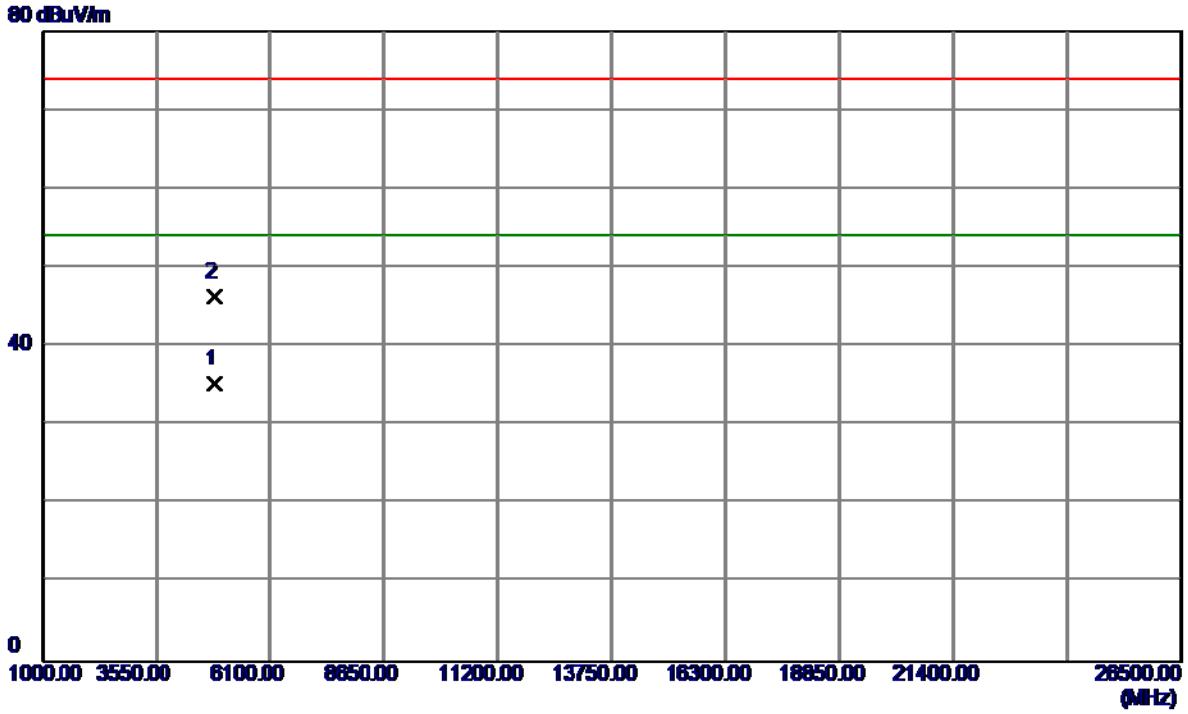
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2358.9000	25.83	32.64	58.47	74.00	-15.53	Peak	
2	2358.9000	16.01	32.64	48.65	54.00	-5.35	AVG	
3	2390.0000	26.19	32.77	58.96	74.00	-15.04	Peak	
4	2390.0000	17.98	32.77	50.75	54.00	-3.25	AVG	
5	2432.5000	68.24	32.94	101.18	74.00	27.18	Peak	NO LIMIT
6 *	2438.2000	60.70	32.97	93.67	54.00	39.67	AVG	NO LIMIT

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

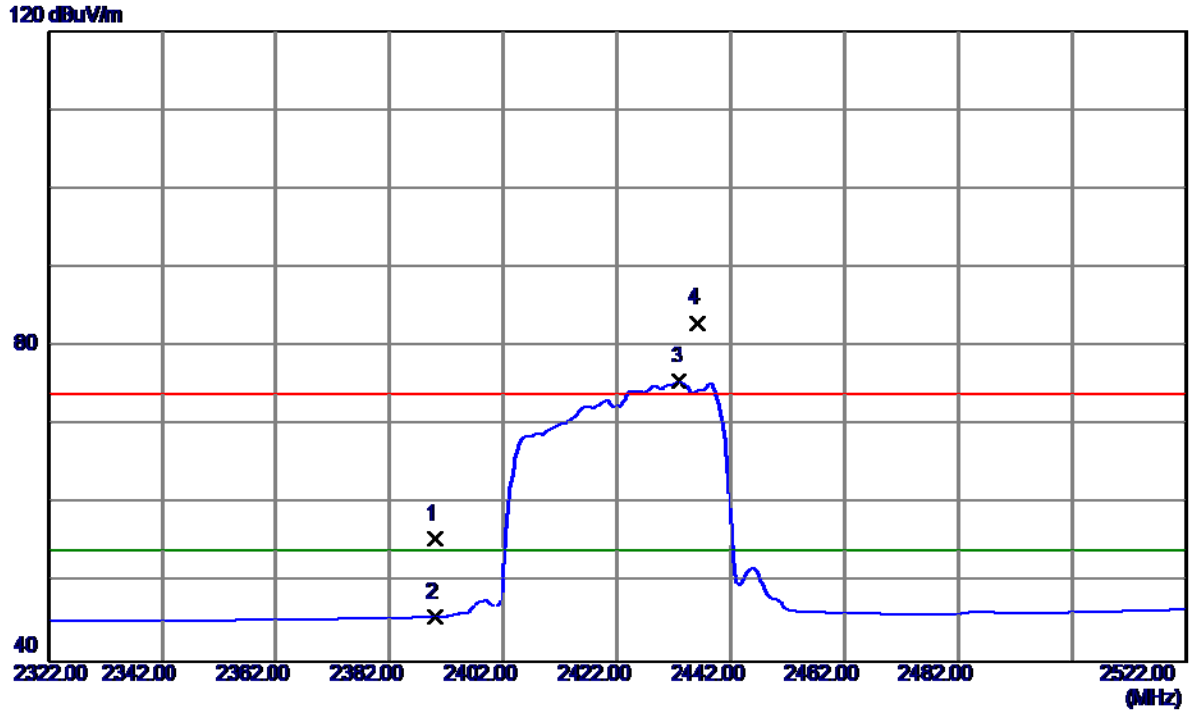
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4843.9220	30.50	4.77	35.27	54.00	-18.73	AVG	
2	4844.1700	41.40	4.77	46.17	74.00	-27.83	Peak	

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

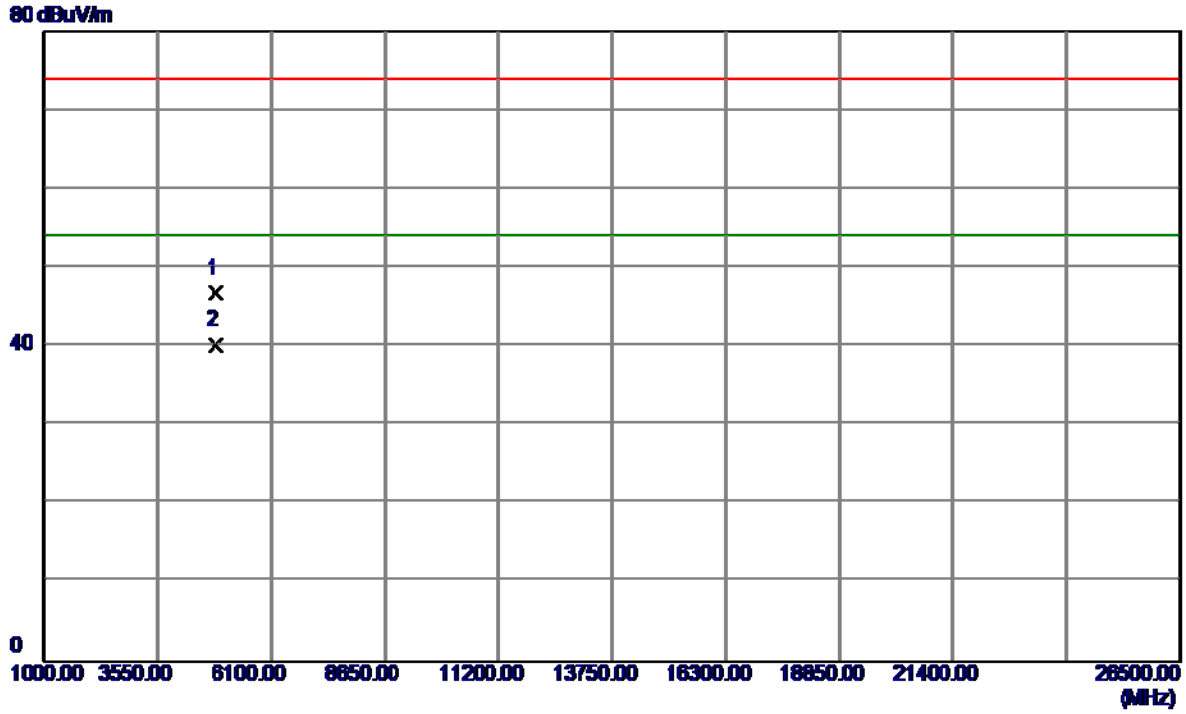
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	22.81	32.77	55.58	74.00	-18.42	Peak	
2	2390.0000	12.85	32.77	45.62	54.00	-8.38	AVG	
3 *	2433.0000	42.52	32.94	75.46	54.00	21.46	AVG	NO LIMIT
4	2436.2000	50.00	32.96	82.96	74.00	8.96	Peak	NO LIMIT

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

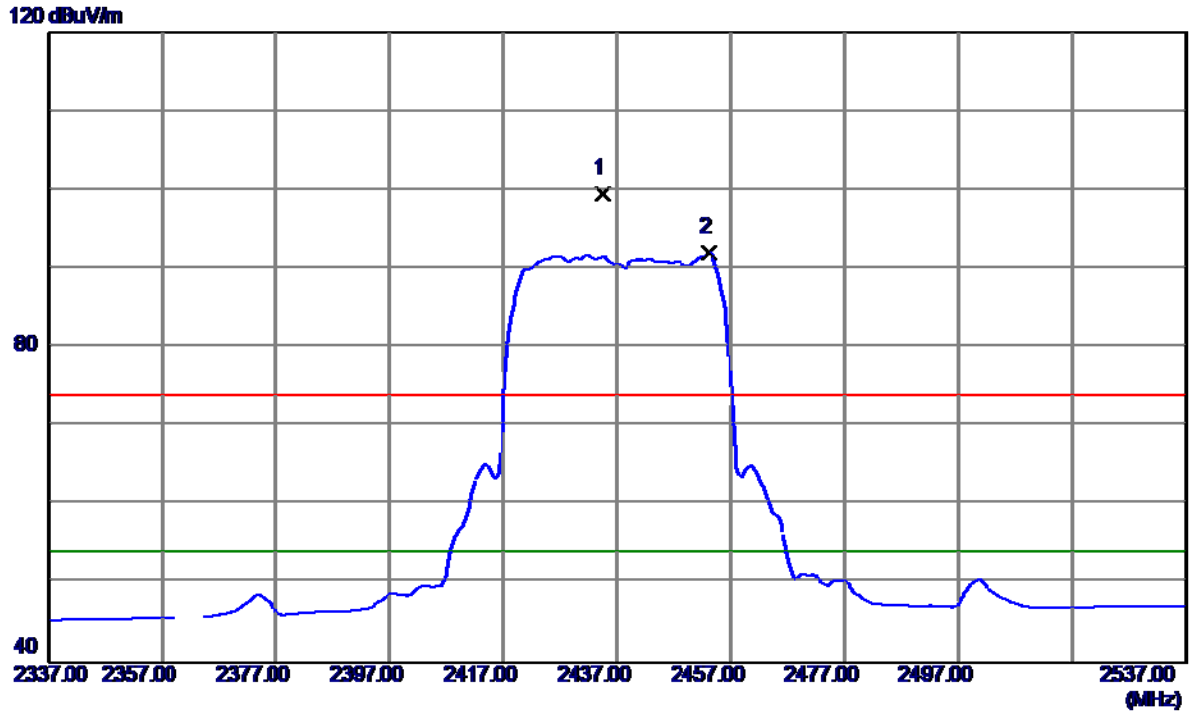
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4843.9000	41.98	4.77	46.75	74.00	-27.25	Peak	
2 *	4843.9400	35.32	4.77	40.09	54.00	-13.91	AVG	

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

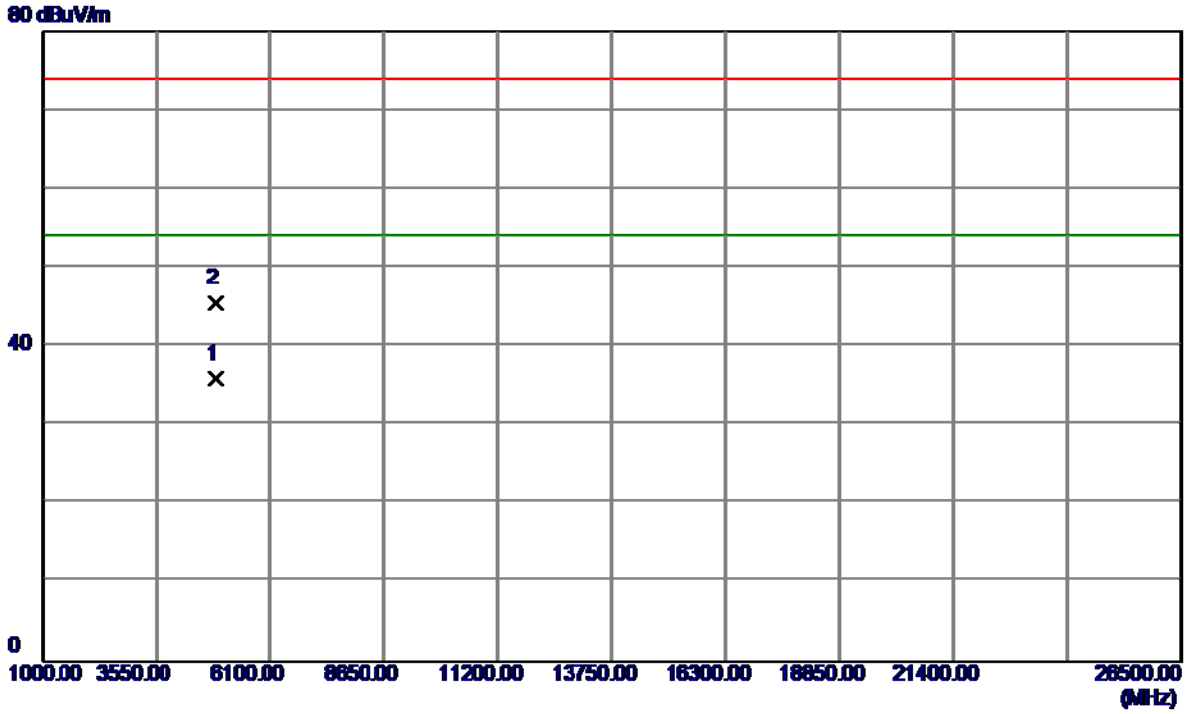
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434.6000	66.52	32.95	99.47	74.00	25.47	Peak	NO LIMIT
2 *	2453.2000	58.91	33.03	91.94	54.00	37.94	AVG	NO LIMIT

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

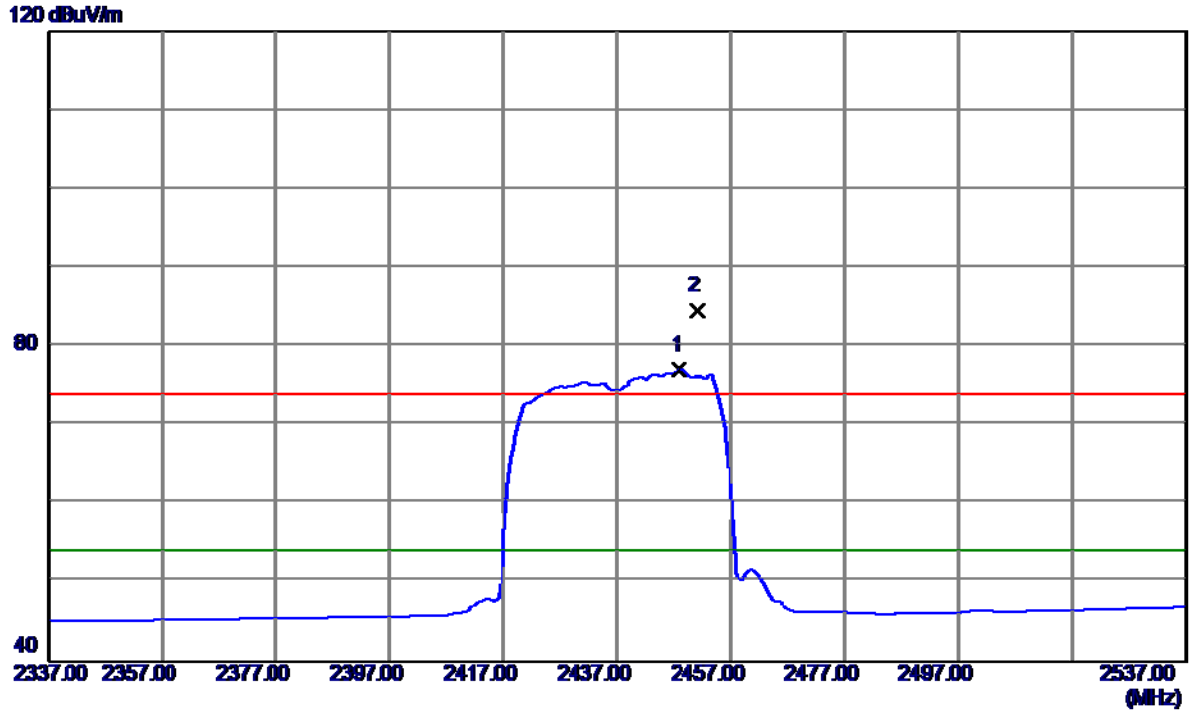
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873.9320	30.90	4.89	35.79	54.00	-18.21	AVG	
2	4874.0230	40.58	4.89	45.47	74.00	-28.53	Peak	

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

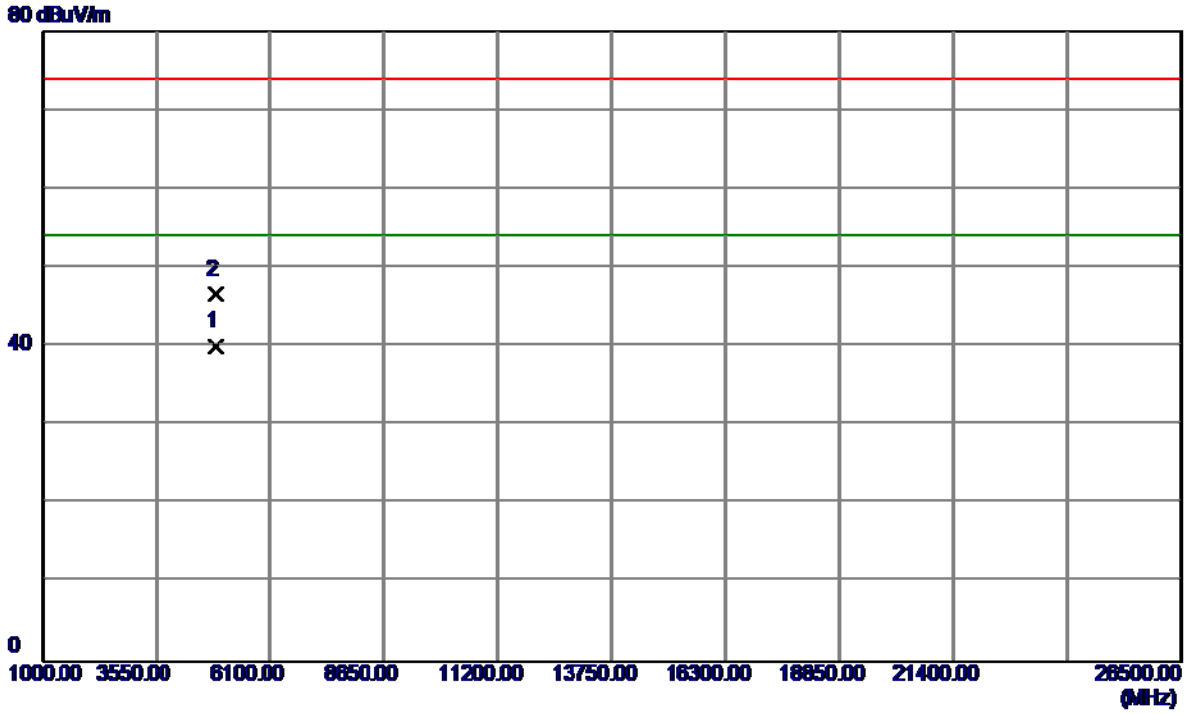
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2448.0000	43.92	33.01	76.93	54.00	22.93	AVG	NO LIMIT
2	2451.2000	51.50	33.02	84.52	74.00	10.52	Peak	NO LIMIT

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

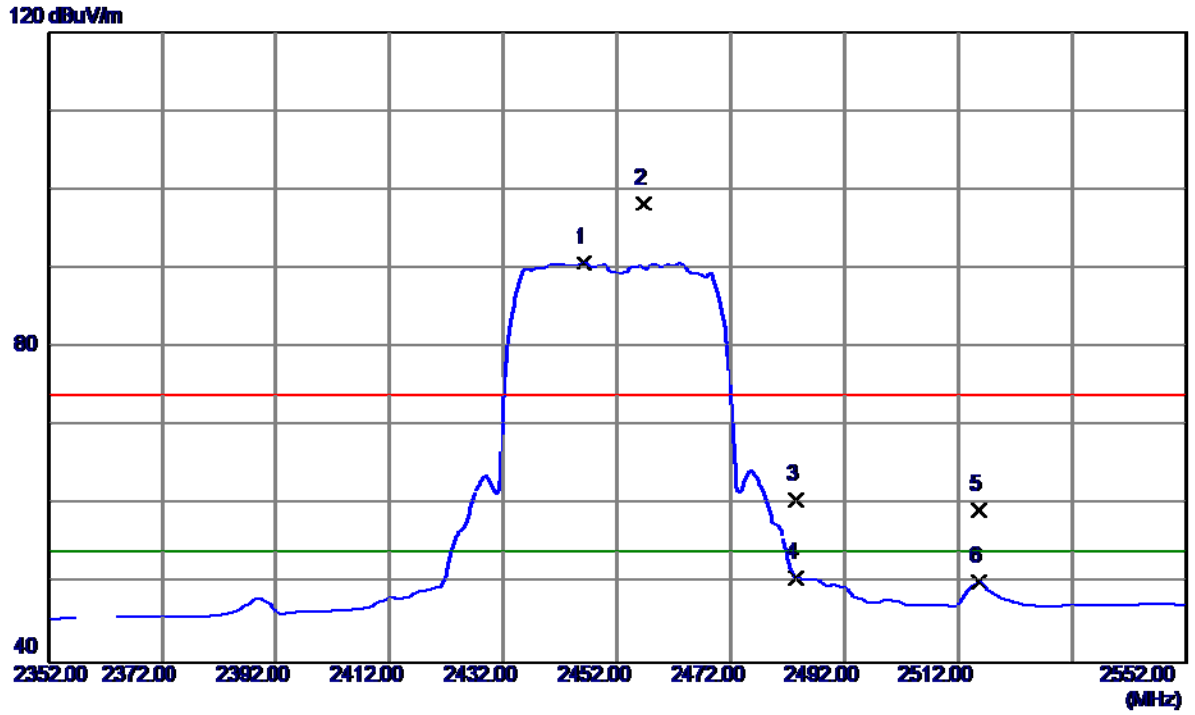
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873.9400	35.06	4.89	39.95	54.00	-14.05	AVG	
2	4874.0099	41.62	4.89	46.51	74.00	-27.49	Peak	

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

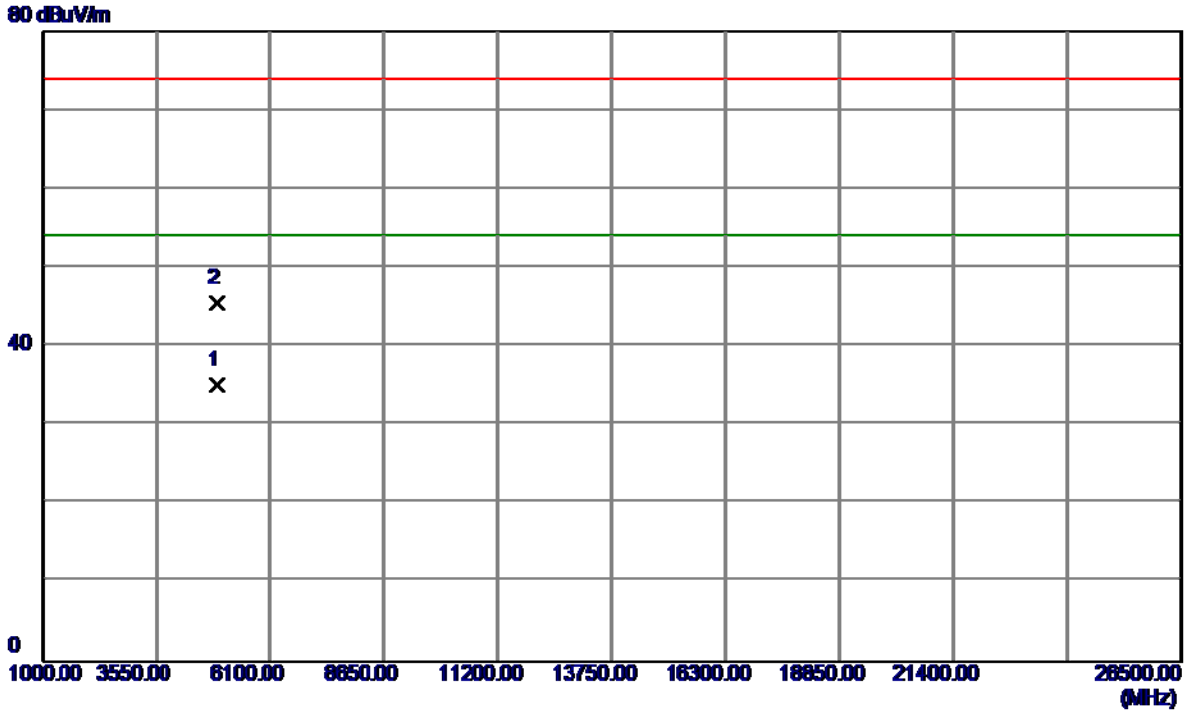
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2446.2000	57.69	33.00	90.69	54.00	36.69	AVG	NO LIMIT
2	2456.7000	65.28	33.04	98.32	74.00	24.32	Peak	NO LIMIT
3	2483.5000	27.44	33.15	60.59	74.00	-13.41	Peak	
4	2483.5000	17.63	33.15	50.78	54.00	-3.22	AVG	
5	2515.6000	26.10	33.30	59.40	74.00	-14.60	Peak	
6	2515.6000	16.90	33.30	50.20	54.00	-3.80	AVG	

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

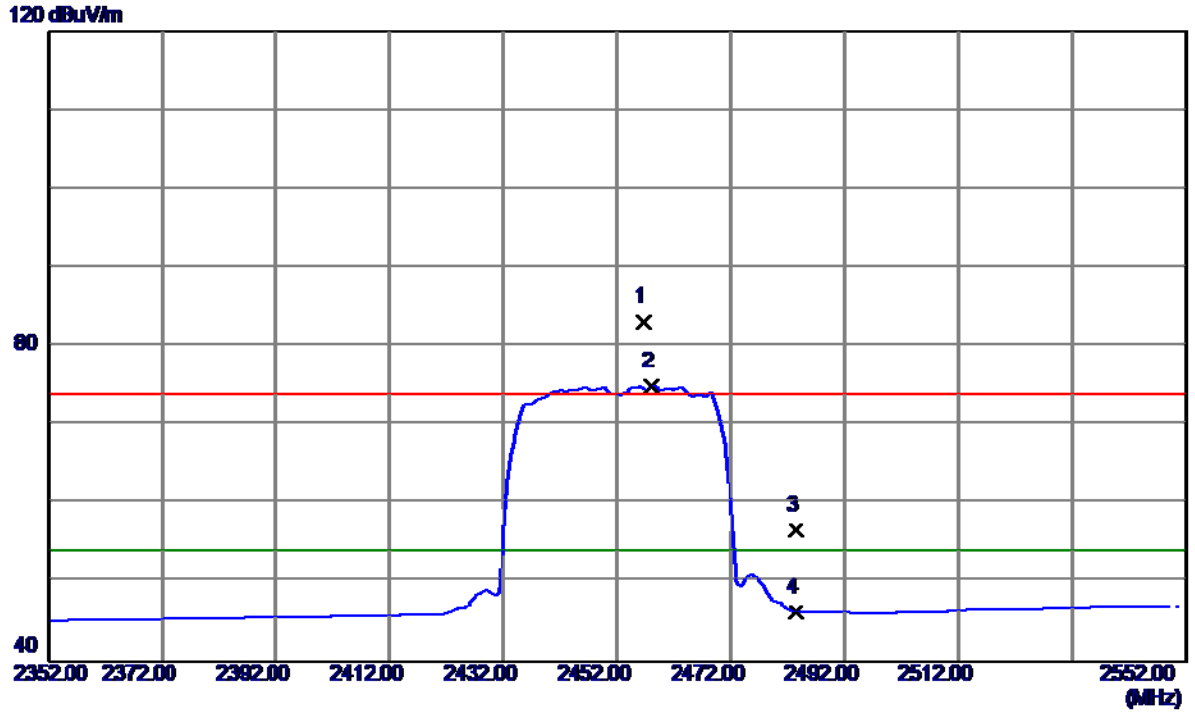
Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4903.9450	30.05	5.01	35.06	54.00	-18.94	AVG	
2	4904.0550	40.39	5.01	45.40	74.00	-28.60	Peak	

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

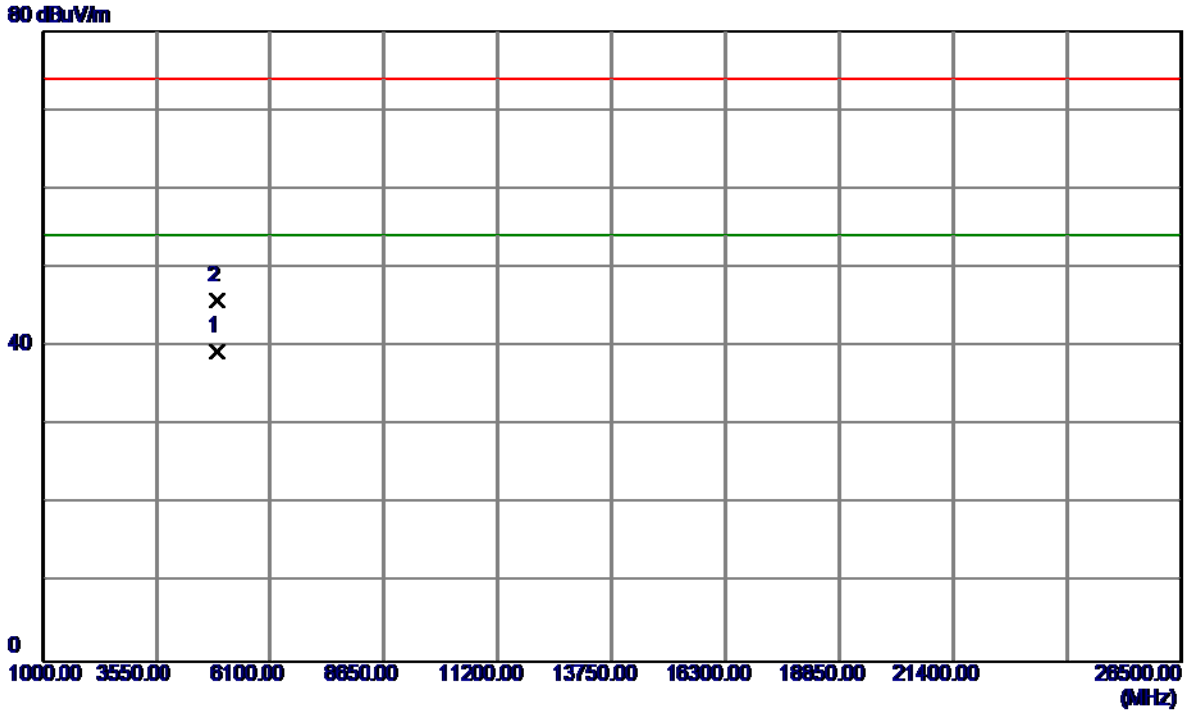
Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2456.6000	49.95	33.04	82.99	74.00	8.99	Peak	NO LIMIT
2 *	2458.0000	41.82	33.05	74.87	54.00	20.87	AVG	NO LIMIT
3	2483.5000	23.45	33.15	56.60	74.00	-17.40	Peak	
4	2483.5000	13.07	33.15	46.22	54.00	-7.78	AVG	

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

Horizontal



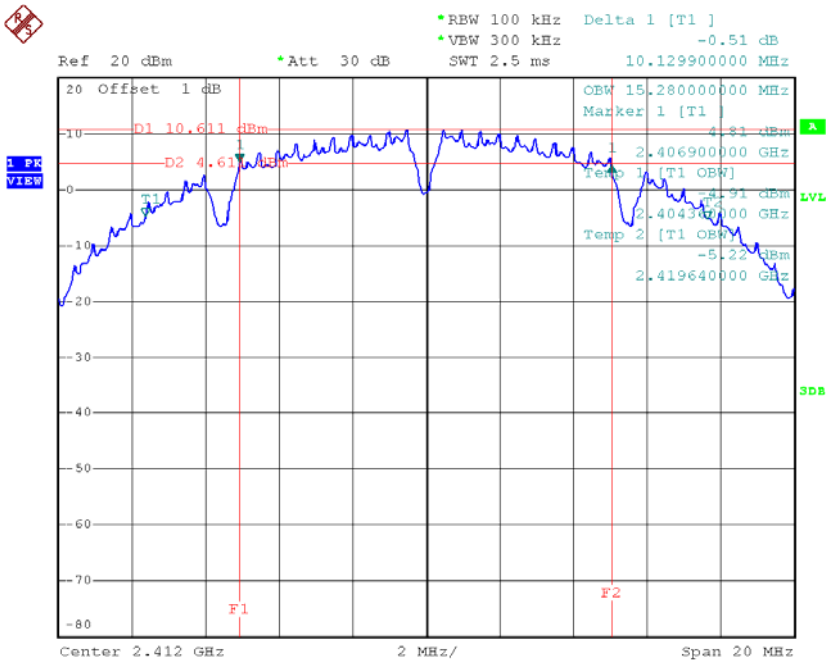
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4903.9400	34.36	5.01	39.37	54.00	-14.63	AVG	
2	4904.1800	40.82	5.01	45.83	74.00	-28.17	Peak	

ATTACHMENT E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

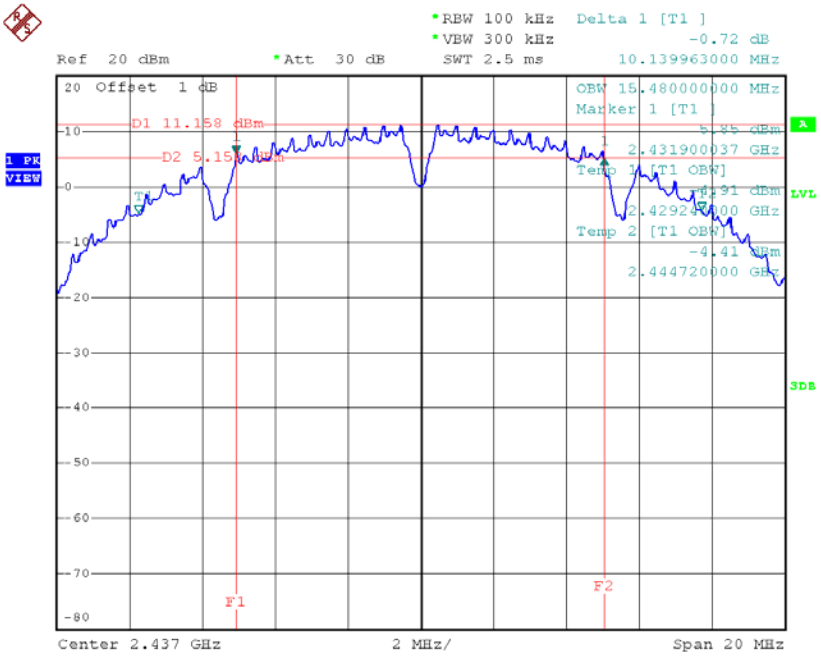
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.13	15.28	500	Complies
2437	10.14	15.48	500	Complies
2462	10.14	15.08	500	Complies

TX CH01



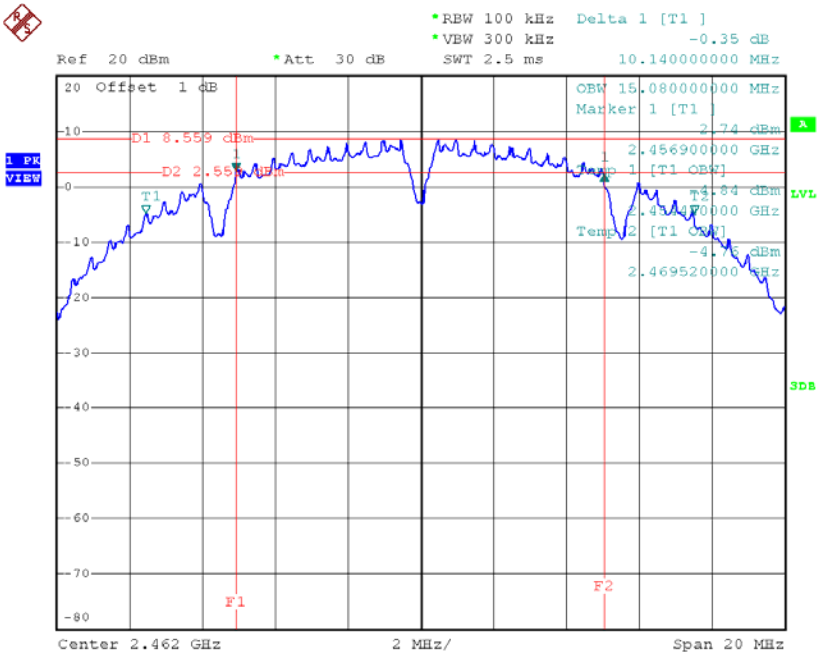
Date: 23.MAY.2016 16:27:51

TX CH06



Date: 23.MAY.2016 16:29:33

TX CH11

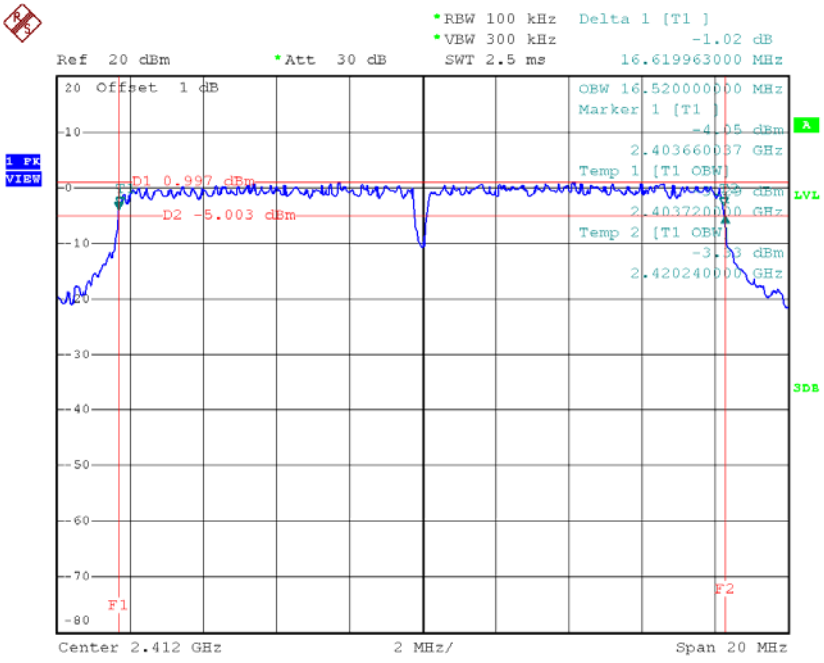


Date: 23.MAY.2016 16:30:55

Test Mode: TX G Mode_CH01/06/11

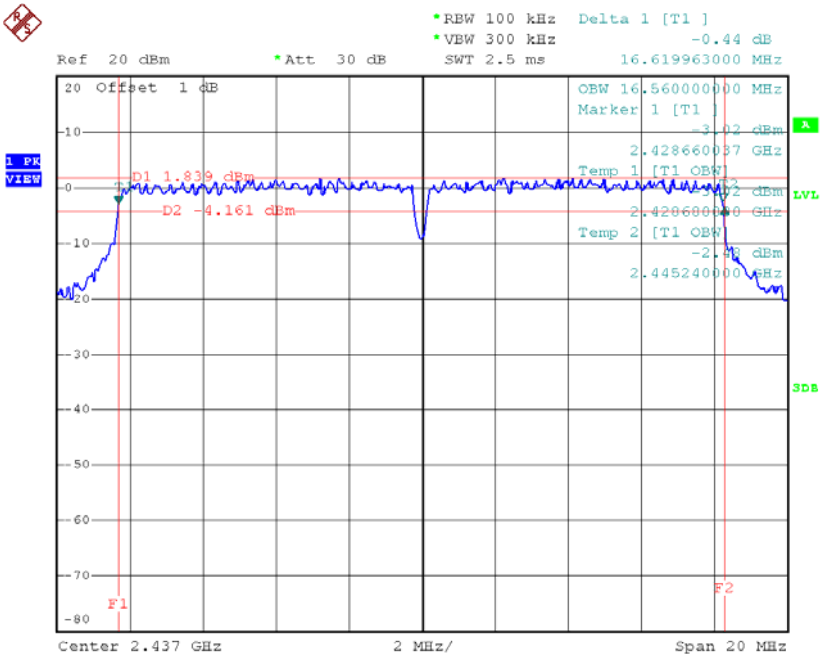
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.62	16.52	500	Complies
2437	16.62	16.56	500	Complies
2462	16.6	16.52	500	Complies

TX CH01



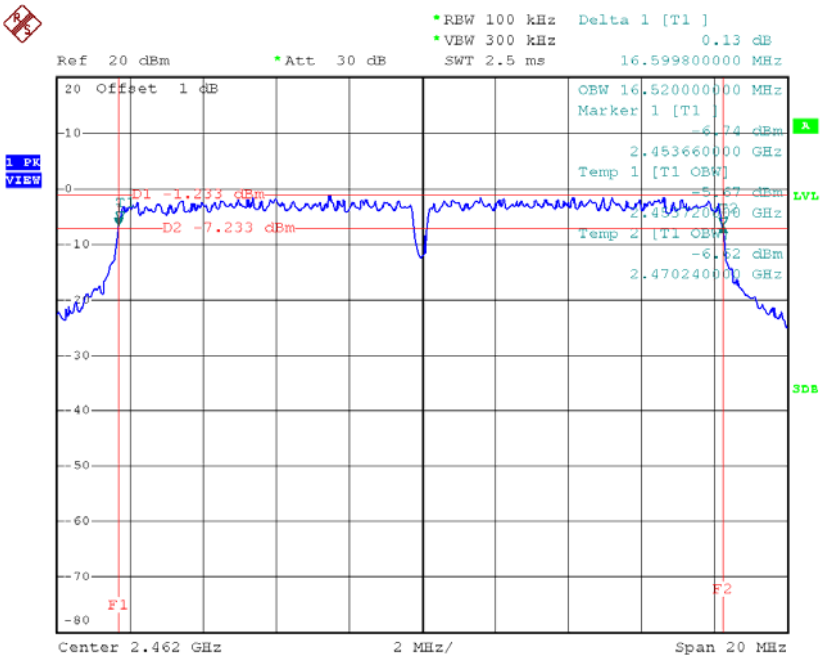
Date: 23.MAY.2016 16:33:50

TX CH06



Date: 23.MAY.2016 16:35:25

TX CH11

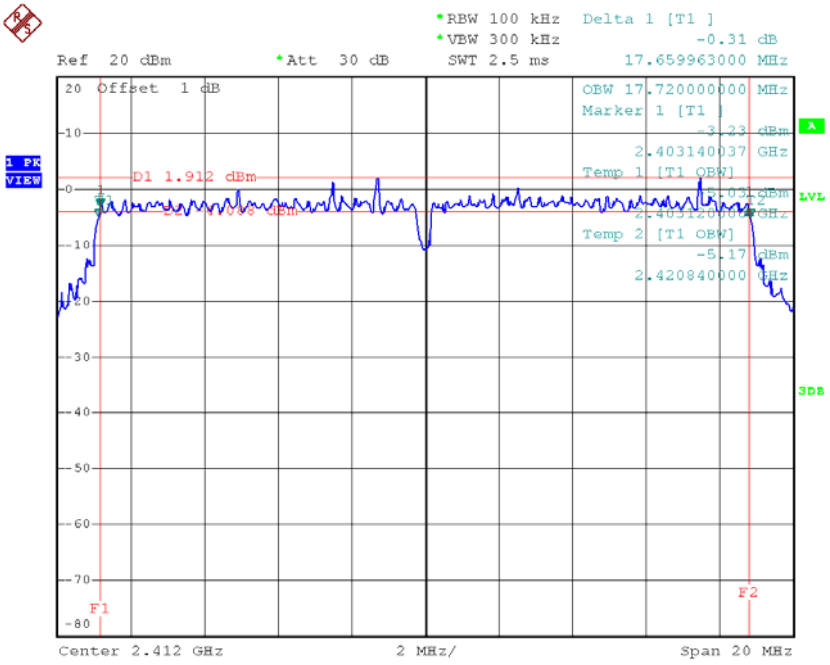


Date: 23.MAY.2016 16:36:40

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

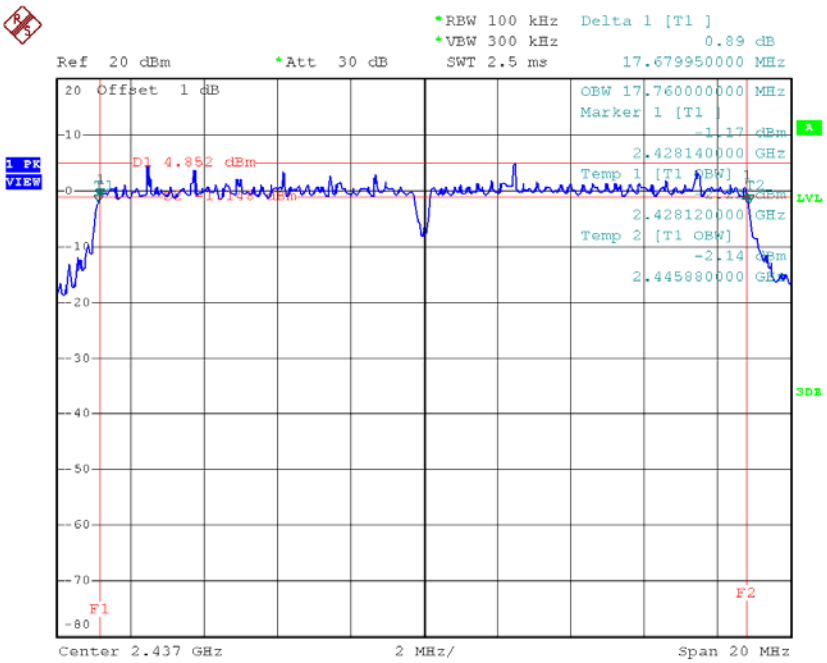
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.66	17.72	500	Complies
2437	17.68	17.76	500	Complies
2462	17.73	17.76	500	Complies

TX CH01



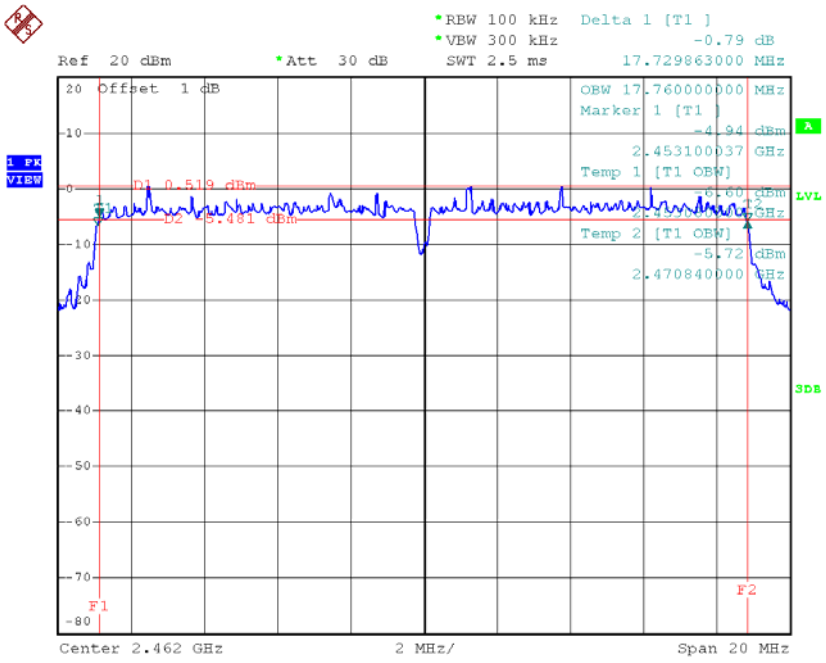
Date: 23.MAY.2016 16:38:52

TX CH06



Date: 23.MAY.2016 16:40:05

TX CH11

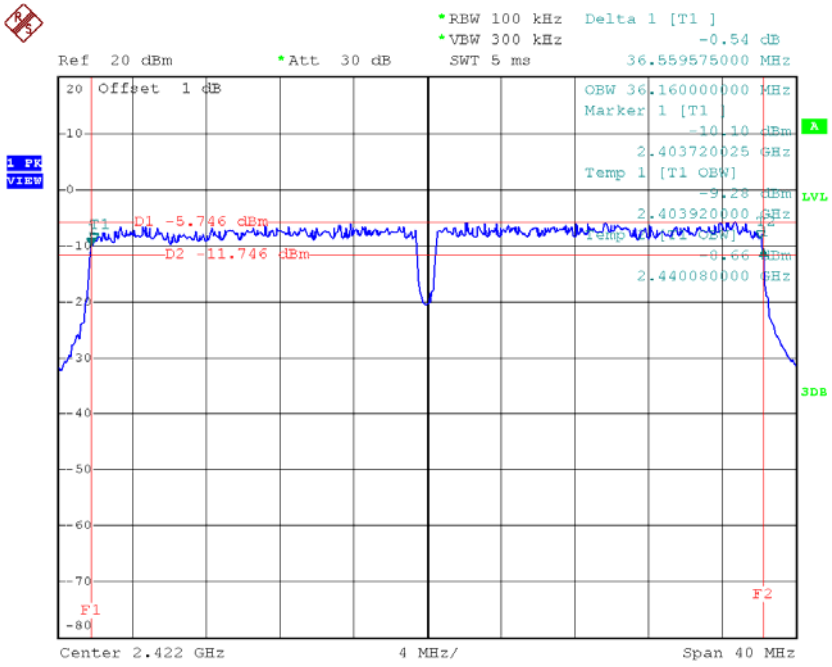


Date: 23.MAY.2016 16:41:12

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

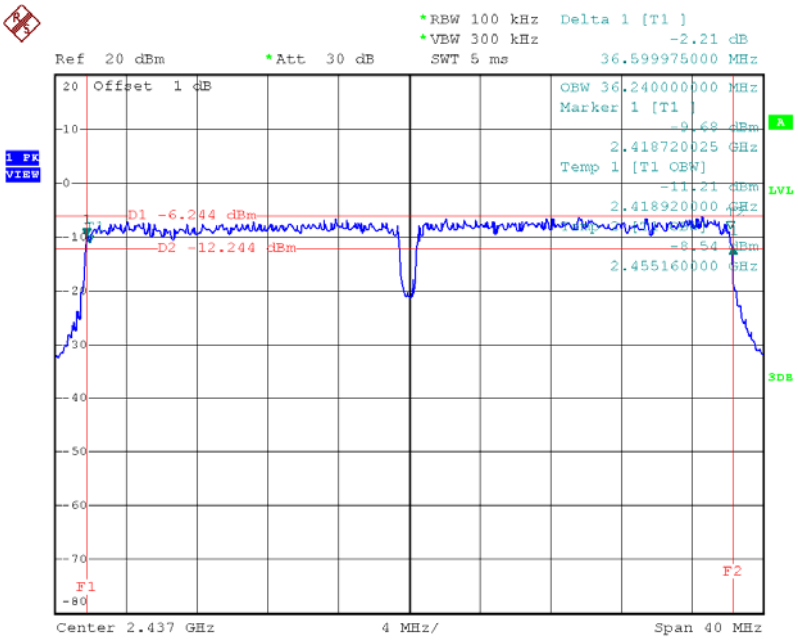
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.56	36.16	500	Complies
2437	36.6	36.24	500	Complies
2452	36.55	36.24	500	Complies

TX CH03



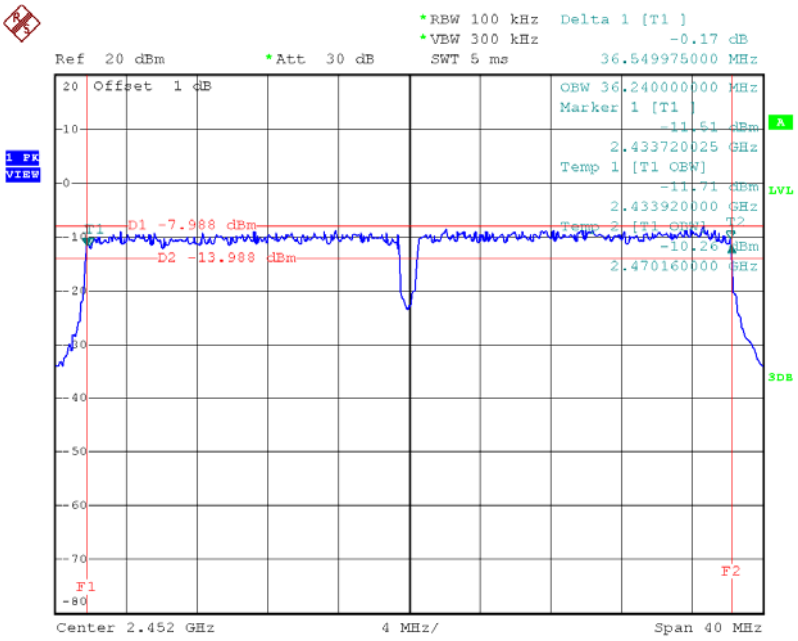
Date: 23.MAY.2016 16:43:31

TX CH06



Date: 23.MAY.2016 16:45:31

TX CH09



Date: 23.MAY.2016 16:46:36

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	22.13	0.16	30.00	1.00	Complies
2437	24.71	0.30	30.00	1.00	Complies
2462	18.41	0.07	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	24.99	0.32	30.00	1.00	Complies
2437	25.49	0.35	30.00	1.00	Complies
2462	23.21	0.21	30.00	1.00	Complies

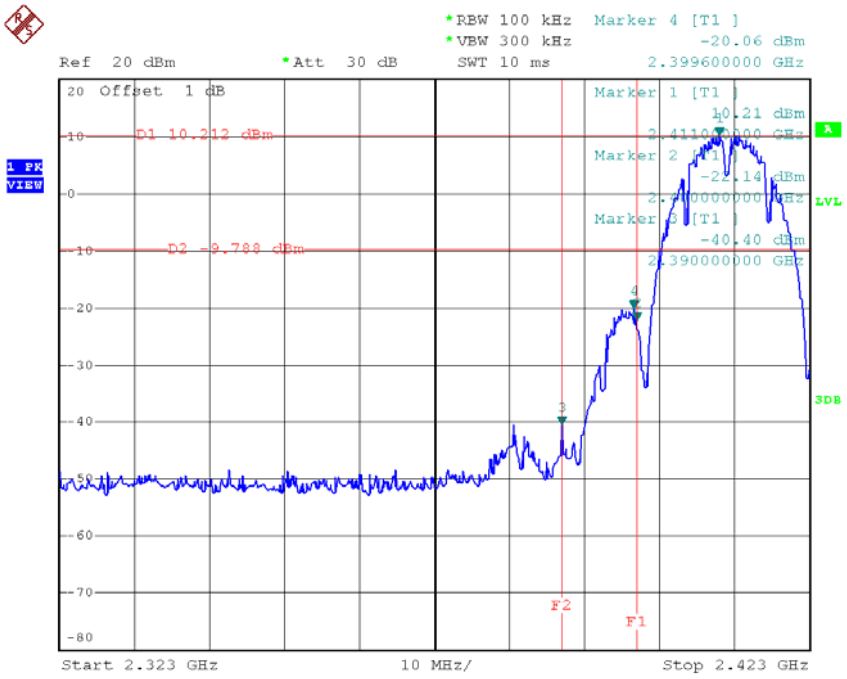
Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	23.44	0.22	30.00	1.00	Complies
2437	25.31	0.34	30.00	1.00	Complies
2462	22.78	0.19	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	20.26	0.11	30.00	1.00	Complies
2437	20.22	0.11	30.00	1.00	Complies
2452	20.03	0.10	30.00	1.00	Complies

ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

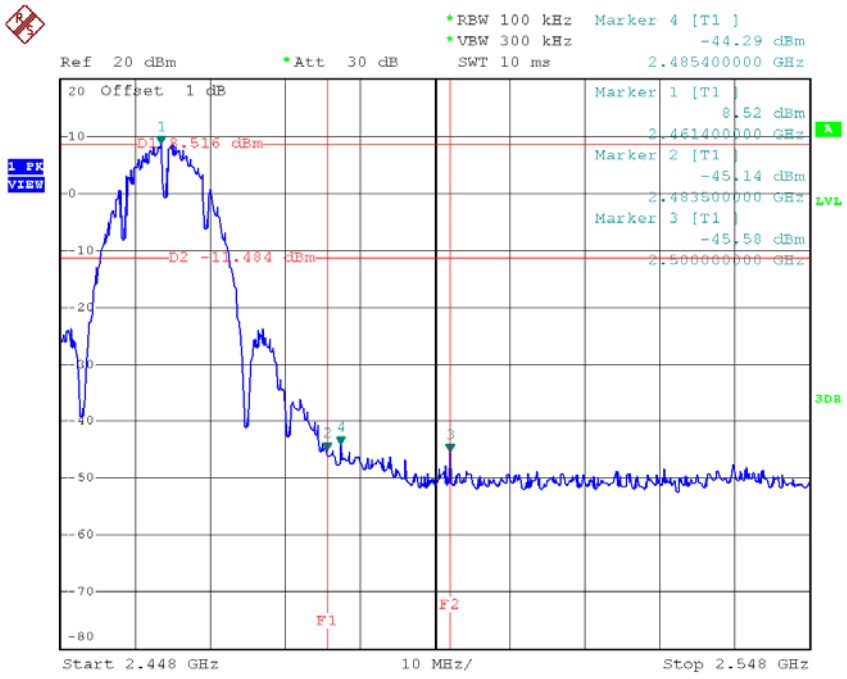
Test Mode :	TX B Mode

TX B mode CH01



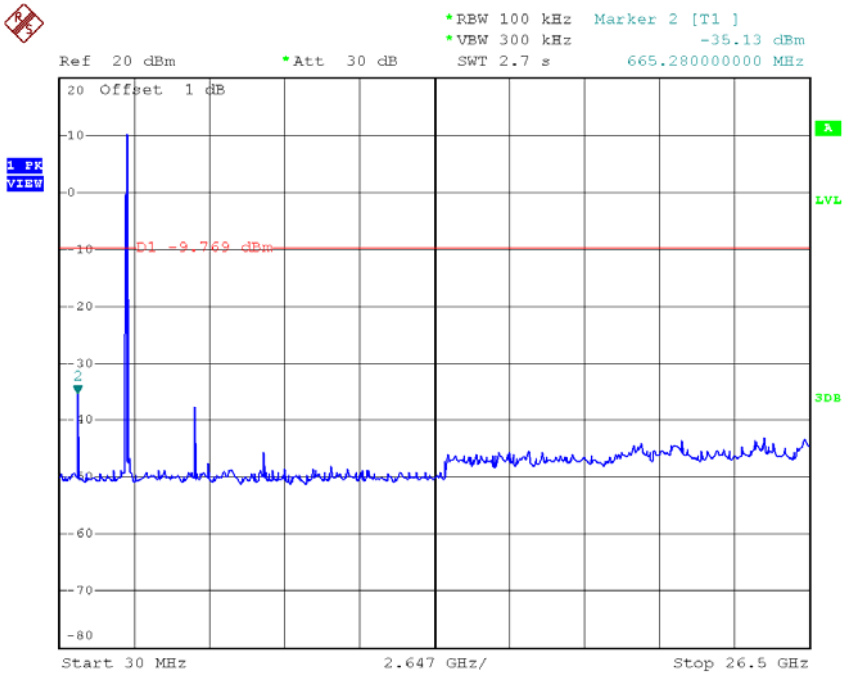
Date: 23.MAY.2016 16:28:13

TX B mode CH11



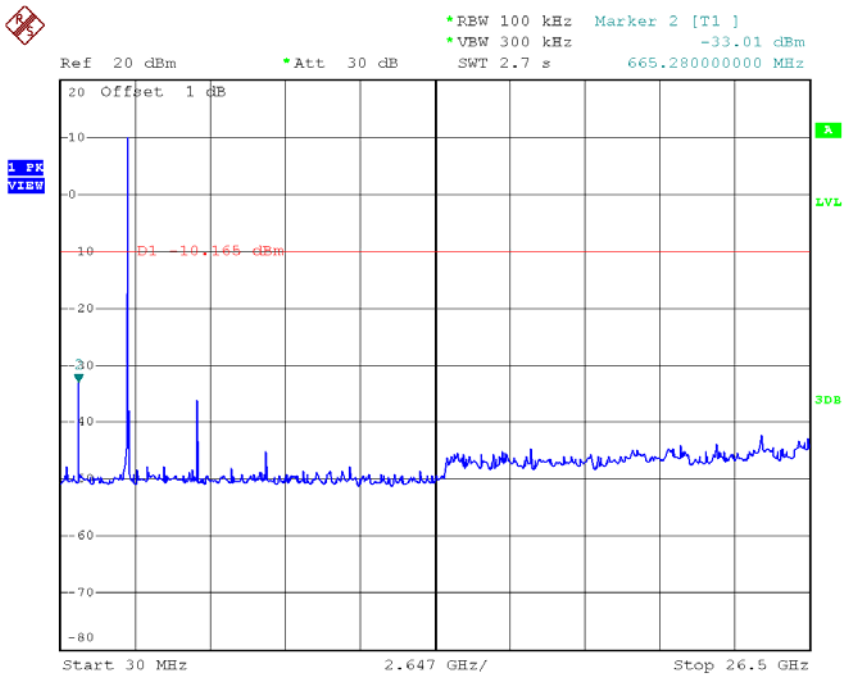
Date: 23.MAY.2016 16:31:17

TX B mode CH01 (10 Harmonic of the frequency)



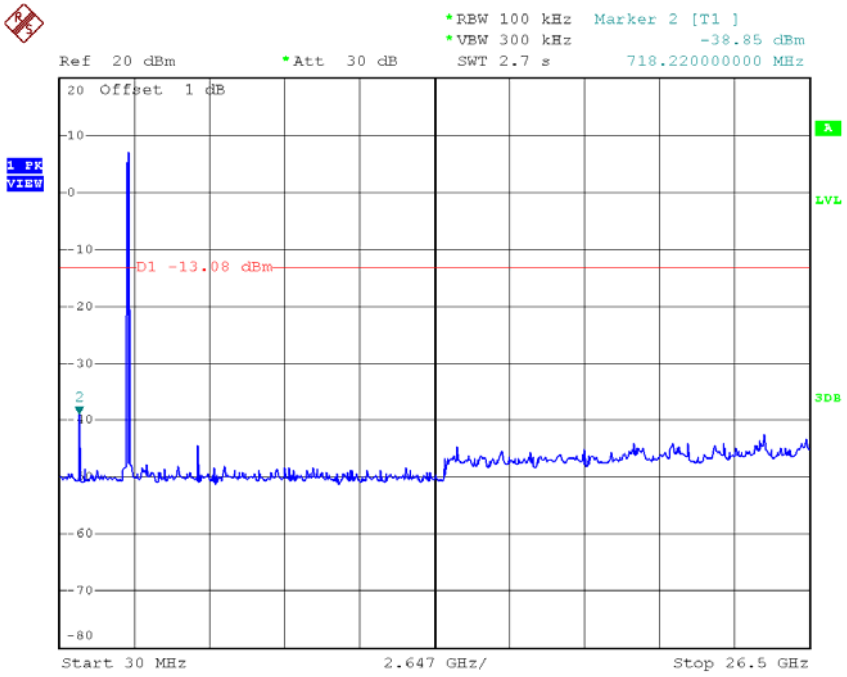
Date: 23.MAY.2016 16:28:06

TX B mode CH06 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:29:47

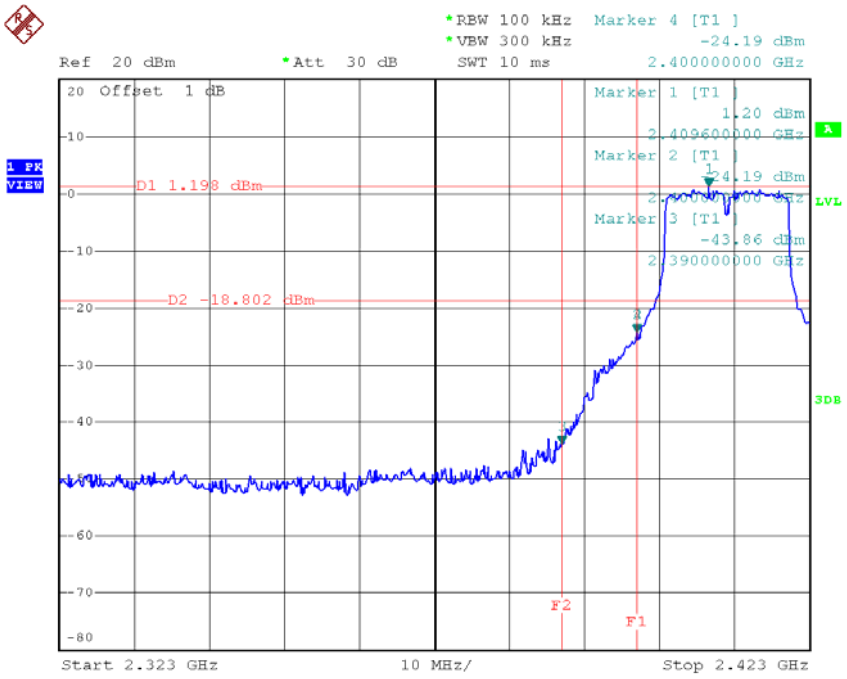
TX B mode CH11 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:31:10

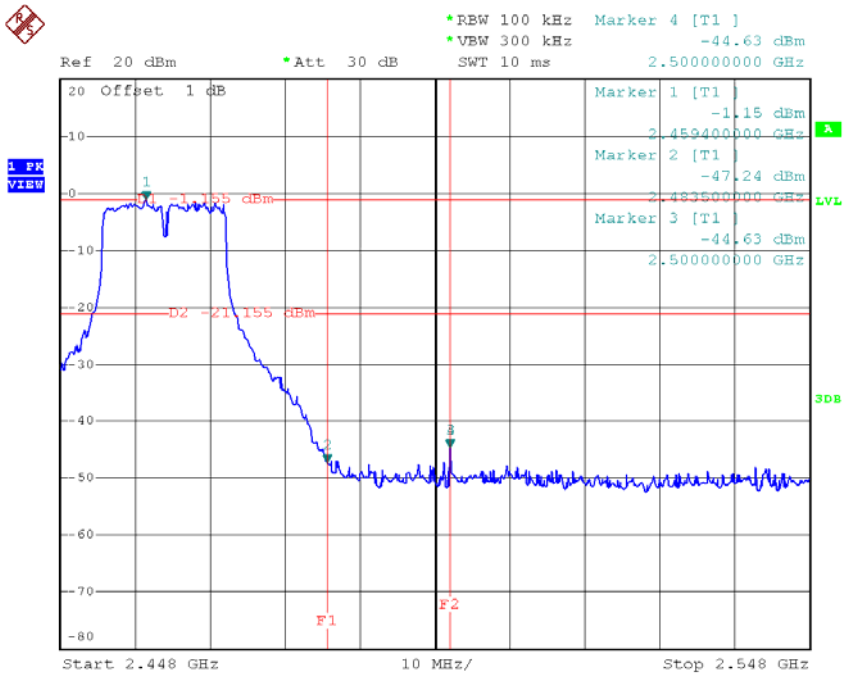
Test Mode :	TX G Mode

TX G mode CH01



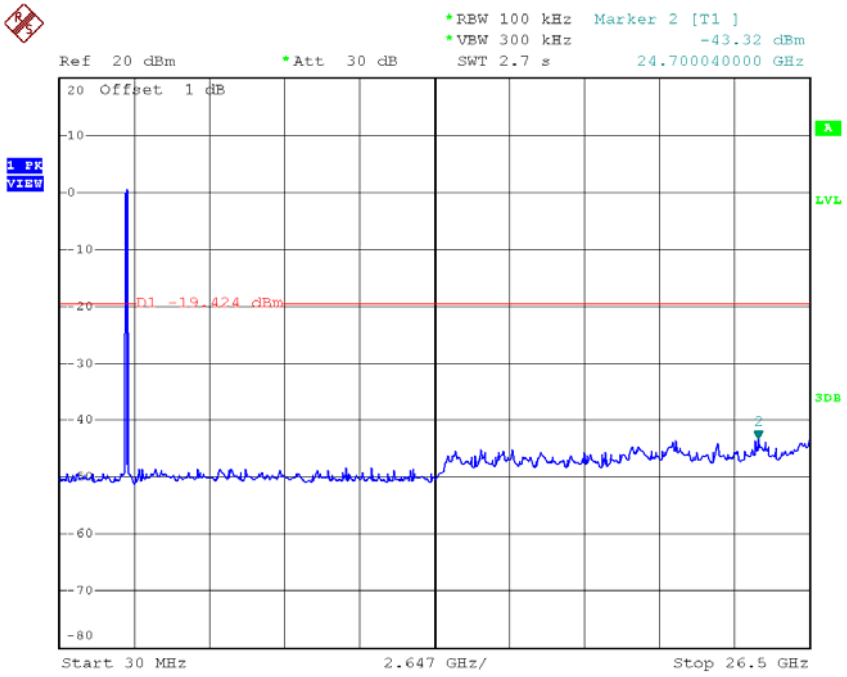
Date: 23.MAY.2016 16:34:12

TX G mode CH11



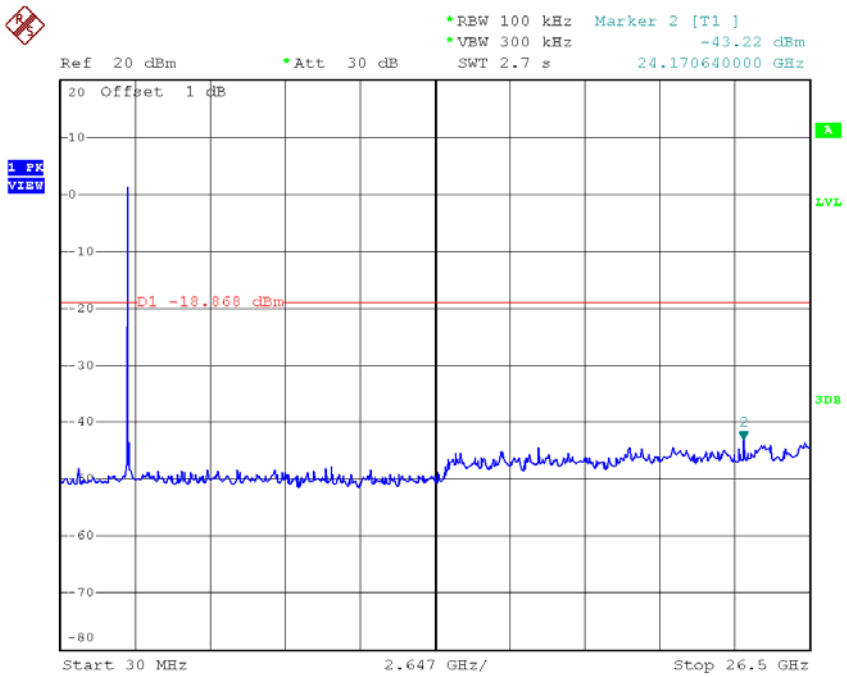
Date: 23.MAY.2016 16:37:02

TX G mode CH01 (10 Harmonic of the frequency)



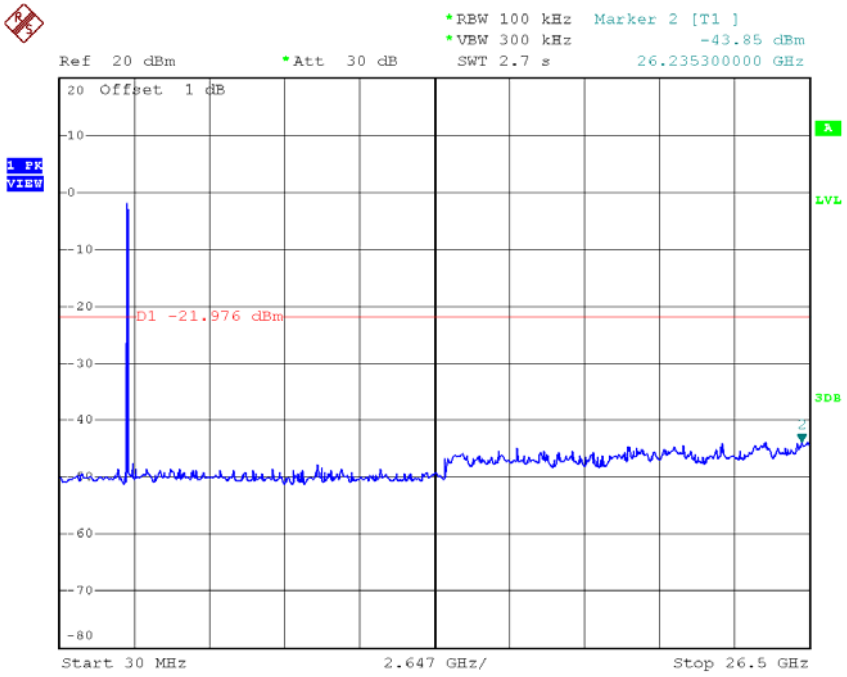
Date: 23.MAY.2016 16:34:04

TX G mode CH06 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:35:39

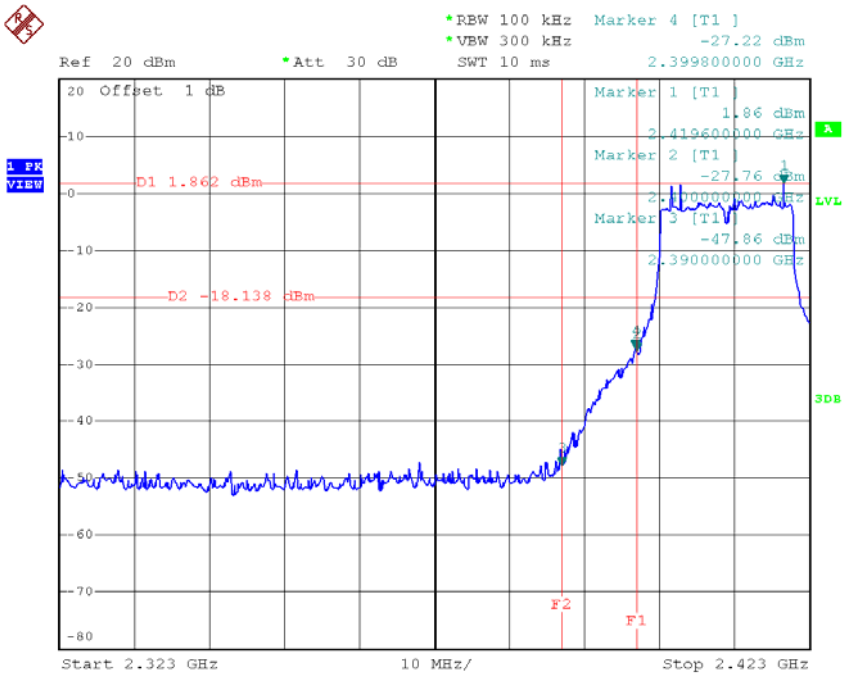
TX G mode CH11 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:36:55

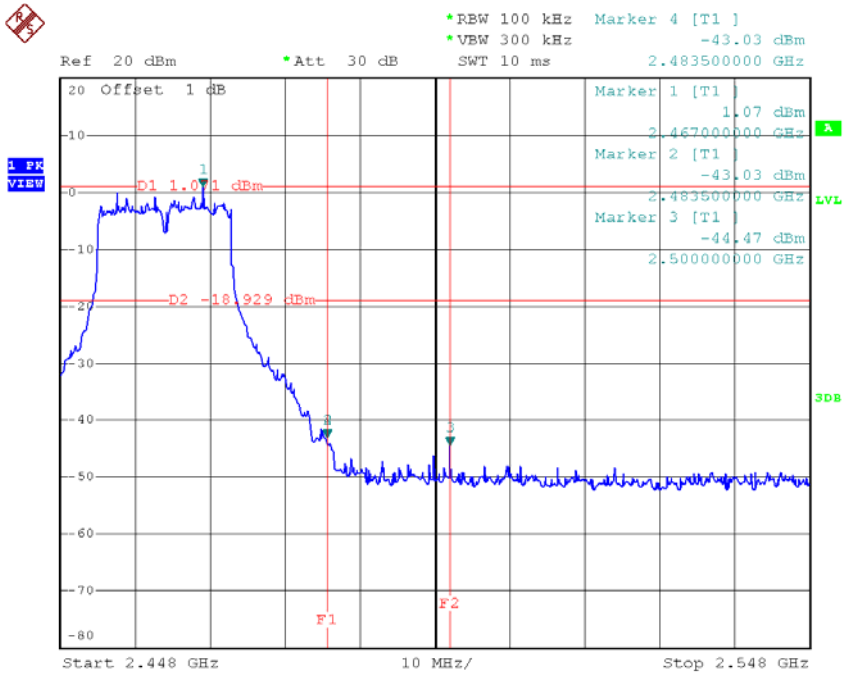
Test Mode :	TX N-20M Mode

TX HT20 mode CH01



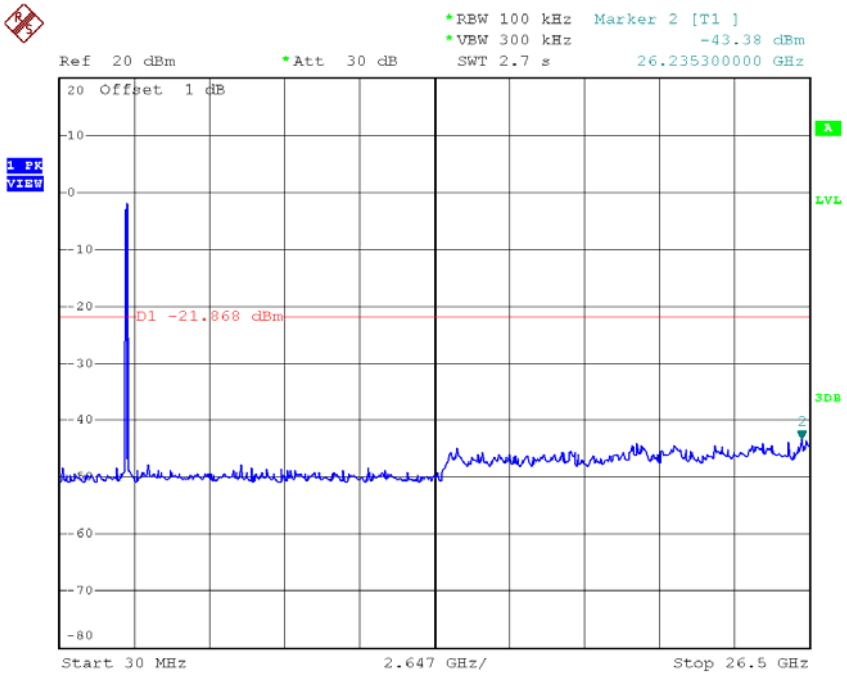
Date: 23.MAY.2016 16:39:14

TX HT20 mode CH11



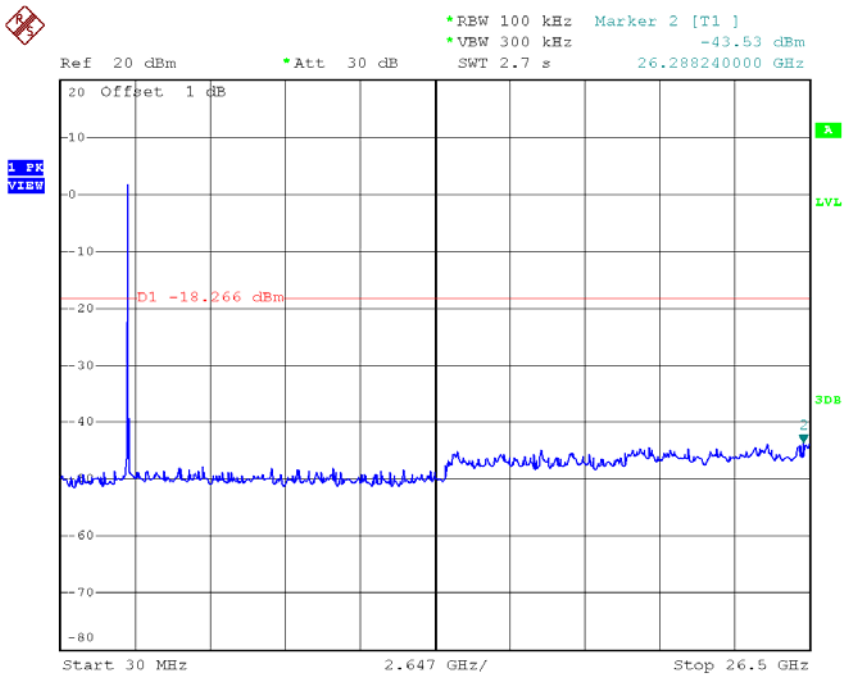
Date: 23.MAY.2016 16:41:34

TX HT20 mode CH01 (10 Harmonic of the frequency)



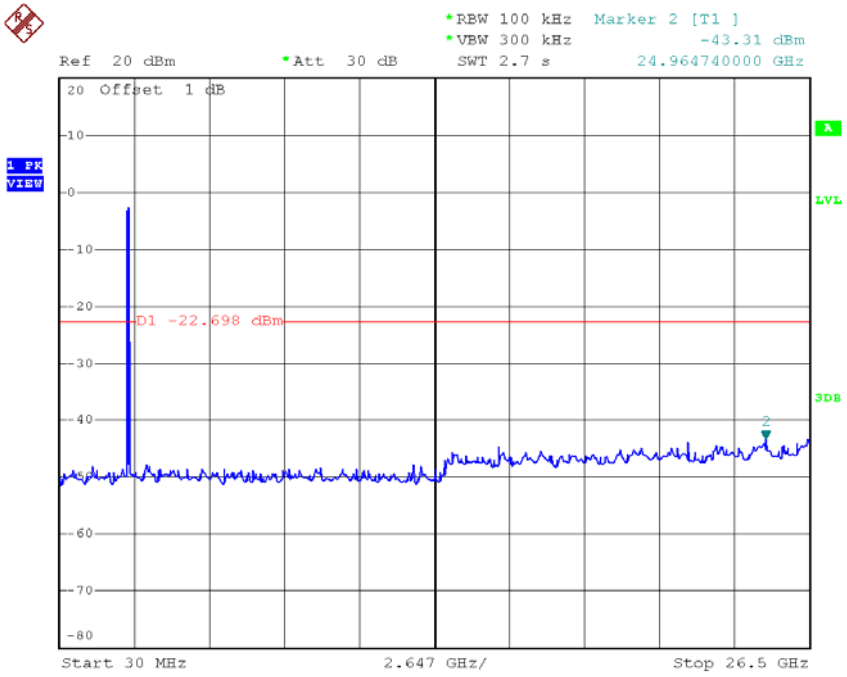
Date: 23.MAY.2016 16:39:06

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:40:19

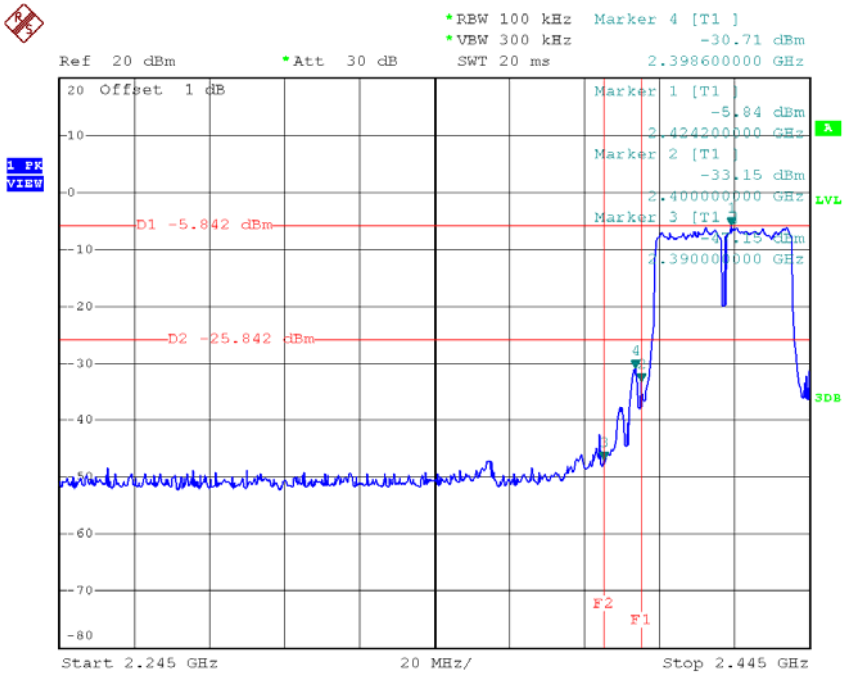
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:41:26

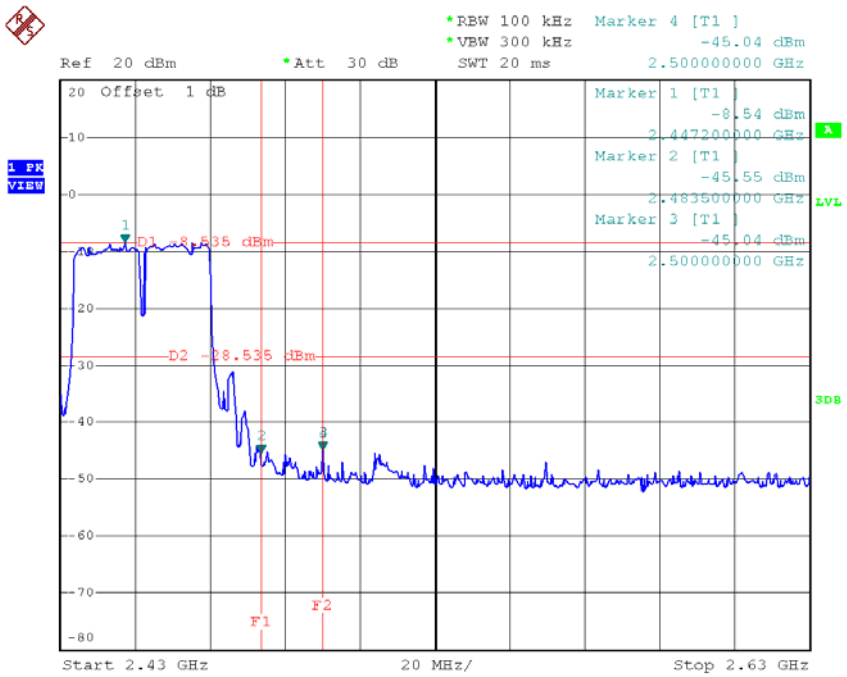
Test Mode :	TX N-40M Mode

TX HT40 mode CH03



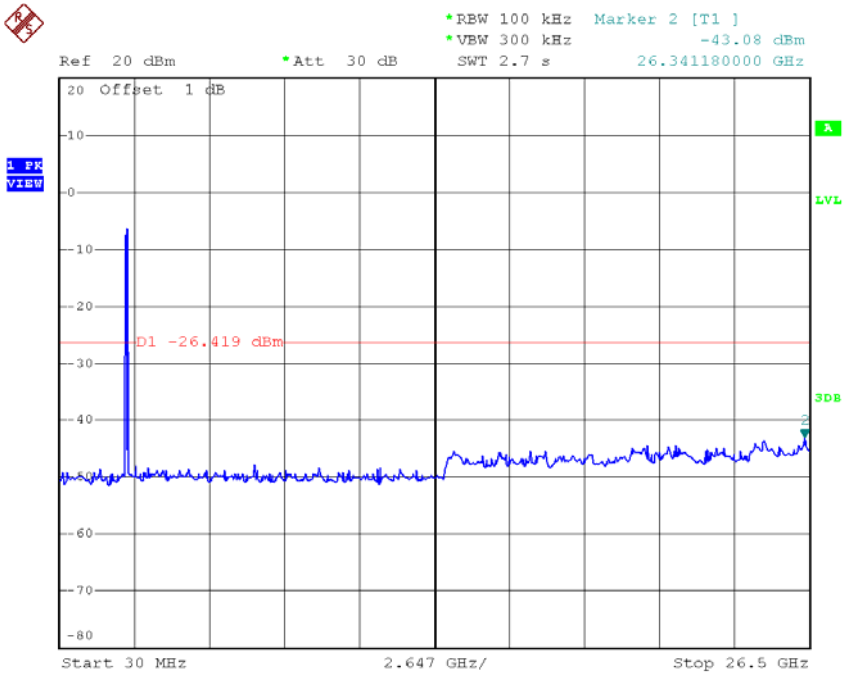
Date: 23.MAY.2016 16:43:53

TX HT40 mode CH09



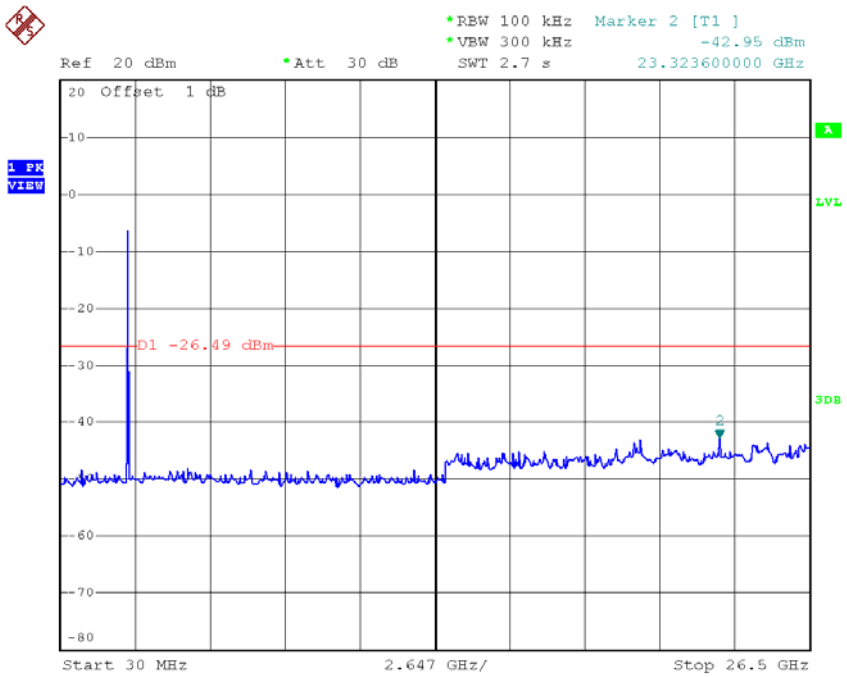
Date: 23.MAY.2016 16:46:58

TX HT40 mode CH03 (10 Harmonic of the frequency)



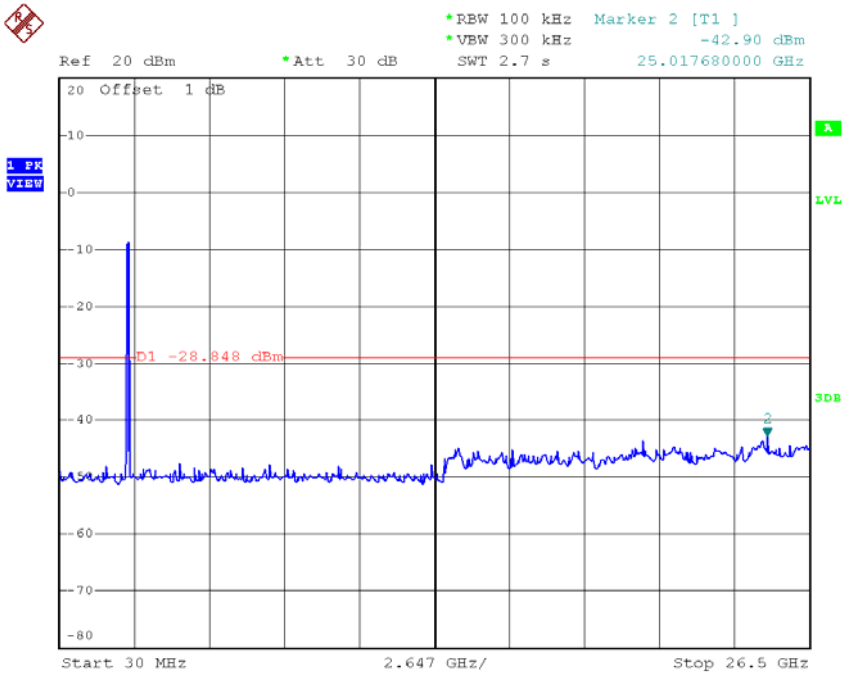
Date: 23.MAY.2016 16:43:45

TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 23.MAY.2016 16:45:44

TX HT40 mode CH09 (10 Harmonic of the frequency)

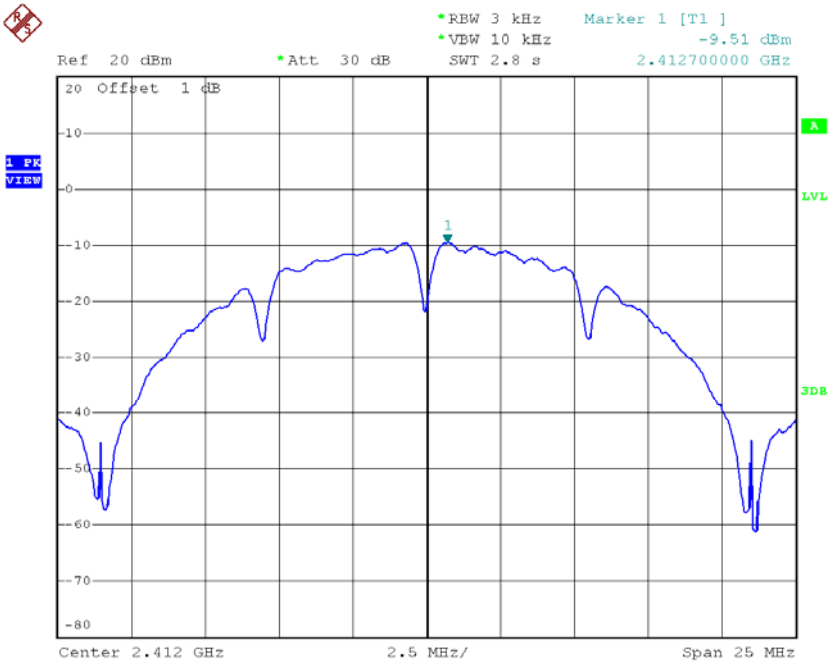


Date: 23.MAY.2016 16:46:50

ATTACHMENT H - POWER SPECTRAL DENSITY

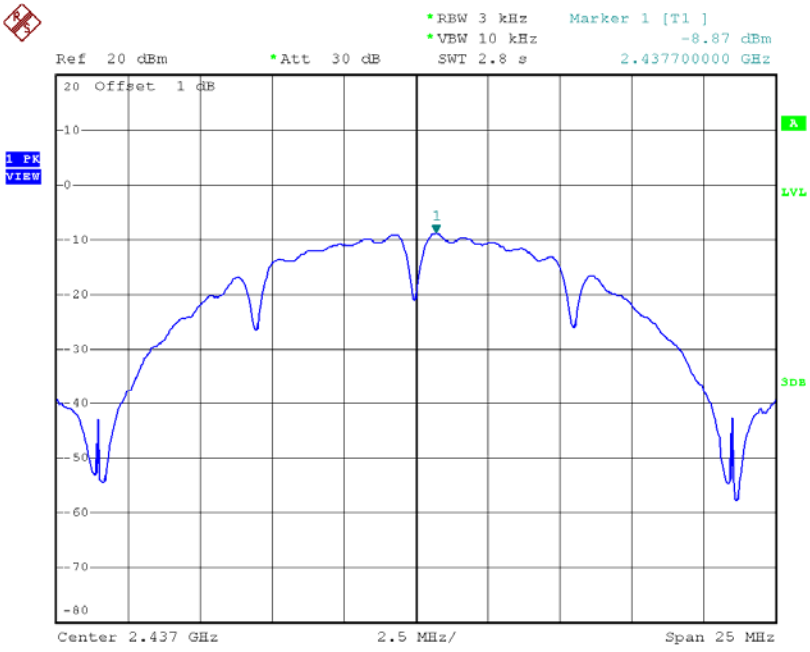
Test Mode :TX B Mode_CH01/06/11				
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-9.51	0.1119	8.00	Complies
2437	-8.87	0.1297	8.00	Complies
2462	-11.45	0.0716	8.00	Complies

TX CH01



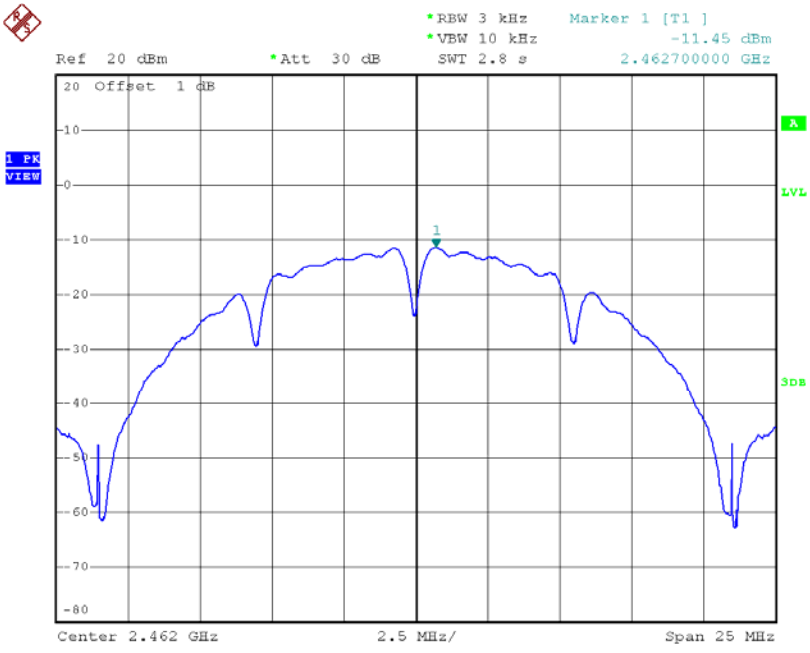
Date: 23.MAY.2016 16:28:22

TX CH06



Date: 23.MAY.2016 16:29:56

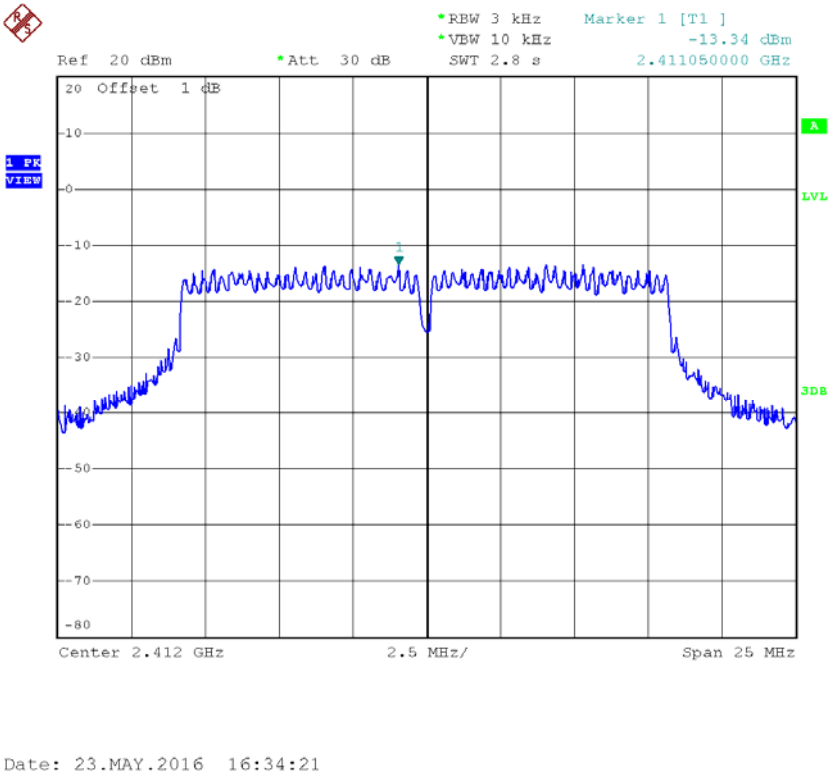
TX CH11



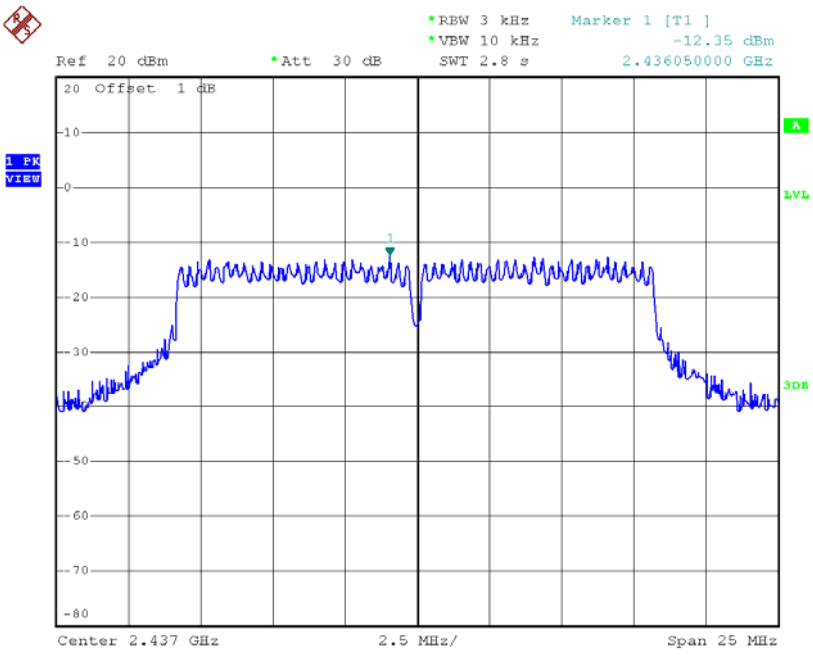
Date: 23.MAY.2016 16:31:27

Test Mode :TX G Mode_CH01/06/11				
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-13.34	0.0463	8.00	Complies
2437	-12.35	0.0582	8.00	Complies
2462	-15.59	0.0276	8.00	Complies

TX CH01

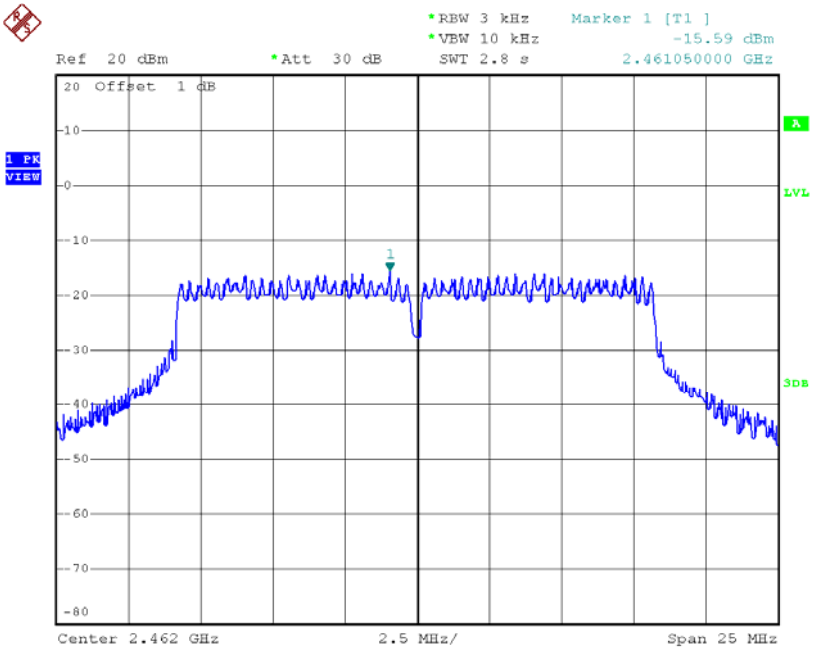


TX CH06



Date: 23.MAY.2016 16:35:48

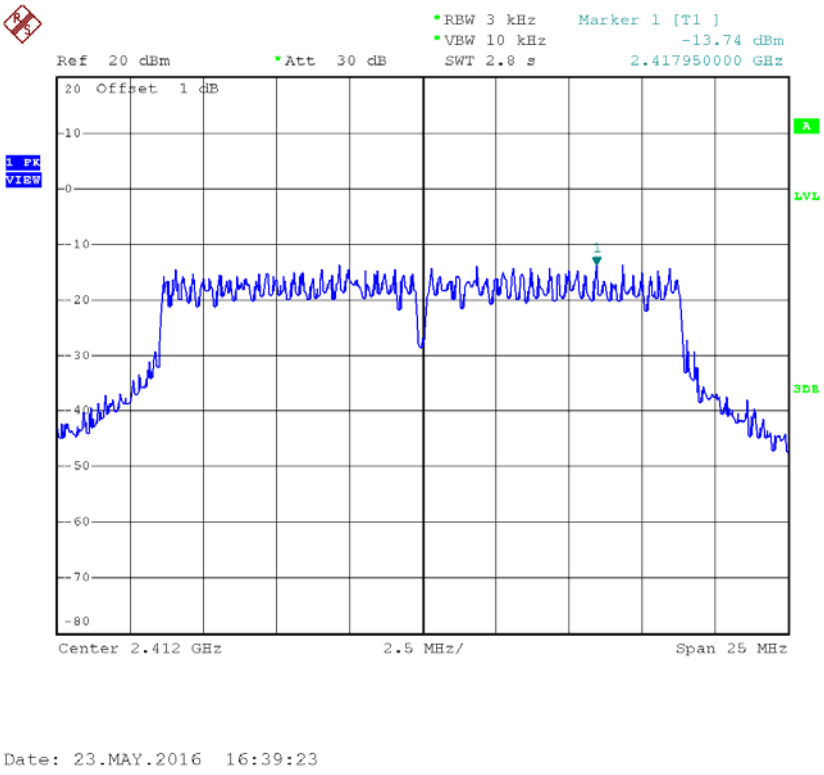
TX CH11



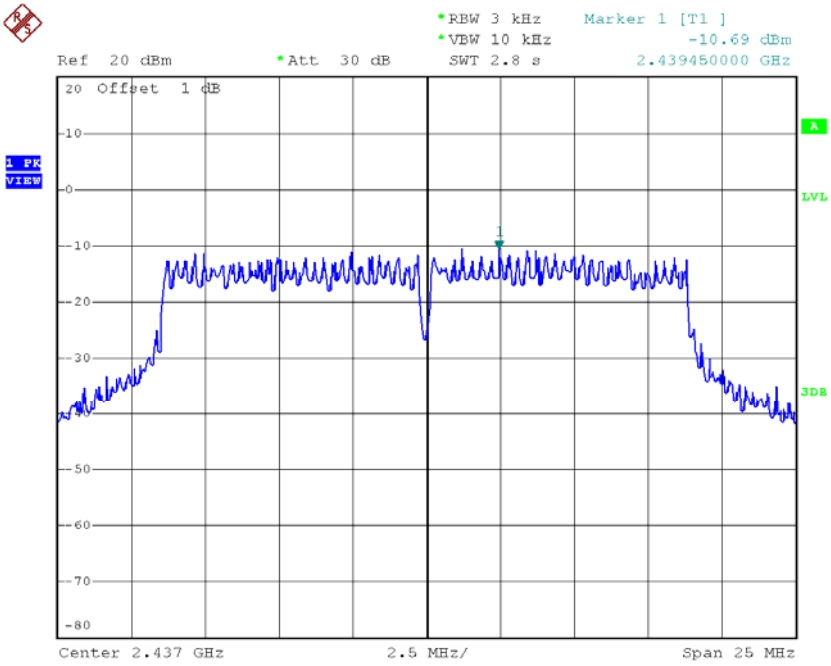
Date: 23.MAY.2016 16:37:11

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	-13.74	0.0423	8.00	Complies
2437	-10.69	0.0853	8.00	Complies
2462	-13.97	0.0401	8.00	Complies

TX CH01

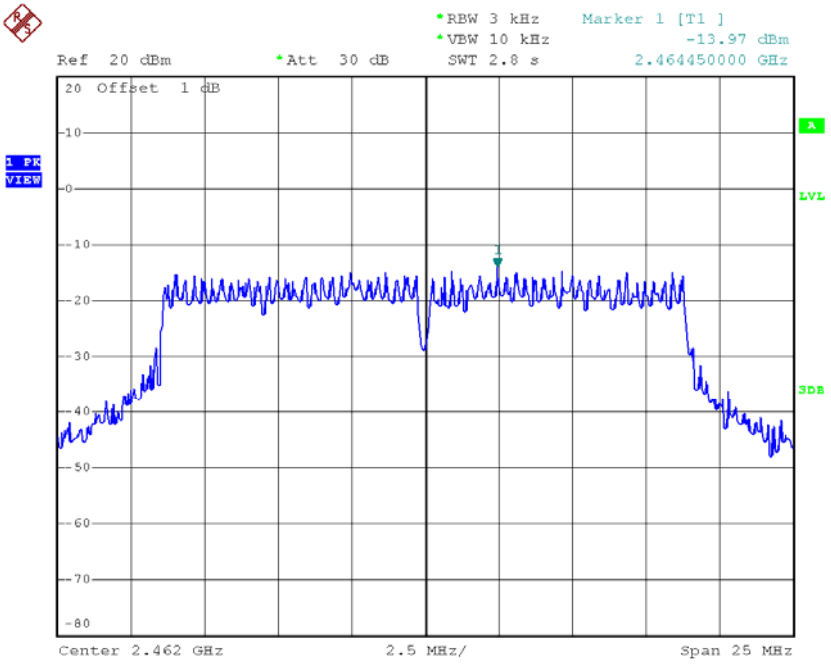


TX CH06



Date: 23.MAY.2016 16:40:28

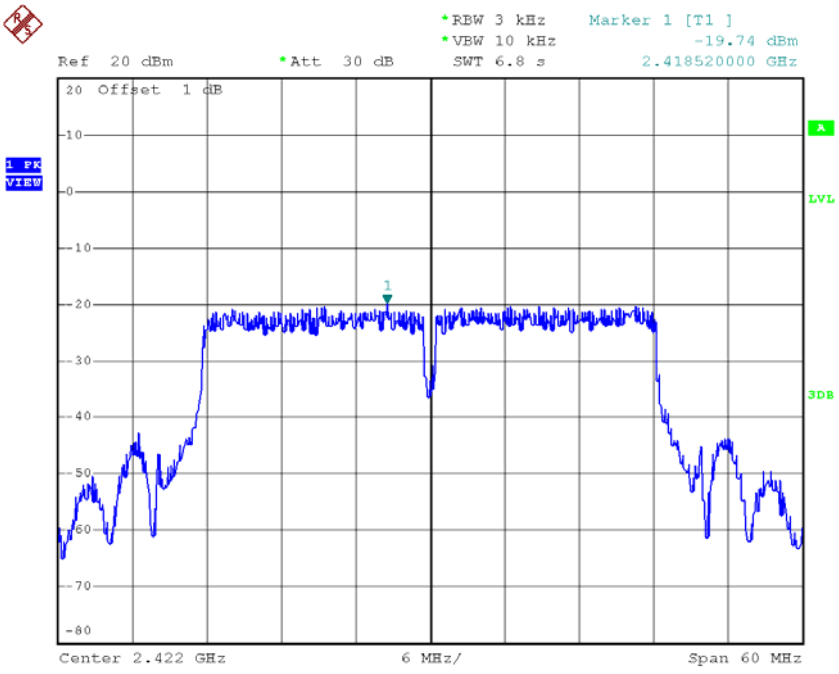
TX CH11



Date: 23.MAY.2016 16:41:43

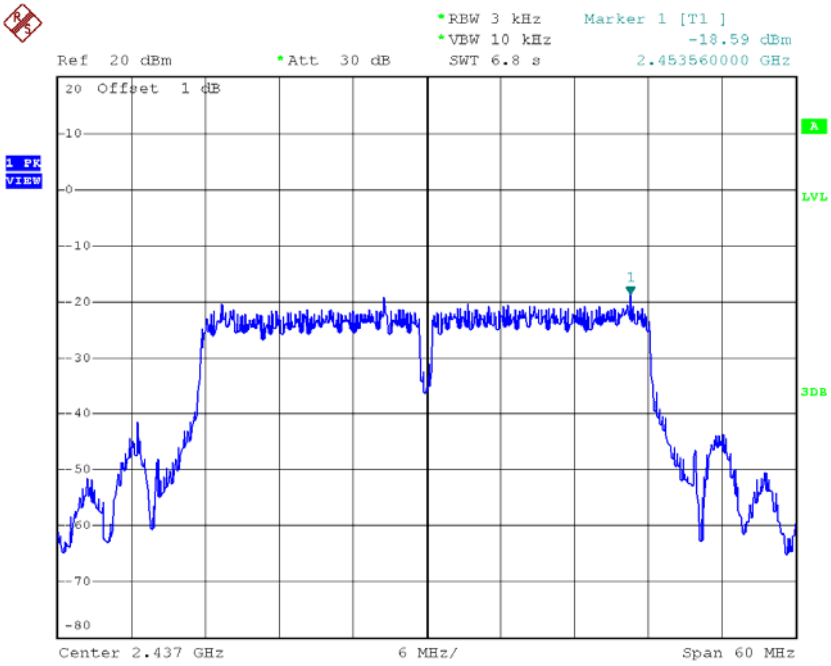
Test Mode : TX N-40M Mode_CH03/06/09				
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-19.74	0.0106	8.00	Complies
2437	-18.59	0.0138	8.00	Complies
2452	-21.83	0.0066	8.00	Complies

TX CH03



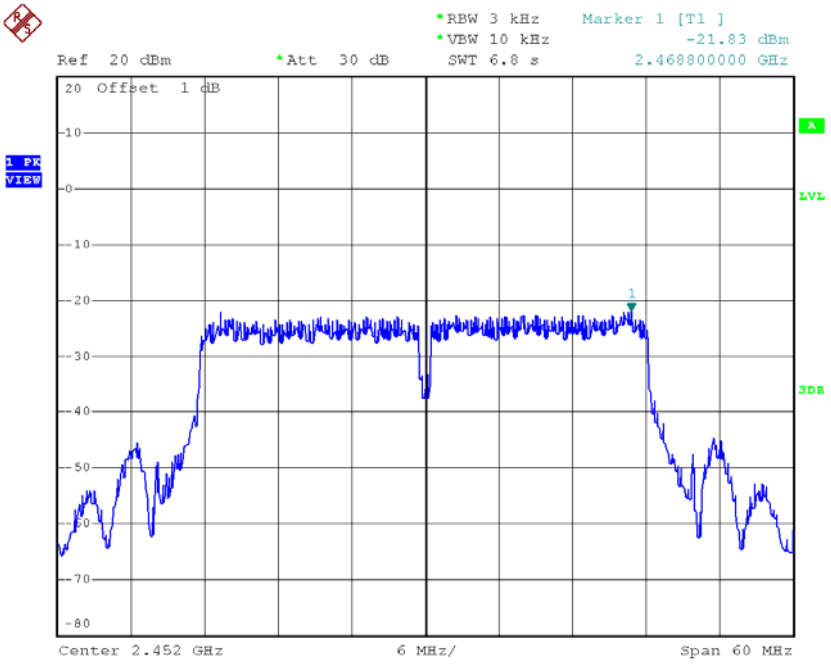
Date: 23.MAY.2016 16:44:05

TX CH06



Date: 23.MAY.2016 16:45:57

TX CH09



Date: 23.MAY.2016 16:47:10