

FCC Radio Test Report

FCC ID: KA2IR814A1

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

Project No. : 1606C323
Equipment : AC750 Wi-Fi Router
Test Model : DIR-814
Series Model : DIR-814A1
Applicant : D-Link Corporation
Address : NO.289, Xinhua 3rd Rd., Neihu District, Taipei City
114, Taiwan, R.O.C.

Date of Receipt : Jun. 29, 2016
Date of Test : Jun. 29, 2016 ~ Jul. 29, 2016
Issued Date : Aug. 01, 2016
Tested by : BTL Inc.

Testing Engineer :

Shawn Xiao

(Shawn Xiao)

Technical Manager :

David Mao

(David Mao)

Authorized Signatory :

Steven Lu

(Steven Lu)

B T L I N C .

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan,
Guangdong, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

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).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

BTL's report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **BTL-self**, extracts from the test report shall not be reproduced except in full with **BTL's** authorized written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

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.

Table of Contents	Page
1 . CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	11
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	12
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	13
3.5 DESCRIPTION OF SUPPORT UNITS	13
4 . EMC EMISSION TEST	14
4.1 CONDUCTED EMISSION MEASUREMENT	14
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	14
4.1.2 TEST PROCEDURE	14
4.1.3 DEVIATION FROM TEST STANDARD	14
4.1.4 TEST SETUP	15
4.1.5 EUT OPERATING CONDITIONS	15
4.1.6 EUT TEST CONDITIONS	15
4.1.7 TEST RESULTS	15
4.2 RADIATED EMISSION MEASUREMENT	16
4.2.1 RADIATED EMISSION LIMITS	16
4.2.2 TEST PROCEDURE	17
4.2.3 DEVIATION FROM TEST STANDARD	17
4.2.4 TEST SETUP	18
4.2.5 EUT OPERATING CONDITIONS	19
4.2.6 EUT TEST CONDITIONS	19
4.2.7 TEST RESULTS (9KHZ TO 30MHZ)	20
4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)	20
4.2.9 TEST RESULTS (ABOVE 1000 MHZ)	20
5 . BANDWIDTH TEST	21
5.1 APPLIED PROCEDURES	21
5.1.1 TEST PROCEDURE	21
5.1.2 DEVIATION FROM STANDARD	21
5.1.3 TEST SETUP	21
5.1.4 EUT OPERATION CONDITIONS	21
5.1.5 EUT TEST CONDITIONS	21
5.1.6 TEST RESULTS	21
6 . MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST	22

Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	22
6.1.1 TEST PROCEDURE	22
6.1.2 DEVIATION FROM STANDARD	22
6.1.3 TEST SETUP	22
6.1.4 EUT OPERATION CONDITIONS	22
6.1.5 EUT TEST CONDITIONS	22
6.1.6 TEST RESULTS	22
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	23
7.1 APPLIED PROCEDURES / LIMIT	23
7.1.1 TEST PROCEDURE	23
7.1.2 DEVIATION FROM STANDARD	23
7.1.3 TEST SETUP	23
7.1.4 EUT OPERATION CONDITIONS	23
7.1.5 EUT TEST CONDITIONS	23
7.1.6 TEST RESULTS	23
8 . POWER SPECTRAL DENSITY TEST	24
8.1 APPLIED PROCEDURES / LIMIT	24
8.1.1 TEST PROCEDURE	24
8.1.2 DEVIATION FROM STANDARD	24
8.1.3 TEST SETUP	24
8.1.4 EUT OPERATION CONDITIONS	24
8.1.5 EUT TEST CONDITIONS	24
8.1.6 TEST RESULTS	24
9 . MEASUREMENT INSTRUMENTS LIST	25
ATTACHMENT A - CONDUCTED EMISSION	27
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	33
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	37
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	51
ATTACHMENT E - BANDWIDTH	101
ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER	111
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	116
ATTACHMENT H - POWER SPECTRAL DENSITY	154

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1606C323	Original Issue.	Aug. 01, 2016

1. CERTIFICATION

Equipment : AC750 Wi-Fi Router
Brand Name : D-Link
Test Model : DIR-814
Series Model : DIR-814A1
Applicant : D-Link Corporation
Manufacturer : Alpha Networks Inc.
Address : No. 8, Li-Shing 7th Rd., Science-Based Industrial Park, Hsinchu, Taiwan
Factory : Alpha Networks (Dongguan) Inc
Address : Xin An District, Chang An Town, Dongguan City, Guangdong Province, China
Date of Test : Jun. 29, 2016 ~ Jul. 29, 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-1-1606C323) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

NOTE:

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

2.1 TEST FACILITY

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

BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

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

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

A. Conducted Measurement:

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

B. Radiated Measurement:

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	AC750 Wi-Fi Router	
Brand Name	D-Link	
Test Model	DIR-814	
Series Model	DIR-814A1	
Model Difference	Only differ in model name.	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300 Mbps
	Output Power (Max.)	802.11b: 29.77dBm 802.11g: 29.98dBm 802.11n(20MHz): 29.99dBm 802.11n(40MHz): 29.46dBm
Power Source	DC voltage supplied from AC Adapter. Brand : D-Link Model : 1# 2ABB018F 2# MU18A2120150-A1	
Power Rating	1# I/P: 100-240V 50/60Hz 0.6A O/P: 12V 1.5A 2# I/P: 100-240V 50/60Hz 0.5A O/P: 12V 1.5A	

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 – 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	Model Name	Antenna Type	Connector	Gain (dBi)
1	D-Link	N/A	Dipole	N/A	4.2
2	D-Link	N/A	Dipole	N/A	4.2

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R).
2. ANT 1 for 1TX was found to be the worst case and recorded.

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

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

Note:

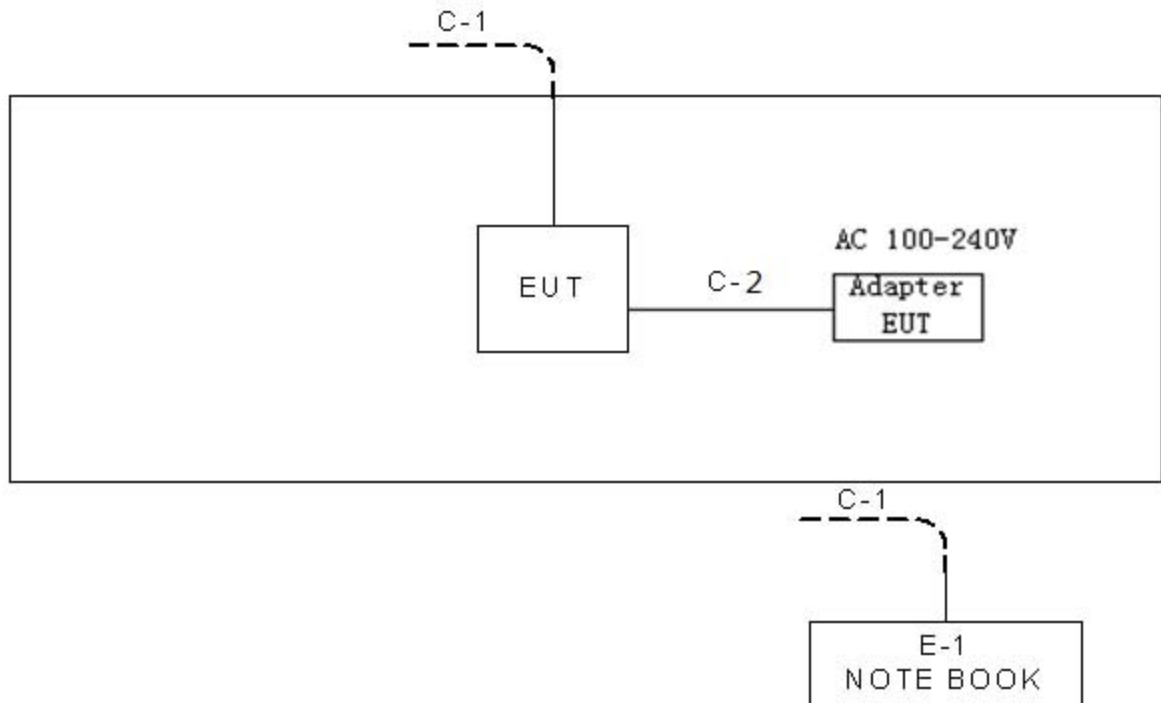
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (13Mbps)
 802.11n HT40 mode : BPSK (27Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	MP Tool		
Frequency (MHz)	2412	2437	2462
802.11b	54	54	54
802.11g	46	44	43
802.11n (20MHz)	48	46	46
Frequency	2422	2437	2452
802.11n (40MHz)	50	49	49

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.
E-1	Notebook	Lenovo	H2510	DOC	SS07999198

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NA	NA	10M	Rj45 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

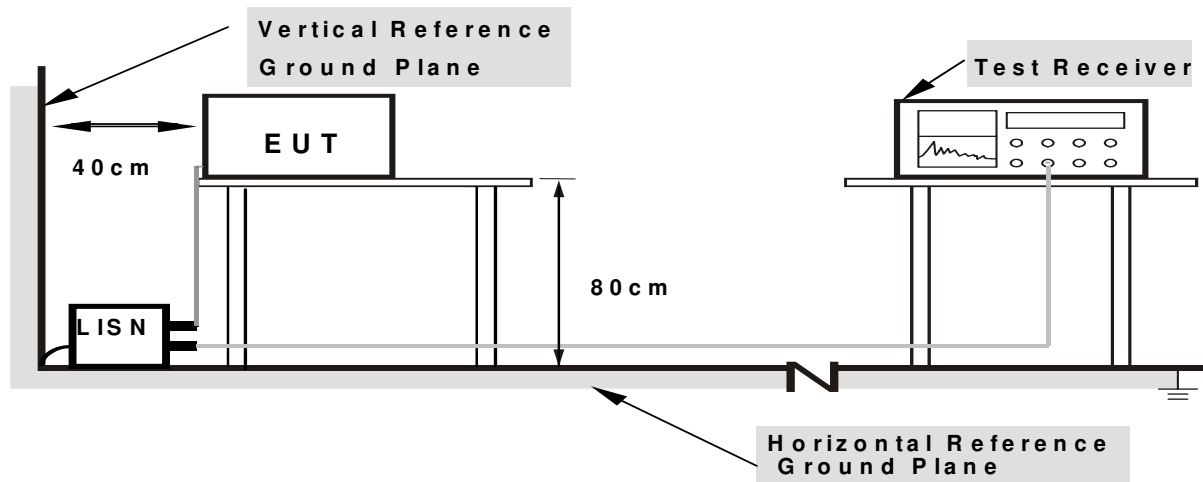
4.1.2 TEST PROCEDURE

- 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 cm from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Attachment A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

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

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

4.2.2 TEST PROCEDURE

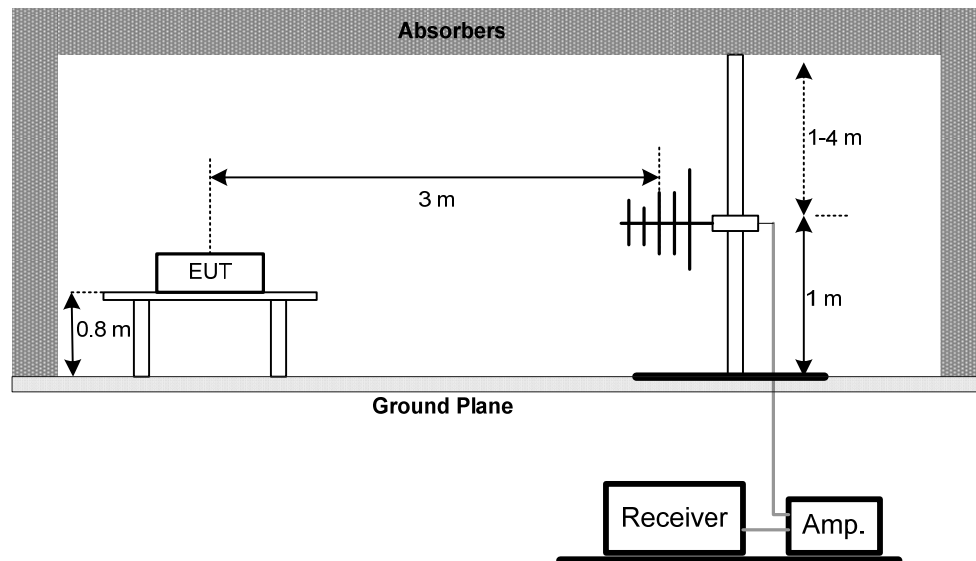
- The measuring distance of at 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance 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 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- The initial step in collecting 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.

4.2.3 DEVIATION FROM TEST STANDARD

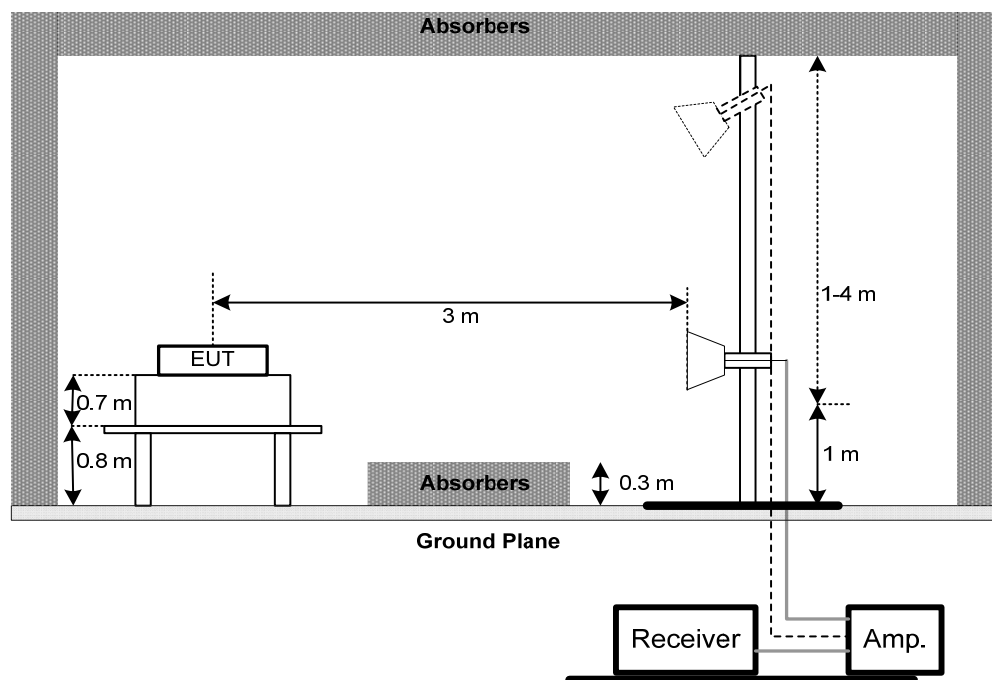
No deviation

4.2.4 TEST SETUP

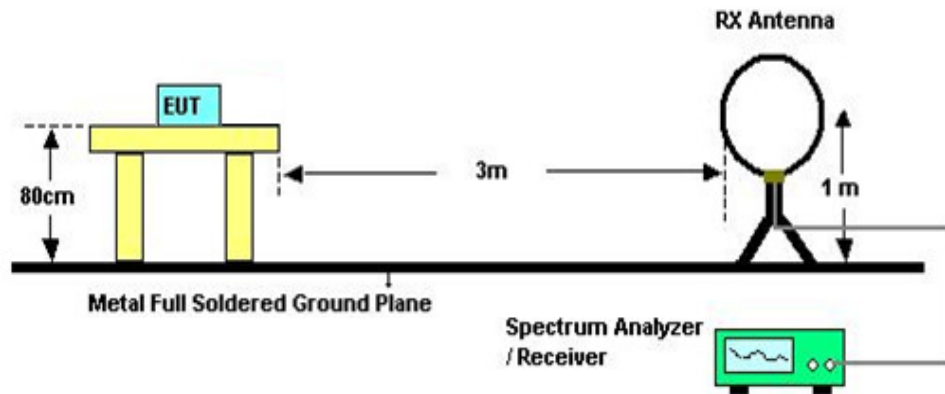
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For Radiated Emissions Below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

Remark:

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

4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

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

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

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

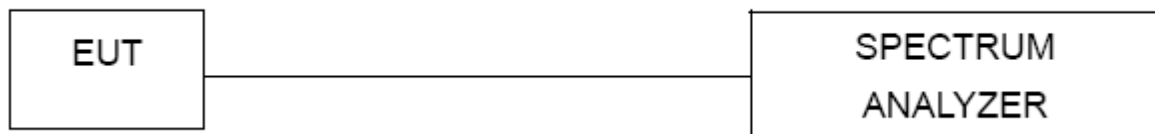
5.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the 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

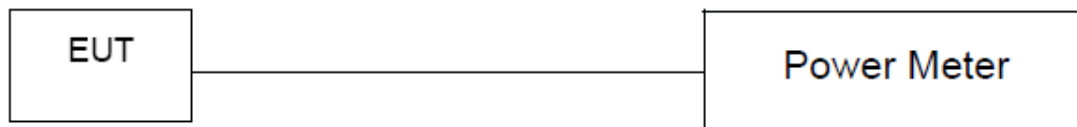
6.1.1 TEST PROCEDURE

- 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 558074 D01 DTS Meas Guidance v03r05 and FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

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

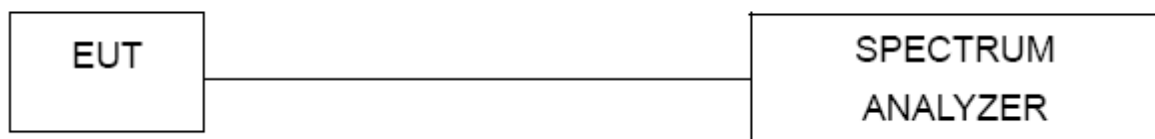
7.1.1 TEST PROCEDURE

- 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

7.1.2 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

- 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	0052765	Mar. 27, 2017
2	LISN	R&S	ENV216	101447	Mar. 27, 2017
3	Test Cable	emci	RG223(9KHz-30 MHz)	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. 27, 2017
5	Control	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	Mar. 27, 2017
7	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2016
8	Receiver	AGILENT	N9038A	MY52130039	Oct. 11, 2016
9	Test Cable	emci	EMC104-SM-SM-10000(1GHz – 26.5GHz)	C-68	Jun. 27, 2017
10	Controller	CT	SC100	N/A	N/A
11	Position Control	MF	MF-7802	MF780208416	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
2	Test Cable	emci	EMC104-SM-SM-900 0(0.01GHz— 26.5GHz)	C-100	N/A

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	ANRITSU	ML2495A	1128009	Apr. 26, 2017
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Apr. 26, 2017

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
2	Test Cable	emci	EMC104-SM-SM-900 0(0.01GHz— 26.5GHz)	C-100	N/A

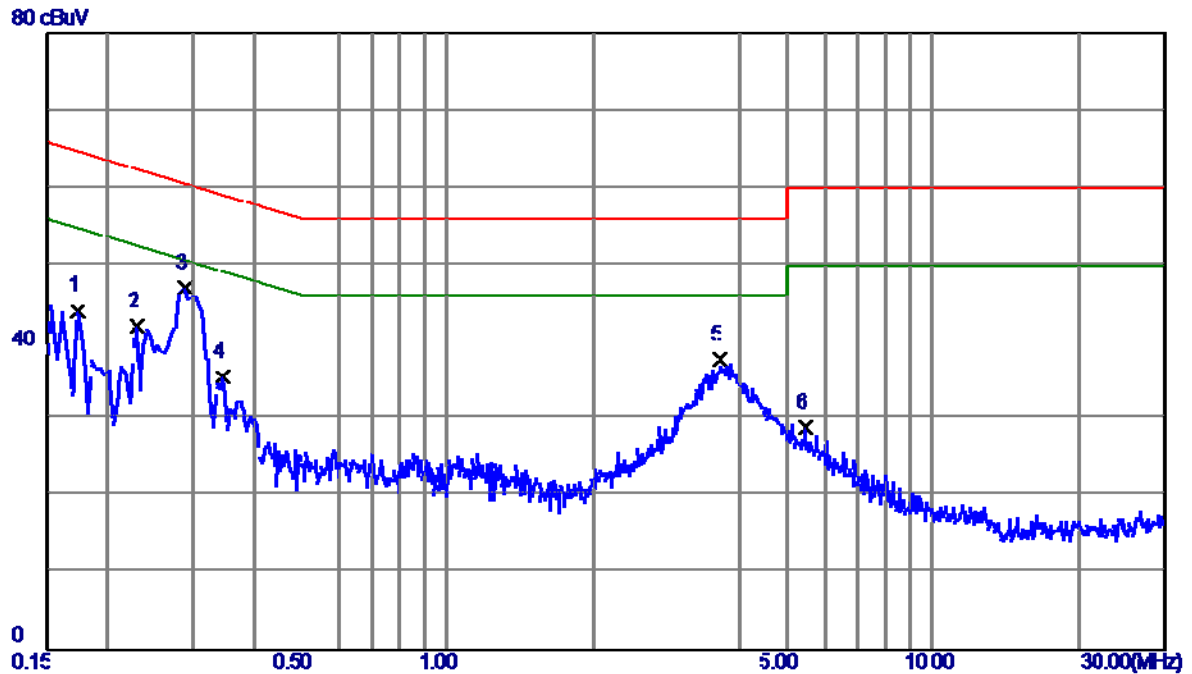
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016
2	Test Cable	emci	EMC104-SM-SM-900 0(0.01GHz— 26.5GHz)	C-100	N/A

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

ATTACHMENT A - CONDUCTED EMISSION

Test Mode : Normal Link (Adapter:1# 2ABB018F)

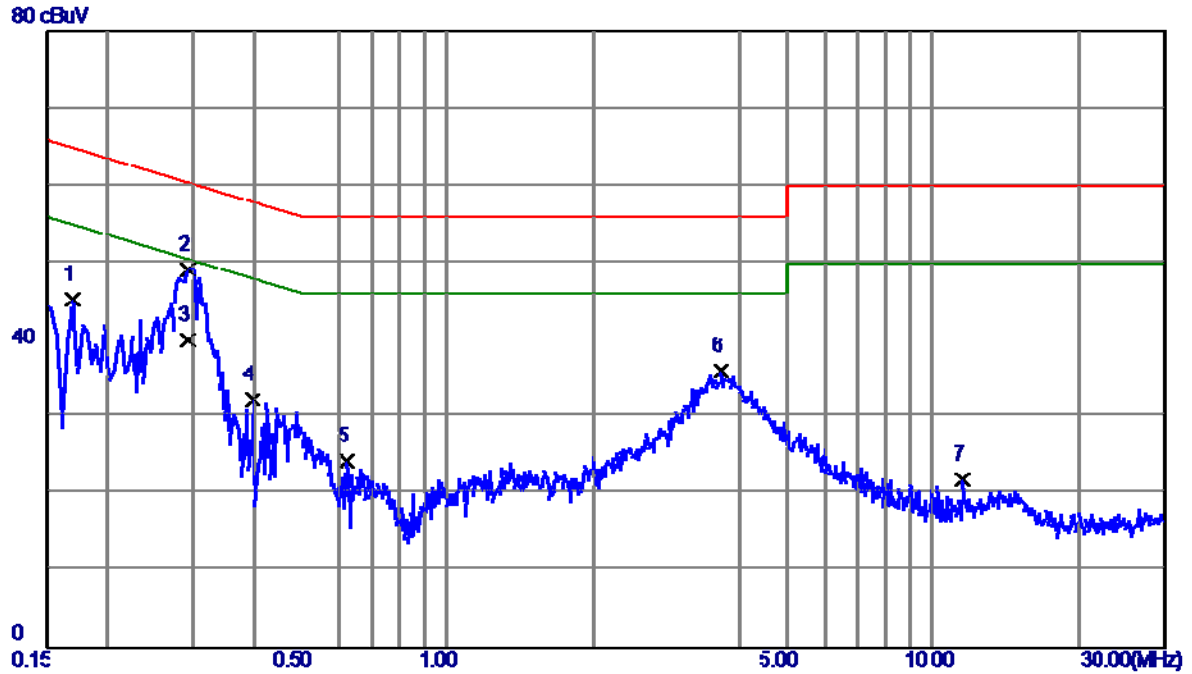
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1740	34.56	9.52	44.08	64.77	-20.69	Peak	
2	0.2300	32.62	9.53	42.15	62.45	-20.30	Peak	
3 *	0.2900	37.44	9.53	46.97	60.52	-13.55	Peak	
4	0.3460	25.92	9.53	35.45	59.06	-23.61	Peak	
5	3.6500	27.60	10.15	37.75	56.00	-18.25	Peak	
6	5.4740	18.98	10.03	29.01	60.00	-30.99	Peak	

Test Mode : Normal Link (Adapter:1# 2ABB018F)

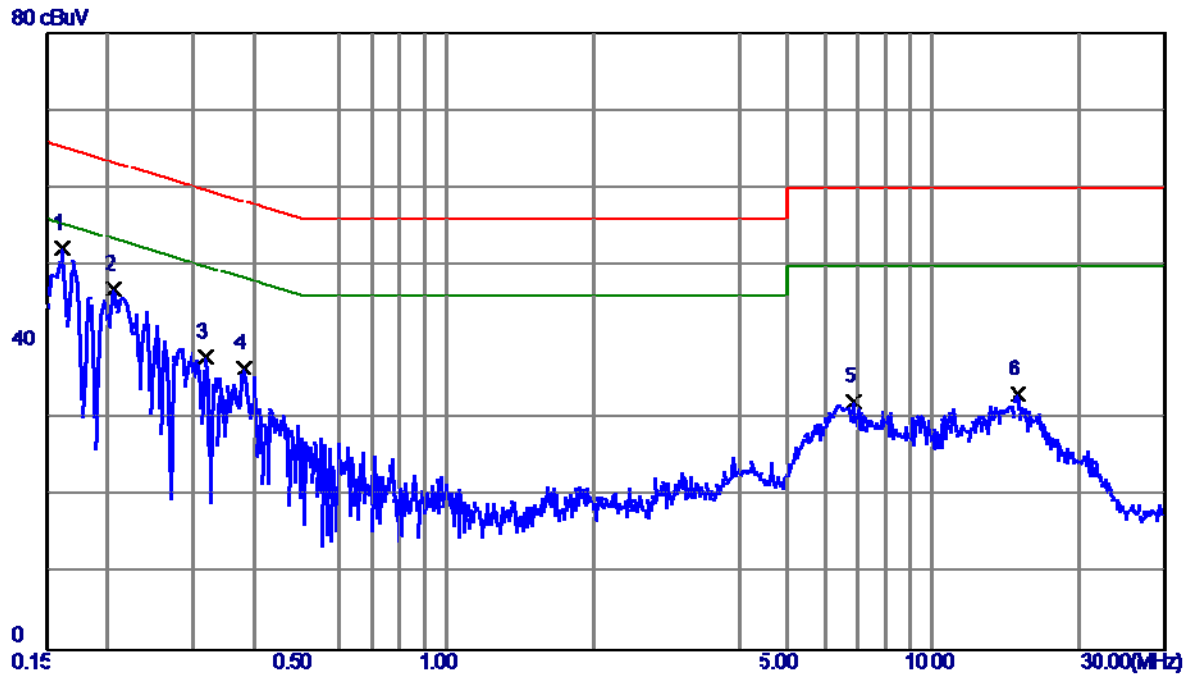
Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1700	35.82	9.42	45.24	64.96	-19.72	Peak	
2	0.2940	39.56	9.53	49.09	60.41	-11.32	Peak	
3 *	0.2940	30.40	9.53	39.93	50.41	-10.48	AVG	
4	0.3980	22.83	9.44	32.27	57.90	-25.63	Peak	
5	0.6220	14.87	9.44	24.31	56.00	-31.69	Peak	
6	3.6780	26.09	9.86	35.95	56.00	-20.05	Peak	
7	11.5100	11.57	10.32	21.89	60.00	-38.11	Peak	

Test Mode : Normal Link (Adapter:2# MU18A2120150-A1)

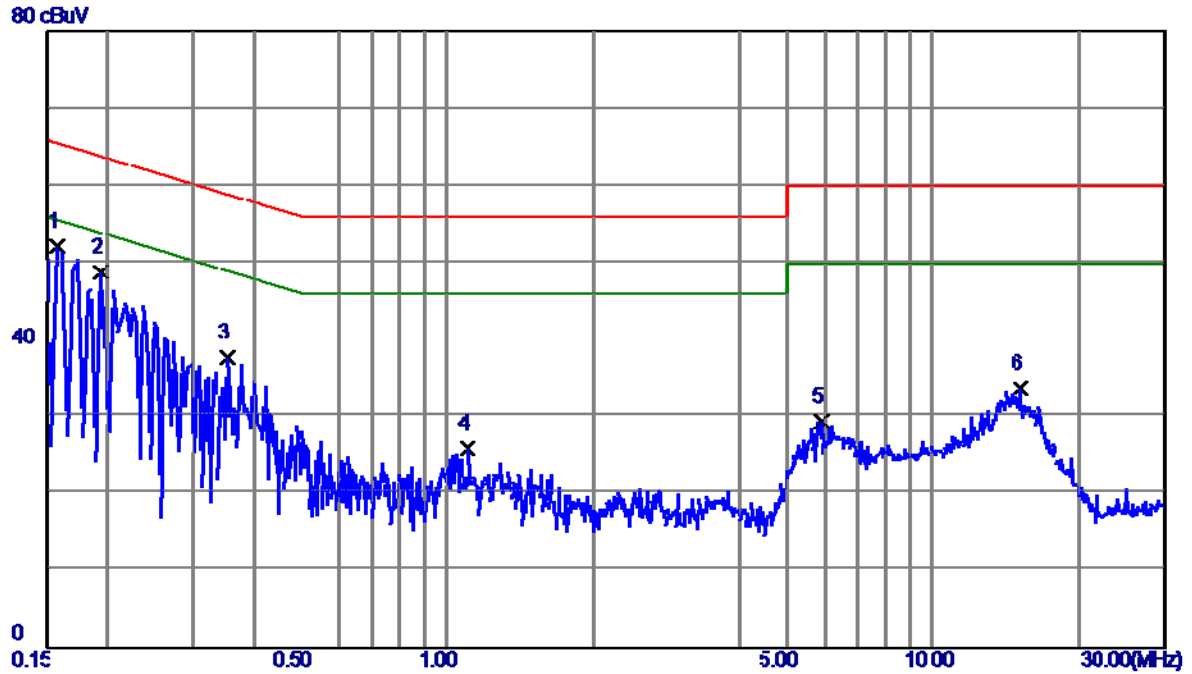
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1620	42.68	9.52	52.20	65.36	-13.16	Peak	
2	0.2060	37.36	9.53	46.89	63.37	-16.48	Peak	
3	0.3180	28.49	9.53	38.02	59.76	-21.74	Peak	
4	0.3820	27.06	9.54	36.60	58.24	-21.64	Peak	
5	6.8660	22.12	10.14	32.26	60.00	-27.74	Peak	
6	14.9500	22.93	10.36	33.29	60.00	-26.71	Peak	

Test Mode : Normal Link (Adapter:2# MU18A2120150-A1)

Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1580	42.69	9.48	52.17	65.57	-13.40	Peak	
2	0.1940	39.25	9.51	48.76	63.86	-15.10	Peak	
3	0.3540	28.25	9.53	37.78	58.87	-21.09	Peak	
4	1.1060	16.25	9.66	25.91	56.00	-30.09	Peak	
5	5.9060	19.48	9.97	29.45	60.00	-30.55	Peak	
6	15.1380	23.36	10.36	33.72	60.00	-26.28	Peak	

Conducted Measurement Photos



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

Test Mode:	TX B MODE CHANNEL 01 (Adapter:1# 2ABB018F)
------------	--

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0092	0°	13.65	24.9840	38.6340	128.3285	-89.6945	AVG
0.0092	0°	14.34	24.9840	39.3240	148.3285	-109.0045	PEAK
0.0284	0°	6.7	23.7680	30.4680	118.5379	-88.0699	AVG
0.0284	0°	8.28	23.7680	32.0480	138.5379	-106.4899	PEAK
0.036	0°	3.34	23.2867	26.6267	116.4782	-89.8515	AVG
0.036	0°	5.51	23.2867	28.7967	136.4782	-107.6815	PEAK
0.0586	0°	1.24	22.2280	23.4680	112.2463	-88.7783	AVG
0.0586	0°	2.5	22.2280	24.7280	132.2463	-107.5183	PEAK
0.5094	0°	19.37	19.8301	39.2001	73.4630	-34.2630	QP
1.9522	0°	23.84	19.5048	43.3448	69.5400	-26.1952	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0124	90°	13.42	24.3000	37.7200	125.7358	-88.0158	AVG
0.0124	90°	14.81	24.3000	39.1100	145.7358	-106.6258	PEAK
0.026	90°	7.32	23.9200	31.2400	119.3048	-88.0648	AVG
0.026	90°	8.9	23.9200	32.8200	139.3048	-106.4848	PEAK
0.0432	90°	5.24	22.8307	28.0707	114.8945	-86.8239	AVG
0.0432	90°	6.27	22.8307	29.1007	134.8945	-105.7939	PEAK
0.0581	90°	1.5	22.2380	23.7380	112.3207	-88.5827	AVG
0.0581	90°	2.74	22.2380	24.9780	132.3207	-107.3427	PEAK
0.6219	90°	22.36	20.1901	42.5501	71.7298	-29.1797	QP
2.0541	90°	24.5	19.4675	43.9675	69.5400	-25.5725	QP

Test Mode:	TX B MODE CHANNEL 01 (Adapter:2# MU18A2120150-A1)
------------	---

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0094	0°	13.74	24.9713	38.7113	128.1417	-89.4303	AVG
0.0094	0°	14.21	24.9713	39.1813	148.1417	-108.9603	PEAK
0.0282	0°	6.72	23.7807	30.5007	118.5992	-88.0986	AVG
0.0282	0°	8.17	23.7807	31.9507	138.5992	-106.6486	PEAK
0.0361	0°	3.3	23.2803	26.5803	116.4541	-89.8737	AVG
0.0361	0°	5.51	23.2803	28.7903	136.4541	-107.6637	PEAK
0.0582	0°	1.25	22.2360	23.4860	112.3058	-88.8198	AVG
0.0582	0°	2.54	22.2360	24.7760	132.3058	-107.5298	PEAK
0.509	0°	19.36	19.8288	39.1888	73.4699	-34.2811	QP
1.9523	0°	23.67	19.5048	43.1748	69.5400	-26.3652	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0128	90°	13.45	24.3000	37.7500	125.4600	-87.7100	AVG
0.0128	90°	14.8	24.3000	39.1000	145.4600	-106.3600	PEAK
0.0261	90°	7.21	23.9137	31.1237	119.2714	-88.1477	AVG
0.0261	90°	8.9	23.9137	32.8137	139.2714	-106.4577	PEAK
0.0435	90°	5.27	22.8117	28.0817	114.8344	-86.7528	AVG
0.0435	90°	6.25	22.8117	29.0617	134.8344	-105.7728	PEAK
0.0588	90°	1.5	22.2240	23.7240	112.2167	-88.4927	AVG
0.0588	90°	2.87	22.2240	25.0940	132.2167	-107.1227	PEAK
0.6225	90°	22.41	20.1920	42.6020	71.7214	-29.1194	QP
2.0545	90°	24.5	19.4673	43.9673	69.5400	-25.5727	QP

Radiated Measurement Photos

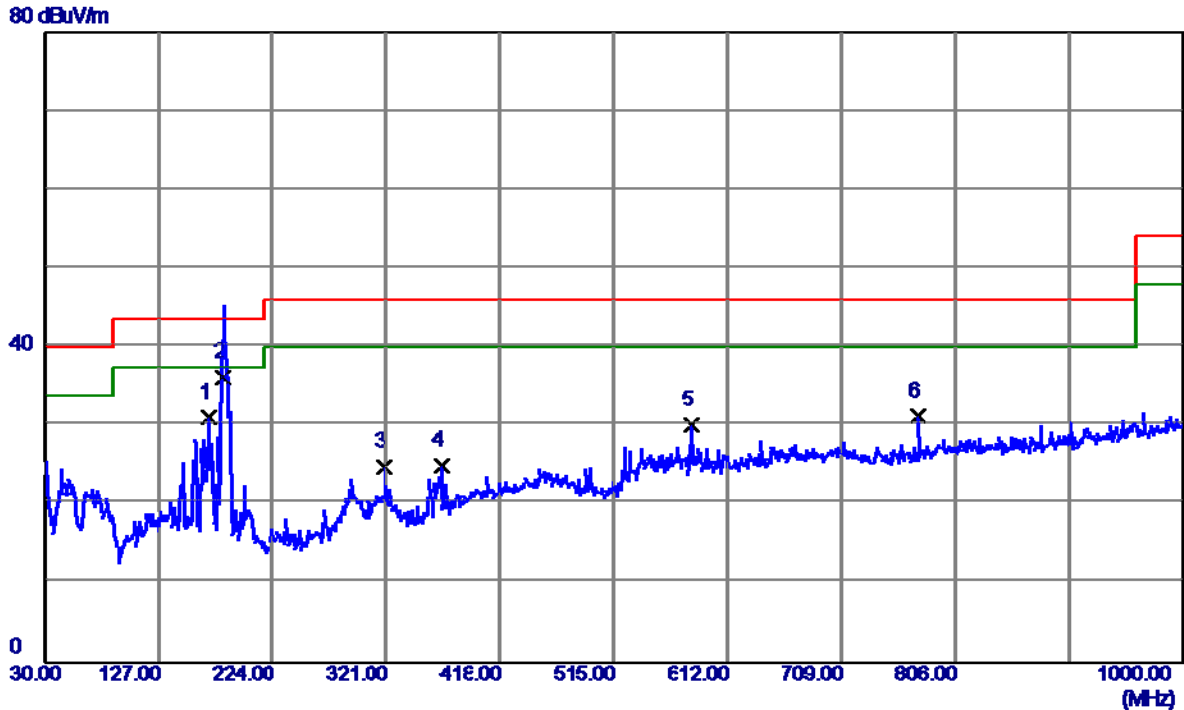
9KHz to 30MHz



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

Test Mode: TX B MODE CHANNEL 01 (Adapter:1# 2ABB018F)

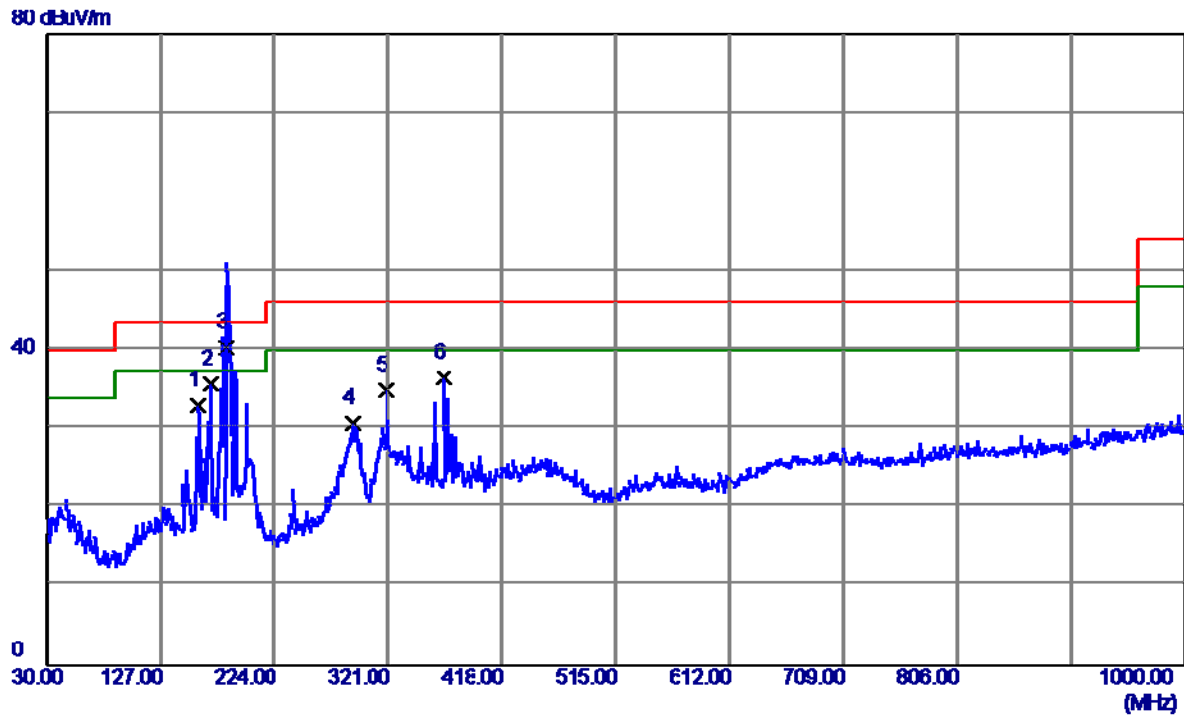
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	170.1649	41.69	-10.71	30.98	43.50	-12.52	Peak	
2 *	181.7025	48.47	-12.30	36.17	43.50	-7.33	QP	
3	320.0300	35.12	-10.29	24.83	46.00	-21.17	Peak	
4	368.0450	34.48	-9.49	24.99	46.00	-21.01	Peak	
5	581.4450	34.98	-4.93	30.05	46.00	-15.95	Peak	
6	774.9600	31.76	-0.53	31.23	46.00	-14.77	Peak	

Test Mode: TX B MODE CHANNEL 01 (Adapter:1# 2ABB018F)

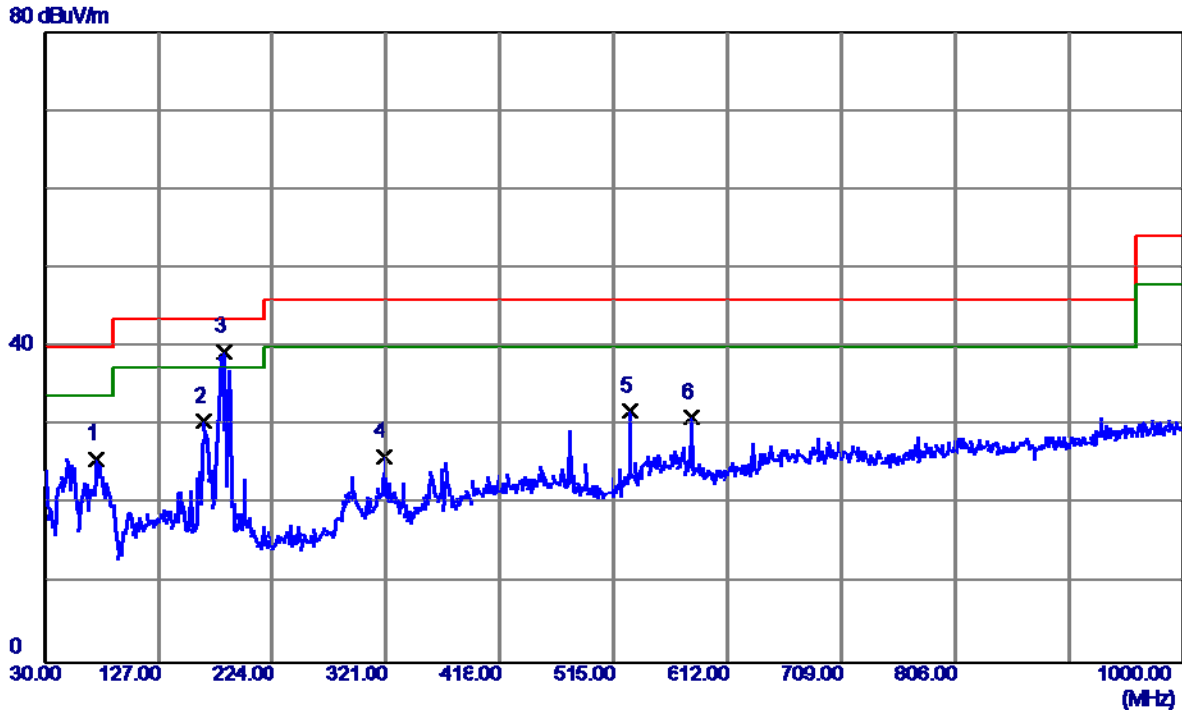
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	159.4950	45.43	-12.50	32.93	43.50	-10.57	Peak	
2	170.1650	46.34	-10.71	35.63	43.50	-7.87	Peak	
3 *	182.9775	52.75	-12.43	40.32	43.50	-3.18	QP	
4	290.9300	40.68	-9.99	30.69	46.00	-15.31	Peak	
5	320.0300	45.22	-10.29	34.93	46.00	-11.07	Peak	
6	368.5300	45.92	-9.46	36.46	46.00	-9.54	Peak	

Test Mode: TX B MODE CHANNEL 06 (Adapter:1# 2ABB018F)

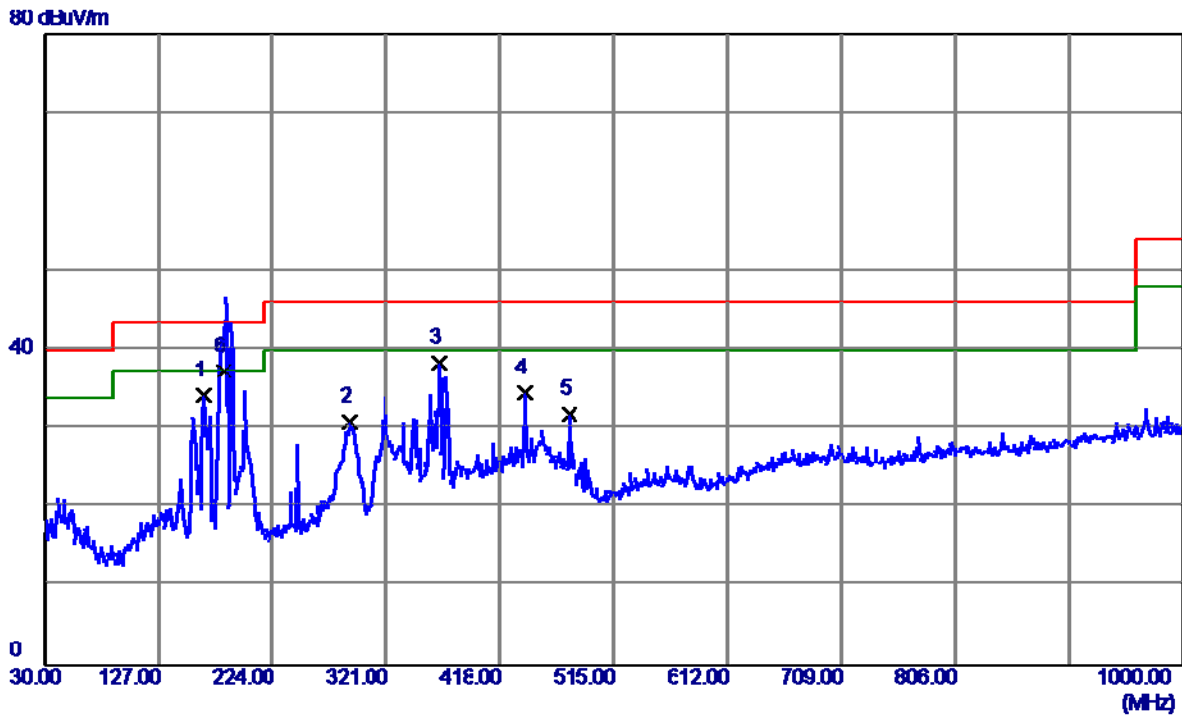
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	74.6200	41.74	-16.03	25.71	40.00	-14.29	Peak	
2	165.8000	42.03	-11.46	30.57	43.50	-12.93	Peak	
3 *	182.7750	51.82	-12.41	39.41	43.50	-4.09	Peak	
4	320.0300	36.43	-10.29	26.14	46.00	-19.86	Peak	
5	529.0650	37.78	-5.95	31.83	46.00	-14.17	Peak	
6	581.4450	35.96	-4.93	31.03	46.00	-14.97	Peak	

Test Mode: TX B MODE CHANNEL 06 (Adapter:1# 2ABB018F)

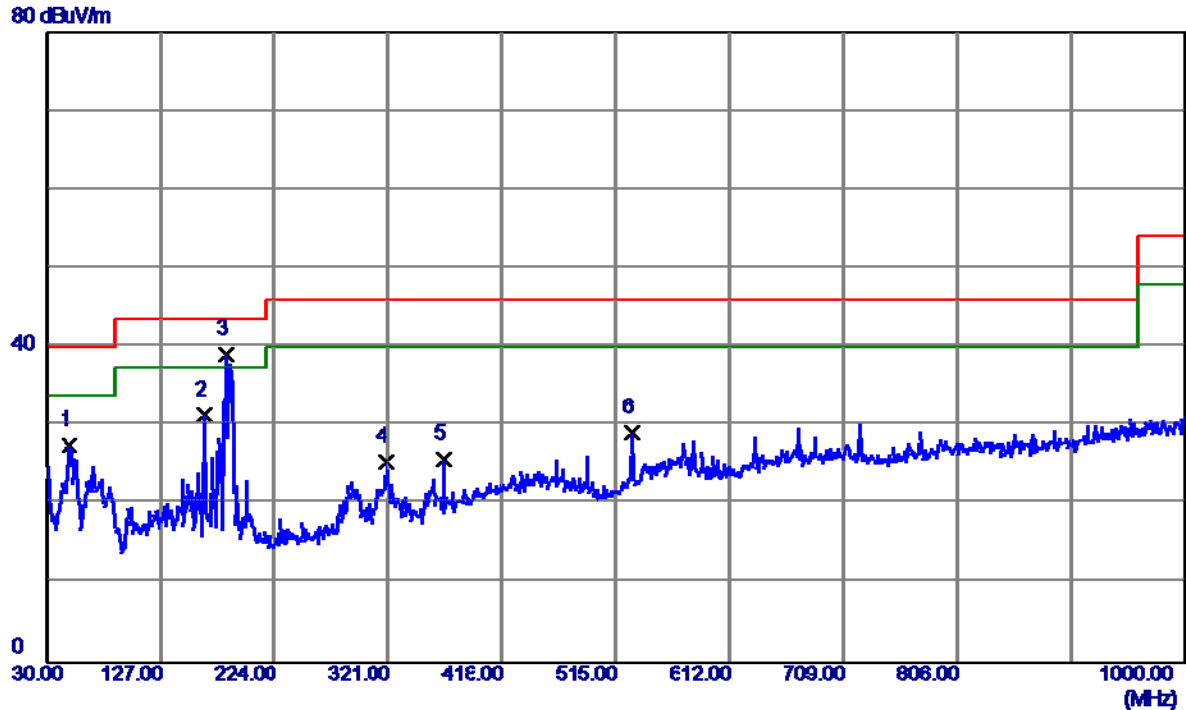
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	165.8000	45.69	-11.46	34.23	43.50	-9.27	Peak	
2	289.9600	40.89	-10.00	30.89	46.00	-15.11	Peak	
3	366.1050	48.05	-9.63	38.42	46.00	-7.58	Peak	
4	439.3400	41.63	-7.09	34.54	46.00	-11.46	Peak	
5	477.1700	39.26	-7.45	31.81	46.00	-14.19	Peak	
6 *	183.3375	49.74	-12.47	37.27	43.50	-6.23	QP	

Test Mode: TX B MODE CHANNEL 11 (Adapter:1# 2ABB018F)

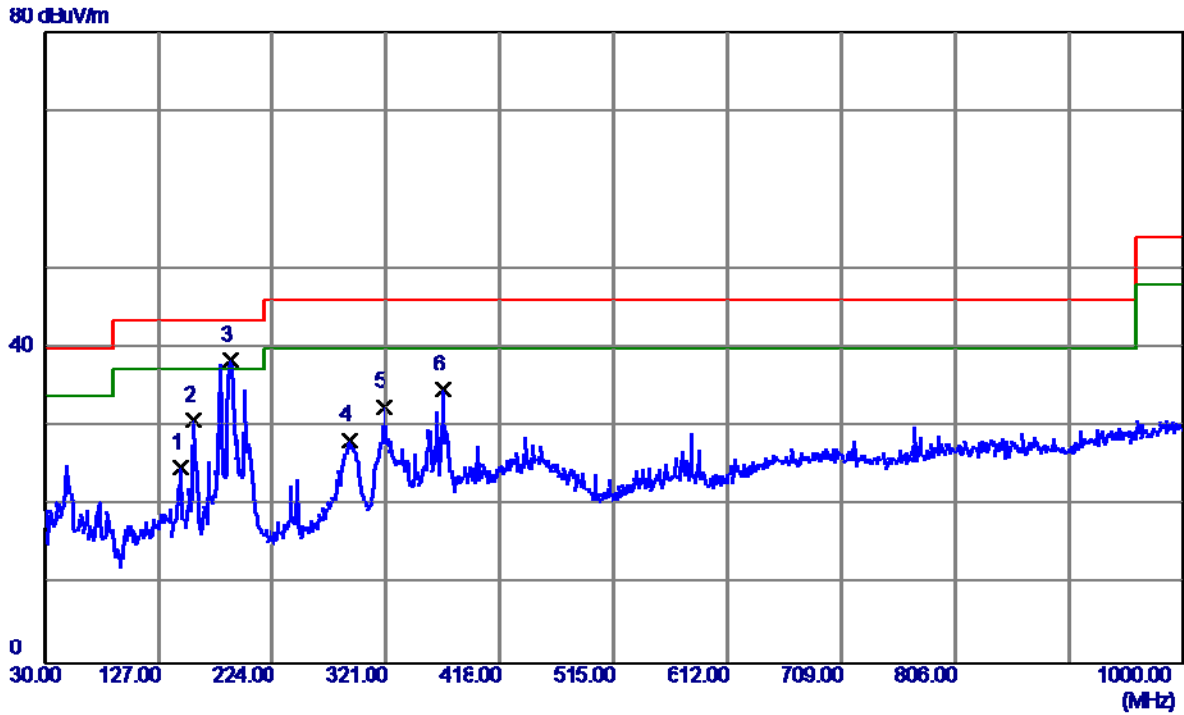
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	49.8850	39.48	-11.99	27.49	40.00	-12.51	Peak	
2	164.8300	42.96	-11.64	31.32	43.50	-12.18	Peak	
3 *	182.7750	51.50	-12.41	39.09	43.50	-4.41	Peak	
4	320.0300	35.71	-10.29	25.42	46.00	-20.58	Peak	
5	368.0450	35.27	-9.49	25.78	46.00	-20.22	Peak	
6	529.0650	35.08	-5.95	29.13	46.00	-16.87	Peak	

Test Mode: TX B MODE CHANNEL 11 (Adapter:1# 2ABB018F)

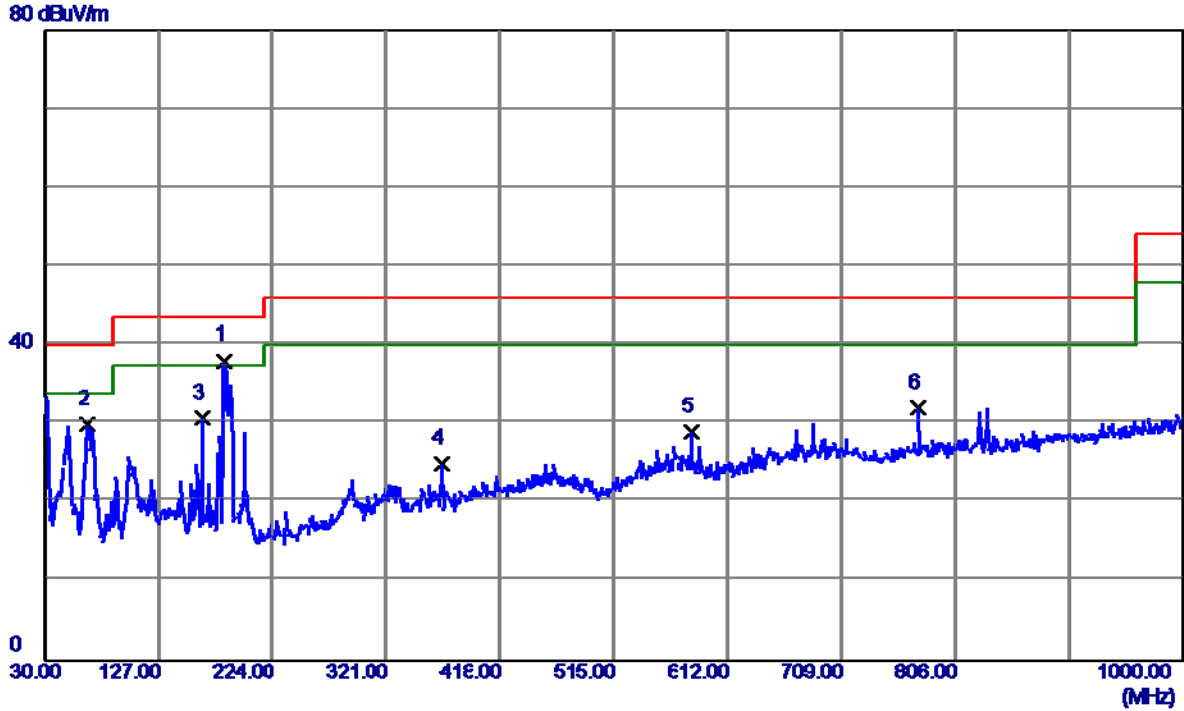
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	146.8850	36.65	-11.86	24.79	43.50	-18.71	Peak	
2	157.5549	43.17	-12.37	30.80	43.50	-12.70	Peak	
3 *	188.1100	51.43	-12.95	38.48	43.50	-5.02	Peak	
4	289.9600	38.35	-10.00	28.35	46.00	-17.65	Peak	
5	320.0300	42.84	-10.29	32.55	46.00	-13.45	Peak	
6	369.0150	44.09	-9.43	34.66	46.00	-11.34	Peak	

Test Mode: TX B MODE CHANNEL 01 (Adapter:2# MU18A2120150-A1)

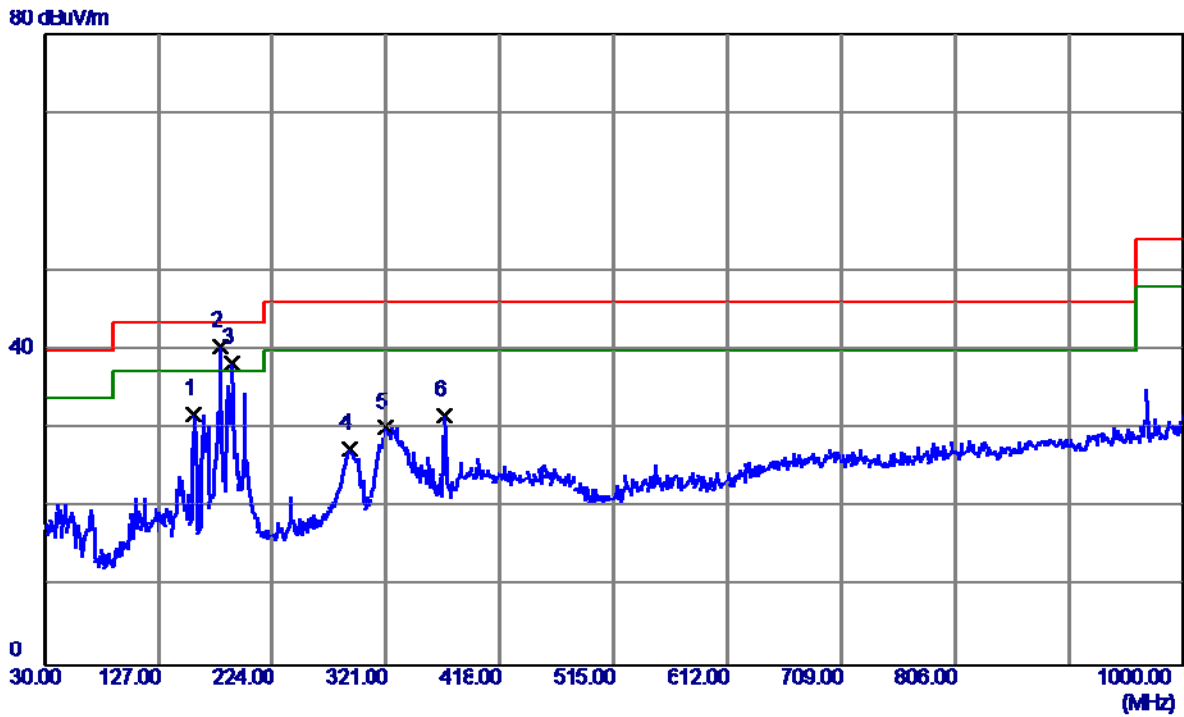
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	183.2600	50.46	-12.46	38.00	43.50	-5.50	Peak	
2	66.8600	44.20	-14.22	29.98	40.00	-10.02	Peak	
3	164.3450	42.50	-11.73	30.77	43.50	-12.73	Peak	
4	368.0450	34.50	-9.49	25.01	46.00	-20.99	Peak	
5	581.4450	33.96	-4.93	29.03	46.00	-16.97	Peak	
6	774.9600	32.60	-0.53	32.07	46.00	-13.93	Peak	

Test Mode: TX B MODE CHANNEL 01 (Adapter:2# MU18A2120150-A1)

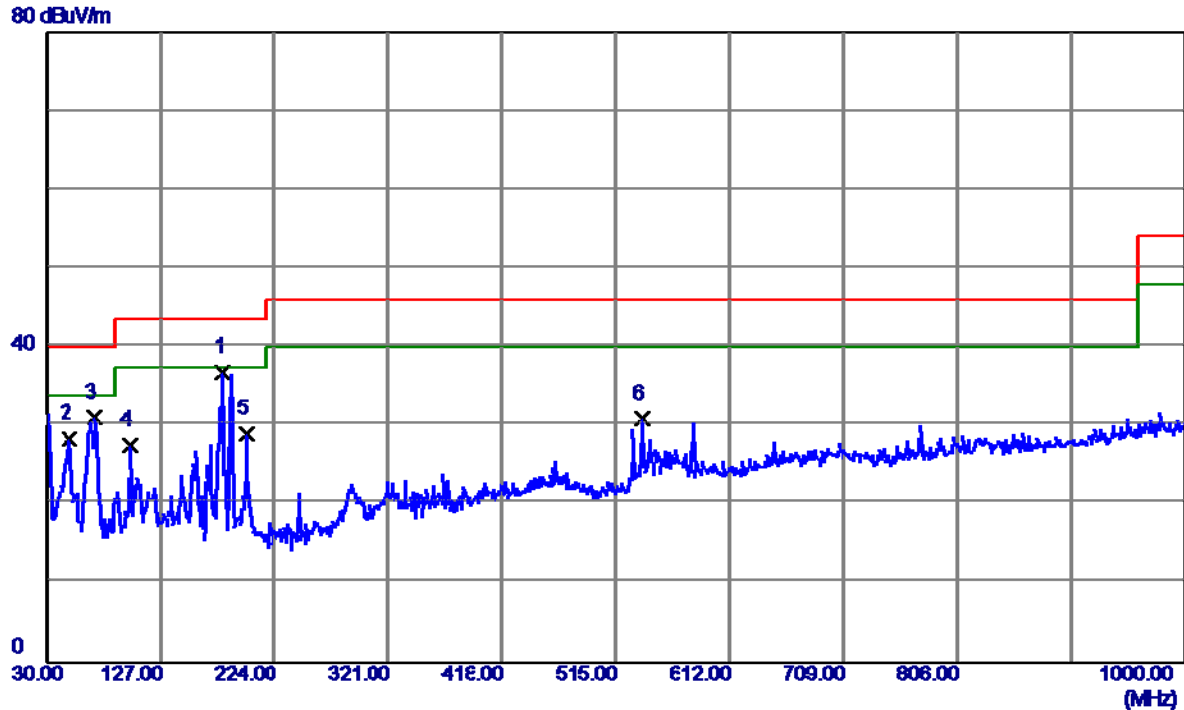
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	157.5549	44.16	-12.37	31.79	43.50	-11.71	Peak	
2 *	179.8650	52.60	-12.11	40.49	43.50	-3.01	Peak	
3	189.0800	51.47	-13.05	38.42	43.50	-5.08	Peak	
4	289.9600	37.59	-10.00	27.59	46.00	-18.41	Peak	
5	321.0000	40.47	-10.31	30.16	46.00	-15.84	Peak	
6	370.4700	40.98	-9.32	31.66	46.00	-14.34	Peak	

Test Mode: TX B MODE CHANNEL 06 (Adapter:2# MU18A2120150-A1)

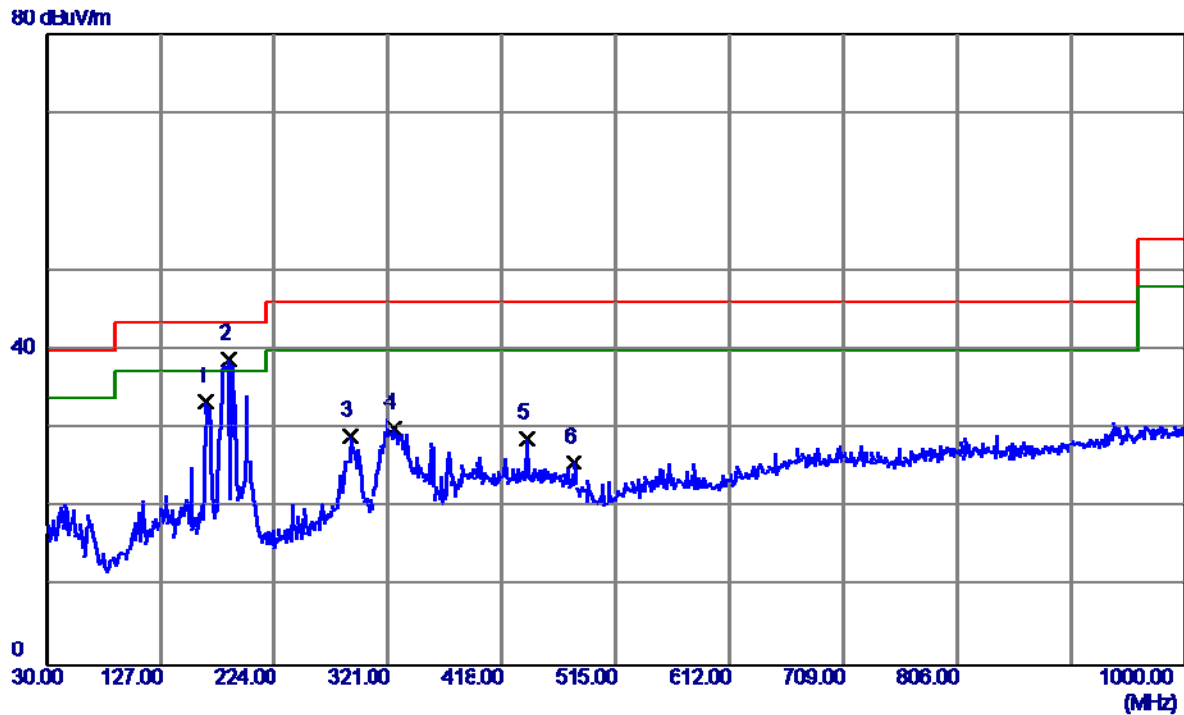
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	180.3500	48.95	-12.17	36.78	43.50	-6.72	Peak	
2	49.4000	40.35	-12.09	28.26	40.00	-11.74	Peak	
3	71.2250	46.45	-15.37	31.08	40.00	-8.92	Peak	
4	101.2950	41.95	-14.39	27.56	43.50	-15.94	Peak	
5	200.2350	42.63	-13.63	29.00	43.50	-14.50	Peak	
6	537.7950	36.26	-5.40	30.86	46.00	-15.14	Peak	

Test Mode: TX B MODE CHANNEL 06 (Adapter:2# MU18A2120150-A1)

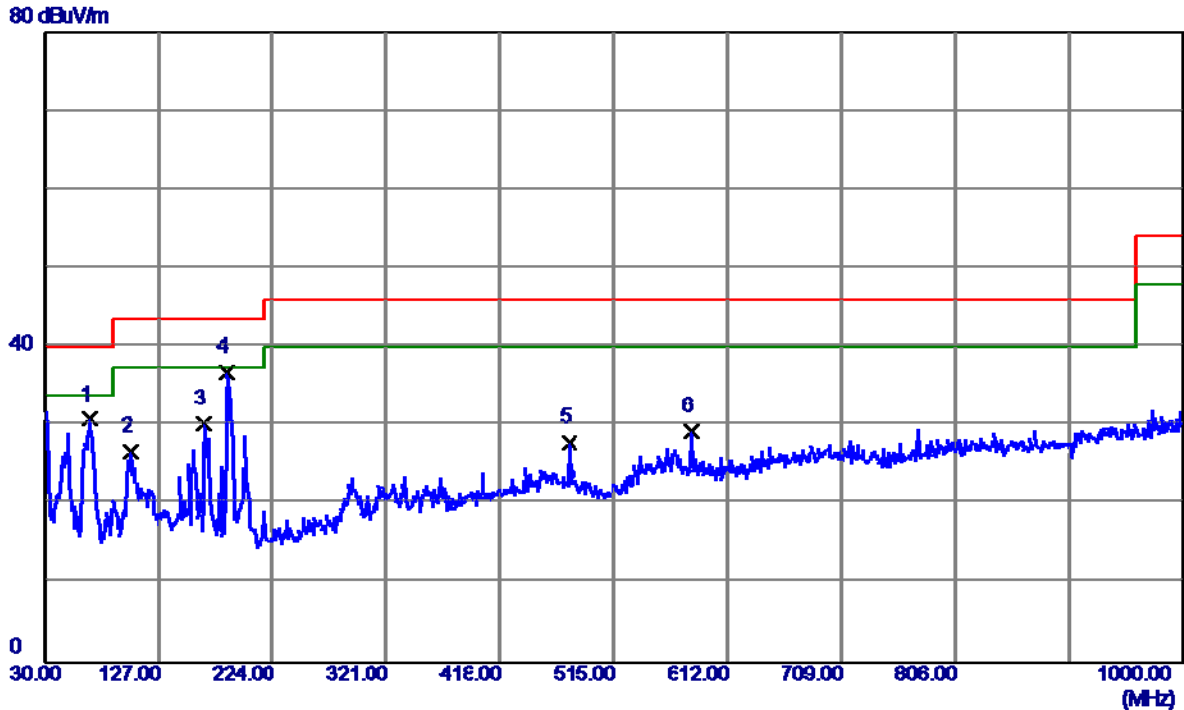
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	165.8000	44.96	-11.46	33.50	43.50	-10.00	Peak	
2 *	184.7150	51.52	-12.61	38.91	43.50	-4.59	Peak	
3	288.9900	39.31	-10.17	29.14	46.00	-16.86	Peak	
4	325.8500	40.44	-10.39	30.05	46.00	-15.95	Peak	
5	439.8250	35.94	-7.09	28.85	46.00	-17.15	Peak	
6	479.5950	33.24	-7.48	25.76	46.00	-20.24	Peak	

Test Mode: TX B MODE CHANNEL 11 (Adapter:2# MU18A2120150-A1)

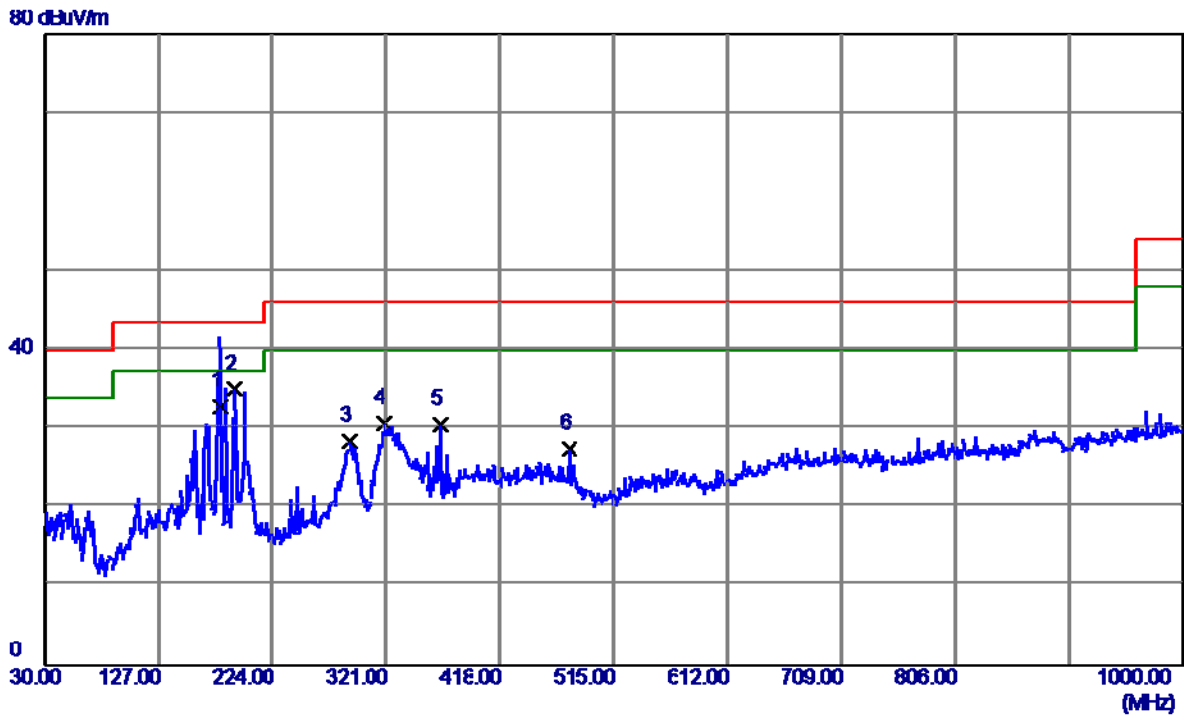
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	68.3150	45.44	-14.64	30.80	40.00	-9.20	Peak	
2	103.7200	41.00	-14.23	26.77	43.50	-16.73	Peak	
3	166.2850	41.64	-11.37	30.27	43.50	-13.23	Peak	
4 *	185.6850	49.44	-12.71	36.73	43.50	-6.77	Peak	
5	477.1700	35.33	-7.45	27.88	46.00	-18.12	Peak	
6	581.4450	34.24	-4.93	29.31	46.00	-16.69	Peak	

Test Mode: TX B MODE CHANNEL 11 (Adapter:2# MU18A2120150-A1)

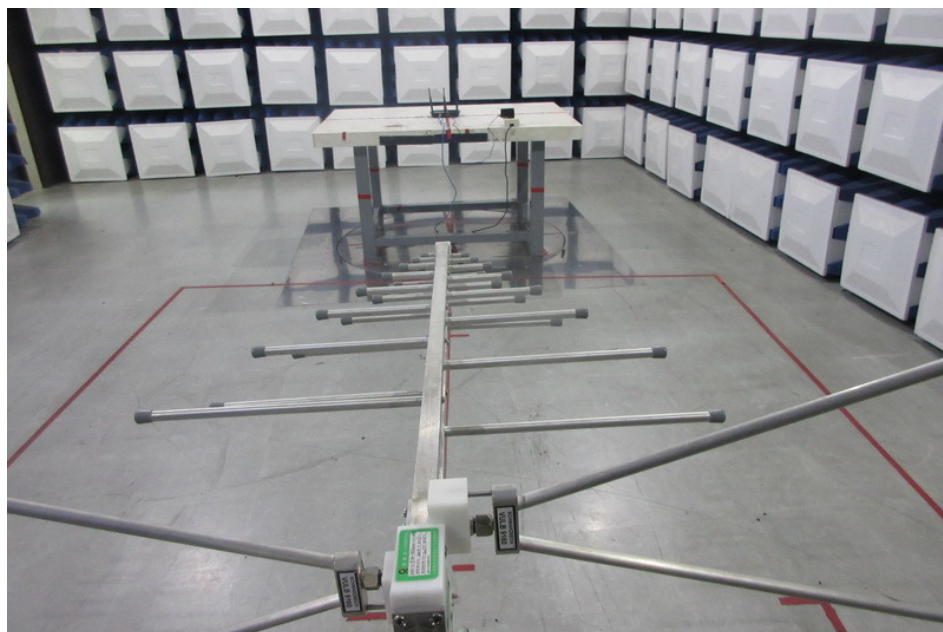
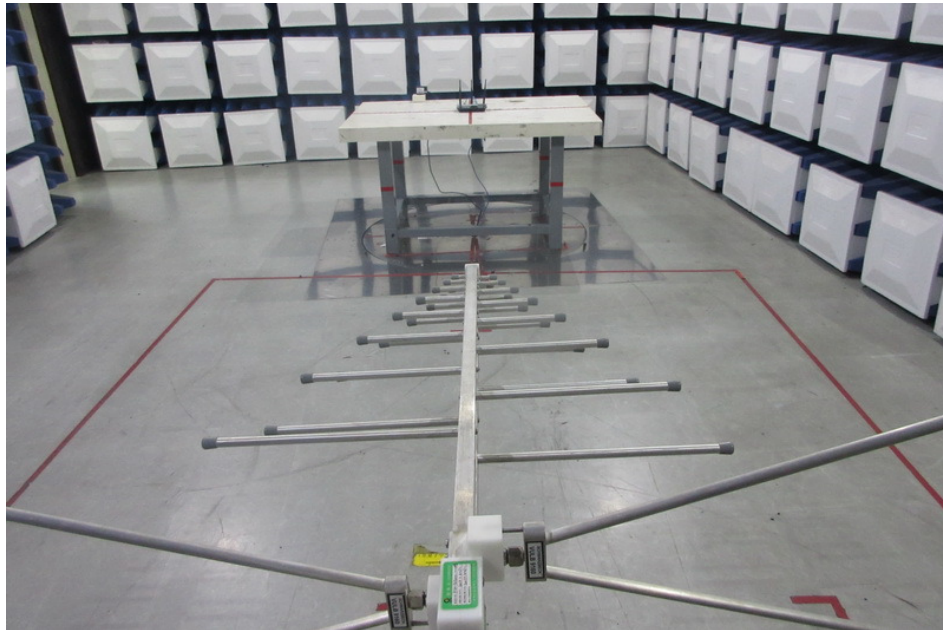
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	179.5350	44.84	-12.06	32.78	43.50	-10.72	QP	
2 *	191.9900	48.33	-13.24	35.09	43.50	-8.41	Peak	
3	289.9600	38.50	-10.00	28.50	46.00	-17.50	Peak	
4	320.0300	41.04	-10.29	30.75	46.00	-15.25	Peak	
5	367.0750	40.08	-9.56	30.52	46.00	-15.48	Peak	
6	477.1700	34.93	-7.45	27.48	46.00	-18.52	Peak	

Radiated Measurement Photos

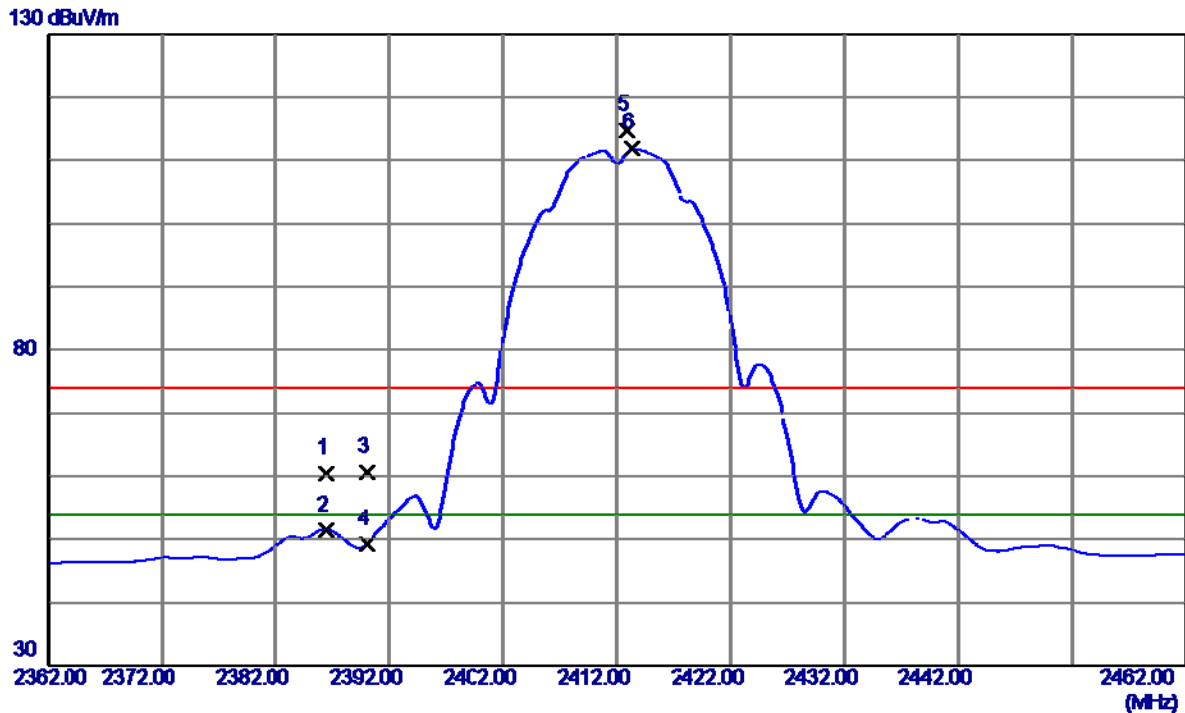
30MHz to 1000MHz



ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

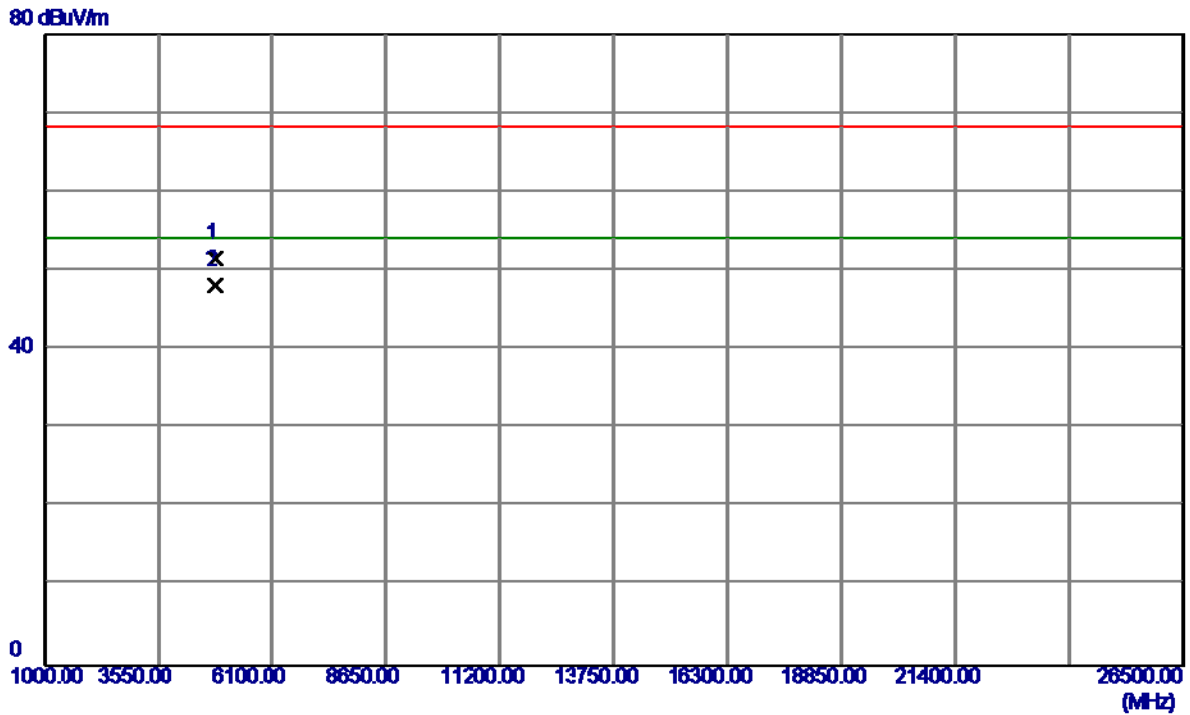
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2386.4000	27.76	32.67	60.43	74.00	-13.57	Peak	
2	2386.4000	18.78	32.67	51.45	54.00	-2.55	AVG	
3	2390.0000	27.86	32.68	60.54	74.00	-13.46	Peak	
4	2390.0000	16.56	32.68	49.24	54.00	-4.76	AVG	
5	2412.9000	82.01	32.71	114.72	74.00	40.72	Peak	NO LIMIT
6 *	2413.3000	79.21	32.71	111.92	54.00	57.92	AVG	NO LIMIT

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

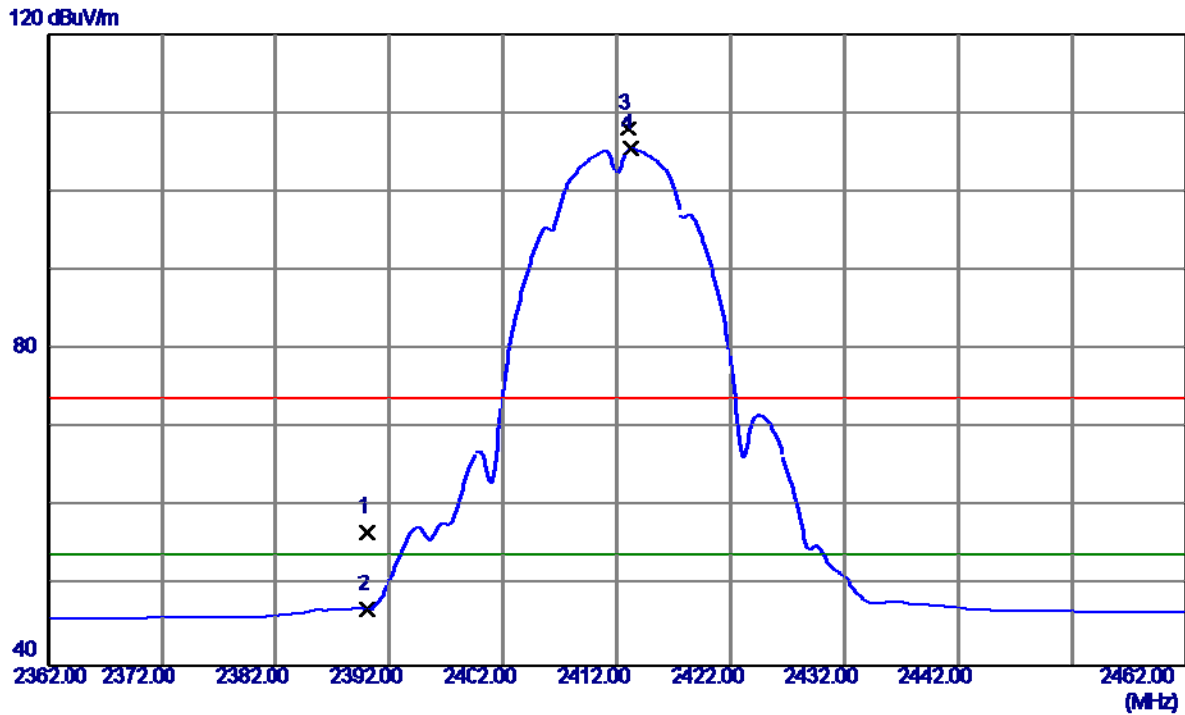
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9750	46.65	4.85	51.50	68.30	-16.80	Peak	
2 *	4823.9750	43.37	4.85	48.22	54.00	-5.78	AVG	

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

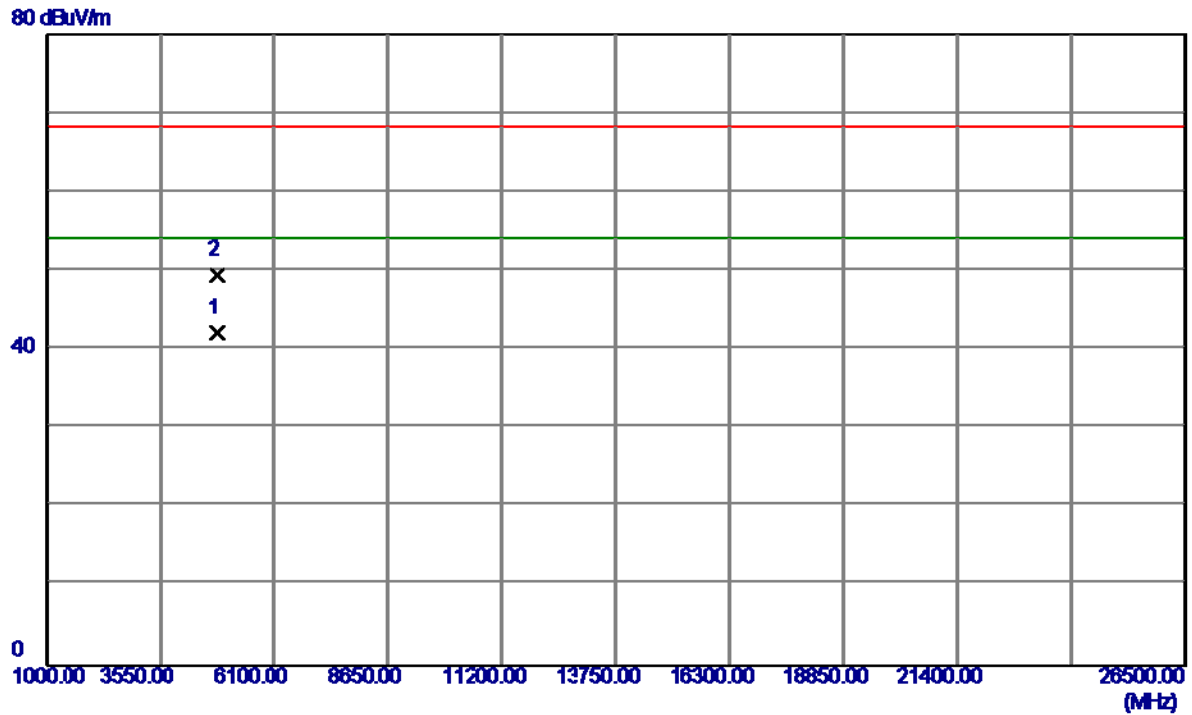
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.06	32.68	56.74	74.00	-17.26	Peak	
2	2390.0000	14.34	32.68	47.02	54.00	-6.98	AVG	
3	2413.0000	75.36	32.71	108.07	74.00	34.07	Peak	NO LIMIT
4 *	2413.2000	72.68	32.71	105.39	54.00	51.39	AVG	NO LIMIT

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

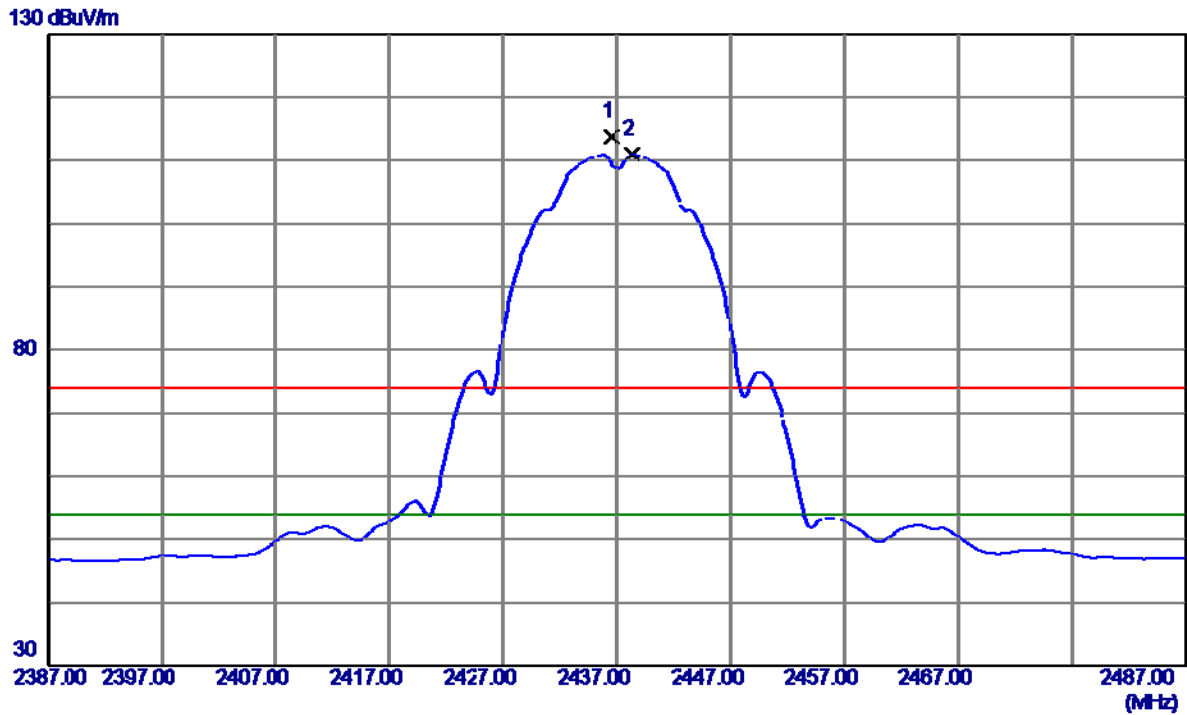
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9950	37.17	4.85	42.02	54.00	-11.98	AVG	
2	4824.0250	44.52	4.85	49.37	68.30	-18.93	Peak	

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

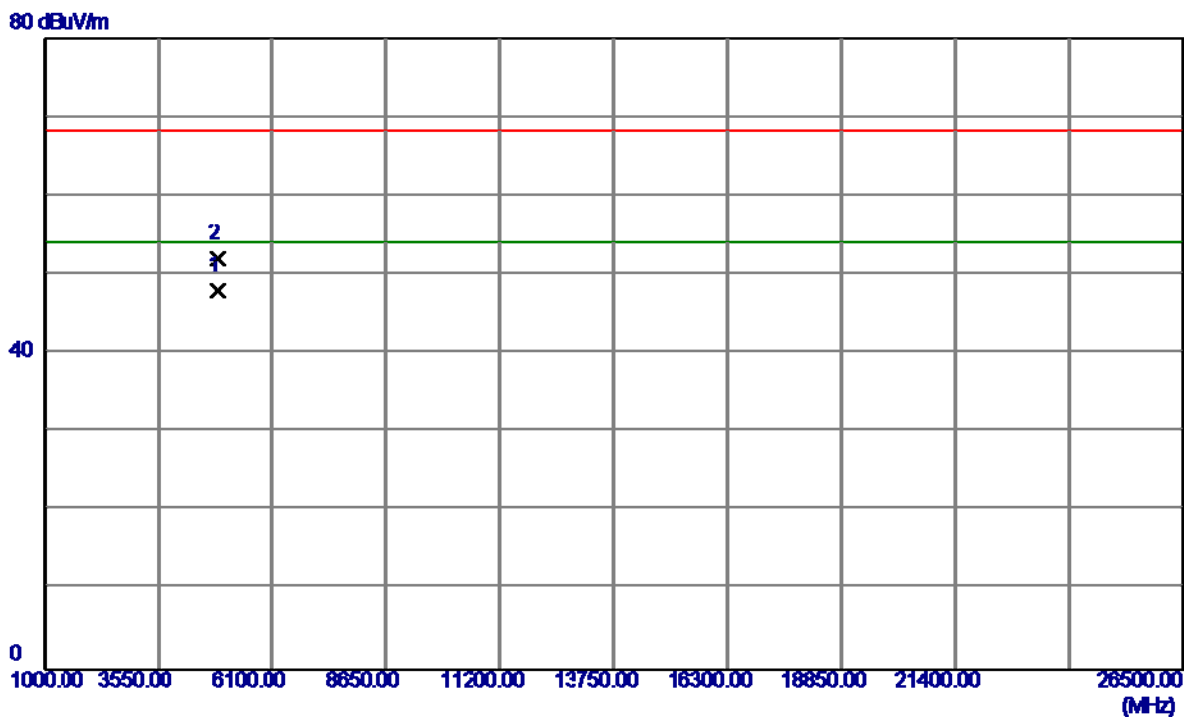
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.6000	81.03	32.74	113.77	74.00	39.77	Peak	NO LIMIT
2 *	2438.3000	78.24	32.74	110.98	54.00	56.98	AVG	NO LIMIT

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

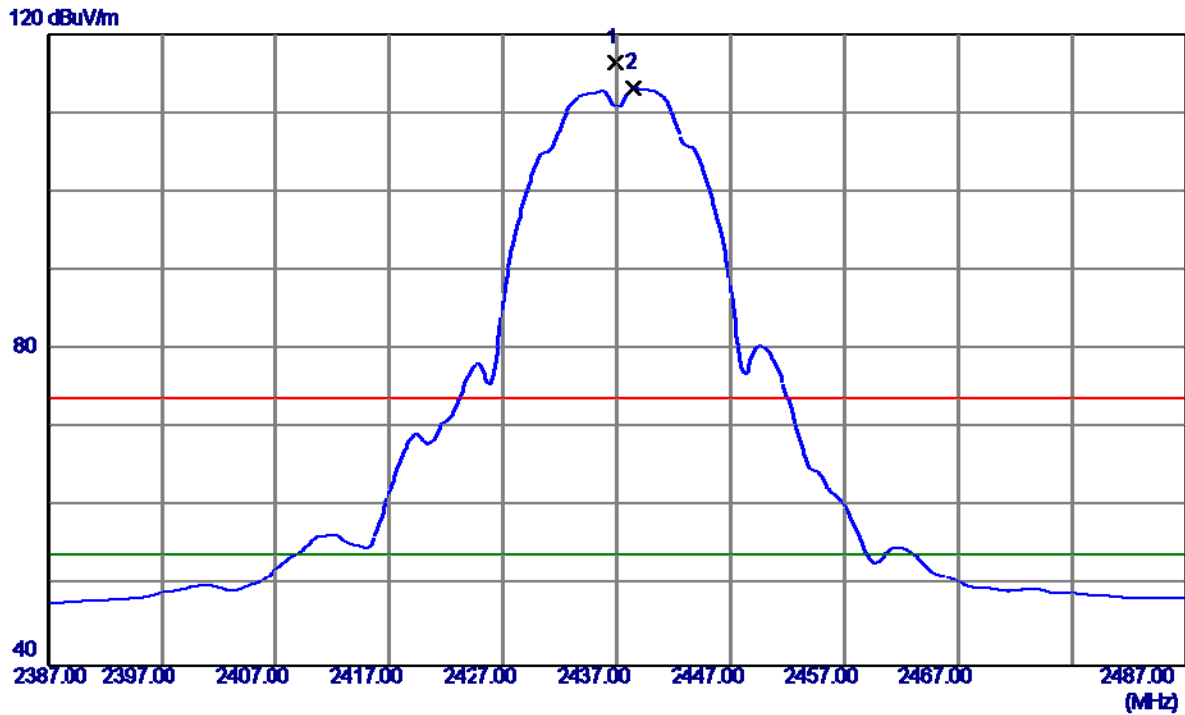
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0099	42.98	5.07	48.05	54.00	-5.95	AVG	
2	4874.0350	46.97	5.07	52.04	68.30	-16.26	Peak	

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

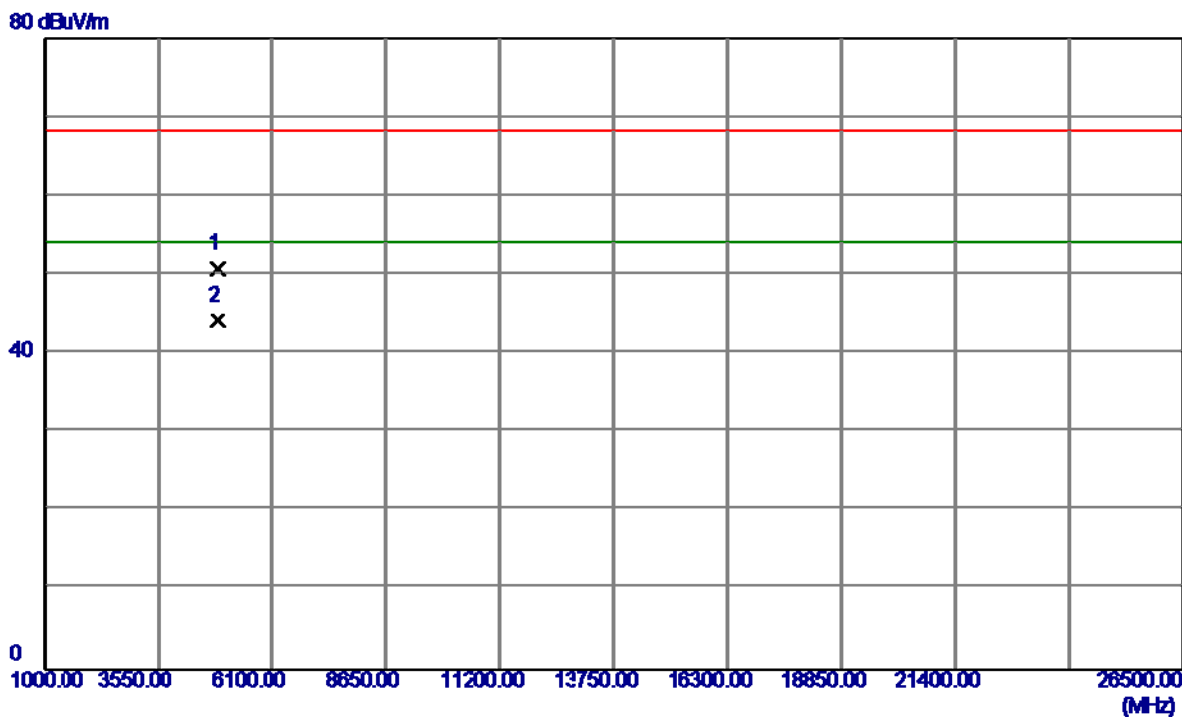
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.9000	83.58	32.74	116.32	74.00	42.32	Peak	NO LIMIT
2 *	2438.5000	80.34	32.75	113.09	54.00	59.09	AVG	NO LIMIT

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

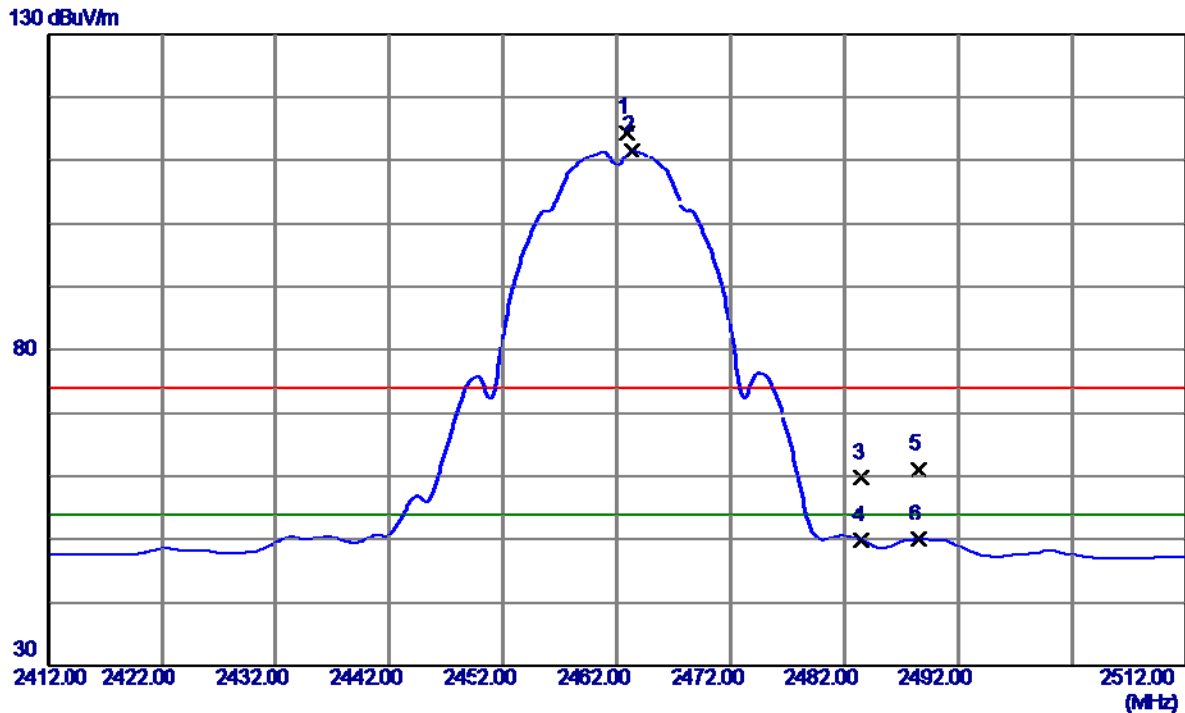
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.0000	45.60	5.07	50.67	68.30	-17.63	Peak	
2 *	4874.0150	39.05	5.07	44.12	54.00	-9.88	AVG	

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

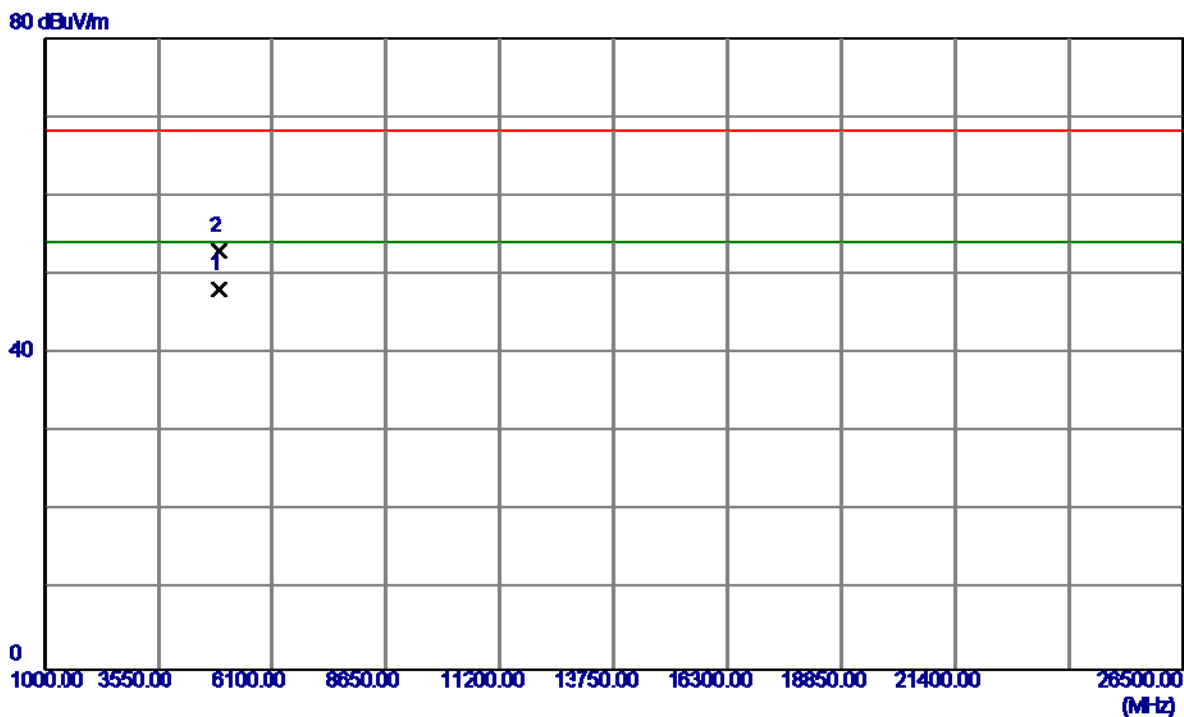
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2462.9000	81.62	32.78	114.40	74.00	40.40	Peak	NO LIMIT
2 *	2463.3000	78.79	32.78	111.57	54.00	57.57	AVG	NO LIMIT
3	2483.5000	26.89	32.81	59.70	74.00	-14.30	Peak	
4	2483.5000	17.03	32.81	49.84	54.00	-4.16	AVG	
5	2488.6000	28.24	32.81	61.05	74.00	-12.95	Peak	
6	2488.6000	17.23	32.81	50.04	54.00	-3.96	AVG	

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

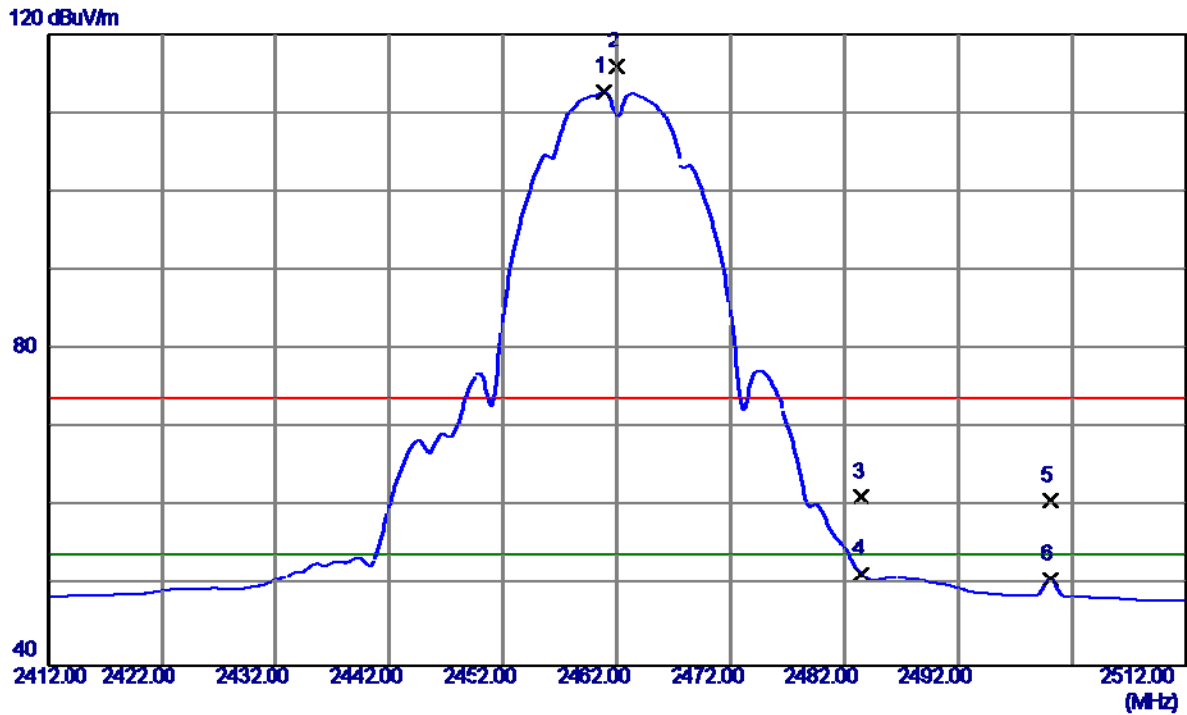
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9450	42.81	5.28	48.09	54.00	-5.91	AVG	
2	4923.9900	47.63	5.28	52.91	68.30	-15.39	Peak	

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

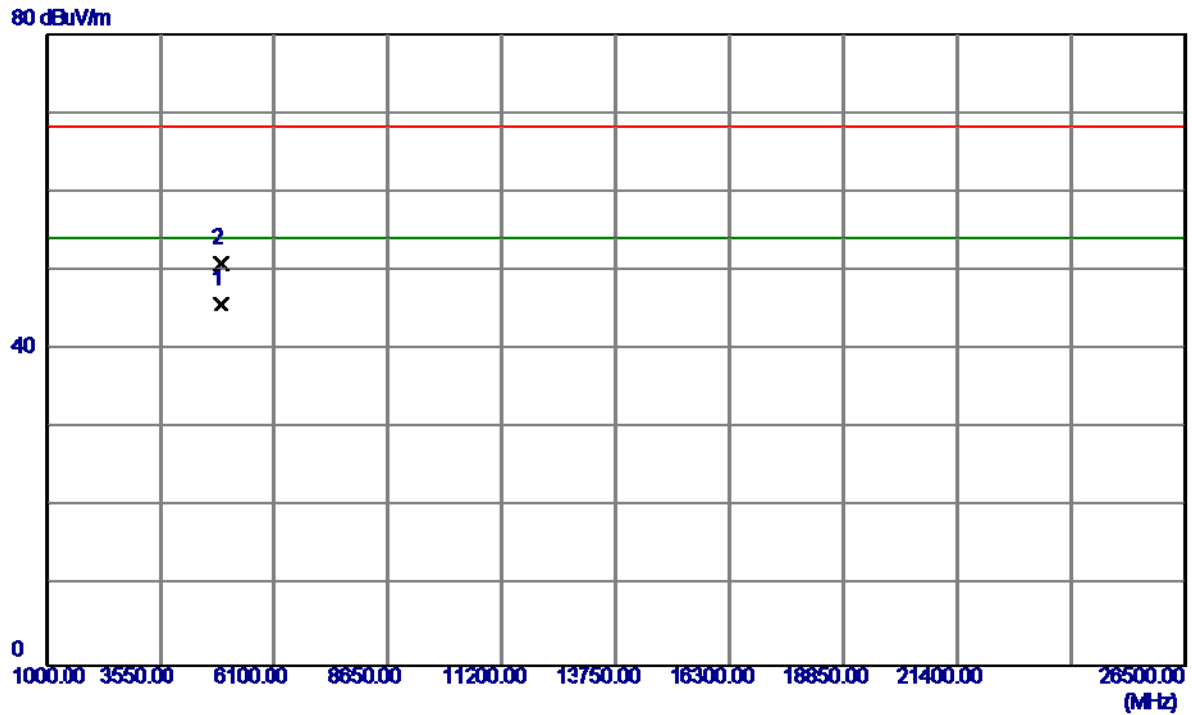
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2460.9000	79.81	32.78	112.59	54.00	58.59	AVG	NO LIMIT
2	2462.0000	83.07	32.78	115.85	74.00	41.85	Peak	NO LIMIT
3	2483.5000	28.48	32.81	61.29	74.00	-12.71	Peak	
4	2483.5000	18.64	32.81	51.45	54.00	-2.55	AVG	
5	2500.1000	27.95	32.83	60.78	74.00	-13.22	Peak	
6	2500.1000	17.99	32.83	50.82	54.00	-3.18	AVG	

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

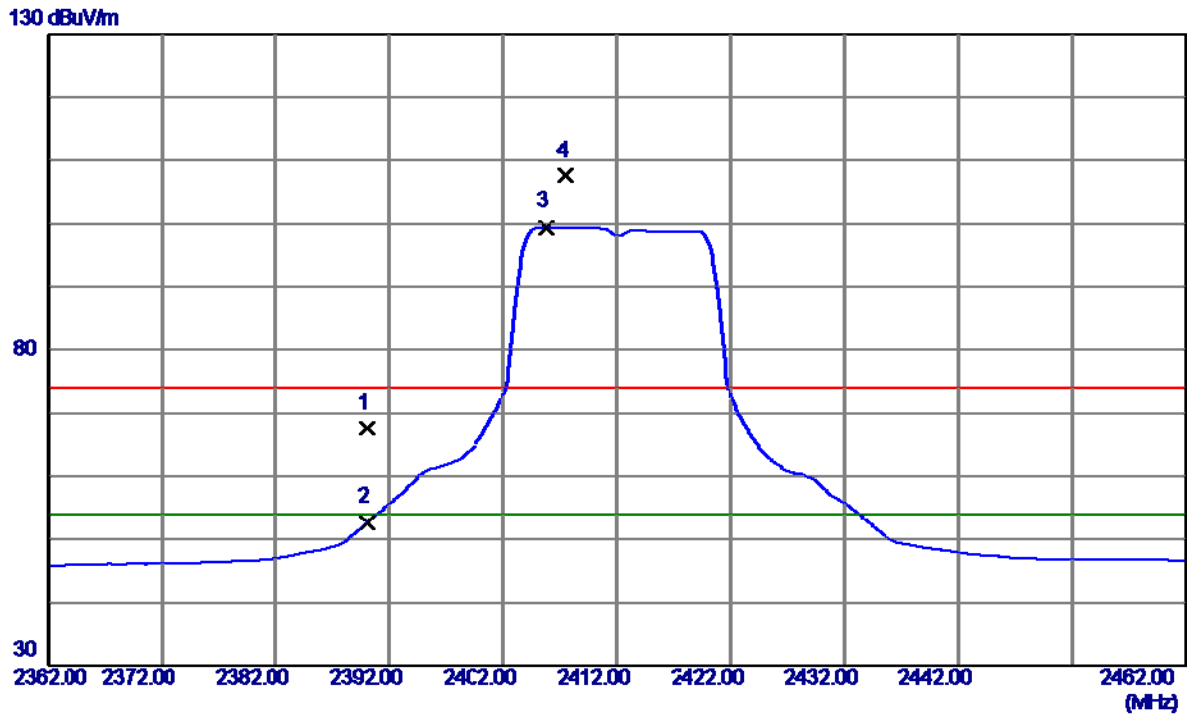
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9900	40.45	5.28	45.73	54.00	-8.27	AVG	
2	4924.0750	45.64	5.28	50.92	68.30	-17.38	Peak	

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

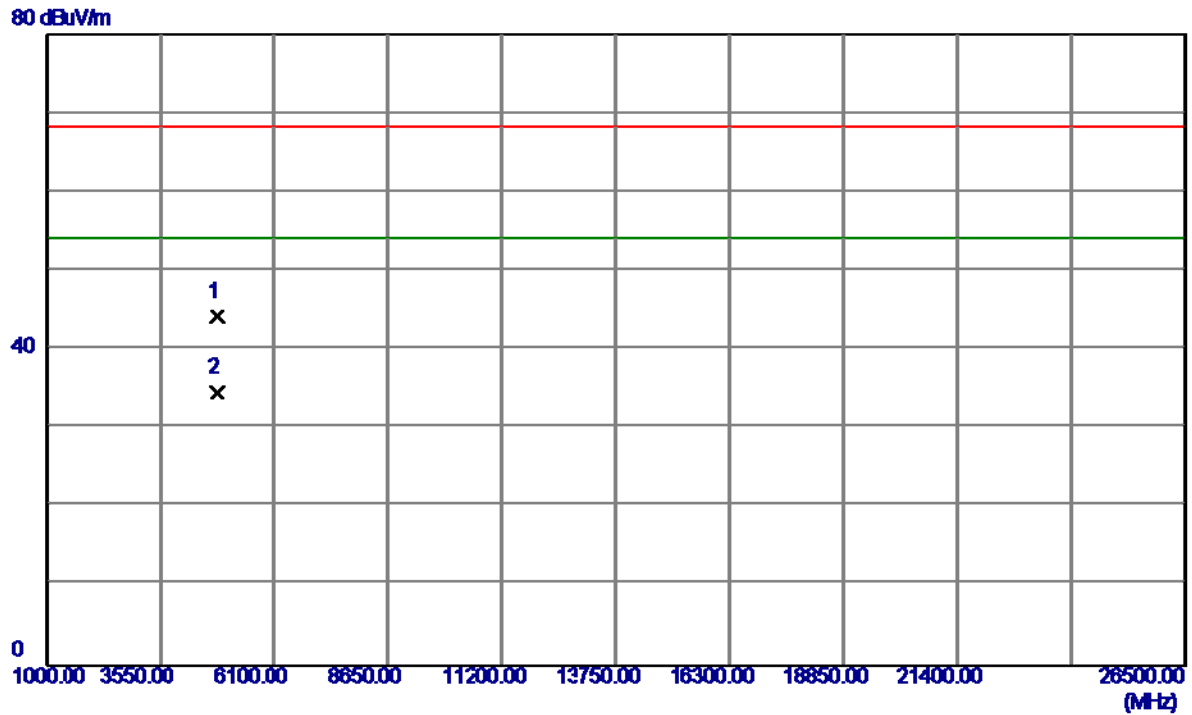
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	34.96	32.68	67.64	74.00	-6.36	Peak	
2	2390.0000	20.02	32.68	52.70	54.00	-1.30	AVG	
3 *	2405.8000	66.80	32.70	99.50	54.00	45.50	AVG	NO LIMIT
4	2407.5000	74.99	32.70	107.69	74.00	33.69	Peak	NO LIMIT

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

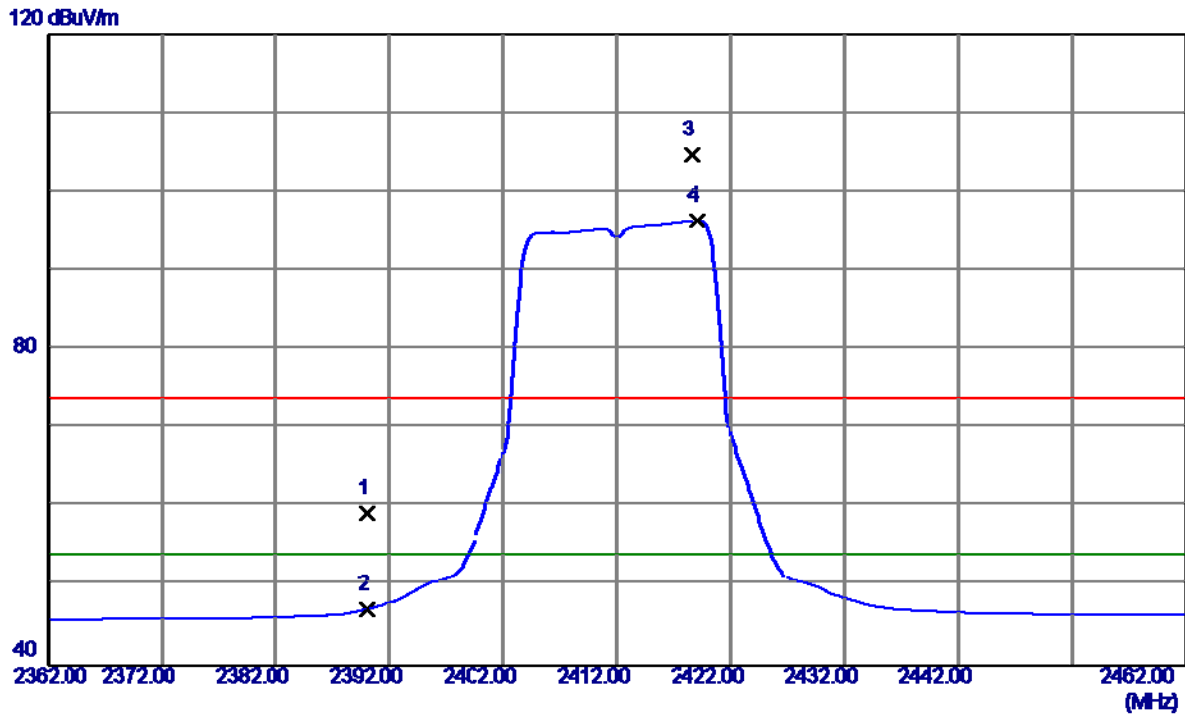
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9700	39.28	4.85	44.13	68.30	-24.17	Peak	
2 *	4824.1400	29.78	4.85	34.63	54.00	-19.37	AVG	

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

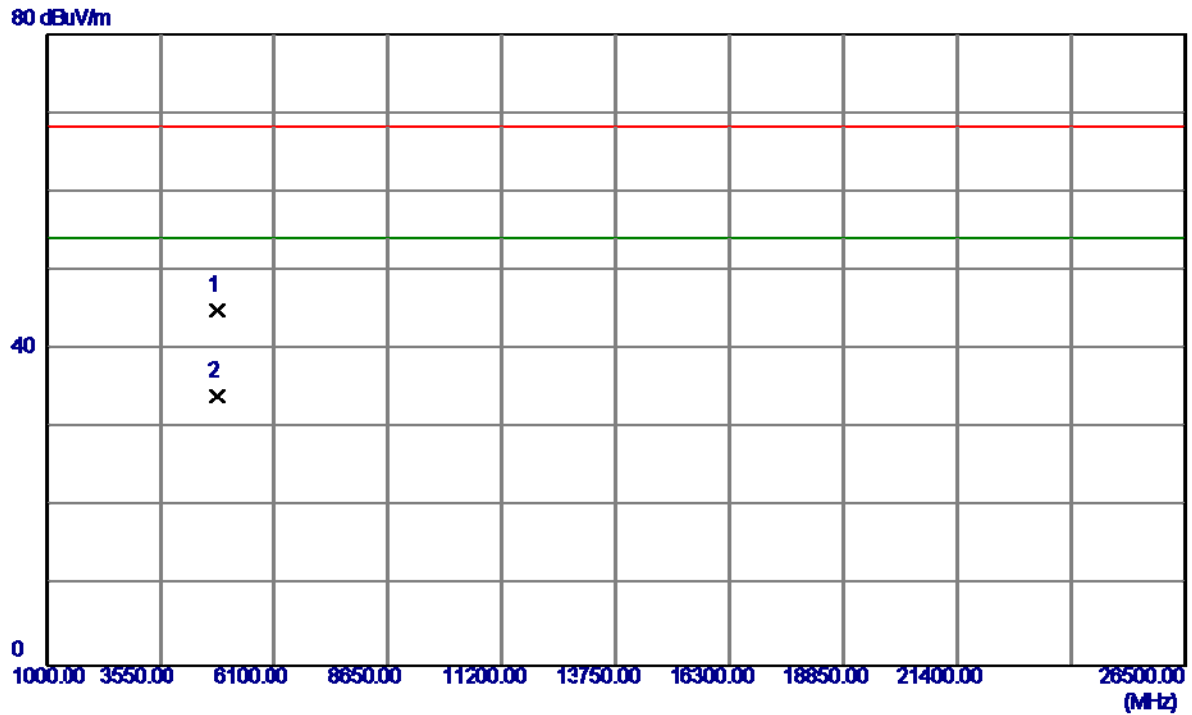
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.55	32.68	59.23	74.00	-14.77	Peak	
2	2390.0000	14.42	32.68	47.10	54.00	-6.90	AVG	
3	2418.7000	71.86	32.72	104.58	74.00	30.58	Peak	NO LIMIT
4 *	2419.1000	63.56	32.72	96.28	54.00	42.28	AVG	NO LIMIT

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

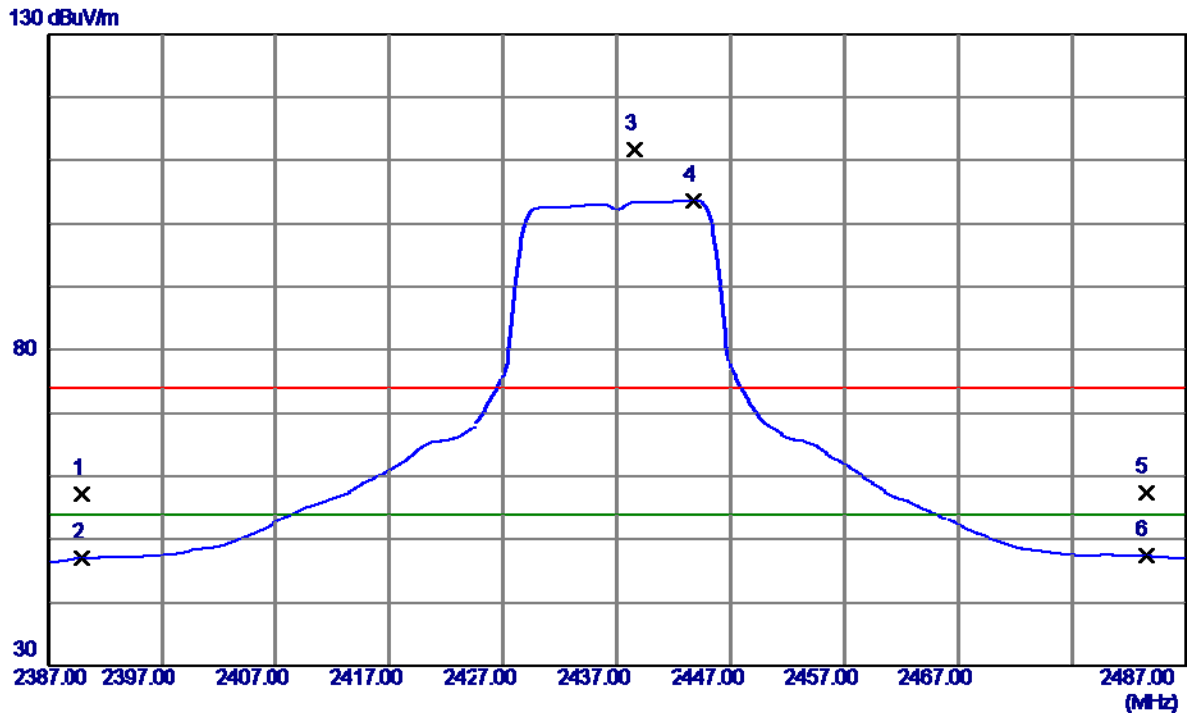
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.7400	40.15	4.85	45.00	68.30	-23.30	Peak	
2 *	4824.1200	29.20	4.85	34.05	54.00	-19.95	AVG	

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

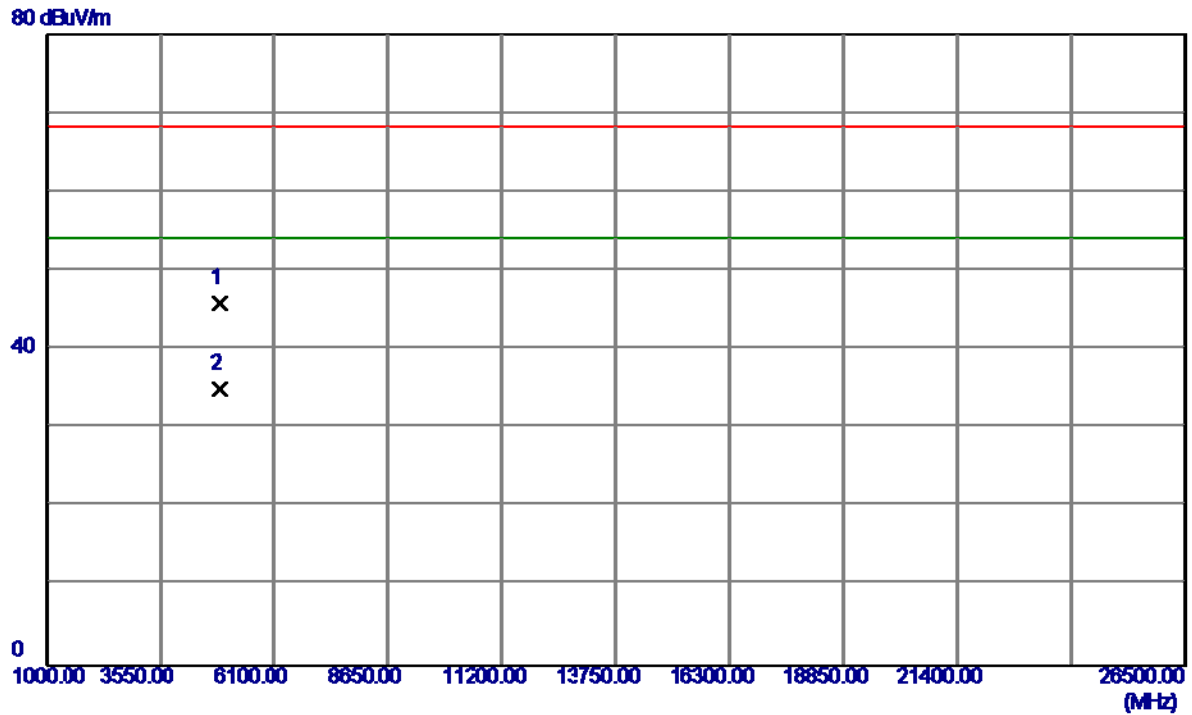
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.53	32.68	57.21	74.00	-16.79	Peak	
2	2390.0000	14.37	32.68	47.05	54.00	-6.95	AVG	
3	2438.6000	79.06	32.75	111.81	74.00	37.81	Peak	NO LIMIT
4 *	2443.8000	70.84	32.75	103.59	54.00	49.59	AVG	NO LIMIT
5	2483.5000	24.57	32.81	57.38	74.00	-16.62	Peak	
6	2483.5000	14.51	32.81	47.32	54.00	-6.68	AVG	

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

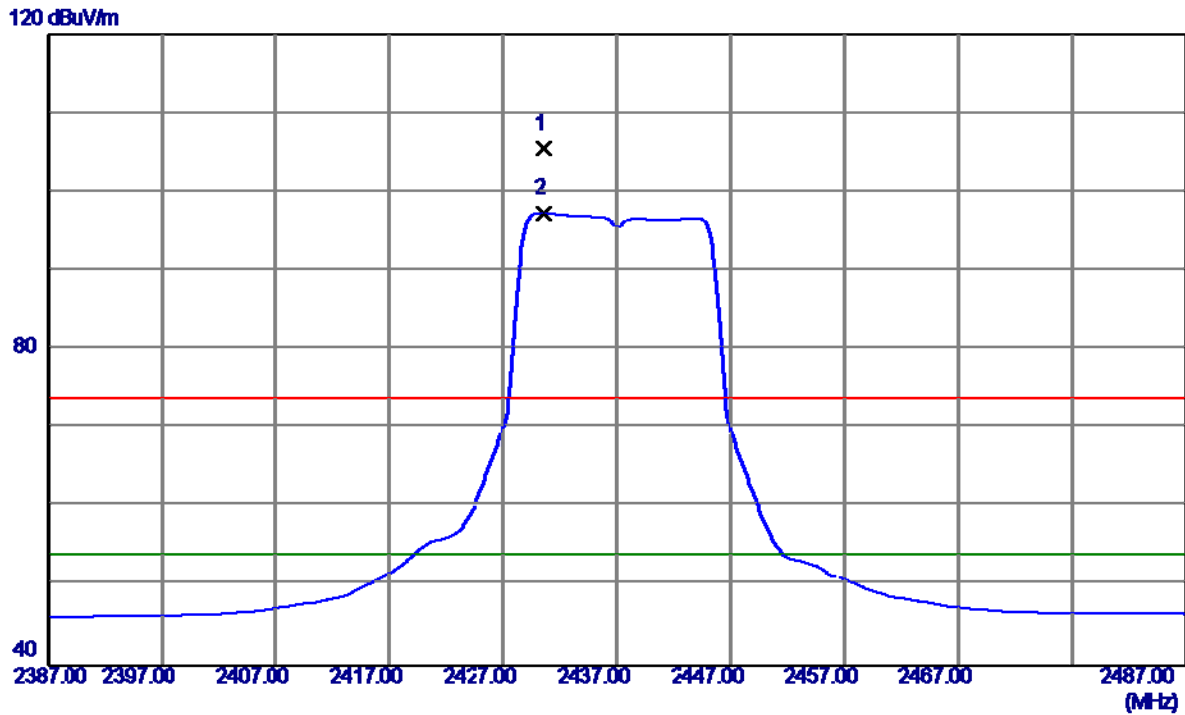
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.0299	40.90	5.07	45.97	68.30	-22.33	Peak	
2 *	4874.0700	29.99	5.07	35.06	54.00	-18.94	AVG	

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

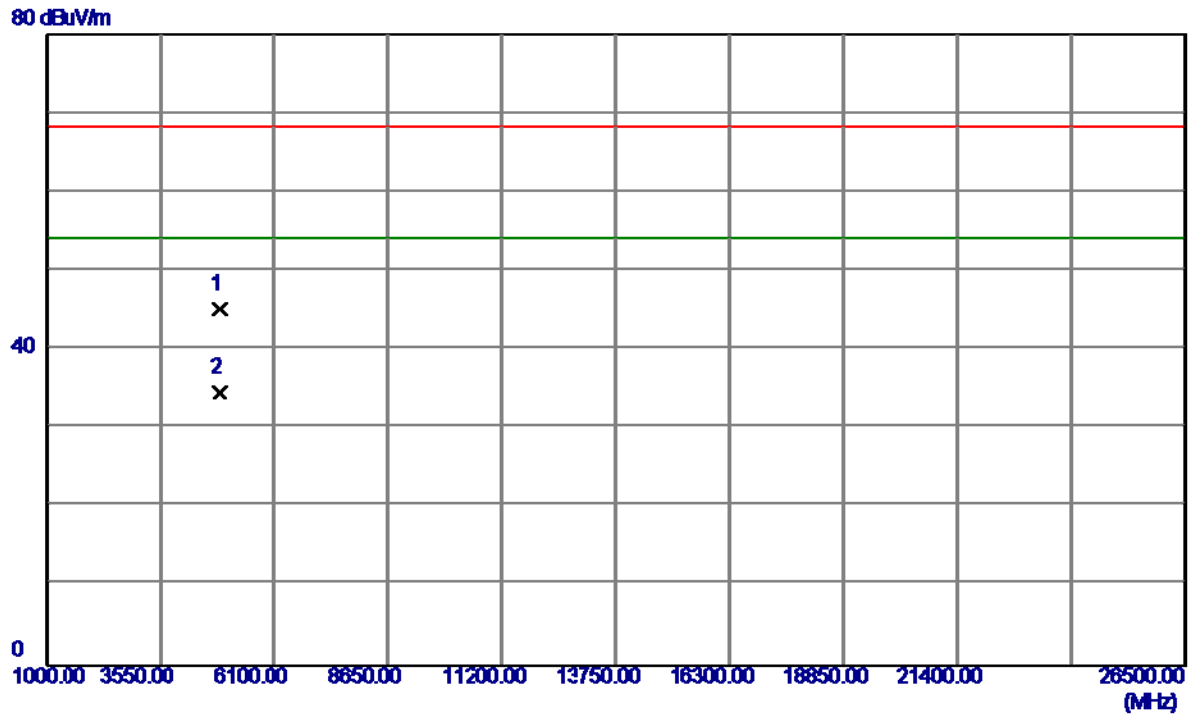
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2430.6000	72.79	32.73	105.52	74.00	31.52	Peak	NO LIMIT
2 *	2430.6000	64.57	32.73	97.30	54.00	43.30	AVG	NO LIMIT

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

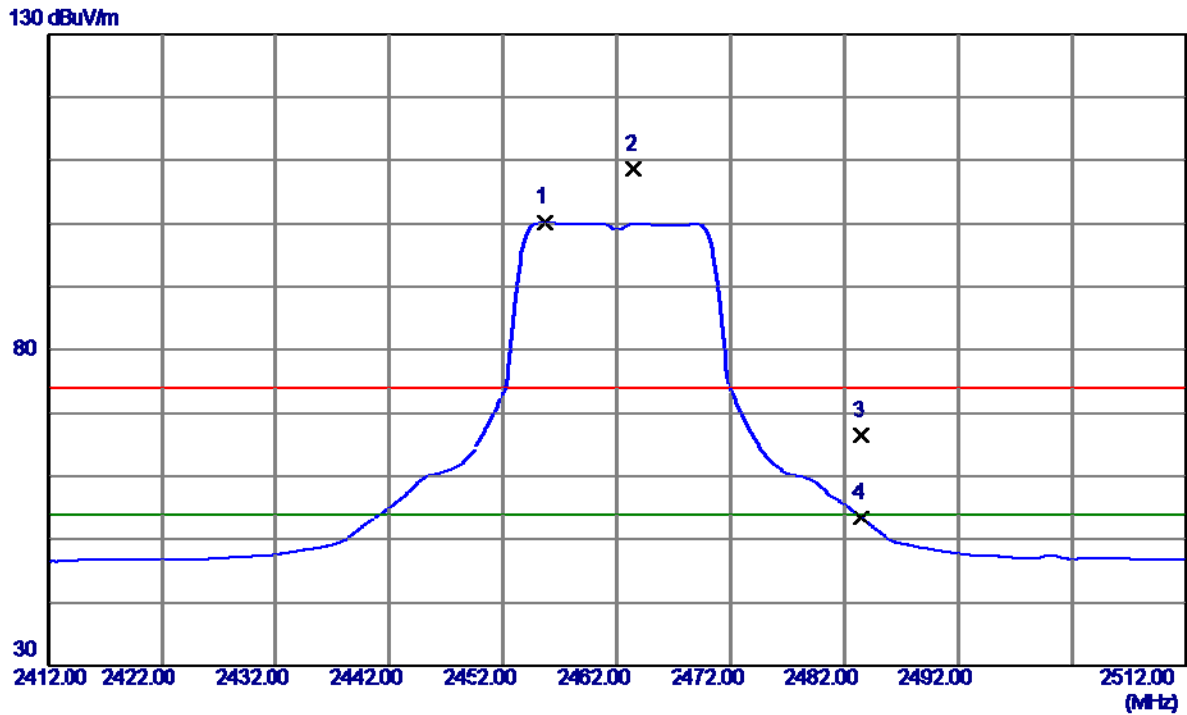
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.0600	40.08	5.07	45.15	68.30	-23.15	Peak	
2 *	4874.5200	29.48	5.07	34.55	54.00	-19.45	AVG	

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

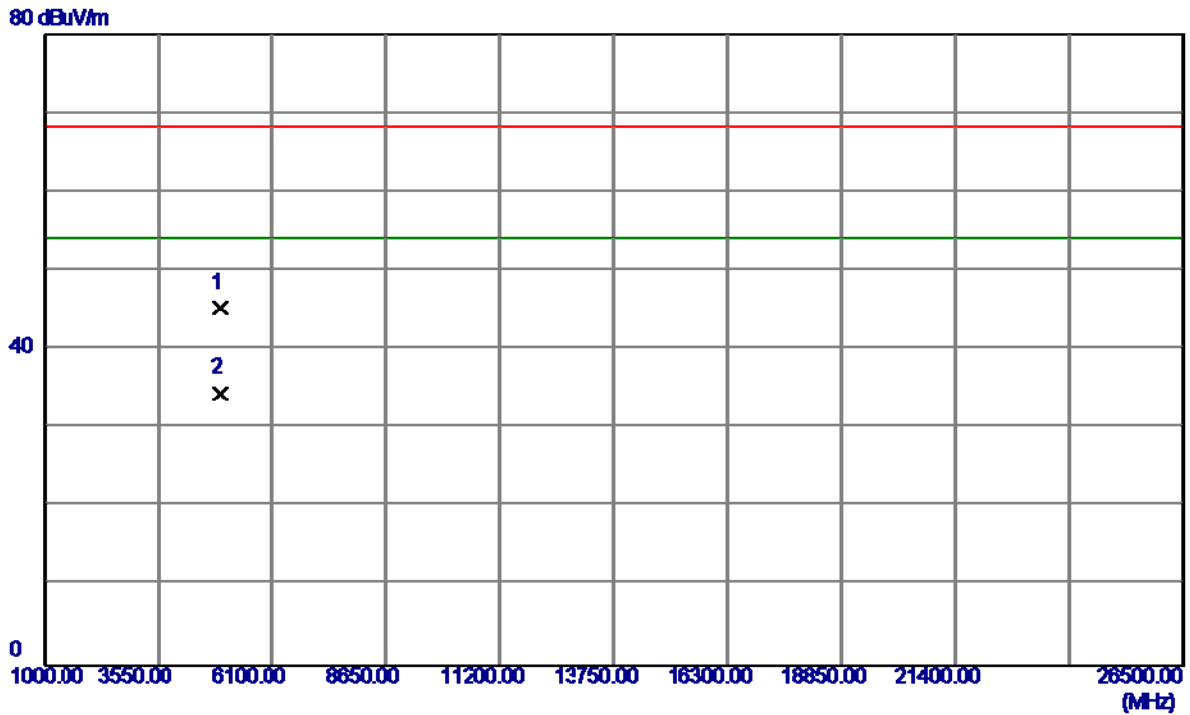
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2455.7000	67.39	32.77	100.16	54.00	46.16	AVG	NO LIMIT
2	2463.5000	75.81	32.78	108.59	74.00	34.59	Peak	NO LIMIT
3	2483.5000	33.50	32.81	66.31	74.00	-7.69	Peak	
4	2483.5000	20.52	32.81	53.33	54.00	-0.67	AVG	

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

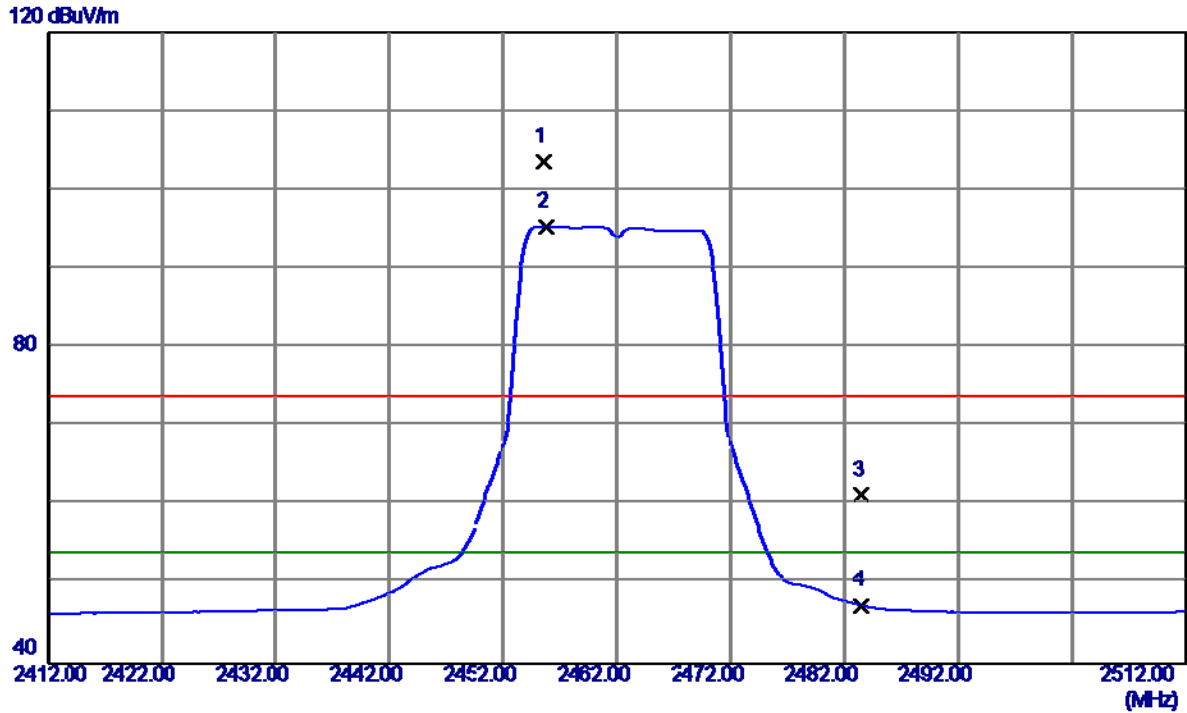
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.1800	40.03	5.28	45.31	68.30	-22.99	Peak	
2 *	4924.2400	29.20	5.28	34.48	54.00	-19.52	AVG	

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

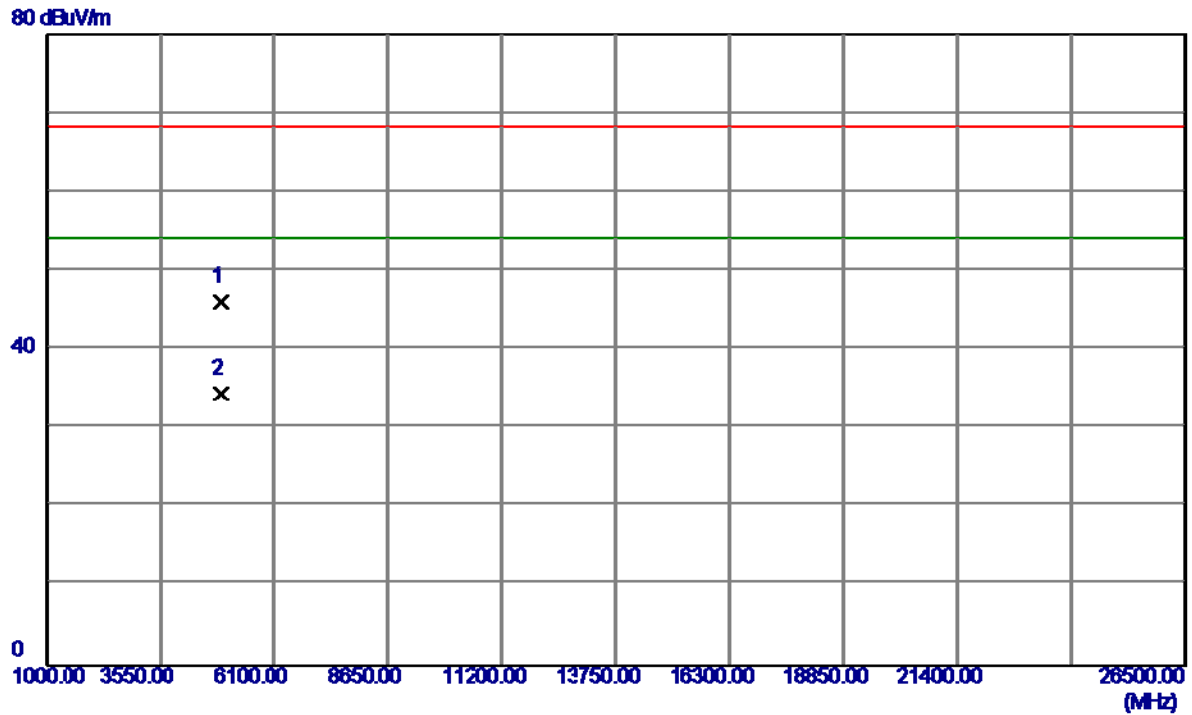
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2455.6000	70.83	32.77	103.60	74.00	29.60	Peak	NO LIMIT
2 *	2455.8000	62.51	32.77	95.28	54.00	41.28	AVG	NO LIMIT
3	2483.5000	28.46	32.81	61.27	74.00	-12.73	Peak	
4	2483.5000	14.47	32.81	47.28	54.00	-6.72	AVG	

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

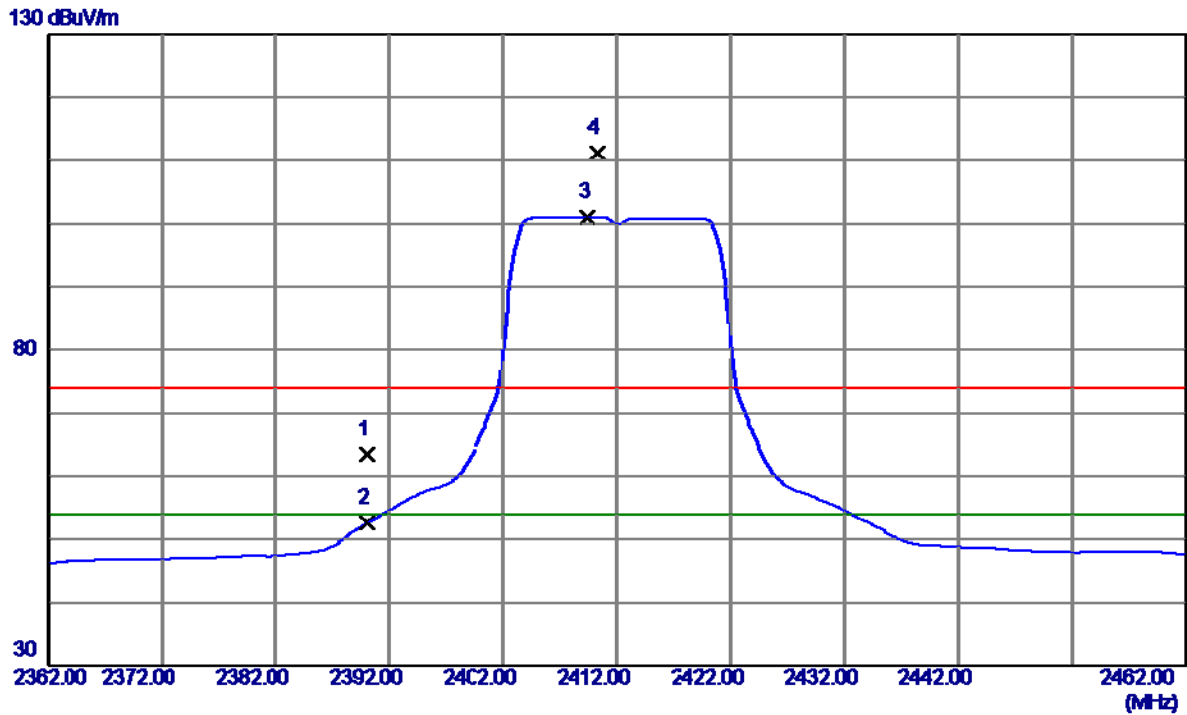
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.3200	40.79	5.27	46.06	68.30	-22.24	Peak	
2 *	4924.1600	29.19	5.28	34.47	54.00	-19.53	AVG	

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

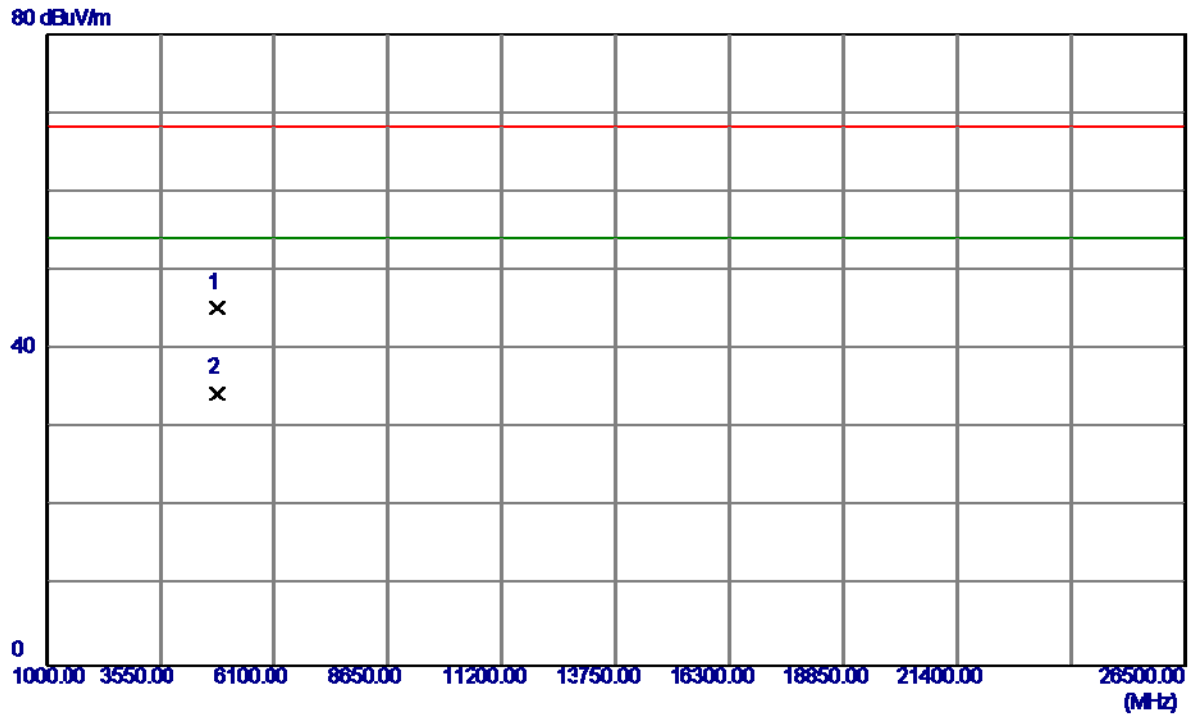
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	30.74	32.68	63.42	74.00	-10.58	Peak	
2	2390.0000	19.85	32.68	52.53	54.00	-1.47	AVG	
3 *	2409.5000	68.38	32.71	101.09	54.00	47.09	AVG	NO LIMIT
4	2410.3000	78.58	32.71	111.29	74.00	37.29	Peak	NO LIMIT

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

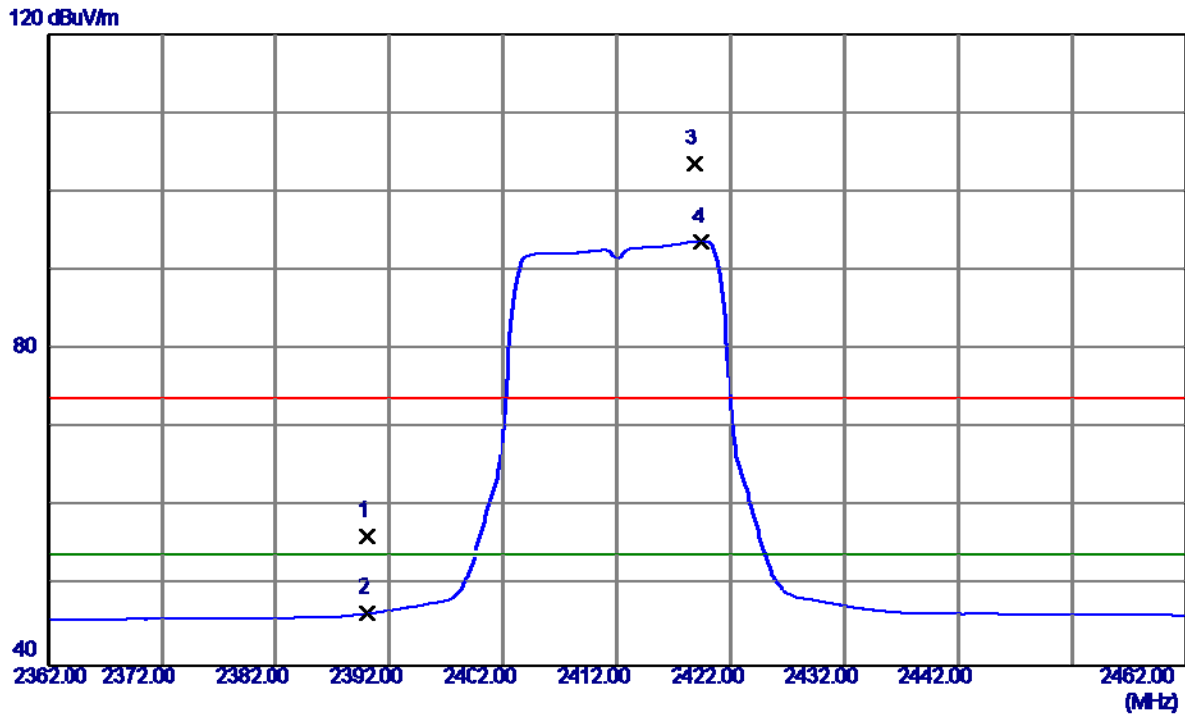
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9200	40.46	4.85	45.31	68.30	-22.99	Peak	
2 *	4824.1400	29.63	4.85	34.48	54.00	-19.52	AVG	

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

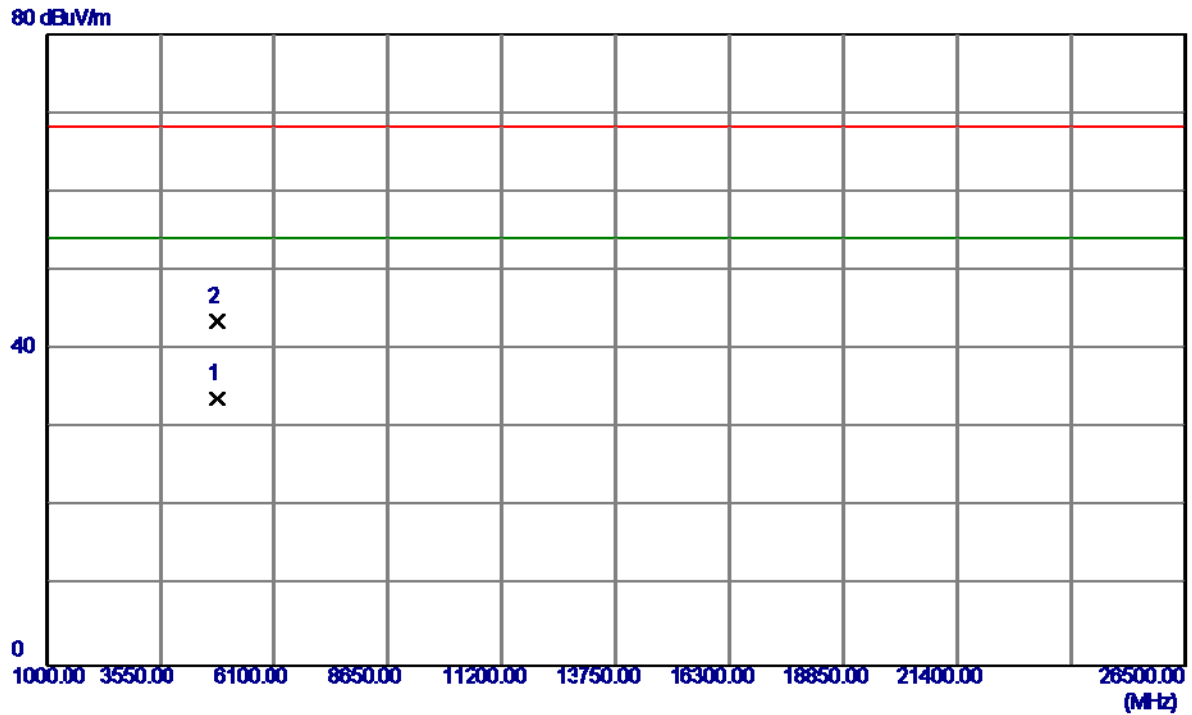
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	23.60	32.68	56.28	74.00	-17.72	Peak	
2	2390.0000	13.81	32.68	46.49	54.00	-7.51	AVG	
3	2418.9000	70.74	32.72	103.46	74.00	29.46	Peak	NO LIMIT
4 *	2419.5000	60.95	32.72	93.67	54.00	39.67	AVG	NO LIMIT

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

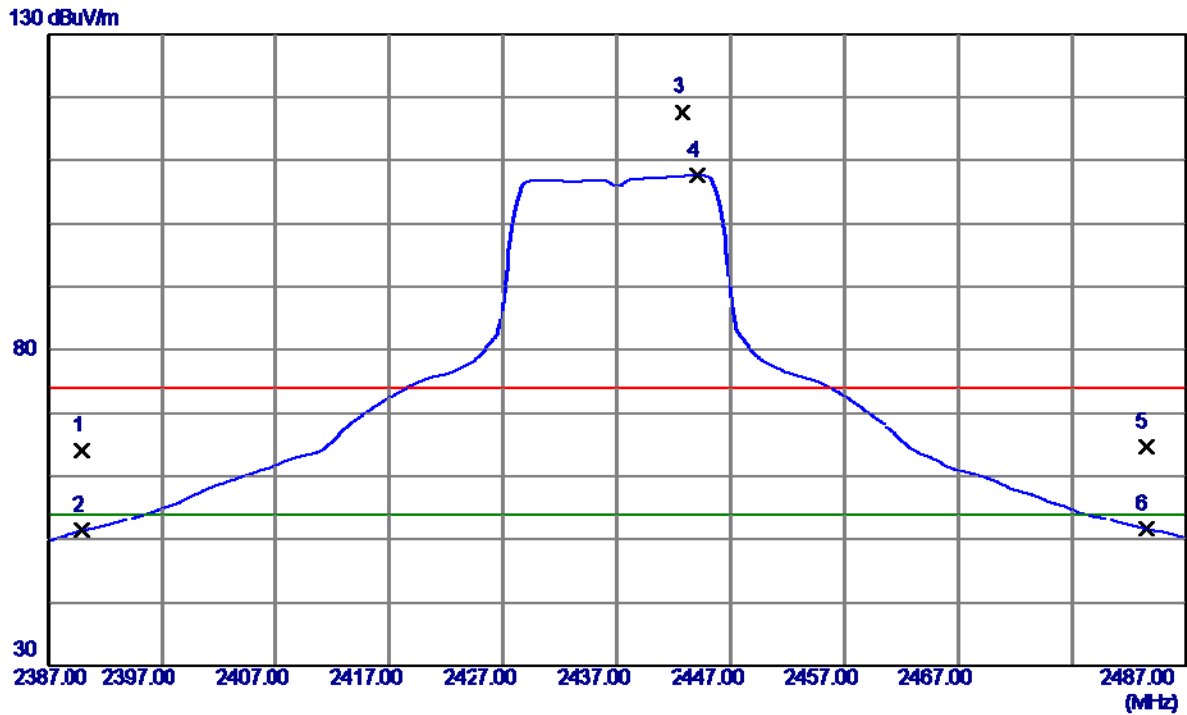
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.7799	28.90	4.85	33.75	54.00	-20.25	AVG	
2	4824.2799	38.61	4.85	43.46	68.30	-24.84	Peak	

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

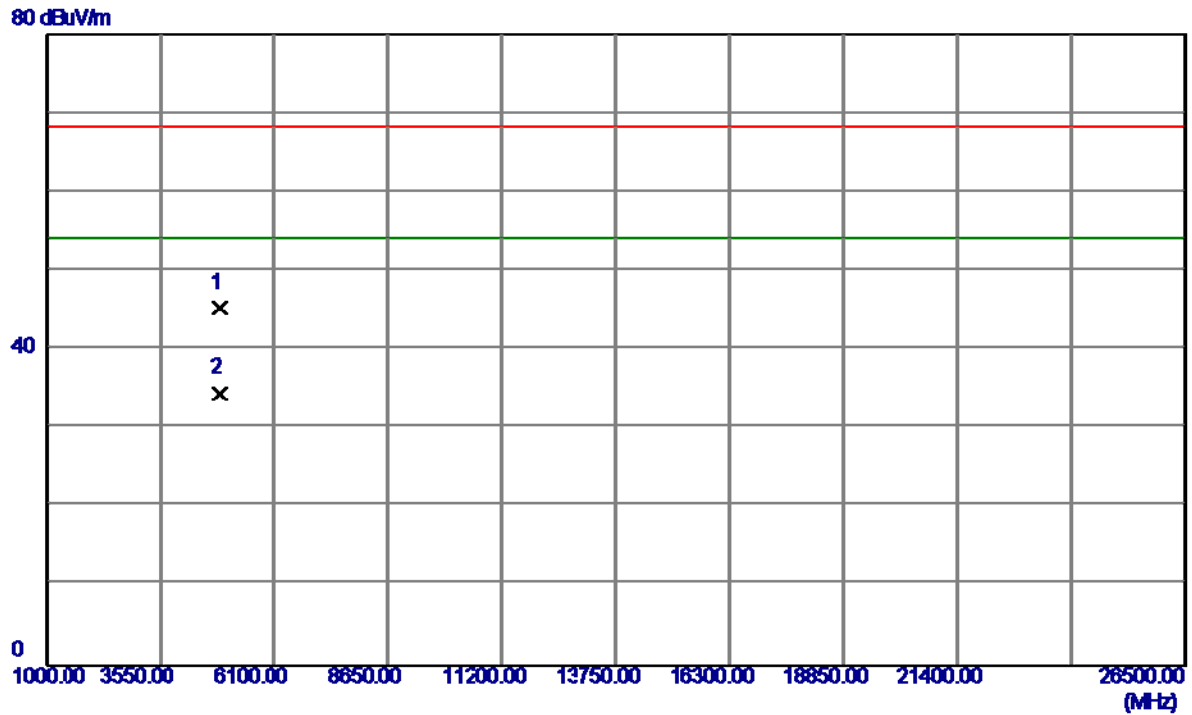
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	31.38	32.68	64.06	74.00	-9.94	Peak	
2	2390.0000	18.63	32.68	51.31	54.00	-2.69	AVG	
3	2442.8000	84.86	32.75	117.61	74.00	43.61	Peak	NO LIMIT
4 *	2444.1000	74.88	32.75	107.63	54.00	53.63	AVG	NO LIMIT
5	2483.5000	31.77	32.81	64.58	74.00	-9.42	Peak	
6	2483.5000	18.72	32.81	51.53	54.00	-2.47	AVG	

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

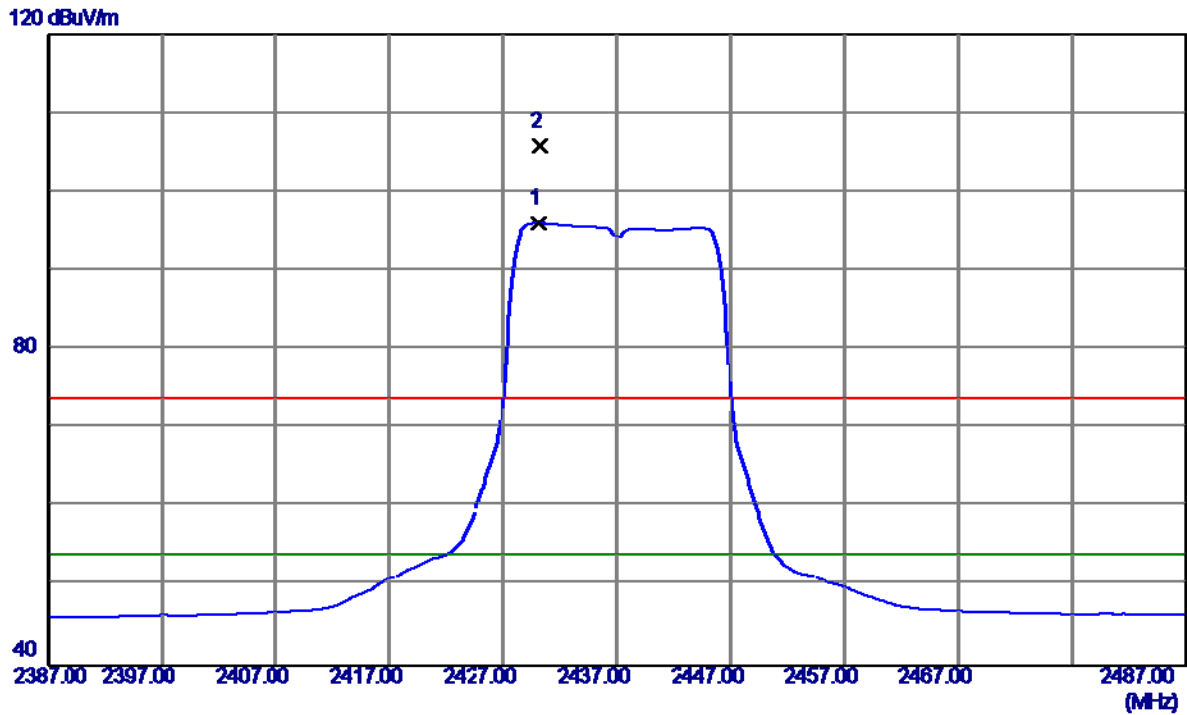
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4875.1300	40.24	5.07	45.31	68.30	-22.99	Peak	
2 *	4874.2900	29.41	5.07	34.48	54.00	-19.52	AVG	

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

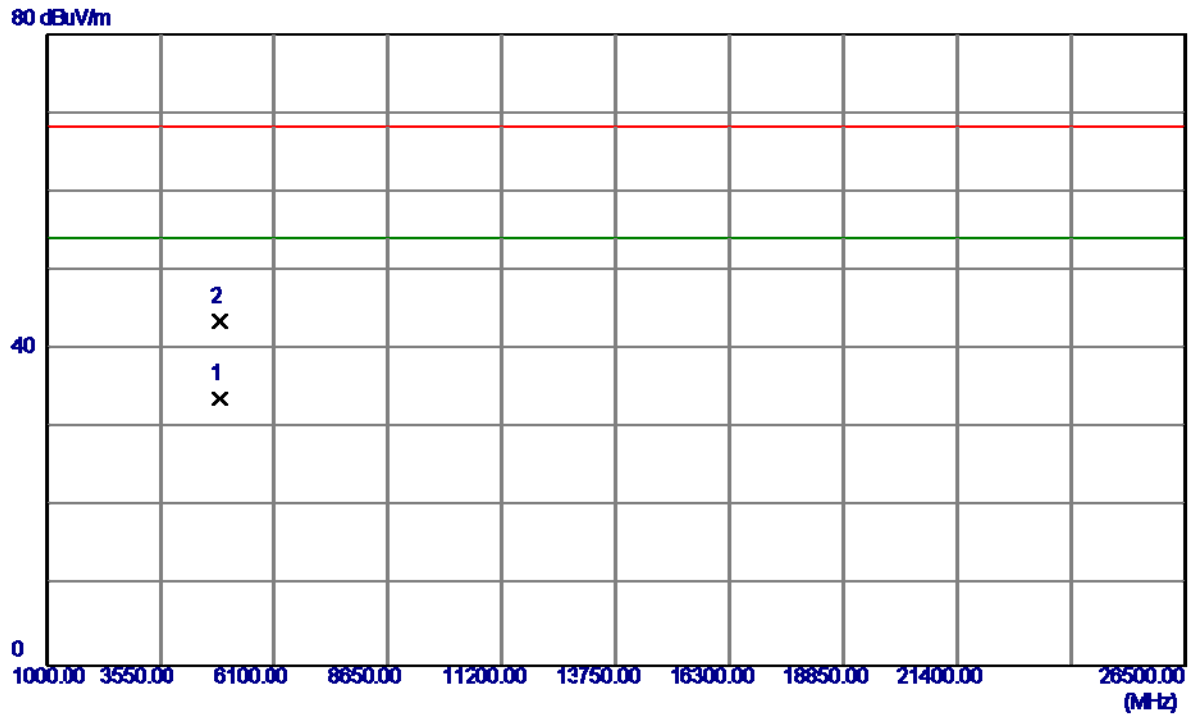
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2430.1000	63.23	32.73	95.96	54.00	41.96	AVG	NO LIMIT
2	2430.2000	73.08	32.73	105.81	74.00	31.81	Peak	NO LIMIT

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

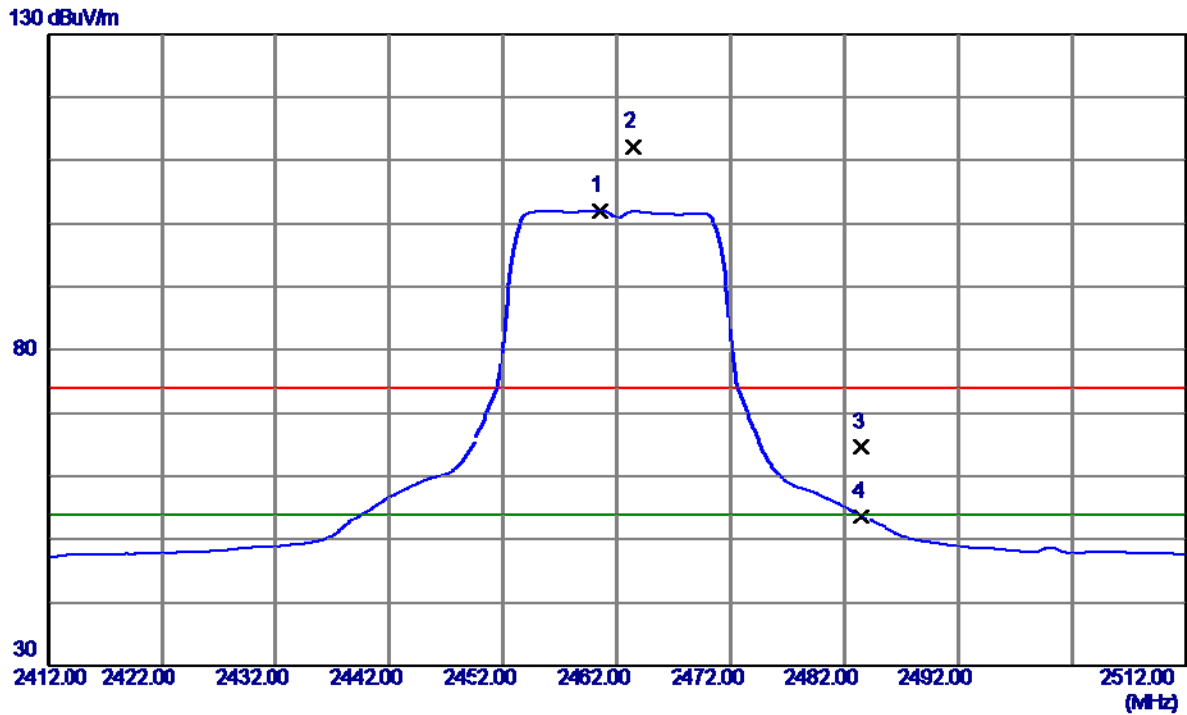
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0500	28.68	5.07	33.75	54.00	-20.25	AVG	
2	4874.1900	38.39	5.07	43.46	68.30	-24.84	Peak	

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

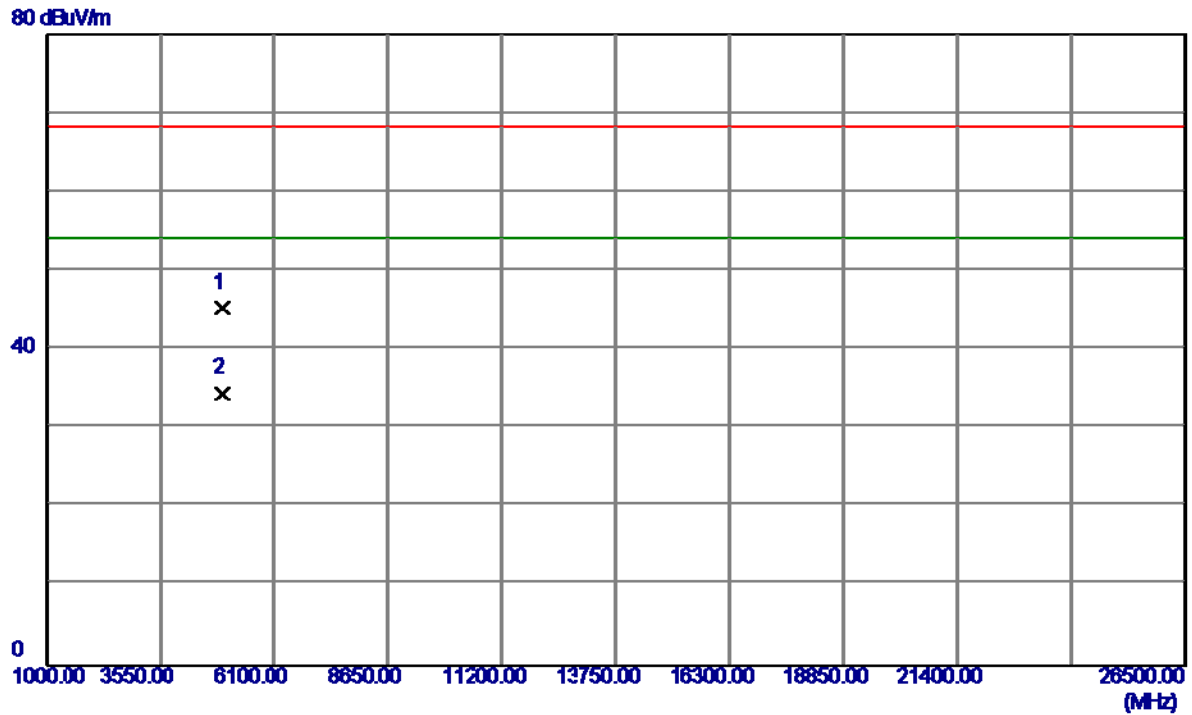
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2460.6000	69.22	32.78	102.00	54.00	48.00	AVG	NO LIMIT
2	2463.4000	79.43	32.78	112.21	74.00	38.21	Peak	NO LIMIT
3	2483.5000	31.82	32.81	64.63	74.00	-9.37	Peak	
4	2483.5000	20.84	32.81	53.65	54.00	-0.35	AVG	

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

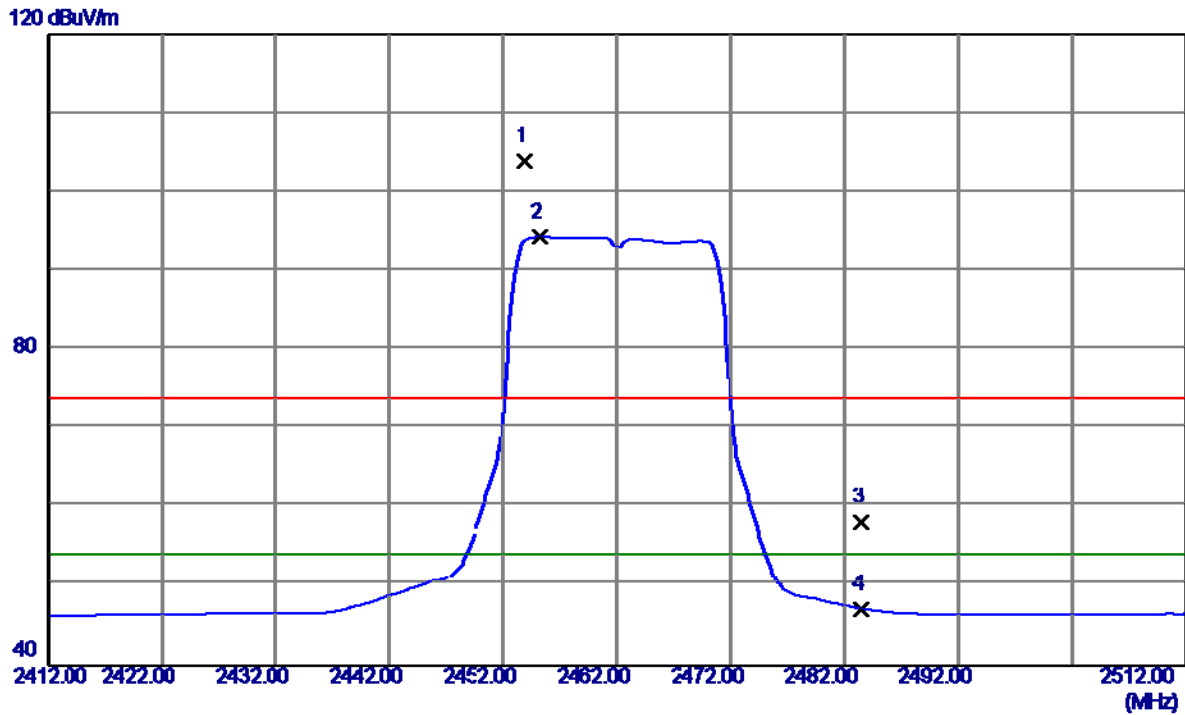
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4925.0900	40.03	5.28	45.31	68.30	-22.99	Peak	
2 *	4924.4600	29.20	5.28	34.48	54.00	-19.52	AVG	

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

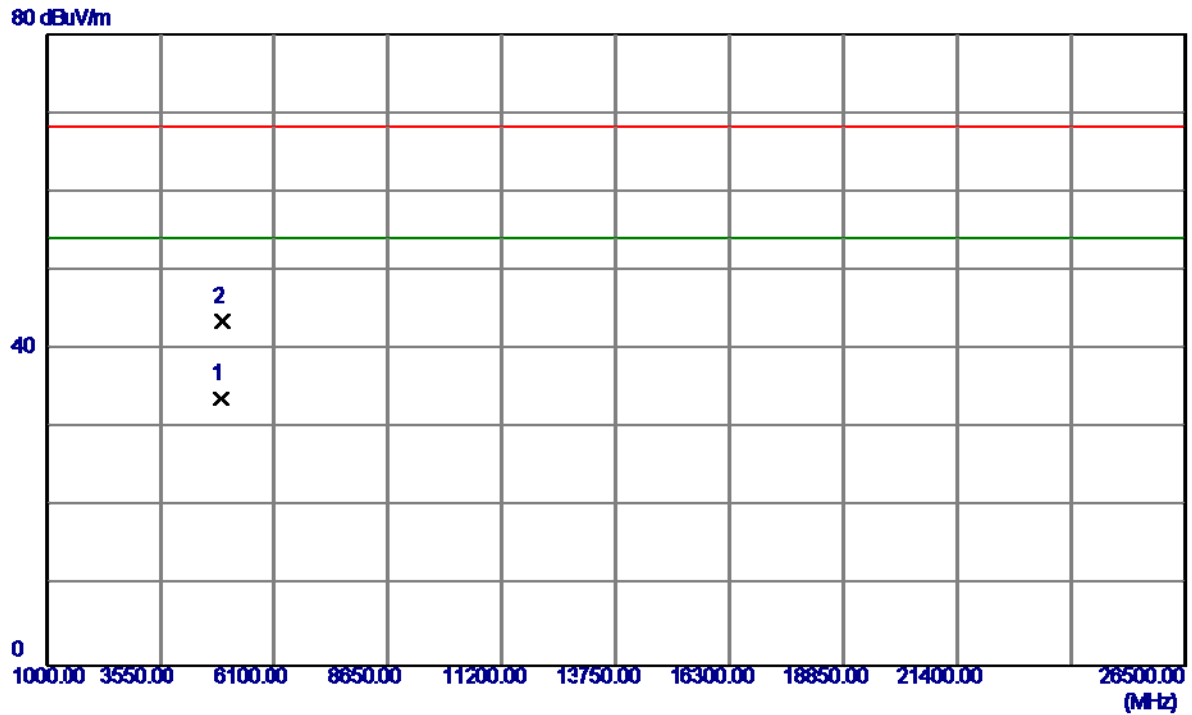
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2453.9000	71.07	32.77	103.84	74.00	29.84	Peak	NO LIMIT
2 *	2455.2000	61.44	32.77	94.21	54.00	40.21	AVG	NO LIMIT
3	2483.5000	25.23	32.81	58.04	74.00	-15.96	Peak	
4	2483.5000	14.30	32.81	47.11	54.00	-6.89	AVG	

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

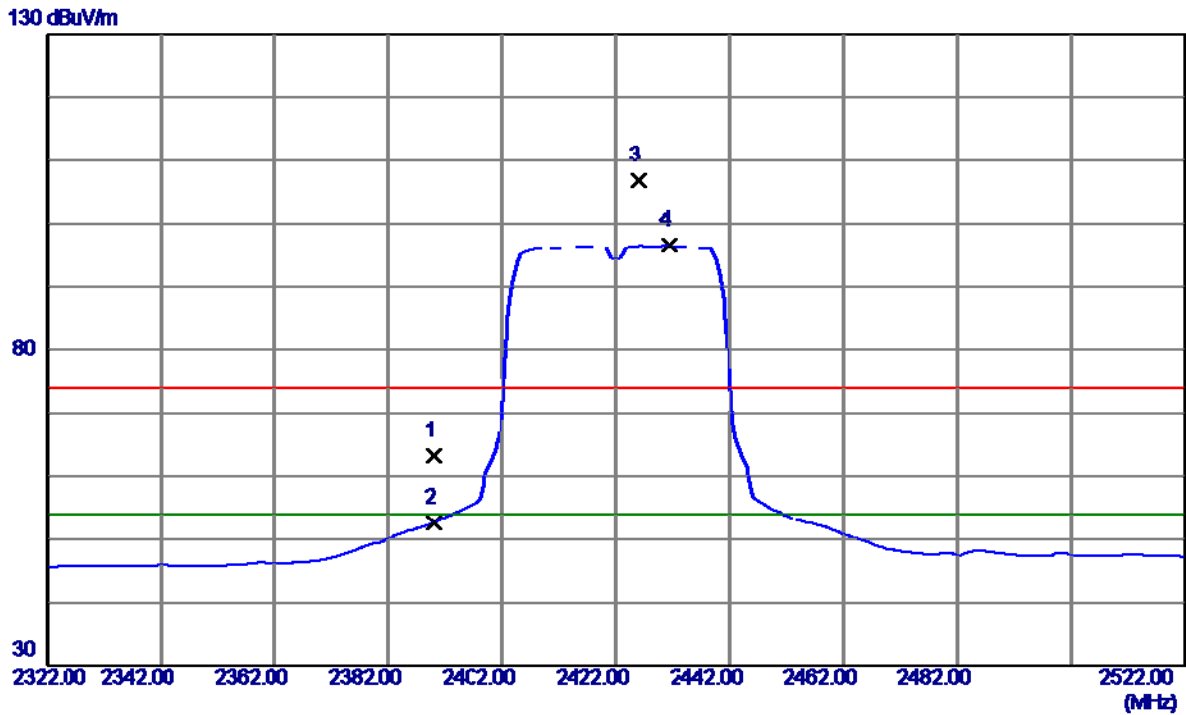
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.8800	28.47	5.28	33.75	54.00	-20.25	AVG	
2	4924.1700	38.18	5.28	43.46	68.30	-24.84	Peak	

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

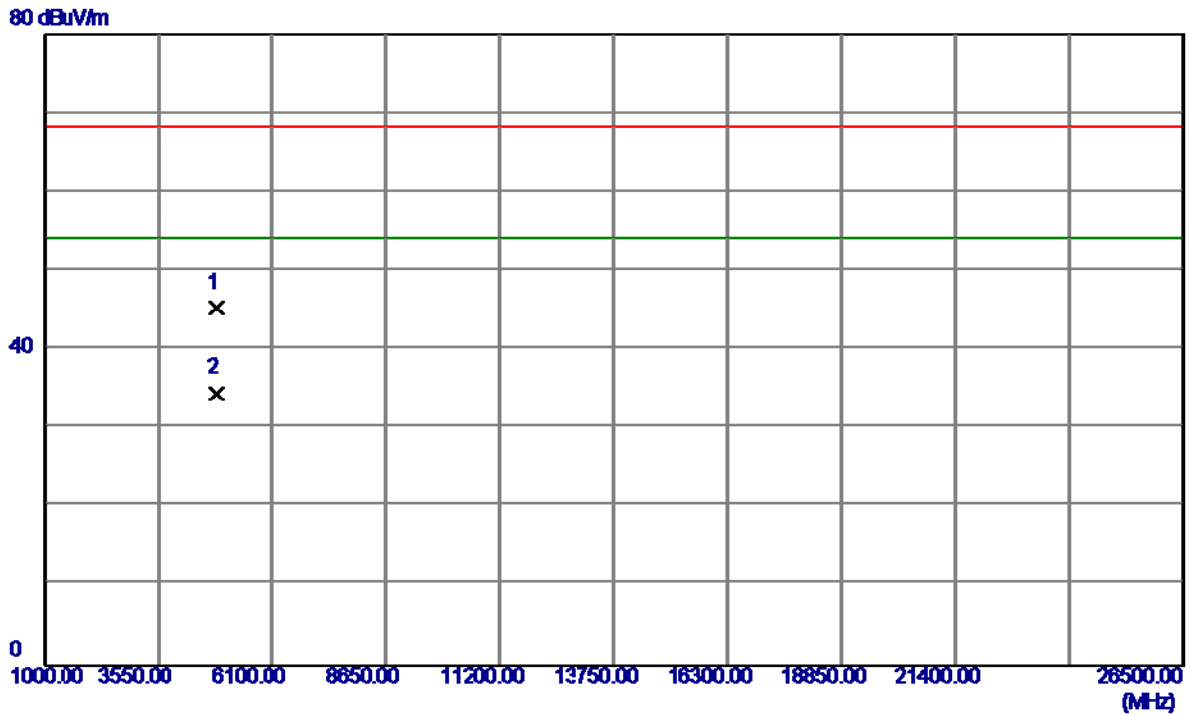
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	30.54	32.68	63.22	74.00	-10.78	Peak	
2	2390.0000	19.99	32.68	52.67	54.00	-1.33	AVG	
3	2422.0000	74.03	32.73	106.76	74.00	32.76	Peak	NO LIMIT
4 *	2431.4000	63.77	32.74	96.51	54.00	42.51	AVG	NO LIMIT

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

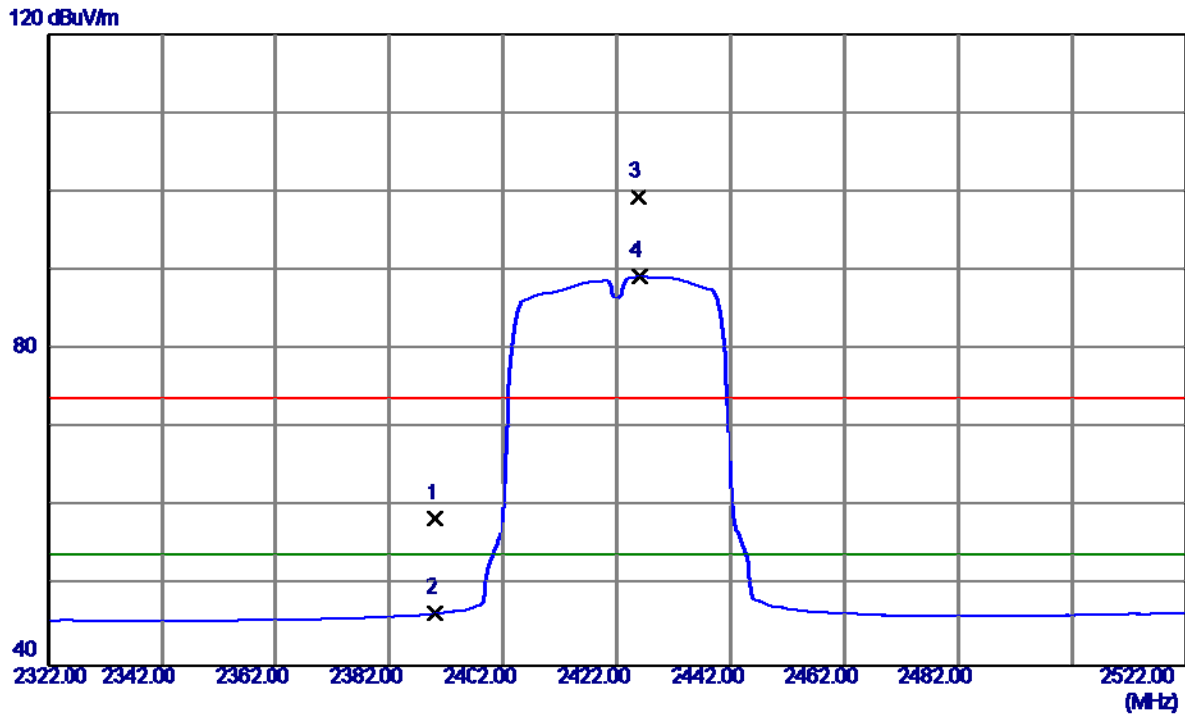
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4844.2700	40.37	4.94	45.31	68.30	-22.99	Peak	
2 *	4843.9100	29.54	4.94	34.48	54.00	-19.52	AVG	

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

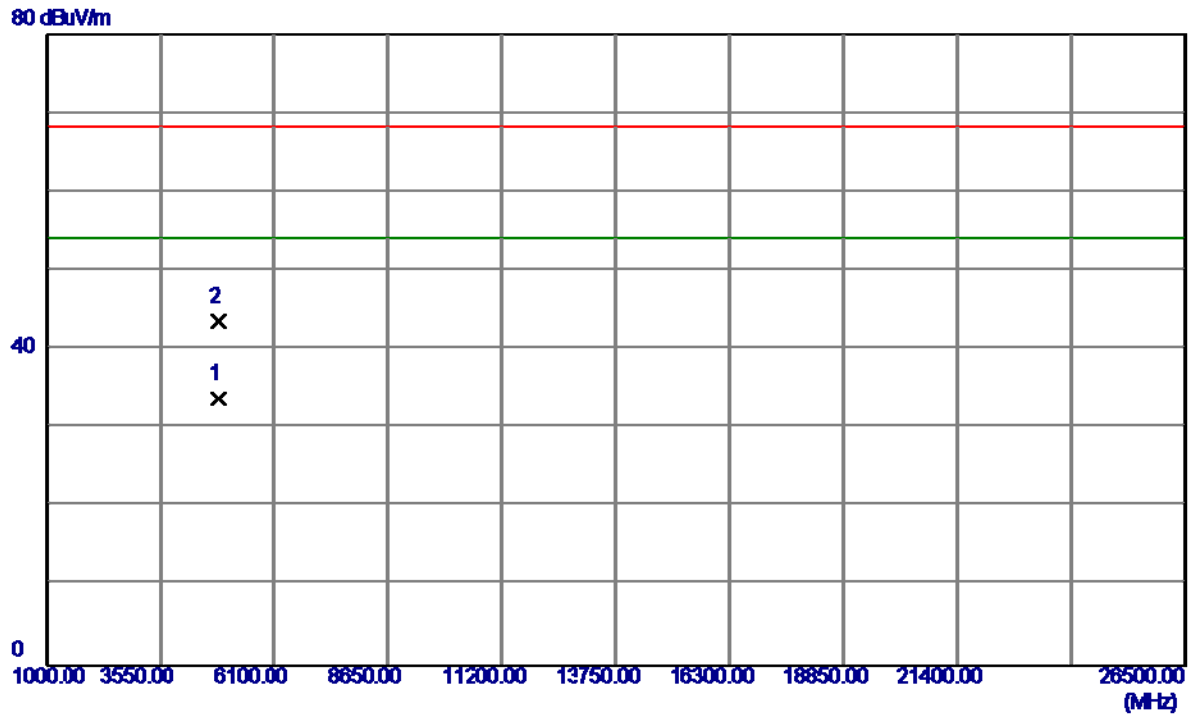
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.90	32.68	58.58	74.00	-15.42	Peak	
2	2390.0000	13.84	32.68	46.52	54.00	-7.48	AVG	
3	2425.8000	66.59	32.73	99.32	74.00	25.32	Peak	NO LIMIT
4 *	2426.0000	56.51	32.73	89.24	54.00	35.24	AVG	NO LIMIT

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

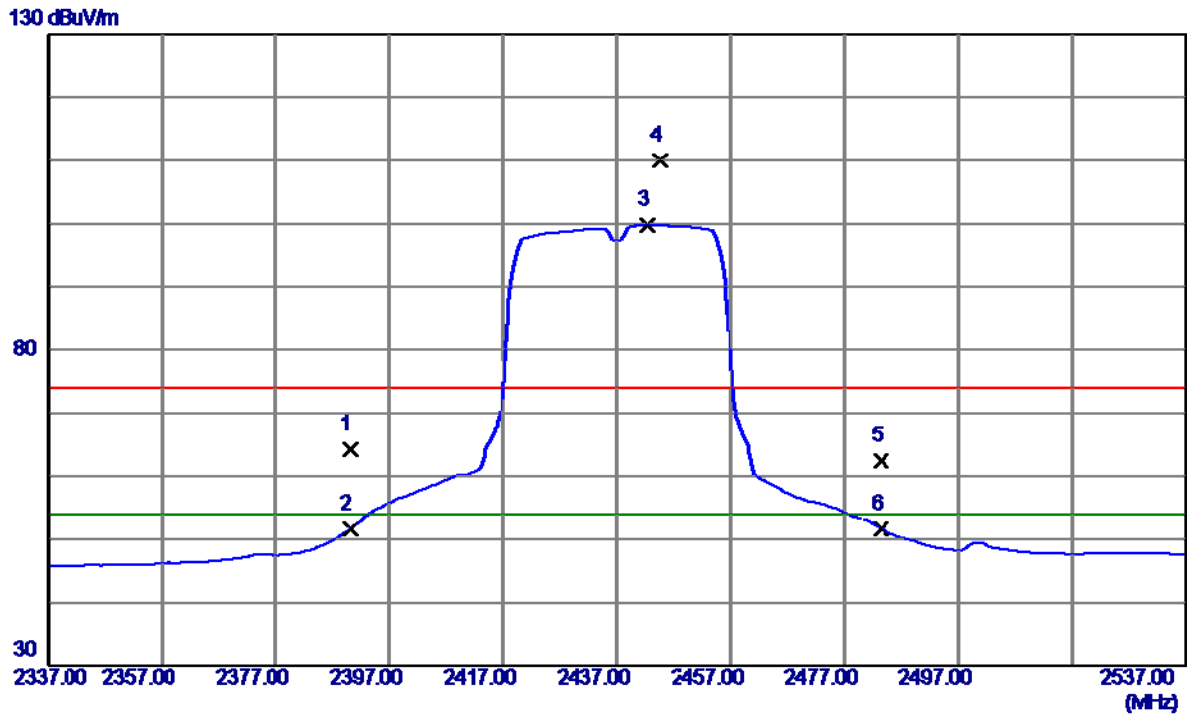
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4845.0700	28.81	4.94	33.75	54.00	-20.25	AVG	
2	4844.6500	38.52	4.94	43.46	68.30	-24.84	Peak	

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

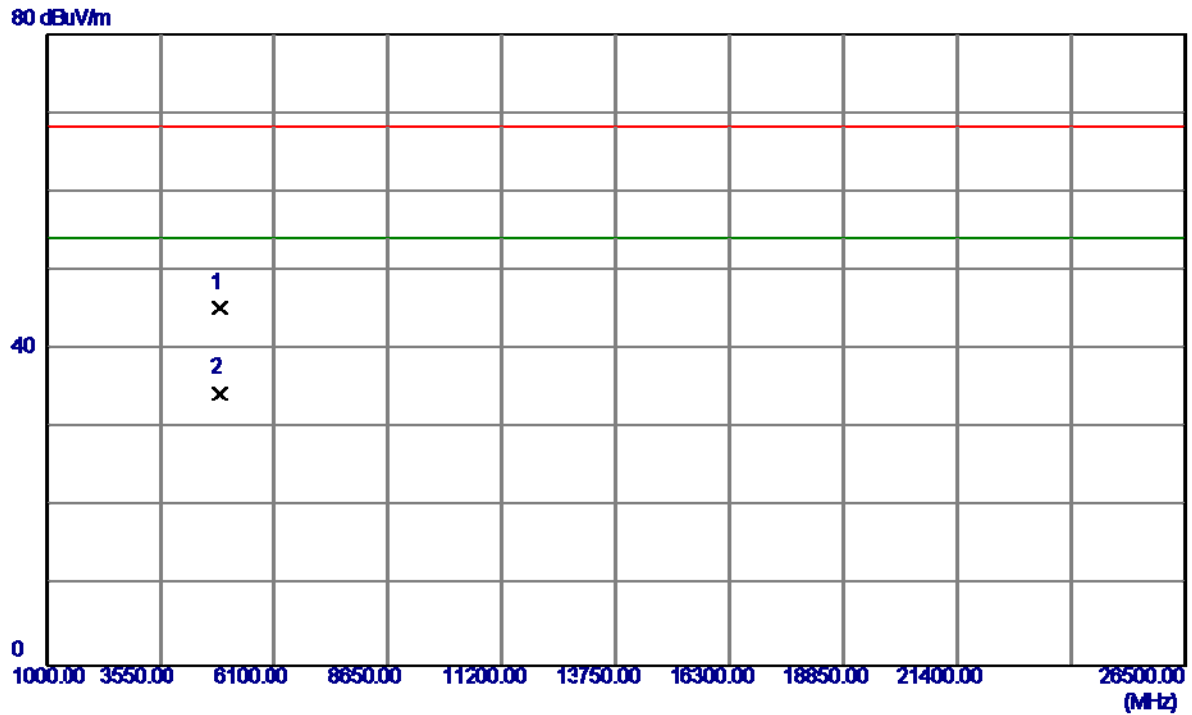
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	31.51	32.68	64.19	74.00	-9.81	Peak	
2	2390.0000	18.98	32.68	51.66	54.00	-2.34	AVG	
3 *	2442.4000	67.09	32.75	99.84	54.00	45.84	AVG	NO LIMIT
4	2444.6000	77.35	32.75	110.10	74.00	36.10	Peak	NO LIMIT
5	2483.5000	29.58	32.81	62.39	74.00	-11.61	Peak	
6	2483.5000	18.75	32.81	51.56	54.00	-2.44	AVG	

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

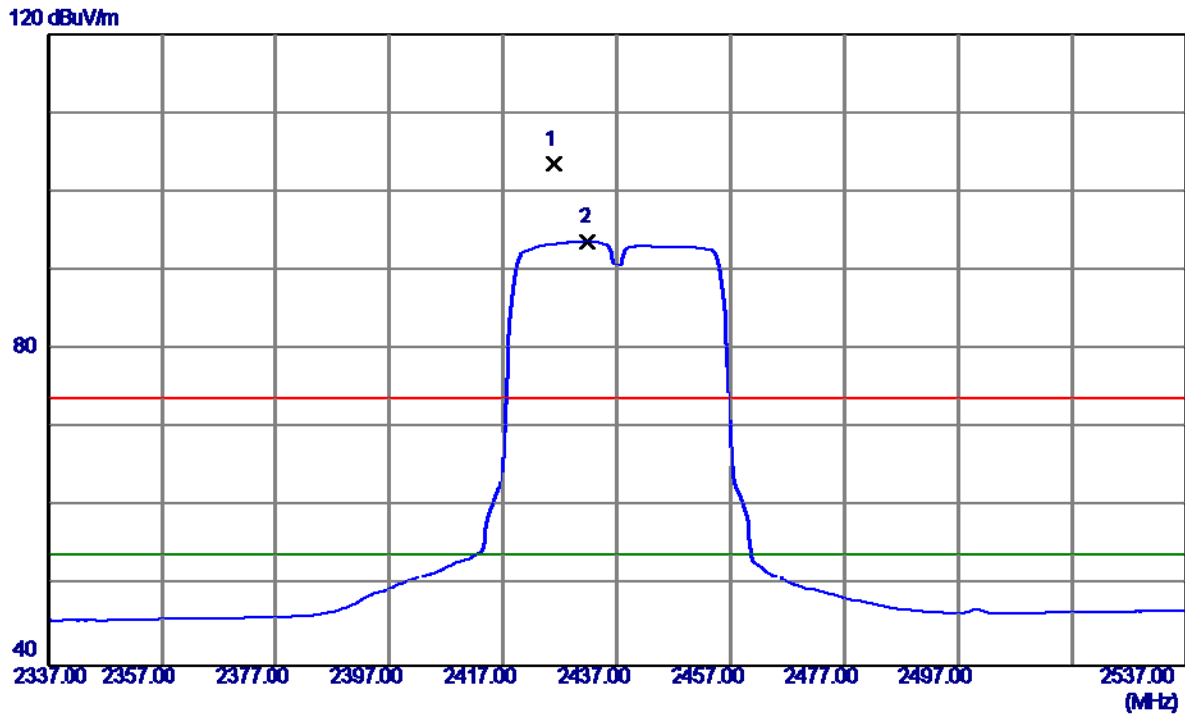
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4875.2700	40.24	5.07	45.31	68.30	-22.99	Peak	
2 *	4876.1900	29.41	5.07	34.48	54.00	-19.52	AVG	

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

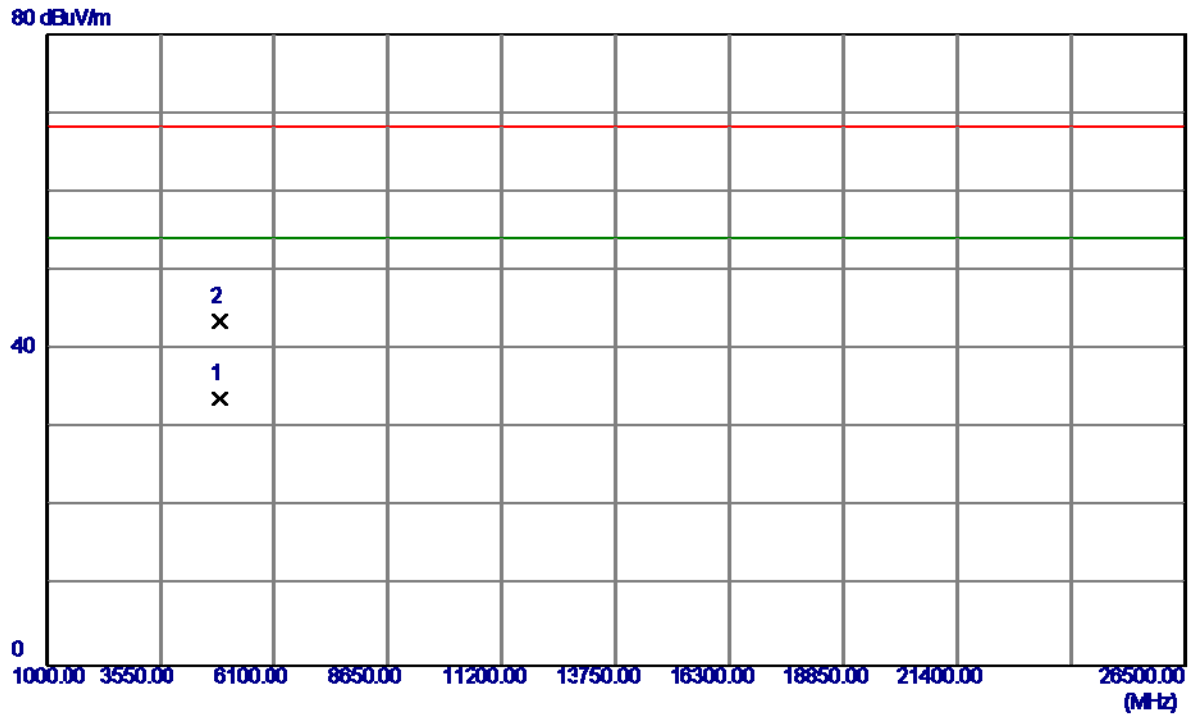
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2425.8000	70.71	32.73	103.44	74.00	29.44	Peak	NO LIMIT
2 *	2432.0000	60.91	32.74	93.65	54.00	39.65	AVG	NO LIMIT

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

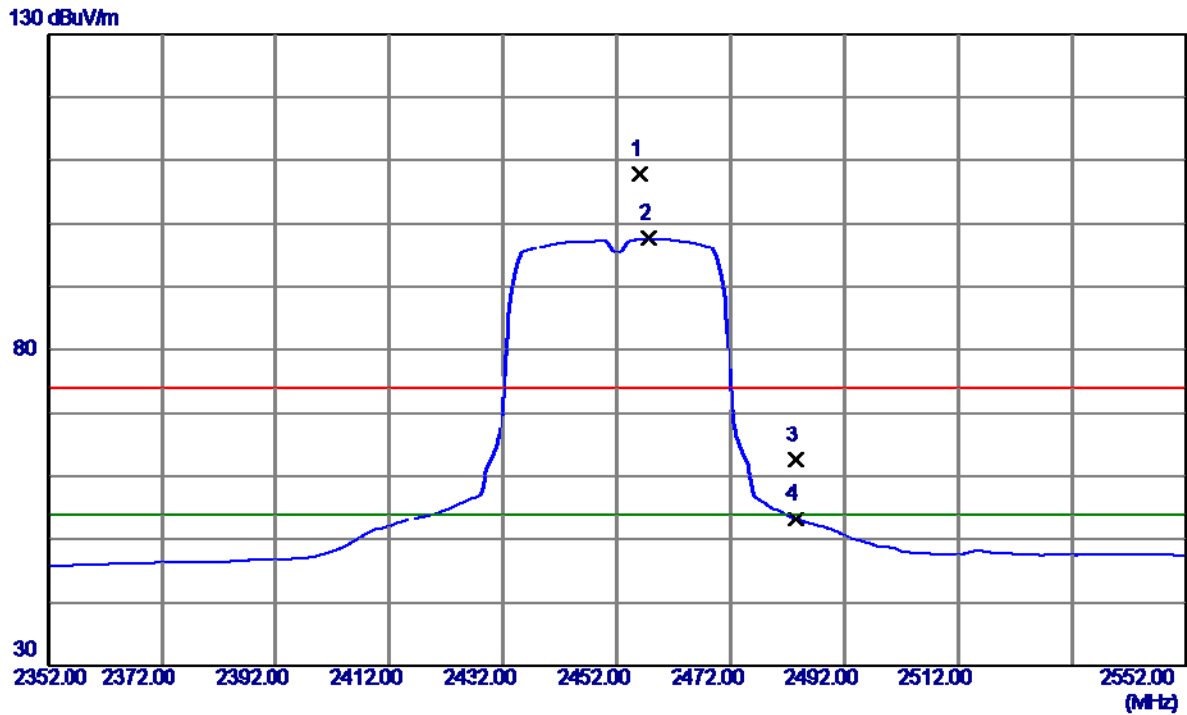
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.5200	28.68	5.07	33.75	54.00	-20.25	AVG	
2	4875.0099	38.39	5.07	43.46	68.30	-24.84	Peak	

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

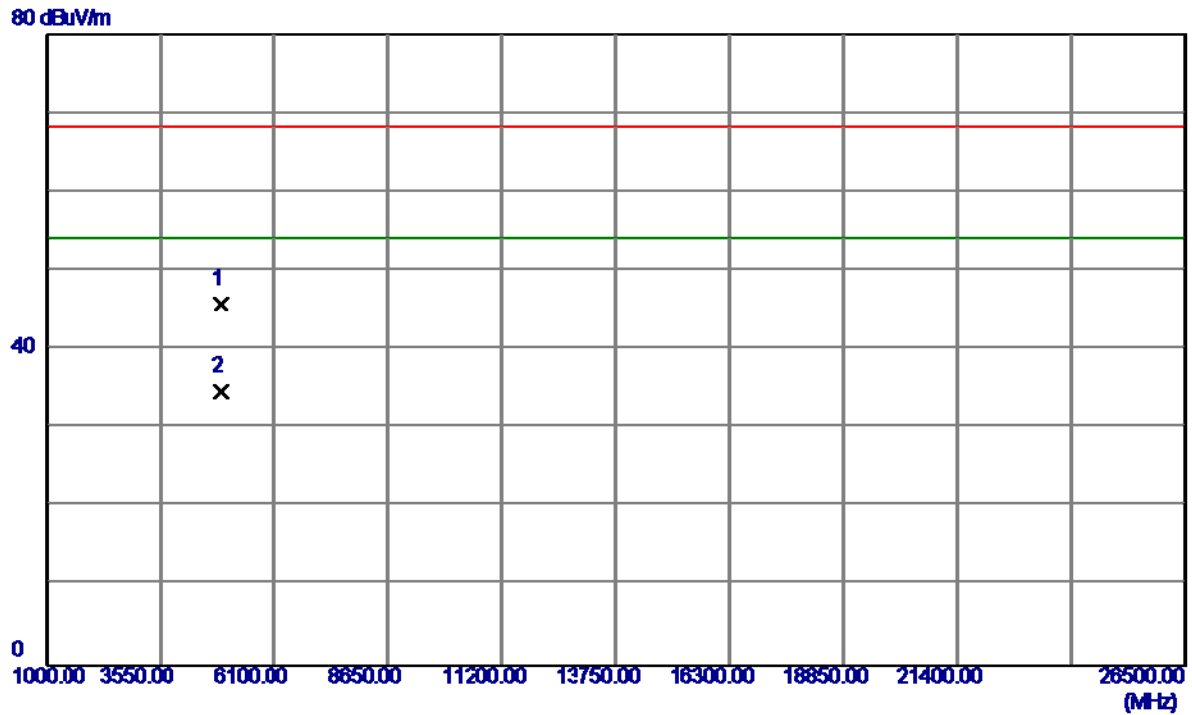
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2456.0000	75.10	32.77	107.87	74.00	33.87	Peak	NO LIMIT
2 *	2457.6000	64.93	32.77	97.70	54.00	43.70	AVG	NO LIMIT
3	2483.5000	29.69	32.81	62.50	74.00	-11.50	Peak	
4	2483.5000	20.35	32.81	53.16	54.00	-0.84	AVG	

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

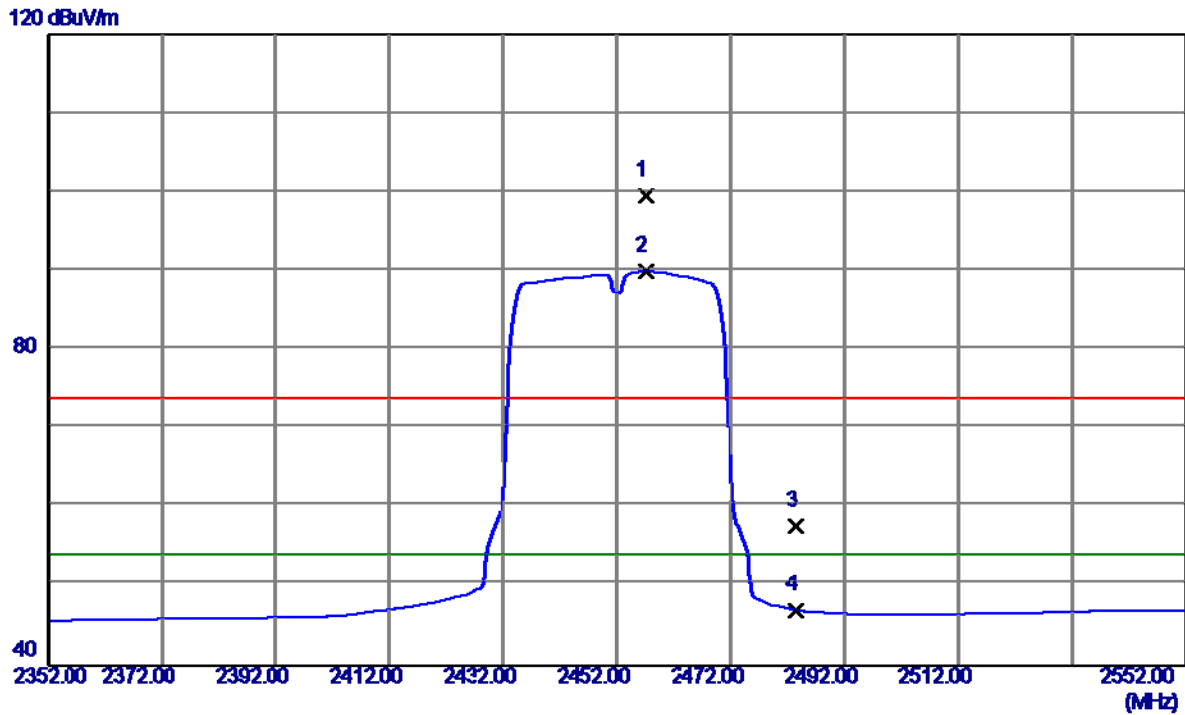
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4905.0299	40.57	5.20	45.77	68.30	-22.53	Peak	
2 *	4906.1100	29.46	5.20	34.66	54.00	-19.34	AVG	

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

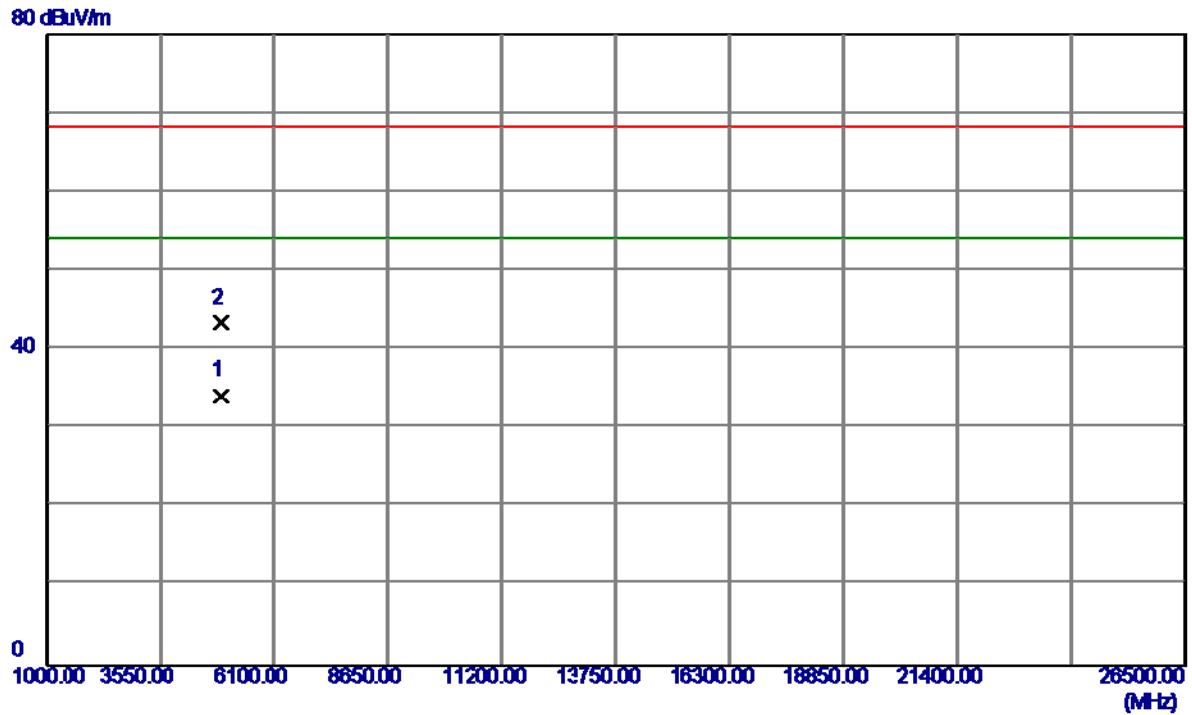
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2457.0000	66.81	32.77	99.58	74.00	25.58	Peak	NO LIMIT
2 *	2457.0000	57.15	32.77	89.92	54.00	35.92	AVG	NO LIMIT
3	2483.5000	24.81	32.81	57.62	74.00	-16.38	Peak	
4	2483.5000	14.15	32.81	46.96	54.00	-7.04	AVG	

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

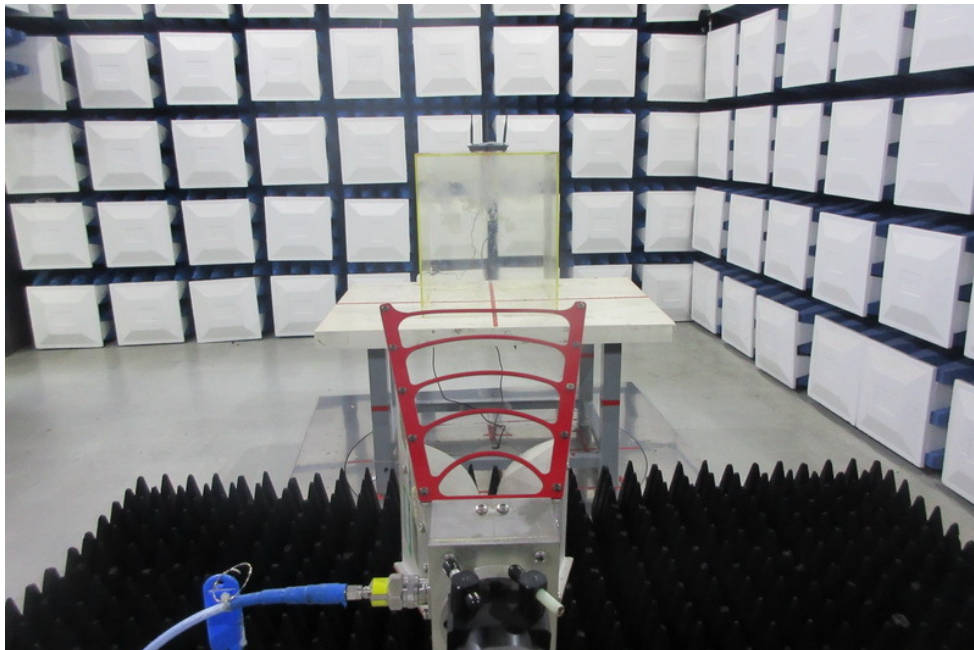
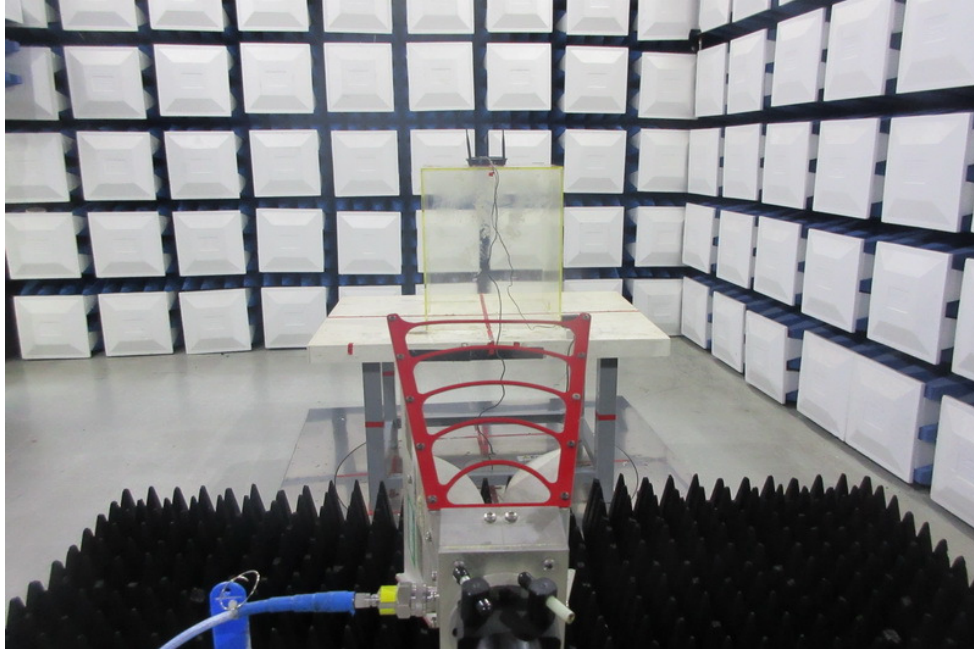
Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4904. 0800	28. 97	5. 19	34. 16	54. 00	-19. 84	AVG	
2	4905. 4300	38. 16	5. 20	43. 36	68. 30	-24. 94	Peak	

Radiated Measurement Photos

Above 1000MHz

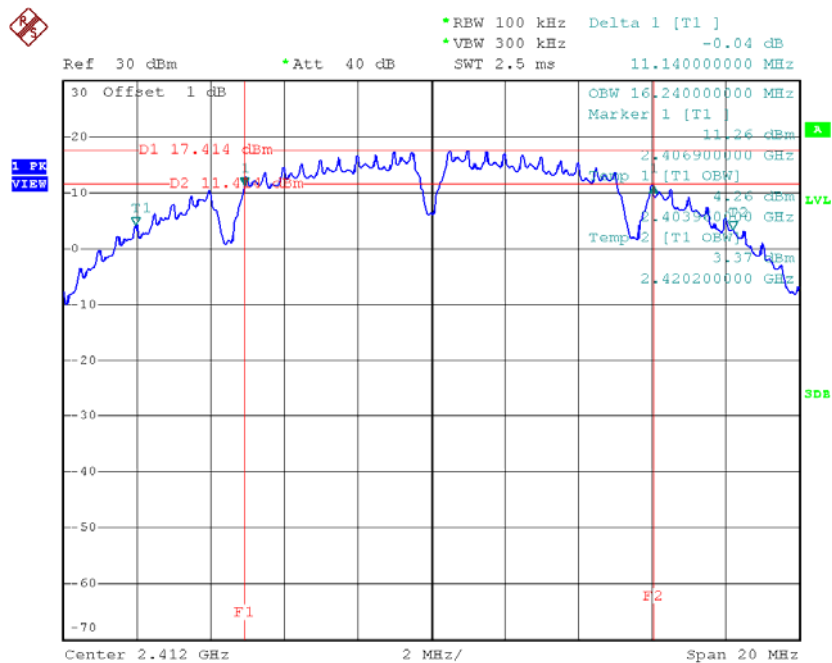


ATTACHMENT E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

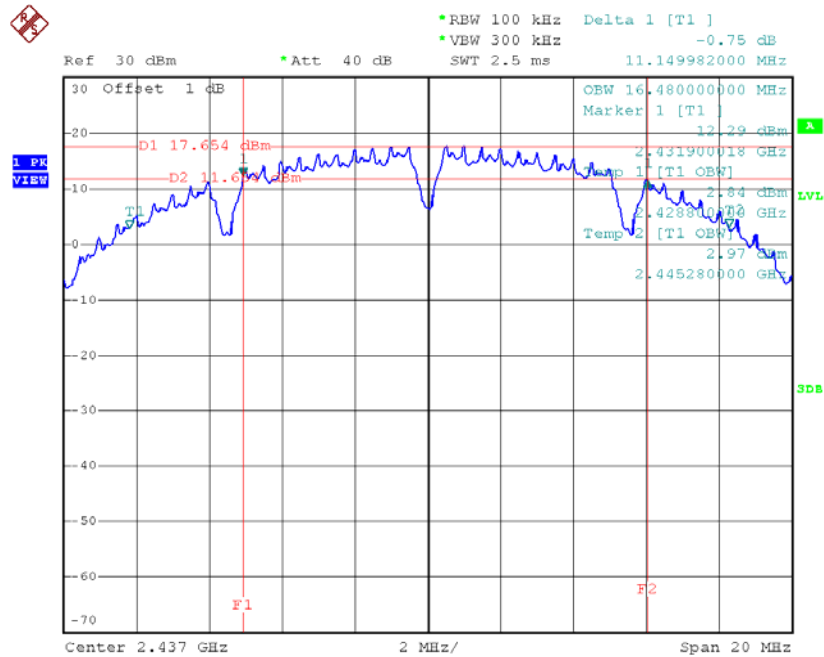
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	11.14	16.24	500	Complies
2437	11.15	16.48	500	Complies
2462	12.10	16.52	500	Complies

TX CH01



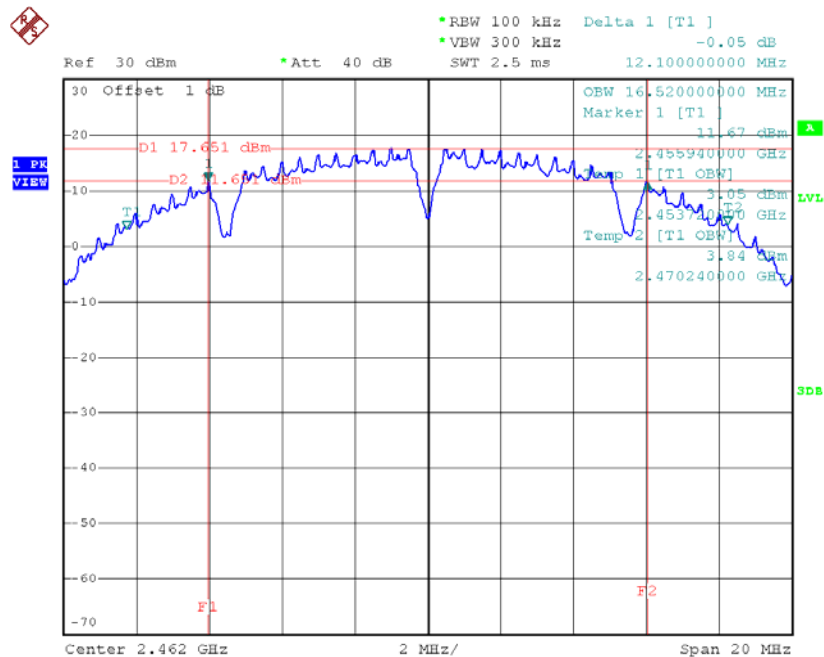
Date: 15.JUL.2016 10:30:38

TX CH06



Date: 15.JUL.2016 10:33:29

TX CH11

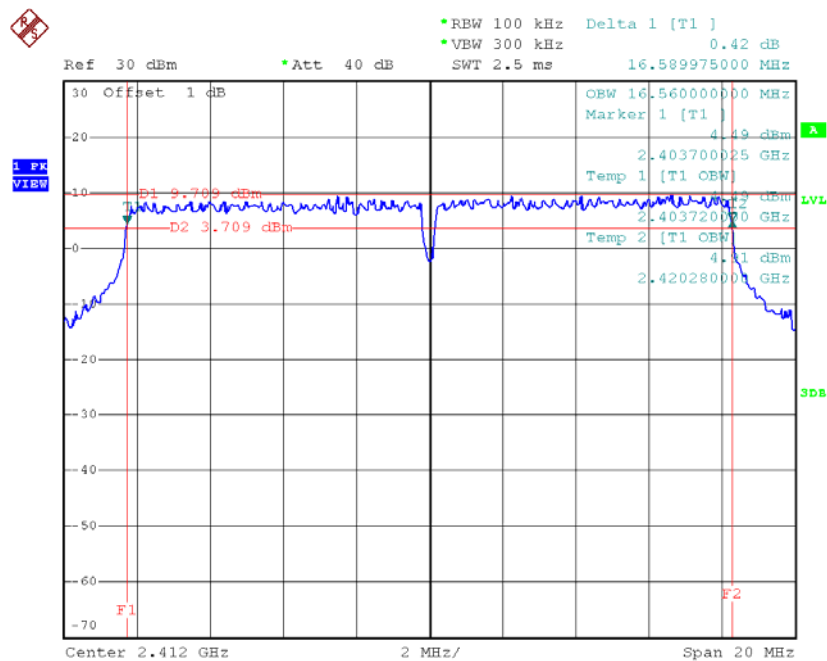


Date: 15.JUL.2016 10:35:42

Test Mode: TX G Mode_CH01/06/11

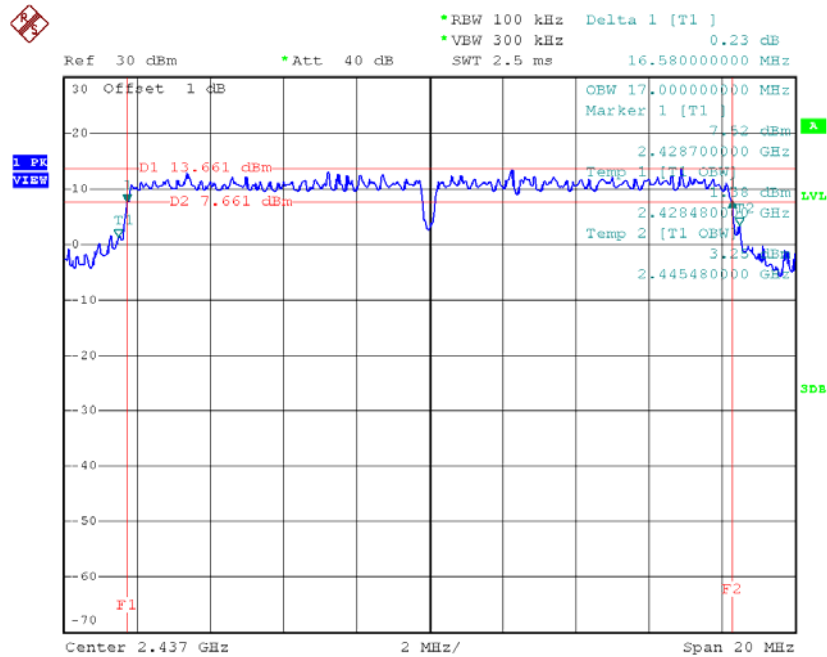
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.59	16.56	500	Complies
2437	16.58	17.00	500	Complies
2462	16.59	16.56	500	Complies

TX CH01



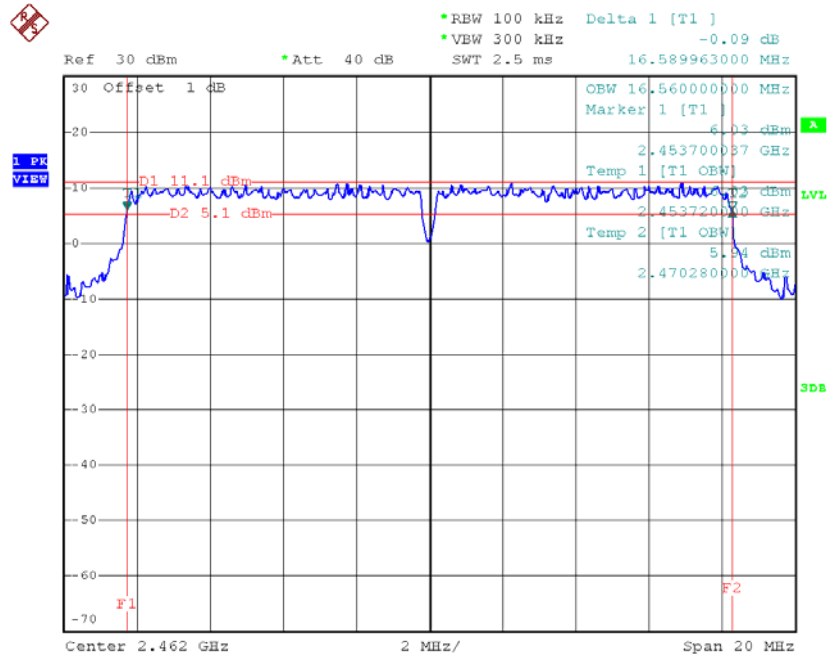
Date: 15.JUL.2016 10:38:37

TX CH06



Date: 15.JUL.2016 10:40:28

TX CH11

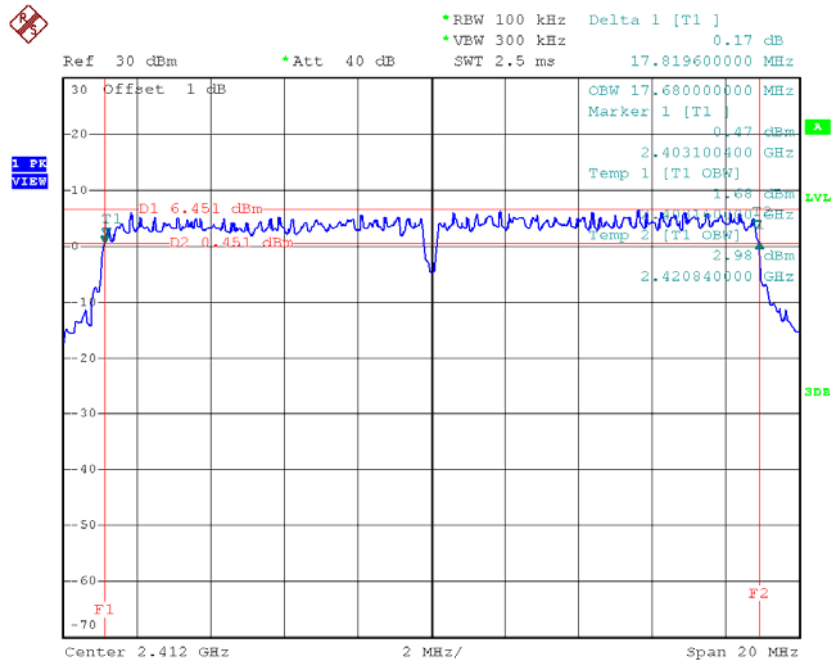


Date: 15.JUL.2016 10:41:59

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

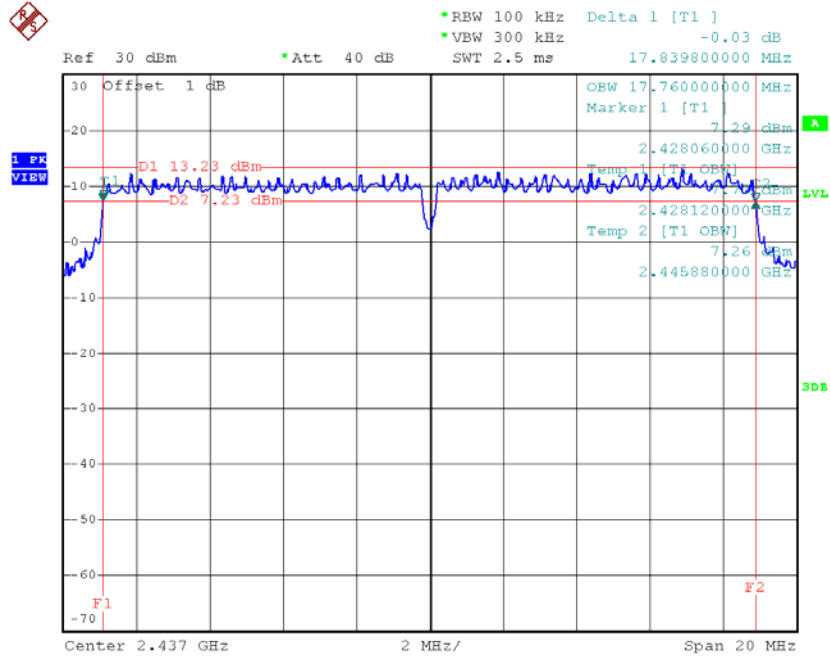
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.82	17.68	500	Complies
2437	17.84	17.76	500	Complies
2462	17.83	17.68	500	Complies

TX CH01



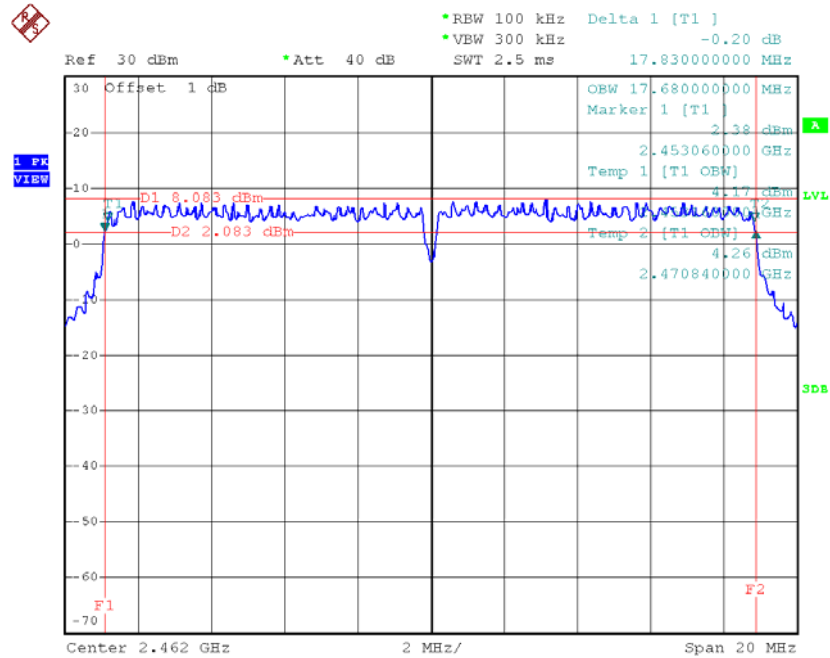
Date: 15.JUL.2016 12:14:42

TX CH06



Date: 15.JUL.2016 12:16:07

TX CH11

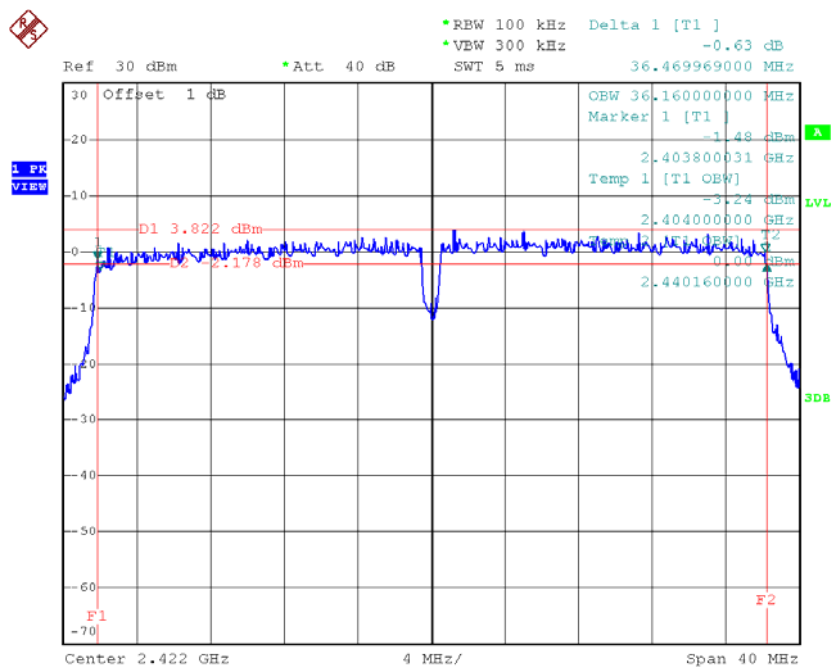


Date: 15.JUL.2016 12:18:11

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

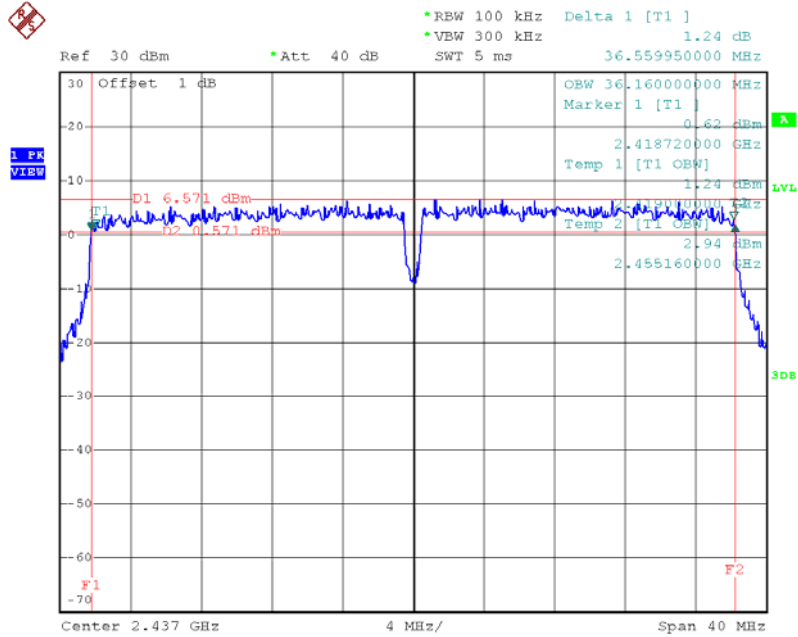
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.47	36.16	500	Complies
2437	36.56	36.16	500	Complies
2452	36.55	36.24	500	Complies

TX CH03



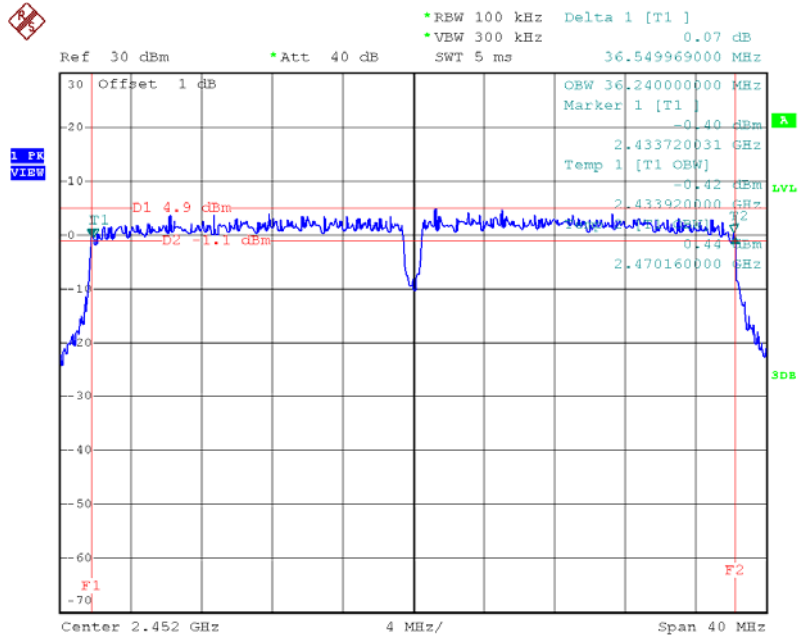
Date: 15.JUL.2016 12:20:02

TX CH06



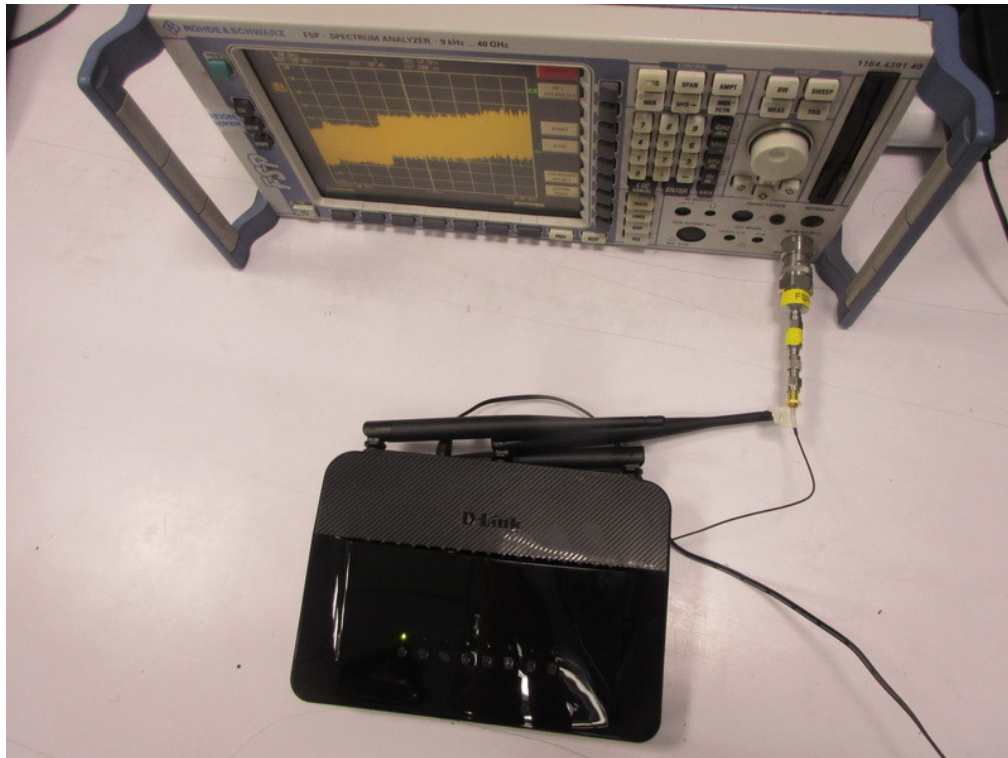
Date: 15.JUL.2016 12:21:42

TX CH09



Date: 15.JUL.2016 12:23:10

Bandwidth Measurement Photos



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	29.77	0.95	30.00	1.00	Complies
2437	26.59	0.46	30.00	1.00	Complies
2462	29.54	0.90	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	29.75	0.94	30.00	1.00	Complies
2437	29.97	0.99	30.00	1.00	Complies
2462	29.98	1.00	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	26.12	0.41	30.00	1.00	Complies
2437	26.59	0.46	30.00	1.00	Complies
2462	26.65	0.46	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	27.69	0.59	30.00	1.00	Complies
2437	26.79	0.48	30.00	1.00	Complies
2462	26.92	0.49	30.00	1.00	Complies

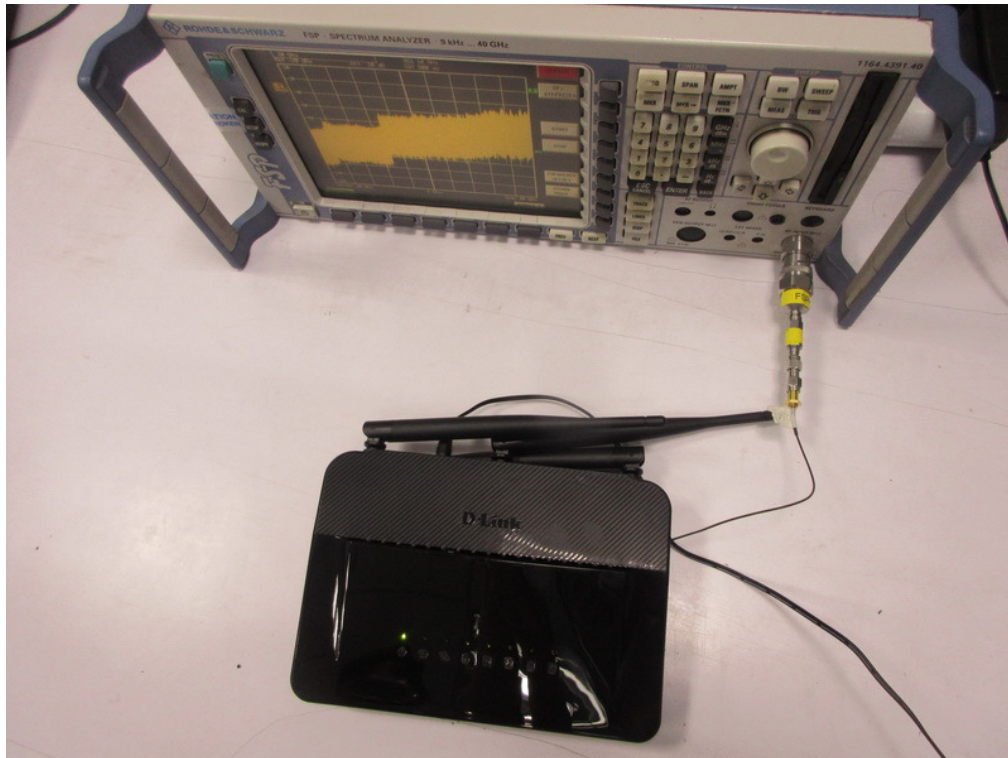
Test Mode :TX N20 Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	29.99	1.00	30.00	1.00	Complies
2437	29.70	0.93	30.00	1.00	Complies
2462	29.80	0.95	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	25.72	0.37	30.00	1.00	Complies
2437	25.76	0.38	30.00	1.00	Complies
2452	26.26	0.42	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	26.74	0.47	30.00	1.00	Complies
2437	26.97	0.50	30.00	1.00	Complies
2452	26.64	0.46	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	29.27	0.85	30.00	1.00	Complies
2437	29.42	0.87	30.00	1.00	Complies
2452	29.46	0.88	30.00	1.00	Complies

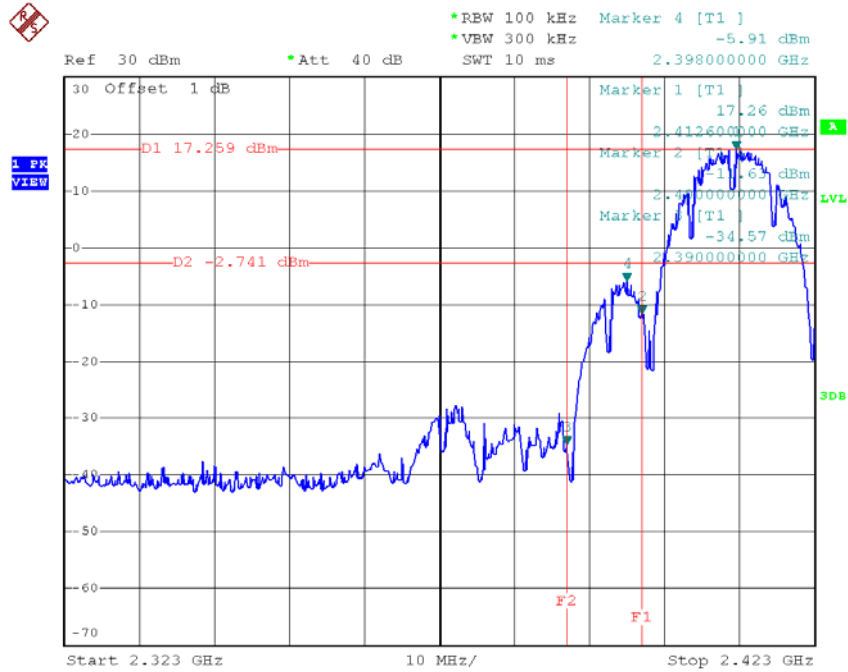
Output Power Measurement Photos



ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

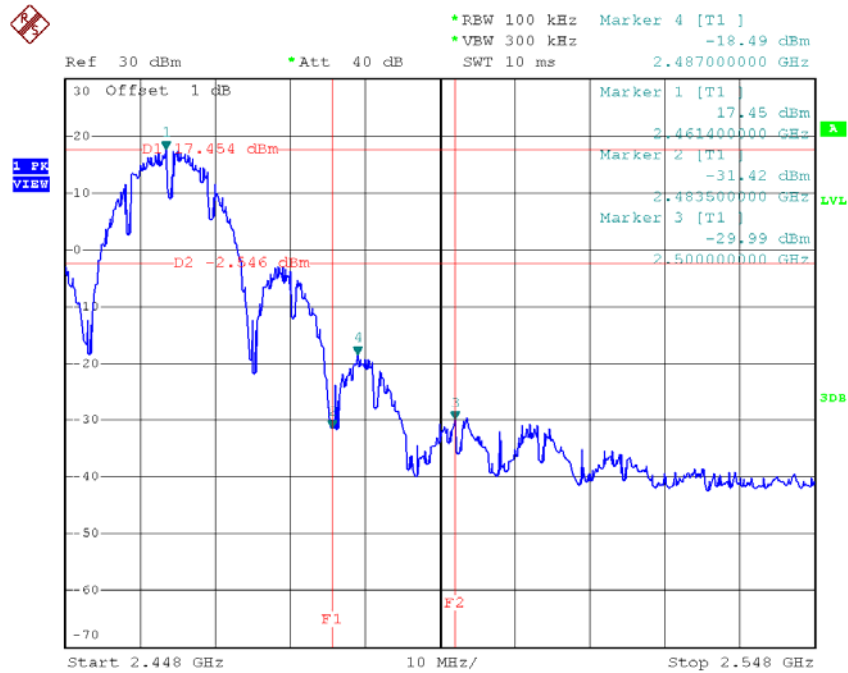
Test Mode : TX B Mode

TX B mode CH01



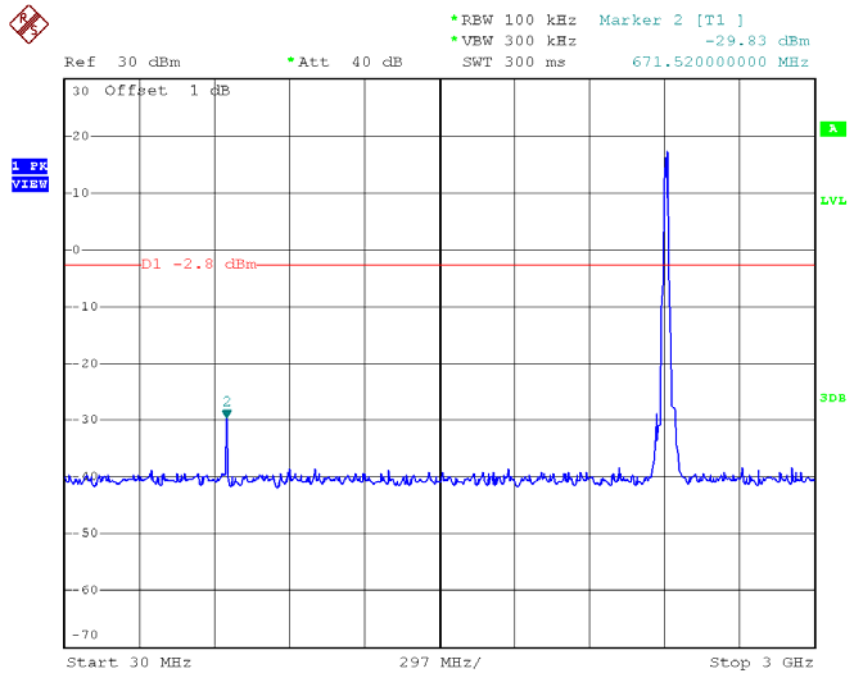
Date: 15.JUL.2016 10:31:18

TX B mode CH11

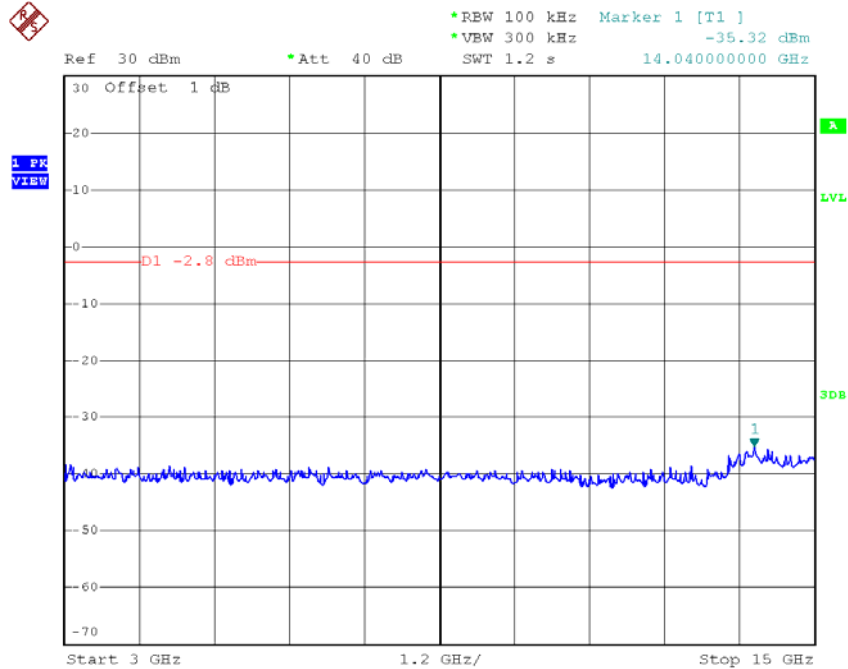


Date: 15.JUL.2016 10:36:21

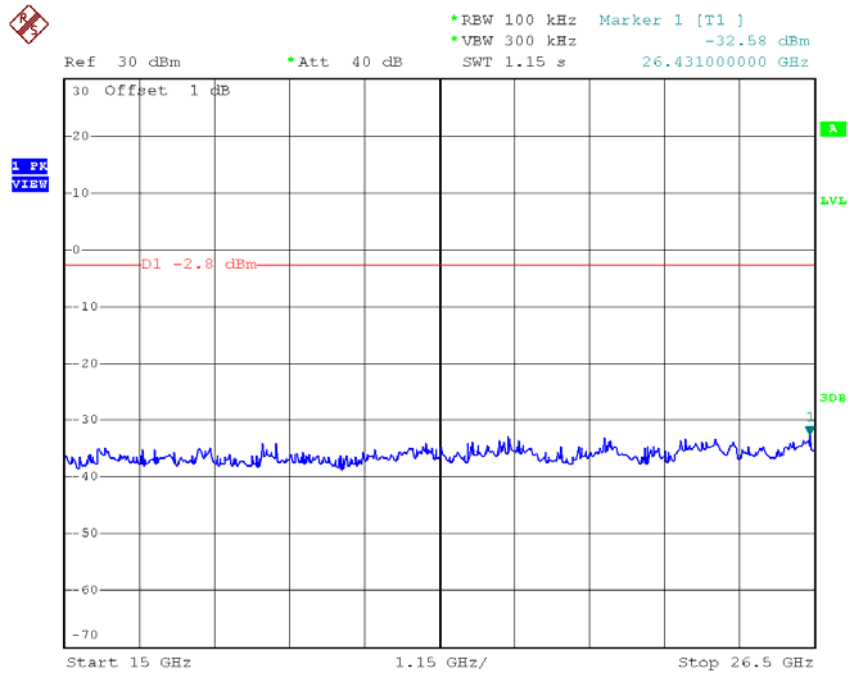
TX B mode CH01 (10 Harmonic of the frequency)



Date: 15.JUL.2016 10:30:53

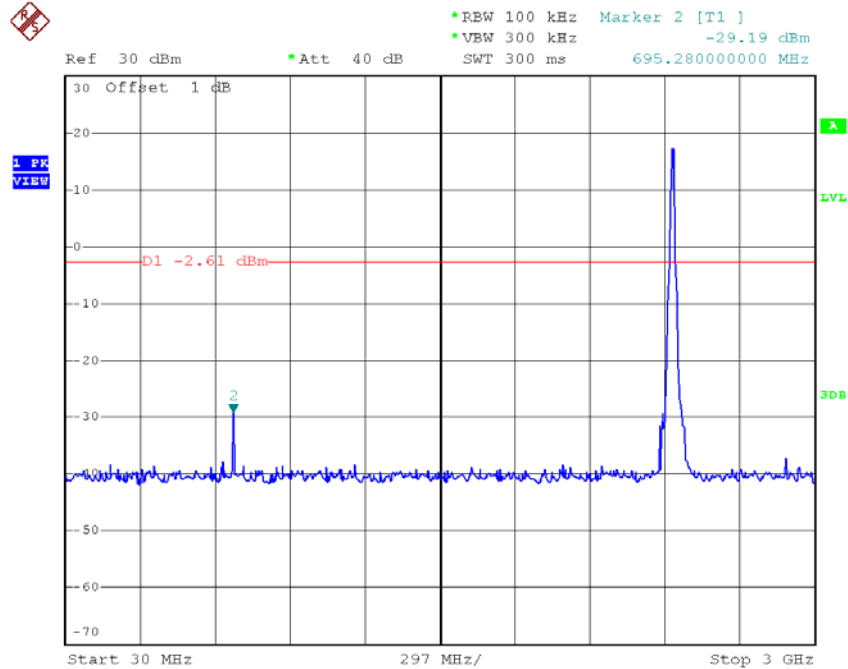


Date: 15.JUL.2016 10:31:01

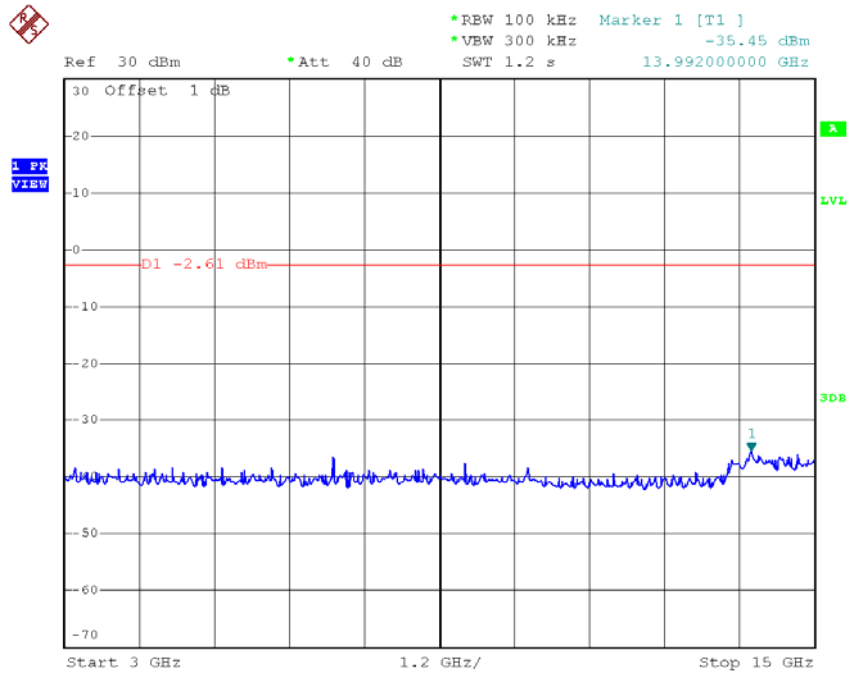


Date: 15.JUL.2016 10:31:10

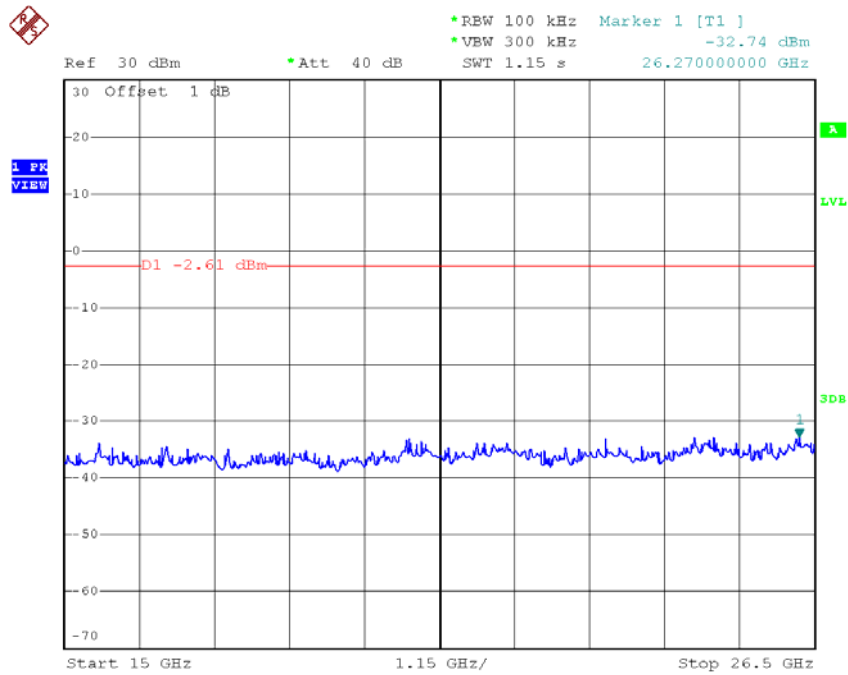
TX B mode CH06 (10 Harmonic of the frequency)



Date: 15.JUL.2016 10:33:44

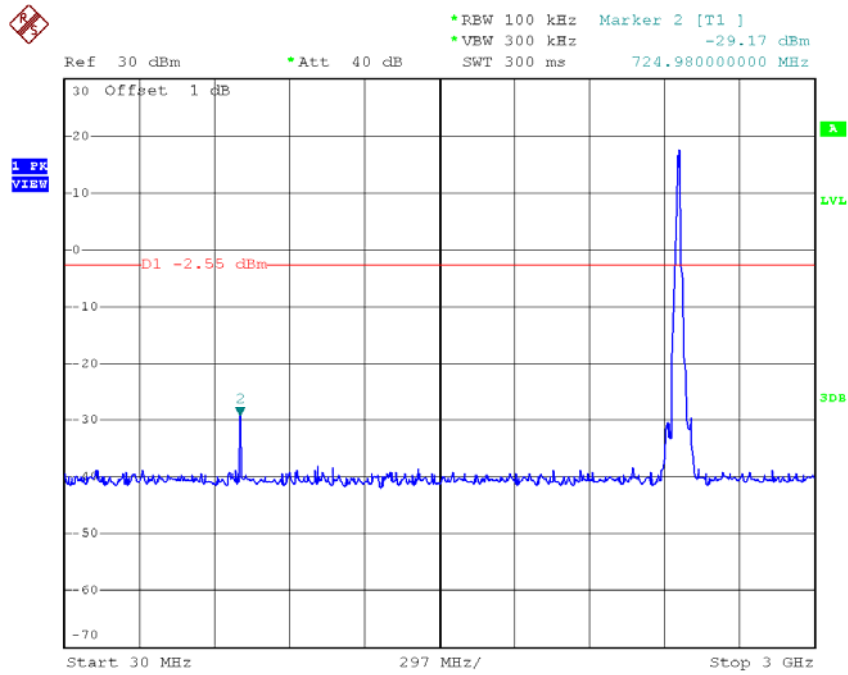


Date: 15.JUL.2016 10:33:52

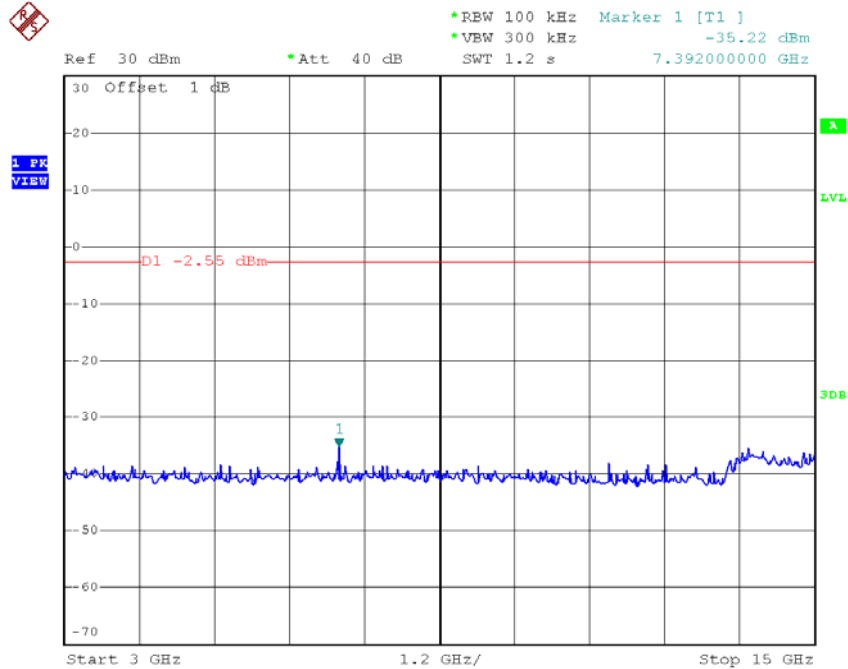


Date: 15.JUL.2016 10:34:01

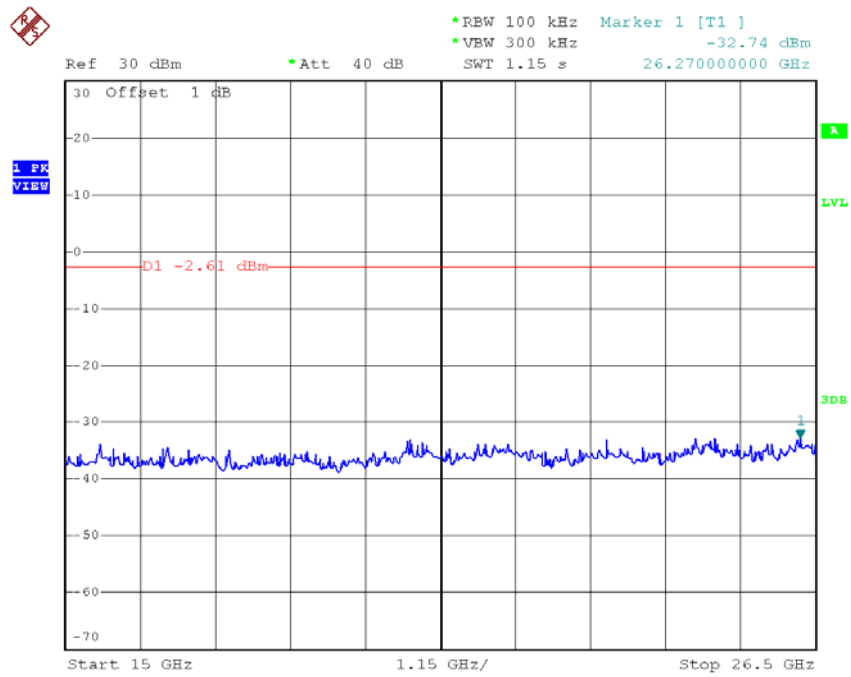
TX B mode CH11 (10 Harmonic of the frequency)



Date: 15.JUL.2016 10:35:56



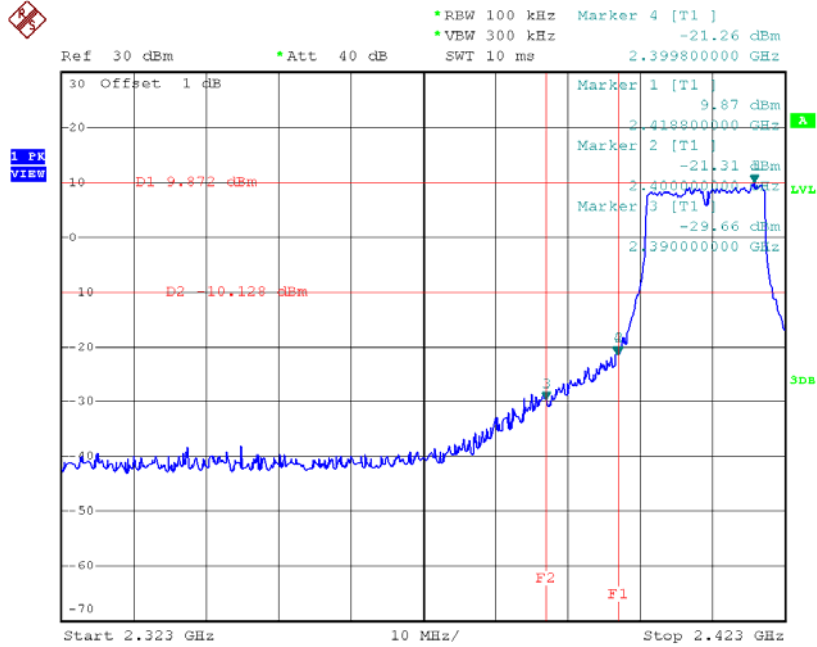
Date: 15.JUL.2016 10:36:04



Date: 15.JUL.2016 10:34:01

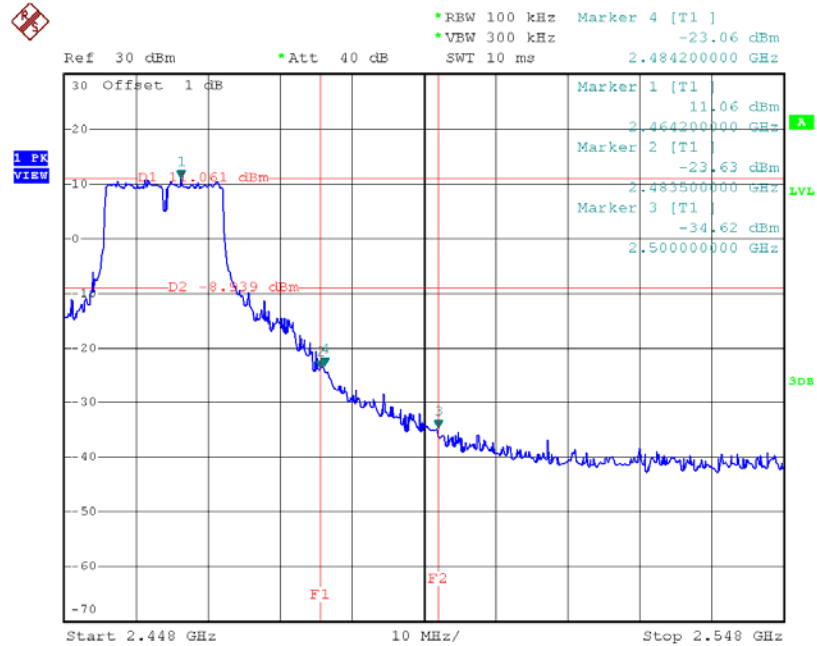
Test Mode : TX G Mode

TX G mode CH01



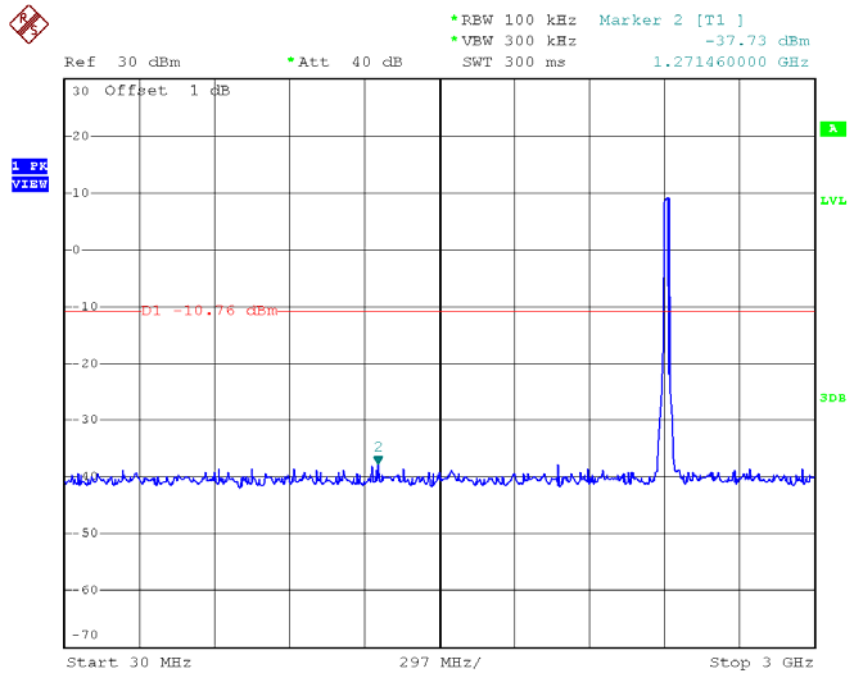
Date: 15.JUL.2016 10:39:16

TX G mode CH11

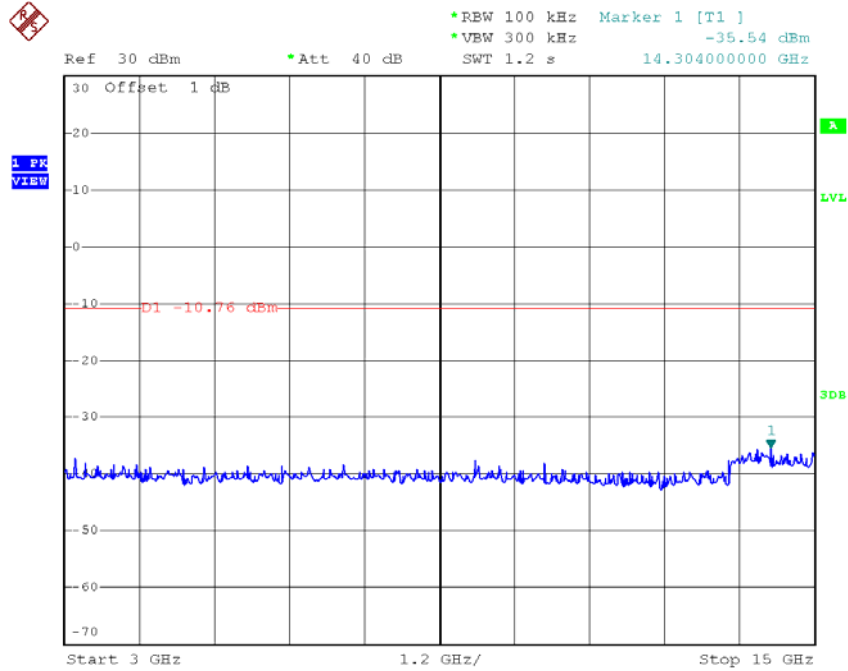


Date: 15.JUL.2016 10:42:37

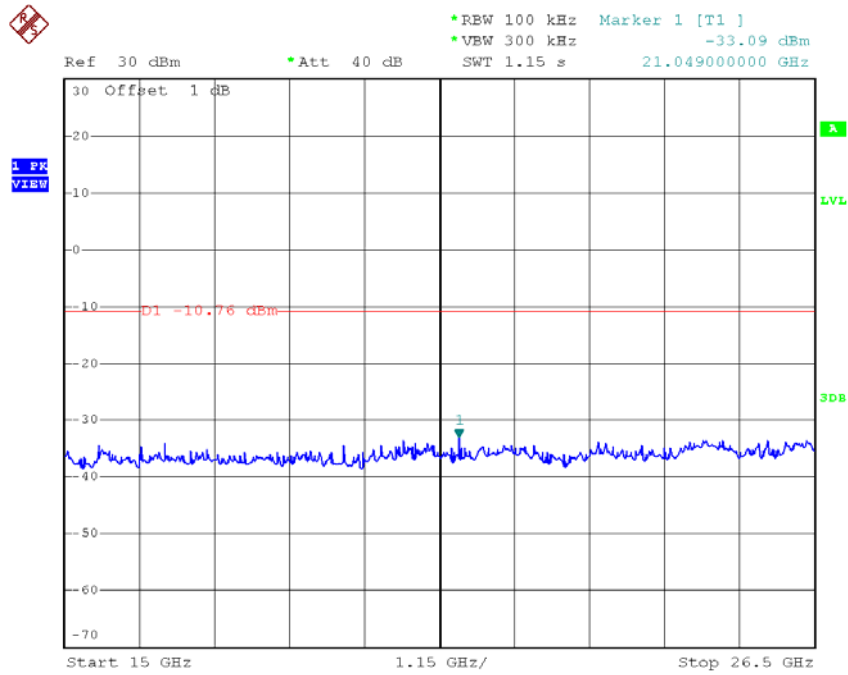
TX G mode CH01 (10 Harmonic of the frequency)



Date: 15.JUL.2016 10:38:51

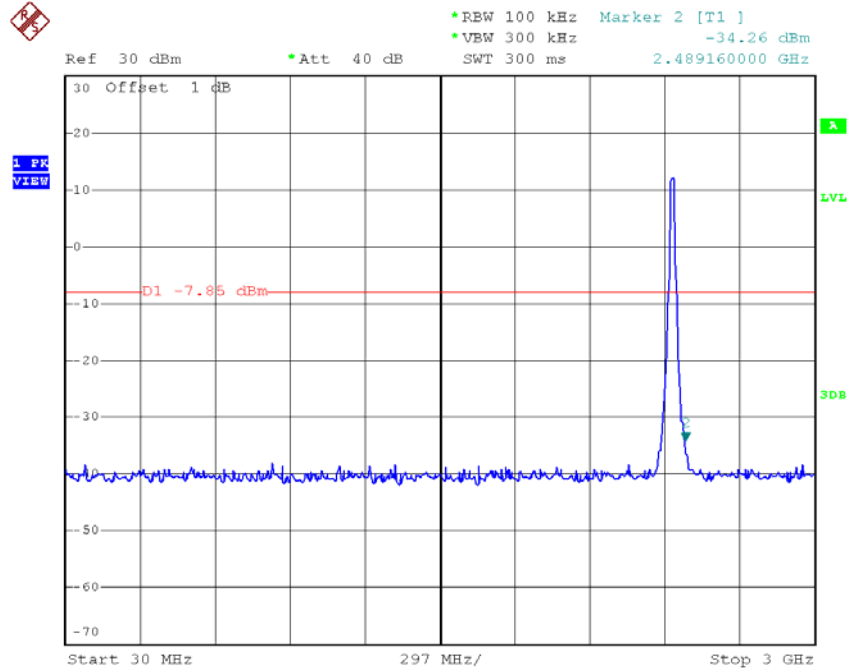


Date: 15.JUL.2016 10:39:00

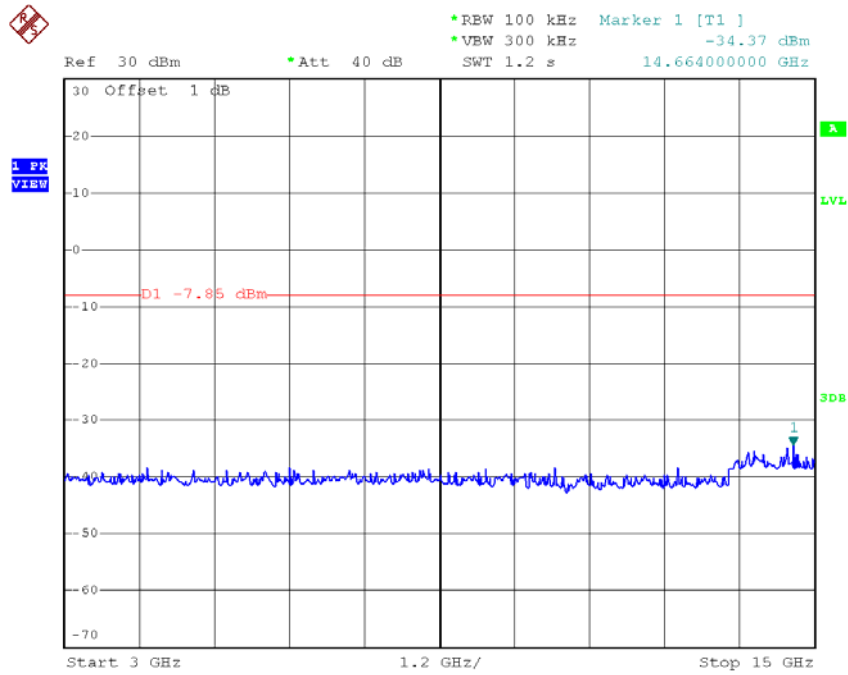


Date: 15.JUL.2016 10:39:08

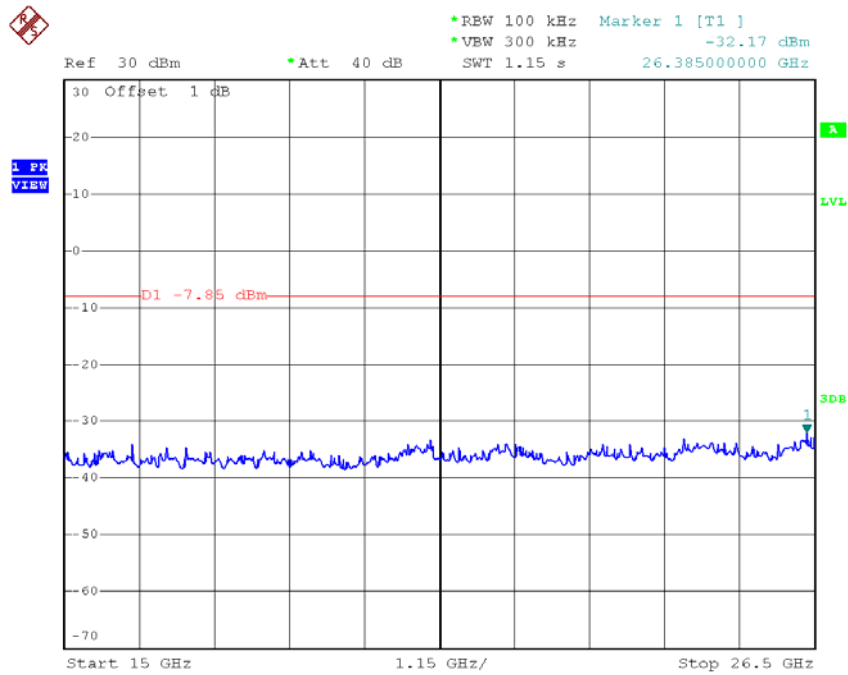
TX G mode CH06 (10 Harmonic of the frequency)



Date: 15.JUL.2016 10:40:42

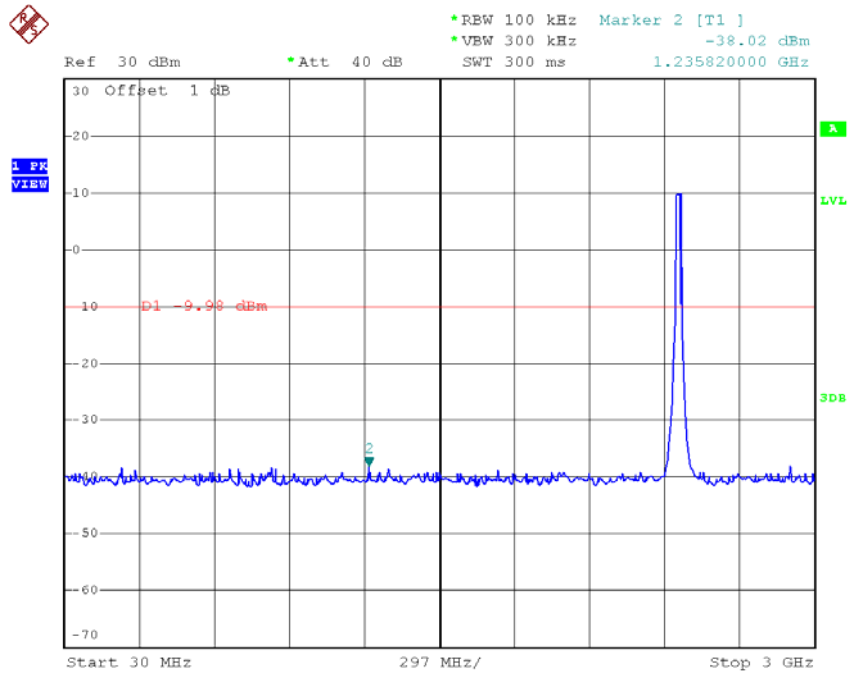


Date: 15.JUL.2016 10:40:51

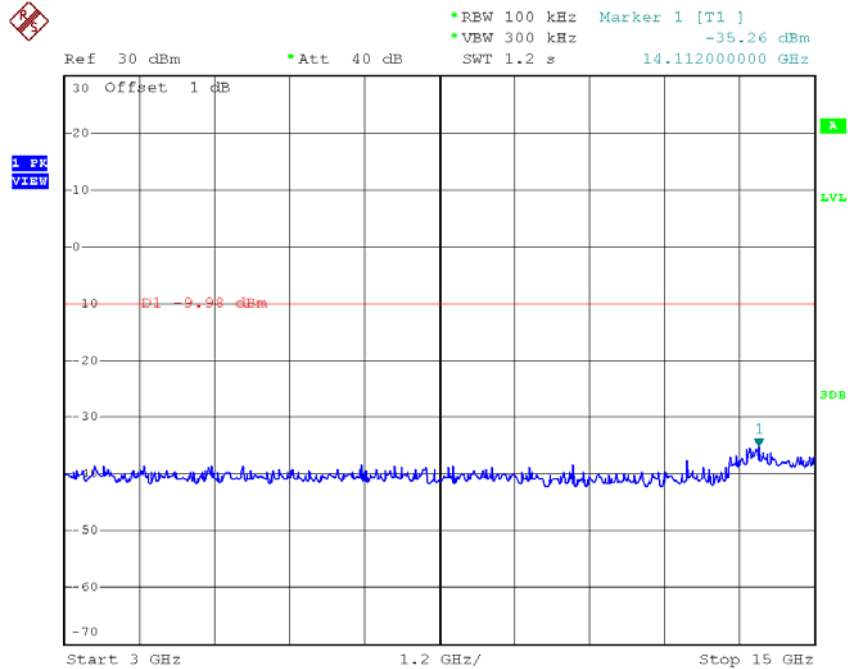


Date: 15.JUL.2016 10:40:59

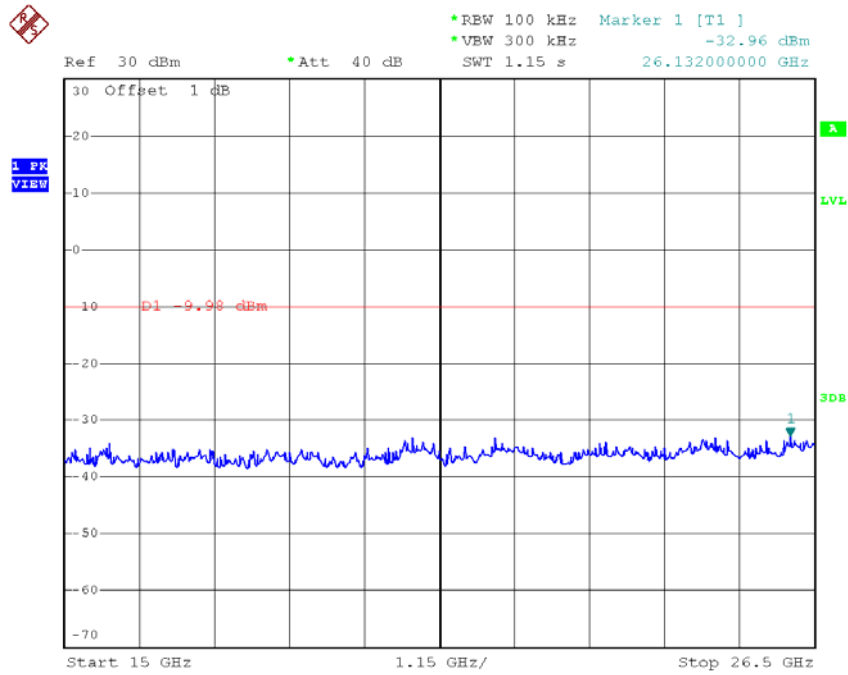
TX G mode CH11 (10 Harmonic of the frequency)



Date: 15.JUL.2016 10:42:13



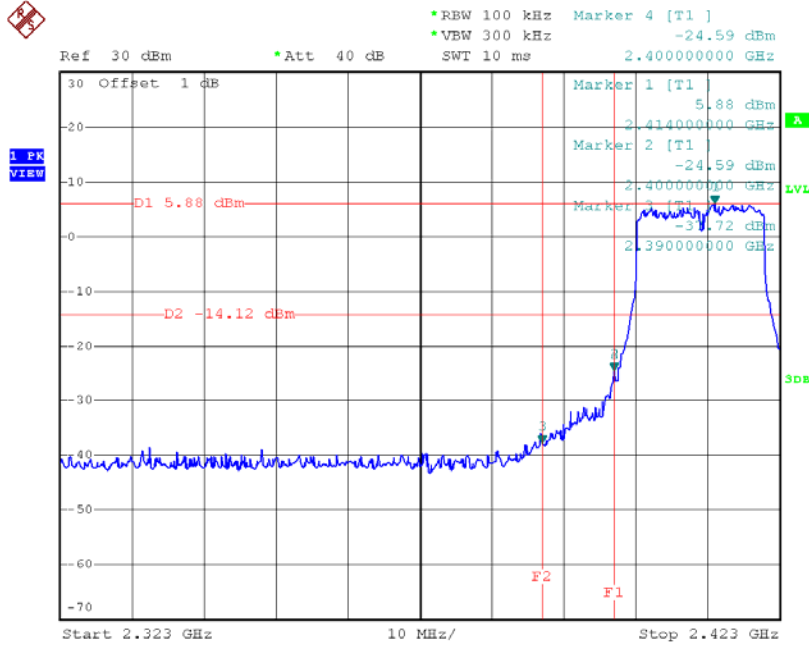
Date: 15.JUL.2016 10:42:21



Date: 15.JUL.2016 10:42:30

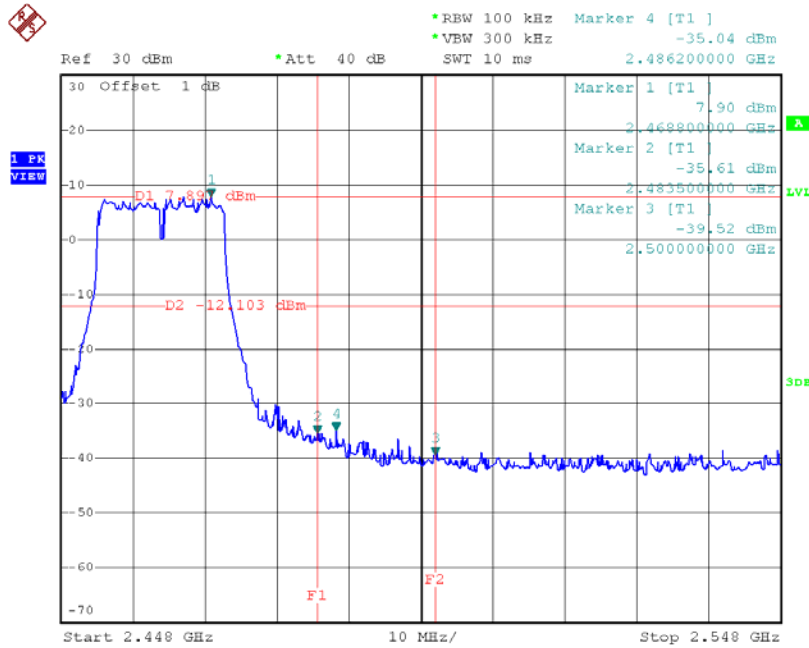
Test Mode : TX N-20M Mode_ANT 1

TX HT20 mode CH01



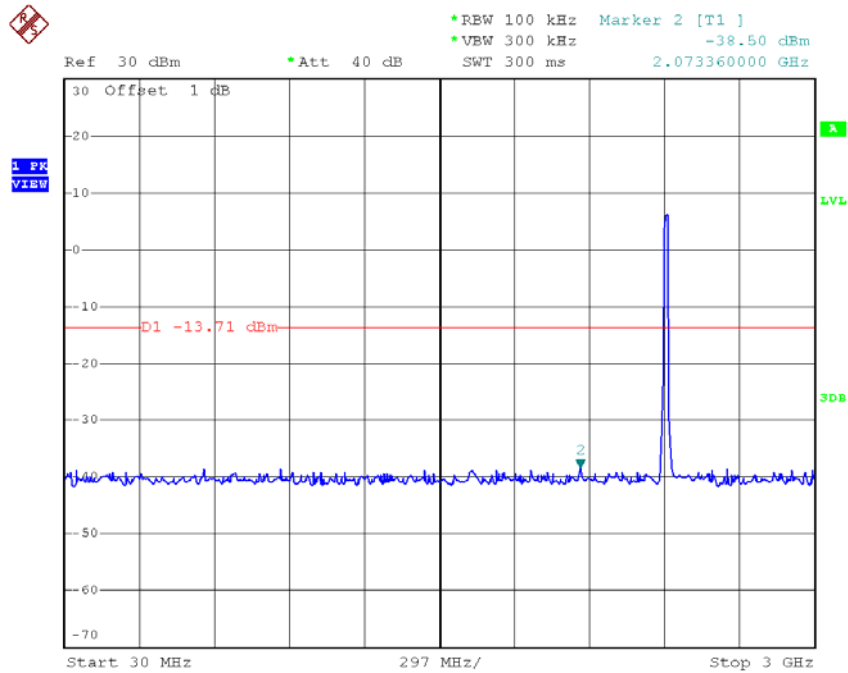
Date: 15.JUL.2016 12:15:21

TX HT20 mode CH11

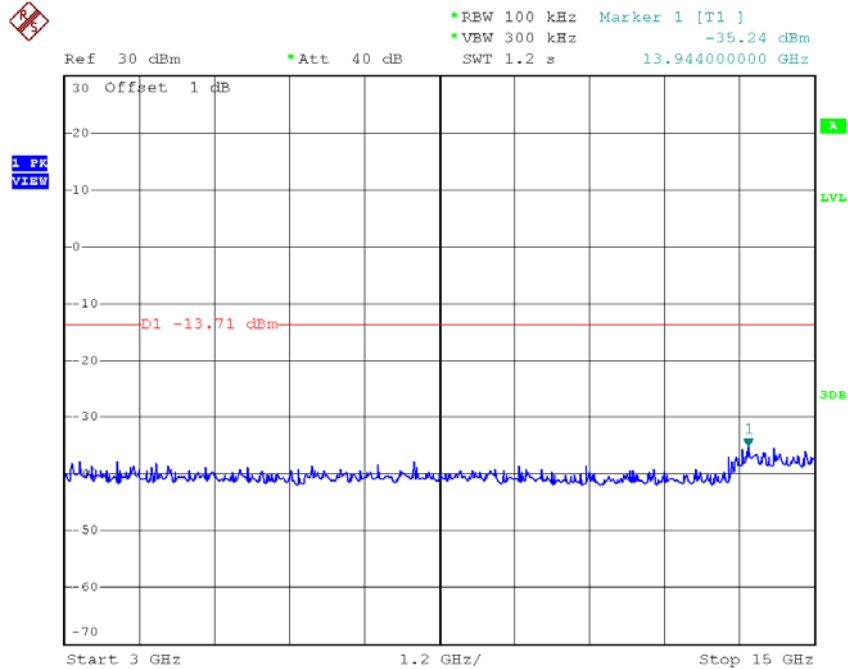


Date: 15.JUL.2016 12:18:49

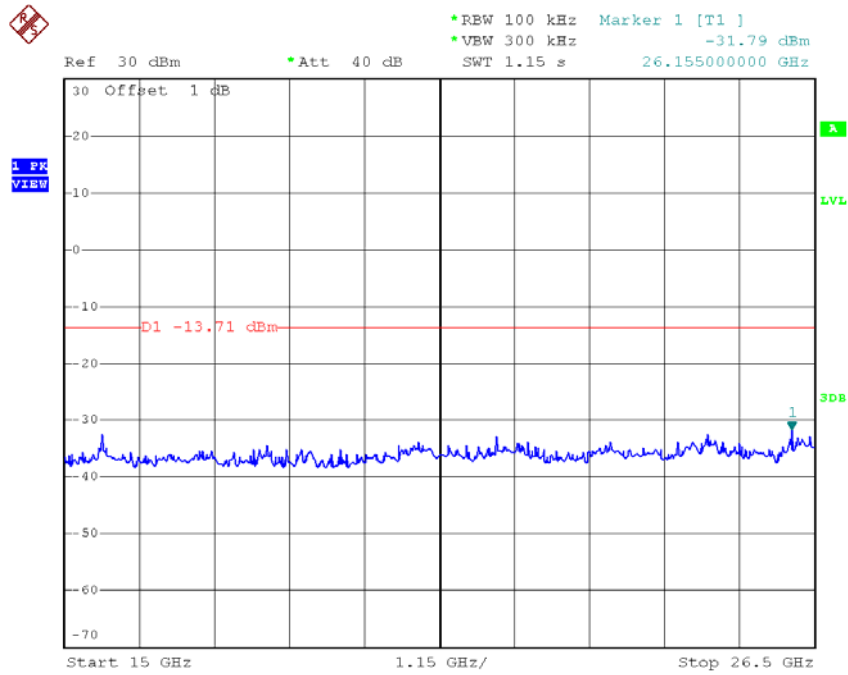
TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:14:56

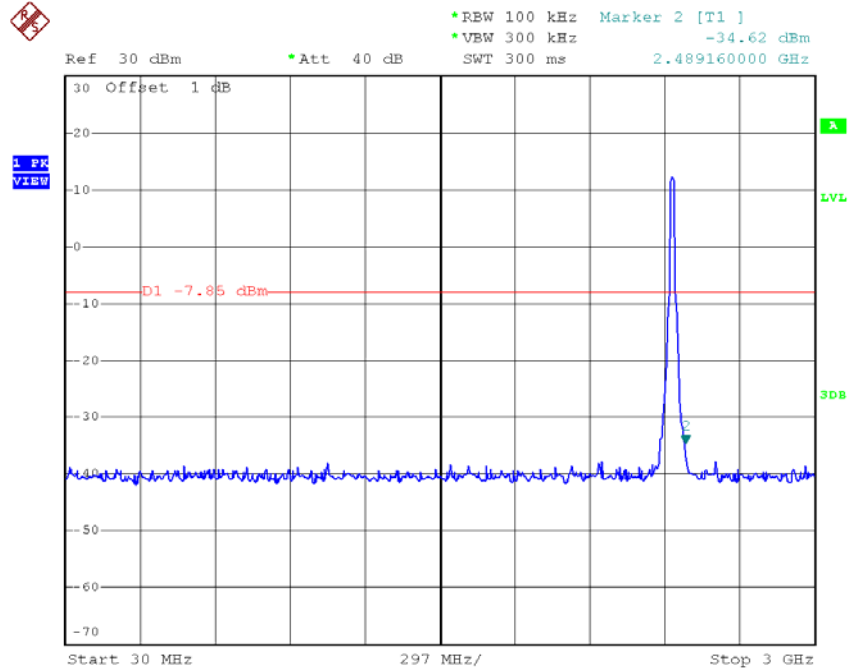


Date: 15.JUL.2016 12:15:05

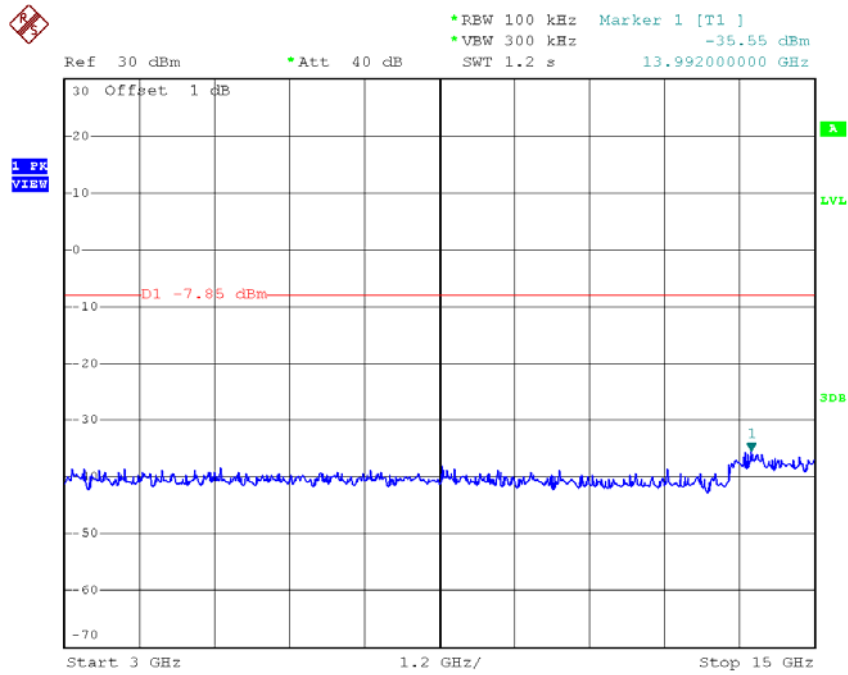


Date: 15.JUL.2016 12:15:13

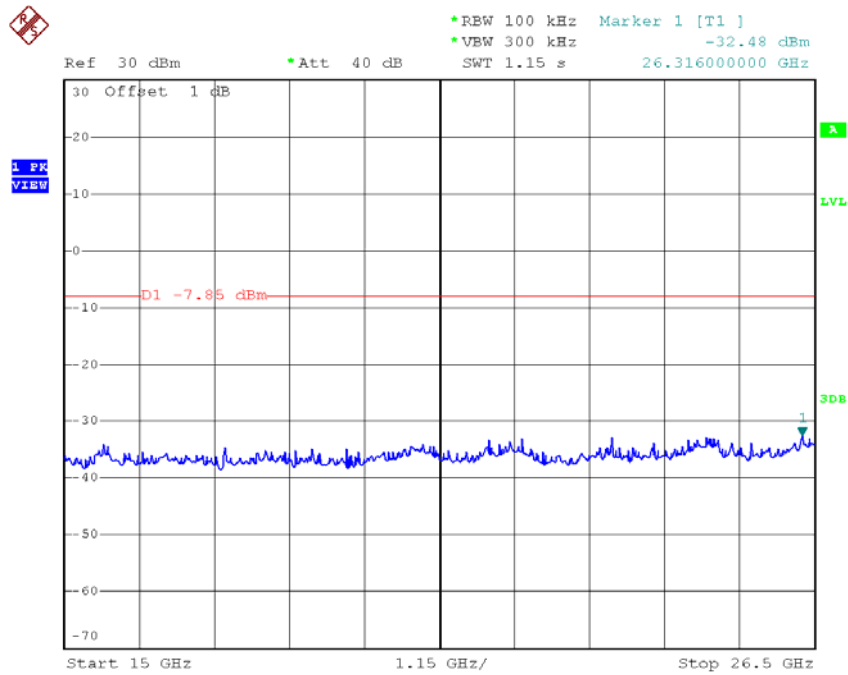
TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:16:21

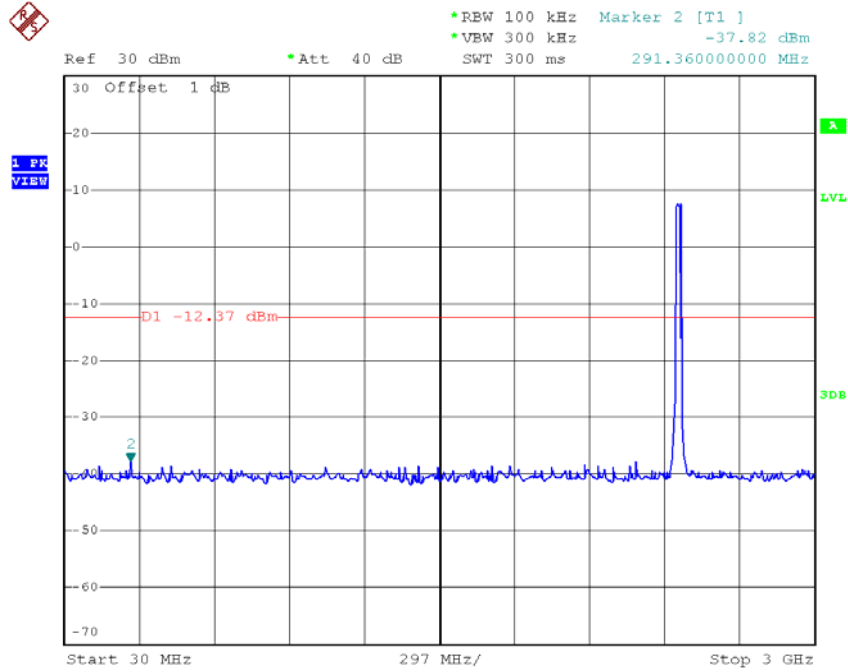


Date: 15.JUL.2016 12:16:29

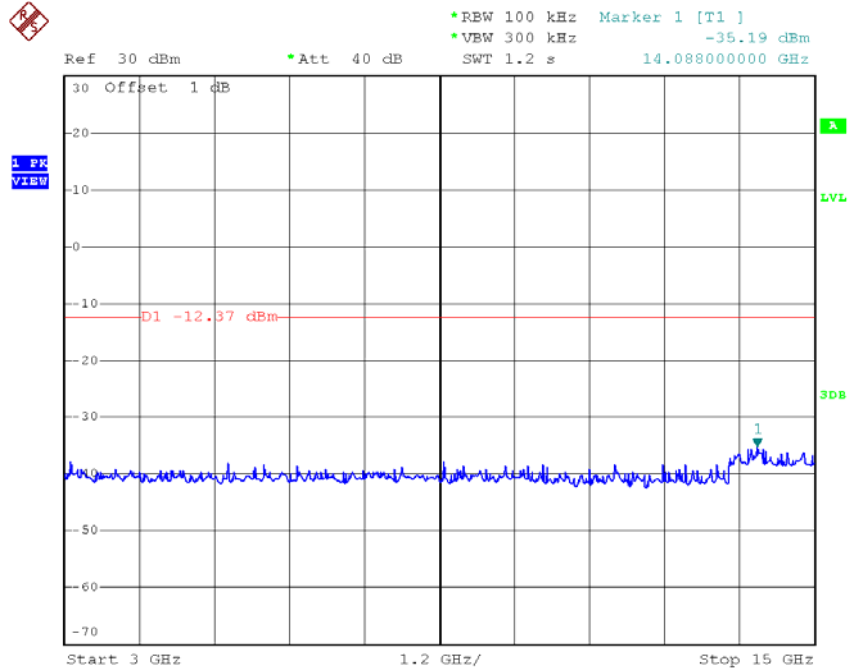


Date: 15.JUL.2016 12:16:38

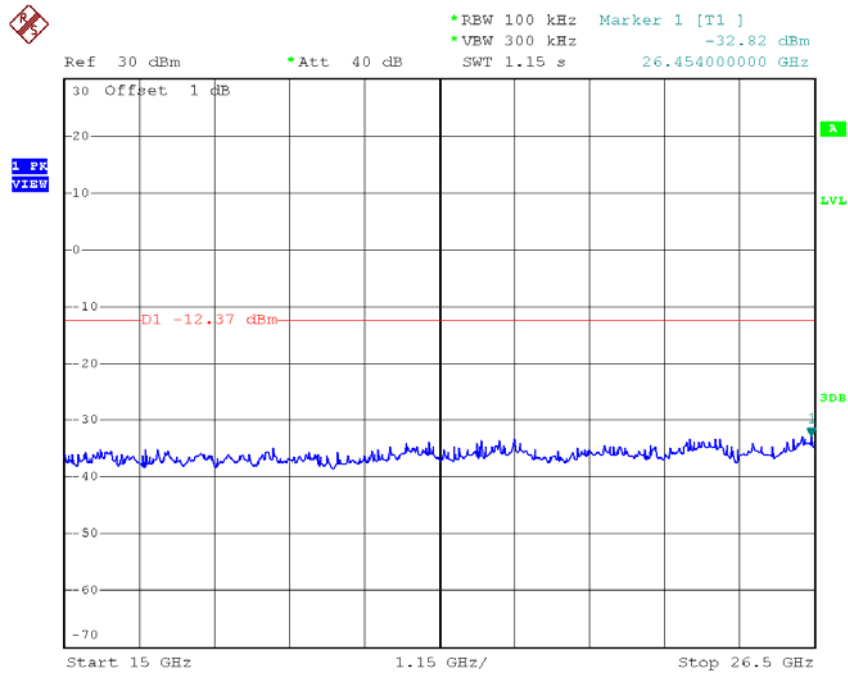
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:18:25



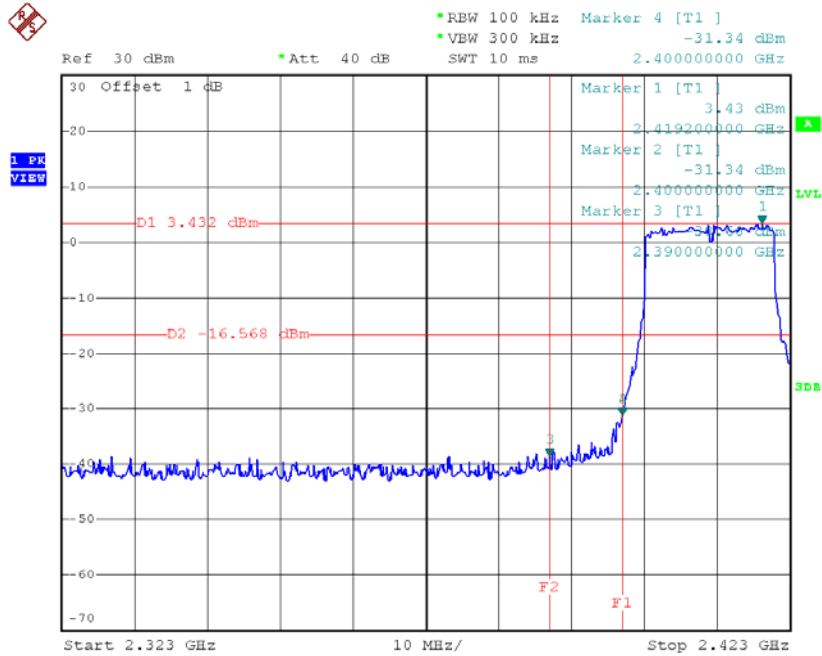
Date: 15.JUL.2016 12:18:33



Date: 15.JUL.2016 12:18:41

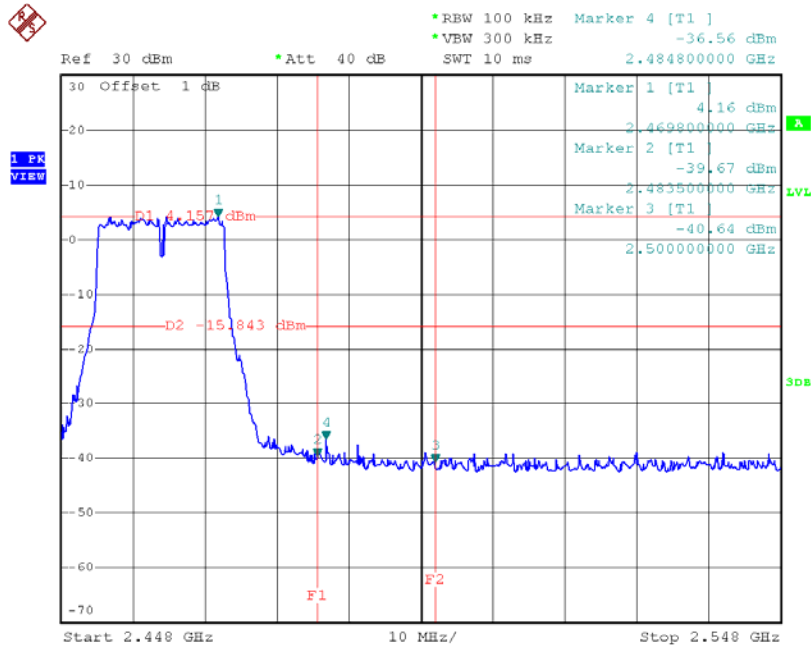
Test Mode : TX N-20M Mode_ANT 2

TX HT20 mode CH01



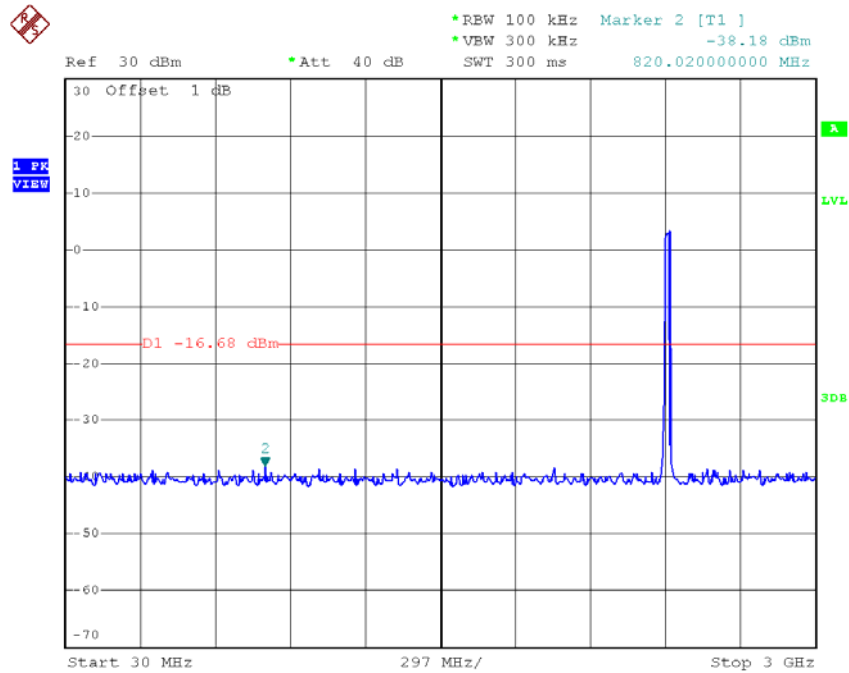
Date: 15.JUL.2016 12:27:25

TX HT20 mode CH11

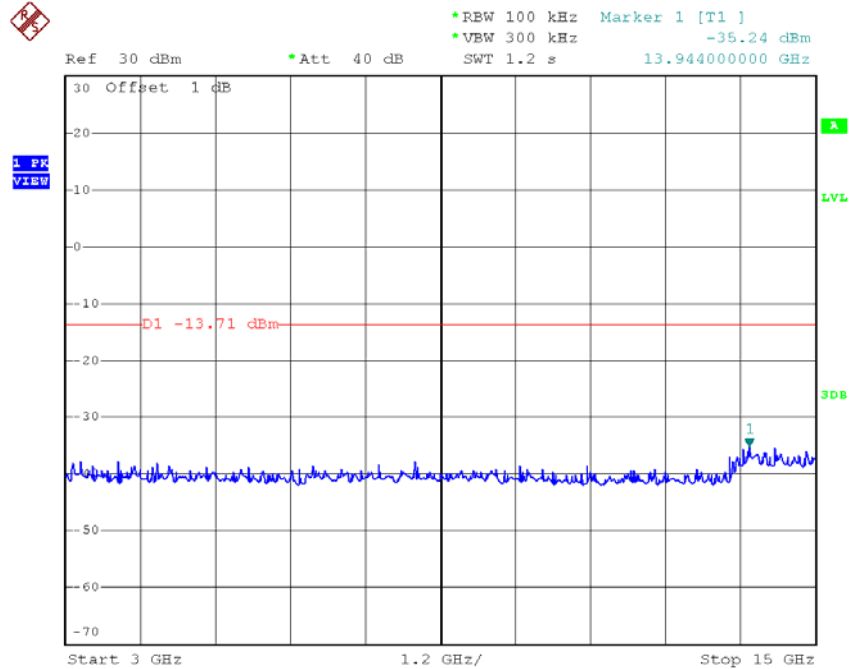


Date: 15.JUL.2016 12:30:19

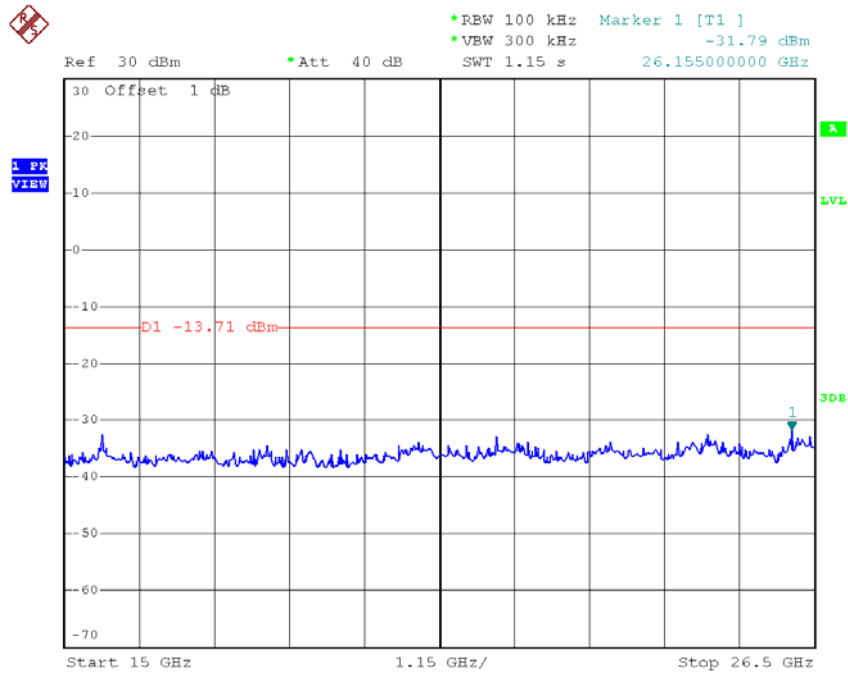
TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:27:00

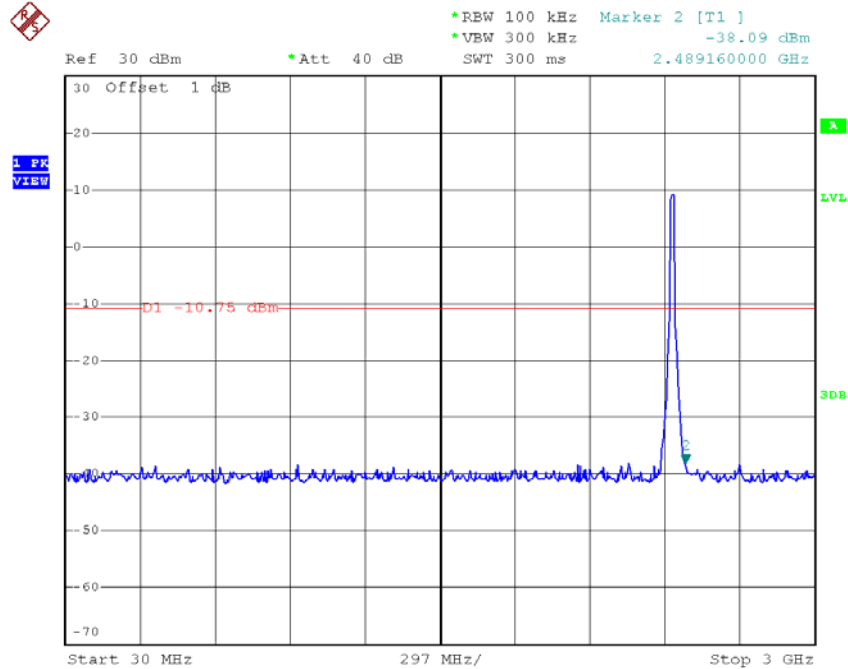


Date: 15.JUL.2016 12:15:05

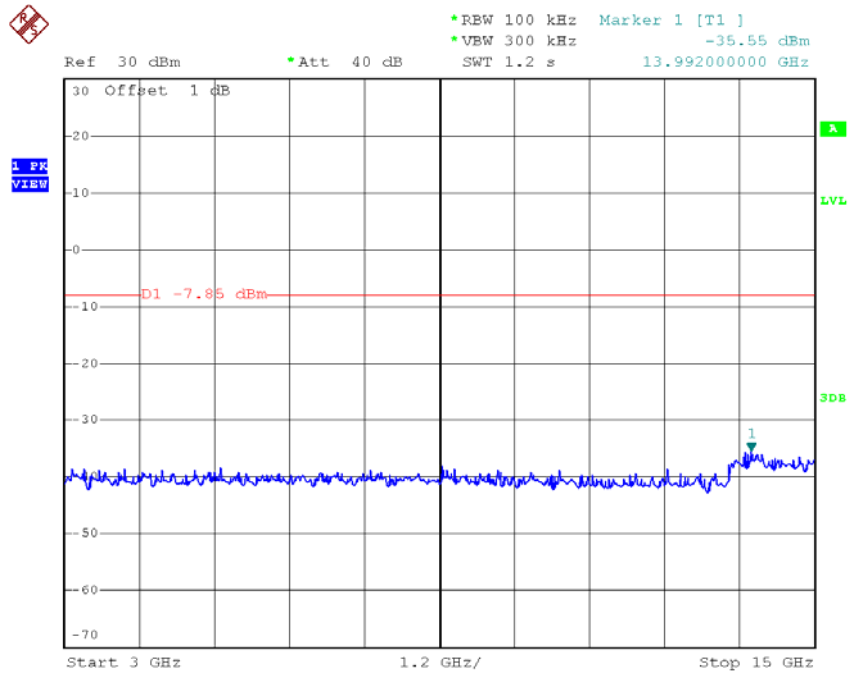


Date: 15.JUL.2016 12:15:13

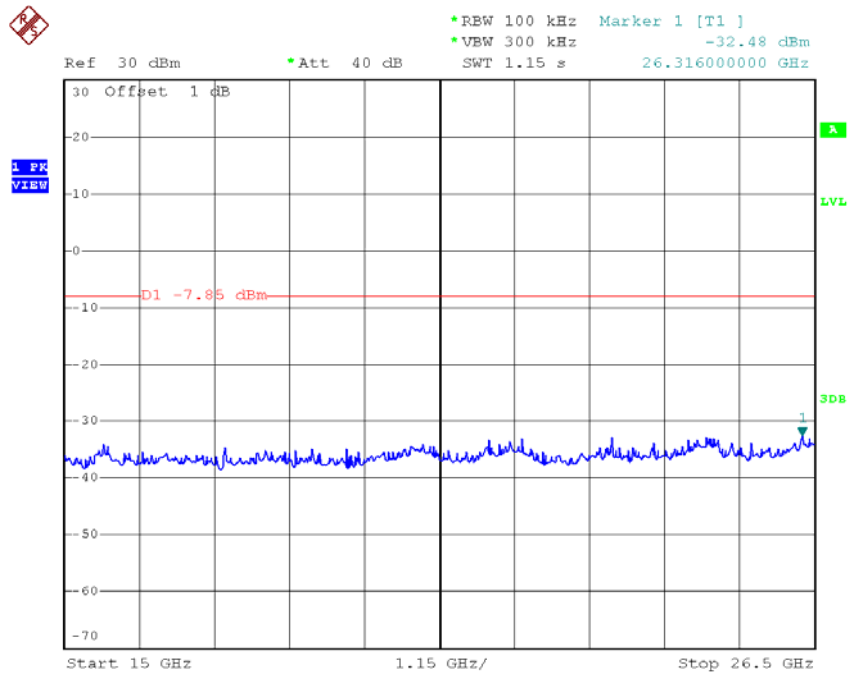
TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:28:21

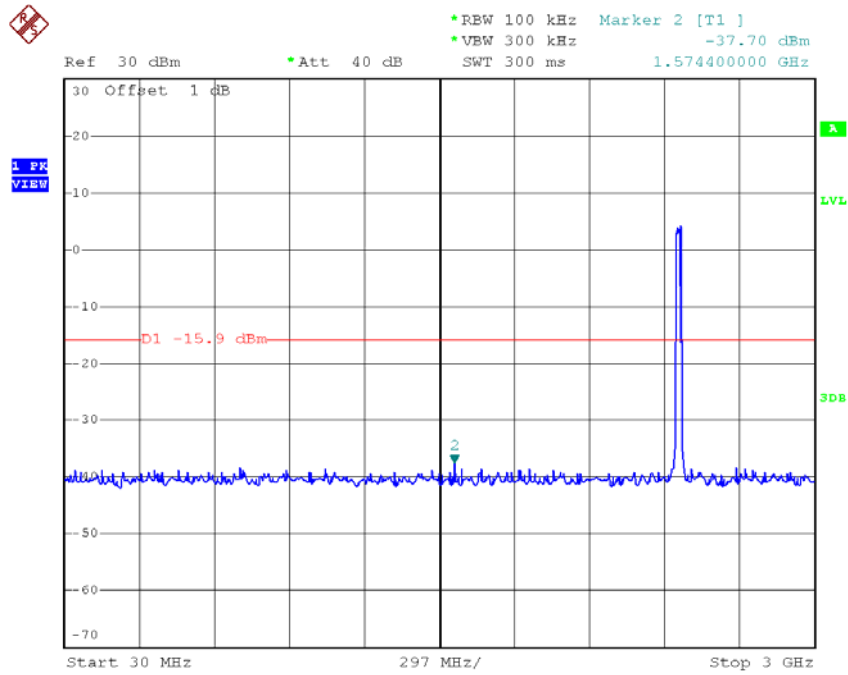


Date: 15.JUL.2016 12:16:29

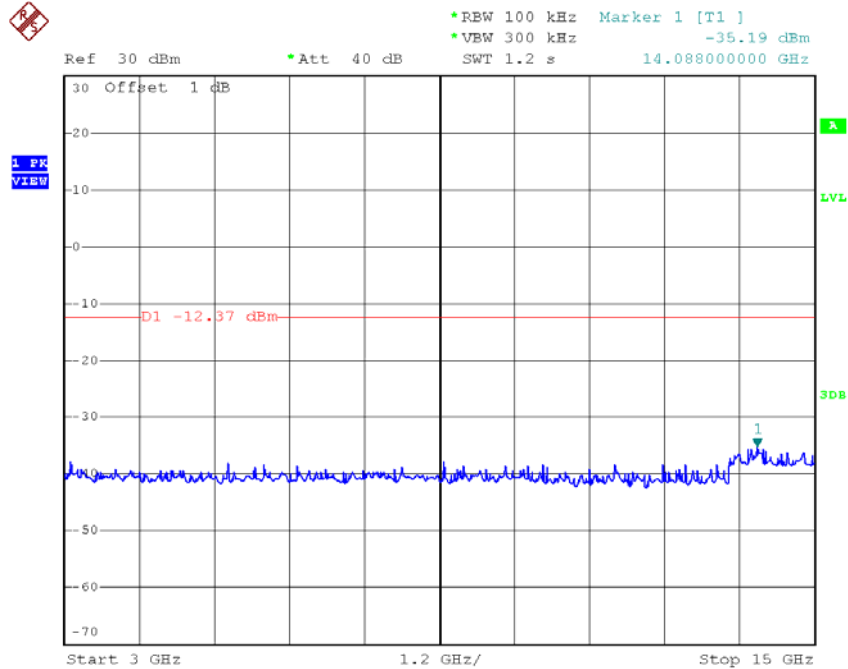


Date: 15.JUL.2016 12:16:38

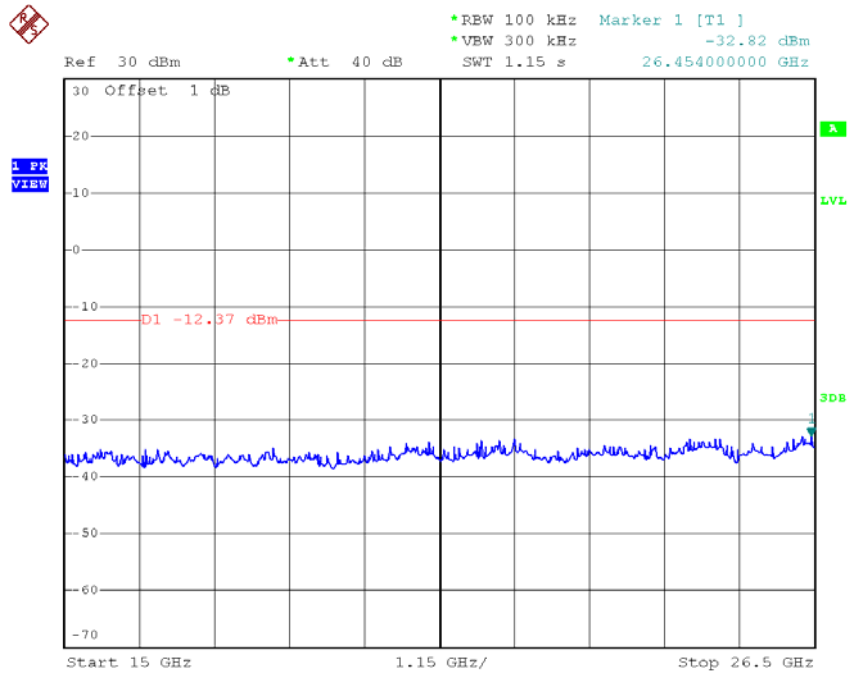
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:29:55



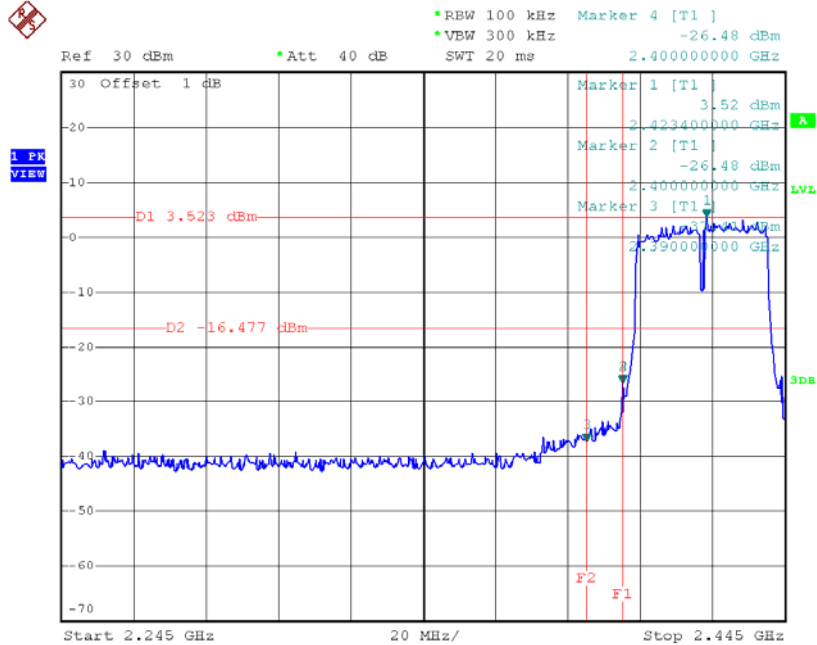
Date: 15.JUL.2016 12:18:33



Date: 15.JUL.2016 12:18:41

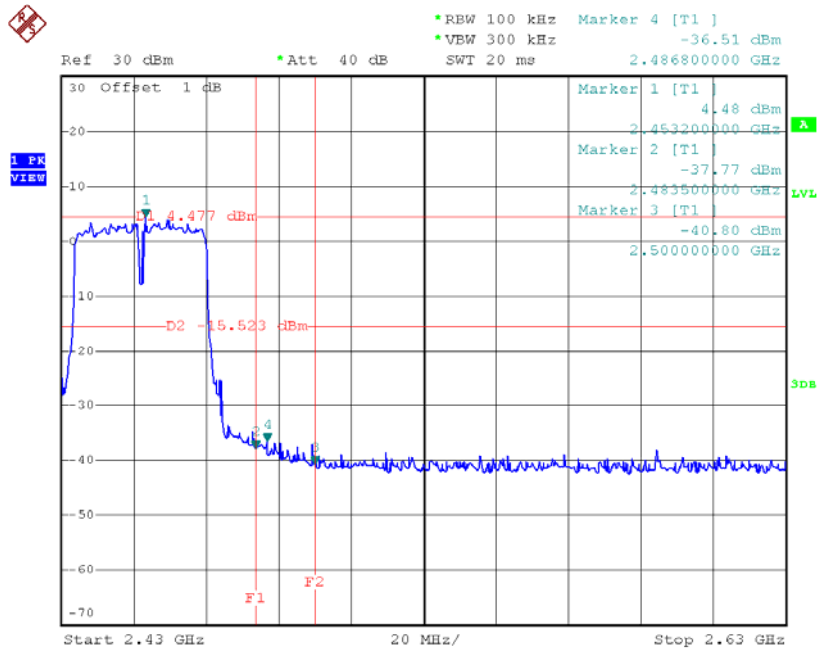
Test Mode : TX N-40M Mode_ANT 1

TX HT40 mode CH03



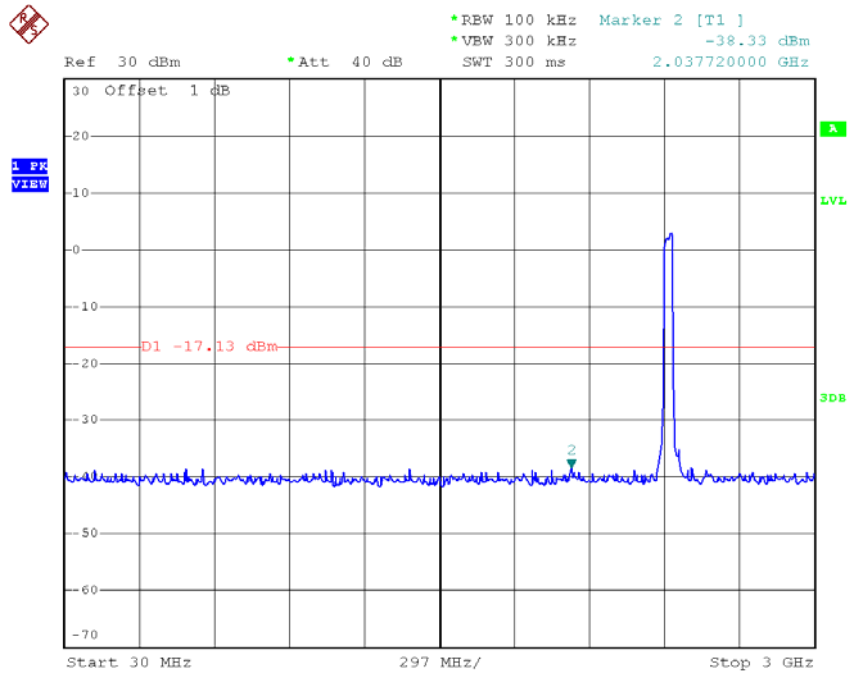
Date: 15.JUL.2016 12:20:40

TX HT40 mode CH09

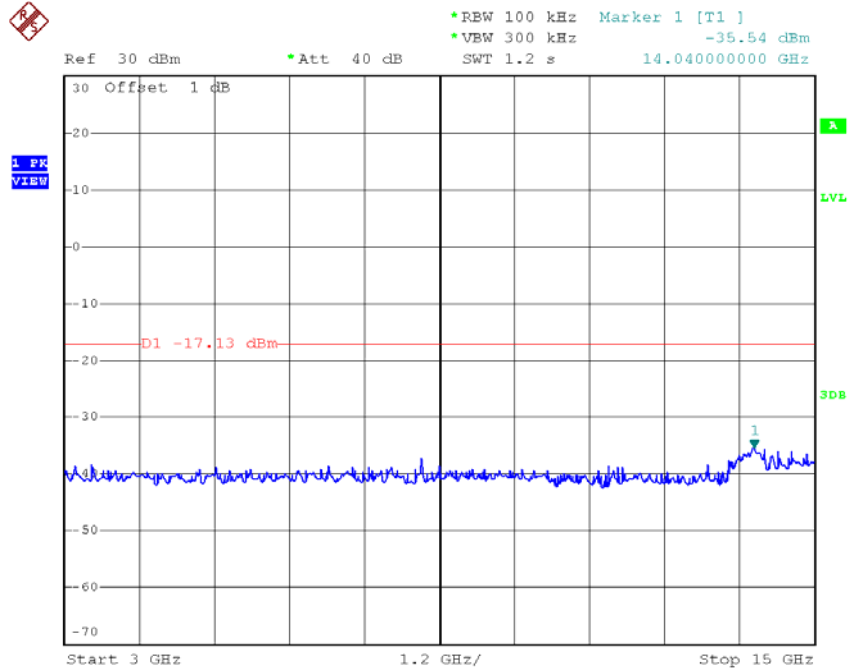


Date: 15.JUL.2016 12:23:48

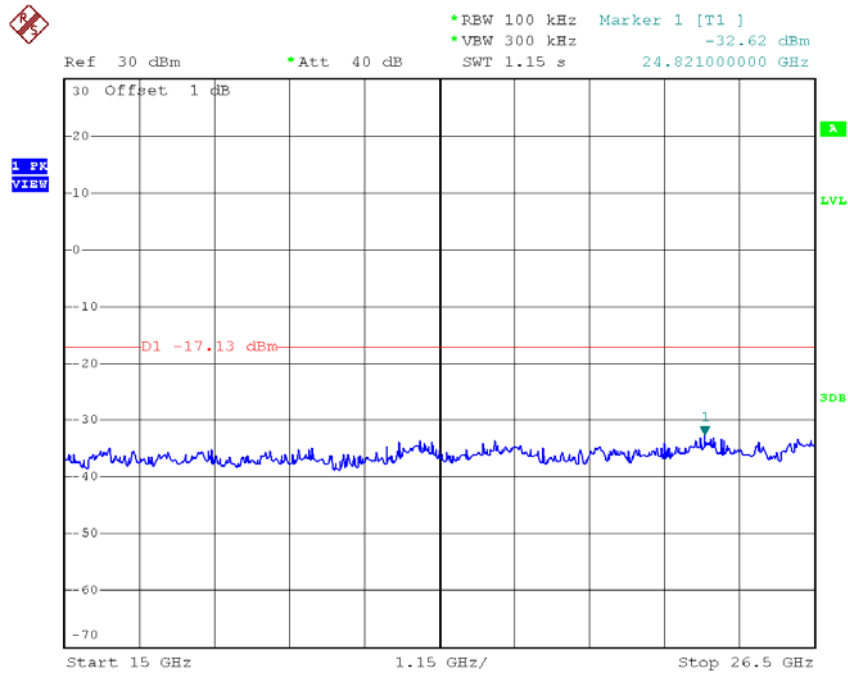
TX HT40 mode CH03 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:20:16

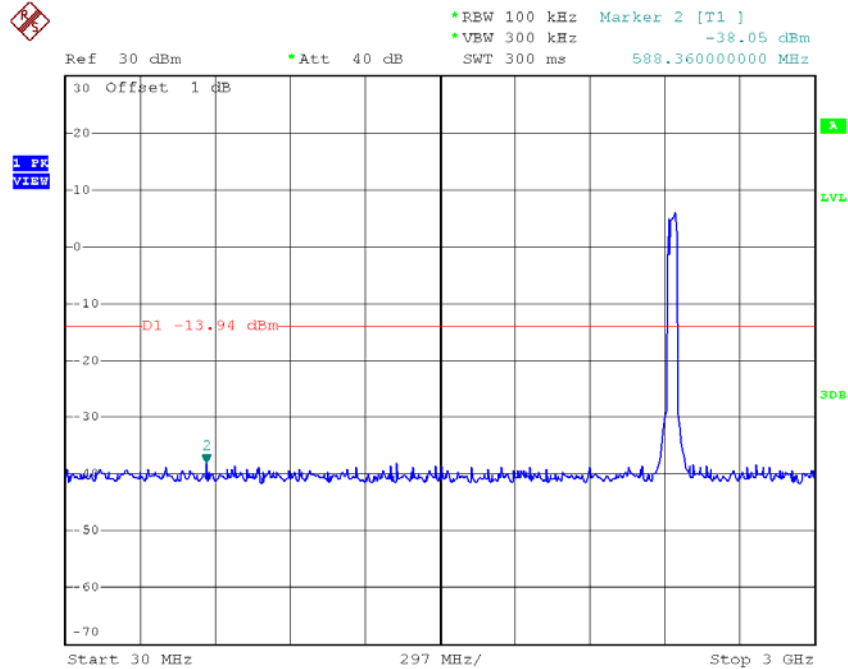


Date: 15.JUL.2016 12:20:24

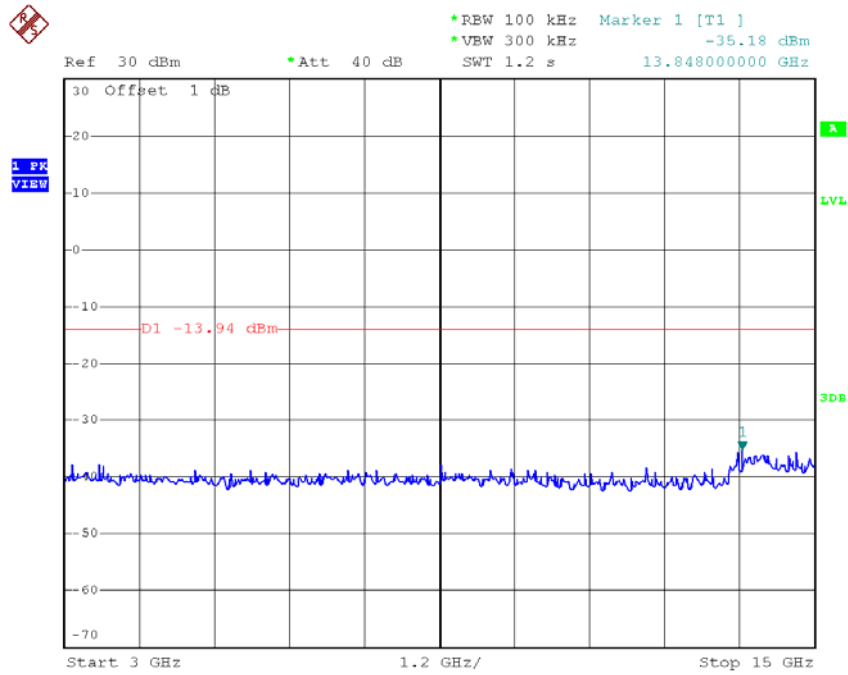


Date: 15.JUL.2016 12:20:33

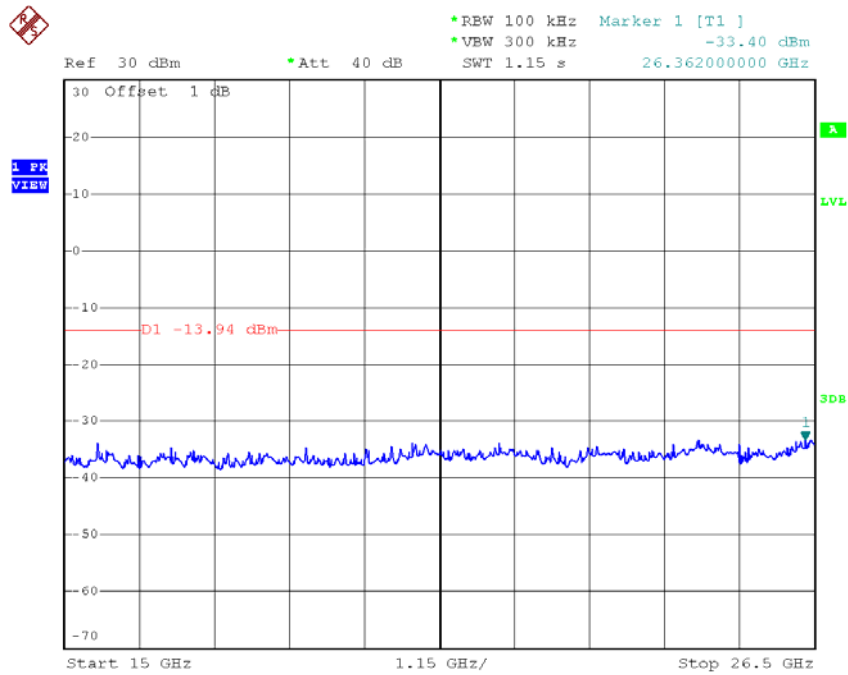
TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:21:57

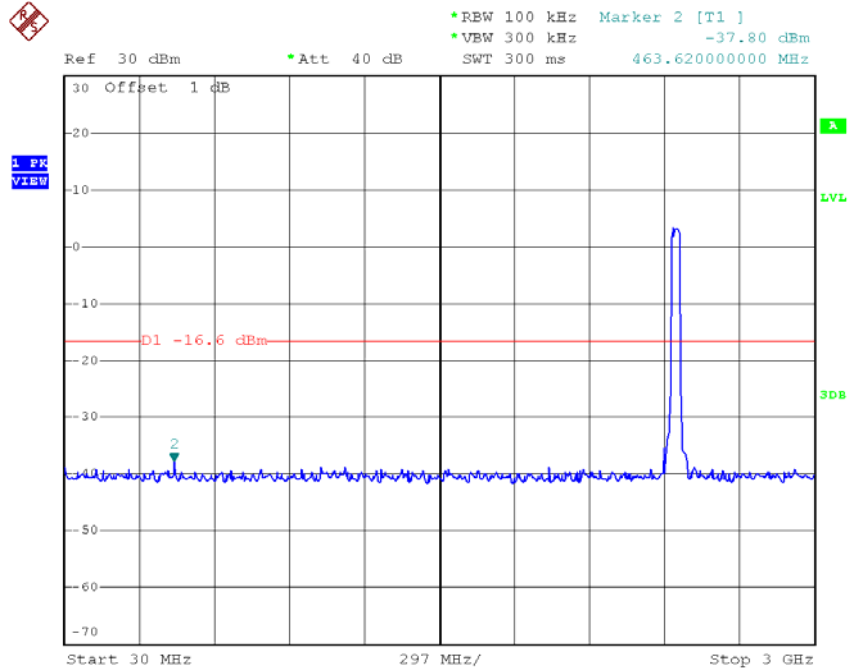


Date: 15.JUL.2016 12:22:05

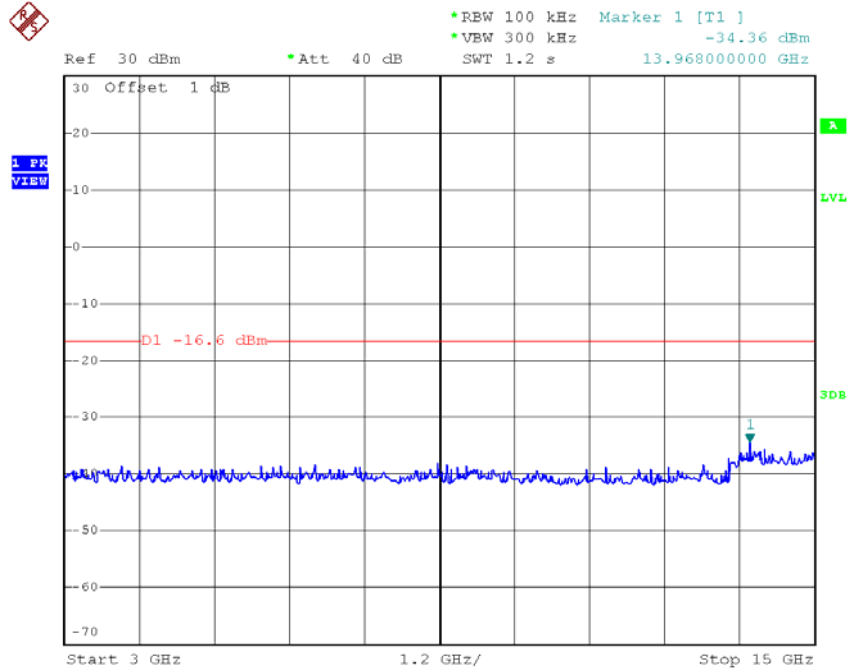


Date: 15.JUL.2016 12:22:25

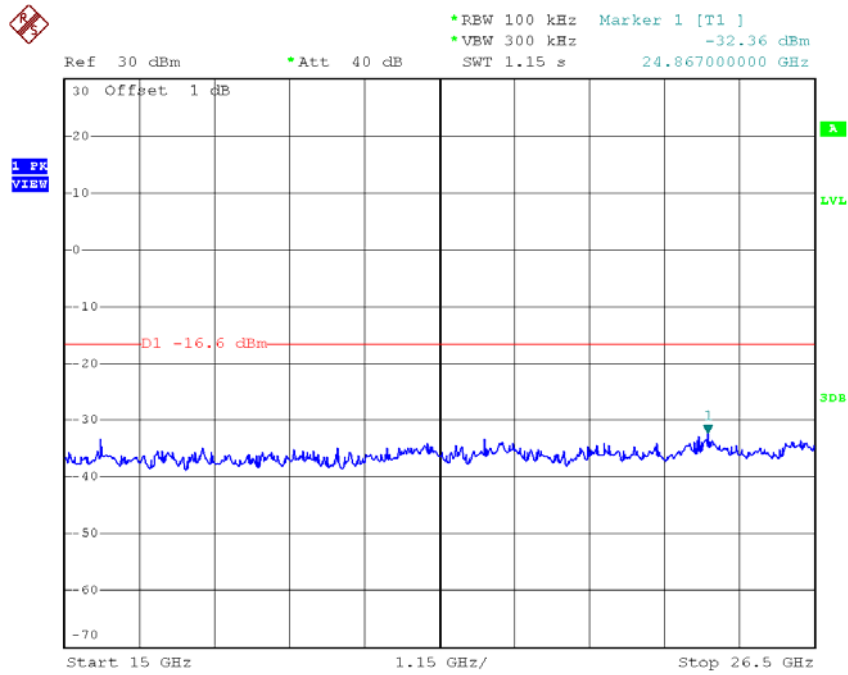
TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:23:24



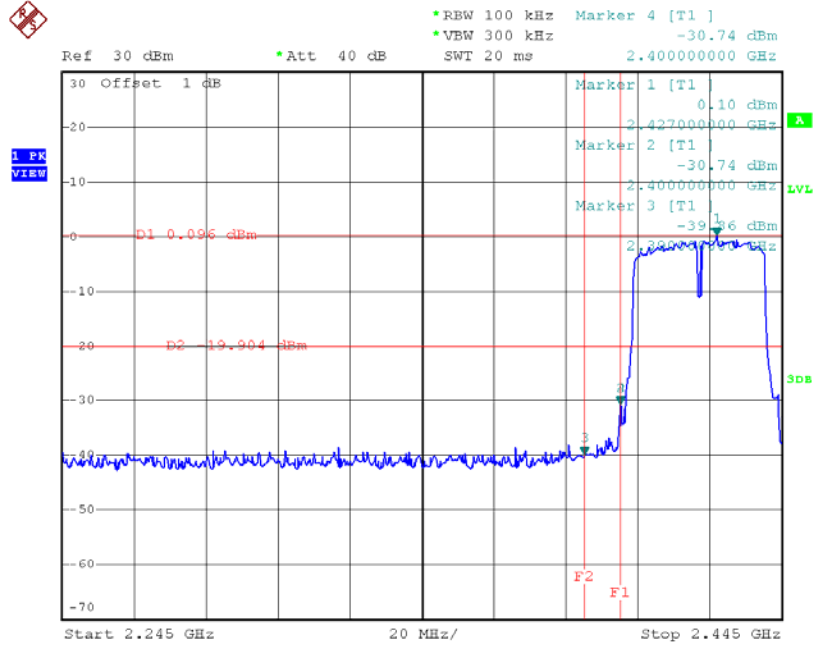
Date: 15.JUL.2016 12:23:32



Date: 15.JUL.2016 12:23:41

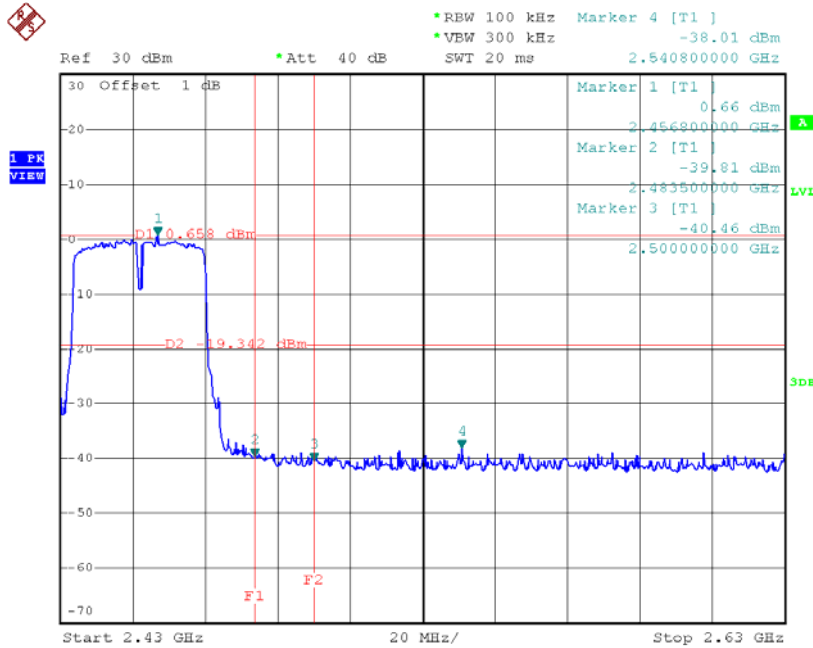
Test Mode : TX N-40M Mode_ANT 2

TX HT40 mode CH03



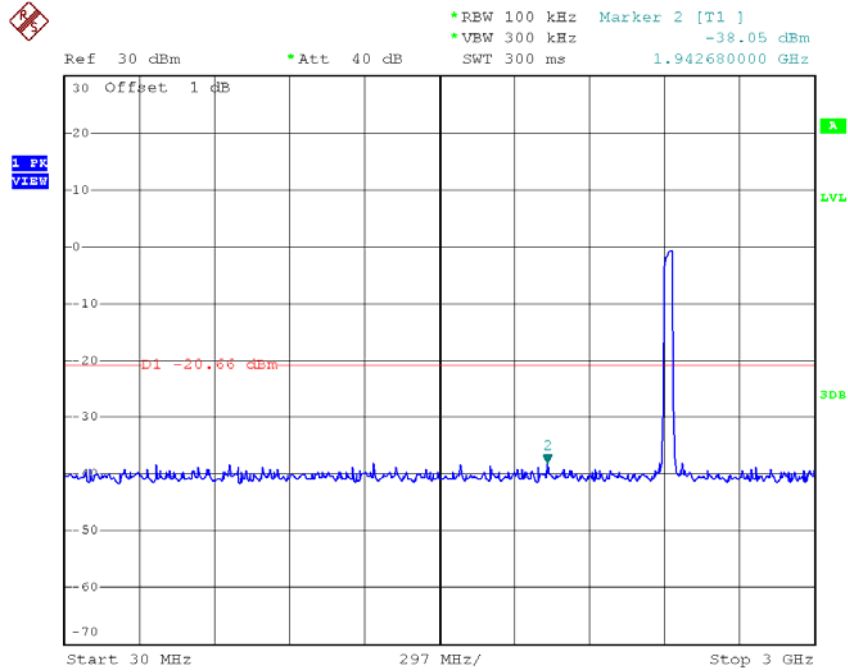
Date: 15.JUL.2016 12:32:13

TX HT40 mode CH09

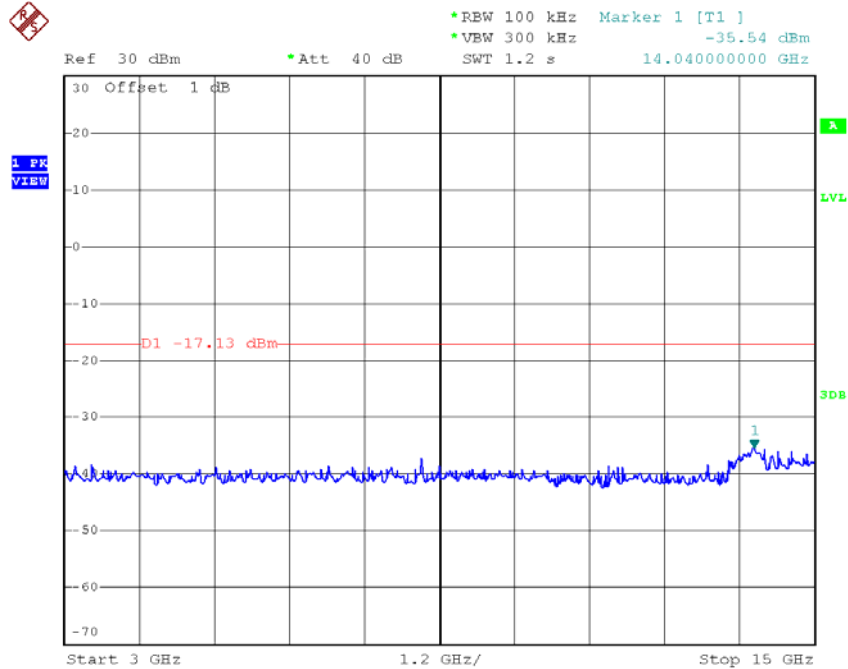


Date: 15.JUL.2016 12:50:40

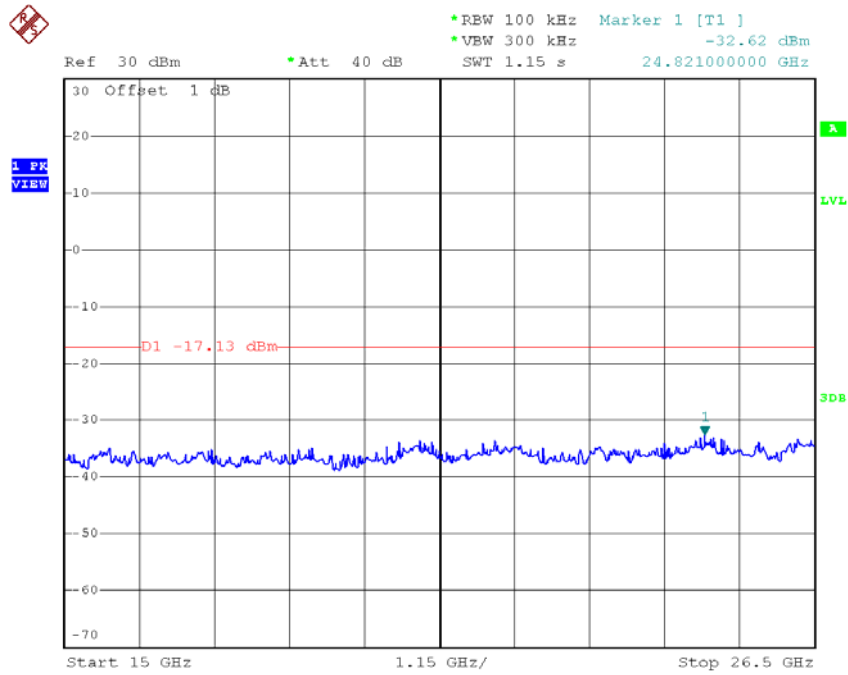
TX HT40 mode CH03 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:31:48

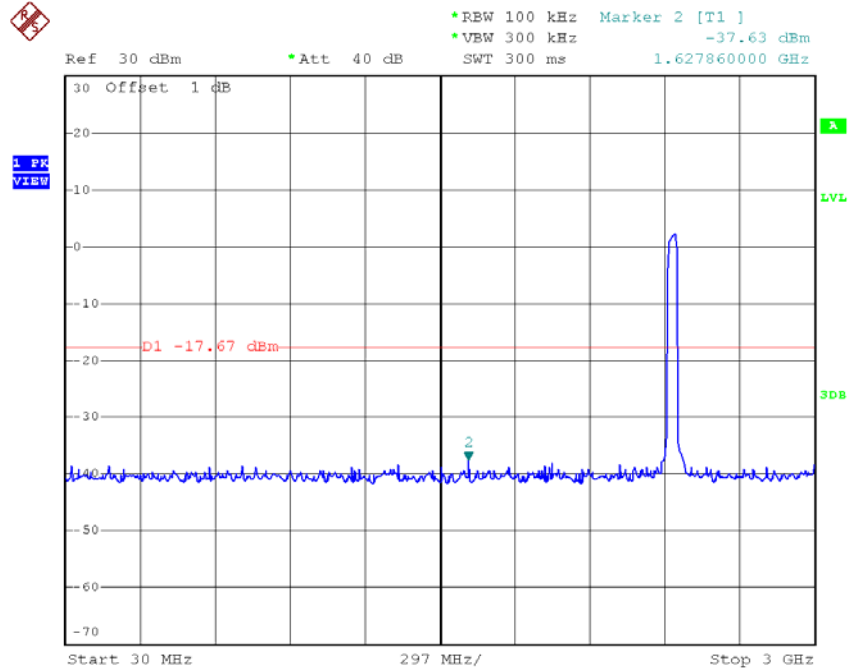


Date: 15.JUL.2016 12:20:24

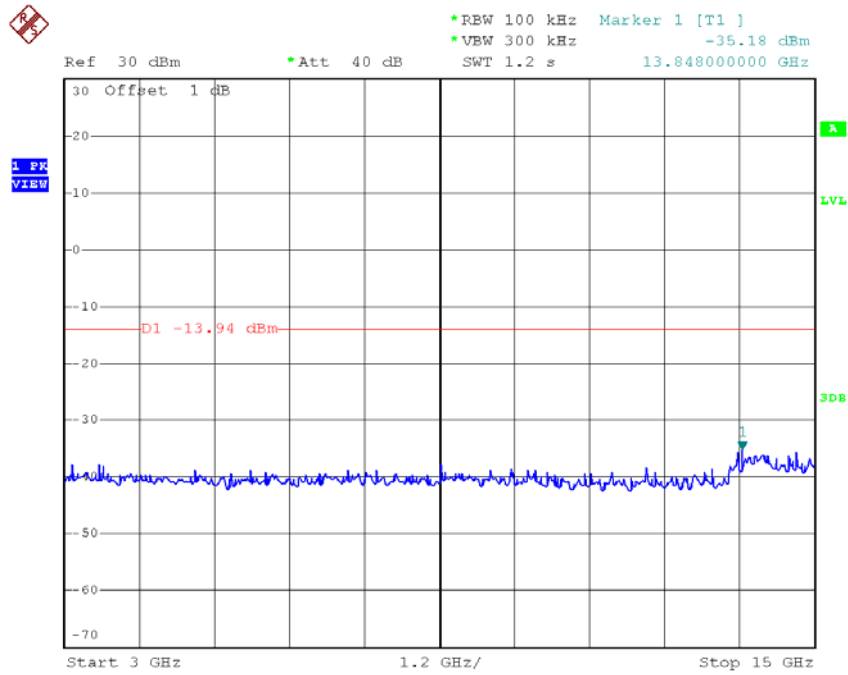


Date: 15.JUL.2016 12:20:33

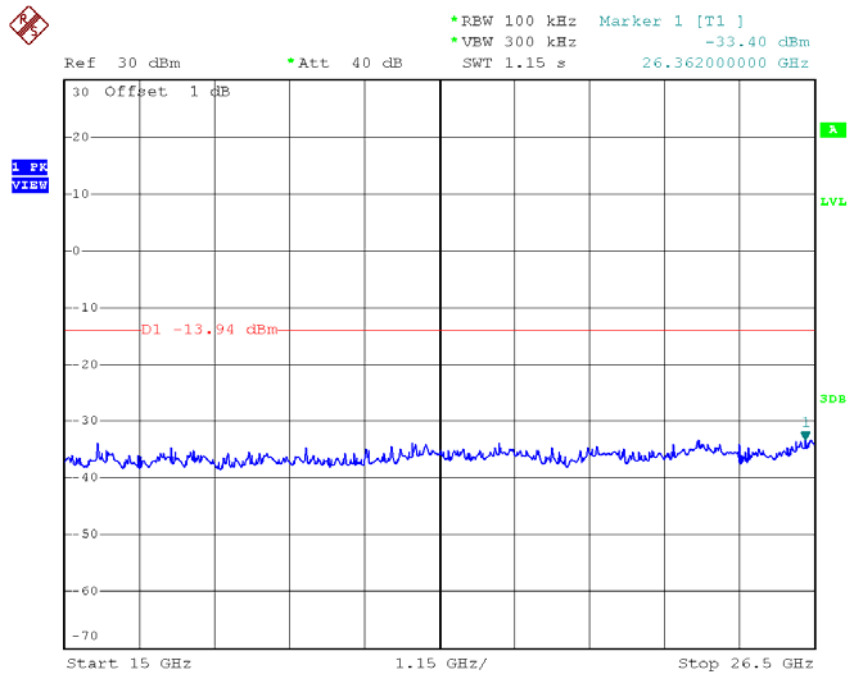
TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:48:44

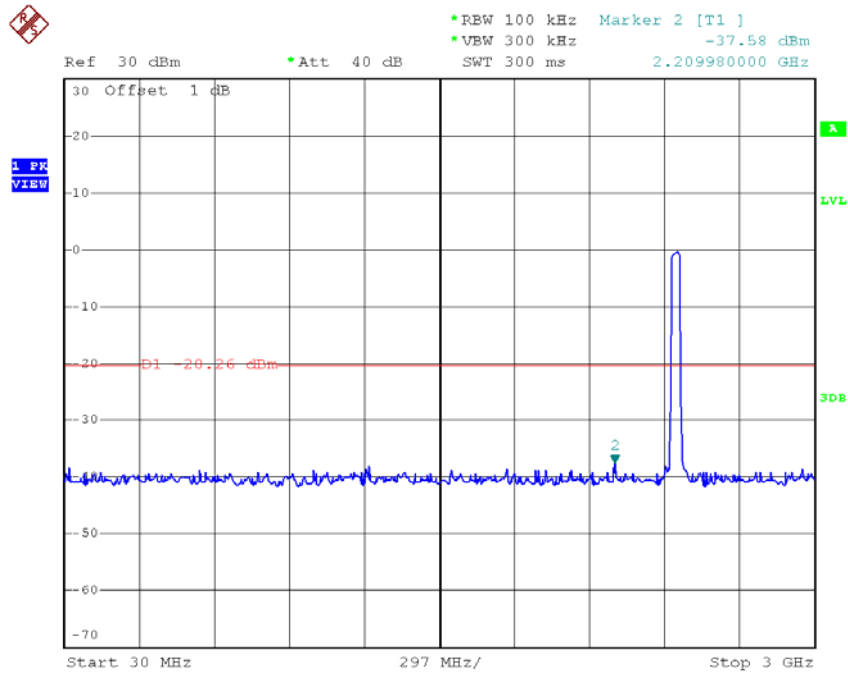


Date: 15.JUL.2016 12:22:05

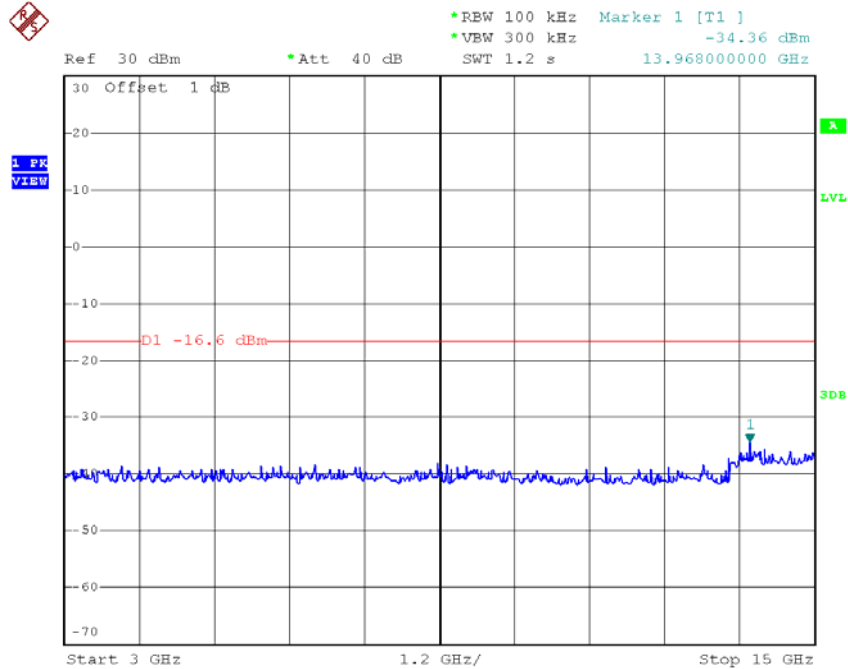


Date: 15.JUL.2016 12:22:25

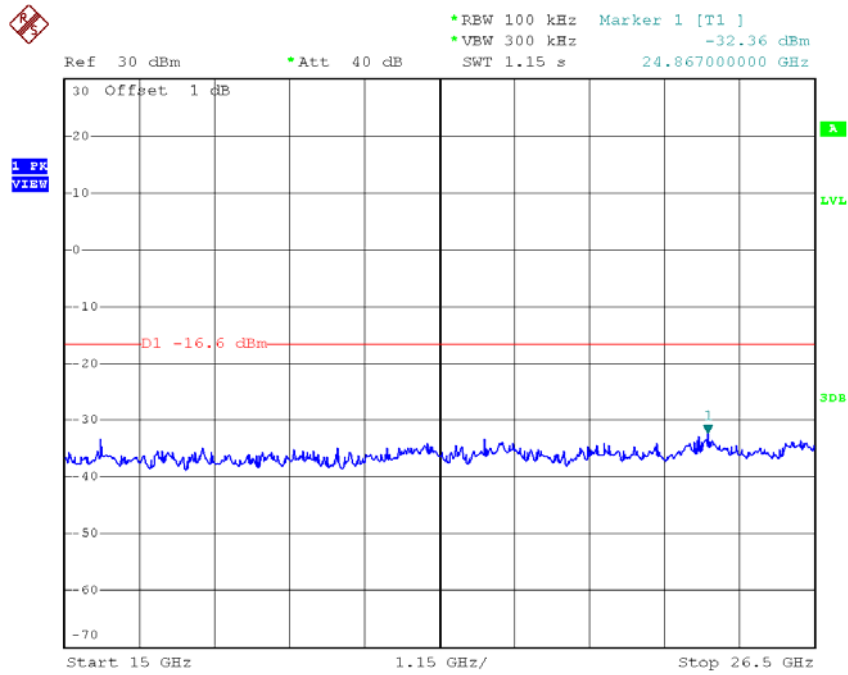
TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 15.JUL.2016 12:50:16

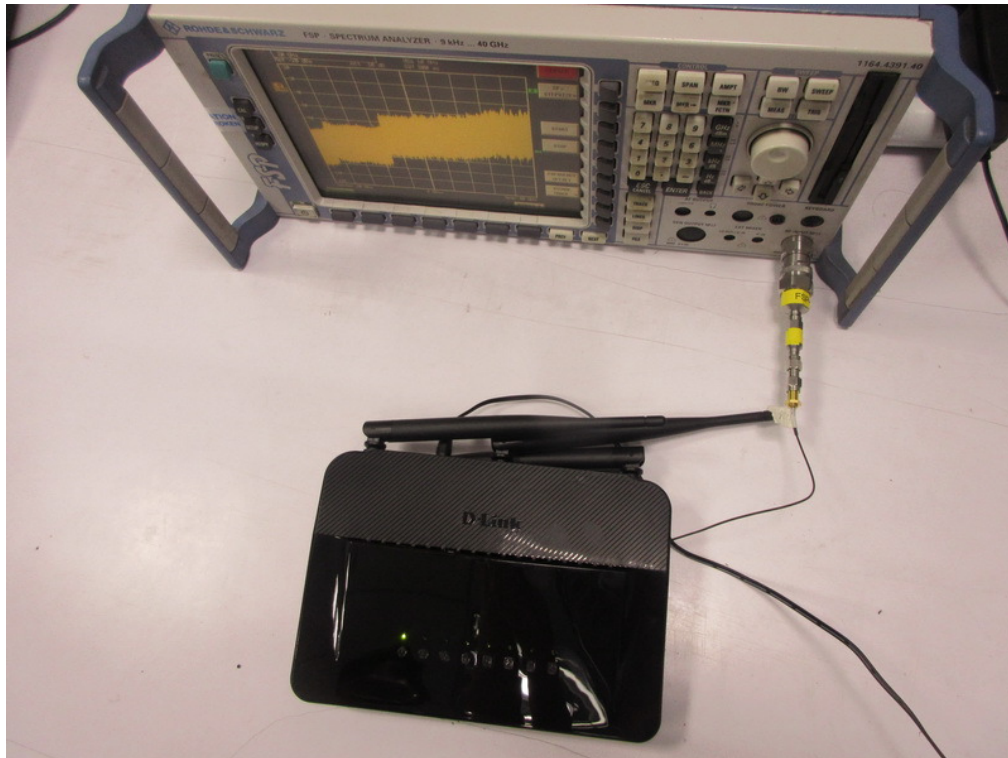


Date: 15.JUL.2016 12:23:32



Date: 15.JUL.2016 12:23:41

Antenna Conducted Spurious Emission Measurement Photos

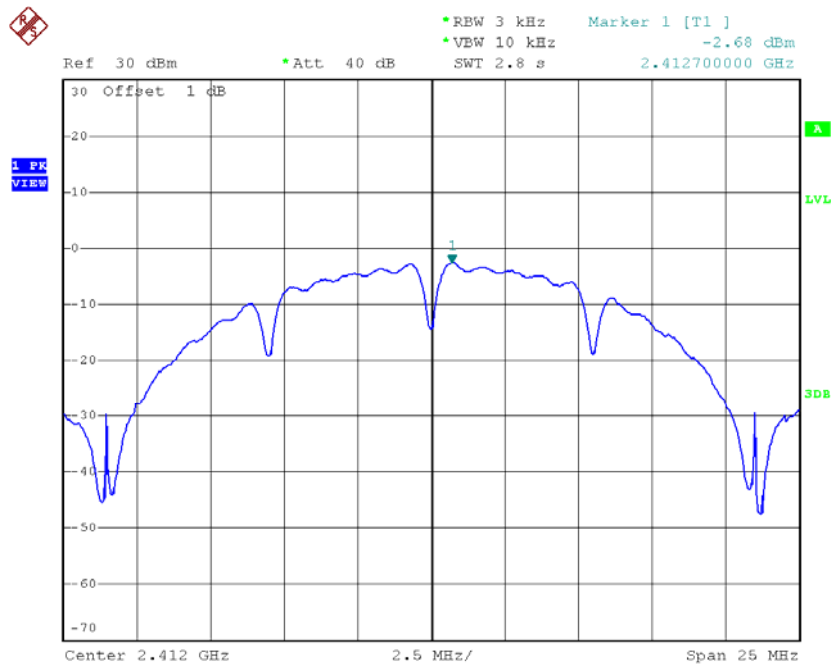


ATTACHMENT H - POWER SPECTRAL DENSITY

Test Mode :TX B Mode_CH01/06/11

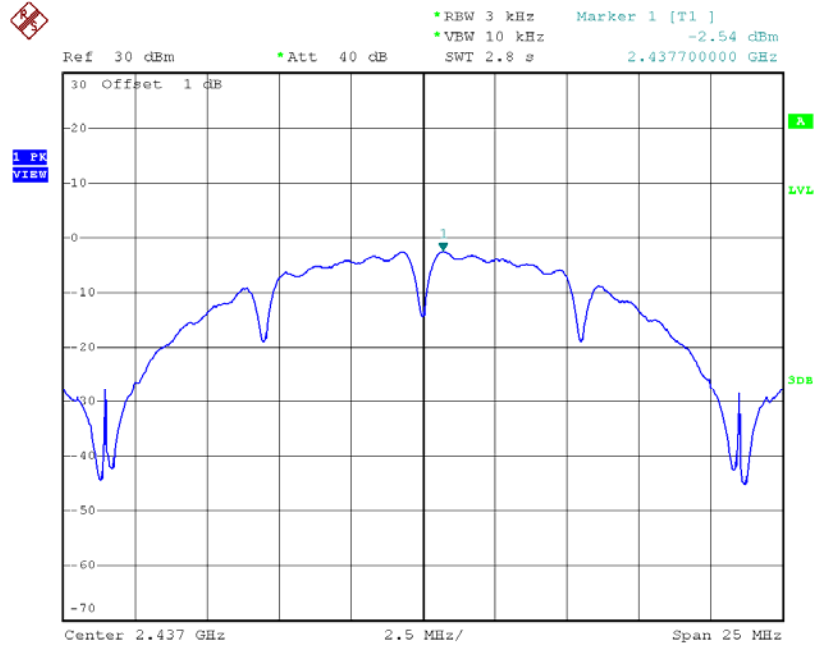
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-2.68	0.5395	8.00	Complies
2437	-2.54	0.5572	8.00	Complies
2462	-2.58	0.5521	8.00	Complies

TX CH01



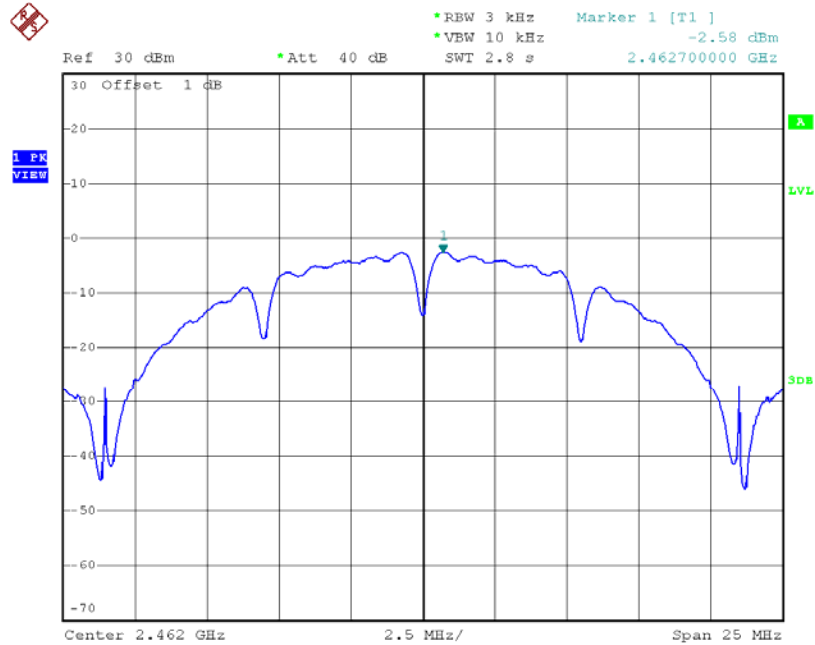
Date: 15.JUL.2016 10:31:27

TX CH06



Date: 15.JUL.2016 10:34:10

TX CH11

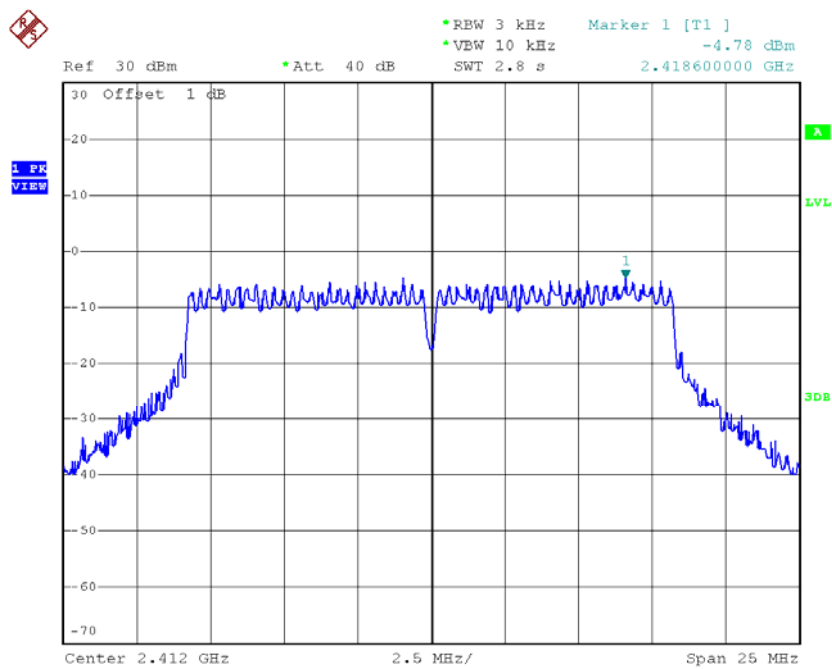


Date: 15.JUL.2016 10:36:30

Test Mode :TX G Mode_CH01/06/11

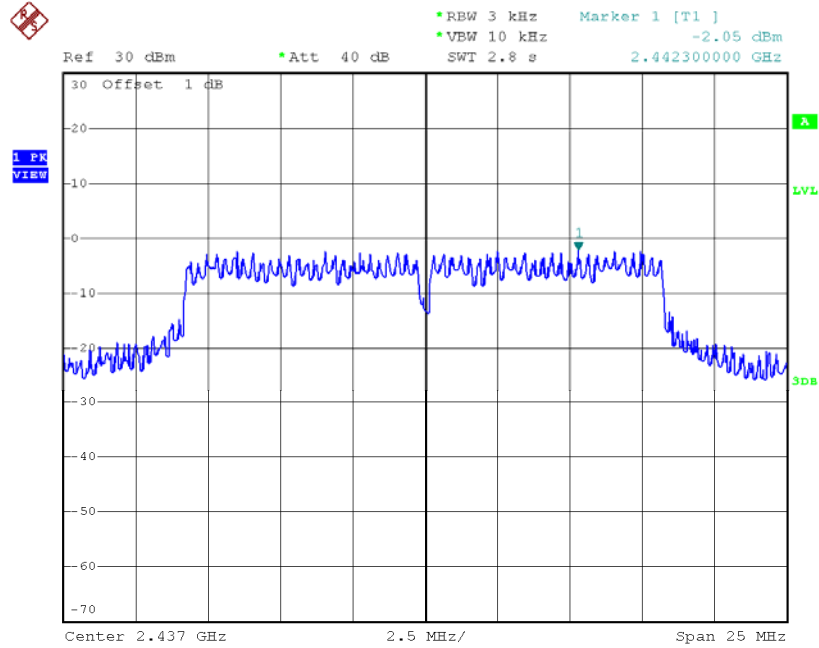
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-4.78	0.3327	8.00	Complies
2437	-2.05	0.6237	8.00	Complies
2462	-3.43	0.4539	8.00	Complies

TX CH01



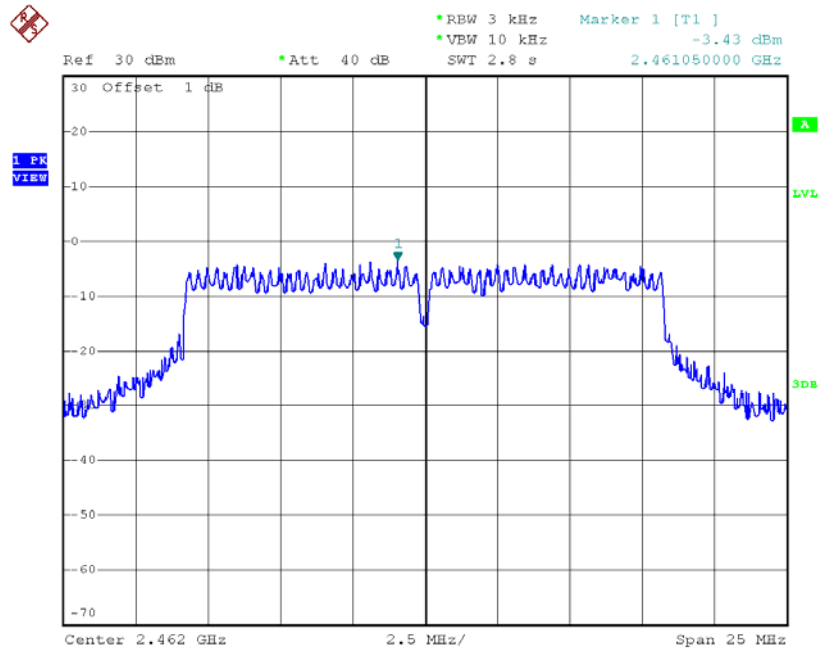
Date: 15.JUL.2016 10:39:25

TX CH06



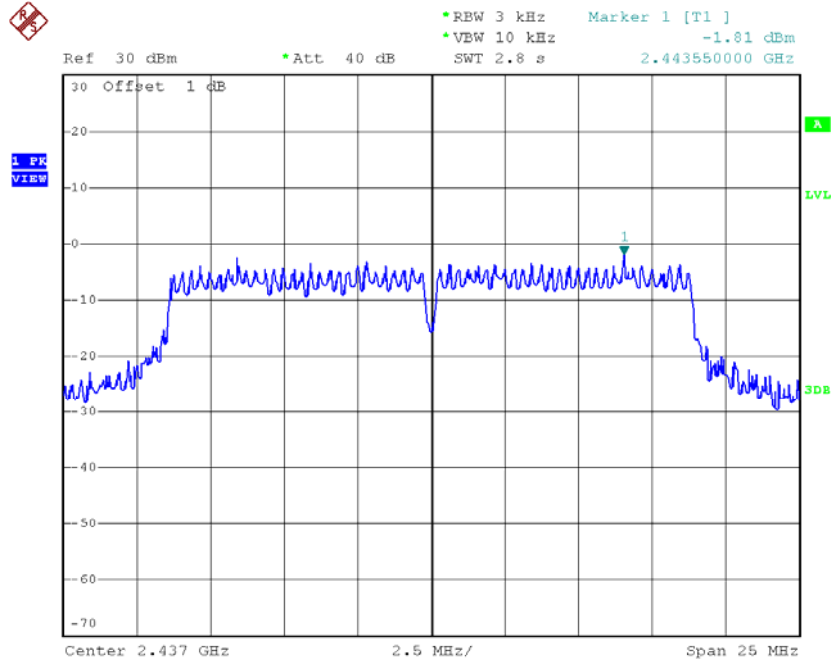
Date: 15.JUL.2016 10:41:08

TX CH11



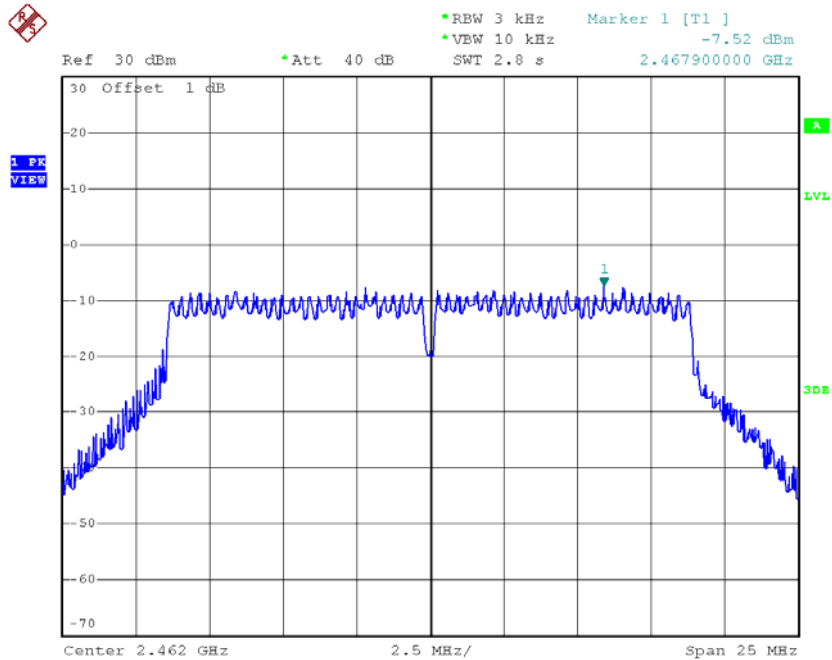
Date: 15.JUL.2016 10:42:47

TX CH06



Date: 15.JUL.2016 12:16:47

TX CH11

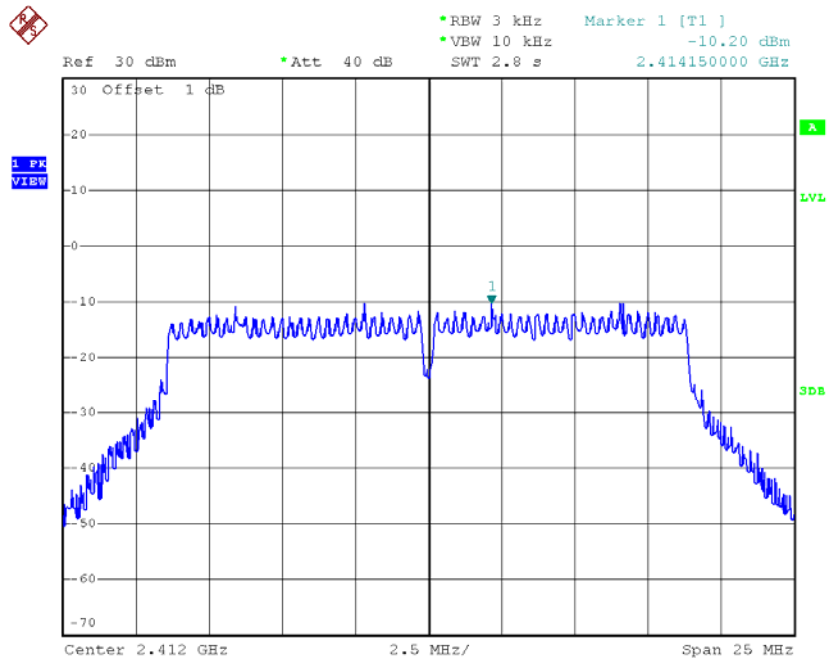


Date: 15.JUL.2016 12:18:58

Test Mode : TX N-20M Mode_CH01/06/11_ANT 2

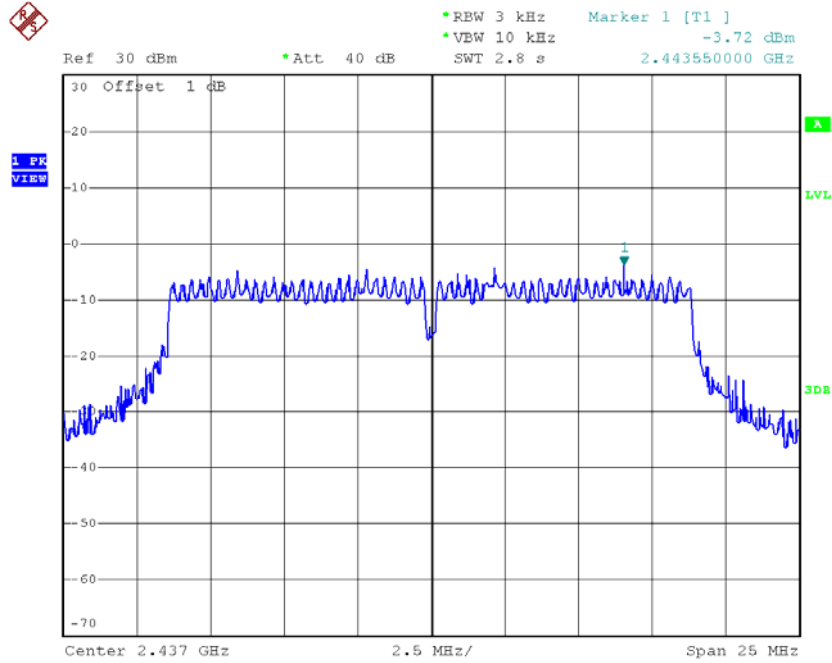
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-10.20	0.0955	8.00	Complies
2437	-3.72	0.4246	8.00	Complies
2462	-8.20	0.1514	8.00	Complies

TX CH01



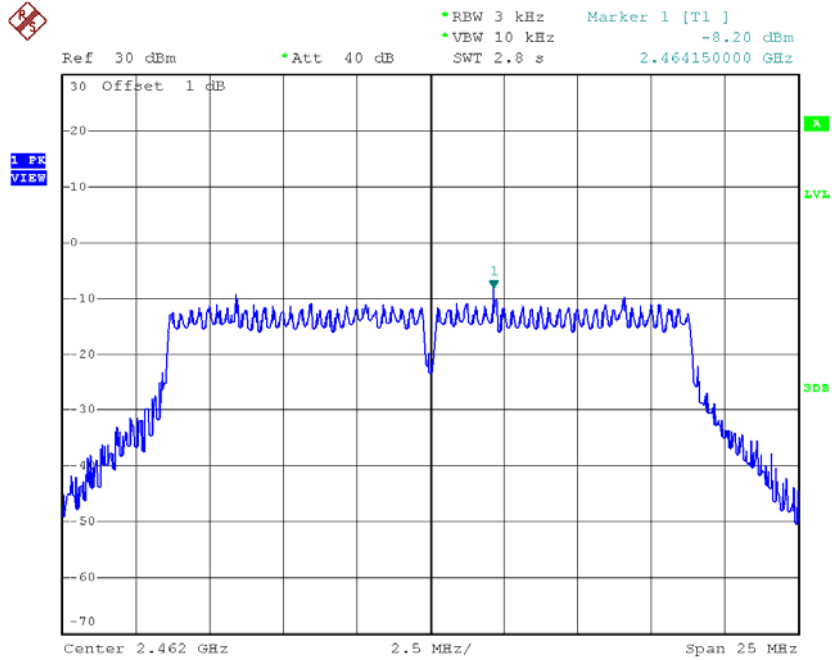
Date: 15.JUL.2016 12:27:34

TX CH06



Date: 15.JUL.2016 12:28:47

TX CH11



Date: 15.JUL.2016 12:30:28

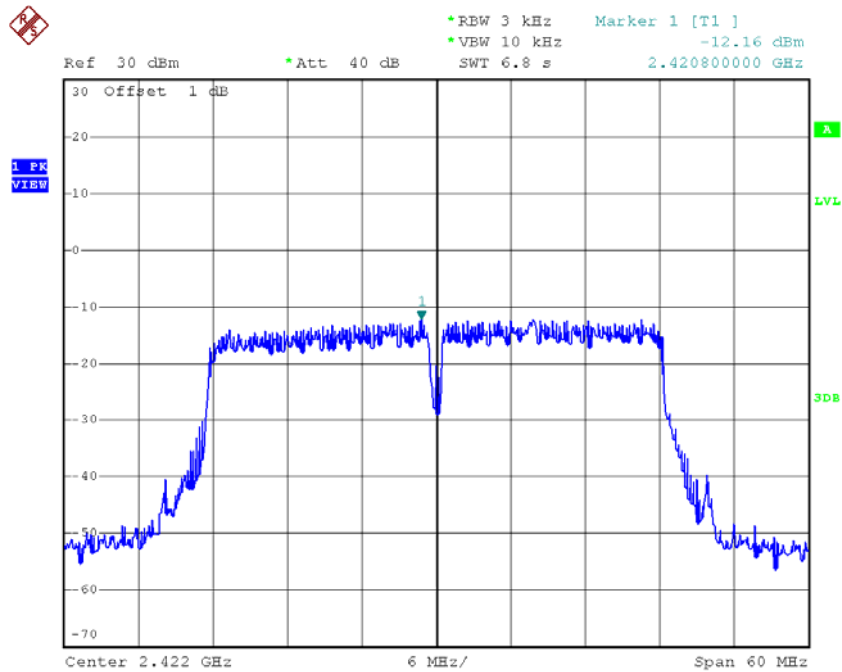
Test Mode : TX N-20M Mode_CH01/06/11_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-6.02	0.2500	8.00	Complies
2437	0.33	1.0800	8.00	Complies
2462	-4.81	0.3300	8.00	Complies

Test Mode : TX N-40M Mode_CH03/06/09_ANT 1

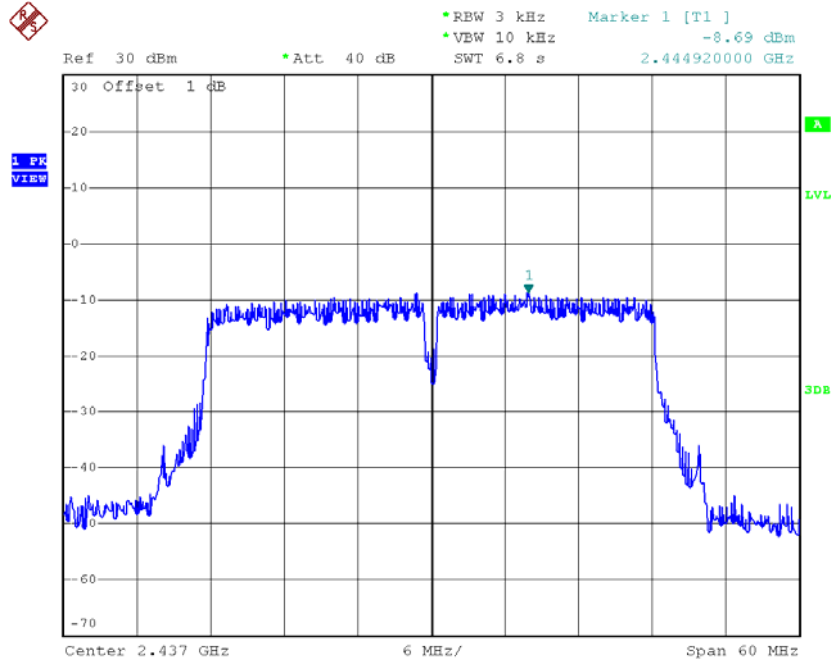
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-12.16	0.0608	8.00	Complies
2437	-8.69	0.1352	8.00	Complies
2452	-10.65	0.0861	8.00	Complies

TX CH03



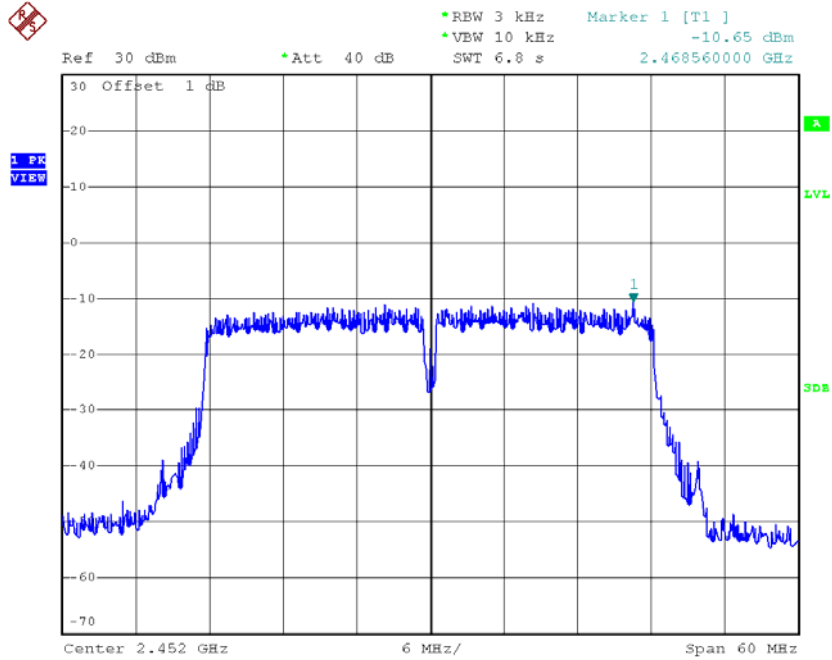
Date: 15.JUL.2016 12:20:53

TX CH06



Date: 15.JUL.2016 12:22:17

TX CH09

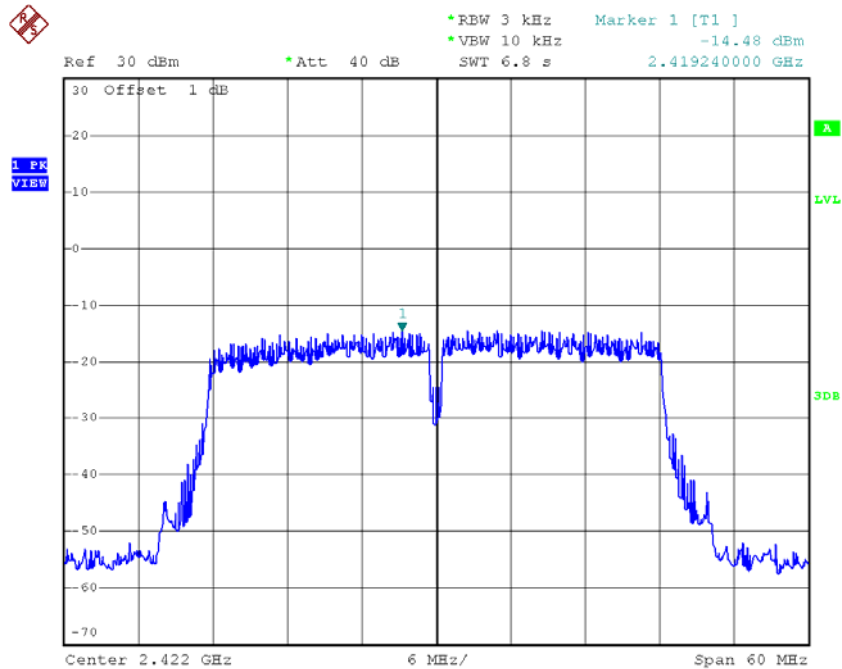


Date: 15.JUL.2016 12:24:01

Test Mode : TX N-40M Mode_CH03/06/09_ANT 2

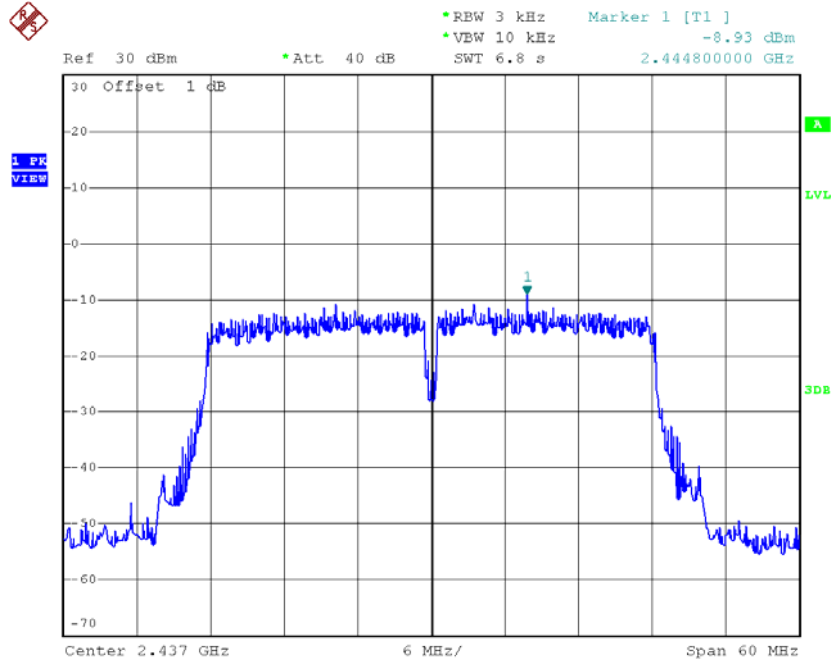
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-14.48	0.0356	8.00	Complies
2437	-8.93	0.1279	8.00	Complies
2452	-13.12	0.0488	8.00	Complies

TX CH03



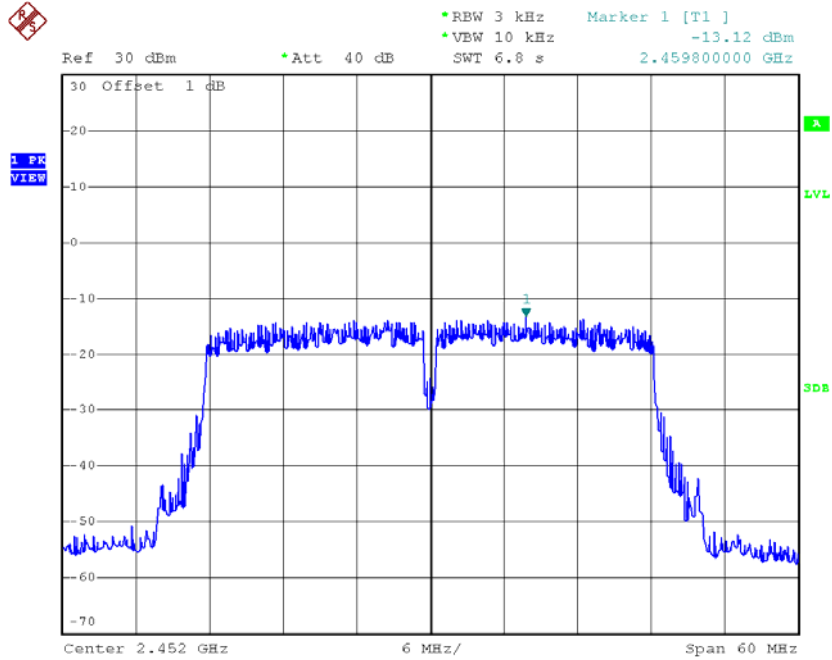
Date: 15.JUL.2016 12:32:25

TX CH06



Date: 15.JUL.2016 12:49:13

TX CH09



Date: 15.JUL.2016 12:50:52

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

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-10.00	0.1000	8.00	Complies
2437	-5.69	0.2700	8.00	Complies
2452	-8.54	0.1400	8.00	Complies

Power Density Measurement Photos

