

FCC Radio Test Report

FCC ID: RWO-RZ090220

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

Project No. : 1707C103
Equipment : Notebook
Model Name : RZ09-0220
Applicant : Razer Inc.
Address : 201 3rd Street, Suite 900, San Francisco, CA 94103

Date of Receipt : Jul. 13, 2017
Date of Test : Jul. 13, 2017 ~ Aug. 08, 2017
Issued Date : Aug. 09, 2017
Tested by : BTL Inc.

Testing Engineer : Shawn Xiao
(Shawn Xiao)

Technical Manager : David Mao
(David Mao)

Authorized Signatory : 
(Steven Lu)

BTL INC.

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	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 DESCRIPTION OF SUPPORT UNITS	14
4 . EMC EMISSION TEST	15
4.1 CONDUCTED EMISSION MEASUREMENT	15
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	15
4.1.2 TEST PROCEDURE	15
4.1.3 DEVIATION FROM TEST STANDARD	15
4.1.4 TEST SETUP	16
4.1.5 EUT OPERATING CONDITIONS	16
4.1.6 EUT TEST CONDITIONS	16
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	17
4.2.1 RADIATED EMISSION LIMITS	17
4.2.2 TEST PROCEDURE	18
4.2.3 DEVIATION FROM TEST STANDARD	18
4.2.4 TEST SETUP	19
4.2.5 EUT OPERATING CONDITIONS	20
4.2.6 EUT TEST CONDITIONS	20
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
APPENDIX A - CONDUCTED EMISSION	27
APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)	30
APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)	35
APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)	42
APPENDIX E - BANDWIDTH	91
APPENDIX F – MAXIMUM PEAK CONDUCTED OUTPUT POWER	100
APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION	105
APPENDIX H - POWER SPECTRAL DENSITY	154

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1707C103	Original Issue.	Aug. 09, 2017

1. CERTIFICATION

Equipment : Notebook
Brand Name : RAZER
Model Name : RZ09-0220
Applicant : Razer Inc.
Manufacturer : Razer Inc.
Address : 201 3rd Street, Suite 900, San Francisco, CA 94103
Factory : BYD Precision Manufacture Co.,Ltd.
Address : No.3001, Baohe Road, Baolong industrial, Longgang Street , Longgang Zone, Shenzhen
Date of Test : Jul. 13, 2017 ~ Aug. 08, 2017
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C (15.247)
ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1707C103) 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).

Test results included in this report is only for the WLAN 2.4G part.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

Note:

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

2.1 TEST FACILITY

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

BTL's test firm number for FCC: 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 $U_{\text{cisp}}^{\text{BTL}}$ 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	Notebook	
Brand Name	RAZER	
Model Name	RZ09-0220	
Model Difference	N/A	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300 Mbps
	Output Power (Max.)	802.11b: 20.26dBm 802.11g: 24.25dBm 802.11n(20MHz): 24.56dBm 802.11n(40MHz): 22.89dBm
Power Source	#1 DC voltage supplied from AC/DC adapter. Model: RC30-0165 #2 Supplied Li-ion battery Model: RC30-0220	
Power Rating	#1 I/P: AC 100-240V 2.5A 50/60Hz O/P: DC 19.8V 8.33A #2 DC 11.4V 6160mAh 70Wh	

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	INPAQ TECHNOLOGY CO.LTD	WA-F-LB-02-08 3	Internal	IPEX	1.68
2	INPAQ TECHNOLOGY CO.LTD	WA-F-LB-01-03 8	Internal	IPEX	1.15

Note: The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R).

4.

Operating Mode TX Mode	2TX
802.11b	V (ANT 1 + ANT 2)
802.11g	V (ANT 1 + ANT 2)
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	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 5	TX Mode

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

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

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

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

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

Note:

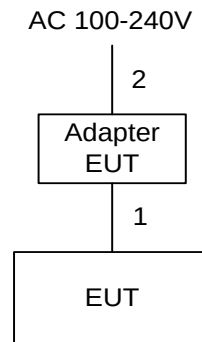
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (13Mbps)
 802.11n HT40 mode : BPSK (27Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) 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	QACRCT		
Frequency (MHz)	2412	2437	2462
802.11b	12	12	12
802.11g	13	13	12
802.11n (20MHz)	13	13	13
Frequency	2422	2437	2452
802.11n (40MHz)	11	11	11

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
2	NO	NO	1m	AC 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

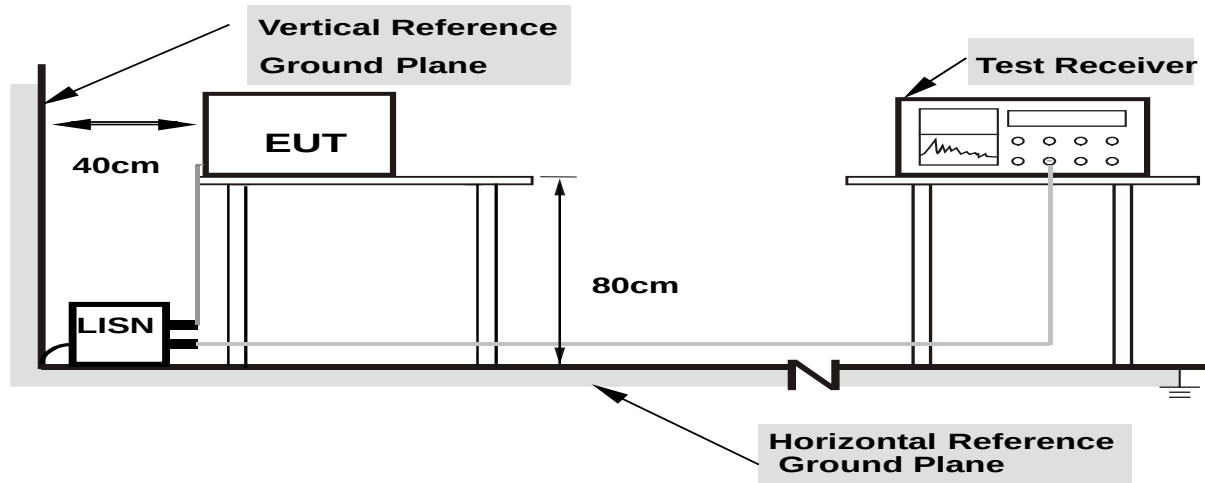
4.1.2 TEST PROCEDURE

- 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 Appendix A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

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

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

4.2.2 TEST PROCEDURE

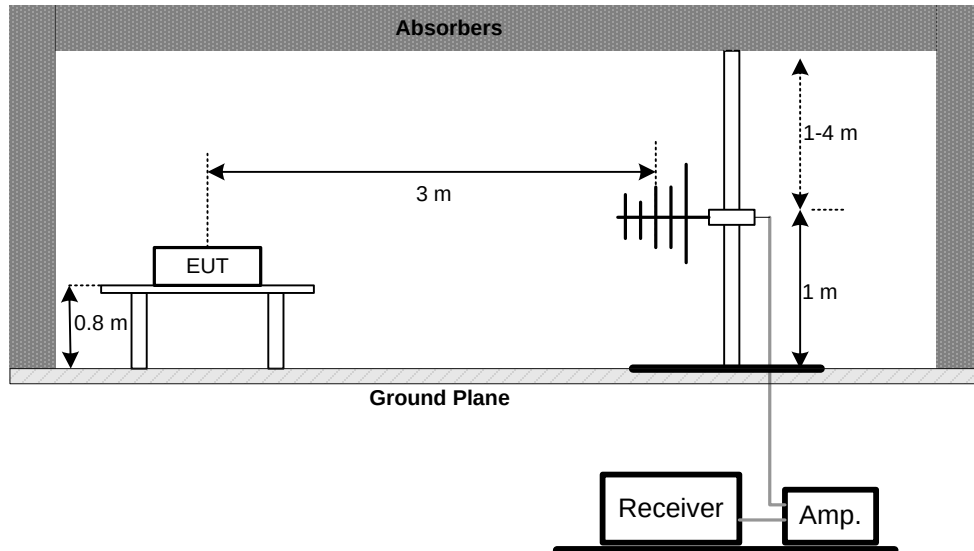
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of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

4.2.3 DEVIATION FROM TEST STANDARD

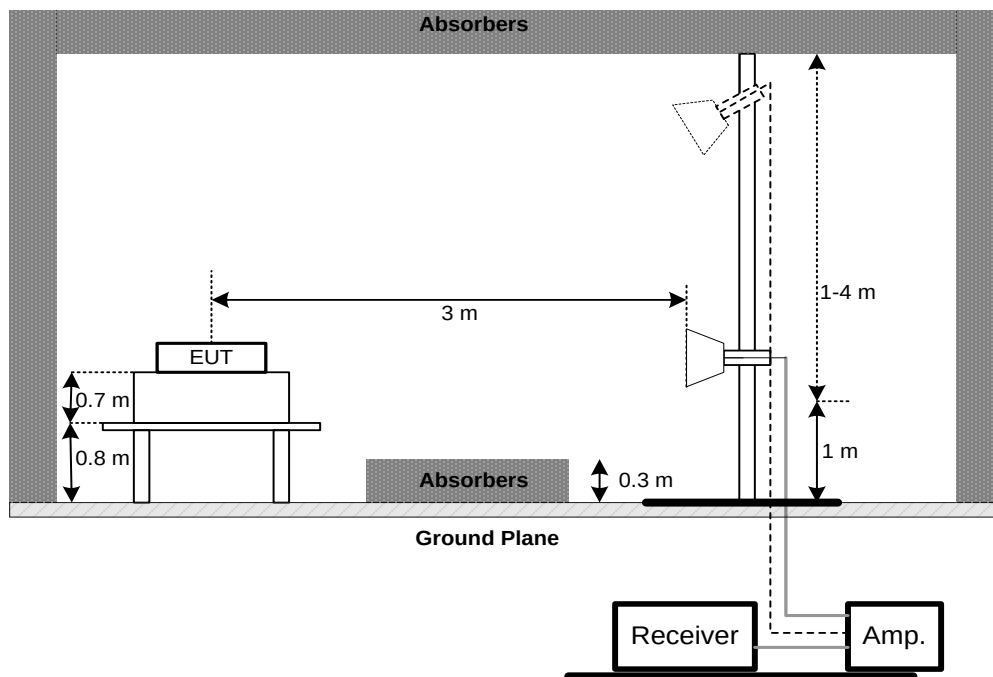
No deviation

4.2.4 TEST SETUP

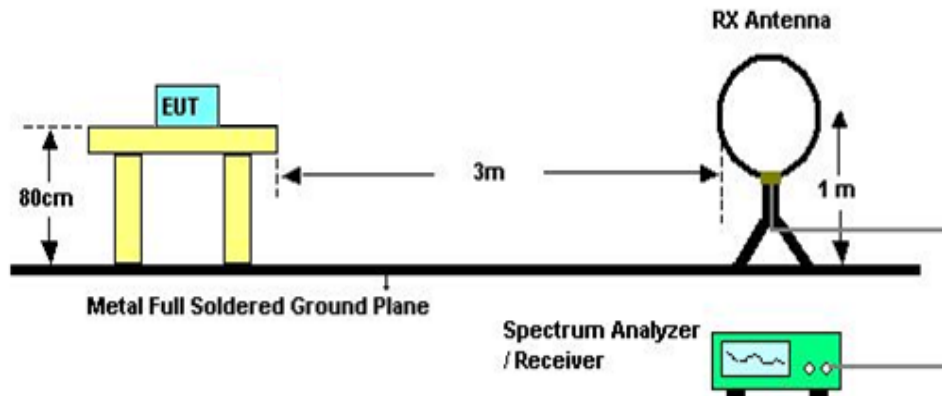
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For Radiated Emissions Below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Appendix B

Remark:

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

4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)

Please refer to the Appendix C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Appendix D.

Remark:

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

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

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

5.1.1 TEST PROCEDURE

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Appendix E.

6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	2400-2483.5	PASS

6.1.1 TEST PROCEDURE

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

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Appendix F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

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

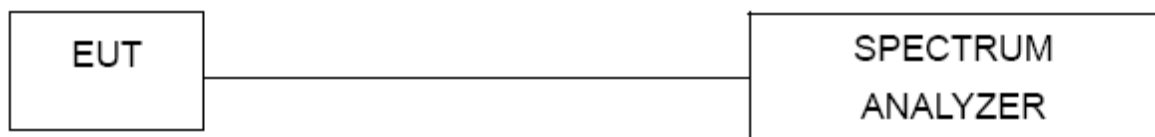
7.1.1 TEST PROCEDURE

- 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 Appendix G.

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

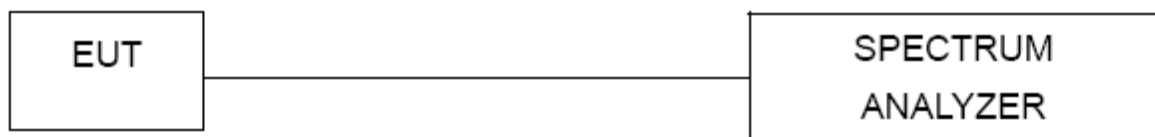
8.1.1 TEST PROCEDURE

- 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 Appendix H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2018
2	LISN	EMCO	3816/2	52765	Mar. 26, 2018
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 26, 2018
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 26, 2018
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Oct. 20, 2017

Radiated Emission Measurement - Below 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 26, 2018
2	Amplifier	HP	8447D	2944A09673	Oct. 20, 2017
3	Receiver	Agilent	N9038A	MY52130039	Sep. 04, 2017
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	Jun. 26, 2018
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 06, 2017

Radiated Emission Measurement - Above 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 26, 2018
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 08, 2018
3	Amplifier	Agilent	8449B	3008A02274	May. 16, 2018
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
5	Receiver	Agilent	N9038A	MY52130039	Sep. 04, 2017
6	Antenna	EM	EM-6876-1	230	Jul. 07, 2018
7	Controller	CT	SC100	N/A	N/A
8	Controller	MF	MF-7802	MF780208416	N/A
9	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018
10	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

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

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

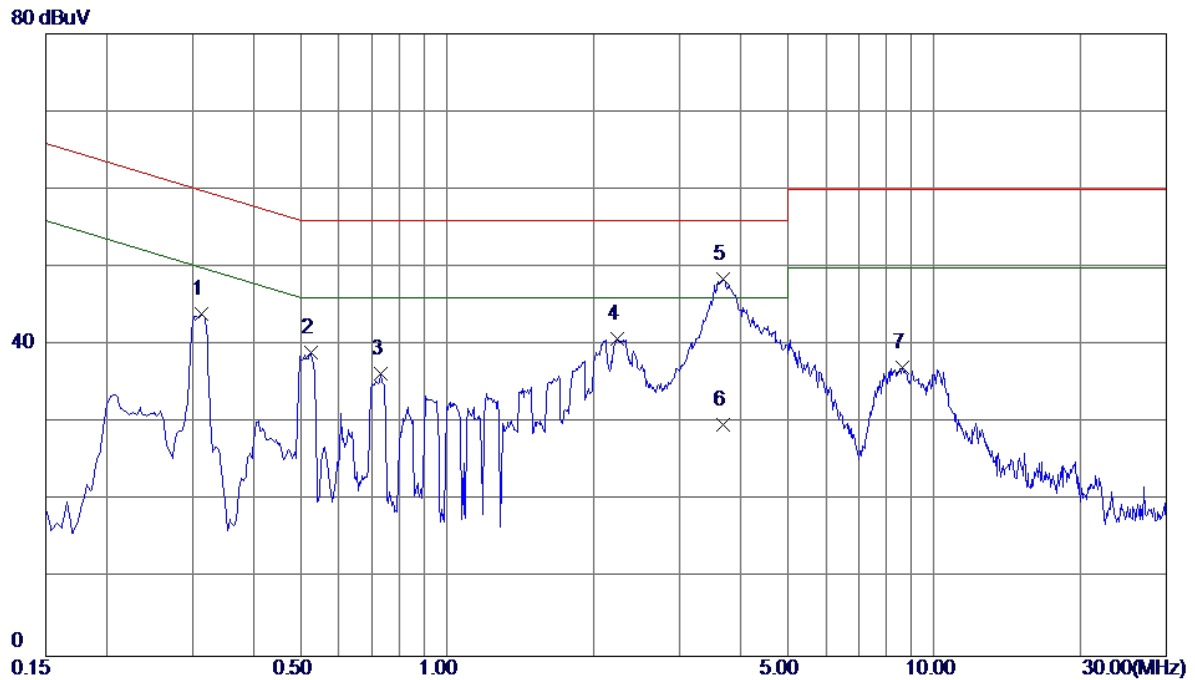
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Sep. 04, 2017

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

APPENDIX A - CONDUCTED EMISSION

Test Mode : TX Mode

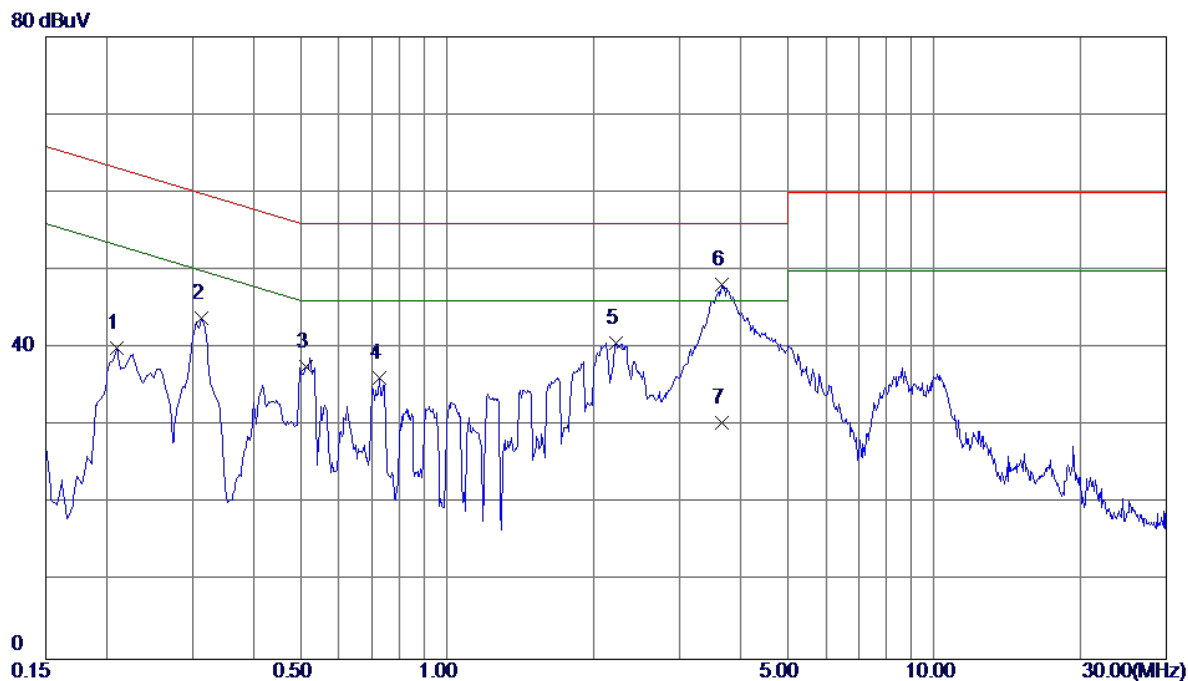
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.3140	34.40	9.53	43.93	59.86	-15.93	Peak	
2	0.5260	29.37	9.64	39.01	56.00	-16.99	Peak	
3	0.7300	26.60	9.68	36.28	56.00	-19.72	Peak	
4	2.2340	30.79	9.98	40.77	56.00	-15.23	Peak	
5 *	3.6940	38.32	10.16	48.48	56.00	-7.52	Peak	
6	3.6940	19.60	10.16	29.76	46.00	-16.24	AVG	
7	8.6059	27.00	10.19	37.19	60.00	-22.81	Peak	

Test Mode : TX Mode

Neutral



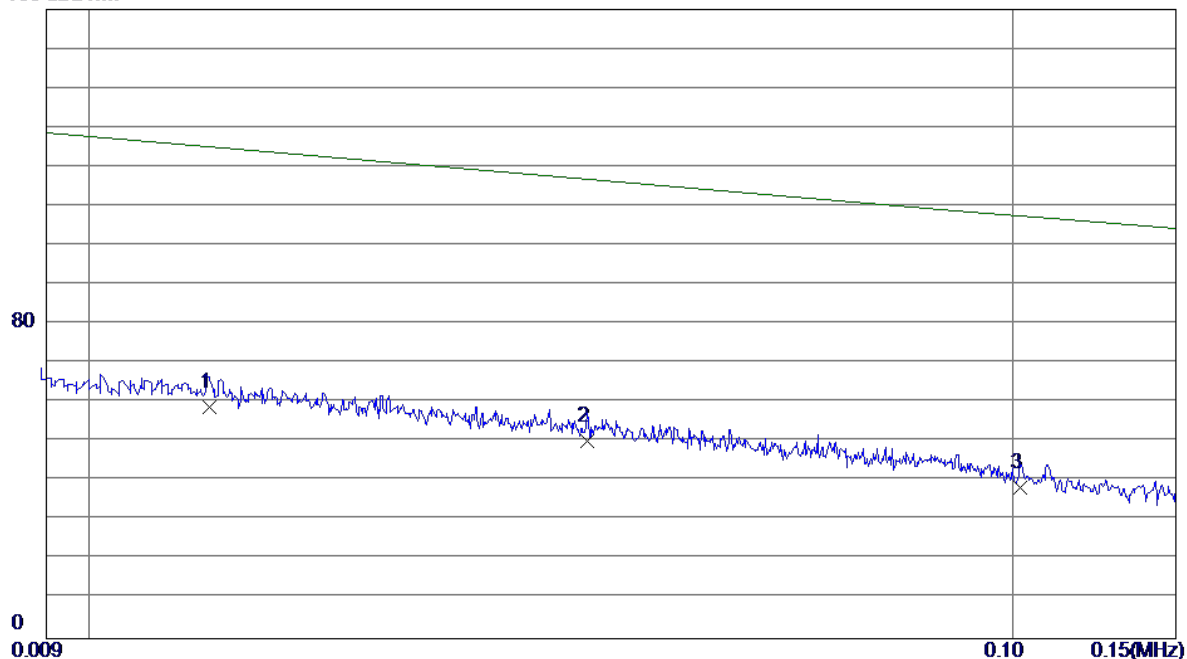
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.2100	30.50	9.53	40.03	63.21	-23.18	Peak	
2	0.3140	34.34	9.53	43.87	59.86	-15.99	Peak	
3	0.5140	28.12	9.44	37.56	56.00	-18.44	Peak	
4	0.7260	26.74	9.47	36.21	56.00	-19.79	Peak	
5	2.2300	30.97	9.74	40.71	56.00	-15.29	Peak	
6 *	3.6780	38.34	9.86	48.20	56.00	-7.80	Peak	
7	3.6780	20.50	9.86	30.36	46.00	-15.64	AVG	

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

Test Mode: TX B MODE CHANNEL 01

Ant 0°

160 dBuV/m

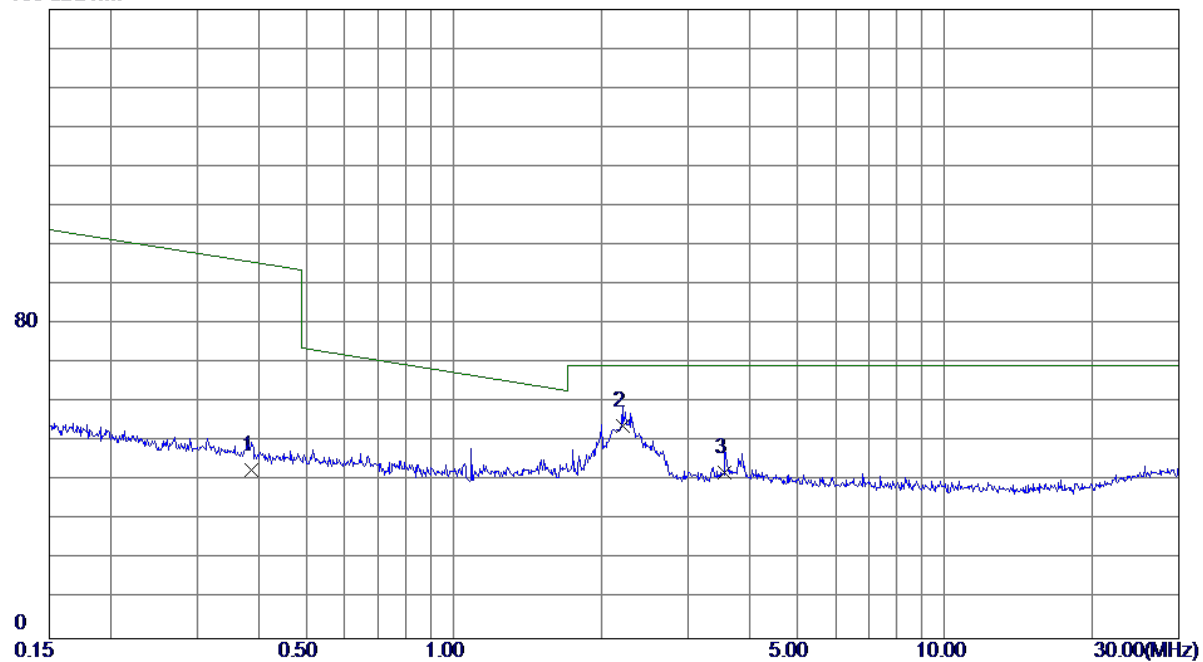


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	0.0135	38.37	20.47	58.84	127.38	-68.54	AVG	
2	0.0346	31.12	19.18	50.30	122.17	-71.87	AVG	
3	0.1017	20.71	17.61	38.32	107.50	-69.18	AVG	

Test Mode: TX B MODE CHANNEL 01

Ant 0°

160 dBuV/m

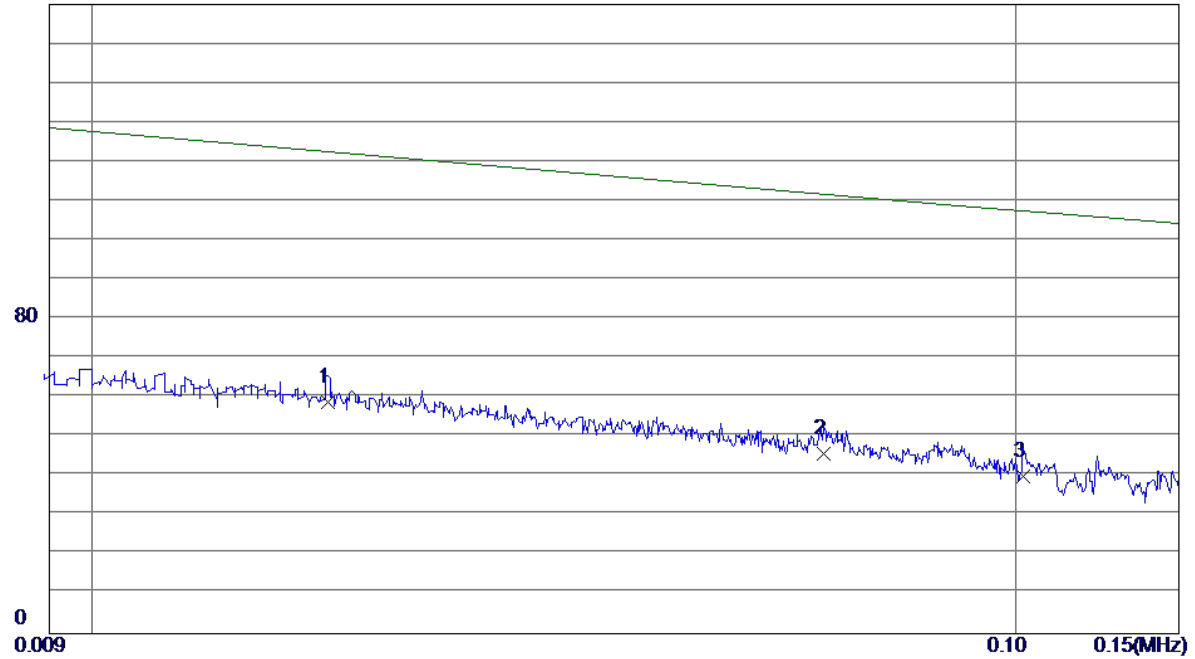


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.3871	26.23	16.55	42.78	97.31	-54.53	AVG	
2 *	2.2132	38.76	15.45	54.21	69.54	-15.33	QP	
3	3.5654	27.27	15.07	42.34	69.54	-27.20	QP	

Test Mode: TX B MODE CHANNEL 01

Ant 90°

160 dBuV/m

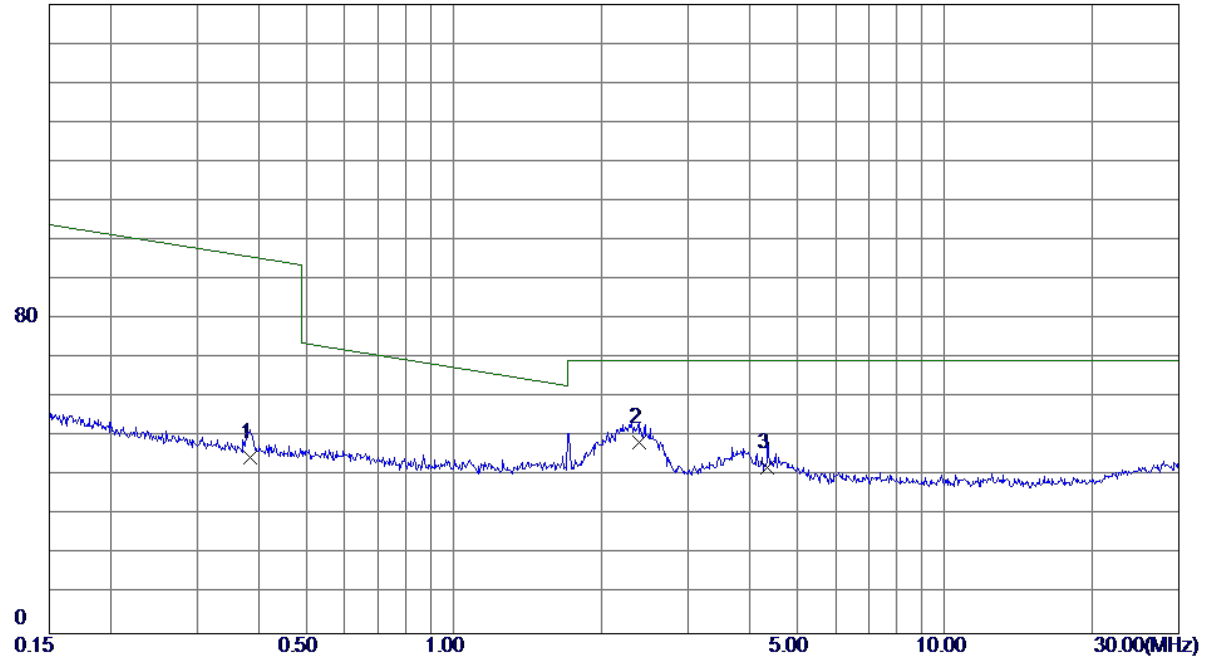


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	0.0180	39.01	19.88	58.89	126.27	-67.38	AVG	
2	0.0620	27.27	18.48	45.75	115.41	-69.66	AVG	
3	0.1017	22.44	17.61	40.05	107.50	-67.45	AVG	

Test Mode: TX B MODE CHANNEL 01

Ant 90°

160 dBuV/m

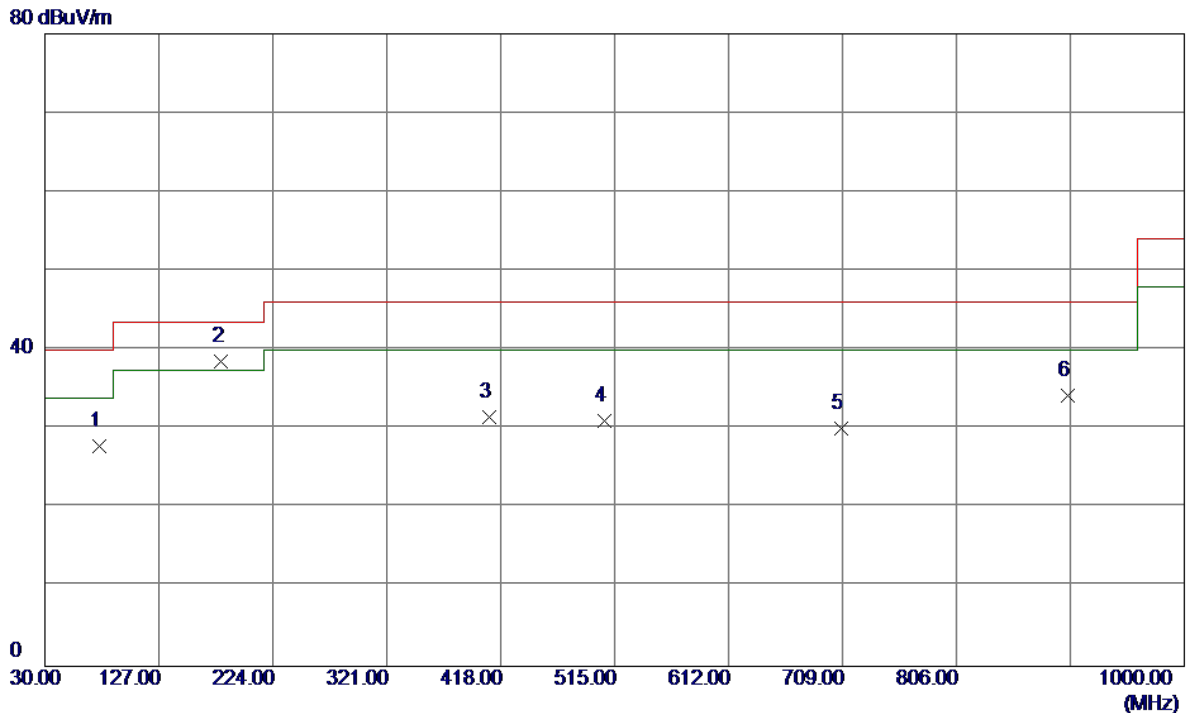


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.3852	28.31	16.55	44.86	97.38	-52.52	AVG	
2 *	2.3836	33.27	15.40	48.67	69.54	-20.87	QP	
3	4.3606	27.53	14.75	42.28	69.54	-27.26	QP	

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

Test Mode: TX B MODE CHANNEL 01

Vertical

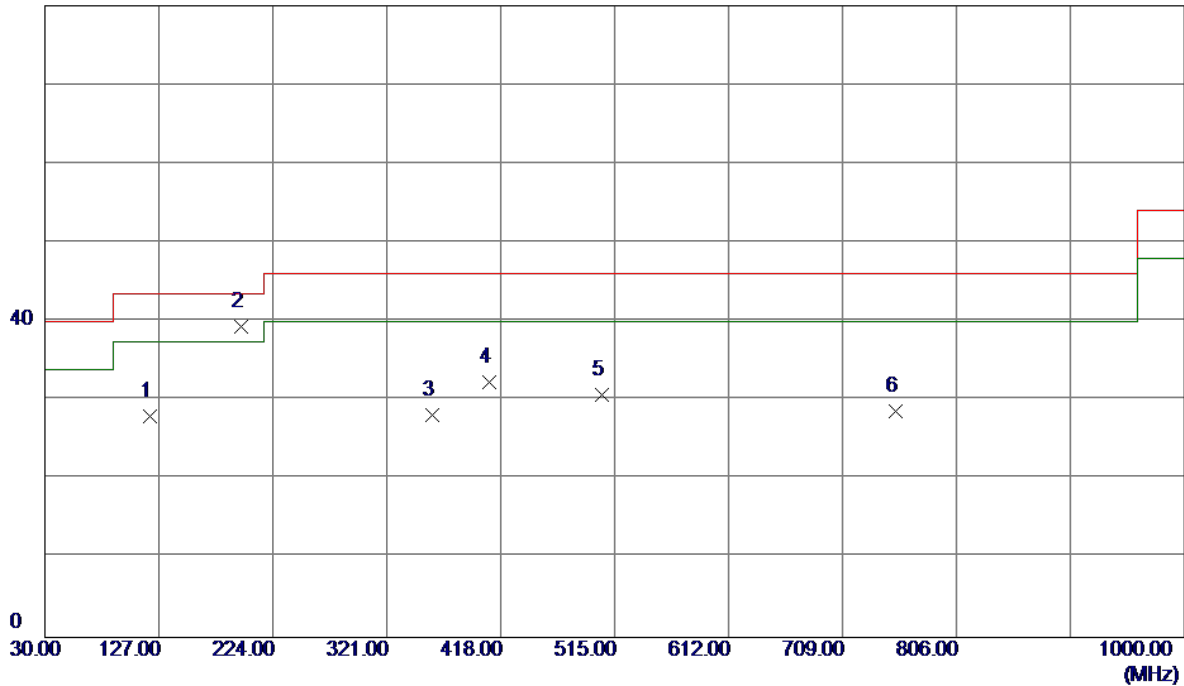


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	76.5600	45.27	-17.44	27.83	40.00	-12.17	Peak	
2 *	180.3500	50.68	-12.07	38.61	43.50	-4.89	Peak	
3	408.3000	42.64	-11.12	31.52	46.00	-14.48	Peak	
4	506.2700	39.67	-8.59	31.08	46.00	-14.92	Peak	
5	708.0300	33.81	-3.70	30.11	46.00	-15.89	Peak	
6	901.0600	33.17	1.05	34.22	46.00	-11.78	Peak	

Test Mode: TX B MODE CHANNEL 01

Horizontal

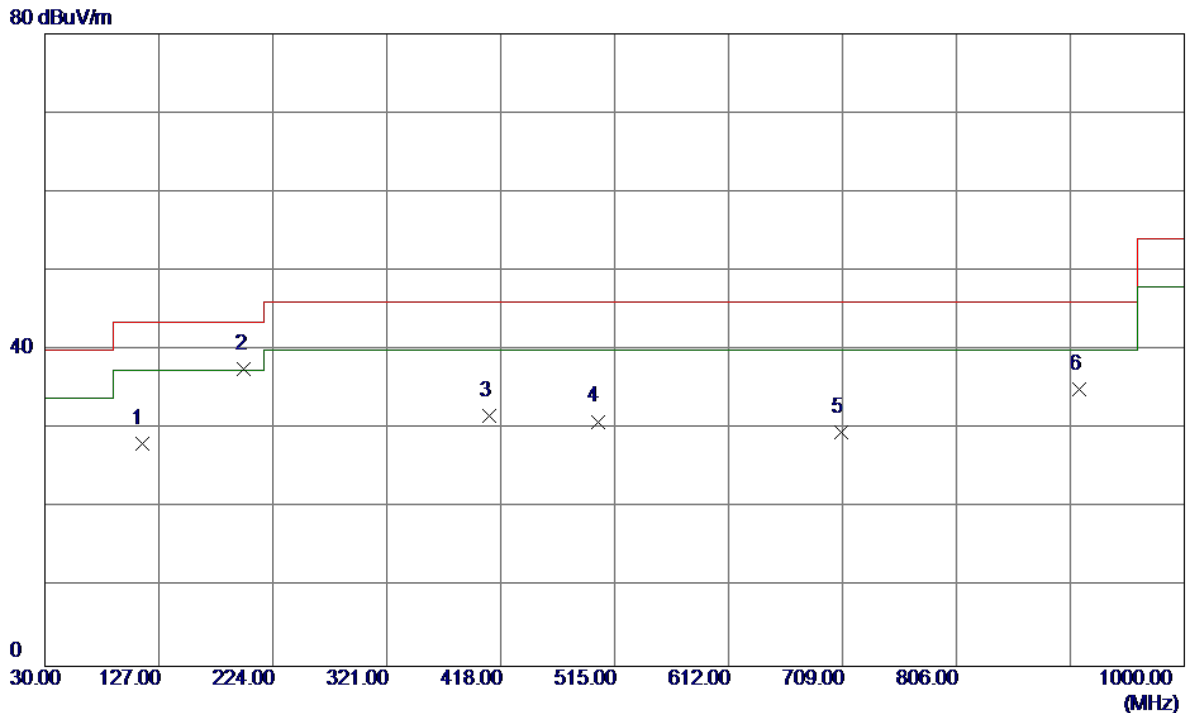
80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	119.2400	43.52	-15.46	28.06	43.50	-15.44	Peak	
2 *	196.8400	52.76	-13.46	39.30	43.50	-4.20	Peak	
3	359.8000	39.93	-11.84	28.09	46.00	-17.91	Peak	
4	408.3000	43.51	-11.12	32.39	46.00	-13.61	Peak	
5	504.3300	39.40	-8.63	30.77	46.00	-15.23	Peak	
6	754.5900	31.06	-2.35	28.71	46.00	-17.29	Peak	

Test Mode: TX B MODE CHANNEL 06

Vertical

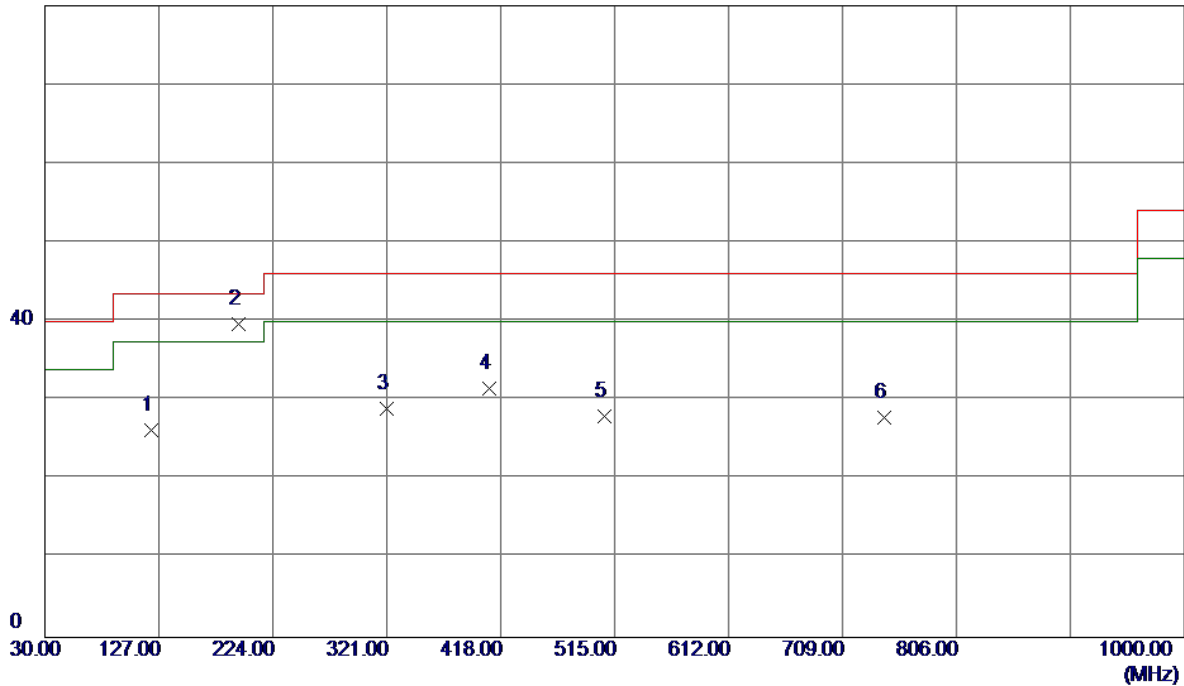


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	112.4500	44.09	-16.00	28.09	43.50	-15.41	Peak	
2 *	199.7500	51.39	-13.73	37.66	43.50	-5.84	Peak	
3	408.3000	42.75	-11.12	31.63	46.00	-14.37	Peak	
4	500.4500	39.67	-8.71	30.96	46.00	-15.04	Peak	
5	708.0300	33.33	-3.70	29.63	46.00	-16.37	Peak	
6	910.7600	33.83	1.24	35.07	46.00	-10.93	Peak	

Test Mode: TX B MODE CHANNEL 06

Horizontal

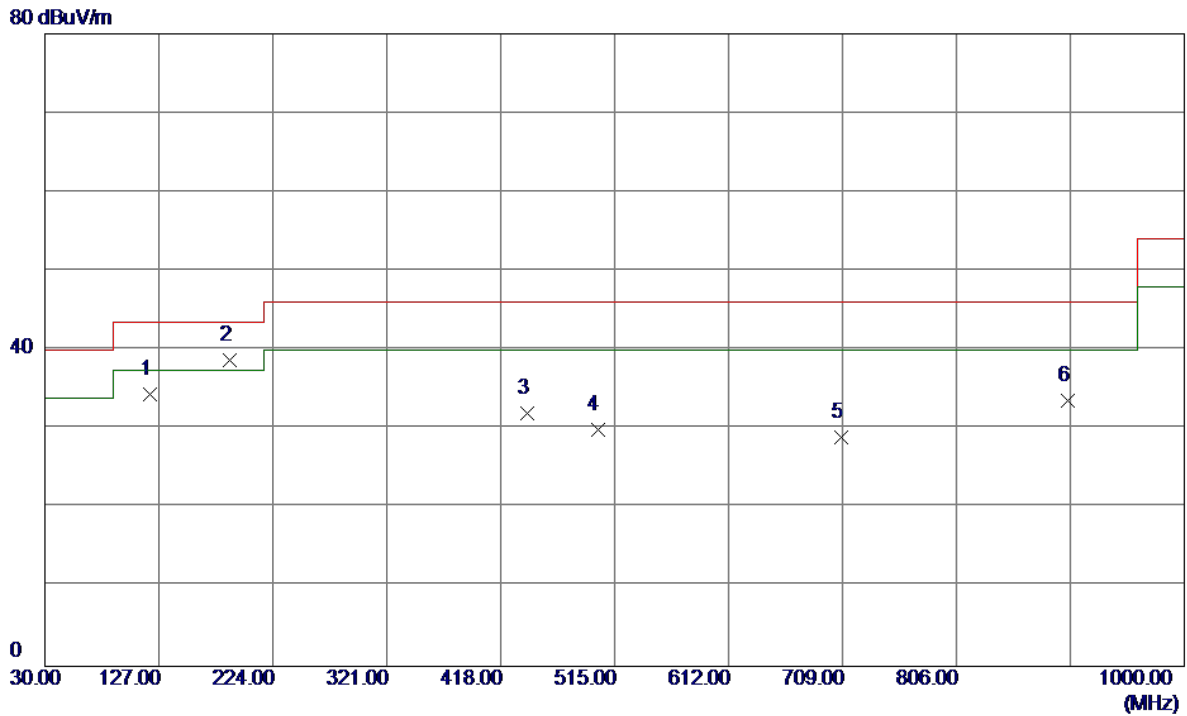
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	120.2100	41.64	-15.38	26.26	43.50	-17.24	Peak	
2 *	194.9000	52.96	-13.29	39.67	43.50	-3.83	Peak	
3	321.0000	41.48	-12.46	29.02	46.00	-16.98	Peak	
4	408.3000	42.58	-11.12	31.46	46.00	-14.54	Peak	
5	506.2700	36.65	-8.59	28.06	46.00	-17.94	Peak	
6	744.8900	30.37	-2.60	27.77	46.00	-18.23	Peak	

Test Mode: TX B MODE CHANNEL 11

Vertical

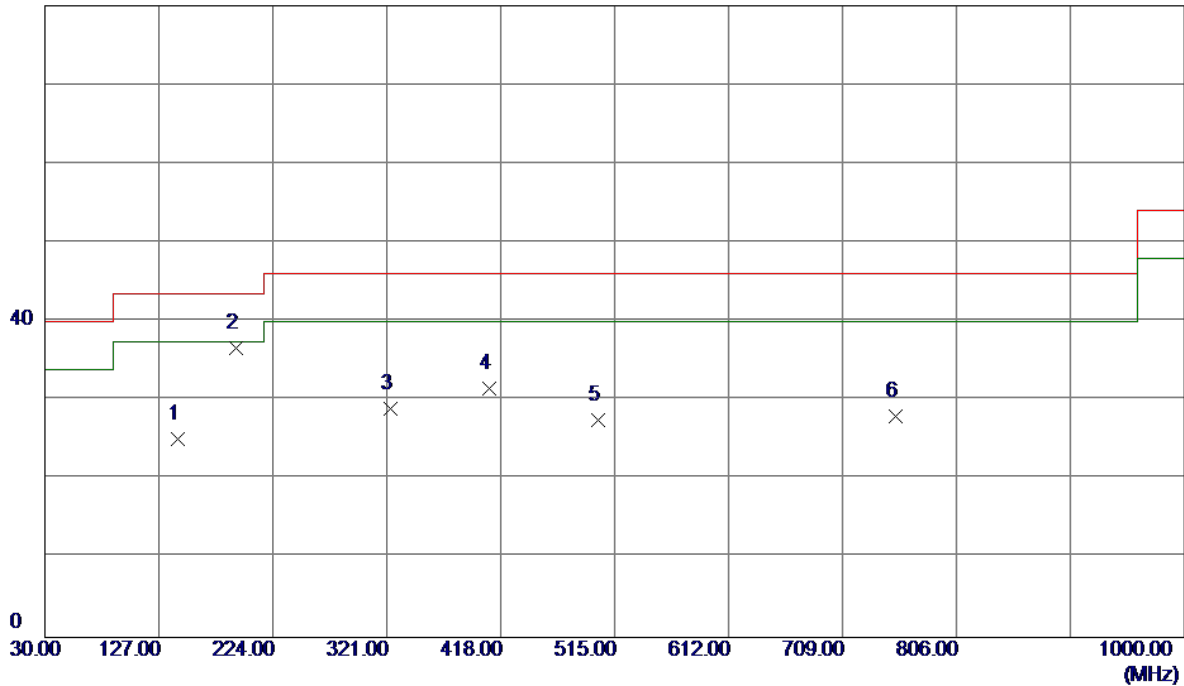


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	119.2400	49.91	-15.46	34.45	43.50	-9.05	Peak	
2 *	187.1400	51.30	-12.61	38.69	43.50	-4.81	Peak	
3	440.3100	42.25	-10.22	32.03	46.00	-13.97	Peak	
4	500.4500	38.65	-8.71	29.94	46.00	-16.06	Peak	
5	708.0300	32.68	-3.70	28.98	46.00	-17.02	Peak	
6	901.0600	32.59	1.05	33.64	46.00	-12.36	Peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal

80 dBuV/m



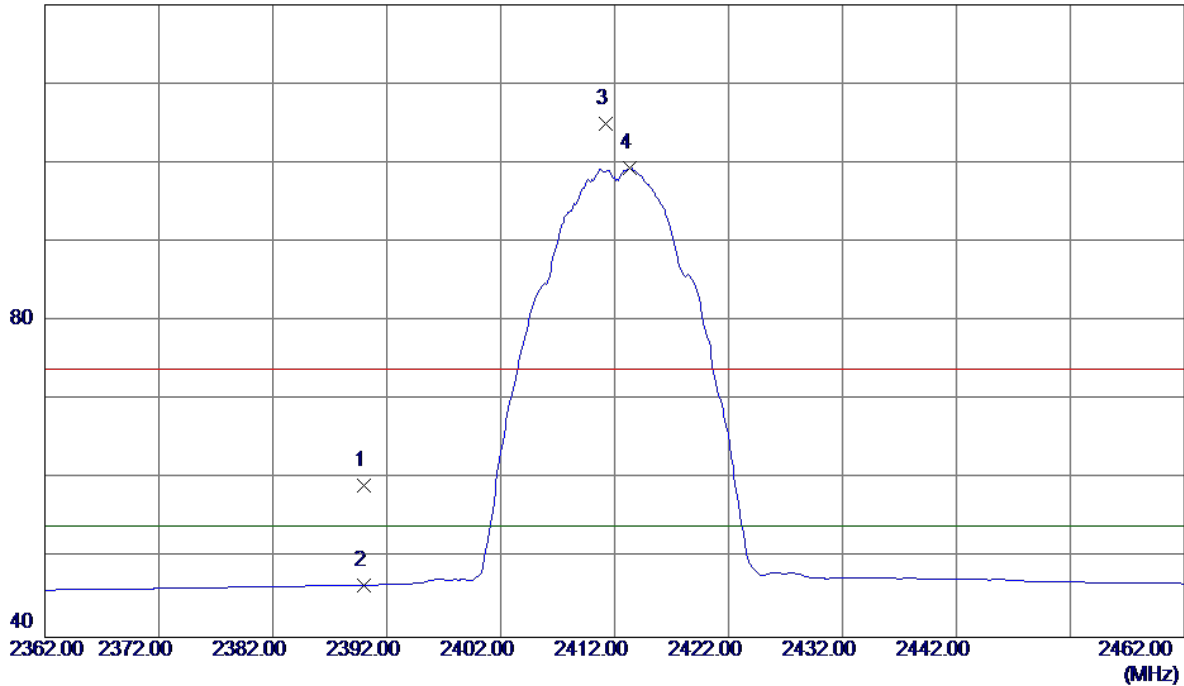
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	143.4900	39.07	-13.97	25.10	43.50	-18.40	Peak	
2 *	192.9600	49.82	-13.11	36.71	43.50	-6.79	Peak	
3	323.9100	41.37	-12.41	28.96	46.00	-17.04	Peak	
4	408.3000	42.64	-11.12	31.52	46.00	-14.48	Peak	
5	501.4200	36.20	-8.69	27.51	46.00	-18.49	Peak	
6	754.5900	30.40	-2.35	28.05	46.00	-17.95	Peak	

APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

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

Vertical

120 dBuV/m

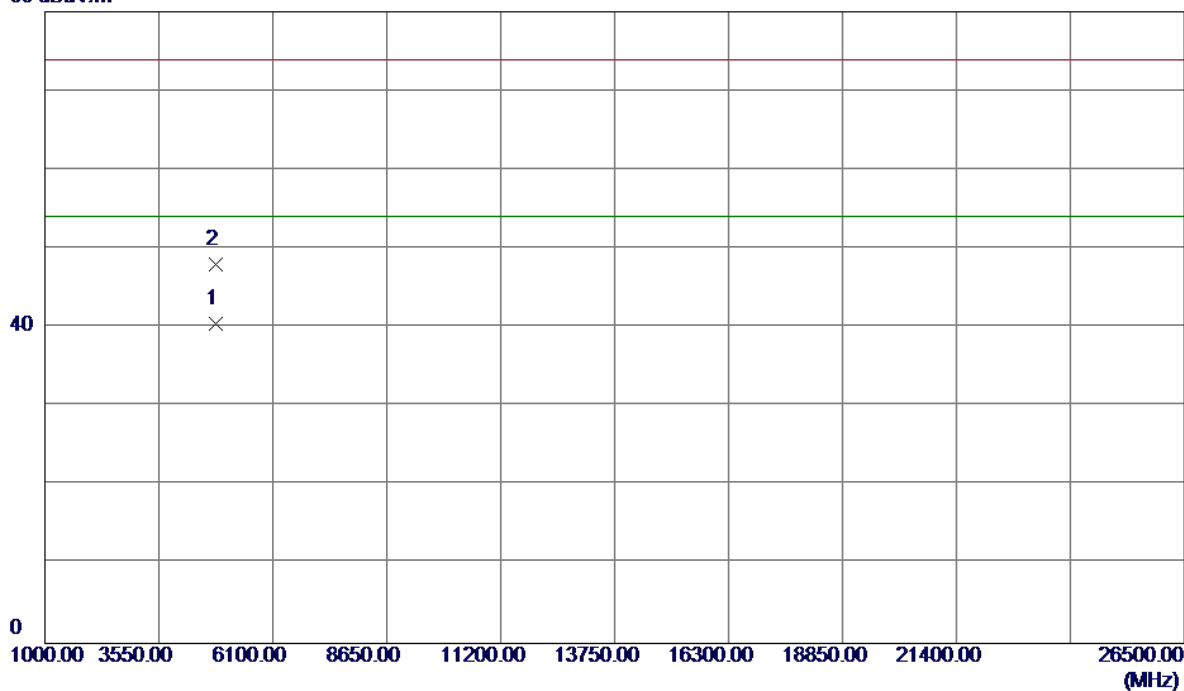


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.12	33.01	59.13	74.00	-14.87	Peak	
2	2390.0000	13.60	33.01	46.61	54.00	-7.39	AVG	
3	2411.2000	71.80	33.10	104.90	74.00	30.90	Peak	No Limit
4 *	2413.3000	66.25	33.11	99.36	54.00	45.36	AVG	No Limit

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

Vertical

80 dBuV/m

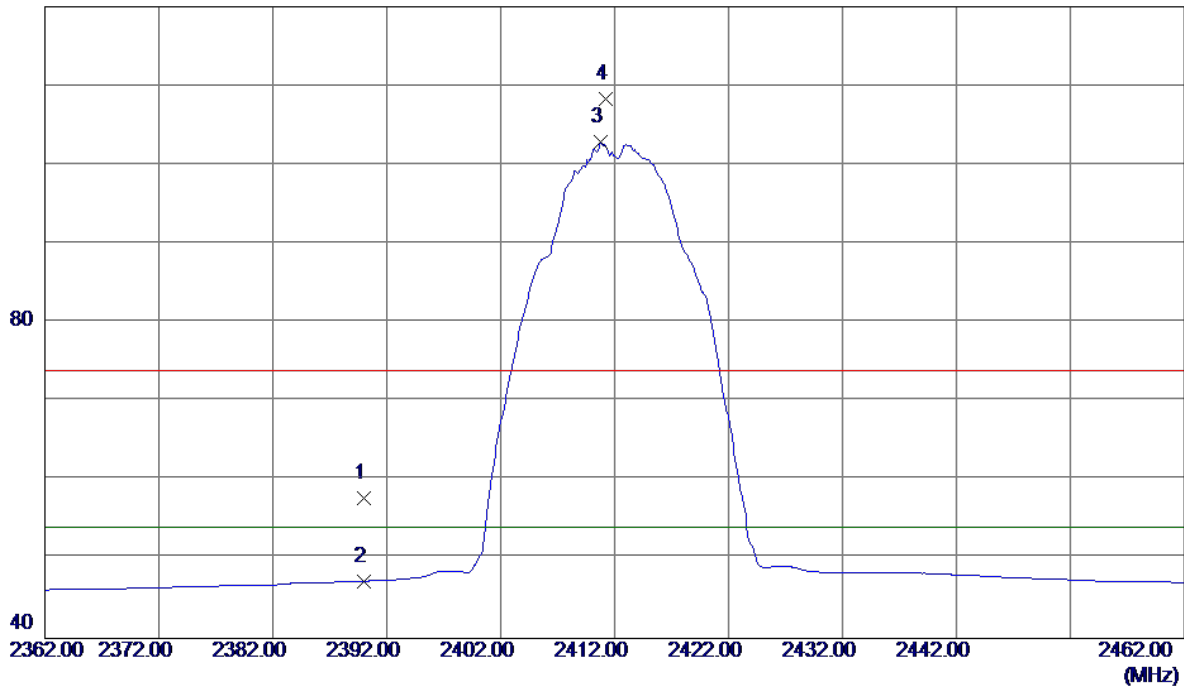


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9600	35.58	4.85	40.43	54.00	-13.57	AVG	
2	4824.1800	43.13	4.85	47.98	74.00	-26.02	Peak	

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

Horizontal

120 dBuV/m

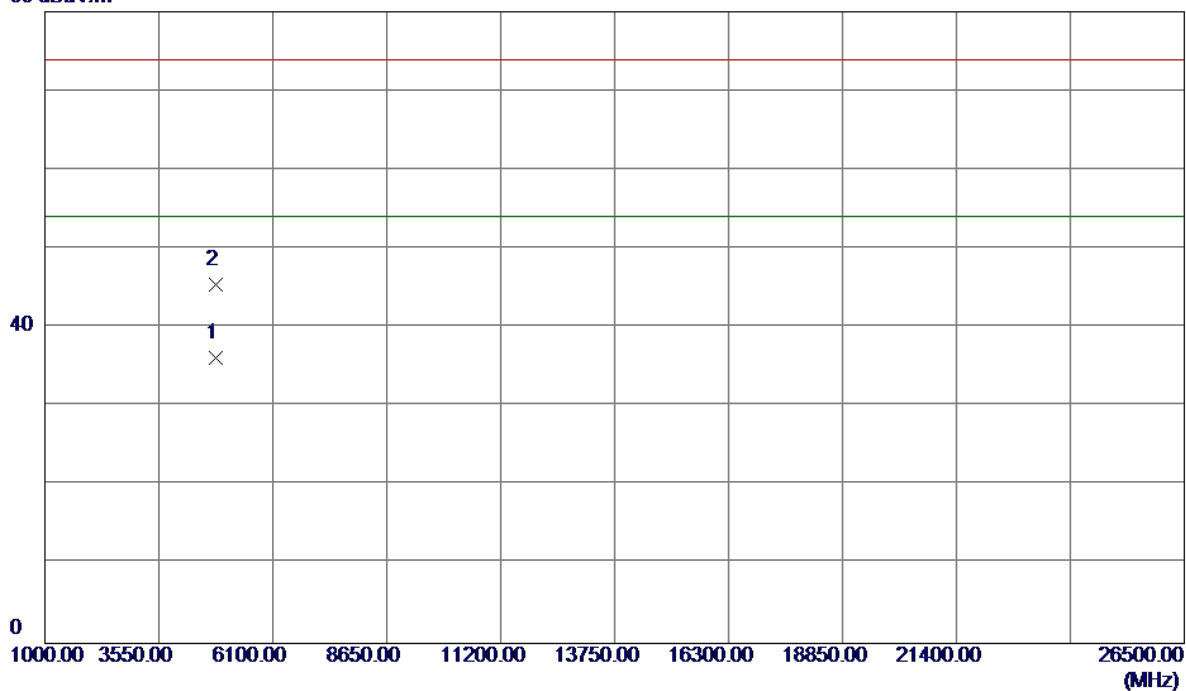


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.72	33.01	57.73	74.00	-16.27	Peak	
2	2390.0000	14.26	33.01	47.27	54.00	-6.73	AVG	
3 *	2410.8000	69.79	33.10	102.89	54.00	48.89	AVG	No Limit
4	2411.2000	75.15	33.10	108.25	74.00	34.25	Peak	No Limit

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

Horizontal

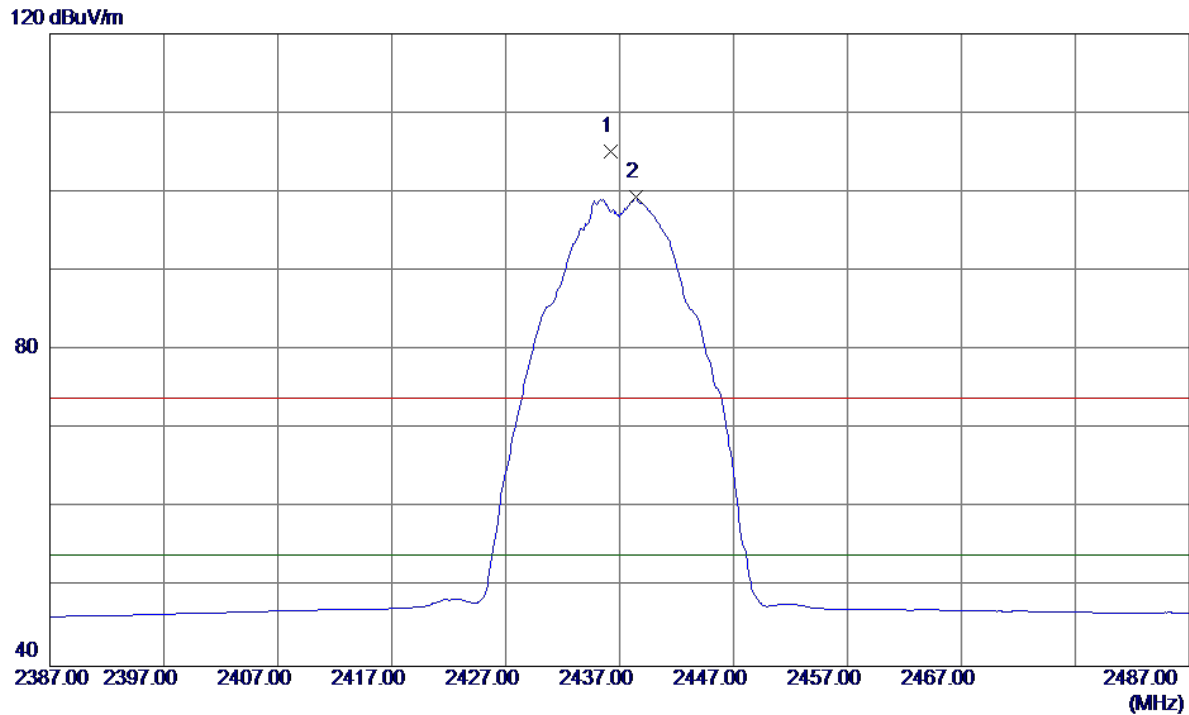
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.0600	31.33	4.85	36.18	54.00	-17.82	AVG	
2	4824.0200	40.60	4.85	45.45	74.00	-28.55	Peak	

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

Vertical

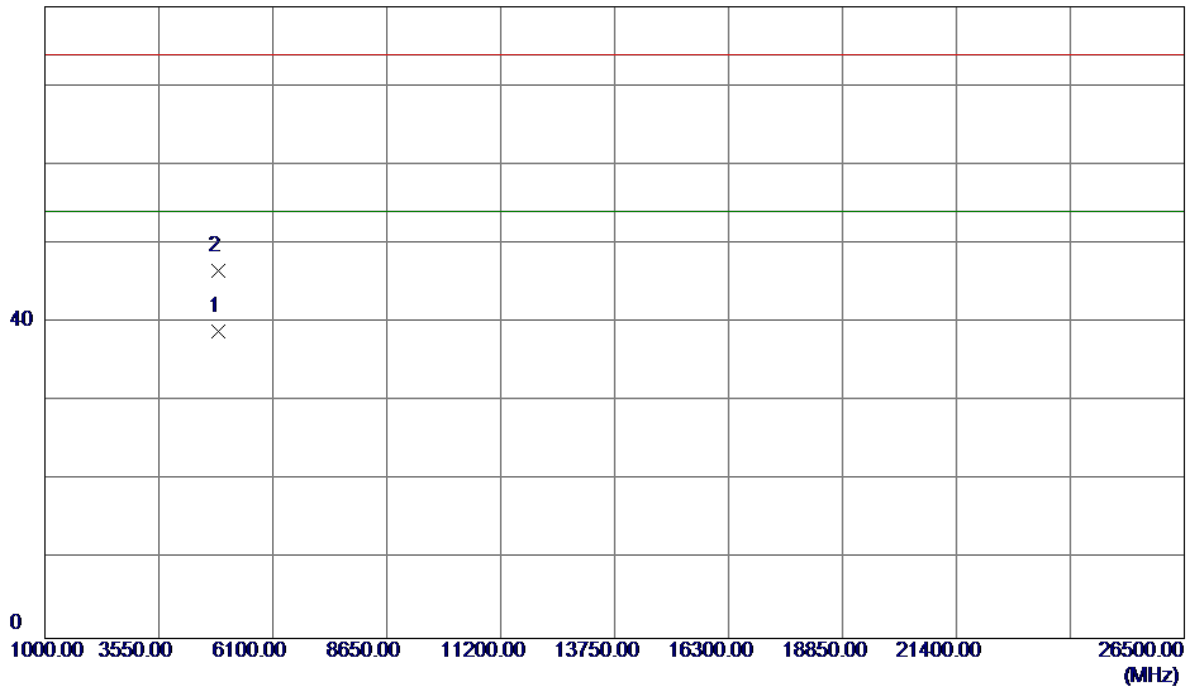


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.2000	71.88	33.20	105.08	74.00	31.08	Peak	No Limit
2 *	2438.4000	66.08	33.21	99.29	54.00	45.29	AVG	No Limit

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

Vertical

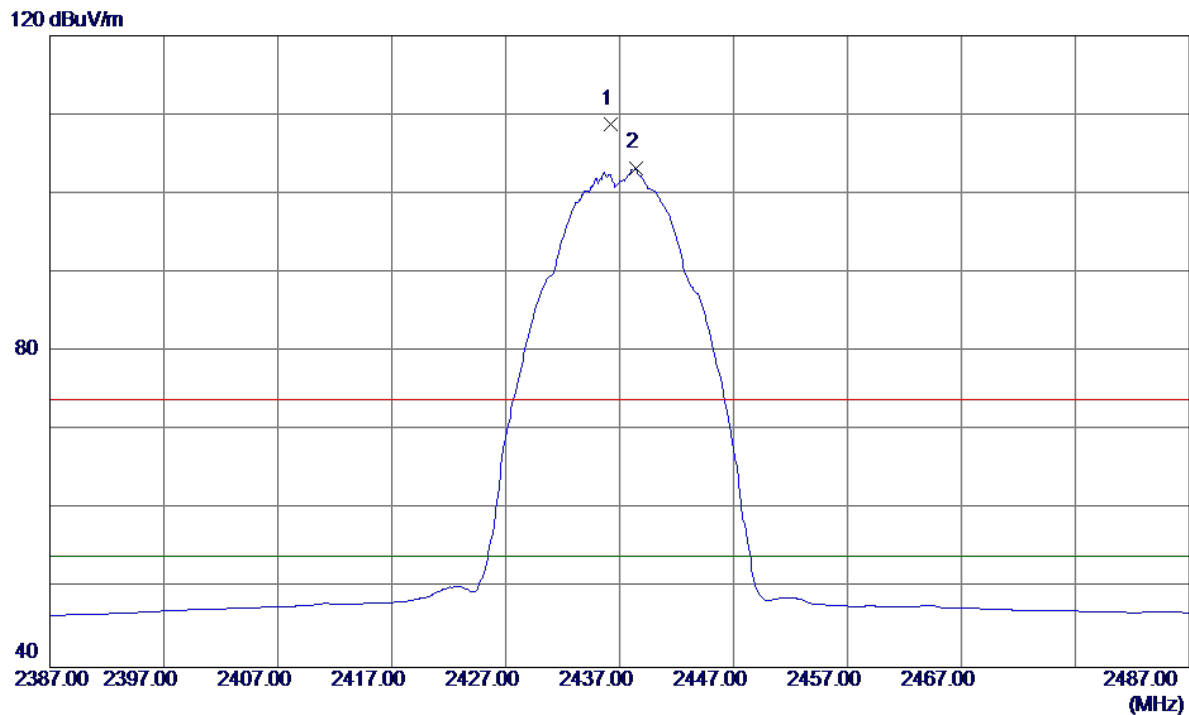
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0200	33.83	5.07	38.90	54.00	-15.10	AVG	
2	4873.8800	41.54	5.07	46.61	74.00	-27.39	Peak	

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

Horizontal

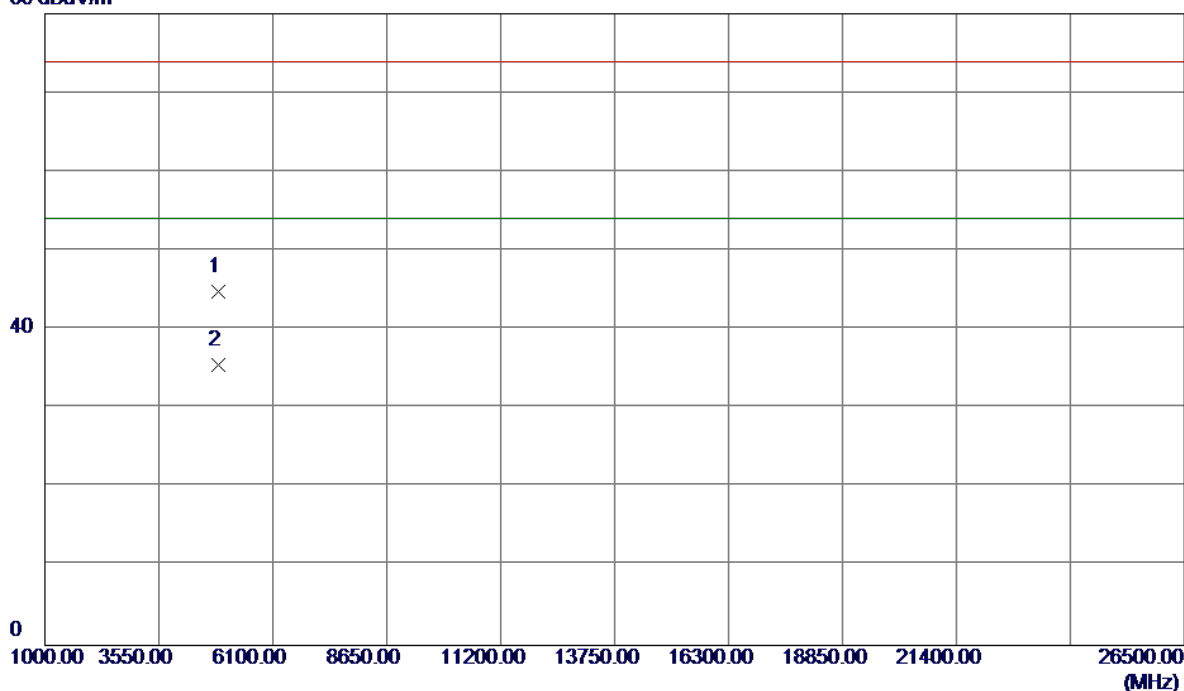


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.2000	75.64	33.20	108.84	74.00	34.84	Peak	No Limit
2 *	2438.4000	70.07	33.21	103.28	54.00	49.28	AVG	No Limit

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

Horizontal

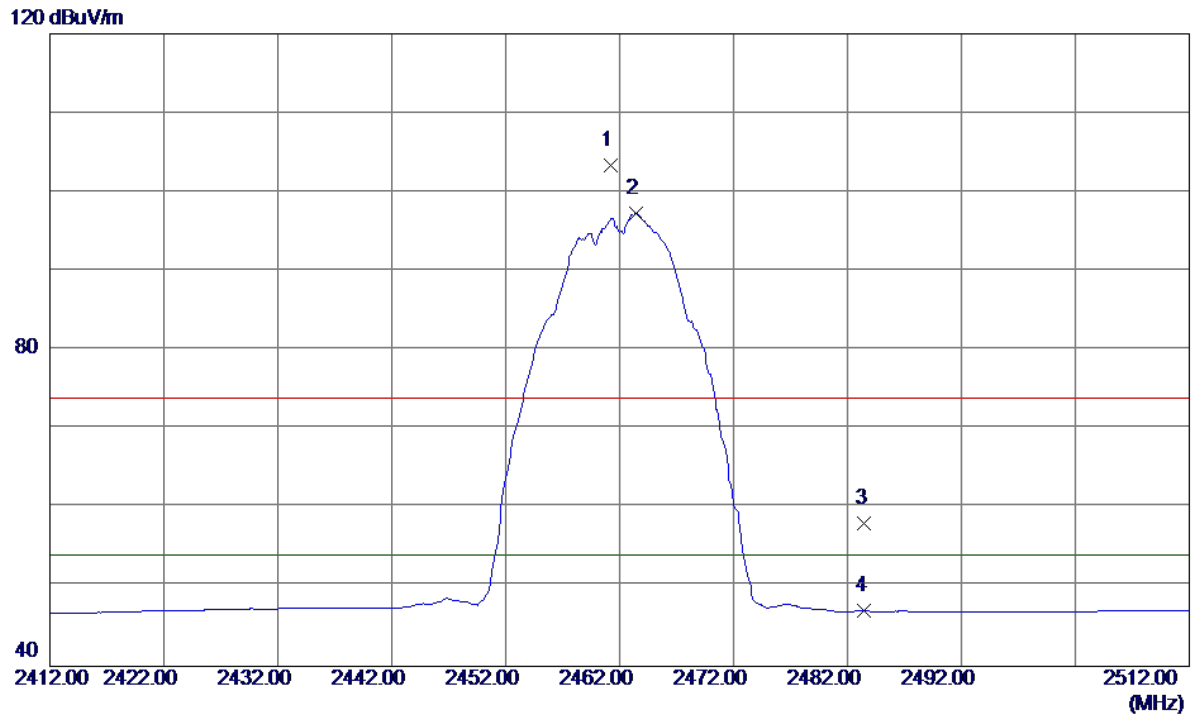
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.8200	39.73	5.06	44.79	74.00	-29.21	Peak	
2 *	4874.0400	30.40	5.07	35.47	54.00	-18.53	AVG	

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

Vertical

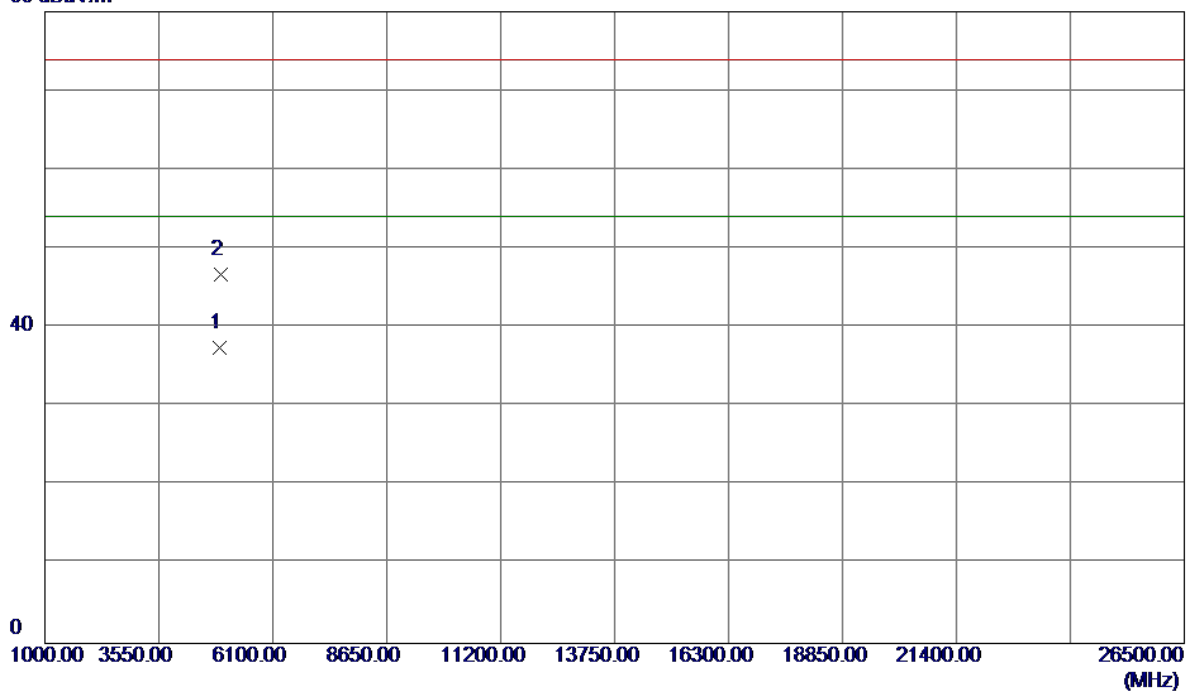


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.2000	70.00	33.31	103.31	74.00	29.31	Peak	No Limit
2 *	2463.4000	64.00	33.32	97.32	54.00	43.32	AVG	No Limit
3	2483.5000	24.69	33.40	58.09	74.00	-15.91	Peak	
4	2483.5000	13.58	33.40	46.98	54.00	-7.02	AVG	

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

Vertical

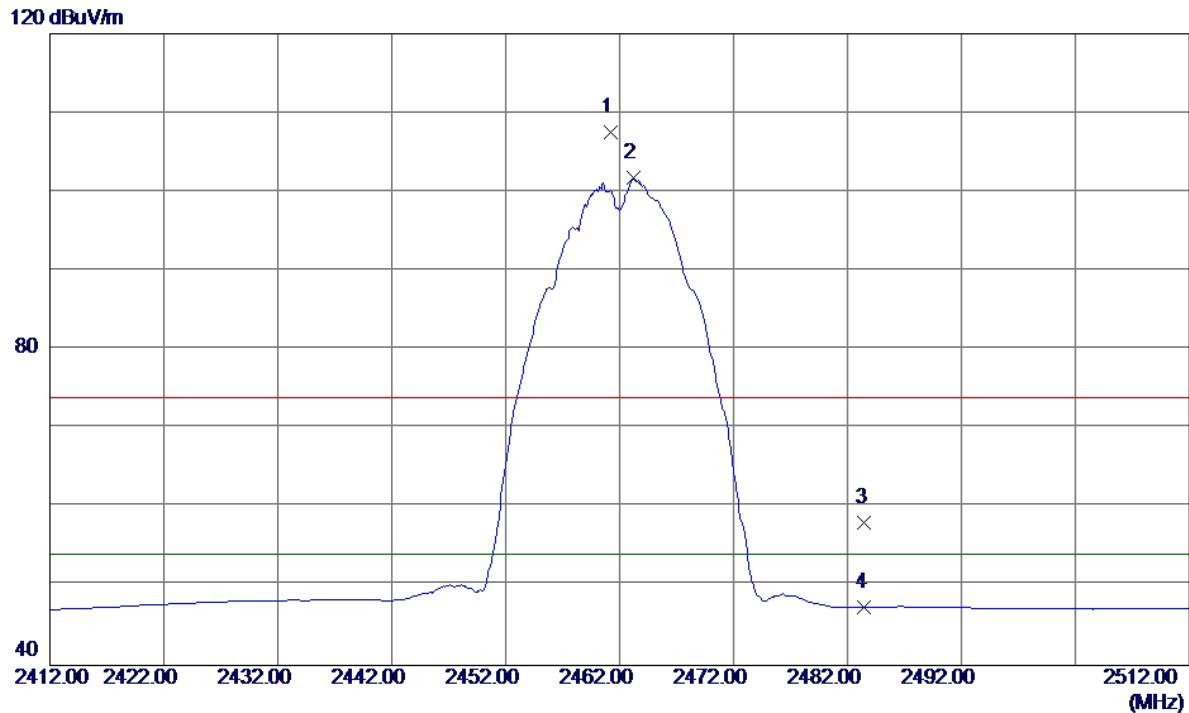
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.0600	32.14	5.28	37.42	54.00	-16.58	AVG	
2	4924.1800	41.44	5.28	46.72	74.00	-27.28	Peak	

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

Horizontal

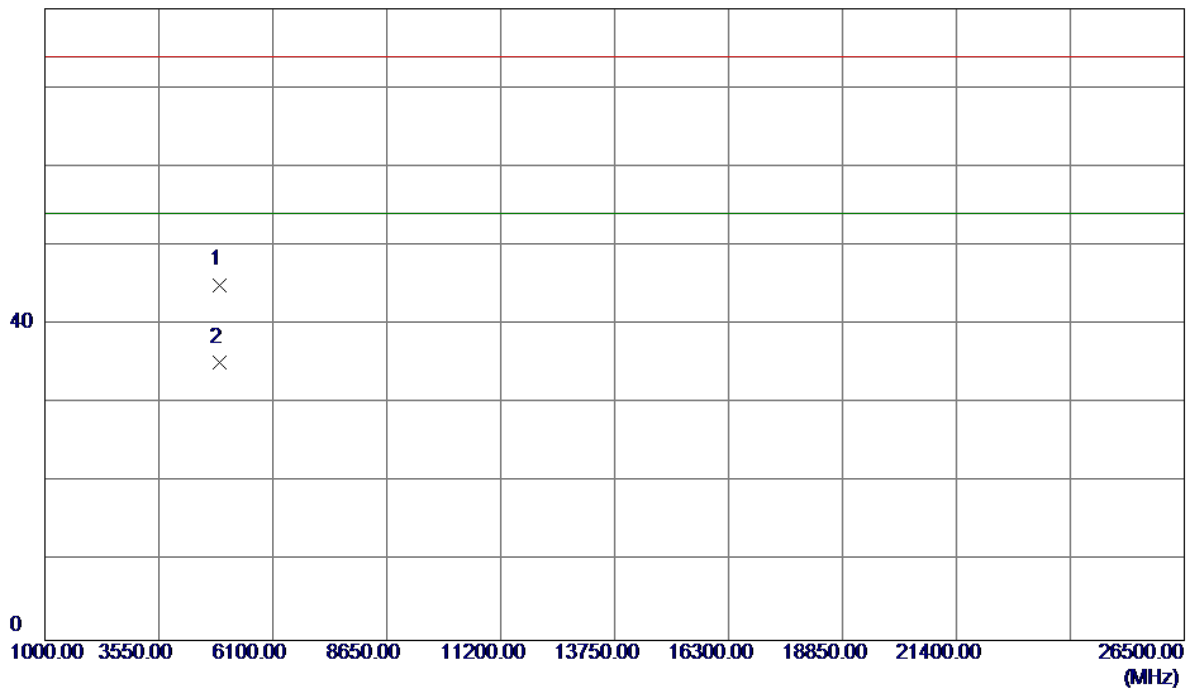


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.2000	74.19	33.31	107.50	74.00	33.50	Peak	No Limit
2 *	2463.2000	68.36	33.32	101.68	54.00	47.68	AVG	No Limit
3	2483.5000	24.68	33.40	58.08	74.00	-15.92	Peak	
4	2483.5000	14.02	33.40	47.42	54.00	-6.58	AVG	

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

Horizontal

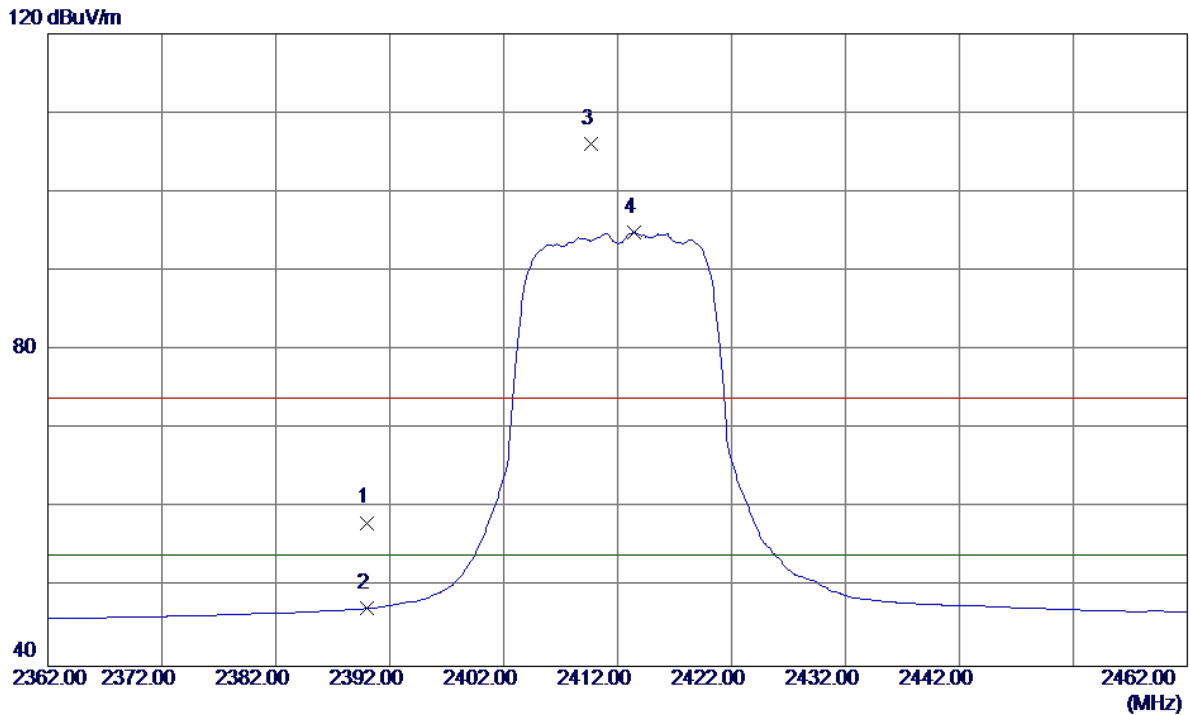
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.0600	39.76	5.28	45.04	74.00	-28.96	Peak	
2 *	4924.0600	29.92	5.28	35.20	54.00	-18.80	AVG	

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

Vertical

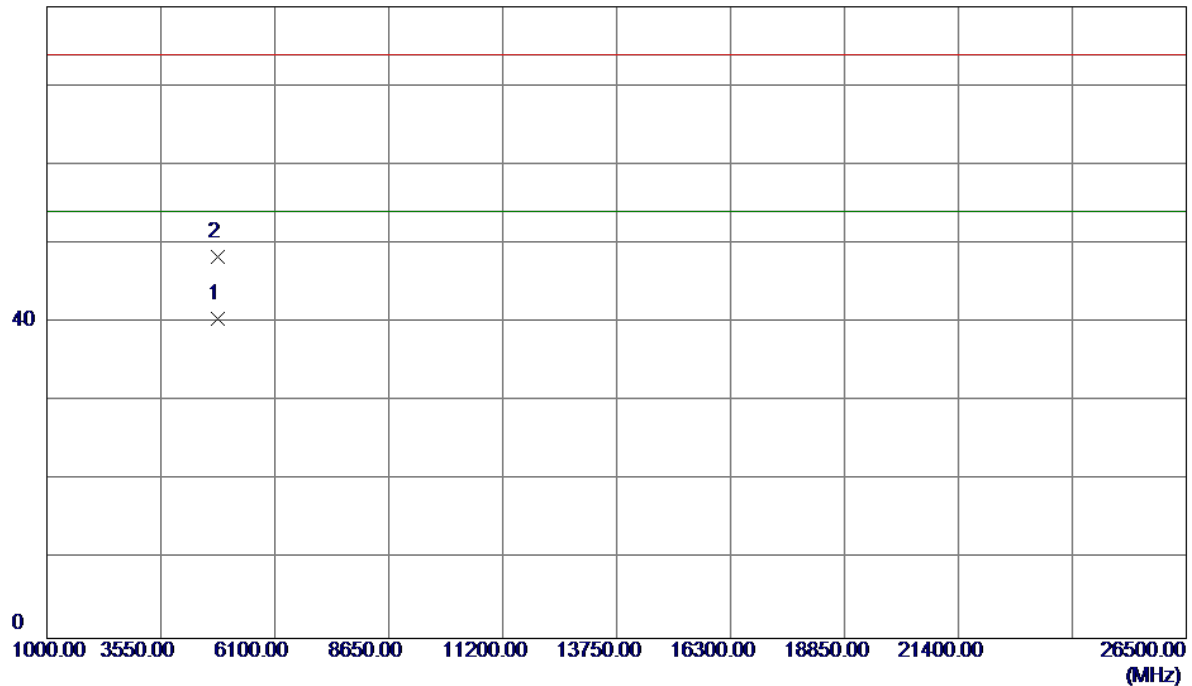


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.15	33.01	58.16	74.00	-15.84	Peak	
2	2390.0000	14.30	33.01	47.31	54.00	-6.69	AVG	
3	2409.7000	72.92	33.09	106.01	74.00	32.01	Peak	No Limit
4 *	2413.4000	61.80	33.11	94.91	54.00	40.91	AVG	No Limit

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

Vertical

80 dBuV/m

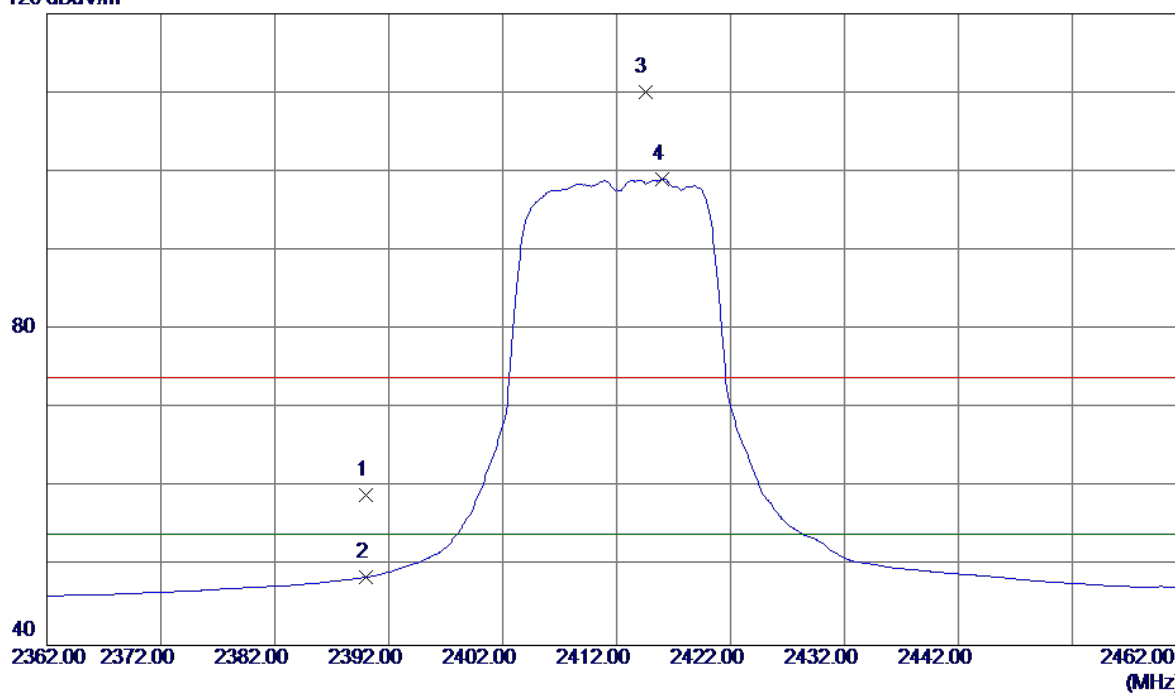


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.8600	35.65	4.85	40.50	54.00	-13.50	AVG	
2	4824.3400	43.48	4.86	48.34	74.00	-25.66	Peak	

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

Horizontal

120 dBuV/m

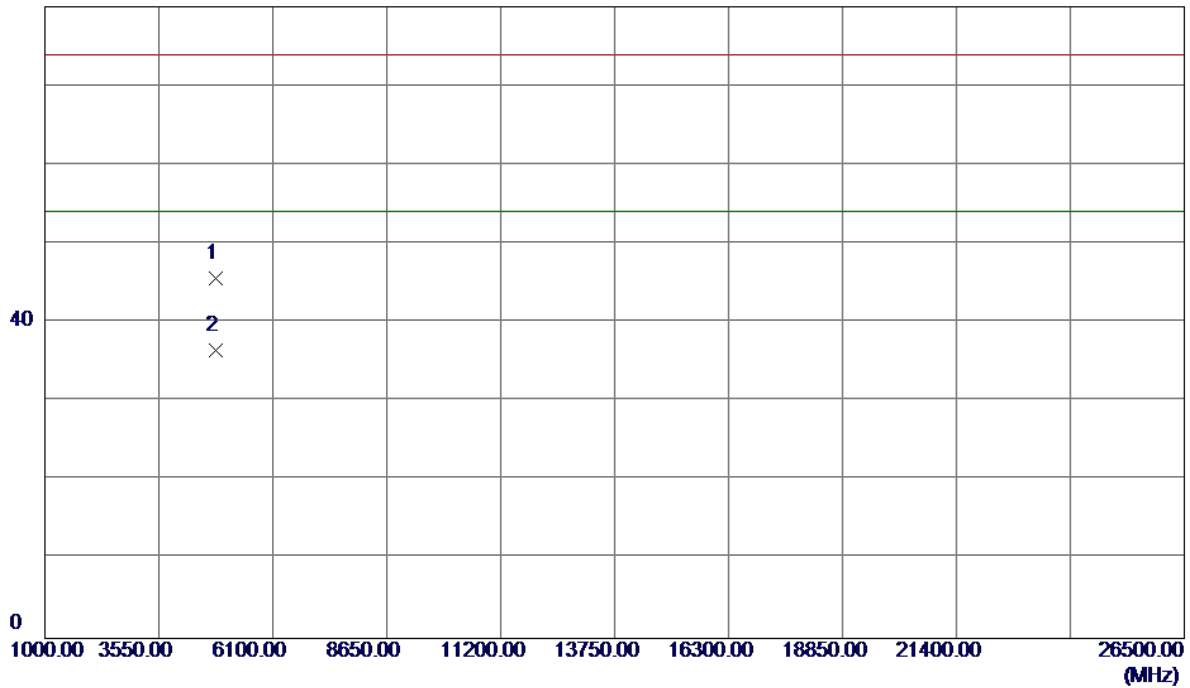


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.02	33.01	59.03	74.00	-14.97	Peak	
2	2390.0000	15.63	33.01	48.64	54.00	-5.36	AVG	
3	2414.5000	76.92	33.11	110.03	74.00	36.03	Peak	No Limit
4 *	2416.0000	65.96	33.12	99.08	54.00	45.08	AVG	No Limit

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

Horizontal

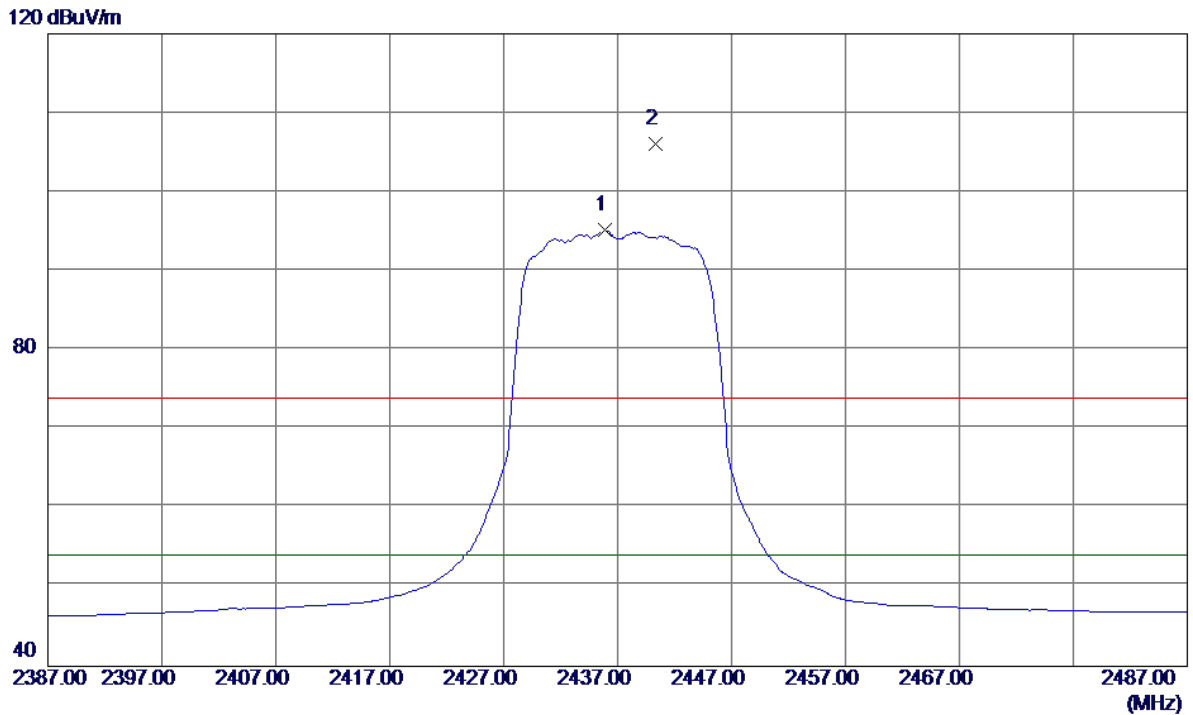
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.1200	40.79	4.85	45.64	74.00	-28.36	Peak	
2 *	4824.3600	31.55	4.86	36.41	54.00	-17.59	AVG	

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

Vertical

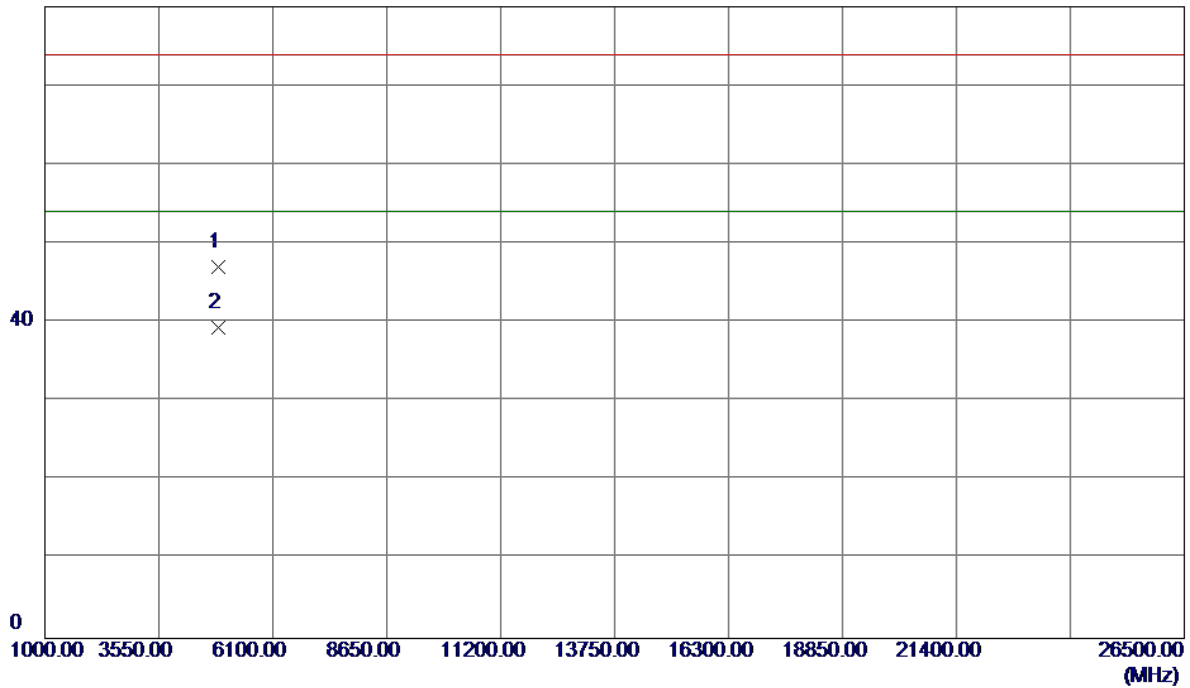


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2435.9000	61.94	33.20	95.14	54.00	41.14	AVG	No Limit
2	2440.3000	72.88	33.22	106.10	74.00	32.10	Peak	No Limit

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

Vertical

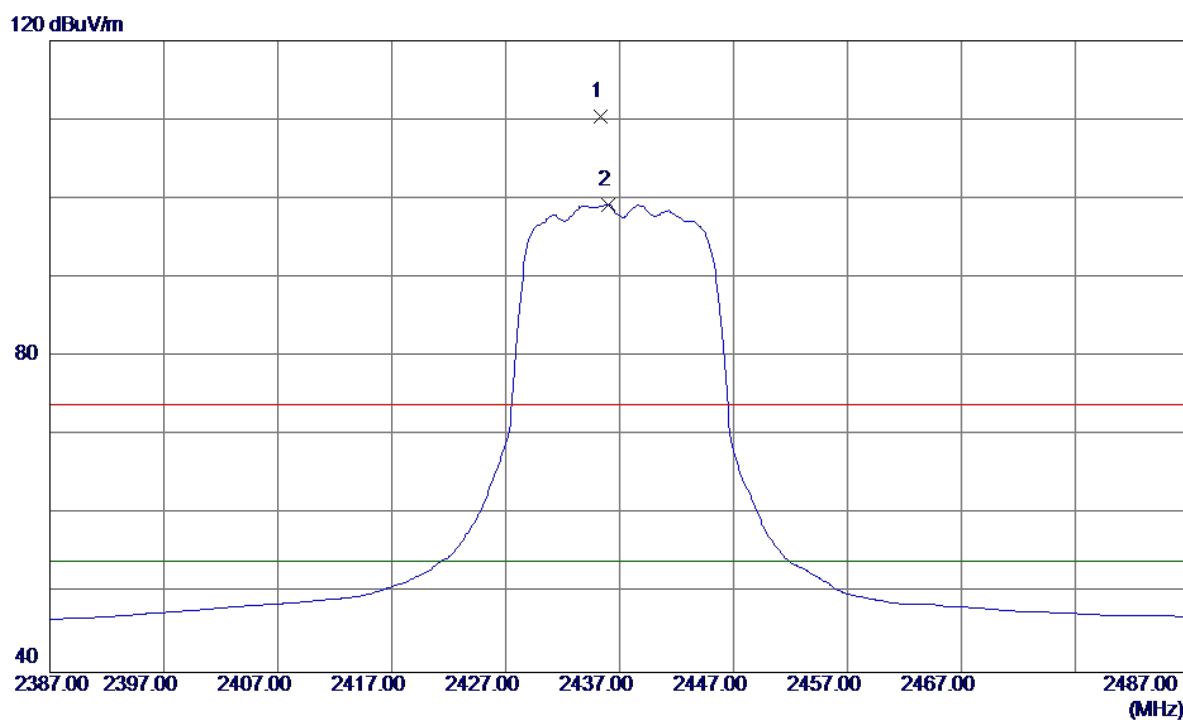
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.5400	41.96	5.06	47.02	74.00	-26.98	Peak	
2 *	4874.0200	34.25	5.07	39.32	54.00	-14.68	AVG	

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

Horizontal

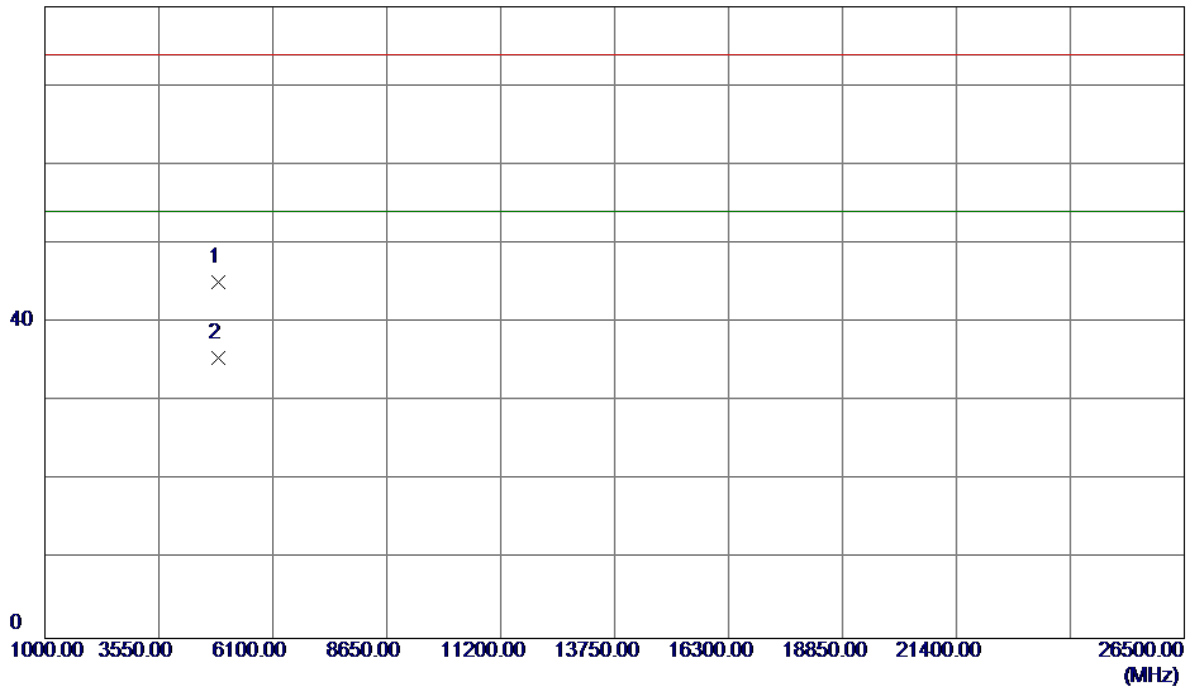


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.3000	77.15	33.20	110.35	74.00	36.35	Peak	No Limit
2 *	2436.0000	65.99	33.20	99.19	54.00	45.19	AVG	No Limit

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

Horizontal

80 dBuV/m

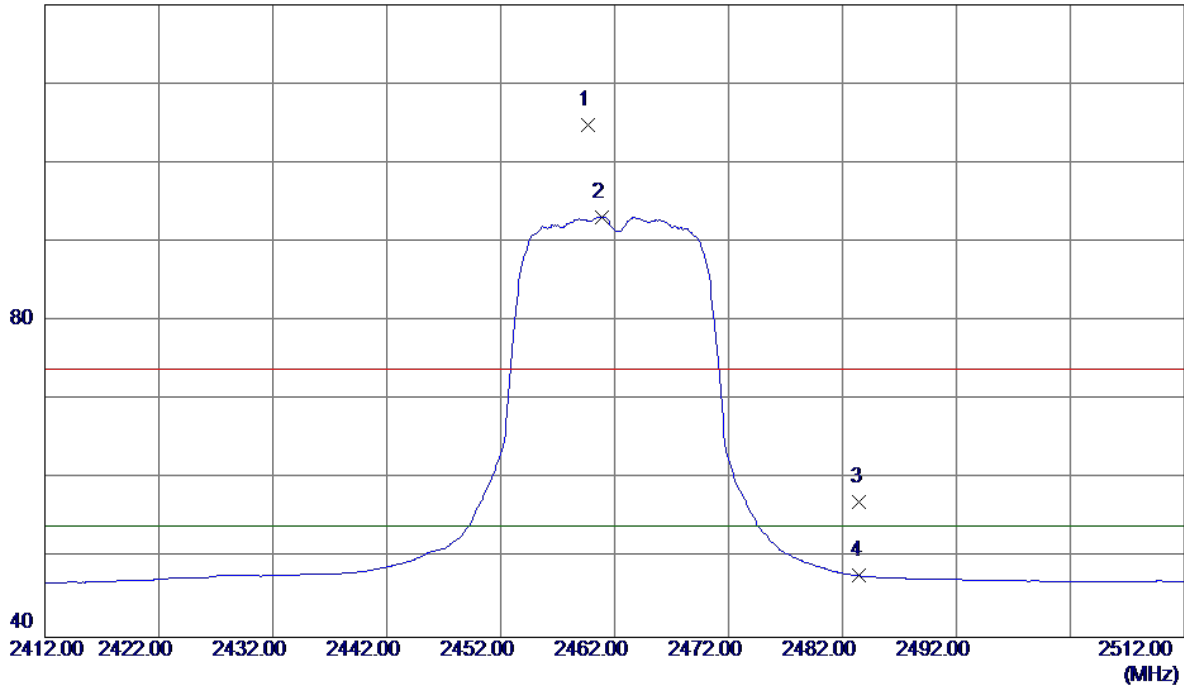


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.2599	40.13	5.06	45.19	74.00	-28.81	Peak	
2 *	4874.2400	30.40	5.07	35.47	54.00	-18.53	AVG	

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

Vertical

120 dBuV/m

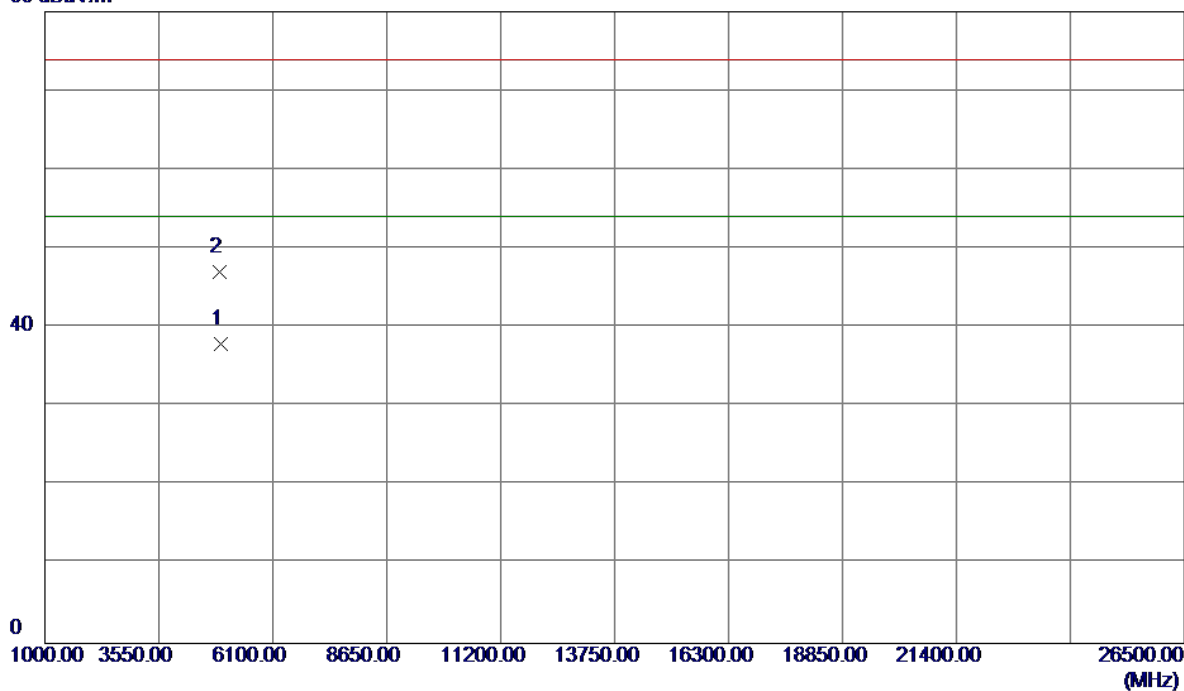


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.7000	71.56	33.30	104.86	74.00	30.86	Peak	No Limit
2 *	2460.9000	59.87	33.31	93.18	54.00	39.18	AVG	No Limit
3	2483.5000	23.76	33.40	57.16	74.00	-16.84	Peak	
4	2483.5000	14.40	33.40	47.80	54.00	-6.20	AVG	

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

Vertical

80 dBuV/m

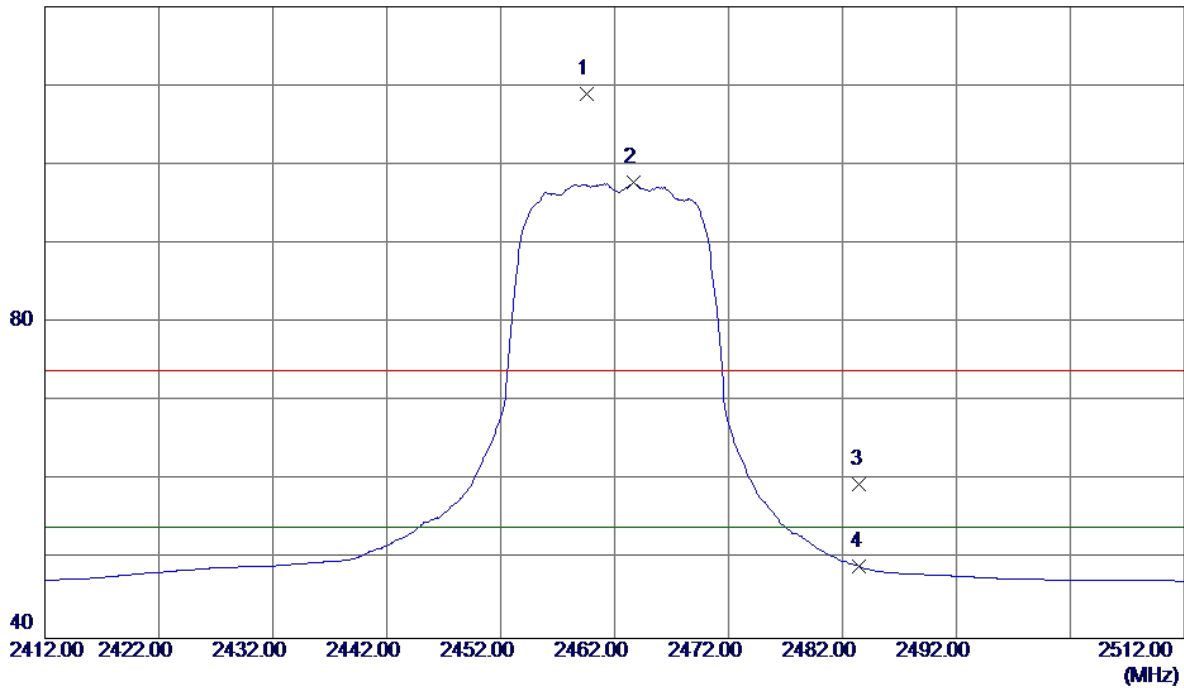


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.2500	32.68	5.28	37.96	54.00	-16.04	AVG	
2	4924.1100	41.83	5.28	47.11	74.00	-26.89	Peak	

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

Horizontal

120 dBuV/m

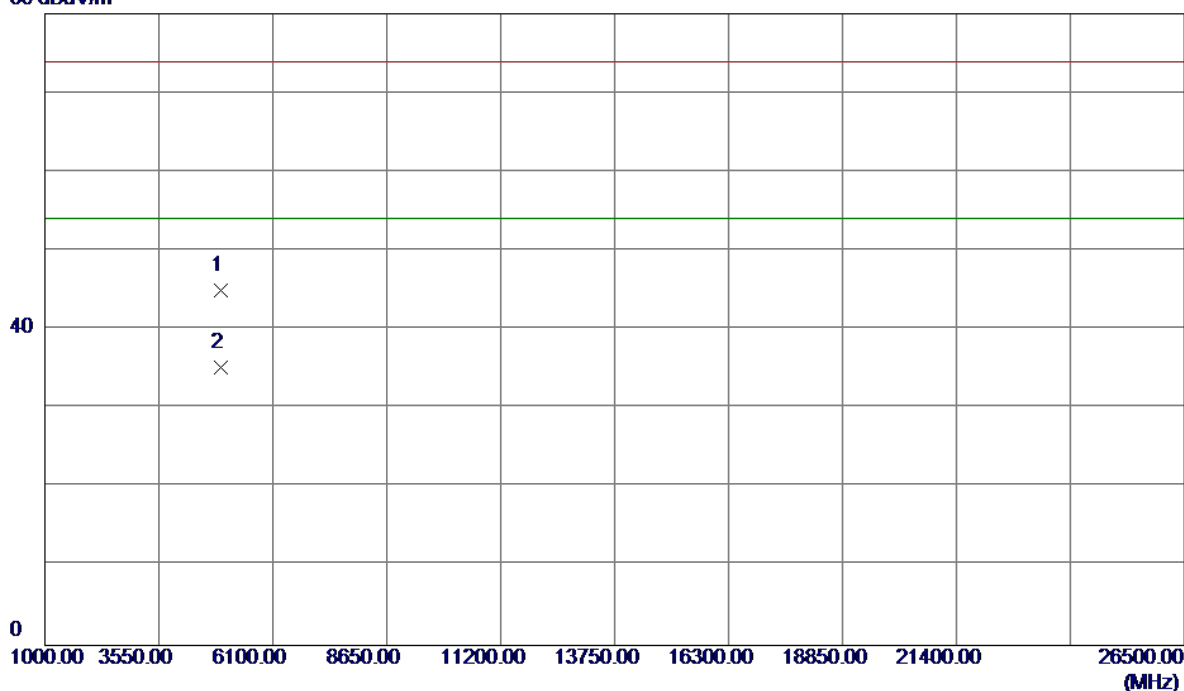


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.6000	75.72	33.30	109.02	74.00	35.02	Peak	No Limit
2 *	2463.7000	64.39	33.32	97.71	54.00	43.71	AVG	No Limit
3	2483.5000	26.06	33.40	59.46	74.00	-14.54	Peak	
4	2483.5000	15.69	33.40	49.09	54.00	-4.91	AVG	

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

Horizontal

80 dBuV/m

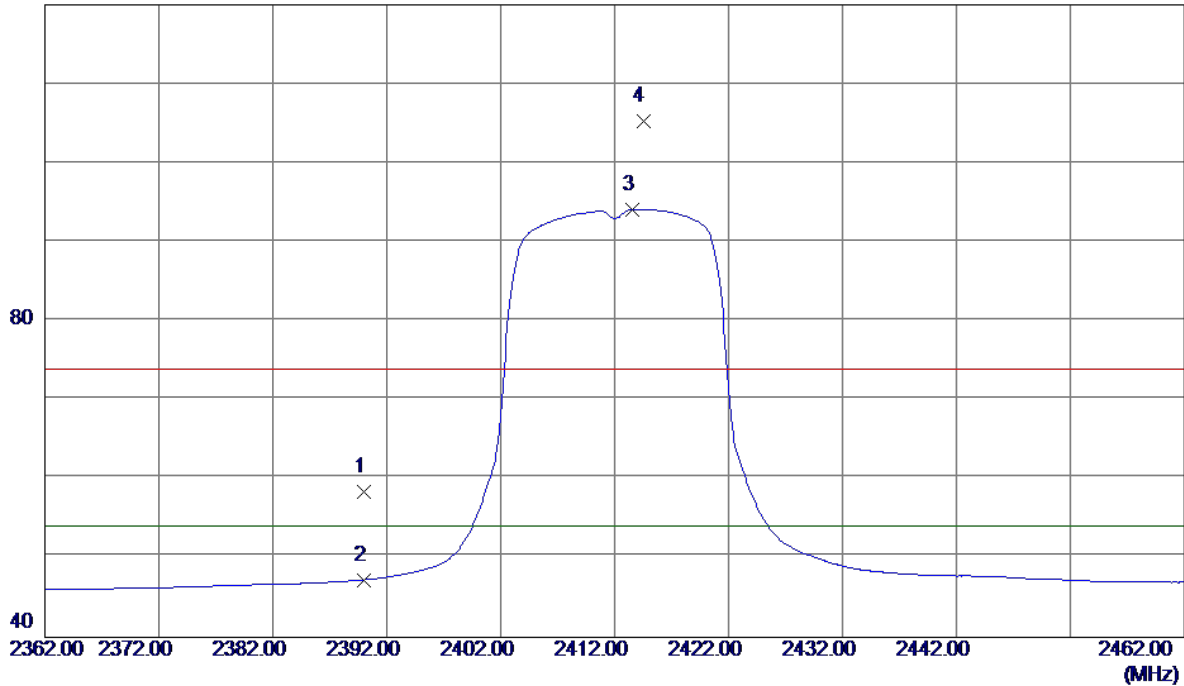


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.3100	39.68	5.28	44.96	74.00	-29.04	Peak	
2 *	4924.3100	29.92	5.28	35.20	54.00	-18.80	AVG	

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

Vertical

120 dBuV/m

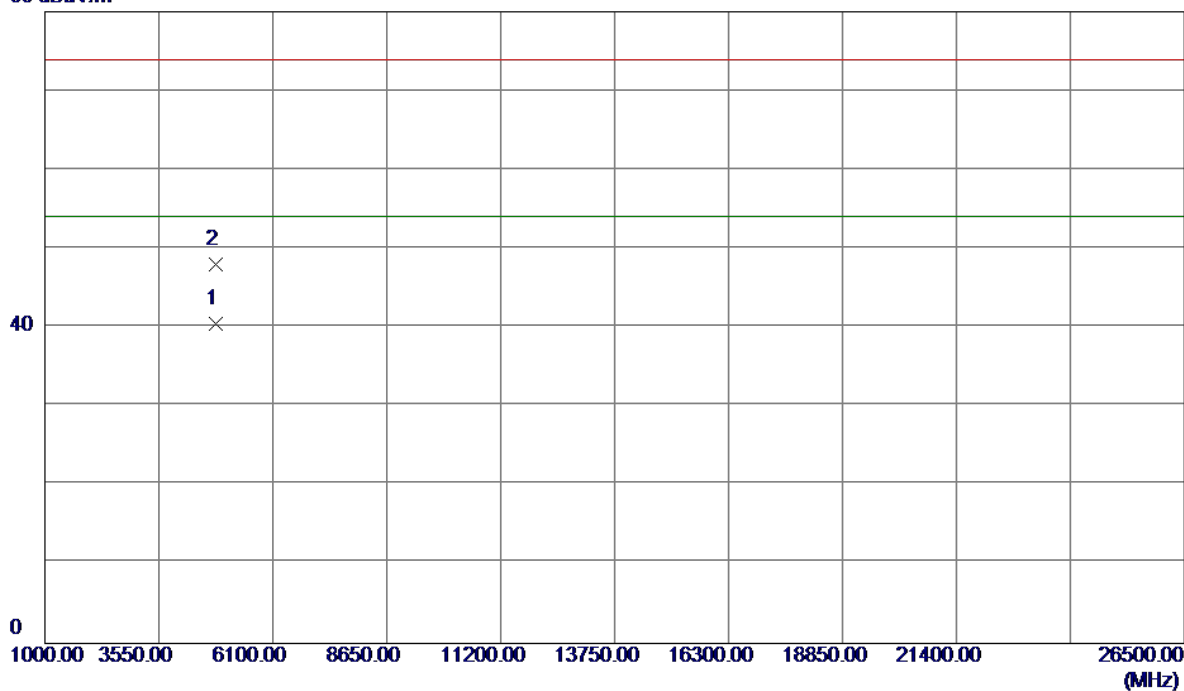


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.44	33.01	58.45	74.00	-15.55	Peak	
2	2390.0000	14.26	33.01	47.27	54.00	-6.73	AVG	
3 *	2413.6000	61.01	33.11	94.12	54.00	40.12	AVG	No Limit
4	2414.5000	72.14	33.11	105.25	74.00	31.25	Peak	No Limit

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

Vertical

80 dBuV/m

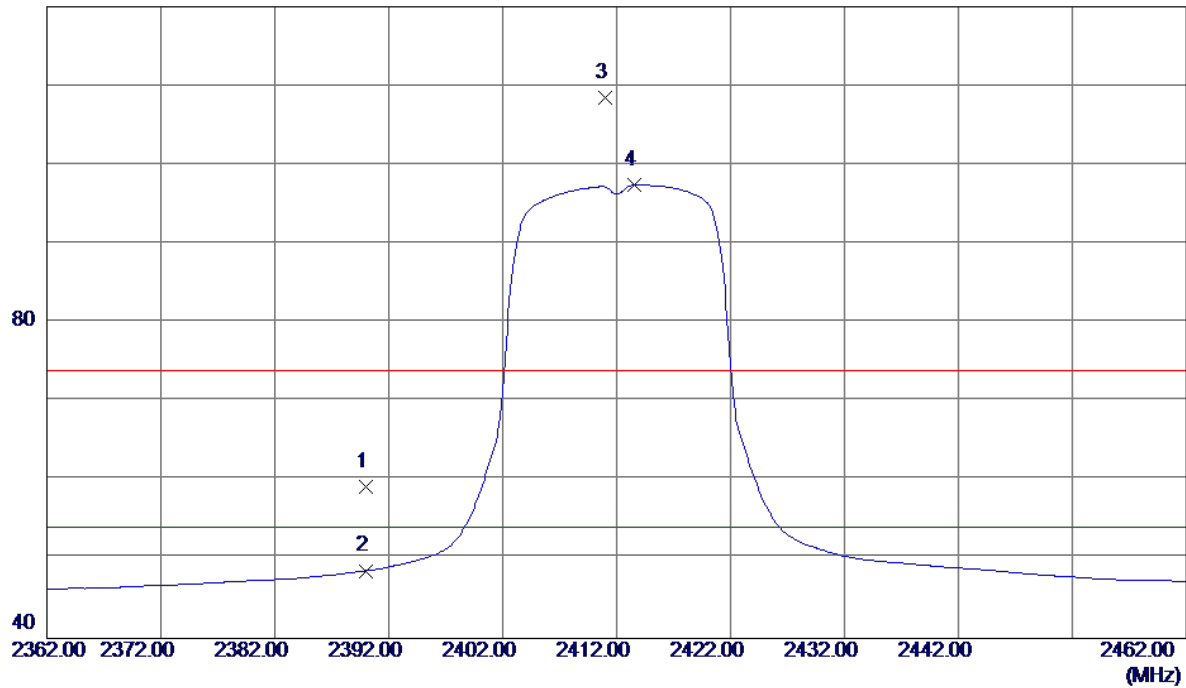


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.4500	35.63	4.85	40.48	54.00	-13.52	AVG	
2	4824.2599	43.13	4.85	47.98	74.00	-26.02	Peak	

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

Horizontal

120 dBuV/m

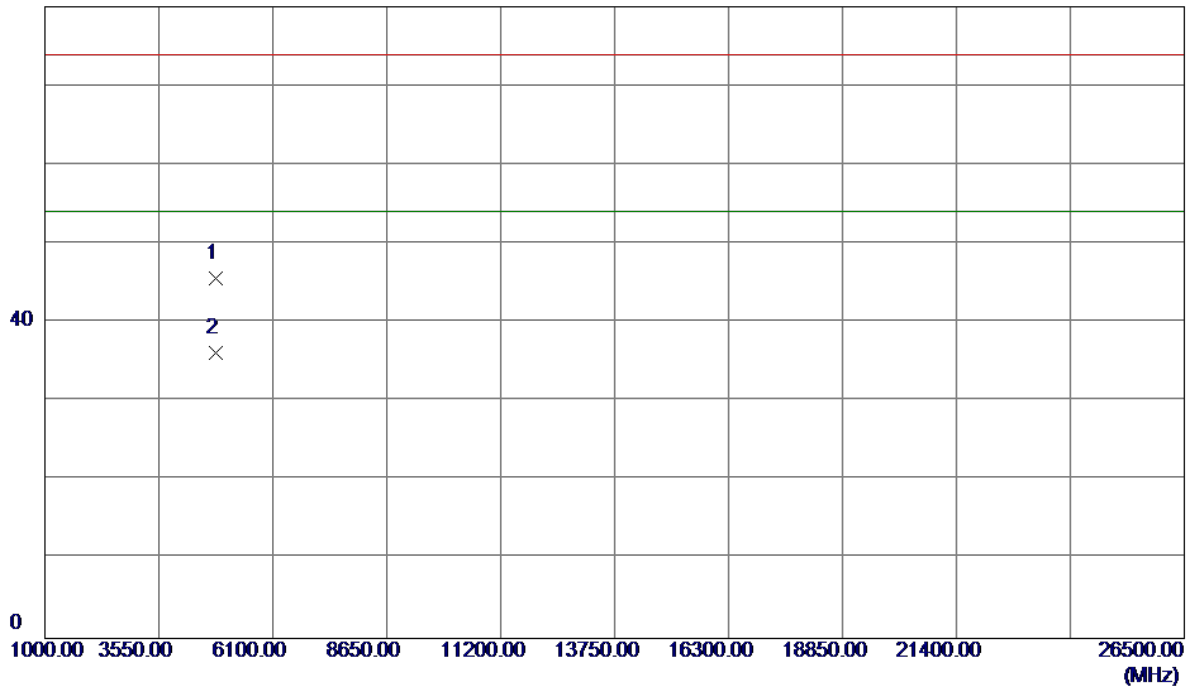


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.17	33.01	59.18	74.00	-14.82	Peak	
2	2390.0000	15.55	33.01	48.56	54.00	-5.44	AVG	
3	2411.0000	75.42	33.10	108.52	74.00	34.52	Peak	No Limit
4 *	2413.6000	64.31	33.11	97.42	54.00	43.42	AVG	No Limit

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

Horizontal

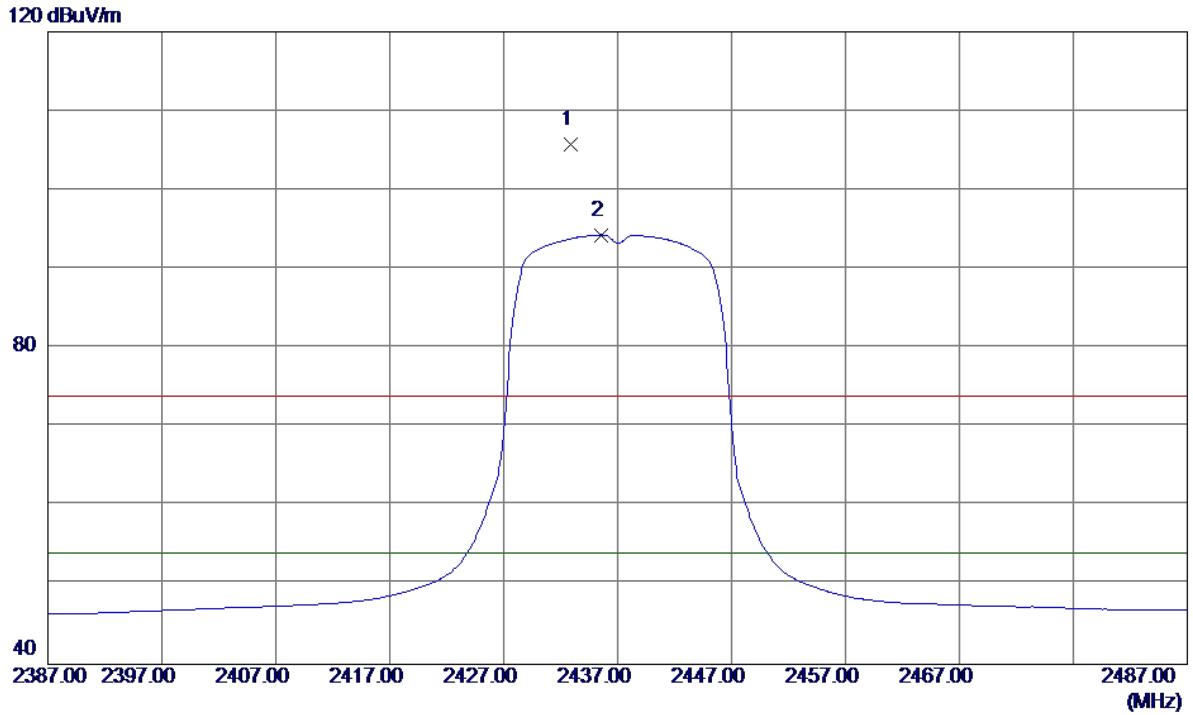
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.2799	40.79	4.85	45.64	74.00	-28.36	Peak	
2 *	4824.3100	31.33	4.85	36.18	54.00	-17.82	AVG	

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

Vertical

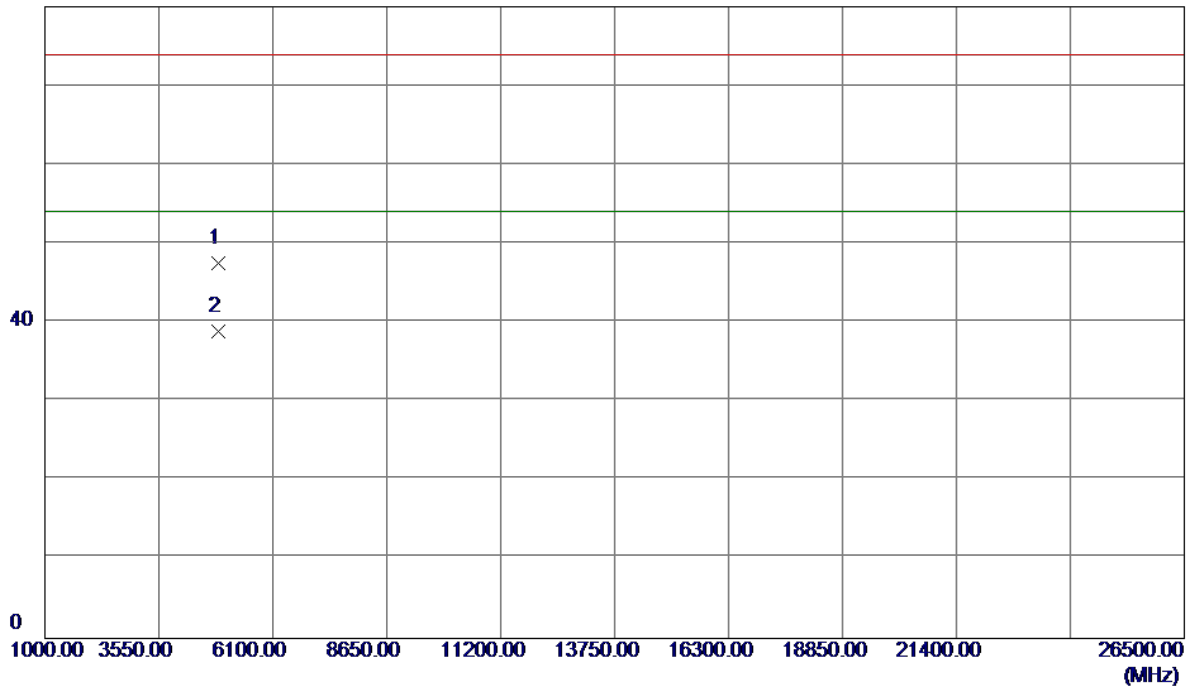


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2432.9000	72.49	33.19	105.68	74.00	31.68	Peak	No Limit
2 *	2435.6000	61.12	33.20	94.32	54.00	40.32	AVG	No Limit

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

Vertical

80 dBuV/m

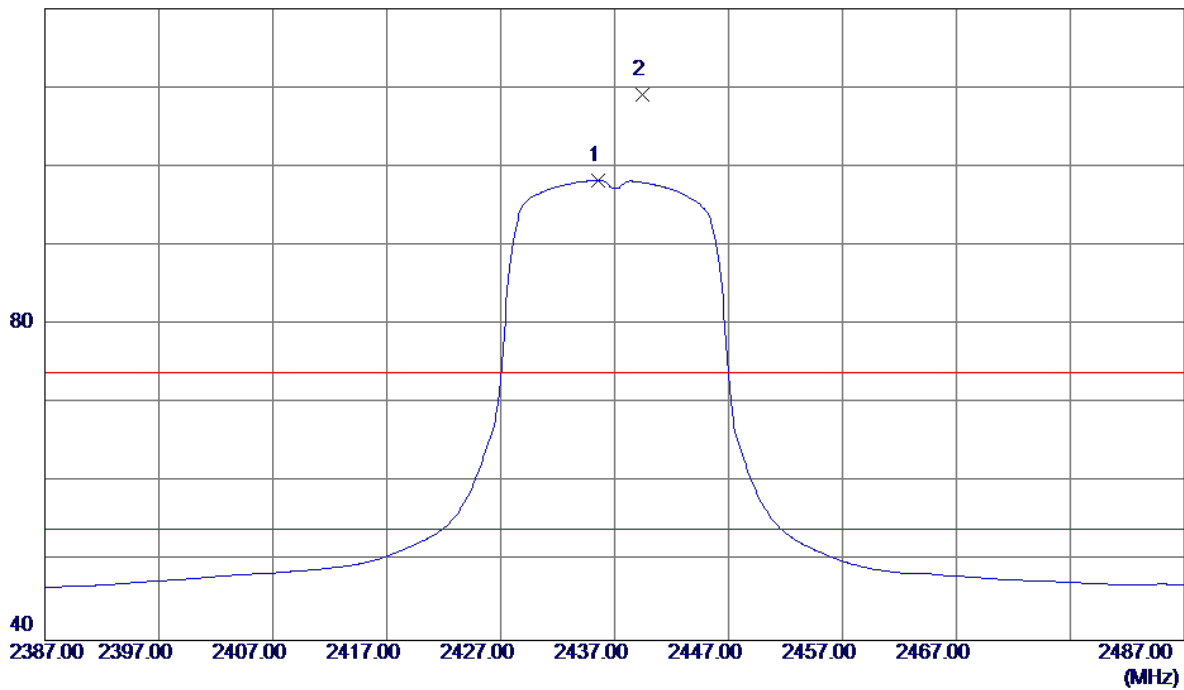


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.6400	42.49	5.06	47.55	74.00	-26.45	Peak	
2 *	4874.5200	33.83	5.07	38.90	54.00	-15.10	AVG	

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

Horizontal

120 dBuV/m

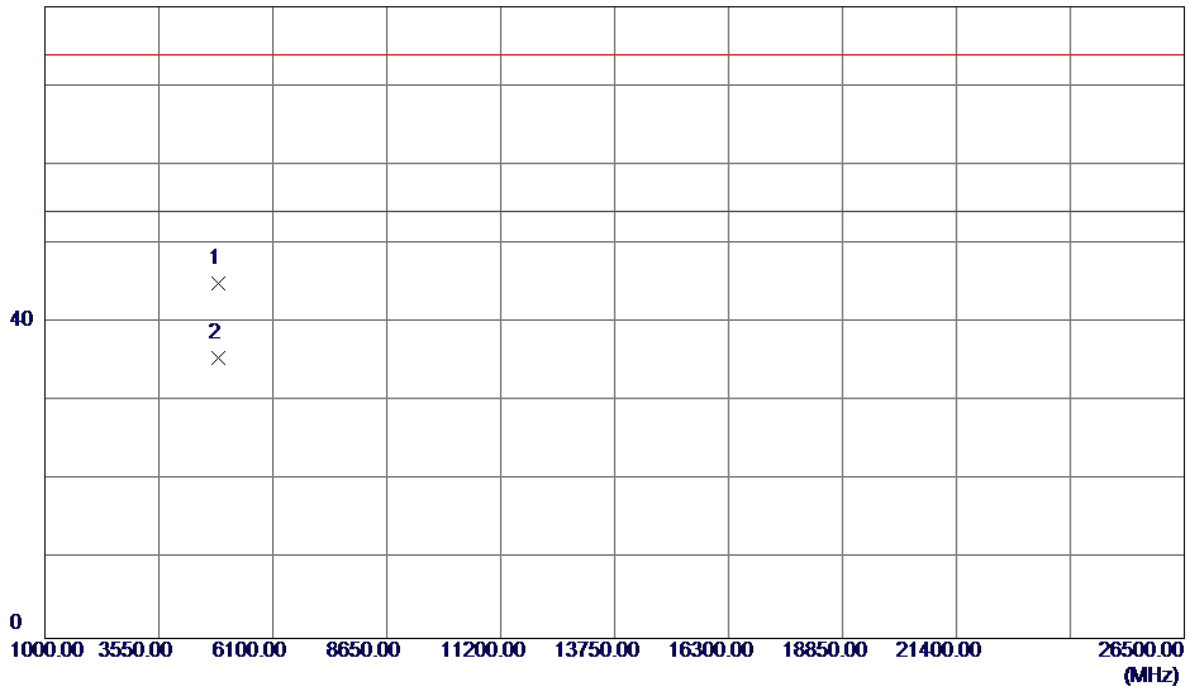


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2435.6000	65.09	33.20	98.29	54.00	44.29	AVG	No Limit
2	2439.4000	75.93	33.22	109.15	74.00	35.15	Peak	No Limit

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

Horizontal

80 dBuV/m

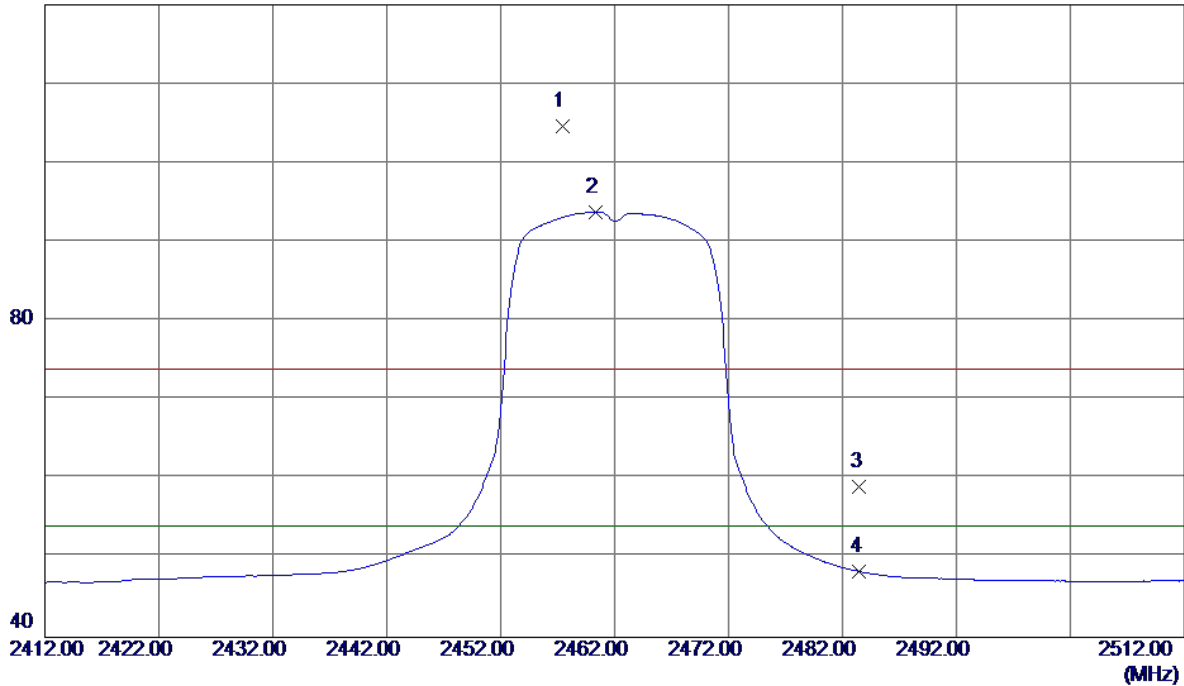


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.4300	39.84	5.06	44.90	74.00	-29.10	Peak	
2 *	4874.2799	30.40	5.07	35.47	54.00	-18.53	AVG	

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

Vertical

120 dBuV/m

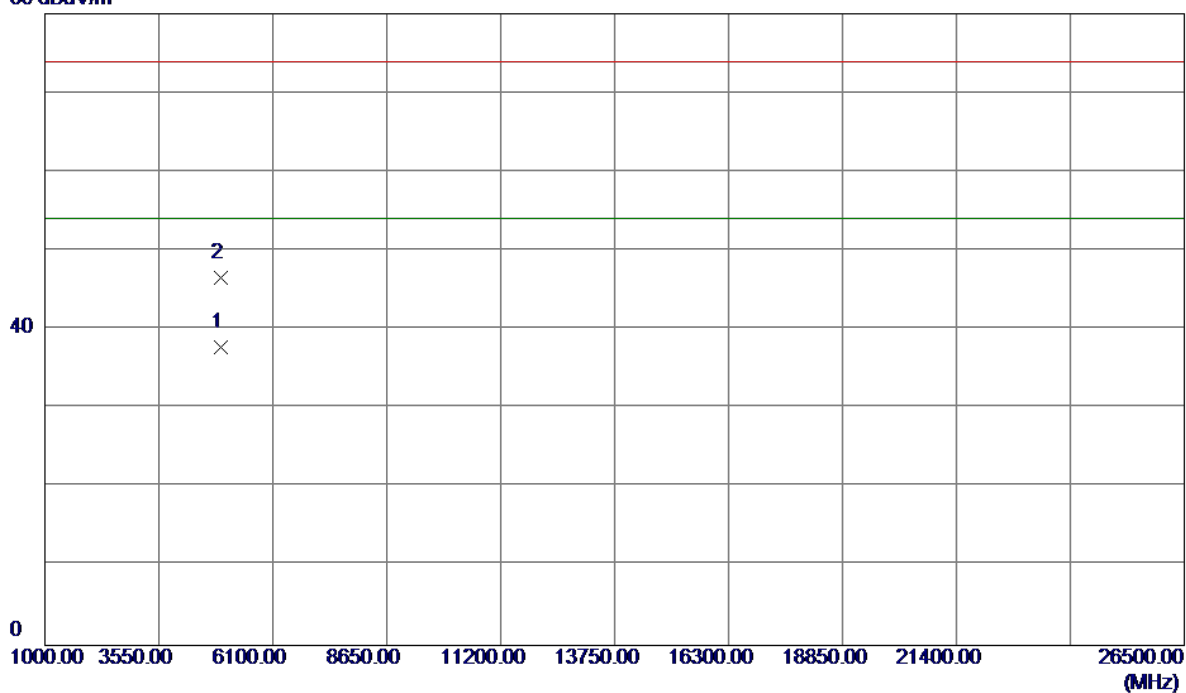


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2457.4000	71.38	33.29	104.67	74.00	30.67	Peak	No Limit
2 *	2460.3000	60.47	33.30	93.77	54.00	39.77	AVG	No Limit
3	2483.5000	25.61	33.40	59.01	74.00	-14.99	Peak	
4	2483.5000	14.92	33.40	48.32	54.00	-5.68	AVG	

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

Vertical

80 dBuV/m

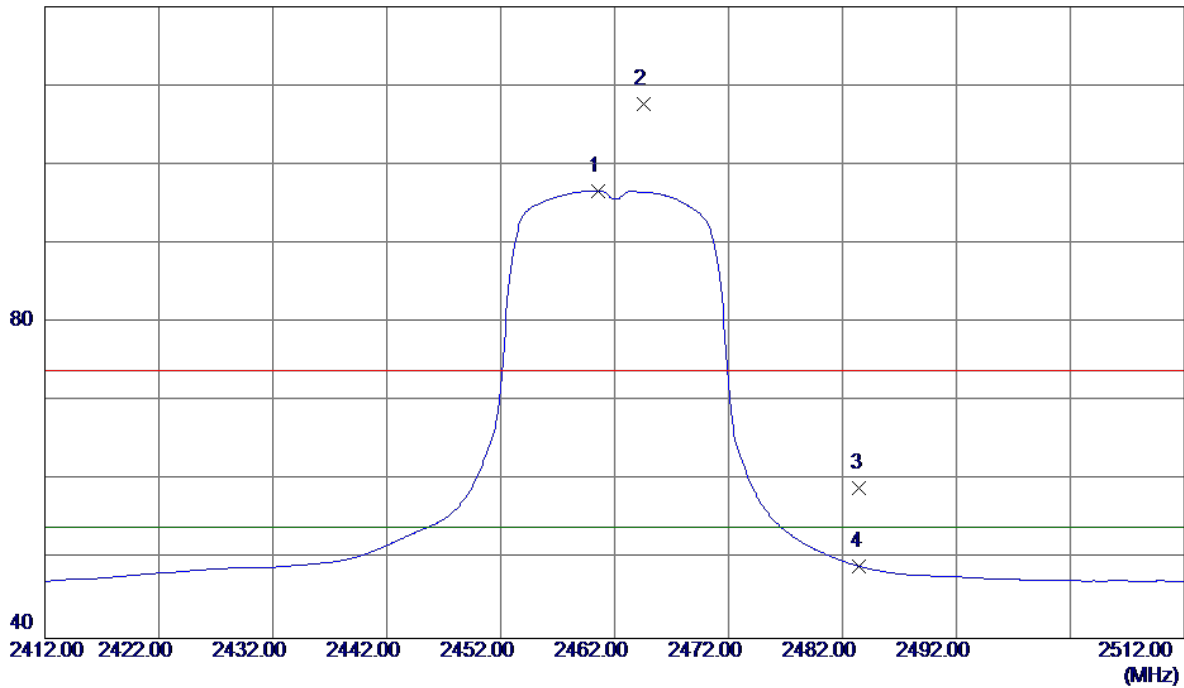


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.2599	32.48	5.28	37.76	54.00	-16.24	AVG	
2	4924.2300	41.35	5.28	46.63	74.00	-27.37	Peak	

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

Horizontal

120 dBuV/m

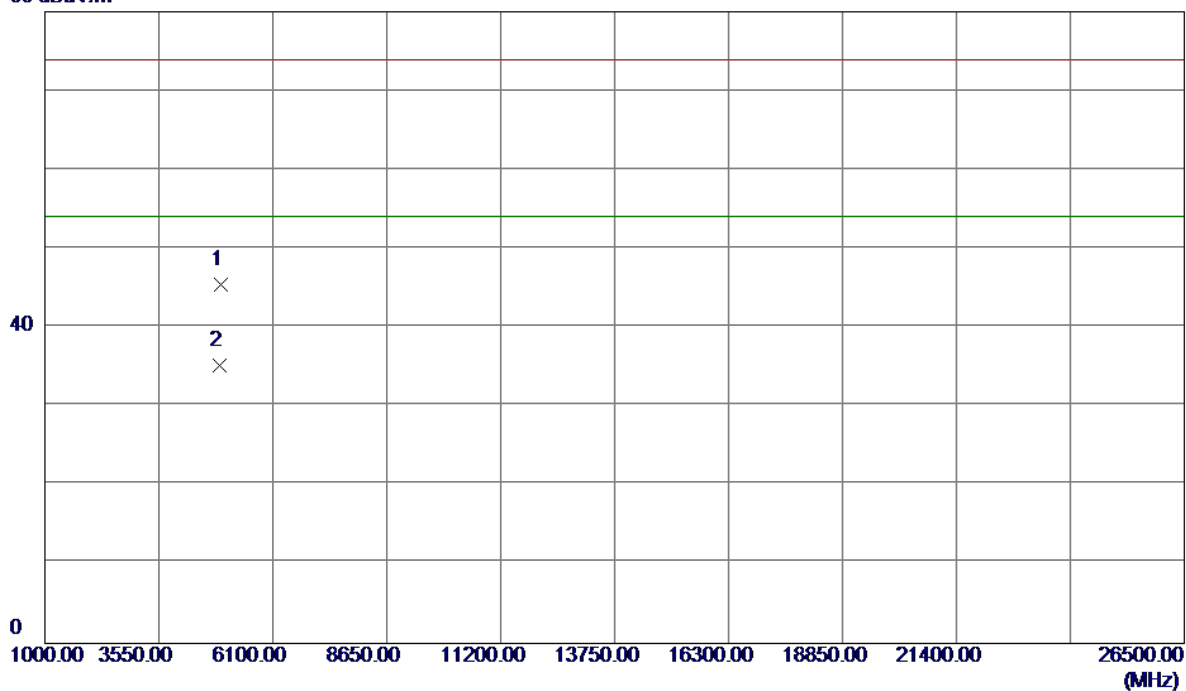


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2460.6000	63.38	33.31	96.69	54.00	42.69	AVG	No Limit
2	2464.6000	74.36	33.32	107.68	74.00	33.68	Peak	No Limit
3	2483.5000	25.70	33.40	59.10	74.00	-14.90	Peak	
4	2483.5000	15.71	33.40	49.11	54.00	-4.89	AVG	

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

Horizontal

80 dBuV/m

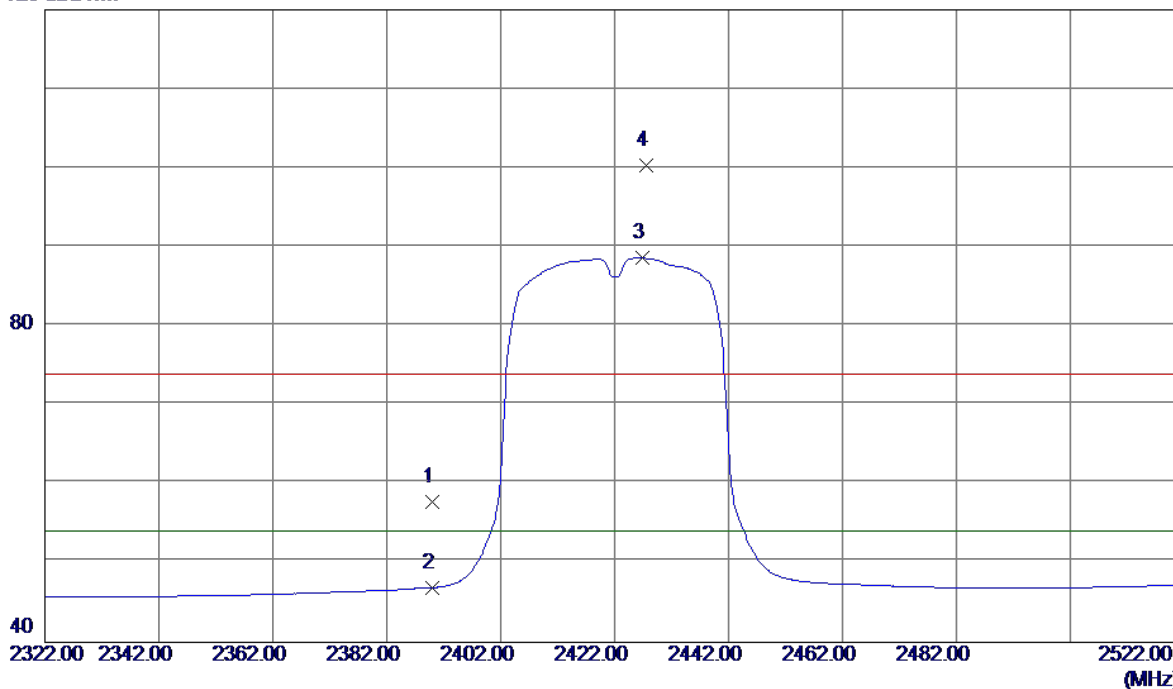


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.2700	40.12	5.28	45.40	74.00	-28.60	Peak	
2 *	4924.0800	29.92	5.28	35.20	54.00	-18.80	AVG	

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

Vertical

120 dBuV/m

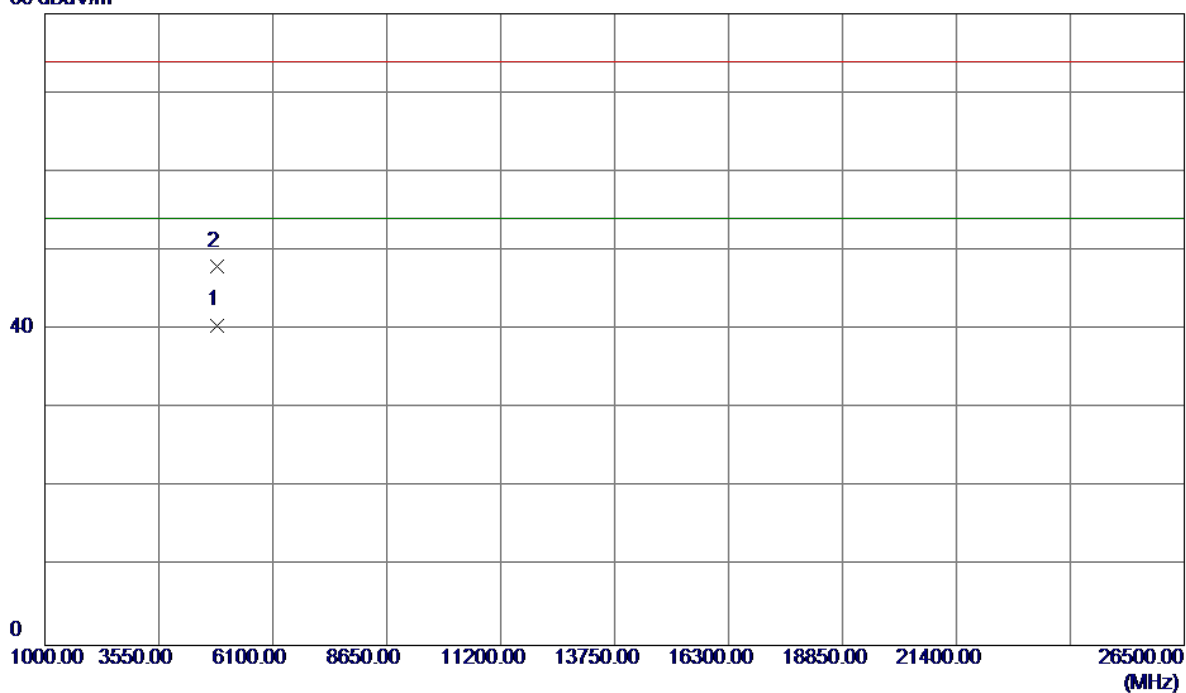


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.80	33.01	57.81	74.00	-16.19	Peak	
2	2390.0000	13.91	33.01	46.92	54.00	-7.08	AVG	
3 *	2426.8000	55.43	33.16	88.59	54.00	34.59	AVG	No Limit
4	2427.6000	67.14	33.17	100.31	74.00	26.31	Peak	No Limit

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

Vertical

80 dBuV/m

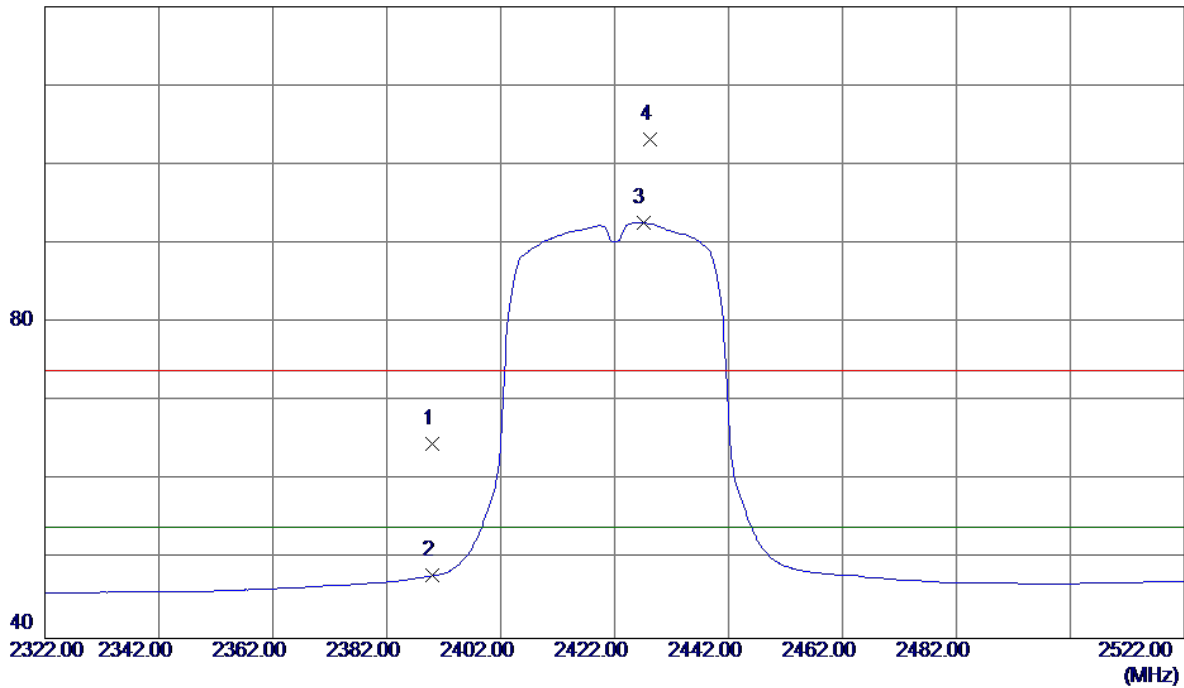


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4843.7400	35.62	4.94	40.56	54.00	-13.44	AVG	
2	4844.5200	43.04	4.94	47.98	74.00	-26.02	Peak	

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

Horizontal

120 dBuV/m

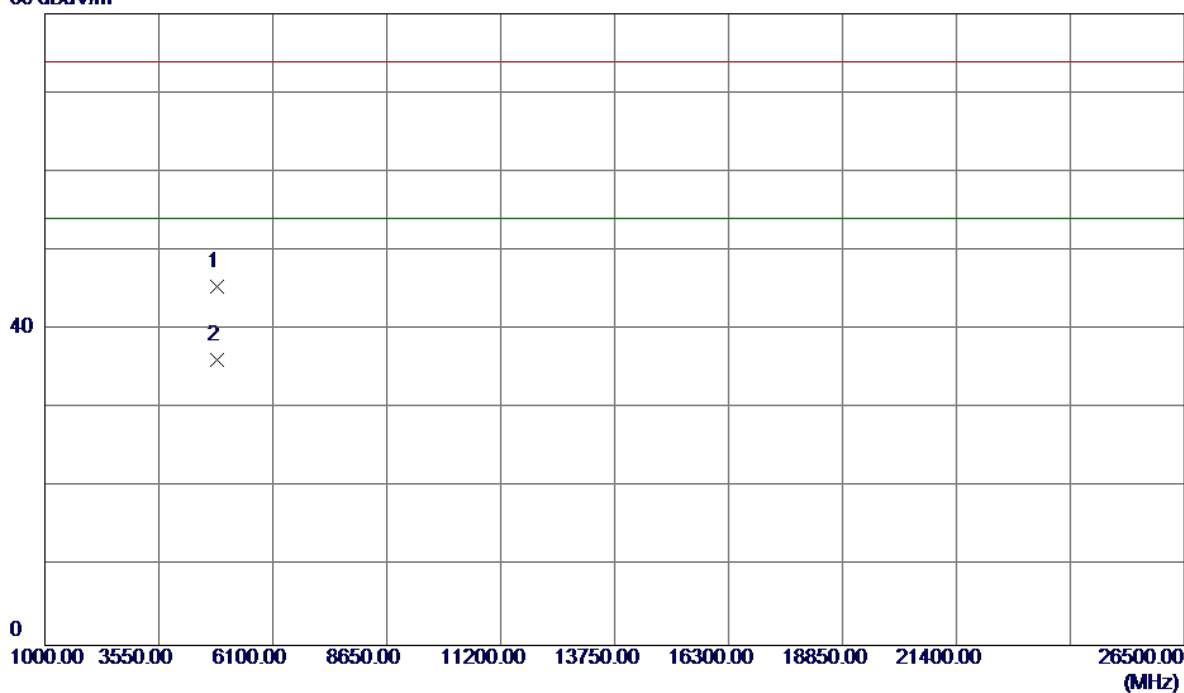


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	31.67	33.01	64.68	74.00	-9.32	Peak	
2	2390.0000	14.92	33.01	47.93	54.00	-6.07	AVG	
3 *	2427.0000	59.47	33.16	92.63	54.00	38.63	AVG	No Limit
4	2428.2000	70.06	33.17	103.23	74.00	29.23	Peak	No Limit

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

Horizontal

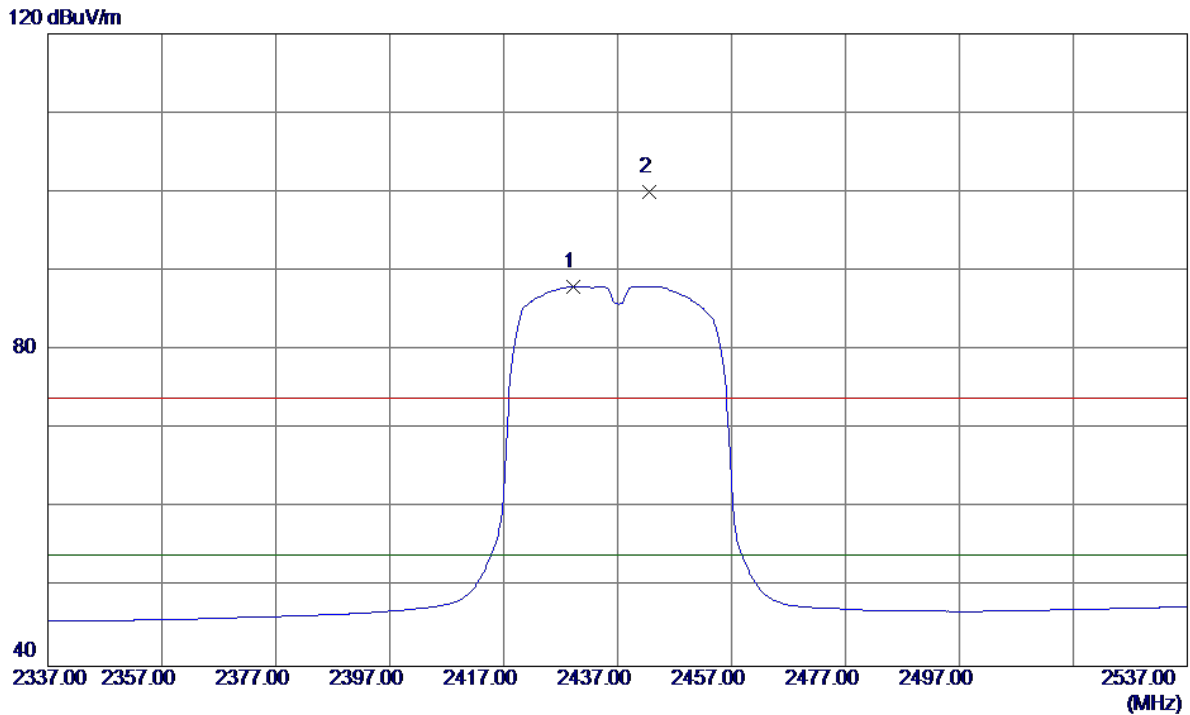
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4844.0200	40.51	4.94	45.45	74.00	-28.55	Peak	
2 *	4844.0600	31.24	4.94	36.18	54.00	-17.82	AVG	

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

Vertical

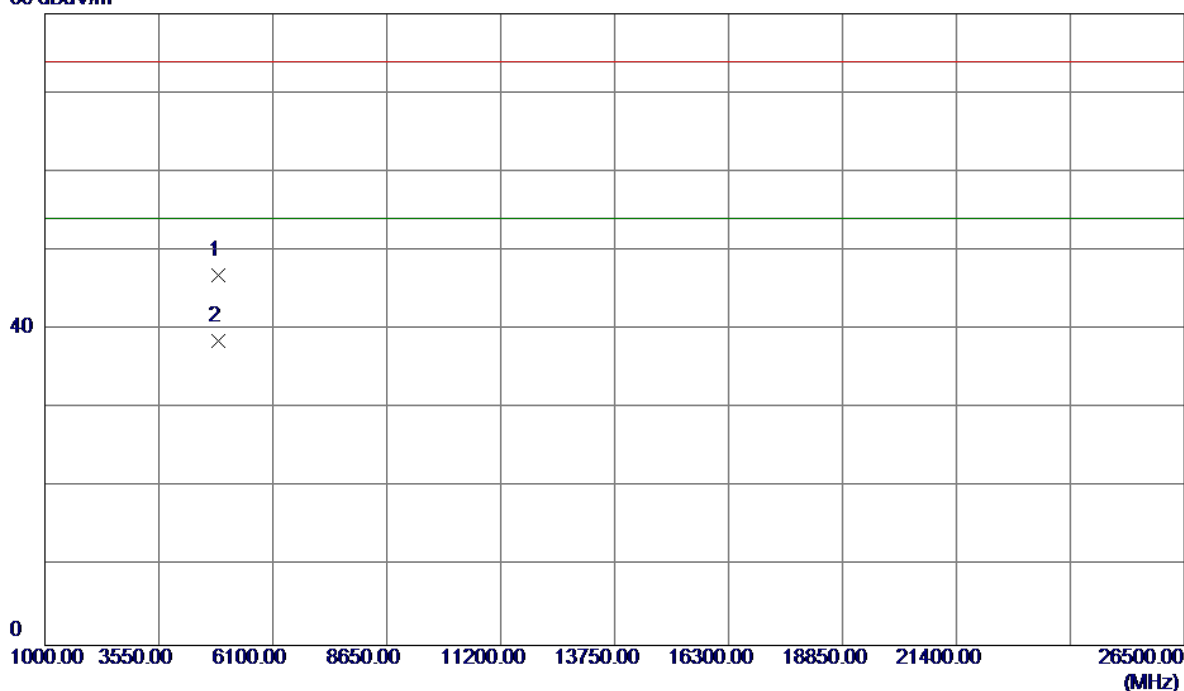


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2429.2000	54.86	33.17	88.03	54.00	34.03	AVG	No Limit
2	2442.6000	66.76	33.23	99.99	74.00	25.99	Peak	No Limit

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

Vertical

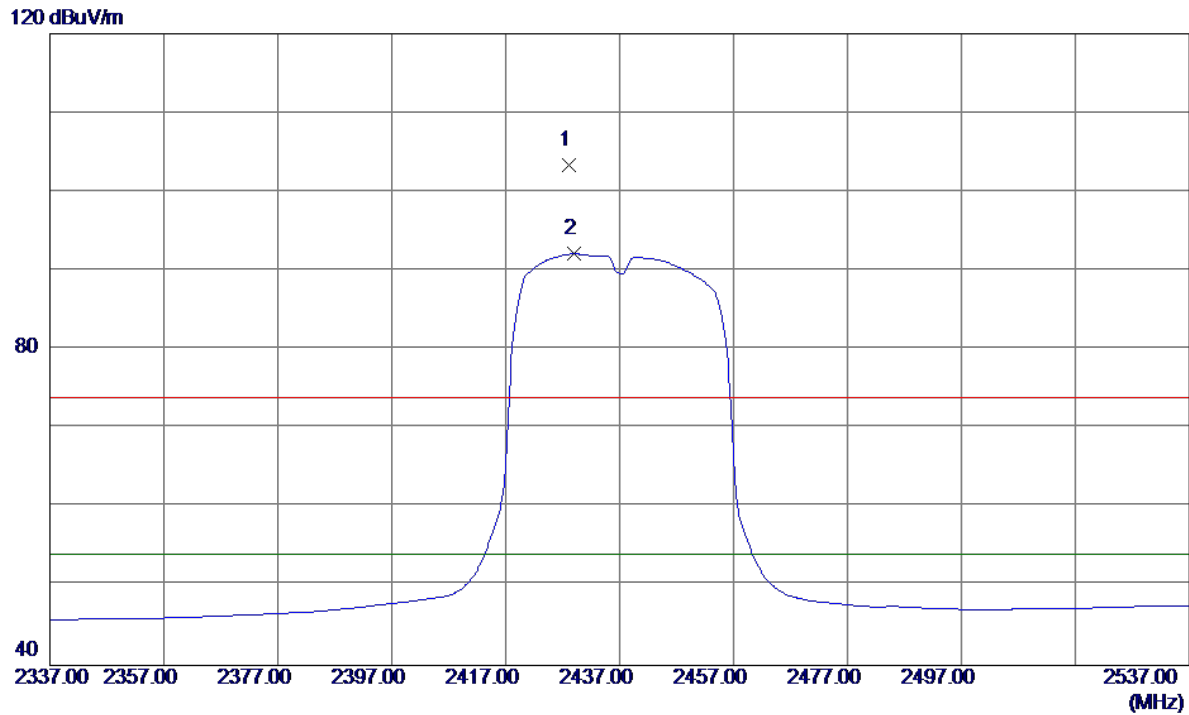
80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874.2200	41.78	5.07	46.85	74.00	-27.15	Peak	
2 *	4874.3100	33.55	5.07	38.62	54.00	-15.38	AVG	

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

Horizontal

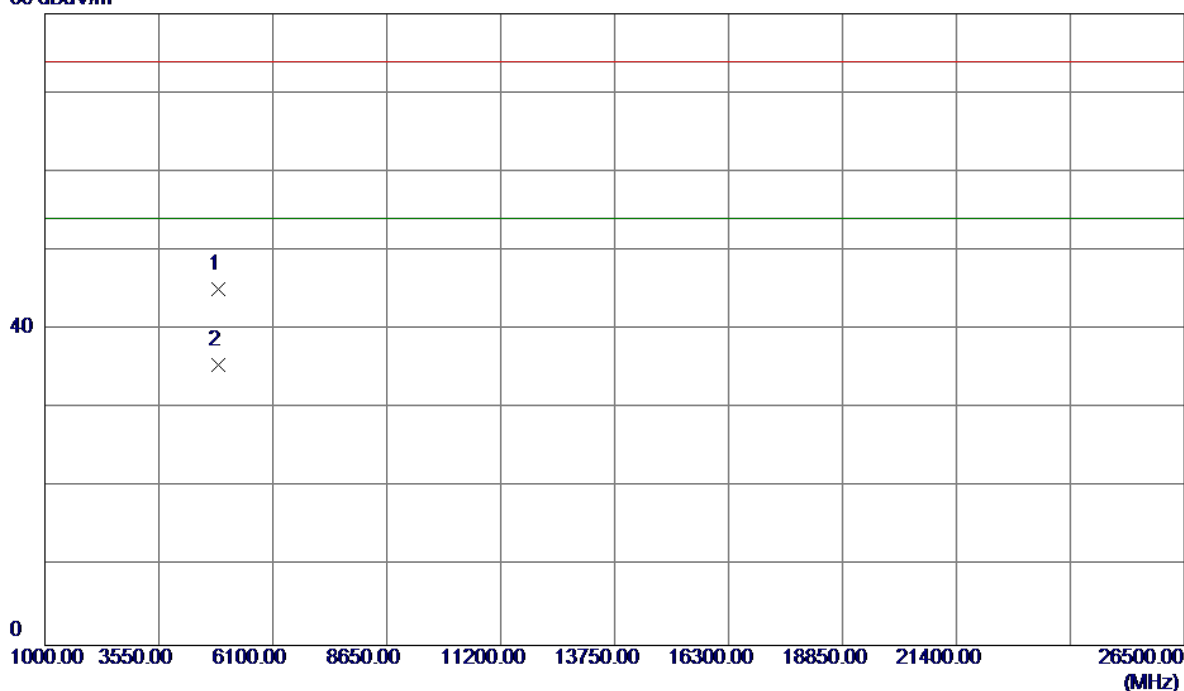


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2428.2000	70.16	33.17	103.33	74.00	29.33	Peak	No Limit
2 *	2429.0000	58.95	33.17	92.12	54.00	38.12	AVG	No Limit

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

Horizontal

80 dBuV/m

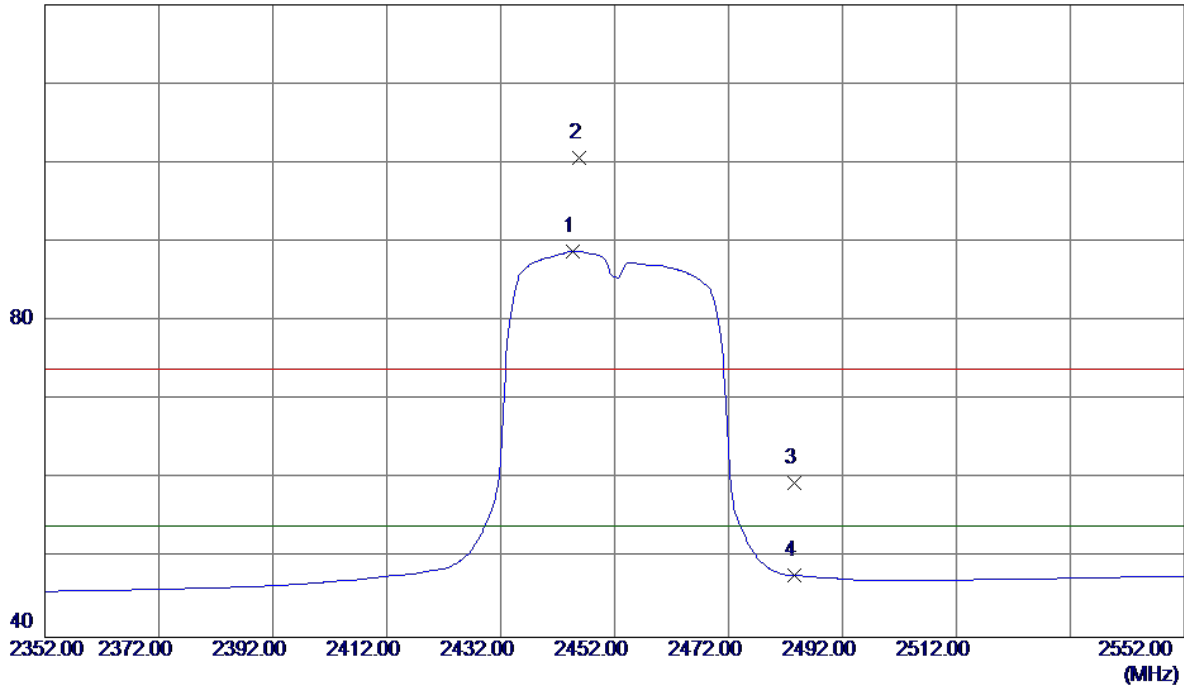


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.8000	40.11	5.06	45.17	74.00	-28.83	Peak	
2 *	4874.7700	30.40	5.07	35.47	54.00	-18.53	AVG	

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

Vertical

120 dBuV/m

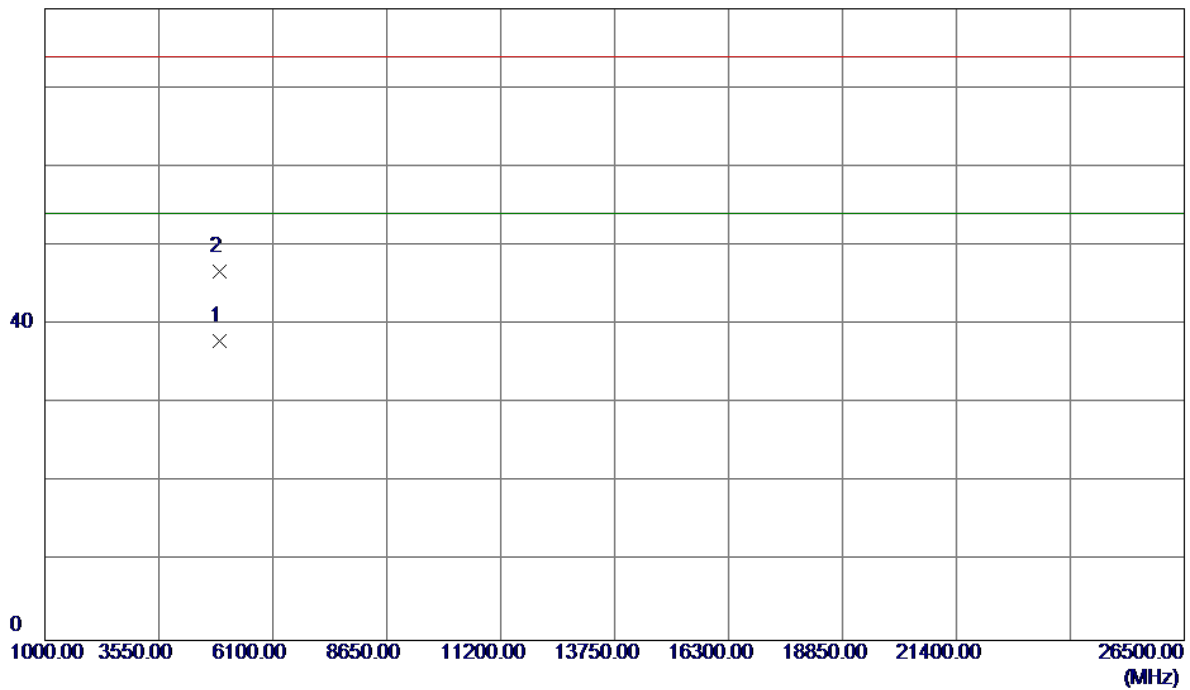


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2444.6000	55.57	33.24	88.81	54.00	34.81	AVG	No Limit
2	2445.8000	67.42	33.24	100.66	74.00	26.66	Peak	No Limit
3	2483.5000	26.14	33.40	59.54	74.00	-14.46	Peak	
4	2483.5000	14.42	33.40	47.82	54.00	-6.18	AVG	

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

Vertical

80 dBuV/m

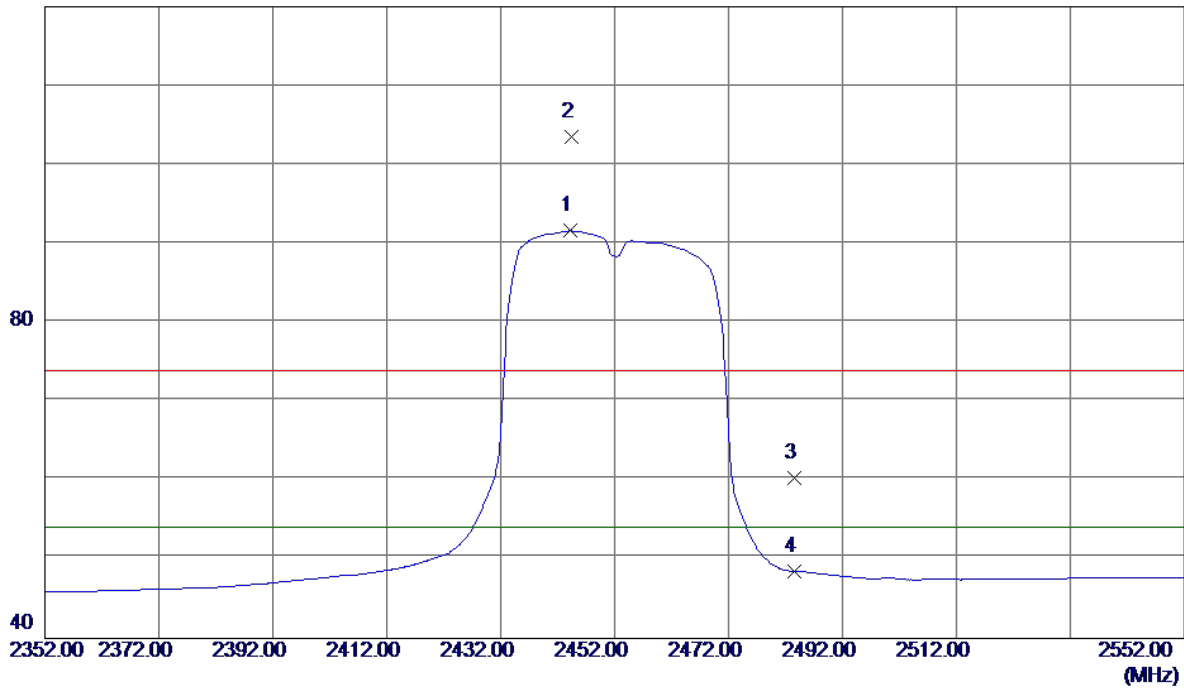


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4904.2400	32.79	5.19	37.98	54.00	-16.02	AVG	
2	4904.1800	41.53	5.19	46.72	74.00	-27.28	Peak	

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

Horizontal

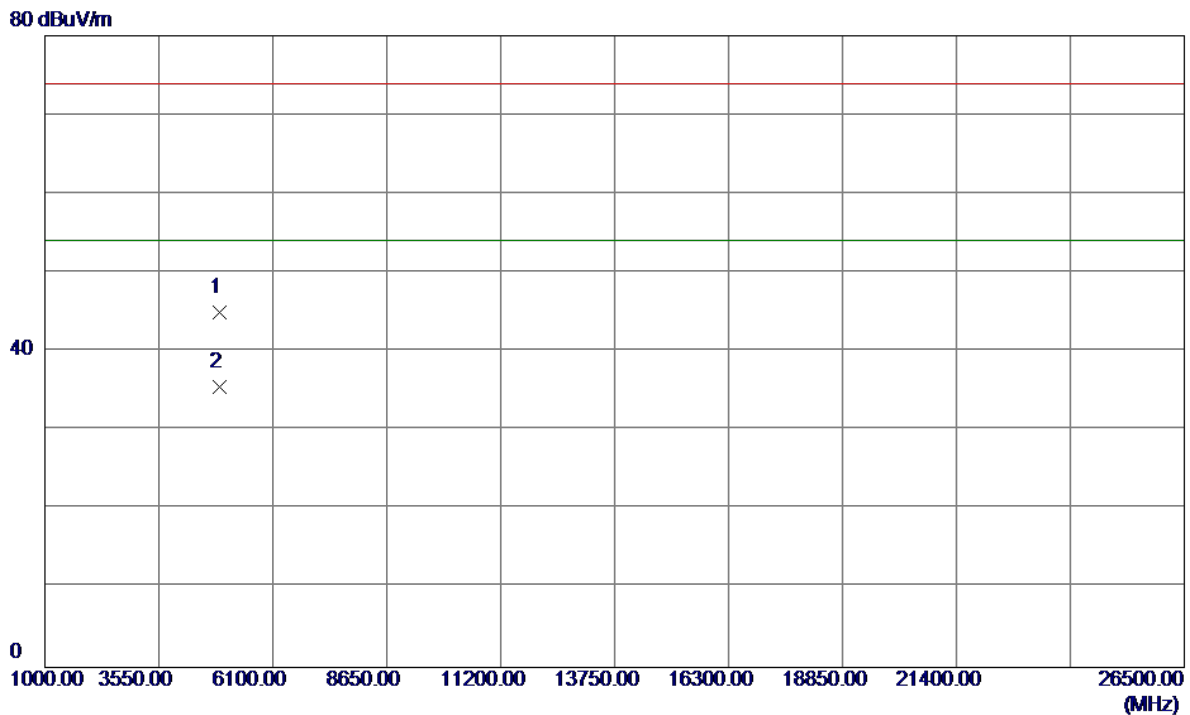
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2444.2000	58.37	33.24	91.61	54.00	37.61	AVG	No Limit
2	2444.4000	70.24	33.24	103.48	74.00	29.48	Peak	No Limit
3	2483.5000	26.85	33.40	60.25	74.00	-13.75	Peak	
4	2483.5000	15.08	33.40	48.48	54.00	-5.52	AVG	

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

Horizontal



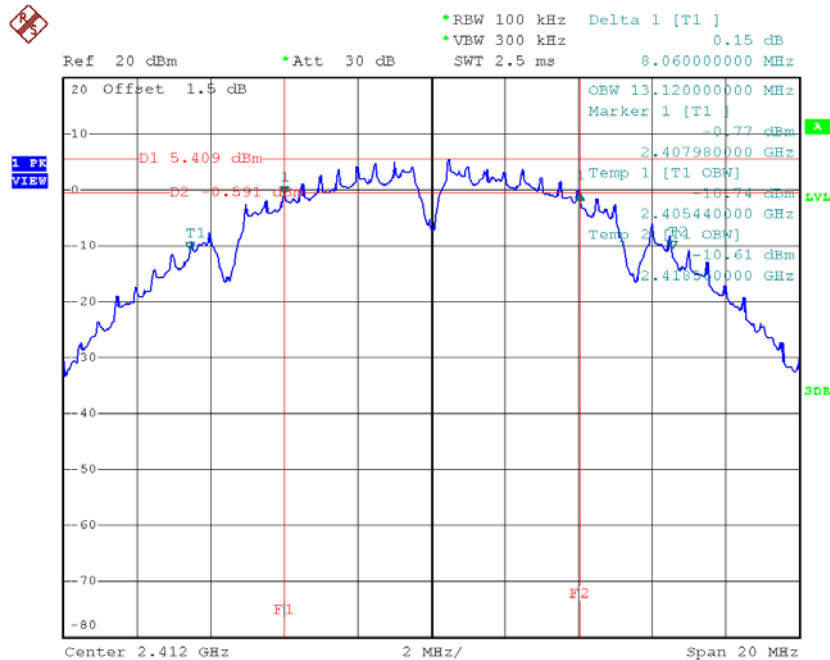
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4904.2500	39.76	5.19	44.95	74.00	-29.05	Peak	
2 *	4904.3700	30.28	5.19	35.47	54.00	-18.53	AVG	

APPENDIX E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

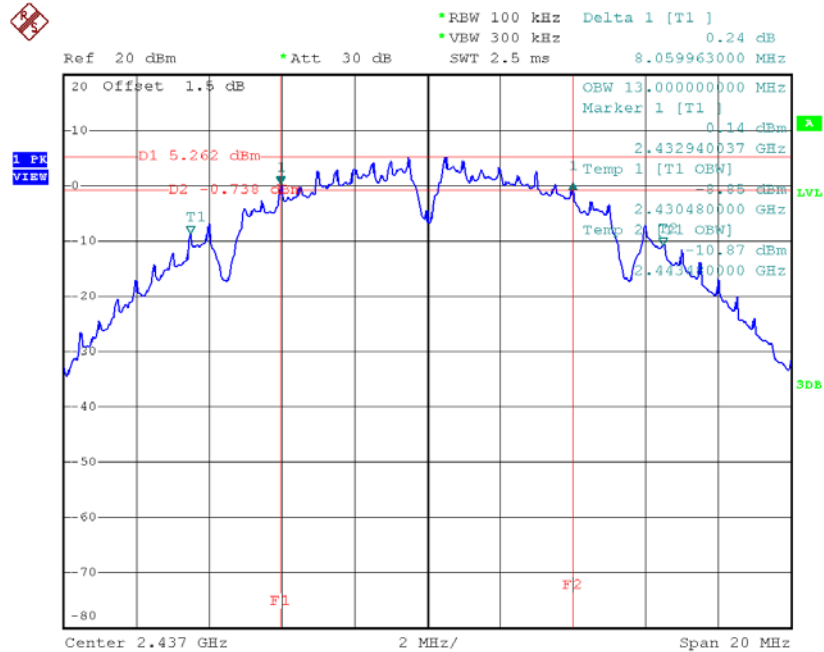
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	8.06	13.12	500	Complies
2437	8.06	13.00	500	Complies
2462	8.60	13.00	500	Complies

TX CH01



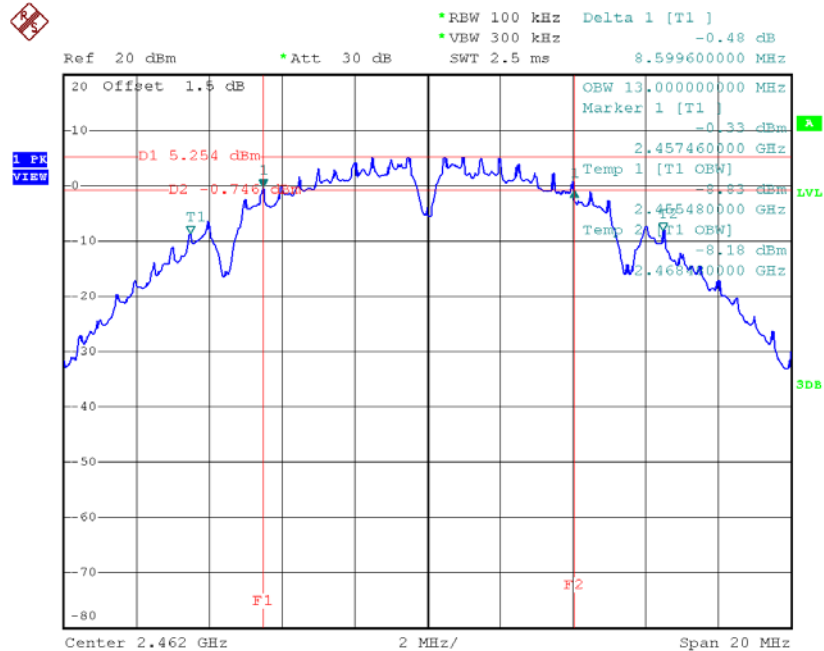
Date: 14.JUL.2017 16:23:59

TX CH06



Date: 14.JUL.2017 16:25:49

TX CH11

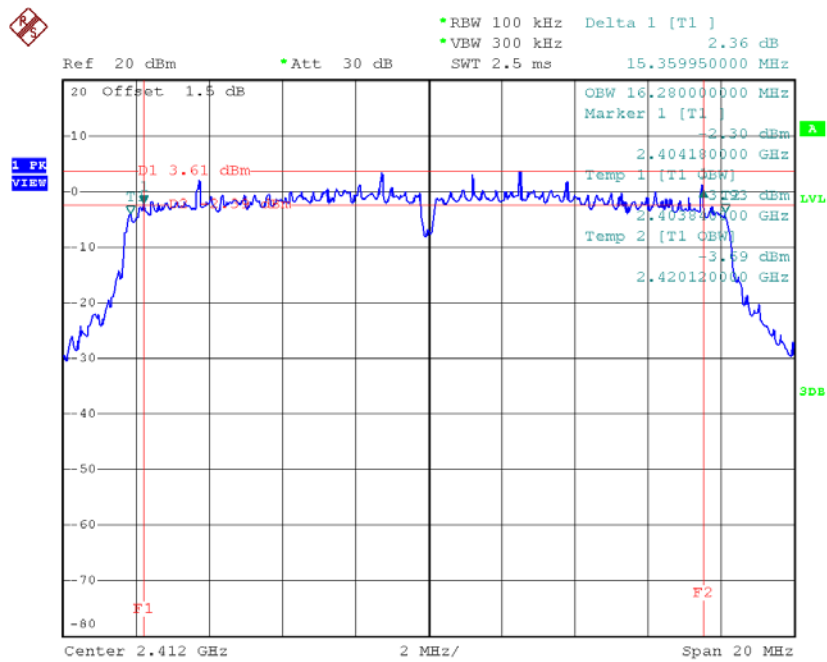


Date: 14.JUL.2017 16:27:16

Test Mode: TX G Mode_CH01/06/11

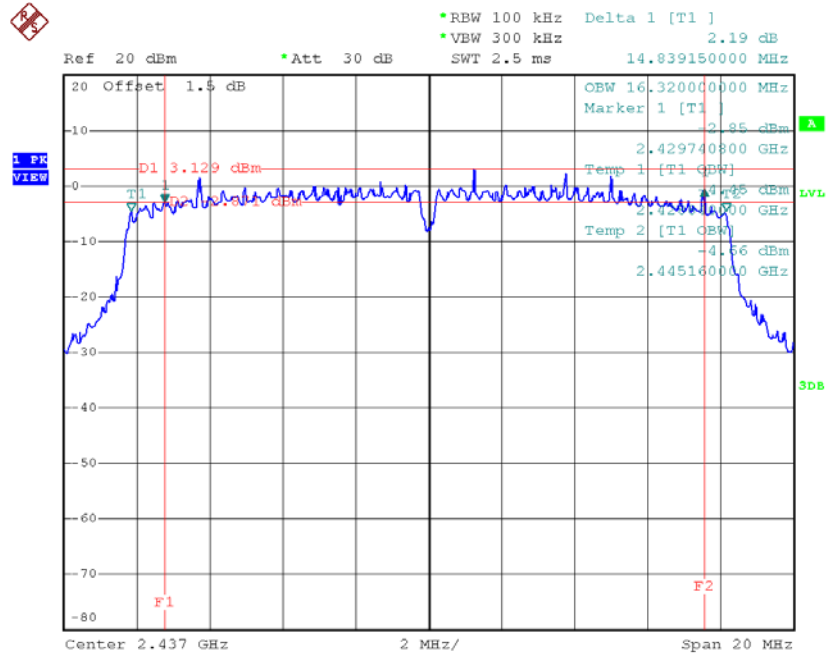
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.36	16.28	500	Complies
2437	14.84	16.32	500	Complies
2462	15.36	16.28	500	Complies

TX CH01



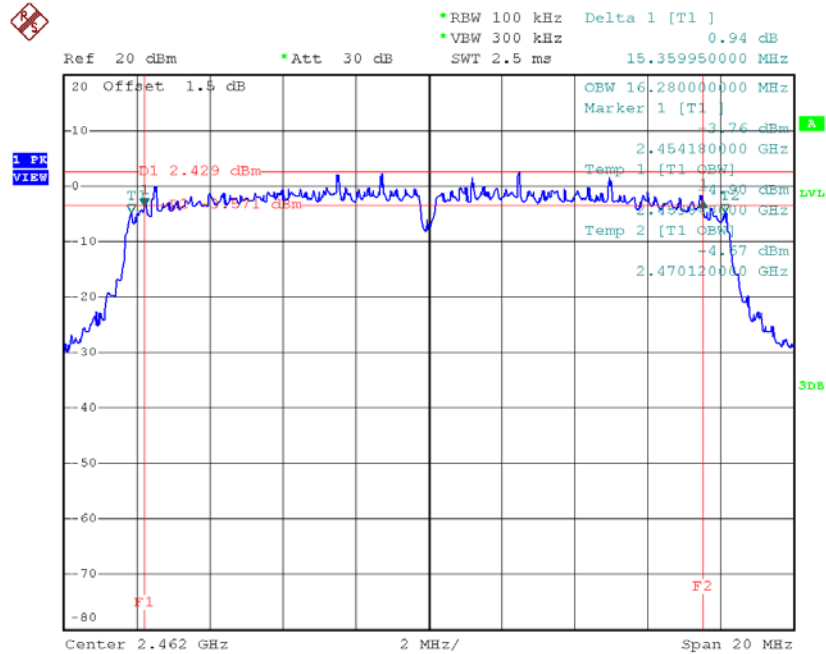
Date: 14.JUL.2017 16:34:19

TX CH06



Date: 14.JUL.2017 16:35:36

TX CH11

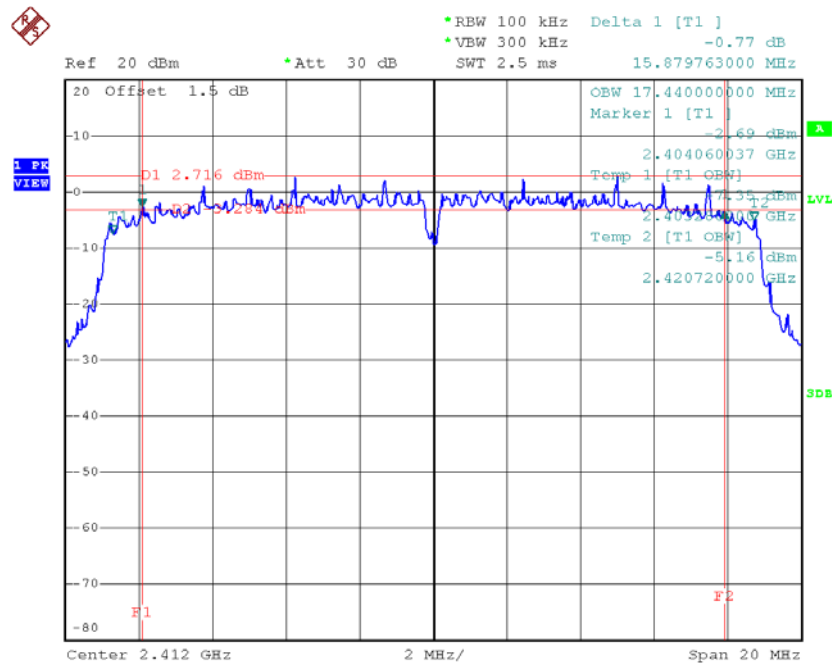


Date: 14.JUL.2017 16:36:50

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

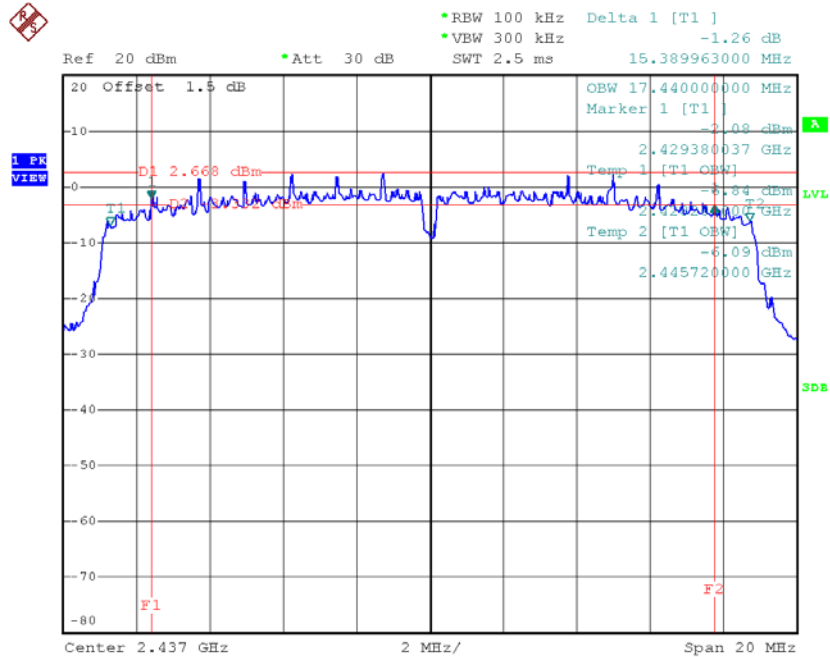
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.88	17.44	500	Complies
2437	15.39	17.44	500	Complies
2462	15.17	17.44	500	Complies

TX CH01



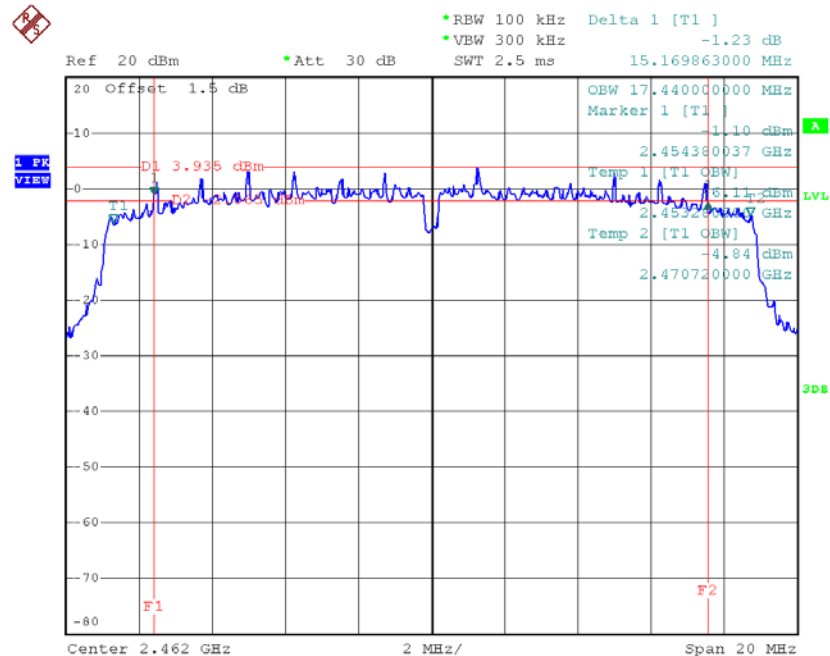
Date: 14.JUL.2017 16:49:30

TX CH06



Date: 14.JUL.2017 16:50:52

TX CH11

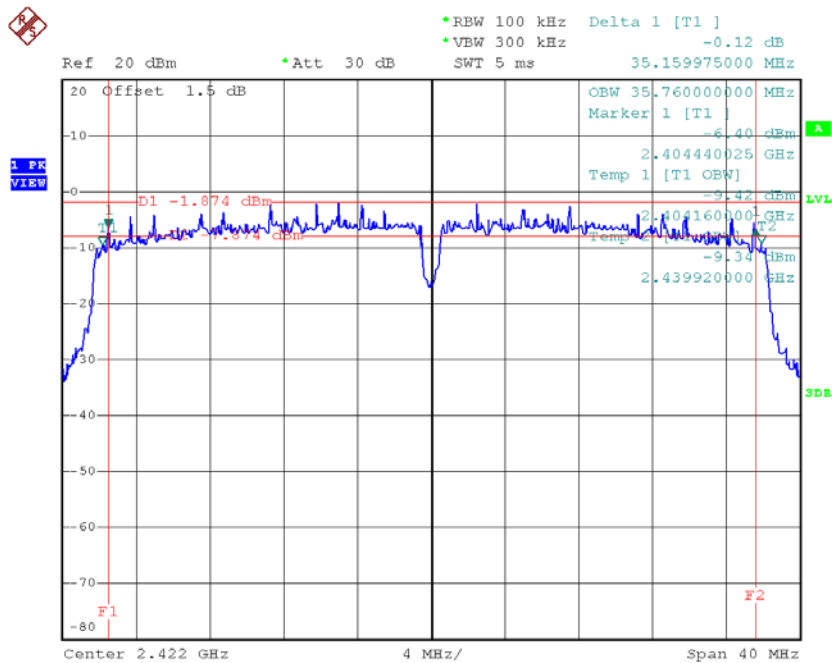


Date: 14.JUL.2017 16:52:01

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

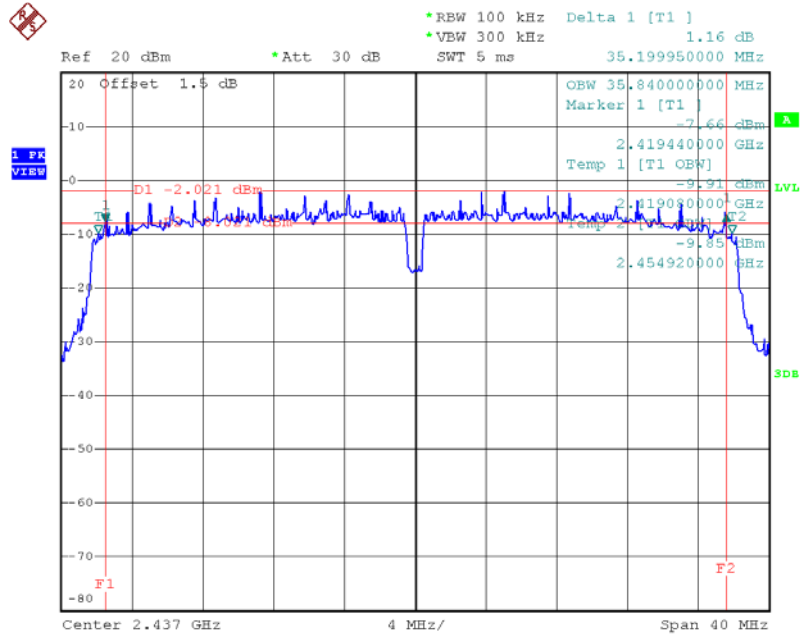
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.16	35.76	500	Complies
2437	35.2	35.84	500	Complies
2452	34	35.84	500	Complies

TX CH03



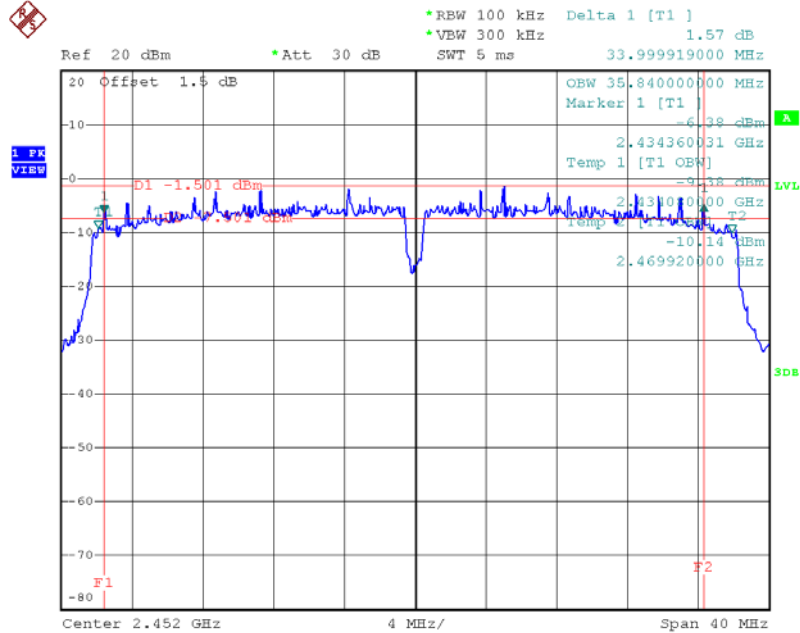
Date: 14.JUL.2017 17:00:59

TX CH06



Date: 14.JUL.2017 17:06:34

TX CH09



Date: 14.JUL.2017 17:08:28

APPENDIX F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.73	0.05	30.00	1.00	Complies
2437	16.55	0.05	30.00	1.00	Complies
2462	17.31	0.05	30.00	1.00	Complies

Test Mode :TX B Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.96	0.05	30.00	1.00	Complies
2437	16.27	0.04	30.00	1.00	Complies
2462	17.18	0.05	30.00	1.00	Complies

Test Mode :TX B Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	19.86	0.10	30.00	1.00	Complies
2437	19.42	0.09	30.00	1.00	Complies
2462	20.26	0.11	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.13	0.13	30.00	1.00	Complies
2437	20.86	0.12	30.00	1.00	Complies
2462	20.76	0.12	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.34	0.14	30.00	1.00	Complies
2437	21.11	0.13	30.00	1.00	Complies
2462	21.03	0.13	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.25	0.27	30.00	1.00	Complies
2437	24.00	0.25	30.00	1.00	Complies
2462	23.91	0.25	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	21.04	0.13	30.00	1.00	Complies
2437	21.21	0.13	30.00	1.00	Complies
2462	21.72	0.15	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	21.08	0.13	30.00	1.00	Complies
2437	21.07	0.13	30.00	1.00	Complies
2462	21.38	0.14	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	24.07	0.26	30.00	1.00	Complies
2437	24.15	0.26	30.00	1.00	Complies
2462	24.56	0.29	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	19.71	0.09	30.00	1.00	Complies
2437	19.51	0.09	30.00	1.00	Complies
2452	19.97	0.10	30.00	1.00	Complies

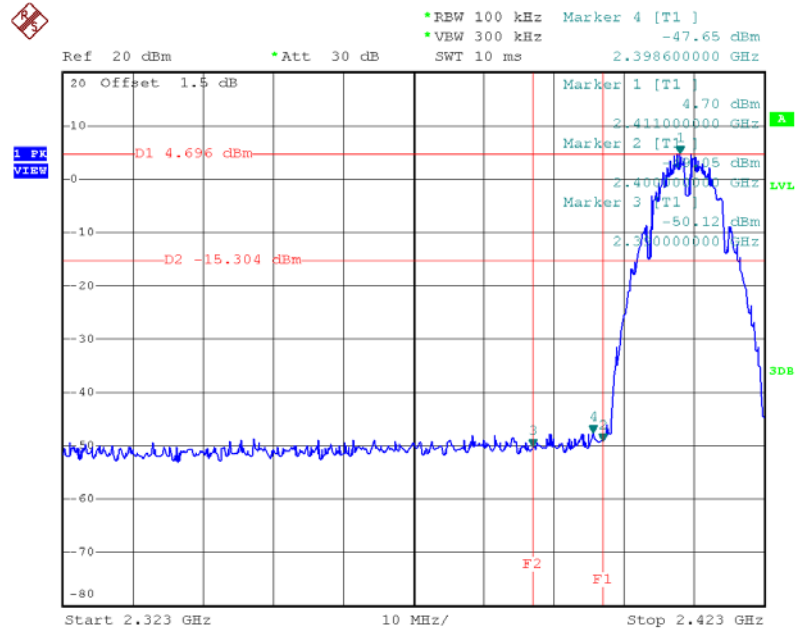
Test Mode :TX N40 Mode_CH03/06/09_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	20.05	0.10	30.00	1.00	Complies
2437	19.87	0.10	30.00	1.00	Complies
2452	19.52	0.09	30.00	1.00	Complies

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	22.89	0.19	30.00	1.00	Complies
2437	22.70	0.19	30.00	1.00	Complies
2452	22.76	0.19	30.00	1.00	Complies

APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

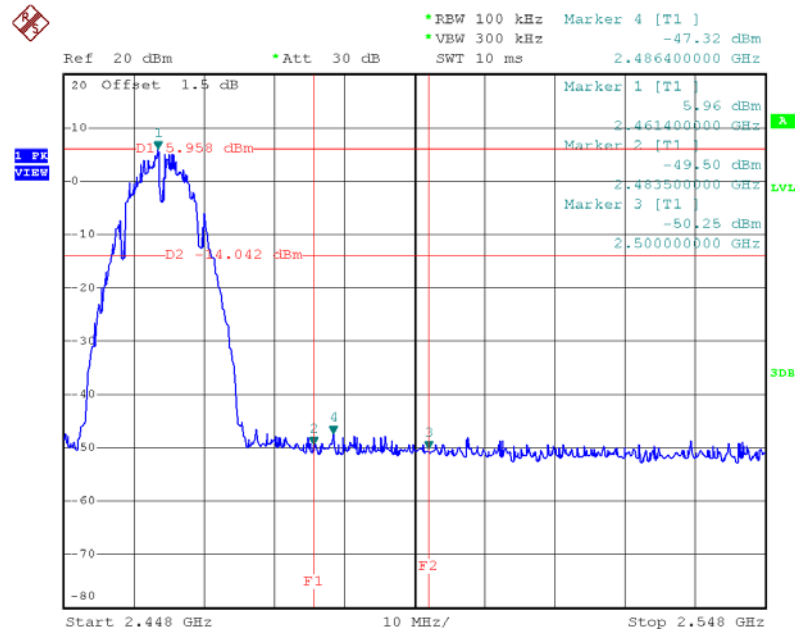
Test Mode : TX B Mode_ANT 1

TX B mode CH01



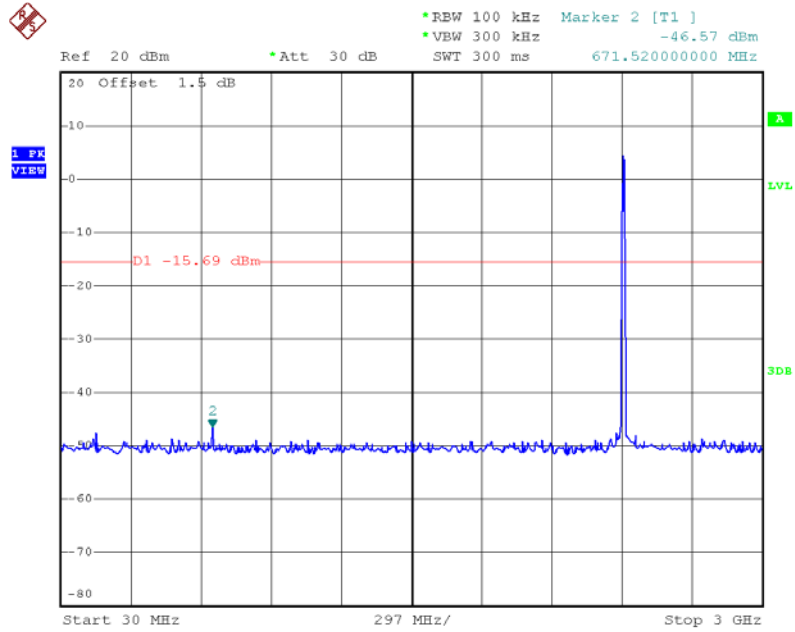
Date: 14.JUL.2017 16:24:38

TX B mode CH11

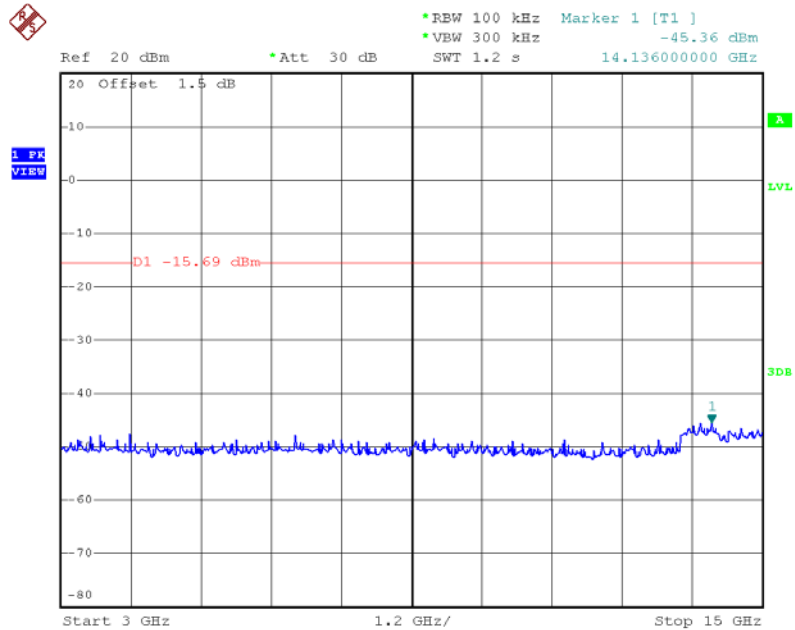


Date: 14.JUL.2017 16:27:54

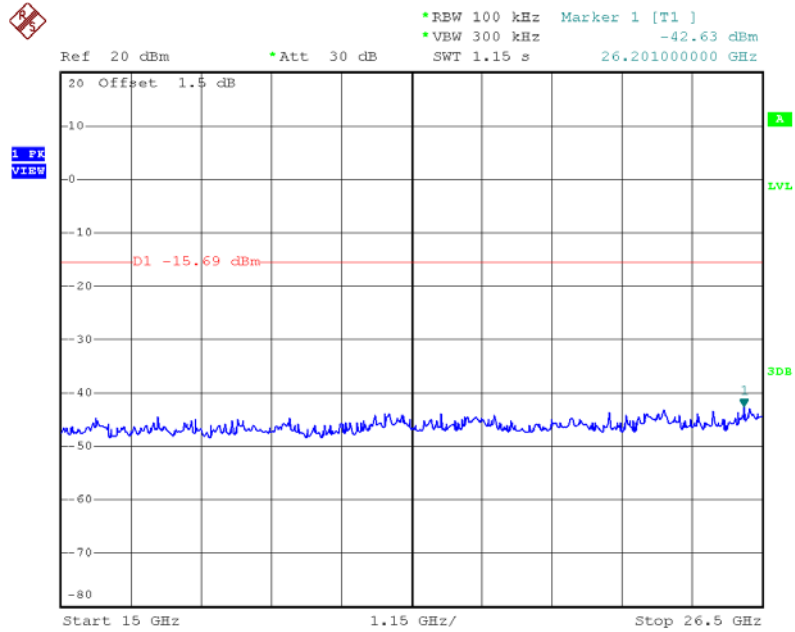
TX B mode CH01 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:24:14

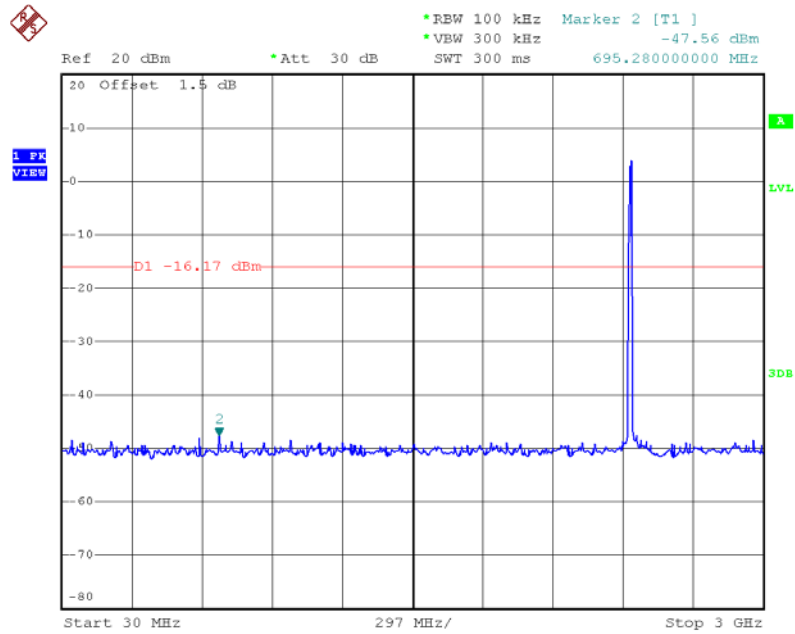


Date: 14.JUL.2017 16:24:22

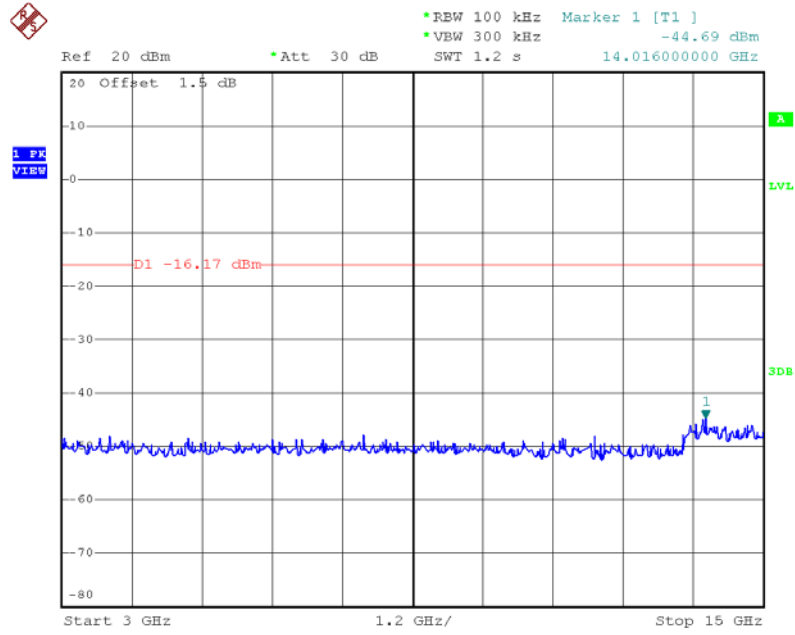


Date: 14.JUL.2017 16:24:30

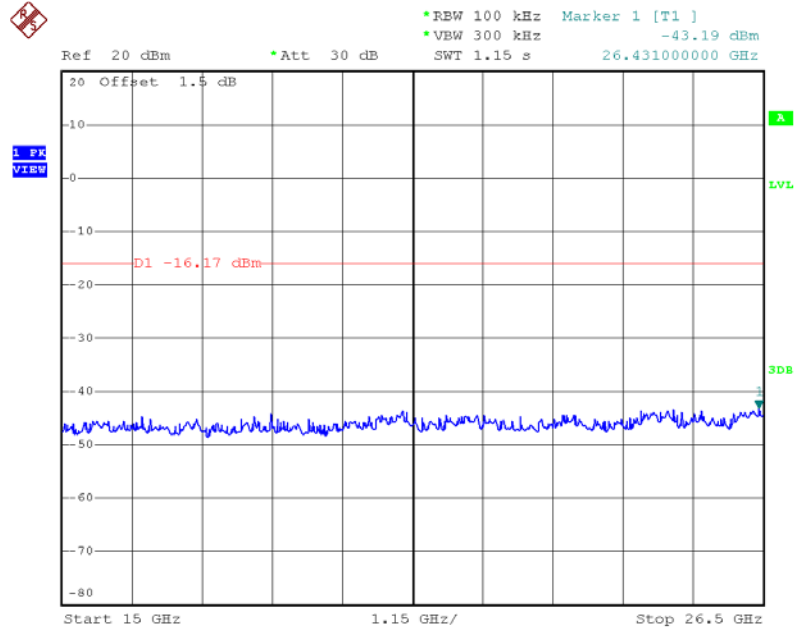
TX B mode CH06 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:26:03

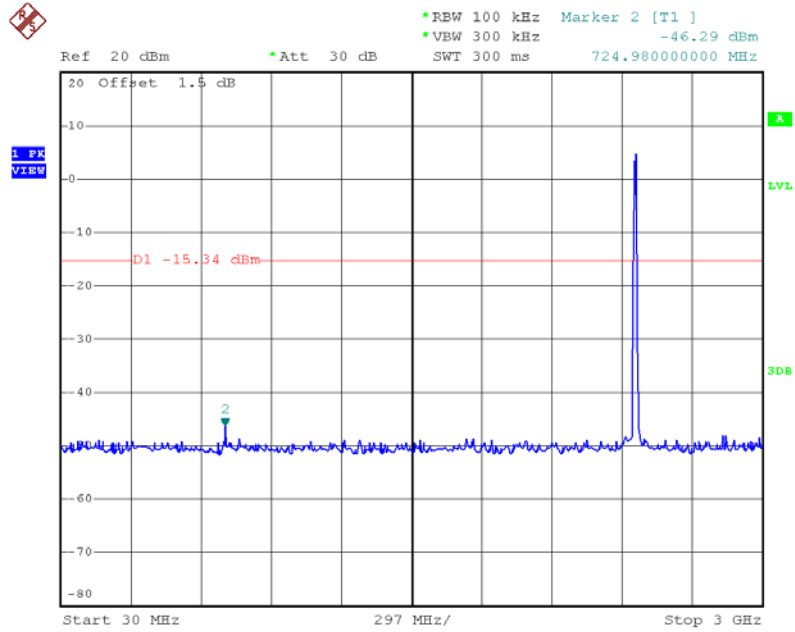


Date: 14.JUL.2017 16:26:11

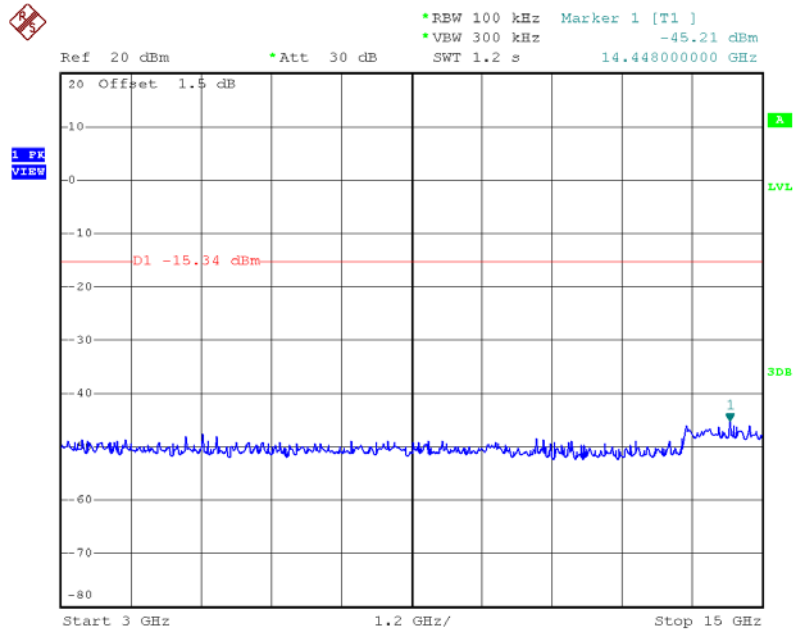


Date: 14.JUL.2017 16:26:20

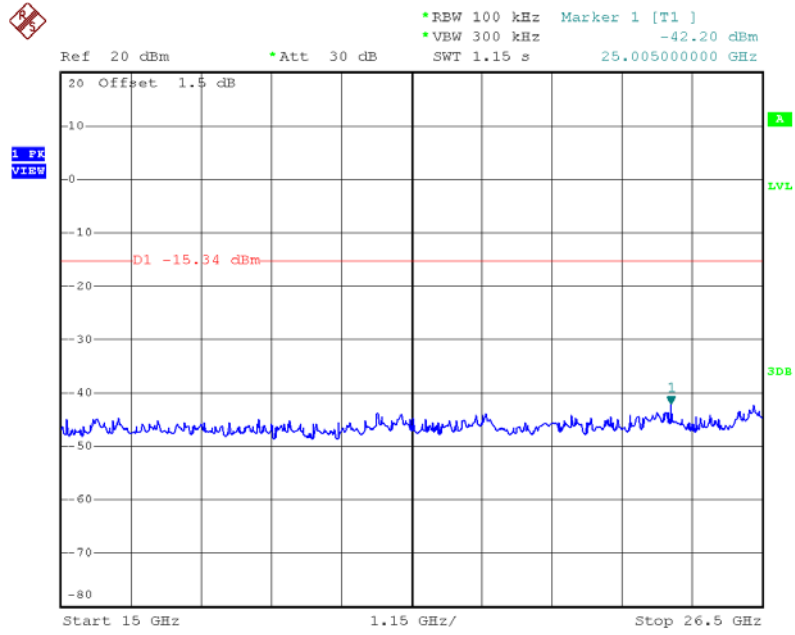
TX B mode CH11 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:27:29



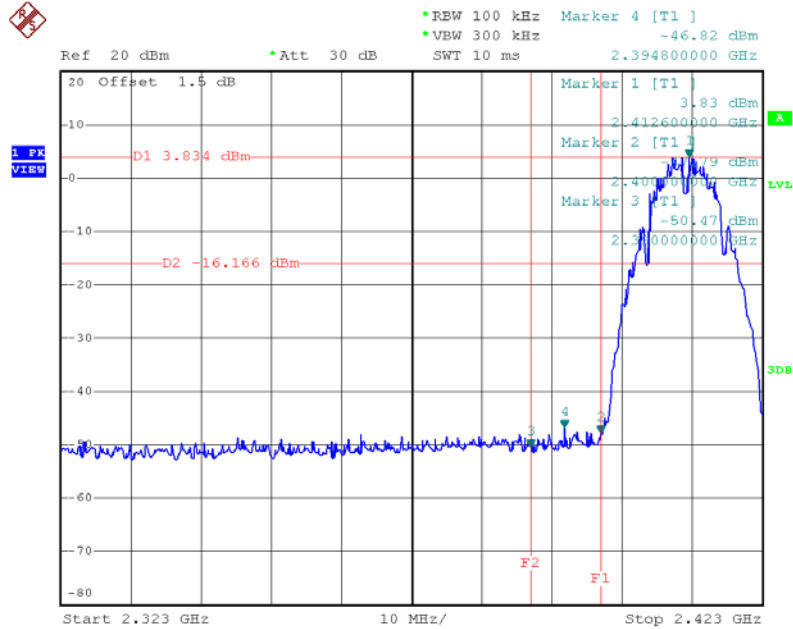
Date: 14.JUL.2017 16:27:38



Date: 14.JUL.2017 16:27:46

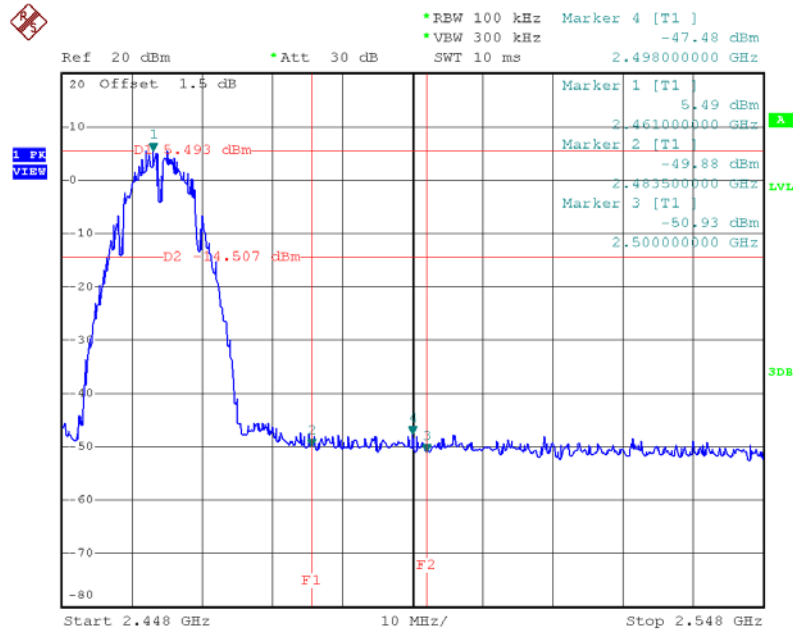
Test Mode : TX B Mode_ANT 2

TX B mode CH01



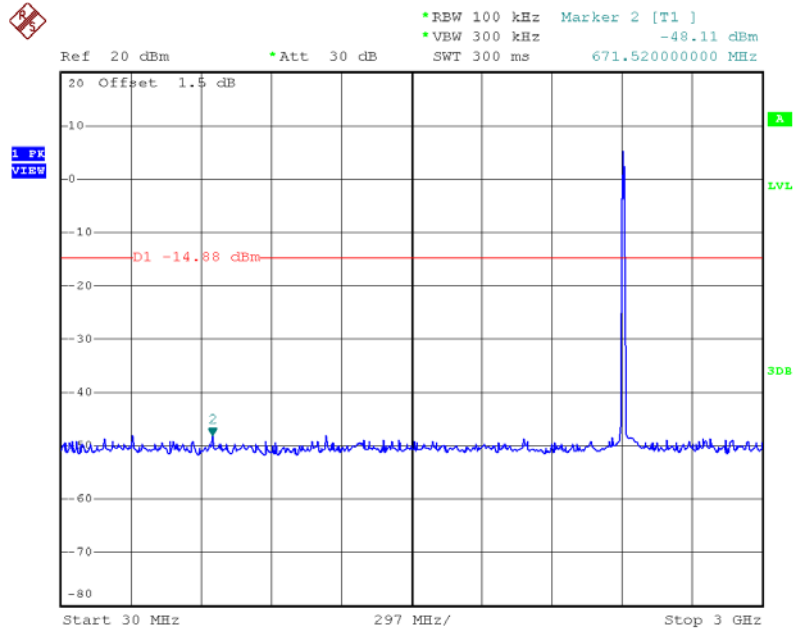
Date: 14.JUL.2017 16:29:50

TX B mode CH11

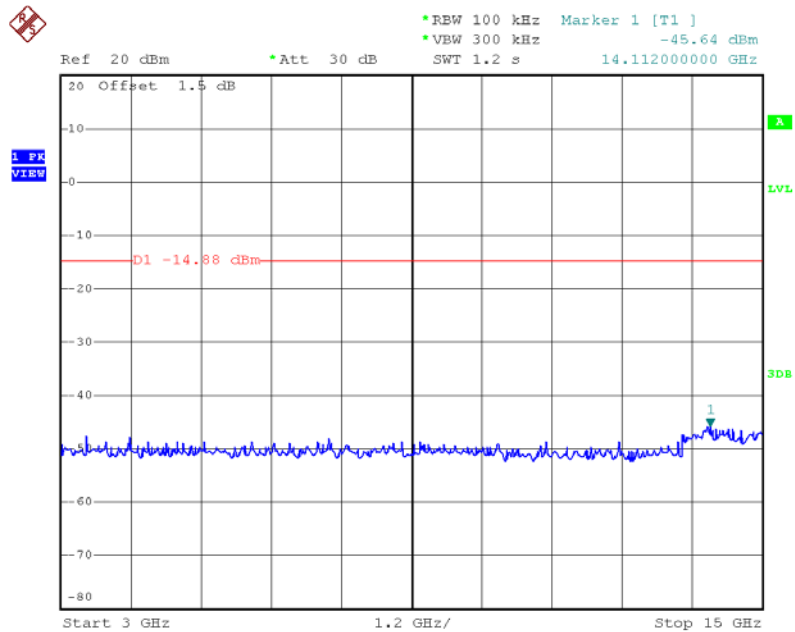


Date: 14.JUL.2017 16:32:59

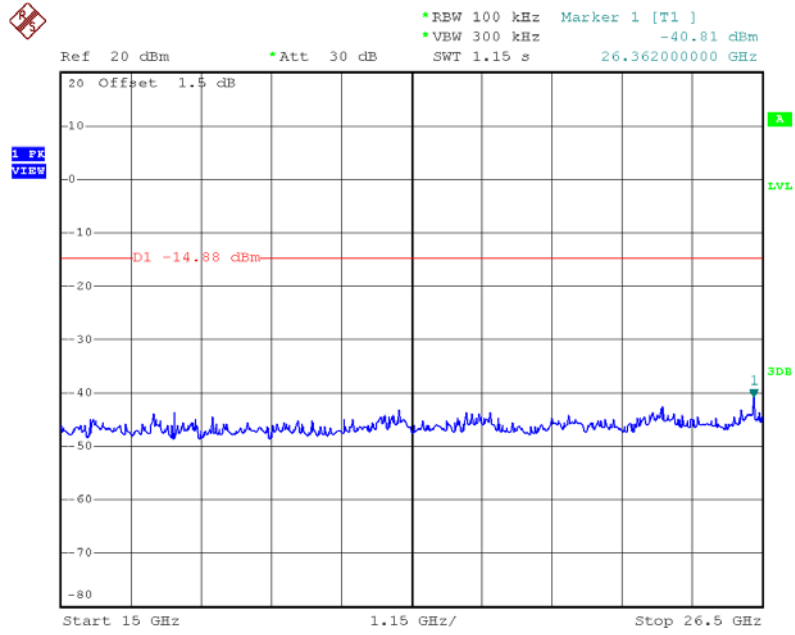
TX B mode CH01 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:29:26

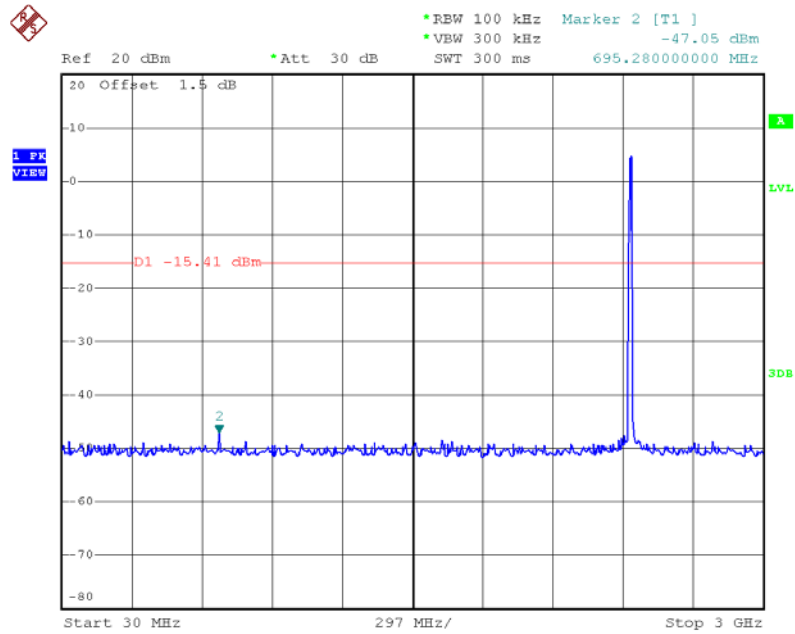


Date: 14.JUL.2017 16:29:34

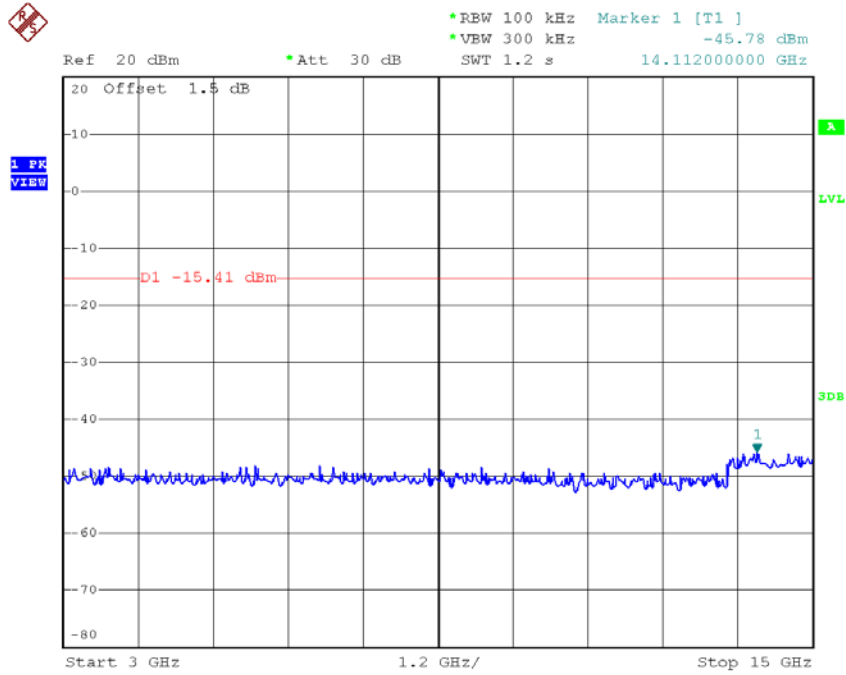


Date: 14.JUL.2017 16:29:43

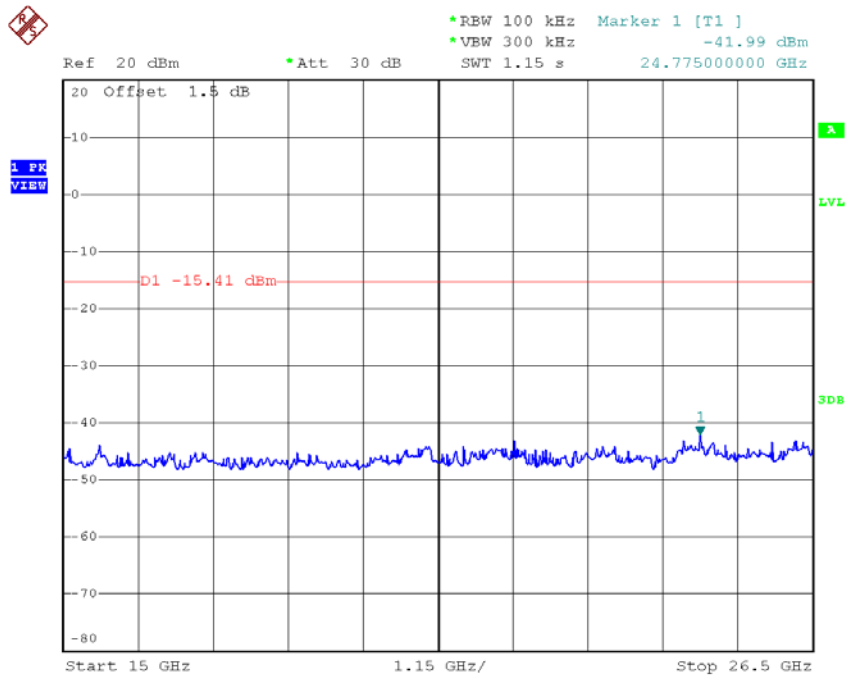
TX B mode CH06 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:31:14

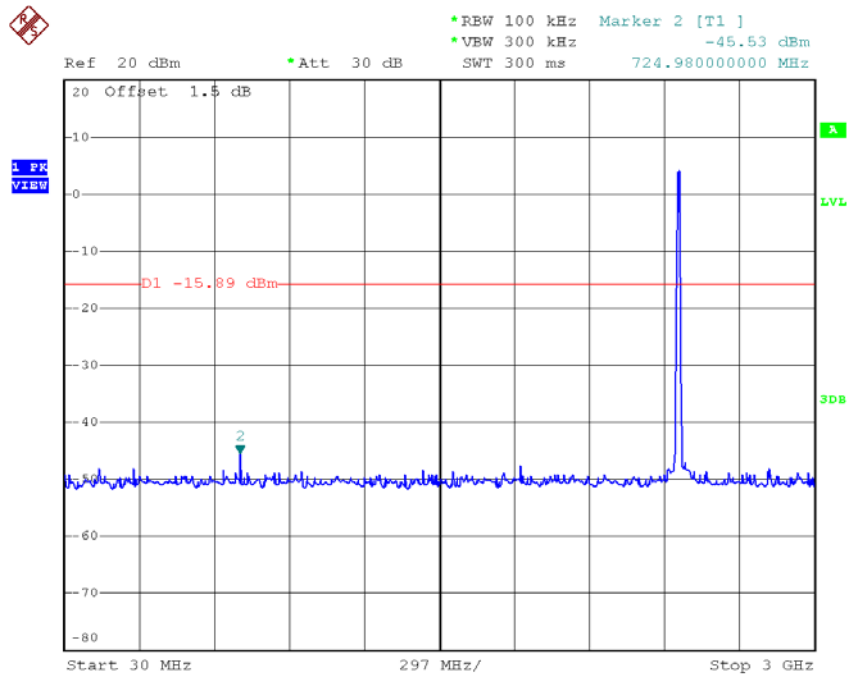


Date: 14.JUL.2017 16:31:22

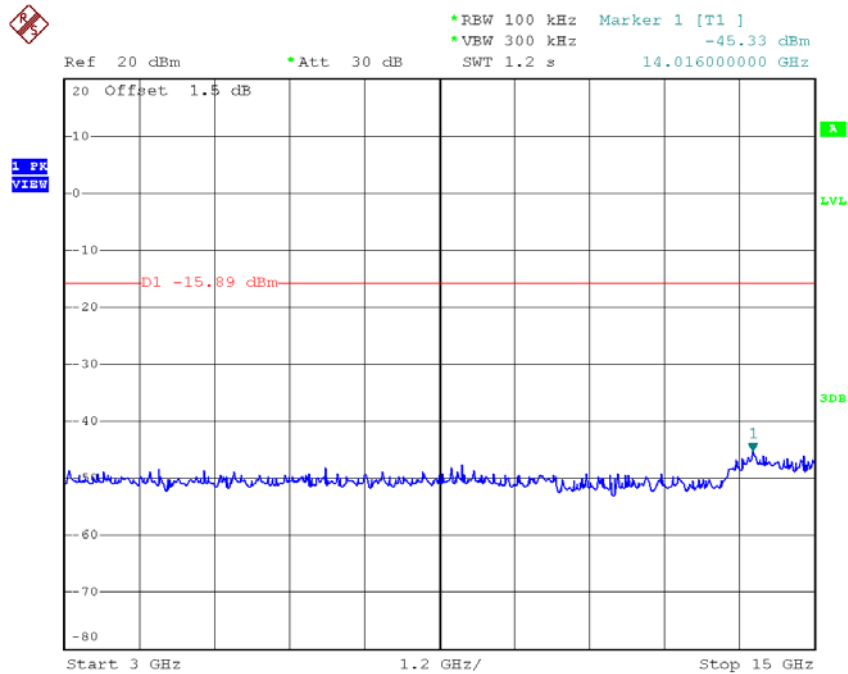


Date: 14.JUL.2017 16:31:31

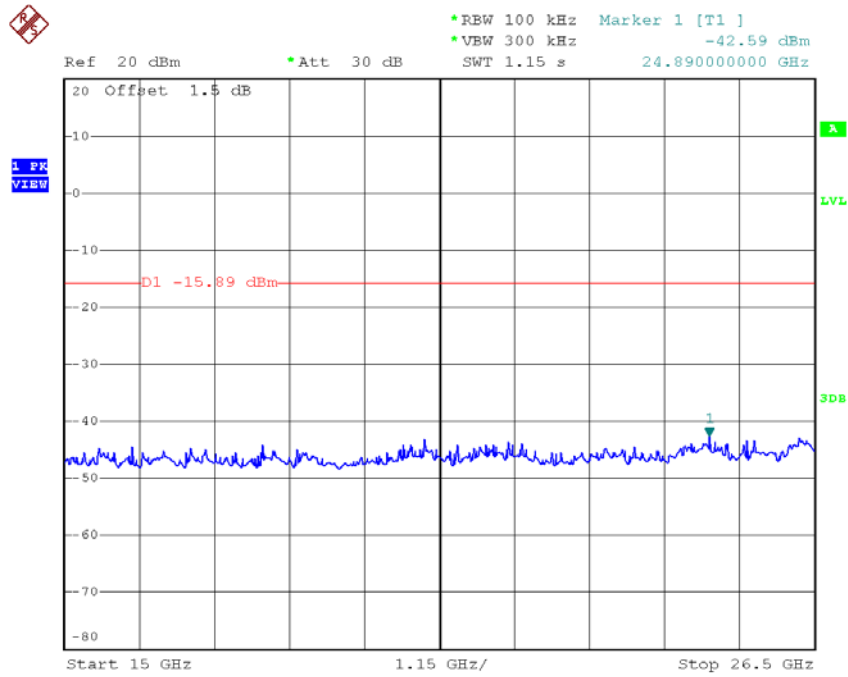
TX B mode CH11 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:32:35



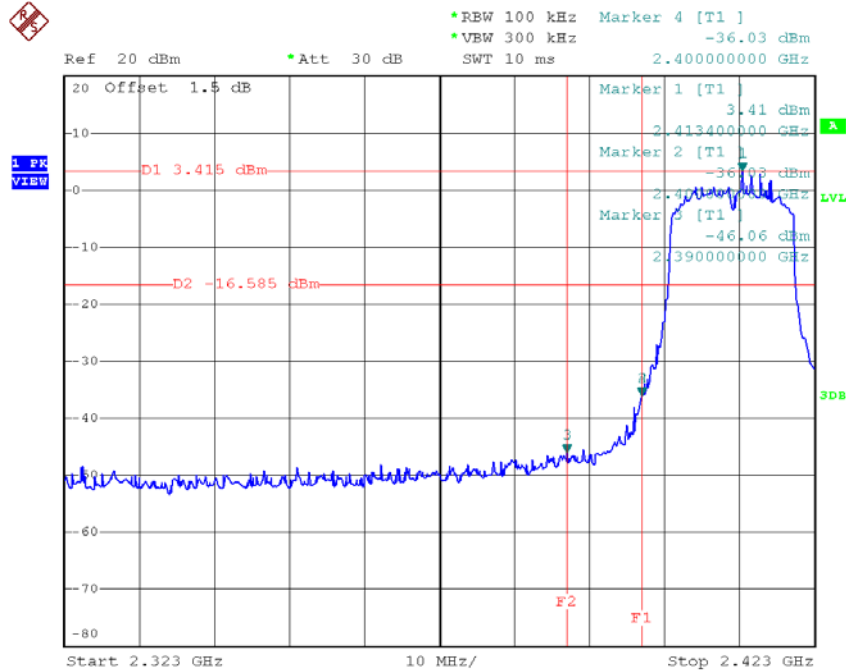
Date: 14.JUL.2017 16:32:43



Date: 14.JUL.2017 16:32:52

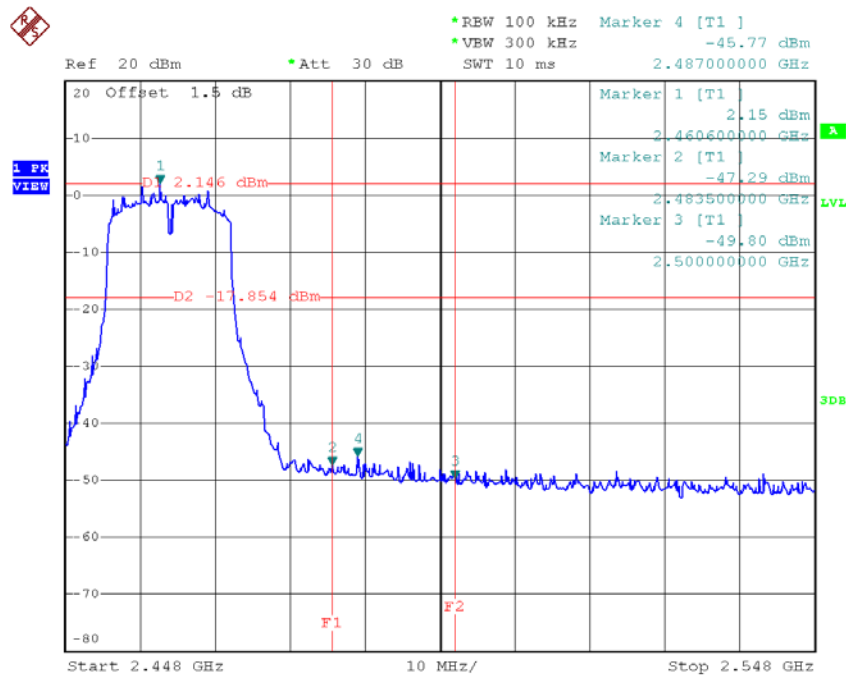
Test Mode : TX G Mode_ANT 1

TX G mode CH01



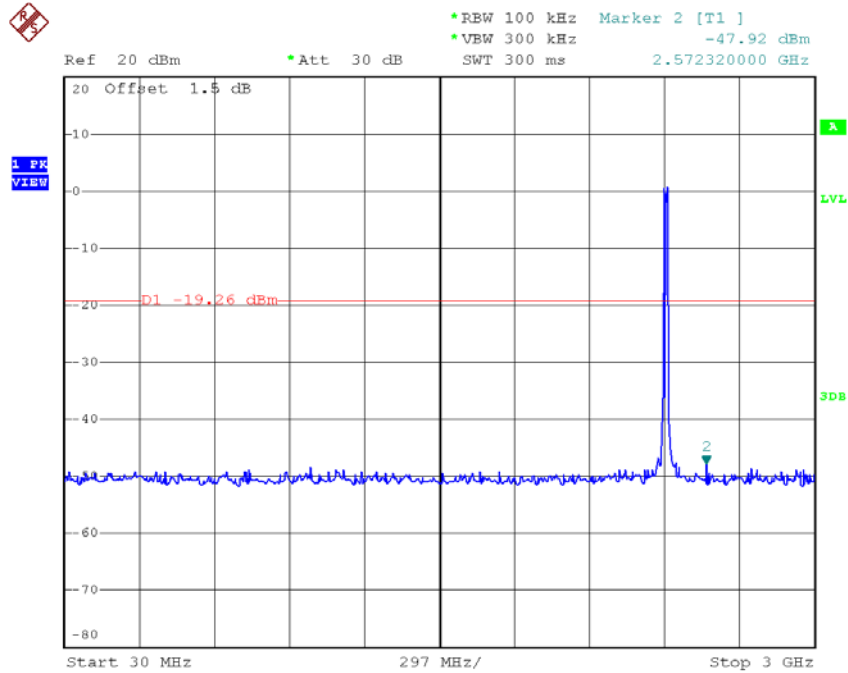
Date: 14.JUL.2017 16:34:57

TX G mode CH11

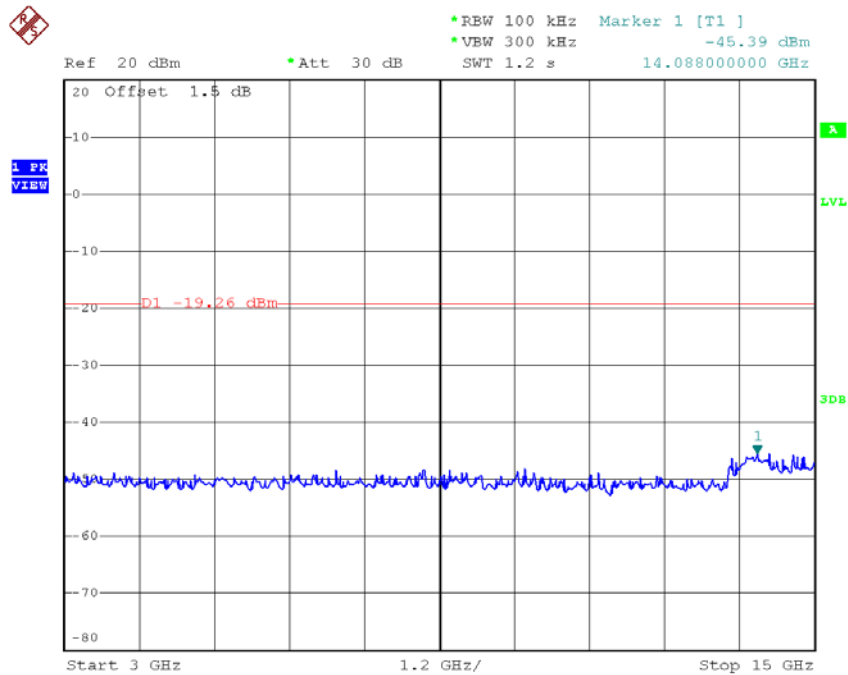


Date: 14.JUL.2017 16:37:29

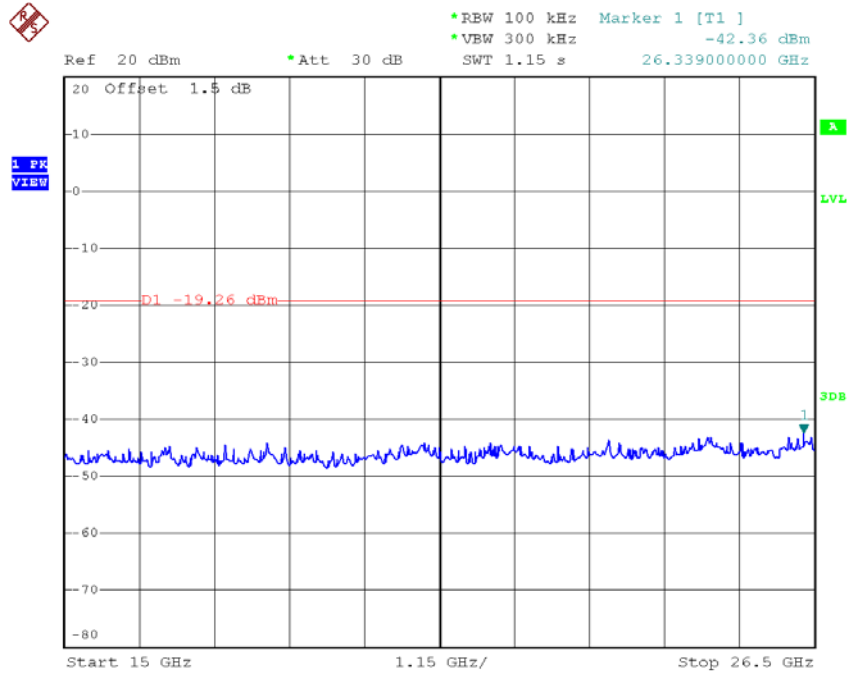
TX G mode CH01 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:34:33

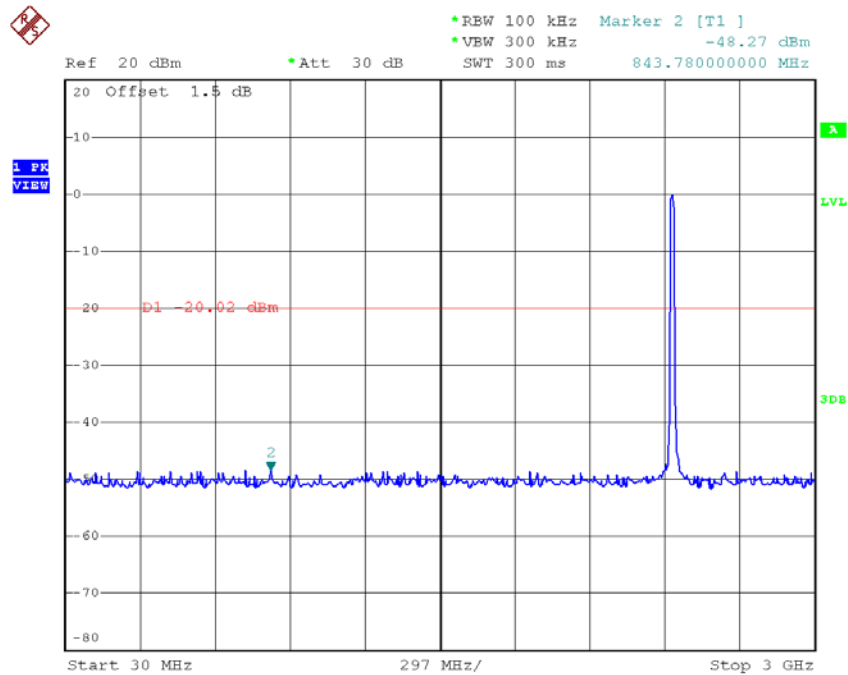


Date: 14.JUL.2017 16:34:41

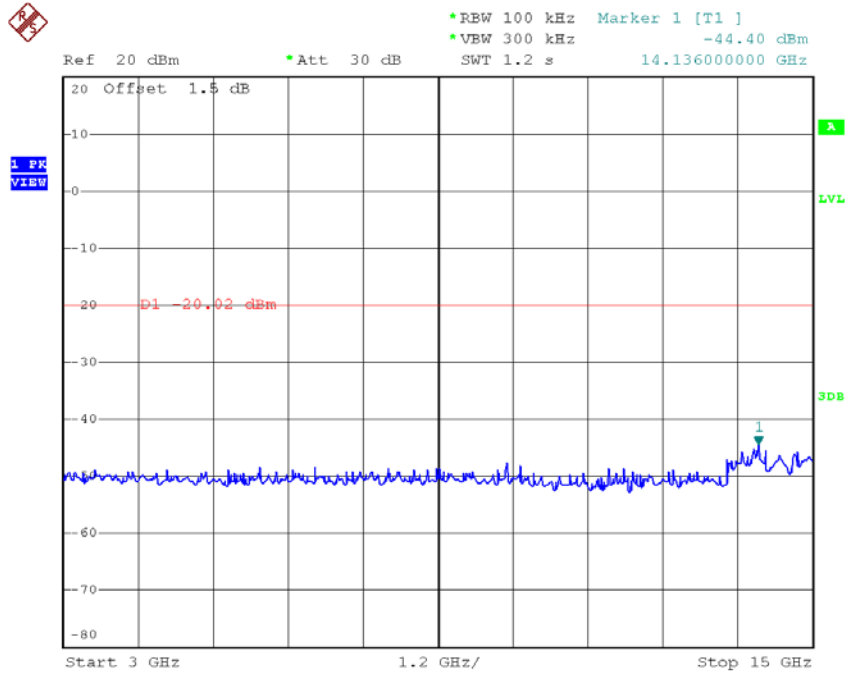


Date: 14.JUL.2017 16:34:49

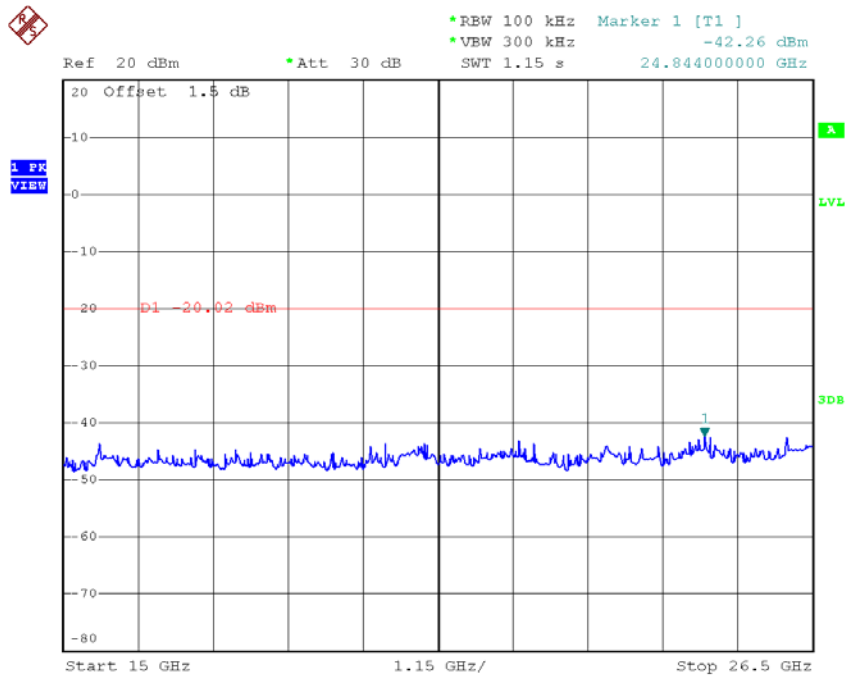
TX G mode CH06 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:35:50

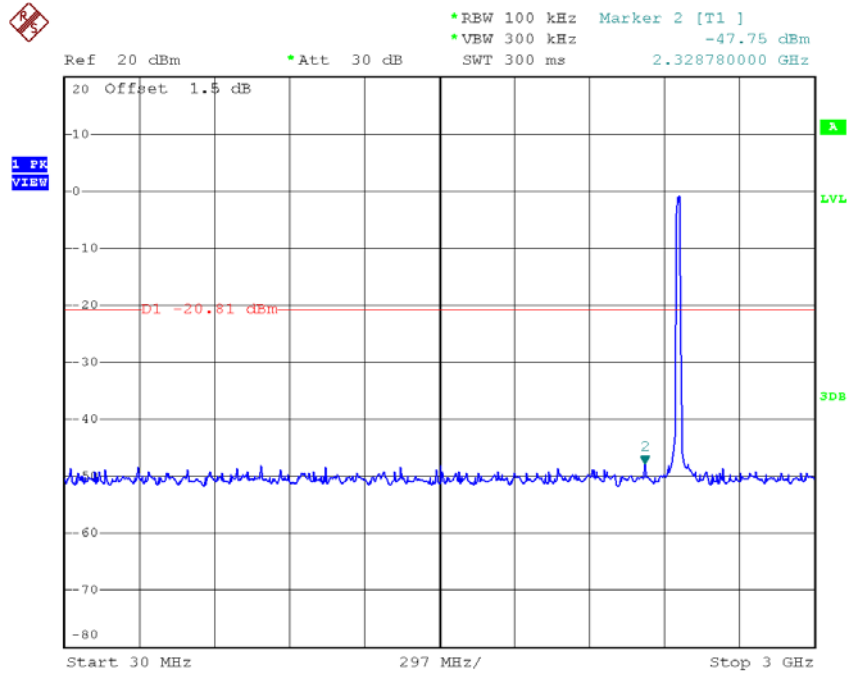


Date: 14.JUL.2017 16:35:59

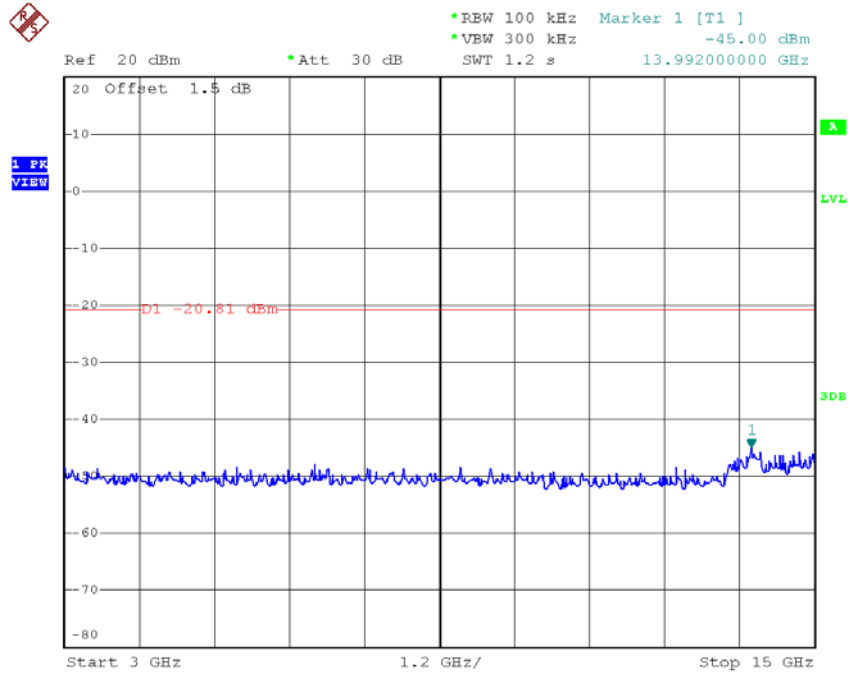


Date: 14.JUL.2017 16:36:07

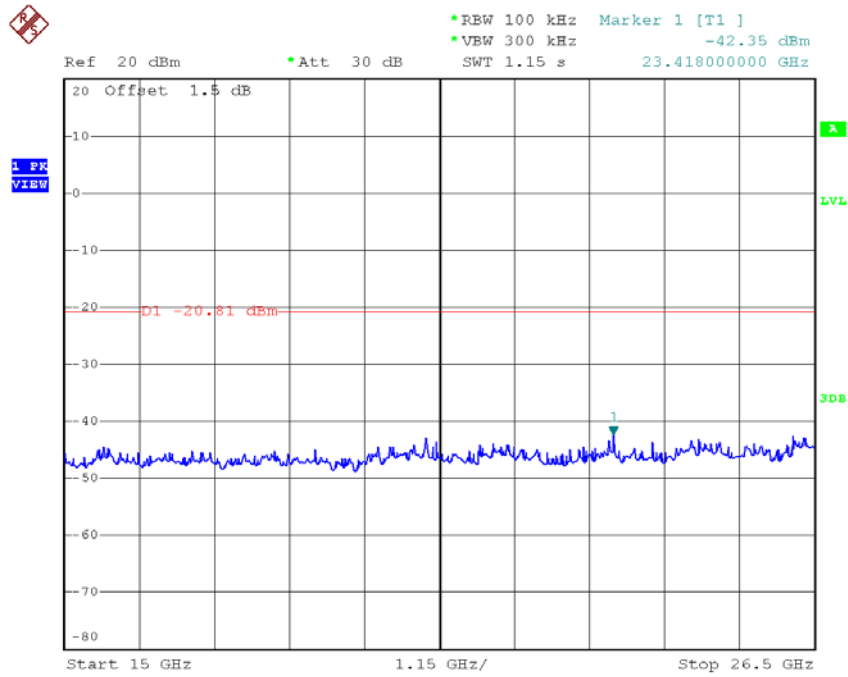
TX G mode CH11 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:37:05



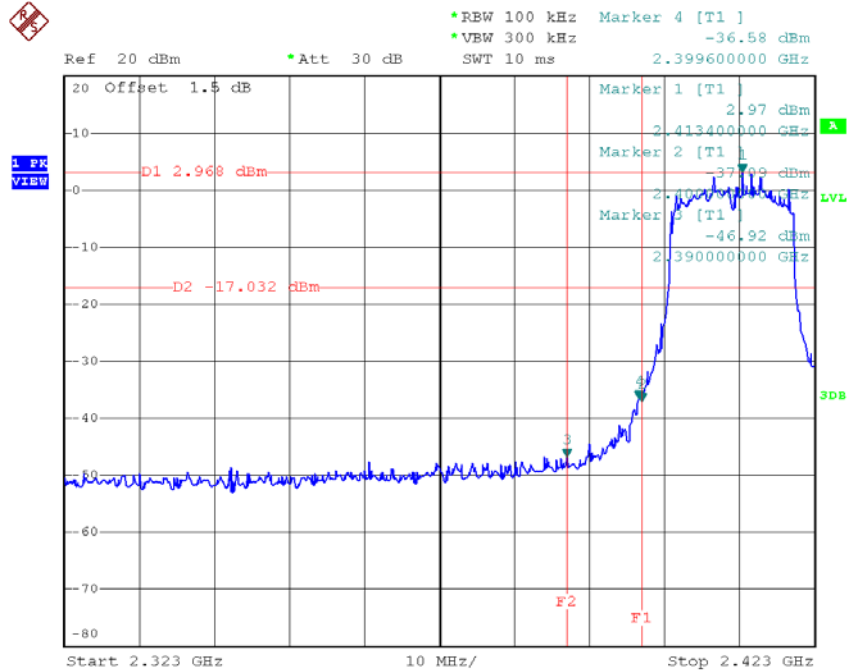
Date: 14.JUL.2017 16:37:13



Date: 14.JUL.2017 17:18:16

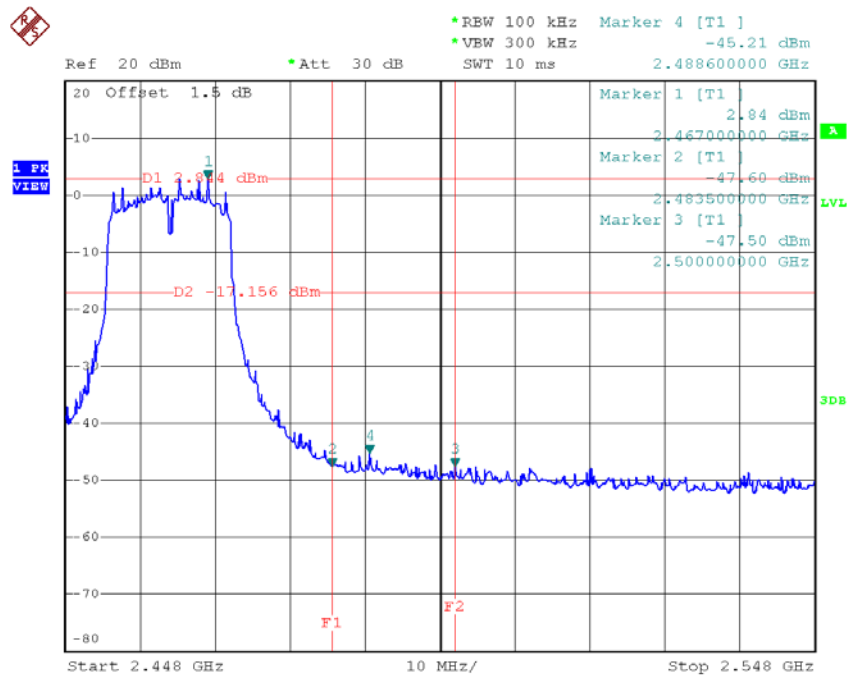
Test Mode : TX G Mode_ANT 2

TX G mode CH01



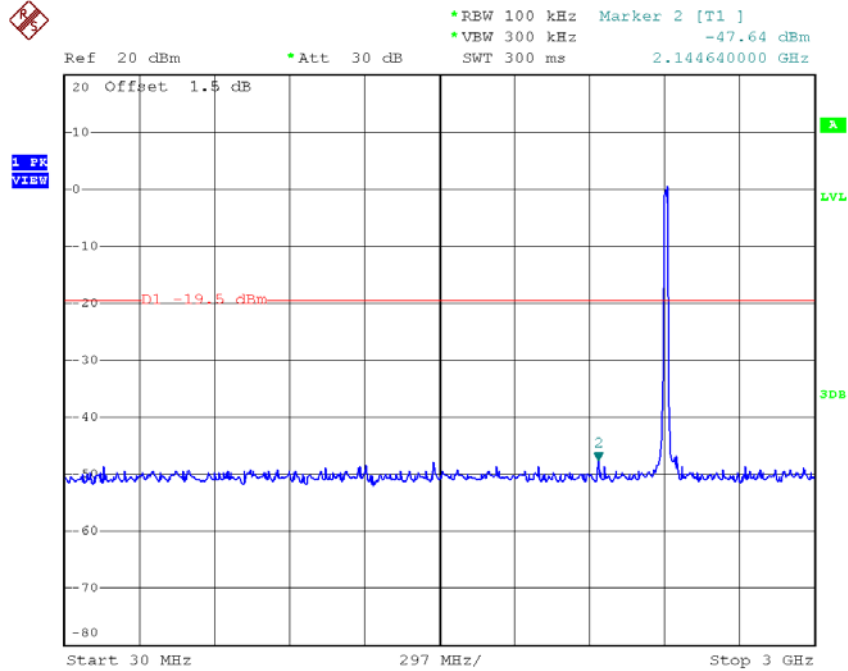
Date: 14.JUL.2017 16:39:49

TX G mode CH11

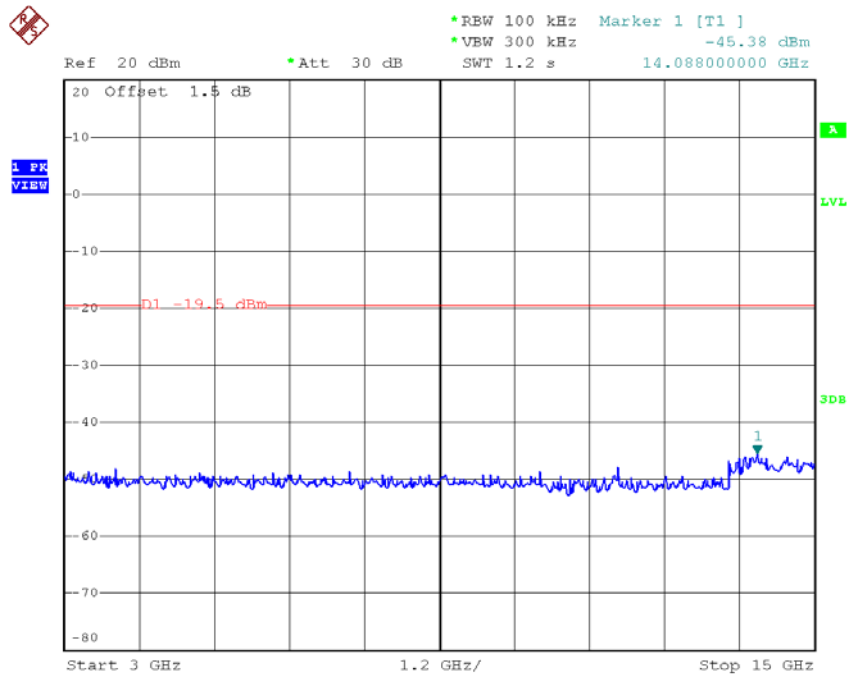


Date: 14.JUL.2017 16:42:26

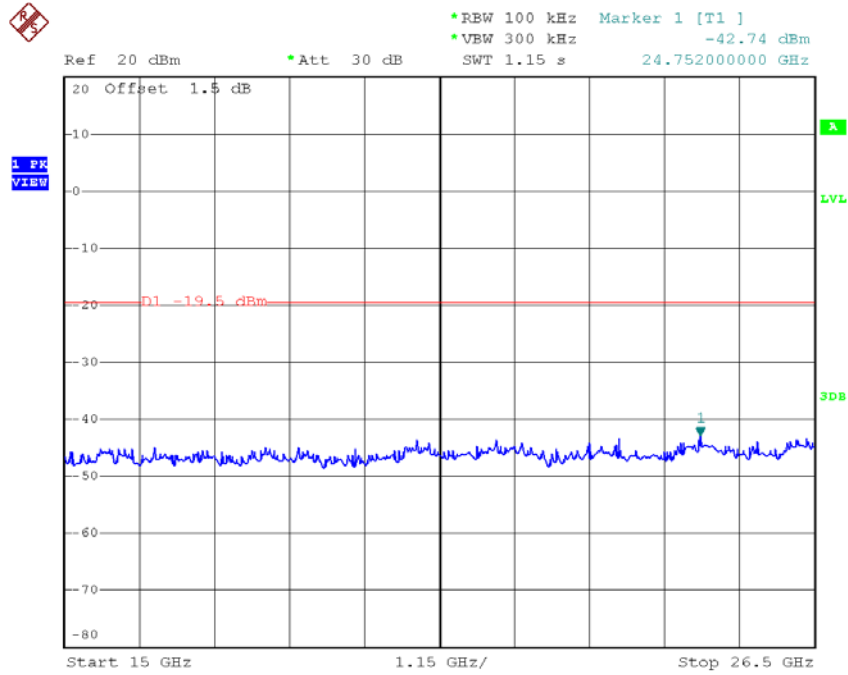
TX G mode CH01 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:39:24

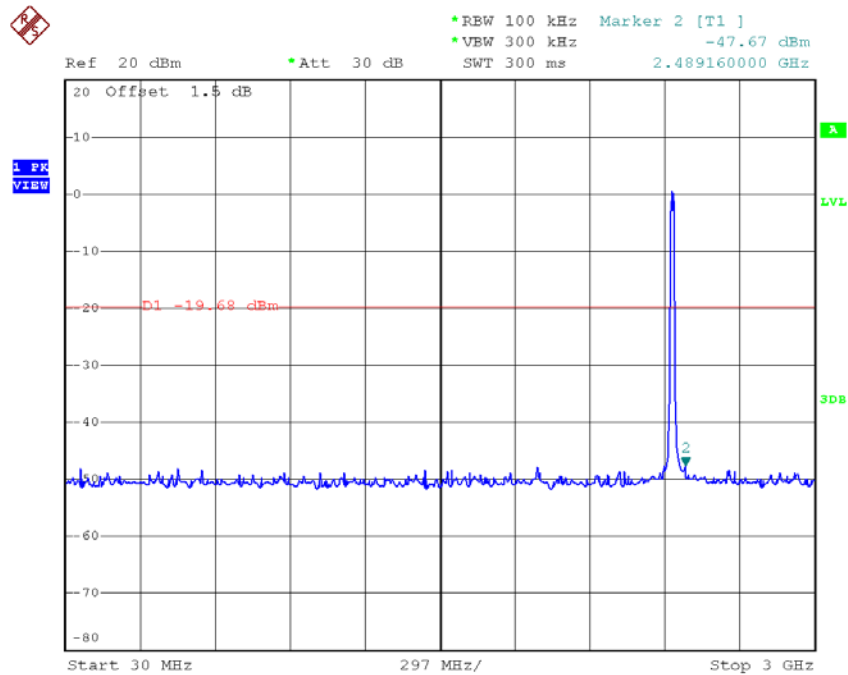


Date: 14.JUL.2017 16:39:33

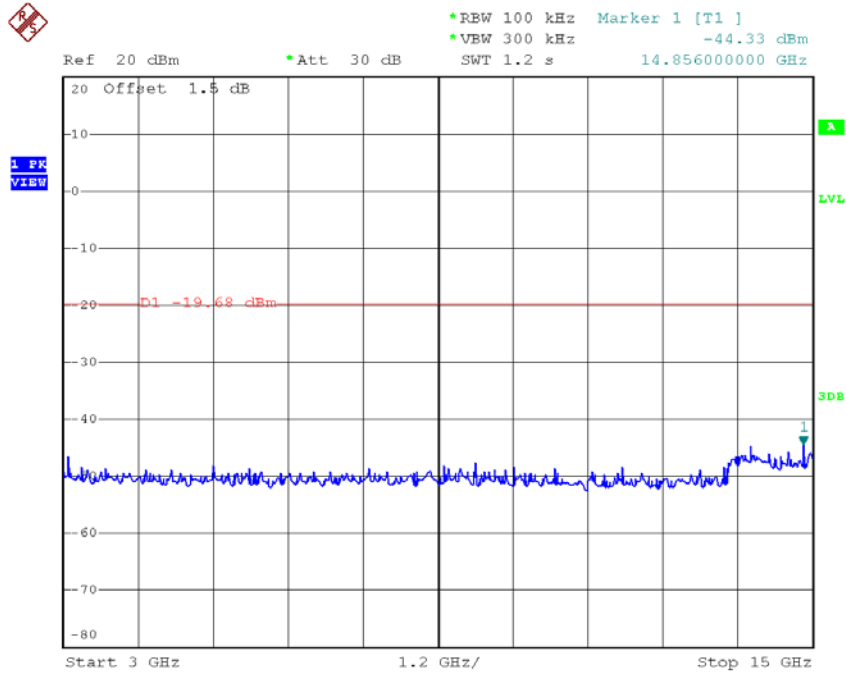


Date: 14.JUL.2017 16:39:41

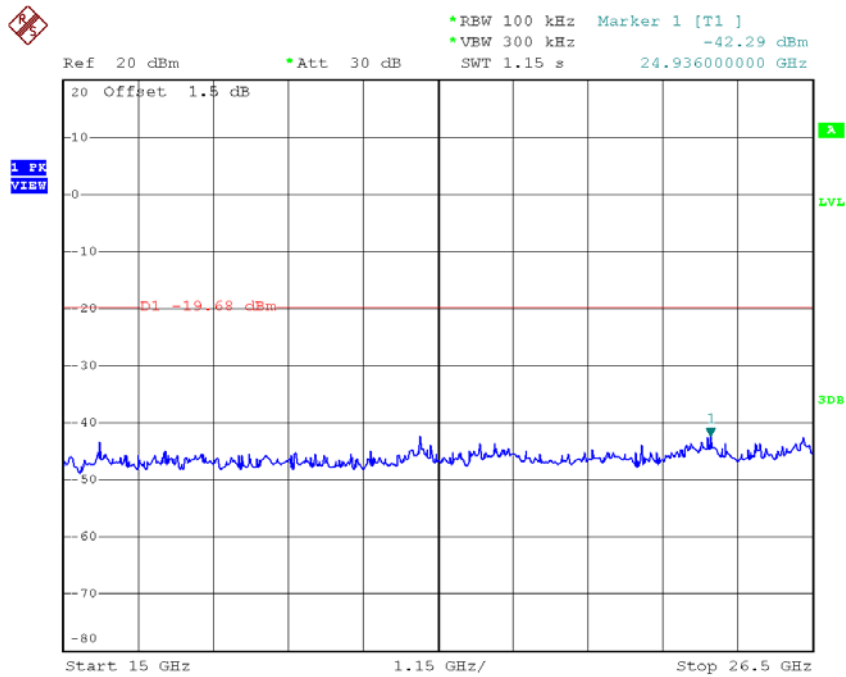
TX G mode CH06 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:40:44

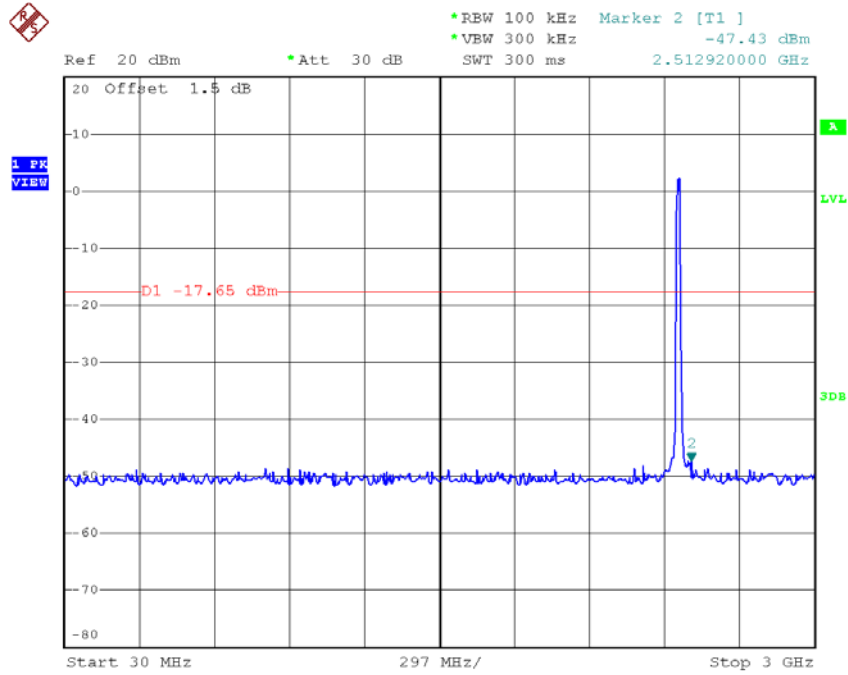


Date: 14.JUL.2017 16:40:53

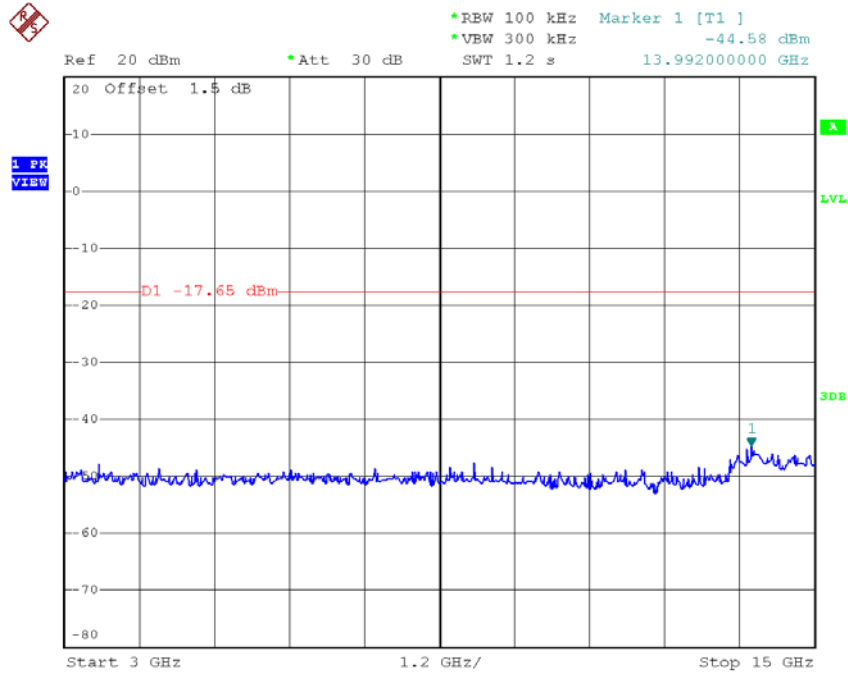


Date: 14.JUL.2017 16:41:01

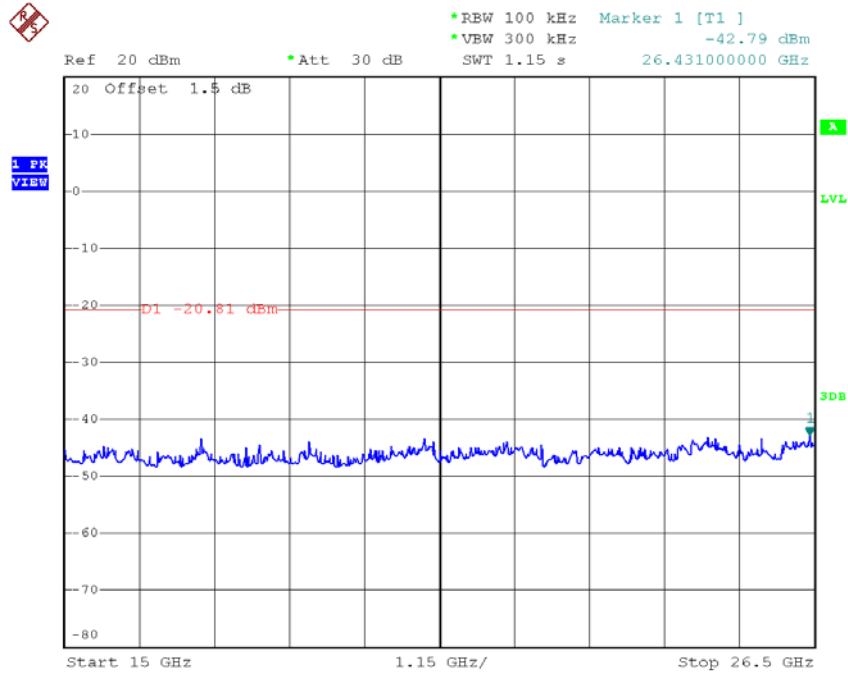
TX G mode CH11 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:42:01



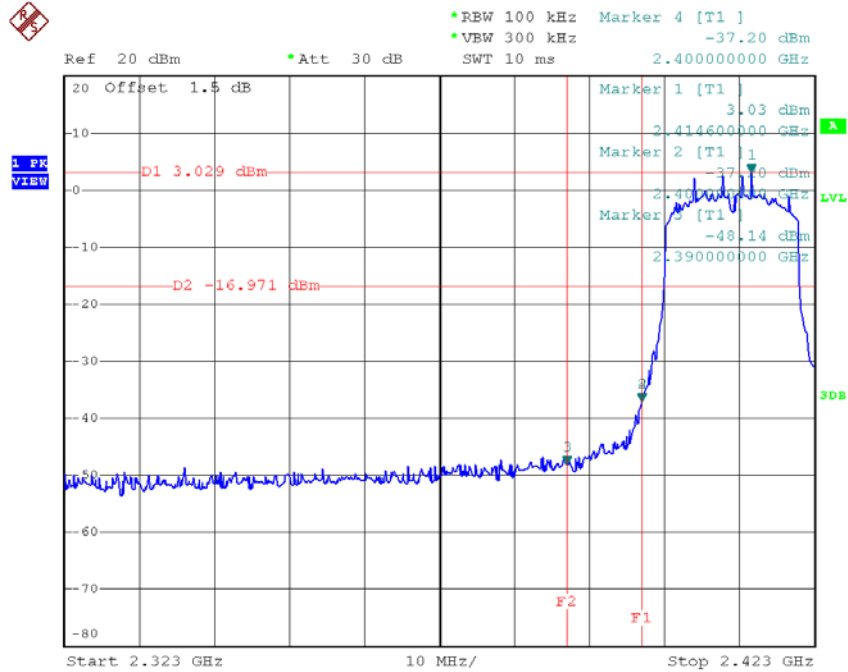
Date: 14.JUL.2017 16:42:10



Date:14.JUL.2017 16:37:21

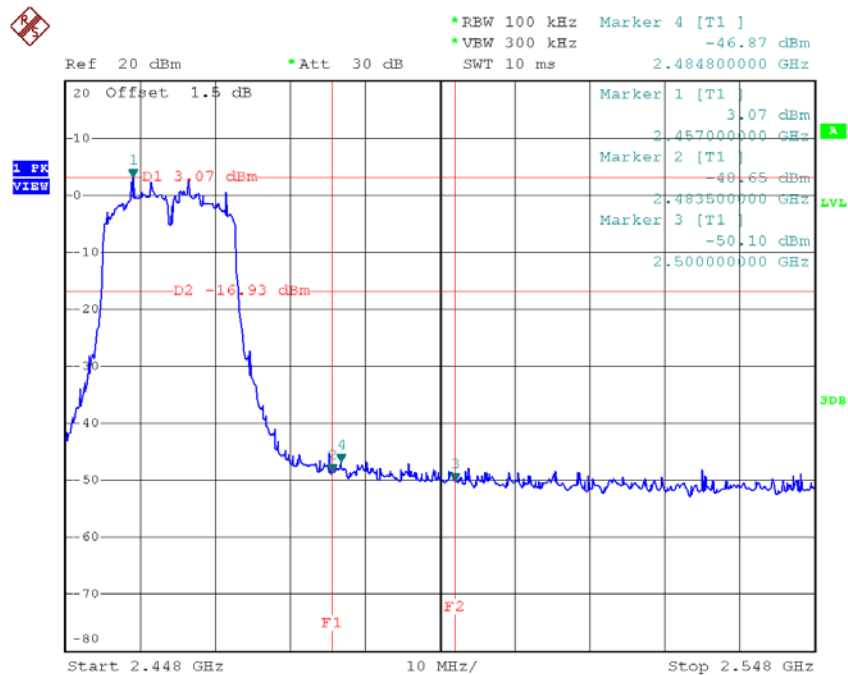
Test Mode : TX N-20M Mode_ANT 1

TX HT20 mode CH01



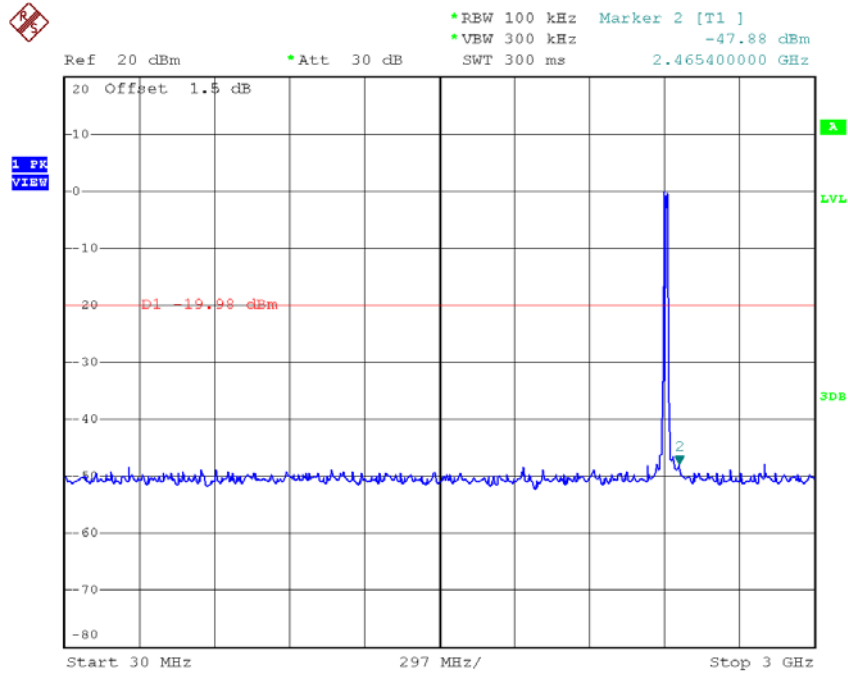
Date: 14.JUL.2017 16:50:09

TX HT20 mode CH11

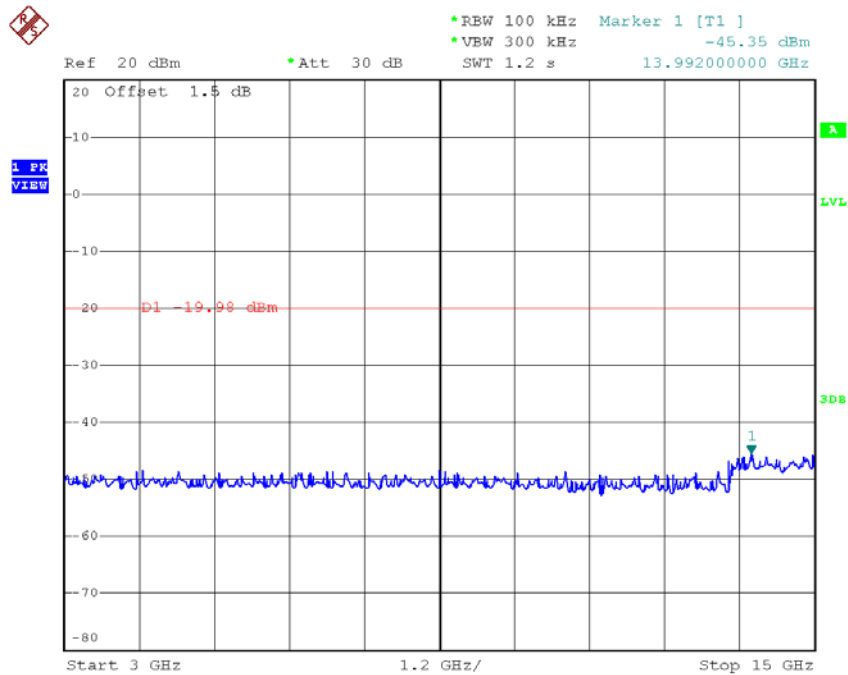


Date: 14.JUL.2017 16:52:40

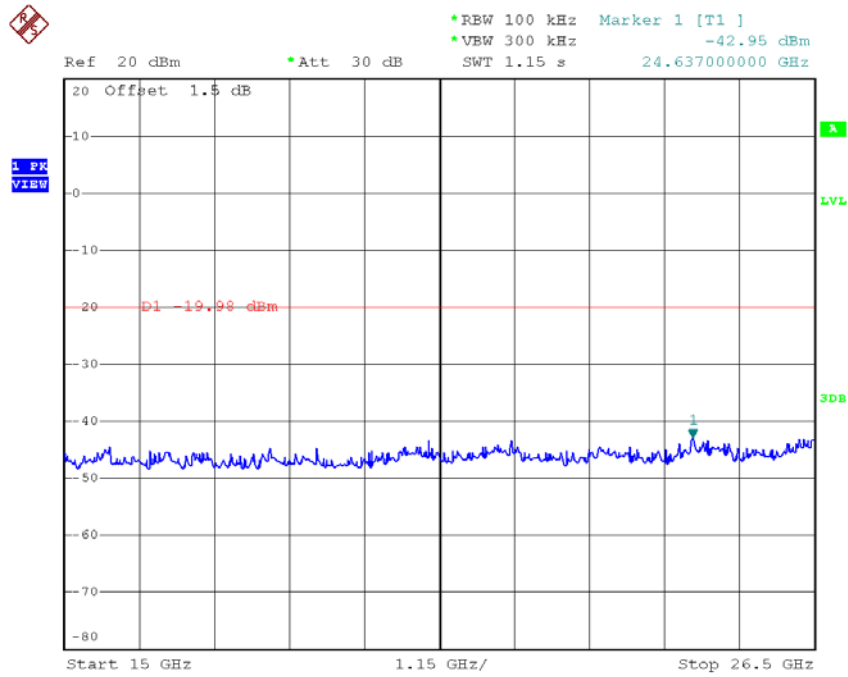
TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:49:45

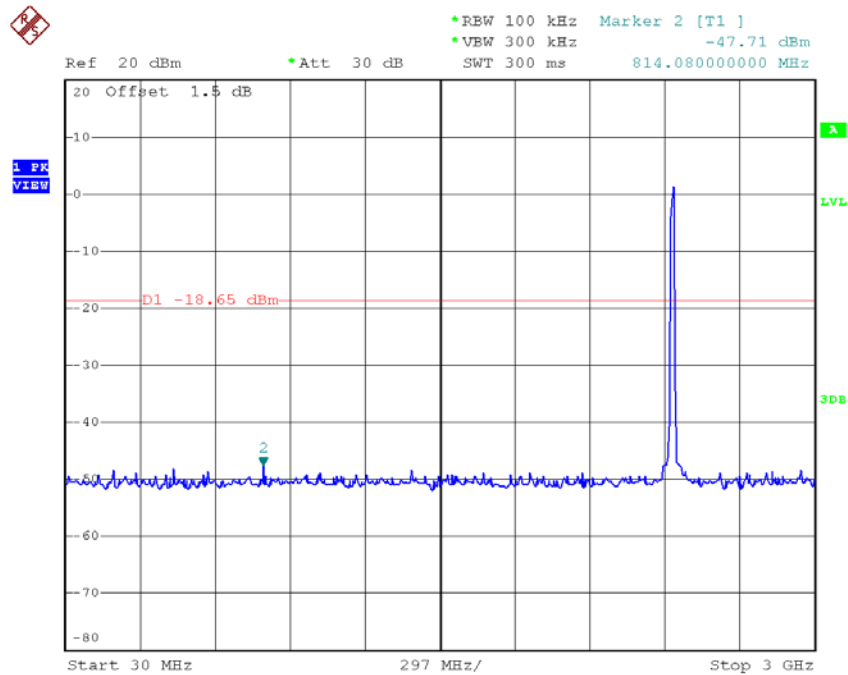


Date: 14.JUL.2017 16:49:53

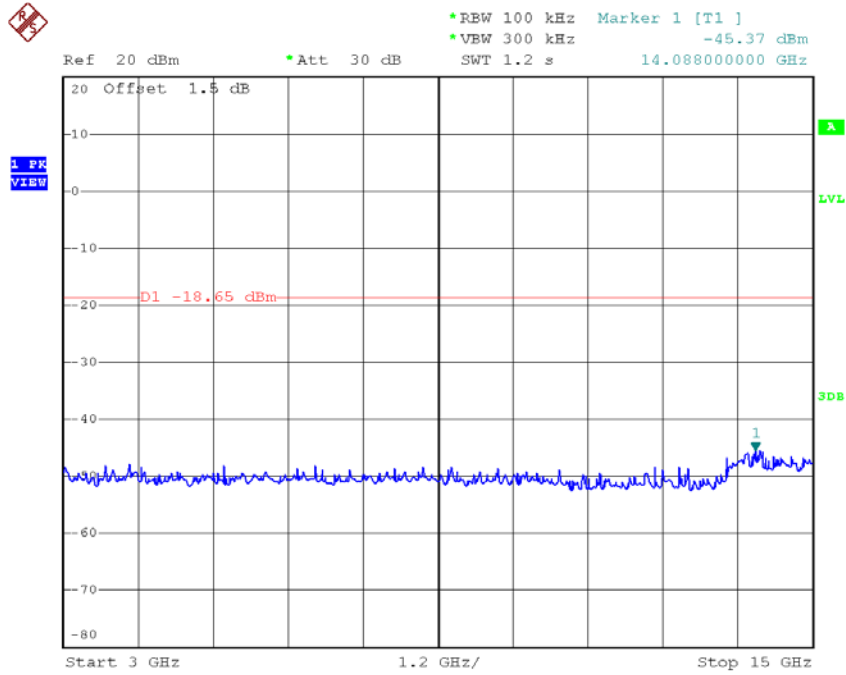


Date: 14.JUL.2017 16:50:01

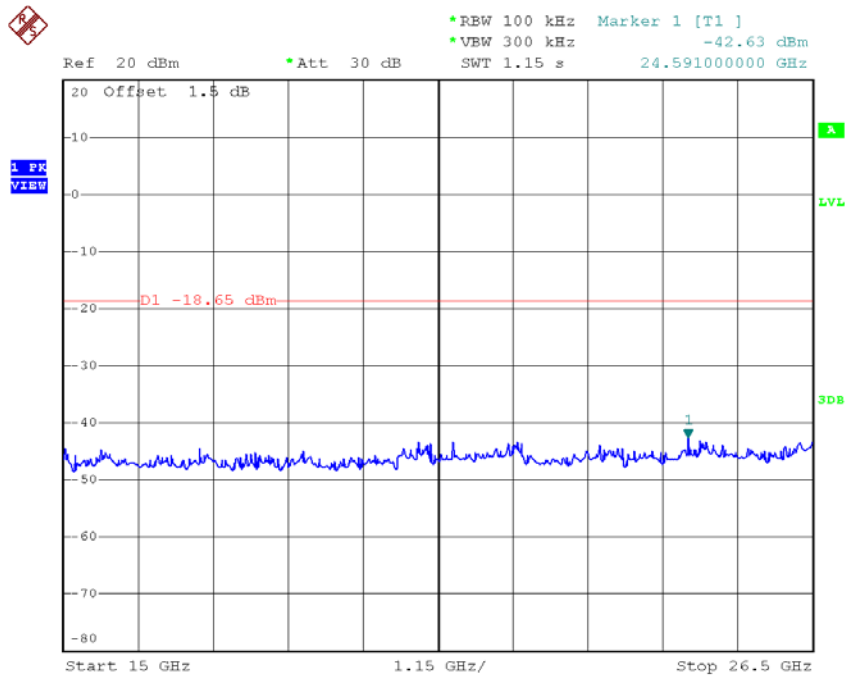
TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 14.JUL.2017 16:51:06



Date: 14.JUL.2017 16:51:14



Date: 14.JUL.2017 16:51:31