

FCC Radio Test Report

FCC ID: RWO-RZ090288

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

Project No. : 1810C079
Equipment : Notebook
Test Model : RZ09-0288
Series Model : RZ09-02886
Applicant : Razer Inc.
Address : 201 3rd Street, Suite 900, San Francisco, CA 94103
USA

Date of Receipt : Nov. 13, 2018
Date of Test : Nov. 15, 2018 ~ Dec. 10, 2018
Issued Date : Jan. 08, 2019
Tested by : BTL Inc.

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Certificate #5123.02

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Limitation

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

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Jan. 02, 2019
R01	1. Updated the description of model difference. 2. Update the output power of 802.11n(40 MHz) channel.	Jan. 08, 2019

1. GENERAL SUMMARY

Equipment : Notebook
Brand Name : RAZER
Test Model : RZ09-0288
Series Model : RZ09-02886
Applicant : Razer Inc.
Manufacturer : Razer Inc.
Address : 201 3rd Street, Suite 900, San Francisco, CA 94103 USA
Factory : BYD Precision Manufacture Co.,Ltd.
Address : No.3001, Baohe Road, Baolong industrial, Longgang Street, Longgang Zone, Shenzhen
Date of Test : Nov. 15, 2018 ~ Dec. 10, 2018
Test Sample : Engineering Sample No.: D181110293 for conducted, D181110290 for radiated.
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-3-1810C079) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

Test results included in this report is only for the WLAN 2.4GHz 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)	6 dB Bandwidth	PASS	
15.247(b)(3)	Maximum 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 Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) $k=1.96$ or $k=2$ (which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %, $U=2xUc(y)$.

The BTL measurement uncertainty as below table:

A. Conducted Measurement:

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

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9 KHz~30 MHz	V	3.79
		9 KHz~30 MHz	H	3.57
		30 MHz~200 MHz	V	3.82
		30 MH~200 MHz	H	3.78
		200 MHz~1,000 MHz	V	4.10
		200 MHz~1,000 MHz	H	4.06
		1 GHz~18 GHz	V	3.12
		1 GHz~18 GHz	H	3.68
		18 GHz~40 GHz	V	4.15
18 GHz~40 GHz	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		
Test Model	RZ09-0288		
Series Model	RZ09-02886		
Model Difference(s)	The only difference between the two models is the graphics card. The two graphics cards are with identical electrical characteristics (pin compatible) and only differ in the model name of GPU with identical hardware/software. GPU used for model RZ09-0288 are N18E-G3-A1 and N18E-G2-A1, GPU used for model RZ09-02886 is N18E-G1-A1.		
Software Version	C2_MB		
Hardware Version	Windows 10		
Product Description	Operation Frequency	2412 MHz ~ 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: 21.01 dBm 802.11g: 24.34 dBm 802.11n(20 MHz): 24.23 dBm 802.11n(40 MHz): 22.75 dBm	
Power Source	1# DC Voltage supplied from AC/DC adapter. Model1: RC30-0238(200W) Model2: RC30-024801(230W) 2# Supplied from Li-ion battery Model: RC30-0248		
Power Rating	1# Model1: I/P: AC100-240V, 2.5A, 50/60Hz O/P: 19.5V --- 10.26A Model2: I/P:100-240V~3.6A 50/60Hz O/P:19.5V --- 11.8A 2# DC15.4V,5209mAh,80Wh		

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(20 MHz) CH03 - CH09 for 802.11n(40 MHz)							
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)	Note
1	molex	2065720001	PIFA	N/A	3.13	N/A
2	molex	2065720001	PIFA	N/A	3.06	N/A

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other.

So Directional gain = $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N]$ dBi, that is

Directional gain = $10\log[(10^{3.13/20} + 10^{3.06/20})^2 / 2]$ dBi = 6.11.

So, the output power limit is $30 - 6.11 + 6 = 29.89$, the power density limit is $8 - 6.11 + 6 = 7.89$.

4. The worst case for 2TX as follow:

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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz 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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz 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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

6 dB 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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Maximum 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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz 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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Note:

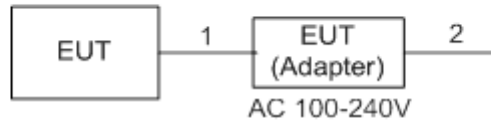
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1 Mbps)
 802.11g mode: OFDM (6 Mbps)
 802.11n HT20 mode : BPSK (13 Mbps)
 802.11n HT40 mode : BPSK (27 Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated 30 MHz to 1000 MHz 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 TEST 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	DRTU		
Frequency (MHz)	2412	2437	2462
802.11b	15/15	15/15	15/15
802.11g	15/15	15/15	15/15
802.11n (20 MHz)	15/15	15/15	15/15
Frequency (MHz)	2422	2437	2452
802.11n (40 MHz)	13/13	13/13	13.5/13

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	2m	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 150 kHz-30 MHz)

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note:

- (1) The limit of " * " decreases with the logarithm of the frequency
- (2) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
 Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

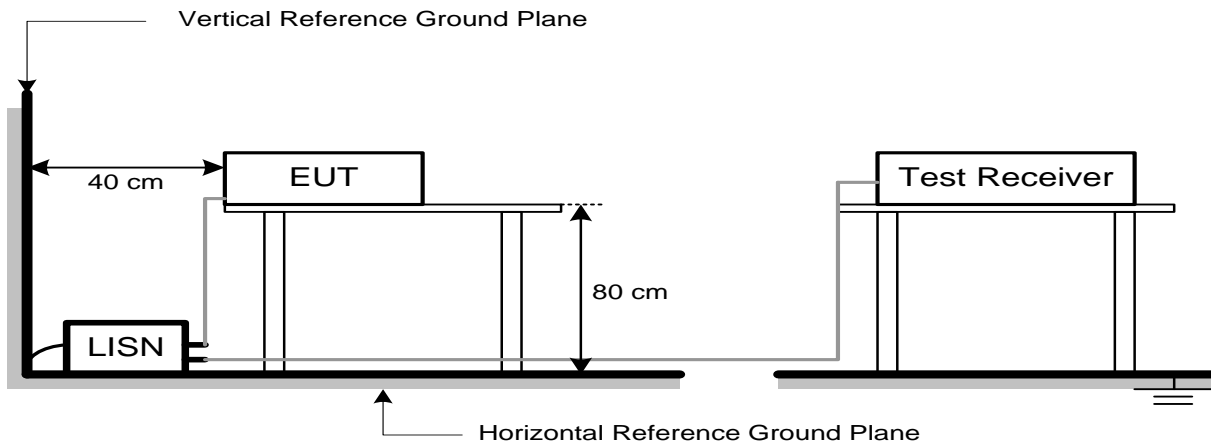
4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment 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



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: 53% Test Voltage: AC 120V/60Hz

4.1.7 TEST RESULTS

Please refer to the Appendix A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “*” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150 kHz to 30 MHz.

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 (9 kHz-1000 MHz)

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 1000 MHz)

Frequency (MHz)	(dBuV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

Note:

- (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)	1 MHz / 3 MHz for Peak, 1 MHz / 1/T for Average

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

4.2.2 TEST PROCEDURE

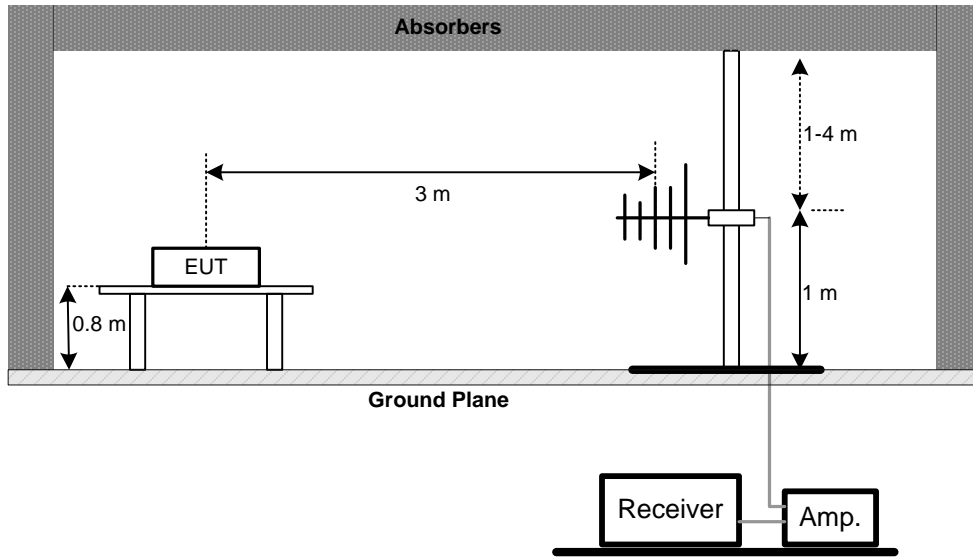
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b. The measuring distance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

4.2.3 DEVIATION FROM TEST STANDARD

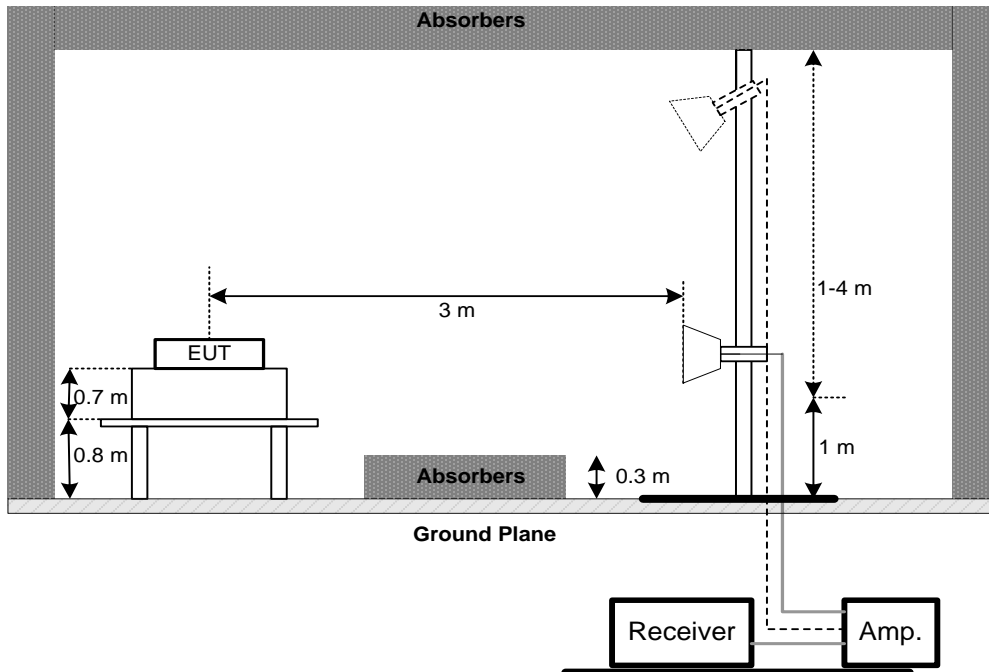
No deviation

4.2.4 TEST SETUP

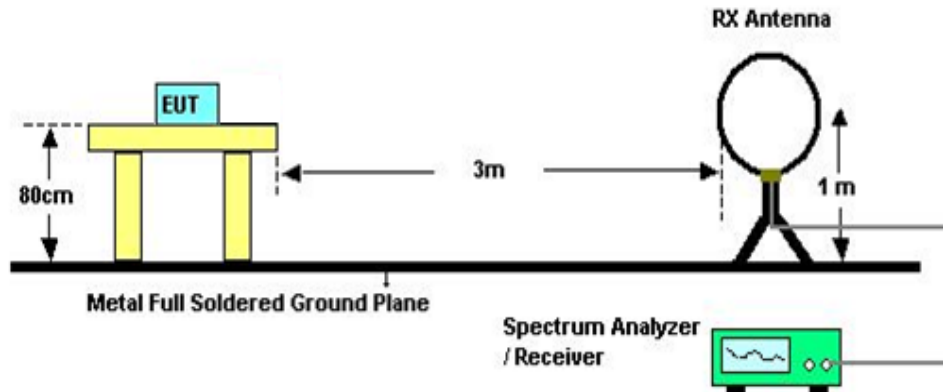
(A) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



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



(C) For Radiated Emissions 9 kHz-30 MHz



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: 60% Test Voltage: AC 120V/60Hz

4.2.7 TEST RESULTS (9 kHz TO 30 MHz)

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 (30 MHz 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

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: For B, G, N20, N40 mode: 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: 56% Test Voltage: AC 120V/60Hz

5.1.6 TEST RESULTS

Please refer to the Appendix E.

6. MAXIMUM 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 30 dBm	2400-2483.5	PASS

6.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. The maximum output power was performed in accordance with method 11.9.2.3 of ANSI C63.10.

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: 56% 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 intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

7.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, Sweep time = Auto.
- c. Offset=antenna gain+cable loss

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 56% 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 3 kHz)	2400-2483.5	PASS

8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW=3 kHz, VBW=10 kHz, 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: 56% 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. 11, 2019
2	LISN	EMCO	3816/2	52765	Mar. 11, 2019
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 11, 2019
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 11, 2019
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 23, 2019

Radiated Emission Measurement-9 kHz TO 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Feb. 07, 2019
2	Cable	N/A	RG 213/U	C-102	Jun. 01, 2019
3	EMI Test Receiver	R&S	ESCI	100382	Mar. 11, 2019
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement-30 MHz TO 1000 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 11, 2019
2	Amplifier	HP	8447D	2944A09673	Aug. 11, 2019
3	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 25, 2019
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

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. 11, 2019
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 30, 2019
3	Amplifier	Agilent	8449B	3008A02274	Mar. 11, 2019
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 11, 2019
5	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	B10-01-01-12M	18072744	Jul. 30, 2019
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6 dB Bandwidth

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

Maximum output power

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	ANRITSU	ML2495A	1128009	Mar. 11, 2019
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 11, 2019

Antenna Conducted Spurious Emission

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

Power Spectral Density

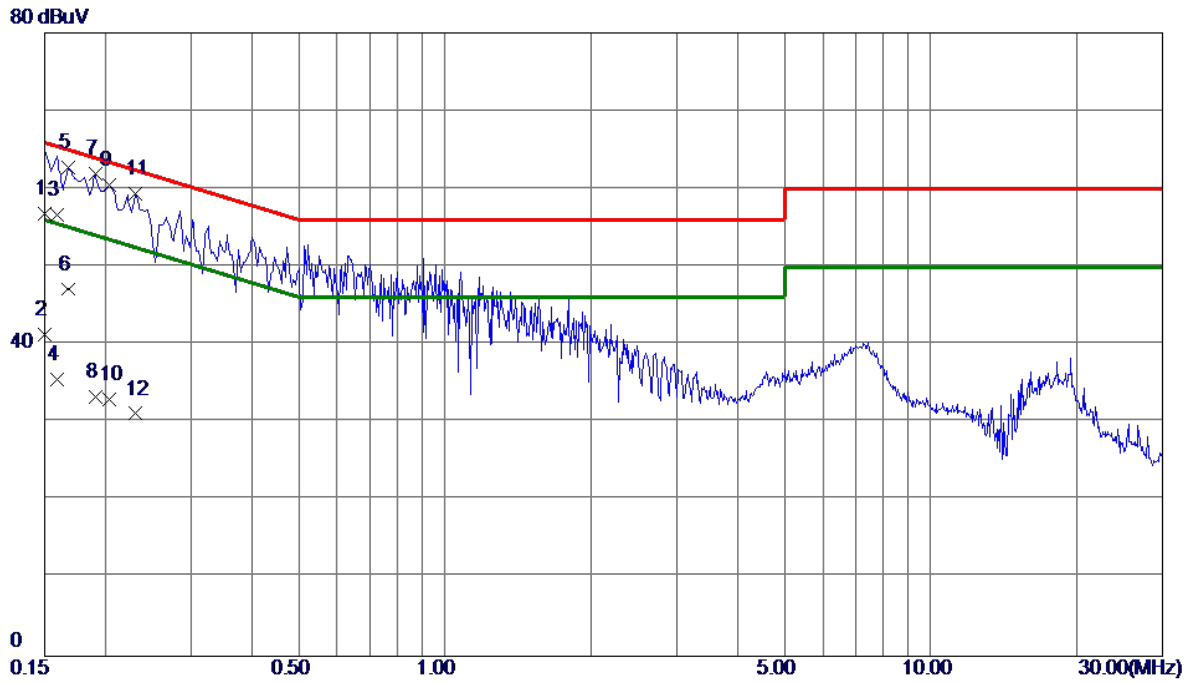
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

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 (Adapter: RC30-024801)

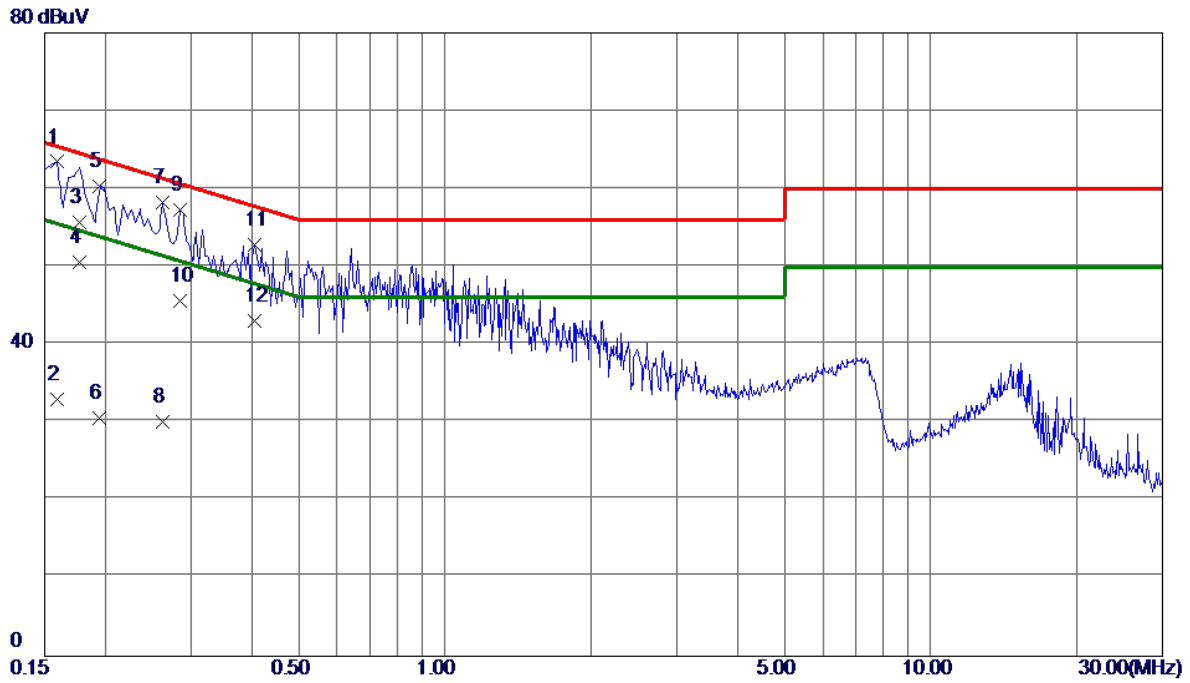
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1500	47.00	9.82	56.82	66.00	-9.18	QP	
2	0.1500	31.50	9.82	41.32	56.00	-14.68	AVG	
3	0.1590	46.80	9.82	56.62	65.52	-8.90	QP	
4	0.1590	25.70	9.82	35.52	55.52	-20.00	AVG	
5	0.1680	52.92	9.82	62.74	65.06	-2.32	Peak	
6	0.1680	37.30	9.82	47.12	55.06	-7.94	AVG	
7 *	0.1905	52.04	9.82	61.86	64.01	-2.15	Peak	
8	0.1905	23.50	9.82	33.32	54.01	-20.69	AVG	
9	0.2040	50.66	9.82	60.48	63.45	-2.97	Peak	
10	0.2040	23.20	9.82	33.02	53.45	-20.43	AVG	
11	0.2310	49.53	9.82	59.35	62.41	-3.06	Peak	
12	0.2310	21.30	9.82	31.12	52.41	-21.29	AVG	

Test Mode: TX Mode (Adapter: RC30-024801)

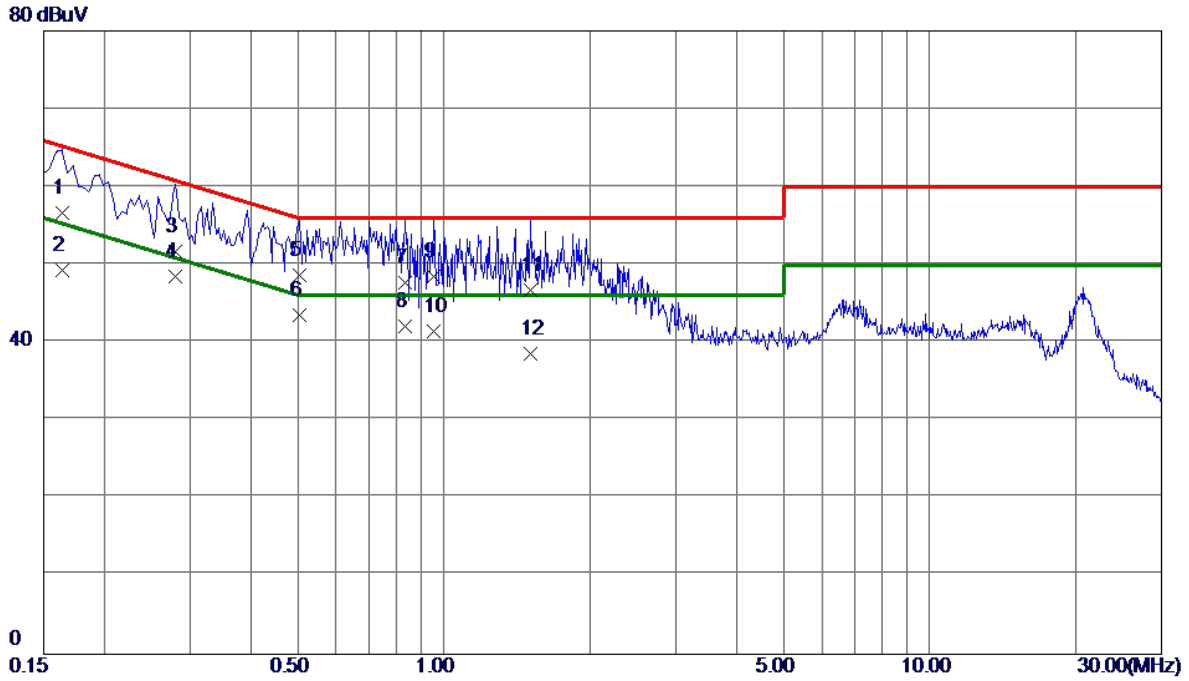
Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1590	53.53	9.91	63.44	65.52	-2.08	Peak	
2	0.1590	23.10	9.91	33.01	55.52	-22.51	AVG	
3	0.1770	45.81	9.91	55.72	64.63	-8.91	QP	
4	0.1770	40.61	9.91	50.52	54.63	-4.11	AVG	
5	0.1949	50.34	9.91	60.25	63.83	-3.58	Peak	
6	0.1949	20.60	9.91	30.51	53.83	-23.32	AVG	
7	0.2625	48.28	9.92	58.20	61.35	-3.15	Peak	
8	0.2625	20.11	9.92	30.03	51.35	-21.32	AVG	
9	0.2850	47.33	9.93	57.26	60.67	-3.41	Peak	
10	0.2850	35.59	9.93	45.52	50.67	-5.15	AVG	
11	0.4065	42.80	9.95	52.75	57.72	-4.97	Peak	
12	0.4065	33.10	9.95	43.05	47.72	-4.67	AVG	

Test Mode: TX Mode (Adapter: RC30-0238)

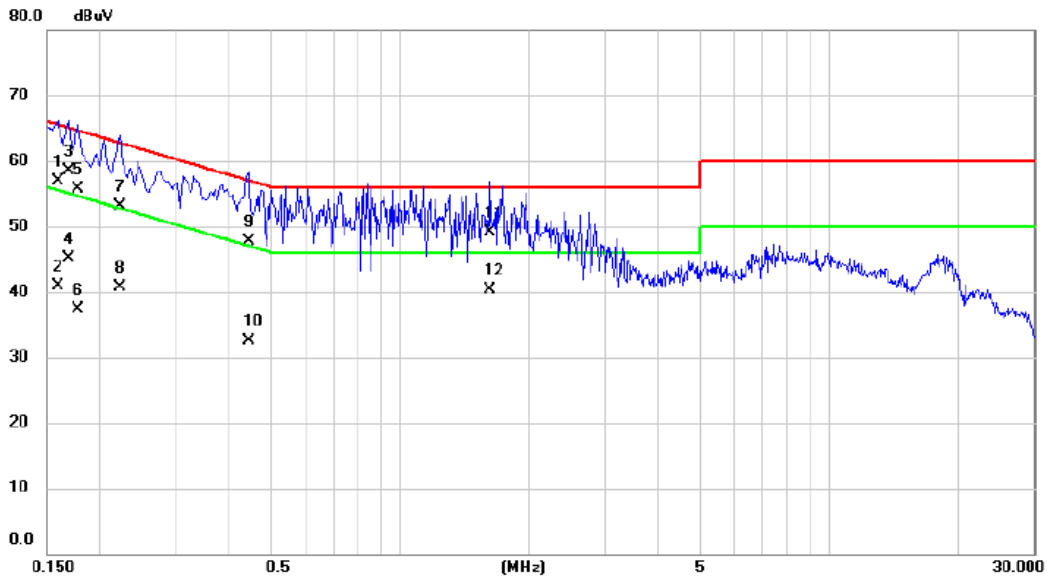
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1635	46.80	9.82	56.62	65.28	-8.66	QP	
2	0.1635	39.40	9.82	49.22	55.28	-6.06	AVG	
3	0.2805	41.80	9.82	51.62	60.80	-9.18	QP	
4 *	0.2805	38.60	9.82	48.42	50.80	-2.38	AVG	
5	0.5055	38.90	9.79	48.69	56.00	-7.31	QP	
6	0.5055	33.70	9.79	43.49	46.00	-2.51	AVG	
7	0.8340	37.70	9.91	47.61	56.00	-8.39	QP	
8	0.8340	32.20	9.91	42.11	46.00	-3.89	AVG	
9	0.9510	38.50	9.92	48.42	56.00	-7.58	QP	
10	0.9510	31.50	9.92	41.42	46.00	-4.58	AVG	
11	1.5045	36.80	9.96	46.76	56.00	-9.24	QP	
12	1.5045	28.60	9.96	38.56	46.00	-7.44	AVG	

Test Mode: TX Mode (Adapter: RC30-0238)

Neutral

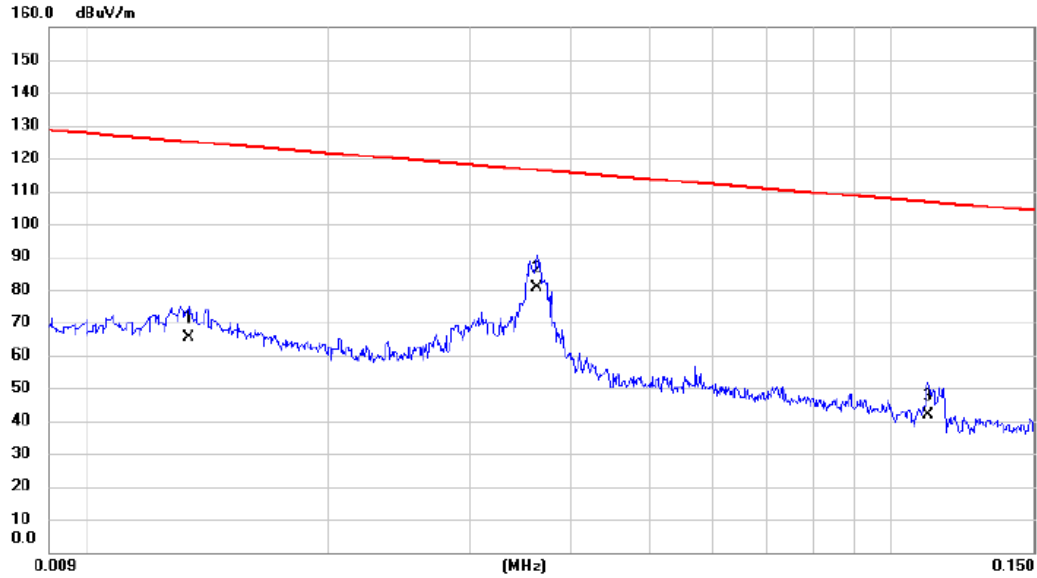


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1590	46.90	9.91	56.81	65.52	-8.71	QP	
2	0.1590	31.00	9.91	40.91	55.52	-14.61	AVG	
3	0.1680	48.50	9.91	58.41	65.06	-6.65	QP	
4	0.1680	35.27	9.91	45.18	55.06	-9.88	AVG	
5	0.1770	45.80	9.92	55.72	64.63	-8.91	QP	
6	0.1770	27.40	9.92	37.32	54.63	-17.31	AVG	
7	0.2220	43.10	9.92	53.02	62.74	-9.72	QP	
8	0.2220	30.70	9.92	40.62	52.74	-12.12	AVG	
9	0.4425	37.80	9.94	47.74	57.01	-9.27	QP	
10	0.4425	22.60	9.94	32.54	47.01	-14.47	AVG	
11	1.6215	38.90	10.16	49.06	56.00	-6.94	QP	
12 *	1.6215	30.10	10.16	40.26	46.00	-5.74	AVG	

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

Test Mode: TX Mode (Adapter: RC30-024801)

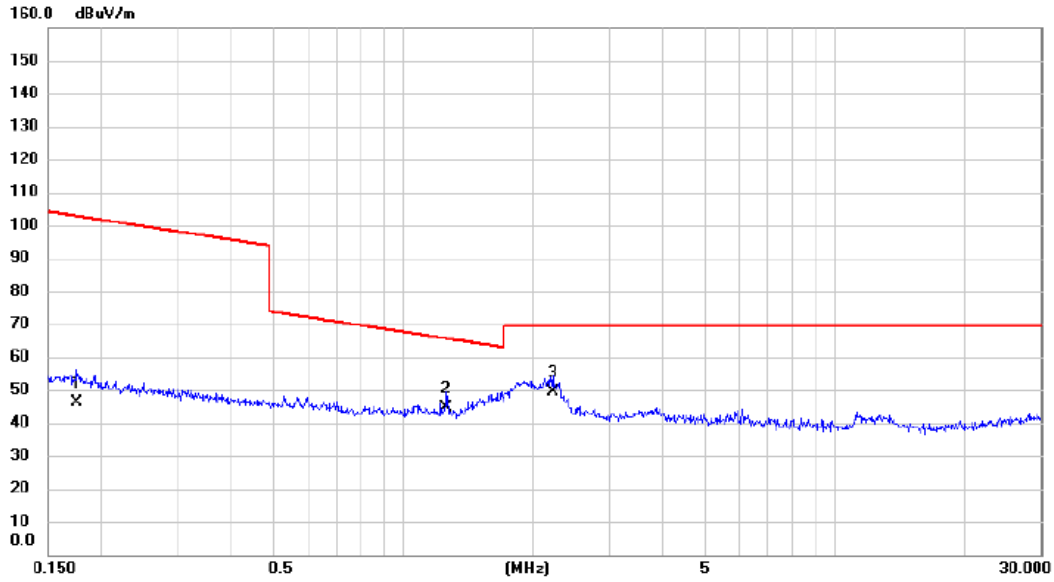
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.0134	44.30	20.94	65.24	125.06	-59.82	AVG	
2	*	0.0363	60.70	19.76	80.46	116.41	-35.95	AVG	
3		0.1110	23.50	18.18	41.68	106.70	-65.02	AVG	

Test Mode: TX Mode (Adapter: RC30-024801)

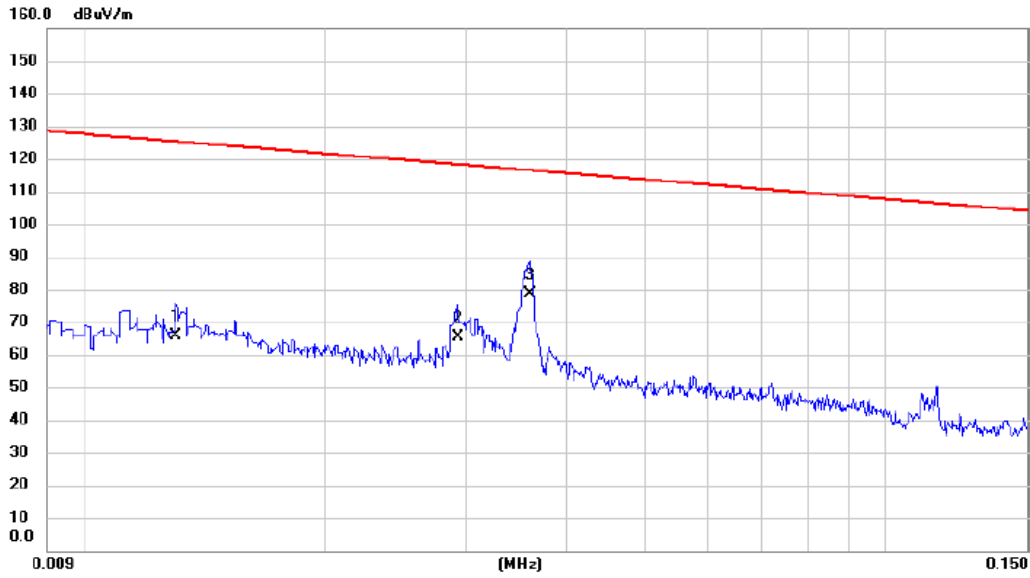
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.1750	28.80	17.21	46.01	102.75	-56.74	AVG	
2		1.2555	27.80	16.73	44.53	65.63	-21.10	QP	
3	*	2.2132	32.50	16.99	49.49	69.54	-20.05	QP	

Test Mode: TX Mode (Adapter: RC30-024801)

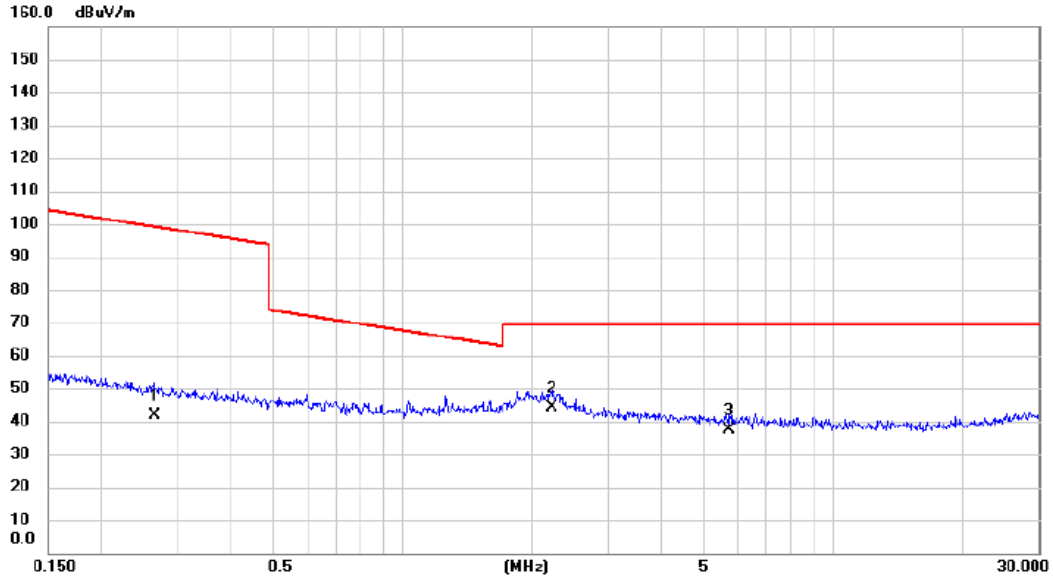
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.0130	44.70	21.00	65.70	125.33	-59.63	AVG	
2		0.0293	45.50	19.86	65.36	118.27	-52.91	AVG	
3	*	0.0360	58.70	19.76	78.46	116.48	-38.02	AVG	

Test Mode: TX Mode (Adapter: RC30-024801)

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2644	24.80	17.05	41.85	99.16	-57.31	AVG	
2	*	2.2132	27.40	16.99	44.39	69.54	-25.15	QP	
3		5.7437	22.30	15.04	37.34	69.54	-32.20	QP	

Test Mode: TX Mode (Adapter: RC30-0238)

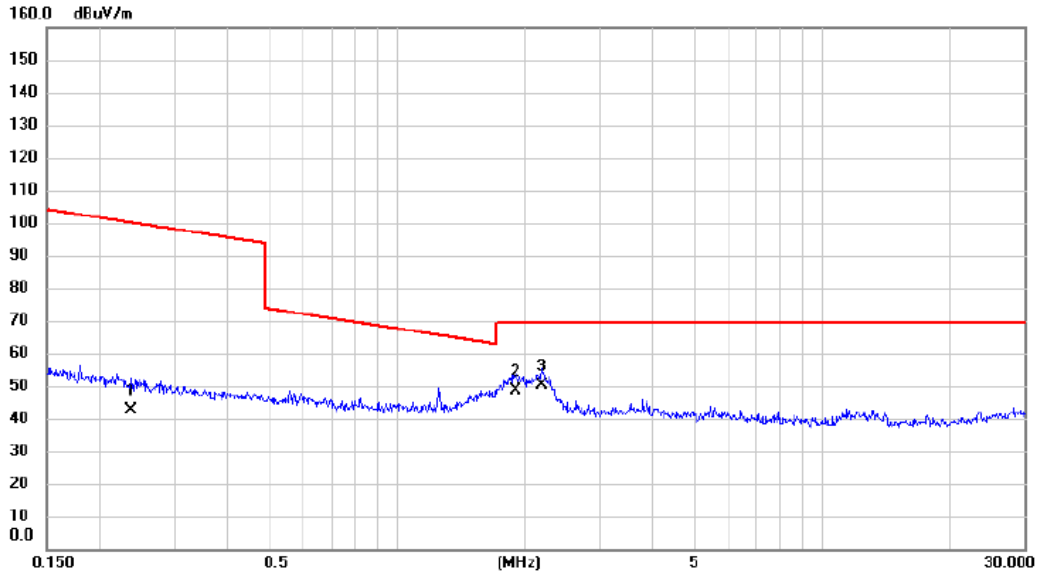
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0130	44.61	21.00	65.61	125.33	-59.72	AVG	
2		0.0317	47.10	19.82	66.92	117.58	-50.66	AVG	
3	*	0.0388	61.50	19.72	81.22	115.83	-34.61	AVG	

Test Mode: TX Mode (Adapter: RC30-0238)

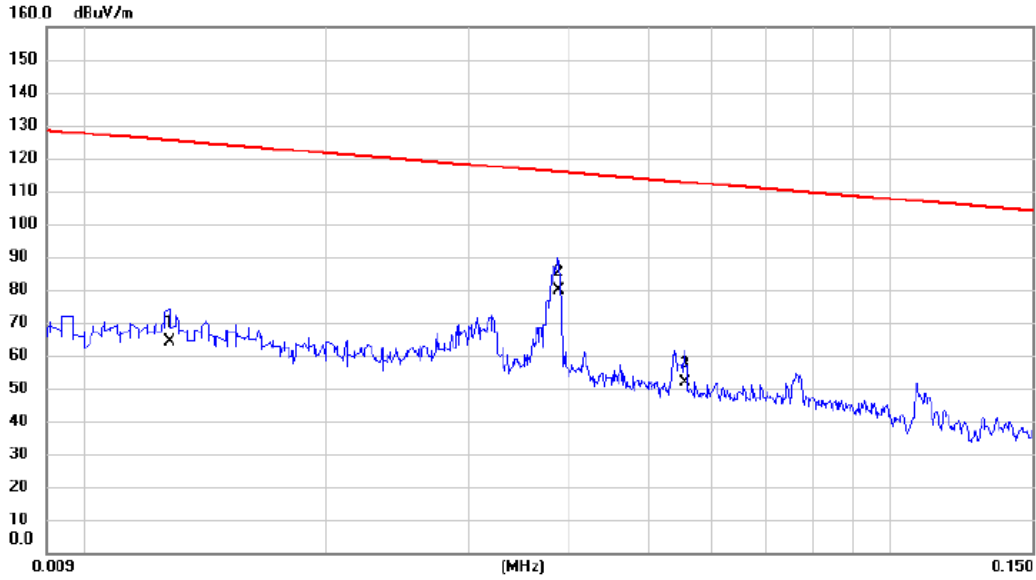
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2366	25.40	17.09	42.49	100.13	-57.64	AVG	
2		1.9080	31.70	17.06	48.76	69.54	-20.78	QP	
3	*	2.1898	33.30	17.01	50.31	69.54	-19.23	QP	

Test Mode: TX Mode (Adapter: RC30-0238)

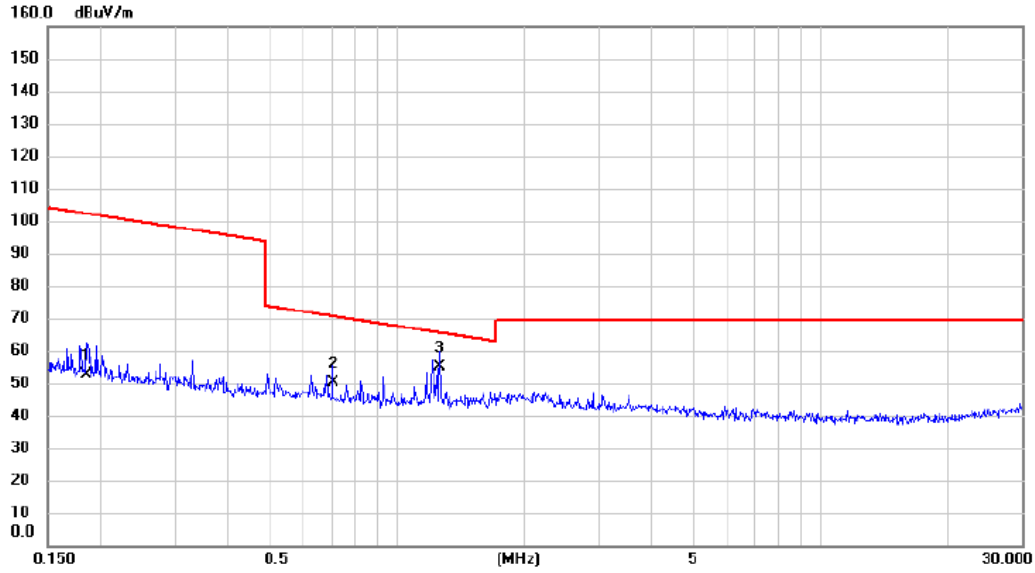
Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		0.0128	43.10	21.03	64.13	125.46	-61.33	AVG	
2	*	0.0388	60.20	19.72	79.92	115.83	-35.91	AVG	
3		0.0557	32.30	19.42	51.72	112.69	-60.97	AVG	

Test Mode: TX Mode (Adapter: RC30-0238)

Ant 90°



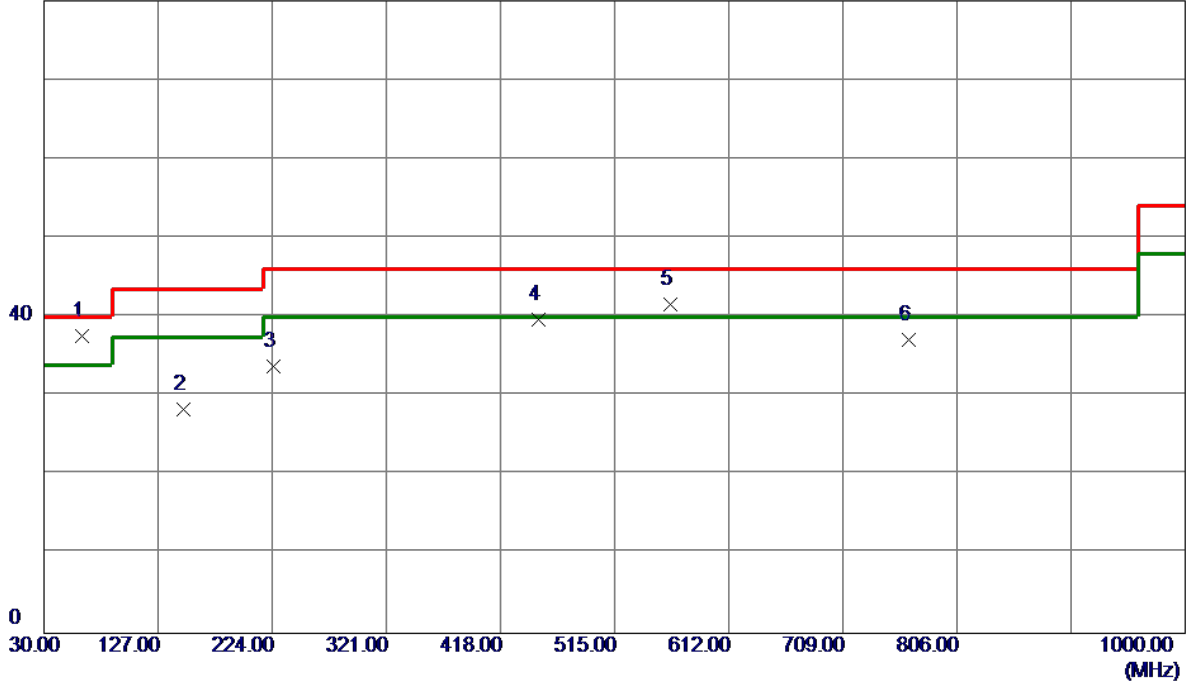
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.1853	35.40	17.19	52.59	102.25	-49.66	AVG	
2		0.7047	33.40	16.90	50.30	70.64	-20.34	QP	
3	*	1.2621	38.20	16.73	54.93	65.58	-10.65	QP	

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

Test Mode: TX B Mode Channel 01 (Adapter: RC30-024801)

Vertical

80 dBuV/m

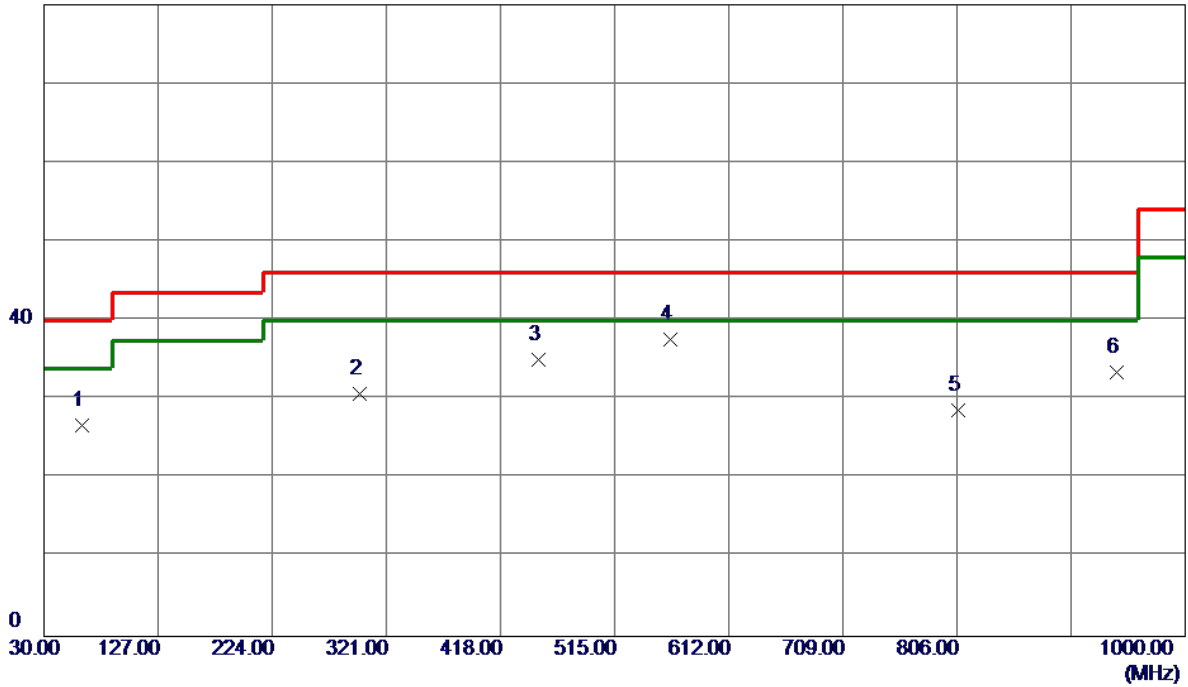


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	62.0100	53.64	-16.02	37.62	40.00	-2.38	QP	
2	148.3400	39.98	-11.59	28.39	43.50	-15.11	Peak	
3	224.9700	48.70	-14.90	33.80	46.00	-12.20	Peak	
4	450.0100	47.03	-7.41	39.62	46.00	-6.38	Peak	
5	562.5300	47.22	-5.67	41.55	46.00	-4.45	Peak	
6	764.7750	40.32	-3.16	37.16	46.00	-8.84	Peak	

Test Mode: TX B Mode Channel 01 (Adapter: RC30-024801)

Horizontal

80 dBuV/m

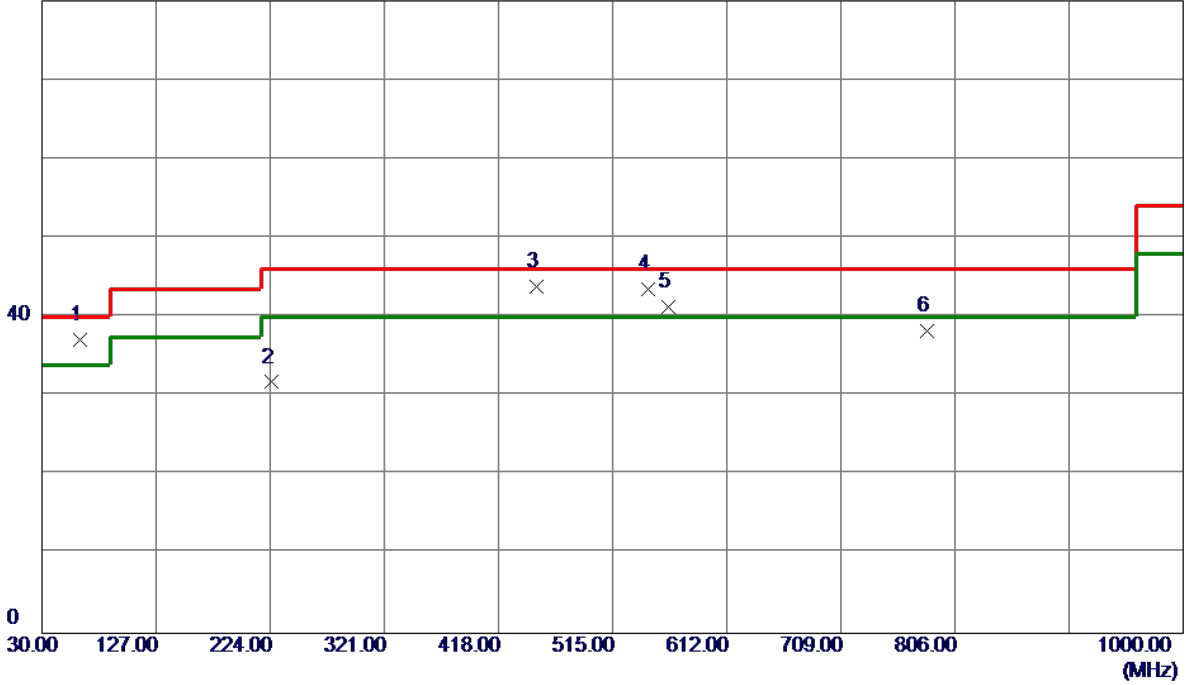


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	62.4950	42.86	-16.11	26.75	40.00	-13.25	Peak	
2	298.2049	41.16	-10.47	30.69	46.00	-15.31	Peak	
3	450.0100	42.46	-7.41	35.05	46.00	-10.95	Peak	
4 *	562.5300	43.20	-5.67	37.53	46.00	-8.47	Peak	
5	806.9699	29.81	-1.15	28.66	46.00	-17.34	Peak	
6	941.8000	32.40	1.08	33.48	46.00	-12.52	Peak	

Test Mode: TX B Mode Channel 06 (Adapter: RC30-024801)

Vertical

80 dBuV/m

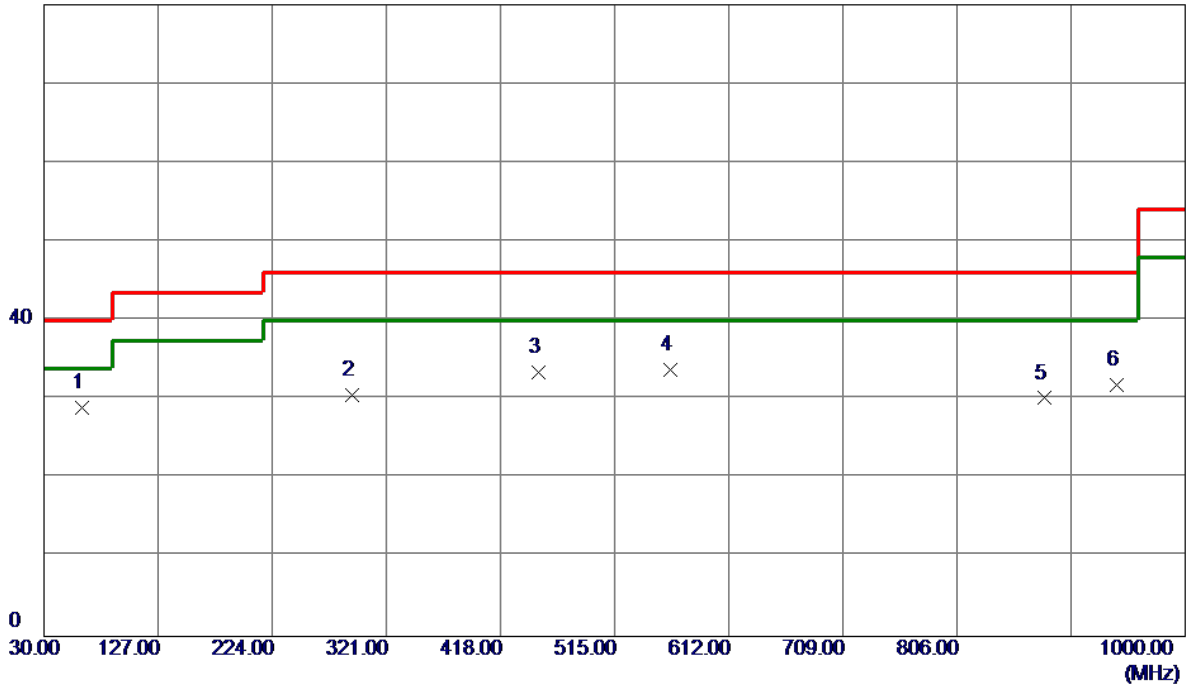


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	62.4950	53.25	-16.11	37.14	40.00	-2.86	QP	
2	224.9700	46.66	-14.90	31.76	46.00	-14.24	Peak	
3 *	450.0100	51.21	-7.41	43.80	46.00	-2.20	Peak	
4	545.5550	49.29	-5.74	43.55	46.00	-2.45	Peak	
5	562.5300	46.89	-5.67	41.22	46.00	-4.78	Peak	
6	782.7199	40.28	-2.08	38.20	46.00	-7.80	Peak	

Test Mode: TX B Mode Channel 06 (Adapter: RC30-024801)

Horizontal

80 dBuV/m

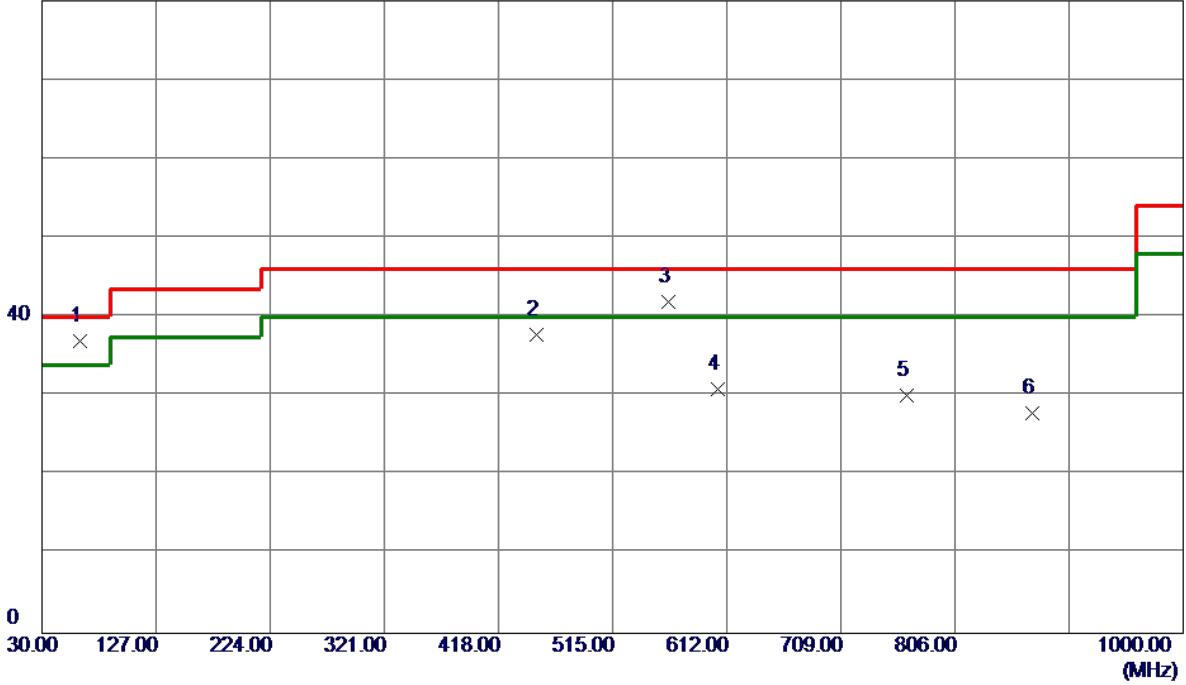


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	62.4950	45.08	-16.11	28.97	40.00	-11.03	Peak	
2	292.3850	41.40	-10.81	30.59	46.00	-15.41	Peak	
3	450.0100	40.78	-7.41	33.37	46.00	-12.63	Peak	
4	562.5300	39.47	-5.67	33.80	46.00	-12.20	Peak	
5	880.6900	31.23	-1.07	30.16	46.00	-15.84	Peak	
6	941.8000	30.80	1.08	31.88	46.00	-14.12	Peak	

Test Mode: TX B Mode Channel 11 (Adapter: RC30-024801)

Vertical

80 dBuV/m

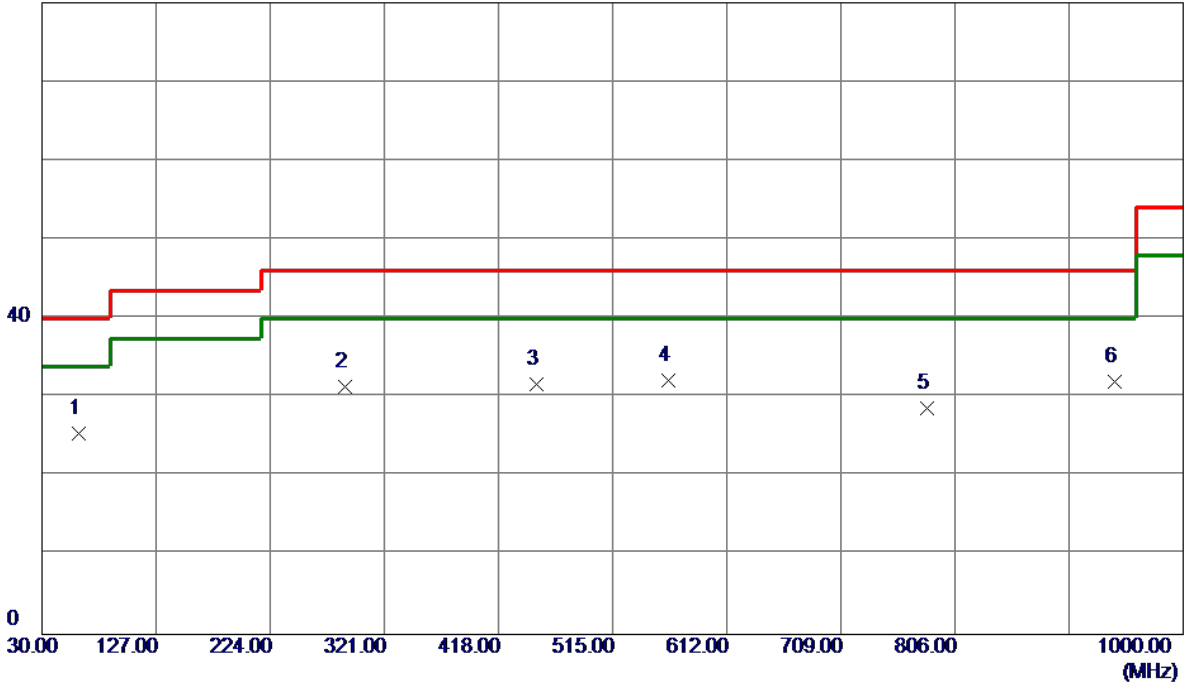


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	62.4950	53.05	-16.11	36.94	40.00	-3.06	QP	
2	450.0100	45.22	-7.41	37.81	46.00	-8.19	Peak	
3	562.5300	47.57	-5.67	41.90	46.00	-4.10	Peak	
4	604.2400	37.05	-6.20	30.85	46.00	-15.15	Peak	
5	764.7750	33.26	-3.16	30.10	46.00	-15.90	Peak	
6	871.4750	29.19	-1.30	27.89	46.00	-18.11	Peak	

Test Mode: TX B Mode Channel 11 (Adapter: RC30-024801)

Horizontal

80 dBuV/m

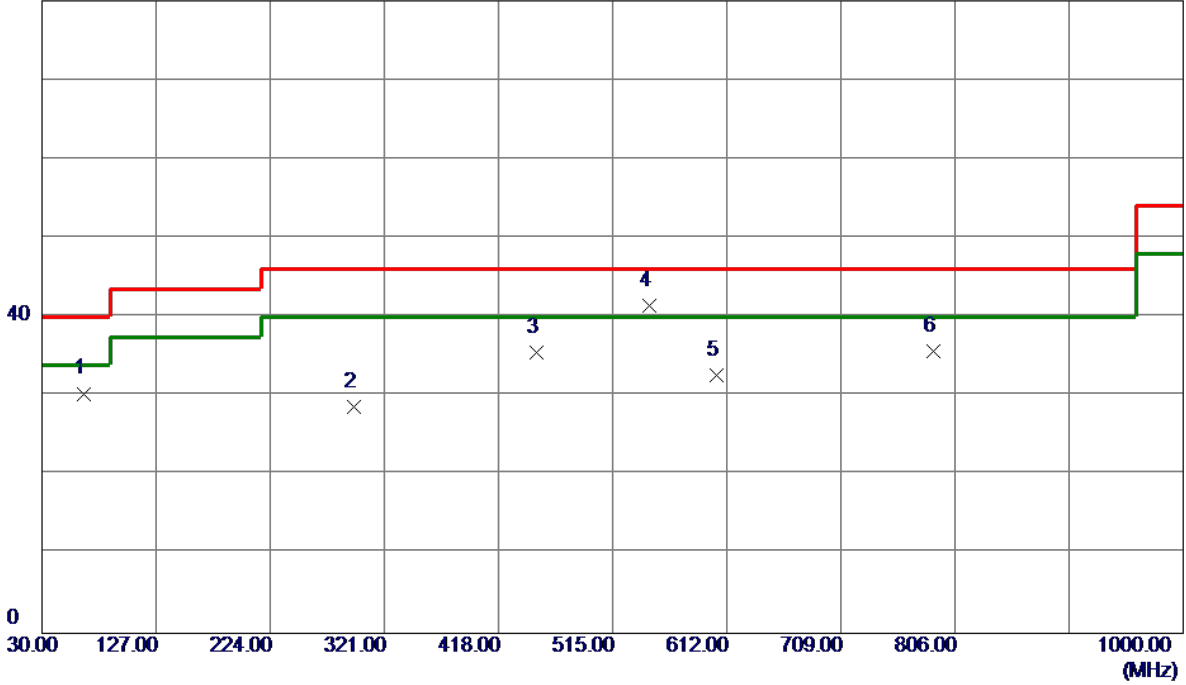


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	61.5250	41.32	-15.94	25.38	40.00	-14.62	Peak	
2	287.5350	42.34	-11.05	31.29	46.00	-14.71	Peak	
3	450.0100	39.05	-7.41	31.64	46.00	-14.36	Peak	
4 *	562.5300	37.83	-5.67	32.16	46.00	-13.84	Peak	
5	782.2350	30.70	-2.11	28.59	46.00	-17.41	Peak	
6	941.8000	30.96	1.08	32.04	46.00	-13.96	Peak	

Test Mode: TX B Mode Channel 01 (Adapter: RC30-0238)

Vertical

80 dBuV/m

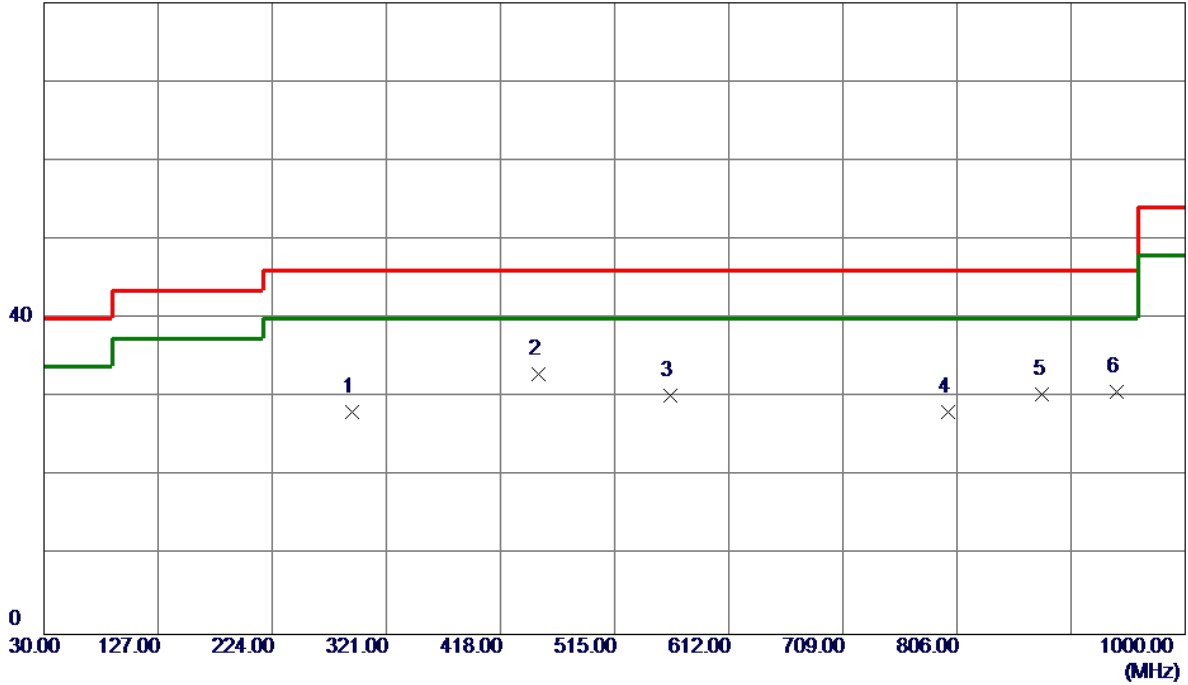


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	65.4050	46.92	-16.60	30.32	40.00	-9.68	Peak	
2	295.2950	39.28	-10.64	28.64	46.00	-17.36	Peak	
3	450.0100	42.89	-7.41	35.48	46.00	-10.52	Peak	
4 *	546.0400	47.22	-5.71	41.51	46.00	-4.49	Peak	
5	603.7550	38.82	-6.22	32.60	46.00	-13.40	Peak	
6	787.5700	37.55	-1.79	35.76	46.00	-10.24	Peak	

Test Mode: TX B Mode Channel 01 (Adapter: RC30-0238)

Horizontal

80 dBuV/m

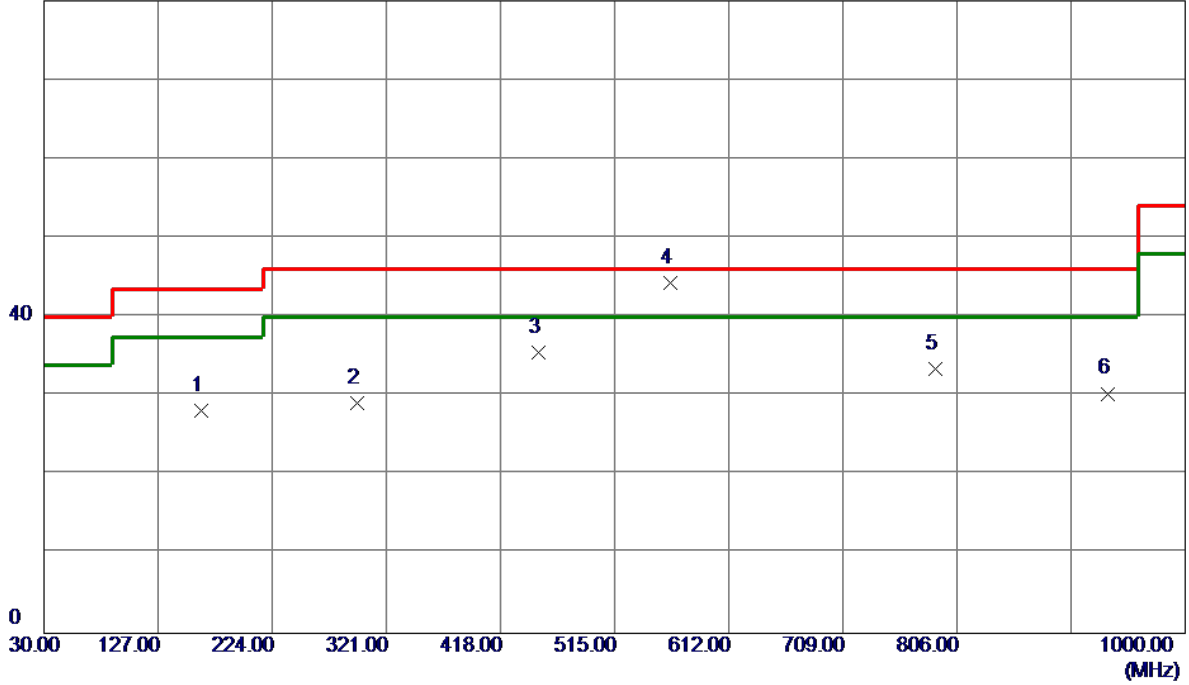


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	292.3850	38.98	-10.81	28.17	46.00	-17.83	Peak	
2 *	450.0100	40.37	-7.41	32.96	46.00	-13.04	Peak	
3	562.5300	35.88	-5.67	30.21	46.00	-15.79	Peak	
4	798.7250	29.29	-1.12	28.17	46.00	-17.83	Peak	
5	878.7500	31.48	-1.12	30.36	46.00	-15.64	Peak	
6	941.8000	29.61	1.08	30.69	46.00	-15.31	Peak	

Test Mode: TX B Mode Channel 06 (Adapter: RC30-0238)

Vertical

80 dBuV/m

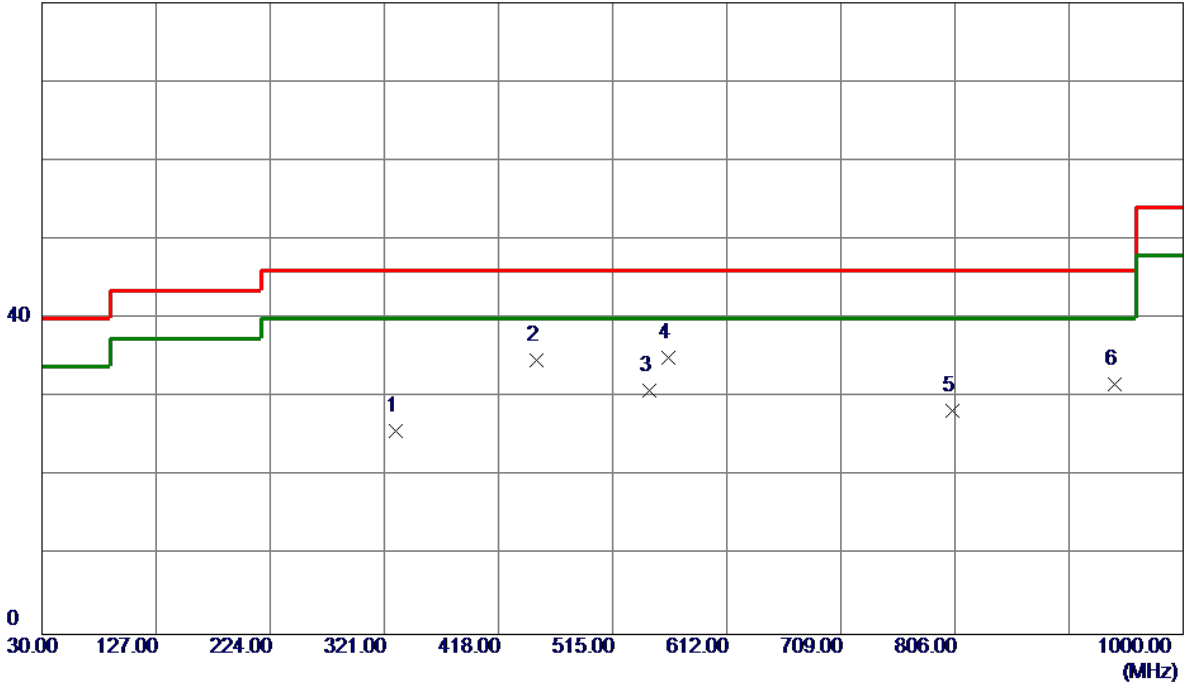


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	163.3750	39.03	-10.80	28.23	43.50	-15.27	Peak	
2	296.2650	39.68	-10.59	29.09	46.00	-16.91	Peak	
3	450.0100	42.92	-7.41	35.51	46.00	-10.49	Peak	
4 *	562.5300	49.95	-5.67	44.28	46.00	-1.72	Peak	
5	787.5700	35.30	-1.79	33.51	46.00	-12.49	Peak	
6	934.0400	29.55	0.77	30.32	46.00	-15.68	Peak	

Test Mode: TX B Mode Channel 06 (Adapter: RC30-0238)

Horizontal

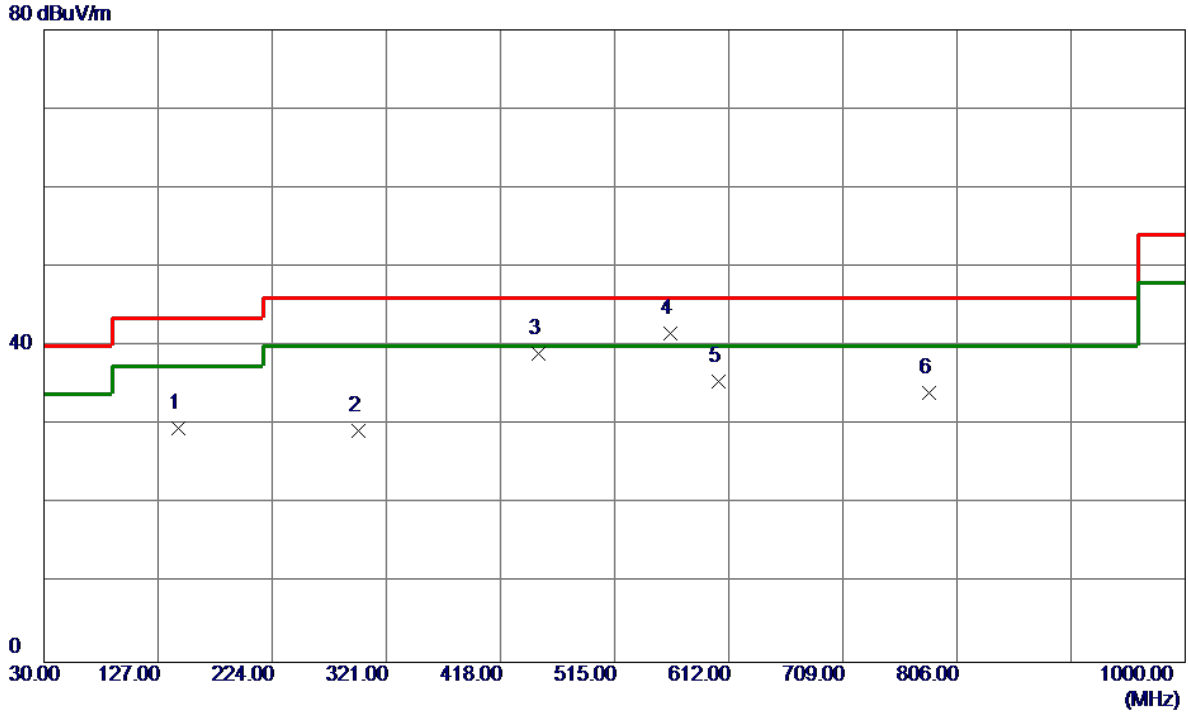
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	330.2150	36.53	-10.80	25.73	46.00	-20.27	Peak	
2	450.0100	42.10	-7.41	34.69	46.00	-11.31	Peak	
3	546.0400	36.60	-5.71	30.89	46.00	-15.11	Peak	
4 *	562.5300	40.68	-5.67	35.01	46.00	-10.99	Peak	
5	804.0600	29.41	-1.10	28.31	46.00	-17.69	Peak	
6	941.3150	30.64	1.06	31.70	46.00	-14.30	Peak	

Test Mode: TX B Mode Channel 11 (Adapter: RC30-0238)

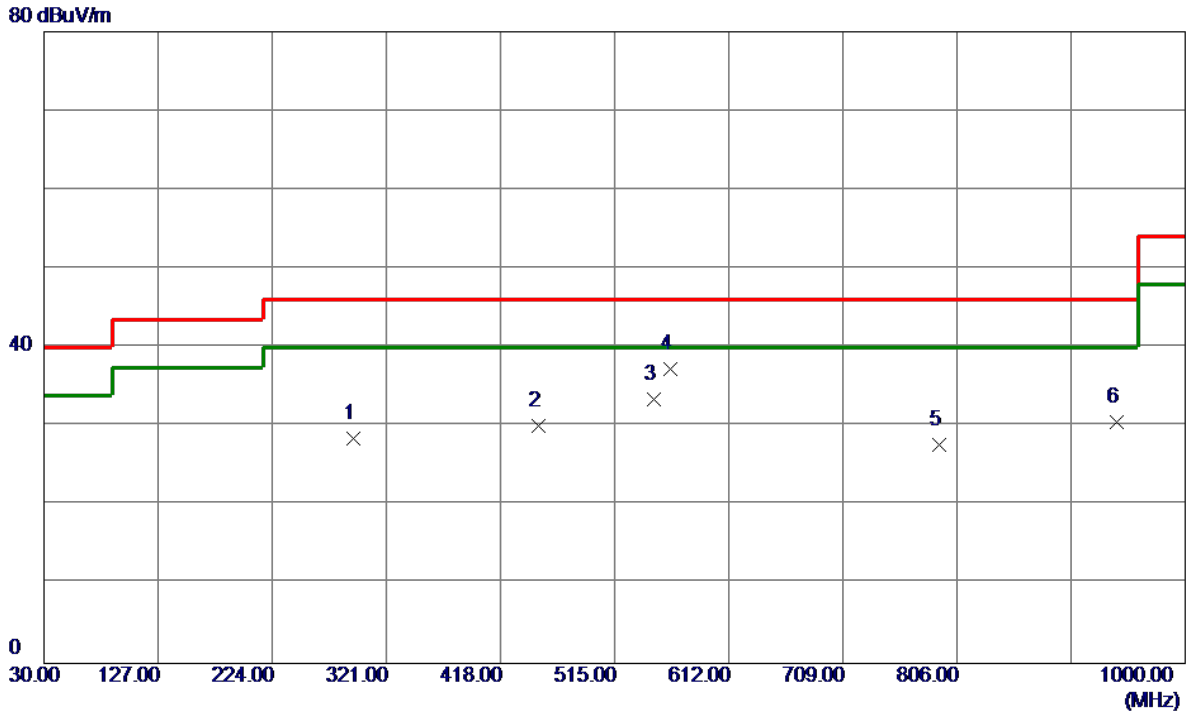
Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	144.4600	41.49	-11.83	29.66	43.50	-13.84	Peak	
2	297.2349	39.81	-10.53	29.28	46.00	-16.72	Peak	
3	450.0100	46.41	-7.41	39.00	46.00	-7.00	Peak	
4 *	562.5300	47.28	-5.67	41.61	46.00	-4.39	Peak	
5	603.7550	41.73	-6.22	35.51	46.00	-10.49	Peak	
6	782.7199	36.18	-2.08	34.10	46.00	-11.90	Peak	

Test Mode: TX B Mode Channel 11 (Adapter: RC30-0238)

Horizontal



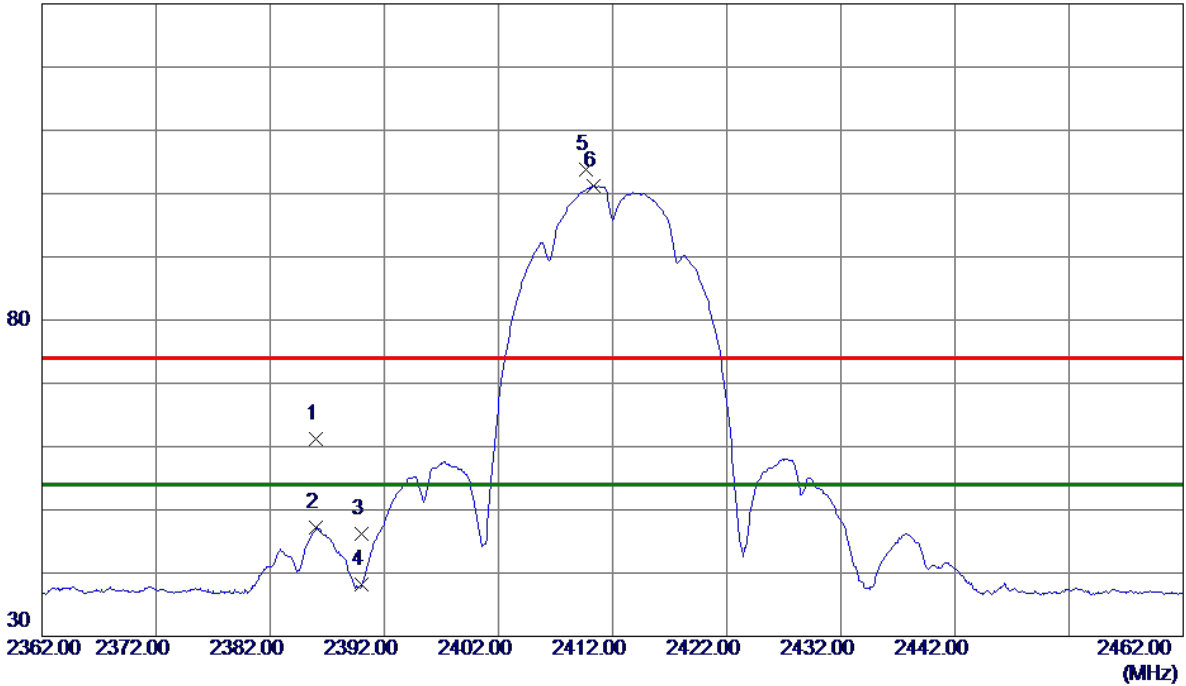
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	292.8700	39.26	-10.79	28.47	46.00	-17.53	Peak	
2	450.0100	37.44	-7.41	30.03	46.00	-15.97	Peak	
3	548.4650	39.06	-5.56	33.50	46.00	-12.50	Peak	
4 *	562.5300	42.92	-5.67	37.25	46.00	-8.75	Peak	
5	790.4800	29.27	-1.61	27.66	46.00	-18.34	Peak	
6	941.8000	29.45	1.08	30.53	46.00	-15.47	Peak	

APPENDIX D - RADIATED EMISSION (ABOVE 1000 MHZ)

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Vertical

130 dBuV/m

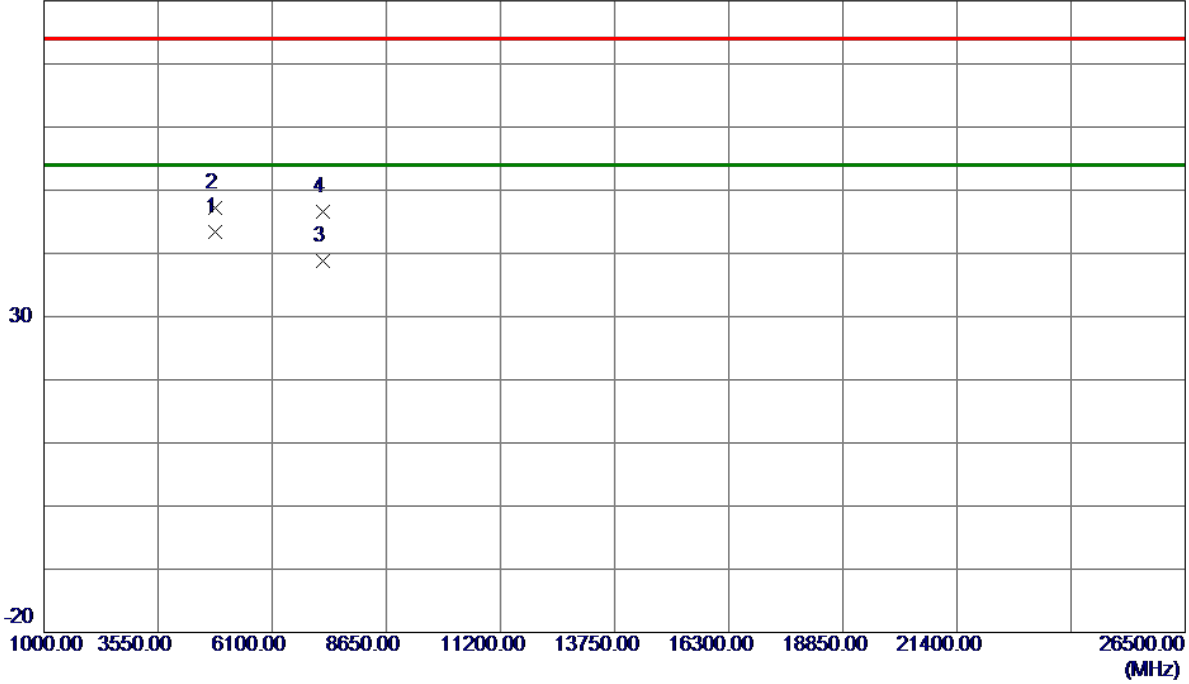


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2386.0500	54.66	6.62	61.28	74.00	-12.72	Peak	
2	2386.0500	40.60	6.62	47.22	54.00	-6.78	AVG	
3	2390.0000	39.63	6.62	46.25	74.00	-27.75	Peak	
4	2390.0000	31.56	6.62	38.18	54.00	-15.82	AVG	
5	2409.7000	97.27	6.62	103.89	74.00	29.89	Peak	No Limit
6 *	2410.3000	94.58	6.62	101.20	54.00	47.20	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Vertical

80 dBuV/m

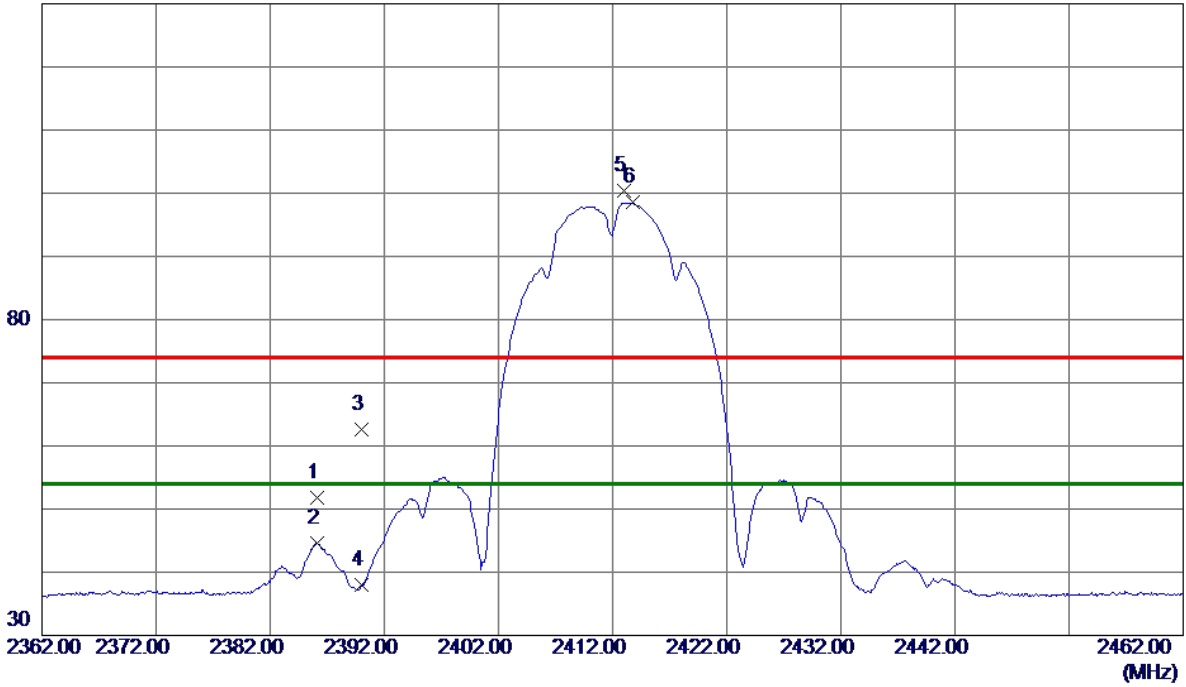


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.0390	39.80	3.57	43.37	54.00	-10.63	AVG	
2	4824.0760	43.65	3.57	47.22	74.00	-26.78	Peak	
3	7235.1300	29.26	9.45	38.71	54.00	-15.29	AVG	
4	7235.1600	37.19	9.45	46.64	74.00	-27.36	Peak	

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Horizontal

130 dBuV/m

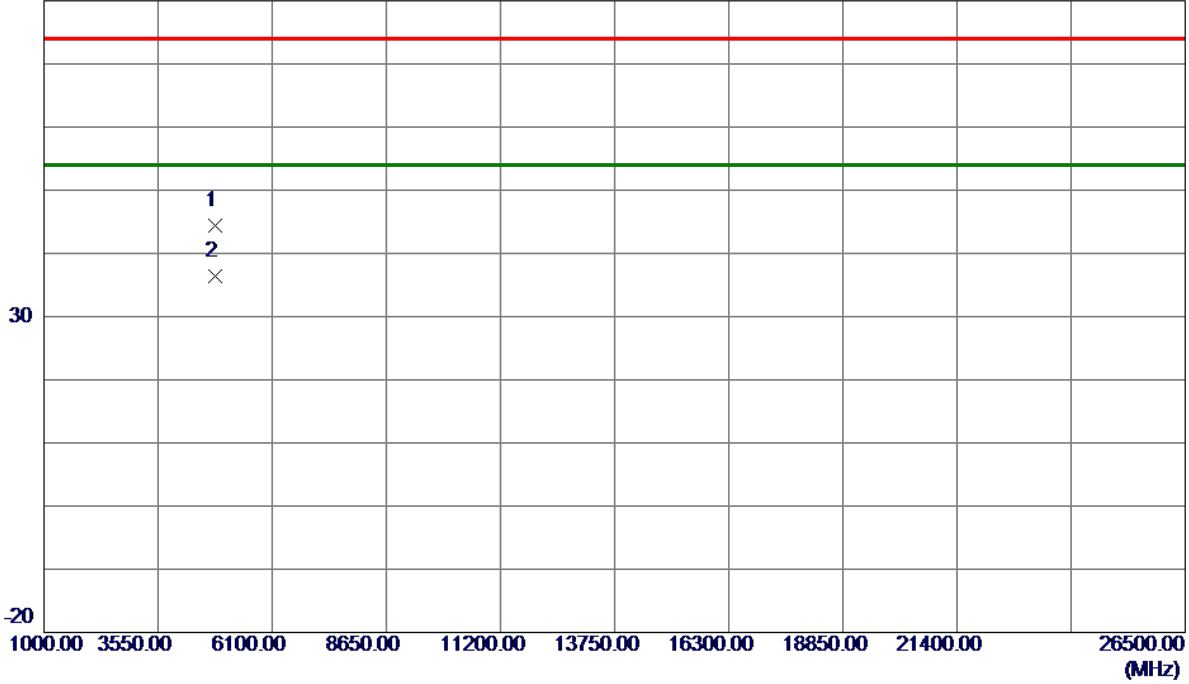


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2386.1000	45.26	6.62	51.88	74.00	-22.12	Peak	
2	2386.1000	37.99	6.62	44.61	54.00	-9.39	AVG	
3	2390.0000	55.90	6.62	62.52	74.00	-11.48	Peak	
4	2390.0000	31.38	6.62	38.00	54.00	-16.00	AVG	
5	2412.9500	93.78	6.62	100.40	74.00	26.40	Peak	No Limit
6 *	2413.7500	91.90	6.62	98.52	54.00	44.52	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Horizontal

80 dBuV/m

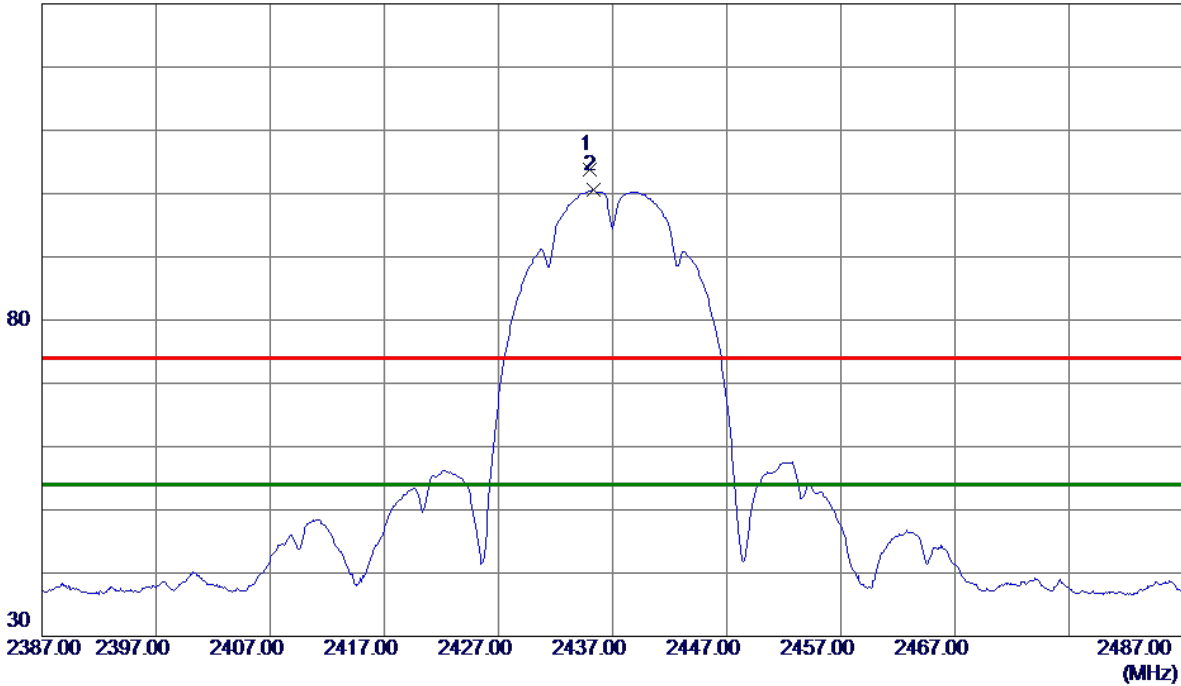


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9680	40.92	3.57	44.49	74.00	-29.51	Peak	
2 *	4823.9790	32.77	3.57	36.34	54.00	-17.66	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Vertical

130 dBuV/m

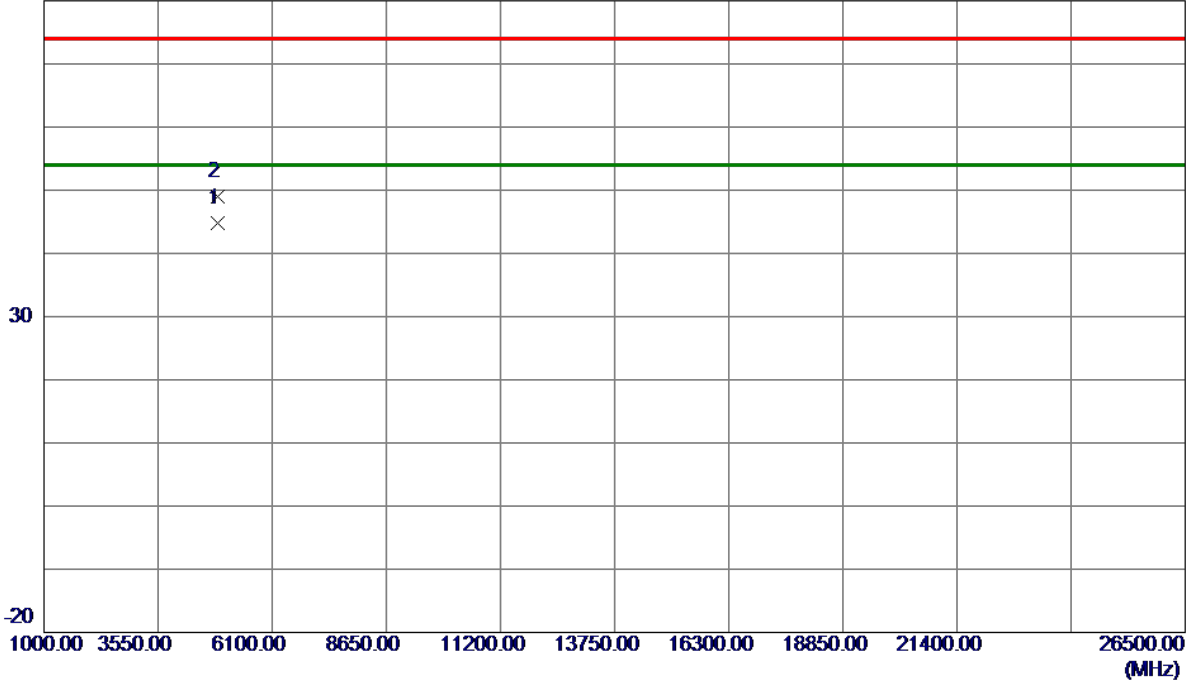


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.0500	97.18	6.61	103.79	74.00	29.79	Peak	No Limit
2 *	2435.3000	93.93	6.61	100.54	54.00	46.54	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Vertical

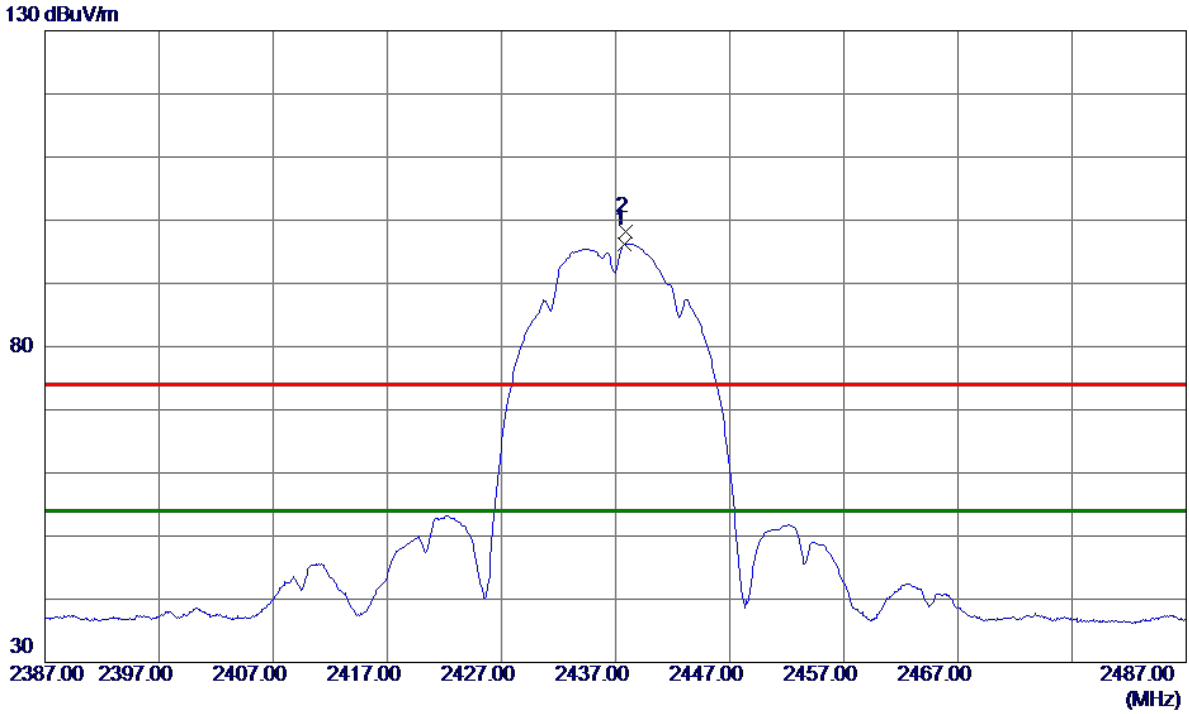
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9960	41.07	3.68	44.75	54.00	-9.25	AVG	
2	4874.0150	45.23	3.68	48.91	74.00	-25.09	Peak	

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Horizontal

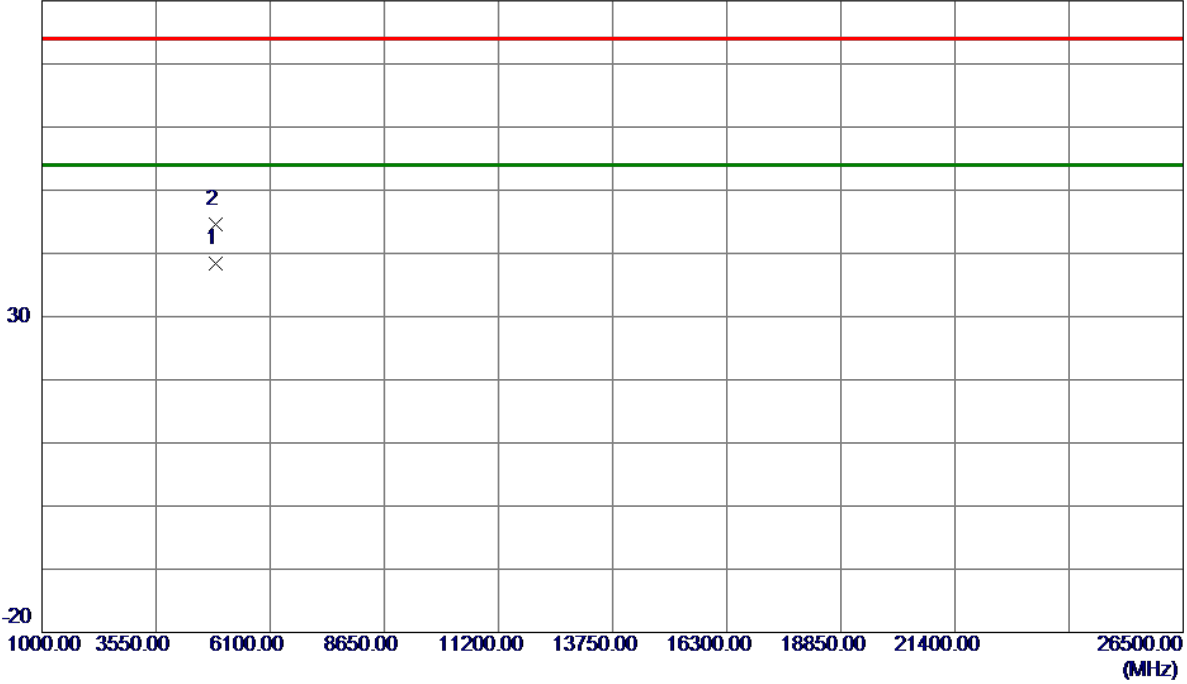


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2437.8000	89.68	6.61	96.29	54.00	42.29	AVG	No Limit
2	2437.9000	91.61	6.61	98.22	74.00	24.22	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Horizontal

80 dBuV/m

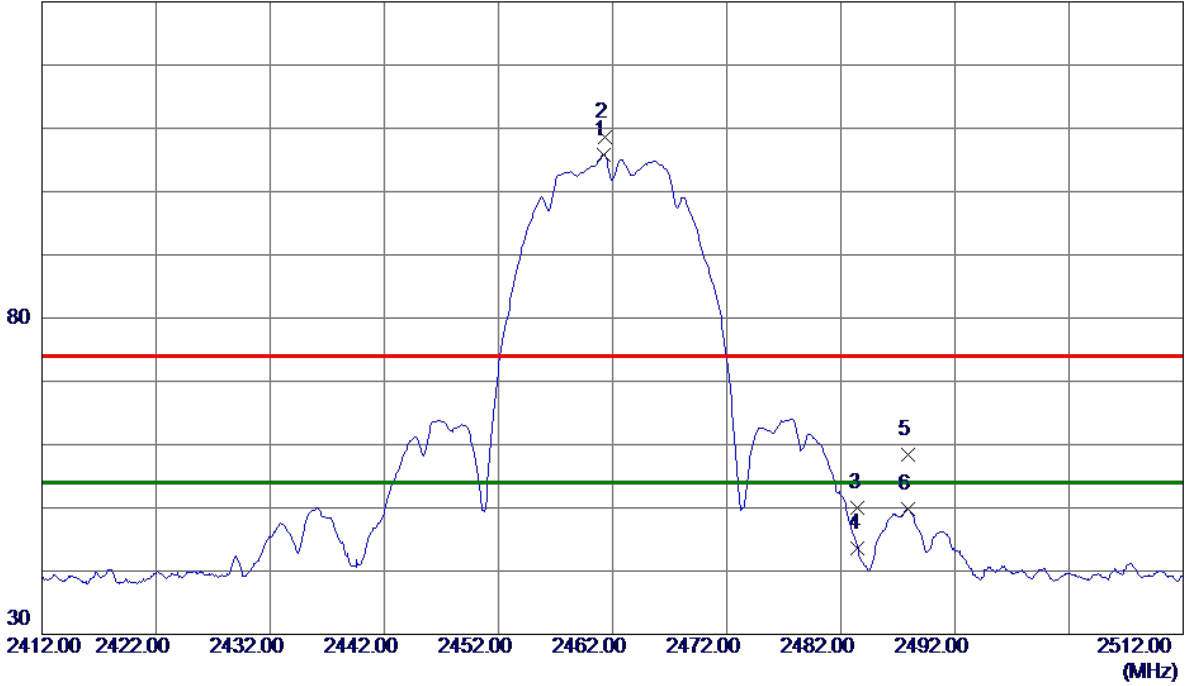


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0059	34.71	3.68	38.39	54.00	-15.61	AVG	
2	4874.0580	40.88	3.68	44.56	74.00	-29.44	Peak	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Vertical

130 dBuV/m

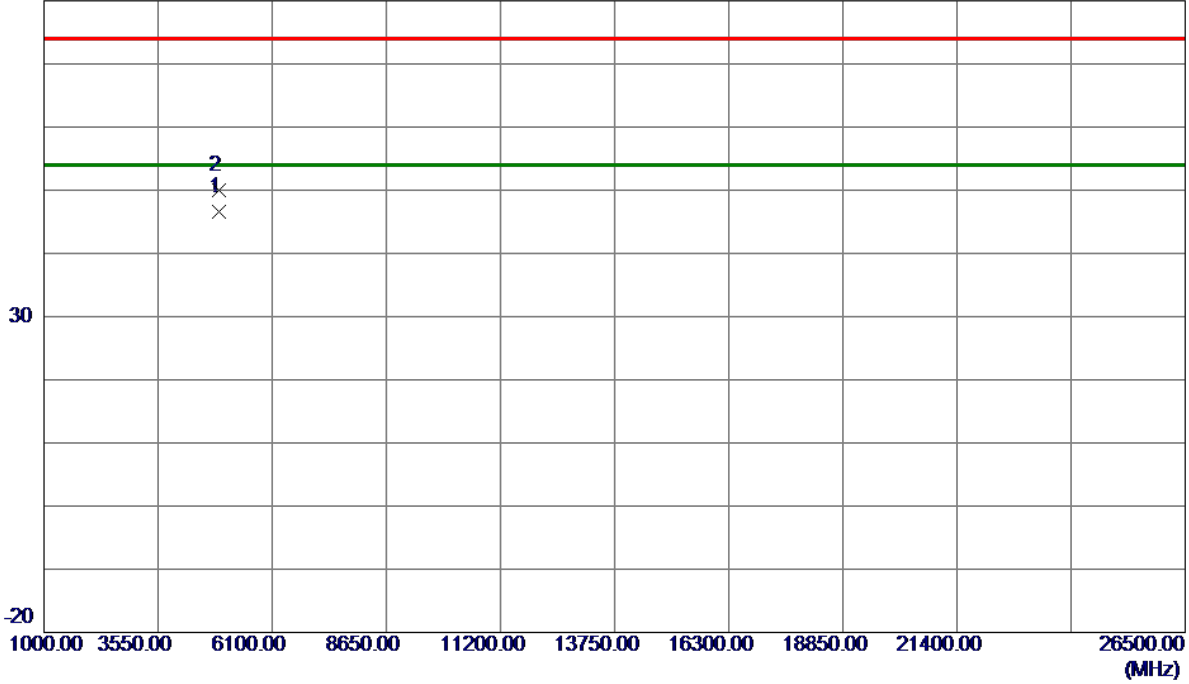


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.2500	99.18	6.61	105.79	54.00	51.79	AVG	No Limit
2	2461.3000	101.97	6.61	108.58	74.00	34.58	Peak	No Limit
3	2483.5000	43.35	6.61	49.96	74.00	-24.04	Peak	
4	2483.5000	36.91	6.61	43.52	54.00	-10.48	AVG	
5	2487.8500	51.84	6.61	58.45	74.00	-15.55	Peak	
6	2487.8500	43.20	6.61	49.81	54.00	-4.19	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Vertical

80 dBuV/m

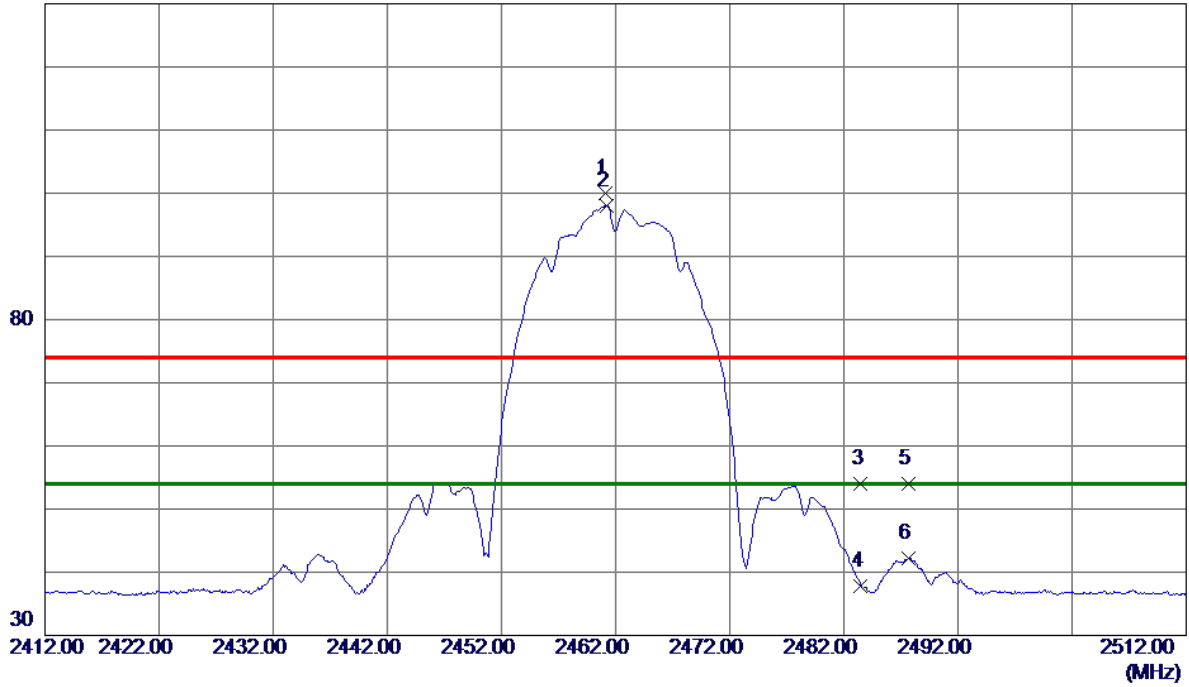


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9960	42.88	3.79	46.67	54.00	-7.33	AVG	
2	4924.0440	46.30	3.79	50.09	74.00	-23.91	Peak	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Horizontal

130 dBuV/m

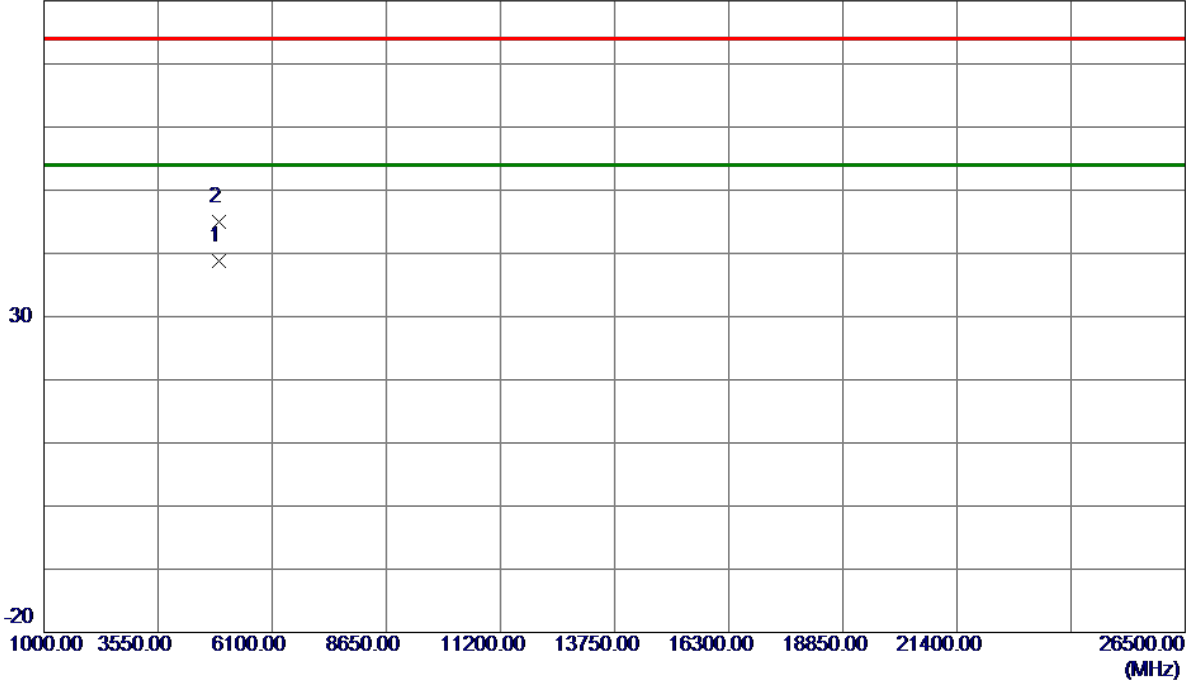


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.1500	93.32	6.61	99.93	74.00	25.93	Peak	No Limit
2 *	2461.2000	91.42	6.61	98.03	54.00	44.03	AVG	No Limit
3	2483.5000	47.41	6.61	54.02	74.00	-19.98	Peak	
4	2483.5000	31.14	6.61	37.75	54.00	-16.25	AVG	
5	2487.7000	47.45	6.61	54.06	74.00	-19.94	Peak	
6	2487.7000	35.62	6.61	42.23	54.00	-11.77	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Horizontal

80 dBuV/m

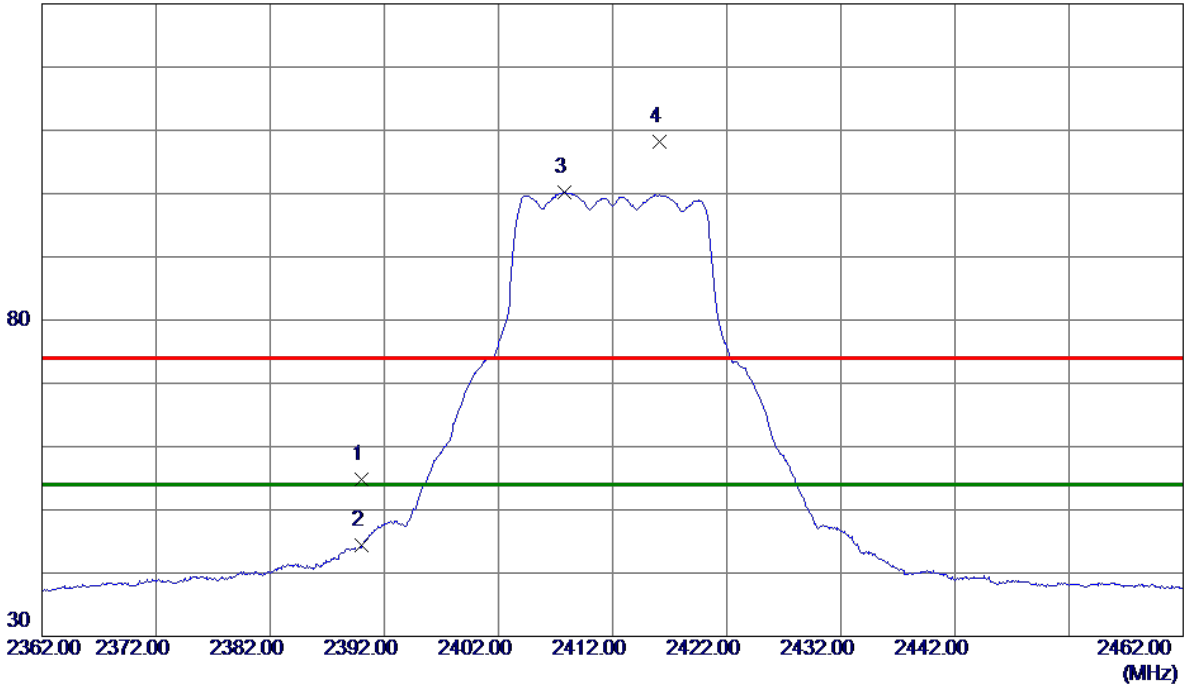


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9890	34.96	3.79	38.75	54.00	-15.25	AVG	
2	4924.0040	41.19	3.79	44.98	74.00	-29.02	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Vertical

130 dBuV/m

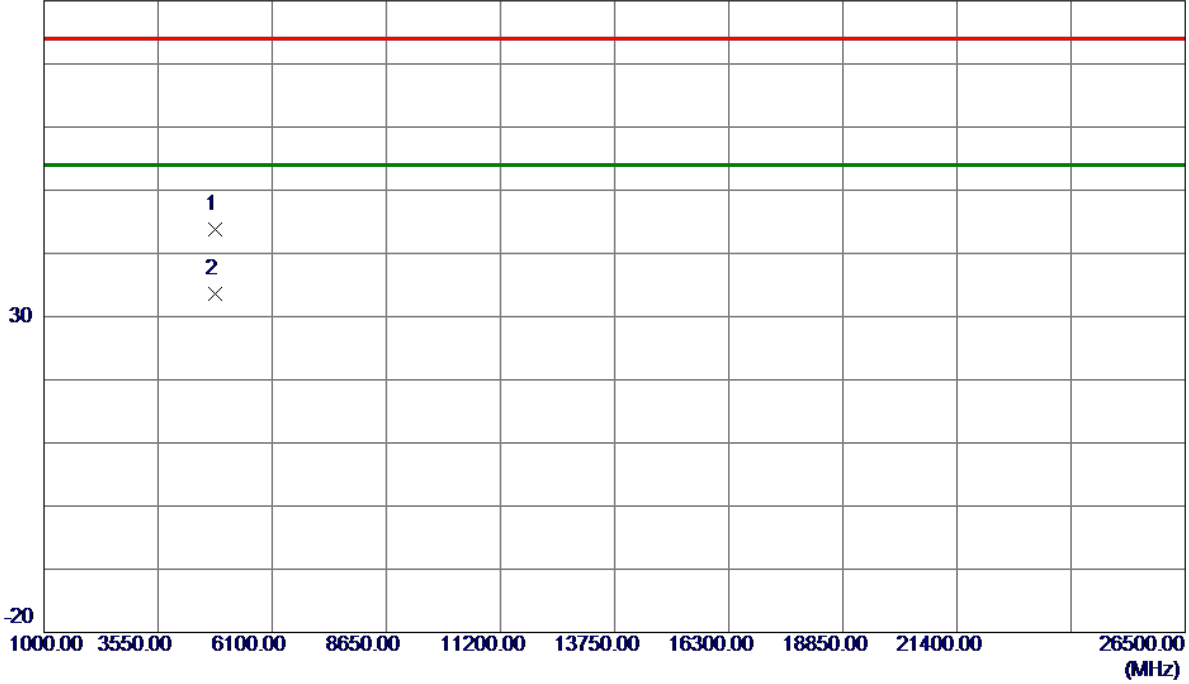


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	48.25	6.62	54.87	74.00	-19.13	Peak	
2	2390.0000	37.69	6.62	44.31	54.00	-9.69	AVG	
3 *	2407.8000	93.57	6.62	100.19	54.00	46.19	AVG	No Limit
4	2416.1000	101.57	6.62	108.19	74.00	34.19	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Vertical

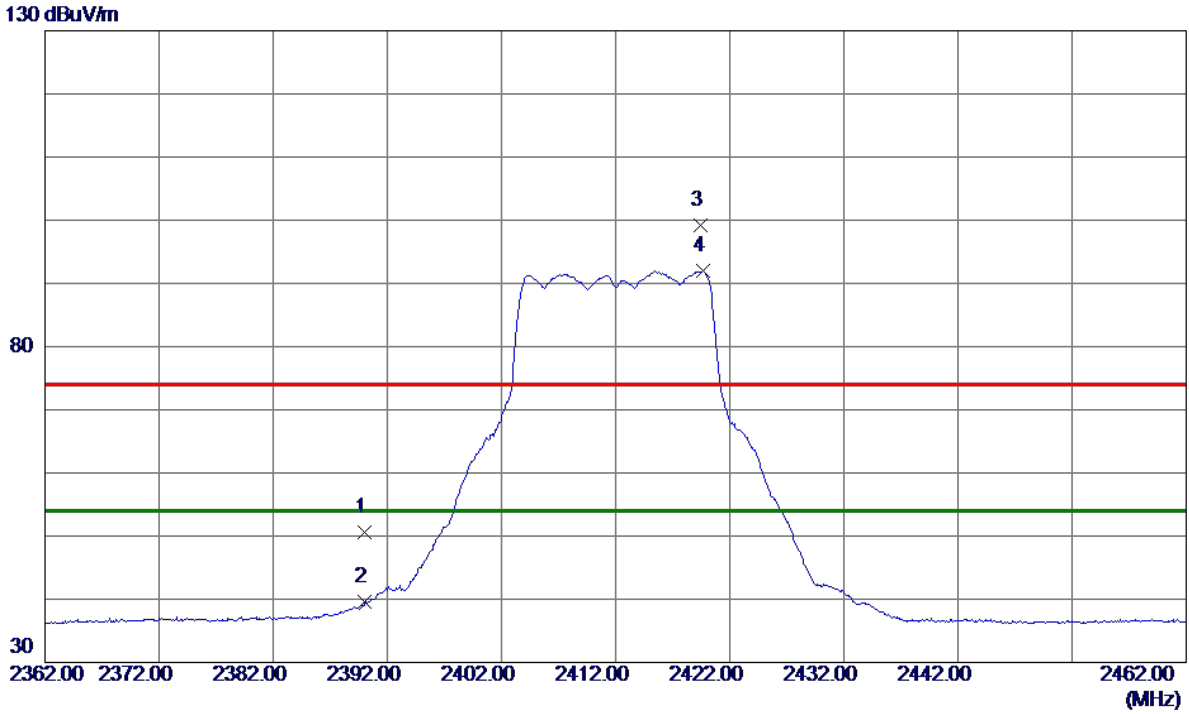
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4819.8250	40.16	3.56	43.72	74.00	-30.28	Peak	
2 *	4827.7500	30.02	3.58	33.60	54.00	-20.40	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Horizontal

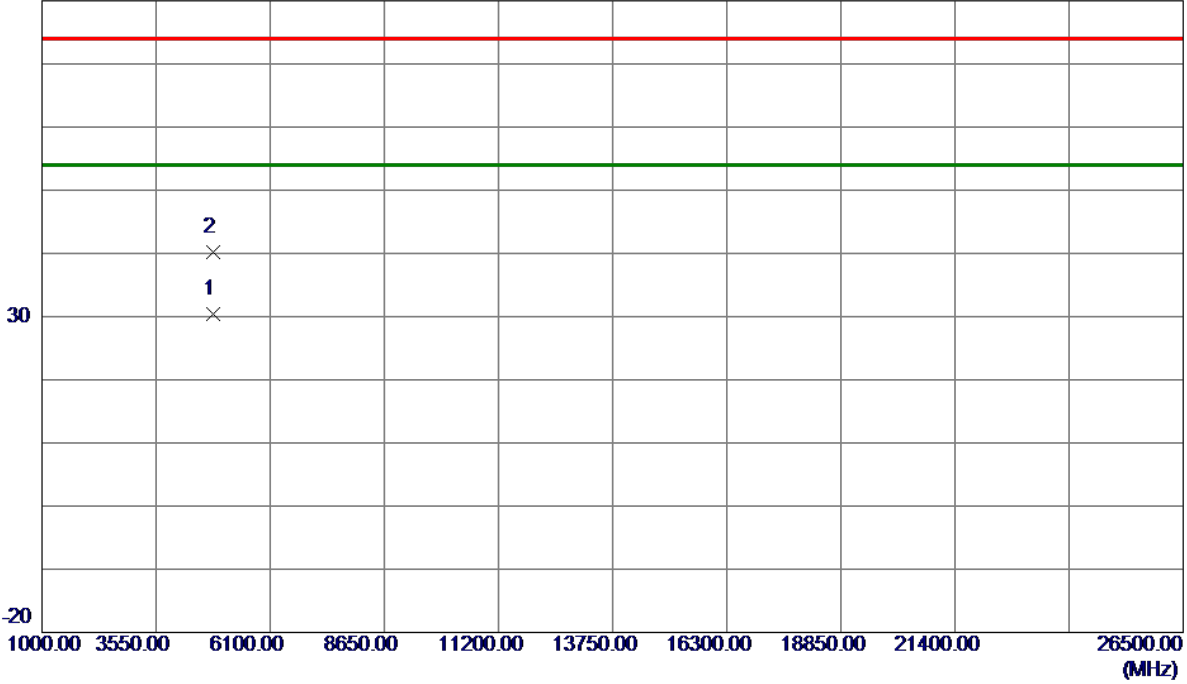


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	44.03	6.62	50.65	74.00	-23.35	Peak	
2	2390.0000	32.93	6.62	39.55	54.00	-14.45	AVG	
3	2419.4000	92.60	6.62	99.22	74.00	25.22	Peak	No Limit
4 *	2419.7000	85.34	6.62	91.96	54.00	37.96	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Horizontal

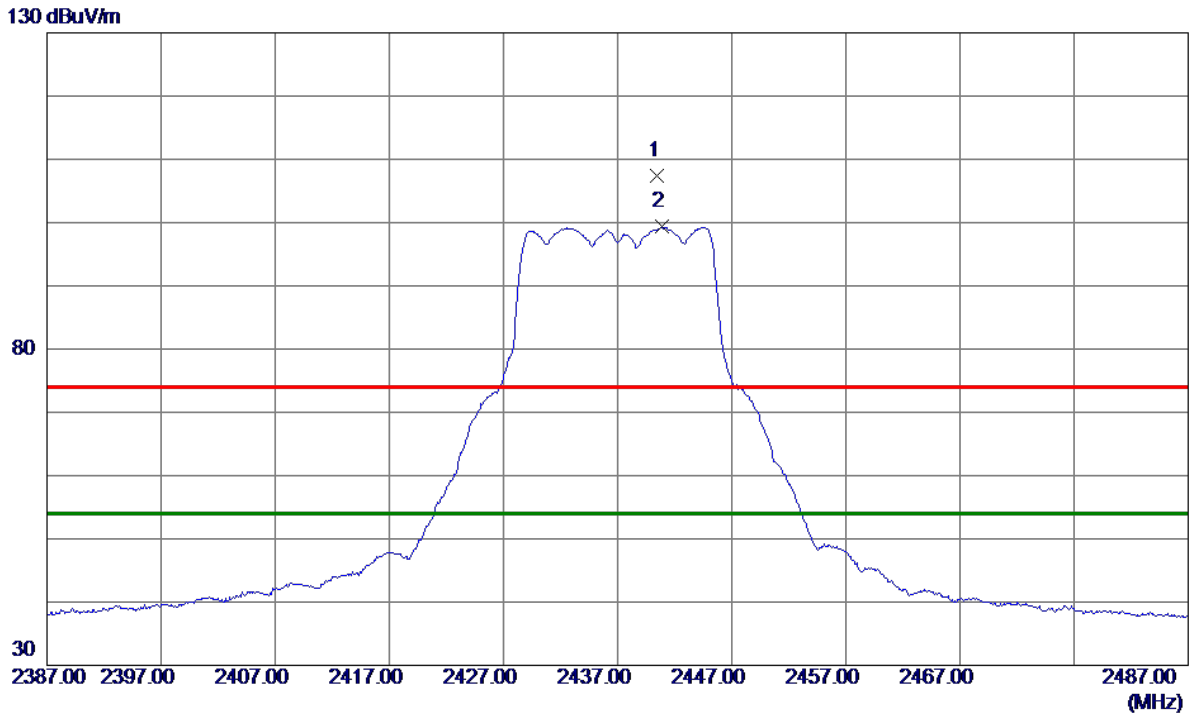
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4821.9500	26.86	3.57	30.43	54.00	-23.57	AVG	
2	4834.8750	36.69	3.60	40.29	74.00	-33.71	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Vertical

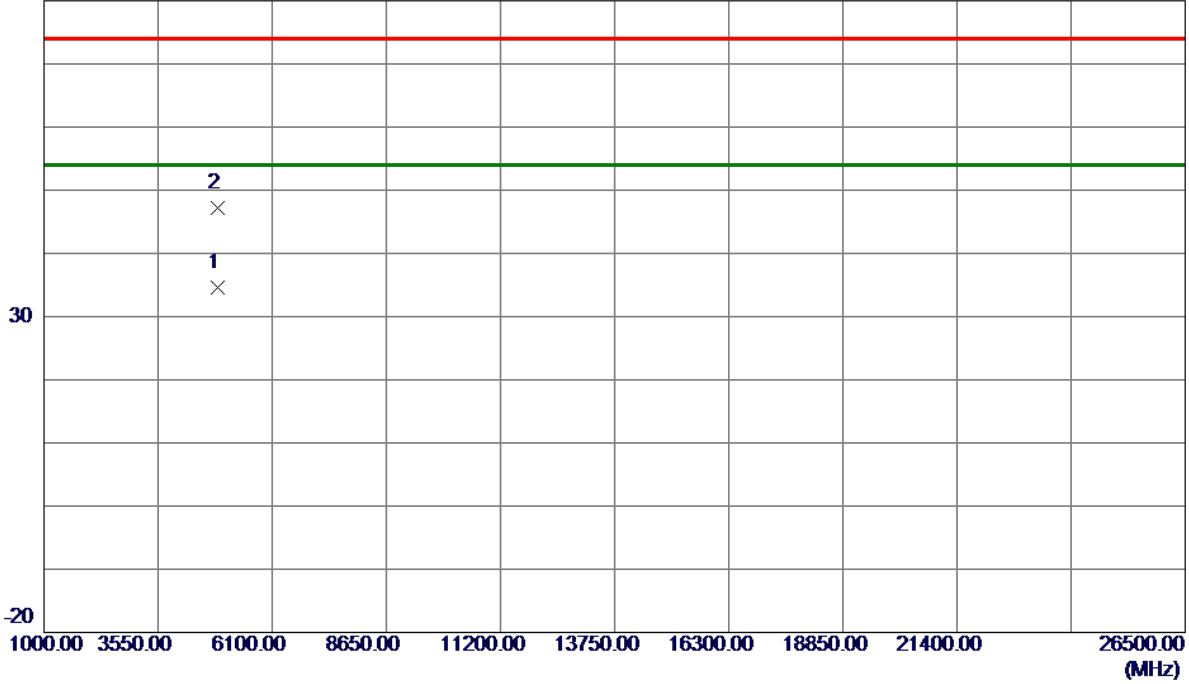


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2440.5000	100.84	6.61	107.45	74.00	33.45	Peak	No Limit
2 *	2440.8500	92.76	6.61	99.37	54.00	45.37	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Vertical

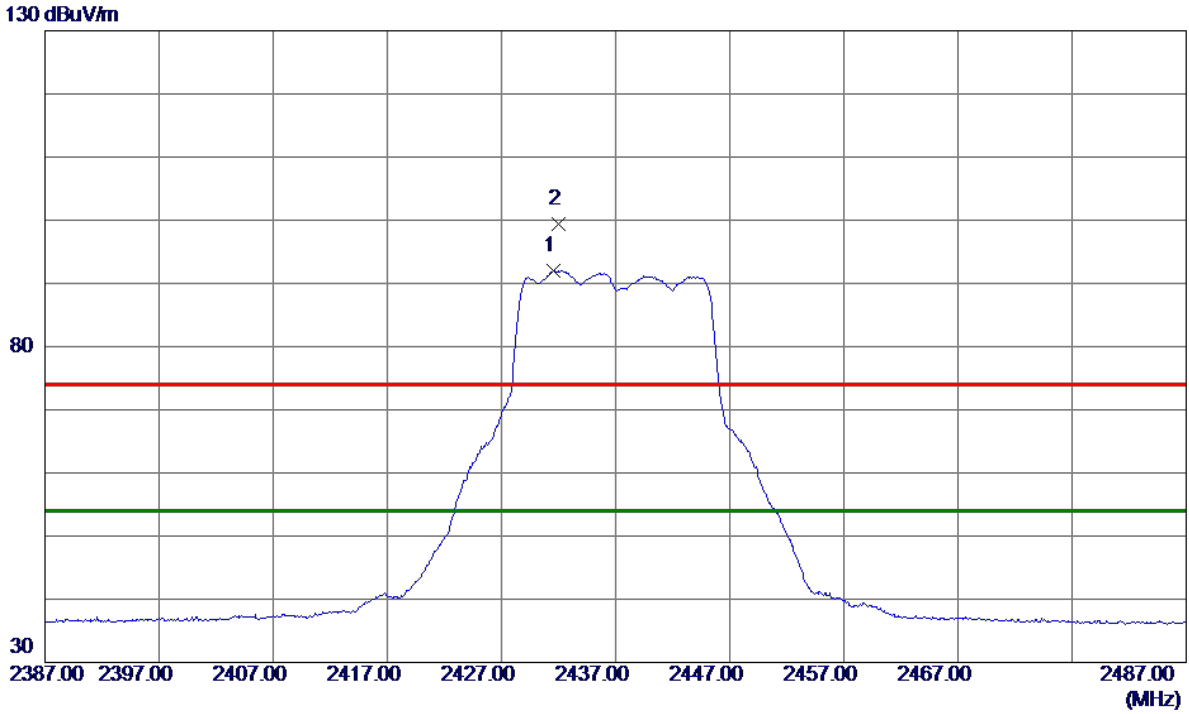
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4871.0500	30.95	3.67	34.62	54.00	-19.38	AVG	
2	4871.7000	43.54	3.68	47.22	74.00	-26.78	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Horizontal

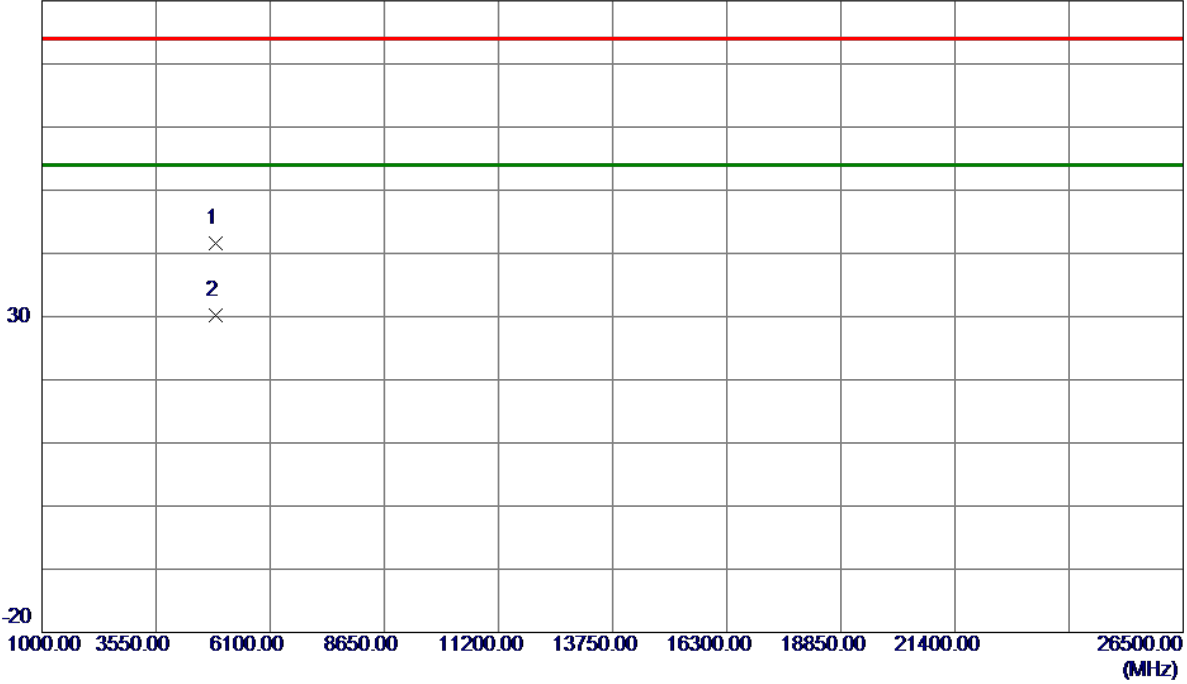


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2431.6000	85.41	6.62	92.03	54.00	38.03	AVG	No Limit
2	2432.0000	92.81	6.62	99.43	74.00	25.43	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Horizontal

80 dBuV/m

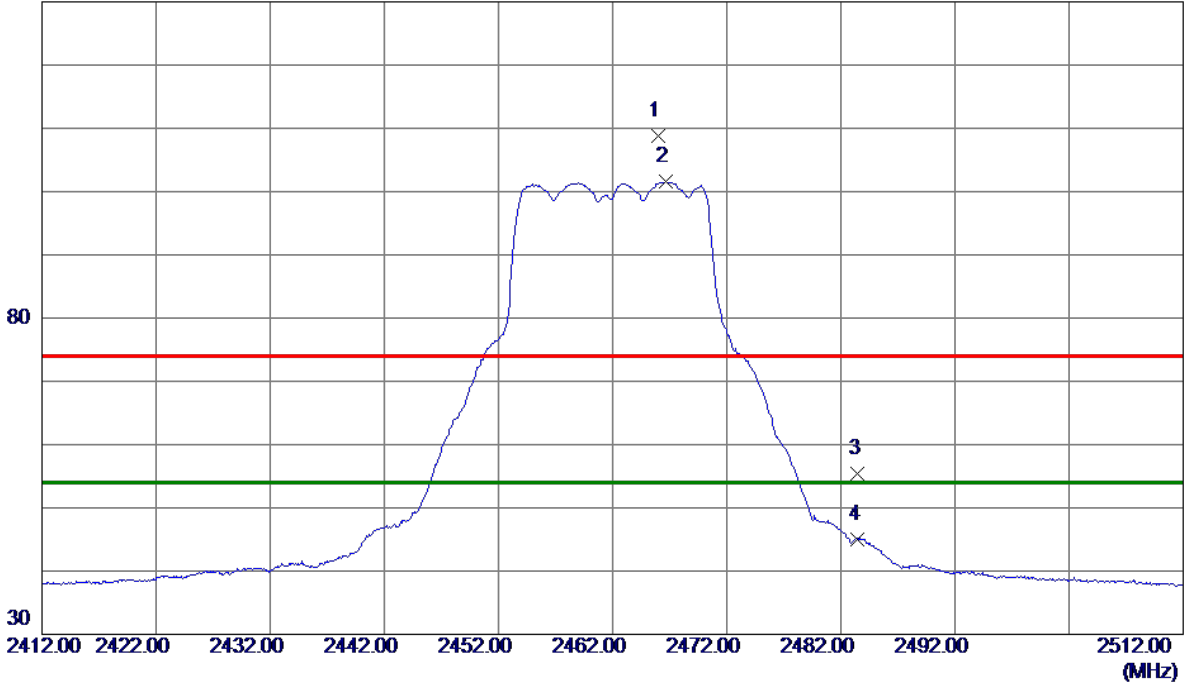


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4869.2750	37.92	3.67	41.59	74.00	-32.41	Peak	
2 *	4873.8250	26.49	3.68	30.17	54.00	-23.83	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Vertical

130 dBuV/m

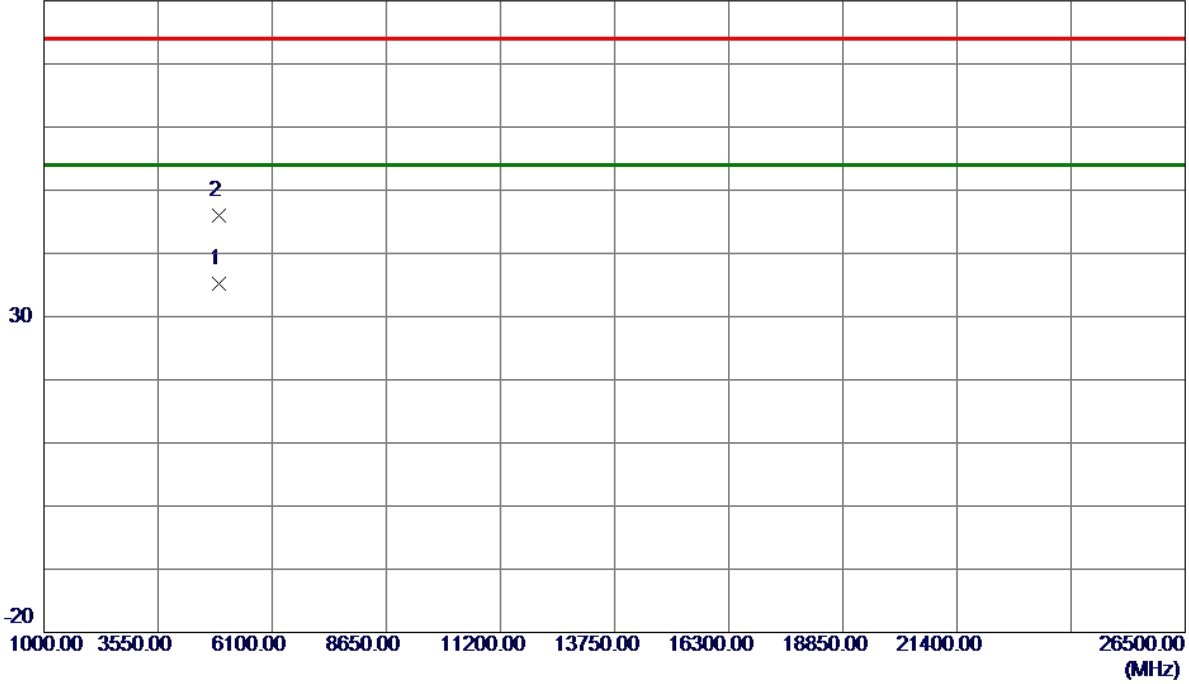


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2466.0000	102.15	6.61	108.76	74.00	34.76	Peak	No Limit
2 *	2466.6500	95.08	6.61	101.69	54.00	47.69	AVG	No Limit
3	2483.5000	48.72	6.61	55.33	74.00	-18.67	Peak	
4	2483.5000	38.47	6.61	45.08	54.00	-8.92	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Vertical

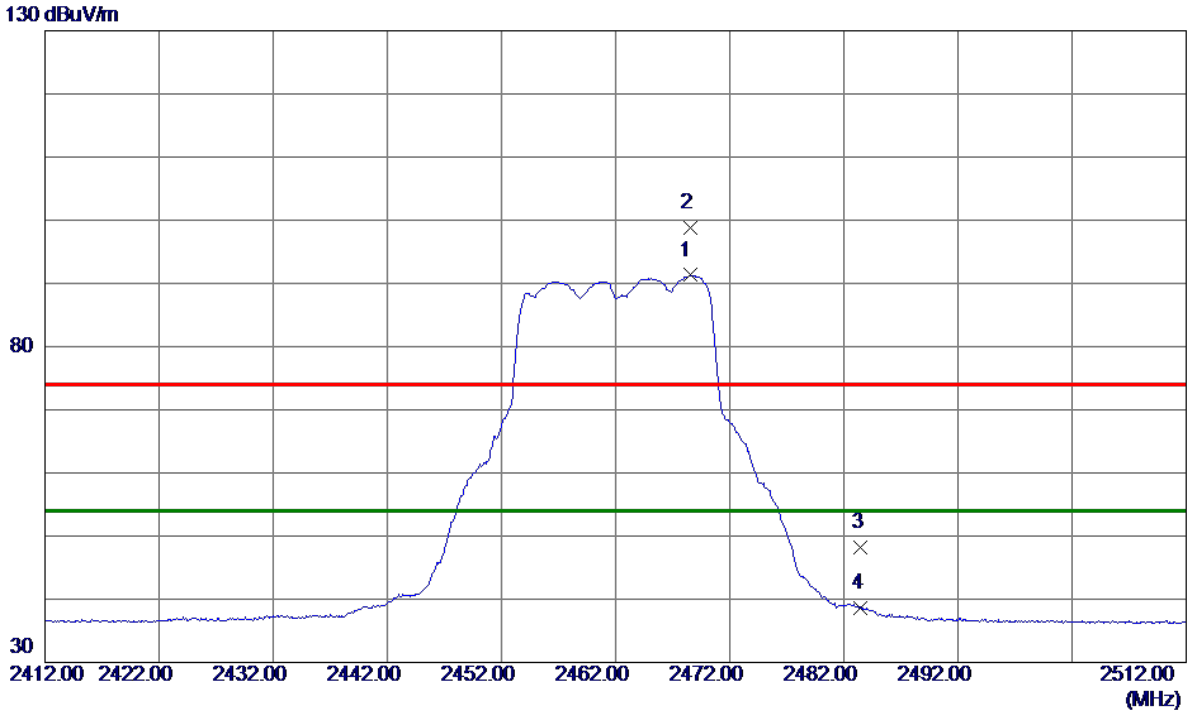
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4921.2750	31.36	3.79	35.15	54.00	-18.85	AVG	
2	4921.5250	42.15	3.79	45.94	74.00	-28.06	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Horizontal

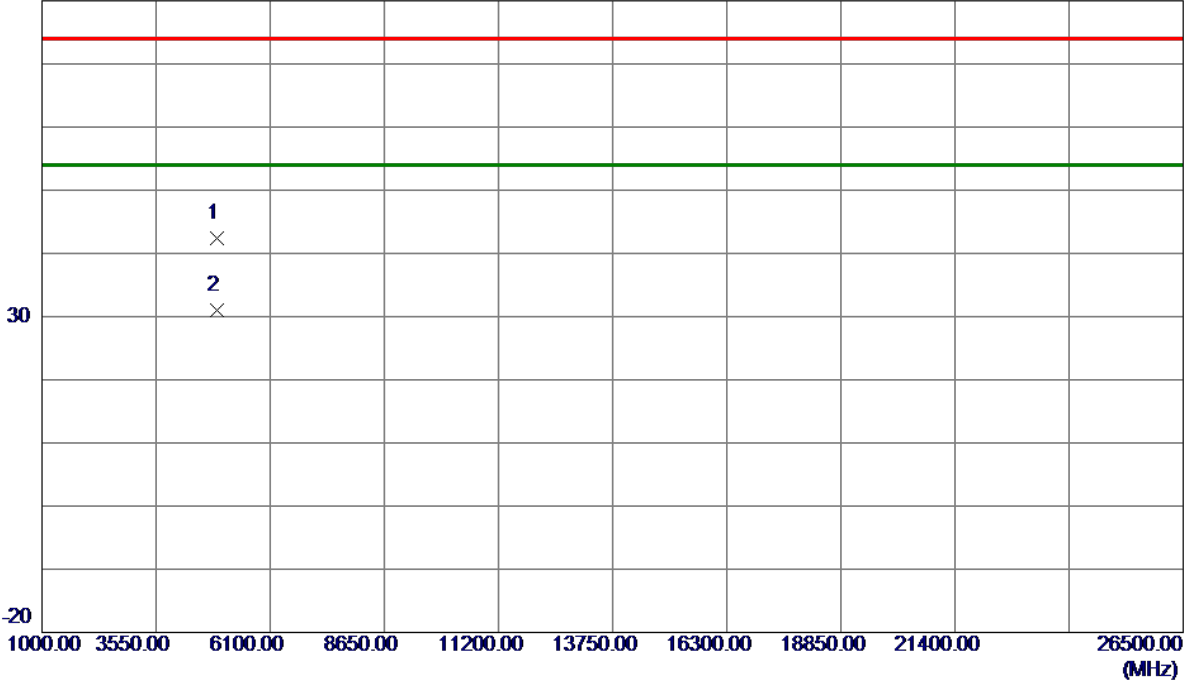


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2468.5000	84.69	6.61	91.30	54.00	37.30	AVG	No Limit
2	2468.6000	92.14	6.61	98.75	74.00	24.75	Peak	No Limit
3	2483.5000	41.55	6.61	48.16	74.00	-25.84	Peak	
4	2483.5000	32.07	6.61	38.68	54.00	-15.32	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Horizontal

80 dBuV/m

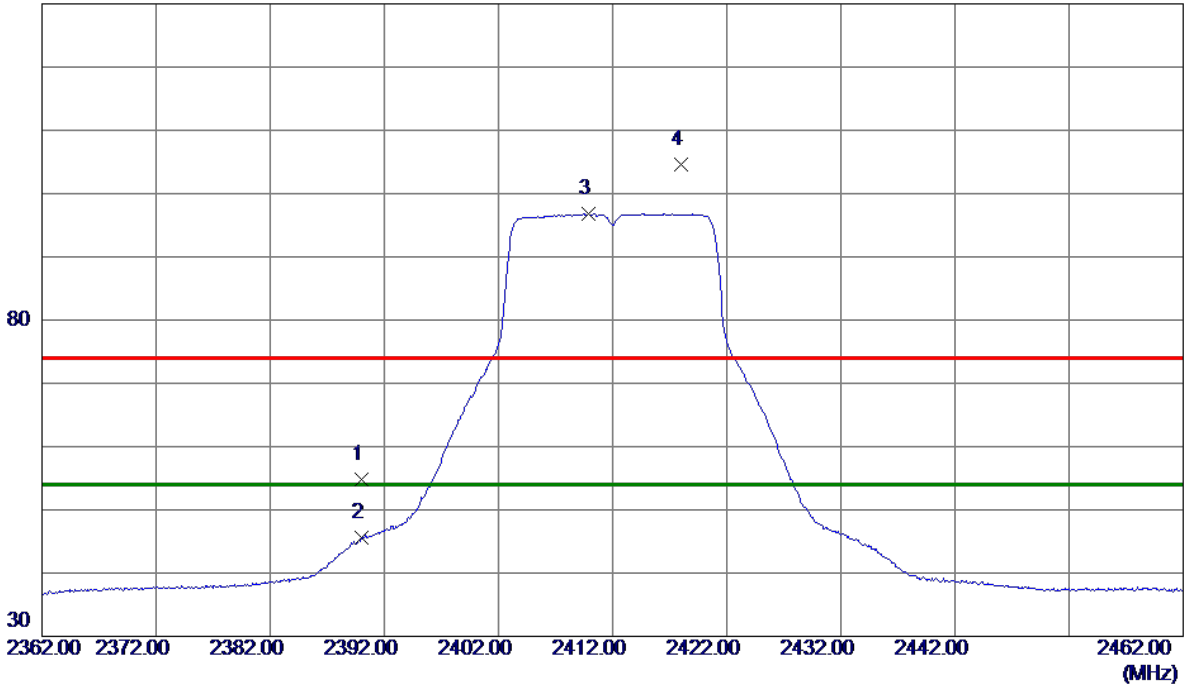


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.0500	38.56	3.79	42.35	74.00	-31.65	Peak	
2 *	4923.2250	27.16	3.79	30.95	54.00	-23.05	AVG	

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

Vertical

130 dBuV/m

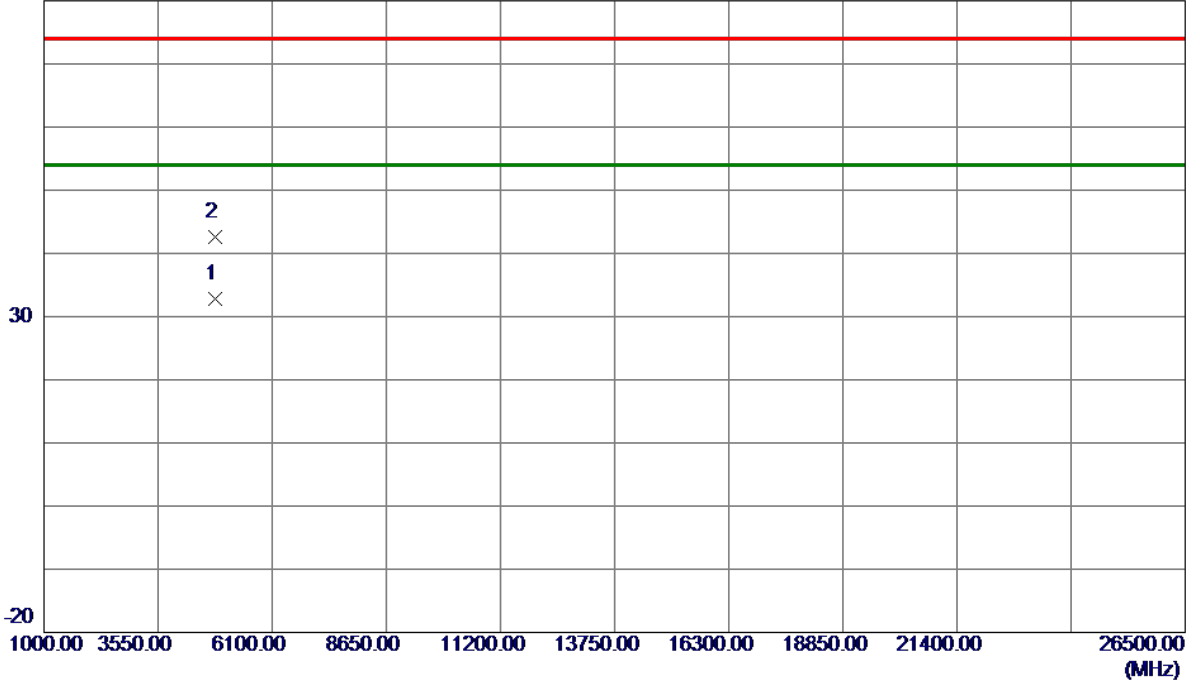


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	48.09	6.62	54.71	74.00	-19.29	Peak	
2	2390.0000	38.94	6.62	45.56	54.00	-8.44	AVG	
3 *	2409.8500	90.14	6.62	96.76	54.00	42.76	AVG	No Limit
4	2418.0500	98.01	6.62	104.63	74.00	30.63	Peak	No Limit

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

Vertical

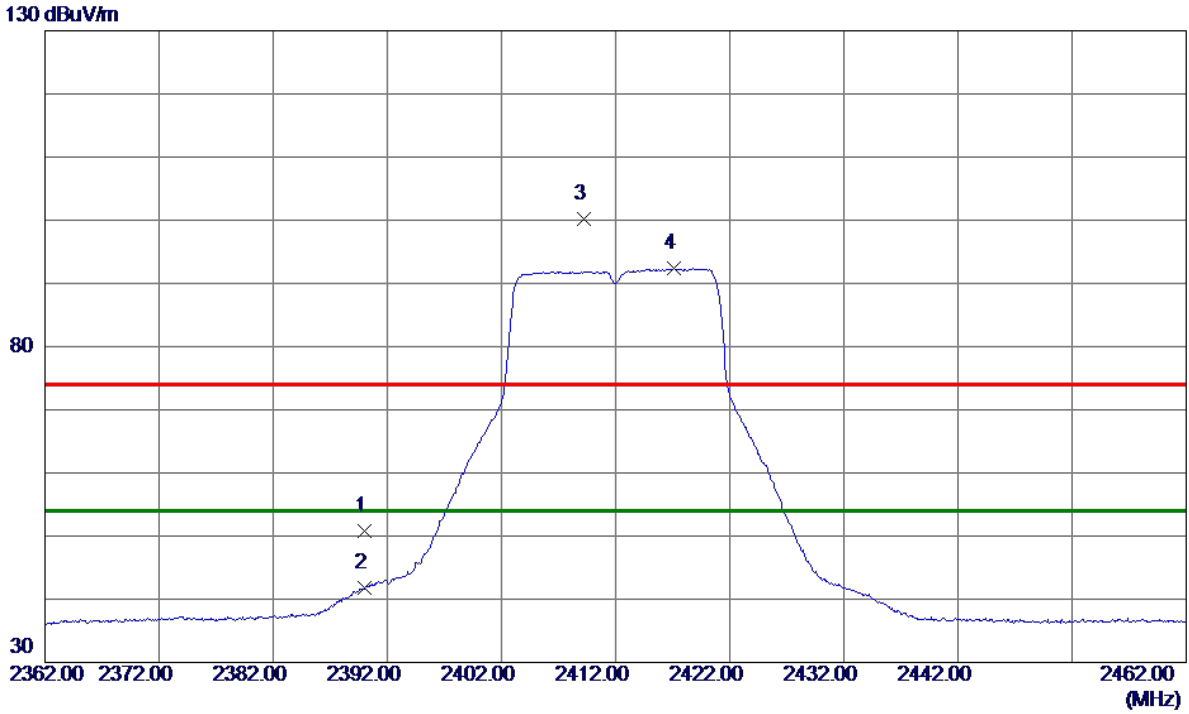
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.4750	29.23	3.57	32.80	54.00	-21.20	AVG	
2	4825.0500	39.04	3.57	42.61	74.00	-31.39	Peak	

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

Horizontal

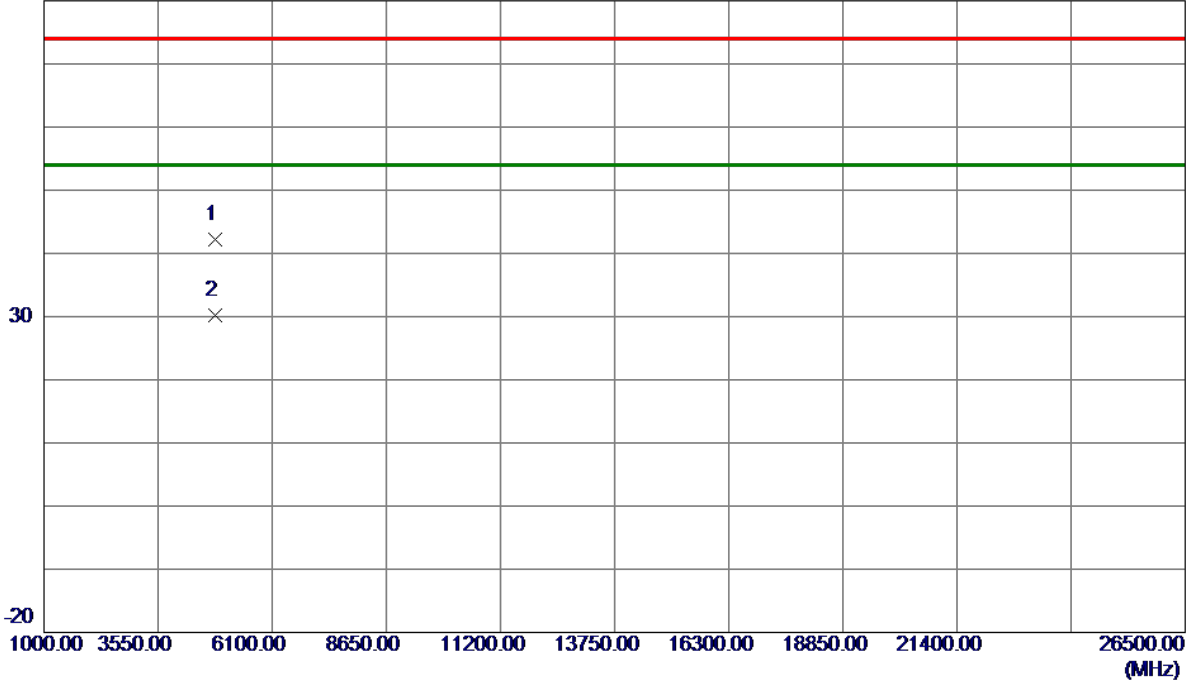


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	44.24	6.62	50.86	74.00	-23.14	Peak	
2	2390.0000	35.20	6.62	41.82	54.00	-12.18	AVG	
3	2409.2500	93.61	6.62	100.23	74.00	26.23	Peak	No Limit
4 *	2417.1000	85.71	6.62	92.33	54.00	38.33	AVG	No Limit

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

Horizontal

80 dBuV/m

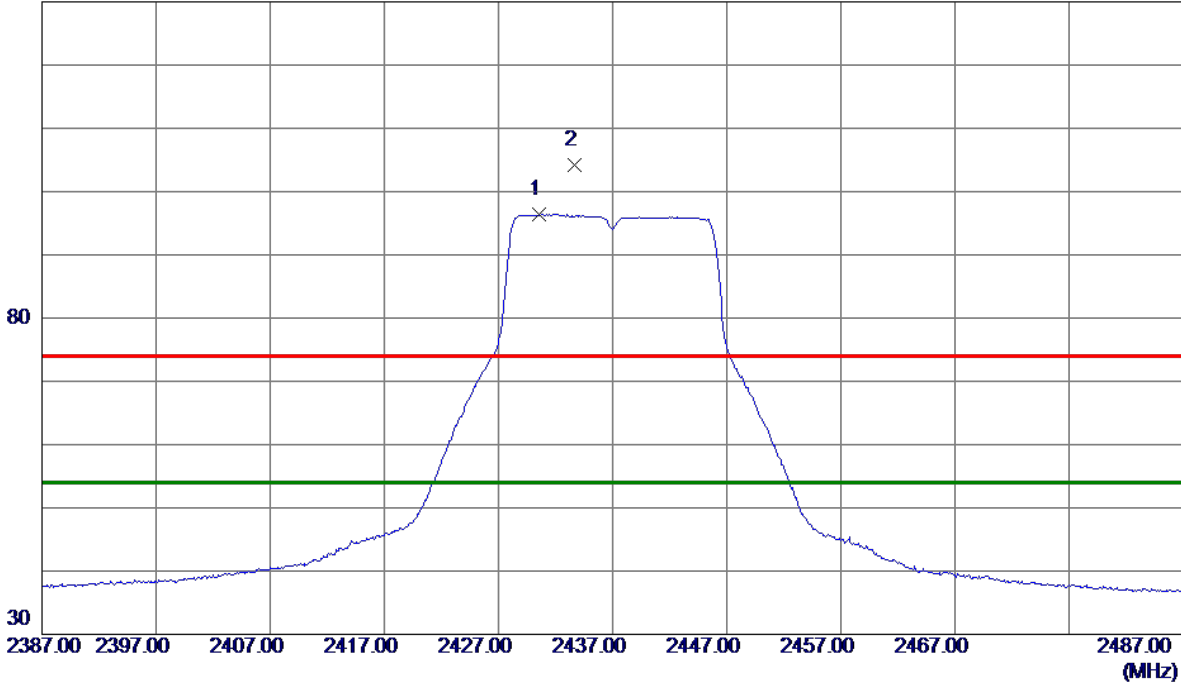


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4816.6750	38.56	3.55	42.11	74.00	-31.89	Peak	
2 *	4824.4250	26.69	3.57	30.26	54.00	-23.74	AVG	

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

Vertical

130 dBuV/m

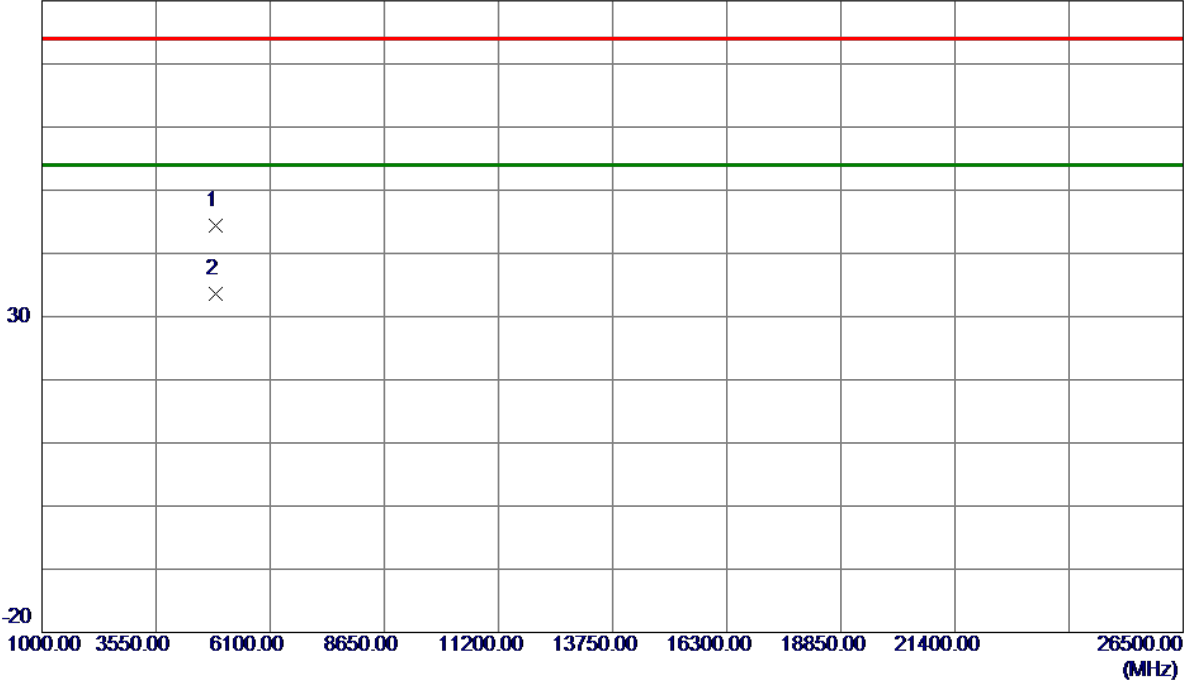


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2430.5500	89.79	6.62	96.41	54.00	42.41	AVG	No Limit
2	2433.7000	97.68	6.61	104.29	74.00	30.29	Peak	No Limit

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

Vertical

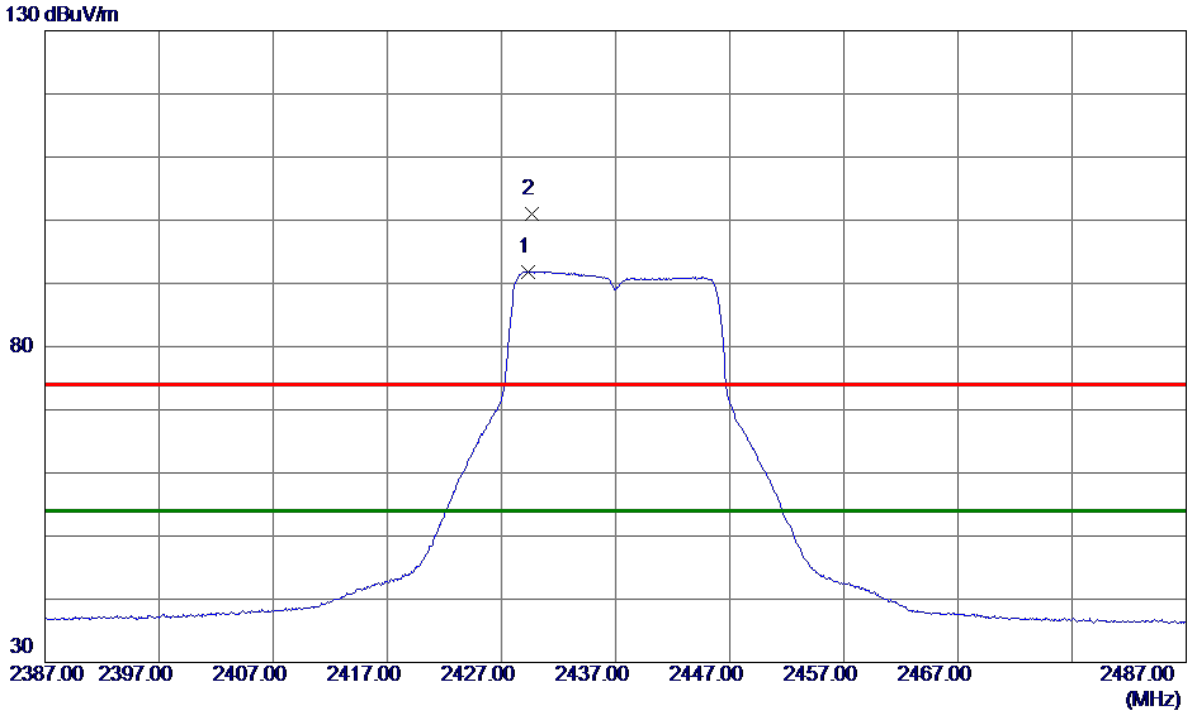
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.3250	40.65	3.68	44.33	74.00	-29.67	Peak	
2 *	4874.0750	29.99	3.68	33.67	54.00	-20.33	AVG	

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

Horizontal

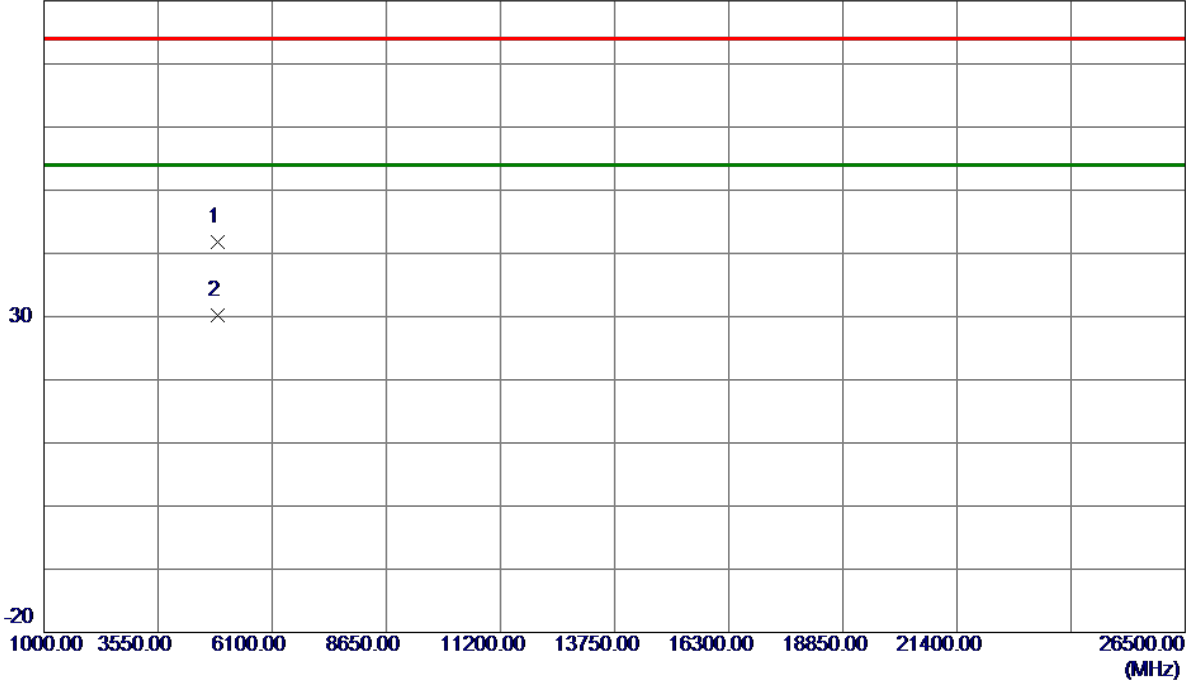


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2429.3000	85.26	6.62	91.88	54.00	37.88	AVG	No Limit
2	2429.6500	94.37	6.62	100.99	74.00	26.99	Peak	No Limit

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

Horizontal

80 dBuV/m

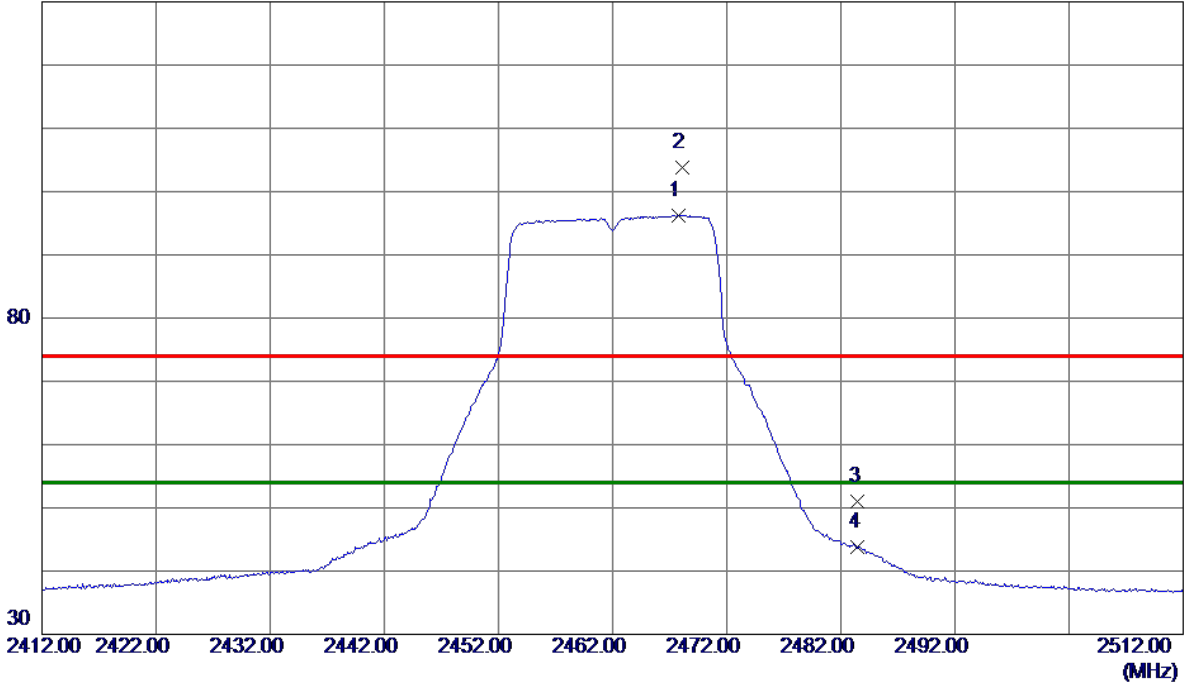


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.8750	38.03	3.68	41.71	74.00	-32.29	Peak	
2 *	4875.4750	26.52	3.68	30.20	54.00	-23.80	AVG	

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

Vertical

130 dBuV/m

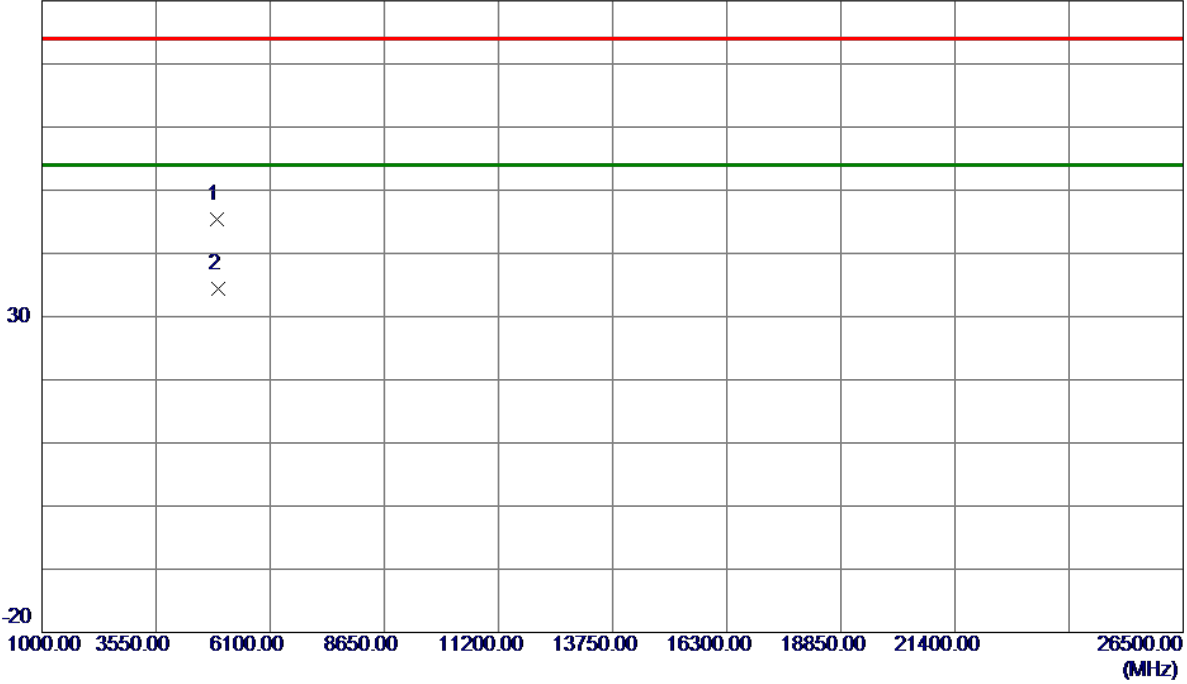


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2467.8000	89.68	6.61	96.29	54.00	42.29	AVG	No Limit
2	2468.1000	97.20	6.61	103.81	74.00	29.81	Peak	No Limit
3	2483.5000	44.40	6.61	51.01	74.00	-22.99	Peak	
4	2483.5000	37.26	6.61	43.87	54.00	-10.13	AVG	

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

Vertical

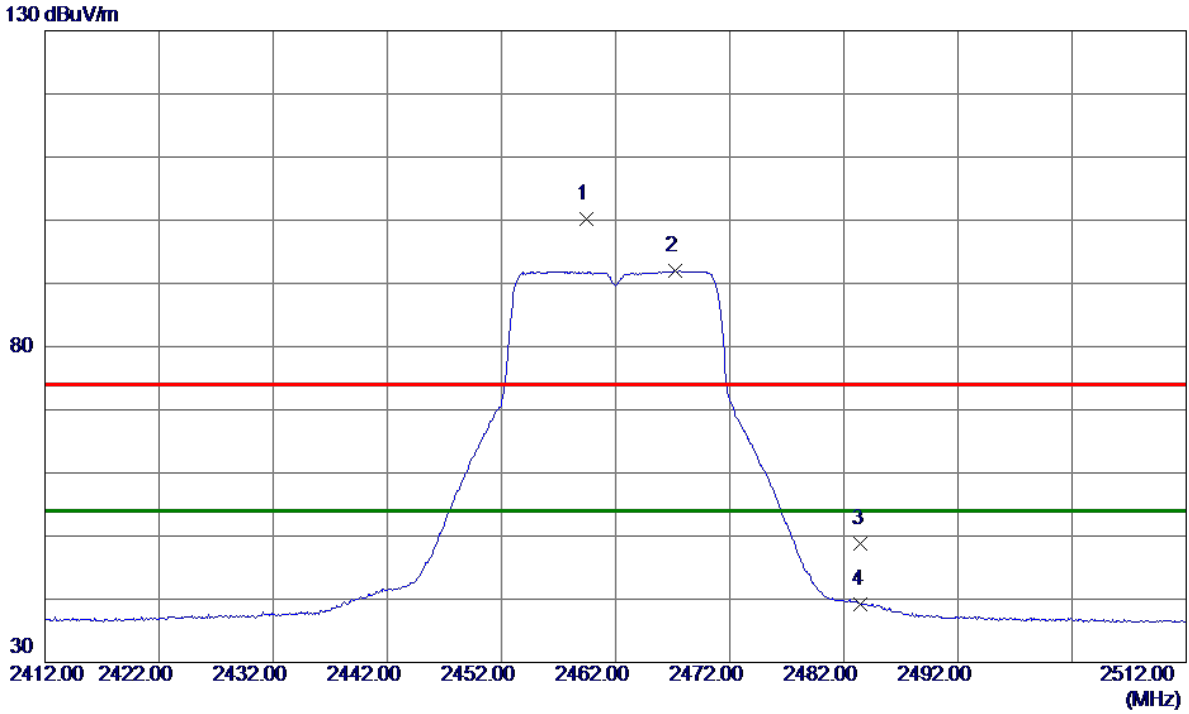
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.5750	41.54	3.79	45.33	74.00	-28.67	Peak	
2 *	4924.1750	30.69	3.79	34.48	54.00	-19.52	AVG	

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

Horizontal

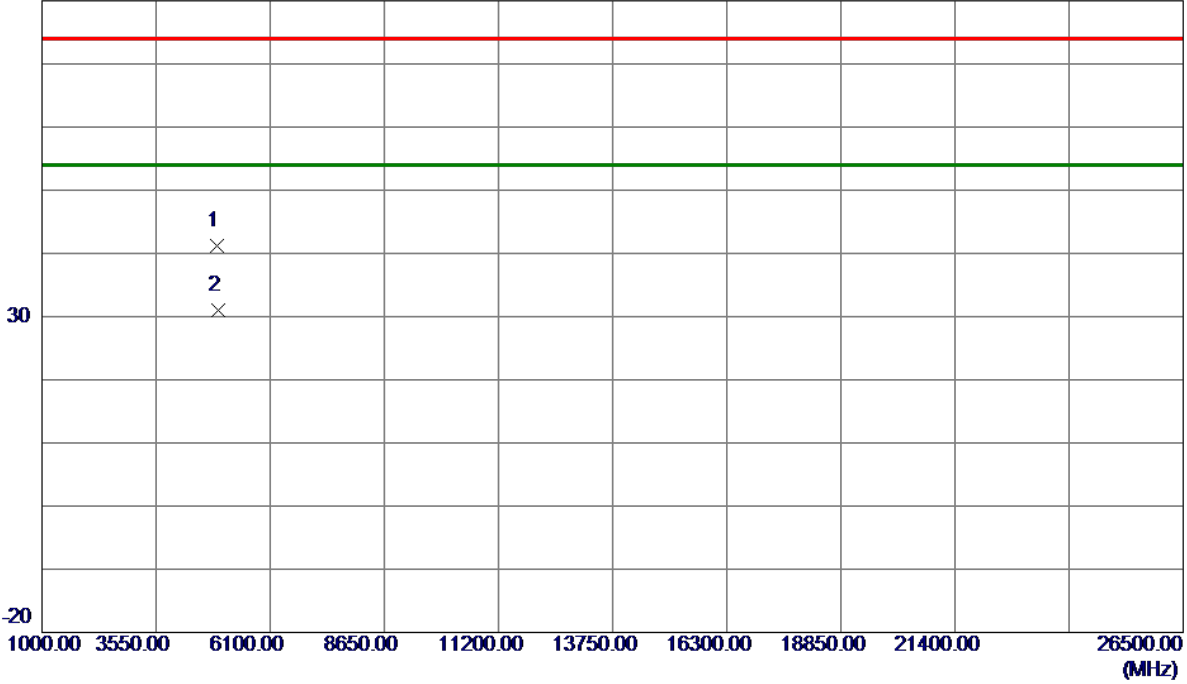


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.4000	93.57	6.61	100.18	74.00	26.18	Peak	No Limit
2 *	2467.2000	85.44	6.61	92.05	54.00	38.05	AVG	No Limit
3	2483.5000	42.11	6.61	48.72	74.00	-25.28	Peak	
4	2483.5000	32.51	6.61	39.12	54.00	-14.88	AVG	

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

Horizontal

80 dBuV/m

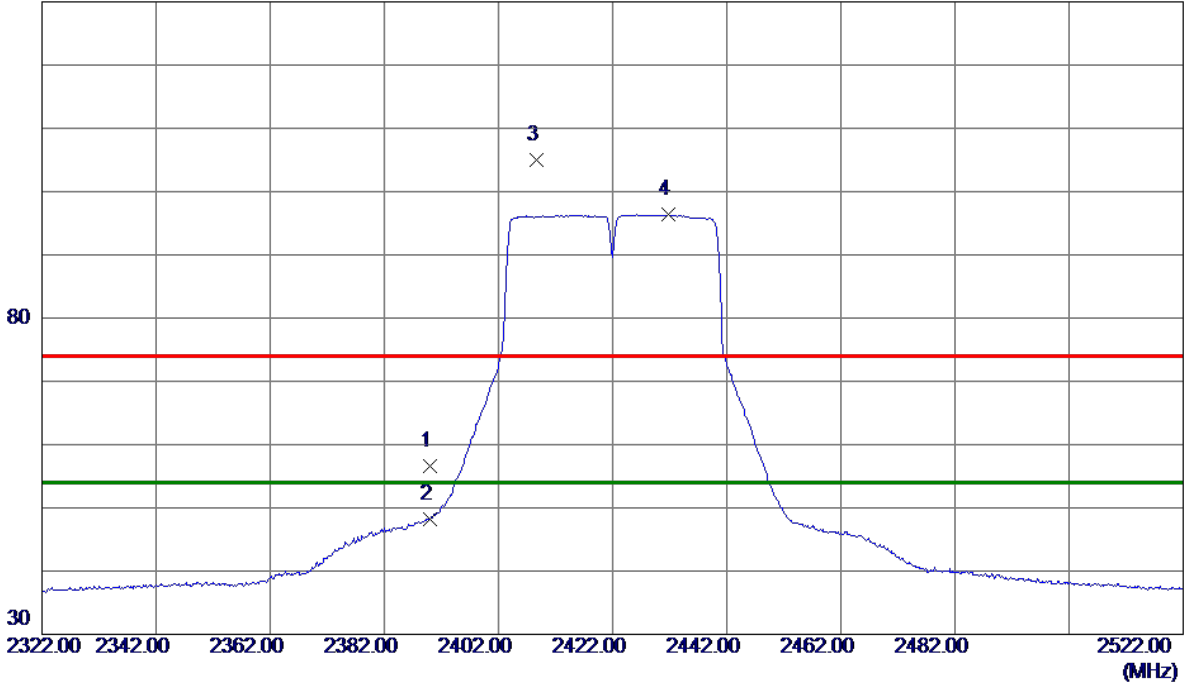


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4916.1250	37.40	3.77	41.17	74.00	-32.83	Peak	
2 *	4924.5250	27.14	3.79	30.93	54.00	-23.07	AVG	

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

Vertical

130 dBuV/m

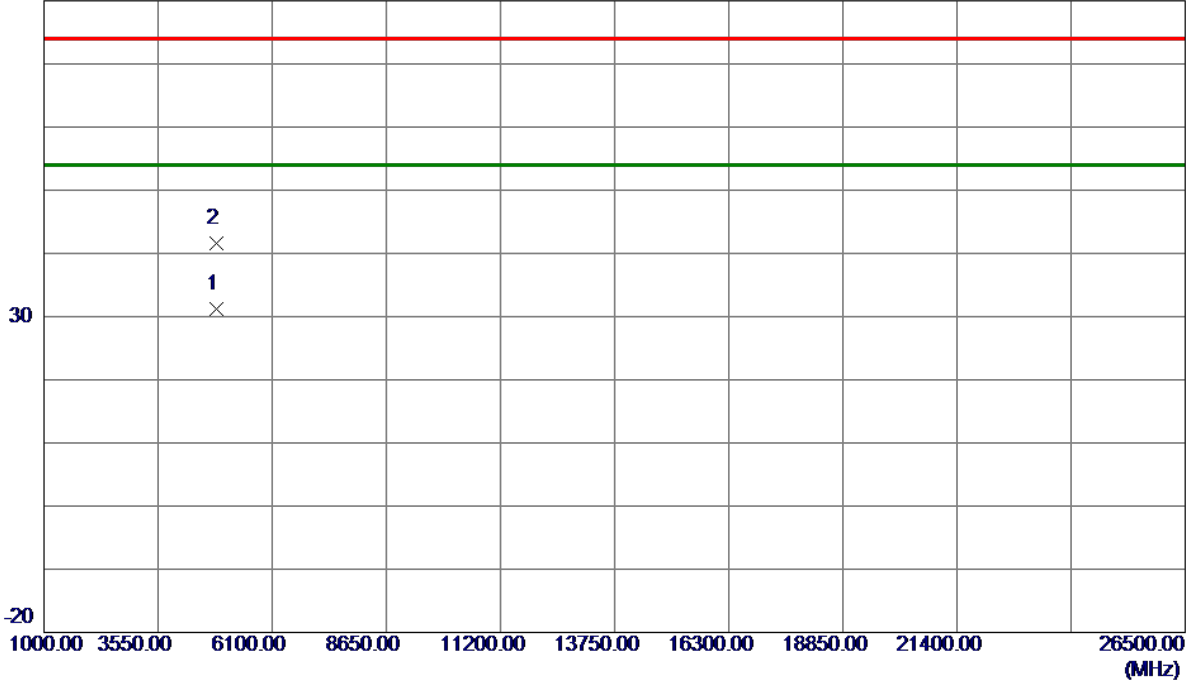


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	50.00	6.62	56.62	74.00	-17.38	Peak	
2	2390.0000	41.60	6.62	48.22	54.00	-5.78	AVG	
3	2408.7000	98.29	6.62	104.91	74.00	30.91	Peak	No Limit
4 *	2431.8000	89.79	6.62	96.41	54.00	42.41	AVG	No Limit

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

Vertical

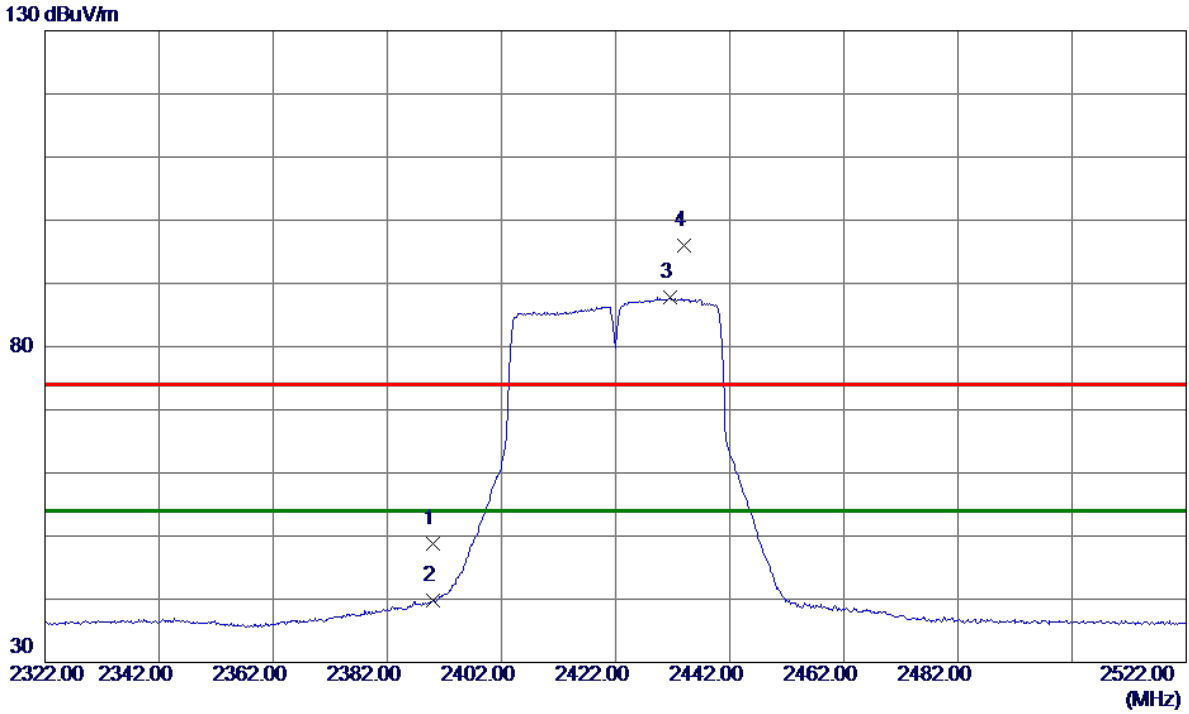
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4844.7000	27.60	3.62	31.22	54.00	-22.78	AVG	
2	4846.7000	38.03	3.62	41.65	74.00	-32.35	Peak	

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

Horizontal

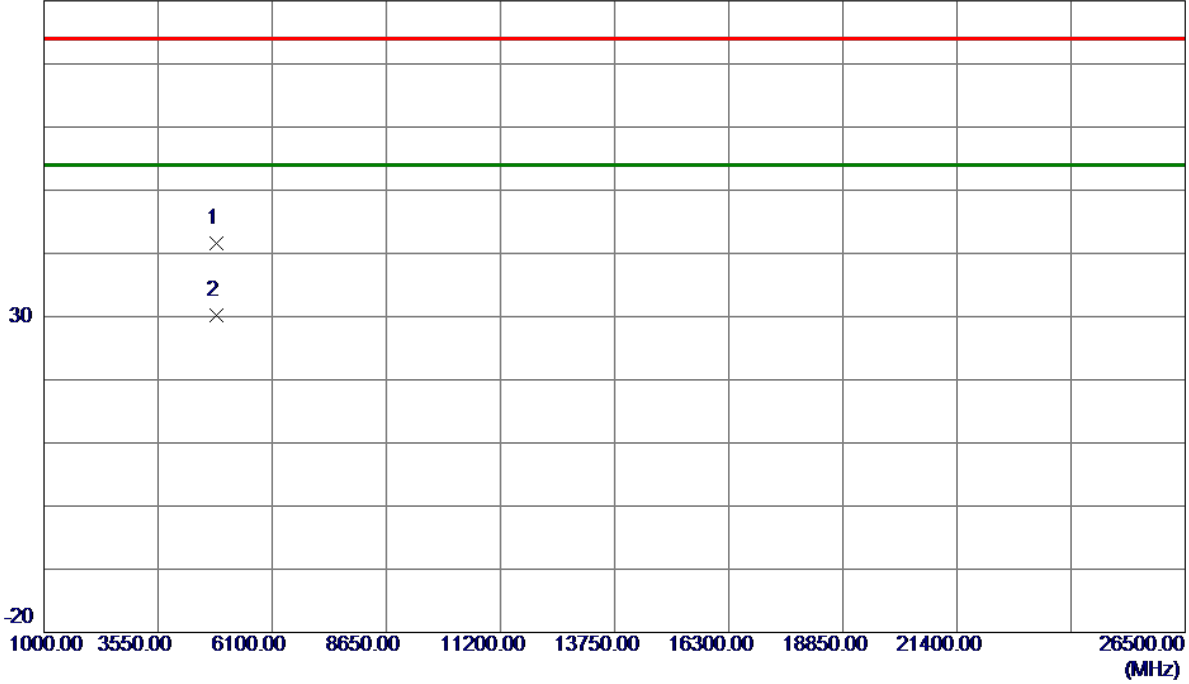


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	42.21	6.62	48.83	74.00	-25.17	Peak	
2	2390.0000	33.13	6.62	39.75	54.00	-14.25	AVG	
3 *	2431.6000	81.24	6.62	87.86	54.00	33.86	AVG	No Limit
4	2433.9000	89.34	6.61	95.95	74.00	21.95	Peak	No Limit

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

Horizontal

80 dBuV/m

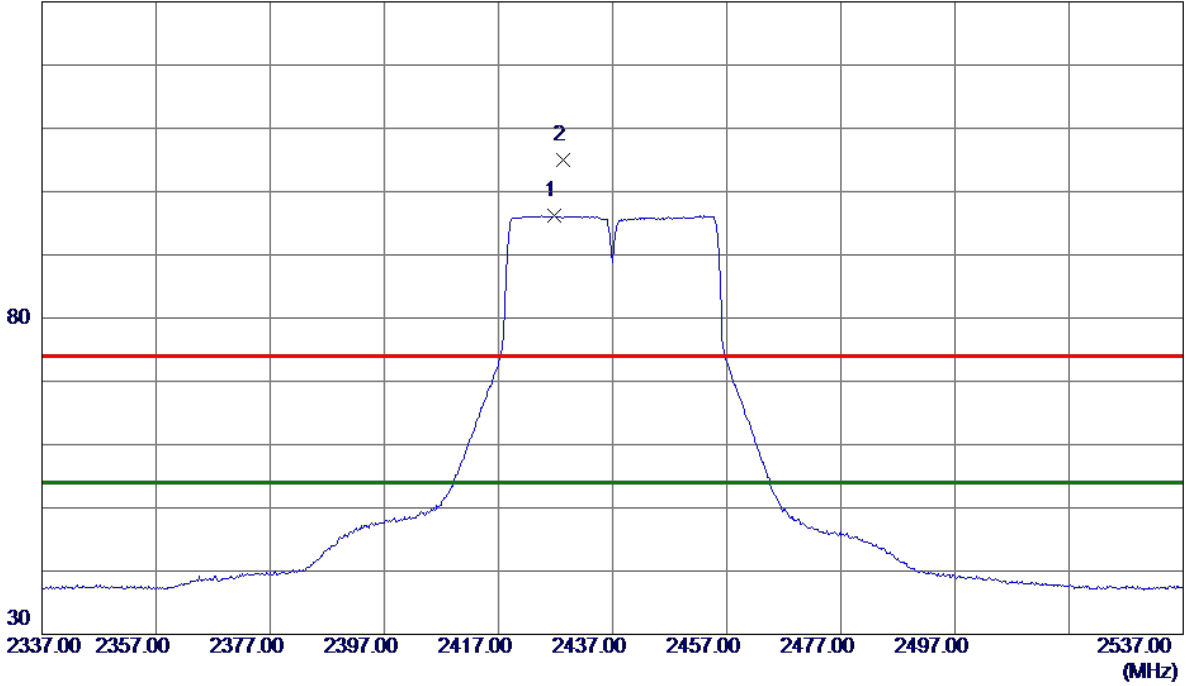


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.1000	38.06	3.61	41.67	74.00	-32.33	Peak	
2 *	4844.5250	26.55	3.62	30.17	54.00	-23.83	AVG	

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

Vertical

130 dBuV/m

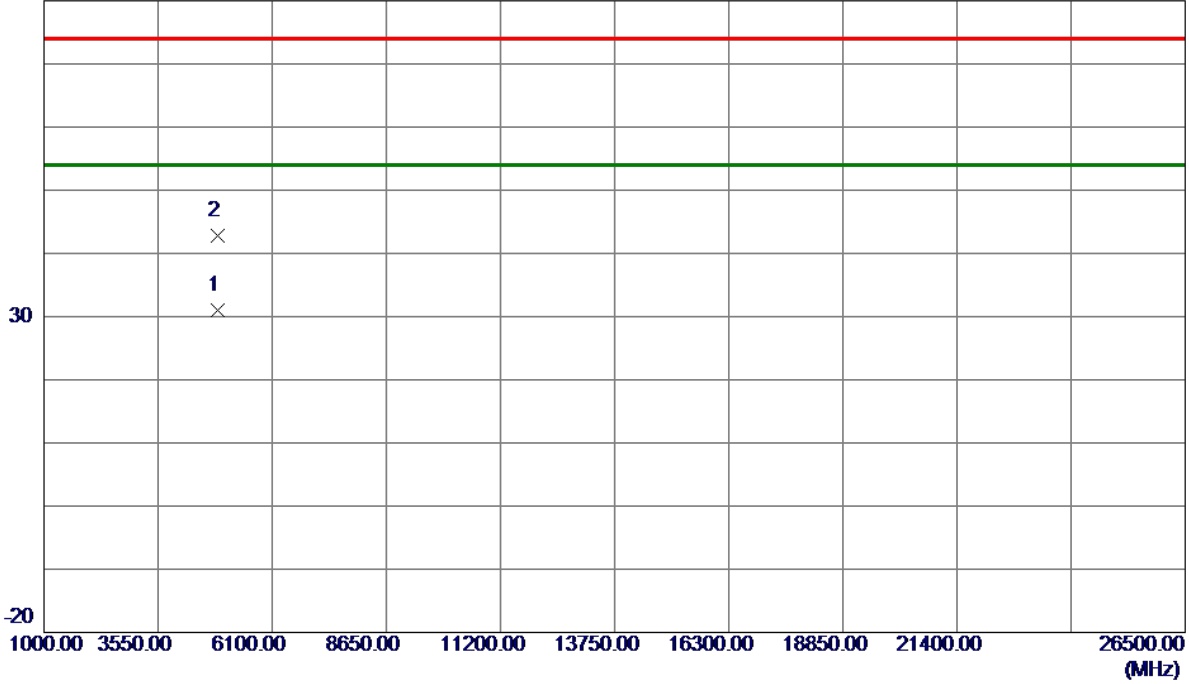


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2426.7000	89.63	6.62	96.25	54.00	42.25	AVG	No Limit
2	2428.3000	98.46	6.62	105.08	74.00	31.08	Peak	No Limit

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

Vertical

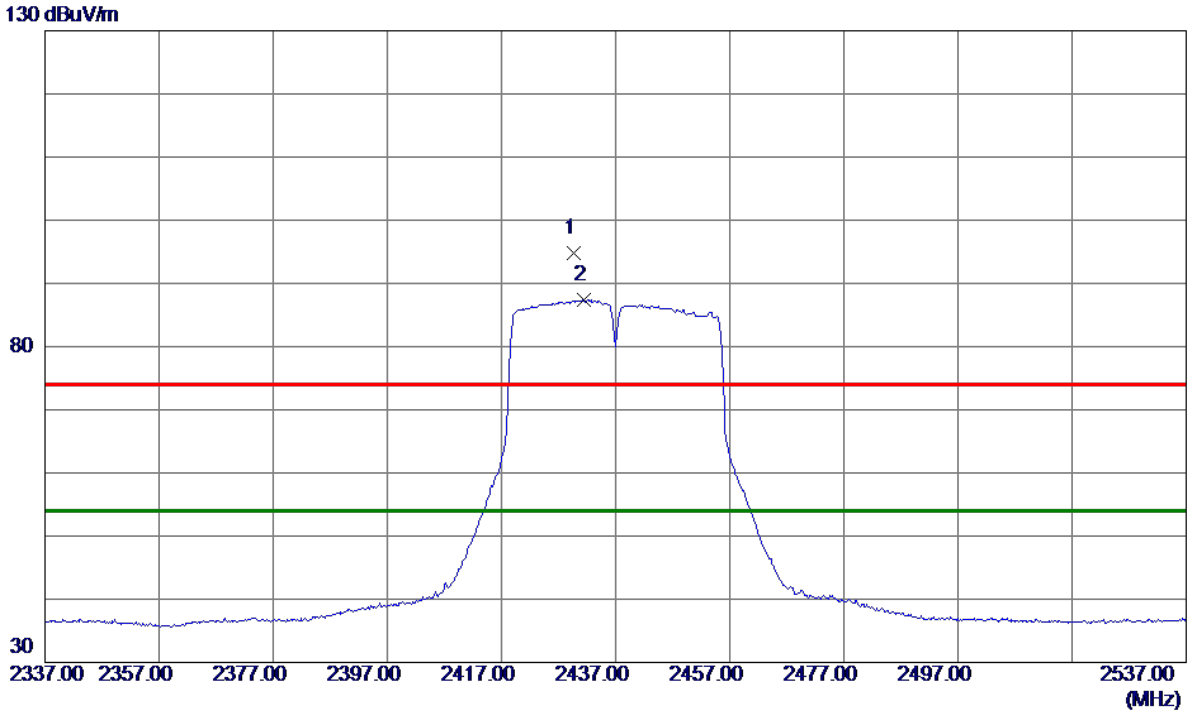
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.2200	27.27	3.68	30.95	54.00	-23.05	AVG	
2	4875.3700	39.21	3.68	42.89	74.00	-31.11	Peak	

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

Horizontal

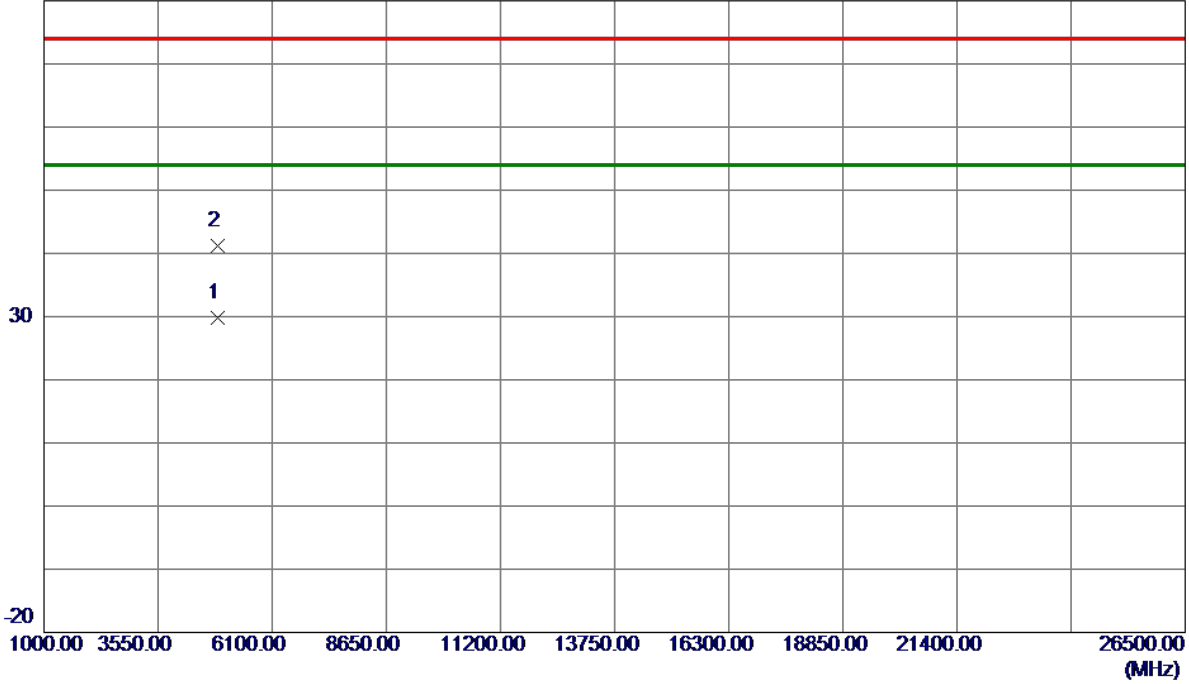


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2429.6000	88.27	6.62	94.89	74.00	20.89	Peak	No Limit
2 *	2431.4000	80.78	6.62	87.40	54.00	33.40	AVG	No Limit

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

Horizontal

80 dBuV/m

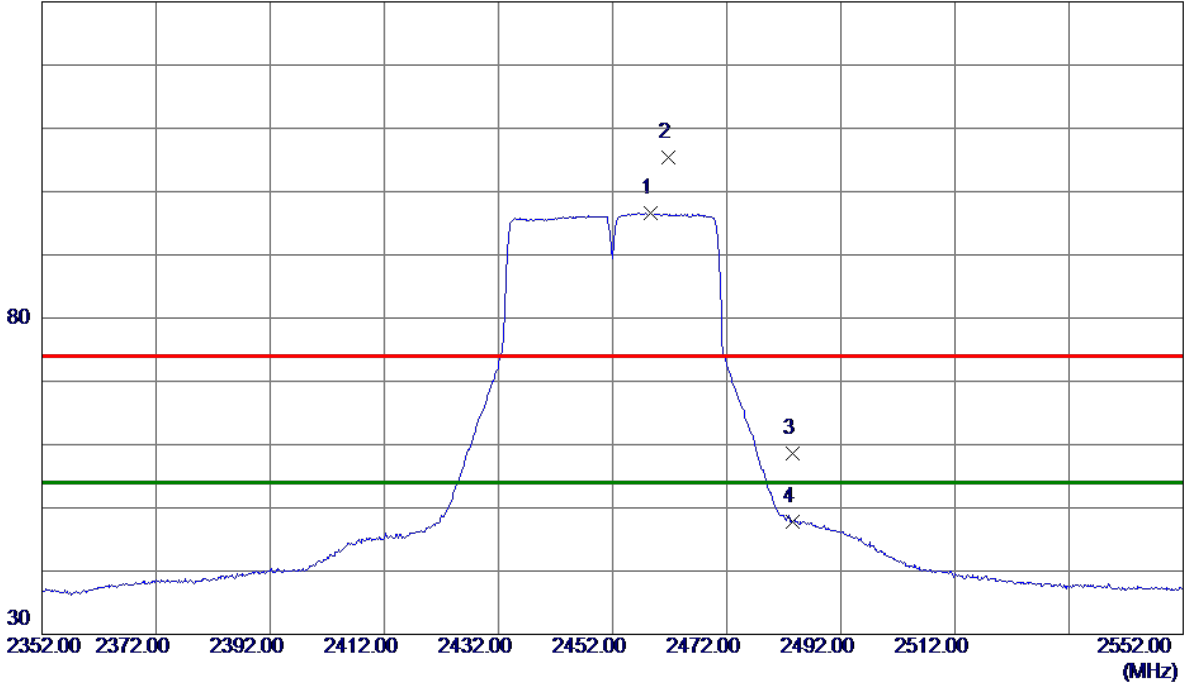


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4871.9650	26.10	3.68	29.78	54.00	-24.22	AVG	
2	4875.3350	37.52	3.68	41.20	74.00	-32.80	Peak	

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

Vertical

130 dBuV/m

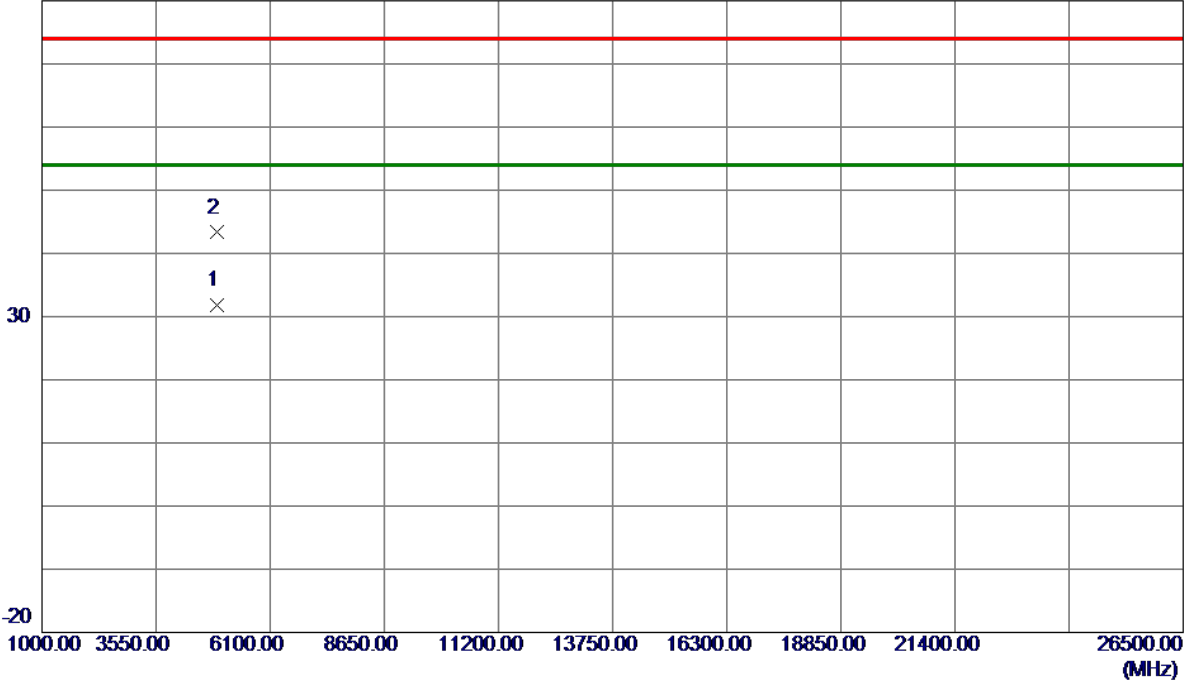


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2458.7000	90.01	6.61	96.62	54.00	42.62	AVG	No Limit
2	2461.7000	98.79	6.61	105.40	74.00	31.40	Peak	No Limit
3	2483.5000	51.97	6.61	58.58	74.00	-15.42	Peak	
4	2483.5000	41.14	6.61	47.75	54.00	-6.25	AVG	

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

Vertical

80 dBuV/m

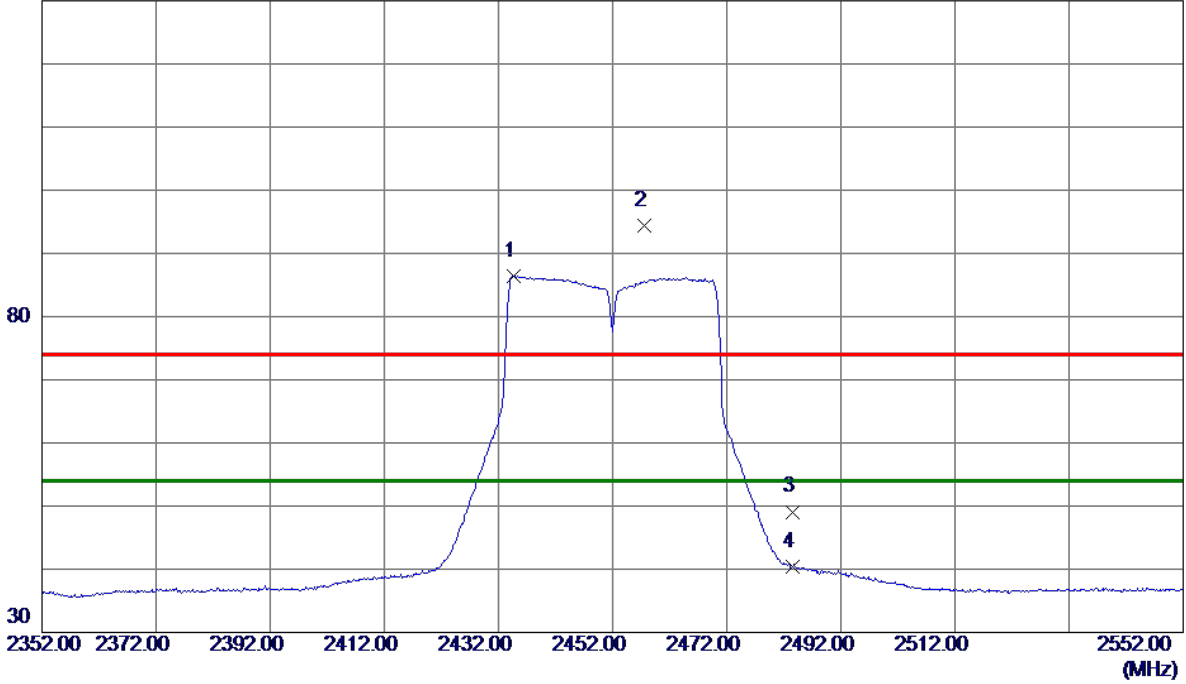


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4903.6720	28.08	3.75	31.83	54.00	-22.17	AVG	
2	4906.1420	39.55	3.75	43.30	74.00	-30.70	Peak	

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

Horizontal

130 dBuV/m

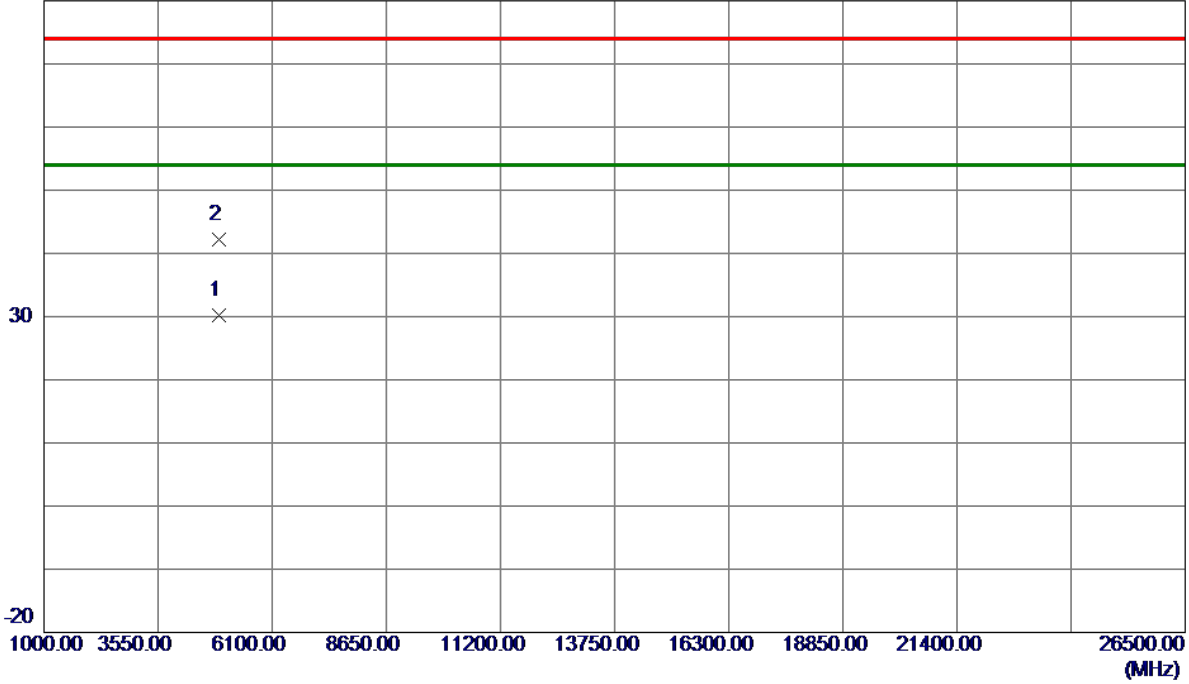


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2434.7000	79.88	6.61	86.49	54.00	32.49	AVG	No Limit
2	2457.5000	87.72	6.61	94.33	74.00	20.33	Peak	No Limit
3	2483.5000	42.49	6.61	49.10	74.00	-24.90	Peak	
4	2483.5000	33.85	6.61	40.46	54.00	-13.54	AVG	

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

Horizontal

80 dBuV/m



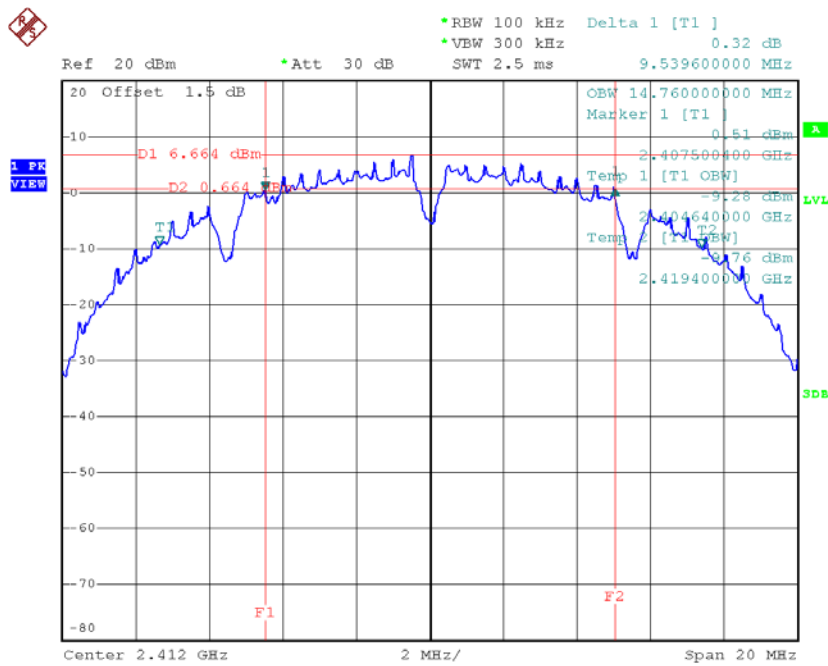
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4901.5419	26.47	3.74	30.21	54.00	-23.79	AVG	
2	4903.8300	38.41	3.75	42.16	74.00	-31.84	Peak	

APPENDIX E - BANDWIDTH

Test Mode: TX B Mode_CH01/06/11

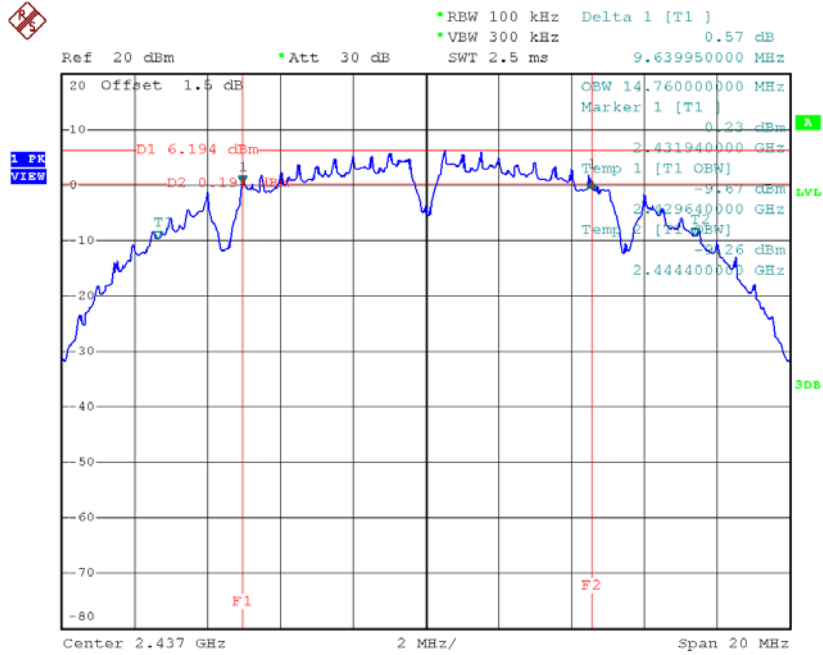
Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	9.54	14.76	500	Complies
2437	9.64	14.76	500	Complies
2462	9.11	14.72	500	Complies

TX CH01



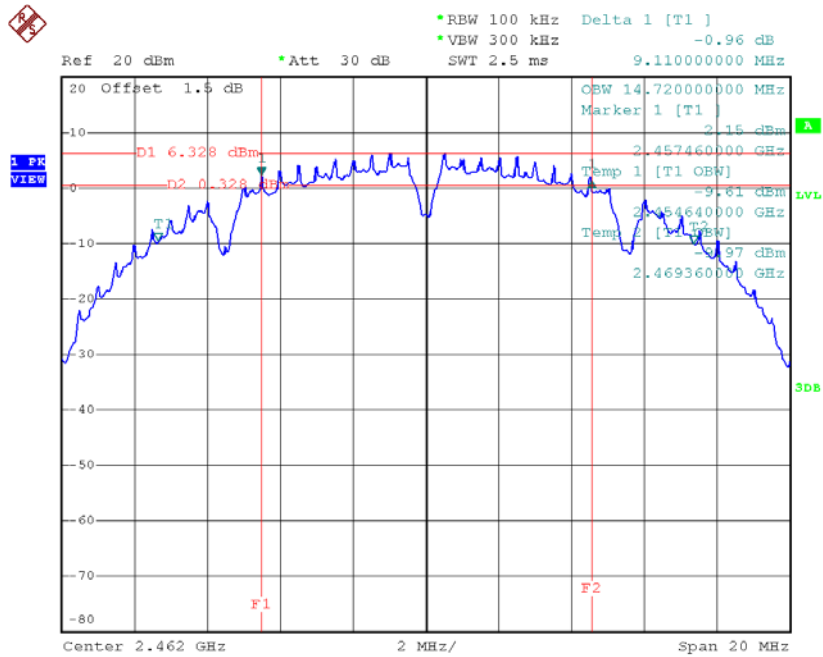
Date: 24.NOV.2018 14:33:16

TX CH06



Date: 24.NOV.2018 14:36:01

TX CH11

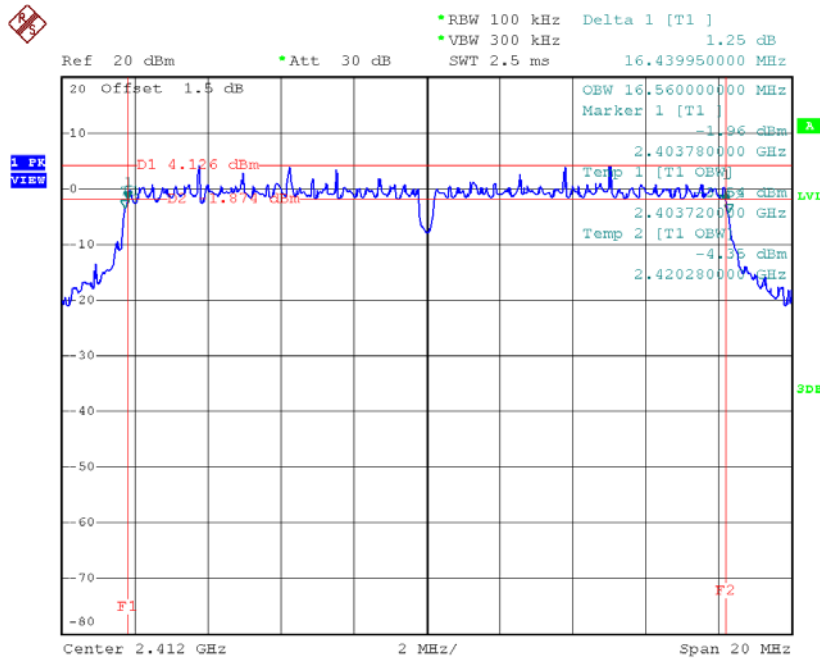


Date: 24.NOV.2018 14:37:42

Test Mode: TX G Mode_CH01/06/11

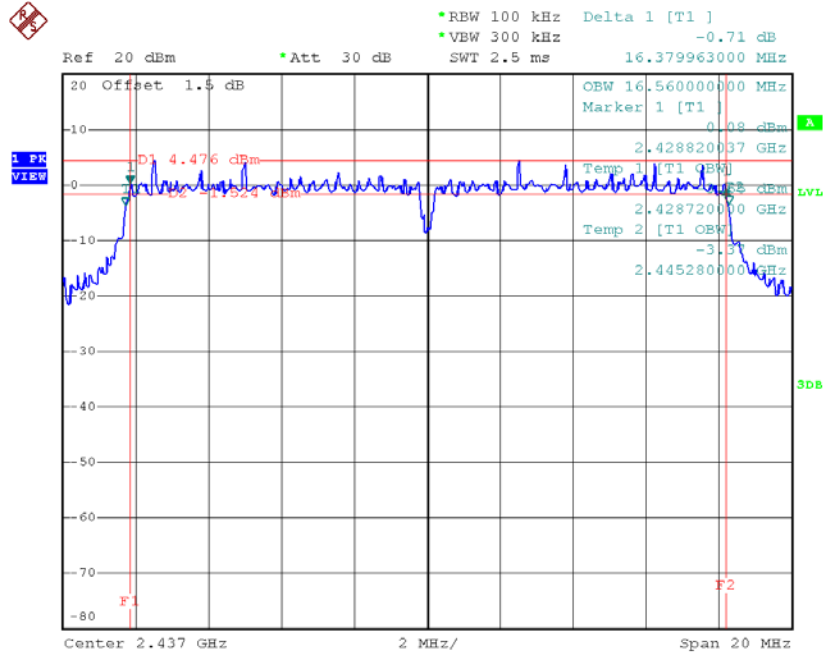
Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.44	16.56	500	Complies
2437	16.38	16.56	500	Complies
2462	16.38	16.52	500	Complies

TX CH01



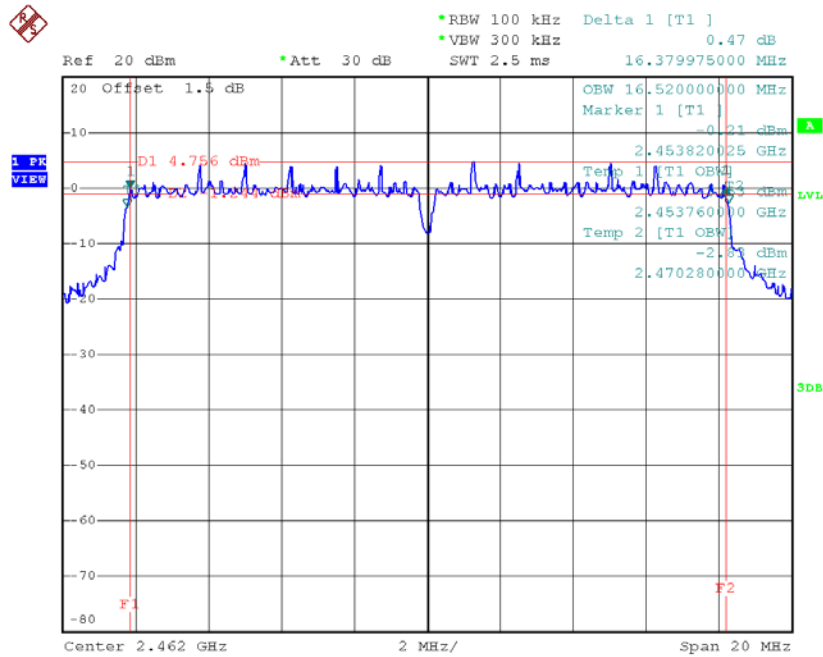
Date: 24.NOV.2018 14:39:36

TX CH06



Date: 24.NOV.2018 14:40:52

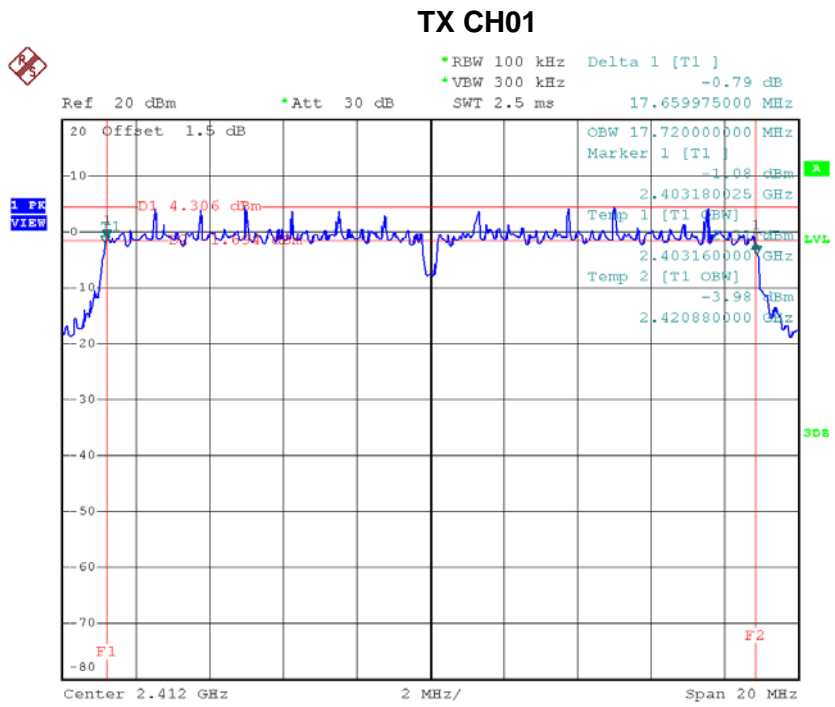
TX CH11



Date: 24.NOV.2018 14:42:40

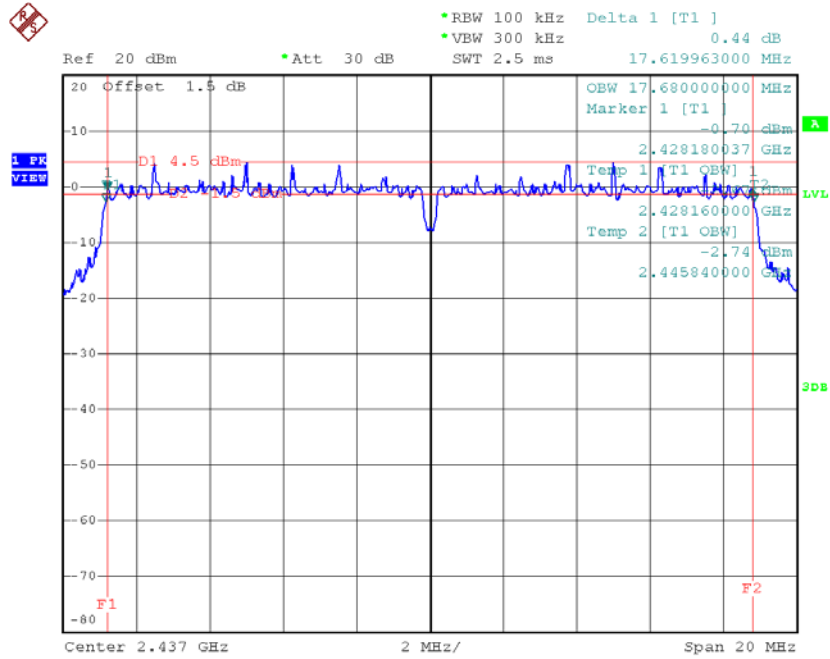
Test Mode: TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.66	17.72	500	Complies
2437	17.62	17.68	500	Complies
2462	17.63	17.72	500	Complies



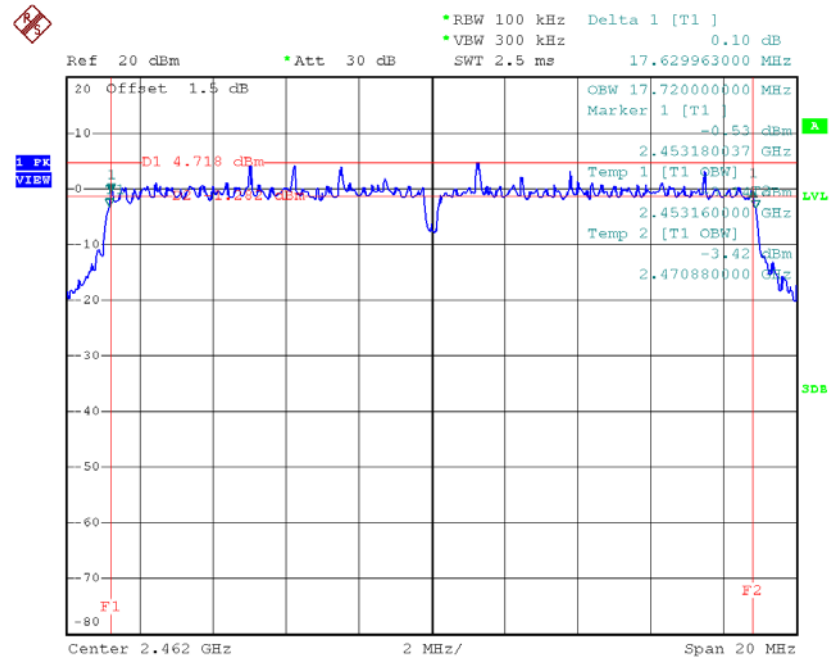
Date: 24.NOV.2018 14:44:58

TX CH06



Date: 24.NOV.2018 14:46:22

TX CH11

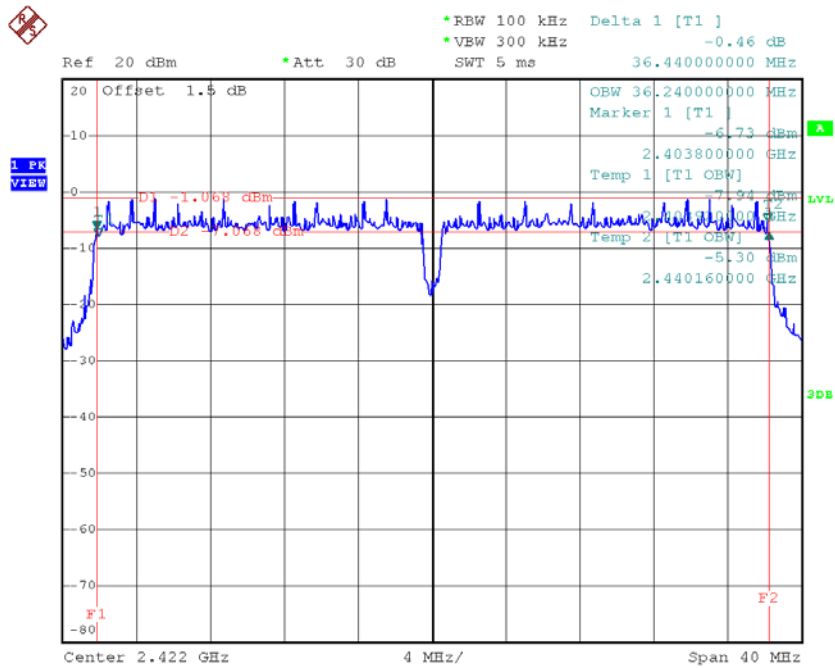


Date: 24.NOV.2018 14:47:38

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

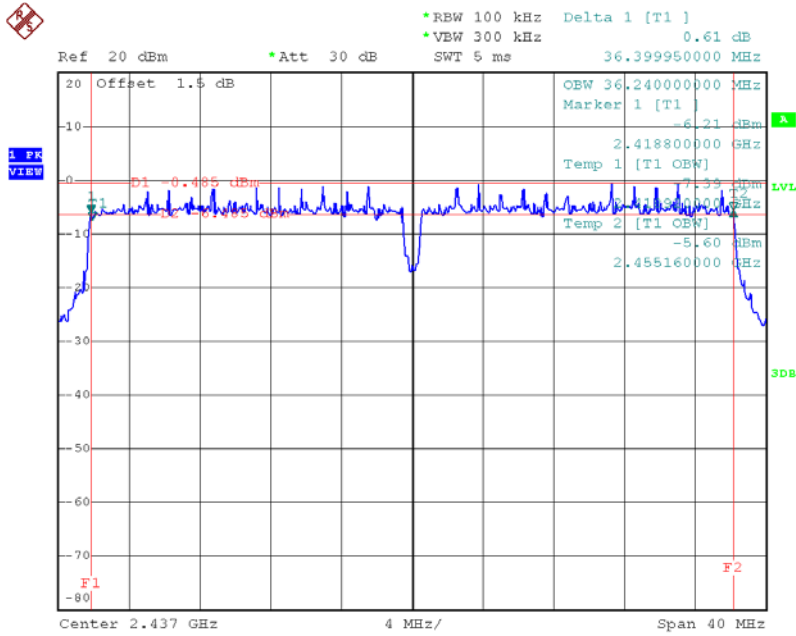
Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.44	36.24	500	Complies
2437	36.40	36.24	500	Complies
2452	36.48	36.24	500	Complies

TX CH03



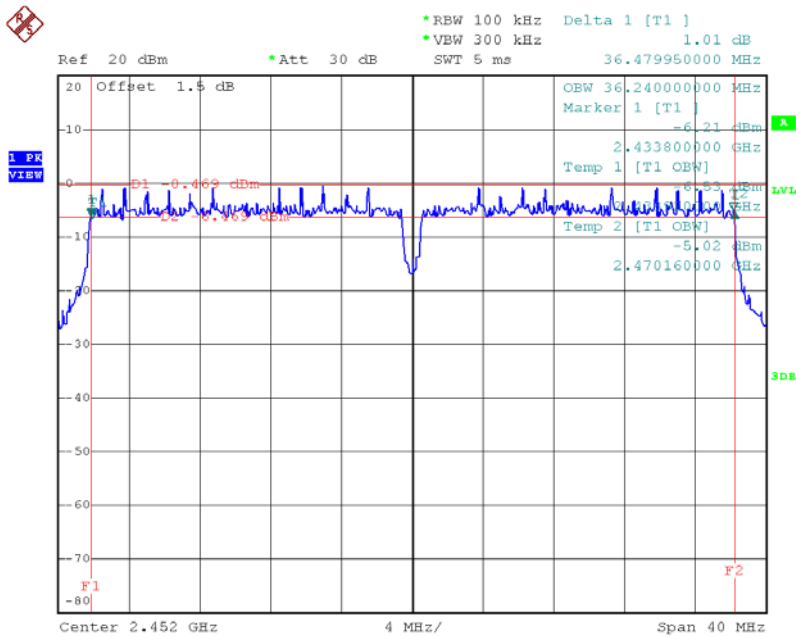
Date: 24.NOV.2018 14:49:58

TX CH06



Date: 24.NOV.2018 14:51:34

TX CH09



Date: 24.NOV.2018 14:52:59

APPENDIX F - MAXIMUM OUTPUT POWER

Test Mode: TX B Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.88	0.06	29.89	0.97	Complies
2437	18.01	0.06	29.89	0.97	Complies
2462	18.03	0.06	29.89	0.97	Complies

Test Mode: TX B Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.87	0.06	29.89	0.97	Complies
2437	17.99	0.06	29.89	0.97	Complies
2462	17.90	0.06	29.89	0.97	Complies

Test Mode: TX B Mode_CH01/06/11_Total					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.89	0.12	29.89	0.97	Complies
2437	21.01	0.13	29.89	0.97	Complies
2462	20.98	0.13	29.89	0.97	Complies

Test Mode: TX G Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.98	0.13	29.89	0.97	Complies
2437	21.26	0.13	29.89	0.97	Complies
2462	21.11	0.13	29.89	0.97	Complies

Test Mode: TX G Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.66	0.15	29.89	0.97	Complies
2437	21.11	0.13	29.89	0.97	Complies
2462	21.18	0.13	29.89	0.97	Complies

Test Mode: TX G Mode_CH01/06/11_Total					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.34	0.27	29.89	0.97	Complies
2437	24.20	0.26	29.89	0.97	Complies
2462	24.16	0.26	29.89	0.97	Complies

Test Mode: TX N20 Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.04	0.13	29.89	0.97	Complies
2437	21.21	0.13	29.89	0.97	Complies
2462	21.22	0.13	29.89	0.97	Complies

Test Mode: TX N20 Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.09	0.13	29.89	0.97	Complies
2437	21.22	0.13	29.89	0.97	Complies
2462	21.17	0.13	29.89	0.97	Complies

Test Mode: TX N20 Mode_CH01/06/11_Total					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.08	0.26	29.89	0.97	Complies
2437	24.23	0.26	29.89	0.97	Complies
2462	24.21	0.26	29.89	0.97	Complies

Test Mode: TX N40 Mode_CH03/06/09_ANT 1					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	19.63	0.09	29.89	0.97	Complies
2437	19.61	0.09	29.89	0.97	Complies
2452	20.02	0.10	29.89	0.97	Complies

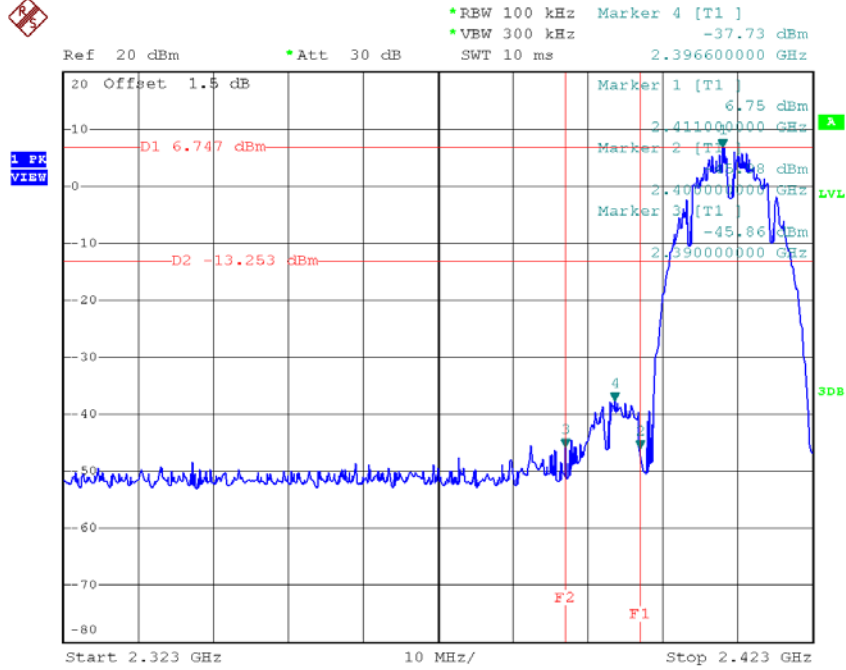
Test Mode: TX N40 Mode_CH03/06/09_ANT 2					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	19.71	0.09	29.89	0.97	Complies
2437	19.42	0.09	29.89	0.97	Complies
2452	19.43	0.09	29.89	0.97	Complies

Test Mode: TX N40 Mode_CH03/06/09_Total					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	22.68	0.19	29.89	0.97	Complies
2437	22.53	0.18	29.89	0.97	Complies
2452	22.75	0.19	29.89	0.97	Complies

APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

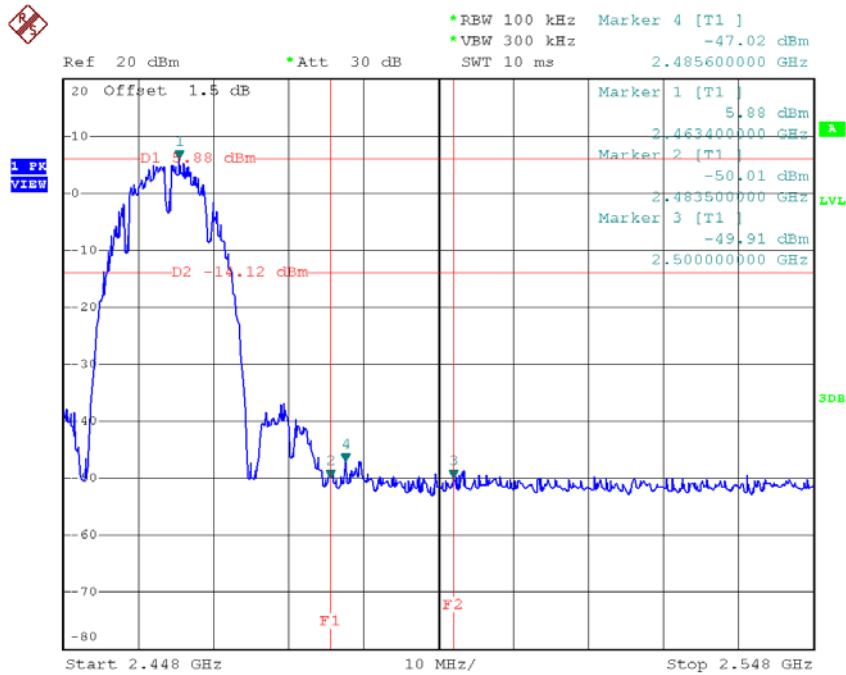
Test Mode: TX B Mode_ANT 1

TX B mode CH01



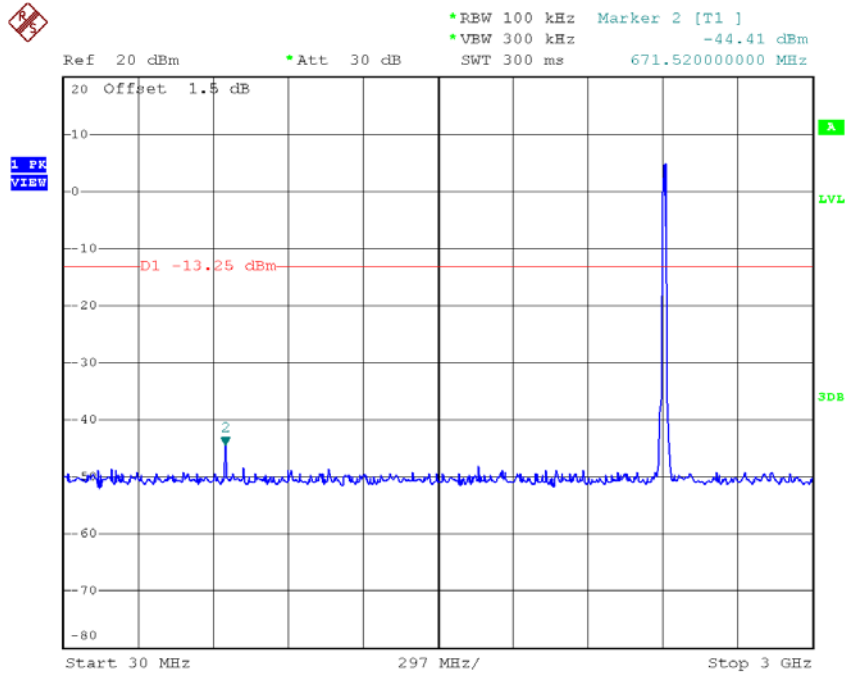
Date: 24.NOV.2018 14:33:25

TX B mode CH11

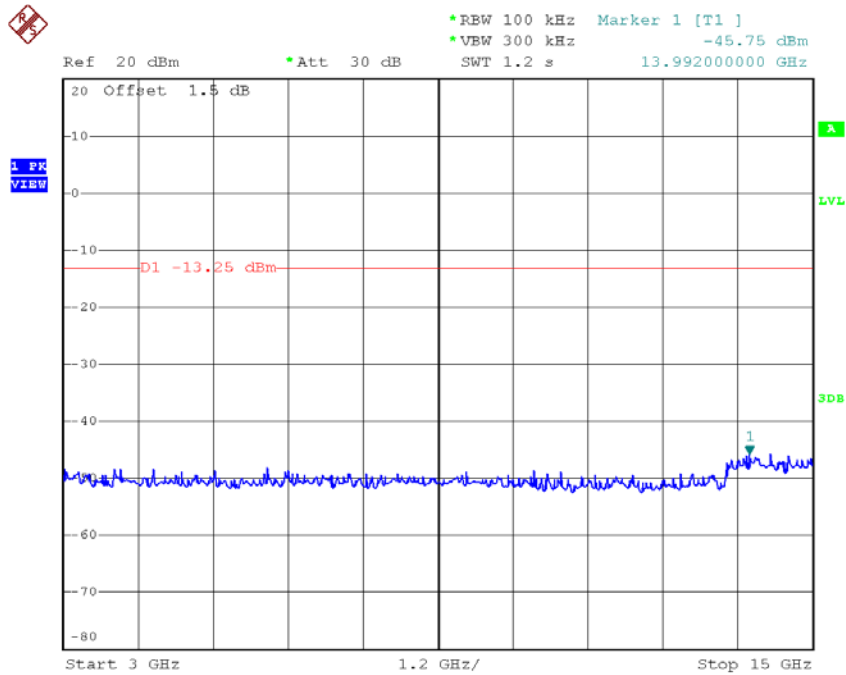


Date: 24.NOV.2018 14:37:50

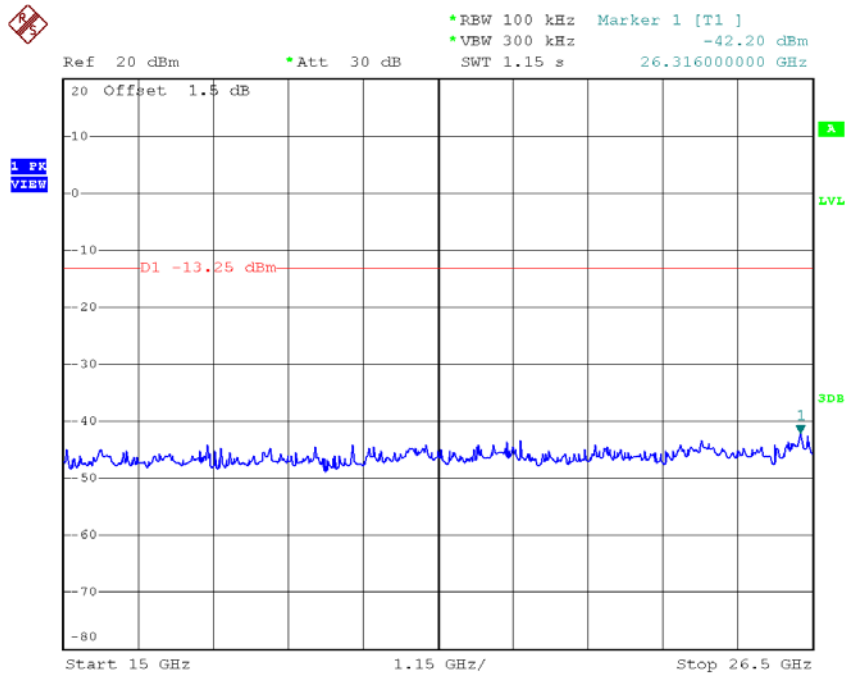
TX B mode CH01 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:33:38

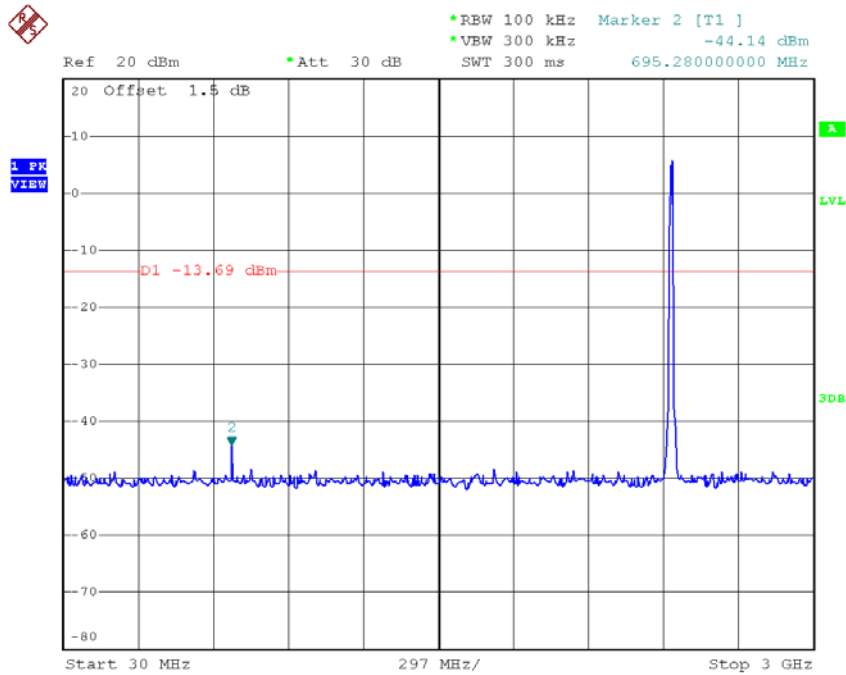


Date: 24.NOV.2018 14:33:47

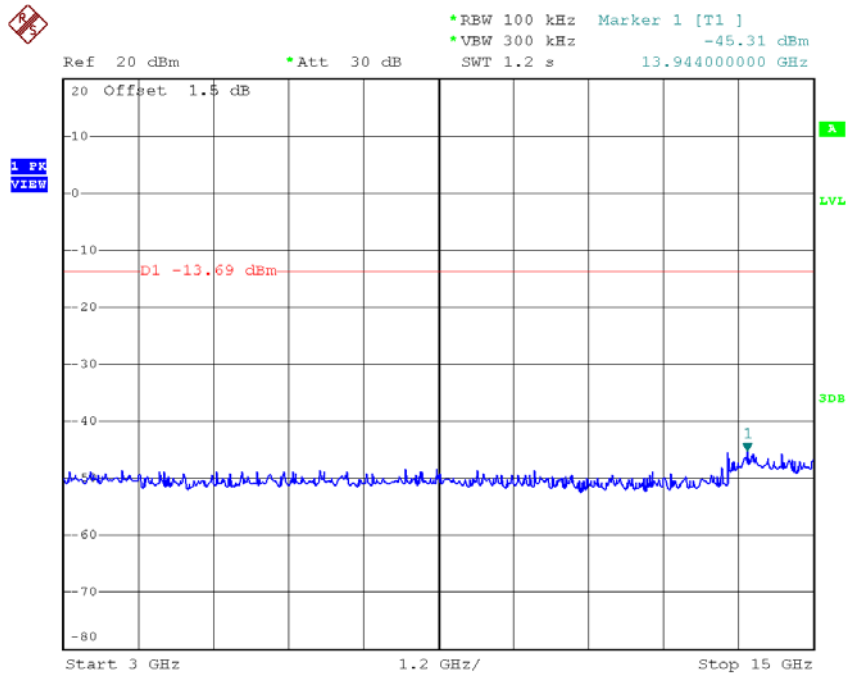


Date: 24.NOV.2018 14:33:56

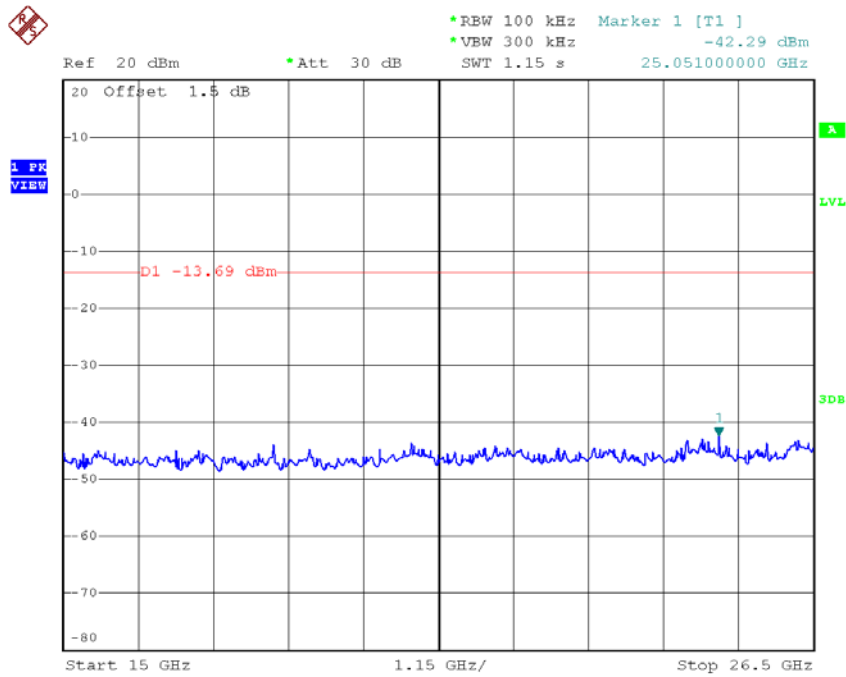
TX B mode CH06 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:36:24

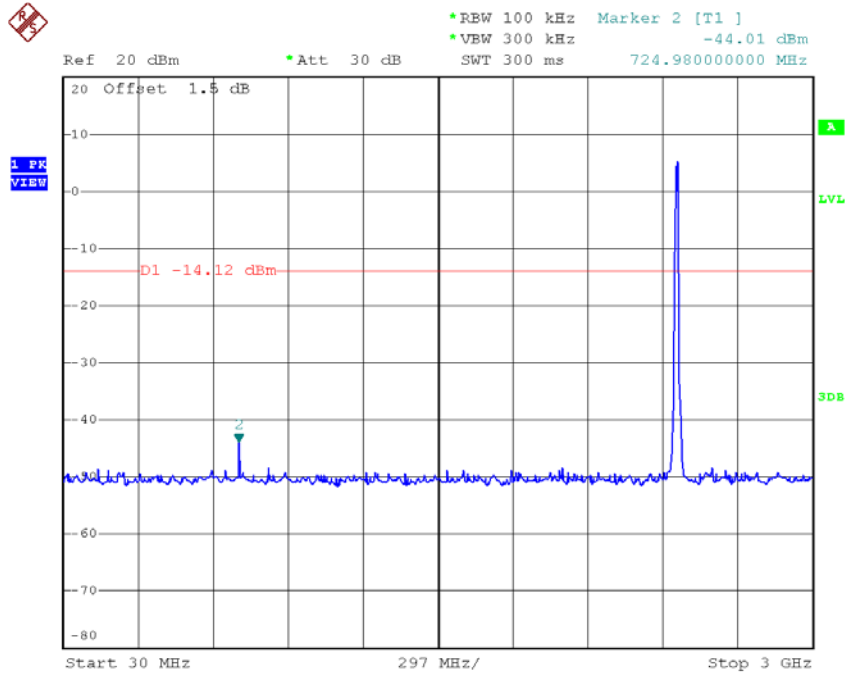


Date: 24.NOV.2018 14:36:32

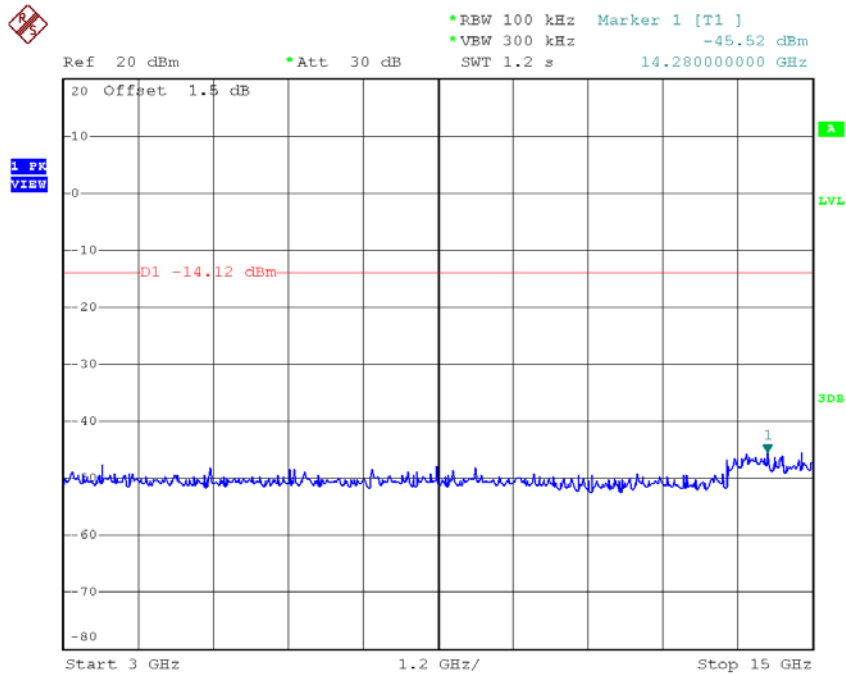


Date: 24.NOV.2018 14:36:41

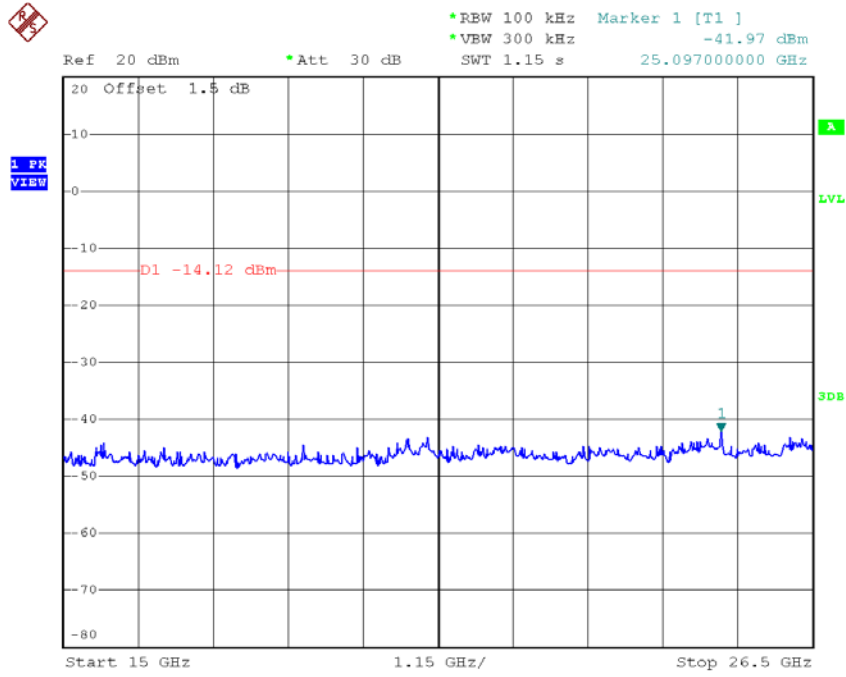
TX B mode CH11 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:38:04



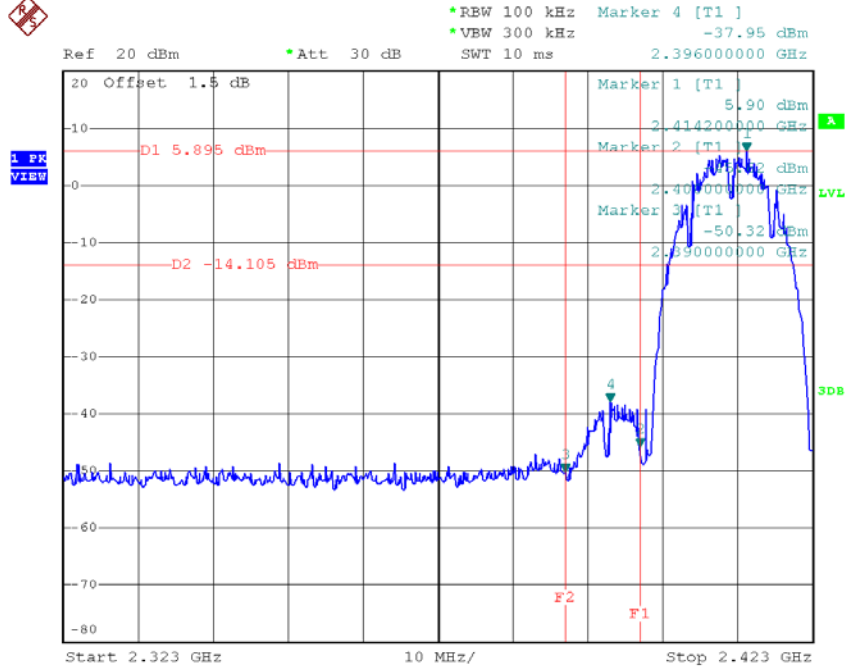
Date: 24.NOV.2018 14:38:13



Date: 24.NOV.2018 14:38:21

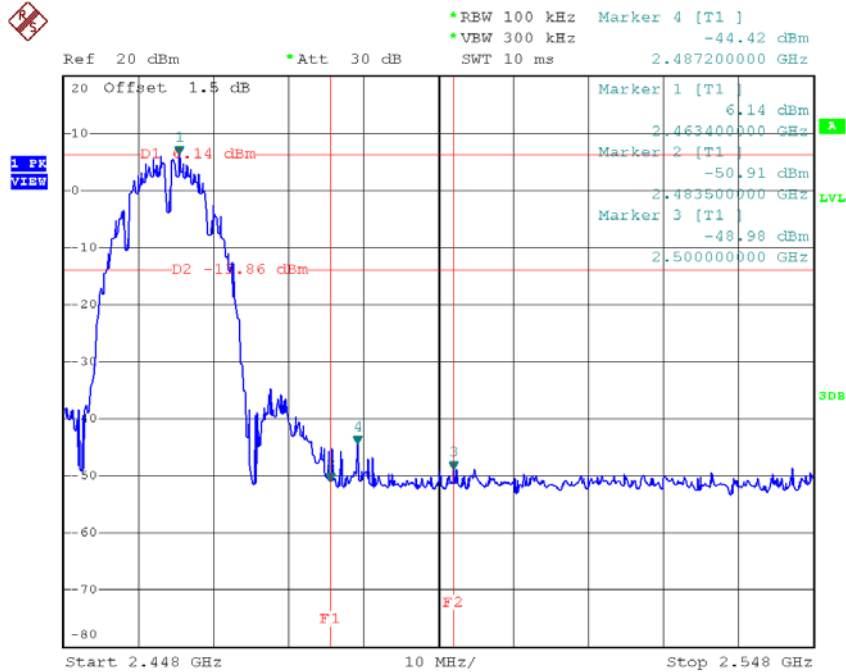
Test Mode: TX B Mode_ANT 2

TX B mode CH01



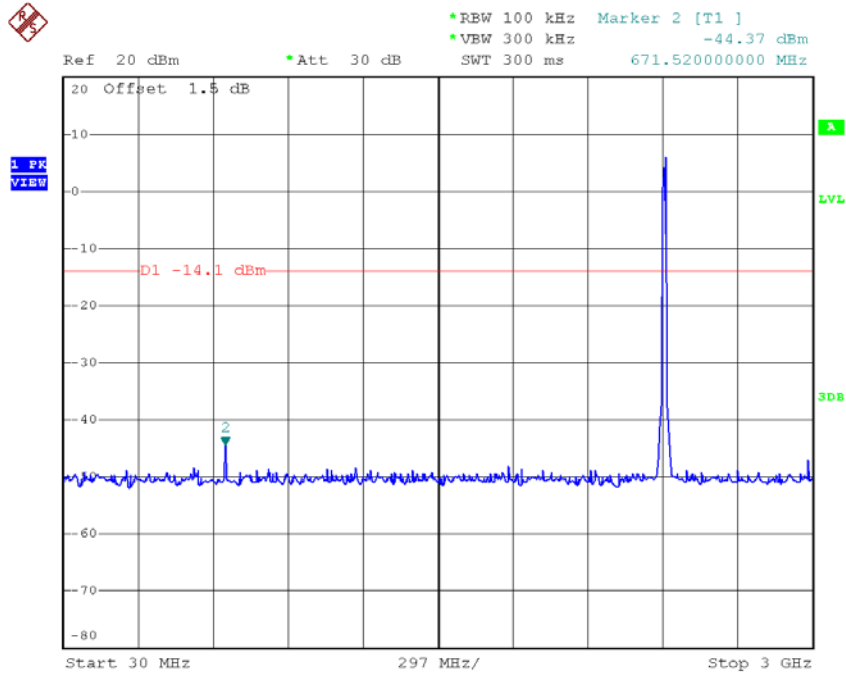
Date: 24.NOV.2018 15:07:18

TX B mode CH11

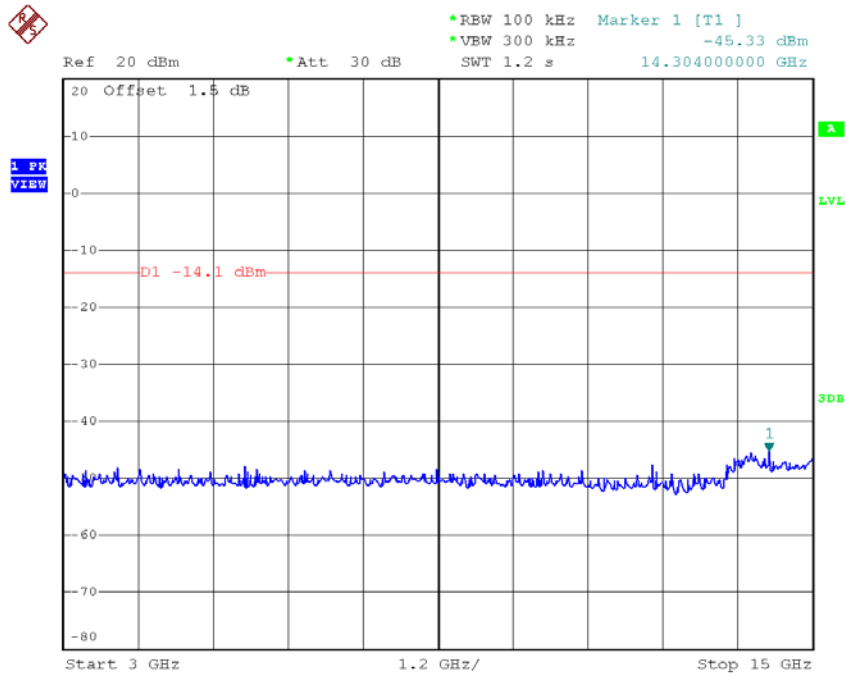


Date: 24.NOV.2018 15:10:32

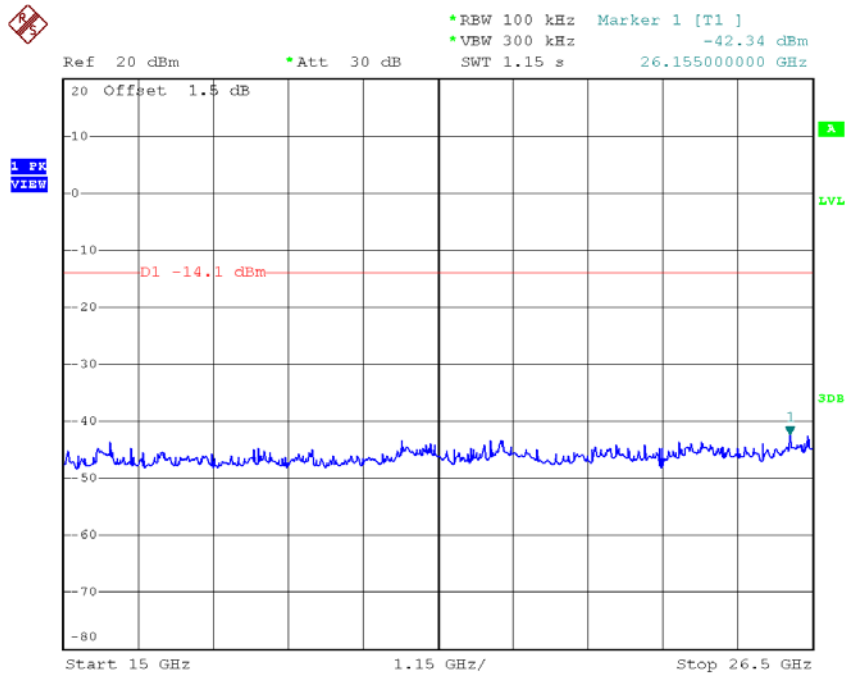
TX B mode CH01 (10 Harmonic of the frequency)



Date: 24.NOV.2018 15:07:32

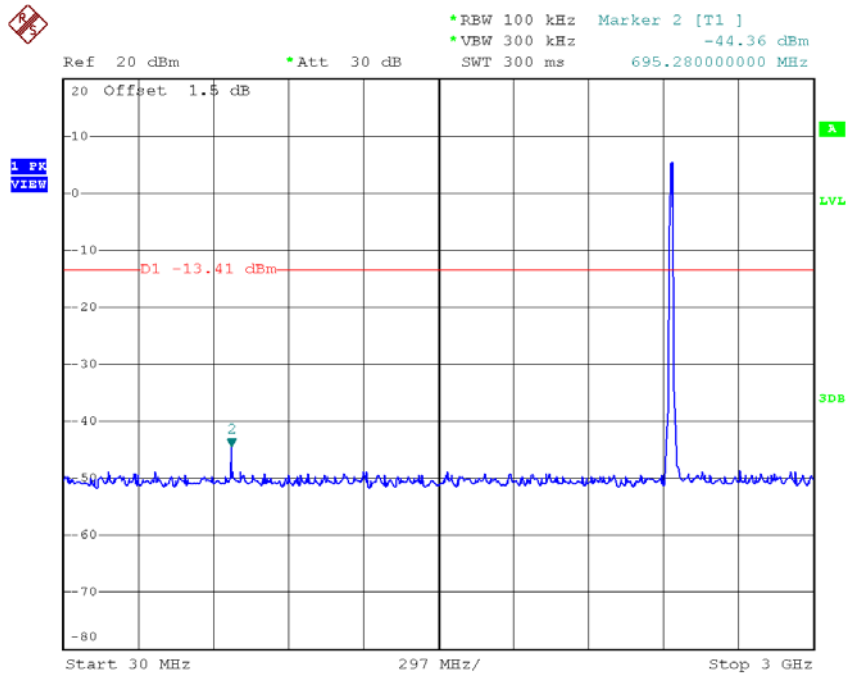


Date: 24.NOV.2018 15:07:41

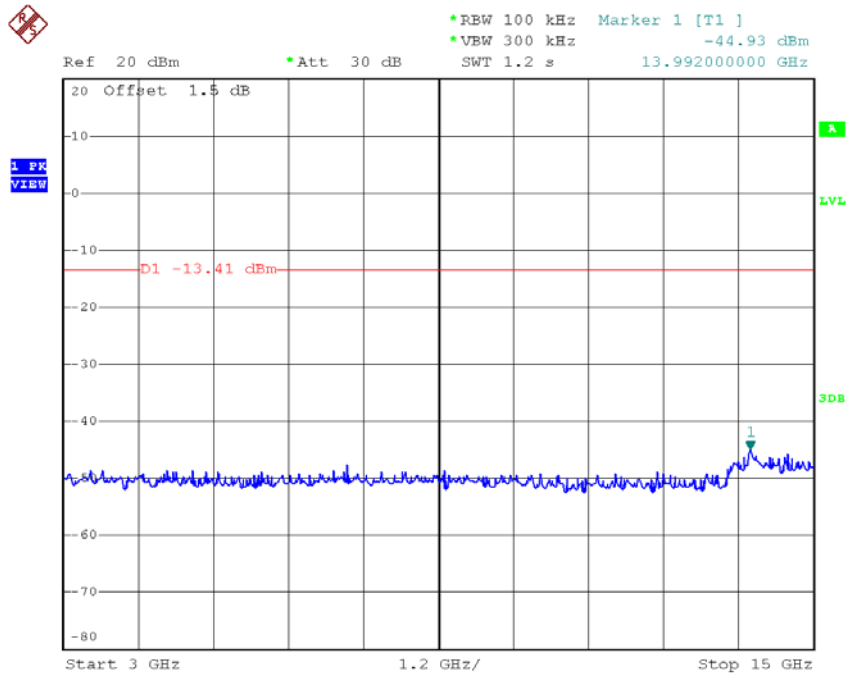


Date: 24.NOV.2018 15:07:49

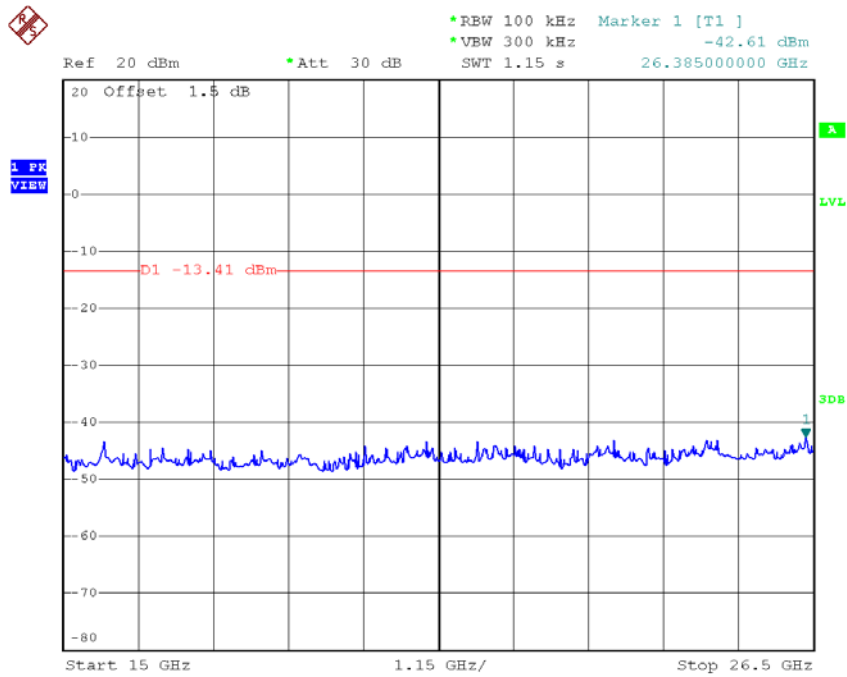
TX B mode CH06 (10 Harmonic of the frequency)



Date: 24.NOV.2018 15:09:06

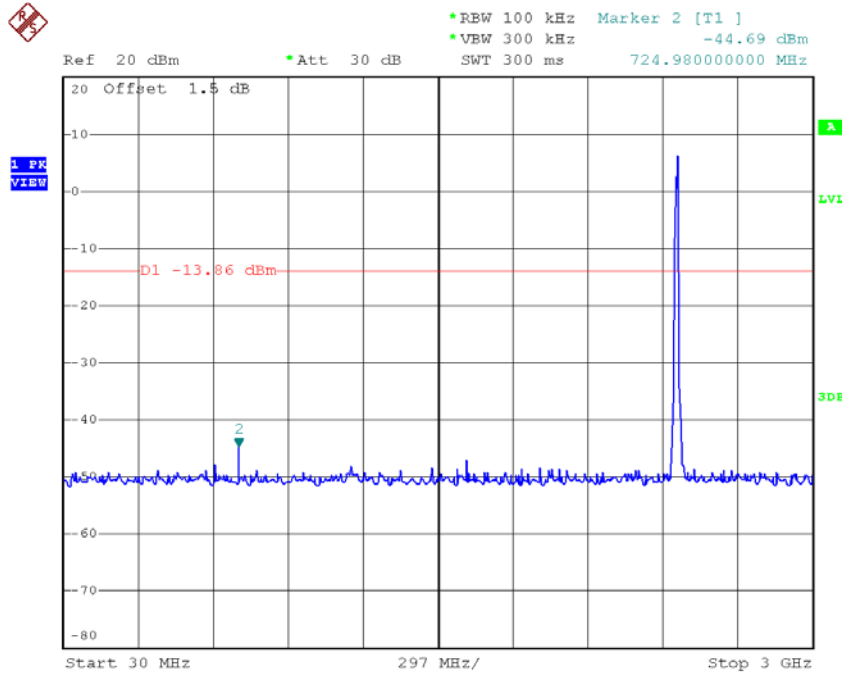


Date: 24.NOV.2018 15:09:15

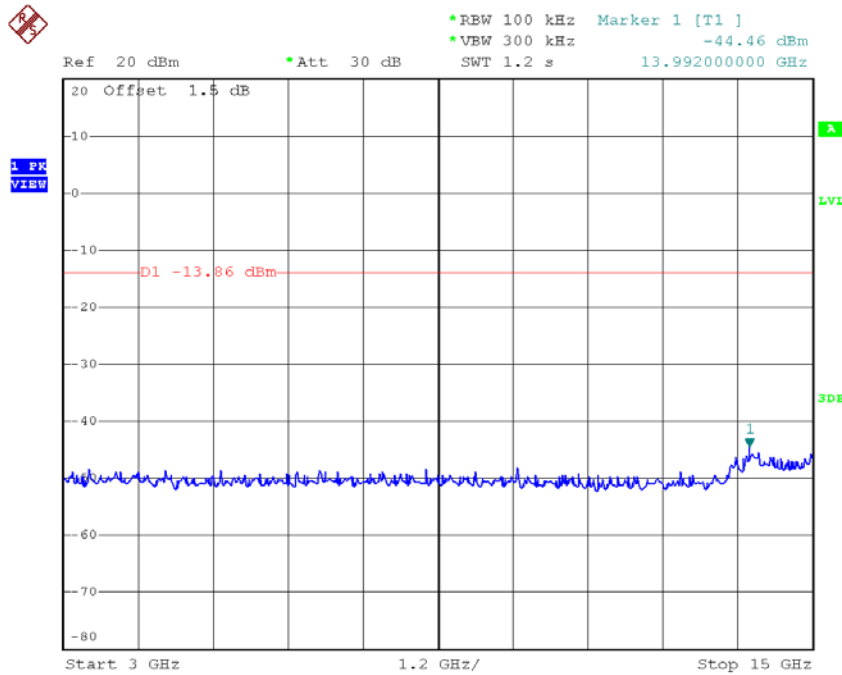


Date: 24.NOV.2018 15:09:23

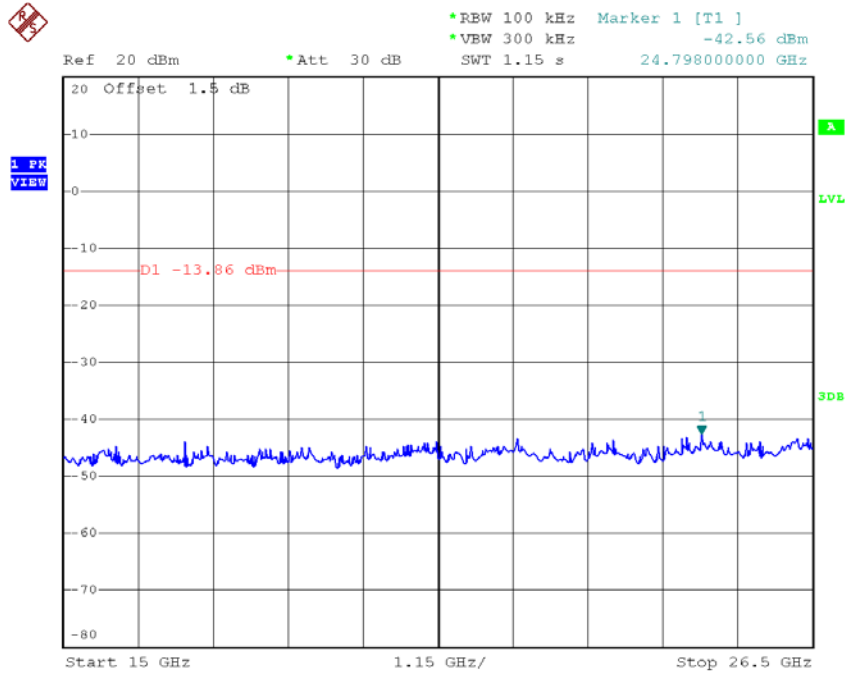
TX B mode CH11 (10 Harmonic of the frequency)



Date: 24.NOV.2018 15:10:46



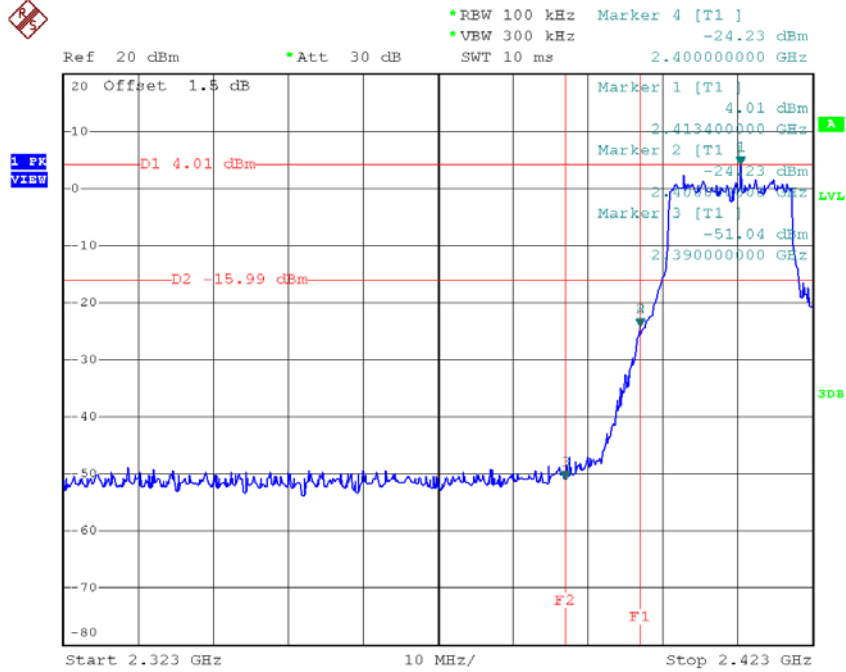
Date: 24.NOV.2018 15:10:55



Date: 24.NOV.2018 15:11:03

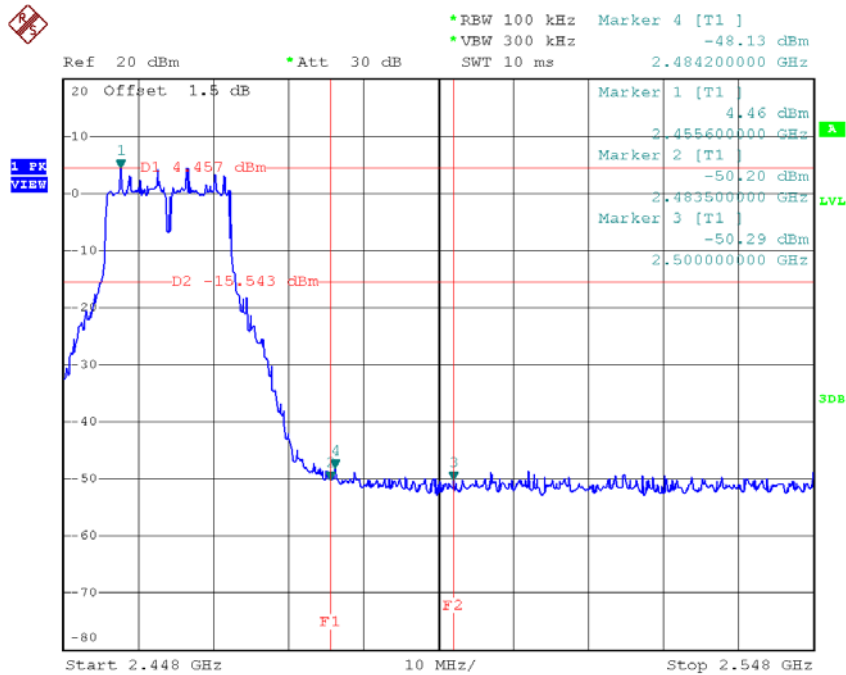
Test Mode: TX G Mode_ANT 1

TX G mode CH01



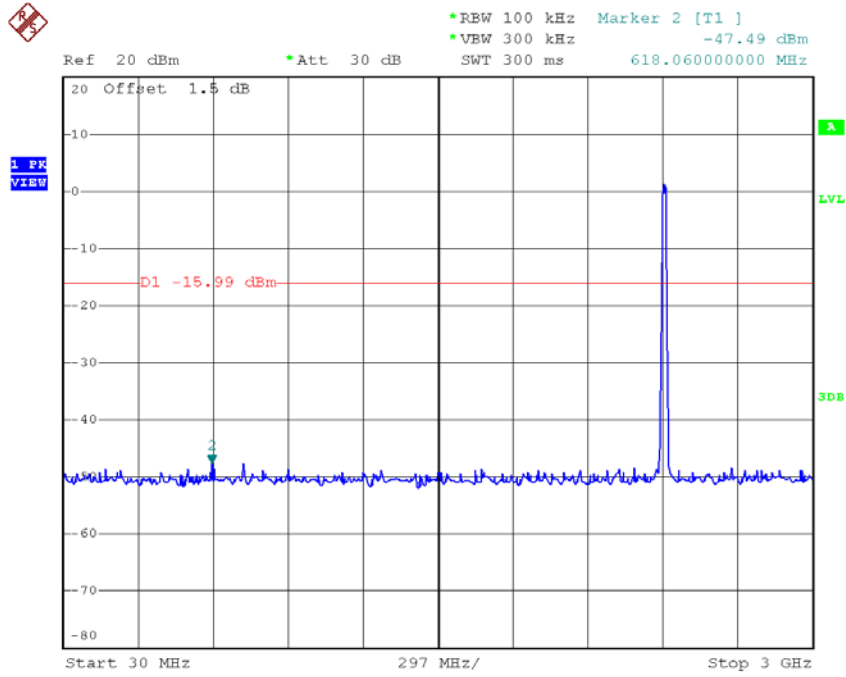
Date: 24.NOV.2018 14:39:44

TX G mode CH11

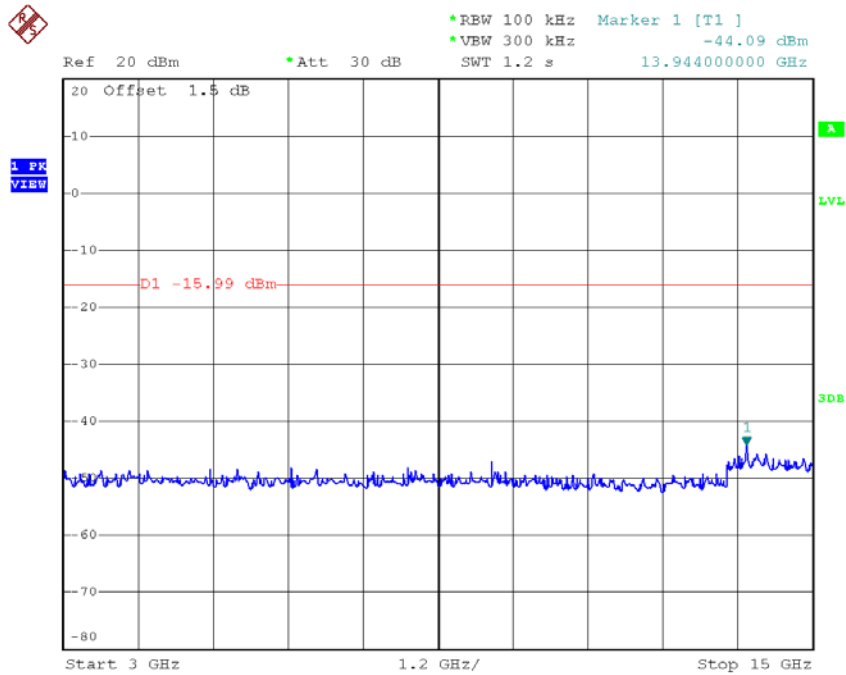


Date: 24.NOV.2018 14:42:48

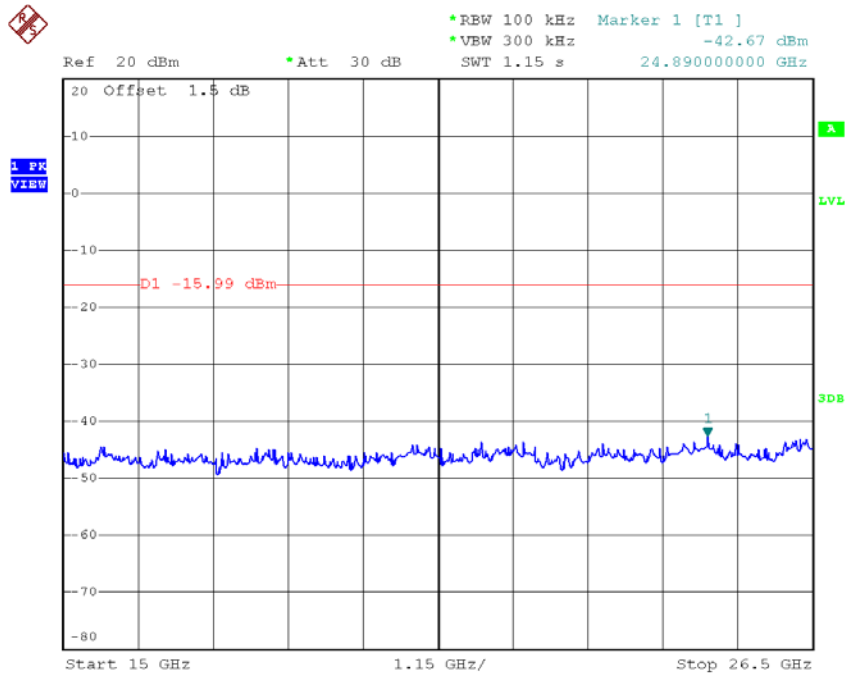
TX G mode CH01 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:39:58

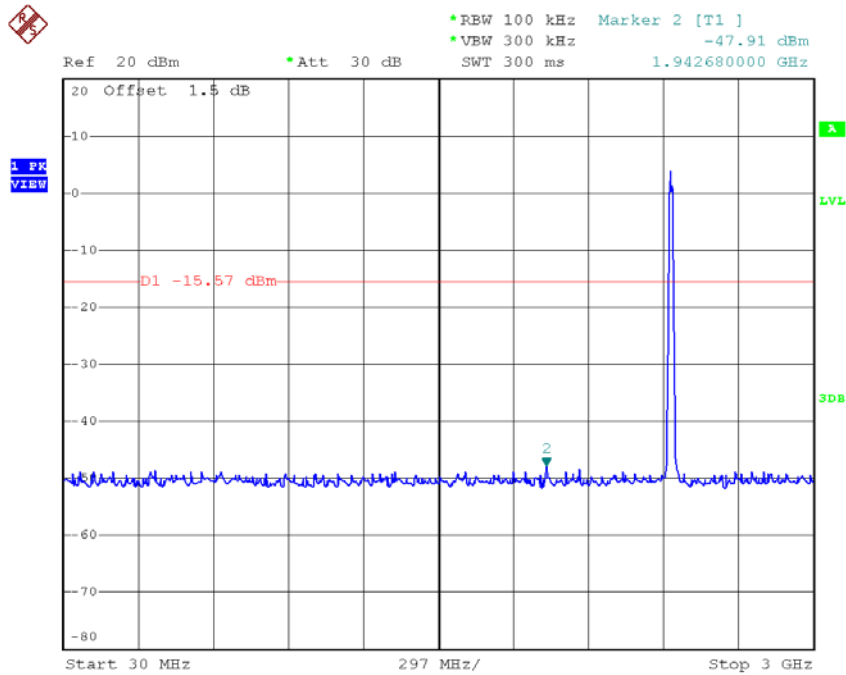


Date: 24.NOV.2018 14:40:06

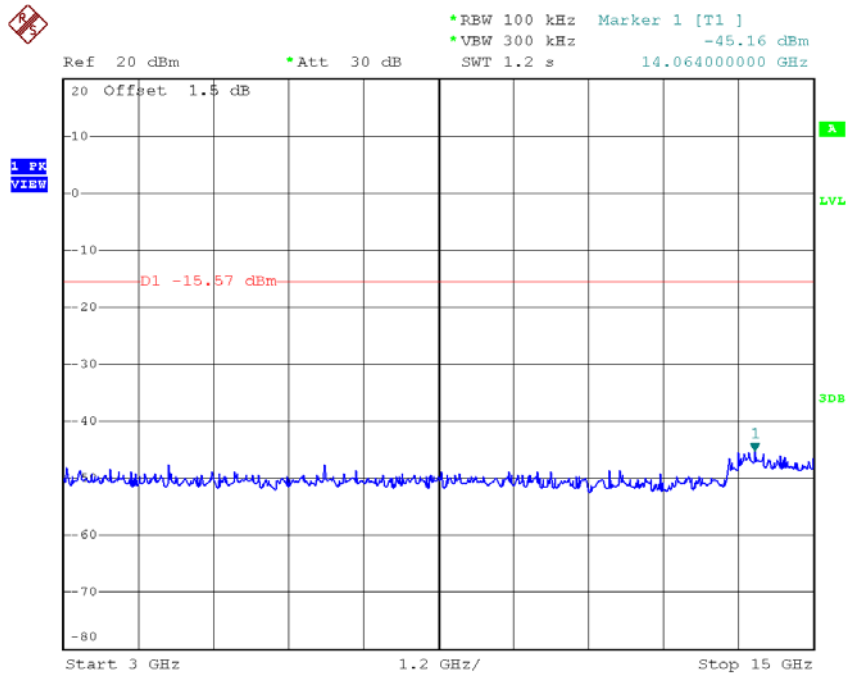


Date: 24.NOV.2018 14:40:15

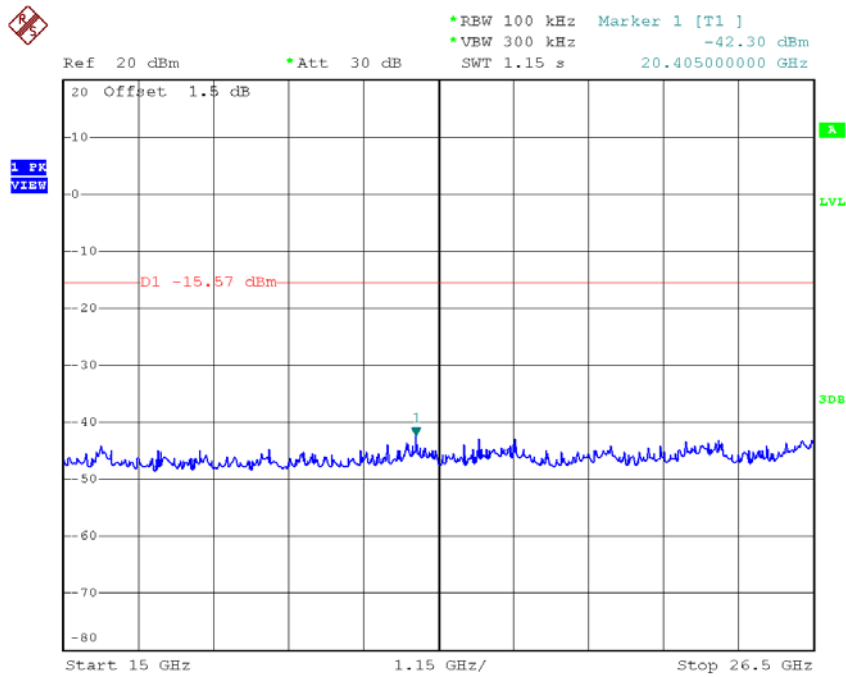
TX G mode CH06 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:41:14

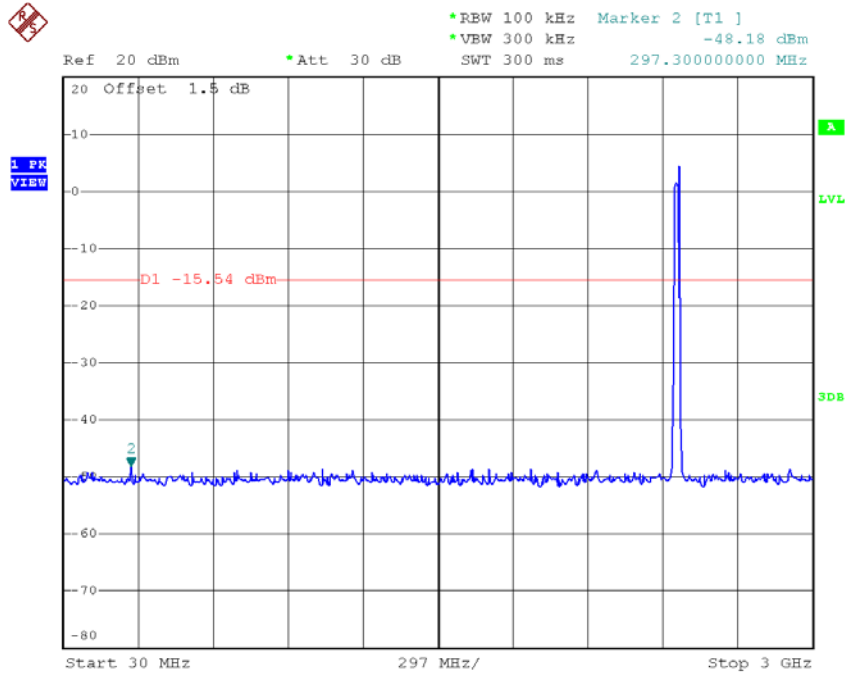


Date: 24.NOV.2018 14:41:23

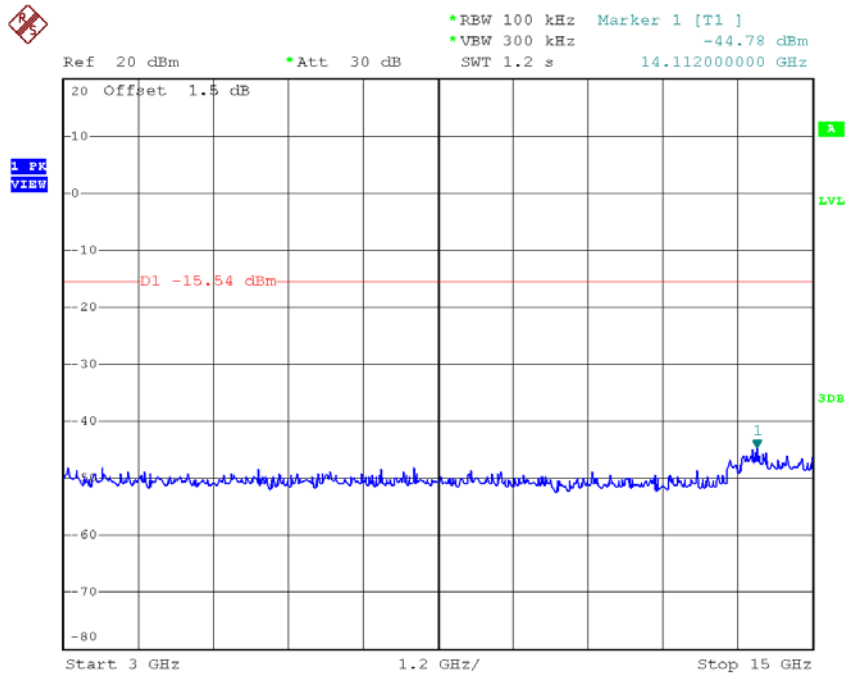


Date: 24.NOV.2018 14:41:31

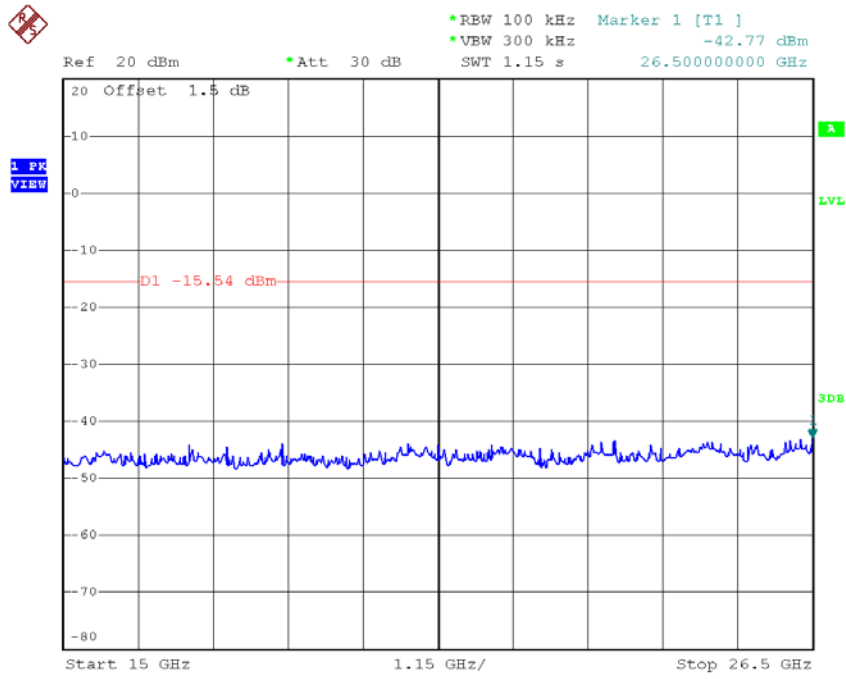
TX G mode CH11 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:43:02



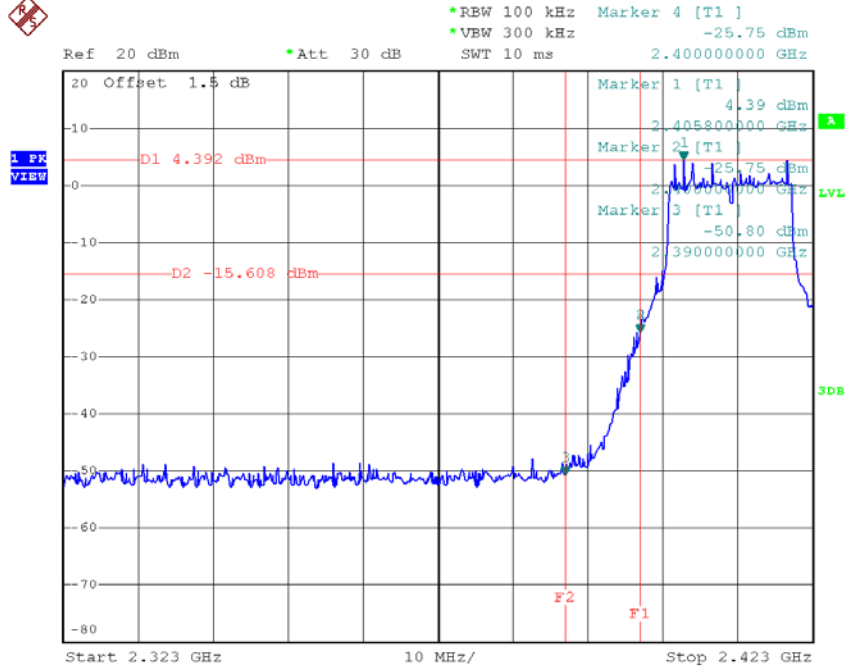
Date: 24.NOV.2018 14:43:11



Date: 24.NOV.2018 14:43:19

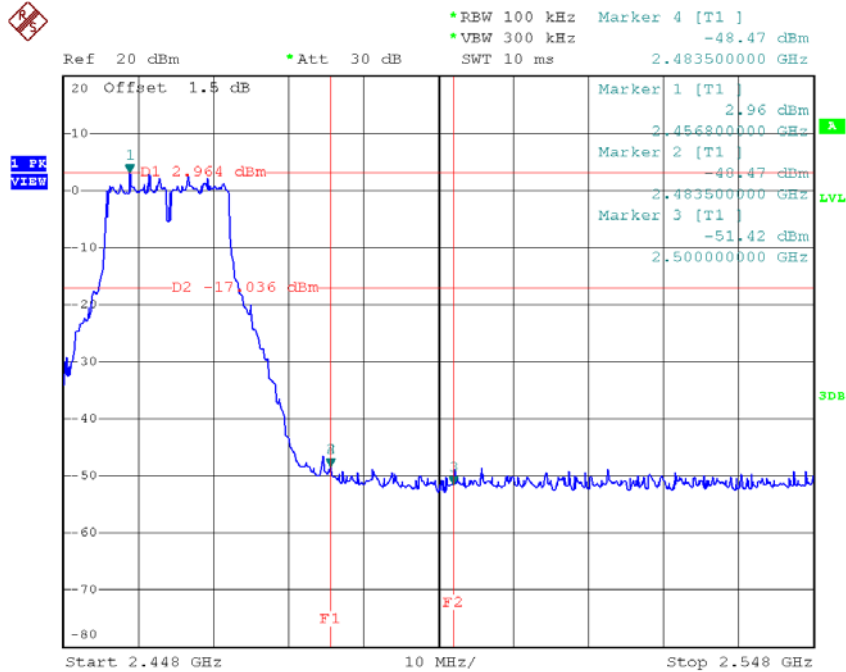
Test Mode: TX G Mode_ANT 2

TX G mode CH01



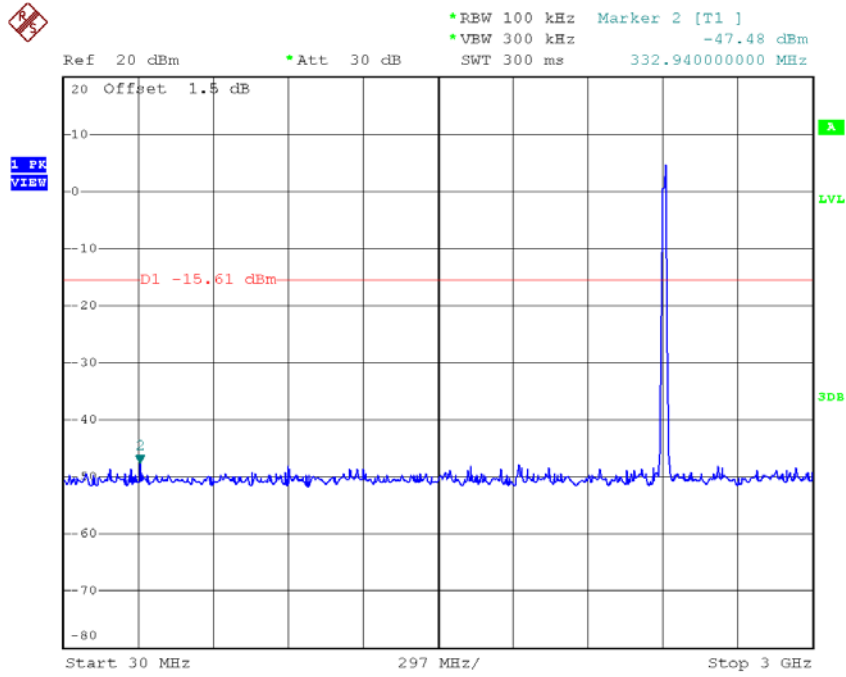
Date: 24.NOV.2018 15:12:10

TX G mode CH11

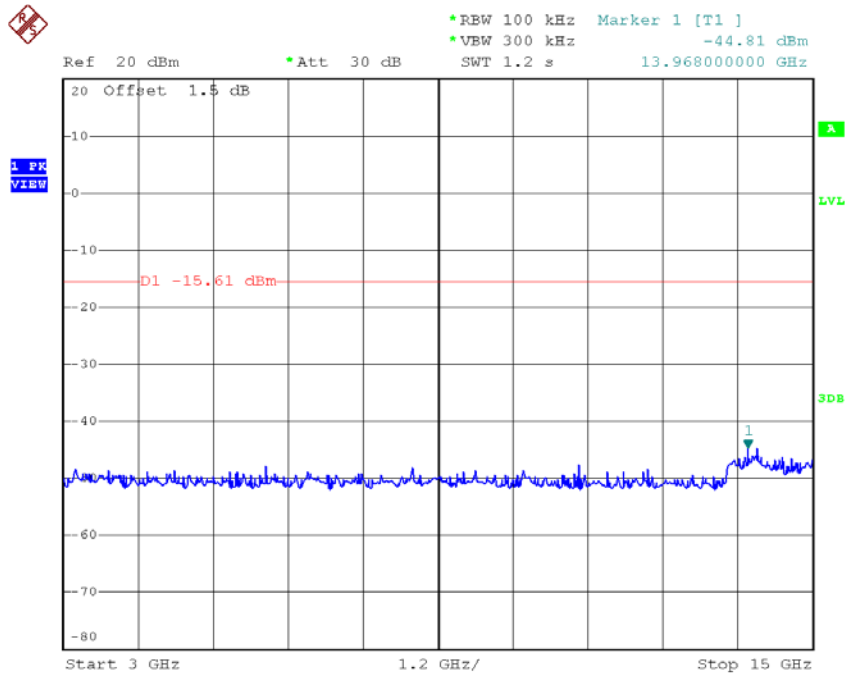


Date: 24.NOV.2018 15:15:24

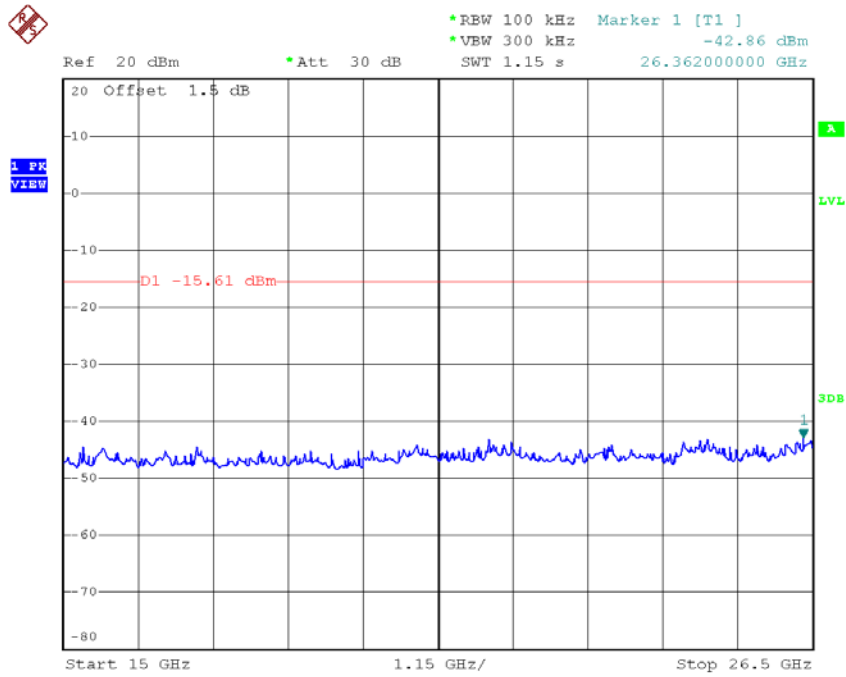
TX G mode CH01 (10 Harmonic of the frequency)



Date: 24.NOV.2018 15:12:24

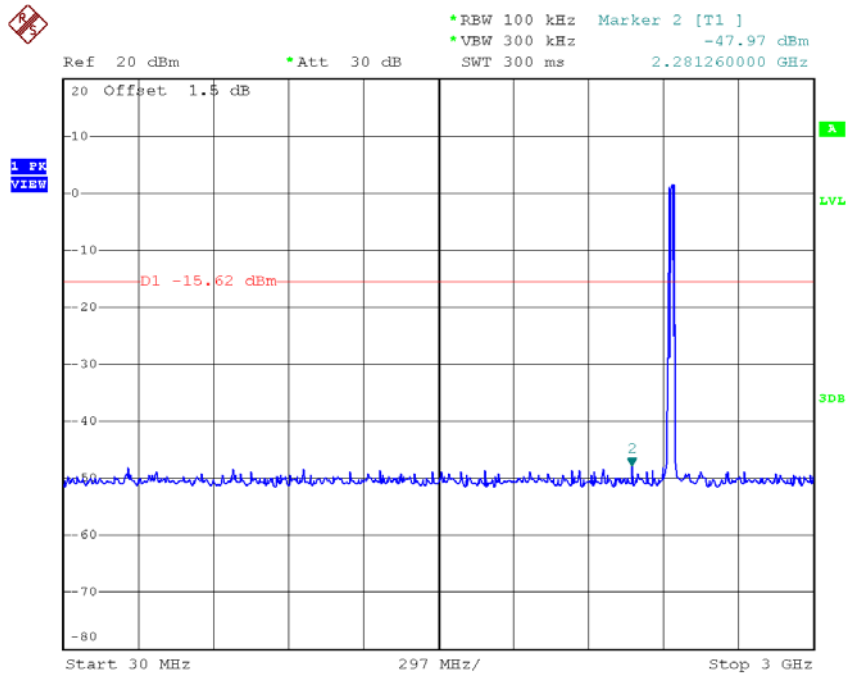


Date: 24.NOV.2018 15:12:32

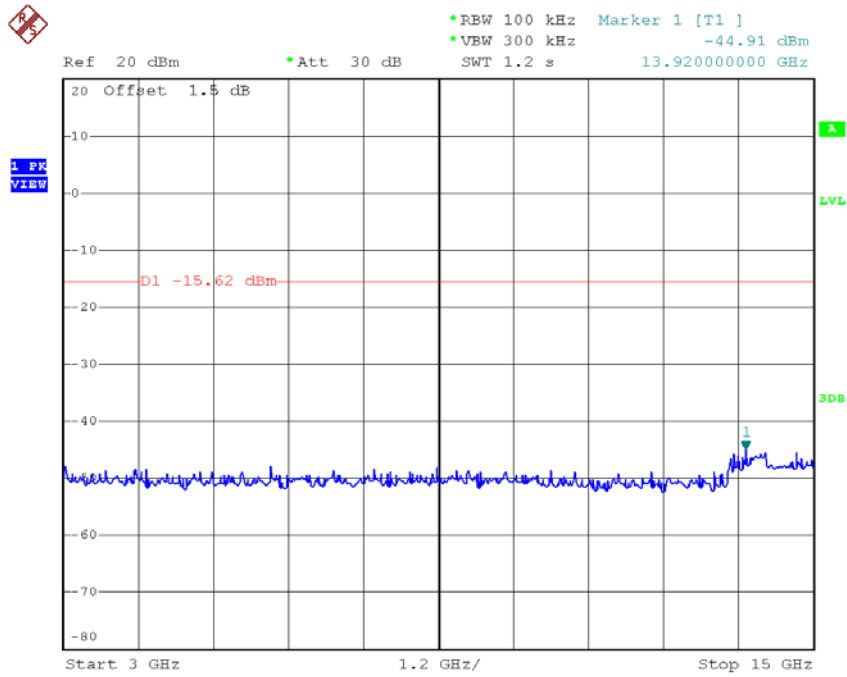


Date: 24.NOV.2018 15:12:41

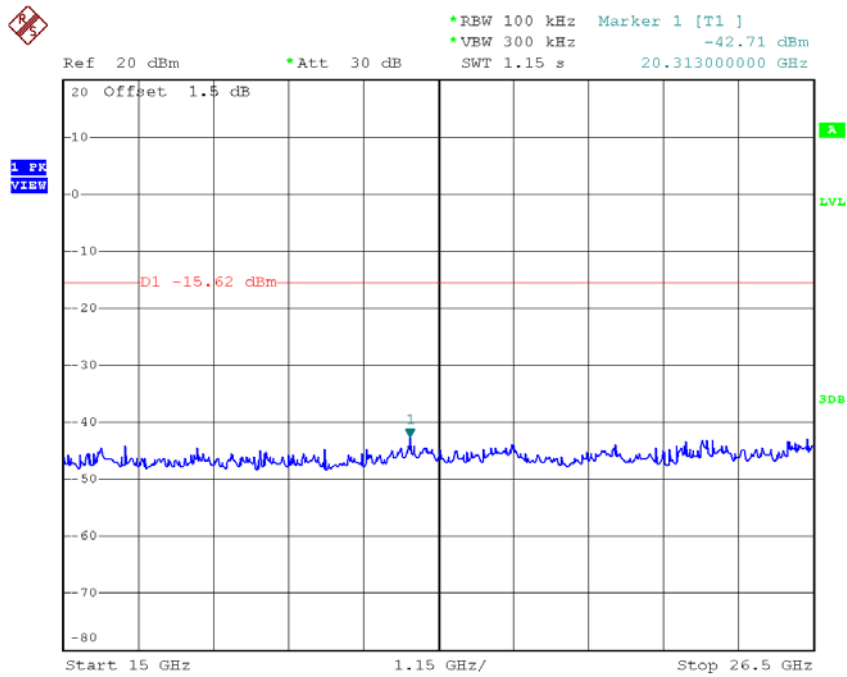
TX G mode CH06 (10 Harmonic of the frequency)



Date: 24.NOV.2018 15:13:43

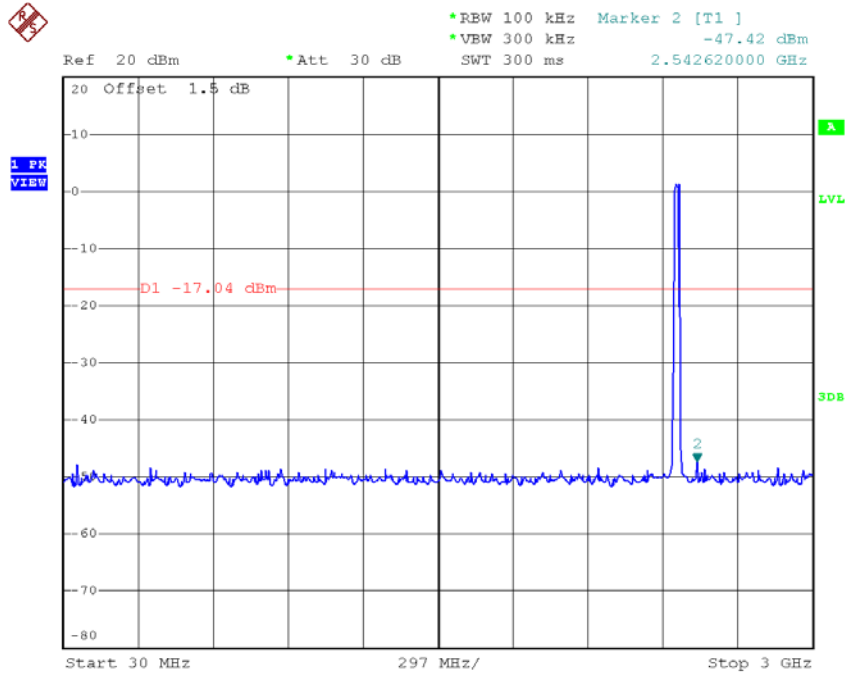


Date: 24.NOV.2018 15:13:51

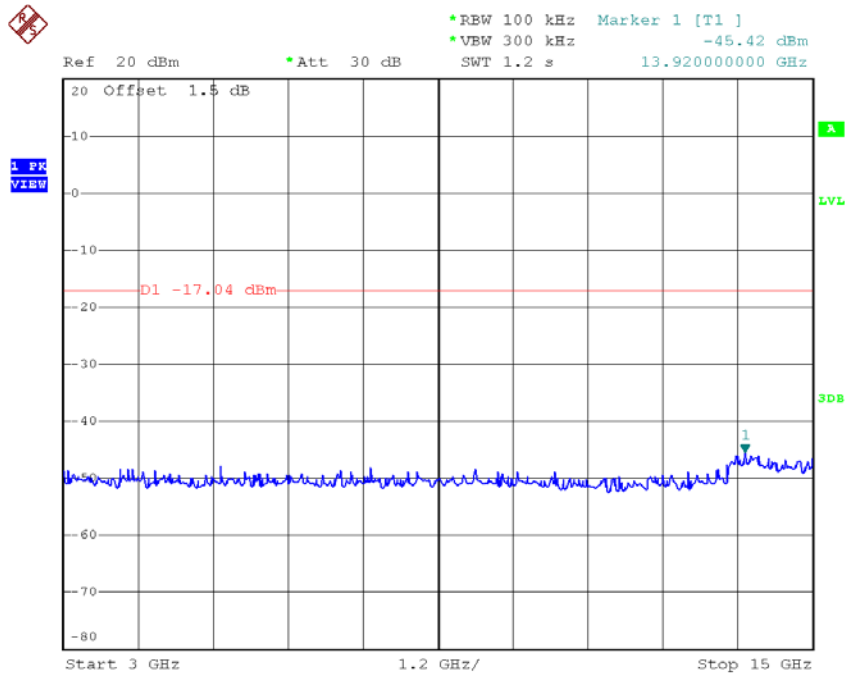


Date: 24.NOV.2018 15:14:00

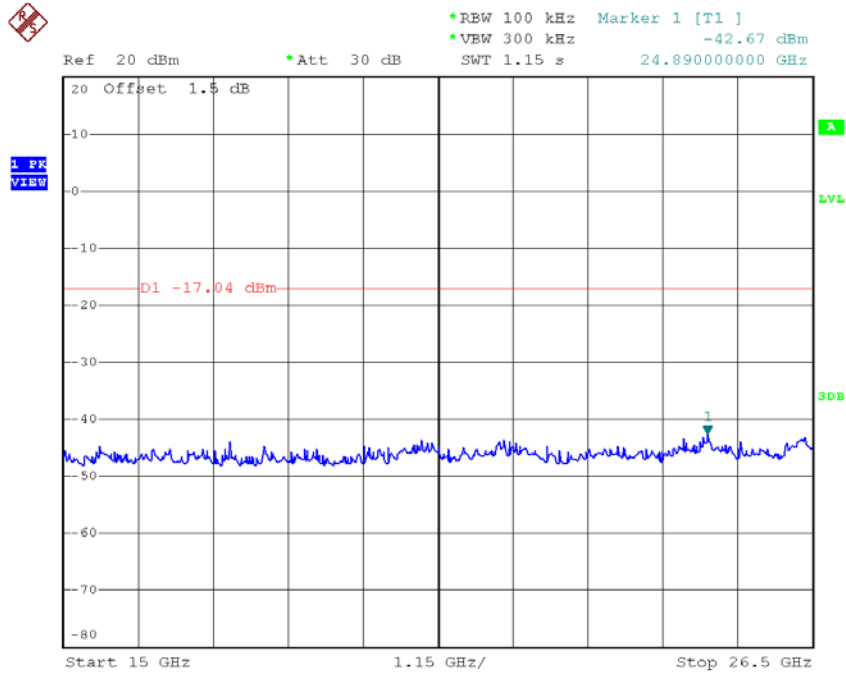
TX G mode CH11 (10 Harmonic of the frequency)



Date: 24.NOV.2018 15:15:38



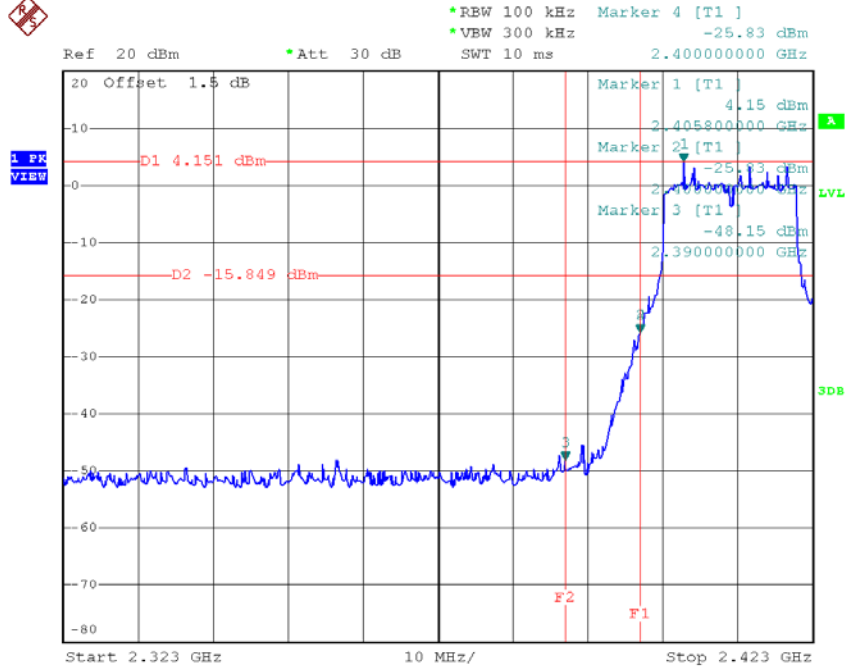
Date: 24.NOV.2018 15:15:47



Date: 24.NOV.2018 15:15:55

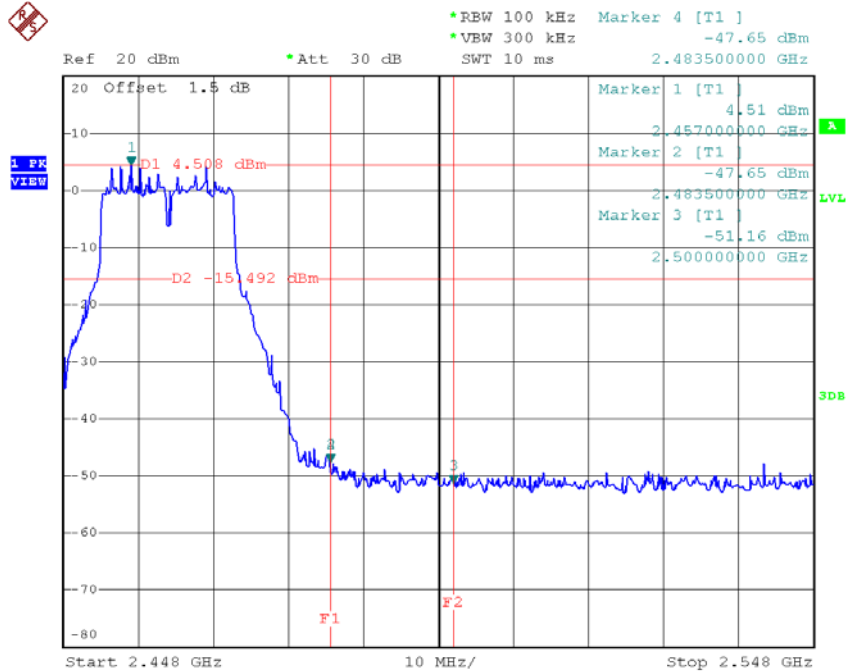
Test Mode: TX N-20M Mode_ANT 1

TX HT20 mode CH01



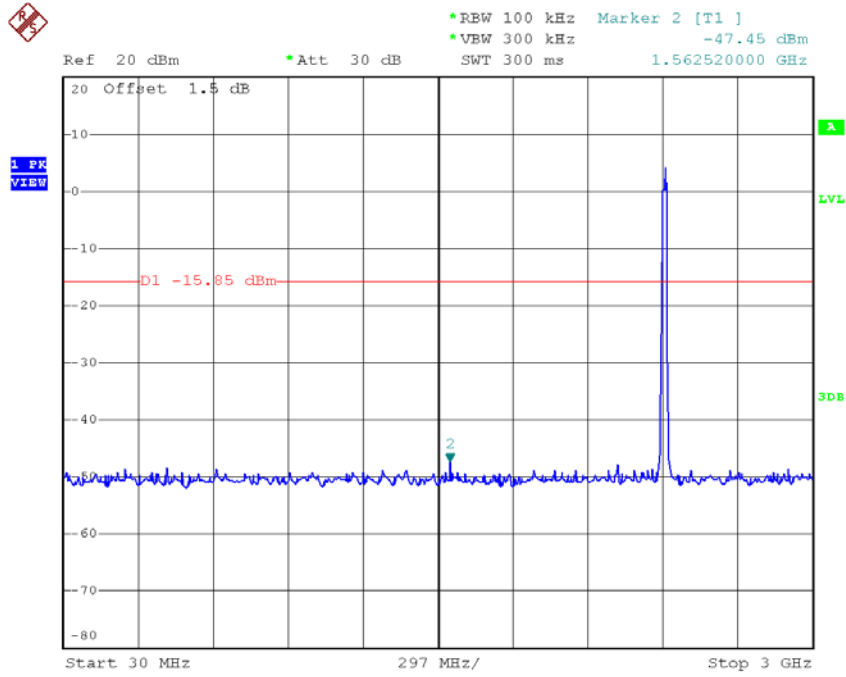
Date: 24.NOV.2018 14:45:06

TX HT20 mode CH11

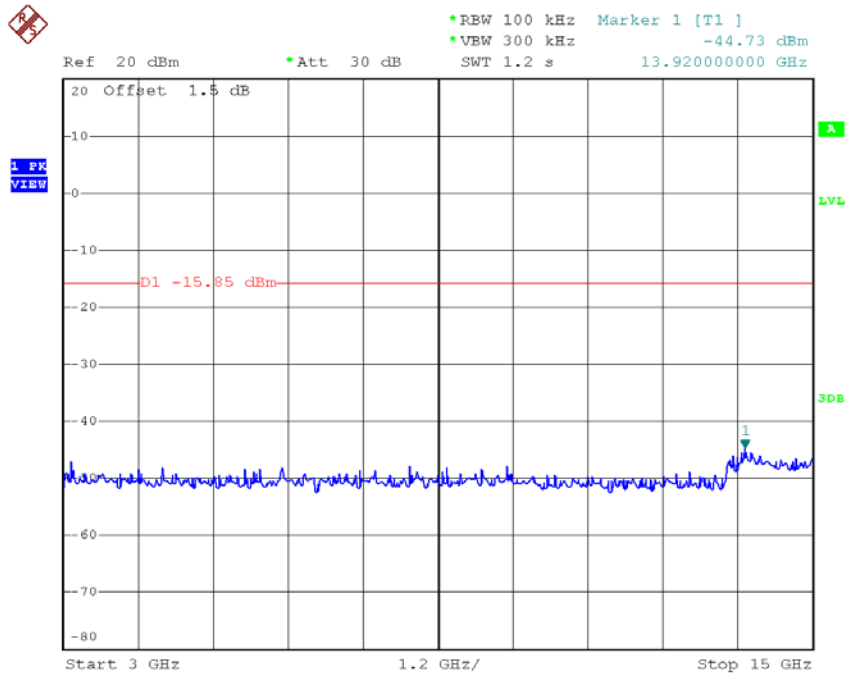


Date: 24.NOV.2018 14:47:46

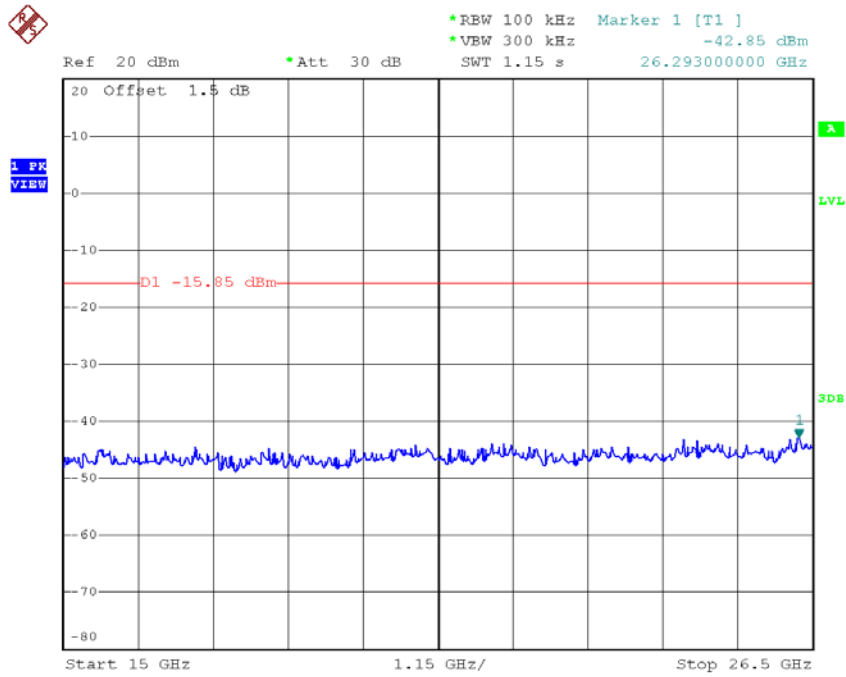
TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:45:19

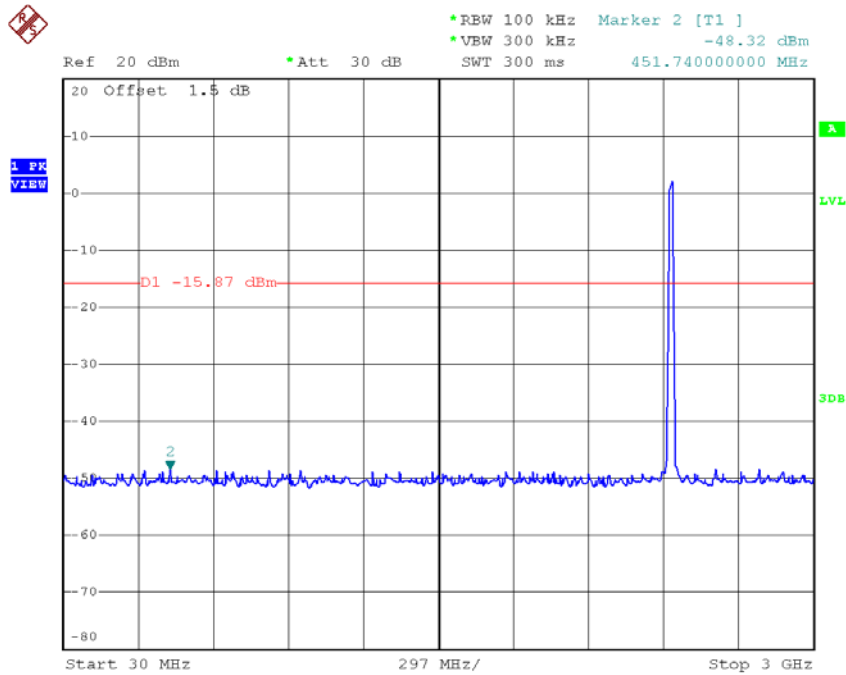


Date: 24.NOV.2018 14:45:28



Date: 24.NOV.2018 14:45:36

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 24.NOV.2018 14:46:44