

FCC Radio Test Report

FCC ID: KA2CHS161A1

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

Project No. : 1808H001
Equipment : Wi-Fi Water Sensor
Test Model : DCH-S161
Series Model : N/A
Applicant : D-Link Corporation
Address : 17595 Mt. Herrmann, Fountain Valley, California,
United States 92708

Date of Receipt : Aug. 06, 2018
Date of Test : Aug. 07, 2018 ~ Aug. 24, 2018
Issued Date : Sep. 18, 2018
Tested by : BTL Inc.

Testing Engineer : Jivey Jiang
(Jivey Jiang)

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Declaration

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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.

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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.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements in all the possible configurations as representative of its intended use.

Limitation

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

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1808H001	Original Issue.	Sep. 18, 2018

1. CERTIFICATION

Equipment : Wi-Fi Water Sensor
Brand Name : D-Link
Test Model : DCH-S161
Series Model : N/A
Applicant : D-Link Corporation
Manufacturer : D-Link Corporation
Address : 17595 Mt. Herrmann, Fountain Valley, California, United States 92708
Date of Test : Aug. 07, 2018 ~ Aug. 23, 2018
Test Sample : Engineering Sample No.: D180806608 for radiated, D180806606 for conducted.
Standard(s) : FCC Part15, Subpart C (15.247) / ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1808H001) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C			
Standard(s) Section	Test Item	Judgment	Remark
15.207	Conducted Emission	N/A	
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 number for FCC: 854385

BTL's designation number for FCC: CN5020

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 %, $U=2 \times U_c(y)$.

The BTL measurement uncertainty as below table:

A. 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	Wi-Fi Water Sensor	
Brand Name	D-Link	
Test Model	DCH-S161	
Series Model	N/A	
Model Difference(s)	N/A	
Software Version	100	
Hardware Version	A1	
Product Description	Operation Frequency	2412 ~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 150 Mbps
	Output Power (Max.)	802.11b: 18.48 dBm 802.11g: 22.57 dBm 802.11n(20 MHz): 22.08 dBm 802.11n(40 MHz): 21.49 dBm
Power Source	Supplied from battery.	
Power Rating	DC 3V, 0.5A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. Channel List:

CH01 - CH11 for 802.11b, 802.11g, 802.11n(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)
1	N/A	WL6DR1500	PCB	N/A	0

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

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

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:

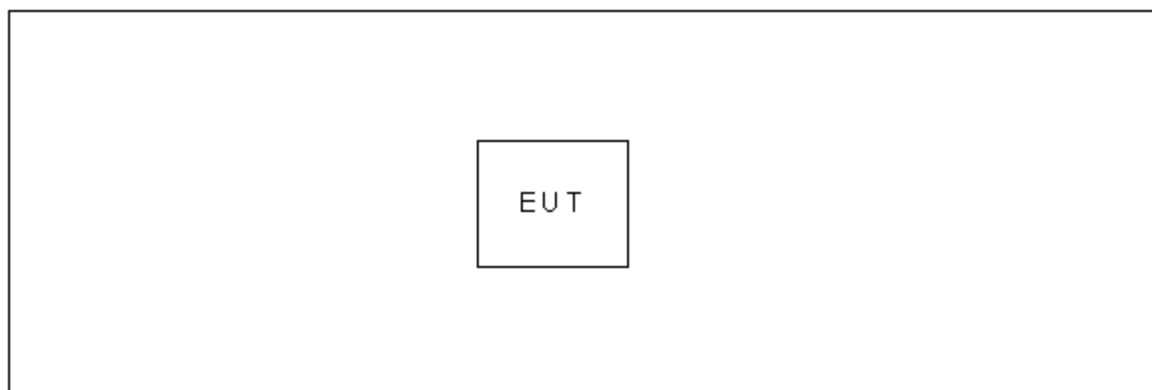
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1 Mbps)
 802.11g mode: OFDM (6 Mbps)
 802.11n HT20 mode : BPSK (6.5 Mbps)
 802.11n HT40 mode : BPSK (13.5 Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated 30 MHz to 1000 MHz test, the 802.11b is found to be the worst case and recorded.

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	UI_mptool		
Frequency (MHz)	2412	2437	2462
802.11b	35	35	35
802.11g	40	39	39
802.11n (20 MHz)	40	39	39
Frequency (MHz)	2422	2437	2452
802.11n (40 MHz)	38	38	38

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
-	-	-	-	-

4. EMC EMISSION TEST

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 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

4.1.2 TEST PROCEDURE

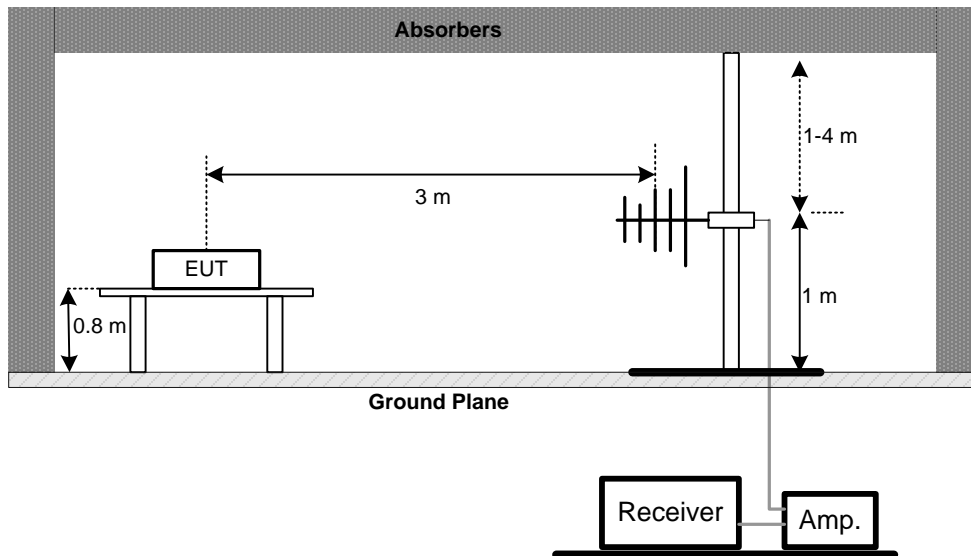
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance 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)
- 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 1 GHz.
- 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 1 GHz)
- 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)
- For the actual test configuration, please refer to the related Item -EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

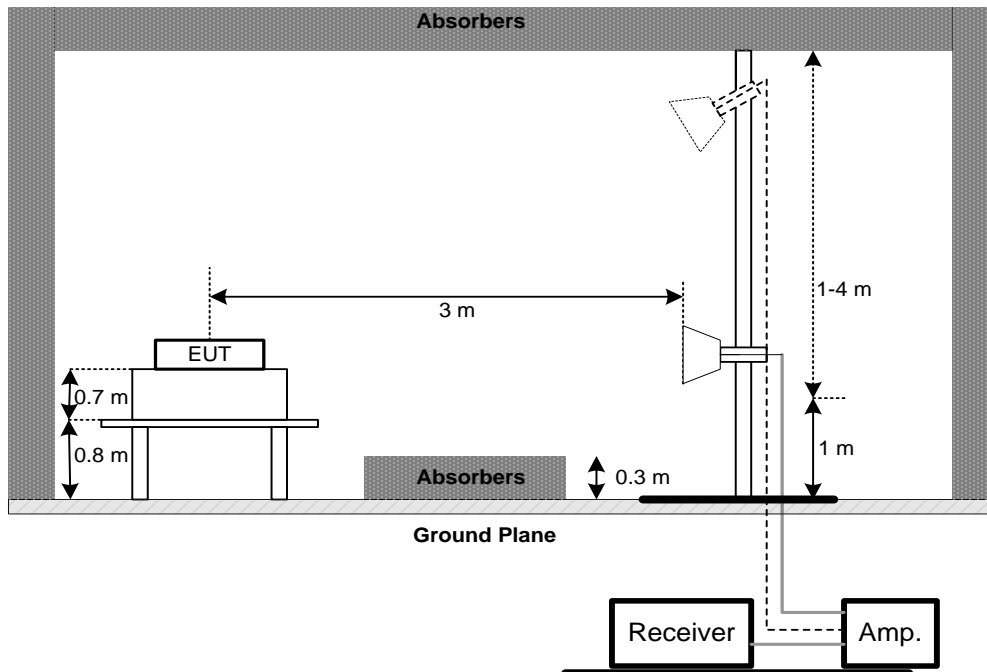
No deviation

4.1.4 TEST SETUP

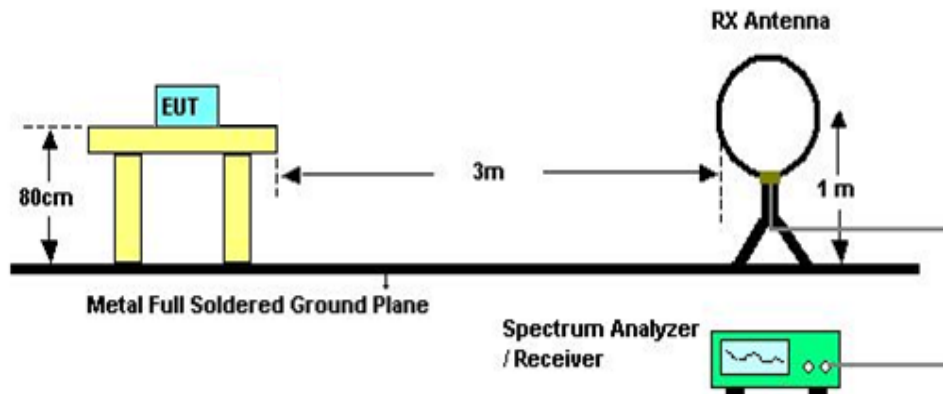
(A) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



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



(C) For Radiated Emissions 9 kHz-30 MHz



4.1.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.1.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: DC 3V

4.1.7 TEST RESULTS (9 kHz TO 30 MHz)

Please refer to the Appendix A.

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.

4.1.8 TEST RESULTS (30 MHz TO 1000 MHz)

Please refer to the Appendix B.

4.1.9 TEST RESULTS (ABOVE 1000 MHz)

Please refer to the Appendix C.

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= 100 kHz, VBW=300 kHz, 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: DC 3V

5.1.6 TEST RESULTS

Please refer to the Appendix D.

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

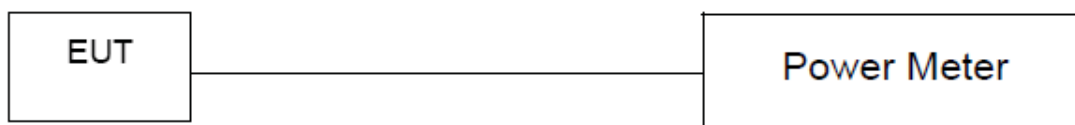
6.1.1 TEST PROCEDURE

- 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 v04 DTS Meas Guidance.

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: DC 3V

6.1.6 TEST RESULTS

Please refer to the Appendix E.

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

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, 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: DC 3V

7.1.6 TEST RESULTS

Please refer to the Appendix F.

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

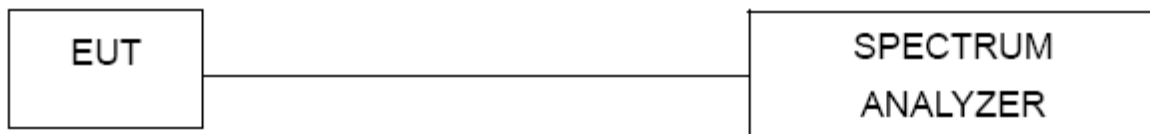
8.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- 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: 55% Test Voltage: DC 3V

8.1.6 TEST RESULTS

Please refer to the Appendix G.

9. MEASUREMENT INSTRUMENTS LIST

Radiated Emission Measurement-9kHz 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

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

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

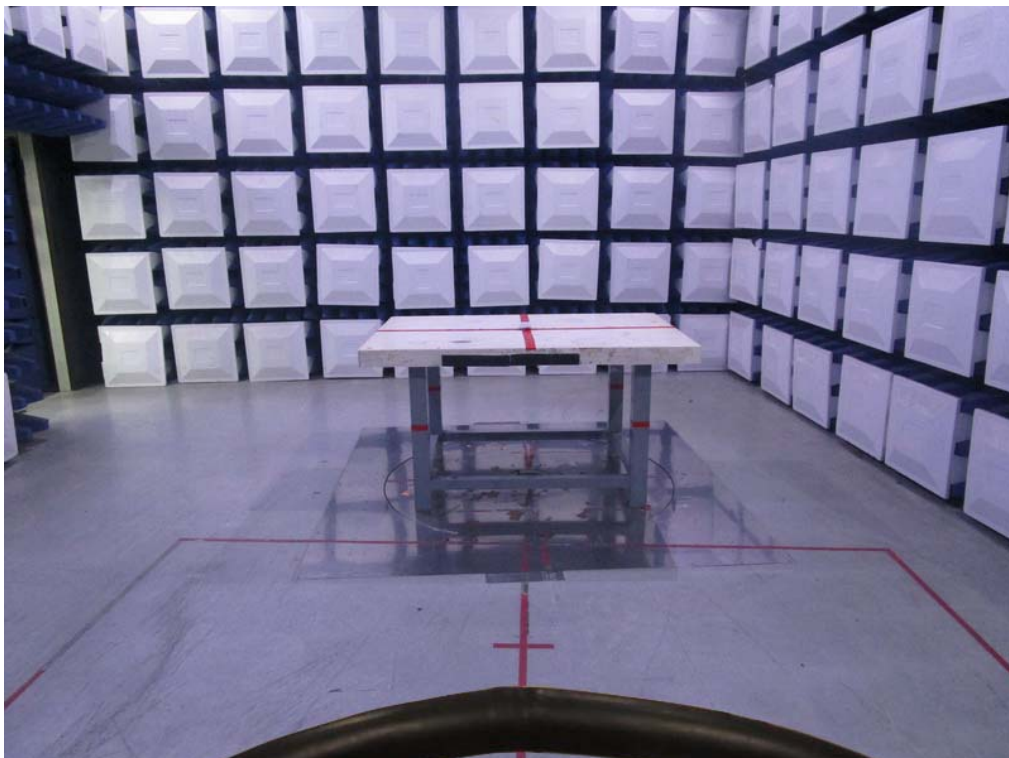
Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019

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

10. EUT TEST PHOTO

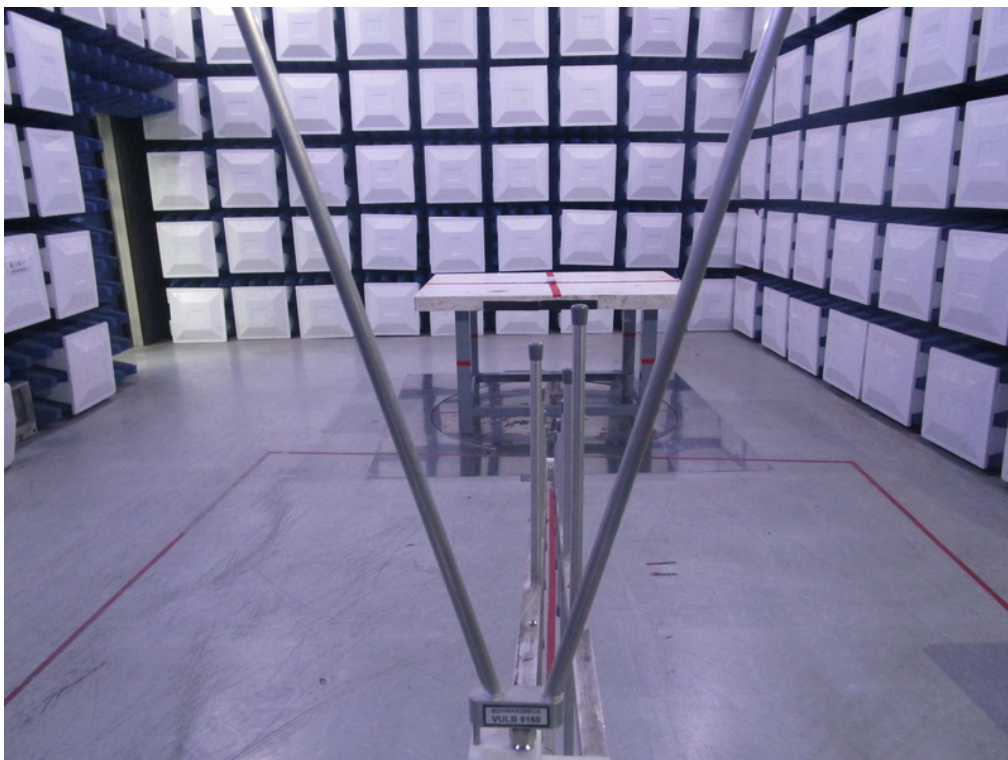
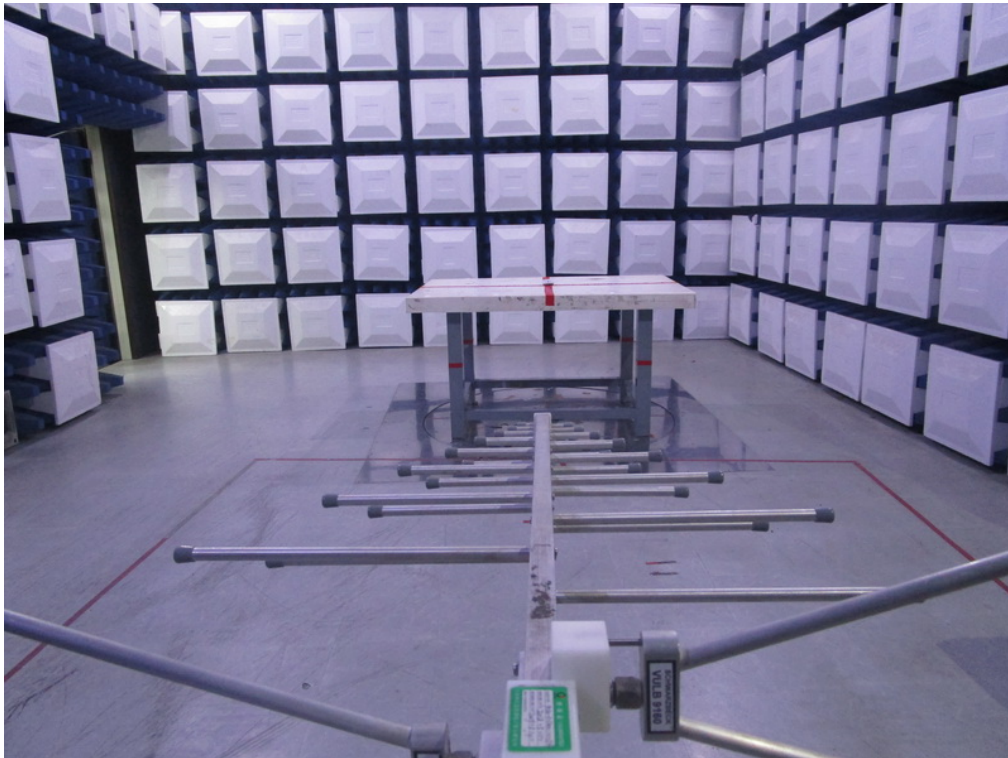
Radiated Measurement Photos

9 kHz to 30 MHz



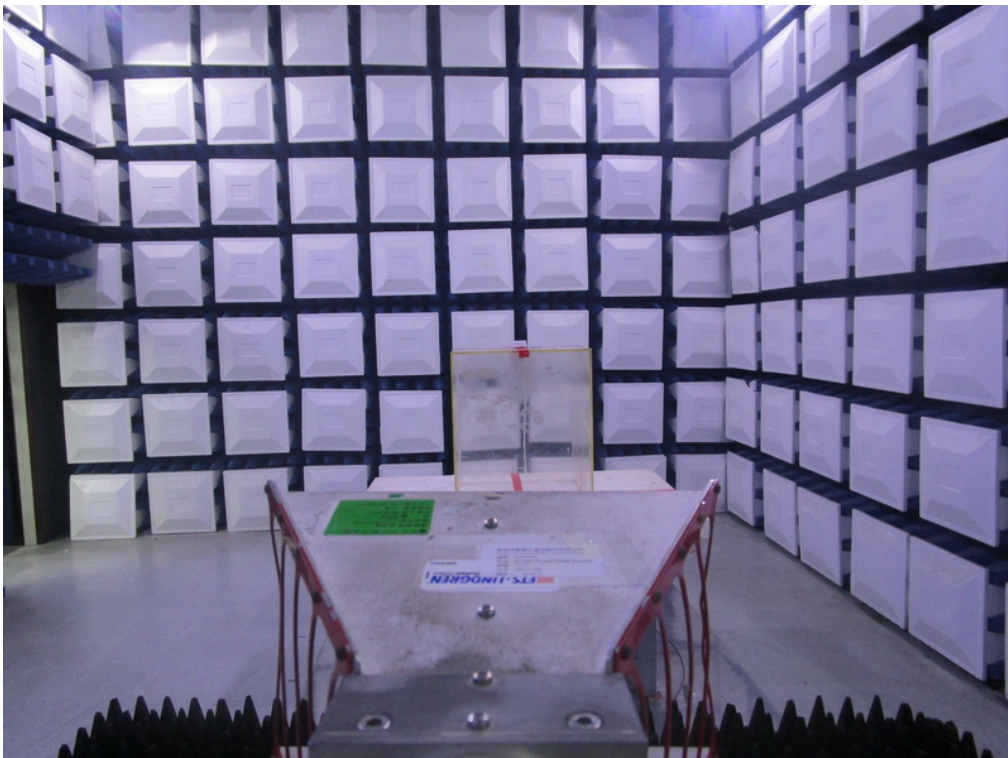
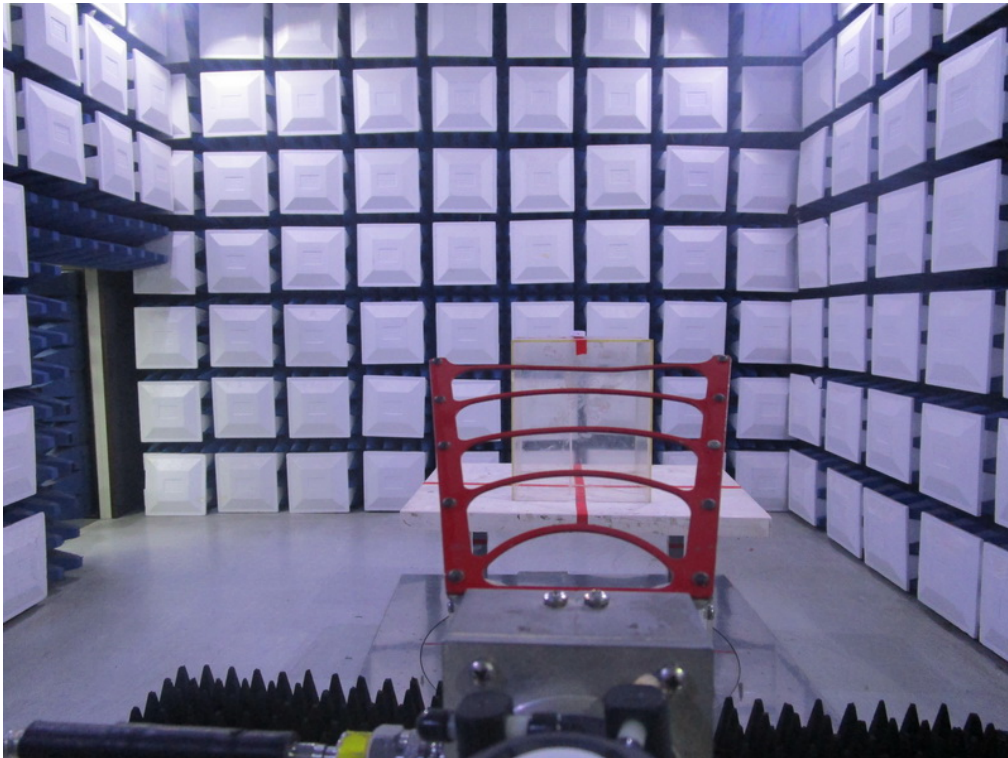
Radiated Measurement Photos

30 MHz to 1000 MHz



Radiated Measurement Photos

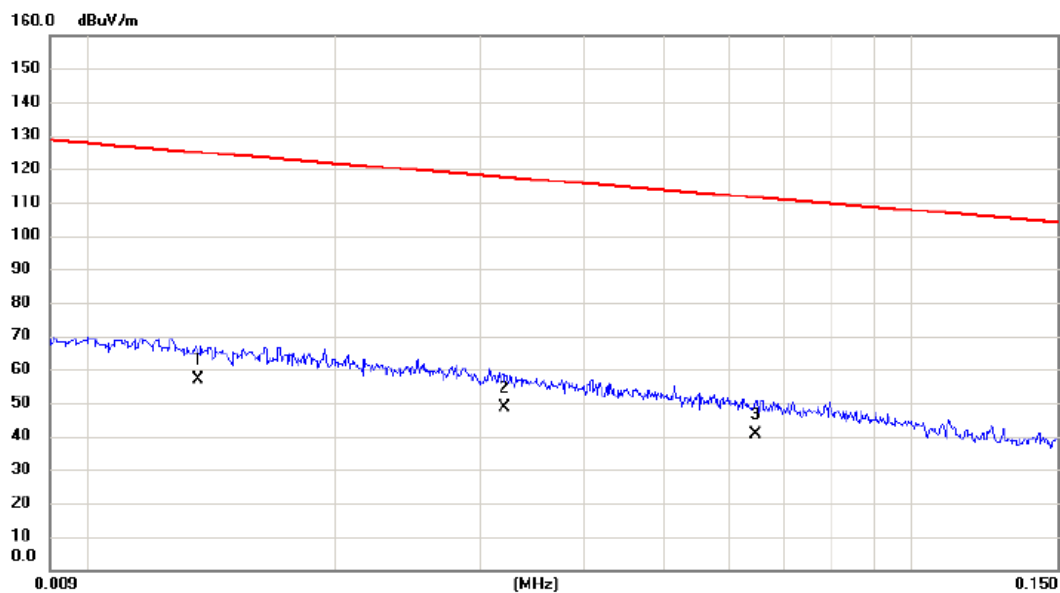
Above 1000 MHz



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

Test Mode: TX Mode

Ant 0°

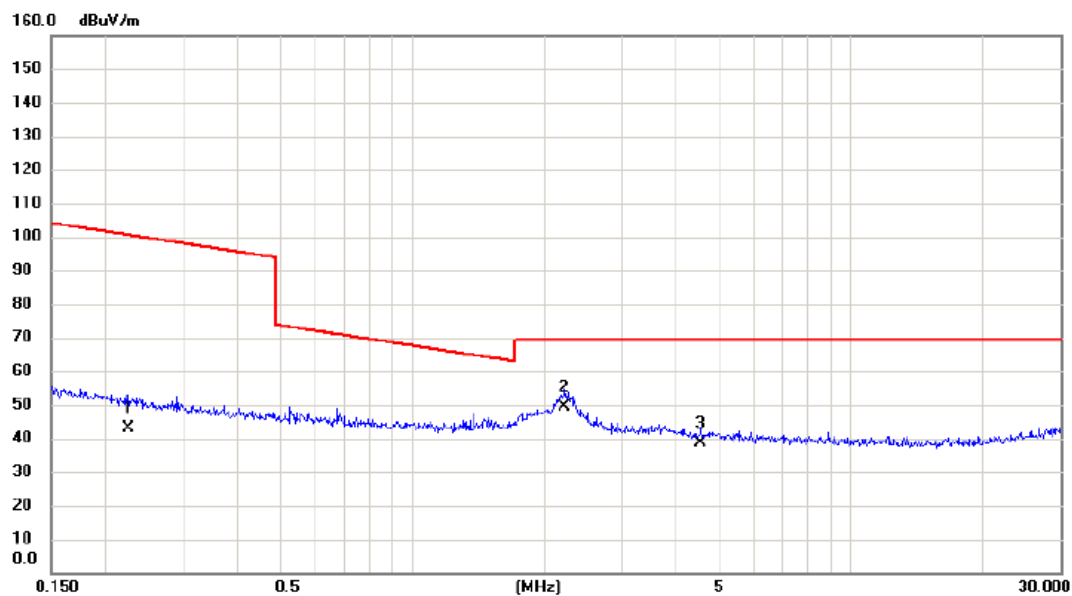


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0136	36.20	20.92	57.12	124.93	-67.81	AVG	
2		0.0320	28.70	19.82	48.52	117.50	-68.98	AVG	
3		0.0646	21.40	19.24	40.64	111.40	-70.76	AVG	

Test Mode:

TX Mode

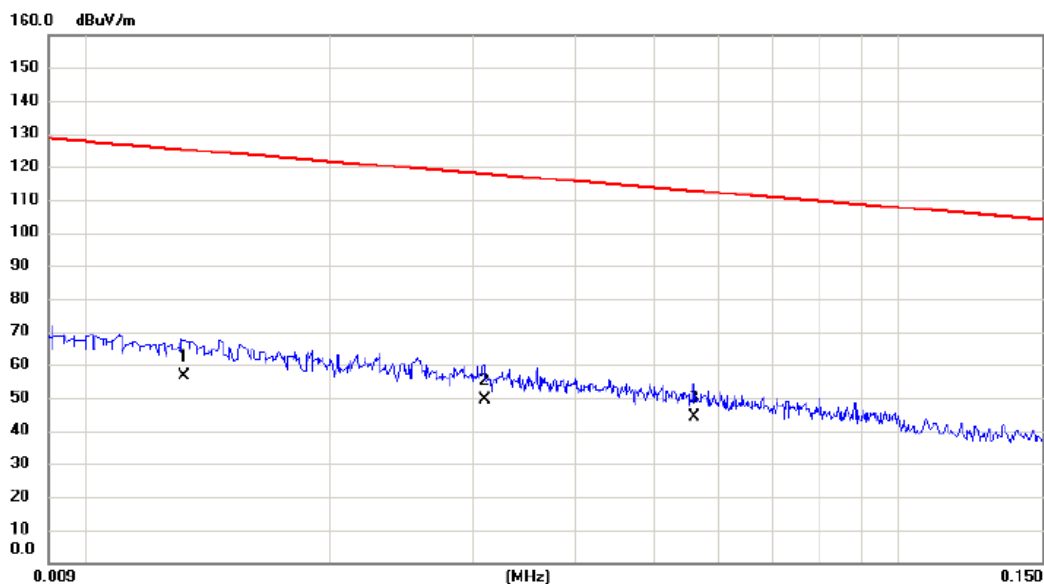
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.2256	25.80	17.10	42.90	100.54	-57.64	AVG	
2	*	2.2250	32.31	16.97	49.28	69.54	-20.26	QP	
3		4.5254	23.10	15.44	38.54	69.54	-31.00	QP	

Test Mode: TX Mode

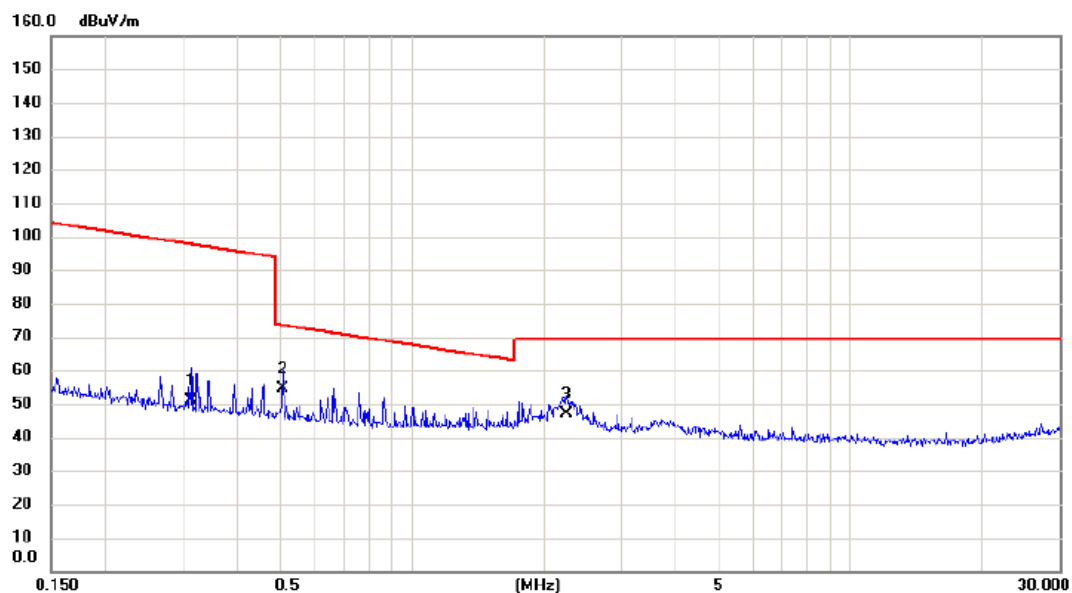
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0132	35.80	20.97	56.77	125.19	-68.42	AVG	
2	*	0.0310	29.70	19.84	49.54	117.78	-68.24	AVG	
3		0.0560	24.60	19.41	44.01	112.64	-68.63	AVG	

Test Mode: TX Mode

Ant 90°



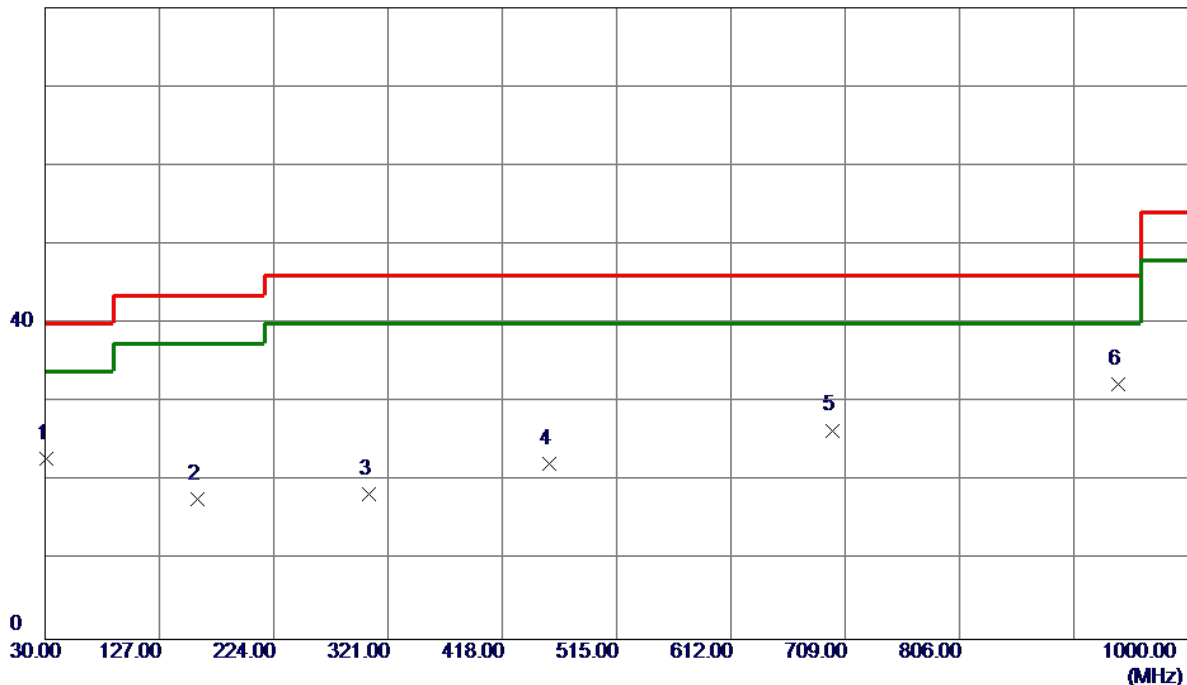
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3133	34.10	17.03	51.13	97.69	-46.56	AVG	
2	*	0.5074	37.50	16.97	54.47	73.50	-19.03	QP	
3		2.2486	30.20	16.96	47.16	69.54	-22.38	QP	

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

Test Mode: TX B Mode Channel 01

Vertical

80 dBuV/m

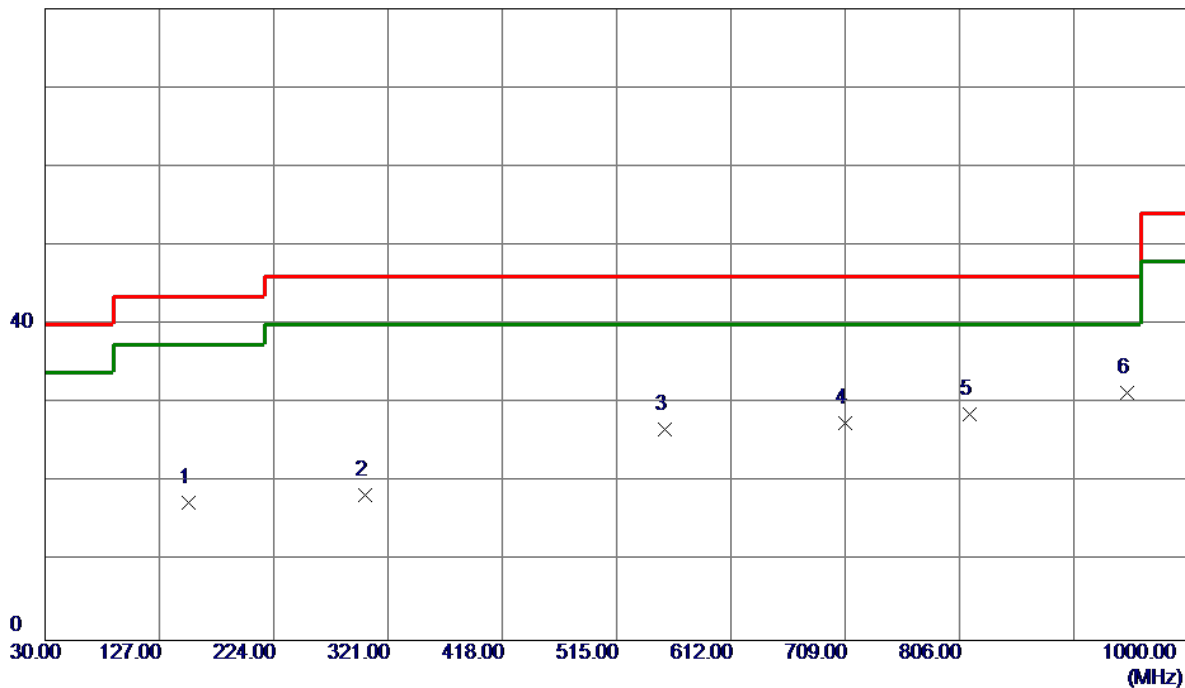


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	30.9700	37.89	-15.00	22.89	40.00	-17.11	Peak	
2	159.0100	28.45	-10.69	17.76	43.50	-25.74	Peak	
3	304.5100	28.84	-10.43	18.41	46.00	-27.59	Peak	
4	457.7700	29.86	-7.58	22.28	46.00	-23.72	Peak	
5	698.3300	29.31	-2.83	26.48	46.00	-19.52	Peak	
6 *	940.8300	31.23	1.04	32.27	46.00	-13.73	Peak	

Test Mode: TX B Mode Channel 01

Horizontal

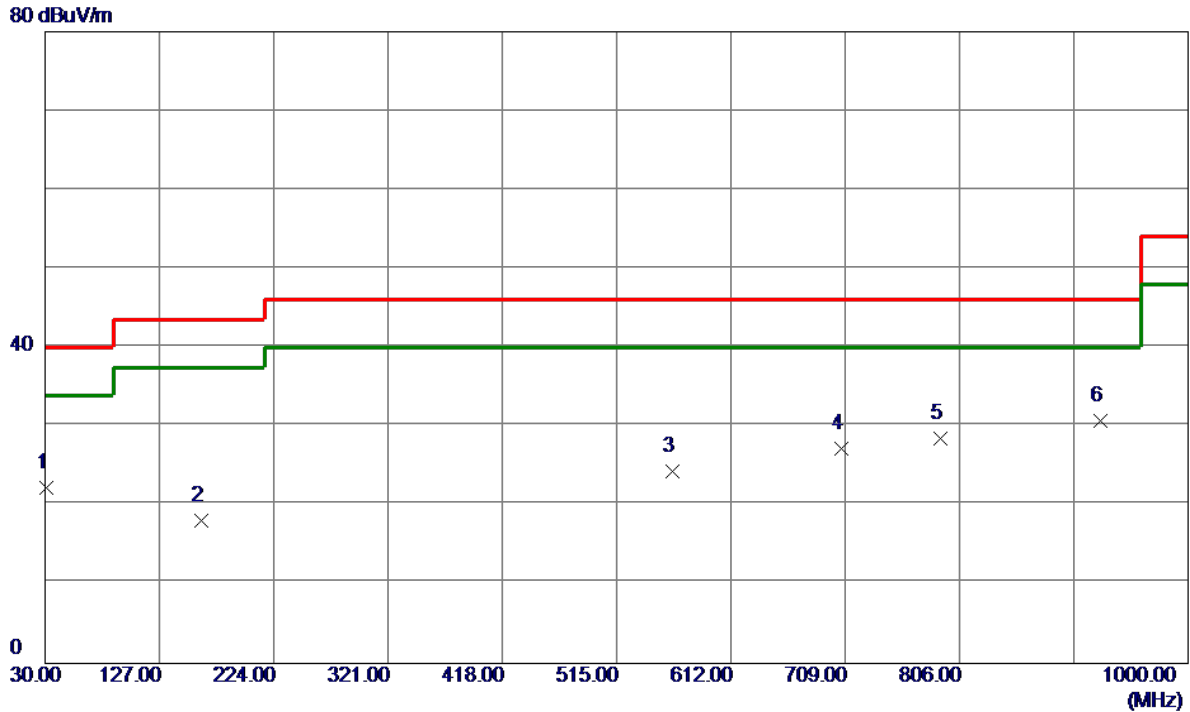
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	152.2200	28.73	-11.30	17.43	43.50	-26.07	Peak	
2	301.6000	28.75	-10.39	18.36	46.00	-27.64	Peak	
3	555.7400	32.32	-5.56	26.76	46.00	-19.24	Peak	
4	709.0000	30.57	-2.98	27.59	46.00	-18.41	Peak	
5	814.7300	29.92	-1.27	28.65	46.00	-17.35	Peak	
6 *	948.5900	30.06	1.35	31.41	46.00	-14.59	Peak	

Test Mode: TX B Mode Channel 06

Vertical

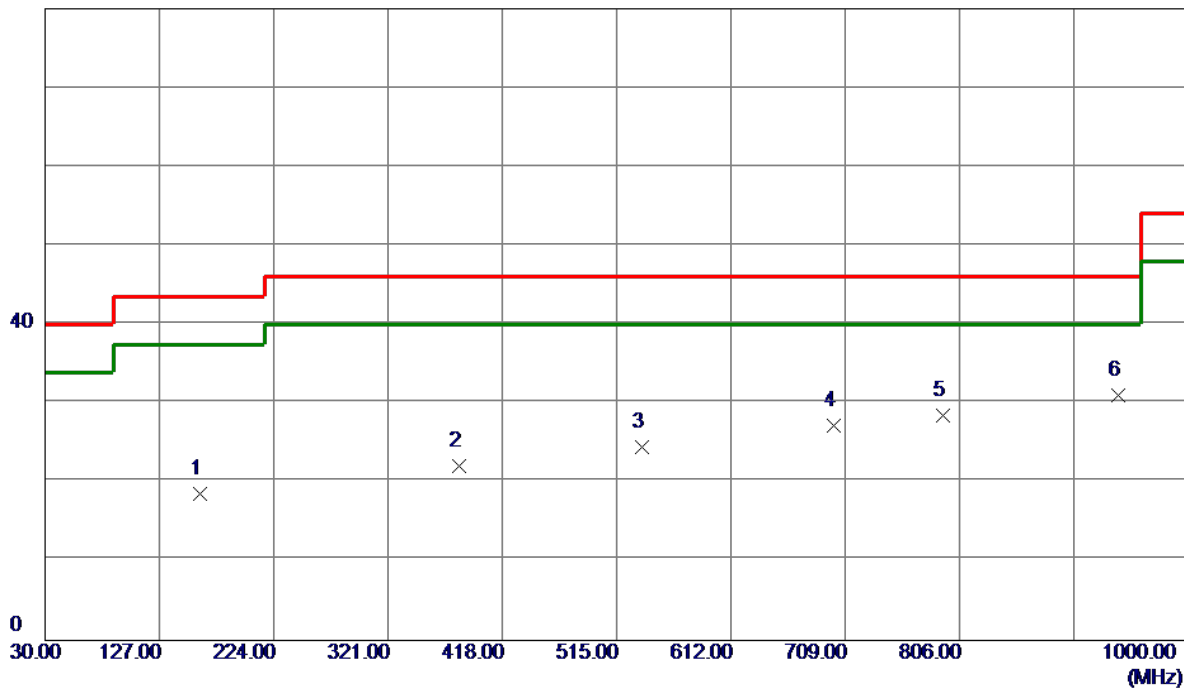


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	30.9700	37.29	-15.00	22.29	40.00	-17.71	Peak	
2	162.8900	28.78	-10.77	18.01	43.50	-25.49	Peak	
3	562.5300	30.00	-5.67	24.33	46.00	-21.67	Peak	
4	706.0900	30.17	-2.90	27.27	46.00	-18.73	Peak	
5	789.5100	30.20	-1.67	28.53	46.00	-17.47	Peak	
6 *	925.3100	30.27	0.42	30.69	46.00	-15.31	Peak	

Test Mode: TX B Mode Channel 06

Horizontal

80 dBuV/m

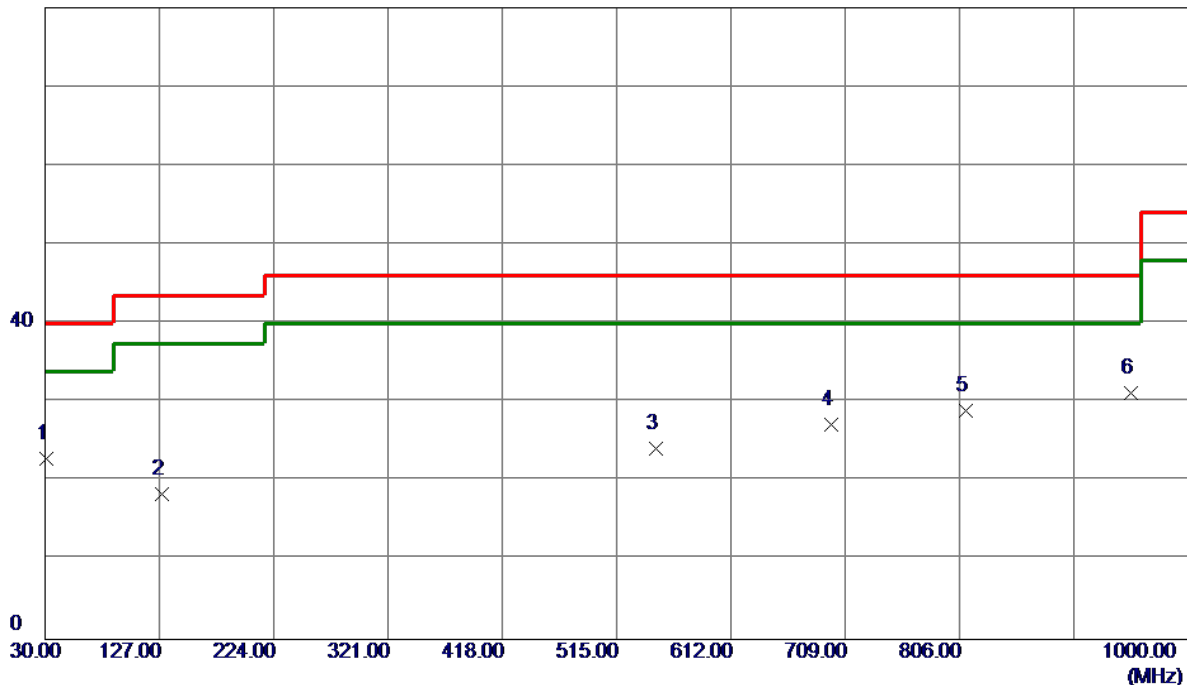


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	161.9200	29.22	-10.71	18.51	43.50	-24.99	Peak	
2	381.1400	32.05	-10.02	22.03	46.00	-23.97	Peak	
3	536.3400	30.75	-6.30	24.45	46.00	-21.55	Peak	
4	699.3000	30.04	-2.78	27.26	46.00	-18.74	Peak	
5	792.4200	30.03	-1.50	28.53	46.00	-17.47	Peak	
6 *	940.8300	29.96	1.04	31.00	46.00	-15.00	Peak	

Test Mode: TX B Mode Channel 11

Vertical

80 dBuV/m

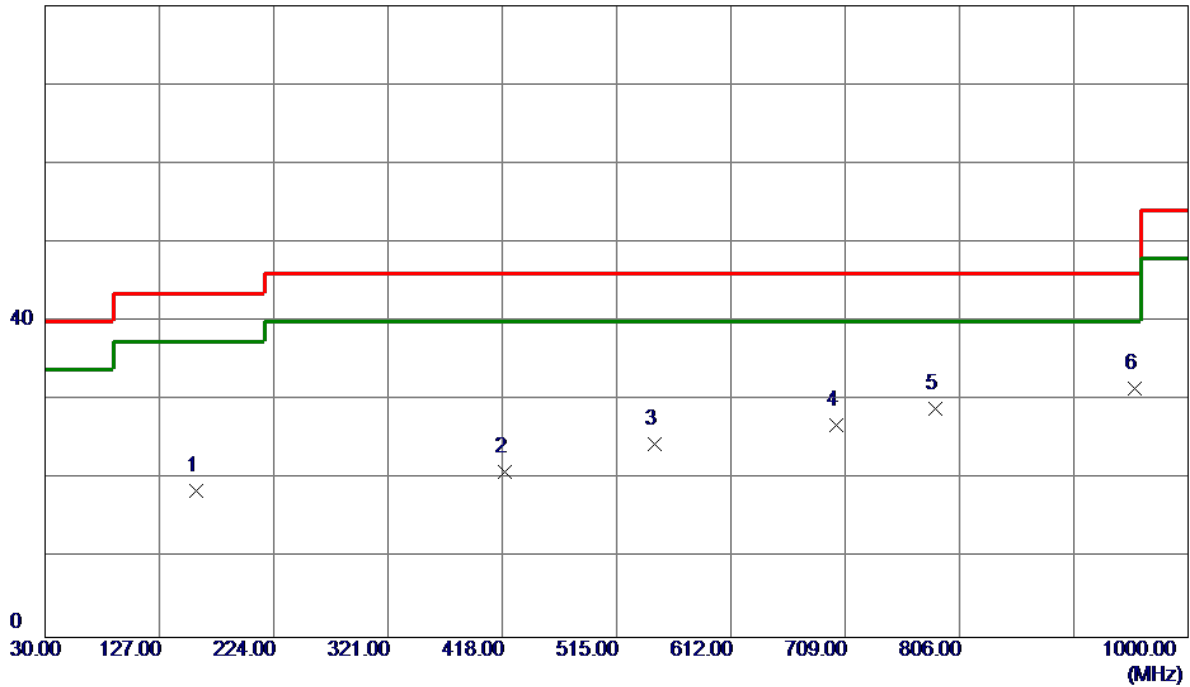


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	30.9700	37.91	-15.00	22.91	40.00	-17.09	Peak	
2	128.9400	31.86	-13.53	18.33	43.50	-25.17	Peak	
3	547.9800	29.82	-5.59	24.23	46.00	-21.77	Peak	
4	697.3600	30.04	-2.87	27.17	46.00	-18.83	Peak	
5	811.8200	30.18	-1.22	28.96	46.00	-17.04	Peak	
6 *	951.5000	29.87	1.37	31.24	46.00	-14.76	Peak	

Test Mode: TX B Mode Channel 11

Horizontal

80 dBuV/m



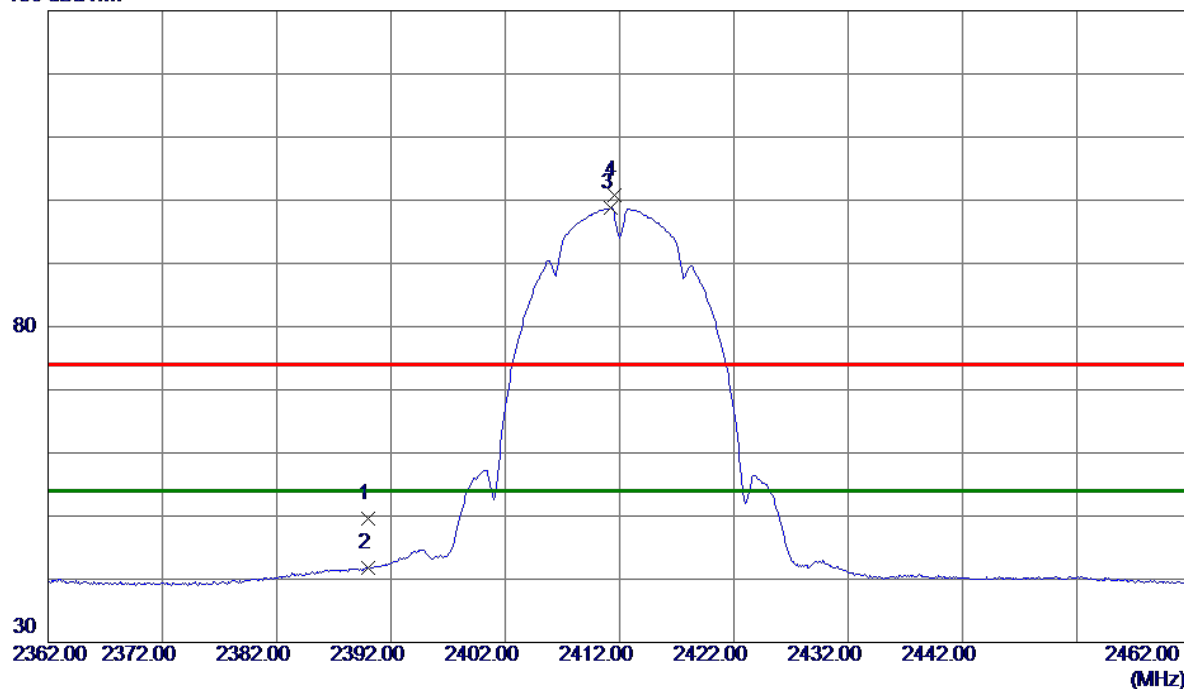
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	158.0399	29.40	-10.77	18.63	43.50	-24.87	Peak	
2	419.9400	29.50	-8.59	20.91	46.00	-25.09	Peak	
3	547.0100	30.17	-5.65	24.52	46.00	-21.48	Peak	
4	701.2400	29.70	-2.78	26.92	46.00	-19.08	Peak	
5	785.6300	30.86	-1.90	28.96	46.00	-17.04	Peak	
6 *	954.4100	30.15	1.31	31.46	46.00	-14.54	Peak	

APPENDIX C - RADIATED EMISSION (ABOVE 1000 MHZ)

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Vertical

130 dBuV/m

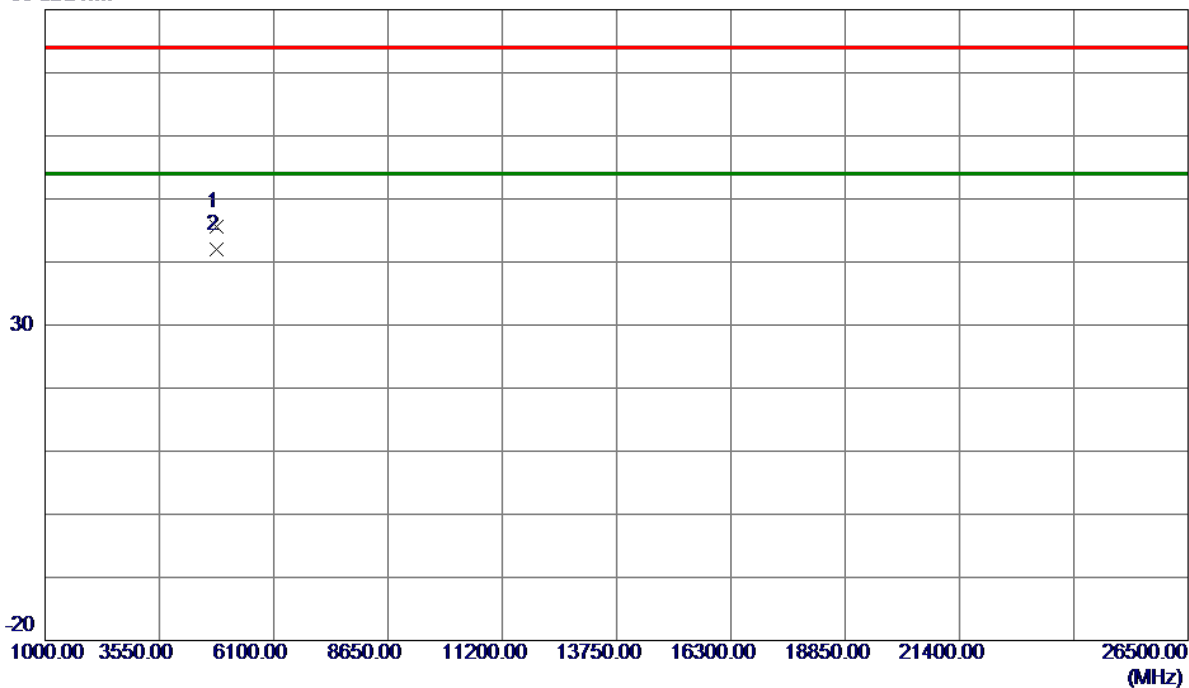


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	38.25	11.30	49.55	74.00	-24.45	Peak	
2	2390.0000	30.57	11.30	41.87	54.00	-12.13	AVG	
3 *	2411.2000	87.44	11.30	98.74	54.00	44.74	AVG	No Limit
4	2411.6000	89.50	11.30	100.80	74.00	26.80	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Vertical

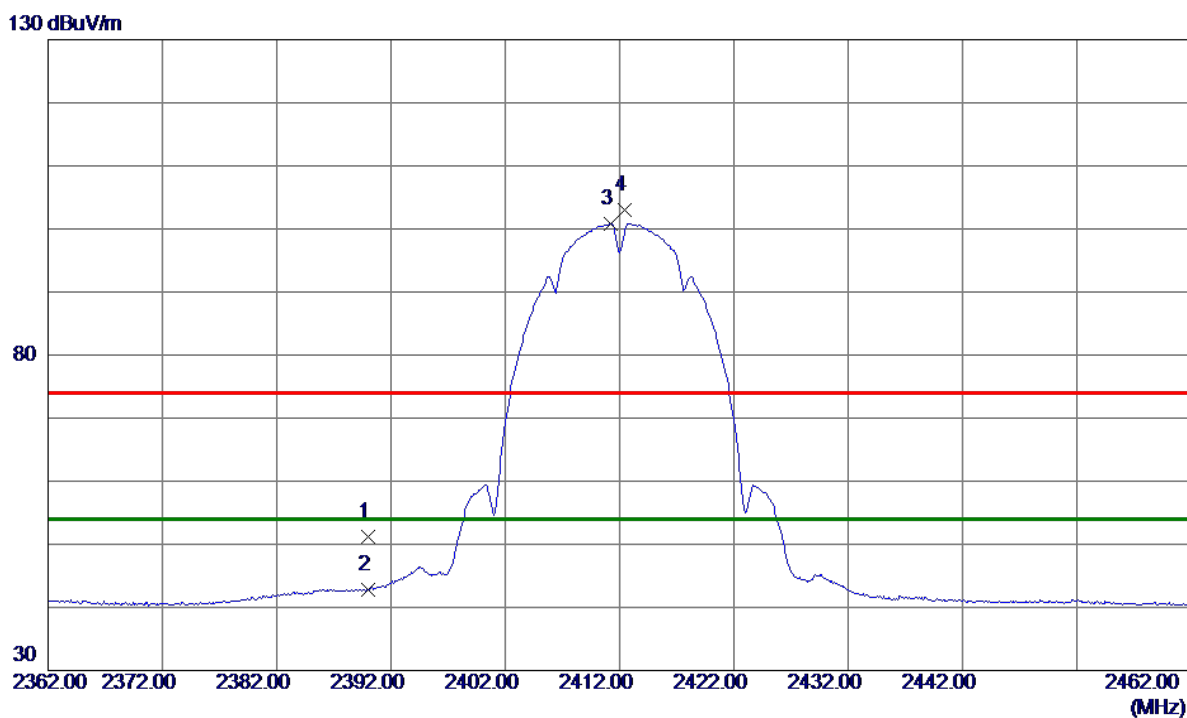
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9800	35.74	9.91	45.65	74.00	-28.35	Peak	
2 *	4824.0500	32.10	9.91	42.01	54.00	-11.99	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Horizontal

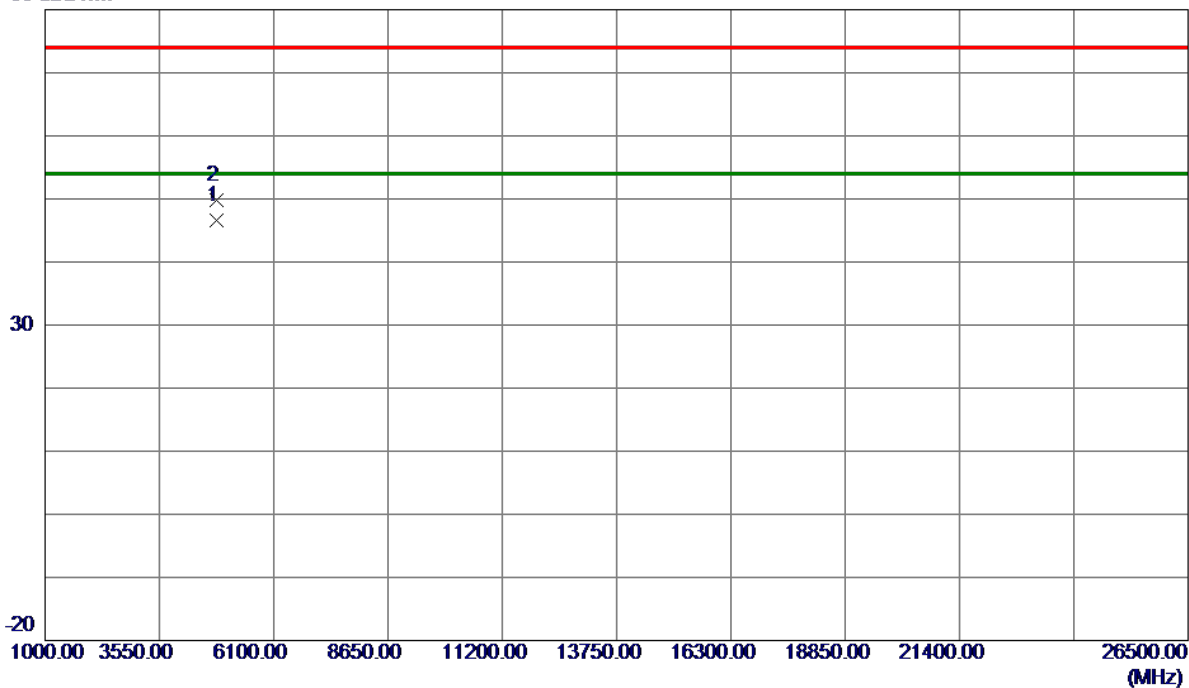


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	39.99	11.30	51.29	74.00	-22.71	Peak	
2	2390.0000	31.42	11.30	42.72	54.00	-11.28	AVG	
3 *	2411.2000	89.54	11.30	100.84	54.00	46.84	AVG	No Limit
4	2412.4000	91.62	11.30	102.92	74.00	28.92	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

Horizontal

80 dBuV/m

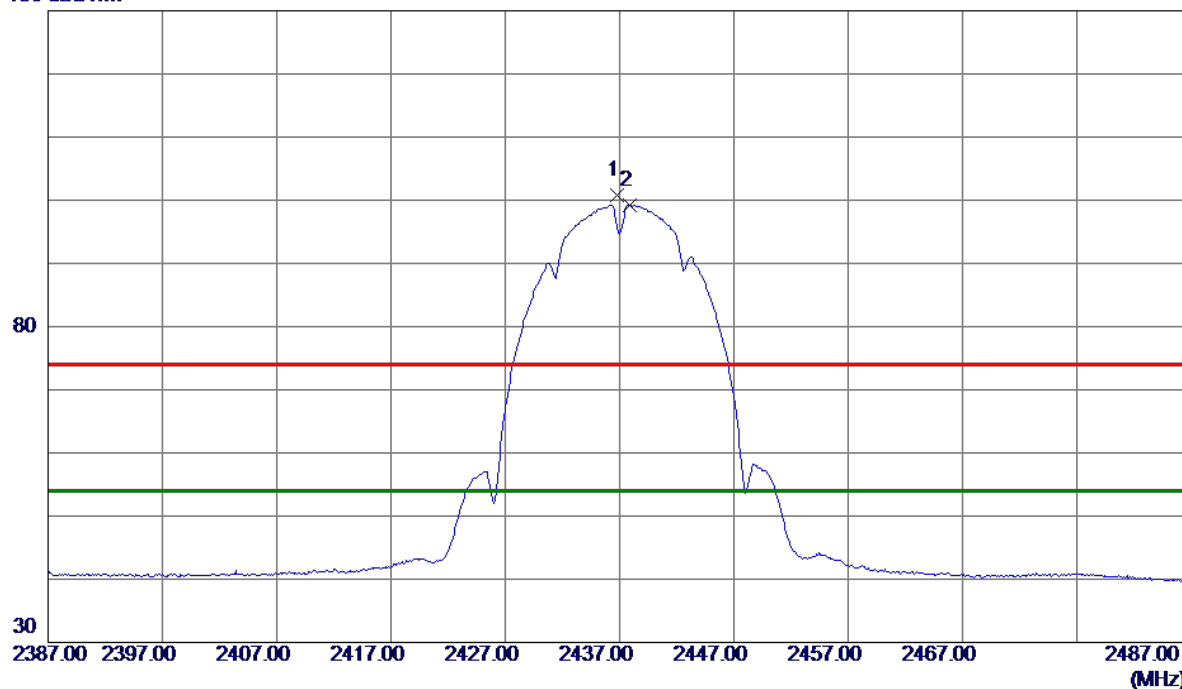


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.0350	36.72	9.91	46.63	54.00	-7.37	AVG	
2	4824.0500	39.80	9.91	49.71	74.00	-24.29	Peak	

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Vertical

130 dBuV/m

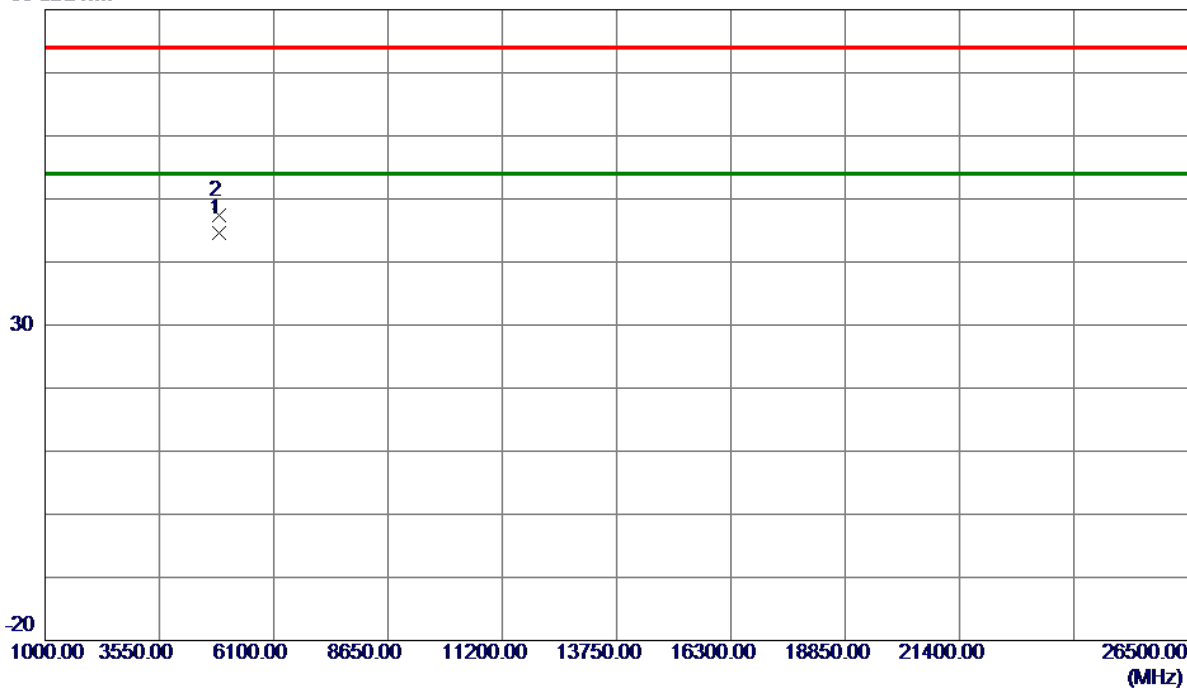


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.8000	89.49	11.31	100.80	74.00	26.80	Peak	No Limit
2 *	2437.9000	87.94	11.31	99.25	54.00	45.25	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Vertical

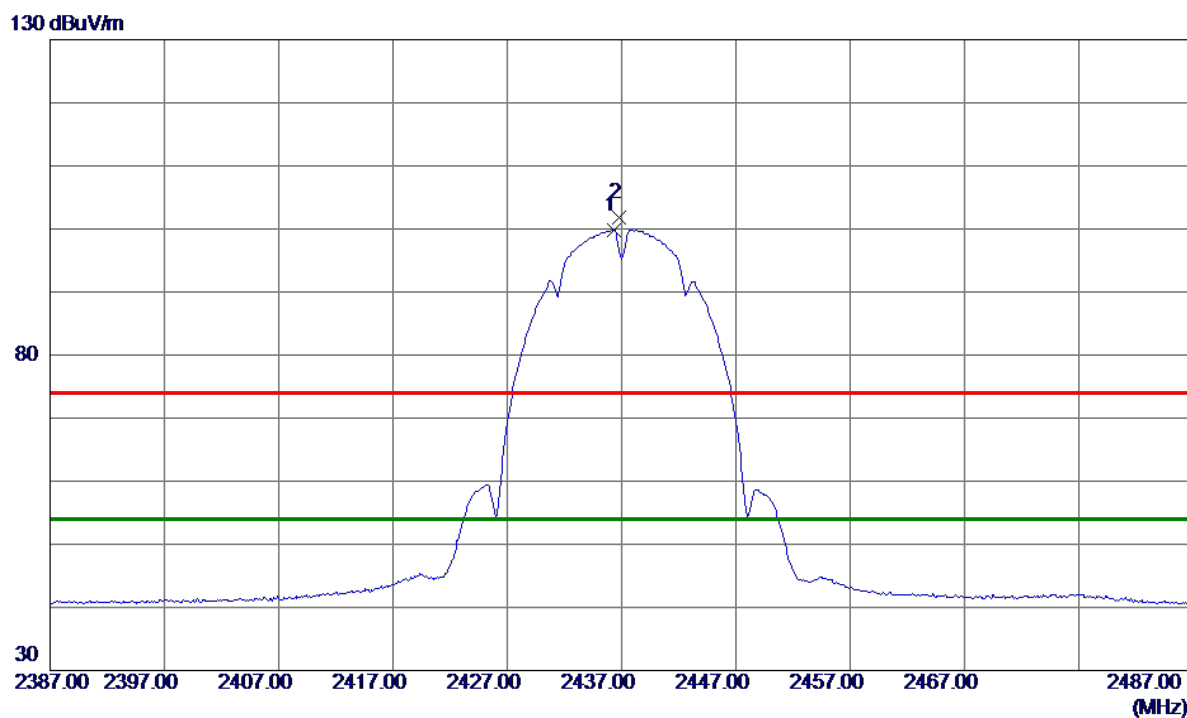
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9600	34.53	10.05	44.58	54.00	-9.42	AVG	
2	4873.9950	37.35	10.05	47.40	74.00	-26.60	Peak	

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Horizontal

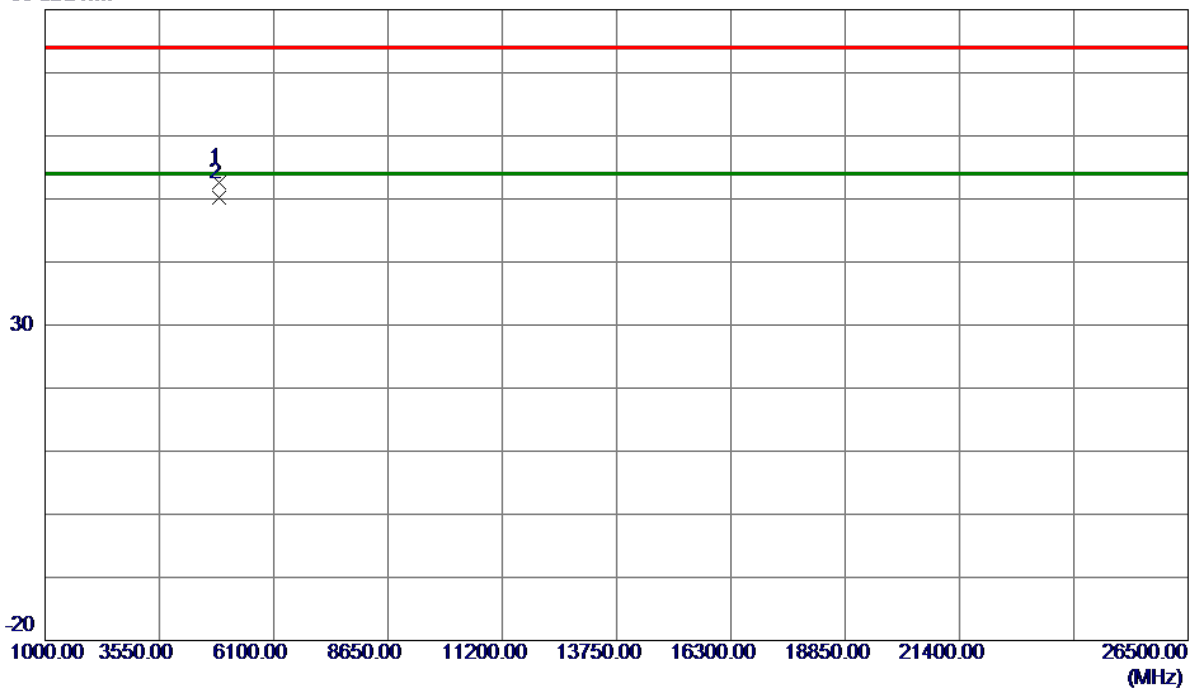


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.3000	88.56	11.31	99.87	54.00	45.87	AVG	No Limit
2	2436.8000	90.58	11.31	101.89	74.00	27.89	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

Horizontal

80 dBuV/m

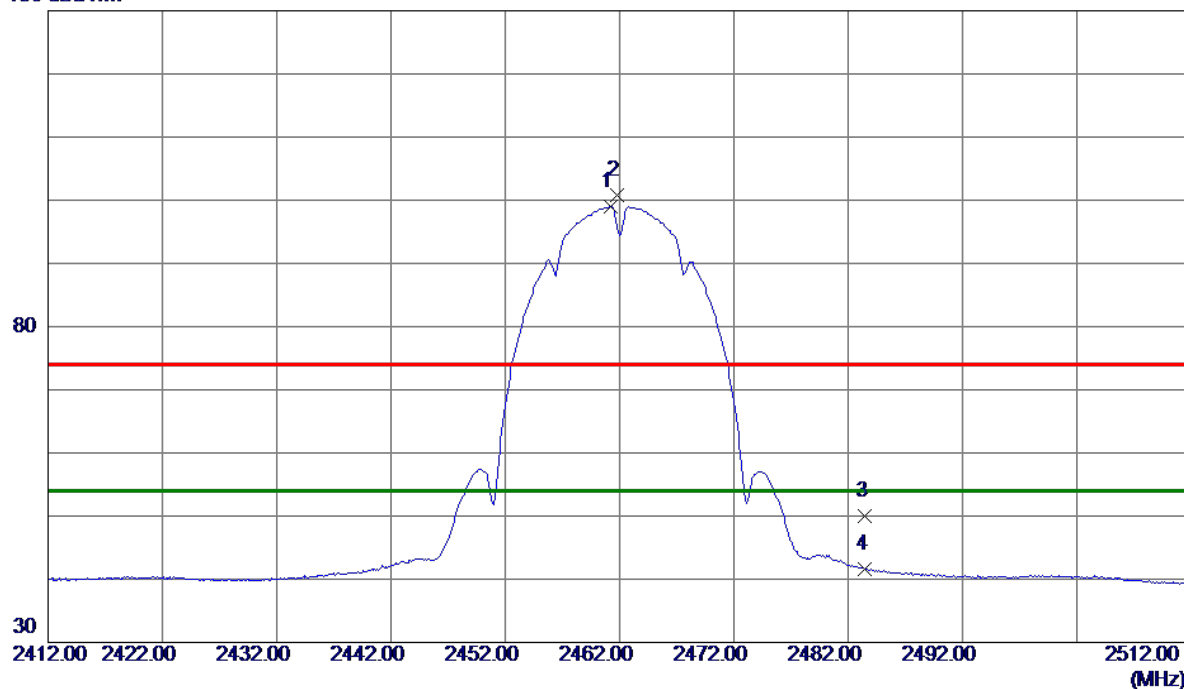


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9650	42.61	10.05	52.66	74.00	-21.34	Peak	
2 *	4874.0299	40.22	10.05	50.27	54.00	-3.73	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Vertical

130 dBuV/m

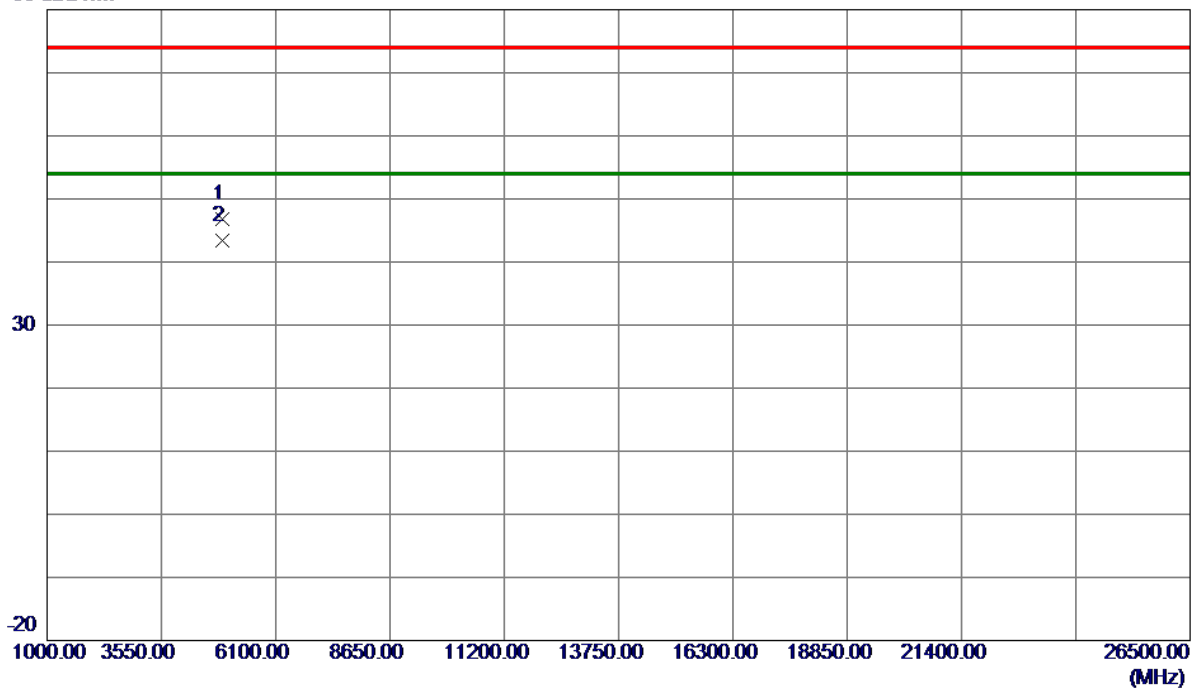


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.2000	87.71	11.32	99.03	54.00	45.03	AVG	No Limit
2	2461.8000	89.45	11.32	100.77	74.00	26.77	Peak	No Limit
3	2483.5000	38.76	11.32	50.08	74.00	-23.92	Peak	
4	2483.5000	30.27	11.32	41.59	54.00	-12.41	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Vertical

80 dBuV/m

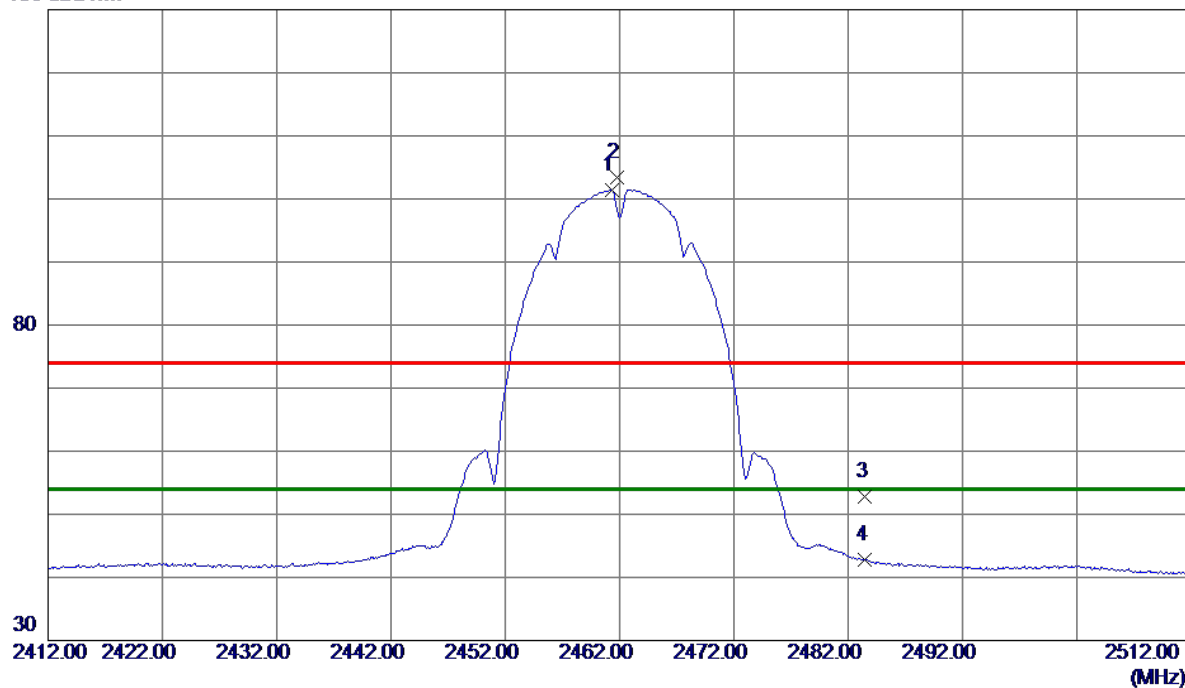


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.0050	36.59	10.18	46.77	74.00	-27.23	Peak	
2 *	4924.0250	33.17	10.18	43.35	54.00	-10.65	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Horizontal

130 dBuV/m

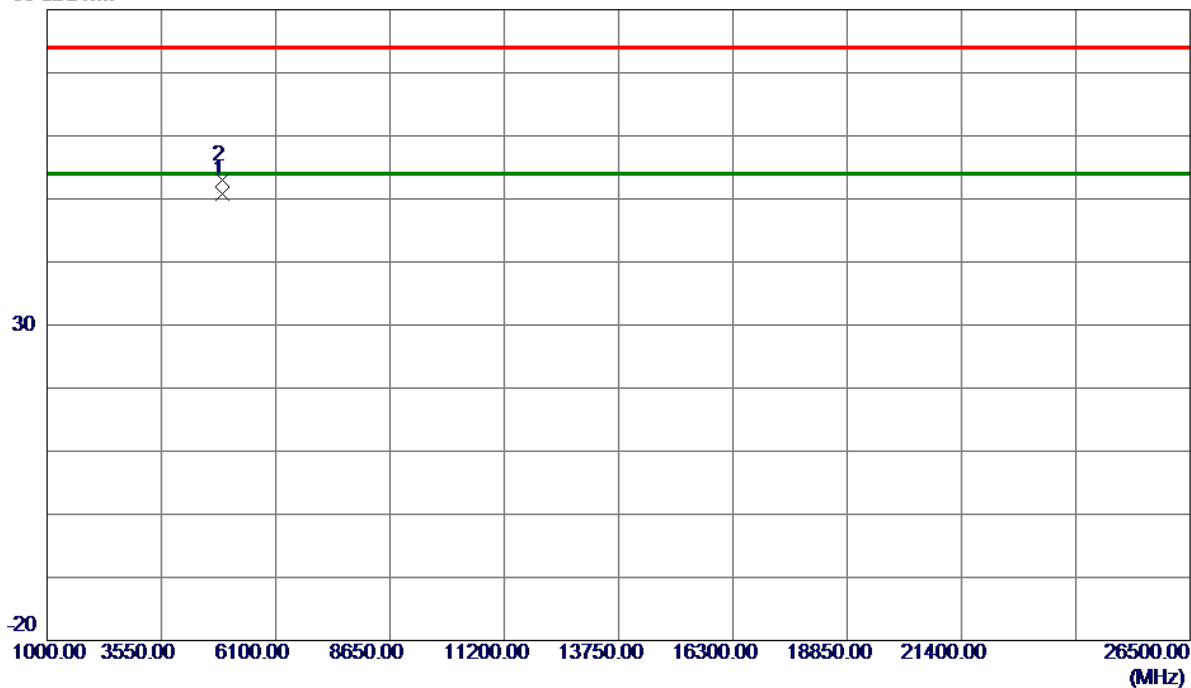


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.3000	90.16	11.32	101.48	54.00	47.48	AVG	No Limit
2	2461.8000	92.15	11.32	103.47	74.00	29.47	Peak	No Limit
3	2483.5000	41.39	11.32	52.71	74.00	-21.29	Peak	
4	2483.5000	31.50	11.32	42.82	54.00	-11.18	AVG	

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

Horizontal

80 dBuV/m

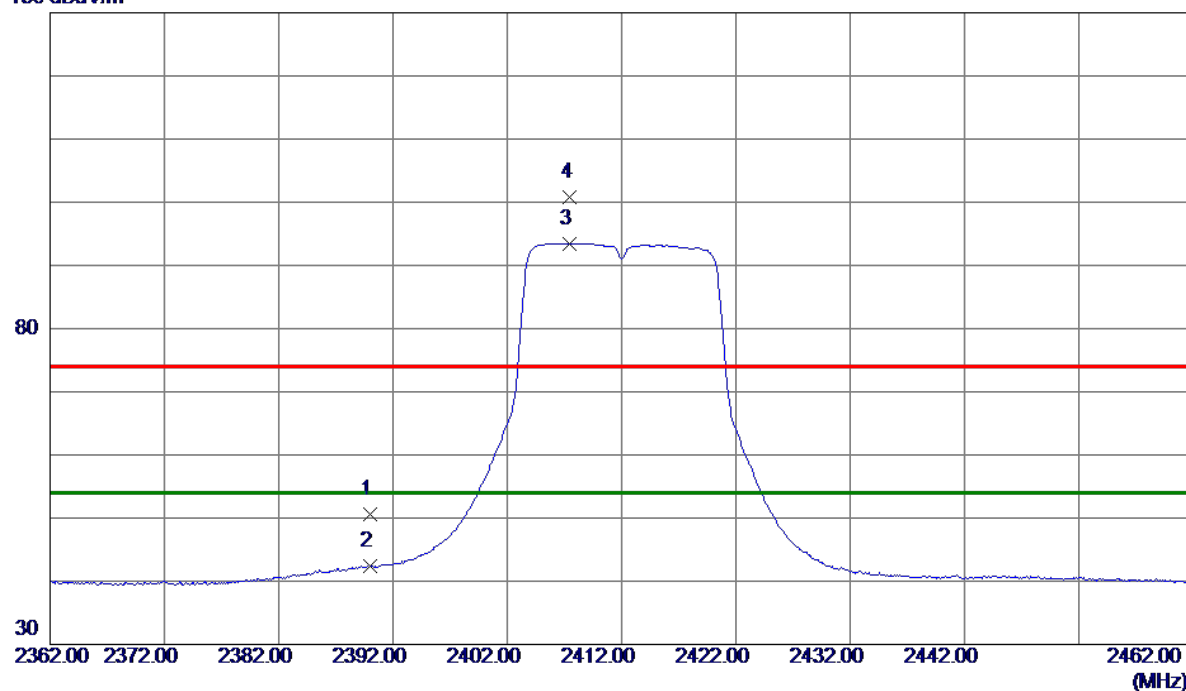


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9950	40.58	10.18	50.76	54.00	-3.24	AVG	
2	4924.0700	42.75	10.18	52.93	74.00	-21.07	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Vertical

130 dBuV/m

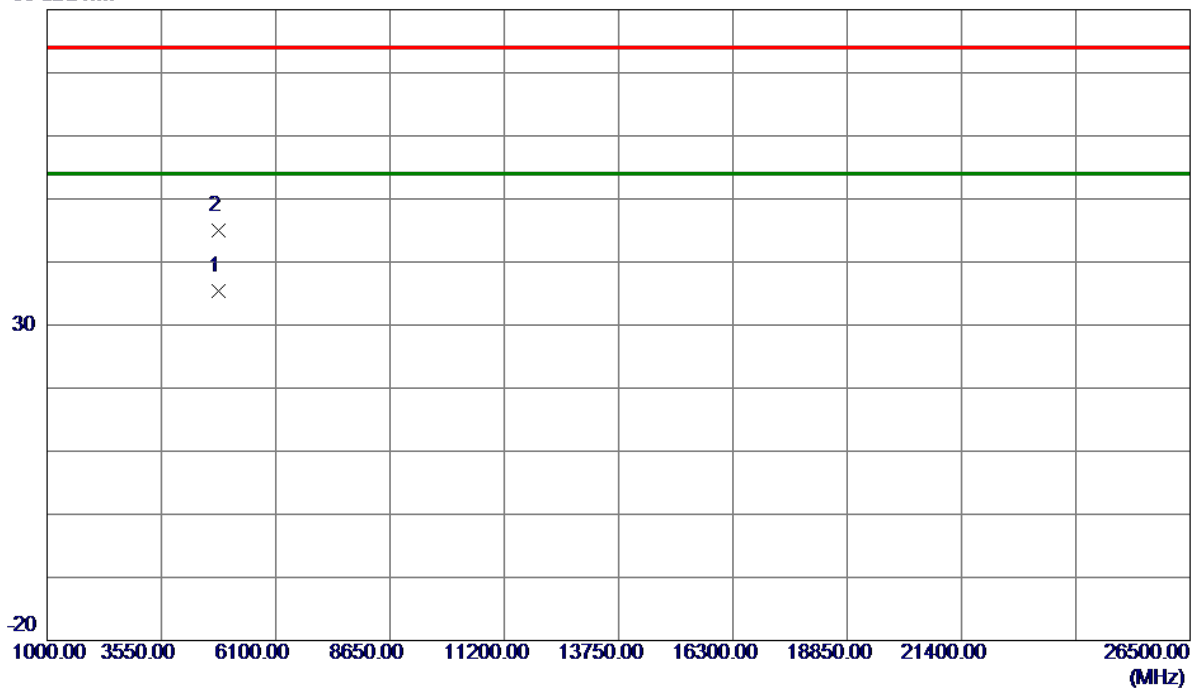


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	39.24	11.30	50.54	74.00	-23.46	Peak	
2	2390.0000	31.18	11.30	42.48	54.00	-11.52	AVG	
3 *	2407.4000	82.19	11.30	93.49	54.00	39.49	AVG	No Limit
4	2407.5000	89.53	11.30	100.83	74.00	26.83	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Vertical

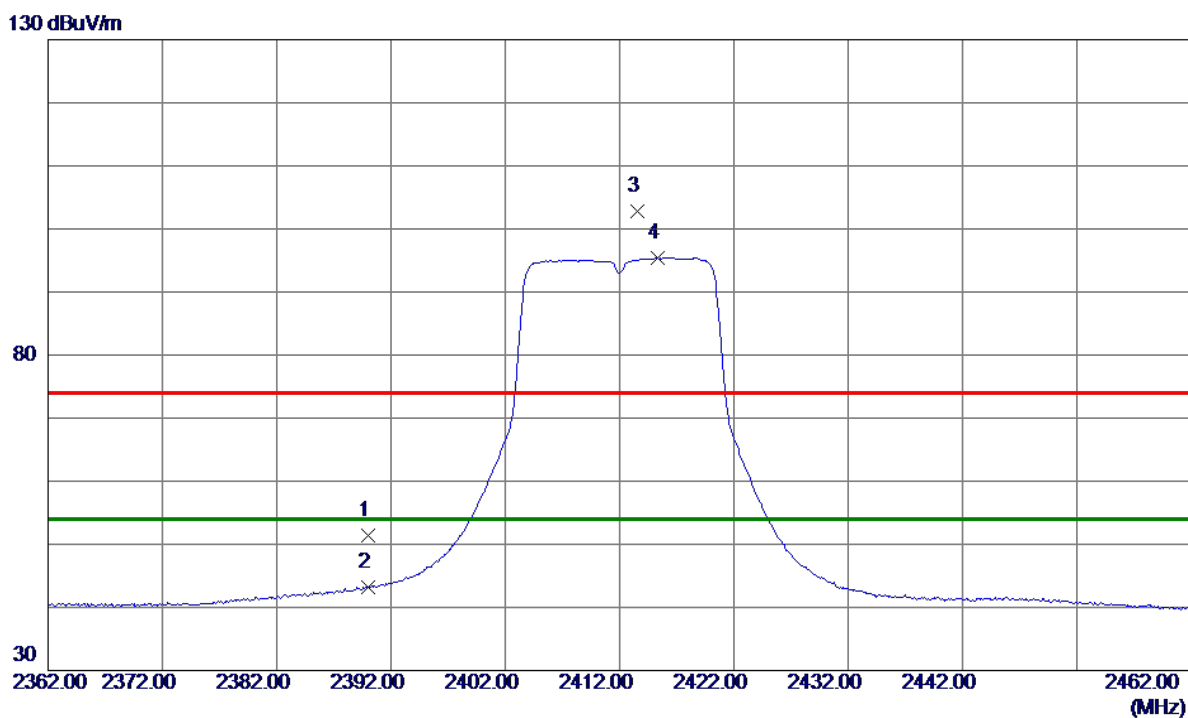
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.0500	25.46	9.91	35.37	54.00	-18.63	AVG	
2	4824.5000	35.12	9.92	45.04	74.00	-28.96	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Horizontal

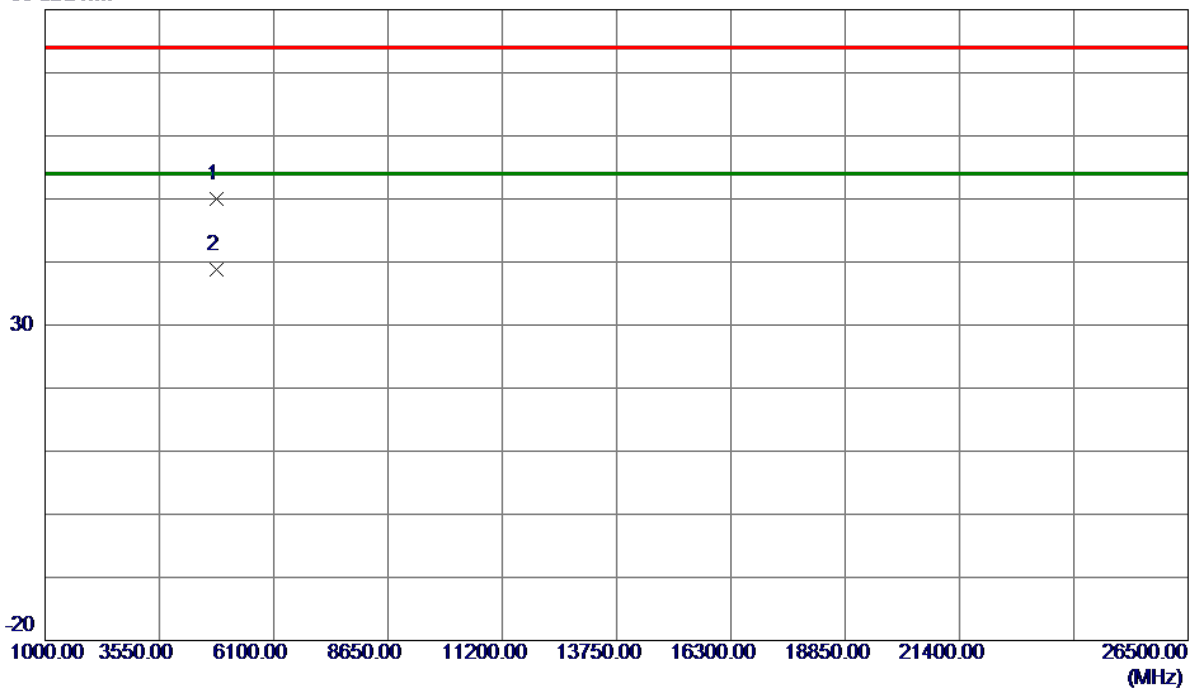


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	40.04	11.30	51.34	74.00	-22.66	Peak	
2	2390.0000	31.93	11.30	43.23	54.00	-10.77	AVG	
3	2413.6000	91.53	11.31	102.84	74.00	28.84	Peak	No Limit
4 *	2415.3000	84.08	11.31	95.39	54.00	41.39	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

Horizontal

80 dBuV/m

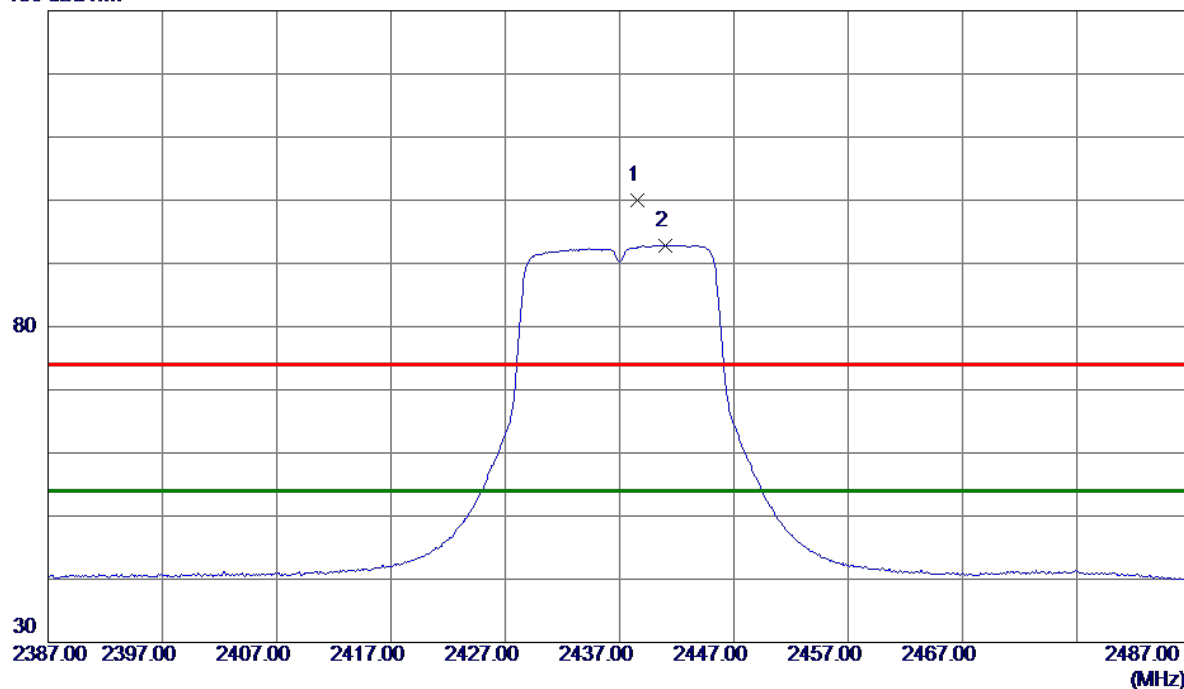


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4820.2500	40.12	9.90	50.02	74.00	-23.98	Peak	
2 *	4823.9500	28.81	9.91	38.72	54.00	-15.28	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Vertical

130 dBuV/m

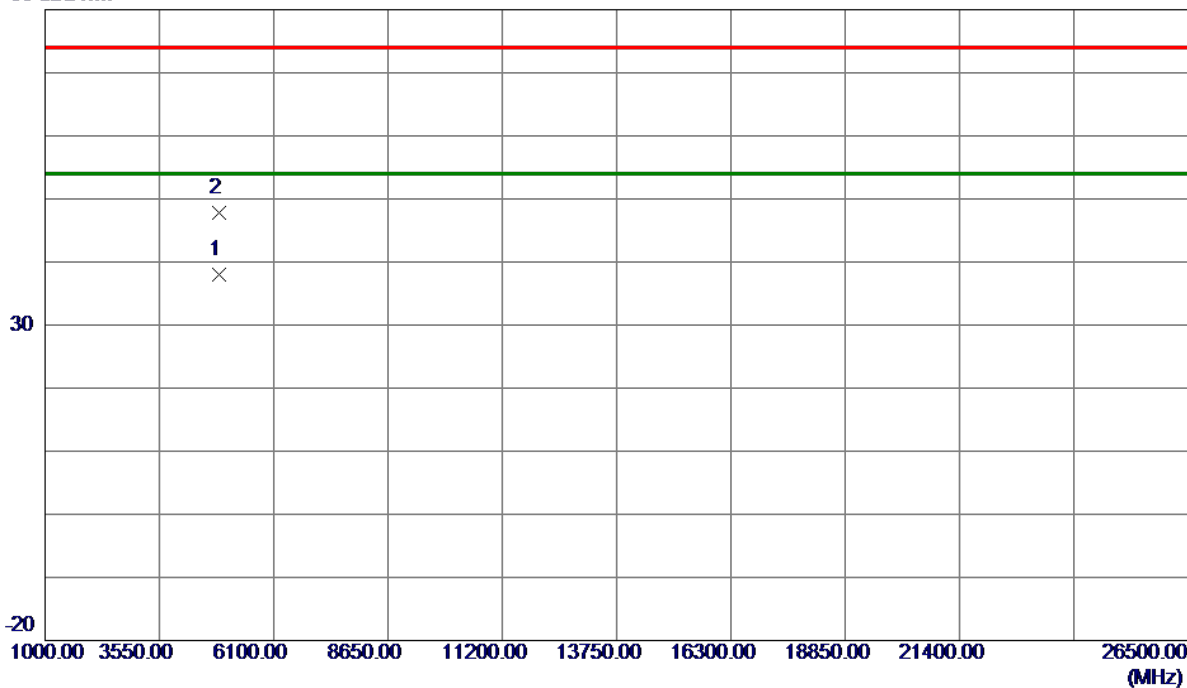


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2438.6000	88.62	11.31	99.93	74.00	25.93	Peak	No Limit
2 *	2441.0000	81.55	11.31	92.86	54.00	38.86	AVG	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Vertical

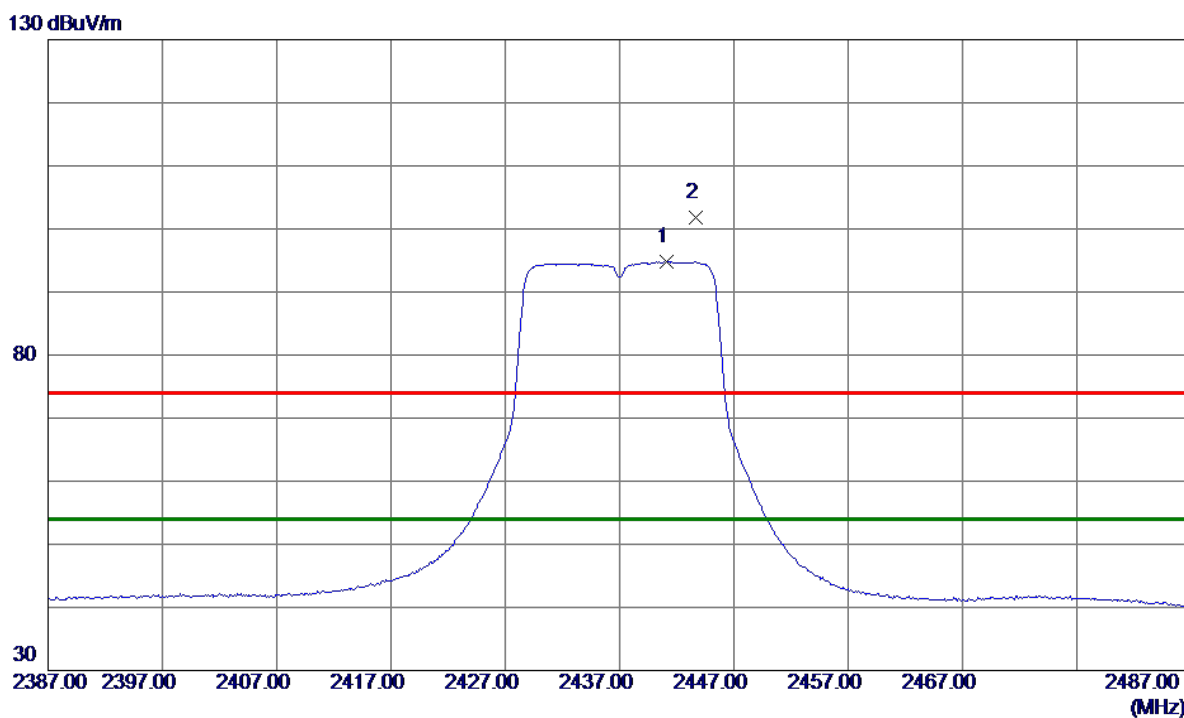
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0500	27.97	10.05	38.02	54.00	-15.98	AVG	
2	4874.4500	37.75	10.05	47.80	74.00	-26.20	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Horizontal

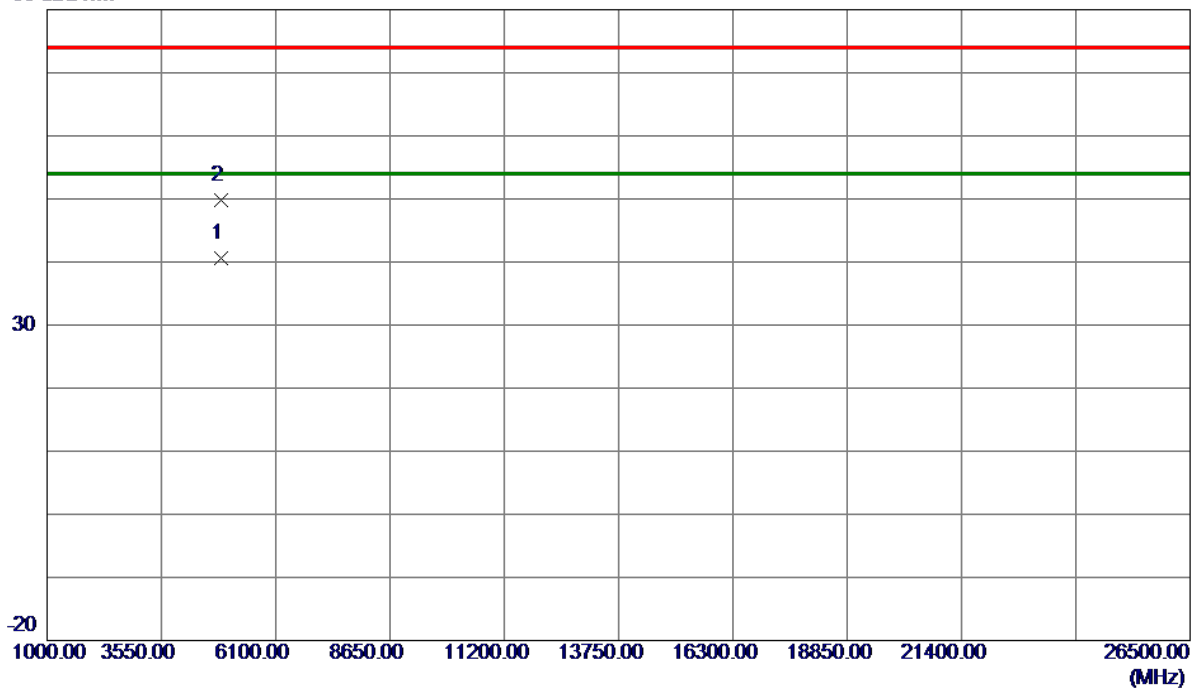


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2441.1000	83.42	11.31	94.73	54.00	40.73	AVG	No Limit
2	2443.7000	90.48	11.31	101.79	74.00	27.79	Peak	No Limit

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

Horizontal

80 dBuV/m

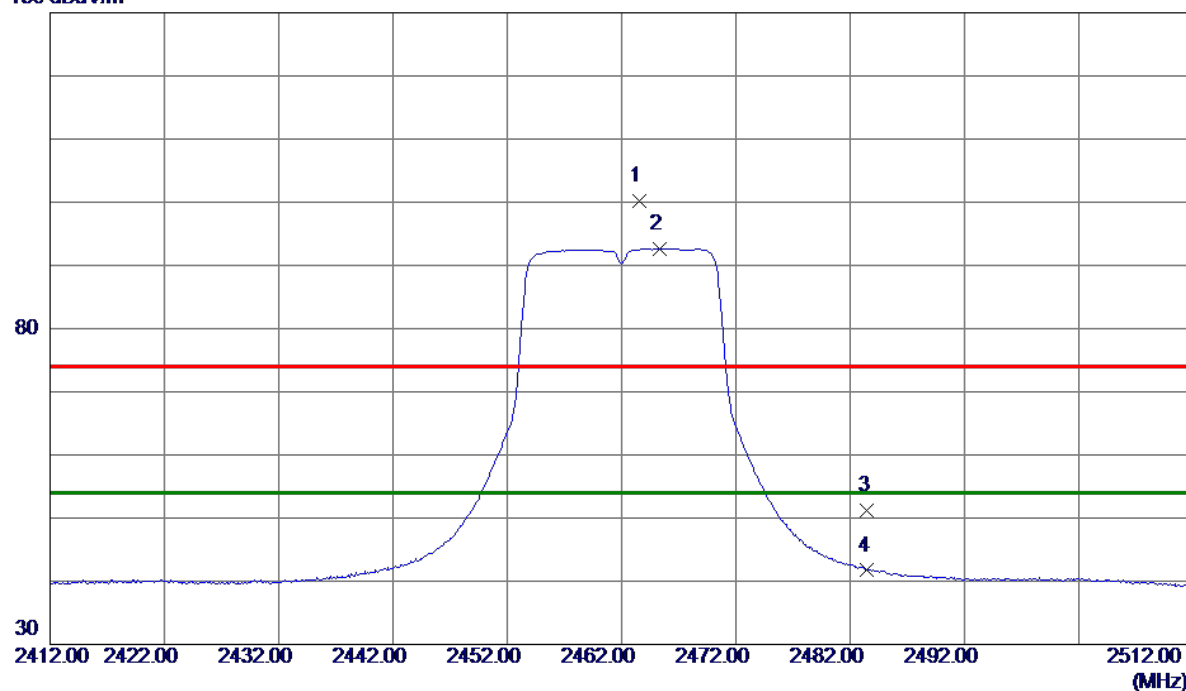


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0500	30.55	10.05	40.60	54.00	-13.40	AVG	
2	4874.5500	39.74	10.05	49.79	74.00	-24.21	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Vertical

130 dBuV/m

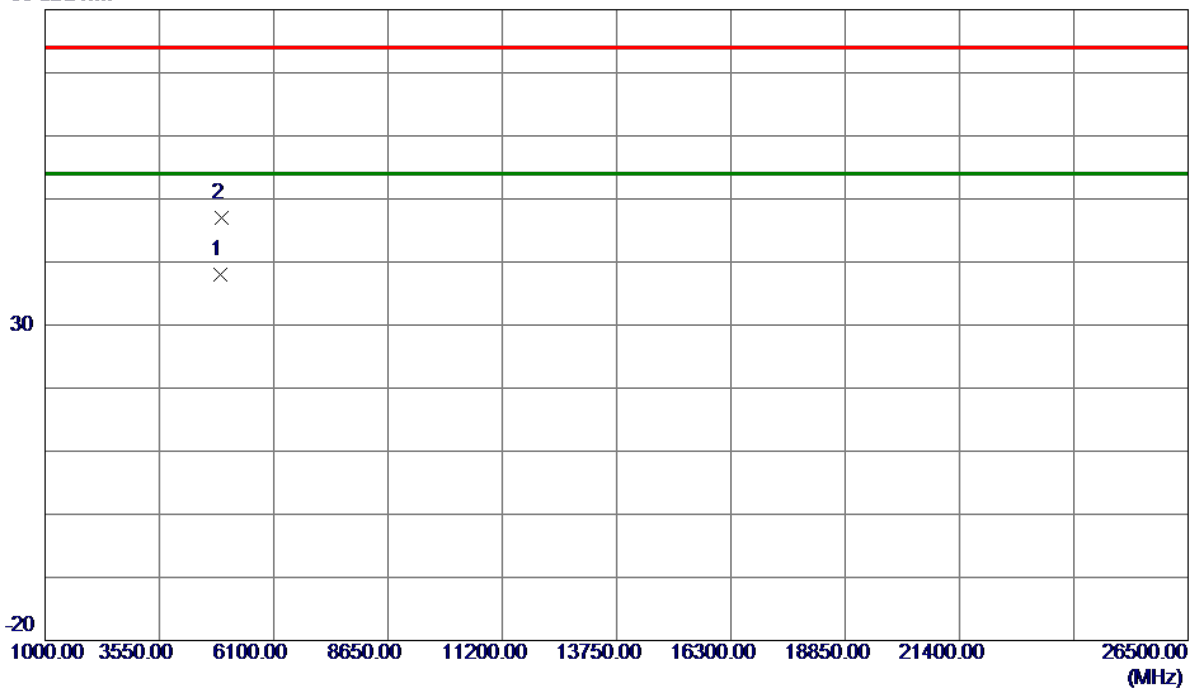


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2463.6000	88.83	11.32	100.15	74.00	26.15	Peak	No Limit
2 *	2465.3000	81.37	11.32	92.69	54.00	38.69	AVG	No Limit
3	2483.5000	39.96	11.32	51.28	74.00	-22.72	Peak	
4	2483.5000	30.38	11.32	41.70	54.00	-12.30	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Vertical

80 dBuV/m

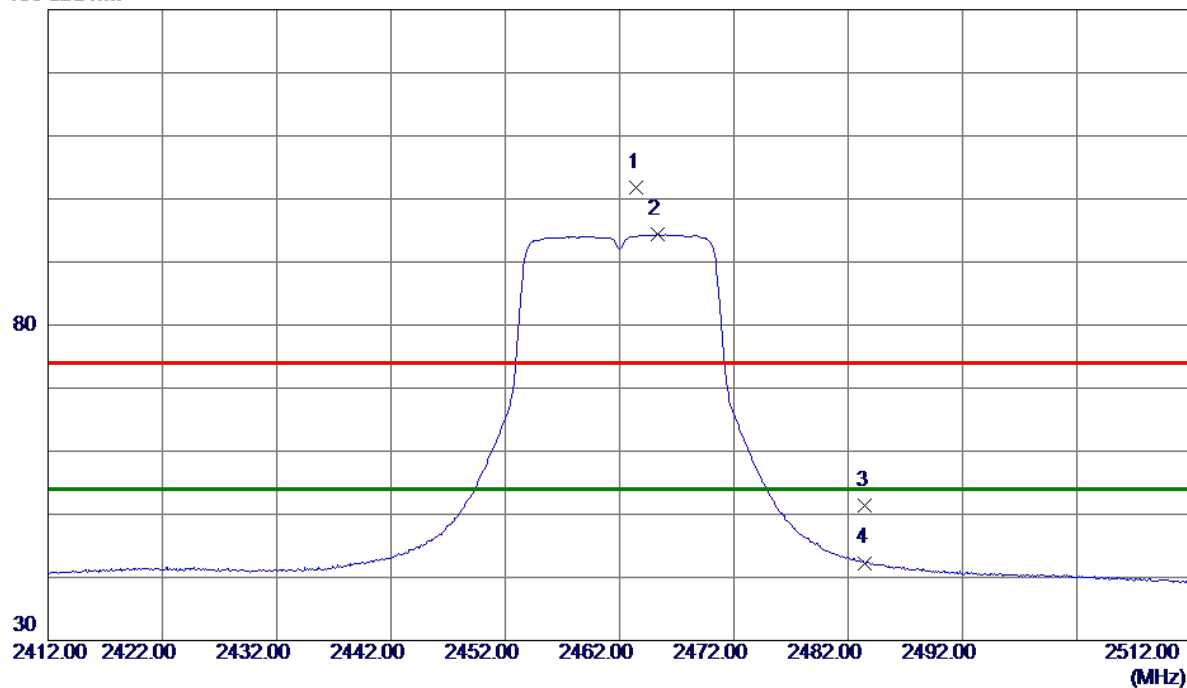


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.1000	27.82	10.19	38.01	54.00	-15.99	AVG	
2	4924.7000	36.75	10.19	46.94	74.00	-27.06	Peak	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Horizontal

130 dBuV/m

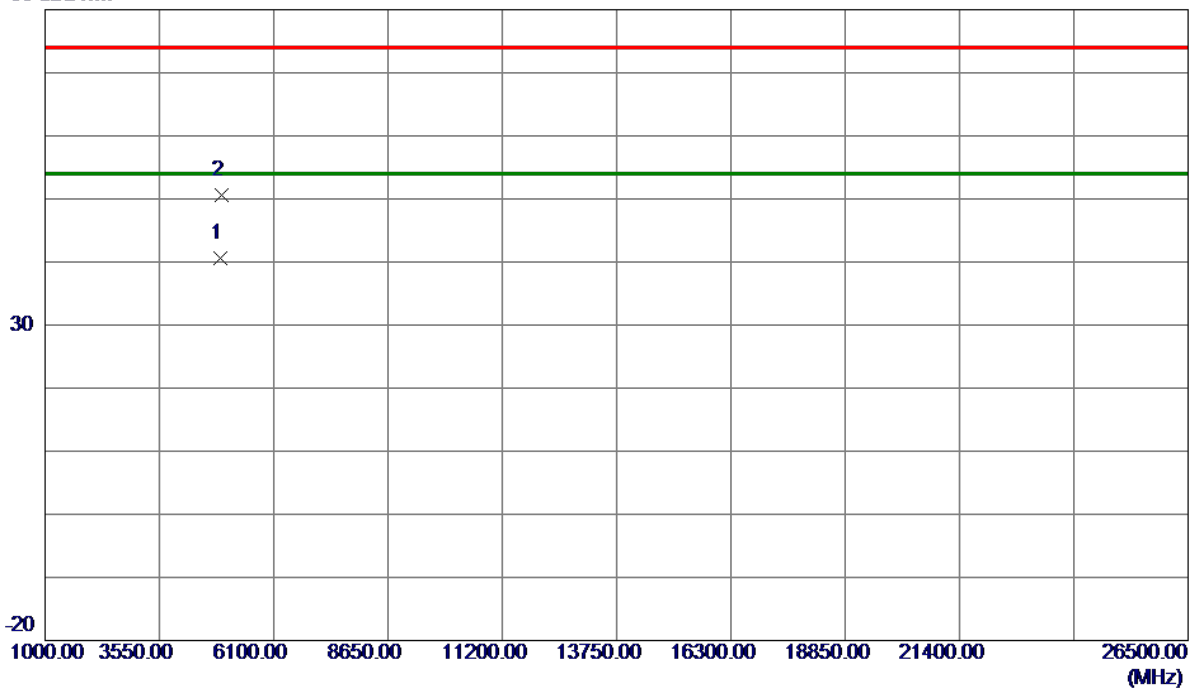


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2463.5000	90.49	11.32	101.81	74.00	27.81	Peak	No Limit
2 *	2465.3000	83.01	11.32	94.33	54.00	40.33	AVG	No Limit
3	2483.5000	40.07	11.32	51.39	74.00	-22.61	Peak	
4	2483.5000	30.98	11.32	42.30	54.00	-11.70	AVG	

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

Horizontal

80 dBuV/m

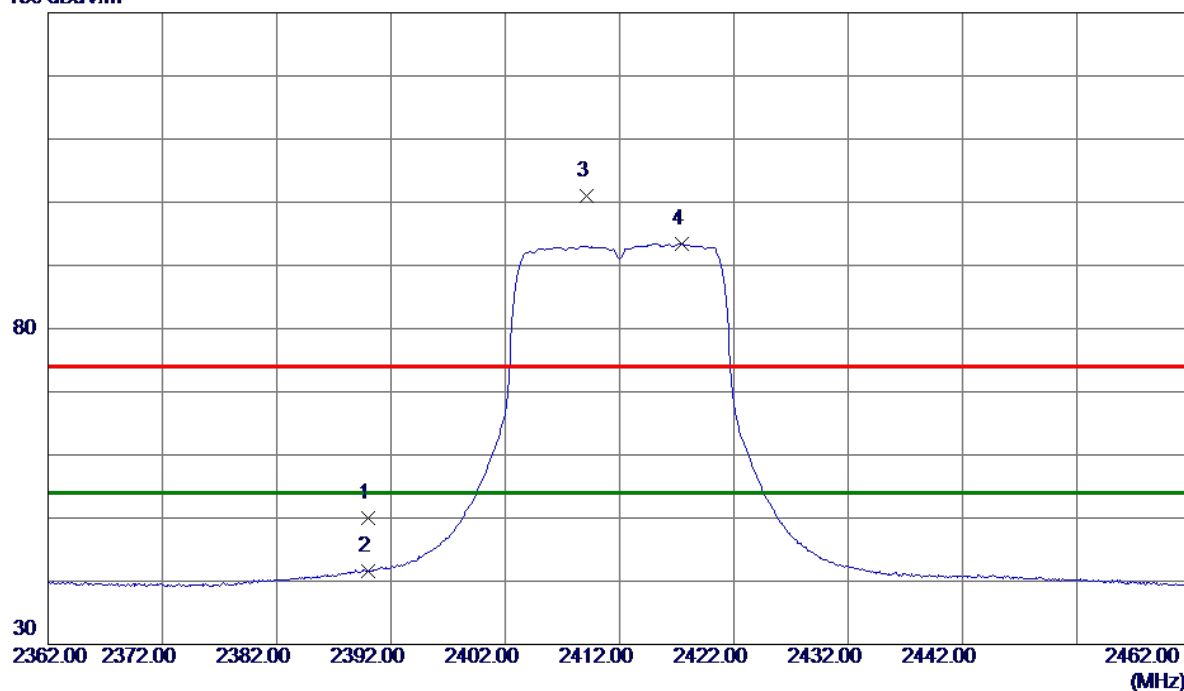


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.0500	30.37	10.18	40.55	54.00	-13.45	AVG	
2	4924.5500	40.37	10.19	50.56	74.00	-23.44	Peak	

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

Vertical

130 dBuV/m

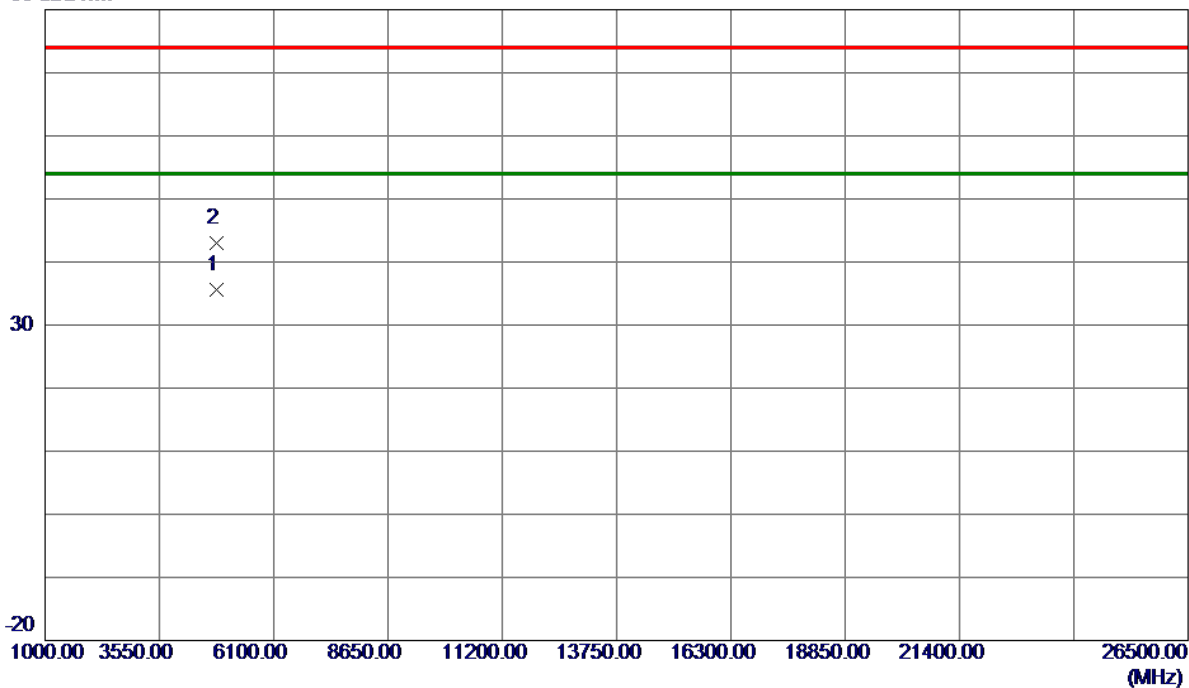


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	38.72	11.30	50.02	74.00	-23.98	Peak	
2	2390.0000	30.36	11.30	41.66	54.00	-12.34	AVG	
3	2409.1000	89.75	11.30	101.05	74.00	27.05	Peak	No Limit
4 *	2417.4000	82.09	11.31	93.40	54.00	39.40	AVG	No Limit

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

Vertical

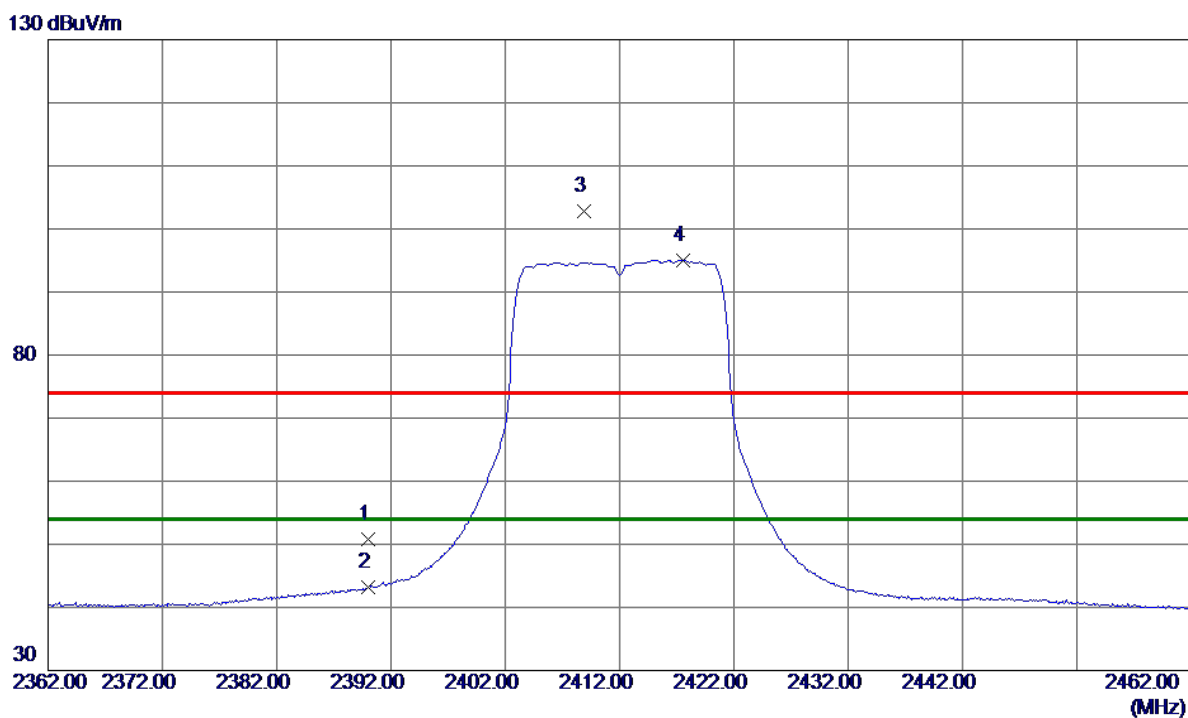
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9000	25.63	9.91	35.54	54.00	-18.46	AVG	
2	4827.6500	33.16	9.92	43.08	74.00	-30.92	Peak	

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

Horizontal

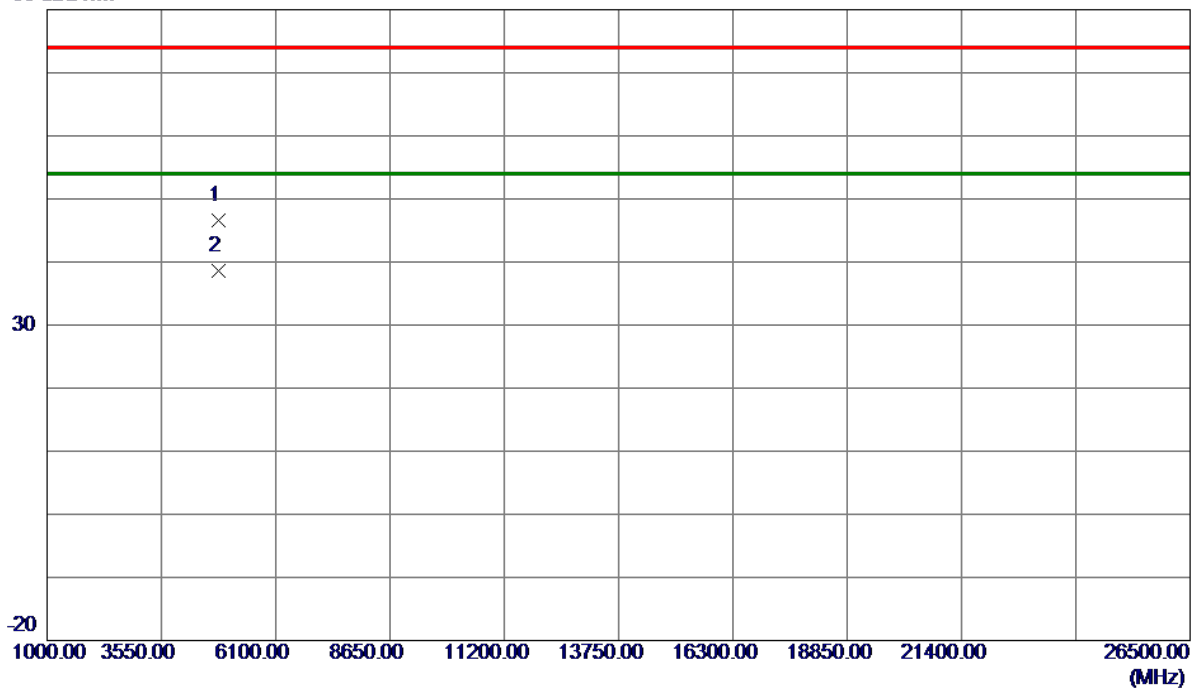


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	39.59	11.30	50.89	74.00	-23.11	Peak	
2	2390.0000	31.91	11.30	43.21	54.00	-10.79	AVG	
3	2408.9000	91.50	11.30	102.80	74.00	28.80	Peak	No Limit
4 *	2417.6000	83.73	11.31	95.04	54.00	41.04	AVG	No Limit

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

Horizontal

80 dBuV/m

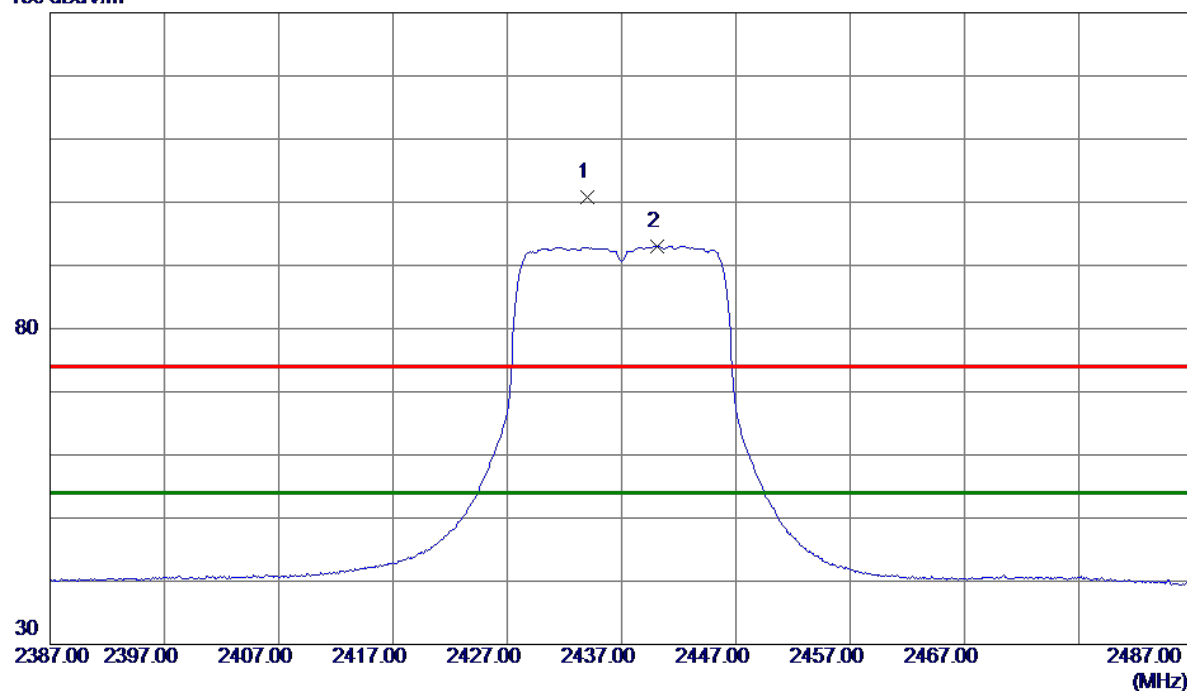


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4822.5000	36.67	9.91	46.58	74.00	-27.42	Peak	
2 *	4823.8500	28.77	9.91	38.68	54.00	-15.32	AVG	

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

Vertical

130 dBuV/m

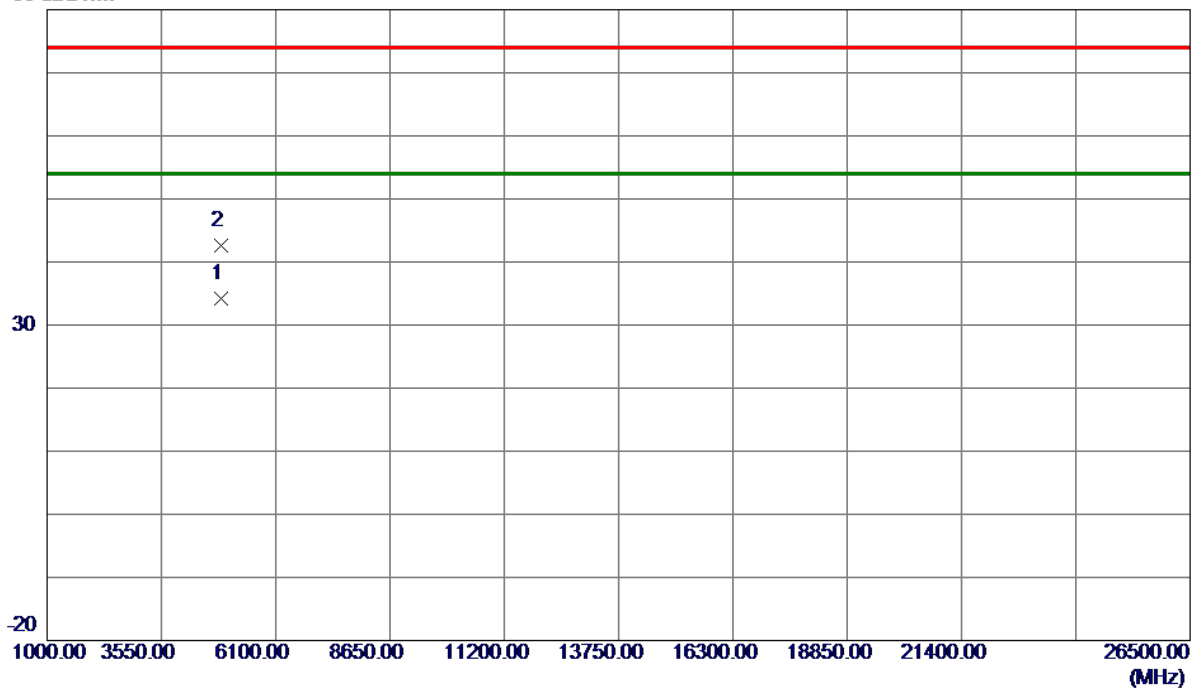


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.0000	89.51	11.31	100.82	74.00	26.82	Peak	No Limit
2 *	2440.1000	81.74	11.31	93.05	54.00	39.05	AVG	No Limit

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

Vertical

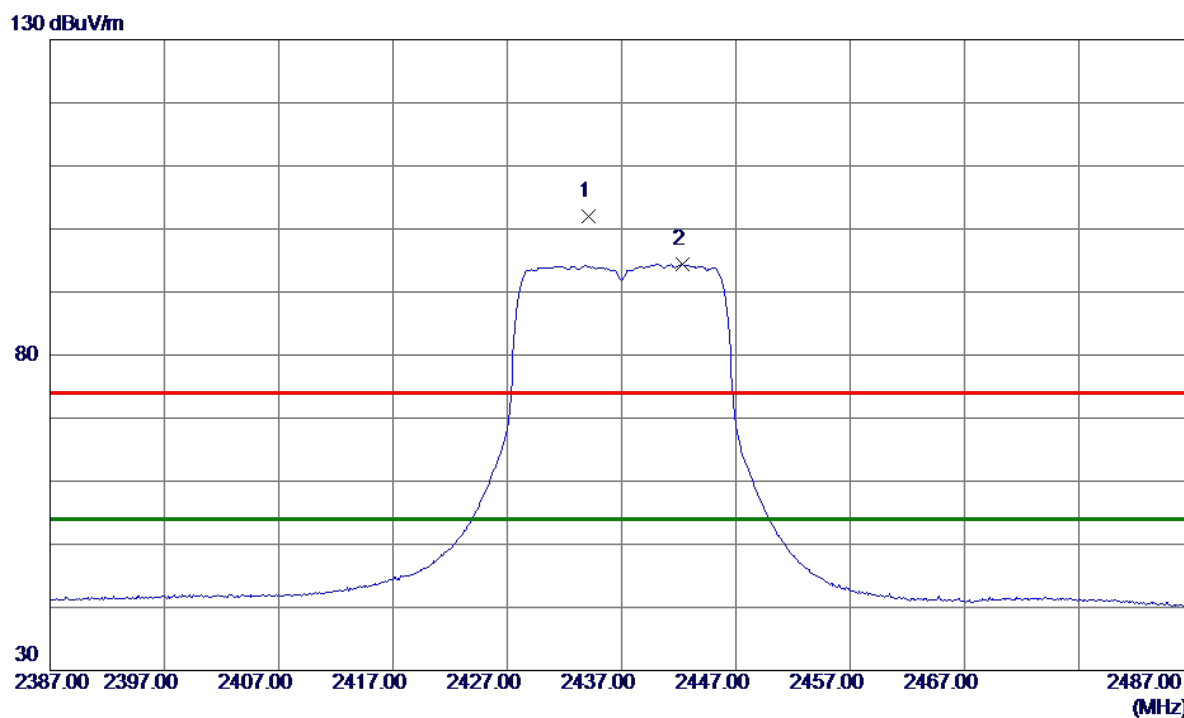
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9000	24.18	10.05	34.23	54.00	-19.77	AVG	
2	4876.9500	32.52	10.06	42.58	74.00	-31.42	Peak	

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

Horizontal

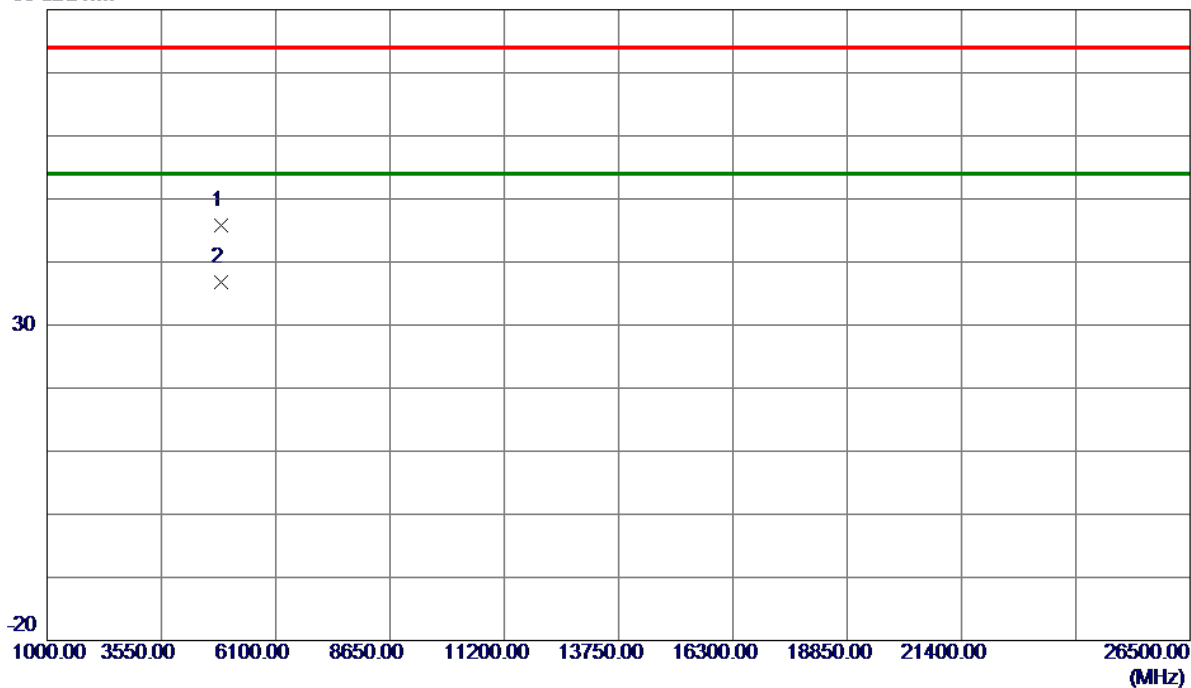


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.1000	90.66	11.31	101.97	74.00	27.97	Peak	No Limit
2 *	2442.3000	83.02	11.31	94.33	54.00	40.33	AVG	No Limit

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

Horizontal

80 dBuV/m

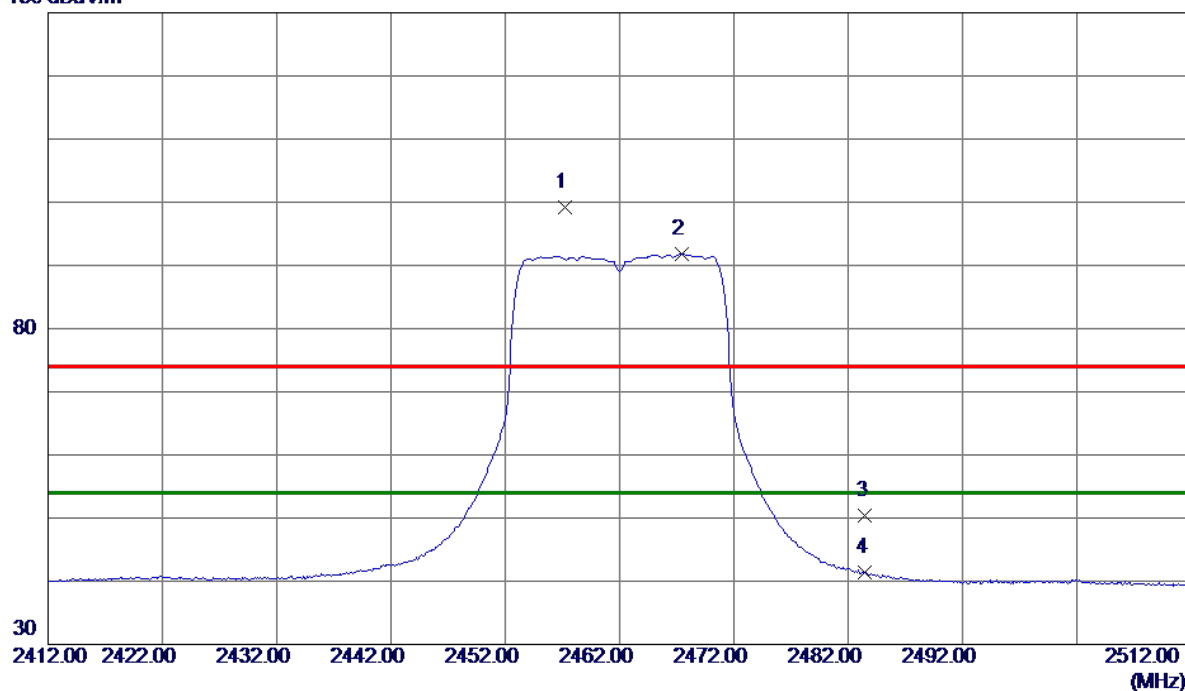


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4871.8000	35.75	10.04	45.79	74.00	-28.21	Peak	
2 *	4873.8500	26.78	10.05	36.83	54.00	-17.17	AVG	

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

Vertical

130 dBuV/m

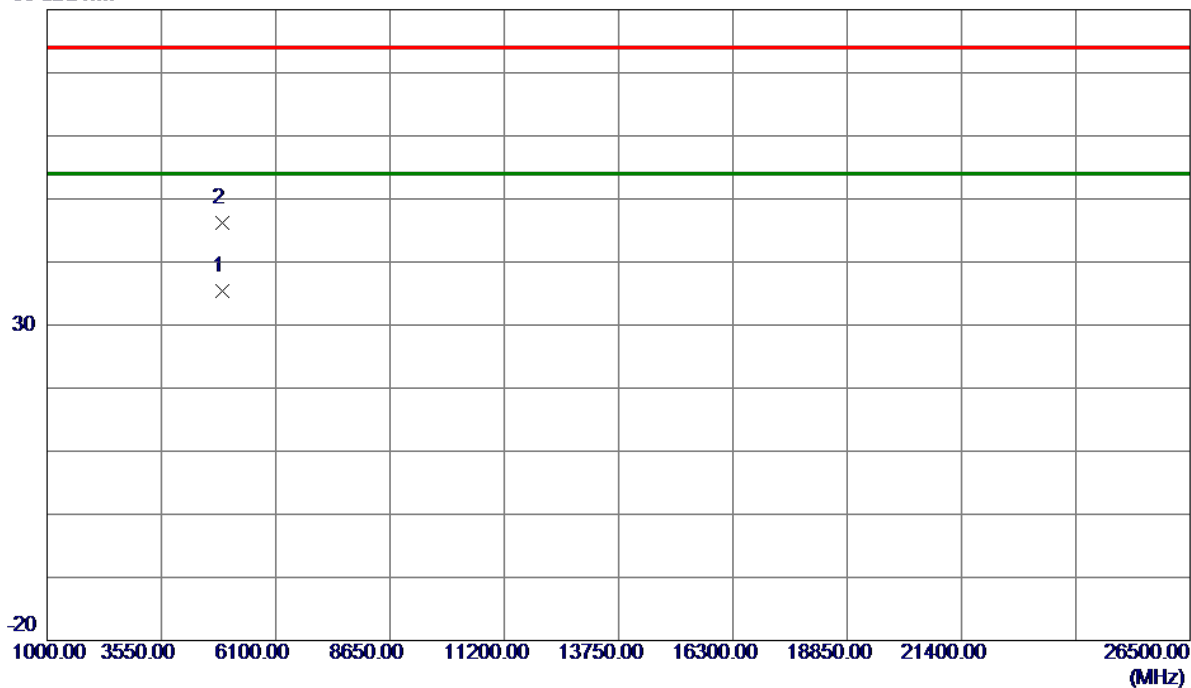


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2457.2000	87.93	11.32	99.25	74.00	25.25	Peak	No Limit
2 *	2467.4000	80.47	11.32	91.79	54.00	37.79	AVG	No Limit
3	2483.5000	39.10	11.32	50.42	74.00	-23.58	Peak	
4	2483.5000	29.99	11.32	41.31	54.00	-12.69	AVG	

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

Vertical

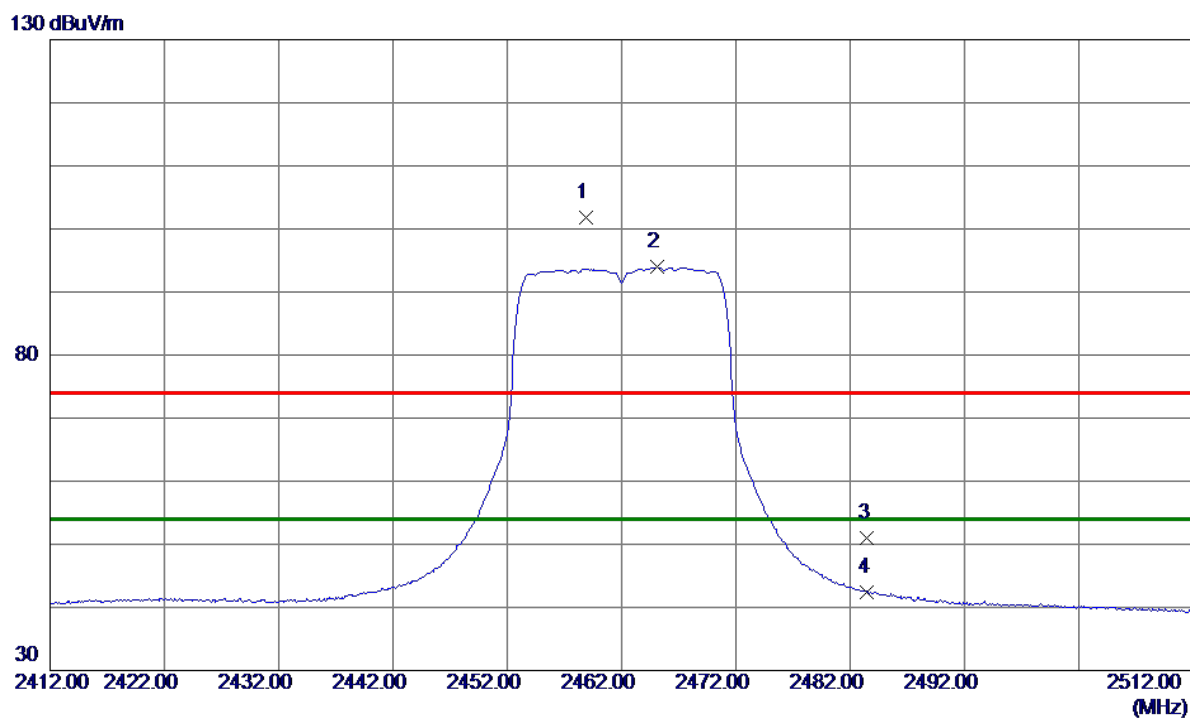
80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923.8500	25.25	10.18	35.43	54.00	-18.57	AVG	
2	4923.9500	35.96	10.18	46.14	74.00	-27.86	Peak	

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

Horizontal

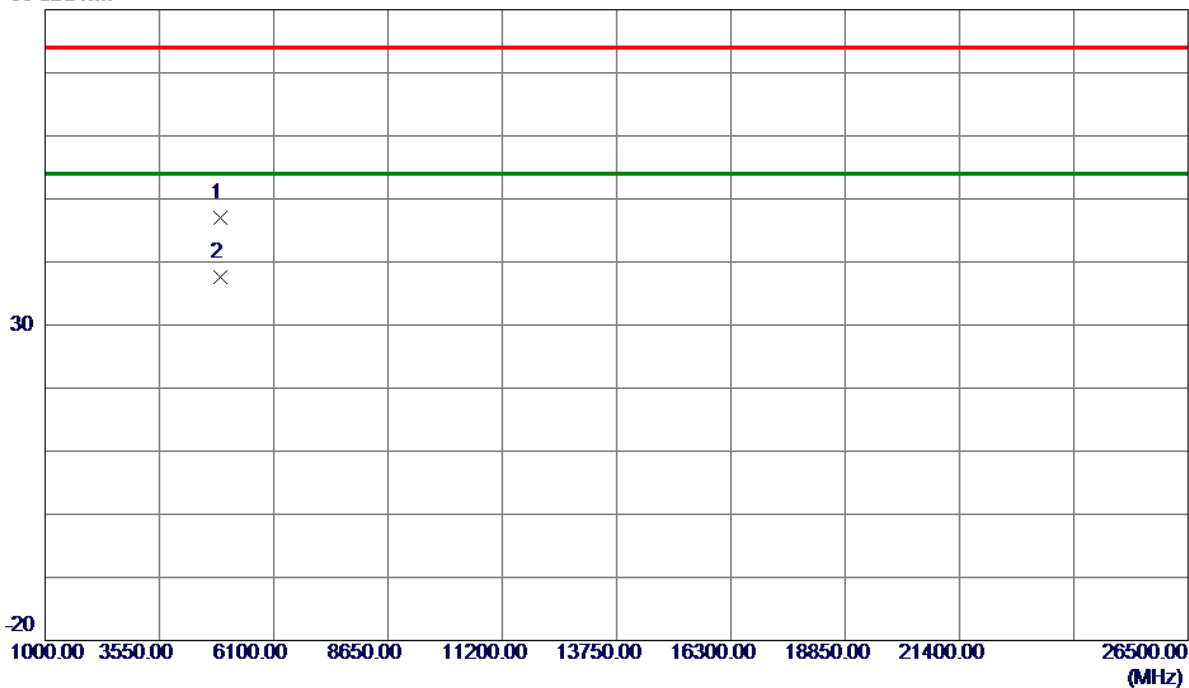


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2458.9000	90.55	11.32	101.87	74.00	27.87	Peak	No Limit
2 *	2465.1000	82.58	11.32	93.90	54.00	39.90	AVG	No Limit
3	2483.5000	39.64	11.32	50.96	74.00	-23.04	Peak	
4	2483.5000	31.10	11.32	42.42	54.00	-11.58	AVG	

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

Horizontal

80 dBuV/m

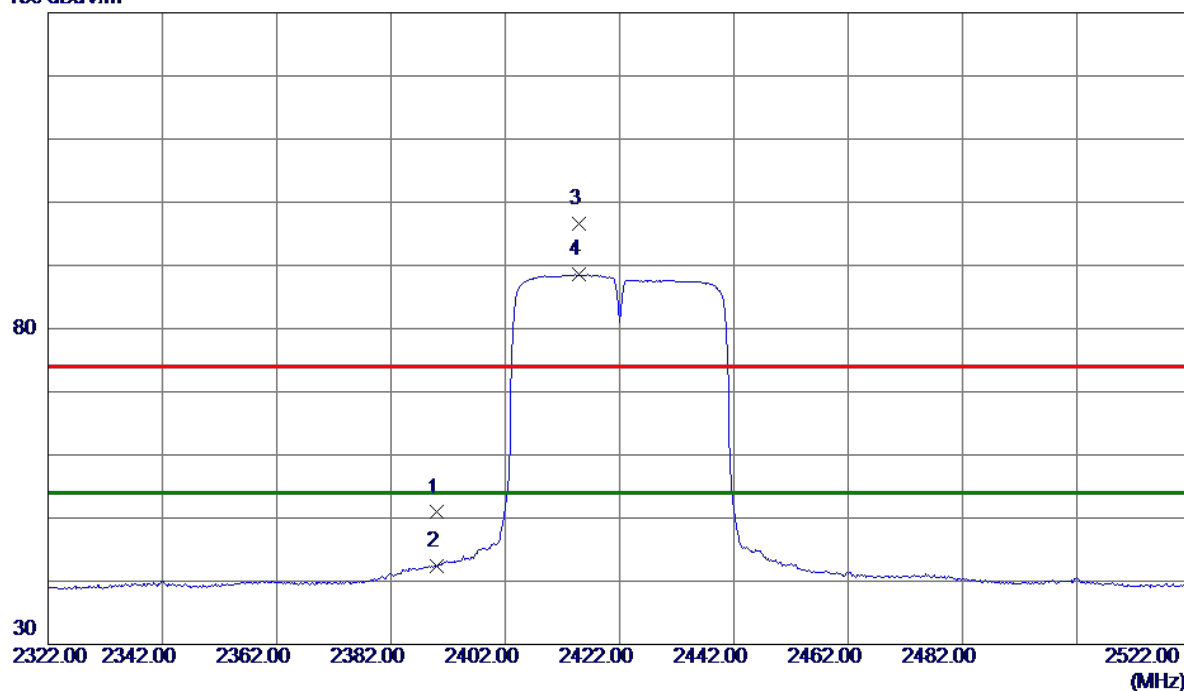


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.3500	36.86	10.18	47.04	74.00	-26.96	Peak	
2 *	4923.9000	27.47	10.18	37.65	54.00	-16.35	AVG	

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

Vertical

130 dBuV/m

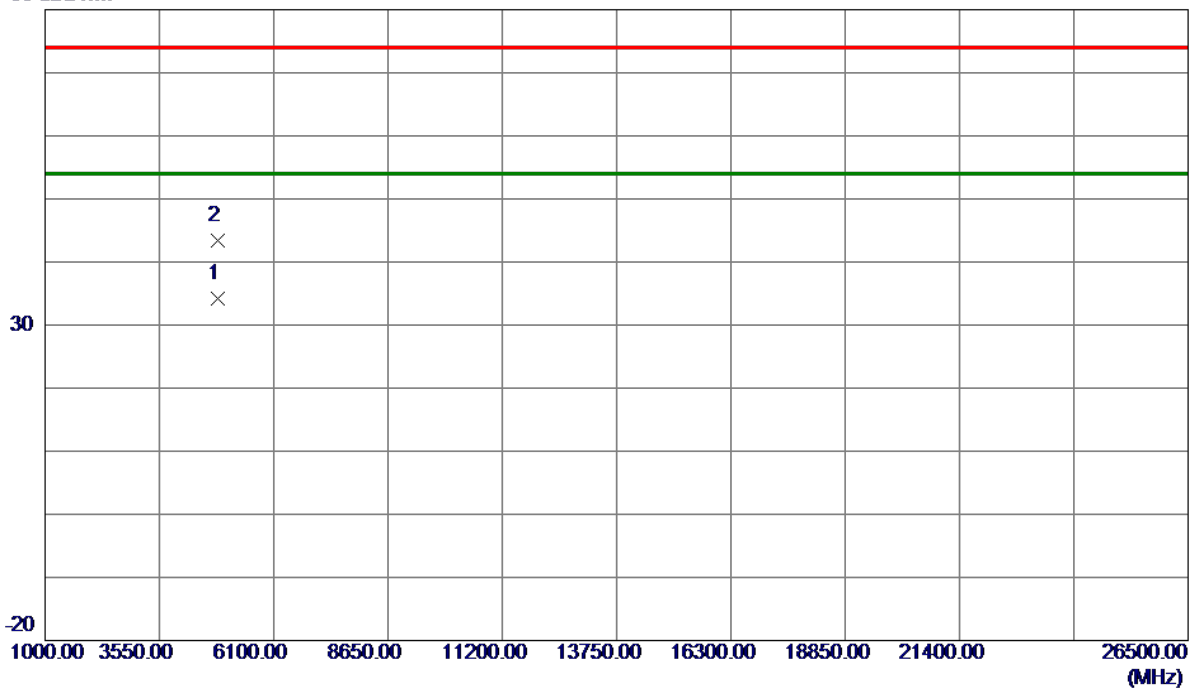


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	39.60	11.30	50.90	74.00	-23.10	Peak	
2	2390.0000	31.03	11.30	42.33	54.00	-11.67	AVG	
3	2414.8000	85.22	11.31	96.53	74.00	22.53	Peak	No Limit
4 *	2414.8000	77.22	11.31	88.53	54.00	34.53	AVG	No Limit

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

Vertical

80 dBuV/m

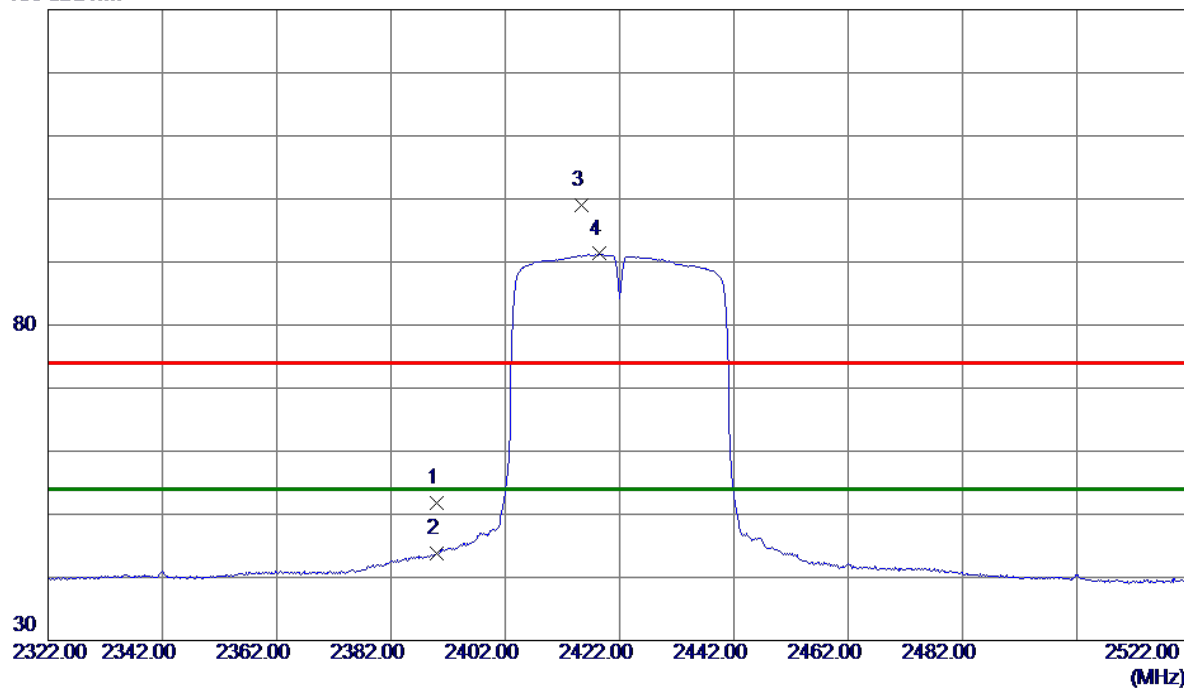


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4843.8500	24.28	9.97	34.25	54.00	-19.75	AVG	
2	4844.3000	33.36	9.97	43.33	74.00	-30.67	Peak	

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

Horizontal

130 dBuV/m

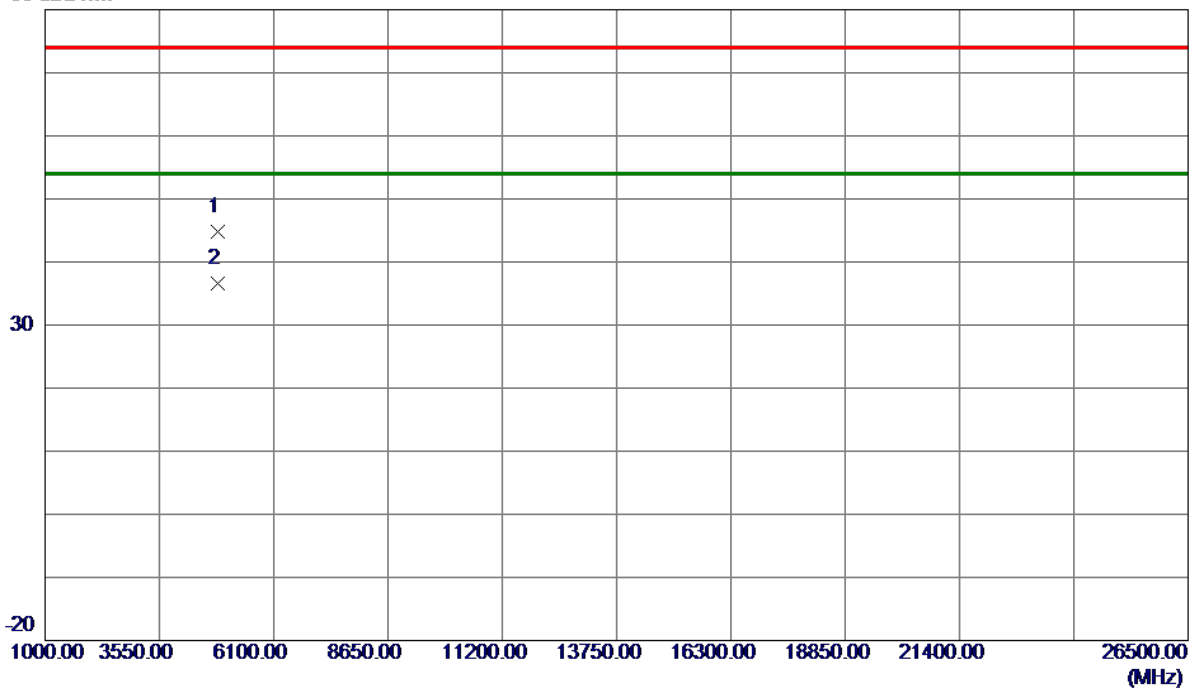


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	40.47	11.30	51.77	74.00	-22.23	Peak	
2	2390.0000	32.41	11.30	43.71	54.00	-10.29	AVG	
3	2415.4000	87.73	11.31	99.04	74.00	25.04	Peak	No Limit
4 *	2418.4000	79.99	11.31	91.30	54.00	37.30	AVG	No Limit

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

Horizontal

80 dBuV/m

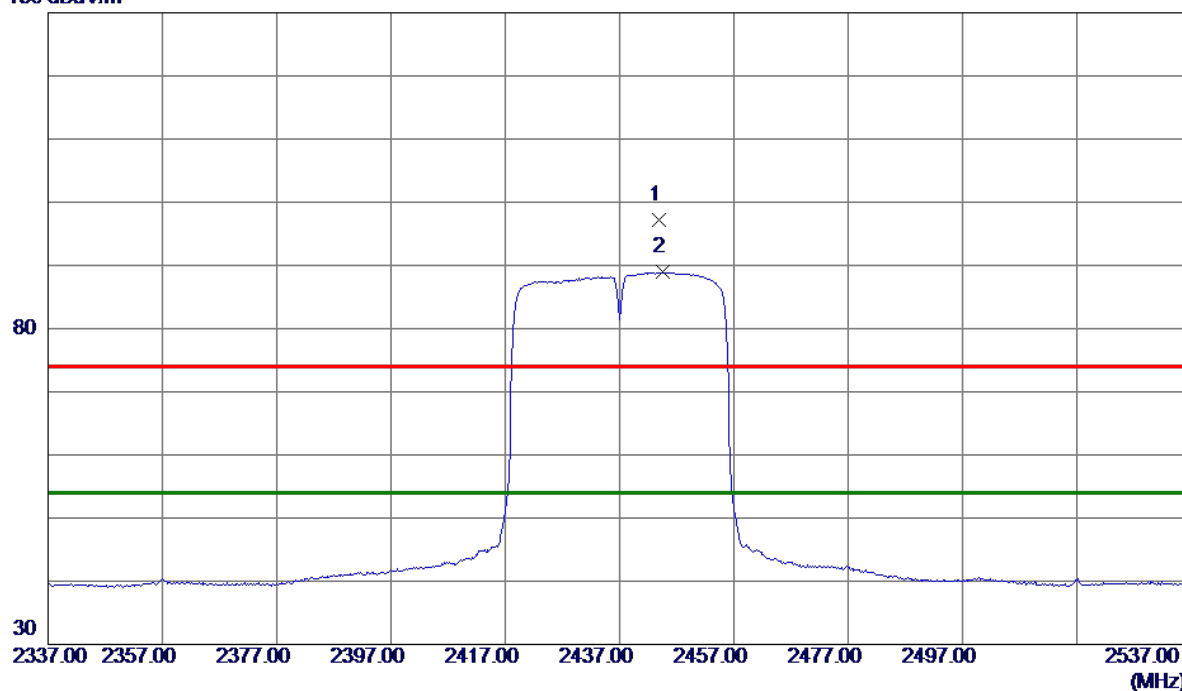


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.7500	34.85	9.97	44.82	74.00	-29.18	Peak	
2 *	4844.0000	26.54	9.97	36.51	54.00	-17.49	AVG	

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

Vertical

130 dBuV/m

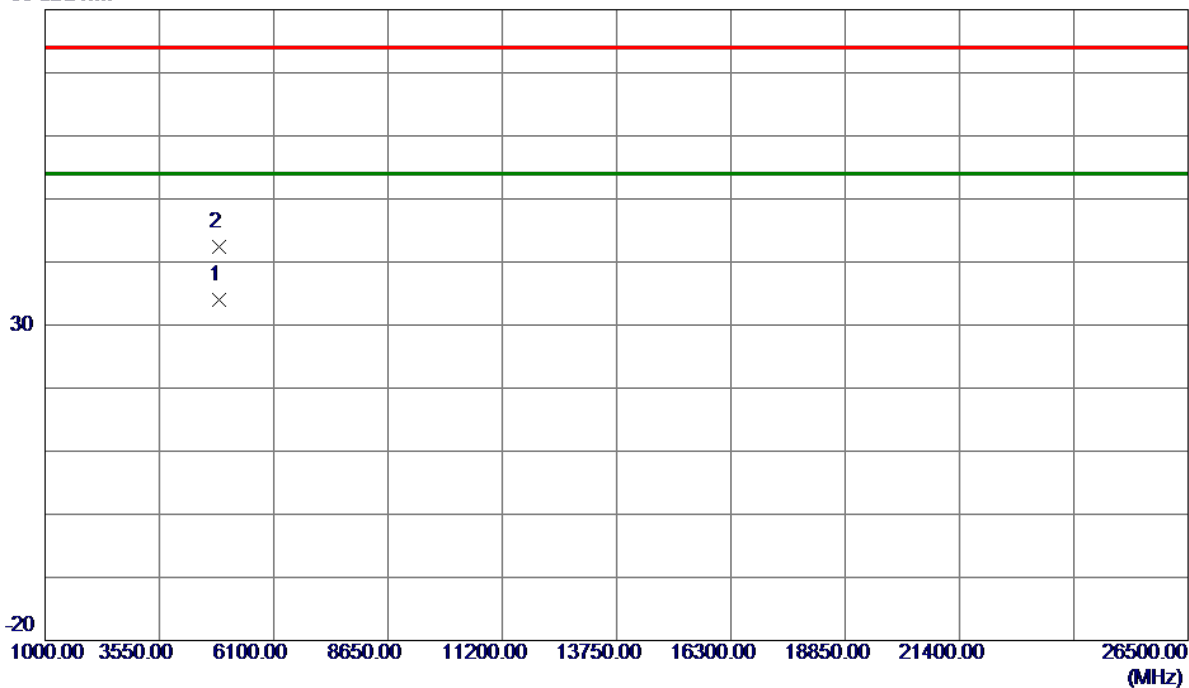


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2443.8000	85.86	11.31	97.17	74.00	23.17	Peak	No Limit
2 *	2444.6000	77.59	11.31	88.90	54.00	34.90	AVG	No Limit

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

Vertical

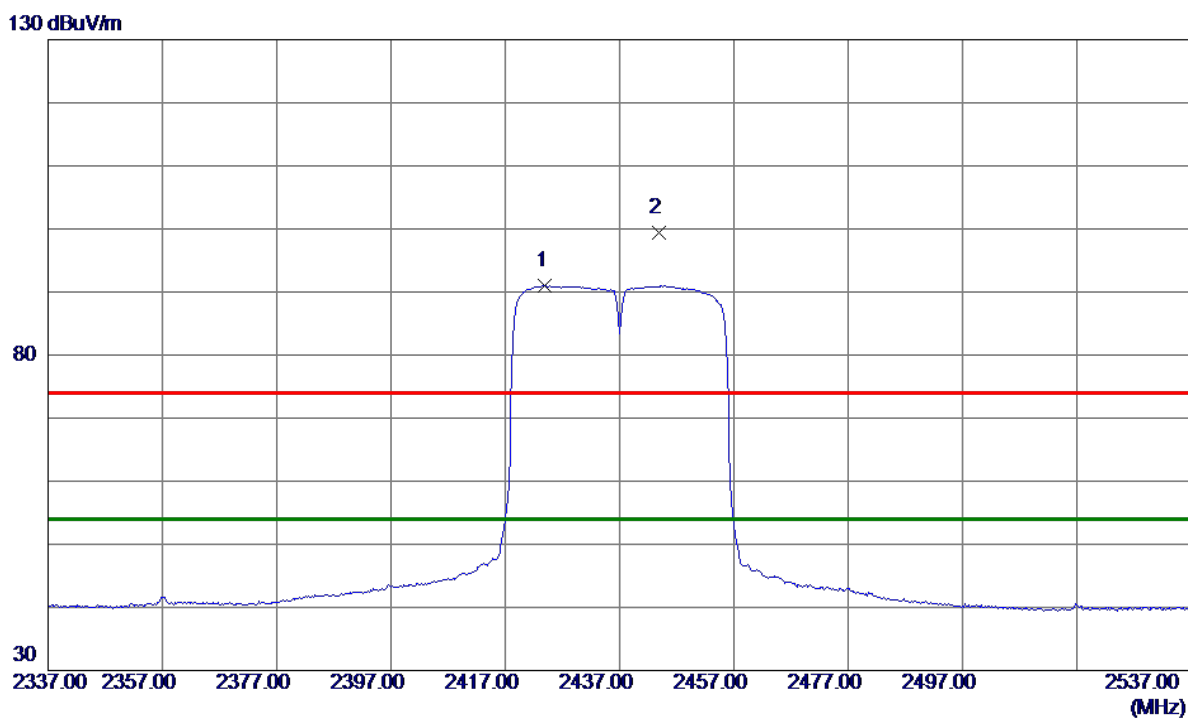
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.8500	24.03	10.05	34.08	54.00	-19.92	AVG	
2	4875.0000	32.26	10.05	42.31	74.00	-31.69	Peak	

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

Horizontal

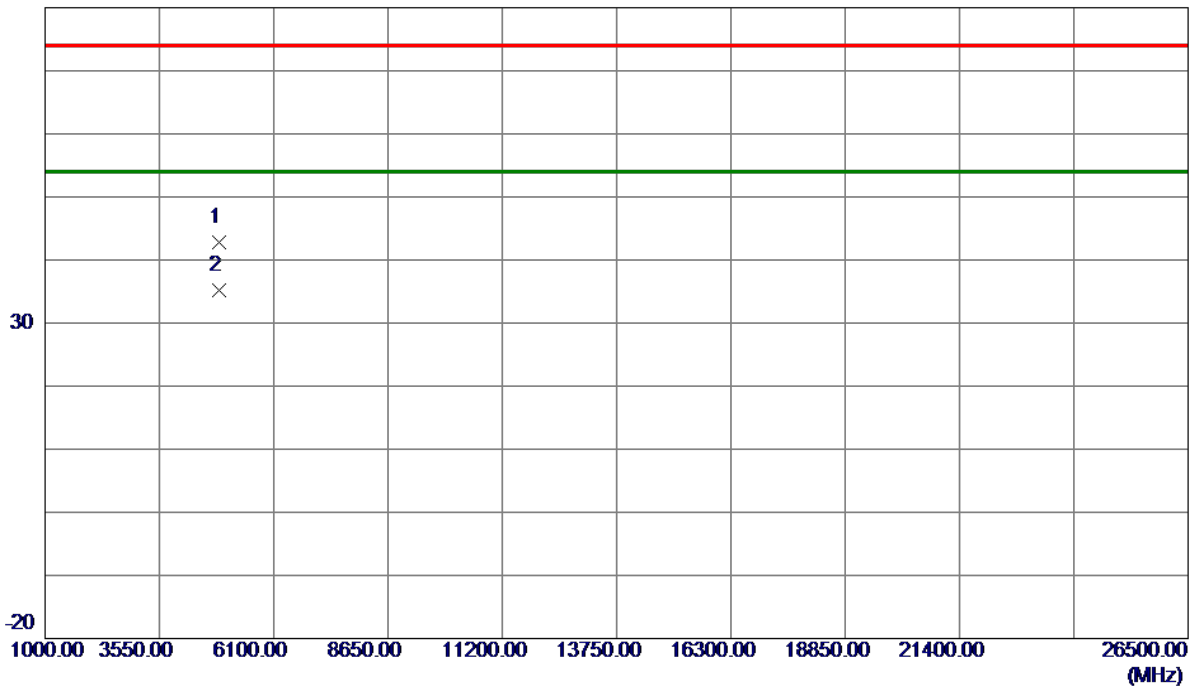


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2424.0000	79.67	11.31	90.98	54.00	36.98	AVG	No Limit
2	2443.8000	88.00	11.31	99.31	74.00	25.31	Peak	No Limit

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

Horizontal

80 dBuV/m

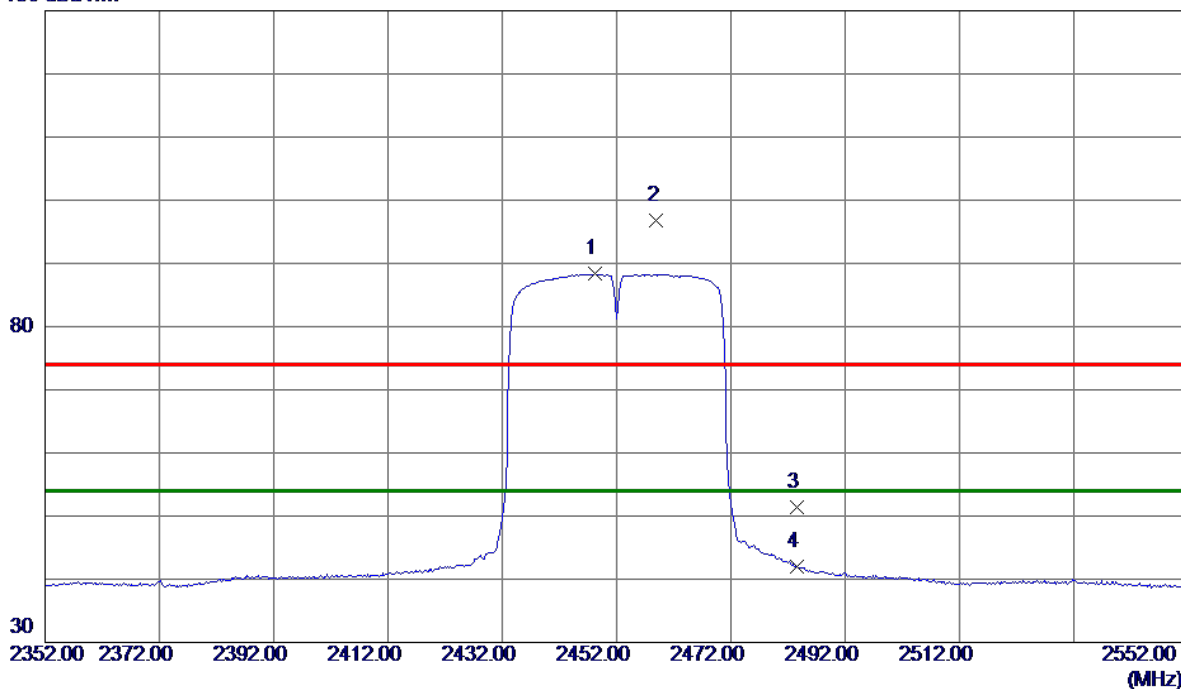


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4870.5000	32.73	10.04	42.77	74.00	-31.23	Peak	
2 *	4874.0500	25.13	10.05	35.18	54.00	-18.82	AVG	

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

Vertical

130 dBuV/m

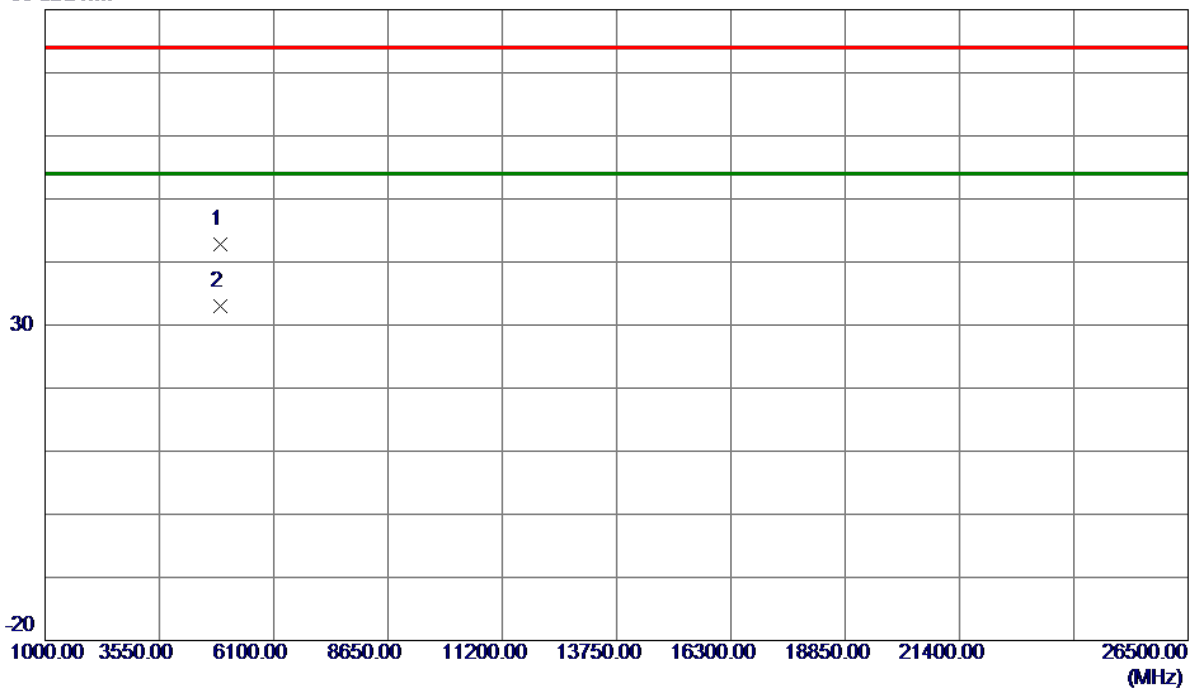


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2448.2000	77.04	11.31	88.35	54.00	34.35	AVG	No Limit
2	2459.0000	85.50	11.32	96.82	74.00	22.82	Peak	No Limit
3	2483.5000	40.06	11.32	51.38	74.00	-22.62	Peak	
4	2483.5000	30.69	11.32	42.01	54.00	-11.99	AVG	

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

Vertical

80 dBuV/m

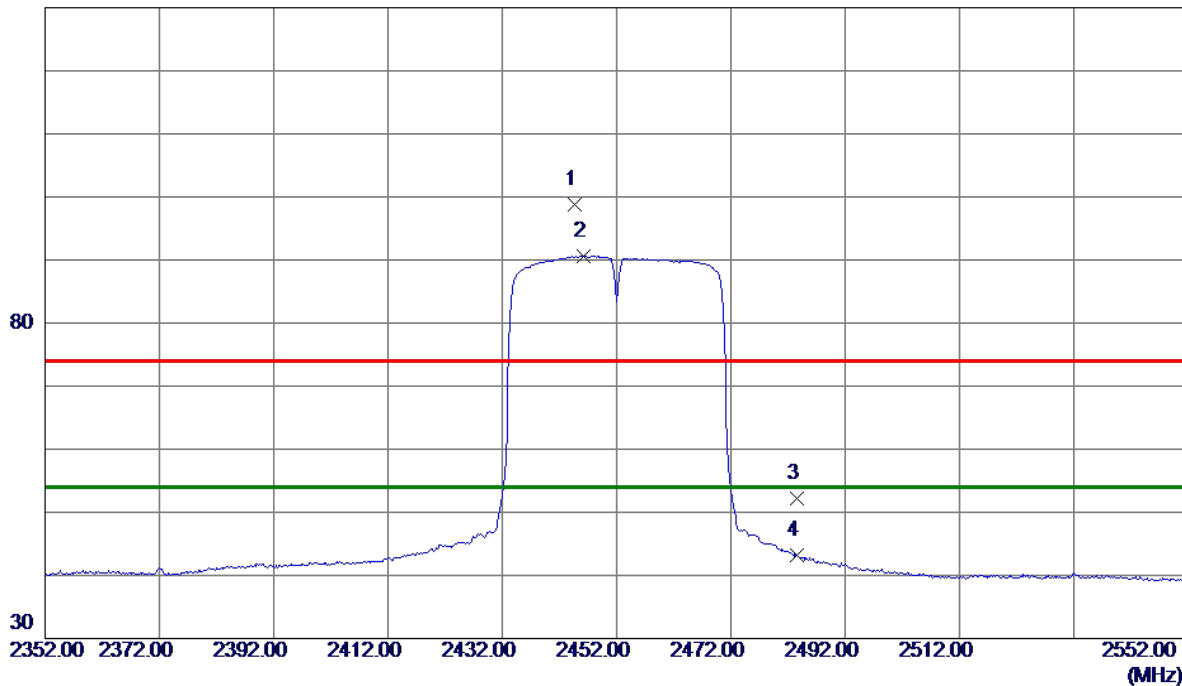


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4901.4500	32.72	10.12	42.84	74.00	-31.16	Peak	
2 *	4904.0000	22.89	10.13	33.02	54.00	-20.98	AVG	

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

Horizontal

130 dBuV/m

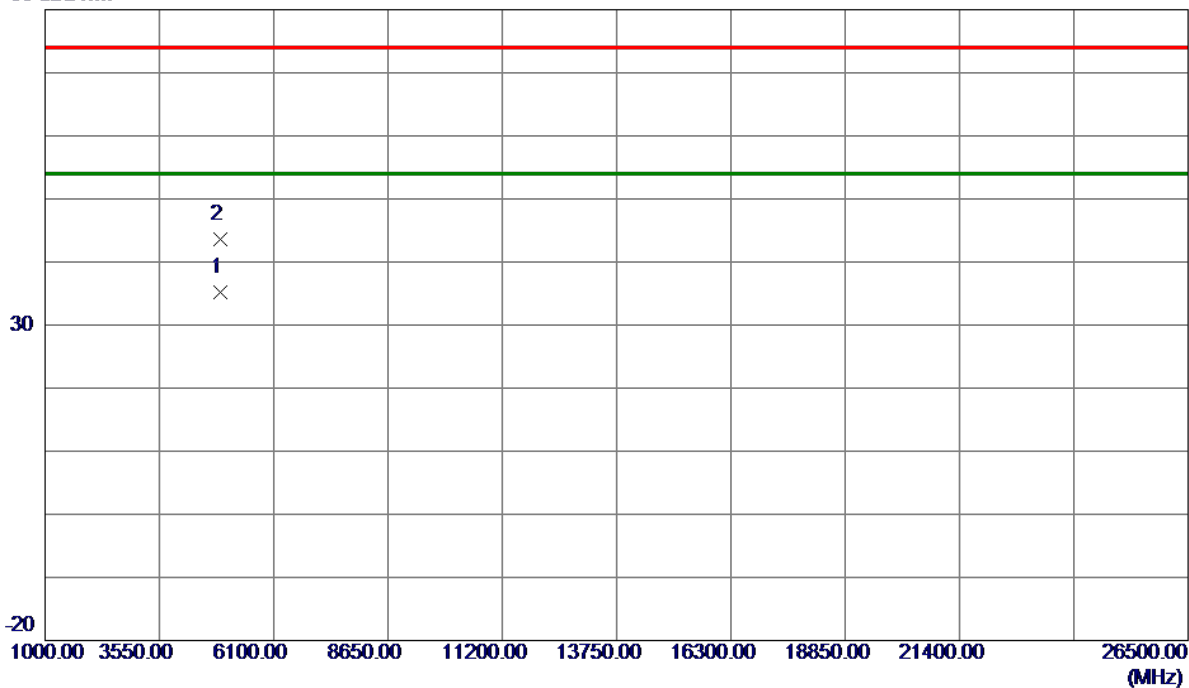


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2444.6000	87.58	11.31	98.89	74.00	24.89	Peak	No Limit
2 *	2446.2000	79.31	11.31	90.62	54.00	36.62	AVG	No Limit
3	2483.5000	40.90	11.32	52.22	74.00	-21.78	Peak	
4	2483.5000	31.80	11.32	43.12	54.00	-10.88	AVG	

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

Horizontal

80 dBuV/m



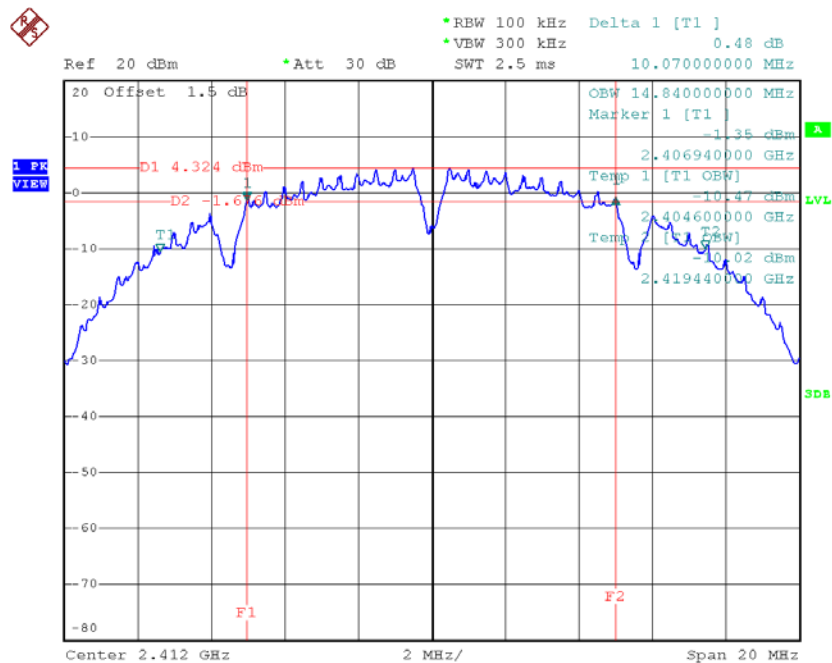
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4903.9000	25.06	10.13	35.19	54.00	-18.81	AVG	
2	4904.6500	33.47	10.13	43.60	74.00	-30.40	Peak	

APPENDIX D - BANDWIDTH

Test Mode: TX B Mode_CH01/06/11

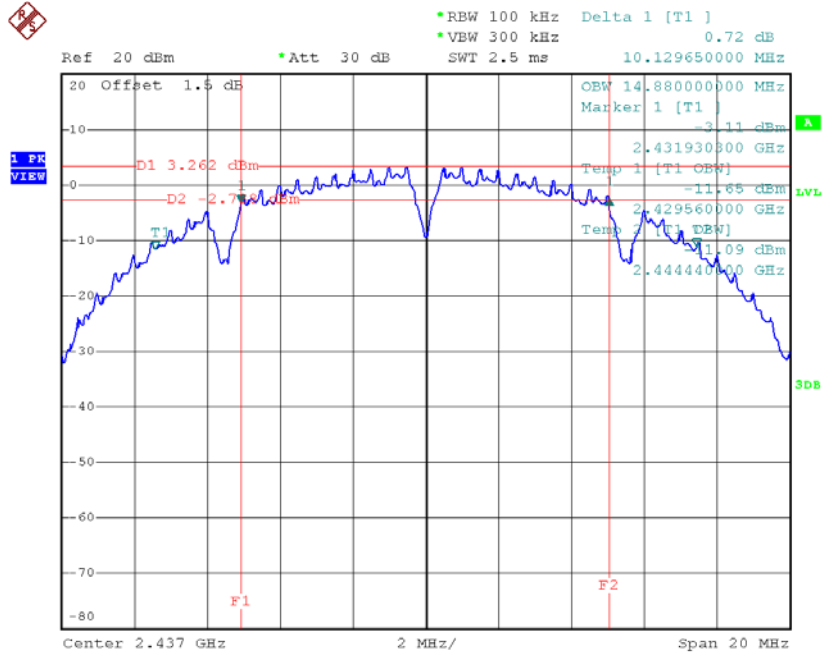
Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.07	14.84	500	Complies
2437	10.13	14.88	500	Complies
2462	10.10	14.84	500	Complies

TX CH01



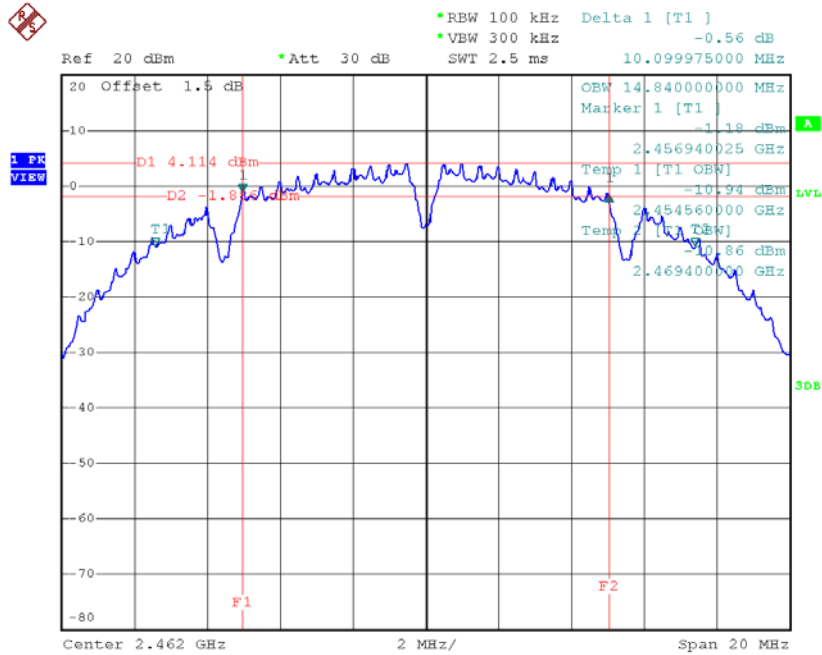
Date: 13.AUG.2018 10:03:46

TX CH06



Date: 13.AUG.2018 10:06:12

TX CH11

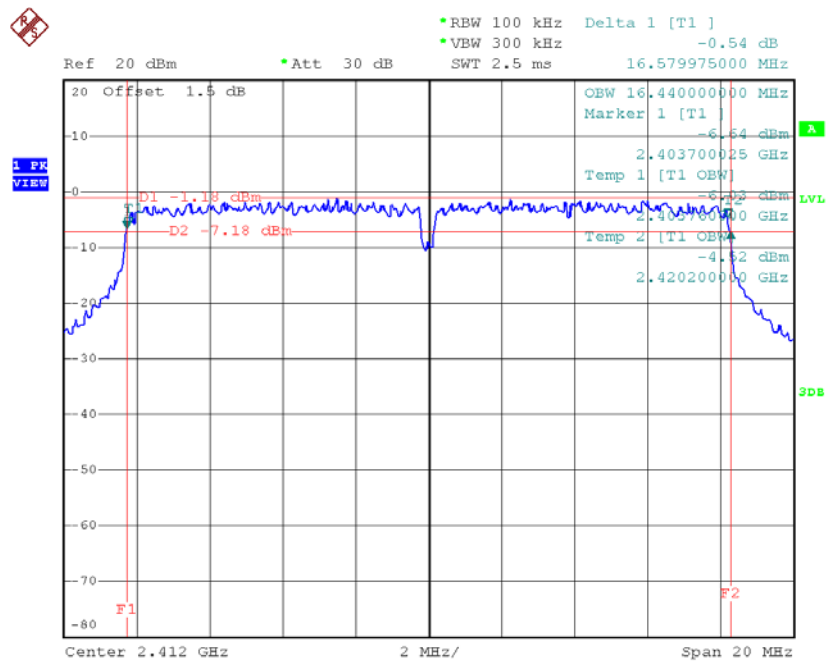


Date: 13.AUG.2018 10:09:28

Test Mode: TX G Mode_CH01/06/11

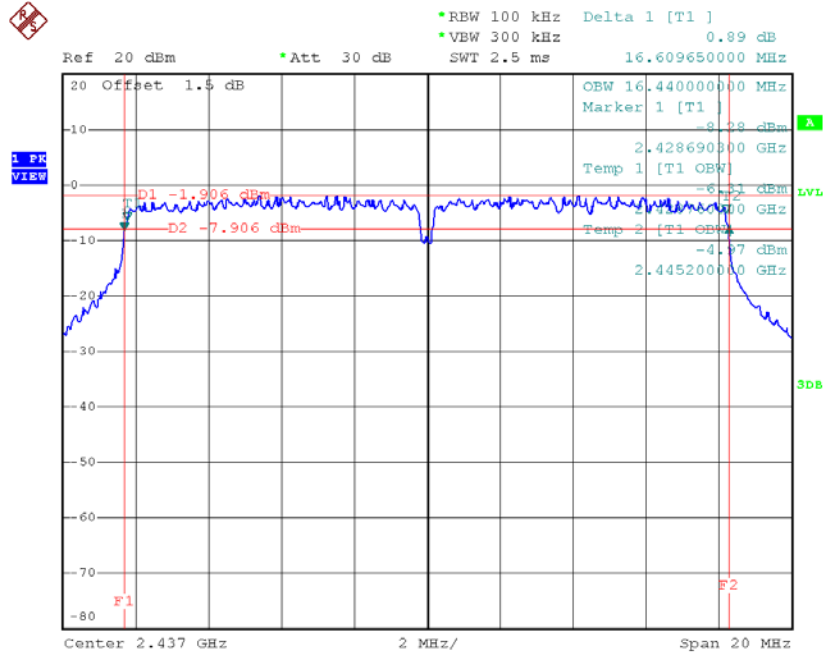
Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.58	16.44	500	Complies
2437	16.61	16.44	500	Complies
2462	16.58	16.44	500	Complies

TX CH01



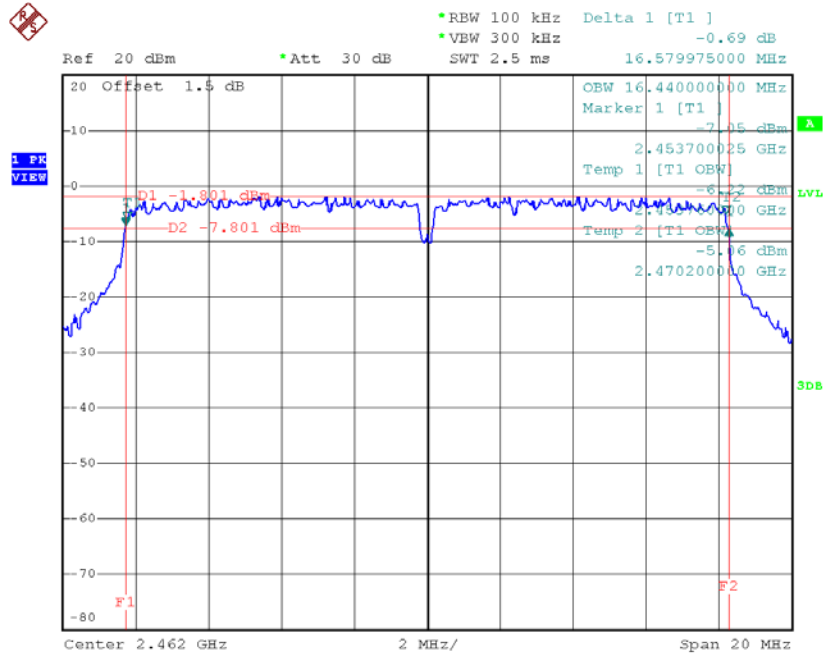
Date: 13.AUG.2018 10:12:06

TX CH06



Date: 13.AUG.2018 10:13:58

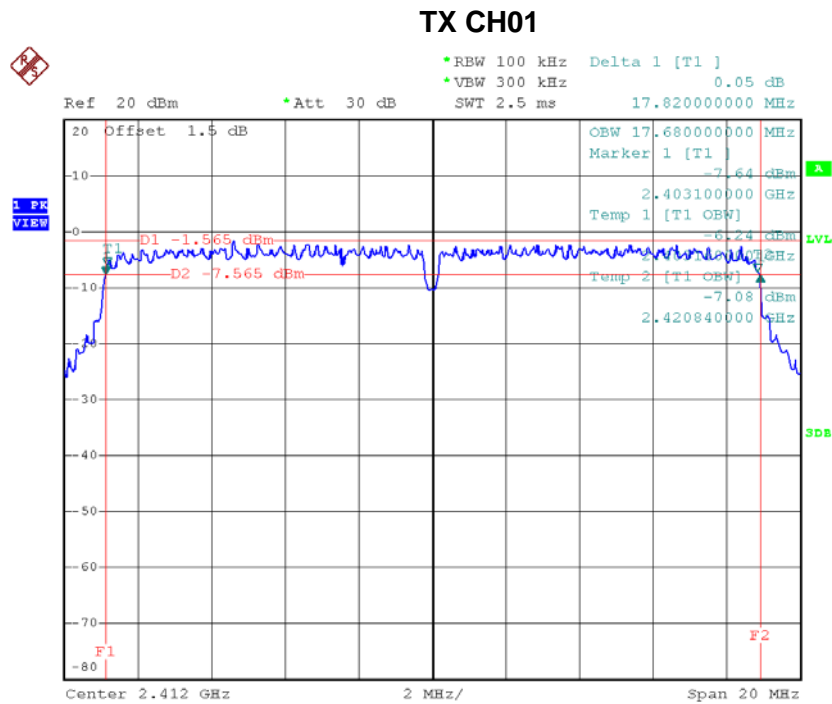
TX CH11



Date: 13.AUG.2018 10:17:34

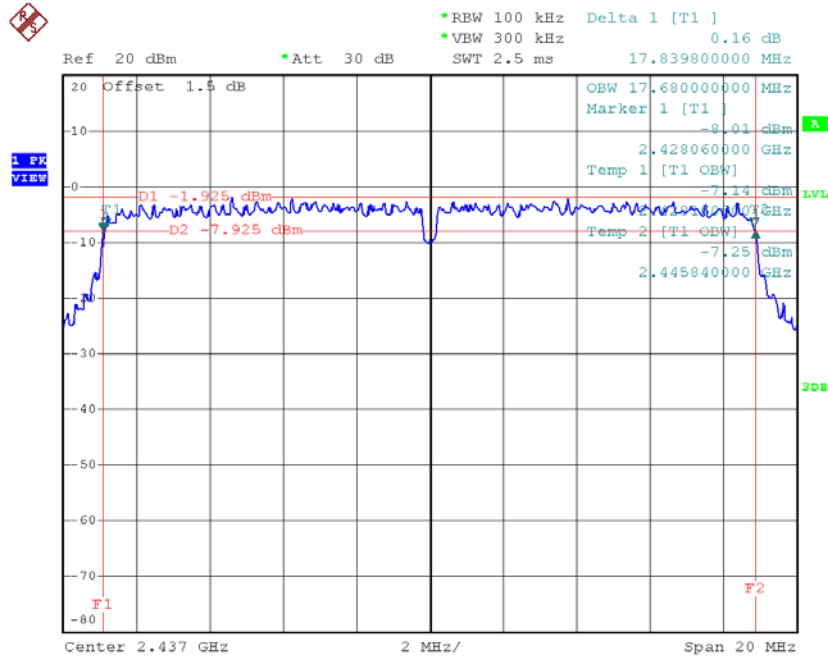
Test Mode: TX N-20MHz Mode_CH01/06/11

Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.82	17.68	500	Complies
2437	17.84	17.68	500	Complies
2462	17.76	17.64	500	Complies



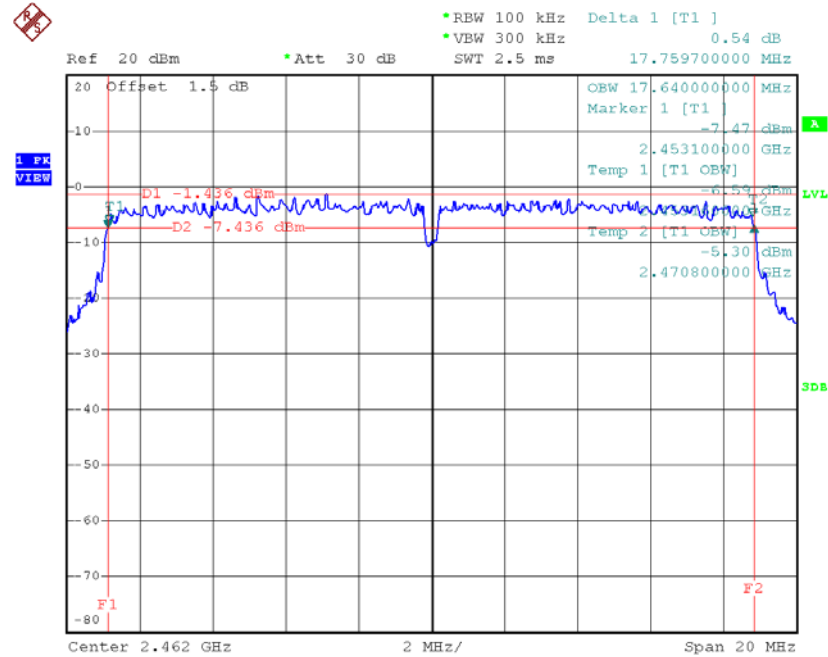
Date: 13.AUG.2018 10:19:50

TX CH06



Date: 13.AUG.2018 10:22:31

TX CH11

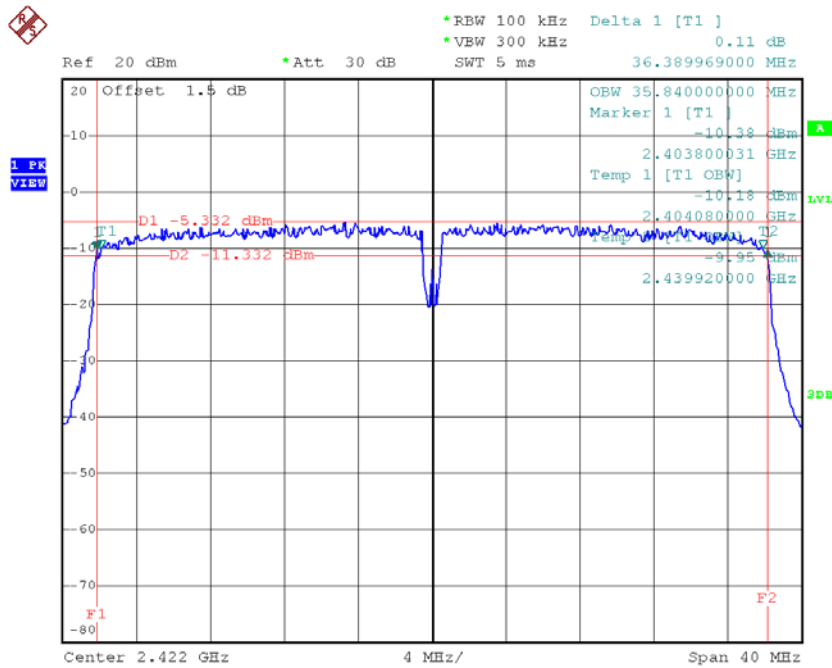


Date: 13.AUG.2018 10:24:28

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

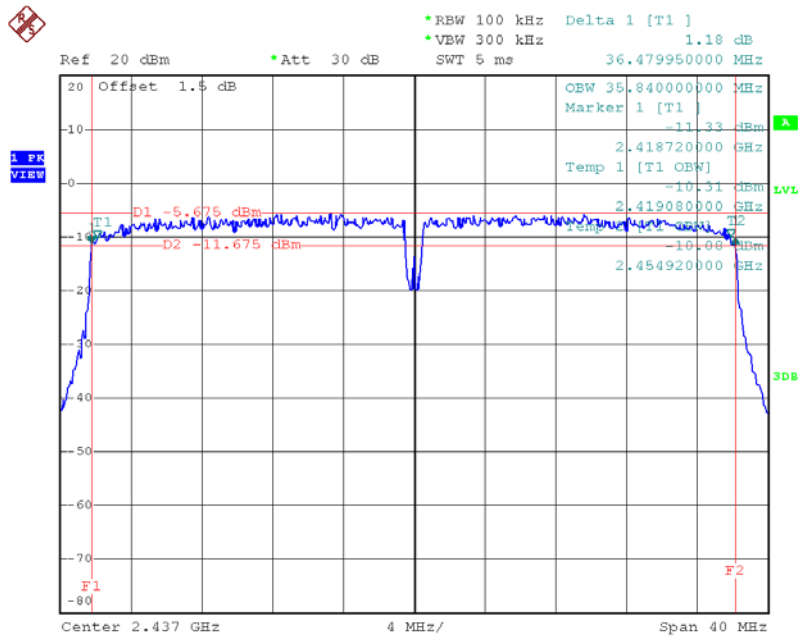
Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.39	35.84	500	Complies
2437	36.48	35.84	500	Complies
2452	36.52	35.84	500	Complies

TX CH03



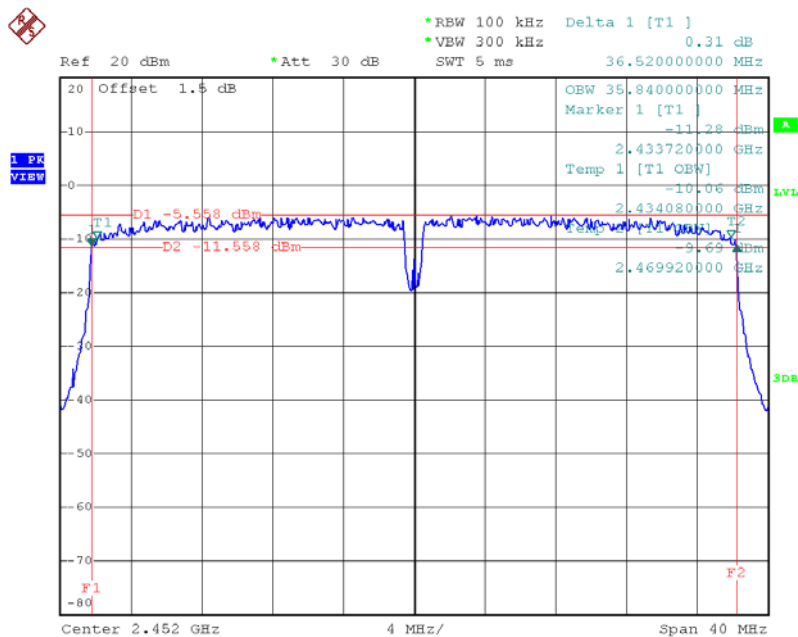
Date: 13.AUG.2018 10:27:52

TX CH06



Date: 13.AUG.2018 10:29:45

TX CH09



Date: 13.AUG.2018 10:31:30

APPENDIX E - MAXIMUM OUTPUT POWER

Test Mode: TX B Mode_CH01/06/11					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.45	0.07	30.00	1.00	Complies
2437	18.44	0.07	30.00	1.00	Complies
2462	18.48	0.07	30.00	1.00	Complies

Test Mode: TX G Mode_CH01/06/11					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.57	0.18	30.00	1.00	Complies
2437	22.31	0.17	30.00	1.00	Complies
2462	22.54	0.18	30.00	1.00	Complies

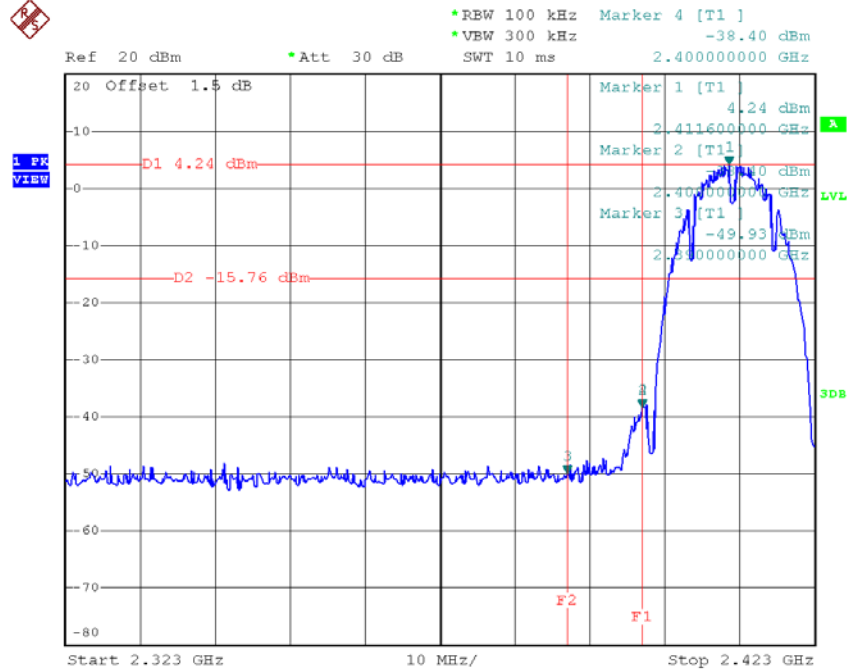
Test Mode: TX N20 Mode_CH01/06/11					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.02	0.16	30.00	1.00	Complies
2437	21.83	0.15	30.00	1.00	Complies
2462	22.08	0.16	30.00	1.00	Complies

Test Mode: TX N40 Mode_CH03/06/09					
Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	21.17	0.13	30.00	1.00	Complies
2437	21.24	0.13	30.00	1.00	Complies
2452	21.49	0.14	30.00	1.00	Complies

APPENDIX F - ANTENNA CONDUCTED SPURIOUS EMISSION

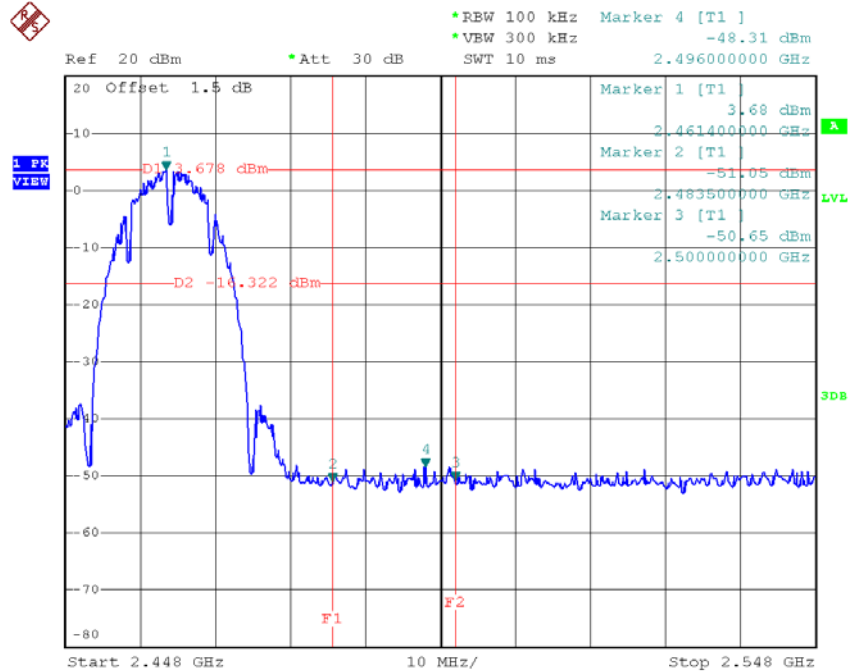
Test Mode: TX B Mode

TX B mode CH01



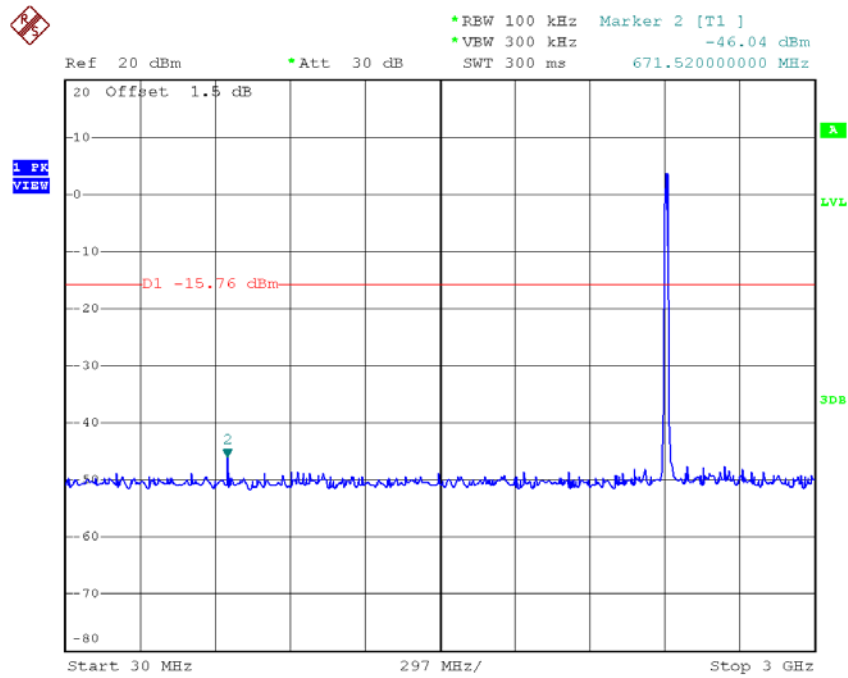
Date: 13.AUG.2018 10:03:54

TX B mode CH11

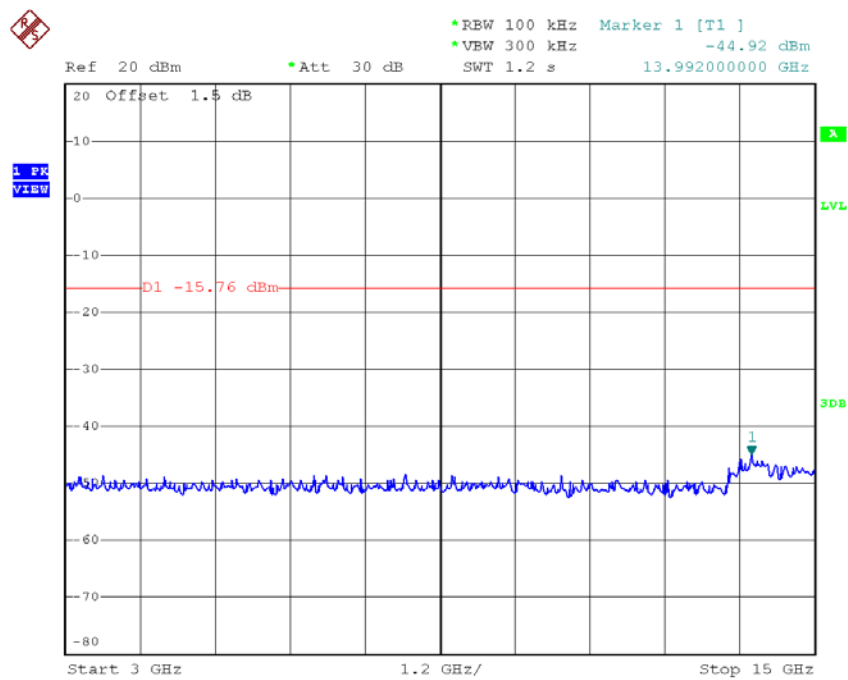


Date: 13.AUG.2018 10:09:37

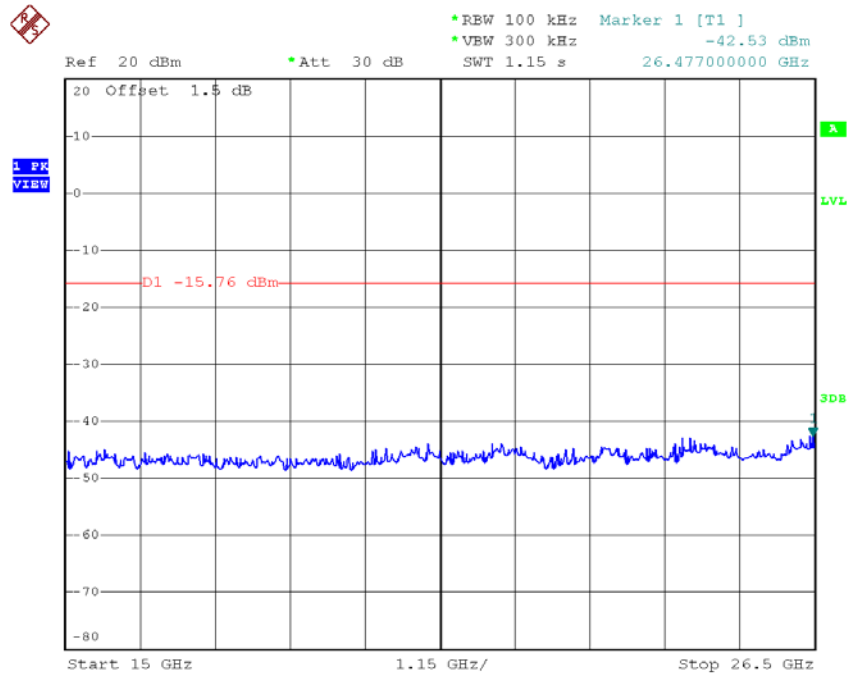
TX B mode CH01 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:04:08

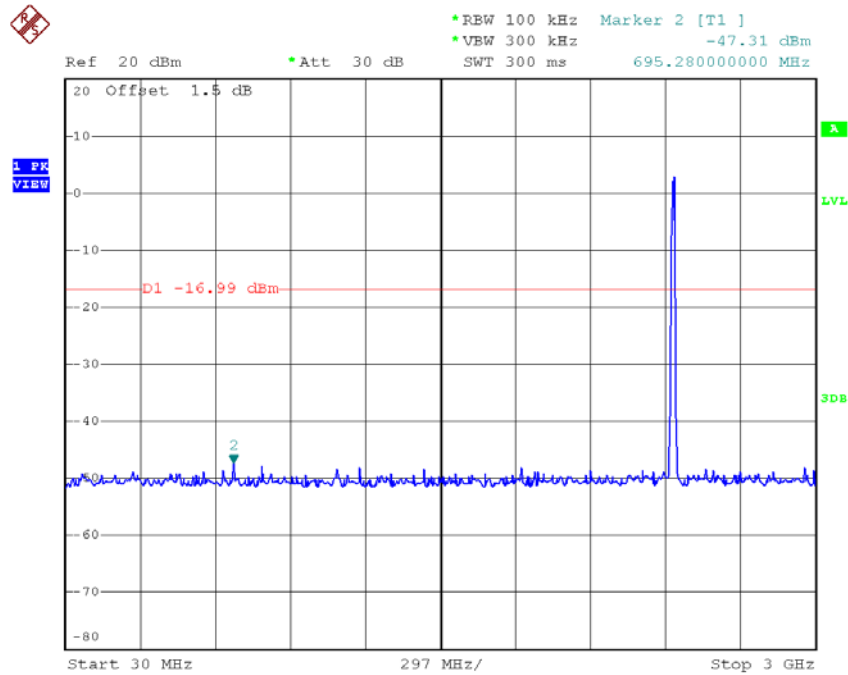


Date: 13.AUG.2018 10:04:17

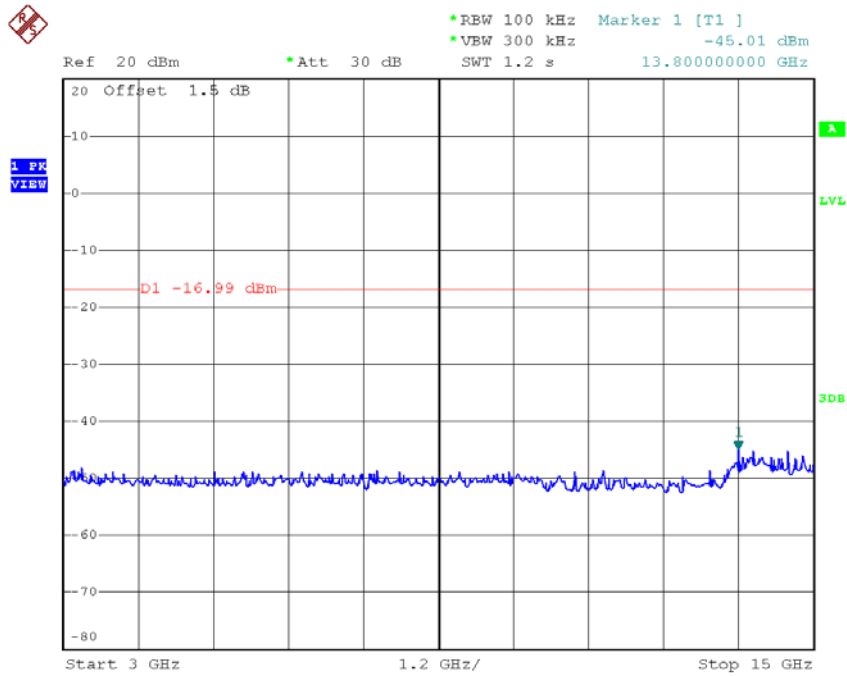


Date: 13.AUG.2018 10:04:25

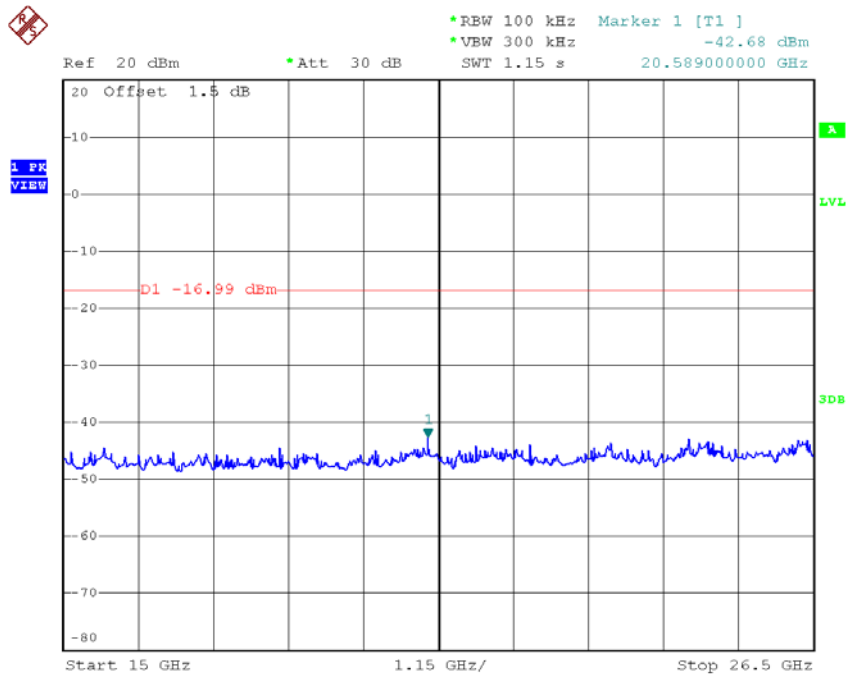
TX B mode CH06 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:06:35

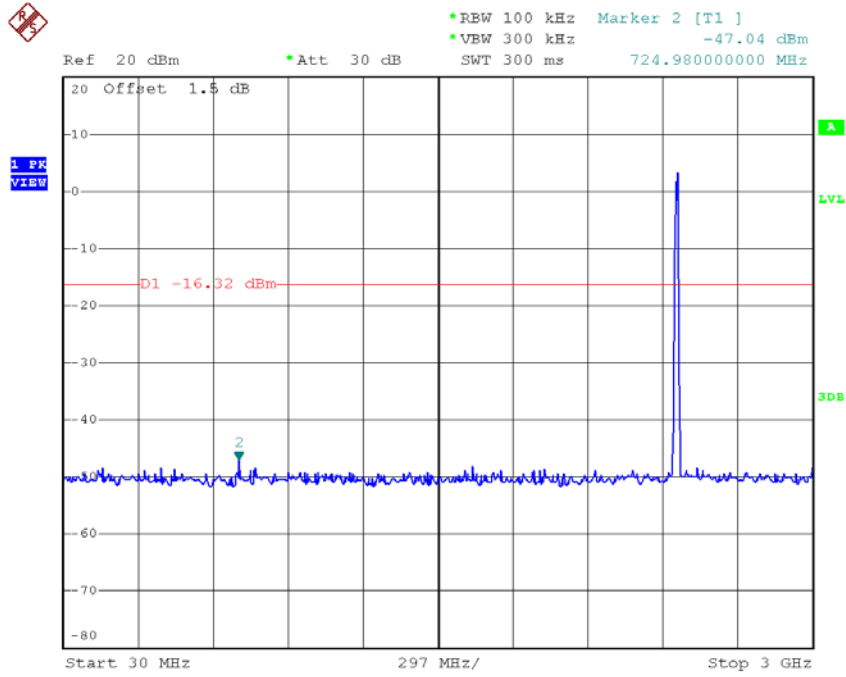


Date: 13.AUG.2018 10:06:43

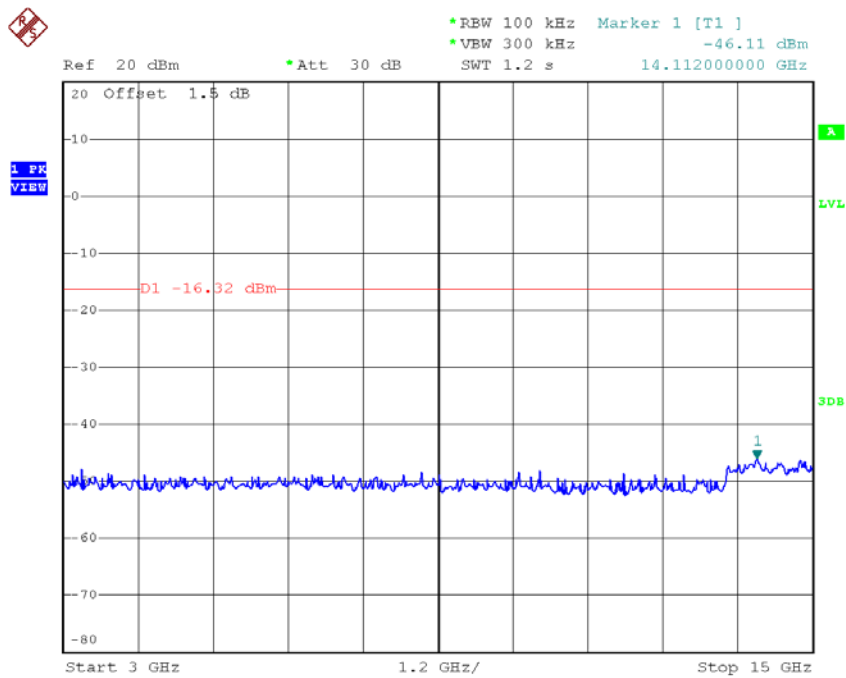


Date: 13.AUG.2018 10:06:52

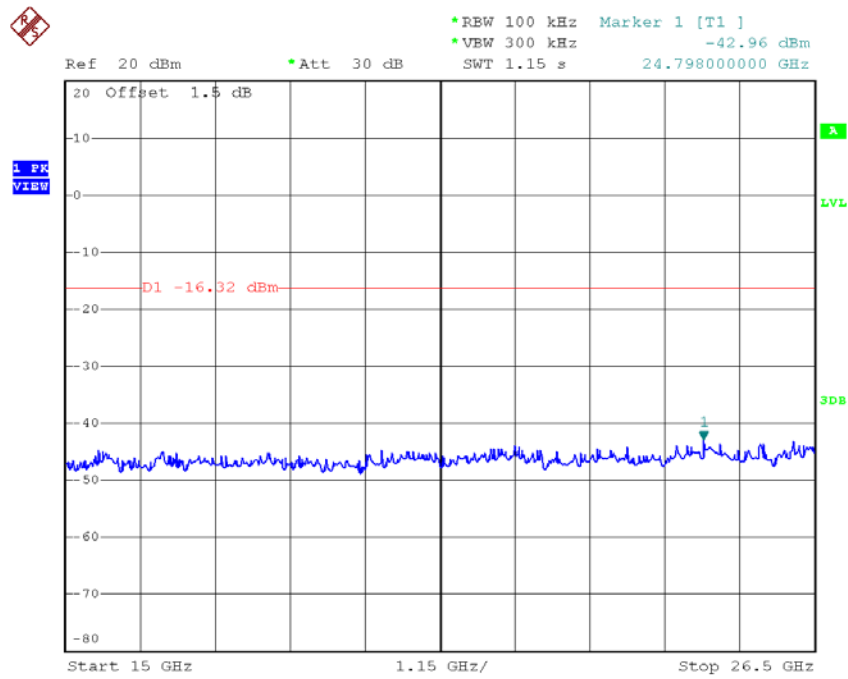
TX B mode CH11 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:09:51



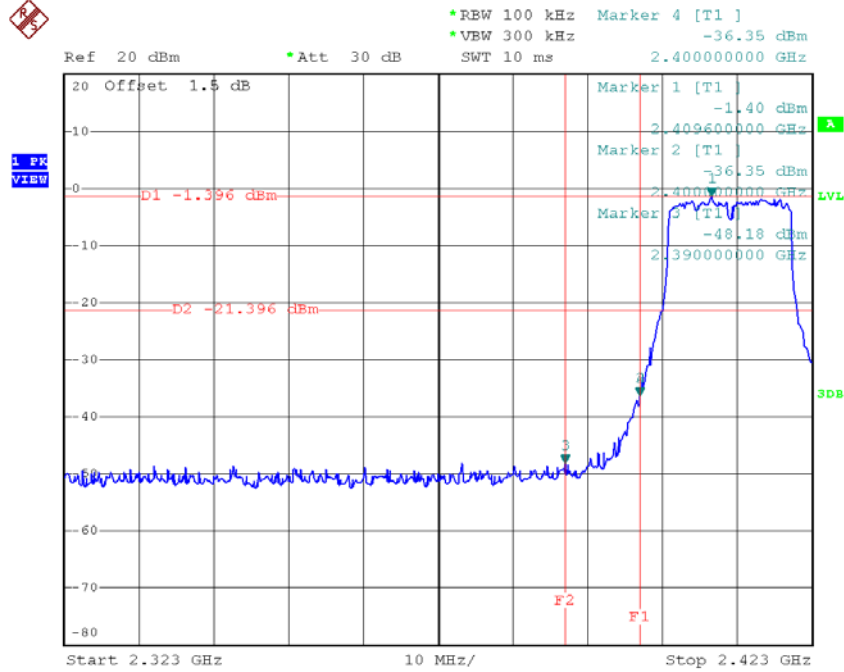
Date: 13.AUG.2018 10:10:00



Date: 13.AUG.2018 10:10:08

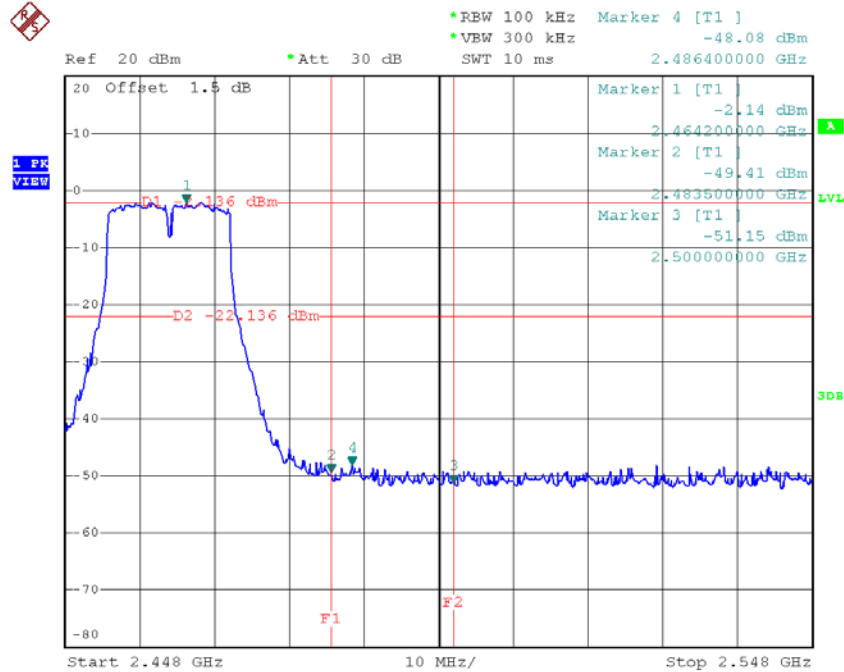
Test Mode: TX G Mode

TX G mode CH01



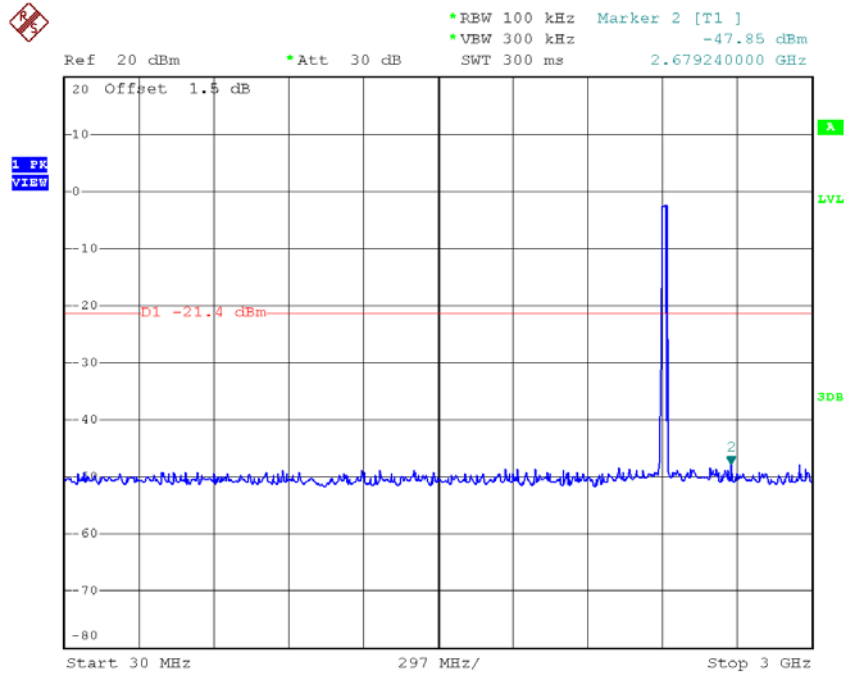
Date: 13.AUG.2018 10:12:15

TX G mode CH11

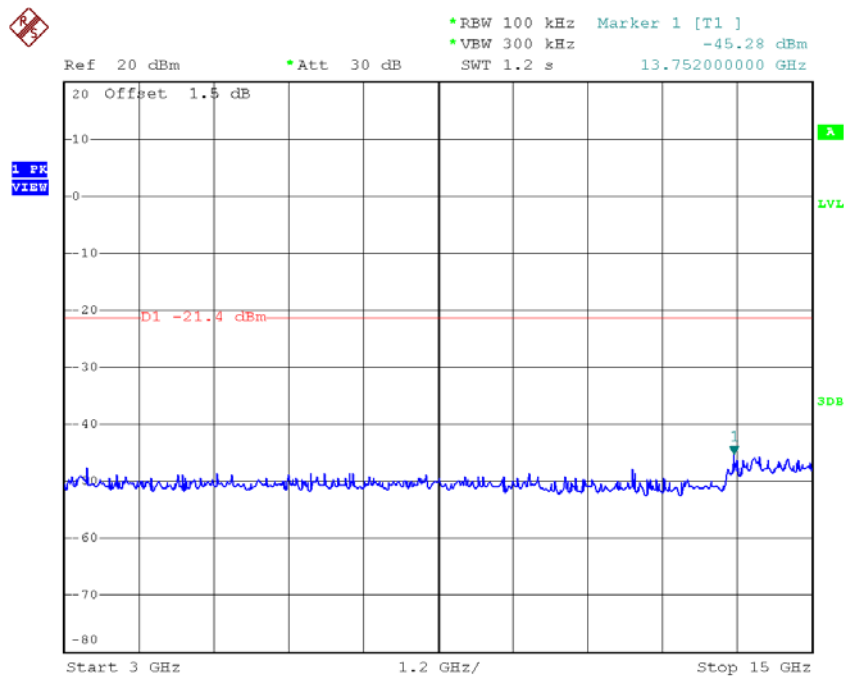


Date: 13.AUG.2018 10:17:43

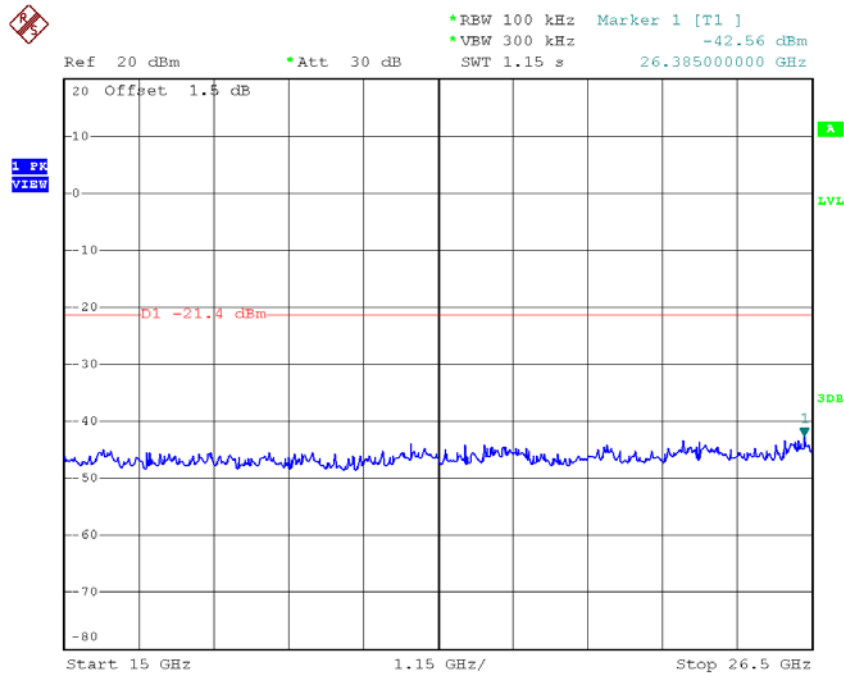
TX G mode CH01 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:12:28

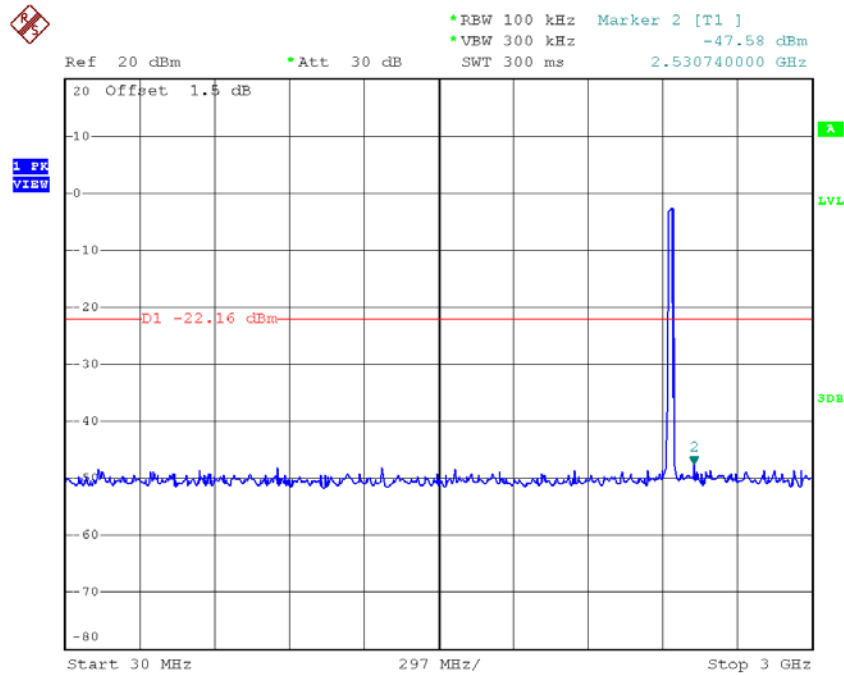


Date: 13.AUG.2018 10:12:37

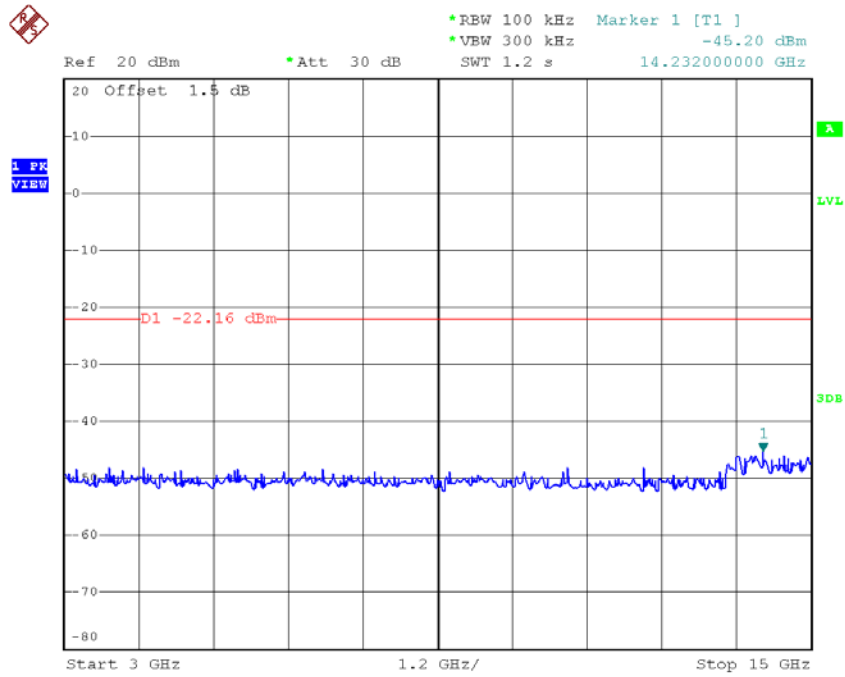


Date: 13.AUG.2018 10:12:45

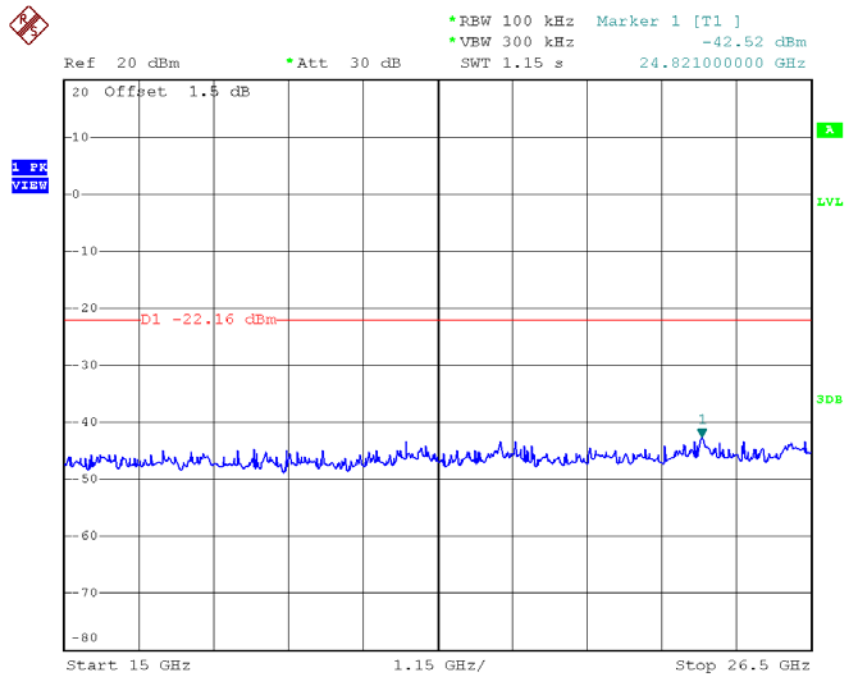
TX G mode CH06 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:14:20

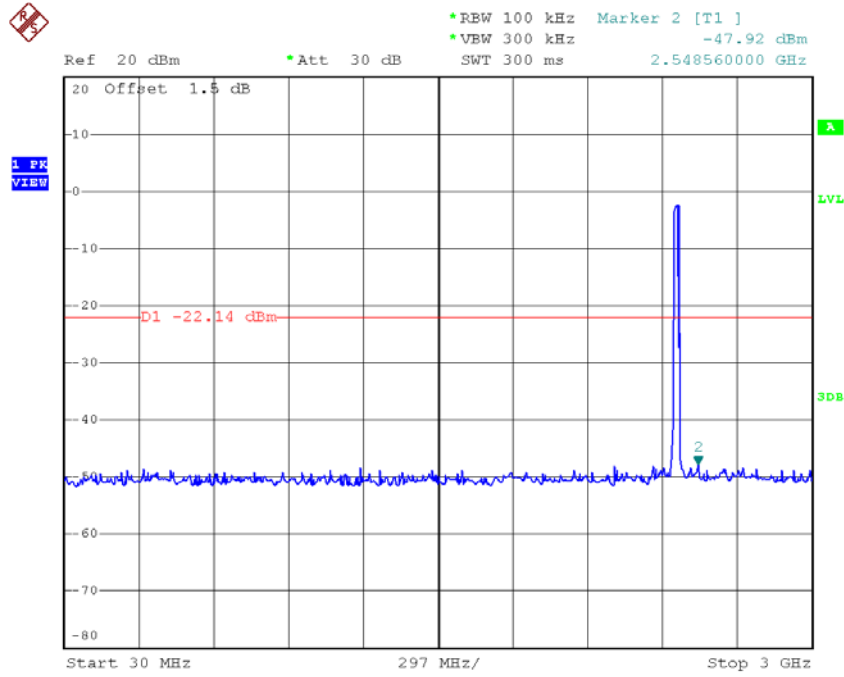


Date: 13.AUG.2018 10:14:28

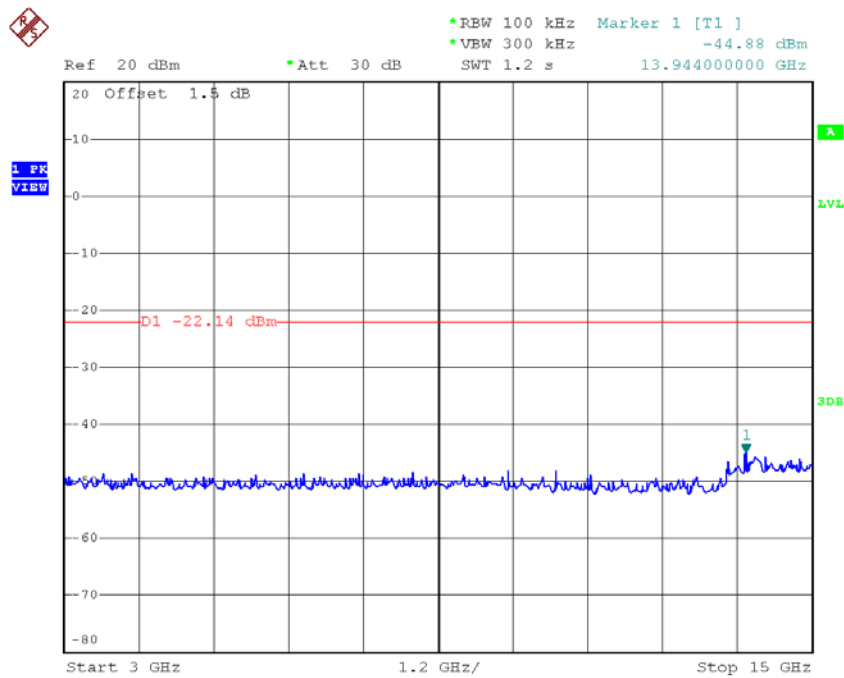


Date: 13.AUG.2018 10:14:37

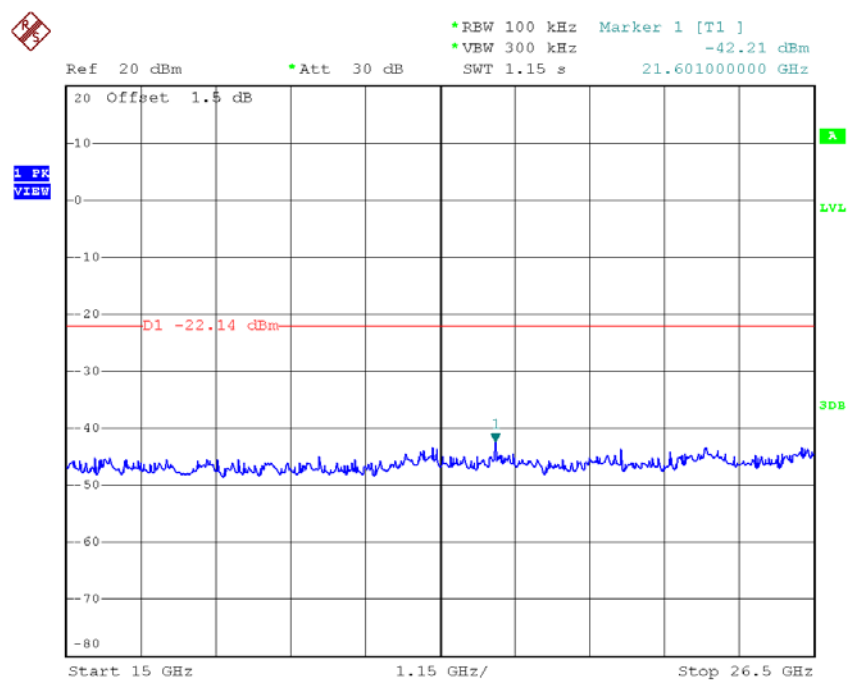
TX G mode CH11 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:17:57



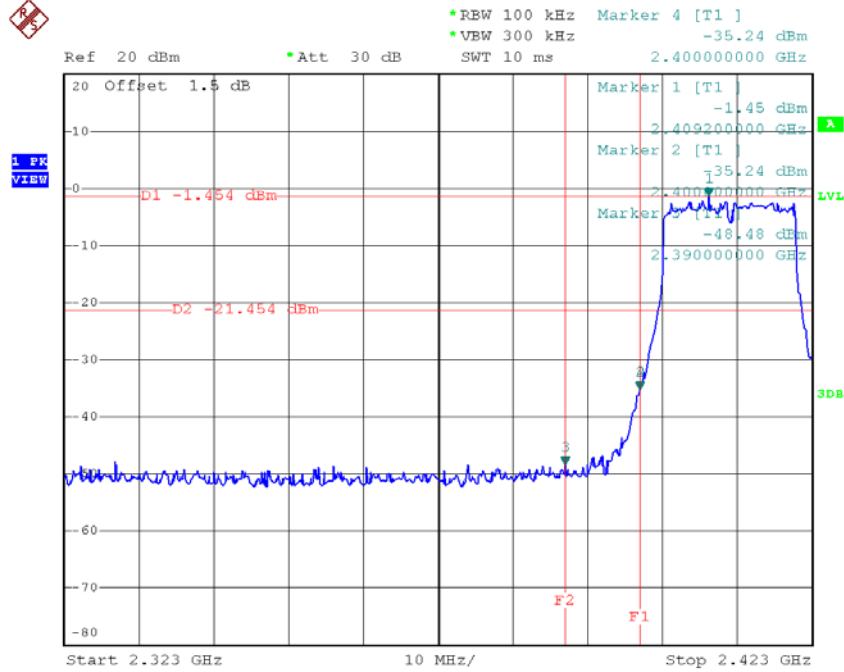
Date: 13.AUG.2018 10:18:06



Date: 13.AUG.2018 10:18:14

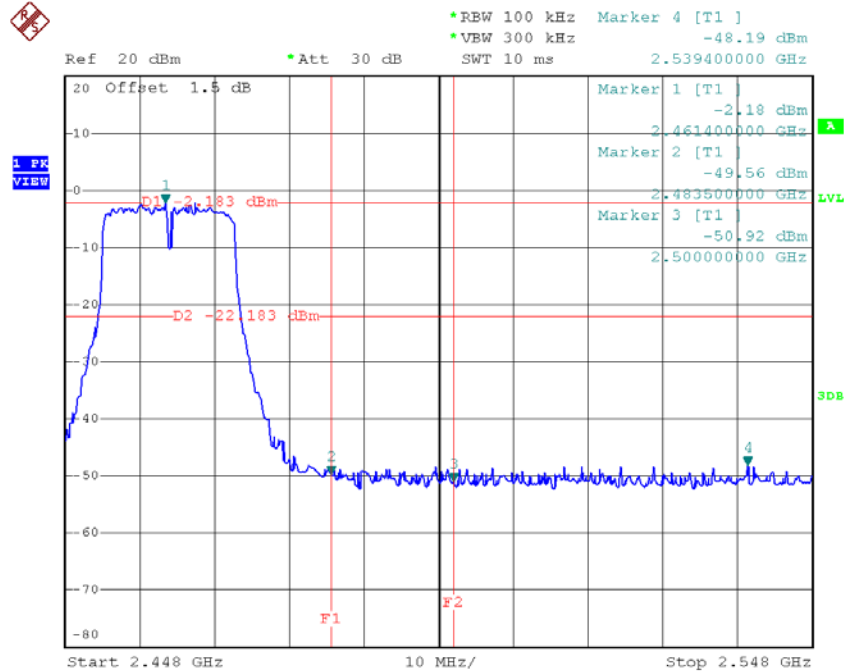
Test Mode: TX N-20M Mode

TX HT20 mode CH01



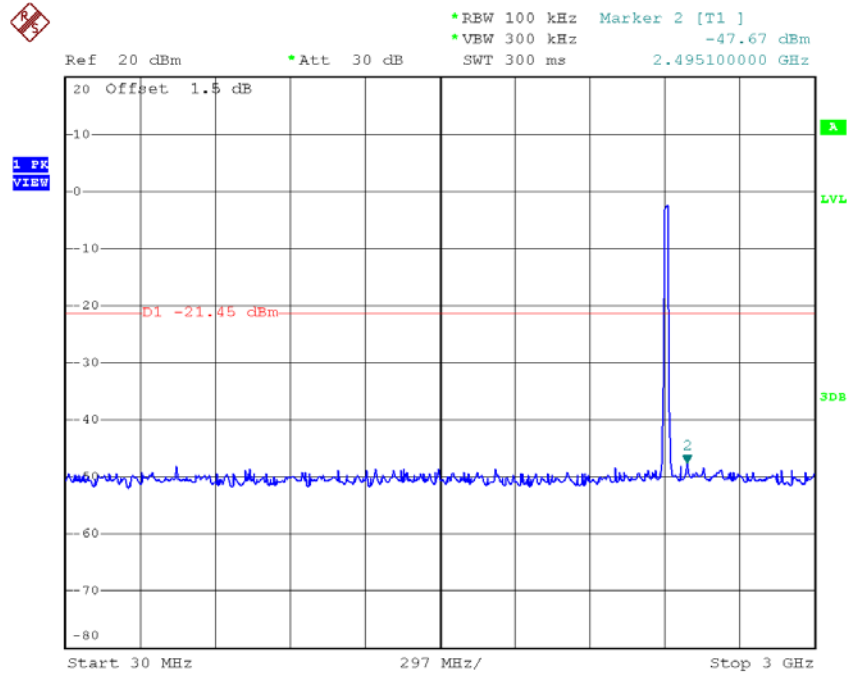
Date: 13.AUG.2018 10:19:58

TX HT20 mode CH11

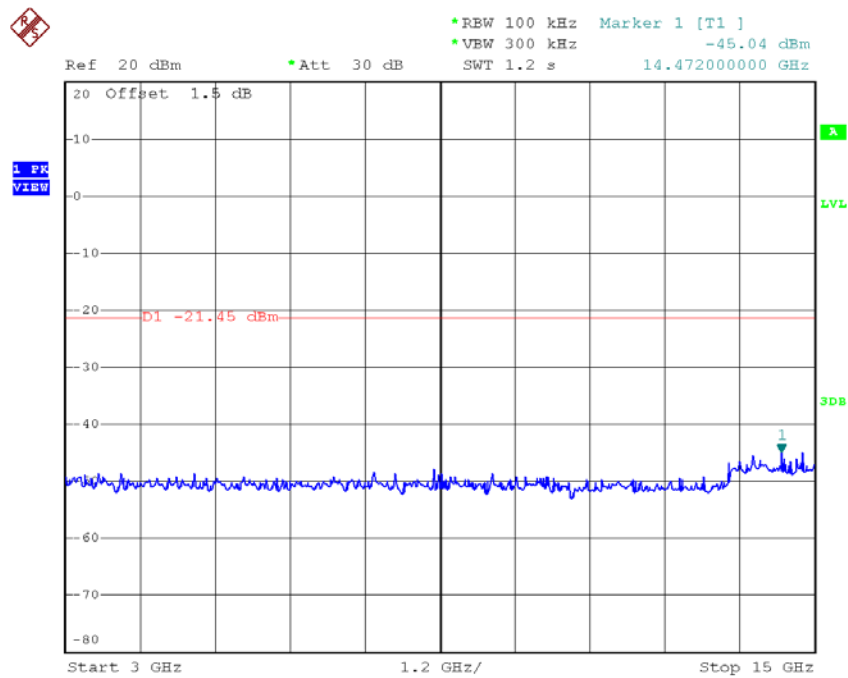


Date: 13.AUG.2018 10:24:36

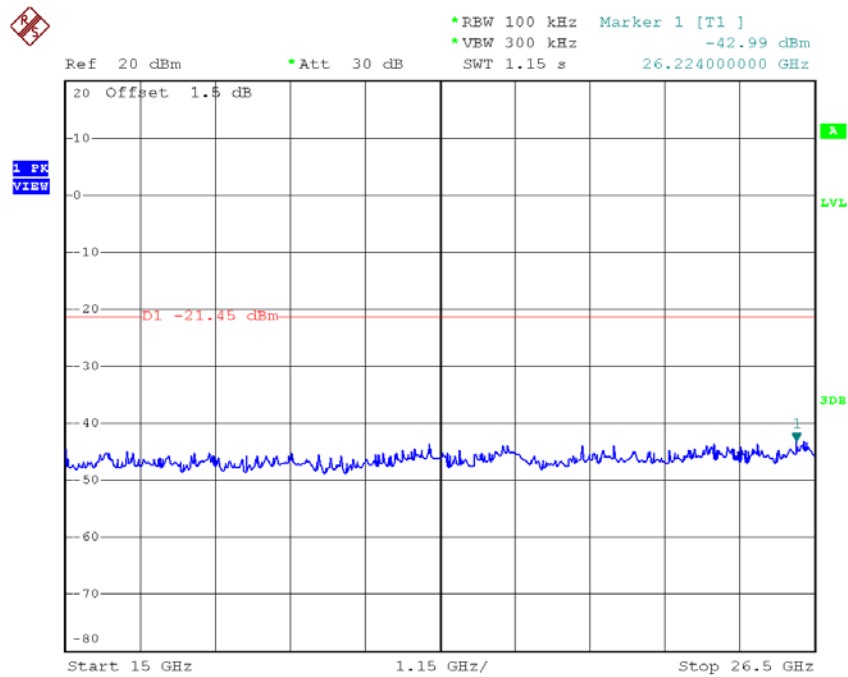
TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:20:12

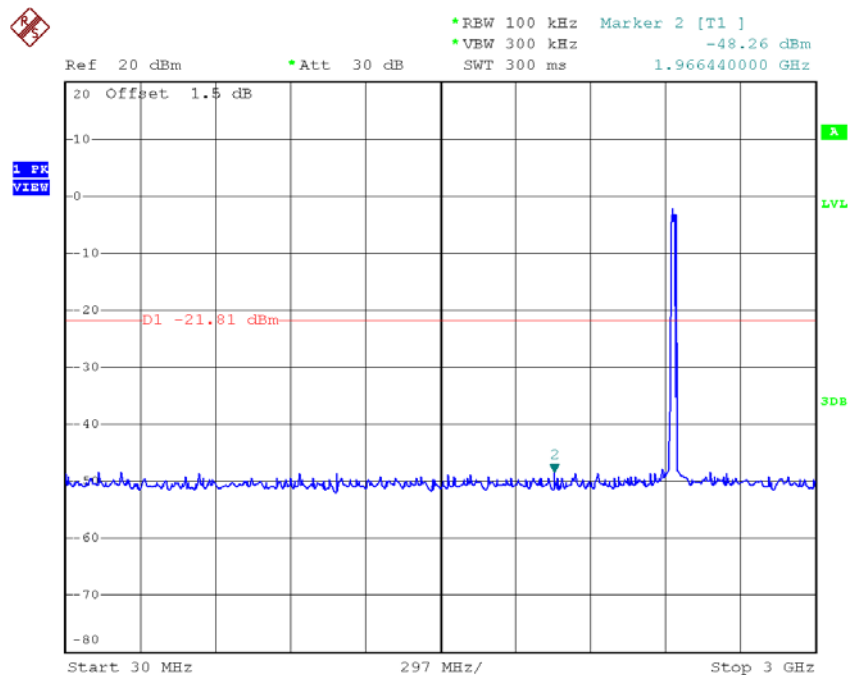


Date: 13.AUG.2018 10:20:20

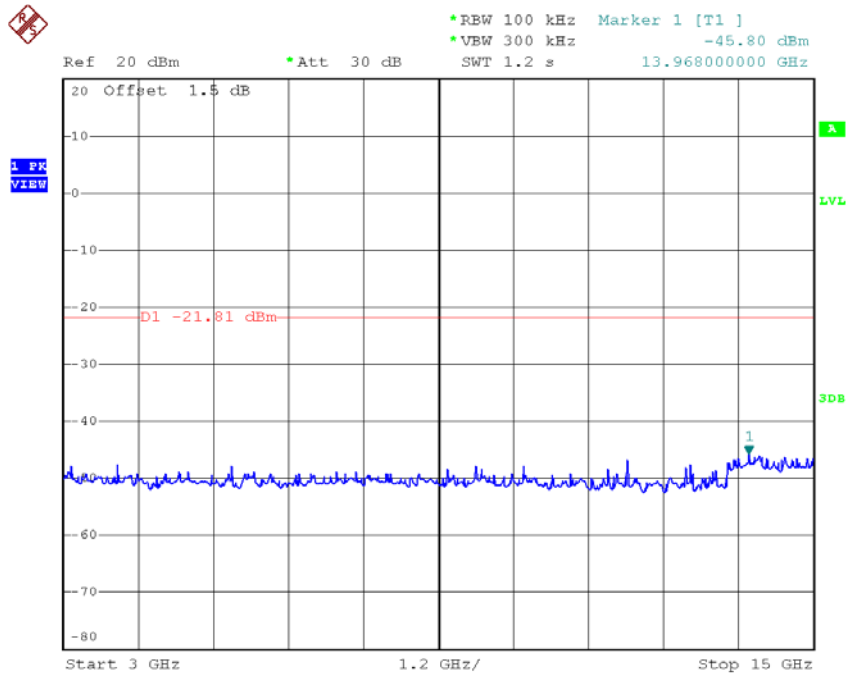


Date: 13.AUG.2018 10:20:29

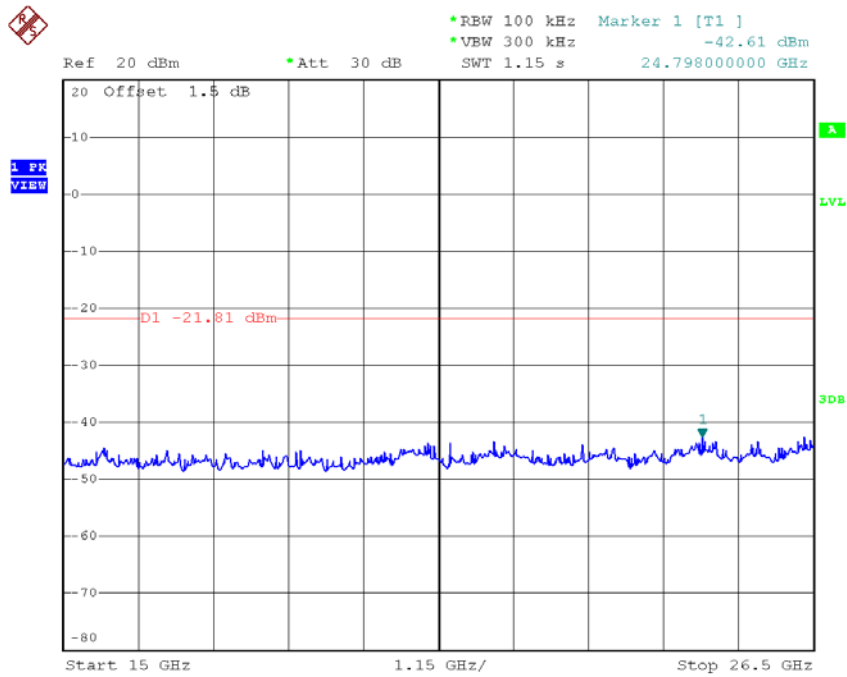
TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:22:53

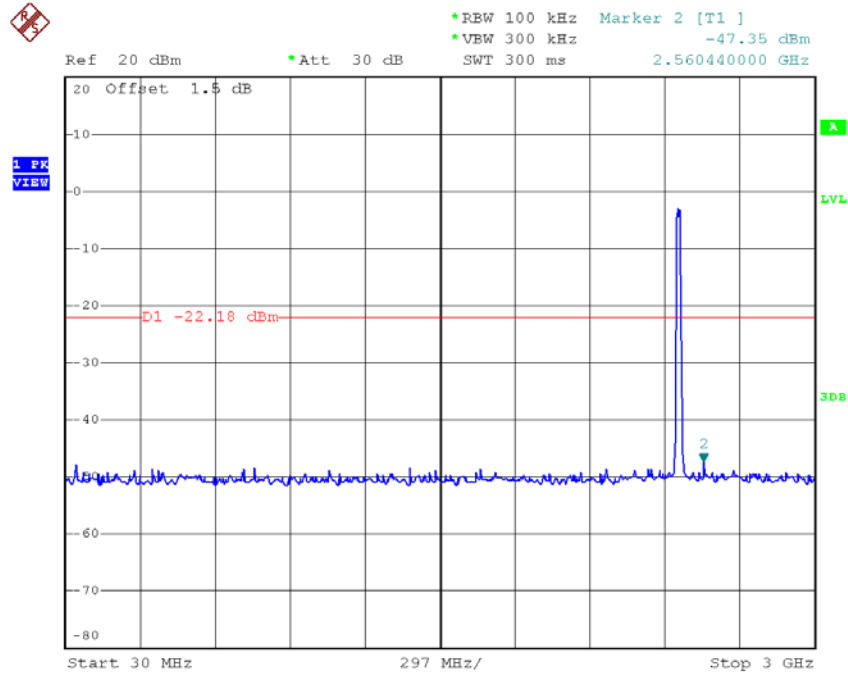


Date: 13.AUG.2018 10:23:01

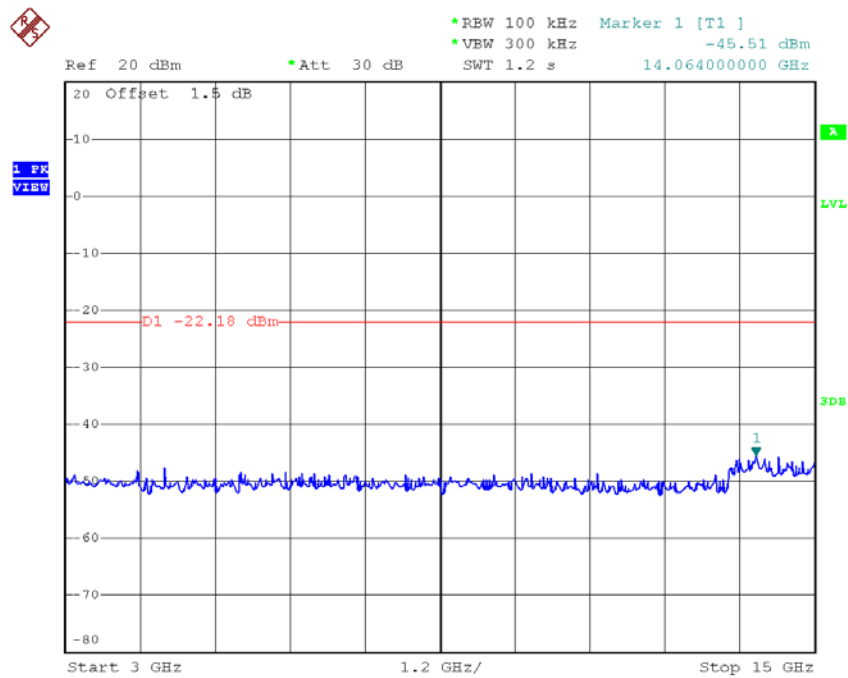


Date: 13.AUG.2018 10:23:10

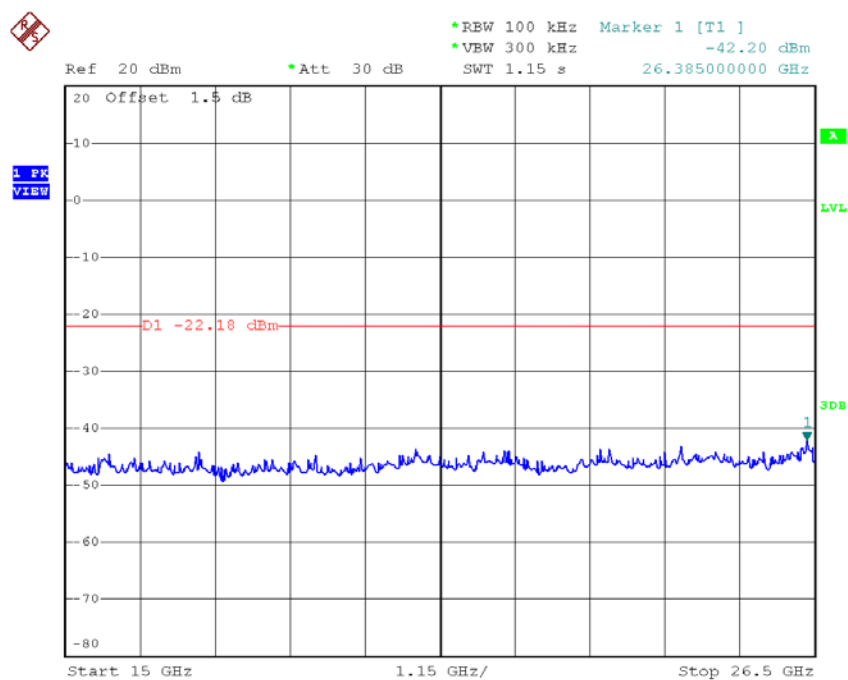
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 13.AUG.2018 10:24:51



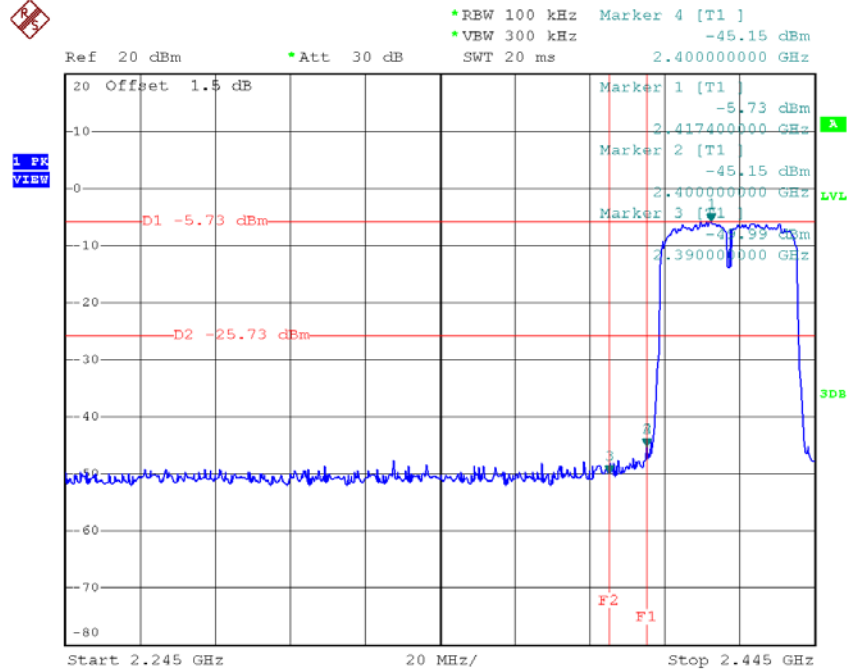
Date: 13.AUG.2018 10:24:59



Date: 13.AUG.2018 10:25:07

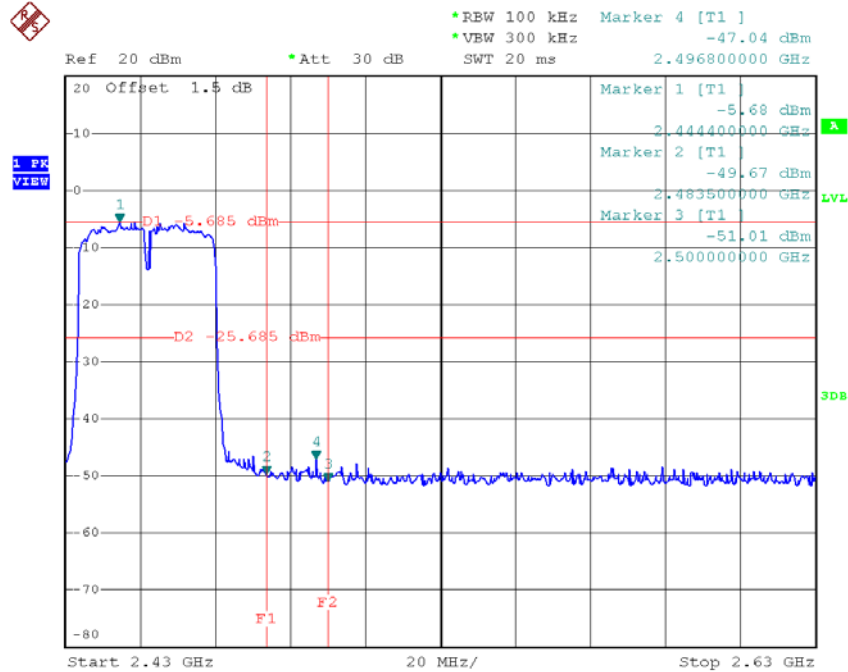
Test Mode: TX N-40M Mode

TX HT40 mode CH03



Date: 13.AUG.2018 10:28:00

TX HT40 mode CH09



Date: 13.AUG.2018 10:31:38