

FCC Radio Test Report

FCC ID: KA2CS8010LHA1

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

Project No. : 1710C185
Equipment : HD Wi-Fi Camera
Test Model : DCS-936L
Series Model : DCS-8010LH
Applicant : D-Link Corporation
Address : 17595 Mt. Herrmann, Fountain Valley, California,
United States 92708

Date of Receipt : Oct.19, 2017
Date of Test : Oct.19, 2017 ~ Jan. 25, 2018
Issued Date : Feb. 26, 2018
Tested by : BTL Inc.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-3-1710C185	Original Issue.	Feb. 26, 2018

1. CERTIFICATION

Equipment : HD Wi-Fi Camera
Brand Name : D-LINK
Test Model : DCS-936L
Series Model : DCS-8010LH
Applicant : D-LINK Corporation
Manufacturer : D-LINK Corporation
Address : 17595 Mt. Herrmann, Fountain Valley, California, United States 92708
Date of Test : Oct.19, 2017 ~ Jan. 24, 2018
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C:(15.247) / ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1710C185) 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	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
15.247(d)/ 15.205/ 15.209	Transmitter Radiated Emissions	PASS	

NOTE:

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

2.1 TEST FACILITY

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

BTL's test firm number for FCC: 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. Conducted Measurement:

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

B. Radiated Measurement:

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	HD Wi-Fi Camera	
Brand Name	D-LINK	
Test Model	DCS-936L	
Series Model	DCS-8010LH	
Model Difference	Only differ in product appearance color.	
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: 21.01dBm 802.11g: 27.11dBm 802.11n(20MHz): 27.03dBm 802.11n(40MHz): 26.51dBm
Power Source	DC voltage supplied from AC/DC adapter. Model: F06W-050120SPACP	
Power Rating	I/P: 100-240V~50/60Hz 0.2A O/P: 5V $\equiv$ 1.2A	

Note:

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

CH01 - CH11 for 802.11b, 802.11g, 802.11n(20MHz) CH03 - CH09 for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	3.22

3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	Normal Link

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

For Conducted Test	
Final Test Mode	Description
Mode 5	Normal Link

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

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

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

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

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

Note:

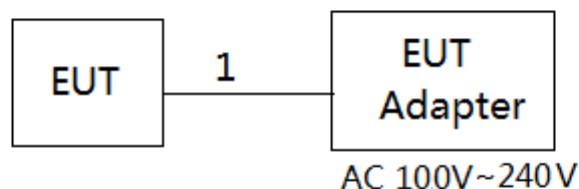
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (6.5Mbps)
 802.11n HT40 mode : BPSK (13.5Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	cmd		
Frequency (MHz)	2412	2437	2462
802.11b	6	6	6
802.11g	55	55	54
802.11n (20MHz)	6	6	6
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	6	6	6

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.5m	DC Cable

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

The following table is the setting of the receiver

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

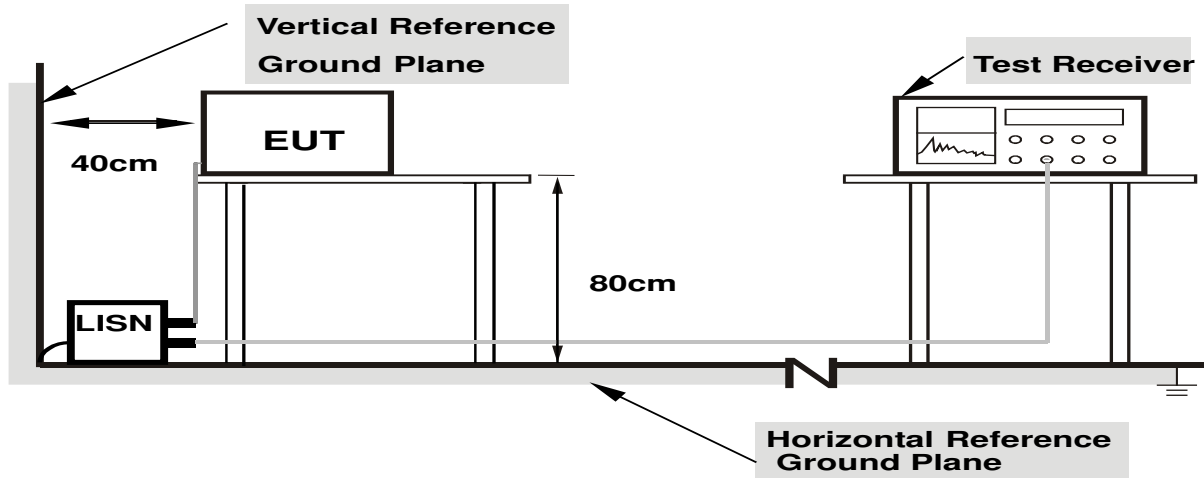
4.1.2 TEST PROCEDURE

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



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Appendix A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

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

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

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

4.2.2 TEST PROCEDURE

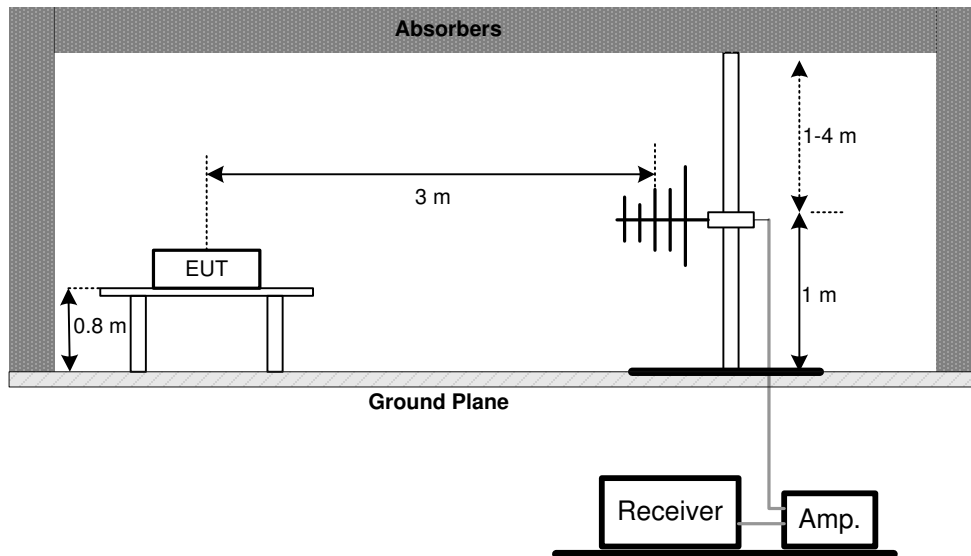
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of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

4.2.3 DEVIATION FROM TEST STANDARD

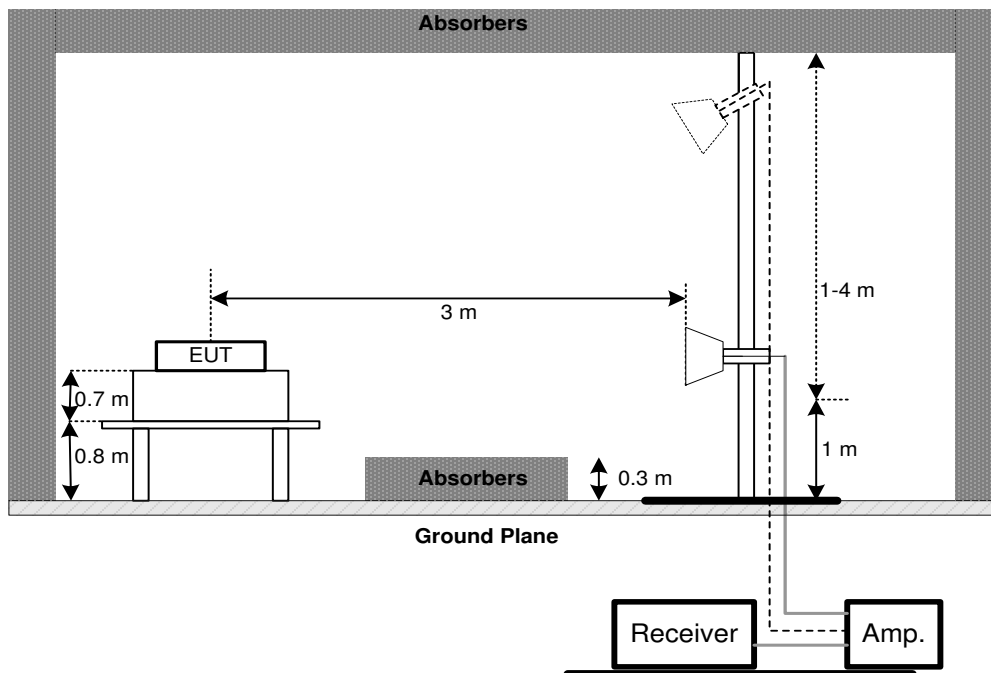
No deviation

4.2.4 TEST SETUP

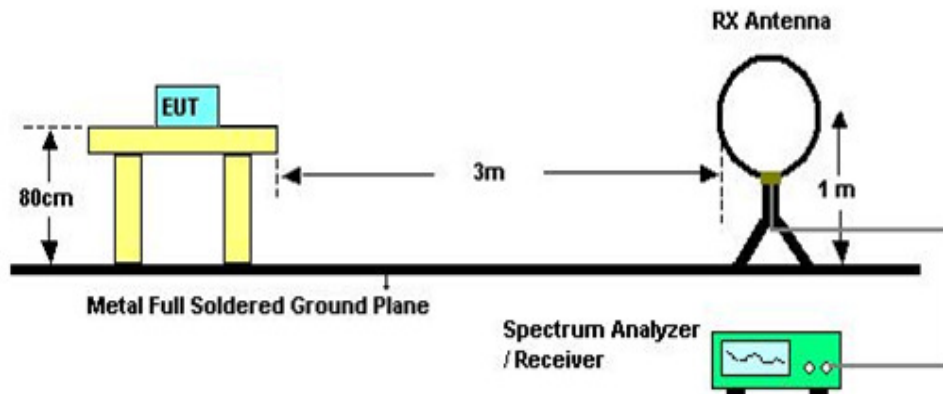
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For Radiated Emissions Below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Appendix B

Remark:

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

4.2.8 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the Appendix C.

4.2.9 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the Appendix D.

Remark:

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

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

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

5.1.1 TEST PROCEDURE

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Appendix E.

6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

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

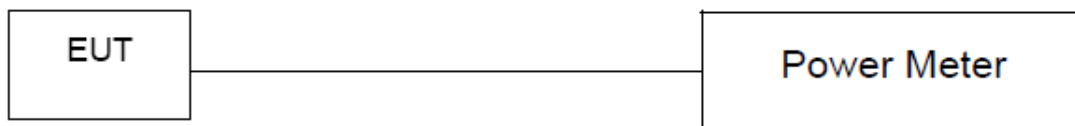
6.1.1 TEST PROCEDURE

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

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Appendix F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

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

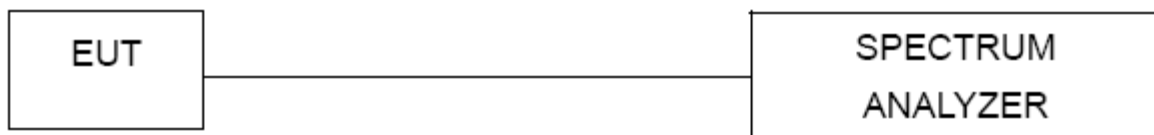
7.1.1 TEST PROCEDURE

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

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.1.5 EUT TEST CONDITIONS

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

7.1.6 TEST RESULTS

Please refer to the Appendix G.

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

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

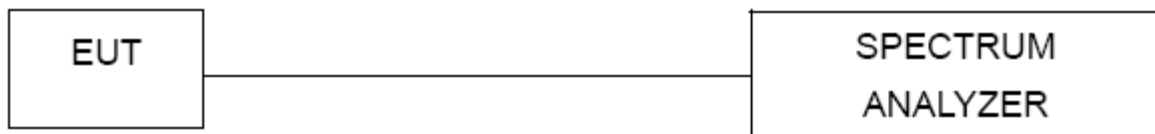
8.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting: RBW=3KHz, VBW=10KHz, Sweep time = Auto.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Appendix H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2018
2	LISN	EMCO	3816/2	52765	Mar. 26, 2018
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 26, 2018
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 26, 2018
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Oct. 19, 2018

Radiated Emission Measurement - Below 1GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 26, 2018
2	Amplifier	HP	8447D	2944A09673	Oct. 19, 2018
3	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	Jun. 26, 2018
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	Antenna	EM	EM-6876-1	230	Mar. 06, 2018

Radiated Emission Above 1GHz

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 26, 2018
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 08, 2018
3	Amplifier	Agilent	8449B	3008A02274	May. 16, 2018
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
5	Receiver	Agilent	N9038A	MY52130039	Aug. 20, 2018
6	Antenna	EM	EM-6876-1	230	Mar. 06, 2018
7	Controller	CT	SC100	N/A	N/A
8	Controller	MF	MF-7802	MF780208416	N/A
9	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018
10	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Peak Output Power

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

Antenna Conducted Spurious Emission

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Power Spectral Density

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

10. EUT TEST PHOTO

Conducted Measurement Photos



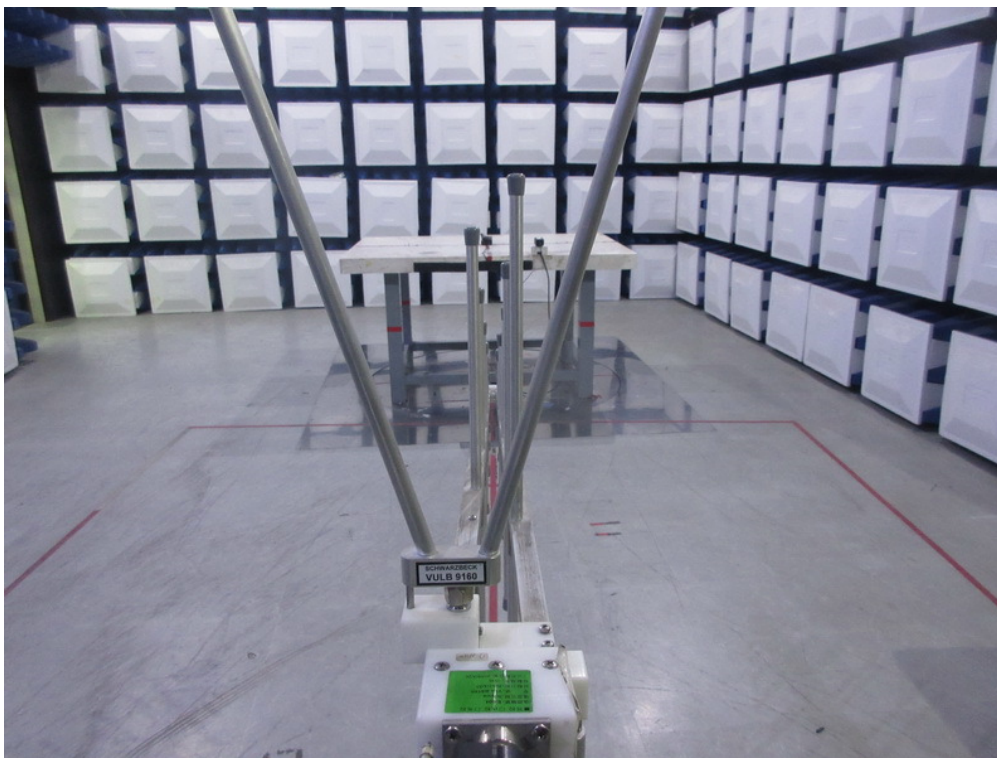
Radiated Measurement Photos

9KHz to 30MHz



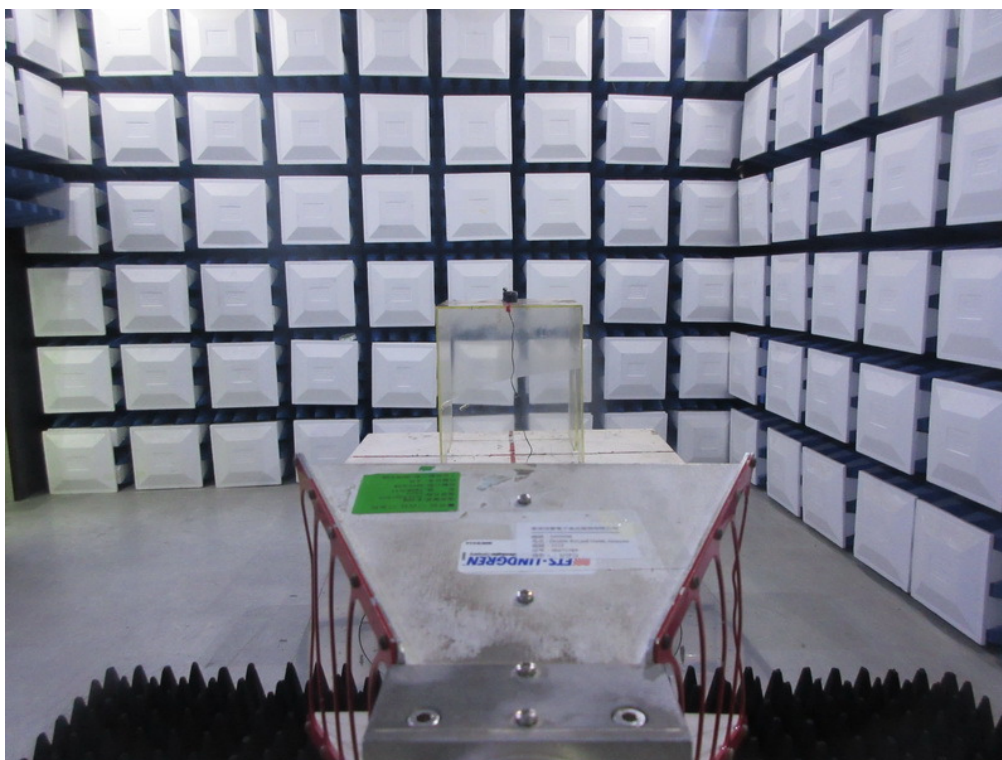
Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

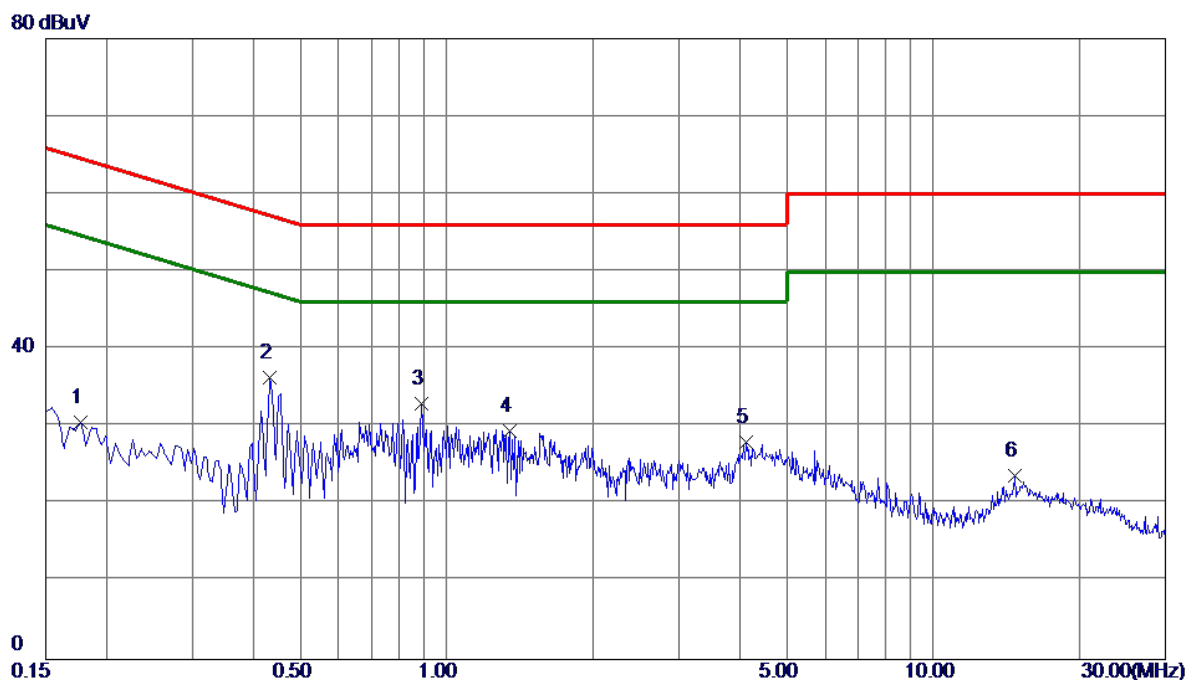
Above 1000MHz



APPENDIX A - CONDUCTED EMISSION

Test Mode : Normal Link

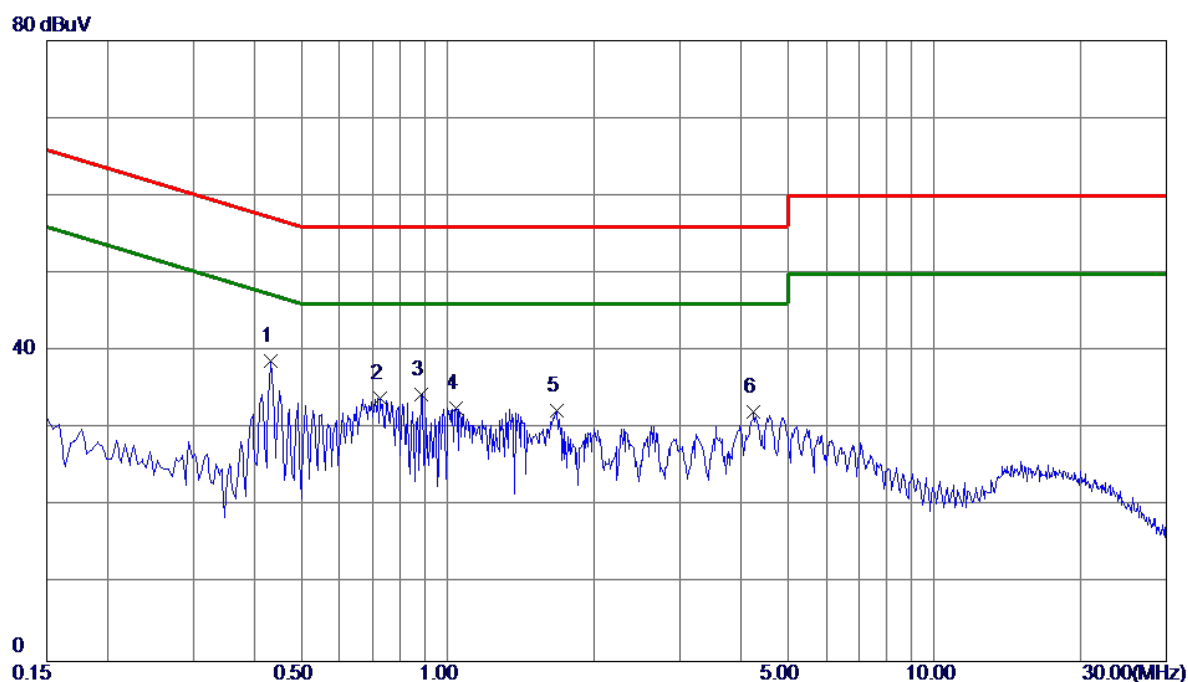
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1770	20.83	9.71	30.54	64.63	-34.09	Peak	
2 *	0.4335	26.68	9.71	36.39	57.19	-20.80	Peak	
3	0.8880	23.22	9.72	32.94	56.00	-23.06	Peak	
4	1.3470	19.68	9.72	29.40	56.00	-26.60	Peak	
5	4.1325	18.23	9.73	27.96	56.00	-28.04	Peak	
6	14.7075	13.70	9.99	23.69	60.00	-36.31	Peak	

Test Mode : Normal Link

Neutral



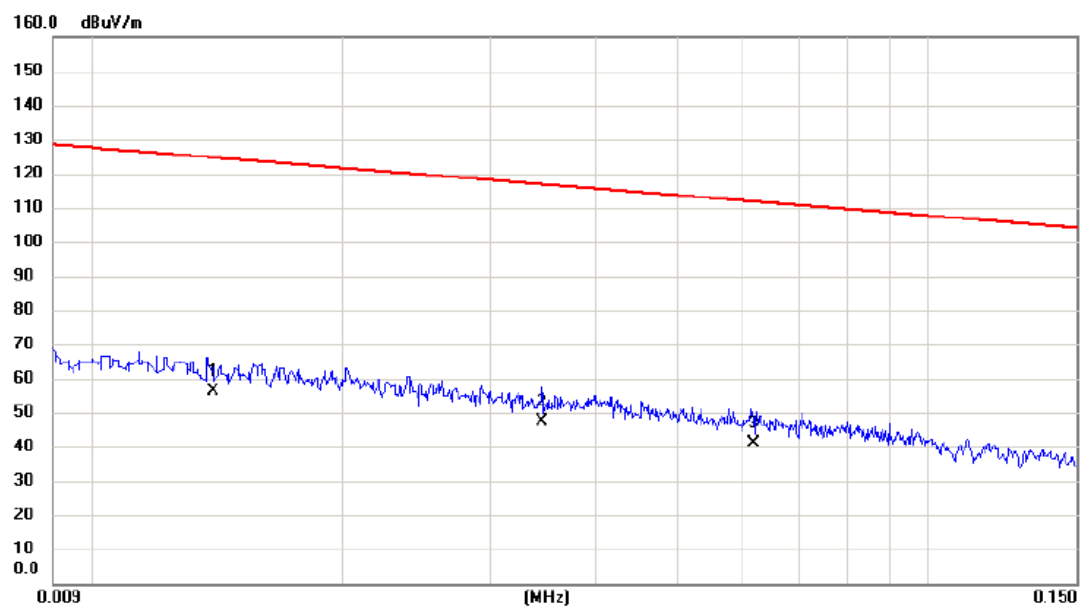
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.4335	29.07	9.60	38.67	57.19	-18.52	Peak	
2	0.7260	24.37	9.61	33.98	56.00	-22.02	Peak	
3	0.8835	24.77	9.61	34.38	56.00	-21.62	Peak	
4	1.0410	23.10	9.61	32.71	56.00	-23.29	Peak	
5	1.6755	22.64	9.62	32.26	56.00	-23.74	Peak	
6	4.2495	22.48	9.66	32.14	56.00	-23.86	Peak	

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

Test Mode:

TX Mode

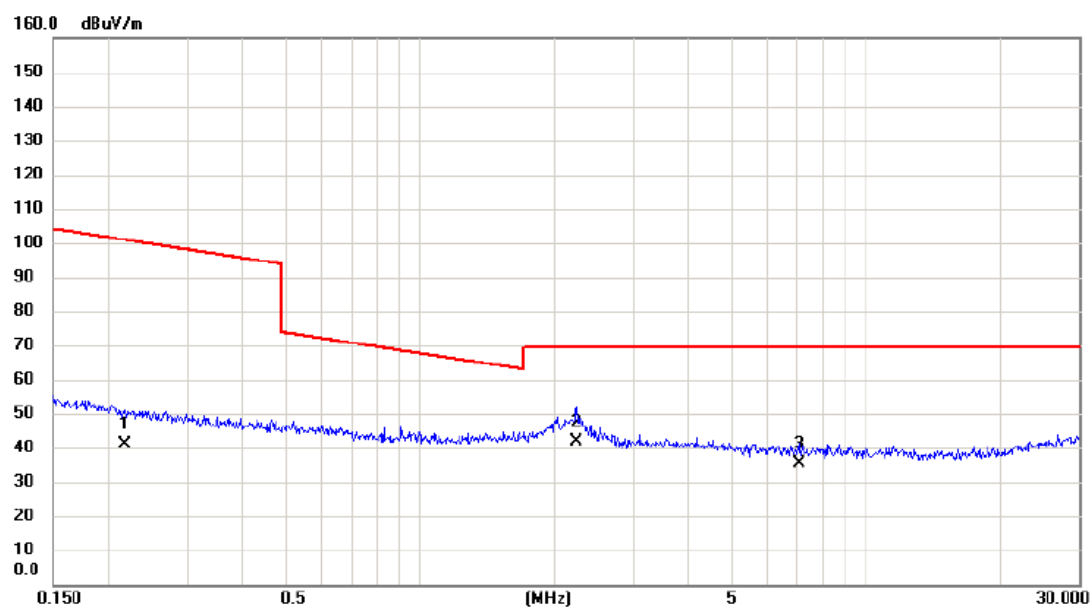
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0140	35.96	20.40	56.36	124.68	-68.32	AVG	
2		0.0346	28.17	19.18	47.35	116.82	-69.47	AVG	
3		0.0617	22.54	18.50	41.04	111.80	-70.76	AVG	

Test Mode: TX Mode

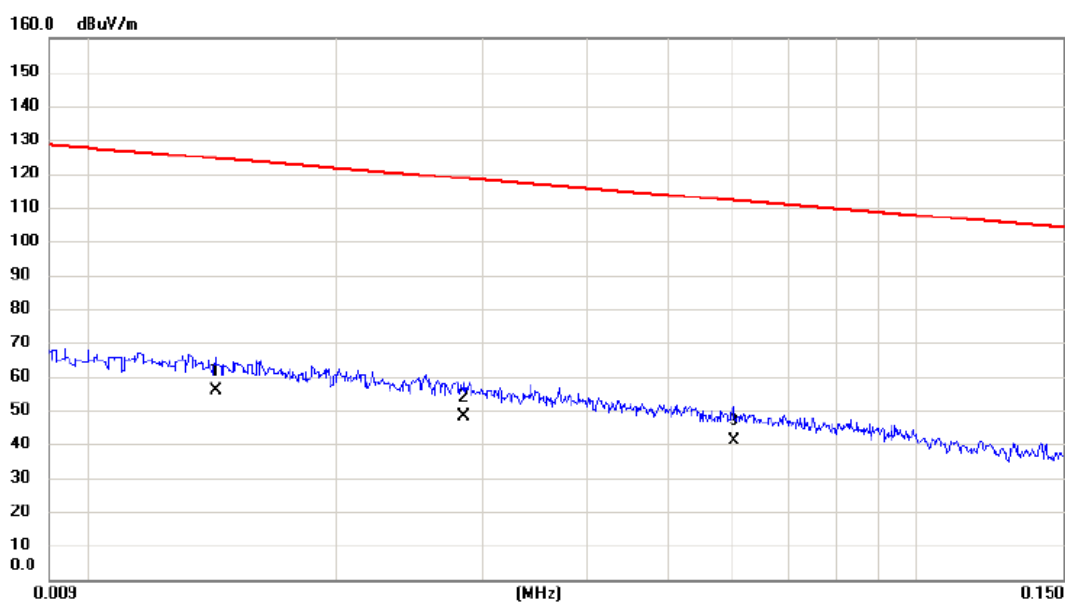
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2174	24.44	16.75	41.19	100.86	-59.67	AVG	
2	*	2.2367	26.34	15.44	41.78	69.54	-27.76	QP	
3		7.0622	21.37	14.11	35.48	69.54	-34.06	QP	

Test Mode: TX Mode

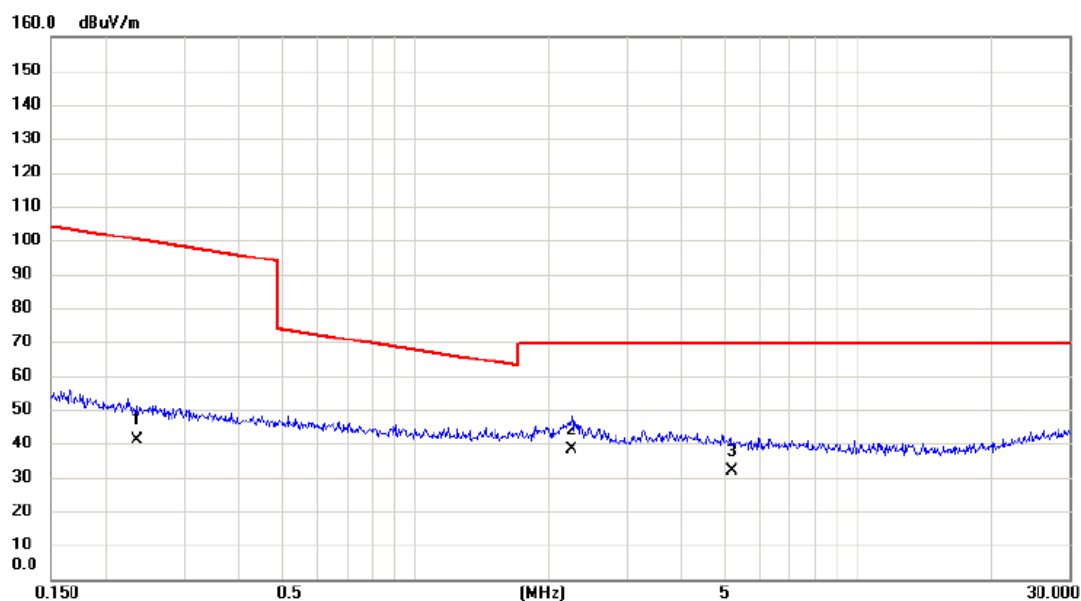
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0143	35.27	20.36	55.63	124.50	-68.87	AVG	
2		0.0284	28.71	19.37	48.08	118.54	-70.46	AVG	
3		0.0601	22.49	18.53	41.02	112.03	-71.01	AVG	

Test Mode: TX Mode

Ant 90°



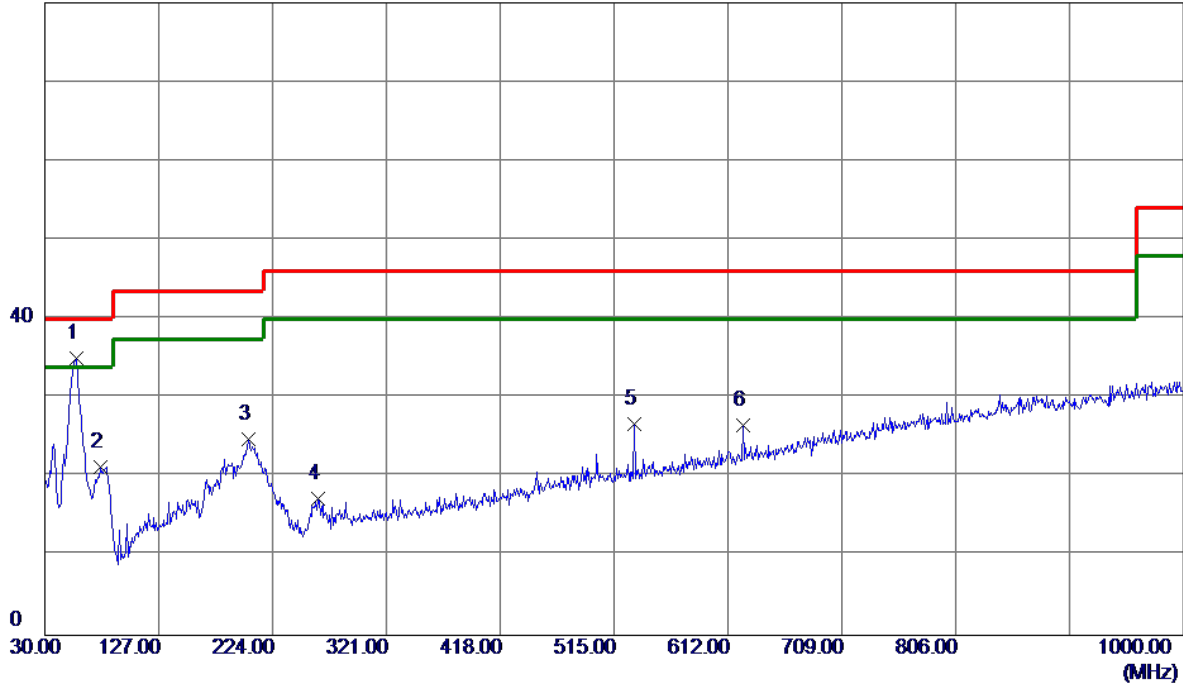
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2353	24.46	16.69	41.15	100.17	-59.02	AVG	
2	*	2.2486	22.72	15.44	38.16	69.54	-31.38	QP	
3		5.1663	17.56	14.35	31.91	69.54	-37.63	QP	

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

Test Mode: TX B MODE CHANNEL 01

Vertical

80 dBuV/m

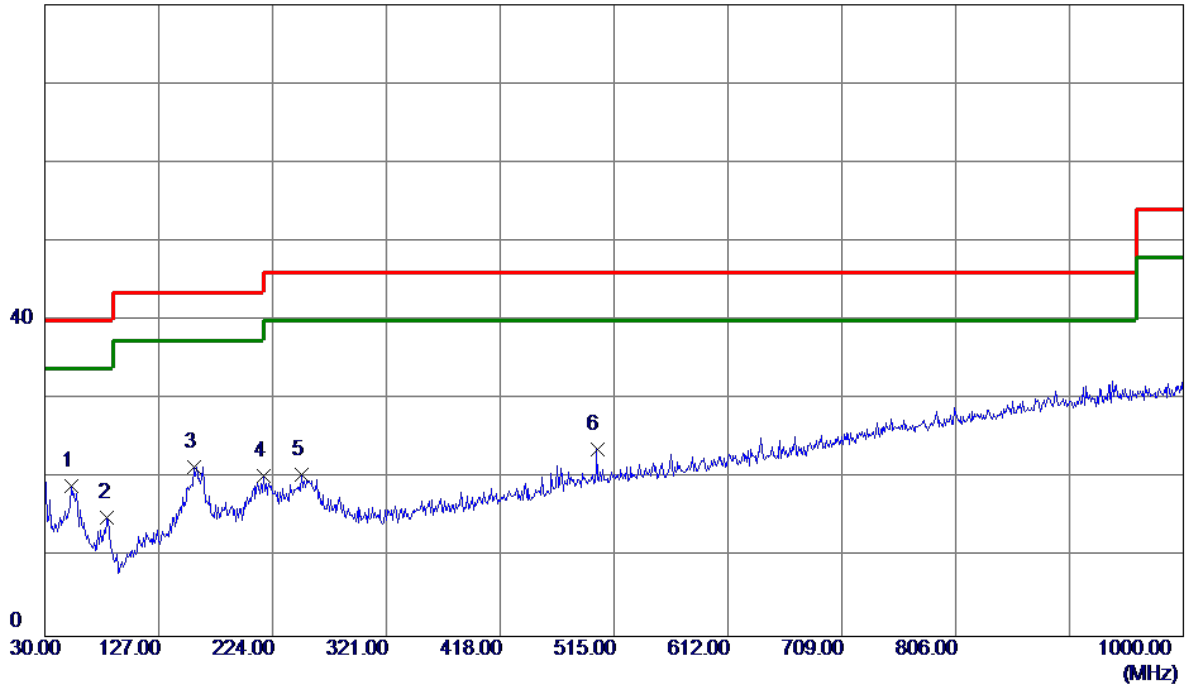


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	57.1600	49.13	-14.04	35.09	40.00	-4.91	Peak	
2	77.5300	39.02	-17.67	21.35	40.00	-18.65	Peak	
3	203.6300	38.56	-13.83	24.73	43.50	-18.77	Peak	
4	262.8000	33.01	-15.75	17.26	46.00	-28.74	Peak	
5	532.4600	34.86	-8.07	26.79	46.00	-19.21	Peak	
6	624.6100	32.52	-5.95	26.57	46.00	-19.43	Peak	

Test Mode: TX B MODE CHANNEL 01

Horizontal

80 dBuV/m

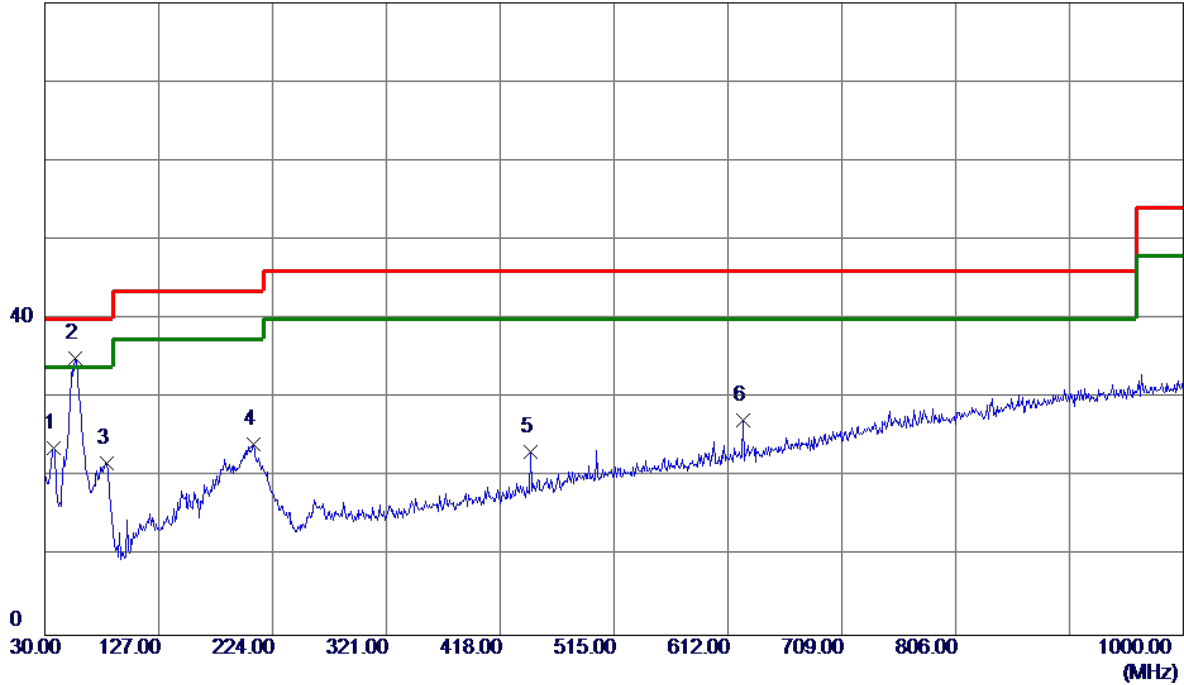


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	52.3100	32.85	-13.79	19.06	40.00	-20.94	Peak	
2	83.3500	33.44	-18.34	15.10	40.00	-24.90	Peak	
3	157.0700	34.60	-13.10	21.50	43.50	-22.00	Peak	
4	216.2400	34.21	-13.93	20.28	46.00	-25.72	Peak	
5	249.2200	35.27	-14.84	20.43	46.00	-25.57	Peak	
6	500.4500	32.41	-8.71	23.70	46.00	-22.30	Peak	

Test Mode: TX B MODE CHANNEL 06

Vertical

80 dBuV/m

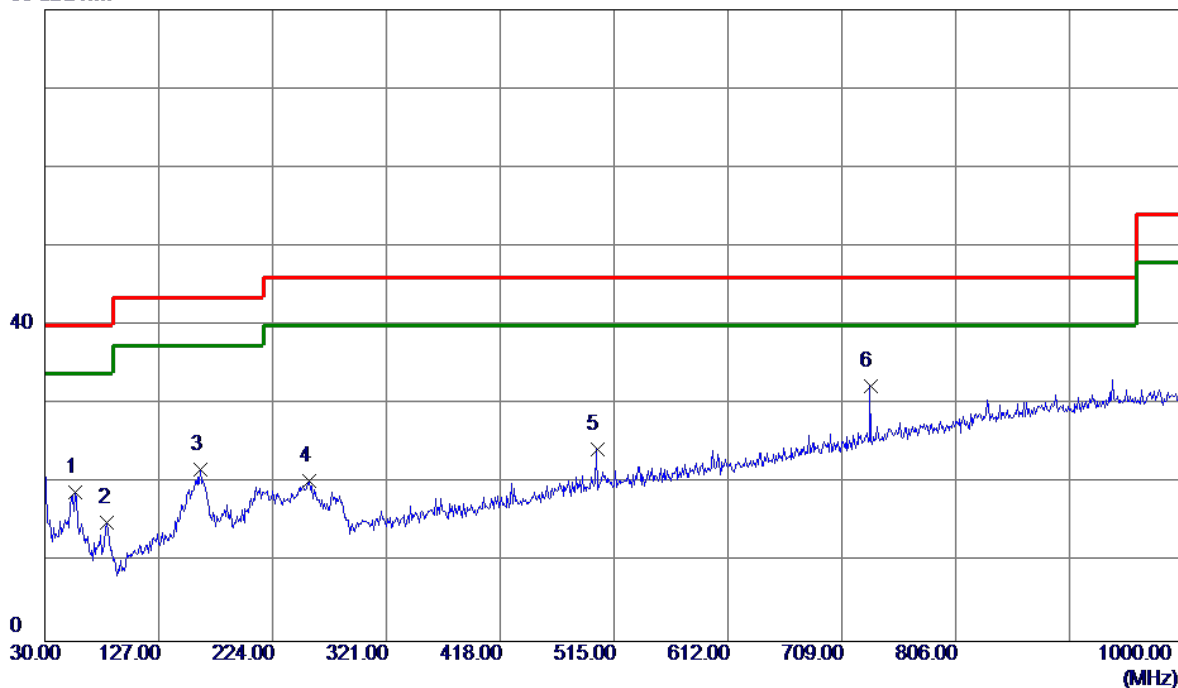


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	37.7599	37.94	-14.30	23.64	40.00	-16.36	Peak	
2 *	56.1900	48.95	-13.95	35.00	40.00	-5.00	Peak	
3	82.3800	40.10	-18.31	21.79	40.00	-18.21	Peak	
4	207.5100	38.14	-13.92	24.22	43.50	-19.28	Peak	
5	444.1900	33.26	-10.10	23.16	46.00	-22.84	Peak	
6	624.6100	33.16	-5.95	27.21	46.00	-18.79	Peak	

Test Mode: TX B MODE CHANNEL 06

Horizontal

80 dBuV/m

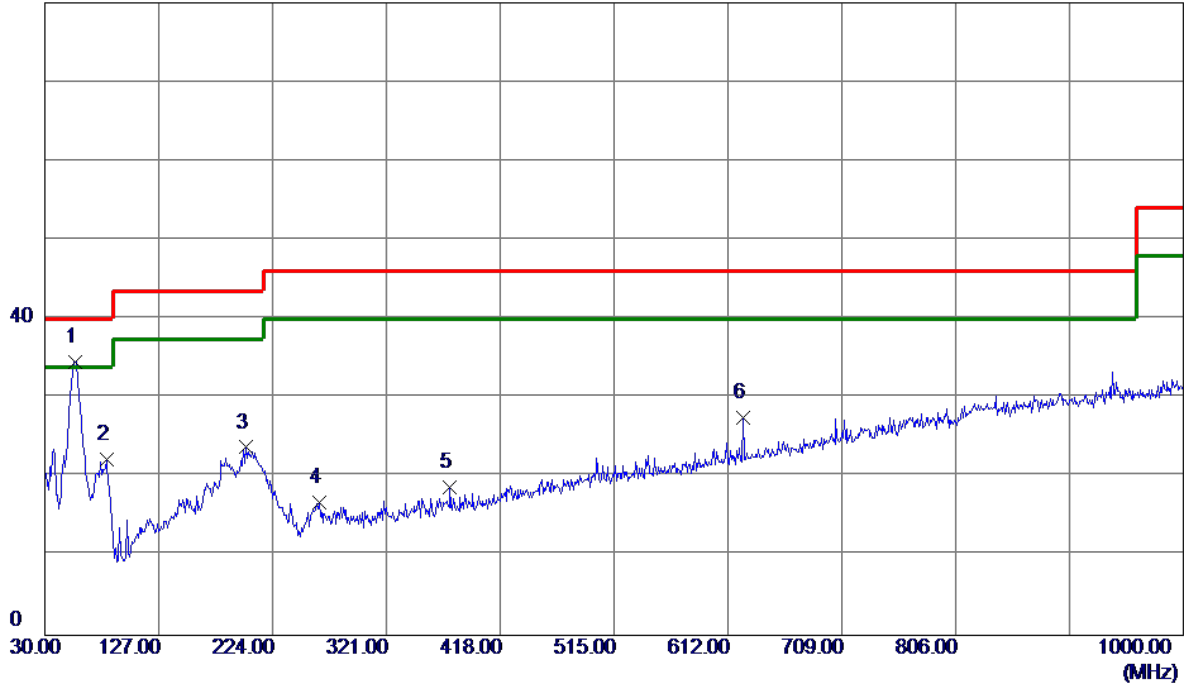


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	56.1900	32.76	-13.95	18.81	40.00	-21.19	Peak	
2	83.3500	33.43	-18.34	15.09	40.00	-24.91	Peak	
3	162.8900	34.45	-12.76	21.69	43.50	-21.81	Peak	
4	255.0400	35.60	-15.30	20.30	46.00	-25.70	Peak	
5	500.4500	33.03	-8.71	24.32	46.00	-21.68	Peak	
6 *	733.2500	35.27	-2.95	32.32	46.00	-13.68	Peak	

Test Mode: TX B MODE CHANNEL 11

Vertical

80 dBuV/m

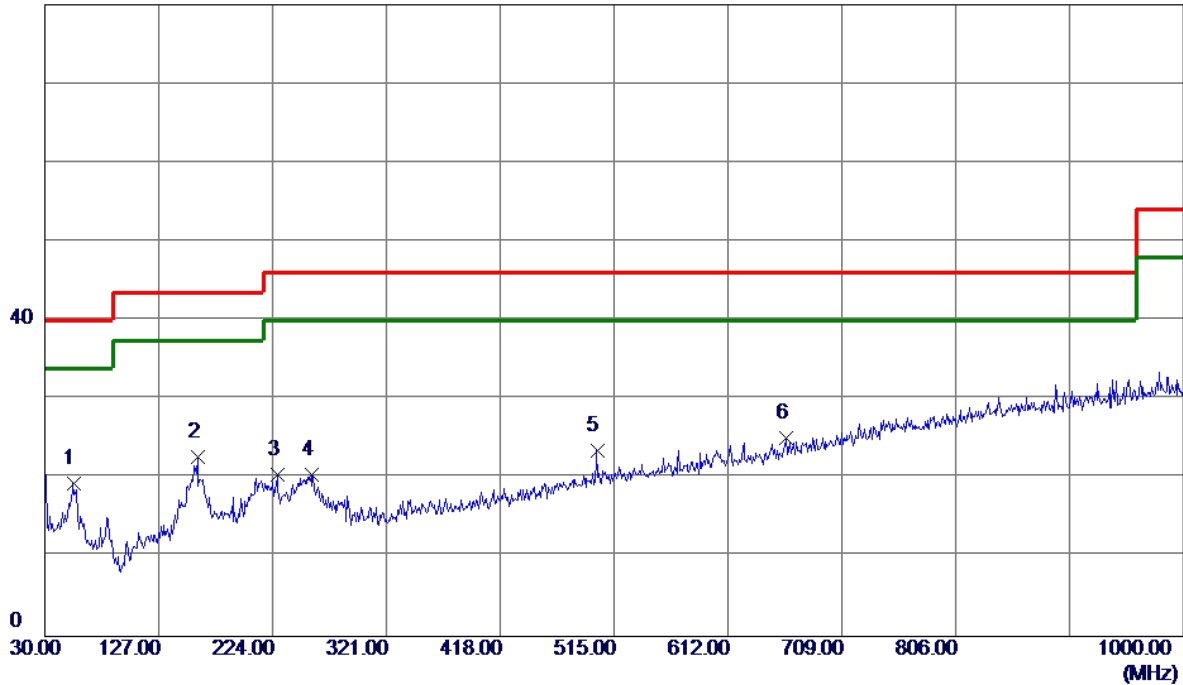


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	56.1900	48.56	-13.95	34.61	40.00	-5.39	Peak	
2	82.3800	40.59	-18.31	22.28	40.00	-17.72	Peak	
3	201.6900	37.55	-13.79	23.76	43.50	-19.74	Peak	
4	263.7700	32.62	-15.76	16.86	46.00	-29.14	Peak	
5	375.3200	30.30	-11.65	18.65	46.00	-27.35	Peak	
6	624.6100	33.45	-5.95	27.50	46.00	-18.50	Peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal

80 dBuV/m



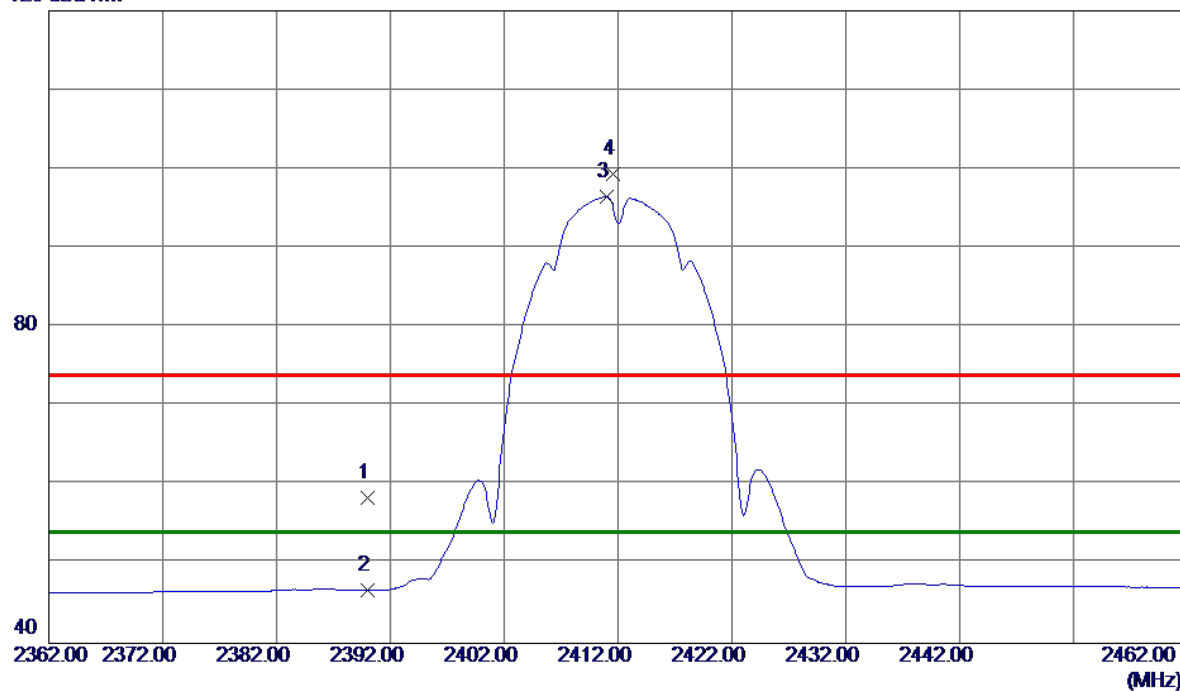
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	54.2500	33.36	-13.95	19.41	40.00	-20.59	Peak	
2	159.9800	35.64	-12.93	22.71	43.50	-20.79	Peak	
3	227.8800	34.51	-14.08	20.43	46.00	-25.57	Peak	
4	256.9800	36.01	-15.46	20.55	46.00	-25.45	Peak	
5	500.4500	32.30	-8.71	23.59	46.00	-22.41	Peak	
6	661.4699	30.23	-5.12	25.11	46.00	-20.89	Peak	

APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

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

Vertical

120 dBuV/m

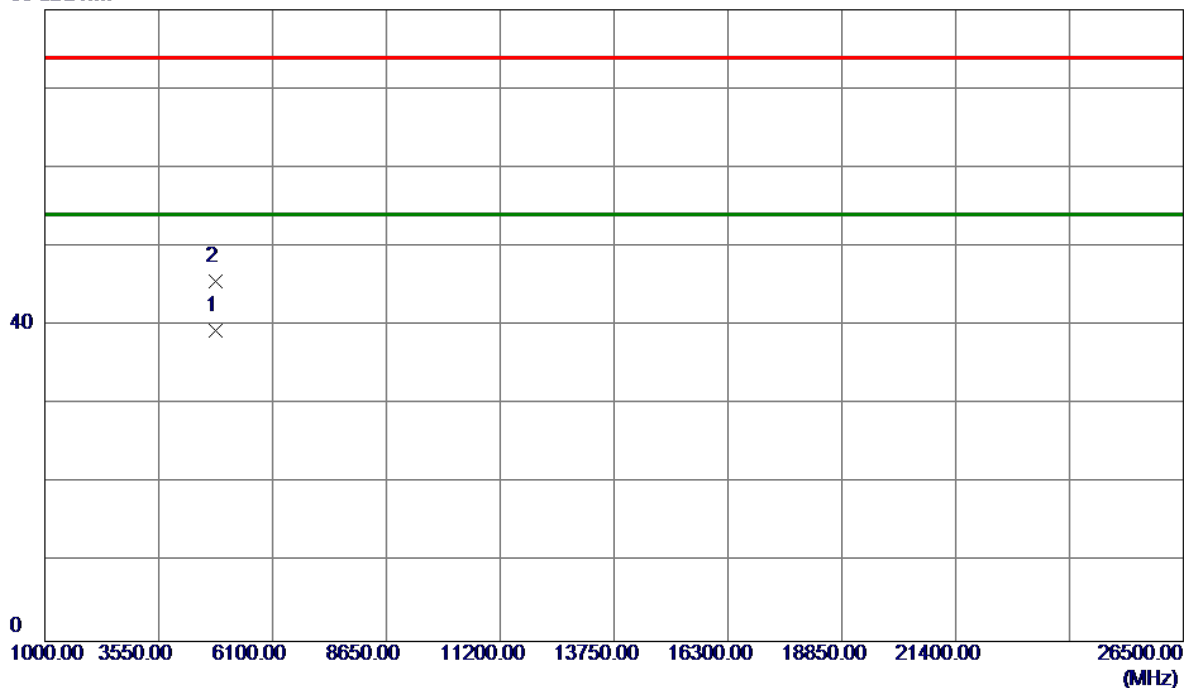


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.29	33.06	58.35	74.00	-15.65	Peak	
2	2390.0000	13.67	33.06	46.73	54.00	-7.27	AVG	
3 *	2411.0000	63.36	33.14	96.50	54.00	42.50	AVG	No Limit
4	2411.6000	66.24	33.14	99.38	74.00	25.38	Peak	No Limit

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

Vertical

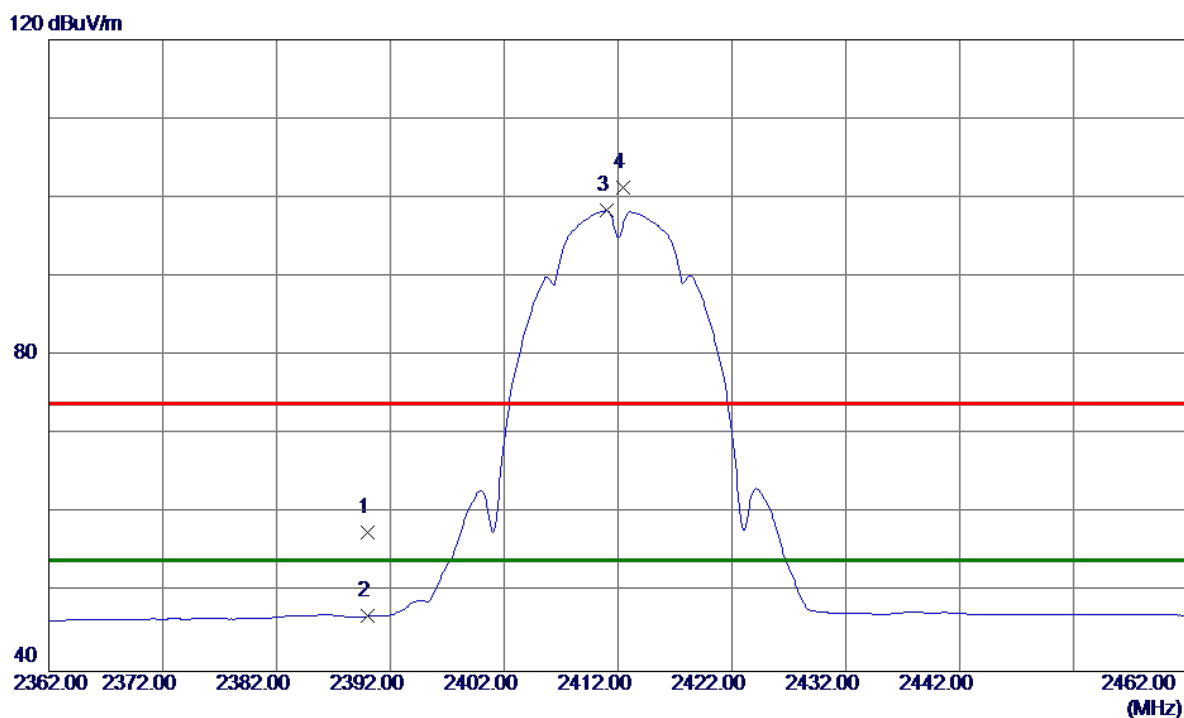
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9420	32.63	6.66	39.29	54.00	-14.71	AVG	
2	4824.0160	39.00	6.66	45.66	74.00	-28.34	Peak	

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

Horizontal

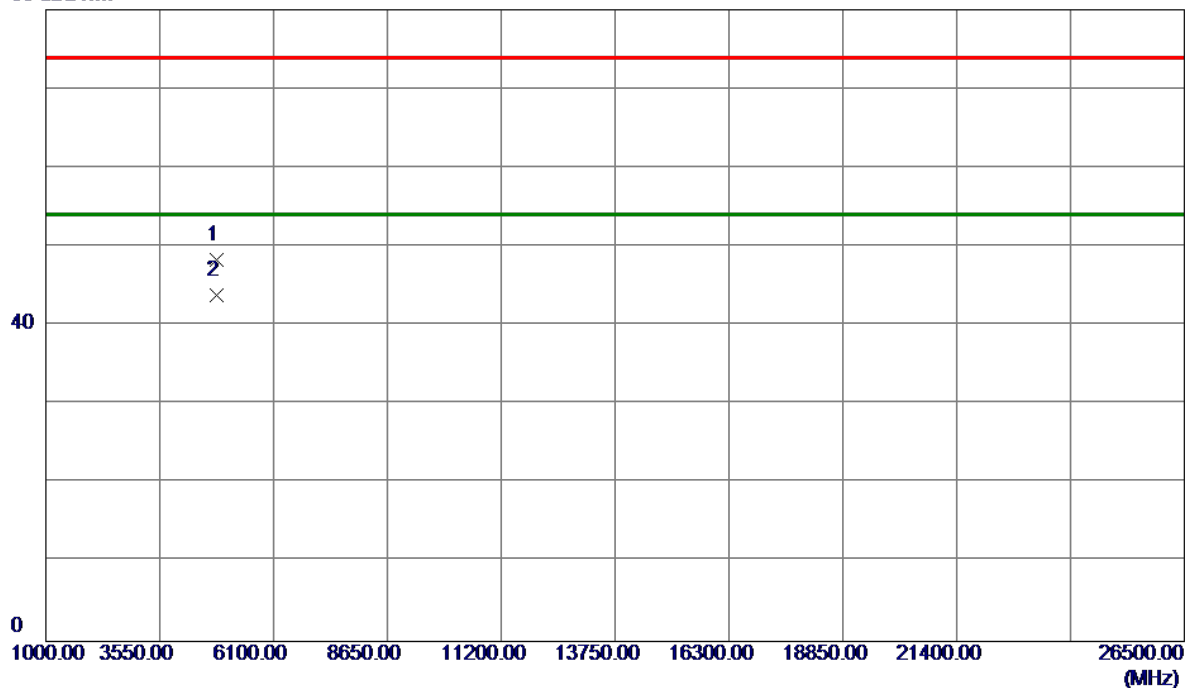


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	24.50	33.06	57.56	74.00	-16.44	Peak	
2	2390.0000	13.91	33.06	46.97	54.00	-7.03	AVG	
3 *	2411.0000	65.20	33.14	98.34	54.00	44.34	AVG	No Limit
4	2412.4000	68.09	33.14	101.23	74.00	27.23	Peak	No Limit

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

Horizontal

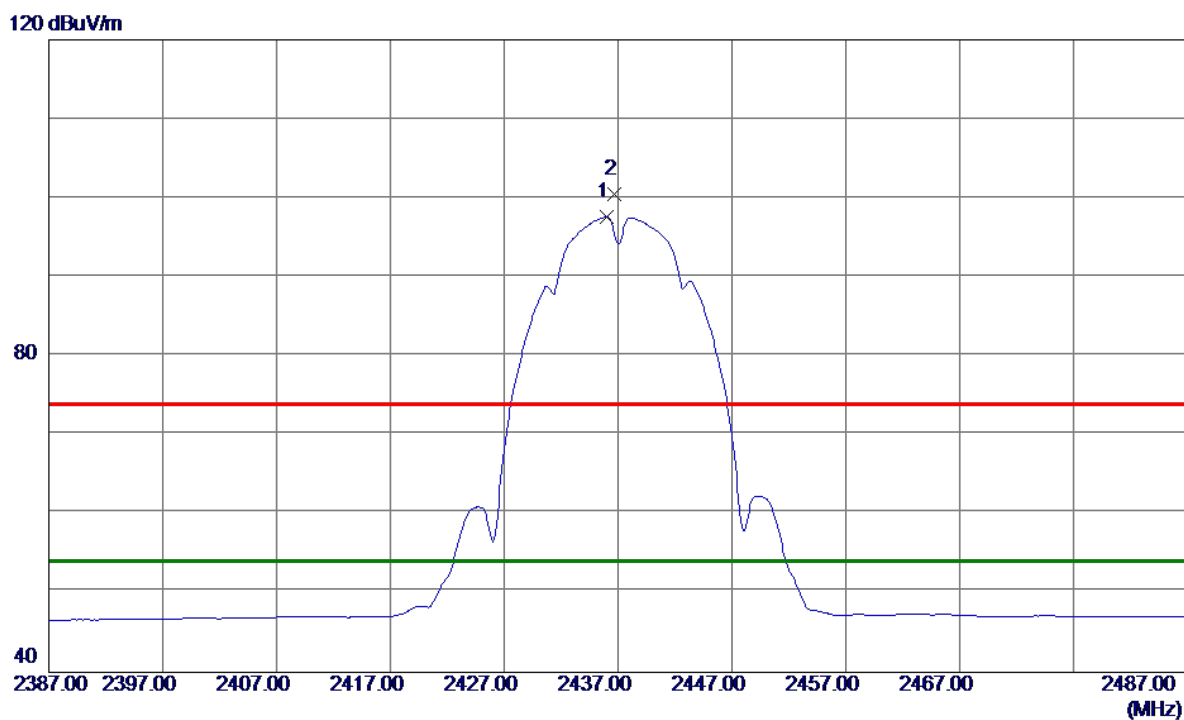
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.9200	41.70	6.66	48.36	74.00	-25.64	Peak	
2 *	4823.9600	37.26	6.66	43.92	54.00	-10.08	AVG	

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

Vertical

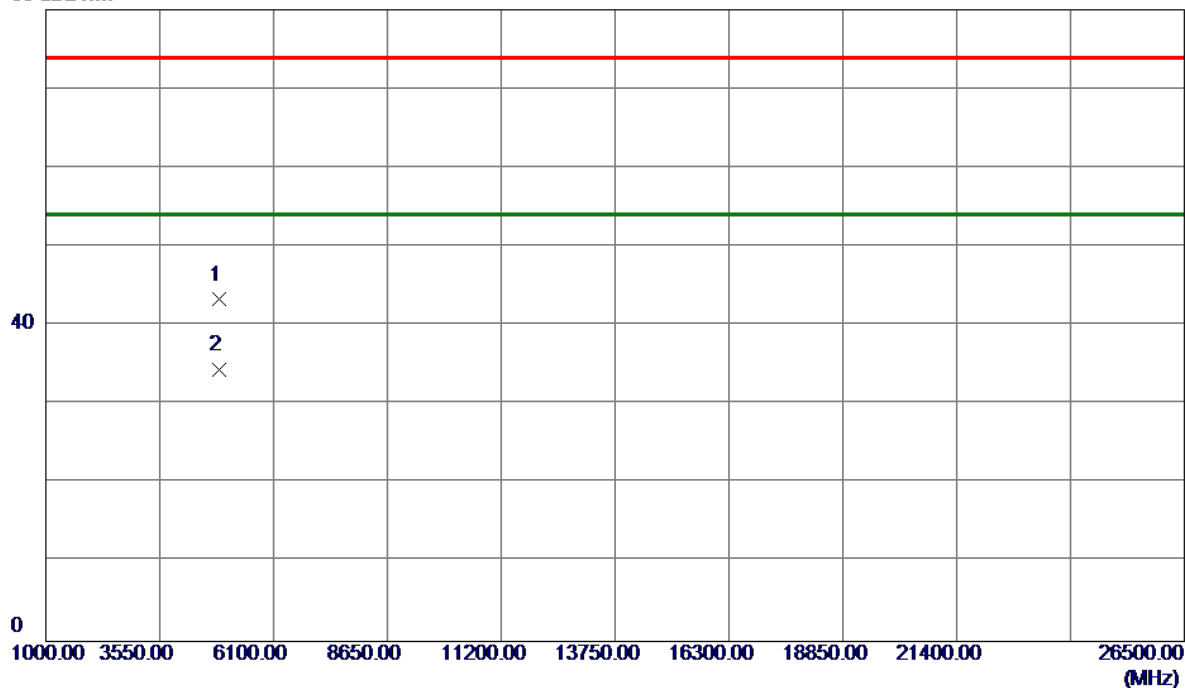


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.0000	64.36	33.23	97.59	54.00	43.59	AVG	No Limit
2	2436.7000	67.31	33.23	100.54	74.00	26.54	Peak	No Limit

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

Vertical

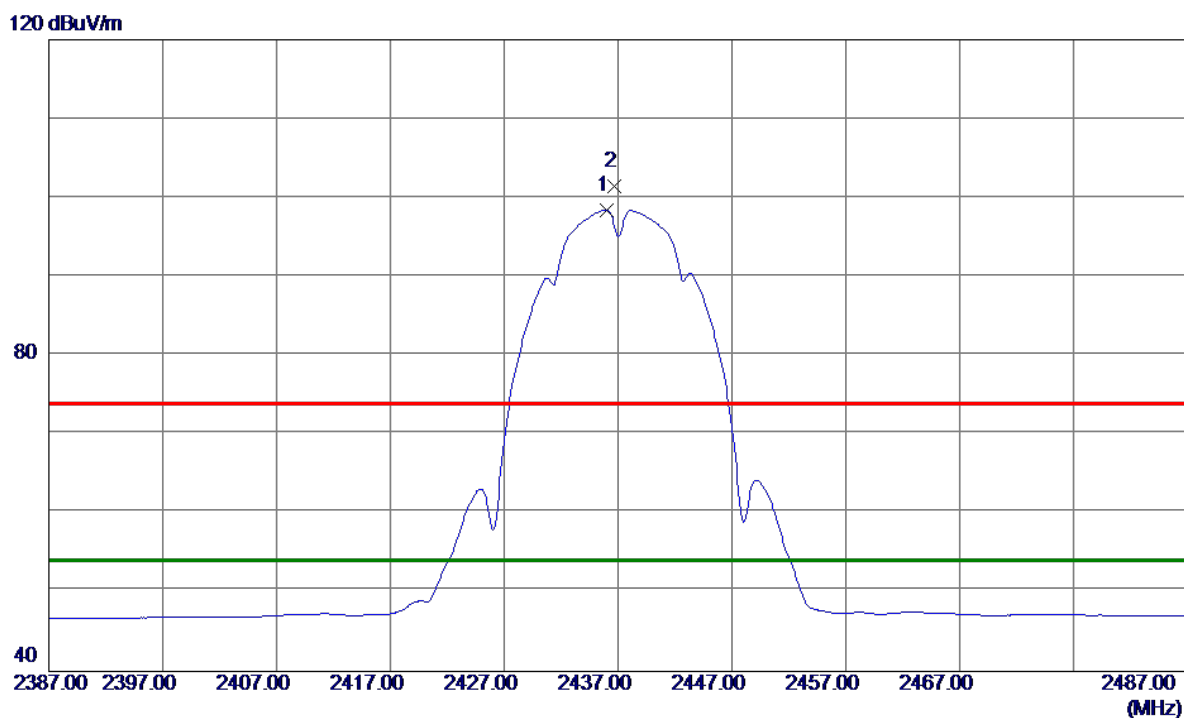
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.7180	36.44	6.84	43.28	74.00	-30.72	Peak	
2 *	4874.0040	27.62	6.84	34.46	54.00	-19.54	AVG	

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

Horizontal

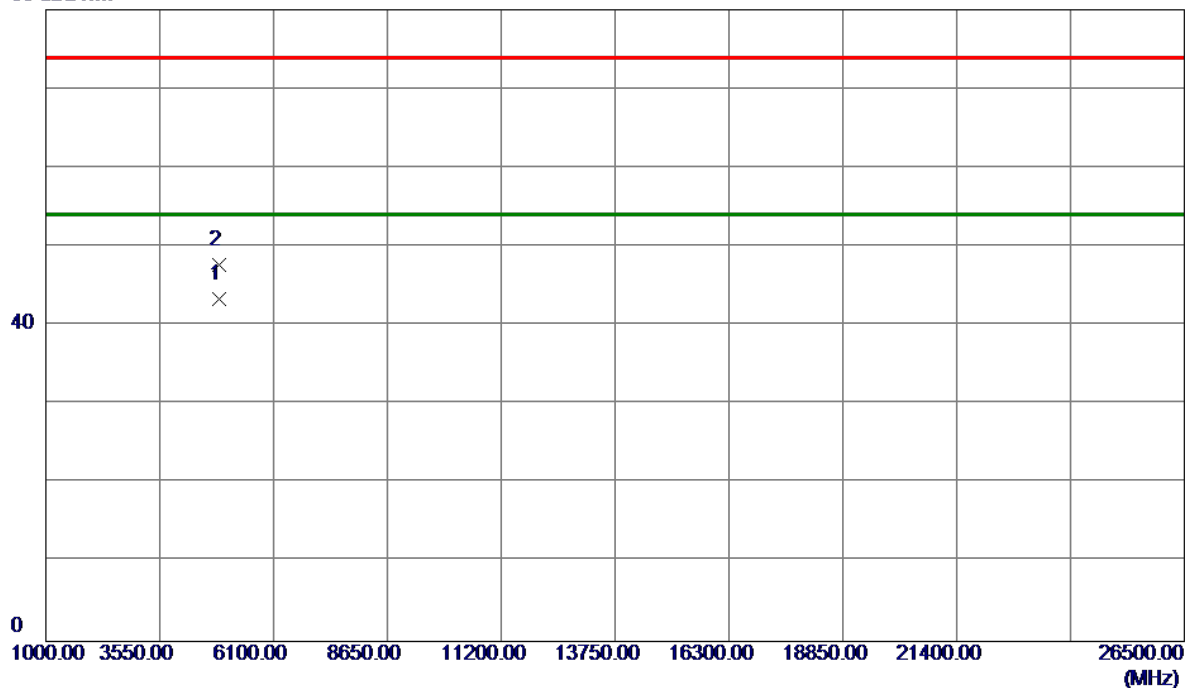


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.0000	65.21	33.23	98.44	54.00	44.44	AVG	No Limit
2	2436.7000	68.21	33.23	101.44	74.00	27.44	Peak	No Limit

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

Horizontal

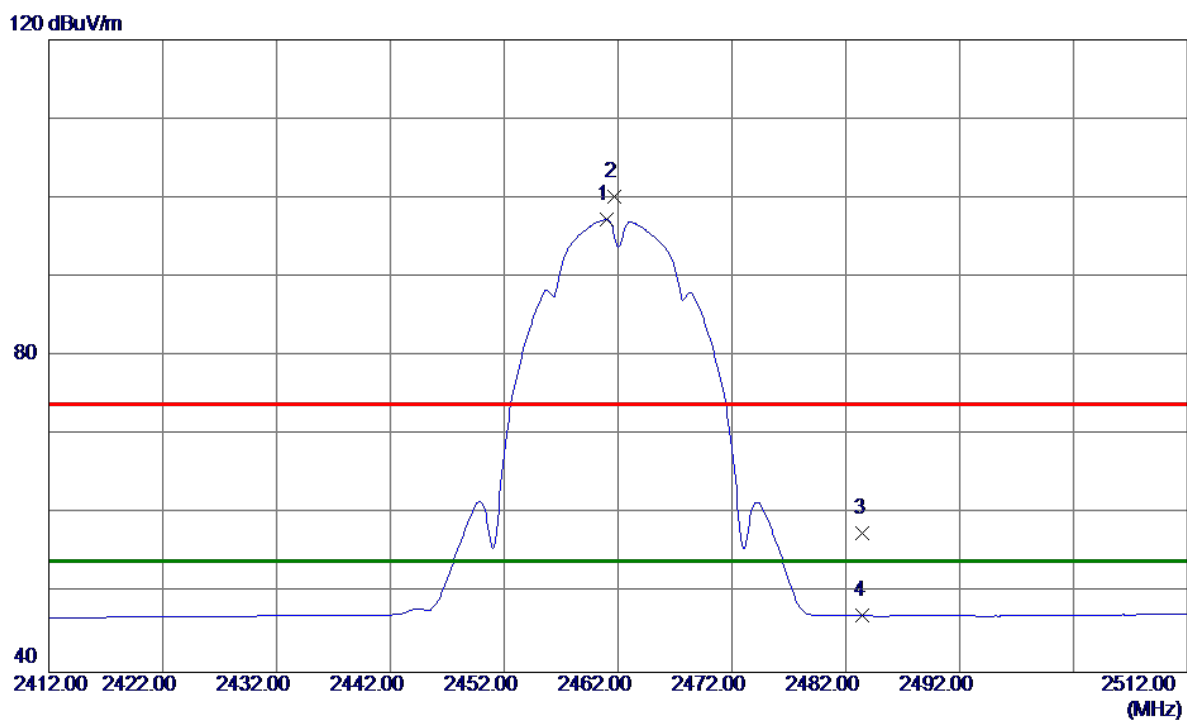
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9700	36.48	6.84	43.32	54.00	-10.68	AVG	
2	4874.0179	40.87	6.84	47.71	74.00	-26.29	Peak	

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

Vertical

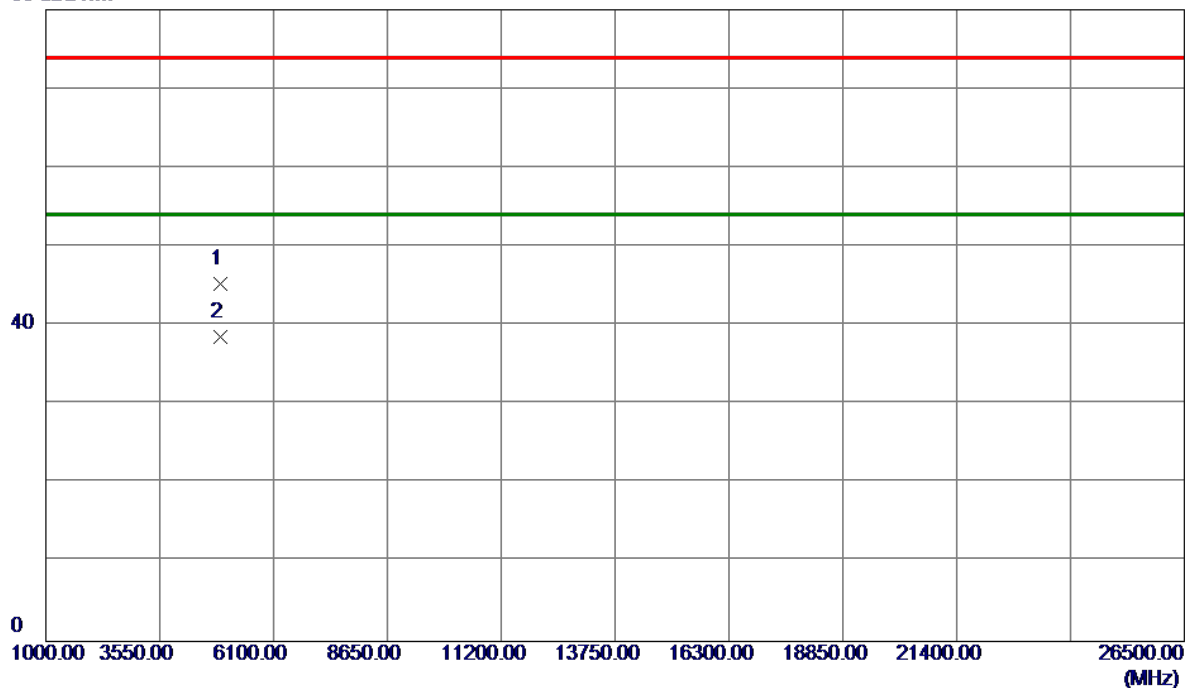


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.0000	63.96	33.32	97.28	54.00	43.28	AVG	No Limit
2	2461.7000	66.85	33.33	100.18	74.00	26.18	Peak	No Limit
3	2483.5000	24.19	33.41	57.60	74.00	-16.40	Peak	
4	2483.5000	13.77	33.41	47.18	54.00	-6.82	AVG	

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

Vertical

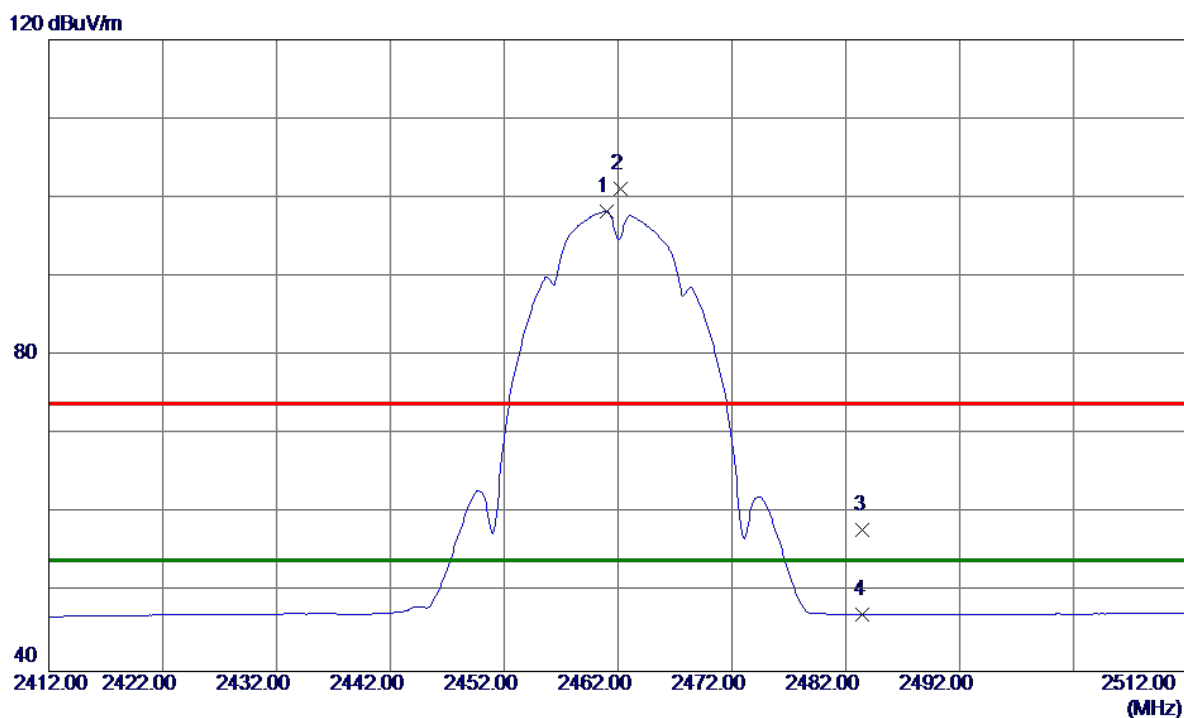
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.8920	38.32	7.02	45.34	74.00	-28.66	Peak	
2 *	4923.9880	31.52	7.02	38.54	54.00	-15.46	AVG	

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

Horizontal

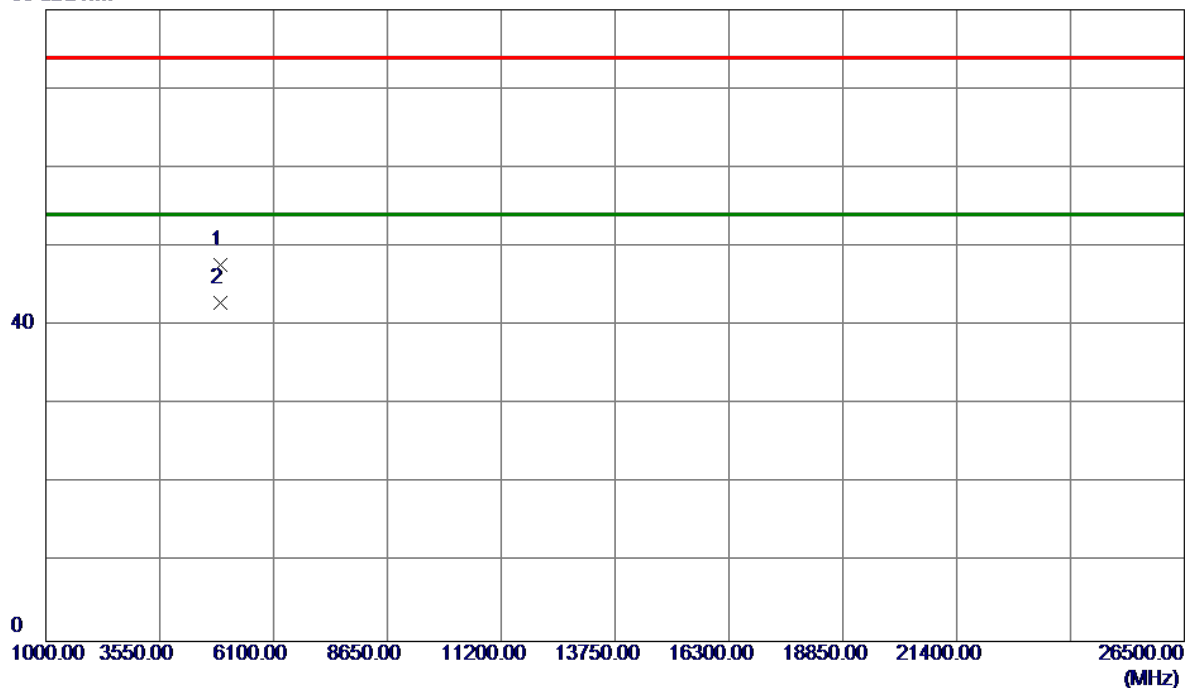


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.0000	64.90	33.32	98.22	54.00	44.22	AVG	No Limit
2	2462.2000	67.80	33.33	101.13	74.00	27.13	Peak	No Limit
3	2483.5000	24.55	33.41	57.96	74.00	-16.04	Peak	
4	2483.5000	13.82	33.41	47.23	54.00	-6.77	AVG	

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

Horizontal

80 dBuV/m

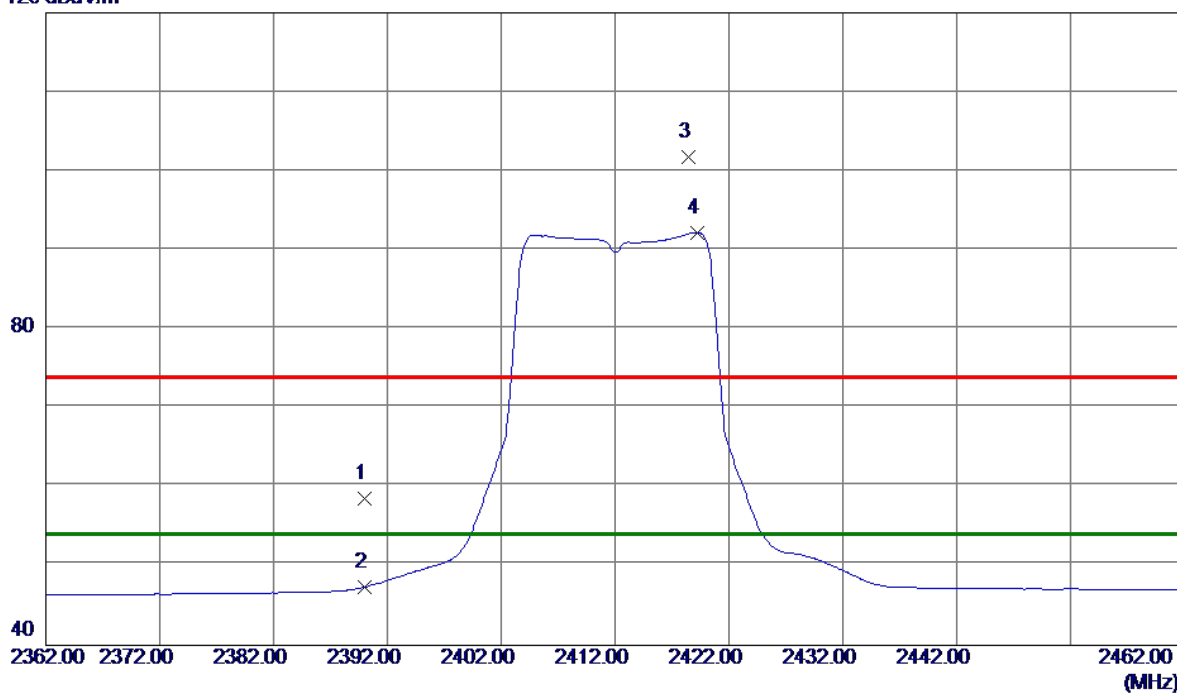


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.9420	40.72	7.02	47.74	74.00	-26.26	Peak	
2 *	4923.9740	35.89	7.02	42.91	54.00	-11.09	AVG	

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

Vertical

120 dBuV/m

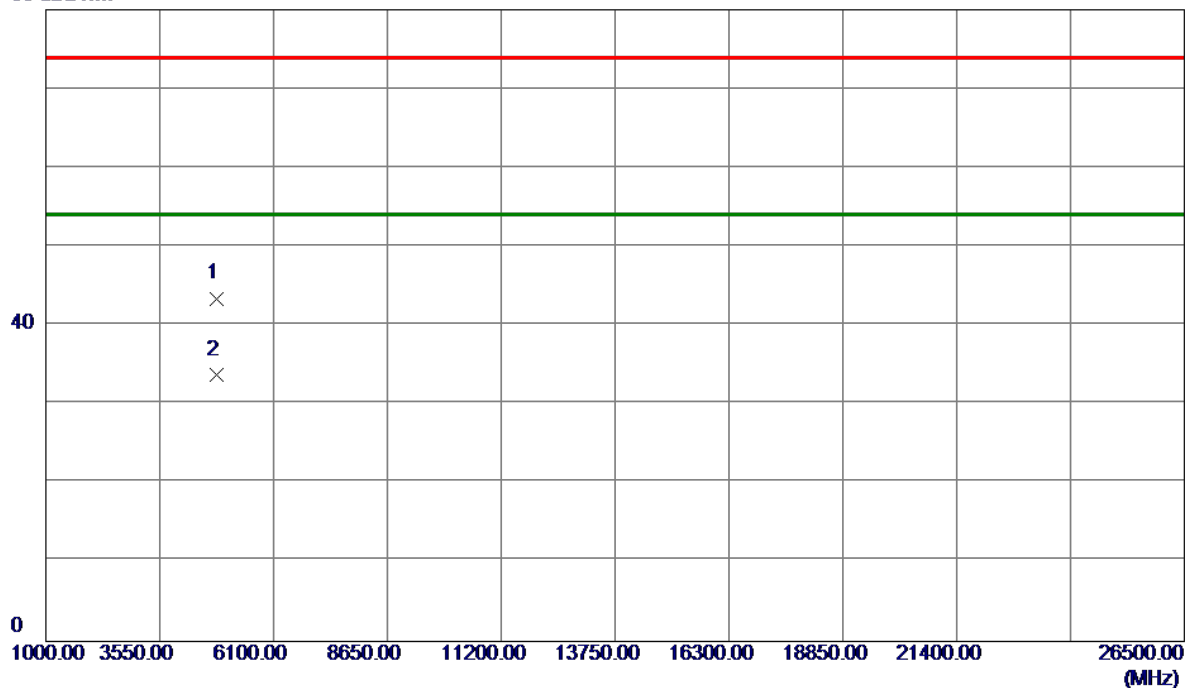


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.56	33.06	58.62	74.00	-15.38	Peak	
2	2390.0000	14.29	33.06	47.35	54.00	-6.65	AVG	
3	2418.4000	68.55	33.16	101.71	74.00	27.71	Peak	No Limit
4 *	2419.2000	59.02	33.17	92.19	54.00	38.19	AVG	No Limit

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

Vertical

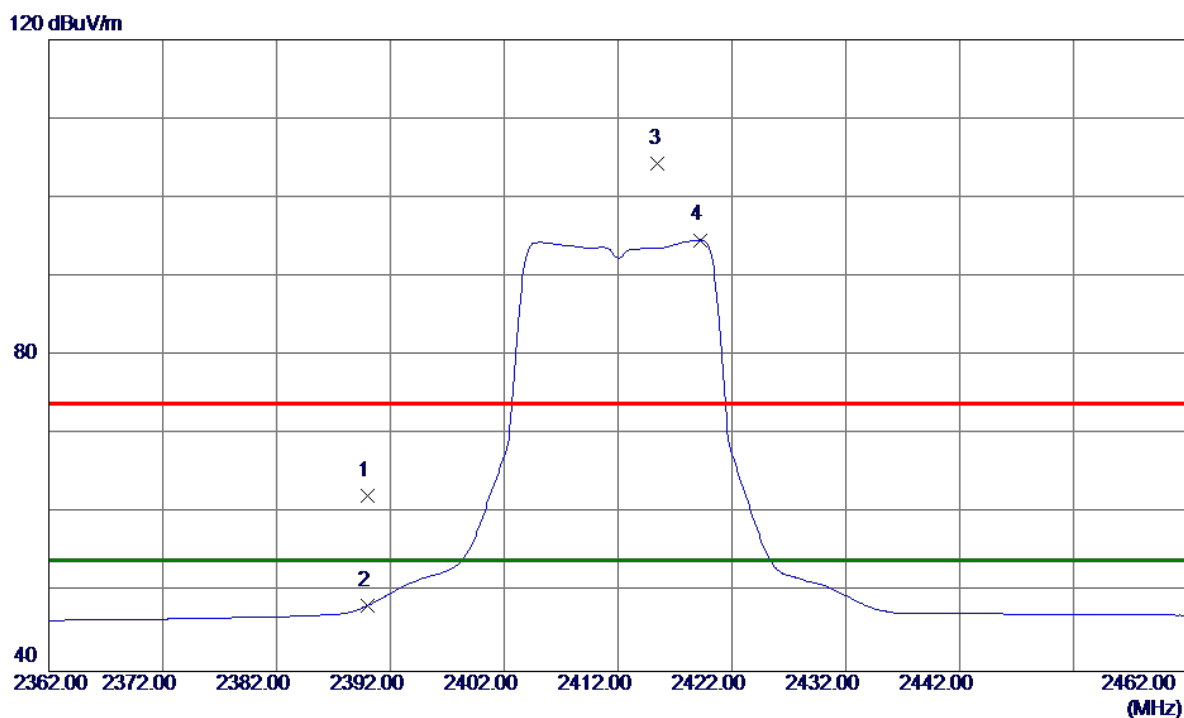
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.8660	36.78	6.66	43.44	74.00	-30.56	Peak	
2 *	4824.0179	27.06	6.66	33.72	54.00	-20.28	AVG	

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

Horizontal

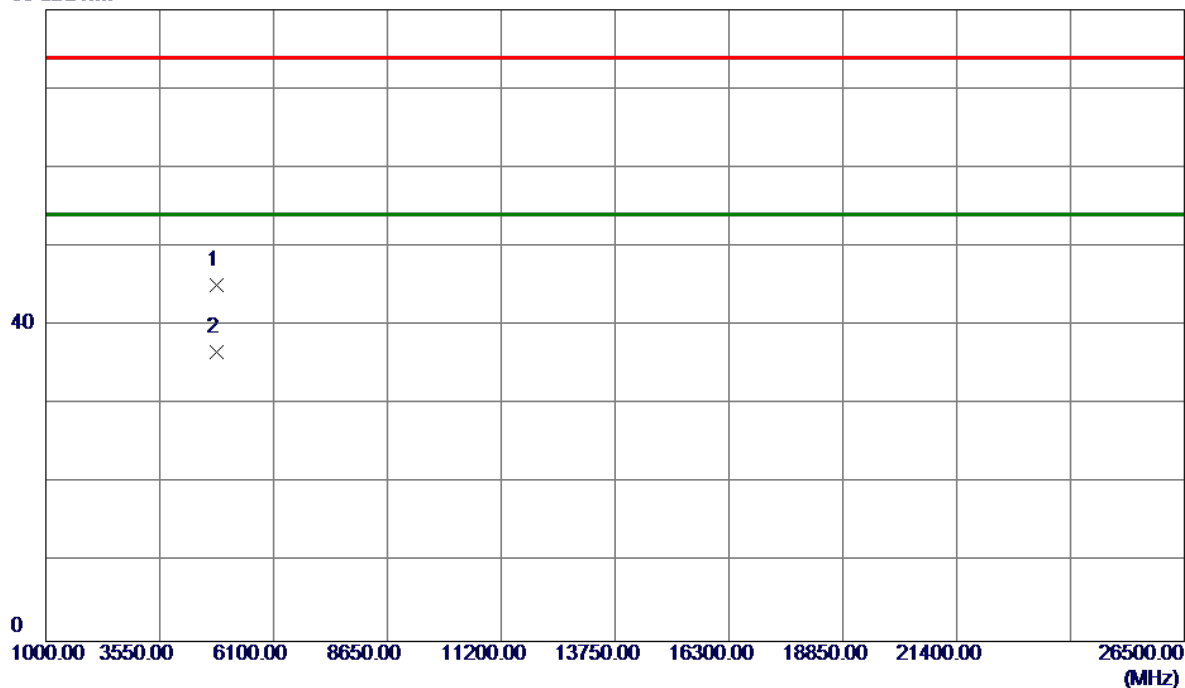


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	29.20	33.06	62.26	74.00	-11.74	Peak	
2	2390.0000	15.31	33.06	48.37	54.00	-5.63	AVG	
3	2415.5000	71.18	33.15	104.33	74.00	30.33	Peak	No Limit
4 *	2419.2000	61.47	33.17	94.64	54.00	40.64	AVG	No Limit

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

Horizontal

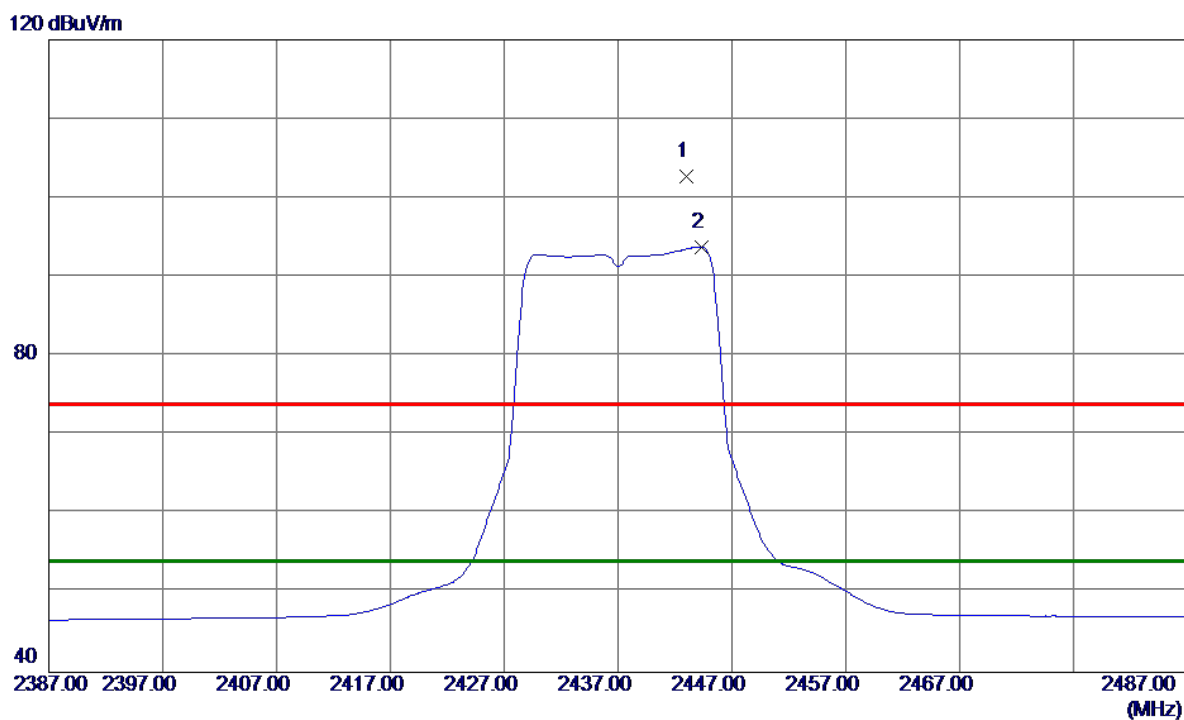
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.7460	38.45	6.66	45.11	74.00	-28.89	Peak	
2 *	4823.9480	30.04	6.66	36.70	54.00	-17.30	AVG	

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

Vertical

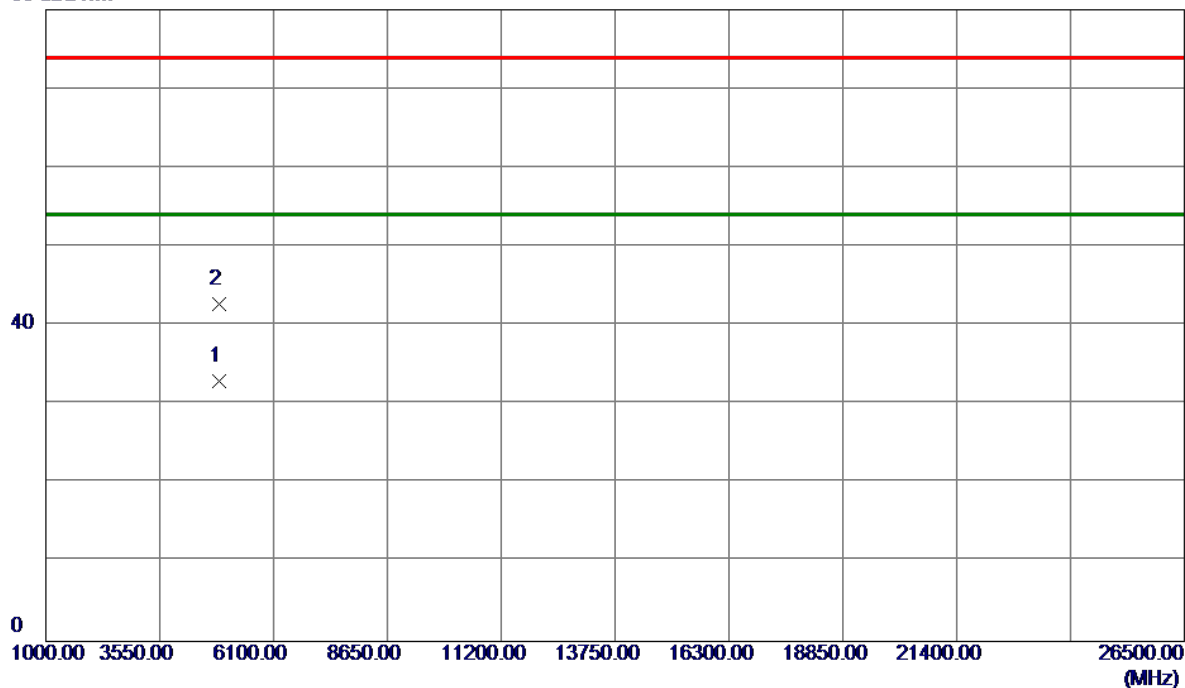


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2443.0000	69.45	33.26	102.71	74.00	28.71	Peak	No Limit
2 *	2444.3000	60.54	33.26	93.80	54.00	39.80	AVG	No Limit

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

Vertical

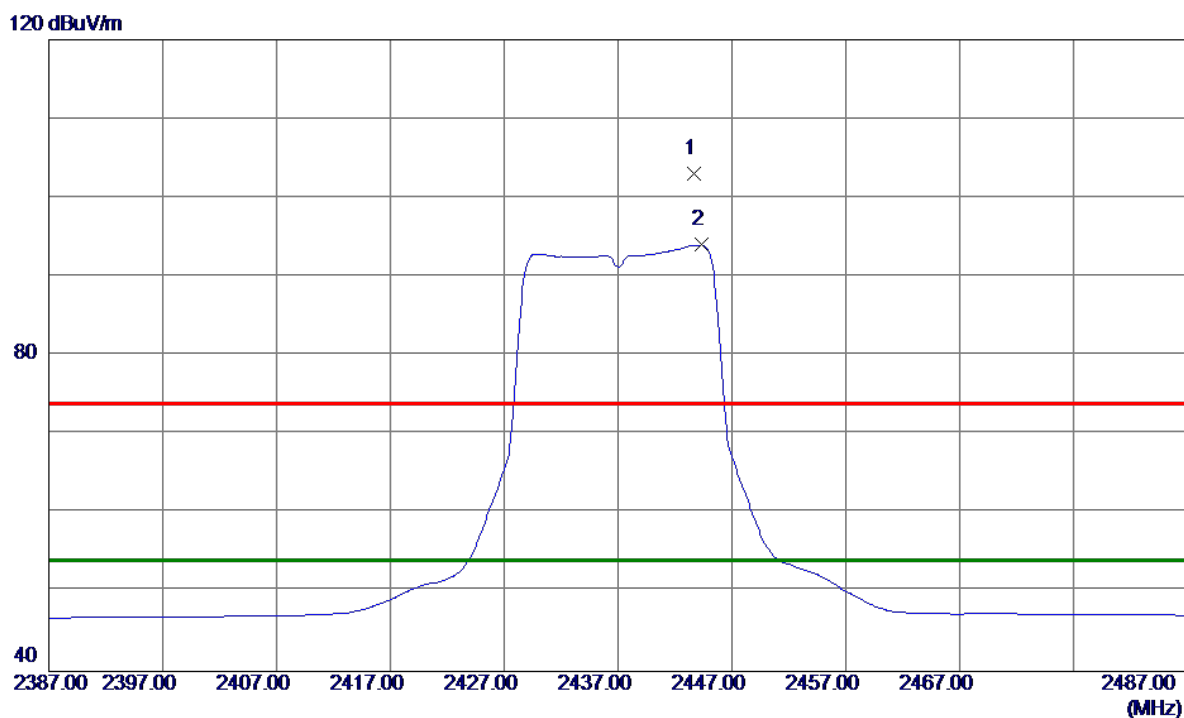
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9740	26.12	6.84	32.96	54.00	-21.04	AVG	
2	4874.0120	35.82	6.84	42.66	74.00	-31.34	Peak	

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

Horizontal

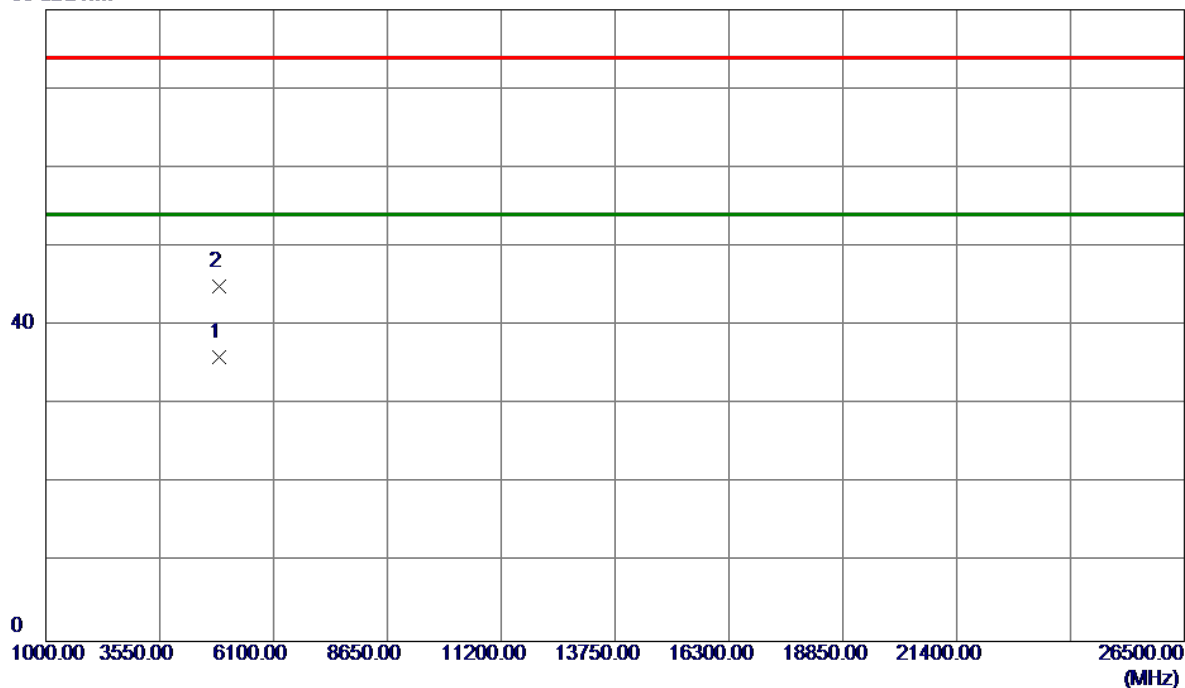


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2443.7000	69.74	33.26	103.00	74.00	29.00	Peak	No Limit
2 *	2444.3000	60.75	33.26	94.01	54.00	40.01	AVG	No Limit

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

Horizontal

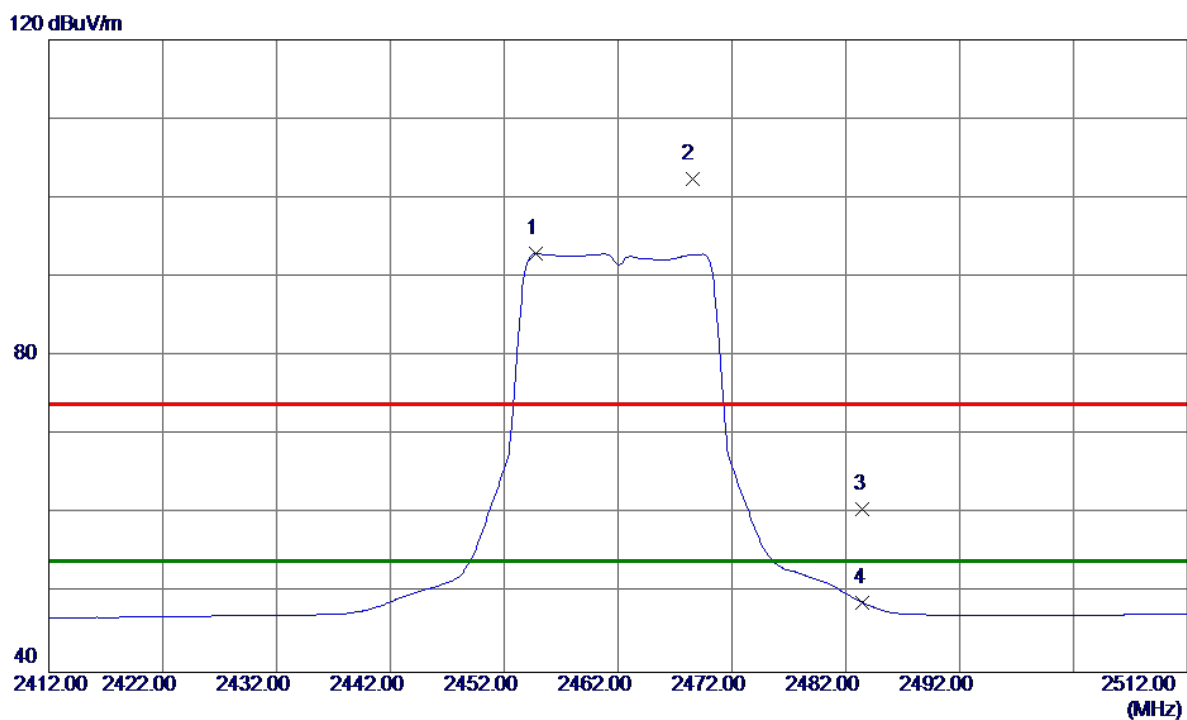
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9380	29.10	6.84	35.94	54.00	-18.06	AVG	
2	4873.9700	38.13	6.84	44.97	74.00	-29.03	Peak	

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

Vertical

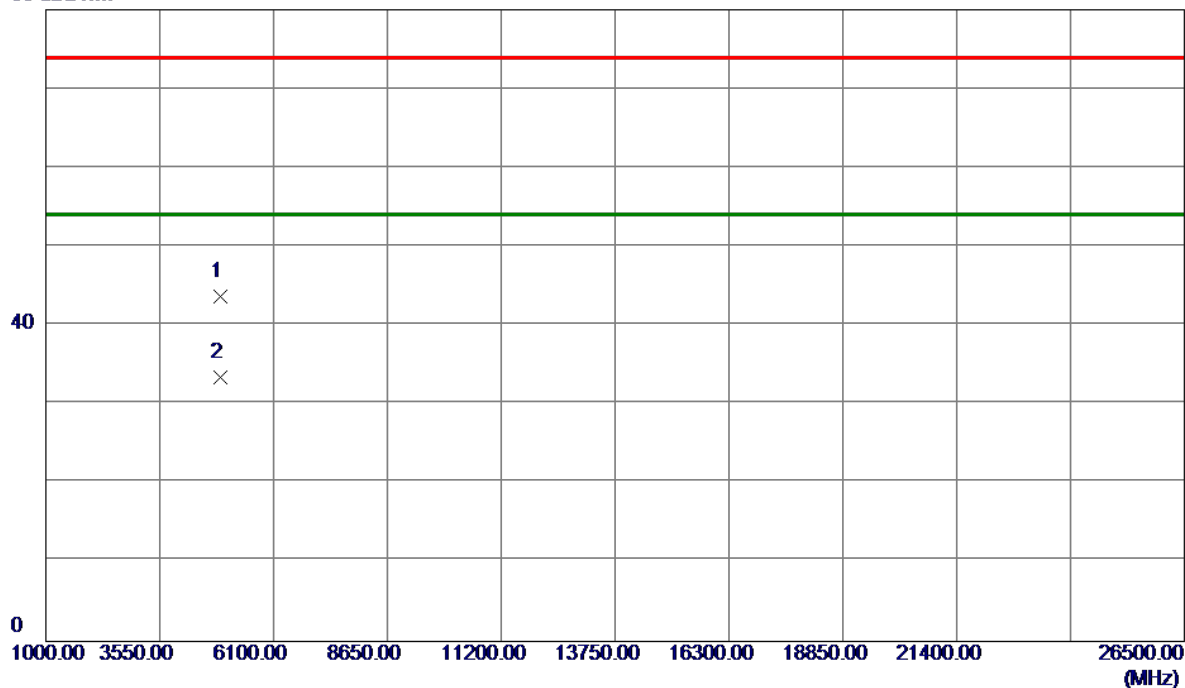


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2454.8000	59.61	33.30	92.91	54.00	38.91	AVG	No Limit
2	2468.5000	69.05	33.35	102.40	74.00	28.40	Peak	No Limit
3	2483.5000	27.17	33.41	60.58	74.00	-13.42	Peak	
4	2483.5000	15.40	33.41	48.81	54.00	-5.19	AVG	

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

Vertical

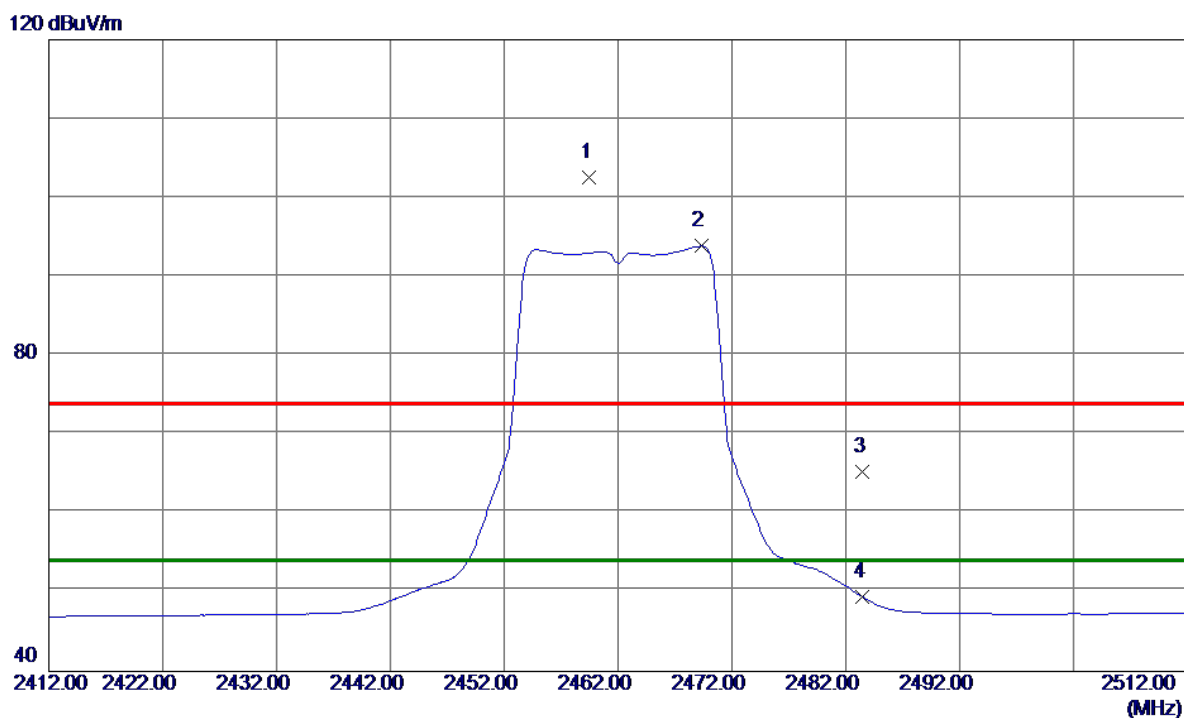
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.0339	36.70	7.01	43.71	74.00	-30.29	Peak	
2 *	4923.9660	26.47	7.02	33.49	54.00	-20.51	AVG	

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

Horizontal

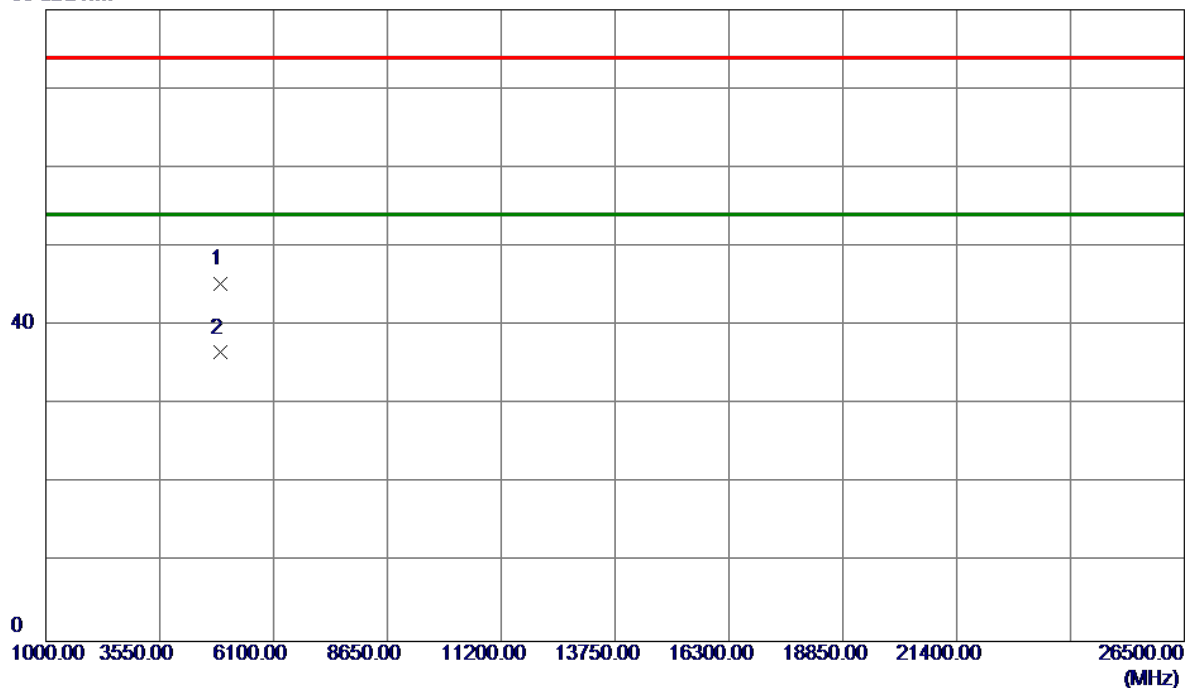


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2459.5000	69.25	33.32	102.57	74.00	28.57	Peak	No Limit
2 *	2469.3000	60.51	33.35	93.86	54.00	39.86	AVG	No Limit
3	2483.5000	31.93	33.41	65.34	74.00	-8.66	Peak	
4	2483.5000	15.98	33.41	49.39	54.00	-4.61	AVG	

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

Horizontal

80 dBuV/m

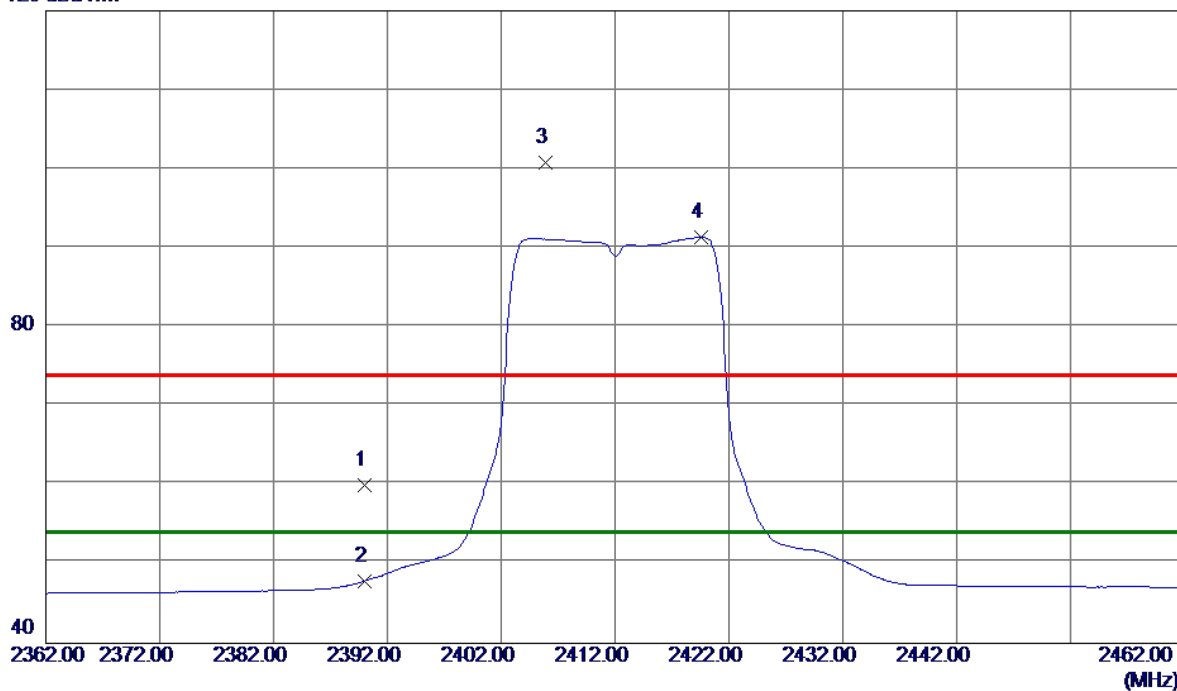


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.8600	38.21	7.02	45.23	74.00	-28.77	Peak	
2 *	4923.9640	29.54	7.02	36.56	54.00	-17.44	AVG	

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

Vertical

120 dBuV/m

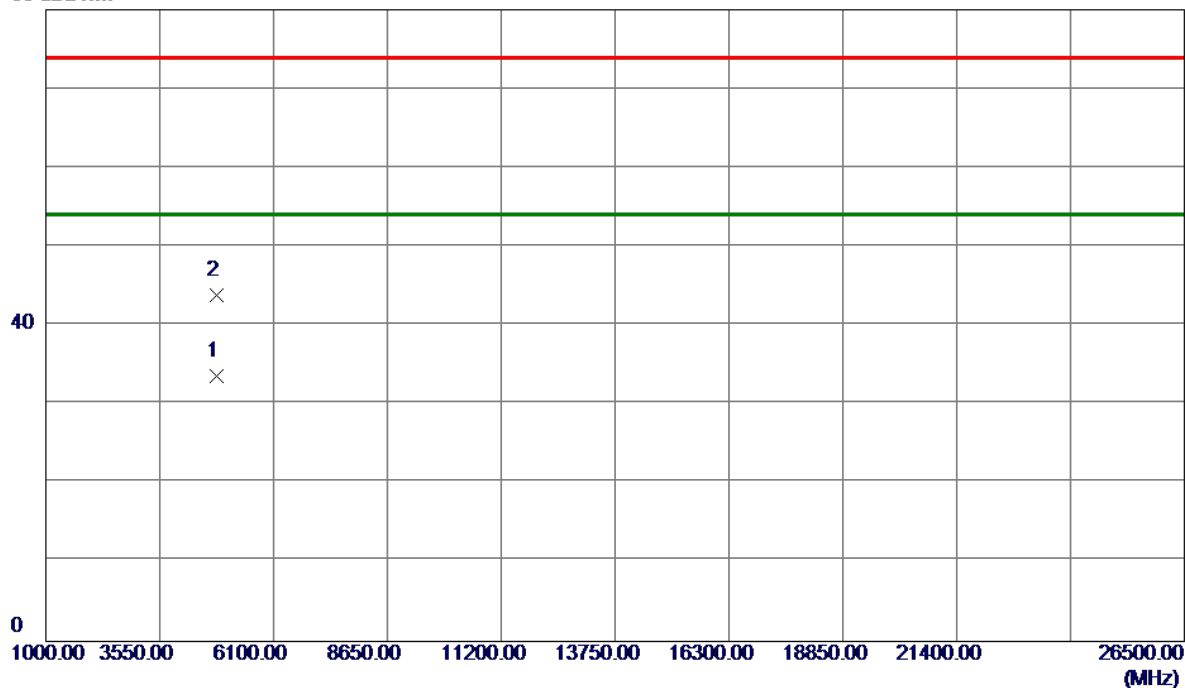


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	26.91	33.06	59.97	74.00	-14.03	Peak	
2	2390.0000	14.84	33.06	47.90	54.00	-6.10	AVG	
3	2405.9000	67.63	33.12	100.75	74.00	26.75	Peak	No Limit
4 *	2419.6000	58.20	33.17	91.37	54.00	37.37	AVG	No Limit

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

Vertical

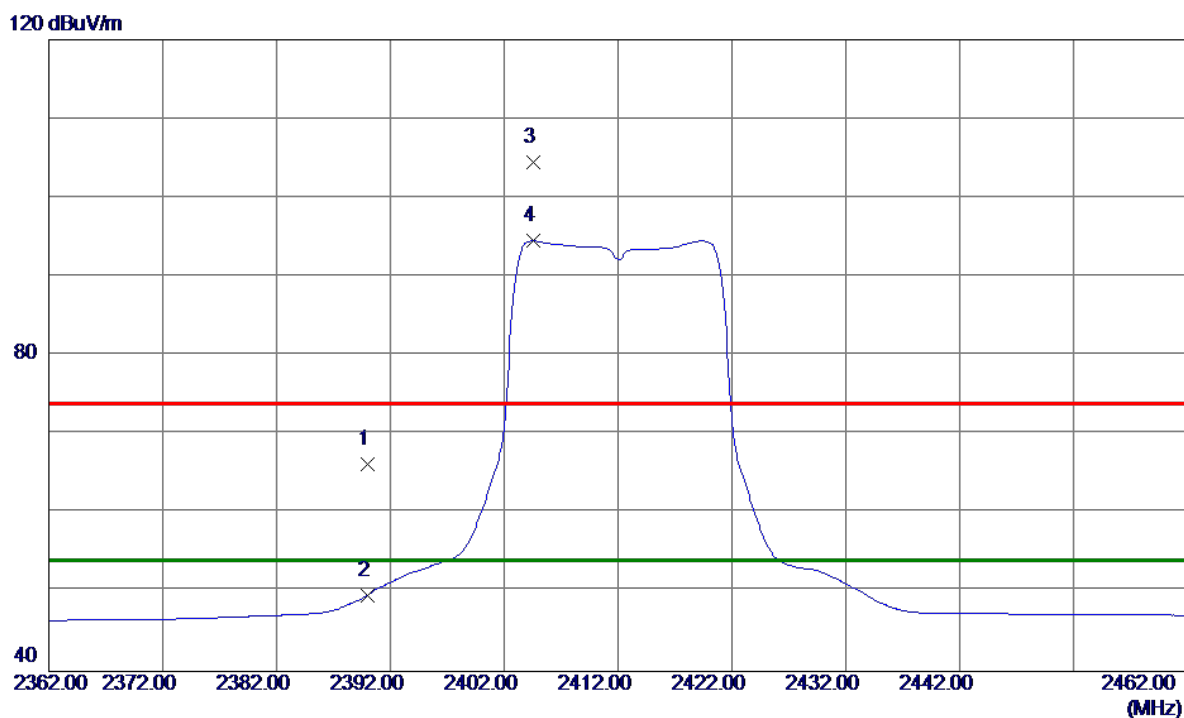
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9300	26.98	6.66	33.64	54.00	-20.36	AVG	
2	4824.1900	37.23	6.66	43.89	74.00	-30.11	Peak	

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

Horizontal

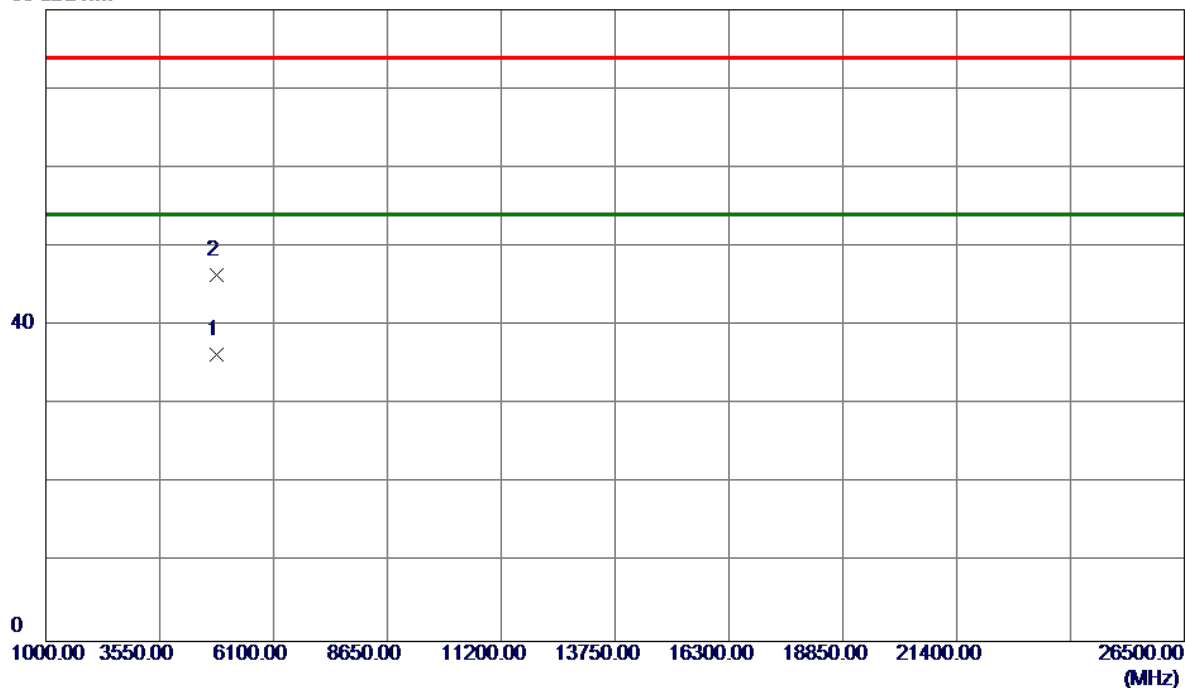


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	33.26	33.06	66.32	74.00	-7.68	Peak	
2	2390.0000	16.61	33.06	49.67	54.00	-4.33	AVG	
3	2404.6000	71.30	33.11	104.41	74.00	30.41	Peak	No Limit
4 *	2404.6000	61.41	33.11	94.52	54.00	40.52	AVG	No Limit

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

Horizontal

80 dBuV/m

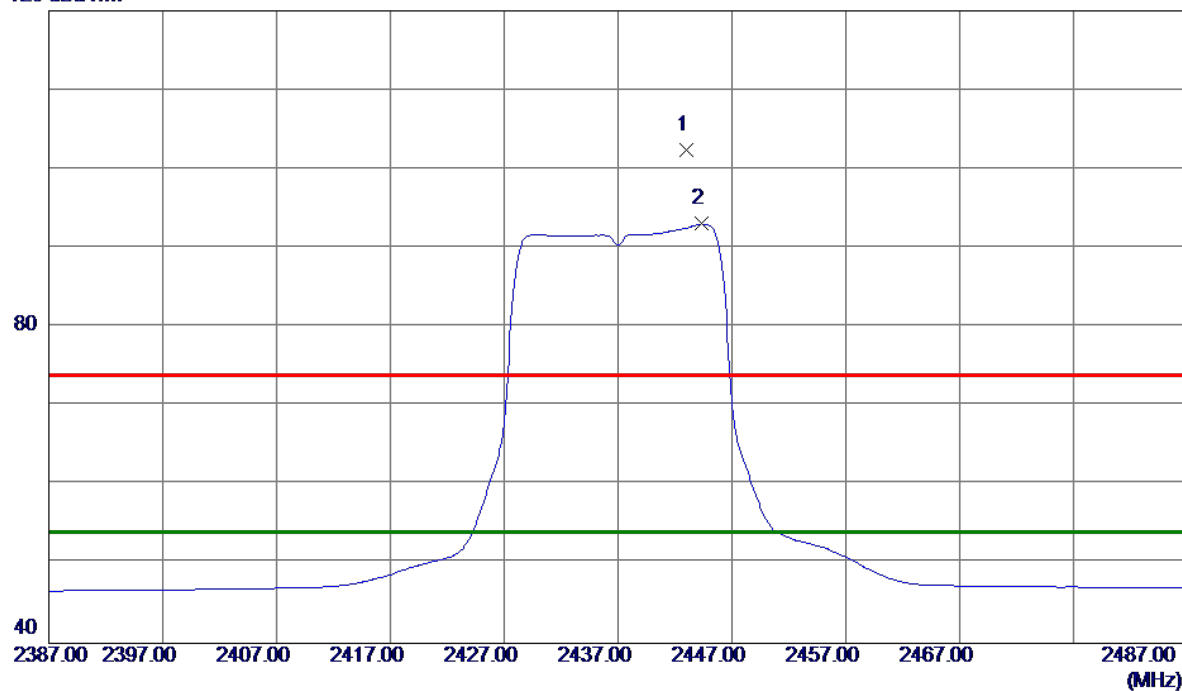


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9880	29.67	6.66	36.33	54.00	-17.67	AVG	
2	4824.3860	39.73	6.66	46.39	74.00	-27.61	Peak	

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

Vertical

120 dBuV/m

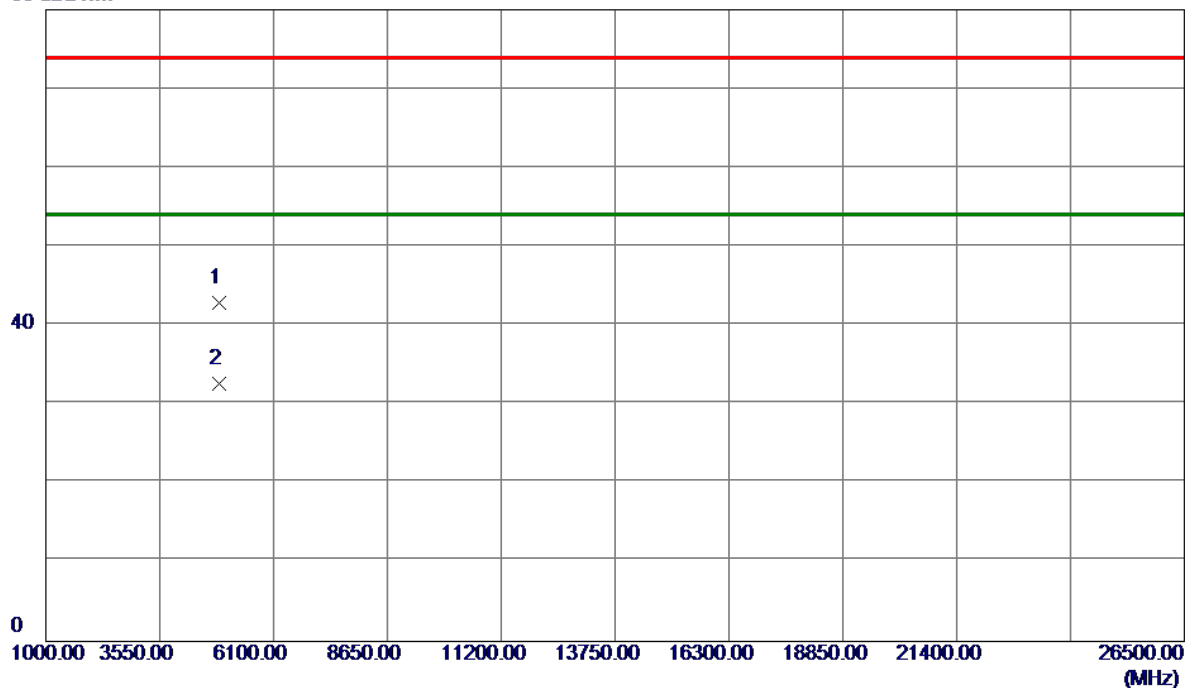


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2443.0000	69.18	33.26	102.44	74.00	28.44	Peak	No Limit
2 *	2444.3000	59.79	33.26	93.05	54.00	39.05	AVG	No Limit

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

Vertical

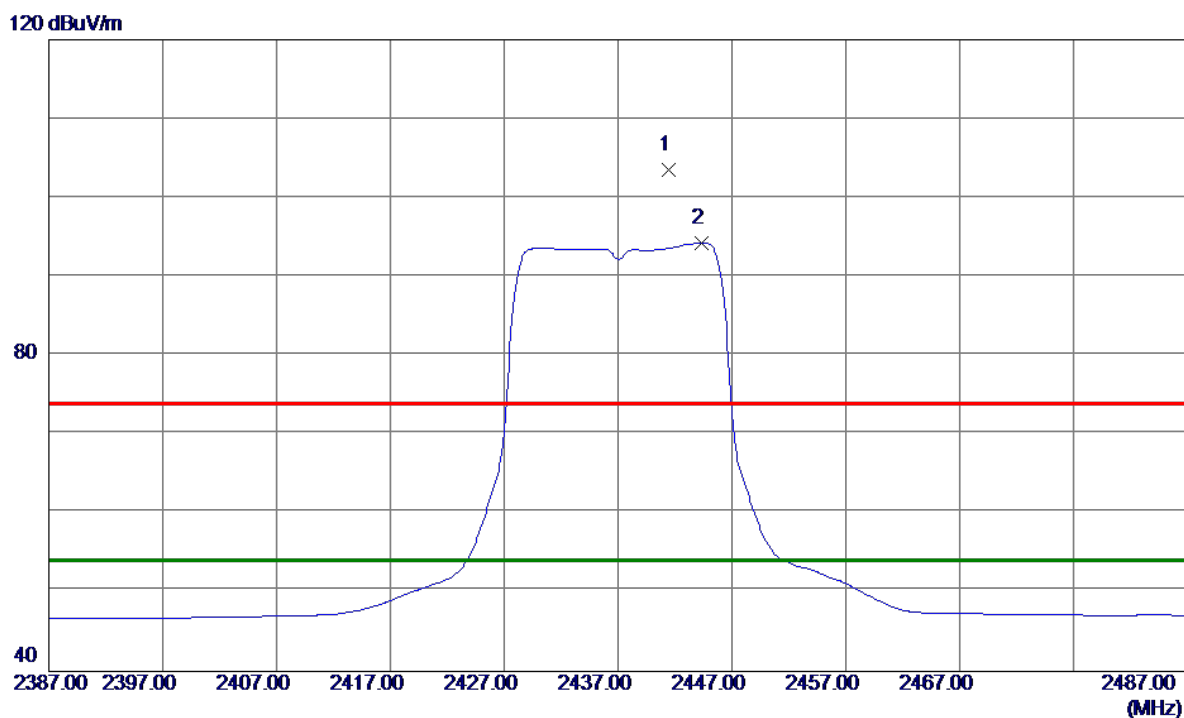
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.5500	36.08	6.84	42.92	74.00	-31.08	Peak	
2 *	4873.8680	25.79	6.84	32.63	54.00	-21.37	AVG	

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

Horizontal

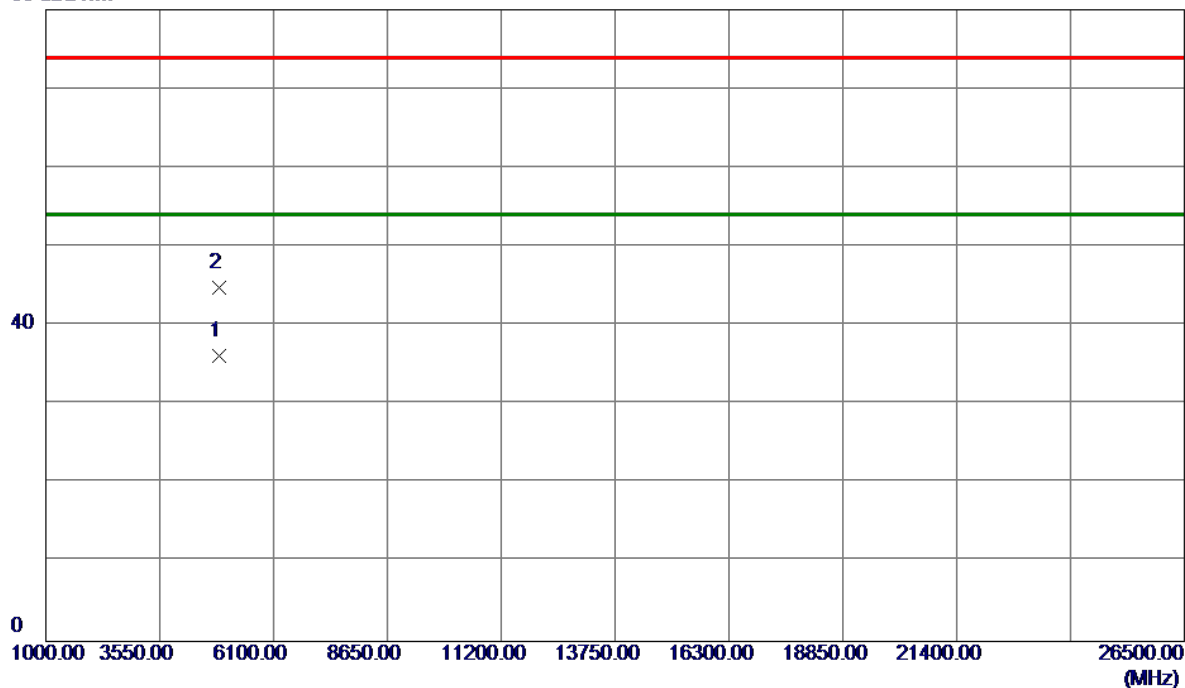


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2441.4000	70.35	33.25	103.60	74.00	29.60	Peak	No Limit
2 *	2444.3000	61.01	33.26	94.27	54.00	40.27	AVG	No Limit

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

Horizontal

80 dBuV/m

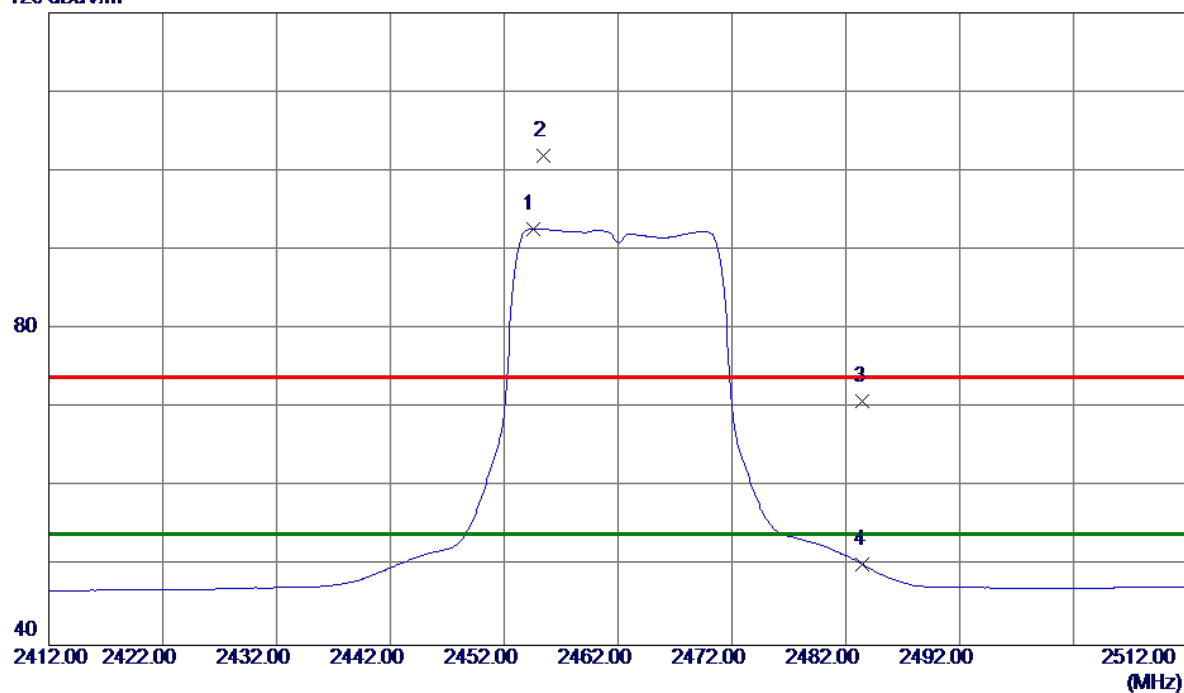


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9740	29.28	6.84	36.12	54.00	-17.88	AVG	
2	4874.0620	37.92	6.84	44.76	74.00	-29.24	Peak	

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

Vertical

120 dBuV/m

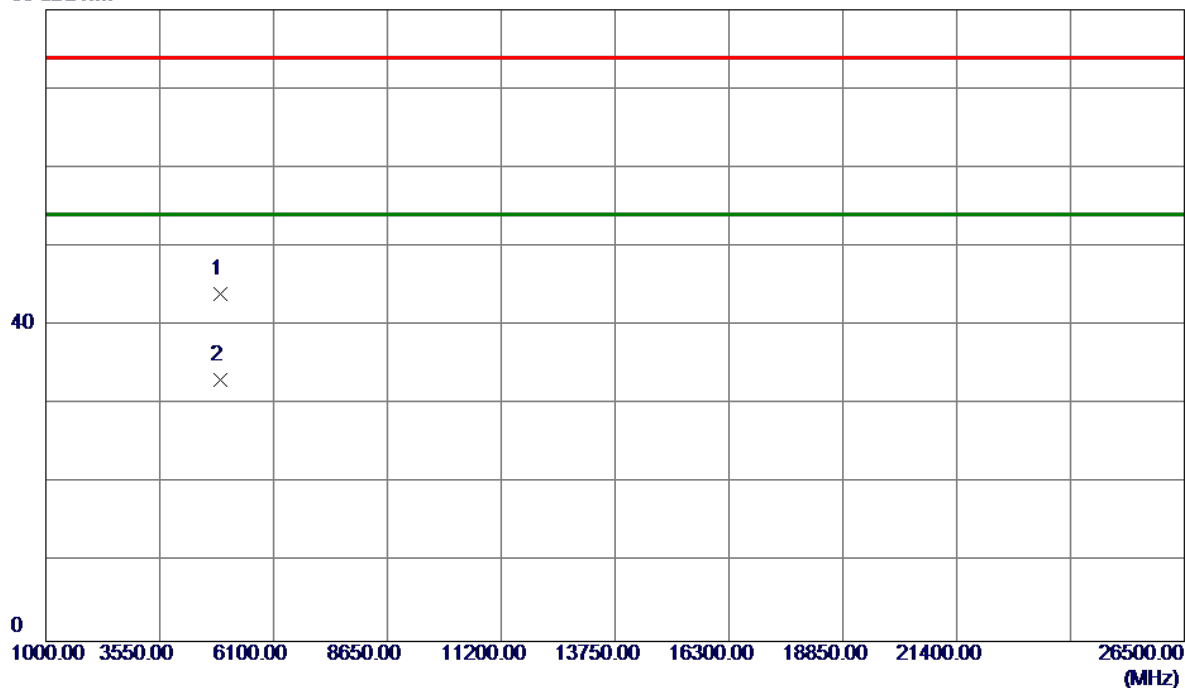


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2454.5000	59.39	33.30	92.69	54.00	38.69	AVG	No Limit
2	2455.4000	68.62	33.30	101.92	74.00	27.92	Peak	No Limit
3	2483.5000	37.48	33.41	70.89	74.00	-3.11	Peak	
4	2483.5000	16.78	33.41	50.19	54.00	-3.81	AVG	

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

Vertical

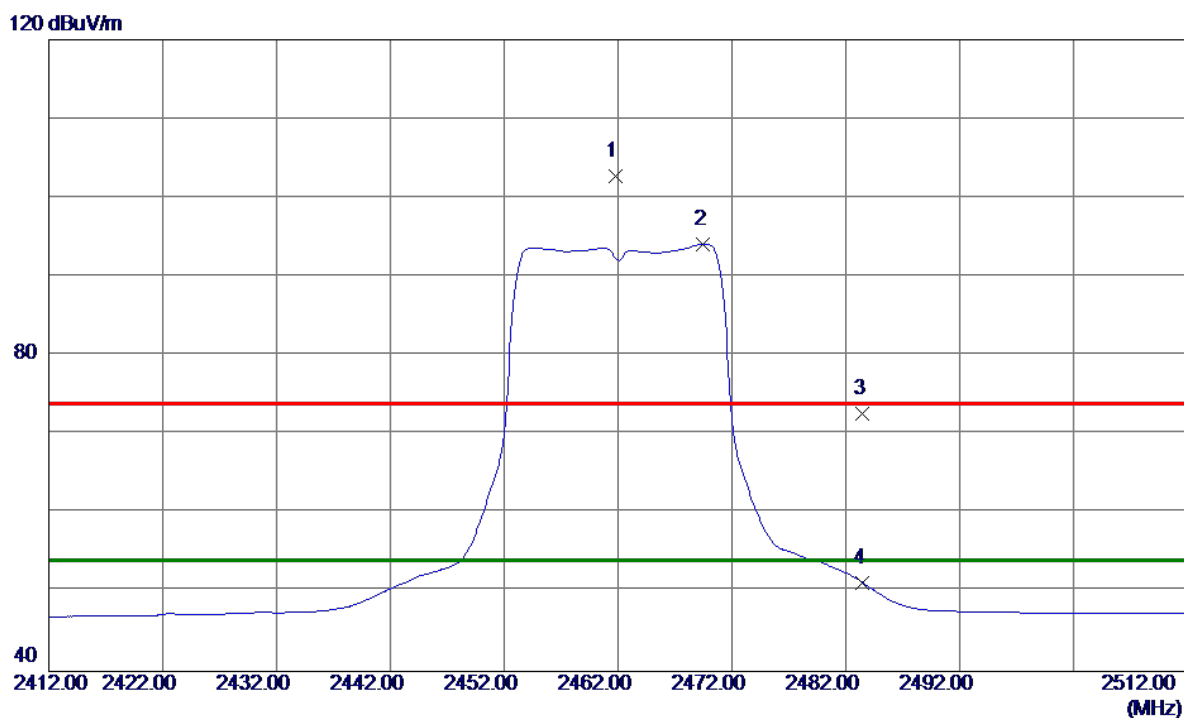
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.9160	36.96	7.02	43.98	74.00	-30.02	Peak	
2 *	4923.9640	26.15	7.02	33.17	54.00	-20.83	AVG	

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

Horizontal

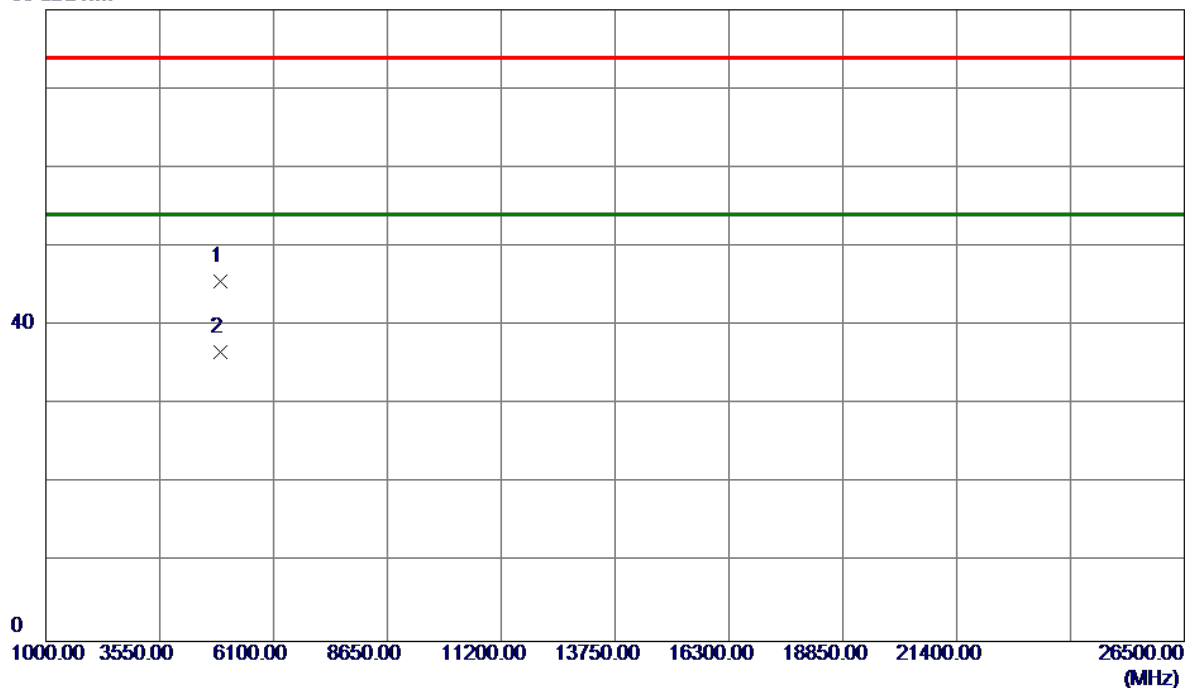


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.8000	69.37	33.33	102.70	74.00	28.70	Peak	No Limit
2 *	2469.5000	60.74	33.36	94.10	54.00	40.10	AVG	No Limit
3	2483.5000	39.24	33.41	72.65	74.00	-1.35	Peak	
4	2483.5000	17.81	33.41	51.22	54.00	-2.78	AVG	

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

Horizontal

80 dBuV/m

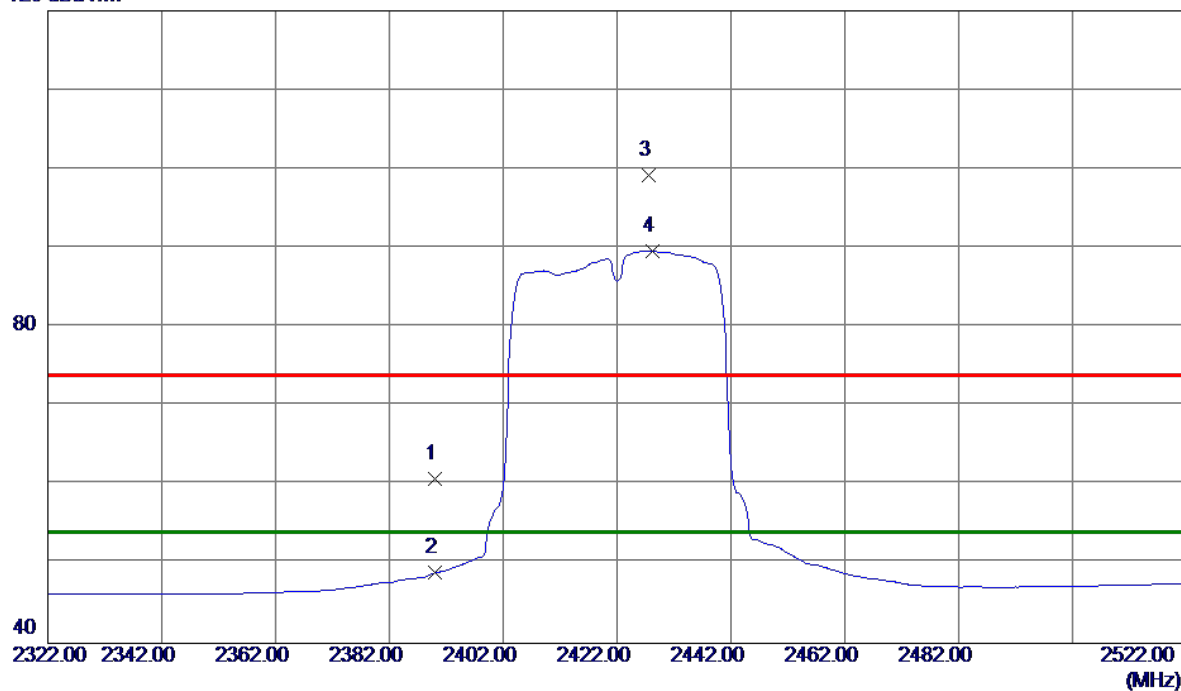


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.8620	38.51	7.02	45.53	74.00	-28.47	Peak	
2 *	4923.9560	29.64	7.02	36.66	54.00	-17.34	AVG	

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

Vertical

120 dBuV/m

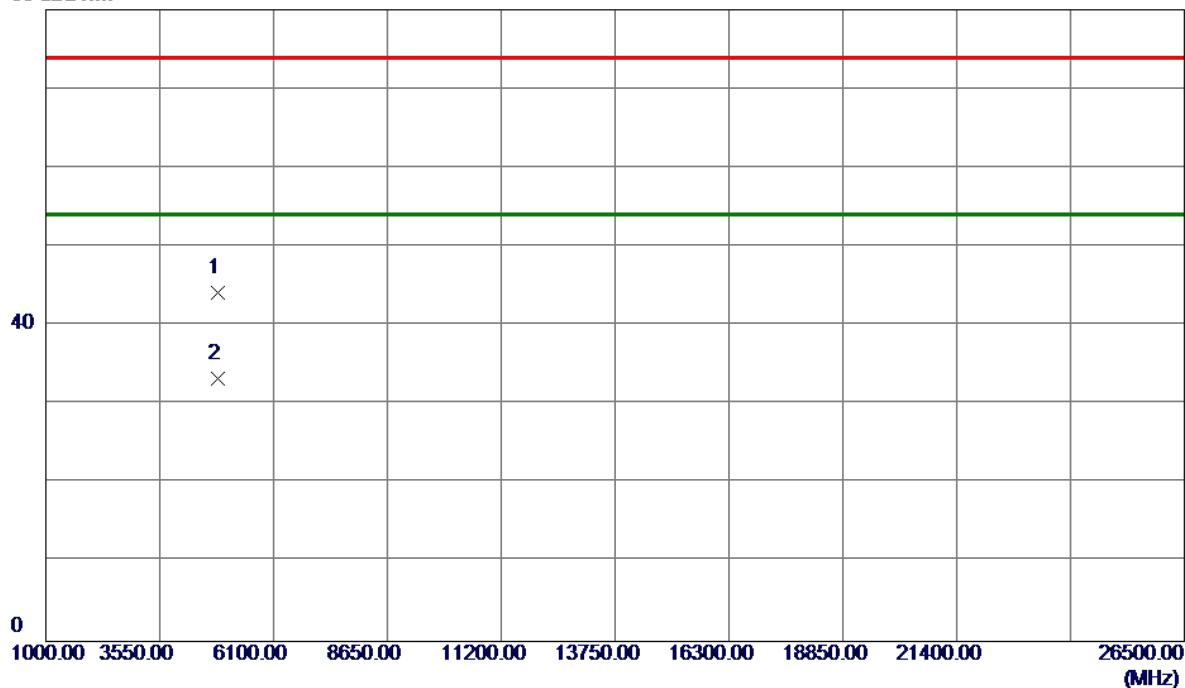


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	27.69	33.06	60.75	74.00	-13.25	Peak	
2	2390.0000	15.84	33.06	48.90	54.00	-5.10	AVG	
3	2427.6000	66.04	33.20	99.24	74.00	25.24	Peak	No Limit
4 *	2428.2000	56.42	33.20	89.62	54.00	35.62	AVG	No Limit

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

Vertical

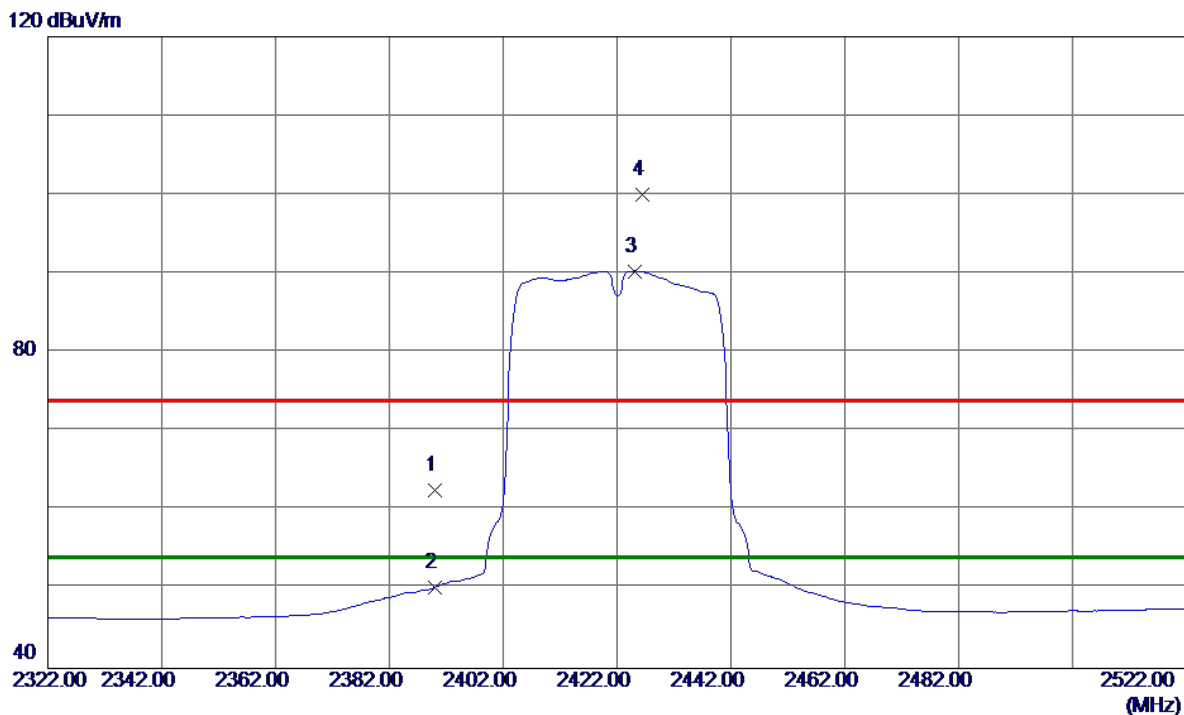
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.8720	37.43	6.73	44.16	74.00	-29.84	Peak	
2 *	4844.0120	26.51	6.73	33.24	54.00	-20.76	AVG	

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

Horizontal

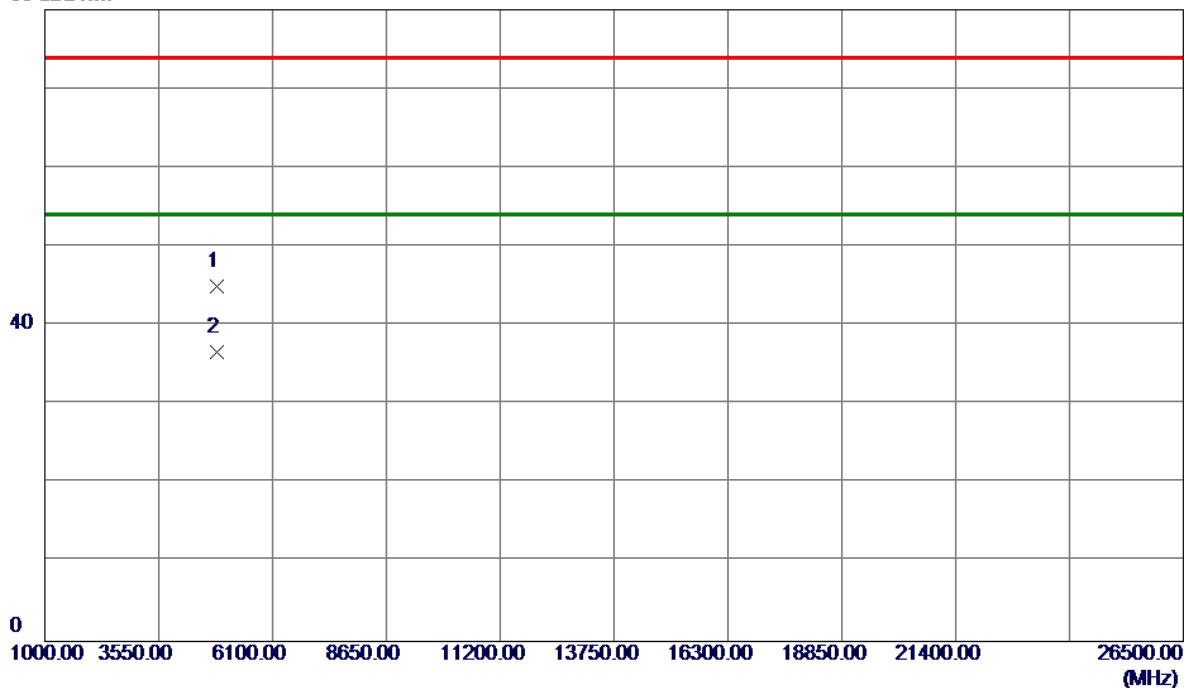


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	29.49	33.06	62.55	74.00	-11.45	Peak	
2	2390.0000	17.23	33.06	50.29	54.00	-3.71	AVG	
3 *	2425.2000	57.13	33.19	90.32	54.00	36.32	AVG	No Limit
4	2426.4000	66.83	33.19	100.02	74.00	26.02	Peak	No Limit

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

Horizontal

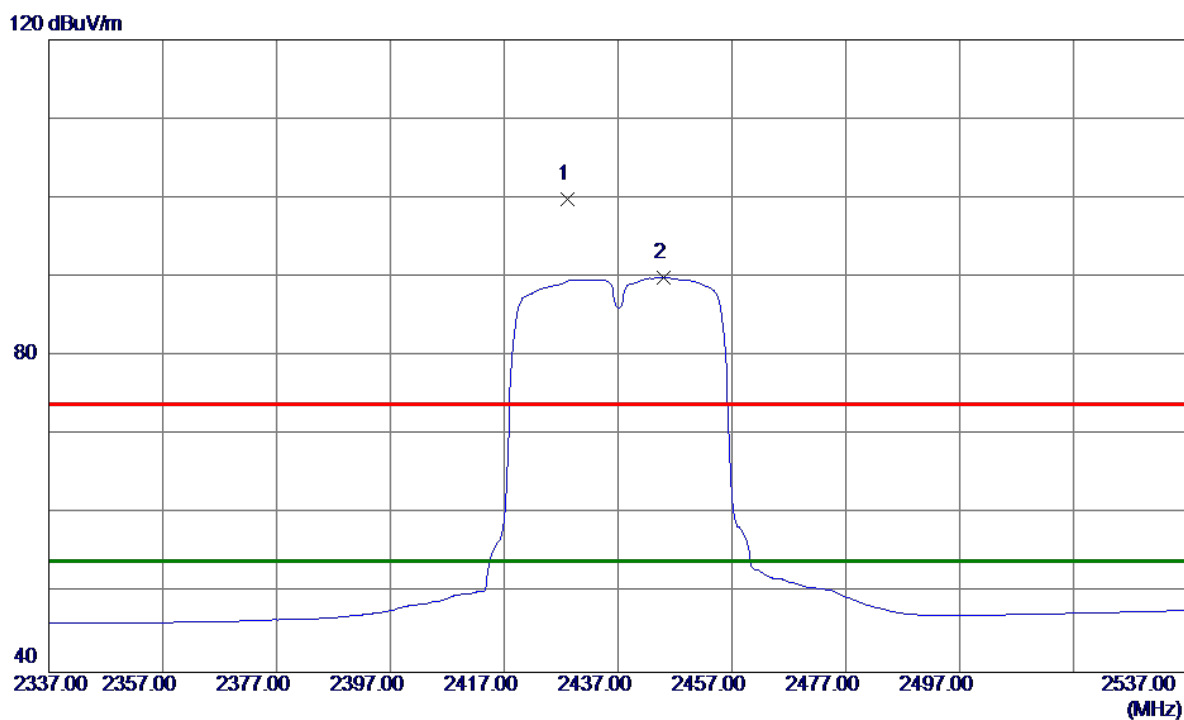
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4843.8280	38.27	6.73	45.00	74.00	-29.00	Peak	
2 *	4844.0000	29.98	6.73	36.71	54.00	-17.29	AVG	

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

Vertical

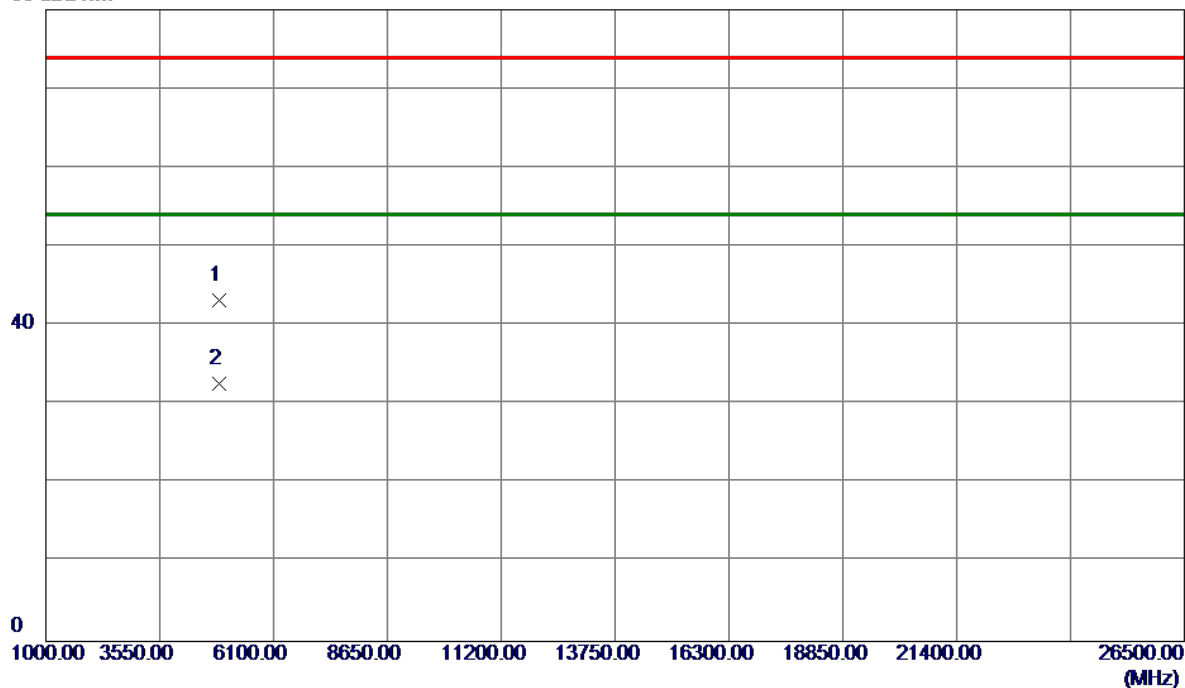


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2428.2000	66.70	33.20	99.90	74.00	25.90	Peak	No Limit
2 *	2445.0000	56.68	33.26	89.94	54.00	35.94	AVG	No Limit

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

Vertical

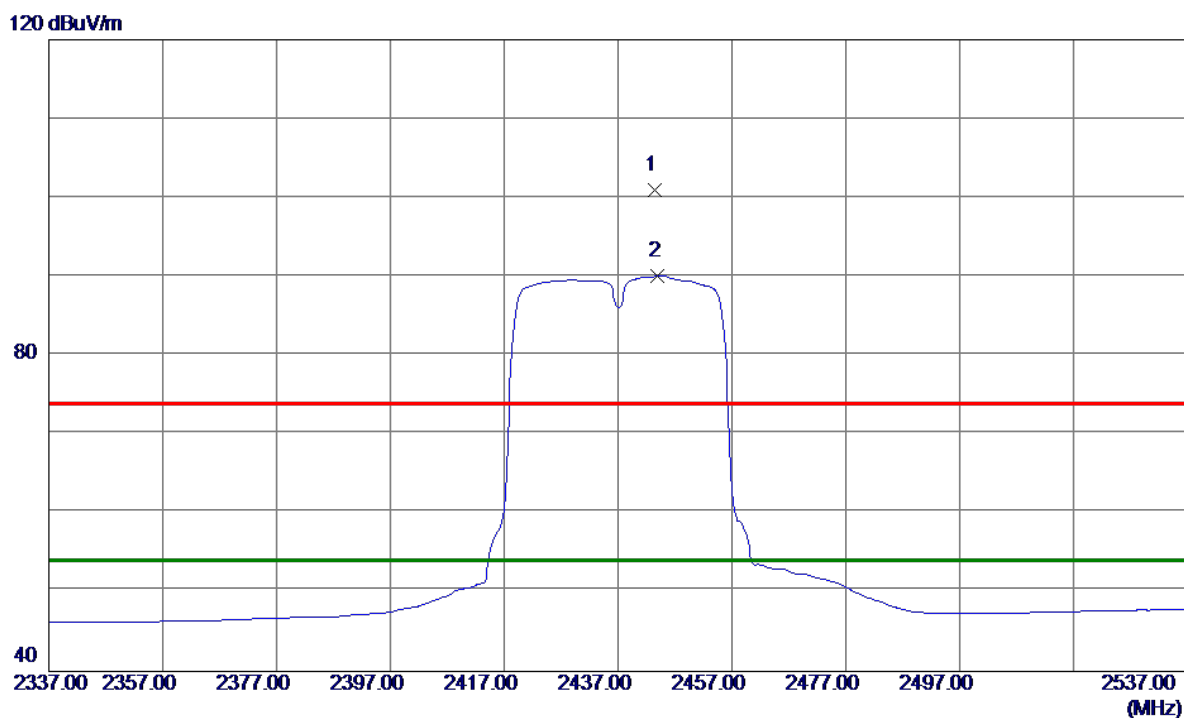
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9900	36.39	6.84	43.23	74.00	-30.77	Peak	
2 *	4874.0339	25.73	6.84	32.57	54.00	-21.43	AVG	

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

Horizontal

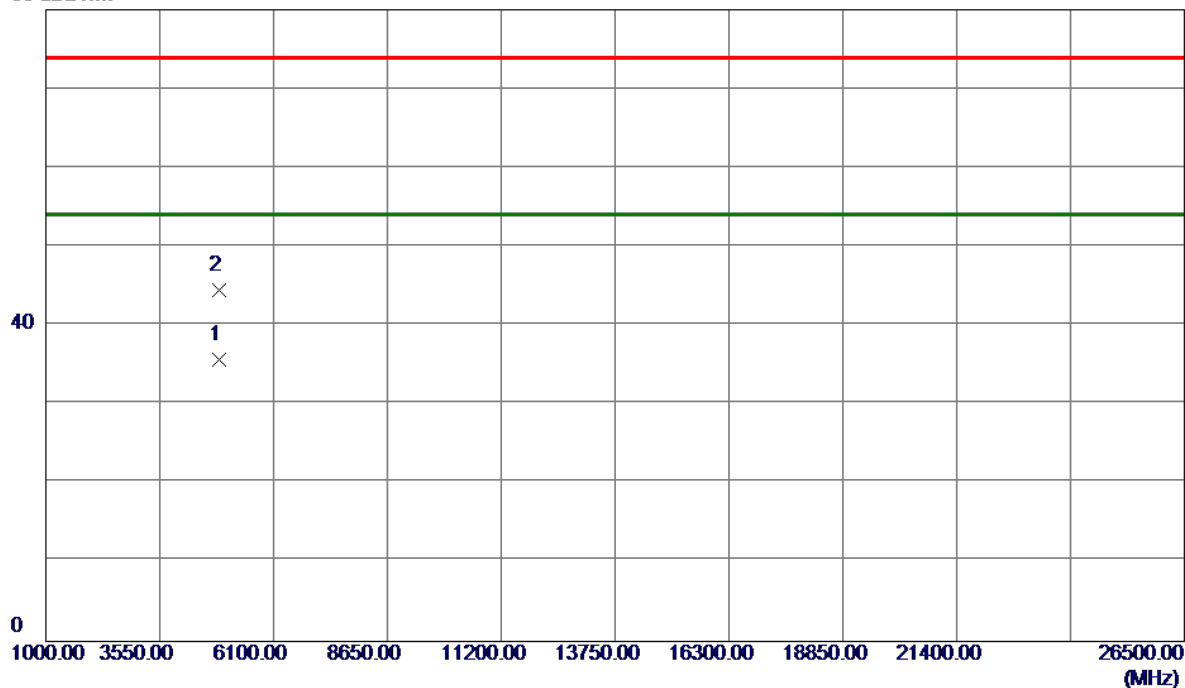


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2443.4000	67.73	33.26	100.99	74.00	26.99	Peak	No Limit
2 *	2444.0000	56.83	33.26	90.09	54.00	36.09	AVG	No Limit

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

Horizontal

80 dBuV/m

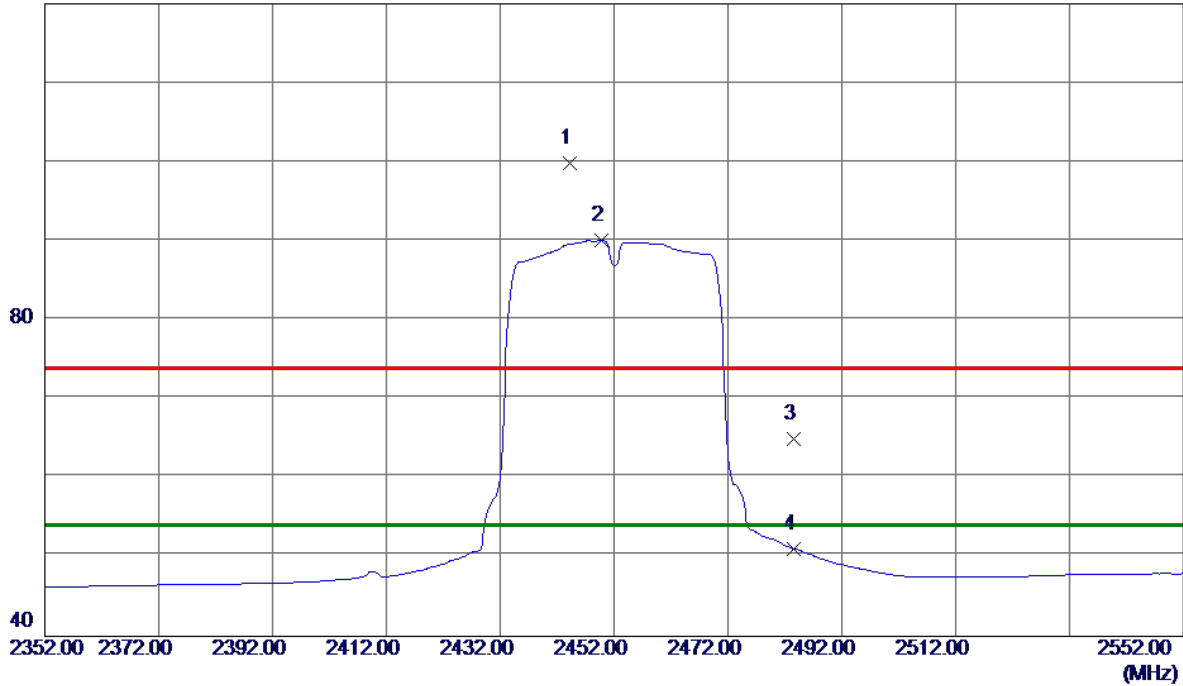


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.9920	28.86	6.84	35.70	54.00	-18.30	AVG	
2	4874.0360	37.67	6.84	44.51	74.00	-29.49	Peak	

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

Vertical

120 dBuV/m

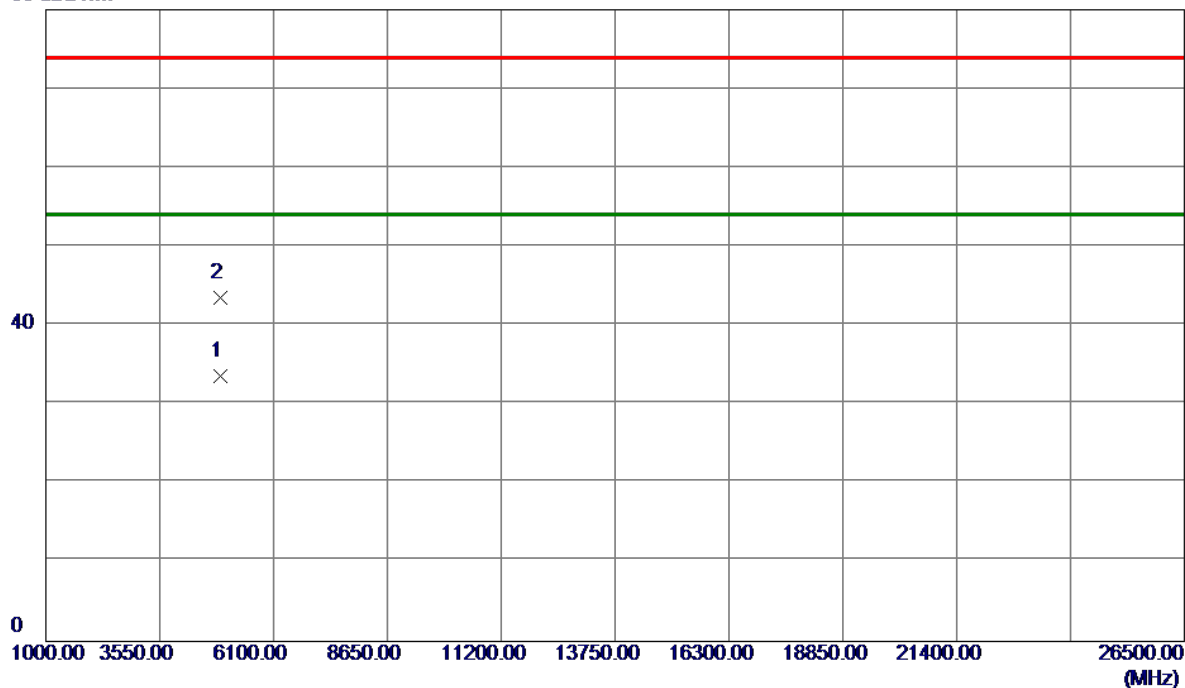


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2444.2000	66.57	33.26	99.83	74.00	25.83	Peak	No Limit
2 *	2449.8000	56.79	33.28	90.07	54.00	36.07	AVG	No Limit
3	2483.5000	31.56	33.41	64.97	74.00	-9.03	Peak	
4	2483.5000	17.67	33.41	51.08	54.00	-2.92	AVG	

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

Vertical

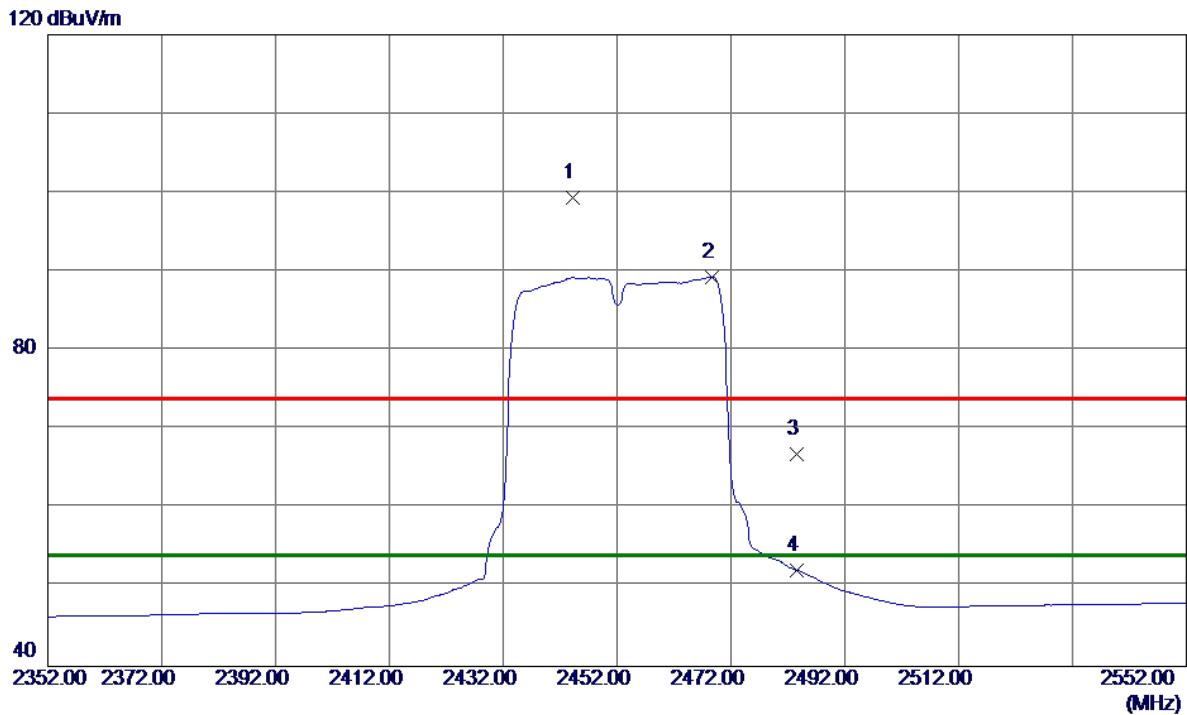
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4903.9900	26.71	6.95	33.66	54.00	-20.34	AVG	
2	4904.0580	36.52	6.95	43.47	74.00	-30.53	Peak	

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

Horizontal

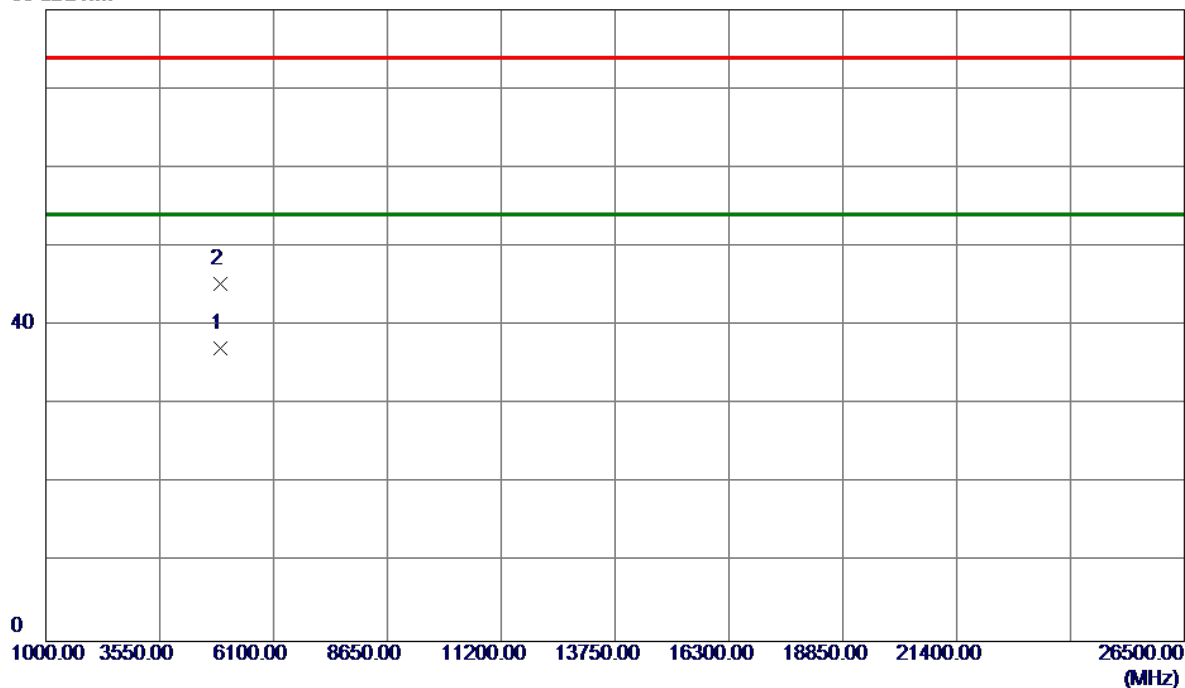


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2444.2000	66.12	33.26	99.38	74.00	25.38	Peak	No Limit
2 *	2468.6000	56.00	33.35	89.35	54.00	35.35	AVG	No Limit
3	2483.5000	33.50	33.41	66.91	74.00	-7.09	Peak	
4	2483.5000	18.78	33.41	52.19	54.00	-1.81	AVG	

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

Horizontal

80 dBuV/m



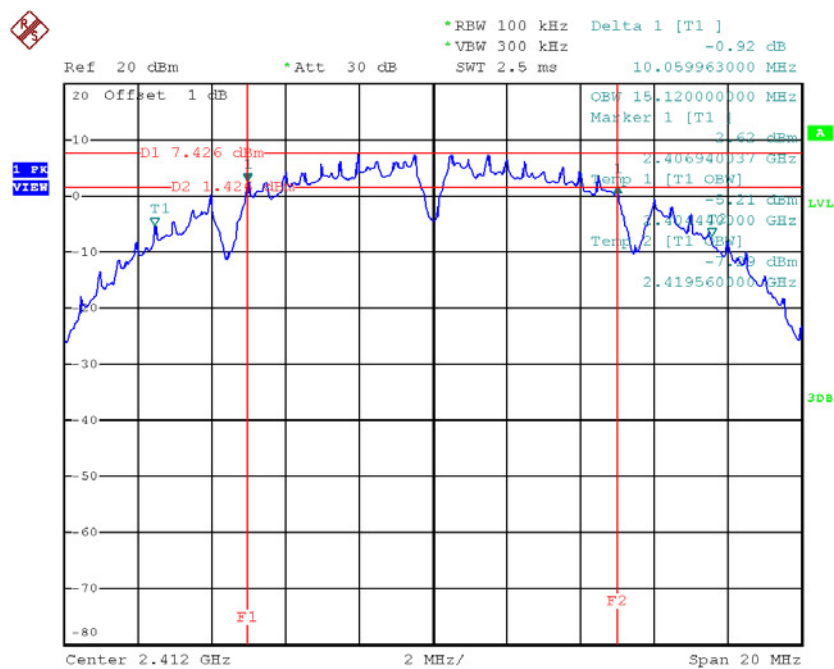
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4903.9700	30.15	6.95	37.10	54.00	-16.90	AVG	
2	4904.0940	38.29	6.95	45.24	74.00	-28.76	Peak	

APPENDIX E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

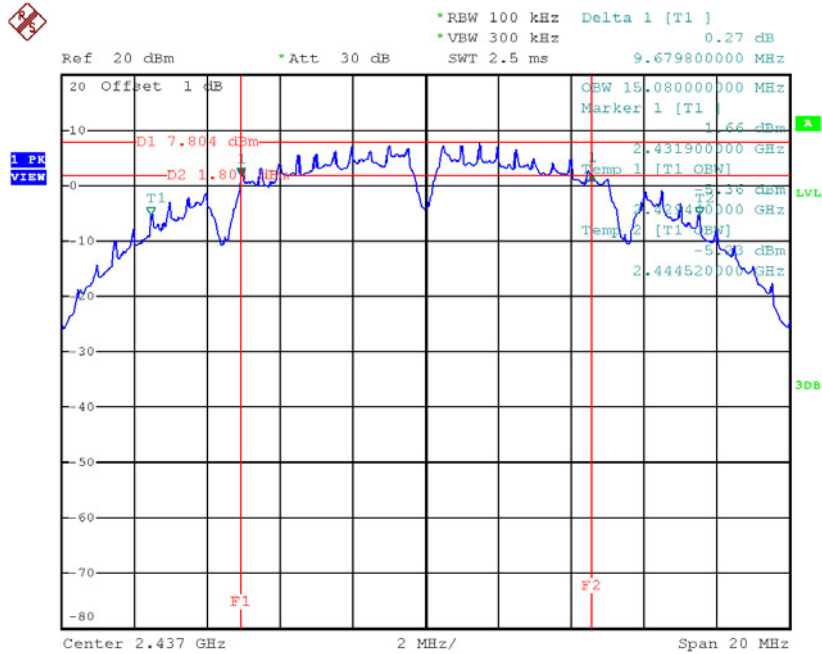
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.06	15.12	500	Complies
2437	9.68	15.08	500	Complies
2462	10.03	15.12	500	Complies

TX CH01



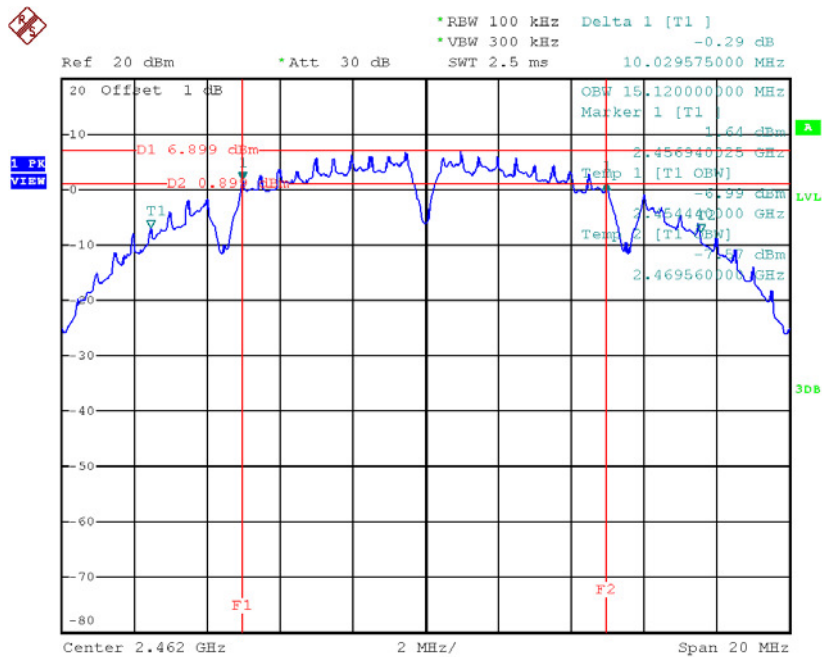
Date: 23.JAN.2018 09:32:18

TX CH06



Date: 23.JAN.2018 09:42:40

TX CH11

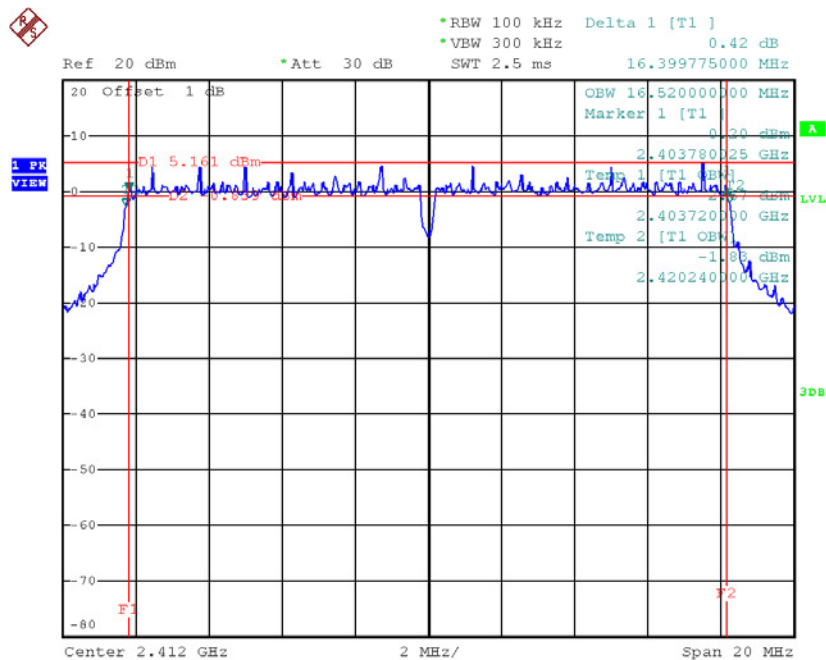


Date: 23.JAN.2018 09:46:26

Test Mode: TX G Mode_CH01/06/11

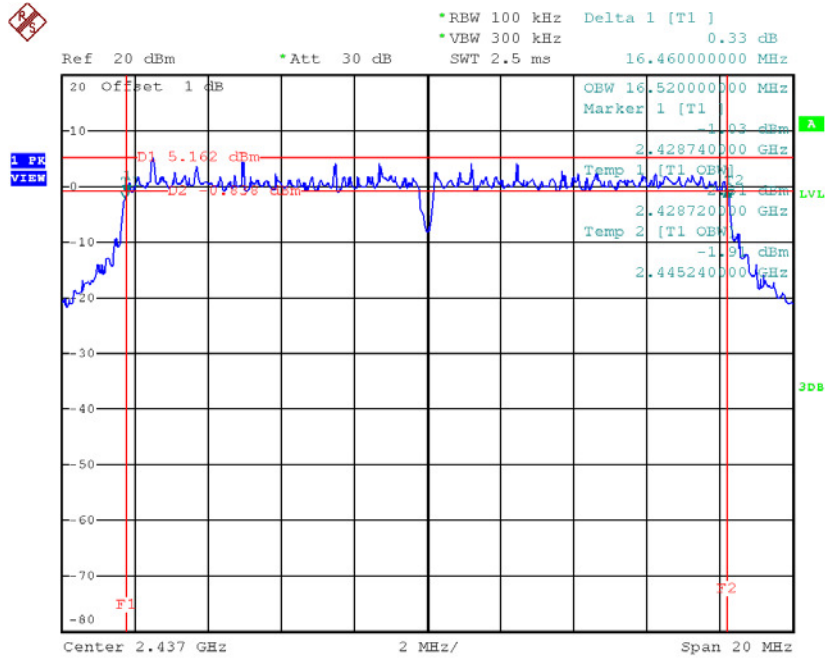
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.4	16.52	500	Complies
2437	16.46	16.52	500	Complies
2462	16.49	16.52	500	Complies

TX CH01



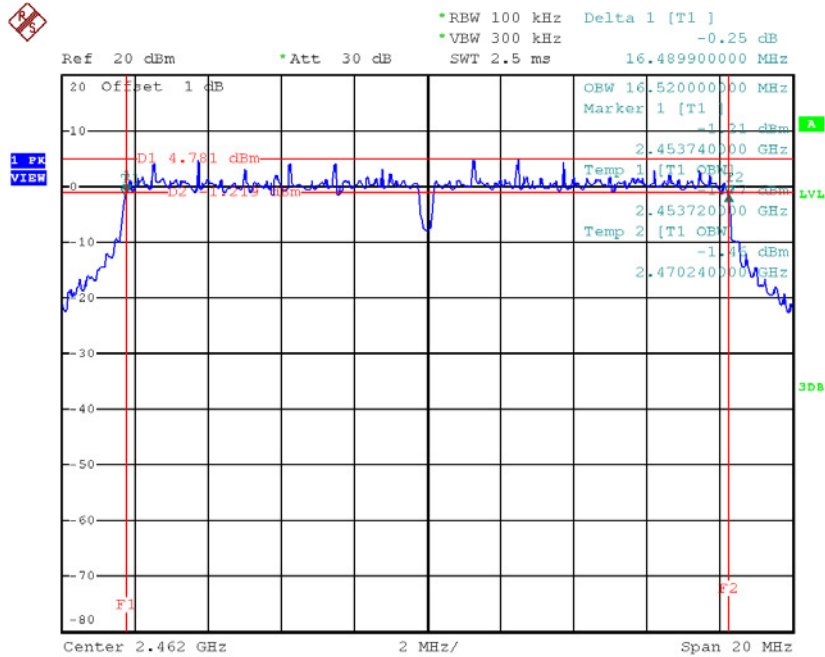
Date: 23.JAN.2018 09:48:34

TX CH06



Date: 23.JAN.2018 09:51:05

TX CH11

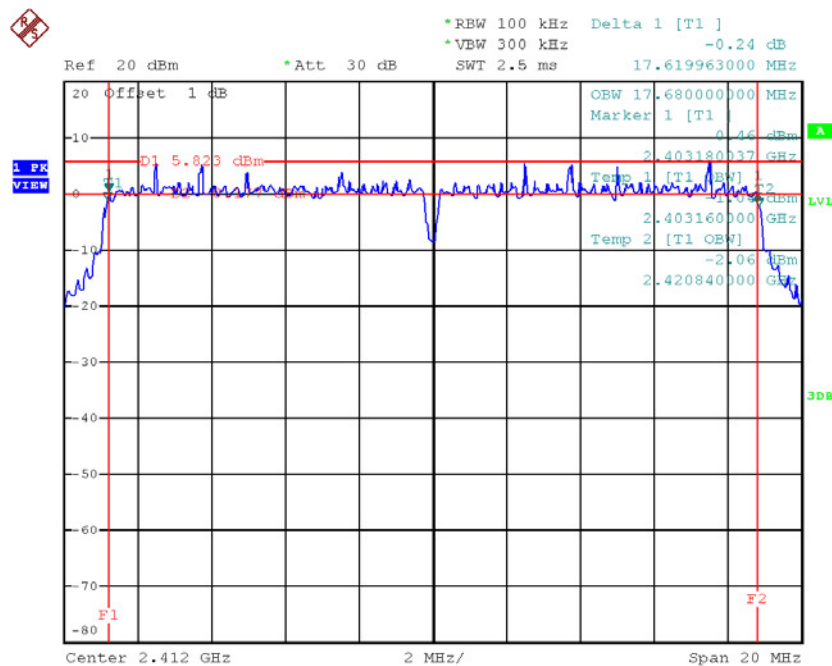


Date: 23.JAN.2018 09:52:37

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

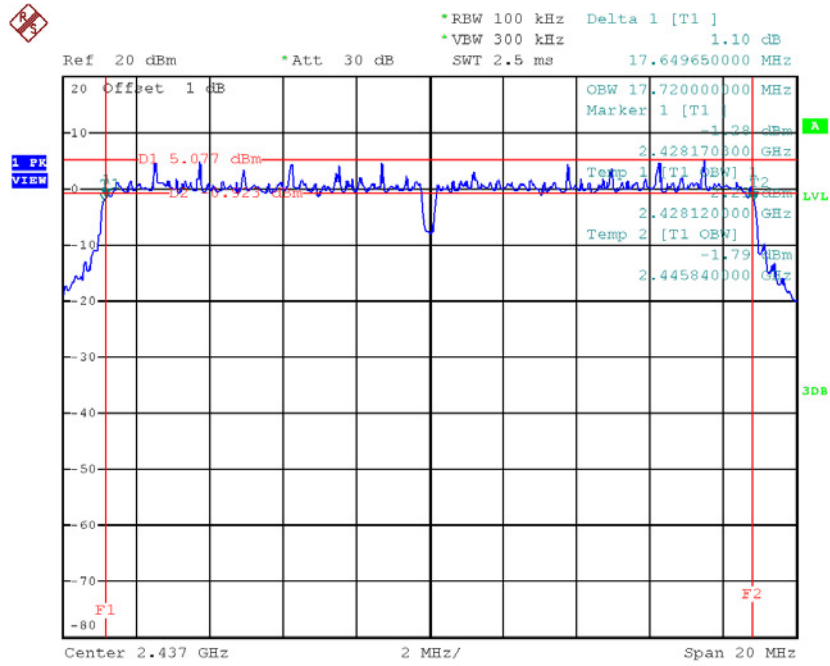
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.62	17.68	500	Complies
2437	17.65	17.72	500	Complies
2462	17.65	17.64	500	Complies

TX CH01



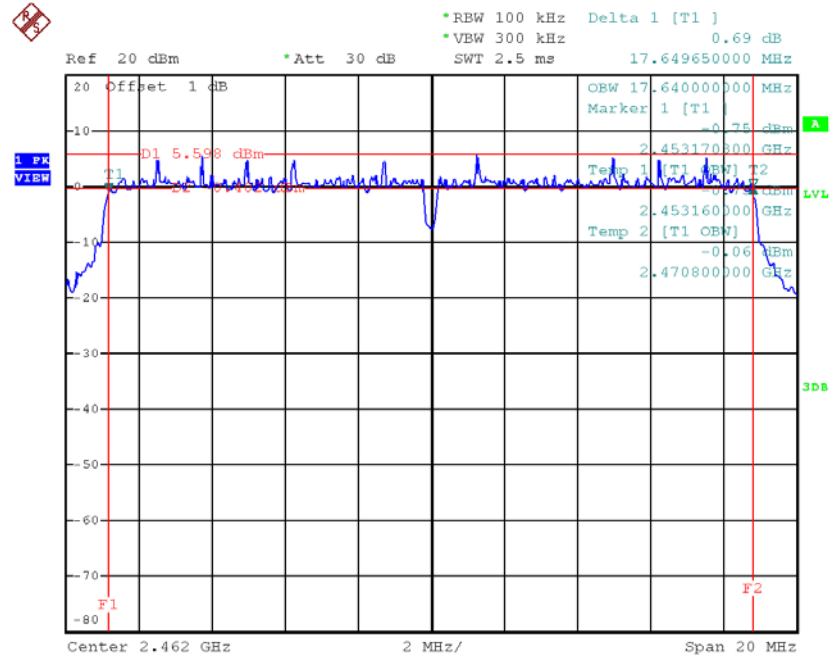
Date: 23.JAN.2018 09:54:33

TX CH06



Date: 23.JAN.2018 09:56:02

TX CH11

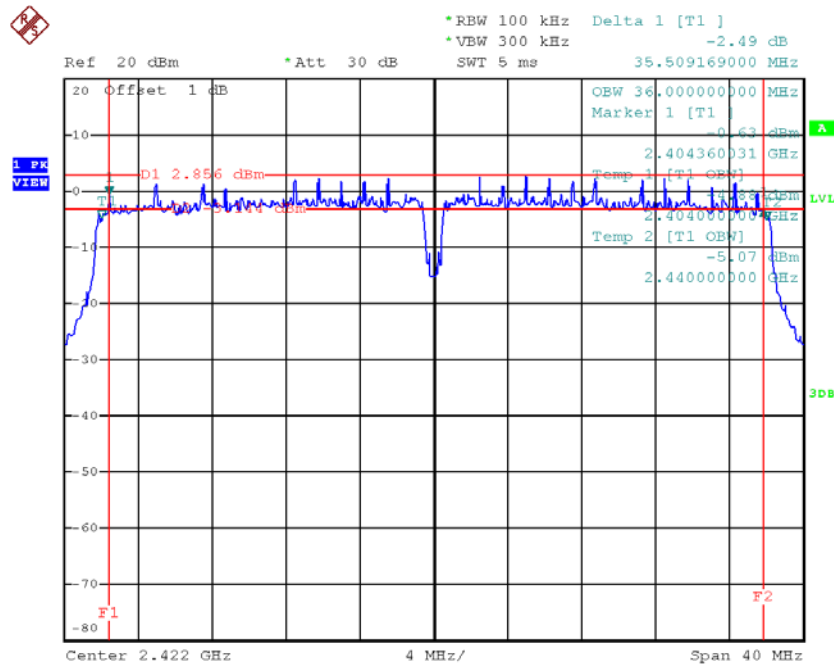


Date: 23.JAN.2018 09:57:39

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

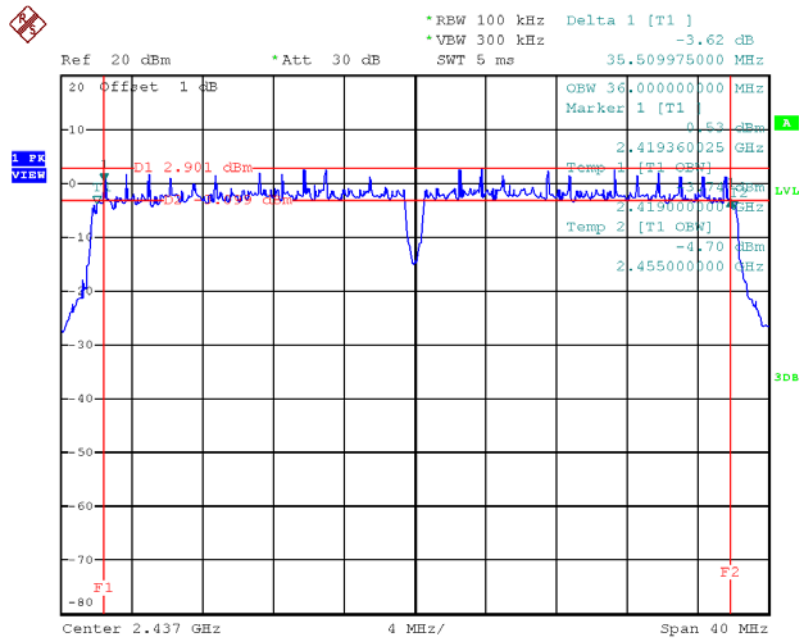
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.51	36.00	500	Complies
2437	35.51	36.00	500	Complies
2452	35.84	36.08	500	Complies

TX CH03



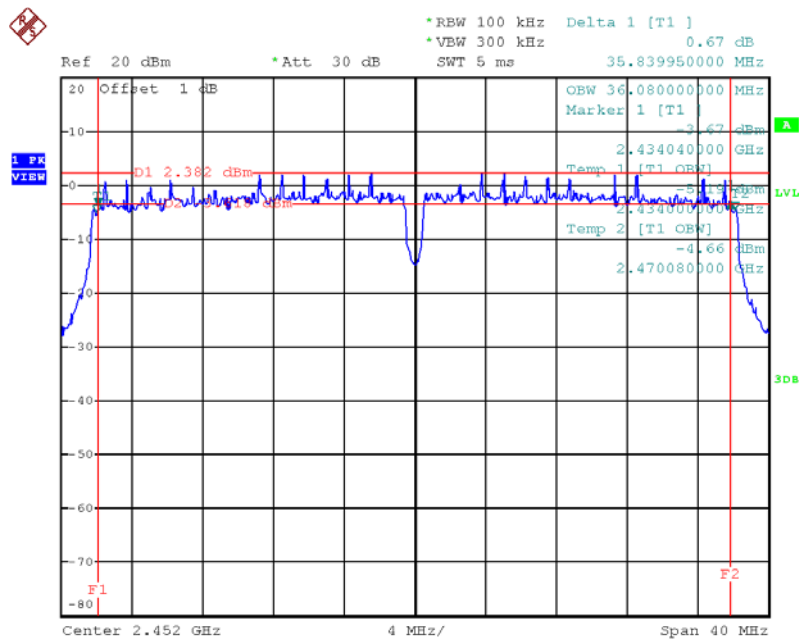
Date: 23.JAN.2018 09:59:06

TX CH06



Date: 23.JAN.2018 10:00:41

TX CH09



Date: 23.JAN.2018 10:05:13

APPENDIX F - MAXIMUM PEAK CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.01	0.13	30.00	1.00	Complies
2437	20.68	0.12	30.00	1.00	Complies
2462	19.89	0.10	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	27.11	0.51	30.00	1.00	Complies
2437	27.09	0.51	30.00	1.00	Complies
2462	26.55	0.45	30.00	1.00	Complies

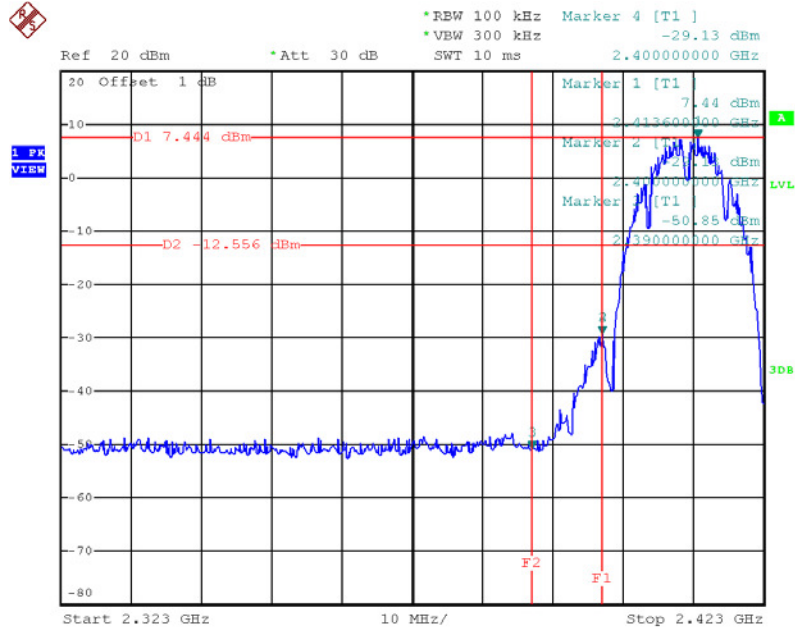
Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	27.03	0.50	30.00	1.00	Complies
2437	26.96	0.50	30.00	1.00	Complies
2462	26.87	0.49	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	26.51	0.45	30.00	1.00	Complies
2437	26.14	0.41	30.00	1.00	Complies
2452	26.04	0.40	30.00	1.00	Complies

APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

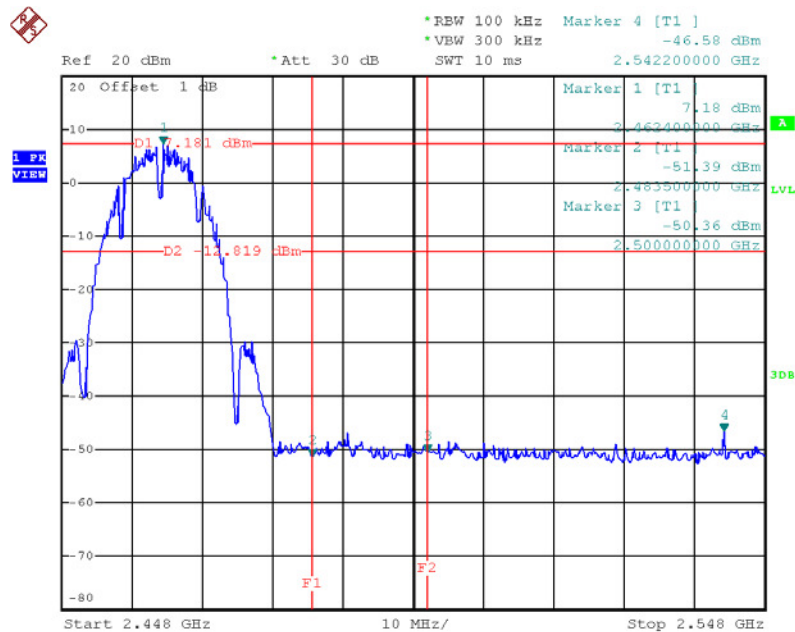
Test Mode : TX B Mode

TX B mode CH01



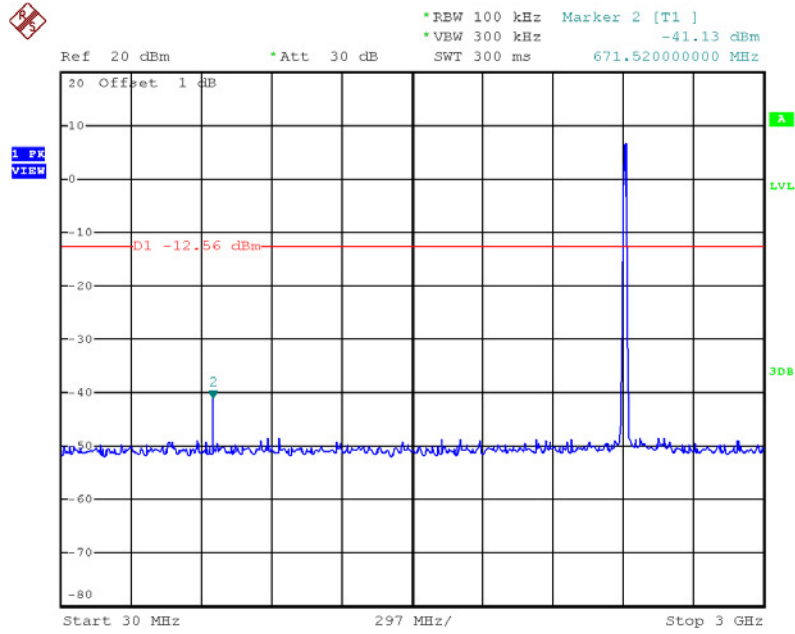
Date: 23.JAN.2018 09:32:25

TX B mode CH11

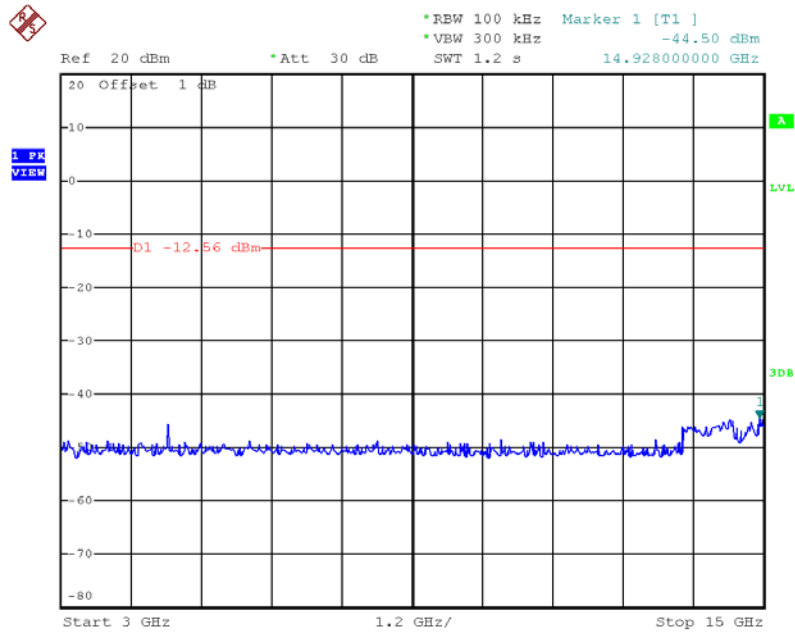


Date: 23.JAN.2018 09:46:33

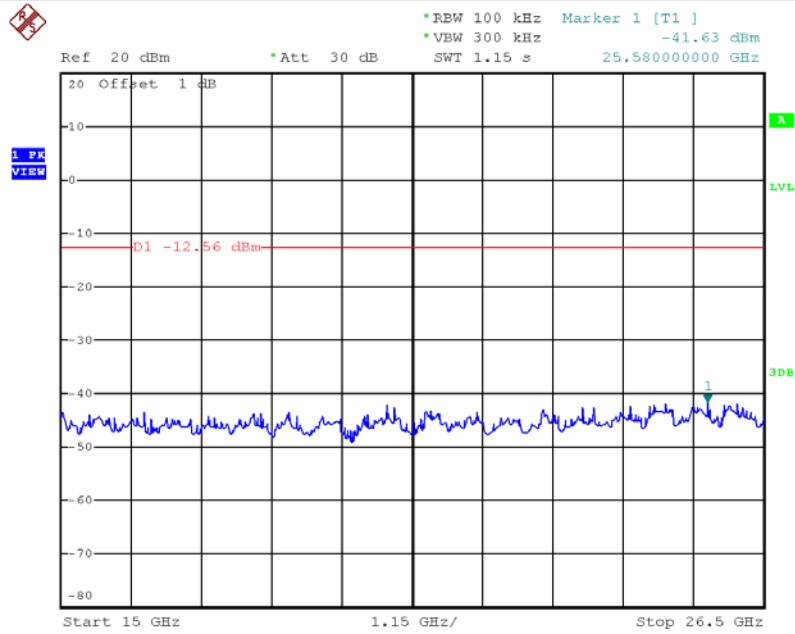
TX B mode CH01 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:32:38

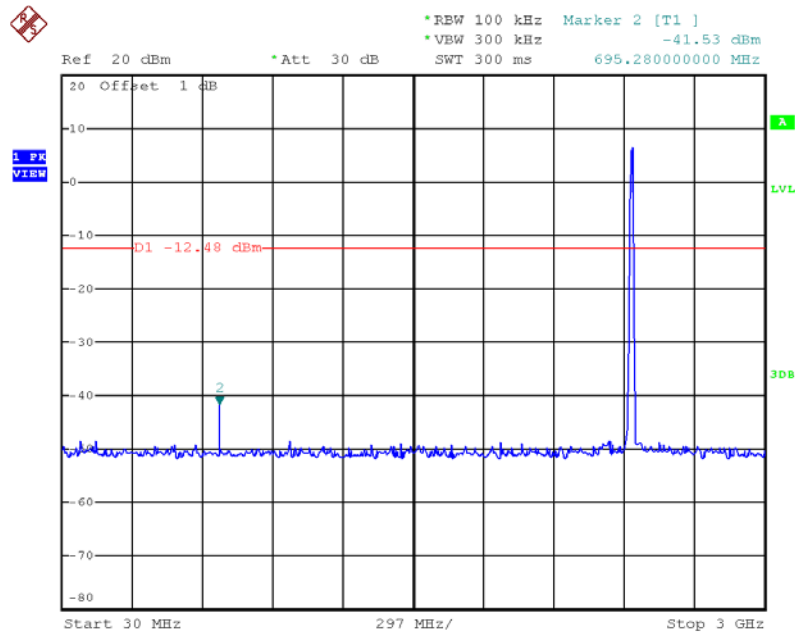


Date: 23.JAN.2018 09:32:45

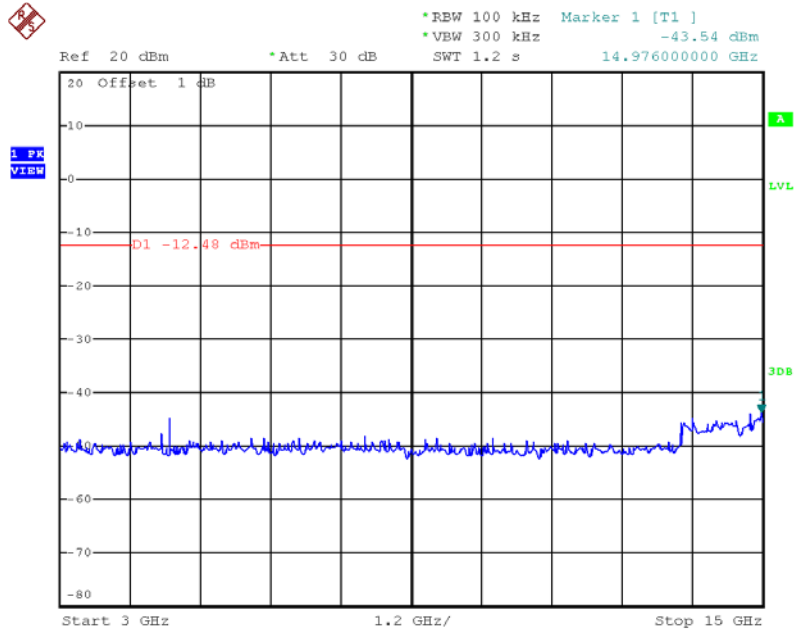


Date: 23.JAN.2018 09:32:52

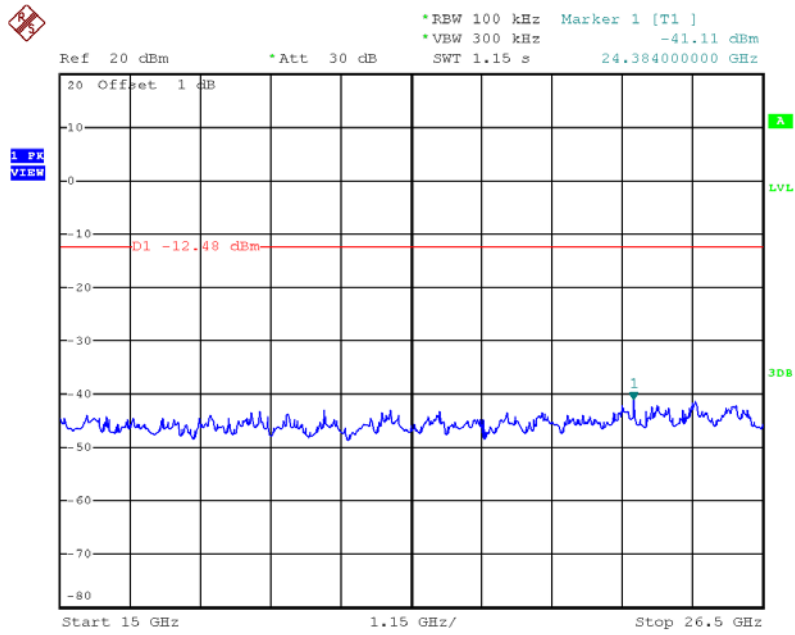
TX B mode CH06 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:43:01

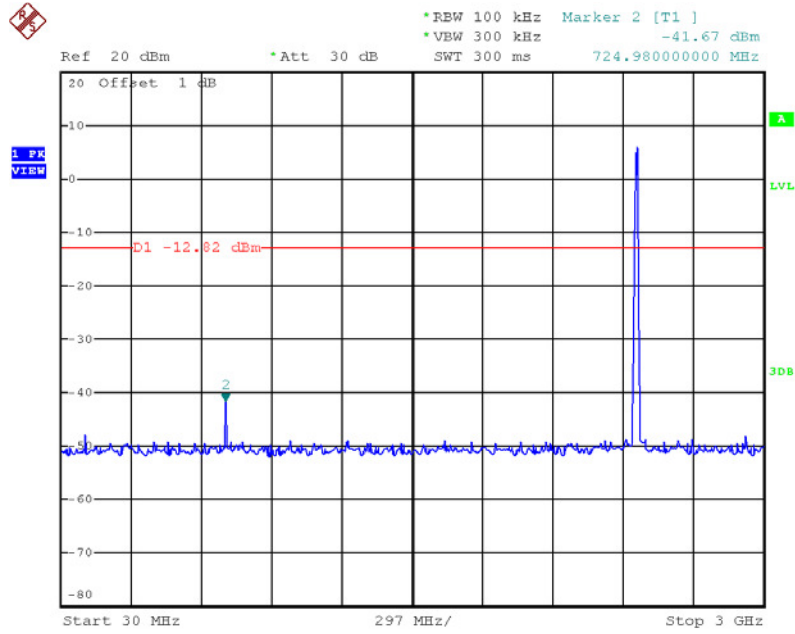


Date: 23.JAN.2018 09:43:07

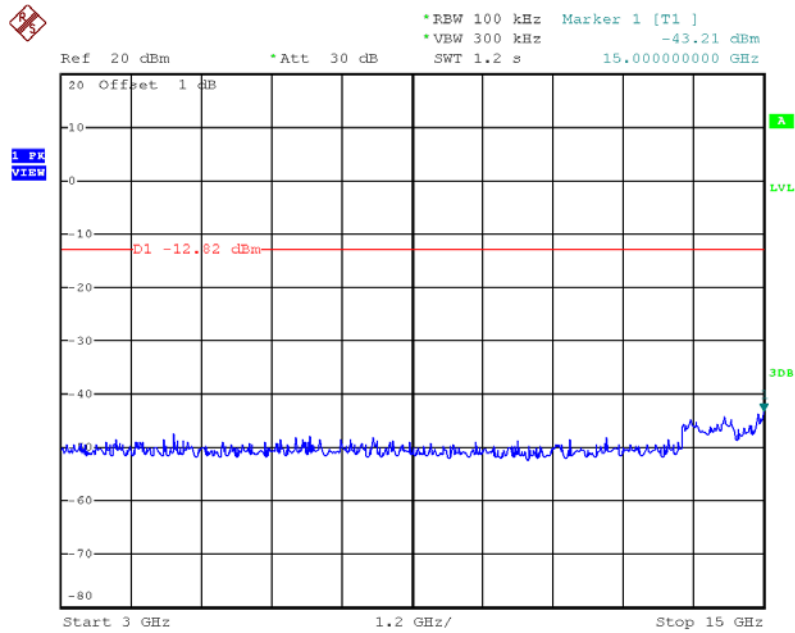


Date: 23.JAN.2018 09:43:14

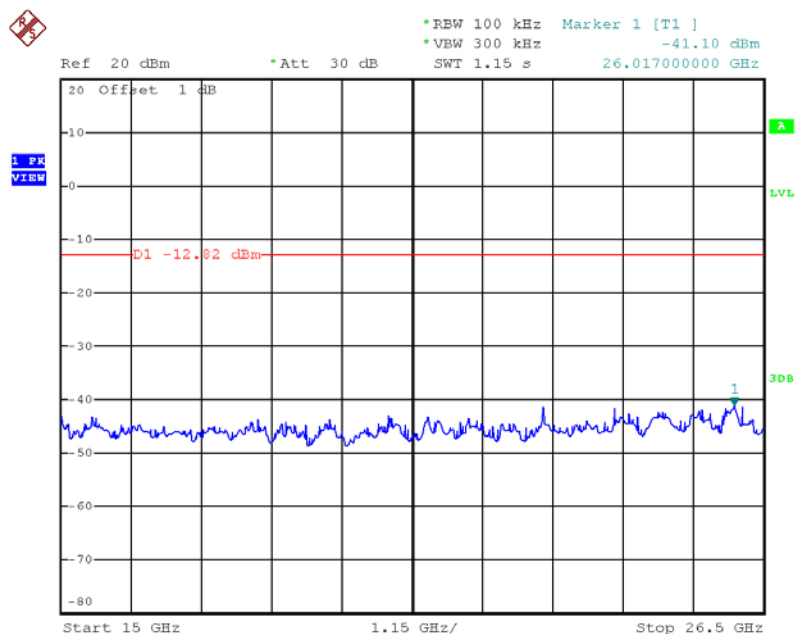
TX B mode CH11 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:46:46



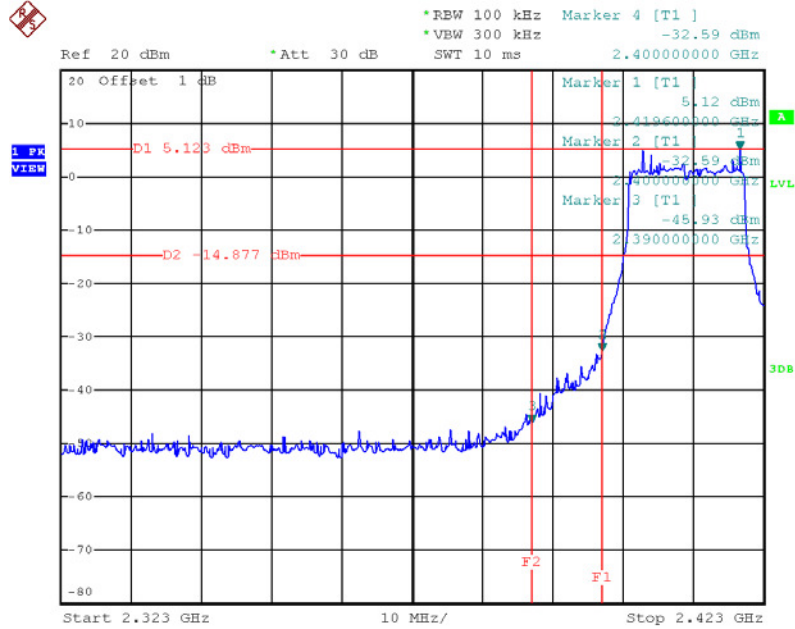
Date: 23.JAN.2018 09:46:53



Date: 23.JAN.2018 09:46:59

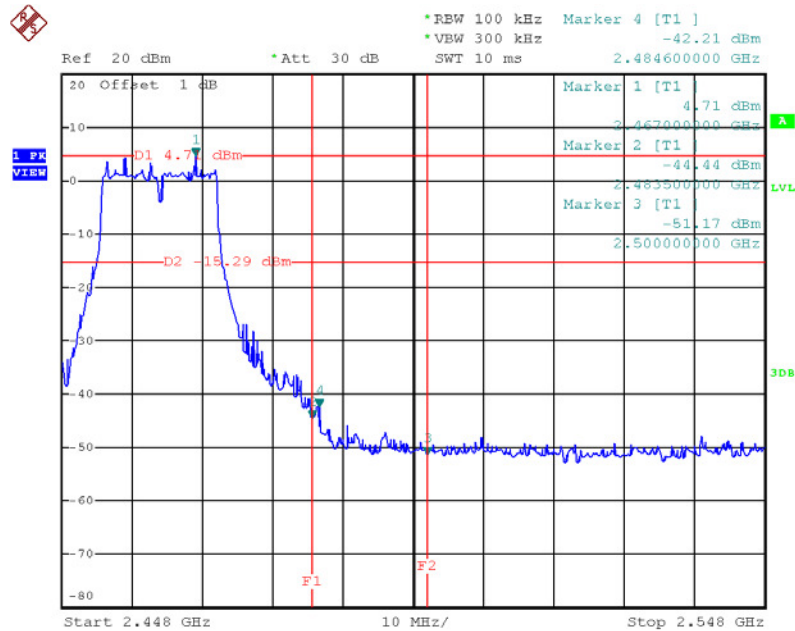
Test Mode : TX G Mode

TX G mode CH01



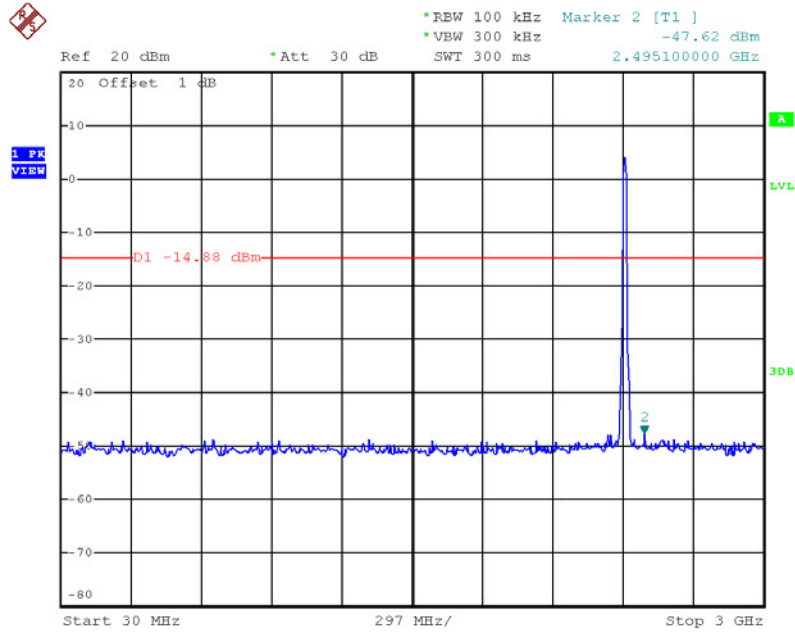
Date: 23.JAN.2018 09:48:41

TX G mode CH11

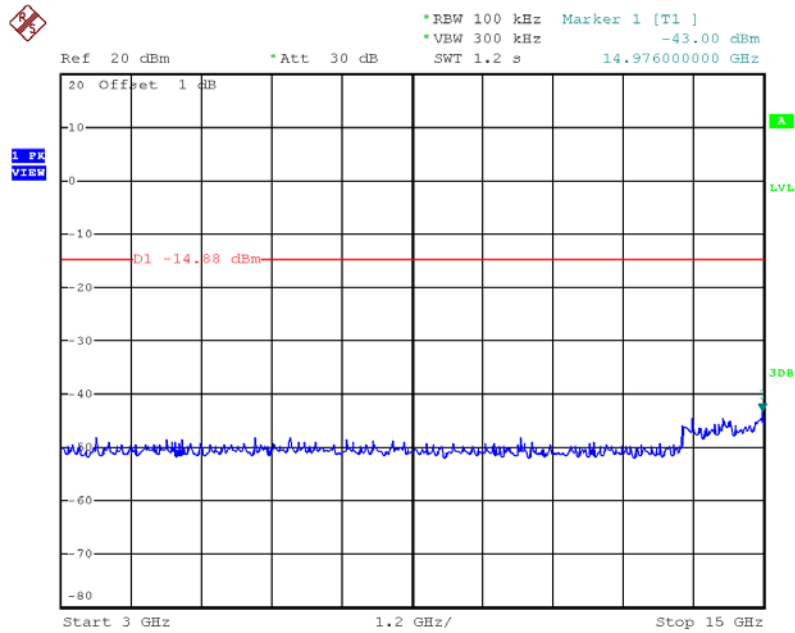


Date: 23.JAN.2018 09:52:44

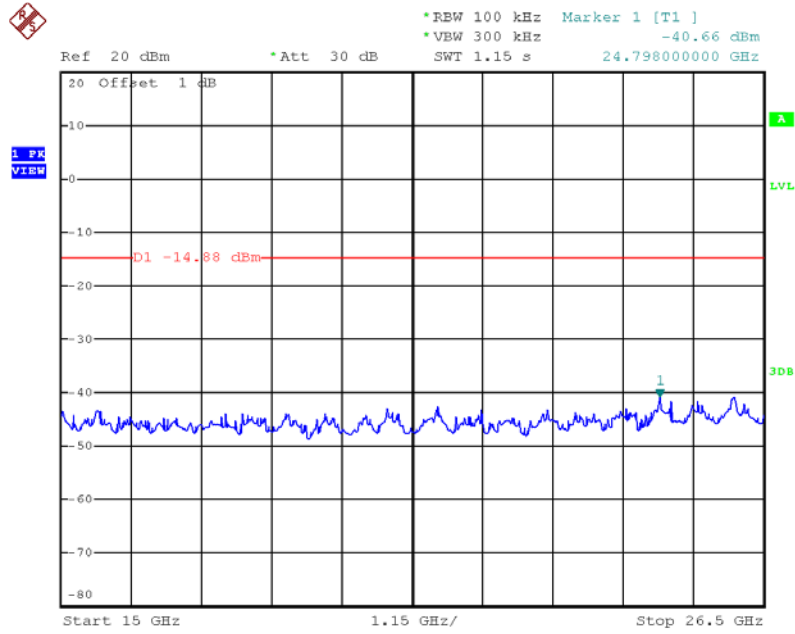
TX G mode CH01 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:48:54

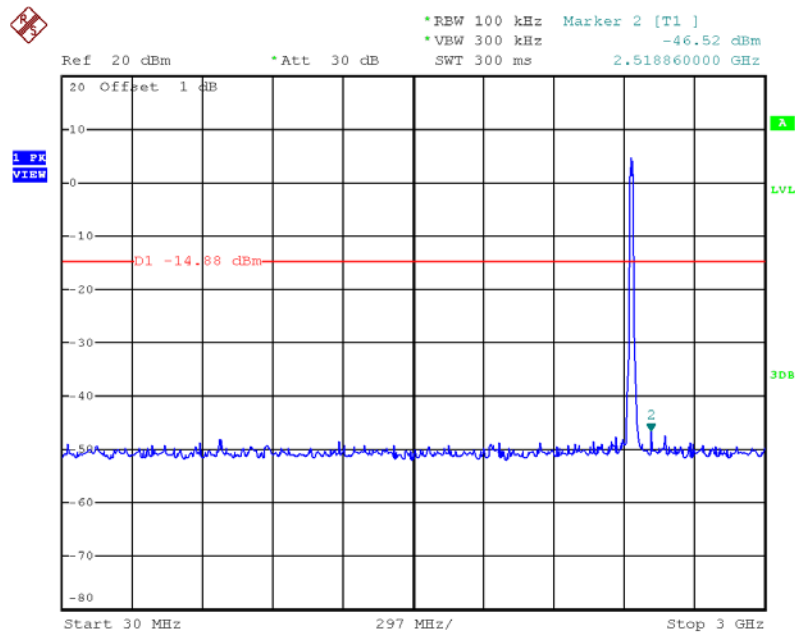


Date: 23.JAN.2018 09:49:01

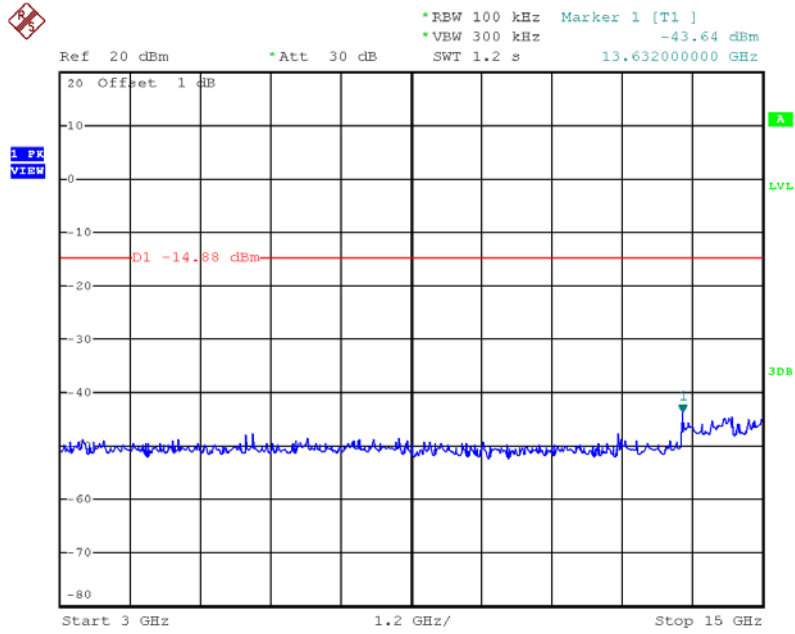


Date: 23.JAN.2018 09:49:08

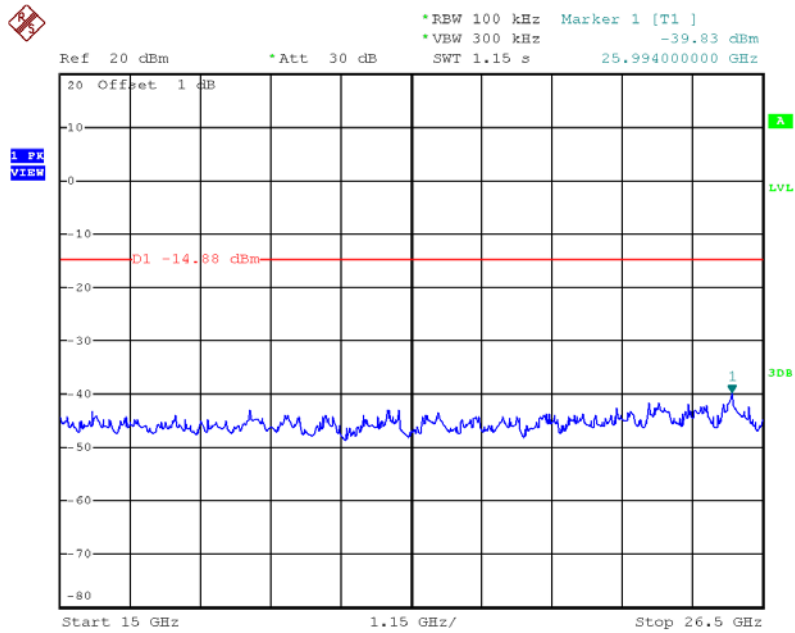
TX G mode CH06 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:51:25

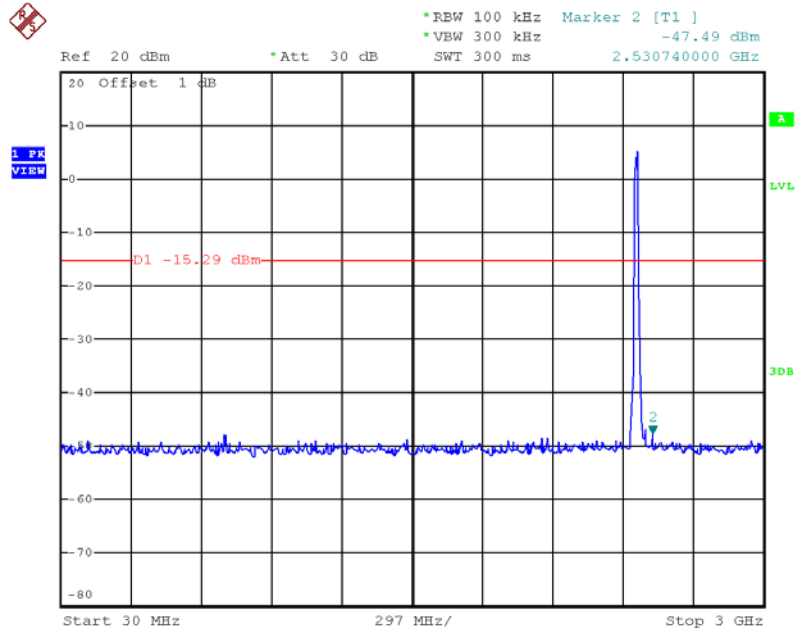


Date: 23.JAN.2018 09:51:32

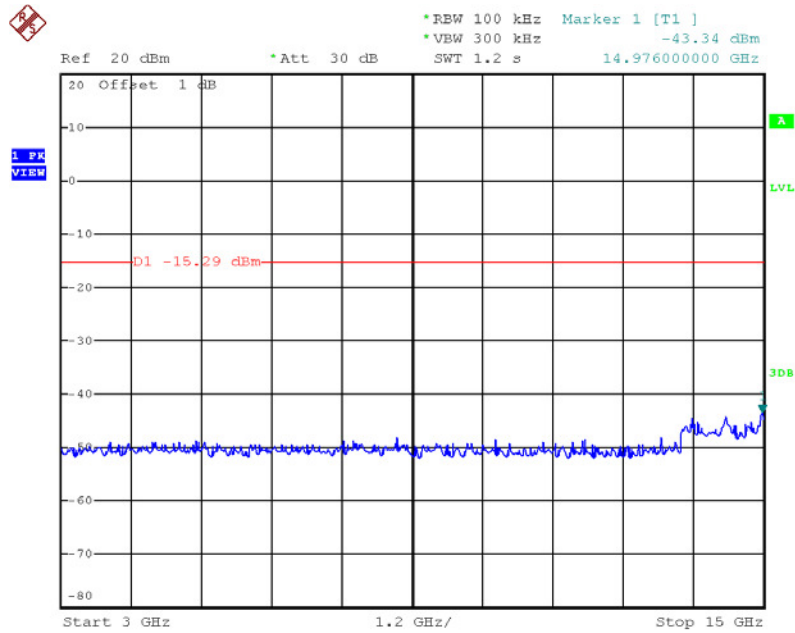


Date: 23.JAN.2018 09:51:38

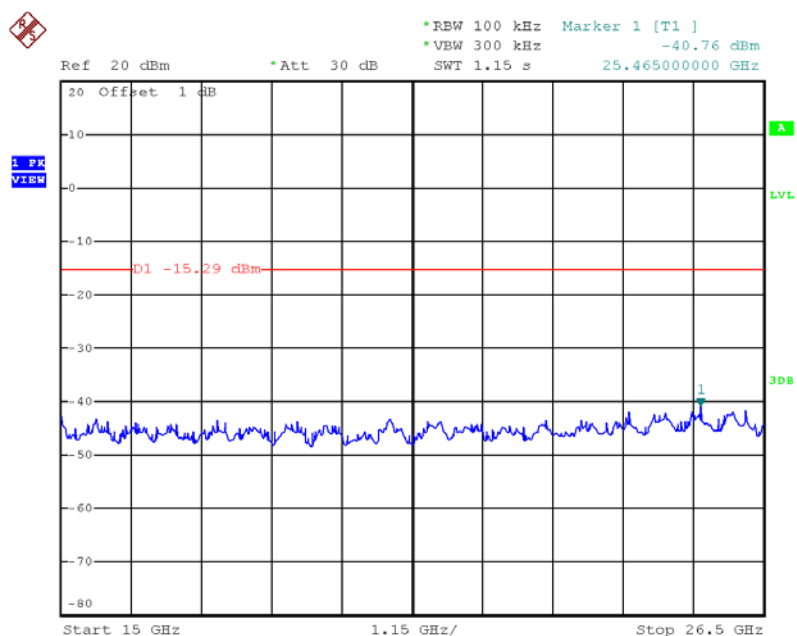
TX G mode CH11 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:52:57



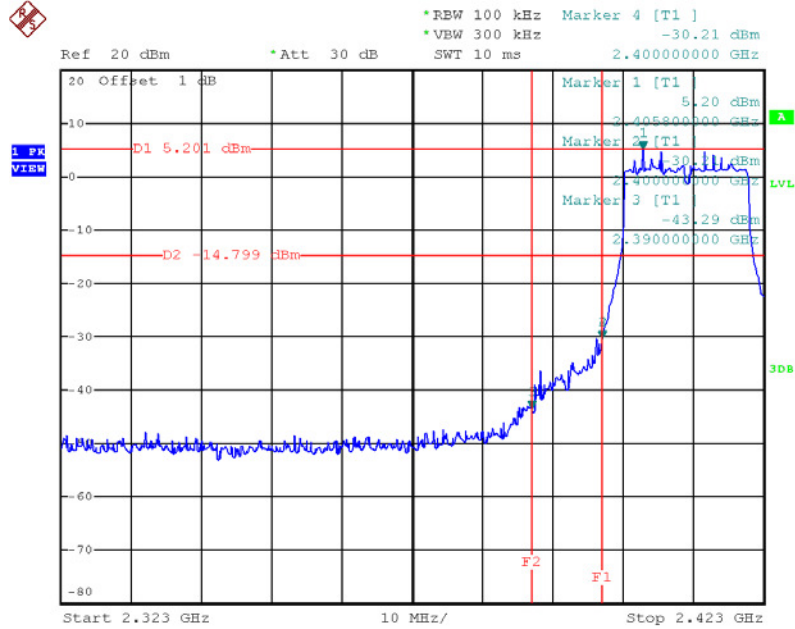
Date: 23.JAN.2018 09:53:04



Date: 23.JAN.2018 09:53:10

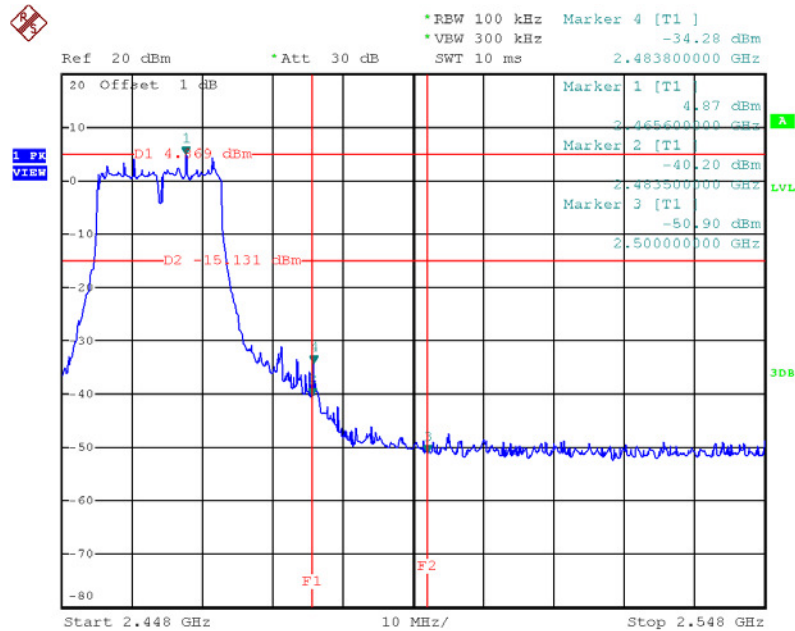
Test Mode : TX N-20M Mode

TX HT20 mode CH01



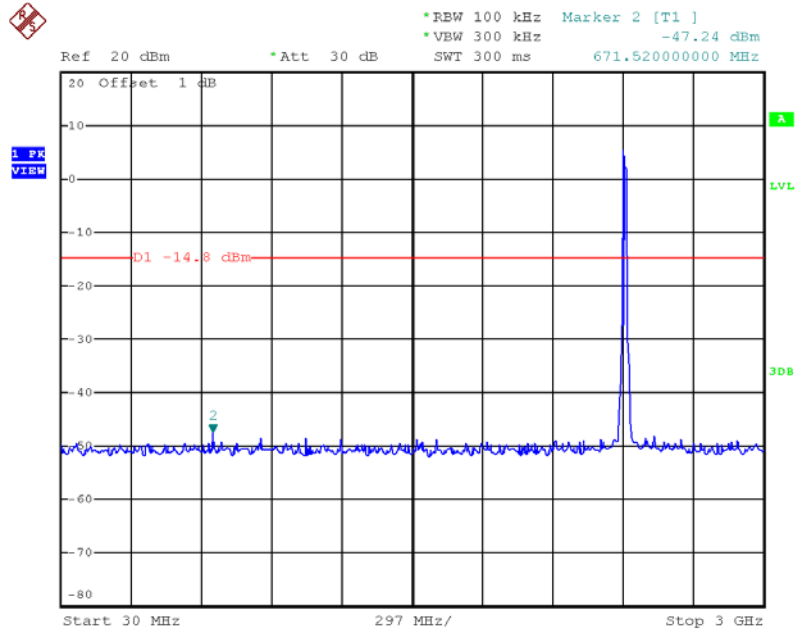
Date: 23.JAN.2018 09:54:40

TX HT20 mode CH11

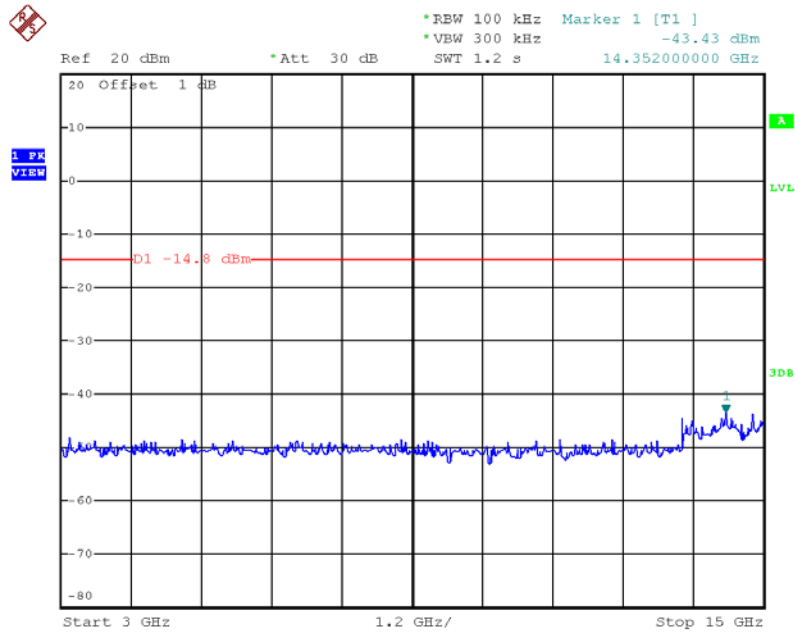


Date: 23.JAN.2018 09:57:47

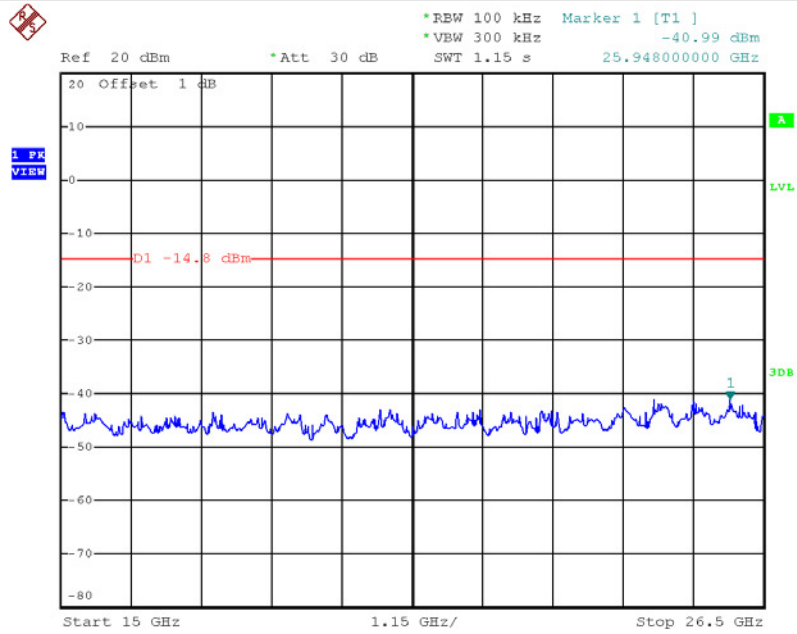
TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:54:53

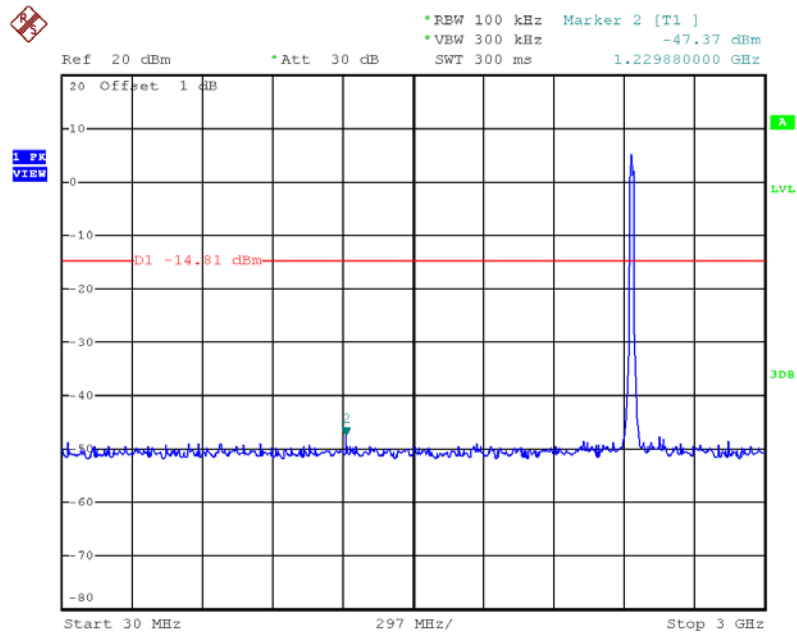


Date: 23.JAN.2018 09:54:59

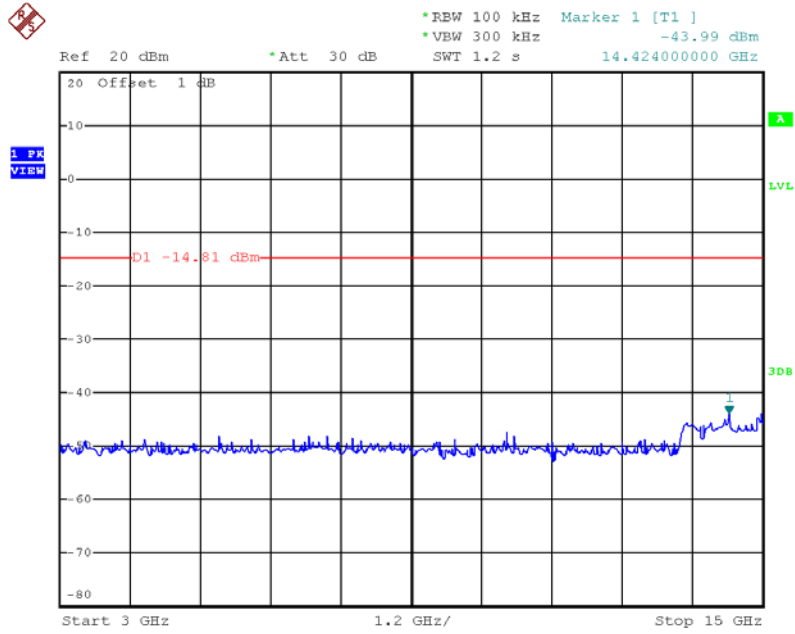


Date: 23.JAN.2018 09:55:06

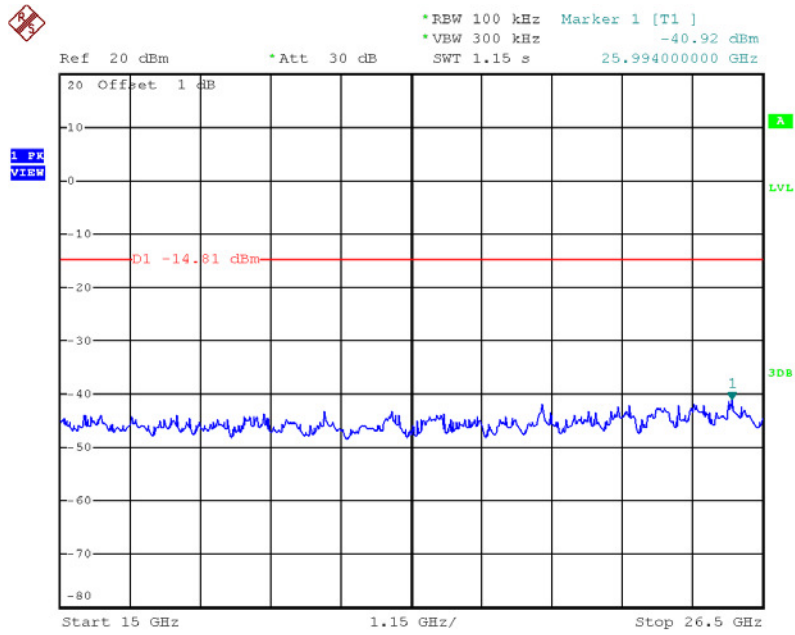
TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 23.JAN.2018 09:56:22



Date: 23.JAN.2018 09:56:29



Date: 23.JAN.2018 09:56:36