

FCC Radio Test Report

FCC ID: TE7WA850REV6

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

Project No. : 1802C079
Equipment : 300Mbps Wi-Fi Range Extender
Test Model : TL-WA850RE
Series Model : N/A
Applicant : TP-Link Technologies Co., Ltd.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4), Central
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518057 China

Date of Receipt : Feb. 11, 2018
Date of Test : Feb. 23, 2018 ~ Apr. 09, 2018
Issued Date : May 16, 2018
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Table of Contents	Page
1 . CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	11
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 DESCRIPTION OF SUPPORT UNITS	14
4 . EMC EMISSION TEST	15
4.1 CONDUCTED EMISSION MEASUREMENT	15
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	15
4.1.2 TEST PROCEDURE	15
4.1.3 DEVIATION FROM TEST STANDARD	15
4.1.4 TEST SETUP	16
4.1.5 EUT OPERATING CONDITIONS	16
4.1.6 EUT TEST CONDITIONS	16
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	17
4.2.1 RADIATED EMISSION LIMITS	17
4.2.2 TEST PROCEDURE	18
4.2.3 DEVIATION FROM TEST STANDARD	18
4.2.4 TEST SETUP	19
4.2.5 EUT OPERATING CONDITIONS	20
4.2.6 EUT TEST CONDITIONS	20
4.2.7 TEST RESULTS (9KHZ TO 30MHZ)	20
4.2.8 TEST RESULTS (30MHZ TO 1000MHZ)	20
4.2.9 TEST RESULTS (ABOVE 1000MHZ)	20
5 . BANDWIDTH TEST	21
5.1 APPLIED PROCEDURES	21
5.1.1 TEST PROCEDURE	21
5.1.2 DEVIATION FROM STANDARD	21
5.1.3 TEST SETUP	21
5.1.4 EUT OPERATION CONDITIONS	21
5.1.5 EUT TEST CONDITIONS	21
5.1.6 TEST RESULTS	21
6 . MAXIMUM AVG CONDUCTED OUTPUT POWER TEST	22

Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	22
6.1.1 TEST PROCEDURE	22
6.1.2 DEVIATION FROM STANDARD	22
6.1.3 TEST SETUP	22
6.1.4 EUT OPERATION CONDITIONS	22
6.1.5 EUT TEST CONDITIONS	22
6.1.6 TEST RESULTS	22
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	23
7.1 APPLIED PROCEDURES / LIMIT	23
7.1.1 TEST PROCEDURE	23
7.1.2 DEVIATION FROM STANDARD	23
7.1.3 TEST SETUP	23
7.1.4 EUT OPERATION CONDITIONS	23
7.1.5 EUT TEST CONDITIONS	23
7.1.6 TEST RESULTS	23
8 . POWER SPECTRAL DENSITY TEST	24
8.1 APPLIED PROCEDURES / LIMIT	24
8.1.1 TEST PROCEDURE	24
8.1.2 DEVIATION FROM STANDARD	24
8.1.3 TEST SETUP	24
8.1.4 EUT OPERATION CONDITIONS	24
8.1.5 EUT TEST CONDITIONS	24
8.1.6 TEST RESULTS	24
9 . MEASUREMENT INSTRUMENTS LIST	25
10 . EUT TEST PHOTO	27
APPENDIX A - CONDUCTED EMISSION	31
APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)	34
APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)	39
APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)	46
APPENDIX E - BANDWIDTH	127
APPENDIX F - MAXIMUM AVG CONDUCTED OUTPUT POWER	136
APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION	141
APPENDIX H - POWER SPECTRAL DENSITY	190

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1802C079	Original Issue.	May 16, 2018

1. CERTIFICATION

Equipment : 300Mbps Wi-Fi Range Extender
Brand Name : tp-link
Test Model : TL-WA850RE
Series Model : N/A
Applicant : TP-Link Technologies Co., Ltd.
Manufacturer : TP-Link Technologies Co., Ltd.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4), Central Science and Technology Park,Nanshan Shenzhen, 518057 China
Date of Test : Feb. 27, 2018 ~ Apr. 09, 2018
Test Sample : Engineering Sample No.for Conducted: D180201406 & Radiation: D180201406
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-1-1802C079) 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	300Mbps Wi-Fi Range Extender	
Brand Name	tp-link	
Test Model	TL-WA850RE	
Series Model	N/A	
Model Difference	N/A	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300 Mbps
	AVG Output Power (Max.)	802.11b: 21.71dBm 802.11g: 22.57dBm 802.11n(20MHz): 22.59dBm 802.11n(40MHz): 19.66dBm
Power Source	AC Mains.	
Power Rating	100-240V 50/60Hz 0.3A	

Note:

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

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

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	TP-LINK	N/A	Internal	N/A	2	N/A
2	TP-LINK	N/A	Internal	N/A	2	N/A

Note:

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

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

3.2 DESCRIPTION OF TEST MODES

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

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

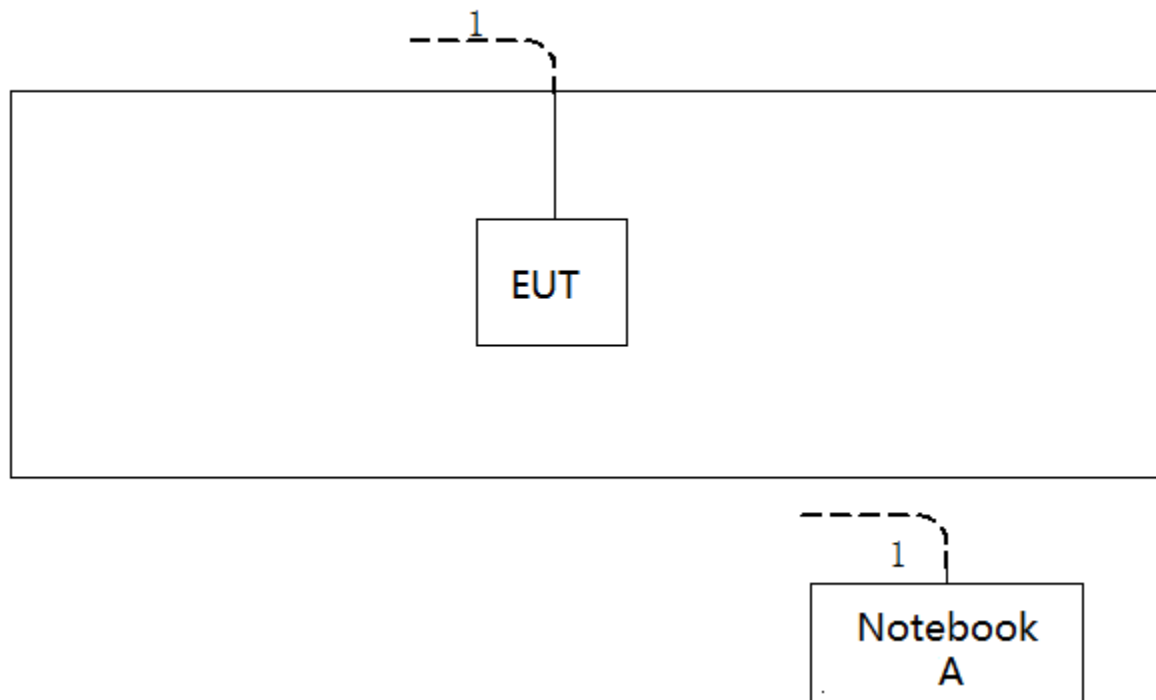
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (13Mbps)
802.11n HT40 mode : BPSK (27Mbps)
For radiated emission tests, the highest output powers were set for final test.
- (3) For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

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	QATool_Dbg		
Frequency (MHz)	2412	2437	2462
802.11b	1D	1C	1A
802.11g	18	20	17
802.11n (20MHz)	18	22	16
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	0F	1B	11

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



4

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.
A	Notebook	Dell	DCSM	DOC	G7K832X

Item	Shielded Type	Ferrite Core	Length	Note
1	N/A	N/A	10m	RJ45 Cable

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

The following table is the setting of the receiver

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

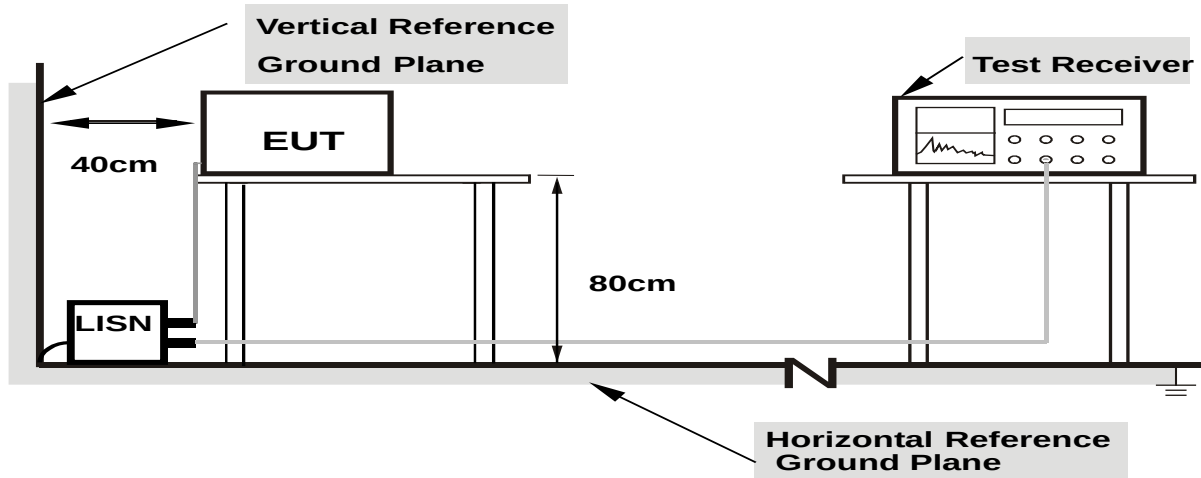
4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support 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)	Band edge at 3m (dBμV/m)		Harmonic at 1.5m (dBμV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	80 (Note 5)	60(Note 5)

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

(5)

$$FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

$$20 \log d_{\text{limit}}/d_{\text{measure}} = 20 \log 3/1.5 = 6 \text{dB}.$$

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

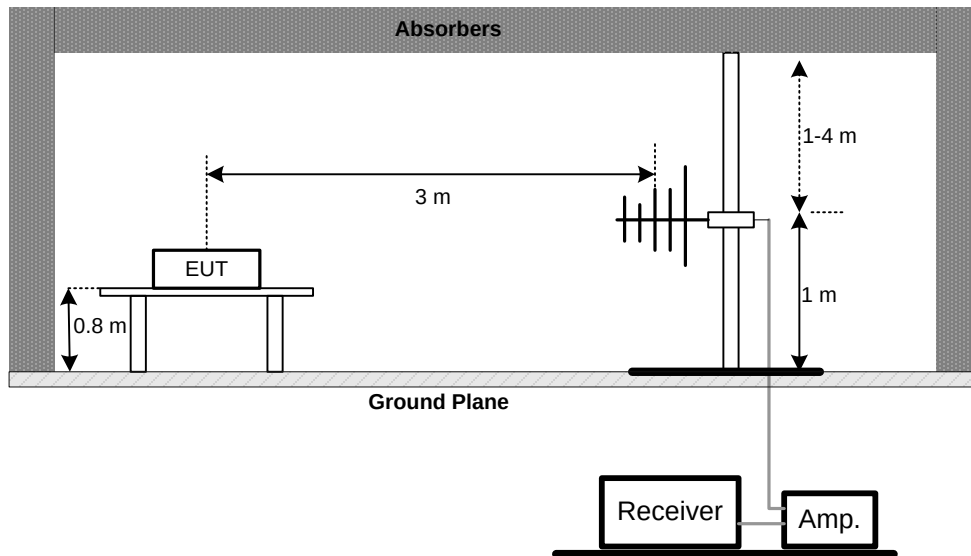
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m or 1.5m 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

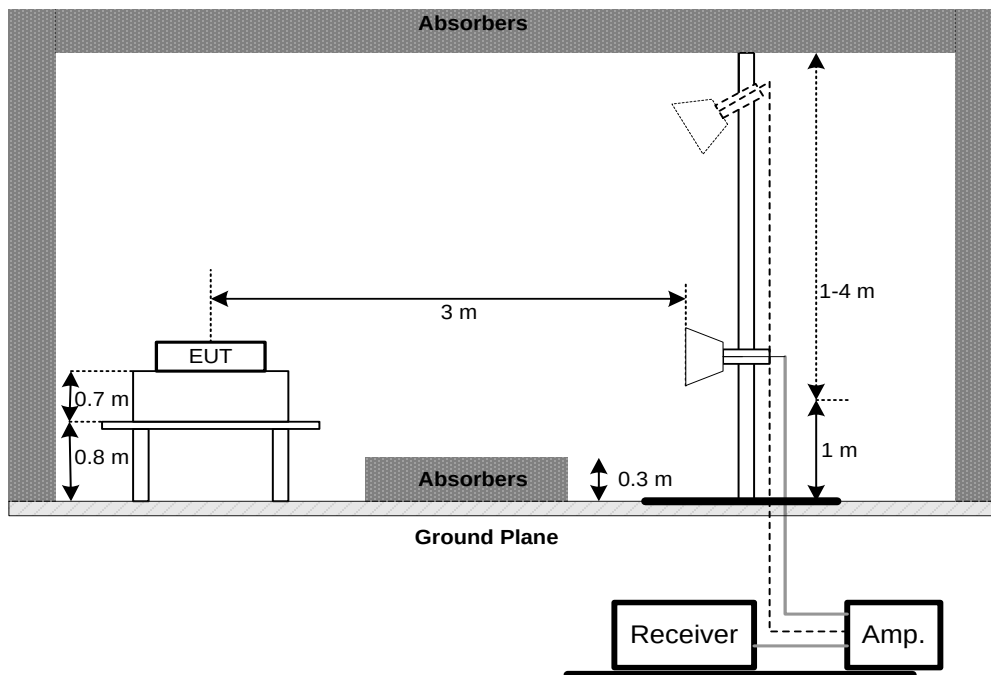
No deviation

4.2.4 TEST SETUP

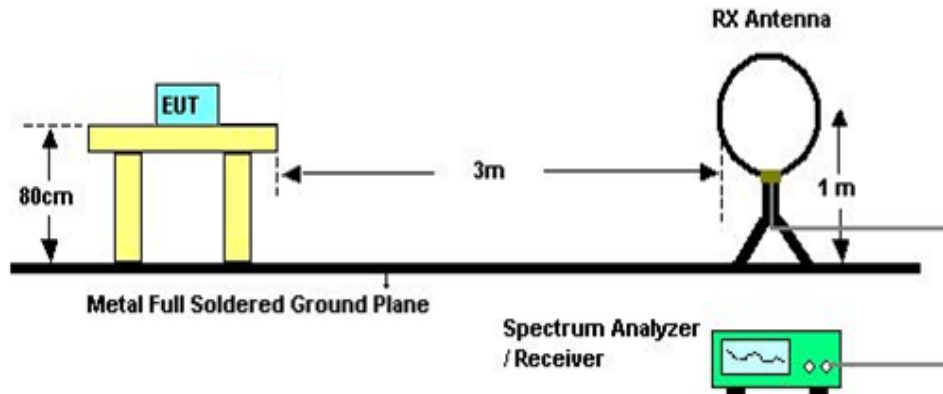
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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

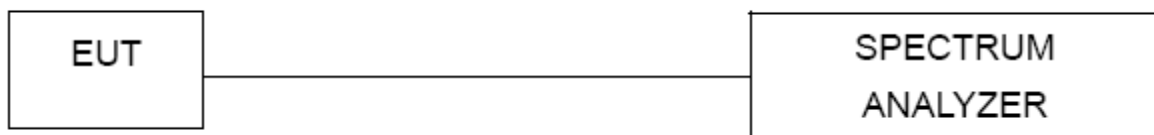
5.1.1 TEST PROCEDURE

- 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 AVG 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 avg conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 v04 DTS Meas Guidance and FCC KDB 662911 D01 Multiple Transmitter Output.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Appendix F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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 conducted power limits. If the transmitter complies with the conducted 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= 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					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 11, 2019
2	LISN	EMCO	3816/2	52765	Mar. 11, 2019
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 11, 2019
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 11, 2019
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Oct. 19, 2018

Radiated Emission Below 1GHz					
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	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	Feb. 07, 2019

Radiated Emission 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. 08, 2018
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. 20, 2018
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	emci	EMC104-SM-SM-1 2000(12m)	N/A	Jun. 26, 2018
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 20, 2018

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

Power Spectral Density Measurement					
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



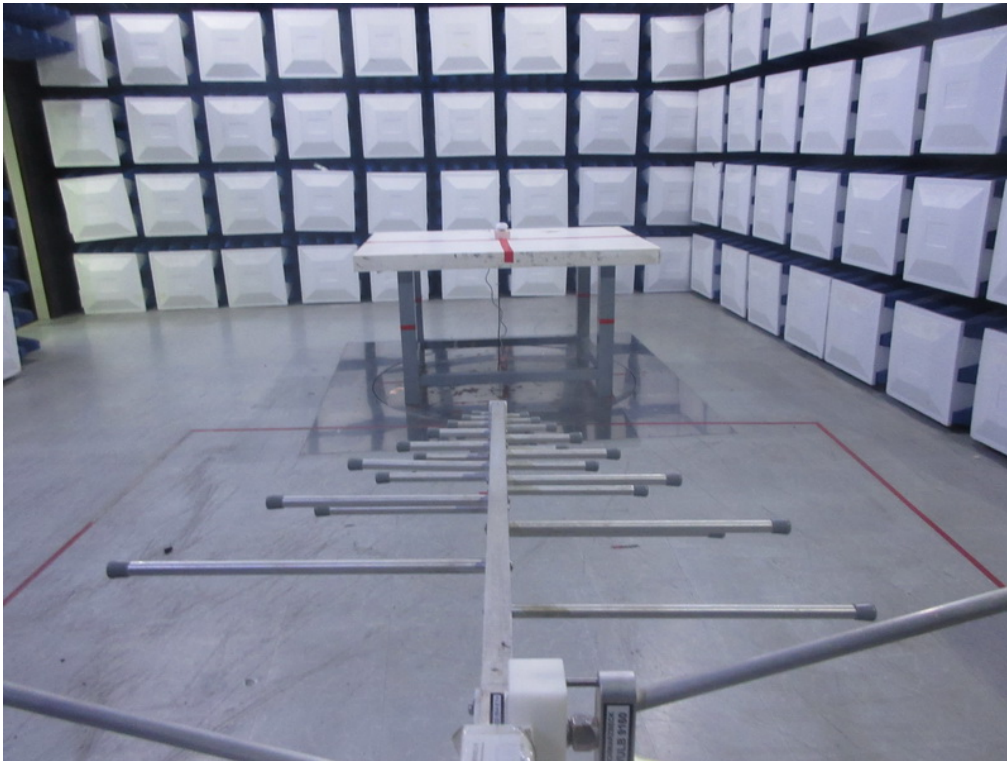
Radiated Measurement Photos

9KHz to 30MHz



Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

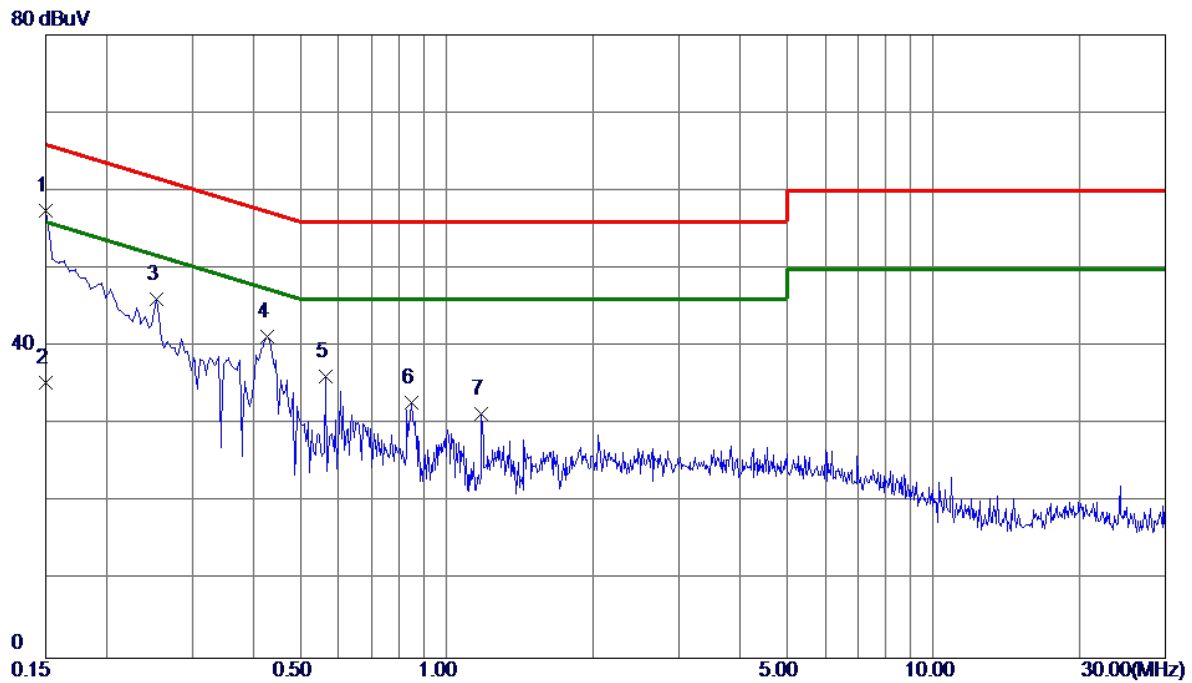
Above 1000MHz



APPENDIX A - CONDUCTED EMISSION

Test Mode : Normal Link

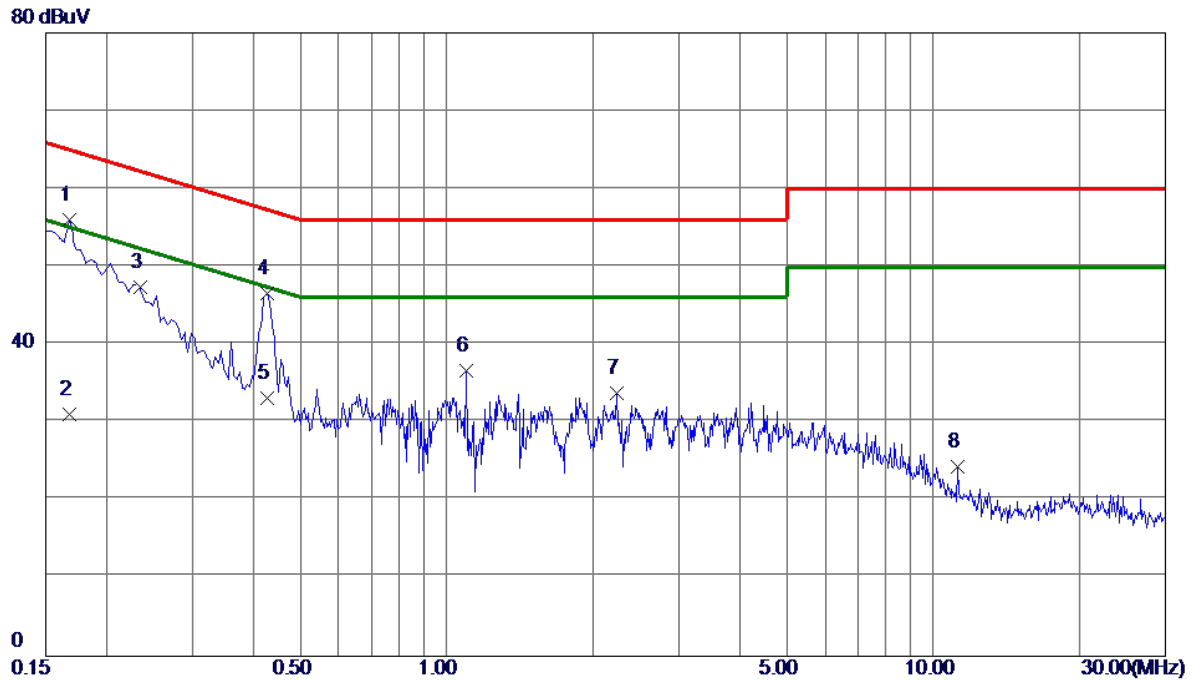
Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1500	47.68	9.79	57.47	66.00	-8.53	Peak	
2	0.1500	25.64	9.79	35.43	56.00	-20.57	AVG	
3	0.2535	36.31	9.76	46.07	61.64	-15.57	Peak	
4	0.4290	31.49	9.80	41.29	57.27	-15.98	Peak	
5	0.5639	26.30	9.81	36.11	56.00	-19.89	Peak	
6	0.8475	23.00	9.83	32.83	56.00	-23.17	Peak	
7	1.1805	21.43	9.87	31.30	56.00	-24.70	Peak	

Test Mode : Normal Link

Neutral

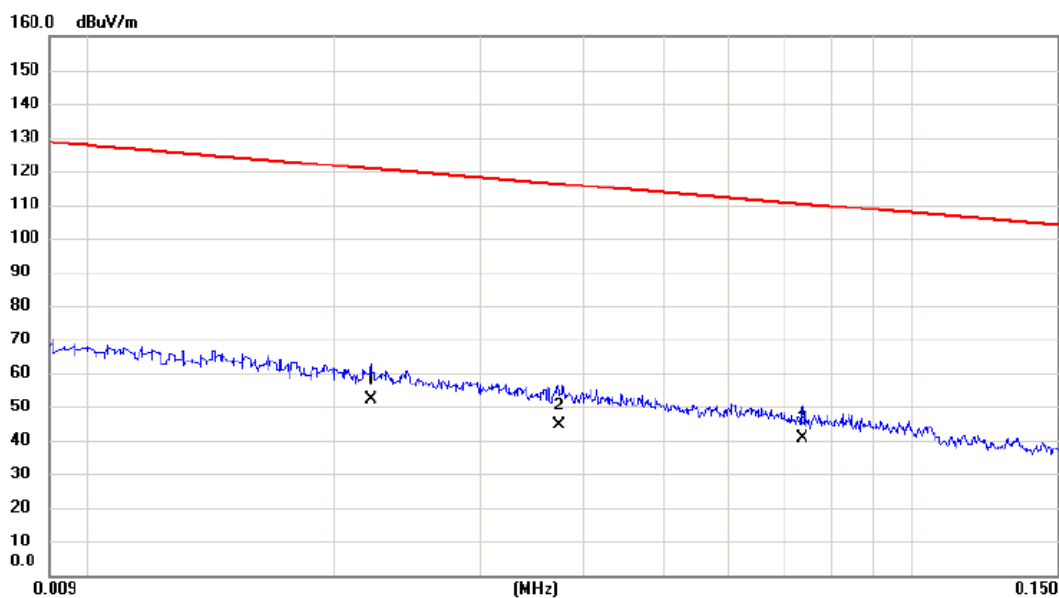


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1680	46.34	9.68	56.02	65.06	-9.04	Peak	
2	0.1680	21.30	9.68	30.98	55.06	-24.08	AVG	
3	0.2341	37.61	9.68	47.29	62.30	-15.01	Peak	
4	0.4290	36.80	9.69	46.49	57.27	-10.78	Peak	
5	0.4290	23.40	9.69	33.09	47.27	-14.18	AVG	
6	1.0950	26.94	9.75	36.69	56.00	-19.31	Peak	
7	2.2425	23.93	9.86	33.79	56.00	-22.21	Peak	
8	11.2335	13.94	10.36	24.30	60.00	-35.70	Peak	

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

Test Mode: TX MODE

Ant 0°

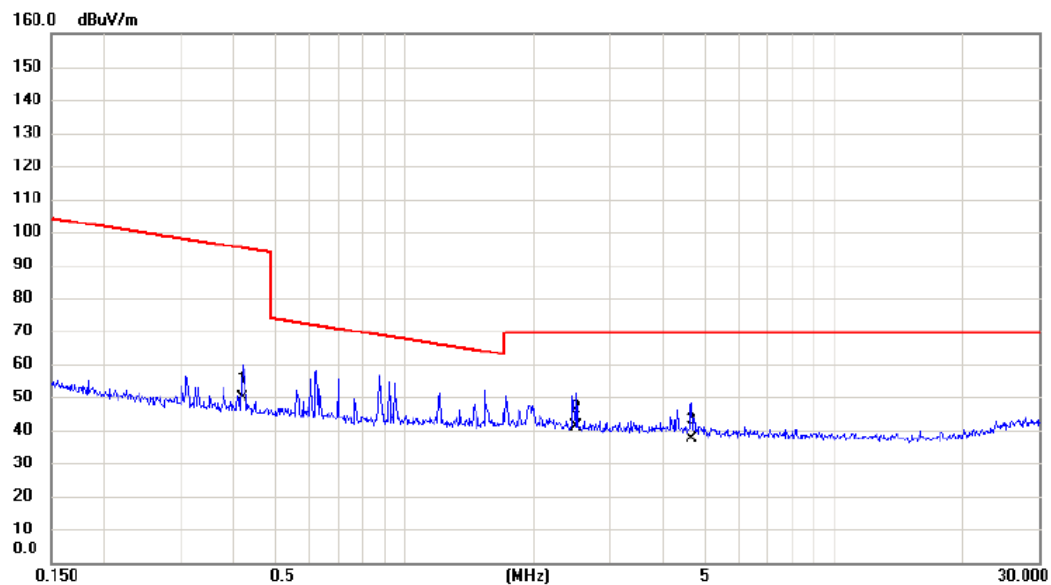


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0221	32.45	19.56	52.01	120.72	-68.71	AVG	
2		0.0374	25.44	19.10	44.54	116.15	-71.61	AVG	
3		0.0738	22.39	18.25	40.64	110.24	-69.60	AVG	

Test Mode:

TX MODE

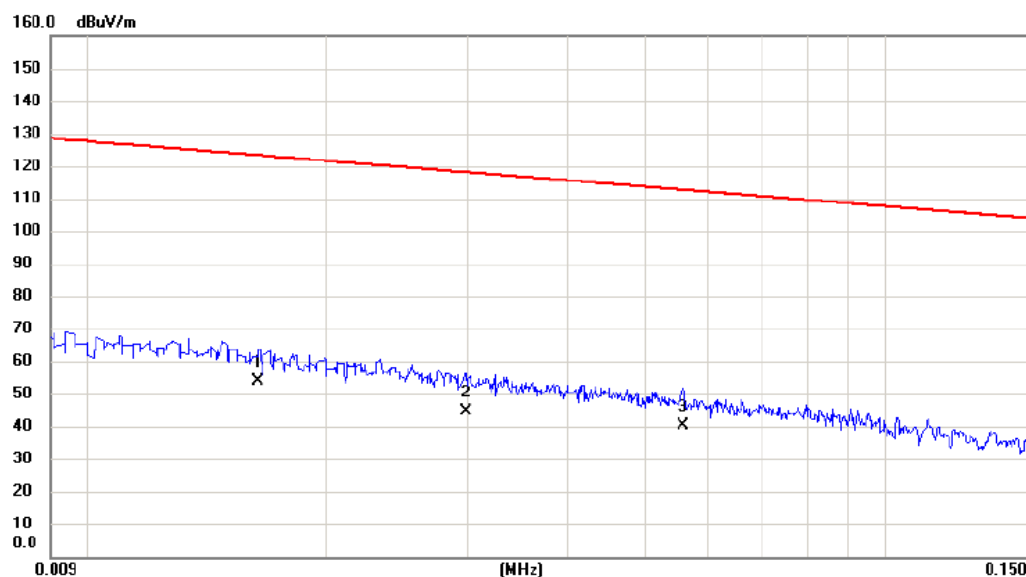
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4192	33.45	16.53	49.98	95.16	-45.18	AVG	
2	*	2.5132	25.47	15.37	40.84	69.54	-28.70	QP	
3		4.6715	22.69	14.56	37.25	69.54	-32.29	QP	

Test Mode:	TX MODE
------------	---------

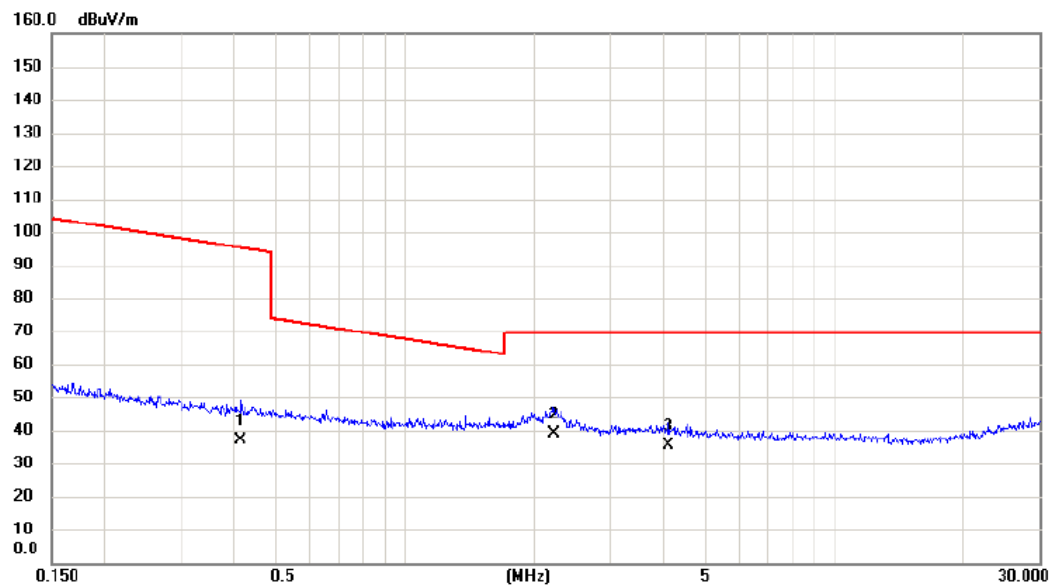
Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0164	33.58	20.09	53.67	123.31	-69.64	AVG	
2		0.0298	25.44	19.33	44.77	118.12	-73.35	AVG	
3		0.0558	21.46	18.61	40.07	112.67	-72.60	AVG	

Test Mode: TX MODE

Ant 90°



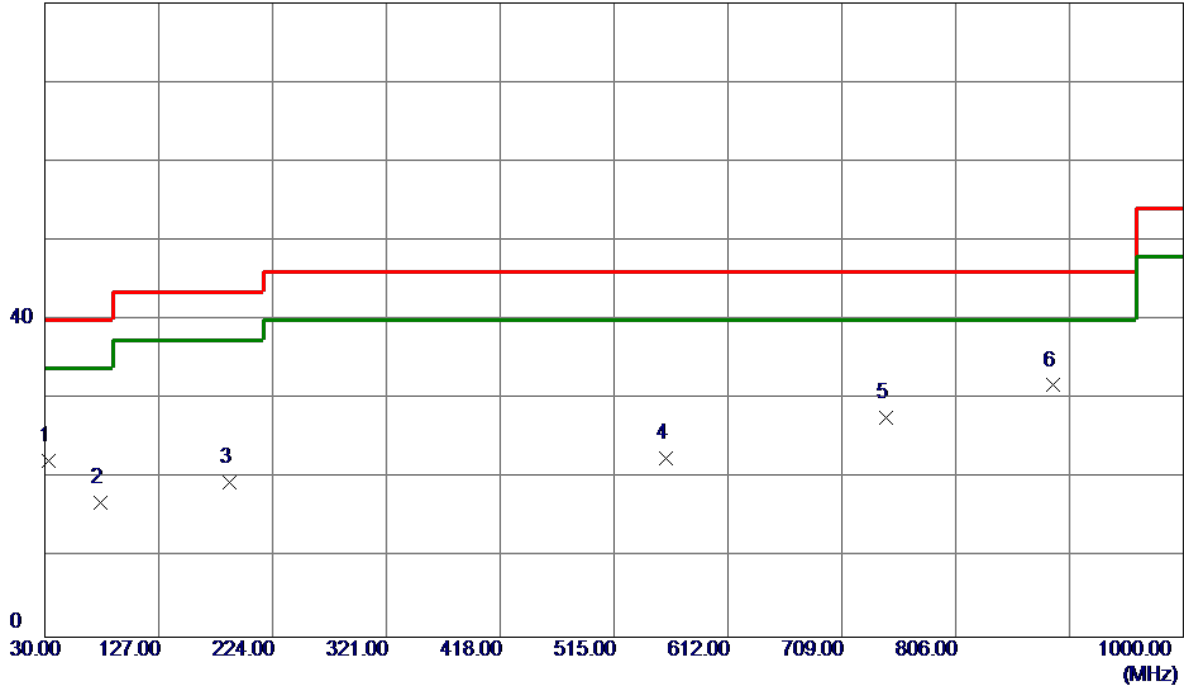
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.4148	20.48	16.54	37.02	95.25	-58.23	AVG	
2	*	2.2132	23.55	15.45	39.00	69.54	-30.54	QP	
3		4.1137	20.49	14.88	35.37	69.54	-34.17	QP	

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

Test Mode: TX B MODE CHANNEL 01

Vertical

80 dBuV/m

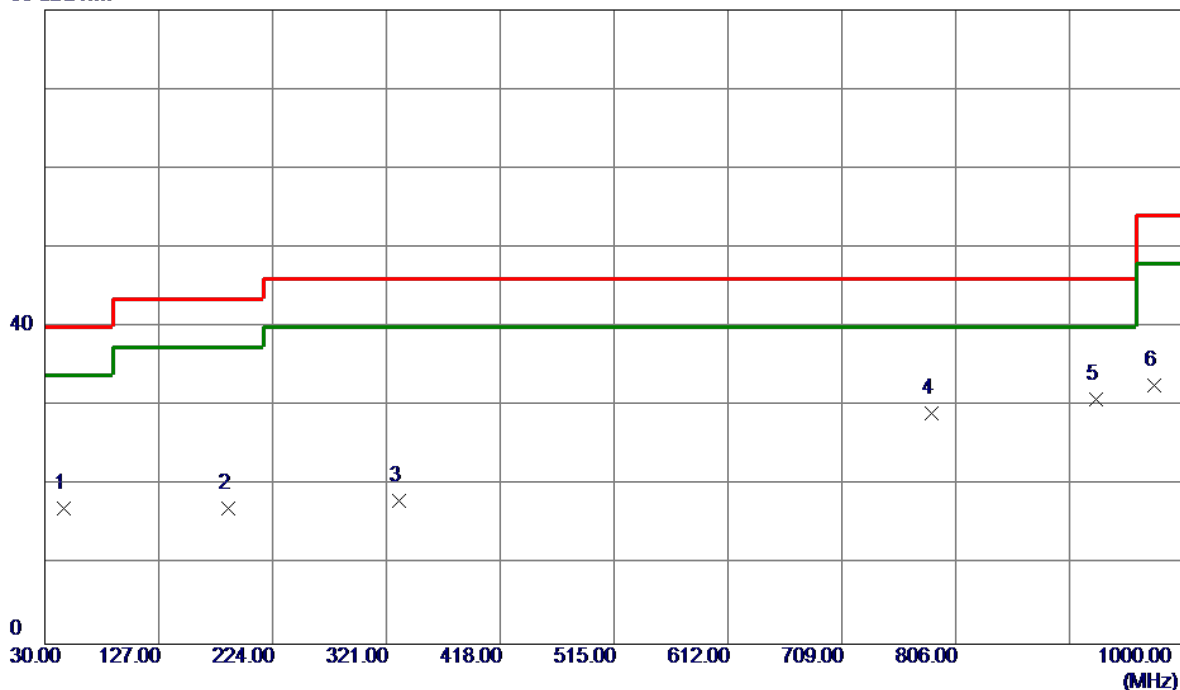


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	32.9100	37.07	-14.89	22.18	40.00	-17.82	Peak	
2	77.5300	34.68	-17.67	17.01	40.00	-22.99	Peak	
3	187.1400	32.14	-12.61	19.53	43.50	-23.97	Peak	
4	559.6200	30.03	-7.47	22.56	46.00	-23.44	Peak	
5	746.8300	30.21	-2.54	27.67	46.00	-18.33	Peak	
6 *	889.4200	30.95	0.81	31.76	46.00	-14.24	Peak	

Test Mode: TX B MODE CHANNEL 01

Horizontal

80 dBuV/m

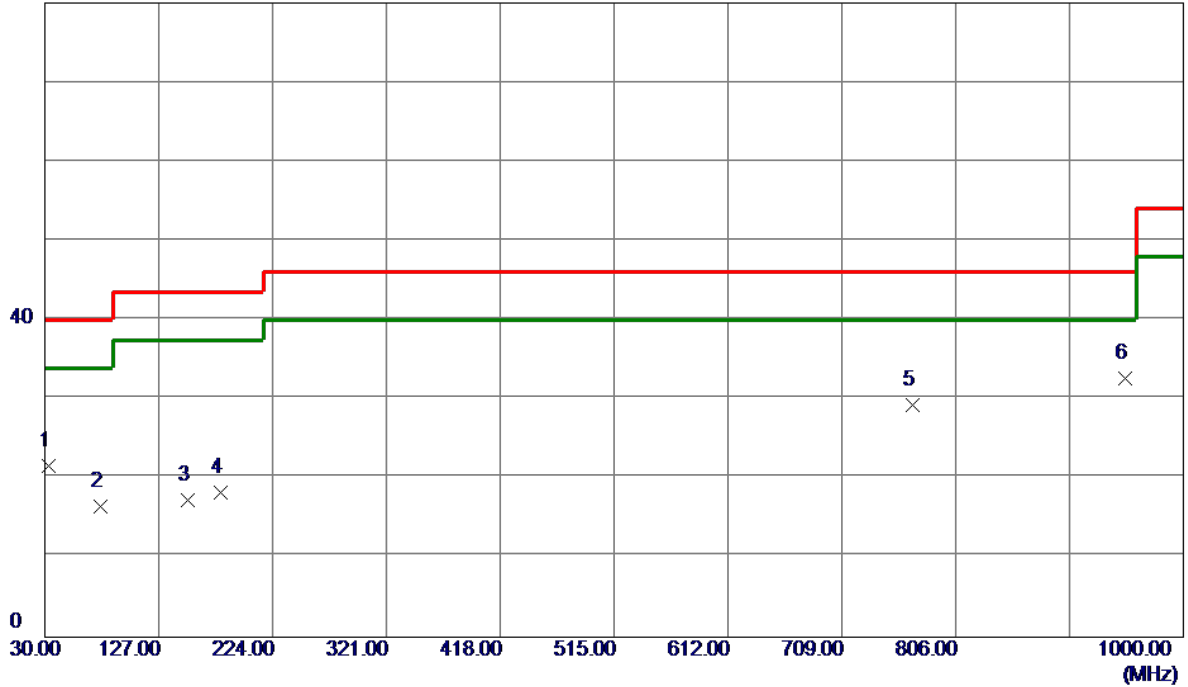


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	46.4900	30.06	-12.98	17.08	40.00	-22.92	Peak	
2	186.1700	29.64	-12.54	17.10	43.50	-26.40	Peak	
3	331.6700	30.32	-12.28	18.04	46.00	-27.96	Peak	
4	785.6300	30.72	-1.67	29.05	46.00	-16.95	Peak	
5 *	925.3100	29.38	1.52	30.90	46.00	-15.10	Peak	
6	974.7800	30.16	2.47	32.63	54.00	-21.37	Peak	

Test Mode: TX B MODE CHANNEL 06

Vertical

80 dBuV/m

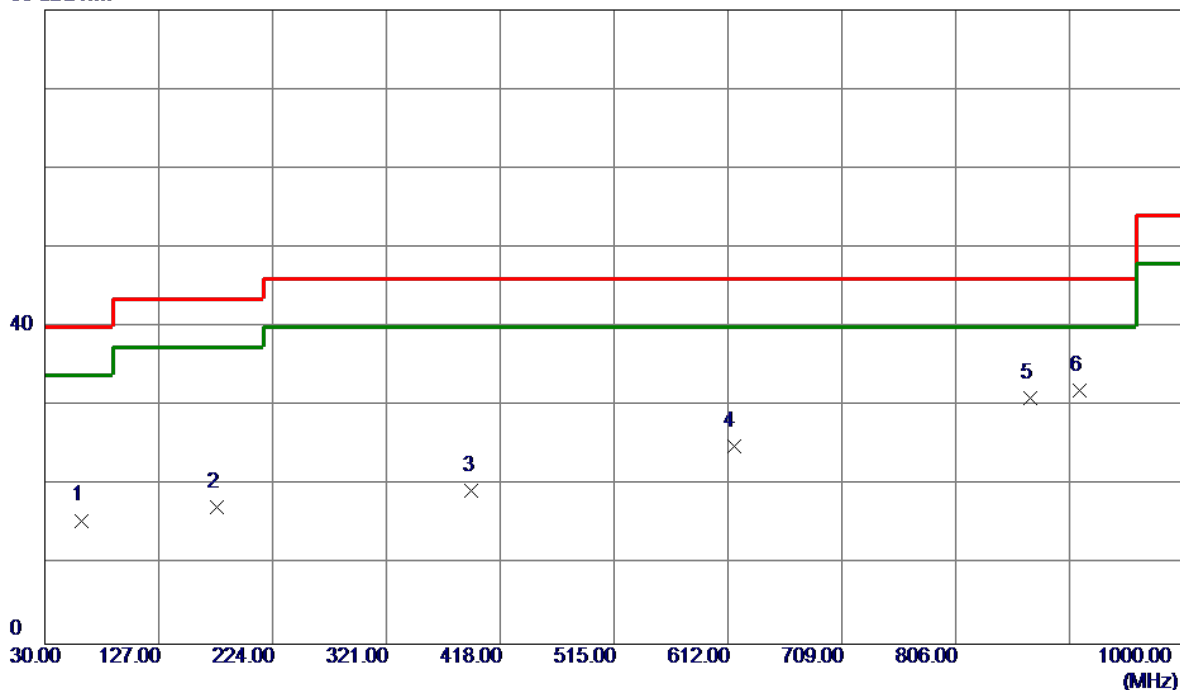


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	32.9100	36.54	-14.89	21.65	40.00	-18.35	Peak	
2	77.5300	34.14	-17.67	16.47	40.00	-23.53	Peak	
3	152.2200	30.62	-13.39	17.23	43.50	-26.27	Peak	
4	179.3800	30.30	-12.06	18.24	43.50	-25.26	Peak	
5	769.1400	31.35	-2.03	29.32	46.00	-16.68	Peak	
6 *	950.5300	30.66	2.01	32.67	46.00	-13.33	Peak	

Test Mode: TX B MODE CHANNEL 06

Horizontal

80 dBuV/m

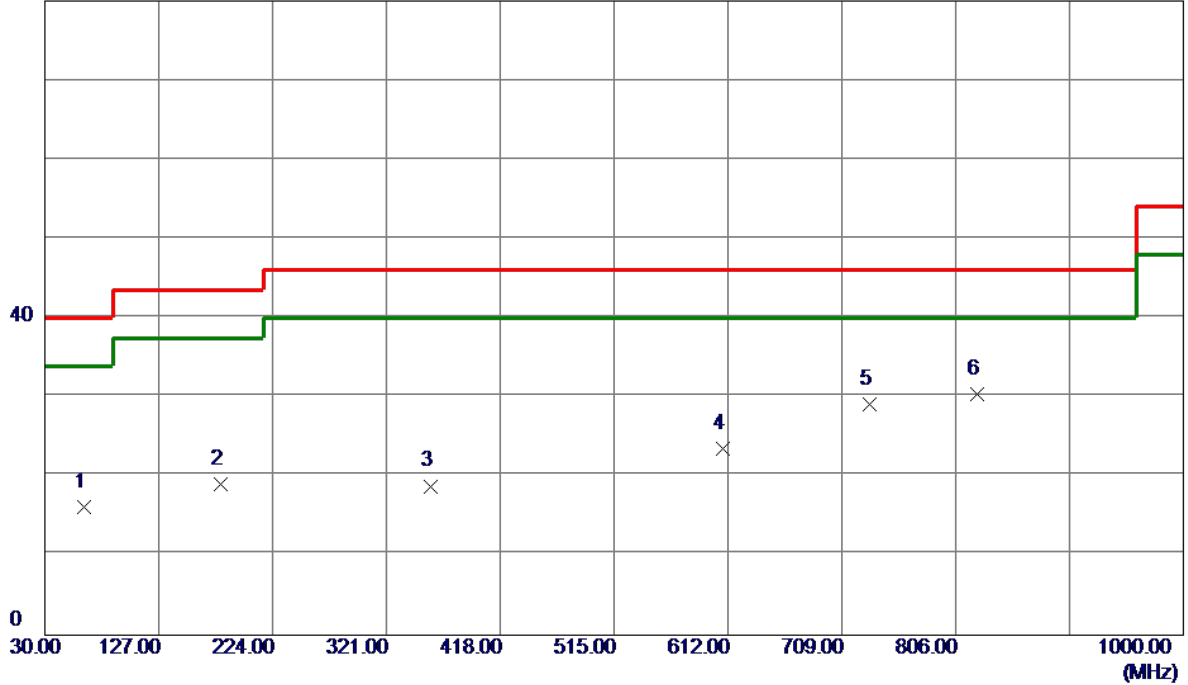


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	61.0400	30.08	-14.48	15.60	40.00	-24.40	Peak	
2	176.4700	29.48	-12.14	17.34	43.50	-26.16	Peak	
3	393.7500	30.83	-11.43	19.40	46.00	-26.60	Peak	
4	616.8500	31.01	-6.10	24.91	46.00	-21.09	Peak	
5	870.0200	30.60	0.41	31.01	46.00	-14.99	Peak	
6 *	911.7300	30.74	1.26	32.00	46.00	-14.00	Peak	

Test Mode: TX B MODE CHANNEL 11

Vertical

80 dBuV/m

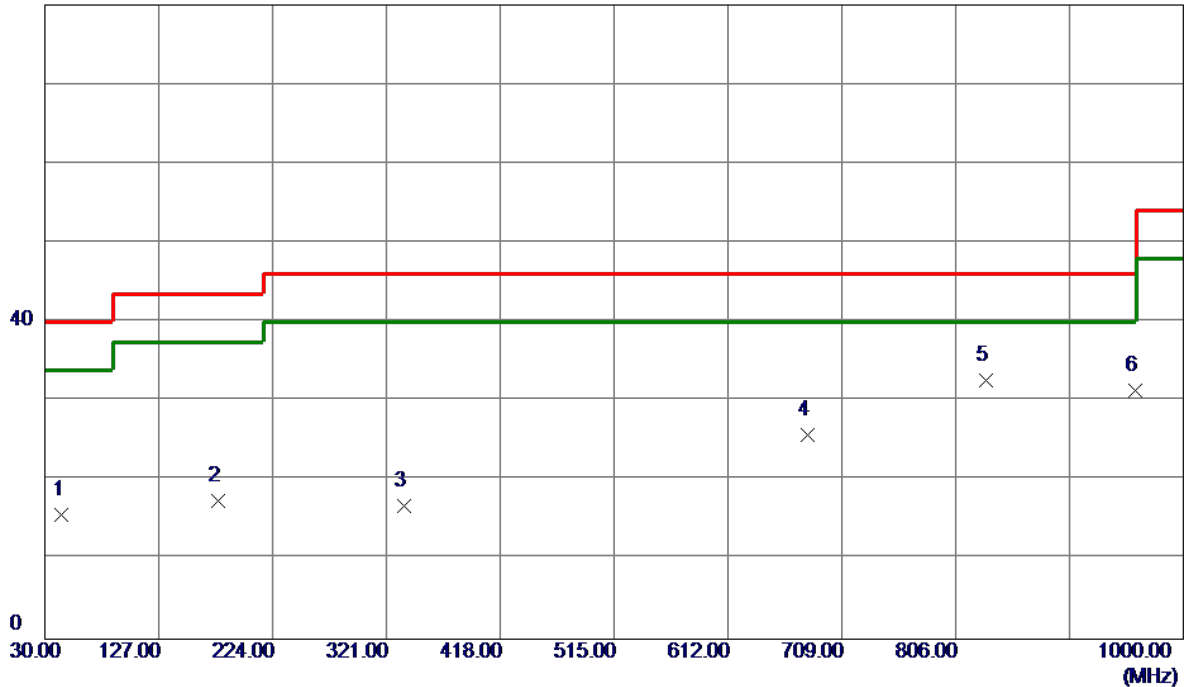


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	62.9800	30.97	-14.82	16.15	40.00	-23.85	Peak	
2	179.3800	31.17	-12.06	19.11	43.50	-24.39	Peak	
3	358.8299	30.65	-11.85	18.80	46.00	-27.20	Peak	
4	608.1200	29.75	-6.27	23.48	46.00	-22.52	Peak	
5	732.2800	32.15	-2.97	29.18	46.00	-16.82	Peak	
6 *	824.4300	31.16	-0.70	30.46	46.00	-15.54	Peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal

80 dBuV/m

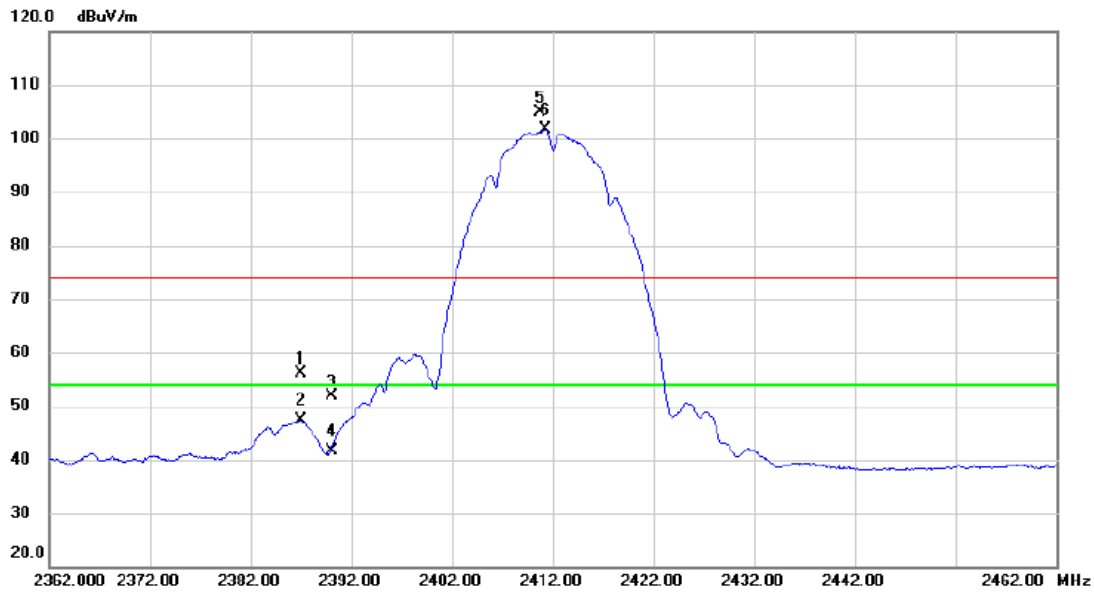


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	44.5500	28.99	-13.36	15.63	40.00	-24.37	Peak	
2	177.4400	29.51	-12.12	17.39	43.50	-26.11	Peak	
3	336.5200	29.07	-12.19	16.88	46.00	-29.12	Peak	
4	679.9000	30.31	-4.56	25.75	46.00	-20.25	Peak	
5 *	832.1900	33.10	-0.48	32.62	46.00	-13.38	Peak	
6	959.2600	29.24	2.17	31.41	46.00	-14.59	Peak	

APPENDIX D - RADIATED EMISSION (ABOVE 1000MHZ)

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

Vertical

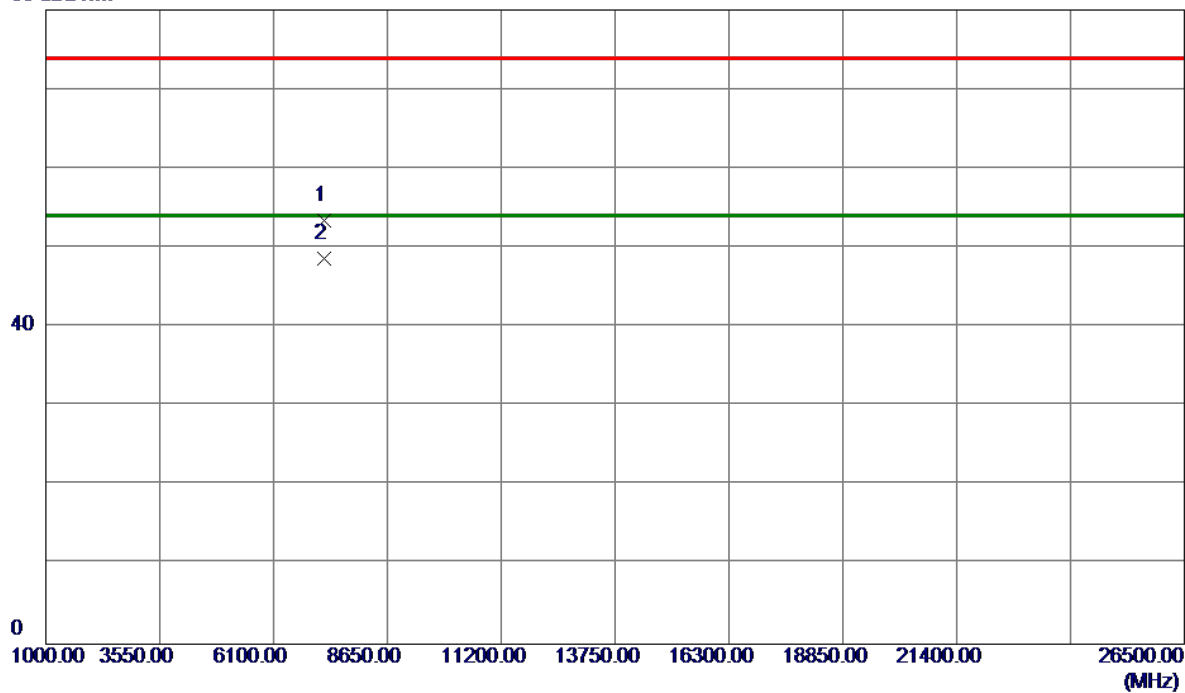


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2387.000	46.89	9.13	56.02	74.00	-17.98	peak	
2		2387.000	38.28	9.13	47.41	54.00	-6.59	AVG	
3		2390.000	42.63	9.13	51.76	74.00	-22.24	peak	
4		2390.000	32.57	9.13	41.70	54.00	-12.30	AVG	
5	X	2410.700	95.66	9.22	104.88	74.00	30.88	peak	No Limit
6	*	2411.300	92.43	9.22	101.65	54.00	47.65	AVG	No Limit

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

Vertical

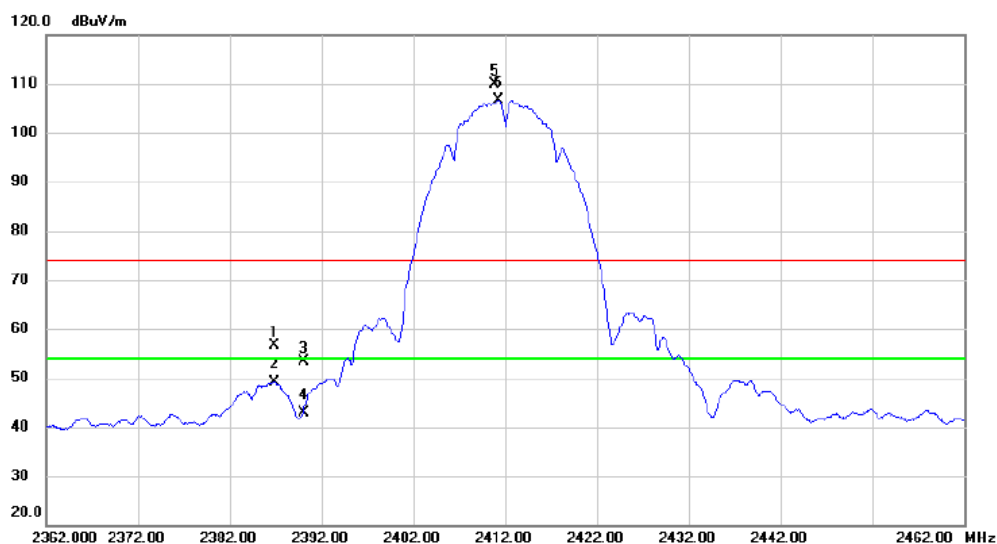
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7235.2600	40.21	13.16	53.37	74.00	-20.63	Peak	
2 *	7236.9000	35.47	13.16	48.63	54.00	-5.37	AVG	

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

Horizontal

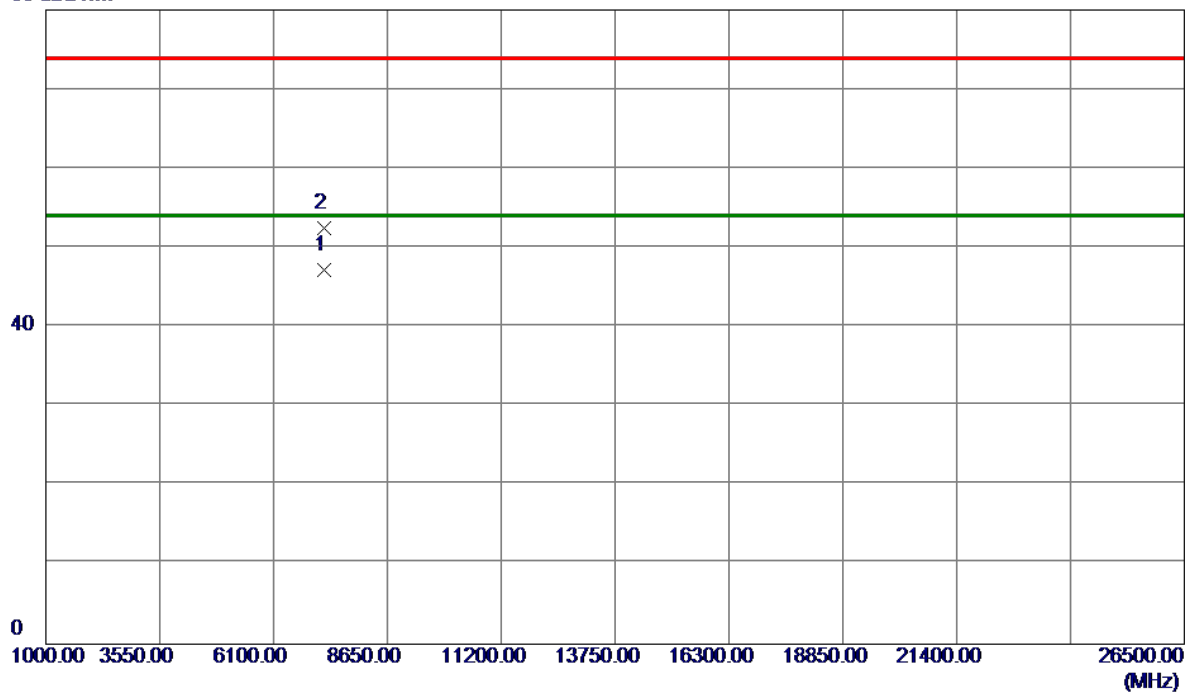


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2386.900	47.38	9.13	56.51	74.00	-17.49	peak	
2		2386.900	39.99	9.13	49.12	54.00	-4.88	AVG	
3		2390.000	44.31	9.13	53.44	74.00	-20.56	peak	
4		2390.000	33.87	9.13	43.00	54.00	-11.00	AVG	
5	X	2410.800	100.74	9.22	109.96	74.00	35.96	peak	No Limit
6	*	2411.300	97.51	9.22	106.73	54.00	52.73	AVG	No Limit

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

Horizontal

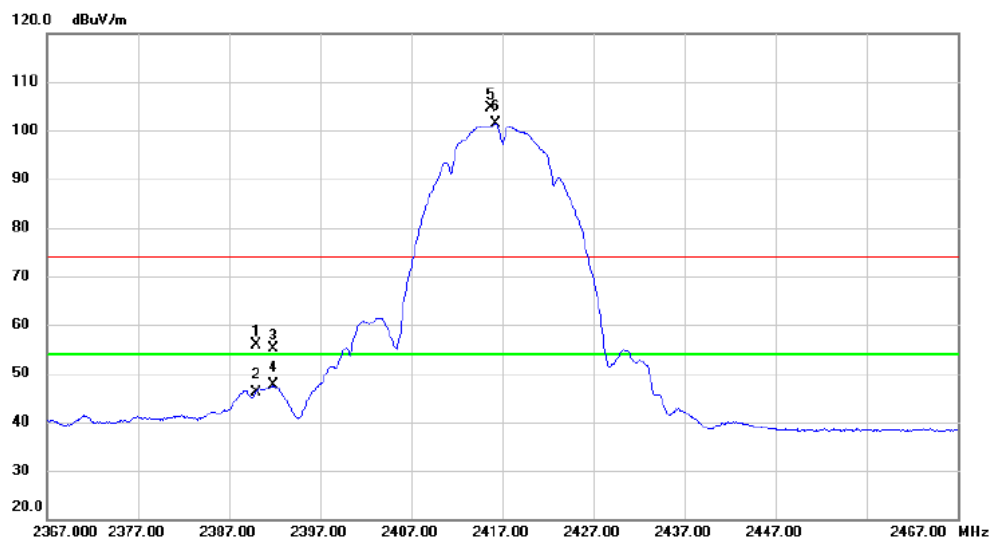
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7236.8000	34.08	13.16	47.24	54.00	-6.76	AVG	
2	7238.0000	39.29	13.16	52.45	74.00	-21.55	Peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2417MHz

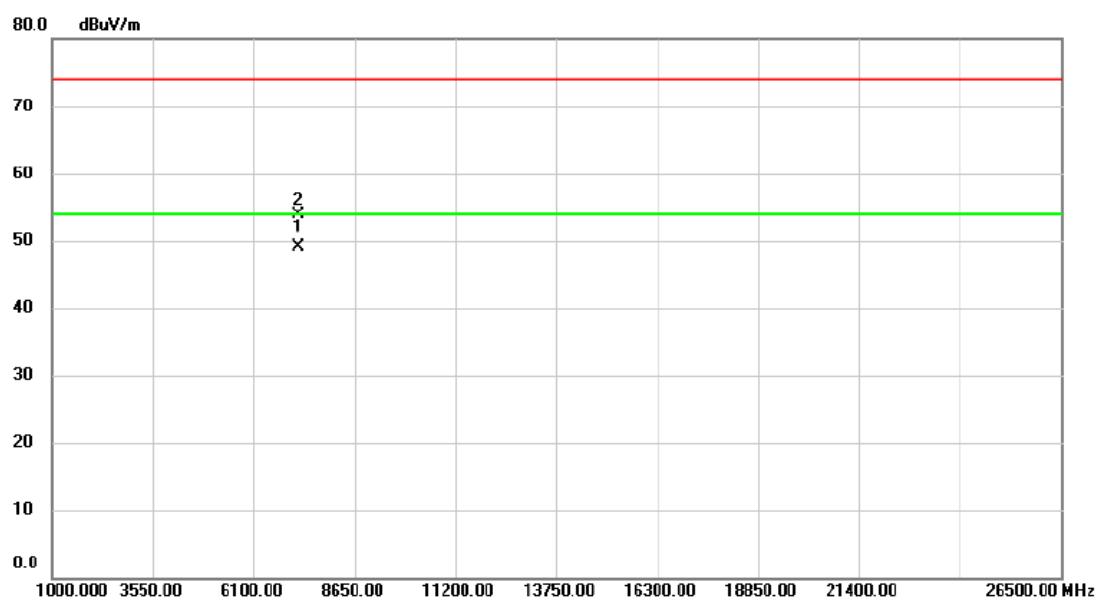
Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	46.78	9.13	55.91	74.00	-18.09	peak	
2	2390.000	37.12	9.13	46.25	54.00	-7.75	AVG	
3	2391.900	46.06	9.14	55.20	74.00	-18.80	peak	
4	2391.900	38.42	9.14	47.56	54.00	-6.44	AVG	
5 X	2415.700	95.34	9.23	104.57	74.00	30.57	peak	No Limit
6 *	2416.300	92.18	9.23	101.41	54.00	47.41	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX B MODE 2417MHz

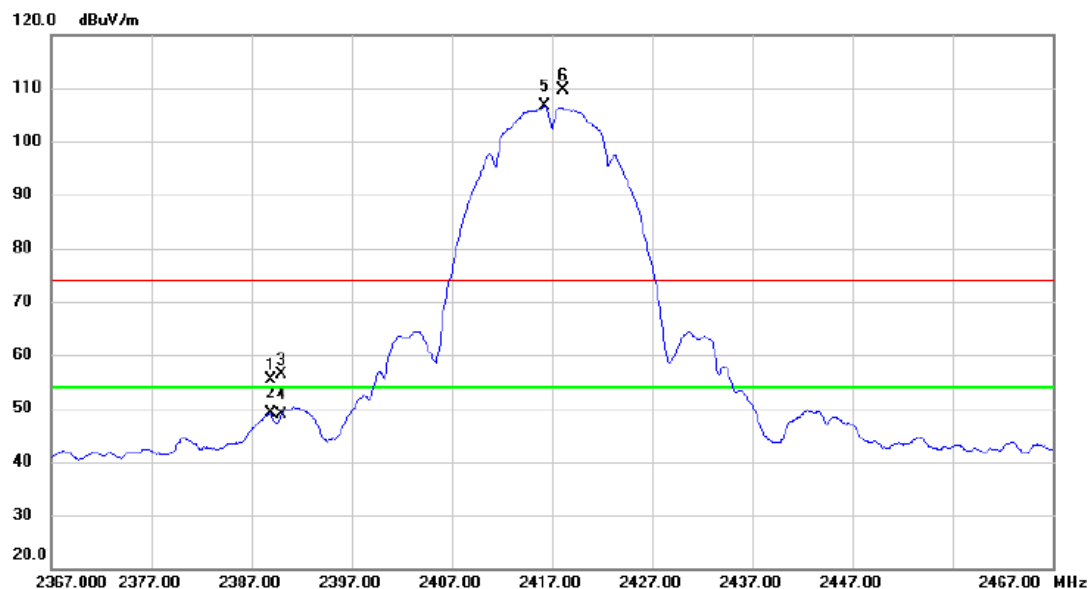
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7251.920	35.94	13.17	49.11	54.00	-4.89	AVG	
2		7252.020	40.70	13.16	53.86	74.00	-20.14	peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2417MHz

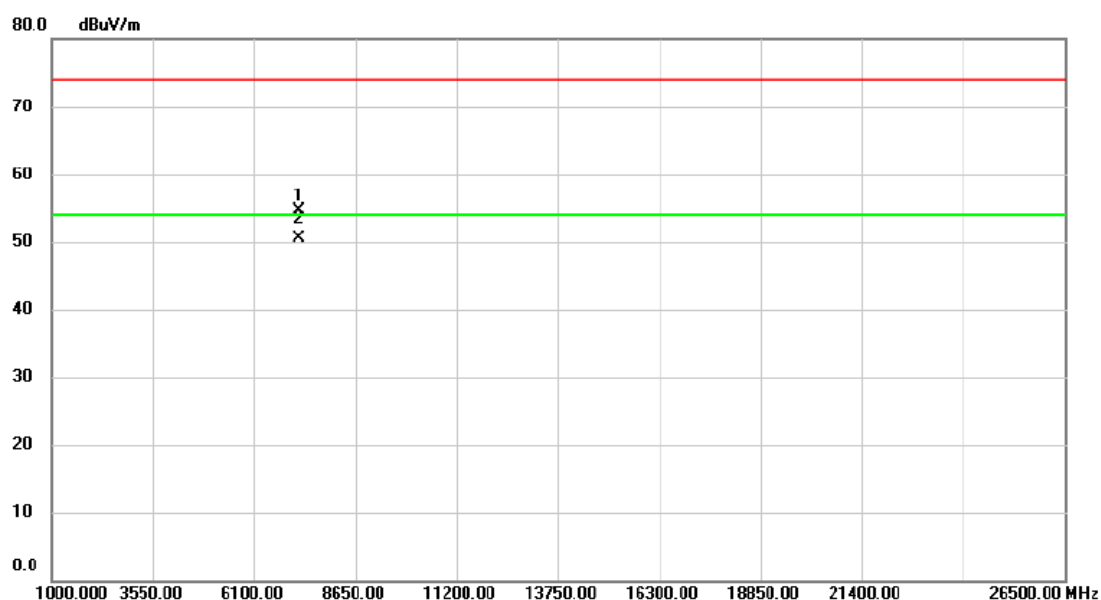
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2388.900	46.31	9.13	55.44	74.00	-18.56	peak	
2		2388.900	39.92	9.13	49.05	54.00	-4.95	AVG	
3		2390.000	47.31	9.13	56.44	74.00	-17.56	peak	
4		2390.000	39.80	9.13	48.93	54.00	-5.07	AVG	
5	*	2416.300	97.41	9.23	106.64	54.00	52.64	AVG	No Limit
6	X	2418.200	100.47	9.25	109.72	74.00	35.72	peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX B MODE 2417MHz

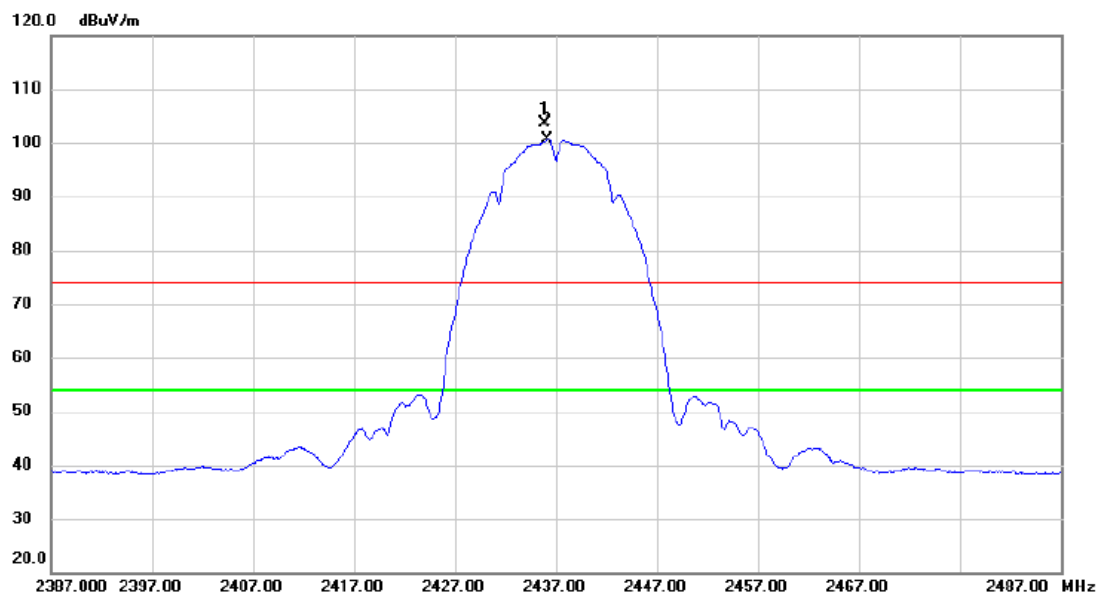
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		7252.000	41.57	13.17	54.74	74.00	-19.26	peak	
2	*	7252.000	37.26	13.17	50.43	54.00	-3.57	AVG	

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

Vertical

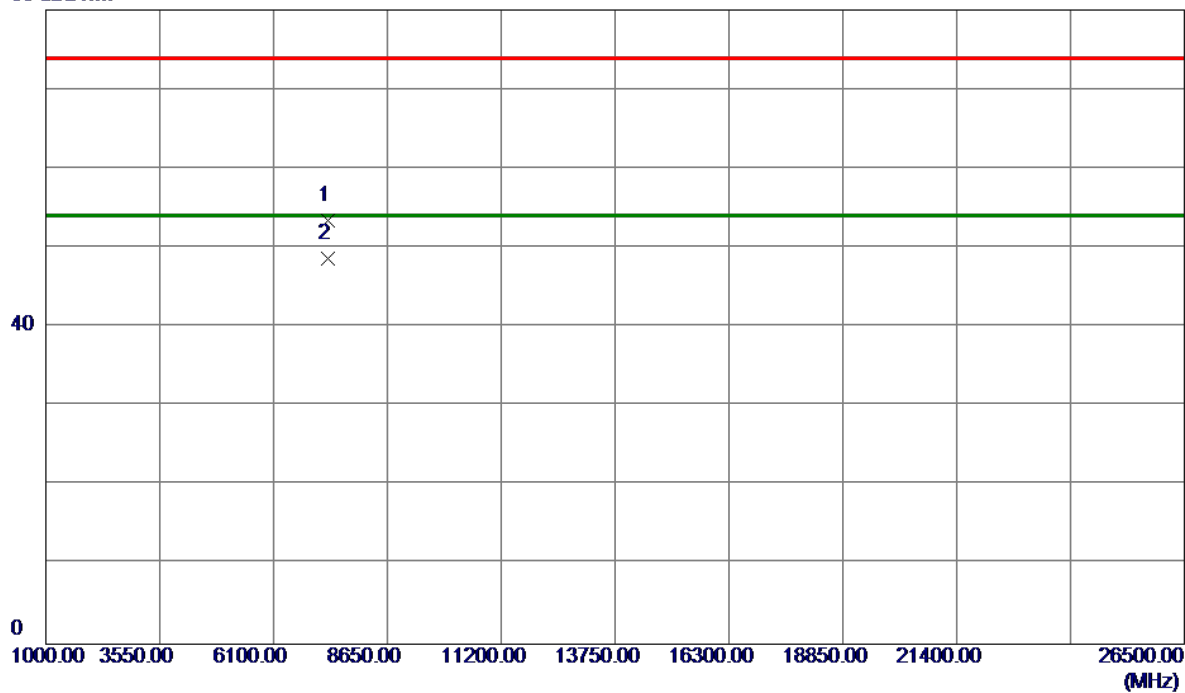


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2435.900	94.38	9.31	103.69	74.00	29.69	peak	No Limit
2	*	2436.200	91.33	9.31	100.64	54.00	46.64	AVG	No Limit

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

Vertical

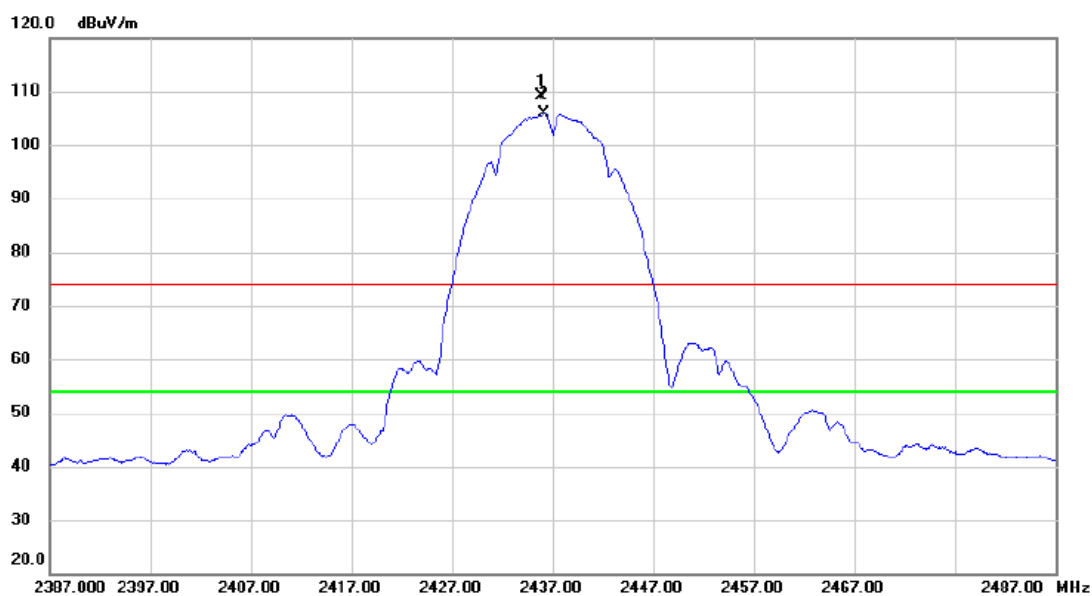
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7311.9200	40.28	13.21	53.49	74.00	-20.51	Peak	
2 *	7311.9200	35.38	13.21	48.59	54.00	-5.41	AVG	

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

Horizontal

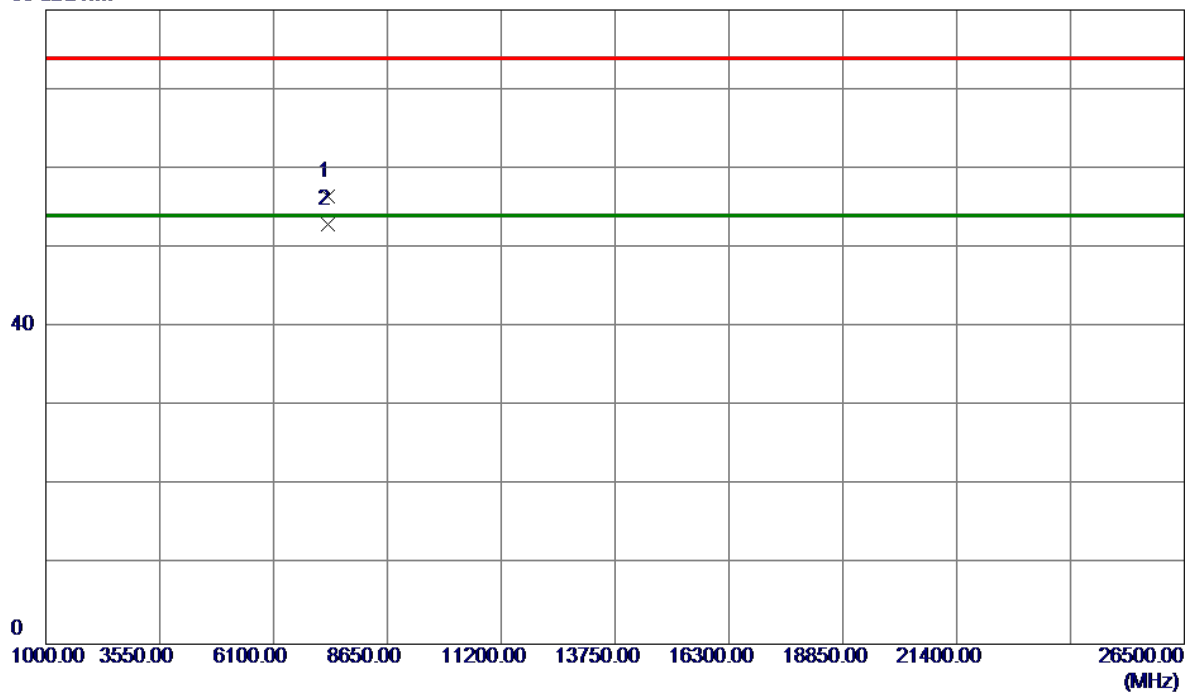


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2435.800	99.76	9.31	109.07	74.00	35.07	peak	No Limit
2	*	2436.200	96.62	9.31	105.93	54.00	51.93	AVG	No Limit

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

Horizontal

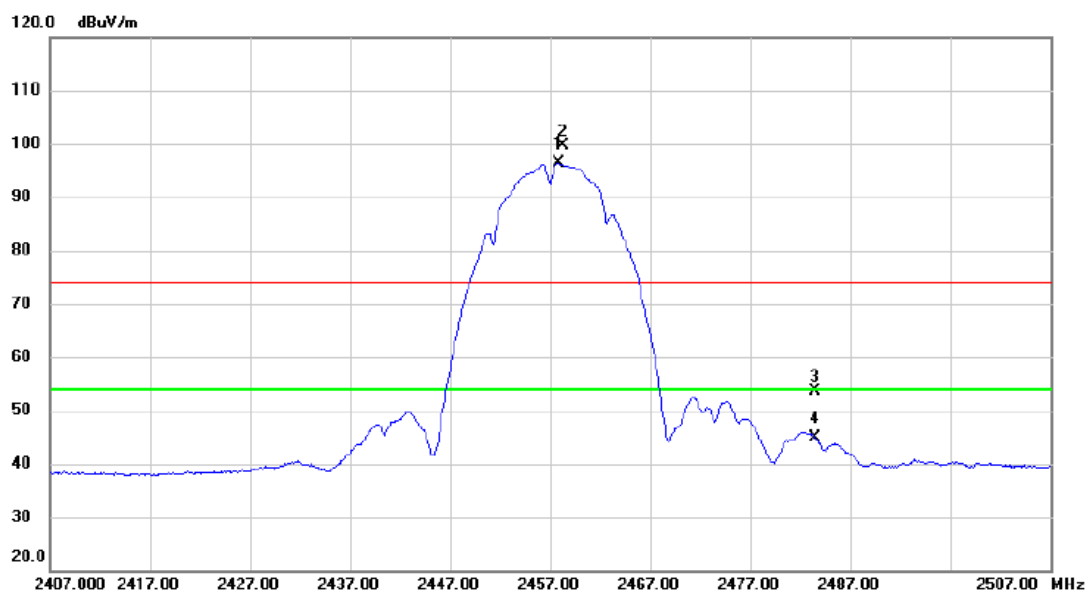
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7310.1500	43.33	13.21	56.54	74.00	-17.46	Peak	
2 *	7311.8500	39.72	13.21	52.93	54.00	-1.07	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2457MHz

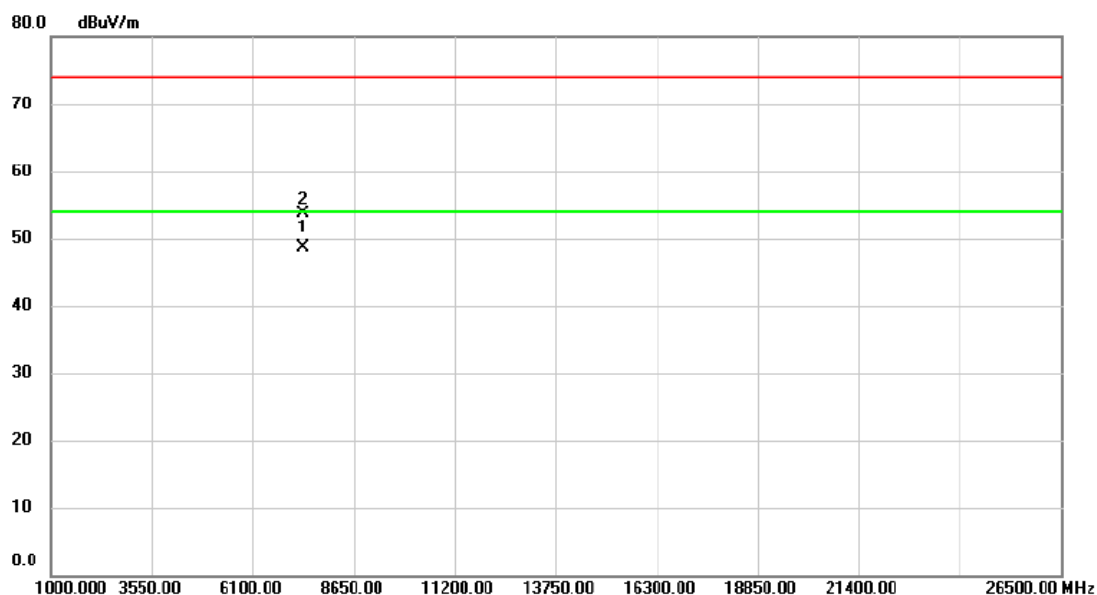
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2457.800	86.90	9.39	96.29	54.00	42.29	AVG	No Limit
2	X	2458.300	90.29	9.39	99.68	74.00	25.68	peak	No Limit
3		2483.500	44.13	9.49	53.62	74.00	-20.38	peak	
4		2483.500	35.41	9.49	44.90	54.00	-9.10	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2457MHz

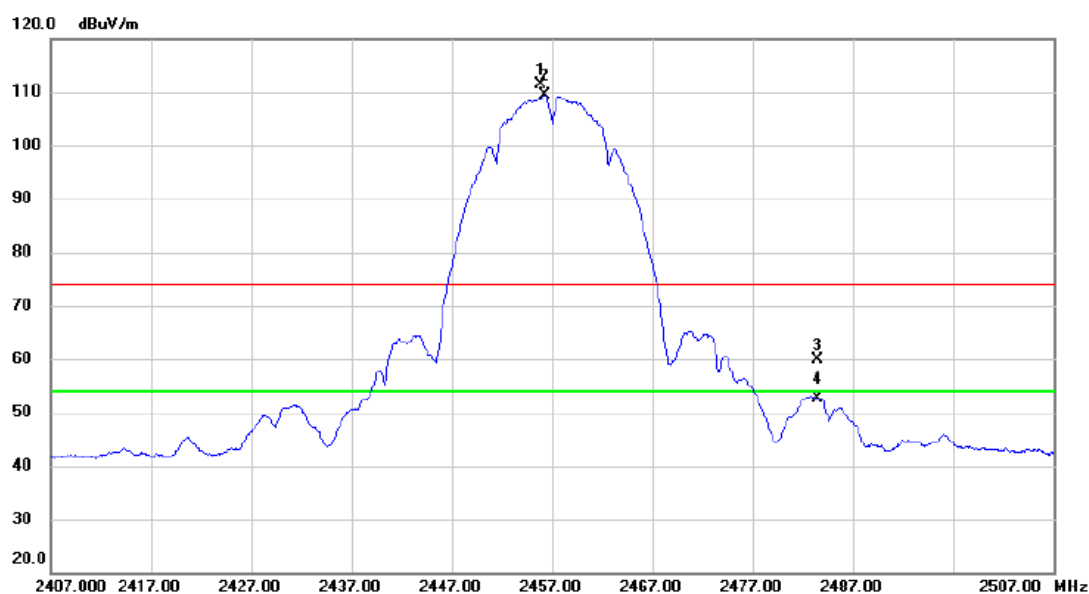
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7370.160	35.43	13.26	48.69	54.00	-5.31	AVG	
2		7370.520	40.38	13.26	53.64	74.00	-20.36	peak	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2457MHz

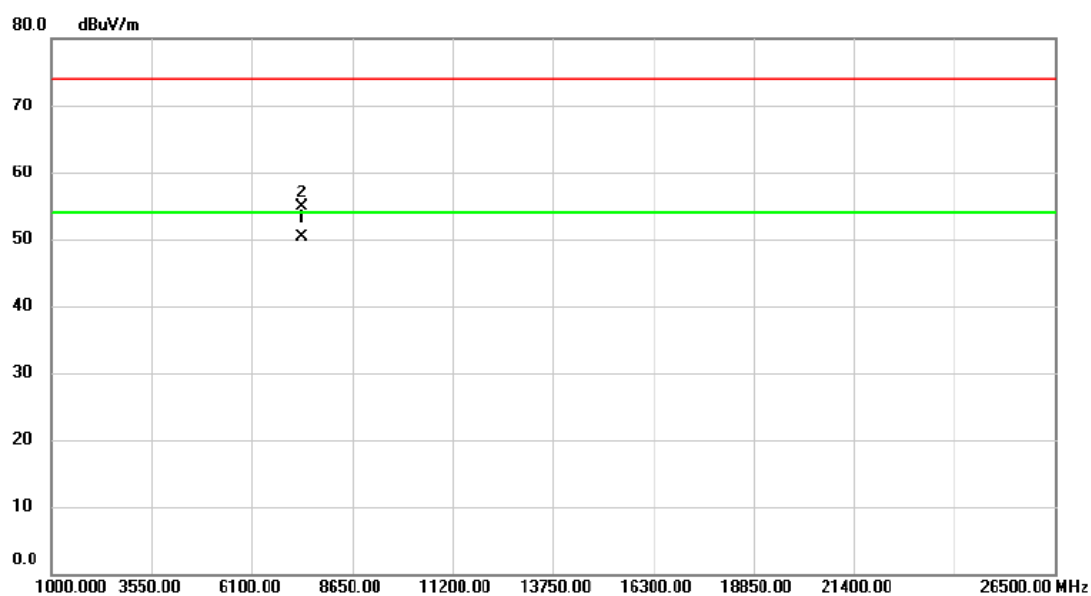
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2455.900	102.07	9.39	111.46	74.00	37.46	peak	No Limit
2	*	2456.300	99.93	9.39	109.32	54.00	55.32	AVG	No Limit
3		2483.500	50.49	9.49	59.98	74.00	-14.02	peak	
4		2483.500	43.08	9.49	52.57	54.00	-1.43	AVG	

Orthogonal Axis :	X
Test Mode :	TX B MODE 2457MHz

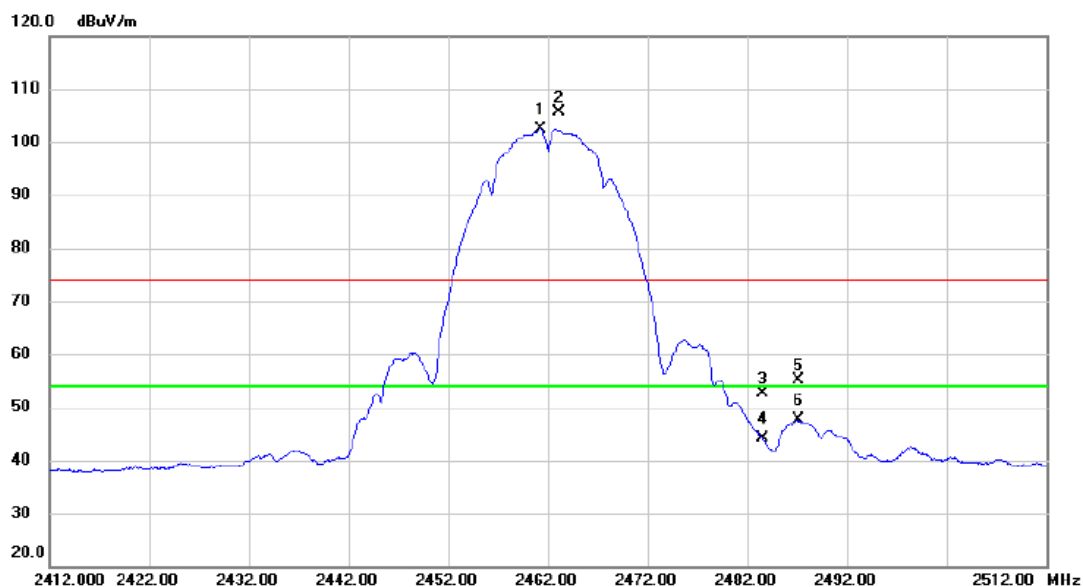
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7370.100	37.06	13.26	50.32	54.00	-3.68	AVG	
2		7372.100	41.66	13.26	54.92	74.00	-19.08	peak	

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

Vertical

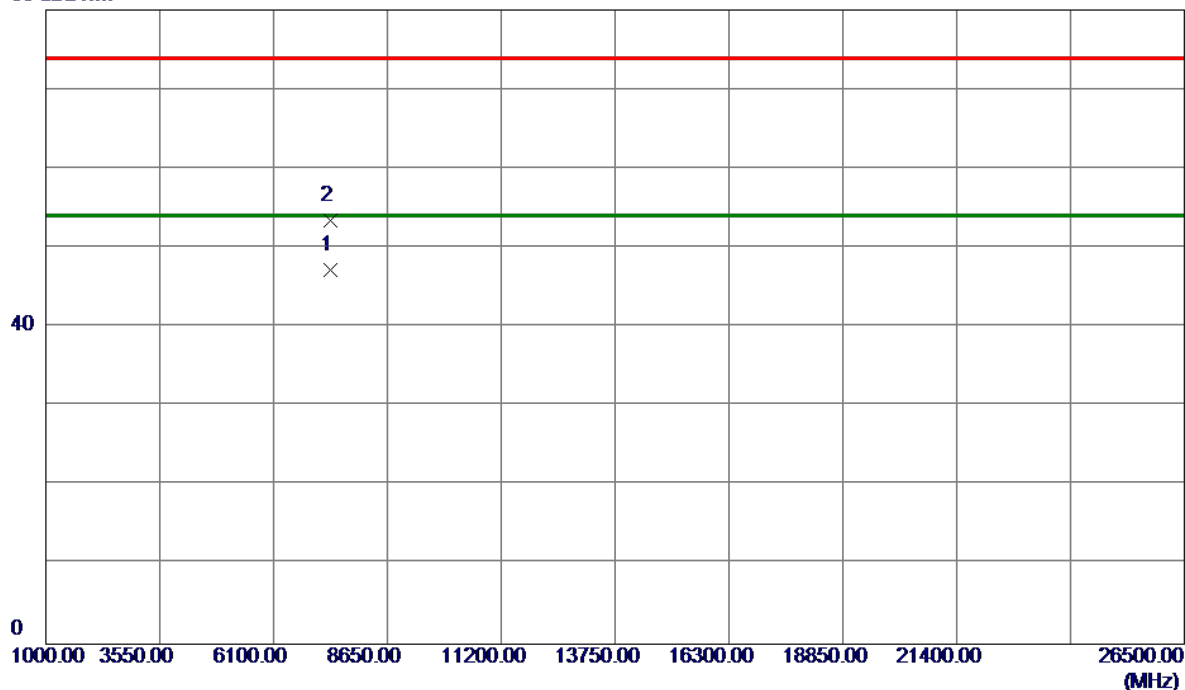


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2461.300	93.09	9.41	102.50	54.00	48.50	AVG	No Limit
2	X	2463.200	96.21	9.41	105.62	74.00	31.62	peak	No Limit
3		2483.500	43.19	9.49	52.68	74.00	-21.32	peak	
4		2483.500	34.75	9.49	44.24	54.00	-9.76	AVG	
5		2487.100	45.66	9.51	55.17	74.00	-18.83	peak	
6		2487.100	38.01	9.51	47.52	54.00	-6.48	AVG	

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

Vertical

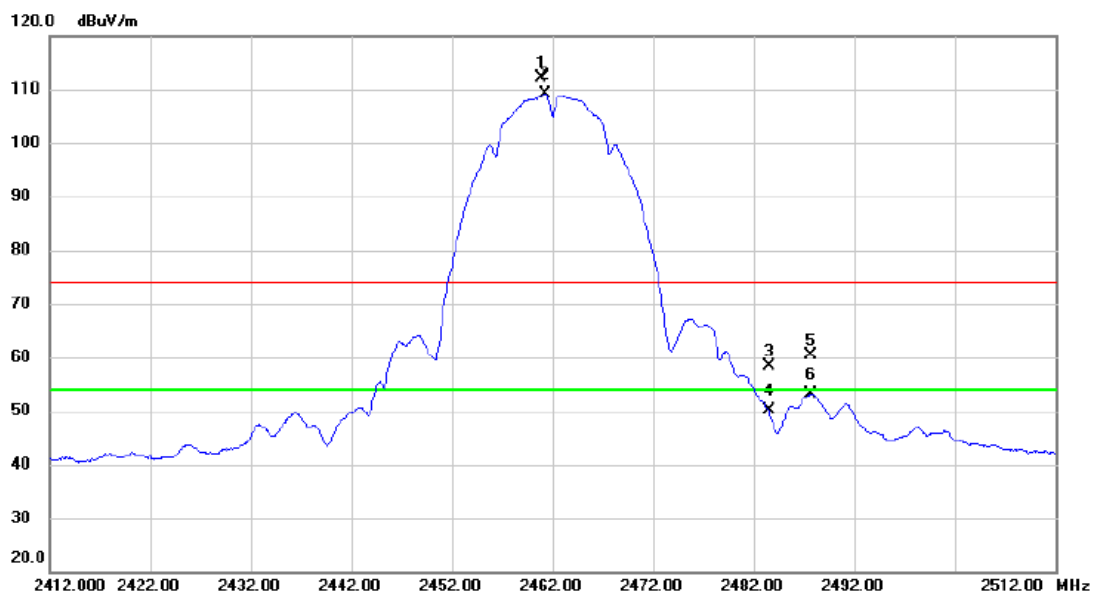
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7383.4600	33.97	13.27	47.24	54.00	-6.76	AVG	
2	7383.9400	40.19	13.27	53.46	74.00	-20.54	Peak	

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

Horizontal

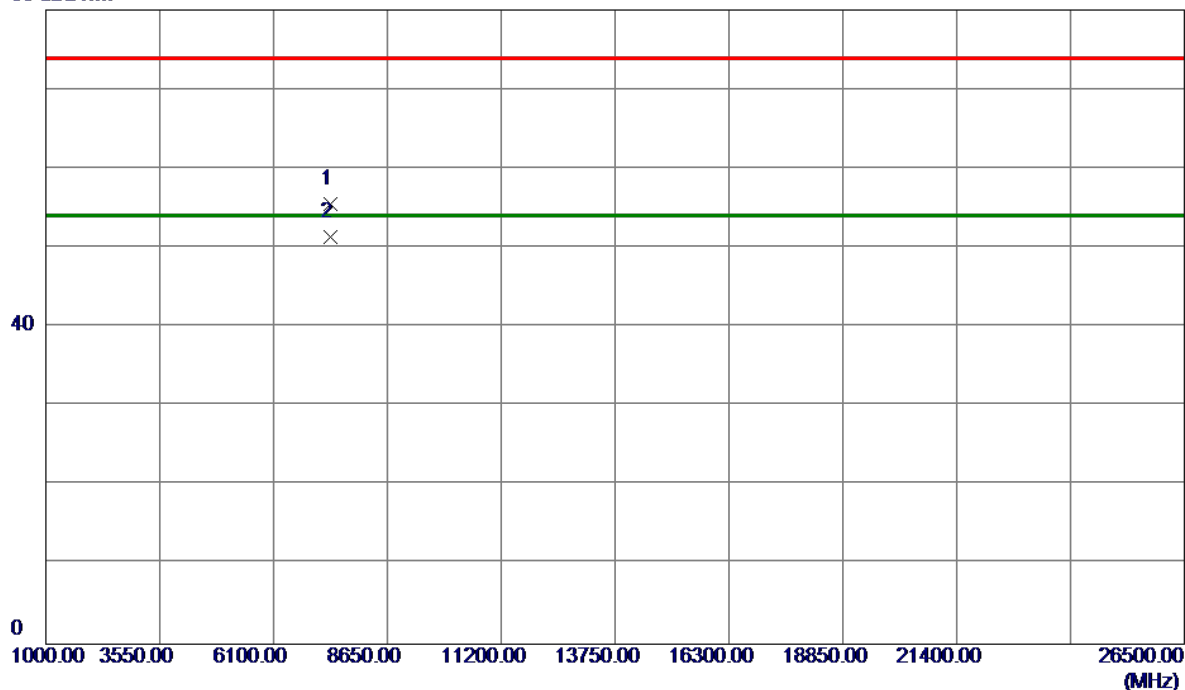


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2460.800	102.68	9.40	112.08	74.00	38.08	peak	No Limit
2	*	2461.300	99.77	9.41	109.18	54.00	55.18	AVG	No Limit
3		2483.500	48.92	9.49	58.41	74.00	-15.59	peak	
4		2483.500	40.53	9.49	50.02	54.00	-3.98	AVG	
5		2487.700	50.82	9.51	60.33	74.00	-13.67	peak	
6		2487.700	43.73	9.51	53.24	54.00	-0.76	AVG	

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

Horizontal

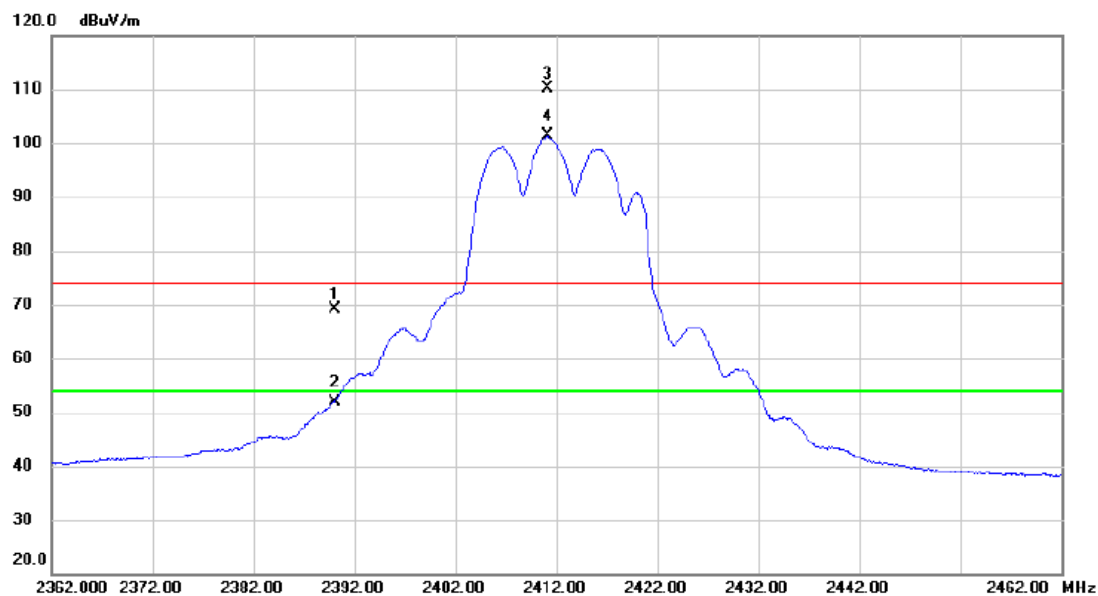
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7383.2000	42.29	13.27	55.56	74.00	-18.44	Peak	
2 *	7385.2000	38.13	13.27	51.40	54.00	-2.60	AVG	

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

Vertical

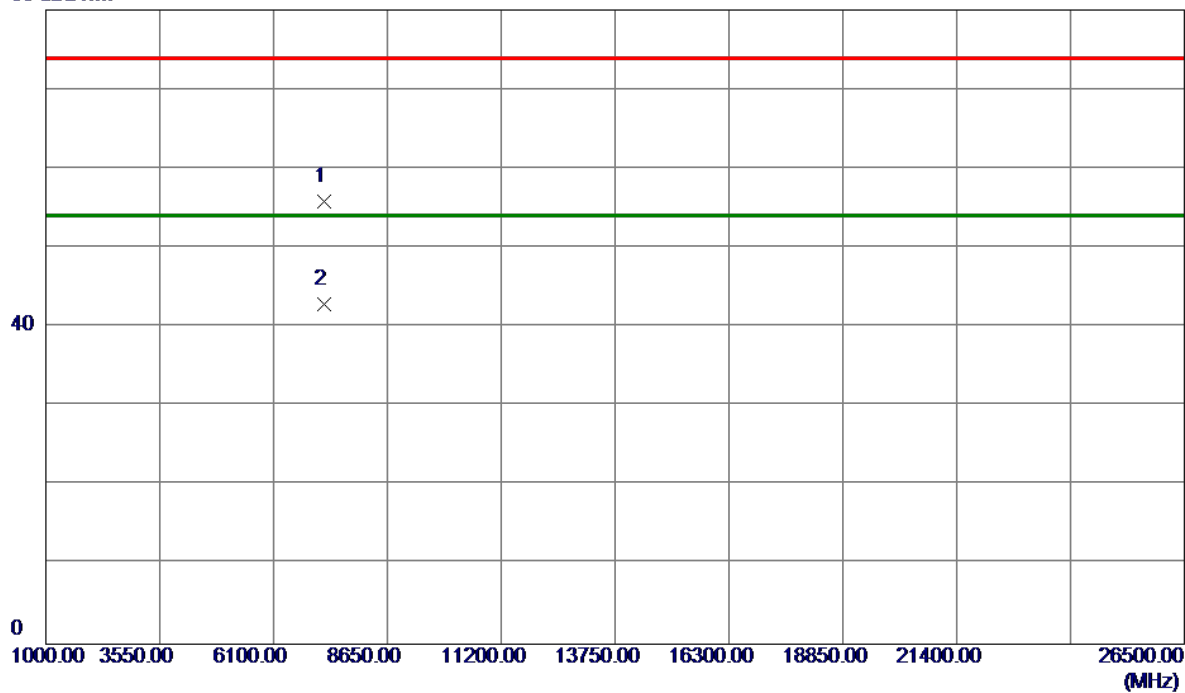


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	60.11	9.13	69.24	74.00	-4.76	peak	
2		2390.000	42.75	9.13	51.88	54.00	-2.12	AVG	
3	X	2411.100	101.03	9.22	110.25	74.00	36.25	peak	No Limit
4	*	2411.200	92.24	9.22	101.46	54.00	47.46	AVG	No Limit

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

Vertical

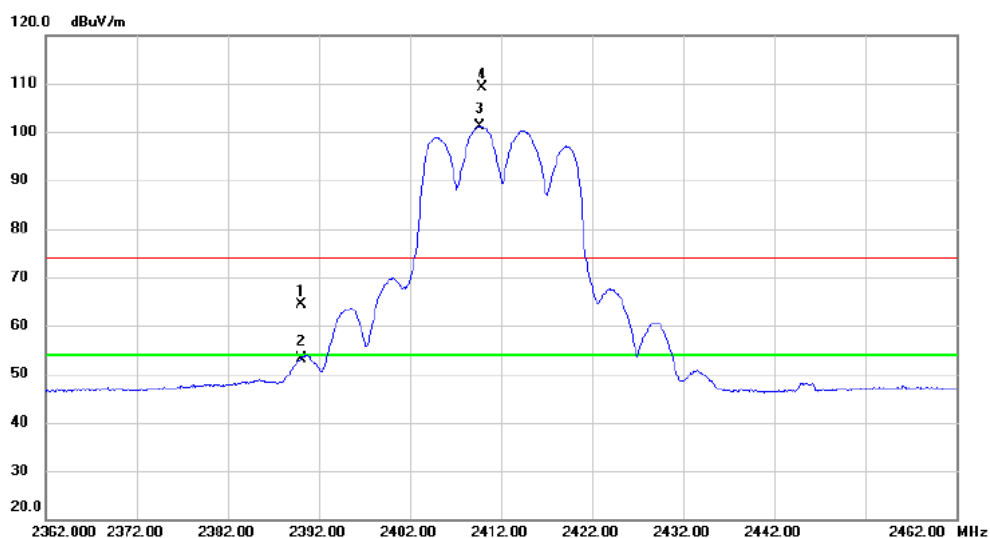
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7234.0000	42.73	13.16	55.89	74.00	-18.11	Peak	
2 *	7238.6500	29.65	13.16	42.81	54.00	-11.19	AVG	

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

Horizontal

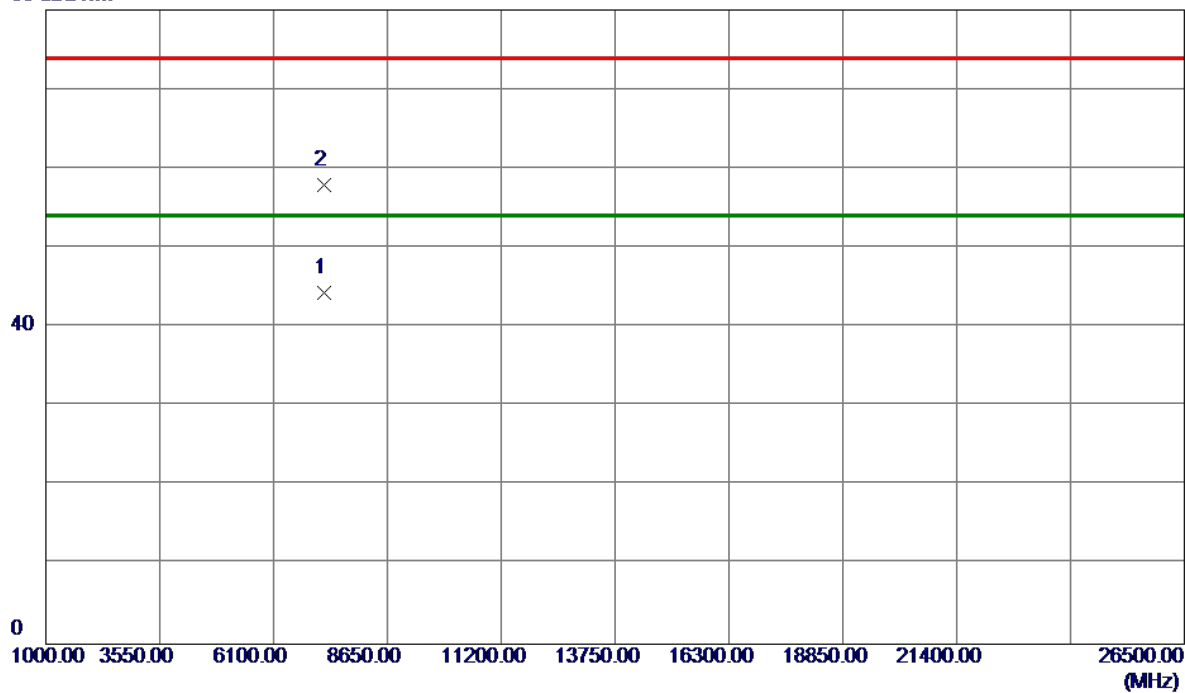


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	45.35	19.13	64.48	74.00	-9.52	peak	
2		2390.000	33.93	19.13	53.06	54.00	-0.94	AVG	
3	*	2409.700	81.97	19.22	101.19	54.00	47.19	AVG	No Limit
4	X	2409.900	89.86	19.22	109.08	74.00	35.08	peak	No Limit

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

Horizontal

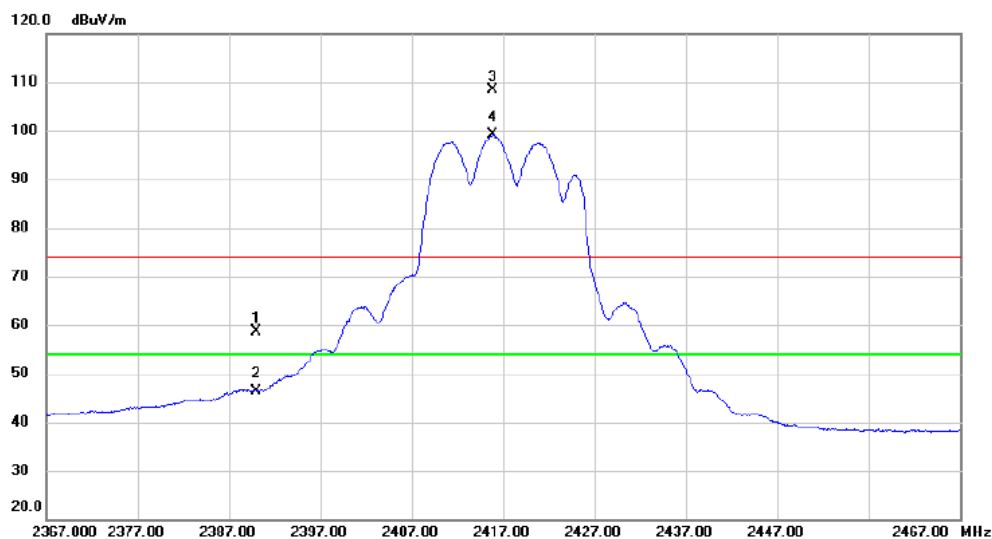
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7234.4000	31.10	13.16	44.26	54.00	-9.74	AVG	
2	7239.2500	44.76	13.16	57.92	74.00	-16.08	Peak	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2417MHz

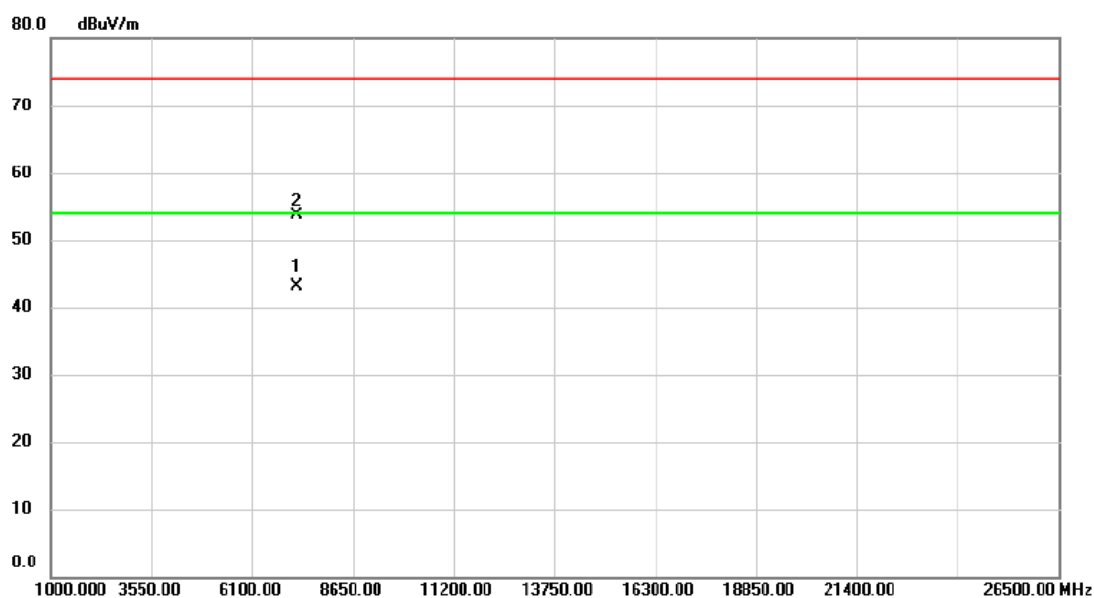
Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	49.43	9.13	58.56	74.00	-15.44	peak	
2	2390.000	37.18	9.13	46.31	54.00	-7.69	AVG	
3 X	2415.900	99.08	9.23	108.31	74.00	34.31	peak	No Limit
4 *	2415.900	89.88	9.23	99.11	54.00	45.11	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX G MODE 2417MHz

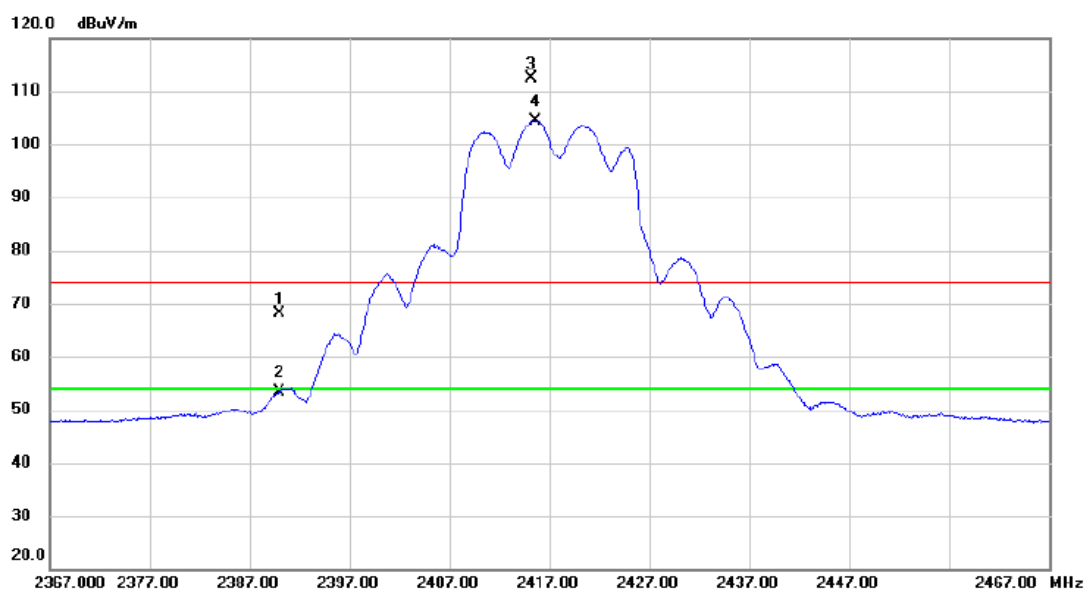
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7253.700	29.86	13.16	43.02	54.00	-10.98	AVG	
2		7254.100	40.48	13.16	53.64	74.00	-20.36	peak	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2417MHz

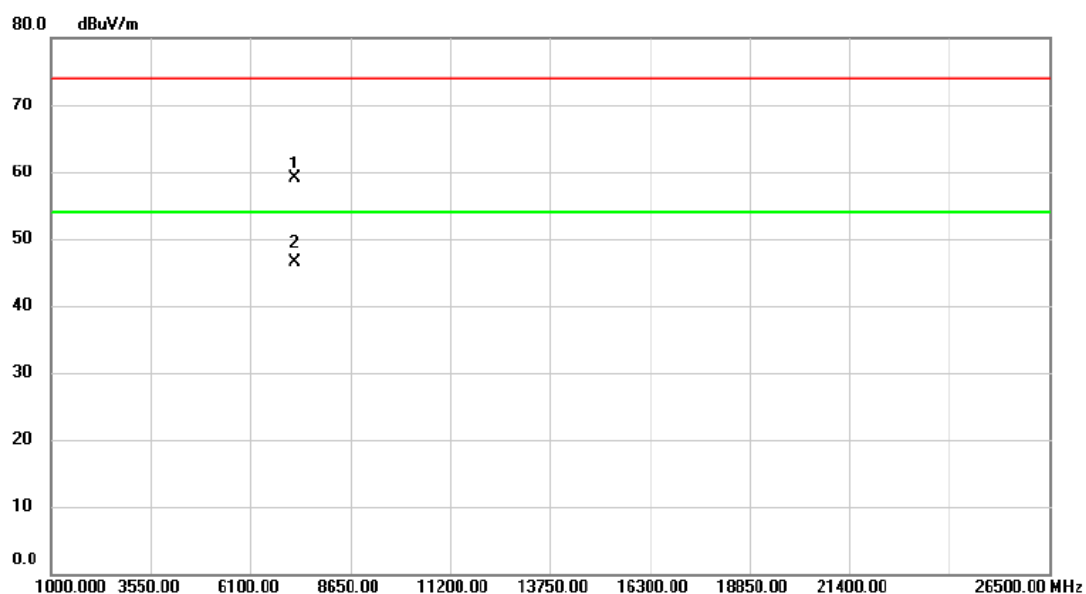
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	49.01	19.13	68.14	74.00	-5.86	peak	
2		2390.000	34.26	19.13	53.39	54.00	-0.61	AVG	
3	X	2415.200	93.05	19.23	112.28	74.00	38.28	peak	No Limit
4	*	2415.600	85.15	19.23	104.38	54.00	50.38	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TX G MODE 2417MHz

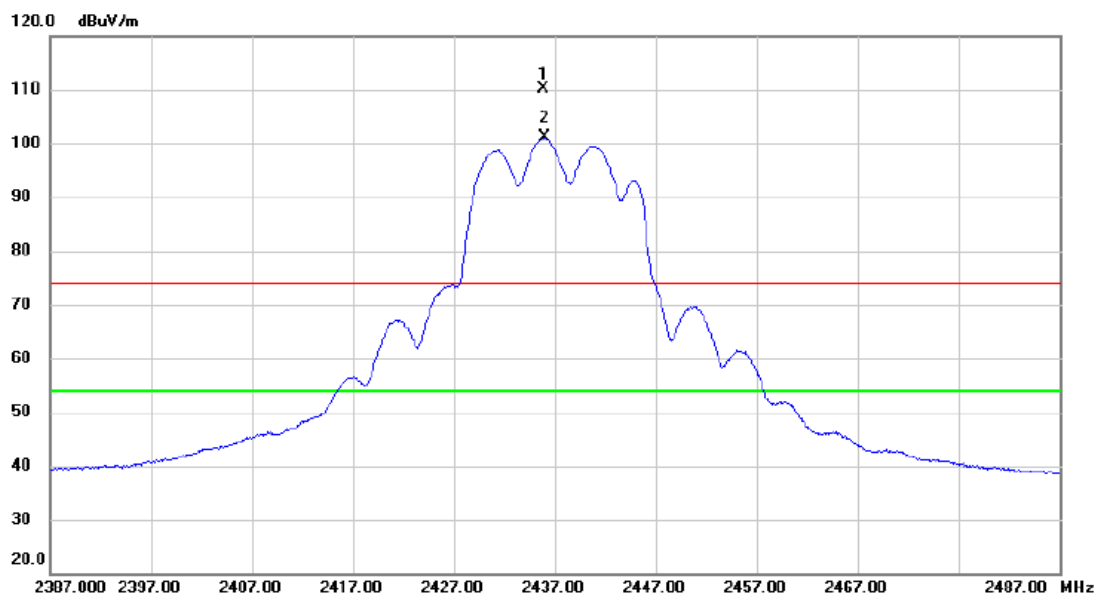
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		7253.700	45.96	13.16	59.12	74.00	-14.88	peak	
2	*	7254.400	33.28	13.17	46.45	54.00	-7.55	AVG	

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

Vertical

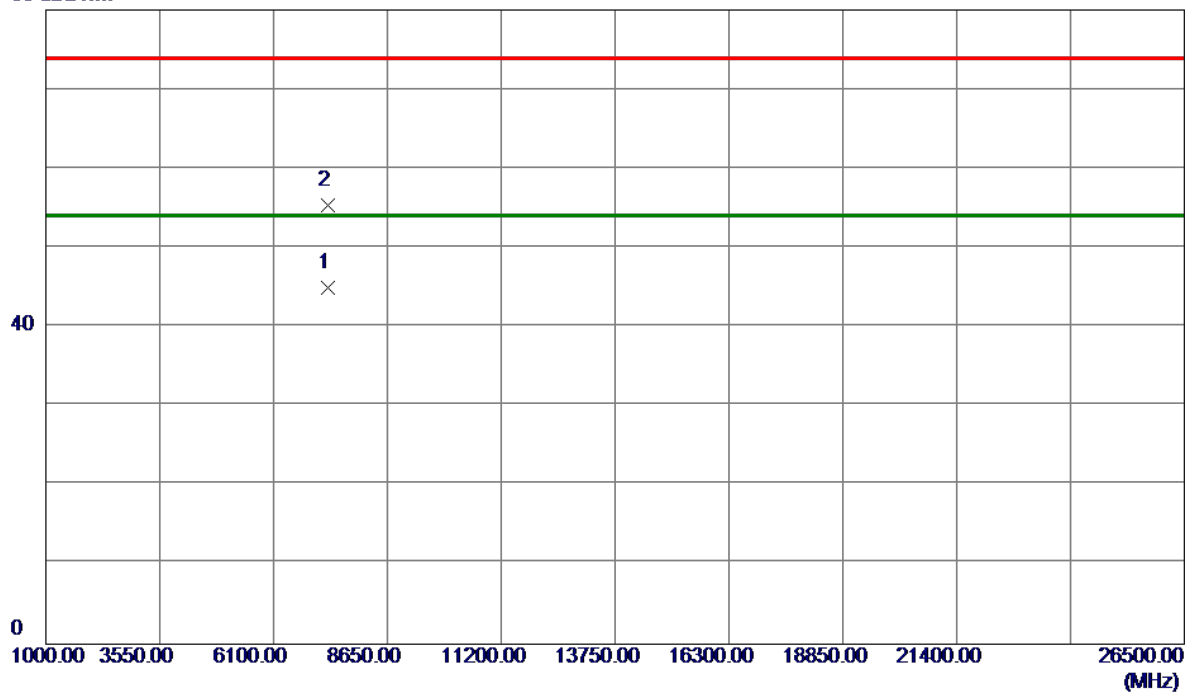


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2435.900	100.86	9.31	110.17	74.00	36.17	peak	No Limit
2	*	2436.000	91.85	9.31	101.16	54.00	47.16	AVG	No Limit

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

Vertical

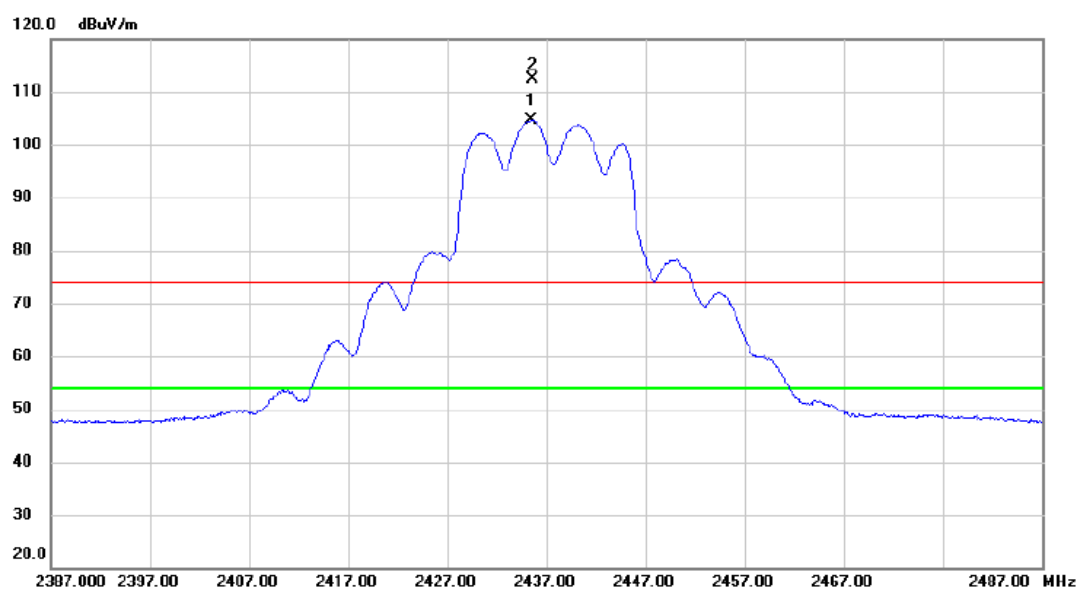
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7309.3500	31.81	13.21	45.02	54.00	-8.98	AVG	
2	7314.8000	42.18	13.22	55.40	74.00	-18.60	Peak	

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

Horizontal

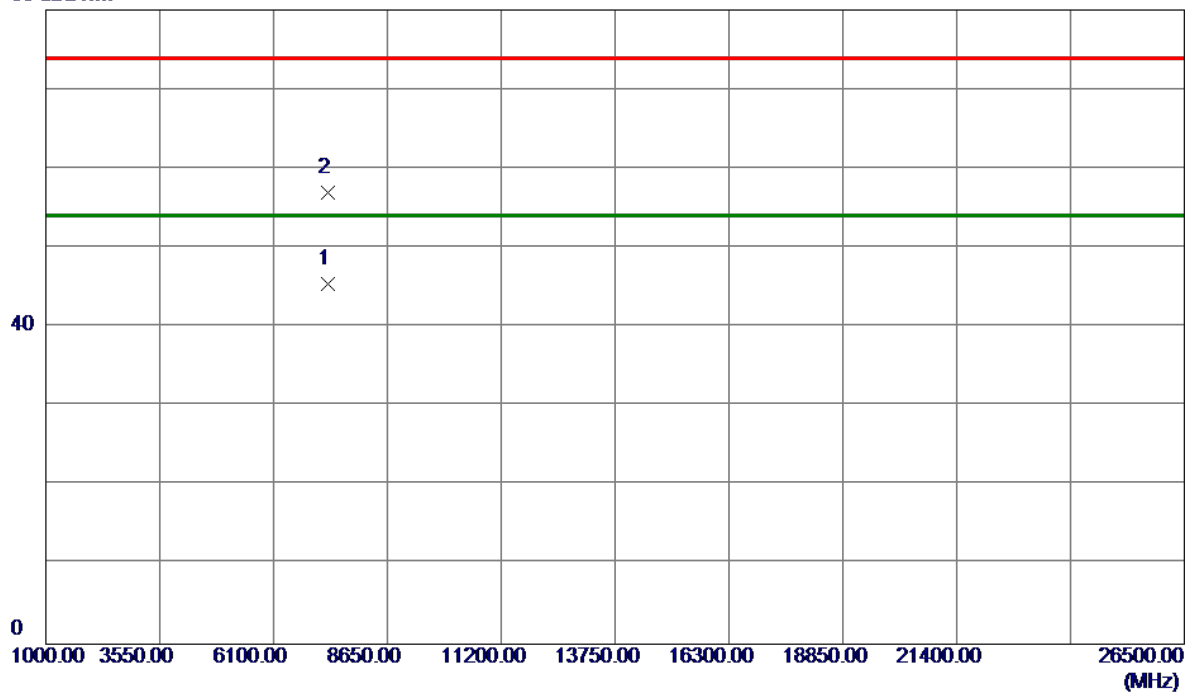


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2435.500	85.23	19.31	104.54	54.00	50.54	AVG	No Limit
2	X	2435.600	92.95	19.31	112.26	74.00	38.26	peak	No Limit

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

Horizontal

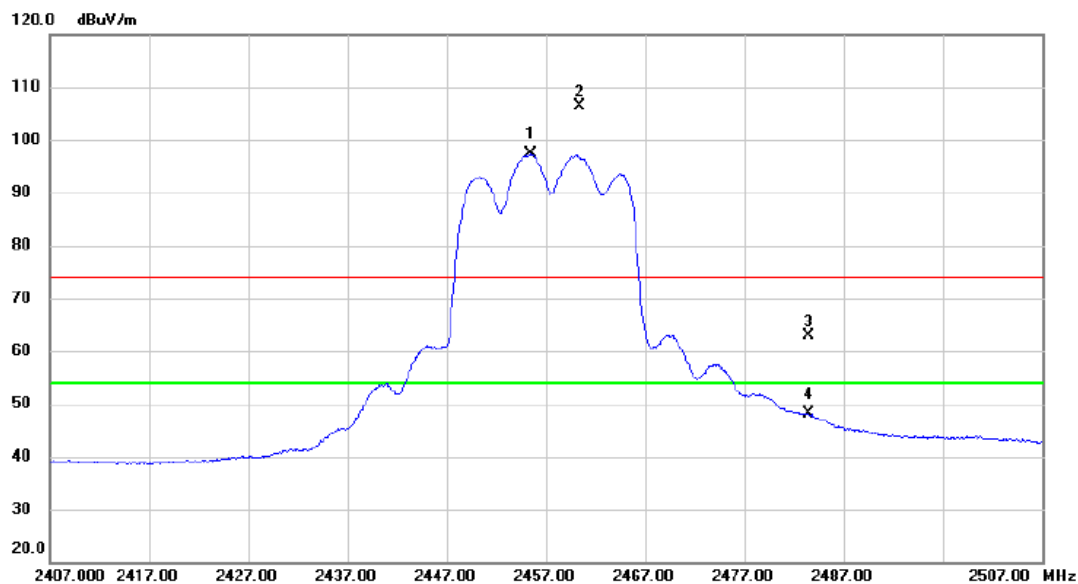
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7309.2500	32.17	13.21	45.38	54.00	-8.62	AVG	
2	7309.9500	43.77	13.21	56.98	74.00	-17.02	Peak	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2457MHz

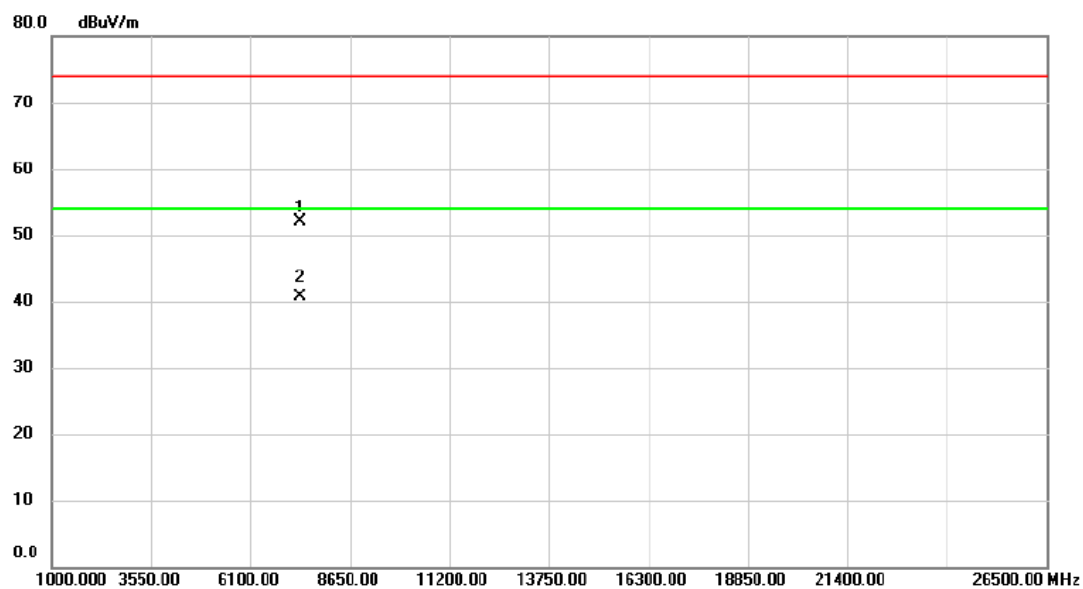
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2455.500	87.91	9.38	97.29	54.00	43.29	AVG	No Limit
2	X	2460.400	96.88	9.40	106.28	74.00	32.28	peak	No Limit
3		2483.500	53.49	9.49	62.98	74.00	-11.02	peak	
4		2483.500	38.55	9.49	48.04	54.00	-5.96	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2457MHz

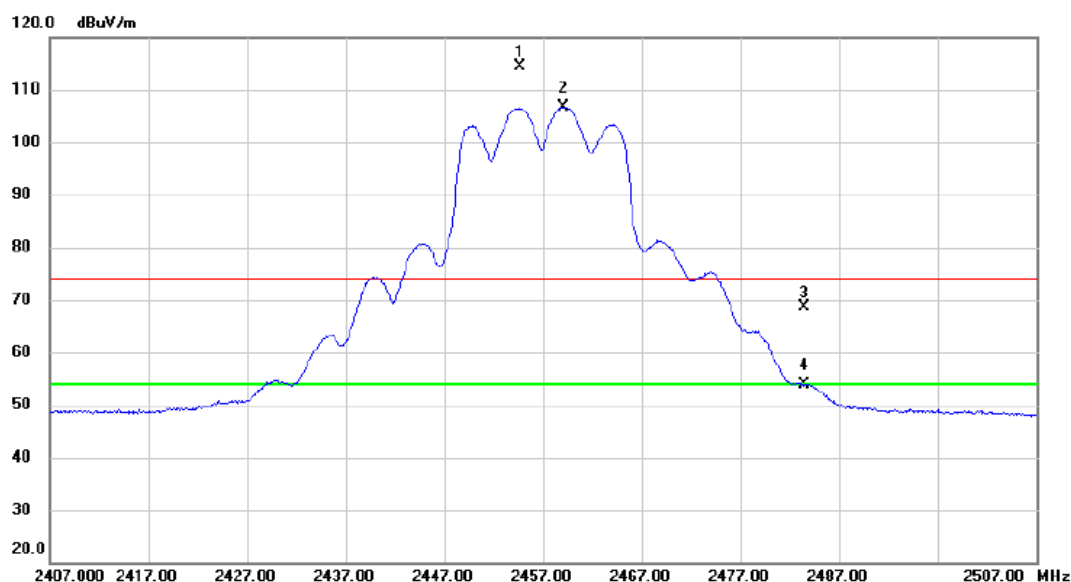
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		7368.400	38.86	13.25	52.11	74.00	-21.89	peak	
2	*	7369.200	27.44	13.26	40.70	54.00	-13.30	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2457MHz

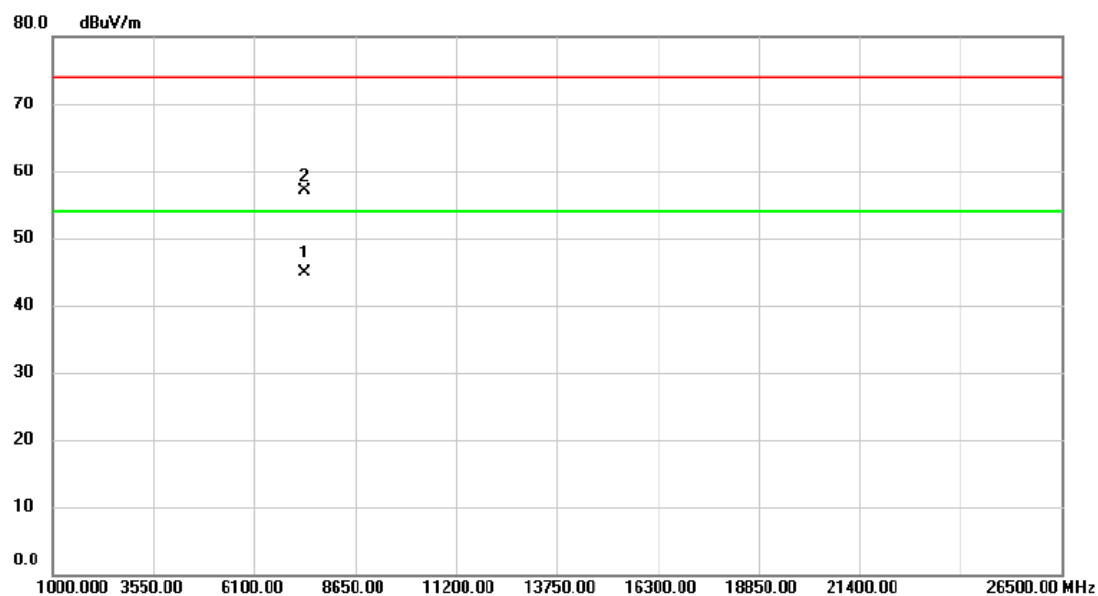
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2454.700	95.10	19.38	114.48	74.00	40.48	peak	No Limit
2	*	2459.100	87.34	19.39	106.73	54.00	52.73	AVG	No Limit
3		2483.500	49.24	19.49	68.73	74.00	-5.27	peak	
4		2483.500	34.32	19.49	53.81	54.00	-0.19	AVG	

Orthogonal Axis :	X
Test Mode :	TX G MODE 2457MHz

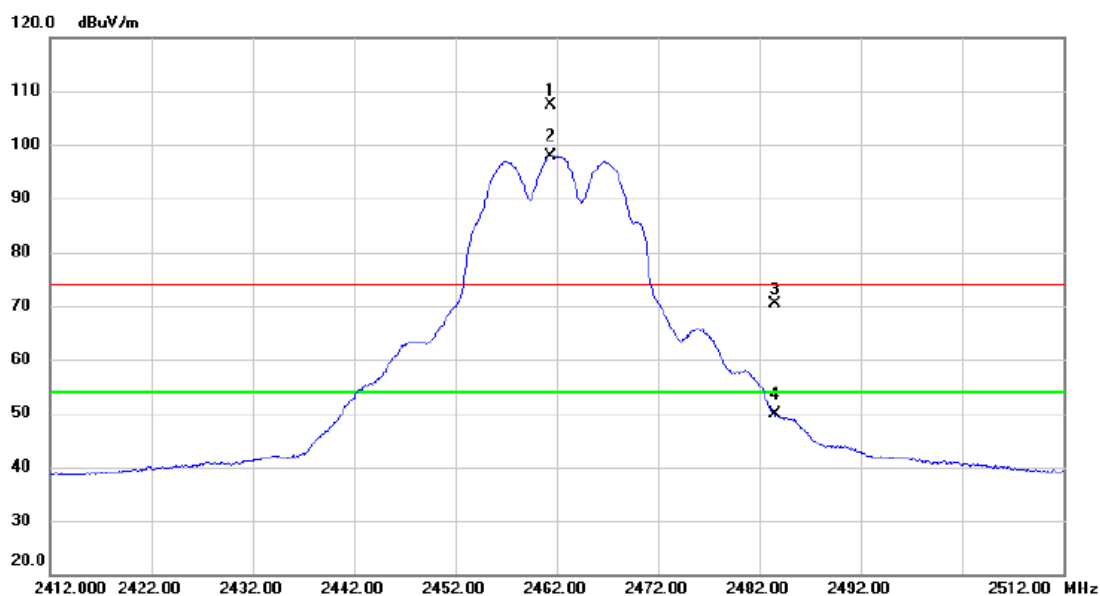
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7369.050	31.72	13.26	44.98	54.00	-9.02	AVG	
2		7373.400	43.84	13.26	57.10	74.00	-16.90	peak	

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

Vertical

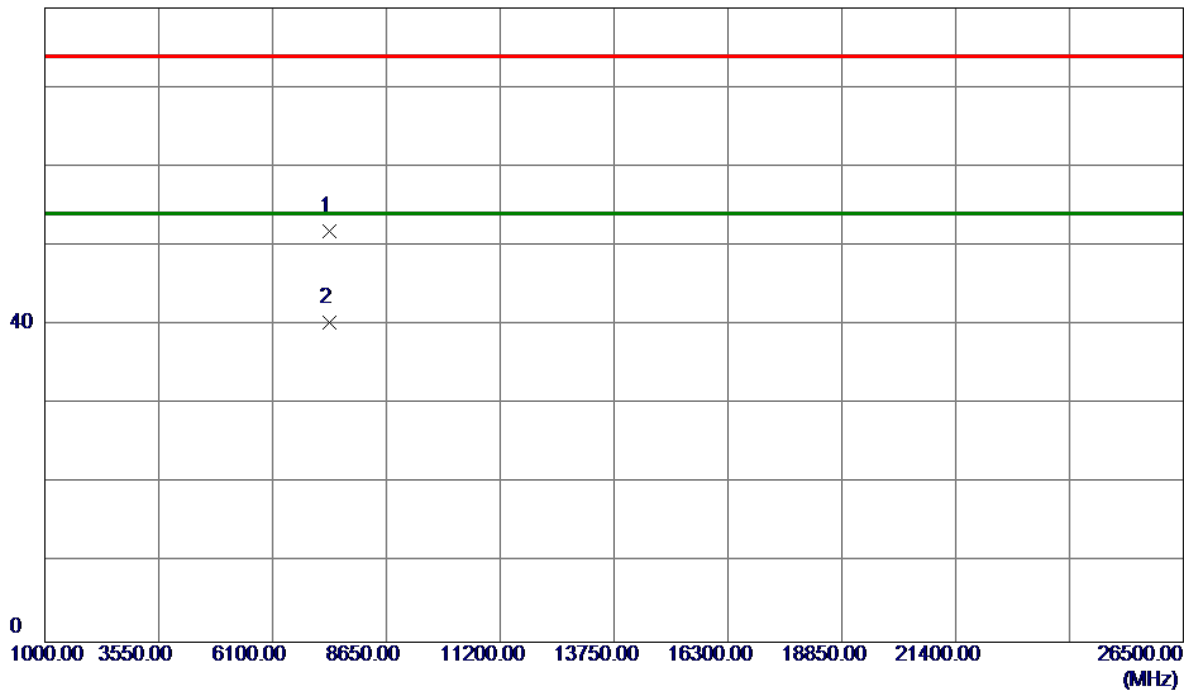


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2461.400	98.06	9.41	107.47	74.00	33.47	peak	No Limit
2	*	2461.400	88.58	9.41	97.99	54.00	43.99	AVG	No Limit
3		2483.500	60.91	9.49	70.40	74.00	-3.60	peak	
4		2483.500	40.29	9.49	49.78	54.00	-4.22	AVG	

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

Vertical

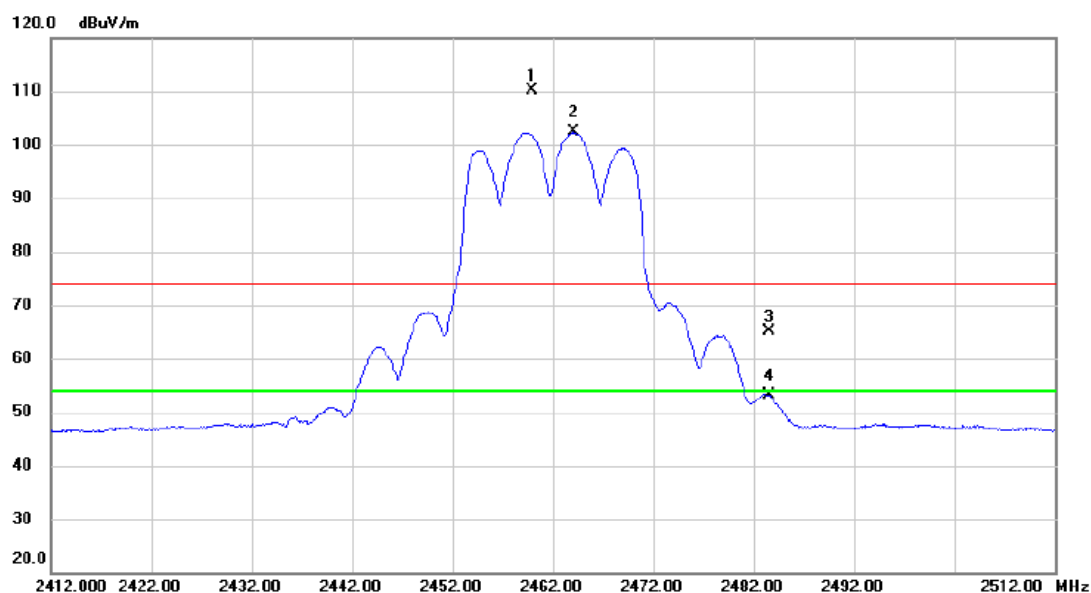
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7383.3000	38.53	13.27	51.80	74.00	-22.20	Peak	
2 *	7384.4000	27.03	13.27	40.30	54.00	-13.70	AVG	

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

Horizontal

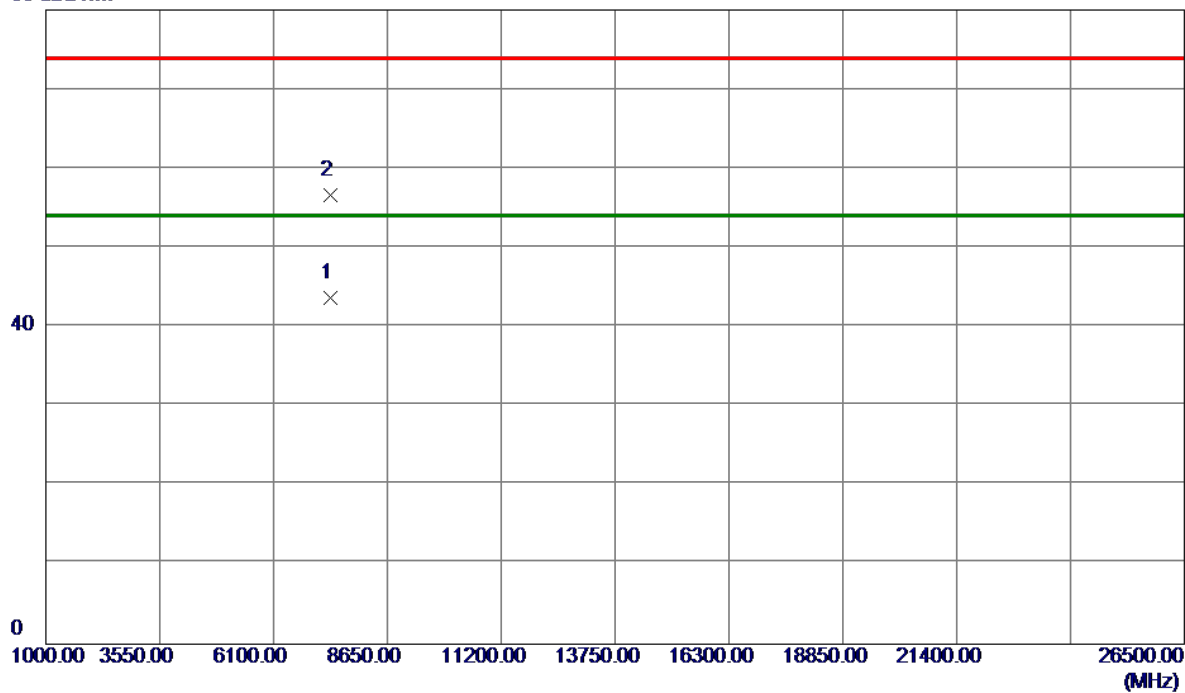


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2459.900	90.61	19.40	110.01	74.00	36.01	peak	No Limit
2	*	2464.100	82.85	19.42	102.27	54.00	48.27	AVG	
3		2483.500	45.62	19.49	65.11	74.00	-8.89	peak	No Limit
4		2483.500	33.69	19.49	53.18	54.00	-0.82	AVG	

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

Horizontal

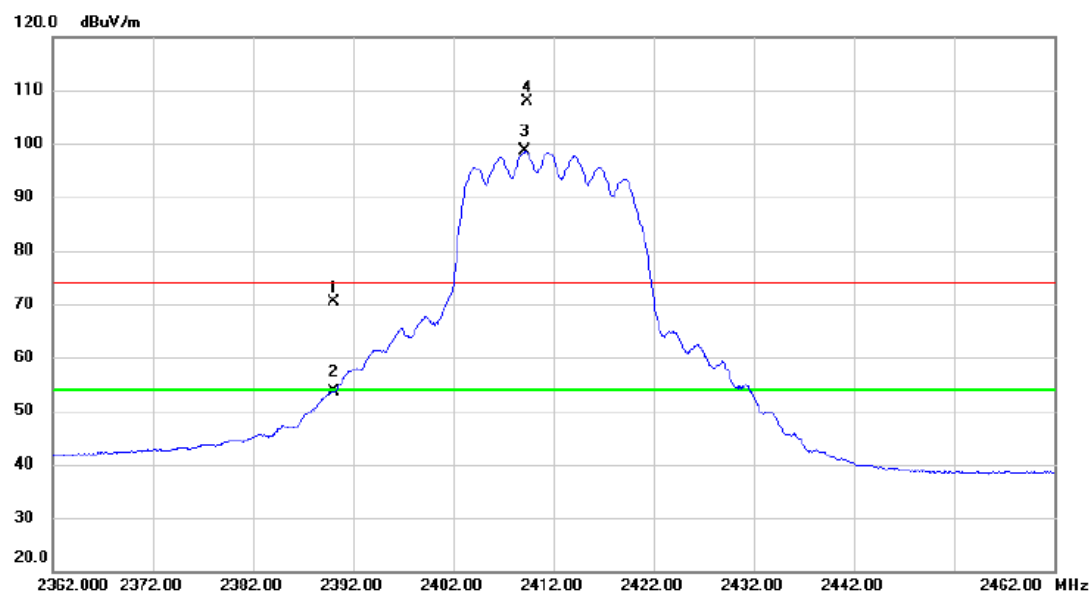
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7384.4500	30.46	13.27	43.73	54.00	-10.27	AVG	
2	7384.5000	43.39	13.27	56.66	74.00	-17.34	Peak	

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

Vertical

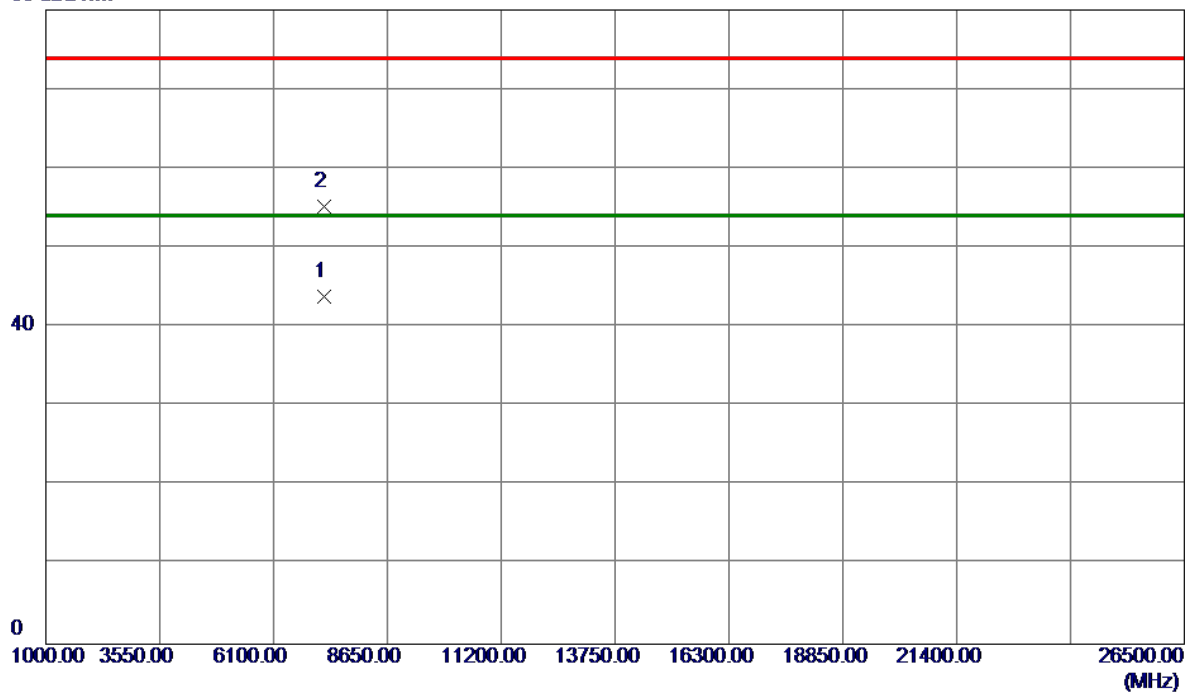


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	61.30	9.13	70.43	74.00	-3.57	peak	
2		2390.000	44.43	9.13	53.56	54.00	-0.44	AVG	
3	*	2409.200	89.35	9.20	98.55	54.00	44.55	AVG	No Limit
4	X	2409.400	98.68	9.20	107.88	74.00	33.88	peak	No Limit

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

Vertical

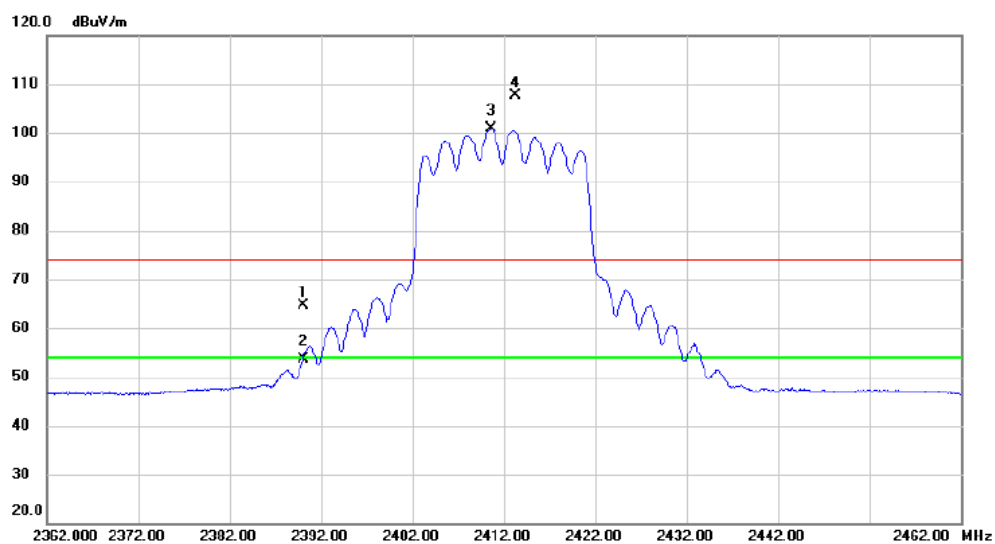
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7237.5200	30.76	13.16	43.92	54.00	-10.08	AVG	
2	7240.3000	42.11	13.16	55.27	74.00	-18.73	Peak	

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

Horizontal

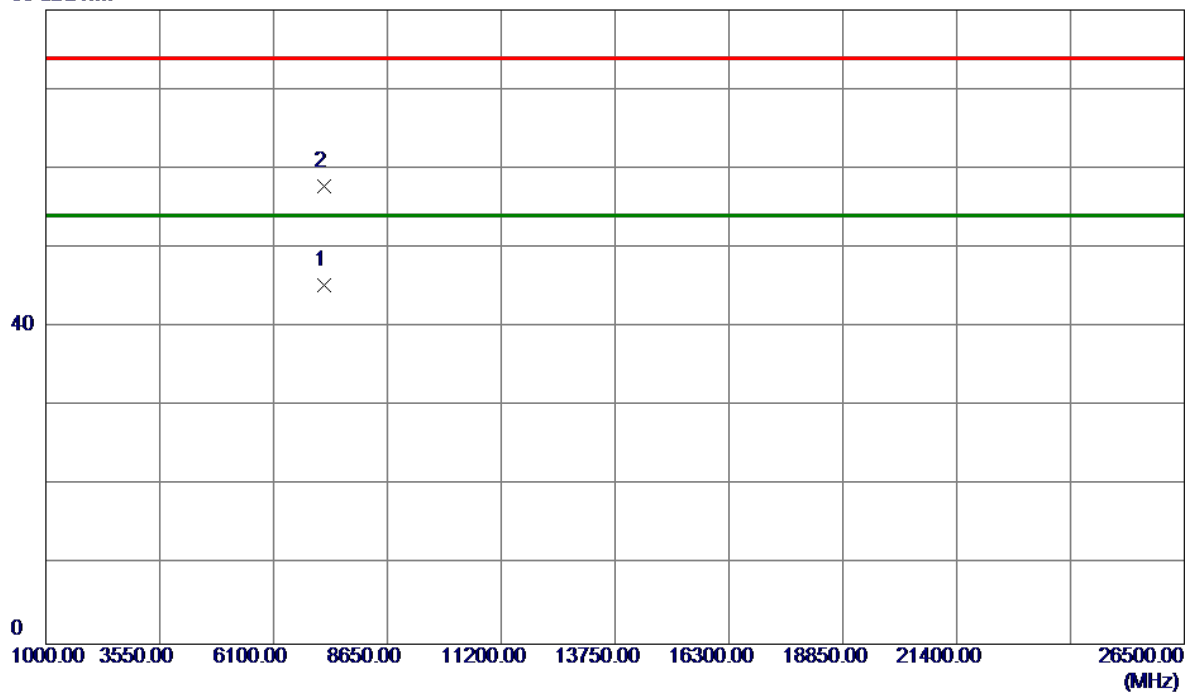


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	45.53	19.13	64.66	74.00	-9.34	peak	
2		2390.000	34.44	19.13	53.57	54.00	-0.43	AVG	
3	*	2410.600	81.61	19.22	100.83	54.00	46.83	AVG	No Limit
4	X	2413.300	88.51	19.22	107.73	74.00	33.73	peak	No Limit

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

Horizontal

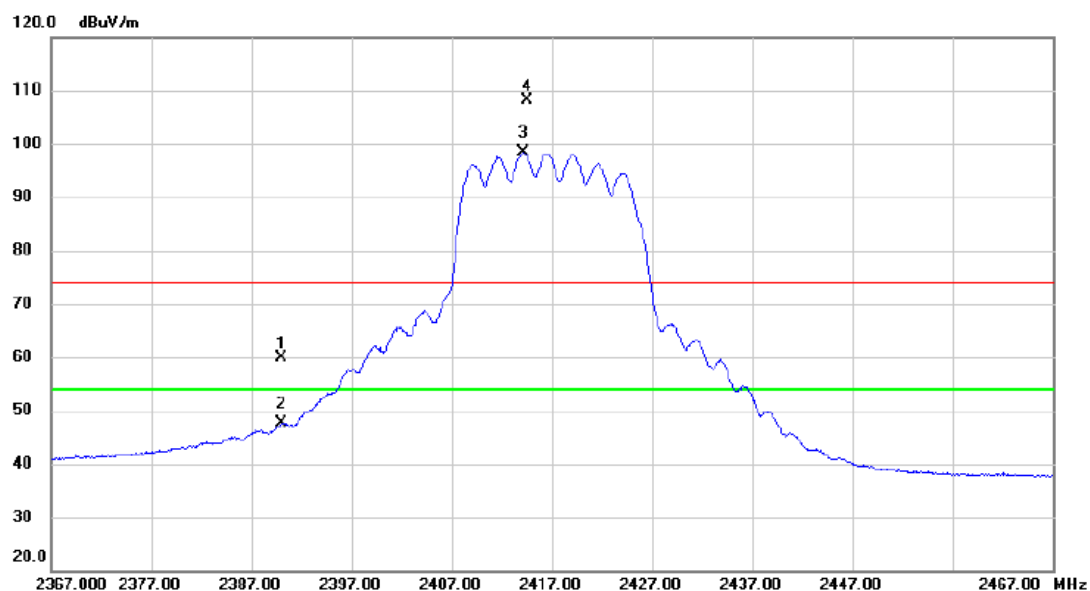
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7237.3500	32.17	13.16	45.33	54.00	-8.67	AVG	
2	7240.3000	44.62	13.16	57.78	74.00	-16.22	Peak	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2417MHz

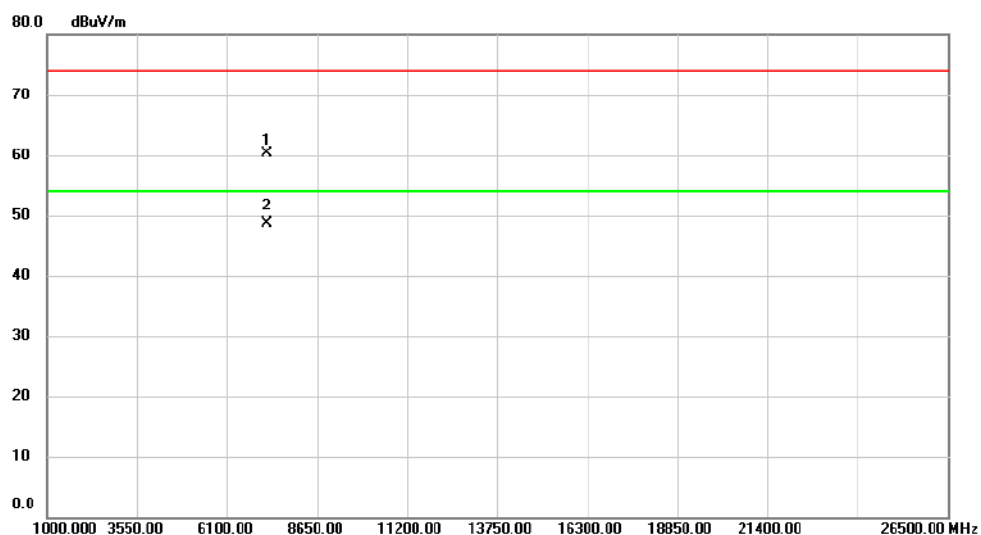
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	50.73	9.13	59.86	74.00	-14.14	peak	
2		2390.000	38.52	9.13	47.65	54.00	-6.35	AVG	
3	*	2414.100	89.16	9.23	98.39	54.00	44.39	AVG	No Limit
4	X	2414.500	99.00	9.23	108.23	74.00	34.23	peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2417MHz

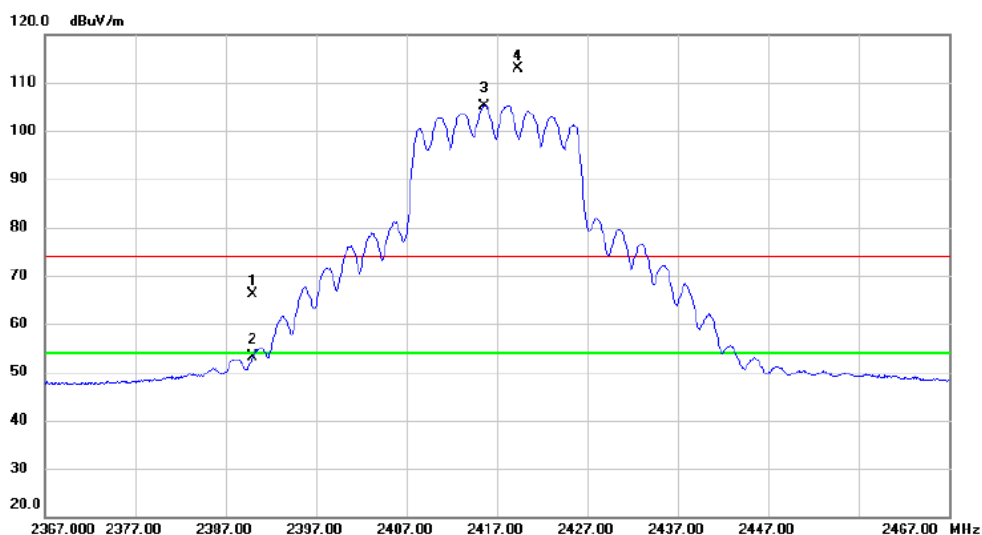
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		7252.800	47.18	13.16	60.34	74.00	-13.66	peak	
2 *		7252.800	35.50	13.16	48.66	54.00	-5.34	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2417MHz

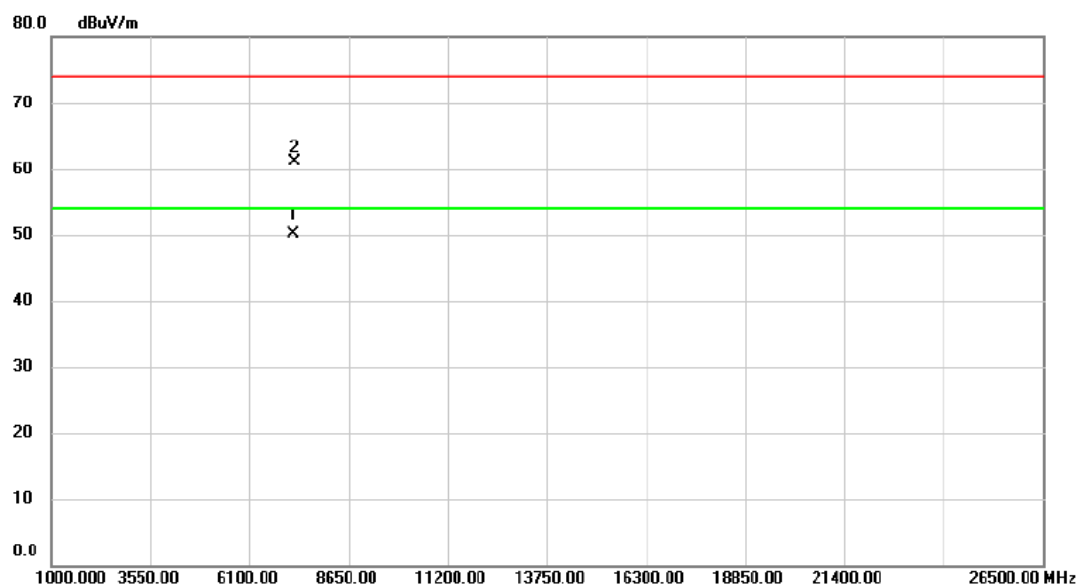
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	46.88	19.13	66.01	74.00	-7.99	peak	
2		2390.000	33.98	19.13	53.11	54.00	-0.89	AVG	
3	*	2415.600	86.00	19.23	105.23	54.00	51.23	AVG	No Limit
4	X	2419.300	93.59	19.25	112.84	74.00	38.84	peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2417MHz

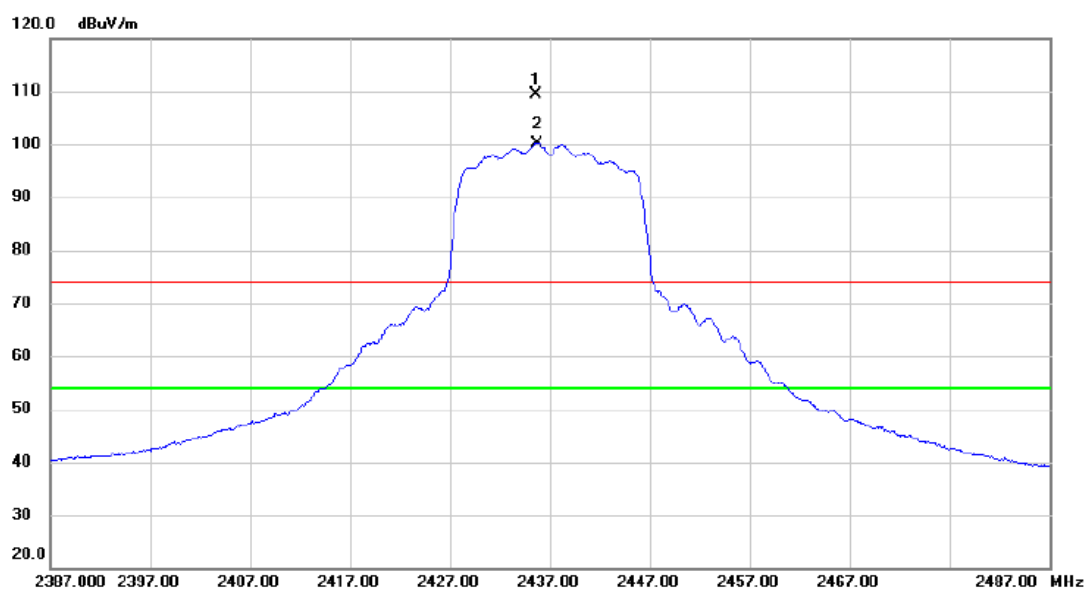
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7252.900	36.96	13.16	50.12	54.00	-3.88	AVG	
2		7258.150	47.92	13.18	61.10	74.00	-12.90	peak	

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

Vertical

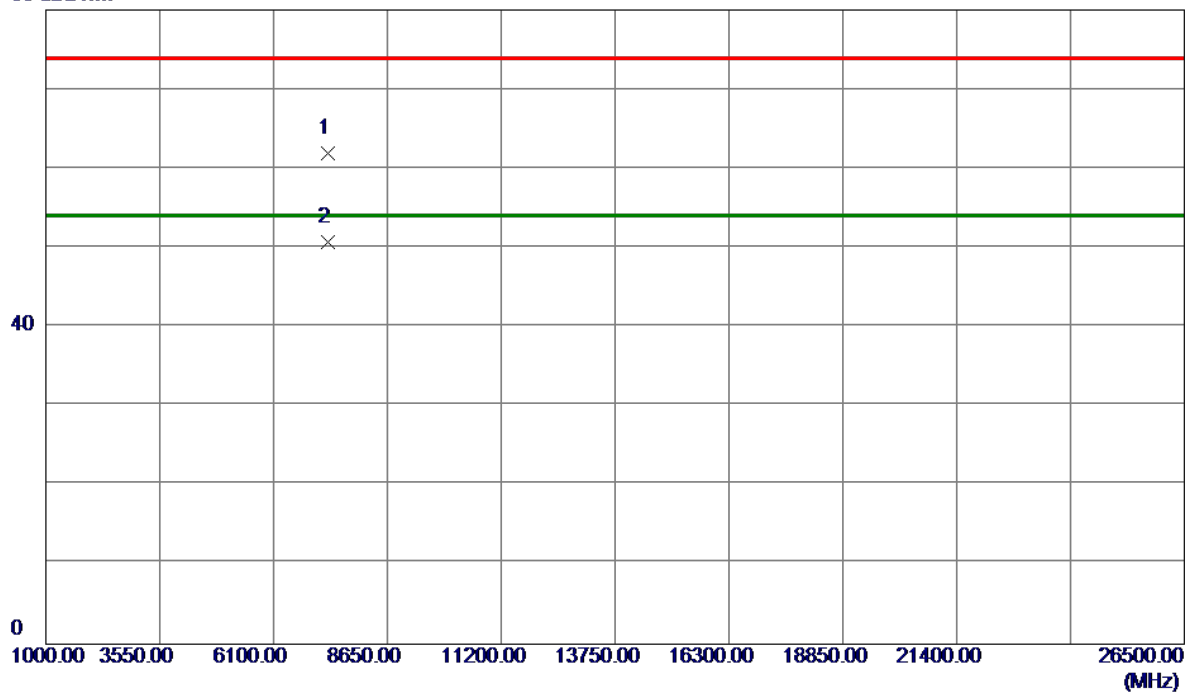


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2435.600	100.09	9.31	109.40	74.00	35.40	peak	No Limit
2	*	2435.700	90.85	9.31	100.16	54.00	46.16	AVG	No Limit

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

Vertical

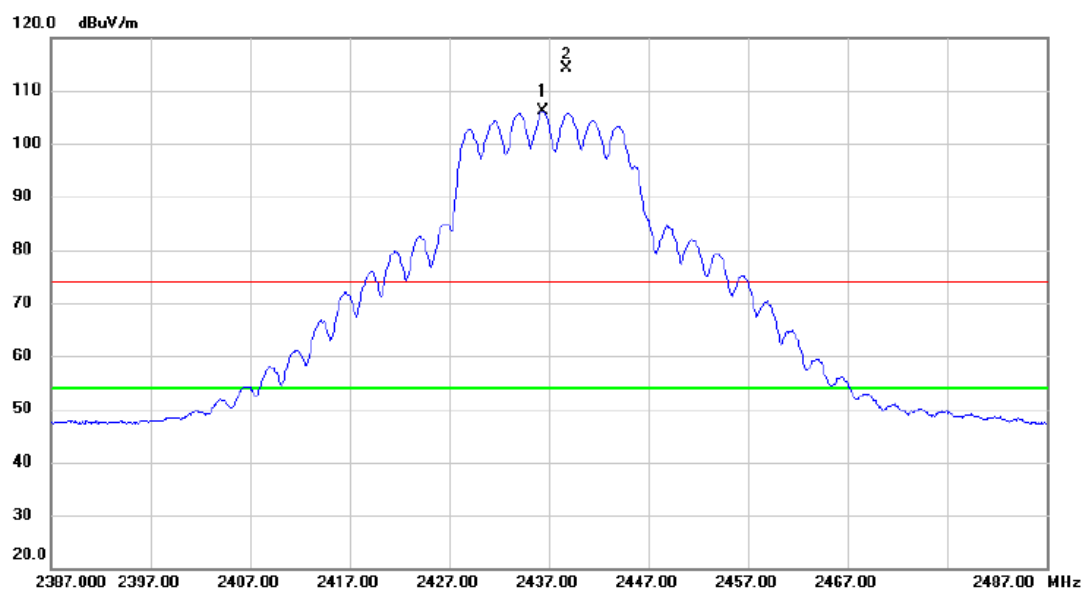
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7310.2200	48.63	13.21	61.84	74.00	-12.16	Peak	
2 *	7310.3000	37.55	13.21	50.76	54.00	-3.24	AVG	

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

Horizontal

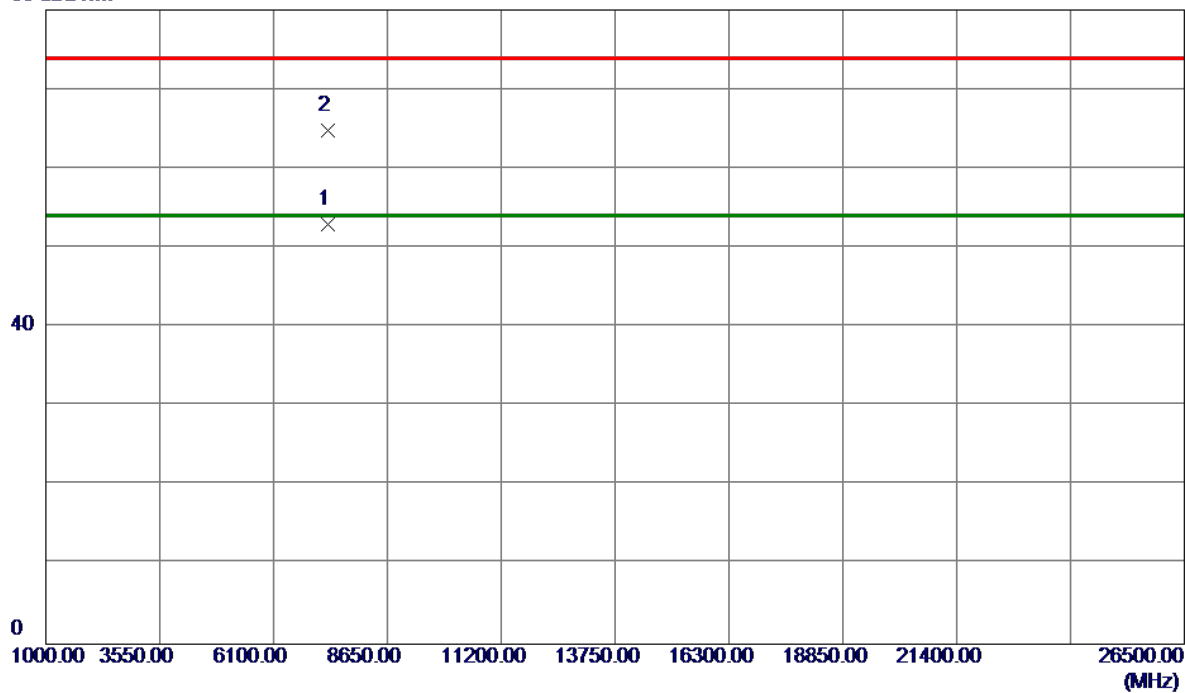


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2436.400	86.85	19.31	106.16	54.00	52.16	AVG	No Limit
2	X	2438.800	94.82	19.32	114.14	74.00	40.14	peak	No Limit

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

Horizontal

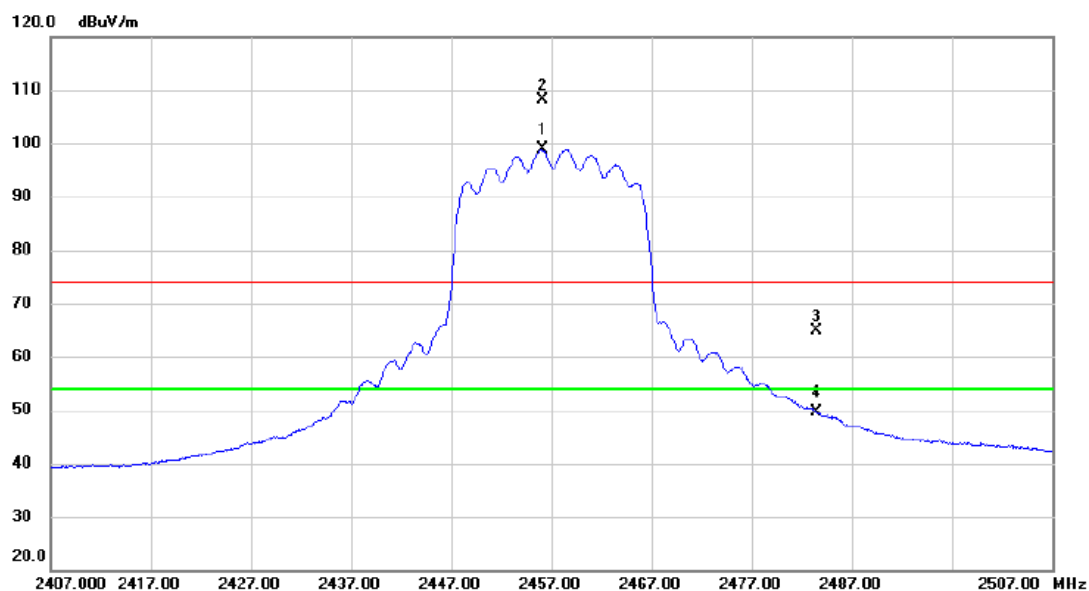
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7310.3500	39.82	13.21	53.03	54.00	-0.97	AVG	
2	7312.9000	51.57	13.21	64.78	74.00	-9.22	Peak	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2457MHz

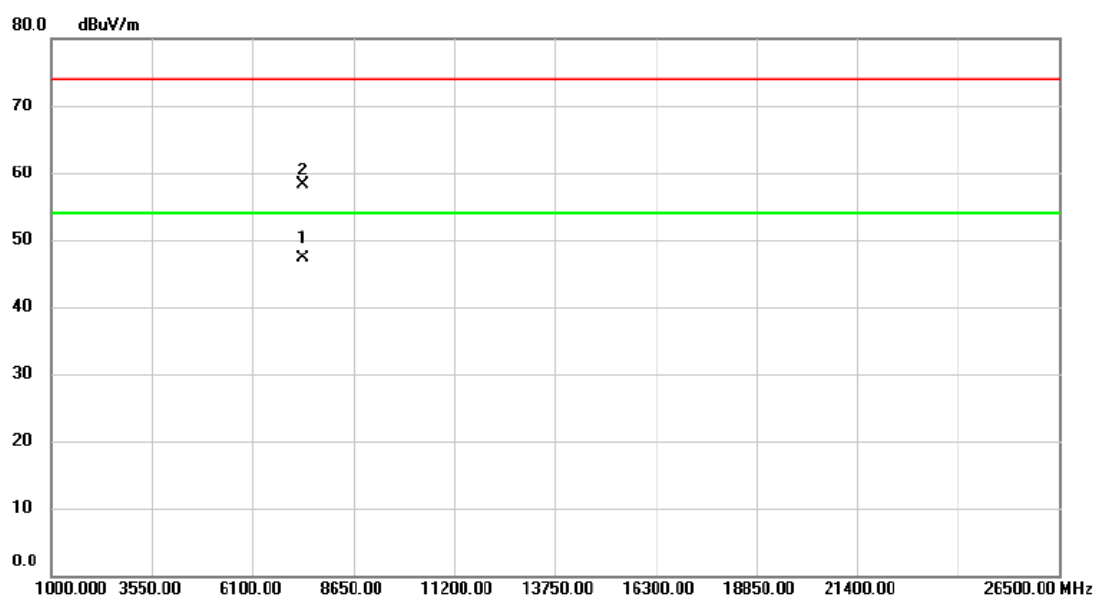
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2456.100	89.50	9.39	98.89	54.00	44.89	AVG	No Limit
2	X	2456.200	98.83	9.39	108.22	74.00	34.22	peak	No Limit
3		2483.500	55.33	9.49	64.82	74.00	-9.18	peak	
4		2483.500	40.19	9.49	49.68	54.00	-4.32	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2457MHz

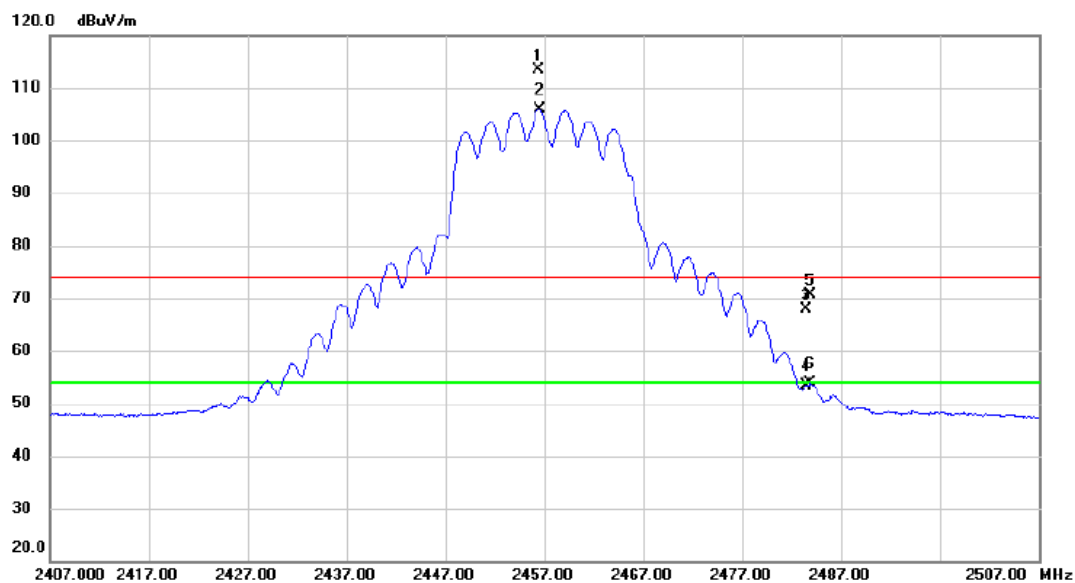
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7367.700	34.06	13.25	47.31	54.00	-6.69	AVG	
2		7367.840	45.14	13.25	58.39	74.00	-15.61	peak	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2457MHz

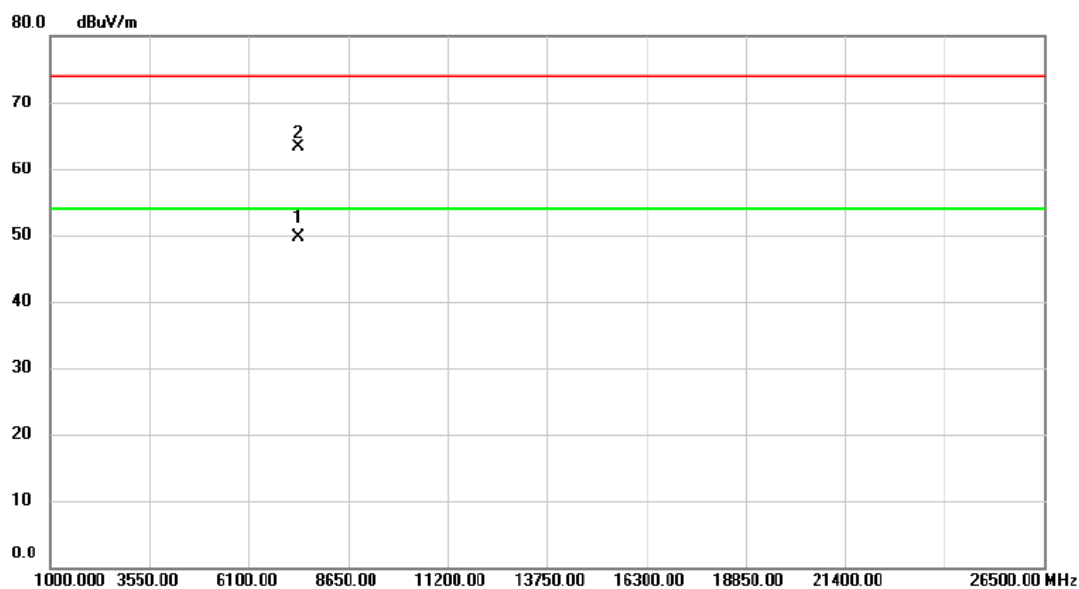
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2456.400	93.94	19.39	113.33	74.00	39.33	peak	No Limit
2	*	2456.500	86.48	19.39	105.87	54.00	51.87	AVG	No Limit
3		2483.500	48.33	19.49	67.82	74.00	-6.18	peak	
4		2483.500	33.95	19.49	53.44	54.00	-0.56	AVG	
5		2483.900	51.20	19.49	70.69	74.00	-3.31	peak	
6		2483.900	34.38	19.49	53.87	54.00	-0.13	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2457MHz

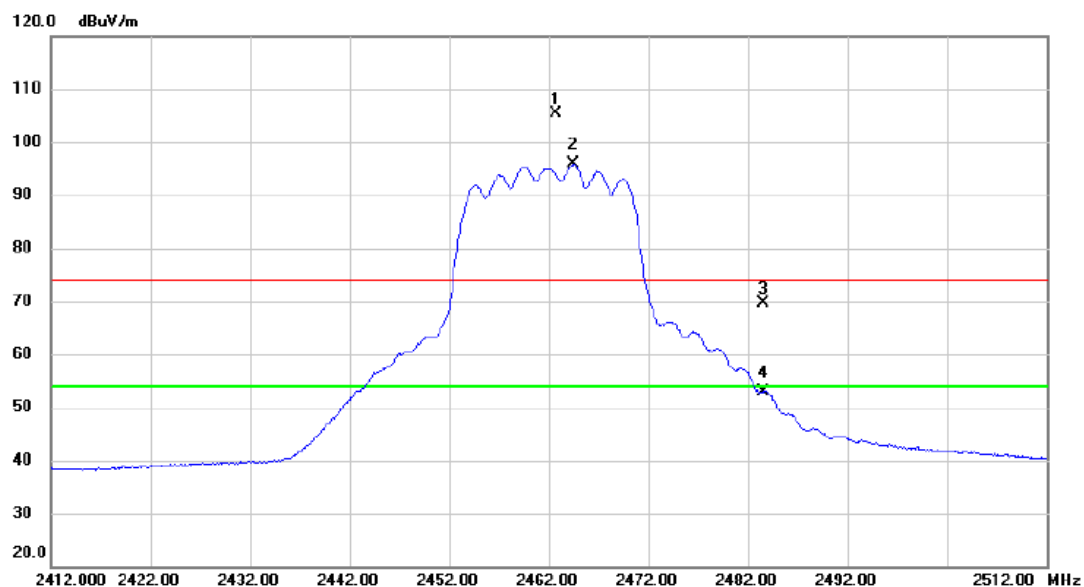
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	7370.400	36.39	13.26	49.65	54.00	-4.35	AVG	
2		7370.500	49.97	13.26	63.23	74.00	-10.77	peak	

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

Vertical

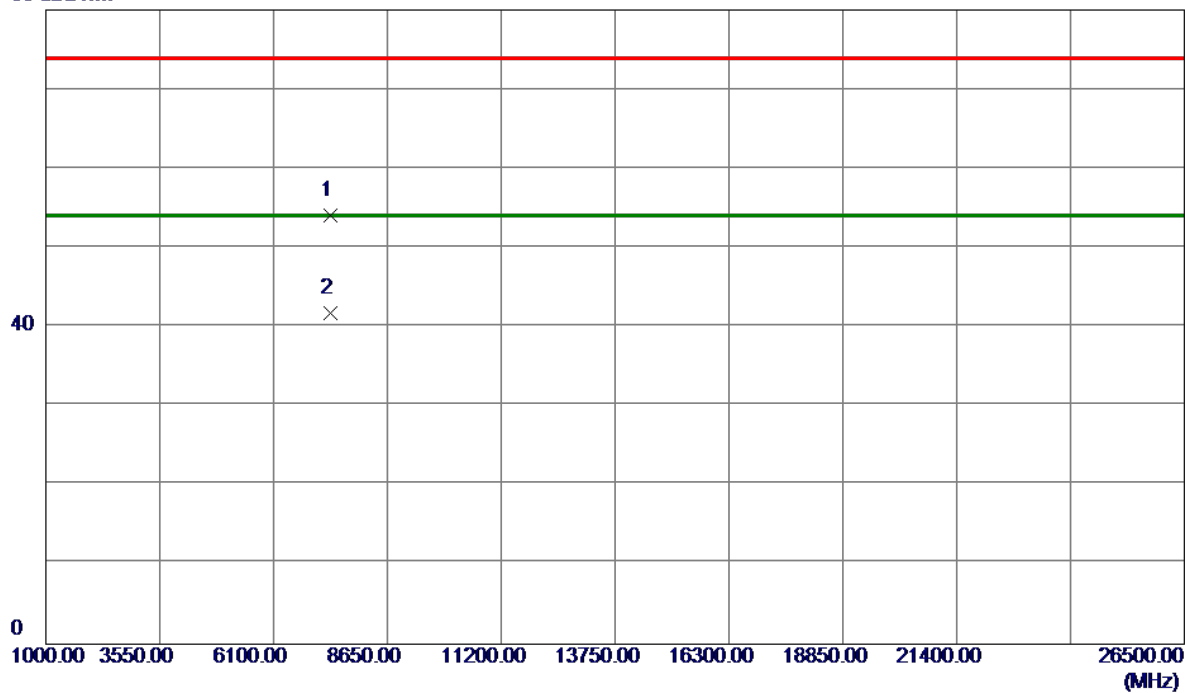


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2462.700	96.09	9.41	105.50	74.00	31.50	peak	No Limit
2	*	2464.500	86.35	9.42	95.77	54.00	41.77	AVG	No Limit
3		2483.500	60.19	9.49	69.68	74.00	-4.32	peak	
4		2483.500	43.41	9.49	52.90	54.00	-1.10	AVG	

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

Vertical

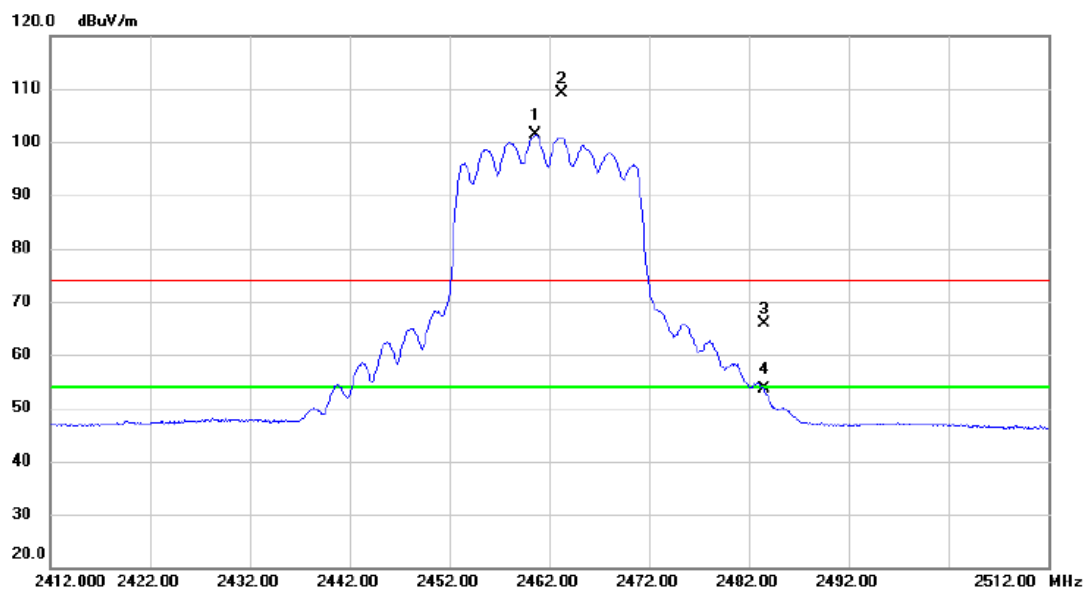
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7382.8800	40.87	13.27	54.14	74.00	-19.86	Peak	
2 *	7384.9600	28.55	13.27	41.82	54.00	-12.18	AVG	

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

Horizontal

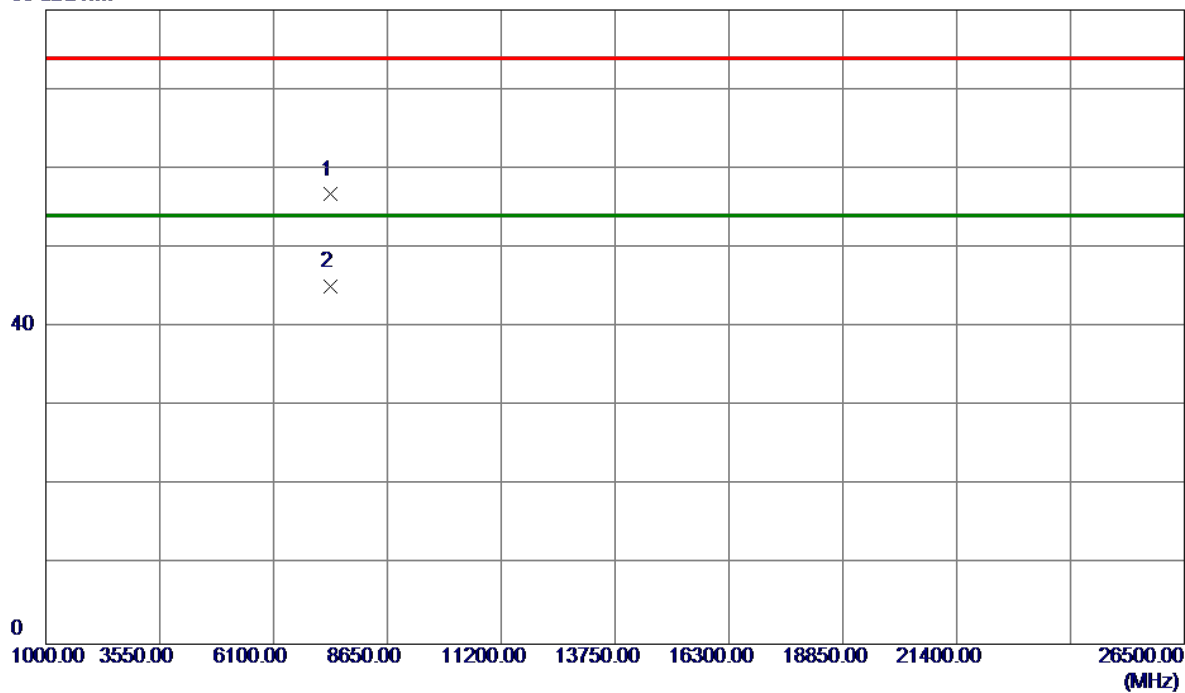


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2460.600	81.89	19.40	101.29	54.00	47.29	AVG	No Limit
2 X	2463.300	89.65	19.41	109.06	74.00	35.06	peak	No Limit
3	2483.500	46.37	19.49	65.86	74.00	-8.14	peak	
4	2483.500	34.10	19.49	53.59	54.00	-0.41	AVG	

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

Horizontal

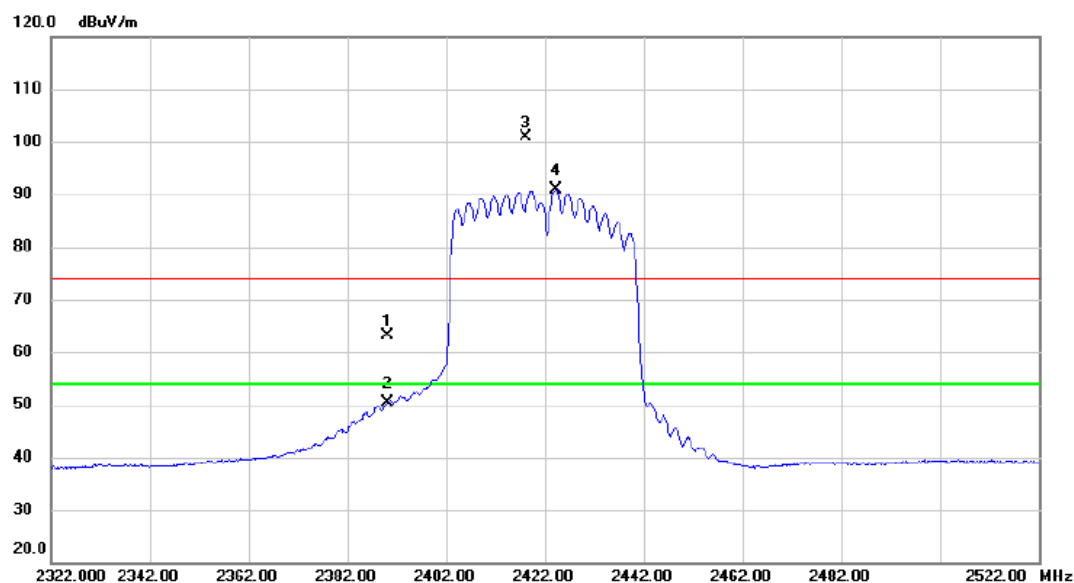
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7380.3500	43.45	13.27	56.72	74.00	-17.28	Peak	
2 *	7382.8000	31.79	13.27	45.06	54.00	-8.94	AVG	

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

Vertical

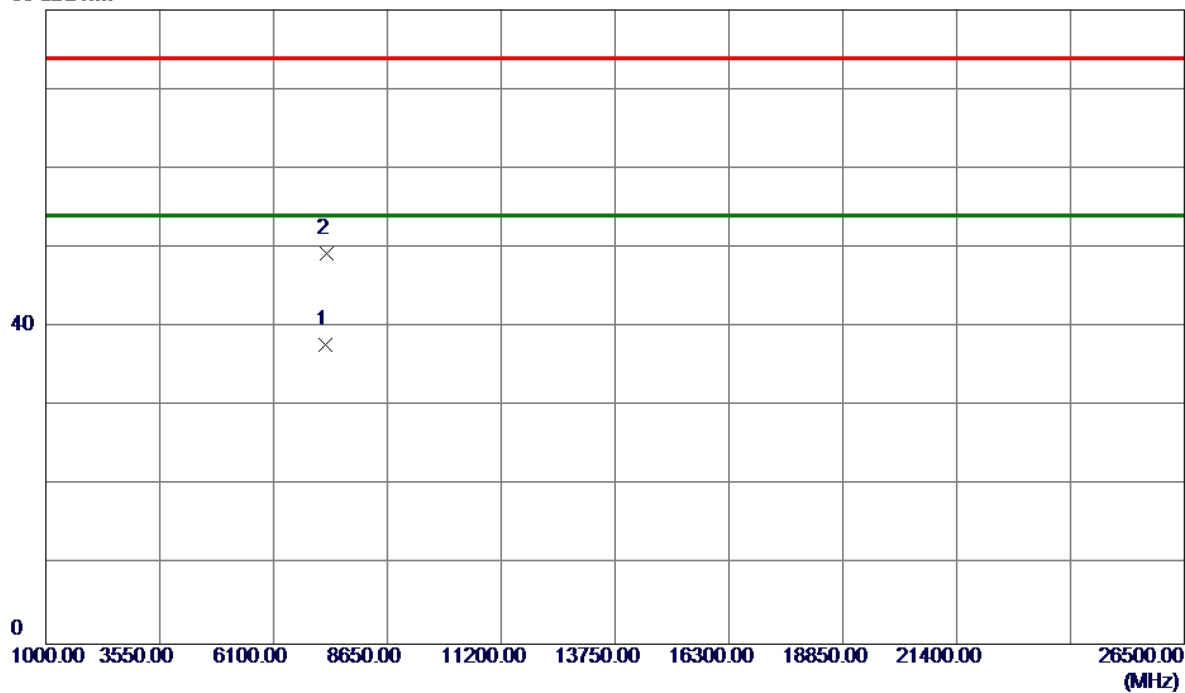


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	53.90	9.13	63.03	74.00	-10.97	peak	
2		2390.000	41.21	9.13	50.34	54.00	-3.66	AVG	
3	X	2418.200	91.71	9.25	100.96	74.00	26.96	peak	No Limit
4	*	2424.200	81.60	9.26	90.86	54.00	36.86	AVG	No Limit

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

Vertical

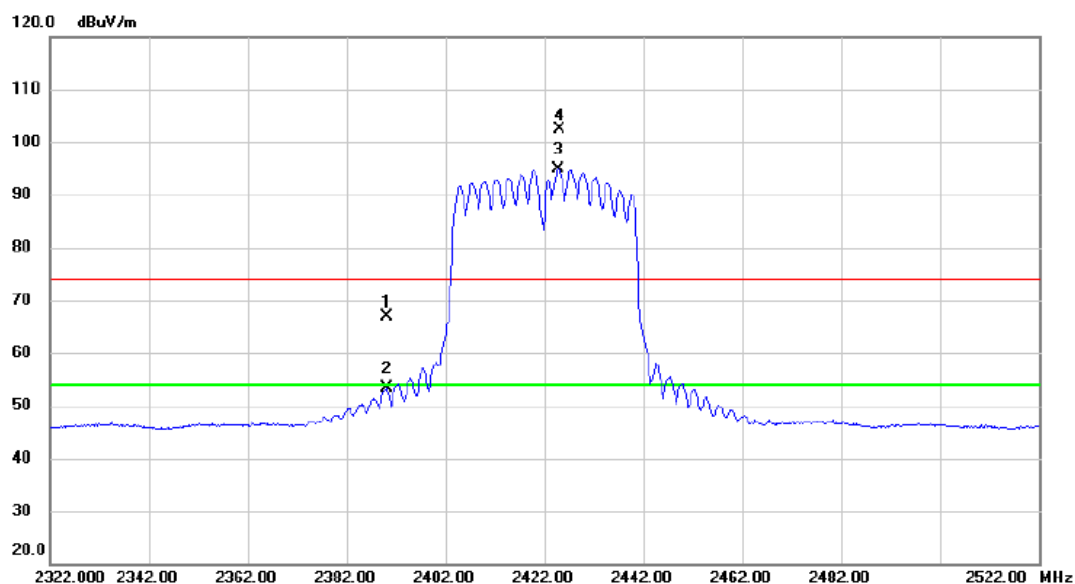
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7272.7500	24.64	13.18	37.82	54.00	-16.18	AVG	
2	7280.0000	36.16	13.19	49.35	74.00	-24.65	Peak	

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

Horizontal

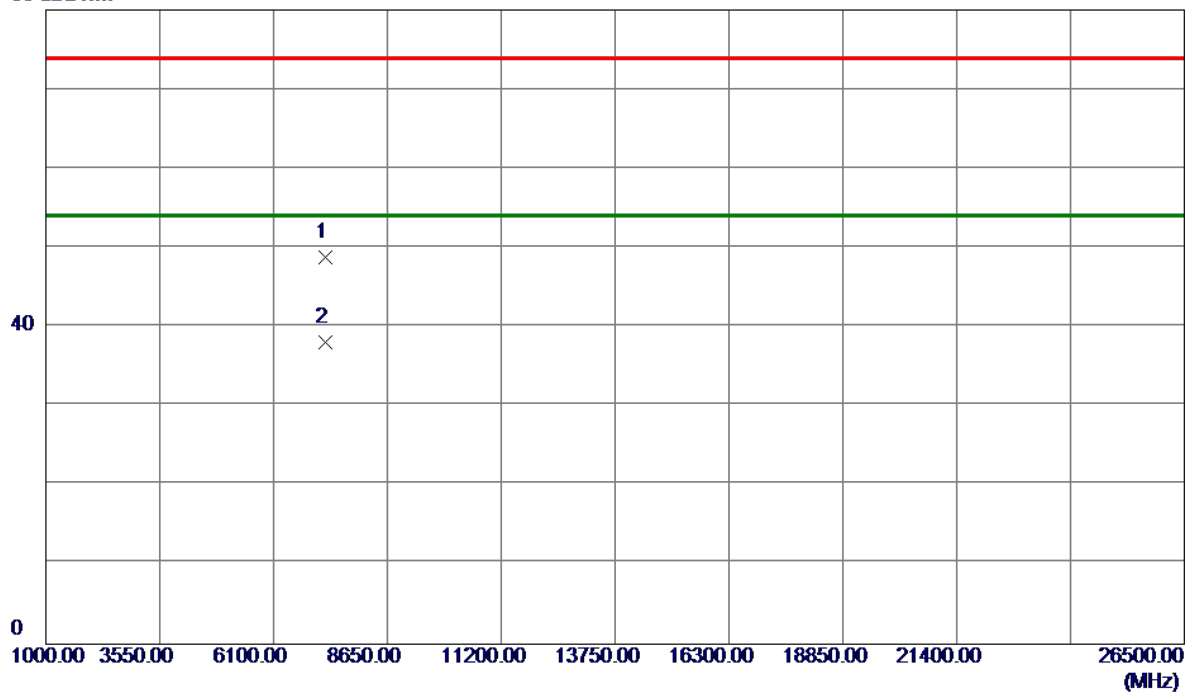


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	47.83	19.13	66.96	74.00	-7.04	peak	
2		2390.000	34.21	19.13	53.34	54.00	-0.66	AVG	
3	*	2424.800	75.55	19.26	94.81	54.00	40.81	AVG	No Limit
4	X	2425.000	83.08	19.26	102.34	74.00	28.34	peak	No Limit

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

Horizontal

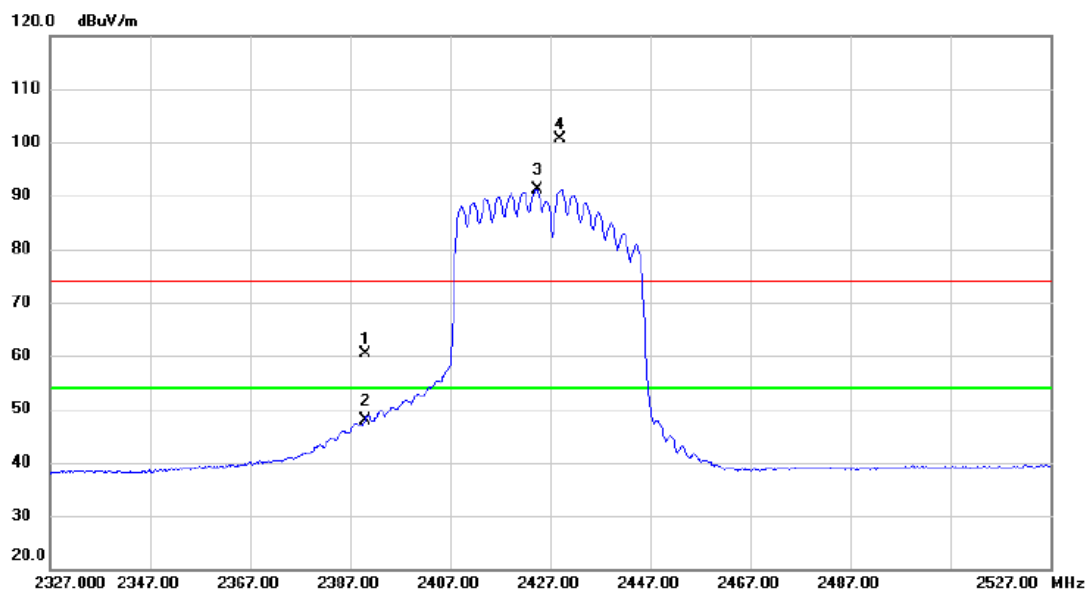
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7263.1500	35.65	13.18	48.83	74.00	-25.17	Peak	
2 *	7267.9000	24.89	13.18	38.07	54.00	-15.93	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2427MHz

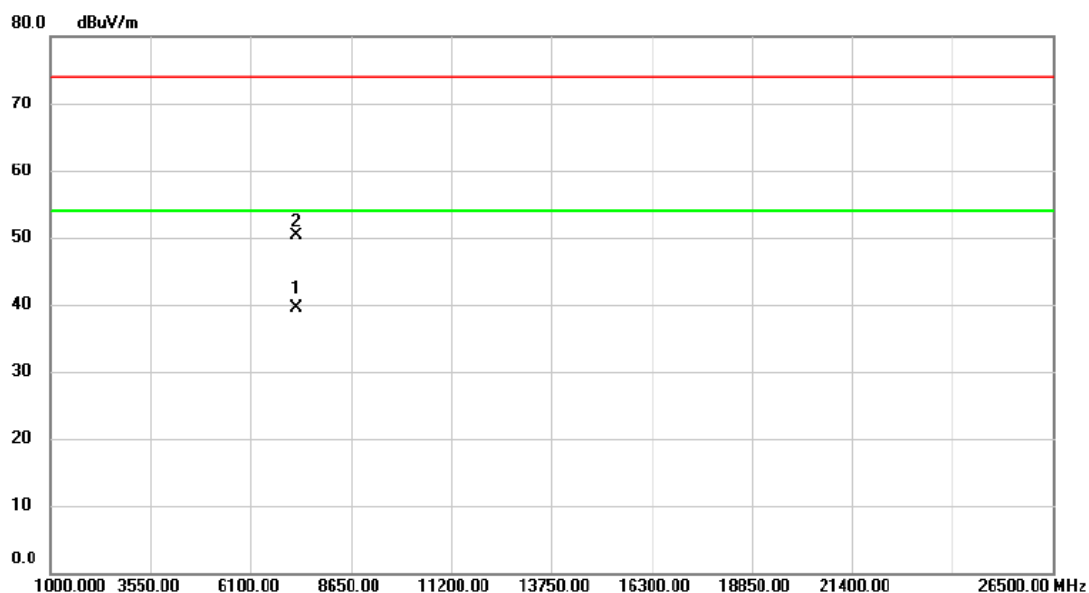
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	51.34	9.13	60.47	74.00	-13.53	peak	
2		2390.000	38.65	9.13	47.78	54.00	-6.22	AVG	
3	*	2424.400	81.97	9.26	91.23	54.00	37.23	AVG	No Limit
4	X	2429.000	91.40	9.29	100.69	74.00	26.69	peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2427MHz

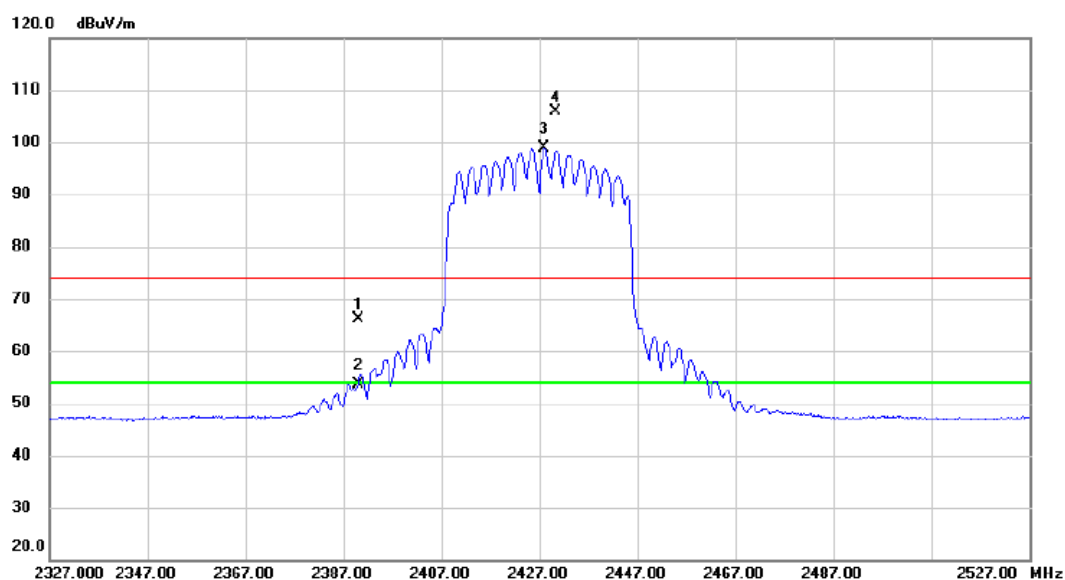
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7285.250	26.36	13.19	39.55	54.00	-14.45	AVG	
2		7287.700	37.12	13.20	50.32	74.00	-23.68	peak	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2427MHz

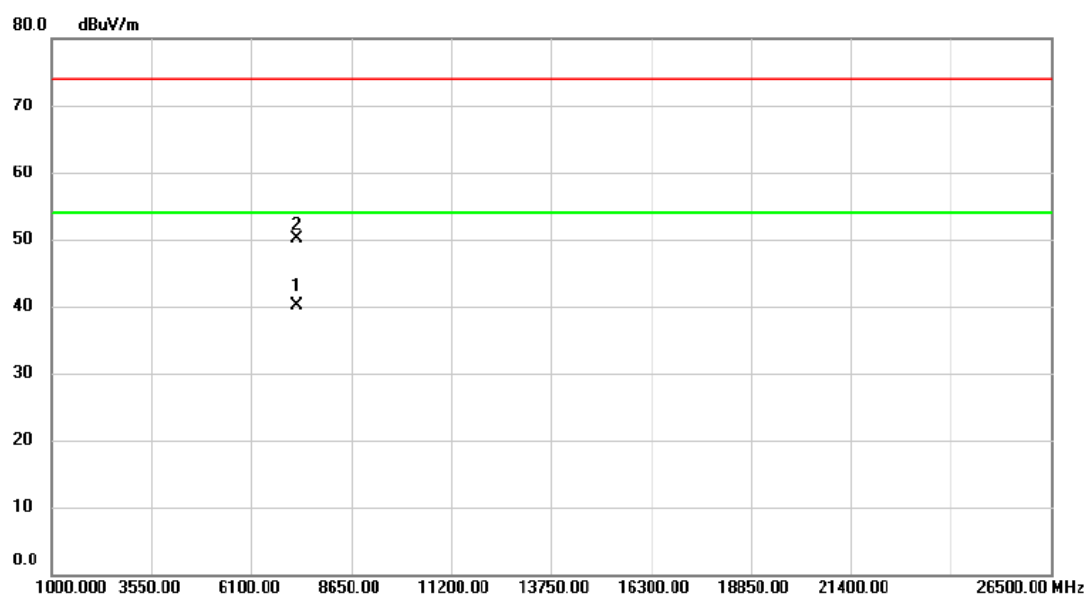
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	46.92	19.13	66.05	74.00	-7.95	peak	
2		2390.000	34.62	19.13	53.75	54.00	-0.25	AVG	
3	*	2428.000	79.67	19.28	98.95	54.00	44.95	AVG	No Limit
4	X	2430.400	86.67	19.29	105.96	74.00	31.96	peak	No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2427MHz

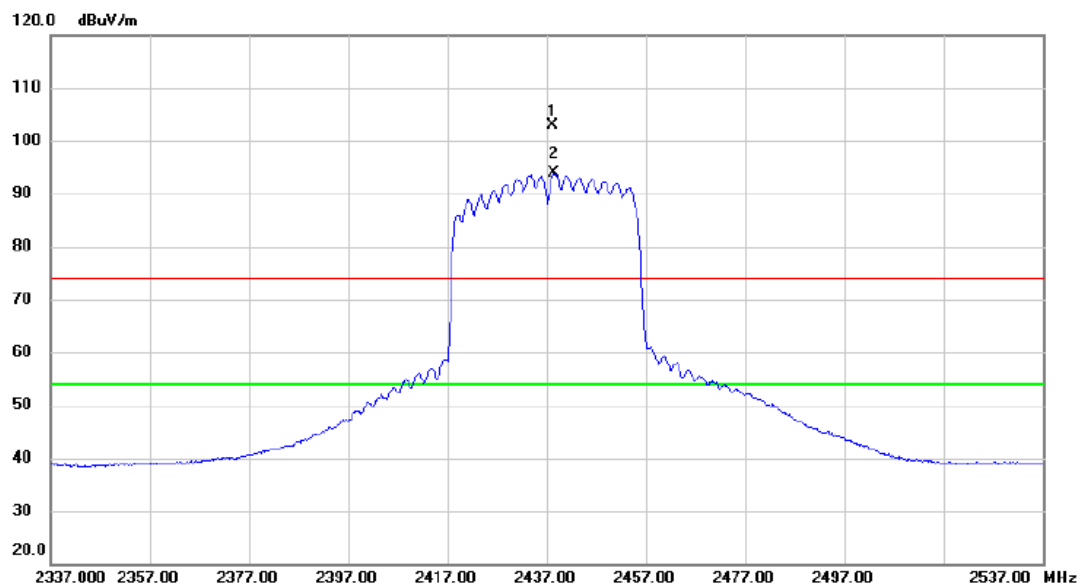
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	7279.850	26.89	13.19	40.08	54.00	-13.92	AVG	
2		7287.100	37.00	13.19	50.19	74.00	-23.81	peak	

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

Vertical

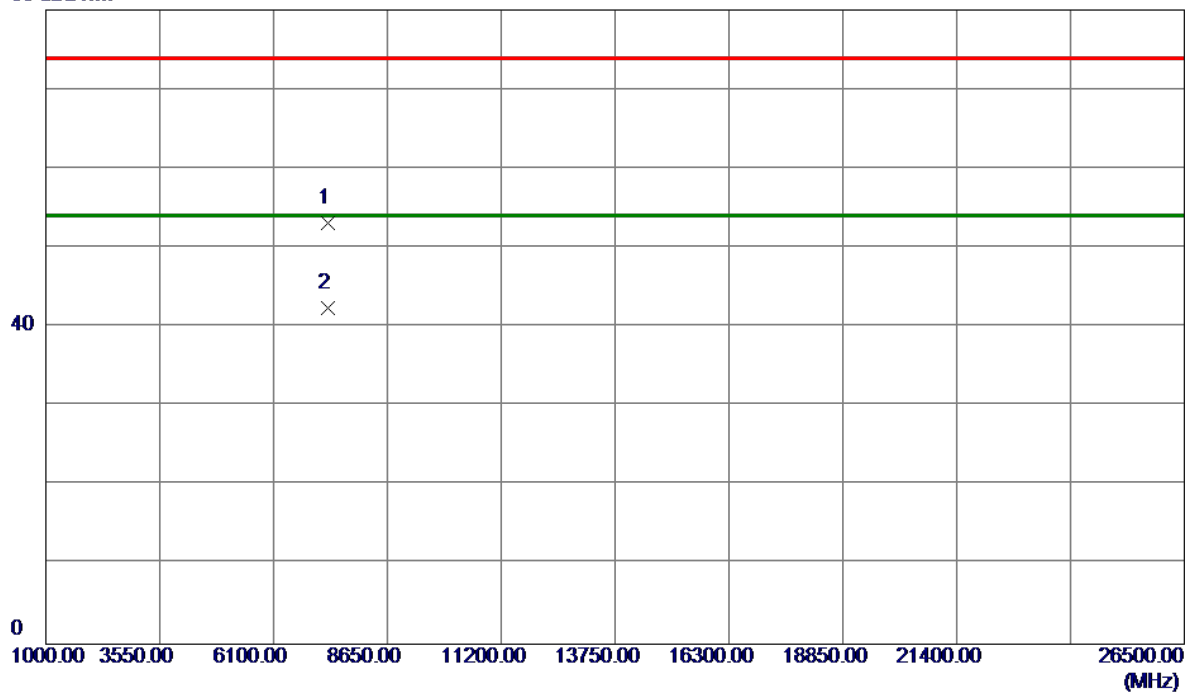


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2438.200	93.57	9.32	102.89	74.00	28.89	peak	No Limit
2	*	2438.600	84.45	9.32	93.77	54.00	39.77	AVG	No Limit

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

Vertical

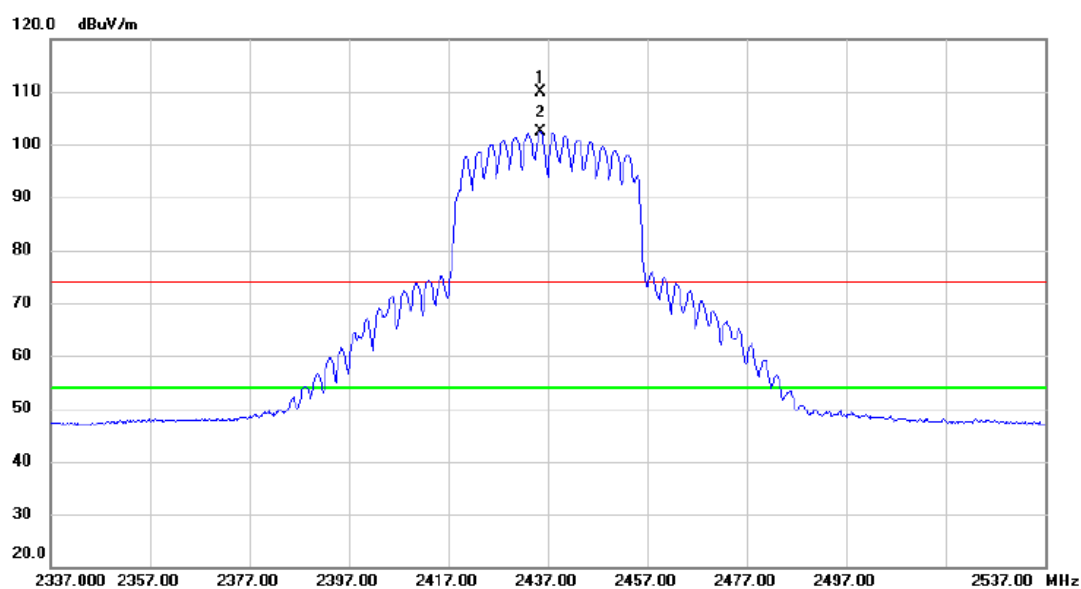
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7307.6000	39.95	13.21	53.16	74.00	-20.84	Peak	
2 *	7310.5000	29.18	13.21	42.39	54.00	-11.61	AVG	

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

Horizontal

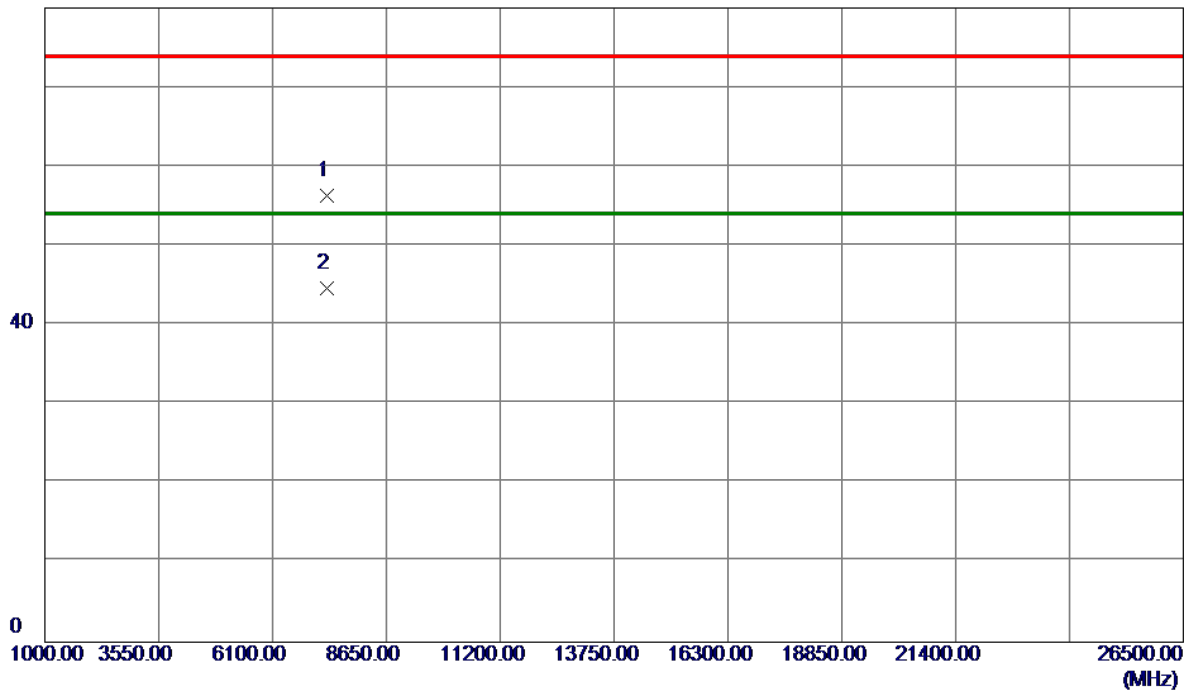


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2435.400	90.45	19.31	109.76	74.00	35.76	peak	No Limit
2	*	2435.600	83.04	19.31	102.35	54.00	48.35	AVG	No Limit

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

Horizontal

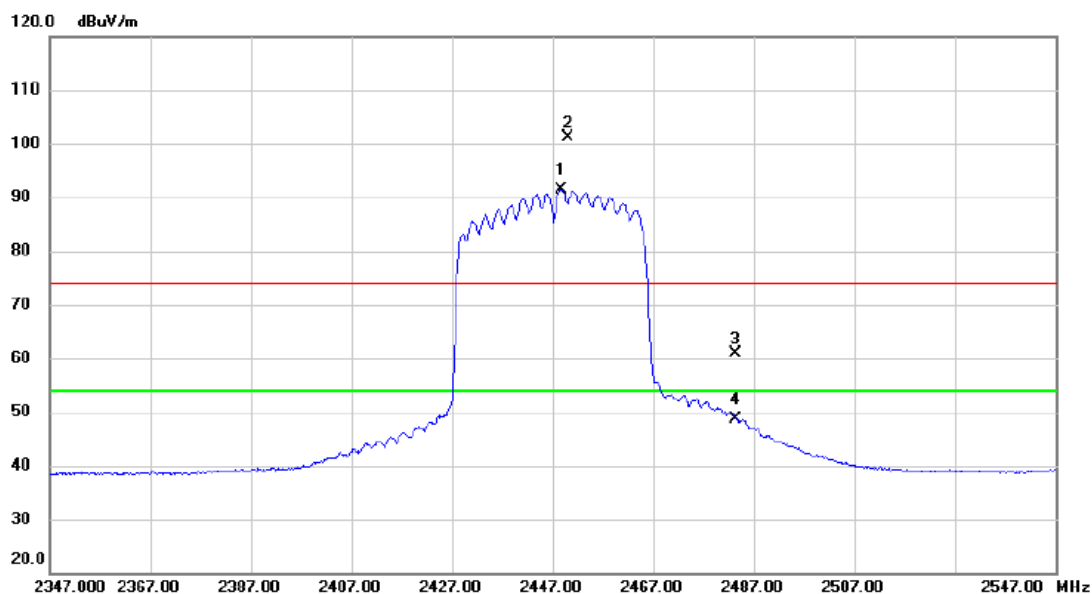
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7305.3500	43.07	13.21	56.28	74.00	-17.72	Peak	
2 *	7307.9000	31.38	13.21	44.59	54.00	-9.41	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2447MHz

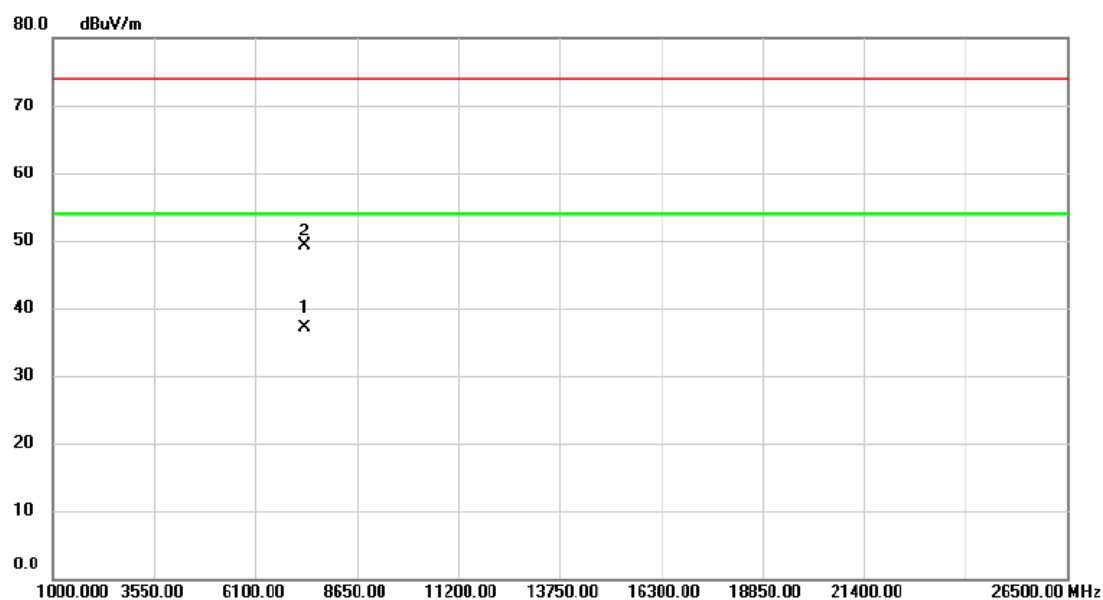
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2448.800	82.08	9.36	91.44	54.00	37.44	AVG	No Limit
2	X	2450.200	91.88	9.36	101.24	74.00	27.24	peak	No Limit
3		2483.500	51.34	9.49	60.83	74.00	-13.17	peak	
4		2483.500	39.22	9.49	48.71	54.00	-5.29	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2447MHz

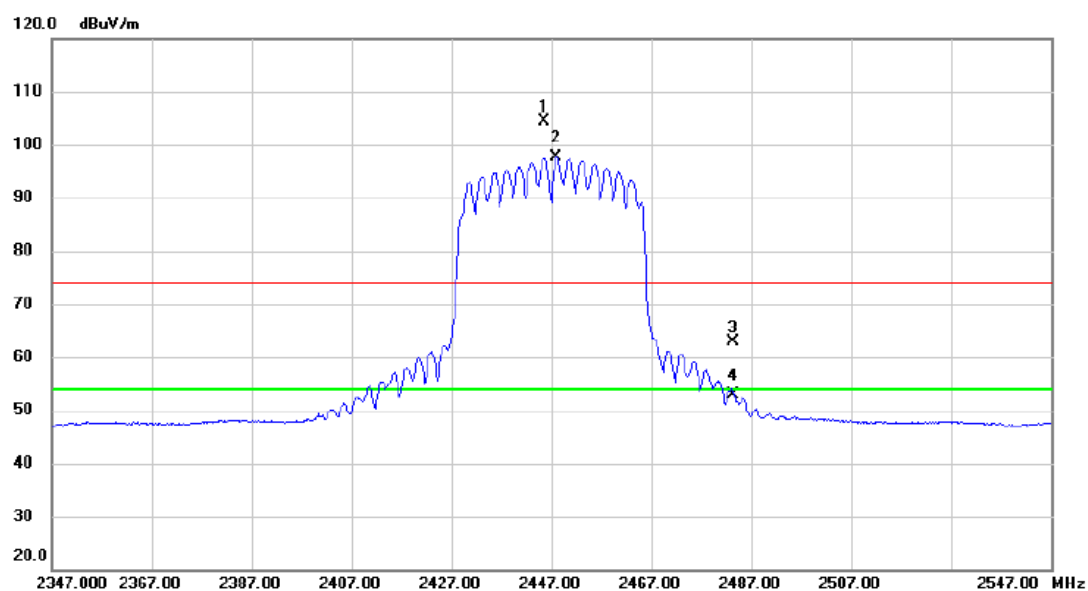
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7332.850	23.82	13.23	37.05	54.00	-16.95	AVG	
2		7347.500	36.05	13.25	49.30	74.00	-24.70	peak	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2447MHz

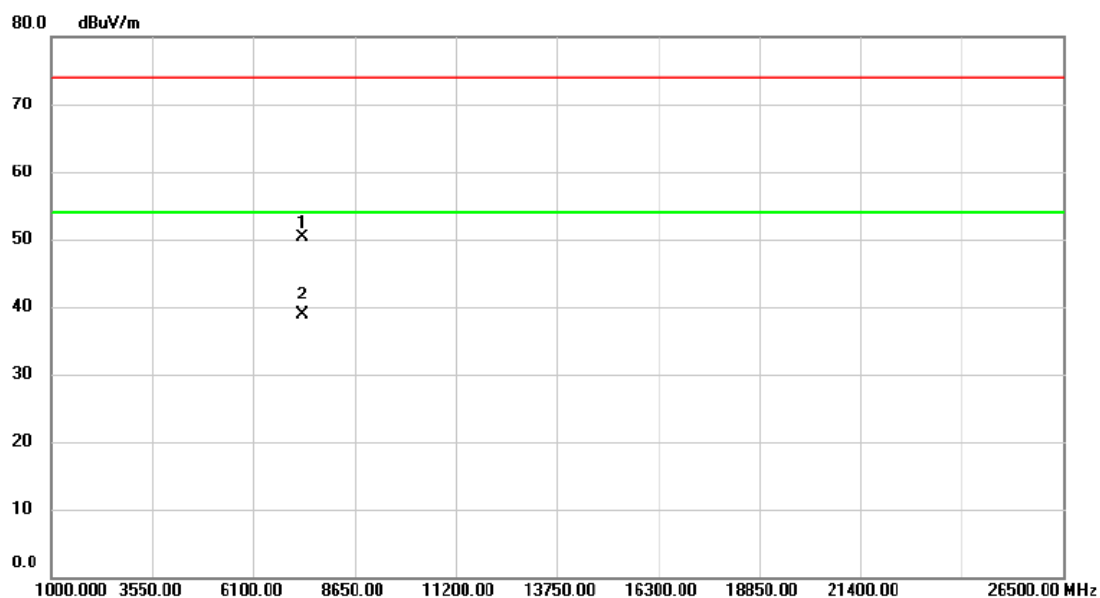
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2445.400	85.05	19.35	104.40	74.00	30.40	peak	No Limit
2	*	2448.000	78.24	19.35	97.59	54.00	43.59	AVG	No Limit
3		2483.500	43.47	19.49	62.96	74.00	-11.04	peak	
4		2483.500	33.48	19.49	52.97	54.00	-1.03	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2447MHz

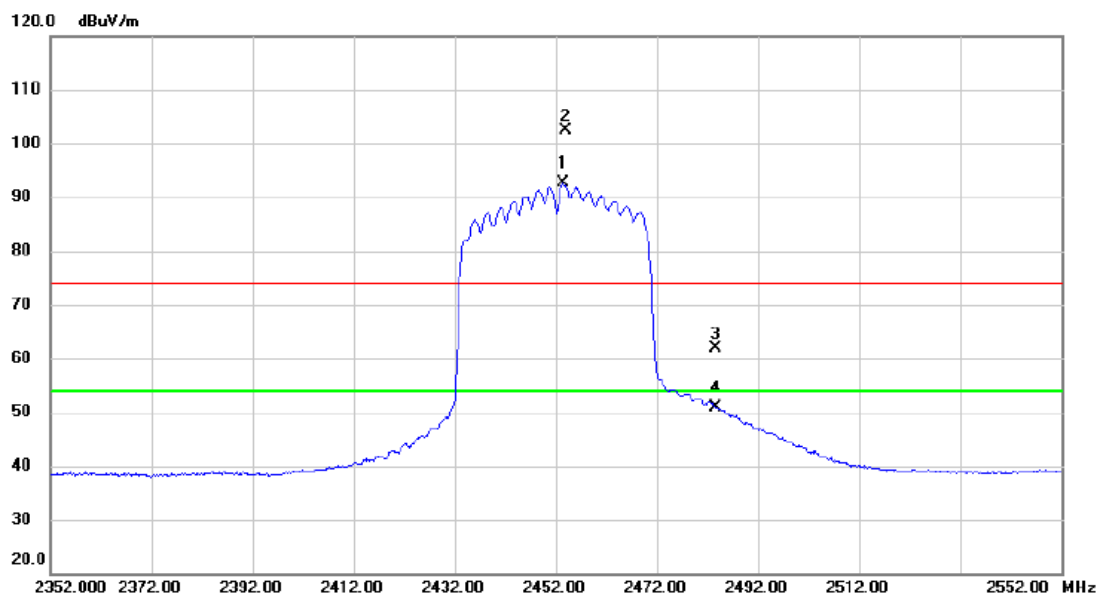
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		7340.200	37.06	13.23	50.29	74.00	-23.71	peak	
2	*	7342.500	25.71	13.23	38.94	54.00	-15.06	AVG	

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

Vertical

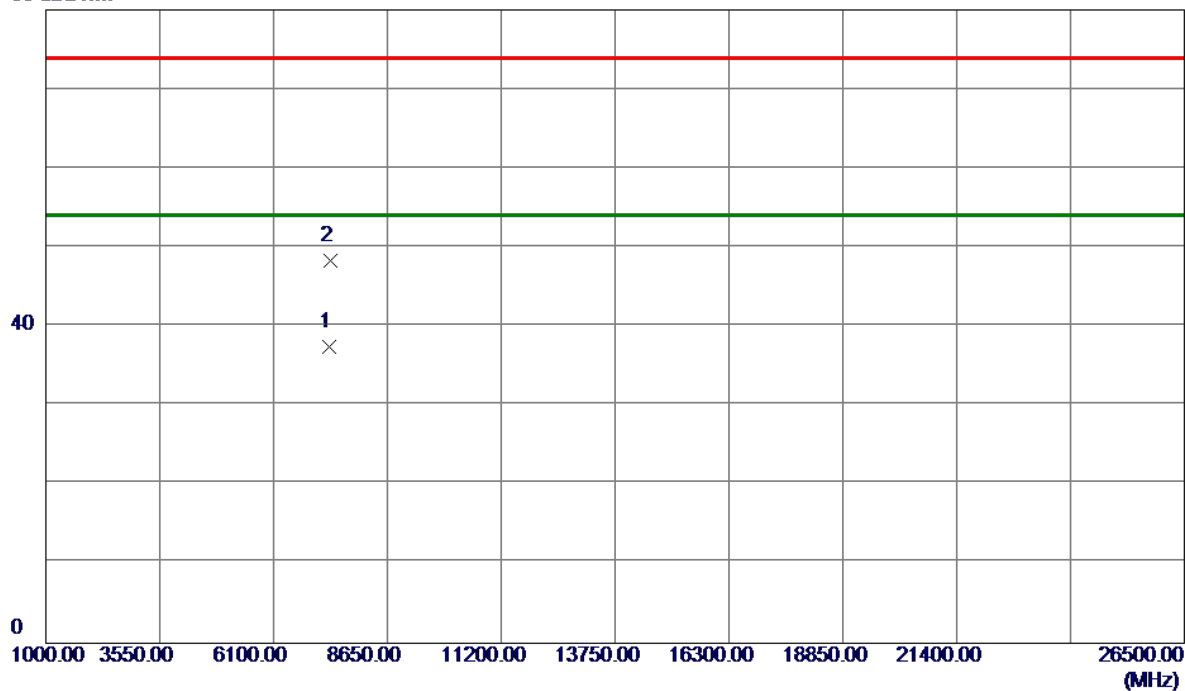


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2453.600	83.18	9.38	92.56	54.00	38.56	AVG	No Limit
2	X	2454.000	92.93	9.38	102.31	74.00	28.31	peak	No Limit
3		2483.500	52.44	9.49	61.93	74.00	-12.07	peak	
4		2483.500	41.46	9.49	50.95	54.00	-3.05	AVG	

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

Vertical

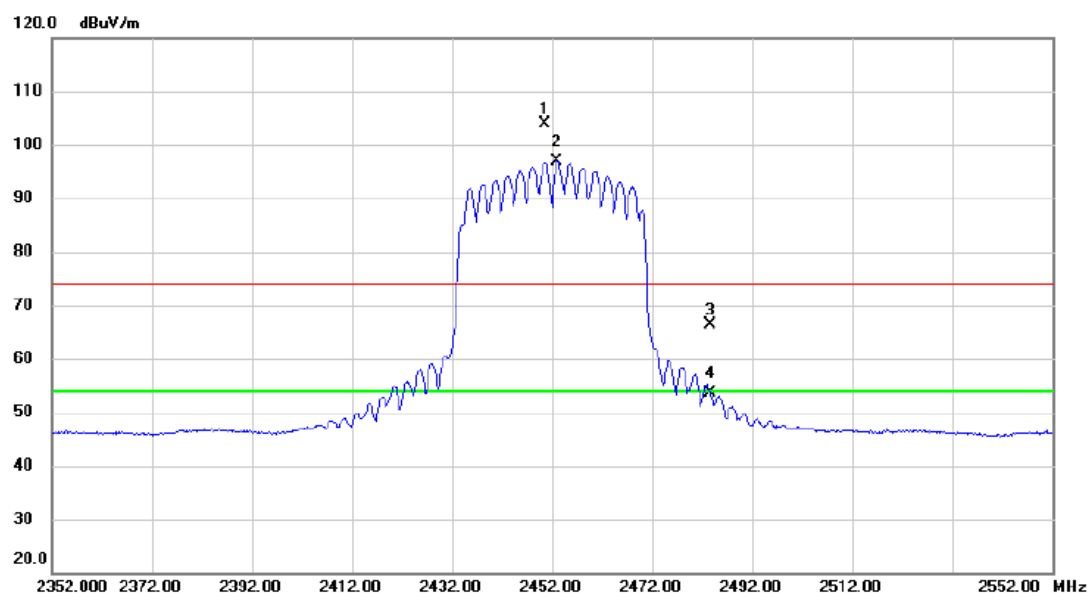
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7360.5000	24.14	13.25	37.39	54.00	-16.61	AVG	
2	7363.0500	35.10	13.25	48.35	74.00	-25.65	Peak	

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

Horizontal

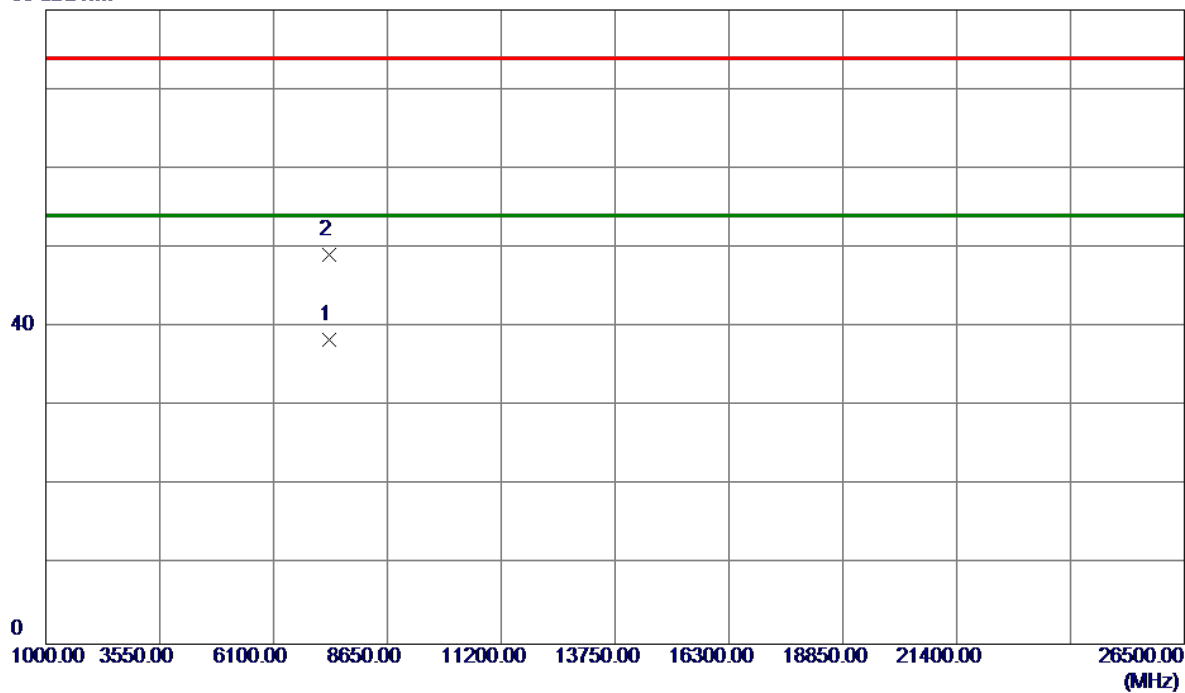


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2450.600	84.60	19.36	103.96	74.00	29.96	peak	No Limit
2	*	2453.000	77.62	19.38	97.00	54.00	43.00	AVG	No Limit
3		2483.500	47.01	19.49	66.50	74.00	-7.50	peak	
4		2483.500	34.18	19.49	53.67	54.00	-0.33	AVG	

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

Horizontal

80 dBuV/m



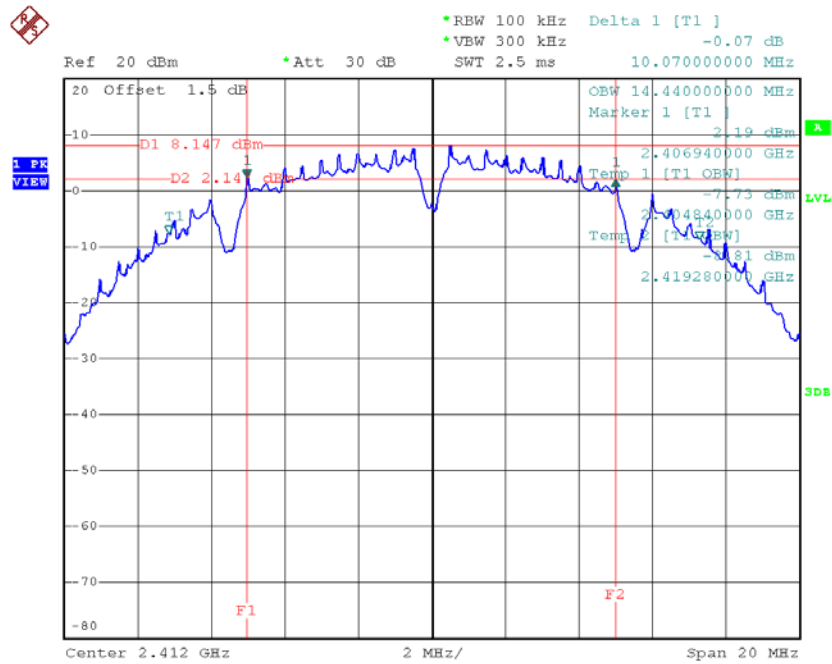
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7355.2000	25.15	13.25	38.40	54.00	-15.60	AVG	
2	7360.3000	35.93	13.25	49.18	74.00	-24.82	Peak	

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	10.07	14.44	500	Complies
2437	10.10	14.36	500	Complies
2462	10.06	14.40	500	Complies

TX CH01

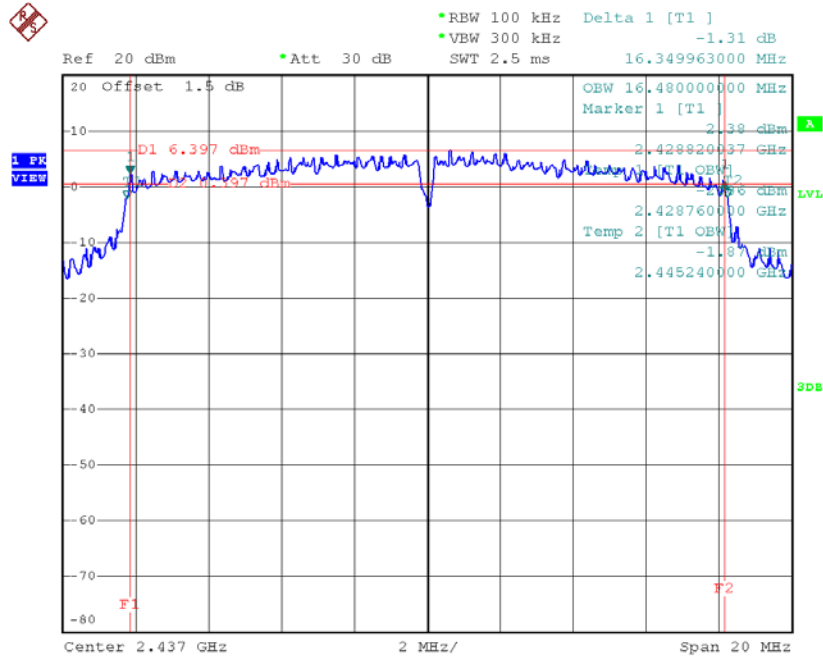


Date: 8.APR.2018 15:18:34

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.35	16.40	500	Complies
2437	16.35	16.48	500	Complies
2462	16.39	16.36	500	Complies

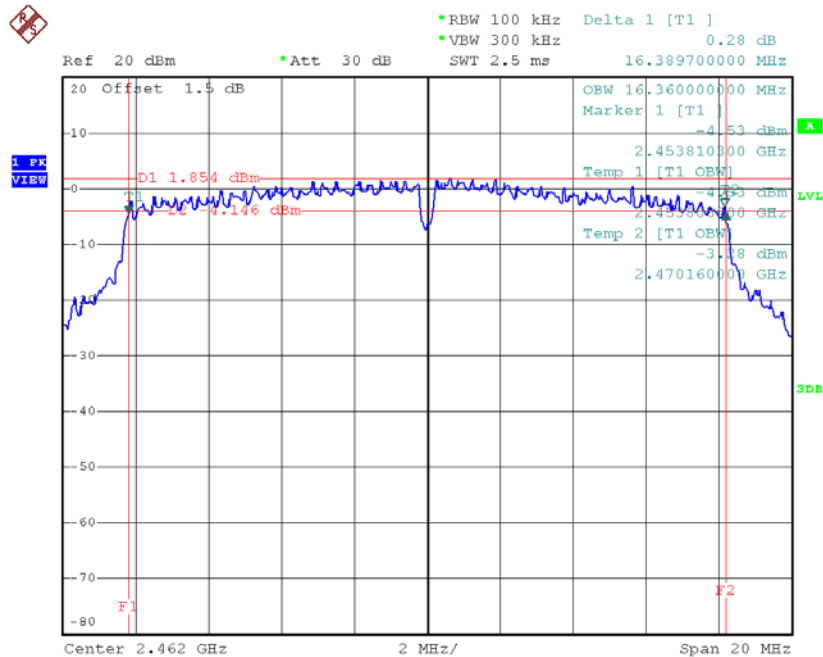


TX CH06



Date: 8.APR.2018 15:34:47

TX CH11

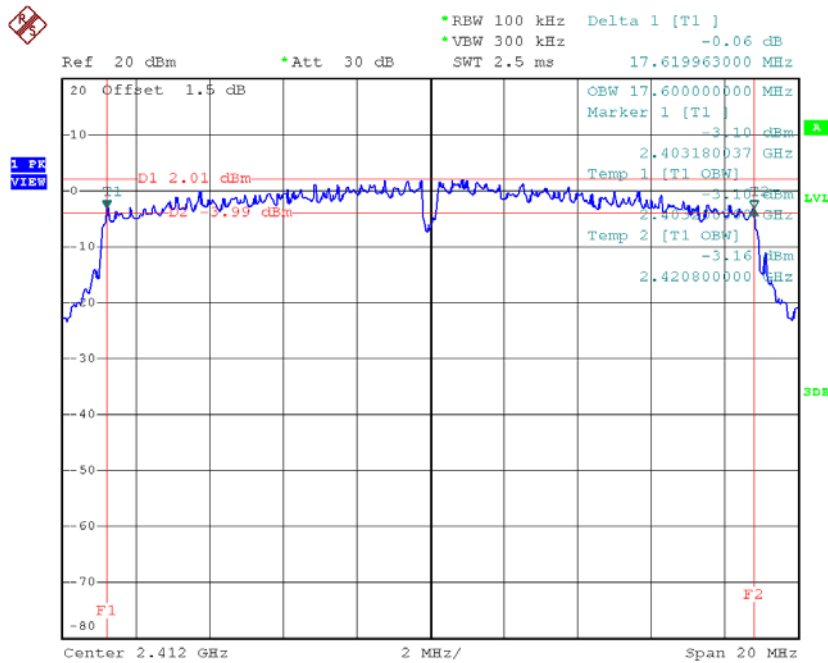


Date: 8.APR.2018 15:36:16

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

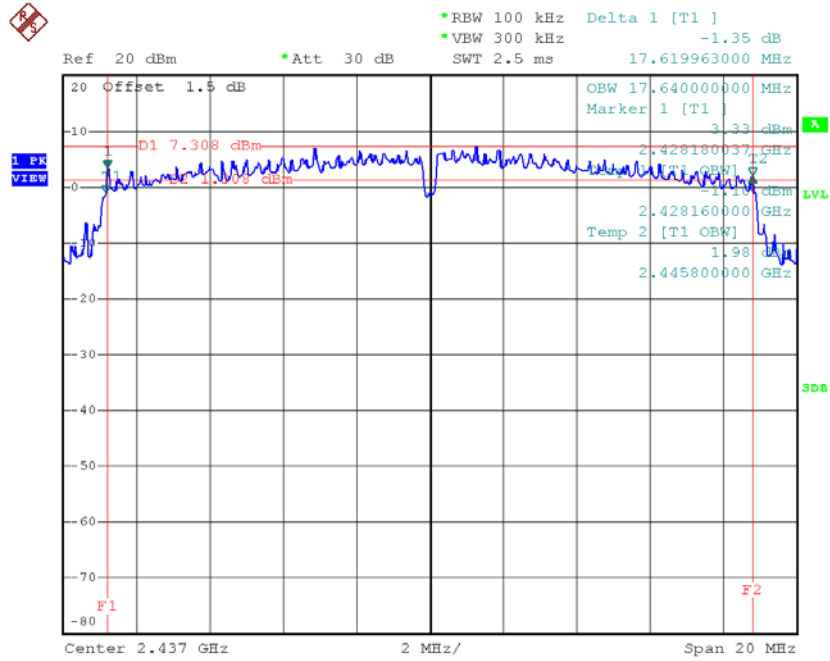
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.62	17.60	500	Complies
2437	17.62	17.64	500	Complies
2462	17.23	17.56	500	Complies

TX CH01



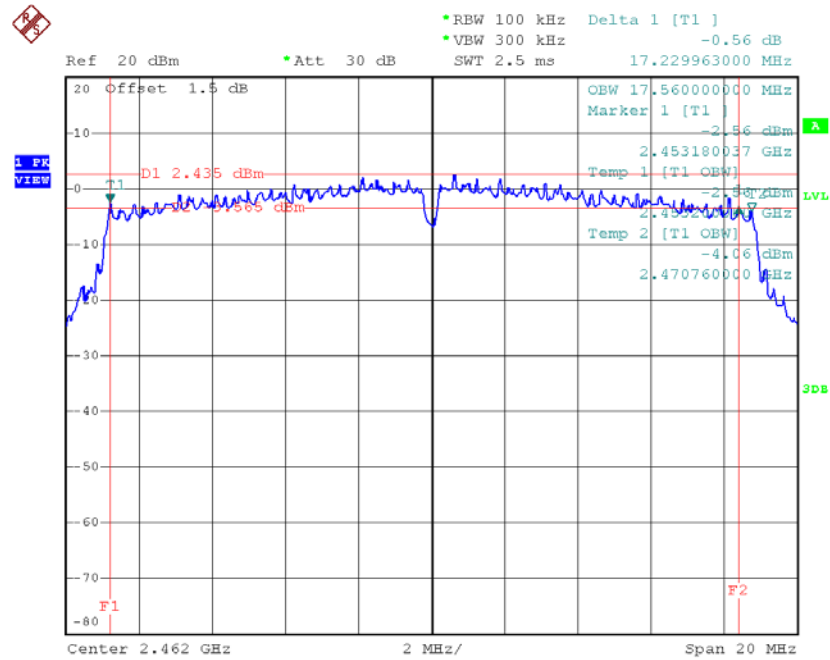
Date: 8.APR.2018 15:53:58

TX CH06



Date: 8.APR.2018 15:55:22

TX CH11



Date: 8.APR.2018 16:51:43

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.44	35.84	500	Complies
2437	35.35	36.00	500	Complies
2452	34.56	35.92	500	Complies

1 PK
VIEW

Ref 20 dBm *Att 30 dB SWT 5 ms

Offset 1.5 dB

RBW 100 kHz Delta 1 [T1] -0.64 dB

VBW 300 kHz 35.439569000 MHz

Marker 1 [T1] 2.404440031 GHz -6.513 dBm

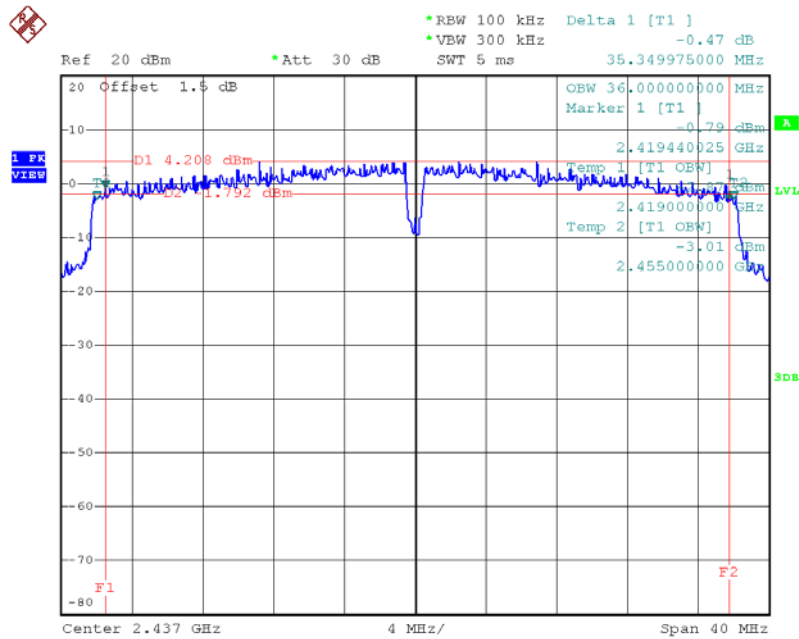
Temp 1 [T1 OBW] -7.44 dBm

Temp 2 [T1 OBW] -7.05 dBm

Center 2.422 GHz 4 MHz/ Span 40 MHz

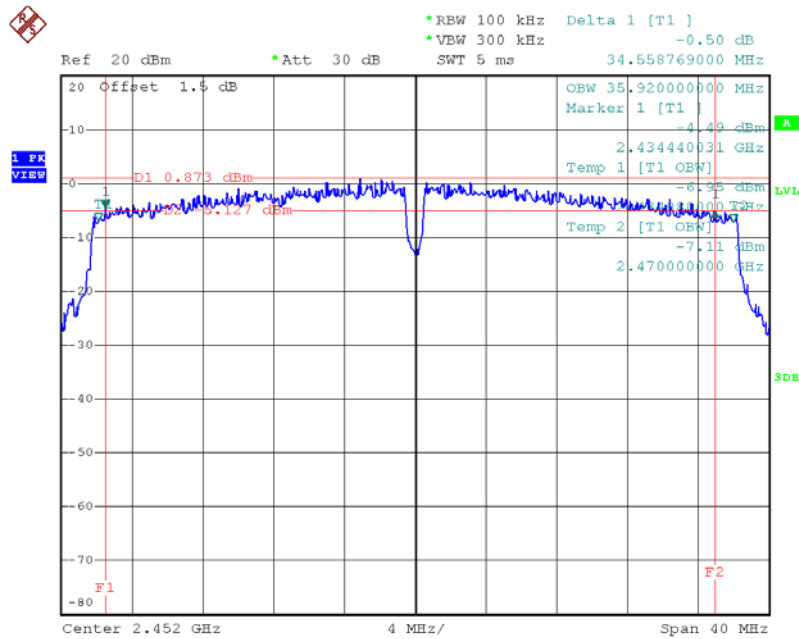
Page 134 of 210

TX CH06



Date: 8.APR.2018 16:55:13

TX CH09



Date: 8.APR.2018 16:57:04

APPENDIX F - MAXIMUM AVG CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.84	0.08	30.00	1.00	Complies
2437	18.53	0.07	30.00	1.00	Complies
2462	17.73	0.06	30.00	1.00	Complies

Test Mode :TX B Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.56	0.07	30.00	1.00	Complies
2437	18.21	0.07	30.00	1.00	Complies
2462	17.25	0.05	30.00	1.00	Complies

Test Mode :TX B Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.71	0.15	30.00	1.00	Complies
2437	21.38	0.14	30.00	1.00	Complies
2462	20.51	0.11	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.43	0.04	30.00	1.00	Complies
2437	19.65	0.09	30.00	1.00	Complies
2462	15.95	0.04	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.35	0.04	30.00	1.00	Complies
2437	19.47	0.09	30.00	1.00	Complies
2462	15.54	0.04	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	19.40	0.09	30.00	1.00	Complies
2437	22.57	0.18	30.00	1.00	Complies
2462	18.76	0.08	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.32	0.04	30.00	1.00	Complies
2437	19.67	0.09	30.00	1.00	Complies
2462	15.23	0.03	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.43	0.04	30.00	1.00	Complies
2437	19.48	0.09	30.00	1.00	Complies
2462	15.02	0.03	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	19.39	0.09	30.00	1.00	Complies
2437	22.59	0.18	30.00	1.00	Complies
2462	18.14	0.07	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	12.07	0.02	30.00	1.00	Complies
2437	16.86	0.05	30.00	1.00	Complies
2452	13.12	0.02	30.00	1.00	Complies

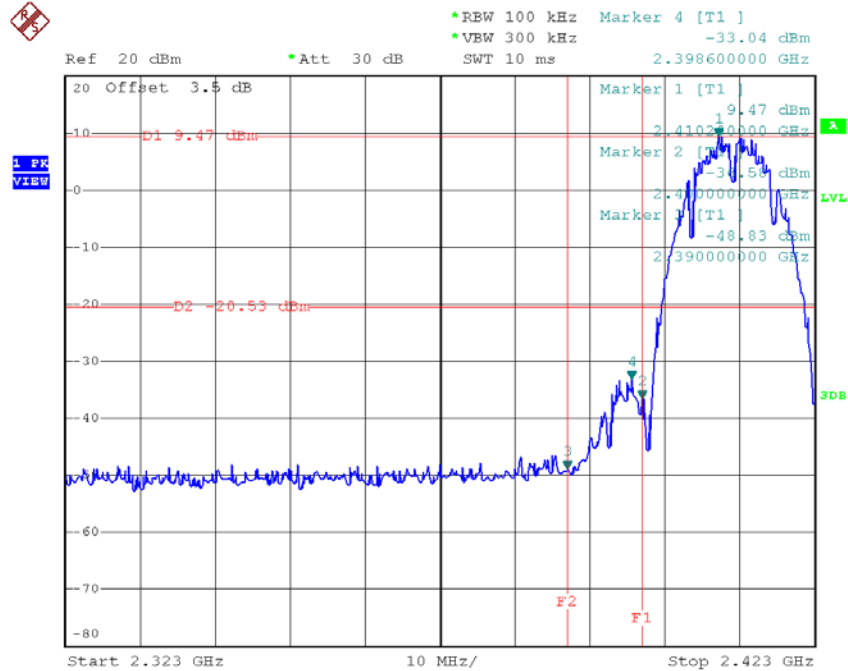
Test Mode :TX N40 Mode_CH03/06/09_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	12.16	0.02	30.00	1.00	Complies
2437	16.43	0.04	30.00	1.00	Complies
2452	13.17	0.02	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	15.13	0.03	30.00	1.00	Complies
2437	19.66	0.09	30.00	1.00	Complies
2452	16.16	0.04	30.00	1.00	Complies

APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

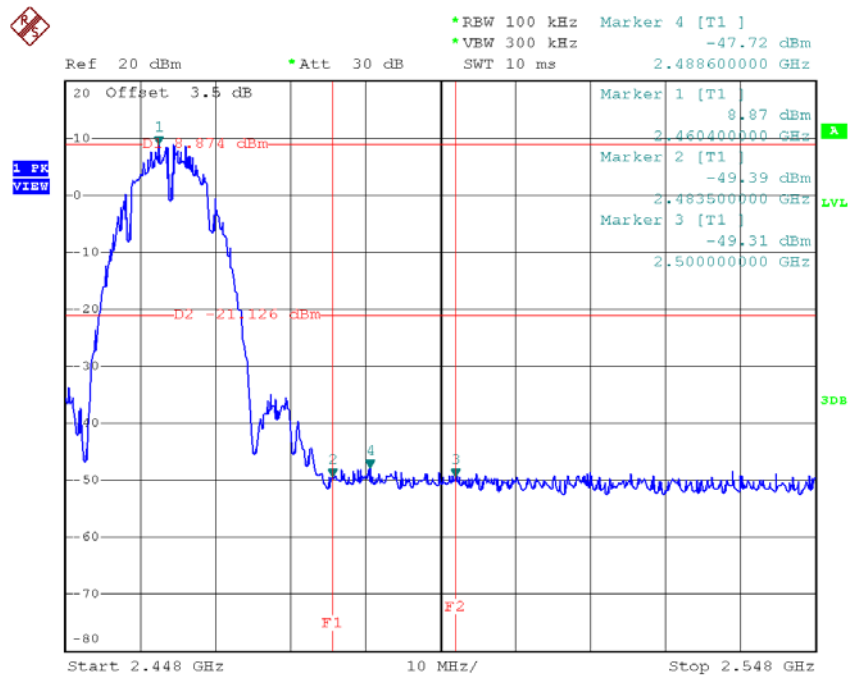
Test Mode : TX B Mode_ANT 1

TX B mode CH01



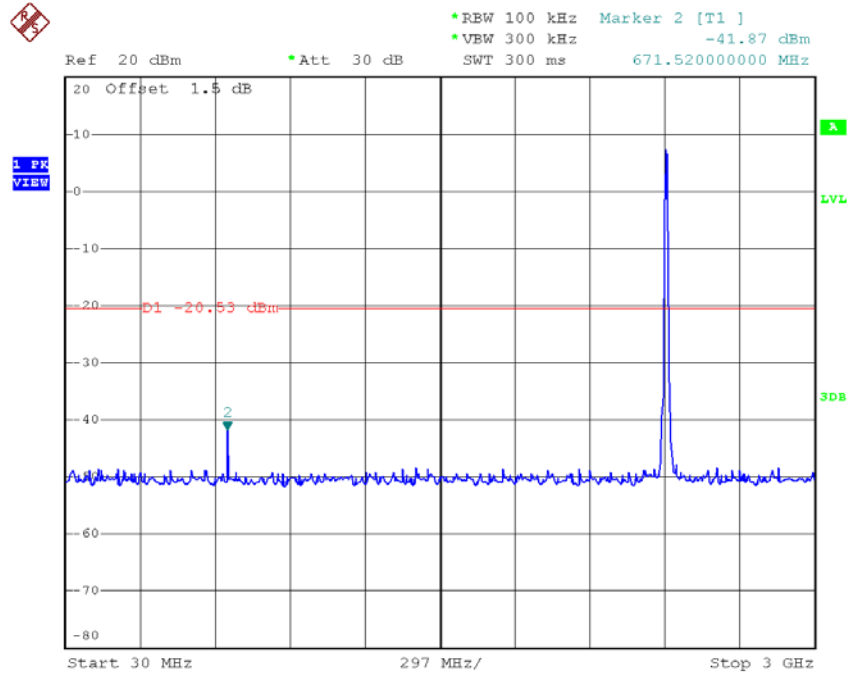
Date: 8.APR.2018 15:18:43

TX B mode CH11

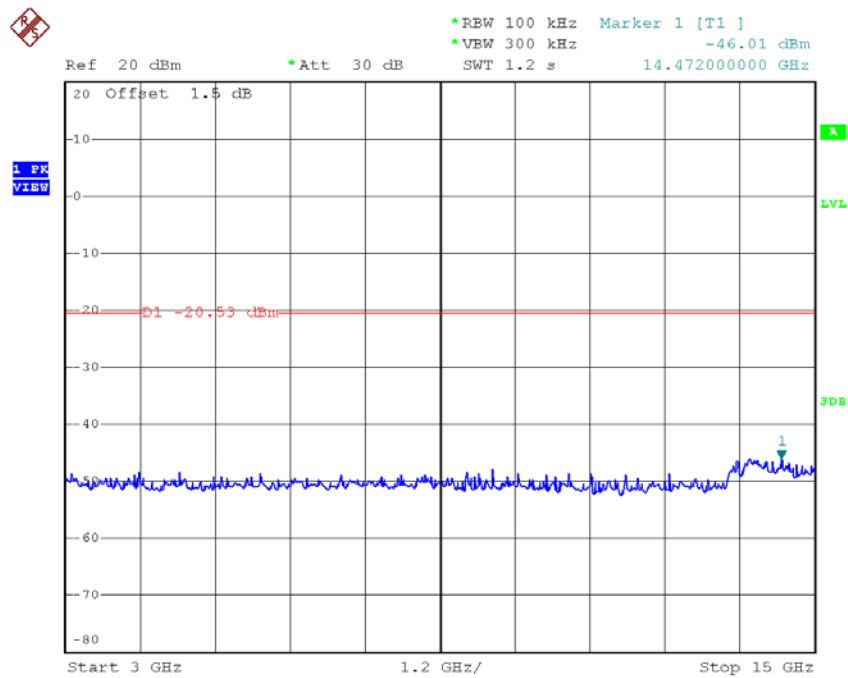


Date: 8.APR.2018 15:25:53

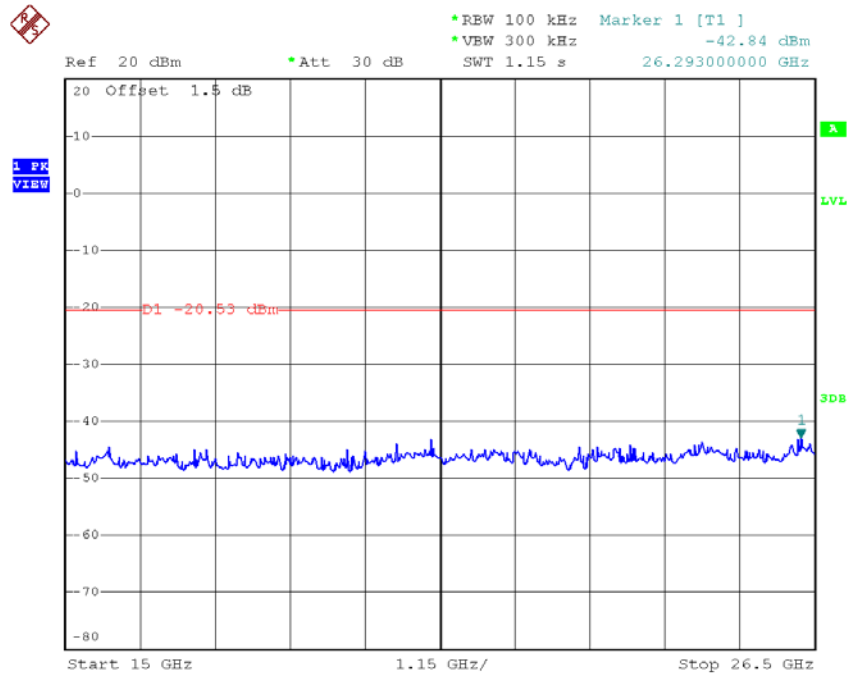
TX B mode CH01 (10 Harmonic of the frequency)



Date: 8.APR.2018 15:18:57

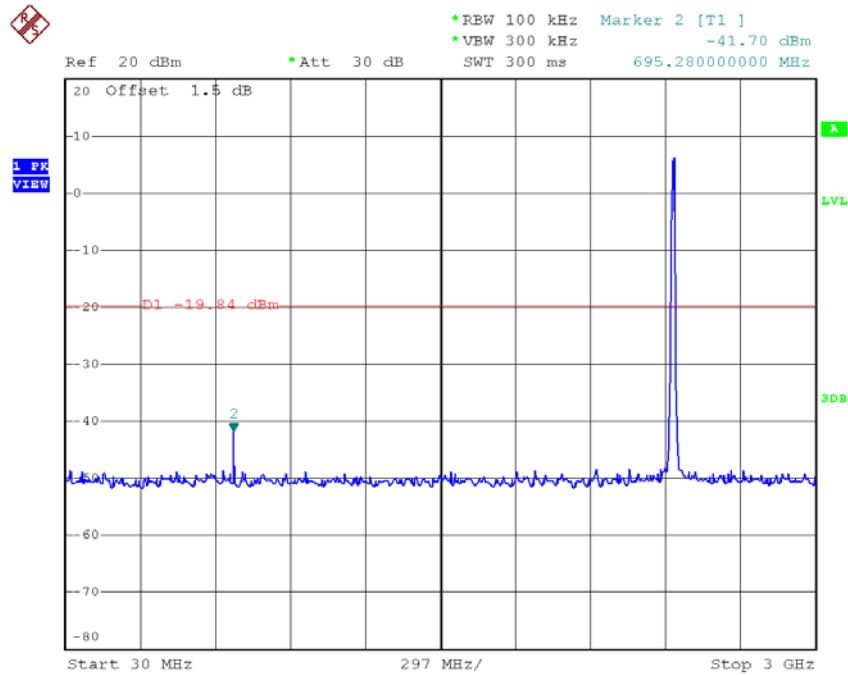


Date: 8.APR.2018 15:19:06

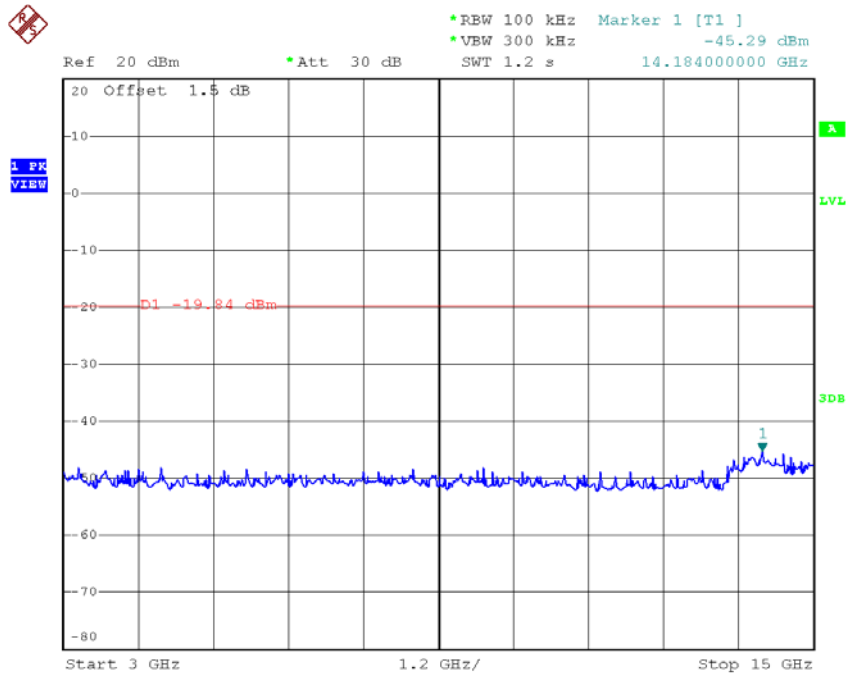


Date: 8.APR.2018 15:19:15

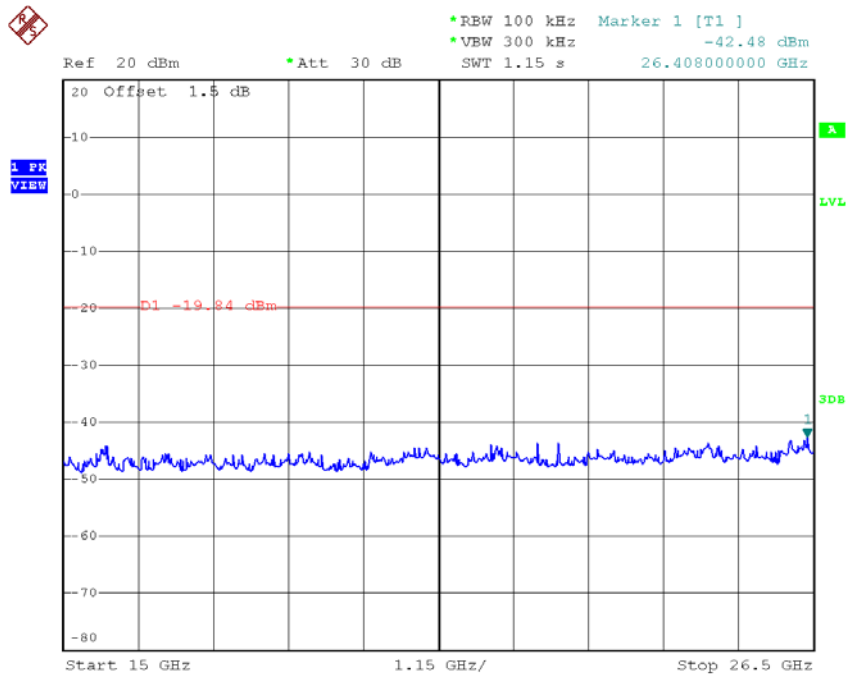
TX B mode CH06 (10 Harmonic of the frequency)



Date: 8.APR.2018 15:22:04

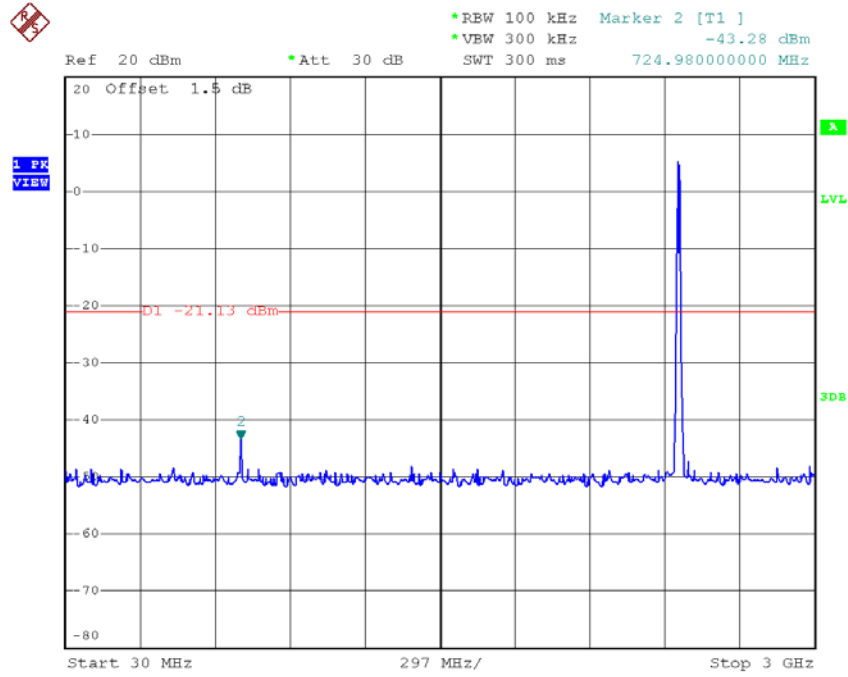


Date: 8.APR.2018 15:22:13

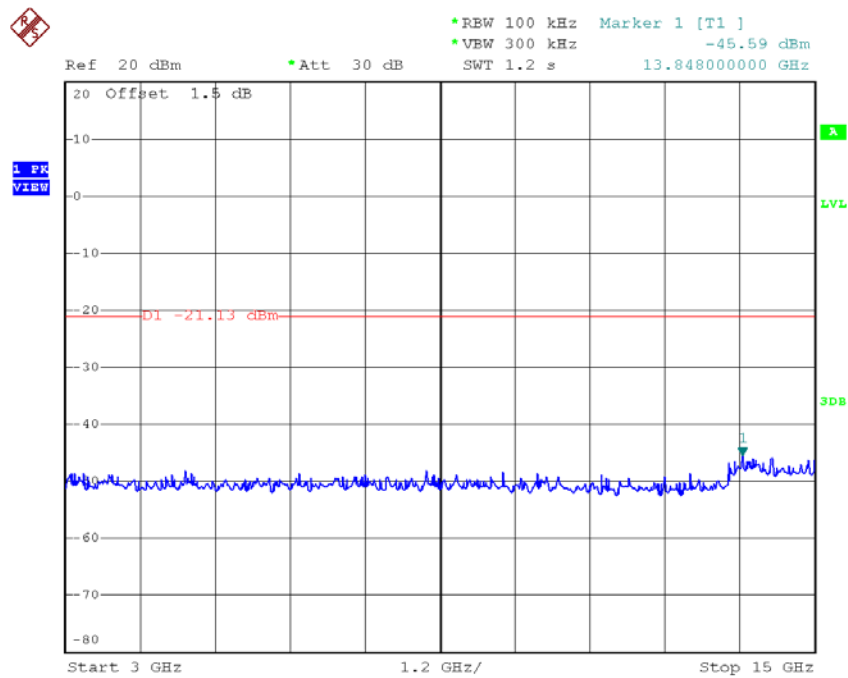


Date: 8.APR.2018 15:22:23

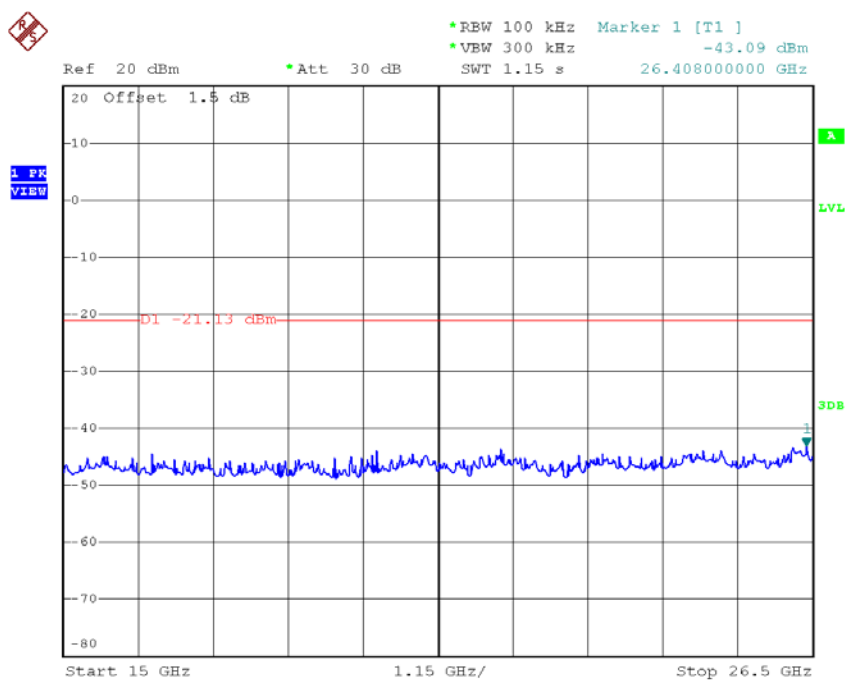
TX B mode CH11 (10 Harmonic of the frequency)



Date: 8.APR.2018 15:26:08



Date: 8.APR.2018 15:26:17



Date: 8.APR.2018 15:26:26