

FCC Radio Test Report

FCC ID: TE7CPE210V32

This report concerns: Original Grant

Project No. : 1908C055
Equipment : 2.4GHz 300Mbps 9dBi Outdoor CPE
Brand Name : tp-link
Test Model : CPE210
Series Model : N/A
Applicant : TP-Link Technologies Co., Ltd.
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Manufacturer : TP-Link Technologies Co., Ltd.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Date of Receipt : Aug. 07, 2019
Date of Test : Aug. 08, 2019 ~ Aug. 21, 2019
Issued Date : Oct. 29, 2019
Report Version : R01
Test Sample : Engineering Sample No.: DG190807117 for conducted, DG190807116 for radiated.
Standard(s) : FCC Part15, Subpart C (15.247)
 ANSI C63.10-2013
 FCC KDB 558074 D01 DTS Meas Guidance v05r02
 FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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



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Declaration

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BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

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

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

Limitation

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

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Sep. 23, 2019
R01	Modified the comments of TCB.	Oct. 29, 2019

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart C (15.247)				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	-----
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----
15.247(a)(2)	Bandwidth	APPENDIX E	PASS	-----
15.247(b)(3)	Maximum Average Output Power	APPENDIX F	PASS	-----
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS	-----
15.247(e)	Power Spectral Density	APPENDIX H	PASS	-----
15.203	Antenna Requirement	-----	PASS	Note(2)

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

1.1 TEST FACILITY

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

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

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

B. Radiated emissions test:

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	4.88
		30MHz ~ 200MHz	H	4.14
		200MHz ~ 1,000MHz	V	4.62
		200MHz ~ 1,000MHz	H	4.80
		1GHz ~ 6GHz	-	4.58
		6GHz ~ 18GHz	-	5.18
		18GHz ~ 26.5GHz	-	3.80
		26.5GHz ~ 40GHz	-	4.30

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

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	25°C	53%	AC 120V/60Hz	Damon Deng
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Bert Xu
Radiated Emissions-30 MHz to 1GHz	24°C	68%	AC 120V/60Hz	Bert Xu
Radiated Emissions-Above 1000 MHz	25°C	60%	AC 120V/60Hz	Bert Xu
Bandwidth	25°C	62%	AC 120V/60Hz	Arvin Zan
Maximum Average output power	25°C	62%	AC 120V/60Hz	Arvin Zan
Conducted Spurious Emissions	25°C	62%	AC 120V/60Hz	Arvin Zan
Power Spectral Density	25°C	62%	AC 120V/60Hz	Arvin Zan

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	2.4GHz 300Mbps 9dBi Outdoor CPE
Brand Name	tp-link
Test Model	CPE210
Series Model	N/A
Model Difference(s)	N/A
Power Source	DC Voltage supplied from PoE adapter.
Power Rating	I/P: 100-240V~ 50/60Hz
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps
Maximum Average Output Power	IEEE 802.11b: 22.18 dBm (0.1653 W) IEEE 802.11g: 25.41 dBm (0.3479 W) IEEE 802.11n (HT20): 24.97 dBm (0.3143 W) IEEE 802.11n (HT40): 18.41 dBm (0.0694 W)

Note:

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

2. Channel List:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n (HT20)							
CH03 - CH09 for IEEE 802.11n (HT40)							
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. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1		N/A	PCB	Weld	8.07
2		N/A	PCB	Weld	9.64

Note:

This EUT supports CDD, and antenna gains are not equal, so Directional gain= $10\log[(10^{G1/20}+10^{G2/20}+...10^{GN/20})^2/N]$ dBi=11.90. For fixed point-to-point operation, the directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. So the average output power limit is $30-[(\text{Directional gain}-6)*1/3]=30-1.97=28.03$, the power spectral density limit is $8-(\text{Directional gain}-6)=8-5.9=2.10$.

4. The worst case for 2TX as follow:

Operating Mode	TX Mode	2TX
IEEE 802.11b		V (Ant. 1+ Ant. 2)
IEEE 802.11g		V (Ant. 1+ Ant. 2)
IEEE 802.11n(HT20)		V (Ant. 1+ Ant. 2)
IEEE 802.11n(HT40)		V (Ant. 1+ Ant. 2)

2.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX G Mode Channel 06
Mode 6	TX B Mode Channel 01/02/06/10/11
Mode 7	TX G Mode Channel 01/02/06/10/11
Mode 8	TX N-20 MHz Mode Channel 01/02/06/10/11
Mode 9	TX N-40 MHz Mode Channel 03/04/06/08/09

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode	Description
Mode 5	TX G Mode Channel 06

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 5	TX G Mode Channel 06

Radiated emissions test - Above 1GHz	
Final Test Mode:	Description
Mode 6	TX B Mode Channel 01/02/06/10/11
Mode 7	TX G Mode Channel 01/02/06/10/11
Mode 8	TX N-20 MHz Mode Channel 01/02/06/10/11
Mode 9	TX N-40 MHz Mode Channel 03/04/06/08/09

Conducted test	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

NOTE:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) For radiated emission below 1 GHz test, the IEEE 802.11g channel 06 is found to be the worst case and recorded.
- (3) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (4) For radiated emission above 1 GHz test, 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.

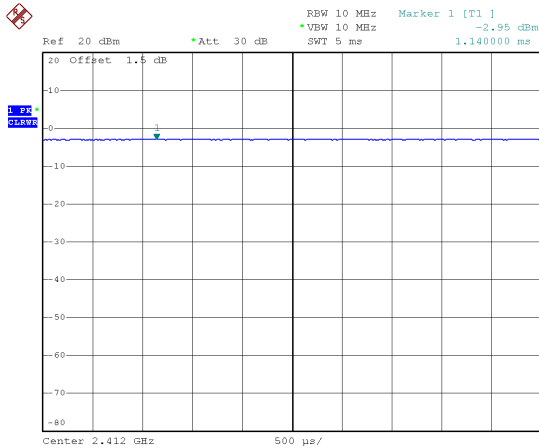
2.3 PARAMETERS OF TEST SOFTWARE

Test Software	cart		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	16.5	17.5	13
IEEE 802.11g	13.5	22	13
IEEE 802.11n (HT20)	13	22	12.5
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	10	13.5	10

2.4 DUTY CYCLE

If duty cycle is $\geq 98\%$, duty factor is not required.
 If duty cycle is $< 98\%$, duty factor shall be considered.
 The output power = measured power + duty factor.

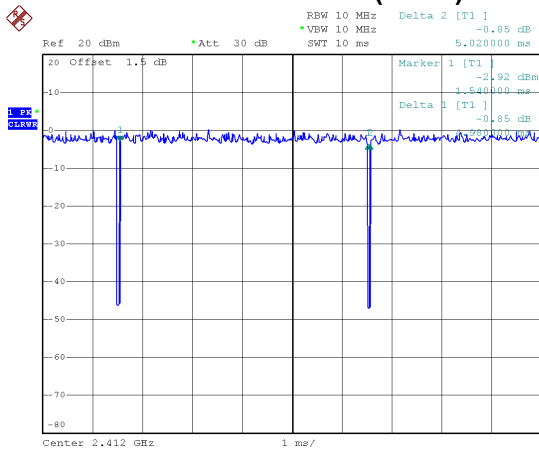
IEEE 802.11b



Date: 10.AUG.2019 14:24:23

Duty cycle = 5.000 ms / 5.000 ms = 100%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$

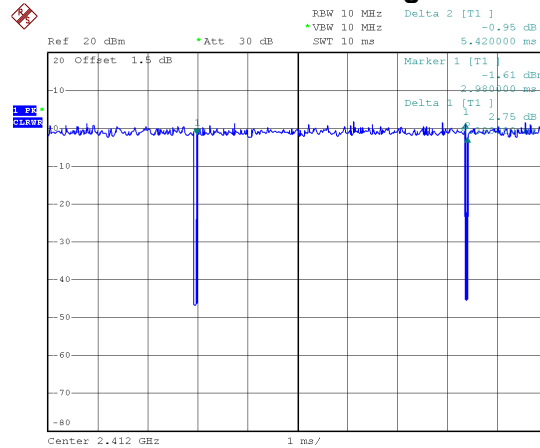
IEEE 802.11n (HT20)



Date: 10.AUG.2019 14:16:05

Duty cycle = 4.980 ms / 5.020 ms = 99.20%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$

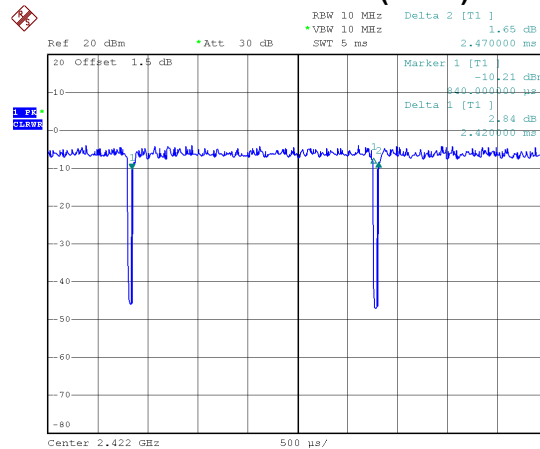
IEEE 802.11g



Date: 10.AUG.2019 14:26:03

Duty cycle = 5.380 ms / 5.420 ms = 99.26%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$

IEEE 802.11n (HT40)



Date: 10.AUG.2019 14:17:19

Duty cycle = 2.420 ms / 2.470 ms = 97.98%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.09$

NOTE:

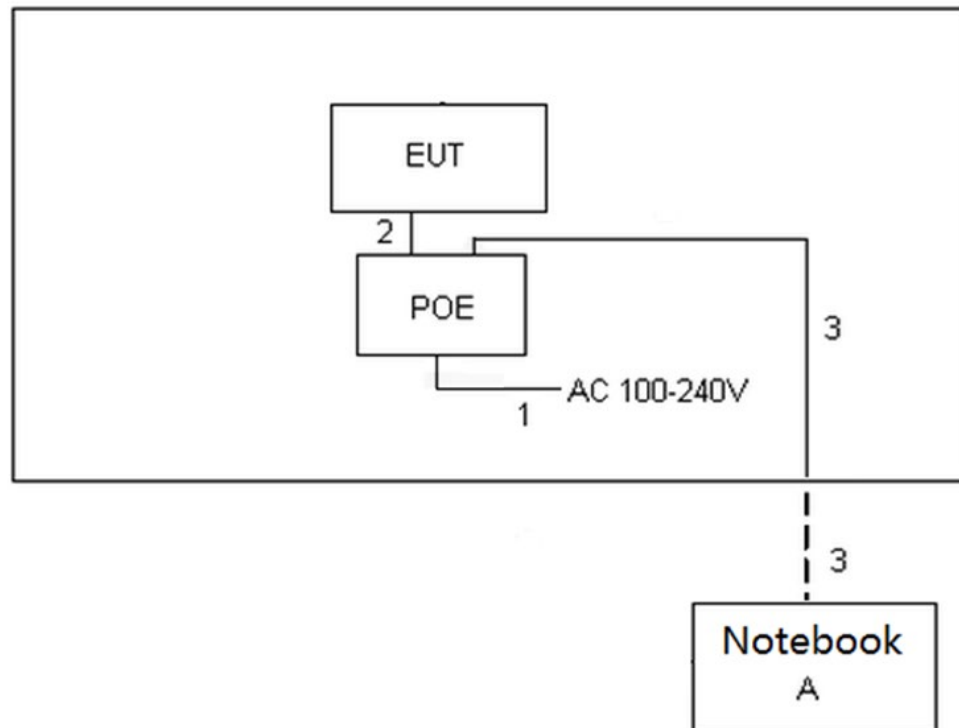
For IEEE 802.11g and IEEE 802.11n (HT20):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle $< 98\%$).

For IEEE 802.11n (HT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle $< 98\%$).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Dell	Inspiron 15-7559	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	AC Cable	NO	NO	1m
2	Network Cable	NO	NO	1m
3	RJ45 Cable	NO	NO	10m

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

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

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

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

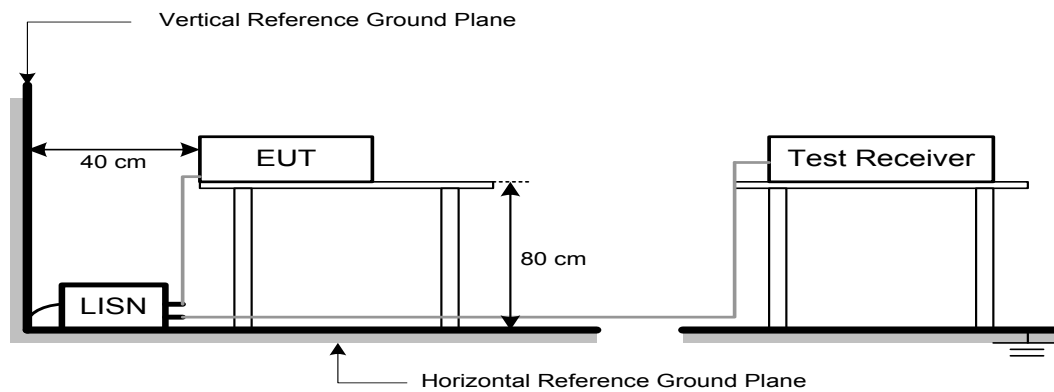
3.2 TEST PROCEDURE

- 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.

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

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

NOTE:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

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

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

4.2 TEST PROCEDURE

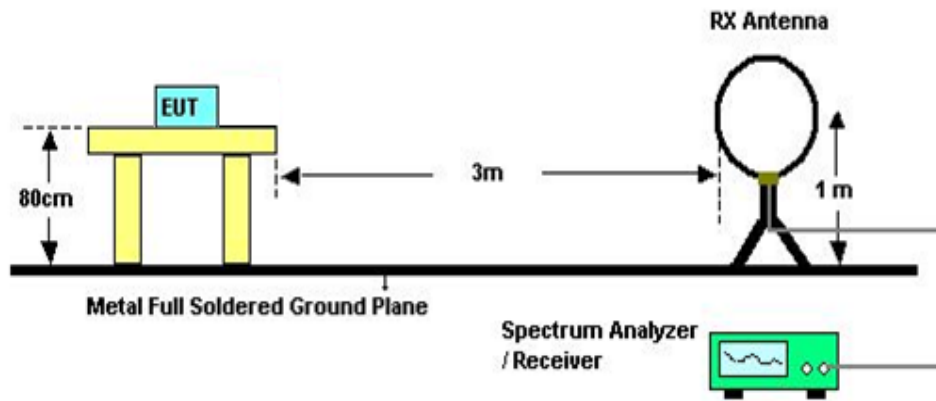
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance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

4.3 DEVIATION FROM TEST STANDARD

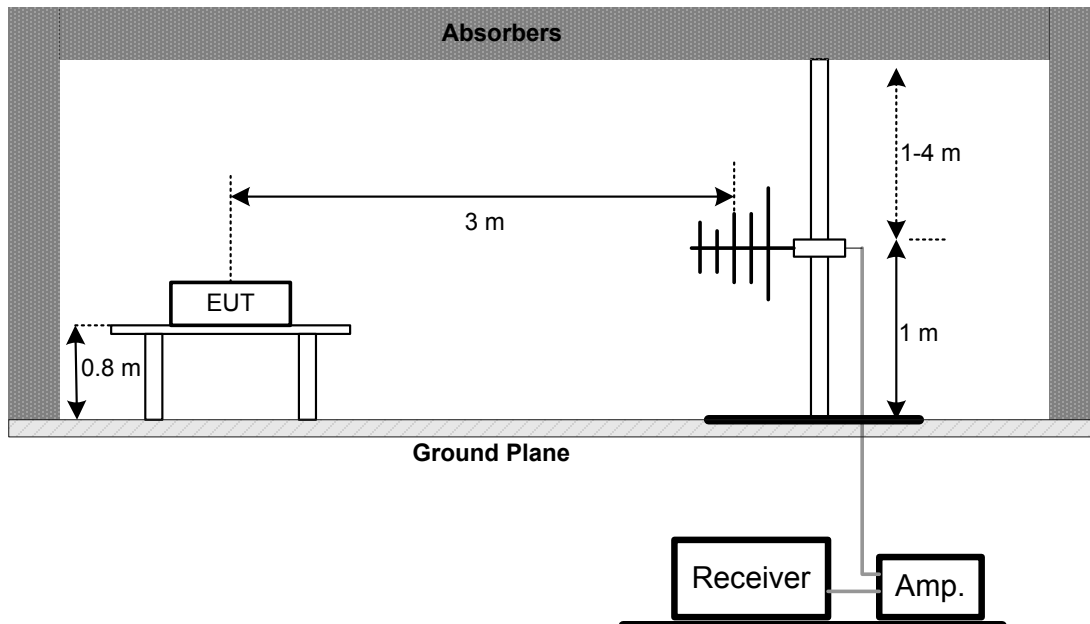
No deviation

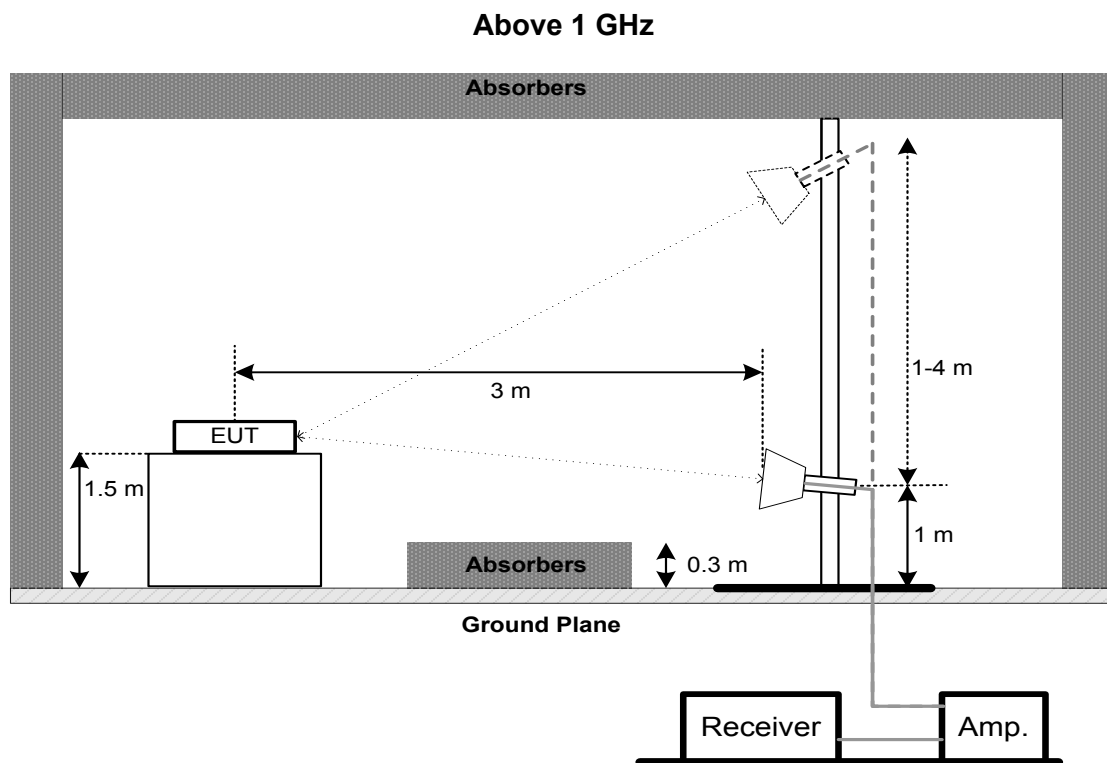
4.4 TEST SETUP

9 kHz-30 MHz



30 MHz to 1 GHz





4.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B

Remark:

- (1) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

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

5. BANDWIDTH TEST

5.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(a)(2)	6 dB Bandwidth	Minimum 500 kHz
	99% Emission Bandwidth	-

5.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- For 6dB Bandwidth Spectrum setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.
For 99% OBW Spectrum Setting: For B,G,N20 mode: RBW= 300KHz, VBW=1MHz, For N40 mode: RBW= 1MHz, VBW=3MHz, Sweep time = 2.5 ms.
- The bandwidth was performed in accordance with method 11.8.1 of ANSI C63.10-2013.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS

Please refer to the APPENDIX E.

6. MAXIMUM AVERAGE OUTPUT POWER TEST

6.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(b)(3)	Maximum Average Output Power	1 Watt or 30dBm

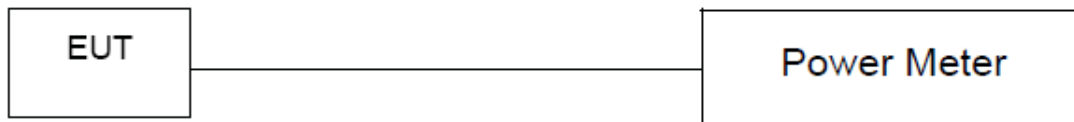
6.2 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.2.3.1 of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. CONDUCTED SPURIOUS EMISSIONS

7.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required.

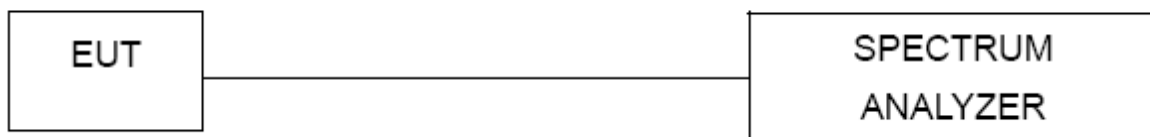
7.2 TEST PROCEDURE

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

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX G.

8. POWER SPECTRAL DENSITY TEST

8.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)

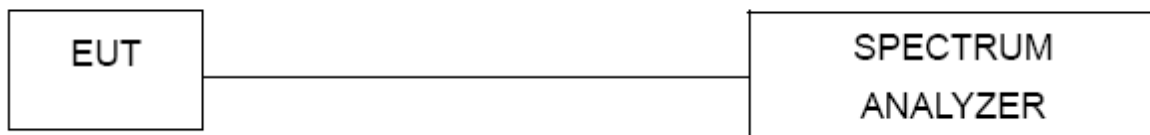
8.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting: RBW=3 kHz, VBW=10 kHz, Sweep time = Auto.
- The Power Spectral Density was performed in accordance with method 11.10.2 of ANSI C63.10-2013.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX H.

9. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 10, 2020
2	LISN	EMCO	3816/2	52765	Mar. 10, 2020
3	50ohm Terminator	SHX	TF5-3	15041305	Mar. 10, 2020
4	Artificial-Mains Network	Schwarzbeck	NSLK 8127	8127685	Mar. 10, 2020
5	TRANSIENT LIMITER	EM	EM-7600	772	Mar. 10, 2020
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	Cable	N/A	RG223	12m	Mar. 12, 2020

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Jan. 15, 2020
2	Cable	N/A	RG 213/U	C-102	May 31, 2020
3	EMI Test Receiver	R&S	ESCI	100895	Mar. 10, 2020
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2020
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	May 24, 2020
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 09, 2020
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02333	Mar. 10, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 10, 2020
5	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	B10-01-01-12M	18072744	Jun. 29, 2020
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth & Antenna Conducted Spurious Emissions & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 03, 2020

Maximum Average Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 03, 2020
2	Wideband power sensor	Keysight	N1923A	MY58310004	Aug. 03, 2020

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

"*" calibration period of equipment list is three year.

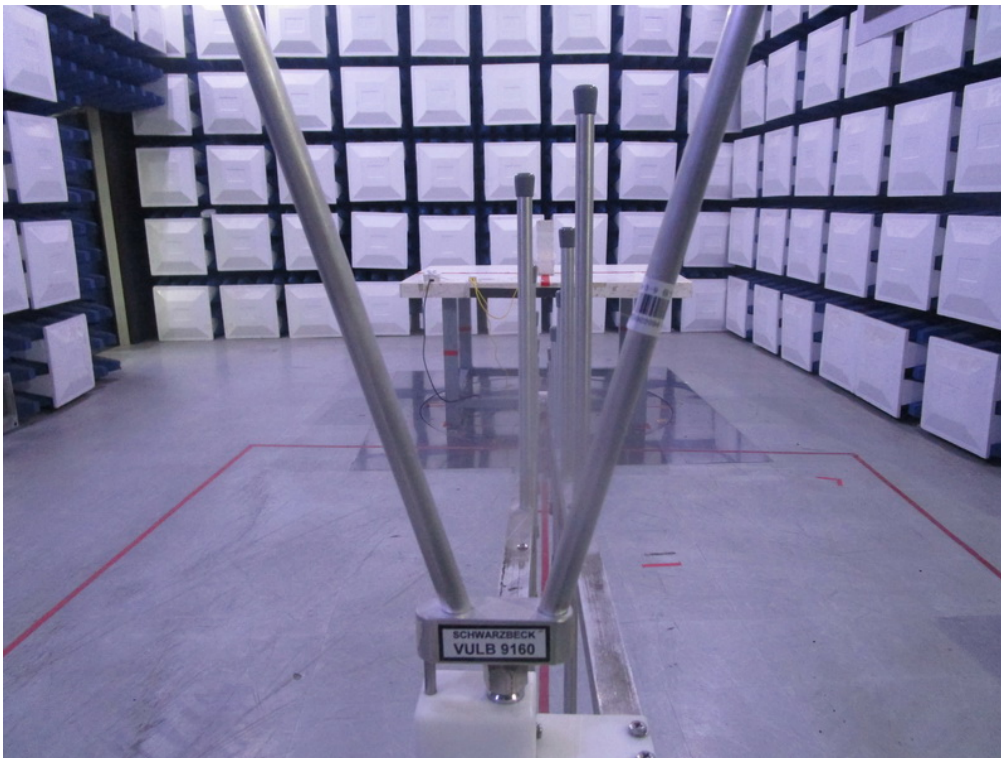
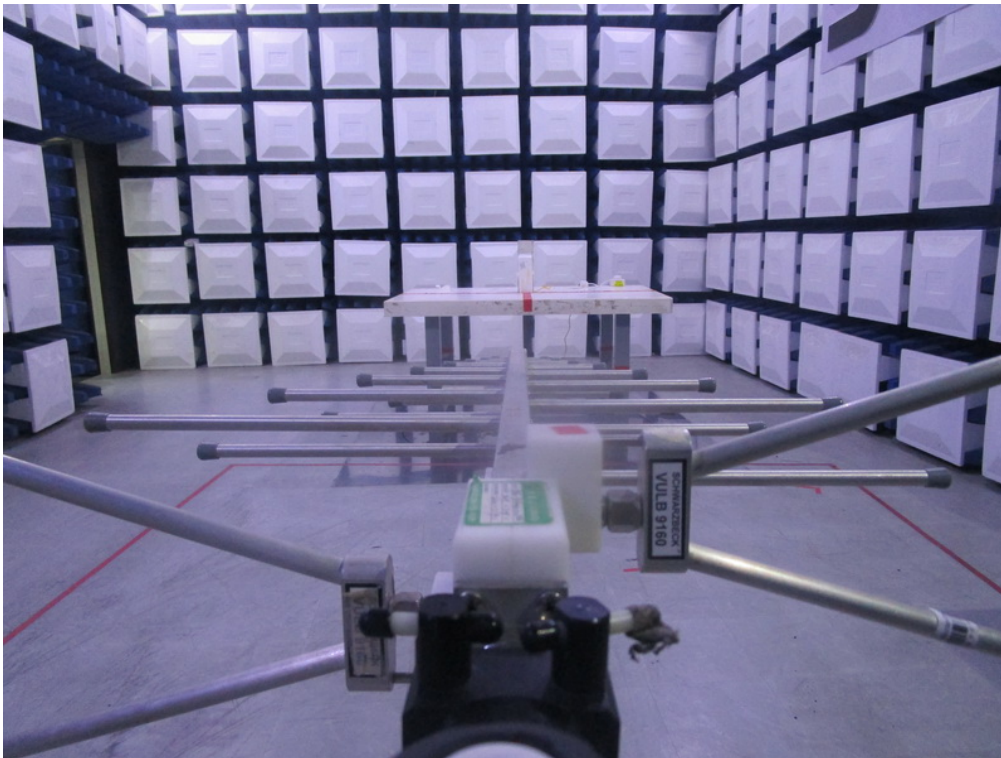
Except * item, all calibration period of equipment list is one year.

10. EUT TEST PHOTO**AC Power Line Conducted Emissions Test Photos**

Radiated Emissions Test Photos**9 kHz to 30 MHz**

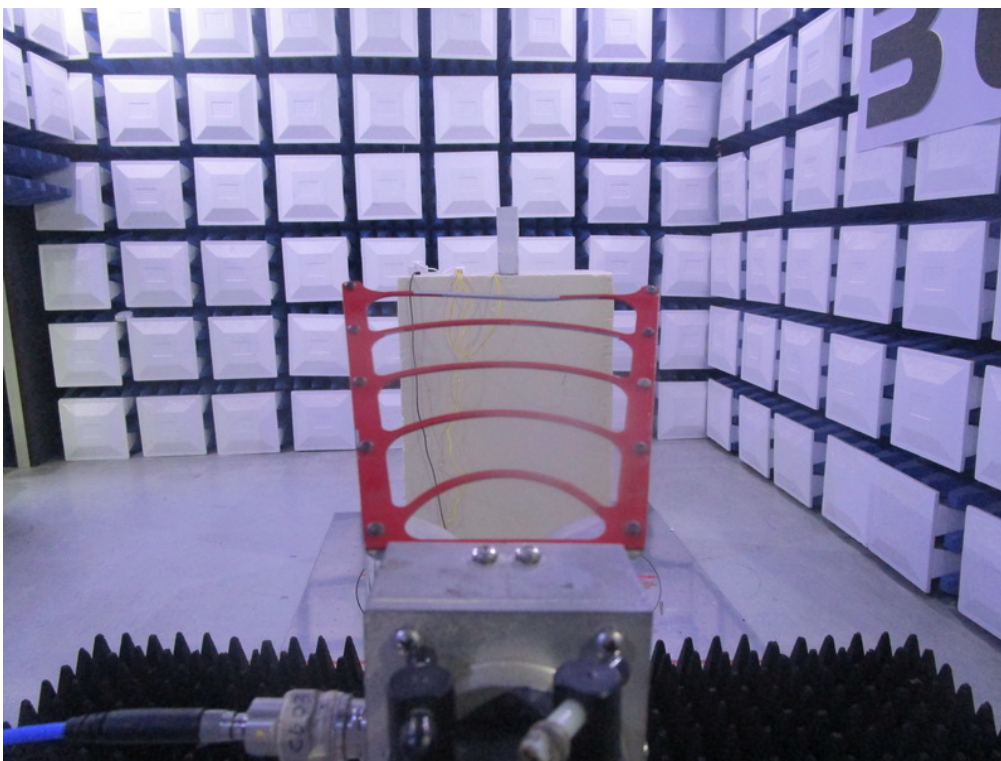
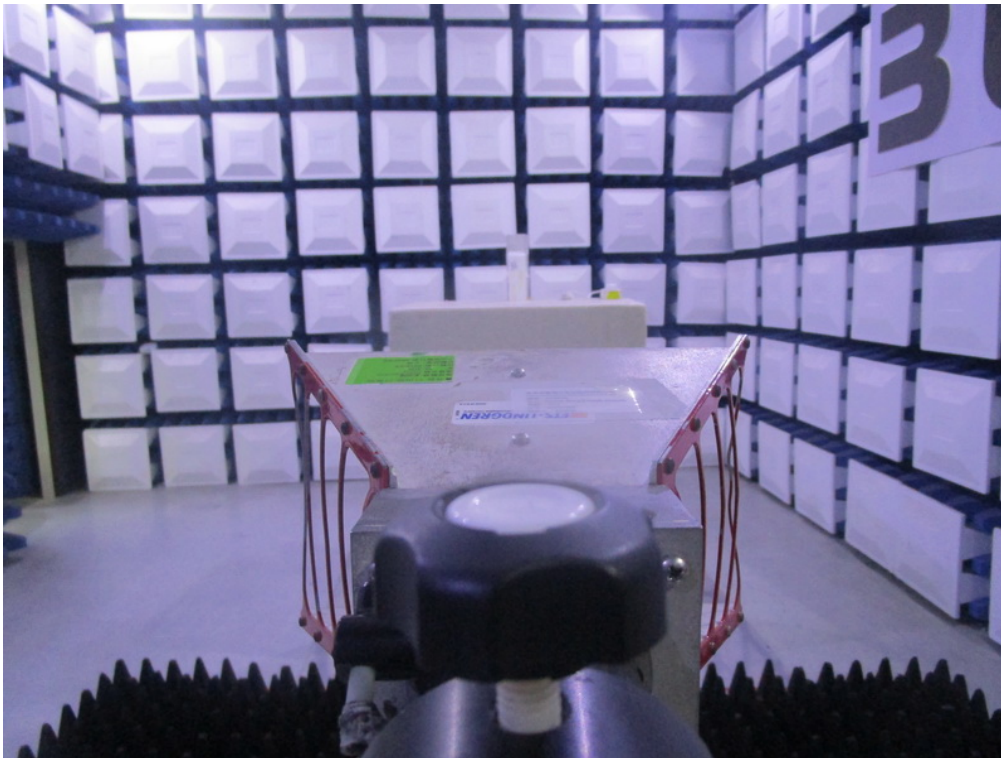
Radiated Emissions Test Photos

30 MHz to 1 GHz



Radiated Emissions Test Photos

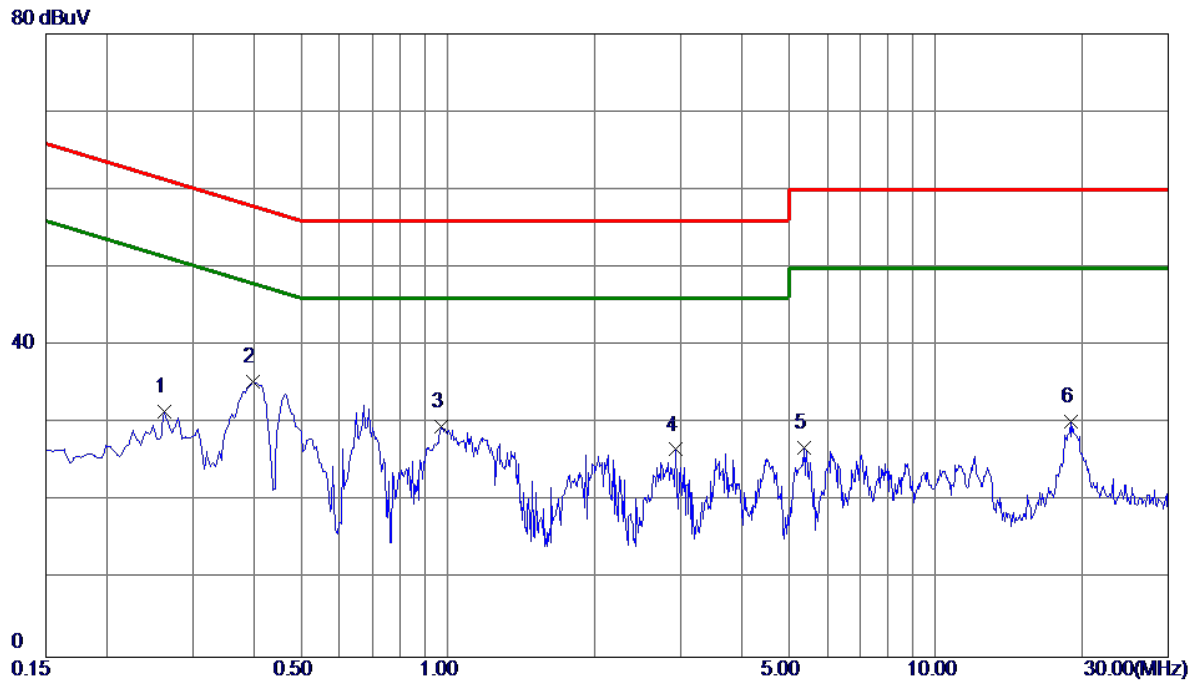
Above 1 GHz



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX G Mode Channel 06

Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.2625	21.68	9.83	31.51	61.35	-29.84	Peak	
2 *	0.3975	25.47	9.87	35.34	57.91	-22.57	Peak	
3	0.9690	19.62	9.92	29.54	56.00	-26.46	Peak	
4	2.9400	16.58	10.06	26.64	56.00	-29.36	Peak	
5	5.3745	16.73	10.22	26.95	60.00	-33.05	Peak	
6	18.9150	19.13	11.09	30.22	60.00	-29.78	Peak	

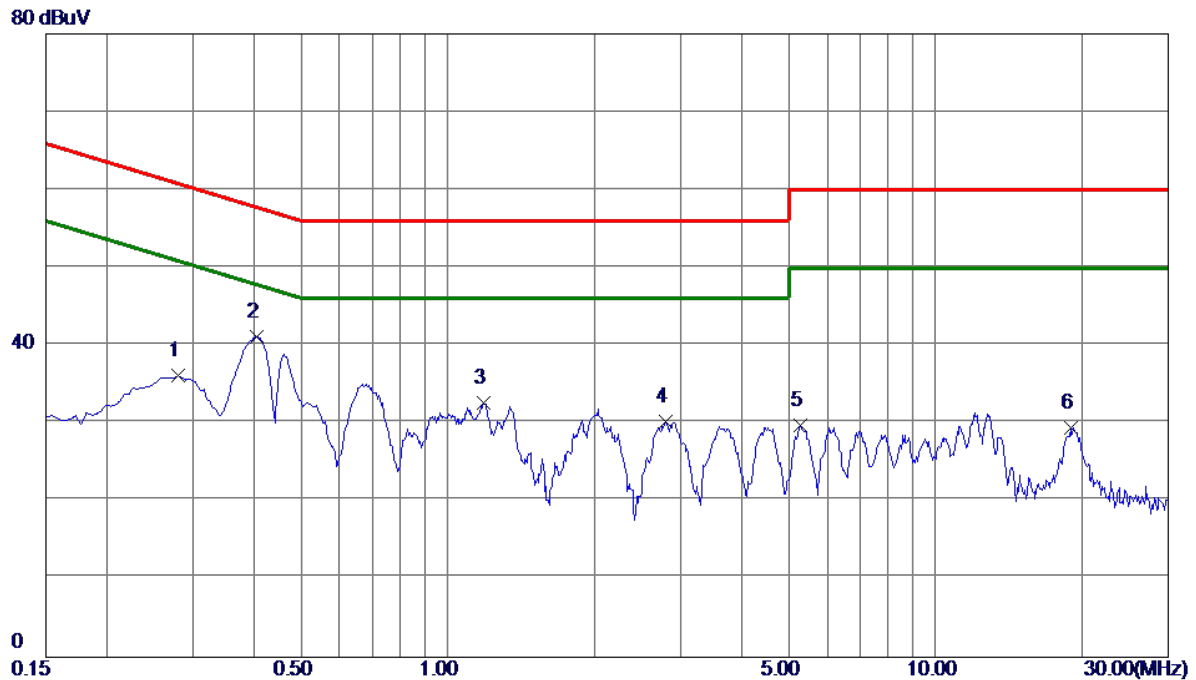
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode Channel 06

Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.2805	26.15	9.94	36.09	60.80	-24.71	Peak	
2 *	0.4065	31.10	10.01	41.11	57.72	-16.61	Peak	
3	1.1849	22.44	10.13	32.57	56.00	-23.43	Peak	
4	2.8005	20.04	10.24	30.28	56.00	-25.72	Peak	
5	5.2845	19.32	10.43	29.75	60.00	-30.25	Peak	
6	18.9150	18.05	11.39	29.44	60.00	-30.56	Peak	

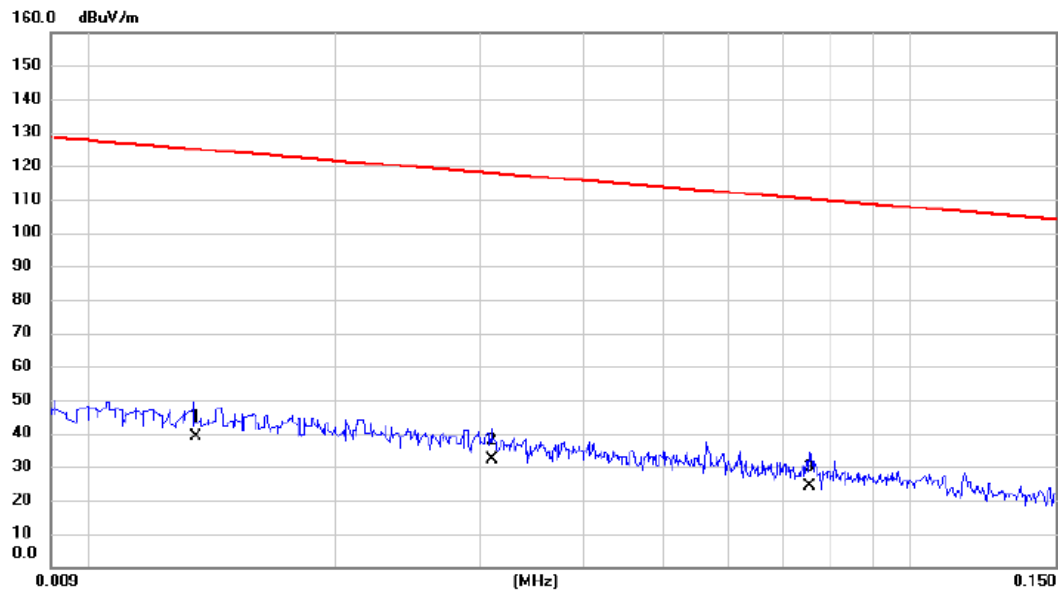
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode: TX G Mode Channel 06

Ant 0°



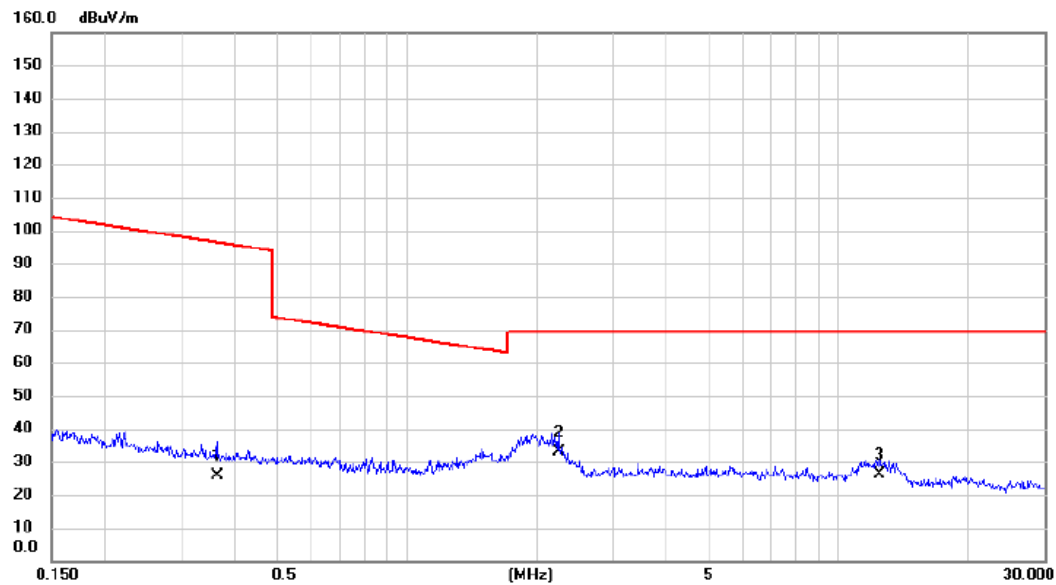
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0135	38.97	0.02	38.99	125.00	-86.01	AVG	
2	*	0.0310	32.09	0.02	32.11	117.78	-85.67	AVG	
3		0.0755	24.16	0.03	24.19	110.05	-85.86	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode Channel 06

Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3634	25.87	0.06	25.93	96.40	-70.47	AVG	
2	*	2.2486	32.73	0.12	32.85	69.54	-36.69	QP	
3		12.4495	26.04	0.25	26.29	69.54	-43.25	QP	

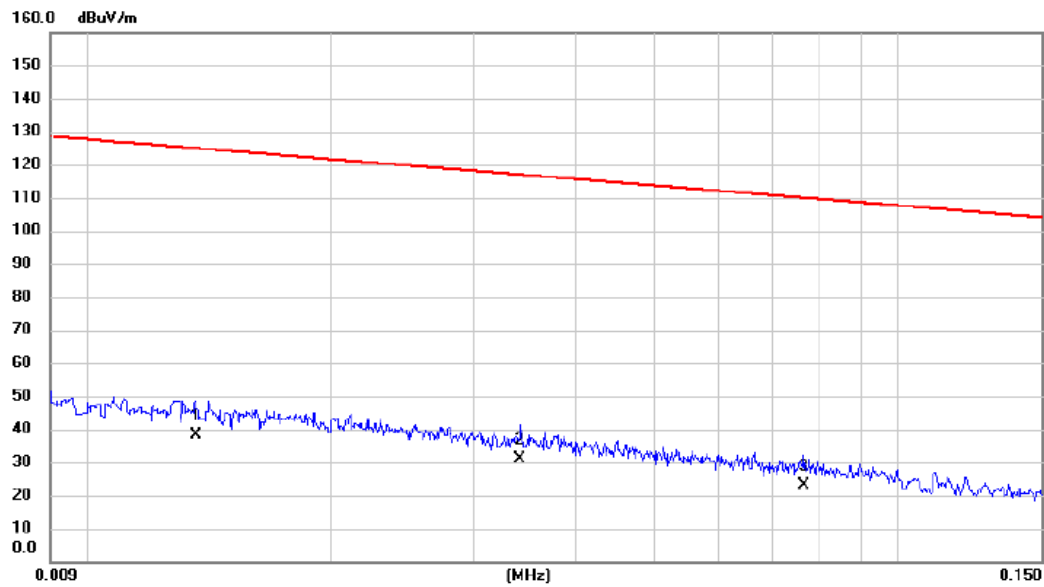
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode Channel 06

Ant 90°



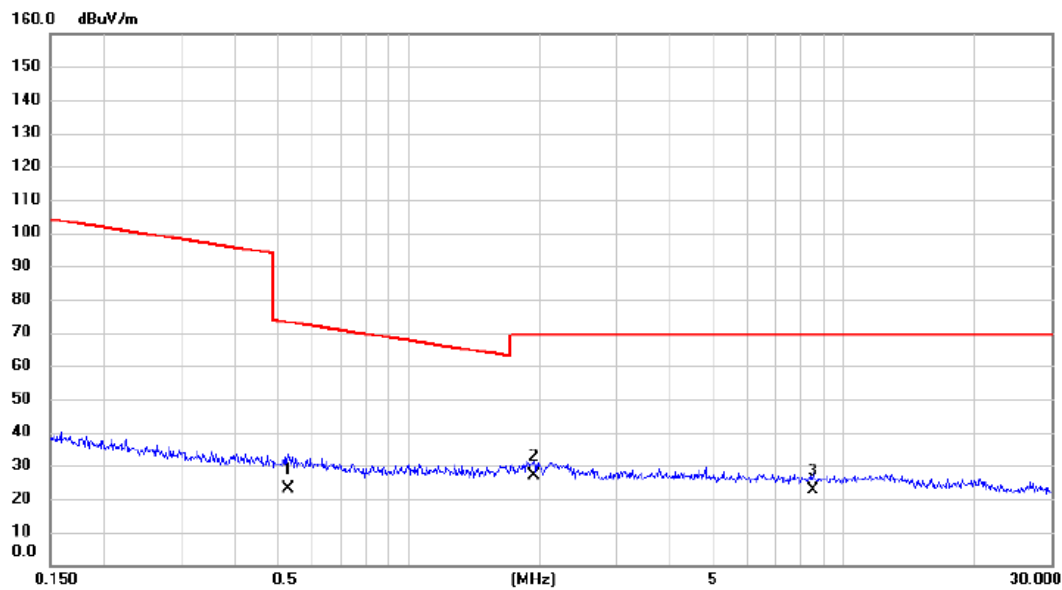
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.0136	38.19	0.02	38.21	124.93	-86.72	AVG	
2 *	0.0342	30.84	0.03	30.87	116.92	-86.05	AVG	
3	0.0764	23.06	0.03	23.09	109.94	-86.85	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode Channel 06

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.5293	22.81	0.06	22.87	73.13	-50.26	AVG	
2	*	1.9386	27.04	0.11	27.15	69.54	-42.39	QP	
3		8.5011	22.51	0.21	22.72	69.54	-46.82	QP	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

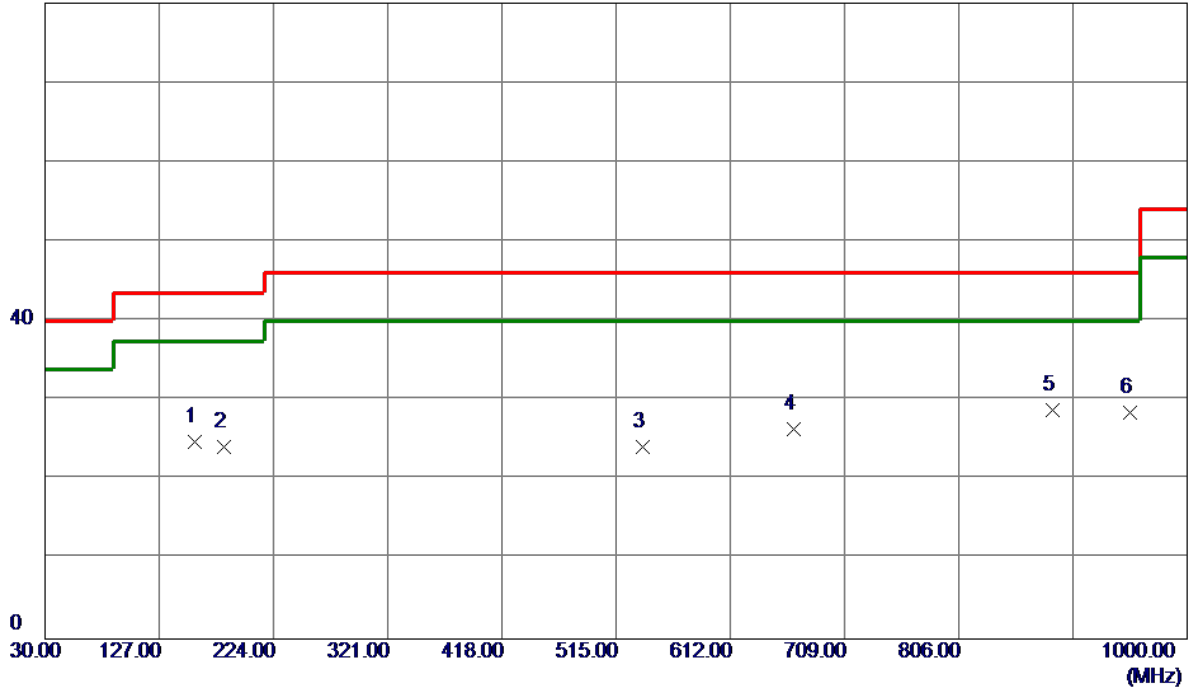
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode: TX G 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	157.0700	36.17	-11.38	24.79	43.50	-18.71	Peak	
2	182.2899	37.65	-13.44	24.21	43.50	-19.29	Peak	
3	537.7950	31.42	-7.32	24.10	46.00	-21.90	Peak	
4	666.3200	30.79	-4.46	26.33	46.00	-19.67	Peak	
5 *	886.0250	30.88	-2.04	28.84	46.00	-17.16	Peak	
6	951.9850	29.24	-0.74	28.50	46.00	-17.50	Peak	

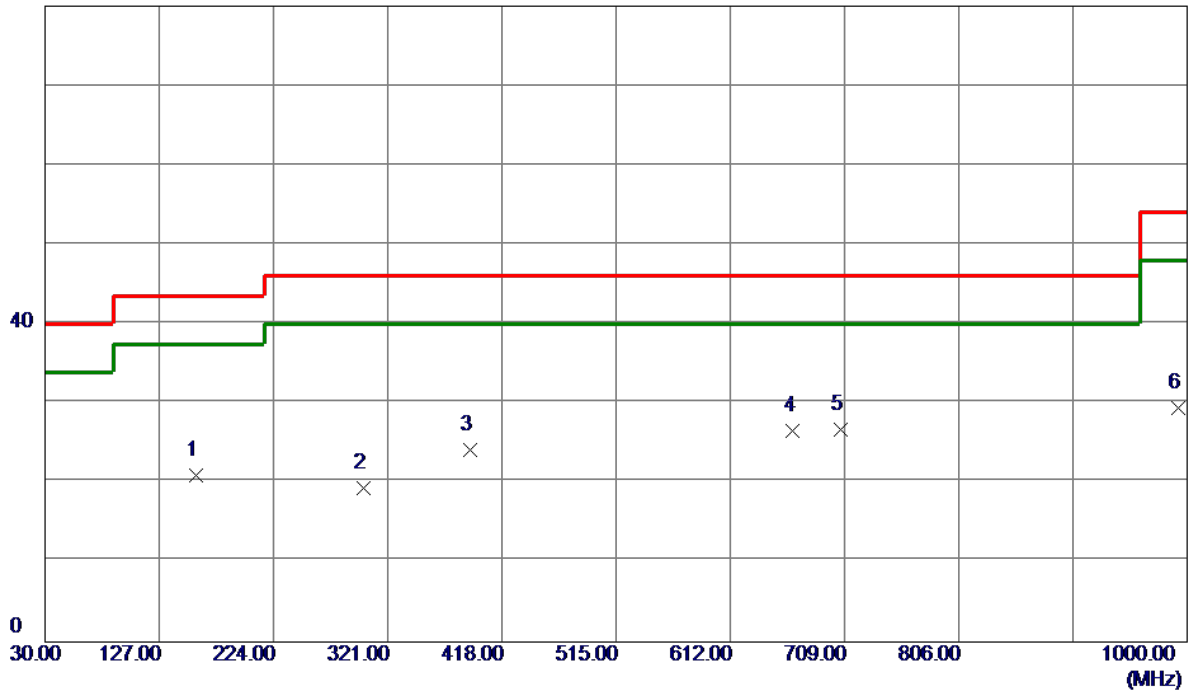
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G 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	158.0399	32.20	-11.25	20.95	43.50	-22.55	Peak	
2	300.6300	30.88	-11.47	19.41	46.00	-26.59	Peak	
3	390.8400	33.80	-9.69	24.11	46.00	-21.89	Peak	
4	665.3500	30.96	-4.47	26.49	46.00	-19.51	Peak	
5 *	706.0900	30.73	-3.97	26.76	46.00	-19.24	Peak	
6	992.7250	29.54	-0.05	29.49	54.00	-24.51	Peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

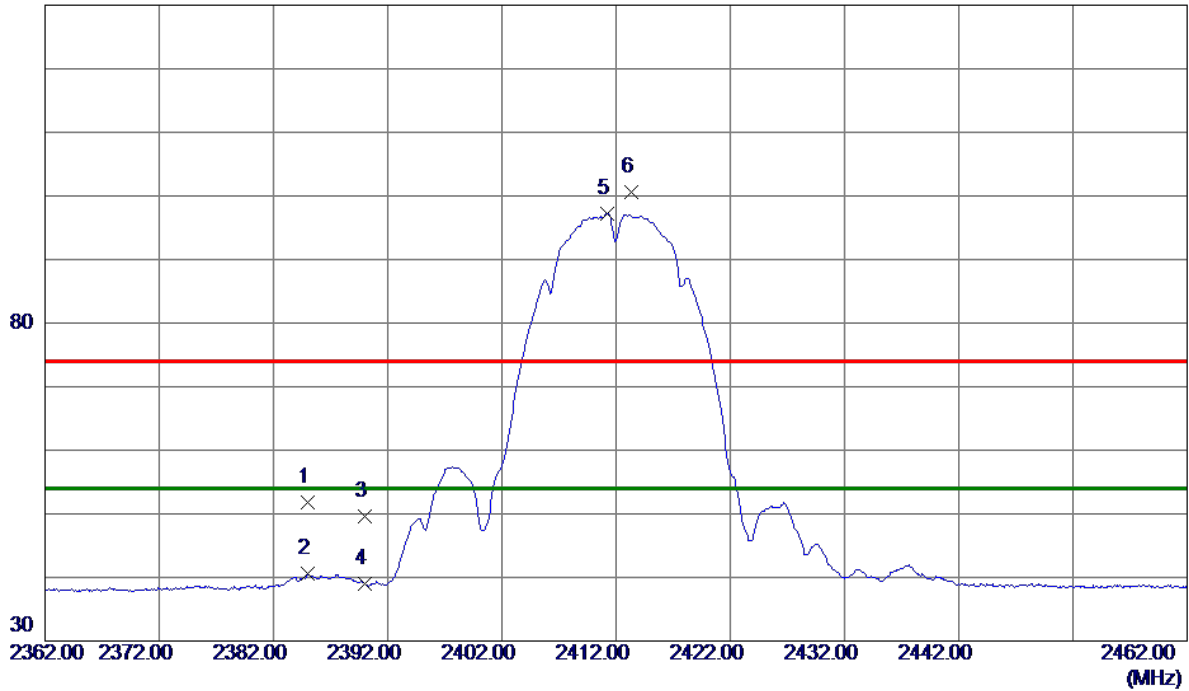
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Test Mode: TX B Mode 2412 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2385.0000	44.20	7.55	51.75	74.00	-22.25	Peak	
2	2385.0000	32.97	7.55	40.52	54.00	-13.48	AVG	
3	2390.0000	42.09	7.56	49.65	74.00	-24.35	Peak	
4	2390.0000	31.43	7.56	38.99	54.00	-15.01	AVG	
5 *	2411.2000	89.52	7.64	97.16	54.00	43.16	AVG	No Limit
6	2413.3000	92.92	7.64	100.56	74.00	26.56	Peak	No Limit

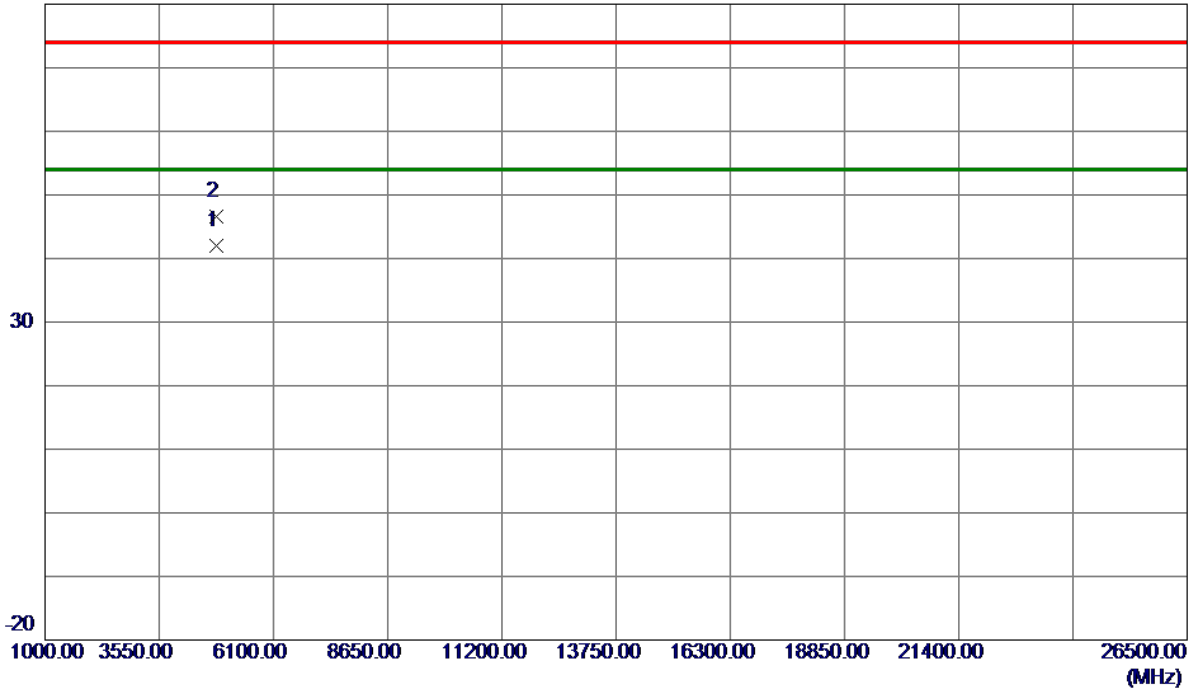
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX B Mode 2412 MHz
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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 *	4823.9990	37.69	4.26	41.95	54.00	-12.05	AVG	
2	4824.1589	42.26	4.26	46.52	74.00	-27.48	Peak	

REMARKS:

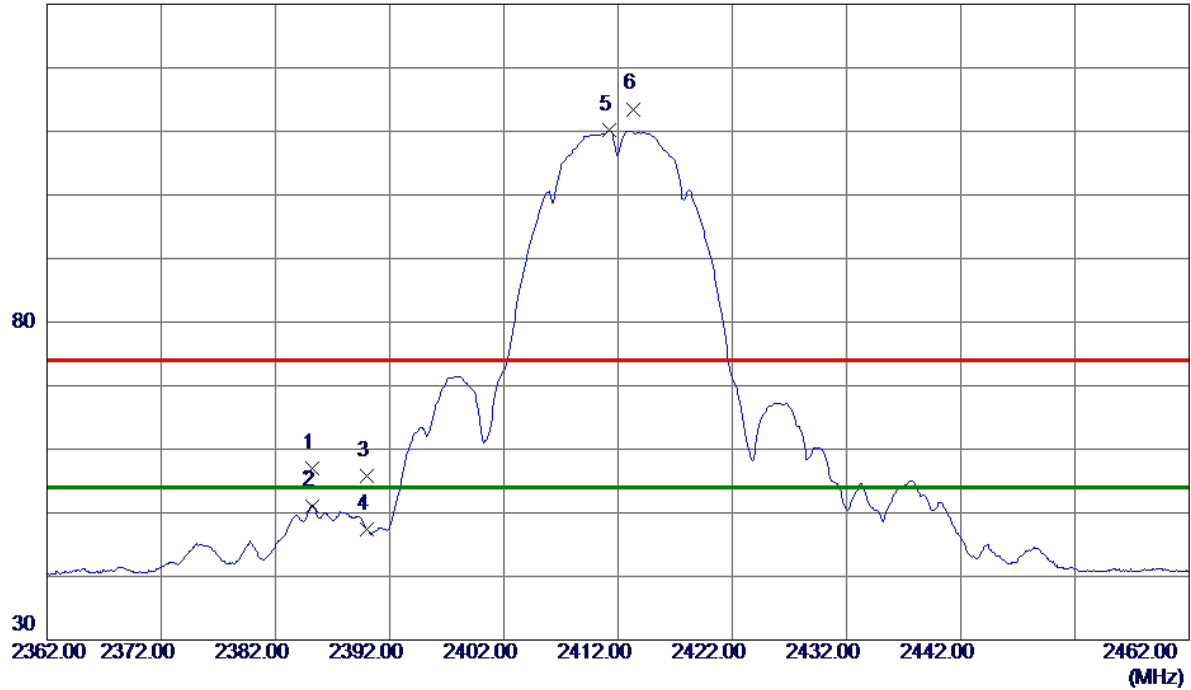
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2412 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2385.2000	49.48	7.55	57.03	74.00	-16.97	Peak	
2	2385.2000	43.55	7.55	51.10	54.00	-2.90	AVG	
3	2390.0000	48.20	7.56	55.76	74.00	-18.24	Peak	
4	2390.0000	39.84	7.56	47.40	54.00	-6.60	AVG	
5 *	2411.2500	102.48	7.64	110.12	54.00	56.12	AVG	No Limit
6	2413.3500	105.86	7.64	113.50	74.00	39.50	Peak	No Limit

REMARKS:

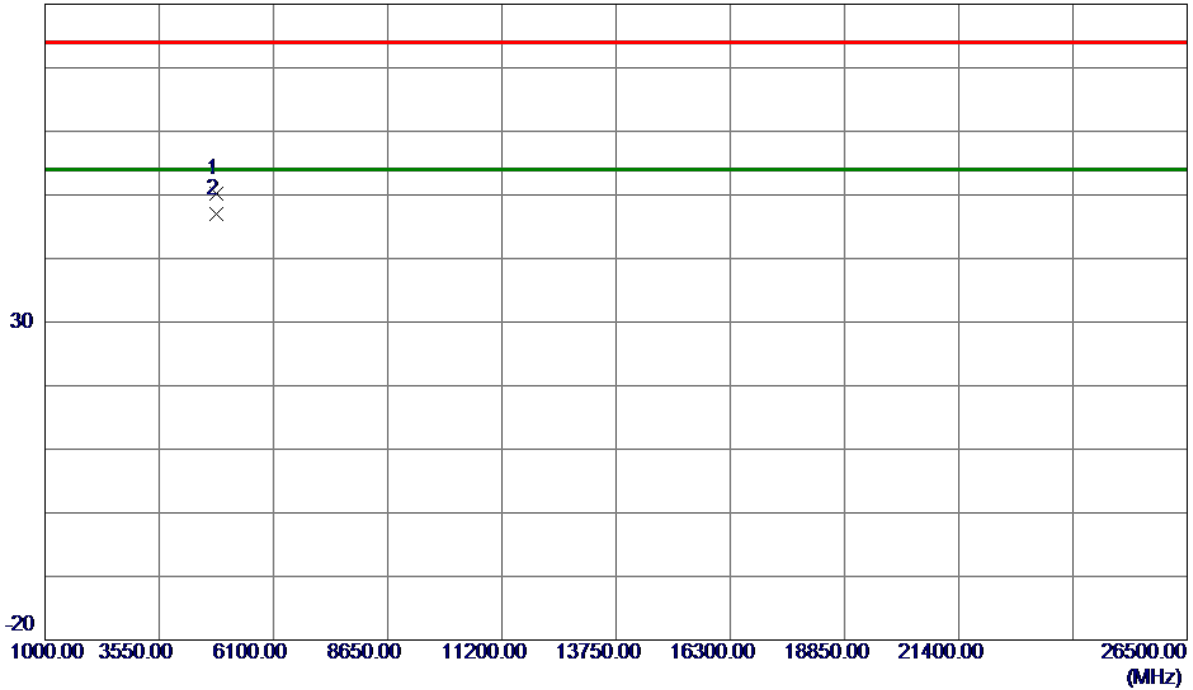
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2412 MHz

Horizontal

80 dBuV/m



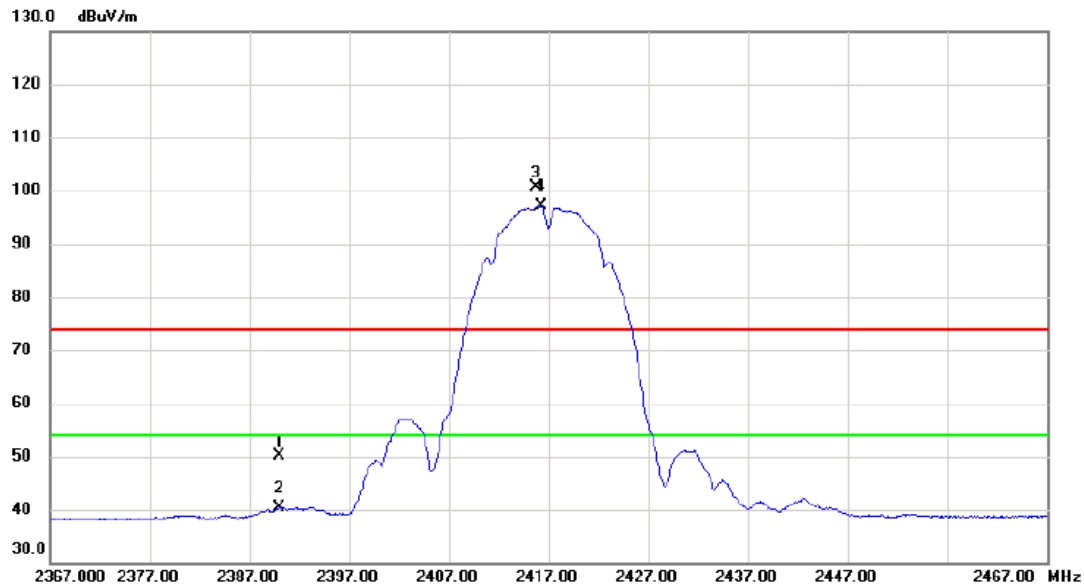
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.8220	45.87	4.25	50.12	74.00	-23.88	Peak	
2 *	4824.0059	42.81	4.26	47.07	54.00	-6.93	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2417 MHz

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	42.67	7.57	50.24	74.00	-23.76	peak	
2		2390.000	32.92	7.57	40.49	54.00	-13.51	AVG	
3	X	2415.700	92.90	7.65	100.55	74.00	26.55	peak	No Limit
4	*	2416.250	89.35	7.66	97.01	54.00	43.01	AVG	No Limit

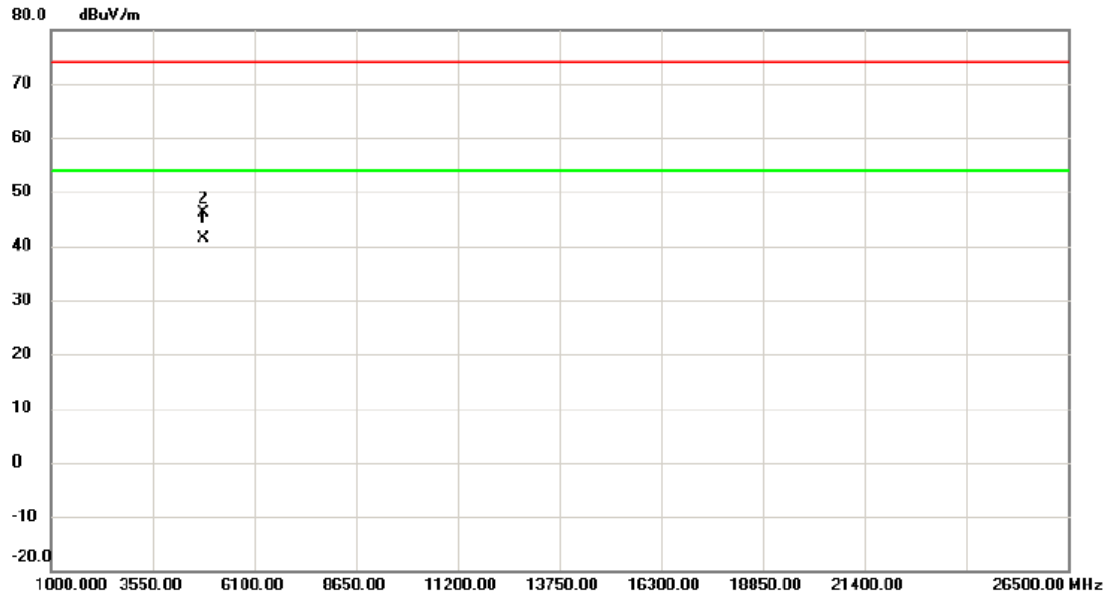
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2417 MHz

Vertical



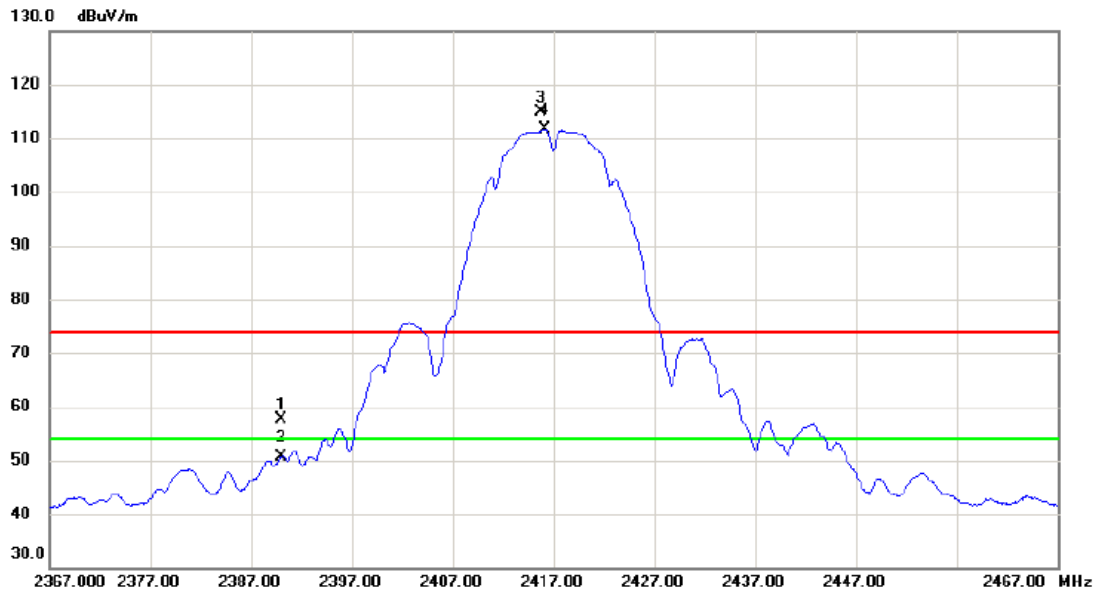
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4833.949	37.02	4.29	41.31	54.00	-12.69	AVG	
2		4834.024	41.81	4.29	46.10	74.00	-27.90	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2417 MHz

Horizontal



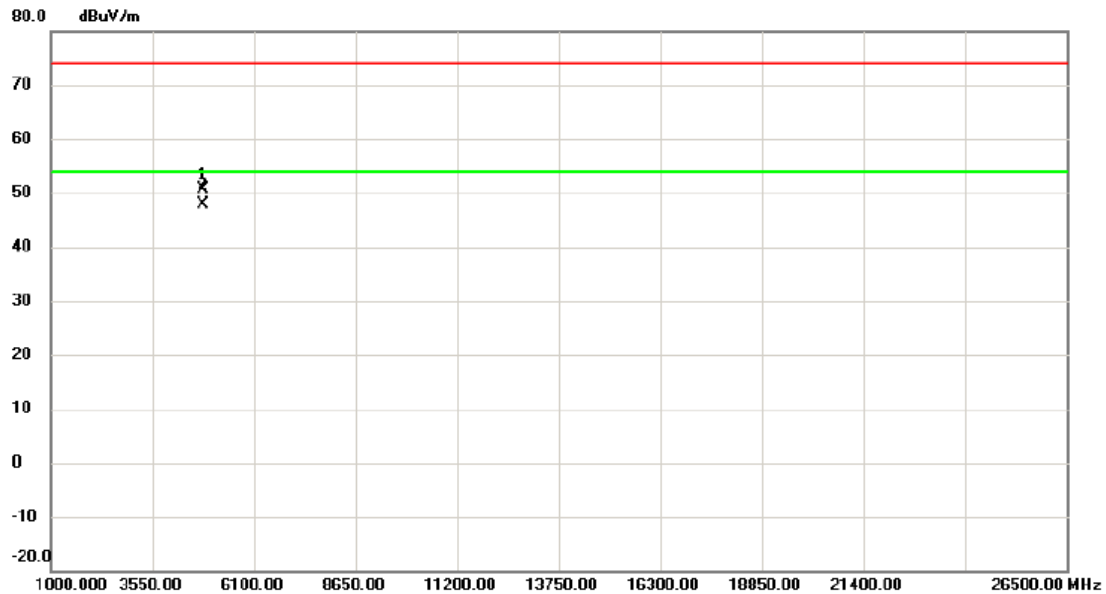
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	50.13	7.57	57.70	74.00	-16.30	peak	
2		2390.000	43.09	7.57	50.66	54.00	-3.34	AVG	
3	X	2415.750	107.34	7.65	114.99	74.00	40.99	peak	No Limit
4	*	2416.200	104.09	7.66	111.75	54.00	57.75	AVG	No Limit

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2417 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4834.002	46.25	4.29	50.54	74.00	-23.46	peak	
2	*	4834.007	43.55	4.29	47.84	54.00	-6.16	AVG	

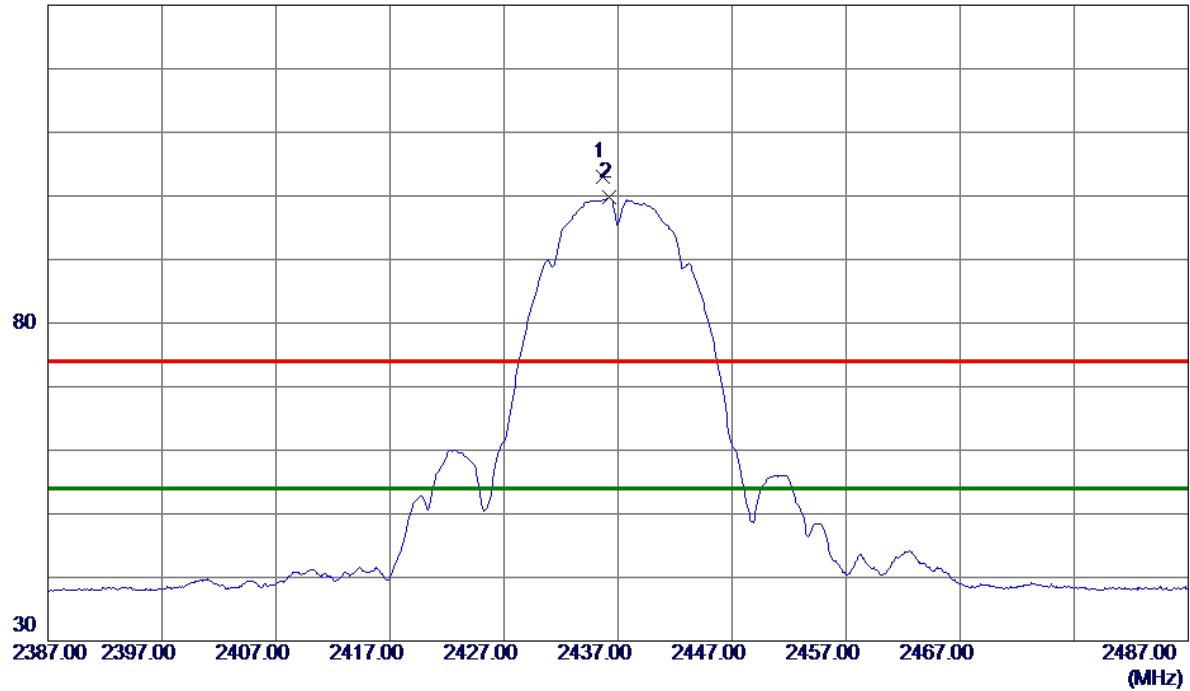
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.6500	95.31	7.72	103.03	74.00	29.03	Peak	No Limit
2 *	2436.2500	92.03	7.72	99.75	54.00	45.75	AVG	No Limit

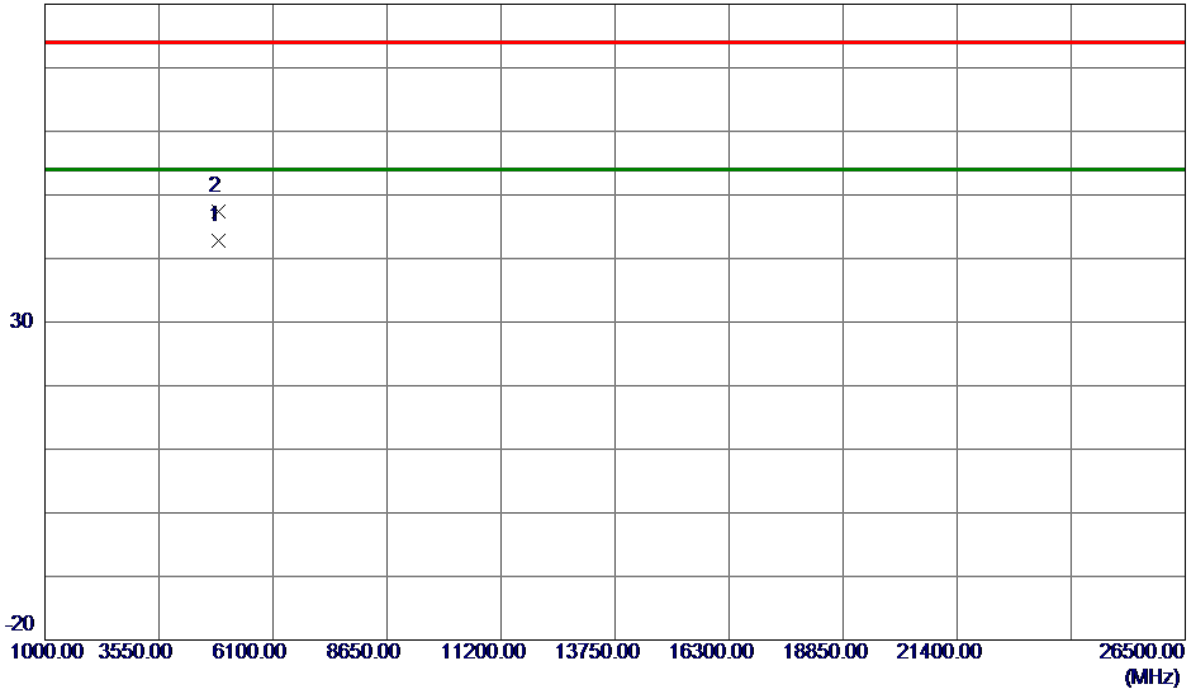
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX B Mode 2437 MHz
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Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0000	38.31	4.44	42.75	54.00	-11.25	AVG	
2	4874.0770	42.93	4.44	47.37	74.00	-26.63	Peak	

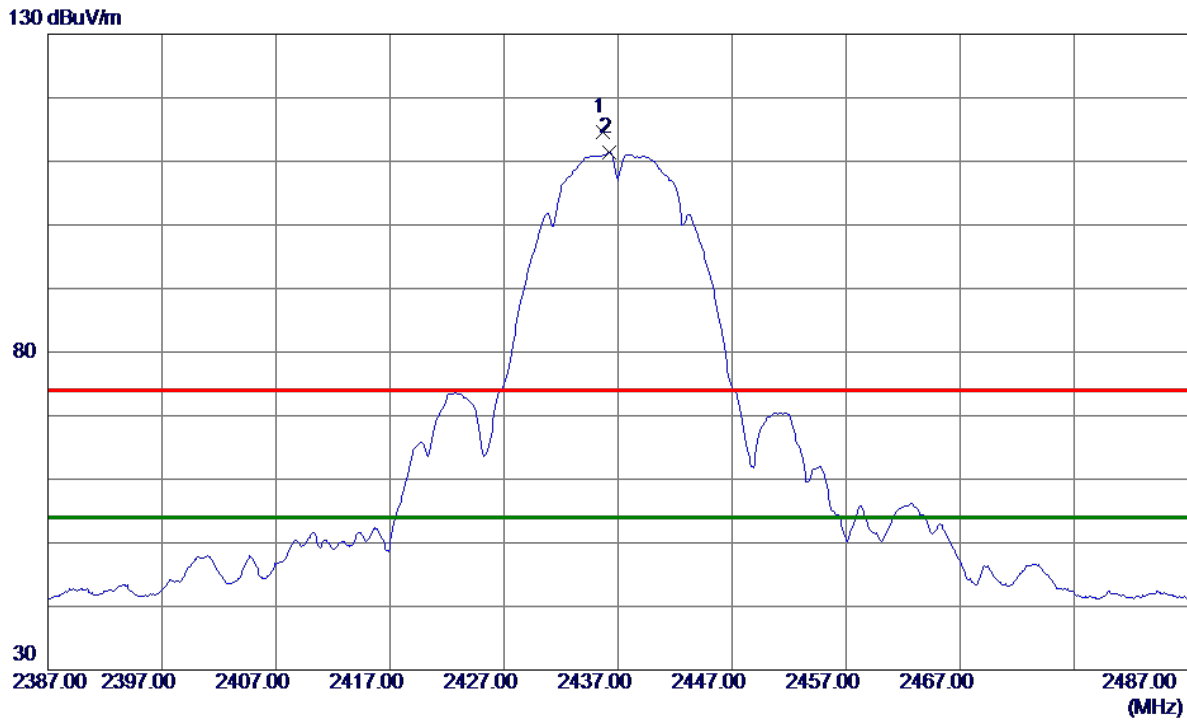
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.7000	106.87	7.72	114.59	74.00	40.59	Peak	No Limit
2 *	2436.2500	103.64	7.72	111.36	54.00	57.36	AVG	No Limit

REMARKS:

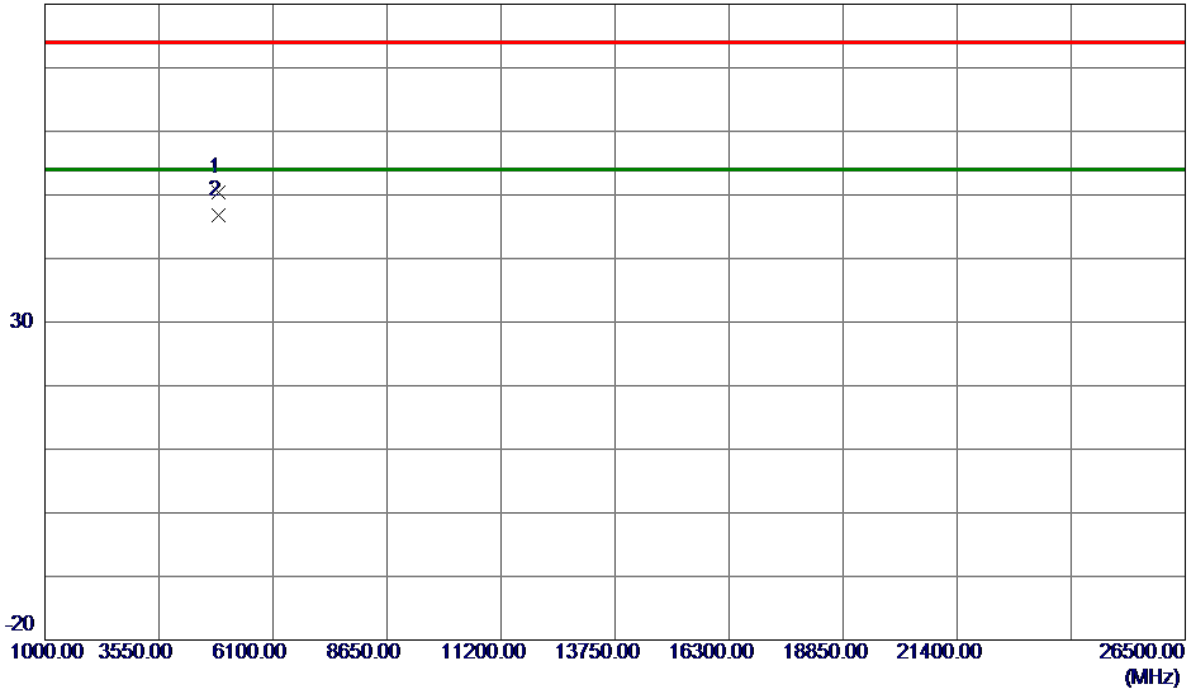
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2437 MHz

Horizontal

80 dBuV/m



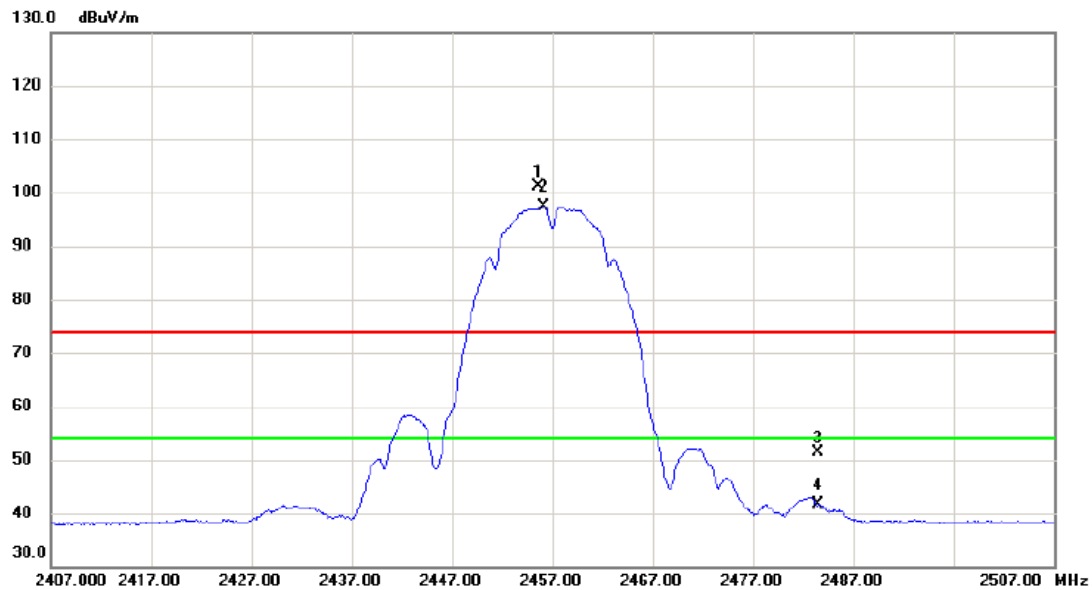
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.8700	45.95	4.44	50.39	74.00	-23.61	Peak	
2 *	4873.9850	42.39	4.44	46.83	54.00	-7.17	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2457 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2455.600	93.32	7.78	101.10	74.00	27.10	peak	No Limit
2	*	2456.200	89.59	7.78	97.37	54.00	43.37	AVG	No Limit
3		2483.500	43.40	7.87	51.27	74.00	-22.73	peak	
4		2483.500	33.79	7.87	41.66	54.00	-12.34	AVG	

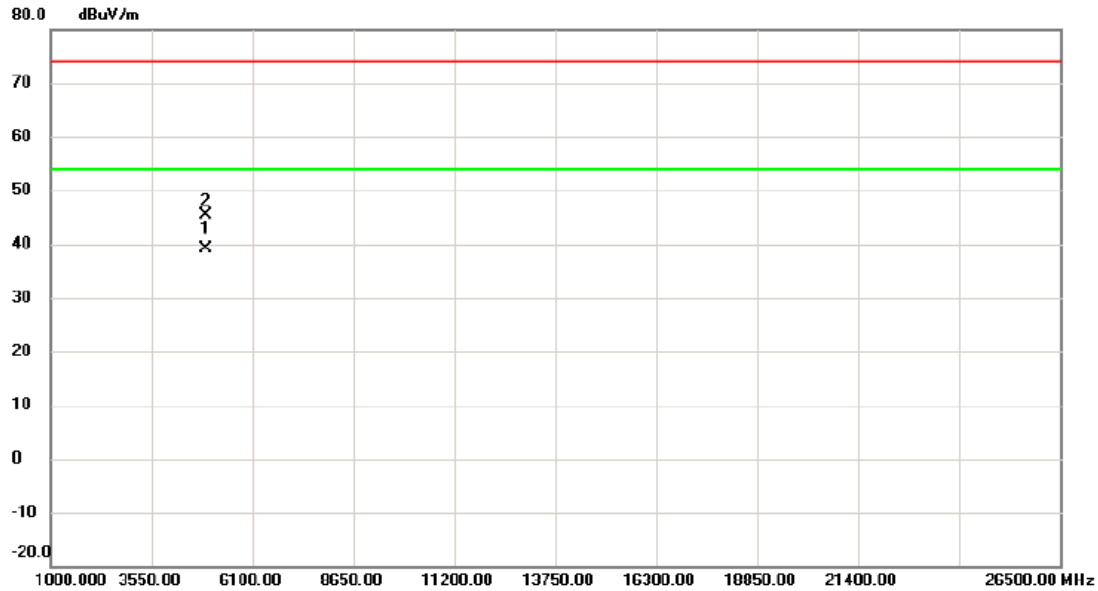
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2457 MHz

Vertical



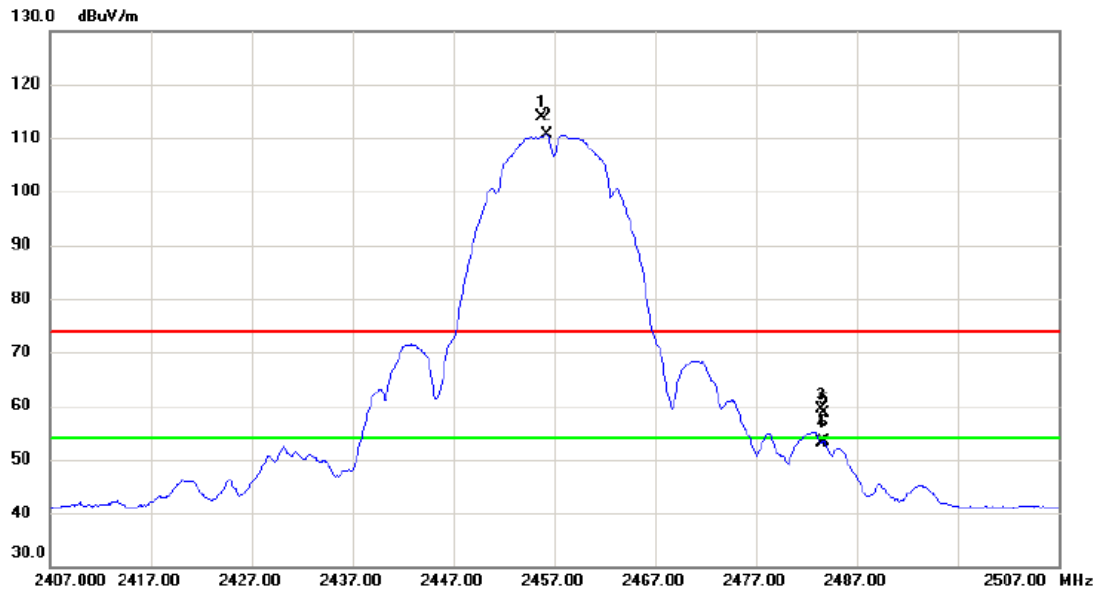
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4913.984	34.53	4.58	39.11	54.00	-14.89	AVG	
2		4914.171	40.68	4.58	45.26	74.00	-28.74	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2457 MHz

Horizontal



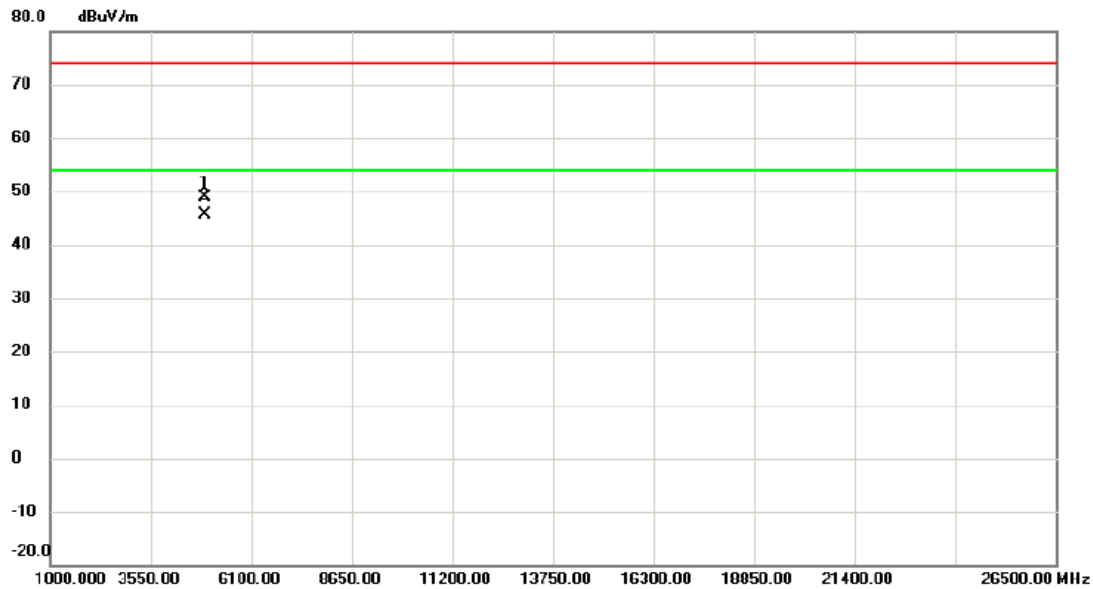
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2455.750	106.08	7.78	113.86	74.00	39.86	peak	No Limit
2	*	2456.250	102.86	7.78	110.64	54.00	56.64	AVG	No Limit
3		2483.500	51.46	7.87	59.33	74.00	-14.67	peak	
4		2483.500	45.32	7.87	53.19	54.00	-0.81	AVG	
5		2483.700	50.83	7.87	58.70	74.00	-15.30	peak	
6		2483.700	45.53	7.87	53.40	54.00	-0.60	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2457 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4913.727	44.32	4.58	48.90	74.00	-25.10	peak	
2	*	4914.007	40.95	4.58	45.53	54.00	-8.47	AVG	

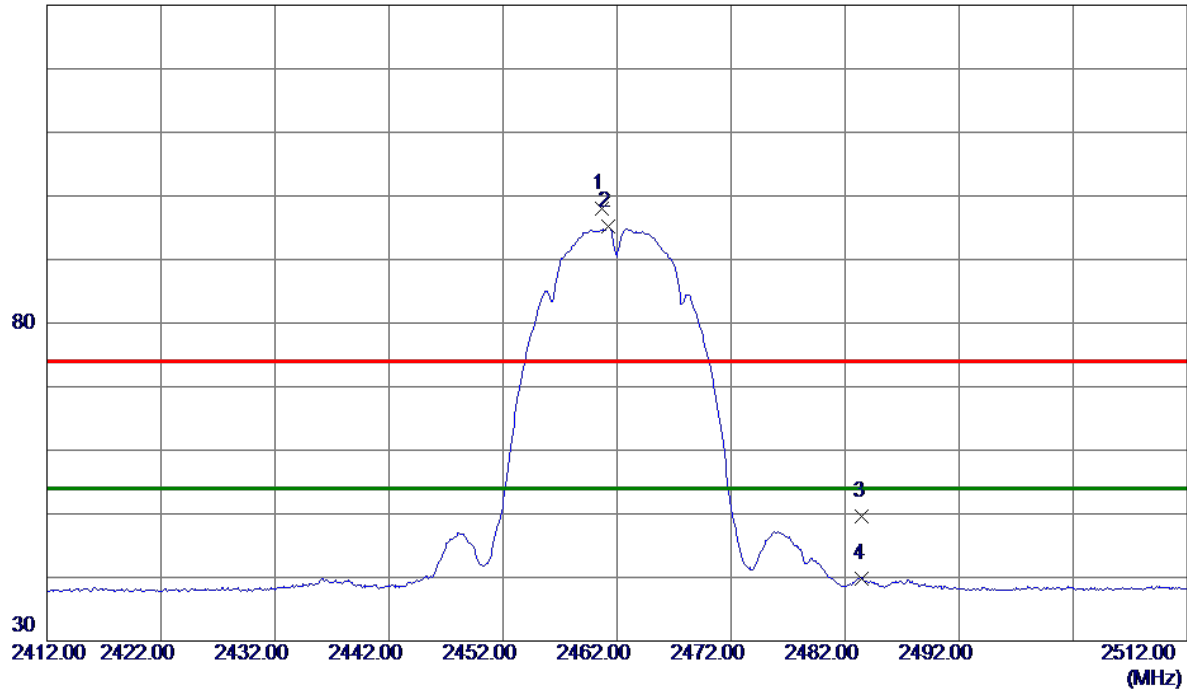
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.7000	90.10	7.80	97.90	74.00	23.90	Peak	No Limit
2 *	2461.2500	87.31	7.80	95.11	54.00	41.11	AVG	No Limit
3	2483.5000	41.70	7.88	49.58	74.00	-24.42	Peak	
4	2483.5000	31.90	7.88	39.78	54.00	-14.22	AVG	

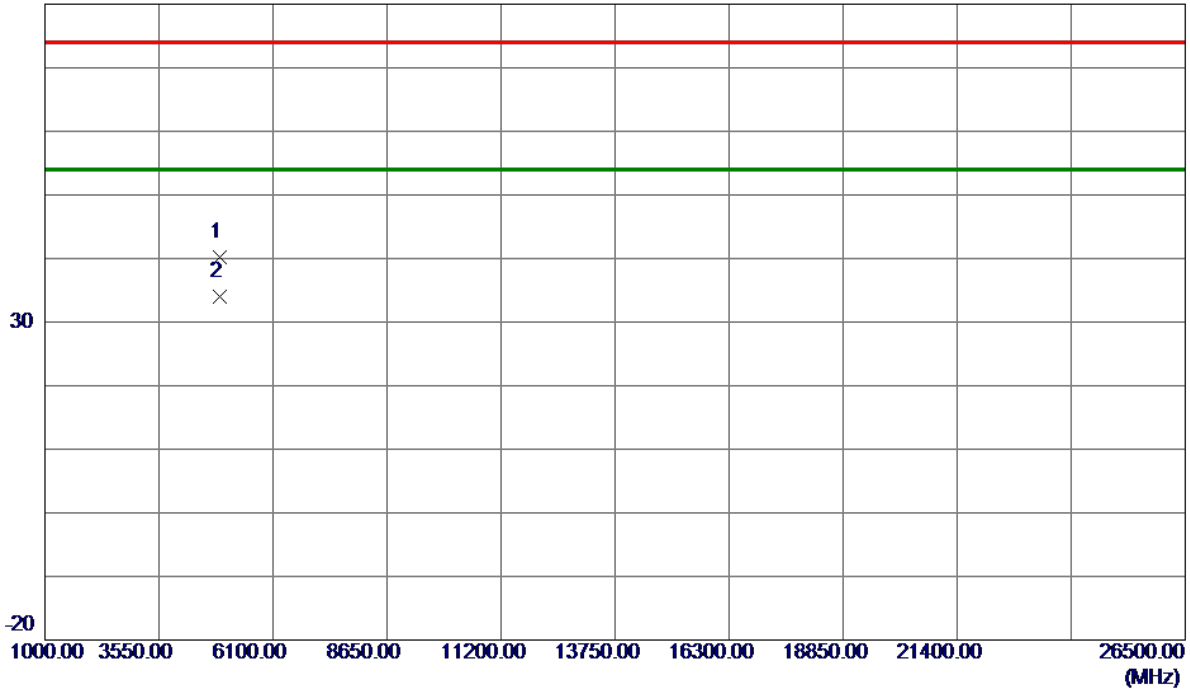
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX B Mode 2462 MHz
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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	4923.7070	35.65	4.63	40.28	74.00	-33.72	Peak	
2 *	4923.9230	29.41	4.63	34.04	54.00	-19.96	AVG	

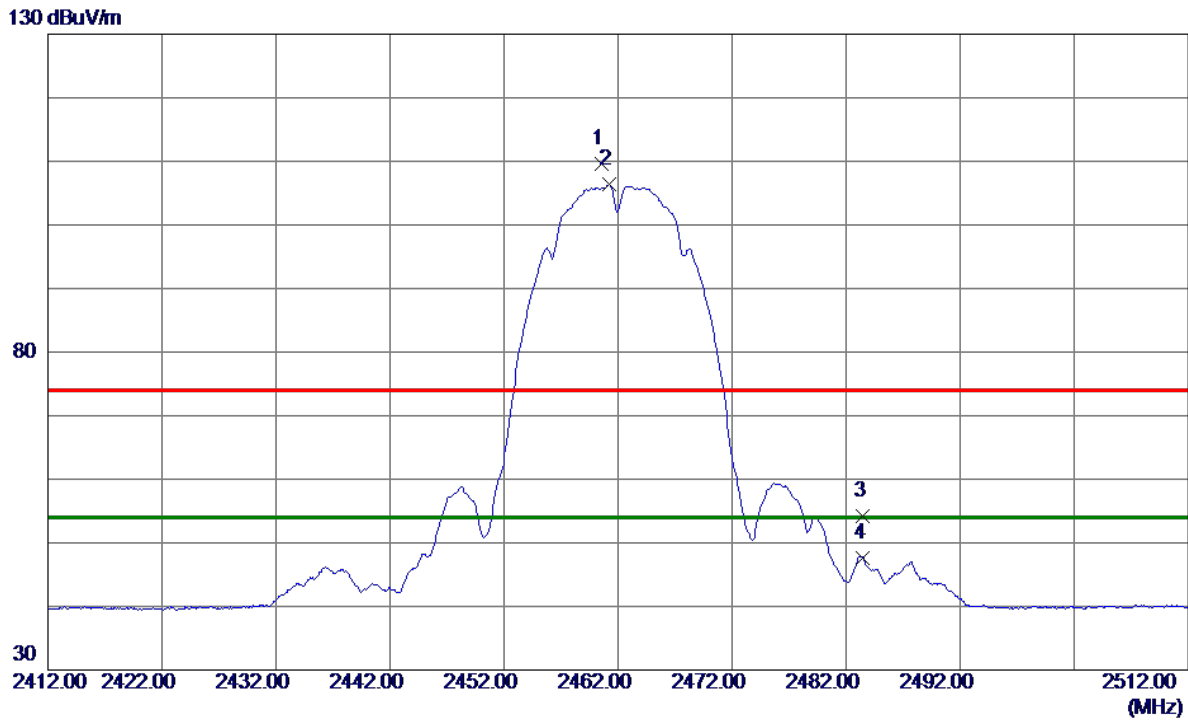
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.6000	101.78	7.80	109.58	74.00	35.58	Peak	No Limit
2 *	2461.2500	98.51	7.80	106.31	54.00	52.31	AVG	No Limit
3	2483.5000	46.41	7.88	54.29	74.00	-19.71	Peak	
4	2483.5000	39.72	7.88	47.60	54.00	-6.40	AVG	

REMARKS:

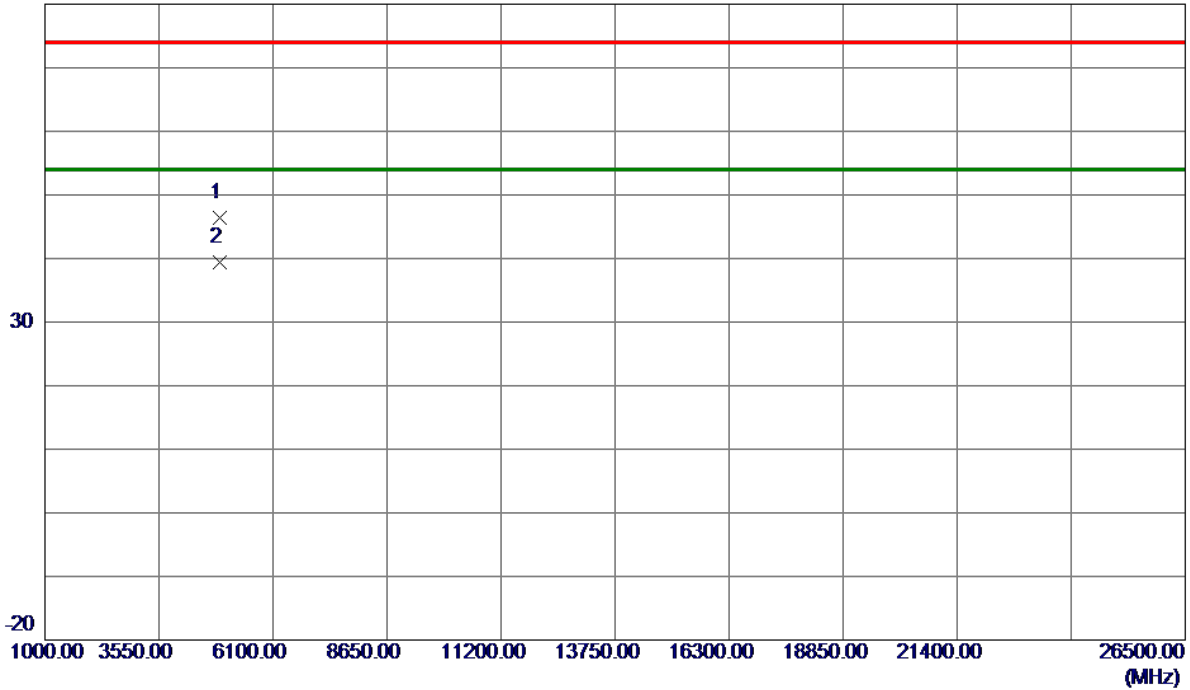
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX B Mode 2462 MHz

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.7470	41.79	4.63	46.42	74.00	-27.58	Peak	
2 *	4923.9460	34.71	4.63	39.34	54.00	-14.66	AVG	

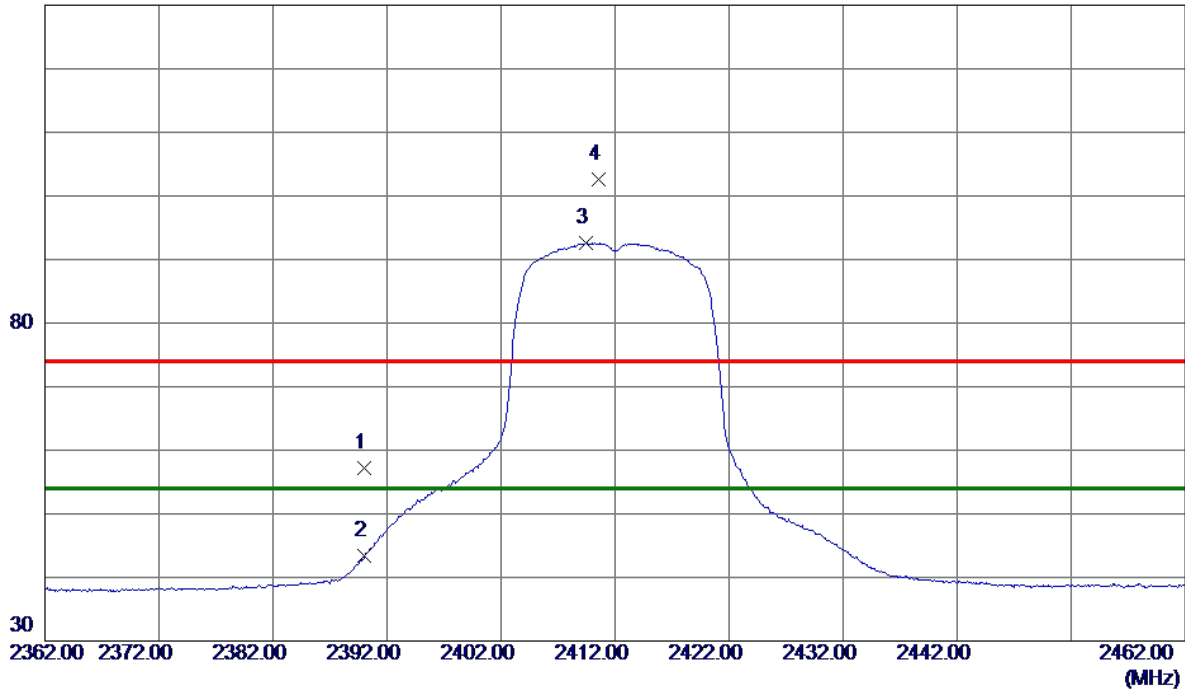
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2412 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	49.55	7.56	57.11	74.00	-16.89	Peak	
2	2390.0000	35.92	7.56	43.48	54.00	-10.52	AVG	
3 *	2409.4500	84.98	7.63	92.61	54.00	38.61	AVG	No Limit
4	2410.6000	94.91	7.63	102.54	74.00	28.54	Peak	No Limit

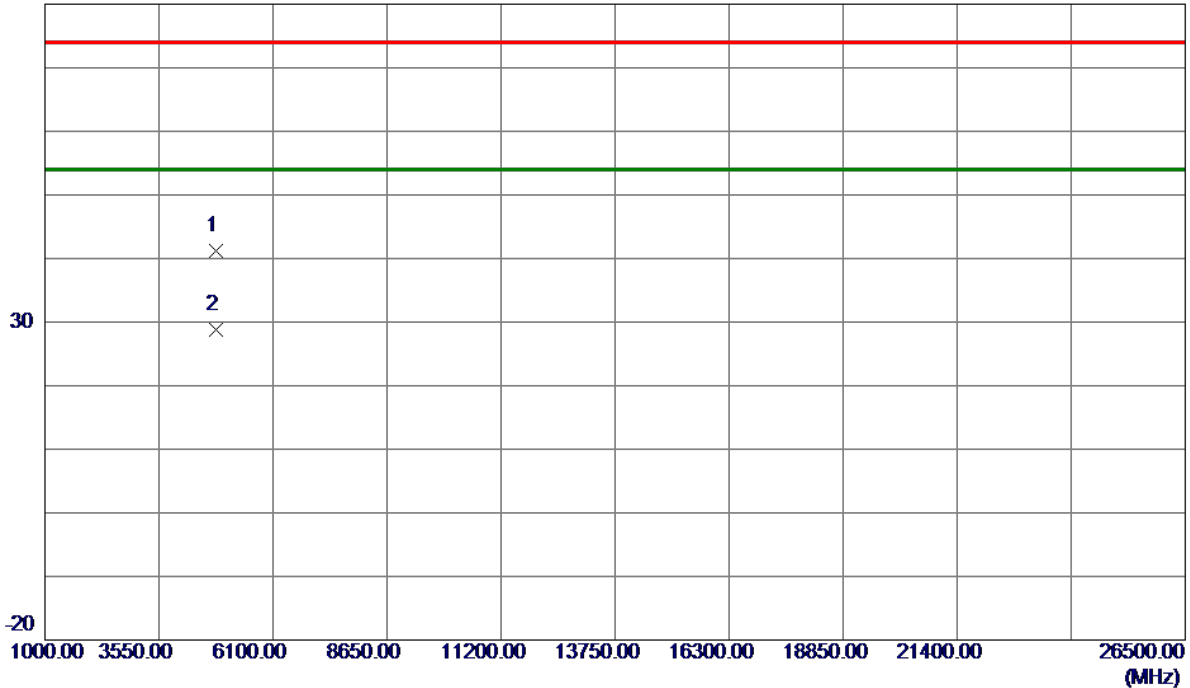
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX G Mode 2412 MHz
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Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.2900	36.98	4.26	41.24	74.00	-32.76	Peak	
2 *	4825.6700	24.50	4.26	28.76	54.00	-25.24	AVG	

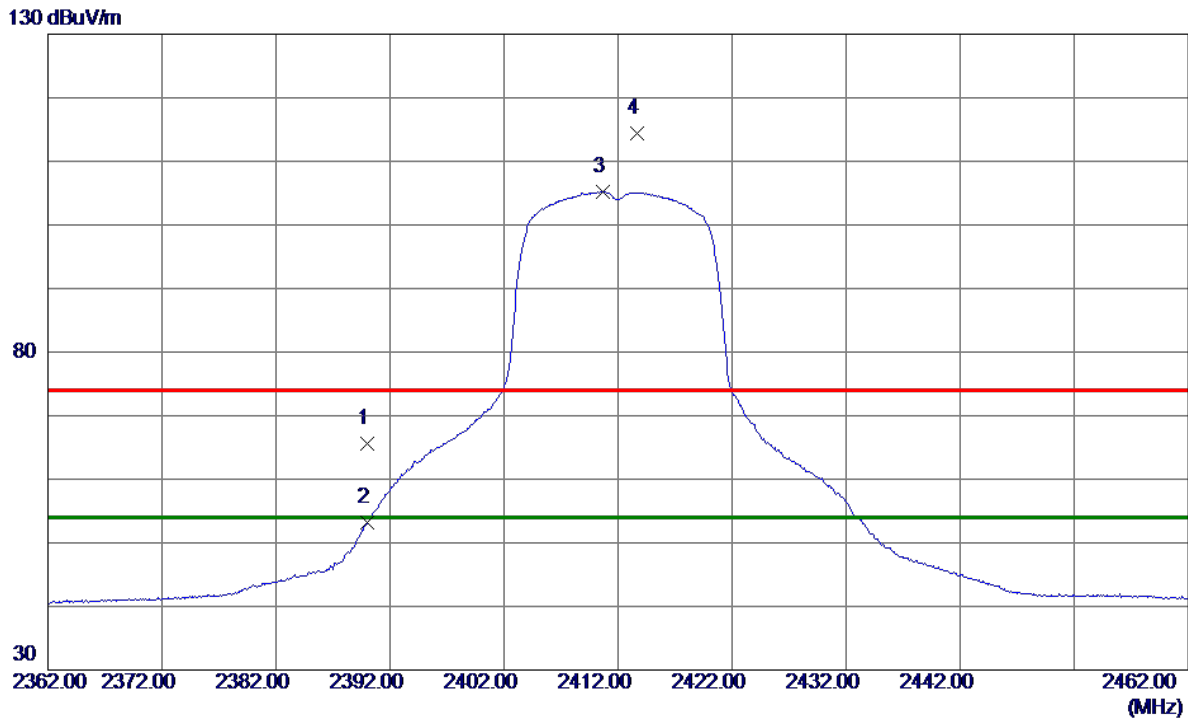
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2412 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	58.13	7.56	65.69	74.00	-8.31	Peak	
2	2390.0000	45.61	7.56	53.17	54.00	-0.83	AVG	
3 *	2410.6500	97.59	7.63	105.22	54.00	51.22	AVG	No Limit
4	2413.6500	106.80	7.64	114.44	74.00	40.44	Peak	No Limit

REMARKS:

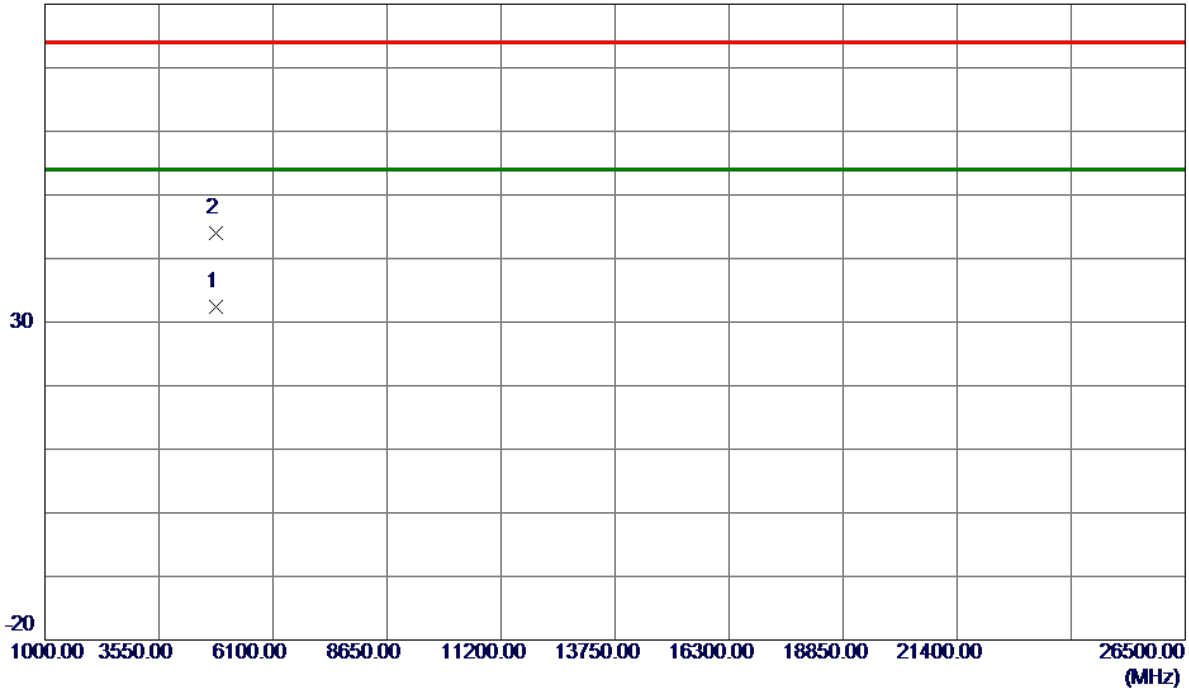
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX G Mode 2412 MHz
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Horizontal

80 dBuV/m



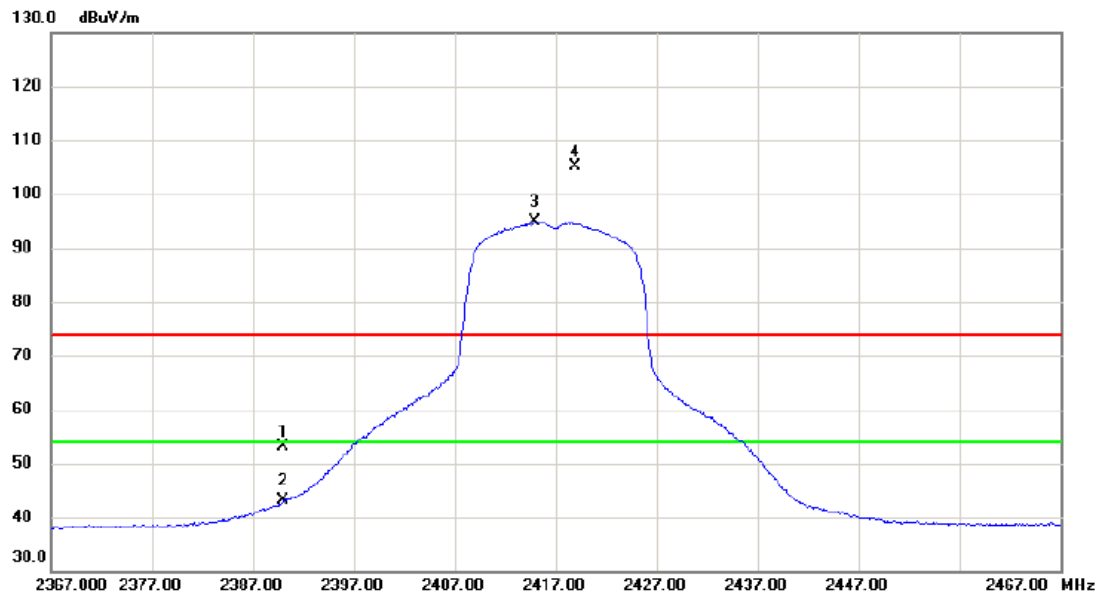
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.1500	28.10	4.26	32.36	54.00	-21.64	AVG	
2	4824.2900	39.83	4.26	44.09	74.00	-29.91	Peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2417 MHz

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	45.65	7.57	53.22	74.00	-20.78	peak	
2		2390.000	35.56	7.57	43.13	54.00	-10.87	AVG	
3	*	2414.900	87.20	7.65	94.85	54.00	40.85	AVG	No Limit
4	X	2418.950	97.36	7.66	105.02	74.00	31.02	peak	No Limit

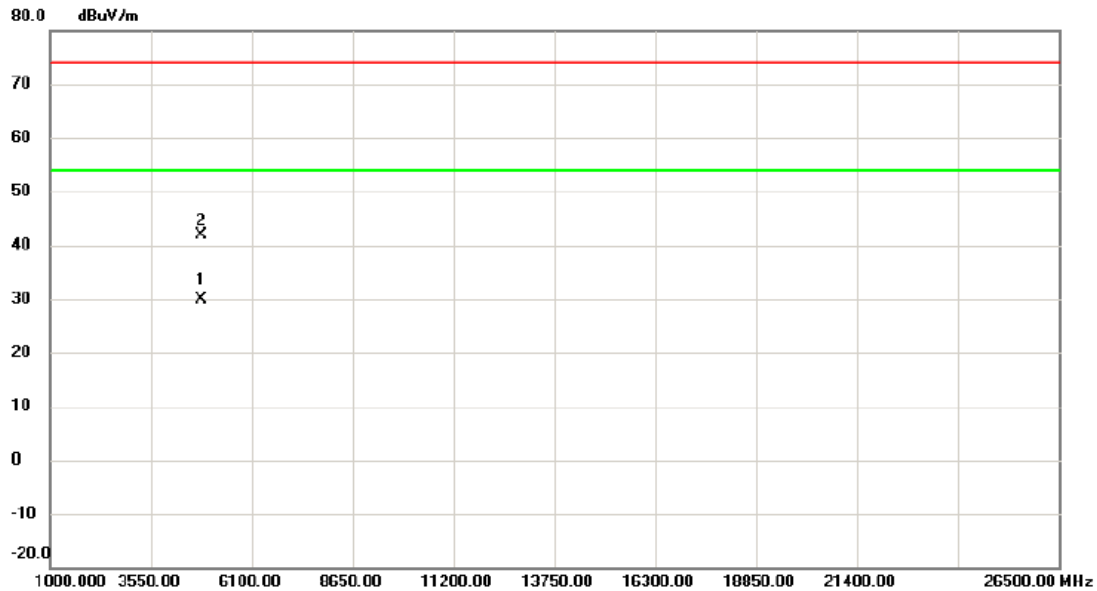
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX G Mode 2417 MHz
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Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4834.670	25.65	4.30	29.95	54.00	-24.05	AVG	
2		4835.760	37.62	4.30	41.92	74.00	-32.08	peak	

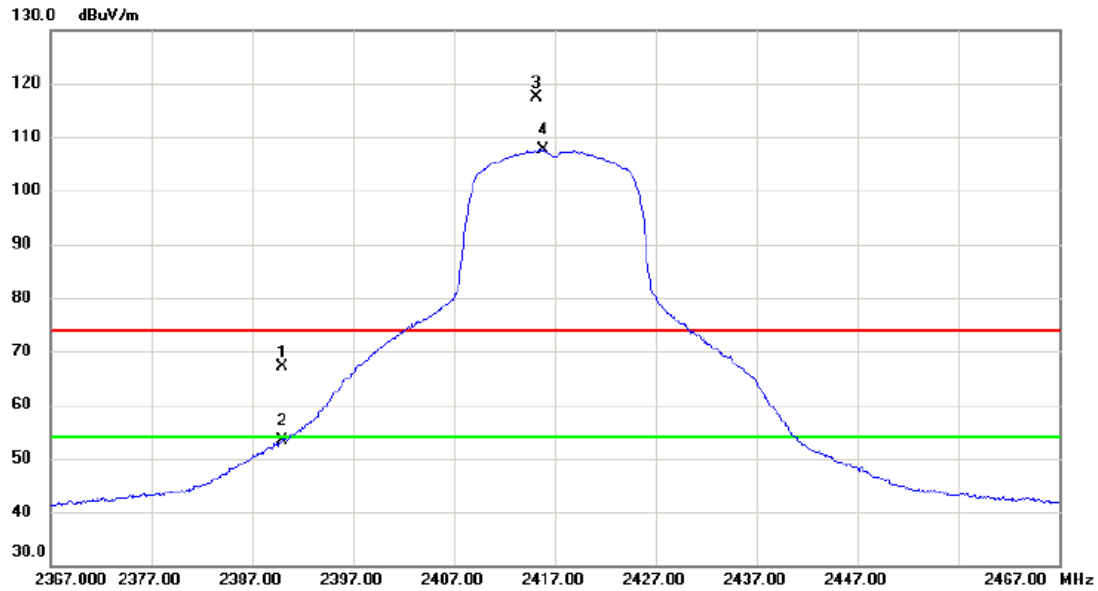
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2417 MHz

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	59.46	7.57	67.03	74.00	-6.97	peak	
2		2390.000	45.93	7.57	53.50	54.00	-0.50	AVG	
3	X	2415.250	109.83	7.65	117.48	74.00	43.48	peak	No Limit
4	*	2415.850	99.92	7.65	107.57	54.00	53.57	AVG	No Limit

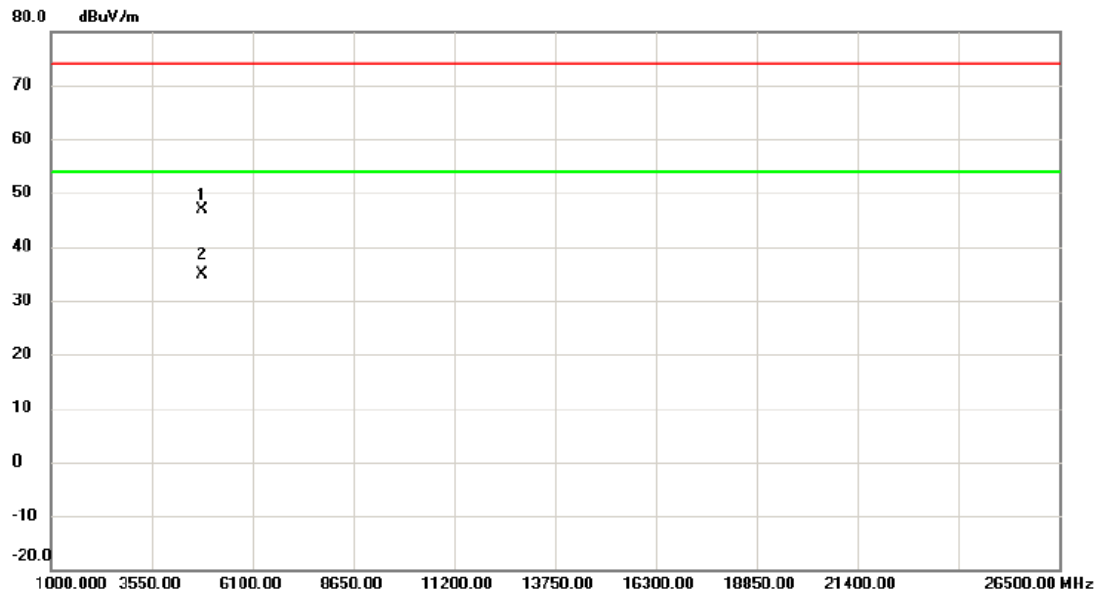
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2417 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4834.560	42.66	4.30	46.96	74.00	-27.04	peak	
2	*	4834.650	30.52	4.30	34.82	54.00	-19.18	AVG	

REMARKS:

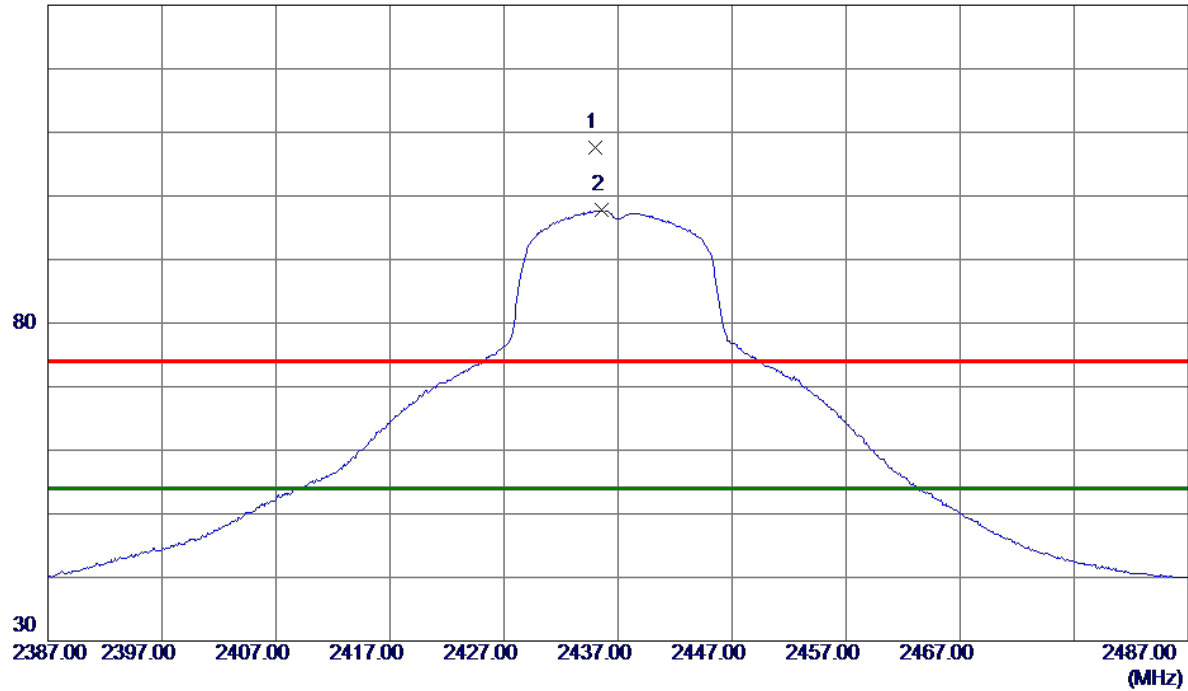
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.0500	99.87	7.71	107.58	74.00	33.58	Peak	No Limit
2 *	2435.6000	90.02	7.72	97.74	54.00	43.74	AVG	No Limit

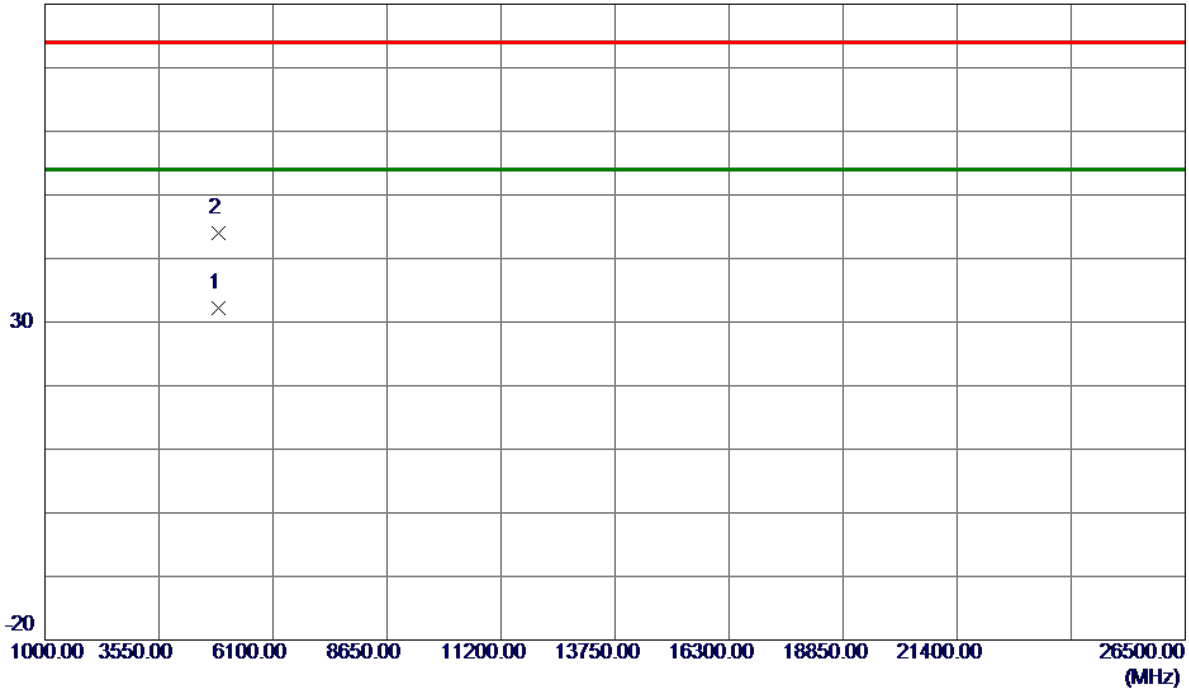
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX G Mode 2437 MHz
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Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.3800	27.73	4.44	32.17	54.00	-21.83	AVG	
2	4878.6400	39.52	4.46	43.98	74.00	-30.02	Peak	

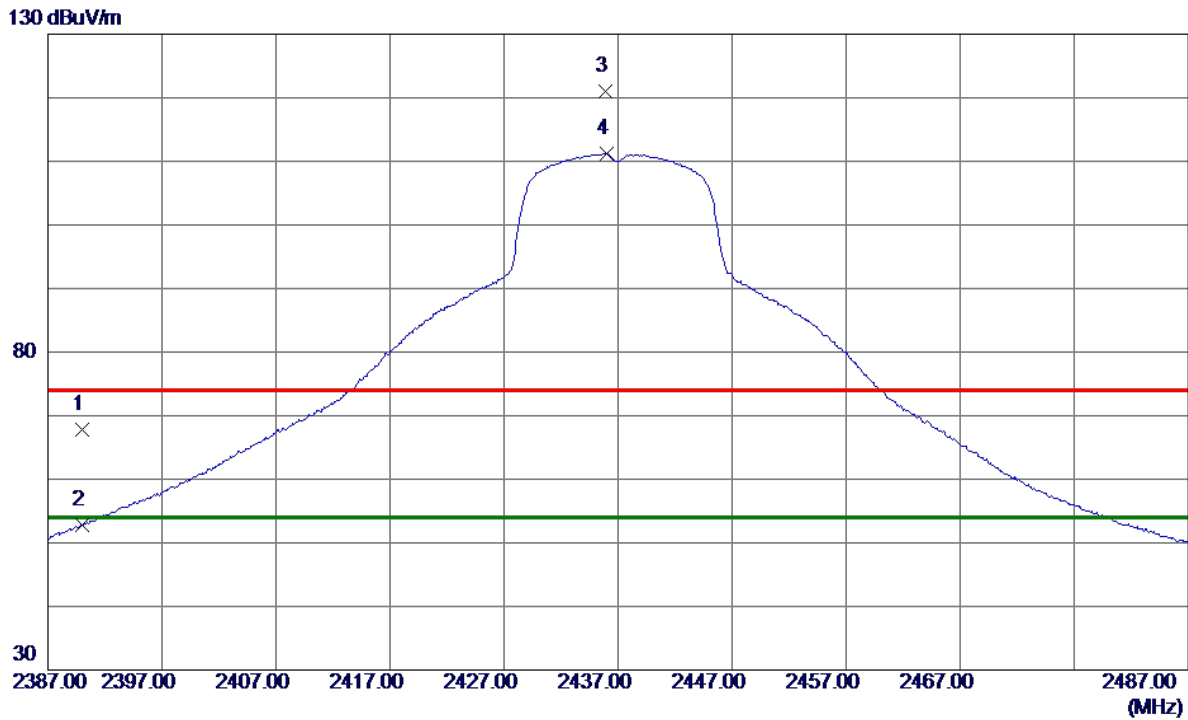
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	60.23	7.56	67.79	74.00	-6.21	Peak	
2	2390.0000	45.15	7.56	52.71	54.00	-1.29	AVG	
3	2435.8500	113.22	7.72	120.94	74.00	46.94	Peak	No Limit
4 *	2435.9500	103.46	7.72	111.18	54.00	57.18	AVG	No Limit

REMARKS:

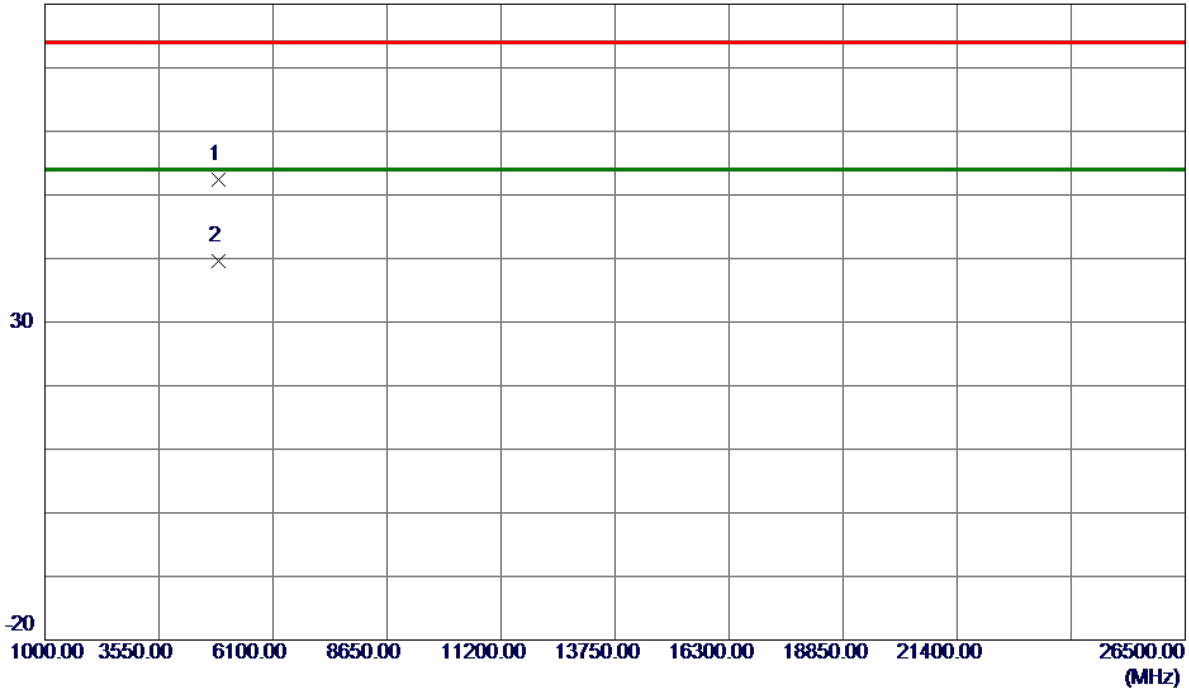
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX G Mode 2437 MHz
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Horizontal

80 dBuV/m



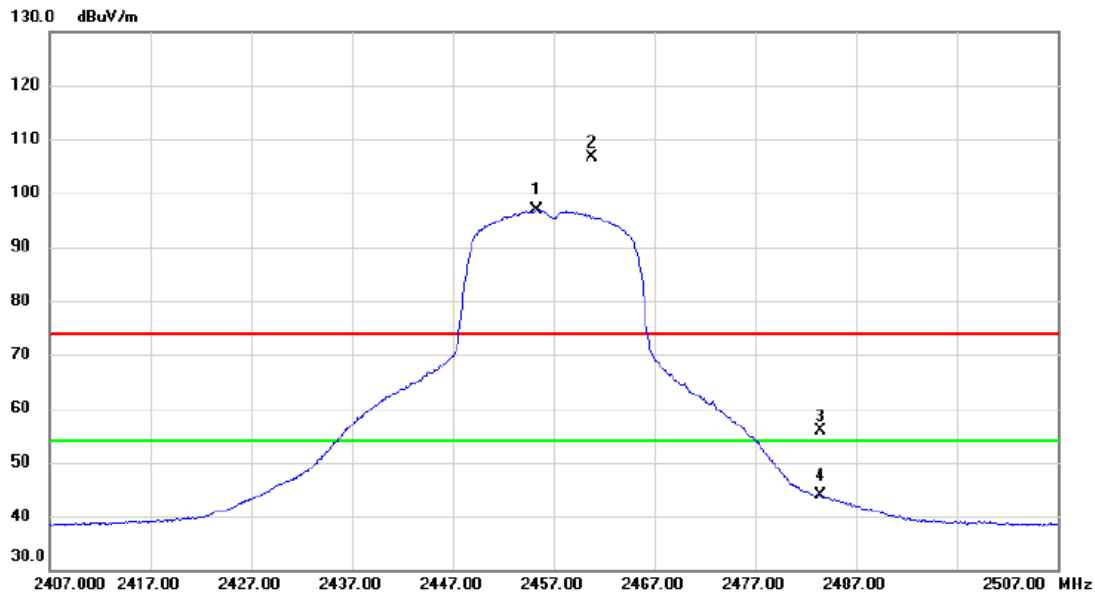
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1700	47.99	4.44	52.43	74.00	-21.57	Peak	
2 *	4874.5400	35.19	4.44	39.63	54.00	-14.37	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2457 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2455.350	89.06	7.78	96.84	54.00	42.84	AVG	No Limit
2	X	2460.850	98.85	7.79	106.64	74.00	32.64	peak	No Limit
3		2483.500	48.06	7.87	55.93	74.00	-18.07	peak	
4		2483.500	35.90	7.87	43.77	54.00	-10.23	AVG	

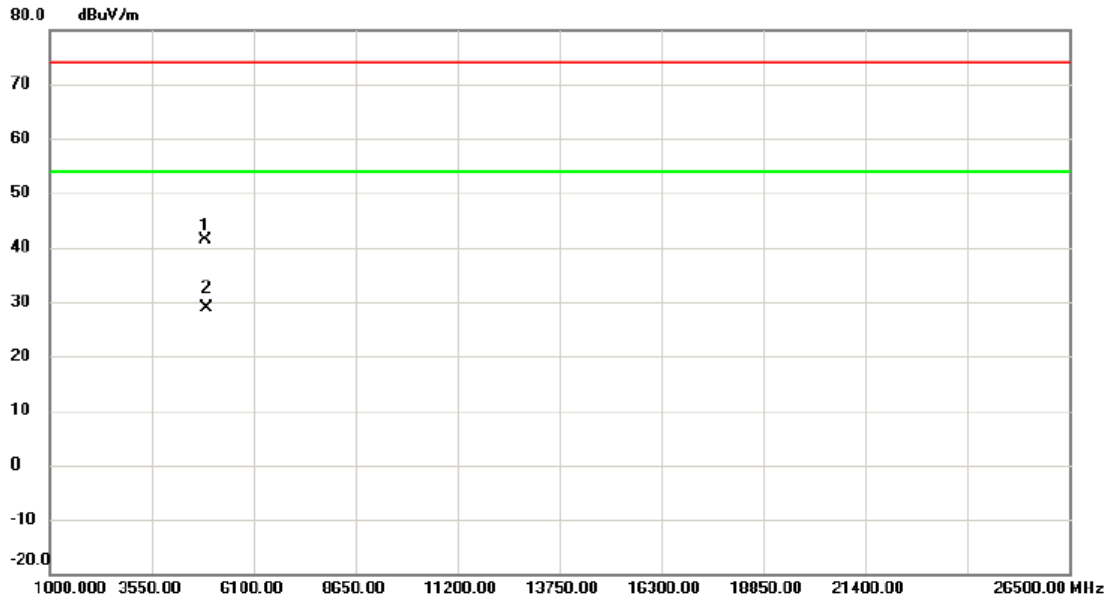
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2457 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4906.880	36.84	4.56	41.40	74.00	-32.60	peak	
2	*	4913.710	24.35	4.58	28.93	54.00	-25.07	AVG	

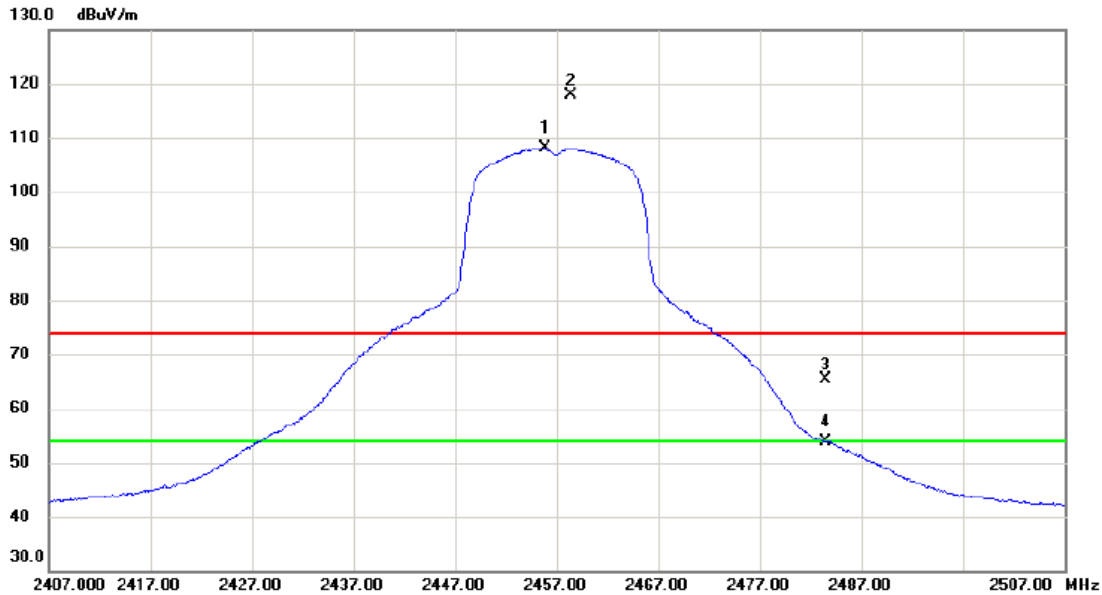
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2457 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2455.900	100.33	7.78	108.11	54.00	54.11	AVG	No Limit
2	X	2458.450	110.11	7.79	117.90	74.00	43.90	peak	No Limit
3		2483.500	57.44	7.87	65.31	74.00	-8.69	peak	
4		2483.500	46.04	7.87	53.91	54.00	-0.09	AVG	

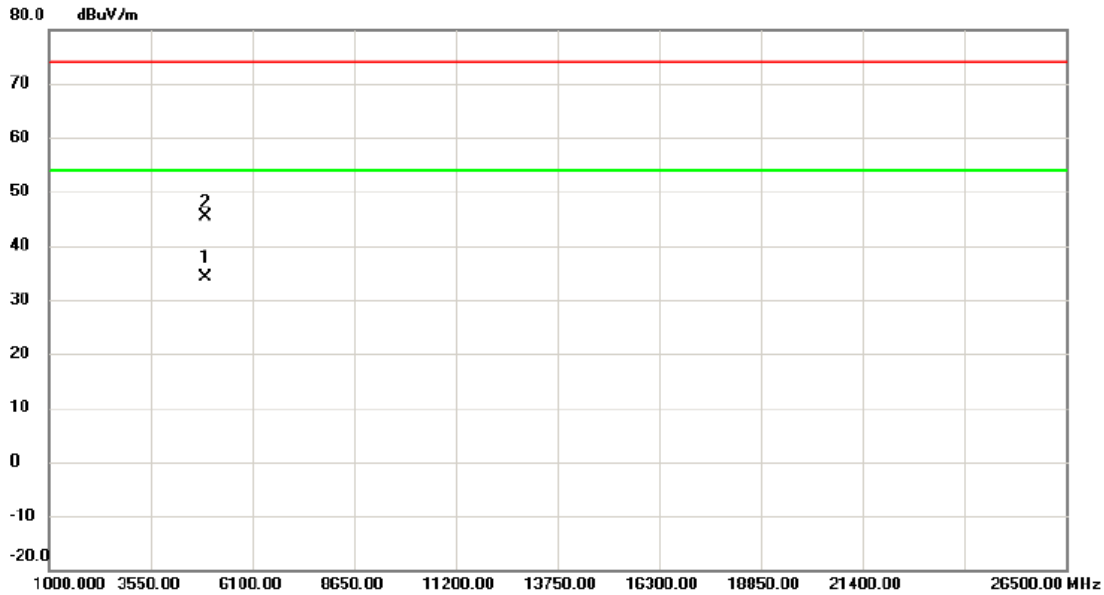
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2457 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4914.030	29.54	4.58	34.12	54.00	-19.88	AVG	
2		4914.270	40.78	4.58	45.36	74.00	-28.64	peak	

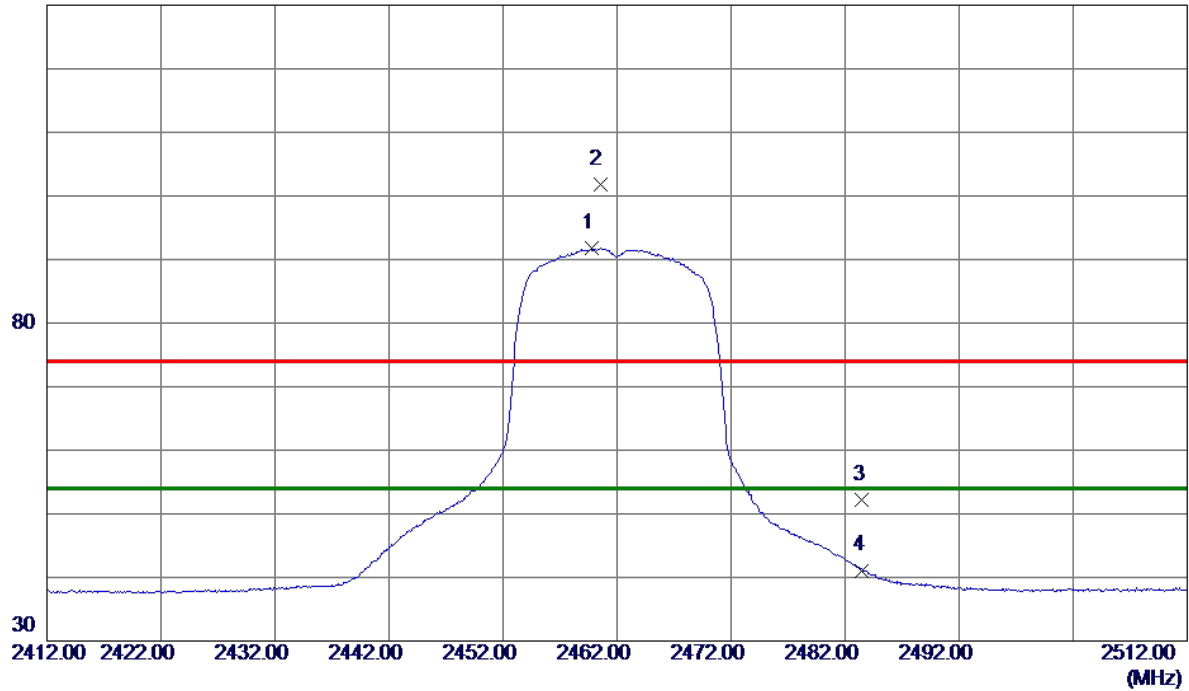
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2459.7500	83.97	7.80	91.77	54.00	37.77	AVG	No Limit
2	2460.5000	94.06	7.80	101.86	74.00	27.86	Peak	No Limit
3	2483.5000	44.39	7.88	52.27	74.00	-21.73	Peak	
4	2483.5000	33.22	7.88	41.10	54.00	-12.90	AVG	

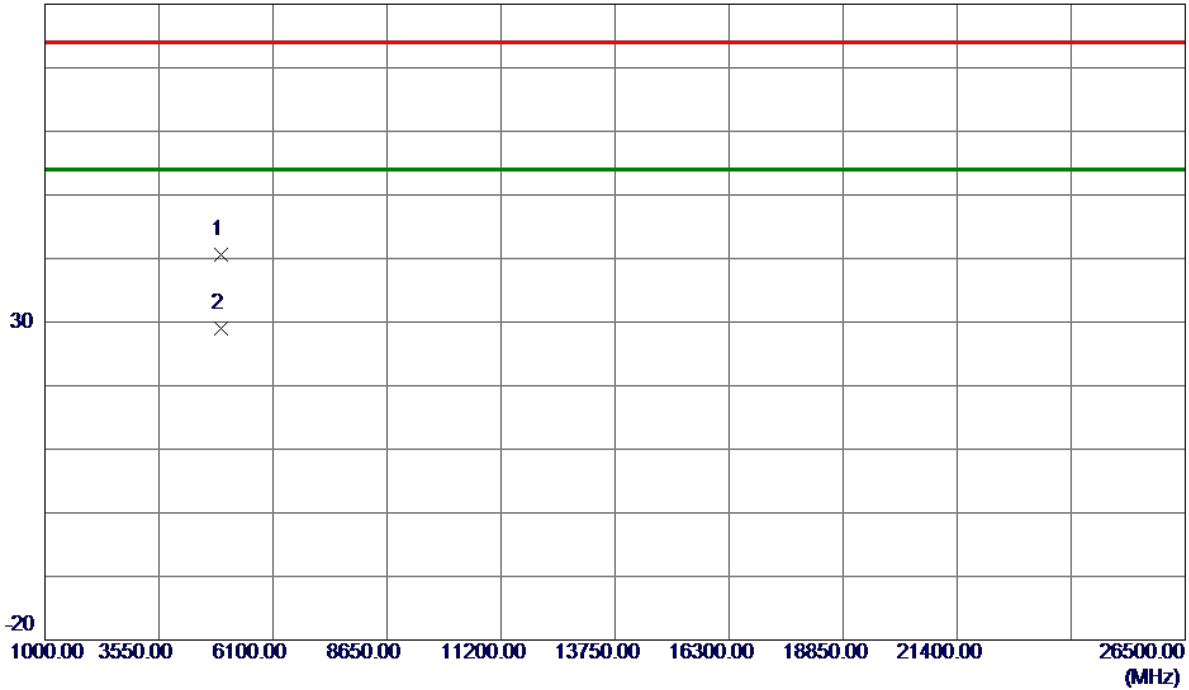
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2462 MHz

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4928.4000	36.02	4.64	40.66	74.00	-33.34	Peak	
2 *	4933.2000	24.41	4.66	29.07	54.00	-24.93	AVG	

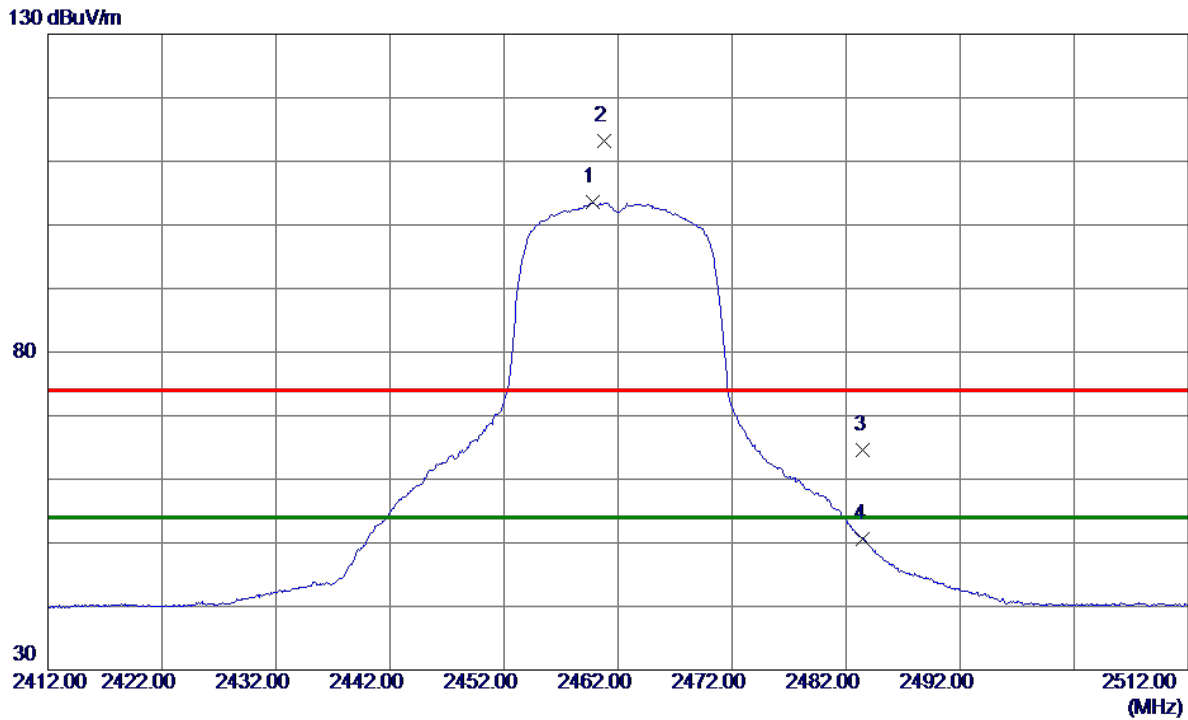
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX G Mode 2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2459.7500	95.75	7.80	103.55	54.00	49.55	AVG	No Limit
2	2460.7500	105.41	7.80	113.21	74.00	39.21	Peak	No Limit
3	2483.5000	56.76	7.88	64.64	74.00	-9.36	Peak	
4	2483.5000	42.69	7.88	50.57	54.00	-3.43	AVG	

REMARKS:

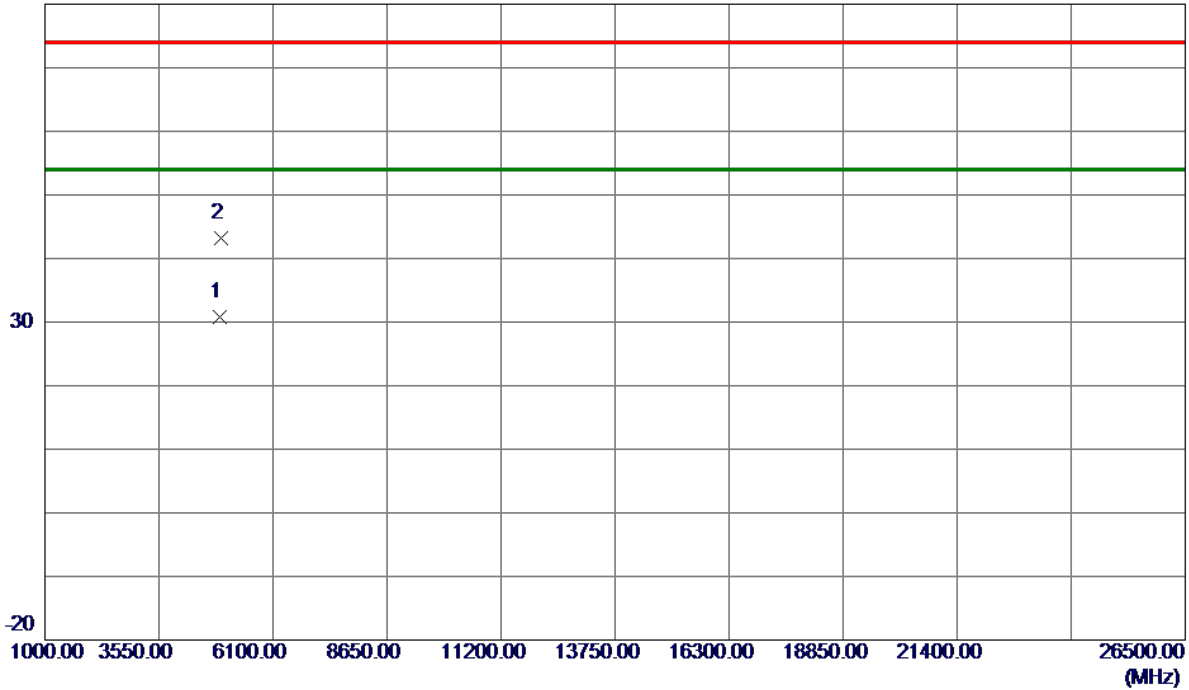
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX G Mode 2462 MHz
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Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.0200	26.23	4.63	30.86	54.00	-23.14	AVG	
2	4924.3100	38.53	4.63	43.16	74.00	-30.84	Peak	

REMARKS:

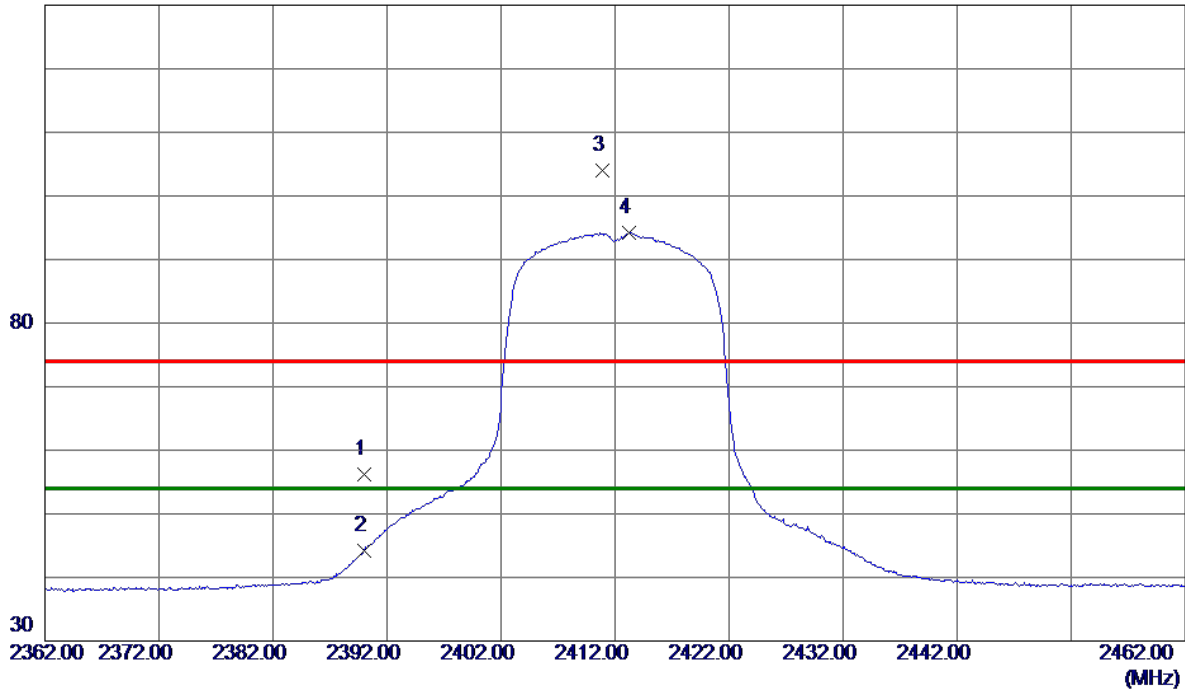
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2412 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	48.57	7.56	56.13	74.00	-17.87	Peak	
2	2390.0000	36.57	7.56	44.13	54.00	-9.87	AVG	
3	2410.9000	96.39	7.63	104.02	74.00	30.02	Peak	No Limit
4 *	2413.2500	86.64	7.64	94.28	54.00	40.28	AVG	No Limit

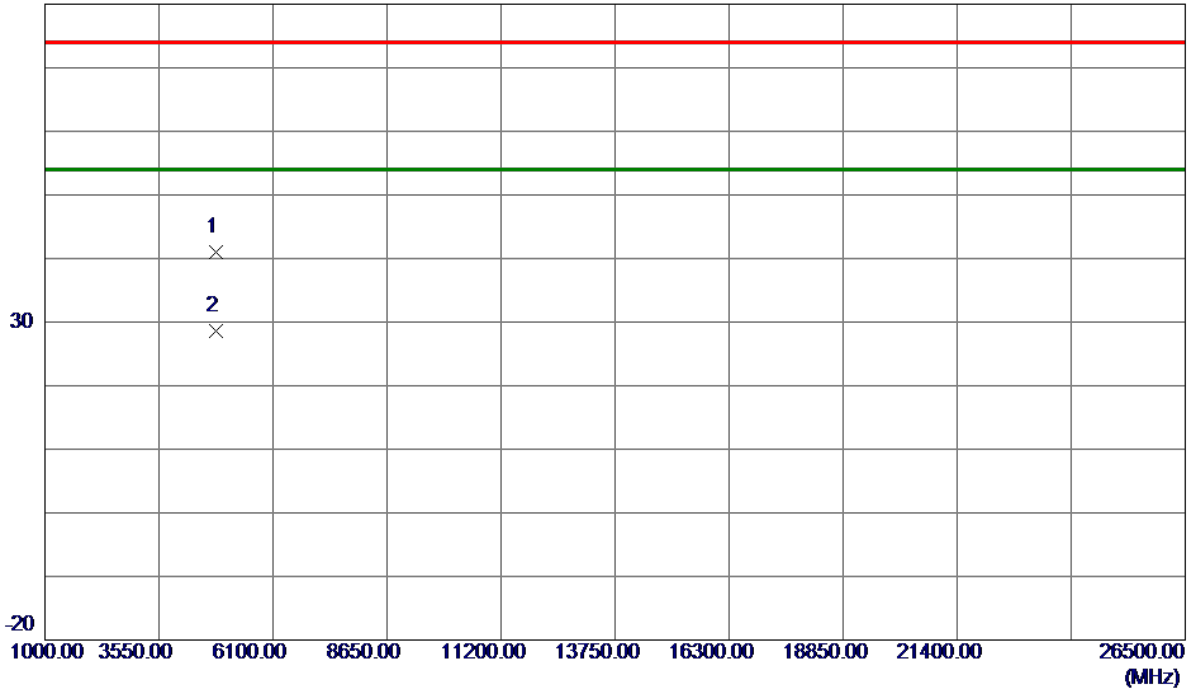
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2412 MHz
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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	4825.7100	36.71	4.26	40.97	74.00	-33.03	Peak	
2 *	4831.4000	24.23	4.28	28.51	54.00	-25.49	AVG	

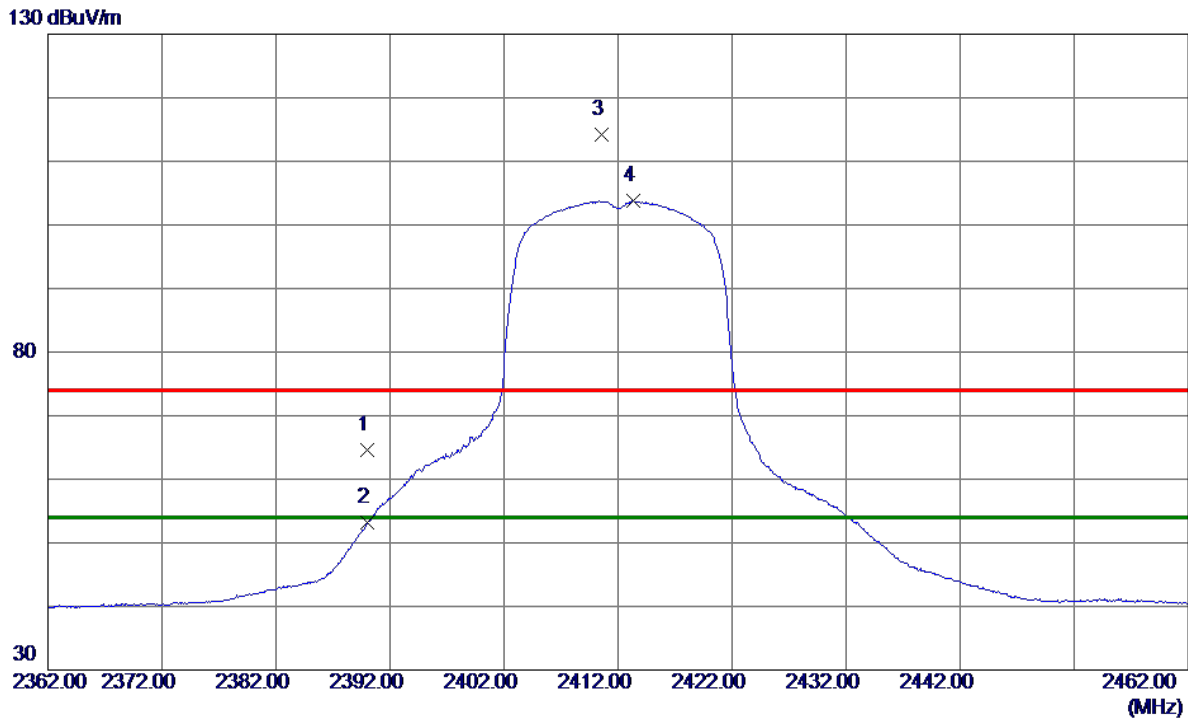
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2412 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	57.10	7.56	64.66	74.00	-9.34	Peak	
2	2390.0000	45.56	7.56	53.12	54.00	-0.88	AVG	
3	2410.5500	106.58	7.63	114.21	74.00	40.21	Peak	No Limit
4 *	2413.3500	96.23	7.64	103.87	54.00	49.87	AVG	No Limit

REMARKS:

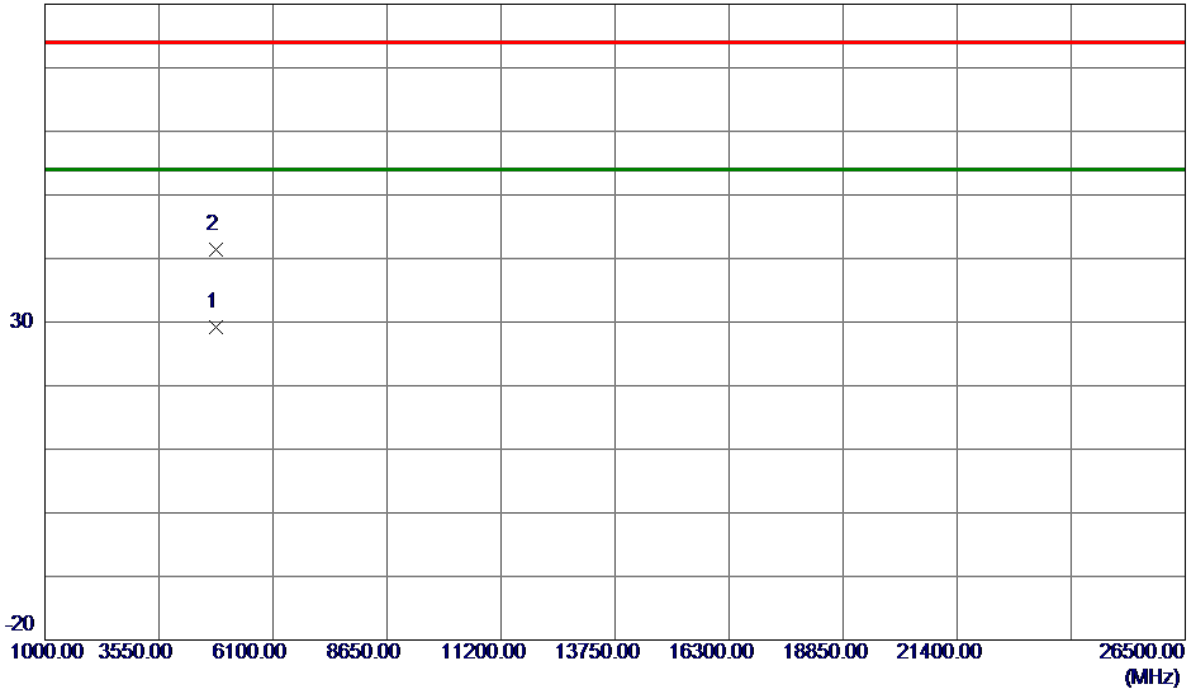
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2412 MHz
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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 *	4826.4300	24.93	4.26	29.19	54.00	-24.81	AVG	
2	4827.3700	37.04	4.27	41.31	74.00	-32.69	Peak	

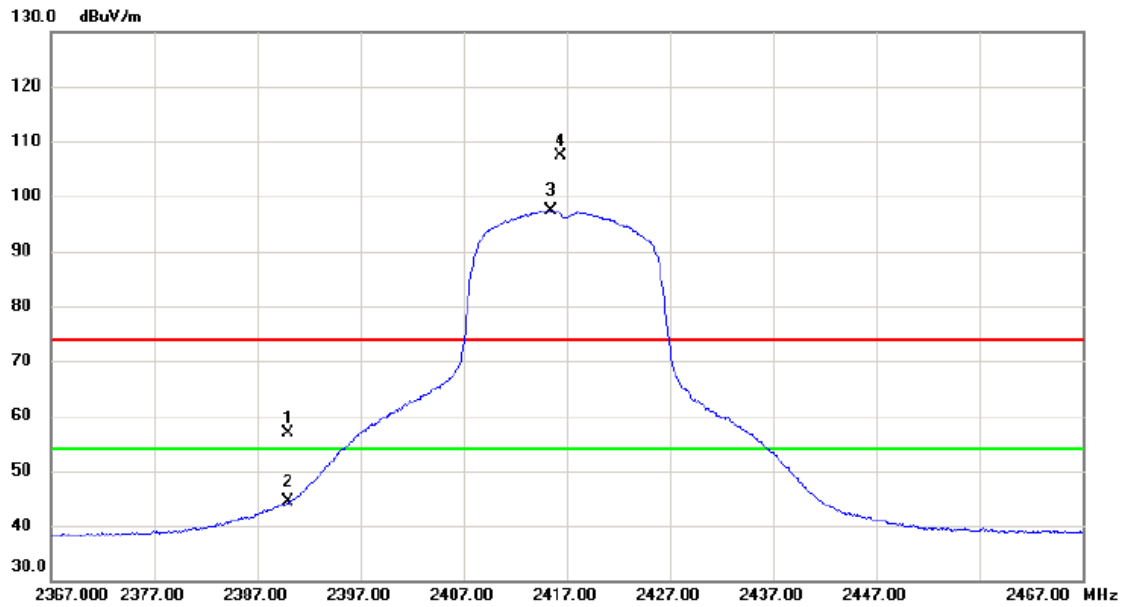
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2417 MHz

Vertical



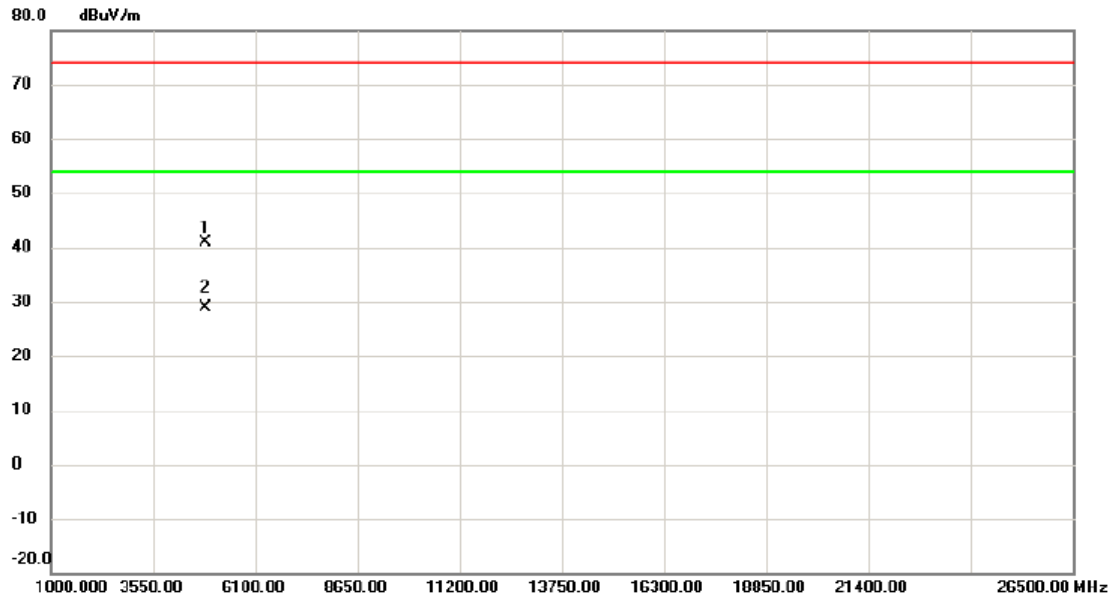
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	49.20	7.57	56.77	74.00	-17.23	peak	
2		2390.000	36.71	7.57	44.28	54.00	-9.72	AVG	
3	*	2415.450	89.63	7.65	97.28	54.00	43.28	AVG	No Limit
4	X	2416.450	99.82	7.66	107.48	74.00	33.48	peak	No Limit

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2417 MHz
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Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4842.890	36.63	4.32	40.95	74.00	-33.05	peak	
2	*	4842.890	24.62	4.32	28.94	54.00	-25.06	AVG	

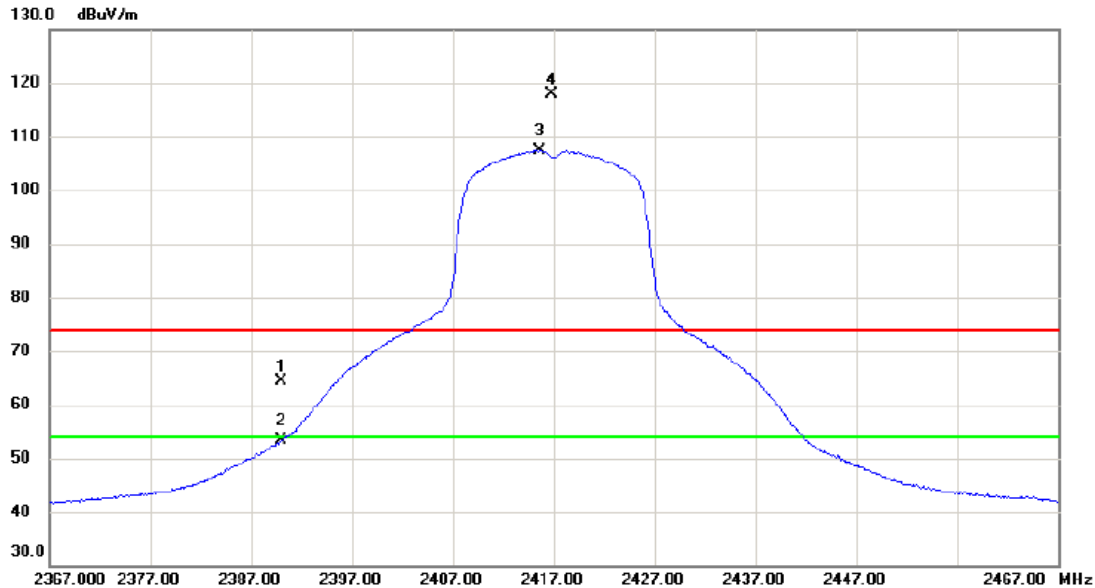
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2417 MHz

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	56.74	7.57	64.31	74.00	-9.69	peak	
2		2390.000	45.89	7.57	53.46	54.00	-0.54	AVG	
3	*	2415.600	99.78	7.65	107.43	54.00	53.43	AVG	No Limit
4	X	2416.850	110.26	7.66	117.92	74.00	43.92	peak	No Limit

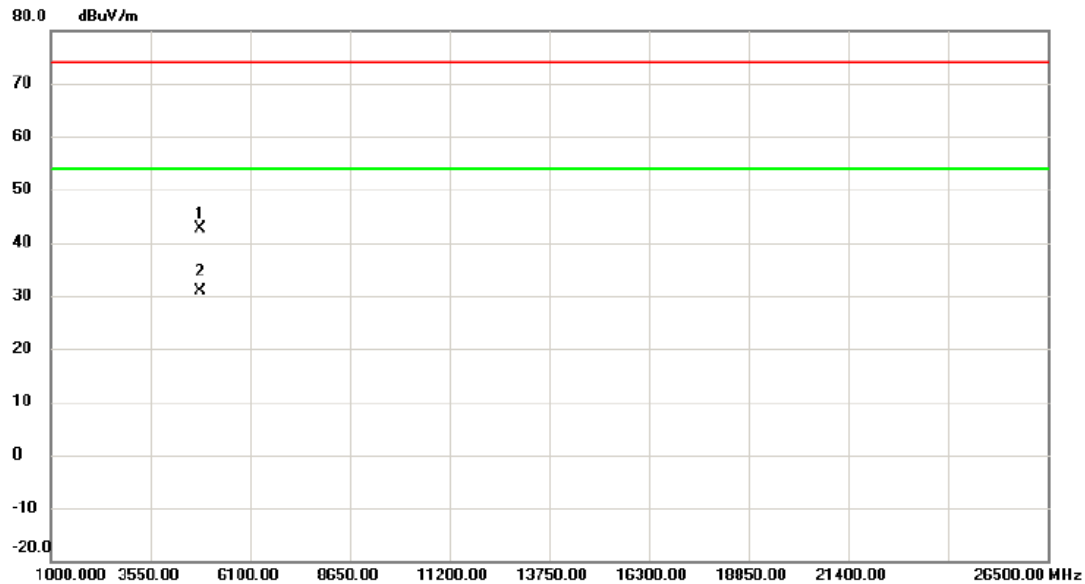
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2417 MHz
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Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4834.880	38.37	4.30	42.67	74.00	-31.33	peak	
2	*	4836.460	26.66	4.30	30.96	54.00	-23.04	AVG	

REMARKS:

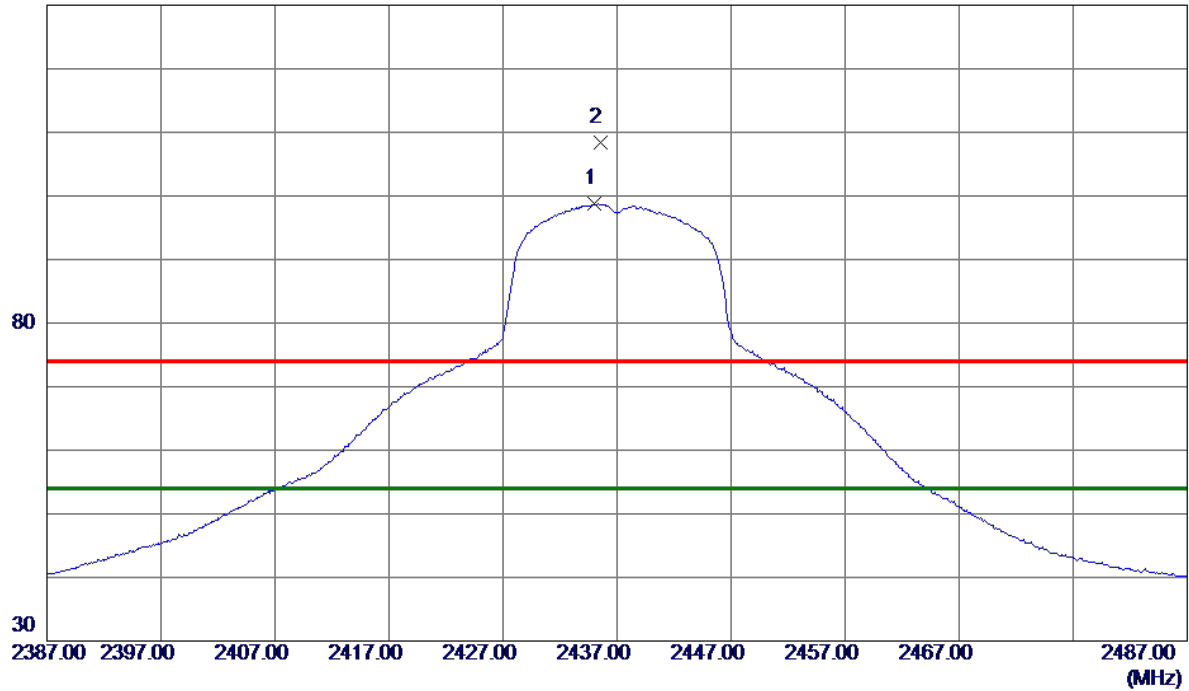
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2435.0500	91.02	7.71	98.73	54.00	44.73	AVG	No Limit
2	2435.5000	100.71	7.72	108.43	74.00	34.43	Peak	No Limit

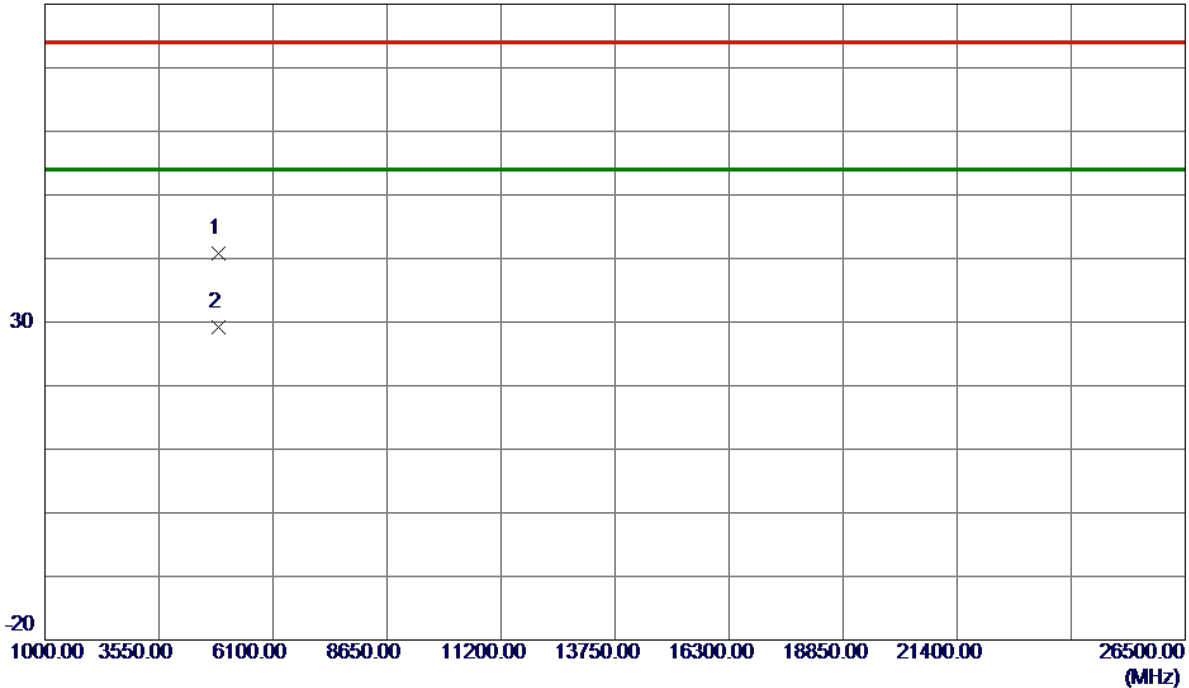
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2437 MHz
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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	4878.6500	36.27	4.46	40.73	74.00	-33.27	Peak	
2 *	4879.9800	24.65	4.46	29.11	54.00	-24.89	AVG	

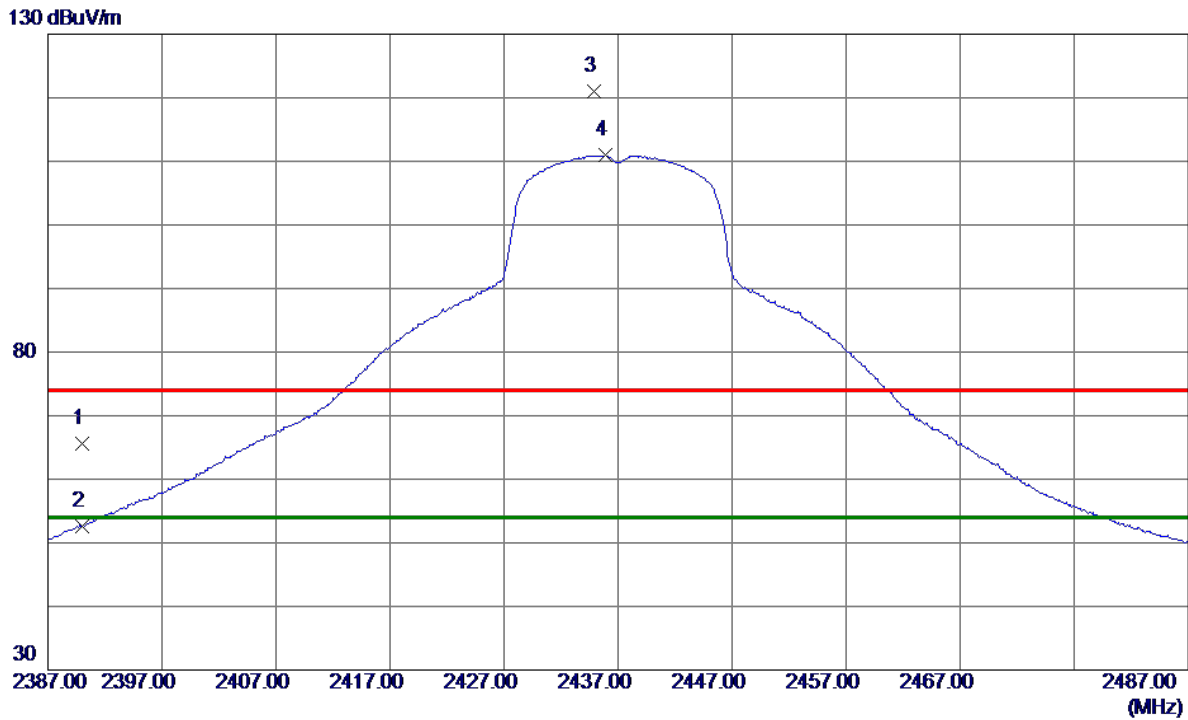
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	58.12	7.56	65.68	74.00	-8.32	Peak	
2	2390.0000	45.06	7.56	52.62	54.00	-1.38	AVG	
3	2434.8500	113.23	7.71	120.94	74.00	46.94	Peak	No Limit
4 *	2435.8500	103.21	7.72	110.93	54.00	56.93	AVG	No Limit

REMARKS:

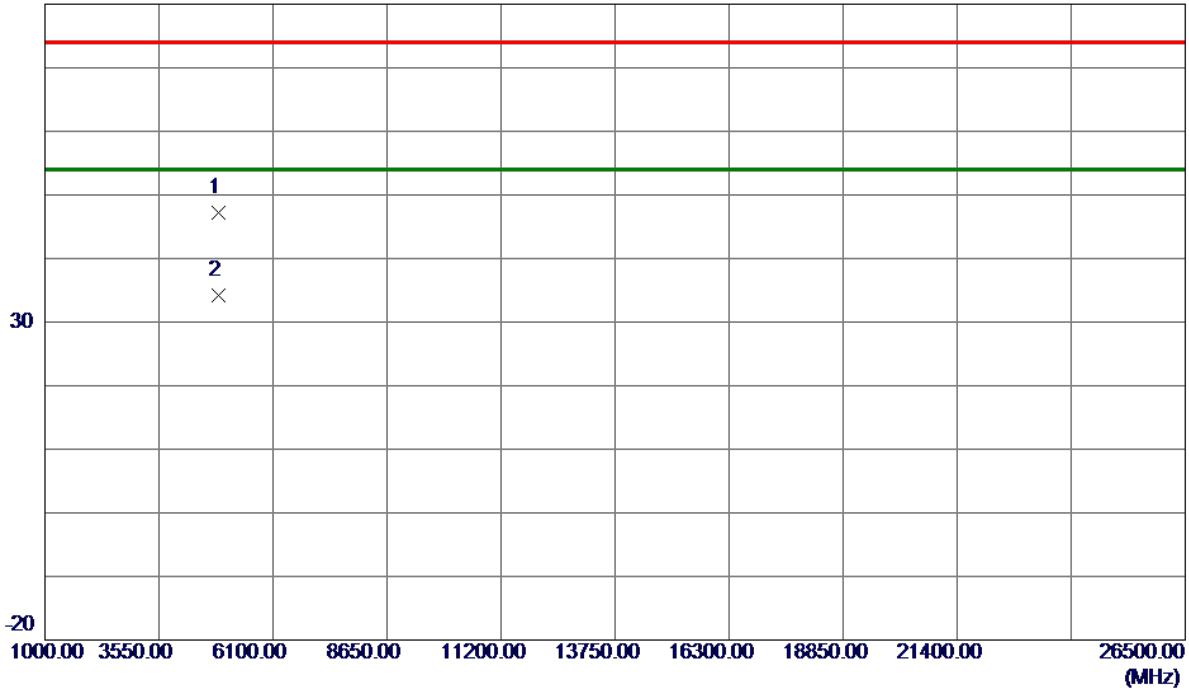
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2437 MHz

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4875.9400	42.78	4.45	47.23	74.00	-26.77	Peak	
2 *	4877.3600	29.78	4.45	34.23	54.00	-19.77	AVG	

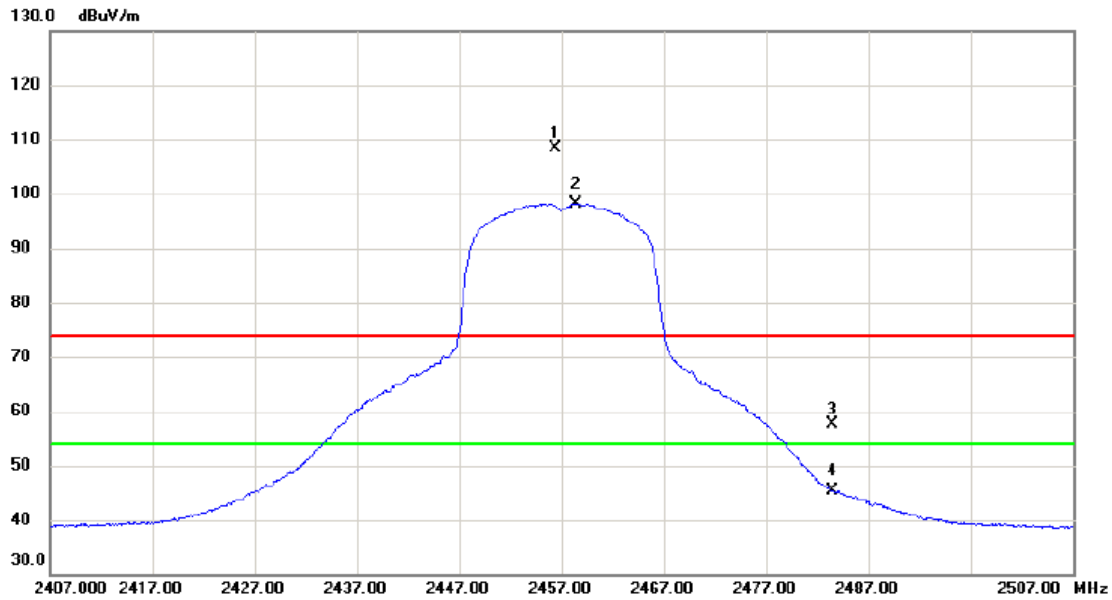
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2457 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2456.450	100.53	7.78	108.31	74.00	34.31	peak	No Limit
2	*	2458.350	90.45	7.79	98.24	54.00	44.24	AVG	No Limit
3		2483.500	49.86	7.87	57.73	74.00	-16.27	peak	
4		2483.500	37.44	7.87	45.31	54.00	-8.69	AVG	

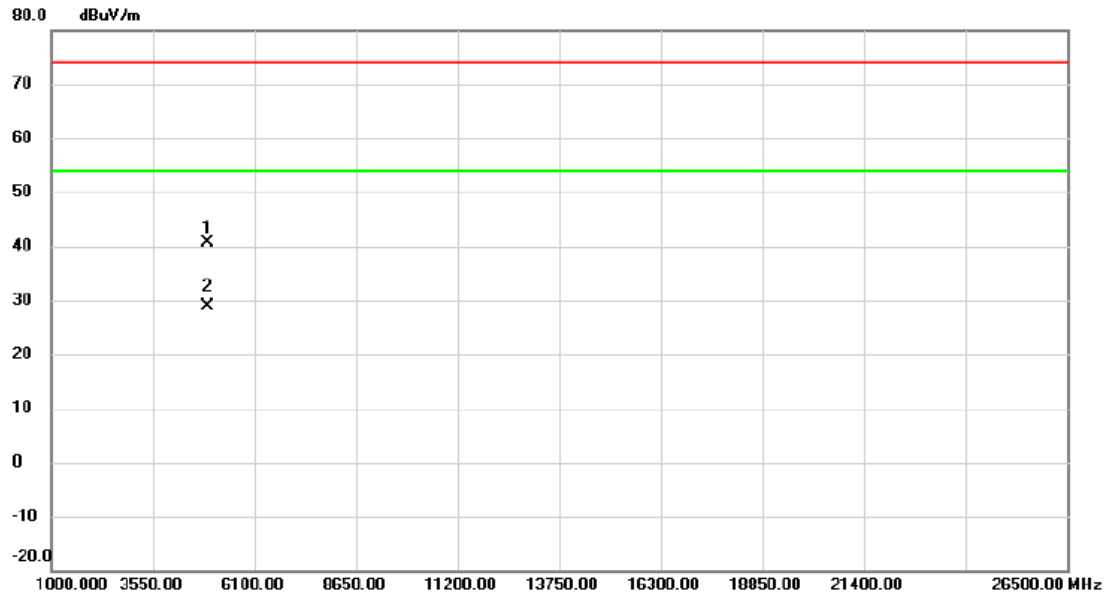
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2457 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4921.430	36.02	4.62	40.64	74.00	-33.36	peak	
2	*	4922.880	24.22	4.63	28.85	54.00	-25.15	AVG	

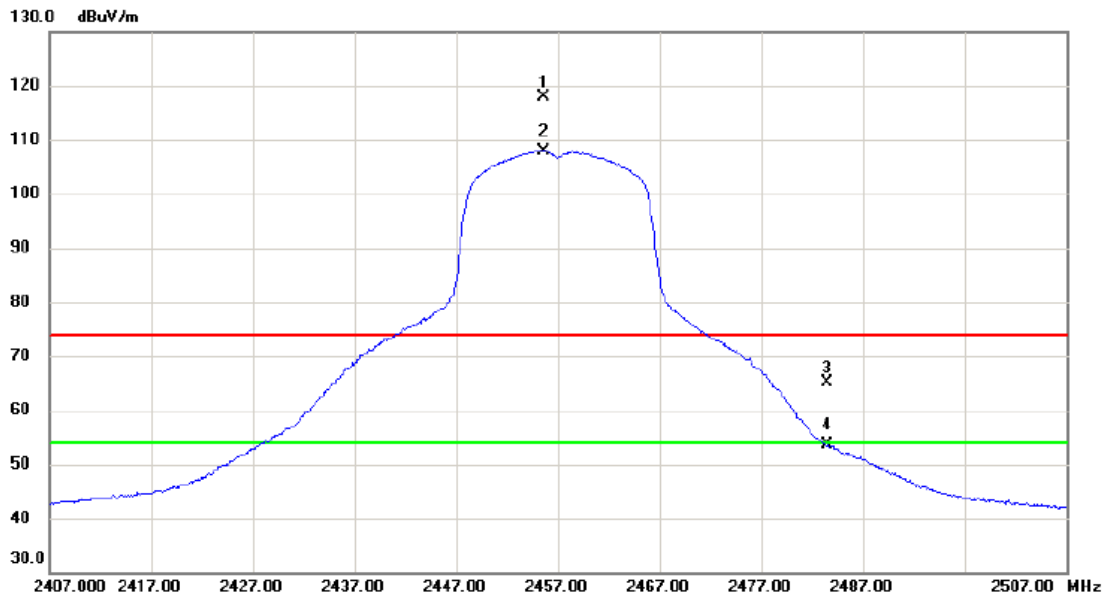
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2457 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2455.650	110.14	7.78	117.92	74.00	43.92	peak	No Limit
2	*	2455.650	100.22	7.78	108.00	54.00	54.00	AVG	No Limit
3		2483.500	57.37	7.87	65.24	74.00	-8.76	peak	
4		2483.500	45.76	7.87	53.63	54.00	-0.37	AVG	

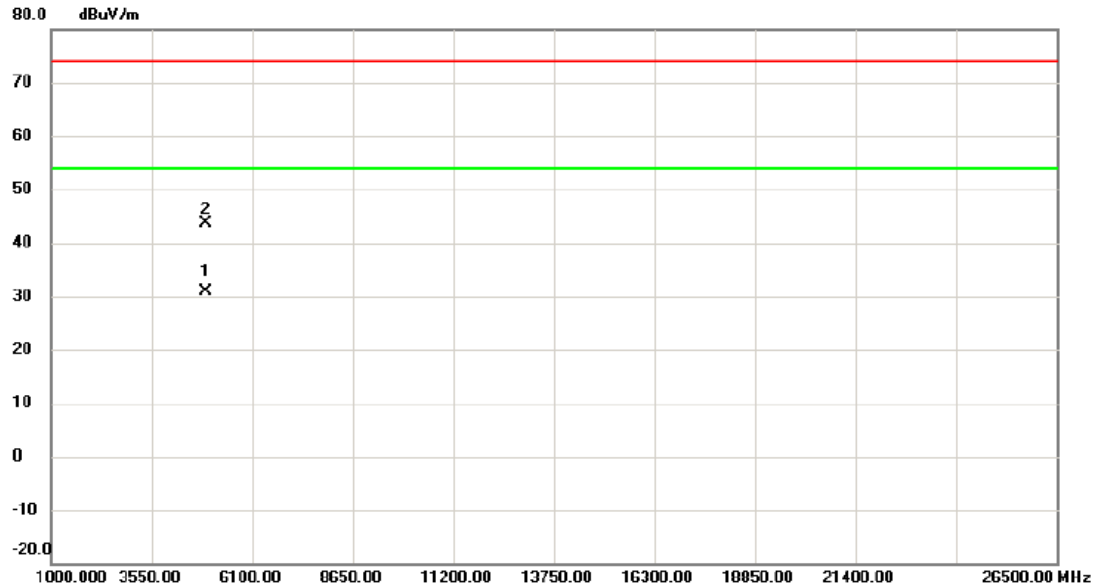
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2457 MHz
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Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4917.050	26.15	4.61	30.76	54.00	-23.24	AVG	
2		4917.980	39.01	4.61	43.62	74.00	-30.38	peak	

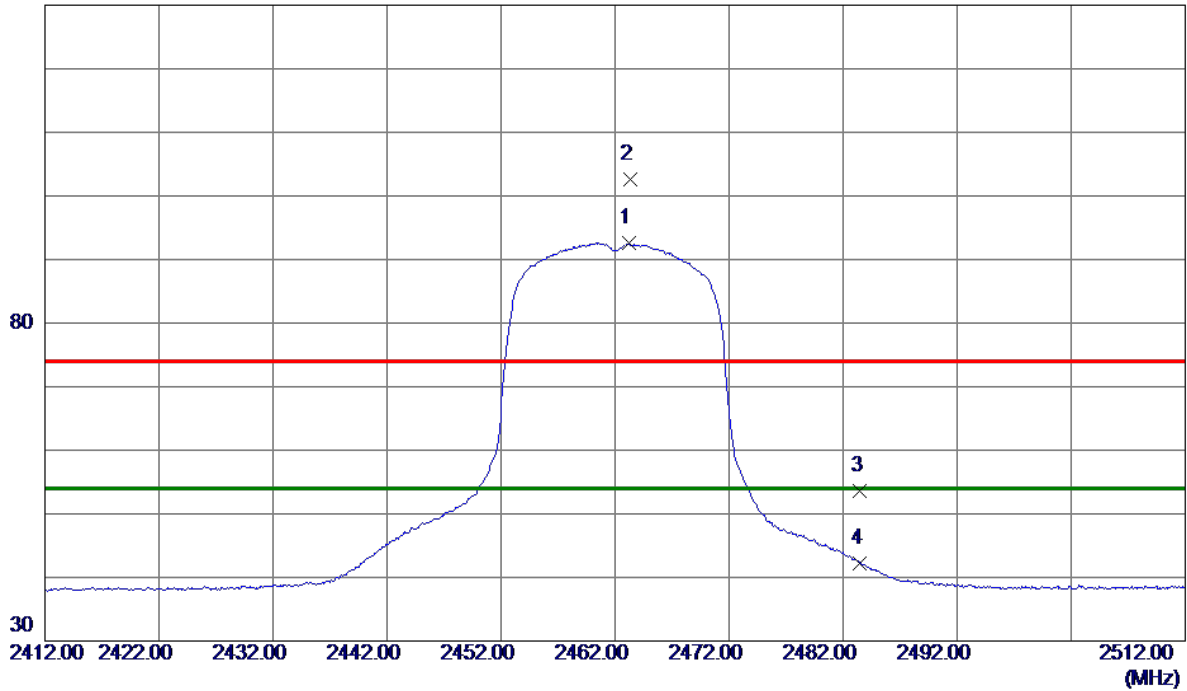
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2463.2000	84.71	7.81	92.52	54.00	38.52	AVG	No Limit
2	2463.3500	94.85	7.81	102.66	74.00	28.66	Peak	No Limit
3	2483.5000	45.73	7.88	53.61	74.00	-20.39	Peak	
4	2483.5000	34.34	7.88	42.22	54.00	-11.78	AVG	

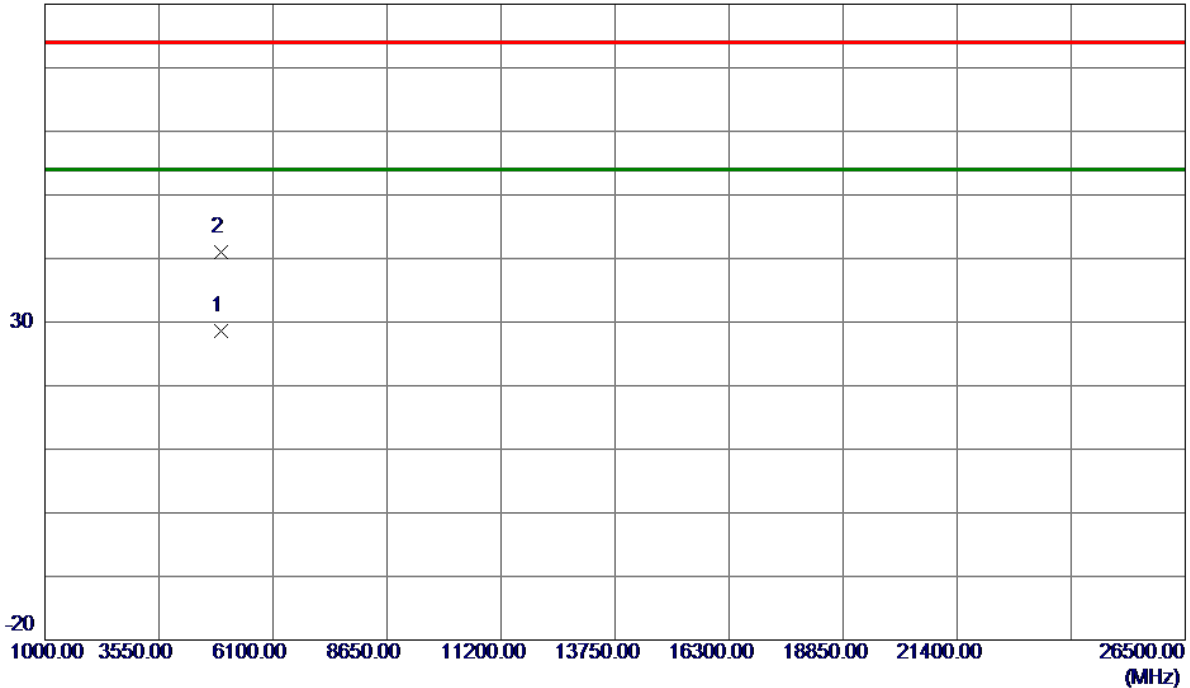
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-20M Mode 2462 MHz
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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 *	4933.1300	23.91	4.66	28.57	54.00	-25.43	AVG	
2	4933.7100	36.26	4.66	40.92	74.00	-33.08	Peak	

REMARKS:

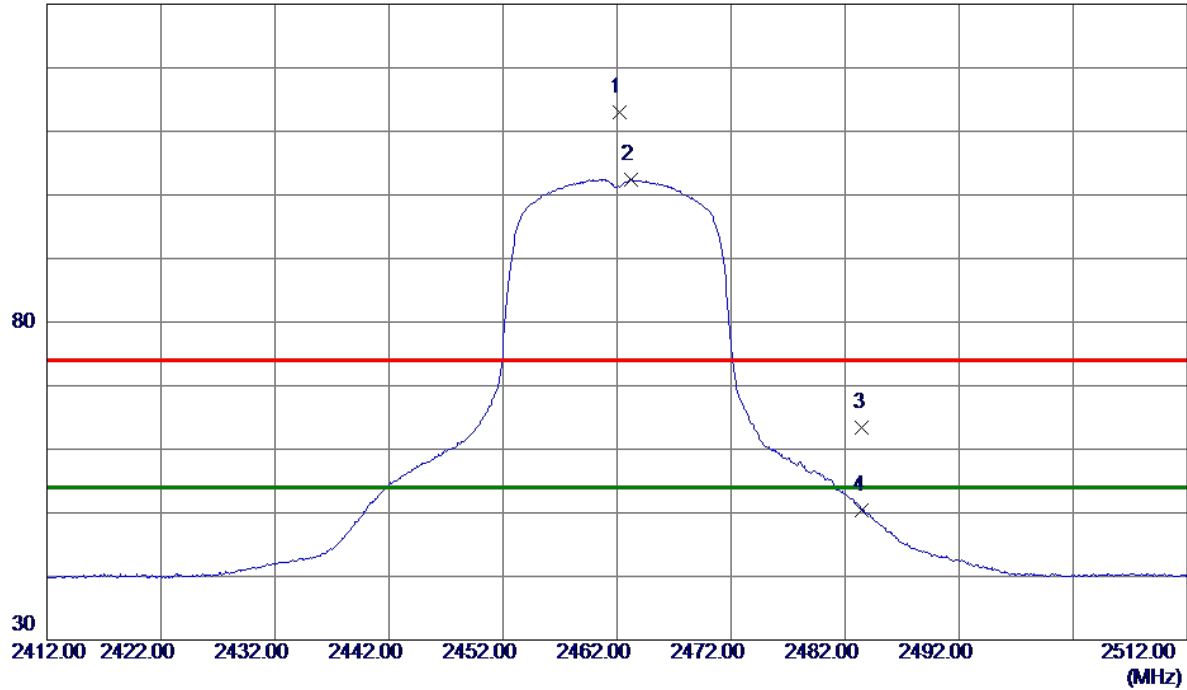
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2462 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2462.2500	105.29	7.80	113.09	74.00	39.09	Peak	No Limit
2 *	2463.2500	94.65	7.81	102.46	54.00	48.46	AVG	No Limit
3	2483.5000	55.49	7.88	63.37	74.00	-10.63	Peak	
4	2483.5000	42.58	7.88	50.46	54.00	-3.54	AVG	

REMARKS:

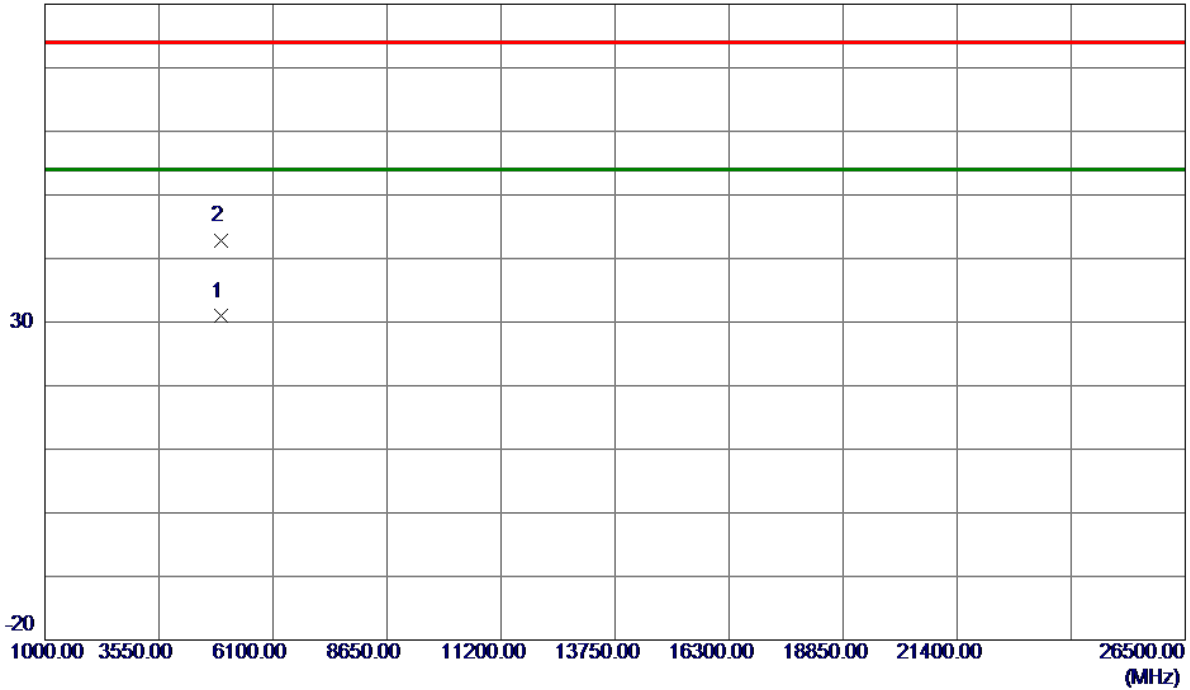
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-20M Mode 2462 MHz

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.7599	26.27	4.63	30.90	54.00	-23.10	AVG	
2	4930.1800	38.15	4.65	42.80	74.00	-31.20	Peak	

REMARKS:

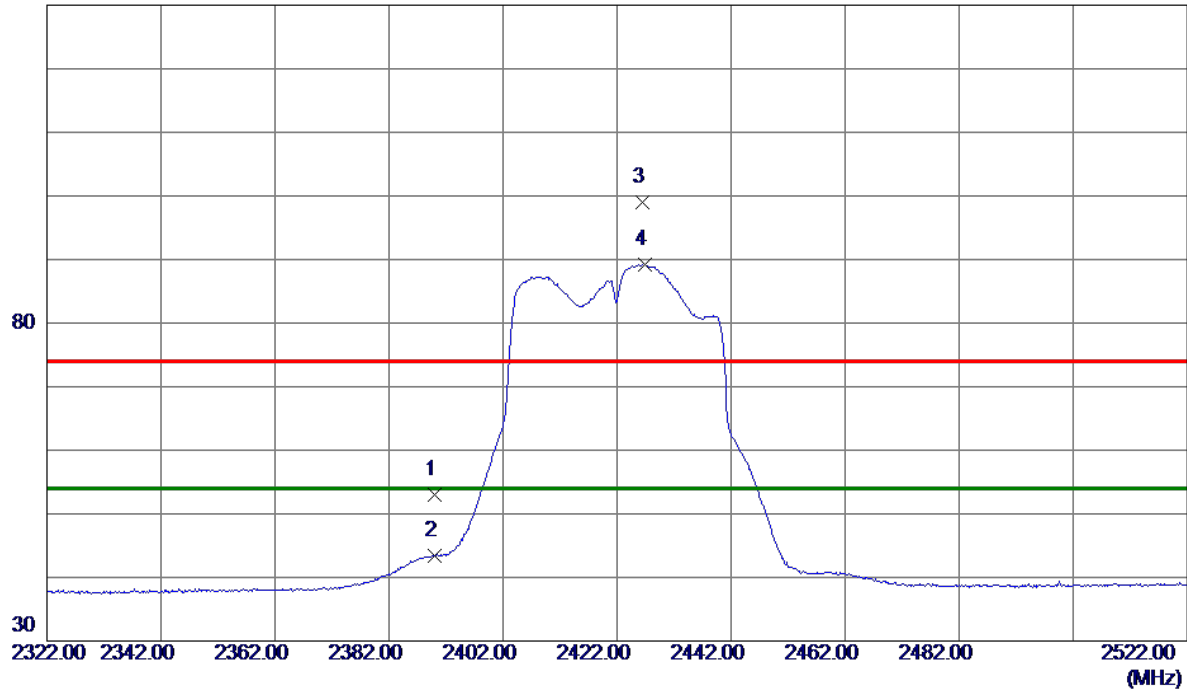
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2422 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	45.44	7.56	53.00	74.00	-21.00	Peak	
2	2390.0000	35.85	7.56	43.41	54.00	-10.59	AVG	
3	2426.5000	91.41	7.69	99.10	74.00	25.10	Peak	No Limit
4 *	2426.8000	81.48	7.69	89.17	54.00	35.17	AVG	No Limit

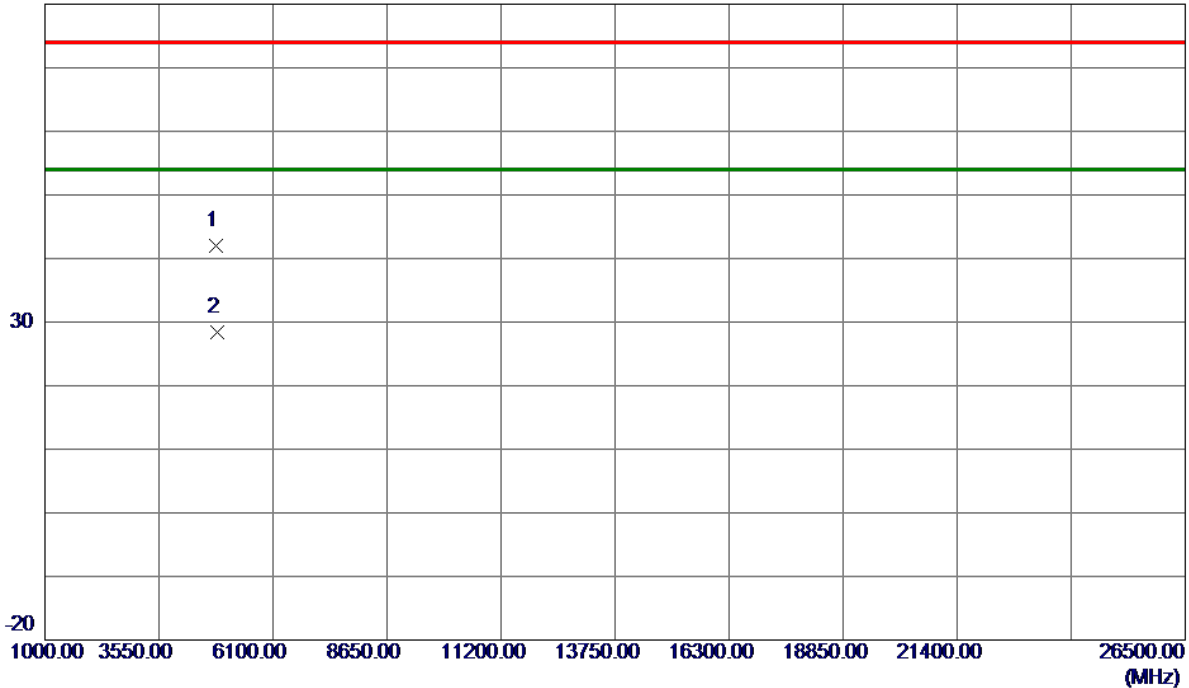
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-40M Mode 2422 MHz
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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	4837.2100	37.64	4.30	41.94	74.00	-32.06	Peak	
2 *	4851.7799	23.96	4.36	28.32	54.00	-25.68	AVG	

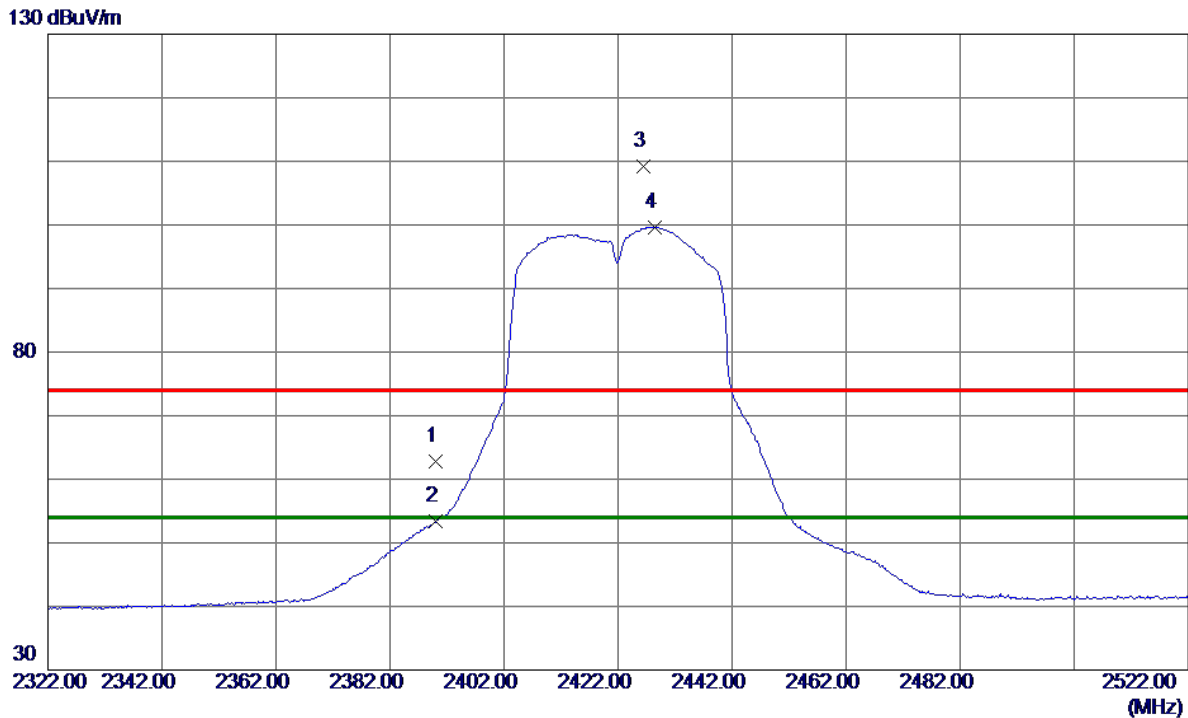
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2422 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	55.19	7.56	62.75	74.00	-11.25	Peak	
2	2390.0000	45.93	7.56	53.49	54.00	-0.51	AVG	
3	2426.5000	101.59	7.69	109.28	74.00	35.28	Peak	No Limit
4 *	2428.5000	92.00	7.69	99.69	54.00	45.69	AVG	No Limit

REMARKS:

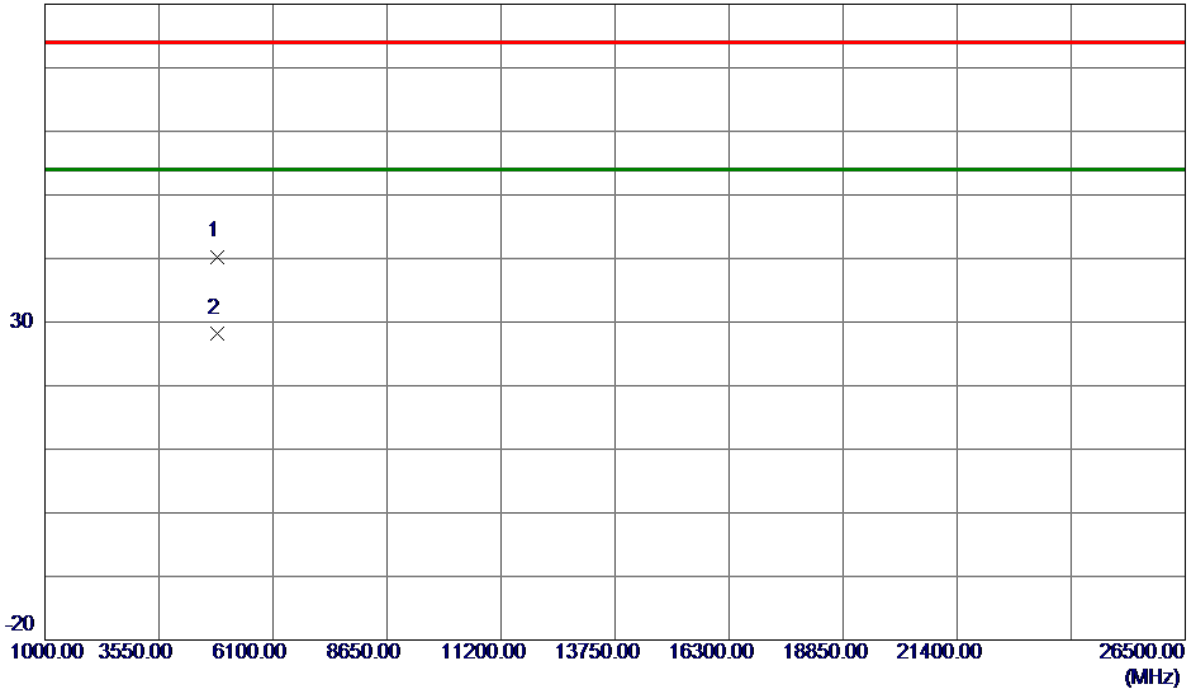
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-40M Mode 2422 MHz
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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	4842.6300	35.98	4.32	40.30	74.00	-33.70	Peak	
2 *	4852.5400	23.87	4.36	28.23	54.00	-25.77	AVG	

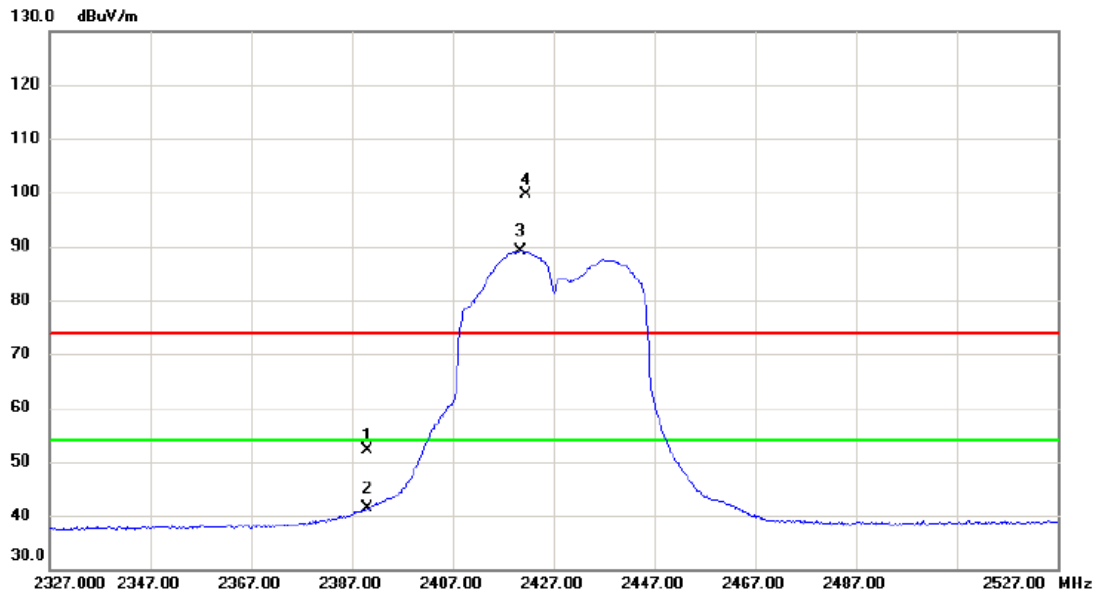
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2427 MHz

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	44.58	7.57	52.15	74.00	-21.85	peak	
2		2390.000	33.72	7.57	41.29	54.00	-12.71	AVG	
3	*	2420.600	81.39	7.67	89.06	54.00	35.06	AVG	No Limit
4	X	2421.400	91.88	7.67	99.55	74.00	25.55	peak	No Limit

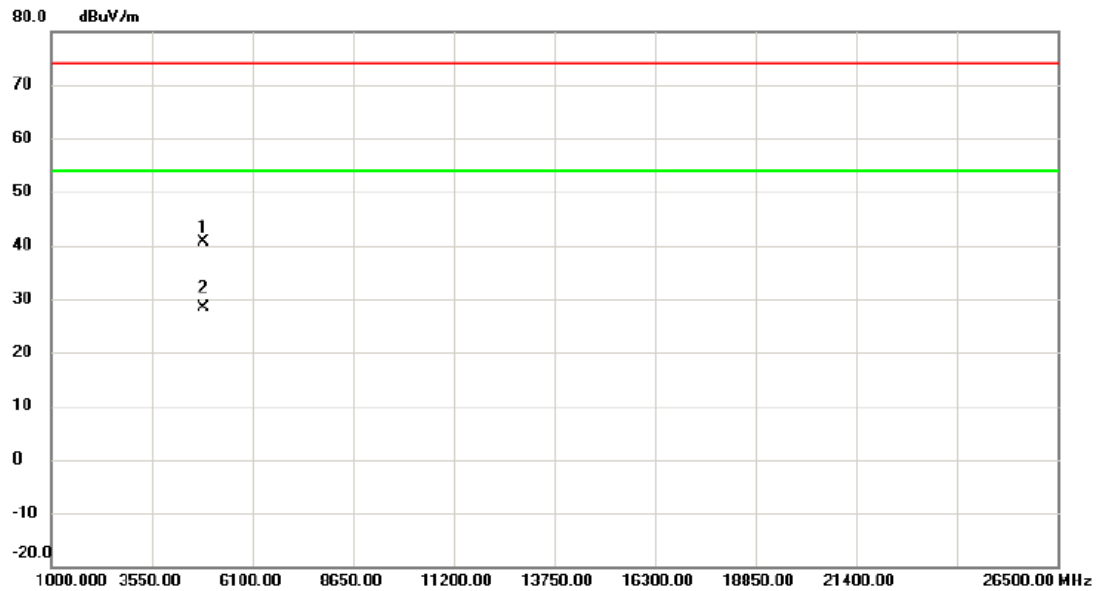
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2427 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4846.070	36.19	4.34	40.53	74.00	-33.47	peak	
2	*	4854.900	23.95	4.37	28.32	54.00	-25.68	AVG	

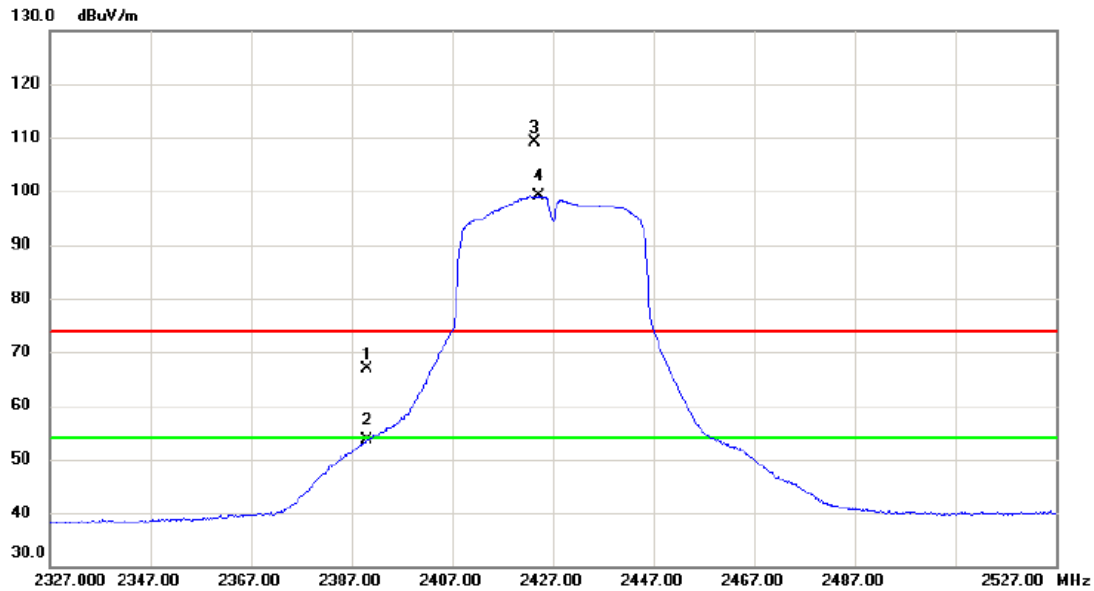
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2427 MHz

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	59.38	7.57	66.95	74.00	-7.05	peak	
2		2390.000	46.10	7.57	53.67	54.00	-0.33	AVG	
3	X	2423.500	101.37	7.67	109.04	74.00	35.04	peak	No Limit
4	*	2424.200	91.38	7.68	99.06	54.00	45.06	AVG	No Limit

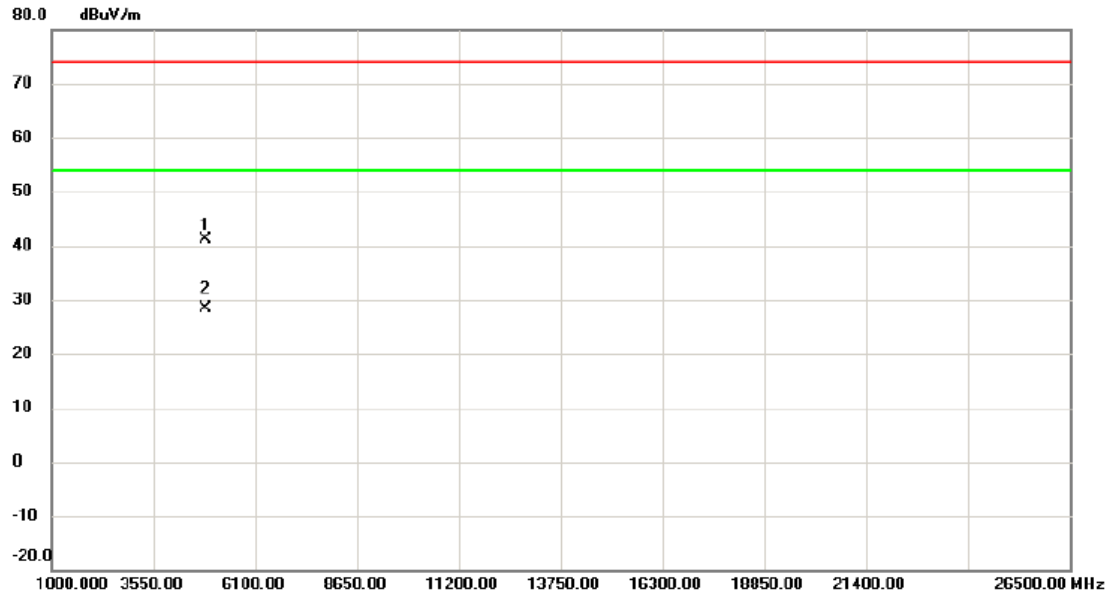
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2427 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4849.790	36.86	4.35	41.21	74.00	-32.79	peak	
2	*	4860.280	24.06	4.39	28.45	54.00	-25.55	AVG	

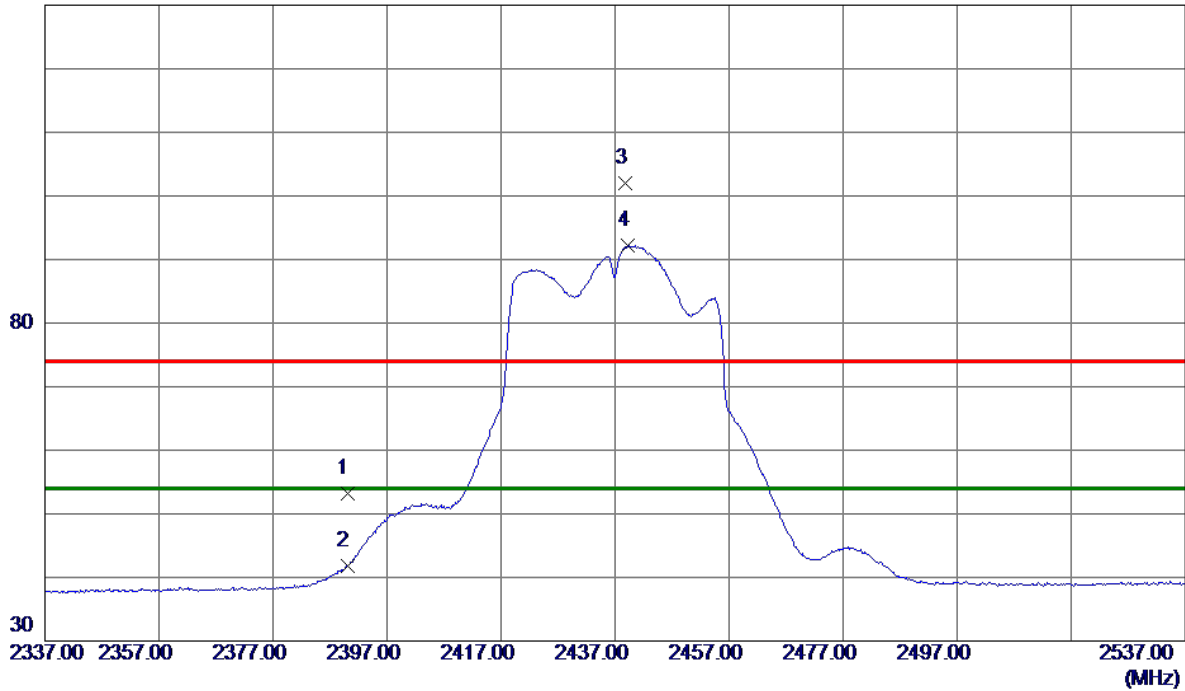
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	45.69	7.56	53.25	74.00	-20.75	Peak	
2	2390.0000	34.29	7.56	41.85	54.00	-12.15	AVG	
3	2438.8000	94.23	7.73	101.96	74.00	27.96	Peak	No Limit
4 *	2439.3000	84.42	7.73	92.15	54.00	38.15	AVG	No Limit

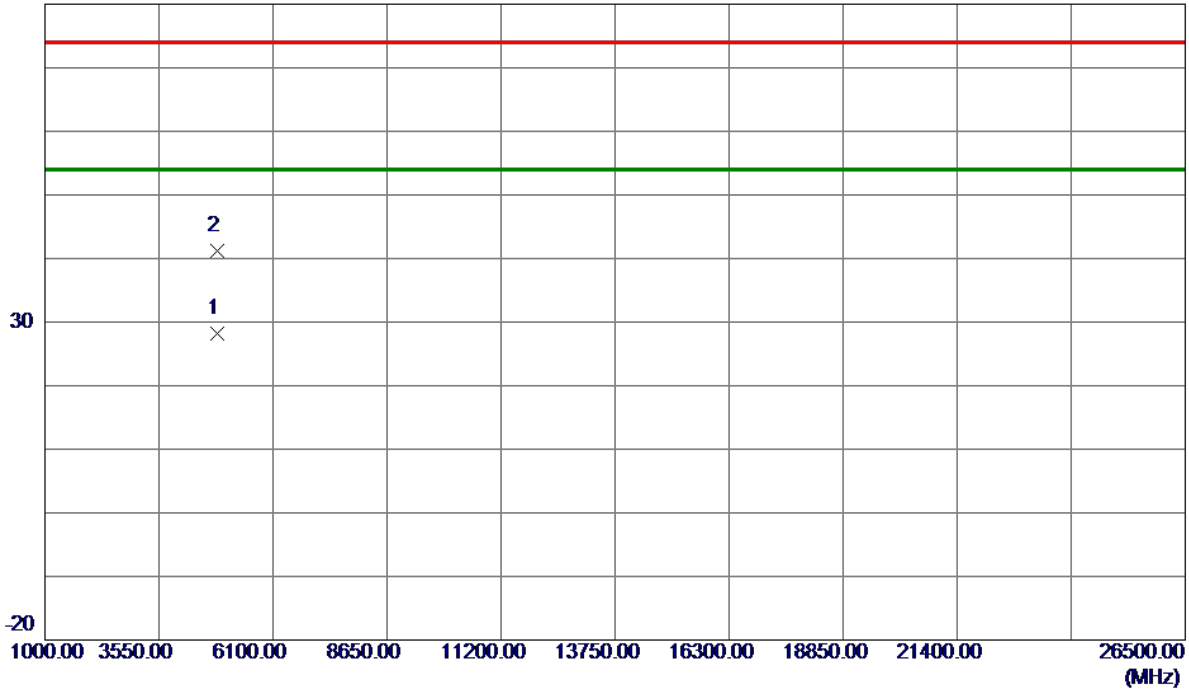
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-40M Mode 2437 MHz
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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 *	4865.5500	23.78	4.41	28.19	54.00	-25.81	AVG	
2	4866.3630	36.82	4.41	41.23	74.00	-32.77	Peak	

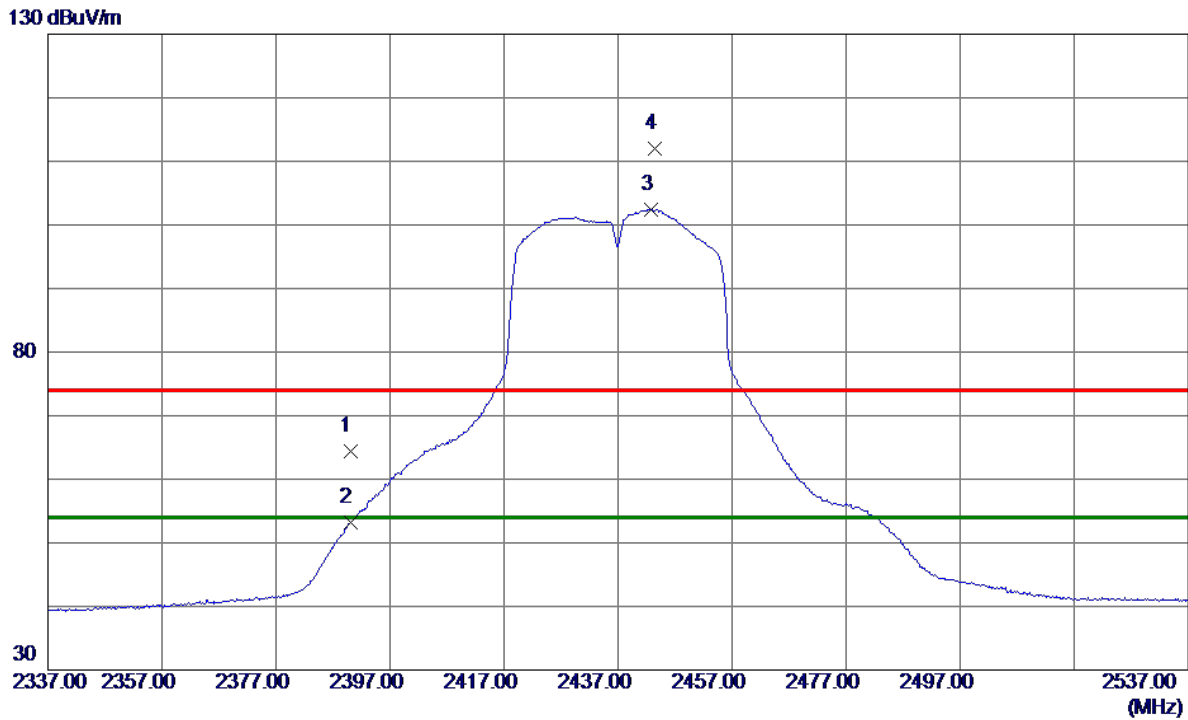
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	56.79	7.56	64.35	74.00	-9.65	Peak	
2	2390.0000	45.66	7.56	53.22	54.00	-0.78	AVG	
3 *	2442.7000	94.69	7.74	102.43	54.00	48.43	AVG	No Limit
4	2443.4000	104.23	7.74	111.97	74.00	37.97	Peak	No Limit

REMARKS:

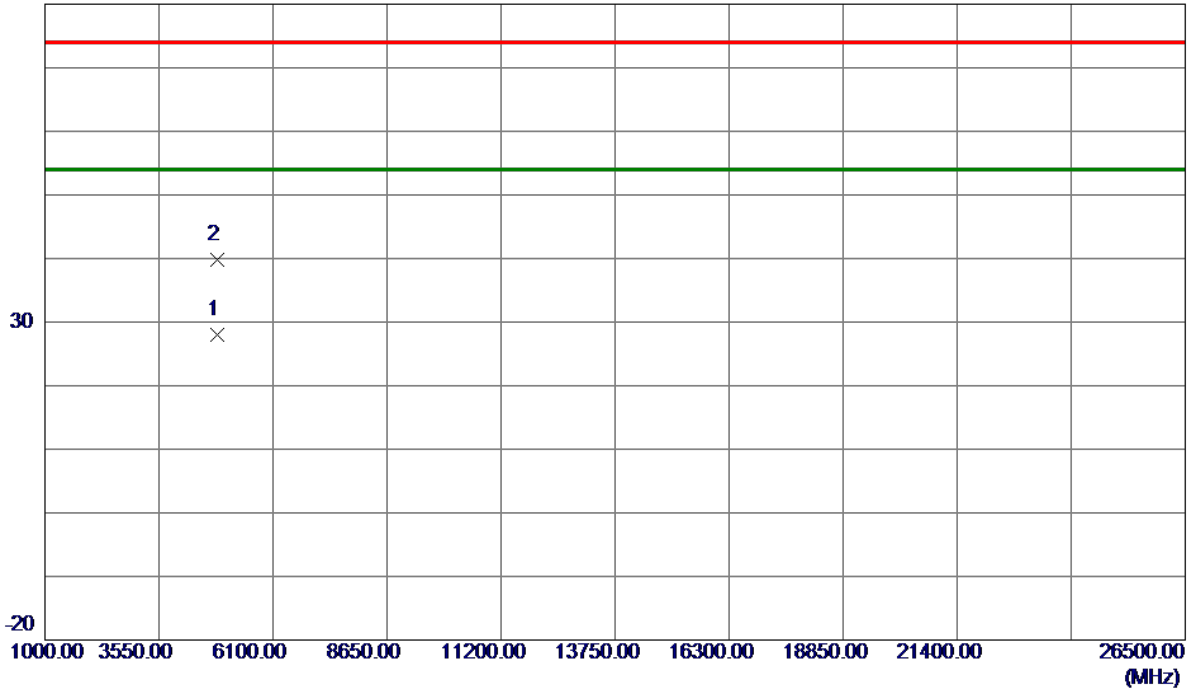
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-40M Mode 2437 MHz
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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 *	4865.4100	23.65	4.41	28.06	54.00	-25.94	AVG	
2	4865.6500	35.47	4.41	39.88	74.00	-34.12	Peak	

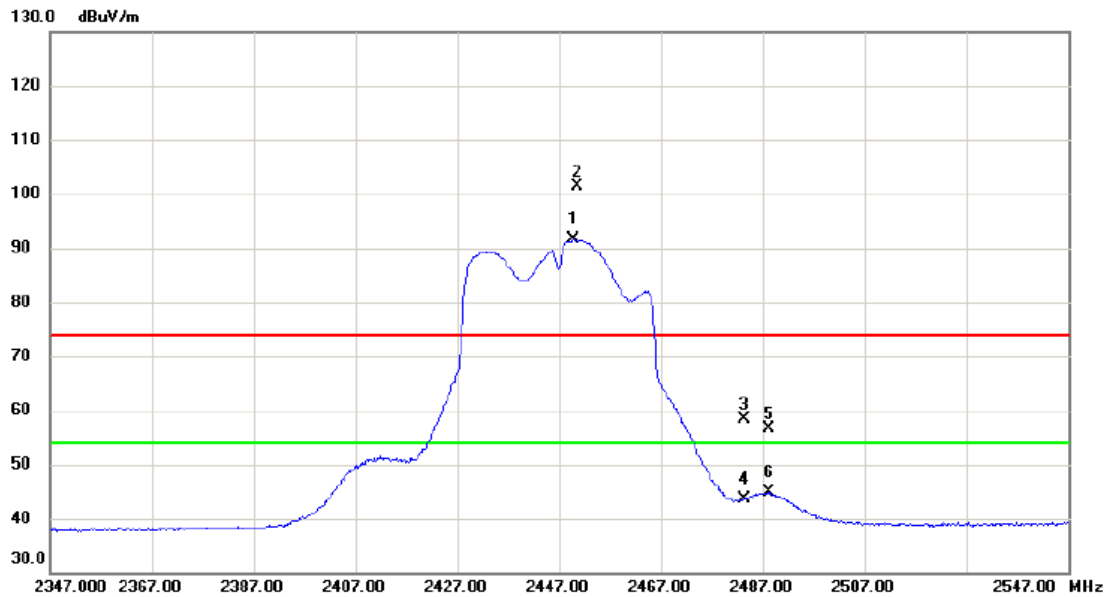
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2447 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2449.900	83.77	7.76	91.53	54.00	37.53	AVG	No Limit
2	X	2450.700	93.69	7.76	101.45	74.00	27.45	peak	No Limit
3		2483.500	50.49	7.87	58.36	74.00	-15.64	peak	
4		2483.500	35.74	7.87	43.61	54.00	-10.39	AVG	
5		2488.300	48.64	7.89	56.53	74.00	-17.47	peak	
6		2488.300	36.98	7.89	44.87	54.00	-9.13	AVG	

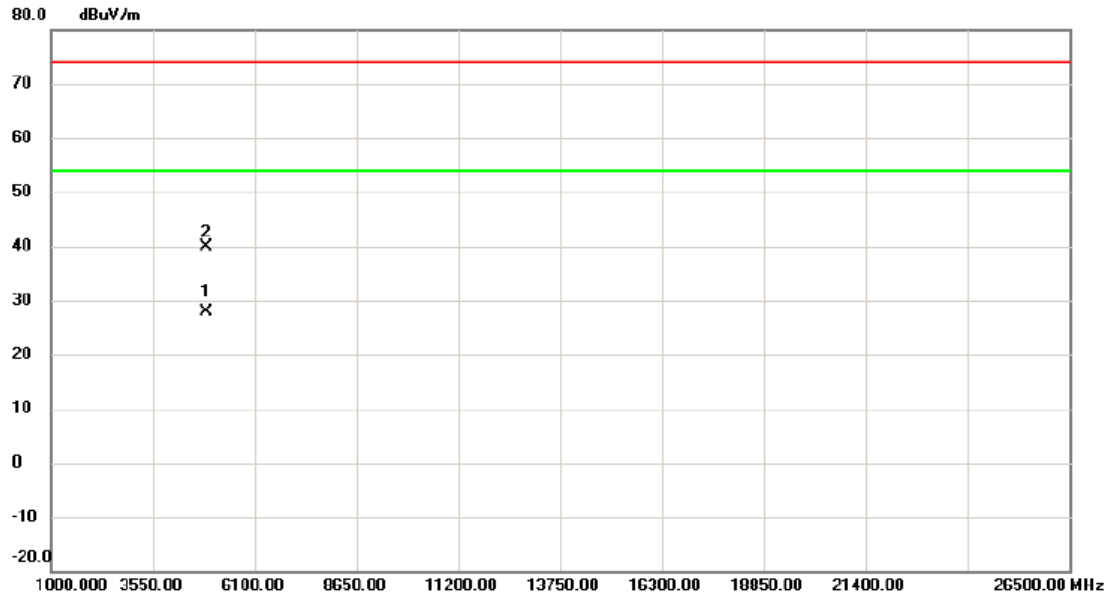
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2447 MHz

Vertical



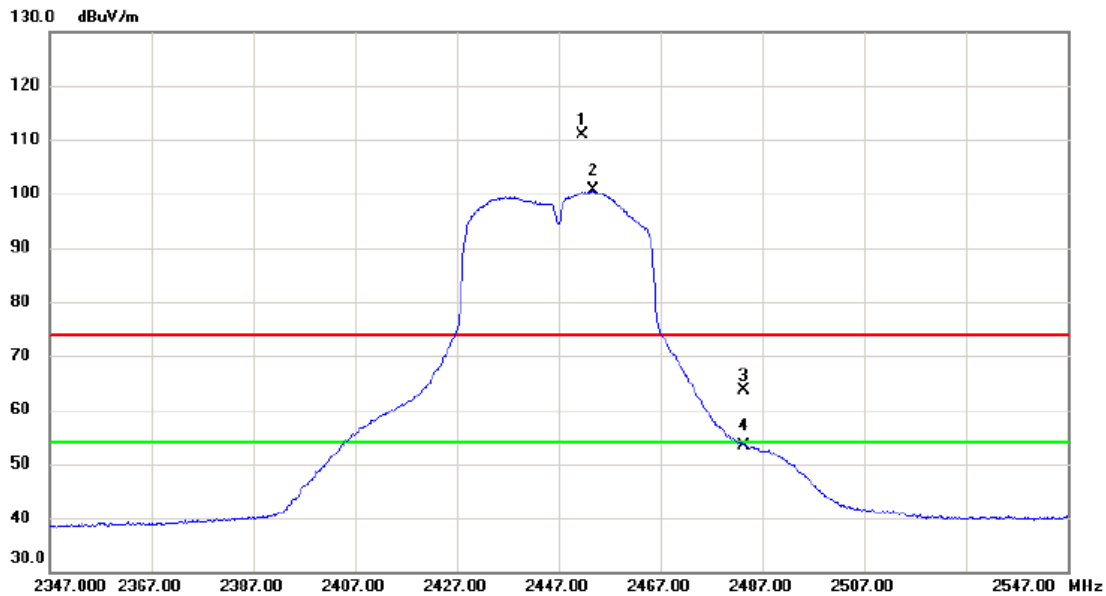
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4886.640	23.33	4.49	27.82	54.00	-26.18	AVG	
2		4898.420	35.41	4.54	39.95	74.00	-34.05	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2447 MHz

Horizontal



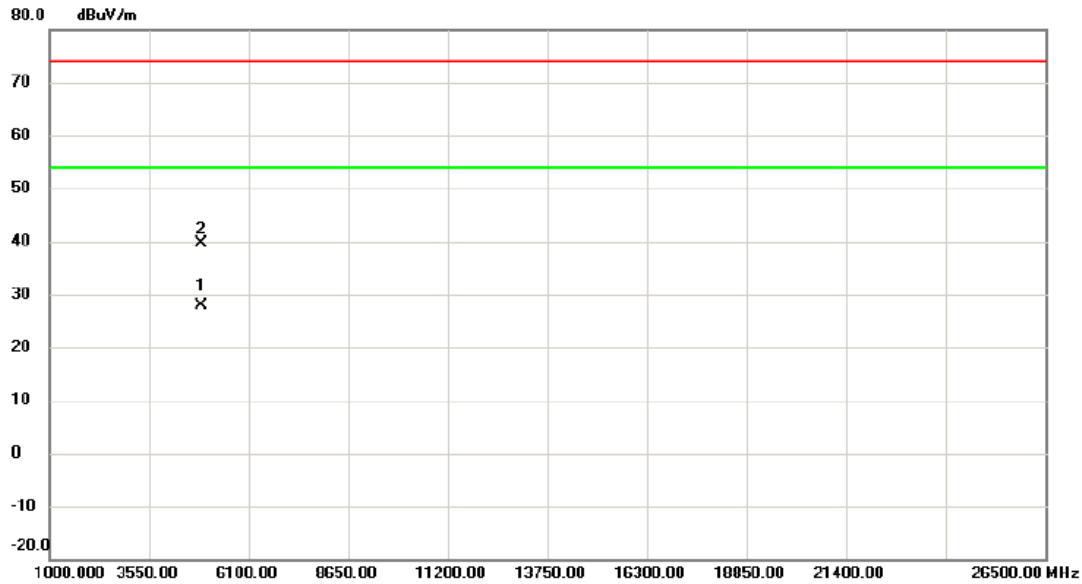
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2451.600	103.08	7.77	110.85	74.00	36.85	peak	No Limit
2	*	2453.800	92.87	7.78	100.65	54.00	46.65	AVG	No Limit
3		2483.500	55.87	7.87	63.74	74.00	-10.26	peak	
4		2483.500	45.41	7.87	53.28	54.00	-0.72	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2447 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4884.040	23.31	4.47	27.78	54.00	-26.22	AVG	
2		4897.810	35.01	4.54	39.55	74.00	-34.45	peak	

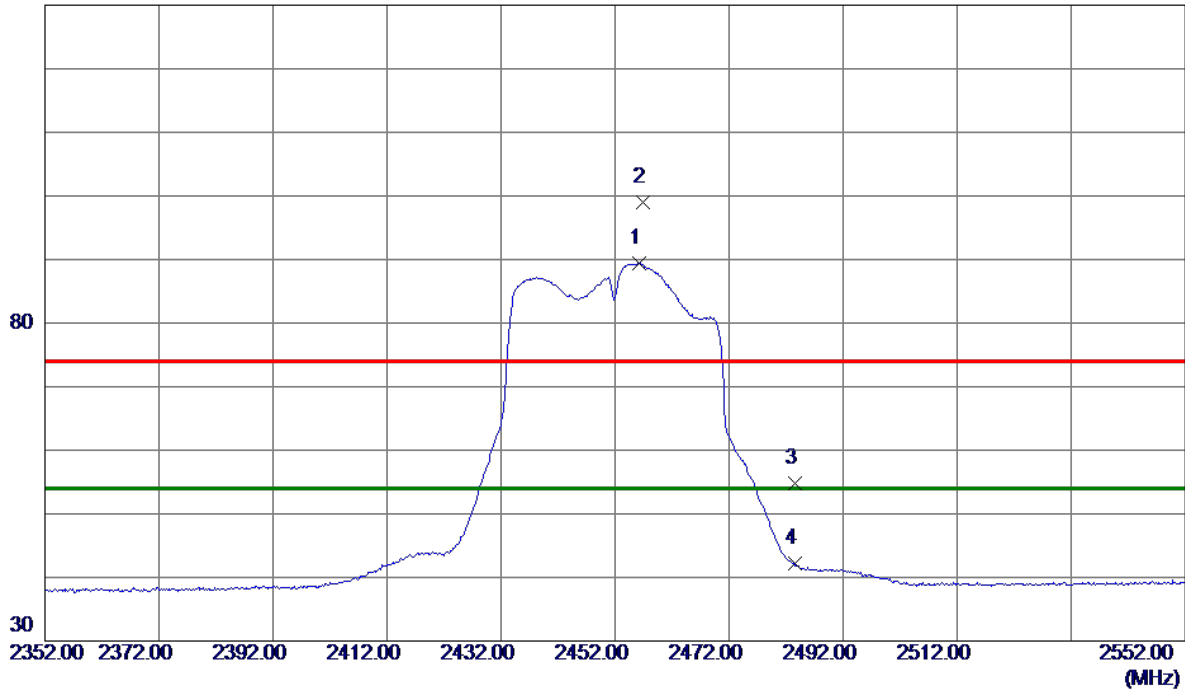
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2452 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2456.2000	81.64	7.78	89.42	54.00	35.42	AVG	No Limit
2	2456.8000	91.30	7.79	99.09	74.00	25.09	Peak	No Limit
3	2483.5000	46.89	7.88	54.77	74.00	-19.23	Peak	
4	2483.5000	34.24	7.88	42.12	54.00	-11.88	AVG	

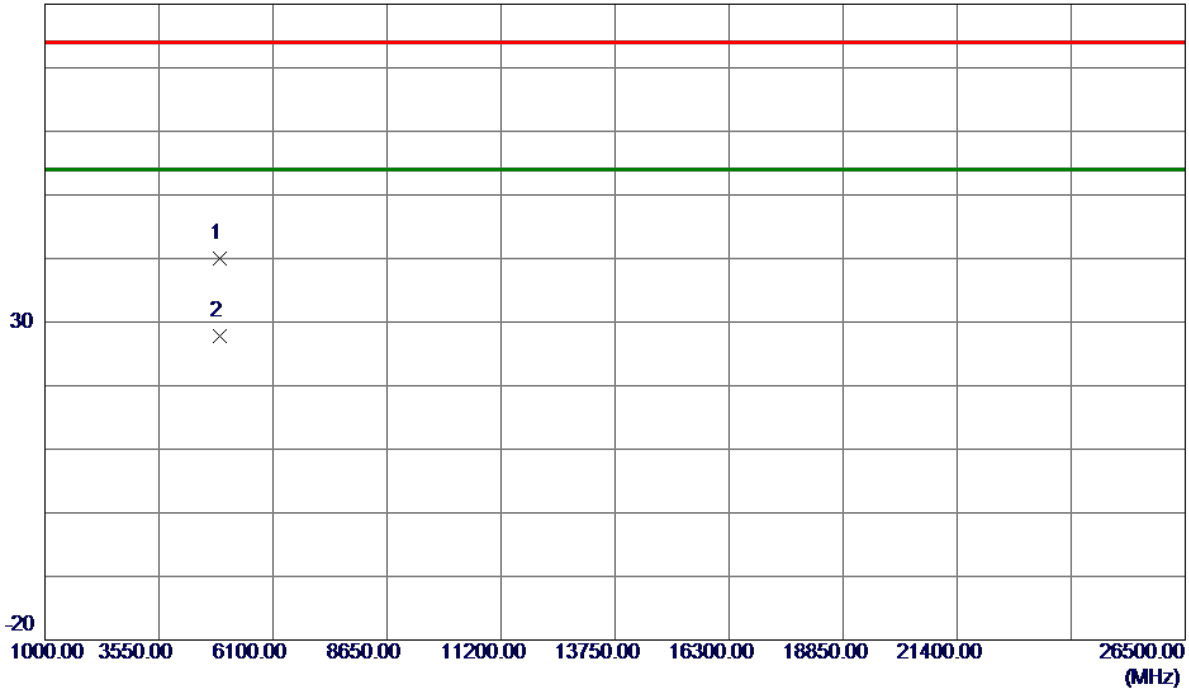
REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-40M Mode 2452 MHz
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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	4911.3800	35.43	4.58	40.01	74.00	-33.99	Peak	
2 *	4913.5800	23.24	4.59	27.83	54.00	-26.17	AVG	

REMARKS:

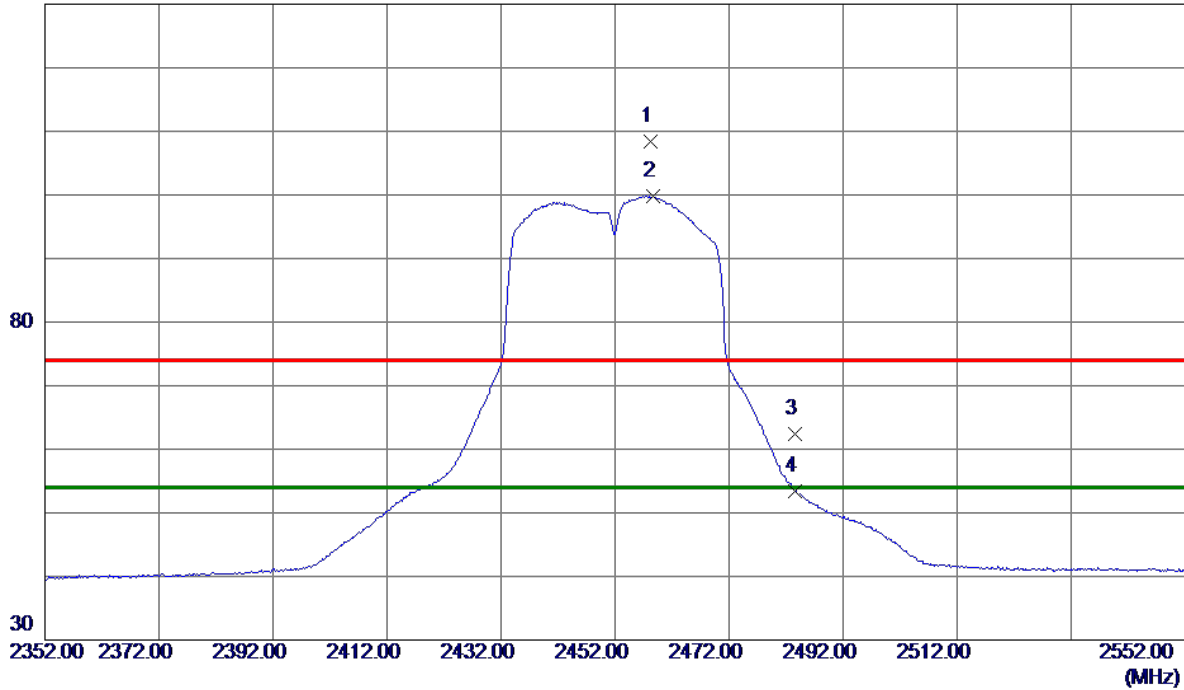
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode: TX N-40M Mode 2452 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2458.3000	100.63	7.79	108.42	74.00	34.42	Peak	No Limit
2 *	2458.7000	92.02	7.79	99.81	54.00	45.81	AVG	No Limit
3	2483.5000	54.56	7.88	62.44	74.00	-11.56	Peak	
4	2483.5000	45.51	7.88	53.39	54.00	-0.61	AVG	

REMARKS:

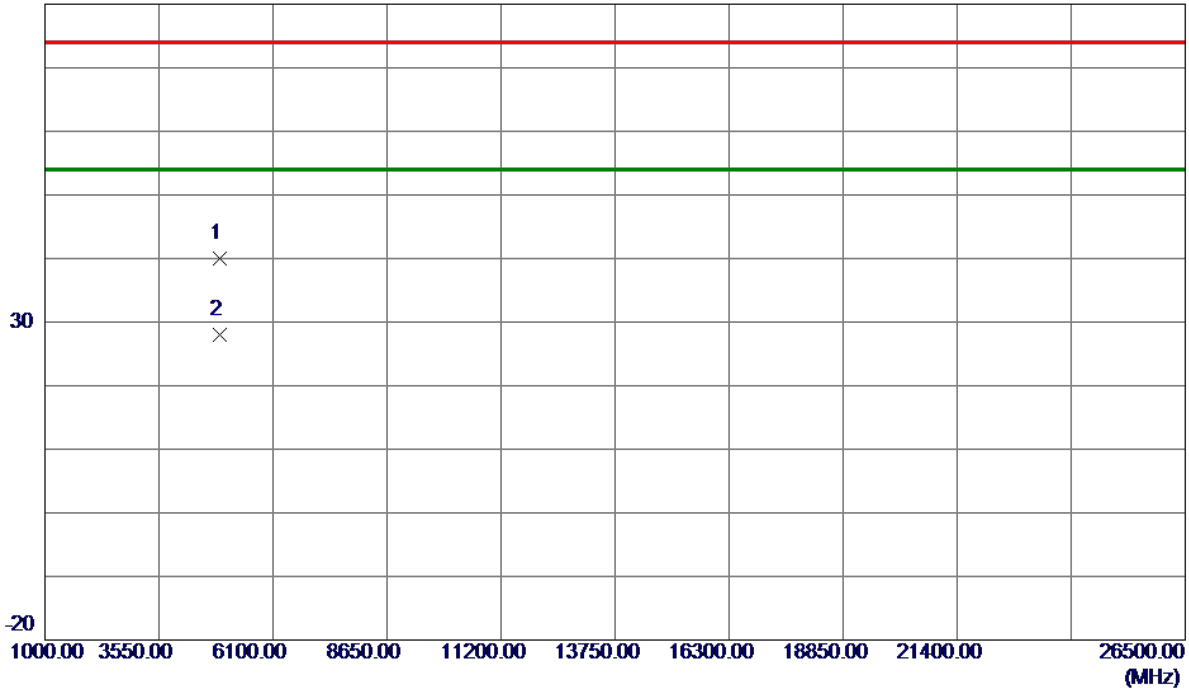
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode:	TX N-40M Mode 2452 MHz
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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	4909.0500	35.46	4.57	40.03	74.00	-33.97	Peak	
2 *	4913.2200	23.38	4.59	27.97	54.00	-26.03	AVG	

REMARKS:

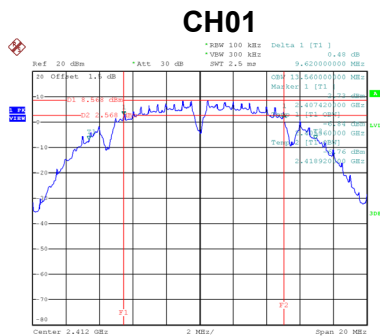
(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

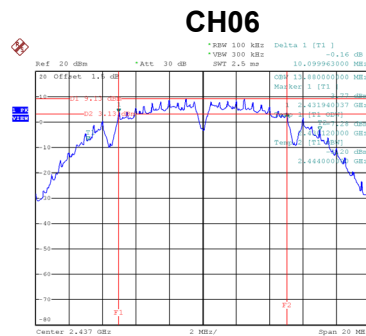
APPENDIX E - BANDWIDTH

Test Mode	TX B Mode
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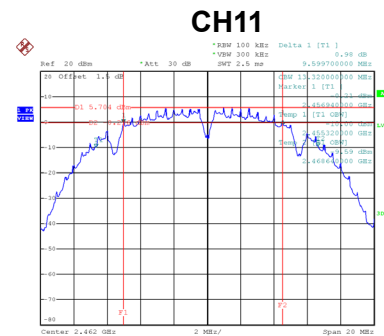
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	9.62	500	Complies
06	2437	10.10	500	Complies
11	2462	9.60	500	Complies



Date: 13.AUG.2019 15:25:28

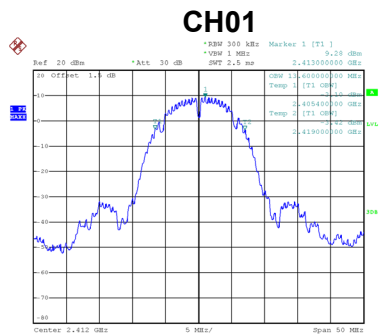


Date: 13.AUG.2019 15:29:02

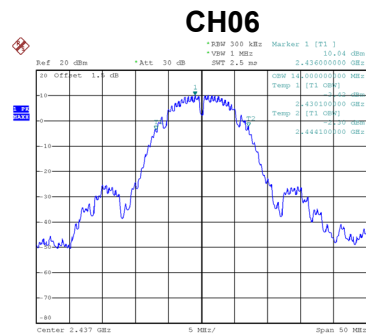


Date: 13.AUG.2019 15:31:33

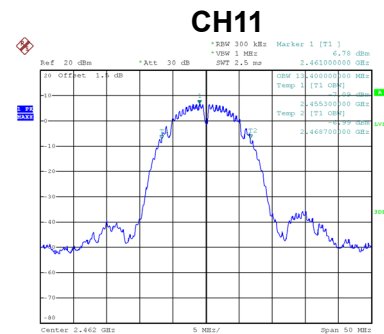
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	13.60	Complies
06	2437	14.00	Complies
11	2462	13.40	Complies



Date: 13.AUG.2019 15:27:03



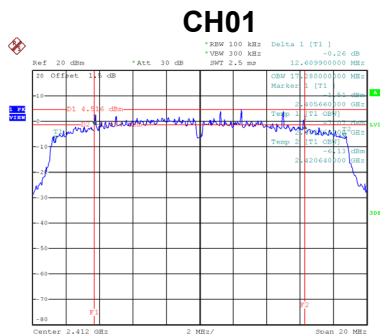
Date: 13.AUG.2019 15:29:44



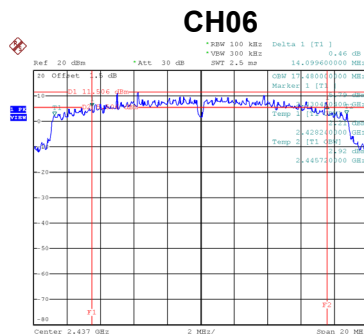
Date: 13.AUG.2019 15:32:29

Test Mode	TX N-20M Mode
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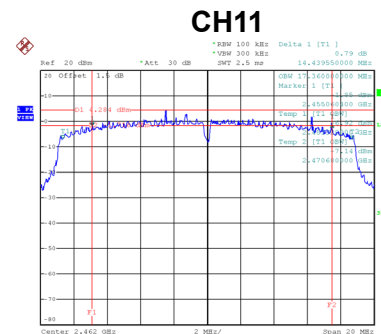
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	12.61	500	Complies
06	2437	14.10	500	Complies
11	2462	14.44	500	Complies



Date: 13.AUG.2019 15:43:02

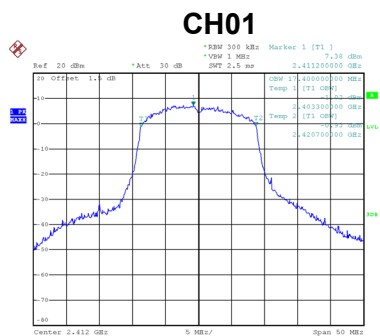


Date: 13.AUG.2019 15:45:20

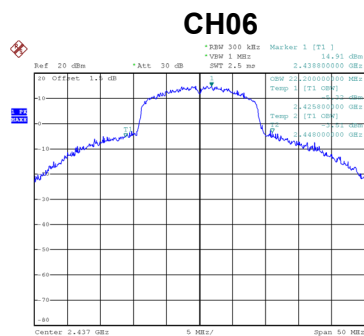


Date: 13.AUG.2019 15:47:44

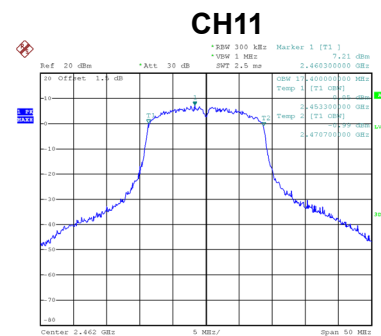
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.40	Complies
06	2437	22.20	Complies
11	2462	17.40	Complies



Date: 13.AUG.2019 15:43:47



Date: 13.AUG.2019 15:45:51



Date: 13.AUG.2019 15:48:19