

# FCC Radio Test Report

## FCC ID: 2AXJ4KL125V2

**This report concerns: Original Grant**

**Project No.** : 2011C175  
**Equipment** : Kasa Smart Wi-Fi Light Bulb, Multicolor  
**Brand Name** : tp-link  
**Test Model** : KL125  
**Series Model** : N/A  
**Applicant** : TP-Link Corporation Limited  
**Address** : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong  
**Manufacturer** : TP-Link Corporation Limited  
**Address** : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong  
**Date of Receipt** : Nov. 23, 2020  
**Date of Test** : Nov. 23, 2020 ~ Dec. 21, 2020  
**Issued Date** : Dec. 29, 2020  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: DG20201123212 for conducted, DG20201123213 for radiated.  
**Standard(s)** : FCC Part15, Subpart C (15.247)  
 ANSI C63.10-2013  
 FCC KDB 558074 D01 15.247 Meas Guidance v05r02

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



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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.	Dec. 29, 2020

## 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 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	150kHz ~ 30MHz	2.68

### B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	V	3.02
		9kHz ~ 30MHz	H	4.26
		30MHz ~ 200MHz	V	3.38
		30MHz ~ 200MHz	H	3.98
		200MHz ~ 1,000MHz	V	3.94
		200MHz ~ 1,000MHz	H	3.96
		1GHz ~ 6GHz	-	5.24
		6GHz ~ 18GHz	-	3.02
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	4.00

### C. Other Measurement:

Parameter	Uncertainty
Bandwidth	$\pm 3.8$ %
Maximum Output Power	$\pm 0.95$ dB
Conducted Spurious Emission	$\pm 2.71$ dB
Power Spectral Density	$\pm 0.86$ dB
Temperature	$\pm 0.08$ °C
Time	$\pm 0.58$ %
Supply voltages	$\pm 0.3$ %

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	Kwok Guo
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	26°C	52%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	26°C	52%	AC 120V/60Hz	Kwok Guo
Bandwidth	22°C	36%	AC 120V/60Hz	Hayden Chen
Maximum Output Power	22°C	36%	AC 120V/60Hz	Laughing Zhang
Conducted Spurious Emissions	22°C	36%	AC 120V/60Hz	Hayden Chen
Power Spectral Density	22°C	36%	AC 120V/60Hz	Hayden Chen

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Kasa Smart Wi-Fi Light Bulb, Multicolor
Brand Name	tp-link
Test Model	KL125
Series Model	N/A
Model Difference(s)	N/A
Power Source	AC Mains.
Power Rating	120V~
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 72.2 Mbps
Maximum Peak Output Power	IEEE 802.11b: 21.48 dBm (0.1406 W) IEEE 802.11g: 25.81 dBm (0.3811 W) IEEE 802.11n (HT20): 25.86 dBm (0.3855 W)
Maximum Average Output Power	IEEE 802.11b: 18.29 dBm (0.0675 W) IEEE 802.11g: 18.54 dBm (0.0714 W) IEEE 802.11n (HT20): 18.57 dBm (0.0719 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)							
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	<b>TP-LINK</b>	N/A	Internal	N/A	0.27

Note:

The antenna gain is provided by the manufacturer.

## 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 N20 Mode Channel 01
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N-20 MHz Mode Channel 01/02/06/10/11

Following mode(s) was (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 4	TX N20 Mode Channel 01

Radiated emissions test - Below 1GHz	
Final Test Mode:	Description
Mode 4	TX N20 Mode Channel 01

Radiated emissions test- Above 1GHz	
Final Test Mode:	Description
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N-20 MHz Mode Channel 01/02/06/10/11

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

**NOTE:**

- (1) The measurements are performed at the high, middle, low available channels.
- (2) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (3) For radiated emission below 1 GHz test, the IEEE 802.11n20 Channel 01 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.

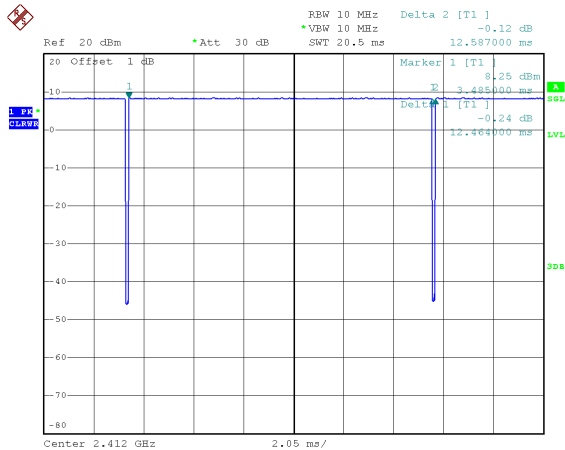
**2.3 PARAMETERS OF TEST SOFTWARE**

Test Software	UI_mptool.exe 1.0.0.1
---------------	-----------------------

## 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.

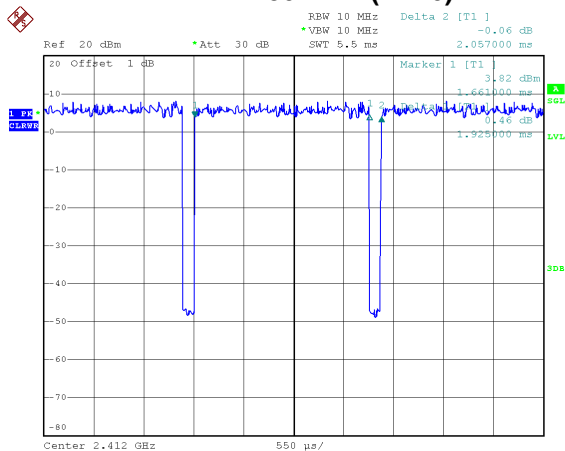
**IEEE 802.11b**



Date: 27.NOV.2020 14:52:19

Duty cycle =  $12.464 \text{ ms} / 12.587 \text{ ms} = 99.02\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.00$

**IEEE 802.11n (HT20)**



Date: 27.NOV.2020 14:53:48

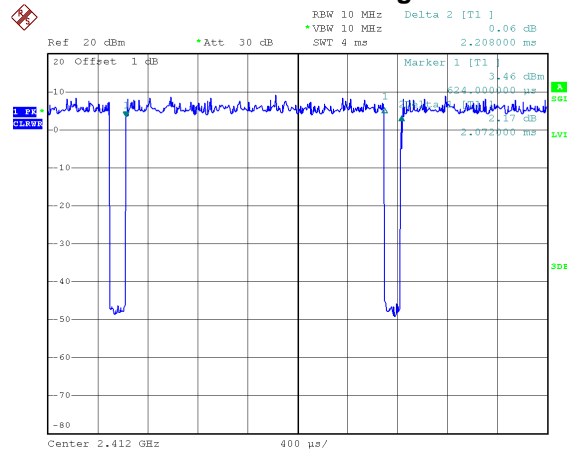
Duty cycle =  $1.925 \text{ ms} / 2.057 \text{ ms} = 93.58\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.29$

### NOTE:

For IEEE 802.11b, 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  $< 98\%$ ).

**IEEE 802.11g**



Date: 27.NOV.2020 14:53:11

Duty cycle =  $2.072 \text{ ms} / 2.208 \text{ ms} = 93.84\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.28$

## 2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



## 2.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
-	-	-	-	-

Item	Cable Type	Shielded Type	Ferrite Core	Length
-	-	-	-	-

### 3. AC POWER LINE CONDUCTED EMISSIONS TEST

#### 3.1 LIMIT

Frequency of Emission (MHz)	Limit (dB $\mu$ 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

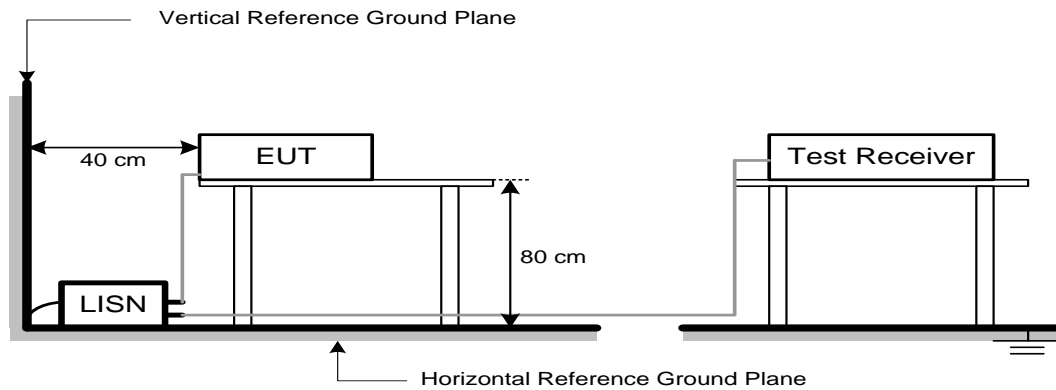
#### 3.2 TEST PROCEDURE

- 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

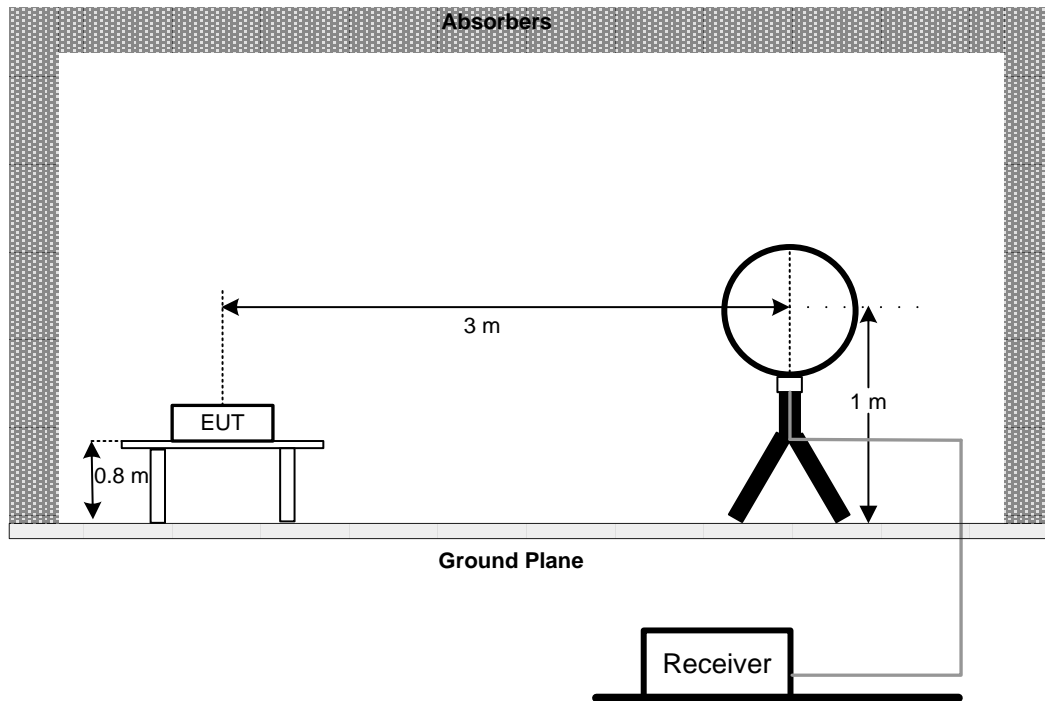
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance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

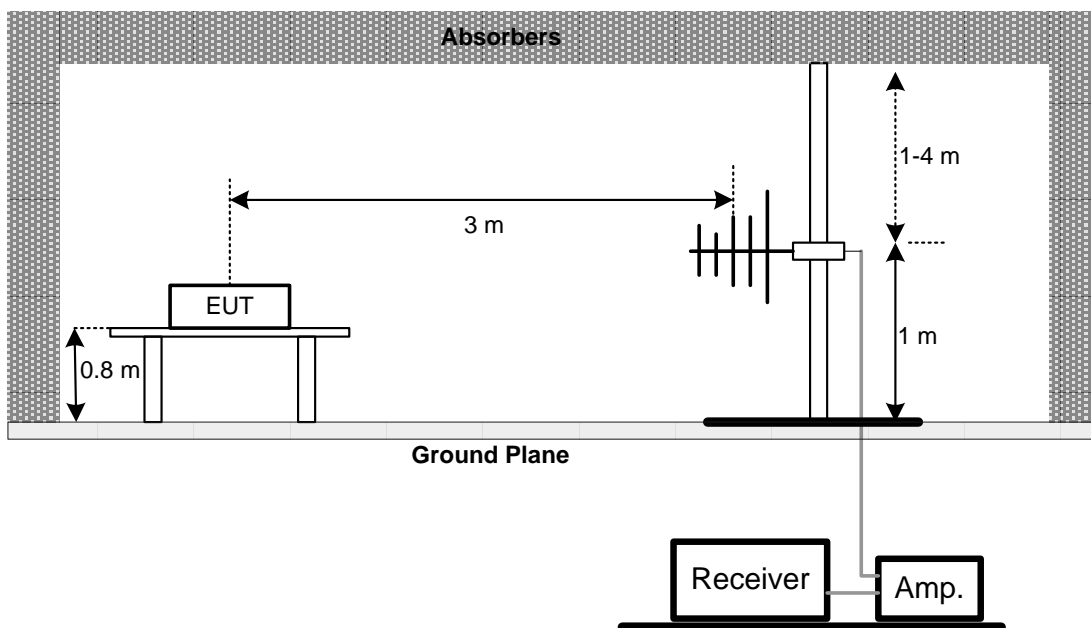
No deviation

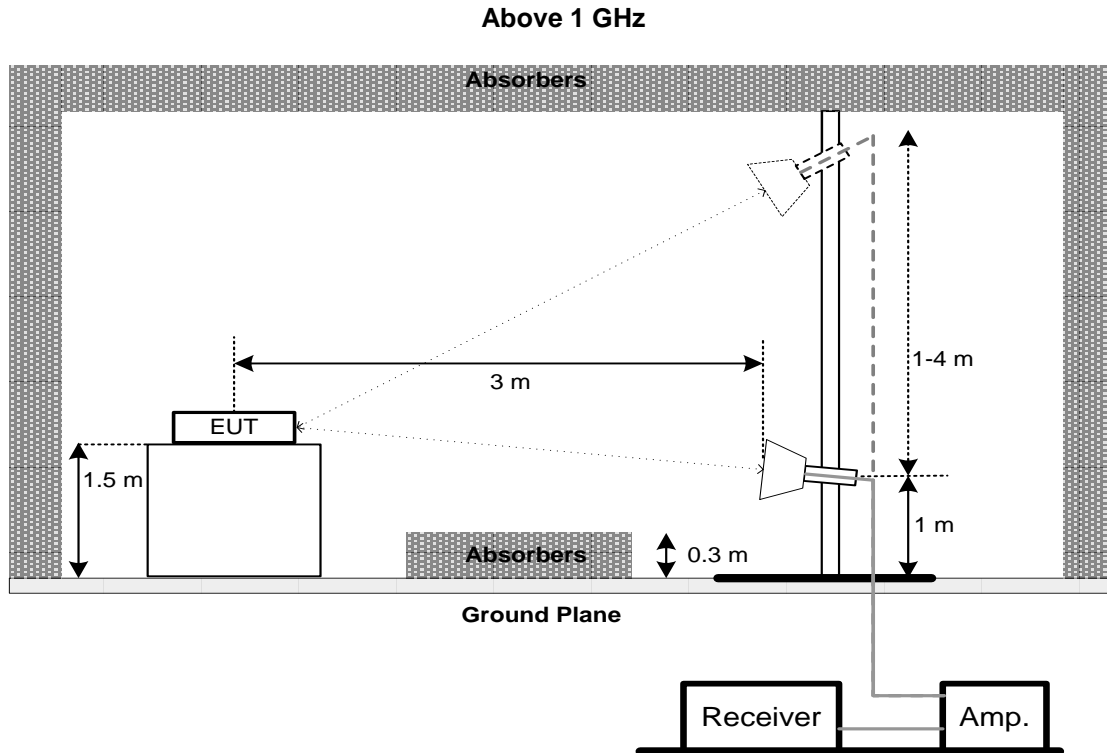
## 4.4 TEST SETUP

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.
- Spectrum Setting:  
For 6 dB Bandwidth : RBW= 100 kHz, VBW=300 kHz, Sweep time = auto.  
For 99% Emission Bandwidth B/G/N-20 Mode: RBW= 300 KHz, VBW=1 MHz, 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 OUTPUT POWER TEST

### 6.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(b)(3)	Maximum 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 11.9.1.3 and 11.9.2.3.1 of ANSI C63.10-2013.

### 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

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

### 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)

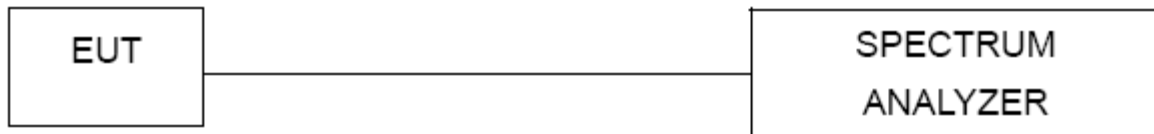
### 8.2 TEST PROCEDURE

- 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	Feb. 28, 2021
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 28, 2021
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 01, 2021
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 10, 2021
7	643 Shield Room	ETS	6*4*3m	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	N/A	May 29, 2021
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
5	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

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, 2021
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 22, 2021
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	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 12, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021
3	Amplifier	Agilent	8449B	3008A02333	Mar. 01, 2021
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	N/A	EMC104-SM-SM-6000	N/A	May 09, 2021
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	Filter	STI	STI15-9912	N/A	Jul. 25, 2021
11	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

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	Jul. 25, 2021
2	RF Cable	Tongkaichuan	N/A	N/A	N/A
3	DC Block	Mini	N/A	N/A	N/A
4	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 11, 2021

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 07, 2021
2	Wideband power sensor	Keysight	N1923A	MY58310004	Jul. 25, 2021
3	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 11, 2021
4	RF Cable	Tongkaichuan	N/A	N/A	N/A

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.

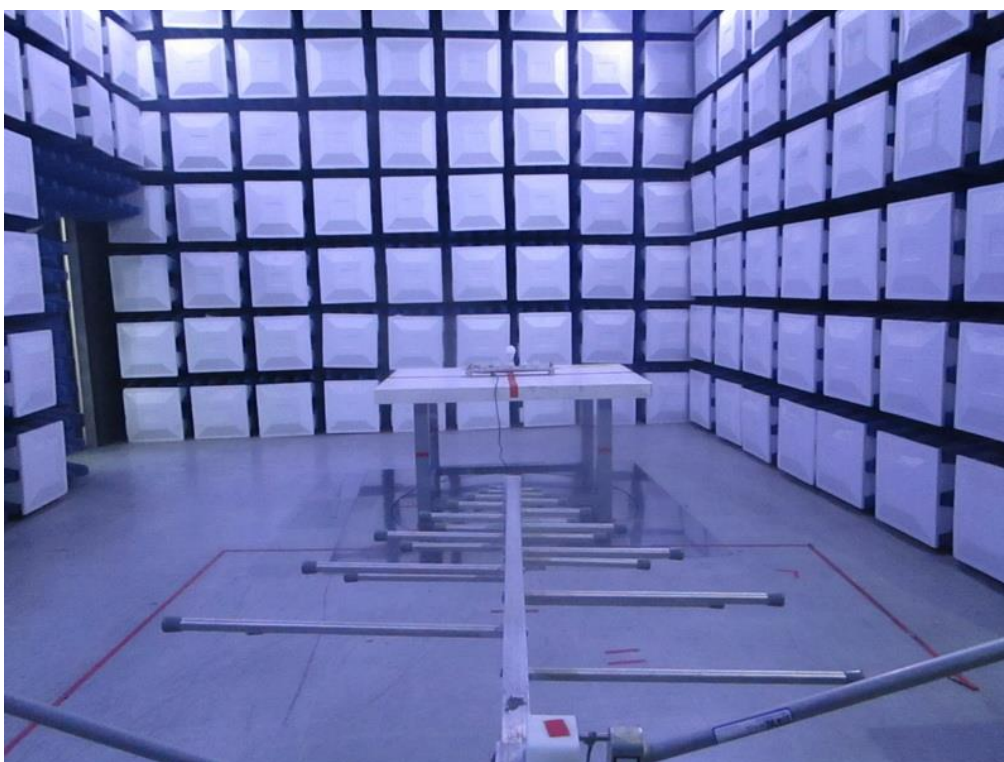
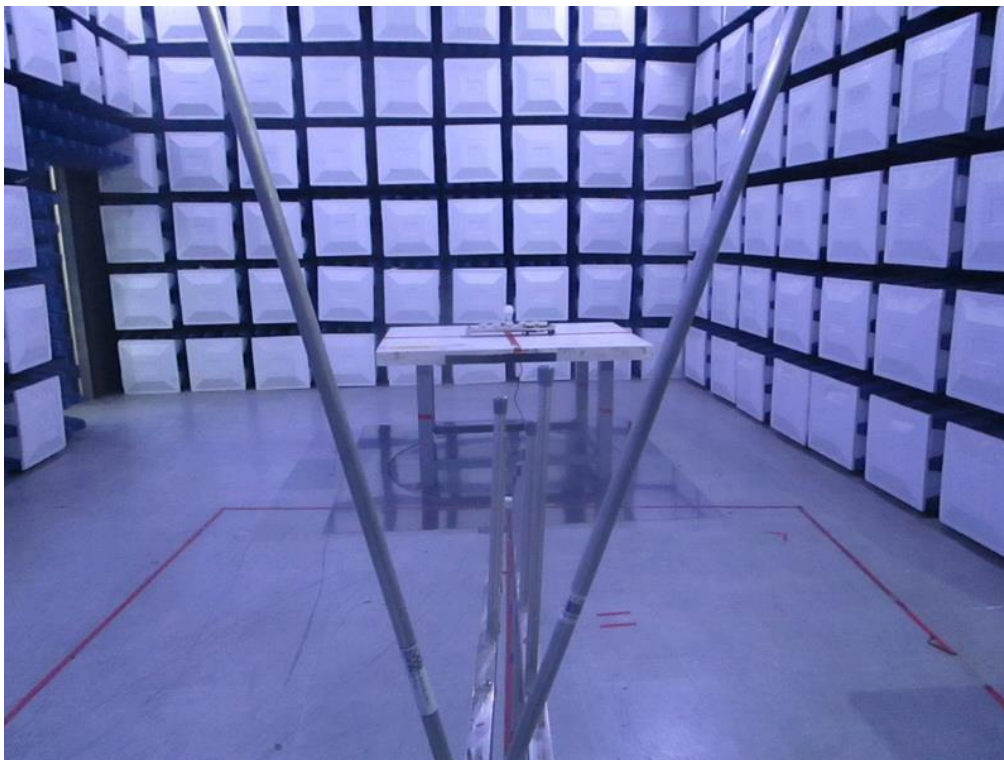
## 10. EUT TEST PHOTO

### AC Power Line Conducted Emissions Test Photos



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



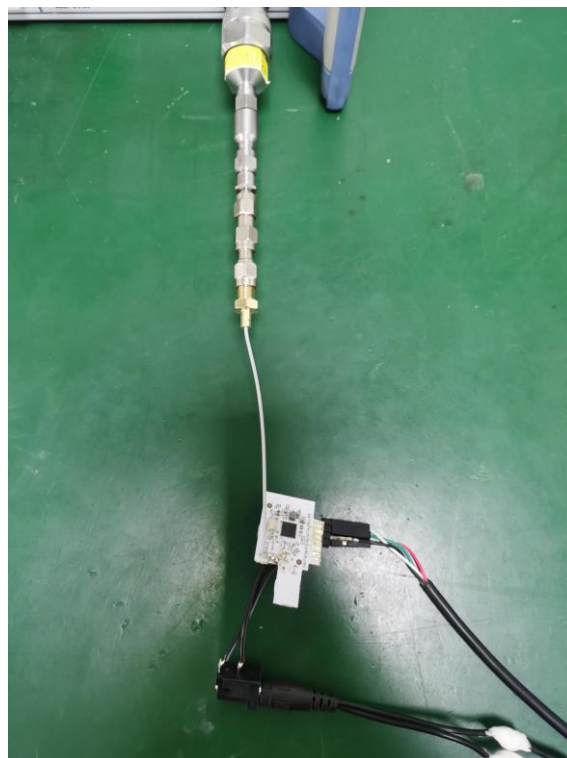
**Radiated Emissions Test Photos****30 MHz to 1 GHz**

## Radiated Emissions Test Photos

Above 1 GHz



## Conducted Emissions Test Photos

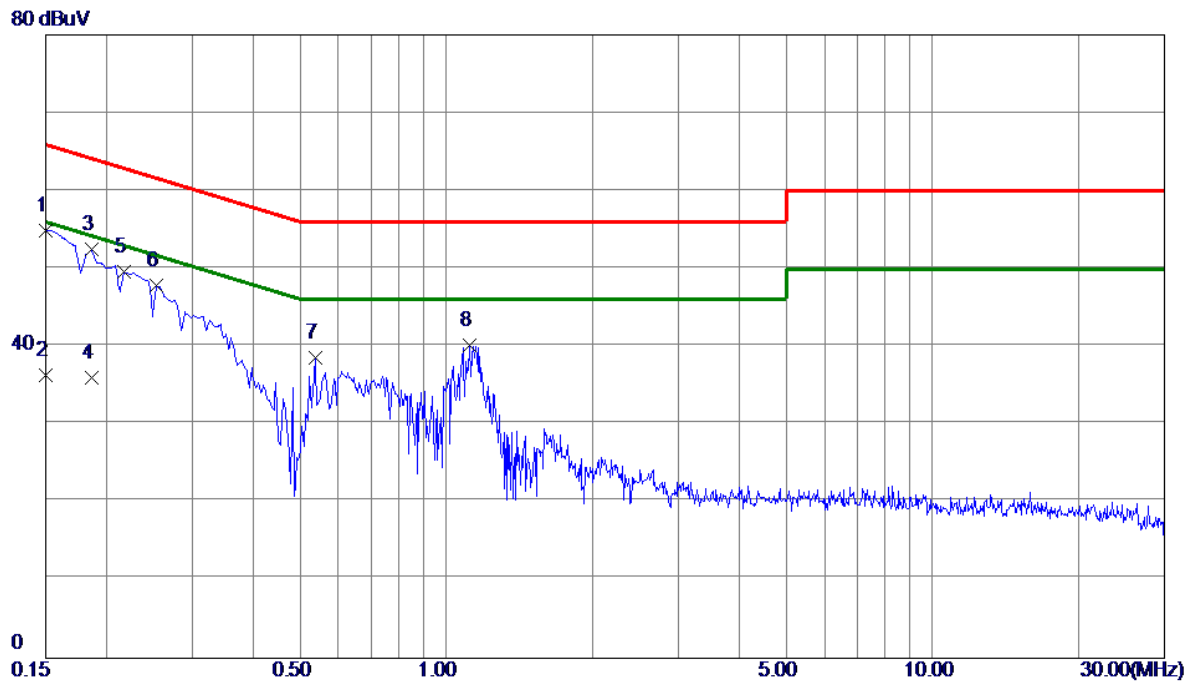


## **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**



Test Mode: TX N20 Mode Channel 01

## Line



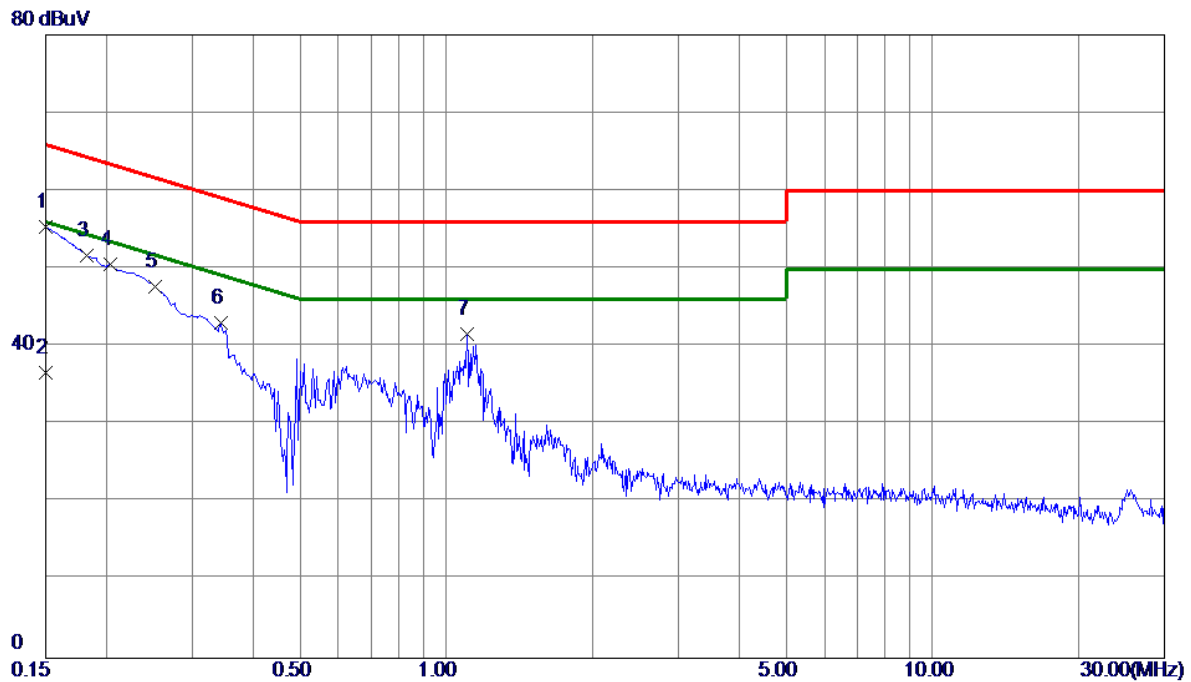
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1500	45.28	9.67	54.95	66.00	-11.05	Peak	
2	0.1500	26.60	9.67	36.27	56.00	-19.73	AVG	
3	0.1860	42.60	9.87	52.47	64.21	-11.74	Peak	
4	0.1860	26.19	9.87	36.06	54.21	-18.15	AVG	
5	0.2175	39.64	9.90	49.54	62.91	-13.37	Peak	
6	0.2535	37.90	9.88	47.78	61.64	-13.86	Peak	
7	0.5370	28.54	9.95	38.49	56.00	-17.51	Peak	
8	1.1174	30.08	10.02	40.10	56.00	-15.90	Peak	

### REMARKS:

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

Test Mode: TX N20 Mode Channel 01

## Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1500	45.56	9.74	55.30	66.00	-10.70	Peak	
2	0.1500	26.90	9.74	36.64	56.00	-19.36	AVG	
3	0.1825	41.74	9.94	51.68	64.37	-12.69	Peak	
4	0.2040	40.62	10.01	50.63	63.45	-12.82	Peak	
5	0.2521	37.76	9.98	47.74	61.69	-13.95	Peak	
6	0.3435	33.05	10.05	43.10	59.12	-16.02	Peak	
7	1.1040	31.28	10.31	41.59	56.00	-14.41	Peak	

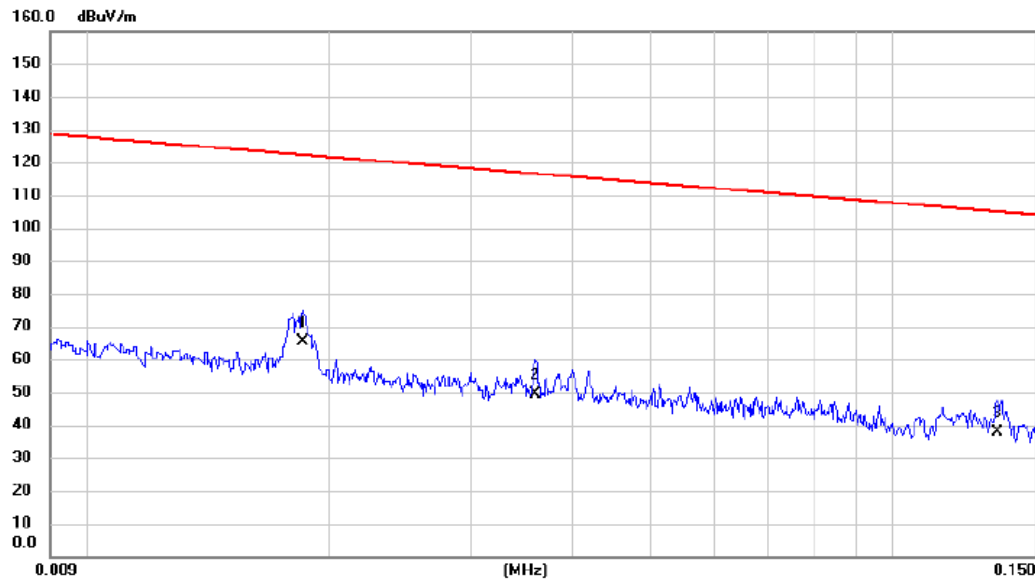
### REMARKS:

- (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 N20 Mode Channel 01

Ant 0°



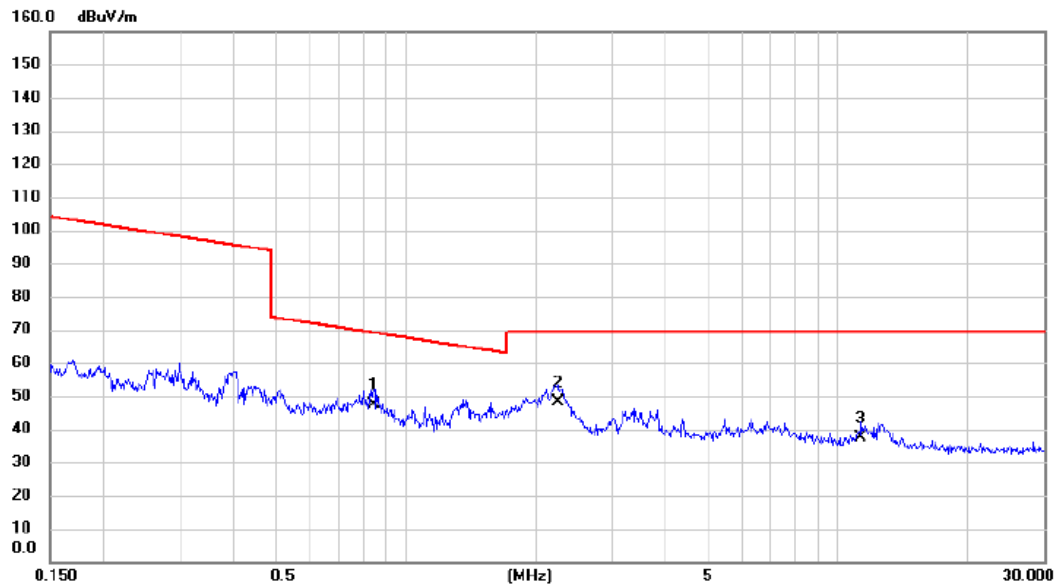
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0185	51.54	13.68	65.22	122.26	-57.04	AVG	
2		0.0360	36.48	12.79	49.27	116.48	-67.21	AVG	
3		0.1348	25.16	12.73	37.89	105.01	-67.12	AVG	

## REMARKS:

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

Test Mode: TX N20 Mode Channel 01

Ant 0°



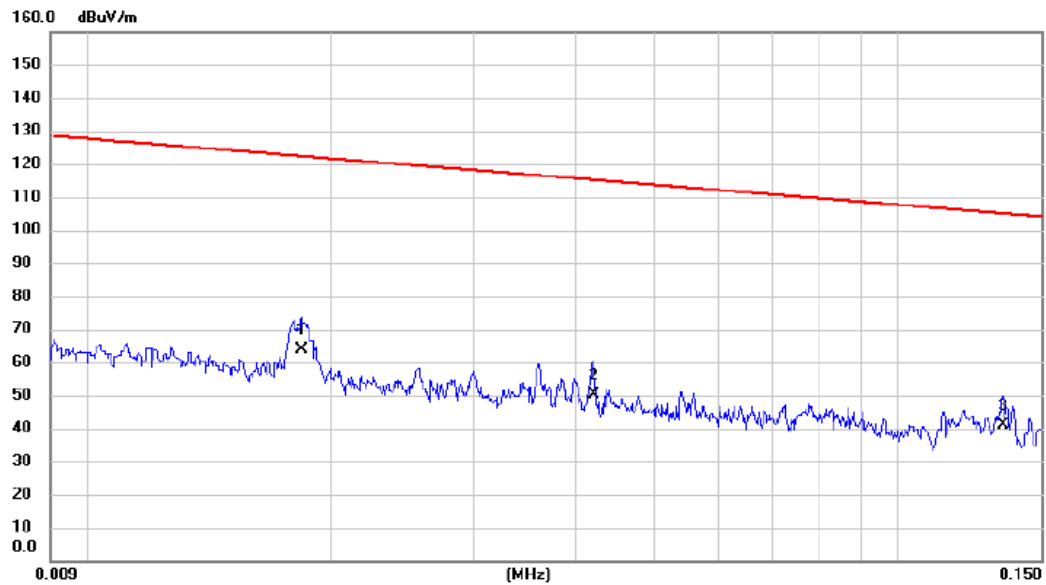
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.8438	35.41	11.86	47.27	69.08	-21.81	QP	
2	*	2.2486	37.16	11.18	48.34	69.54	-21.20	QP	
3		11.3170	25.94	11.52	37.46	69.54	-32.08	QP	

## REMARKS:

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

Test Mode: TX N20 Mode Channel 01

Ant 90°



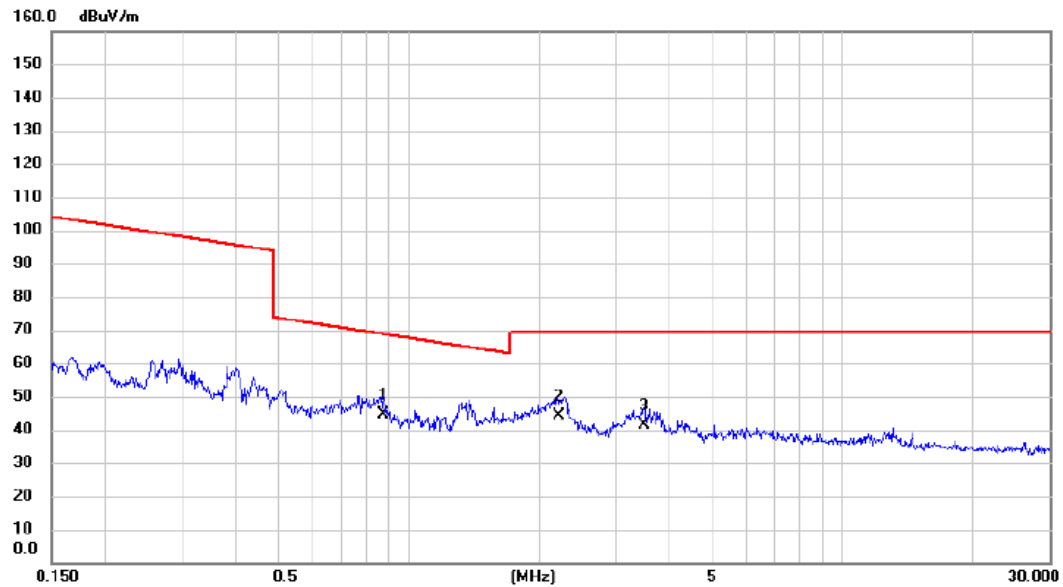
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0184	50.15	13.72	63.87	122.31	-58.44	AVG	
2		0.0421	37.56	12.63	50.19	115.12	-64.93	AVG	
3		0.1348	28.14	12.73	40.87	105.01	-64.14	AVG	

## REMARKS:

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

Test Mode: TX N20 Mode Channel 01

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.8757	32.66	11.85	44.51	68.76	-24.25	QP	
2		2.2132	33.14	11.19	44.33	69.54	-25.21	QP	
3		3.4906	30.51	10.88	41.39	69.54	-28.15	QP	

## REMARKS:

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

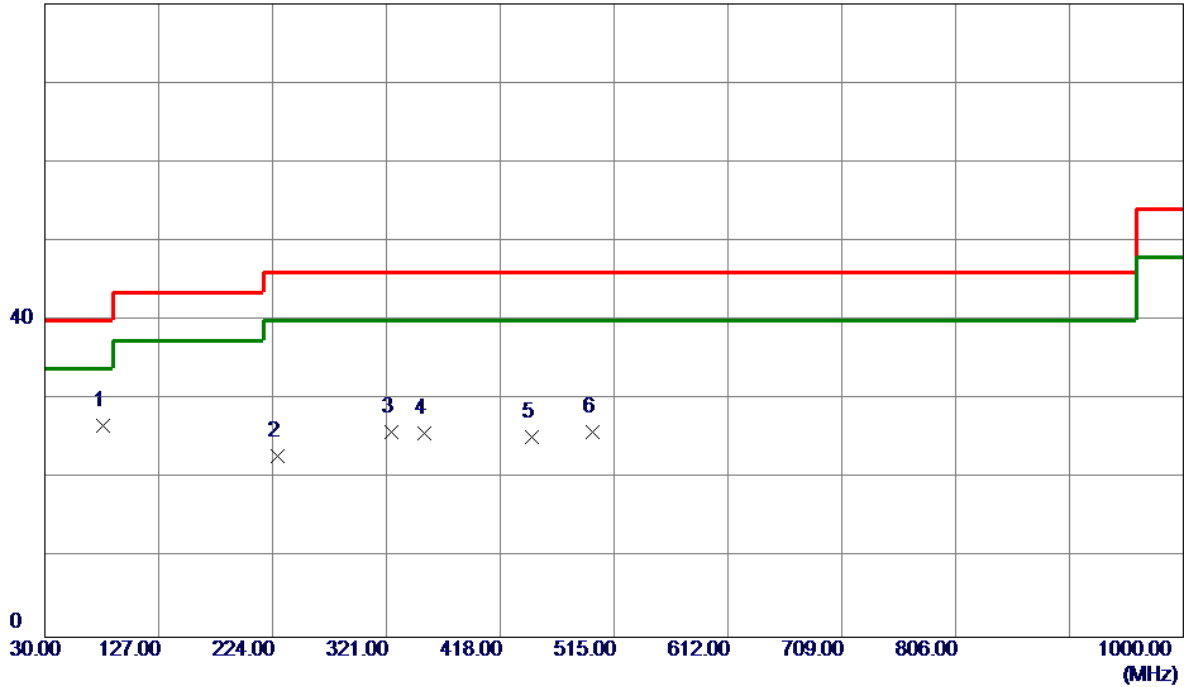
## **APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ**



Test Mode: TX N20 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 *	79.4700	44.33	-17.61	26.72	40.00	-13.28	Peak	
2	227.8800	36.90	-13.94	22.96	46.00	-23.04	Peak	
3	324.8800	36.49	-10.60	25.89	46.00	-20.11	Peak	
4	353.0100	35.83	-10.13	25.70	46.00	-20.30	Peak	
5	445.1600	33.04	-7.77	25.27	46.00	-20.73	Peak	
6	496.5700	33.23	-7.29	25.94	46.00	-20.06	Peak	

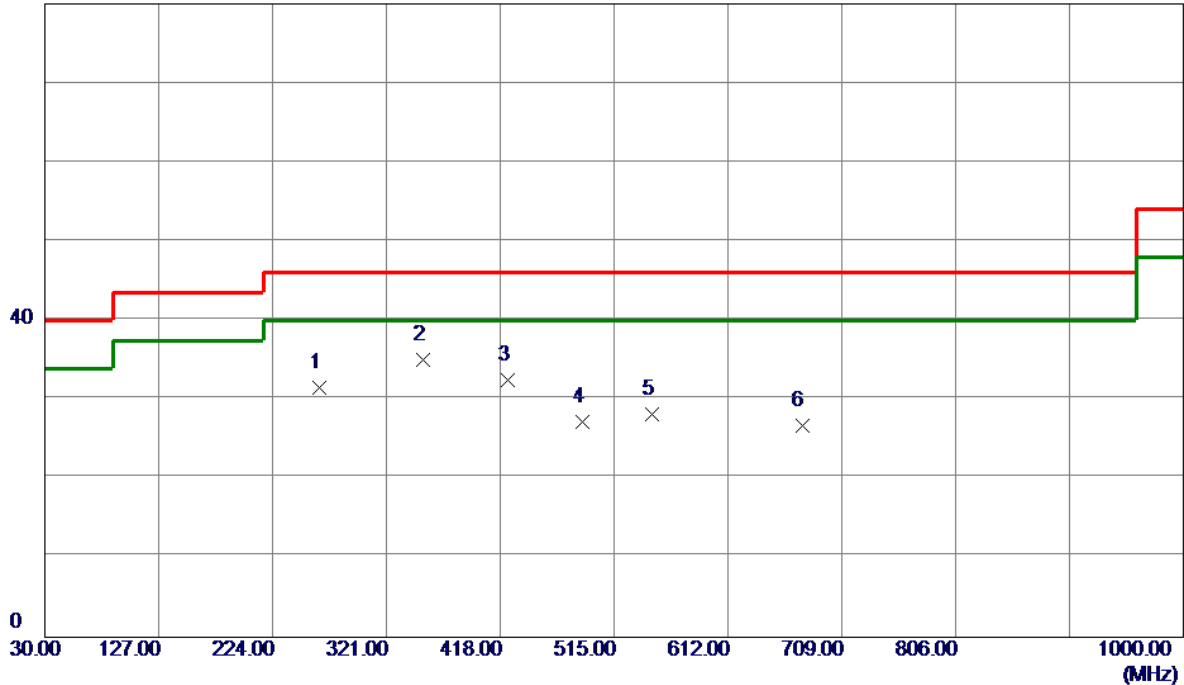
### REMARKS:

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

Test Mode: TX N20 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	263.7700	43.84	-12.38	31.46	46.00	-14.54	Peak	
2 *	352.0400	45.18	-10.15	35.03	46.00	-10.97	Peak	
3	424.7900	40.76	-8.33	32.43	46.00	-13.57	Peak	
4	487.8400	34.48	-7.35	27.13	46.00	-18.87	Peak	
5	547.0100	35.02	-6.83	28.19	46.00	-17.81	Peak	
6	675.0500	30.57	-3.92	26.65	46.00	-19.35	Peak	

### REMARKS:

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

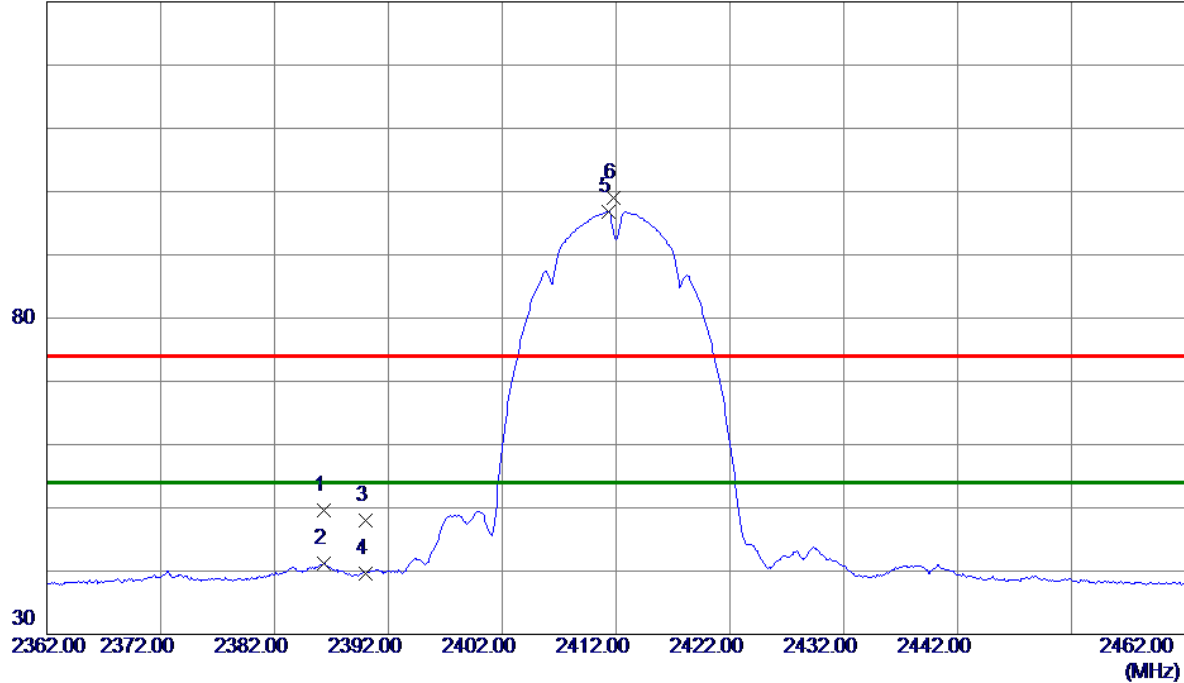
(2) Margin Level = Measurement Value - Limit Value.

## **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	2386.3000	42.32	7.26	49.58	74.00	-24.42	Peak	
2	2386.3000	33.86	7.26	41.12	54.00	-12.88	AVG	
3	2390.0000	40.80	7.26	48.06	74.00	-25.94	Peak	
4	2390.0000	32.39	7.26	39.65	54.00	-14.35	AVG	
5 *	2411.3000	89.55	7.26	96.81	54.00	42.81	AVG	No Limit
6	2411.8000	91.84	7.26	99.10	74.00	25.10	Peak	No Limit

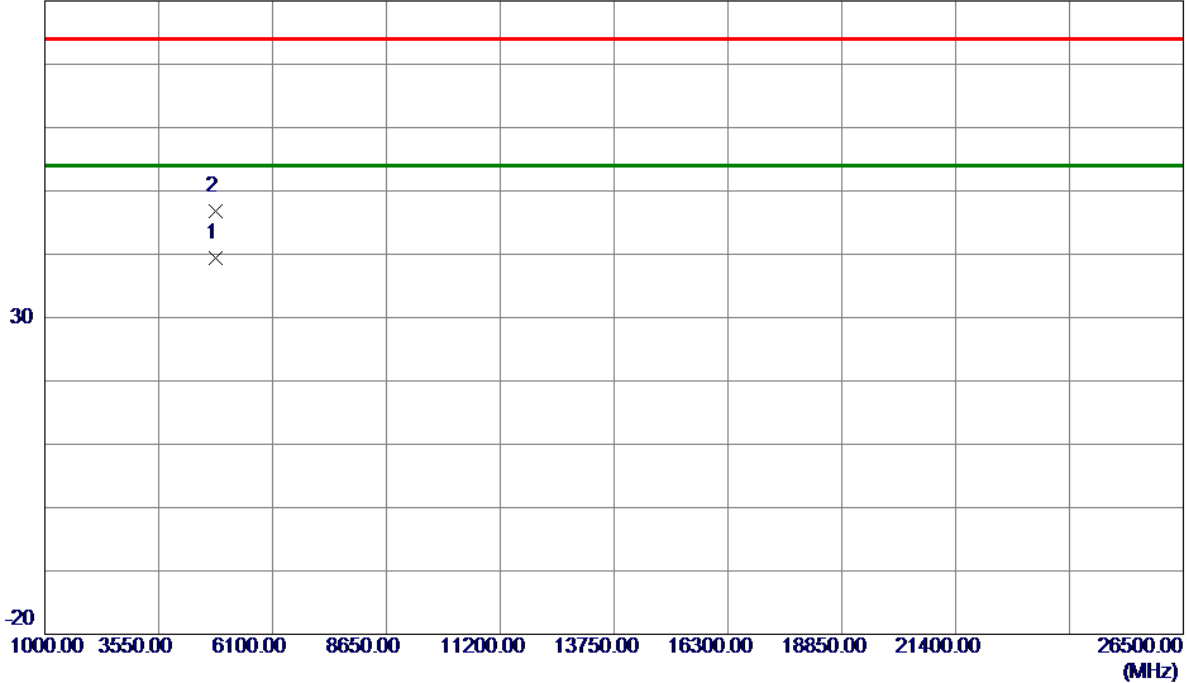
### REMARKS:

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

Test Mode:	TX B Mode 2412 MHz
------------	--------------------

## 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 *	4823.9650	35.02	4.45	39.47	54.00	-14.53	AVG	
2	4824.0700	42.27	4.45	46.72	74.00	-27.28	Peak	

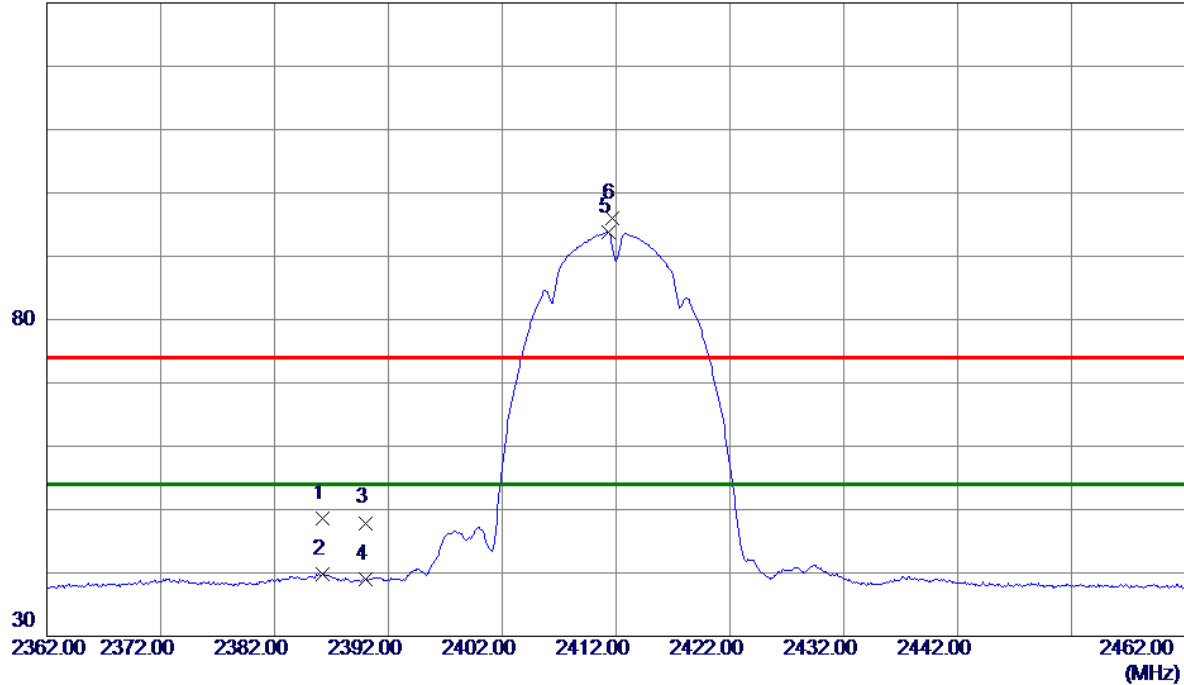
### REMARKS:

- (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	2386.2000	41.41	7.26	48.67	74.00	-25.33	Peak	
2	2386.2000	32.53	7.26	39.79	54.00	-14.21	AVG	
3	2390.0000	40.64	7.26	47.90	74.00	-26.10	Peak	
4	2390.0000	31.80	7.26	39.06	54.00	-14.94	AVG	
5 *	2411.3000	86.59	7.26	93.85	54.00	39.85	AVG	No Limit
6	2411.7000	88.68	7.26	95.94	74.00	21.94	Peak	No Limit

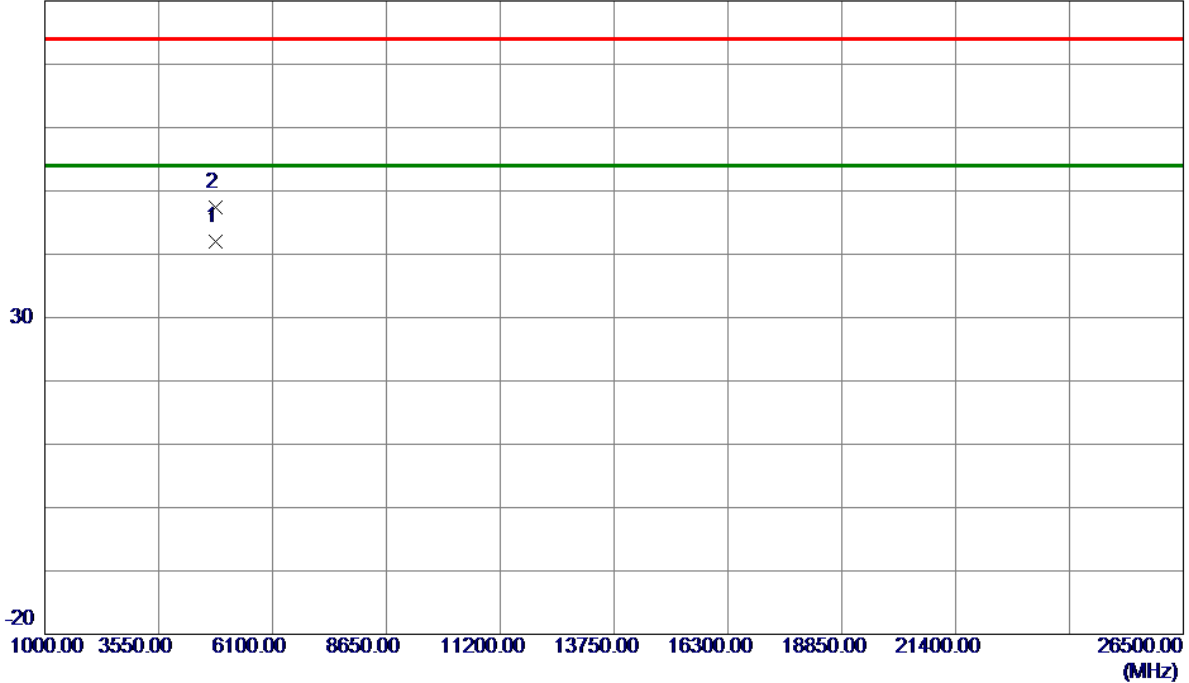
### REMARKS:

- (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



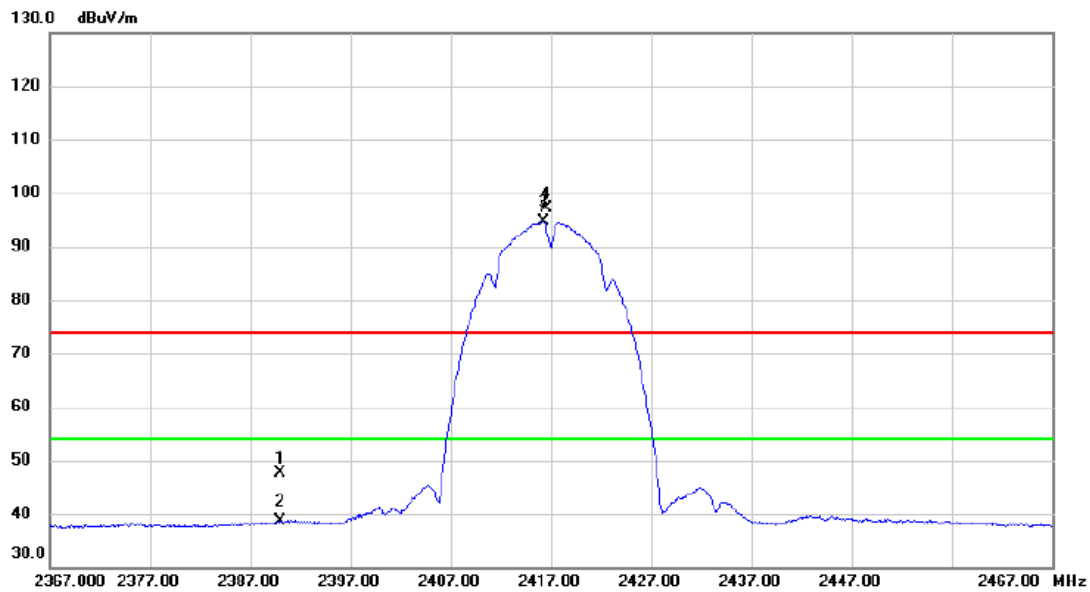
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9450	37.48	4.45	41.93	54.00	-12.07	AVG	
2	4824.2250	43.00	4.45	47.45	74.00	-26.55	Peak	

### 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		2390.000	40.36	7.26	47.62	74.00	-26.38	peak	
2		2390.000	31.40	7.26	38.66	54.00	-15.34	AVG	
3	*	2416.300	87.31	7.26	94.57	54.00	40.57	AVG	No Limit
4	X	2416.600	89.82	7.26	97.08	74.00	23.08	peak	No Limit

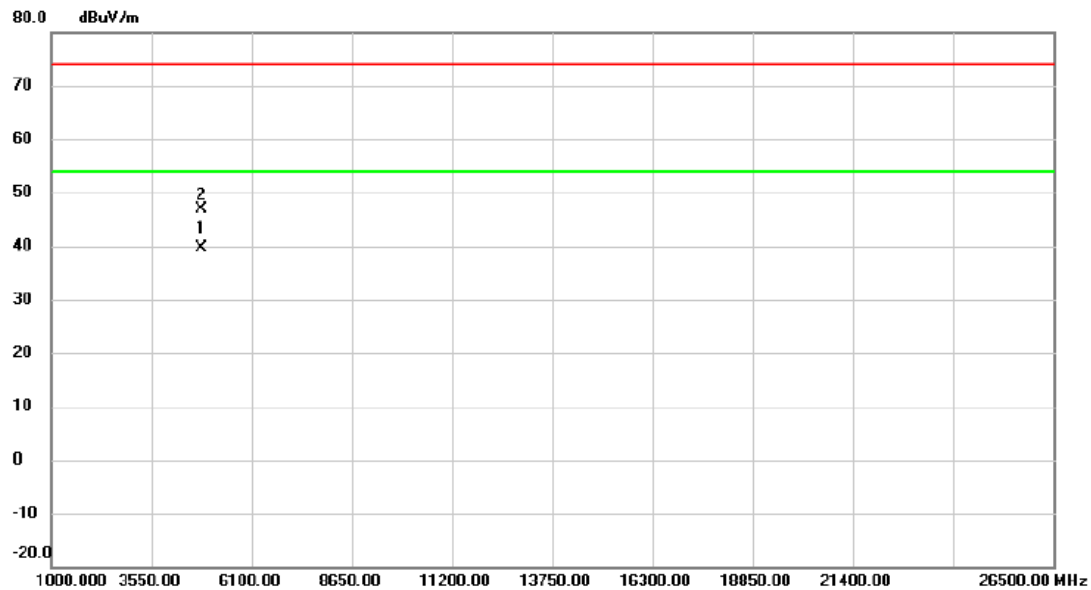
### REMARKS:

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



Test Mode: TX B Mode 2417 MHz

## Vertical



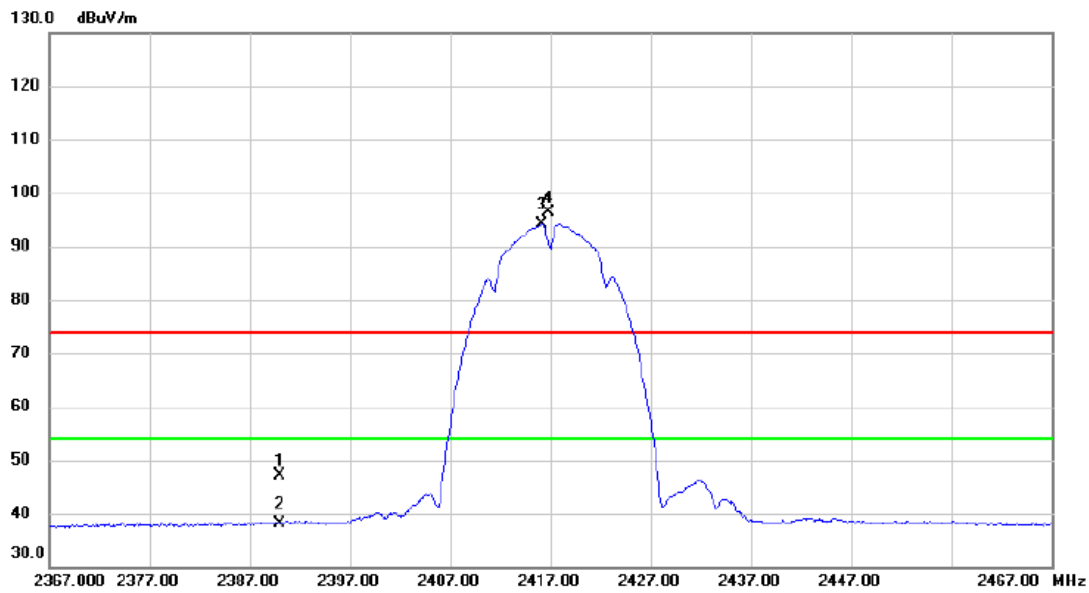
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4834.026	35.26	4.47	39.73	54.00	-14.27	AVG	
2		4834.108	42.49	4.48	46.97	74.00	-27.03	peak	

### REMARKS:

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

Test Mode: TX B Mode 2417 MHz

## Horizontal



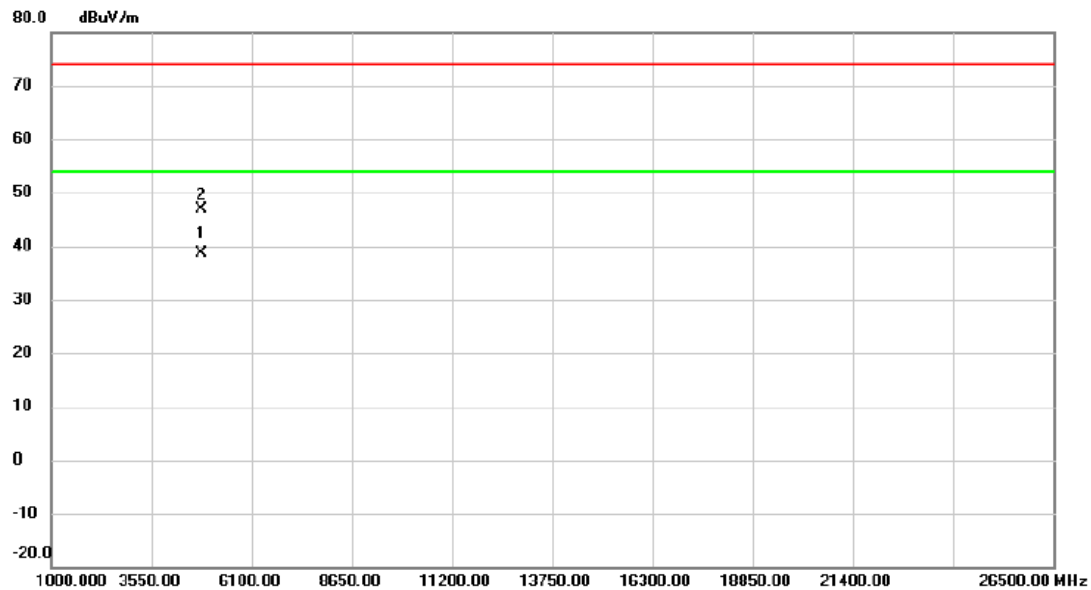
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	39.95	7.26	47.21	74.00	-26.79	peak	
2		2390.000	30.96	7.26	38.22	54.00	-15.78	AVG	
3	*	2416.200	86.88	7.26	94.14	54.00	40.14	AVG	No Limit
4	X	2416.800	89.02	7.26	96.28	74.00	22.28	peak	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.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4833.665	34.17	4.47	38.64	54.00	-15.36	AVG	
2		4834.127	42.35	4.48	46.83	74.00	-27.17	peak	

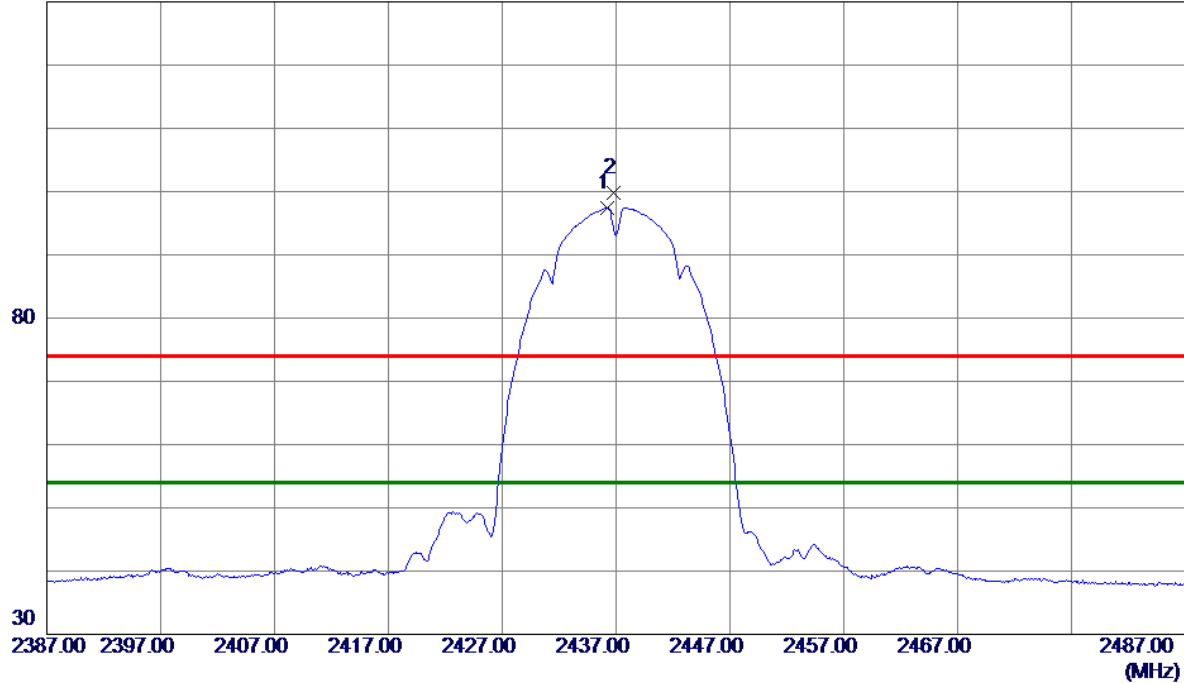
### REMARKS:

- (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 *	2436.2000	90.22	7.25	97.47	54.00	43.47	AVG	No Limit
2	2436.8000	92.51	7.25	99.76	74.00	25.76	Peak	No Limit

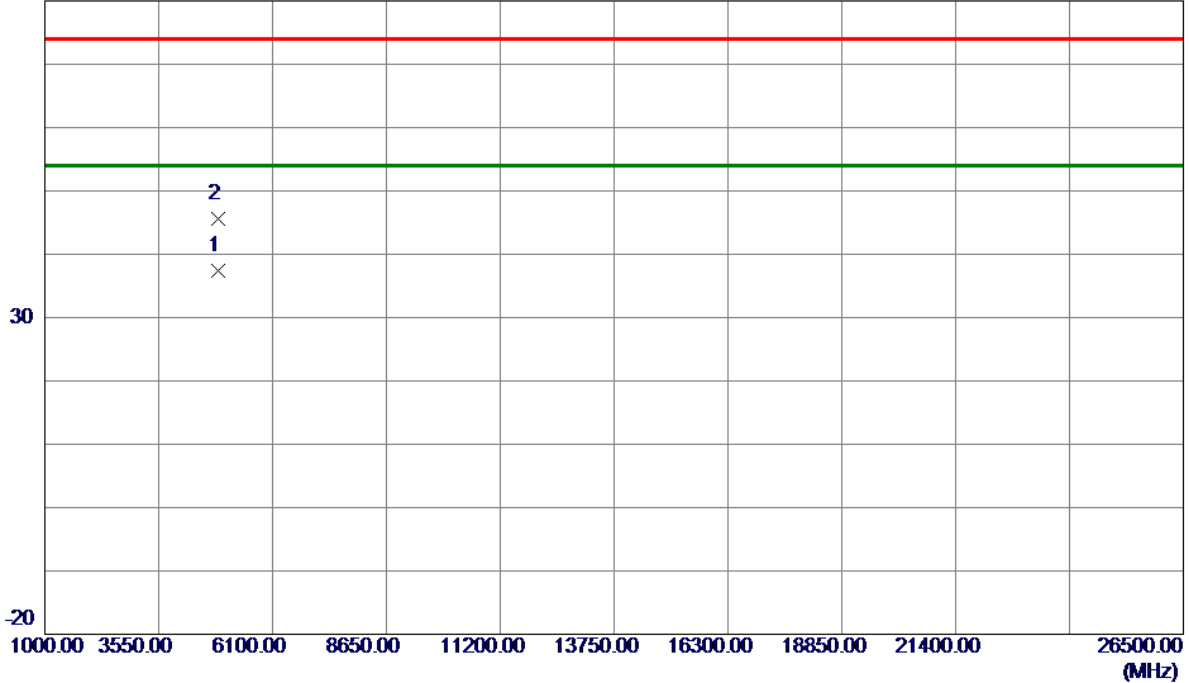
### REMARKS:

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

Test Mode: TX B Mode 2437 MHz

## Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0000	32.80	4.58	37.38	54.00	-16.62	AVG	
2	4874.0800	41.10	4.58	45.68	74.00	-28.32	Peak	

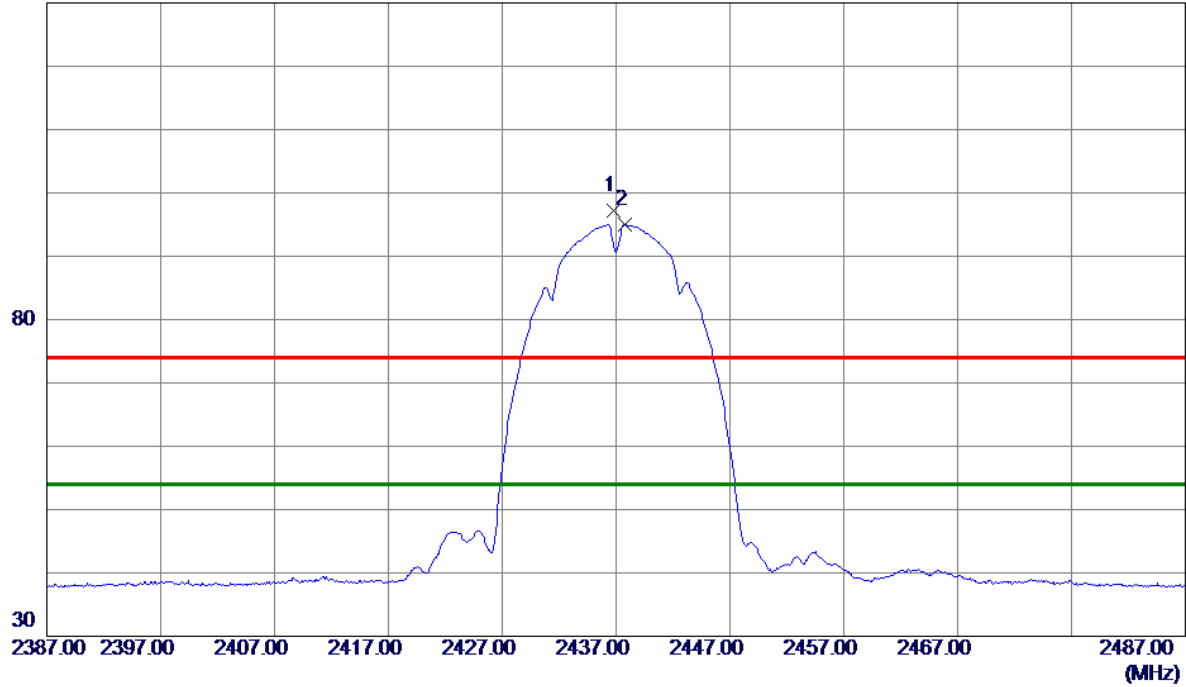
### REMARKS:

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

Test Mode: TX B Mode 2437 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	2436.8000	89.94	7.25	97.19	74.00	23.19	Peak	No Limit
2 *	2437.8000	87.73	7.25	94.98	54.00	40.98	AVG	No Limit

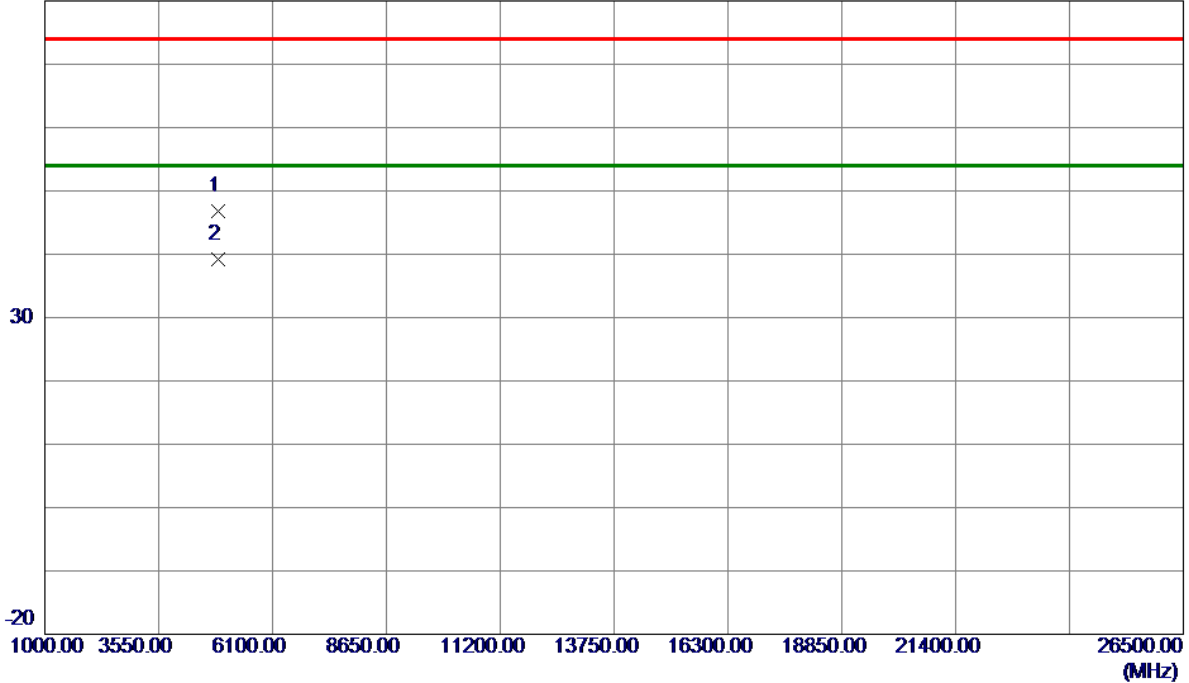
### REMARKS:

- (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



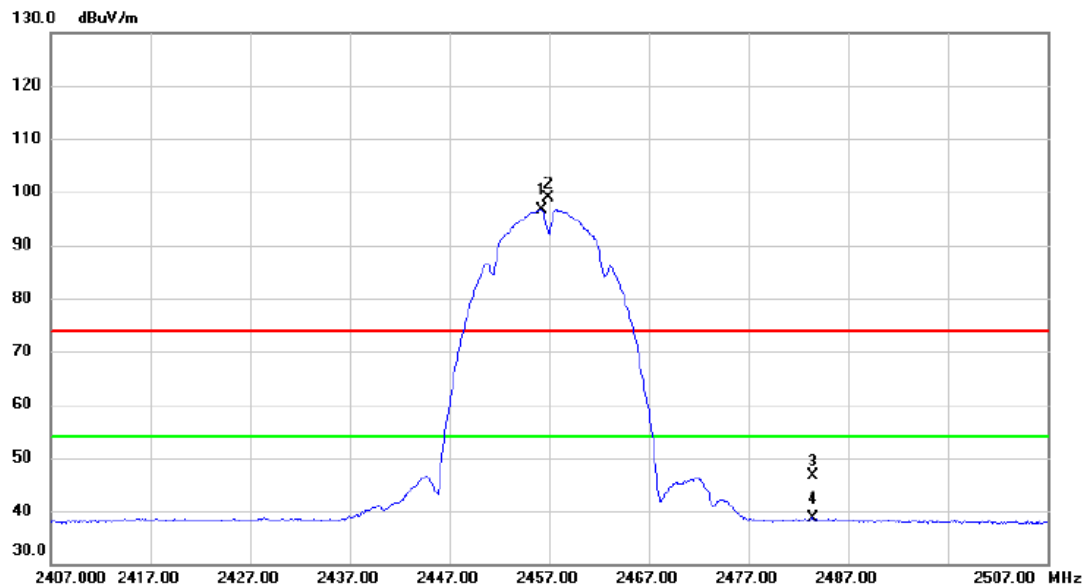
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.8600	42.15	4.58	46.73	74.00	-27.27	Peak	
2 *	4873.8750	34.67	4.58	39.25	54.00	-14.75	AVG	

### 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	*	2456.300	89.48	7.26	96.74	54.00	42.74	AVG	No Limit
2	X	2456.900	91.53	7.26	98.79	74.00	24.79	peak	No Limit
3		2483.500	39.47	7.25	46.72	74.00	-27.28	peak	
4		2483.500	31.50	7.25	38.75	54.00	-15.25	AVG	

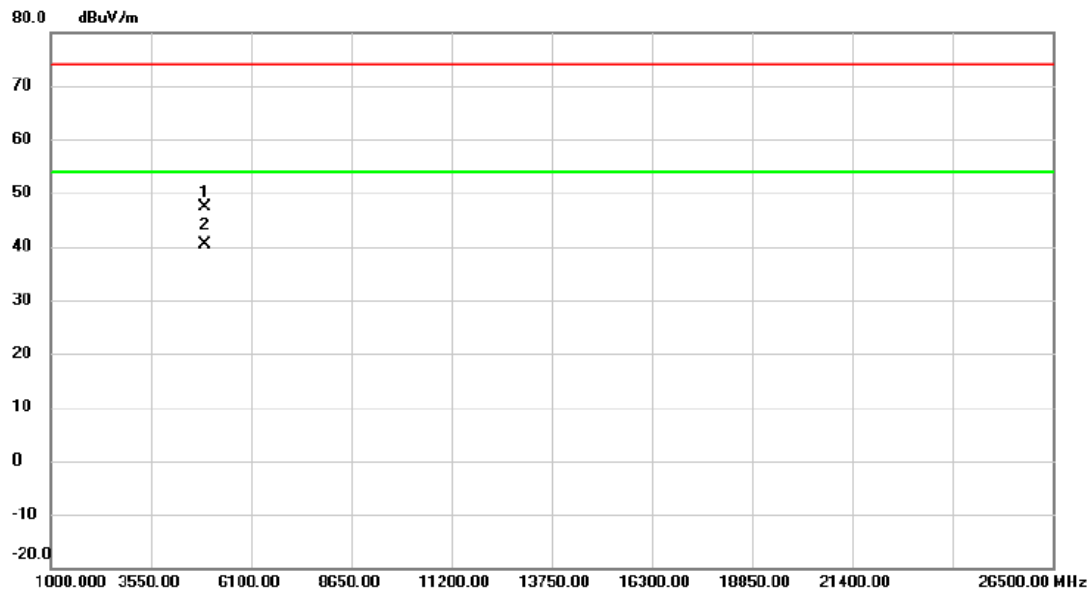
### REMARKS:

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



Test Mode: TX B Mode 2457 MHz

## Vertical



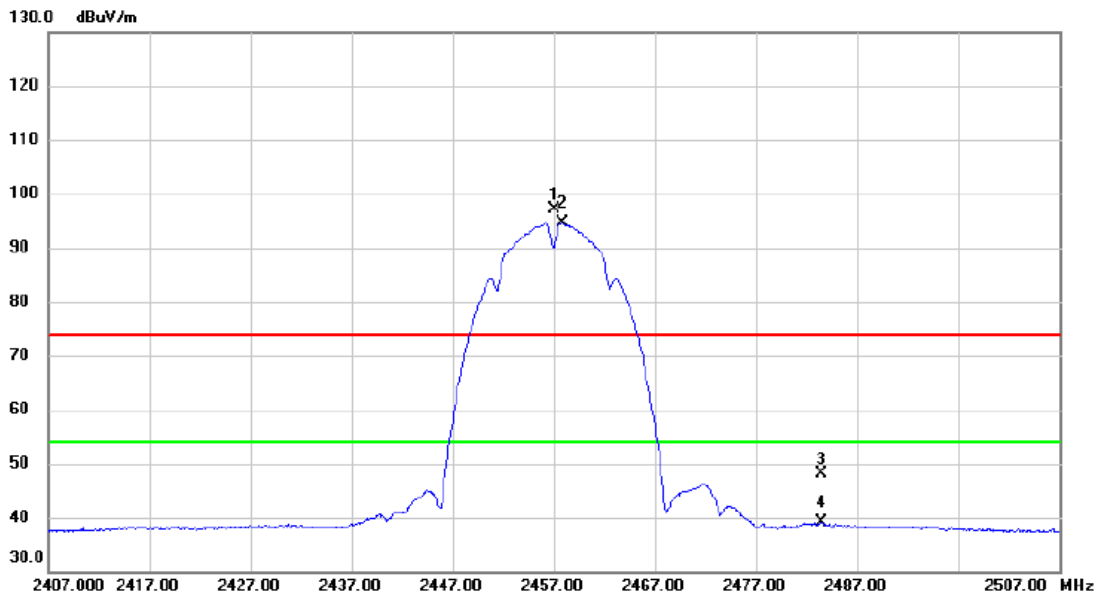
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4913.570	42.62	4.69	47.31	74.00	-26.69	peak	
2	*	4913.868	35.69	4.69	40.38	54.00	-13.62	AVG	

### REMARKS:

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

Test Mode: TX B Mode 2457 MHz

## Horizontal



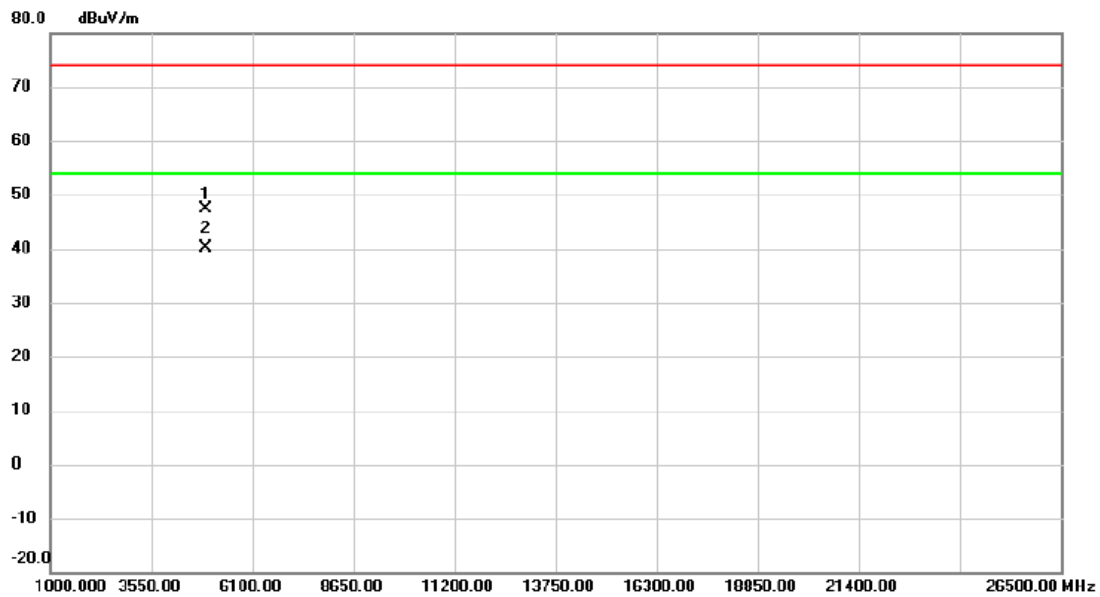
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2457.100	89.81	7.26	97.07	74.00	23.07	peak	No Limit
2	*	2457.800	87.29	7.26	94.55	54.00	40.55	AVG	No Limit
3		2483.500	40.88	7.25	48.13	74.00	-25.87	peak	
4		2483.500	31.88	7.25	39.13	54.00	-14.87	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		4913.520	42.71	4.69	47.40	74.00	-26.60	peak	
2	*	4914.904	35.41	4.69	40.10	54.00	-13.90	AVG	

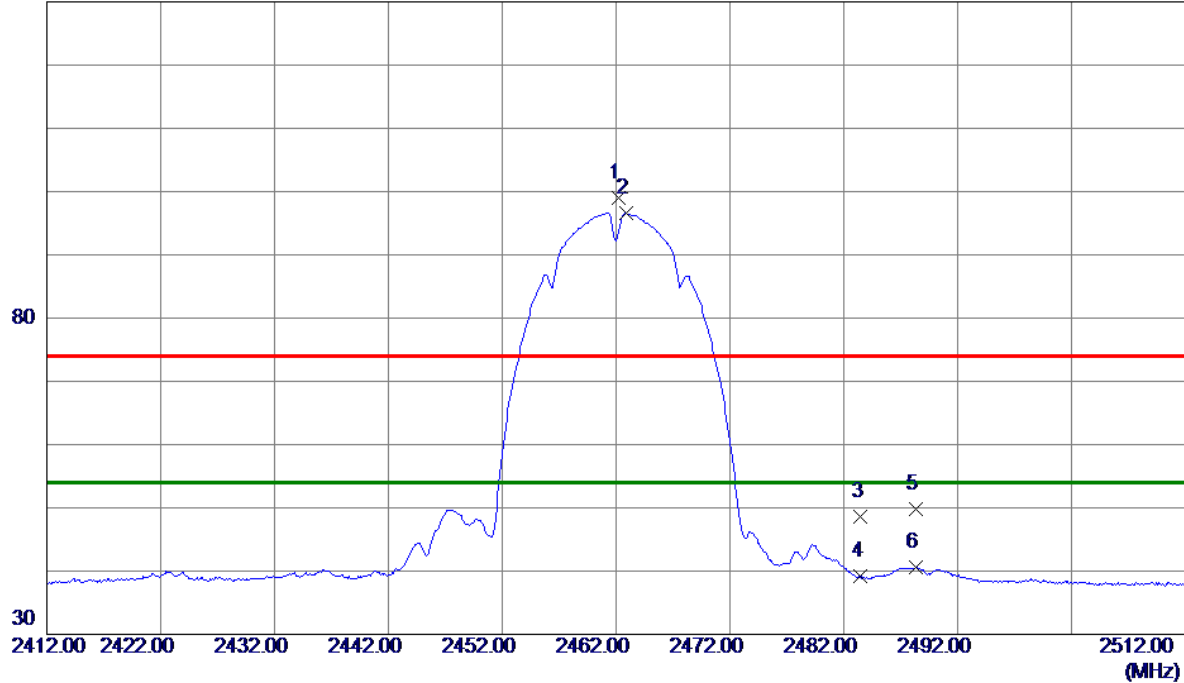
### REMARKS:

- (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	2462.2000	91.70	7.25	98.95	74.00	24.95	Peak	No Limit
2 *	2462.9000	89.36	7.25	96.61	54.00	42.61	AVG	No Limit
3	2483.5000	41.32	7.25	48.57	74.00	-25.43	Peak	
4	2483.5000	31.99	7.25	39.24	54.00	-14.76	AVG	
5	2488.3000	42.46	7.25	49.71	74.00	-24.29	Peak	
6	2488.3000	33.37	7.25	40.62	54.00	-13.38	AVG	

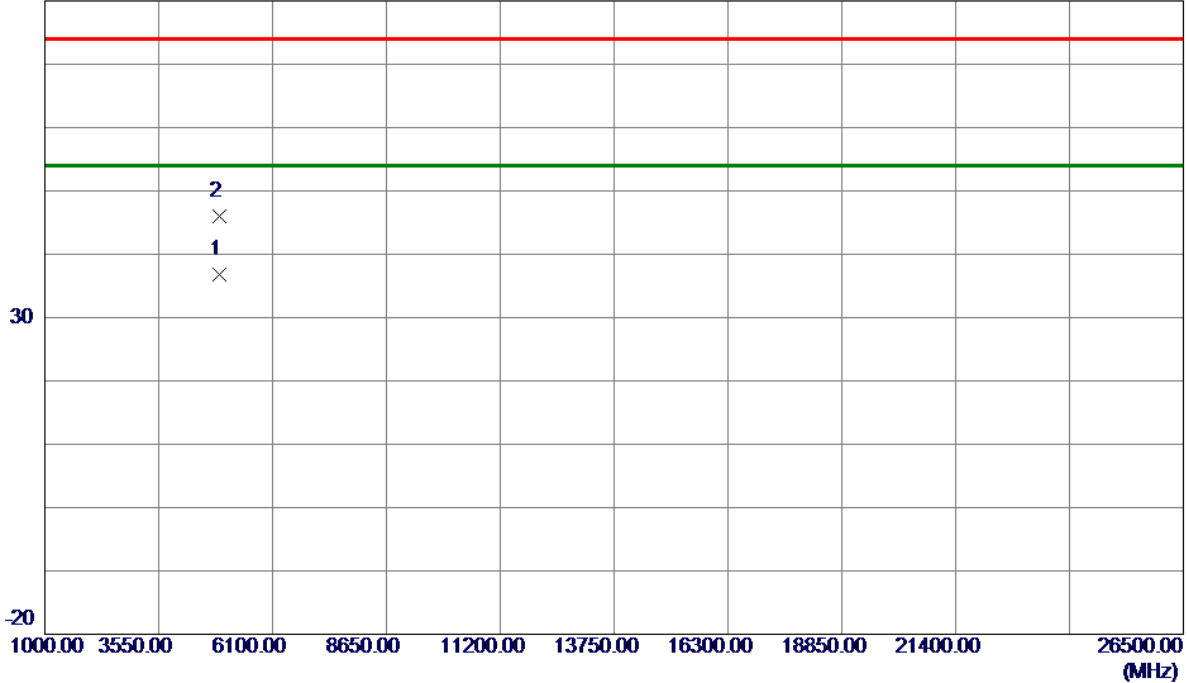
### REMARKS:

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

Test Mode: TX B Mode 2462 MHz

## Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9400	32.04	4.72	36.76	54.00	-17.24	AVG	
2	4923.9550	41.29	4.72	46.01	74.00	-27.99	Peak	

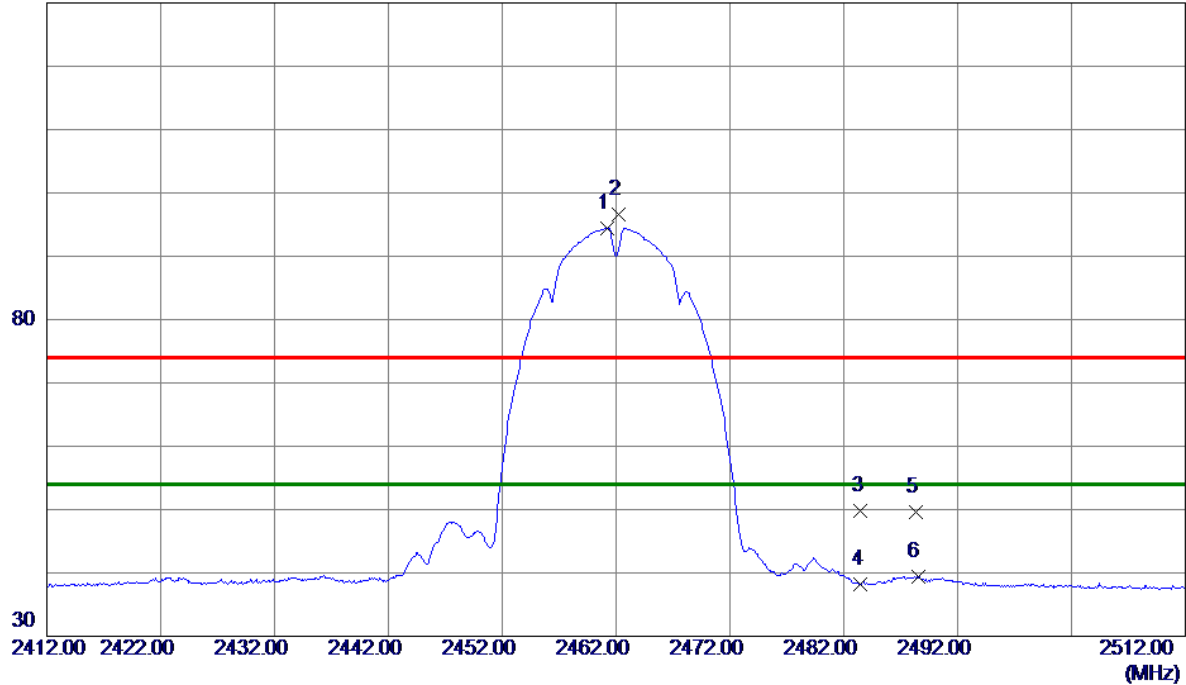
### REMARKS:

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

Test Mode: TX B Mode 2462 MHz

## Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.2000	87.24	7.25	94.49	54.00	40.49	AVG	No Limit
2	2462.2000	89.29	7.25	96.54	74.00	22.54	Peak	No Limit
3	2483.5000	42.51	7.25	49.76	74.00	-24.24	Peak	
4	2483.5000	30.90	7.25	38.15	54.00	-15.85	AVG	
5	2488.3000	42.30	7.25	49.55	74.00	-24.45	Peak	
6	2488.5000	32.23	7.25	39.48	54.00	-14.52	AVG	

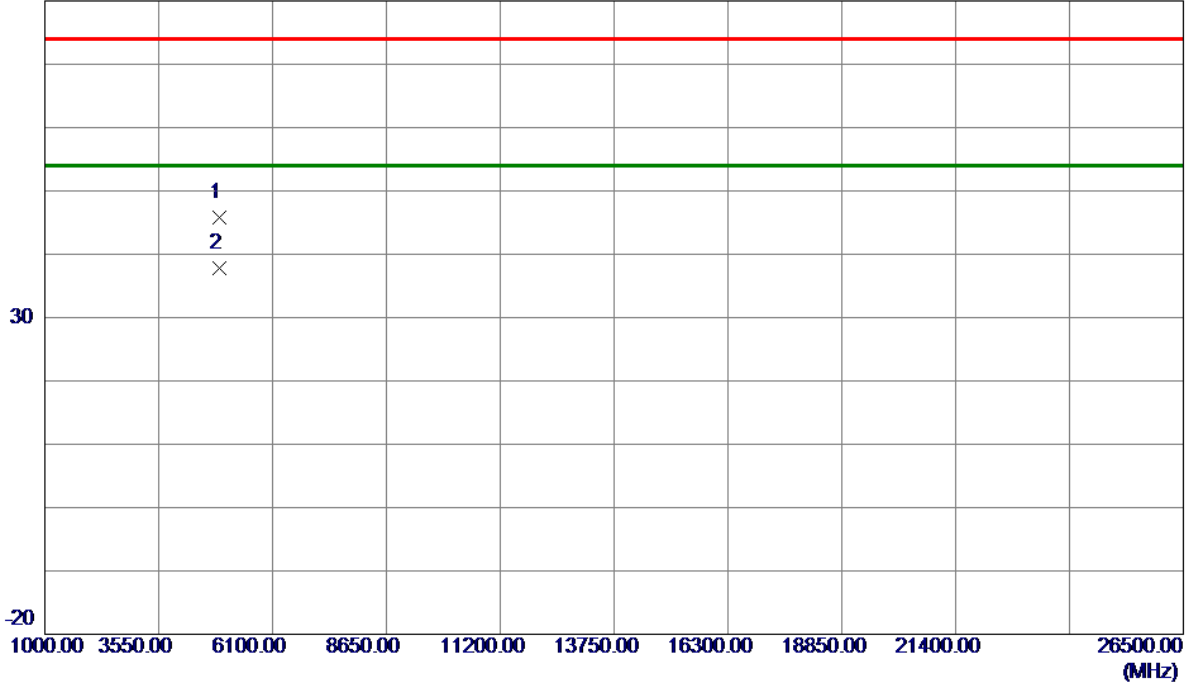
### REMARKS:

- (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	4923.9200	41.16	4.72	45.88	74.00	-28.12	Peak	
2 *	4923.9550	33.04	4.72	37.76	54.00	-16.24	AVG	

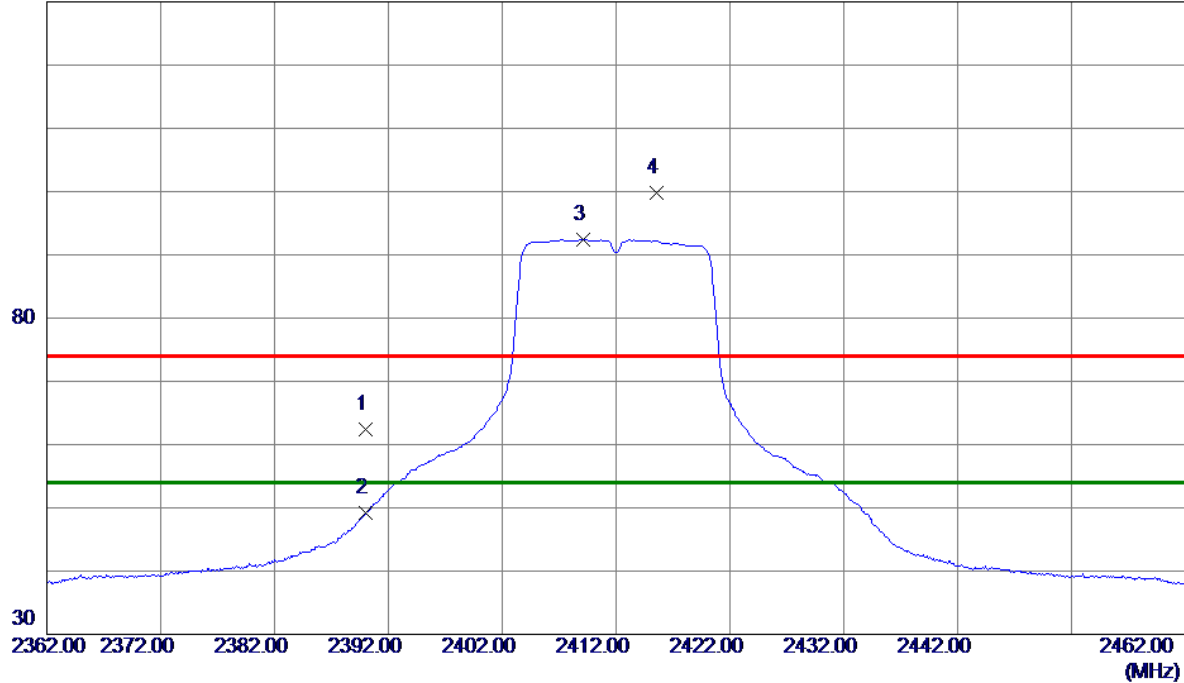
### REMARKS:

- (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	55.05	7.26	62.31	74.00	-11.69	Peak	
2	2390.0000	41.91	7.26	49.17	54.00	-4.83	AVG	
3 *	2409.1000	85.16	7.26	92.42	54.00	38.42	AVG	No Limit
4	2415.6000	92.63	7.26	99.89	74.00	25.89	Peak	No Limit

### REMARKS:

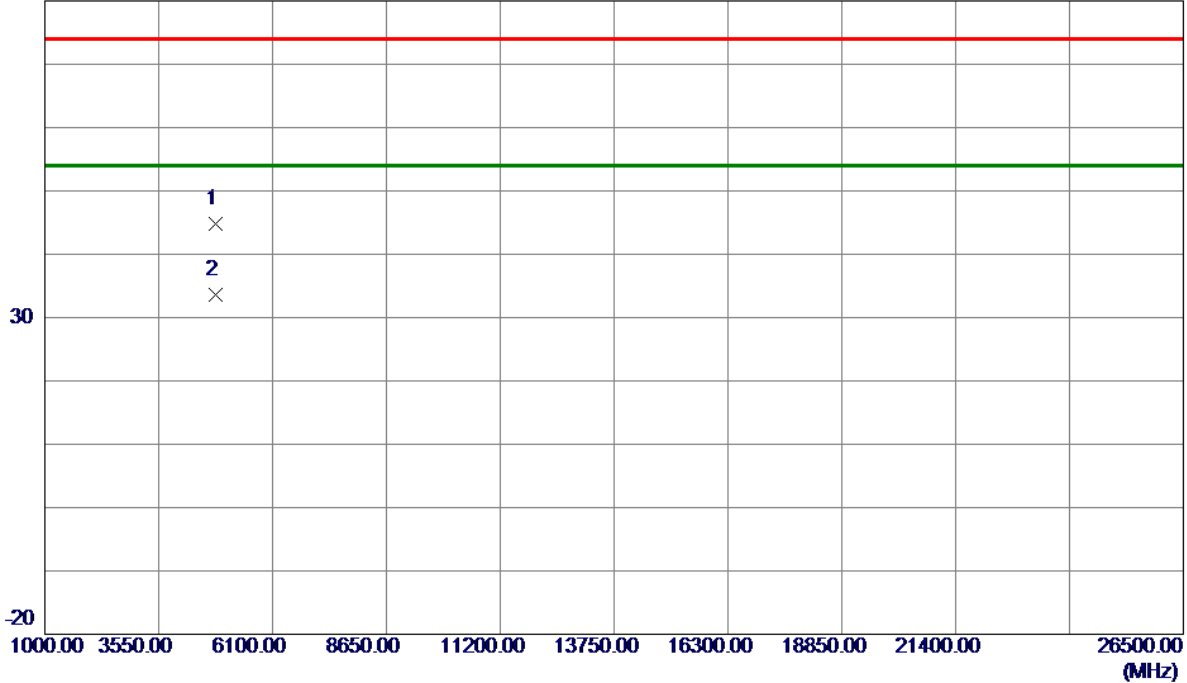
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



Test Mode: TX G Mode 2412 MHz

## 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	4824.9300	40.29	4.45	44.74	74.00	-29.26	Peak	
2 *	4825.6650	29.22	4.45	33.67	54.00	-20.33	AVG	

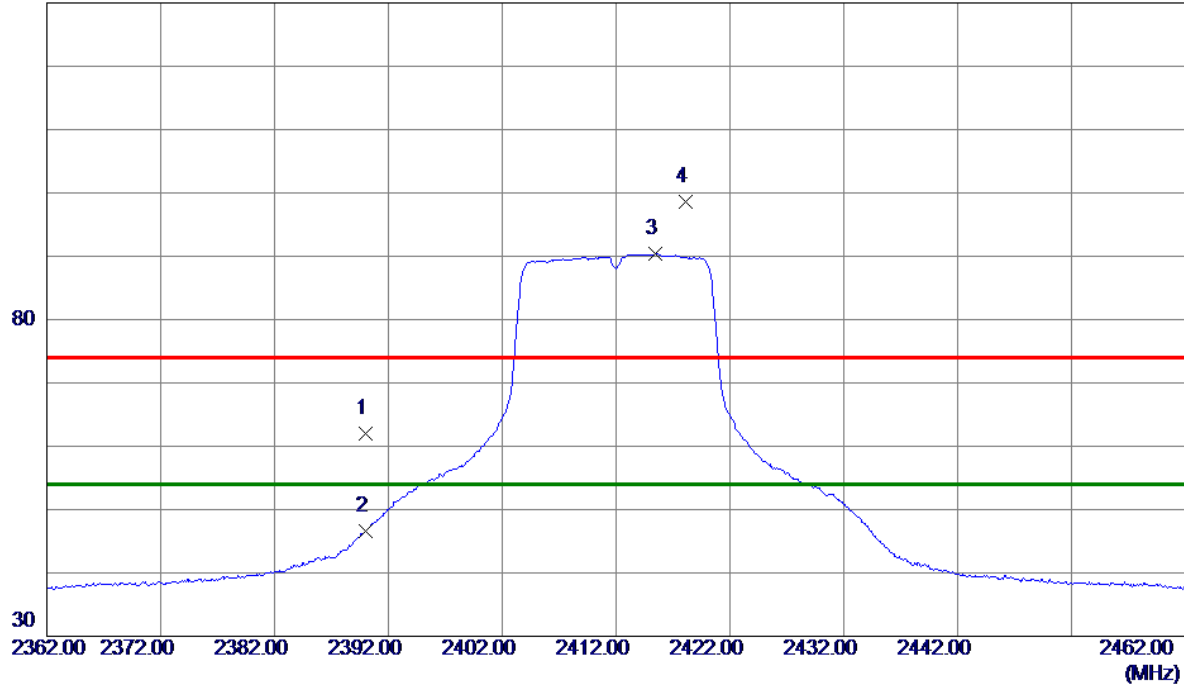
### REMARKS:

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

Test Mode: TX G 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	2390.0000	54.80	7.26	62.06	74.00	-11.94	Peak	
2	2390.0000	39.30	7.26	46.56	54.00	-7.44	AVG	
3 *	2415.4000	83.14	7.26	90.40	54.00	36.40	AVG	No Limit
4	2418.1000	91.41	7.26	98.67	74.00	24.67	Peak	No Limit

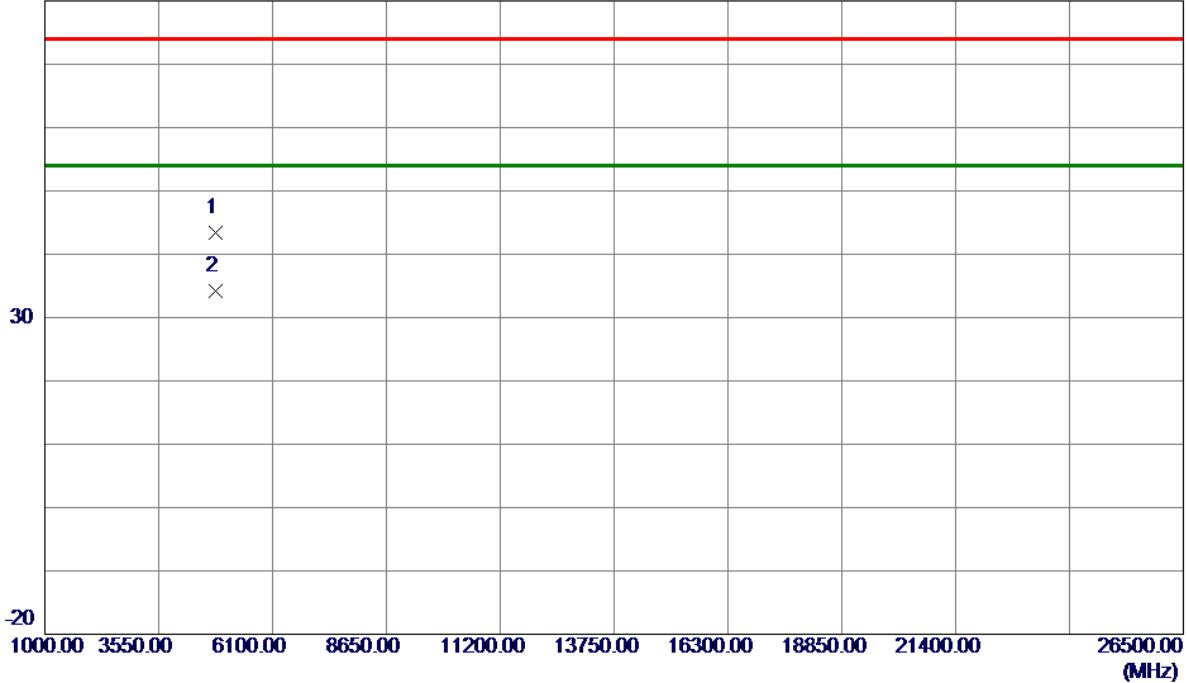
### REMARKS:

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

Test Mode: TX G Mode 2412 MHz

## Horizontal

80 dBuV/m



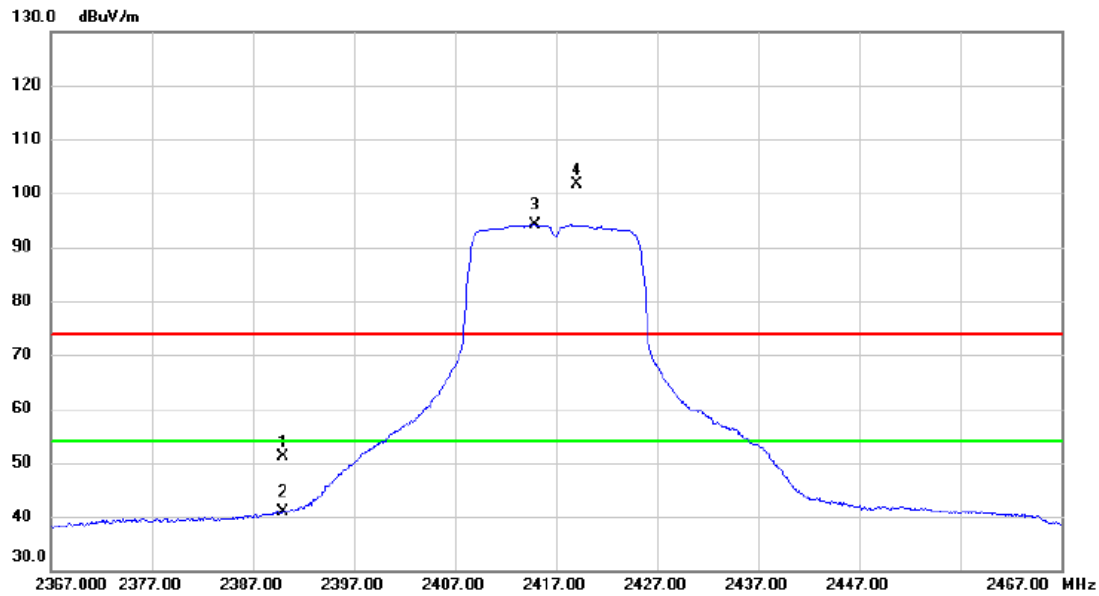
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4819.4500	39.04	4.44	43.48	74.00	-30.52	Peak	
2 *	4824.4600	29.70	4.45	34.15	54.00	-19.85	AVG	

### REMARKS:

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

Test Mode: TX G Mode 2417 MHz

## Vertical



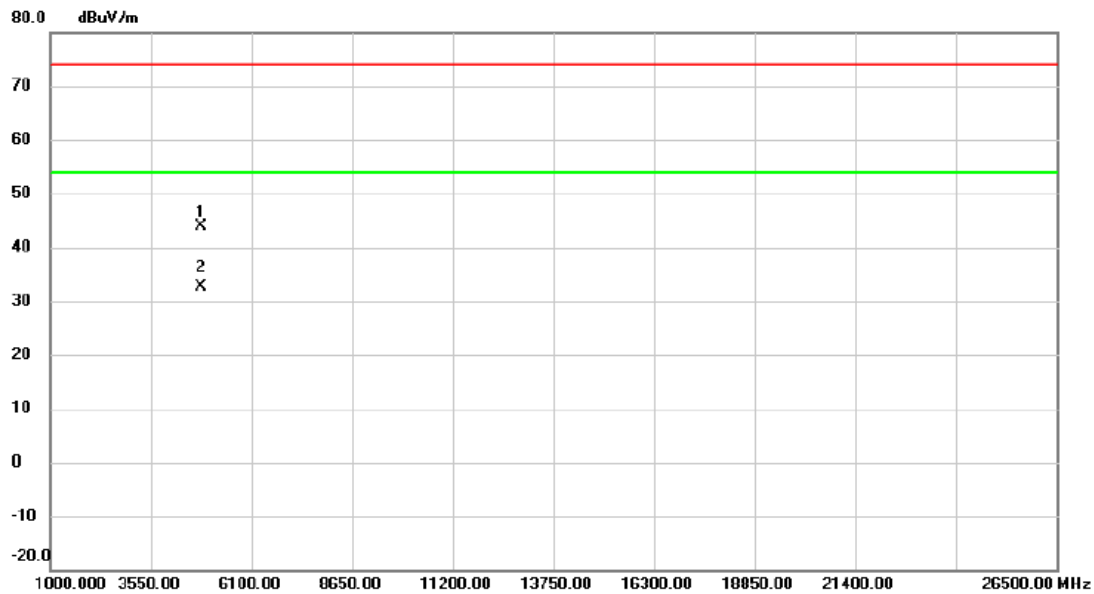
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	43.90	7.26	51.16	74.00	-22.84	peak	
2		2390.000	33.65	7.26	40.91	54.00	-13.09	AVG	
3	*	2414.900	86.84	7.26	94.10	54.00	40.10	AVG	No Limit
4	X	2419.000	94.49	7.26	101.75	74.00	27.75	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

## Vertical



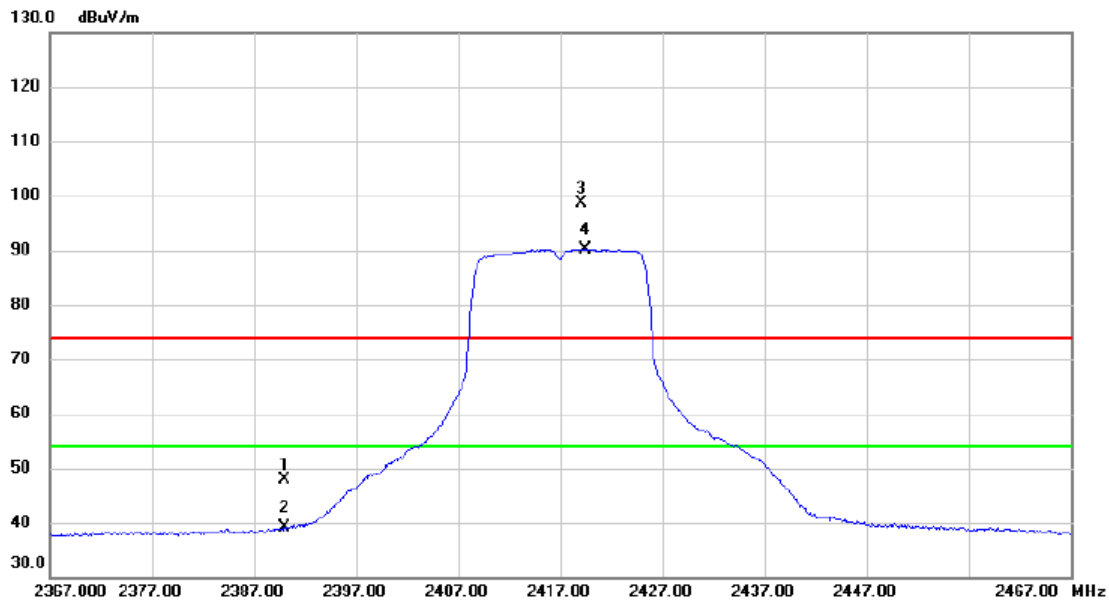
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4833.747	39.30	4.47	43.77	74.00	-30.23	peak	
2	*	4834.331	28.25	4.48	32.73	54.00	-21.27	AVG	

### REMARKS:

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

Test Mode: TX G Mode 2417 MHz

## Horizontal



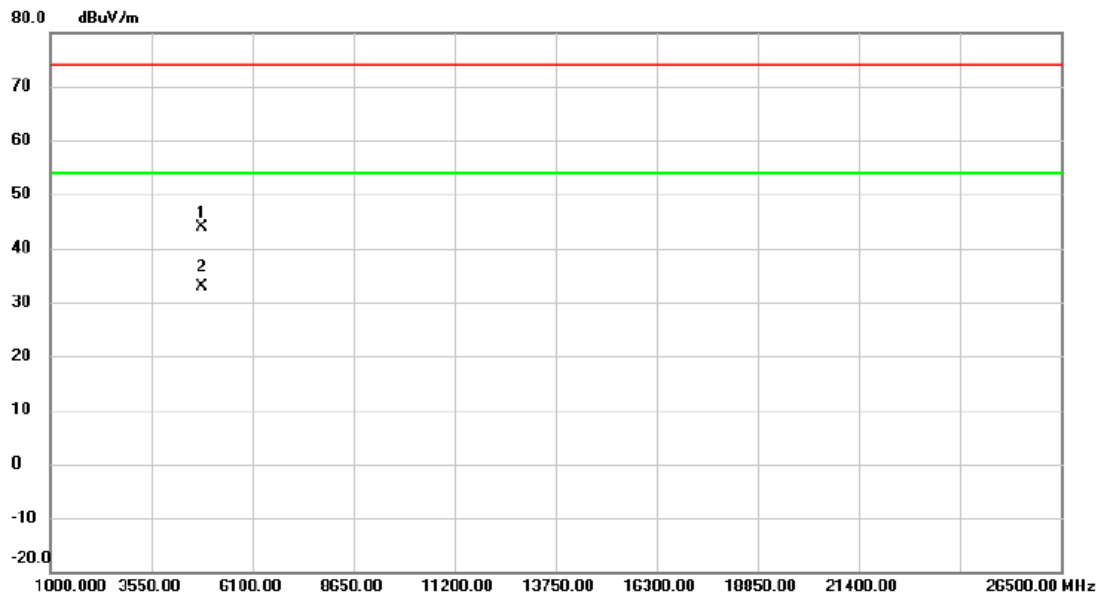
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	40.53	7.26	47.79	74.00	-26.21	peak	
2		2390.000	31.95	7.26	39.21	54.00	-14.79	AVG	
3	X	2419.000	91.28	7.26	98.54	74.00	24.54	peak	No Limit
4	*	2419.400	82.99	7.26	90.25	54.00	36.25	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. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4833.771	39.45	4.47	43.92	74.00	-30.08	peak	
2	*	4833.965	28.35	4.47	32.82	54.00	-21.18	AVG	

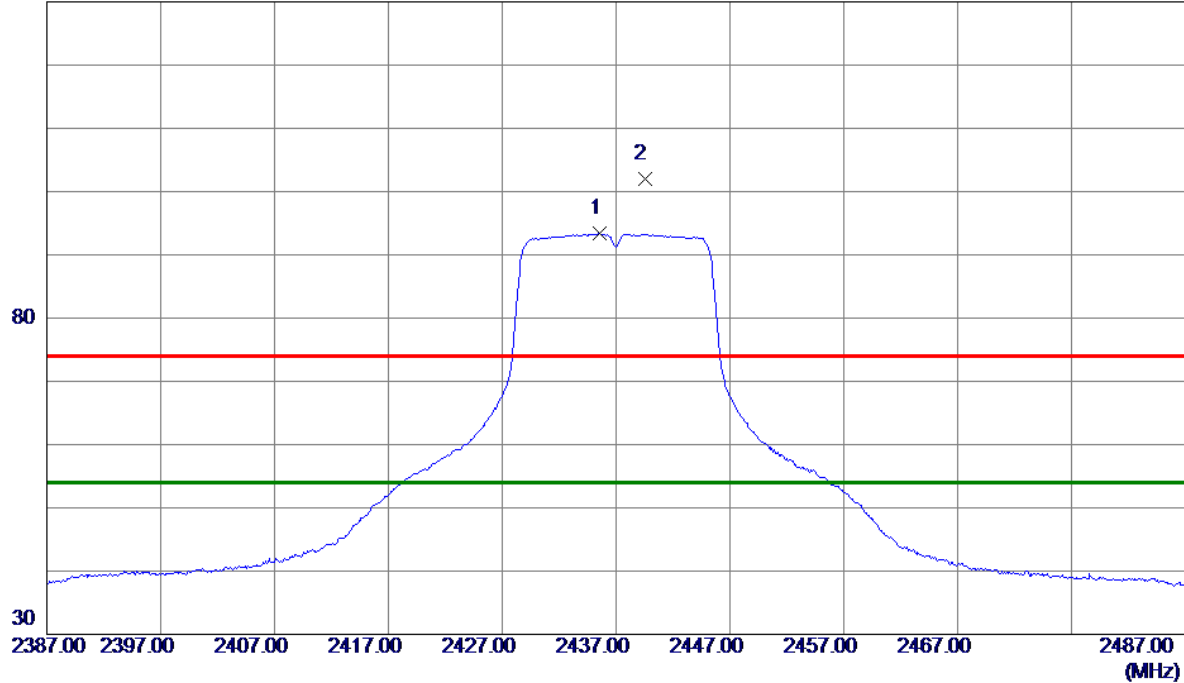
### REMARKS:

- (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 *	2435.6000	86.09	7.25	93.34	54.00	39.34	AVG	No Limit
2	2439.5000	94.72	7.25	101.97	74.00	27.97	Peak	No Limit

### REMARKS:

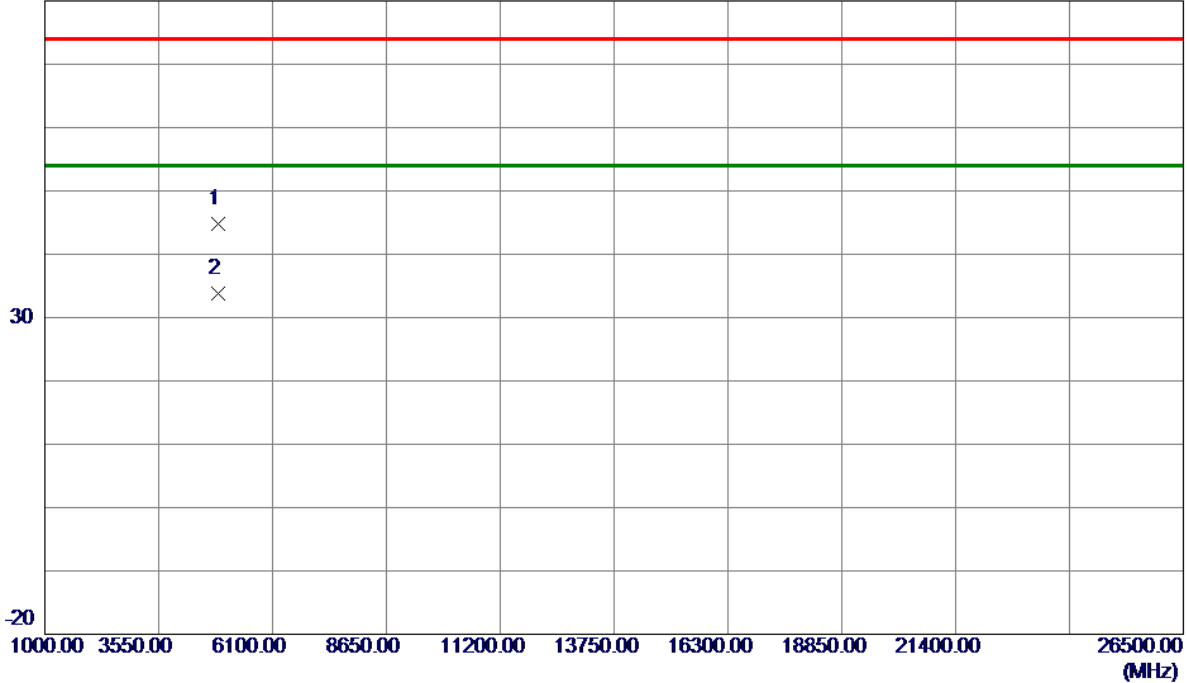
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



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	4872.6200	40.17	4.58	44.75	74.00	-29.25	Peak	
2 *	4874.4350	29.25	4.58	33.83	54.00	-20.17	AVG	

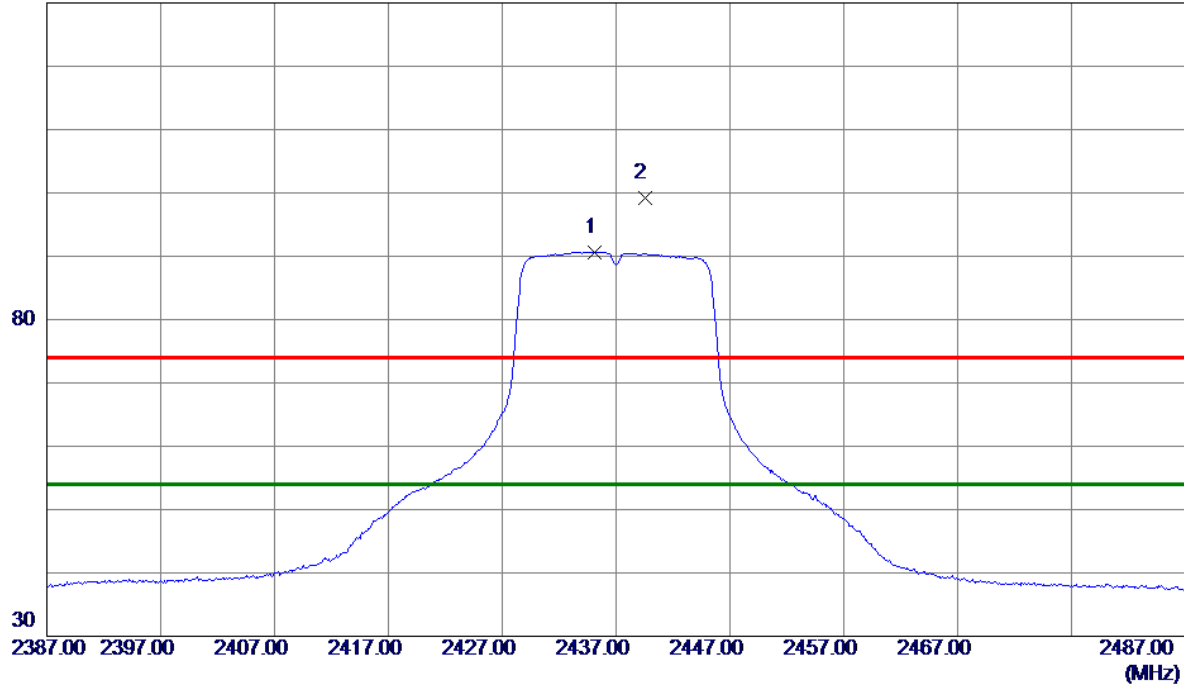
### REMARKS:

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

Test Mode: TX G Mode 2437 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 *	2435.1000	83.43	7.25	90.68	54.00	36.68	AVG	No Limit
2	2439.5000	91.91	7.25	99.16	74.00	25.16	Peak	No Limit

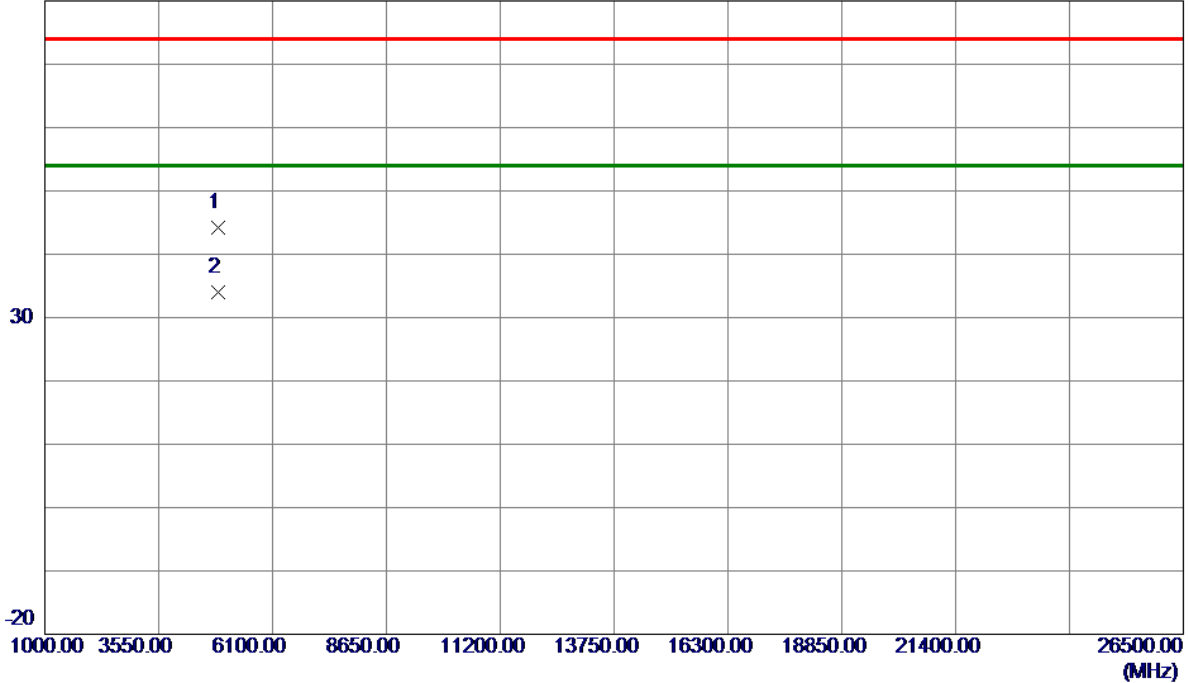
### REMARKS:

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

Test Mode: TX G Mode 2437 MHz

## Horizontal

80 dBuV/m



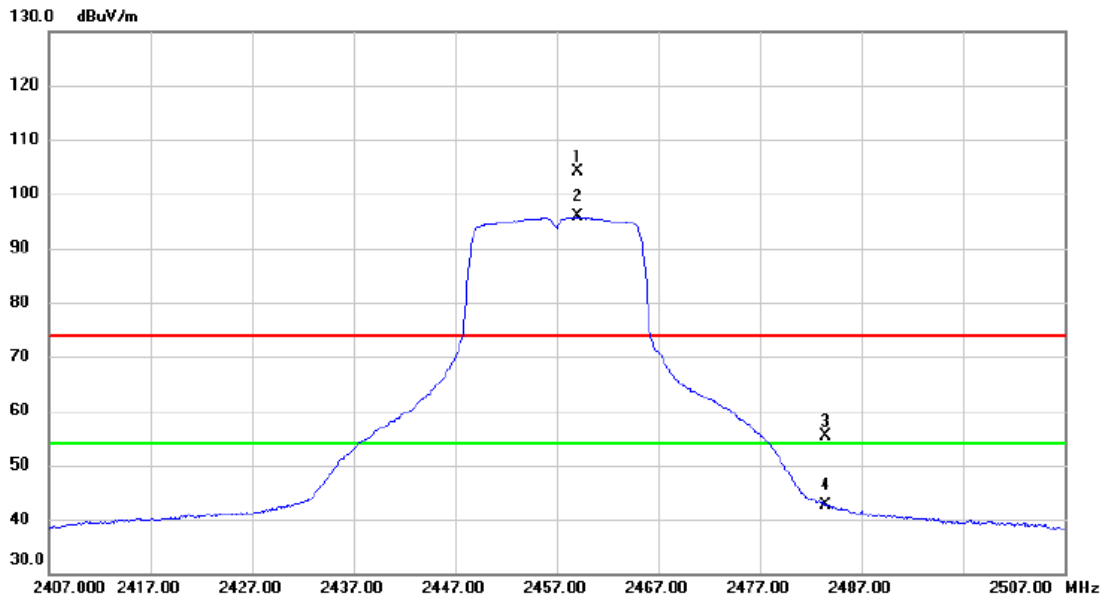
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.2400	39.57	4.58	44.15	74.00	-29.85	Peak	
2 *	4875.8950	29.36	4.59	33.95	54.00	-20.05	AVG	

### REMARKS:

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

Test Mode: TX G Mode 2457 MHz

## Vertical



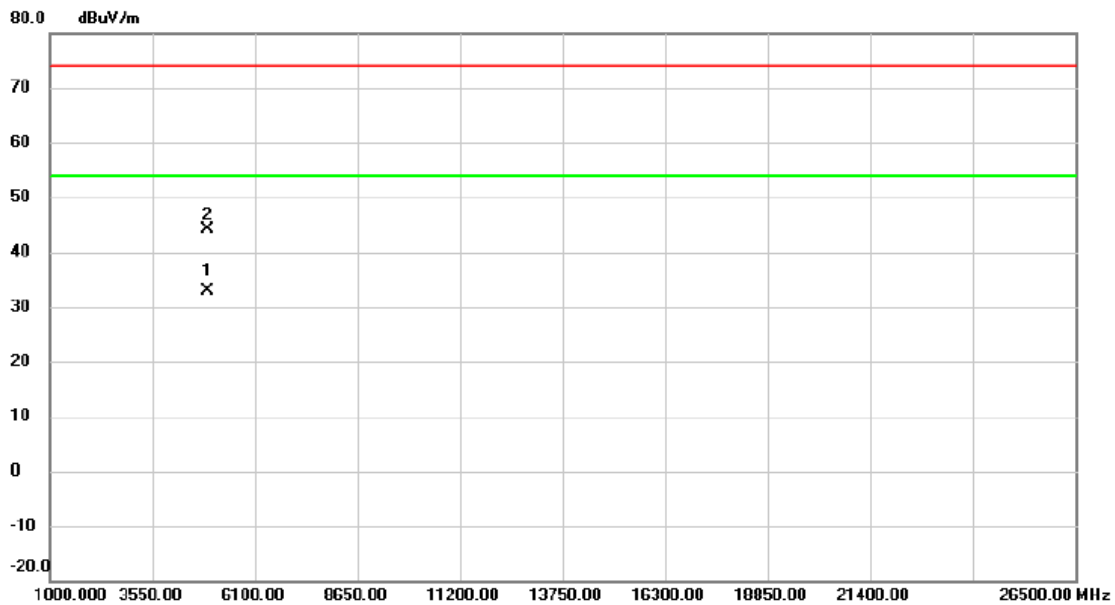
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2459.100	96.87	7.26	104.13	74.00	30.13	peak	No Limit
2	*	2459.100	88.50	7.26	95.76	54.00	41.76	AVG	No Limit
3		2483.500	48.09	7.25	55.34	74.00	-18.66	peak	
4		2483.500	35.41	7.25	42.66	54.00	-11.34	AVG	

### REMARKS:

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

Test Mode: TX G Mode 2457 MHz

## Vertical



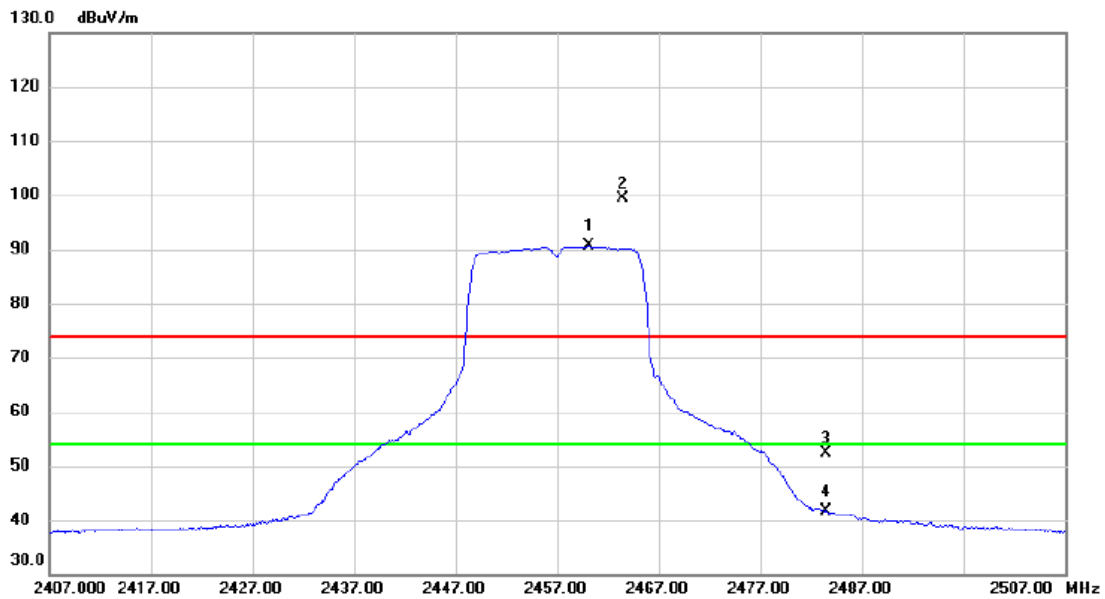
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4913.805	28.11	4.69	32.80	54.00	-21.20	AVG	
2		4914.683	39.56	4.69	44.25	74.00	-29.75	peak	

### REMARKS:

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

Test Mode: TX G Mode 2457 MHz

## Horizontal



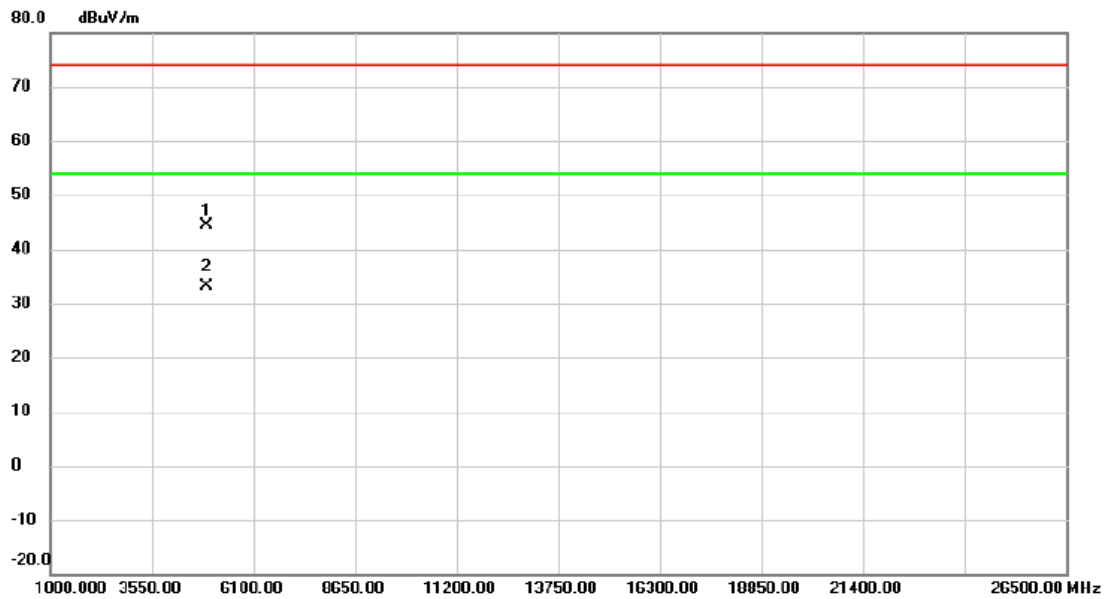
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2460.200	83.29	7.26	90.55	54.00	36.55	AVG	No Limit
2	X	2463.400	92.25	7.25	99.50	74.00	25.50	peak	No Limit
3		2483.500	45.10	7.25	52.35	74.00	-21.65	peak	
4		2483.500	34.29	7.25	41.54	54.00	-12.46	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		4914.112	39.62	4.69	44.31	74.00	-29.69	peak	
2	*	4914.917	28.47	4.69	33.16	54.00	-20.84	AVG	

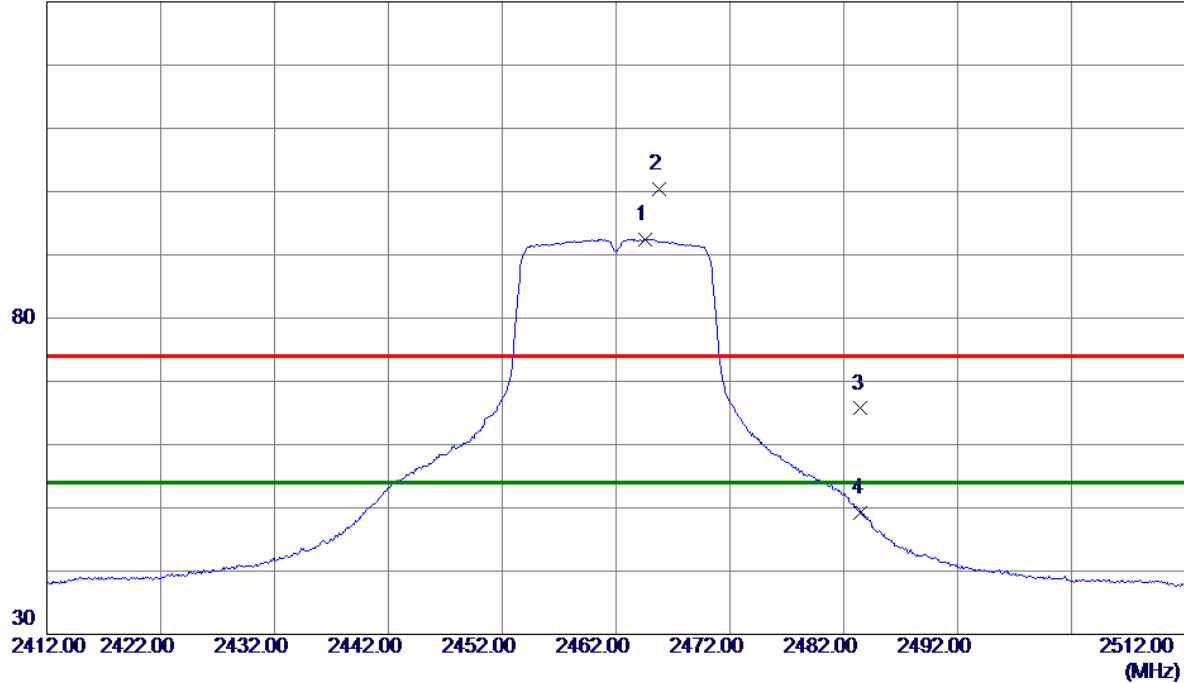
### REMARKS:

- (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 *	2464.6000	85.17	7.25	92.42	54.00	38.42	AVG	No Limit
2	2465.8000	93.22	7.25	100.47	74.00	26.47	Peak	No Limit
3	2483.5000	58.45	7.25	65.70	74.00	-8.30	Peak	
4	2483.5000	41.92	7.25	49.17	54.00	-4.83	AVG	

### REMARKS:

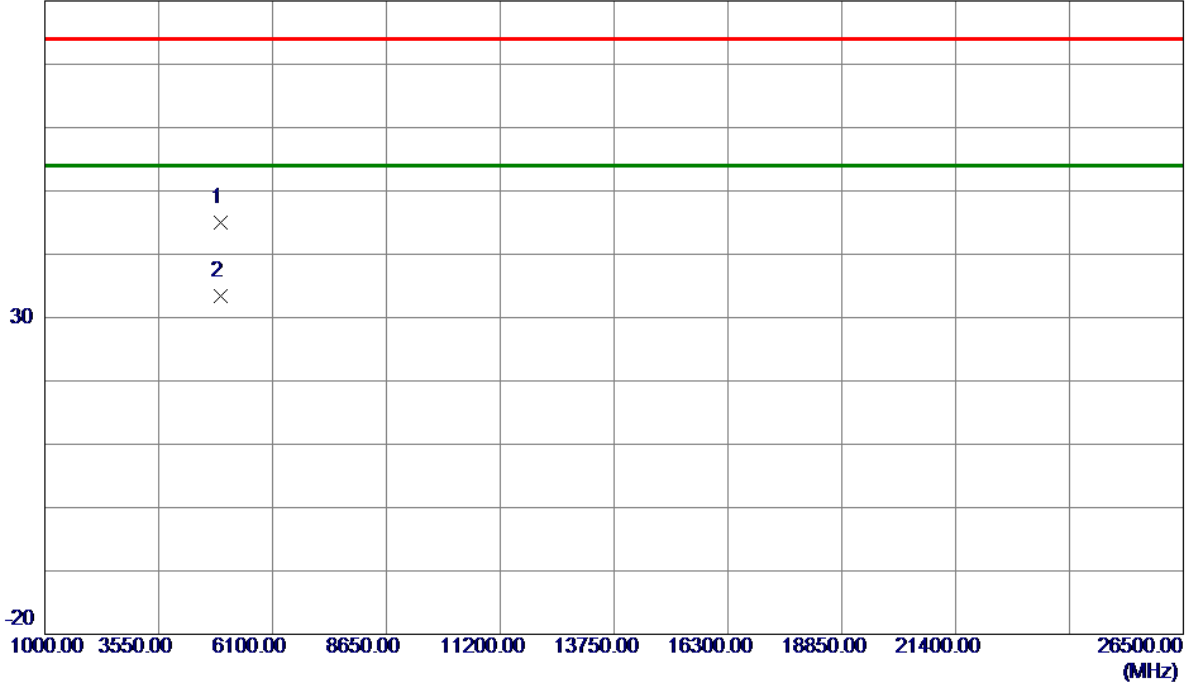
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



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	4924.8550	40.19	4.72	44.91	74.00	-29.09	Peak	
2 *	4926.3450	28.77	4.72	33.49	54.00	-20.51	AVG	

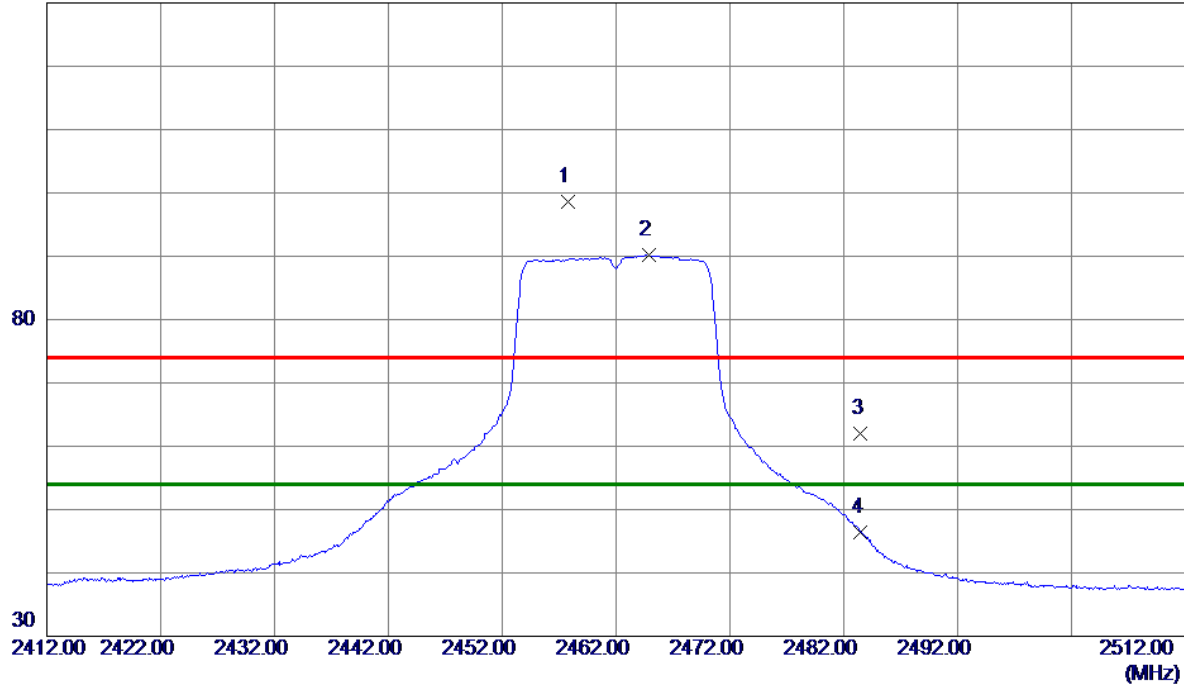
### REMARKS:

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

Test Mode: TX G Mode 2462 MHz

## Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2457.8000	91.34	7.25	98.59	74.00	24.59	Peak	No Limit
2 *	2464.9000	82.86	7.25	90.11	54.00	36.11	AVG	No Limit
3	2483.5000	54.84	7.25	62.09	74.00	-11.91	Peak	
4	2483.5000	39.22	7.25	46.47	54.00	-7.53	AVG	

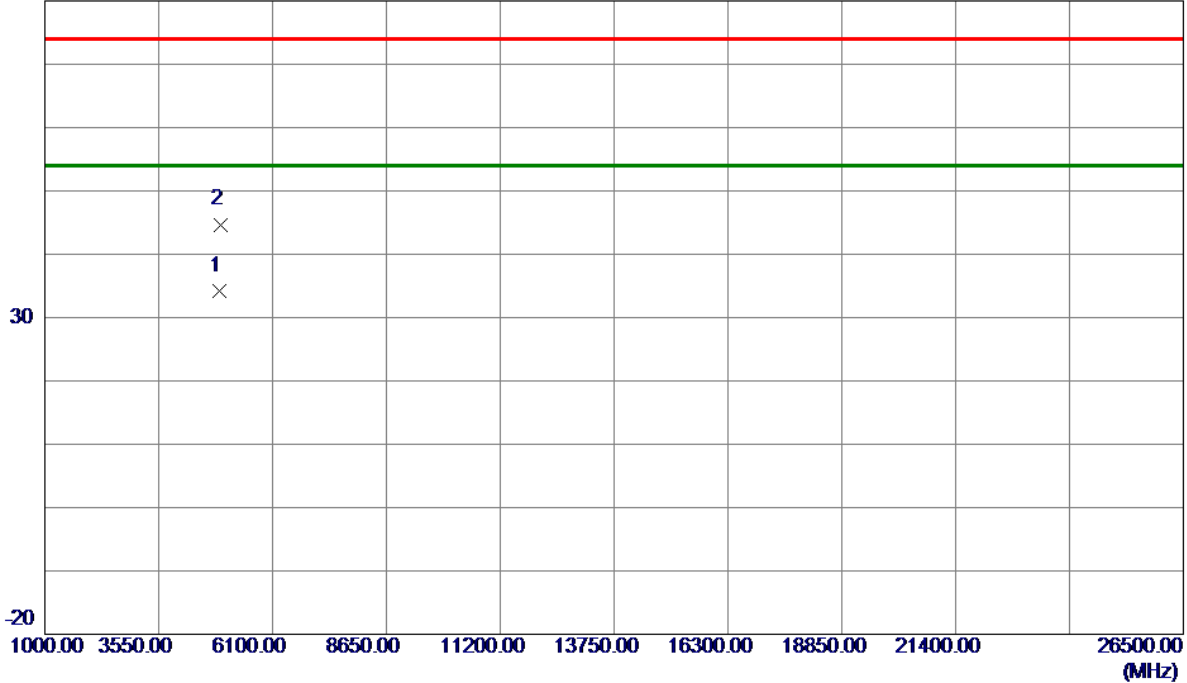
### REMARKS:

- (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 *	4924.1450	29.41	4.72	34.13	54.00	-19.87	AVG	
2	4925.4049	39.98	4.72	44.70	74.00	-29.30	Peak	

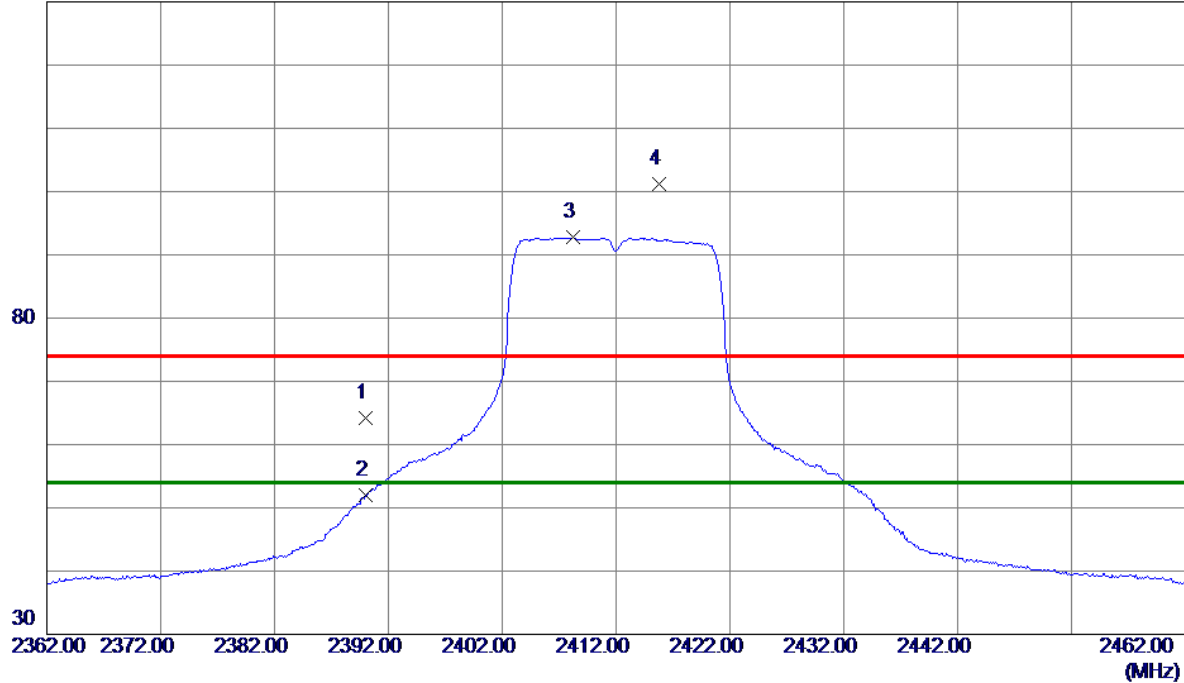
### REMARKS:

- (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	57.01	7.26	64.27	74.00	-9.73	Peak	
2	2390.0000	44.80	7.26	52.06	54.00	-1.94	AVG	
3 *	2408.2000	85.46	7.26	92.72	54.00	38.72	AVG	No Limit
4	2415.8000	93.99	7.26	101.25	74.00	27.25	Peak	No Limit

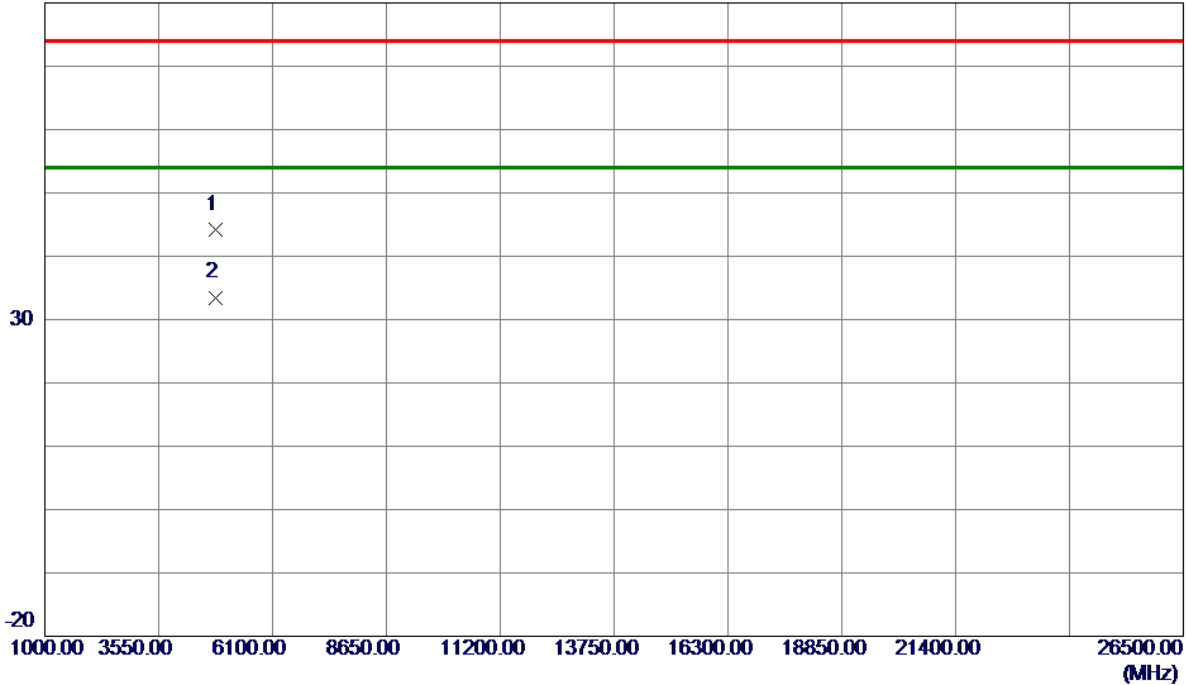
### REMARKS:

- (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	4822.7350	39.69	4.45	44.14	74.00	-29.86	Peak	
2 *	4825.6900	29.05	4.45	33.50	54.00	-20.50	AVG	

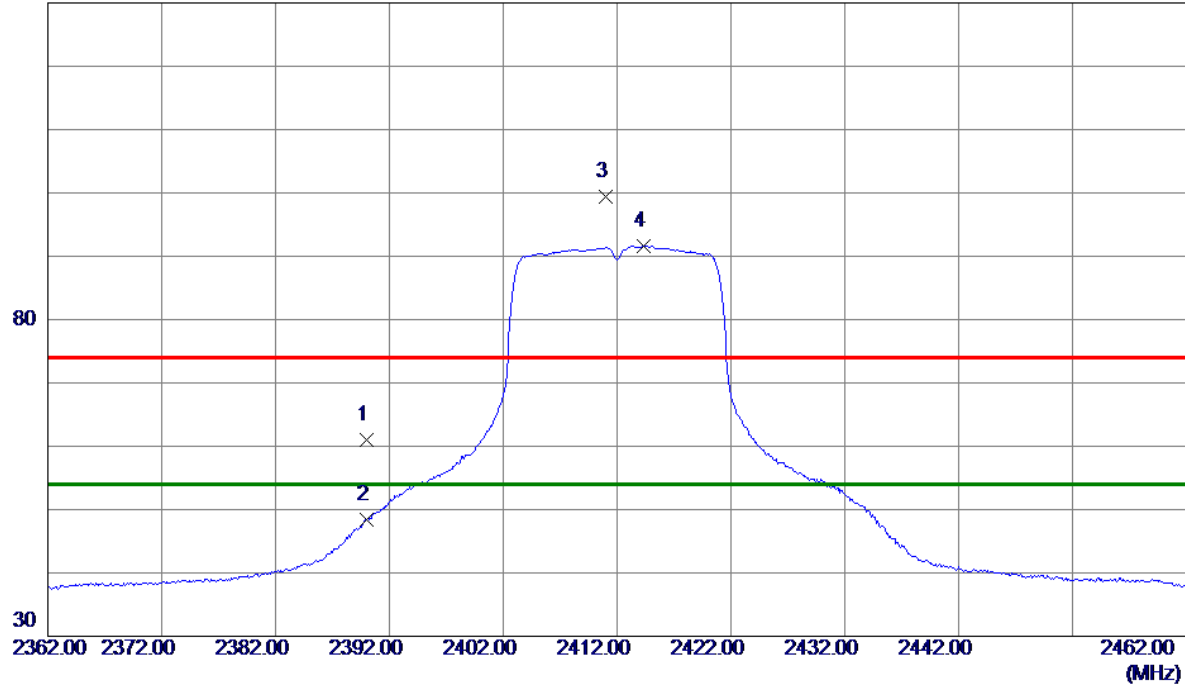
### REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

## Horizontal

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	53.77	7.26	61.03	74.00	-12.97	Peak	
2	2390.0000	41.21	7.26	48.47	54.00	-5.53	AVG	
3	2411.0000	92.13	7.26	99.39	74.00	25.39	Peak	No Limit
4 *	2414.3000	84.34	7.26	91.60	54.00	37.60	AVG	No Limit

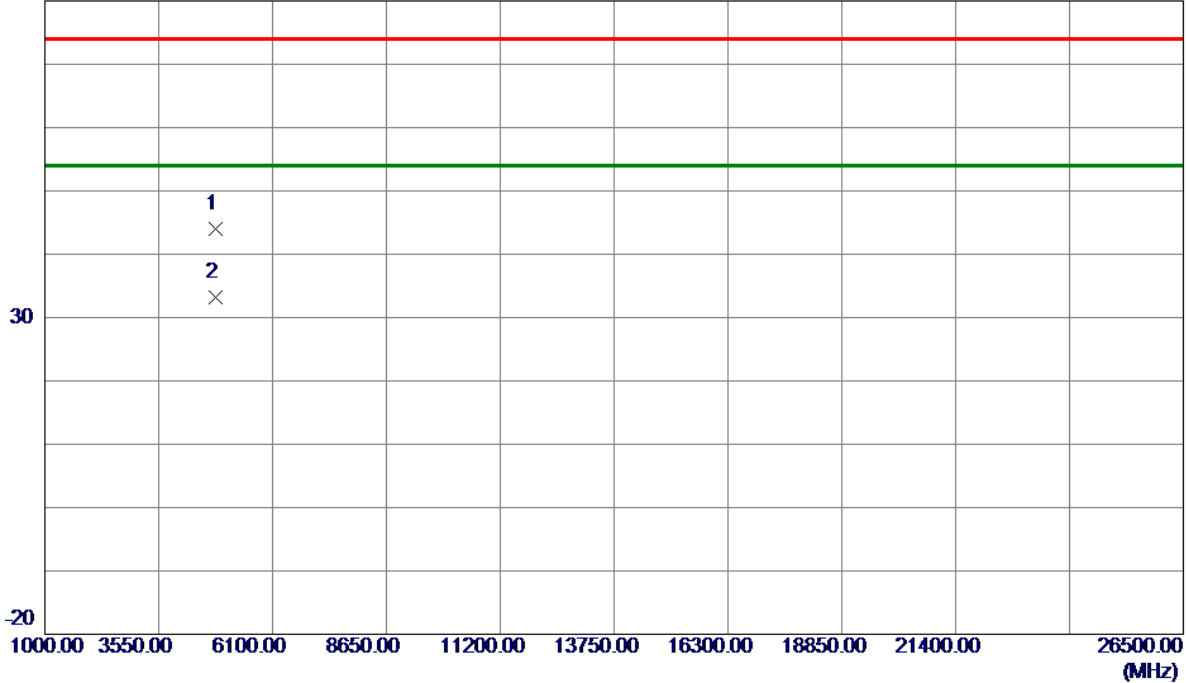
### REMARKS:

- (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



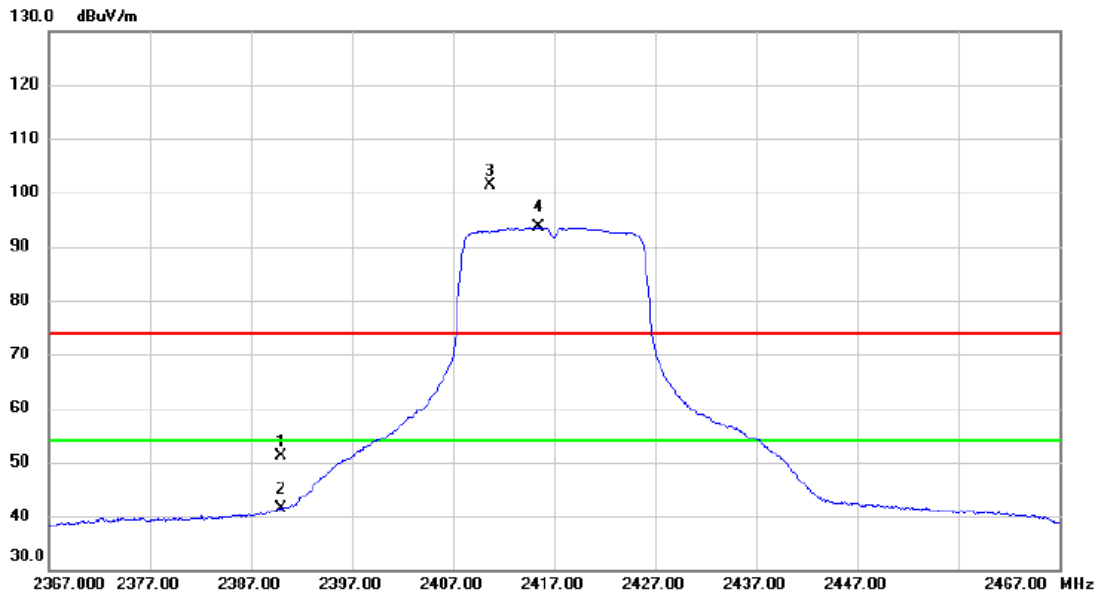
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.7700	39.61	4.45	44.06	74.00	-29.94	Peak	
2 *	4826.4400	28.73	4.46	33.19	54.00	-20.81	AVG	

### 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	43.95	7.26	51.21	74.00	-22.79	peak	
2		2390.000	34.14	7.26	41.40	54.00	-12.60	AVG	
3	X	2410.700	94.07	7.25	101.32	74.00	27.32	peak	No Limit
4	*	2415.400	86.27	7.26	93.53	54.00	39.53	AVG	No Limit

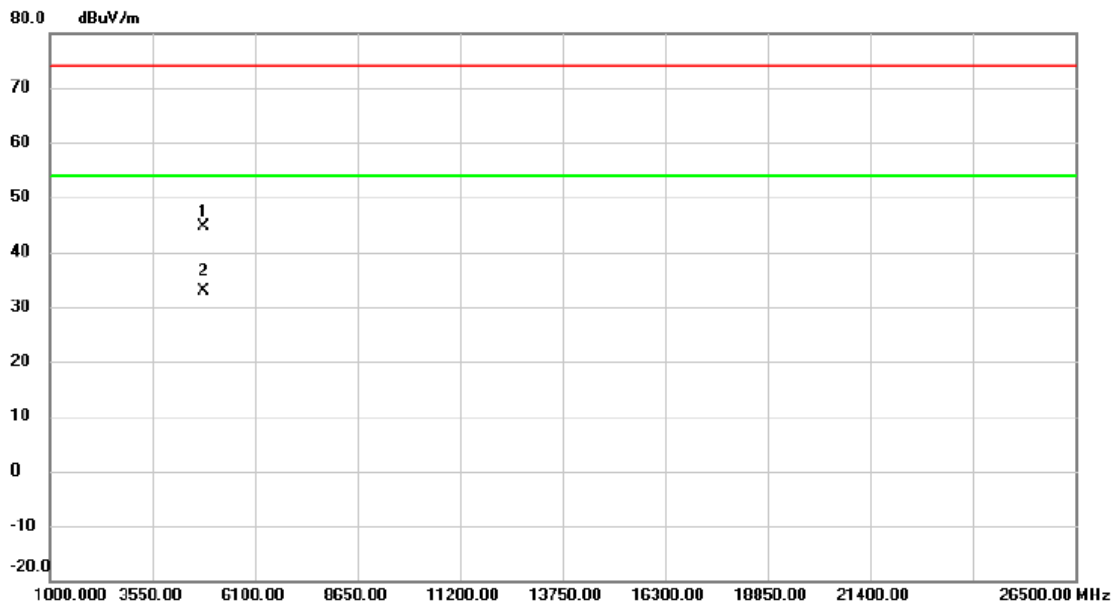
### REMARKS:

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



Test Mode: TX N-20M Mode 2417 MHz

## Vertical



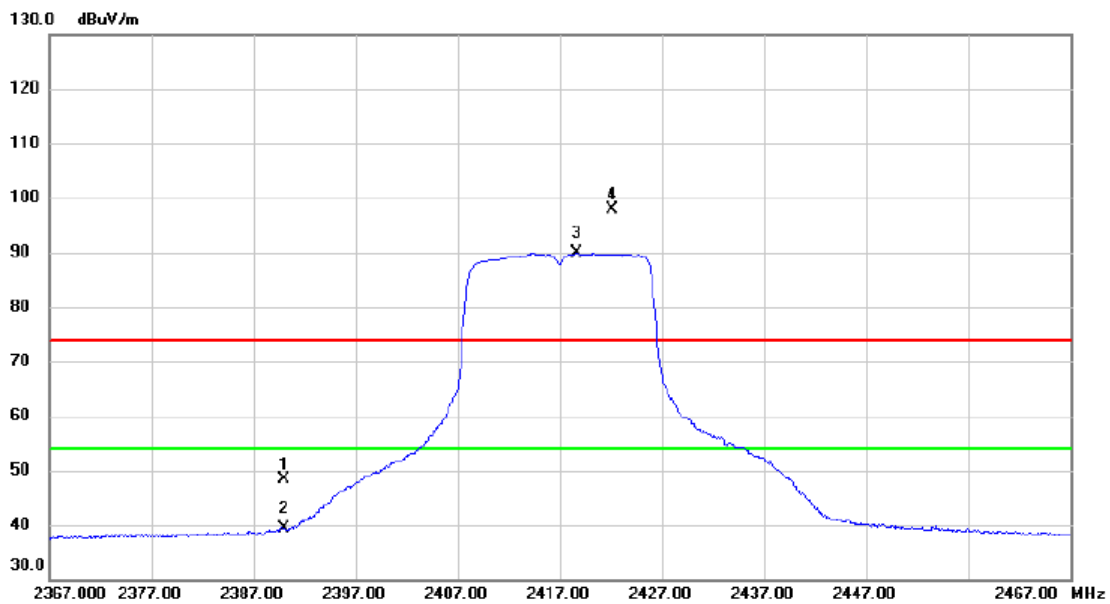
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4833.577	40.19	4.47	44.66	74.00	-29.34	peak	
2 *	4834.932	28.37	4.48	32.85	54.00	-21.15	AVG	

### REMARKS:

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

Test Mode: TX N-20M Mode 2417 MHz

## Horizontal



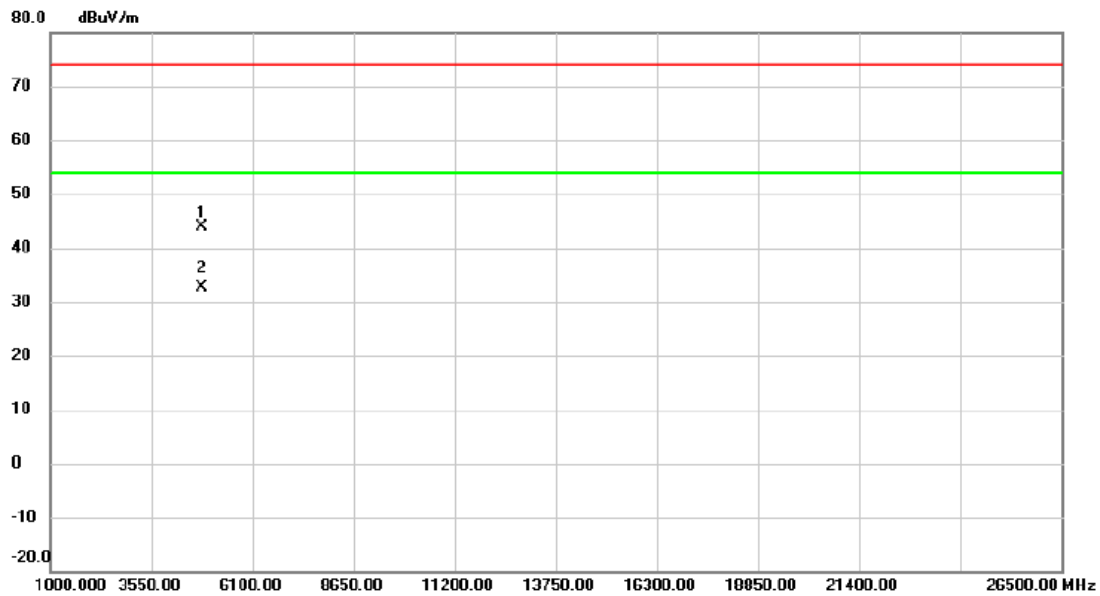
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	41.10	7.26	48.36	74.00	-25.64	peak	
2		2390.000	32.11	7.26	39.37	54.00	-14.63	AVG	
3	*	2418.700	82.64	7.26	89.90	54.00	35.90	AVG	No Limit
4	X	2422.200	90.73	7.26	97.99	74.00	23.99	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.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4833.694	39.45	4.47	43.92	74.00	-30.08	peak	
2	*	4834.206	28.27	4.48	32.75	54.00	-21.25	AVG	

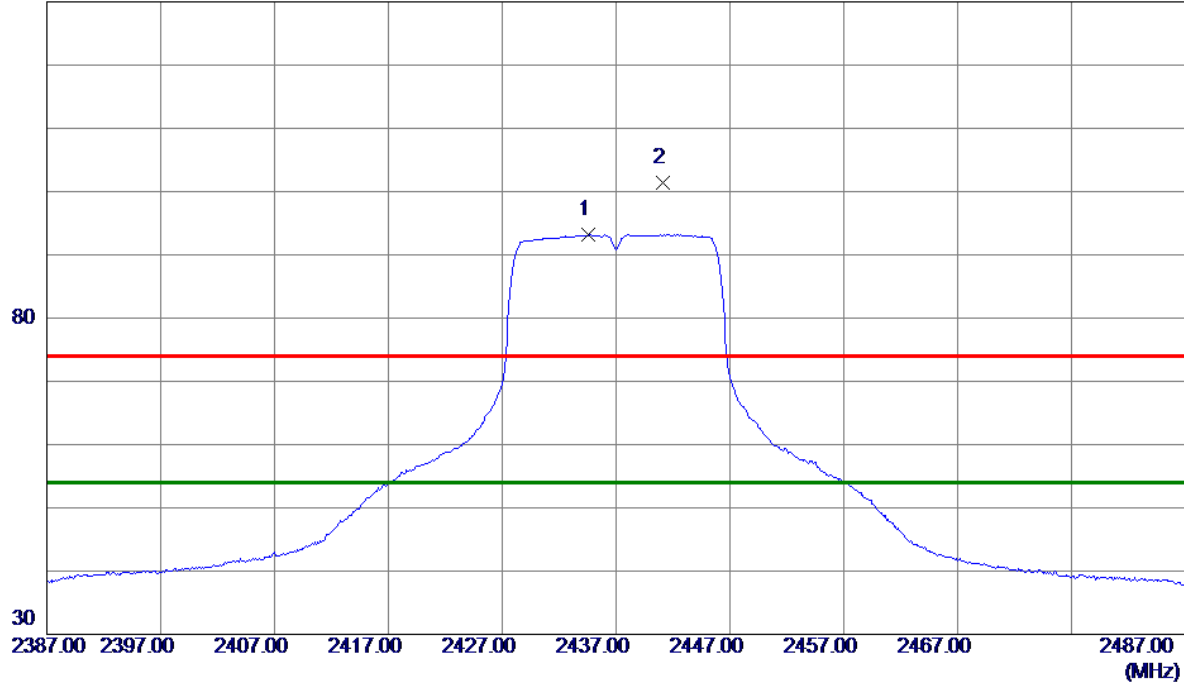
### REMARKS:

- (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 *	2434.6000	85.98	7.25	93.23	54.00	39.23	AVG	No Limit
2	2441.1000	94.19	7.25	101.44	74.00	27.44	Peak	No Limit

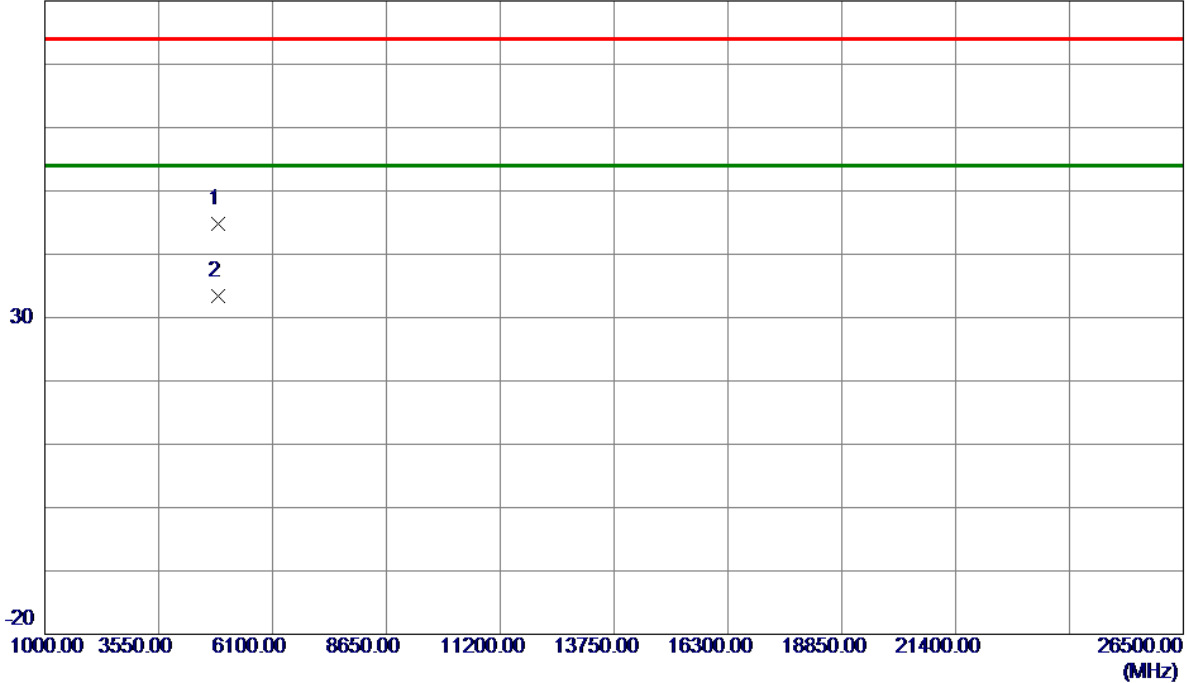
### REMARKS:

- (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	4871.5299	40.30	4.58	44.88	74.00	-29.12	Peak	
2 *	4875.8350	28.78	4.59	33.37	54.00	-20.63	AVG	

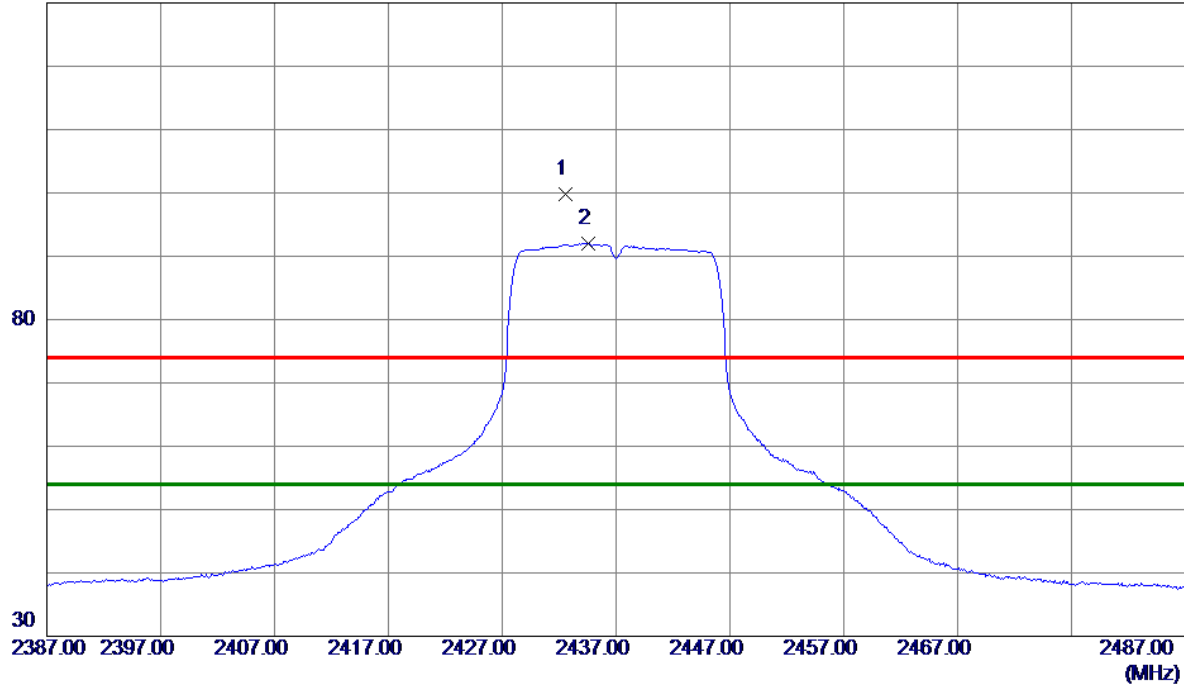
### REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

## Horizontal

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	2432.6000	92.60	7.25	99.85	74.00	25.85	Peak	No Limit
2 *	2434.6000	84.77	7.25	92.02	54.00	38.02	AVG	No Limit

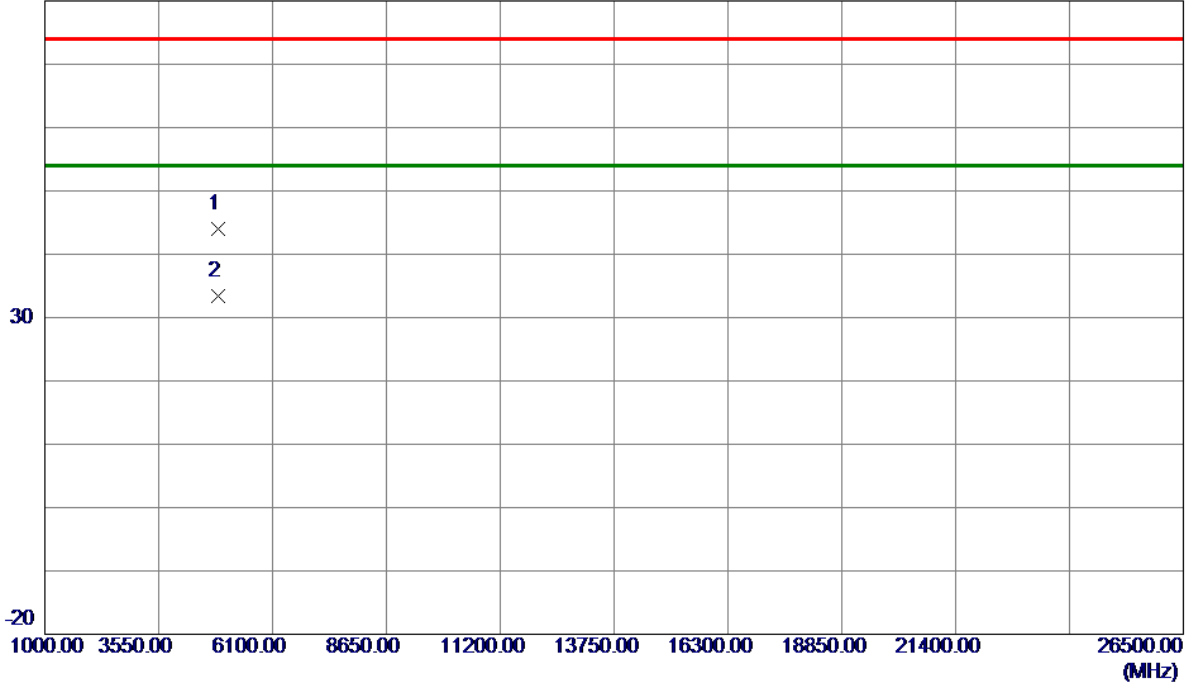
### REMARKS:

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

Test Mode:	TX N-20M Mode 2437 MHz
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## Horizontal

80 dBuV/m



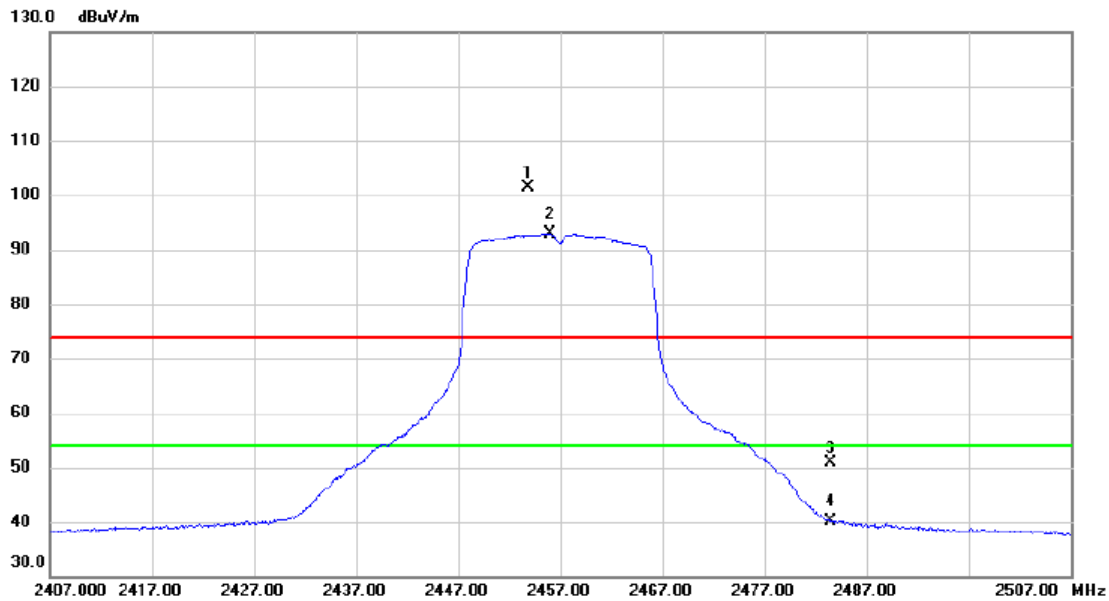
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.2200	39.47	4.58	44.05	74.00	-29.95	Peak	
2 *	4876.4950	28.84	4.59	33.43	54.00	-20.57	AVG	

### 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	2453.800	94.16	7.25	101.41	74.00	27.41	peak	No Limit
2	*	2456.000	85.66	7.26	92.92	54.00	38.92	AVG	No Limit
3		2483.500	43.63	7.25	50.88	74.00	-23.12	peak	
4		2483.500	32.85	7.25	40.10	54.00	-13.90	AVG	

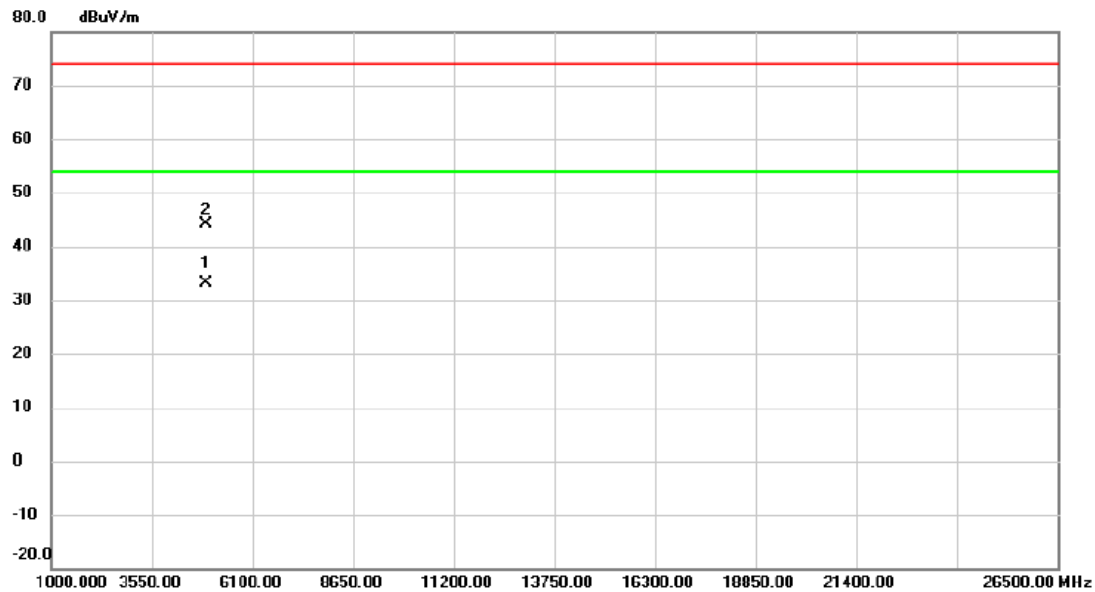
### REMARKS:

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



Test Mode: TX N-20M Mode 2457 MHz

## Vertical



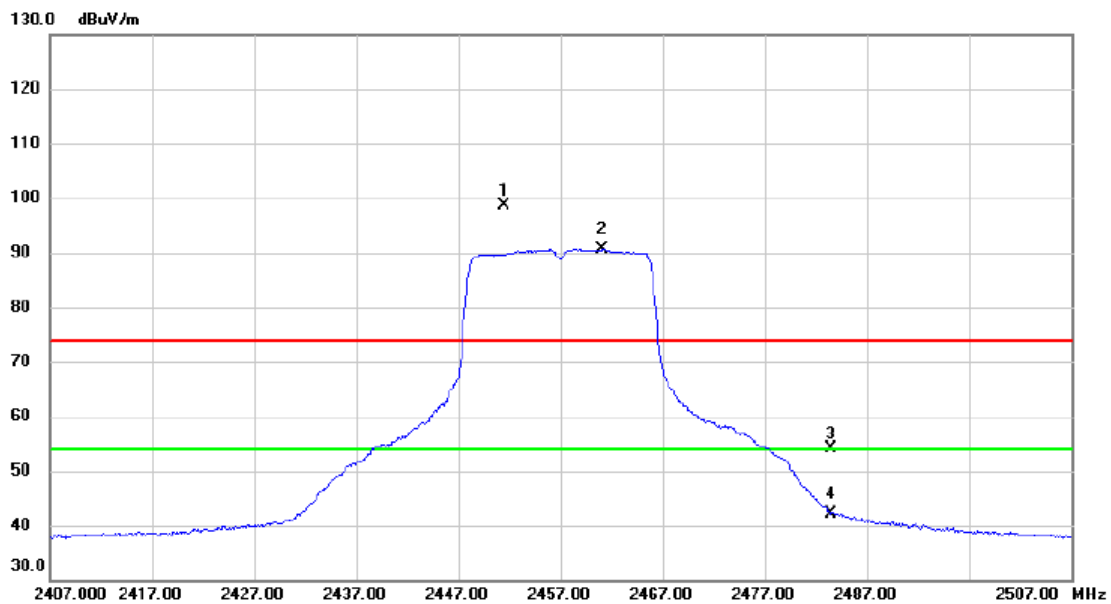
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4913.750	28.48	4.69	33.17	54.00	-20.83	AVG	
2		4914.778	39.39	4.69	44.08	74.00	-29.92	peak	

### 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. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2451.500	91.45	7.25	98.70	74.00	24.70	peak	No Limit
2	*	2461.000	83.34	7.25	90.59	54.00	36.59	AVG	No Limit
3		2483.500	46.78	7.25	54.03	74.00	-19.97	peak	
4		2483.500	34.93	7.25	42.18	54.00	-11.82	AVG	

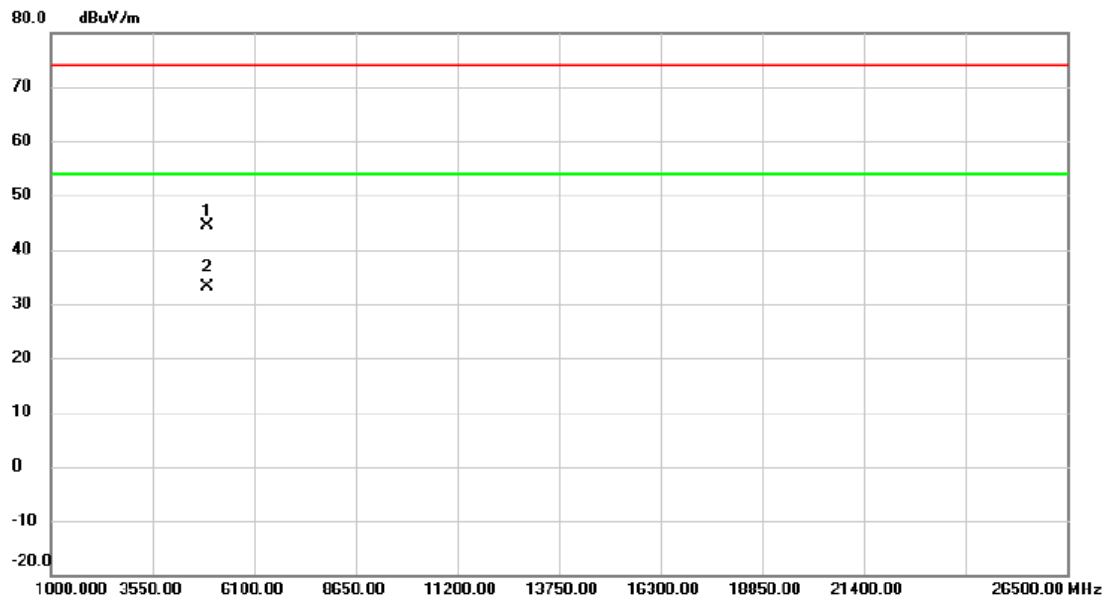
### REMARKS:

(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		4913.580	39.73	4.69	44.42	74.00	-29.58	peak	
2	*	4914.503	28.45	4.69	33.14	54.00	-20.86	AVG	

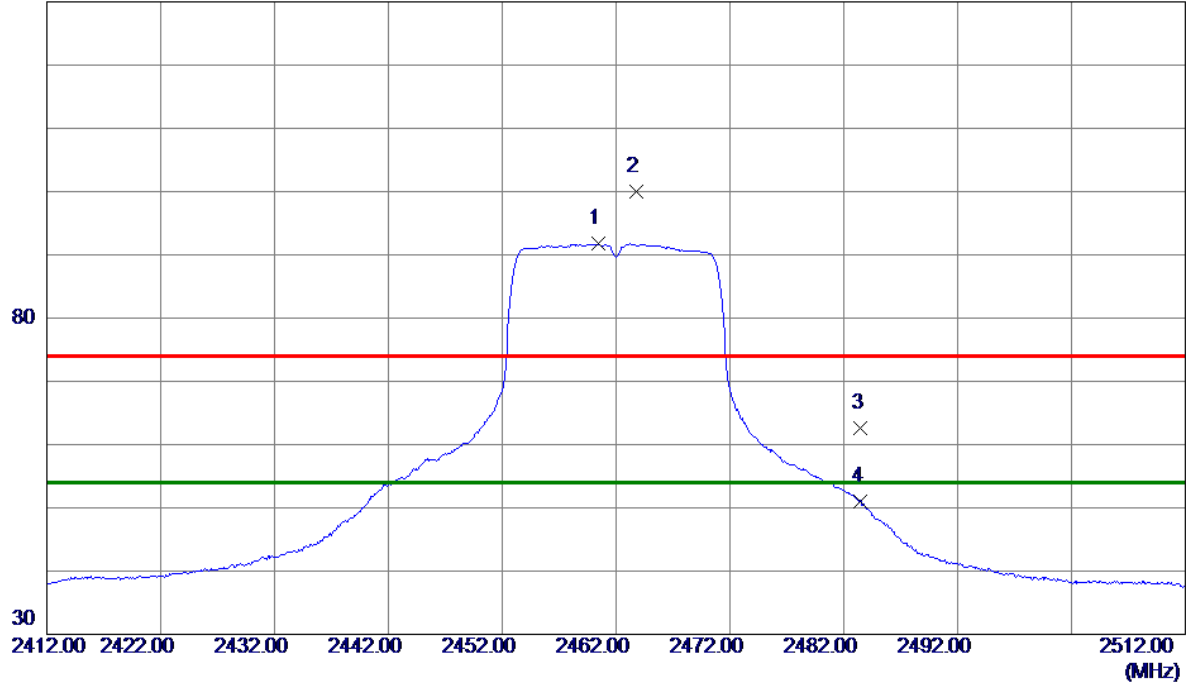
### REMARKS:

- (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 *	2460.4000	84.49	7.25	91.74	54.00	37.74	AVG	No Limit
2	2463.8000	92.69	7.25	99.94	74.00	25.94	Peak	No Limit
3	2483.5000	55.42	7.25	62.67	74.00	-11.33	Peak	
4	2483.5000	43.71	7.25	50.96	54.00	-3.04	AVG	

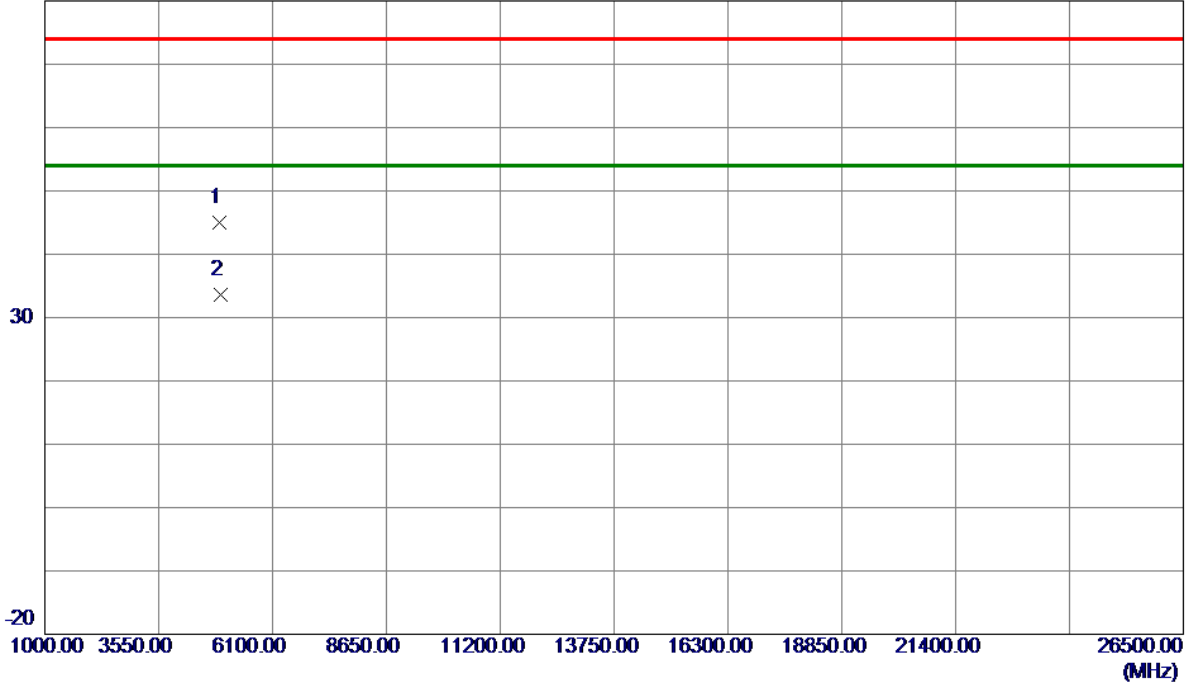
### REMARKS:

- (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	4924.1549	40.28	4.72	45.00	74.00	-29.00	Peak	
2 *	4926.2850	28.93	4.72	33.65	54.00	-20.35	AVG	

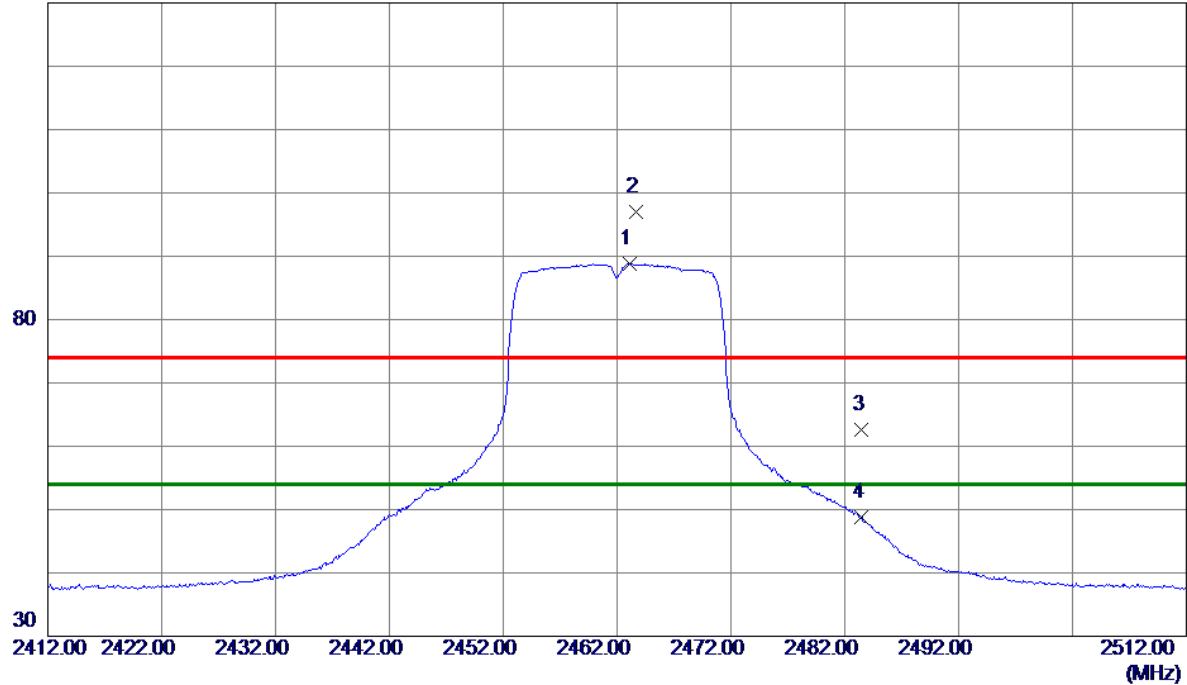
### REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

## Horizontal

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 *	2463.1000	81.55	7.25	88.80	54.00	34.80	AVG	No Limit
2	2463.7000	89.71	7.25	96.96	74.00	22.96	Peak	No Limit
3	2483.5000	55.34	7.25	62.59	74.00	-11.41	Peak	
4	2483.5000	41.54	7.25	48.79	54.00	-5.21	AVG	

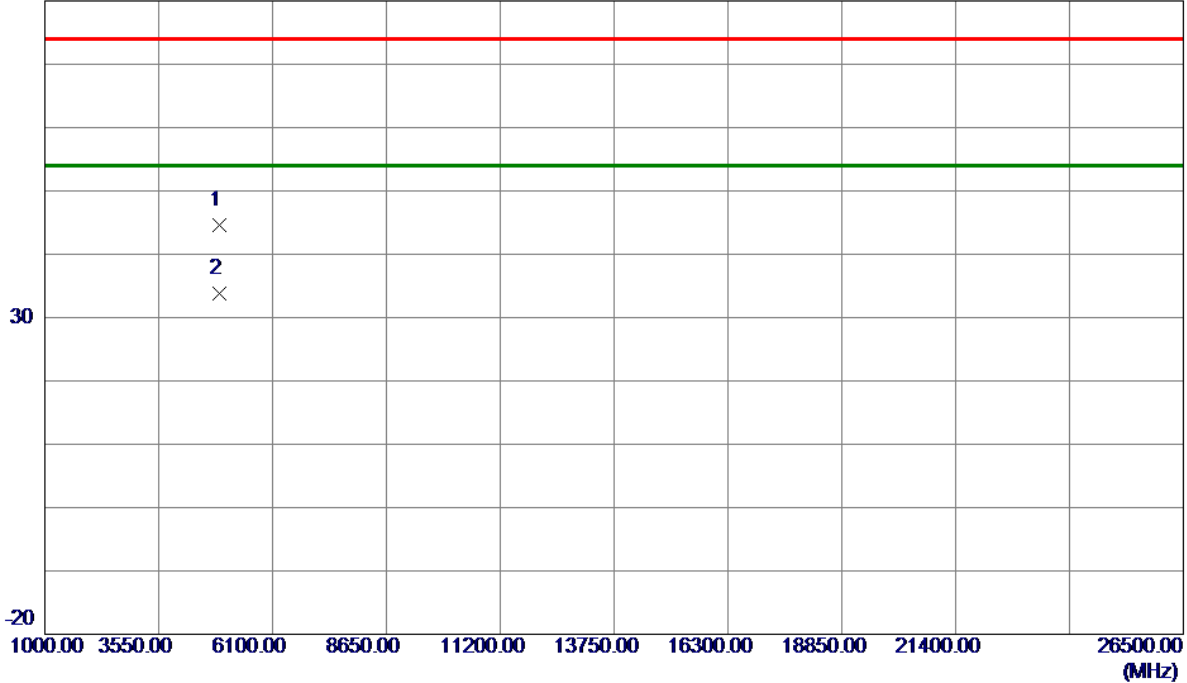
### REMARKS:

- (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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## 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	4923.3550	39.83	4.72	44.55	74.00	-29.45	Peak	
2 *	4923.8700	29.13	4.72	33.85	54.00	-20.15	AVG	

### REMARKS:

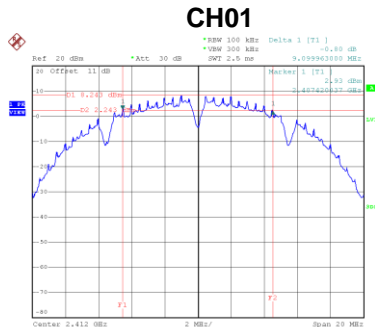
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## **APPENDIX E - BANDWIDTH**

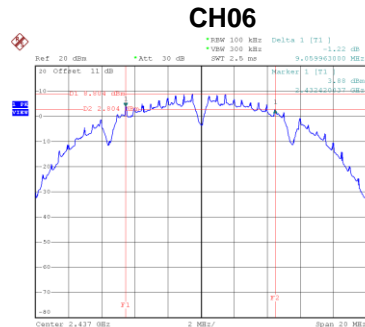


Test Mode	TX B Mode
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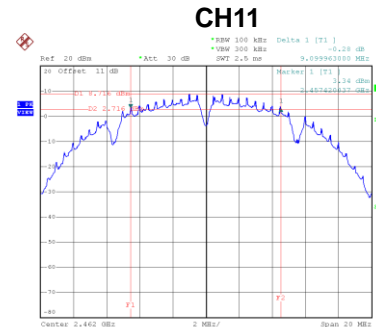
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	9.10	500	Complies
06	2437	9.06	500	Complies
11	2462	9.10	500	Complies



Date: 17.DEC.2020 09:01:27

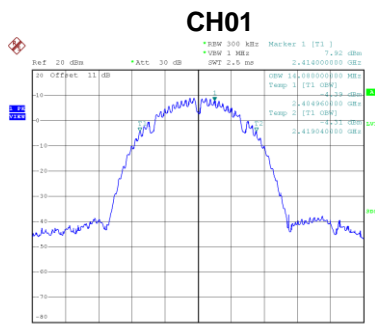


Date: 17.DEC.2020 09:03:01

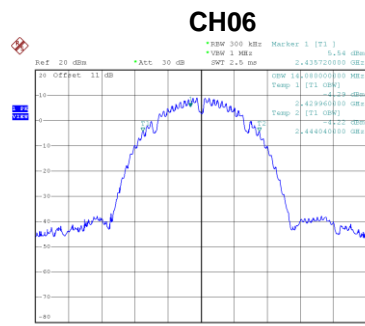


Date: 17.DEC.2020 09:04:34

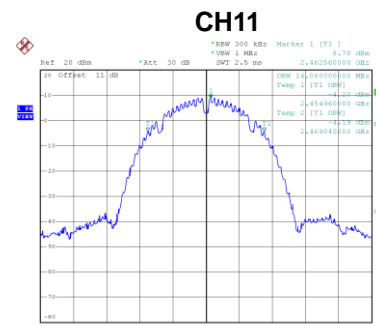
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	14.08	Complies
06	2437	14.08	Complies
11	2462	14.08	Complies



Date: 17.DEC.2020 09:01:34



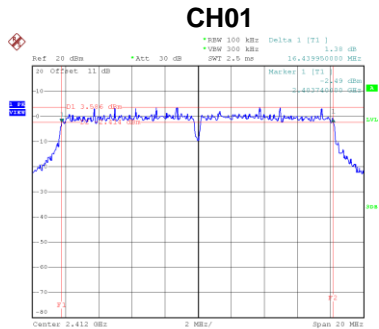
Date: 17.DEC.2020 09:03:09



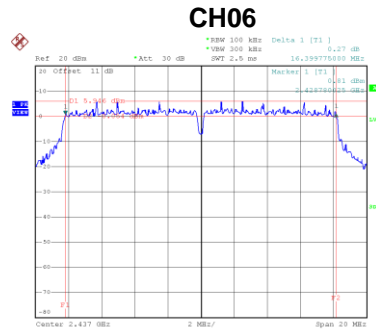
Date: 17.DEC.2020 09:04:41

Test Mode	TX G Mode
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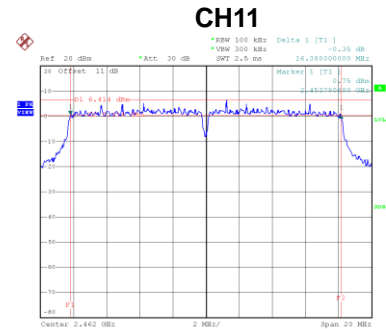
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	16.44	500	Complies
06	2437	16.40	500	Complies
11	2462	16.38	500	Complies



Date: 17.DEC.2020 09:06:45

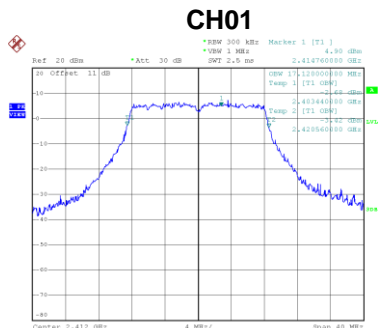


Date: 17.DEC.2020 09:08:11

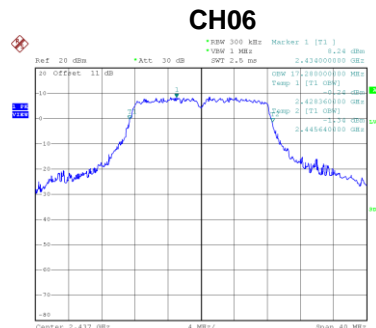


Date: 17.DEC.2020 09:09:31

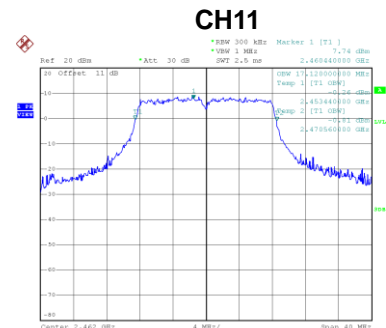
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.12	Complies
06	2437	17.28	Complies
11	2462	17.12	Complies



Date: 17.DEC.2020 09:06:53



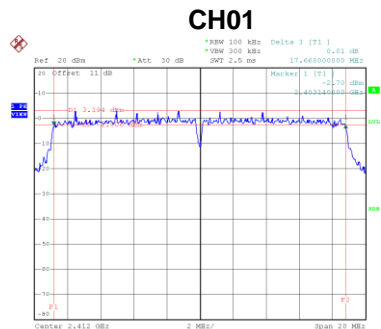
Date: 17.DEC.2020 09:08:18



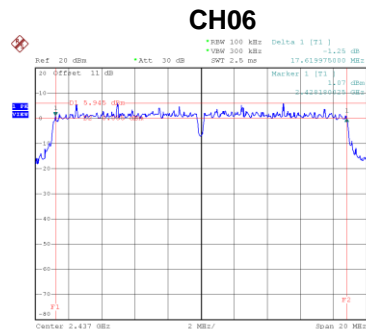
Date: 17.DEC.2020 09:09:38

Test Mode	TX N-20M Mode
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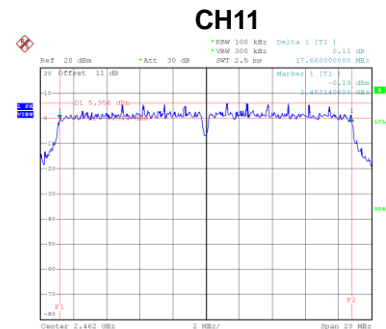
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	17.66	500	Complies
06	2437	17.62	500	Complies
11	2462	17.66	500	Complies



Date: 17.DEC.2020 09:11:03

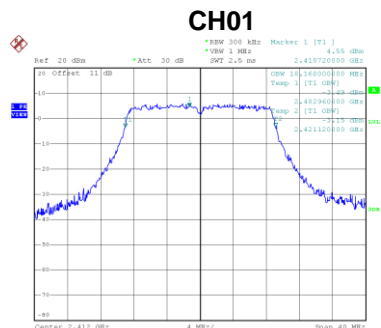


Date: 17.DEC.2020 09:12:34

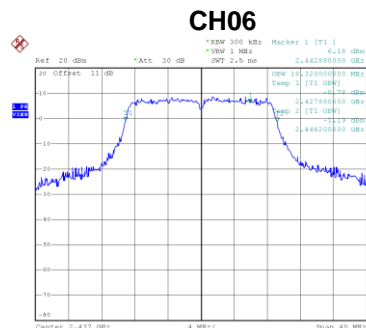


Date: 17.DEC.2020 09:13:49

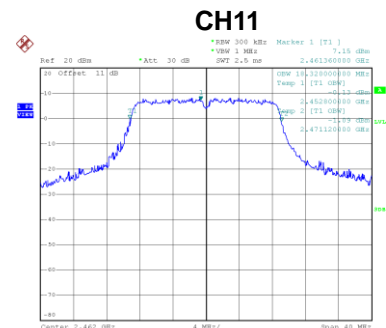
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	18.16	Complies
06	2437	18.32	Complies
11	2462	18.32	Complies



Date: 17.DEC.2020 09:11:11



Date: 17.DEC.2020 09:12:42



Date: 17.DEC.2020 09:13:56

## **APPENDIX F – MAXIMUM OUTPUT POWER**

Test Mode	TX B Mode
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Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.48	30.00	1.0000	Complies
06	2437	21.43	30.00	1.0000	Complies
11	2462	21.36	30.00	1.0000	Complies

Test Mode	TX G Mode
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Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	25.81	30.00	1.0000	Complies
06	2437	25.72	30.00	1.0000	Complies
11	2462	25.68	30.00	1.0000	Complies

Test Mode	TX N-20M Mode
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Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	25.86	30.00	1.0000	Complies
06	2437	25.74	30.00	1.0000	Complies
11	2462	25.63	30.00	1.0000	Complies

Test Mode	TX B Mode
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Channel	Frequency (MHz)	Avg Output Power (dBm)	Duty Factor	Avg Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.15	0.00	18.15	30.00	1.0000	Complies
06	2437	18.24	0.00	18.24	30.00	1.0000	Complies
11	2462	18.29	0.00	18.29	30.00	1.0000	Complies

Test Mode	TX G Mode
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Channel	Frequency (MHz)	Avg Output Power (dBm)	Duty Factor	Avg Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.06	0.28	18.34	30.00	1.0000	Complies
06	2437	18.11	0.28	18.39	30.00	1.0000	Complies
11	2462	18.26	0.28	18.54	30.00	1.0000	Complies

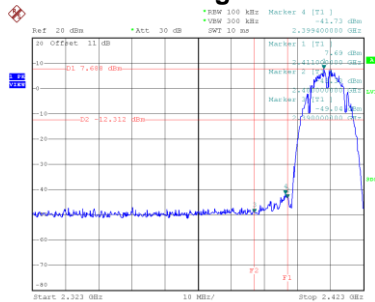
Test Mode	TX N-20M Mode
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Channel	Frequency (MHz)	Avg Output Power (dBm)	Duty Factor	Avg Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.07	0.29	18.36	30.00	1.0000	Complies
06	2437	18.23	0.29	18.52	30.00	1.0000	Complies
11	2462	18.28	0.29	18.57	30.00	1.0000	Complies

## **APPENDIX G - CONDUCTED SPURIOUS EMISSIONS**

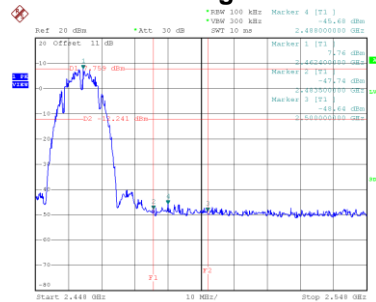
Test Mode TX B Mode

## Bandedge-CH01



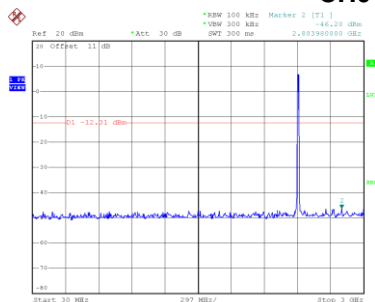
Date: 17.DEC.2020 09:01:42

## Bandedge-CH11

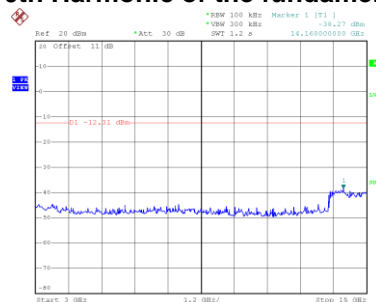


Date: 17.DEC.2020 09:04:49

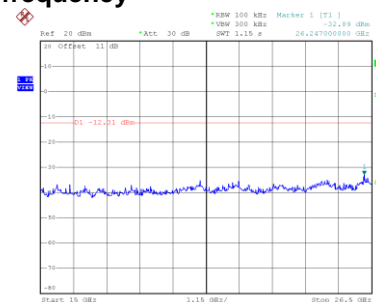
## CH01 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:01:56

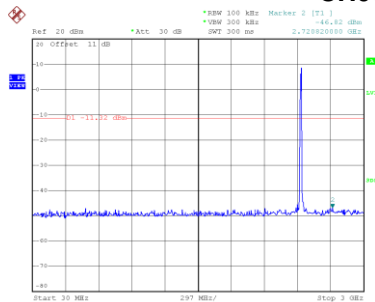


Date: 17.DEC.2020 09:02:04

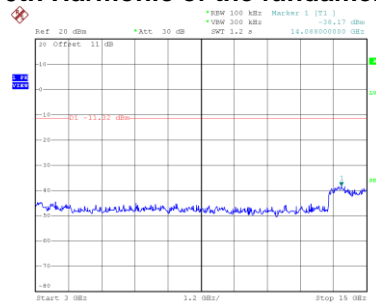


Date: 17.DEC.2020 09:02:12

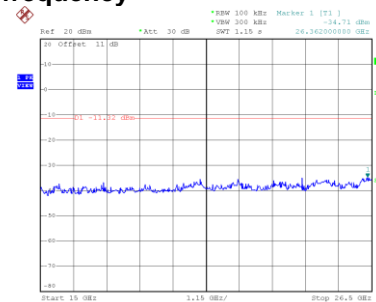
## CH06 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:03:30

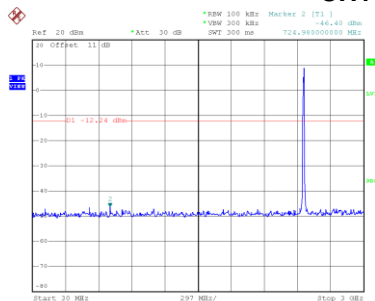


Date: 17.DEC.2020 09:03:38

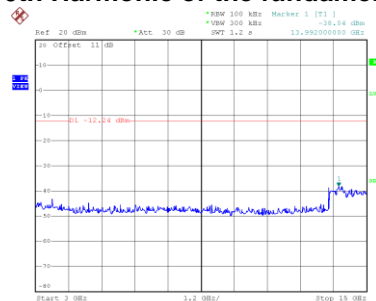


Date: 17.DEC.2020 09:03:46

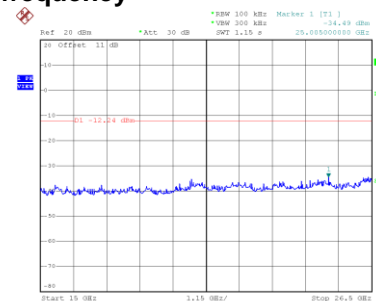
## CH11 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:05:03



Date: 17.DEC.2020 09:05:11

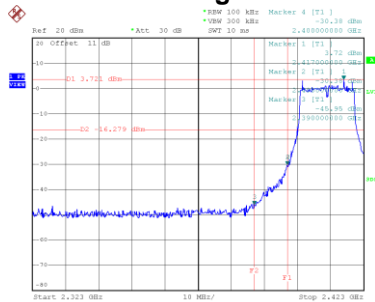


Date: 17.DEC.2020 09:05:19



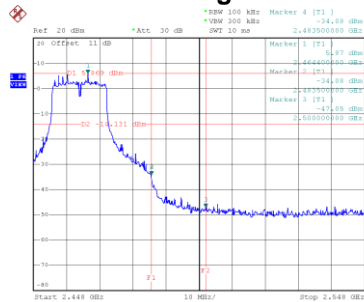
TX G Mode

## Bandedge-CH01



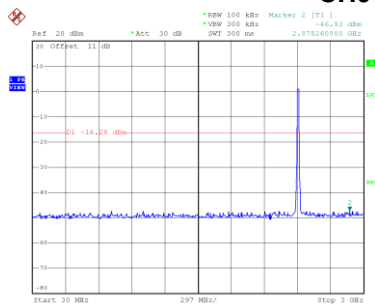
Date: 17.DEC.2020 09:07:00

## Bandedge-CH11

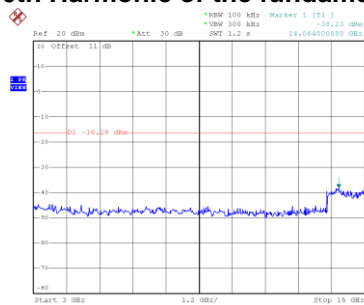


Date: 17.DEC.2020 09:09:46

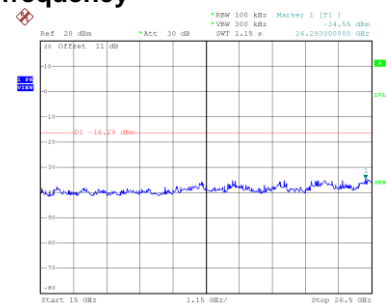
**CH01 – 10th Harmonic of the fundamental frequency**



Date: 17.DEC.2020 09:07:14

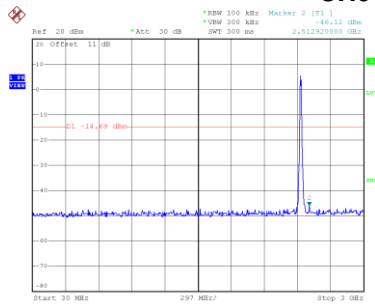


Date: 17.DEC.2020 09:07:22

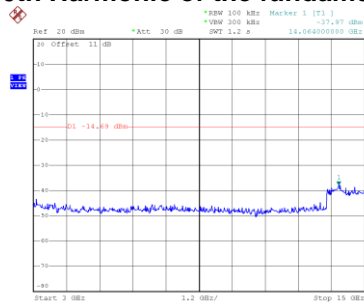


Date: 17.DEC.2020 09:07:30

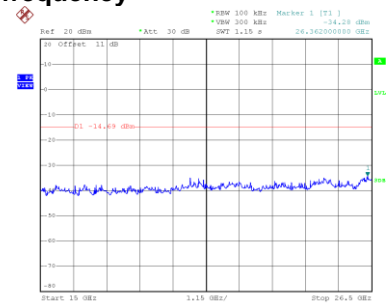
### CH06 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:08:40

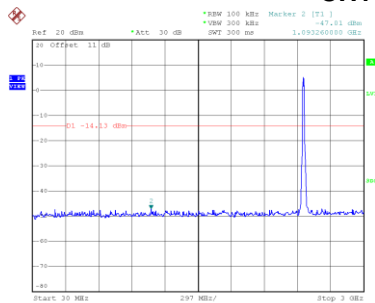


Date: 17.DEC.2020 09:08:48

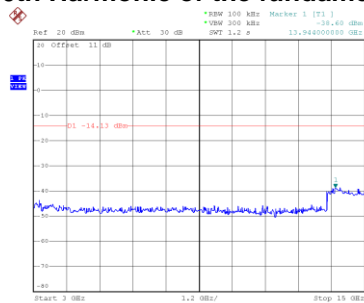


Date: 17.DEC.2020 09:08:56

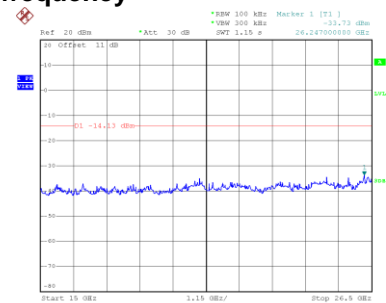
### CH11 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:10:00



Date: 17.DEC.2020 09:10:08

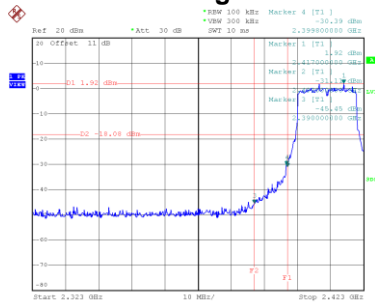


Date: 17.DEC.2020 09:10:16

Test Mode

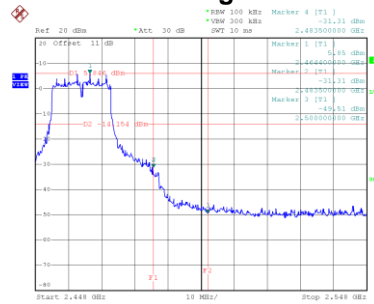
TX N-20M Mode

## Bandedge-CH01



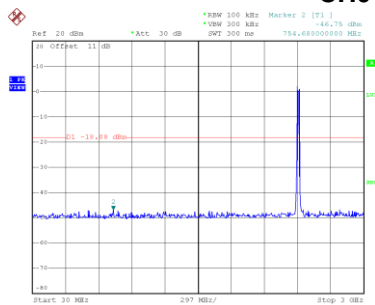
Date: 17.DEC.2020 09:11:19

## Bandedge-CH11

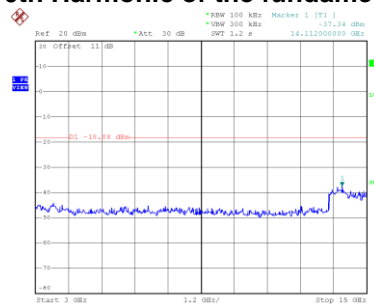


Date: 17.DEC.2020 09:14:04

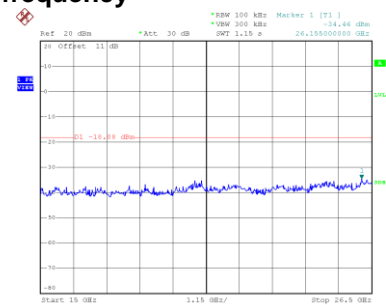
**CH01 – 10th Harmonic of the fundamental frequency**



Date: 17.DEC.2020 09:11:32

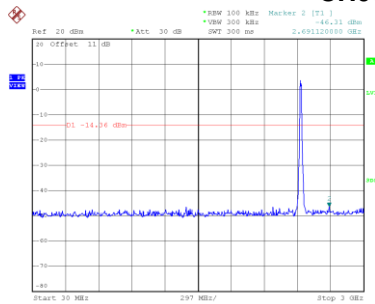


Date: 17.DEC.2020 09:11:40

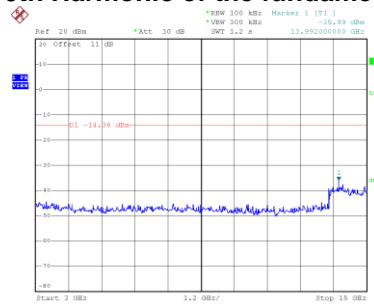


Date: 17.DEC.2020 09:11:48

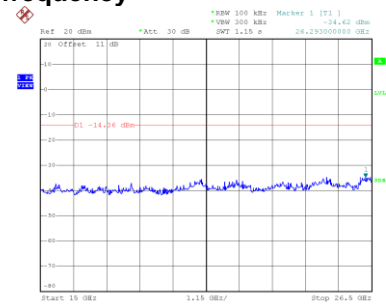
### CH06 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:13:03

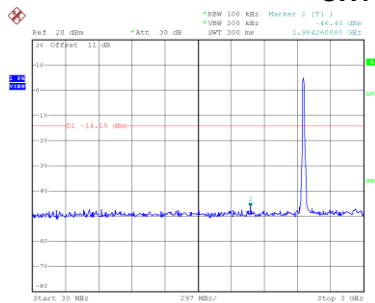


Date: 17.DEC.2020 09:13:11

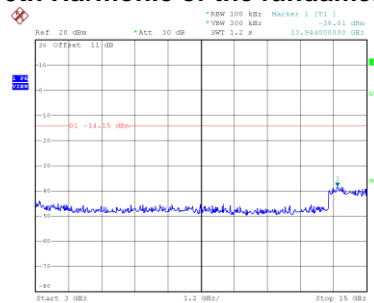


Date: 17.DEC.2020 09:13:19

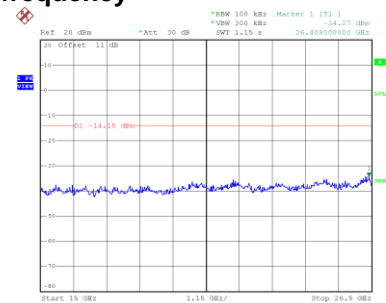
### CH11 – 10th Harmonic of the fundamental frequency



Date: 17.DEC.2020 09:14:17



Date: 17.DEC.2020 09:14:25

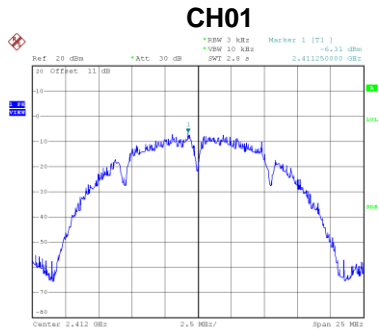


Date: 17.DEC.2020 09:14:34

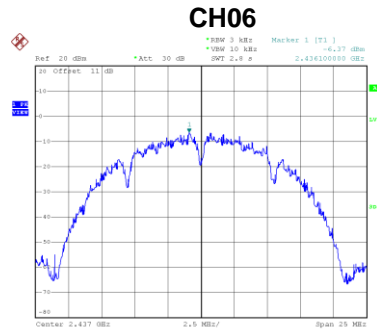
## **APPENDIX H - POWER SPECTRAL DENSITY**

Test Mode	TX B Mode
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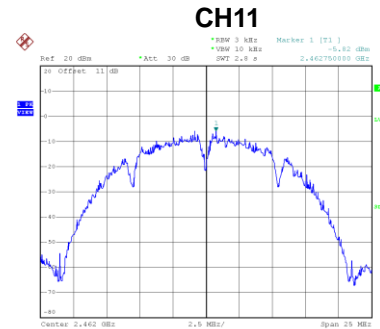
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-6.31	8	Complies
06	2437	-6.37	8	Complies
11	2462	-5.82	8	Complies



Date: 17.DEC.2020 09:02:21



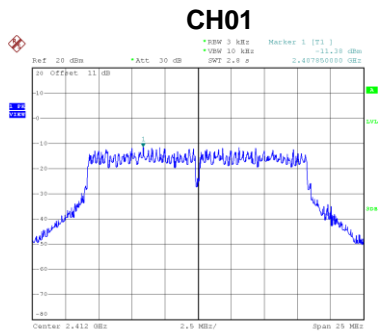
Date: 17.DEC.2020 09:03:56



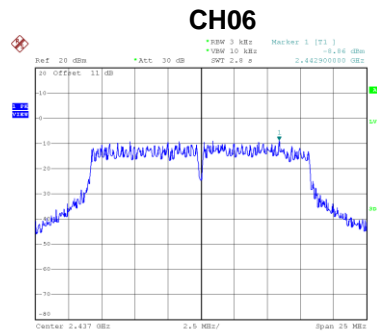
Date: 17.DEC.2020 09:05:28

Test Mode	TX G Mode
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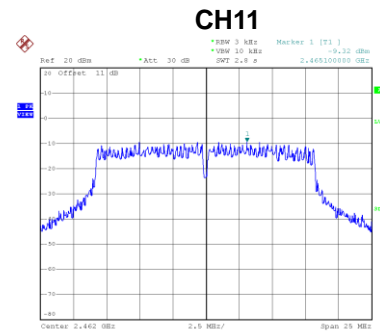
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-11.38	8	Complies
06	2437	-8.86	8	Complies
11	2462	-9.32	8	Complies



Date: 17.DEC.2020 09:07:39



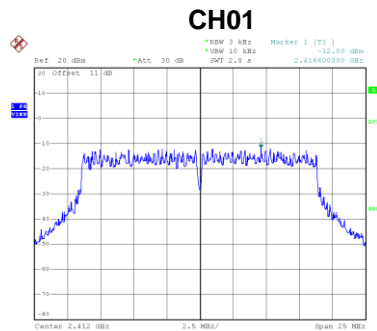
Date: 17.DEC.2020 09:09:05



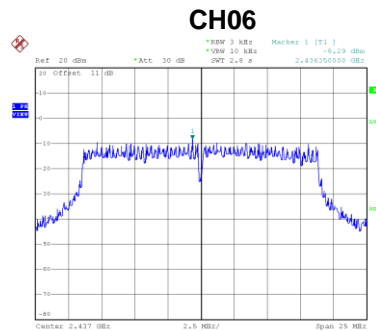
Date: 17.DEC.2020 09:10:25

Test Mode	TX N-20M Mode
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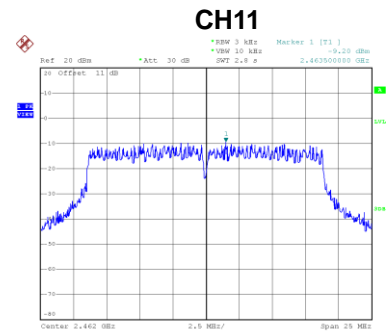
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-12.00	8	Complies
06	2437	-8.29	8	Complies
11	2462	-9.20	8	Complies



Date: 17.DEC.2020 09:11:57



Date: 17.DEC.2020 09:13:28



Date: 17.DEC.2020 09:14:43

End of Test Report