

# FCC Radio Test Report

## FCC ID: 2AV2N-SR120C

This report concerns: Original Grant

**Project No.** : 2002C069  
**Equipment** : Smart Router  
**Brand Name** : FiberHome  
**Test Model** : SR120-C  
**Series Model** : N/A  
**Applicant** : Fiberhome Telecommunication Technologies Co., Ltd.  
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**Manufacturer** : Fiberhome Telecommunication Technologies Co., Ltd.  
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**Factory** : Fiberhome Telecommunication Technologies Co., Ltd.  
**Address** : No.88 Youkeyuan Road, Hongshan District, Wuhan, Hubei , China  
**Date of Receipt** : Feb. 26, 2020  
**Date of Test** : Feb. 27, 2020 ~ Mar. 30, 2020  
**Issued Date** : Jun. 17, 2020  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: DG2020022721 for conducted,  
DG202002276 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.	Jun. 17, 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	2.60

### 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	-	3.62
		26.5GHz ~ 40GHz	-	4.00

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	24°C	68%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	24°C	68%	AC 120V/60Hz	Kwok Guo
Bandwidth	24°C	52%	DC 12V	Hayden Chen
Maximum output power	24°C	52%	DC 12V	Laughing Zhang
Conducted Spurious Emissions	24°C	52%	DC 12V	Hayden Chen
Power Spectral Density	24°C	52%	DC 12V	Hayden Chen



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Smart Router
Brand Name	FiberHome
Test Model	SR120-C
Series Model	N/A
Model Difference(s)	N/A
Power Source	DC voltage supplied from AC/DC adapter. Model1: RD1201000-C55-35MGD Model2: F12L30-120100SPAU
Power Rating	Model1: I/P: 100-240V~ 50/60Hz 0.6A MAX O/P: 12V  1.0A Model2: I/P: 100-240V~ 50/60Hz 0.3A O/P: 12V  1A
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 Output Power _Non Beamforming	IEEE 802.11b: -0.24 dBm (0.0009 W) IEEE 802.11g: 11.47 dBm (0.0140 W) IEEE 802.11n (HT20): 11.33 dBm (0.0136 W) IEEE 802.11n (HT40): 11.86 dBm (0.0153 W)
Maximum Output Power _Beamforming	IEEE 802.11n (HT20): 11.15 dBm (0.0130 W) IEEE 802.11n (HT40): 11.72 dBm (0.0149 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	P/N	Antenna Type	Connector	Gain (dBi)
1	South Star	N12-4345-R0B	PCB	N/A	3.66
2	South Star	N12-4346-R0B	PCB	N/A	3.40

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other, So,

(1) For Non Beamforming function, Directional gain= $10\log [(10^{G1/20}+10^{G2/20}+...10^{GN/20})^2/N]$  dBi=6.54  
So, the output power limit is  $30-(6.54-6)=29.46$ , the power spectral density limit is  $8-(6.54-6)=7.46$ .

(2) For Beamforming function, Beamforming Gain is 3dB. So Directional gain= $3.66 + 3.00 = 6.66$   
So, the output power limit is  $30-(6.66-6)=29.34$ .

### 4. Table for Antenna Configuration:

For Non Beamforming:

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

For Beamforming:

Operating Mode	TX Mode	2TX
802.11n(20 MHz)		V (Ant. 1 + Ant. 2)
802.11n(40 MHz)		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 N-40 MHz Mode Channel 09

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 5	TX N-40 MHz Mode Channel 09

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 5	TX N-40 MHz Mode Channel 09

Radiated emissions test- Above 1GHz for Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Maximum output power test for Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Maximum output power test for Beamforming	
Final Test Mode	Description
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Other Conducted test for Non Beamforming	
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 802.11n40 Channel 09 is found to be the worst case and recorded. All adapters had been pre-test and in this report only recorded the worst case.
- (3) 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.
- (4) The measurements for Power were tested during Non Beamforming and Beamforming, the worst case were Non Beamforming, only worst case were documented for other test items.
- (5) For AC power line conducted emissions test, Power AC 120V/60Hz and AC 240V/60Hz were evaluated, the worst case is recorded in this test report.

## 2.3 PARAMETERS OF TEST SOFTWARE

### Non Beamforming

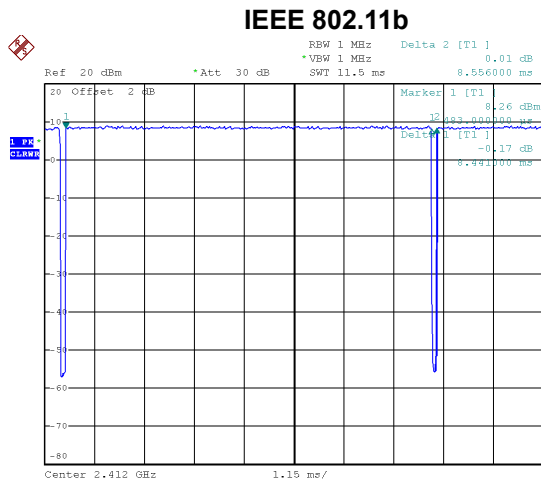
Test Software	MP_TEST		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	4/4	3/2	3/2
IEEE 802.11g	30/28	33/31	34/33
IEEE 802.11n (HT20)	28/28	33/32	33/32
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	34/32	36/35	37/36

### Beamforming

Test Software	MP_TEST		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n (HT20)	28/28	33/32	33/32
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	34/32	36/35	37/36

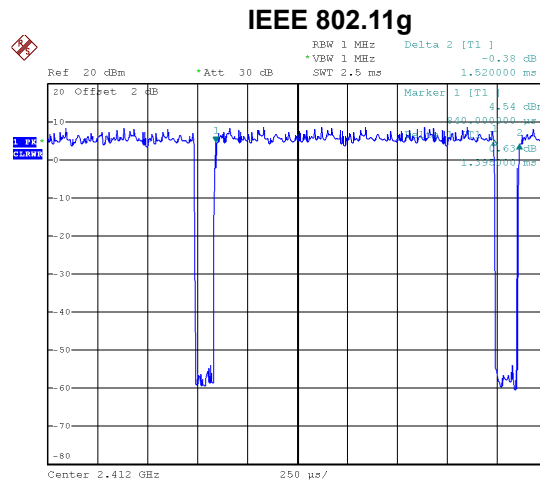
## 2.4 DUTY CYCLE

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.



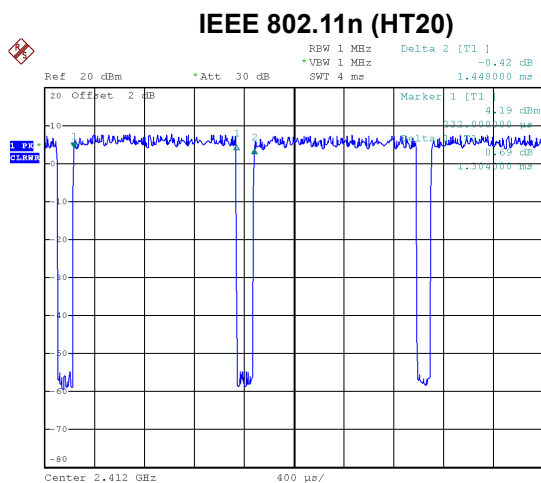
Date: 4.MAR.2020 09:58:26

Duty cycle =  $8.441 \text{ ms} / 8.556 \text{ ms} = 98.66\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.00$



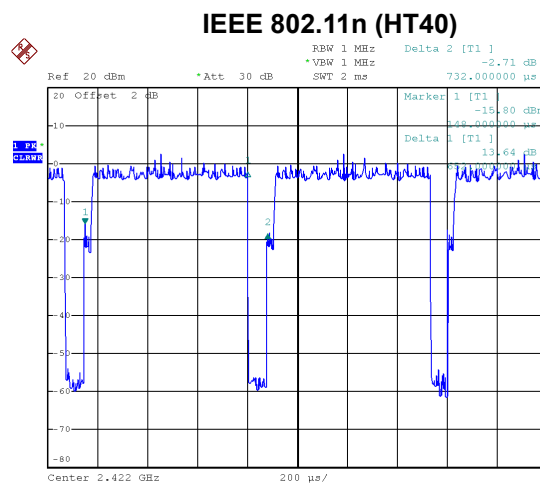
Date: 4.MAR.2020 09:58:51

Duty cycle =  $1.395 \text{ ms} / 1.520 \text{ ms} = 91.78\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.37$



Date: 4.MAR.2020 09:59:43

Duty cycle =  $1.304 \text{ ms} / 1.448 \text{ ms} = 90.06\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.45$



Date: 4.MAR.2020 10:02:09

Duty cycle =  $0.652 \text{ ms} / 0.732 \text{ ms} = 89.07\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.50$

### NOTE:

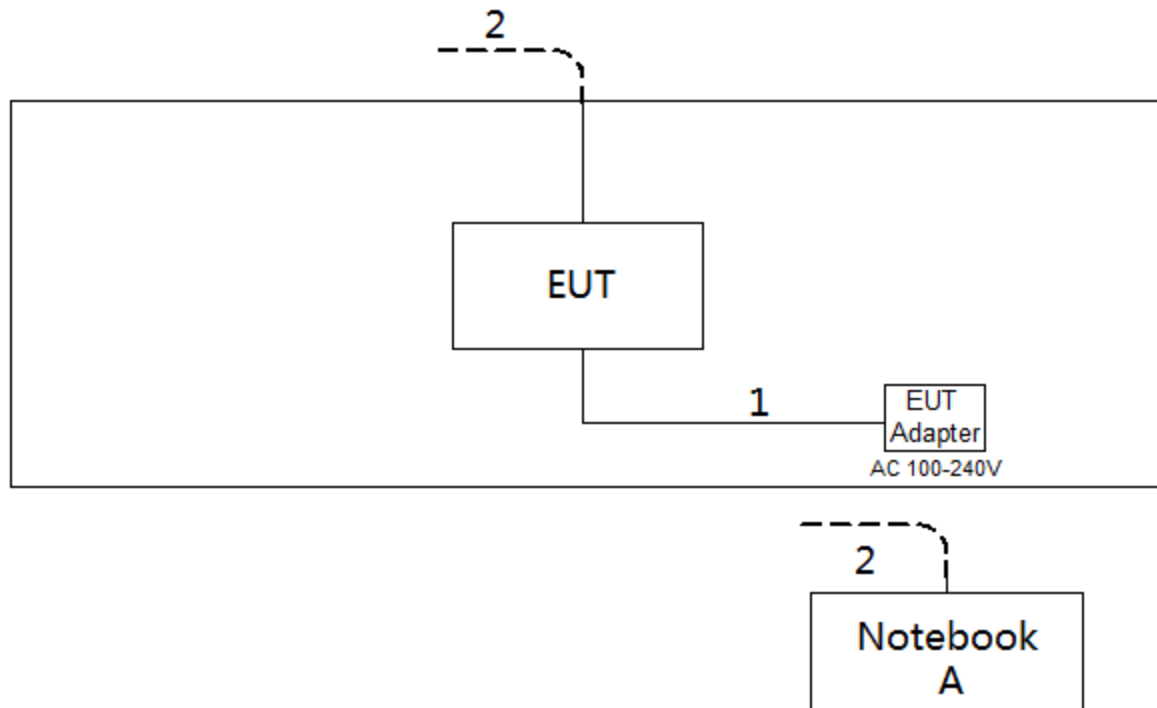
For IEEE 802.11g and IEEE 802.11n (HT20):

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	DC Cable	NO	NO	1.5m
2	RJ45 Cable	NO	NO	10m

### 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

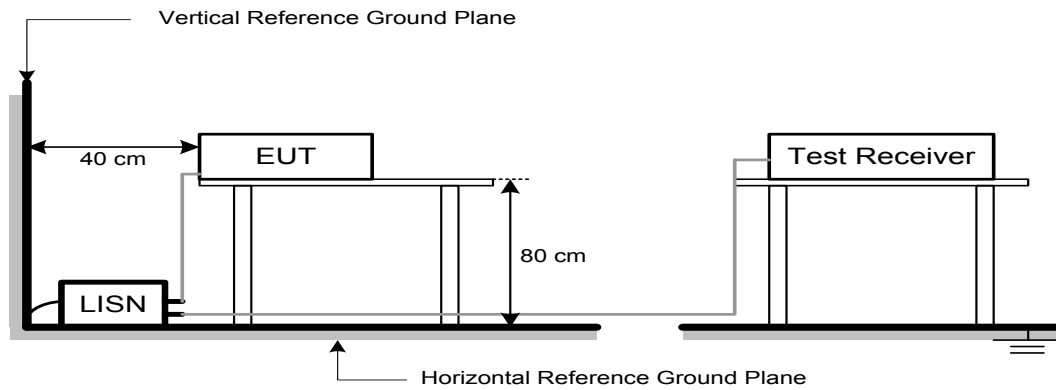
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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

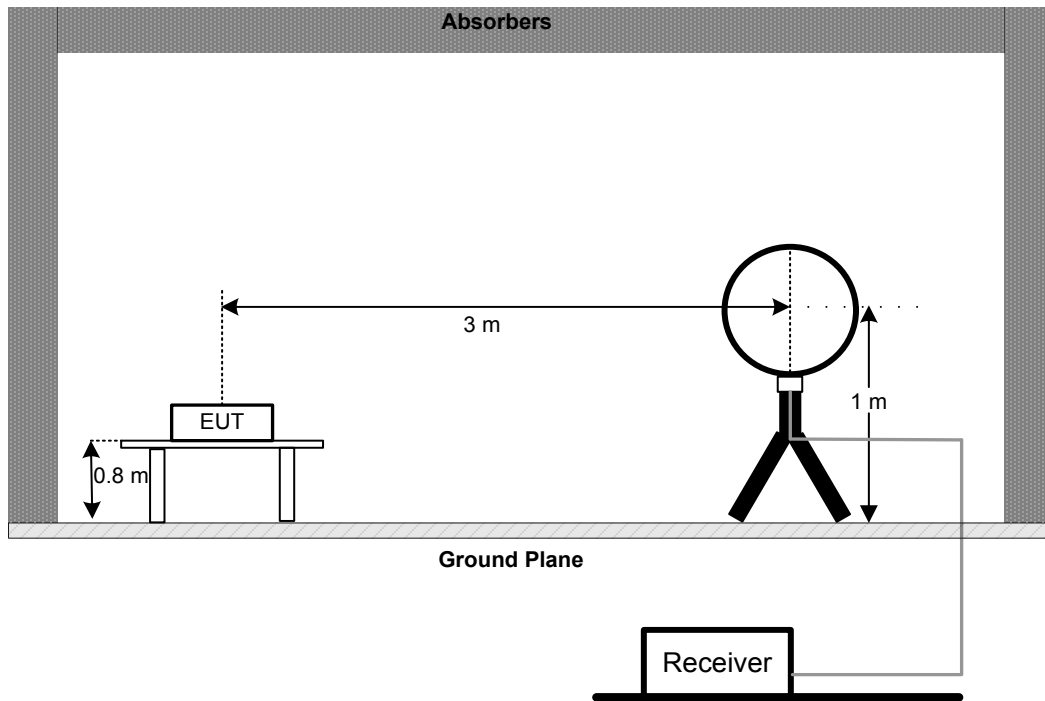
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b. The measuring distance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

## 4.3 DEVIATION FROM TEST STANDARD

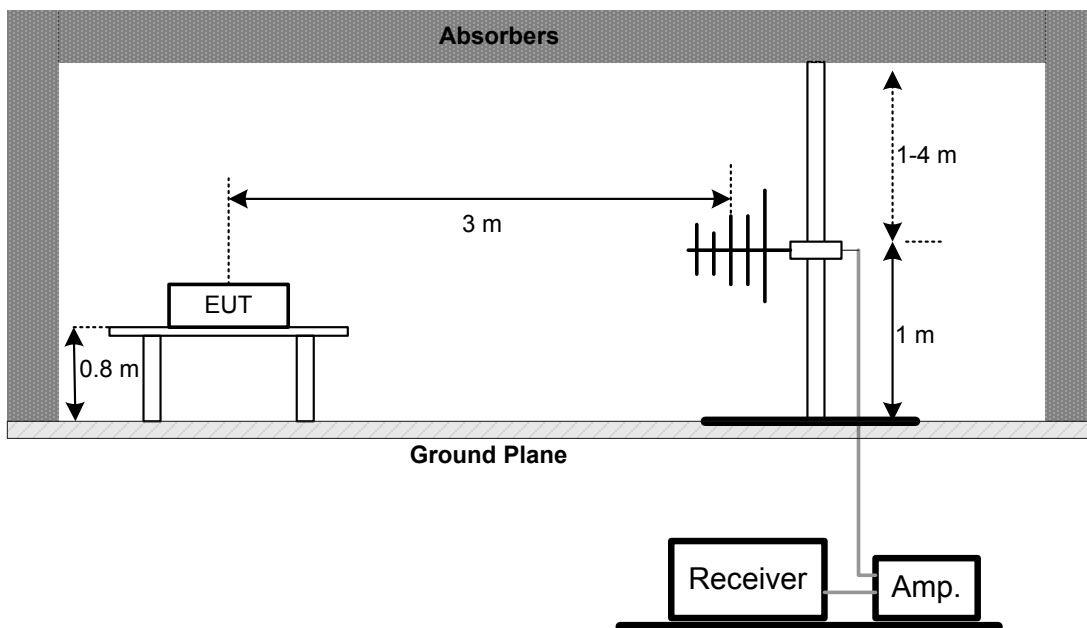
No deviation

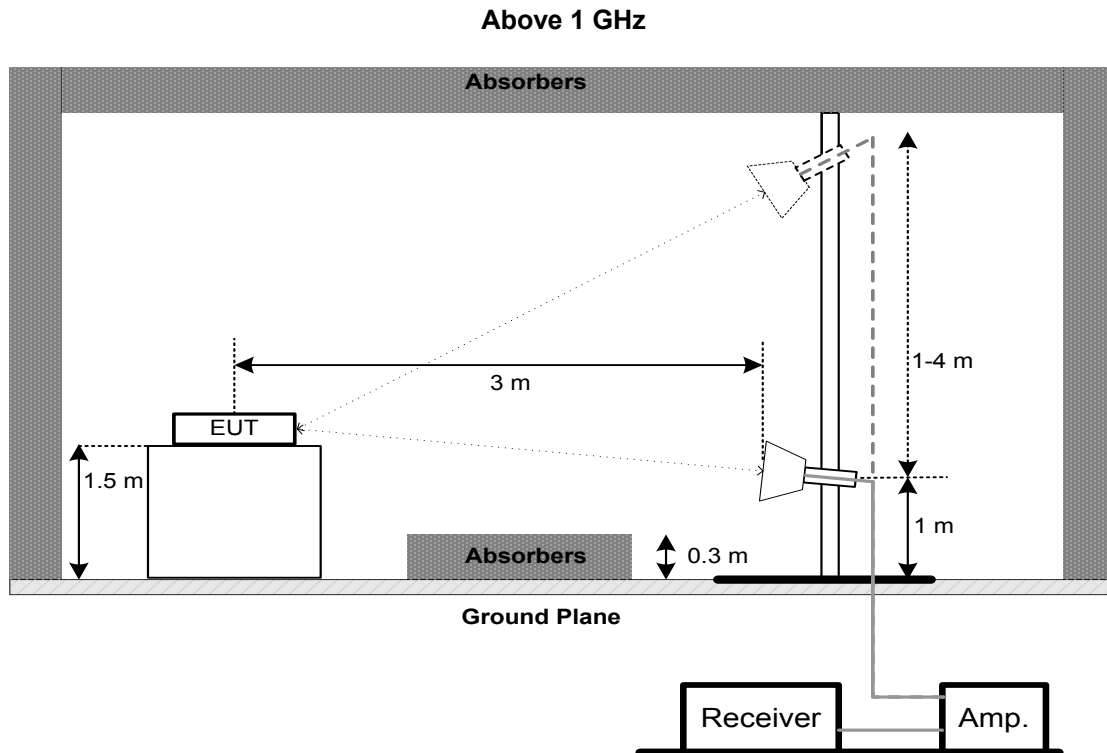
## 4.4 TEST SETUP

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	-

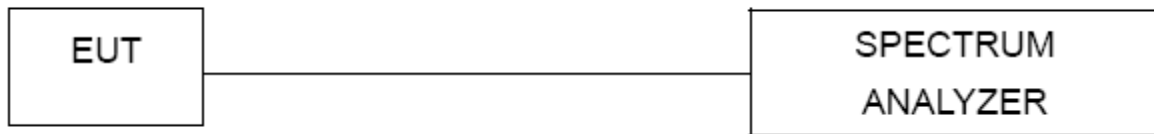
### 5.2 TEST PROCEDURE

- 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.
  - For 99% Emission Bandwidth N-40 Mode: RBW= 1 MHz, VBW=3 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 11.9.2.3.1 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	Feb. 28, 2021
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	May 19, 2020
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

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
2*	Antenna	EM	EM-6876-1	230	Jan. 15, 2022
3	Cable	N/A	RG 213/U(9kHz~1GHz)	N/A	May 31, 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	Apr. 09, 2020
2*	Amplifier	HP	8447D	2944A08742	Mar. 01, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 25, 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	Apr. 09, 2020
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02584	Aug. 03, 2020
4	Microwave Preampifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
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	RWLP50-4.0A-KJ-S MSM-12M	N/A	Nov. 25, 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 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.

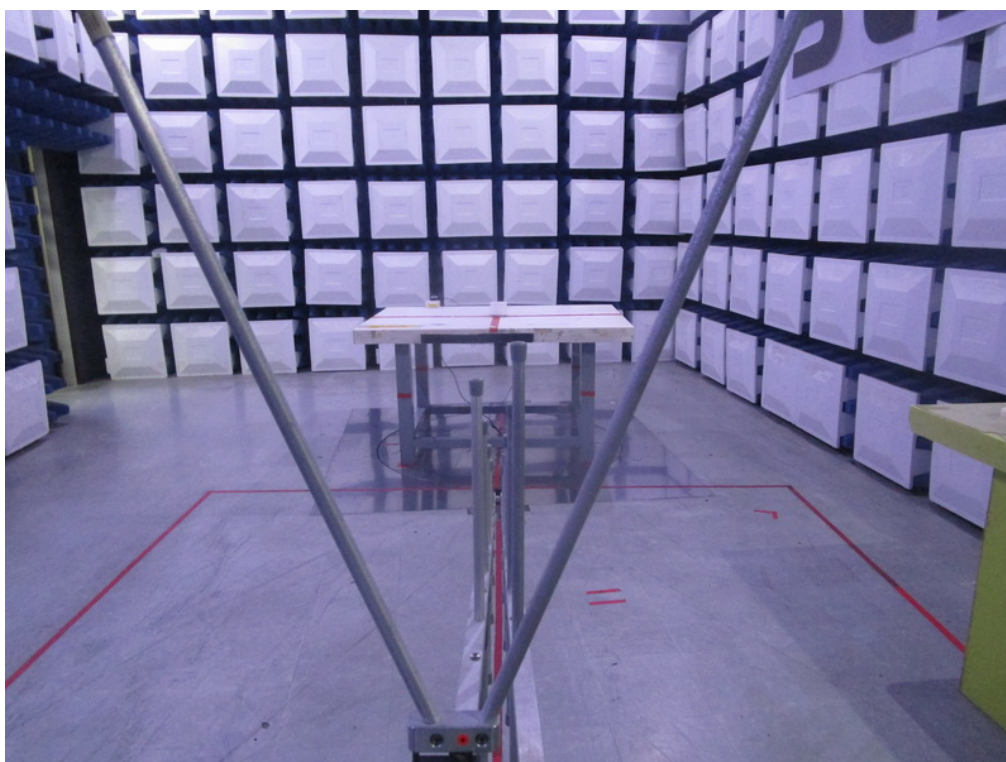
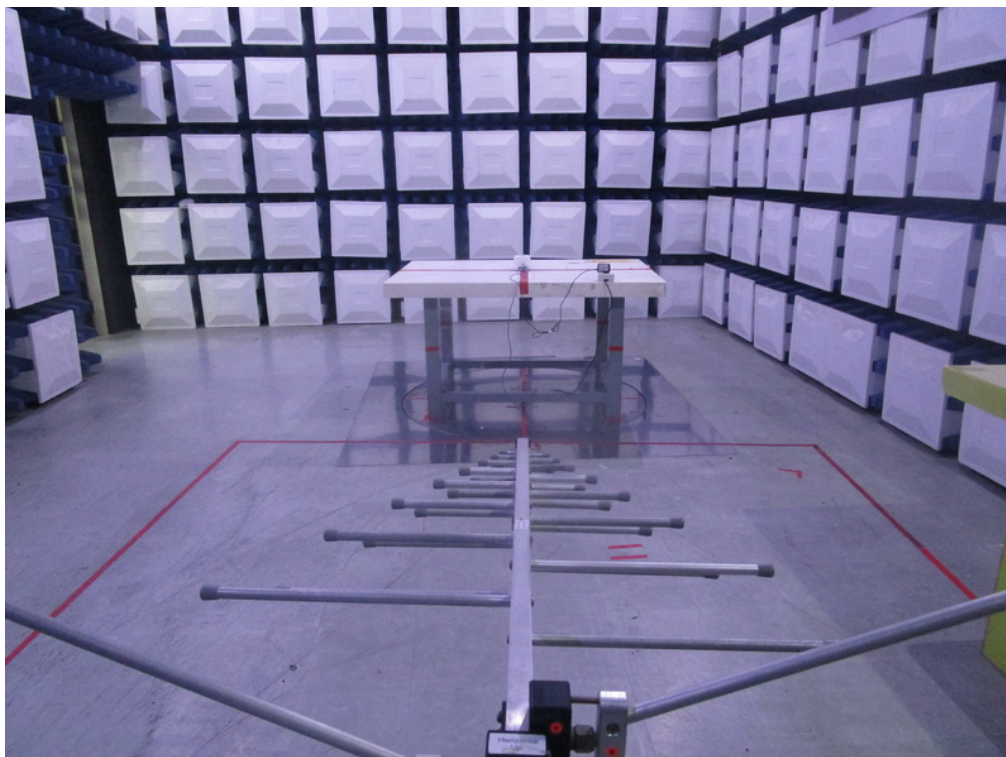
**10. EUT TEST PHOTO****AC Power Line Conducted Emissions Test Photos**

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



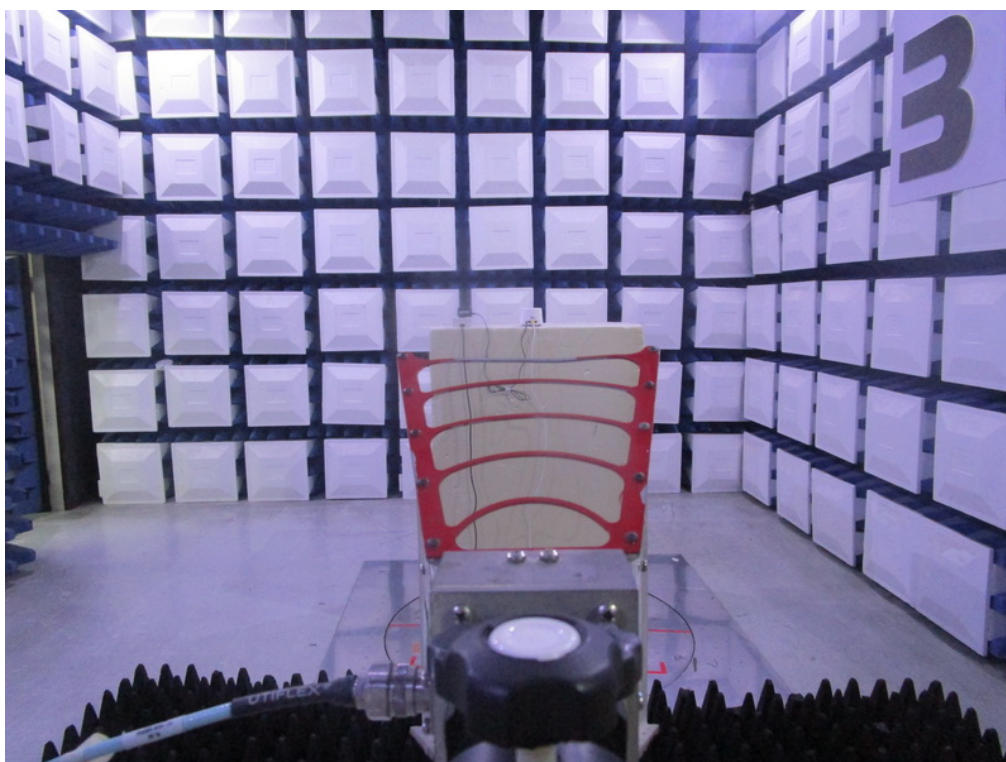
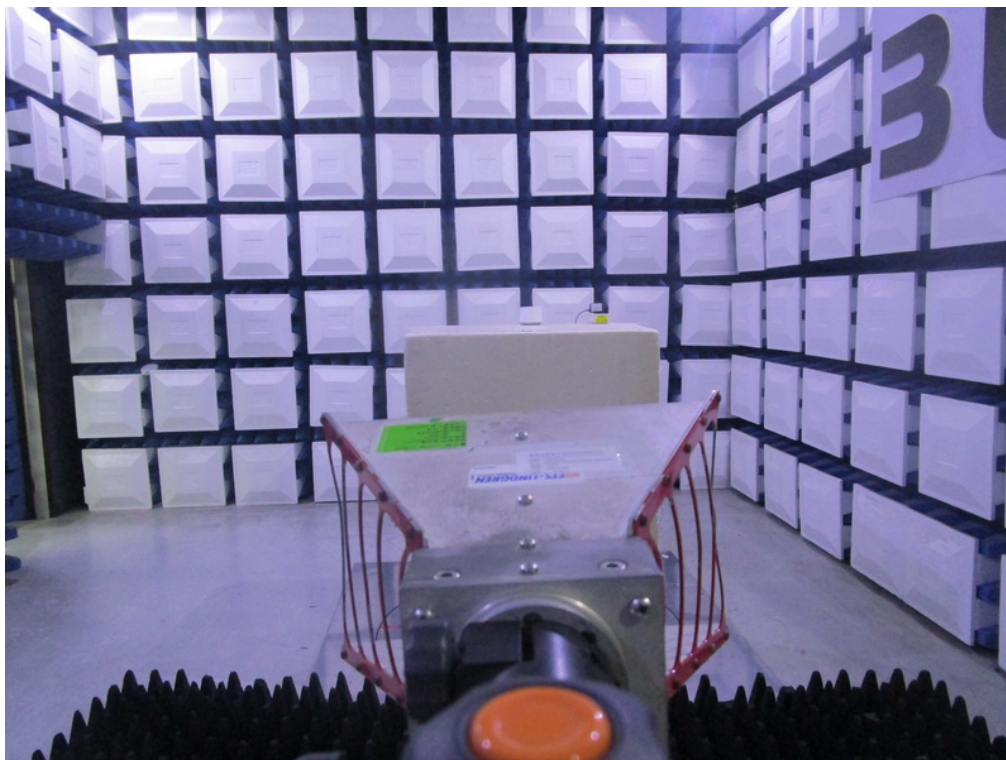
## Radiated Emissions Test Photos

30 MHz to 1 GHz



## Radiated Emissions Test Photos

Above 1 GHz

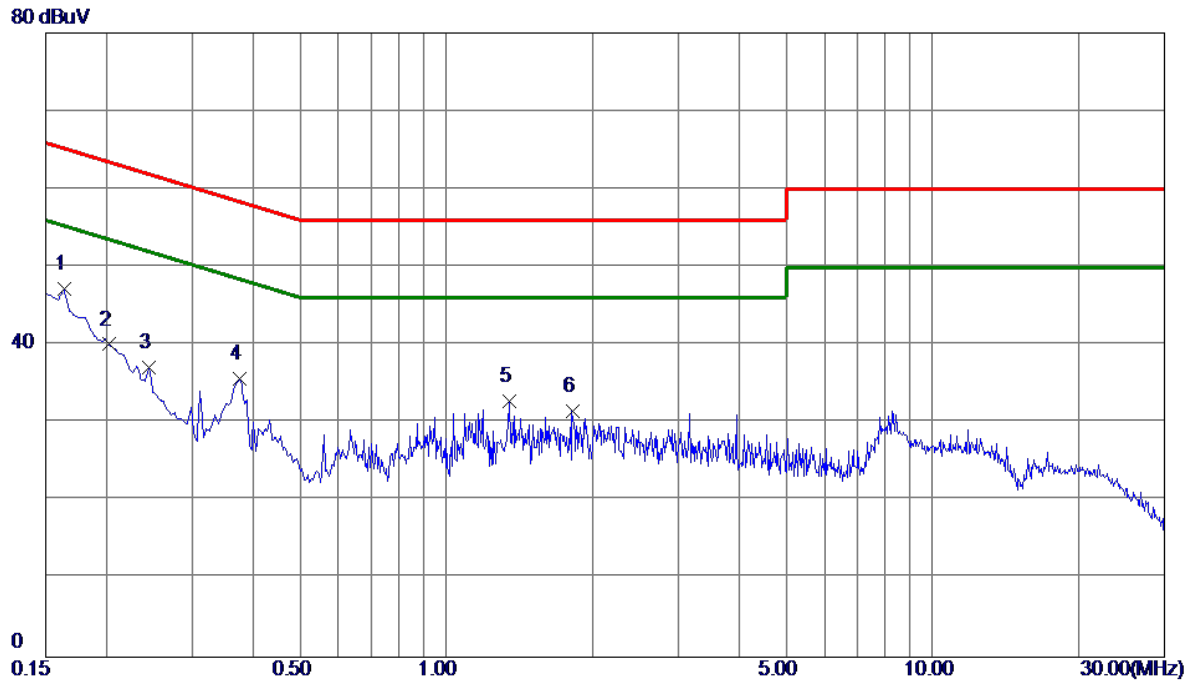


## **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**



Test Mode:	TX N40 Mode Channel 09
Test Voltage:	AC 240V/60Hz

## Line



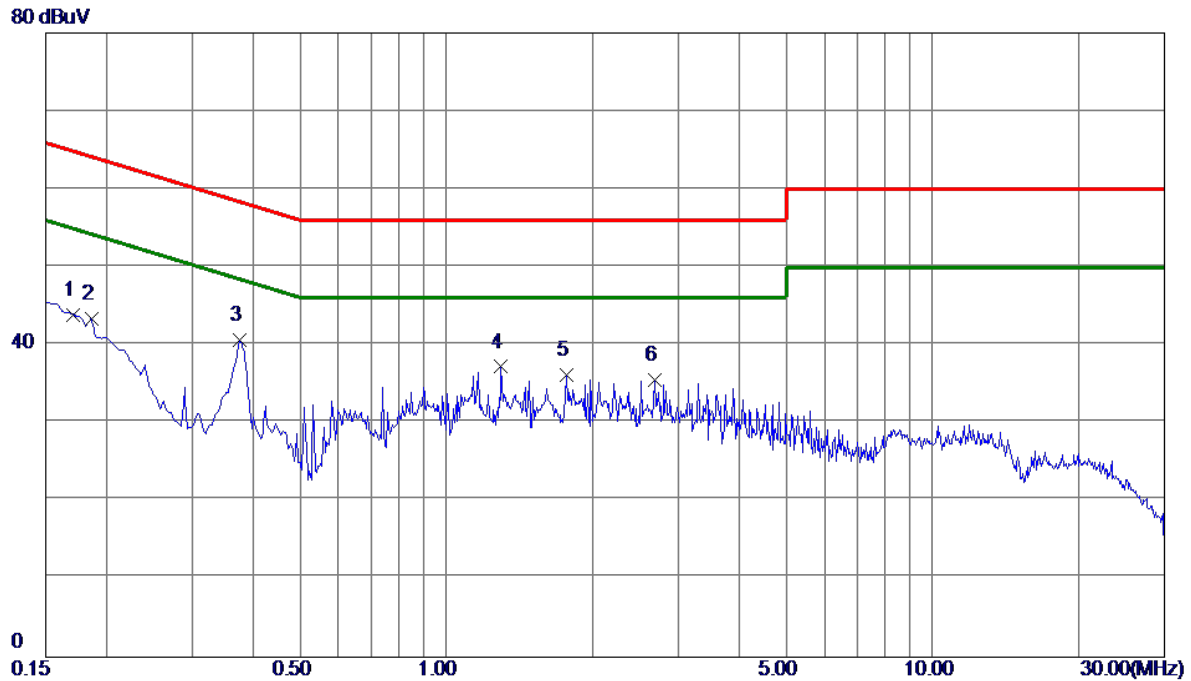
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1635	37.37	9.79	47.16	65.28	-18.12	Peak	
2	0.2030	30.30	9.78	40.08	63.49	-23.41	Peak	
3	0.2445	27.35	9.79	37.14	61.94	-24.80	Peak	
4	0.3750	25.81	9.82	35.63	58.39	-22.76	Peak	
5	1.3470	22.87	9.86	32.73	56.00	-23.27	Peak	
6	1.8150	21.61	9.89	31.50	56.00	-24.50	Peak	

### REMARKS:

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

Test Mode:	TX N40 Mode Channel 09
Test Voltage:	AC 240V/60Hz

## Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1712	33.99	9.88	43.87	64.90	-21.03	Peak	
2	0.1860	33.48	9.88	43.36	64.21	-20.85	Peak	
3 *	0.3750	30.65	9.96	40.61	58.39	-17.78	Peak	
4	1.2975	27.14	10.06	37.20	56.00	-18.80	Peak	
5	1.7700	26.01	10.08	36.09	56.00	-19.91	Peak	
6	2.6790	25.37	10.11	35.48	56.00	-20.52	Peak	

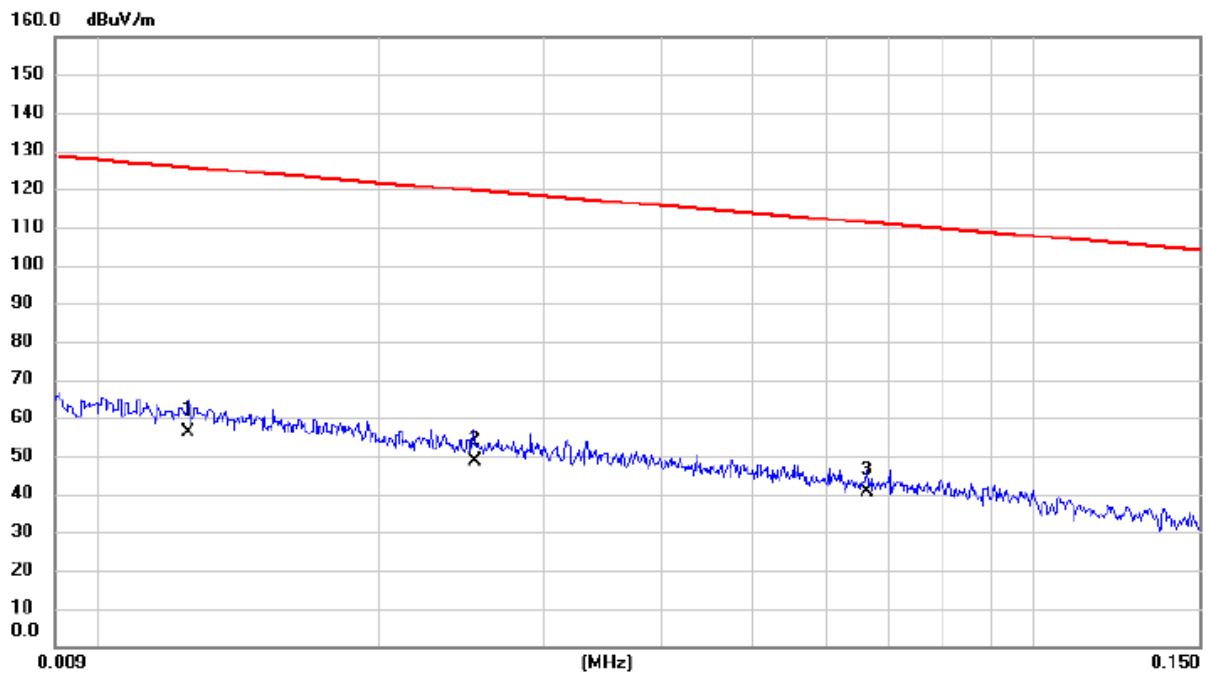
### REMARKS:

- (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 N40 Mode Channel 09

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0125	40.21	16.07	56.28	125.67	-69.39	AVG	
2		0.0253	34.65	13.84	48.49	119.54	-71.05	AVG	
3		0.0663	26.95	13.67	40.62	111.17	-70.55	AVG	

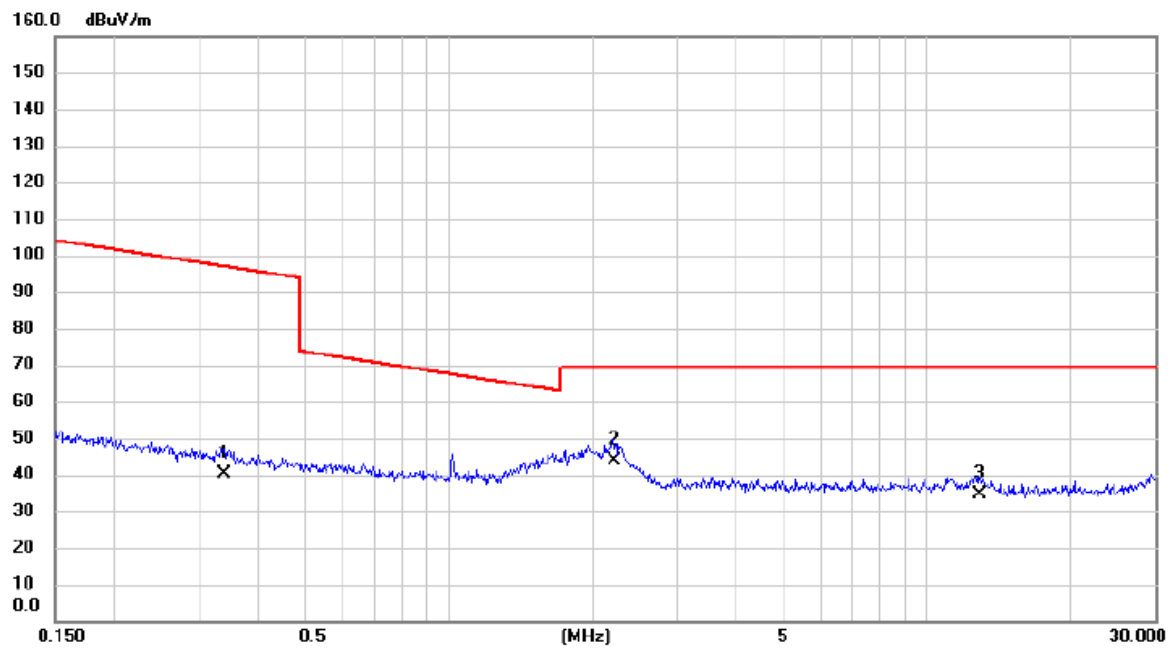
## REMARKS:

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

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

Test Mode: TX N40 Mode Channel 09

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.3392	26.85	13.45	40.30	97.00	-56.70	AVG	
2	*	2.2132	32.14	11.69	43.83	69.54	-25.71	QP	
3		12.8516	22.84	11.60	34.44	69.54	-35.10	QP	

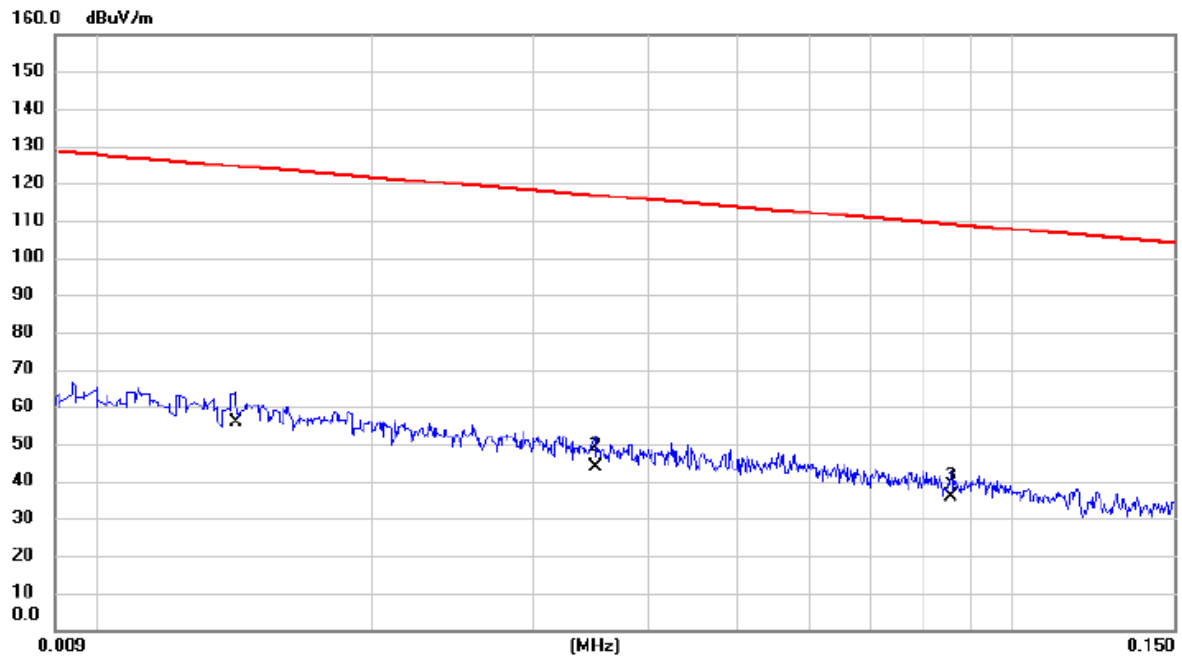
## REMARKS:

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

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

Test Mode: TX N40 Mode Channel 09

Ant 90°



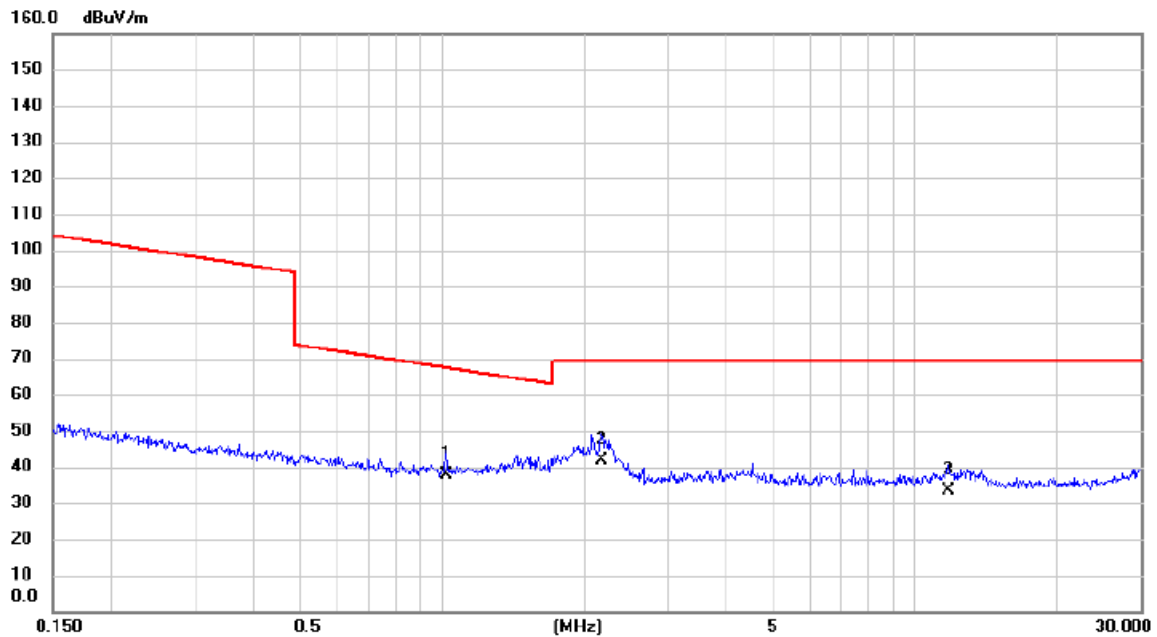
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0142	40.25	15.56	55.81	124.56	-68.75	AVG	
2		0.0350	30.00	13.88	43.88	116.72	-72.84	AVG	
3		0.0857	22.25	13.54	35.79	108.95	-73.16	AVG	

## REMARKS:

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

Test Mode: TX N40 Mode Channel 09

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		1.0211	25.47	12.49	37.96	67.42	-29.46	QP	
2	*	2.1783	30.15	11.71	41.86	69.54	-27.68	QP	
3		11.7446	21.69	11.62	33.31	69.54	-36.23	QP	

## REMARKS:

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

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

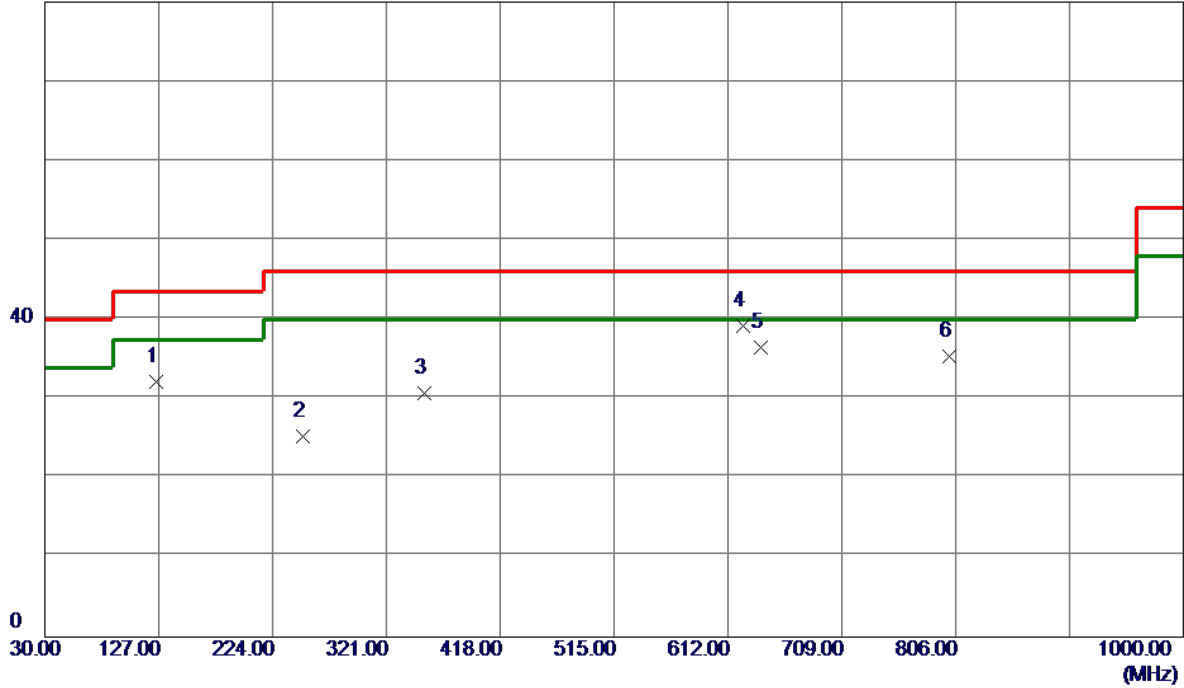
## **APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ**



Test Mode: TX N40 Mode Channel 09

## 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	125.0600	40.44	-8.23	32.21	43.50	-11.29	Peak	
2	250.1900	32.78	-7.56	25.22	46.00	-20.78	Peak	
3	353.0100	35.12	-4.47	30.65	46.00	-15.35	Peak	
4 *	624.6100	38.61	0.63	39.24	46.00	-6.76	Peak	
5	640.1300	35.62	0.89	36.51	46.00	-9.49	Peak	
6	800.1800	32.49	2.92	35.41	46.00	-10.59	Peak	

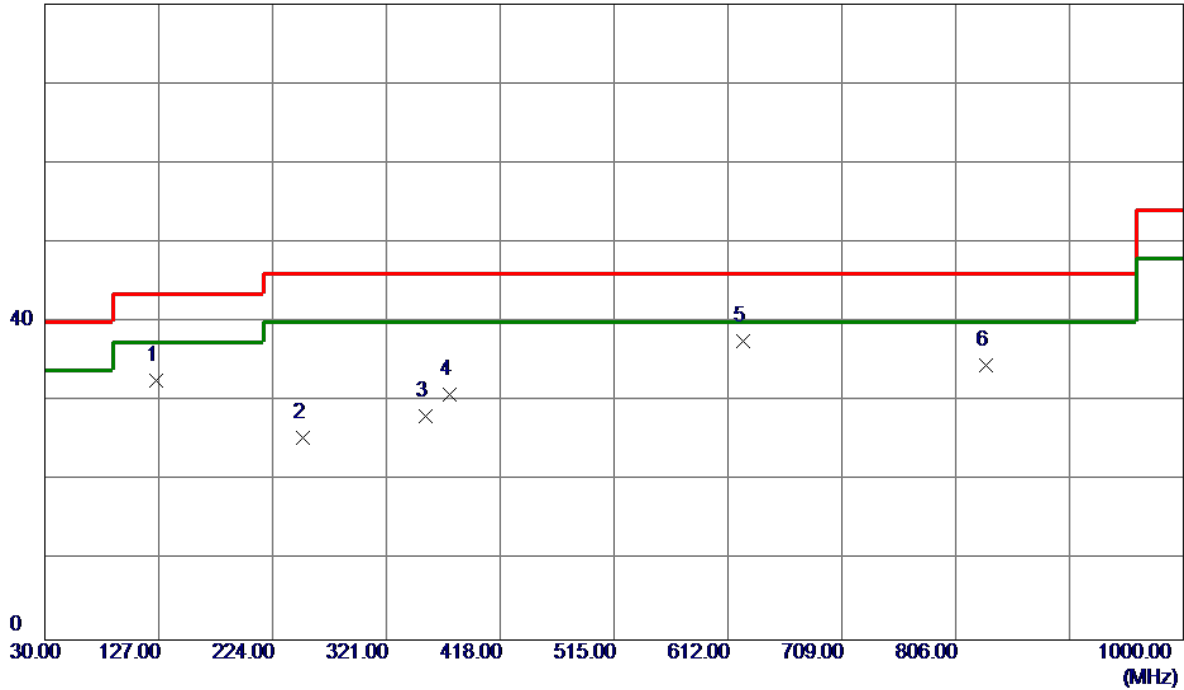
### REMARKS:

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

Test Mode: TX N40 Mode Channel 09

## 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	125.0600	40.83	-8.23	32.60	43.50	-10.90	Peak	
2	250.1900	32.97	-7.56	25.41	46.00	-20.59	Peak	
3	353.9800	32.53	-4.44	28.09	46.00	-17.91	Peak	
4	375.3200	34.67	-3.86	30.81	46.00	-15.19	Peak	
5 *	624.6100	36.98	0.63	37.61	46.00	-8.39	Peak	
6	832.1900	31.30	3.31	34.61	46.00	-11.39	Peak	

### REMARKS:

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

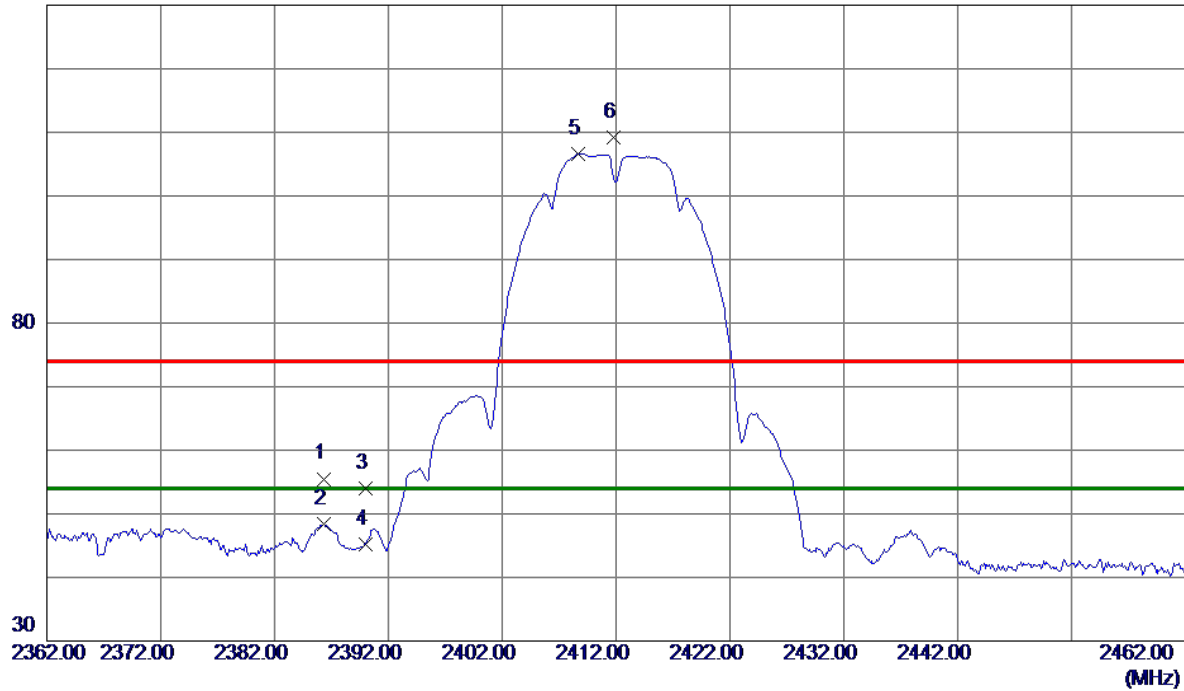
(2) Margin Level = Measurement Value - Limit Value.

## **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	46.43	9.07	55.50	74.00	-18.50	Peak	
2	2386.3000	39.35	9.07	48.42	54.00	-5.58	AVG	
3	2390.0000	44.98	9.07	54.05	74.00	-19.95	Peak	
4	2390.0000	36.22	9.07	45.29	54.00	-8.71	AVG	
5 *	2408.7000	97.56	9.06	106.62	54.00	52.62	AVG	No Limit
6	2411.8000	100.14	9.06	109.20	74.00	35.20	Peak	No Limit

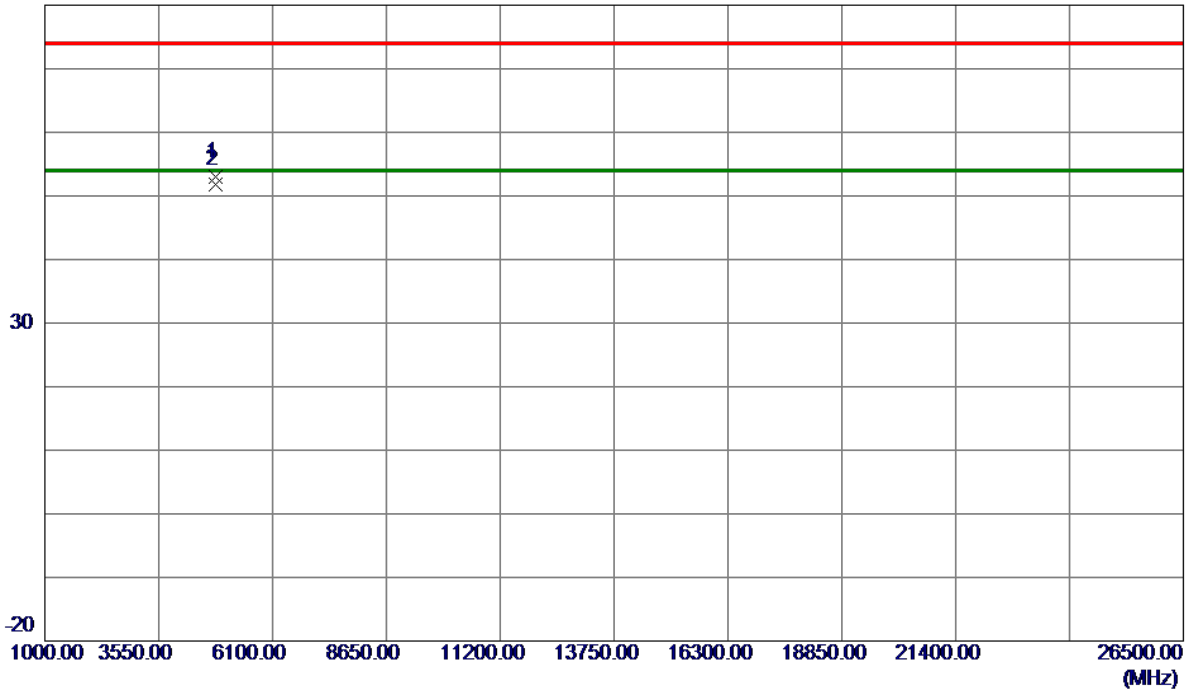
### REMARKS:

- (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	4823.9450	45.05	8.04	53.09	74.00	-20.91	Peak	
2 *	4823.9450	43.78	8.04	51.82	54.00	-2.18	AVG	

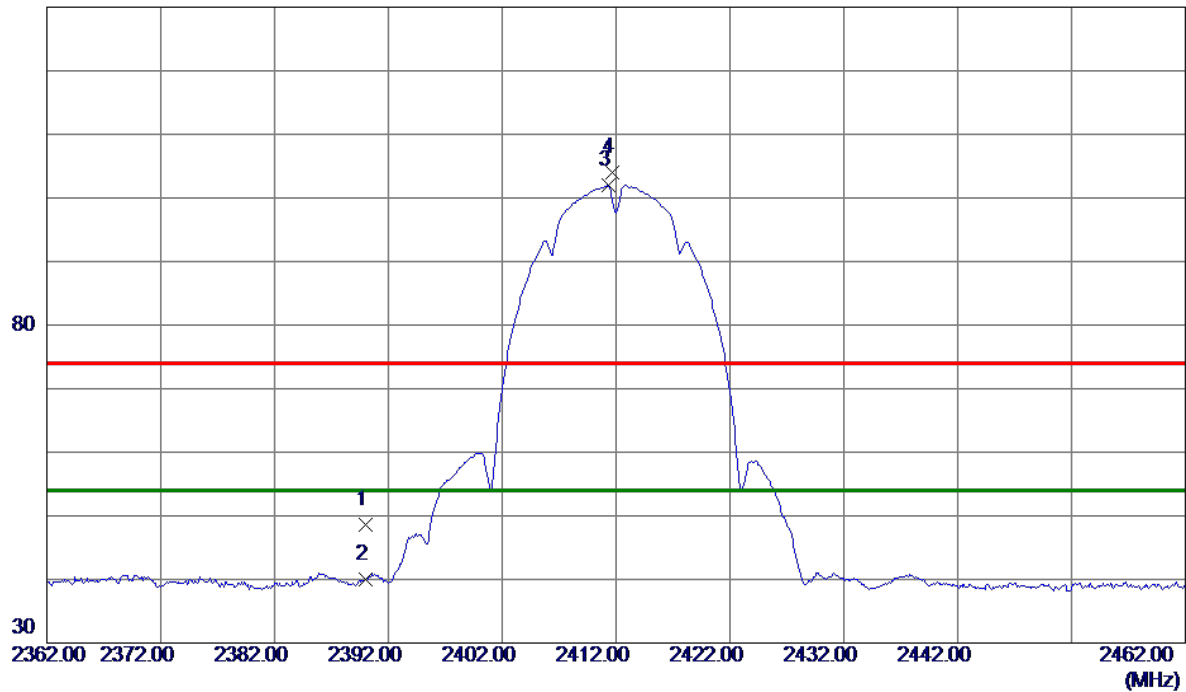
### REMARKS:

- (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	2390.0000	39.60	9.07	48.67	74.00	-25.33	Peak	
2	2390.0000	30.88	9.07	39.95	54.00	-14.05	AVG	
3 *	2411.3000	92.95	9.06	102.01	54.00	48.01	AVG	No Limit
4	2411.7000	94.99	9.06	104.05	74.00	30.05	Peak	No Limit

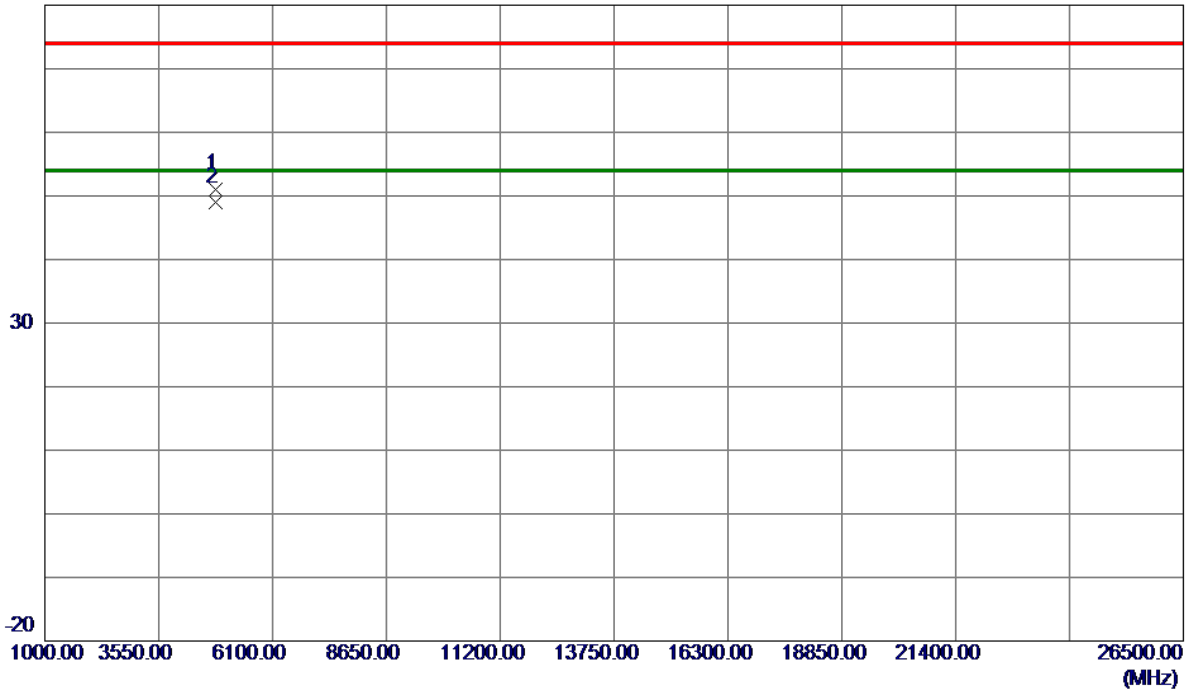
### REMARKS:

- (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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## Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.9450	43.06	8.04	51.10	74.00	-22.90	Peak	
2 *	4823.9450	41.00	8.04	49.04	54.00	-4.96	AVG	

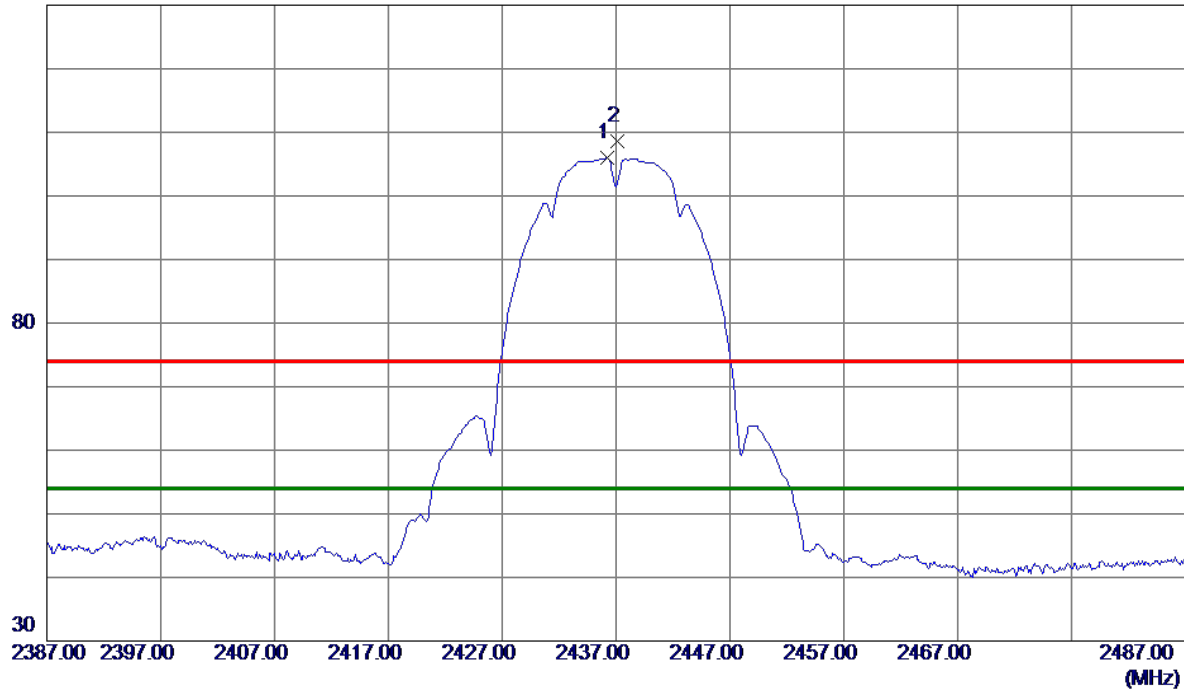
### REMARKS:

- (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 *	2436.2000	96.96	9.04	106.00	54.00	52.00	AVG	No Limit
2	2437.1000	99.64	9.04	108.68	74.00	34.68	Peak	No Limit

### REMARKS:

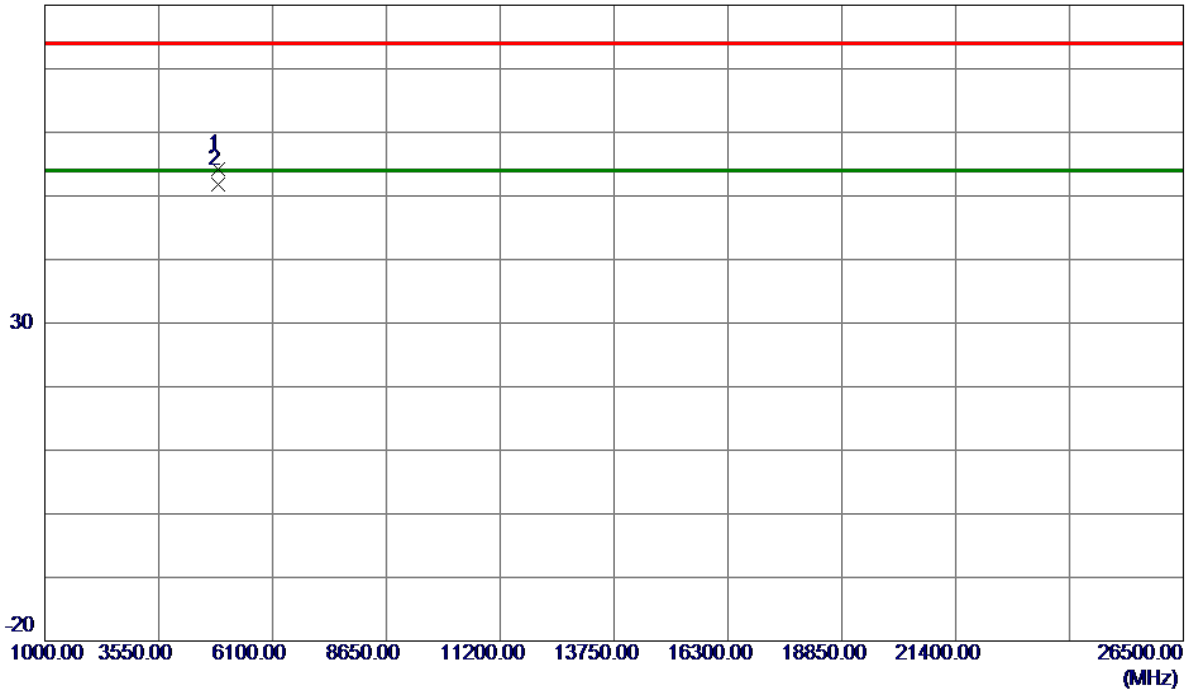
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



Test Mode:	TX B Mode 2437 MHz
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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	4873.8700	45.95	8.21	54.16	74.00	-19.84	Peak	
2 *	4873.9800	43.59	8.21	51.80	54.00	-2.20	AVG	

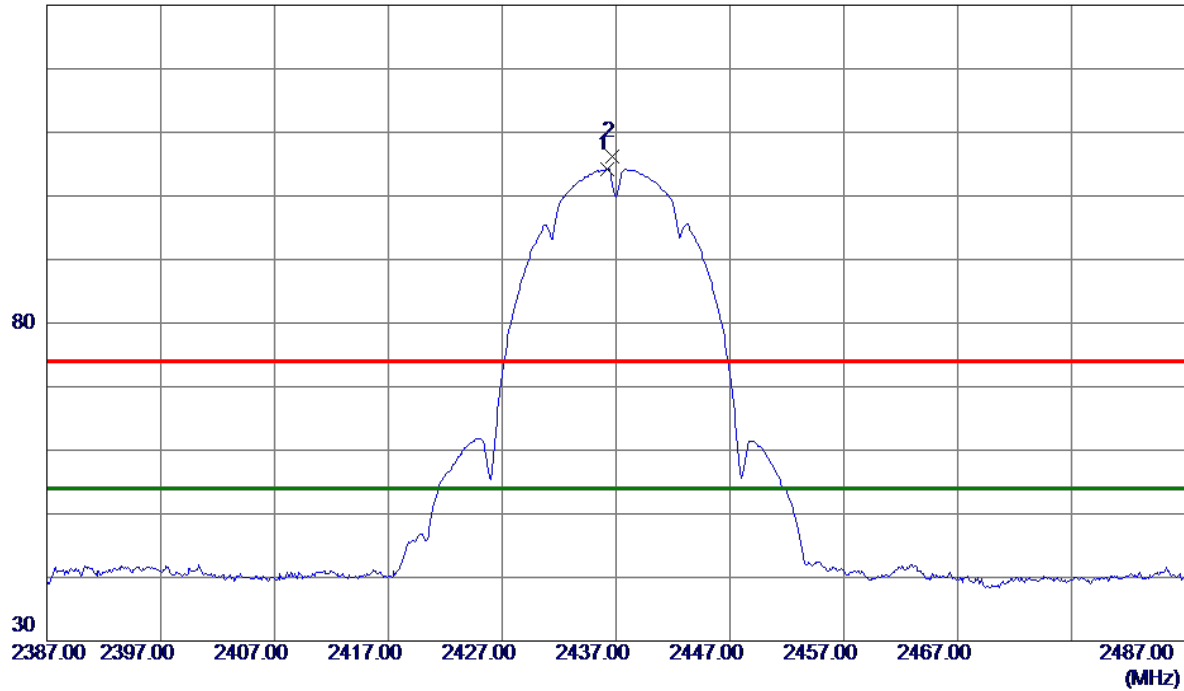
### REMARKS:

- (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 *	2436.2000	95.22	9.04	104.26	54.00	50.26	AVG	No Limit
2	2436.7000	97.22	9.04	106.26	74.00	32.26	Peak	No Limit

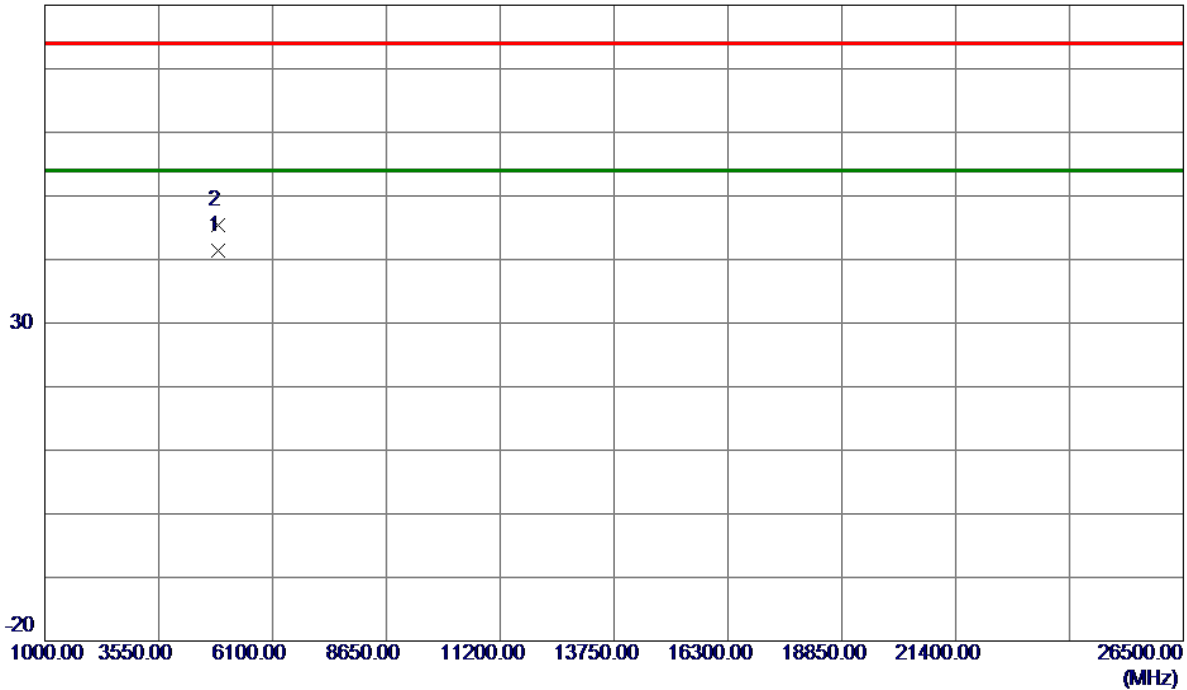
### REMARKS:

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

Test Mode:	TX B Mode 2437 MHz
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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 *	4873.9400	33.21	8.21	41.42	54.00	-12.58	AVG	
2	4873.9700	37.26	8.21	45.47	74.00	-28.53	Peak	

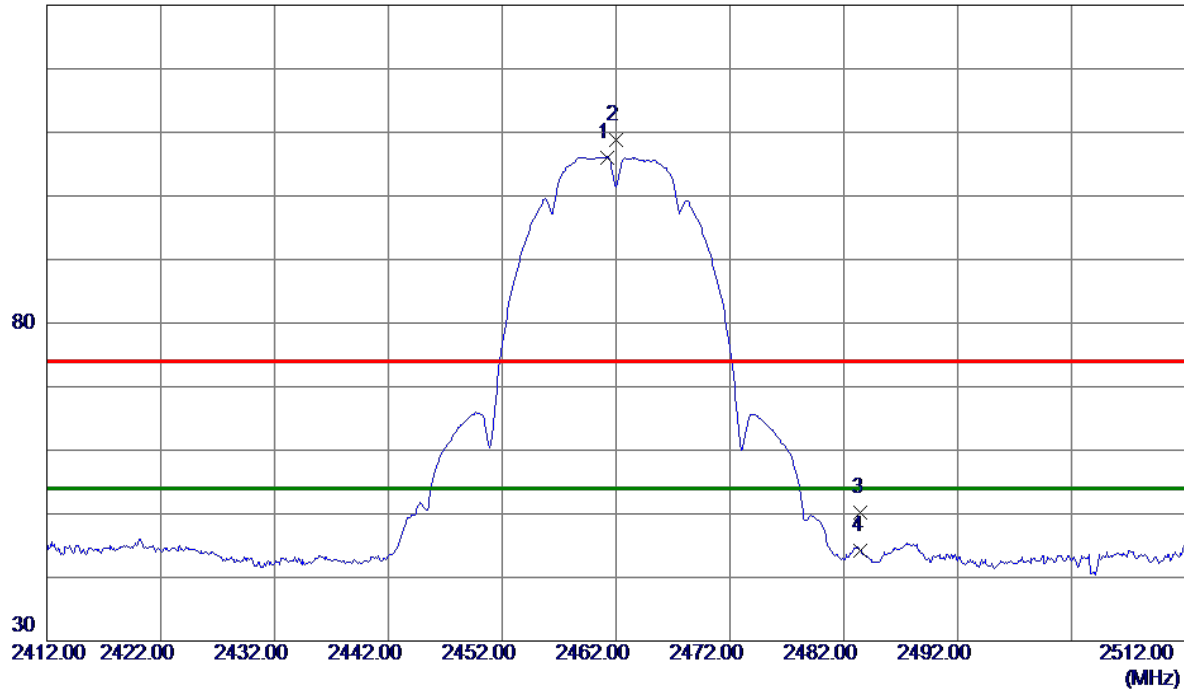
### REMARKS:

- (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 *	2461.2000	97.07	9.03	106.10	54.00	52.10	AVG	No Limit
2	2462.0000	99.69	9.03	108.72	74.00	34.72	Peak	No Limit
3	2483.5000	41.10	9.01	50.11	74.00	-23.89	Peak	
4	2483.5000	35.14	9.01	44.15	54.00	-9.85	AVG	

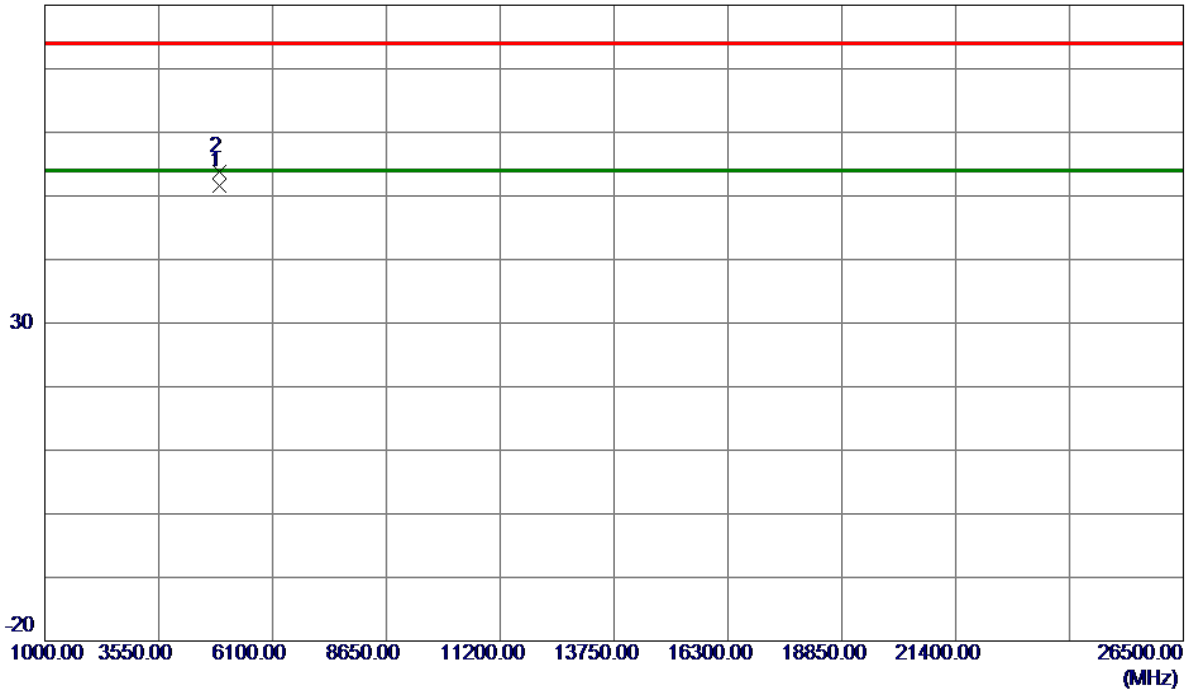
### REMARKS:

- (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 *	4923.9100	43.30	8.38	51.68	54.00	-2.32	AVG	
2	4923.9300	45.33	8.38	53.71	74.00	-20.29	Peak	

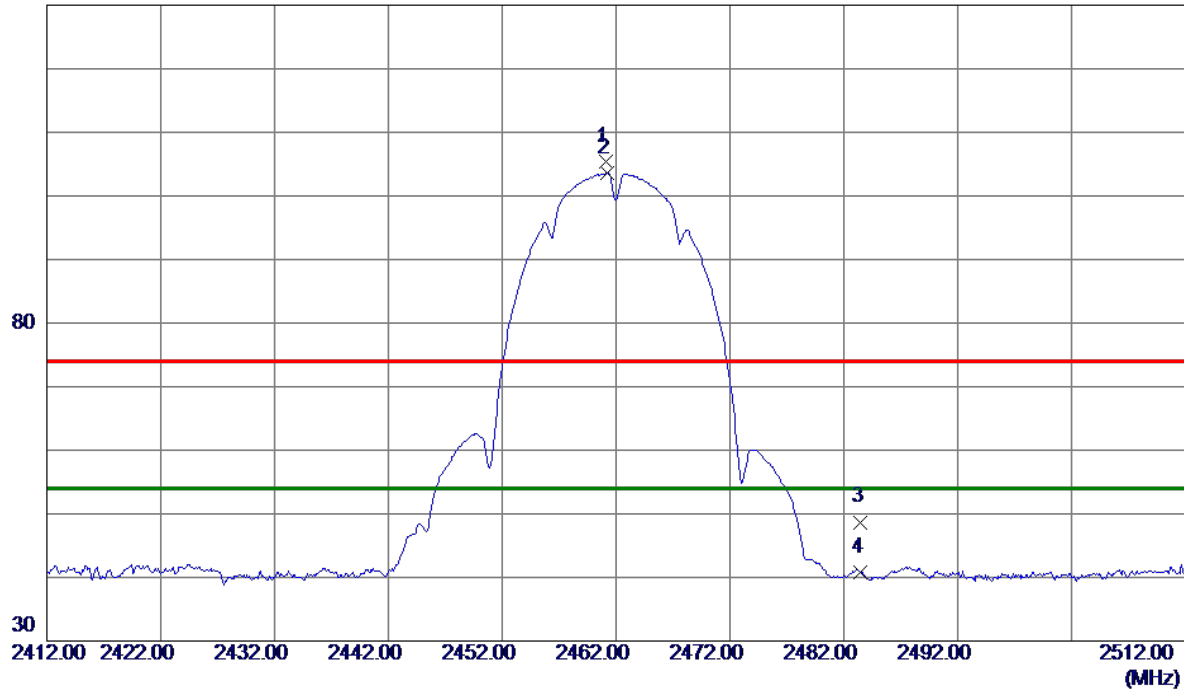
### REMARKS:

- (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	2461.1000	96.46	9.03	105.49	74.00	31.49	Peak	No Limit
2 *	2461.2000	94.54	9.03	103.57	54.00	49.57	AVG	No Limit
3	2483.5000	39.69	9.01	48.70	74.00	-25.30	Peak	
4	2483.5000	31.72	9.01	40.73	54.00	-13.27	AVG	

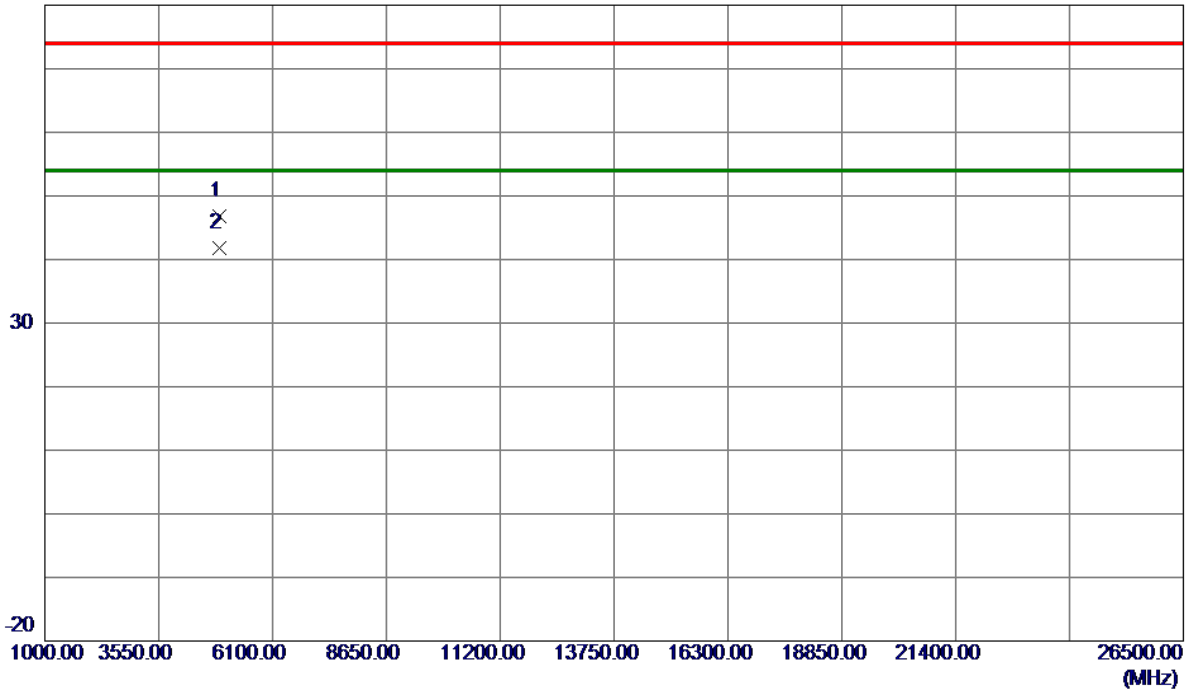
### REMARKS:

- (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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## Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	4923.9200	38.40	8.38	46.78	74.00	-27.22	Peak	
2 *	4923.9500	33.41	8.38	41.79	54.00	-12.21	AVG	

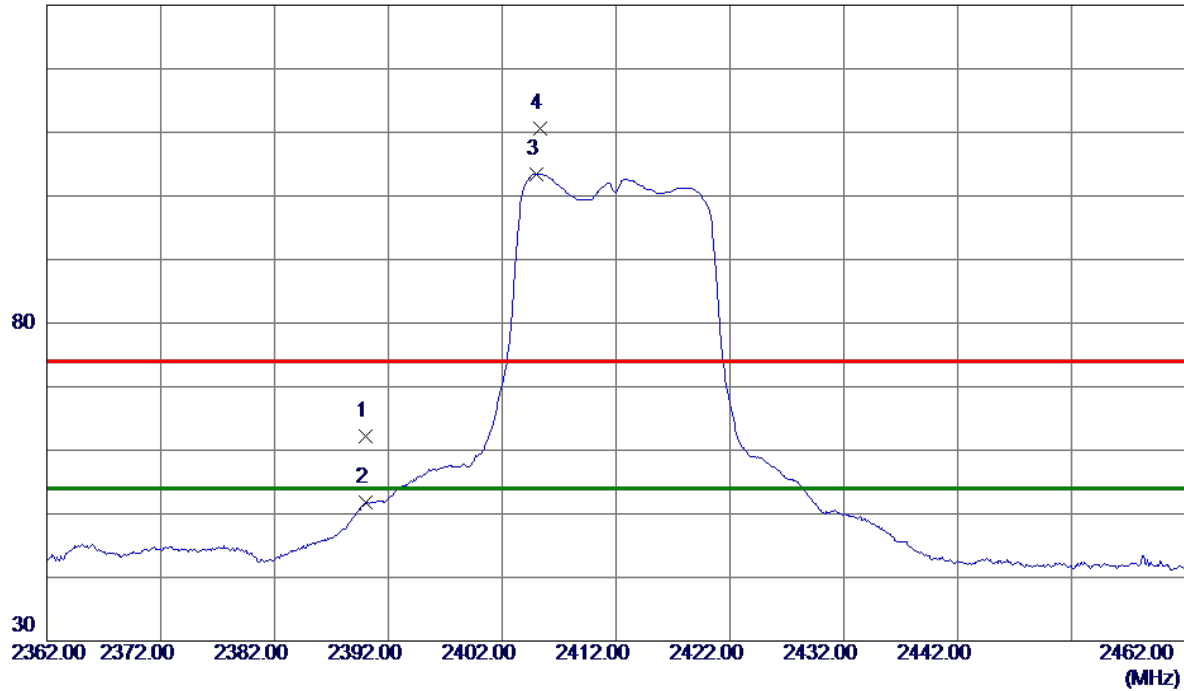
### REMARKS:

- (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	53.14	9.07	62.21	74.00	-11.79	Peak	
2	2390.0000	42.67	9.07	51.74	54.00	-2.26	AVG	
3 *	2405.0000	94.41	9.06	103.47	54.00	49.47	AVG	No Limit
4	2405.3000	101.48	9.06	110.54	74.00	36.54	Peak	No Limit

### REMARKS:

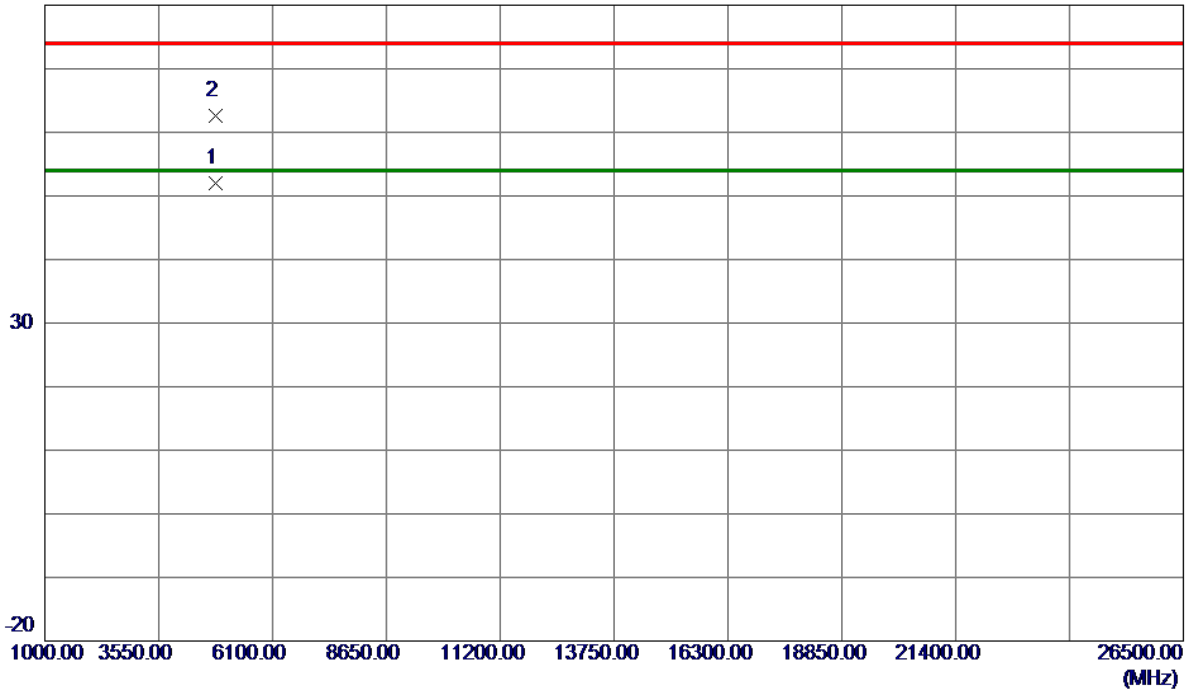
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



Test Mode: TX G Mode 2412 MHz

## 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 *	4823.9600	43.91	8.04	51.95	54.00	-2.05	AVG	
2	4824.0600	54.62	8.04	62.66	74.00	-11.34	Peak	

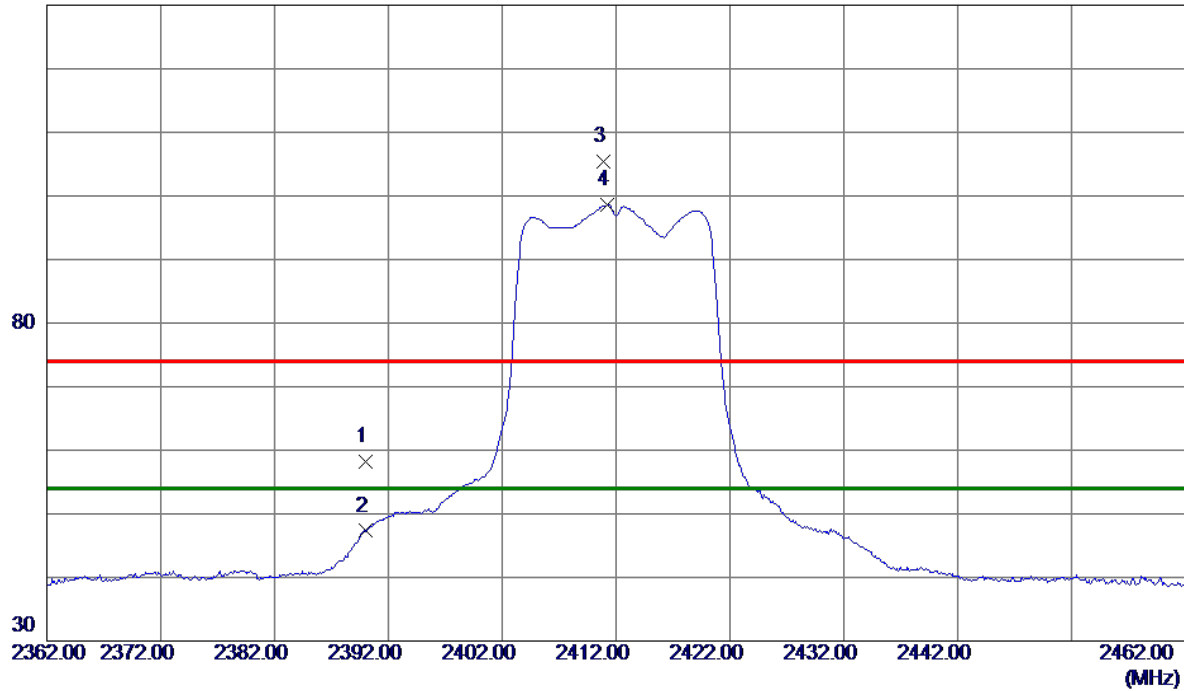
### REMARKS:

- (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	49.20	9.07	58.27	74.00	-15.73	Peak	
2	2390.0000	38.23	9.07	47.30	54.00	-6.70	AVG	
3	2410.9000	96.39	9.06	105.45	74.00	31.45	Peak	No Limit
4 *	2411.2000	89.54	9.06	98.60	54.00	44.60	AVG	No Limit

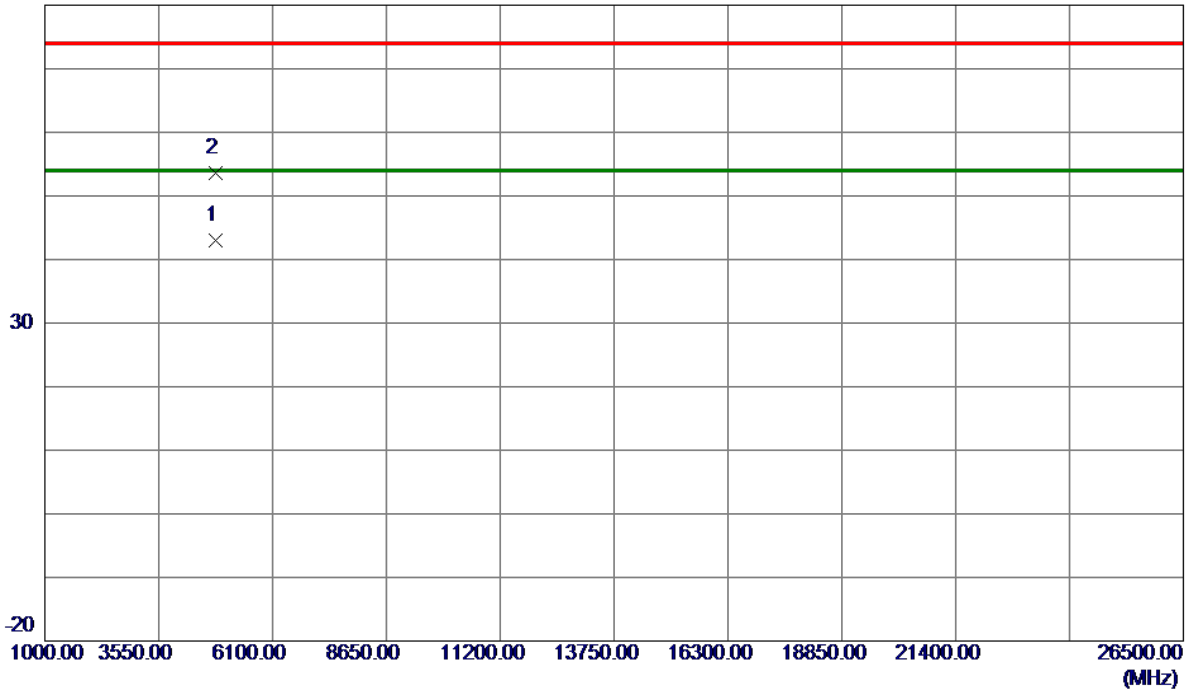
### REMARKS:

- (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 *	4825.1000	34.88	8.04	42.92	54.00	-11.08	AVG	
2	4828.2500	45.52	8.05	53.57	74.00	-20.43	Peak	

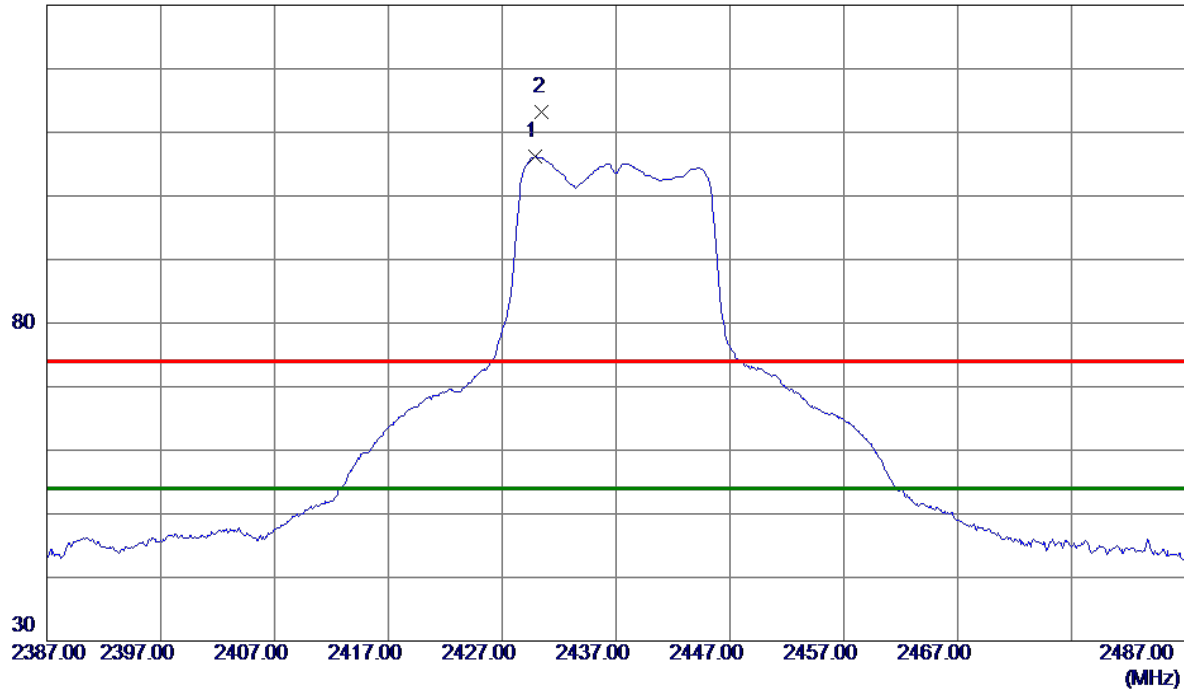
### REMARKS:

- (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 *	2429.9000	97.08	9.05	106.13	54.00	52.13	AVG	No Limit
2	2430.5000	104.21	9.05	113.26	74.00	39.26	Peak	No Limit

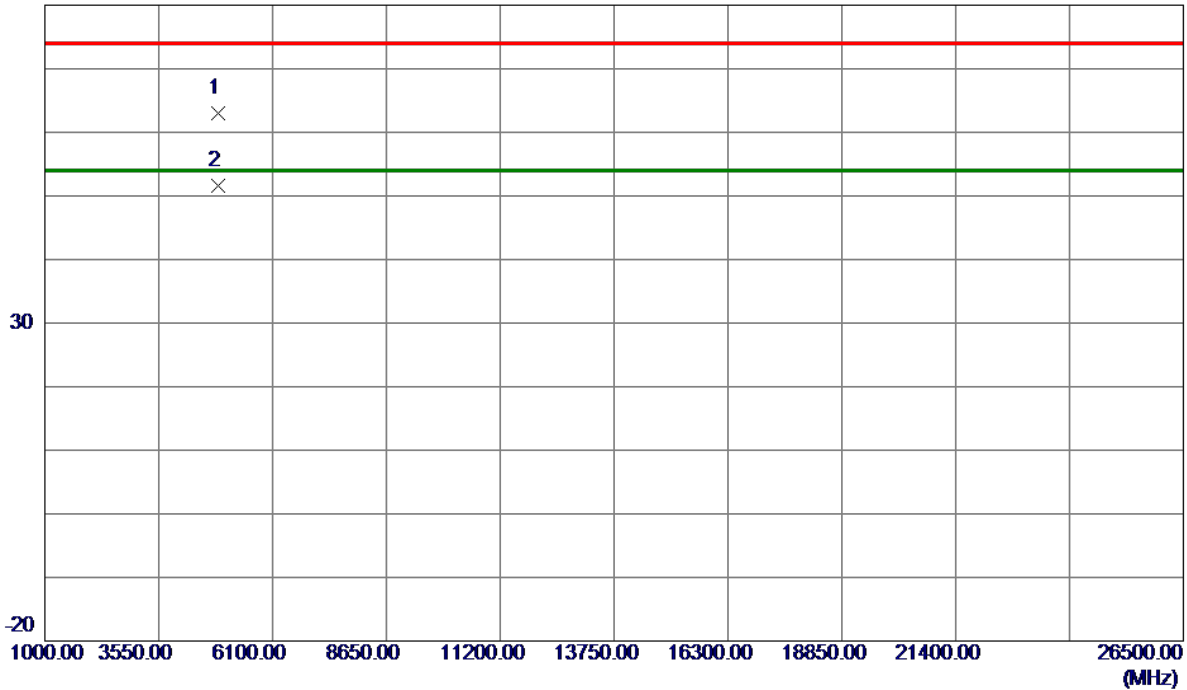
### REMARKS:

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

Test Mode: TX G Mode 2437 MHz

## Vertical

80 dBuV/m



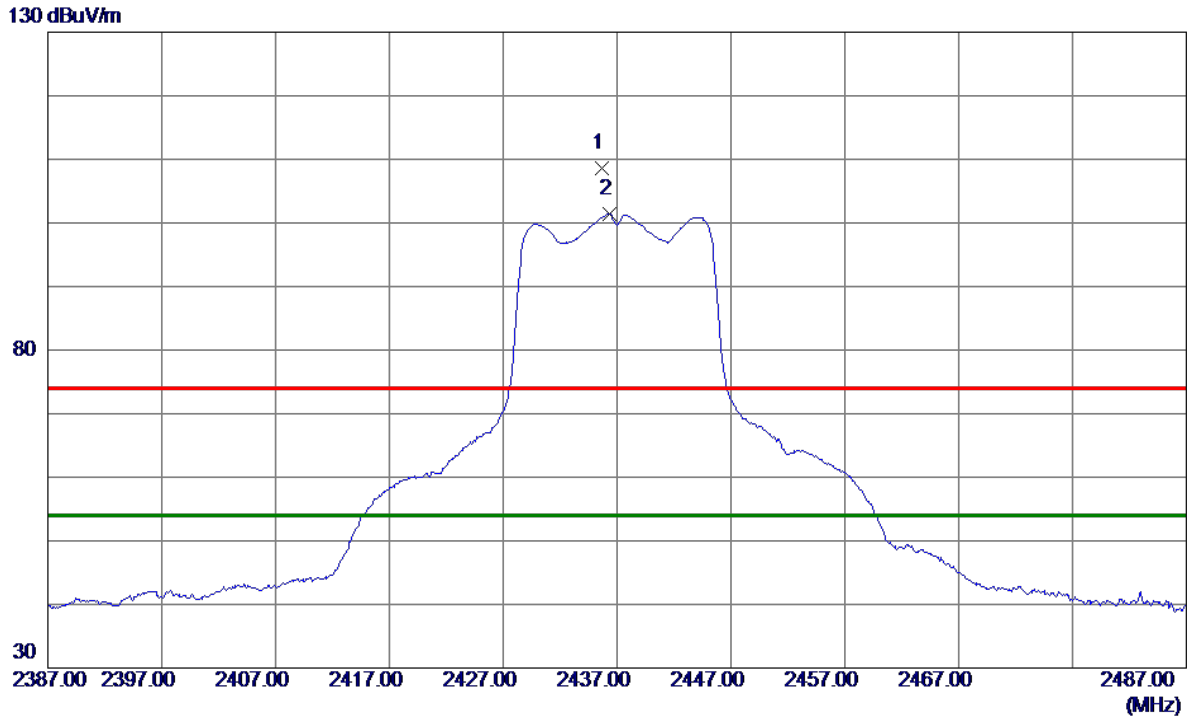
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.6500	54.79	8.21	63.00	74.00	-11.00	Peak	
2 *	4873.8950	43.31	8.21	51.52	54.00	-2.48	AVG	

### 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	2435.7000	99.47	9.04	108.51	74.00	34.51	Peak	No Limit
2 *	2436.3000	92.34	9.04	101.38	54.00	47.38	AVG	No Limit

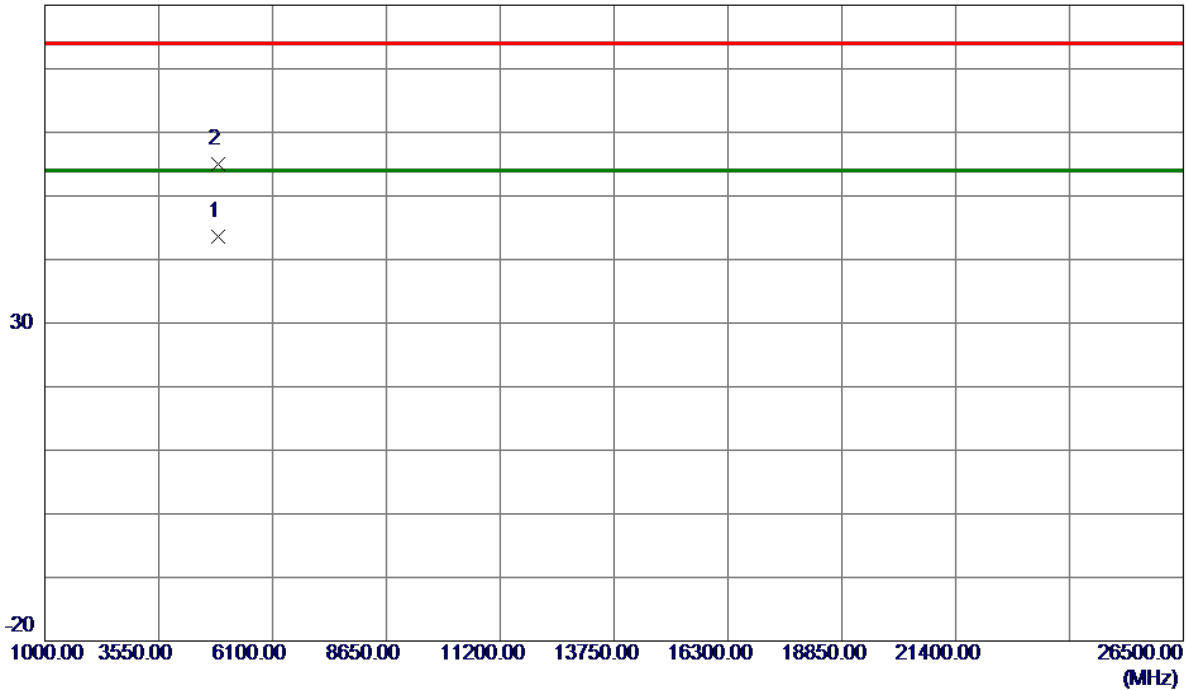
### REMARKS:

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

Test Mode: TX G Mode 2437 MHz

## 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 *	4873.9500	35.42	8.21	43.63	54.00	-10.37	AVG	
2	4874.3000	46.77	8.21	54.98	74.00	-19.02	Peak	

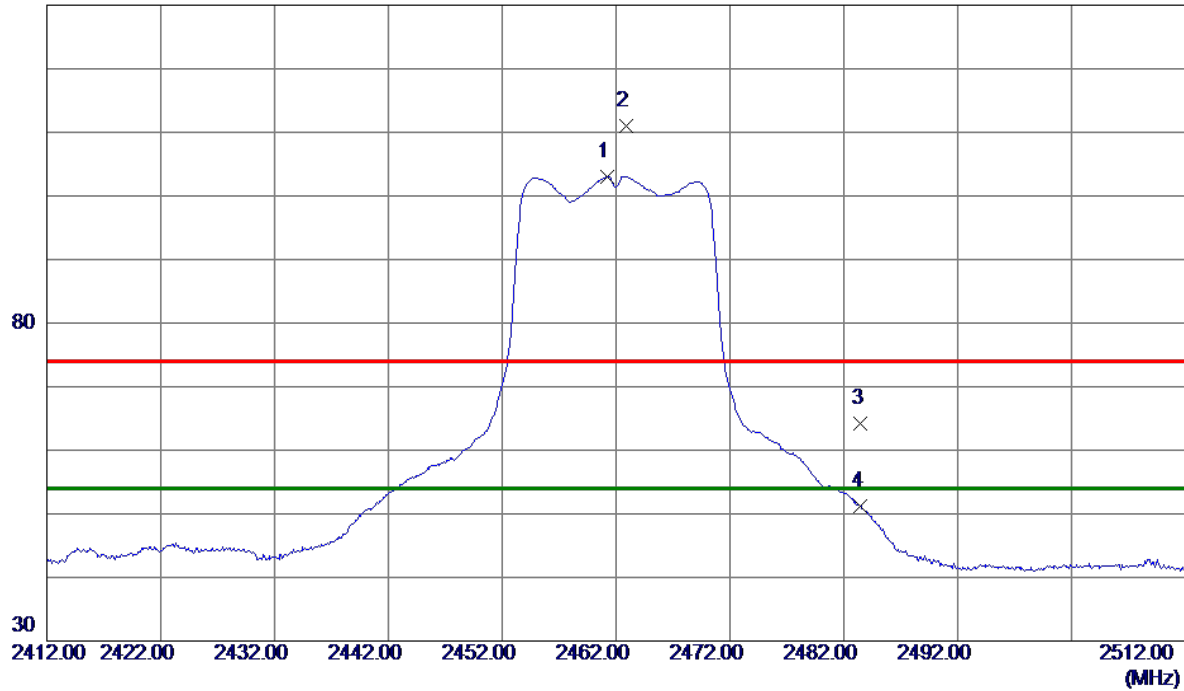
### REMARKS:

- (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 *	2461.2000	94.06	9.03	103.09	54.00	49.09	AVG	No Limit
2	2462.9000	101.89	9.03	110.92	74.00	36.92	Peak	No Limit
3	2483.5000	55.15	9.01	64.16	74.00	-9.84	Peak	
4	2483.5000	42.17	9.01	51.18	54.00	-2.82	AVG	

### REMARKS:

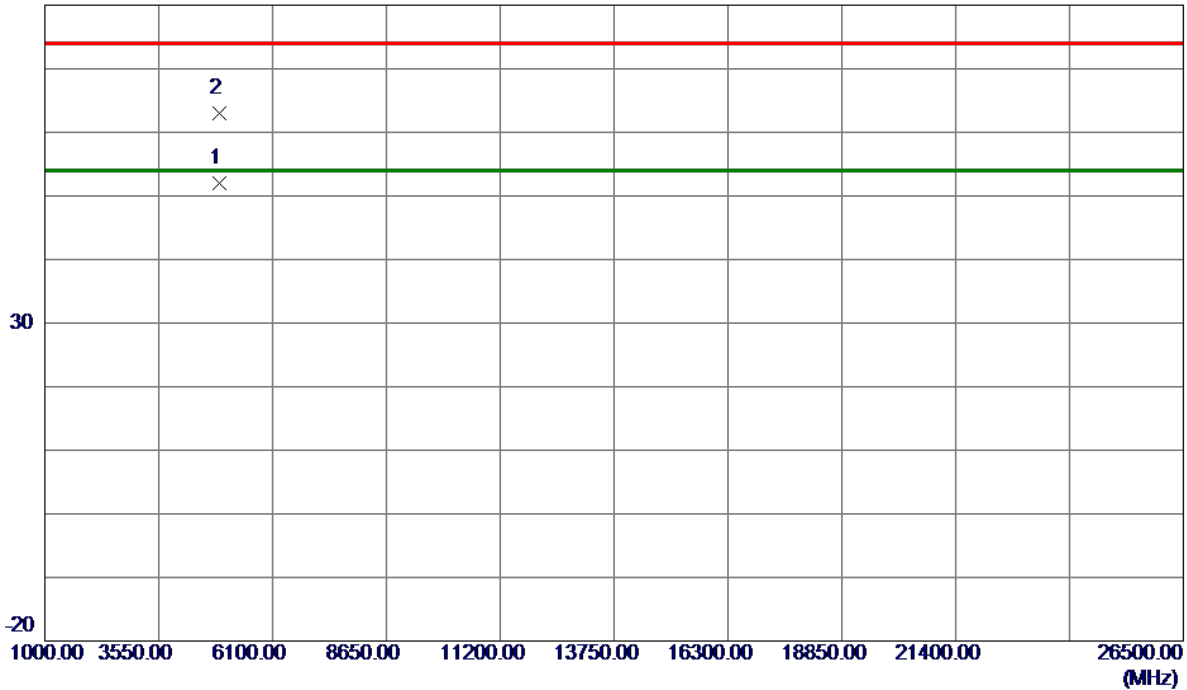
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



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 *	4922.7000	43.59	8.37	51.96	54.00	-2.04	AVG	
2	4922.9500	54.67	8.37	63.04	74.00	-10.96	Peak	

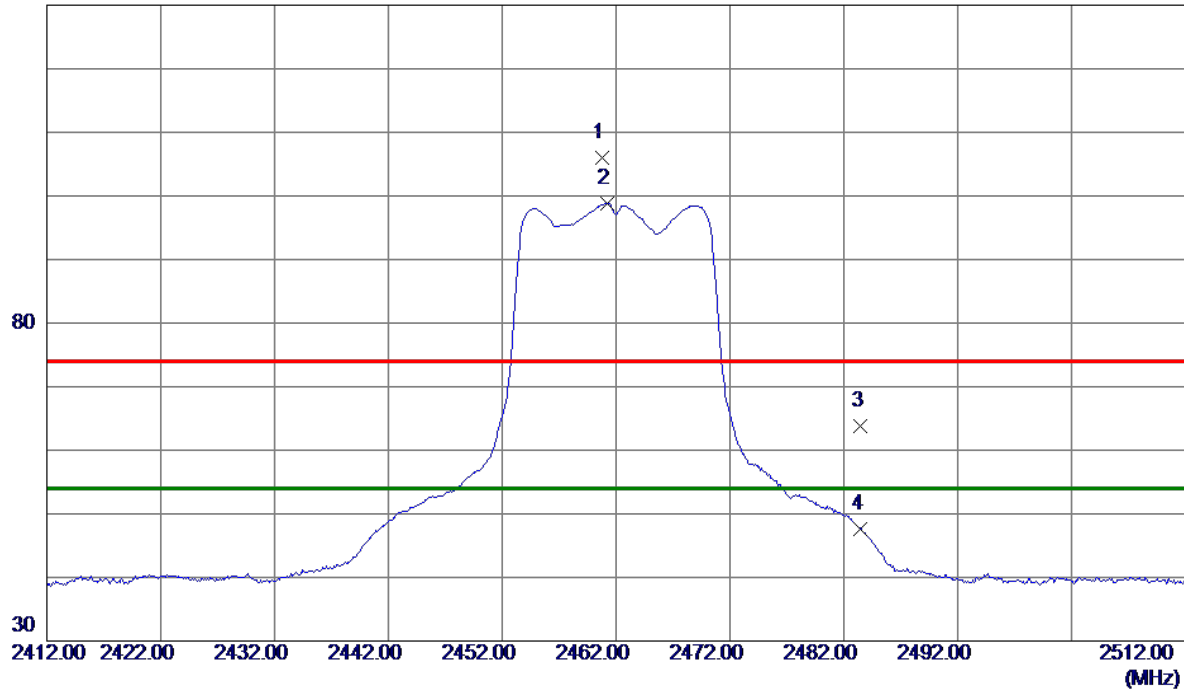
### REMARKS:

- (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	2460.8000	96.93	9.03	105.96	74.00	31.96	Peak	No Limit
2 *	2461.2000	89.86	9.03	98.89	54.00	44.89	AVG	No Limit
3	2483.5000	54.84	9.01	63.85	74.00	-10.15	Peak	
4	2483.5000	38.66	9.01	47.67	54.00	-6.33	AVG	

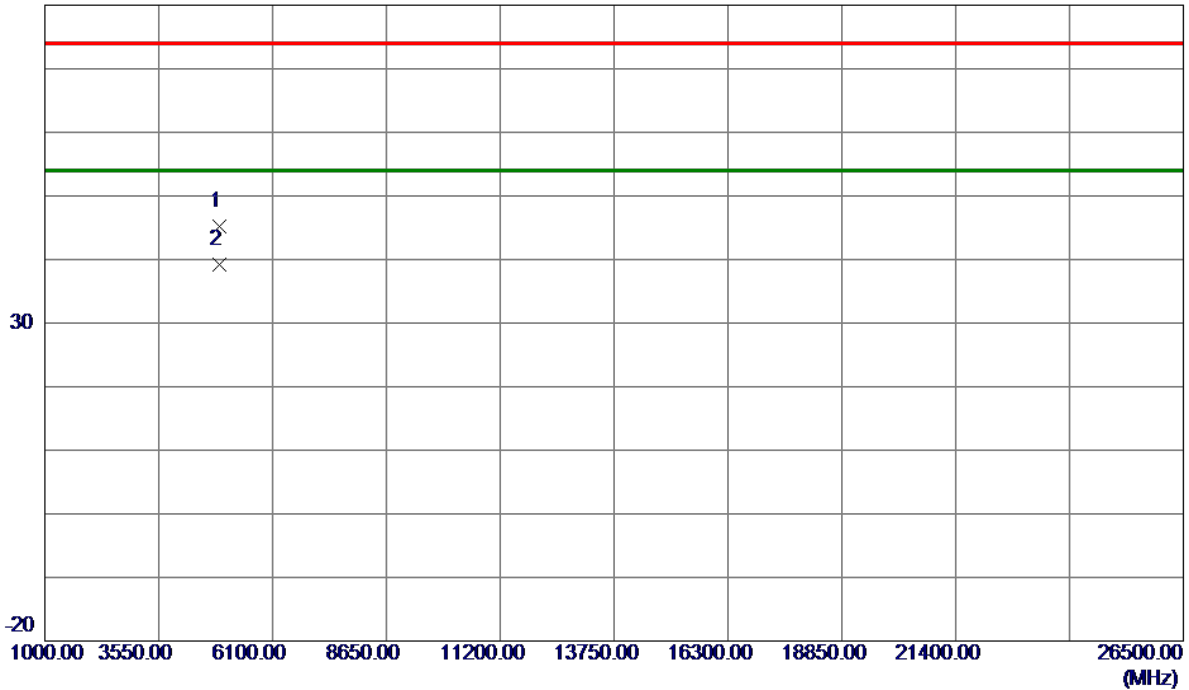
### REMARKS:

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

Test Mode: TX G Mode 2462 MHz

## Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.8500	36.89	8.37	45.26	74.00	-28.74	Peak	
2 *	4924.1500	30.77	8.38	39.15	54.00	-14.85	AVG	

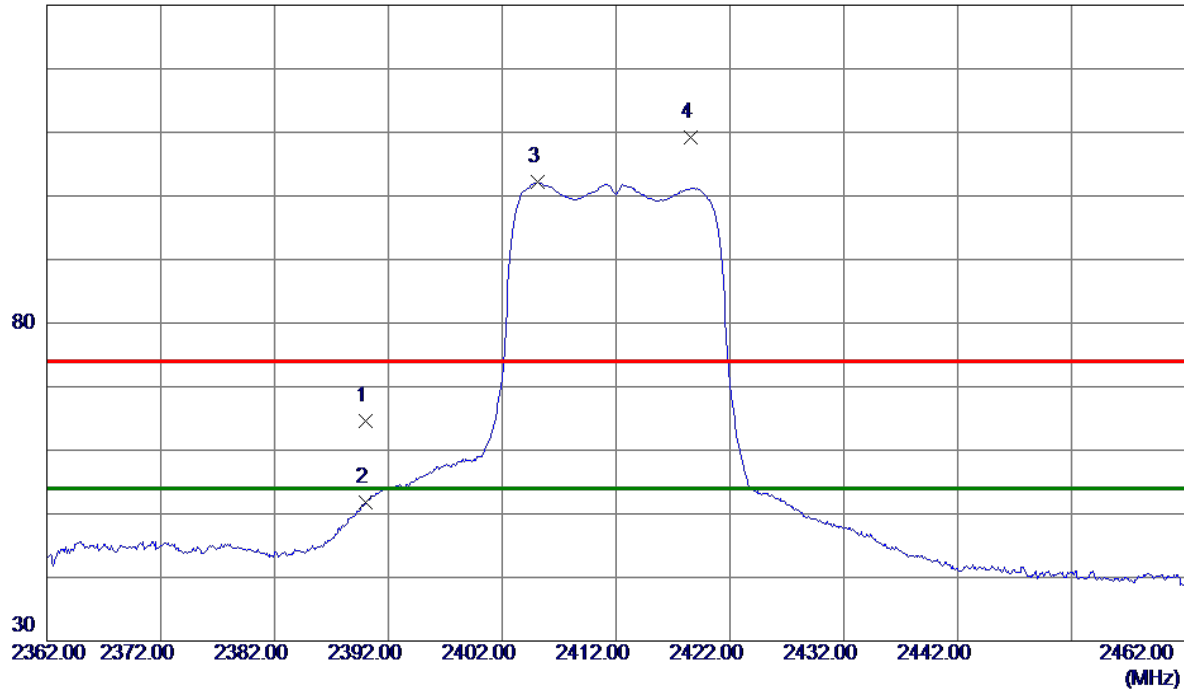
### REMARKS:

- (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	55.55	9.07	64.62	74.00	-9.38	Peak	
2	2390.0000	42.74	9.07	51.81	54.00	-2.19	AVG	
3 *	2405.1000	93.08	9.06	102.14	54.00	48.14	AVG	No Limit
4	2418.6000	100.20	9.05	109.25	74.00	35.25	Peak	No Limit

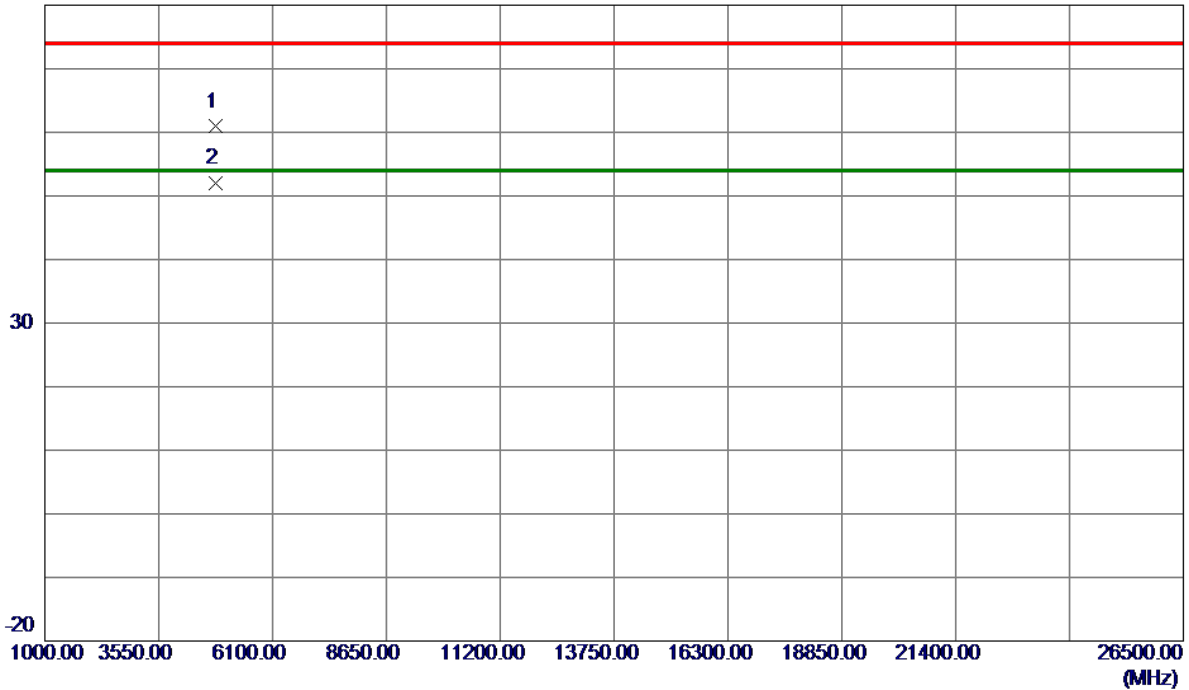
### REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

## 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	4822.8200	52.86	8.04	60.90	74.00	-13.10	Peak	
2 *	4823.9200	43.87	8.04	51.91	54.00	-2.09	AVG	

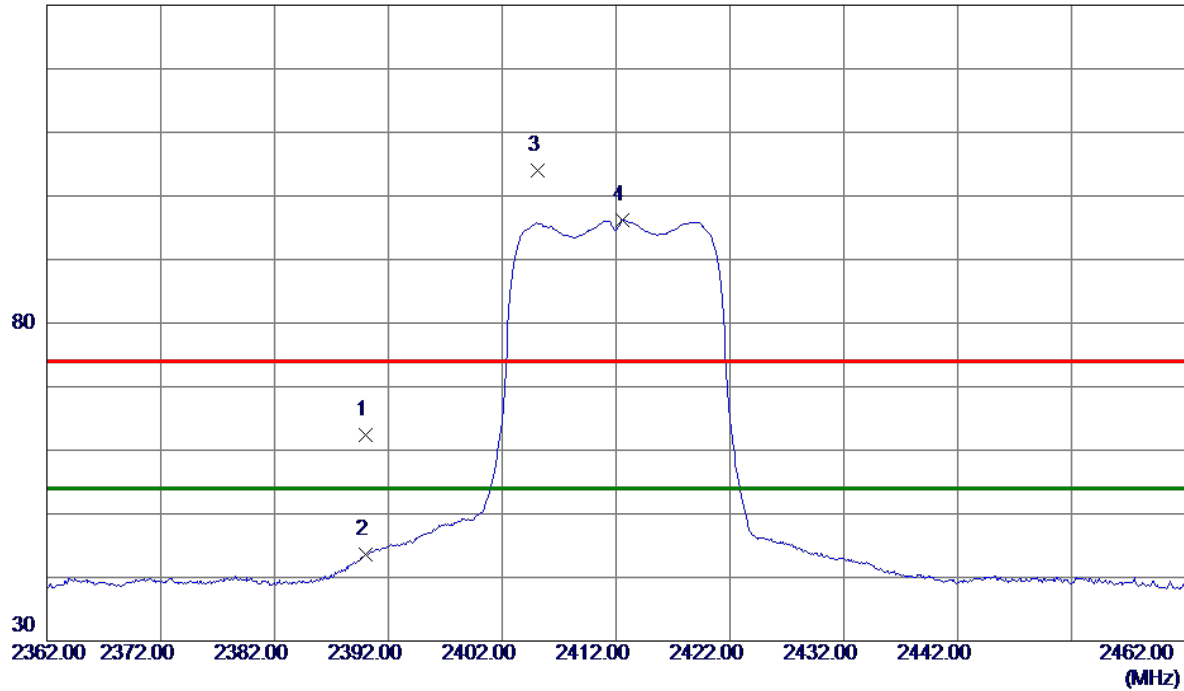
### REMARKS:

- (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	53.37	9.07	62.44	74.00	-11.56	Peak	
2	2390.0000	34.54	9.07	43.61	54.00	-10.39	AVG	
3	2405.1000	94.89	9.06	103.95	74.00	29.95	Peak	No Limit
4 *	2412.6000	87.13	9.06	96.19	54.00	42.19	AVG	No Limit

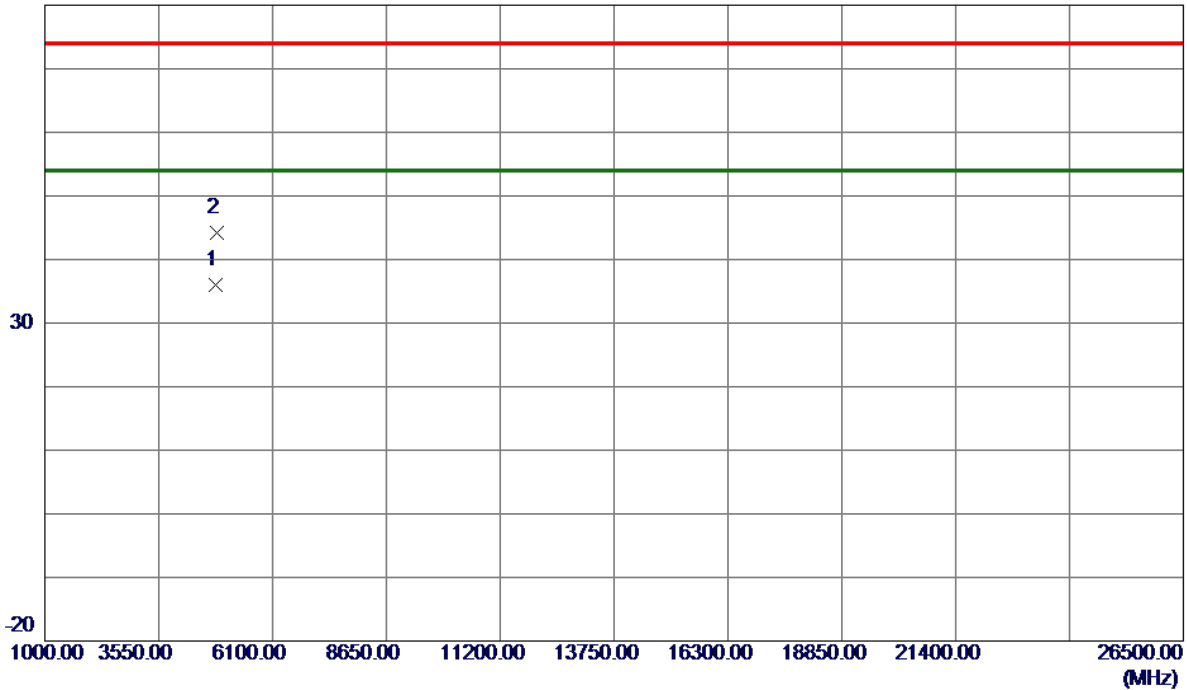
### REMARKS:

- (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 *	4823.4500	27.96	8.04	36.00	54.00	-18.00	AVG	
2	4839.5000	36.11	8.09	44.20	74.00	-29.80	Peak	

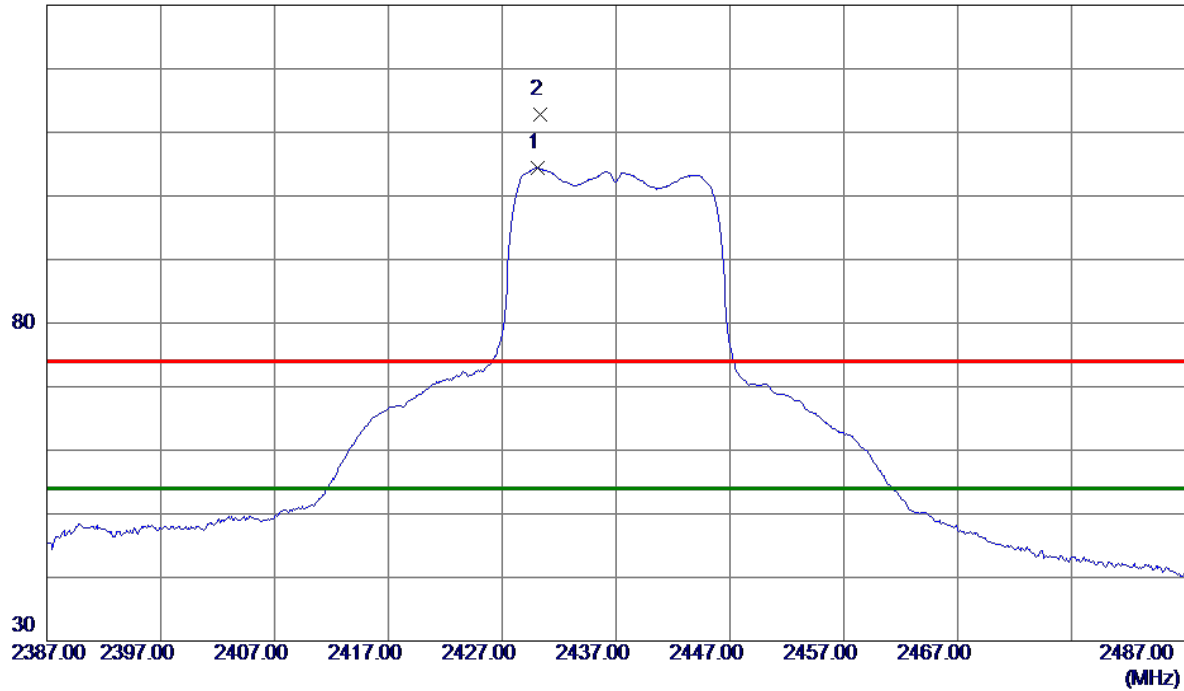
### REMARKS:

- (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 *	2430.1000	95.32	9.05	104.37	54.00	50.37	AVG	No Limit
2	2430.3000	103.81	9.05	112.86	74.00	38.86	Peak	No Limit

### REMARKS:

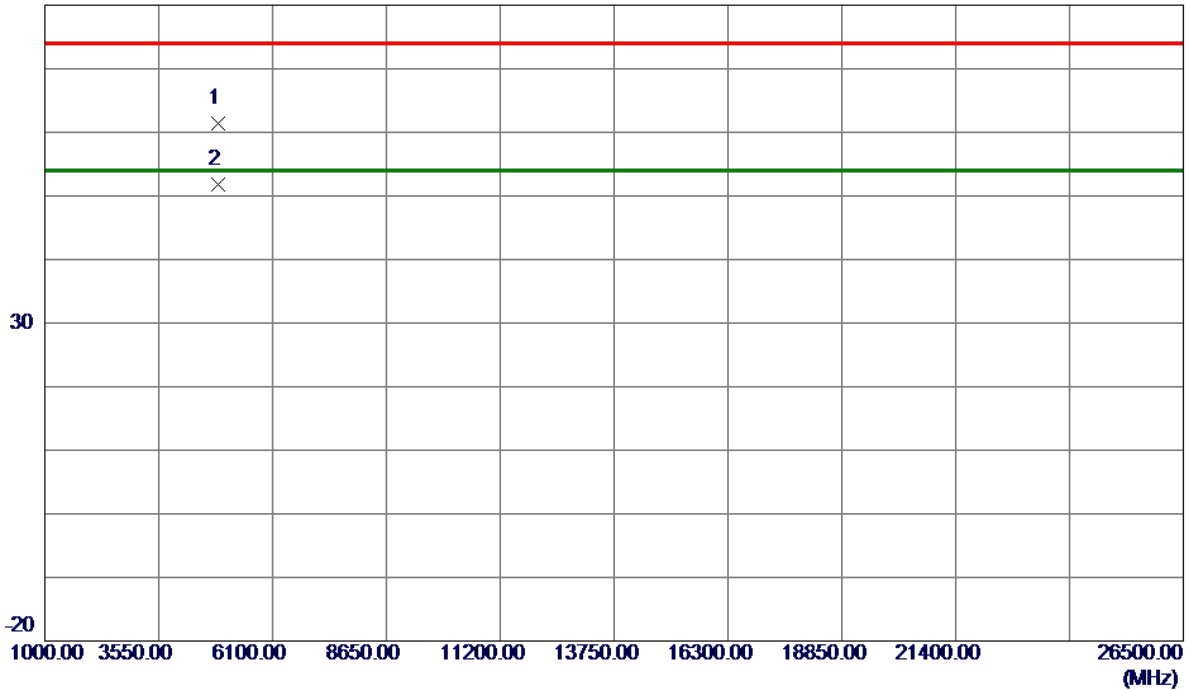
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.



Test Mode: TX N-20M Mode 2437 MHz

## Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.7000	53.13	8.21	61.34	74.00	-12.66	Peak	
2 *	4873.8000	43.65	8.21	51.86	54.00	-2.14	AVG	

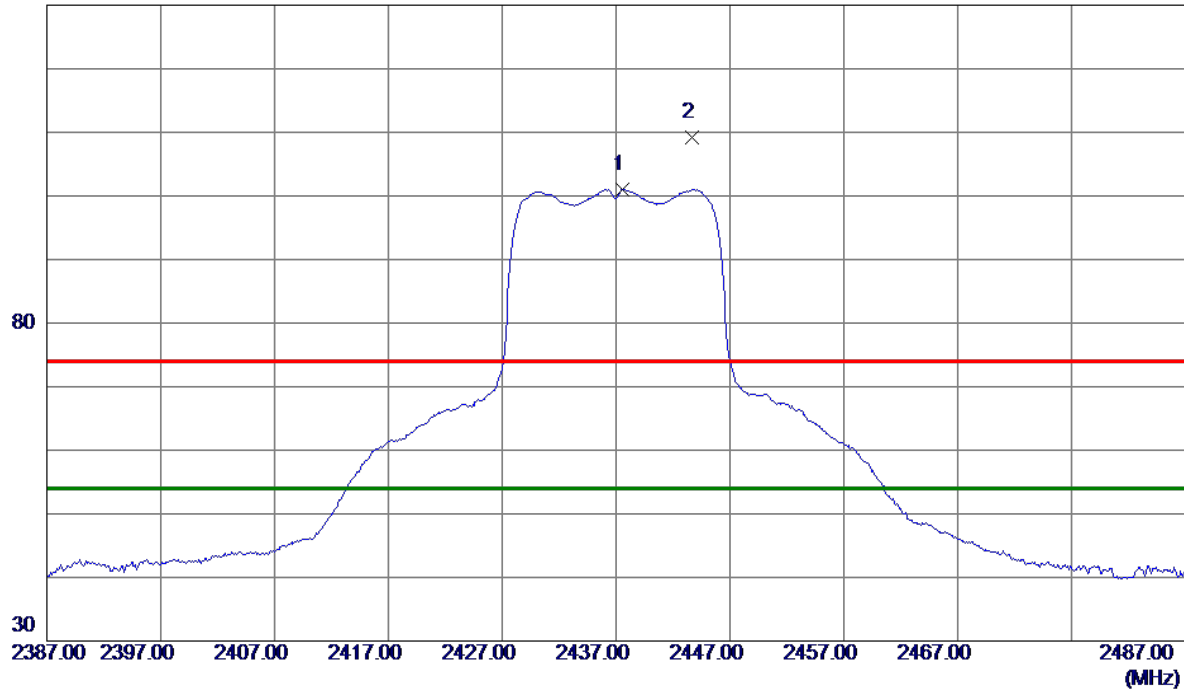
### REMARKS:

- (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.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2437.6000	91.98	9.04	101.02	54.00	47.02	AVG	No Limit
2	2443.7000	100.09	9.04	109.13	74.00	35.13	Peak	No Limit

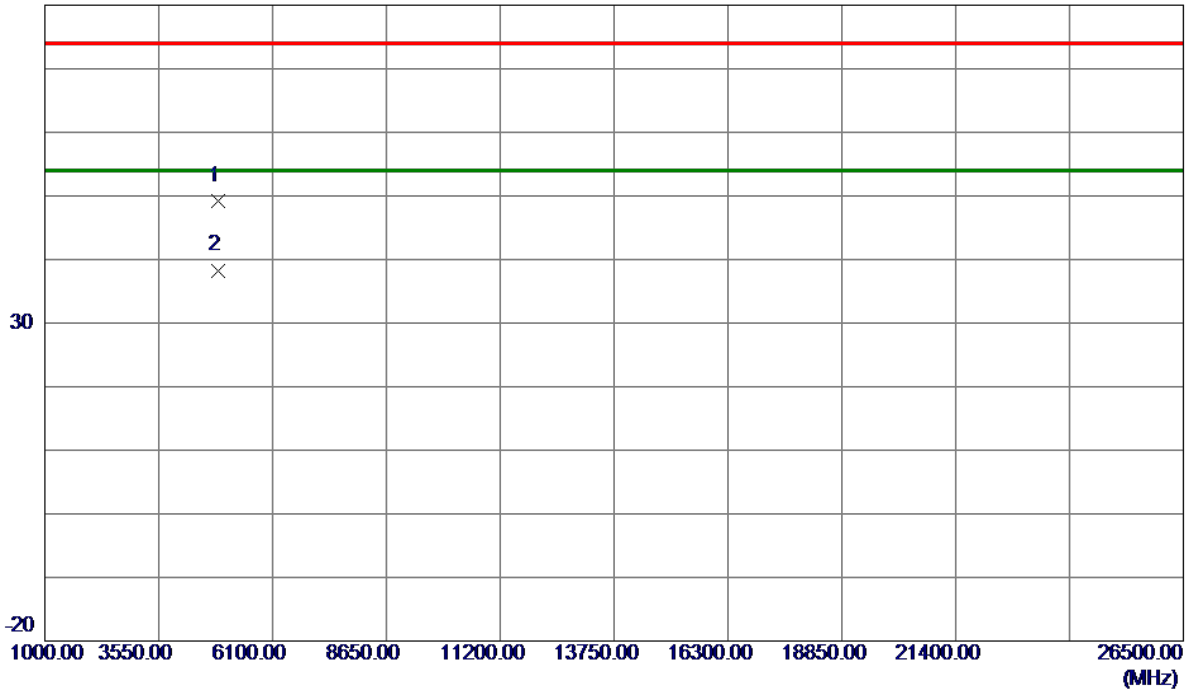
### REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

## 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	4873.1500	40.98	8.20	49.18	74.00	-24.82	Peak	
2 *	4873.9500	30.09	8.21	38.30	54.00	-15.70	AVG	

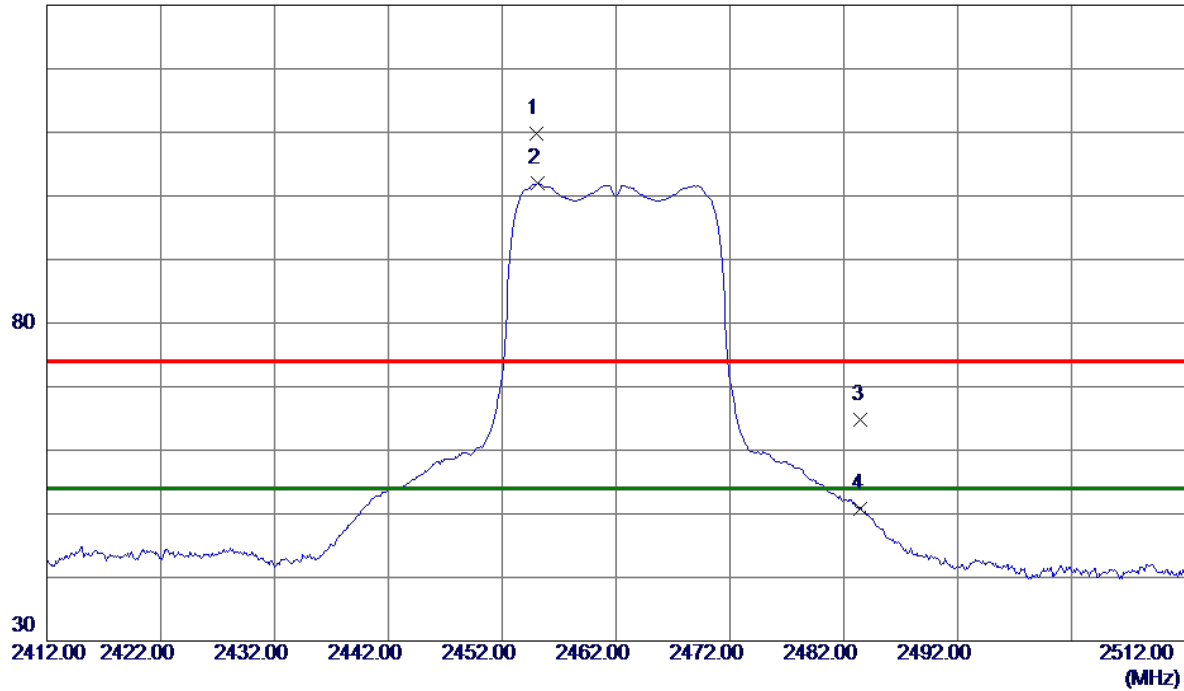
### REMARKS:

- (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	2455.0000	100.75	9.03	109.78	74.00	35.78	Peak	No Limit
2 *	2455.1000	92.88	9.03	101.91	54.00	47.91	AVG	No Limit
3	2483.5000	55.76	9.01	64.77	74.00	-9.23	Peak	
4	2483.5000	41.79	9.01	50.80	54.00	-3.20	AVG	

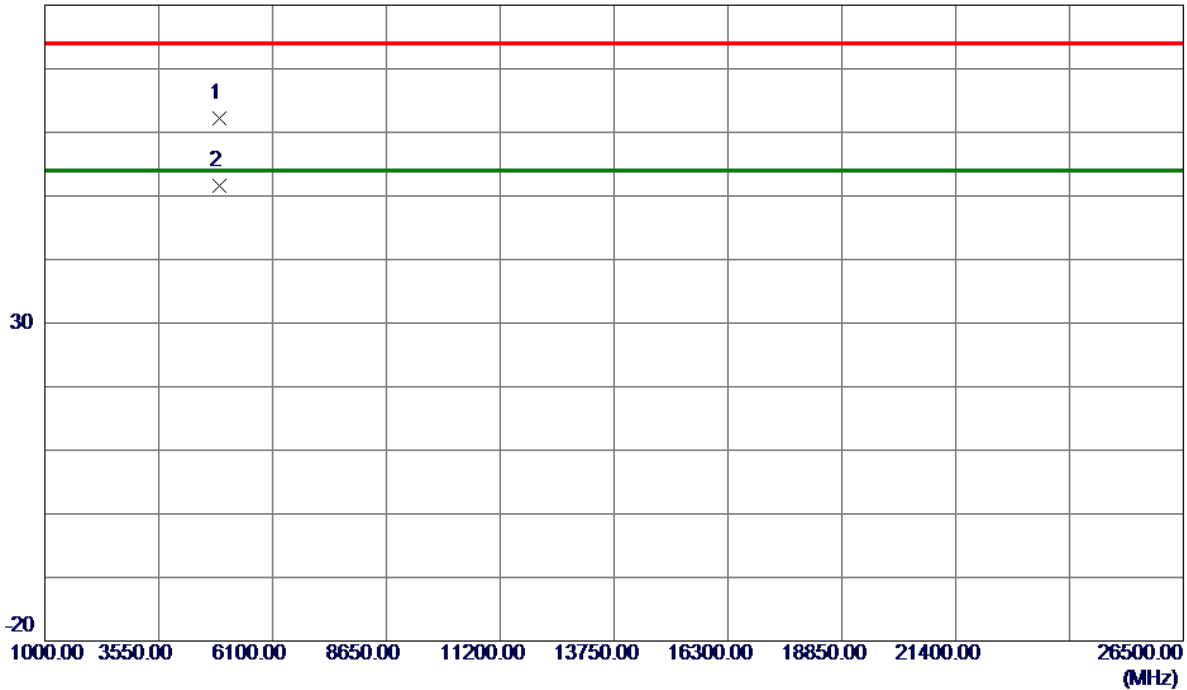
### REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

## Vertical

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	4922.8500	53.82	8.37	62.19	74.00	-11.81	Peak	
2 *	4923.8000	43.29	8.37	51.66	54.00	-2.34	AVG	

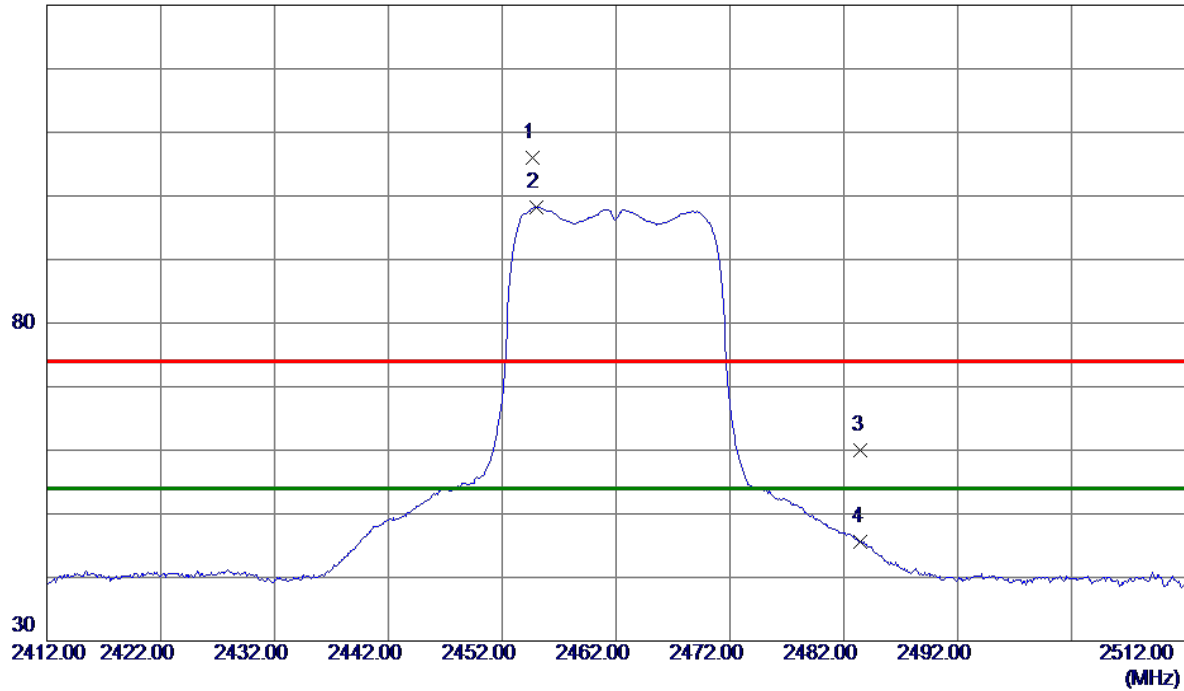
### REMARKS:

- (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	2454.7000	96.94	9.03	105.97	74.00	31.97	Peak	No Limit
2 *	2455.0000	89.21	9.03	98.24	54.00	44.24	AVG	No Limit
3	2483.5000	51.06	9.01	60.07	74.00	-13.93	Peak	
4	2483.5000	36.62	9.01	45.63	54.00	-8.37	AVG	

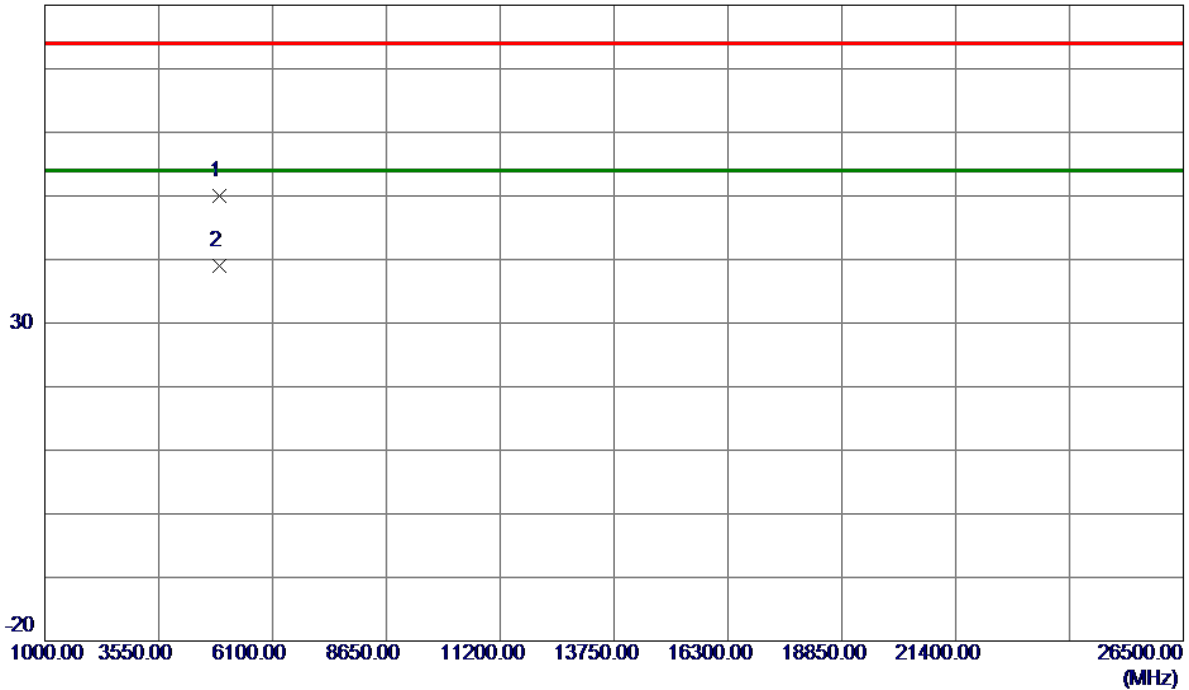
### REMARKS:

- (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	4910.6500	41.75	8.33	50.08	74.00	-23.92	Peak	
2 *	4924.0500	30.61	8.38	38.99	54.00	-15.01	AVG	

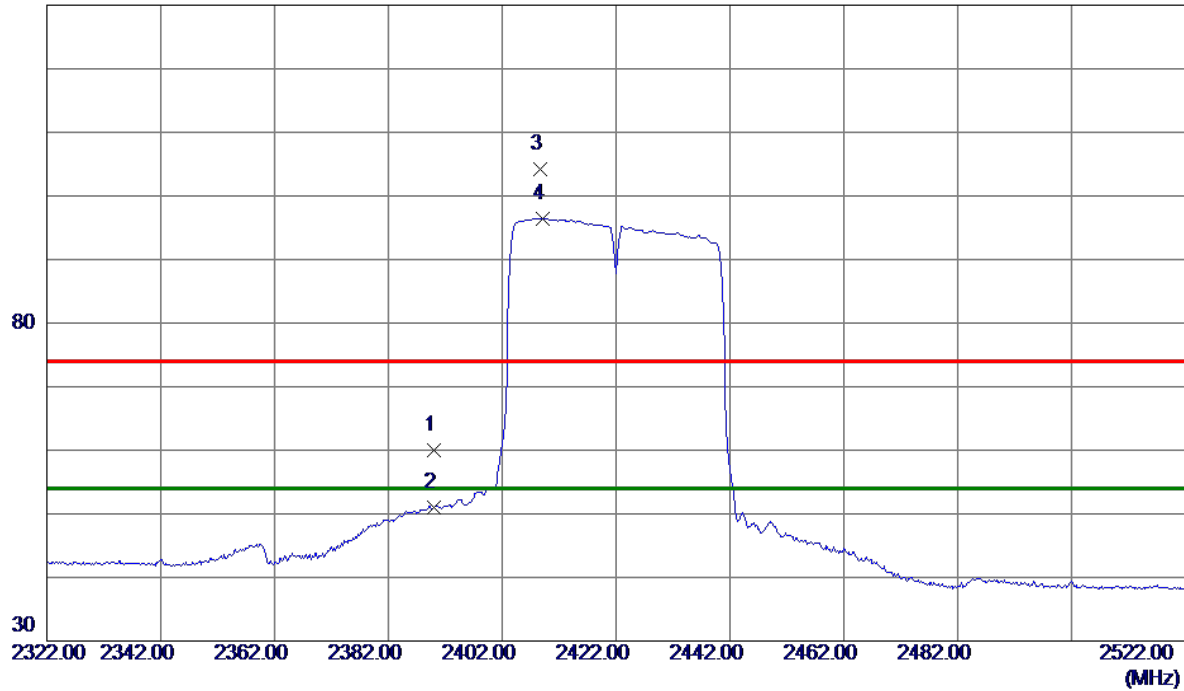
### REMARKS:

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

Test Mode: TX N-40M Mode 2422MHz

## Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	50.90	9.07	59.97	74.00	-14.03	Peak	
2	2390.0000	41.94	9.07	51.01	54.00	-2.99	AVG	
3	2408.6000	95.13	9.06	104.19	74.00	30.19	Peak	No Limit
4 *	2409.2000	87.43	9.06	96.49	54.00	42.49	AVG	No Limit

### REMARKS:

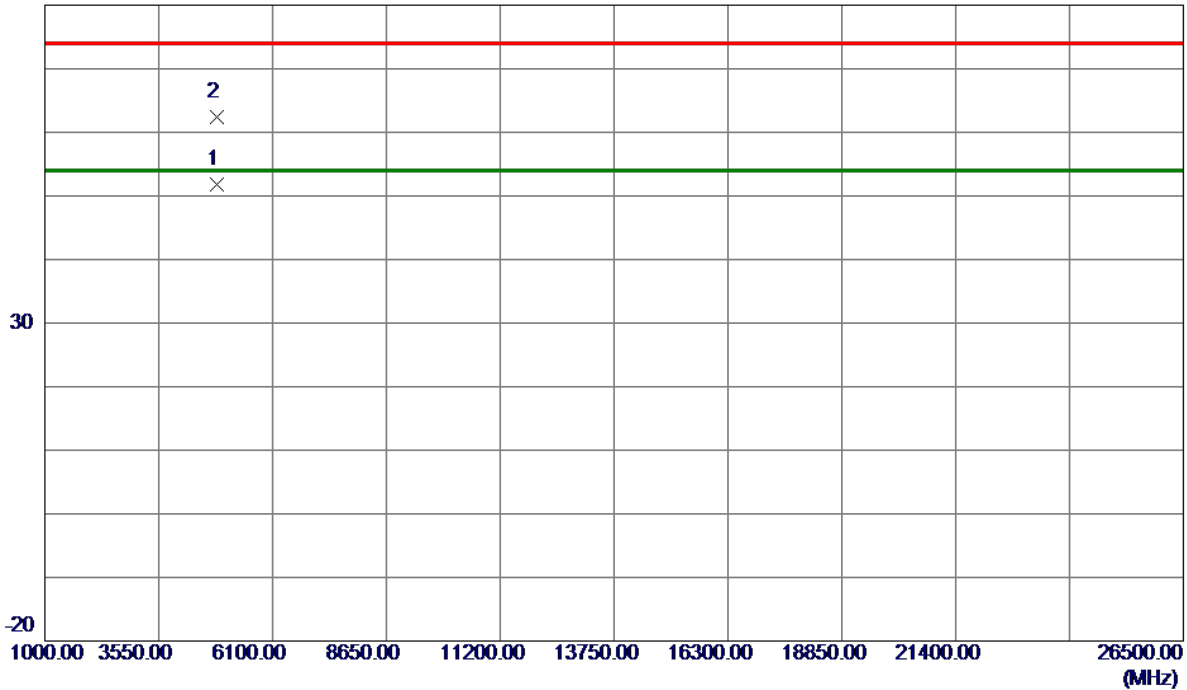
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



Test Mode:	TX N-40M Mode 2422MHz
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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 *	4843.8800	43.74	8.11	51.85	54.00	-2.15	AVG	
2	4844.2799	54.24	8.11	62.35	74.00	-11.65	Peak	

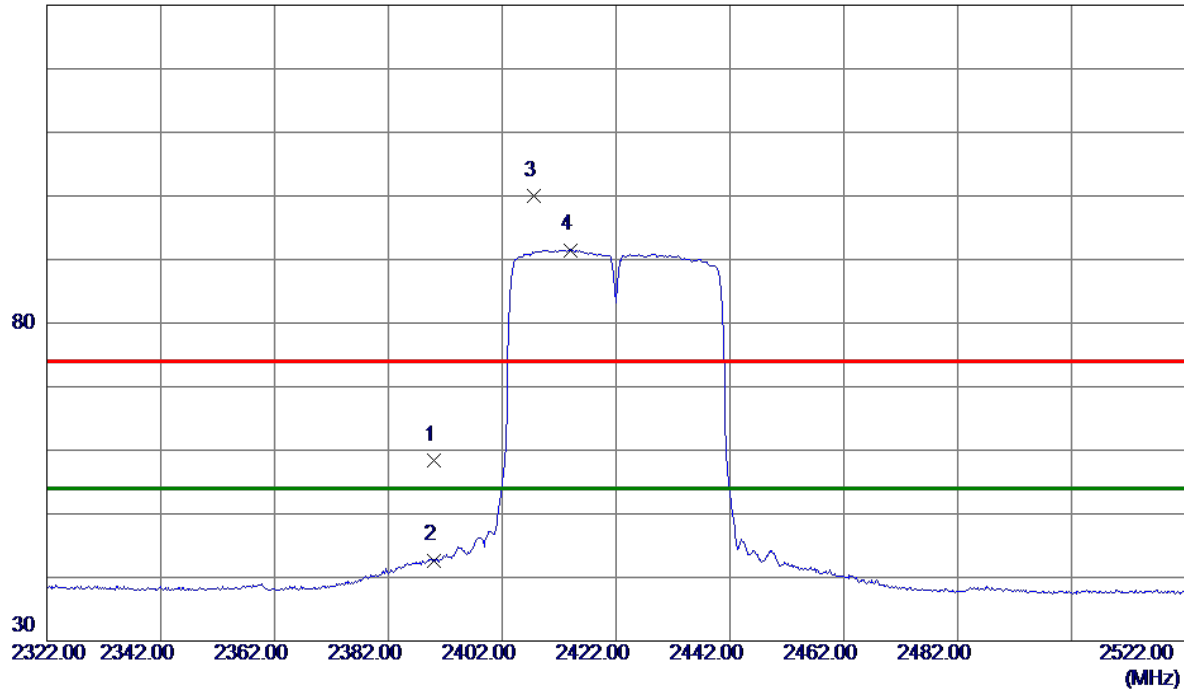
### REMARKS:

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

Test Mode: TX N-40M Mode 2422MHz

## Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	49.28	9.07	58.35	74.00	-15.65	Peak	
2	2390.0000	33.63	9.07	42.70	54.00	-11.30	AVG	
3	2407.6000	90.86	9.06	99.92	74.00	25.92	Peak	No Limit
4 *	2414.0000	82.44	9.06	91.50	54.00	37.50	AVG	No Limit

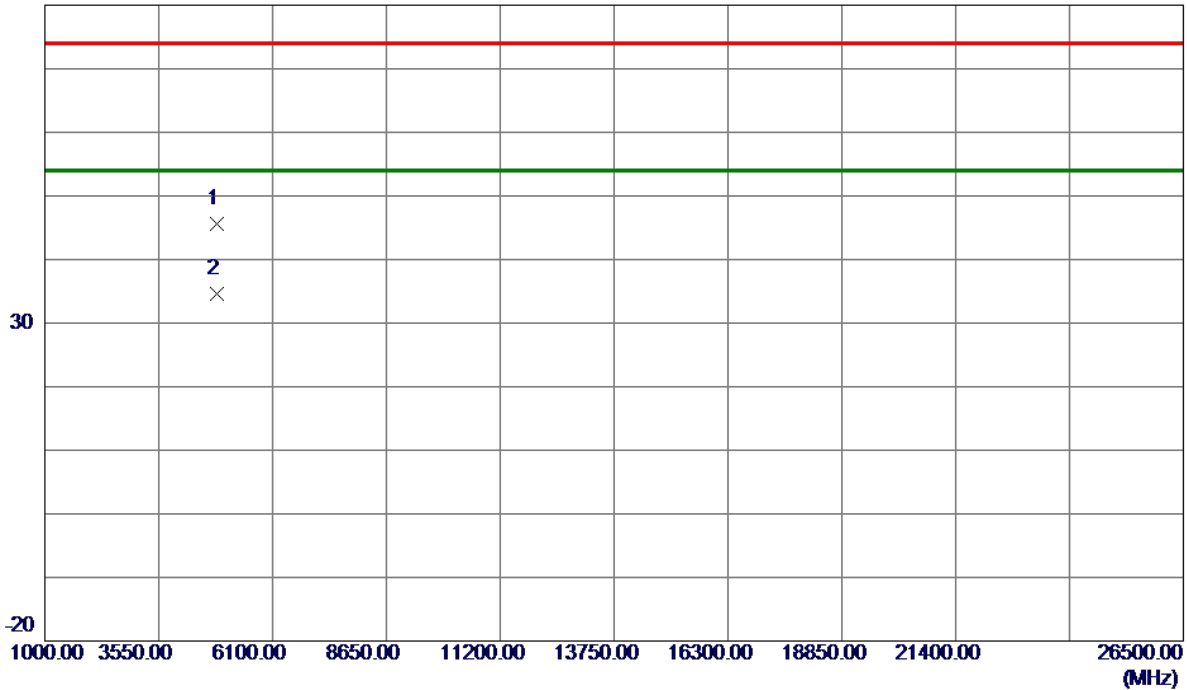
### REMARKS:

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

Test Mode:	TX N-40M Mode 2422MHz
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## Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4843.6000	37.41	8.11	45.52	74.00	-28.48	Peak	
2 *	4844.0500	26.42	8.11	34.53	54.00	-19.47	AVG	

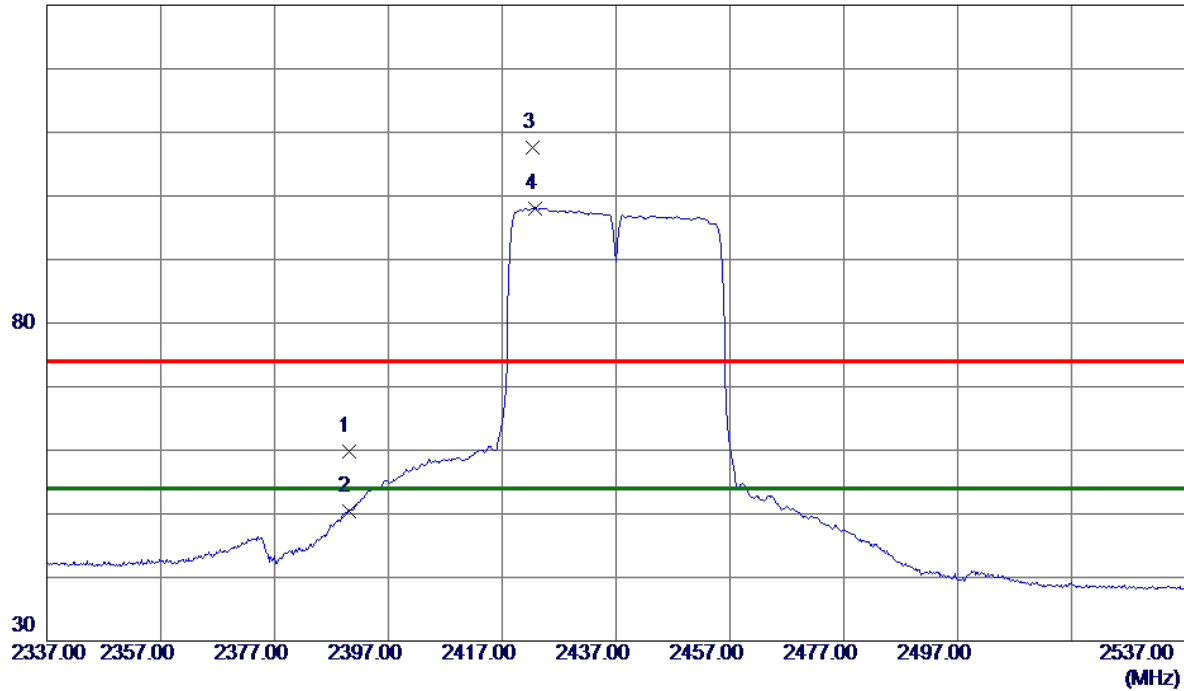
### REMARKS:

- (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	50.78	9.07	59.85	74.00	-14.15	Peak	
2	2390.0000	41.38	9.07	50.45	54.00	-3.55	AVG	
3	2422.4000	98.48	9.05	107.53	74.00	33.53	Peak	No Limit
4 *	2422.8000	89.05	9.05	98.10	54.00	44.10	AVG	No Limit

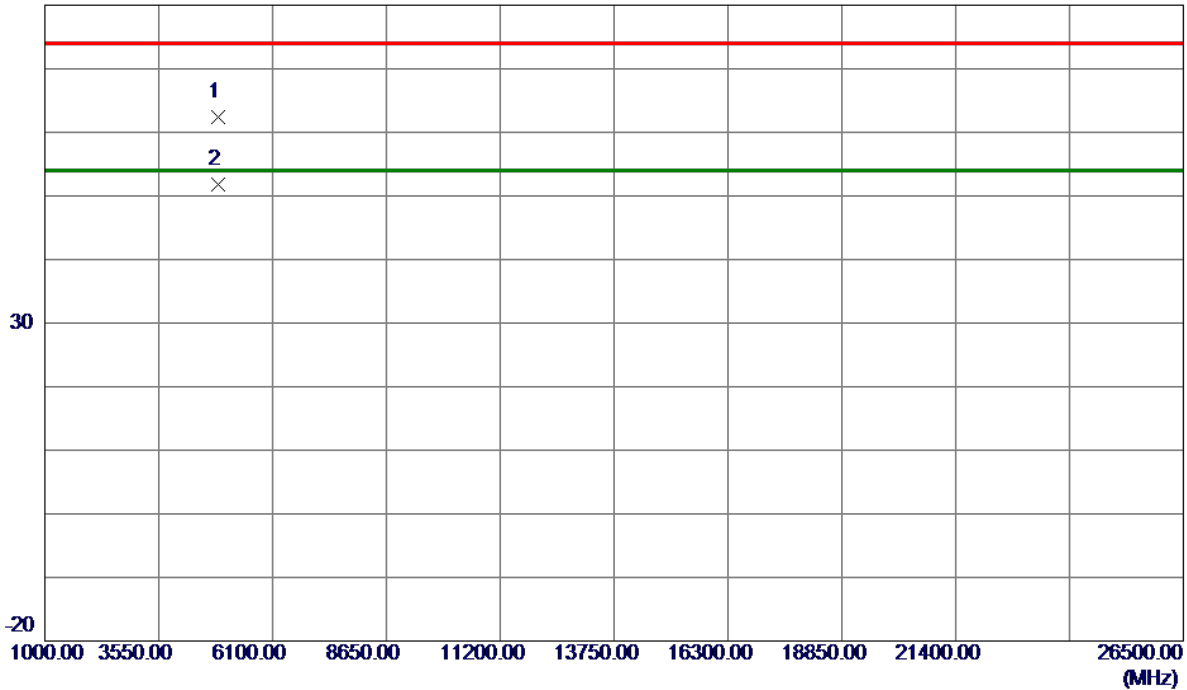
### REMARKS:

- (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	4870.9000	54.15	8.20	62.35	74.00	-11.65	Peak	
2 *	4873.8000	43.61	8.21	51.82	54.00	-2.18	AVG	

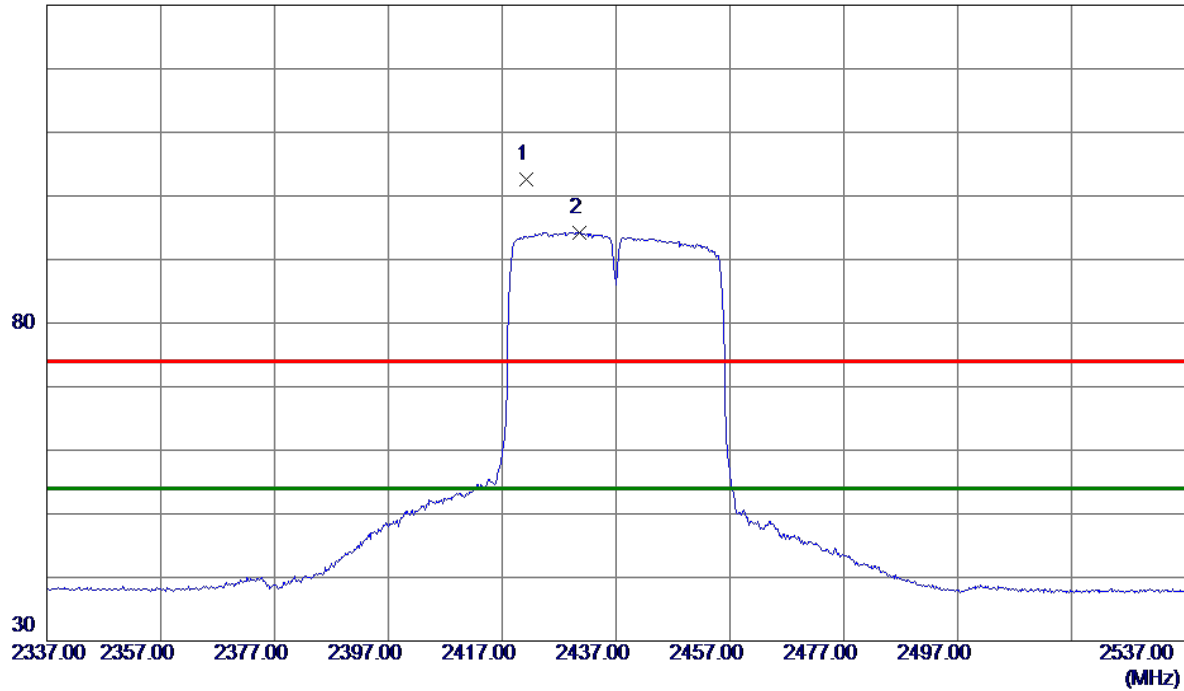
### REMARKS:

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

Test Mode: TX N-40M 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	2421.2000	93.51	9.05	102.56	74.00	28.56	Peak	No Limit
2 *	2430.6000	85.24	9.05	94.29	54.00	40.29	AVG	No Limit

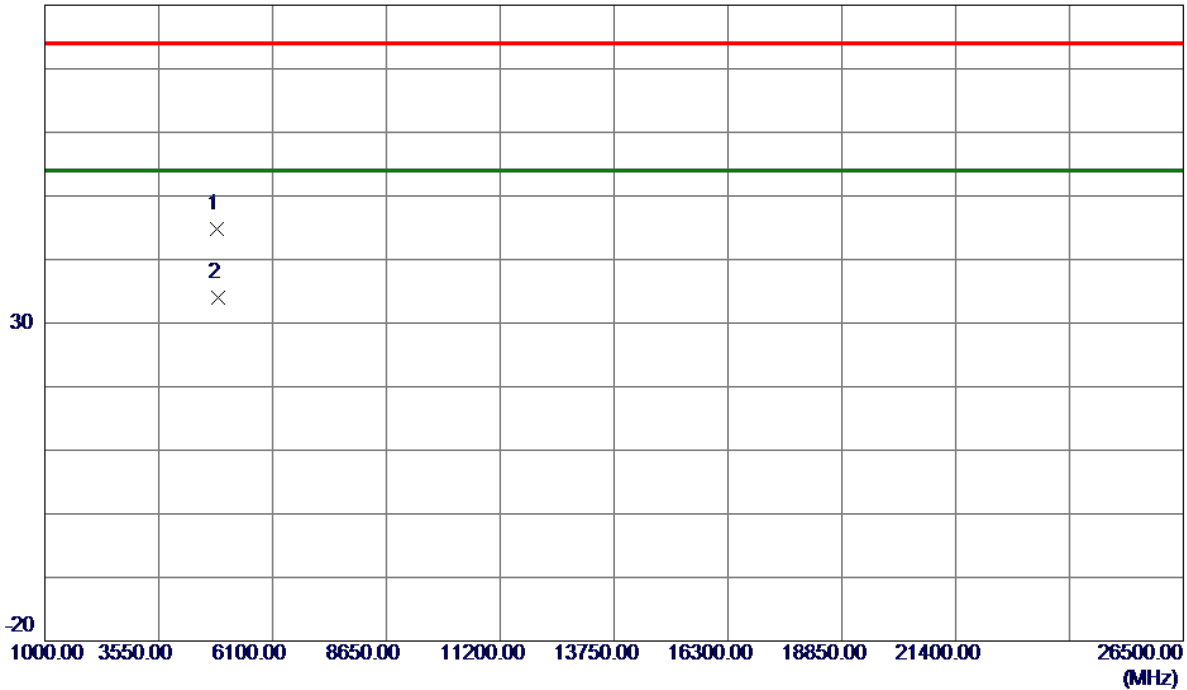
### REMARKS:

- (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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## 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	4850.7500	36.65	8.13	44.78	74.00	-29.22	Peak	
2 *	4870.5500	25.89	8.20	34.09	54.00	-19.91	AVG	

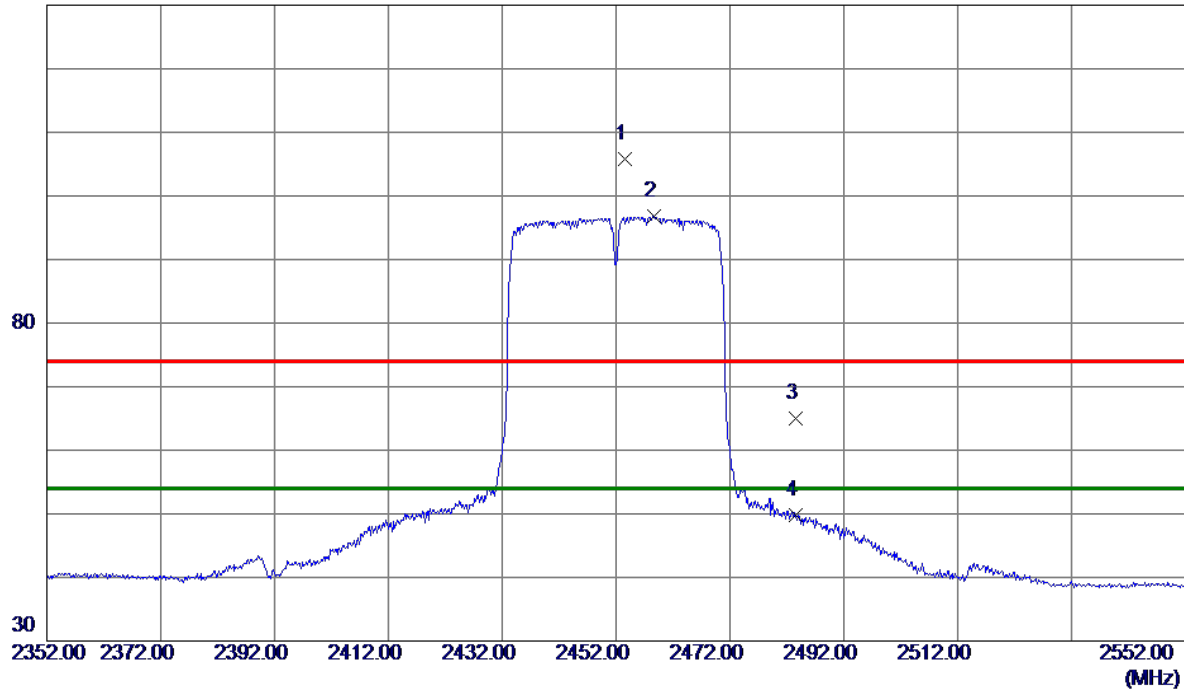
### REMARKS:

- (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	2453.5000	96.86	9.03	105.89	74.00	31.89	Peak	No Limit
2 *	2458.6000	87.75	9.03	96.78	54.00	42.78	AVG	No Limit
3	2483.5000	56.02	9.01	65.03	74.00	-8.97	Peak	
4	2483.5000	40.81	9.01	49.82	54.00	-4.18	AVG	

### REMARKS:

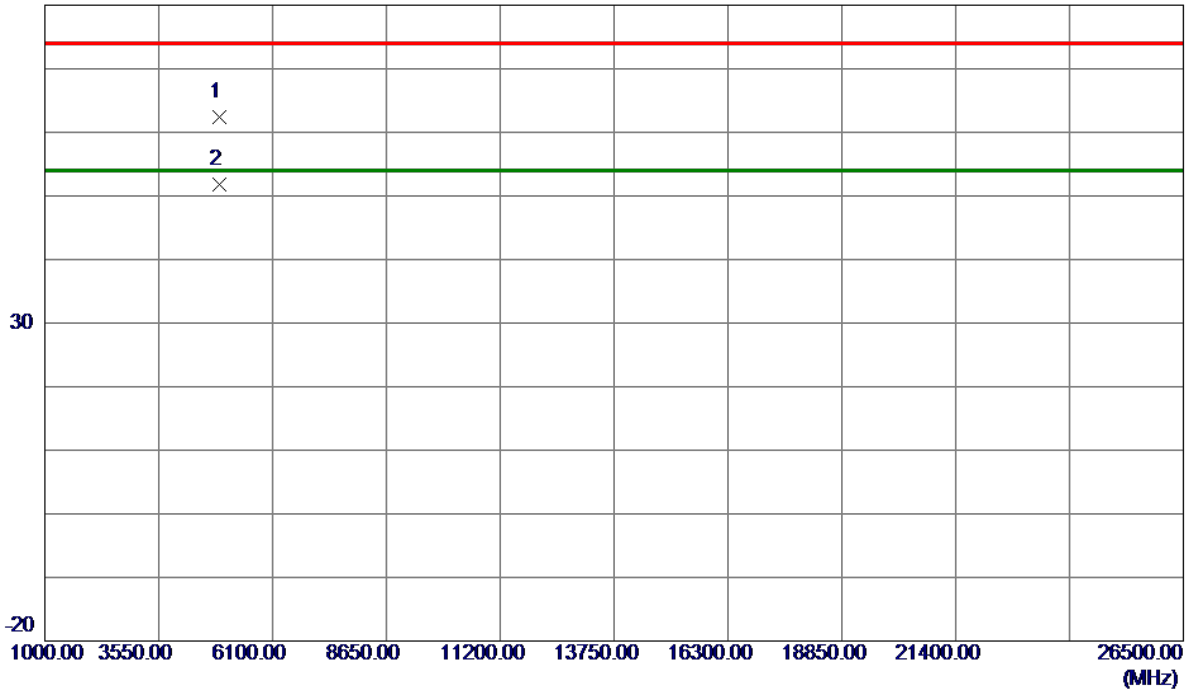
- (1) Measurement Value = Reading Level + Correct Factor.  
(2) Margin Level = Measurement Value - Limit Value.



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	4903.9500	54.06	8.31	62.37	74.00	-11.63	Peak	
2 *	4904.2000	43.46	8.31	51.77	54.00	-2.23	AVG	

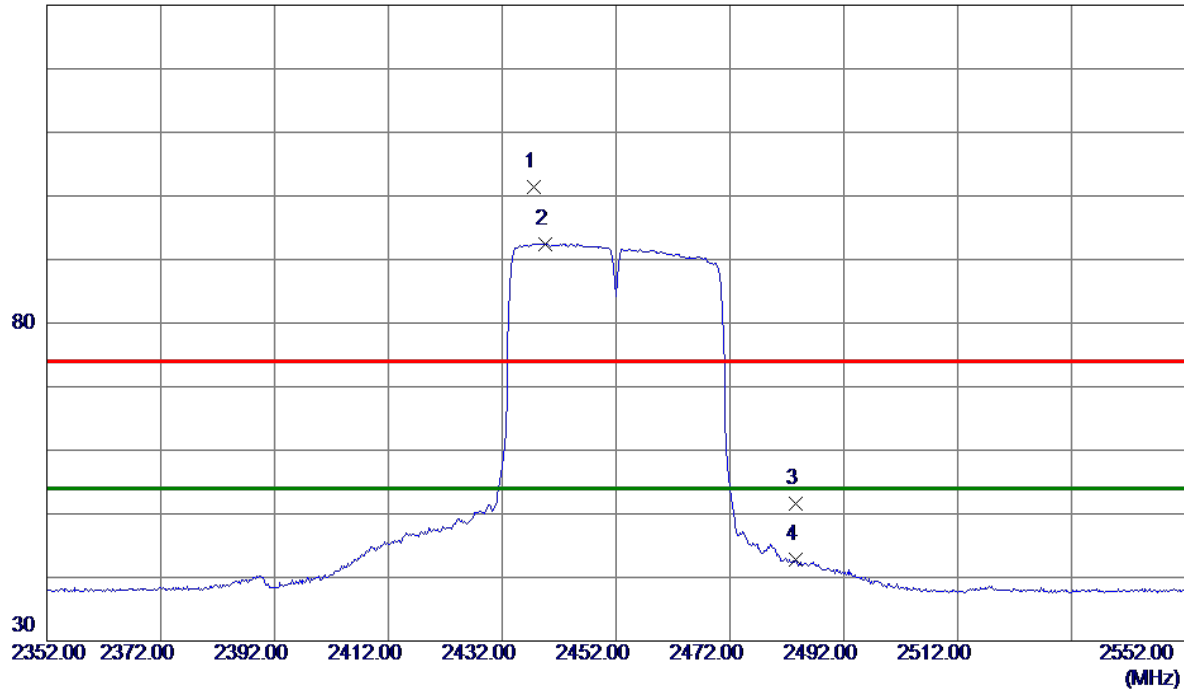
### REMARKS:

- (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	2437.6000	92.45	9.04	101.49	74.00	27.49	Peak	No Limit
2 *	2439.6000	83.41	9.04	92.45	54.00	38.45	AVG	No Limit
3	2483.5000	42.66	9.01	51.67	74.00	-22.33	Peak	
4	2483.5000	33.72	9.01	42.73	54.00	-11.27	AVG	

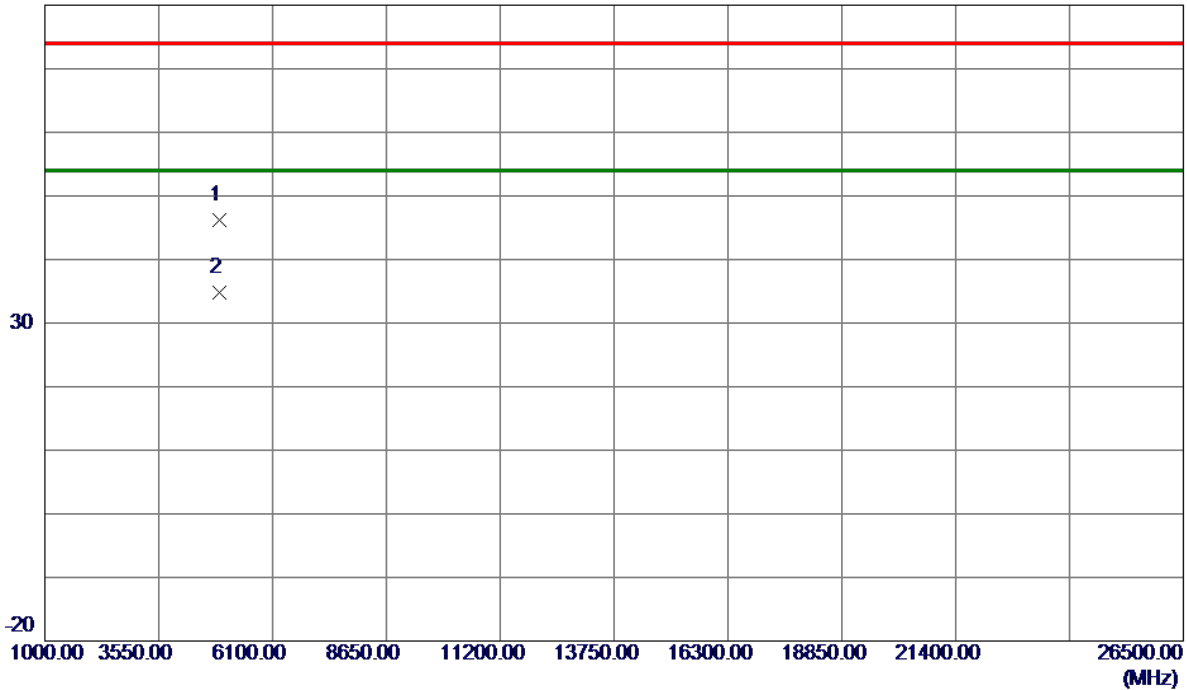
### REMARKS:

- (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	4903.4500	37.86	8.31	46.17	74.00	-27.83	Peak	
2 *	4904.0500	26.56	8.31	34.87	54.00	-19.13	AVG	

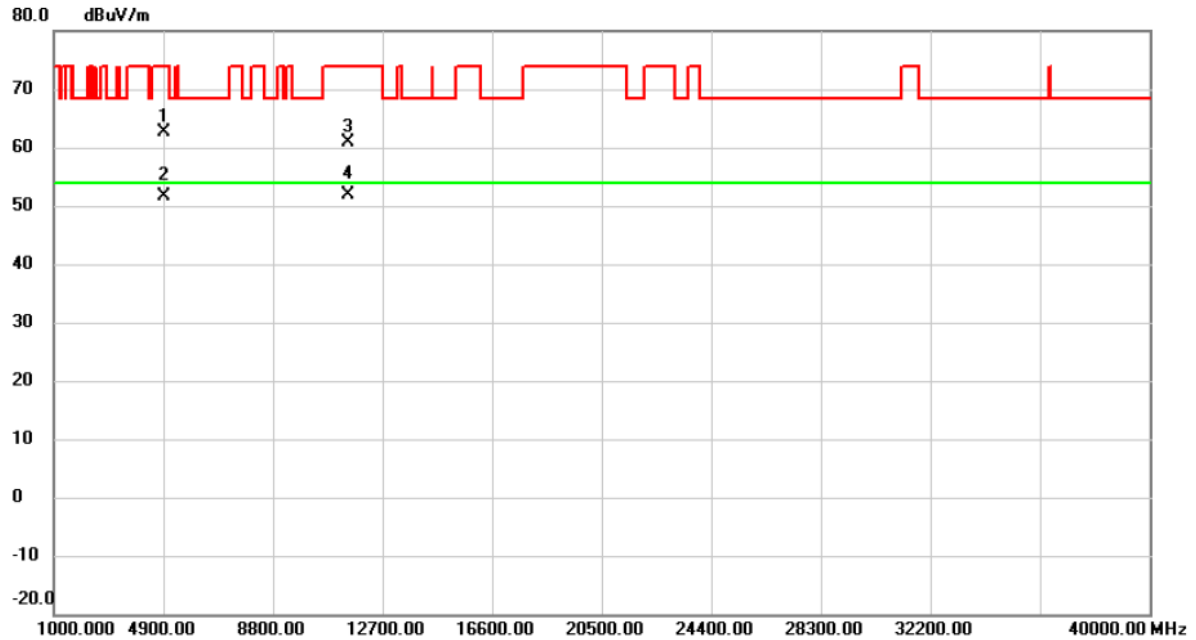
### REMARKS:

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

The worst case of simultaneous transmission:

Test Mode: TX WLAN 2.4G N-40M Mode 2452MHz + WLAN 5G N-20M Mode 5745MHz

## Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4904.050	54.44	8.30	62.74	74.00	-11.26	peak	
2		4904.120	43.33	8.30	51.63	54.00	-2.37	AVG	
3		11490.150	41.10	19.70	60.80	74.00	-13.20	peak	
4	*	11490.250	32.23	19.70	51.93	54.00	-2.07	AVG	

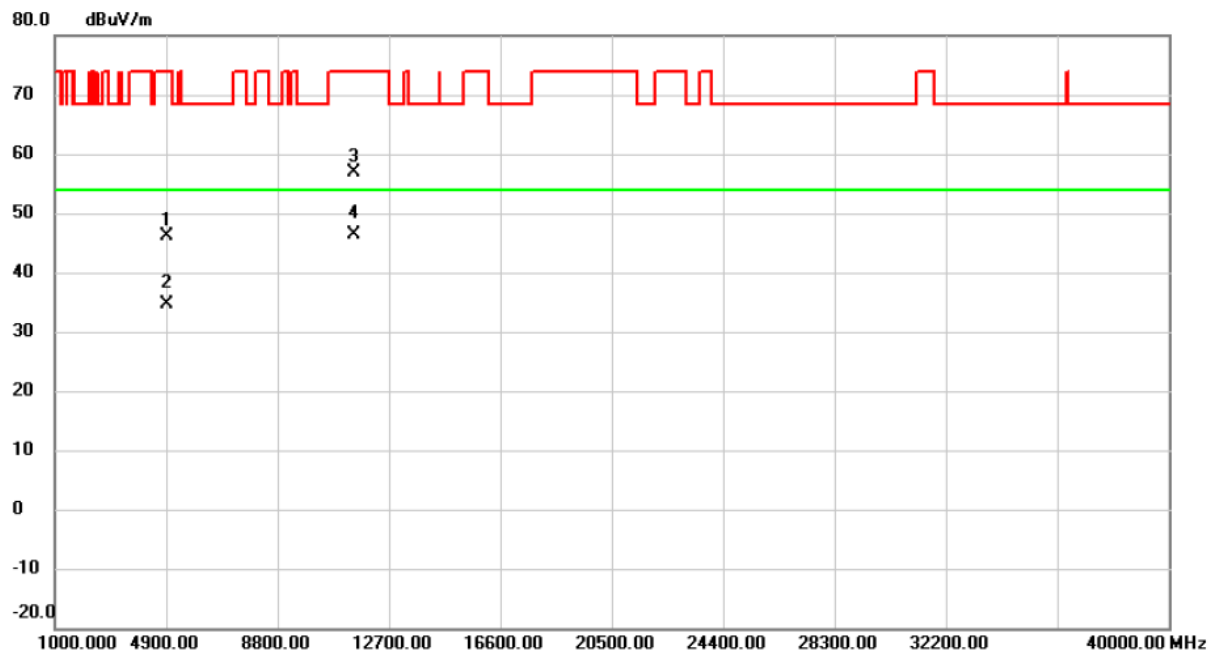
## REMARKS:

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

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

Test Mode: TX WLAN 2.4G N-40M Mode 2452MHz + WLAN 5G N-20M Mode 5745MHz

## Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.500	38.02	8.02	46.04	74.00	-27.96	peak	
2		4904.670	26.71	8.02	34.73	54.00	-19.27	AVG	
3		11490.260	39.88	16.95	56.83	74.00	-17.17	peak	
4	*	11490.350	29.32	16.95	46.27	54.00	-7.73	AVG	

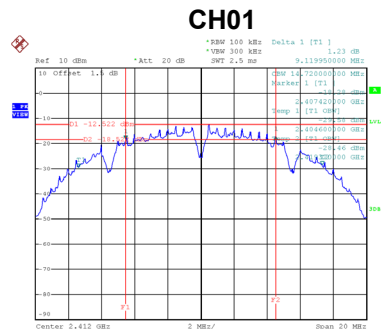
### REMARKS:

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

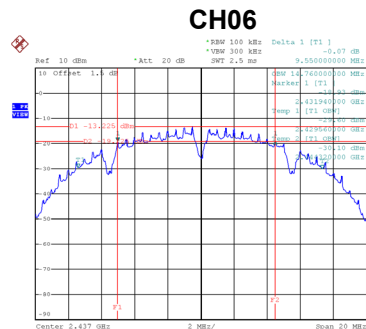
## **APPENDIX E - BANDWIDTH**

Test Mode	TX B Mode
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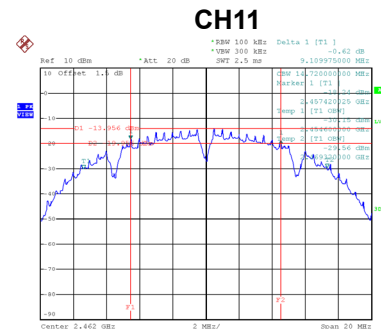
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	9.12	500	Complies
06	2437	9.55	500	Complies
11	2462	9.11	500	Complies



Date: 25\_MAR\_2020 14:40:134

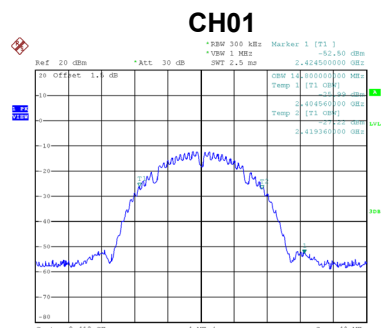


Date: 25\_MAR\_2020 14:42:29

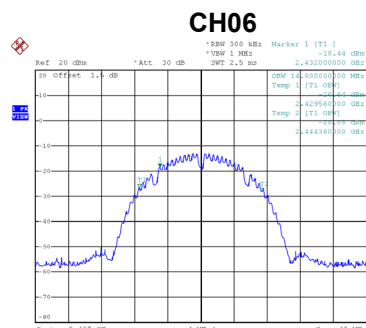


Date: 25\_MAR\_2020 14:45:40

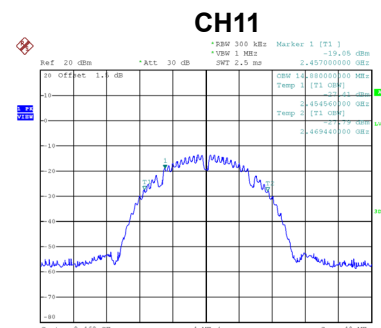
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	14.80	Complies
06	2437	14.80	Complies
11	2462	14.80	Complies



Date: 25\_MAR\_2020 14:48:35



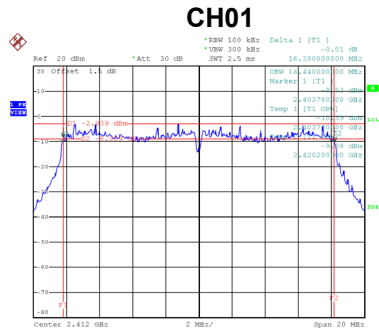
Date: 25\_MAR\_2020 14:48:50



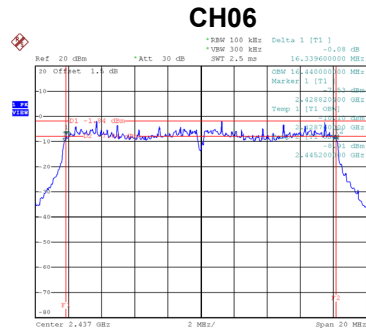
Date: 25\_MAR\_2020 14:49:05

Test Mode	TX G Mode
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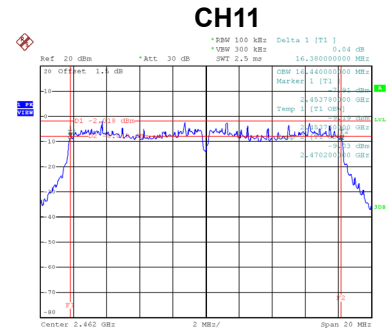
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	16.38	500	Complies
06	2437	16.34	500	Complies
11	2462	16.38	500	Complies



Date: 25.MAR.2020 14:06:08

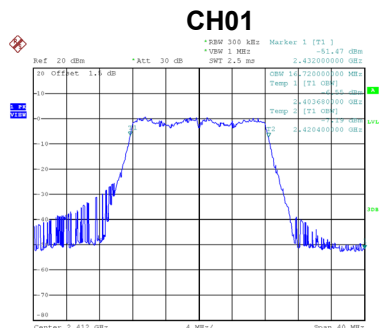


Date: 25.MAR.2020 14:07:40

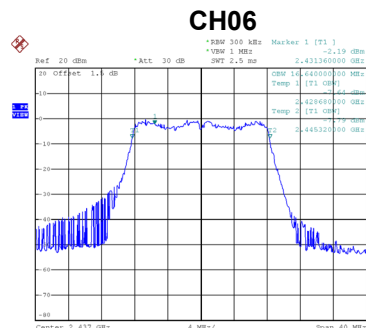


Date: 25.MAR.2020 14:08:51

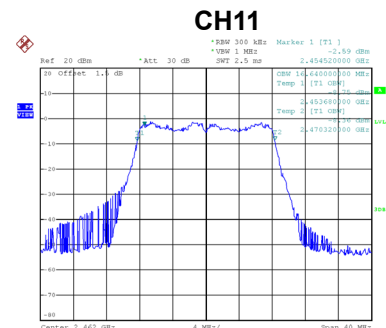
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	16.72	Complies
06	2437	16.64	Complies
11	2462	16.64	Complies



Date: 25.MAR.2020 14:49:29



Date: 25.MAR.2020 14:49:47

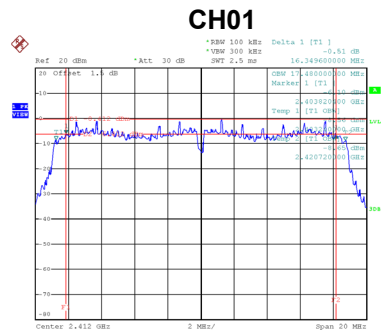


Date: 25.MAR.2020 14:50:02

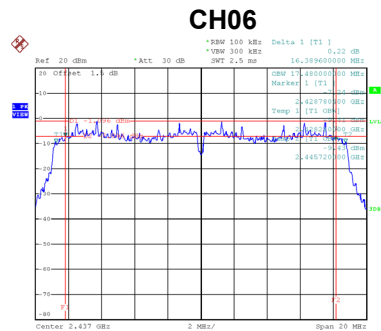


Test Mode	TX N-20M Mode
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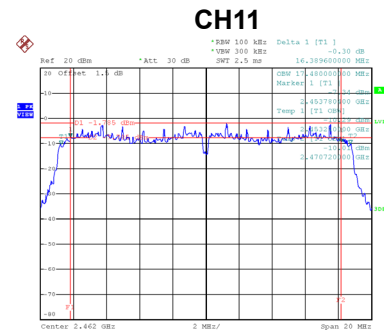
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	16.35	500	Complies
06	2437	16.39	500	Complies
11	2462	16.39	500	Complies



Date: 25.MAR.2020 14:10:46

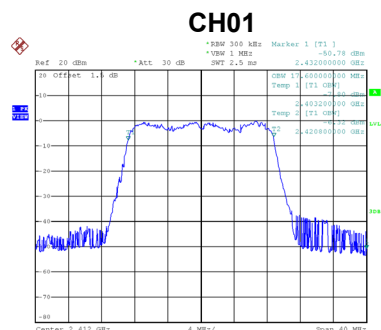


Date: 25.MAR.2020 14:12:11

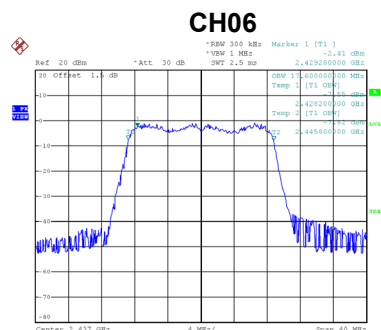


Date: 25.MAR.2020 14:13:38

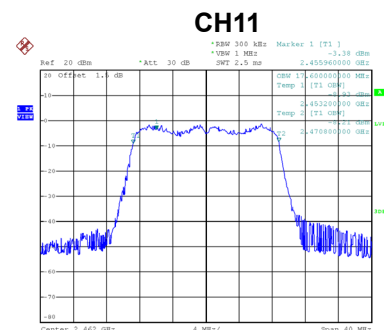
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.60	Complies
06	2437	17.60	Complies
11	2462	17.60	Complies



Date: 25.MAR.2020 14:50:19



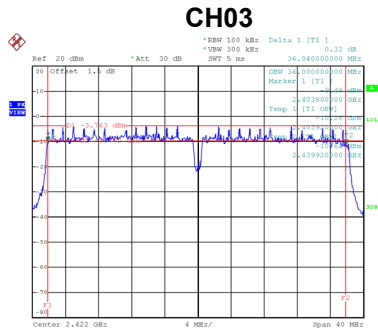
Date: 25.MAR.2020 14:50:33



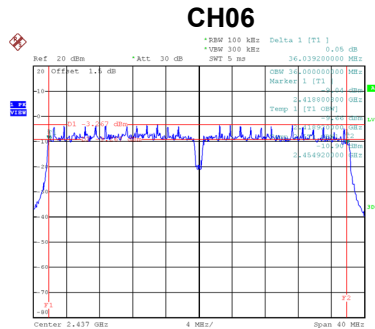
Date: 25.MAR.2020 14:50:47

Test Mode	TX N-40M Mode
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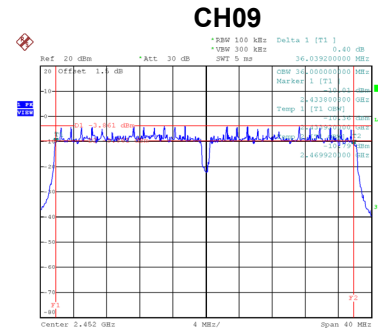
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	36.04	500	Complies
06	2437	36.04	500	Complies
09	2452	36.04	500	Complies



Date: 25.MAR.2020 14:15:15

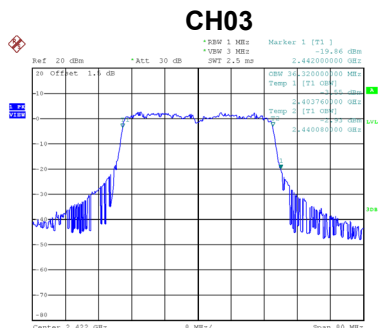


Date: 25.MAR.2020 14:16:29

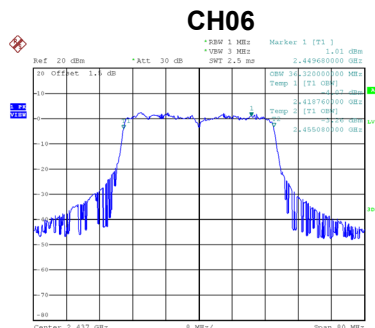


Date: 25.MAR.2020 14:17:40

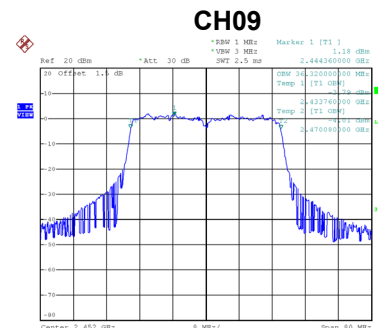
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
03	2422	36.32	Complies
06	2437	36.32	Complies
09	2452	36.32	Complies



Date: 25.MAR.2020 14:51:05



Date: 25.MAR.2020 14:51:20



Date: 25.MAR.2020 14:51:34

## **APPENDIX F - MAXIMUM OUTPUT POWER**

### Non Beamforming

Test Mode	TX B Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	-3.31	0.00	-3.31	30.00	1.0000	Complies
06	2437	-4.33	0.00	-4.33	30.00	1.0000	Complies
11	2462	-5.01	0.00	-5.01	30.00	1.0000	Complies

Test Mode	TX B Mode_Ant. 2
-----------	------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	-3.19	0.00	-3.19	30.00	1.0000	Complies
06	2437	-4.09	0.00	-4.09	30.00	1.0000	Complies
11	2462	-4.57	0.00	-4.57	30.00	1.0000	Complies

Test Mode	TX B Mode_Total
-----------	-----------------

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	-0.24	29.46	0.8831	Complies
06	2437	-1.20	29.46	0.8831	Complies
11	2462	-1.77	29.46	0.8831	Complies

Test Mode	TX G Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	7.42	0.37	7.79	30.00	1.0000	Complies
06	2437	8.21	0.37	8.58	30.00	1.0000	Complies
11	2462	8.02	0.37	8.39	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 2
-----------	------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	6.91	0.37	7.28	30.00	1.0000	Complies
06	2437	7.96	0.37	8.33	30.00	1.0000	Complies
11	2462	8.01	0.37	8.38	30.00	1.0000	Complies

Test Mode	TX G Mode_Total
-----------	-----------------

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	10.56	29.46	0.8831	Complies
06	2437	11.47	29.46	0.8831	Complies
11	2462	11.40	29.46	0.8831	Complies

Test Mode	TX N-20M Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	6.17	0.45	6.62	30.00	1.0000	Complies
06	2437	8.03	0.45	8.48	30.00	1.0000	Complies
11	2462	7.08	0.45	7.53	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 2
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	6.31	0.45	6.76	30.00	1.0000	Complies
06	2437	7.69	0.45	8.14	30.00	1.0000	Complies
11	2462	7.27	0.45	7.72	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Total
-----------	---------------------

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	9.71	29.46	0.8831	Complies
06	2437	11.33	29.46	0.8831	Complies
11	2462	10.64	29.46	0.8831	Complies

Test Mode	TX N-40M Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	7.82	0.50	8.32	30.00	1.0000	Complies
06	2437	8.45	0.50	8.95	30.00	1.0000	Complies
09	2452	8.61	0.50	9.11	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 2
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	7.57	0.50	8.07	30.00	1.0000	Complies
06	2437	8.01	0.50	8.51	30.00	1.0000	Complies
09	2452	8.06	0.50	8.56	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Total
-----------	---------------------

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	11.21	29.46	0.8831	Complies
06	2437	11.75	29.46	0.8831	Complies
09	2452	11.86	29.46	0.8831	Complies

### Beamforming

Test Mode	TX N-20M Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	6.05	0.45	6.50	30.00	1.0000	Complies
06	2437	7.85	0.45	8.30	30.00	1.0000	Complies
11	2462	6.92	0.45	7.37	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 2
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	6.17	0.45	6.62	30.00	1.0000	Complies
06	2437	7.52	0.45	7.97	30.00	1.0000	Complies
11	2462	7.12	0.45	7.57	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Total
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Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	9.58	29.34	0.8590	Complies
06	2437	11.15	29.34	0.8590	Complies
11	2462	10.49	29.34	0.8590	Complies



Test Mode	TX N-40M Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	7.75	0.50	8.25	30.00	1.0000	Complies
06	2437	8.23	0.50	8.73	30.00	1.0000	Complies
09	2452	8.47	0.50	8.97	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 2
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	7.32	0.50	7.82	30.00	1.0000	Complies
06	2437	7.79	0.50	8.29	30.00	1.0000	Complies
09	2452	7.93	0.50	8.43	30.00	1.0000	Complies

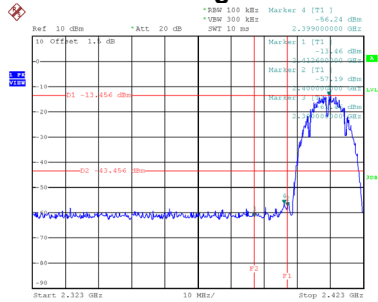
Test Mode	TX N-40M Mode_Total
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Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	11.05	29.34	0.8590	Complies
06	2437	11.53	29.34	0.8590	Complies
09	2452	11.72	29.34	0.8590	Complies

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

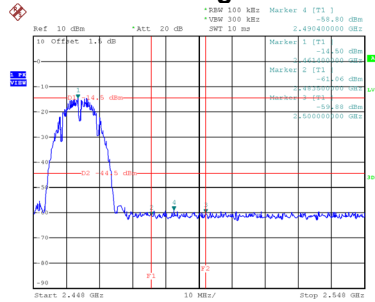
Test Mode TX B Mode\_Ant. 1

## Bandedge-CH01



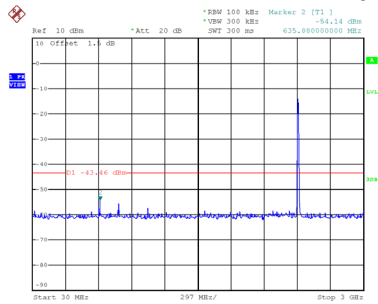
Date: 25.MAR.2020 14:40:42

## Bandedge-CH11

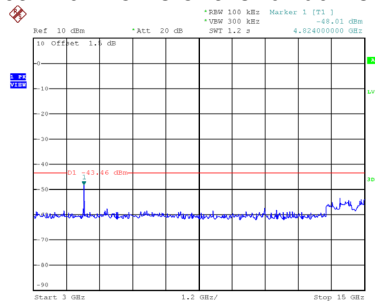


Date: 25.MAR.2020 14:45:48

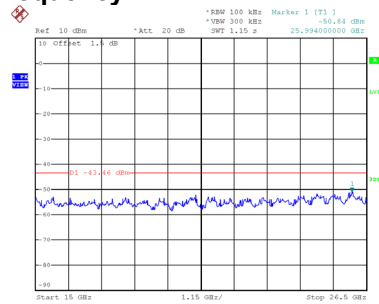
## CH01 – 10th Harmonic of the fundamental frequency



Date: 25.MAR.2020 14:40:54

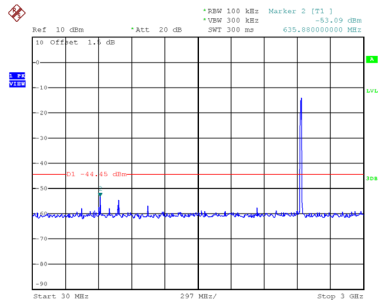


Date: 25.MAR.2020 14:41:01

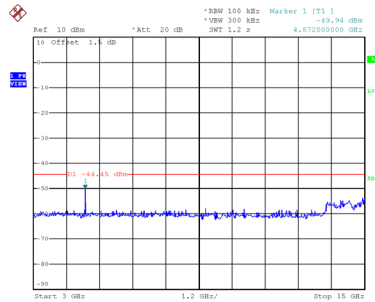


Date: 25.MAR.2020 14:41:12

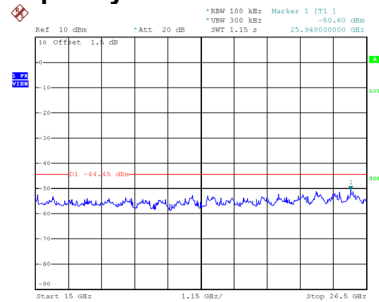
## CH06 – 10th Harmonic of the fundamental frequency



Date: 25.MAR.2020 14:42:50

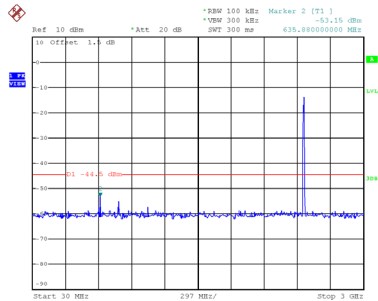


Date: 25.MAR.2020 14:42:56

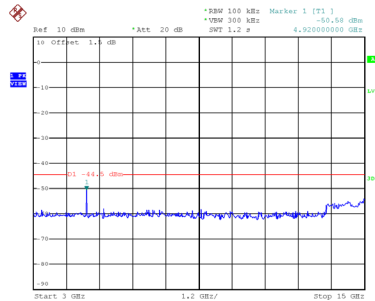


Date: 25.MAR.2020 14:43:03

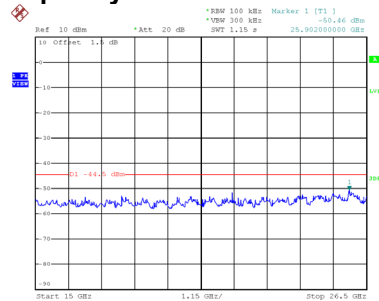
## CH11 – 10th Harmonic of the fundamental frequency



Date: 25.MAR.2020 14:46:00



Date: 25.MAR.2020 14:46:07



Date: 25.MAR.2020 14:46:14