

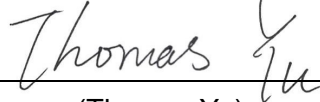
# FCC Radio Test Report

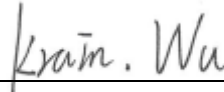
## FCC ID: KA2WR920VA1-1

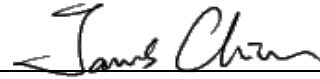
This report concerns: Original Grant

**Project No.** : 1901H008A  
**Equipment** : CPE  
**Test Model** : DWR-920V  
**Series Model** : N/A  
**Applicant** : D-Link Corporation  
**Address** : No.289, Xinhua 3rd Rd., Neihu District, Taipei 11494, Taiwan

**Date of Receipt** : Mar. 19, 2019  
**Date of Test** : Mar. 19, 2019~Apr. 18, 2019  
**Issued Date** : May. 29, 2019  
**Tested by** : BTL Inc.

**Testing Engineer** :   
(Thomas Yu)

**Technical Manager** :   
(Krain Wu)

**Authorized Signatory** :   
(James Chiu)

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Certificate # 5123. 03

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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.	May. 05, 2019
R01	Revised report to address TCB's comments.	May. 29, 2019

## 1. GENERAL SUMMARY

Equipment : CPE  
Brand Name : D-Link  
Test Model : DWR-920V  
Series Model : N/A  
Applicant : D-Link Corporation  
Manufacturer : D-Link Corporation  
Address : No.289, Xinhua 3rd Rd., Neihu District, Taipei 11494, Taiwan  
Date of Test : Mar. 19, 2019~Apr. 18, 2019  
Test Sample : Engineering Sample No.: B190301797  
Standard(s) : FCC Part15, Subpart C (15.247)  
ANSI C63.10-2013  
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.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-4-1901H008A ) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

**Test results included in this report are only for the WLAN 2.4 GHz part.**

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	-----
15.247(d) 15.205 15.209	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:

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



## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210, China  
 BTL's Test Firm Registration Number for FCC: 476765  
 BTL's Designation Number for FCC: CN1241

## 2.2 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. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U,(dB)
SH-C01	CISPR	150 kHz ~ 30MHz	± 2.26

### B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
SH-CB01	CISPR	9 KHz~30 MHz	V	3.79
		9 KHz~30 MHz	H	3.57
		30 MHz~200 MHz	V	4.04
		30 MHz~200 MHz	H	3.76
		200 MHz~1,000 MHz	V	4.24
		200 MHz~1,000 MHz	H	3.84
		1 GHz~18 GHz	V	4.46
		1 GHz~18 GHz	H	4.40
		18 GHz~40 GHz	V	3.95
		18 GHz~40 GHz	H	3.95

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

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	CPE
Brand Name	D-Link
Test Model	DWR-920V
Series Model	N/A
Model Difference(s)	N/A
Software Version	A1
Hardware Version	01.01
Power Source	DC voltage supplied from AC/DC adapter. Model: AMS135-1201000FU
Power Rating	I/P:100-240V~, 50/60Hz, 0.5A      O/P:12V--- 1.0A
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: 16.44 dBm (0.0441 W) IEEE 802.11g: 21.85 dBm (0.1531 W) IEEE 802.11n (HT20): 22.10 dBm (0.1622 W) IEEE 802.11n (HT40): 23.45 dBm (0.2213 W)
Maximum Output Power Beamforming	IEEE 802.11n (HT20): 21.46 dBm (0.1400 W) IEEE 802.11n (HT40): 22.65 dBm (0.1841 W)

Note:

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

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

### 3. Antenna Specification:

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

Note:

This EUT supports MIMO 2X2, any transmit signals are correlated with each other. Then, Directional gain =  $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N]$  dBi. So,

- (1) For Non Beamforming function, Directional gain =  $10\log[(10^{3.14/20} + 10^{3.40/20})^2 / 2]$  dBi = 4.01. The output power limit is 30-4.01+6=31.99, the power density limit is 17-4.01+6=18.99.
- (2) For Beamforming function, Beamforming Gain: 2dBi. So, Directional gain = 1+2=3dBi. Then, the output power limit is 30-3+6=33, the power density limit is 17-3+6=20.

### 4. Table for Antenna Configuration:

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

## 3.2 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

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

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

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

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

**NOTE:**

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1 Mbps)  
 802.11g mode: OFDM (6 Mbps)  
 802.11n HT20 mode : BPSK (13 Mbps)  
 802.11n HT40 mode : BPSK (27 Mbps)  
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated emission below 1 GHz test, the IEEE 802.11b 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.

### 3.3 PARAMETERS OF TEST SOFTWARE

#### Non-Beamforming

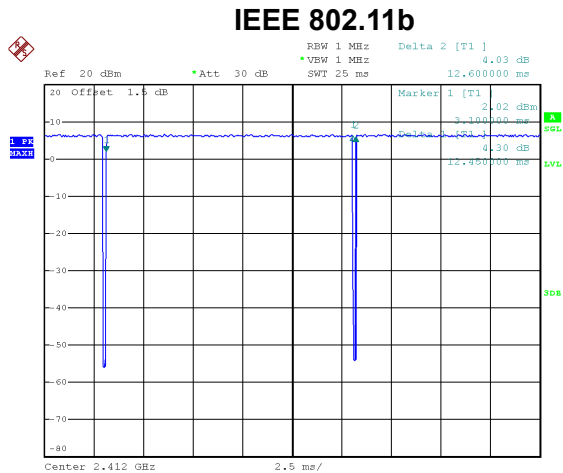
Test Software	ADB		
Test Frequency (MHz)	2412	2437	2462
IEEE 802.11b	34	30	32
IEEE 802.11g	40	36	38
IEEE 802.11n (HT20)	33/33	30/33	31/31
Test Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	35/37	34/36	34/37

#### Beamforming

Test Software	ADB		
Test Frequency (MHz)	2412	2437	2462
IEEE 802.11n (HT20)	33/33	30/33	31/31
Test Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	35/37	34/36	34/37

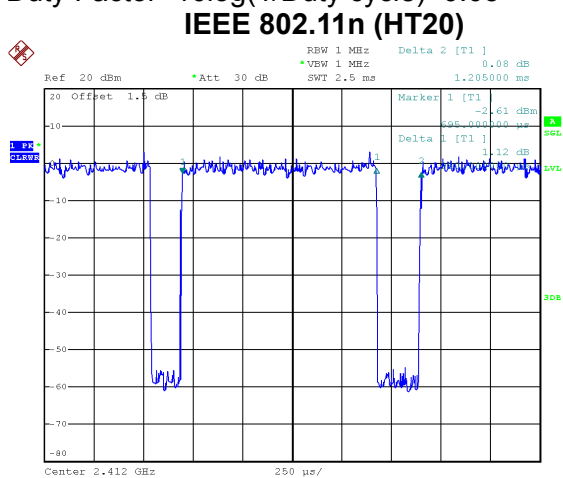
### 3.4 DUTY CYCLE

If duty cycle is  $\geq 98\%$ , duty factor is not required.  
If duty cycle is  $< 98\%$ , duty factor shall be considered.



Date: 26.MAR.2019 14:08:08

Duty cycle = 12.450 ms / 12.600 ms = 98.81%  
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.05$



Date: 26.MAR.2019 14:09:16

Duty cycle = 0.980 ms / 1.205 ms = 81.33%  
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.90$

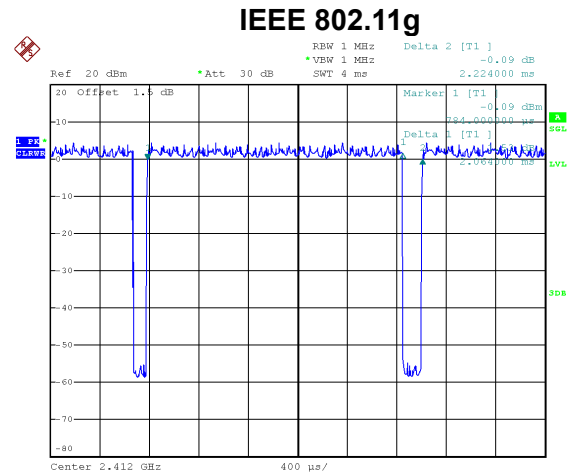
NOTE:

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%).

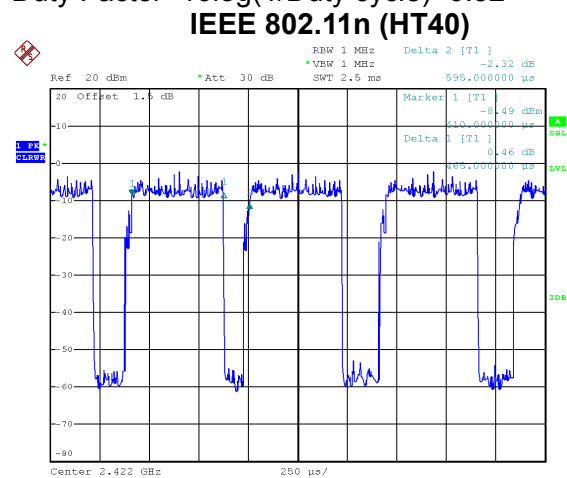
For IEEE 802.11n (HT40):

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%).



Date: 26.MAR.2019 14:08:46

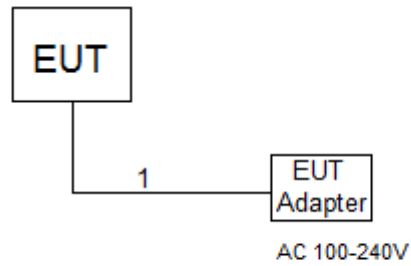
Duty cycle = 2.064 ms / 2.224 ms = 92.81%  
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.32$



Date: 26.MAR.2019 14:17:43

Duty cycle = 0.465 ms / 0.595 ms = 78.15%  
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 1.07$

### 3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



### 3.6 SUPPORT UNITS

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

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.2m	DC Cable

## 4. AC POWER LINE CONDUCTED EMISSIONS TEST

### 4.1 LIMIT

Frequency of Emission (MHz)	Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 - 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

### 4.2 TEST PROCEDURE

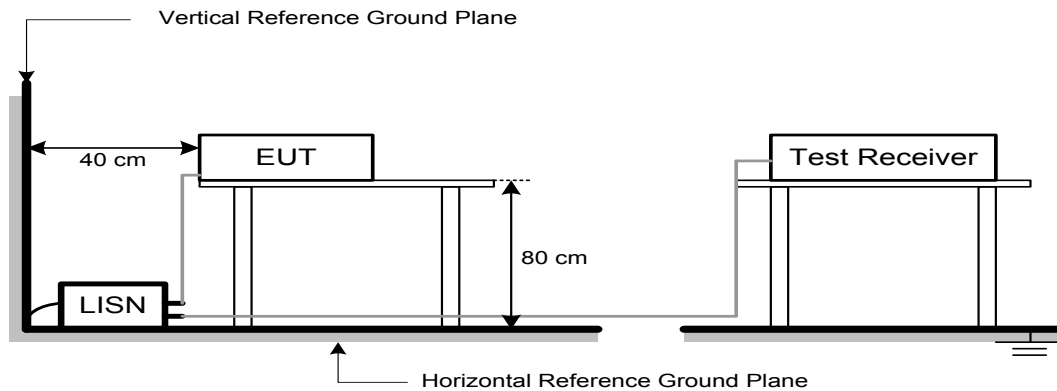
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

### 4.3 DEVIATION FROM TEST STANDARD

No deviation



#### 4.4 TEST SETUP



#### 4.5 EUT OPERATION CONDITIONS

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

#### 4.6 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 53%    Test Voltage: AC 120V/60Hz

#### 4.7 TEST RESULTS

Please refer to the APPENDIX A.

## 5. RADIATED EMISSIONS TEST

### 5.1 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)	Band edge/ Harmonic at 3m (dBμV/m)		Harmonic at 1.5m (dBμV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	80 (Note 5)	60(Note 5)

#### 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).
- (4) The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)  
 Margin Level = Measurement Value - Limit Value

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	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

## 5.2 TEST PROCEDURE

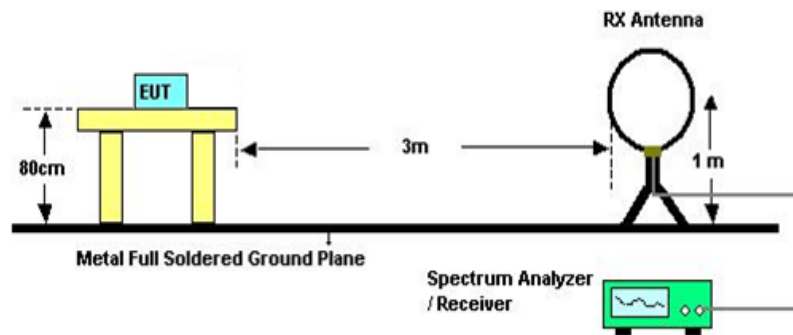
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 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.

## 5.3 DEVIATION FROM TEST STANDARD

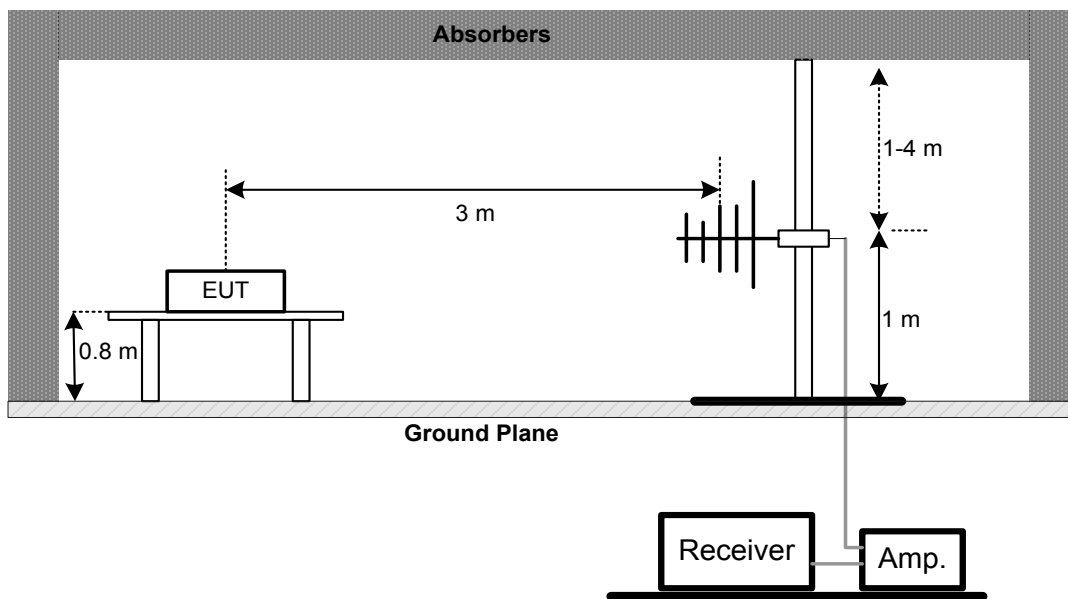
No deviation

## 5.4 TEST SETUP

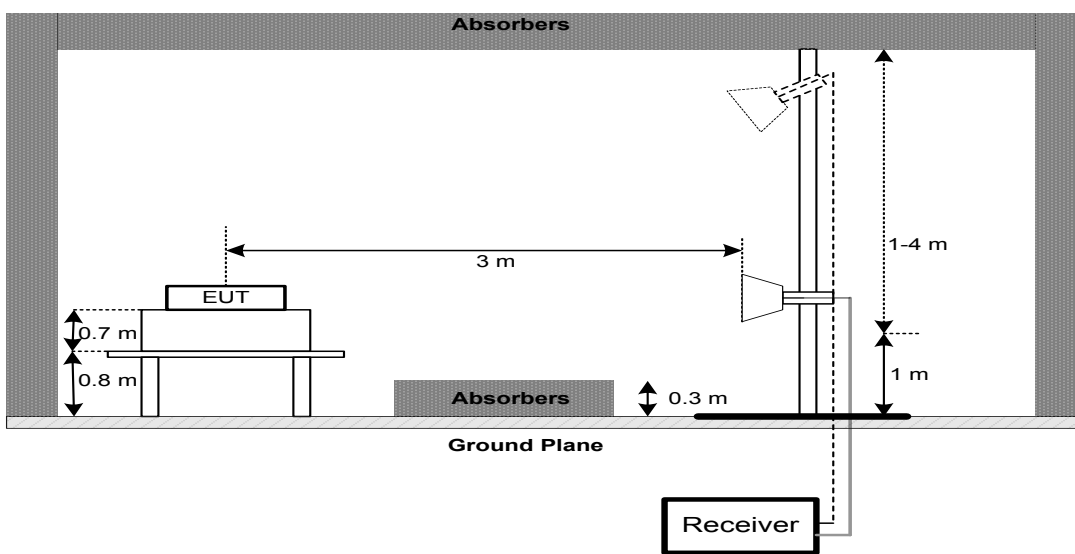
9 kHz-30 MHz

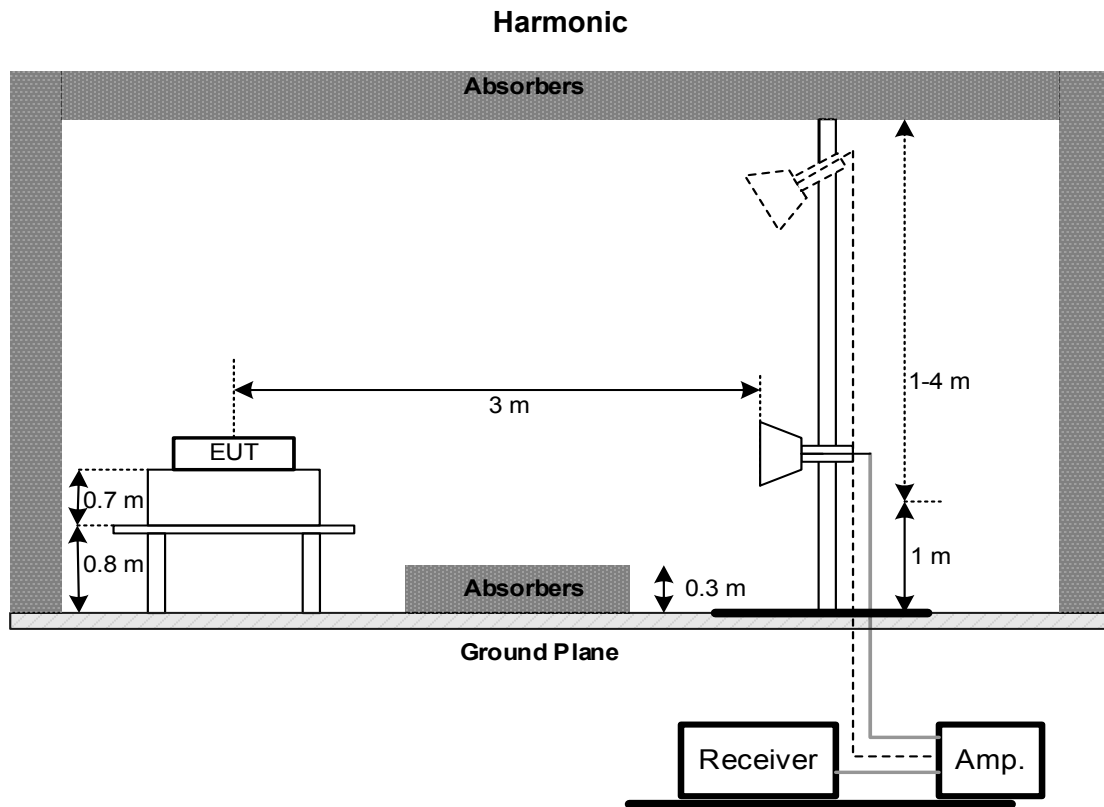


30 MHz to 1 GHz



Above 1 GHz  
Band edge





### 5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 5.6 EUT TEST CONDITIONS

Temperature: 18.4°C    Relative Humidity: 53%    Test Voltage: AC 120V/60Hz

### 5.7 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B

Remark:

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

### 5.8 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

### 5.9 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.

## 6. BANDWIDTH TEST

### 6.1 LIMIT

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

### 6.2 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 = 2.5 ms.
- The bandwidth was performed in accordance with method 11.8 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 EUT TEST CONDITIONS

Temperature: 21°C    Relative Humidity: 54%    Test Voltage: AC 120V/60Hz

### 6.7 TEST RESULTS

Please refer to the APPENDIX E.

## 7. MAXIMUM OUTPUT POWER TEST

### 7.1 LIMIT

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

### 7.2 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 of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

### 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 EUT TEST CONDITIONS

Temperature: 21°C    Relative Humidity: 54%    Test Voltage: AC 120V/60Hz

### 7.7 TEST RESULTS

Please refer to the APPENDIX F.

## 8. CONDUCTED SPURIOUS EMISSIONS

### 8.1 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. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

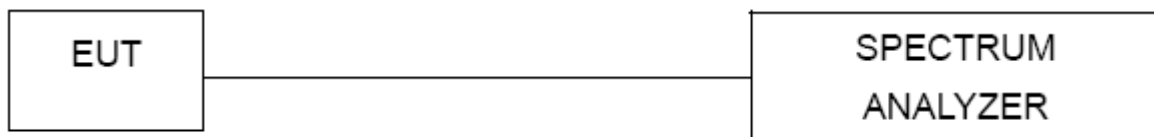
### 8.2 TEST PROCEDURE

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

### 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 EUT TEST CONDITIONS

Temperature: 21°C    Relative Humidity: 54%    Test Voltage: AC 120V/60Hz

### 8.7 TEST RESULTS

Please refer to the APPENDIX G.



## 9. POWER SPECTRAL DENSITY TEST

### 9.1 LIMIT

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

### 9.2 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.

### 9.3 DEVIATION FROM STANDARD

No deviation.

### 9.4 TEST SETUP



### 9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 9.6 EUT TEST CONDITIONS

Temperature: 21°C    Relative Humidity: 54%    Test Voltage: AC 120V/60Hz

### 9.7 TEST RESULTS

Please refer to the APPENDIX H.

## 10. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Line Impedance Stabilisation Network	Schwarzbeck	NNLK 8121	8121-822	Mar. 29, 2020
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Nov. 20, 2020
3	EMI Test Receiver	R&S	ESCI	100082	Mar. 29, 2020
4	50Ω coaxial switch	Anritsu	MP59B	6201750902	Jul. 17, 2019
5	Cable	10m	EMCRG400-BM-NM-10000	170628	Jun. 10, 2019
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EMCI	EMCI LPA600	275	Mar. 29, 2020
2	Cable	N/A	EMCRG400-BM-NM-10000	170628	Jun. 10, 2019
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 29, 2020
4	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	719	Mar. 29, 2020
2	Pre-Amplifier	emci	EMC9135	980400	Mar. 29, 2020
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 29, 2020
4	Attenuator	emci	EMCI-N-6-06	AT-N0644	Mar. 29, 2020
5	Cable	7m	EMC104-SM-SM-7000	170330	Jun. 10, 2019
6	Cable	1m	EMC104-SM-SM-1000	170331	Jun. 10, 2019
7	Cable	3.5m	EMC104-SM-NM-3500	170621	Jun. 10, 2019
8	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A

### Radiated Emissions - Above 1 GHz

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double-Ridged Waveguide Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1787	Mar. 29, 2020
2	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C	00203919	Mar. 29, 2020
3	Pre-Amplifier	emci	EMC012645SE	980421	Mar. 29, 2020
4	Pre-Amplifier	emci	EMC184045SE	980409	Mar. 29, 2020
5	EXA Spectrum Analyzer	Keysight	N9010A	MY56480559	Mar. 29, 2020
6	MXE EMI Receiver	Keysight	N9038A	MY56400088	Mar. 29, 2020
7	Cable	7m	EMC104-SM-SM-7000	170330	Jun. 10, 2019
8	Cable	1m	EMC104-SM-SM-1000	170331	Jun. 10, 2019
9	Cable	3.5m	EMC104-SM-NM-3500	170621	Jun. 10, 2019
10	Cable	0.8m	EMC102-SM-SM-800	170335	Jun. 10, 2019
11	Cable	6m	EMC102-SM-SM-6000	170336	Jun. 10, 2019
12	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

### Bandwidth

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020

### Peak Output Power

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Keysight	8990B	MY51000507	Jul. 27, 2019
2	Pulse Power Sensor	Keysight	N1923A	MY58310003	Aug. 07, 2019

### Antenna Conducted Spurious Emissions

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020

### Power Spectral Density

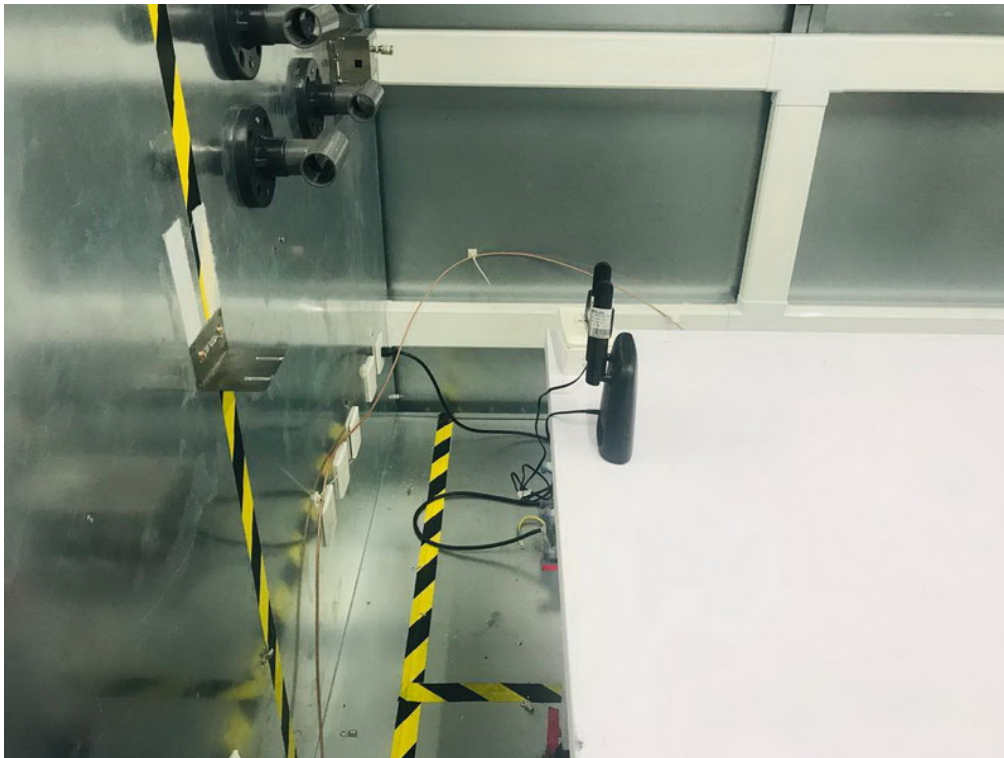
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 29, 2020

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

All calibration period of equipment list is one year.

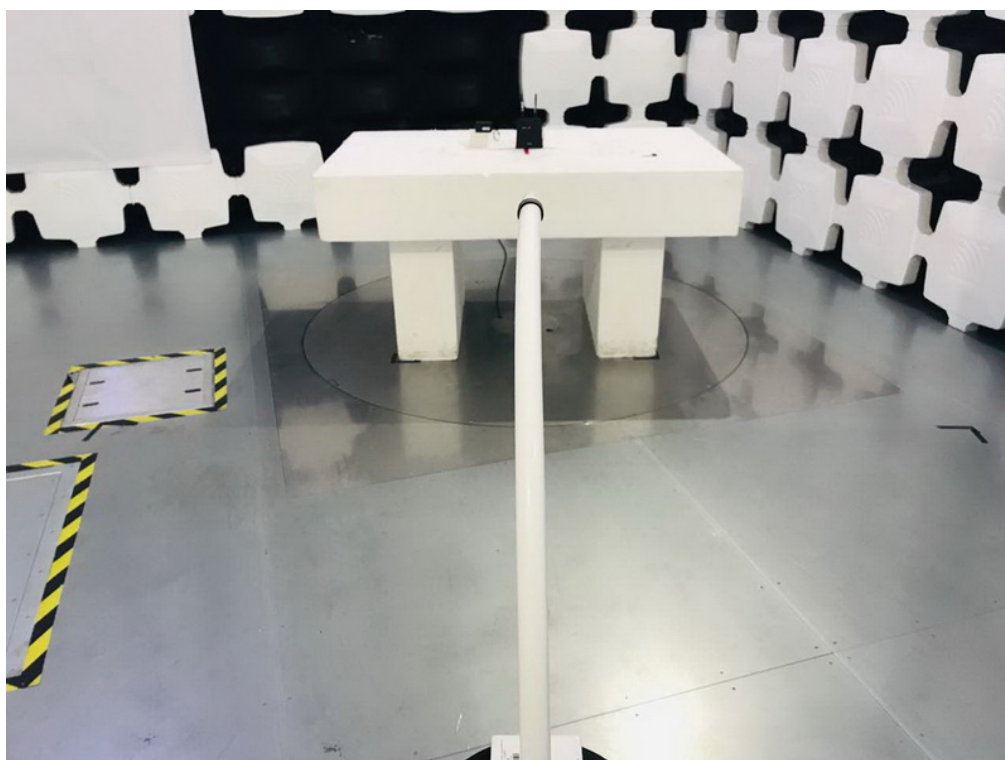
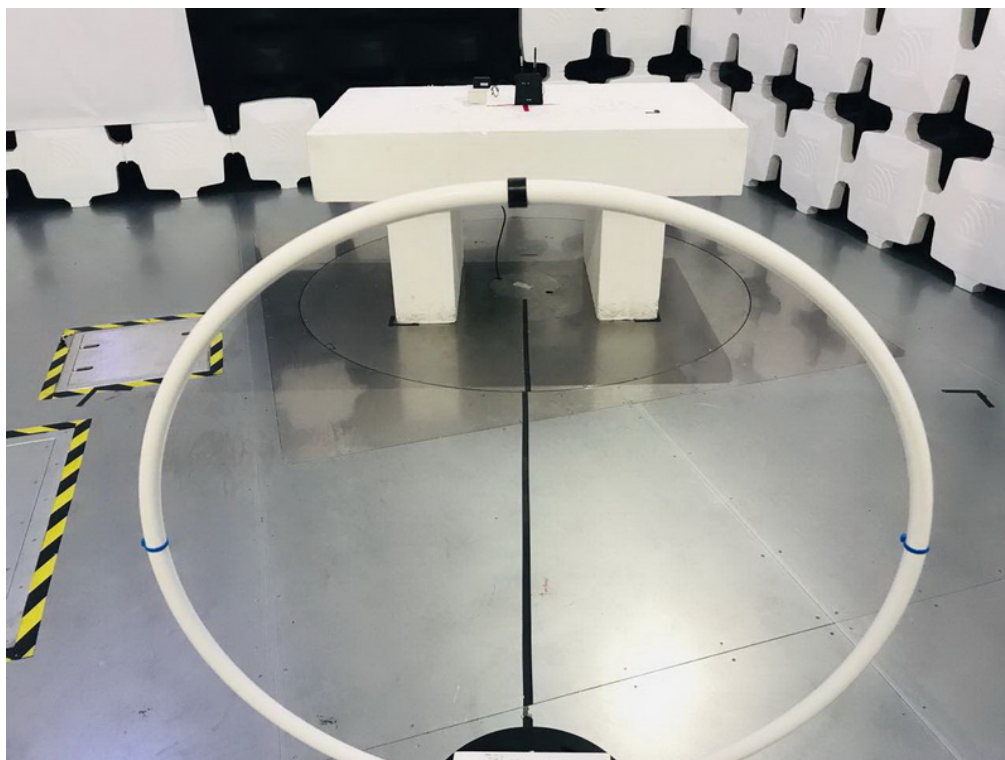
## 11. EUT TEST PHOTO

### AC Power Line Conducted Emissions Test Photos



# **Radiated Emissions Test Photos**

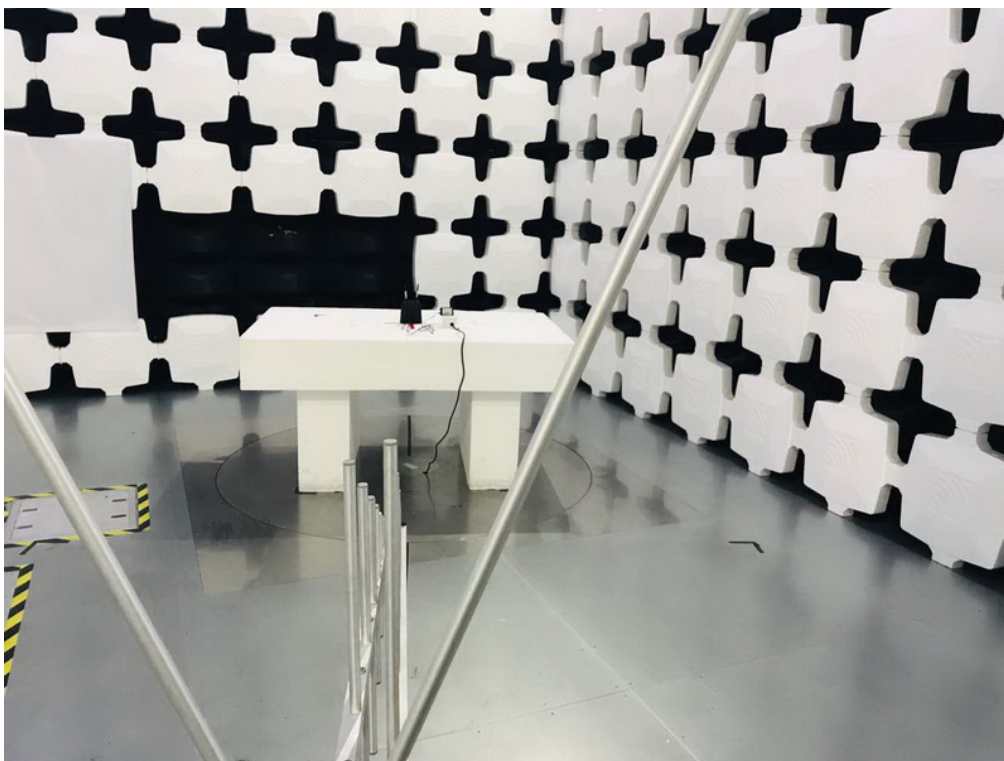
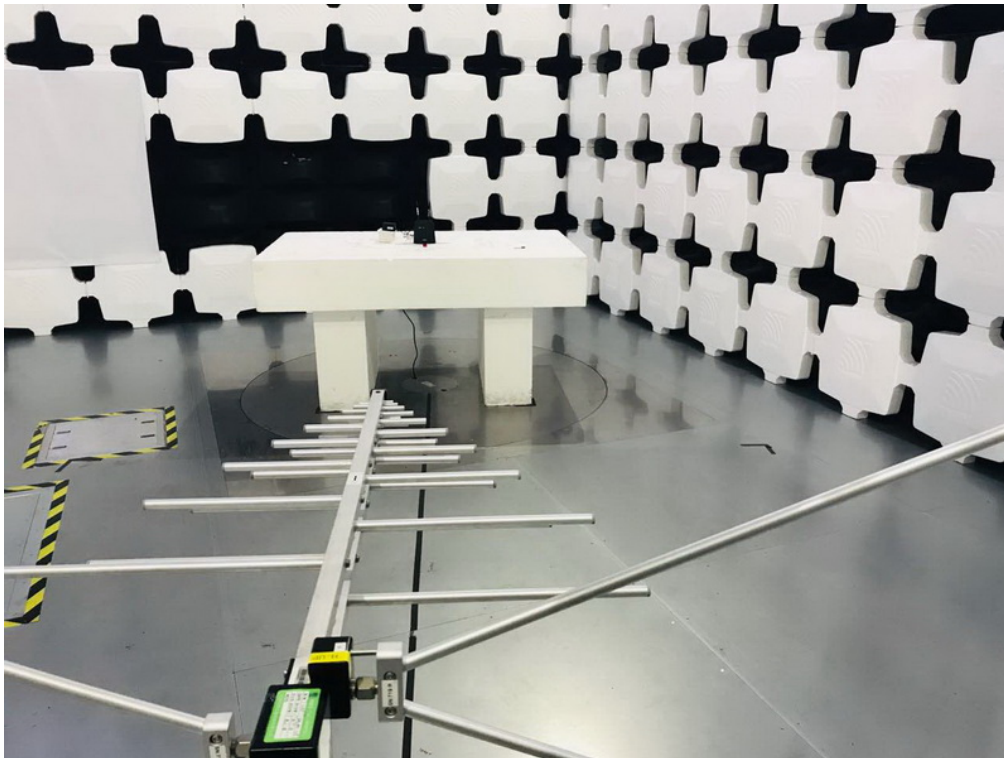
**9 kHz to 30 MHz**





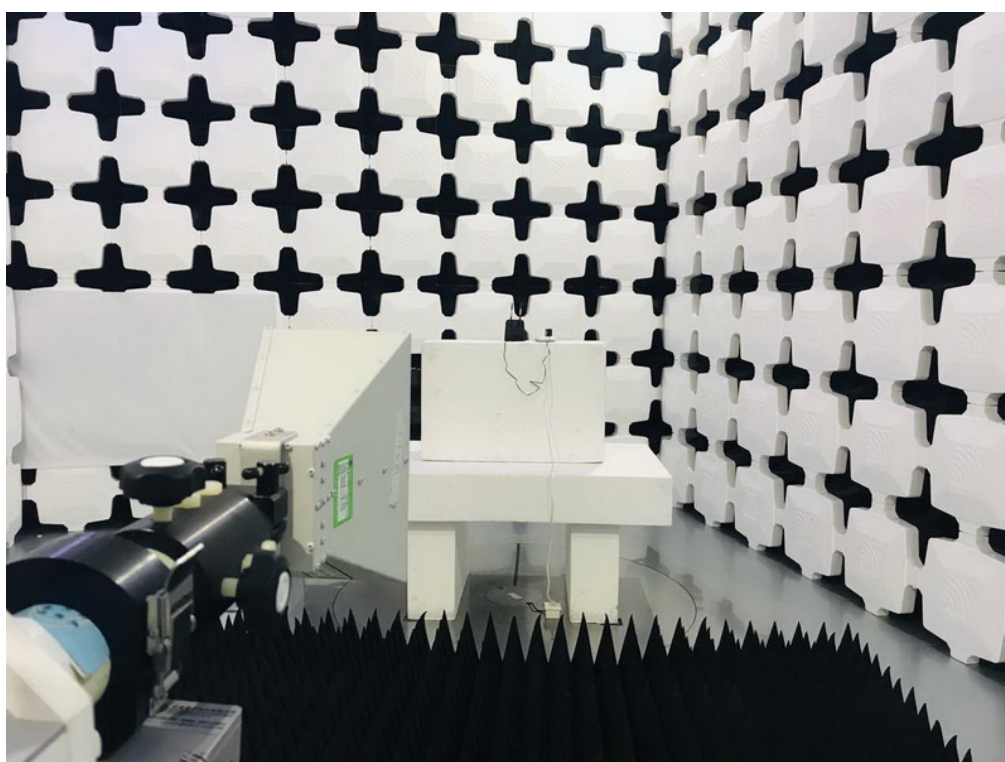
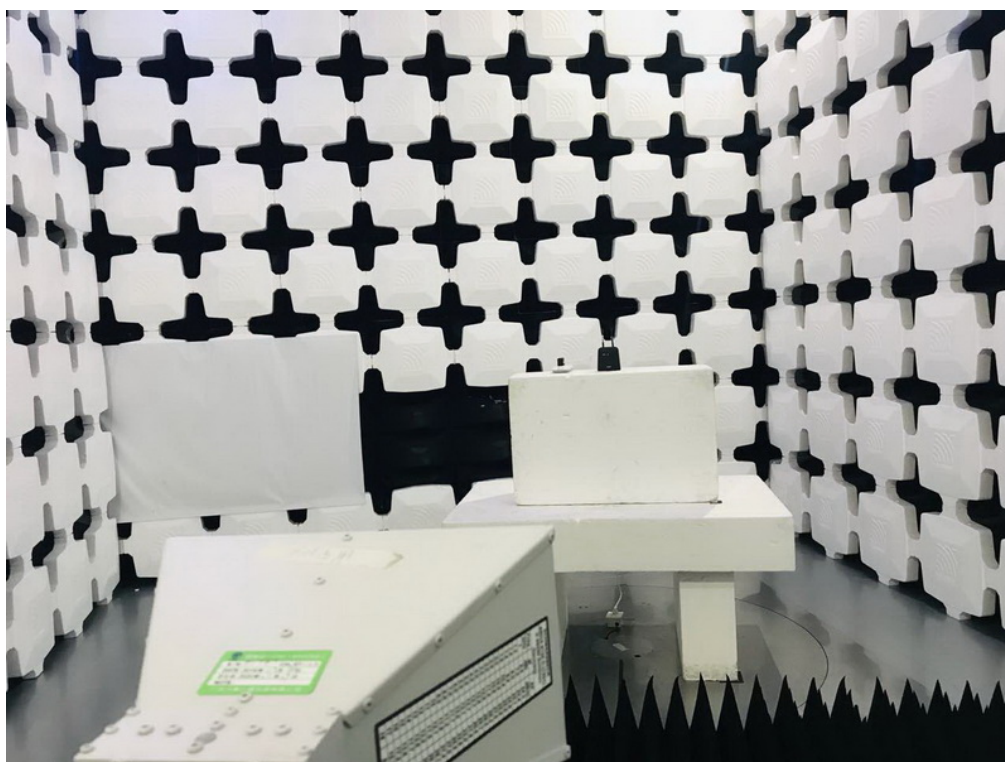
### Radiated Emissions Test Photos

30 MHz to 1 GHz



# Radiated Emissions Test Photos

Above 1 GHz

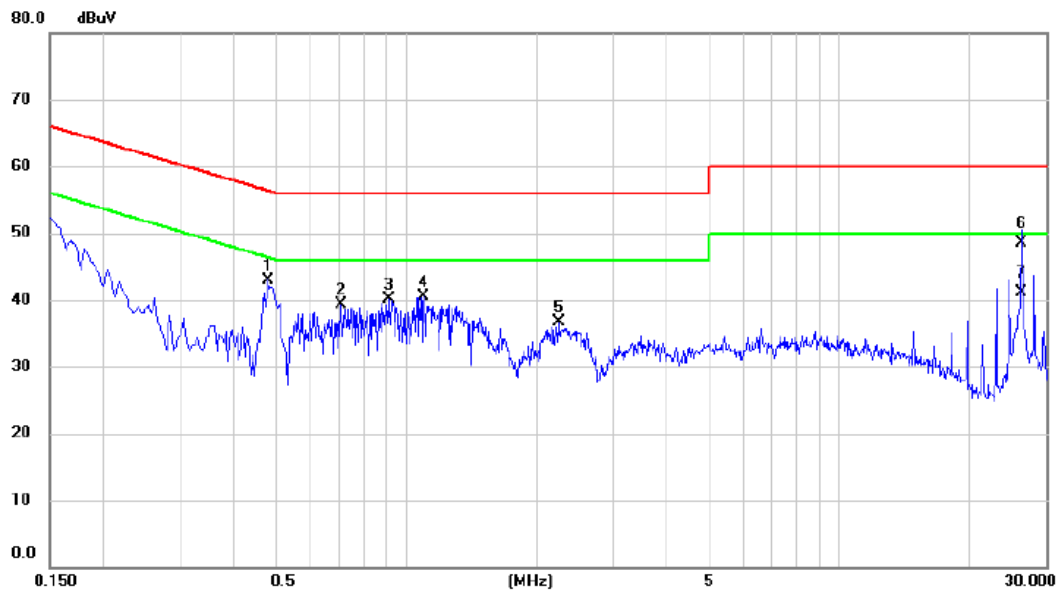


## APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS



Test Mode: TX B Mode Channel 06

# Line



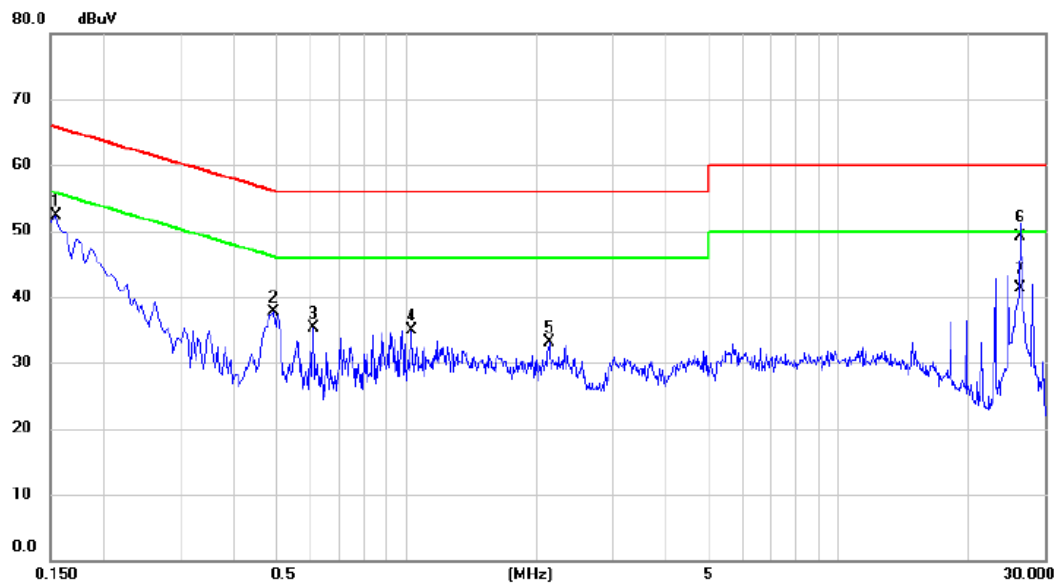
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.4785	33.01	9.99	43.00	56.37	-13.37	peak	
2		0.7080	29.27	9.99	39.26	56.00	-16.74	peak	
3		0.9104	30.15	9.98	40.13	56.00	-15.87	peak	
4		1.0950	30.41	10.11	40.52	56.00	-15.48	peak	
5		2.2470	26.61	10.02	36.63	56.00	-19.37	peak	
6		26.4030	37.68	10.92	48.60	60.00	-11.40	QP	
7	*	26.4030	30.10	10.92	41.02	50.00	-8.98	AVG	

## REMARKS:

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

Test Mode: TX B Mode Channel 06

### Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1544	42.57	9.79	52.36	65.76	-13.40	peak	
2		0.4920	27.77	9.92	37.69	56.13	-18.44	peak	
3		0.6090	25.30	10.00	35.30	56.00	-20.70	peak	
4		1.0274	24.89	9.99	34.88	56.00	-21.12	peak	
5		2.1433	22.97	10.15	33.12	56.00	-22.88	peak	
6		26.4030	38.36	10.81	49.17	60.00	-10.83	QP	
7	*	26.4030	30.50	10.81	41.31	50.00	-8.69	AVG	

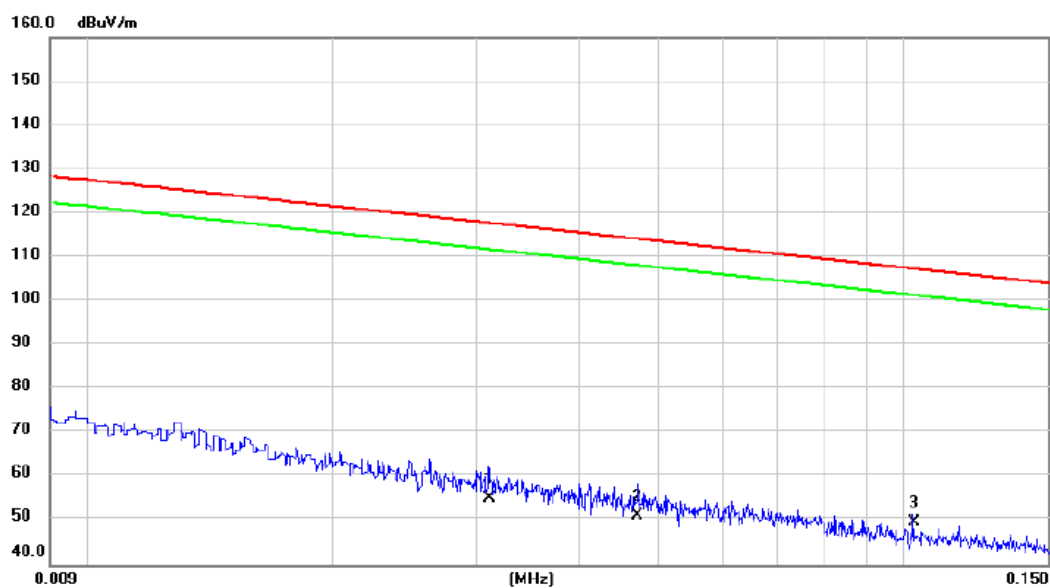
#### REMARKS:

- (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 B MODE CHANNEL 06

Ant 0°



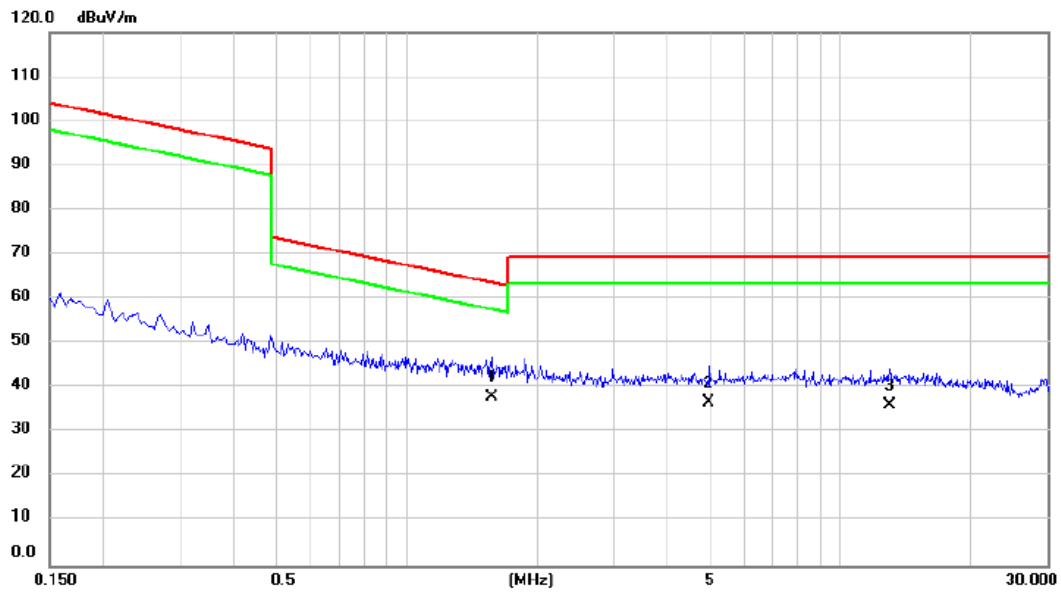
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0311	-14.10	69.37	55.27	117.75	-62.48	AVG	
2		0.0472	-13.70	64.90	51.20	114.13	-62.93	AVG	
3	*	0.1027	-8.10	57.84	49.74	107.38	-57.64	QP	

REMARKS:

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

Test Mode: TX B MODE CHANNEL 06

Ant 0°



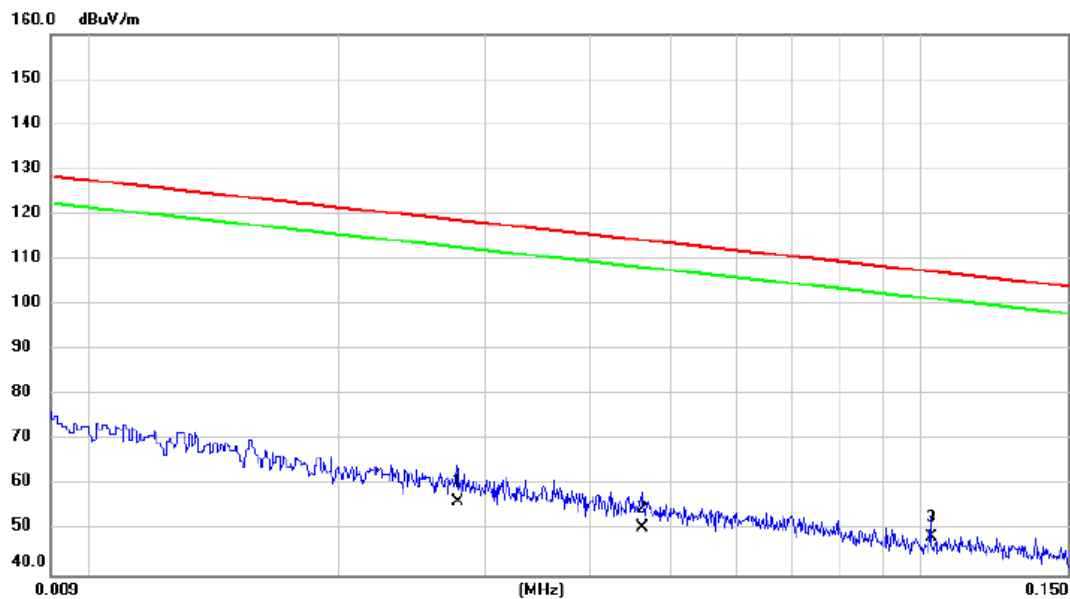
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	1.5765	-2.00	39.82	37.82	63.65	-25.83	QP	
2		4.9785	-1.10	37.70	36.60	69.54	-32.94	QP	
3		13.0065	-1.70	37.97	36.27	69.54	-33.27	QP	

**REMARKS:**

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

Test Mode: TX B MODE CHANNEL 06

Ant 90°



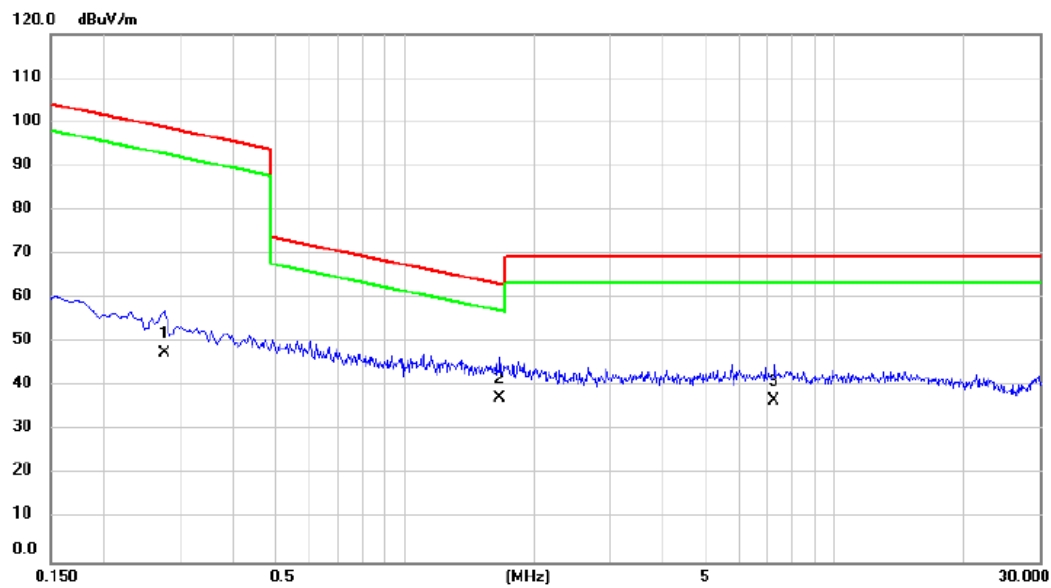
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0278	-13.90	70.27	56.37	118.72	-62.35	AVG	
2		0.0462	-14.50	65.15	50.65	114.31	-63.66	AVG	
3	*	0.1027	-9.20	57.84	48.64	107.38	-58.74	QP	

#### REMARKS:

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

Test Mode: TX B MODE CHANNEL 06

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2760	-2.00	49.52	47.52	98.79	-51.27	AVG	
2	*	1.6665	-2.40	39.60	37.20	63.17	-25.97	QP	
3		7.2375	-0.90	37.78	36.88	69.54	-32.66	QP	

REMARKS:

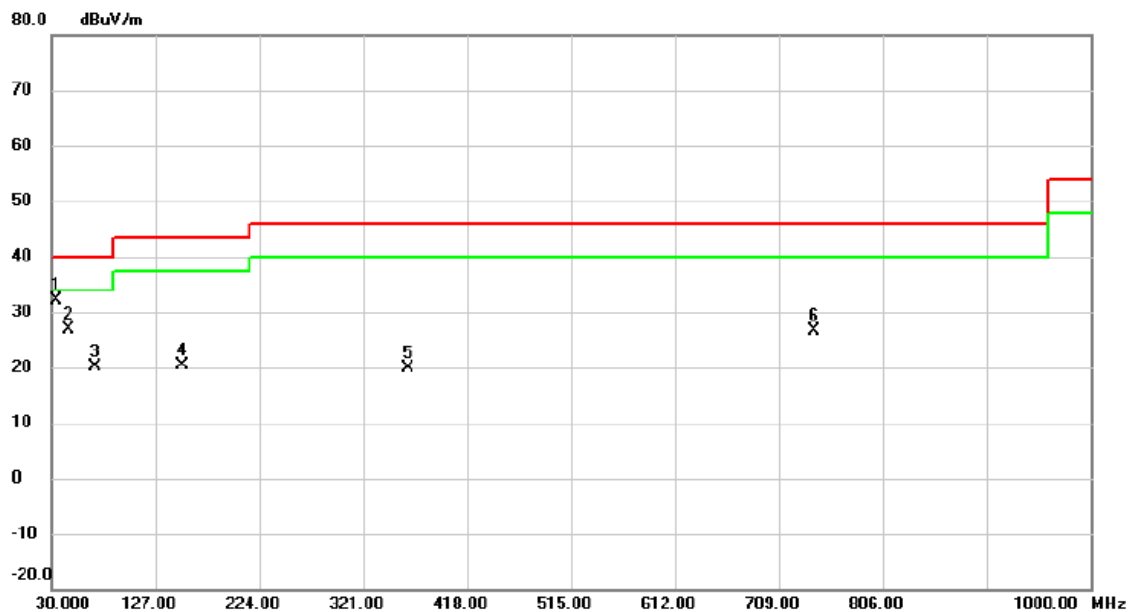
- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

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



Test Mode: TX B MODE CHANNEL 06

Vertical



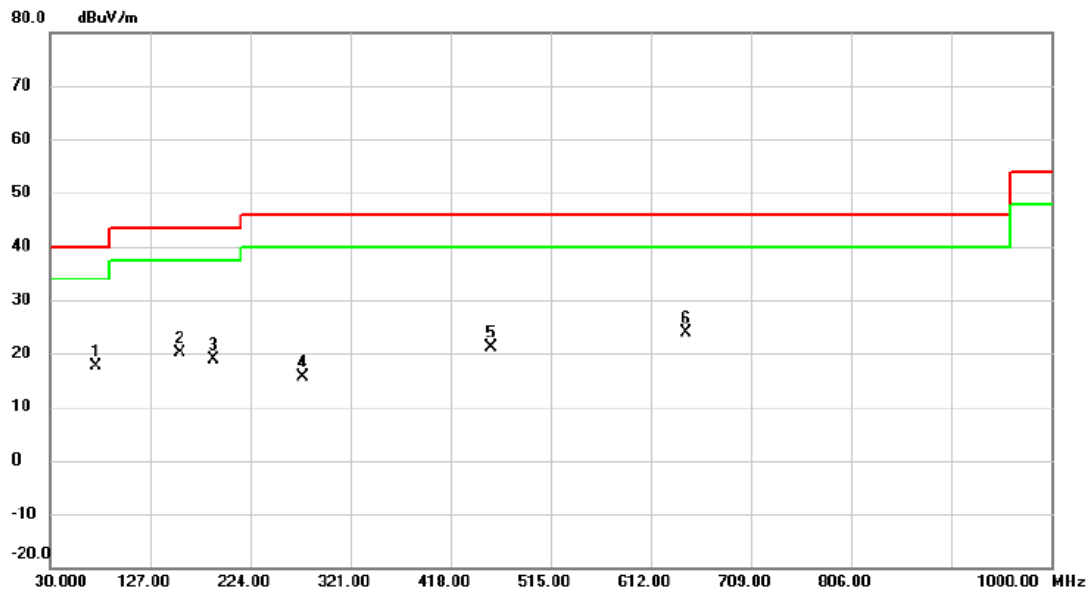
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	34.3650	49.44	-17.40	32.04	40.00	-7.96	peak	
2		45.5200	43.97	-17.15	26.82	40.00	-13.18	peak	
3		70.2550	39.91	-19.86	20.05	40.00	-19.95	peak	
4		152.2200	36.08	-15.61	20.47	43.50	-23.03	peak	
5		362.7100	33.94	-14.15	19.79	46.00	-26.21	peak	
6		742.4650	34.69	-8.16	26.53	46.00	-19.47	peak	

REMARKS:

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

Test Mode: TX B MODE CHANNEL 06

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		74.6200	37.98	-20.38	17.60	40.00	-22.40	peak	
2		156.1000	35.75	-15.71	20.04	43.50	-23.46	peak	
3		188.5950	38.16	-19.18	18.98	43.50	-24.52	peak	
4		274.4400	32.77	-17.11	15.66	46.00	-30.34	peak	
5		457.2850	33.42	-12.36	21.06	46.00	-24.94	peak	
6	*	646.9200	33.11	-9.29	23.82	46.00	-22.18	peak	

#### REMARKS:

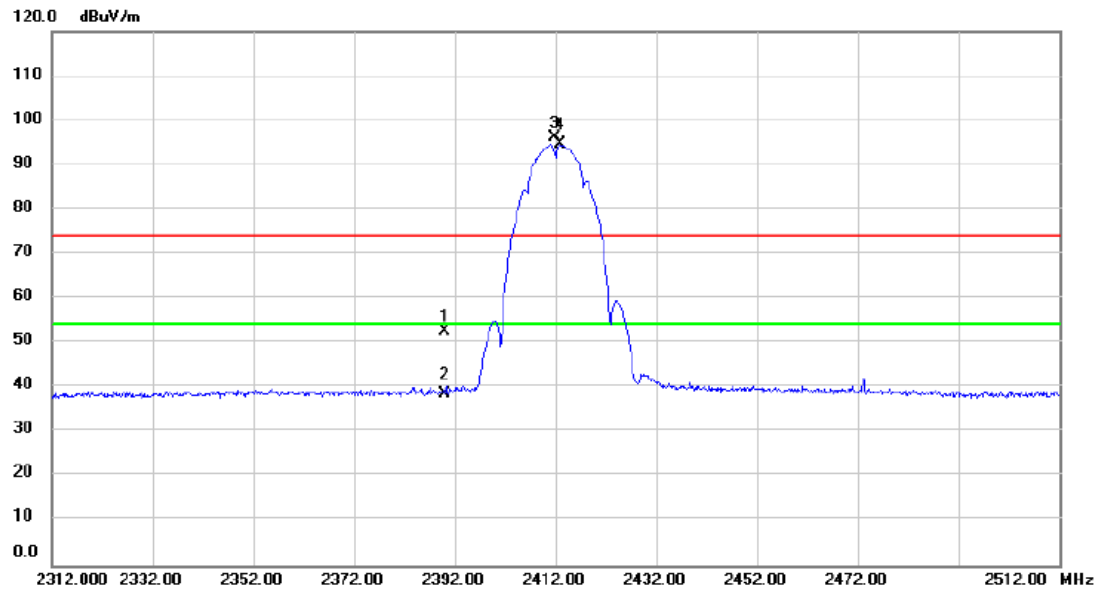
(1) Measurement Value = Reading Level + Correct Factor.

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

## APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

### Vertical



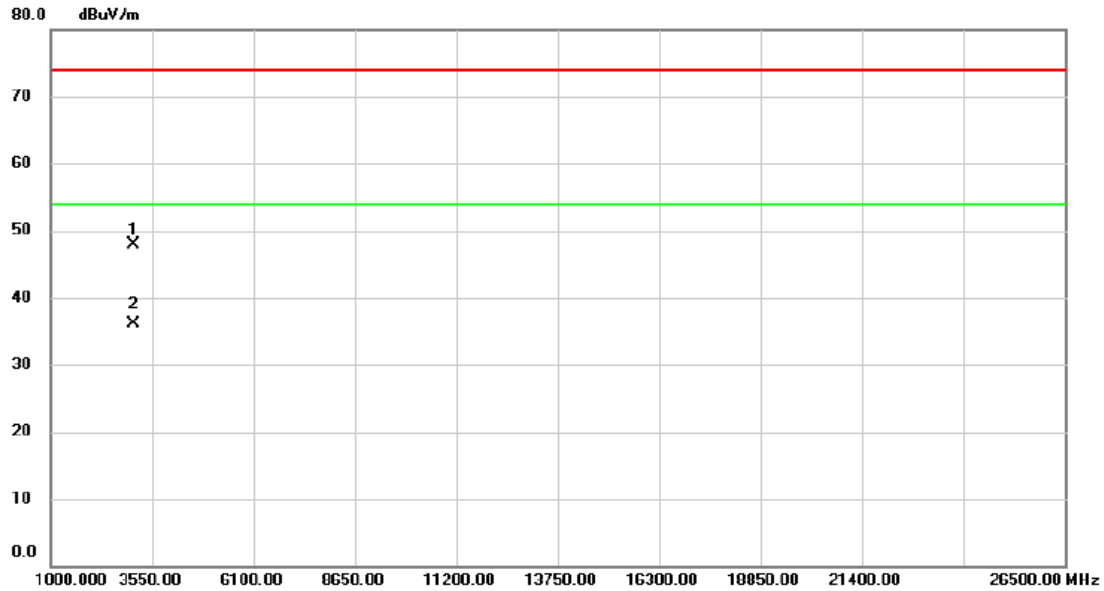
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	20.81	31.79	52.60	74.00	-21.40	peak	
2		2390.000	6.83	31.79	38.62	54.00	-15.38	AVG	
3	X	2411.800	64.18	31.85	96.03	74.00	22.03	peak	No Limit
4	*	2413.000	62.80	31.85	94.65	54.00	40.65	AVG	No Limit

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3083.260	63.28	-15.35	47.93	74.00	-26.07	peak	
2	*	3083.740	51.53	-15.35	36.18	54.00	-17.82	AVG	

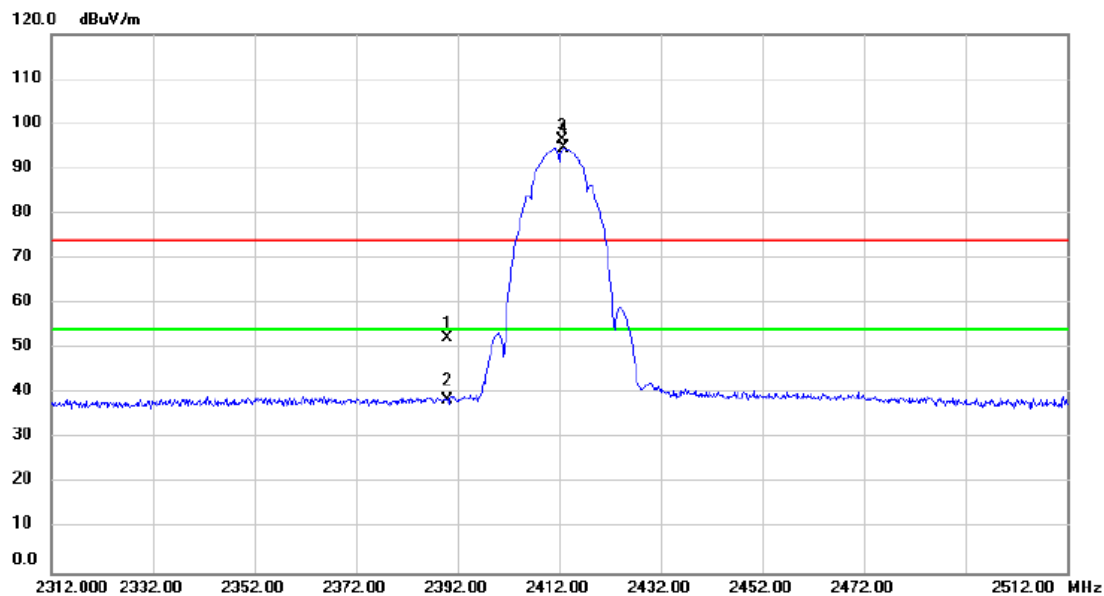
#### REMARKS:

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

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

### Horizontal



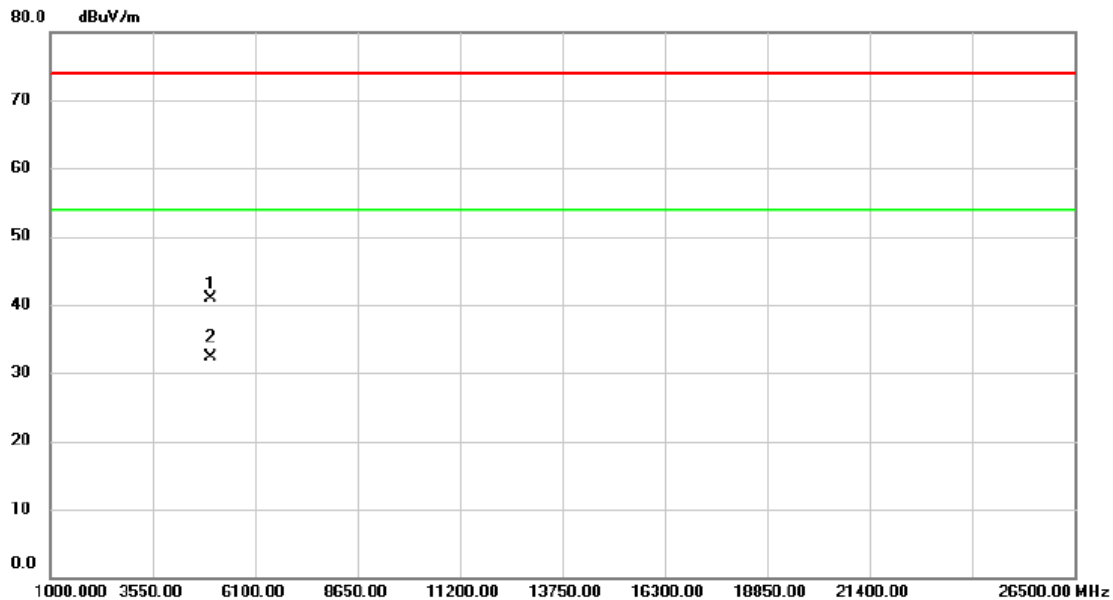
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	20.61	31.79	52.40	74.00	-21.60	peak	
2		2390.000	6.84	31.79	38.63	54.00	-15.37	AVG	
3	X	2412.600	64.75	31.85	96.60	74.00	22.60	peak	No Limit
4	*	2412.800	62.87	31.85	94.72	54.00	40.72	AVG	No Limit

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2412 MHz

### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4999.740	50.96	-9.99	40.97	74.00	-33.03	peak	
2	*	5000.020	42.30	-9.99	32.31	54.00	-21.69	AVG	

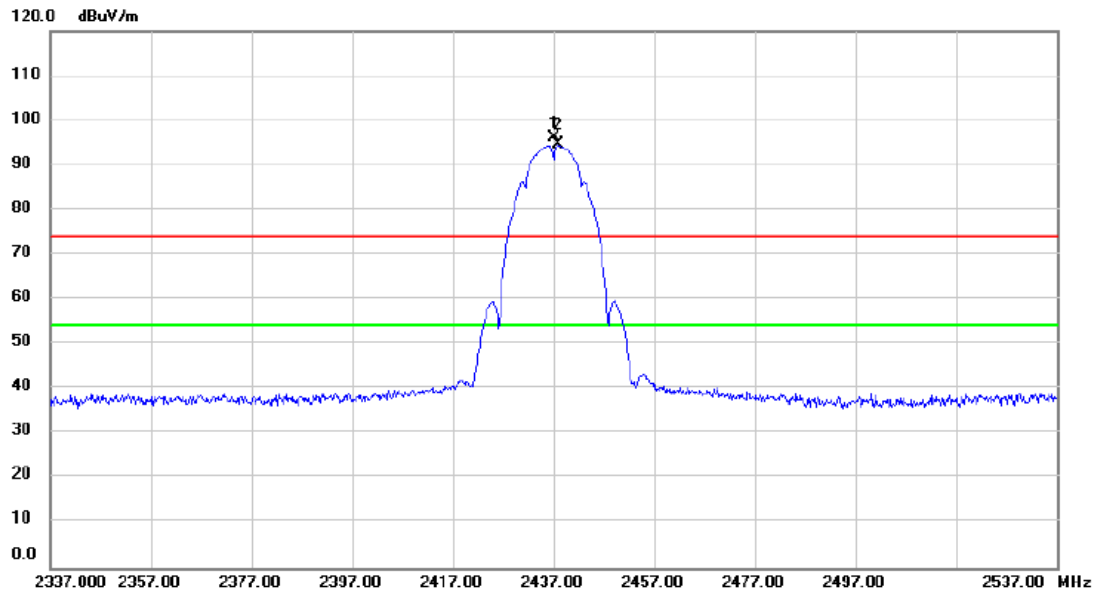
### REMARKS:

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

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 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	2437.000	64.32	31.92	96.24	74.00	22.24	peak	No Limit
2	*	2437.800	62.68	31.93	94.61	54.00	40.61	AVG	No Limit

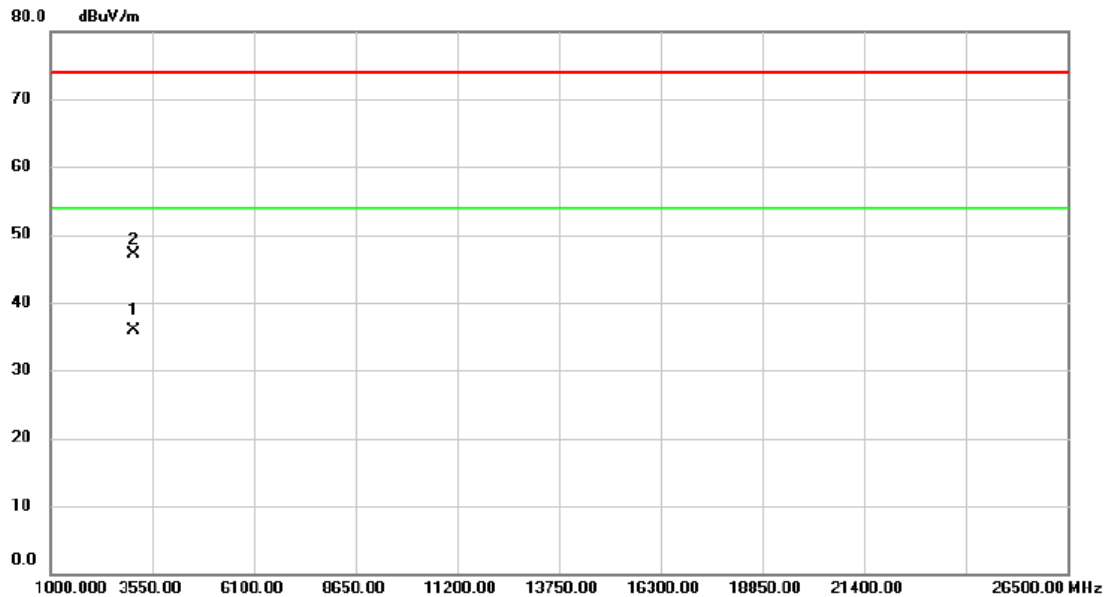
### REMARKS:

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



Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

### Vertical



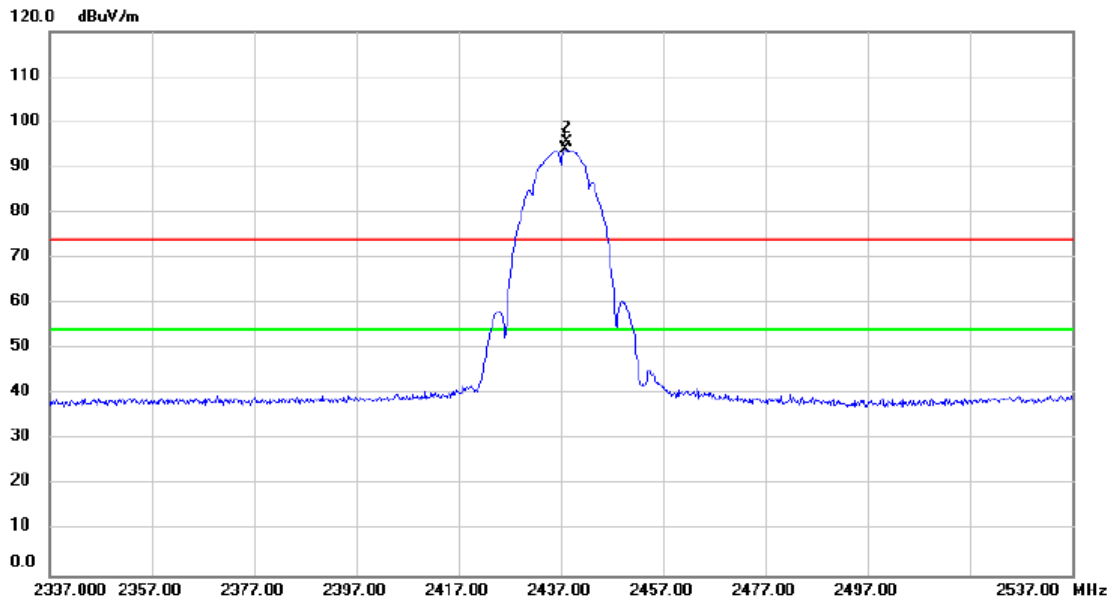
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	3083.400	51.26	-15.35	35.91	54.00	-18.09	AVG	
2		3088.600	62.44	-15.35	47.09	74.00	-26.91	peak	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

### Horizontal



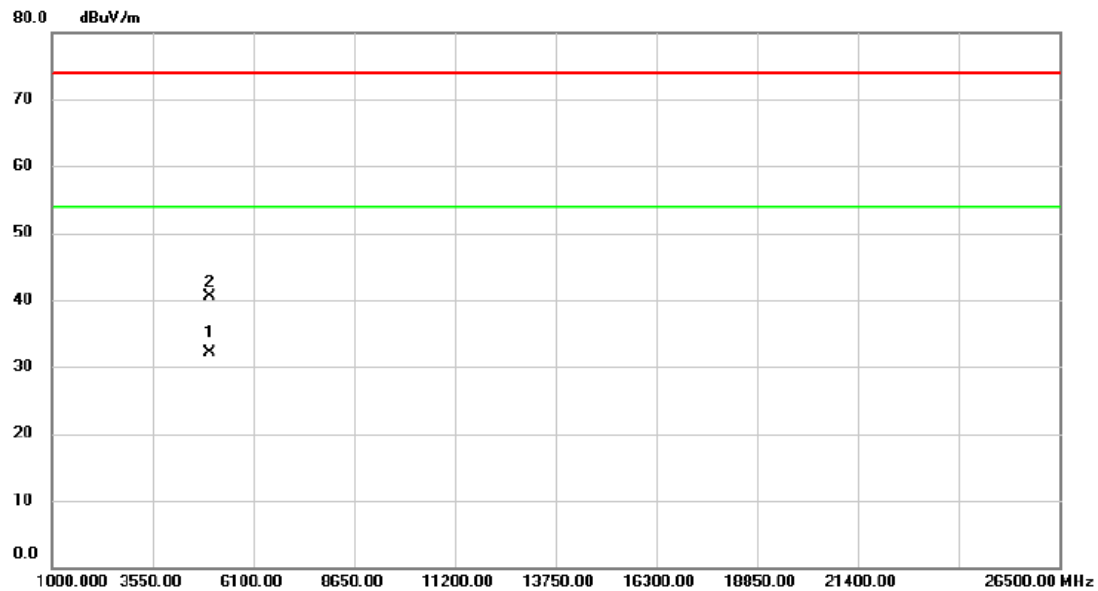
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2438.000	62.10	31.93	94.03	74.00	20.03	peak	No Limit
2	*	2438.200	63.52	31.93	95.45	74.00	21.45	peak	No Limit

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2437 MHz

### Horizontal



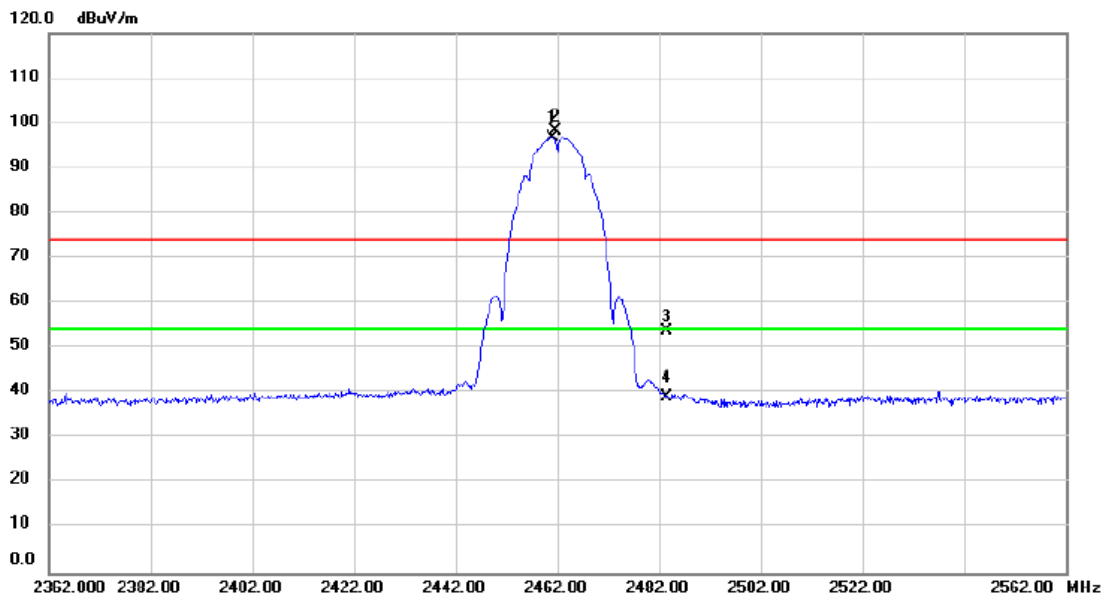
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4999.940	42.18	-9.99	32.19	54.00	-21.81	AVG	
2		5000.040	50.56	-9.99	40.57	74.00	-33.43	peak	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

### Vertical



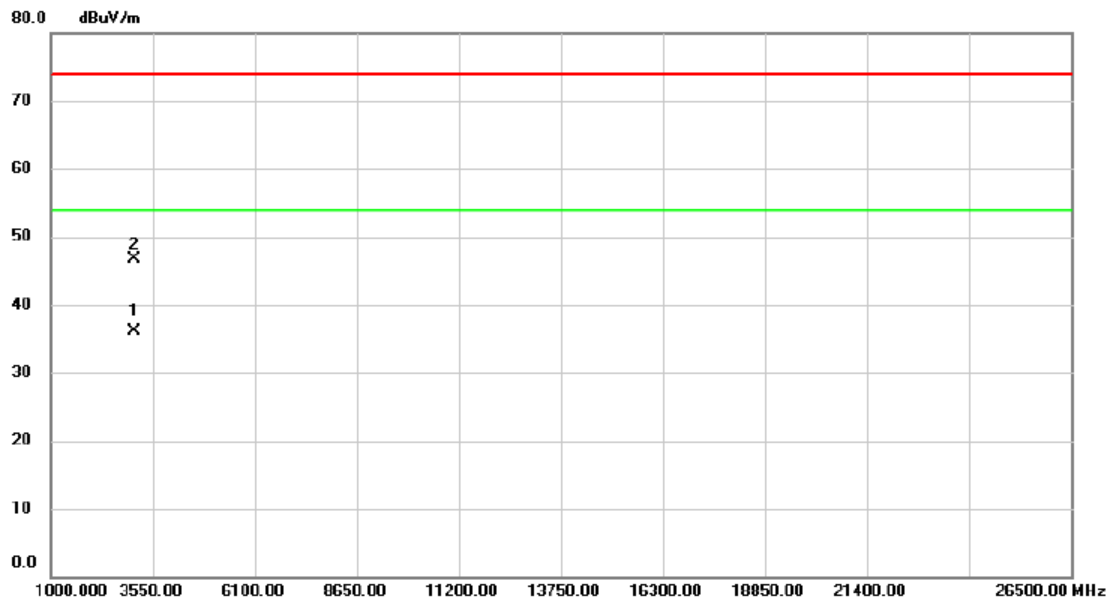
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2461.000	64.88	31.99	96.87	54.00	42.87	AVG	No Limit
2	X	2461.600	66.40	31.99	98.39	74.00	24.39	peak	No Limit
3		2483.500	21.75	32.05	53.80	74.00	-20.20	peak	
4		2483.500	7.19	32.05	39.24	54.00	-14.76	AVG	

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

### Vertical



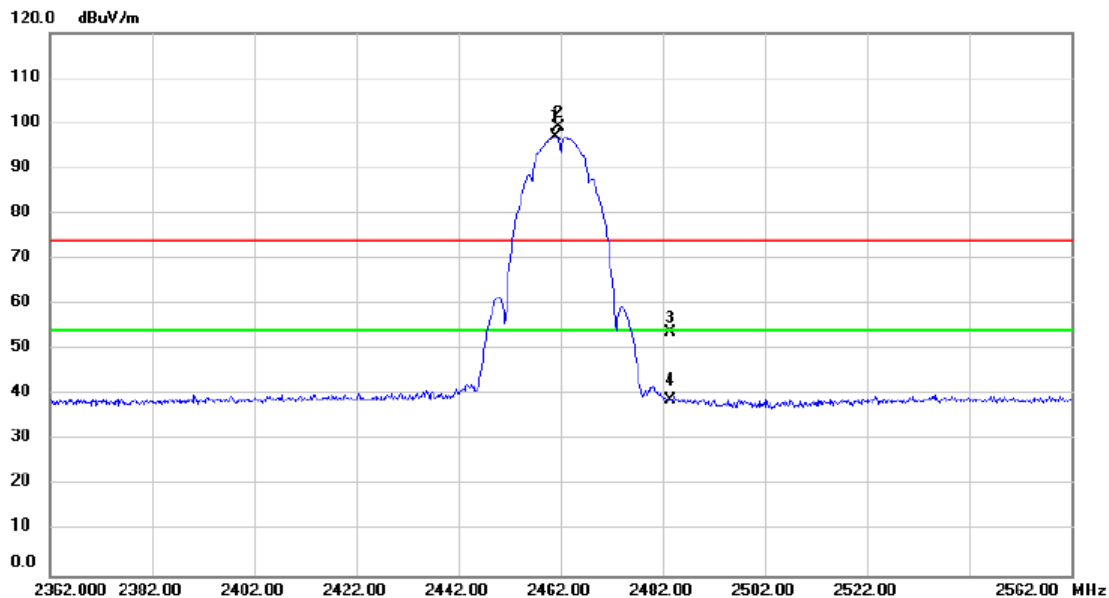
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	3082.000	51.36	-15.35	36.01	54.00	-17.99	AVG	
2		3083.400	62.07	-15.35	46.72	74.00	-27.28	peak	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

### Horizontal



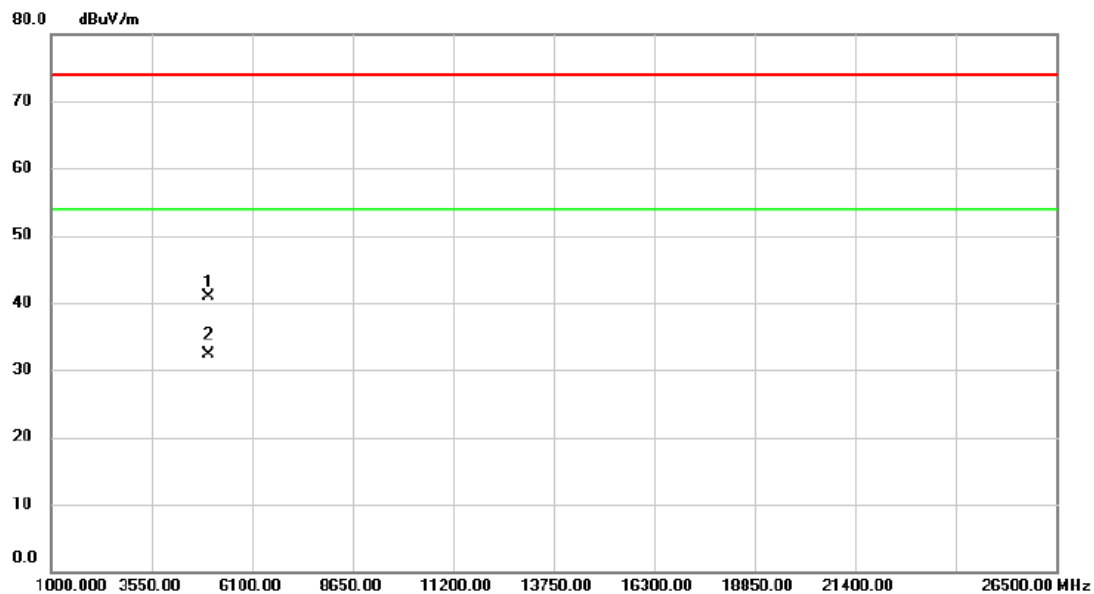
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2461.000	65.03	31.99	97.02	54.00	43.02	AVG	No Limit
2	X	2461.600	67.07	31.99	99.06	74.00	25.06	peak	No Limit
3		2483.500	21.75	32.05	53.80	74.00	-20.20	peak	
4		2483.500	6.69	32.05	38.74	54.00	-15.26	AVG	

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX B Mode 2462 MHz

### Horizontal



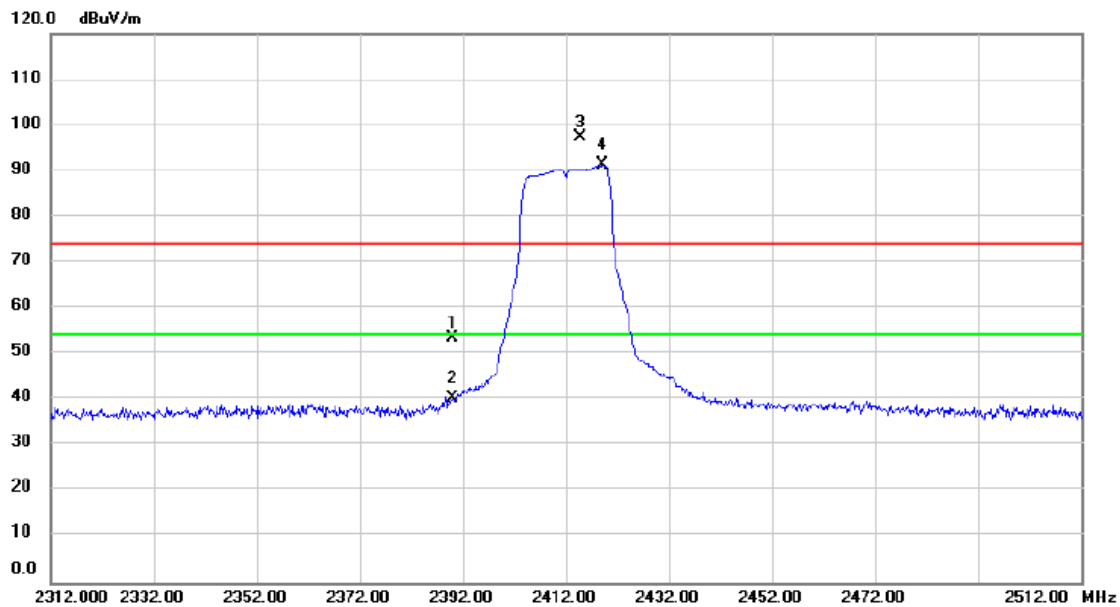
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5000.100	50.98	-9.99	40.99	74.00	-33.01	peak	
2	*	5000.100	42.34	-9.99	32.35	54.00	-21.65	AVG	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 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	21.73	31.79	53.52	74.00	-20.48	peak	
2		2390.000	8.65	31.79	40.44	54.00	-13.56	AVG	
3	X	2414.800	65.51	31.86	97.37	74.00	23.37	peak	No Limit
4	*	2419.200	59.36	31.87	91.23	54.00	37.23	AVG	No Limit

#### REMARKS:

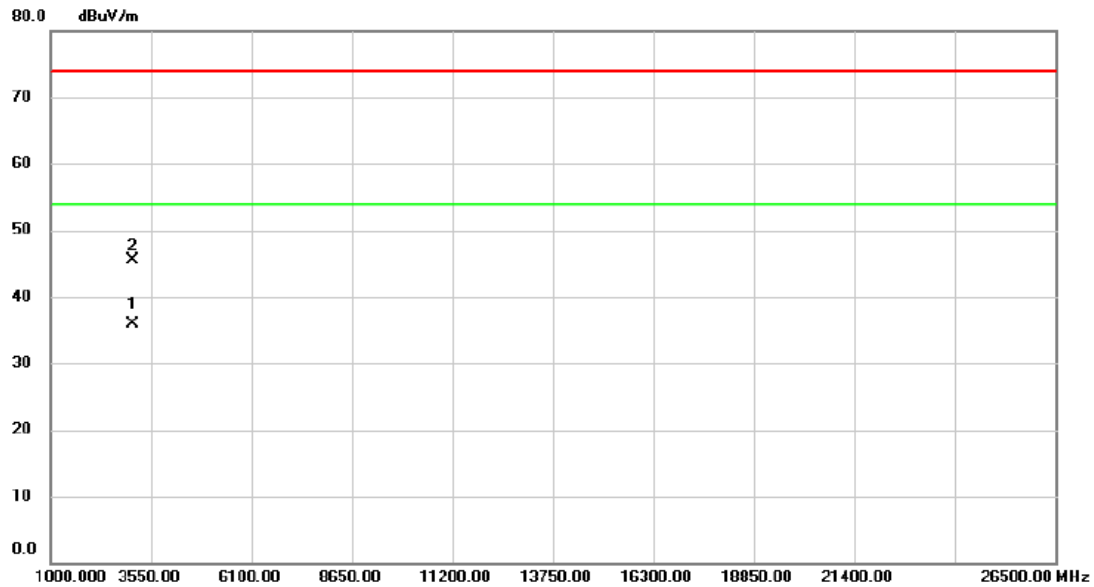
(1) Measurement Value = Reading Level + Correct Factor.

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



Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

### Vertical



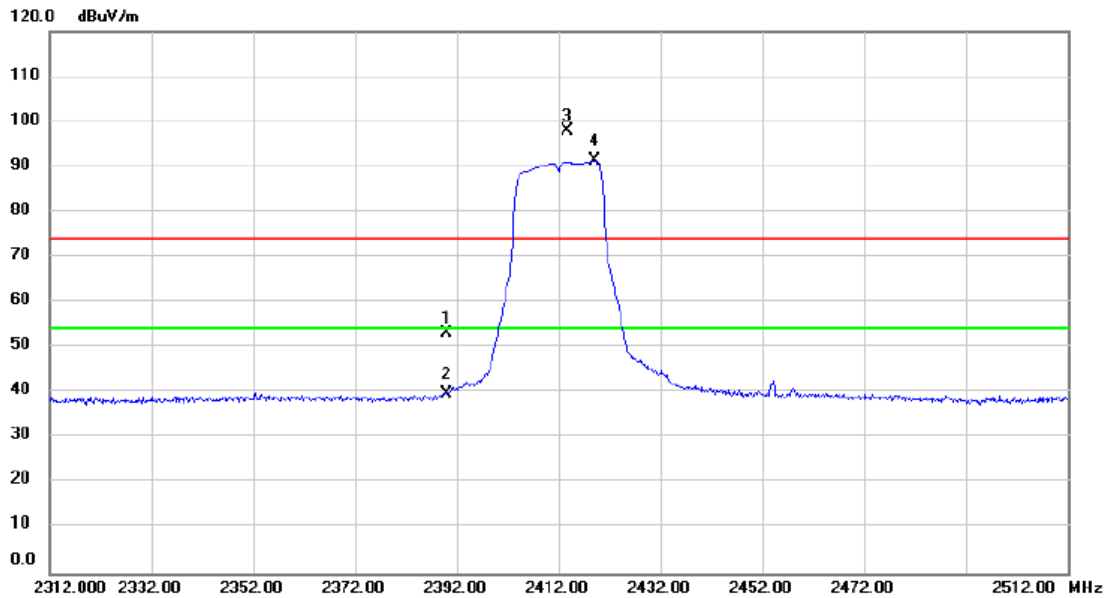
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	3081.700	51.30	-15.35	35.95	54.00	-18.05	AVG	
2		3083.700	60.87	-15.35	45.52	74.00	-28.48	peak	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 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	21.50	31.79	53.29	74.00	-20.71	peak	
2		2390.000	7.83	31.79	39.62	54.00	-14.38	AVG	
3	X	2413.800	66.21	31.85	98.06	74.00	24.06	peak	No Limit
4	*	2419.200	59.54	31.87	91.41	54.00	37.41	AVG	No Limit

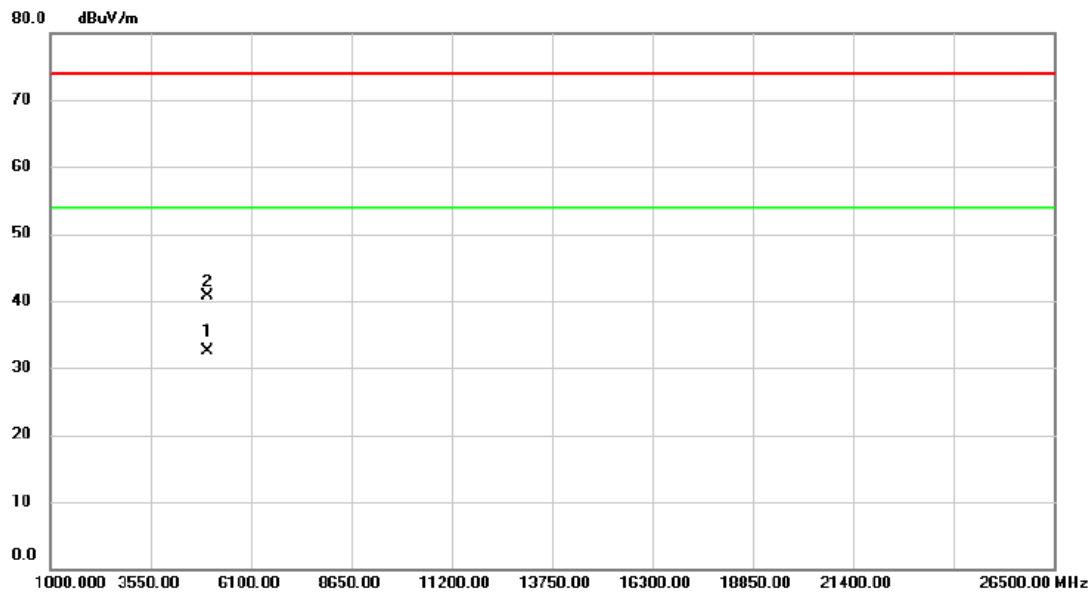
### REMARKS:

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

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2412 MHz

### Horizontal



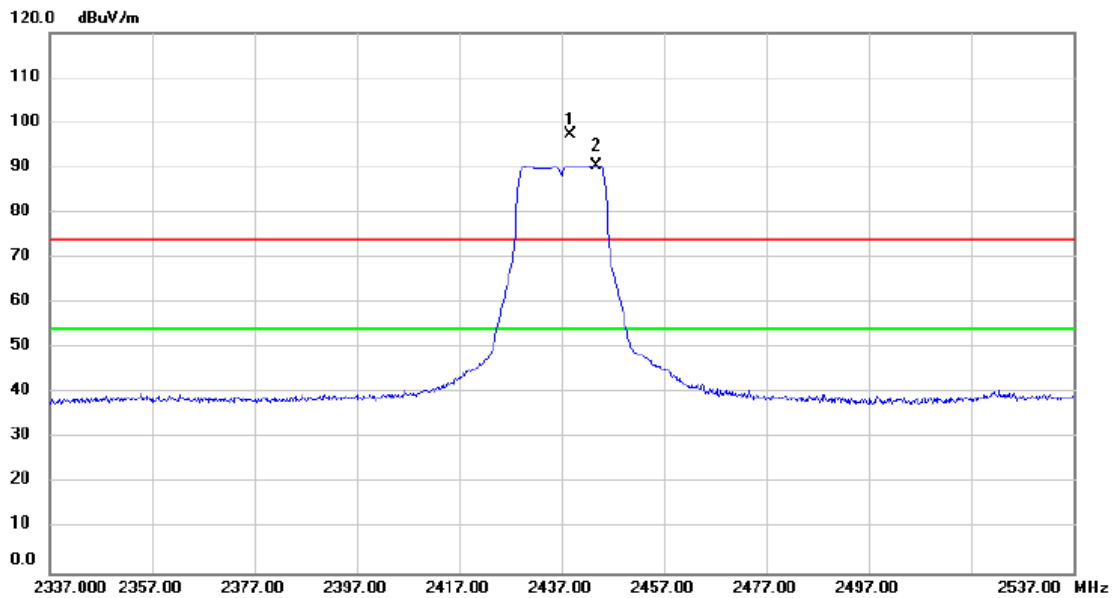
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5000.000	42.44	-9.99	32.45	54.00	-21.55	AVG	
2		5000.200	50.69	-9.99	40.70	74.00	-33.30	peak	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

### Vertical



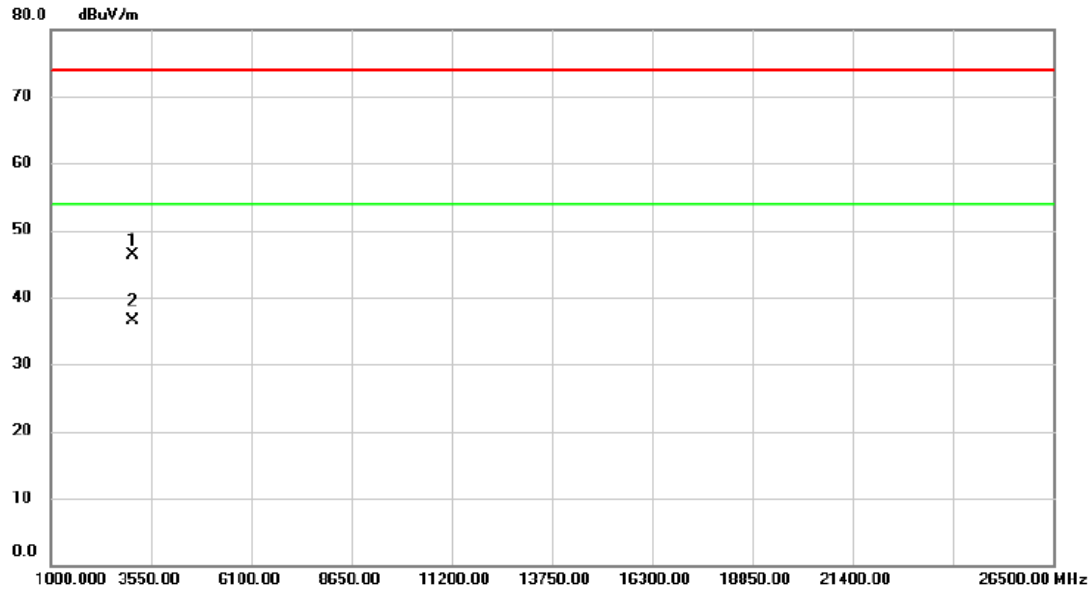
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2438.800	65.54	31.93	97.47	74.00	23.47	peak	No Limit
2	*	2443.800	58.62	31.94	90.56	54.00	36.56	AVG	No Limit

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

### Vertical



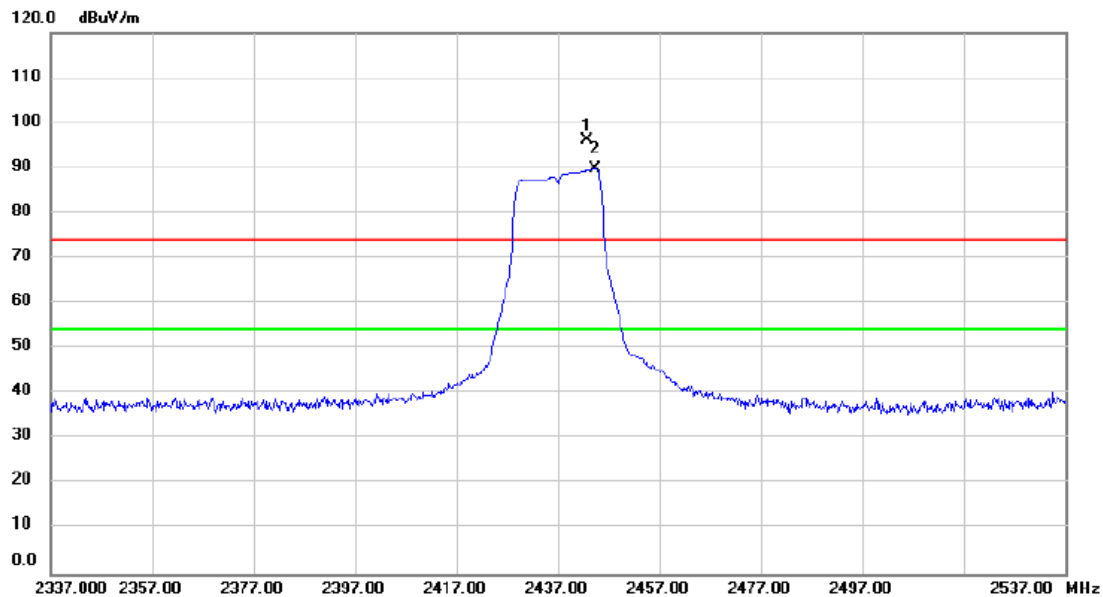
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3081.800	61.62	-15.35	46.27	74.00	-27.73	peak	
2	*	3084.900	51.86	-15.35	36.51	54.00	-17.49	AVG	

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

### Horizontal



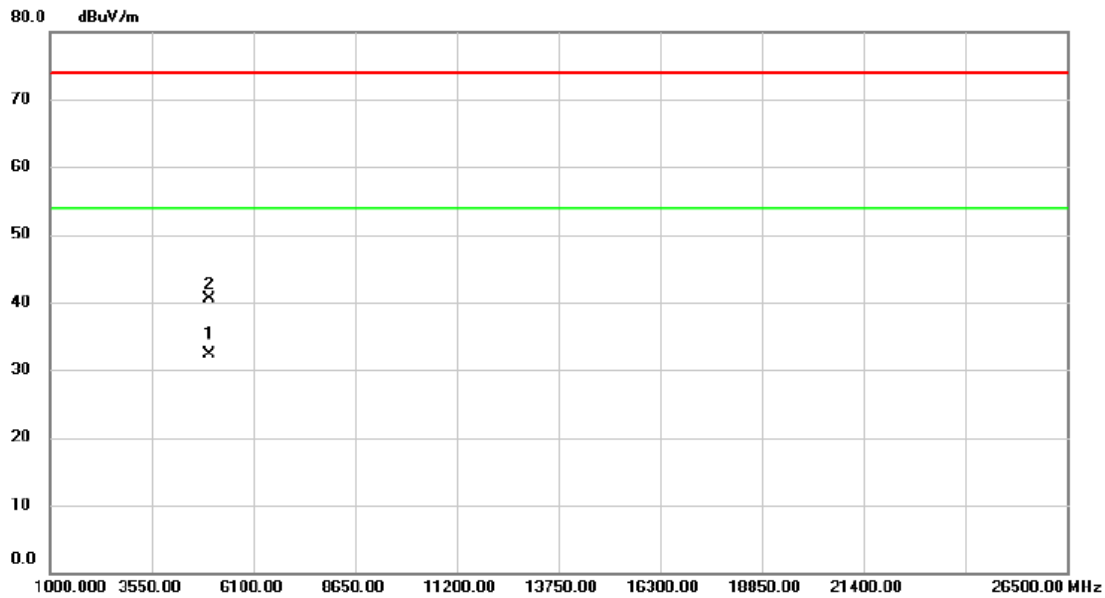
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2442.800	64.27	31.94	96.21	74.00	22.21	peak	No Limit
2	*	2444.400	57.83	31.94	89.77	54.00	35.77	AVG	No Limit

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2437 MHz

### Horizontal



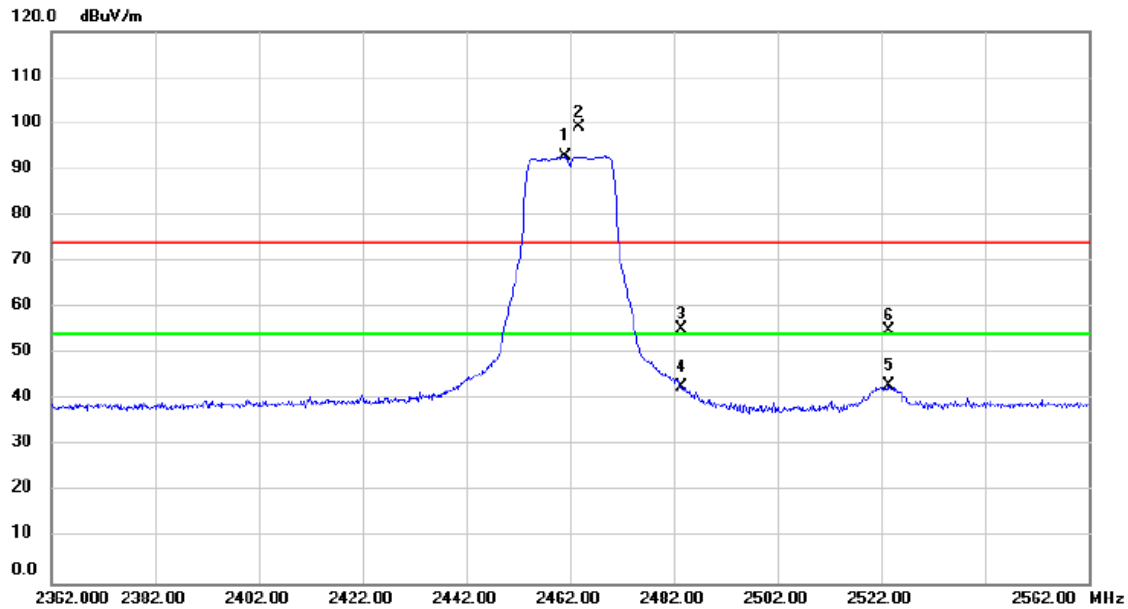
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5000.100	42.27	-9.99	32.28	54.00	-21.72	AVG	
2		5000.200	50.45	-9.99	40.46	74.00	-33.54	peak	

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2461.000	60.74	31.99	92.73	54.00	38.73	AVG	No Limit
2	X	2463.800	67.14	31.99	99.13	74.00	25.13	peak	No Limit
3		2483.500	23.28	32.05	55.33	74.00	-18.67	peak	
4		2483.500	10.81	32.05	42.86	54.00	-11.14	AVG	
5		2523.400	10.80	32.16	42.96	54.00	-11.04	AVG	
6		2523.500	22.82	32.16	54.98	74.00	-19.02	peak	

#### REMARKS:

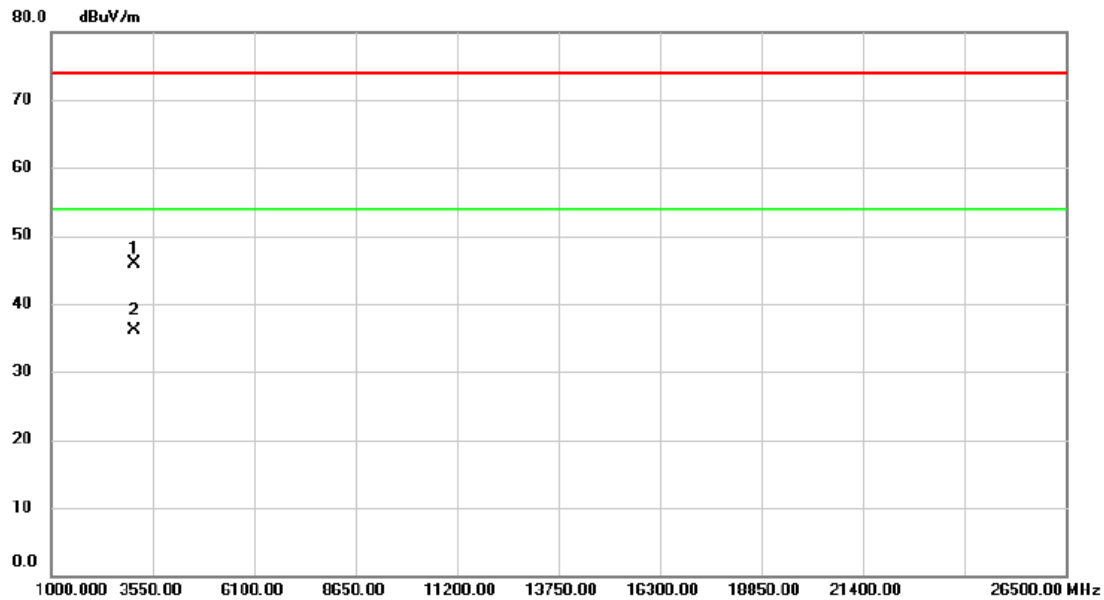
(1) Measurement Value = Reading Level + Correct Factor.

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



Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

### Vertical



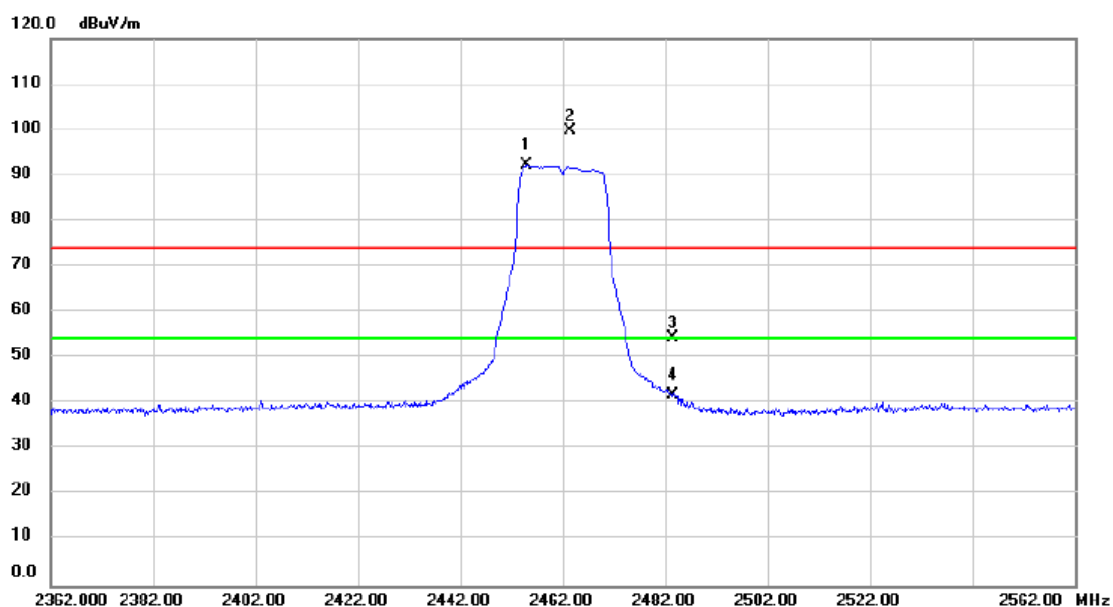
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3079.500	61.19	-15.35	45.84	74.00	-28.16	peak	
2	*	3083.300	51.44	-15.35	36.09	54.00	-17.91	AVG	

#### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

### Horizontal



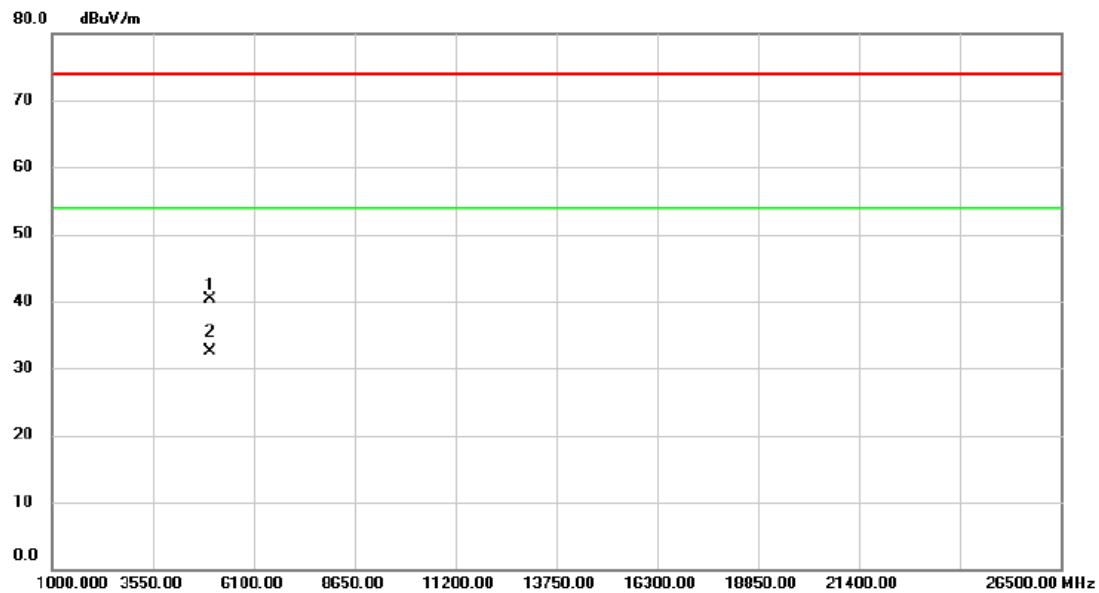
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2455.000	60.17	31.97	92.14	54.00	38.14	AVG	No Limit
2	X	2463.600	67.90	31.99	99.89	74.00	25.89	peak	No Limit
3		2483.500	22.34	32.05	54.39	74.00	-19.61	peak	
4		2483.500	9.80	32.05	41.85	54.00	-12.15	AVG	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX G Mode 2462 MHz

### Horizontal



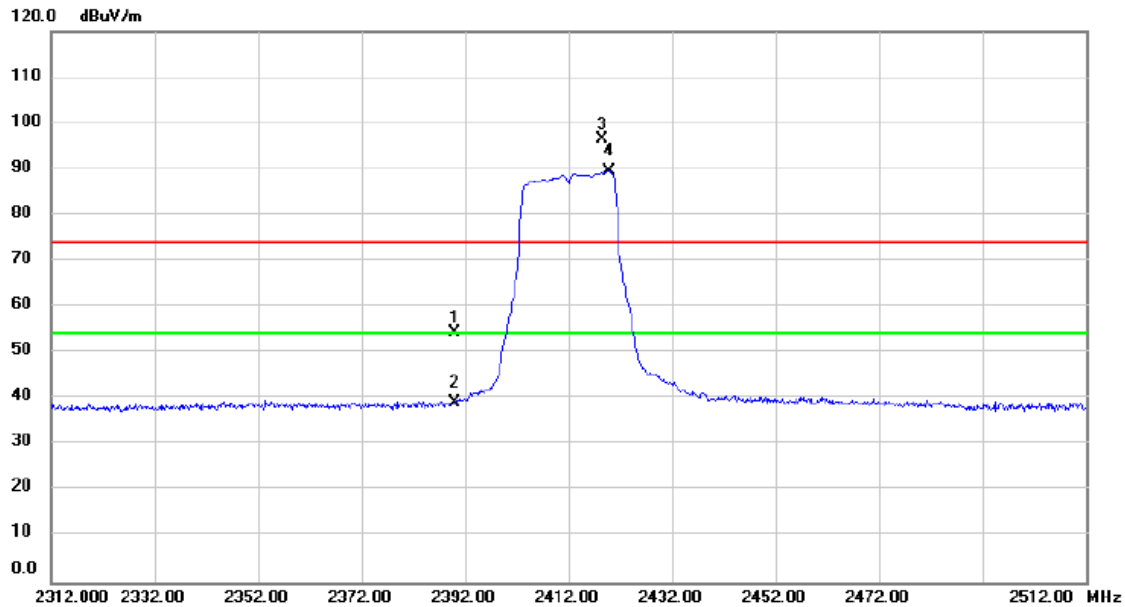
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4991.500	50.28	-10.03	40.25	74.00	-33.75	peak	
2	*	5000.000	42.40	-9.99	32.41	54.00	-21.59	AVG	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2412 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	22.62	31.79	54.41	74.00	-19.59	peak	
2		2390.000	7.27	31.79	39.06	54.00	-14.94	AVG	
3	X	2418.600	64.62	31.87	96.49	74.00	22.49	peak	No Limit
4	*	2419.800	57.61	31.88	89.49	54.00	35.49	AVG	No Limit

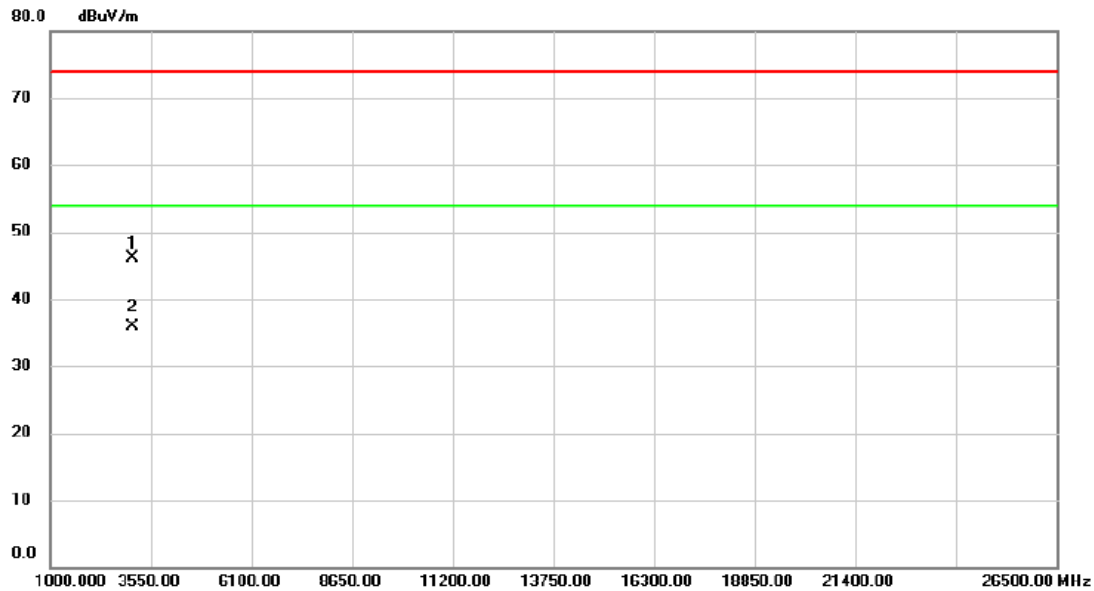
### REMARKS:

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

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

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

### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3082.200	61.52	-15.35	46.17	74.00	-27.83	peak	
2	*	3084.000	51.30	-15.35	35.95	54.00	-18.05	AVG	

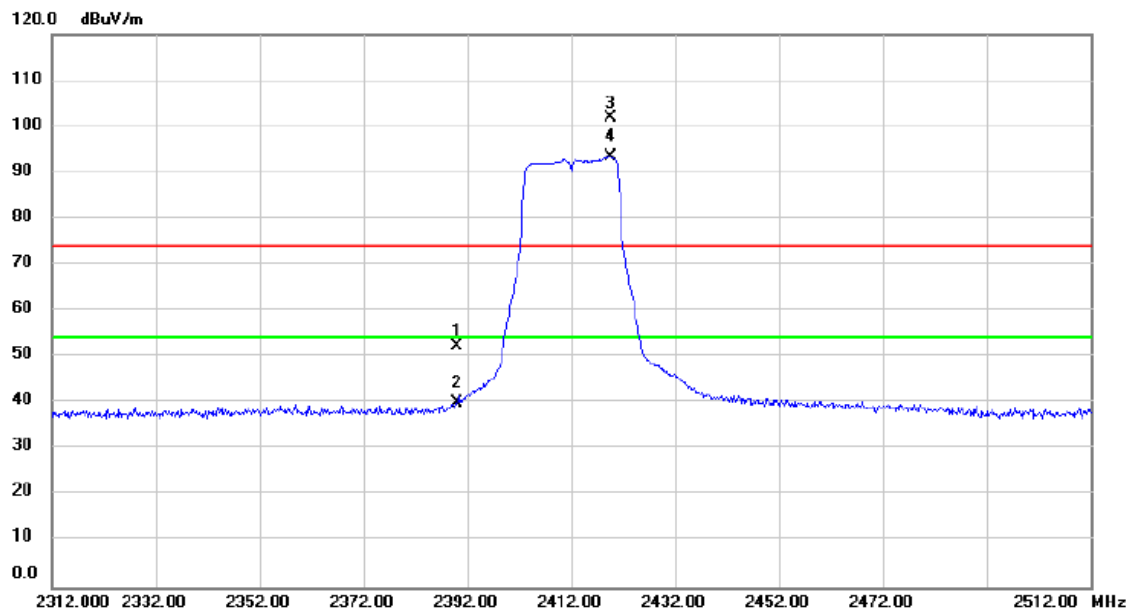
#### REMARKS:

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

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

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2412 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	20.63	31.79	52.42	74.00	-21.58	peak	
2		2390.000	8.37	31.79	40.16	54.00	-13.84	AVG	
3	X	2419.600	70.03	31.88	101.91	74.00	27.91	peak	No Limit
4	*	2419.600	61.46	31.88	93.34	54.00	39.34	AVG	No Limit

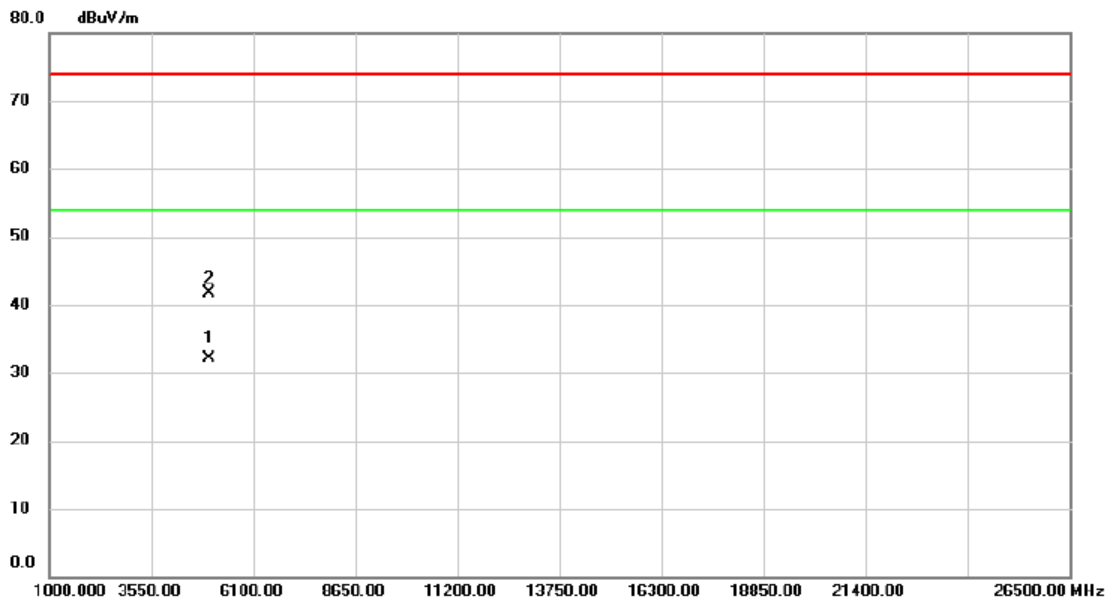
### REMARKS:

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

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

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

### Horizontal



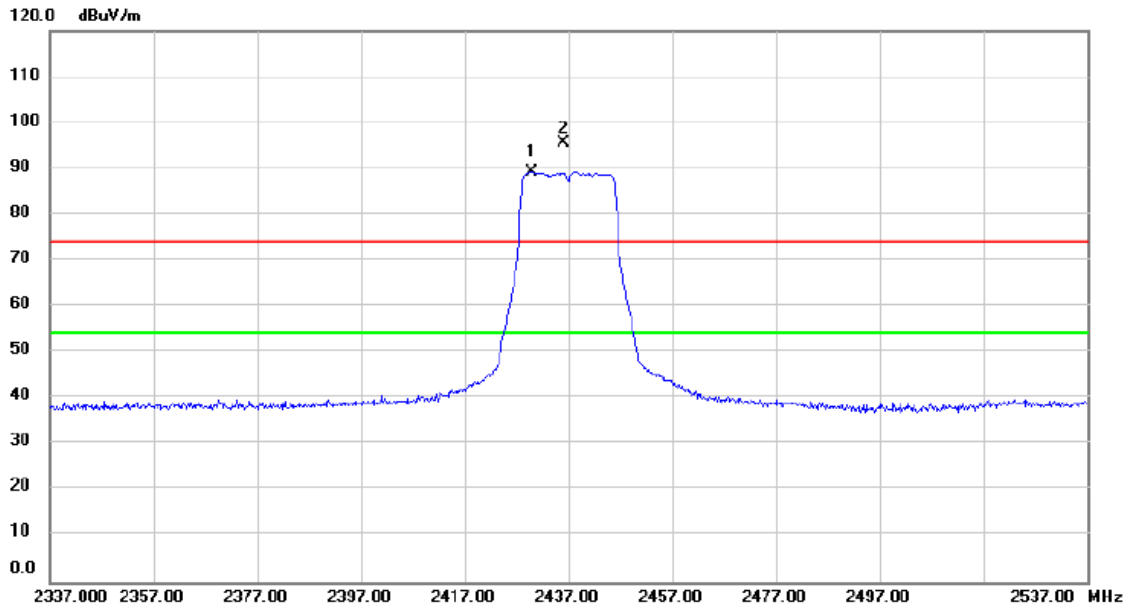
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5000.000	42.06	-9.99	32.07	54.00	-21.93	AVG	
2		5000.200	51.71	-9.99	41.72	74.00	-32.28	peak	

### REMARKS:

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

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

**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2429.800	57.45	31.90	89.35	54.00	35.35	AVG	No Limit
2	X	2436.000	63.78	31.91	95.69	74.00	21.69	peak	No Limit

**REMARKS:**

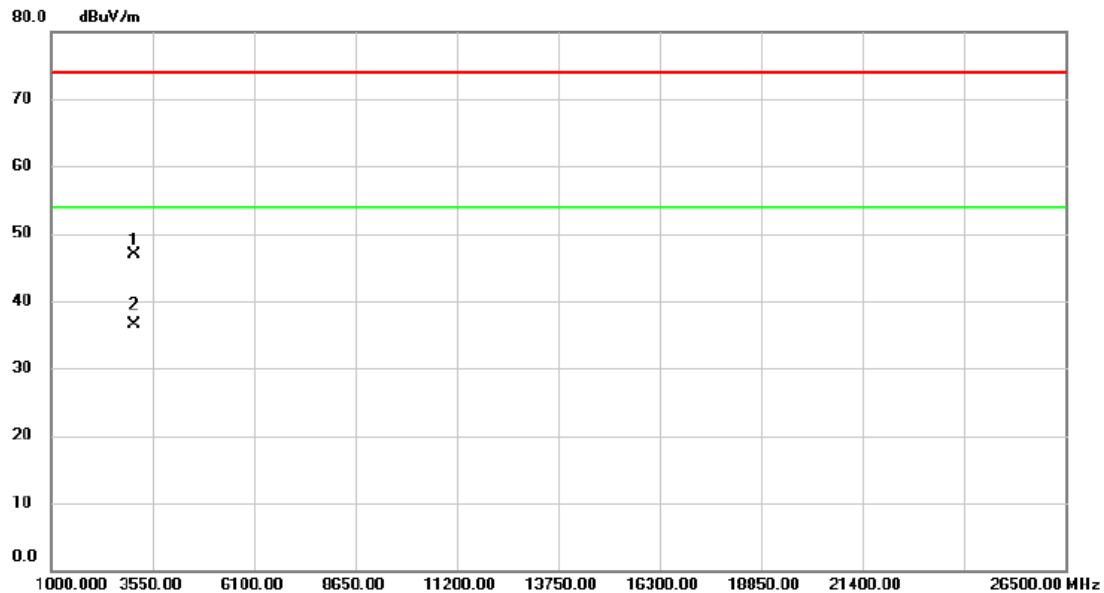
(1) Measurement Value = Reading Level + Correct Factor.

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



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

### Vertical



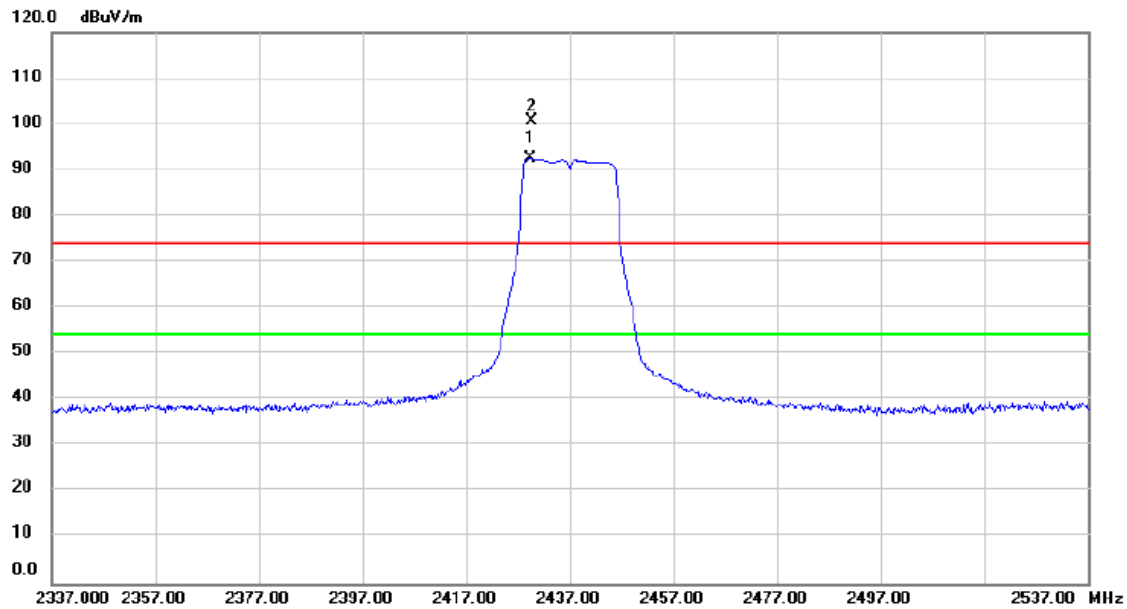
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3081.200	62.28	-15.35	46.93	74.00	-27.07	peak	
2	*	3083.100	51.77	-15.35	36.42	54.00	-17.58	AVG	

#### REMARKS:

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

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

### Horizontal



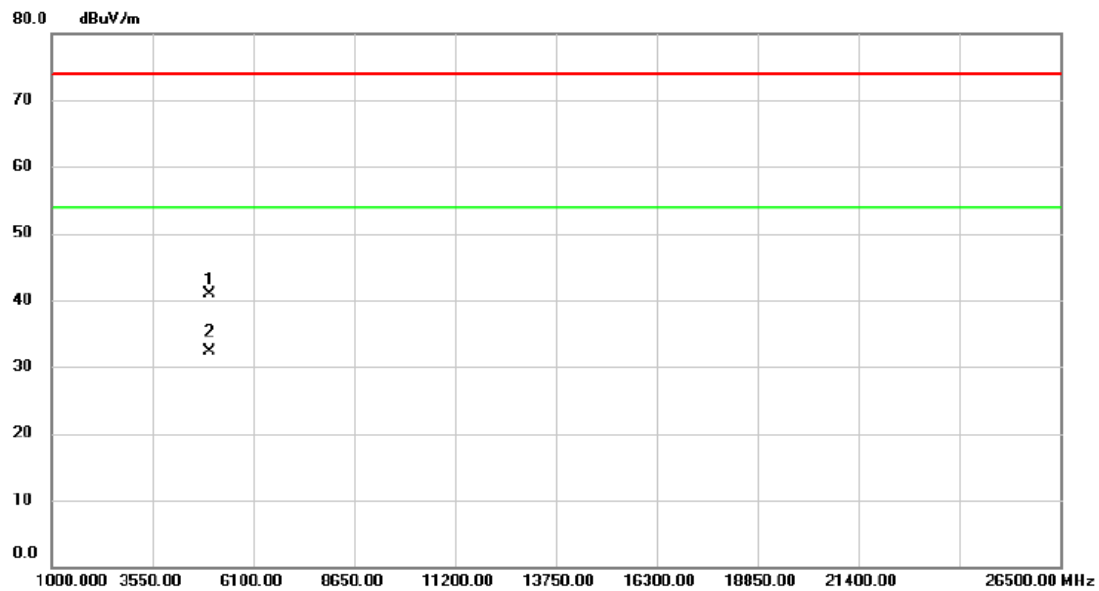
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2429.400	60.59	31.90	92.49	54.00	38.49	AVG	No Limit
2	X	2429.600	68.68	31.90	100.58	74.00	26.58	peak	No Limit

### REMARKS:

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

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

### Horizontal



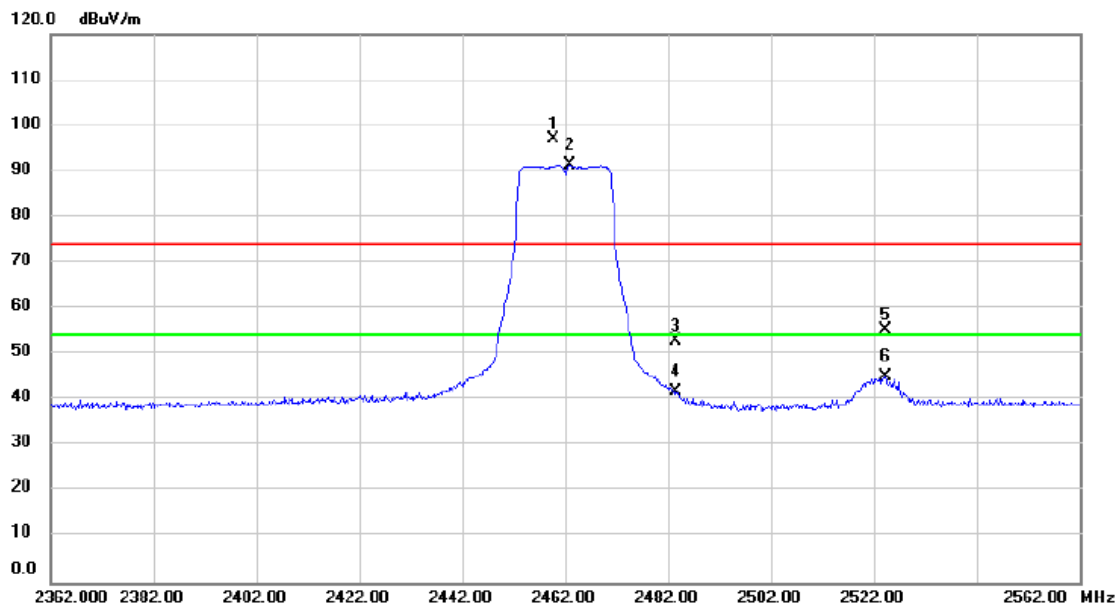
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4999.800	50.91	-9.99	40.92	74.00	-33.08	peak	
2	*	5000.100	42.22	-9.99	32.23	54.00	-21.77	AVG	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX N-20M Mode 2462 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	2459.800	65.21	31.99	97.20	74.00	23.20	peak	No Limit
2	*	2463.000	59.45	31.99	91.44	54.00	37.44	AVG	No Limit
3		2483.500	21.04	32.05	53.09	74.00	-20.91	peak	
4		2483.500	9.65	32.05	41.70	54.00	-12.30	AVG	
5		2524.200	23.12	32.17	55.29	74.00	-18.71	peak	
6		2524.200	13.06	32.17	45.23	54.00	-8.77	AVG	

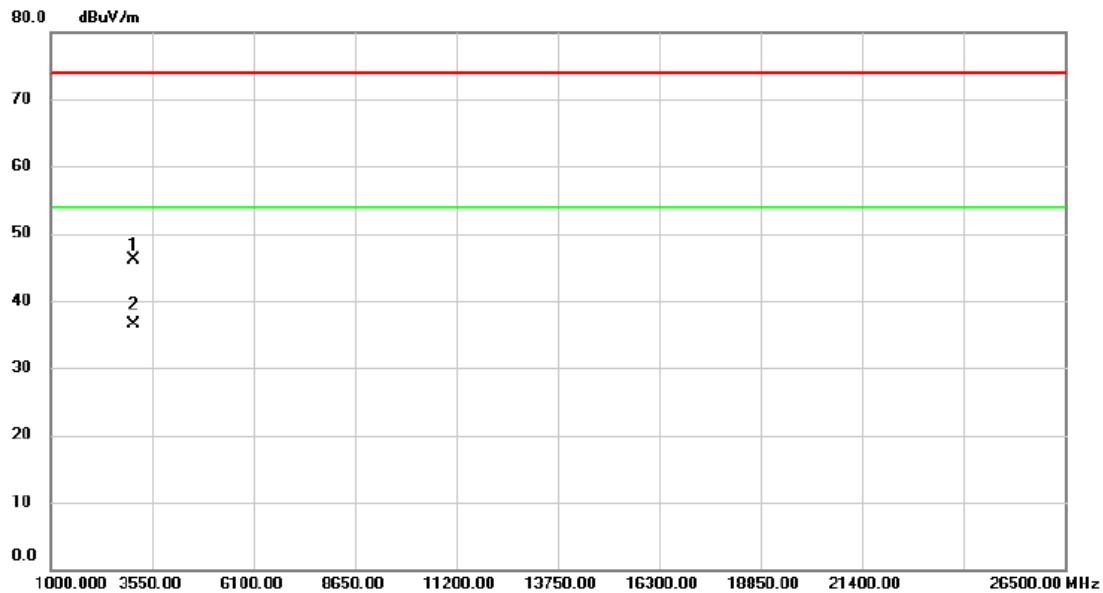
### REMARKS:

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

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

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

### Vertical



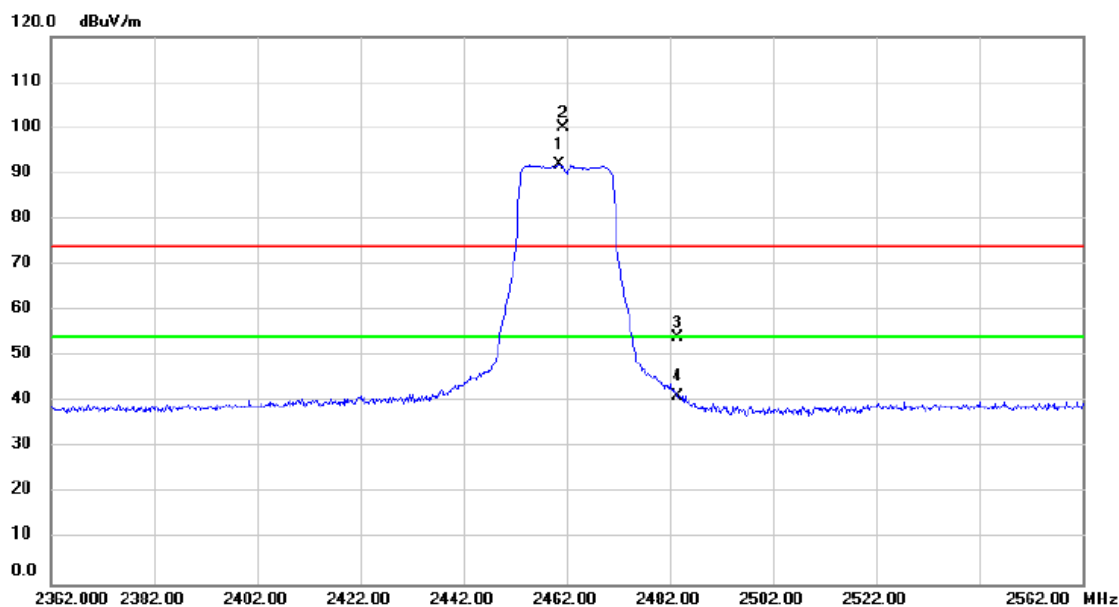
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		3082.400	61.40	-15.35	46.05	74.00	-27.95	peak	
2	*	3082.700	51.87	-15.35	36.52	54.00	-17.48	AVG	

#### REMARKS:

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

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

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2460.600	59.88	31.99	91.87	54.00	37.87	AVG	No Limit
2	X	2461.400	68.08	31.99	100.07	74.00	26.07	peak	No Limit
3		2483.500	21.96	32.05	54.01	74.00	-19.99	peak	
4		2483.500	9.33	32.05	41.38	54.00	-12.62	AVG	

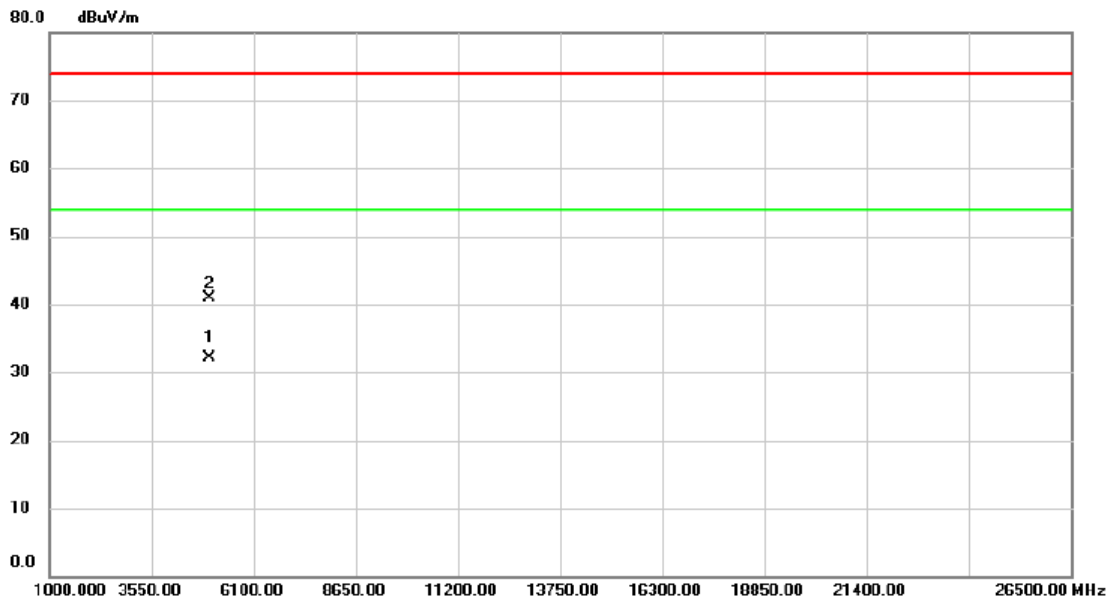
#### REMARKS:

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

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

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

### Horizontal



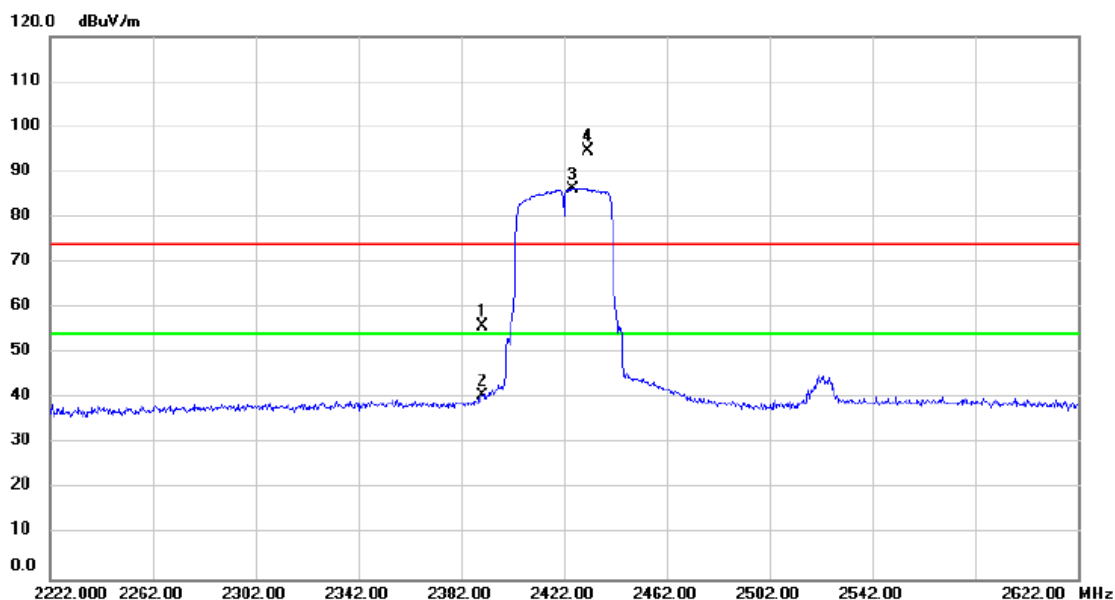
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5000.000	42.16	-9.99	32.17	54.00	-21.83	AVG	
2		5000.300	50.91	-9.99	40.92	74.00	-33.08	peak	

### REMARKS:

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

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

### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	24.18	31.79	55.97	74.00	-18.03	peak	
2		2390.000	8.96	31.79	40.75	74.00	-33.25	peak	
3	X	2425.600	54.48	31.89	86.37	74.00	12.37	peak	No Limit
4	*	2431.600	62.84	31.91	94.75	74.00	20.75	peak	No Limit

#### REMARKS:

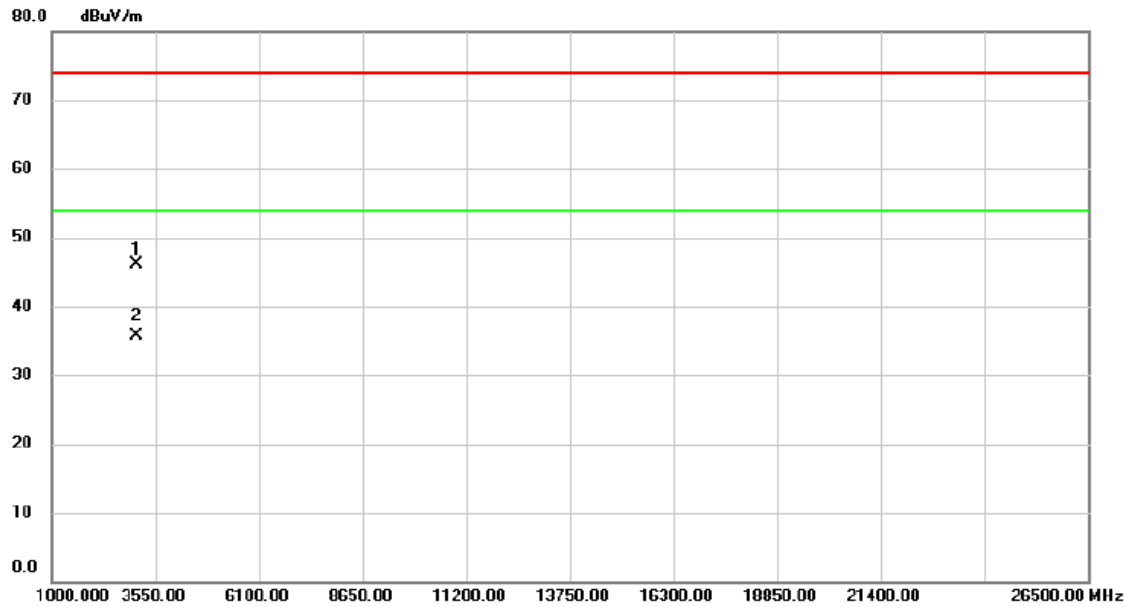
(1) Measurement Value = Reading Level + Correct Factor.

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



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

### Vertical



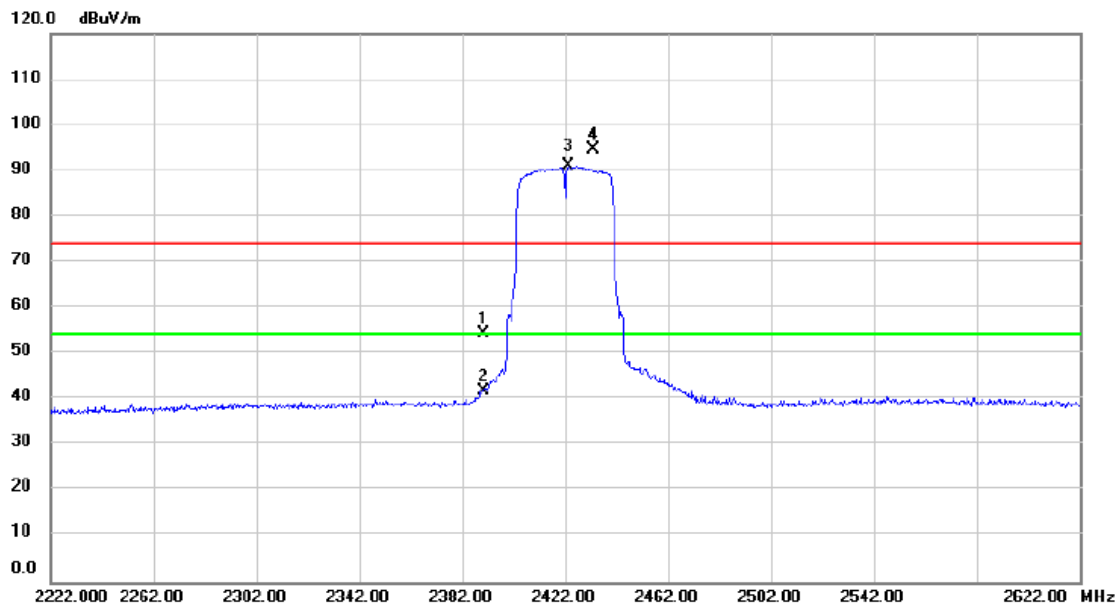
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3080.500	61.42	-15.35	46.07	74.00	-27.93	peak	
2	*	3082.000	51.15	-15.35	35.80	54.00	-18.20	AVG	

#### REMARKS:

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

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

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	22.67	31.79	54.46	74.00	-19.54	peak	
2		2390.000	9.98	31.79	41.77	74.00	-32.23	peak	
3	*	2423.200	59.15	31.88	91.03	54.00	37.03	AVG	No Limit
4	X	2433.200	62.82	31.91	94.73	74.00	20.73	peak	No Limit

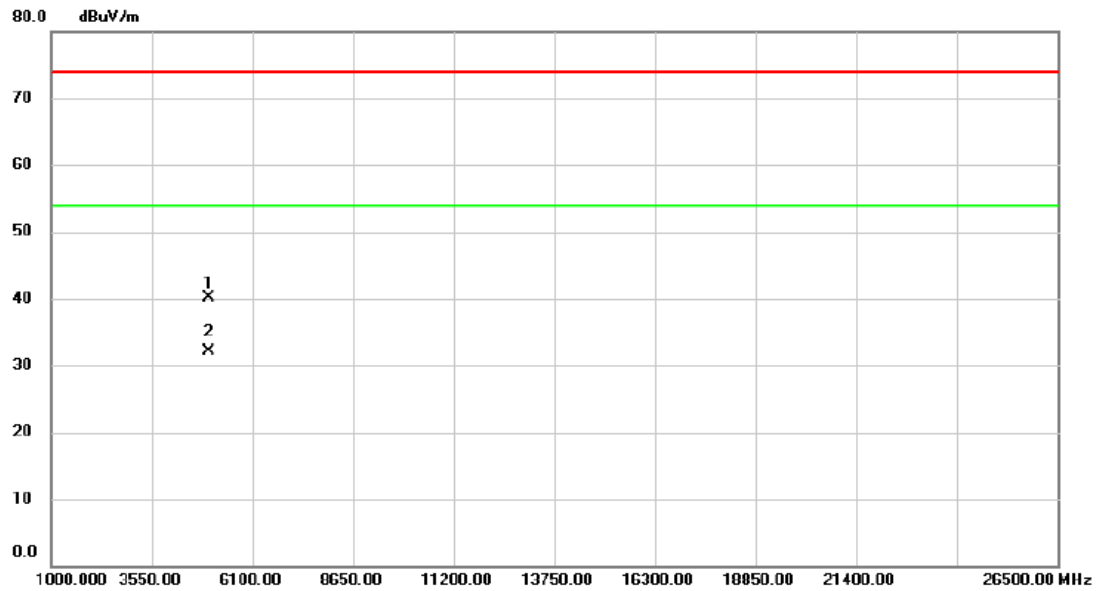
#### REMARKS:

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

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

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

### Horizontal



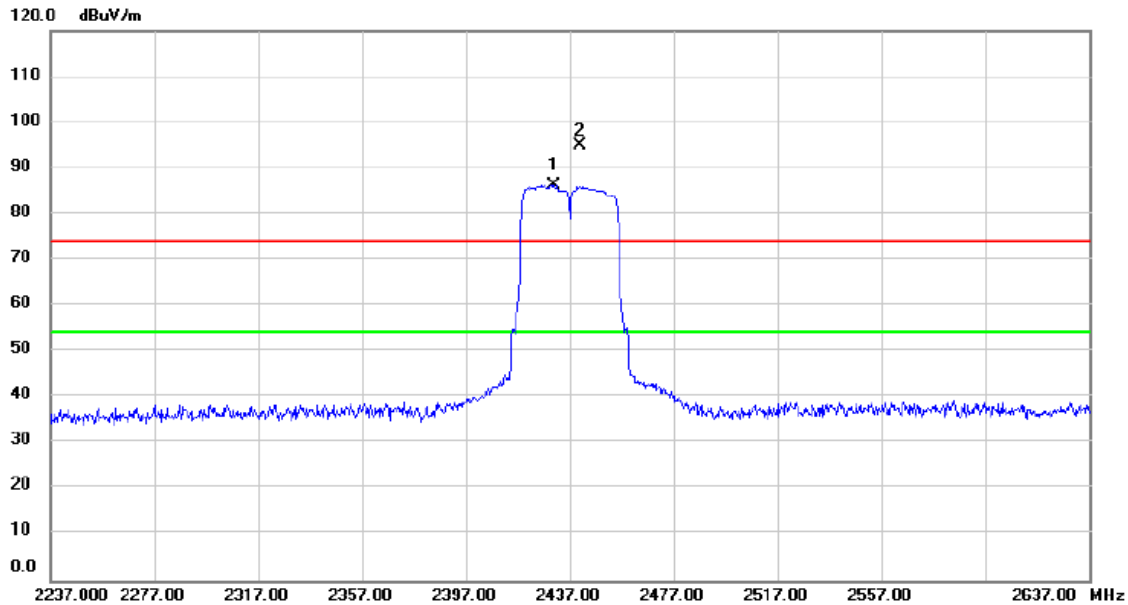
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5000.000	50.12	-9.99	40.13	74.00	-33.87	peak	
2	*	5000.100	42.12	-9.99	32.13	54.00	-21.87	AVG	

#### REMARKS:

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

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

### Vertical



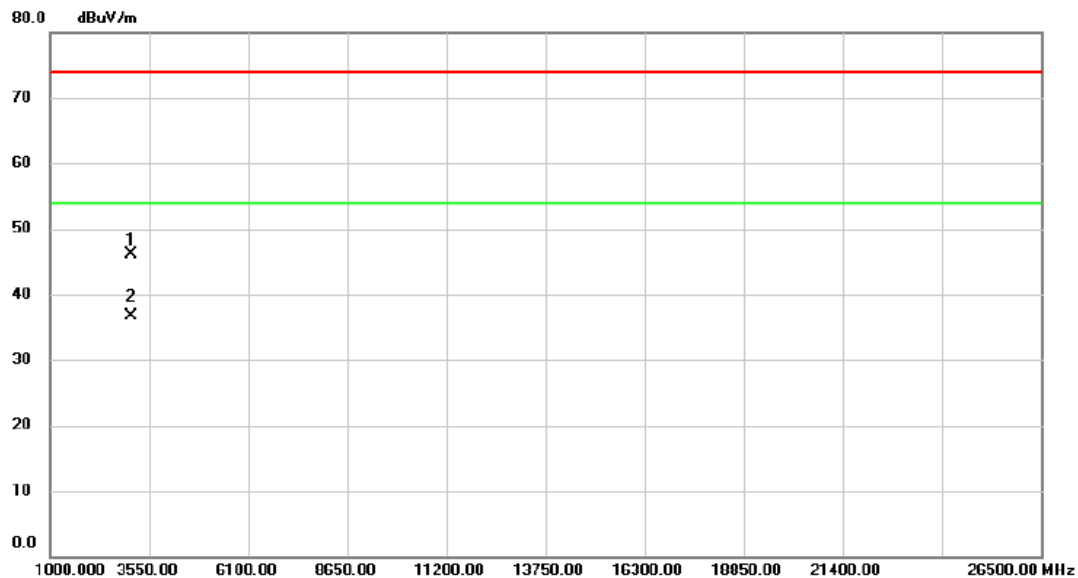
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2431.000	54.39	31.91	86.30	54.00	32.30	AVG	No Limit
2	X	2441.000	62.96	31.93	94.89	74.00	20.89	peak	No Limit

### REMARKS:

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

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

### Vertical



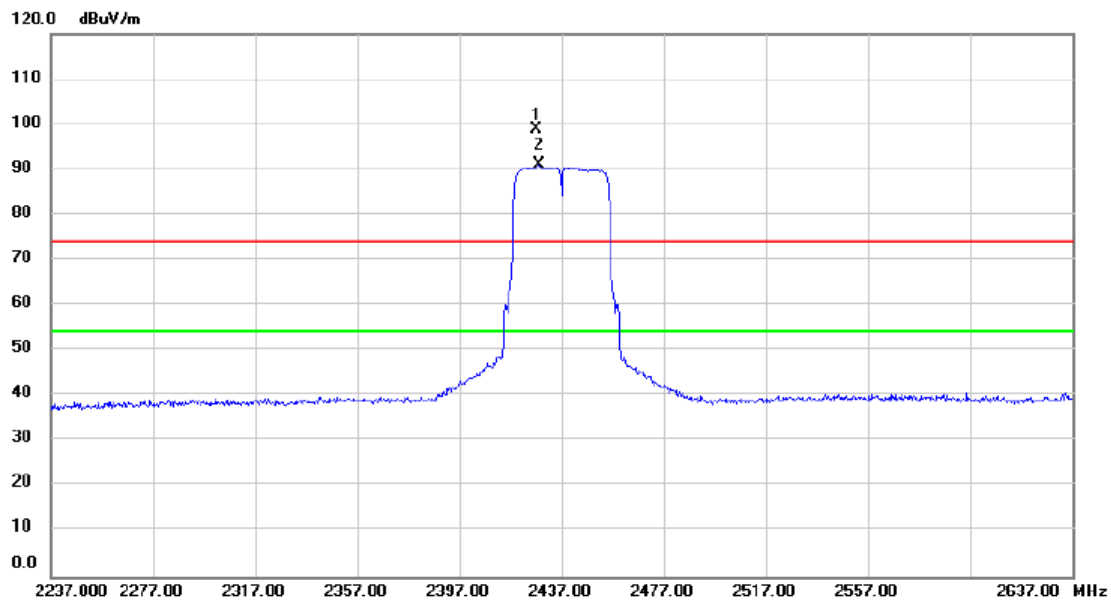
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		3080.200	61.54	-15.35	46.19	74.00	-27.81	peak	
2	*	3083.300	51.99	-15.35	36.64	54.00	-17.36	AVG	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2437 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	2427.000	67.03	31.89	98.92	74.00	24.92	peak	No Limit
2	*	2428.200	59.04	31.90	90.94	54.00	36.94	AVG	No Limit

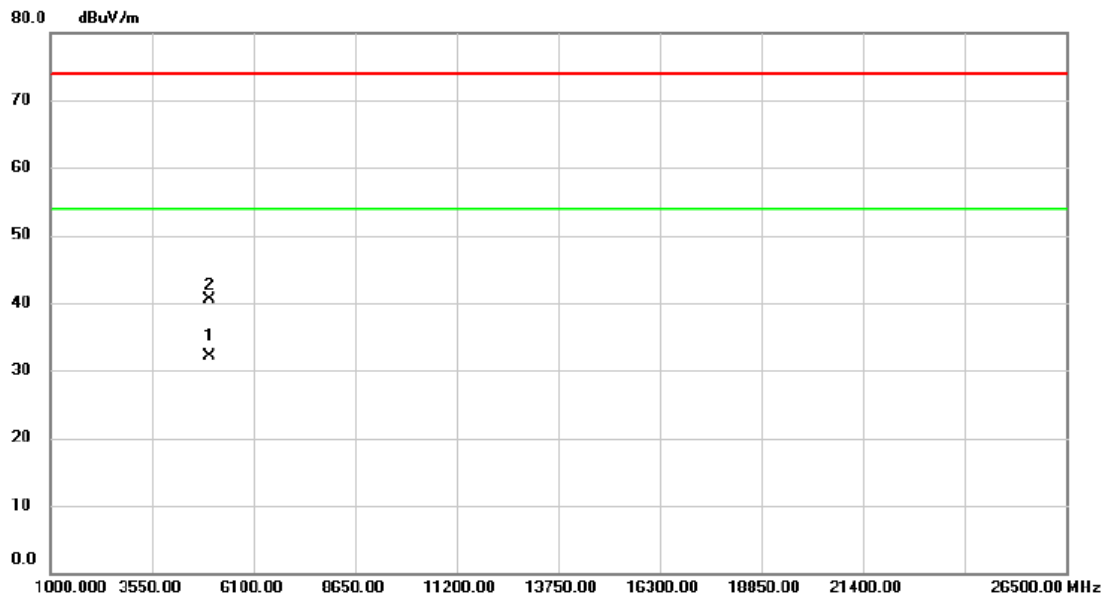
### REMARKS:

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

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

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

### Horizontal



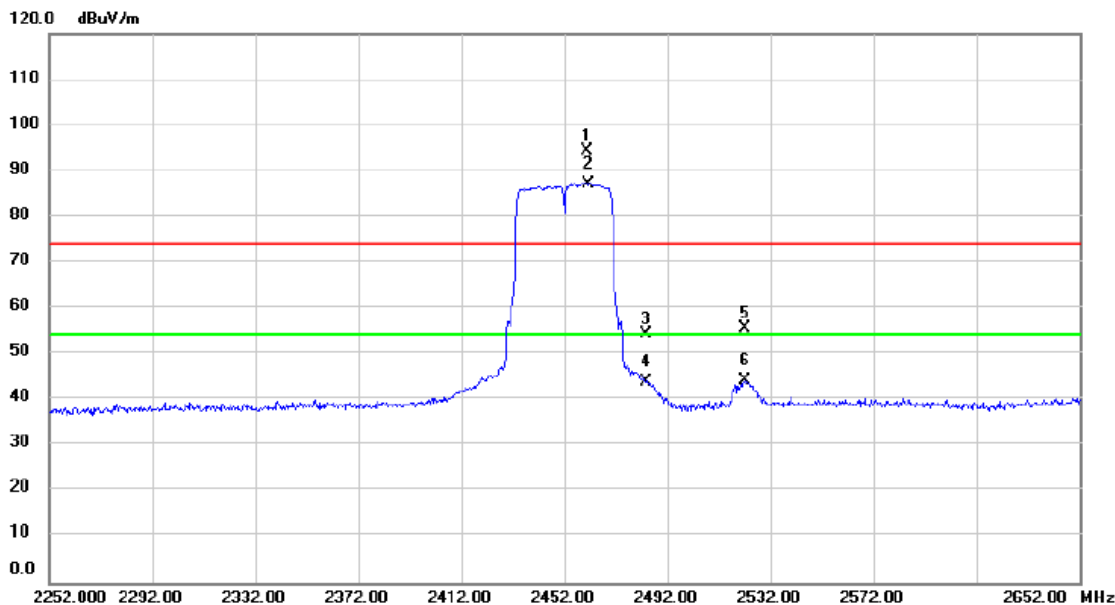
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5000.000	42.16	-9.99	32.17	54.00	-21.83	AVG	
2		5000.200	50.47	-9.99	40.48	74.00	-33.52	peak	

### REMARKS:

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

Orthogonal Axis	X
Test Mode:	TX N-40M Mode 2452 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	2460.800	62.44	31.99	94.43	74.00	20.43	peak	No Limit
2	*	2461.200	55.20	31.99	87.19	54.00	33.19	AVG	No Limit
3		2483.500	22.37	32.05	54.42	74.00	-19.58	peak	
4		2483.500	11.81	32.05	43.86	54.00	-10.14	AVG	
5		2522.000	23.47	32.16	55.63	74.00	-18.37	peak	
6		2522.000	12.11	32.16	44.27	54.00	-9.73	AVG	

#### REMARKS:

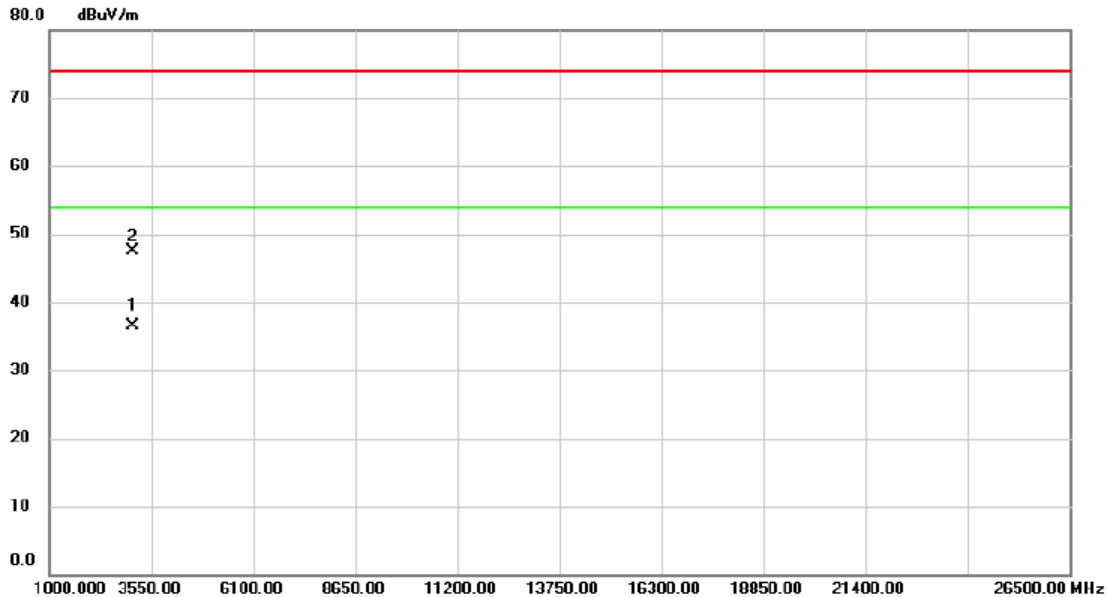
(1) Measurement Value = Reading Level + Correct Factor.

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



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

### Vertical



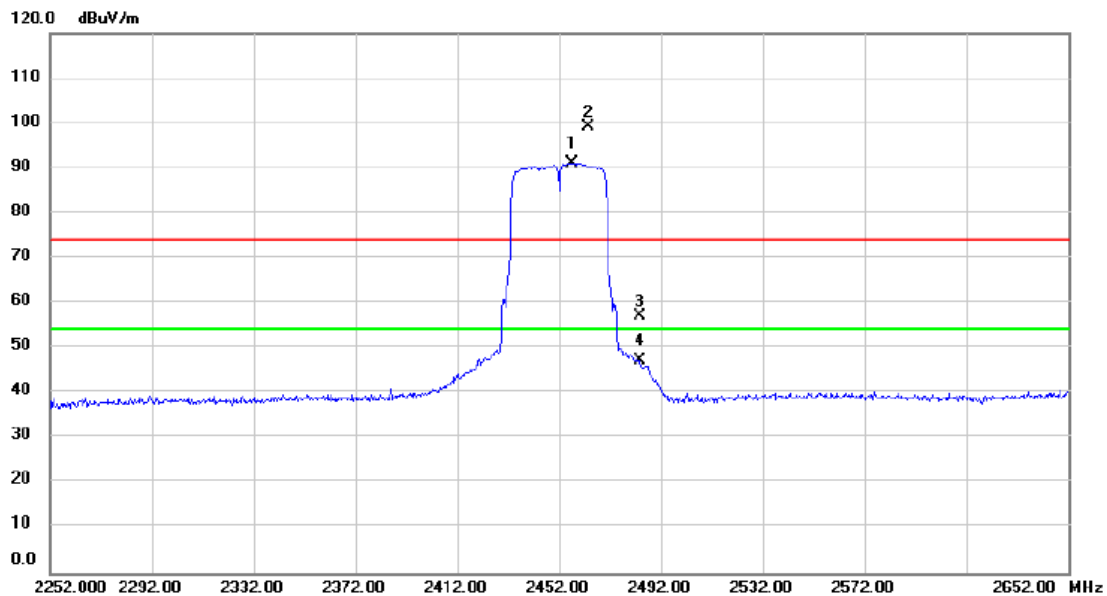
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	3082.900	51.81	-15.35	36.46	54.00	-17.54	AVG	
2		3086.100	62.94	-15.35	47.59	74.00	-26.41	peak	

#### REMARKS:

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

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

### Horizontal



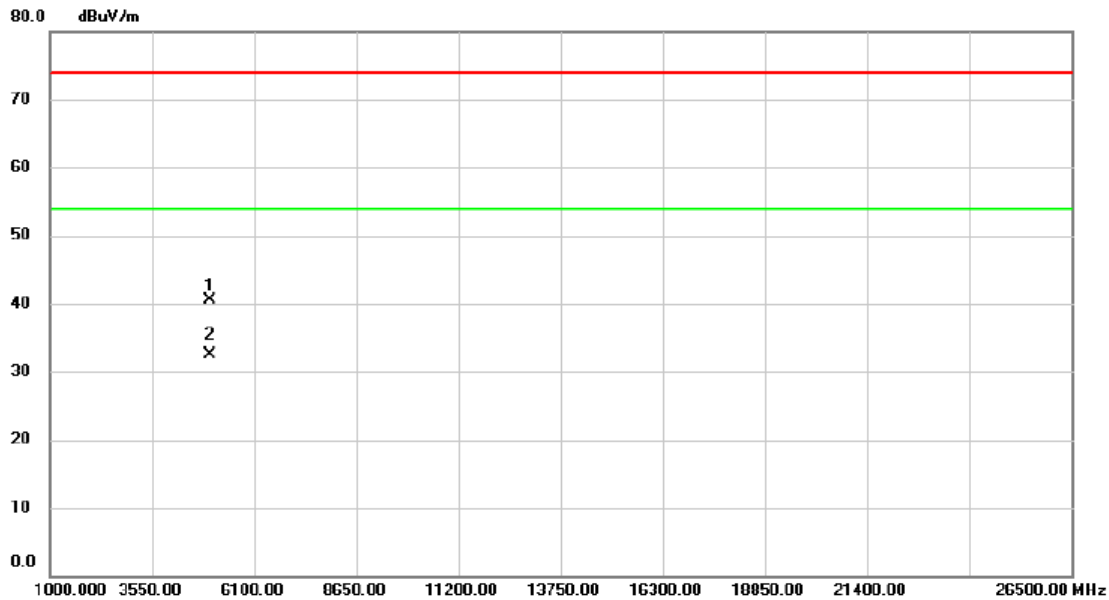
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2456.800	59.09	31.98	91.07	54.00	37.07	AVG	No Limit
2	X	2463.600	67.15	31.99	99.14	74.00	25.14	peak	No Limit
3		2483.500	25.00	32.05	57.05	74.00	-16.95	peak	
4		2483.500	15.32	32.05	47.37	54.00	-6.63	AVG	

### REMARKS:

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

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

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4999.900	50.53	-9.99	40.54	74.00	-33.46	peak	
2	*	5000.000	42.44	-9.99	32.45	54.00	-21.55	AVG	

#### REMARKS:

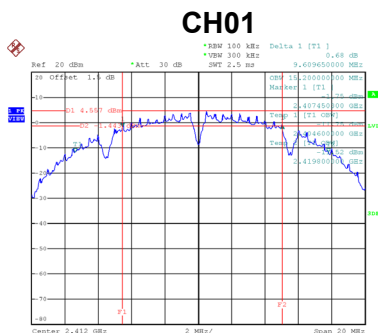
- (1) Measurement Value = Reading Level + Correct Factor.  
 (2) Margin Level = Measurement Value - Limit Value.

## APPENDIX E - BANDWIDTH

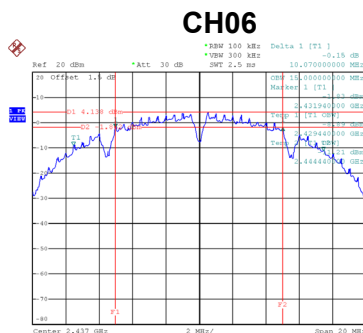
## Non-Beamforming

Test Mode	TX B Mode
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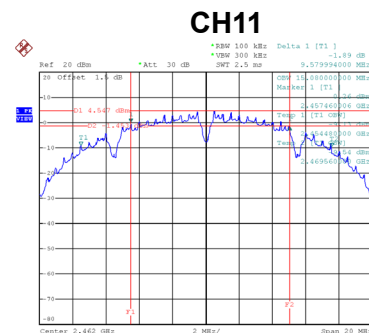
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	9.61	15.20	500	Complies
06	2437	10.07	15.00	500	Complies
11	2462	9.58	15.08	500	Complies



Date: 26.MAR.2019 15:29:39



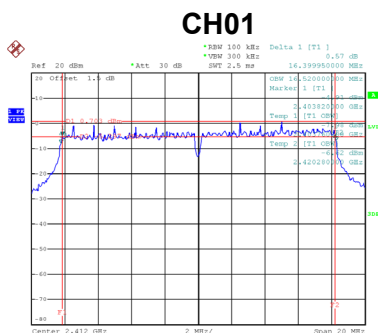
Date: 26.MAR.2019 15:32:20



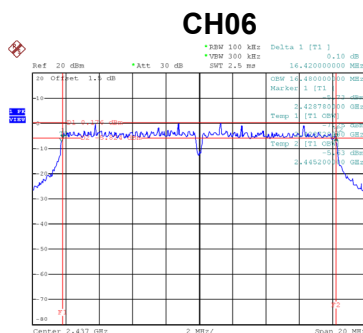
Date: 26.MAR.2019 15:35:22

Test Mode	TX G Mode
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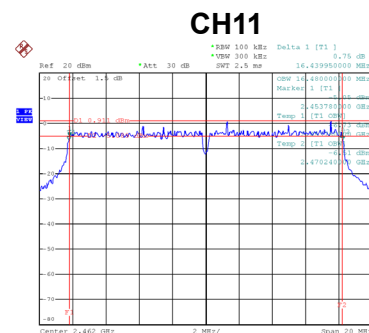
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	16.40	16.52	500	Complies
06	2437	16.42	16.48	500	Complies
11	2462	16.44	16.48	500	Complies



Date: 26.MAR.2019 15:41:07



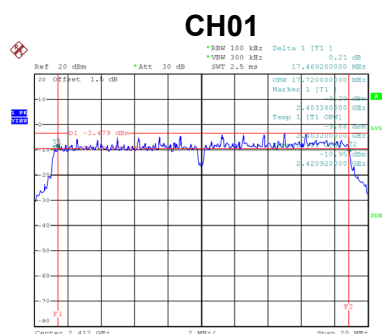
Date: 26.MAR.2019 15:42:55



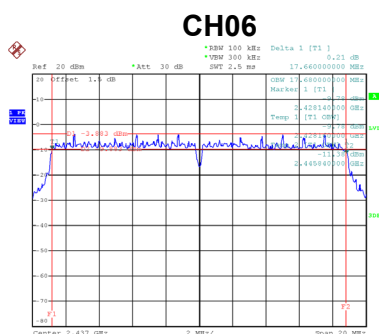
Date: 26.MAR.2019 15:44:48

Test Mode	TX N (HT20) Mode
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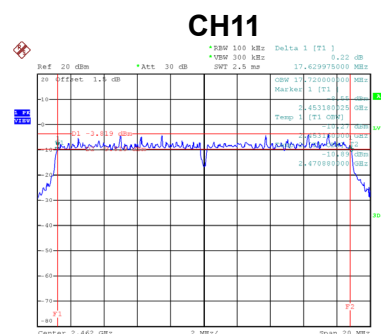
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	17.47	17.72	500	Complies
06	2437	17.66	17.68	500	Complies
11	2462	17.63	17.72	500	Complies



Date: 26.MAR.2019 15:46:52



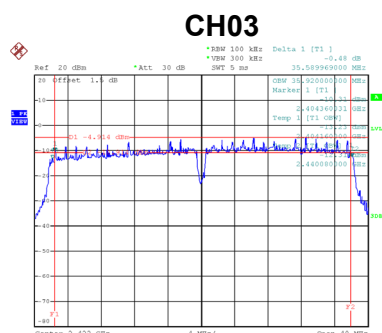
Date: 26.MAR.2019 15:48:33



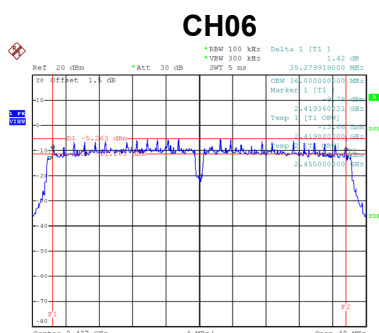
Date: 26.MAR.2019 15:50:31

Test Mode	TX N (HT40) Mode
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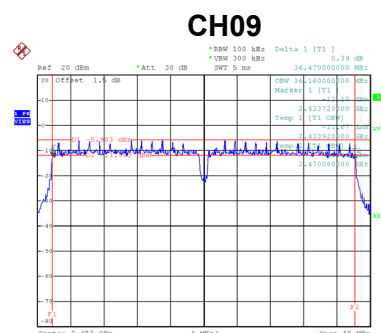
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	35.59	35.92	500	Complies
06	2437	35.28	36.00	500	Complies
09	2452	36.47	36.16	500	Complies



Date: 26.MAR.2019 16:08:58



Date: 26.MAR.2019 16:10:52



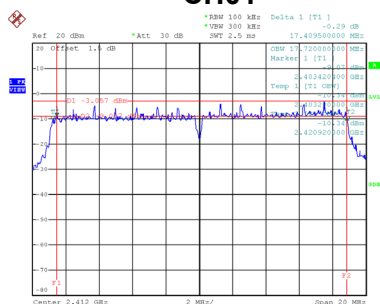
Date: 26.MAR.2019 16:07:30

## Beamforming

Test Mode	TX N (HT20) Mode
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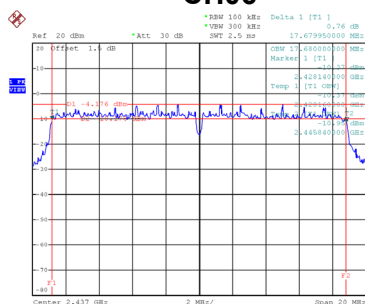
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	17.41	17.72	500	Complies
06	2437	17.68	17.68	500	Complies
11	2462	17.65	17.72	500	Complies

### CH01



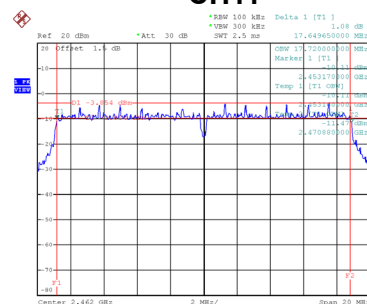
Date: 18.APR.2019 11:54:39

### CH06



Date: 18.APR.2019 12:01:55

### CH11

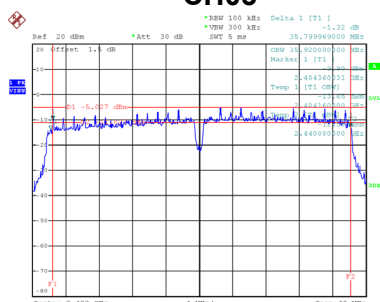


Date: 18.APR.2019 12:46:17

Test Mode	TX N (HT40) Mode
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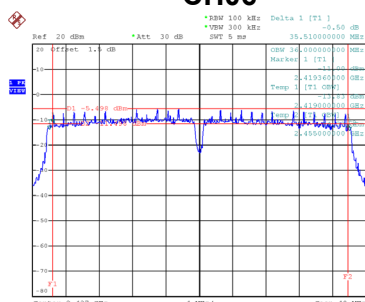
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	35.80	35.92	500	Complies
06	2437	35.51	36.00	500	Complies
09	2452	35.76	36.16	500	Complies

### CH03



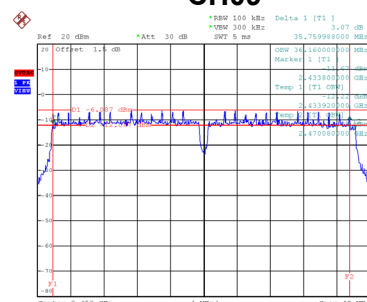
Date: 18.APR.2019 12:49:34

### CH06



Date: 18.APR.2019 13:06:44

### CH09



Date: 18.APR.2019 13:11:09

## APPENDIX F - MAXIMUM OUTPUT POWER



### Non-Beamforming

Test Mode	TX B Mode
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	16.30	0.0427	30.00	1.0000	Complies
06	2437	16.44	0.0441	30.00	1.0000	Complies
11	2462	16.33	0.0430	30.00	1.0000	Complies

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

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.53	0.1422	30.00	1.0000	Complies
06	2437	21.85	0.1531	30.00	1.0000	Complies
11	2462	21.73	0.1489	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Ant. 1
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.23	0.0665	30.00	1.0000	Complies
06	2437	18.50	0.0708	30.00	1.0000	Complies
11	2462	18.10	0.0646	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Ant. 2
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.40	0.0871	30.00	1.0000	Complies
06	2437	19.61	0.0914	30.00	1.0000	Complies
11	2462	18.92	0.0780	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Total
-----------	------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.86	0.1535	30.00	1.0000	Complies
06	2437	22.10	0.1622	30.00	1.0000	Complies
11	2462	21.54	0.1426	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Ant. 1
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	21.86	0.1535	30.00	1.0000	Complies
06	2437	22.10	0.1622	30.00	1.0000	Complies
09	2452	21.54	0.1426	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Ant. 2
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	21.15	0.1303	30.00	1.0000	Complies
06	2437	20.60	0.1148	30.00	1.0000	Complies
09	2452	21.25	0.1334	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Total
-----------	------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	23.45	0.2213	30.00	1.0000	Complies
06	2437	23.09	0.2037	30.00	1.0000	Complies
09	2452	23.37	0.2173	30.00	1.0000	Complies

### Beamforming

Test Mode	TX N (HT20) Mode_Ant. 1
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.52	0.0565	30.00	1.0000	Complies
06	2437	17.86	0.0611	30.00	1.0000	Complies
11	2462	17.51	0.0564	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Ant. 2
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.73	0.0746	30.00	1.0000	Complies
06	2437	18.96	0.0787	30.00	1.0000	Complies
11	2462	18.39	0.0690	30.00	1.0000	Complies

Test Mode	TX N (HT20) Mode_Total
-----------	------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.18	0.1312	30.00	1.0000	Complies
06	2437	21.46	0.1400	30.00	1.0000	Complies
11	2462	20.98	0.1253	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Ant. 1
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	18.68	0.0738	30.00	1.0000	Complies
06	2437	18.69	0.0740	30.00	1.0000	Complies
09	2452	18.49	0.0706	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Ant. 2
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	20.39	0.1094	30.00	1.0000	Complies
06	2437	20.18	0.1042	30.00	1.0000	Complies
09	2452	20.55	0.1135	30.00	1.0000	Complies

Test Mode	TX N (HT40) Mode_Total
-----------	------------------------

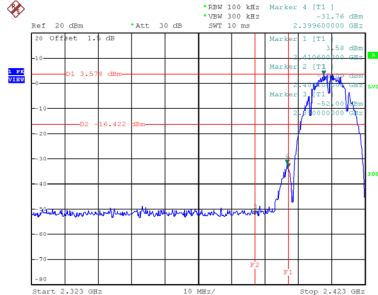
Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	22.63	0.1832	30.00	1.0000	Complies
06	2437	22.51	0.1782	30.00	1.0000	Complies
09	2452	22.65	0.1841	30.00	1.0000	Complies

## APPENDIX G - CONDUCTED SPURIOUS EMISSIONS

## Non-Beamforming

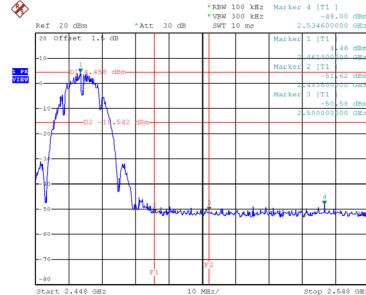
Test Mode TX B Mode

### Bandedge-CH01



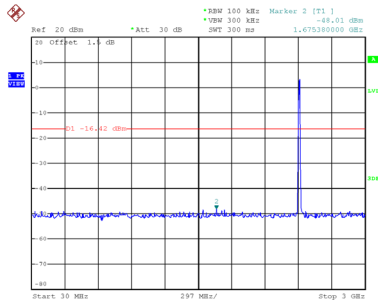
Date: 26.MAR.2019 15:30:03

### Bandedge-CH11

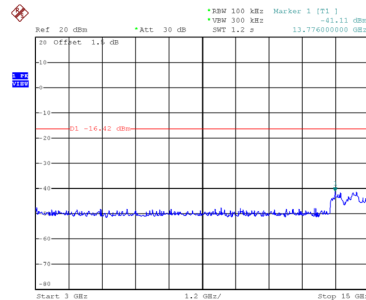


Date: 26.MAR.2019 15:35:29

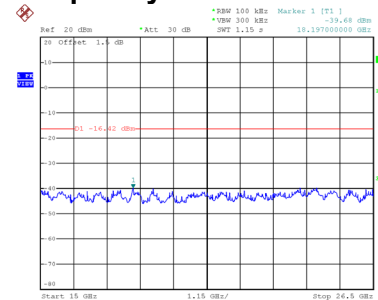
### CH01 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:30:17

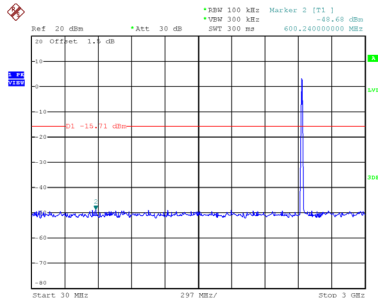


Date: 26.MAR.2019 15:30:23

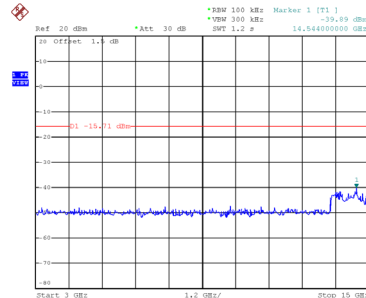


Date: 26.MAR.2019 15:30:31

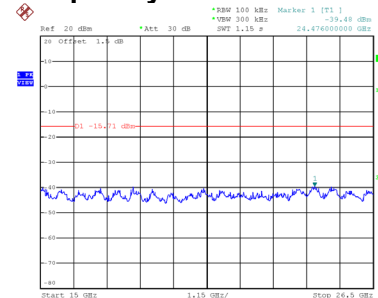
### CH06 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:32:56

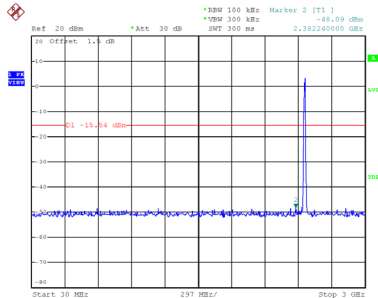


Date: 26.MAR.2019 15:33:03

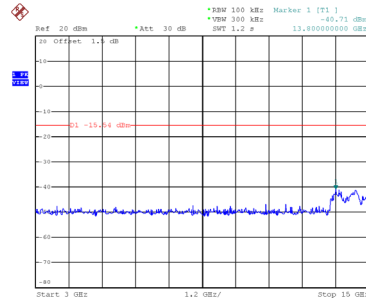


Date: 26.MAR.2019 15:33:10

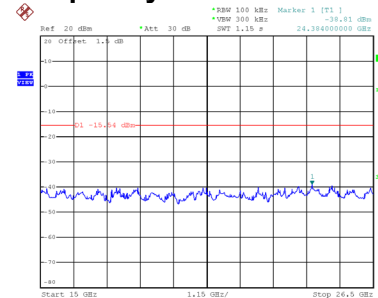
### CH11 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:35:42



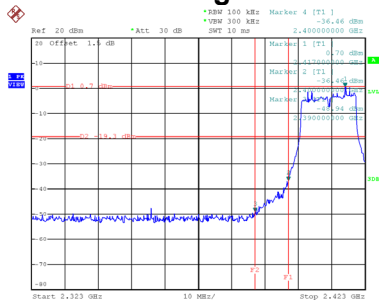
Date: 26.MAR.2019 15:35:49



Date: 26.MAR.2019 15:35:55

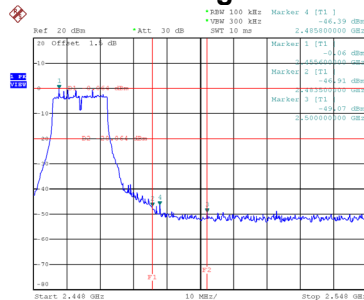
Test Mode TX G Mode

### Bandedge-CH01



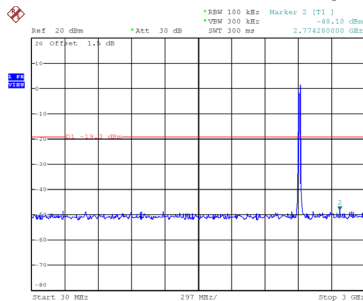
Date: 26.MAR.2019 15:41:30

### Bandedge-CH11

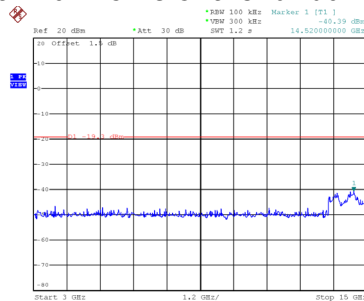


Date: 26.MAR.2019 15:44:55

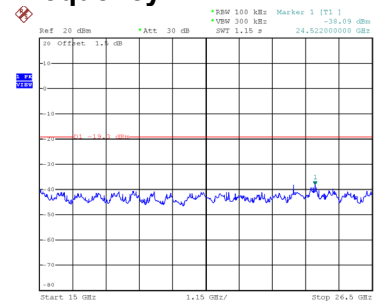
### CH01 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:41:43

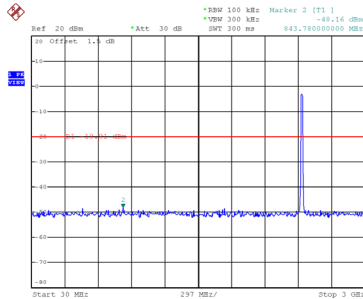


Date: 26.MAR.2019 15:41:50

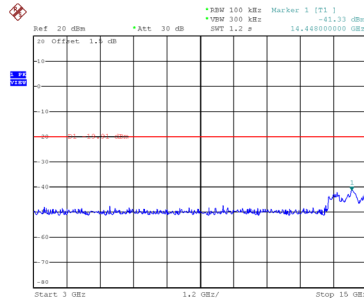


Date: 26.MAR.2019 15:41:57

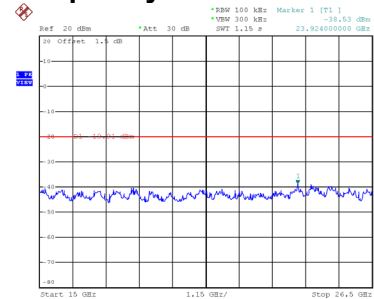
### CH06 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:43:32

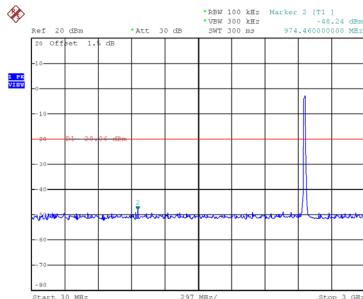


Date: 26.MAR.2019 15:43:38

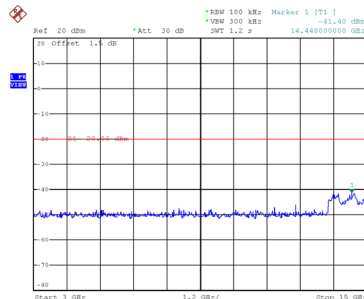


Date: 26.MAR.2019 15:43:45

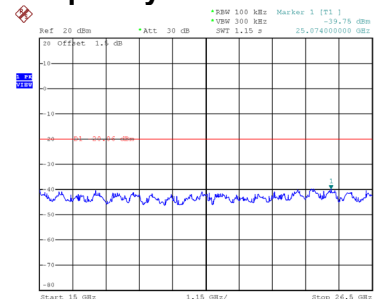
### CH11 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:45:08



Date: 26.MAR.2019 15:45:15



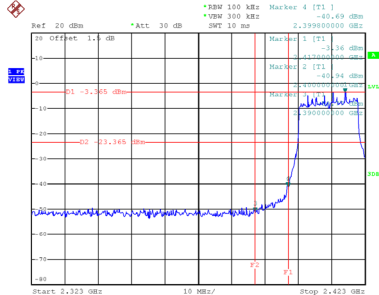
Date: 26.MAR.2019 15:45:21



## Non-Beamforming

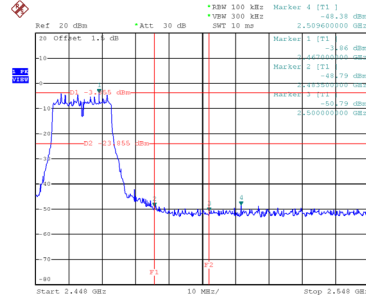
Test Mode TX N (HT20) Mode\_Ant. 1

### Bandedge-CH01



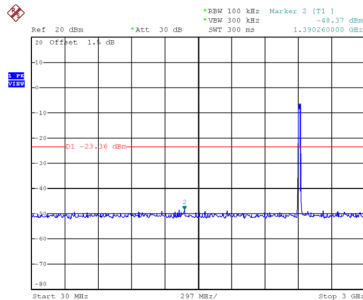
Date: 26.MAR.2019 15:47:16

### Bandedge-CH11

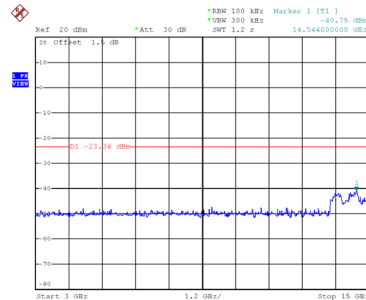


Date: 26.MAR.2019 15:50:38

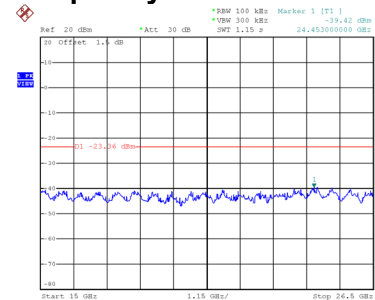
### CH01 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:47:29

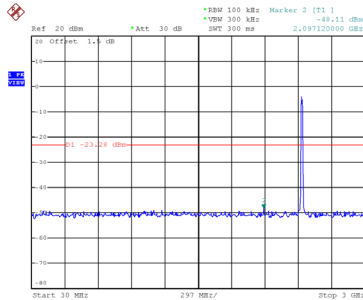


Date: 26.MAR.2019 15:47:35

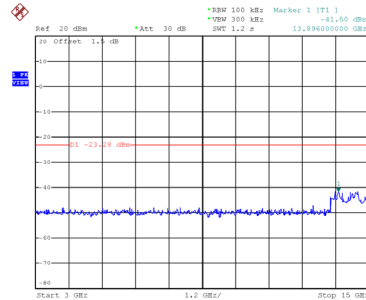


Date: 26.MAR.2019 15:47:42

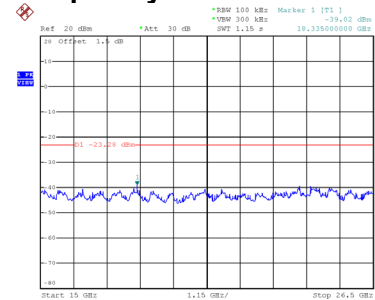
### CH06 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:49:09

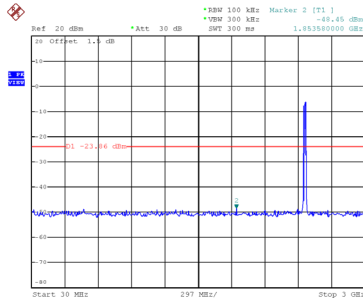


Date: 26.MAR.2019 15:49:16

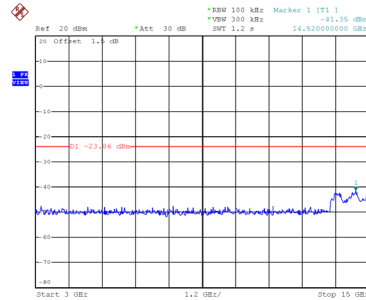


Date: 26.MAR.2019 15:49:23

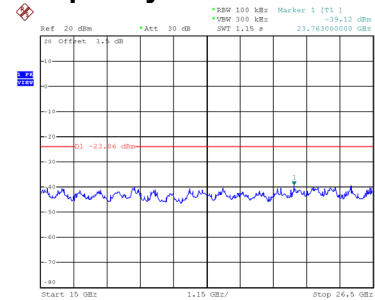
### CH11 – 10th Harmonic of the fundamental frequency



Date: 26.MAR.2019 15:50:51



Date: 26.MAR.2019 15:50:58



Date: 26.MAR.2019 15:51:04