

# FCC Radio Test Report

## FCC ID: G95UIW4054

**This report concerns: Original Grant**

**Project No.** : 2104C150A  
**Equipment** : Set Top Box  
**Brand Name** : Technicolor  
**Test Model** : UIW4054MIL  
**Series Model** : N/A  
**Applicant** : Technicolor Connected Home USA LLC  
**Address** : 4855 Peachtree Industrial Blvd. , Suite 200, Norcross, GA 30092, USA  
**Manufacturer** : Technicolor Connected Home USA LLC  
**Address** : 4855 Peachtree Industrial Blvd. , Suite 200, Norcross, GA 30092, USA  
**Factory** : 1# Maintek Computer (Suzhou) Co Ltd  
2# PT. PEGATRON TECHNOLOGY INDONESIA  
**Address** : 1# 233 Jinfeng Road, New District, Suzhou, Jiangsu, 215011, China  
2# JL Beringin, Lot 2/Lot 5/Lot 11 Batam Industrial Park, Muka  
Kuning, Sungai Beduk, Batam, 29433, Indonesia  
**Date of Receipt** : Apr. 20, 2021  
**Date of Test** : Apr. 22, 2021 ~ Jul. 16, 2021  
**Issued Date** : Aug. 16, 2021  
**Report Version** : R01  
**Test Sample** : Engineering Sample No.: DG20210420128 for conducted,  
DG20210420129 and DG2021070533 for radiated.  
**Standard(s)** : FCC CFR Title 47, Part 15, Subpart C  
FCC KDB 558074 D01 15.247 Meas Guidance v05r02  
FCC KDB 662911 D01 Multiple Transmitter Output v02r01  
ANSI C63.10-2013

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

*chella Zheng*

Prepared by : Chella Zheng

*Ethan Ma*

Approved by : Ethan Ma



TESTING CERT #5123.02

Add: No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China  
Tel: +86-769-8318-3000  
Web: [www.newbtl.com](http://www.newbtl.com)

### **Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

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

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

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

### **Limitation**

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

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

Table of Contents	Page
<b>REPORT ISSUED HISTORY</b>	<b>5</b>
<b>1 . SUMMARY OF TEST RESULTS</b>	<b>6</b>
1.1 TEST FACILITY	7
1.2 MEASUREMENT UNCERTAINTY	7
1.3 TEST ENVIRONMENT CONDITIONS	8
<b>2 . GENERAL INFORMATION</b>	<b>9</b>
2.1 GENERAL DESCRIPTION OF EUT	9
2.2 DESCRIPTION OF TEST MODES	11
2.3 PARAMETERS OF TEST SOFTWARE	12
2.4 DUTY CYCLE	13
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	15
2.6 SUPPORT UNITS	15
<b>3 . AC POWER LINE CONDUCTED EMISSIONS</b>	<b>16</b>
3.1 LIMIT	16
3.2 TEST PROCEDURE	16
3.3 DEVIATION FROM TEST STANDARD	16
3.4 TEST SETUP	17
3.5 EUT OPERATION CONDITIONS	17
3.6 TEST RESULTS	17
<b>4 . RADIATED EMISSIONS</b>	<b>18</b>
4.1 LIMIT	18
4.2 TEST PROCEDURE	19
4.3 DEVIATION FROM TEST STANDARD	20
4.4 TEST SETUP	20
4.5 EUT OPERATION CONDITIONS	21
4.6 TEST RESULTS - 9 KHZ TO 30 MHZ	21
4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ	21
4.8 TEST RESULTS - ABOVE 1000 MHZ	21
<b>5 . BANDWIDTH</b>	<b>22</b>
5.1 LIMIT	22
5.2 TEST PROCEDURE	22
5.3 DEVIATION FROM STANDARD	22
5.4 TEST SETUP	22

**Table of Contents**

	<b>Page</b>
5.5 EUT OPERATION CONDITIONS	22
5.6 TEST RESULTS	22
<b>6 . MAXIMUM OUTPUT POWER</b>	<b>23</b>
6.1 LIMIT	23
6.2 TEST PROCEDURE	23
6.3 DEVIATION FROM STANDARD	23
6.4 TEST SETUP	23
6.5 EUT OPERATION CONDITIONS	23
6.6 TEST RESULTS	23
<b>7 . CONDUCTED SPURIOUS EMISSIONS</b>	<b>24</b>
7.1 LIMIT	24
7.2 TEST PROCEDURE	24
7.3 DEVIATION FROM STANDARD	24
7.4 TEST SETUP	24
7.5 EUT OPERATION CONDITIONS	24
7.6 TEST RESULTS	24
<b>8 . POWER SPECTRAL DENSITY</b>	<b>25</b>
8.1 LIMIT	25
8.2 TEST PROCEDURE	25
8.3 DEVIATION FROM STANDARD	25
8.4 TEST SETUP	25
8.5 EUT OPERATION CONDITIONS	25
8.6 TEST RESULTS	25
<b>9 . MEASUREMENT INSTRUMENTS LIST</b>	<b>26</b>
<b>APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS</b>	<b>28</b>
<b>APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ</b>	<b>31</b>
<b>APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ</b>	<b>36</b>
<b>APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ</b>	<b>39</b>
<b>APPENDIX E - BANDWIDTH</b>	<b>88</b>
<b>APPENDIX F - MAXIMUM OUTPUT POWER</b>	<b>93</b>
<b>APPENDIX G - CONDUCTED SPURIOUS EMISSIONS</b>	<b>100</b>
<b>APPENDIX H - POWER SPECTRAL DENSITY</b>	<b>109</b>

**REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue.	Aug. 12, 2021
R01	Removed the test photos.	Aug. 16, 2021

## 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, 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(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 Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China.  
BTL's Test Firm Registration Number for FCC: 357015  
BTL's Designation Number for FCC: CN1240

## 1.2 MEASUREMENT UNCERTAINTY

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

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.68

B. Radiated emissions test:

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

C. Other Measurement:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Output Power	±0.95 dB
Conducted Spurious Emission	±2.71 dB
Power Spectral Density	±0.86 dB
Temperature	±0.08 °C
Humidity	±1.5%

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	Laughing Zhang
Radiated Emissions-9kHz to 30 MHz	25°C	60%	AC 120V/60Hz	Hayden Chen
Radiated Emissions-30MHz to 1000MHz	26°C	52%	AC 120V/60Hz	Hayden Chen
Radiated Emissions-Above 1000MHz	26°C	52%	AC 120V/60Hz	Hayden Chen
Bandwidth	24°C	51%	DC 12V	Jesse Wang
Maximum Output Power	24°C	51%	DC 12V	Silly Zheng
Conducted Spurious Emissions	24°C	51%	DC 12V	Jesse Wang
Power Spectral Density	24°C	51%	DC 12V	Jesse Wang

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Set Top Box
Brand Name	Technicolor
Test Model	UIW4054MIL
Series Model	N/A
Model Difference(s)	N/A
Software Version	UIW4054MIL_HC_1.0
Hardware Version	LAB1
Power Source	DC voltage supplied from AC adapter. 1# Brand / Model: MASS POWER / E012-1O120100VU 2# Brand / Model: HONOTO / ADS-12HG-12 12012EPCU
Power Rating	1# I/P: 100-240V~, 50/60Hz, 0.4A O/P: 12.0V --- 1.0A 2# I/P: 100-240V~ 50/60Hz Max. 0.4A 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 IEEE 802.11ax: OFDMA
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 144.4 Mbps IEEE 802.11ax: up to 286.8 Mbps
Maximum Output Power Non Beamforming	IEEE 802.11n(HT20): 21.62 dBm (0.1452 W)
Maximum Output Power Beamforming	IEEE 802.11n(HT20): 21.39 dBm (0.1377 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 IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20), IEEE 802.11ax(HE20)							
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	Internal	N/A	3.94
2	N/A	N/A	Internal	N/A	2.78

Note:

1) For CDD: Directional Gain=2.33 dBi

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

$N_{SS}$  = the number of independent spatial streams of data;

$N_{ANT}$  = the total number of antennas

$g_{j,k} = 10^{G_k/20}$  if the  $k$ th antenna is being fed by spatial stream  $j$ , or zero if it is not;  
 $G_k$  is the gain in dBi of the  $k$ th antenna.

2) For TXBF: Directional Gain=10log[(10<sup>G1/20</sup>+10<sup>G2/20</sup>+...+10<sup>GN/20</sup>)<sup>2</sup>/N<sub>ANT</sub>]=4.98dBi.

3) The antenna gain is provided by the manufacturer.

### 4. Table for Antenna Configuration:

For Non Beamforming:

Operating Mode \ TX Mode	2TX
IEEE 802.11b	V(Ant. 1 + Ant. 2)
IEEE 802.11g	V(Ant. 1 + Ant. 2)
IEEE 802.11n(HT20)	V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)	V(Ant. 1 + Ant. 2)

For Beamforming:

Operating Mode \ TX Mode	2TX
IEEE 802.11n(HT20)	V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)	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(HT20) Mode Channel 01/06/11
Mode 4	TX AX(HE20) Mode Channel 01/06/11
Mode 5	TX N(HT20) Mode Channel 06

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(HT20) Mode Channel 06

### Radiated emissions test - Below 1GHz

Final Test Mode	Description
Mode 5	TX N(HT20) Mode Channel 06

### Radiated emissions test- Above 1GHz\_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(HT20) Mode Channel 01/06/11
Mode 4	TX AX(HE20) Mode Channel 01/06/11

### Maximun Output Power test\_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(HT20) Mode Channel 01/06/11
Mode 4	TX AX(HE20) Mode Channel 01/06/11

<b>Maximum Output Power test_Beamforming</b>	
Final Test Mode	Description
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX AX(HE20) Mode Channel 01/06/11

<b>Other Conducted test_Non Beamforming</b>	
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(HT20) Mode Channel 01/06/11
Mode 4	TX AX(HE20) Mode Channel 01/06/11

**NOTE:**

- (1) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (2) For AC power line conducted emissions and radiated emission below 1 GHz test, the TX N(HT20) Mode Channel 06 is found to be the worst case and recorded.
- (3) For radiated emission above 1 GHz test, the spurious points of 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 Output Power are tested, the Non Beamforming and Beamforming are recorded in the report. The worst case is Non Beamforming and only the worst case is documented for other test items.
- (5) IEEE 802.11ax mode only supports full RU, so only the full RU is evaluated and measured inside report.

## 2.3 PARAMETERS OF TEST SOFTWARE

**Non Beamforming**

Test Software Version	N/A		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	75	76	77
IEEE 802.11g	66	75	70
IEEE 802.11n(HT20)	65	77	65
IEEE 802.11ax(HE20)	60	75	60

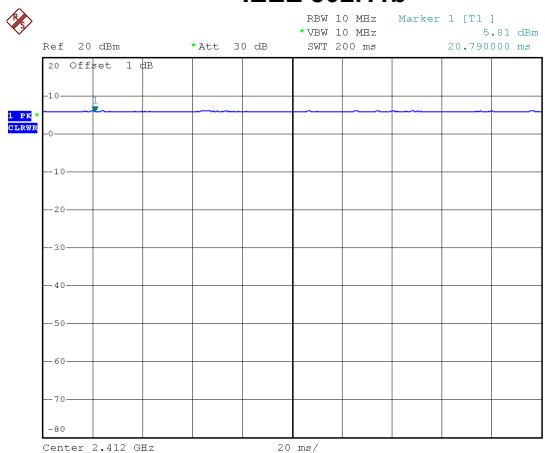
**Beamforming**

Test Software Version	N/A		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n(HT20)	64	76	64
IEEE 802.11ax(HE20)	60	74	60

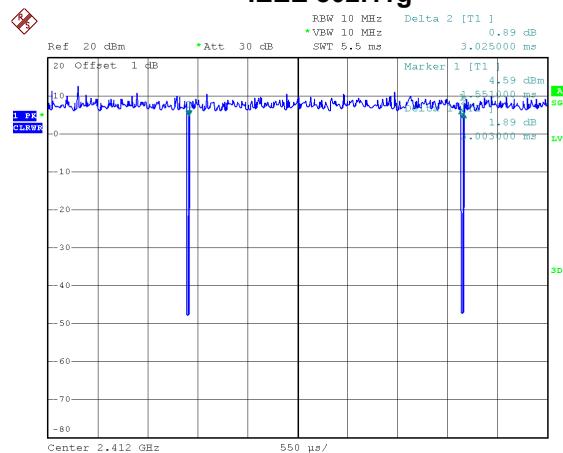
## 2.4 DUTY CYCLE

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

**IEEE 802.11b**



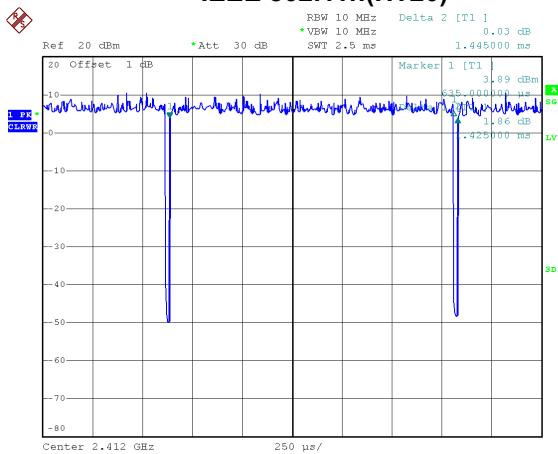
**IEEE 802.11g**



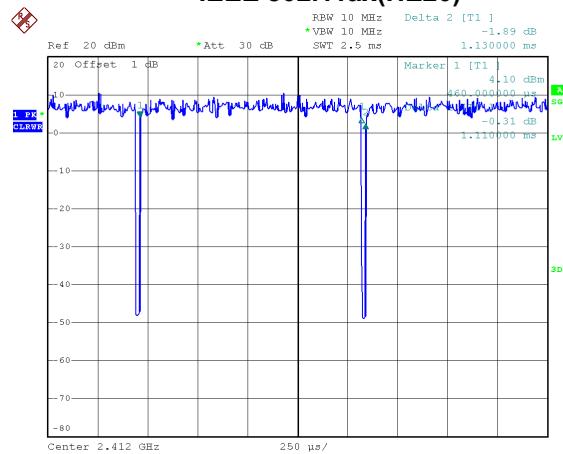
Date: 25.APR.2021 12:00:56

Duty cycle =  $200 \text{ ms} / 200 \text{ ms} = 100\%$   
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.00$

**IEEE 802.11n(HT20)**



**IEEE 802.11ax(HE20)**



Date: 25.APR.2021 11:46:10

Duty cycle =  $1.425 \text{ ms} / 1.445 \text{ ms} = 98.62\%$   
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.00$

Date: 25.APR.2021 11:46:45

Duty cycle =  $1.110 \text{ ms} / 1.130 \text{ ms} = 98.23\%$   
Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.00$

**NOTE:**

For IEEE 802.11b:

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.

For IEEE 802.11g:

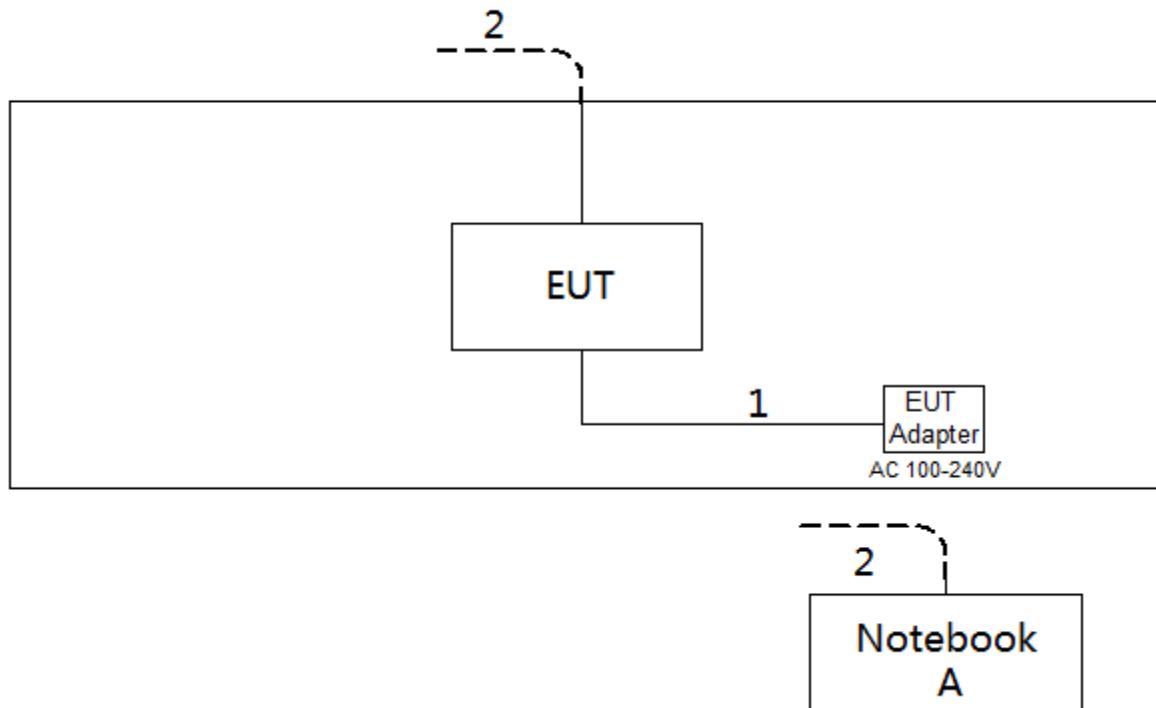
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz.

For 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.

For IEEE 802.11ax(HE20):

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.

**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

#### 3.1 LIMIT

Frequency of Emission (MHz)	Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 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.

#### 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.

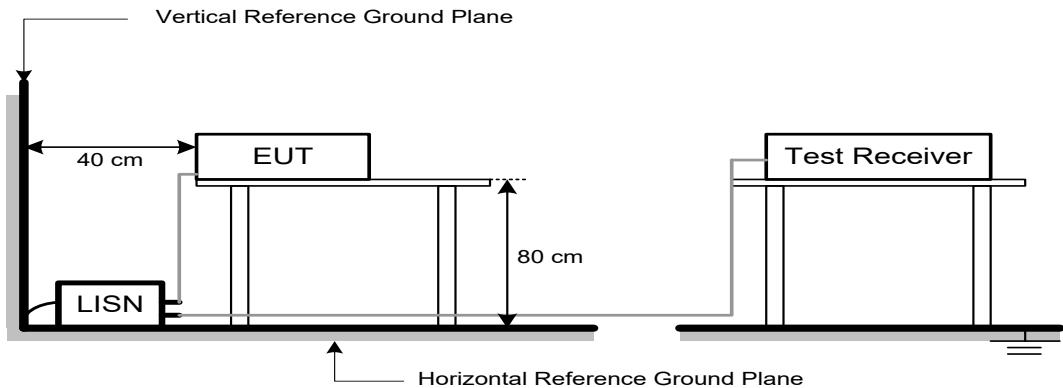
The following table is the setting of the receiver:

Receiver Parameters	Setting
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

#### 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

### 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)	(dB <sub>UV</sub> /m at 3 m)	
	Peak	Average
Above 1000	74	54

#### NOTE:

- (1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dB<sub>UV</sub>/m)=20log Emission level (uV/m).

#### 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.

The following table is the setting of the receiver:

Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz

Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T Hz for AVG value

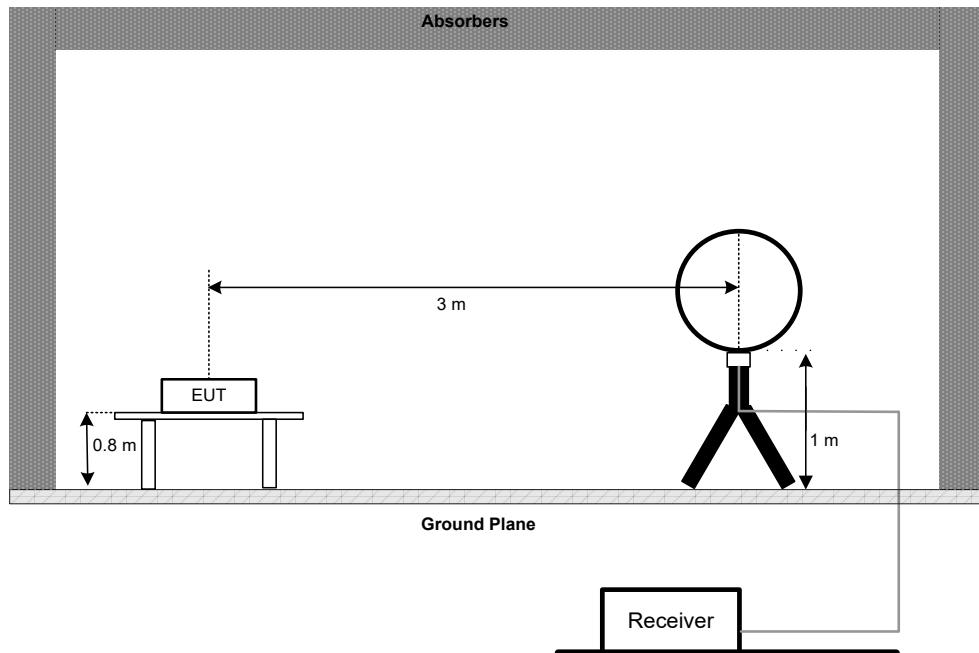
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector
Start ~ Stop Frequency	1 GHz~26.5 GHz for PK/AVG detector

#### 4.3 DEVIATION FROM TEST STANDARD

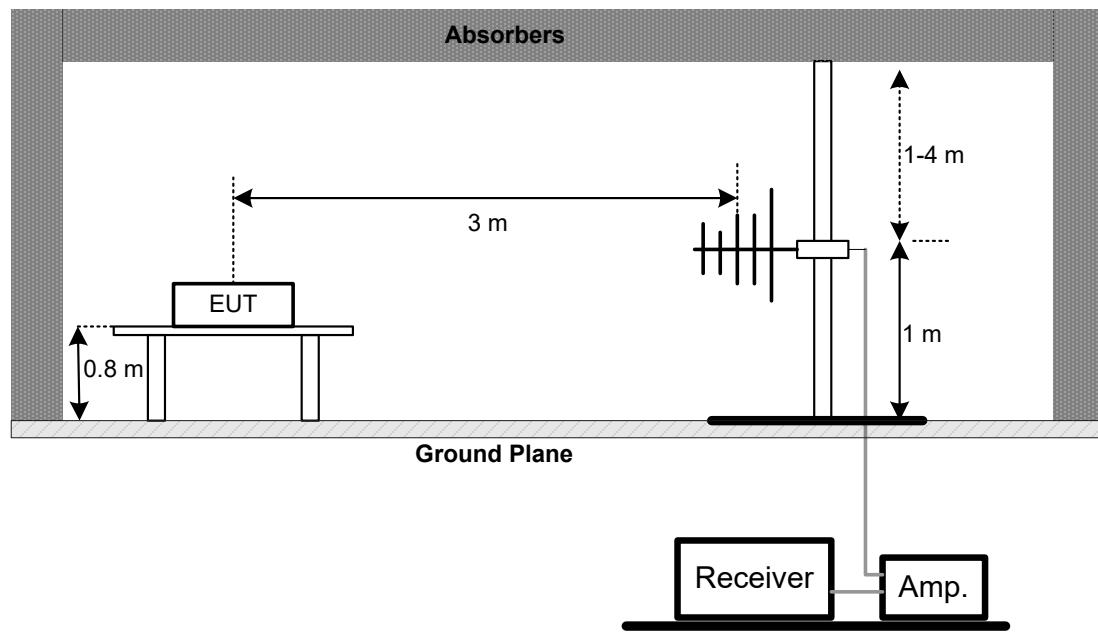
No deviation.

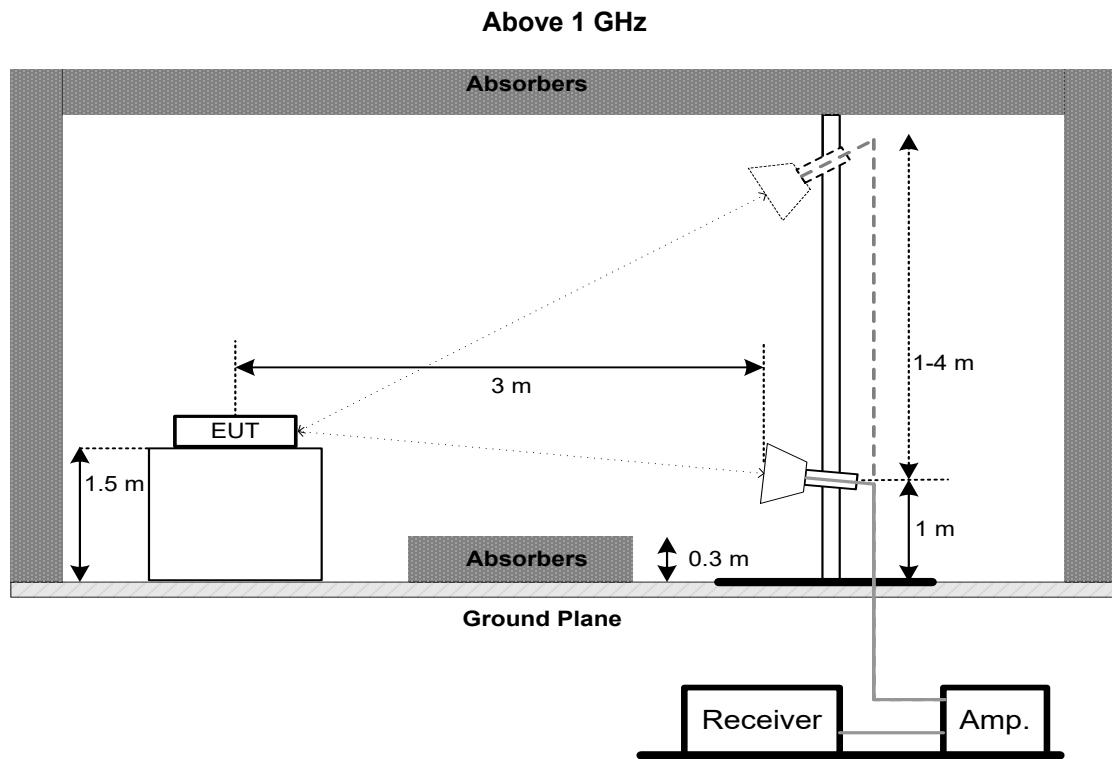
#### 4.4 TEST SETUP

9 kHz to 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

### 5.1 LIMIT

Section	Test Item	Limit
FCC 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.
- The following table is the setting of the spectrum analyzer:

For 6 dB Bandwidth:

Spectrum Parameters	Setting
Span Frequency	> Measurement Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

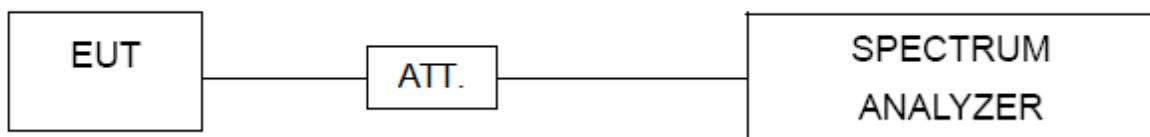
For 99% Emission Bandwidth:

Spectrum Parameters	Setting
Span Frequency	Between 1.5 times and 5.0 times the OBW
RBW	300 kHz
VBW	1 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

### 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

### 6.1 LIMIT

Section	Test Item	Limit
FCC 15.247(b)(3)	Maximum Output Power	1.0000 Watt or 30.00 dBm

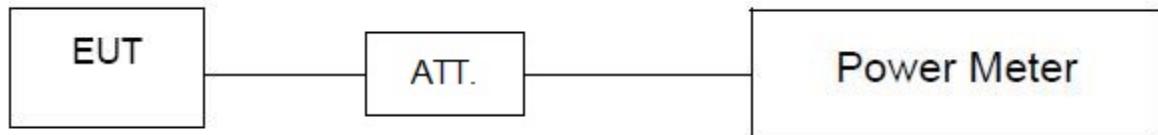
### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. 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

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Start Frequency	30 MHz
Stop Frequency	26.5 GHz
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
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

### 8.1 LIMIT

Section	Test Item	Limit
FCC 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.
- The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Span Frequency	25 MHz
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
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 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, 2022
2	LISN	EMCO	3816/2	52765	Feb. 27, 2022
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 27, 2022
4	50Ω Terminator	SHX	TF5-3	15041305	Feb. 27, 2022
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 09, 2022
7	643 Shield Room	ETS	6*4*3m	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Apr. 28, 2022
2	Cable	N/A	RG 213/U	N/A	May 27, 2022
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 27, 2022
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
5	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 15, 2022
2	Amplifier	HP	8447D	2944A08742	Feb. 28, 2022
3	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 20, 2022
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 10, 2022
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 30, 2022
3	Amplifier	Agilent	8449B	3008A02584	Jul. 25, 2021
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 28, 2022
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	N/A	EMC104-SM-SM-6000	N/A	Oct. 16, 2021
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	Filter	STI	STI15-9912	N/A	Jul. 25, 2021
11	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

**Bandwidth &  
Conducted Spurious Emissions &  
Power Spectral Density**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021
2	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022
3	RF Cable	Tongkaichuan	N/A	N/A	N/A
4	DC Block	Mini	N/A	N/A	N/A

**Maximum Output Power**

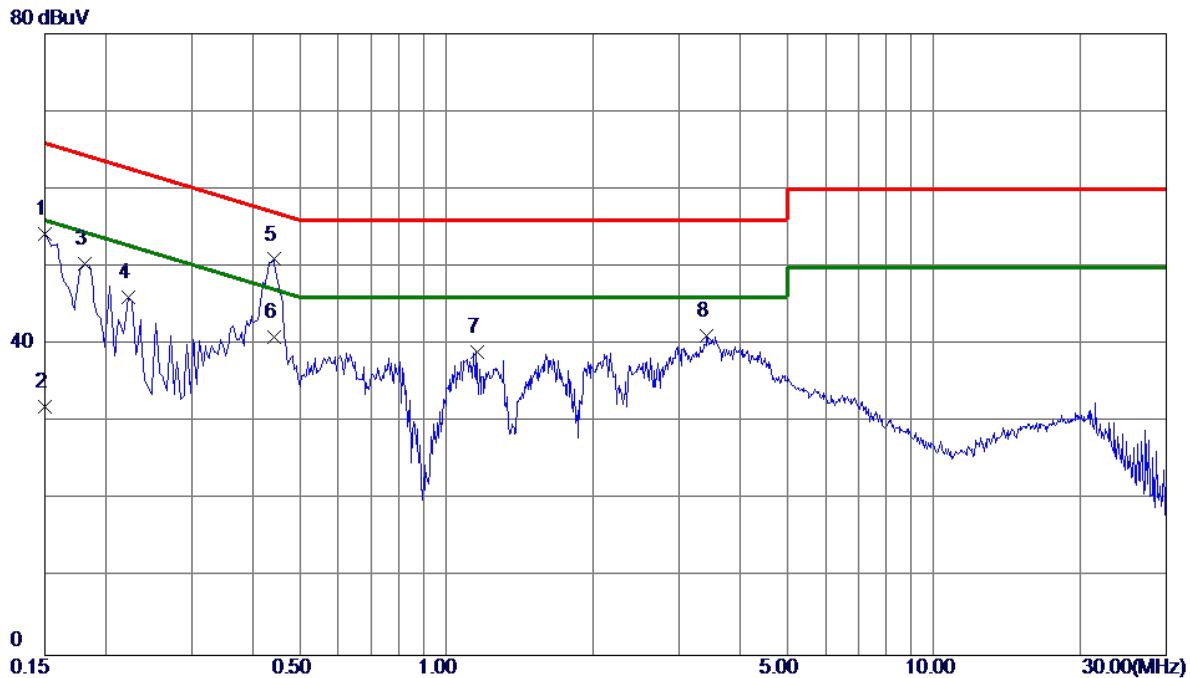
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 07, 2021
2	Wideband power sensor	Keysight	N1923A	MY58310004	Jul. 25, 2021
3	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022
4	RF Cable	Tongkaichuan	N/A	N/A	N/A

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

All calibration period of equipment list is one year.

## APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode	TX N(HT20) Mode Channel 06	Phase	Line
-----------	----------------------------	-------	------

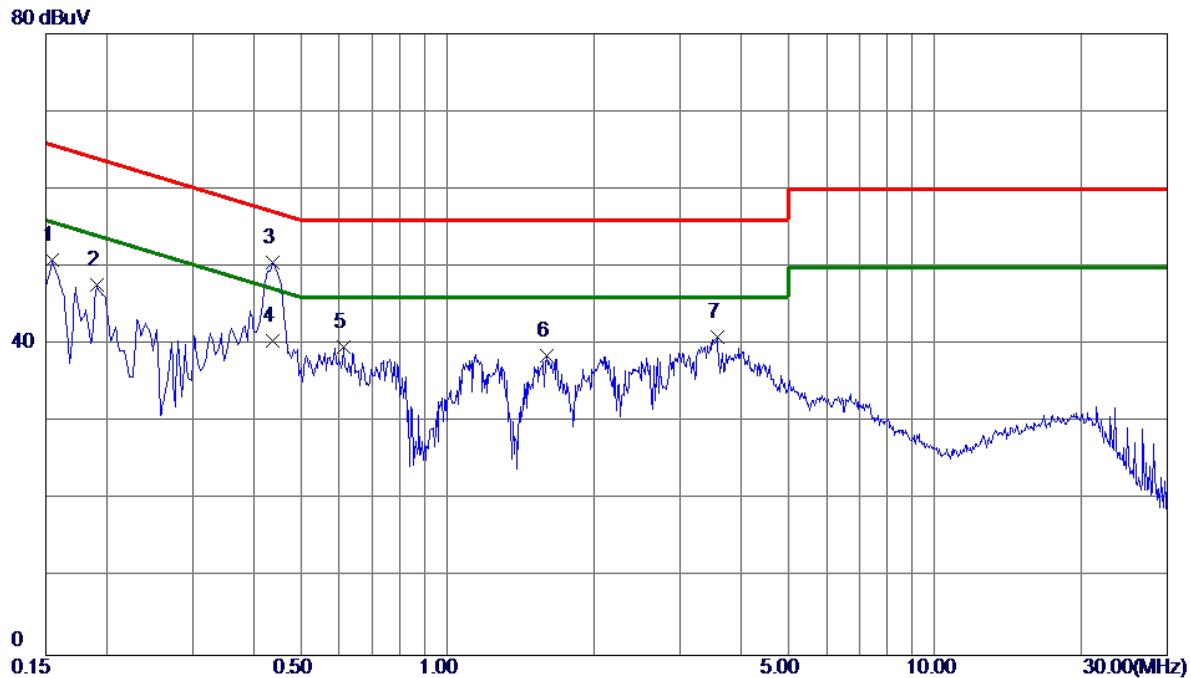


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV	dB	dBuV	dB			
1	0.1500	44.55	9.67	54.22	66.00	-11.78	Peak	
2	0.1500	22.30	9.67	31.97	56.00	-24.03	AVG	
3	0.1815	40.49	9.85	50.34	64.42	-14.08	Peak	
4	0.2220	36.18	9.89	46.07	62.74	-16.67	Peak	
5 *	0.4425	41.03	9.93	50.96	57.01	-6.05	Peak	
6	0.4425	31.00	9.93	40.93	47.01	-6.08	AVG	
7	1.1535	29.01	10.02	39.03	56.00	-16.97	Peak	
8	3.4215	30.87	10.21	41.08	56.00	-14.92	Peak	

## REMARKS:

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

Test Mode	TX N(HT20) Mode Channel 06	Phase	Neutral
-----------	----------------------------	-------	---------



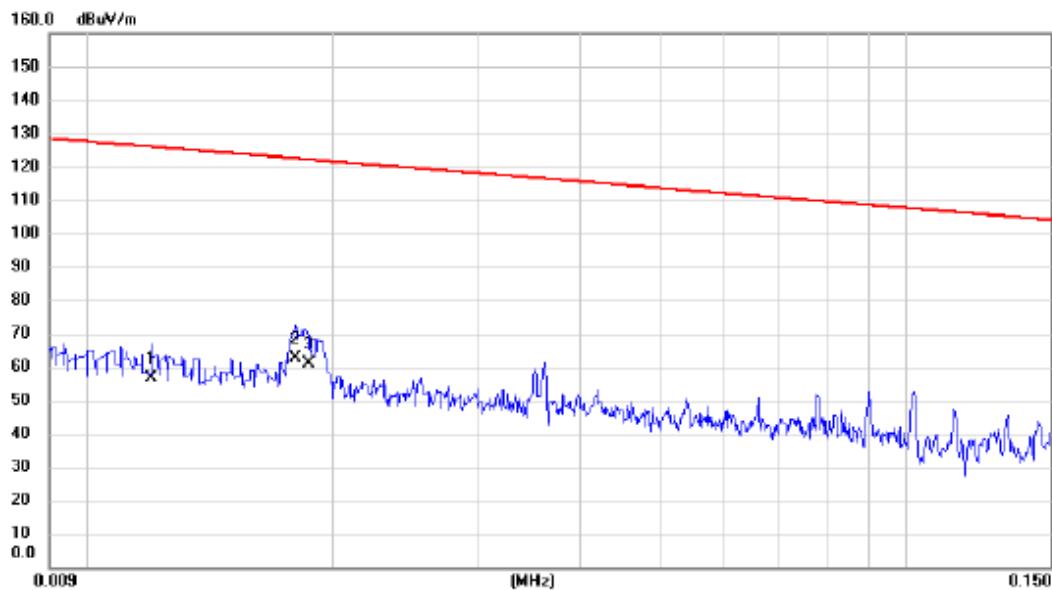
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0. 1545	41. 10	9. 78	50. 88	65. 75	-14. 87	Peak	
2	0. 1905	37. 75	9. 97	47. 72	64. 01	-16. 29	Peak	
3 *	0. 4380	40. 49	10. 11	50. 60	57. 10	-6. 50	Peak	
4	0. 4380	30. 30	10. 11	40. 41	47. 10	-6. 69	AVG	
5	0. 6134	29. 44	10. 18	39. 62	56. 00	-16. 38	Peak	
6	1. 6035	28. 12	10. 38	38. 50	56. 00	-17. 50	Peak	
7	3. 5745	30. 45	10. 56	41. 01	56. 00	-14. 99	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 N(HT20) Mode Channel 06	Polarization	Ant 0°
-----------	----------------------------	--------------	--------

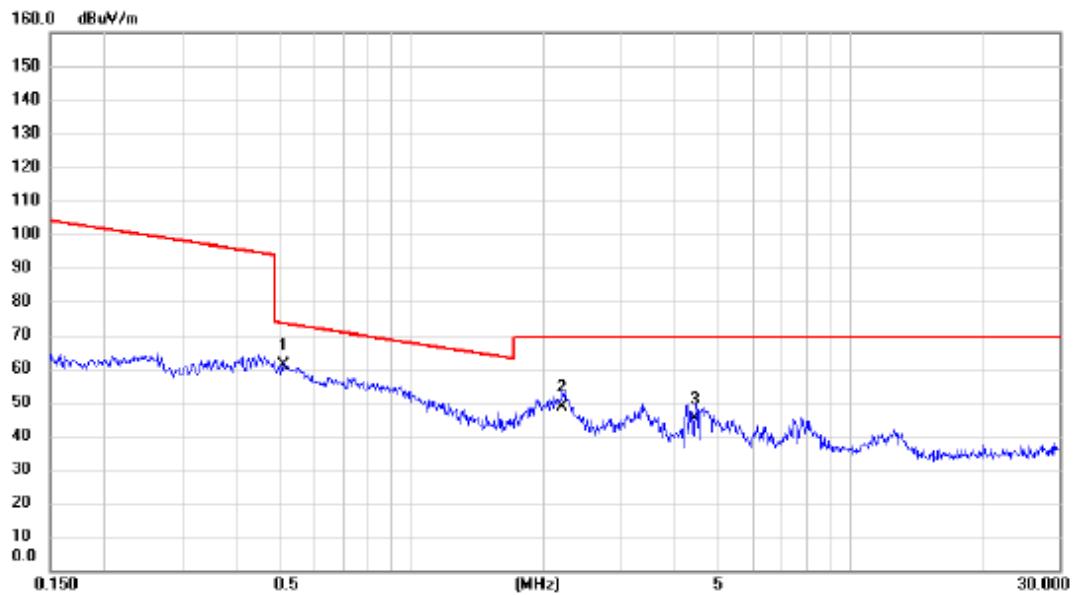


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1		0.012	39.65	16.93	56.58	126.02	-69.44	AVG
2	*	0.018	47.54	15.04	62.58	122.50	-59.92	AVG
3		0.019	46.25	14.82	61.07	122.17	-61.10	AVG

**REMARKS:**

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

Test Mode	TX N(HT20) Mode Channel 06	Polarization	Ant 0°
-----------	----------------------------	--------------	--------



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	*	0.510	47.52	13.56	61.08	73.45	-12.37	QP	
2		2.213	36.54	12.18	48.72	69.54	-20.82	QP	
3		4.454	32.87	12.06	44.93	69.54	-24.61	QP	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode Channel 06	Polarization	Ant 90°
-----------	----------------------------	--------------	---------



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1		0.010	39.65	17.62	57.27	127.78	-70.51	AVG	
2 *		0.018	44.54	15.01	59.55	122.45	-62.90	AVG	
3		0.019	43.62	14.79	58.41	122.12	-63.71	AVG	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode Channel 06	Polarization	Ant 90°
-----------	----------------------------	--------------	---------



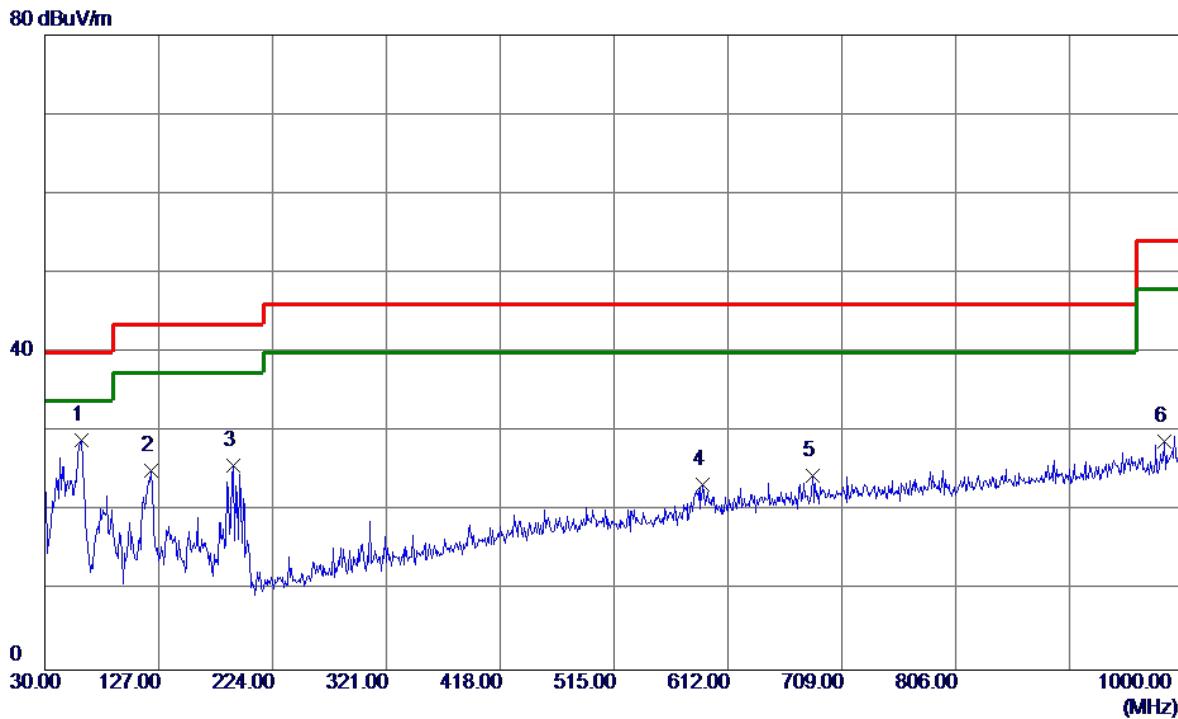
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.543	45.01	13.52	58.53	72.90	-14.37	QP	
2		3.328	29.54	11.98	41.52	69.54	-28.02	QP	
3		4.431	28.22	12.07	40.29	69.54	-29.25	QP	

**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 N(HT20) Mode Channel 06	Polarization	Vertical
-----------	----------------------------	--------------	----------



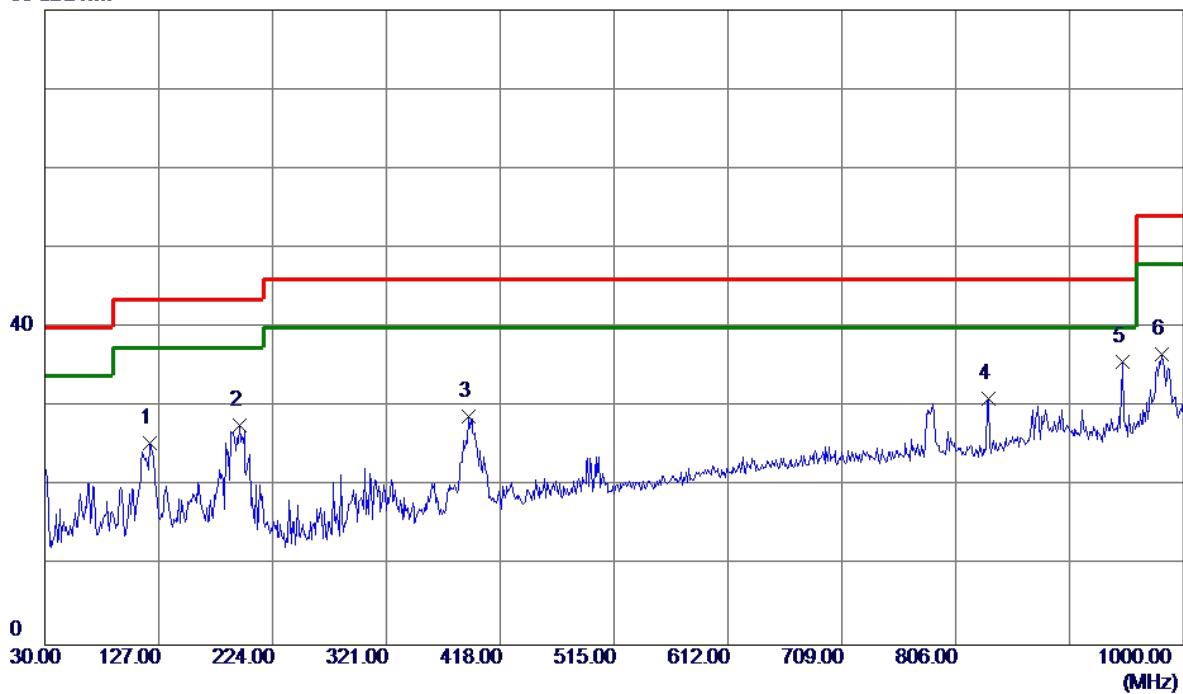
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	61.0400	43.54	-14.59	28.95	40.00	-11.05	Peak	
2	120.2100	37.82	-12.74	25.08	43.50	-18.42	Peak	
3	191.0200	39.87	-14.17	25.70	43.50	-17.80	Peak	
4	590.6599	29.05	-5.62	23.43	46.00	-22.57	Peak	
5	683.7800	28.34	-3.80	24.54	46.00	-21.46	Peak	
6	983.5100	27.95	0.79	28.74	54.00	-25.26	Peak	

## REMARKS:

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

Test Mode	TX N(HT20) Mode Channel 06	Polarization	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
							Detector	Comment	
1	119.2400	38.36	-12.85	25.51	43.50	-17.99	Peak		
2	195.8700	42.18	-14.51	27.67	43.50	-15.83	Peak		
3	390.8400	37.97	-9.23	28.74	46.00	-17.26	Peak		
4	834.1300	33.08	-1.99	31.09	46.00	-14.91	Peak		
5 *	948.5900	35.57	0.10	35.67	46.00	-10.33	Peak		
6	981.5700	35.94	0.76	36.70	54.00	-17.30	Peak		

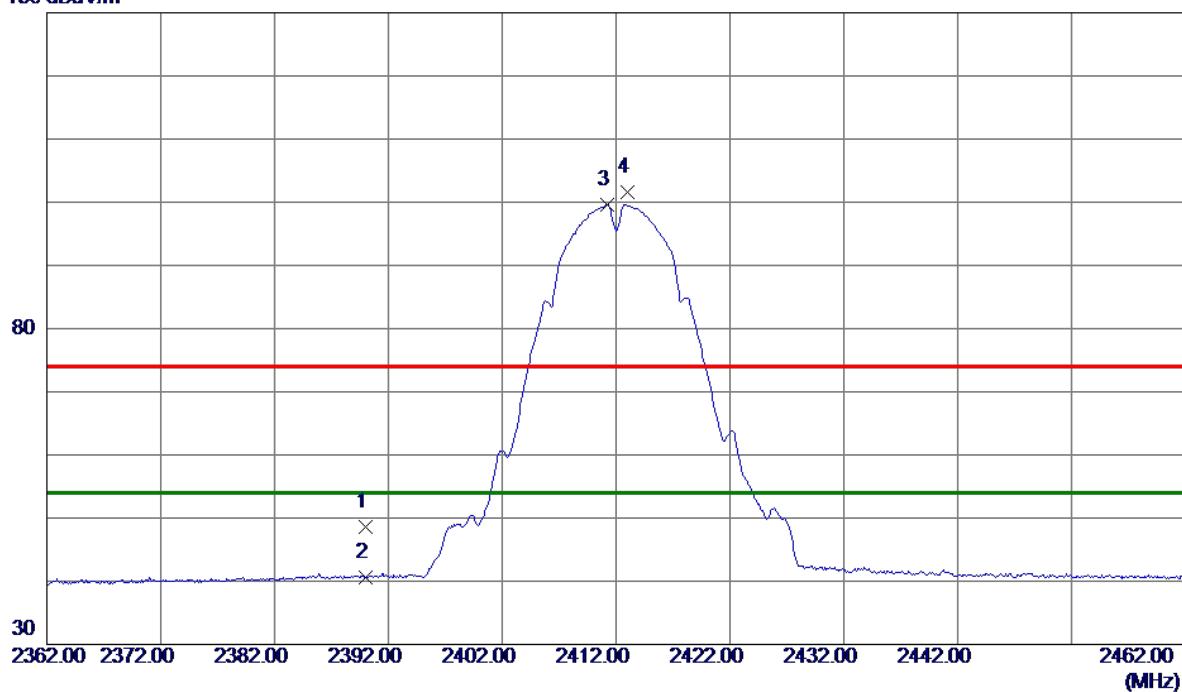
## REMARKS:

(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	Polarization	Vertical
-----------	--------------------	--------------	----------

130 dBuV/m

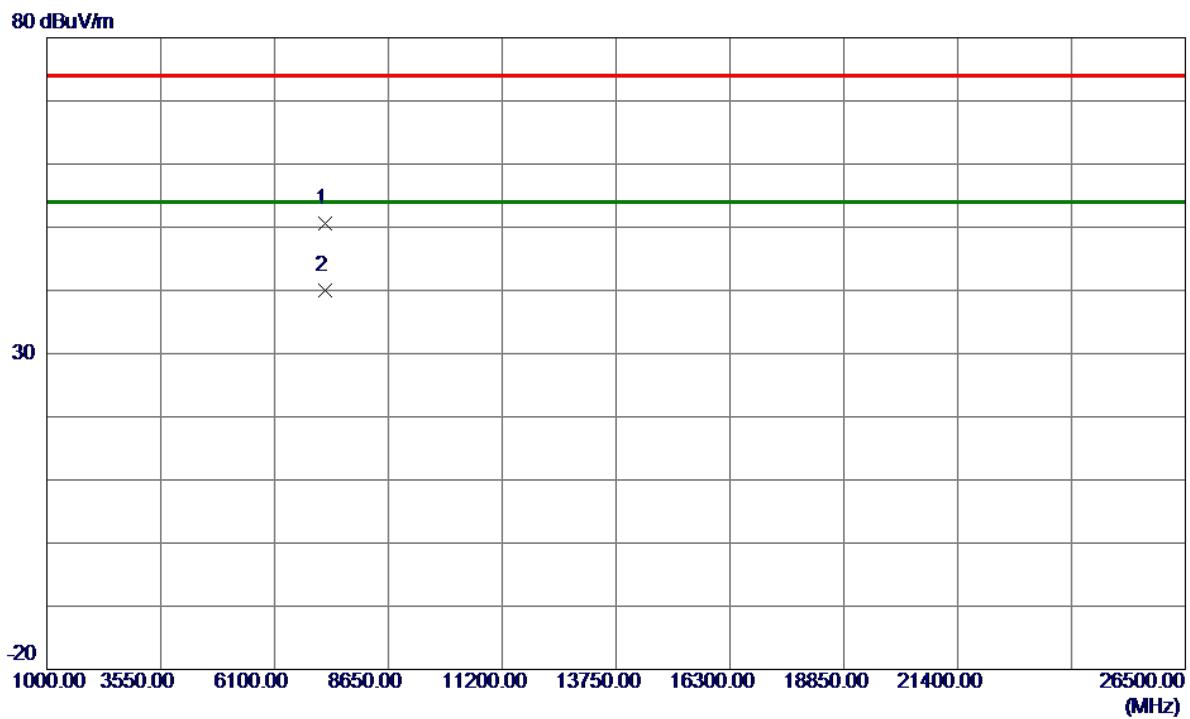


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin dB	Detector		Comment
							Detector		
1	2390.0000	41.31	7.26	48.57	74.00	-25.43	Peak		
2	2390.0000	33.43	7.26	40.69	54.00	-13.31	AVG		
3 *	2411.2000	92.40	7.26	99.66	54.00	45.66	AVG		No Limit
4	2413.0000	94.27	7.26	101.53	74.00	27.53	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	Polarization	Vertical
-----------	--------------------	--------------	----------

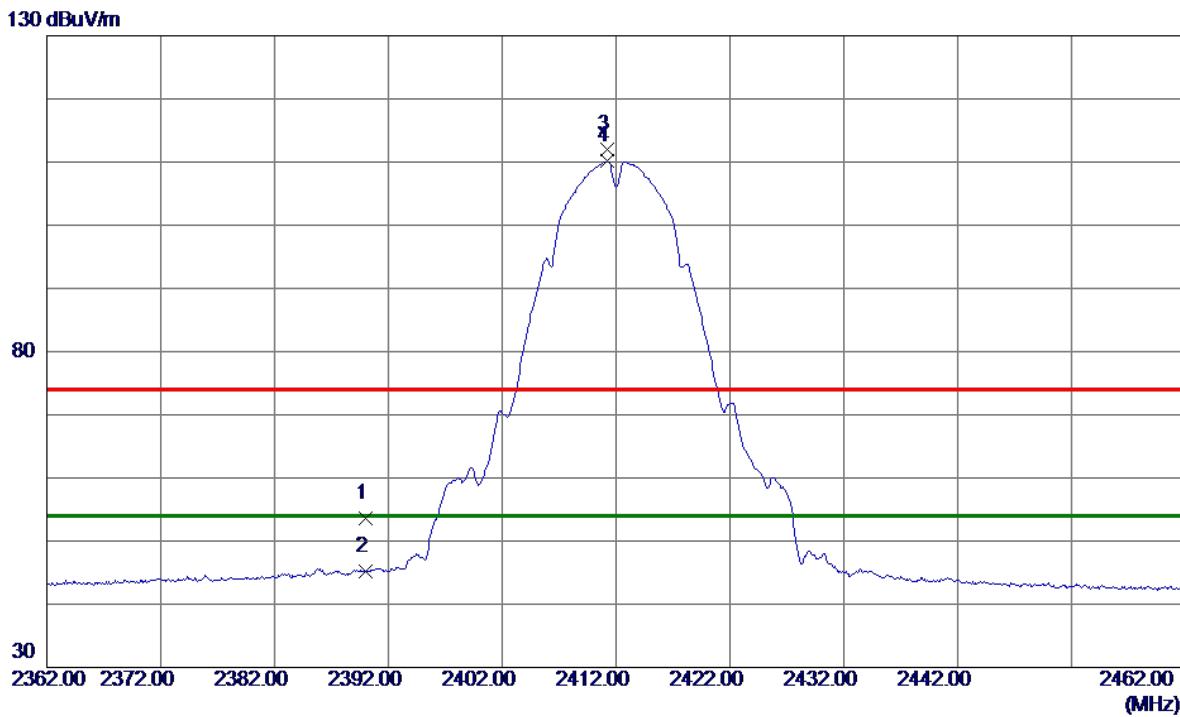


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dB	Detector	Comment
1	7236.4500	40.33	10.19	50.52	74.00	-23.48	Peak
2 *	7237.0350	29.89	10.19	40.08	54.00	-13.92	AVG

**REMARKS:**

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

Test Mode	TX B Mode 2412 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

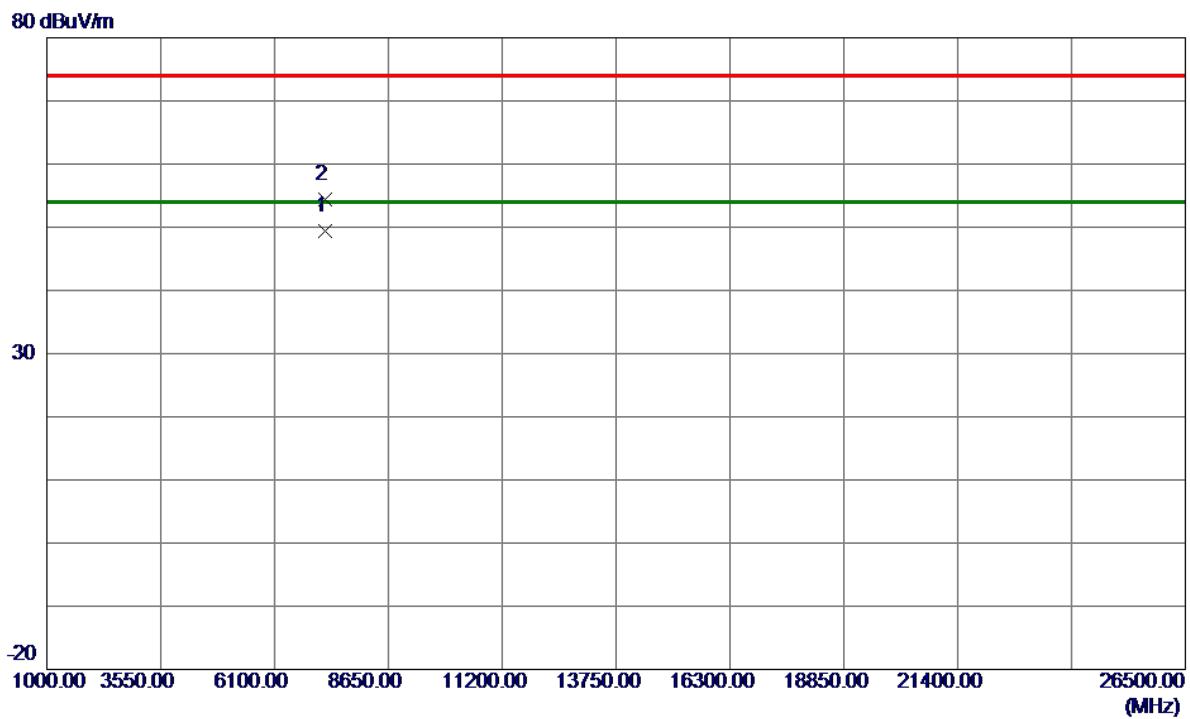


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
							Detector	Comment
1	2390.000	46.25	7.26	53.51	74.00	-20.49	Peak	
2	2390.000	37.99	7.26	45.25	54.00	-8.75	AVG	
3	2411.200	104.70	7.26	111.96	74.00	37.96	Peak	No Limit
4 *	2411.200	102.86	7.26	110.12	54.00	56.12	AVG	No Limit

## REMARKS:

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

Test Mode	TX B Mode 2412 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------



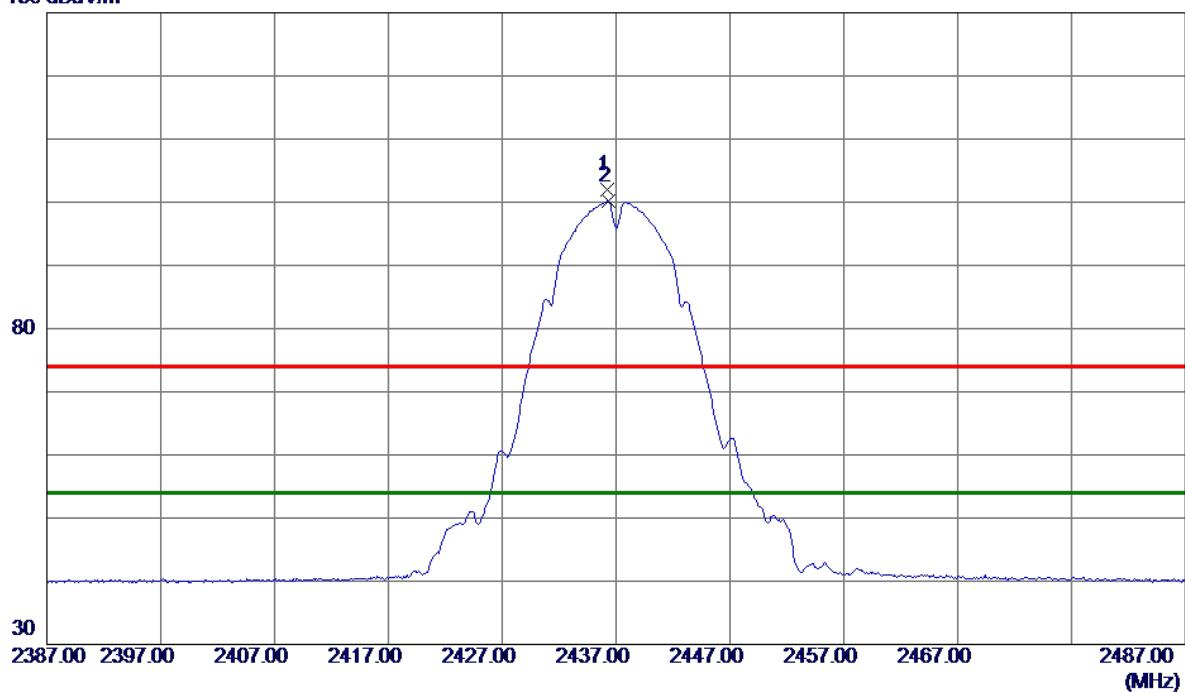
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
							1 *
1 *	7234.9550	39.22	10.19	49.41	54.00	-4.59	AVG
2	7235.7400	44.25	10.19	54.44	74.00	-19.56	Peak

**REMARKS:**

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

Test Mode	TX B Mode 2437 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------

130 dBuV/m

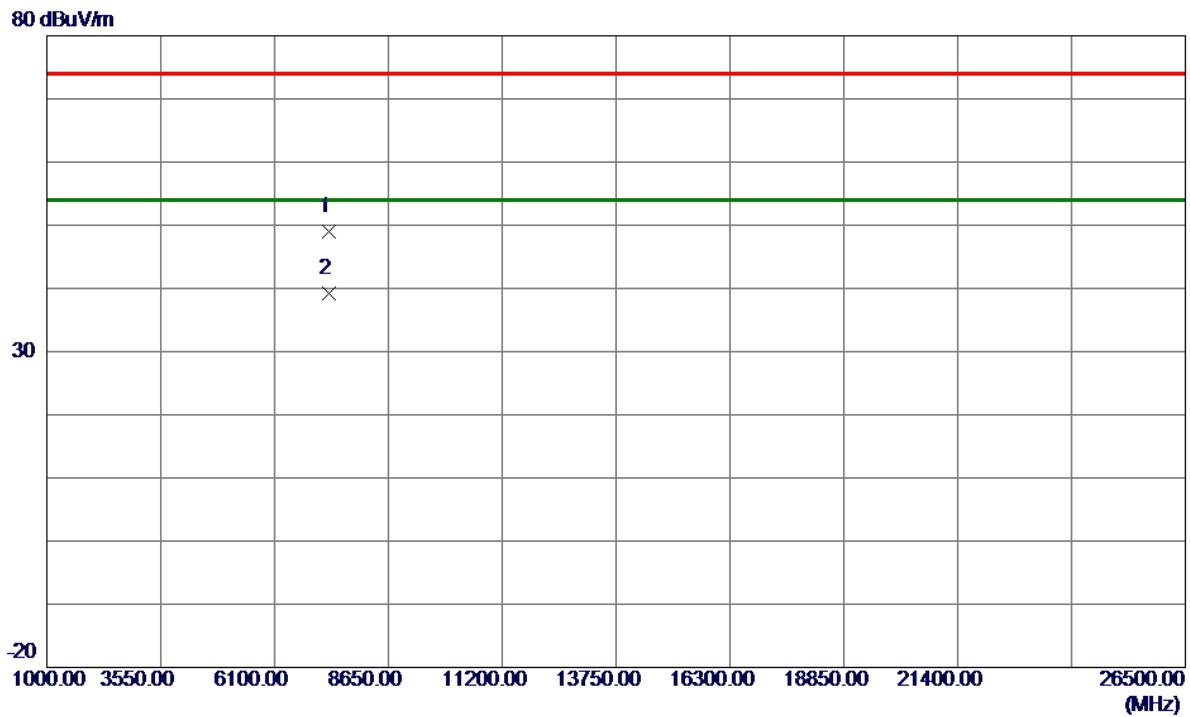


No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	2436.2000	94.74	7.25	101.99	74.00	27.99	Peak	No Limit
2 *	2436.3000	92.88	7.25	100.13	54.00	46.13	AVG	No Limit

## REMARKS:

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

Test Mode	TX B Mode 2437 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------



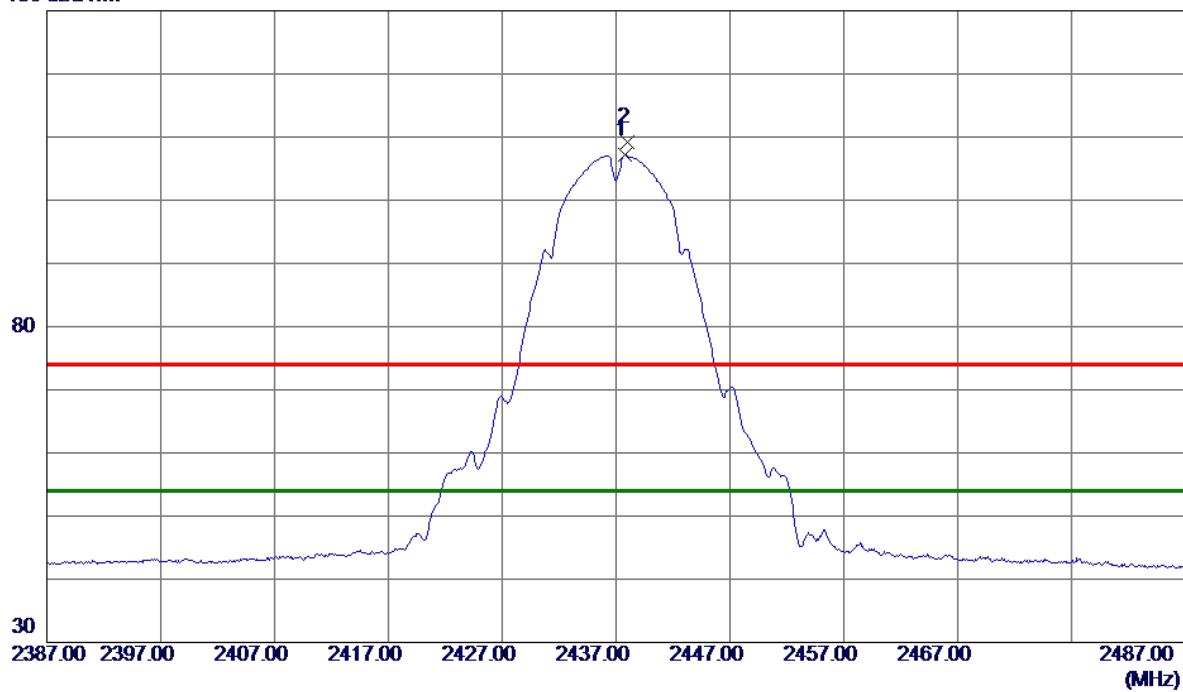
No.	Freq. MHz	Reading Level dB $\mu$ V/m	Correct Factor dB	Measure ment dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin Detector	Comment
1	7309.4700	38.65	10.32	48.97	74.00	-25.03	Peak
2 *	7311.8150	28.95	10.32	39.27	54.00	-14.73	AVG

**REMARKS:**

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

Test Mode	TX B Mode 2437 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

130 dBuV/m

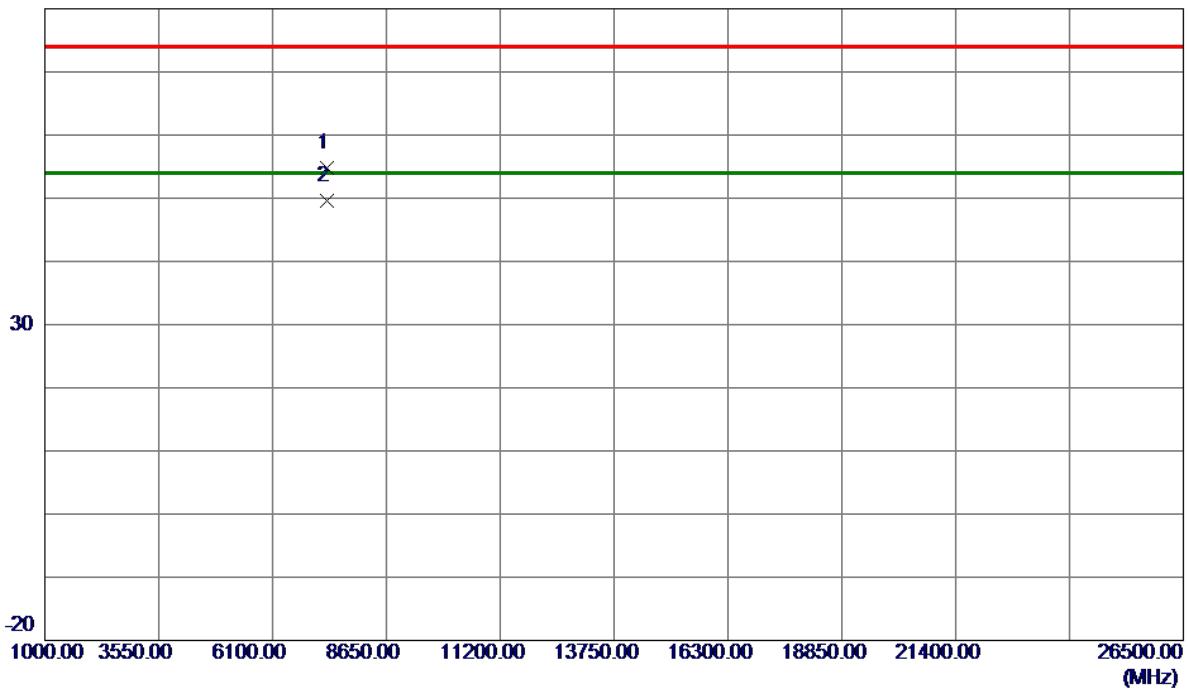


No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment	dBuV/m	dB		
1 *	2437.8000	99.97	7.25	107.22	54.00	53.22	AVG	No Limit
2	2438.0000	101.87	7.25	109.12	74.00	35.12	Peak	No Limit

## REMARKS:

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

Test Mode	TX B Mode 2437 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

**80 dBuV/m**

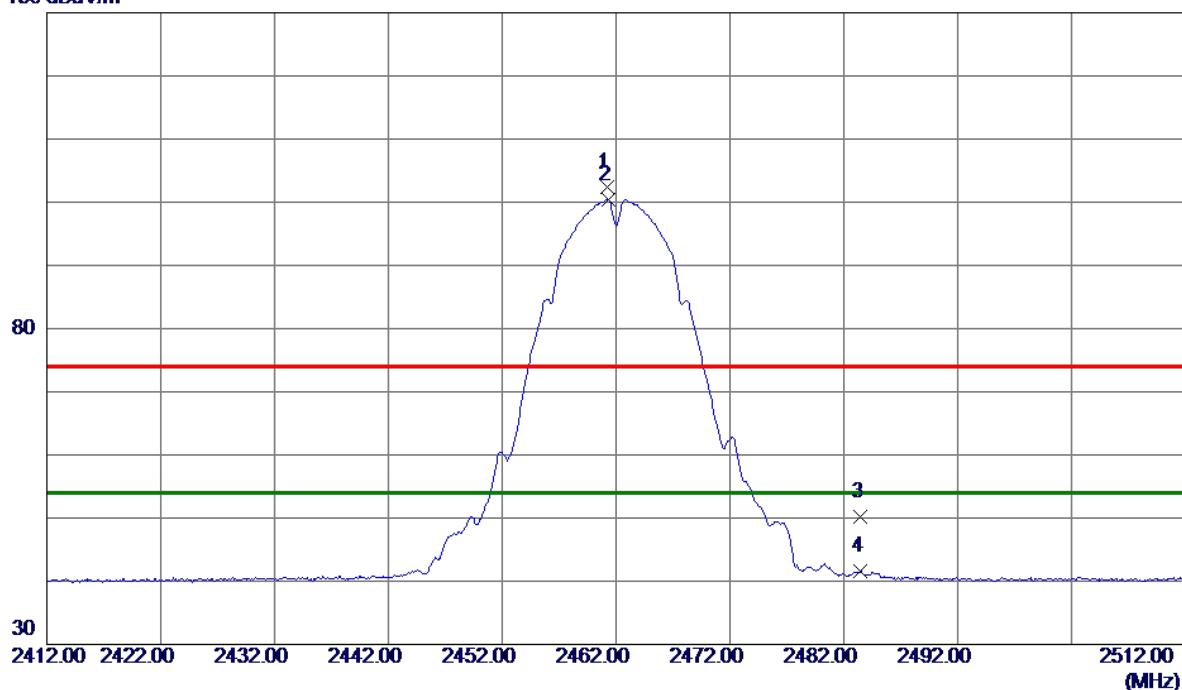
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7311.0550	44.55	10.32	54.87	74.00	-19.13	Peak	
2 *	7312.7250	39.19	10.32	49.51	54.00	-4.49	AVG	

**REMARKS:**

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

Test Mode	TX B Mode 2462 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------

130 dBuV/m

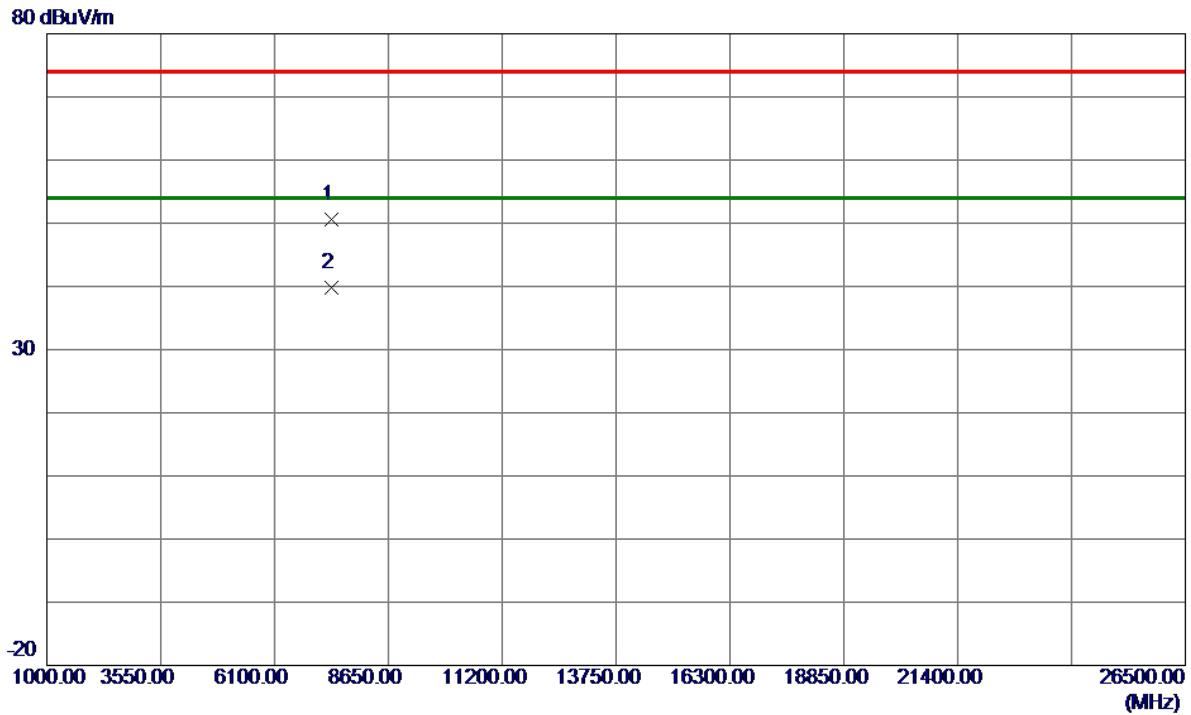


No.	Freq. MHz	Reading Level	Correct Factor	Measure ment	Limit	Margin	Detector	Comment
		dBuV/m	dB	dBuV/m	dB			
1	2461.2000	95.09	7.25	102.34	74.00	28.34	Peak	No Limit
2 *	2461.3000	93.17	7.25	100.42	54.00	46.42	AVG	No Limit
3	2483.5000	42.93	7.25	50.18	74.00	-23.82	Peak	
4	2483.5000	34.33	7.25	41.58	54.00	-12.42	AVG	

## REMARKS:

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

Test Mode	TX B Mode 2462 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------



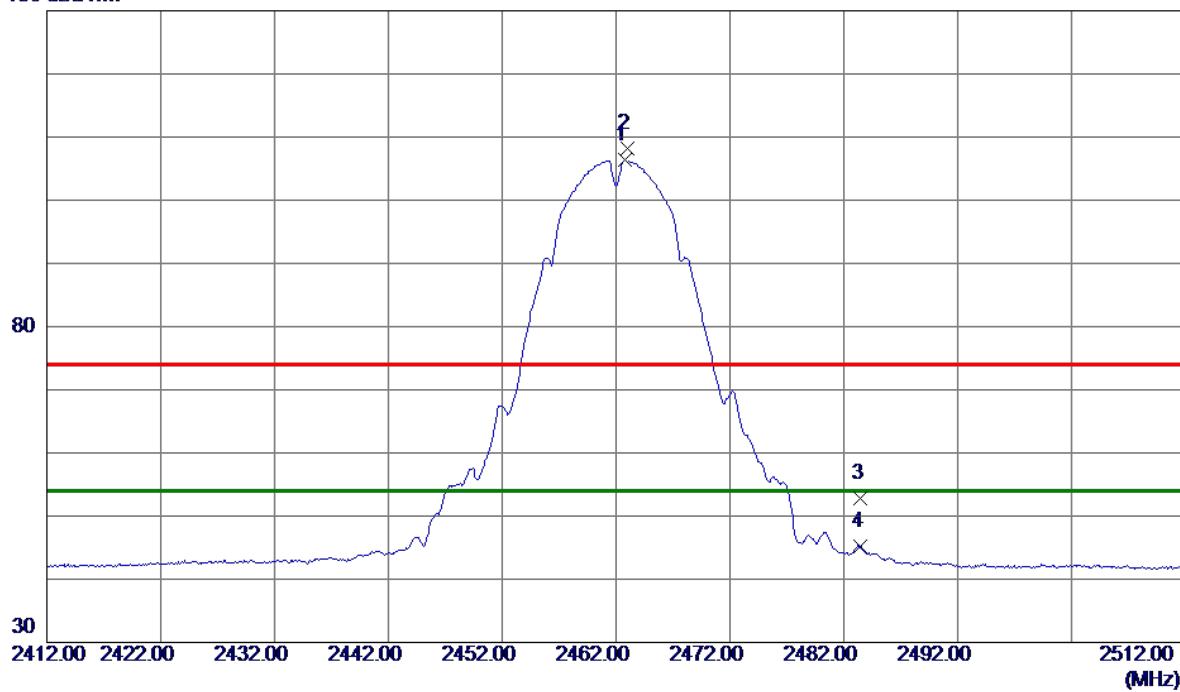
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7384.7150	40.11	10.44	50.55	74.00	-23.45	Peak	
2 *	7386.7700	29.37	10.45	39.82	54.00	-14.18	AVG	

**REMARKS:**

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

Test Mode	TX B Mode 2462 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

130 dBuV/m

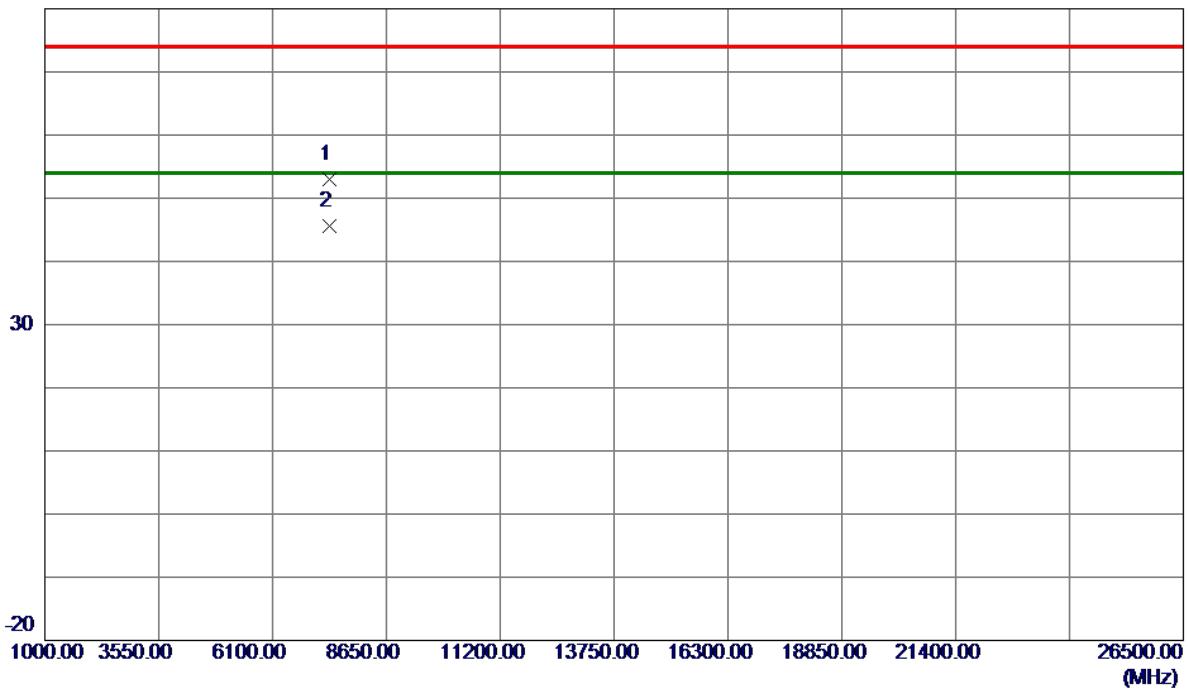


No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment	dBuV/m	dB		
1 *	2462.8000	99.10	7.25	106.35	54.00	52.35	AVG	No Limit
2	2463.0000	101.04	7.25	108.29	74.00	34.29	Peak	No Limit
3	2483.5000	45.64	7.25	52.89	74.00	-21.11	Peak	
4	2483.5000	37.90	7.25	45.15	54.00	-8.85	AVG	

## REMARKS:

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

Test Mode	TX B Mode 2462 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

**80 dBuV/m**

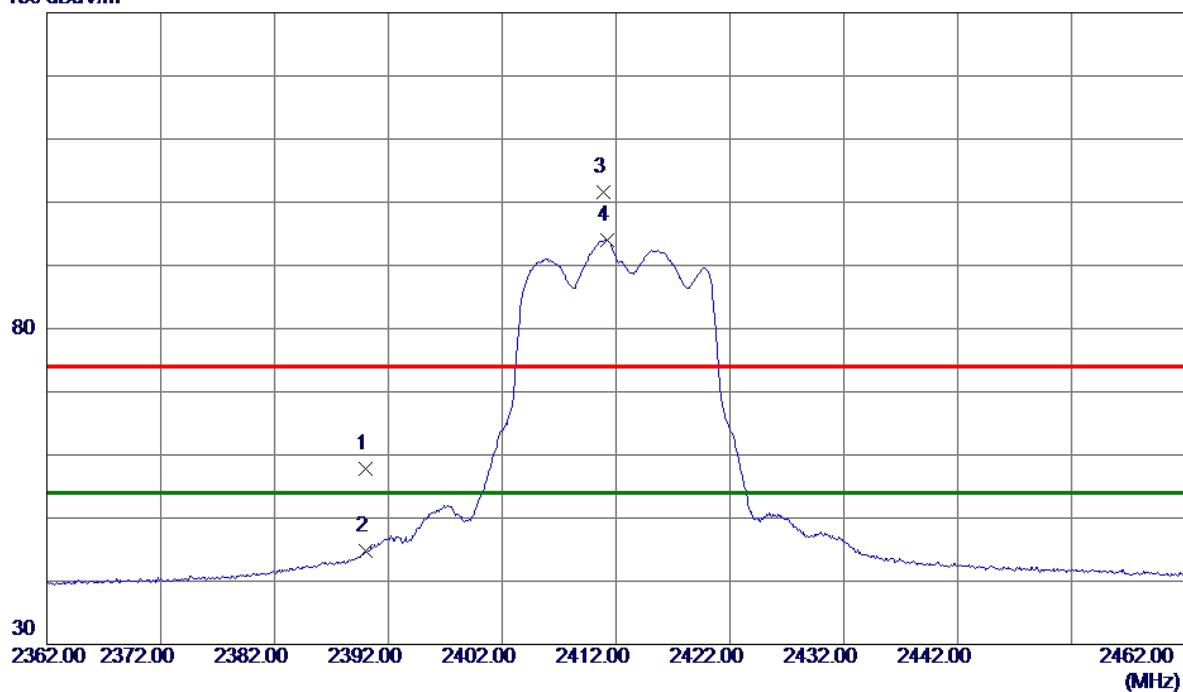
No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dB	Detector	Comment
1	7387. 1100	42. 52	10. 45	52. 97	74. 00	-21. 03	Peak
2 *	7387. 6450	35. 22	10. 45	45. 67	54. 00	-8. 33	AVG

**REMARKS:**

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

Test Mode	TX G Mode 2412 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------

130 dBuV/m

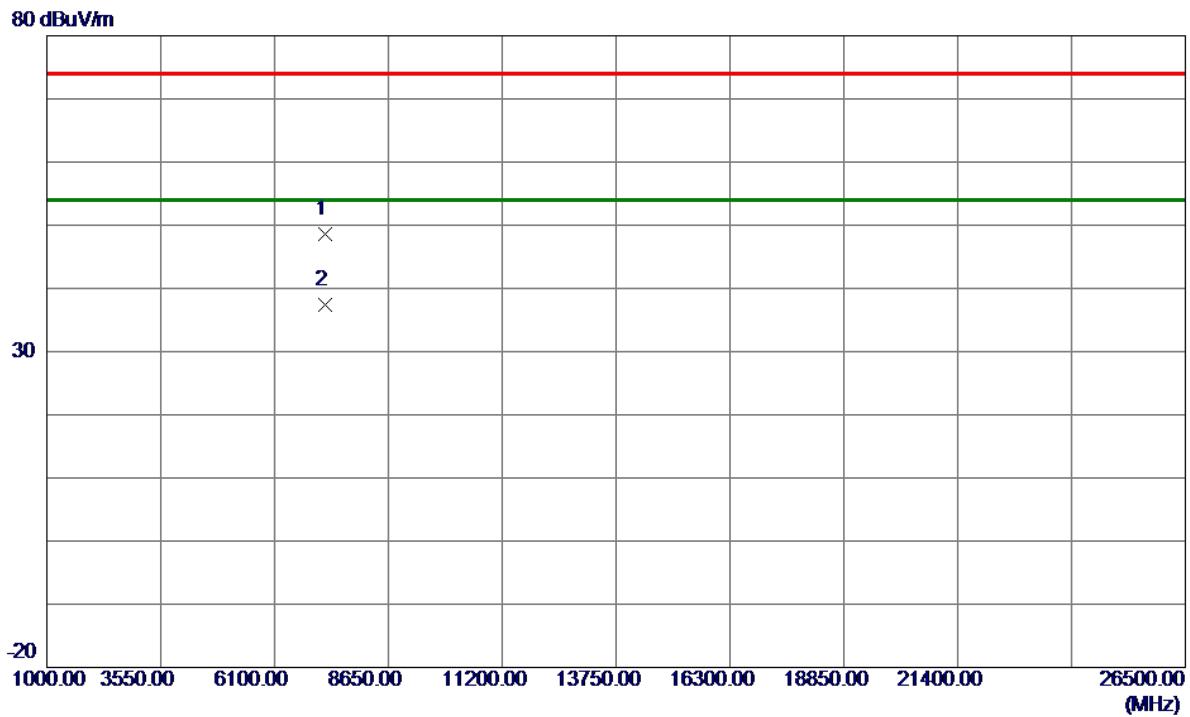


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	50.48	7.26	57.74	74.00	-16.26	Peak	
2	2390.000	37.47	7.26	44.73	54.00	-9.27	AVG	
3	2410.900	94.41	7.26	101.67	74.00	27.67	Peak	No Limit
4 *	2411.200	86.76	7.26	94.02	54.00	40.02	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	Polarization	Vertical
-----------	--------------------	--------------	----------

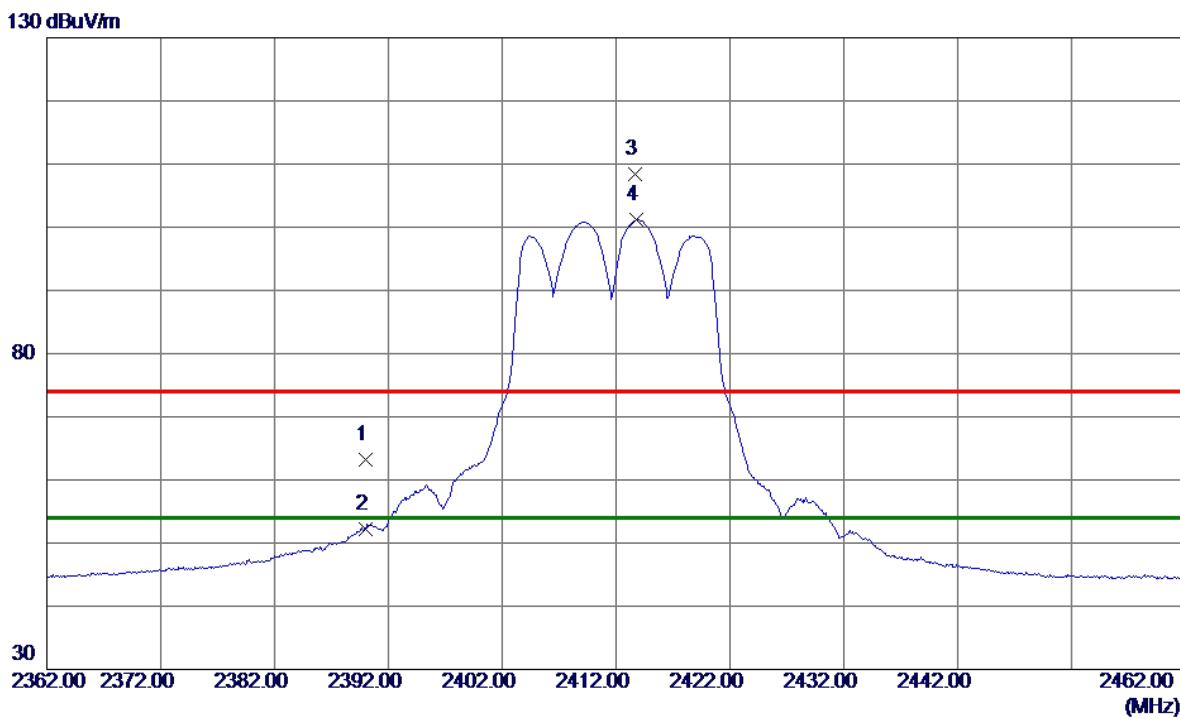


No.	Freq. MHz	Reading Level dB $\mu$ V/m	Correct Factor dB	Measure ment dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin Detector	Comment
1	7231.9750	38.44	10.18	48.62	74.00	-25.38	Peak
2 *	7238.9250	27.26	10.20	37.46	54.00	-16.54	AVG

**REMARKS:**

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

Test Mode	TX G Mode 2412 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

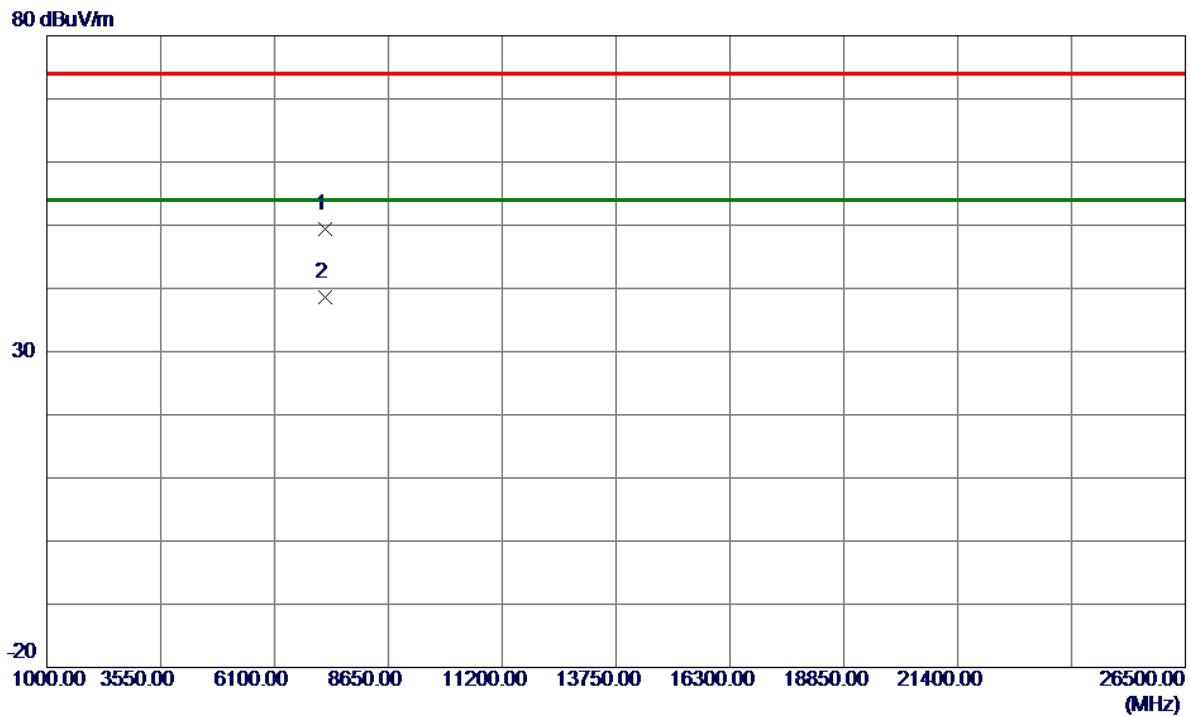


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	2390.0000	56.01	7.26	63.27	74.00	-10.73	Peak	
2	2390.0000	44.95	7.26	52.21	54.00	-1.79	AVG	
3	2413.7000	101.07	7.26	108.33	74.00	34.33	Peak	No Limit
4 *	2413.8000	93.88	7.26	101.14	54.00	47.14	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	Polarization	Horizontal
-----------	--------------------	--------------	------------



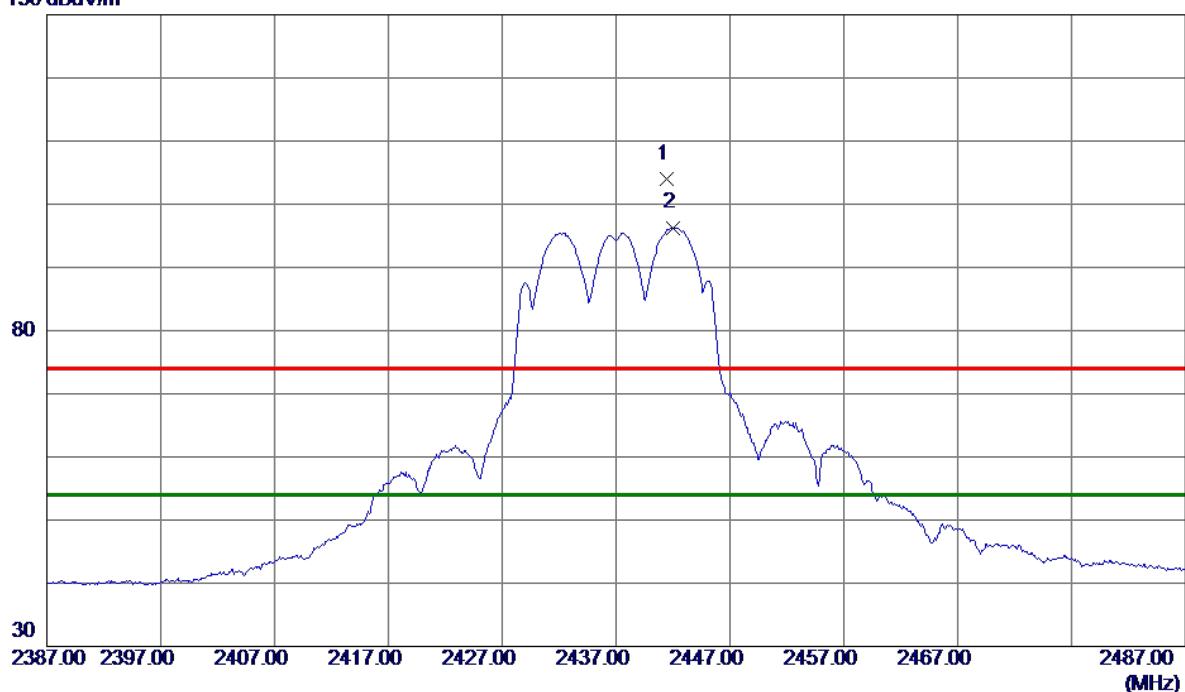
No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dB	Detector	Comment
1	7229.4500	39.20	10.18	49.38	74.00	-24.62	Peak
2 *	7239.4500	28.38	10.20	38.58	54.00	-15.42	AVG

**REMARKS:**

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

Test Mode	TX G Mode 2437 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------

130 dBuV/m

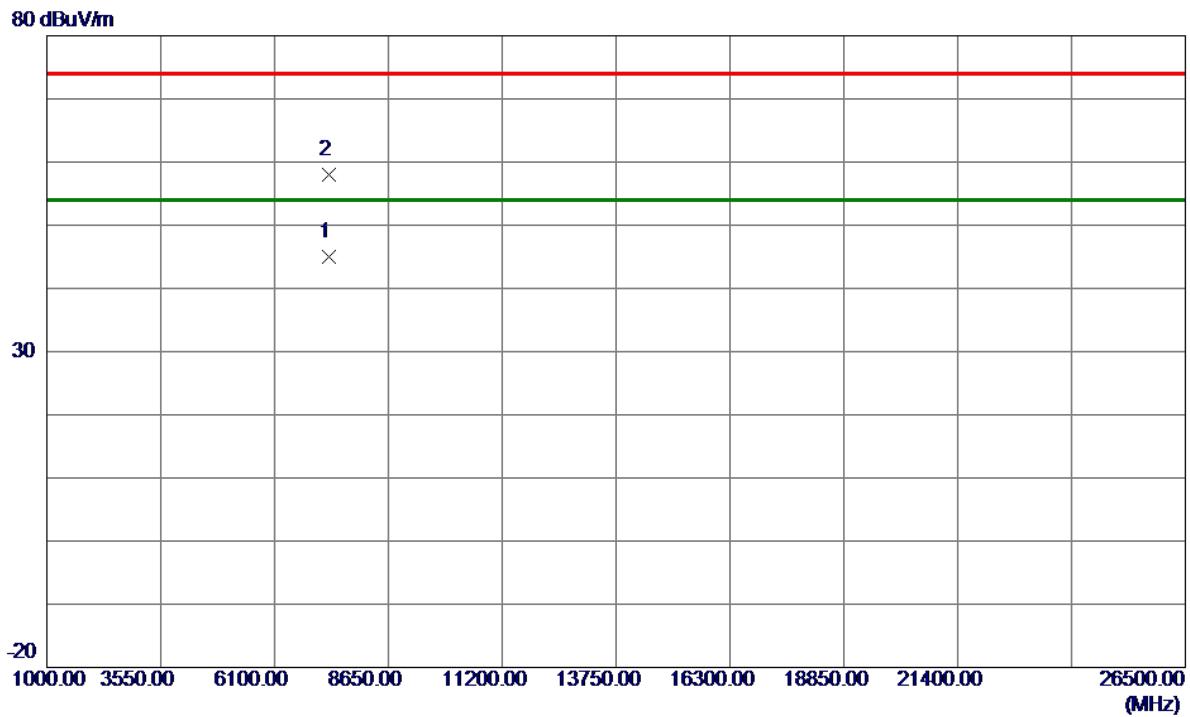


No.	Freq. MHz	Reading Level	Correct Factor	Measure ment	Limit	Margin	Detector	Comment
		dBuV/m	dB	dBuV/m	dB			
1	2441.4000	96.84	7.25	104.09	74.00	30.09	Peak	No Limit
2 *	2442.0000	89.05	7.25	96.30	54.00	42.30	AVG	No Limit

## REMARKS:

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

Test Mode	TX G Mode 2437 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------

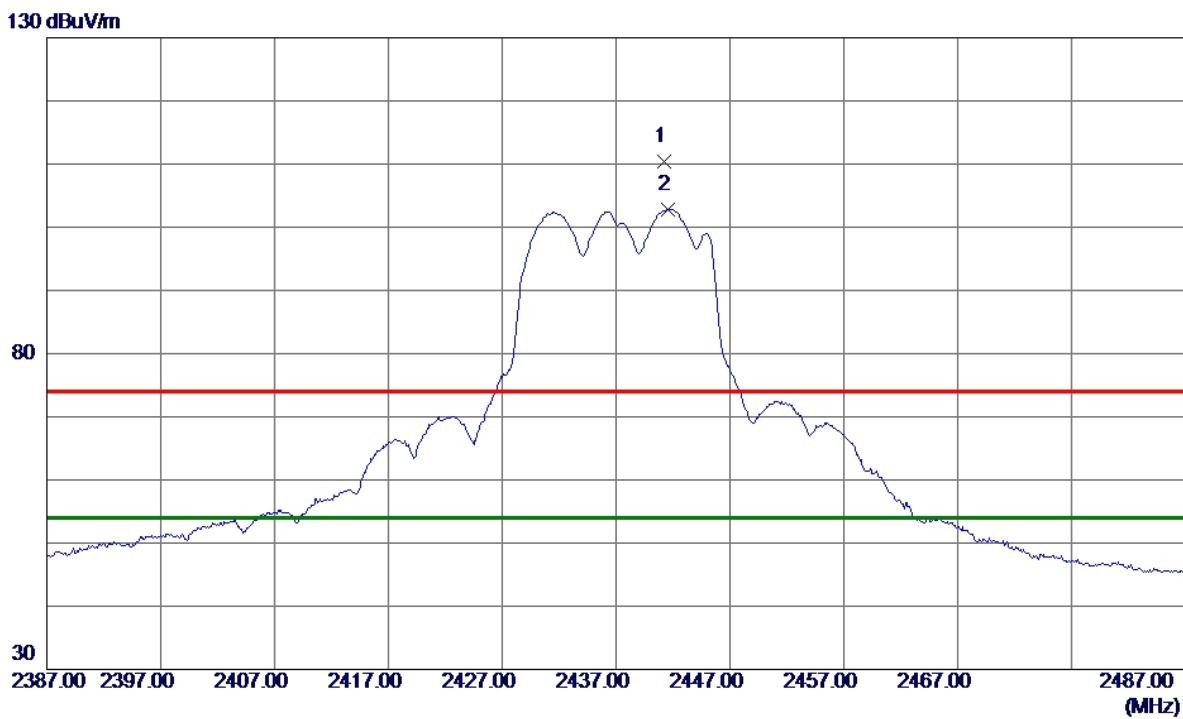


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
	MHz	d $\mu$ V/m	dB	d $\mu$ V/m	dB	Detector	Comment
1 *	7309.1250	34.71	10.32	45.03	54.00	-8.97	AVG
2	7309.2750	47.77	10.32	58.09	74.00	-15.91	Peak

**REMARKS:**

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

Test Mode	TX G Mode 2437 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

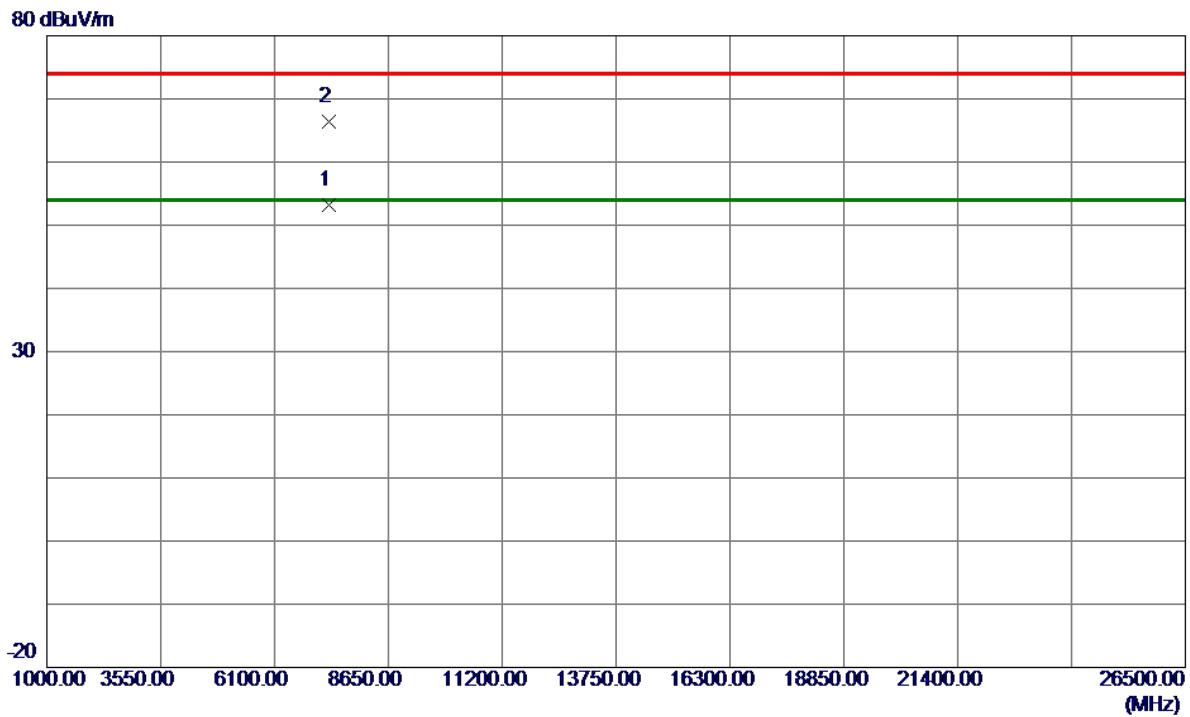


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	
							Peak	AVG
1	2441.2000	103.11	7.25	110.36	74.00	36.36	Peak	No Limit
2 *	2441.6000	95.52	7.25	102.77	54.00	48.77	AVG	No Limit

## REMARKS:

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

Test Mode	TX G Mode 2437 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------



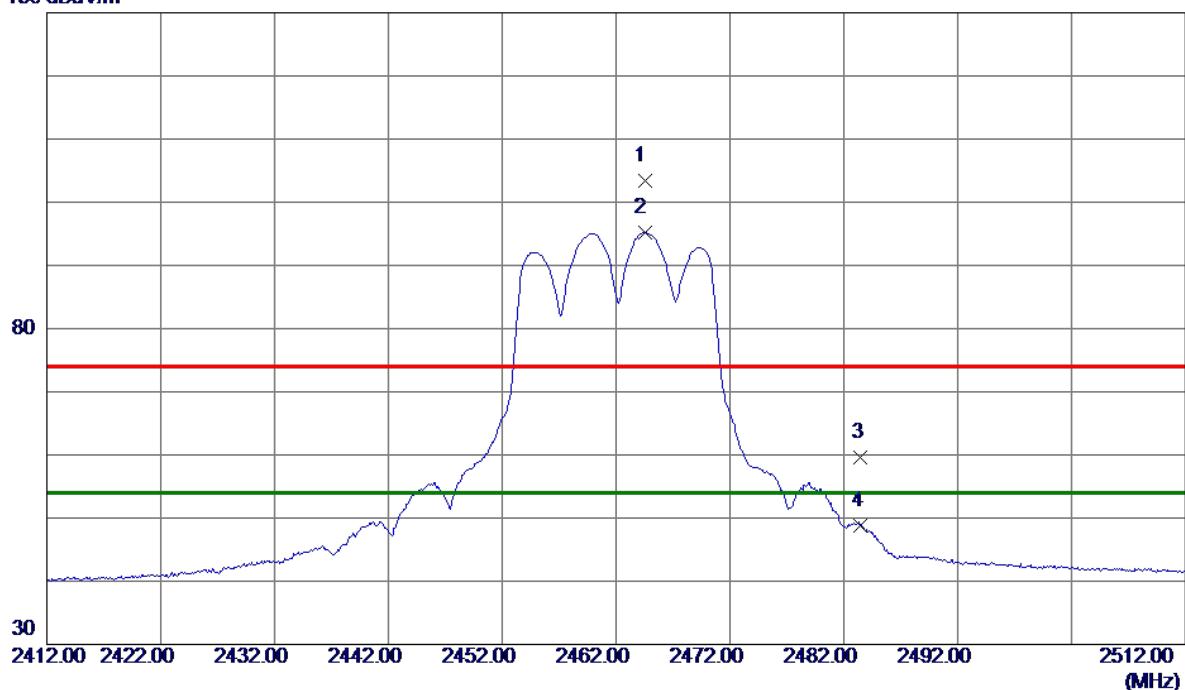
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin Detector	Comment
1 *	7308.8750	42.80	10.32	53.12	54.00	-0.88	AVG
2	7313.9500	56.16	10.32	66.48	74.00	-7.52	Peak

**REMARKS:**

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

Test Mode	TX G Mode 2462 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------

130 dBuV/m

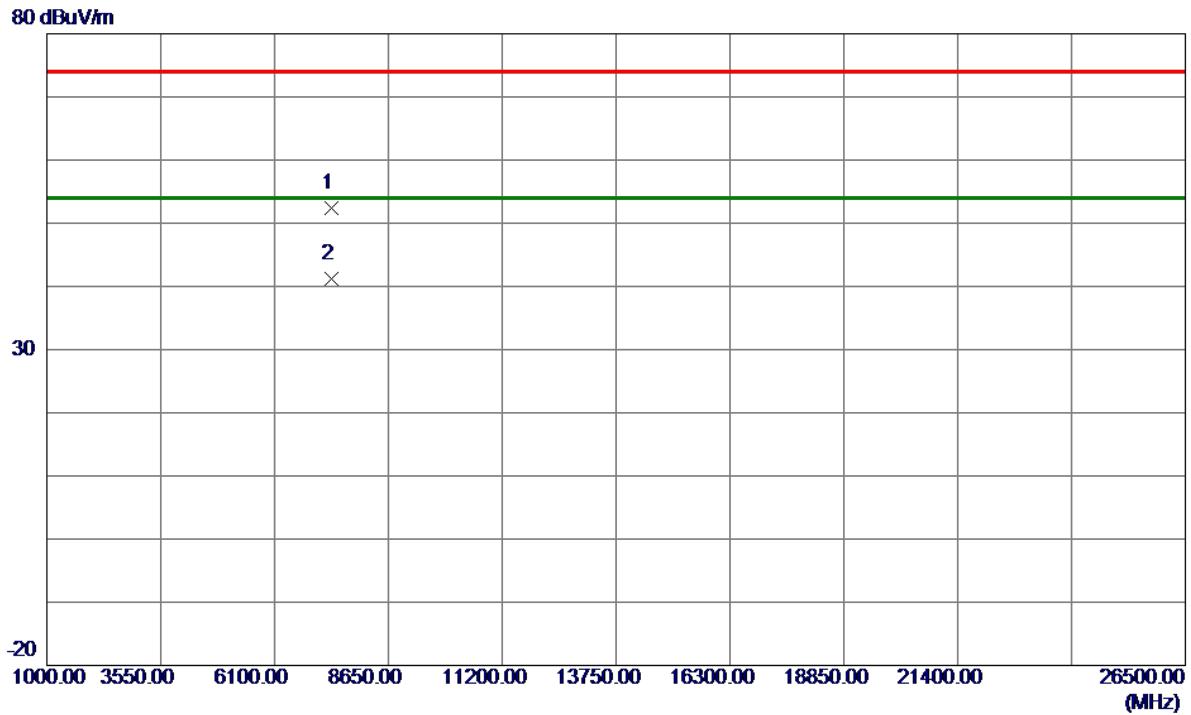


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2464.5000	96.16	7.25	103.41	74.00	29.41	Peak	No Limit
2 *	2464.5000	88.04	7.25	95.29	54.00	41.29	AVG	No Limit
3	2483.5000	52.37	7.25	59.62	74.00	-14.38	Peak	
4	2483.5000	41.53	7.25	48.78	54.00	-5.22	AVG	

## REMARKS:

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

Test Mode	TX G Mode 2462 MHz	Polarization	Vertical
-----------	--------------------	--------------	----------



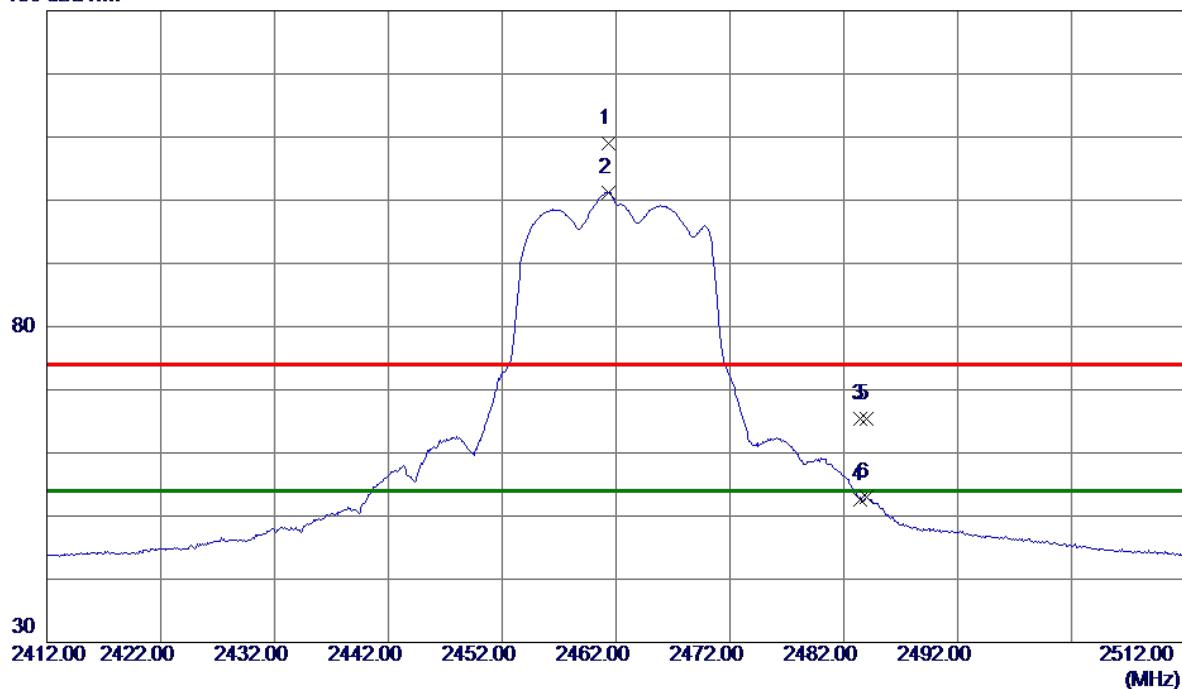
No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1 *	7380.2250	42.00	10.44	52.44	54.00	-1.56	AVG
2	7385.5250	30.77	10.45	41.22	74.00	-32.78	Peak

**REMARKS:**

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

Test Mode	TX G Mode 2462 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------

130 dBuV/m

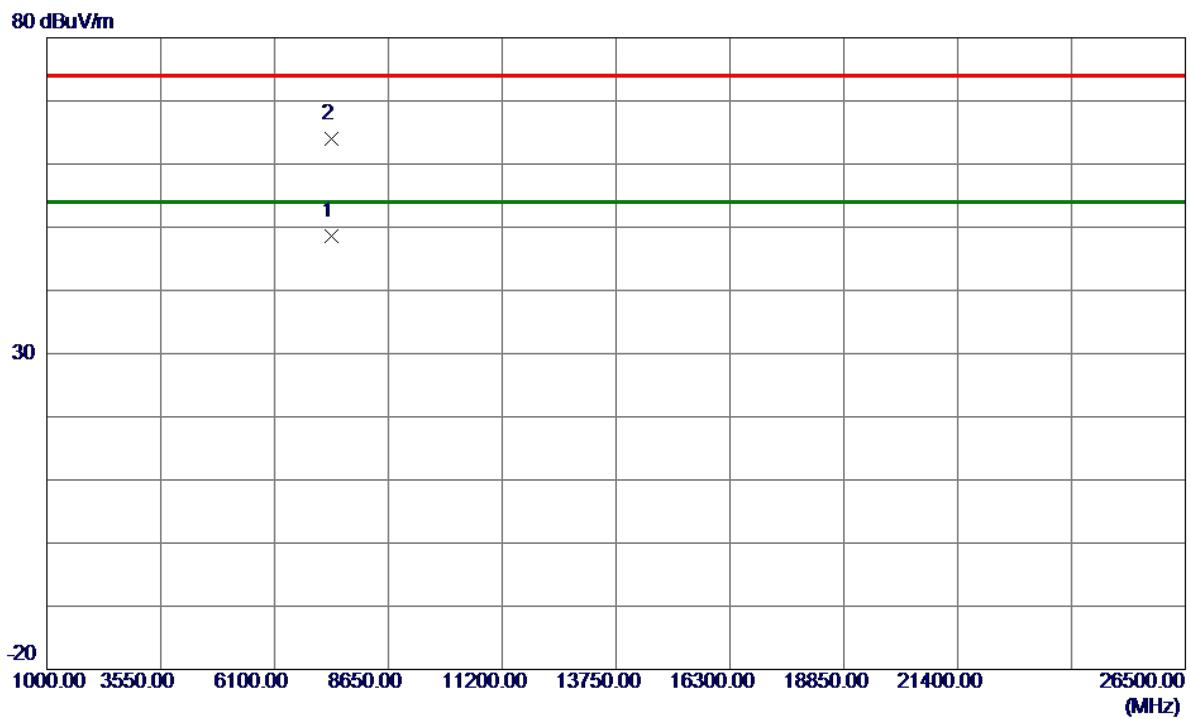


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.3000	101.78	7.25	109.03	74.00	35.03	Peak	No Limit
2 *	2461.3000	94.04	7.25	101.29	54.00	47.29	AVG	No Limit
3	2483.5000	58.15	7.25	65.40	74.00	-8.60	Peak	
4	2483.5000	45.30	7.25	52.55	54.00	-1.45	AVG	
5	2484.0000	58.14	7.25	65.39	74.00	-8.61	Peak	
6	2484.0000	45.75	7.25	53.00	54.00	-1.00	AVG	

## REMARKS:

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

Test Mode	TX G Mode 2462 MHz	Polarization	Horizontal
-----------	--------------------	--------------	------------



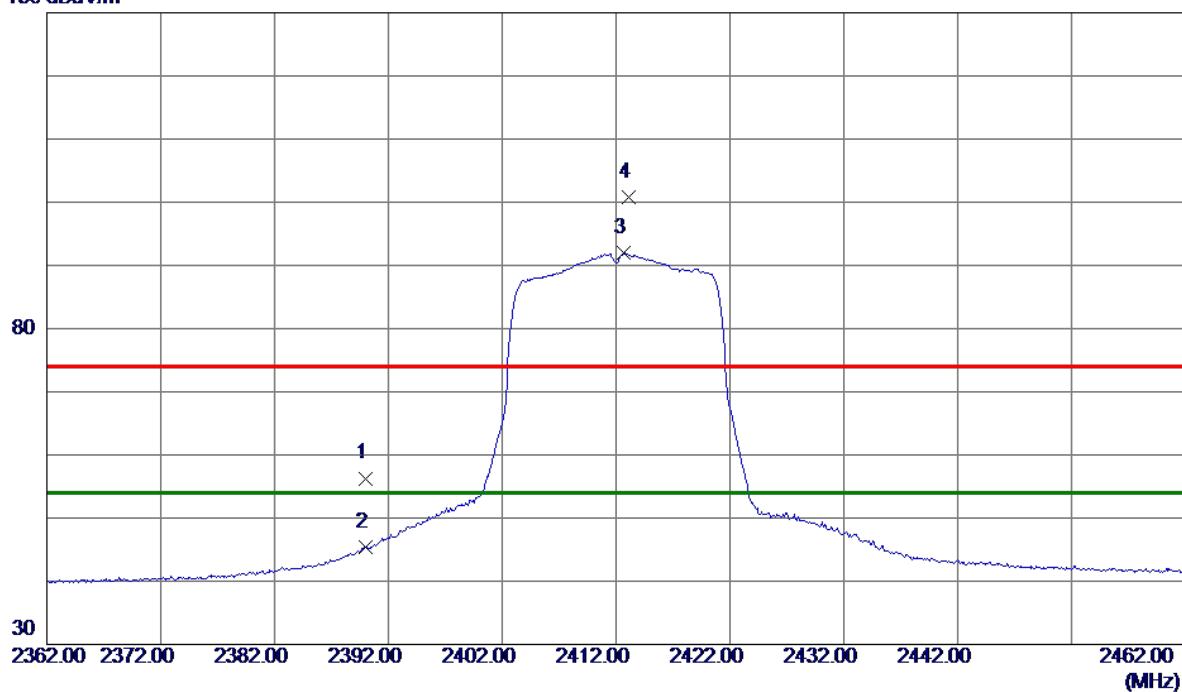
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dB			
1 *	7386.8250	38.15	10.45	48.60	54.00	-5.40	AVG	
2	7386.8750	53.54	10.45	63.99	74.00	-10.01	Peak	

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical
-----------	--------------------------	--------------	----------

130 dBuV/m

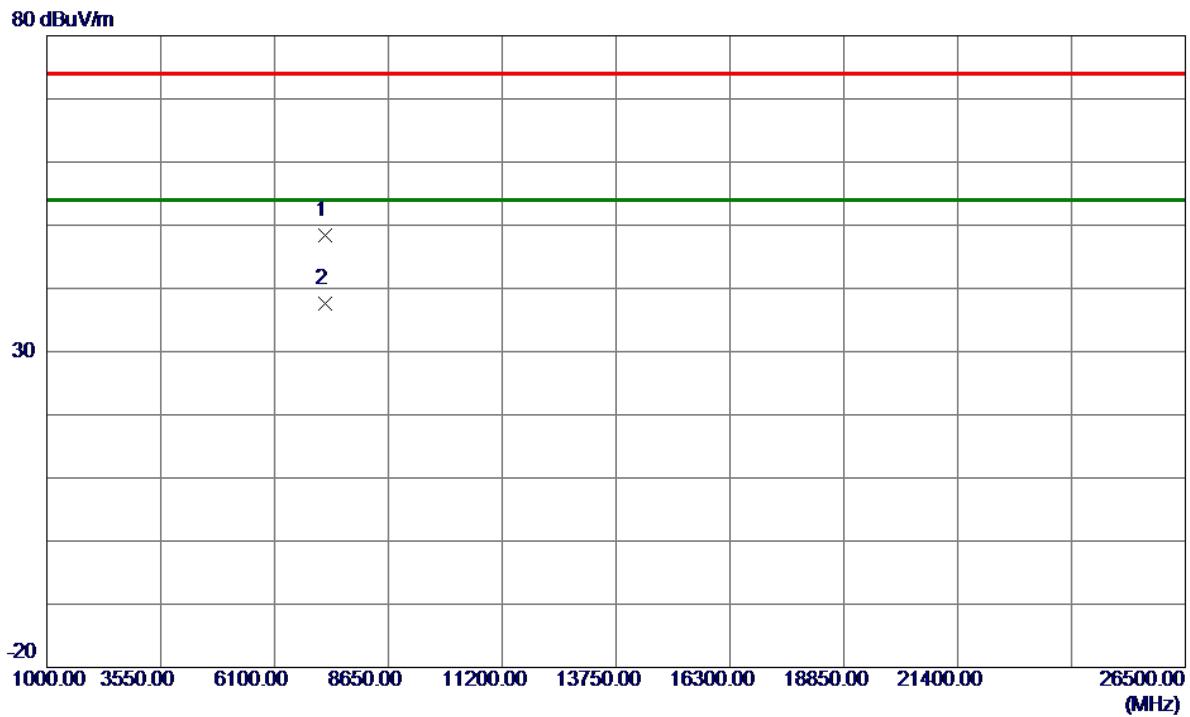


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector		Comment
							Detector	Comment	
1	2390.000	49.04	7.26	56.30	74.00	-17.70	Peak		
2	2390.000	38.06	7.26	45.32	54.00	-8.68	AVG		
3 *	2412.700	84.68	7.26	91.94	54.00	37.94	AVG	No Limit	
4	2413.1000	93.53	7.26	100.79	74.00	26.79	Peak	No Limit	

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical
-----------	--------------------------	--------------	----------



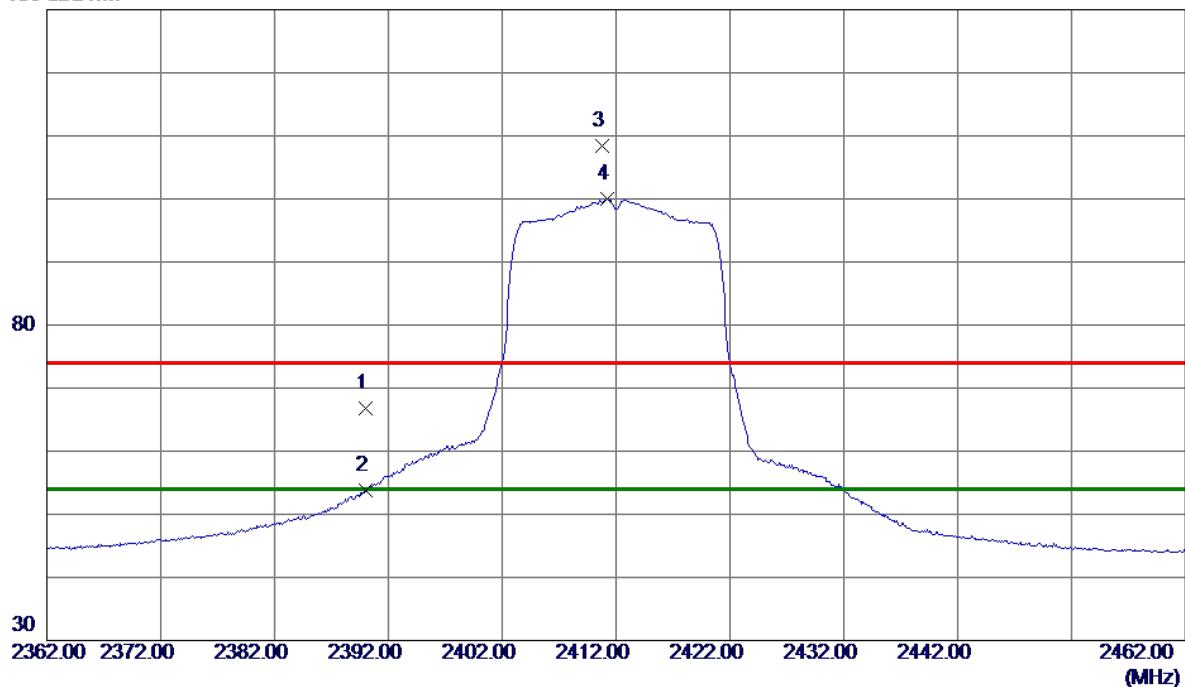
No.	Freq. MHz	Reading Level dB $\mu$ V/m	Correct Factor dB	Measure- ment dB $\mu$ V/m	Limit dB	Margin Detector	Comment
1	7219.8250	38.20	10.16	48.36	74.00	-25.64	Peak
2 *	7220.9500	27.44	10.17	37.61	54.00	-16.39	AVG

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Horizontal
-----------	--------------------------	--------------	------------

130 dBuV/m

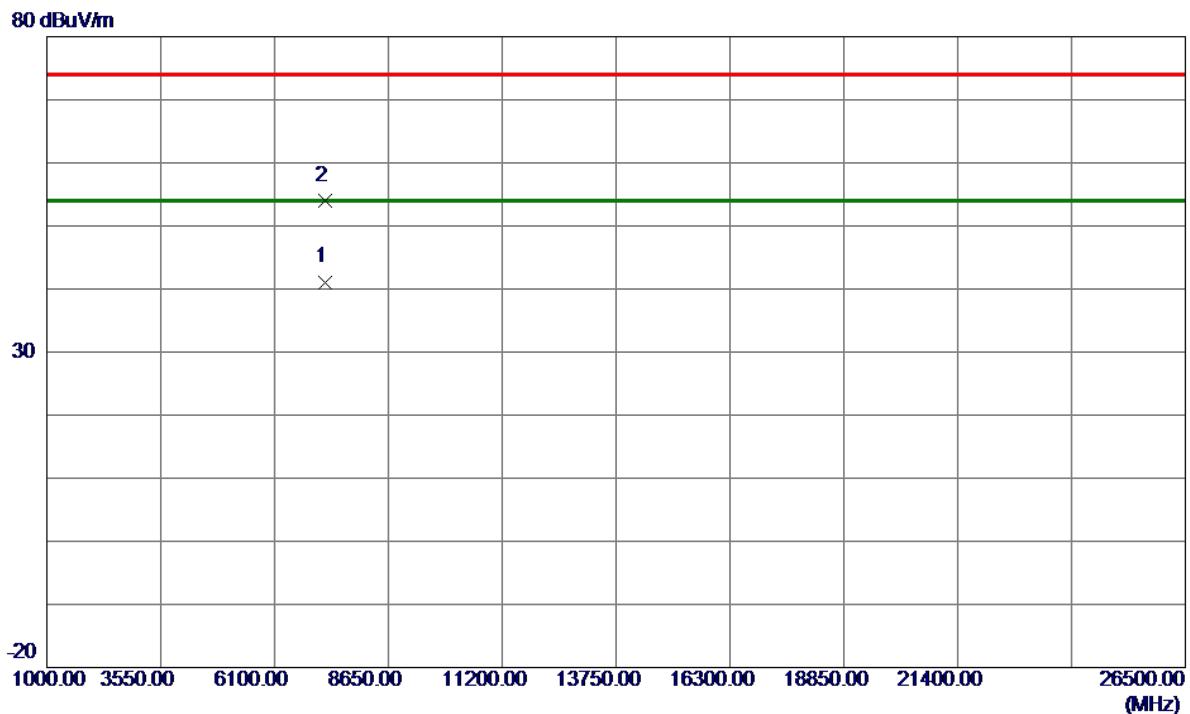


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	59.50	7.26	66.76	74.00	-7.24	Peak	
2	2390.000	46.46	7.26	53.72	54.00	-0.28	AVG	
3	2410.800	101.11	7.26	108.37	74.00	34.37	Peak	No Limit
4 *	2411.200	92.70	7.26	99.96	54.00	45.96	AVG	No Limit

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Horizontal
-----------	--------------------------	--------------	------------



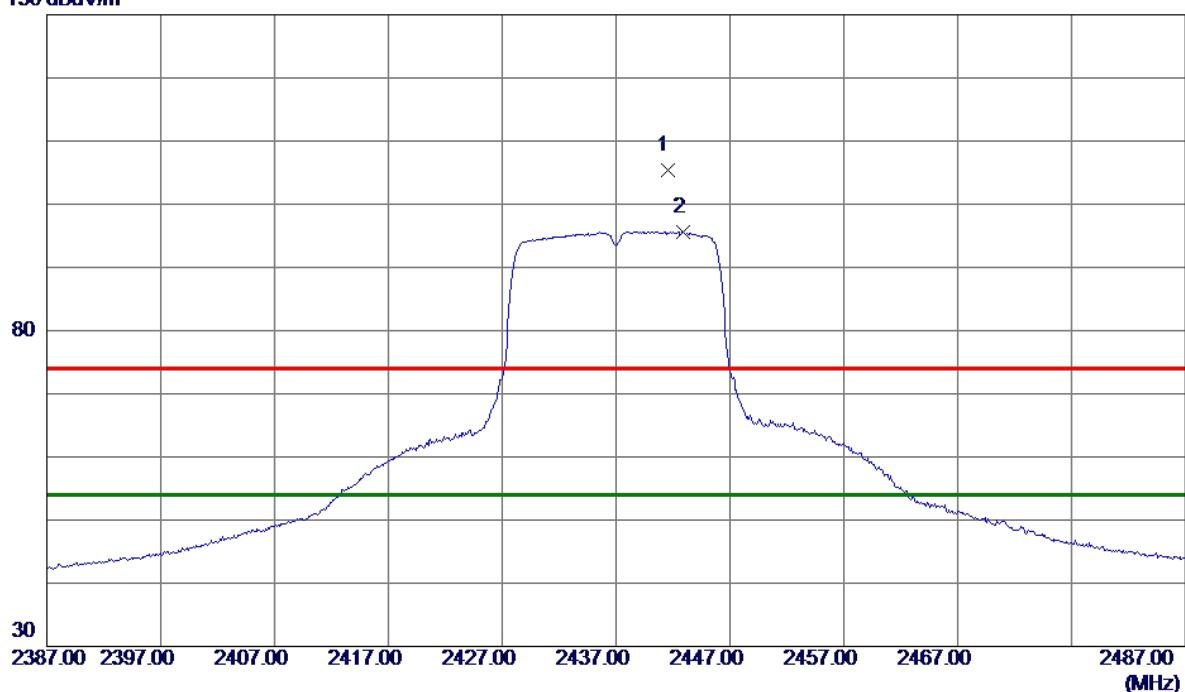
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB			
1 *	7234.1000	30.91	10.19	41.10	54.00	-12.90	AVG	
2	7235.9750	43.86	10.19	54.05	74.00	-19.95	Peak	

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical
-----------	--------------------------	--------------	----------

130 dBuV/m

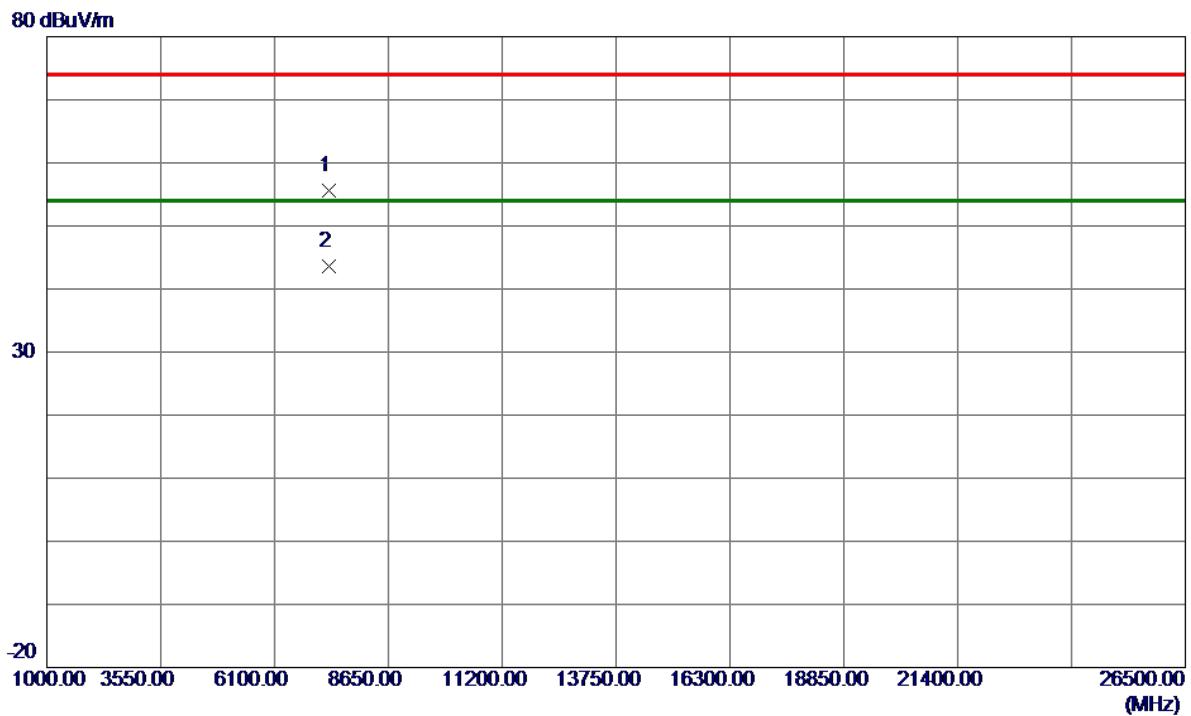


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
								1
1	2441.5000	98.17	7.25	105.42	74.00	31.42	Peak	No Limit
2 *	2442.9000	88.44	7.25	95.69	54.00	41.69	AVG	No Limit

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical
-----------	--------------------------	--------------	----------



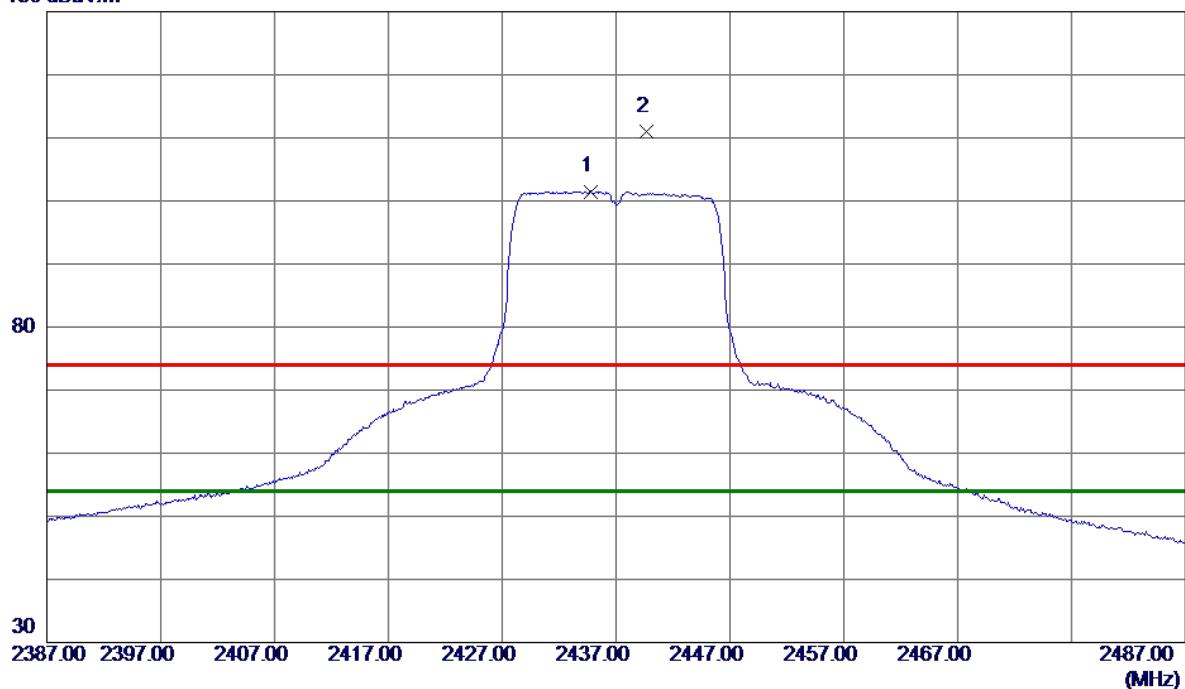
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB $\mu$ V/m	dB		
1	7311.1000	45.25	10.32	55.57	74.00	-18.43	Peak	
2 *	7311.2750	33.20	10.32	43.52	54.00	-10.48	AVG	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Horizontal
-----------	--------------------------	--------------	------------

130 dBuV/m

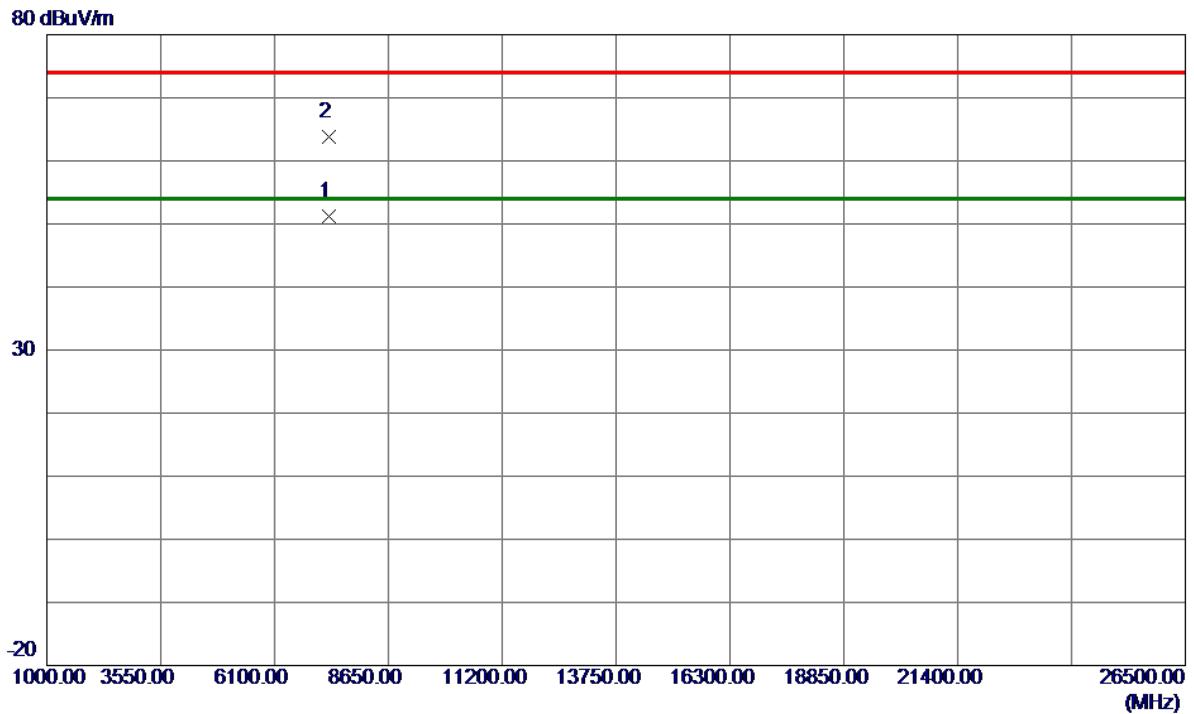


No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	2434.8000	94.25	7.25	101.50	54.00	47.50	AVG	No Limit
2	2439.7000	103.80	7.25	111.05	74.00	37.05	Peak	No Limit

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Horizontal
-----------	--------------------------	--------------	------------



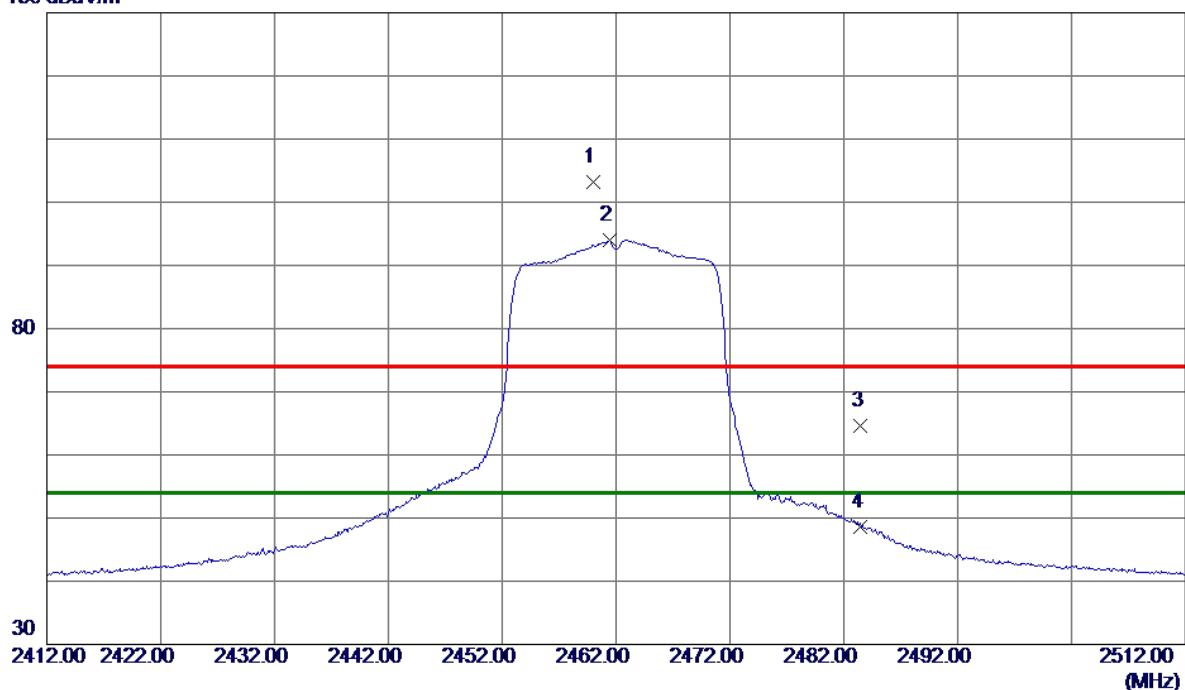
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB			
1 *	7309.6000	40.87	10.32	51.19	54.00	-2.81	AVG	
2	7314.7750	53.48	10.33	63.81	74.00	-10.19	Peak	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Vertical
-----------	--------------------------	--------------	----------

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.000	95.97	7.25	103.22	74.00	29.22	Peak	No Limit
2 *	2461.400	86.68	7.25	93.93	54.00	39.93	AVG	No Limit
3	2483.500	57.40	7.25	64.65	74.00	-9.35	Peak	
4	2483.500	41.35	7.25	48.60	54.00	-5.40	AVG	

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Vertical
-----------	--------------------------	--------------	----------



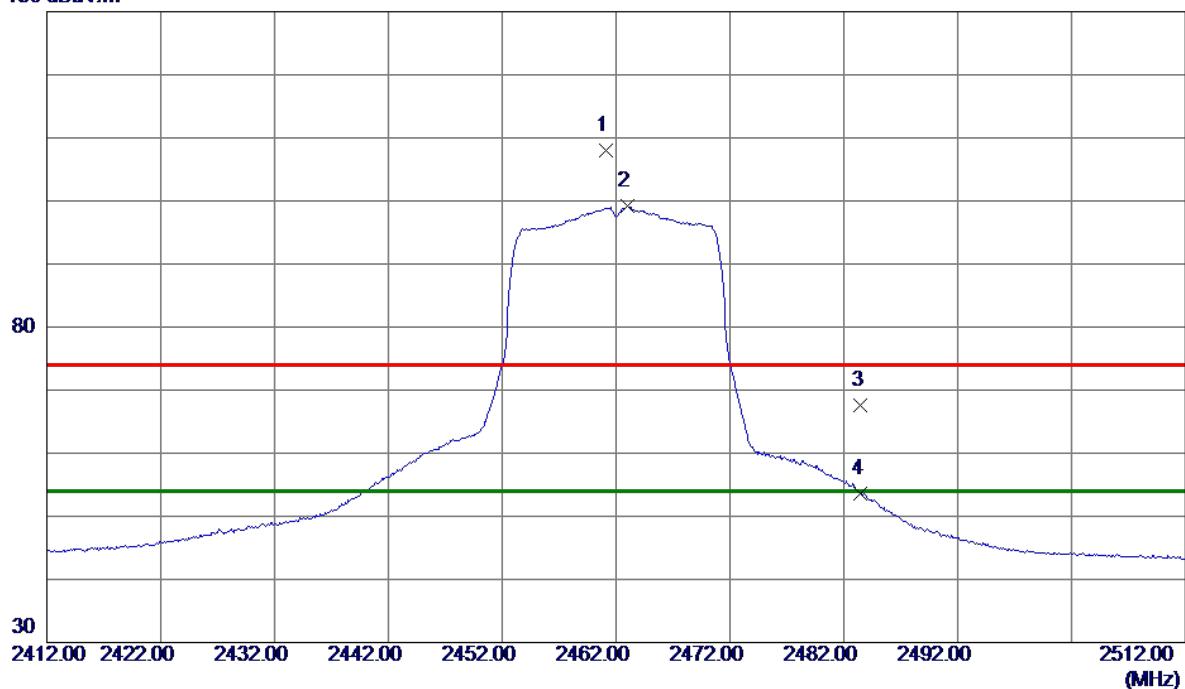
No.	Freq. MHz	Reading Level	Correct Factor	Measure ment	Limit	Margin	Detector	Comment
		dBuV/m	dB	dBuV/m	dB			
1 *	7387.8250	28.47	10.45	38.92	54.00	-15.08	AVG	
2	7389.4000	40.66	10.45	51.11	74.00	-22.89	Peak	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Horizontal
-----------	--------------------------	--------------	------------

130 dBuV/m

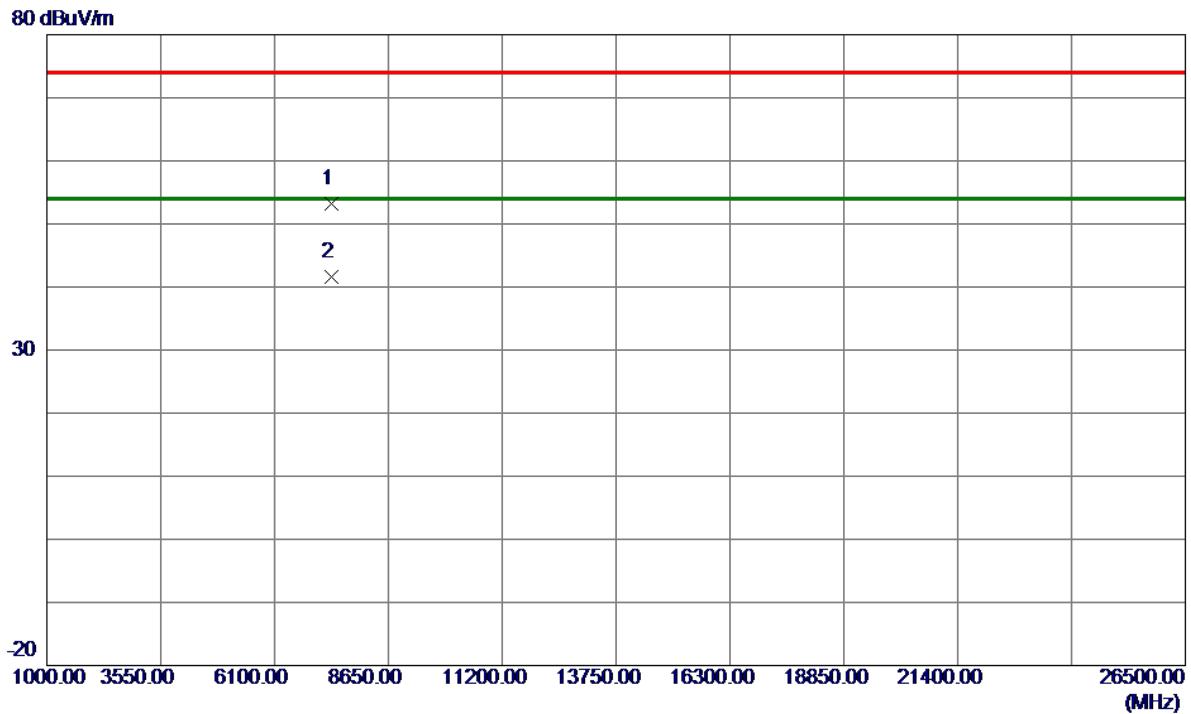


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.100	100.83	7.25	108.08	74.00	34.08	Peak	No Limit
2 *	2463.000	91.91	7.25	99.16	54.00	45.16	AVG	No Limit
3	2483.500	60.33	7.25	67.58	74.00	-6.42	Peak	
4	2483.500	46.42	7.25	53.67	54.00	-0.33	AVG	

## REMARKS:

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

Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Horizontal
-----------	--------------------------	--------------	------------



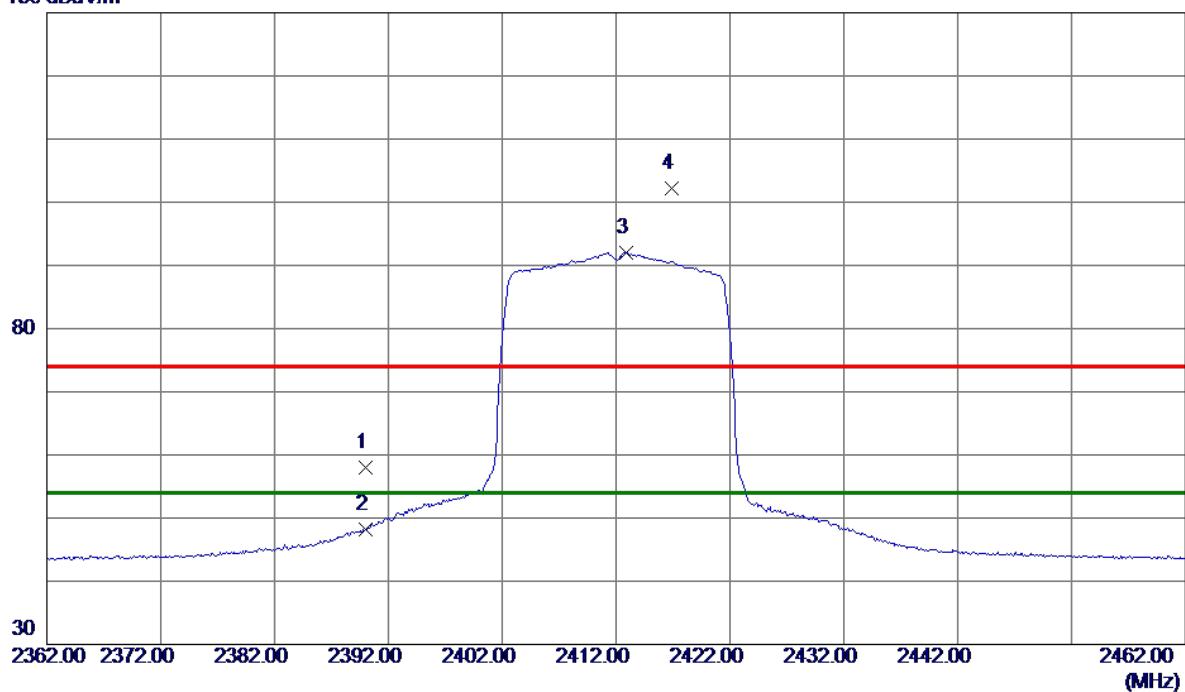
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB			
1	7384.1000	42.78	10.44	53.22	74.00	-20.78	Peak	
2 *	7388.5500	31.14	10.45	41.59	54.00	-12.41	AVG	

**REMARKS:**

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

Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Vertical
-----------	---------------------------	--------------	----------

130 dBuV/m

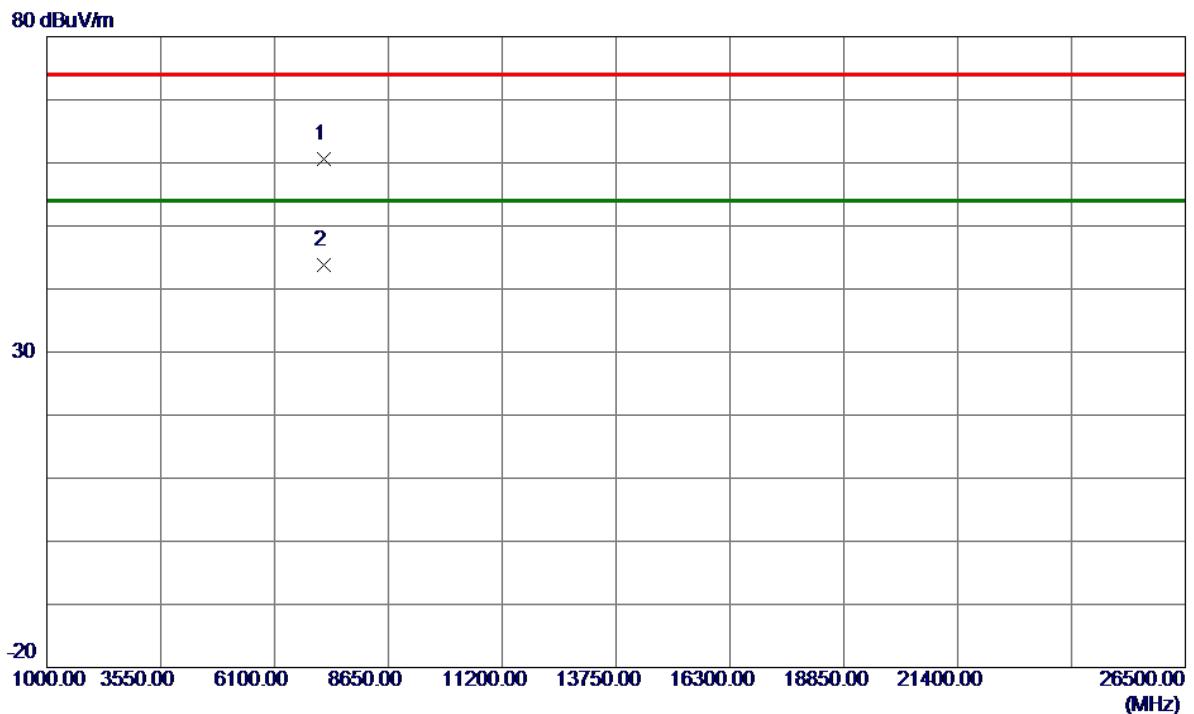


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector		Comment
							Detector	Comment	
1	2390.000	49.73	8.31	58.04	74.00	-15.96	Peak		
2	2390.000	39.92	8.31	48.23	54.00	-5.77	AVG		
3 *	2412.900	83.67	8.33	92.00	54.00	38.00	AVG		
4	2416.900	93.80	8.34	102.14	74.00	28.14	Peak		

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Vertical
-----------	---------------------------	--------------	----------



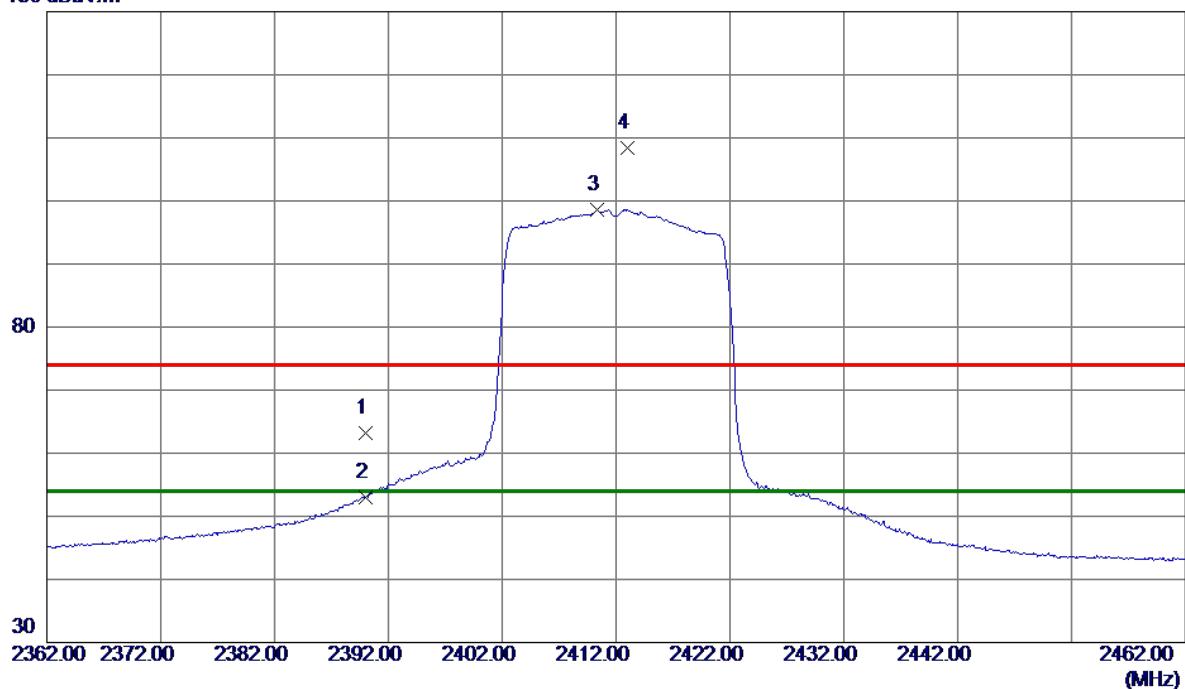
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dB $\mu$ V/m	dB	dB $\mu$ V/m	dB			
1	7209.7650	50.46	10.15	60.61	74.00	-13.39	Peak	
2 *	7210.3800	33.67	10.15	43.82	54.00	-10.18	AVG	

**REMARKS:**

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

Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Horizontal
-----------	---------------------------	--------------	------------

130 dBuV/m

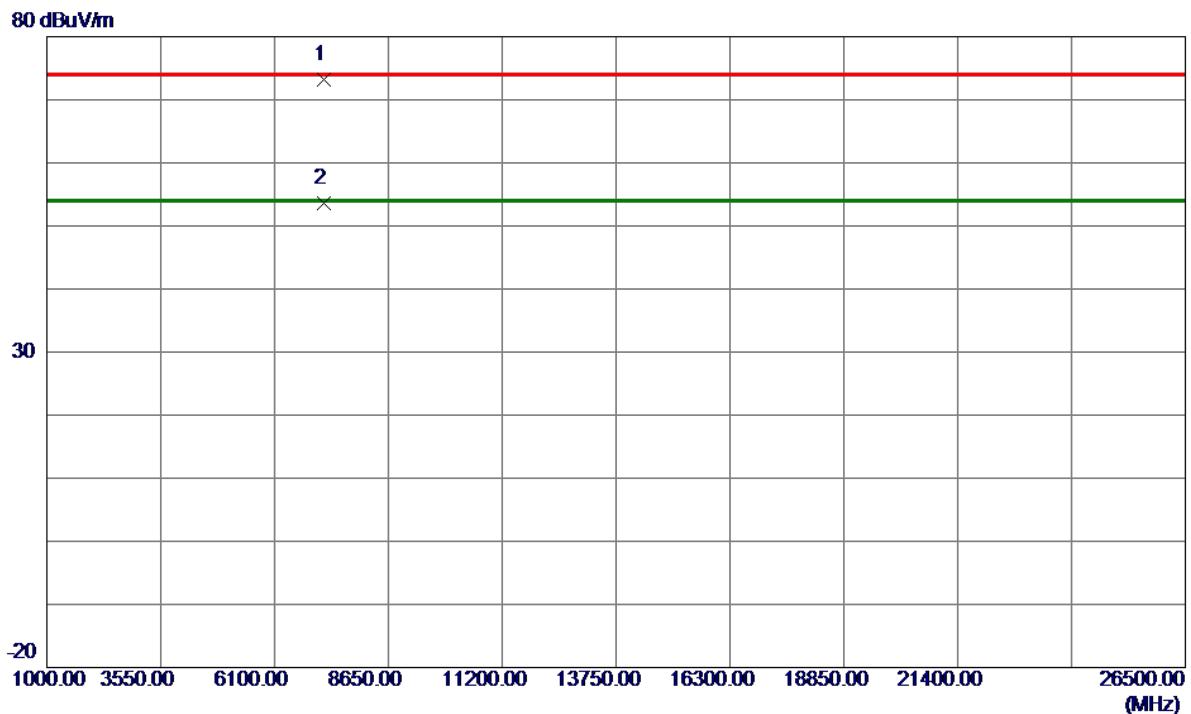


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	54.83	8.31	63.14	74.00	-10.86	Peak	
2	2390.0000	44.71	8.31	53.02	54.00	-0.98	AVG	
3 *	2410.3500	90.26	8.33	98.59	54.00	44.59	AVG	
4	2413.0000	100.02	8.33	108.35	74.00	34.35	Peak	

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Horizontal
-----------	---------------------------	--------------	------------



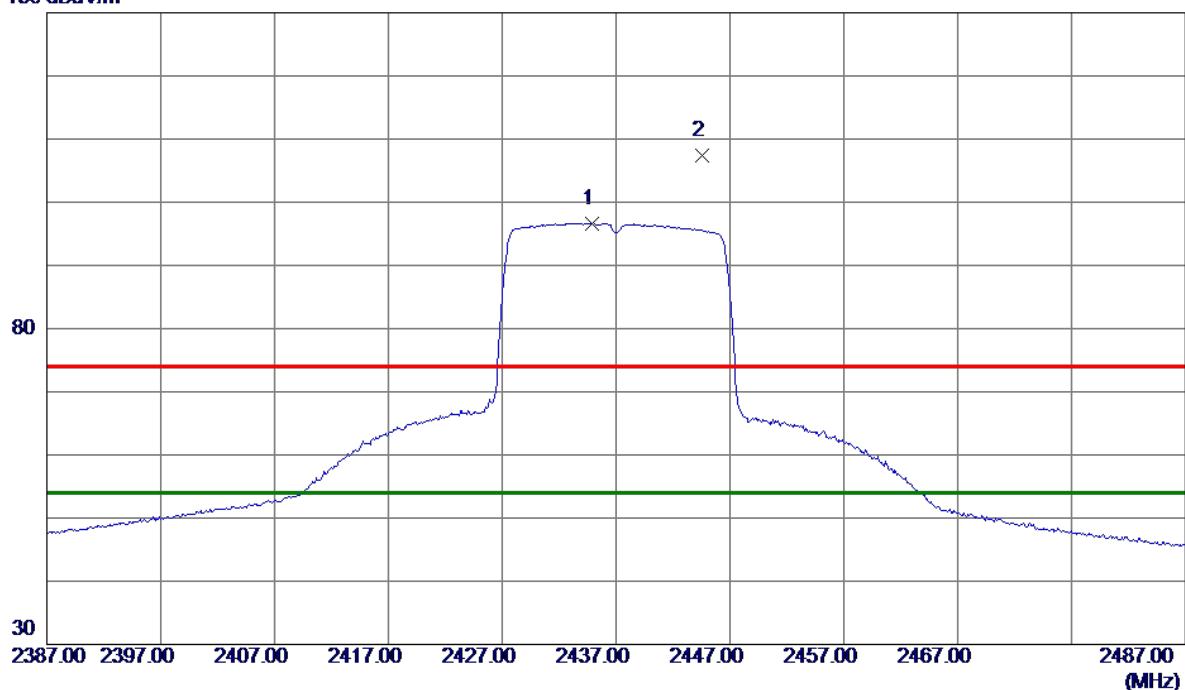
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	7209.3450	63.02	10.15	73.17	74.00	-0.83	Peak	
2 *	7210.3550	43.51	10.15	53.66	54.00	-0.34	AVG	

**REMARKS:**

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

Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Vertical
-----------	---------------------------	--------------	----------

130 dBuV/m

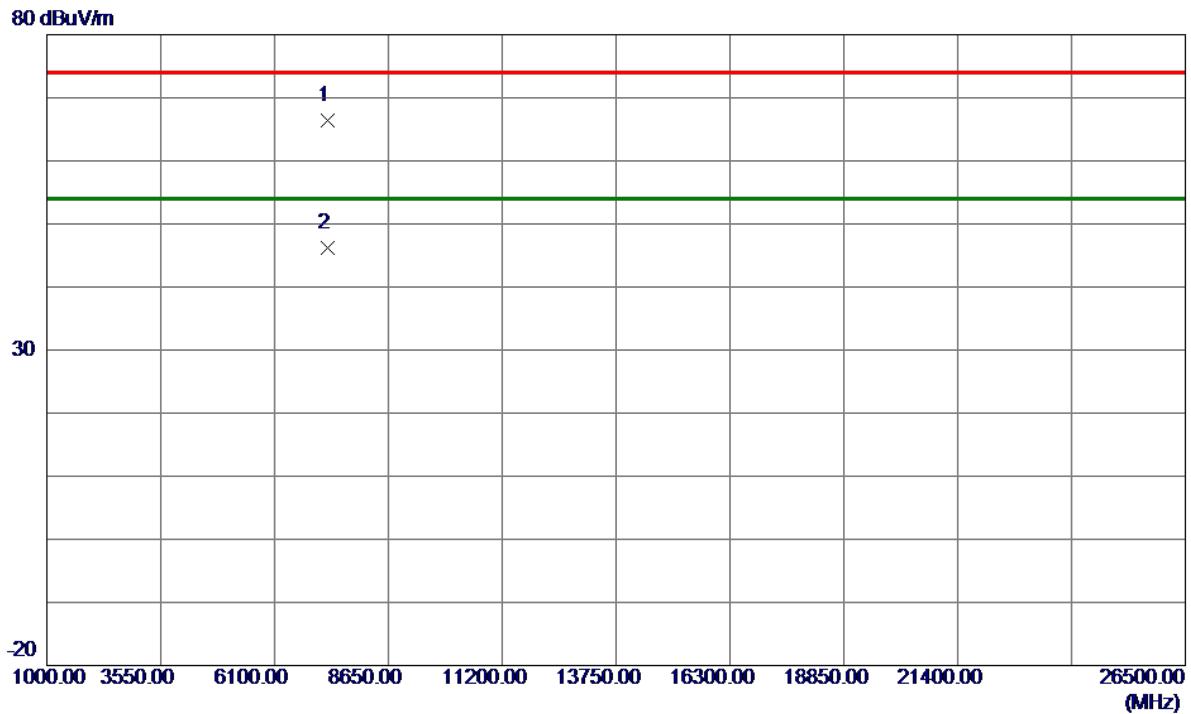


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
								Comment
1 *	2434.9000	88.28	8.36	96.64	54.00	42.64	AVG	
2	2444.6000	99.04	8.37	107.41	74.00	33.41	Peak	

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Vertical
-----------	---------------------------	--------------	----------



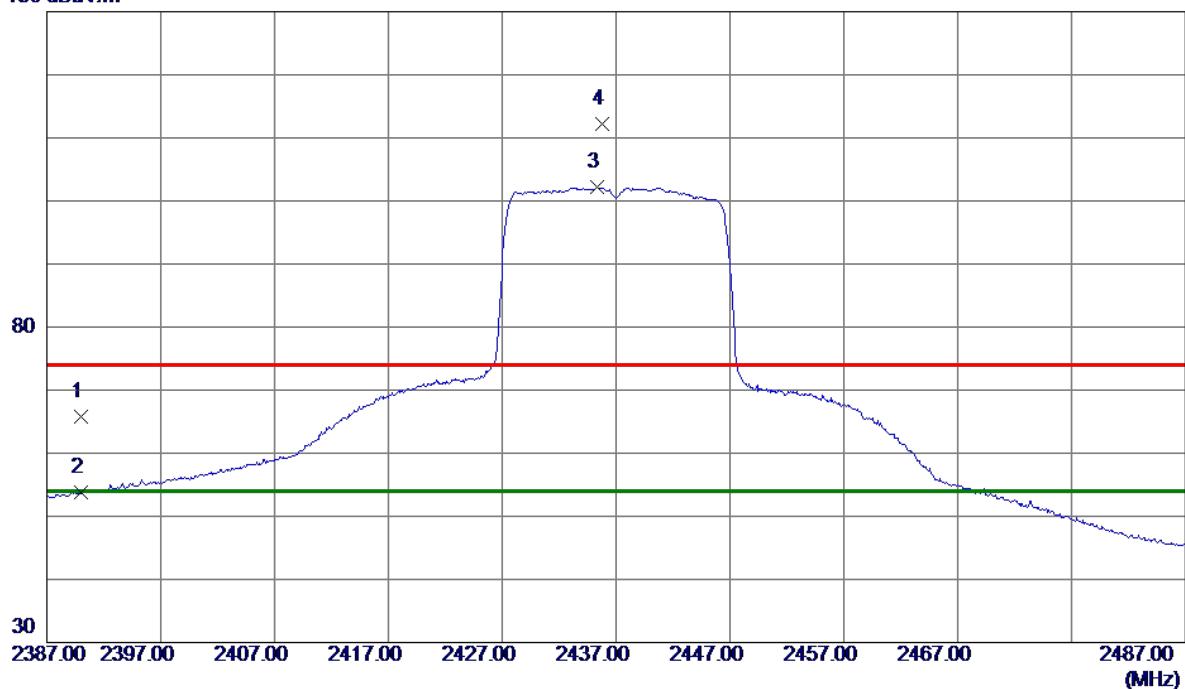
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dB			
1 *	7284.5550	56.05	10.27	66.32	74.00	-7.68	Peak	
2	7285.7650	35.86	10.28	46.14	54.00	-7.86	AVG	

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Horizontal
-----------	---------------------------	--------------	------------

130 dBuV/m

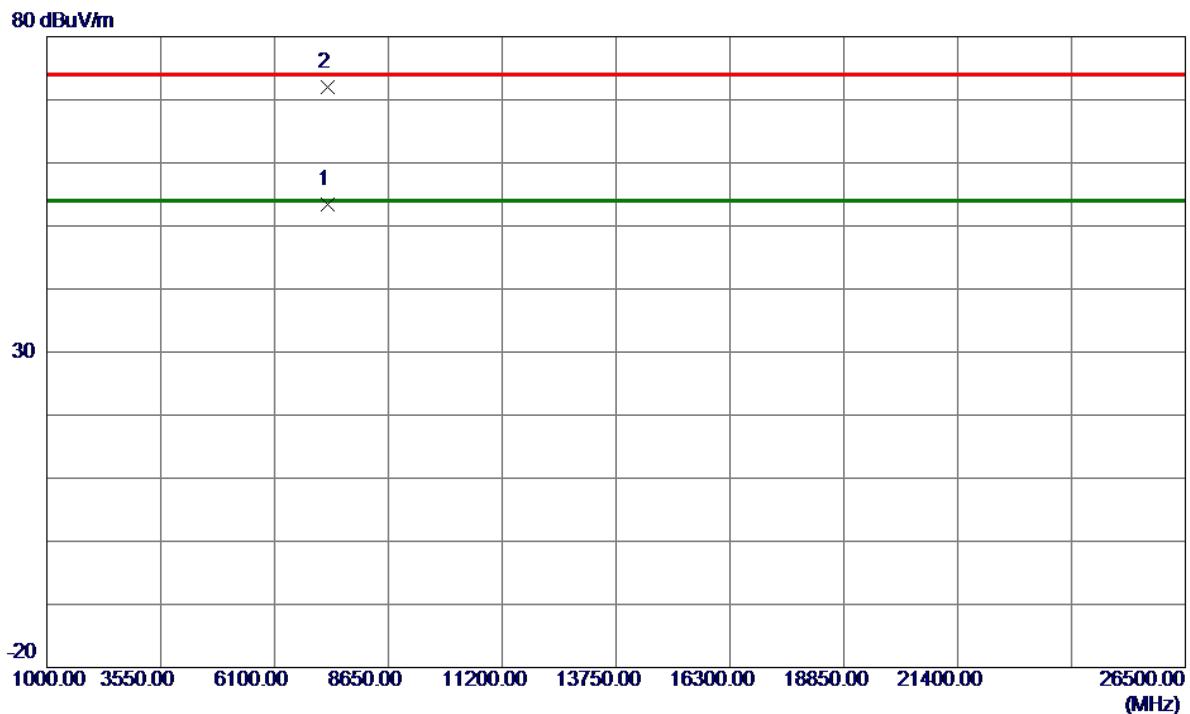


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	57.45	8.31	65.76	74.00	-8.24	Peak	
2	2390.0000	45.43	8.31	53.74	54.00	-0.26	AVG	
3 *	2435.3500	93.75	8.36	102.11	54.00	48.11	AVG	
4	2435.8000	103.93	8.36	112.29	74.00	38.29	Peak	

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Horizontal
-----------	---------------------------	--------------	------------



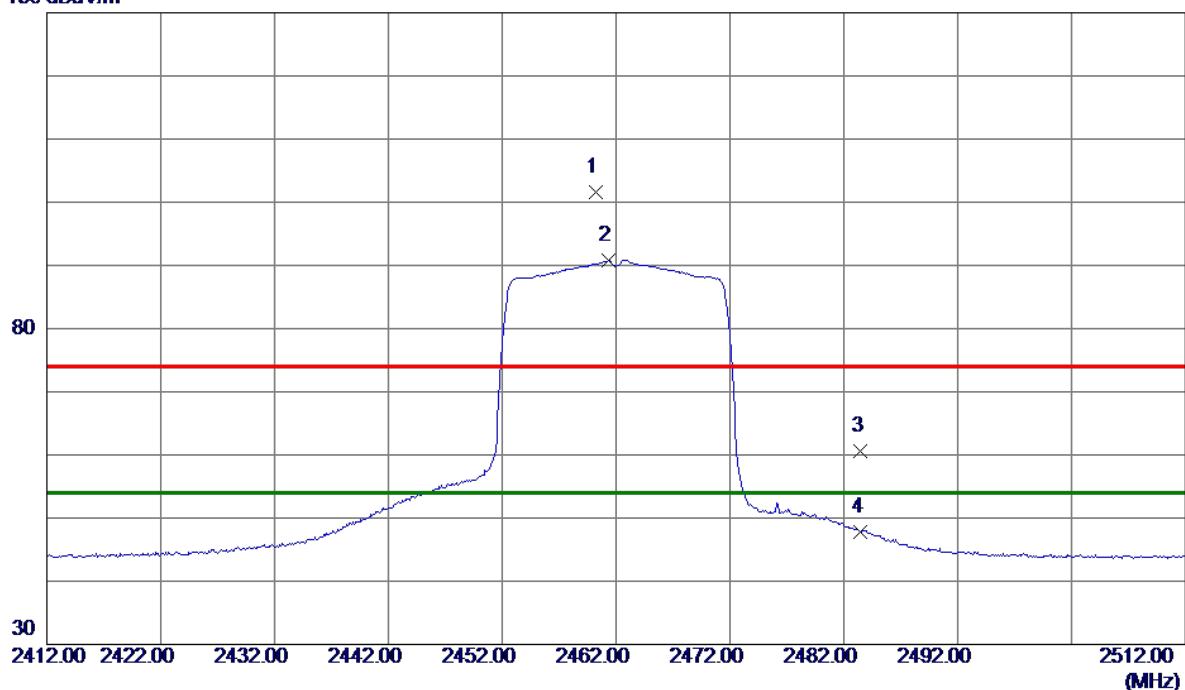
No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	7285.9700	43.11	10.28	53.39	54.00	-0.61	AVG	
2	7286.5550	61.68	10.28	71.96	74.00	-2.04	Peak	

**REMARKS:**

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

Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Vertical
-----------	---------------------------	--------------	----------

130 dBuV/m

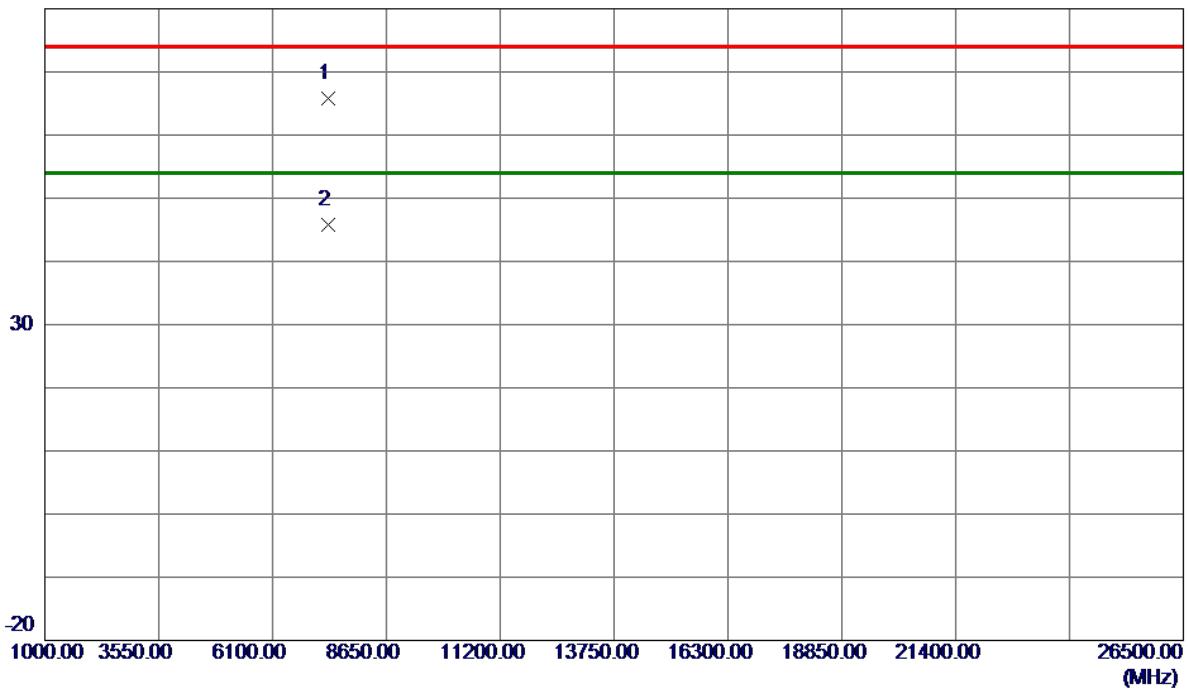


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.2000	93.24	8.39	101.63	74.00	27.63	Peak	
2 *	2461.3000	82.39	8.40	90.79	54.00	36.79	AVG	
3	2483.5000	52.21	8.42	60.63	74.00	-13.37	Peak	
4	2483.5000	39.41	8.42	47.83	54.00	-6.17	AVG	

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Vertical
-----------	---------------------------	--------------	----------

**80 dBuV/m**

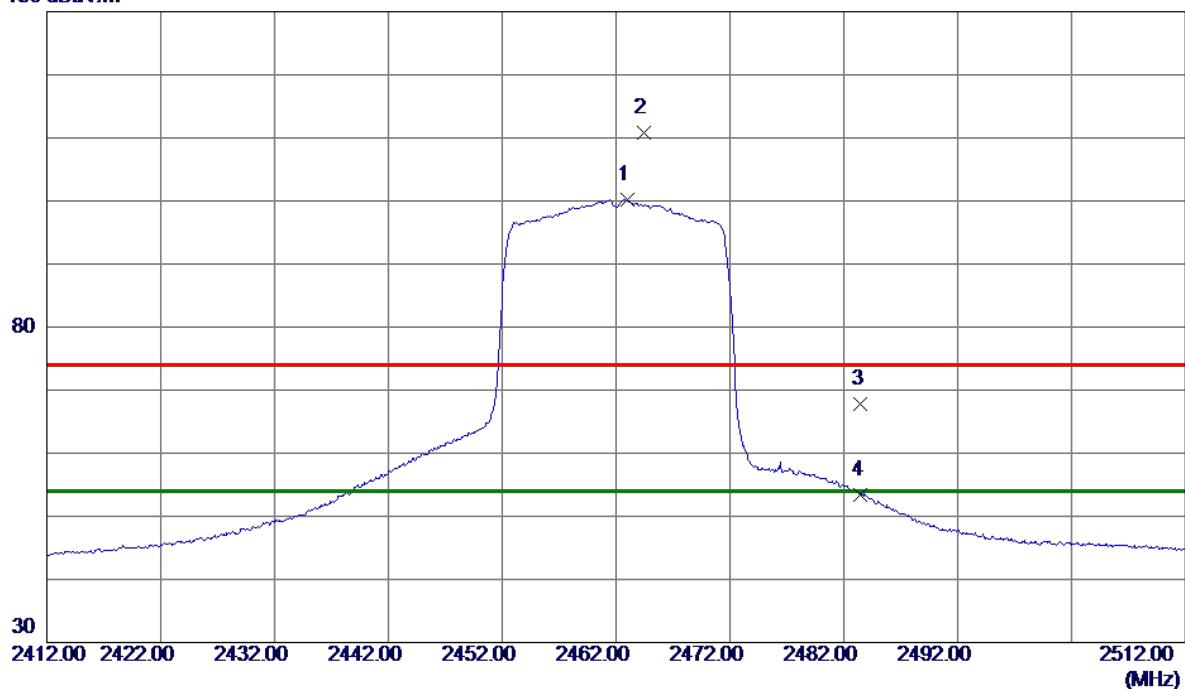
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
							MHz	dBuV/m
1	7359.6550	55.35	10.40	65.75	74.00	-8.25	Peak	
2 *	7360.1050	35.36	10.40	45.76	54.00	-8.24	AVG	

**REMARKS:**

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

Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Horizontal
-----------	---------------------------	--------------	------------

130 dBuV/m

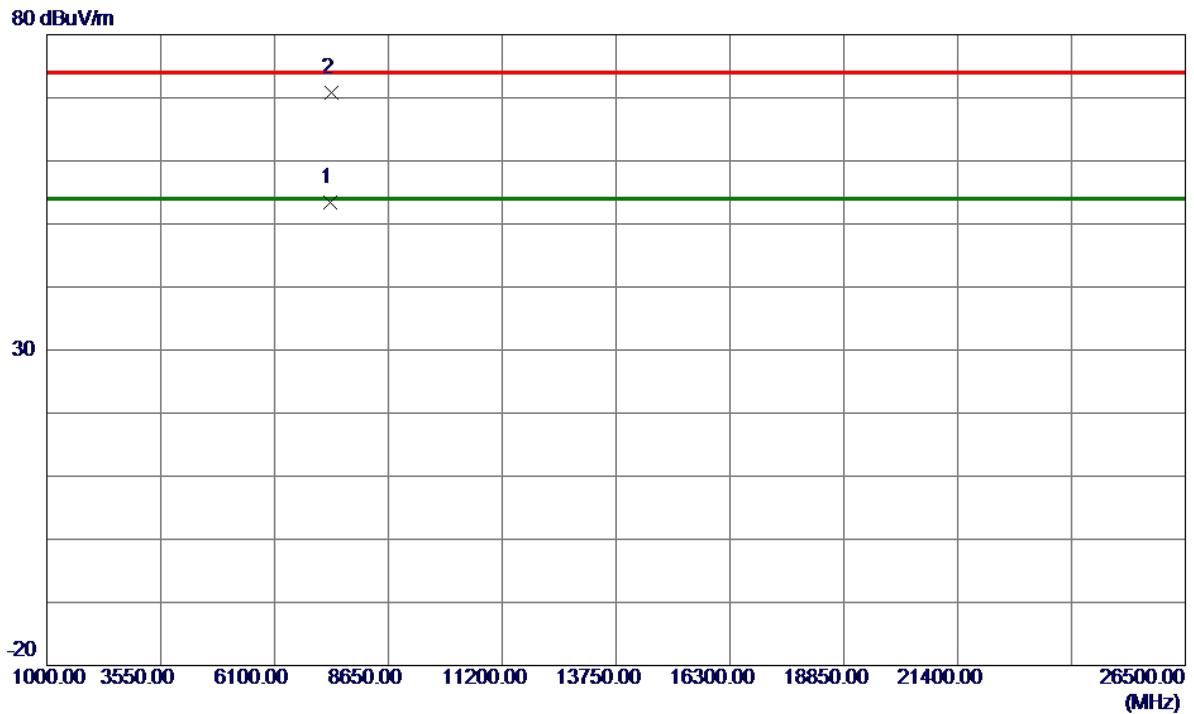


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	2462.9500	91.85	8.40	100.25	54.00	46.25	AVG	
2	2464.4000	102.40	8.40	110.80	74.00	36.80	Peak	
3	2483.5000	59.29	8.42	67.71	74.00	-6.29	Peak	
4	2483.5000	45.07	8.42	53.49	54.00	-0.51	AVG	

## REMARKS:

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

Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Horizontal
-----------	---------------------------	--------------	------------



No.	Freq.	Reading	Correct	Measure	Limit	Margin	Detector	Comment
		Level	Factor	ment				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1 *	7360.4500	42.98	10.40	53.38	54.00	-0.62	AVG	
2	7361.8950	60.34	10.41	70.75	74.00	-3.25	Peak	

**REMARKS:**

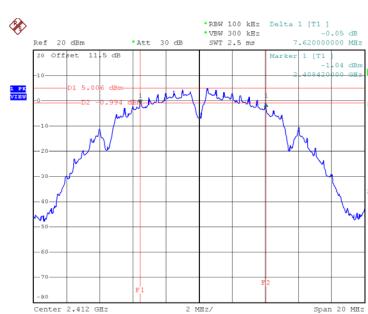
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

## APPENDIX E - BANDWIDTH

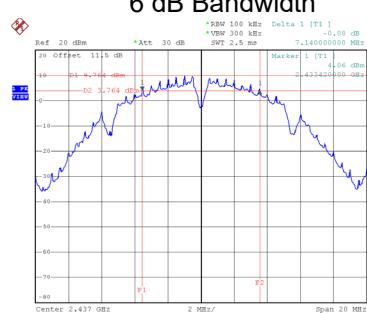
Test Mode TX B Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	7.62	10.96	0.50	Complies
06	2437	7.14	11.84	0.50	Complies
11	2462	7.60	11.92	0.50	Complies

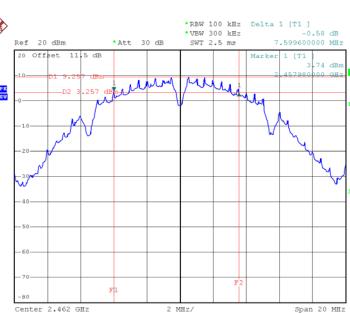
CH01



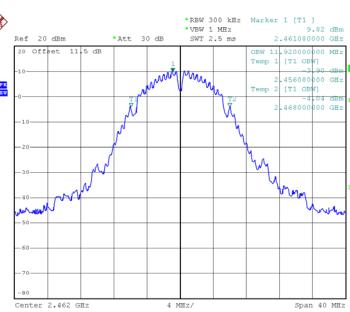
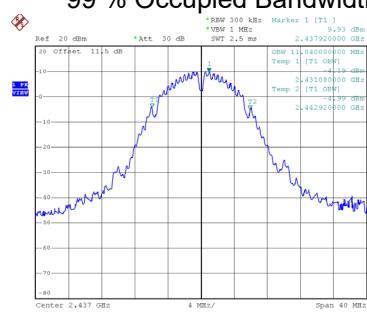
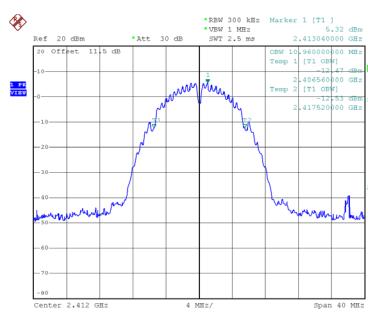
CH06  
6 dB Bandwidth



CH11



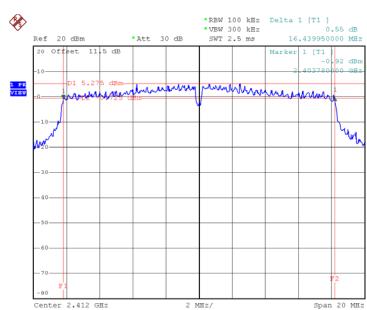
99 % Occupied Bandwidth



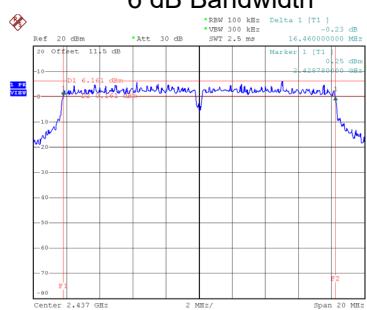
Test Mode	TX G Mode
-----------	-----------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.44	16.88	0.50	Complies
06	2437	16.46	17.28	0.50	Complies
11	2462	16.38	16.96	0.50	Complies

CH01

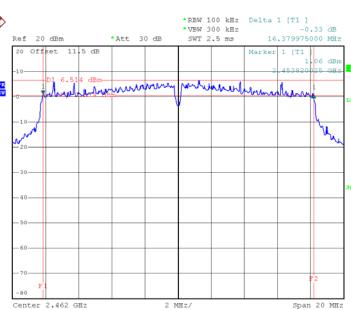


Date: 30.APR.2021 15:31:27

CH06  
6 dB Bandwidth

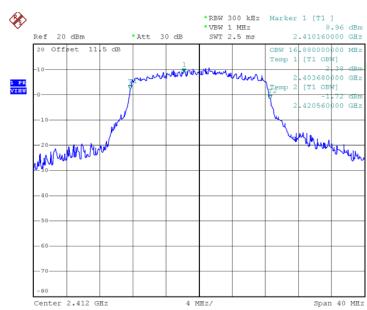
Date: 30.APR.2021 15:34:21

CH11

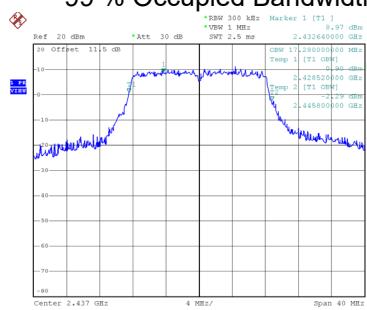


Date: 30.APR.2021 15:35:53

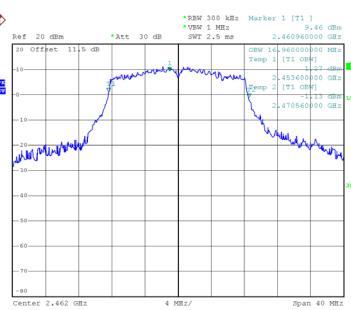
99 % Occupied Bandwidth



Date: 30.APR.2021 15:31:35



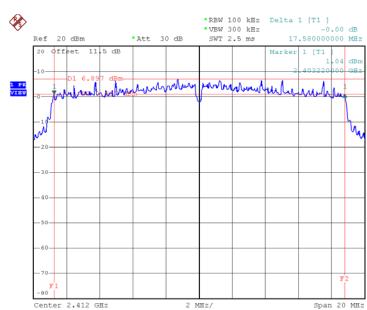
Date: 30.APR.2021 15:34:30



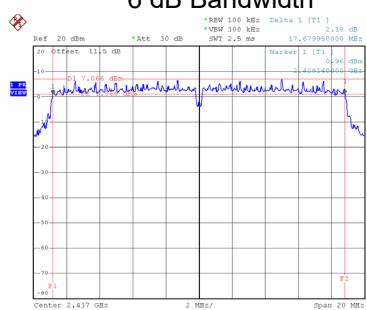
Date: 30.APR.2021 15:36:01

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

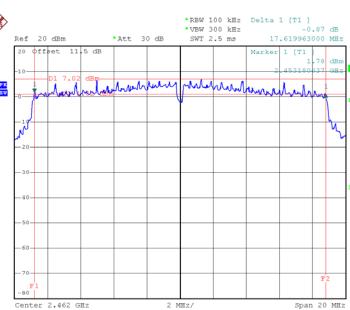
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.58	18.00	0.50	Complies
06	2437	17.68	18.32	0.50	Complies
11	2462	17.62	18.00	0.50	Complies

**CH01**


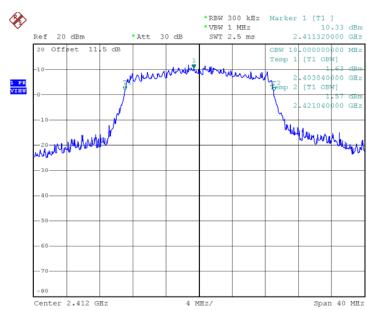
Date: 30.APR.2021 15:39:38

**CH06**  
**6 dB Bandwidth**


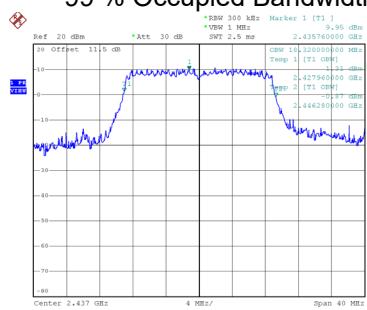
Date: 30.APR.2021 15:41:15

**CH11**


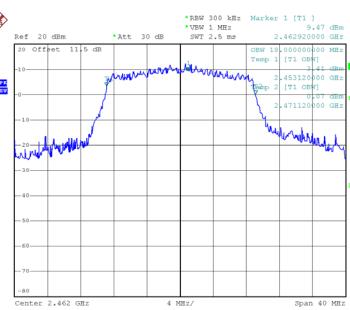
Date: 30.APR.2021 15:43:11

**99 % Occupied Bandwidth**


Date: 30.APR.2021 15:39:46



Date: 30.APR.2021 15:41:23

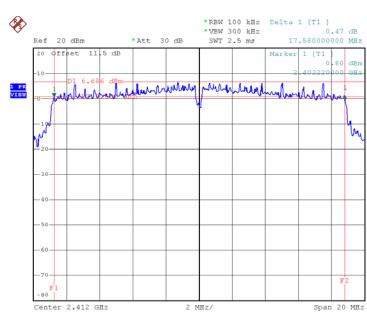


Date: 30.APR.2021 15:43:19

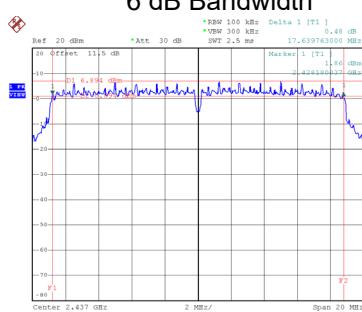
Test Mode TX AX(HE20) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.58	17.92	0.50	Complies
06	2437	17.64	18.24	0.50	Complies
11	2462	17.62	18.00	0.50	Complies

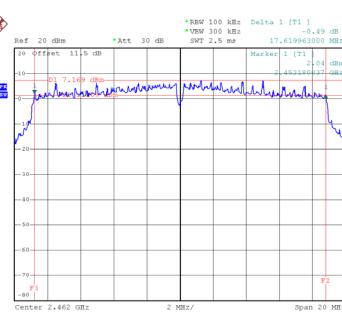
CH01



CH06  
6 dB Bandwidth



CH11

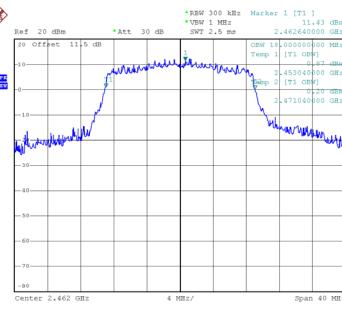
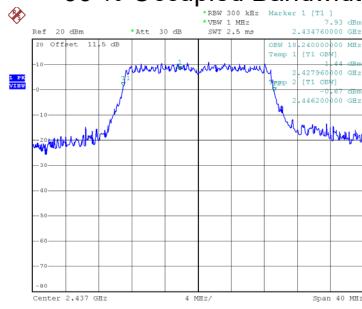
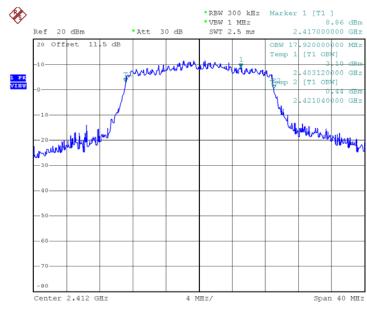


Date: 30.APR.2021 15:49:29

Date: 30.APR.2021 15:50:52

Date: 30.APR.2021 15:55:35

99 % Occupied Bandwidth



Date: 30.APR.2021 15:49:37

Date: 30.APR.2021 15:51:00

Date: 30.APR.2021 15:55:43

## APPENDIX F - MAXIMUM OUTPUT POWER

**Non Beamforming**

Test Mode TX B Mode\_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.45	0.00	18.45	30.00	1.0000	Complies
06	2437	18.47	0.00	18.47	30.00	1.0000	Complies
11	2462	18.51	0.00	18.51	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	18.03	0.00	18.03	30.00	1.0000	Complies
06	2437	18.06	0.00	18.06	30.00	1.0000	Complies
11	2462	18.11	0.00	18.11	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	21.26	30.00	1.0000	Complies
06	2437	21.28	30.00	1.0000	Complies
11	2462	21.32	30.00	1.0000	Complies

## Test Mode TX G Mode\_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.75	0.00	15.75	30.00	1.0000	Complies
06	2437	18.31	0.00	18.31	30.00	1.0000	Complies
11	2462	16.88	0.00	16.88	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	15.82	0.00	15.82	30.00	1.0000	Complies
06	2437	17.91	0.00	17.91	30.00	1.0000	Complies
11	2462	16.50	0.00	16.50	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	18.80	30.00	1.0000	Complies
06	2437	21.12	30.00	1.0000	Complies
11	2462	19.70	30.00	1.0000	Complies

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

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.43	0.00	15.43	30.00	1.0000	Complies
06	2437	18.84	0.00	18.84	30.00	1.0000	Complies
11	2462	15.59	0.00	15.59	30.00	1.0000	Complies

## Test Mode TX N(HT20) 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	15.02	0.00	15.02	30.00	1.0000	Complies
06	2437	18.37	0.00	18.37	30.00	1.0000	Complies
11	2462	15.22	0.00	15.22	30.00	1.0000	Complies

## Test Mode TX N(HT20) Mode\_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.24	30.00	1.0000	Complies
06	2437	21.62	30.00	1.0000	Complies
11	2462	18.42	30.00	1.0000	Complies

Test Mode TX AX(HE20) Mode\_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.51	0.00	14.51	30.00	1.0000	Complies
06	2437	18.01	0.00	18.01	30.00	1.0000	Complies
11	2462	14.41	0.00	14.41	30.00	1.0000	Complies

Test Mode TX AX(HE20) 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	14.15	0.00	14.15	30.00	1.0000	Complies
06	2437	18.25	0.00	18.25	30.00	1.0000	Complies
11	2462	14.21	0.00	14.21	30.00	1.0000	Complies

Test Mode TX AX(HE20) Mode\_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.34	30.00	1.0000	Complies
06	2437	21.14	30.00	1.0000	Complies
11	2462	17.32	30.00	1.0000	Complies

**Beamforming**

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

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.33	0.00	15.33	30.00	1.0000	Complies
06	2437	18.65	0.00	18.65	30.00	1.0000	Complies
11	2462	15.42	0.00	15.42	30.00	1.0000	Complies

Test Mode	TX N(HT20) 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	14.73	0.00	14.73	30.00	1.0000	Complies
06	2437	18.09	0.00	18.09	30.00	1.0000	Complies
11	2462	14.97	0.00	14.97	30.00	1.0000	Complies

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

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.05	30.00	1.0000	Complies
06	2437	21.39	30.00	1.0000	Complies
11	2462	18.21	30.00	1.0000	Complies

Test Mode	TX AX(HE20) Mode_Ant. 1
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.35	0.00	14.35	30.00	1.0000	Complies
06	2437	17.92	0.00	17.92	30.00	1.0000	Complies
11	2462	14.36	0.00	14.36	30.00	1.0000	Complies

Test Mode	TX AX(HE20) 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	14.12	0.00	14.12	30.00	1.0000	Complies
06	2437	18.01	0.00	18.01	30.00	1.0000	Complies
11	2462	14.15	0.00	14.15	30.00	1.0000	Complies

Test Mode	TX AX(HE20) Mode_Total
-----------	------------------------

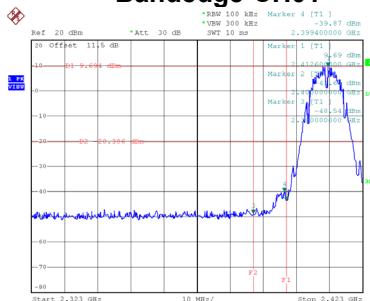
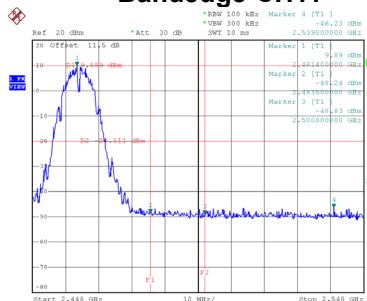
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.25	30.00	1.0000	Complies
06	2437	20.98	30.00	1.0000	Complies
11	2462	17.27	30.00	1.0000	Complies

## APPENDIX G - CONDUCTED SPURIOUS EMISSIONS



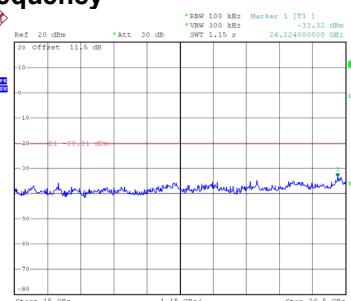
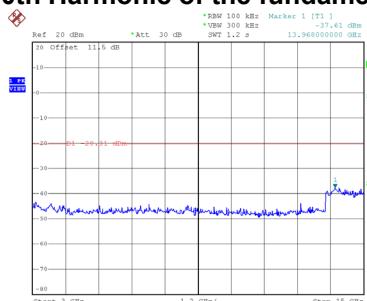
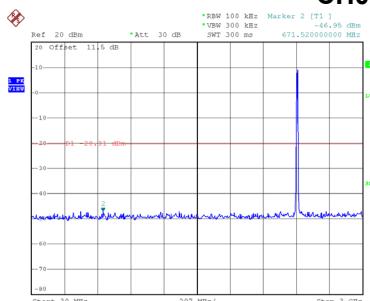
Test Mode

TX B Mode\_Ant. 2

**Bandedge-CH01****Bandedge-CH11**

Date: 19.MAY.2021 13:45:17

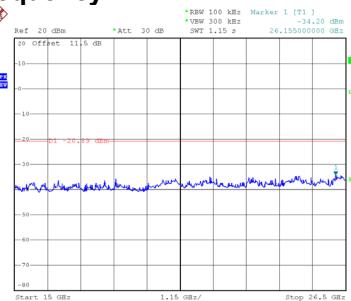
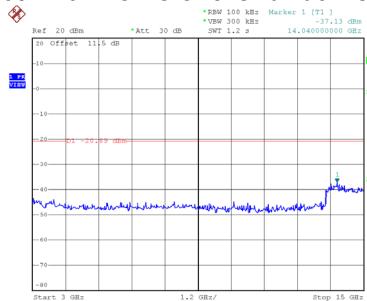
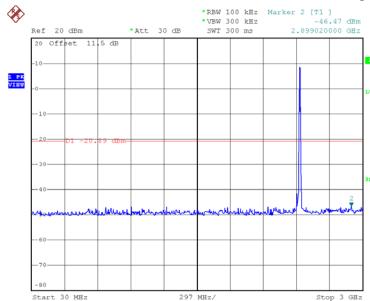
Date: 19.MAY.2021 13:50:51

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

Date: 19.MAY.2021 13:45:31

Date: 19.MAY.2021 13:45:40

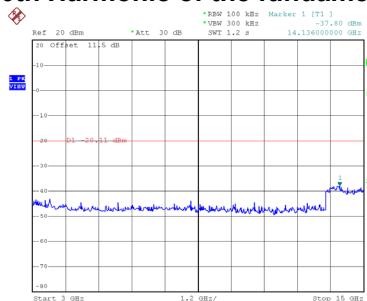
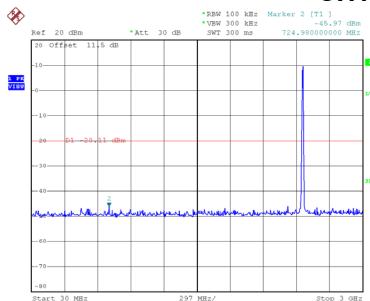
Date: 19.MAY.2021 13:45:48

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

Date: 19.MAY.2021 13:47:37

Date: 19.MAY.2021 13:47:46

Date: 19.MAY.2021 13:47:55

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

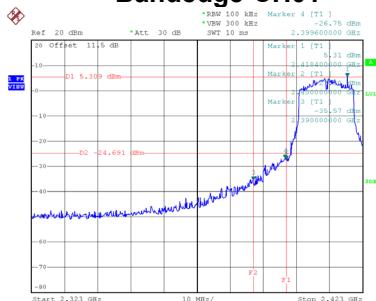
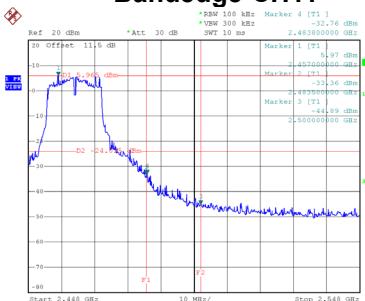
Date: 19.MAY.2021 13:51:05

Date: 19.MAY.2021 13:51:14

Date: 19.MAY.2021 13:51:22

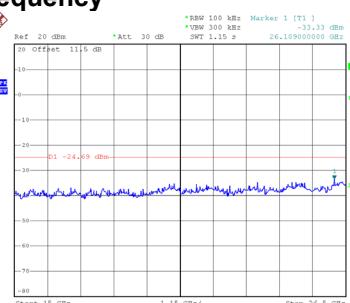
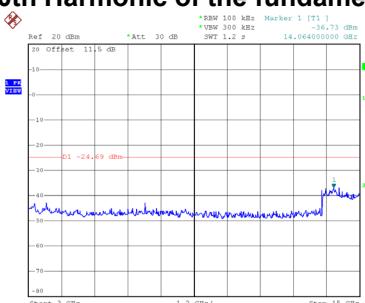
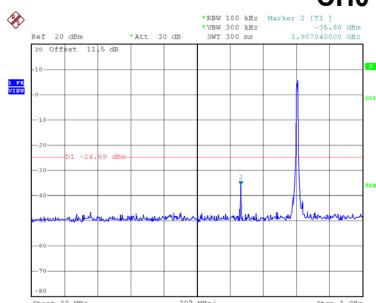
Test Mode

TX G Mode\_Ant. 1

**Bandedge-CH01****Bandedge-CH11**

Date: 30.APR.2021 15:31:43

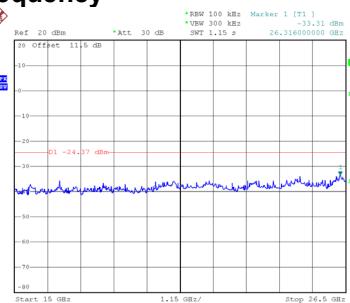
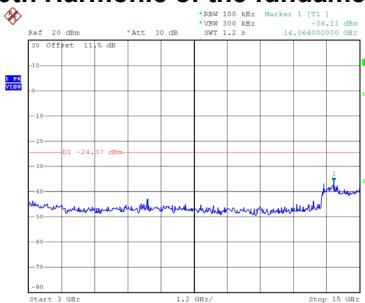
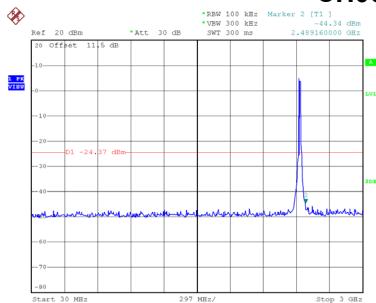
Date: 30.APR.2021 15:36:09

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

Date: 30.APR.2021 15:31:57

Date: 30.APR.2021 15:32:06

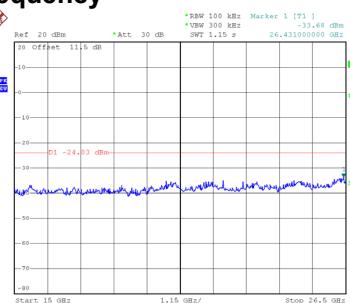
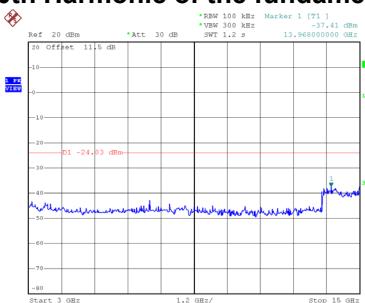
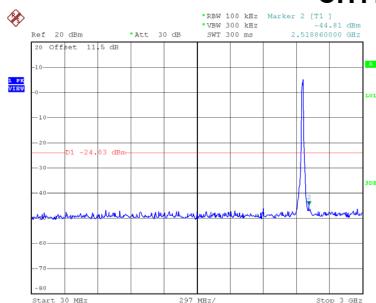
Date: 30.APR.2021 15:32:14

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

Date: 30.APR.2021 15:34:52

Date: 30.APR.2021 15:35:01

Date: 30.APR.2021 15:35:10

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

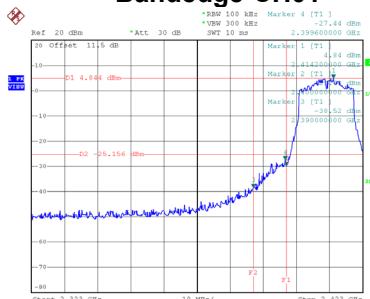
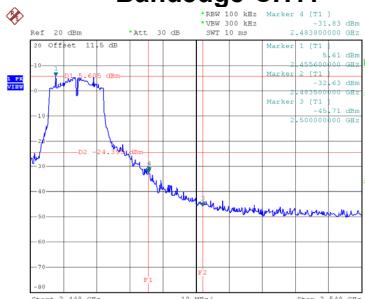
Date: 30.APR.2021 15:36:23

Date: 30.APR.2021 15:36:32

Date: 30.APR.2021 15:36:41

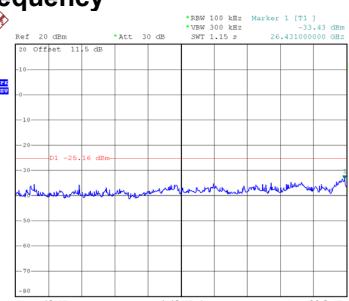
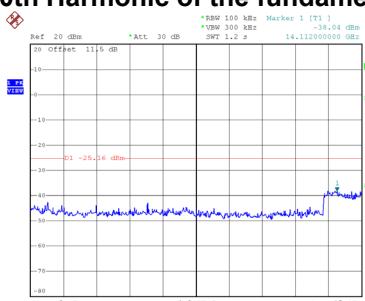
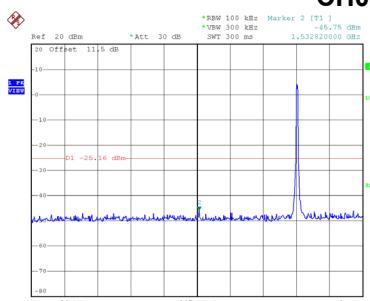
Test Mode

TX G Mode\_Ant. 2

**Bandedge-CH01****Bandedge-CH11**

Date: 19.MAY.2021 13:53:29

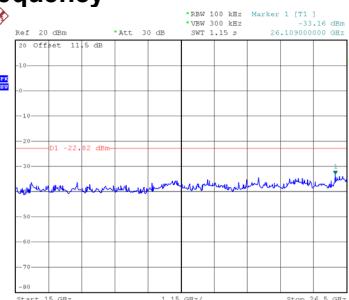
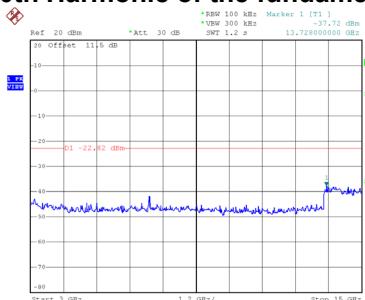
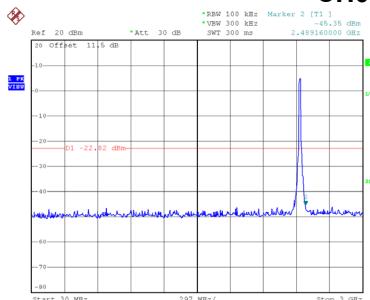
Date: 19.MAY.2021 13:56:38

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

Date: 19.MAY.2021 13:53:43

Date: 19.MAY.2021 13:53:51

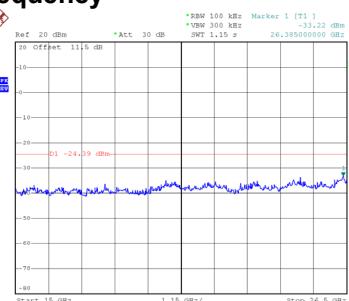
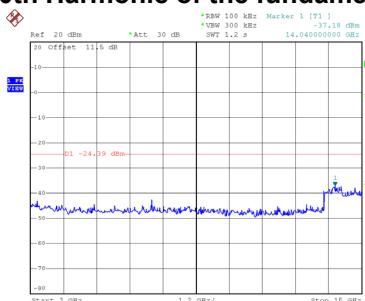
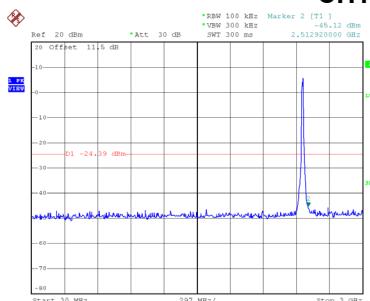
Date: 19.MAY.2021 13:54:00

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

Date: 19.MAY.2021 13:55:17

Date: 19.MAY.2021 13:55:25

Date: 19.MAY.2021 13:55:34

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

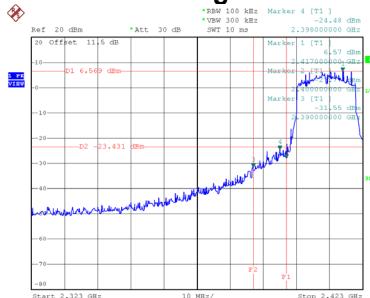
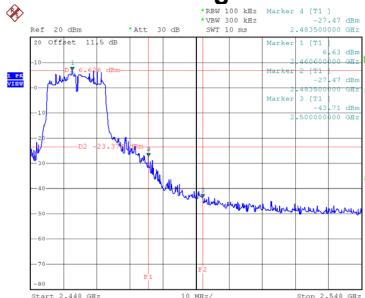
Date: 19.MAY.2021 13:56:52

Date: 19.MAY.2021 13:57:01

Date: 19.MAY.2021 13:57:10

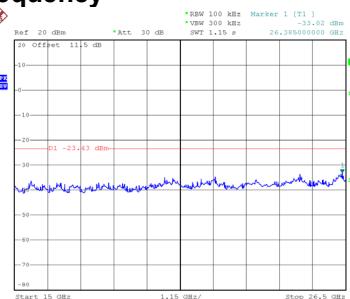
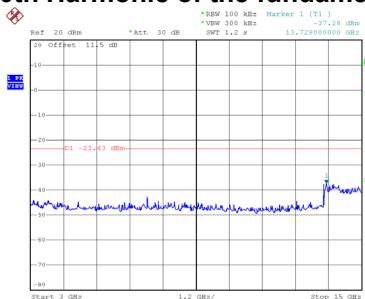
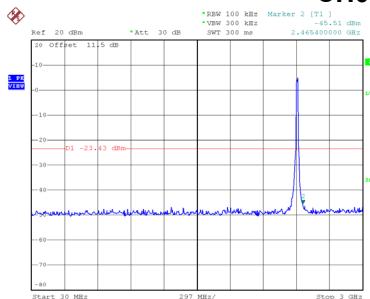
Test Mode

TX N(HT20) Mode\_Ant. 1

**Bandedge-CH01****Bandedge-CH11**

Date: 30.APR.2021 15:39:55

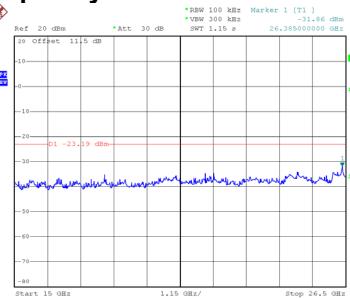
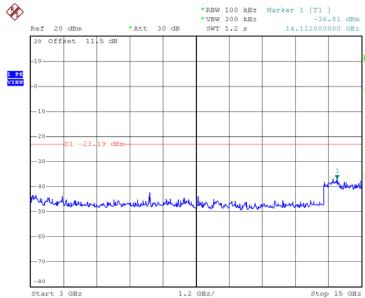
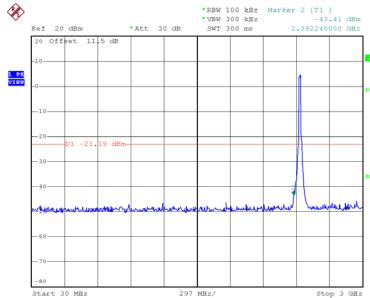
Date: 30.APR.2021 15:43:27

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

Date: 30.APR.2021 15:40:09

Date: 30.APR.2021 15:40:18

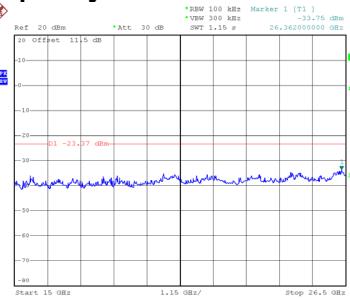
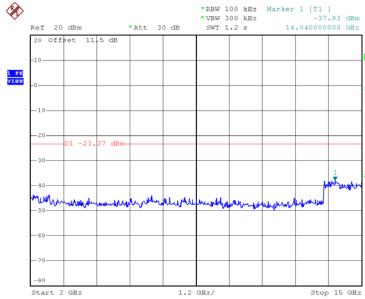
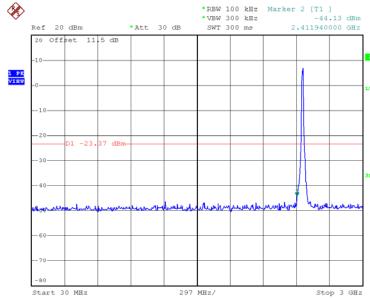
Date: 30.APR.2021 15:40:26

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

Date: 30.APR.2021 15:41:45

Date: 30.APR.2021 15:41:54

Date: 30.APR.2021 15:42:02

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

Date: 30.APR.2021 15:43:41

Date: 30.APR.2021 15:43:50

Date: 30.APR.2021 15:43:58