

# FCC Radio Test Report

## FCC ID: 2AXJ4KS220M

This report concerns: Original Grant

**Project No.** : 2103C171  
**Equipment** : Kasa Smart Wi-Fi Dimmer Switch, Motion-Activated  
**Brand Name** : tp-link  
**Test Model** : KS220M  
**Series Model** : ES20M  
**Applicant** : TP-Link Corporation Limited  
**Address** : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road,  
Tsim Sha Tsui, Kowloon, Hong Kong  
**Manufacturer** : TP-Link Corporation Limited  
**Address** : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road,  
Tsim Sha Tsui, Kowloon, Hong Kong  
**Date of Receipt** : Mar. 22, 2021  
**Date of Test** : Mar. 24, 2021 ~ Mar. 31, 2021  
Apr. 26, 2021 ~ Apr. 28, 2021  
May 11, 2021  
**Issued Date** : May 13, 2021  
**Report Version** : R04  
**Test Sample** : Engineering Sample No.: DG2021031987 for conducted,  
DG2021031988 for radiated.  
**Standard(s)** : FCC CFR Title 47, Part 15, Subpart C  
FCC KDB 558074 D01 15.247 Meas Guidance v05r02  
ANSI C63.10-2013

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



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**Limitation**

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

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

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**REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue.	Apr. 20, 2021
R01	<ol style="list-style-type: none"><li>1. Added the description in section 2.1.</li><li>2. Updated the test photos for AC Power Line Conducted Emissions test.</li><li>3. Updated the data of Appendix A and Appendix G.</li></ol>	Apr. 28, 2021
R02	Added the description in section 7.2.	May 07, 2021
R03	Added the series model.	May 08, 2021
R04	Updated the description in section 7.2 and the data of Appendix G.	May 13, 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 Average Output Power	APPENDIX F	PASS	-----
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS	-----
15.247(e)	Power Spectral Density	APPENDIX H	PASS	-----
15.203	Antenna Requirement	-----	PASS	Note(2)

Note:

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

### 1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China  
 BTL's Test Firm Registration Number for FCC: 357015  
 BTL's Designation Number for FCC: CN1240

### 1.2 MEASUREMENT UNCERTAINTY

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

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	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 Average 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	Gerry Zhao
Radiated Emissions-9kHz to 30 MHz	24°C	60%	DC 5V	Berton Luo
Radiated Emissions-30MHz to 1000MHz	24°C	60%	DC 5V	Berton Luo
Radiated Emissions-Above 1000MHz	24°C	60%	DC 5V	Berton Luo
Bandwidth	20°C	54%	DC 5V	Rick Kuang
Maximum Average Output Power	22°C	49%	DC 5V	Howard Wei
Conducted Spurious Emissions	20°C	54%	DC 5V	Rick Kuang
Power Spectral Density	20°C	54%	DC 5V	Rick Kuang

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Kasa Smart Wi-Fi Dimmer Switch, Motion-Activated
Brand Name	tp-link
Test Model	KS220M
Series Model	ES20M
Model Difference(s)	Only differ in model name.
PMN	Kasa Smart Wi-Fi Dimmer Switch, Motion-Activated
HVIN	KS220M
FVIN	No specified
HMN	No specified
Power Source	AC Mains.
Power Rating	AC 120V
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 72.2 Mbps
Maximum Average Output Power	IEEE 802.11n(HT20): 20.24 dBm (0.1057 W)

Note:

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

#### 2. Channel List:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

#### 3. Antenna Specification:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	tp-link	6035500079	Internal	N/A	2.98

Note: The antenna gain is provided by the manufacturer.

## 2.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX N(HT20) Mode Channel 06
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N(HT20) Mode Channel 01/02/06/10/11

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

<b>AC power line conducted emissions test</b>	
Final Test Mode	Description
Mode 4	TX N(HT20) Mode Channel 06

<b>Radiated emissions test - Below 1GHz</b>	
Final Test Mode	Description
Mode 4	TX N(HT20) Mode Channel 06

<b>Radiated emissions test- Above 1GHz</b>	
Final Test Mode	Description
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N(HT20) Mode Channel 01/02/06/10/11

<b>Conducted test</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

**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 IEEE 802.11n20 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) For radiated emissions test, heavy load and light load have been tested and light load is found to be the worst case and recorded.

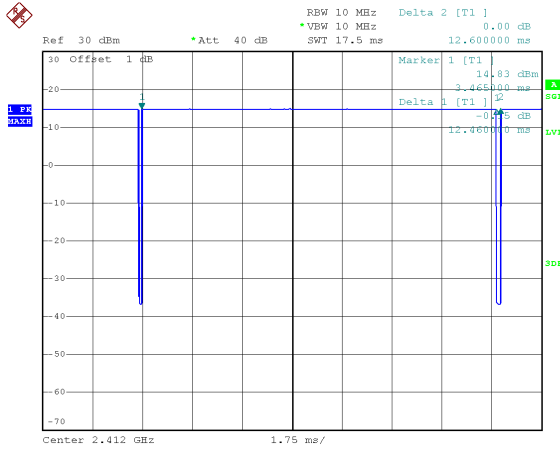
**2.3 PARAMETERS OF TEST SOFTWARE**

Test Software Version	AmebaZ2_mptool_1V3
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## 2.4 DUTY CYCLE

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

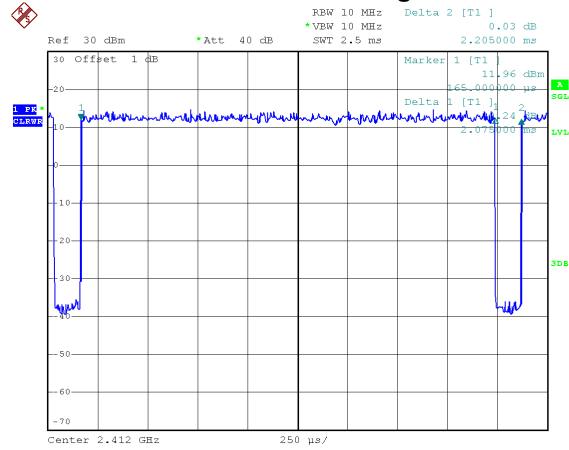
**IEEE 802.11b**



Date: 26.MAR.2021 11:30:32

Duty cycle =  $12.460 \text{ ms} / 12.600 \text{ ms} = 98.89\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.00$

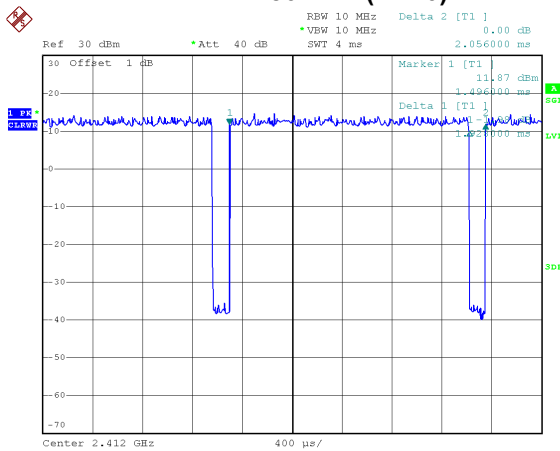
**IEEE 802.11g**



Date: 26.MAR.2021 11:30:52

Duty cycle =  $2.075 \text{ ms} / 2.205 \text{ ms} = 94.10\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.26$

**IEEE 802.11n(HT20)**



Date: 26.MAR.2021 11:31:06

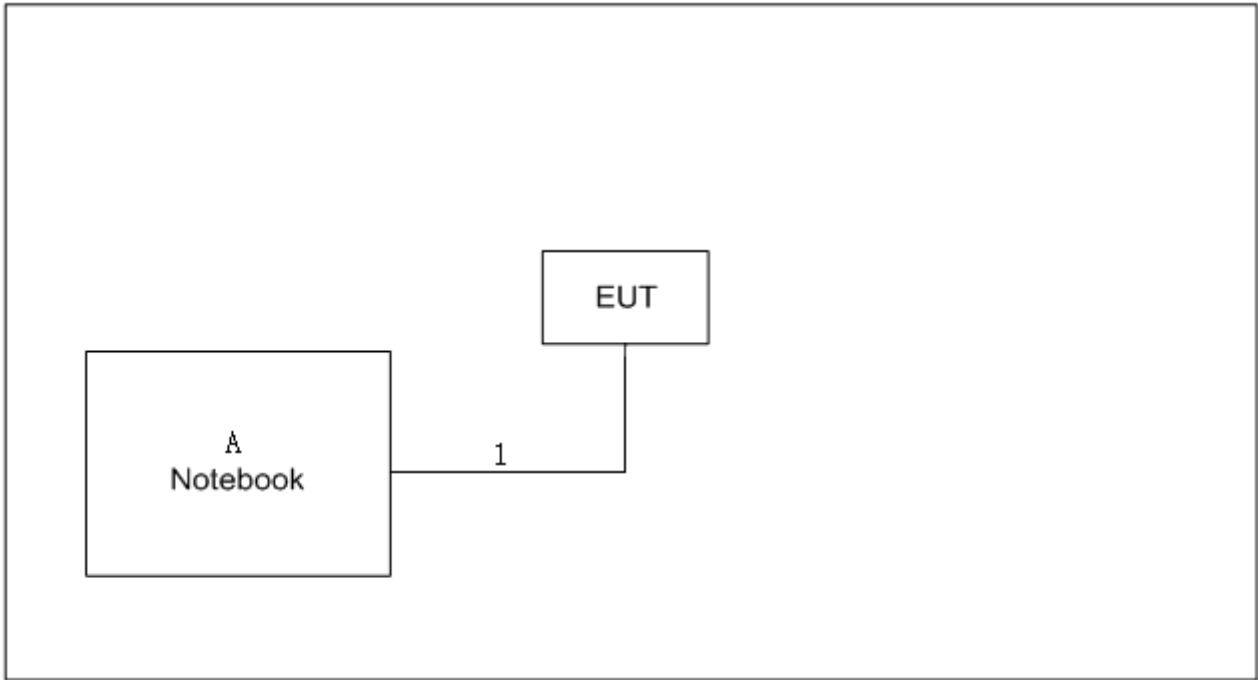
Duty cycle =  $1.928 \text{ ms} / 2.056 \text{ ms} = 93.77\%$   
 Duty Factor =  $10 \log(1/\text{Duty cycle}) = 0.28$

**NOTE:**

For IEEE 802.11b, IEEE 802.11g, 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.

**2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**



**2.6 SUPPORT UNITS**

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Lenovo	V310-14ISK	LR07GZNB

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	USB Cable	NO	NO	0.8m

### 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.

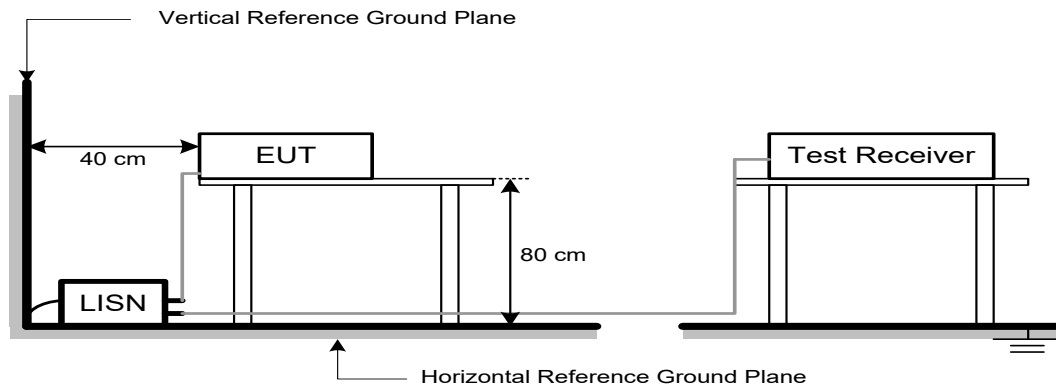
The following table is the setting of the receiver:

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)	(dBuV/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 (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)  
 Margin Level = Measurement Value - Limit Value

## 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

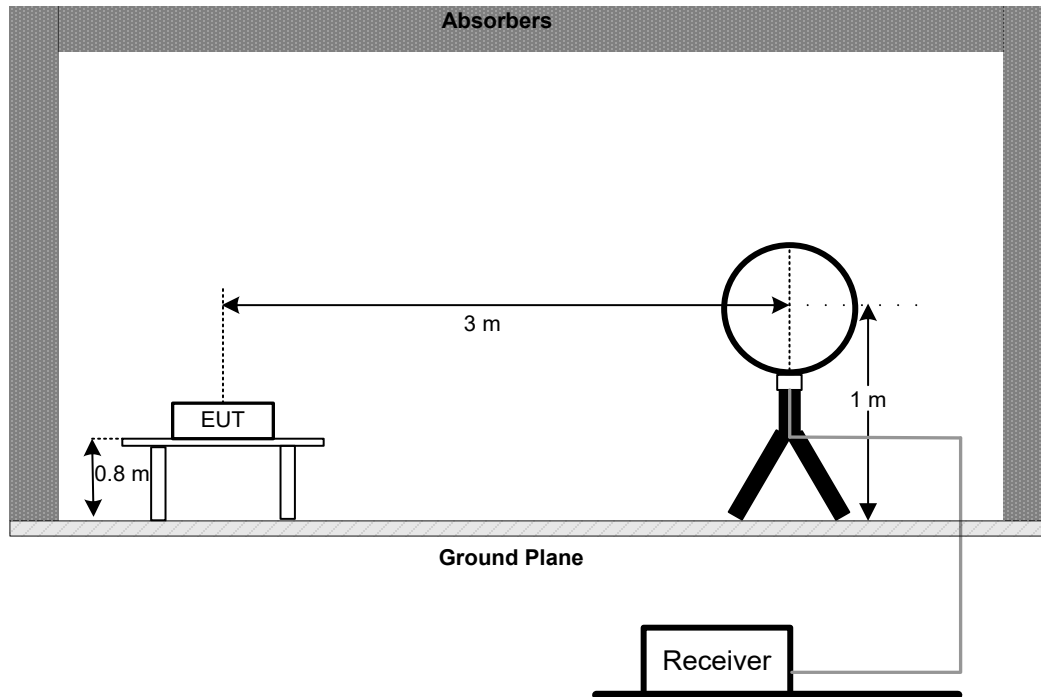
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector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

### 4.3 DEVIATION FROM TEST STANDARD

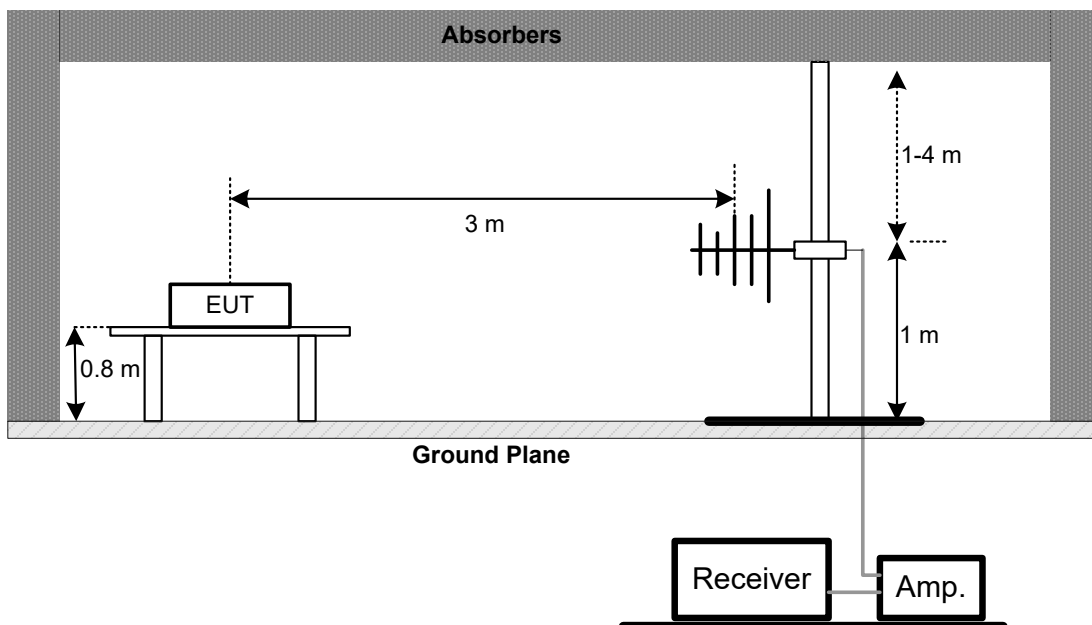
No deviation.

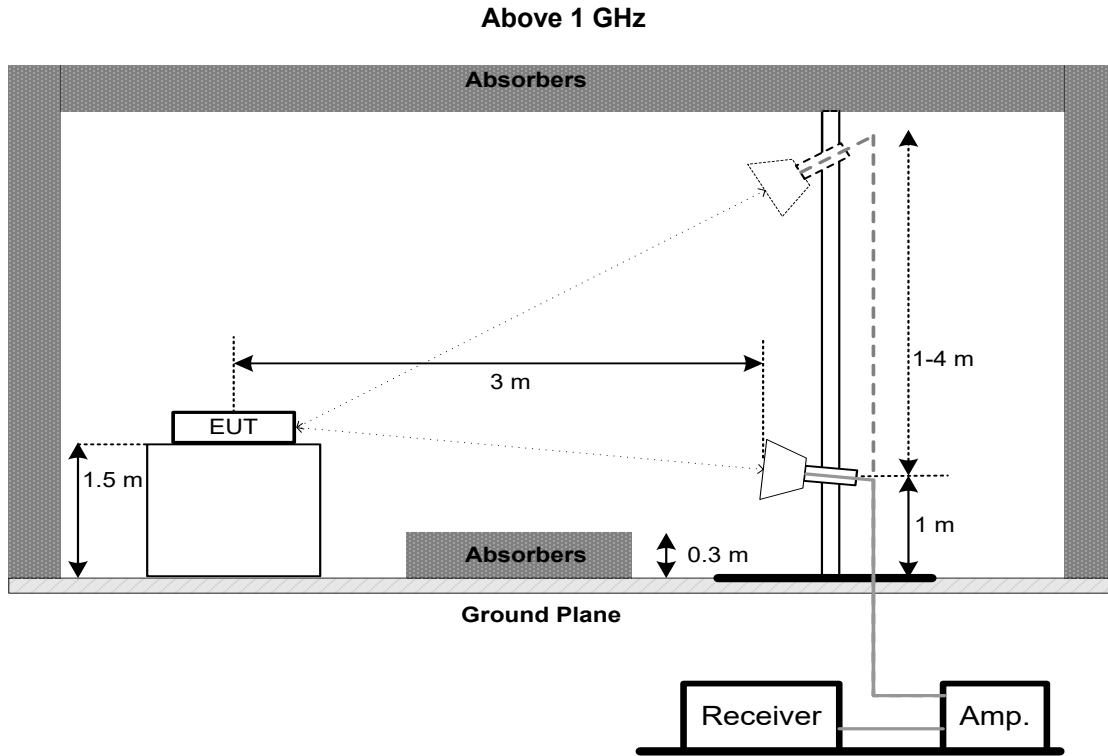
### 4.4 TEST SETUP

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 AVERAGE OUTPUT POWER

### 6.1 LIMIT

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

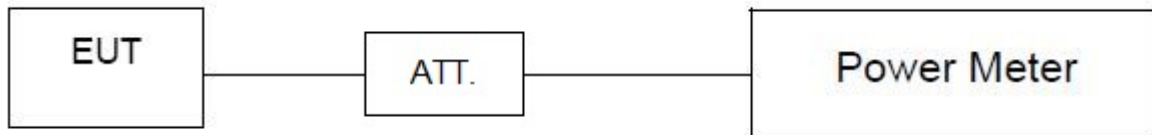
### 6.2 TEST PROCEDURE

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

### 6.3 DEVIATION FROM STANDARD

No deviation.

### 6.4 TEST SETUP



### 6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 6.6 TEST RESULTS

Please refer to the APPENDIX F.

## 7. CONDUCTED SPURIOUS EMISSIONS

### 7.1 LIMIT

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

### 7.2 TEST PROCEDURE

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

For Reference Level:

Spectrum Parameters	Setting
Span Frequency	$\geq 1.5$ times the bandwidth.
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

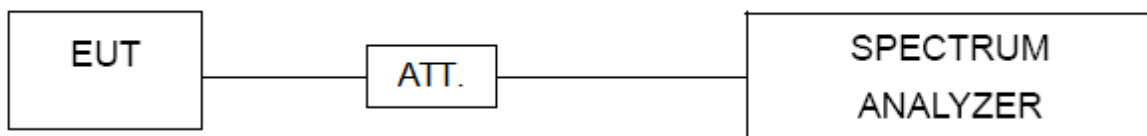
For Emission Level:

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

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. 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	Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	N/A	May 29, 2021
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 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	Trilog-Broadband Antenna	Schwarzbeck	VULB9168	586	Nov. 27, 2021
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 22, 2021
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 12, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021
3	Amplifier	Agilent	8449B	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

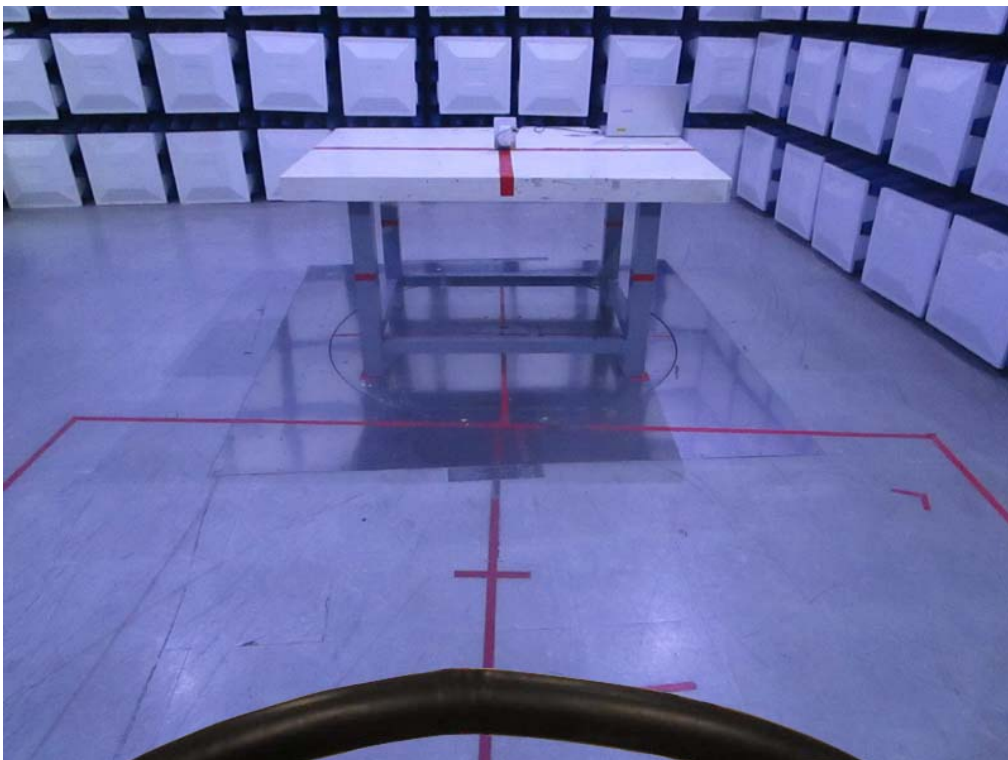
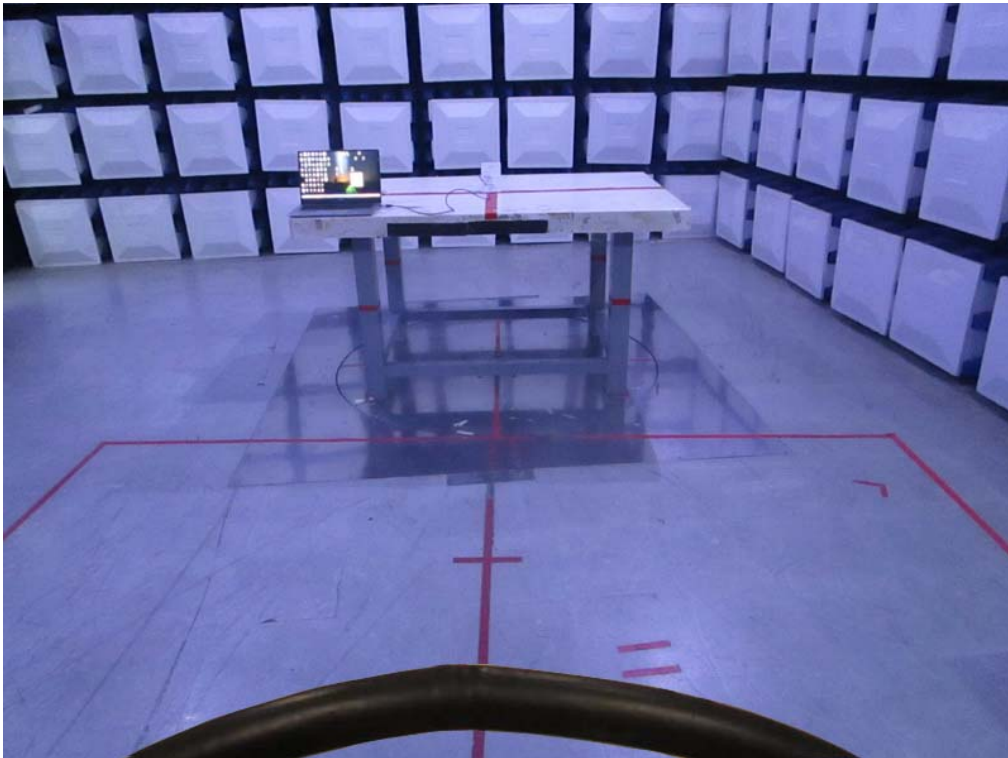
Bandwidth & Conducted Spurious Emissions & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021
2	RF Cable	Tongkaichuan	N/A	N/A	N/A
3	DC Block	Mini	N/A	N/A	N/A
4	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb.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

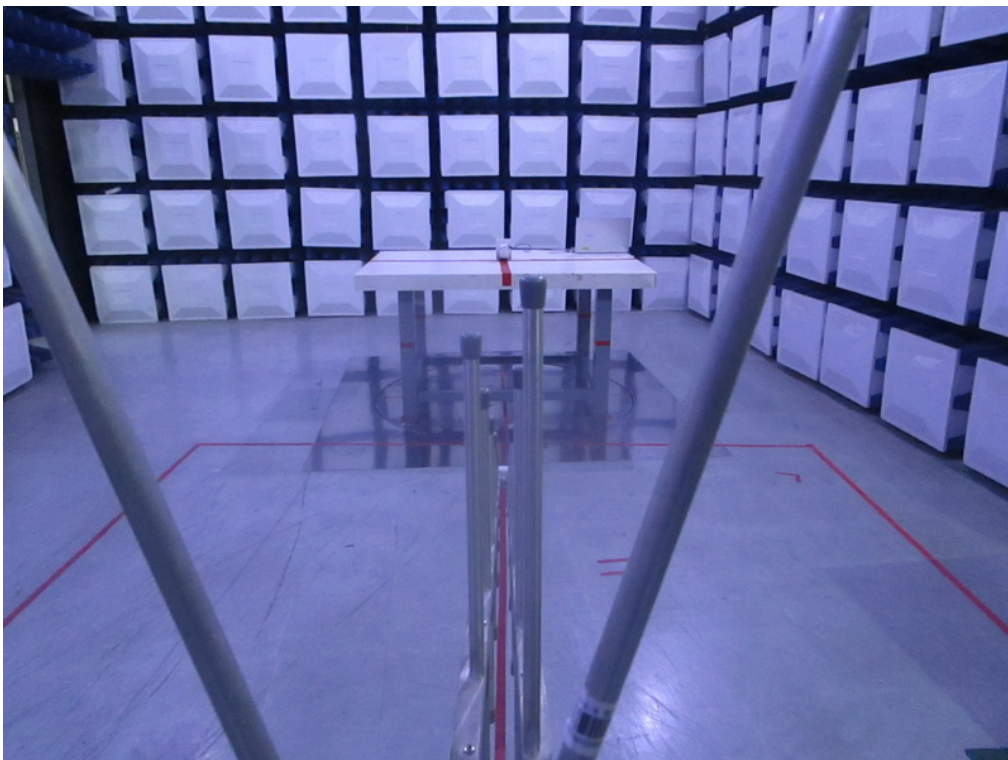
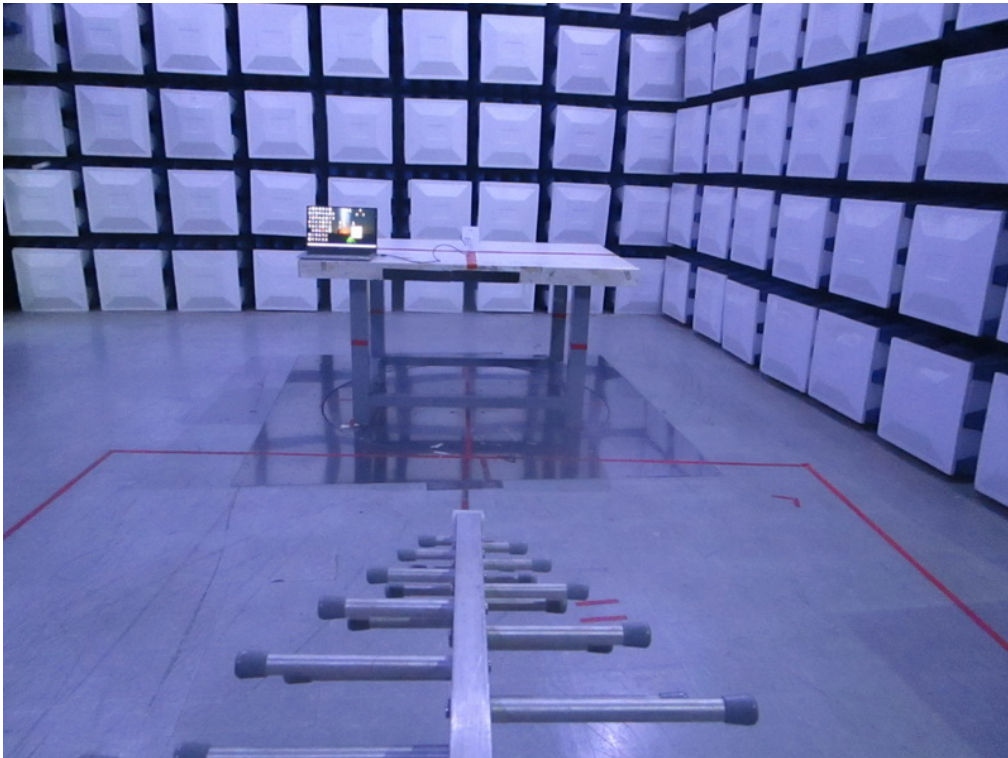
Maximum Average Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 07, 2021
2	Wideband power sensor	Keysight	N1923A	MY58310004	Jul. 25, 2021
3	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022
4	RF Cable	Tongkaichuan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

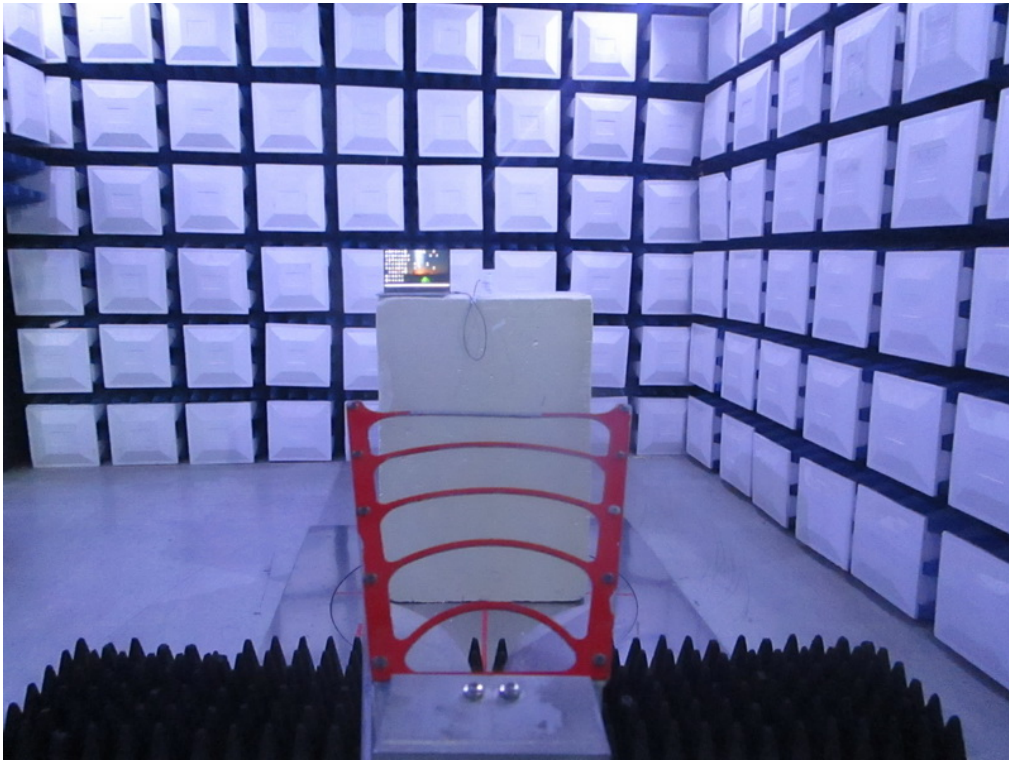
Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

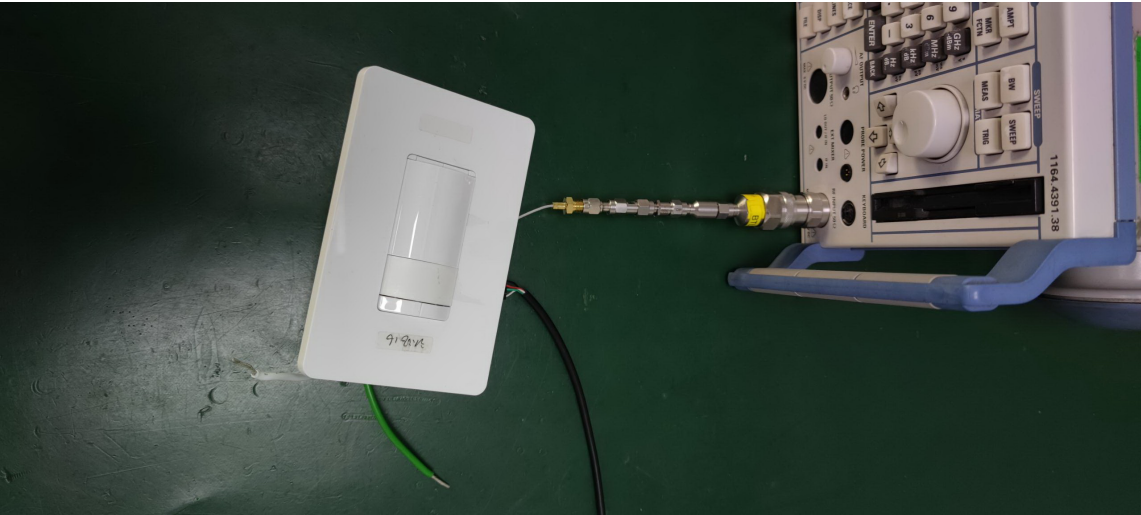
**10. EUT TEST PHOTO****AC Power Line Conducted Emissions Test Photos**

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

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

**Radiated Emissions Test Photos****Above 1 GHz**

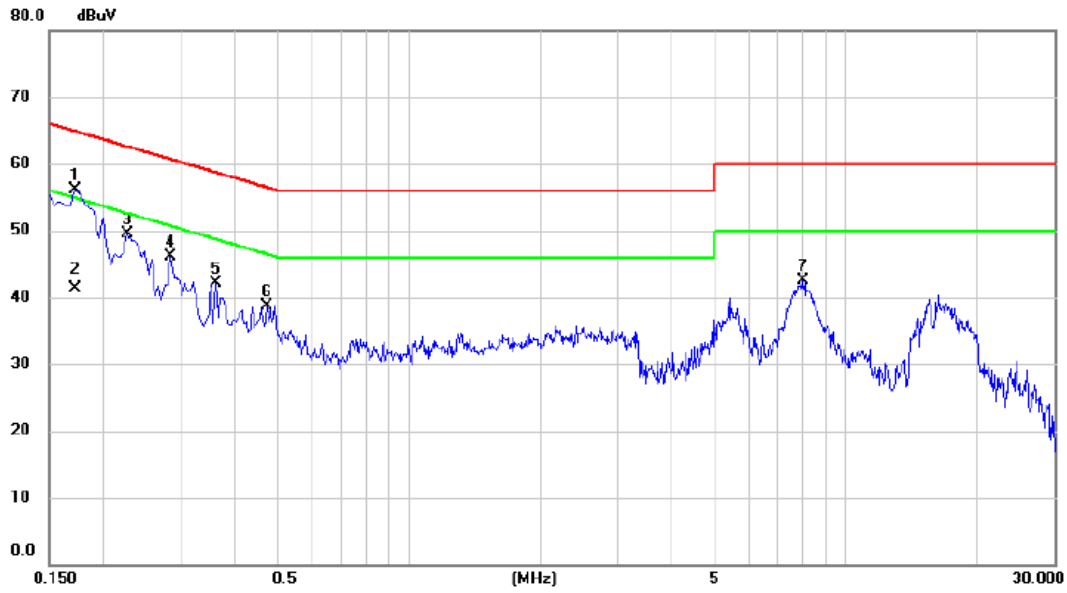
**Conducted Test Photos**



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



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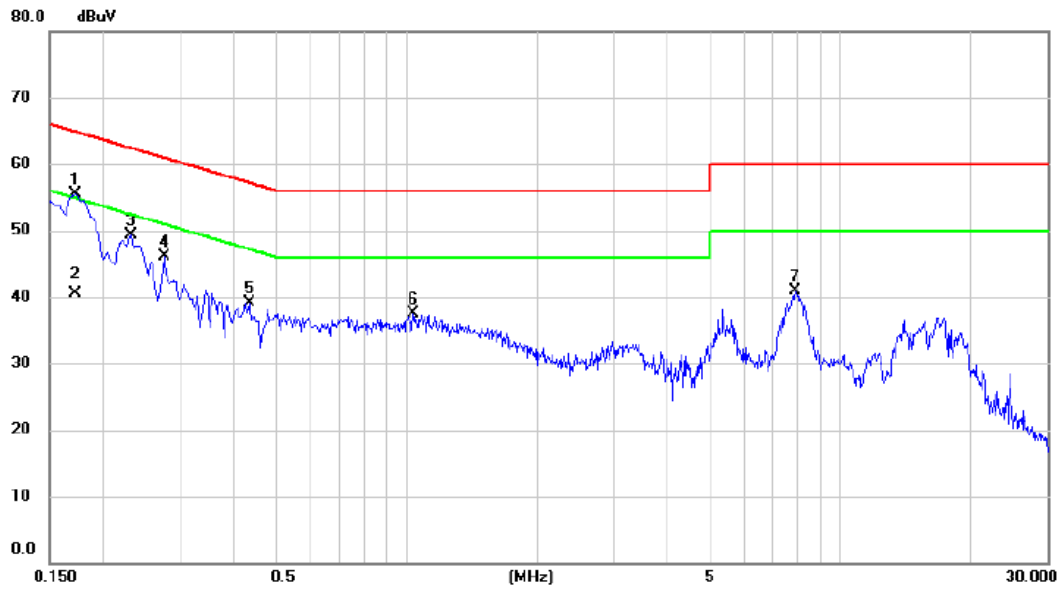


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1725	46.18	9.83	56.01	64.84	-8.83	peak	
2		0.1725	31.50	9.83	41.33	54.84	-13.51	AVG	
3		0.2265	39.55	9.89	49.44	62.58	-13.14	peak	
4		0.2850	36.28	9.88	46.16	60.67	-14.51	peak	
5		0.3615	32.12	9.90	42.02	58.69	-16.67	peak	
6		0.4740	28.72	9.92	38.64	56.44	-17.80	peak	
7		7.9755	31.94	10.51	42.45	60.00	-17.55	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
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1725	45.50	9.91	55.41	64.84	-9.43	peak	
2		0.1725	30.50	9.91	40.41	54.84	-14.43	AVG	
3		0.2310	39.30	9.99	49.29	62.41	-13.12	peak	
4		0.2760	36.02	9.99	46.01	60.94	-14.93	peak	
5		0.4335	29.07	10.08	39.15	57.19	-18.04	peak	
6		1.0320	27.14	10.27	37.41	56.00	-18.59	peak	
7		7.8450	30.11	10.85	40.96	60.00	-19.04	peak	

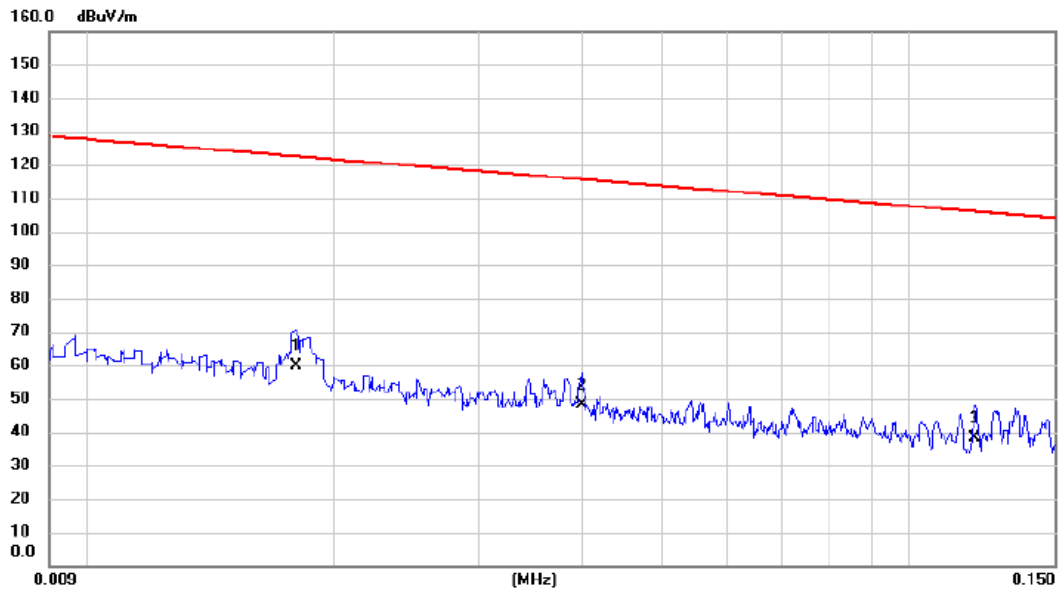
**REMARKS:**

(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°
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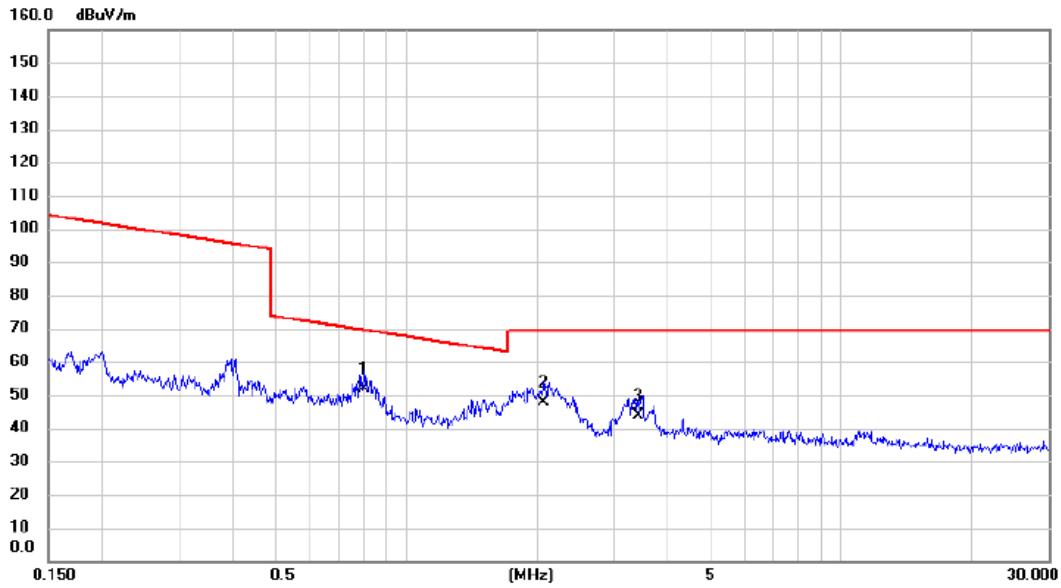


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0180	45.92	13.84	59.76	122.50	-62.74	AVG	
2		0.0400	35.38	12.69	48.07	115.56	-67.49	AVG	
3		0.1201	25.64	12.73	38.37	106.02	-67.65	AVG	

**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°
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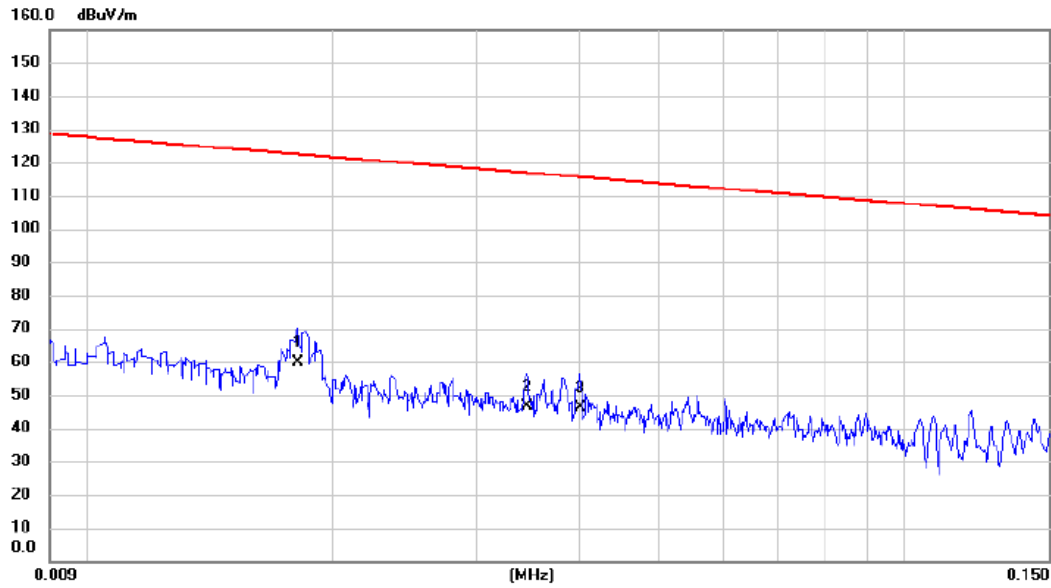


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.8002	40.02	11.88	51.90	69.54	-17.64	QP	
2		2.0768	36.68	11.26	47.94	69.54	-21.60	QP	
3		3.4174	33.12	10.87	43.99	69.54	-25.55	QP	

**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°
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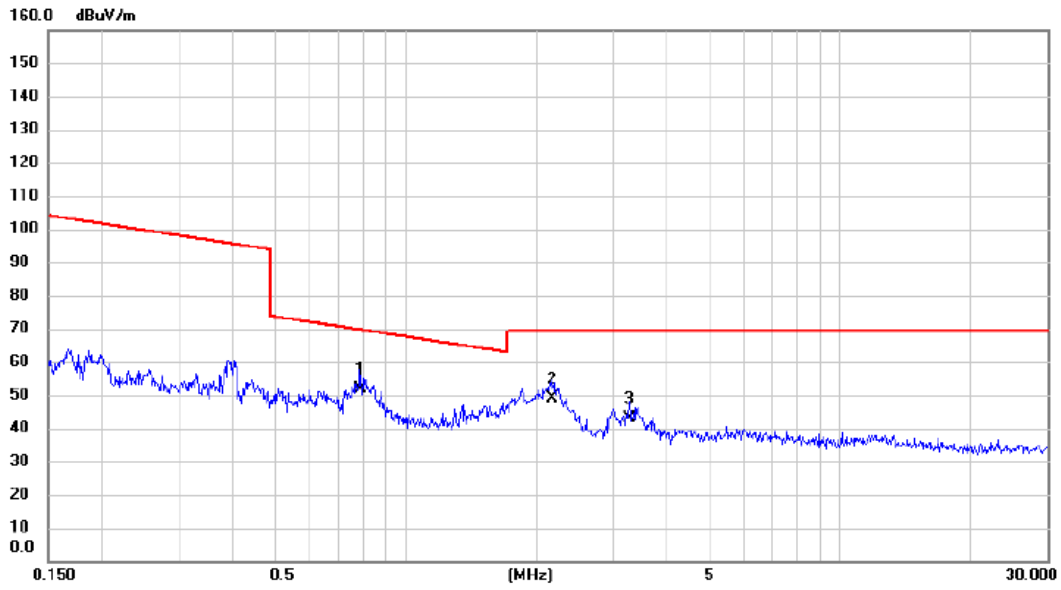


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0181	46.17	13.81	59.98	122.45	-62.47	AVG	
2		0.0346	33.72	12.83	46.55	116.82	-70.27	AVG	
3		0.0401	33.39	12.68	46.07	115.54	-69.47	AVG	

**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°
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.7835	39.98	11.89	51.87	69.72	-17.85	QP	
2		2.1668	37.77	11.22	48.99	69.54	-20.55	QP	
3		3.2756	32.28	10.84	43.12	69.54	-26.42	QP	

**REMARKS:**

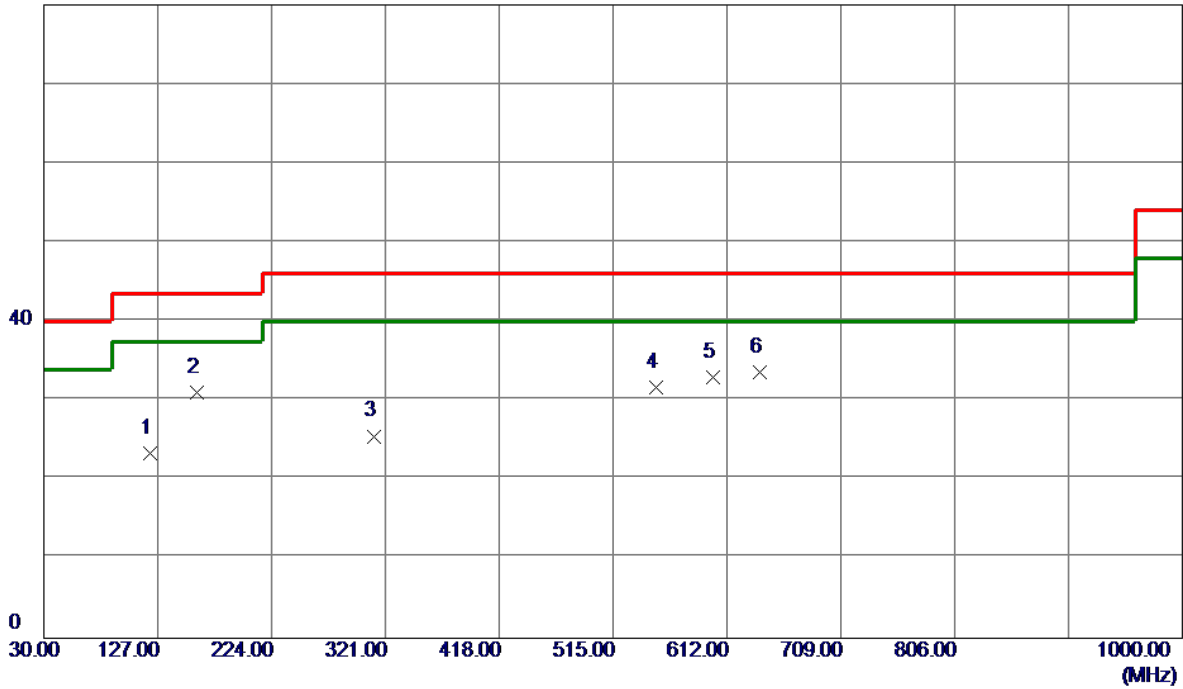
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

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



Test Mode	TX N(HT20) Mode Channel 06	Polarization	Vertical
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80 dBuV/m



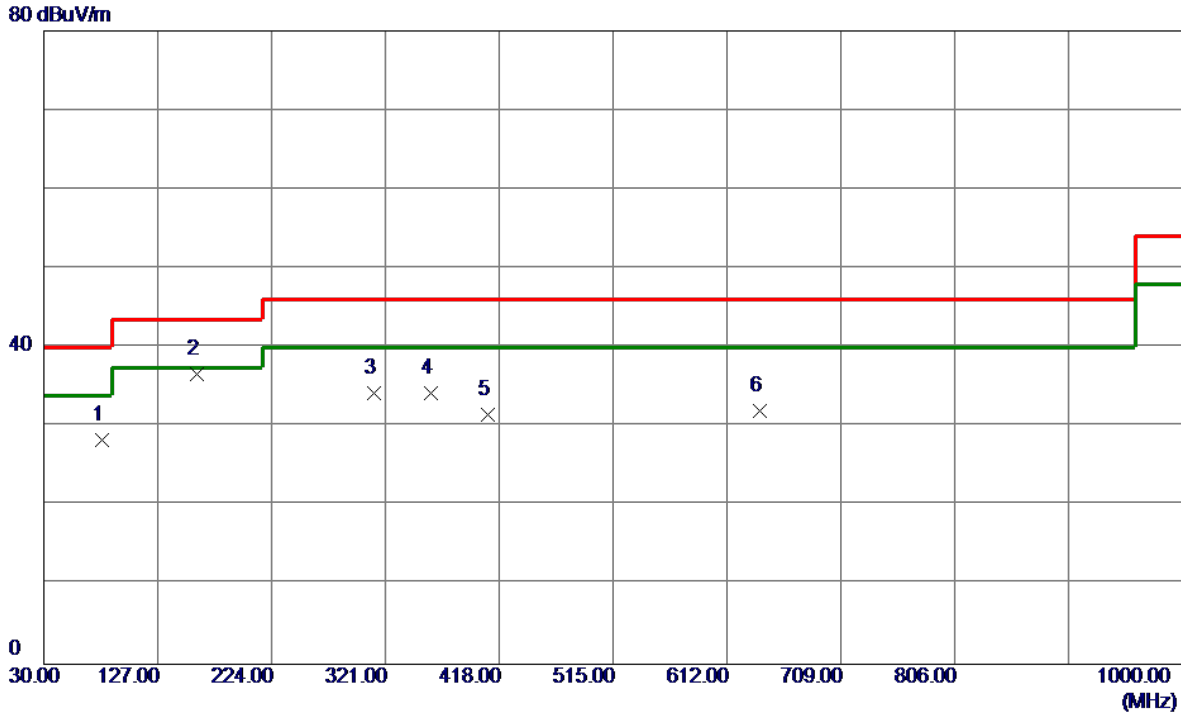
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	120.2100	37.45	-14.14	23.31	43.50	-20.19	Peak	
2	159.9800	43.34	-12.37	30.97	43.50	-12.53	Peak	
3	311.7850	36.19	-10.67	25.52	46.00	-20.48	Peak	
4	551.8600	37.51	-5.85	31.66	46.00	-14.34	Peak	
5	599.8750	37.58	-4.55	33.03	46.00	-12.97	Peak	
6 *	640.1300	37.46	-3.90	33.56	46.00	-12.44	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
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	79.9550	46.61	-18.36	28.25	40.00	-11.75	Peak	
2 *	159.9800	49.02	-12.37	36.65	43.50	-6.85	Peak	
3	311.7850	44.88	-10.67	34.21	46.00	-11.79	Peak	
4	359.8000	43.92	-9.73	34.19	46.00	-11.81	Peak	
5	407.8150	40.11	-8.56	31.55	46.00	-14.45	Peak	
6	640.1300	35.87	-3.90	31.97	46.00	-14.03	Peak	

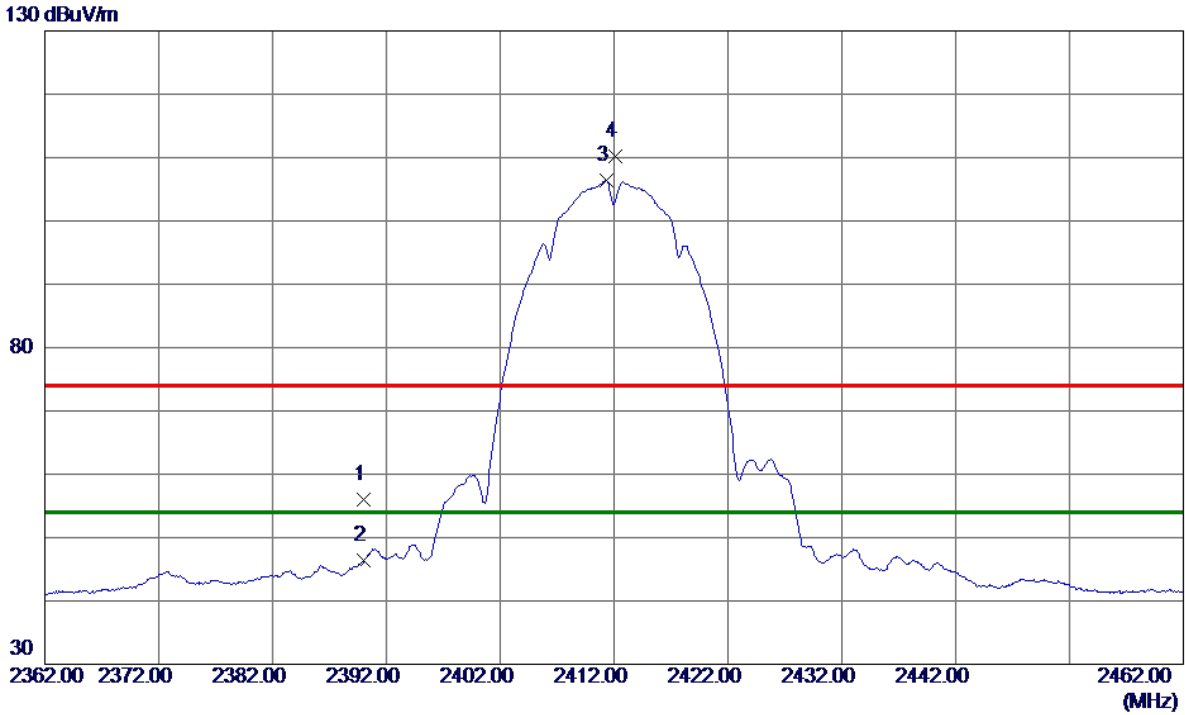
**REMARKS:**

(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
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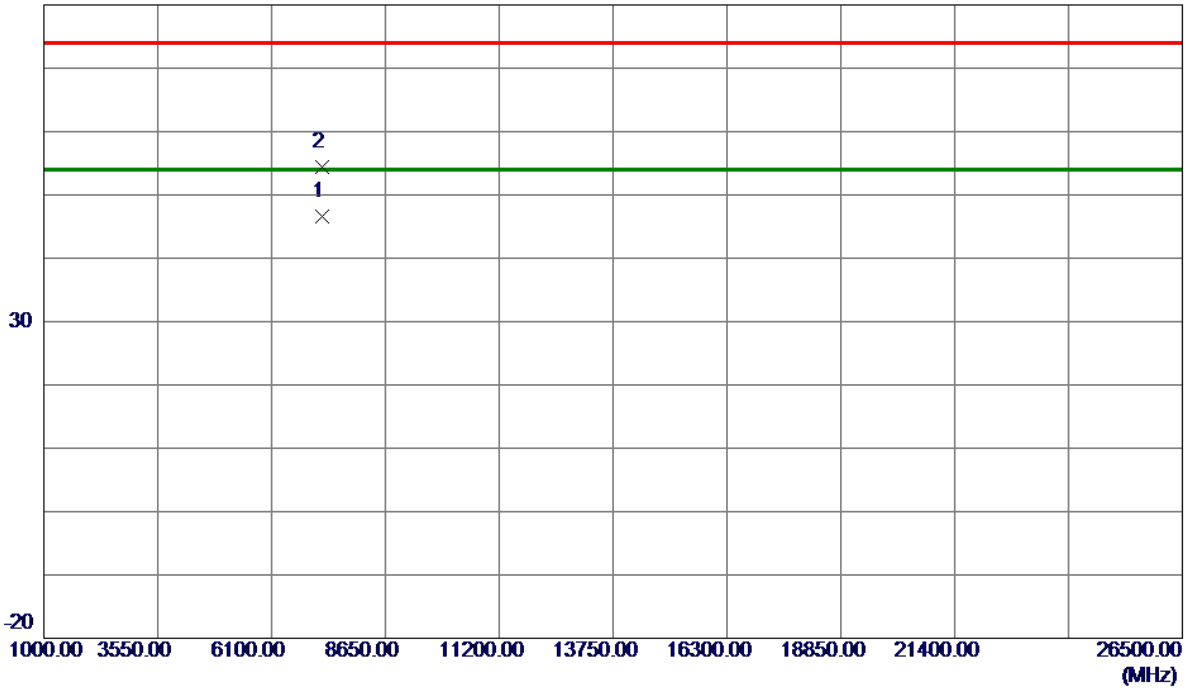
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	44.20	11.82	56.02	74.00	-17.98	Peak	
2	2390.0000	34.55	11.82	46.37	54.00	-7.63	AVG	
3 *	2411.3000	94.48	11.89	106.37	54.00	52.37	AVG	No Limit
4	2412.1000	98.35	11.89	110.24	74.00	36.24	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
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80 dBuV/m

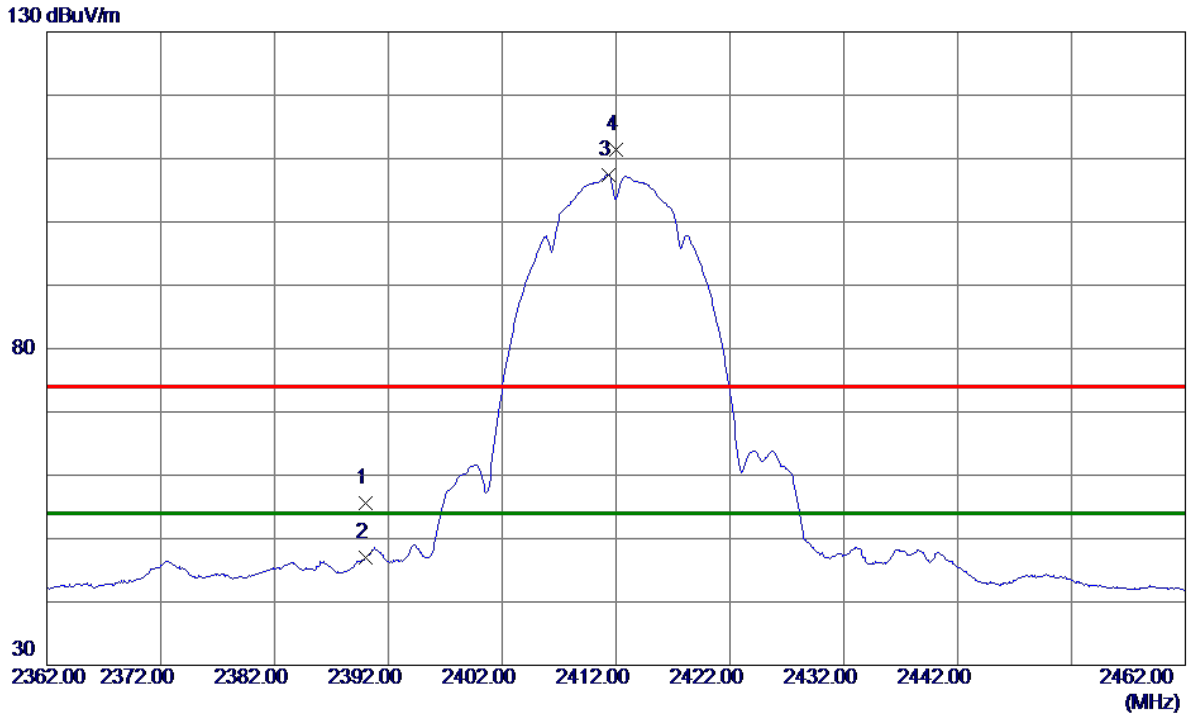


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7236.9450	32.74	13.92	46.66	54.00	-7.34	AVG	
2	7237.5470	40.50	13.92	54.42	74.00	-19.58	Peak	

**REMARKS:**

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

Test Mode	TX B Mode 2412 MHz	Polarization	Horizontal
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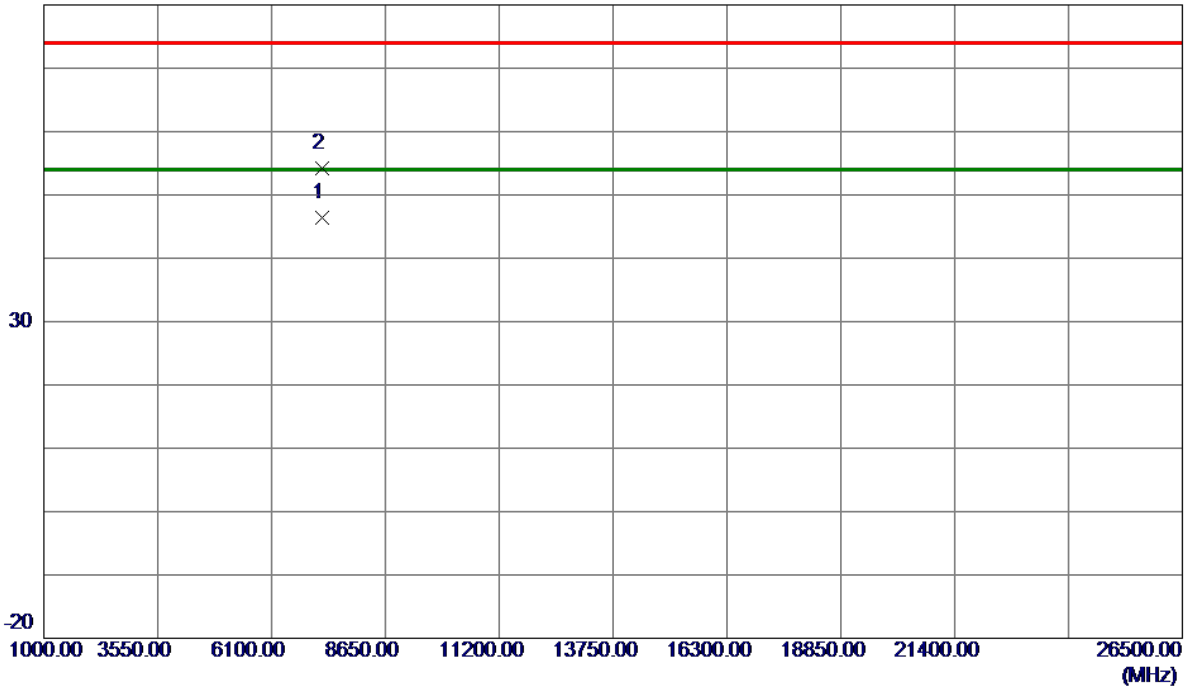
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	43.77	11.82	55.59	74.00	-18.41	Peak	
2	2390.0000	35.15	11.82	46.97	54.00	-7.03	AVG	
3 *	2411.3500	95.54	11.89	107.43	54.00	53.43	AVG	No Limit
4	2412.0500	99.57	11.89	111.46	74.00	37.46	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	Horizontal
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80 dBuV/m

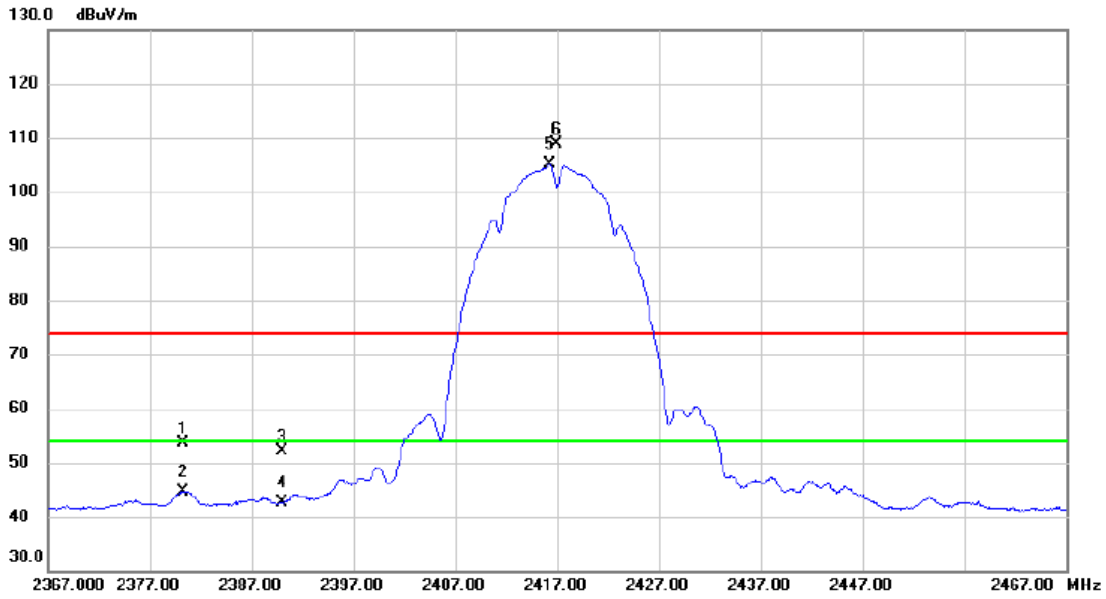


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7236.9200	32.45	13.92	46.37	54.00	-7.63	AVG	
2	7237.2500	40.35	13.92	54.27	74.00	-19.73	Peak	

**REMARKS:**

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

Test Mode	TX B Mode 2417 MHz	Polarization	Vertical
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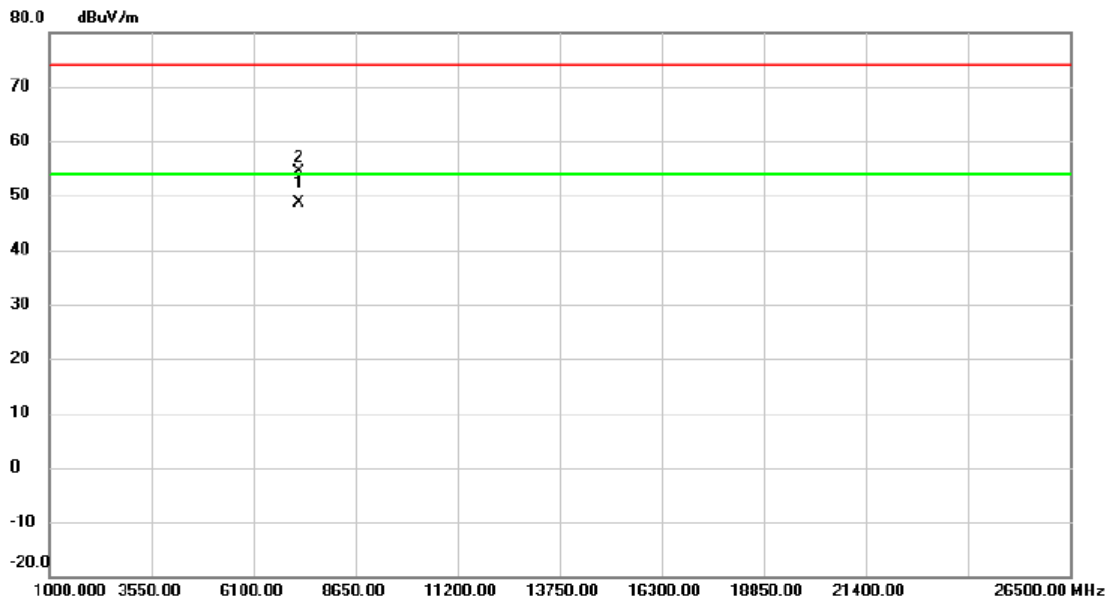
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2380.250	41.88	11.79	53.67	74.00	-20.33	peak	
2		2380.250	32.92	11.79	44.71	54.00	-9.29	AVG	
3		2390.000	40.33	11.83	52.16	74.00	-21.84	peak	
4		2390.000	30.76	11.83	42.59	54.00	-11.41	AVG	
5	*	2416.300	93.23	11.90	105.13	54.00	51.13	AVG	No Limit
6	X	2416.900	96.90	11.91	108.81	74.00	34.81	peak	No Limit

**REMARKS:**

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



Test Mode	TX B Mode 2417 MHz	Polarization	Vertical
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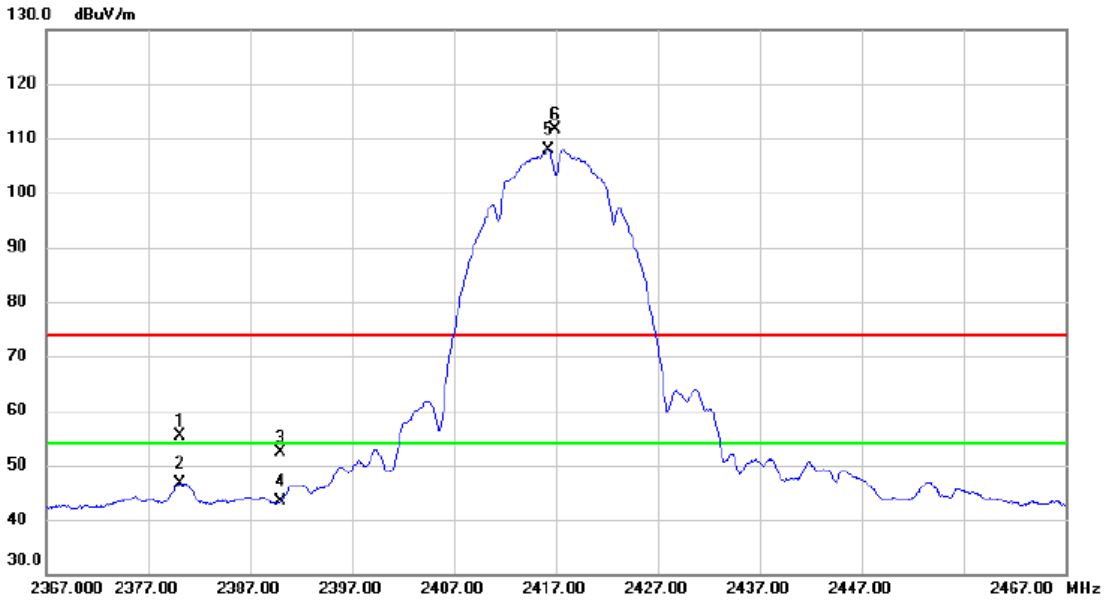


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7246.820	34.58	13.93	48.51	54.00	-5.49	AVG	
2		7247.965	40.47	13.93	54.40	74.00	-19.60	peak	

**REMARKS:**

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

Test Mode	TX B Mode 2417 MHz	Polarization	Horizontal
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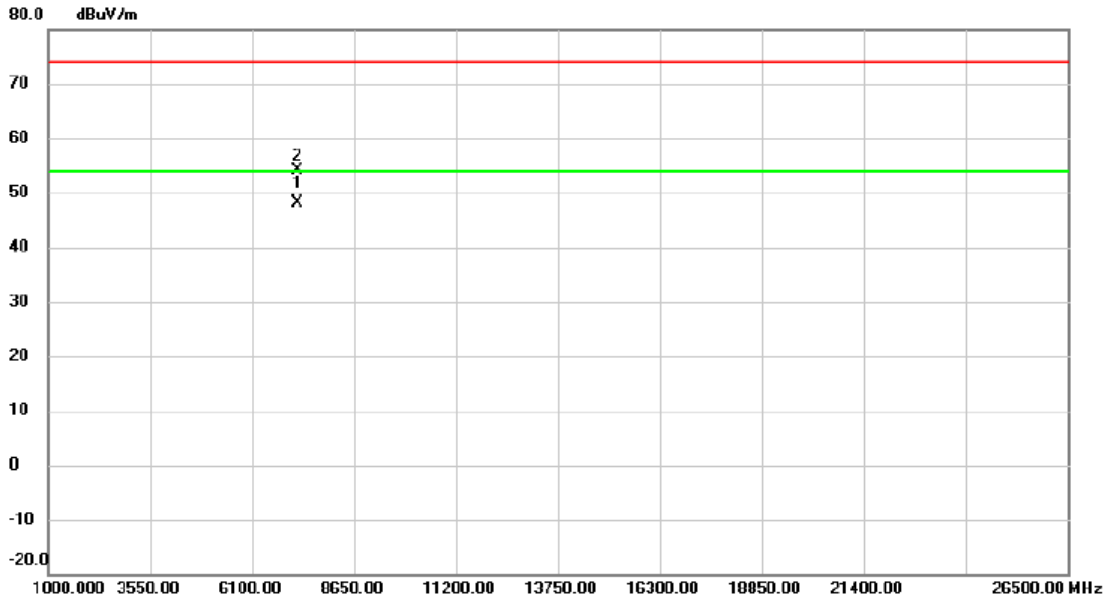


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2380.200	43.68	11.79	55.47	74.00	-18.53	peak	
2		2380.200	34.96	11.79	46.75	54.00	-7.25	AVG	
3		2390.000	40.61	11.83	52.44	74.00	-21.56	peak	
4		2390.000	31.67	11.83	43.50	54.00	-10.50	AVG	
5	*	2416.250	95.95	11.90	107.85	54.00	53.85	AVG	No Limit
6	X	2416.900	99.79	11.91	111.70	74.00	37.70	peak	No Limit

**REMARKS:**

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

Test Mode	TX B Mode 2417 MHz	Polarization	Horizontal
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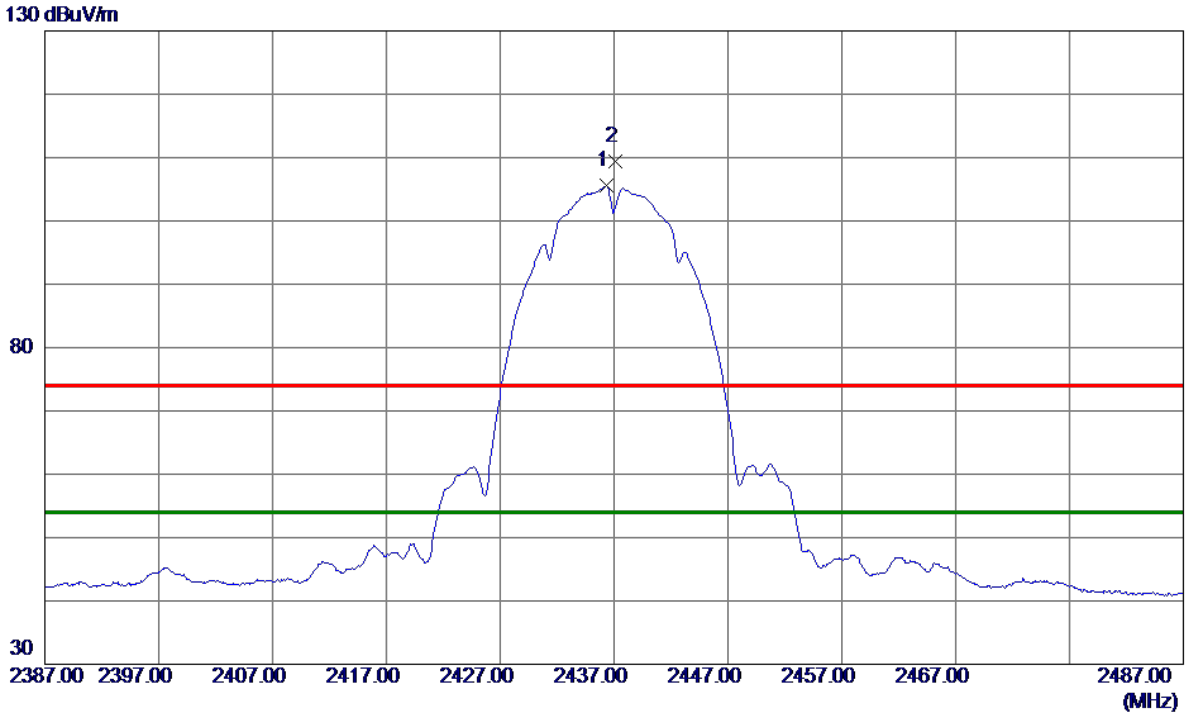


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7247.790	34.15	13.93	48.08	54.00	-5.92	AVG	
2	7248.255	40.25	13.93	54.18	74.00	-19.82	peak	

**REMARKS:**

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

Test Mode	TX B Mode 2437 MHz	Polarization	Vertical
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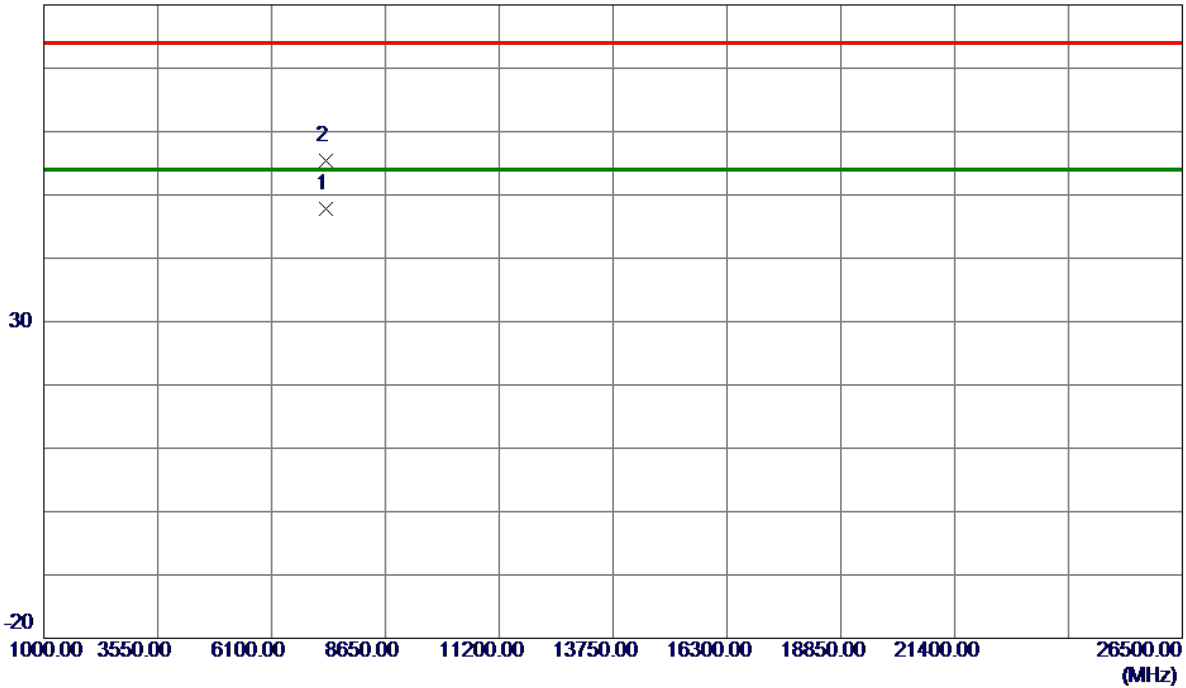
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.3000	93.56	11.97	105.53	54.00	51.53	AVG	No Limit
2	2437.1000	97.38	11.97	109.35	74.00	35.35	Peak	No Limit

**REMARKS:**

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

Test Mode	TX B Mode 2437 MHz	Polarization	Vertical
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80 dBuV/m

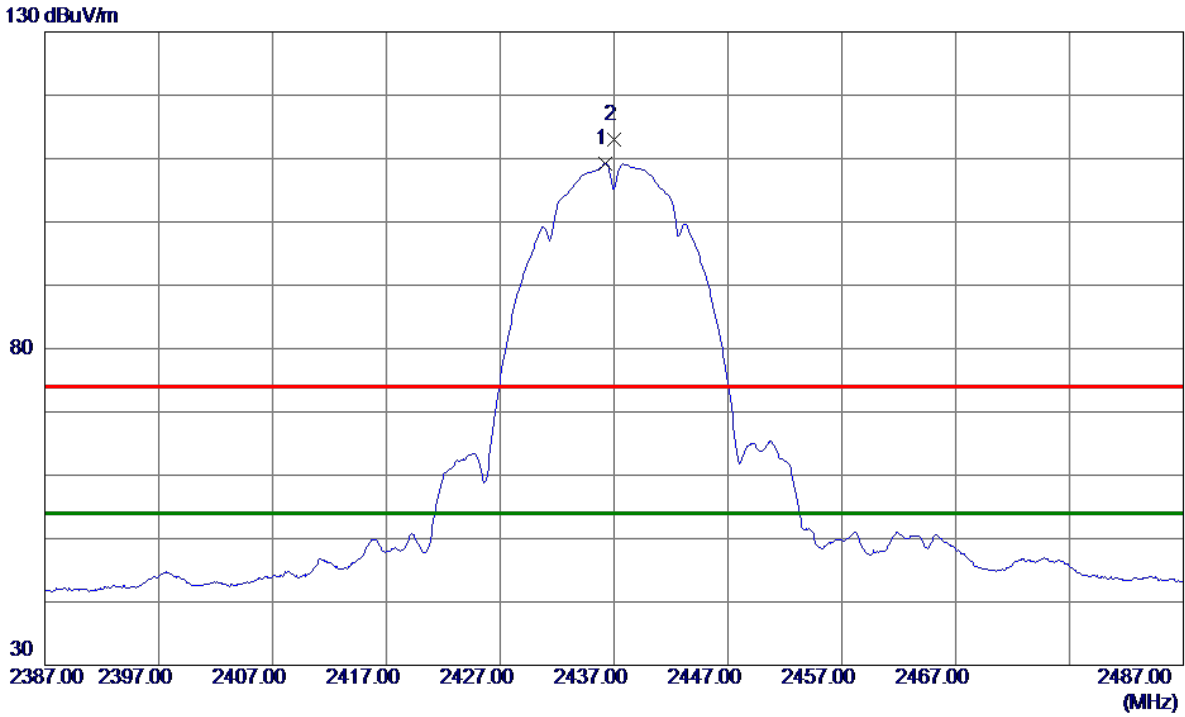


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7311.8400	33.75	14.02	47.77	54.00	-6.23	AVG	
2	7312.4750	41.31	14.02	55.33	74.00	-18.67	Peak	

**REMARKS:**

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

Test Mode	TX B Mode 2437 MHz	Polarization	Horizontal
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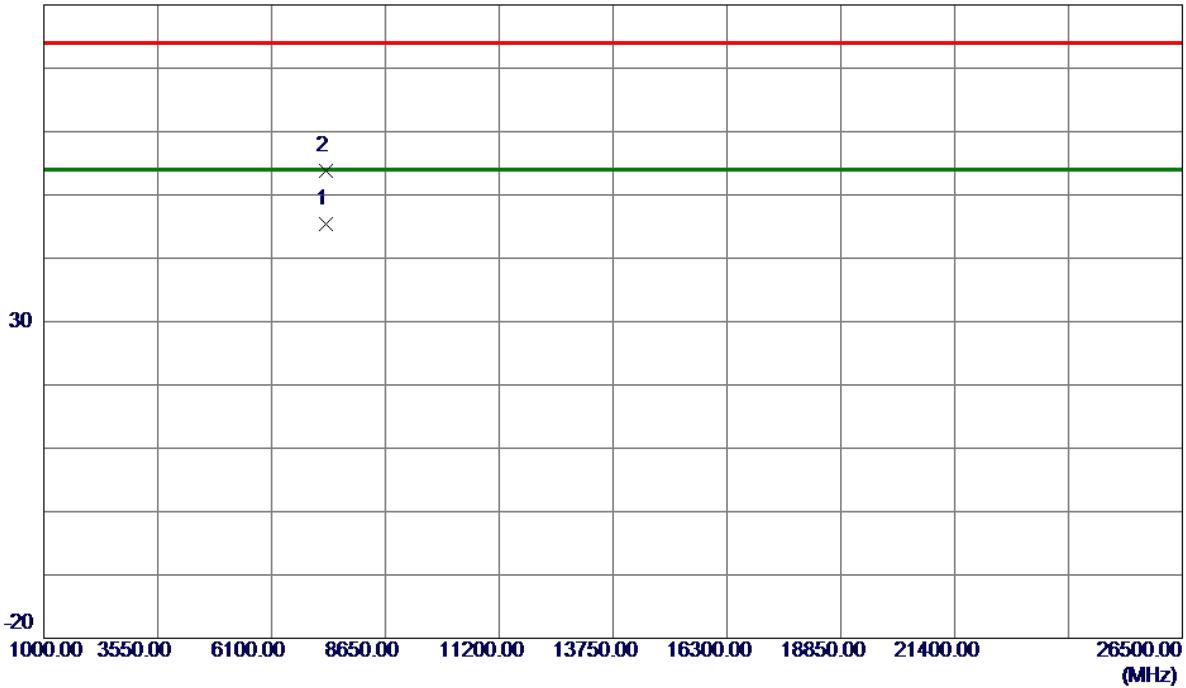
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.2500	97.30	11.97	109.27	54.00	55.27	AVG	No Limit
2	2436.9500	101.07	11.97	113.04	74.00	39.04	Peak	No Limit

**REMARKS:**

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

Test Mode	TX B Mode 2437 MHz	Polarization	Horizontal
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80 dBuV/m

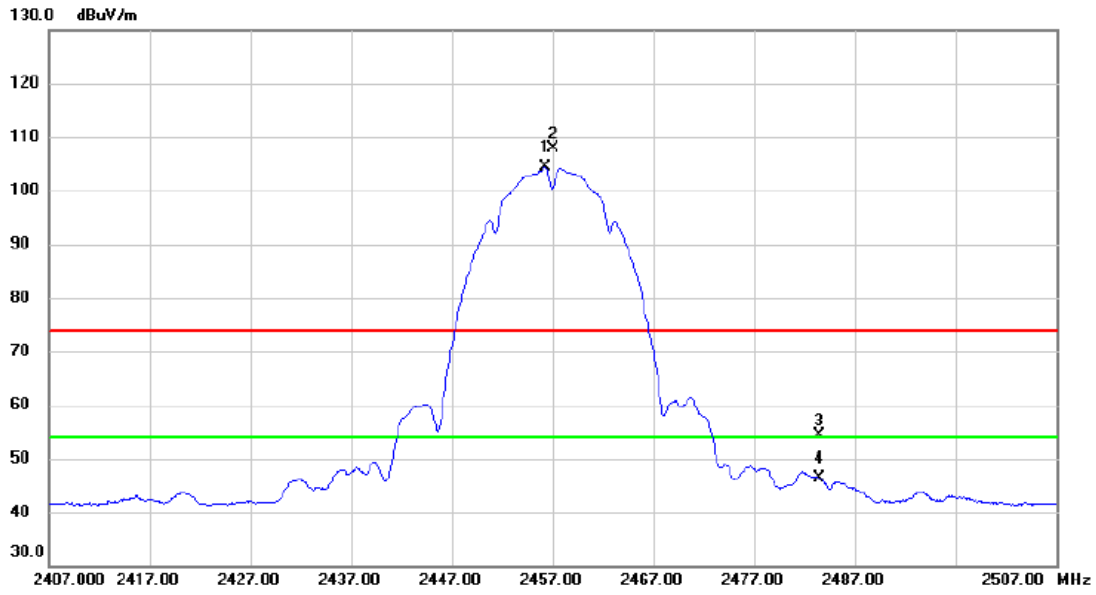


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7313.0230	31.46	14.02	45.48	54.00	-8.52	AVG	
2	7313.2500	39.73	14.02	53.75	74.00	-20.25	Peak	

**REMARKS:**

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

Test Mode	TX B Mode 2457 MHz	Polarization	Vertical
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2456.250	92.31	12.02	104.33	54.00	50.33	AVG	No Limit
2	X	2457.050	95.95	12.04	107.99	74.00	33.99	peak	No Limit
3		2483.500	42.21	12.12	54.33	74.00	-19.67	peak	
4		2483.500	34.15	12.12	46.27	54.00	-7.73	AVG	

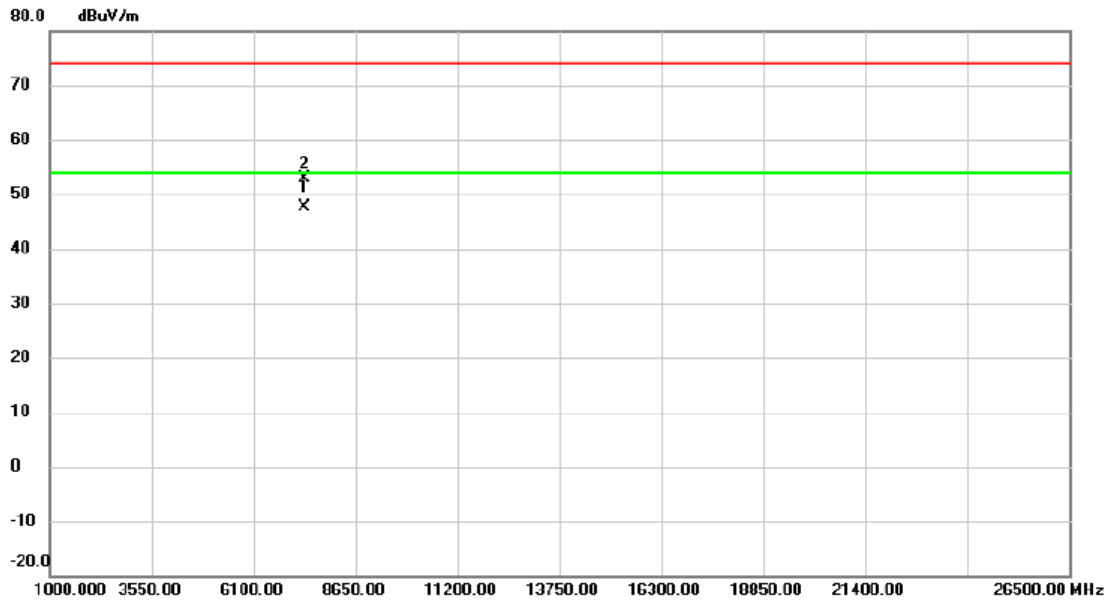
**REMARKS:**

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

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



Test Mode	TX B Mode 2457 MHz	Polarization	Vertical
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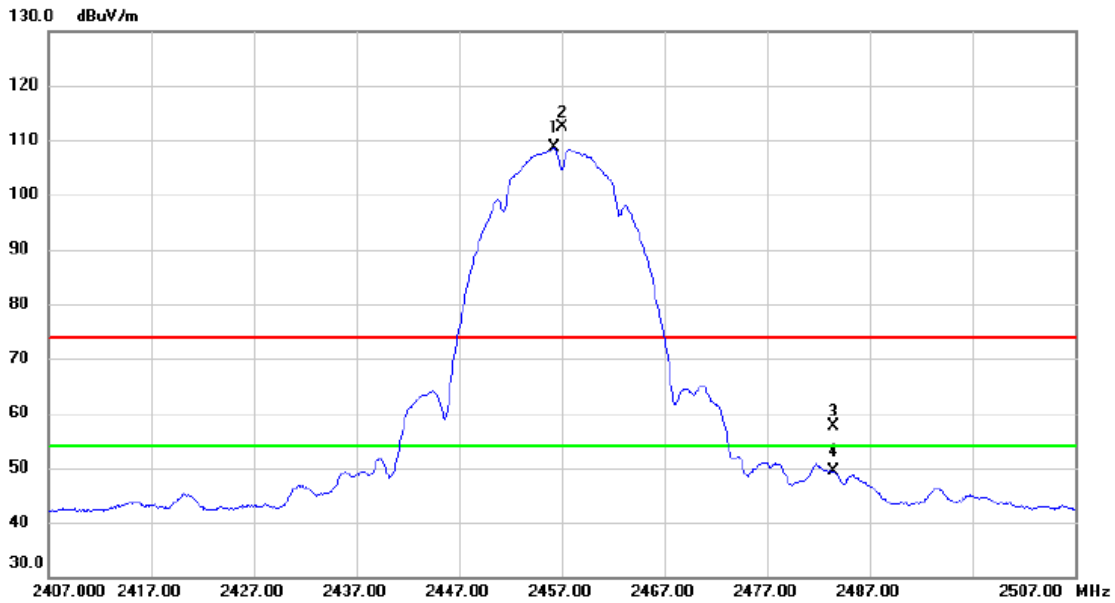


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7366.845	33.47	14.10	47.57	54.00	-6.43	AVG	
2	7372.470	38.87	14.10	52.97	74.00	-21.03	peak	

**REMARKS:**

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

Test Mode	TX B Mode 2457 MHz	Polarization	Horizontal
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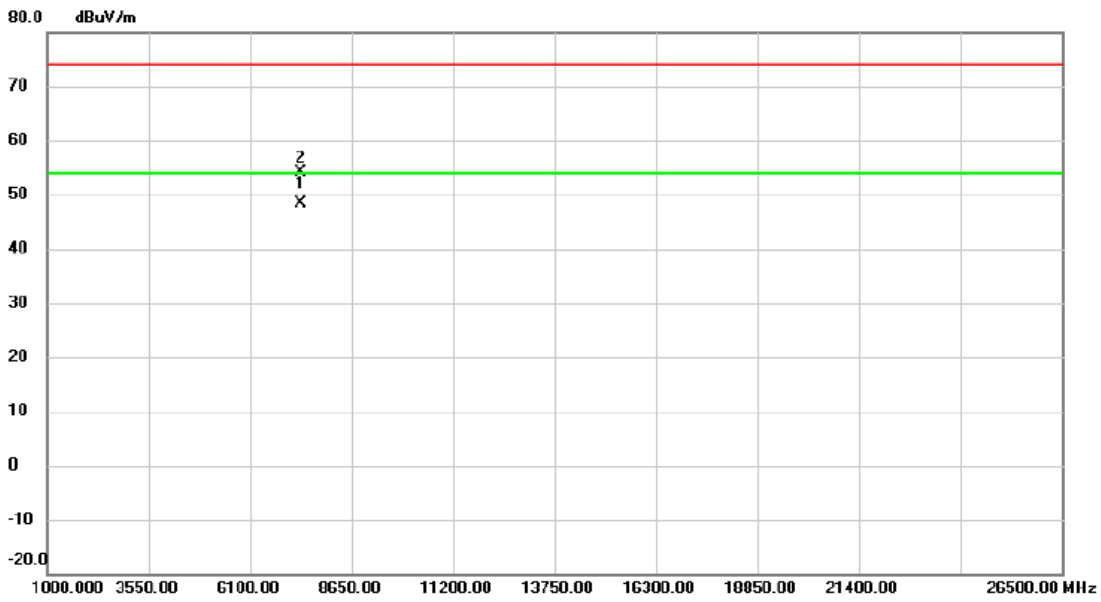


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2456.300	96.72	12.02	108.74	54.00	54.74	AVG	No Limit
2	X	2457.100	100.41	12.04	112.45	74.00	38.45	peak	No Limit
3		2483.500	45.56	12.12	57.68	74.00	-16.32	peak	
4		2483.500	37.19	12.12	49.31	54.00	-4.69	AVG	

**REMARKS:**

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

Test Mode	TX B Mode 2457 MHz	Polarization	Horizontal
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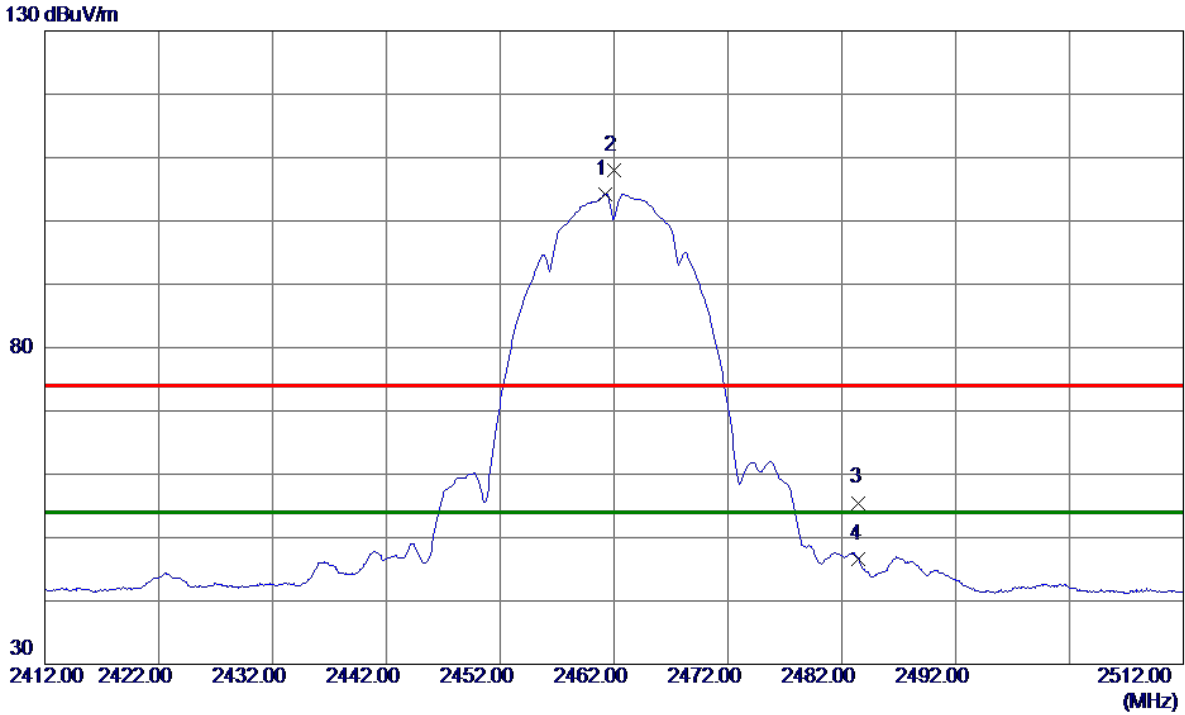


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7367.270	34.18	14.10	48.28	54.00	-5.72	AVG	
2		7375.425	40.12	14.11	54.23	74.00	-19.77	peak	

**REMARKS:**

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

Test Mode	TX B Mode 2462 MHz	Polarization	Vertical
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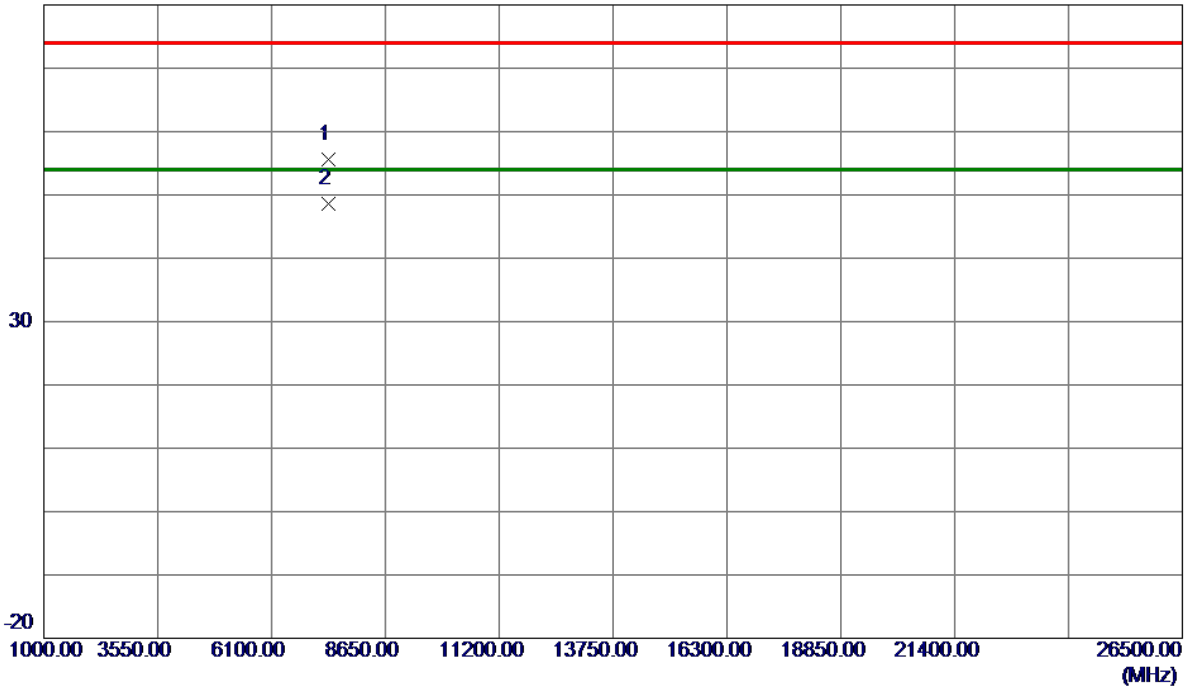
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.2000	92.21	12.05	104.26	54.00	50.26	AVG	No Limit
2	2462.0000	96.00	12.05	108.05	74.00	34.05	Peak	No Limit
3	2483.5000	43.38	12.12	55.50	74.00	-18.50	Peak	
4	2483.5000	34.43	12.12	46.55	54.00	-7.45	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
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80 dBuV/m



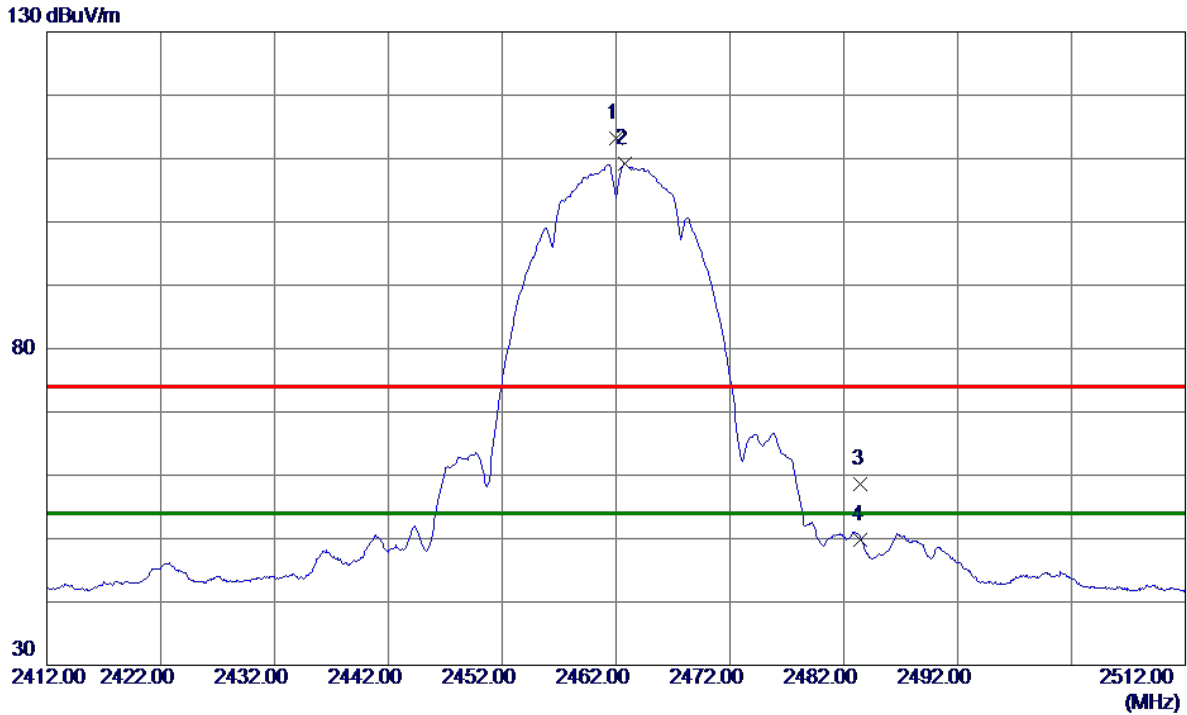
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7385.8130	41.50	14.12	55.62	74.00	-18.38	Peak	
2 *	7386.7830	34.48	14.12	48.60	54.00	-5.40	AVG	

**REMARKS:**

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

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

Test Mode	TX B Mode 2462 MHz	Polarization	Horizontal
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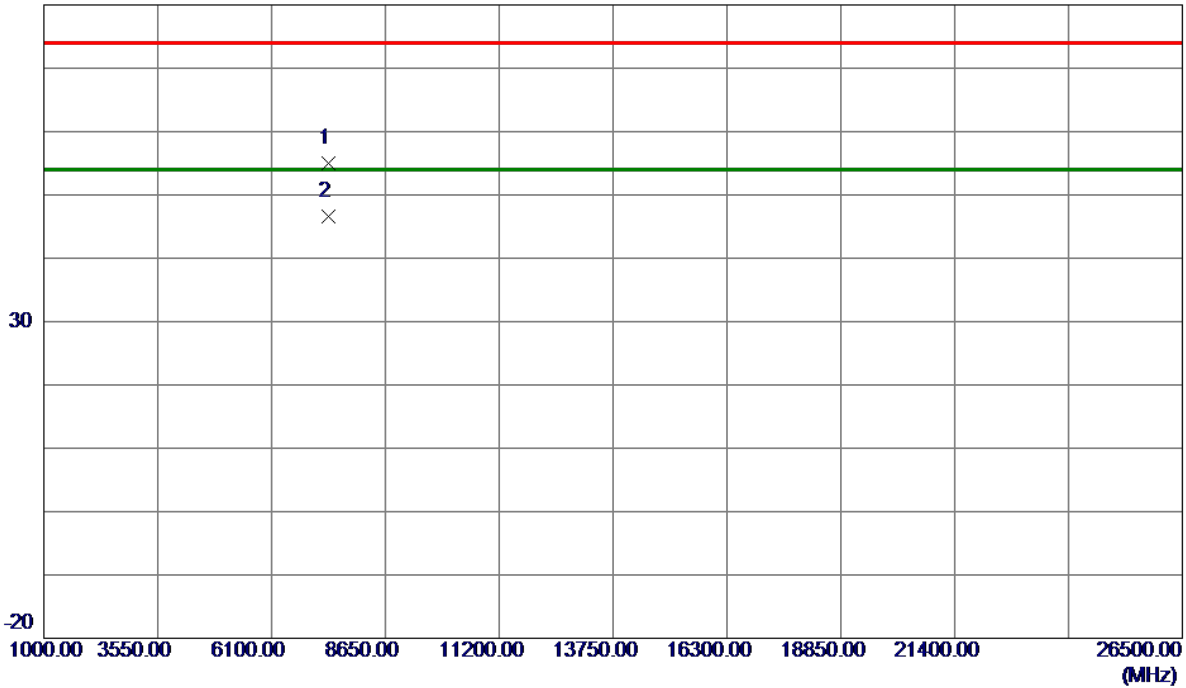
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.9500	101.19	12.05	113.24	74.00	39.24	Peak	No Limit
2 *	2462.8000	97.17	12.05	109.22	54.00	55.22	AVG	No Limit
3	2483.5000	46.51	12.12	58.63	74.00	-15.37	Peak	
4	2483.5000	37.72	12.12	49.84	54.00	-4.16	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
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80 dBuV/m

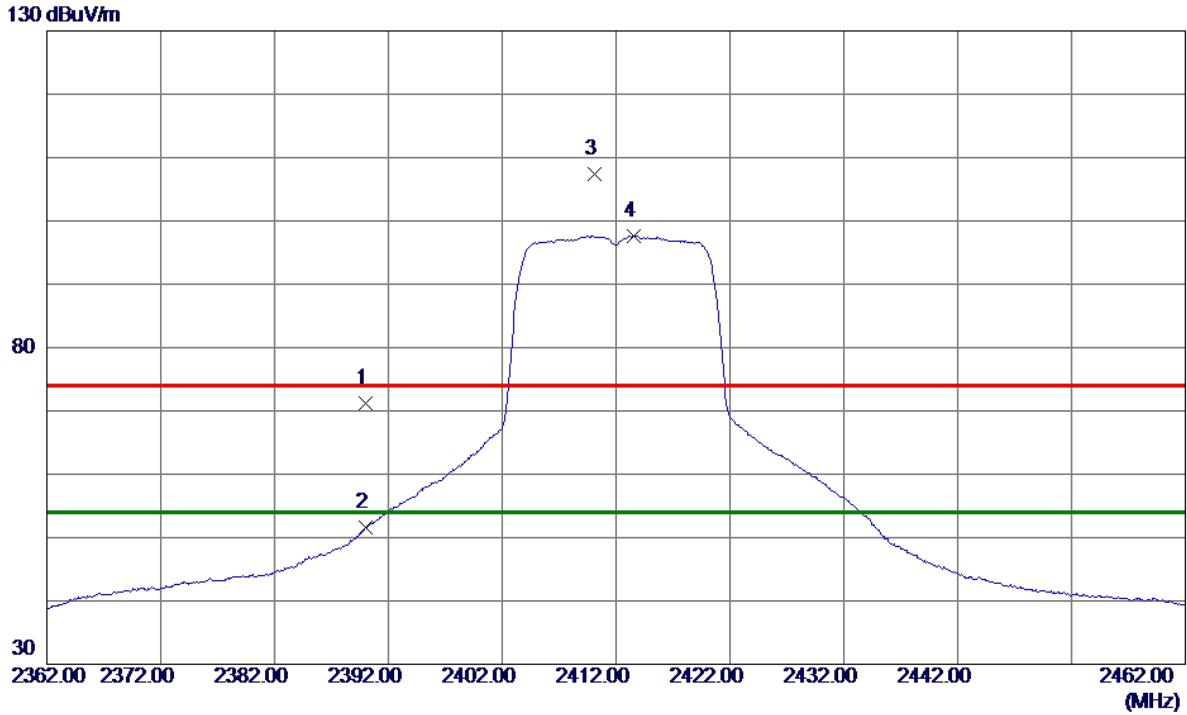


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7386.7920	40.90	14.12	55.02	74.00	-18.98	Peak	
2 *	7387.7150	32.47	14.12	46.59	54.00	-7.41	AVG	

**REMARKS:**

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

Test Mode	TX G Mode 2412 MHz	Polarization	Vertical
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	59.46	11.82	71.28	74.00	-2.72	Peak	
2	2390.0000	39.82	11.82	51.64	54.00	-2.36	AVG	
3	2410.1000	95.53	11.88	107.41	74.00	33.41	Peak	No Limit
4 *	2413.5500	85.78	11.89	97.67	54.00	43.67	AVG	No Limit

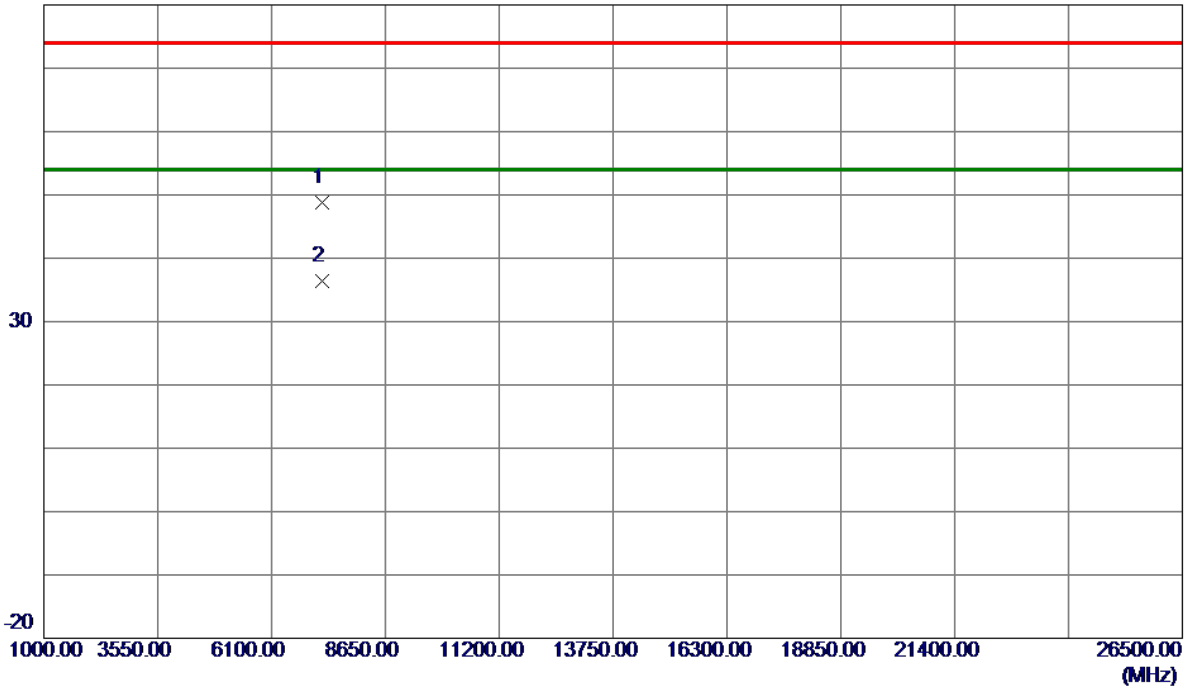
**REMARKS:**

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



Test Mode	TX G Mode 2412 MHz	Polarization	Vertical
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80 dBuV/m



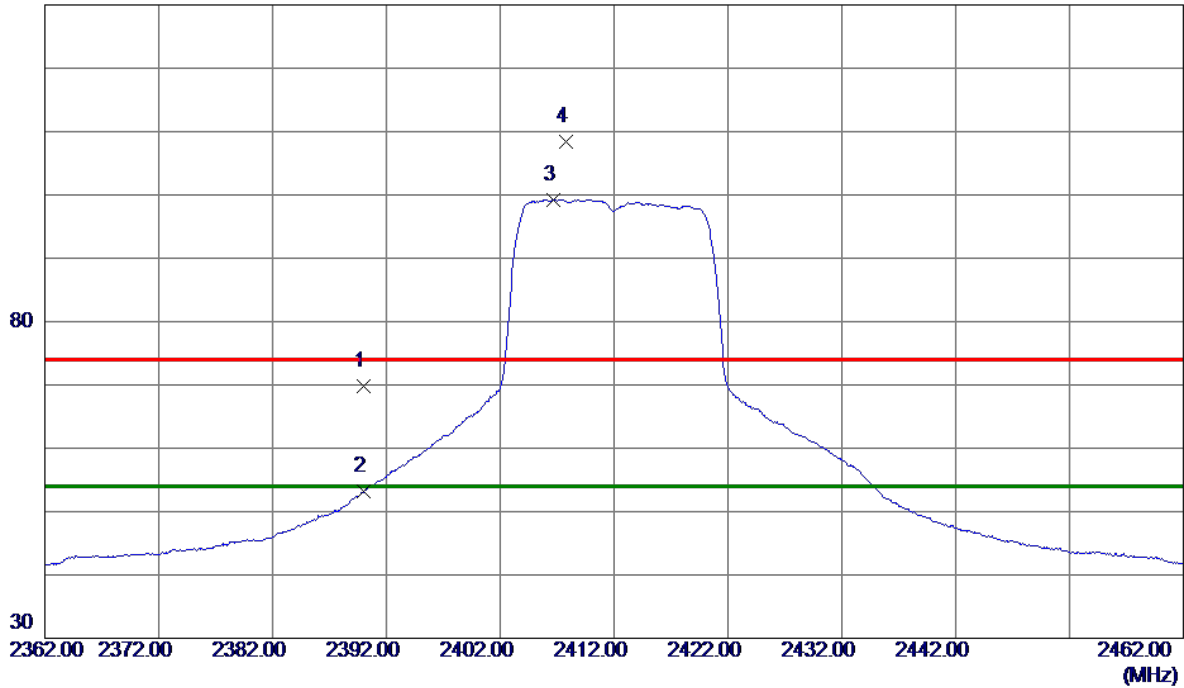
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7236.7750	34.93	13.92	48.85	74.00	-25.15	Peak	
2 *	7237.4720	22.48	13.92	36.40	54.00	-17.60	AVG	

**REMARKS:**

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

Test Mode	TX G Mode 2412 MHz	Polarization	Horizontal
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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	58.03	11.82	69.85	74.00	-4.15	Peak	
2	2390.0000	41.39	11.82	53.21	54.00	-0.79	AVG	
3 *	2406.7000	87.41	11.87	99.28	54.00	45.28	AVG	No Limit
4	2407.7500	96.58	11.87	108.45	74.00	34.45	Peak	No Limit

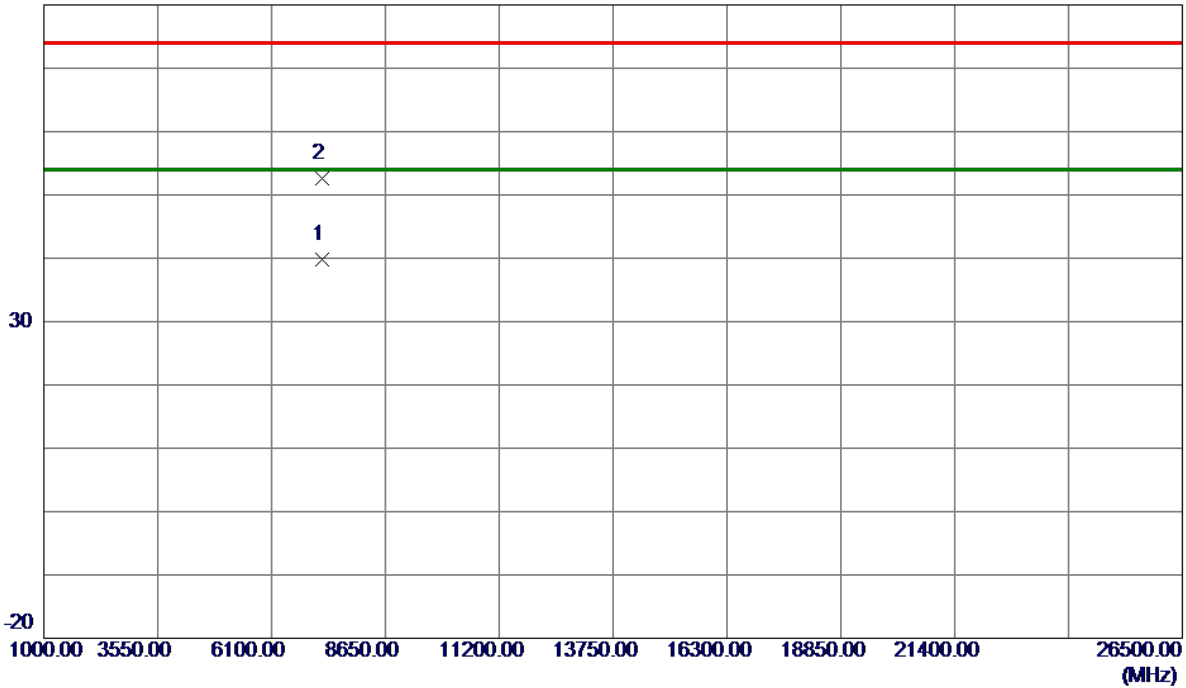
**REMARKS:**

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

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

Test Mode	TX G Mode 2412 MHz	Polarization	Horizontal
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80 dBuV/m

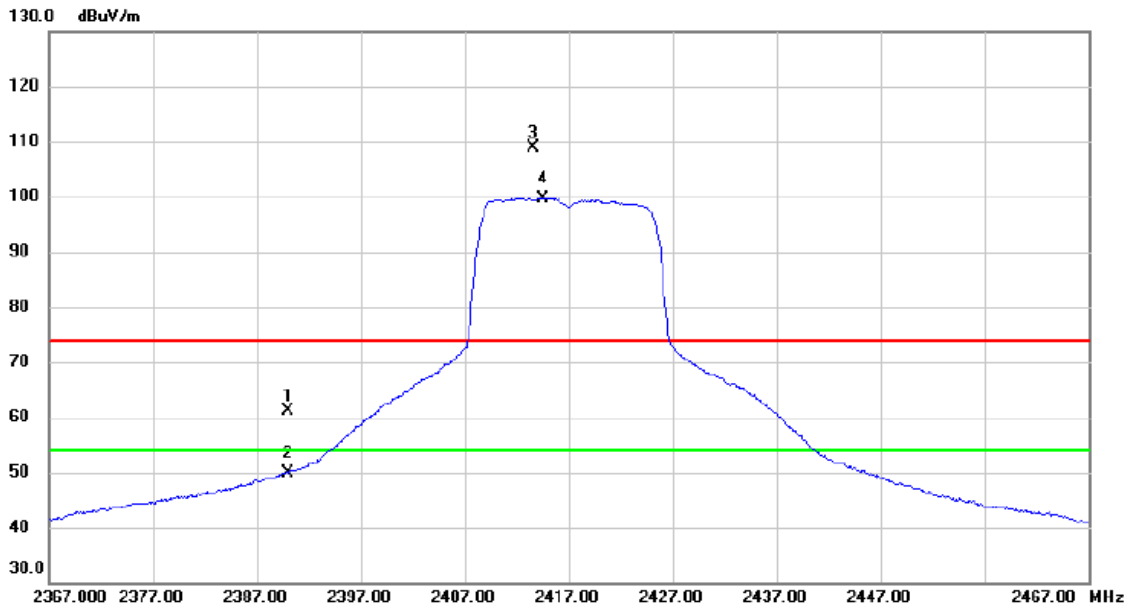


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7236.9130	25.85	13.92	39.77	54.00	-14.23	AVG	
2	7237.2950	38.70	13.92	52.62	74.00	-21.38	Peak	

**REMARKS:**

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

Test Mode	TX G Mode 2417 MHz	Polarization	Vertical
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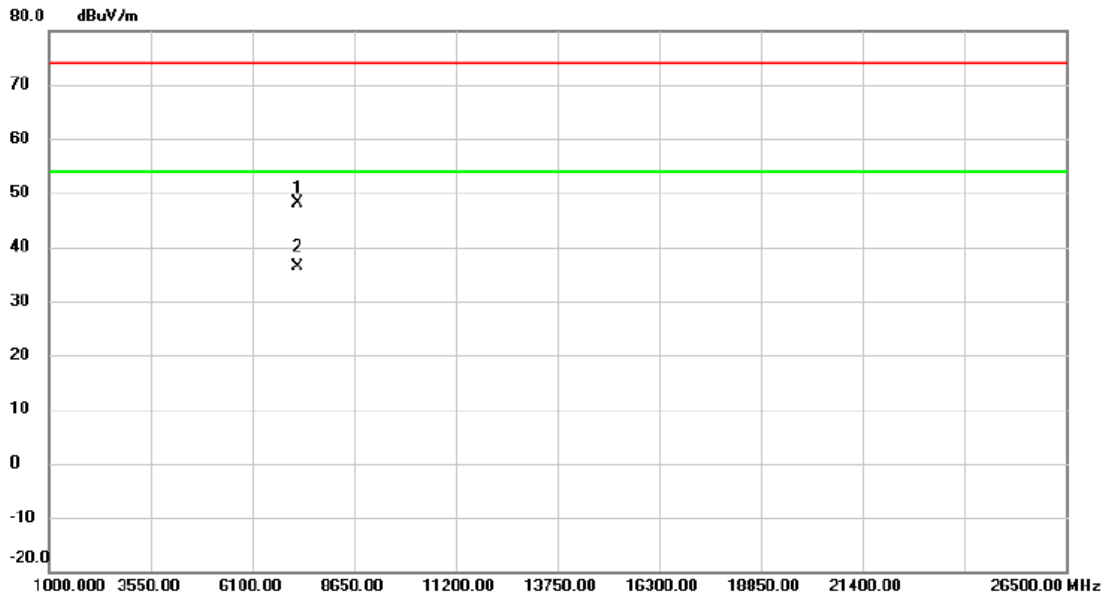


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	49.24	11.83	61.07	74.00	-12.93	peak	
2	2390.000	38.16	11.83	49.99	54.00	-4.01	AVG	
3 X	2413.550	97.11	11.89	109.00	74.00	35.00	peak	No Limit
4 *	2414.500	87.80	11.89	99.69	54.00	45.69	AVG	No Limit

**REMARKS:**

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

Test Mode	TX G Mode 2417 MHz	Polarization	Vertical
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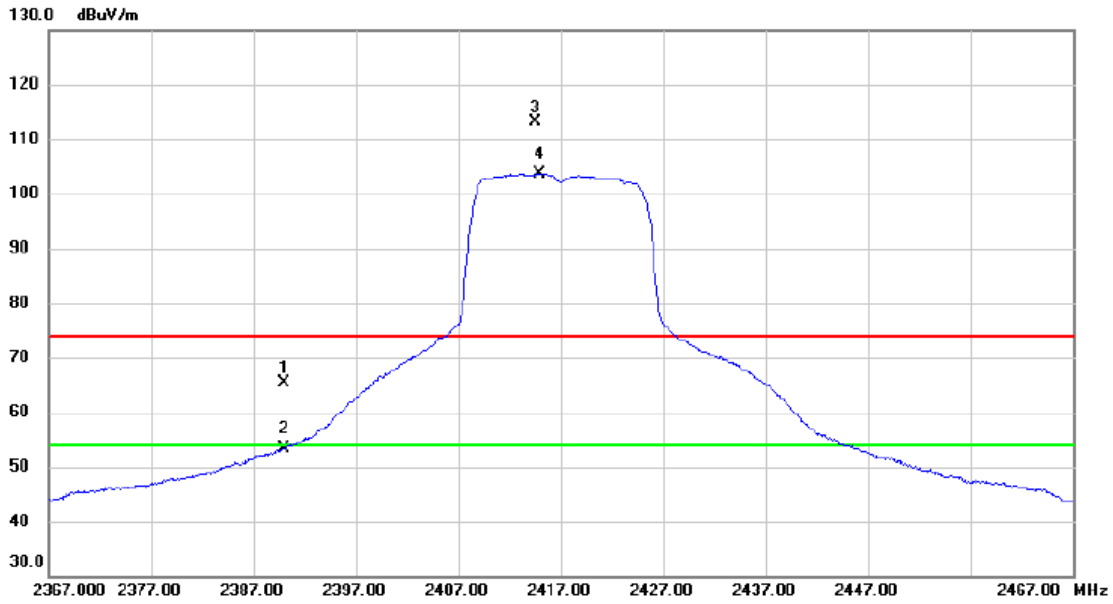


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		7249.845	34.17	13.93	48.10	74.00	-25.90	peak	
2	*	7251.285	22.47	13.94	36.41	54.00	-17.59	AVG	

**REMARKS:**

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

Test Mode	TX G Mode 2417 MHz	Polarization	Horizontal
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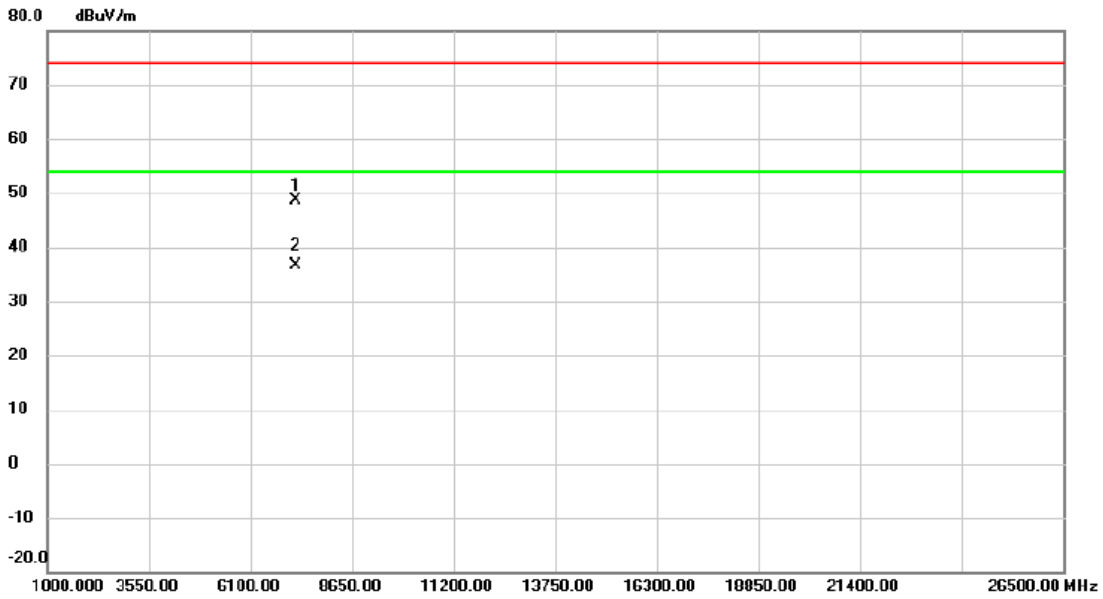


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	53.44	11.83	65.27	74.00	-8.73	peak	
2		2390.000	41.67	11.83	53.50	54.00	-0.50	AVG	
3	X	2414.600	101.19	11.89	113.08	74.00	39.08	peak	No Limit
4	*	2414.950	91.81	11.89	103.70	54.00	49.70	AVG	No Limit

**REMARKS:**

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

Test Mode	TX G Mode 2417 MHz	Polarization	Horizontal
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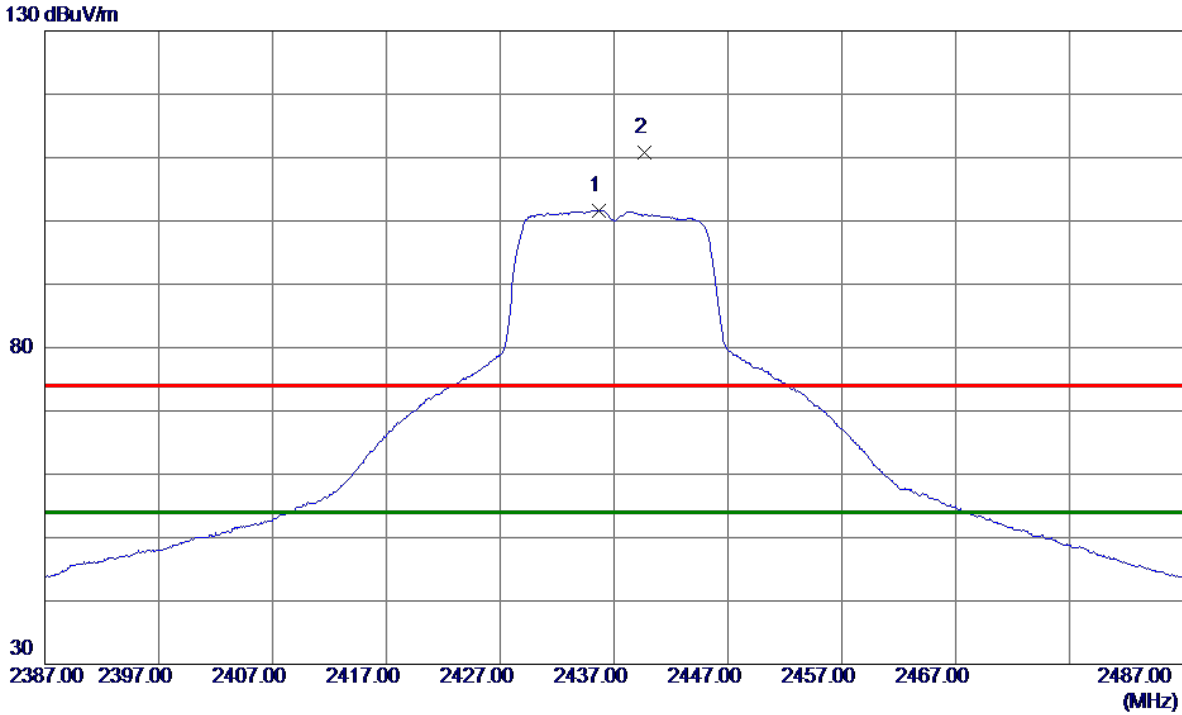
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		7246.035	34.58	13.93	48.51	74.00	-25.49	peak	
2	*	7249.435	22.78	13.93	36.71	54.00	-17.29	AVG	

**REMARKS:**

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

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

Test Mode	TX G Mode 2437 MHz	Polarization	Vertical
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2435.6500	89.72	11.96	101.68	54.00	47.68	AVG	No Limit
2	2439.6500	98.78	11.98	110.76	74.00	36.76	Peak	No Limit

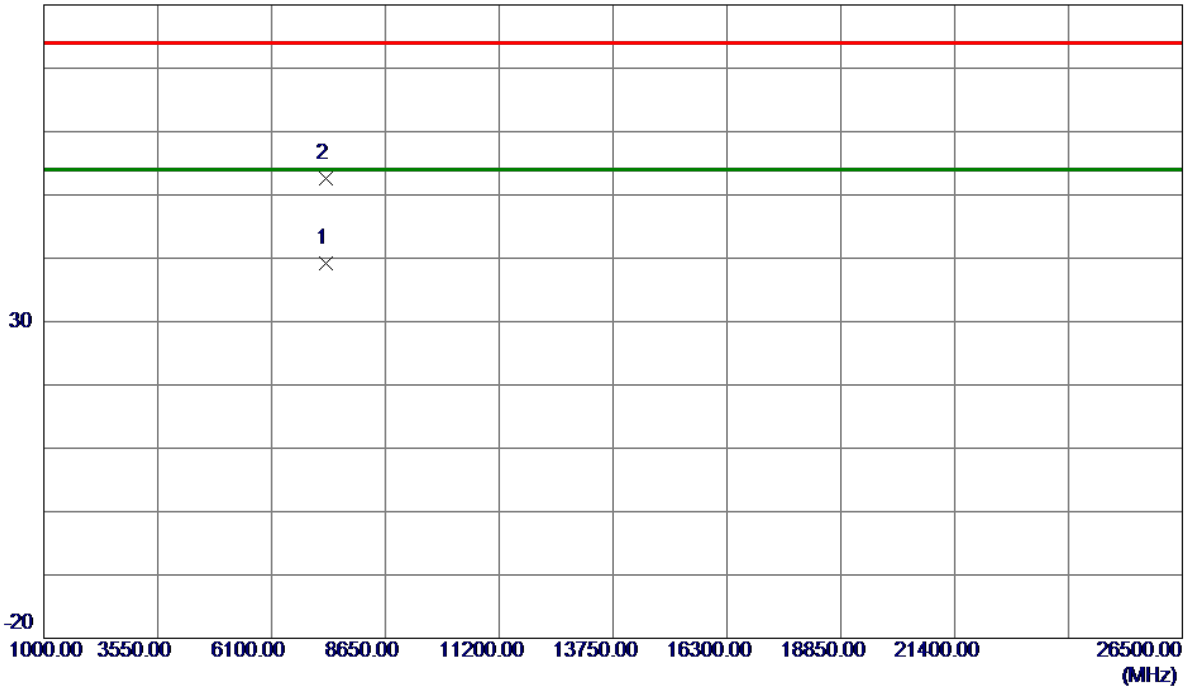
**REMARKS:**

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



Test Mode	TX G Mode 2437 MHz	Polarization	Vertical
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80 dBuV/m

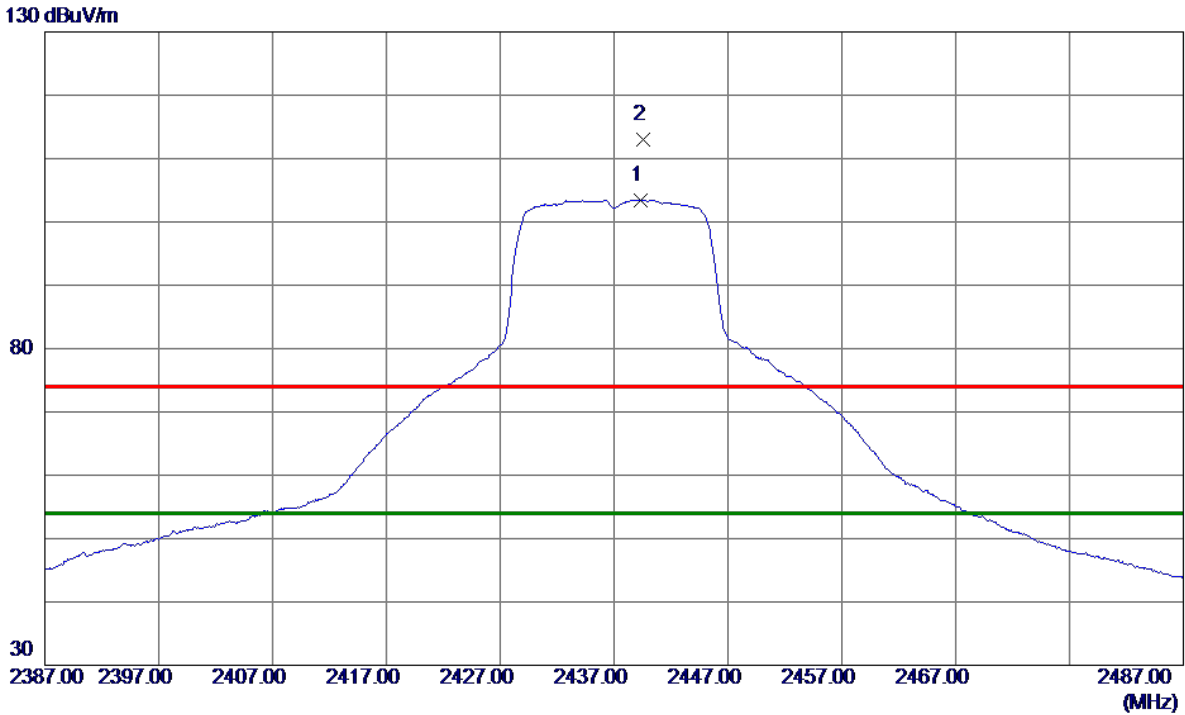


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7308.9150	25.11	14.02	39.13	54.00	-14.87	AVG	
2	7311.0900	38.53	14.02	52.55	74.00	-21.45	Peak	

**REMARKS:**

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

Test Mode	TX G Mode 2437 MHz	Polarization	Horizontal
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2439.3000	91.51	11.98	103.49	54.00	49.49	AVG	No Limit
2	2439.6000	100.96	11.98	112.94	74.00	38.94	Peak	No Limit

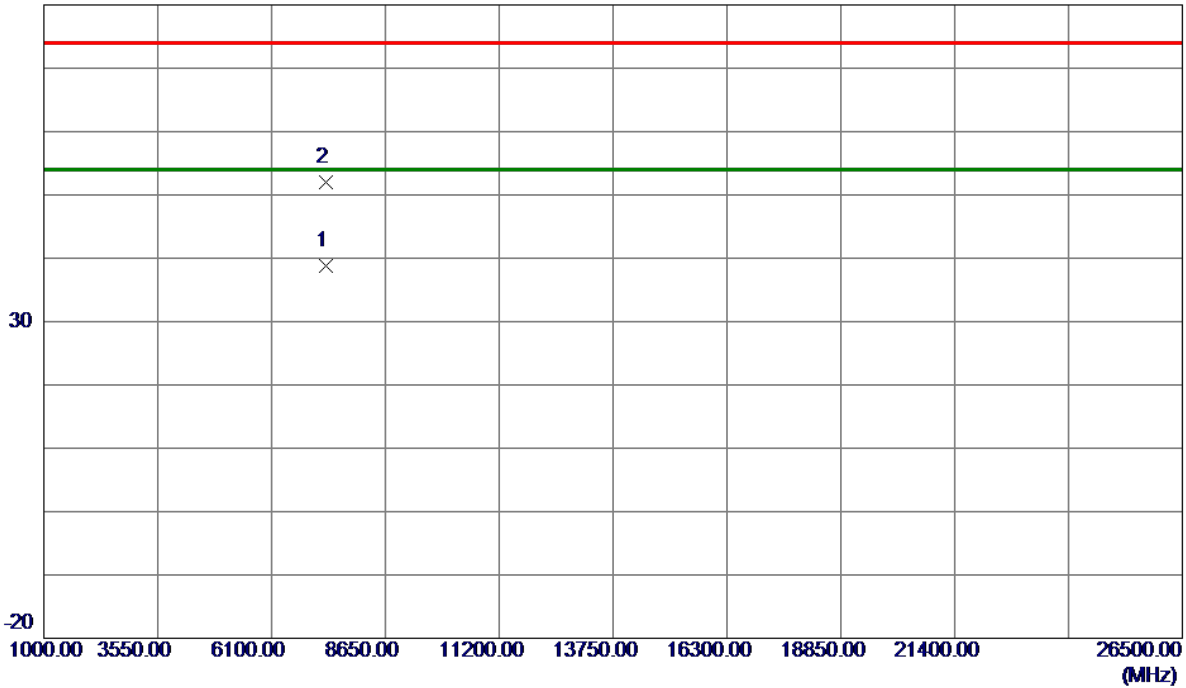
**REMARKS:**

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

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

Test Mode	TX G Mode 2437 MHz	Polarization	Horizontal
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80 dBuV/m

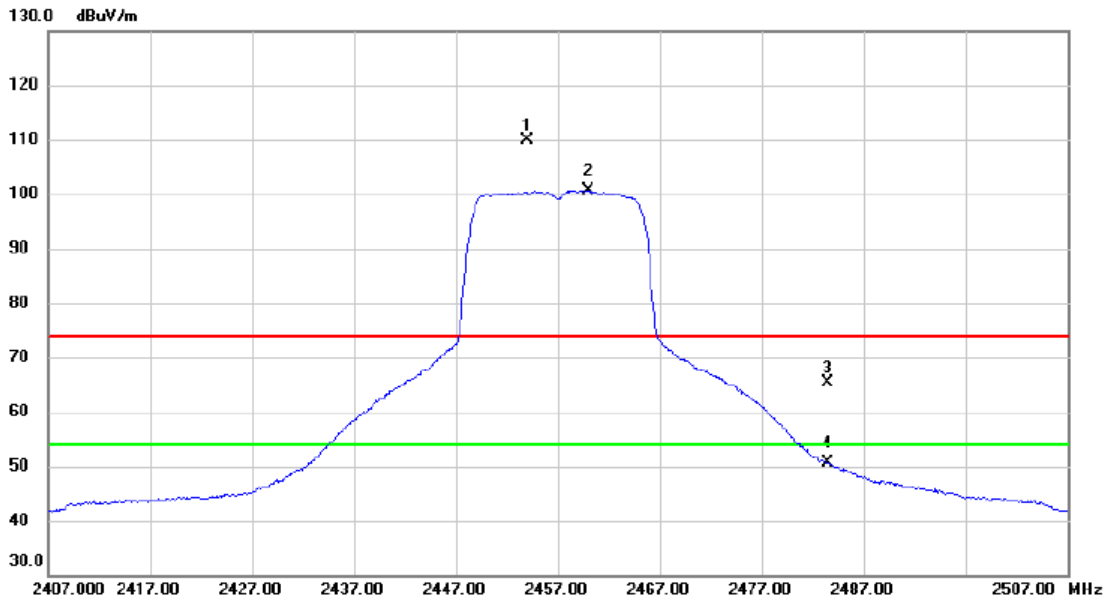


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7310.9620	24.84	14.02	38.86	54.00	-15.14	AVG	
2	7311.0400	37.94	14.02	51.96	74.00	-22.04	Peak	

**REMARKS:**

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

Test Mode	TX G Mode 2457 MHz	Polarization	Vertical
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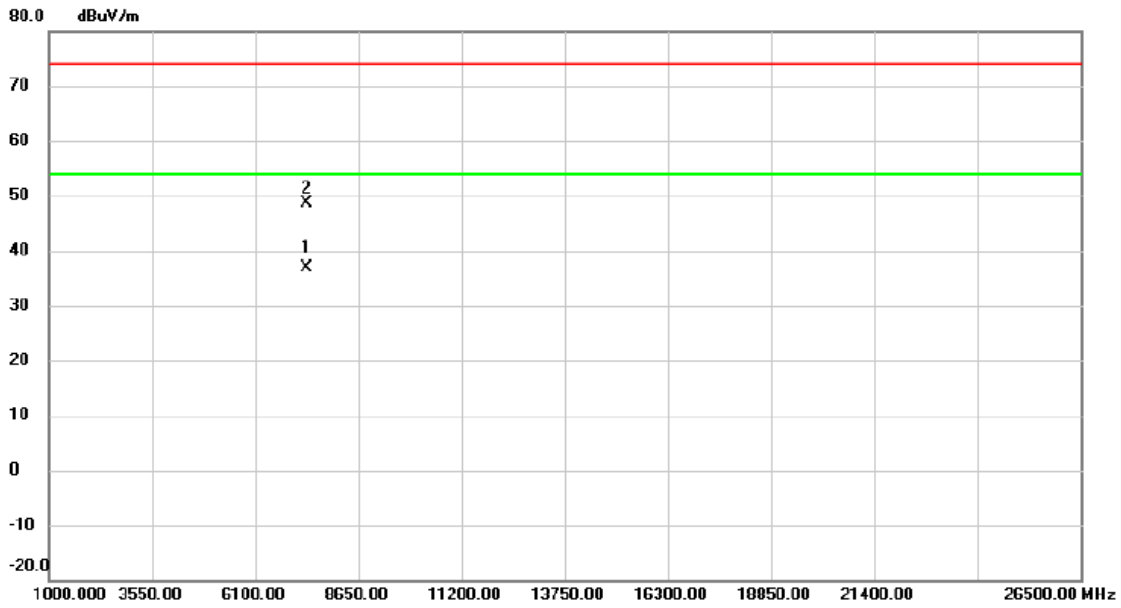


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2453.950	97.96	12.02	109.98	74.00	35.98	peak	No Limit
2	*	2460.050	88.56	12.04	100.60	54.00	46.60	AVG	No Limit
3		2483.500	53.20	12.12	65.32	74.00	-8.68	peak	
4		2483.500	38.40	12.12	50.52	54.00	-3.48	AVG	

**REMARKS:**

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

Test Mode	TX G Mode 2457 MHz	Polarization	Vertical
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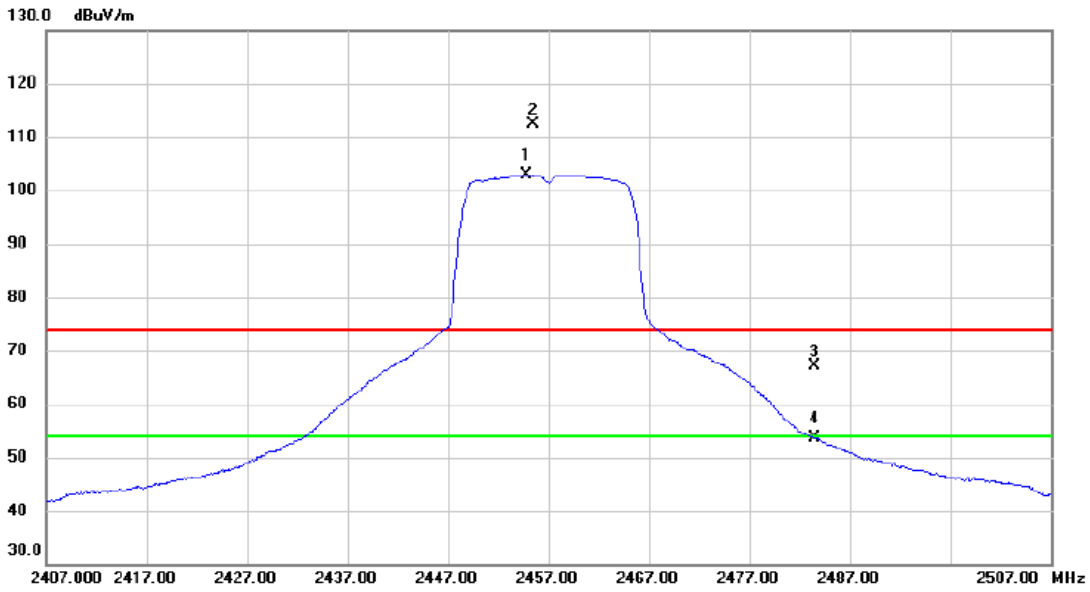


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7368.805	22.74	14.10	36.84	54.00	-17.16	AVG	
2	7370.135	34.48	14.10	48.58	74.00	-25.42	peak	

REMARKS:

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

Test Mode	TX G Mode 2457 MHz	Polarization	Horizontal
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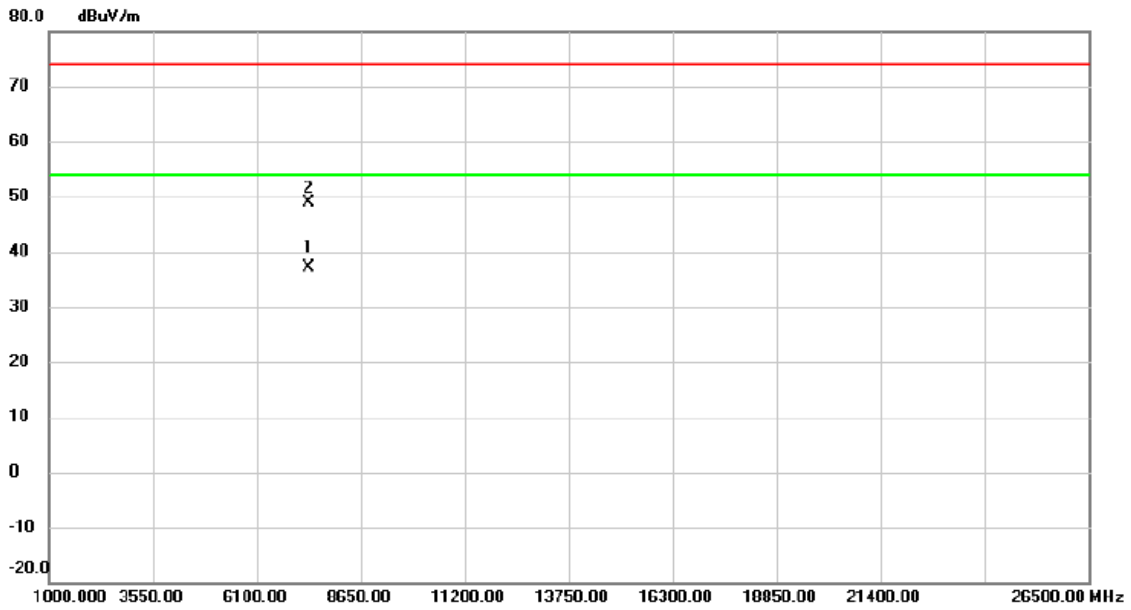


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2454.850	90.92	12.02	102.94	54.00	48.94	AVG	No Limit
2	X	2455.450	100.30	12.02	112.32	74.00	38.32	peak	No Limit
3		2483.500	55.03	12.12	67.15	74.00	-6.85	peak	
4		2483.500	41.49	12.12	53.61	54.00	-0.39	AVG	

**REMARKS:**

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

Test Mode	TX G Mode 2457 MHz	Polarization	Horizontal
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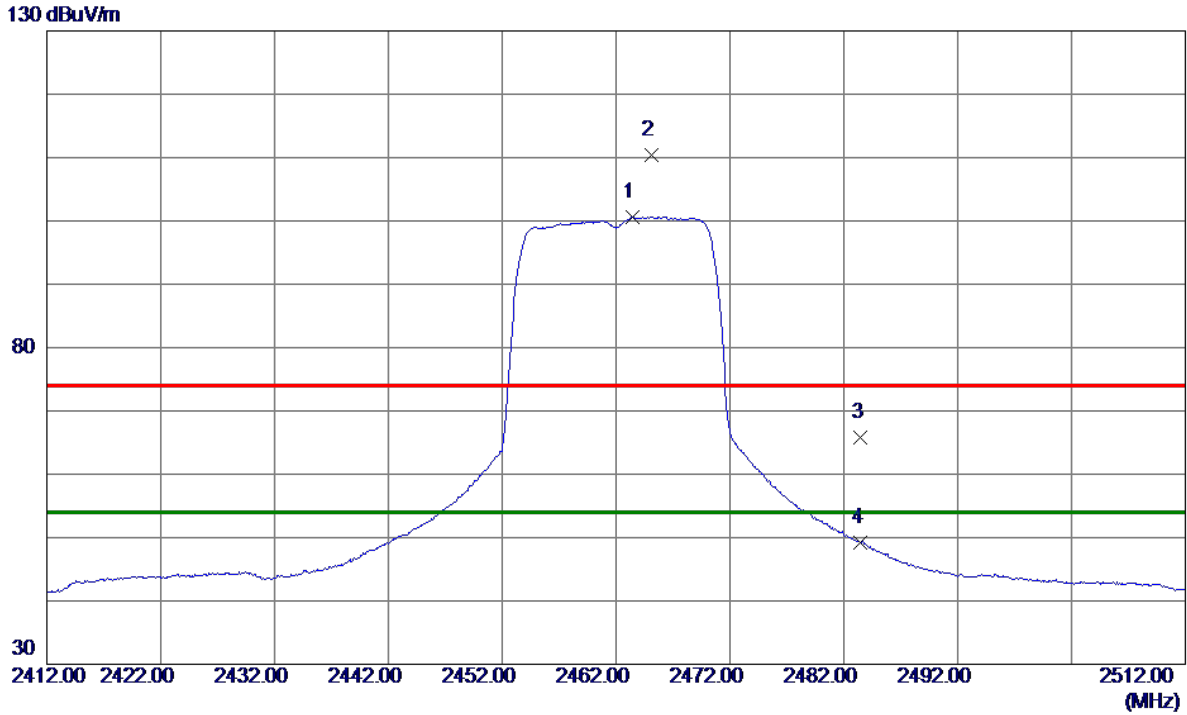


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7366.815	23.14	14.10	37.24	54.00	-16.76	AVG	
2		7368.705	34.87	14.10	48.97	74.00	-25.03	peak	

REMARKS:

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

Test Mode	TX G Mode 2462 MHz	Polarization	Vertical
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2463.4500	88.62	12.05	100.67	54.00	46.67	AVG	No Limit
2	2465.1500	98.29	12.06	110.35	74.00	36.35	Peak	No Limit
3	2483.5000	53.60	12.12	65.72	74.00	-8.28	Peak	
4	2483.5000	37.04	12.12	49.16	54.00	-4.84	AVG	

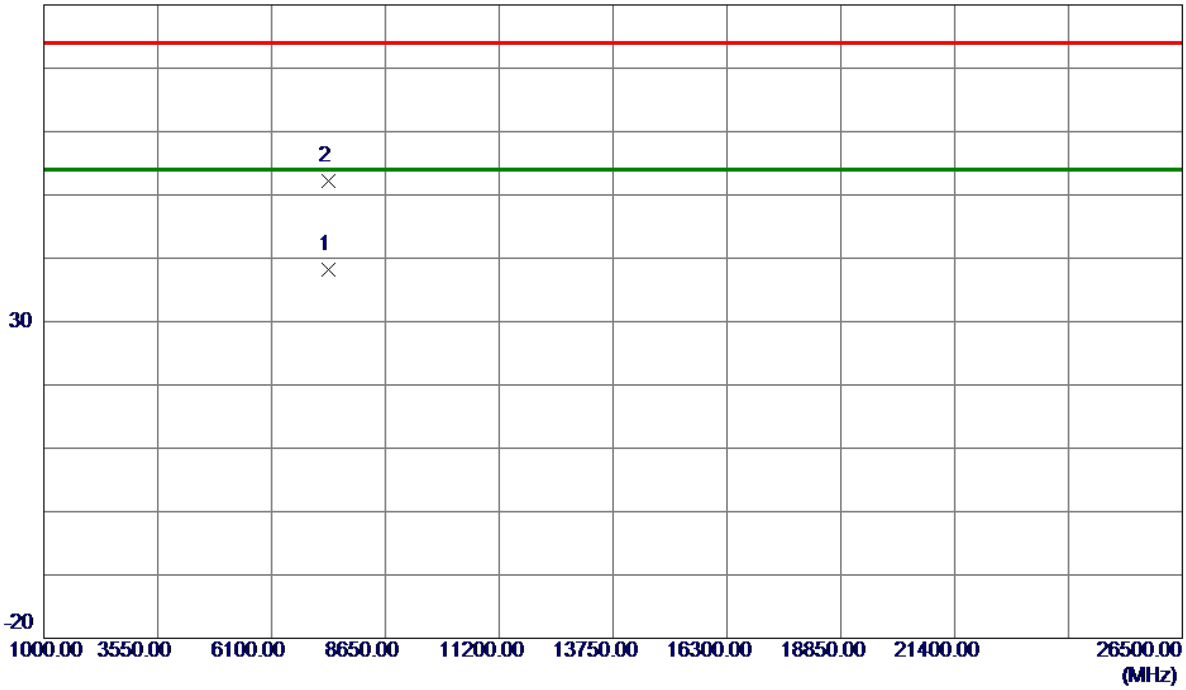
**REMARKS:**

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



Test Mode	TX G Mode 2462 MHz	Polarization	Vertical
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80 dBuV/m



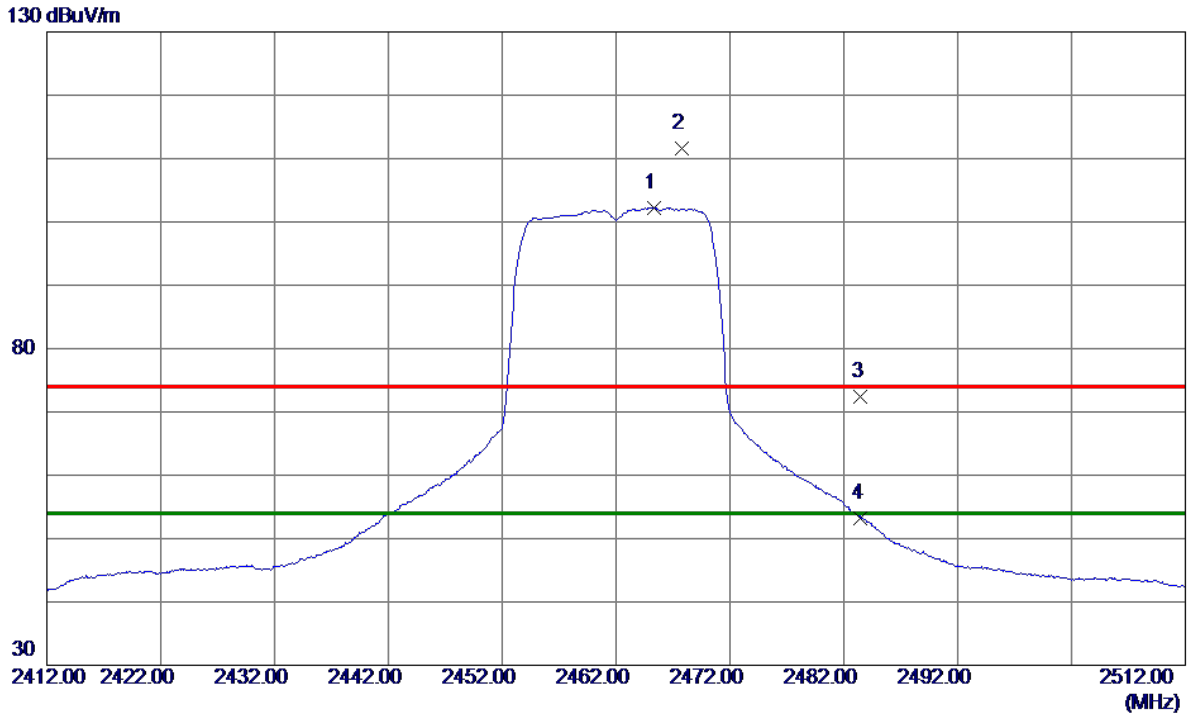
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7384.0970	24.04	14.12	38.16	54.00	-15.84	AVG	
2	7384.3700	38.12	14.12	52.24	74.00	-21.76	Peak	

**REMARKS:**

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

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

Test Mode	TX G Mode 2462 MHz	Polarization	Horizontal
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2465.3500	90.13	12.06	102.19	54.00	48.19	AVG	No Limit
2	2467.8000	99.46	12.07	111.53	74.00	37.53	Peak	No Limit
3	2483.5000	60.27	12.12	72.39	74.00	-1.61	Peak	
4	2483.5000	41.16	12.12	53.28	54.00	-0.72	AVG	

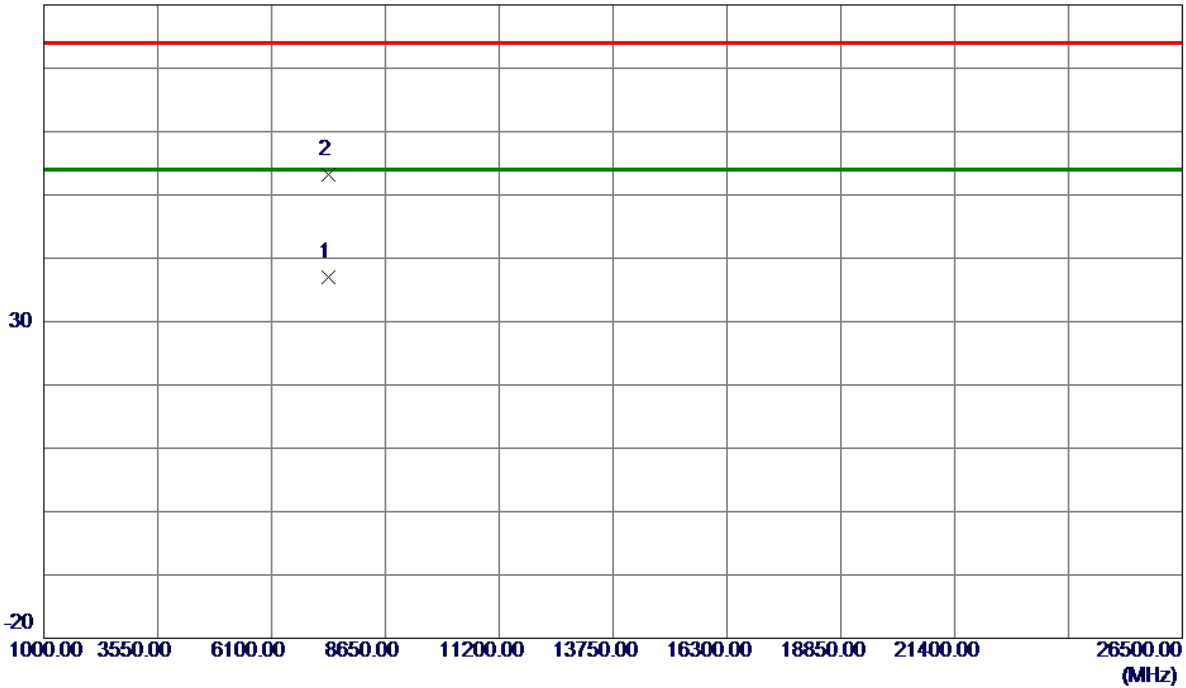
**REMARKS:**

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

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

Test Mode	TX G Mode 2462 MHz	Polarization	Horizontal
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80 dBuV/m

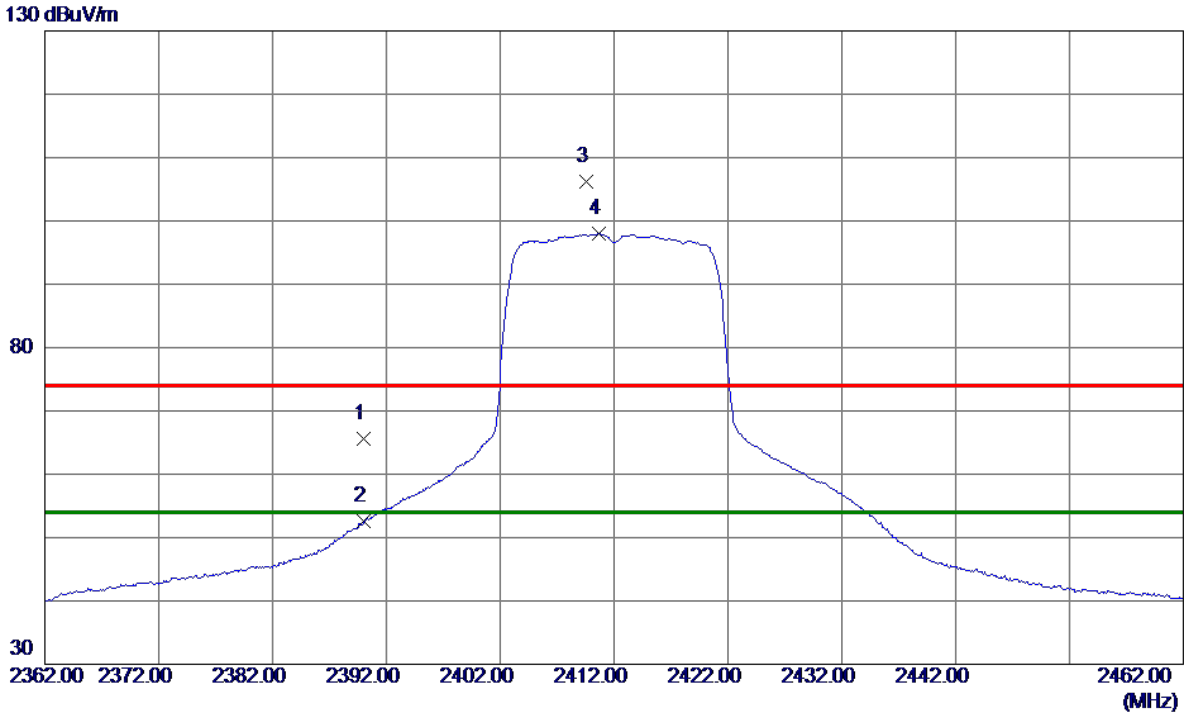


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7385.9100	22.89	14.12	37.01	54.00	-16.99	AVG	
2	7385.9700	39.16	14.12	53.28	74.00	-20.72	Peak	

**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
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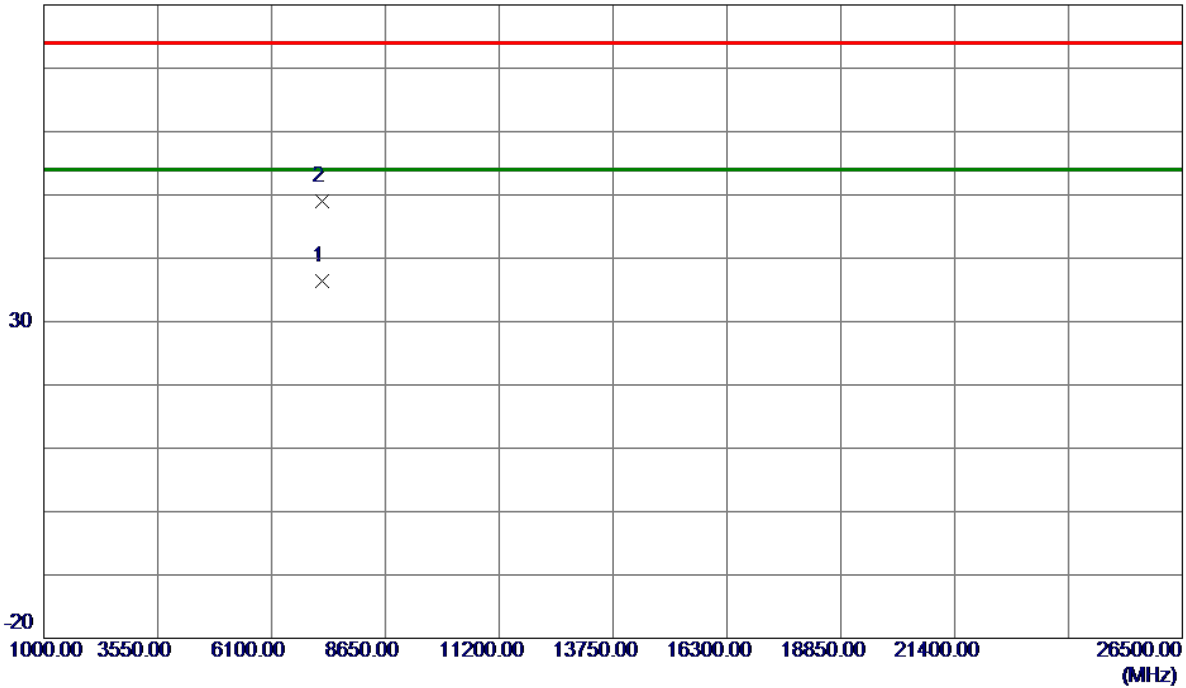
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	53.82	11.82	65.64	74.00	-8.36	Peak	
2	2390.0000	40.71	11.82	52.53	54.00	-1.47	AVG	
3	2409.5500	94.29	11.88	106.17	74.00	32.17	Peak	No Limit
4 *	2410.7000	86.12	11.88	98.00	54.00	44.00	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	Vertical
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80 dBuV/m

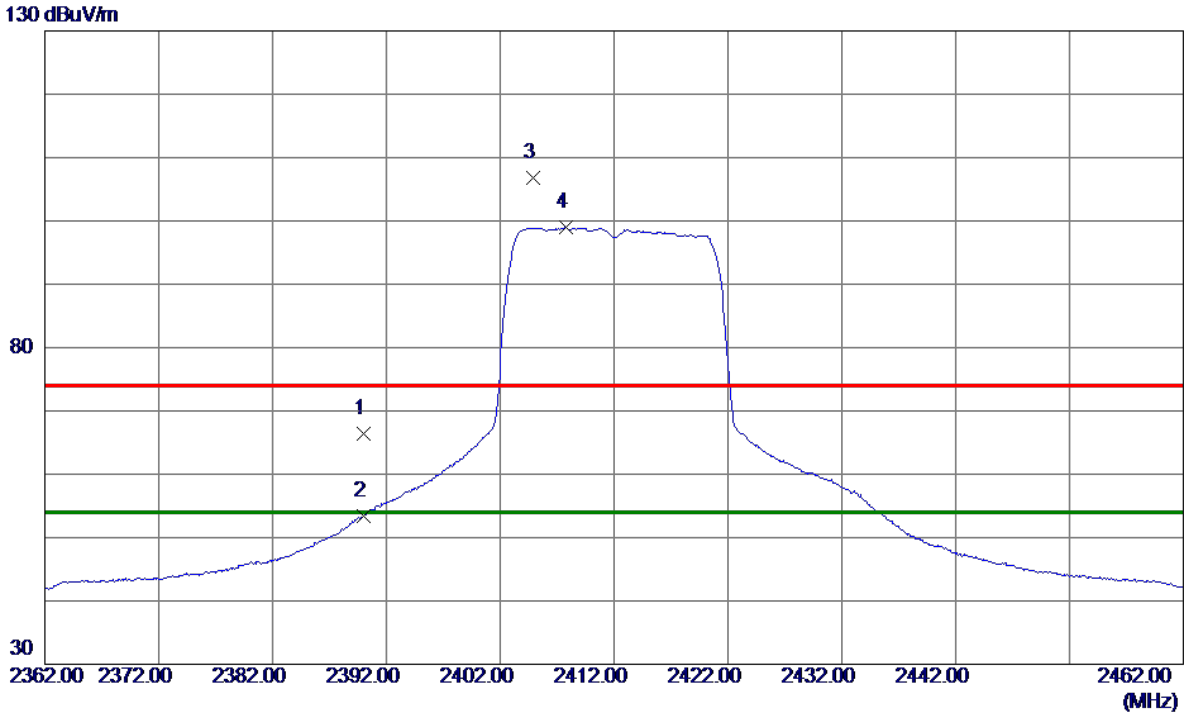


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7234.5050	22.47	13.91	36.38	54.00	-17.62	AVG	
2	7234.5070	35.06	13.91	48.97	74.00	-25.03	Peak	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Horizontal
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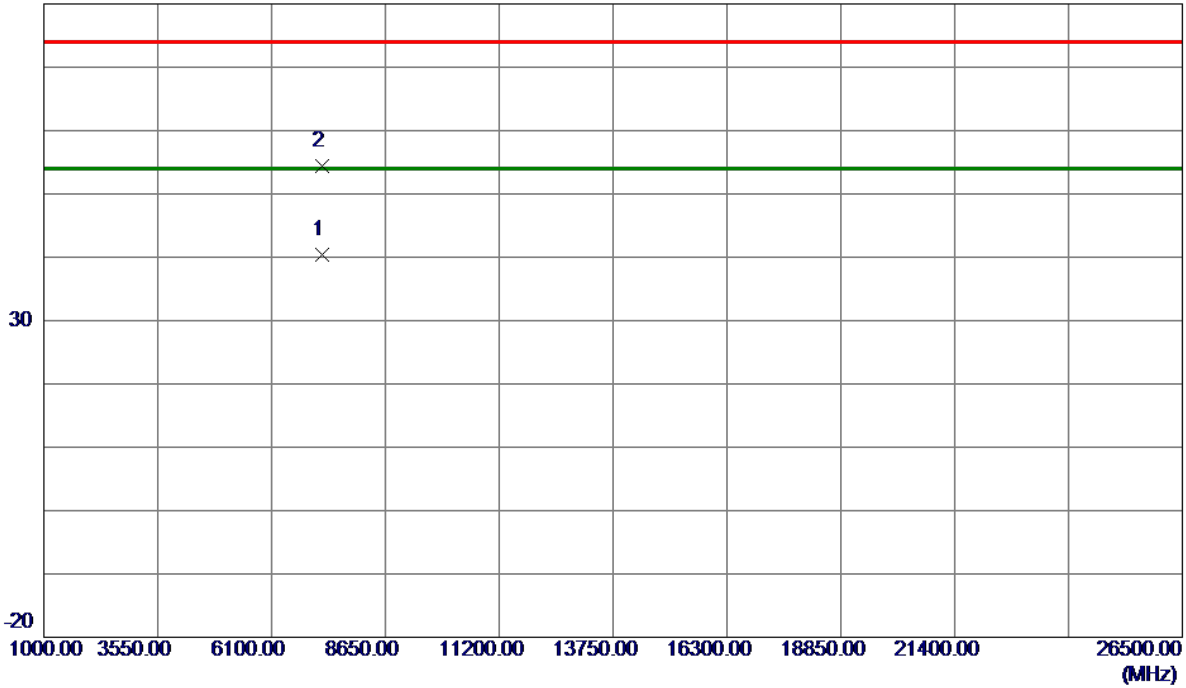
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	54.51	11.82	66.33	74.00	-7.67	Peak	
2	2390.0000	41.60	11.82	53.42	54.00	-0.58	AVG	
3	2404.8500	95.00	11.87	106.87	74.00	32.87	Peak	No Limit
4 *	2407.8000	87.05	11.87	98.92	54.00	44.92	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
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80 dBuV/m

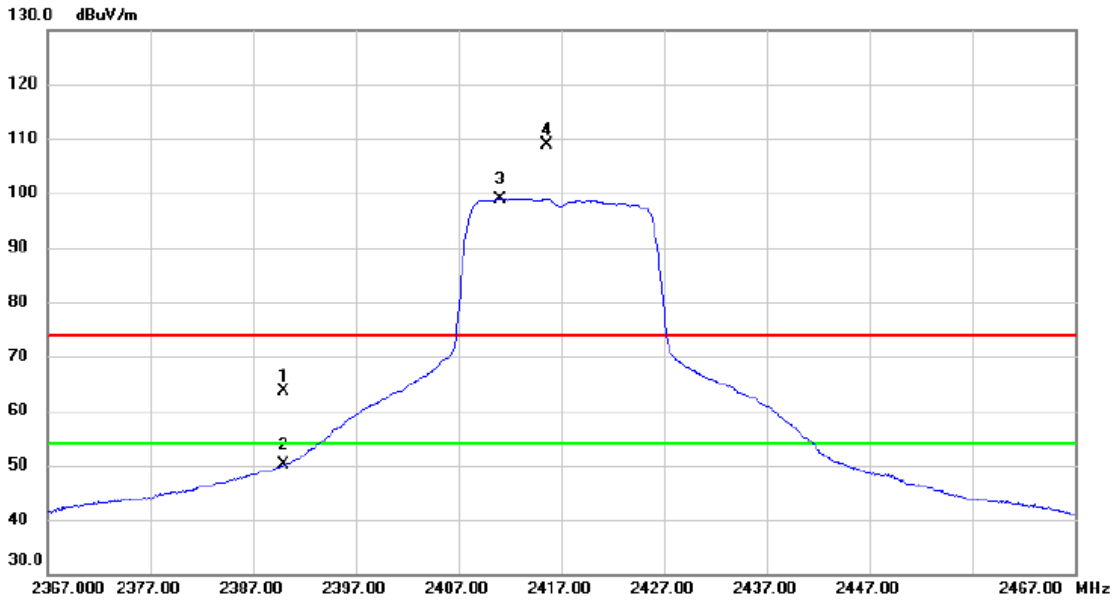


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7236.8920	26.53	13.92	40.45	54.00	-13.55	AVG	
2	7236.9600	40.49	13.92	54.41	74.00	-19.59	Peak	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2417 MHz	Polarization	Vertical
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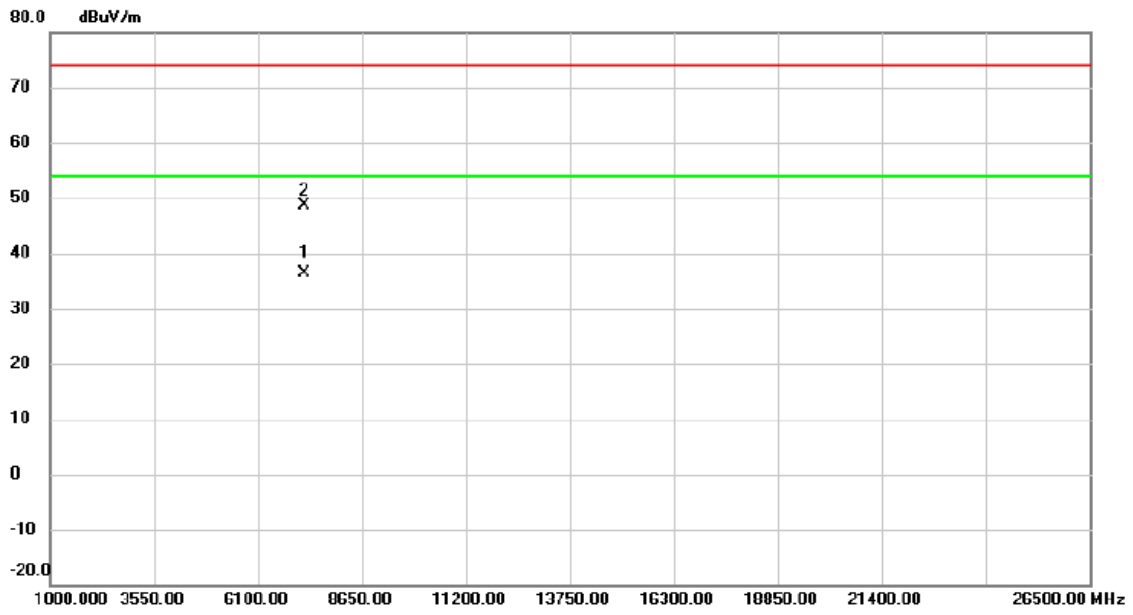
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	51.82	11.83	63.65	74.00	-10.35	peak	
2		2390.000	38.30	11.83	50.13	54.00	-3.87	AVG	
3	*	2411.050	87.12	11.88	99.00	54.00	45.00	AVG	No Limit
4	X	2415.600	96.90	11.89	108.79	74.00	34.79	peak	No Limit

**REMARKS:**

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



Test Mode	TX N(HT20) Mode 2417 MHz	Polarization	Vertical
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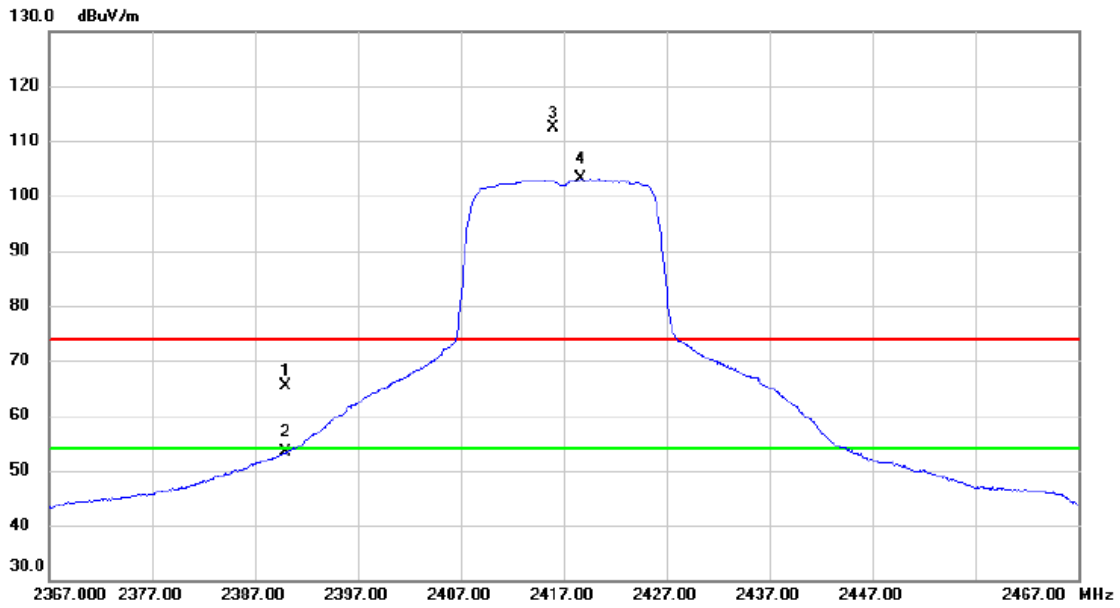


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7247.110	22.47	13.93	36.40	54.00	-17.60	AVG	
2	7247.735	34.78	13.93	48.71	74.00	-25.29	peak	

REMARKS:

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

Test Mode	TX N(HT20) Mode 2417 MHz	Polarization	Horizontal
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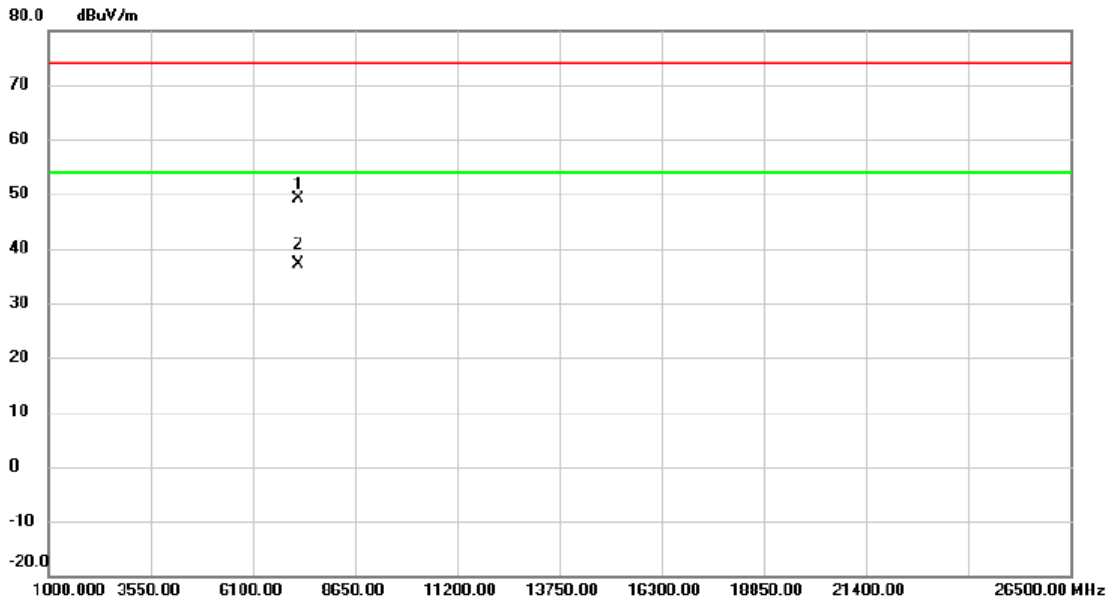


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	53.52	11.83	65.35	74.00	-8.65	peak	
2	2390.000	41.53	11.83	53.36	54.00	-0.64	AVG	
3 X	2415.950	100.49	11.90	112.39	74.00	38.39	peak	No Limit
4 *	2418.650	91.21	11.91	103.12	54.00	49.12	AVG	No Limit

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2417 MHz	Polarization	Horizontal
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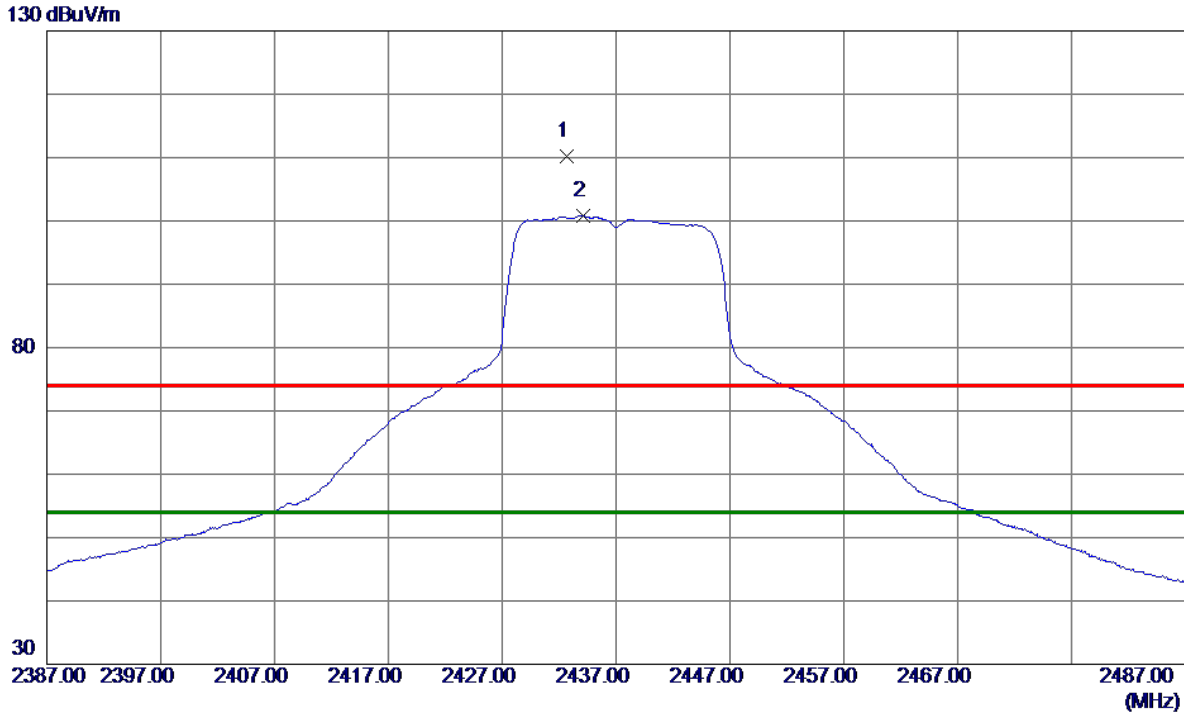
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		7247.180	35.25	13.93	49.18	74.00	-24.82	peak	
2	*	7251.620	23.14	13.94	37.08	54.00	-16.92	AVG	

**REMARKS:**

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

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

Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical
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No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2432.7000	98.31	11.95	110.26	74.00	36.26	Peak	No Limit
2 *	2434.1000	88.85	11.96	100.81	54.00	46.81	AVG	No Limit

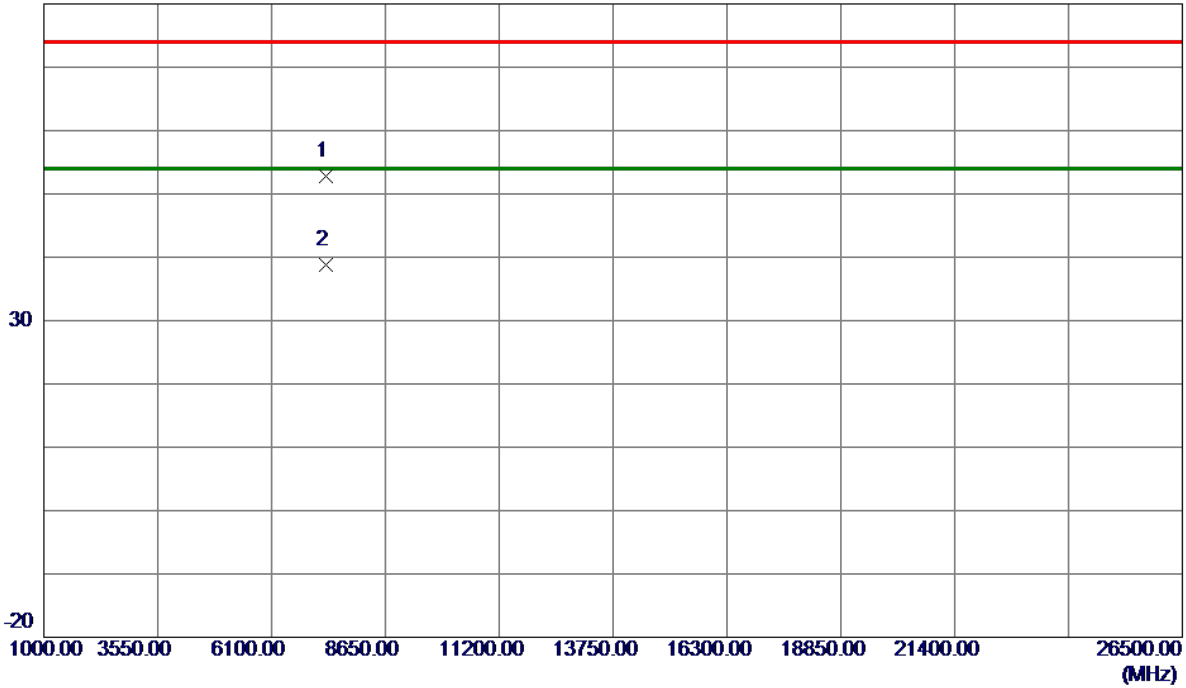
**REMARKS:**

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

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

Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical
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80 dBuV/m

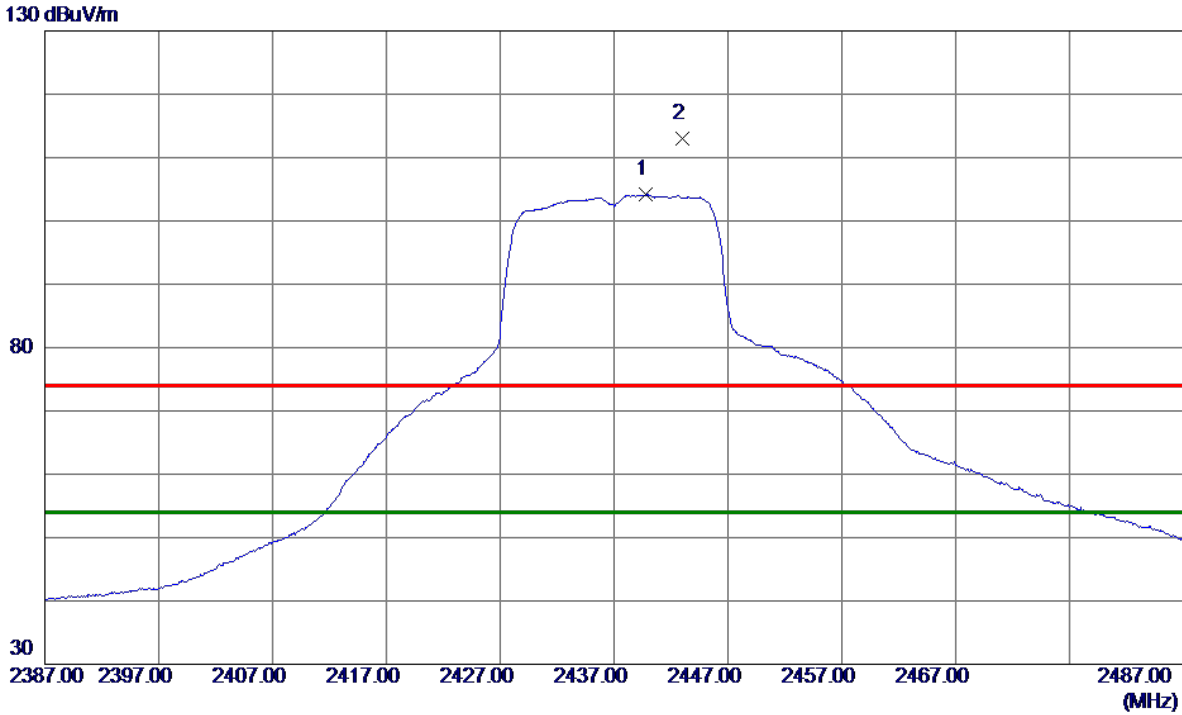


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7310.6630	38.83	14.02	52.85	74.00	-21.15	Peak	
2 *	7310.9080	24.83	14.02	38.85	54.00	-15.15	AVG	

**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
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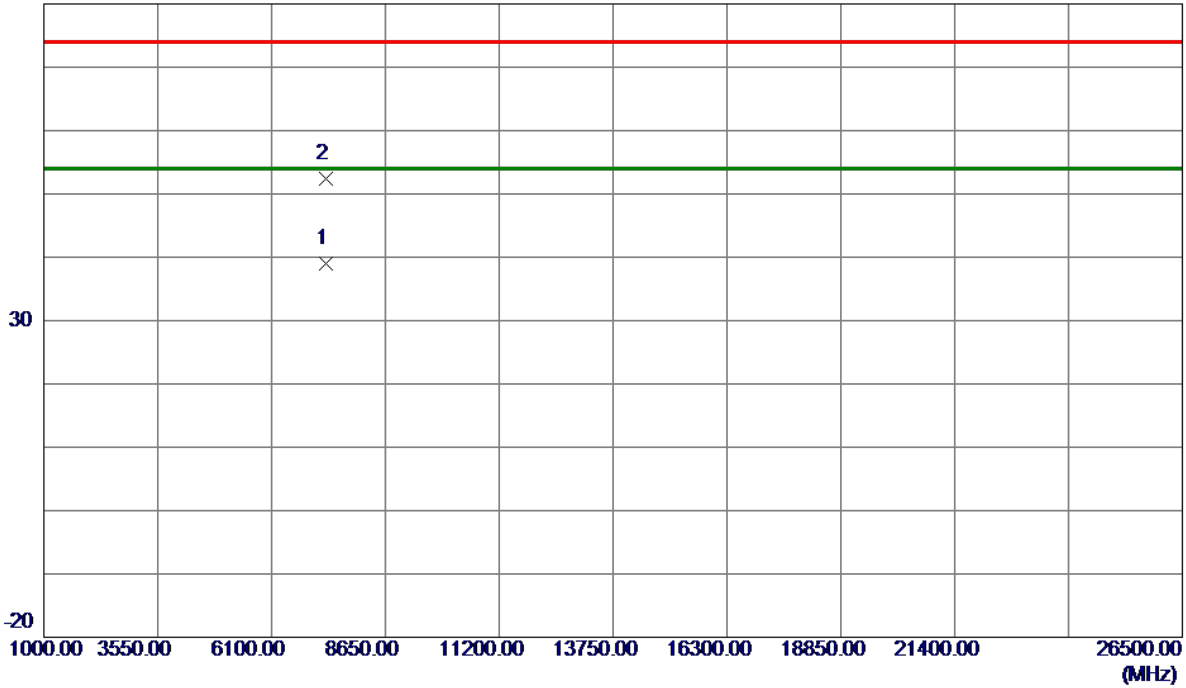
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2439.8000	92.18	11.98	104.16	54.00	50.16	AVG	No Limit
2	2443.0500	101.11	11.99	113.10	74.00	39.10	Peak	No Limit

**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
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80 dBuV/m

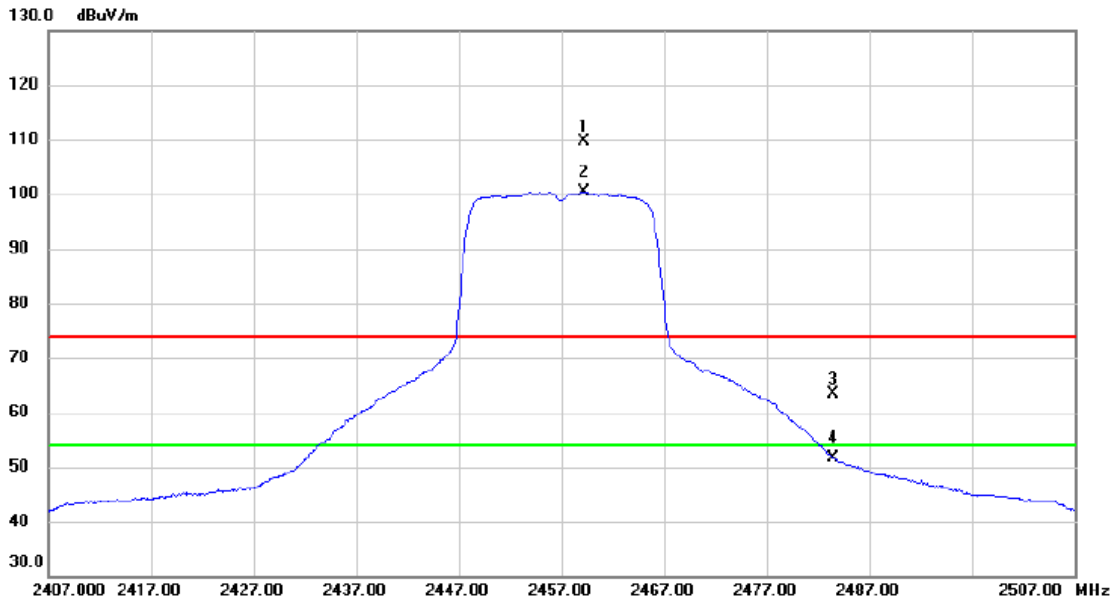


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7311.2970	25.03	14.02	39.05	54.00	-14.95	AVG	
2	7313.4830	38.46	14.02	52.48	74.00	-21.52	Peak	

**REMARKS:**

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

Test Mode	TX N(HT20) Mode 2457 MHz	Polarization	Vertical
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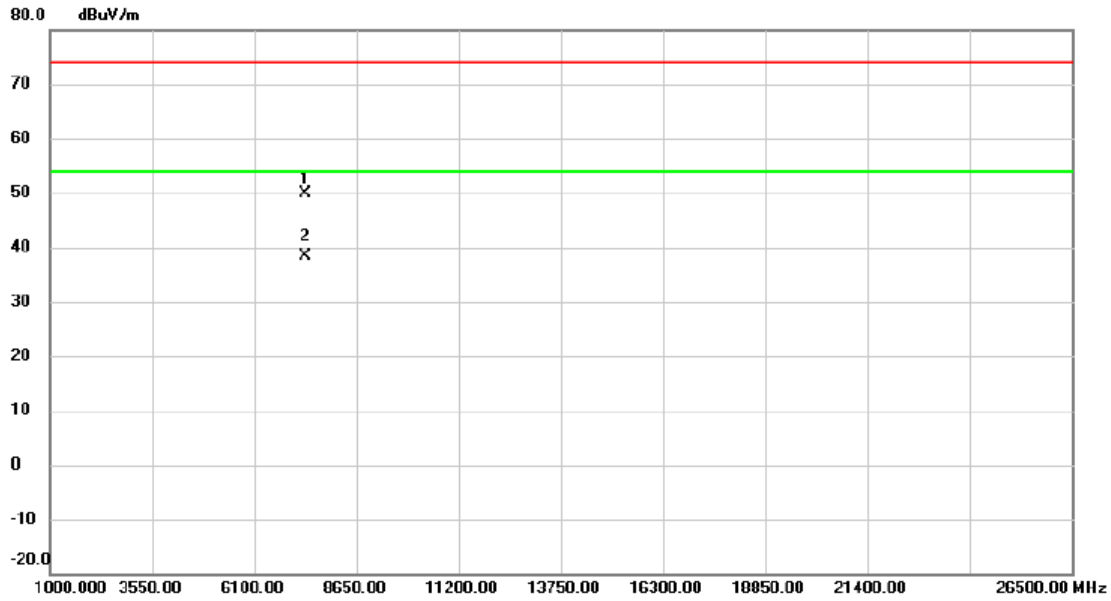
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2459.150	97.52	12.04	109.56	74.00	35.56	peak	No Limit
2	*	2459.150	88.43	12.04	100.47	54.00	46.47	AVG	No Limit
3		2483.500	51.20	12.12	63.32	74.00	-10.68	peak	
4		2483.500	39.61	12.12	51.73	54.00	-2.27	AVG	

**REMARKS:**

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



Test Mode	TX N(HT20) Mode 2457 MHz	Polarization	Vertical
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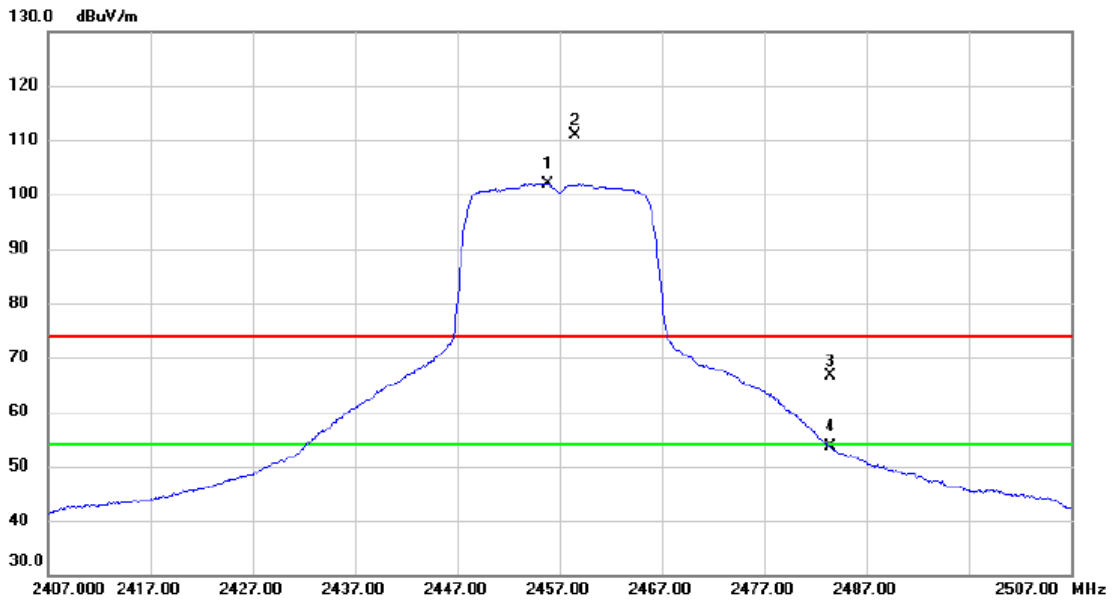
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7369.170	35.87	14.10	49.97	74.00	-24.03	peak	
2 *	7375.940	24.18	14.11	38.29	54.00	-15.71	AVG	

**REMARKS:**

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

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

Test Mode	TX N(HT20) Mode 2457 MHz	Polarization	Horizontal
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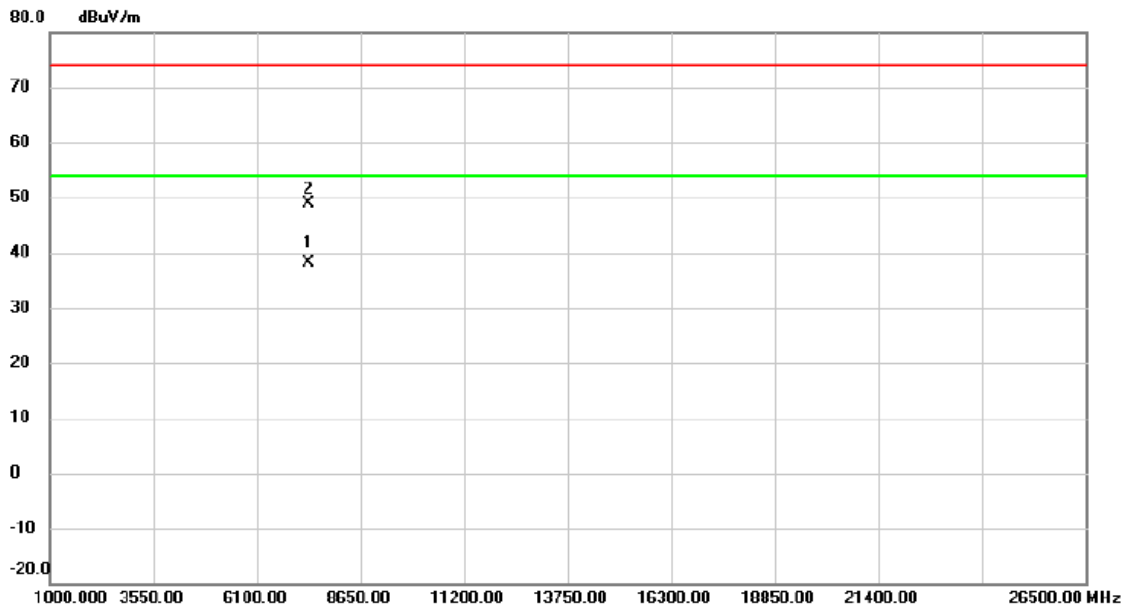
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2455.850	89.92	12.02	101.94	54.00	47.94	AVG	No Limit
2	X	2458.550	98.96	12.04	111.00	74.00	37.00	peak	No Limit
3		2483.500	54.63	12.12	66.75	74.00	-7.25	peak	
4		2483.500	41.41	12.12	53.53	54.00	-0.47	AVG	

**REMARKS:**

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

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

Test Mode	TX N(HT20) Mode 2457 MHz	Polarization	Horizontal
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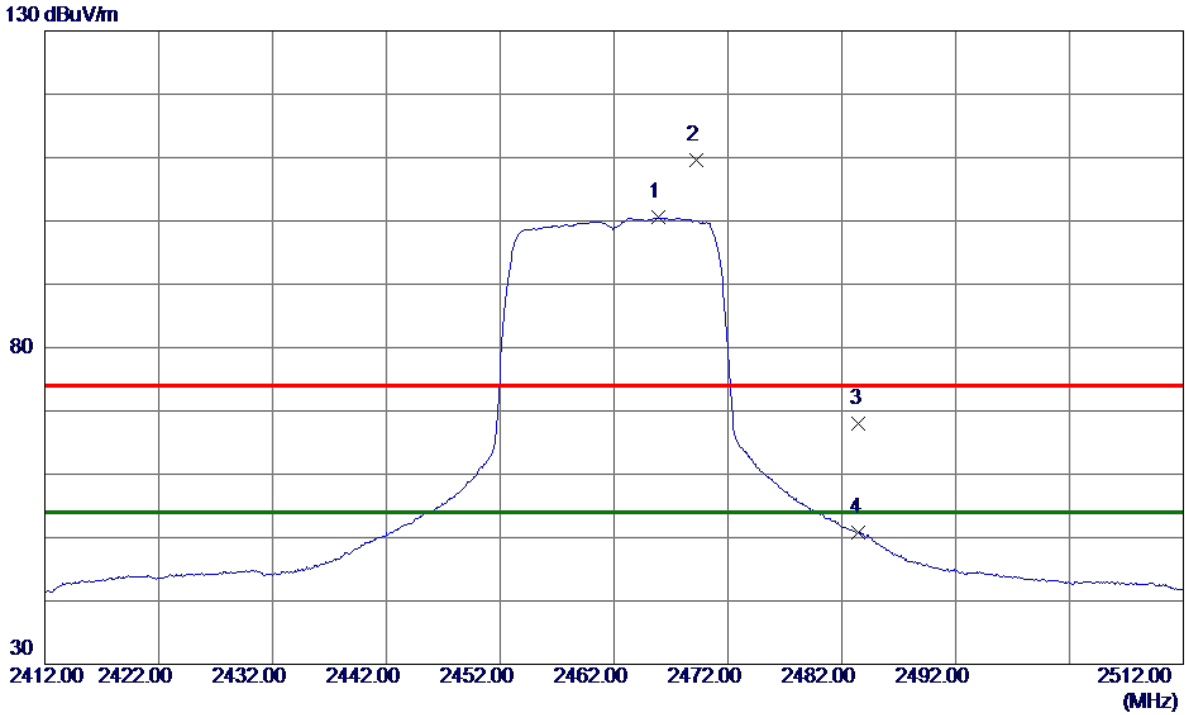


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7375.620	23.93	14.11	38.04	54.00	-15.96	AVG	
2	7375.635	34.87	14.11	48.98	74.00	-25.02	peak	

**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
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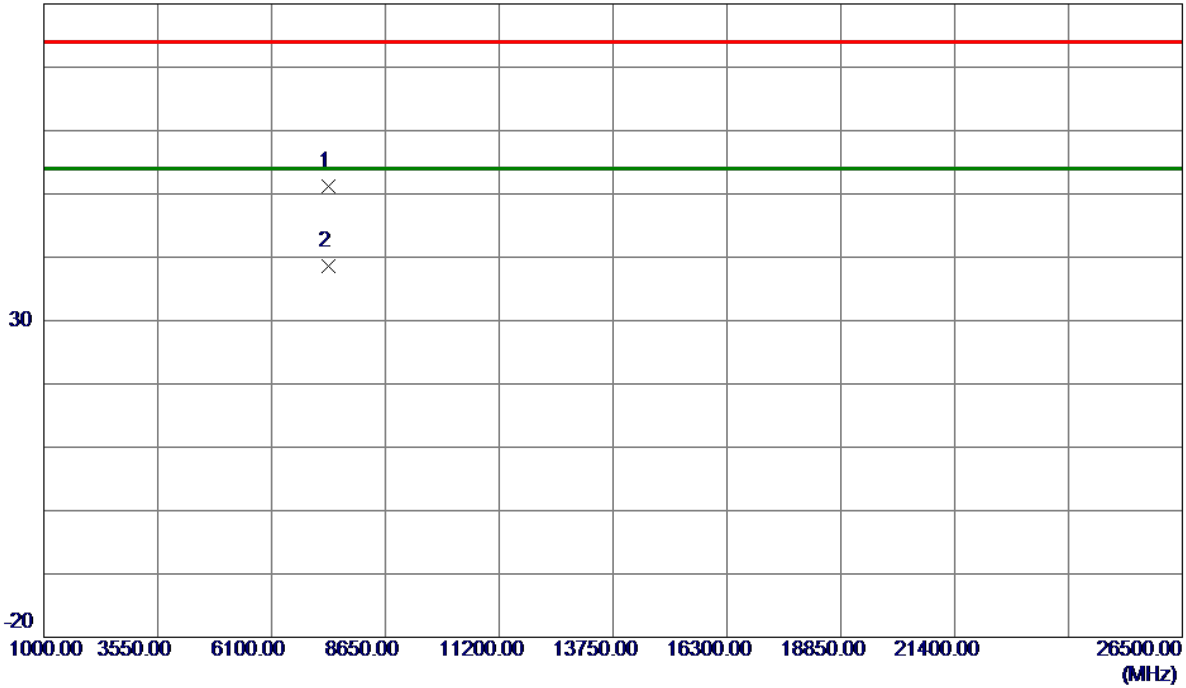
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2465.9000	88.46	12.06	100.52	54.00	46.52	AVG	No Limit
2	2469.2500	97.52	12.07	109.59	74.00	35.59	Peak	No Limit
3	2483.5000	55.80	12.12	67.92	74.00	-6.08	Peak	
4	2483.5000	38.66	12.12	50.78	54.00	-3.22	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
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80 dBuV/m



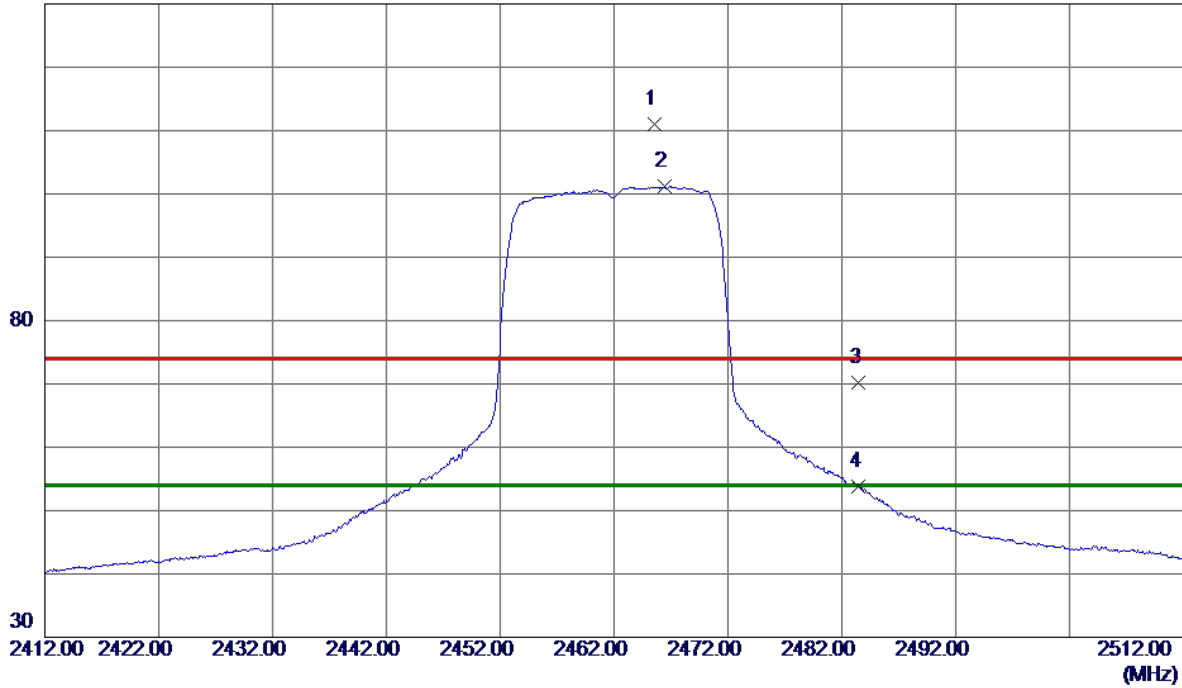
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7386.0420	37.13	14.12	51.25	74.00	-22.75	Peak	
2 *	7386.6370	24.52	14.12	38.64	54.00	-15.36	AVG	

**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
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130 dBuV/m



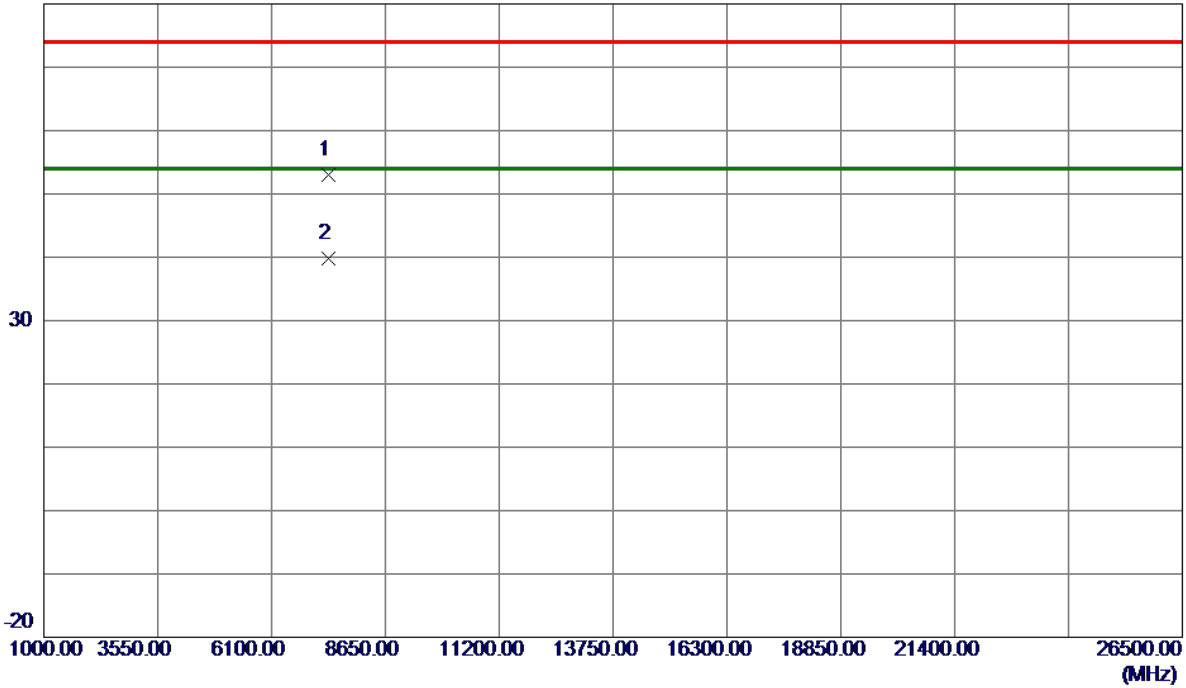
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2465.5500	99.00	12.06	111.06	74.00	37.06	Peak	No Limit
2 *	2466.4500	89.12	12.06	101.18	54.00	47.18	AVG	No Limit
3	2483.5000	58.10	12.12	70.22	74.00	-3.78	Peak	
4	2483.5000	41.66	12.12	53.78	54.00	-0.22	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
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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	7386.0230	38.89	14.12	53.01	74.00	-20.99	Peak	
2 *	7387.4250	25.75	14.12	39.87	54.00	-14.13	AVG	

**REMARKS:**

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

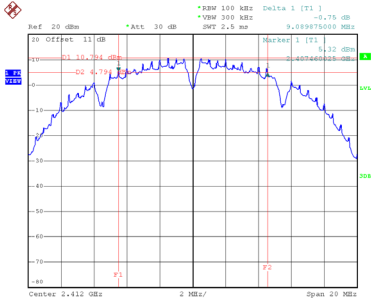
**APPENDIX E - BANDWIDTH**



Test Mode	TX B Mode
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Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	9.09	14.24	0.50	Complies
06	2437	9.14	14.24	0.50	Complies
11	2462	9.56	14.24	0.50	Complies

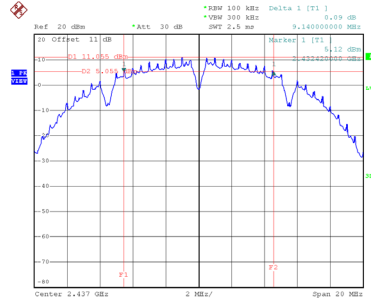
**CH01**



Date: 25\_MAR.2021 10:59:26

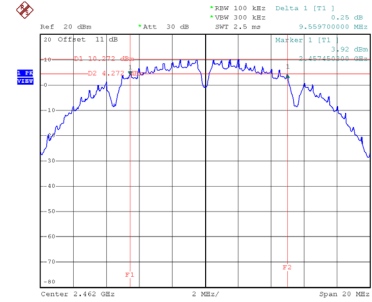
**CH06**

**6 dB Bandwidth**



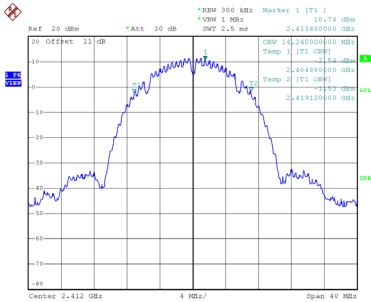
Date: 25\_MAR.2021 11:03:05

**CH11**

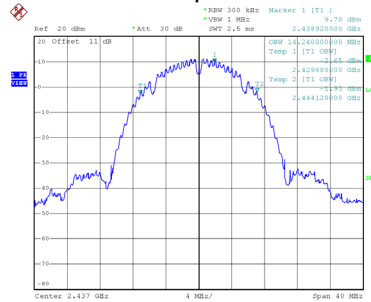


Date: 25\_MAR.2021 11:06:03

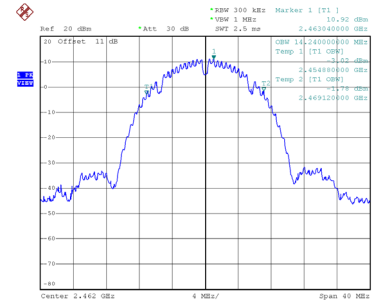
**99 % Occupied Bandwidth**



Date: 25\_MAR.2021 10:59:34



Date: 25\_MAR.2021 11:03:14

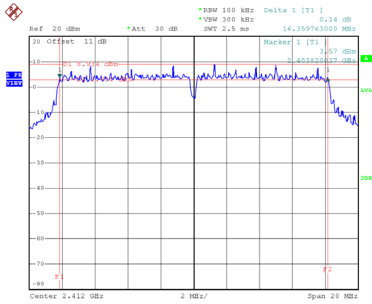


Date: 25\_MAR.2021 11:06:11

Test Mode TX G Mode

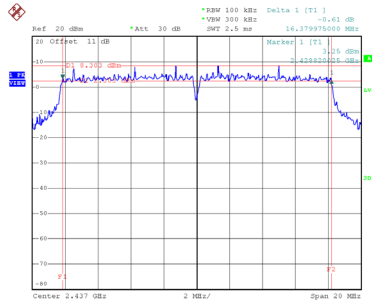
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.36	17.92	0.50	Complies
06	2437	16.38	18.16	0.50	Complies
11	2462	16.38	17.84	0.50	Complies

**CH01**



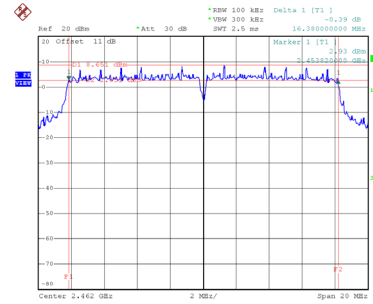
Date: 25\_MAR.2021 11:08:53

**CH06**  
6 dB Bandwidth



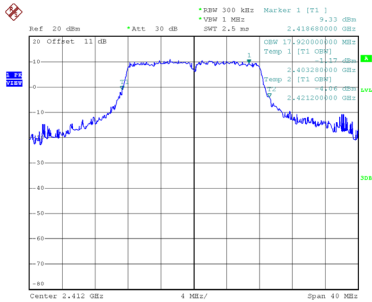
Date: 25\_MAR.2021 11:10:20

**CH11**

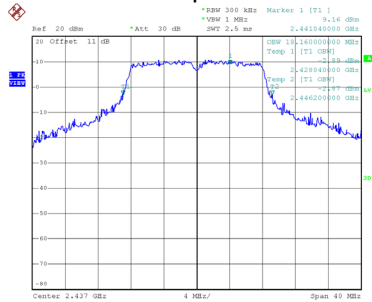


Date: 25\_MAR.2021 11:11:46

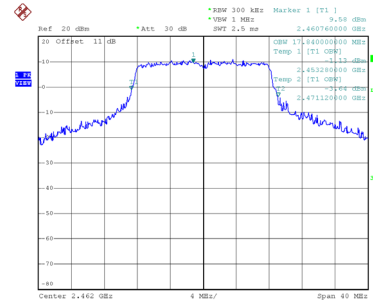
**99 % Occupied Bandwidth**



Date: 25\_MAR.2021 11:09:01



Date: 25\_MAR.2021 11:10:28

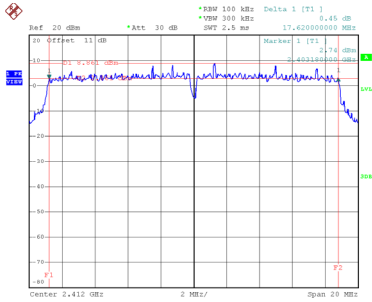


Date: 25\_MAR.2021 11:11:54

Test Mode	TX N(HT20) Mode
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Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.62	18.72	0.50	Complies
06	2437	17.62	18.96	0.50	Complies
11	2462	17.63	18.80	0.50	Complies

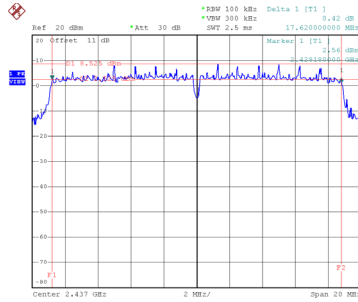
**CH01**



Date: 25\_MAR.2021 11:14:16

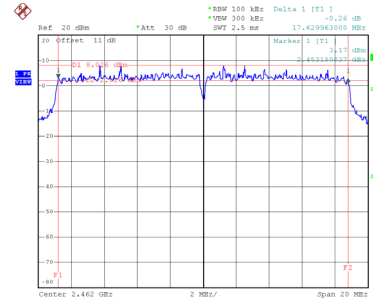
**CH06**

**6 dB Bandwidth**



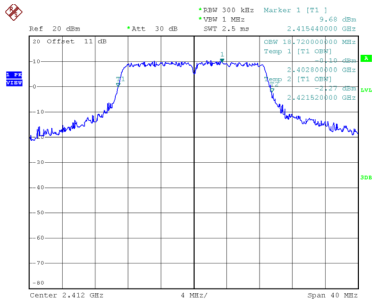
Date: 25\_MAR.2021 11:21:26

**CH11**

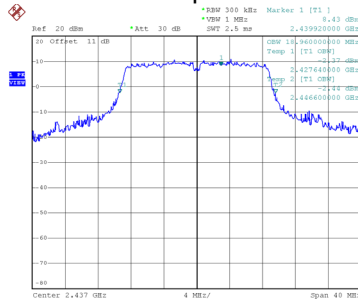


Date: 25\_MAR.2021 11:22:53

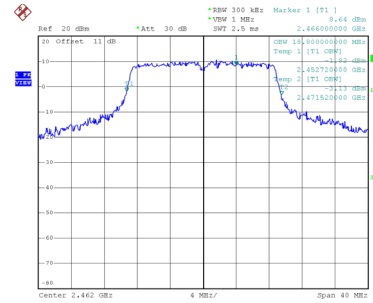
**99 % Occupied Bandwidth**



Date: 25\_MAR.2021 11:14:24



Date: 25\_MAR.2021 11:21:34



Date: 25\_MAR.2021 11:23:01

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

Test Mode	TX B Mode
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Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.84	0.00	19.84	30.00	1.0000	Complies
06	2437	19.98	0.00	19.98	30.00	1.0000	Complies
11	2462	19.91	0.00	19.91	30.00	1.0000	Complies

Test Mode	TX G Mode
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Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.02	0.26	15.28	30.00	1.0000	Complies
06	2437	19.88	0.26	20.14	30.00	1.0000	Complies
11	2462	15.57	0.26	15.83	30.00	1.0000	Complies

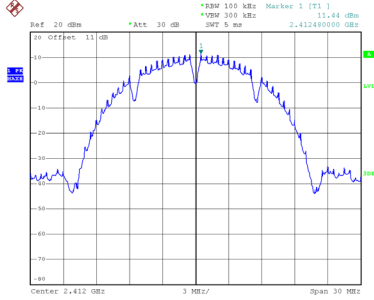
Test Mode	TX N(HT20) Mode
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Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.51	0.28	14.79	30.00	1.0000	Complies
06	2437	19.96	0.28	20.24	30.00	1.0000	Complies
11	2462	14.92	0.28	15.20	30.00	1.0000	Complies

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

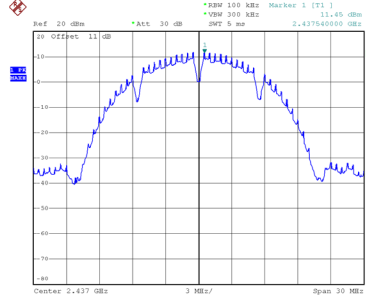
Test Mode TX B Mode

### Reference Level-CH01



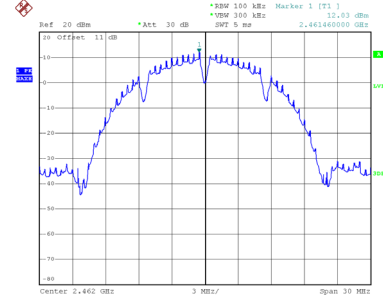
Date: 27.APR.2021 17:24:34

### Reference Level-CH06



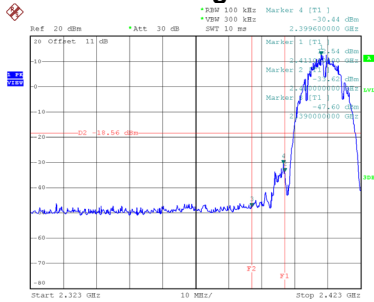
Date: 27.APR.2021 17:23:30

### Reference Level-CH11



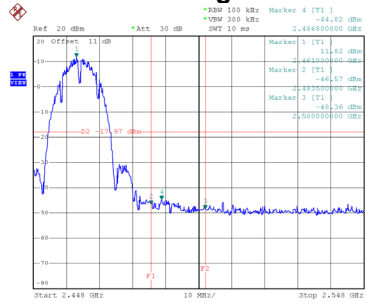
Date: 27.APR.2021 17:25:04

### Bandedge-CH01



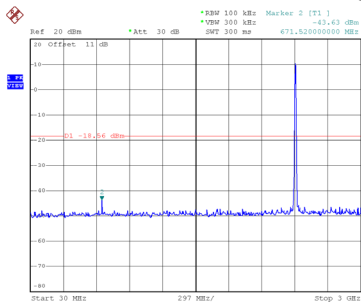
Date: 11.MAY.2021 14:11:02

### Bandedge-CH11

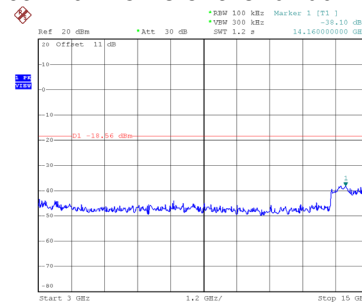


Date: 11.MAY.2021 14:44:27

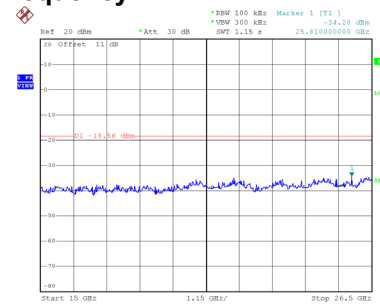
## CH01 – 10th Harmonic of the fundamental frequency



Date: 11.MAY.2021 14:12:39

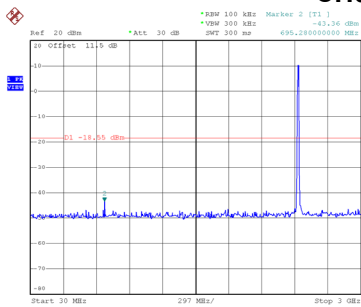


Date: 11.MAY.2021 14:12:49

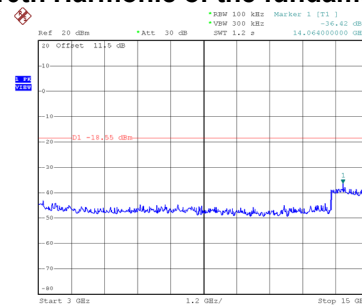


Date: 11.MAY.2021 14:12:58

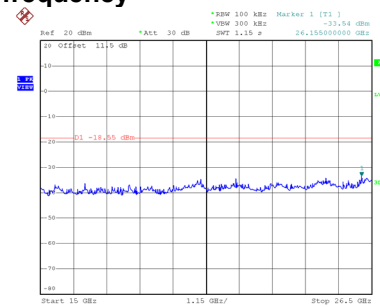
## CH06 – 10th Harmonic of the fundamental frequency



Date: 27.APR.2021 20:00:22

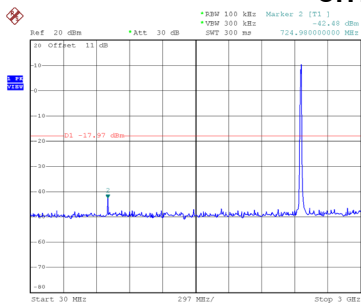


Date: 27.APR.2021 20:00:31

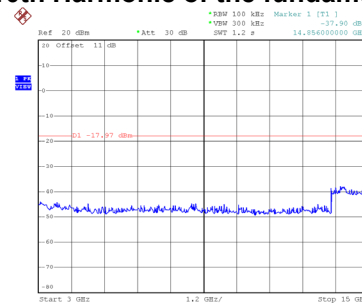


Date: 27.APR.2021 20:00:40

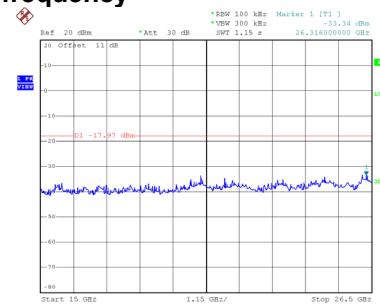
## CH11 – 10th Harmonic of the fundamental frequency



Date: 11.MAY.2021 14:39:14



Date: 11.MAY.2021 14:39:24

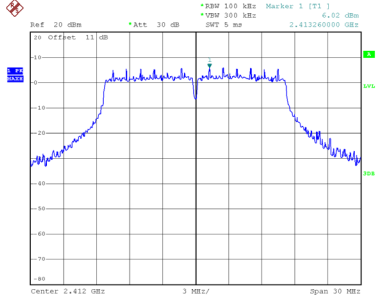


Date: 11.MAY.2021 14:39:33



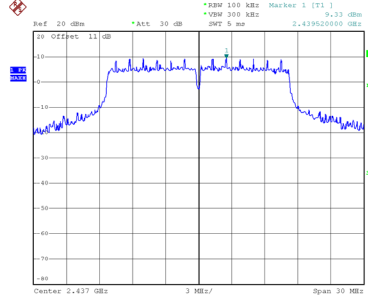
Test Mode TX G Mode

### Reference Level-CH01



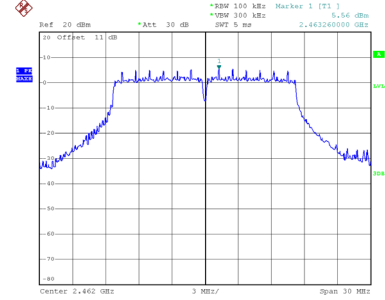
Date: 27.APR.2021 17:27:40

### Reference Level-CH06



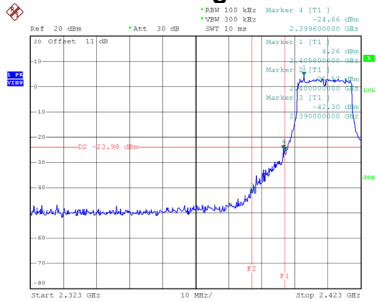
Date: 27.APR.2021 17:29:05

### Reference Level-CH11



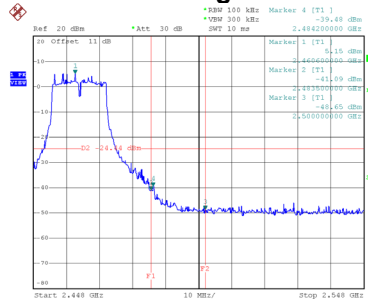
Date: 27.APR.2021 17:30:14

### Bandedge-CH01



Date: 11.MAY.2021 14:18:54

### Bandedge-CH11



Date: 11.MAY.2021 14:41:22