



FCC Radio Test Report

FCC ID: G95OWM7111

This report concerns: Original Grant

Project No. : 2406C089B
Equipment : IoT gateway
Brand Name : Vantiva
Test Model : OWM7111IOT
Series Model : OWM7111IOT1
Applicant : Vantiva USA LLC
Address : 4855 Peachtree Industrial Blvd. Suite 200 Norcross, Georgia 30092
Manufacturer : Vantiva USA LLC
Address : 4855 Peachtree Industrial Blvd. Suite 200 Norcross, Georgia 30092
Factory : FUHONG PRECISION COMPONENT (BAC GIANG) COMPANY LIMITED
Address : Dinh Tram Industrial Zone.Nenh Ward Viet Yen Town.Bac Giang Province. Vietnam
Date of Receipt : Jun. 25, 2024
Date of Test : Jun. 25, 2024 ~ Aug. 21, 2024
Issued Date : Sep. 27, 2024
Report Version : R00
Test Sample : Engineering Sample No.: DG2024062512 for radiated and AC conducted power line emission, DG2024062515 for others.
Standard(s) : FCC CFR Title 47, Part 15, Subpart C

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

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Declaration

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BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 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.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2406C089B	R00	Original Report.	Sep. 27, 2024	Valid

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of A2LA:

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

2. 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.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Dalang, Dongguan City, Guangdong People's Republic of China.

BTL's Registration Number for FCC: 747969

BTL's Designation Number for FCC: CN1377

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95.45% 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_i (dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.88

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	U_i (dB)
DG-CB01	CISPR	9kHz ~ 30MHz	2.36

Test Site	Method	Measurement Frequency Range	Ant. H / V	U_i (dB)
DG-CB03 (3m)	CISPR	30MHz ~ 200MHz	V	4.40
		30MHz ~ 200MHz	H	3.62
		200MHz ~ 1,000MHz	V	4.58
		200MHz ~ 1,000MHz	H	3.98

Test Site	Method	Measurement Frequency Range	U_i (dB)
DG-CB03 (3m)	CISPR	1GHz ~ 6GHz	4.08
		6GHz ~ 18GHz	4.62

Test Site	Method	Measurement Frequency Range	U_i (dB)
DG-CB03 (1m)	CISPR	18 ~ 26.5 GHz	3.36

C. Other Measurement:

Test Item	Uncertainty
Bandwidth	0.90 %
Maximum Output Power	1.3 dB
Conducted Spurious Emission	1.9 dB
Power Spectral Density	1.4 dB
Temperature	0.8 °C
Humidity	2.2 %

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

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
AC Power Line Conducted Emissions	25°C	60%	AC 120V/60Hz	Hayden Chen	Jul. 17, 2024
Radiated Emissions-9kHz to 30 MHz	23°C	46%	AC 120V/60Hz	Hayden Chen	Aug. 05, 2024
Radiated Emissions-30MHz to 1000MHz	26°C	56%	AC 120V/60Hz	Allen Tong	Jul. 17, 2024
Radiated Emissions-Above 1000MHz	25°C	53%	AC 120V/60Hz	Chen Mo	Jul. 27, 2024 Aug. 01, 2024
	25°C	56%	AC 120V/60Hz	Allen Tong	Jul. 18, 2024
Bandwidth	23°C	58%	PoE 54V	Parker Yang	Jul. 20, 2024
Maximum Output Power	22-25°C	48-60%	PoE 54V	Steve Zhou	Jul. 12, 2024 ~ Aug. 02, 2024
Conducted Spurious Emissions	23°C	58%	PoE 54V	Parker Yang	Jul. 20, 2024
Power Spectral Density	23°C	58%	PoE 54V	Parker Yang	Jul. 20, 2024

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	IoT gateway
Brand Name	Vantiva
Test Model	OWM7111IOT
Series Model	OWM7111IOT1
Model Difference(s)	Indoor access point device model: OWM7111IOT Outdoor access point device model : OWM7111IOT1
Software Version	5043_OWM7111IOT_FSW_V07
Hardware Version	FGR
Power Source	DC Voltage supplied from PoE Power Supply. Model: ADP-46PH-54-2- 54046EPCU
Power Rating	INPUT: 100-240V~ 50/60Hz OUTPUT: 54.0V==0.85A
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 300 Mbps IEEE 802.11ax: up to 573.6 Mbps
Maximum Output Power _Non Beamforming	IEEE 802.11b: 29.27 dBm (0.8453 W)
Maximum Output Power _Beamforming	IEEE 802.11ax(HE20): 27.91 dBm (0.6180 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), IEEE 802.11ax(HE20) CH03 - CH09 for IEEE 802.11n(HT40), IEEE 802.11ax(HE40)							
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	IPN	Antenna Type	Connector	Gain (dBi)
1	Vantiva	6338351C	PCB	IPEX	5.4
2	Vantiva	6338352C	PCB	IPEX	6.1

Note:

1) For CDD: Directional gain=4.82 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=6.28 dBi. So, the output power limit is 30-(6.28-6)=29.72

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 802.11n(HT40)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE40)		V(Ant. 1 + Ant. 2)

For Beamforming:

Operating Mode	TX Mode	2TX
IEEE 802.11n(HT20)		V(Ant. 1 + Ant. 2)
IEEE 802.11n(HT40)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)		V(Ant. 1 + Ant. 2)
IEEE 802.11ax(HE40)		V(Ant. 1 + Ant. 2)

3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX N(HT40) Mode Channel 03/06/09
Mode 5	TX AX(HE20) Mode Channel 01/06/11
Mode 6	TX AX(HE40) Mode Channel 03/06/09
Mode 7	TX B Mode Channel 06
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N(HT20) Mode Channel 01/02/06/10/11
Mode 11	TX N(HT40) Mode Channel 03/04/06/08/09
Mode 12	TX AX(HE20) Mode Channel 01/02/06/10/11
Mode 13	TX AX(HE40) Mode Channel 03/04/06/08/09

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 7	TX B Mode Channel 06

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 7	TX B Mode Channel 06

Radiated emissions test- Above 1GHz_Non Beamforming	
Final Test Mode	Description
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N(HT20) Mode Channel 01/02/06/10/11
Mode 11	TX N(HT40) Mode Channel 03/04/06/08/09
Mode 12	TX AX(HE20) Mode Channel 01/02/06/10/11
Mode 13	TX AX(HE40) Mode Channel 03/04/06/08/09

Maximum Output Power test_Non Beamforming	
Final Test Mode	Description
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N(HT20) Mode Channel 01/02/06/10/11
Mode 11	TX N(HT40) Mode Channel 03/04/06/08/09
Mode 12	TX AX(HE20) Mode Channel 01/02/06/10/11
Mode 13	TX AX(HE40) Mode Channel 03/04/06/08/09

Maximum Output Power test_Beamforming	
Final Test Mode	Description
Mode 10	TX N(HT20) Mode Channel 01/02/06/10/11
Mode 11	TX N(HT40) Mode Channel 03/04/06/08/09
Mode 12	TX AX(HE20) Mode Channel 01/02/06/10/11
Mode 13	TX AX(HE40) Mode Channel 03/04/06/08/09

Other Conducted test	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX N(HT40) Mode Channel 03/06/09
Mode 5	TX AX(HE20) Mode Channel 01/06/11
Mode 6	TX AX(HE40) Mode Channel 03/06/09

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 B 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) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.
- (5) 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.
- (6) IEEE 802.11ax mode only supports full RU, so only the full RU is evaluated and measured inside report.
- (7) For radiated emission above 1 GHz test: The polarization of Vertical and Horizontal are evaluated, the worst case is Vertical and recorded.

3.3 PARAMETERS OF TEST SOFTWARE

Non Beamforming

Test Software Version	accessMTool_REL_3_2_0_0				
Frequency (MHz)	2412	2417	2437	2457	2462
IEEE 802.11b	100	99	98	100	99
IEEE 802.11g	87	87	100	86	80
IEEE 802.11n(HT20)	83	87	97	85	75
IEEE 802.11ax(HE20)	76	85	96	81	72
Frequency (MHz)	2422	2427	2437	2447	2452
IEEE 802.11n(HT40)	72	75	86	79	75
IEEE 802.11ax(HE40)	70	73	84	77	74

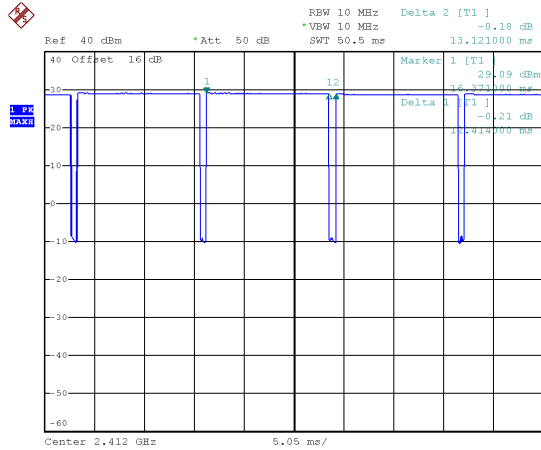
Beamforming

Test Software Version	accessMTool_REL_3_2_0_0				
Frequency (MHz)	2412	2417	2437	2457	2462
IEEE 802.11n(HT20)	82	86	96	84	74
IEEE 802.11ax(HE20)	75	84	95	80	71
Frequency (MHz)	2422	2427	2437	2447	2452
IEEE 802.11n(HT40)	71	74	85	78	74
IEEE 802.11ax(HE40)	69	72	83	76	73

3.4 DUTY CYCLE

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

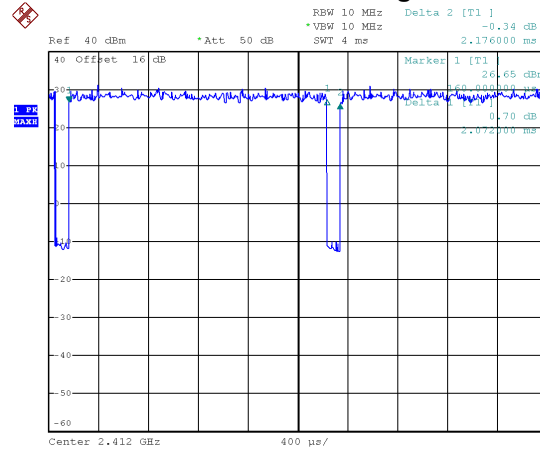
IEEE 802.11b



Date: 20.JUL.2024 13:25:19

Duty cycle = 12.414 ms / 13.121 ms = 94.61%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.24$

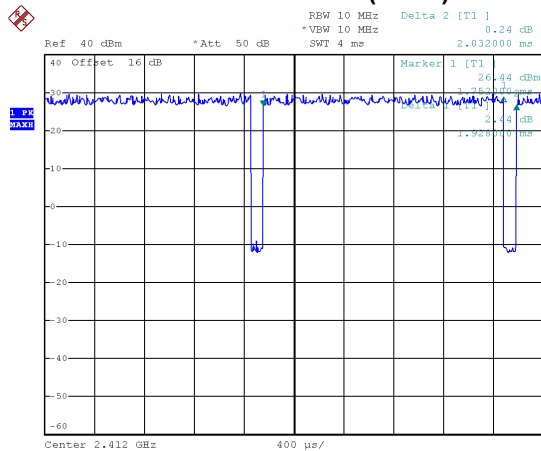
IEEE 802.11g



Date: 20.JUL.2024 13:26:49

Duty cycle = 2.072 ms / 2.176 ms = 95.22%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.21$

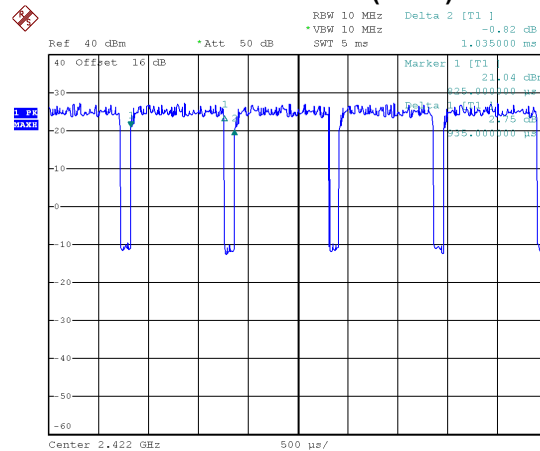
IEEE 802.11n(HT20)



Date: 20.JUL.2024 13:28:10

Duty cycle = 1.928 ms / 2.032 ms = 94.88%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.23$

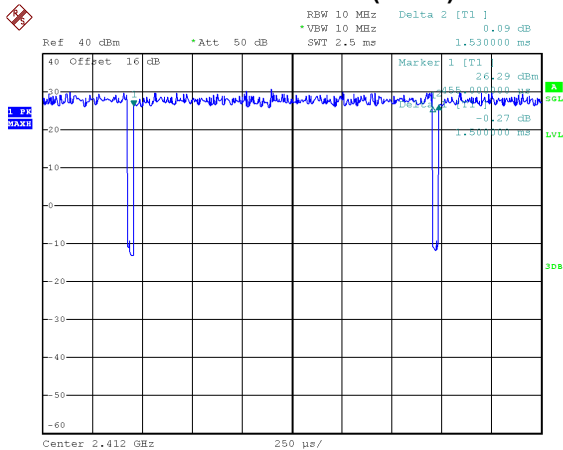
IEEE 802.11n(HT40)



Date: 20.JUL.2024 13:29:40

Duty cycle = 0.935 ms / 1.035 ms = 90.34%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.44$

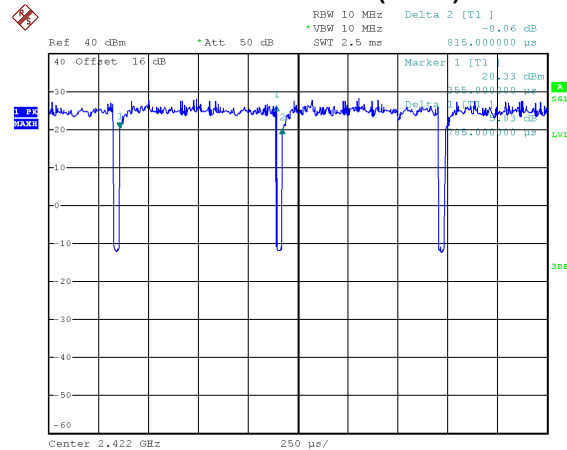
IEEE 802.11ax(HE20)



Date: 20.JUL.2024 13:31:36

Duty cycle = 1.500 ms / 1.530 ms = 98.04%
Duty Factor = 10 log(1/Duty cycle) = 0.00

IEEE 802.11ax(HE40)



Date: 20.JUL.2024 13:32:04

Duty cycle = 0.785 ms / 0.815 ms = 96.32%
Duty Factor = 10 log(1/Duty cycle) = 0.16

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 81 Hz.

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 483 Hz.

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 519 Hz.

For IEEE 802.11n(HT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1070 Hz.

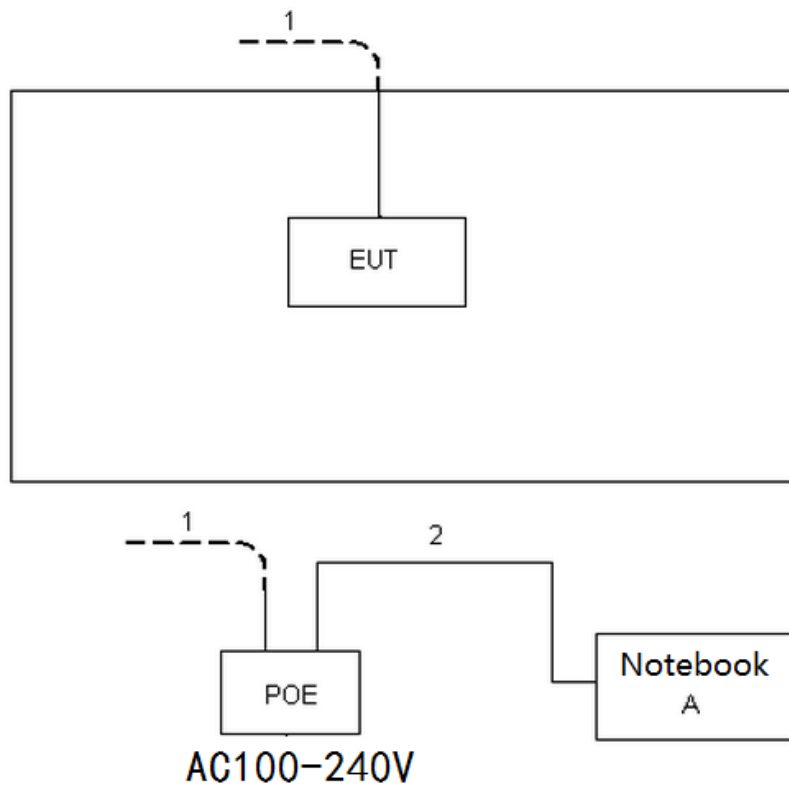
For IEEE 802.11ax(HE20):

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.

For IEEE 802.11ax(HE40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1274 Hz.

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.6 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	RJ45 Cable	NO	NO	10m
2	RJ45 Cable	NO	NO	1m

3.7 CUSTOMER INFORMATION DESCRIPTION

- 1) The antenna gain and beamforming gain are provided by the manufacturer.
- 2) Except for AC power line conducted emissions and radiated emissions, the results of all test items include cable losses. All cable losses are provided by the testing laboratory.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)	
	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) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
 Margin Level = Measurement Value – Limit Value

4.2 TEST PROCEDURE

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

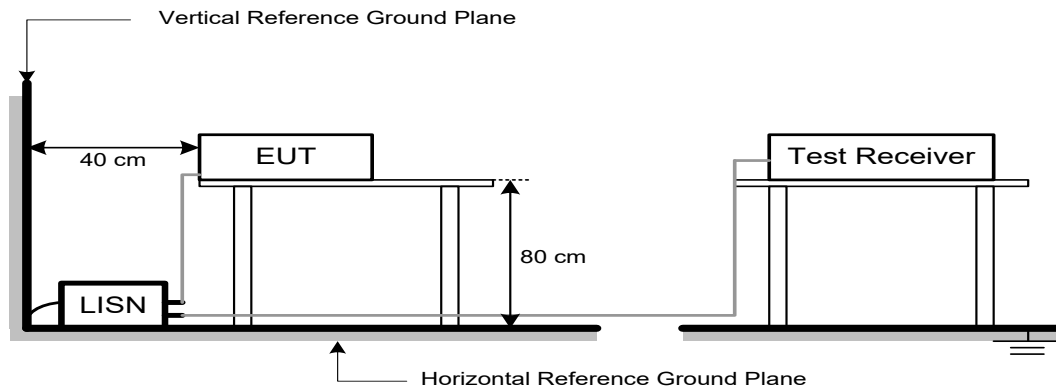
The following table is the setting of the receiver:

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

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS

Please refer to the APPENDIX A.

5. RADIATED EMISSIONS

5.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Band edge/ Harmonic at 3m (dBμV/m)		Harmonic at 1m (dBμV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	83.5 (Note 4)	63.5 (Note 4)

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)

$$FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

20log (d_{limit}/d_{measure})=20log (3/1)=9.5 dB.

FS_{limit}: Harmonic at 3m Peak and Average limit.

FS_{max}: Harmonic at 1m Peak and Average Maximum value.

d_{limit}: Harmonic at 3m test distance.

d_{measure}: Harmonic Actual test distance.

5.2 TEST PROCEDURE

- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance of 3 m or 1m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
(below 1 GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- For the actual test configuration, please refer to the related Item -EUT Test Photos.

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

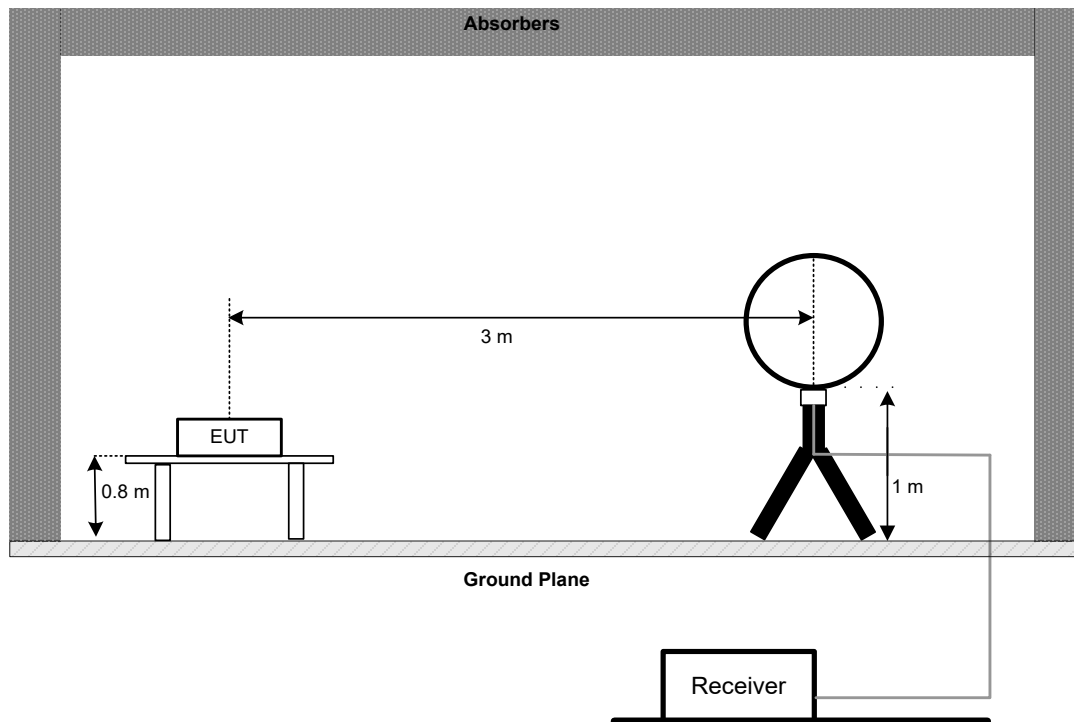
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector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

5.3 DEVIATION FROM TEST STANDARD

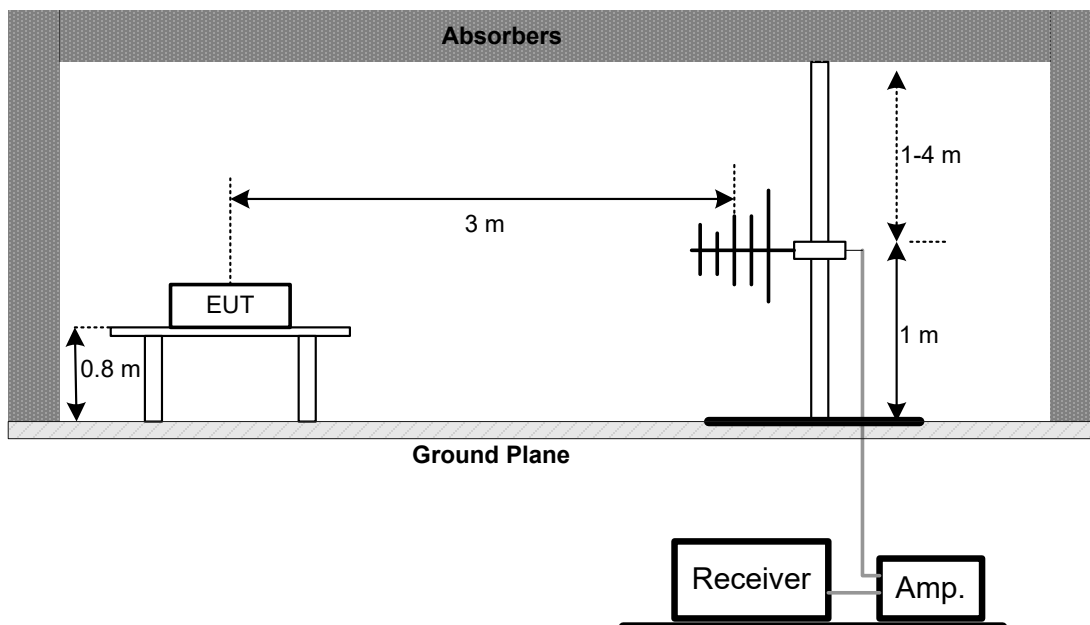
No deviation.

5.4 TEST SETUP

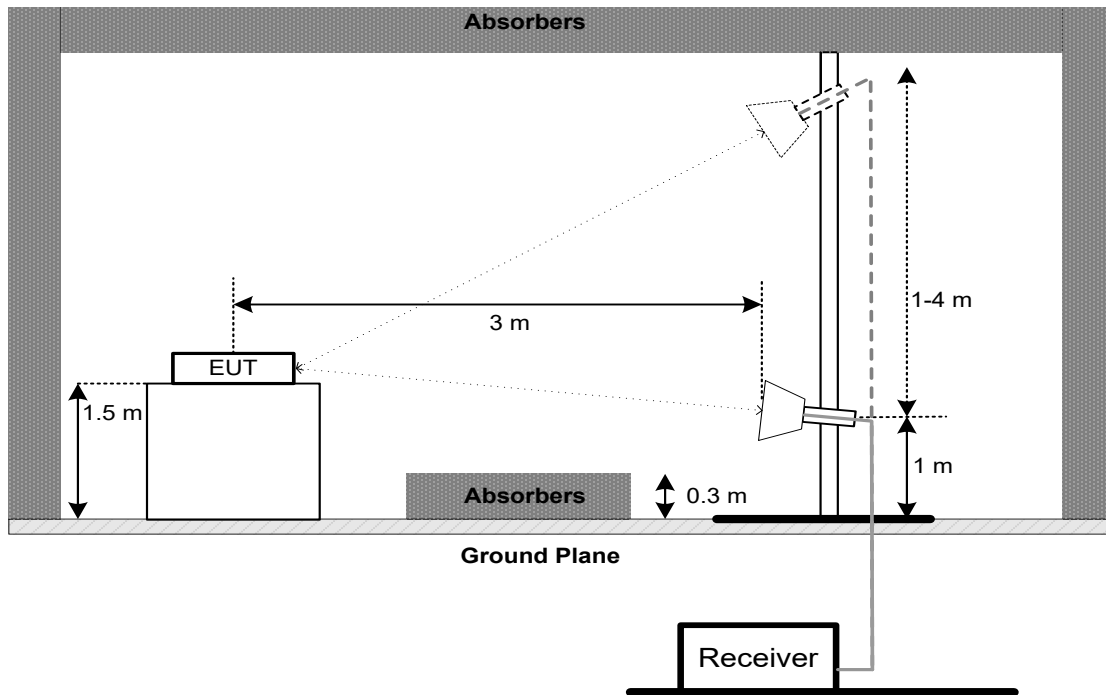
9 kHz to 30 MHz



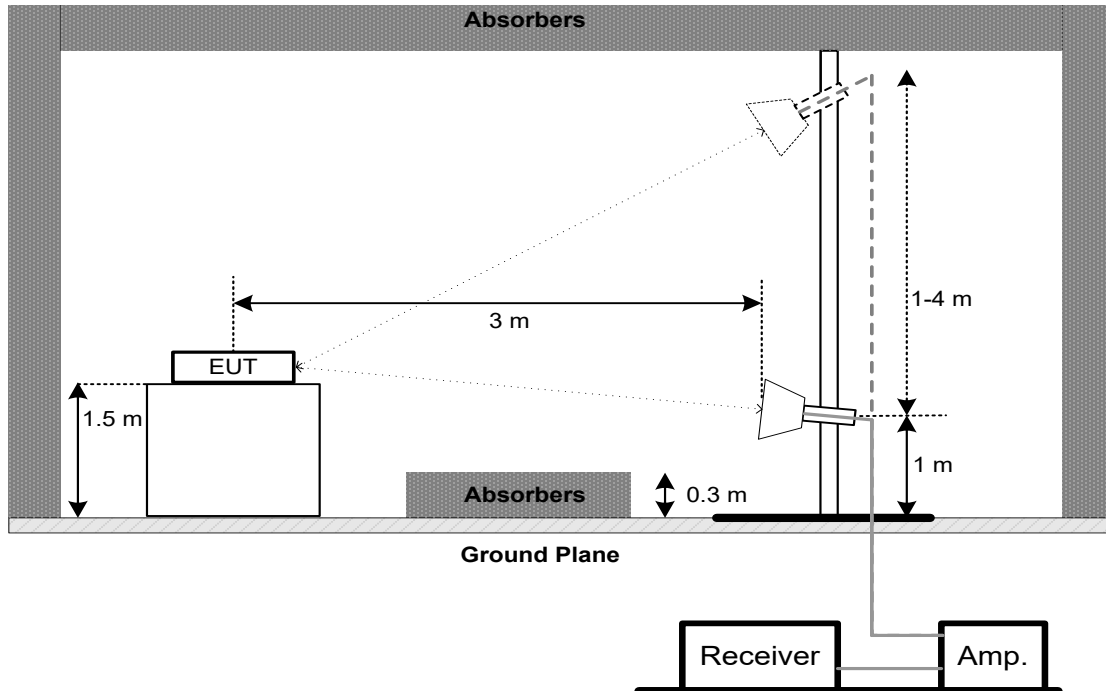
30 MHz to 1 GHz



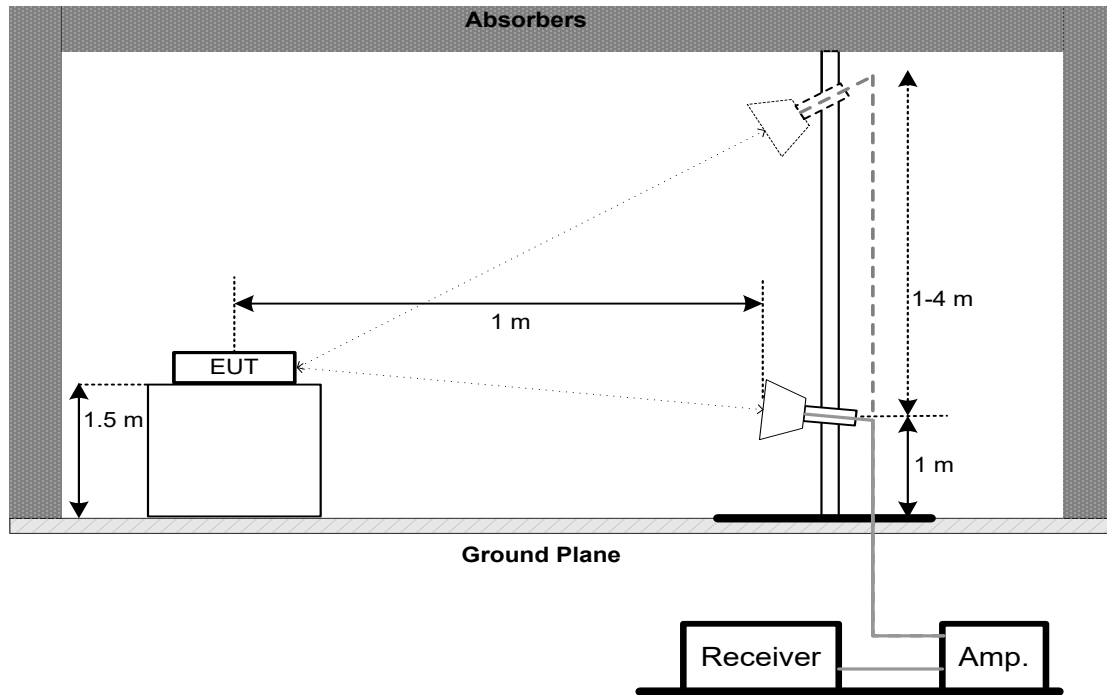
Above 1 GHz Band edge



Harmonic(1 GHz to 18 GHz)



Harmonic(18 GHz to 26.5 GHz)



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 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.

5.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

5.8 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.

6. BANDWIDTH

6.1 LIMIT

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

6.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- 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

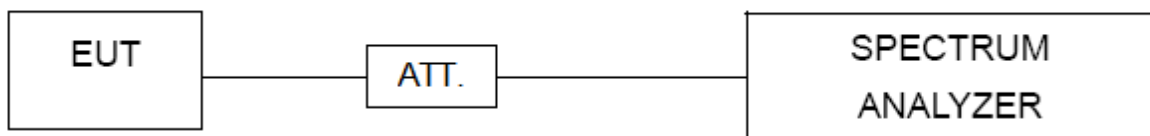
For 99% Emission Bandwidth:

Spectrum Parameters	Setting
Span Frequency	Between 1.5 times and 5.0 times the OBW
RBW	300 kHz For 20MHz 1 MHz For 40MHz
VBW	1 MHz For 20MHz 3 MHz For 40MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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 E.

7. MAXIMUM OUTPUT POWER

7.1 LIMIT

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

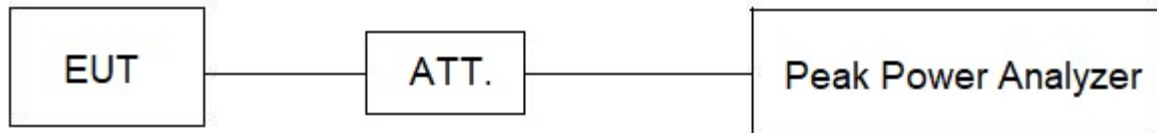
7.2 TEST PROCEDURE

- The EUT was directly connected to the peak power analyzer and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.2.3.1 of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

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 F.

8. CONDUCTED SPURIOUS EMISSIONS

8.1 LIMIT

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

8.2 TEST PROCEDURE

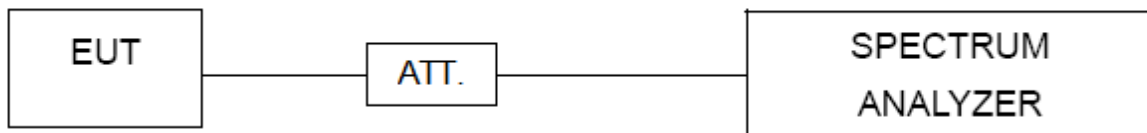
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Start Frequency	30 MHz
Stop Frequency	26.5 GHz
RBW	100 kHz
VBW	300 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 G.

9. POWER SPECTRAL DENSITY

9.1 LIMIT

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

9.2 TEST PROCEDURE

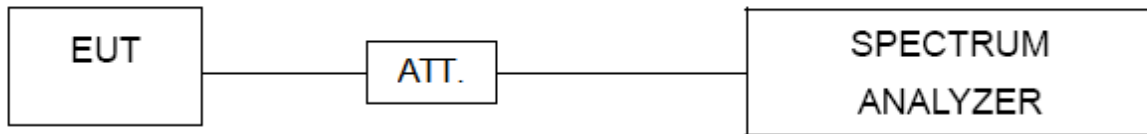
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Span Frequency	25 MHz (20 MHz) / 60 MHz (40 MHz)
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6 TEST RESULTS

Please refer to the APPENDIX H.

10. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI TEST RECEIVER	R&S	ESCI	100382	Dec. 22, 2024
2	TWO-LINE V-NETWORK	R&S	ENV216	101447	Dec. 22, 2024
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
4	Cable	N/A	SFT205-NMNM-9M -001	9M	Nov. 27, 2024
5	643 Shield Room	ETS	6*4*3	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Active Loop Antenna	Schwarzbeck	FMZB 1513-60B	1513-60 B-034	Mar. 30, 2025
2	MXE EMI Receiver	Keysight	N9038A	MY56400091	Dec. 22, 2024
3	Cable	N/A	RW2350-3.8A-NMB M-1.5M	N/A	Jun. 09, 2025
4	Cable	N/A	RG 213/U	N/A	Jun. 09, 2025
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	966 Chamber room	ETS	9*6*6	N/A	May 16, 2025

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	1462	Dec. 13, 2024
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Dec. 13, 2024
3	Preamplifier	EMC INSTRUMENT	EMC001330	980998	Nov. 17, 2024
4	Cable	RegalWay	LMR400-NMNM-12 .5m	N/A	Jun. 06, 2025
5	Cable	RegalWay	LMR400-NMNM-3 m	N/A	Jun. 06, 2025
6	Cable	RegalWay	LMR400-NMNM-0. 5m	N/A	Jun. 06, 2025
7	Receiver	Agilent	N9038A	MY52130039	Dec. 22, 2024
8	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
9	Positioning Controller	MF	MF-7802	N/A	N/A
10	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
11	966 Chamber room	CM	9*6*6	N/A	May 16, 2025

Radiated Emissions - Above 1 GHz

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	MXA Signal Analyzer	KEYSIGHT	N9020B	MY63380204	Nov. 17, 2024
2	Receiver	Agilent	N9038A	MY52130039	Dec. 22, 2024
3	Double Ridged Guide Antenna	ETS	3115	75789	Jun. 15, 2025
4	Cable	RegalWay	RWLP50-4.0A-SMS M-12.5M	N/A	Jul. 03, 2025
5	Cable	RegalWay	RWLP50-4.0A-NM RASM-2.5M	N/A	Jul. 03, 2025
6	Cable	RegalWay	RWLP50-4.0A-NM RASMR-0.8M	N/A	Jul. 03, 2025
7	Preamplifier	EMC INSTRUMENT	EMC184045SE	980905	Nov. 19, 2024
8	Cable	RegalWay	RWLP50-2.6A-2.92 M2.92M-1.1M	N/A	Jul. 26, 2024
9	Cable	Tonscend	HF160-KMKM-3M	N/A	Jul. 26, 2024
10	Broad-Band Horn Antenna	Schwarzbeck	BBHA9170(3m)	9170-319	Jun.16,2025
11	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
12	Filter	STI	STI15-9912	N/A	May 31, 2025
13	966 Chamber room	CM	9*6*6	N/A	May 19, 2025
14	Positioning Controller	MF	MF-7802	N/A	N/A
15	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth & Conducted Spurious Emissions & Power Spectral Density

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP38	100852	May 31, 2025
2	Measurement Software	BTL	BTL Conducted Test	N/A	N/A
3	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A

Maximum Output Power

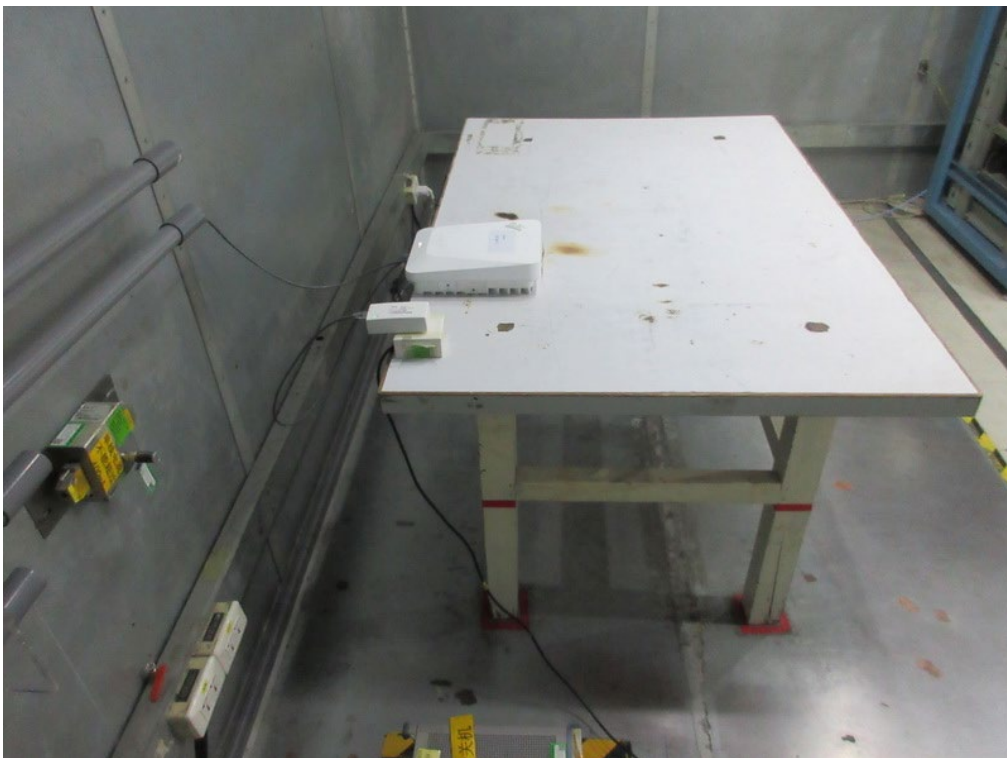
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	May 31, 2025
2	Wideband power sensor	Keysight	N1923A	MY58310004	May 31, 2025
3	Isolation attenuator	Z-Link	ASMA-10-18-2W	N/A	N/A

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

All calibration period of equipment list is one year.

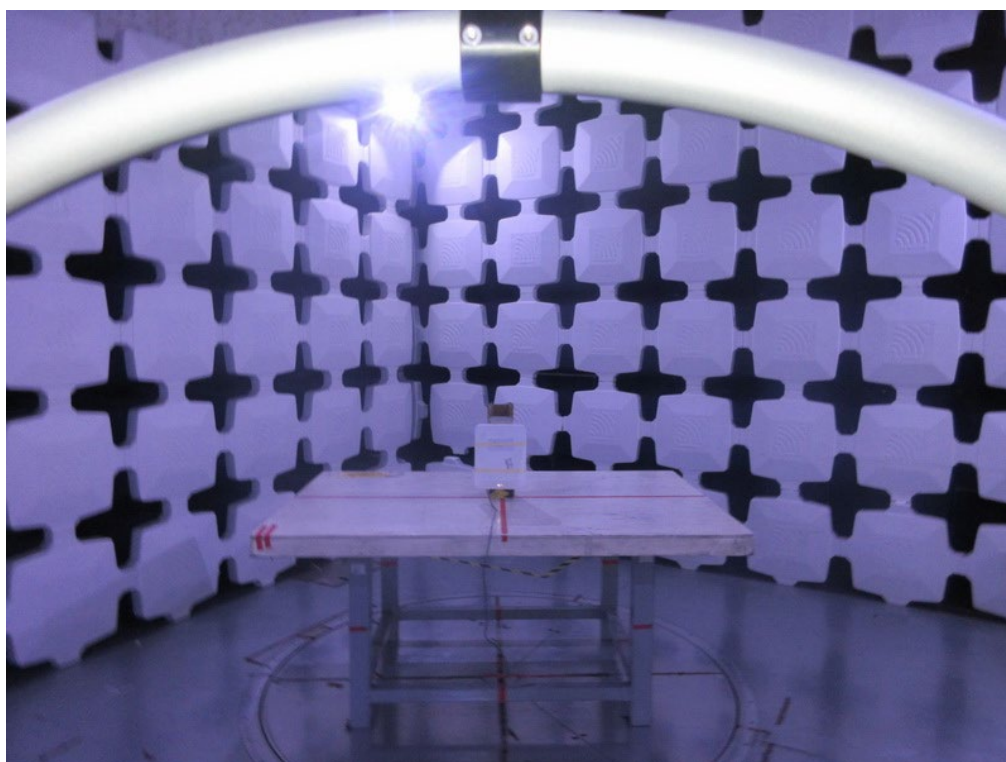
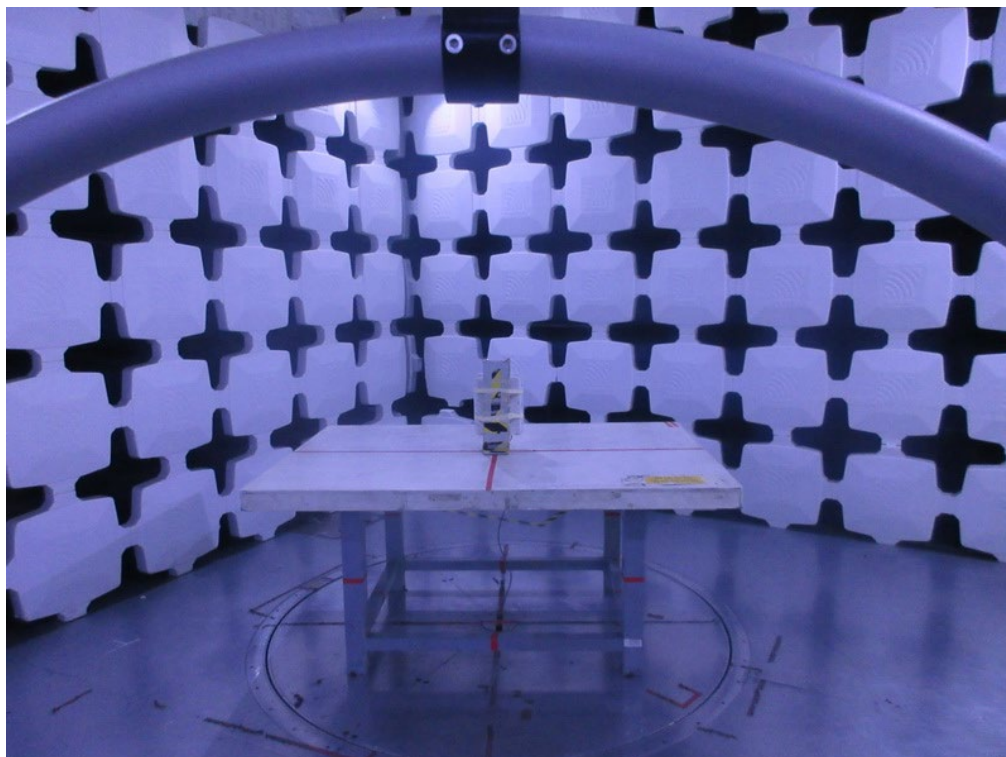
11. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos



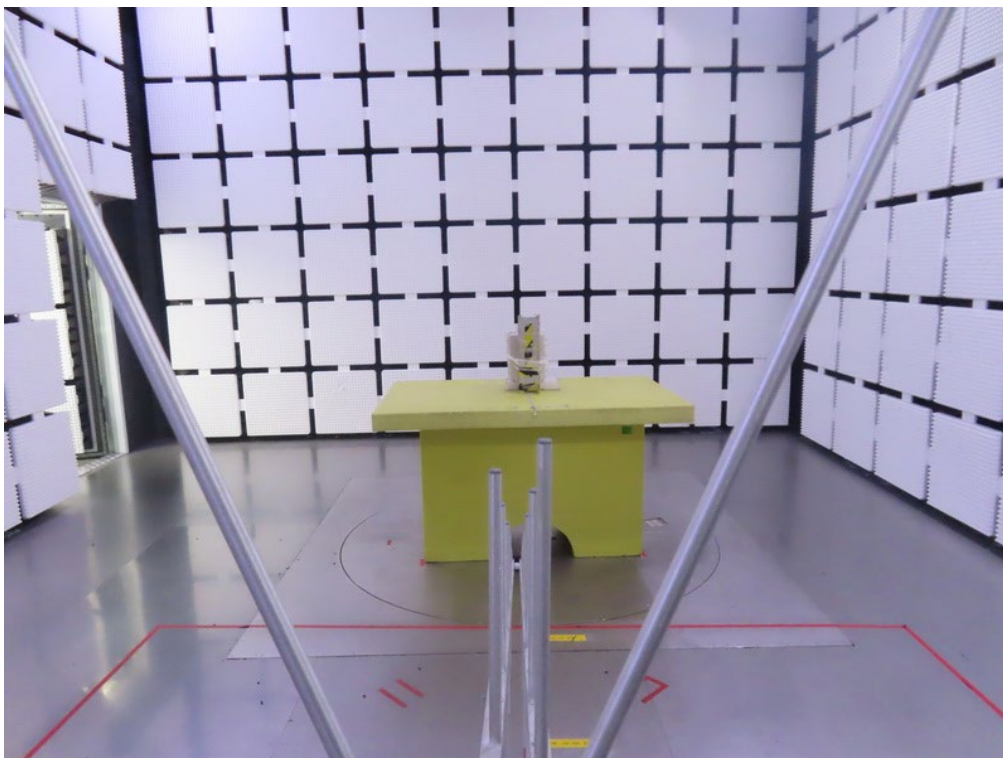
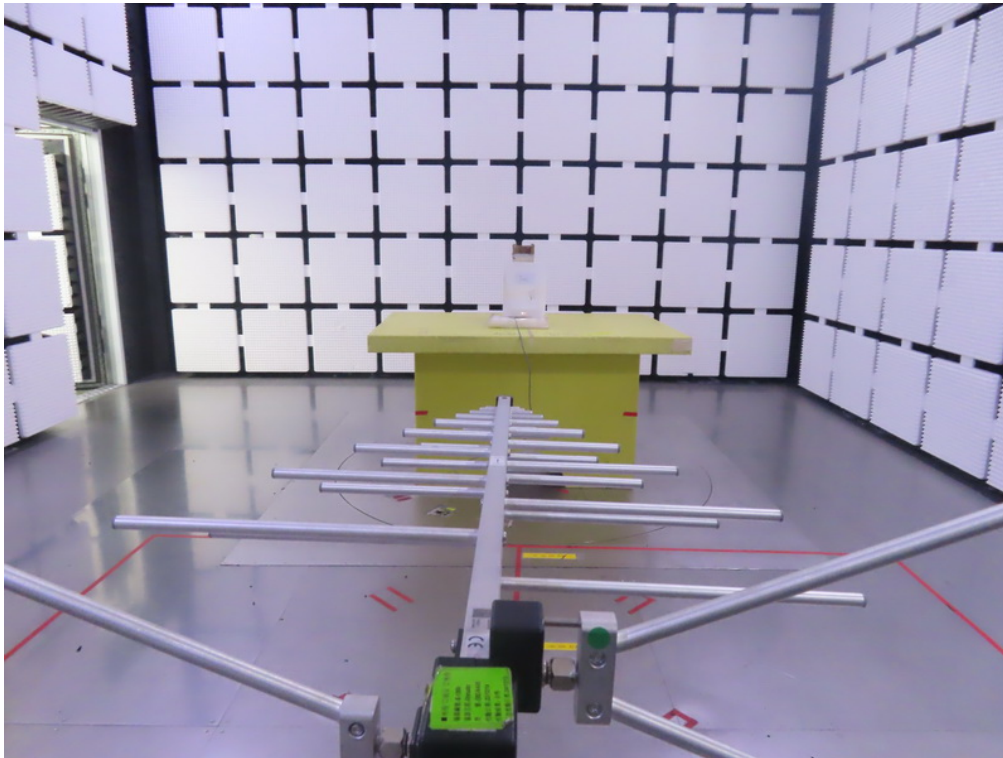
Radiated Emissions Test Photos

9 kHz to 30 MHz



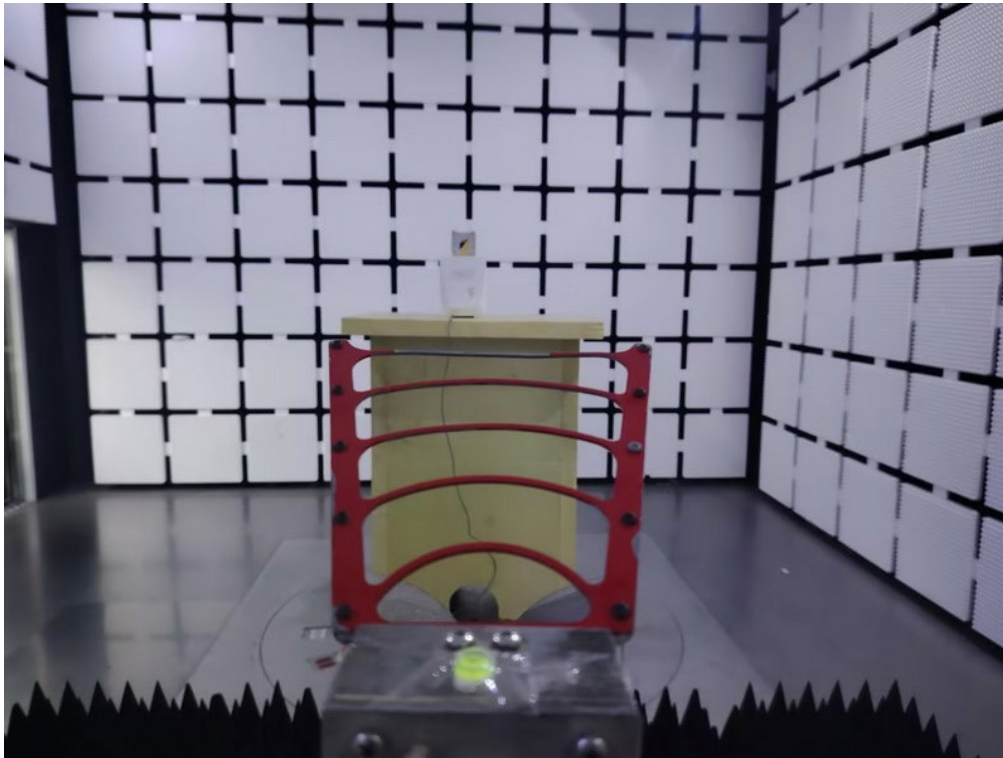
Radiated Emissions Test Photos

30 MHz to 1 GHz



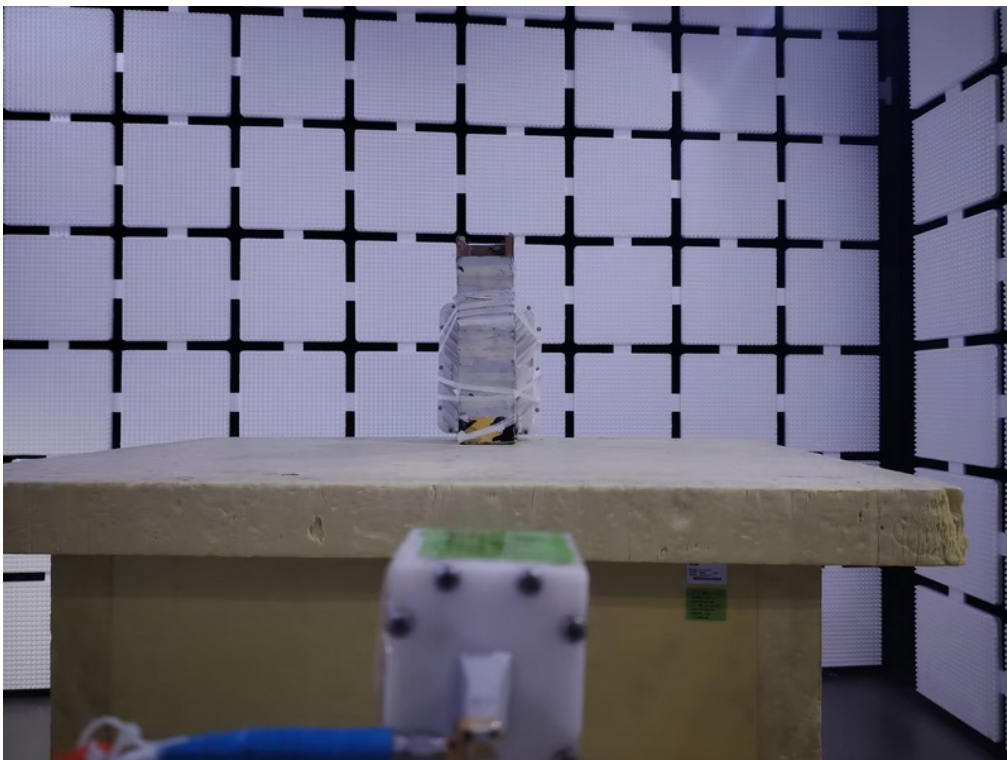
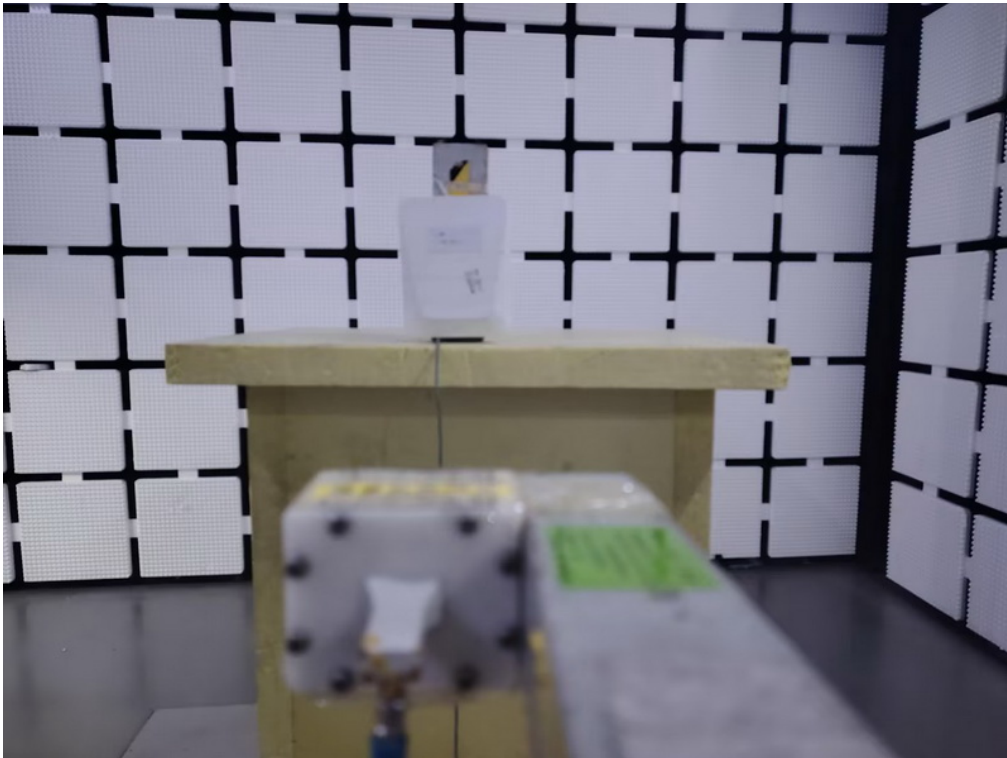
Radiated Emissions Test Photos

1 GHz to 18 GHz

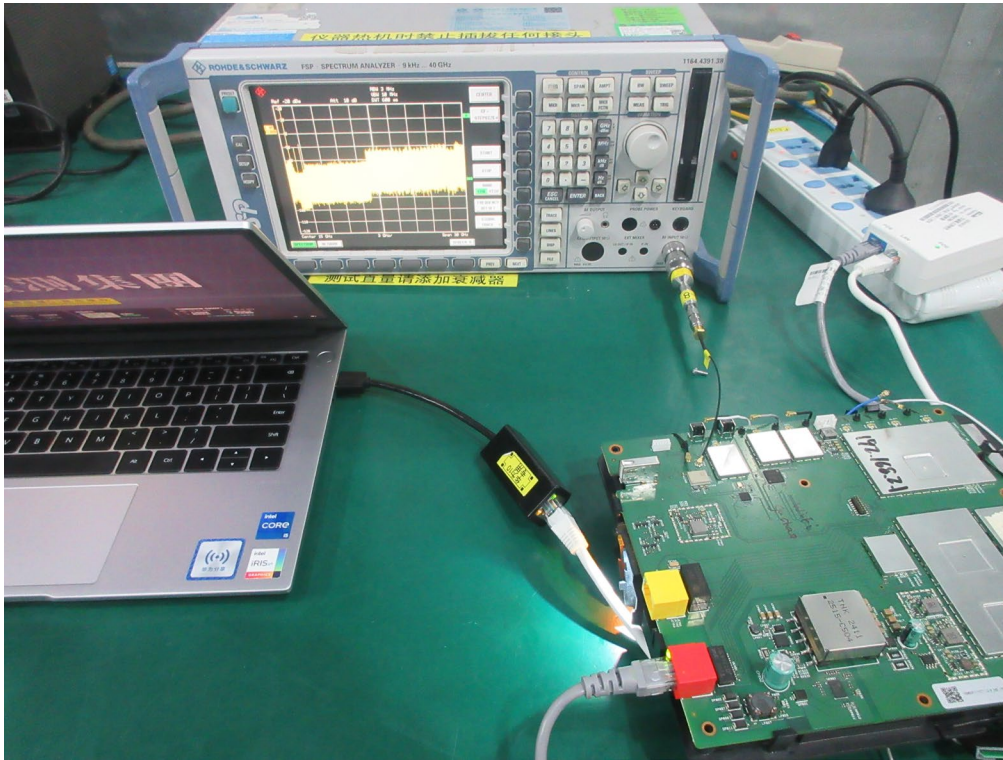


Radiated Emissions Test Photos

Above 18 GHz

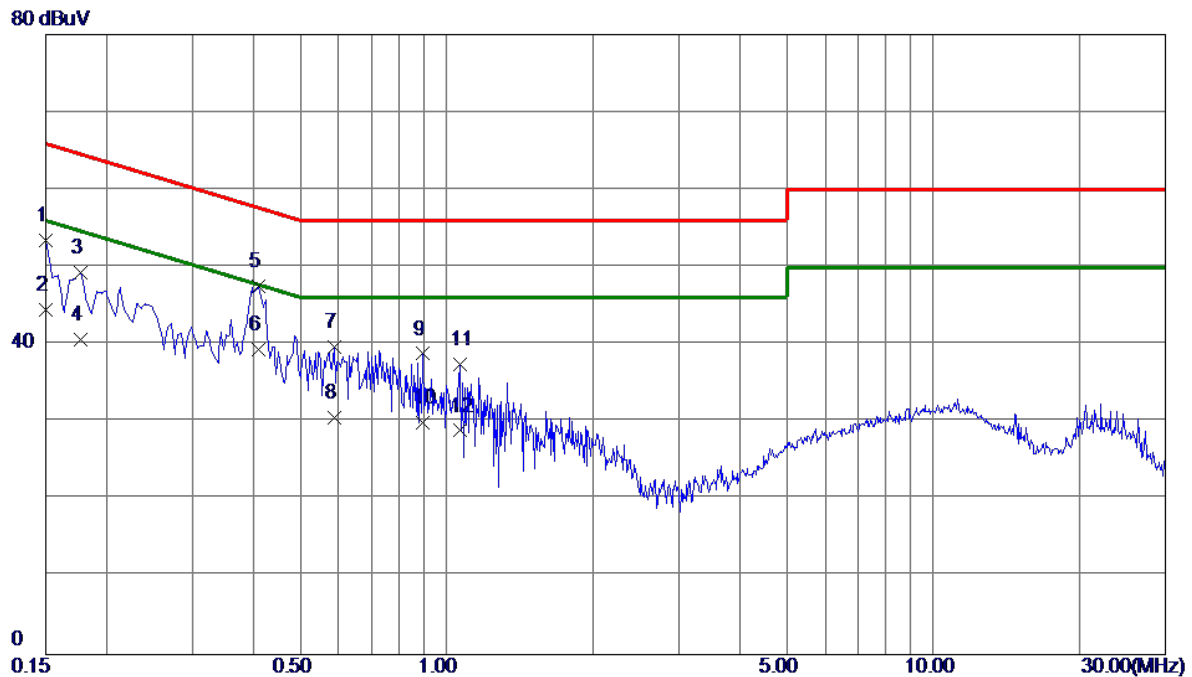


Conducted Test Photos



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode	TX B Mode Channel 06	Phase	Line
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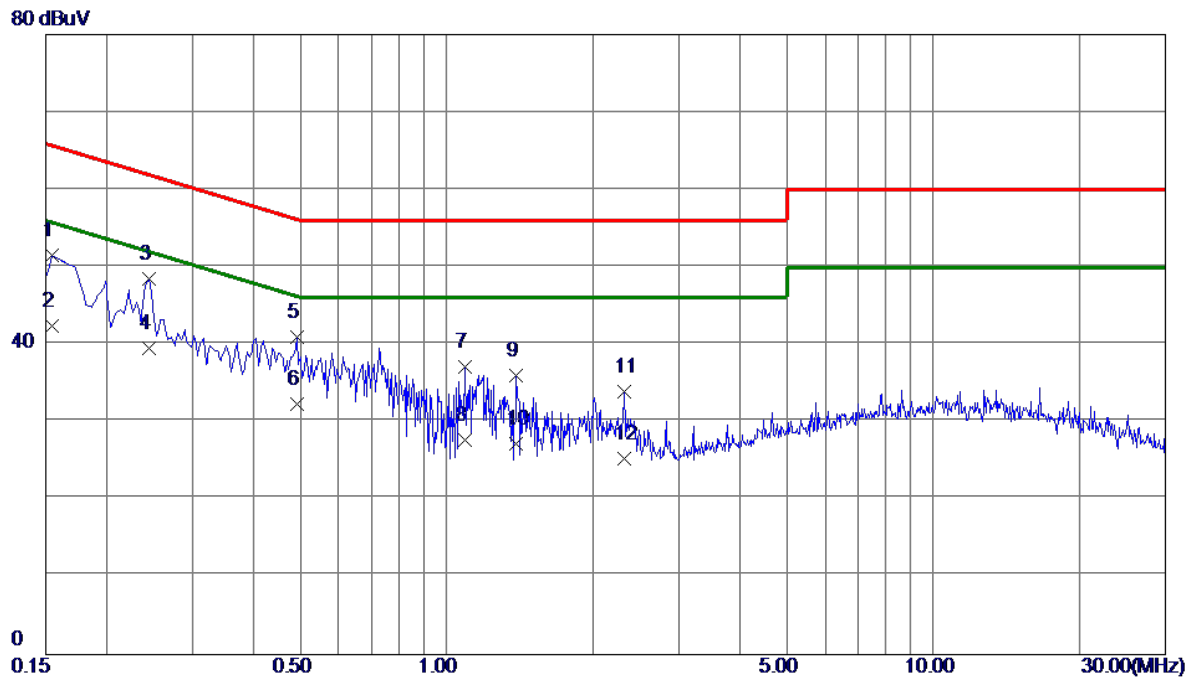


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1500	43.55	9.96	53.51	66.00	-12.49	QP	
2	0.1500	34.50	9.96	44.46	56.00	-11.54	AVG	
3	0.1770	39.30	9.97	49.27	64.63	-15.36	QP	
4	0.1770	30.60	9.97	40.57	54.63	-14.06	AVG	
5	0.4110	37.04	10.43	47.47	57.63	-10.16	QP	
6 *	0.4110	28.89	10.43	39.32	47.63	-8.31	AVG	
7	0.5865	28.95	10.80	39.75	56.00	-16.25	QP	
8	0.5865	19.80	10.80	30.60	46.00	-15.40	AVG	
9	0.8925	27.61	11.19	38.80	56.00	-17.20	QP	
10	0.8925	18.70	11.19	29.89	46.00	-16.11	AVG	
11	1.0635	26.21	11.28	37.49	56.00	-18.51	QP	
12	1.0635	17.60	11.28	28.88	46.00	-17.12	AVG	

REMARKS:

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

Test Mode	TX B Mode Channel 06	Phase	Neutral
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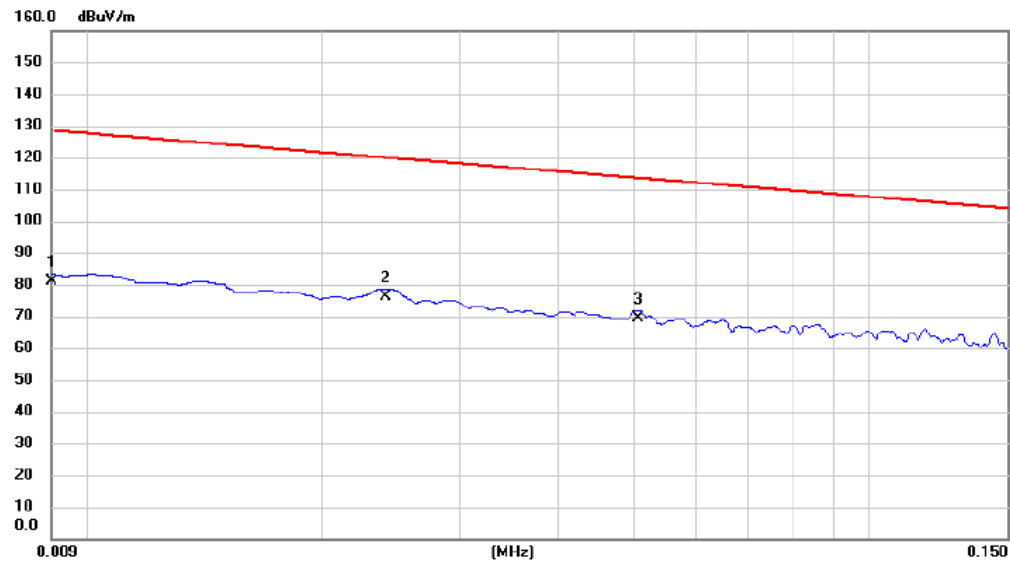
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1545	41.64	9.93	51.57	65.75	-14.18	QP	
2	0.1545	32.51	9.93	42.44	55.75	-13.31	AVG	
3	0.2445	38.41	10.02	48.43	61.94	-13.51	QP	
4 *	0.2445	29.49	10.02	39.51	51.94	-12.43	AVG	
5	0.4920	30.34	10.57	40.91	56.13	-15.22	QP	
6	0.4920	21.80	10.57	32.37	46.13	-13.76	AVG	
7	1.0905	25.84	11.24	37.08	56.00	-18.92	QP	
8	1.0905	16.40	11.24	27.64	46.00	-18.36	AVG	
9	1.3920	24.81	11.24	36.05	56.00	-19.95	QP	
10	1.3920	15.90	11.24	27.14	46.00	-18.86	AVG	
11	2.3190	23.25	10.68	33.93	56.00	-22.07	QP	
12	2.3190	14.61	10.68	25.29	46.00	-20.71	AVG	

REMARKS:

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode	TX B Mode Channel 06	Polarization	Ant 0°
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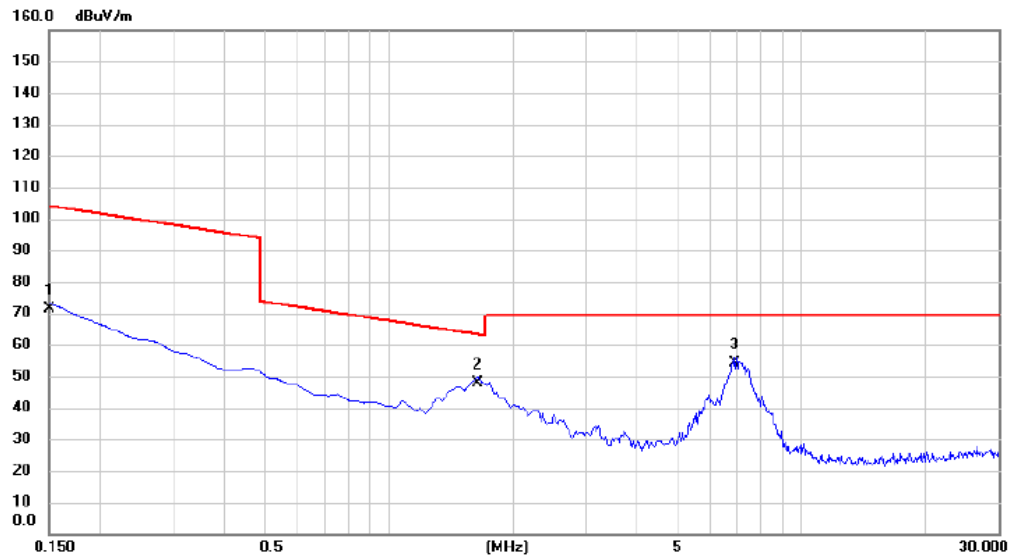


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0090	60.78	20.40	81.18	128.52	-47.34	AVG	
2	*	0.0241	55.12	20.92	76.04	119.96	-43.92	AVG	
3		0.0507	48.26	21.20	69.46	113.50	-44.04	AVG	

REMARKS:

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

Test Mode	TX B Mode Channel 06	Polarization	Ant 0°
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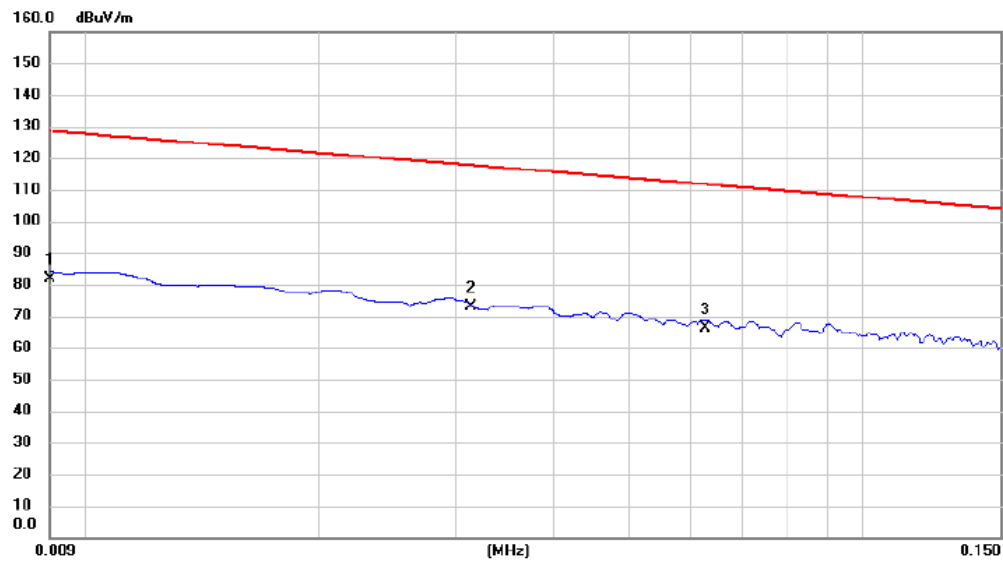
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.1500	50.32	21.27	71.59	104.09	-32.50	AVG	
2		1.6425	26.78	21.14	47.92	63.29	-15.37	QP	
3	*	6.8662	33.12	21.19	54.31	69.54	-15.23	QP	

REMARKS:

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

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

Test Mode	TX B Mode Channel 06	Polarization	Ant 90°
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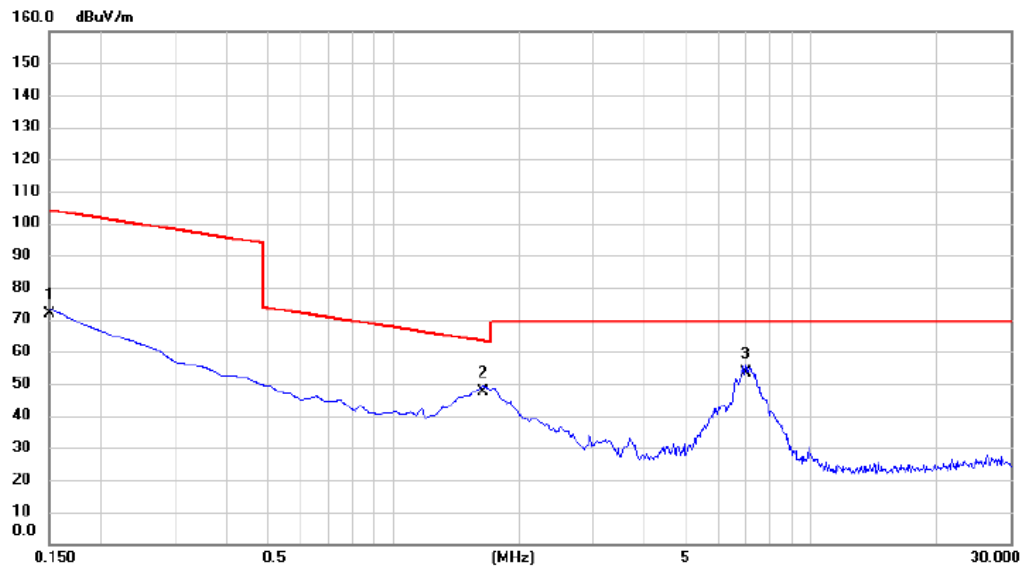


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0090	61.32	20.40	81.72	128.52	-46.80	AVG	
2	*	0.0313	51.79	21.11	72.90	117.69	-44.79	AVG	
3		0.0627	45.15	21.24	66.39	111.66	-45.27	AVG	

REMARKS:

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

Test Mode	TX B 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		0.1500	50.36	21.27	71.63	104.09	-32.46	AVG	
2	*	1.6425	26.45	21.14	47.59	63.29	-15.70	QP	
3		6.9856	32.14	21.19	53.33	69.54	-16.21	QP	

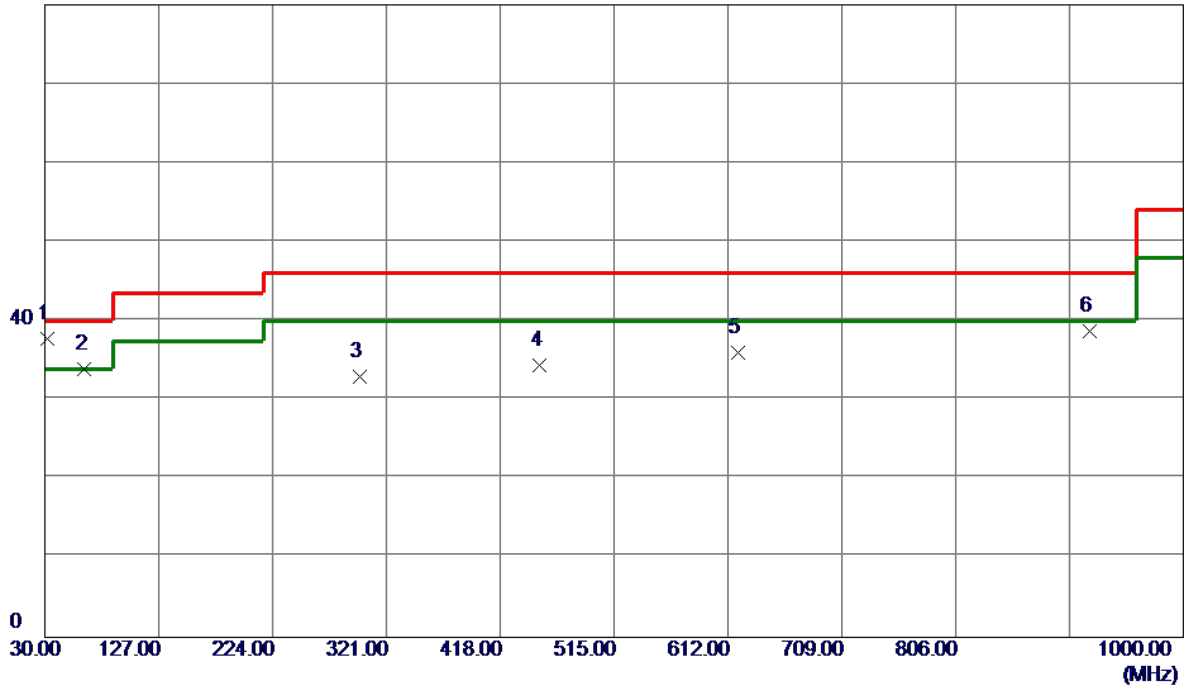
REMARKS:

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode	TX B Mode Channel 06	Polarization	Vertical
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80 dBuV/m



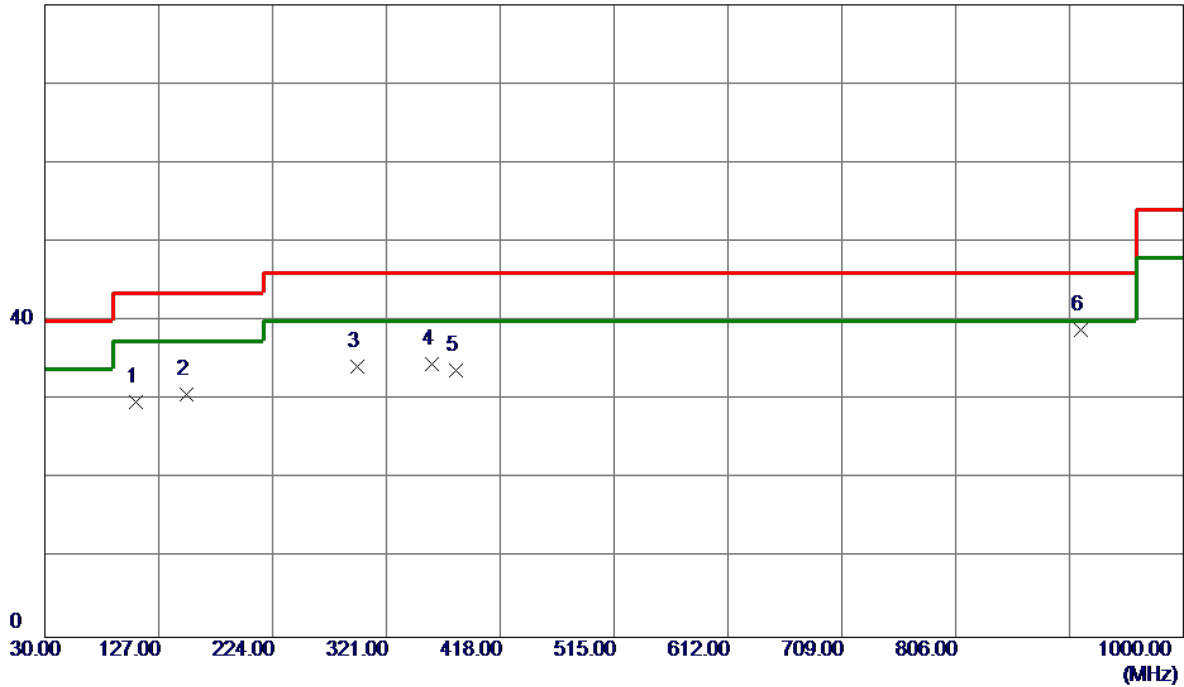
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	32.4250	50.48	-12.66	37.82	40.00	-2.18	QP	
2	63.9500	46.50	-12.52	33.98	40.00	-6.02	Peak	
3	298.2049	43.51	-10.62	32.89	46.00	-13.11	Peak	
4	451.9500	41.12	-6.75	34.37	46.00	-11.63	Peak	
5	620.7300	39.33	-3.28	36.05	46.00	-9.95	Peak	
6	919.9750	38.26	0.39	38.65	46.00	-7.35	Peak	

REMARKS:

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

Test Mode	TX B Mode Channel 06	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	107.1150	44.45	-14.74	29.71	43.50	-13.79	Peak	
2	150.2800	41.82	-11.16	30.66	43.50	-12.84	Peak	
3	296.2650	44.87	-10.64	34.23	46.00	-11.77	Peak	
4	359.8000	43.93	-9.38	34.55	46.00	-11.45	Peak	
5	380.6550	42.39	-8.62	33.77	46.00	-12.23	Peak	
6 *	912.2150	38.56	0.36	38.92	46.00	-7.08	Peak	

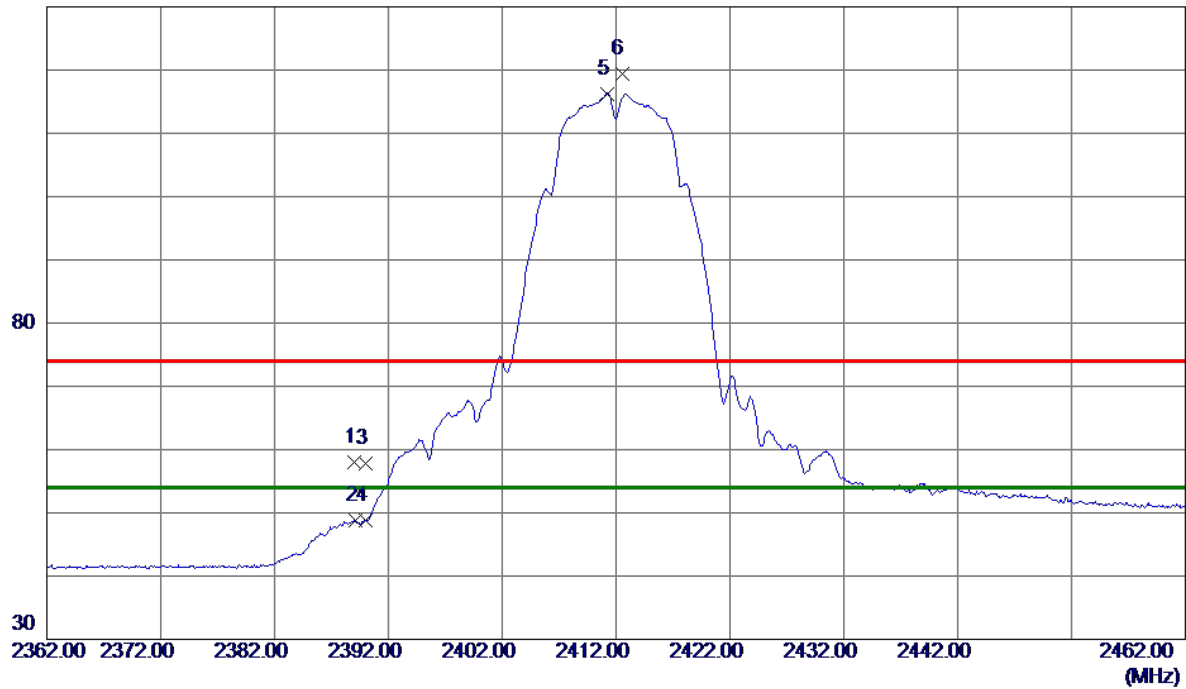
REMARKS:

- (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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130 dBuV/m



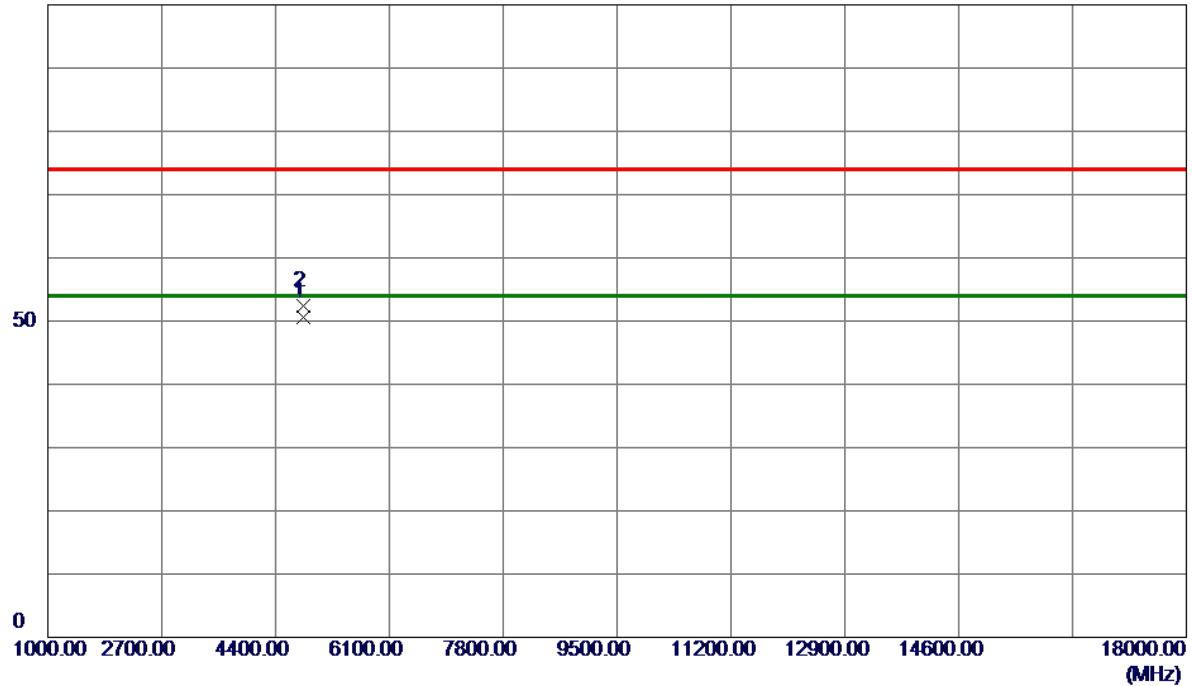
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2389.0000	50.37	7.70	58.07	74.00	-15.93	Peak	
2	2389.1000	41.11	7.70	48.81	54.00	-5.19	AVG	
3	2390.0000	50.02	7.70	57.72	74.00	-16.28	Peak	
4	2390.0000	41.01	7.70	48.71	54.00	-5.29	AVG	
5 *	2411.2500	108.58	7.72	116.30	54.00	62.30	AVG	No Limit
6	2412.5000	111.75	7.72	119.47	74.00	45.47	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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100 dBuV/m



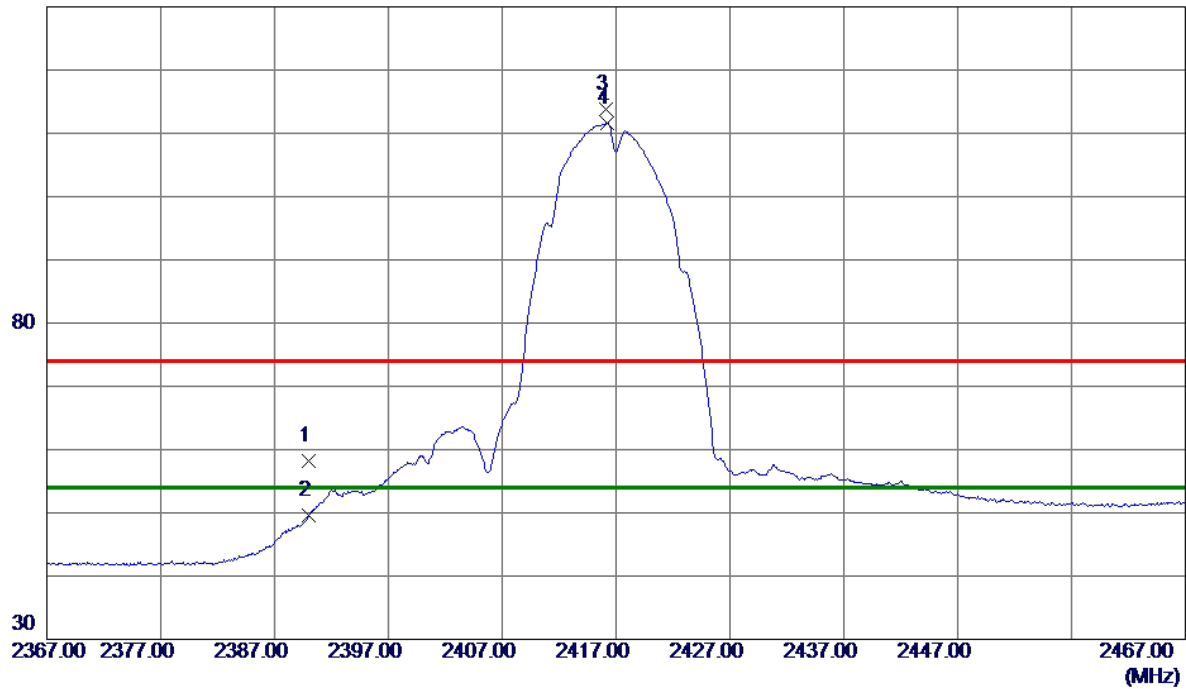
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9900	47.77	2.84	50.61	54.00	-3.39	AVG	
2	4824.0400	49.58	2.84	52.42	74.00	-21.58	Peak	

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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130 dBuV/m



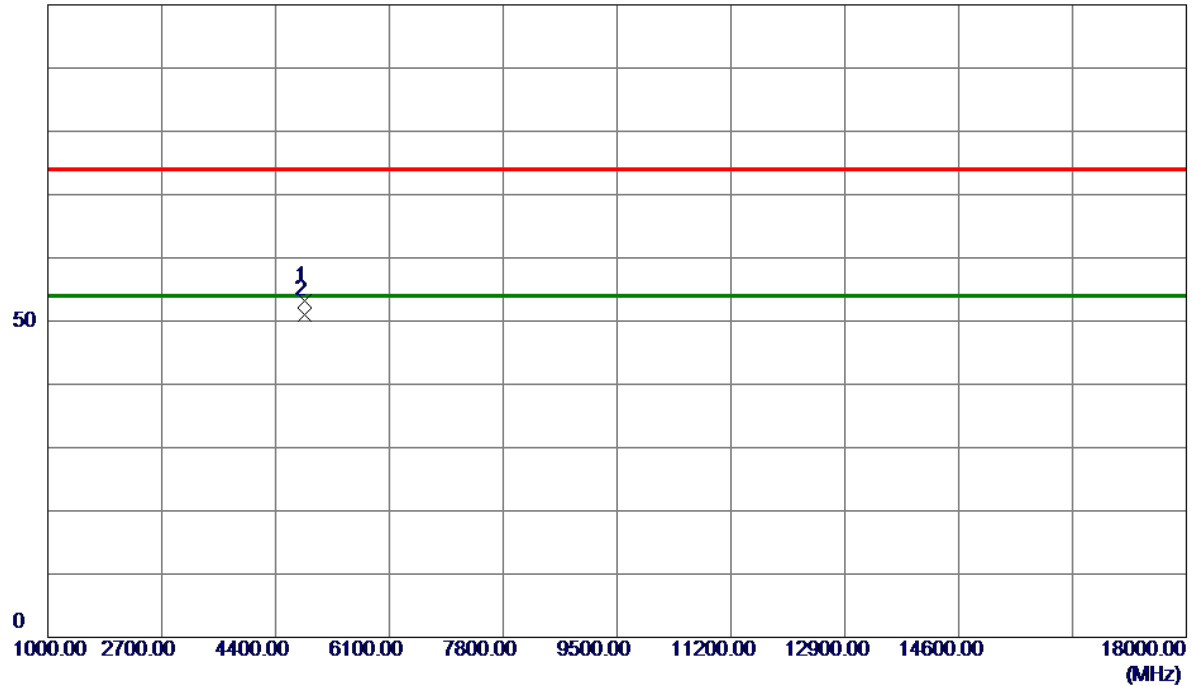
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	50.59	7.70	58.29	74.00	-15.71	Peak	
2	2390.0000	41.93	7.70	49.63	54.00	-4.37	AVG	
3	2416.1500	106.03	7.73	113.76	74.00	39.76	Peak	No Limit
4 *	2416.2000	103.82	7.73	111.55	54.00	57.55	AVG	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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100 dBuV/m



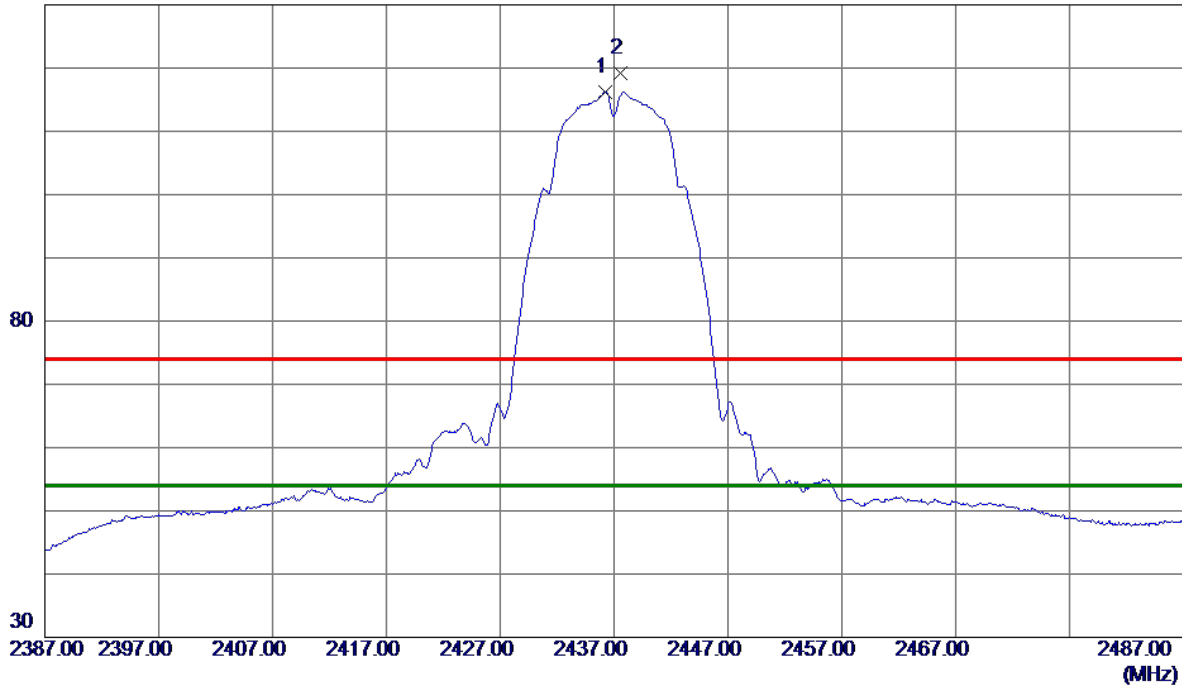
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4833.9950	50.26	2.86	53.12	74.00	-20.88	Peak	
2 *	4834.0000	48.11	2.86	50.97	54.00	-3.03	AVG	

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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130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.2000	108.51	7.75	116.26	54.00	62.26	AVG	No Limit
2	2437.5500	111.40	7.75	119.15	74.00	45.15	Peak	No Limit

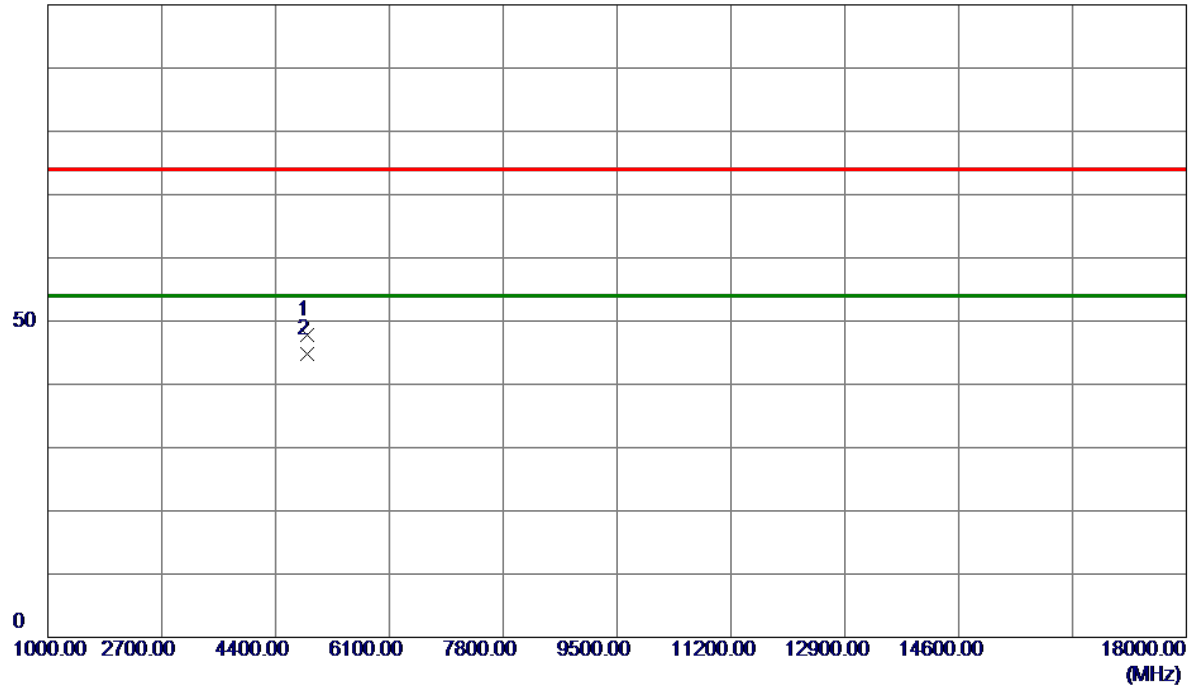
REMARKS:

(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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100 dBuV/m



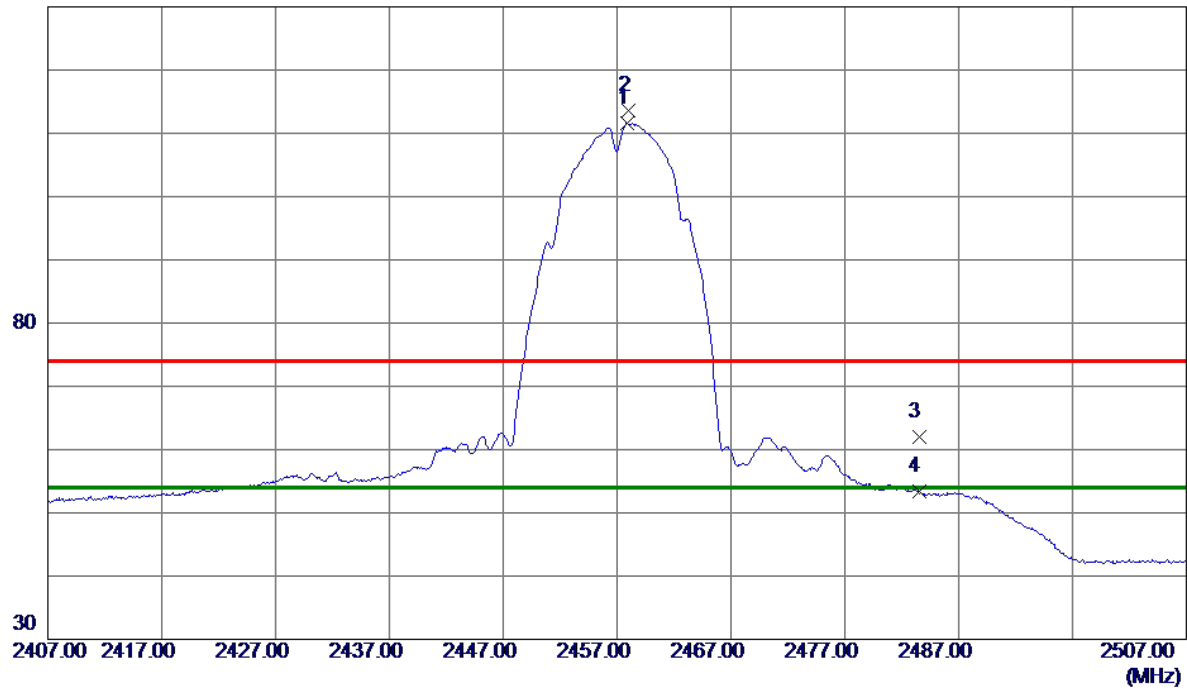
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9800	44.77	2.96	47.73	74.00	-26.27	Peak	
2 *	4874.0099	41.91	2.96	44.87	54.00	-9.13	AVG	

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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130 dBuV/m



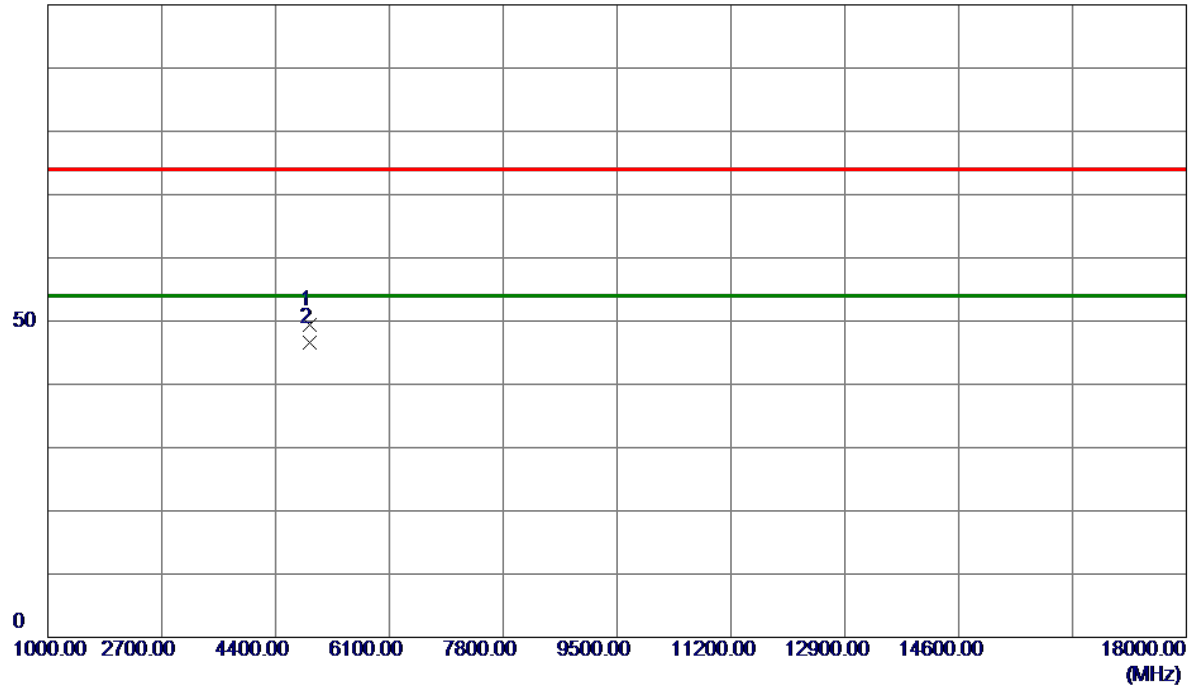
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2457.8500	103.84	7.78	111.62	54.00	57.62	AVG	No Limit
2	2457.9500	105.89	7.78	113.67	74.00	39.67	Peak	No Limit
3	2483.5000	54.25	7.81	62.06	74.00	-11.94	Peak	
4	2483.5000	45.51	7.81	53.32	54.00	-0.68	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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100 dBuV/m



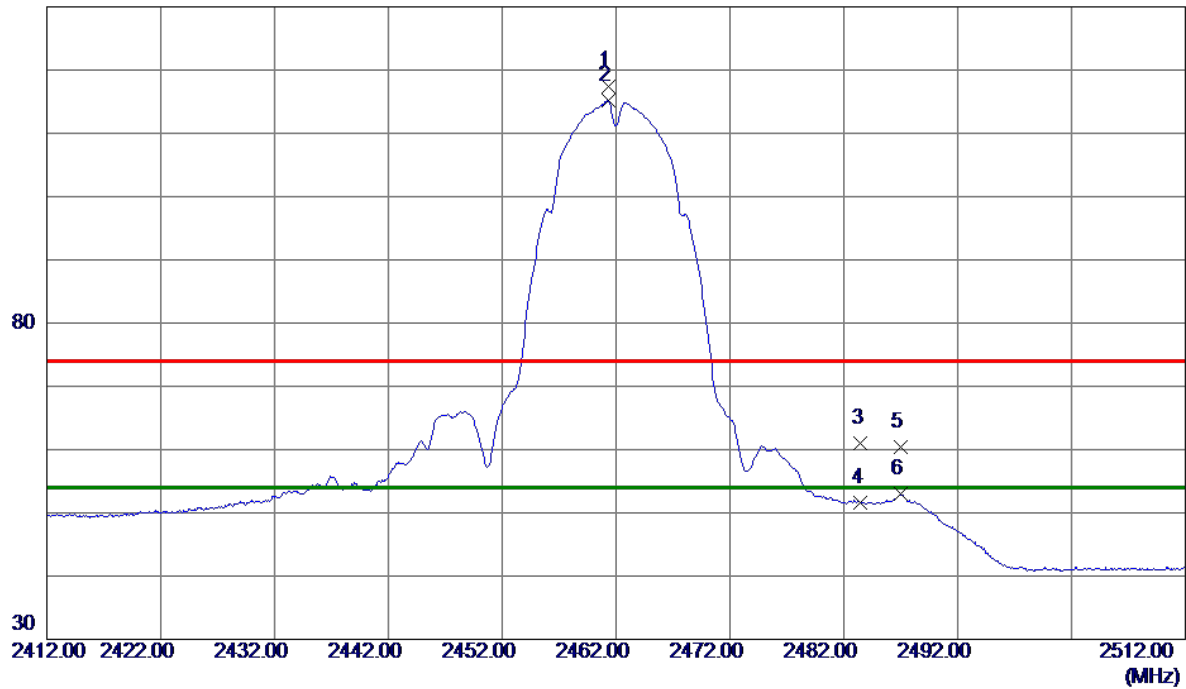
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4914.0250	46.32	3.05	49.37	74.00	-24.63	Peak	
2 *	4914.0250	43.47	3.05	46.52	54.00	-7.48	AVG	

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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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	2461.3000	109.72	7.78	117.50	74.00	43.50	Peak	No Limit
2 *	2461.3000	107.38	7.78	115.16	54.00	61.16	AVG	No Limit
3	2483.5000	53.11	7.81	60.92	74.00	-13.08	Peak	
4	2483.5000	43.86	7.81	51.67	54.00	-2.33	AVG	
5	2487.0500	52.56	7.81	60.37	74.00	-13.63	Peak	
6	2487.0500	45.10	7.81	52.91	54.00	-1.09	AVG	

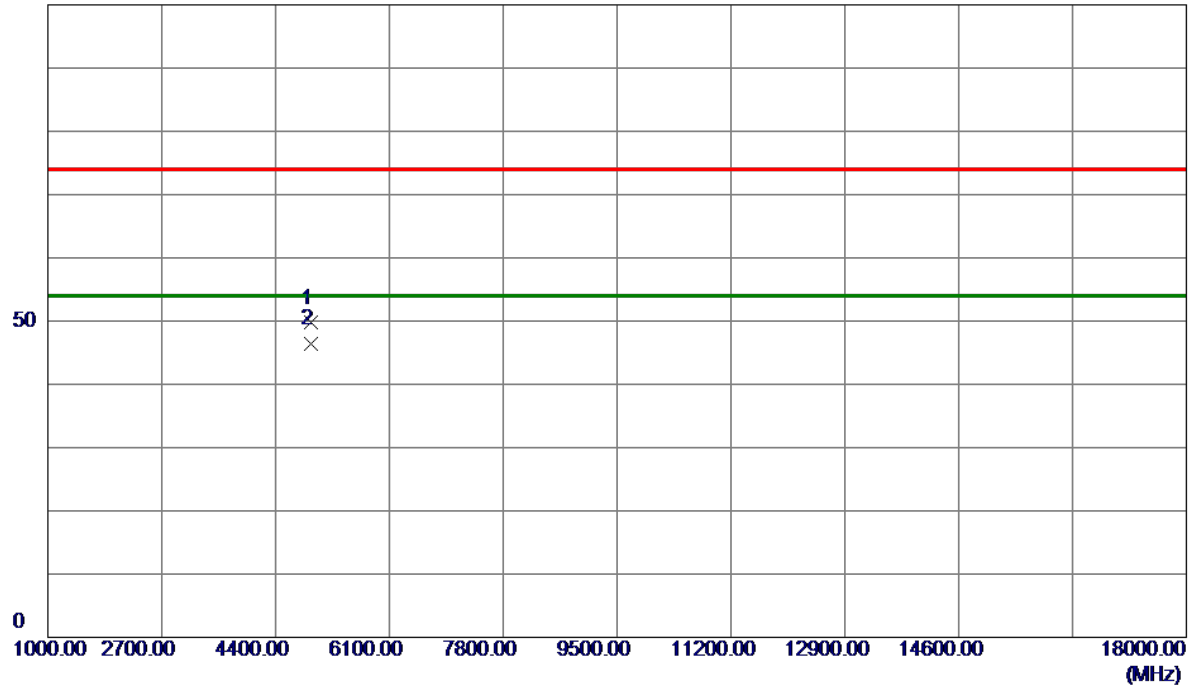
REMARKS:

(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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100 dBuV/m



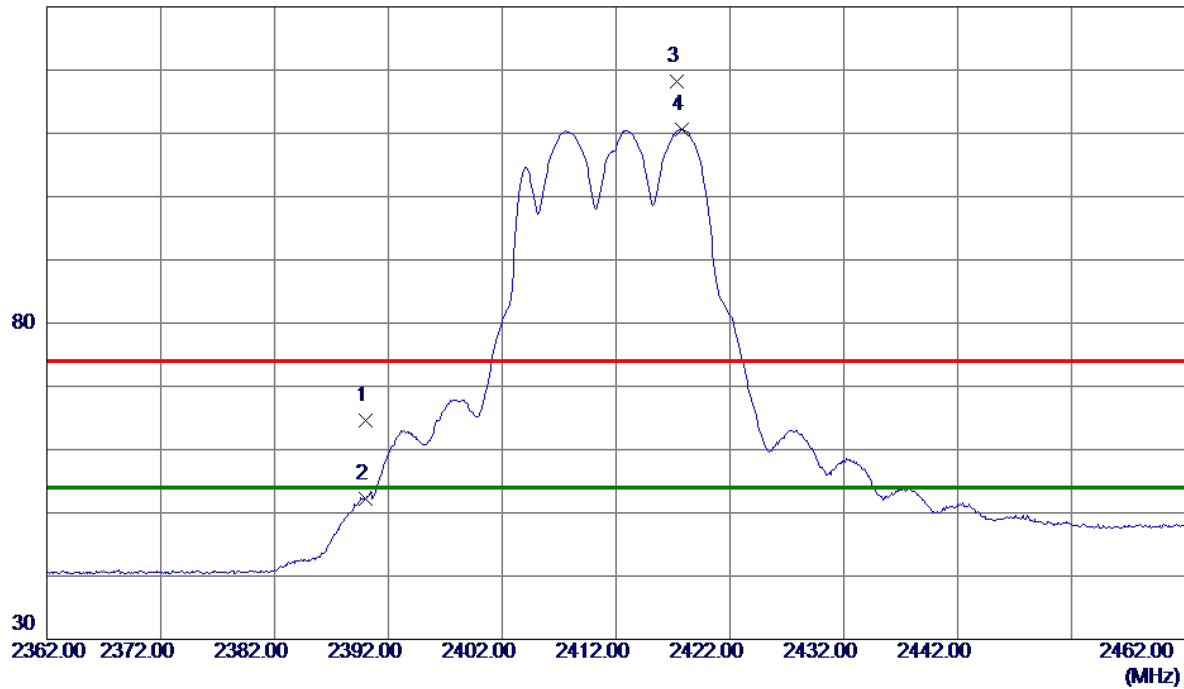
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4923.9100	46.63	3.07	49.70	74.00	-24.30	Peak	
2 *	4924.0200	43.28	3.07	46.35	54.00	-7.65	AVG	

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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130 dBuV/m



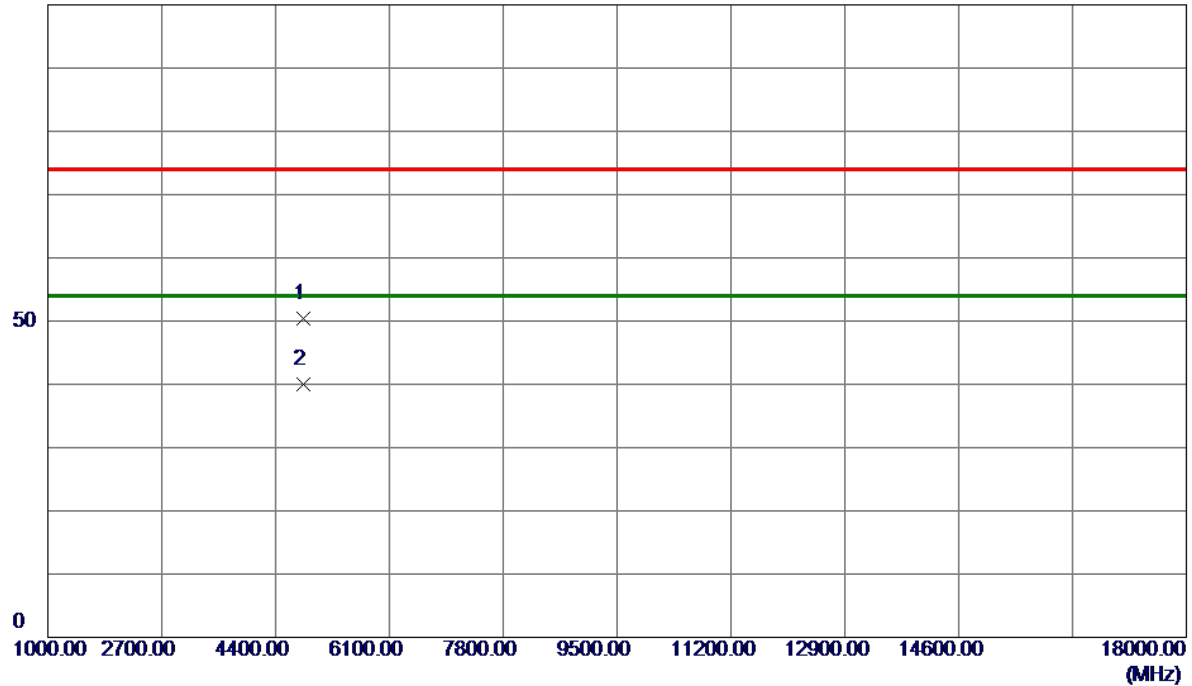
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	56.87	7.70	64.57	74.00	-9.43	Peak	
2	2390.0000	44.41	7.70	52.11	54.00	-1.89	AVG	
3	2417.3000	110.45	7.73	118.18	74.00	44.18	Peak	No Limit
4 *	2417.8000	102.92	7.73	110.65	54.00	56.65	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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100 dBuV/m



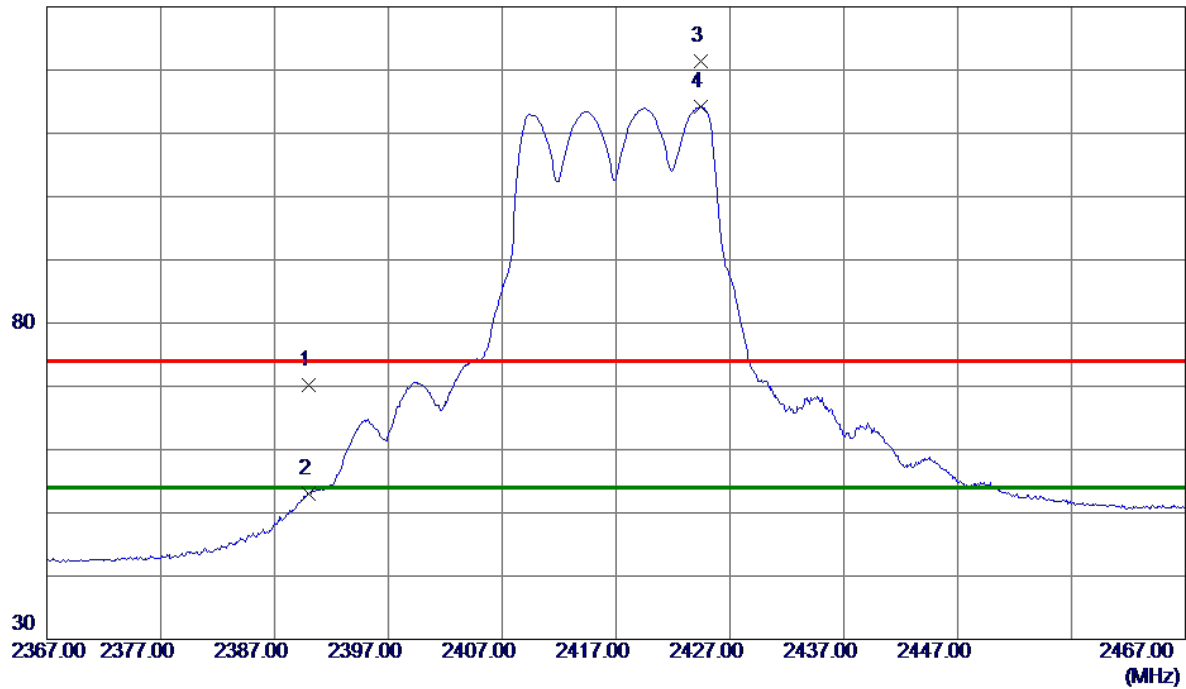
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4820.3000	47.51	2.83	50.34	74.00	-23.66	Peak	
2 *	4824.7500	37.13	2.84	39.97	54.00	-14.03	AVG	

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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130 dBuV/m



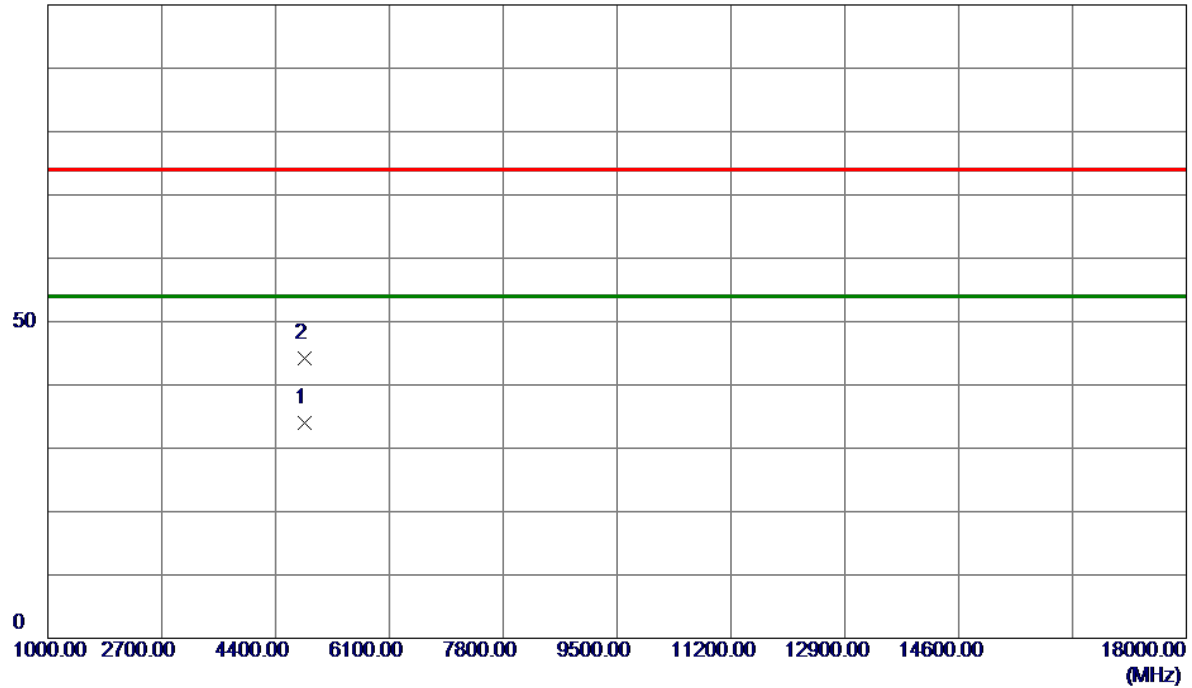
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	62.43	7.70	70.13	74.00	-3.87	Peak	
2	2390.0000	45.24	7.70	52.94	54.00	-1.06	AVG	
3	2424.4000	113.70	7.74	121.44	74.00	47.44	Peak	No Limit
4 *	2424.4500	106.53	7.74	114.27	54.00	60.27	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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100 dBuV/m

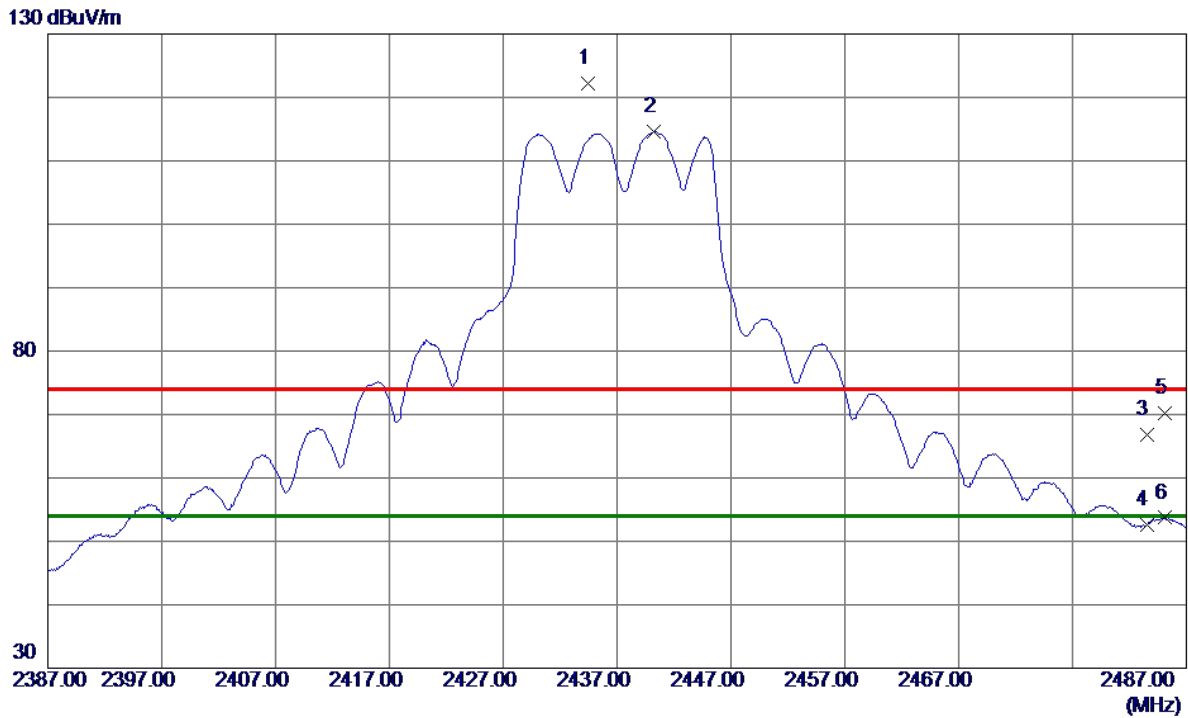


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4835.0200	31.10	2.87	33.97	54.00	-20.03	AVG	
2	4835.1100	41.33	2.87	44.20	74.00	-29.80	Peak	

REMARKS:

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

Test Mode	TX G Mode 2437 MHz	Polarization	Vertical
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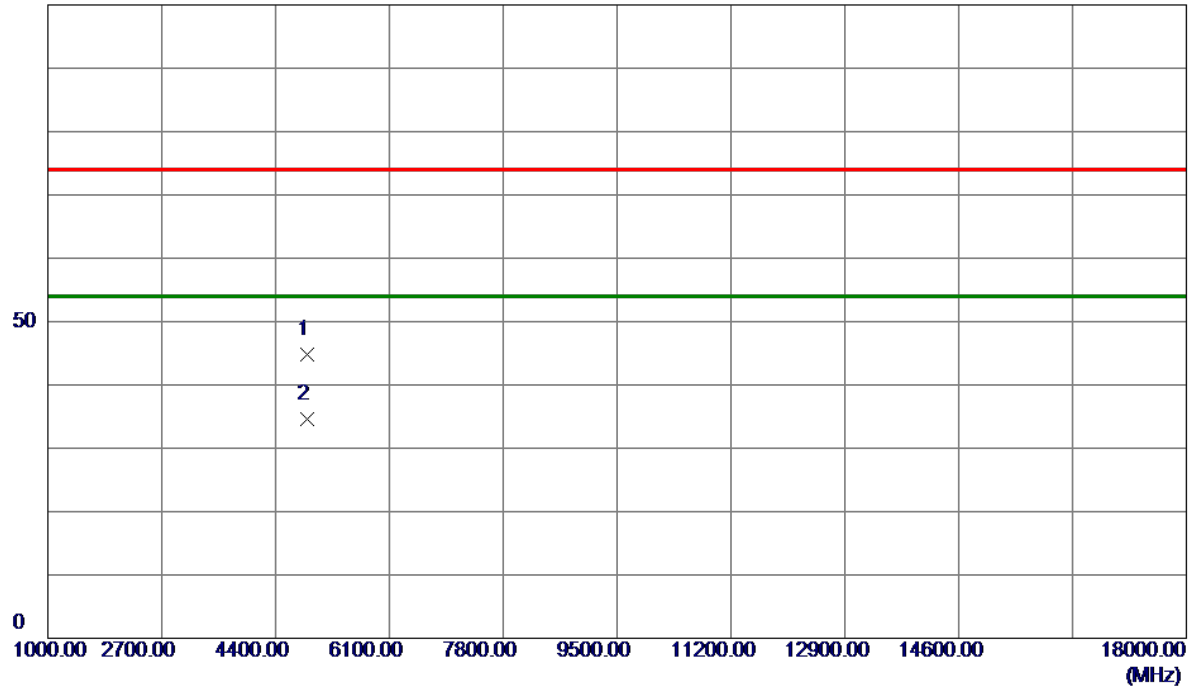
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2434.4500	114.47	7.75	122.22	74.00	48.22	Peak	No Limit
2 *	2440.2000	106.82	7.76	114.58	54.00	60.58	AVG	No Limit
3	2483.5000	59.03	7.81	66.84	74.00	-7.16	Peak	
4	2483.5000	44.88	7.81	52.69	54.00	-1.31	AVG	
5	2485.1000	62.46	7.81	70.27	74.00	-3.73	Peak	
6	2485.1000	45.89	7.81	53.70	54.00	-0.30	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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100 dBuV/m

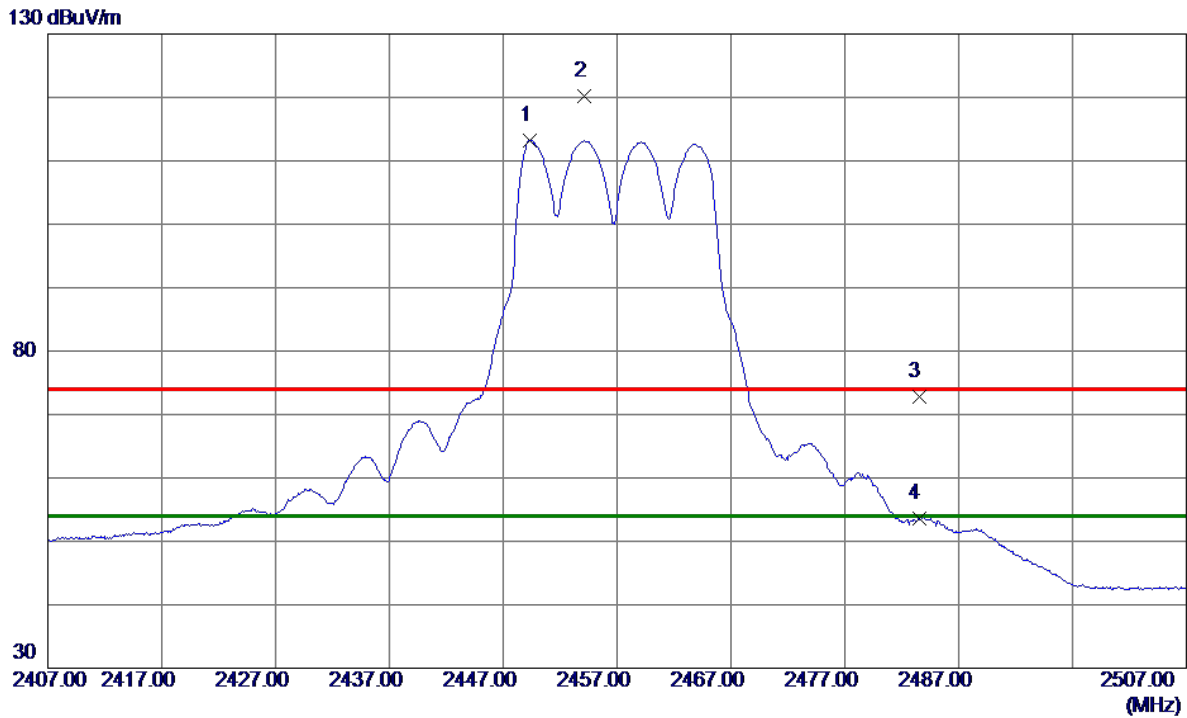


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1000	41.81	2.96	44.77	74.00	-29.23	Peak	
2 *	4874.5750	31.67	2.96	34.63	54.00	-19.37	AVG	

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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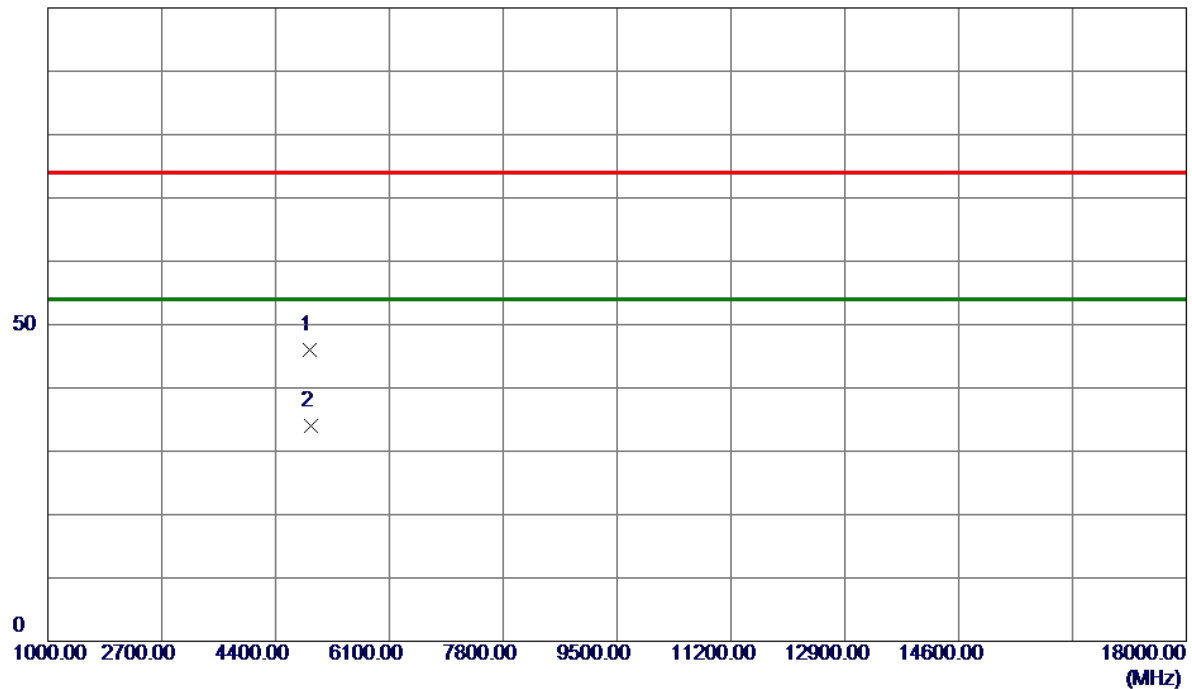
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2449.3000	105.43	7.77	113.20	54.00	59.20	AVG	No Limit
2	2454.1500	112.51	7.77	120.28	74.00	46.28	Peak	No Limit
3	2483.5000	65.03	7.81	72.84	74.00	-1.16	Peak	
4	2483.5000	45.82	7.81	53.63	54.00	-0.37	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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100 dBuV/m



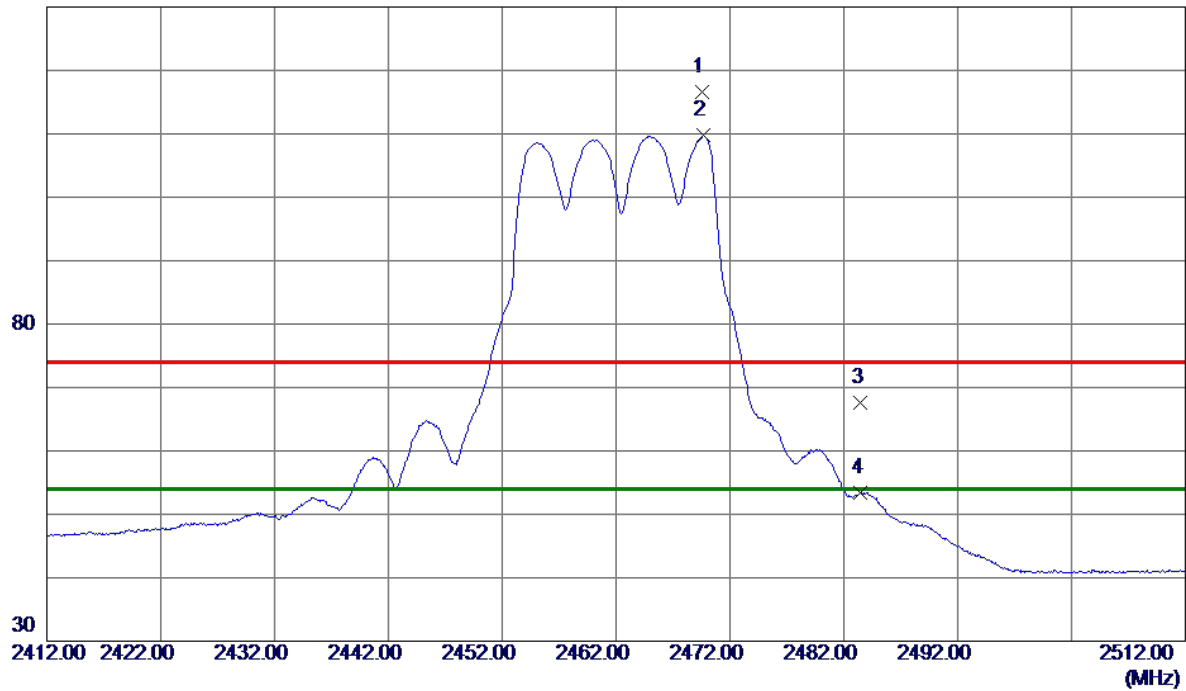
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4909.5400	42.91	3.04	45.95	74.00	-28.05	Peak	
2 *	4920.1300	31.01	3.06	34.07	54.00	-19.93	AVG	

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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130 dBuV/m



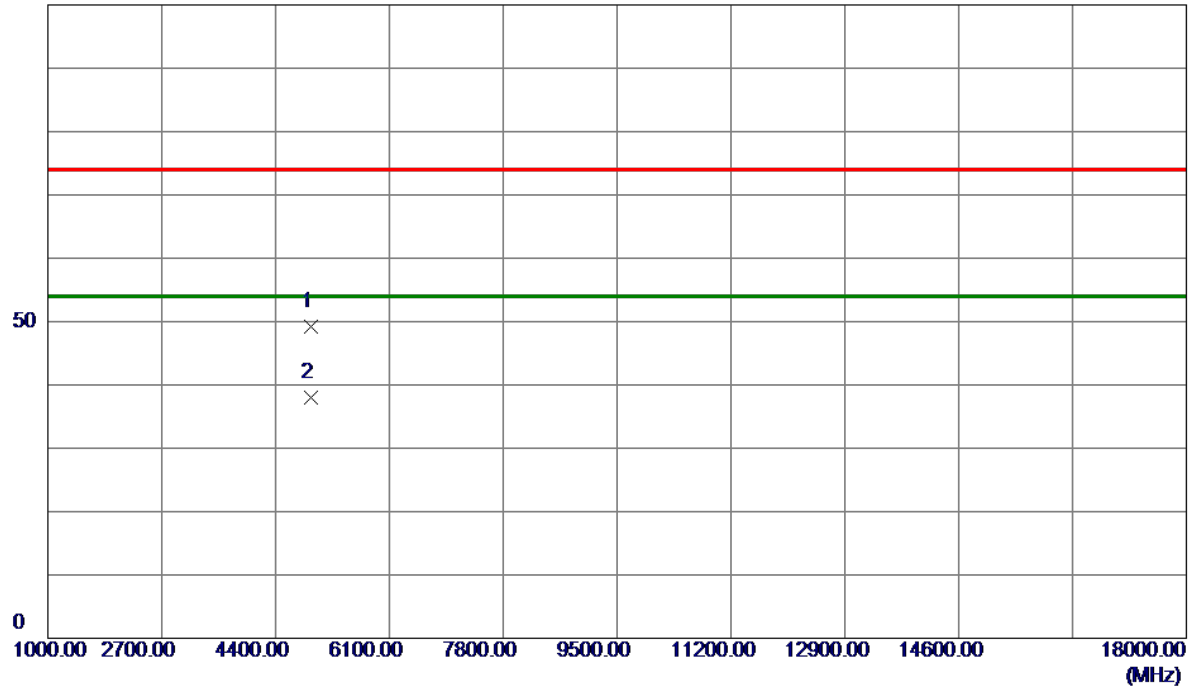
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2469.6000	108.87	7.79	116.66	74.00	42.66	Peak	No Limit
2 *	2469.7000	101.94	7.79	109.73	54.00	55.73	AVG	No Limit
3	2483.5000	59.85	7.81	67.66	74.00	-6.34	Peak	
4	2483.5000	45.59	7.81	53.40	54.00	-0.60	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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100 dBuV/m



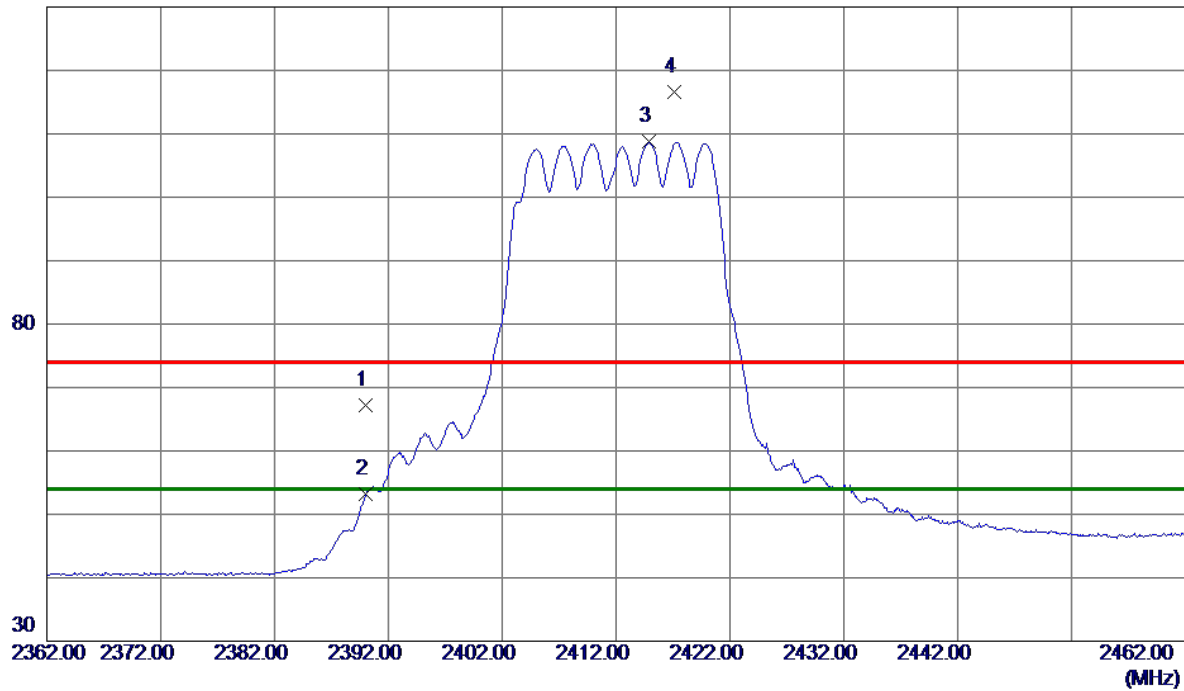
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4922.4250	46.16	3.07	49.23	74.00	-24.77	Peak	
2 *	4923.1750	34.90	3.07	37.97	54.00	-16.03	AVG	

REMARKS:

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

Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical
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130 dBuV/m



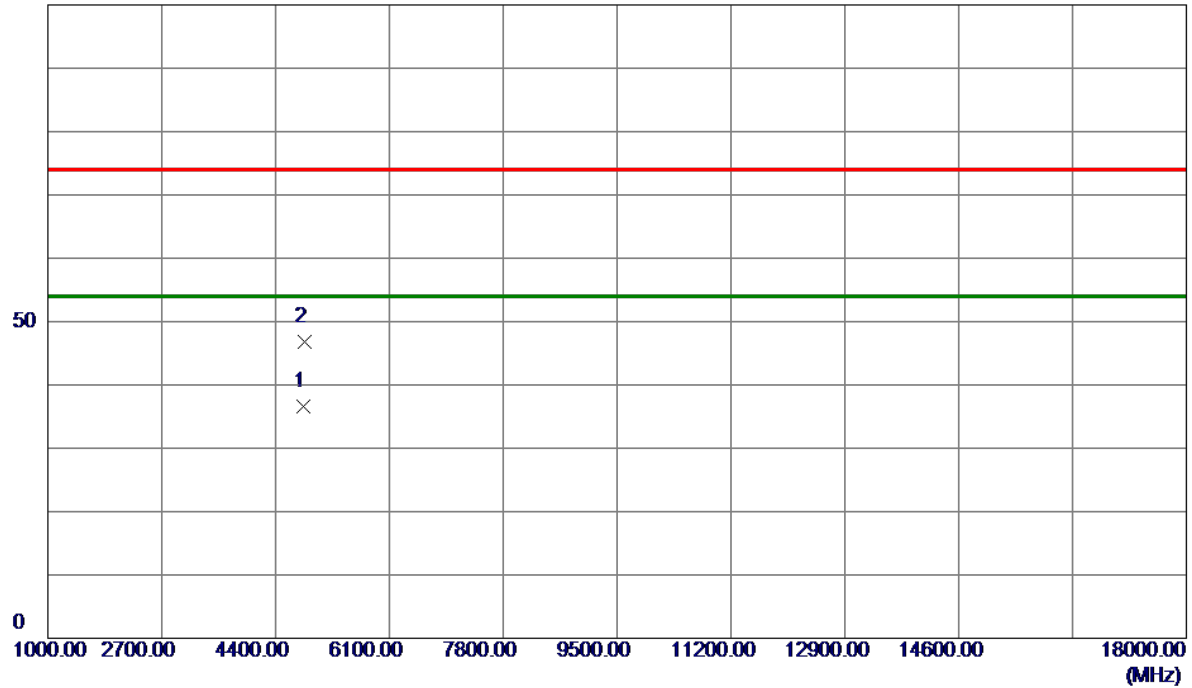
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	59.52	7.70	67.22	74.00	-6.78	Peak	
2	2390.0000	45.46	7.70	53.16	54.00	-0.84	AVG	
3 *	2414.9000	100.98	7.73	108.71	54.00	54.71	AVG	No Limit
4	2417.1500	108.89	7.73	116.62	74.00	42.62	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
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100 dBuV/m

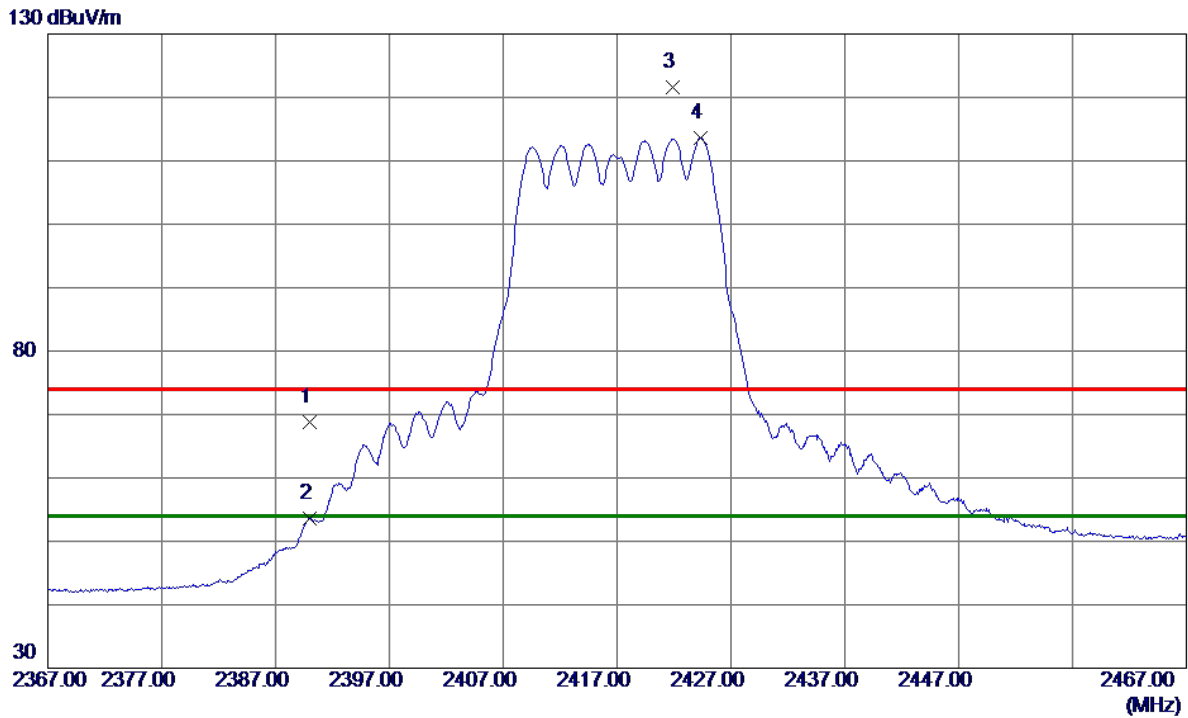


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.8910	33.73	2.84	36.57	54.00	-17.43	AVG	
2	4825.8320	43.93	2.84	46.77	74.00	-27.23	Peak	

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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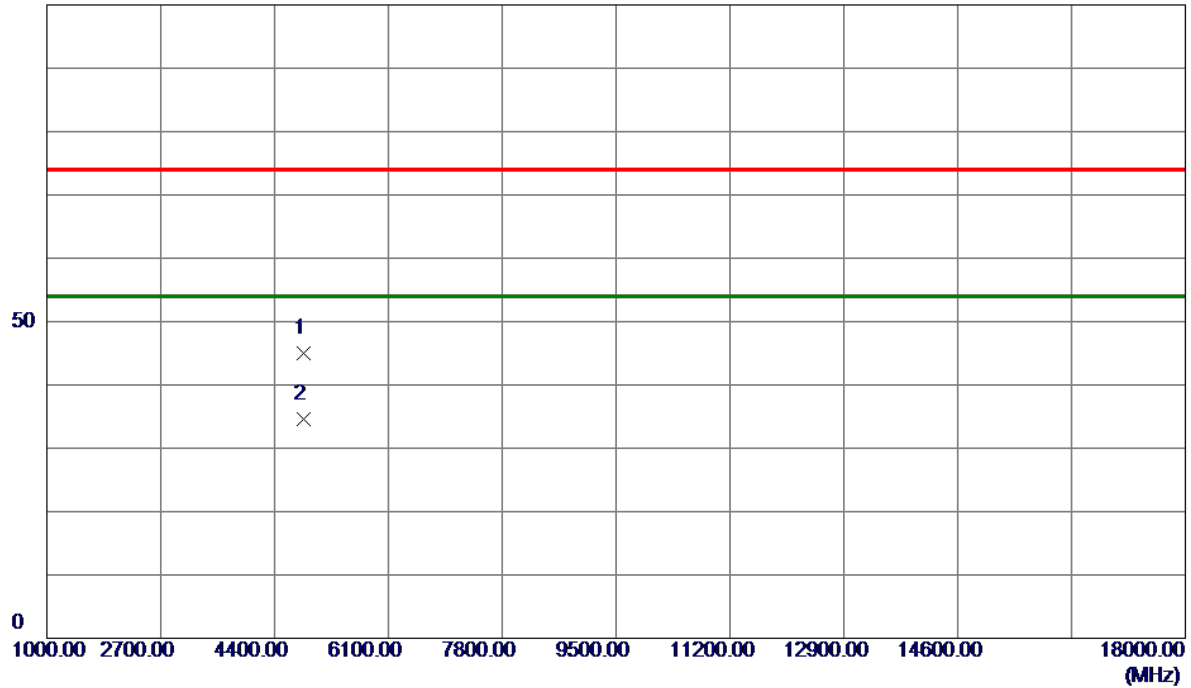
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	61.18	7.70	68.88	74.00	-5.12	Peak	
2	2390.0000	45.81	7.70	53.51	54.00	-0.49	AVG	
3	2421.8500	113.79	7.74	121.53	74.00	47.53	Peak	No Limit
4 *	2424.3500	105.92	7.74	113.66	54.00	59.66	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	Vertical
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100 dBuV/m



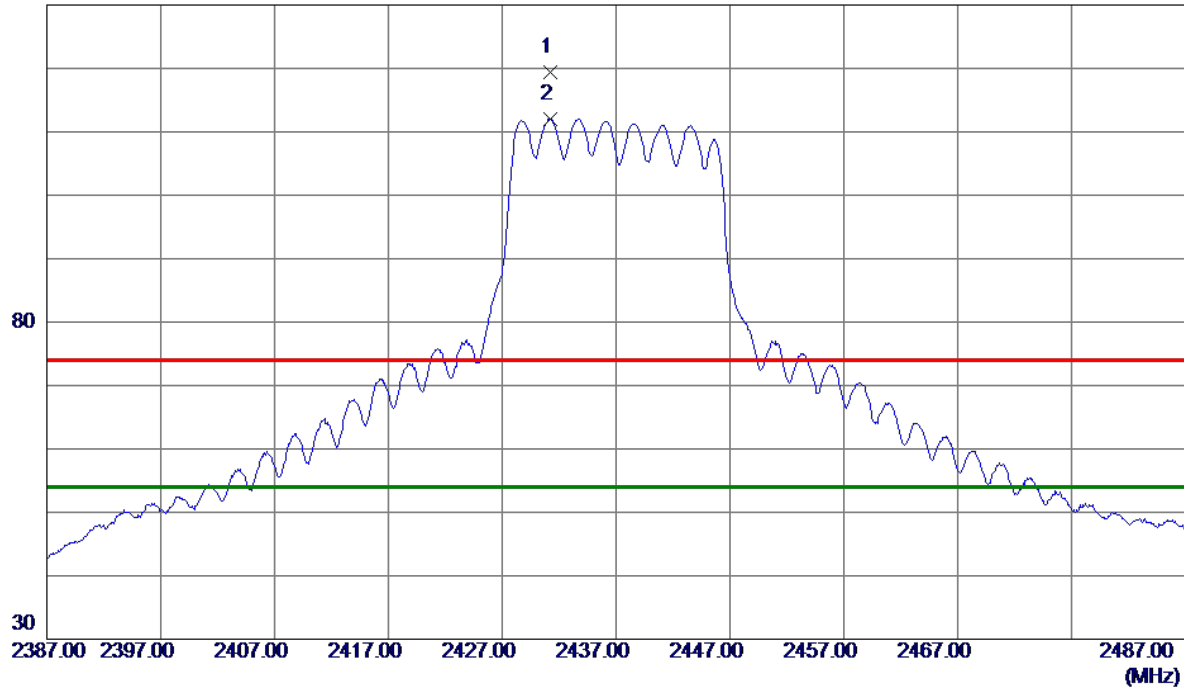
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4831.9320	42.06	2.86	44.92	74.00	-29.08	Peak	
2 *	4832.1450	31.65	2.86	34.51	54.00	-19.49	AVG	

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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130 dBuV/m



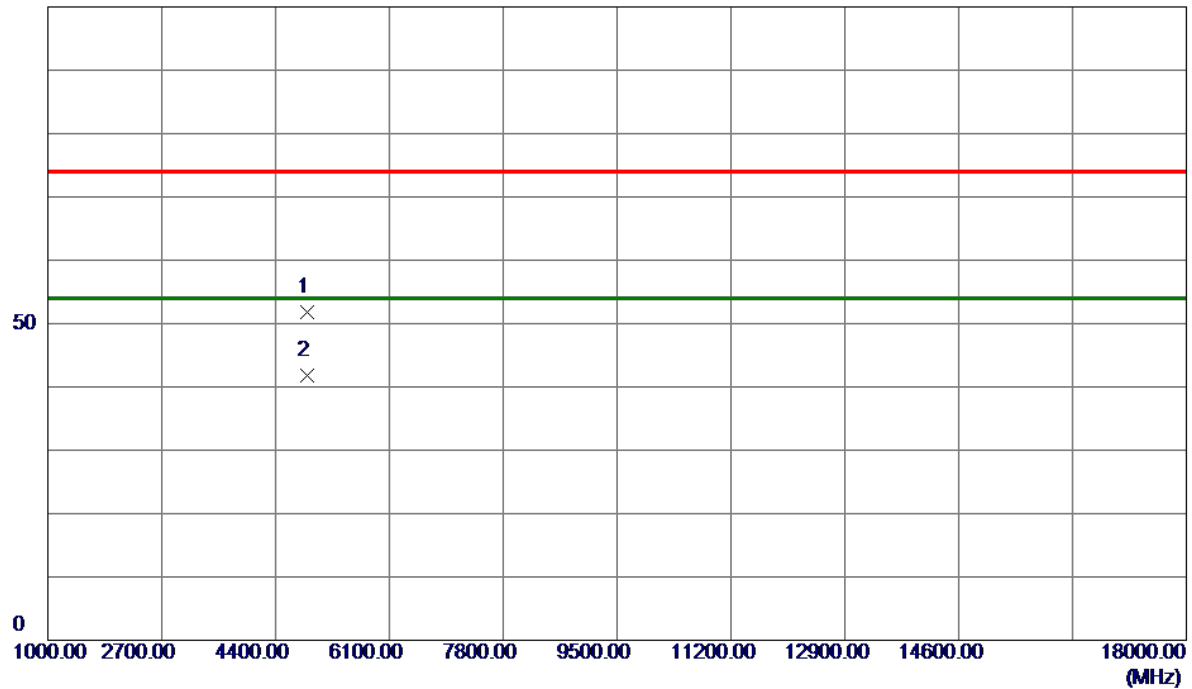
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2431.2000	111.61	7.75	119.36	74.00	45.36	Peak	No Limit
2 *	2431.2500	104.30	7.75	112.05	54.00	58.05	AVG	No Limit

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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100 dBuV/m



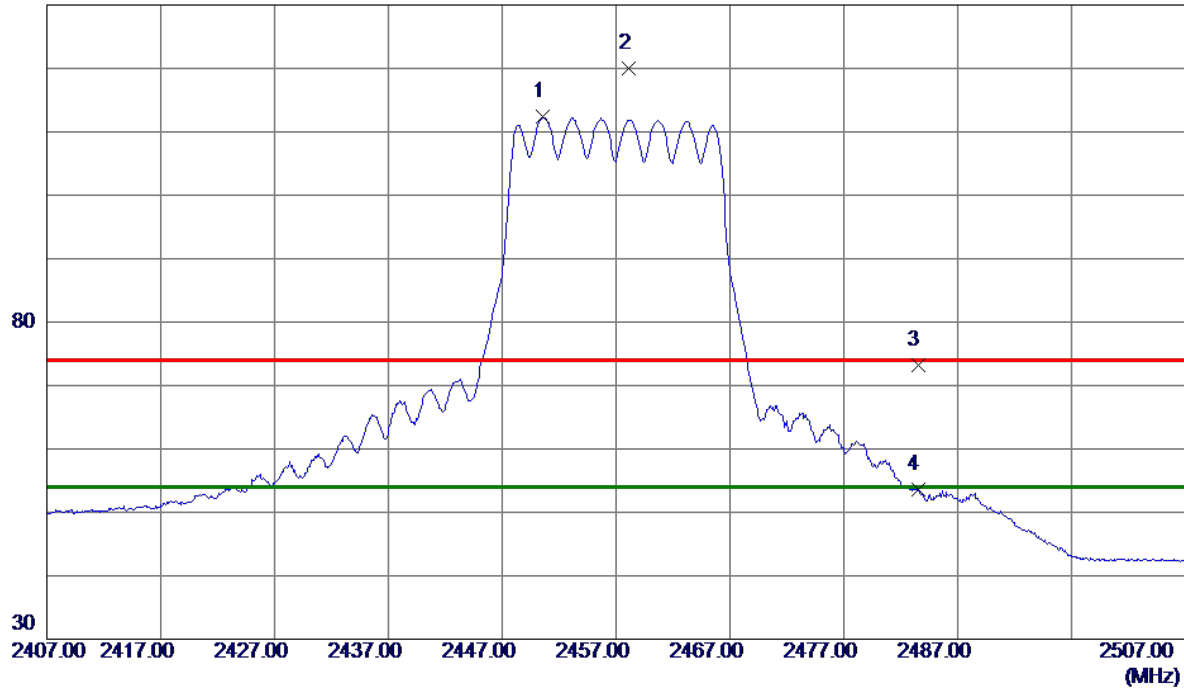
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4872.1669	48.77	2.95	51.72	74.00	-22.28	Peak	
2 *	4874.6450	38.81	2.96	41.77	54.00	-12.23	AVG	

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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130 dBuV/m



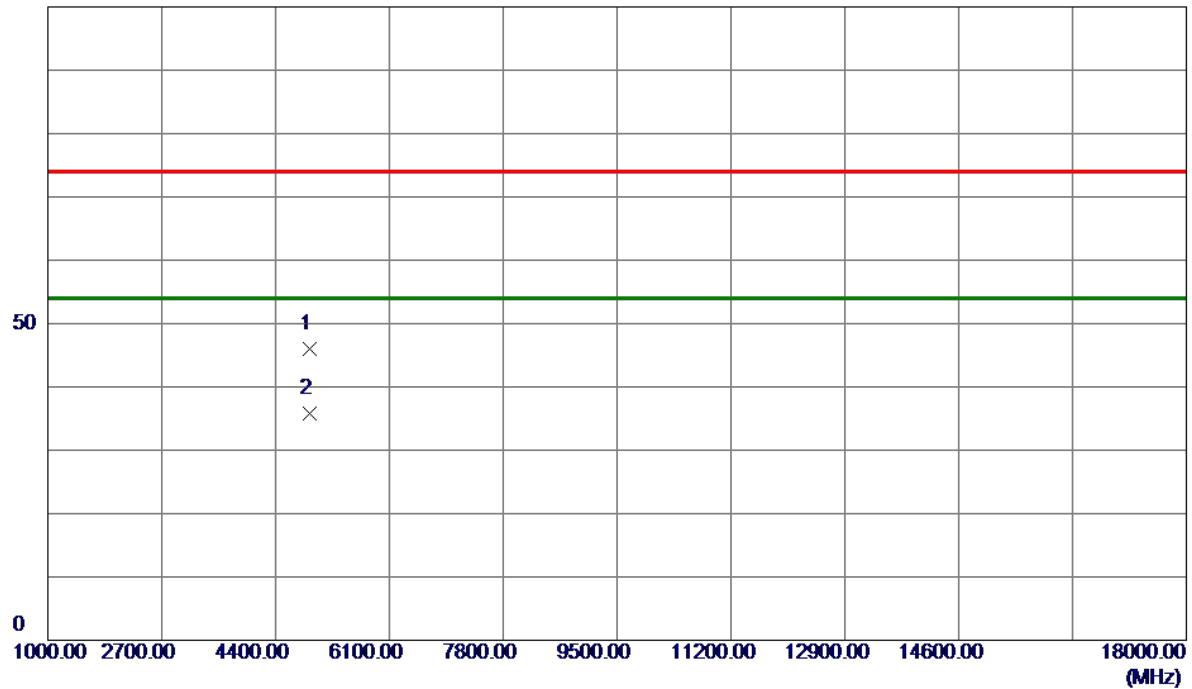
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2450.5500	104.60	7.77	112.37	54.00	58.37	AVG	No Limit
2	2458.1000	112.17	7.78	119.95	74.00	45.95	Peak	No Limit
3	2483.5000	65.48	7.81	73.29	74.00	-0.71	Peak	
4	2483.5000	45.76	7.81	53.57	54.00	-0.43	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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100 dBuV/m



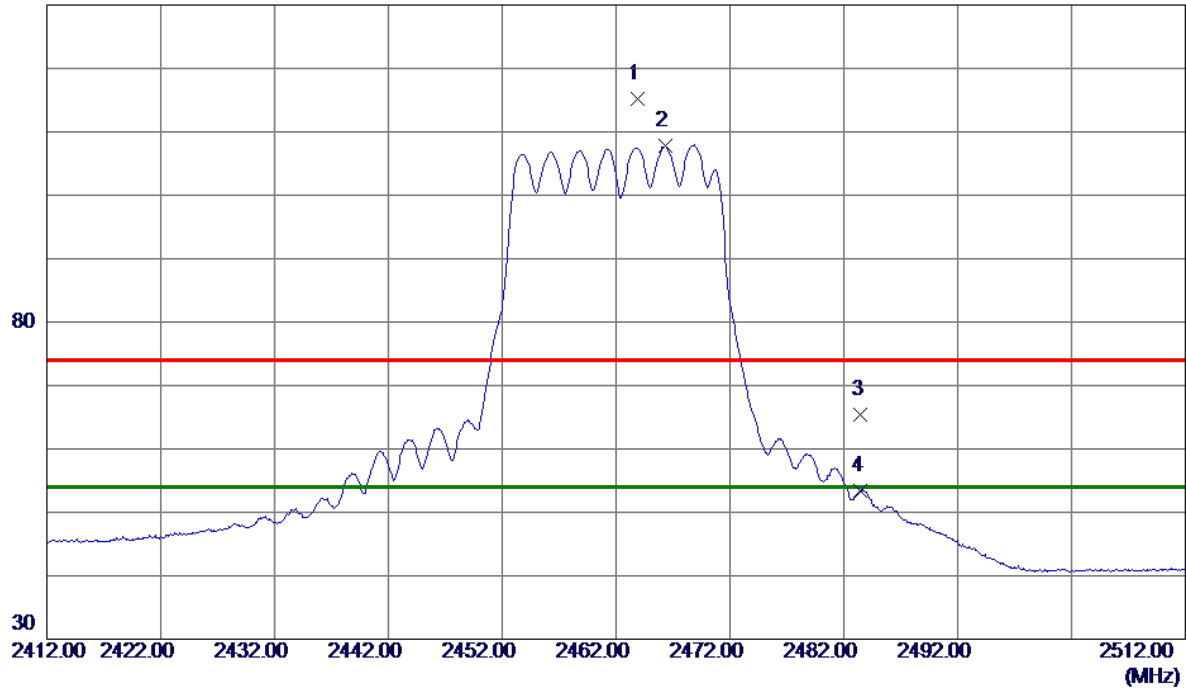
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4914.3200	42.89	3.05	45.94	74.00	-28.06	Peak	
2 *	4914.3849	32.77	3.05	35.82	54.00	-18.18	AVG	

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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130 dBuV/m



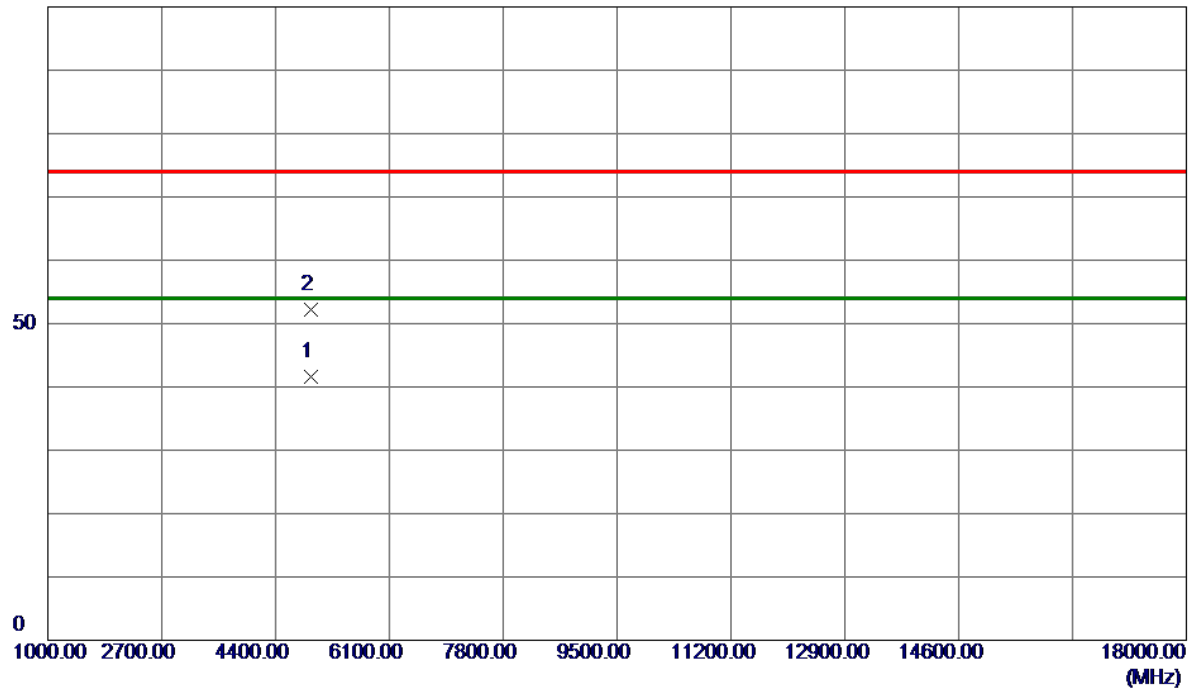
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2463.9000	107.50	7.79	115.29	74.00	41.29	Peak	No Limit
2 *	2466.3500	99.99	7.79	107.78	54.00	53.78	AVG	No Limit
3	2483.5000	57.54	7.81	65.35	74.00	-8.65	Peak	
4	2483.5000	45.54	7.81	53.35	54.00	-0.65	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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100 dBuV/m



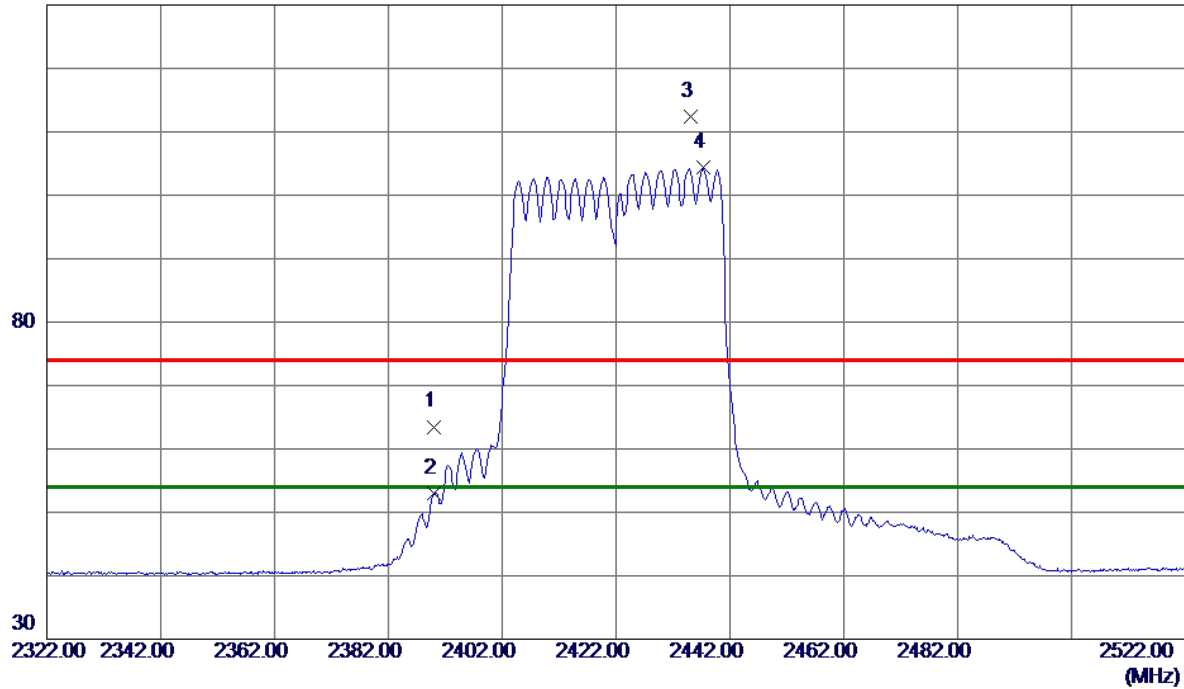
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4922.1980	38.53	3.07	41.60	54.00	-12.40	AVG	
2	4925.9880	49.04	3.08	52.12	74.00	-21.88	Peak	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Vertical
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130 dBuV/m



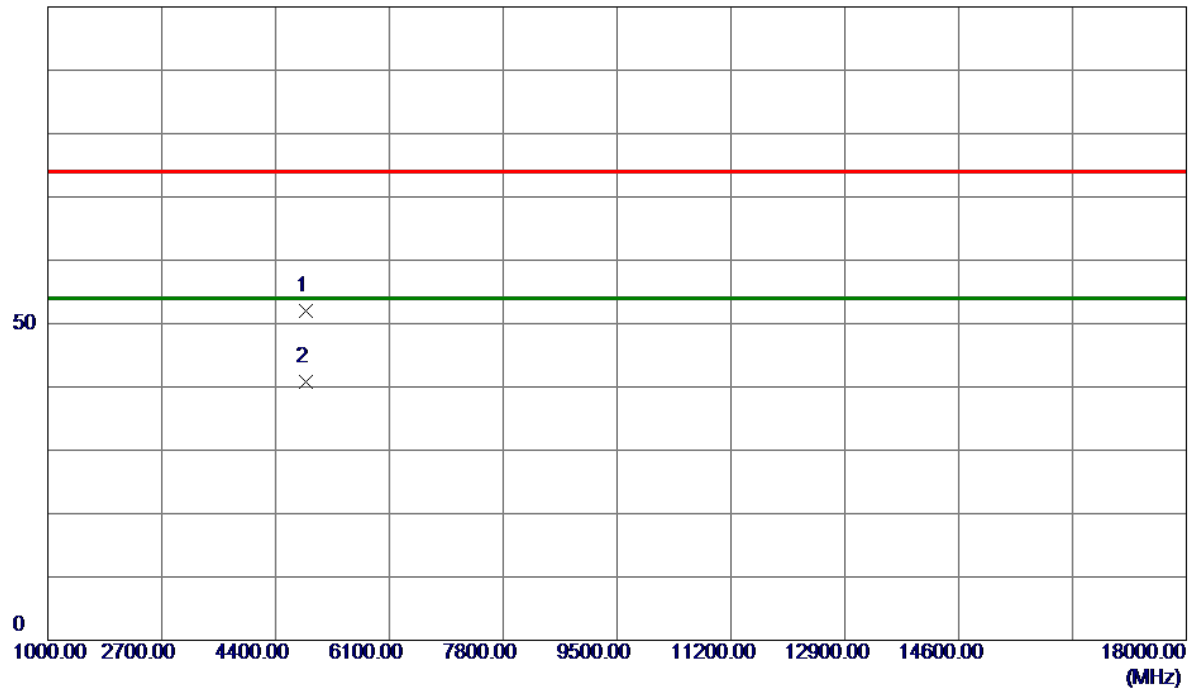
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	55.80	7.70	63.50	74.00	-10.50	Peak	
2	2390.0000	45.38	7.70	53.08	54.00	-0.92	AVG	
3	2435.1000	104.65	7.75	112.40	74.00	38.40	Peak	No Limit
4 *	2437.3000	96.58	7.75	104.33	54.00	50.33	AVG	No Limit

REMARKS:

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

Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Vertical
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100 dBuV/m



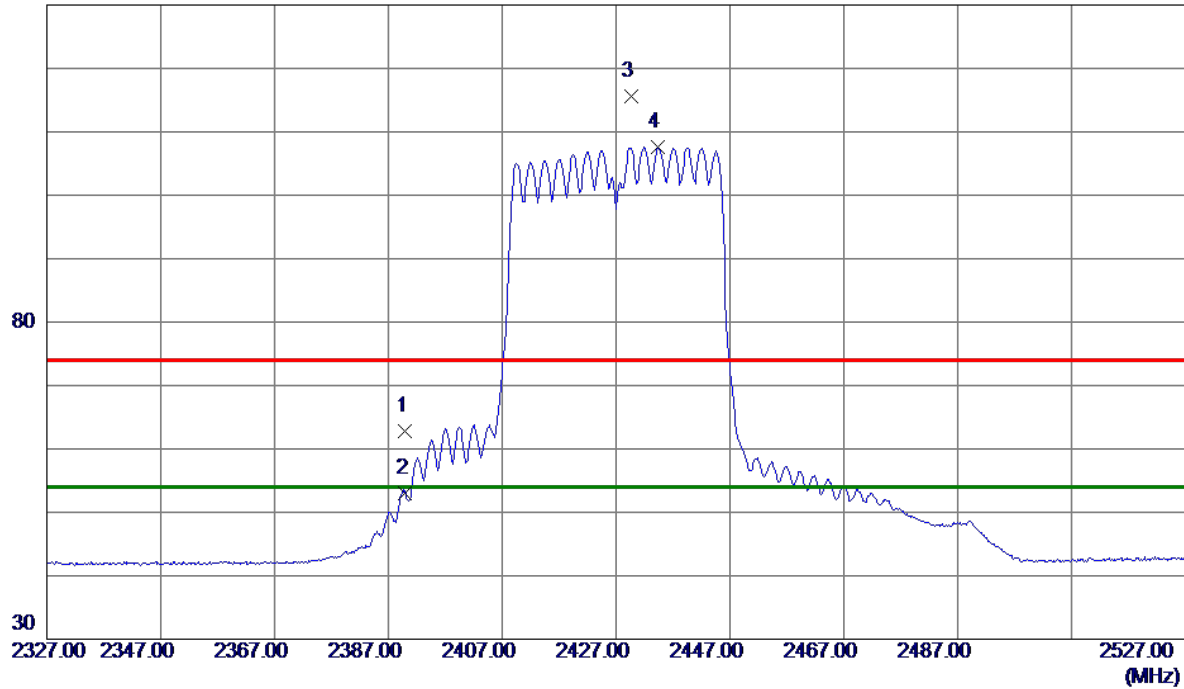
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4844.1930	49.02	2.89	51.91	74.00	-22.09	Peak	
2 *	4845.6850	38.00	2.89	40.89	54.00	-13.11	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2427 MHz	Polarization	Vertical
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130 dBuV/m



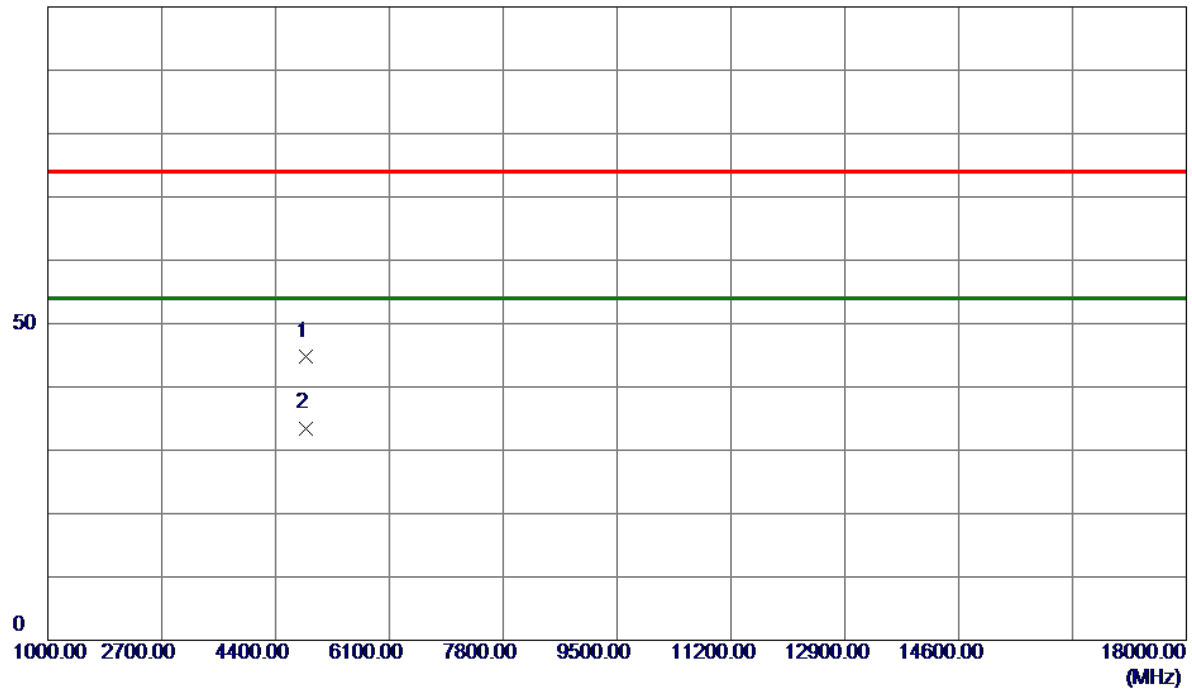
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	55.16	7.70	62.86	74.00	-11.14	Peak	
2	2390.0000	45.38	7.70	53.08	54.00	-0.92	AVG	
3	2429.7000	107.77	7.75	115.52	74.00	41.52	Peak	No Limit
4 *	2434.4000	99.79	7.75	107.54	54.00	53.54	AVG	No Limit

REMARKS:

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

Test Mode	TX N(HT40) Mode 2427 MHz	Polarization	Vertical
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100 dBuV/m



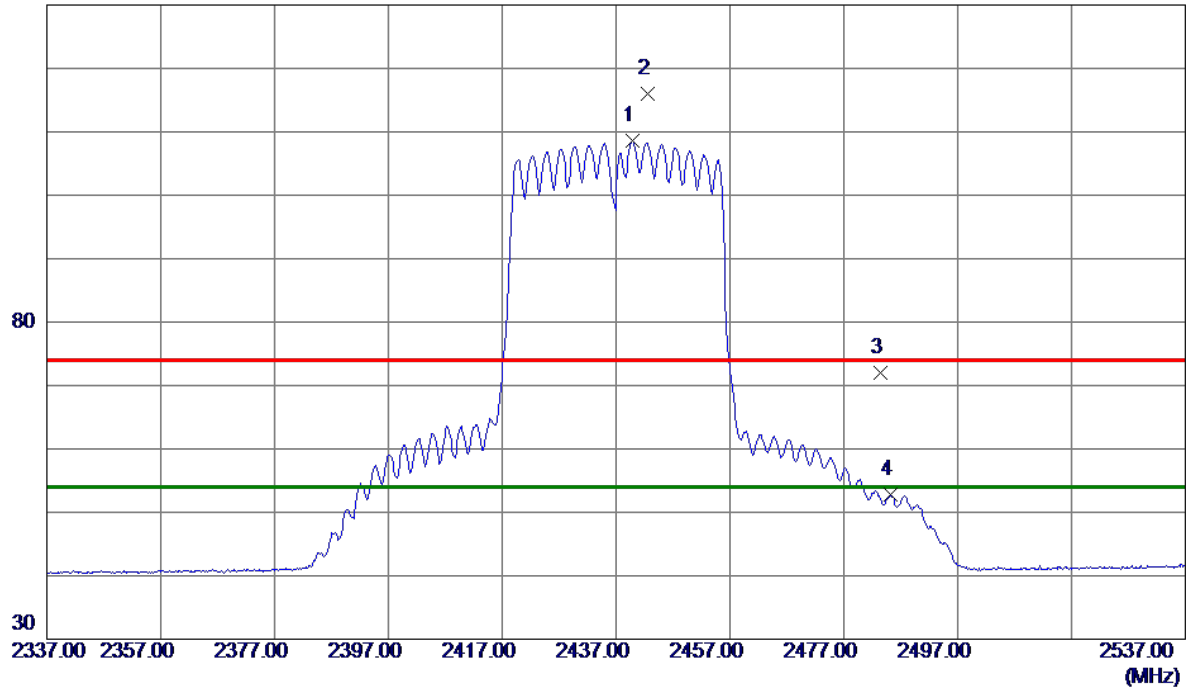
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4854.2000	41.93	2.91	44.84	74.00	-29.16	Peak	
2 *	4854.3769	30.59	2.91	33.50	54.00	-20.50	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2437 MHz	Polarization	Vertical
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130 dBuV/m



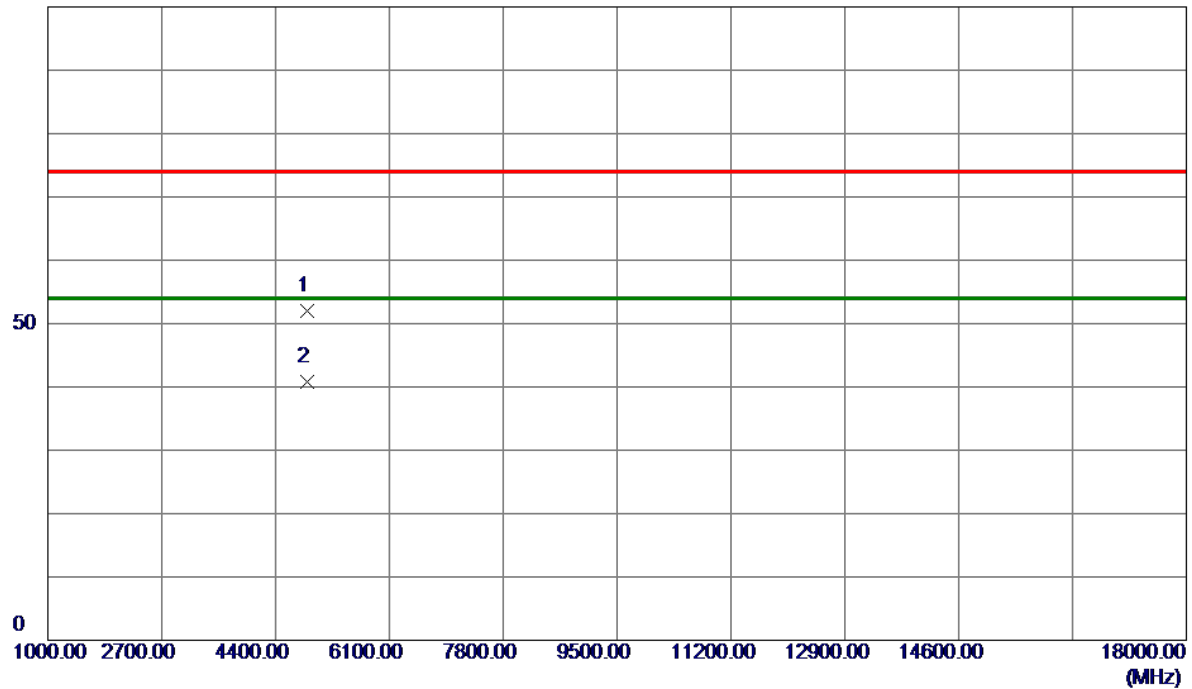
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2439.9000	100.77	7.76	108.53	54.00	54.53	AVG	No Limit
2	2442.5000	108.14	7.76	115.90	74.00	41.90	Peak	No Limit
3	2483.5000	64.26	7.81	72.07	74.00	-1.93	Peak	
4	2485.3000	44.90	7.81	52.71	54.00	-1.29	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2437 MHz	Polarization	Vertical
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100 dBuV/m



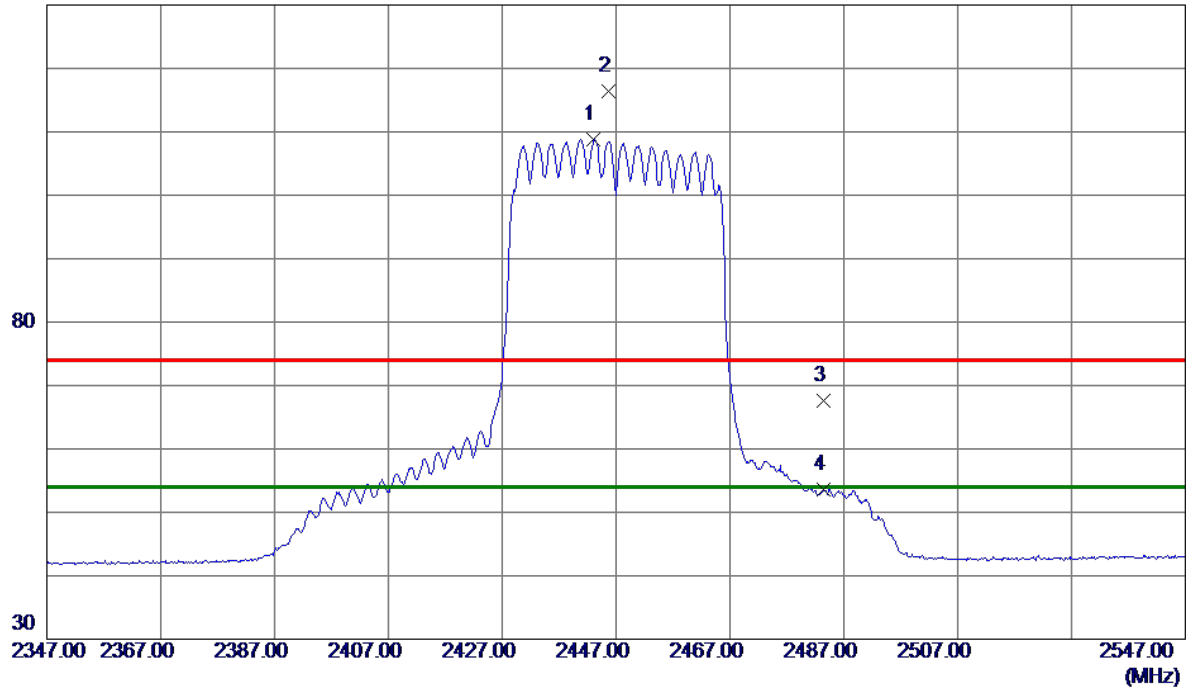
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4875.2170	48.95	2.96	51.91	74.00	-22.09	Peak	
2 *	4875.9169	37.90	2.96	40.86	54.00	-13.14	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2447 MHz	Polarization	Vertical
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130 dBuV/m



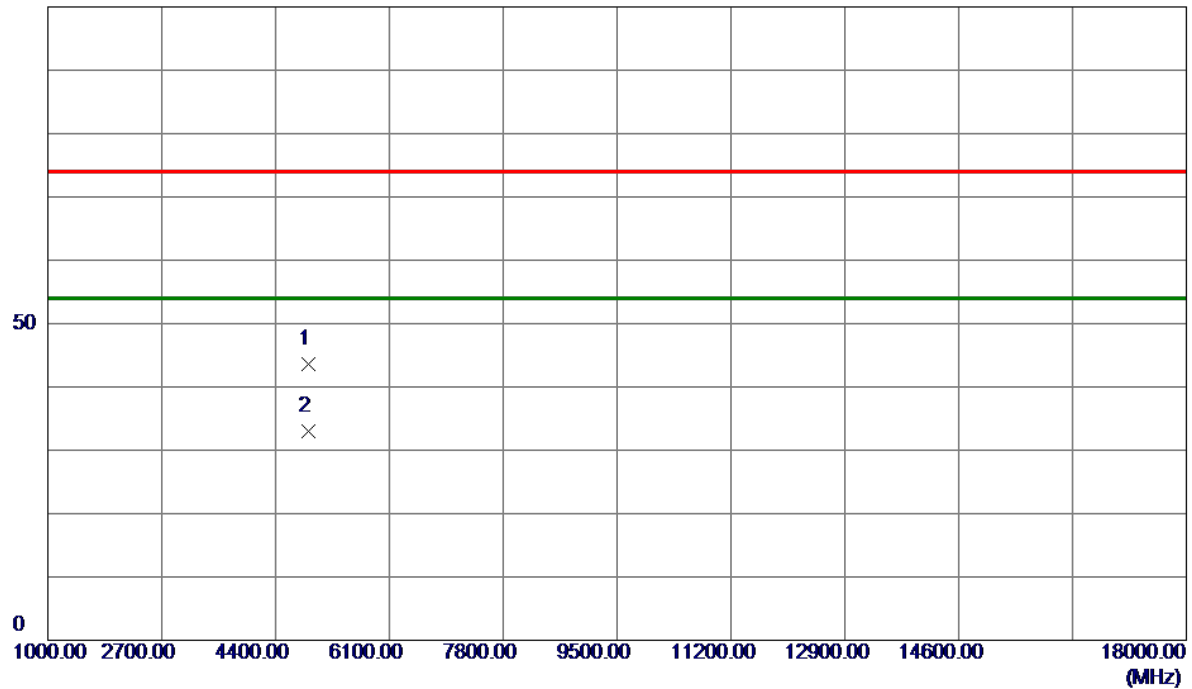
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2443.1000	101.02	7.76	108.78	54.00	54.78	AVG	No Limit
2	2445.7000	108.60	7.76	116.36	74.00	42.36	Peak	No Limit
3	2483.5000	59.88	7.81	67.69	74.00	-6.31	Peak	
4	2483.5000	45.84	7.81	53.65	54.00	-0.35	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2447 MHz	Polarization	Vertical
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100 dBuV/m



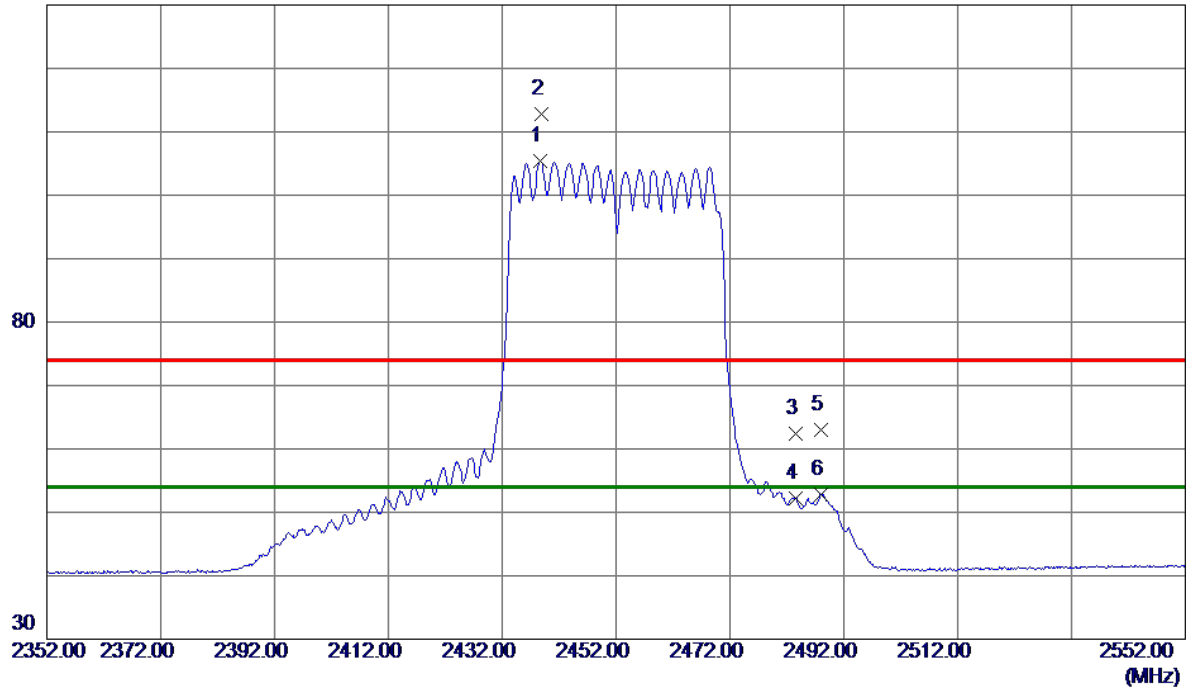
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4892.5450	40.62	3.00	43.62	74.00	-30.38	Peak	
2 *	4895.3820	30.03	3.01	33.04	54.00	-20.96	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2452 MHz	Polarization	Vertical
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130 dBuV/m



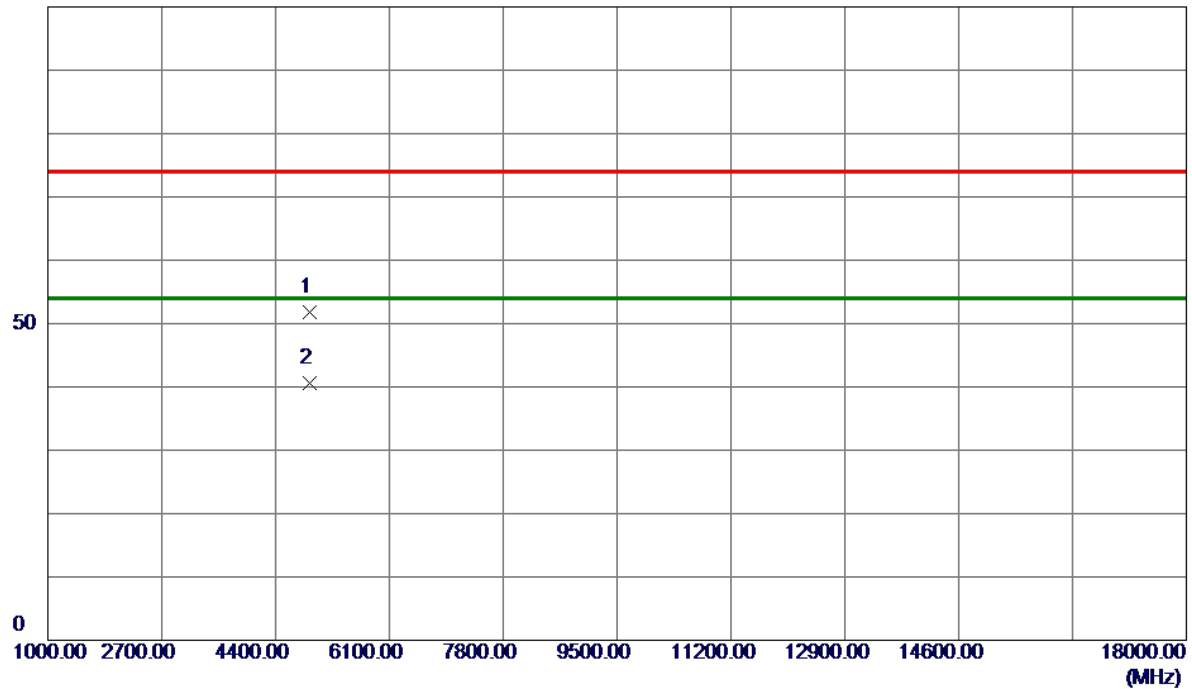
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2438.7000	97.64	7.76	105.40	54.00	51.40	AVG	No Limit
2	2438.9000	105.13	7.76	112.89	74.00	38.89	Peak	No Limit
3	2483.5000	54.56	7.81	62.37	74.00	-11.63	Peak	
4	2483.5000	44.41	7.81	52.22	54.00	-1.78	AVG	
5	2488.0000	55.13	7.82	62.95	74.00	-11.05	Peak	
6	2488.0000	45.00	7.82	52.82	54.00	-1.18	AVG	

REMARKS:

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

Test Mode	TX N(HT40) Mode 2452 MHz	Polarization	Vertical
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100 dBuV/m



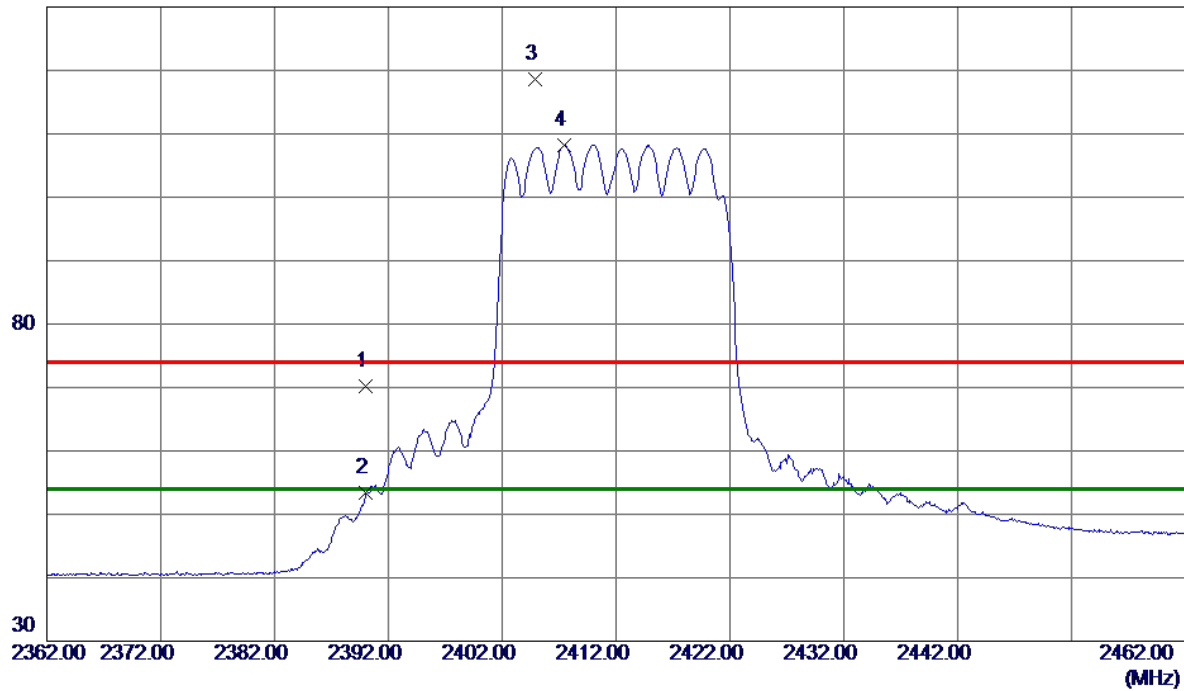
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4901.6580	48.78	3.02	51.80	74.00	-22.20	Peak	
2 *	4905.7250	37.59	3.03	40.62	54.00	-13.38	AVG	

REMARKS:

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

Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Vertical
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130 dBuV/m



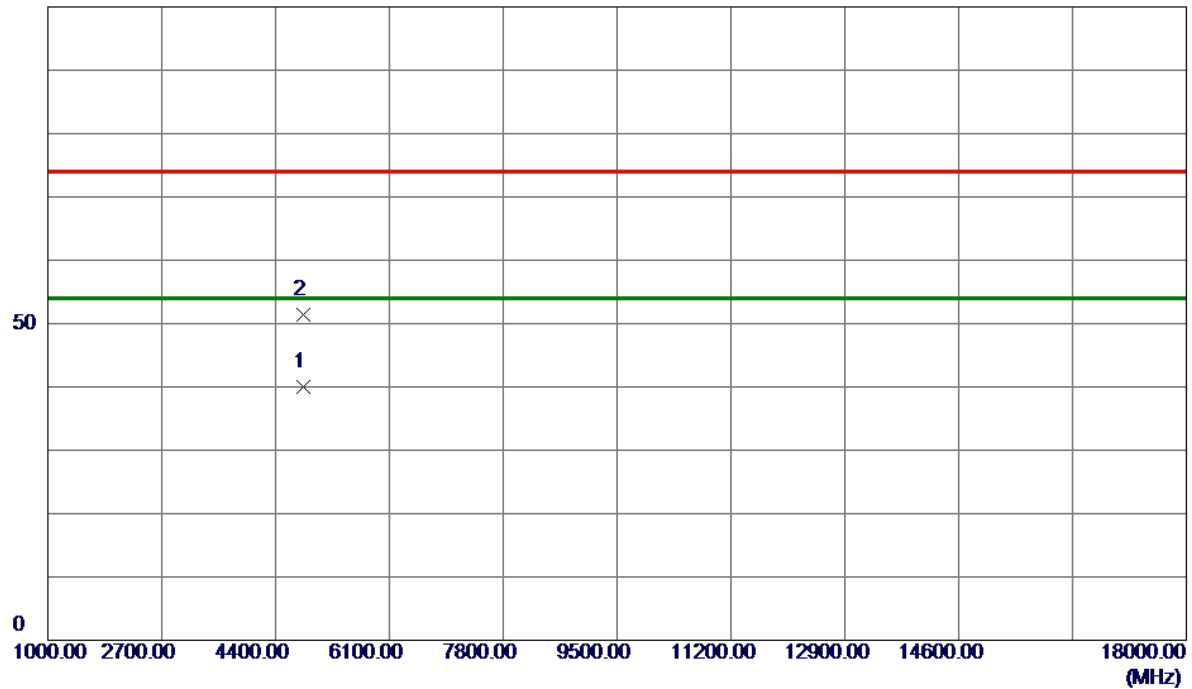
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	62.48	7.70	70.18	74.00	-3.82	Peak	
2	2390.0000	45.68	7.70	53.38	54.00	-0.62	AVG	
3	2404.9000	110.88	7.72	118.60	74.00	44.60	Peak	No Limit
4 *	2407.4500	100.53	7.72	108.25	54.00	54.25	AVG	No Limit

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
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100 dBuV/m



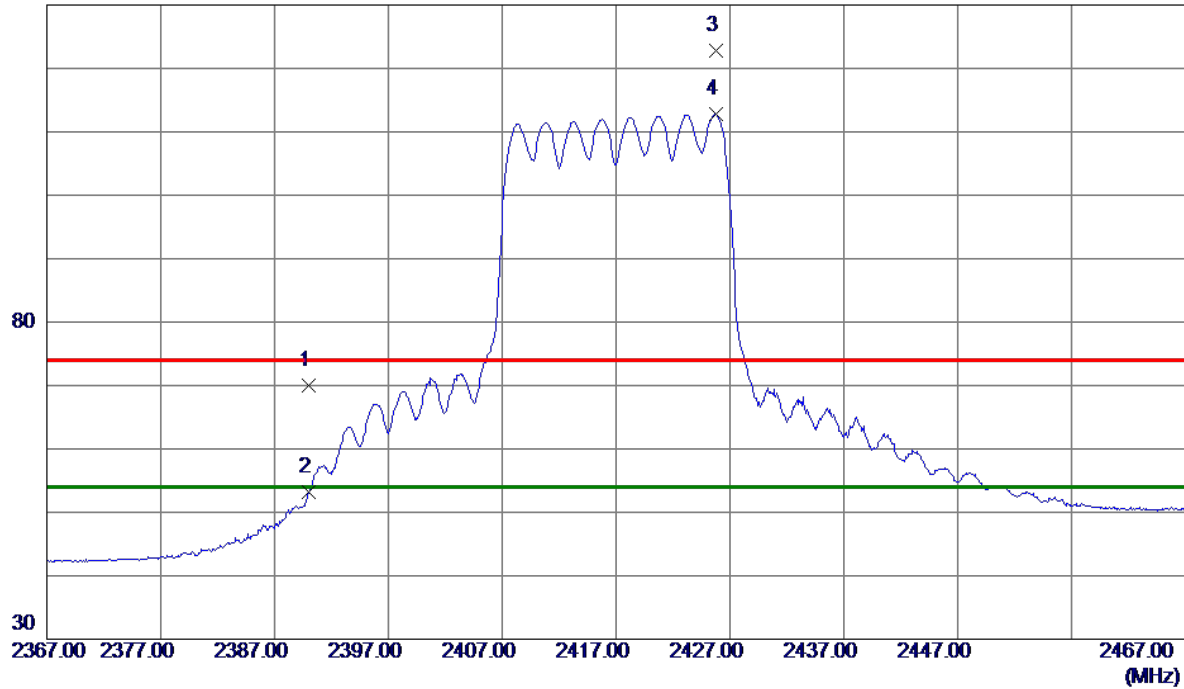
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.3250	37.13	2.84	39.97	54.00	-14.03	AVG	
2	4824.7120	48.48	2.84	51.32	74.00	-22.68	Peak	

REMARKS:

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

Test Mode	TX AX(HE20) Mode 2417 MHz	Polarization	Vertical
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130 dBuV/m



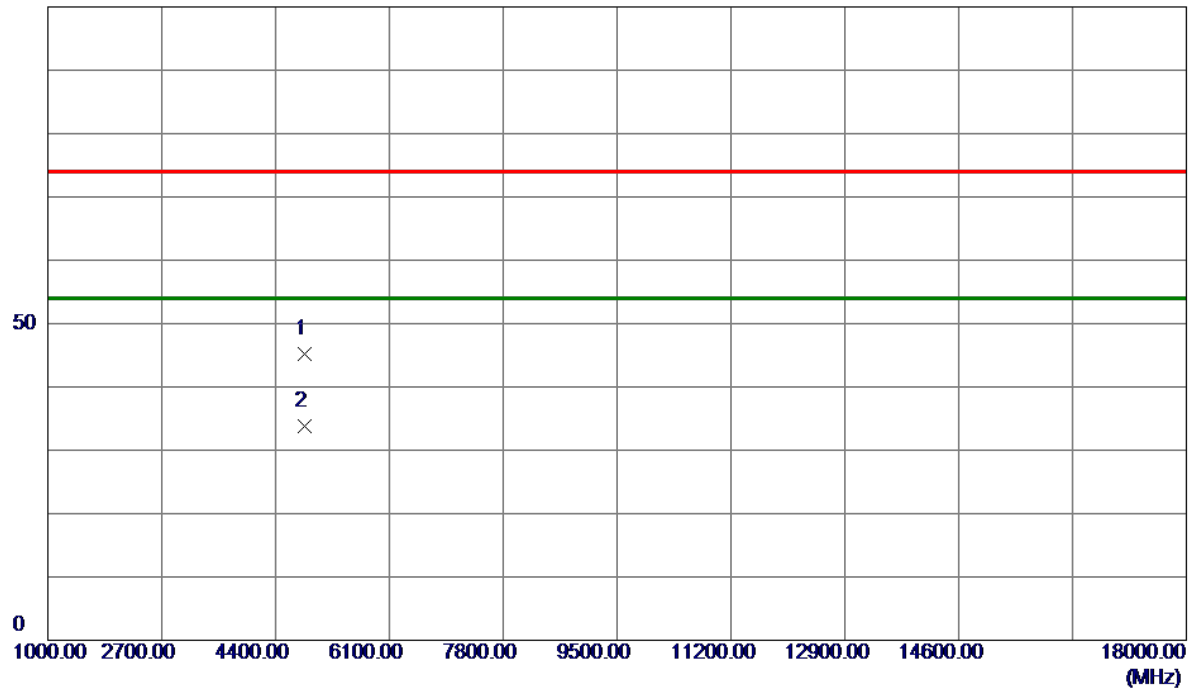
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	62.21	7.70	69.91	74.00	-4.09	Peak	
2	2390.0000	45.42	7.70	53.12	54.00	-0.88	AVG	
3	2425.8000	115.07	7.74	122.81	74.00	48.81	Peak	No Limit
4 *	2425.8000	105.08	7.74	112.82	54.00	58.82	AVG	No Limit

REMARKS:

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

Test Mode	TX AX(HE20) Mode 2417 MHz	Polarization	Vertical
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100 dBuV/m



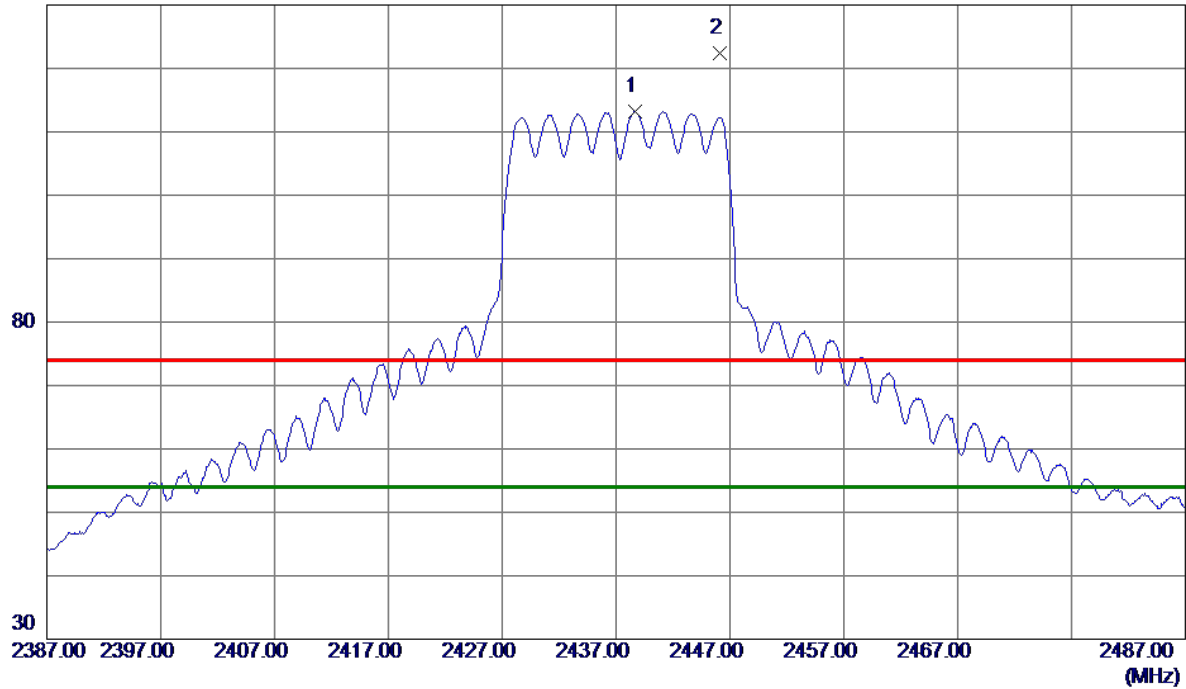
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4831.6269	42.34	2.86	45.20	74.00	-28.80	Peak	
2 *	4834.3769	30.91	2.86	33.77	54.00	-20.23	AVG	

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
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130 dBuV/m



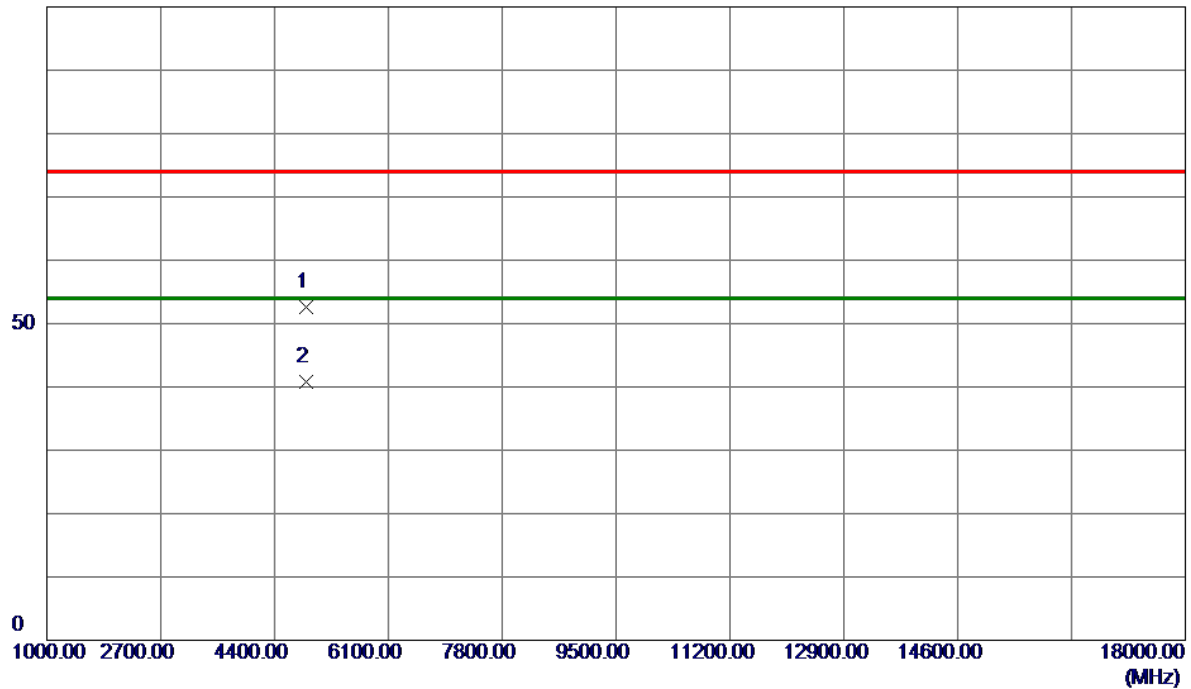
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2438.7000	105.44	7.76	113.20	54.00	59.20	AVG	No Limit
2	2446.1500	114.60	7.77	122.37	74.00	48.37	Peak	No Limit

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
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100 dBuV/m



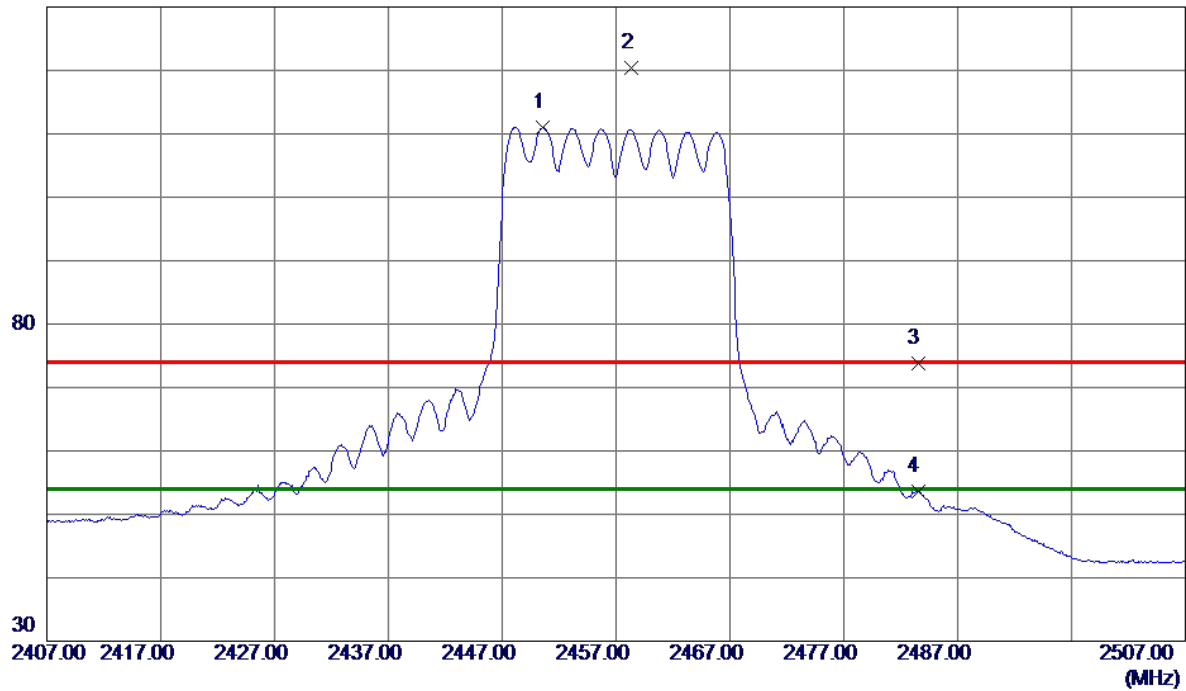
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.7250	49.67	2.96	52.63	74.00	-21.37	Peak	
2 *	4874.1750	37.92	2.96	40.88	54.00	-13.12	AVG	

REMARKS:

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

Test Mode	TX AX(HE20) Mode 2457 MHz	Polarization	Vertical
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130 dBuV/m



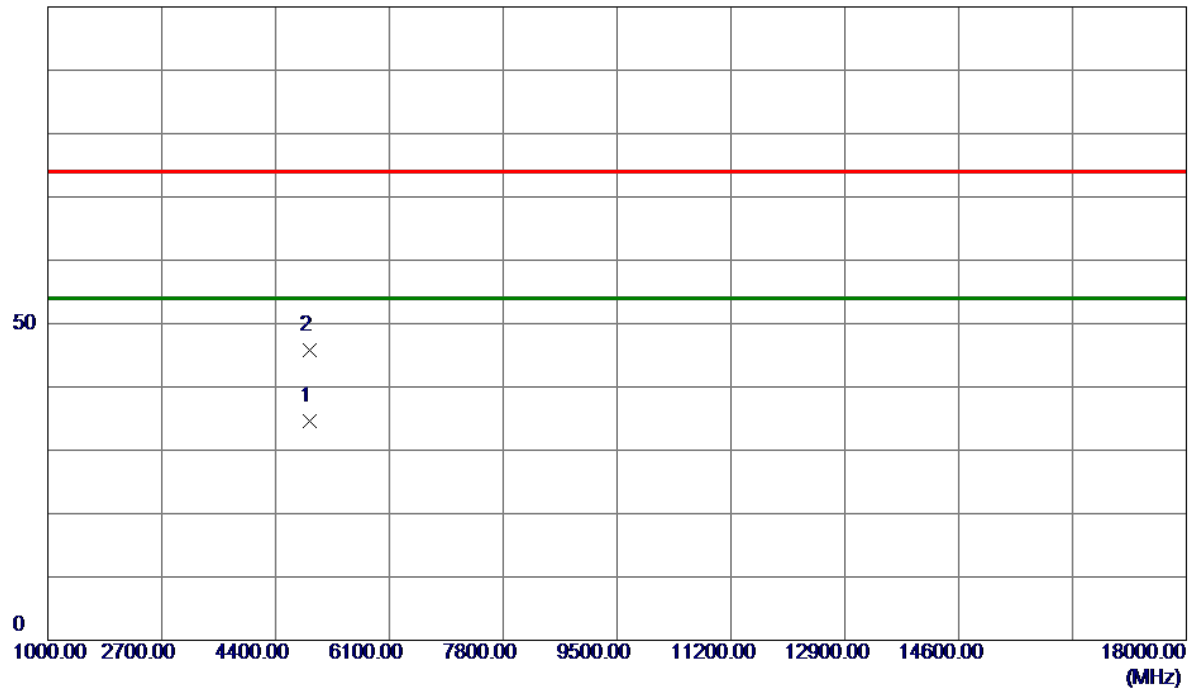
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2450.5500	103.18	7.77	110.95	54.00	56.95	AVG	No Limit
2	2458.3000	112.65	7.78	120.43	74.00	46.43	Peak	No Limit
3	2483.5000	66.07	7.81	73.88	74.00	-0.12	Peak	
4	2483.5000	45.71	7.81	53.52	54.00	-0.48	AVG	

REMARKS:

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

Test Mode	TX AX(HE20) Mode 2457 MHz	Polarization	Vertical
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100 dBuV/m



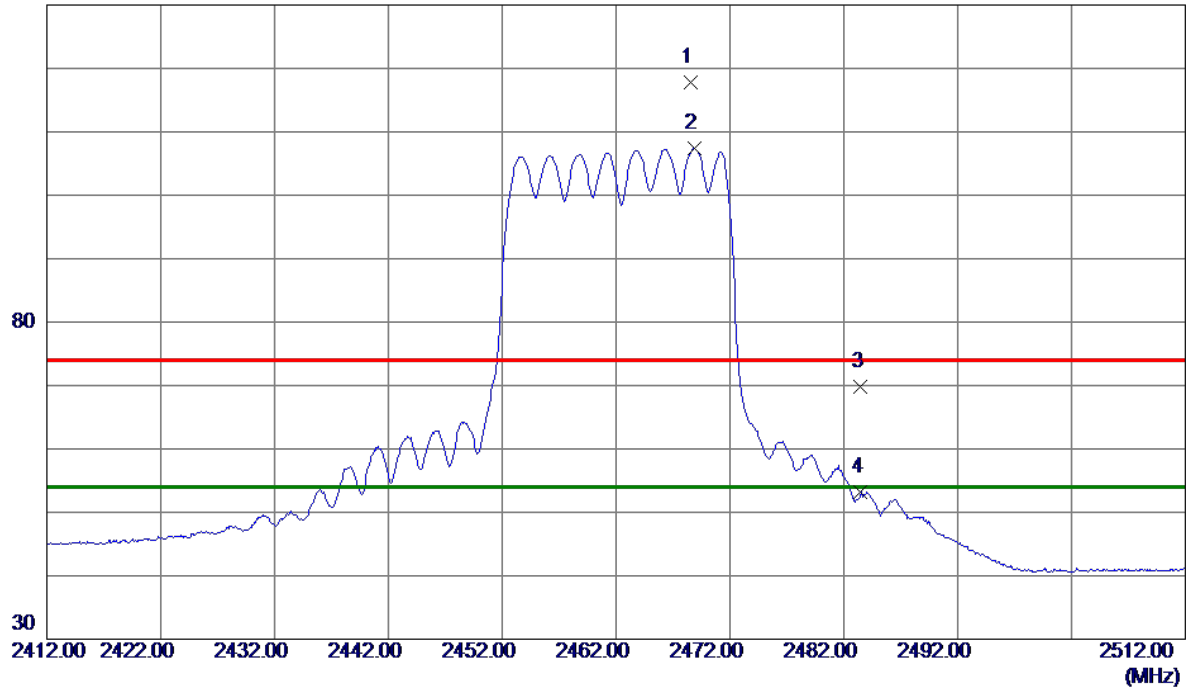
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4914.5950	31.64	3.05	34.69	54.00	-19.31	AVG	
2	4916.4720	42.67	3.06	45.73	74.00	-28.27	Peak	

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
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130 dBuV/m



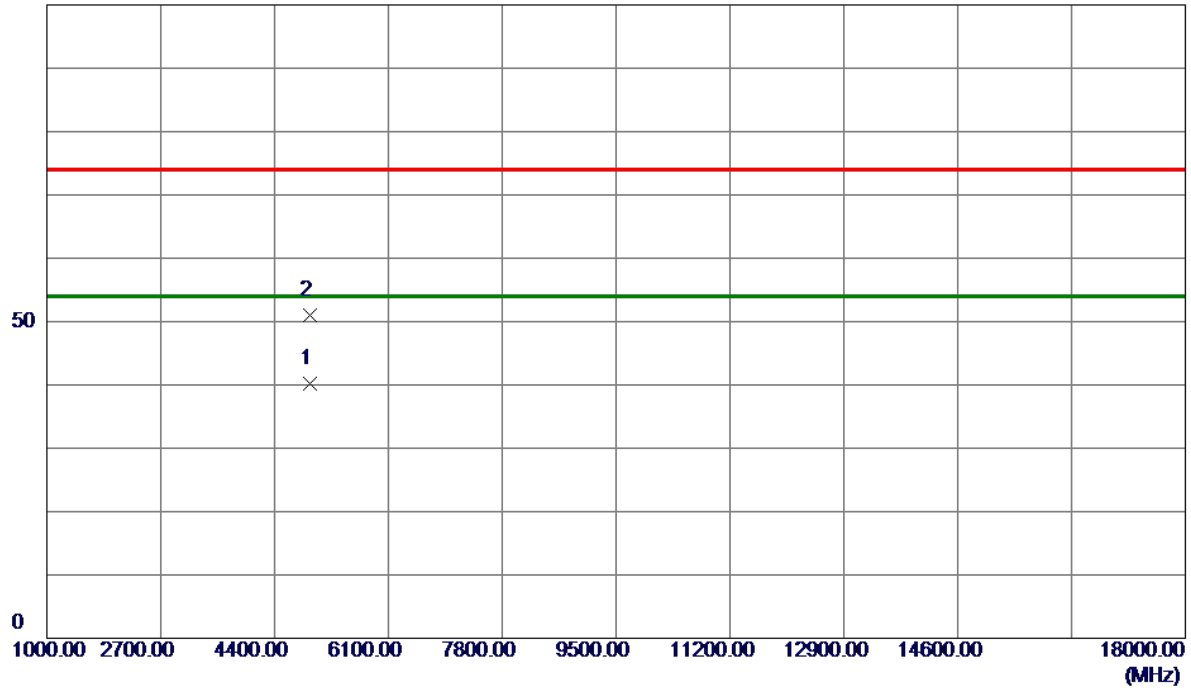
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2468.6000	110.07	7.79	117.86	74.00	43.86	Peak	No Limit
2 *	2468.8500	99.67	7.79	107.46	54.00	53.46	AVG	No Limit
3	2483.5000	61.97	7.81	69.78	74.00	-4.22	Peak	
4	2483.5000	45.30	7.81	53.11	54.00	-0.89	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
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100 dBuV/m



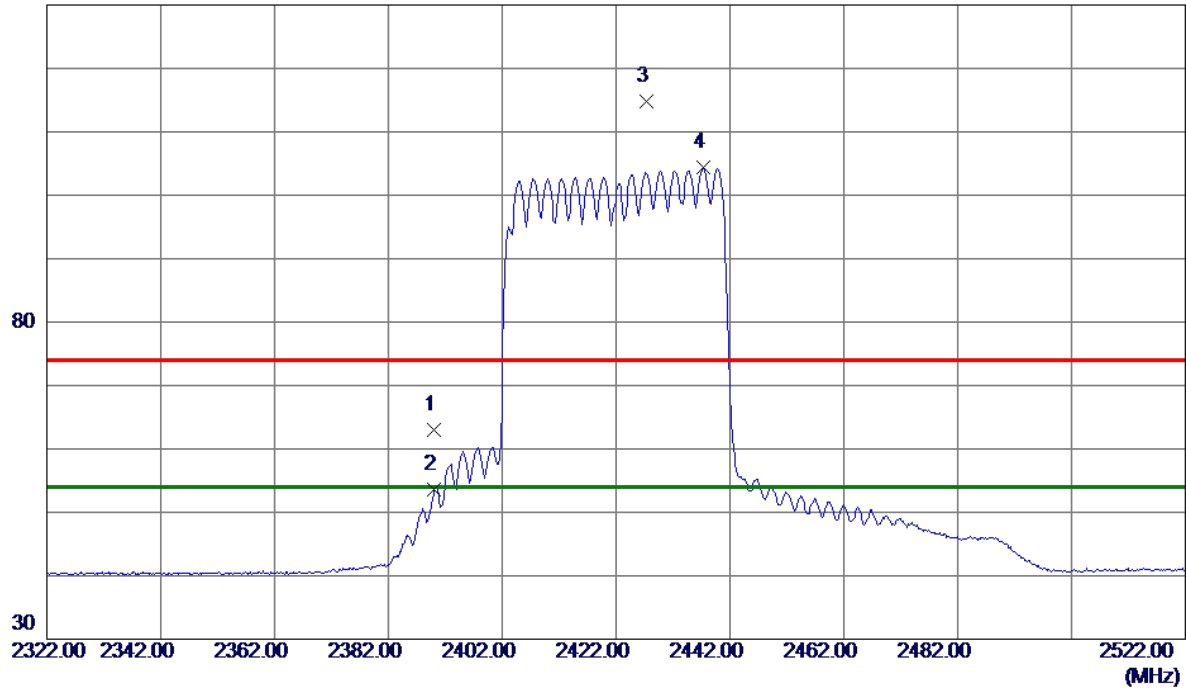
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.7000	37.21	3.07	40.28	54.00	-13.72	AVG	
2	4925.8849	48.01	3.08	51.09	74.00	-22.91	Peak	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2422 MHz	Polarization	Vertical
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130 dBuV/m



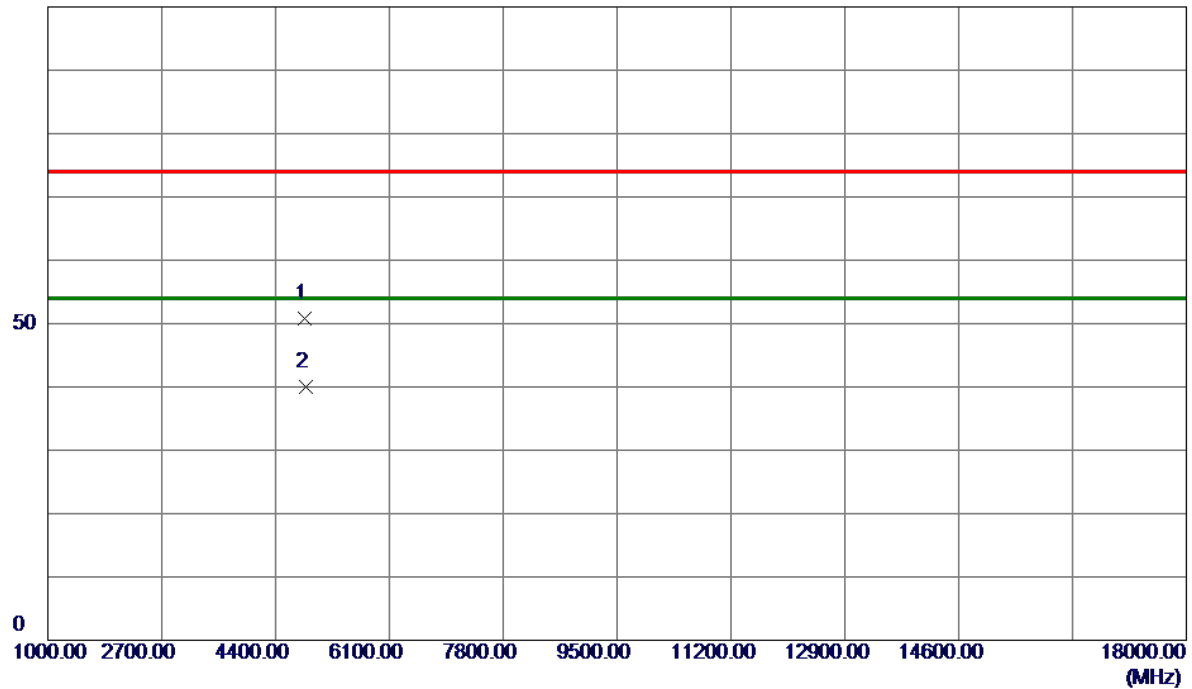
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	55.22	7.70	62.92	74.00	-11.08	Peak	
2	2390.0000	45.94	7.70	53.64	54.00	-0.36	AVG	
3	2427.4000	107.12	7.74	114.86	74.00	40.86	Peak	No Limit
4 *	2437.4000	96.65	7.75	104.40	54.00	50.40	AVG	No Limit

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2422 MHz	Polarization	Vertical
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100 dBuV/m



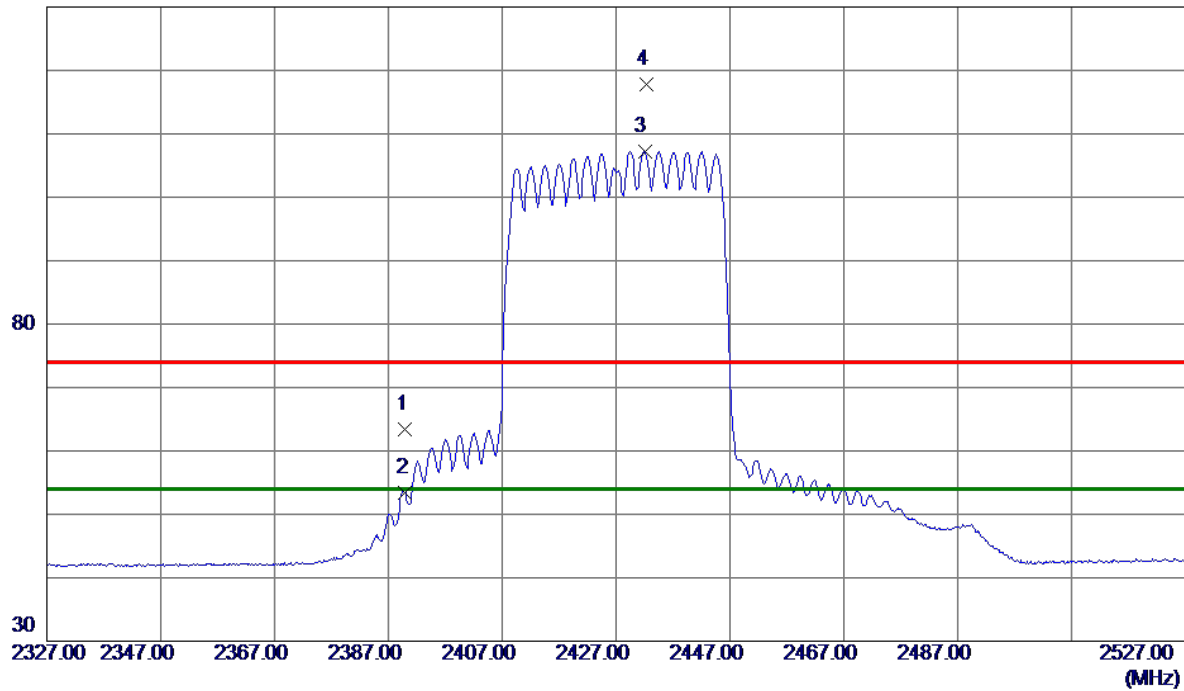
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4841.4350	48.01	2.88	50.89	74.00	-23.11	Peak	
2 *	4845.1850	37.06	2.89	39.95	54.00	-14.05	AVG	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2427 MHz	Polarization	Vertical
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130 dBuV/m



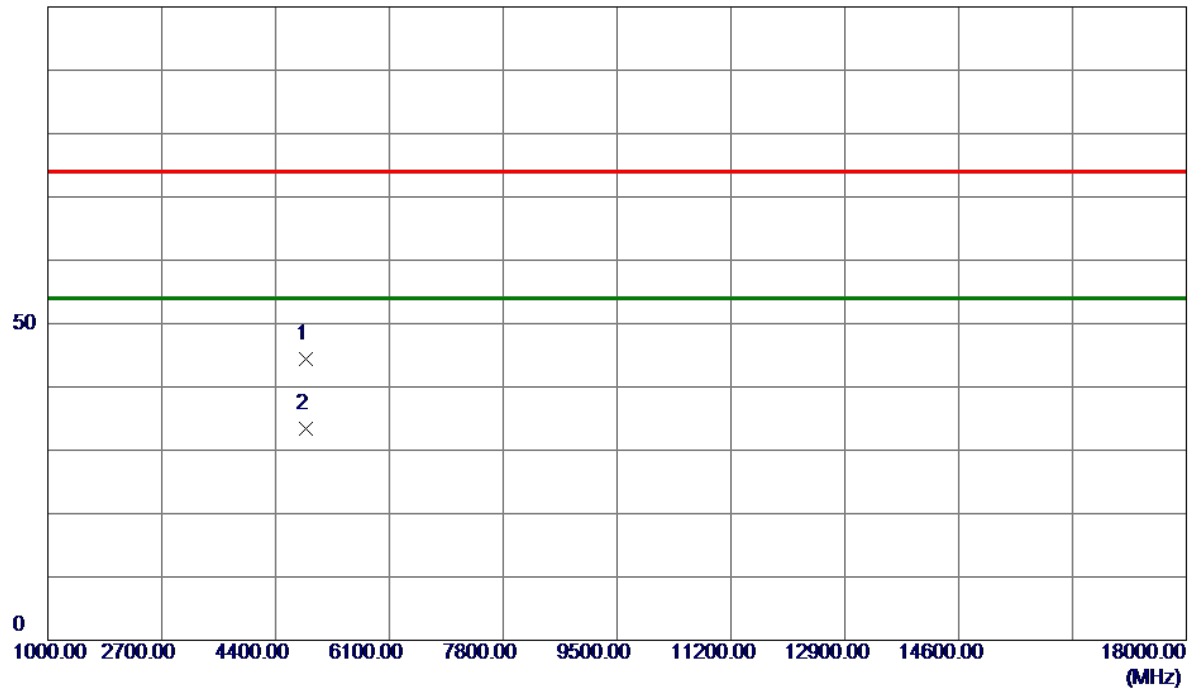
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	55.76	7.70	63.46	74.00	-10.54	Peak	
2	2390.0000	45.71	7.70	53.41	54.00	-0.59	AVG	
3 *	2432.0000	99.50	7.75	107.25	54.00	53.25	AVG	No Limit
4	2432.3000	109.97	7.75	117.72	74.00	43.72	Peak	No Limit

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2427 MHz	Polarization	Vertical
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100 dBuV/m



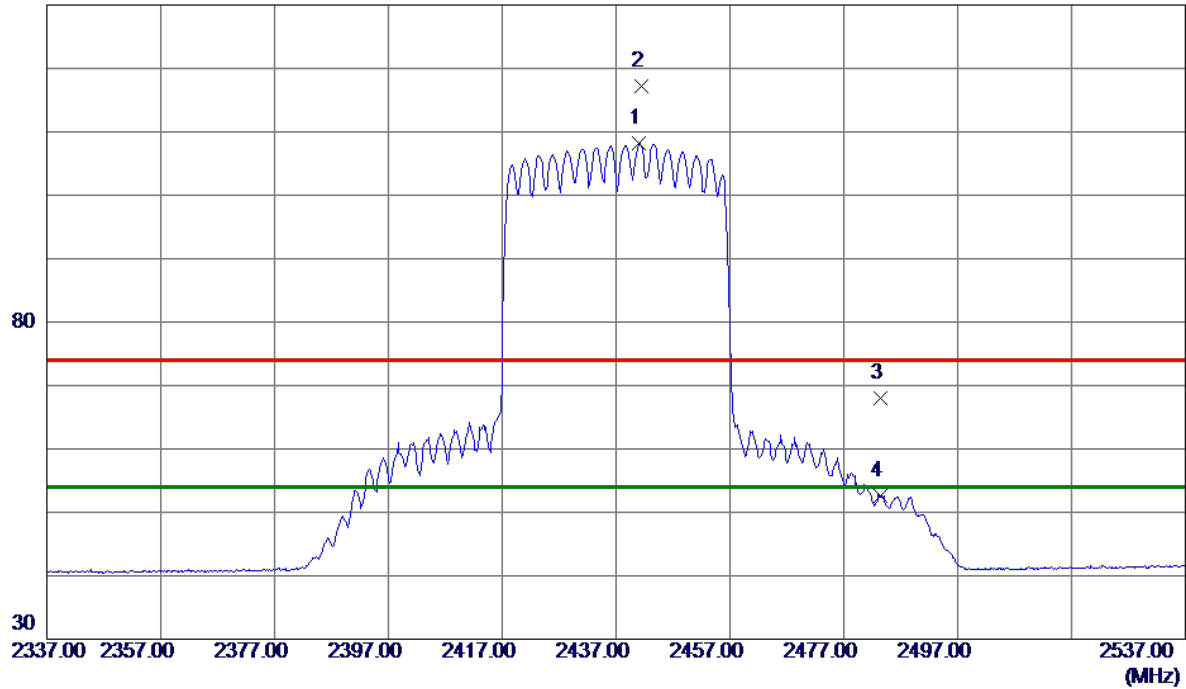
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4854.1980	41.57	2.91	44.48	74.00	-29.52	Peak	
2 *	4854.6349	30.49	2.91	33.40	54.00	-20.60	AVG	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2437 MHz	Polarization	Vertical
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130 dBuV/m



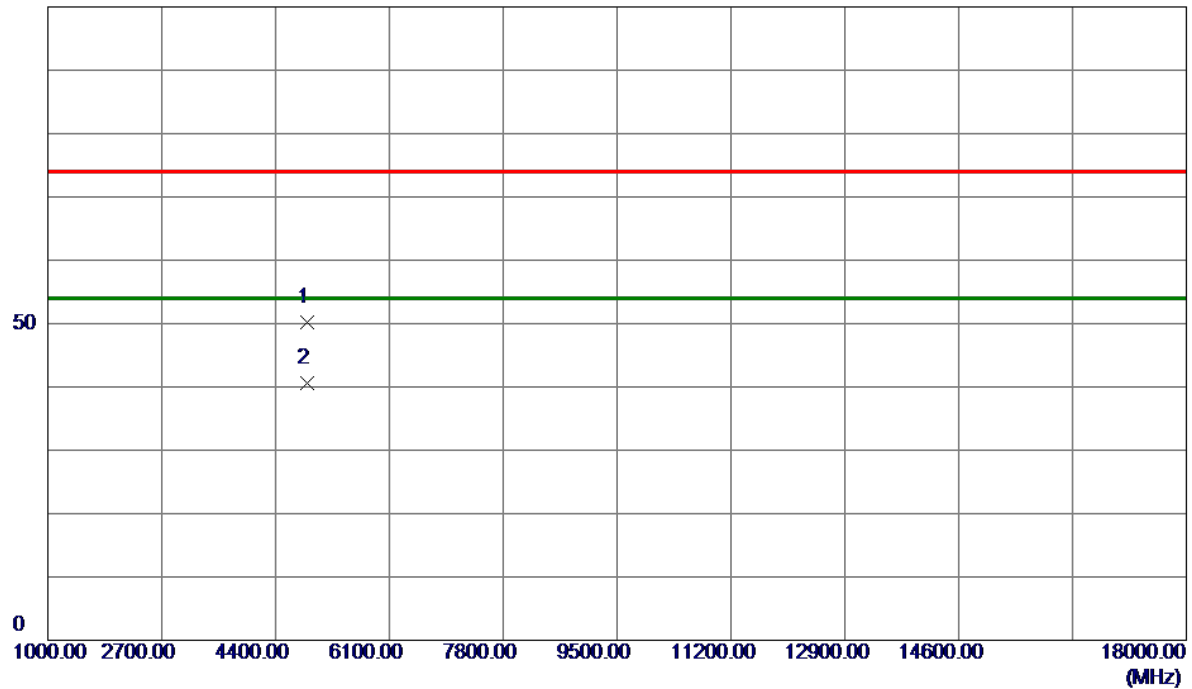
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2441.1000	100.47	7.76	108.23	54.00	54.23	AVG	No Limit
2	2441.5000	109.42	7.76	117.18	74.00	43.18	Peak	No Limit
3	2483.5000	60.14	7.81	67.95	74.00	-6.05	Peak	
4	2483.5000	44.82	7.81	52.63	54.00	-1.37	AVG	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2437 MHz	Polarization	Vertical
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100 dBuV/m



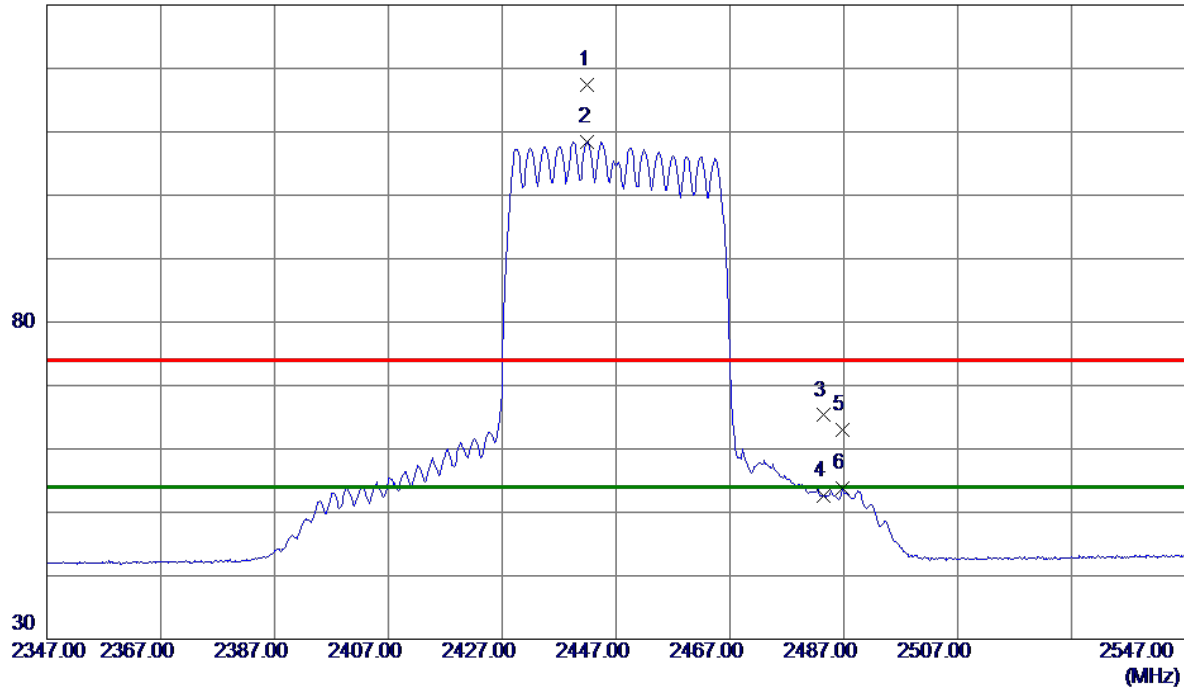
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4876.0600	47.16	2.96	50.12	74.00	-23.88	Peak	
2 *	4876.4650	37.70	2.96	40.66	54.00	-13.34	AVG	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2447 MHz	Polarization	Vertical
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130 dBuV/m



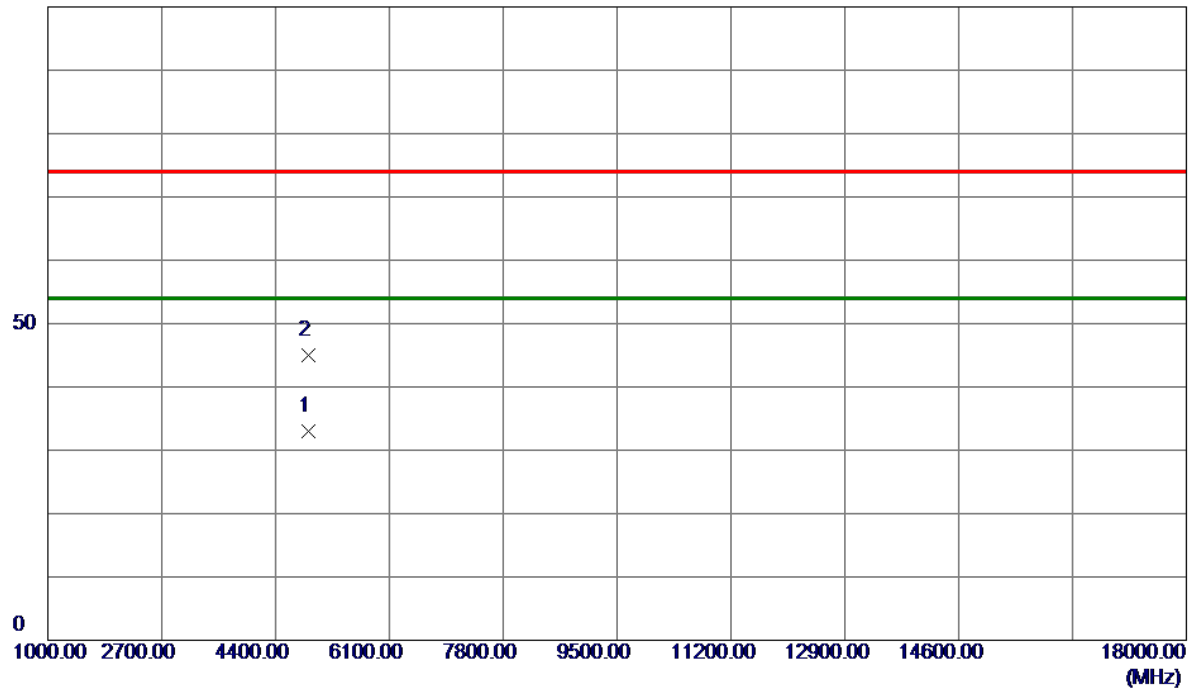
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2442.0000	109.63	7.76	117.39	74.00	43.39	Peak	No Limit
2 *	2442.0000	100.71	7.76	108.47	54.00	54.47	AVG	No Limit
3	2483.5000	57.49	7.81	65.30	74.00	-8.70	Peak	
4	2483.5000	44.73	7.81	52.54	54.00	-1.46	AVG	
5	2486.7000	55.24	7.81	63.05	74.00	-10.95	Peak	
6	2486.7000	45.96	7.81	53.77	54.00	-0.23	AVG	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2447 MHz	Polarization	Vertical
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100 dBuV/m



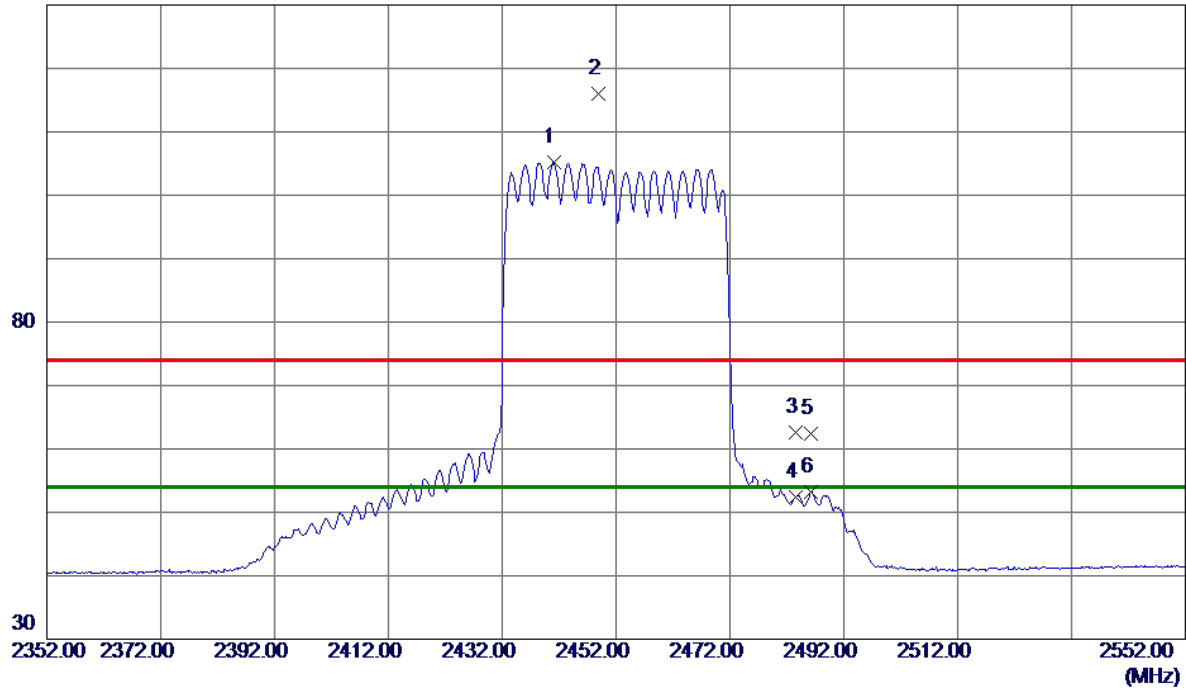
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4895.6629	30.04	3.01	33.05	54.00	-20.95	AVG	
2	4896.2970	41.95	3.01	44.96	74.00	-29.04	Peak	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2452 MHz	Polarization	Vertical
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130 dBuV/m



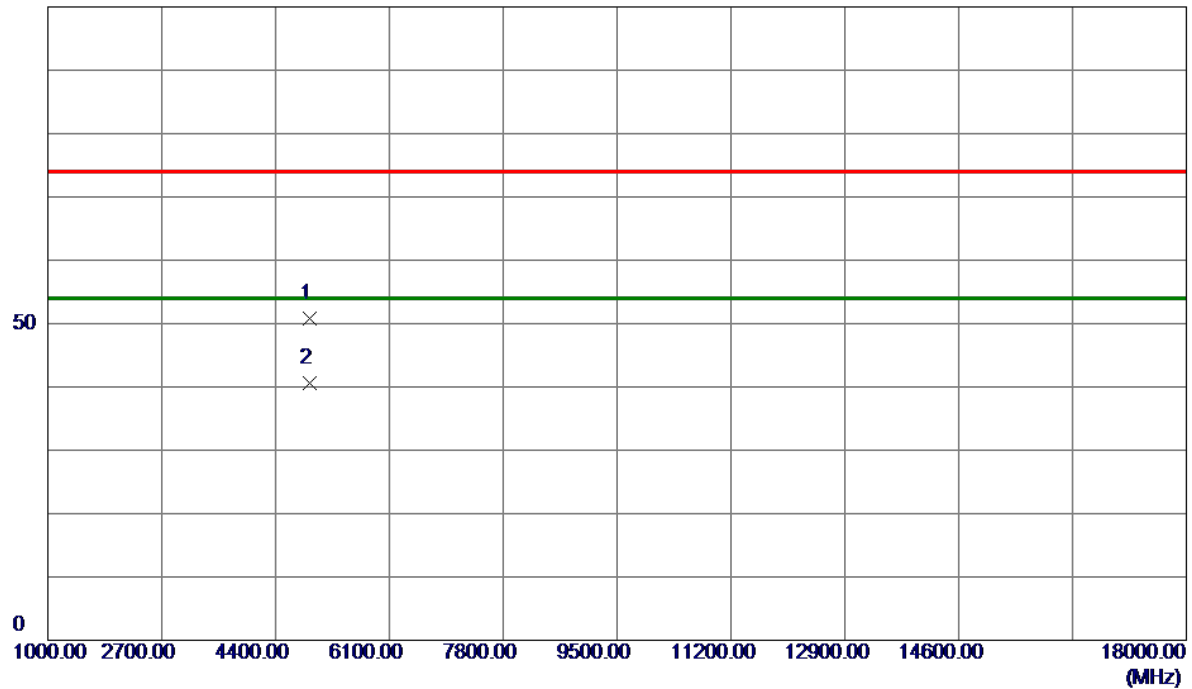
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2441.0000	97.36	7.76	105.12	54.00	51.12	AVG	No Limit
2	2448.8000	108.15	7.77	115.92	74.00	41.92	Peak	No Limit
3	2483.5000	54.72	7.81	62.53	74.00	-11.47	Peak	
4	2483.5000	44.52	7.81	52.33	54.00	-1.67	AVG	
5	2486.3000	54.63	7.81	62.44	74.00	-11.56	Peak	
6	2486.3000	45.42	7.81	53.23	54.00	-0.77	AVG	

REMARKS:

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

Test Mode	TX AX(HE40) Mode 2452 MHz	Polarization	Vertical
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100 dBuV/m

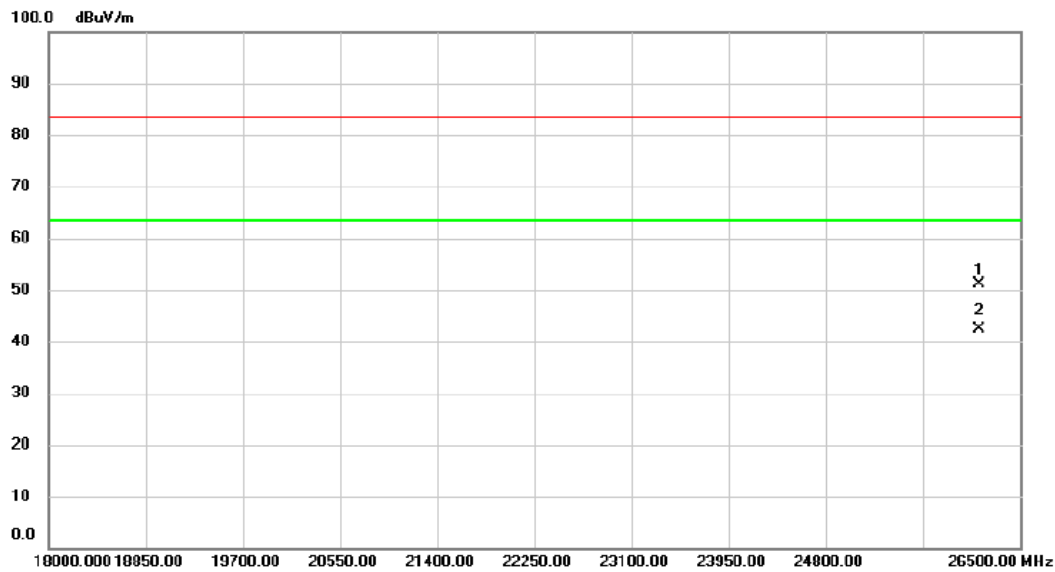


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4903.6629	47.70	3.03	50.73	74.00	-23.27	Peak	
2 *	4906.1020	37.48	3.03	40.51	54.00	-13.49	AVG	

REMARKS:

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

Test Mode	TX B Mode Channel 06	Polarization	Vertical
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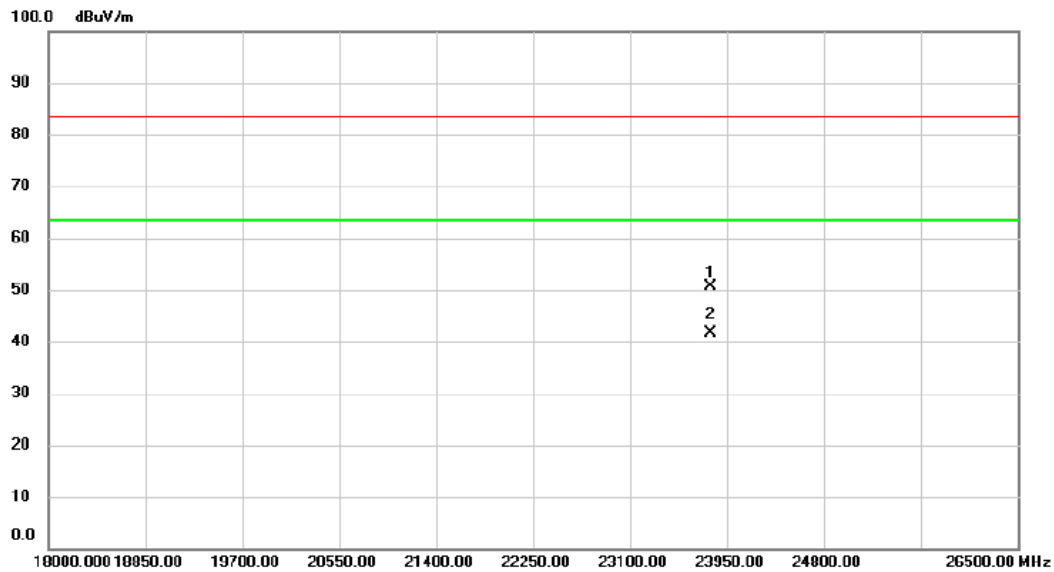


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		26147.25	52.63	-1.45	51.18	83.50	-32.32	peak	
2	*	26147.25	43.82	-1.45	42.37	63.50	-21.13	AVG	

REMARKS:

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

Test Mode	TX B Mode Channel 06	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		23809.75	53.47	-2.92	50.55	83.50	-32.95	peak	
2	*	23809.75	44.50	-2.92	41.58	63.50	-21.92	AVG	

REMARKS:

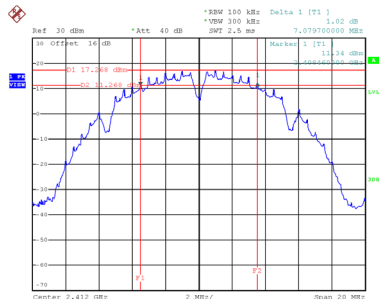
- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	TX B Mode
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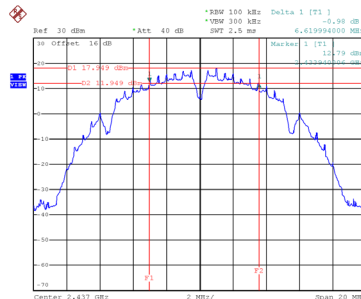
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	7.080	10.640	0.5	Complies
06	2437	6.620	10.480	0.5	Complies
11	2462	7.080	10.480	0.5	Complies

CH01



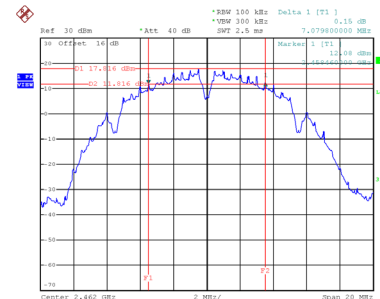
Date: 20.JUL.2024 09:54:08

CH06
6 dB Bandwidth



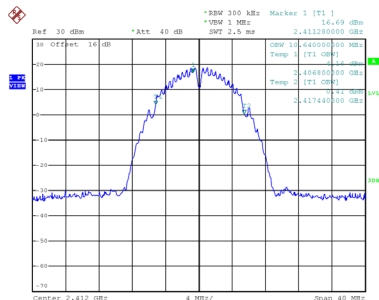
Date: 20.JUL.2024 10:00:05

CH11

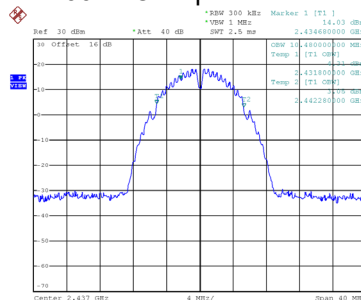


Date: 20.JUL.2024 10:07:31

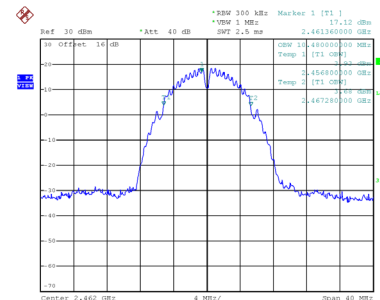
99 % Occupied Bandwidth



Date: 20.JUL.2024 09:54:15



Date: 20.JUL.2024 10:00:12

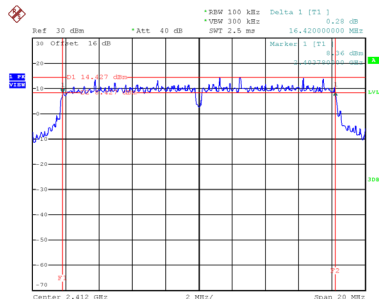


Date: 20.JUL.2024 10:07:38

Test Mode	TX G Mode
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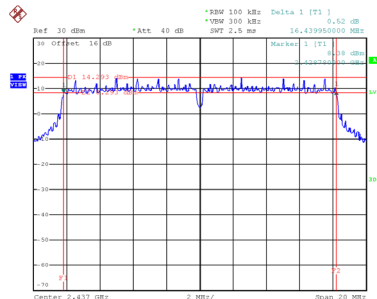
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.420	17.600	0.5	Complies
06	2437	16.440	17.280	0.5	Complies
11	2462	16.440	17.200	0.5	Complies

CH01



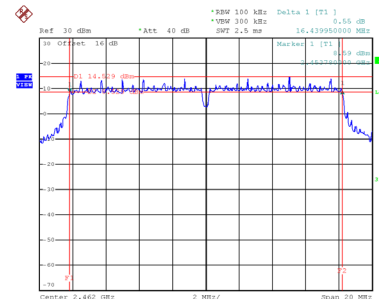
Date: 20.JUL.2024 10:10:01

CH06
6 dB Bandwidth



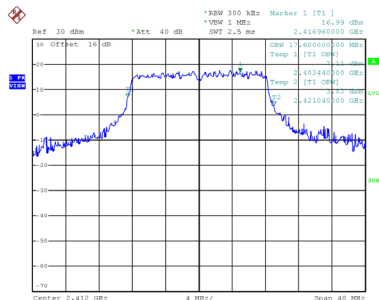
Date: 20.JUL.2024 10:24:18

CH11

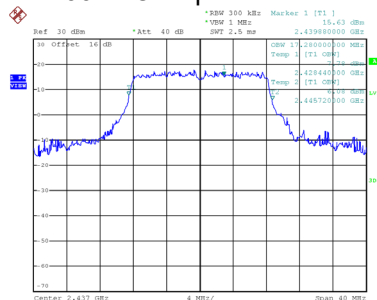


Date: 20.JUL.2024 10:27:42

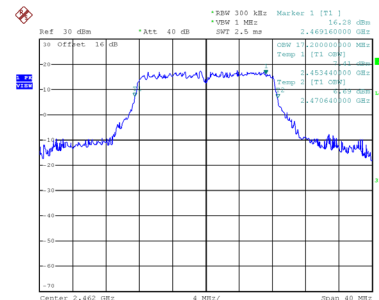
99 % Occupied Bandwidth



Date: 20.JUL.2024 10:10:08



Date: 20.JUL.2024 10:24:25

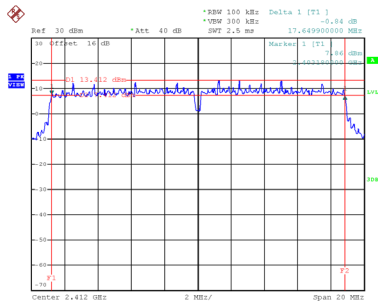


Date: 20.JUL.2024 10:27:49

Test Mode	TX N(HT20) Mode
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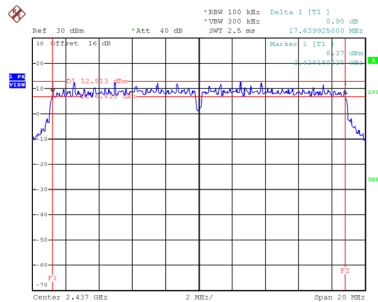
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.650	18.080	0.5	Complies
06	2437	17.640	18.000	0.5	Complies
11	2462	17.630	18.160	0.5	Complies

CH01



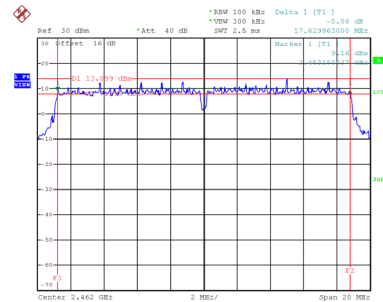
Date: 20.JUL.2024 10:35:14

CH06
6 dB Bandwidth



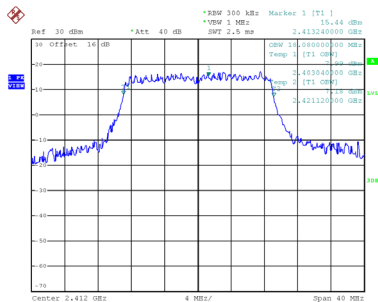
Date: 20.JUL.2024 10:49:39

CH11

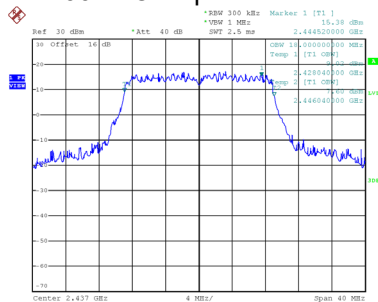


Date: 20.JUL.2024 10:54:44

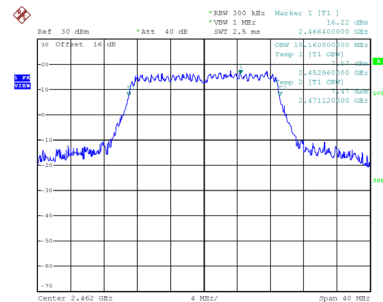
99 % Occupied Bandwidth



Date: 20.JUL.2024 10:35:21



Date: 20.JUL.2024 10:49:46

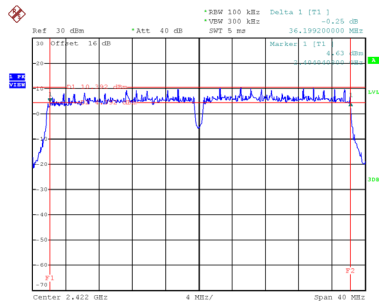


Date: 20.JUL.2024 10:54:51

Test Mode	TX N(HT40) Mode
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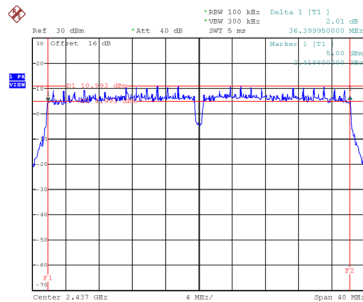
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
03	2422	36.199	36.800	0.5	Complies
06	2437	36.400	36.960	0.5	Complies
09	2452	36.560	37.120	0.5	Complies

CH03



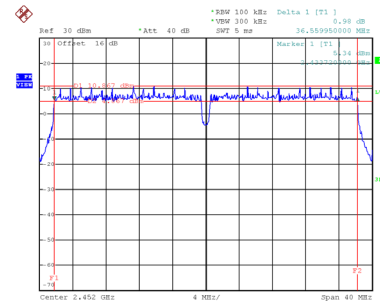
Date: 20.JUL.2024 11:09:23

CH06
6 dB Bandwidth



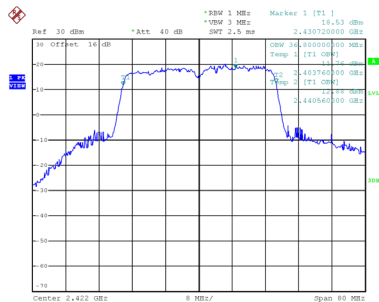
Date: 20.JUL.2024 11:14:16

CH09

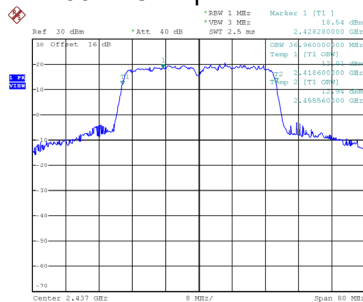


Date: 20.JUL.2024 11:25:59

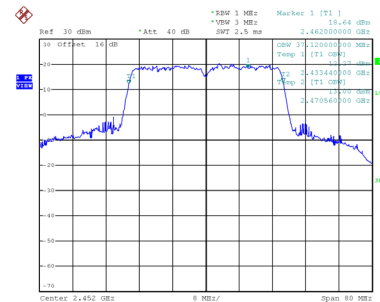
99 % Occupied Bandwidth



Date: 20.JUL.2024 11:09:30



Date: 20.JUL.2024 11:14:23



Date: 20.JUL.2024 11:26:06