FCC Radio Test Report

FCC ID: 2ABZM-PRO6LR

This report concerns: Original Grant

Project No.	:	2106C018
Equipment	:	802.11ax Dual-Band Long Range Access Point
Brand Name	:	IP-COM
Test Model	:	Pro-6-LR
Series Model	:	N/A
Applicant	:	SHENZHEN IP-COM NETWORKS CO.,LTD.
Address	:	Room 101, Unit A, First Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Manufacturer	:	SHENZHEN IP-COM NETWORKS CO.,LTD.
Address	:	Room 101, Unit A, First Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Date of Receipt	:	Jun. 02, 2021
Date of Test	:	Jun. 05, 2021 ~ Jul. 08, 2021
Issued Date	:	Aug. 10, 2021
Report Version	:	R01
Test Sample	:	Engineering Sample No.: DG2021060299
Standard(s)	:	FCC CFR Title 47, Part 15, Subpart C FCC KDB 558074 D01 15.247 Meas Guidance v05r02 FCC KDB 662911 D01 Multiple Transmitter Output v02r01 ANSI C63.10-2013

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

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Approved by : Ethan Ma

TESTING CERT #5123.02

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Declaration

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

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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.	Jul. 29, 2021
R01	Updated the description in section 2.1 note3 and note4.	Aug. 10, 2021

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C				
Standard(s) Section	**Test Item**	**Test Result**	**Judgment**	**Remark**
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.247(a)(2)	Bandwidth	APPENDIX E	PASS	------
15.247(b)(3)	Maximum Output Power	APPENDIX F	PASS	------
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS	------
15.247(e)	Power Spectral Density	APPENDIX H	PASS	------
15.203	Antenna Requirement	------	PASS	Note(2)

Note:

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

(2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

1.1 TEST FACILITY

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

1.2 MEASUREMENT UNCERTAINTY

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

A. AC power line conducted emissions test:

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

B. Radiated emissions test:

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

C. Other Measurement:

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

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

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	25°C	53%	AC 120V/60Hz AC 240V/50Hz	Richard Zhang
Radiated Emissions-9kHz to 30 MHz	25°C	60%	AC 120V/60Hz	Wade Liang
Radiated Emissions-30MHz to 1000MHz	26°C	52%	AC 120V/60Hz	Hayden Chen
Radiated Emissions-Above 1000MHz	26°C	52%	AC 120V/60Hz	Jakyri Wen
Bandwidth	21°C	49%	PoE 48V	Jesse Wang
Maximum Output Power	22°C	56%	PoE 48V	Evan Yang
Conducted Spurious Emissions	21°C	49%	PoE 48V	Jesse Wang
Power Spectral Density	21°C	49%	PoE 48V	Jesse Wang

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	802.11ax Dual-Band Long Range Access Point
Brand Name	IP-COM
Test Model	Pro-6-LR
Series Model	N/A
Model Difference(s)	N/A
Power Source	For EUT: DC voltage supplied from PoE adapter. For PoE adapter: DC voltage supplied from AC adapter. Model: BN017-A38048U
Power Rating	For EUT: 802.3at PoE 48V For PoE adapter: I/P: 100-240V~ 50/60Hz 1.0A O/P: 48.0V ⎓ 800mA
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 Peak Output Power _Non Beamforming	IEEE 802.11ax(HE20): 28.29 dBm (0.6745 W)
Maximum Peak Output Power _Beamforming	IEEE 802.11ax(HE20): 27.84 dBm (0.6081 W)
Maximum Average Output Power _Non Beamforming	IEEE 802.11b: 24.38 dBm (0.2742 W)
Maximum Average Output Power _Beamforming	IEEE 802.11n(HT40): 18.14 dBm (0.0652 W)

Note:

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

2. Channel List:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20), IEEE 802.11ax(HE20) 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	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Internal	N/A	4.77
2	N/A	N/A	Internal	N/A	4.45

Note:

1) This EUT supports CDD, and all antenna gains are not equal. Then, Directional gain=10log[($10^{G1/20}$+$10^{G2/20}$+...$10^{GN/20}$)^2/N]dBi, that is Directional gain=10log[($10^{4.77/20}$+$10^{4.45/20}$)^2/2]dBi =7.62. So, the output power limit is 30-(7.62-6)=28.38, the power spectral density limit is 8-(7.62-6)=6.38.
2) Beamforming Gain: 3 dB. Then, Directional gain=3+4.77=7.77. So, the output power limit is 30-(7.77-6)=28.23.
3) Ant. 1 for 1TX is found to be the worst case and recorded.
4) The antenna gain and beamforming gain are provided by the manufacturer.

4. Table for Antenna Configuration:

For Non Beamforming:

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

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(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 AX(HE20) Mode Channel 11

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 AX(HE20) Mode Channel 11

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 7	TX AX(HE20) Mode Channel 11

Radiated emissions test- Above 1GHz_Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX 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

Maximum Output Power test_Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX 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

Maximum Output Power test_Beamforming	
Final Test Mode	Description
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

Other Conducted test_Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11
Mode 4	TX 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 AX(HE20) Mode Channel 11 is found to be the worst case and recorded.
(3) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
(4) The measurements for Output Power are tested, the Non Beamforming and Beamforming are recorded in the report. The worst case is Non Beamforming and only the worst case is documented for other test items.
(5) IEEE 802.11ax mode only supports full RU, so only the full RU is evaluated and measured inside report.
(6) For radiated emissions, the TX WLAN 2.4G AX20 Mode 2437MHz + WLAN 5G A Mode 5200MHz was found the worst case of simultaneous transmission and recorded.

2.3 PARAMETERS OF TEST SOFTWARE

Non Beamforming

Test Software Version	DUI GUI		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	25	25	25
IEEE 802.11g	18	17	17
IEEE 802.11n(HT20)	15.5	15.5	15.5
IEEE 802.11ax(HE20)	15	15	15
Frequency (MHz)	2422	2437	2452
IEEE 802.11n(HT40)	15.5	15.5	15.5
IEEE 802.11ax(HE40)	15	15	15

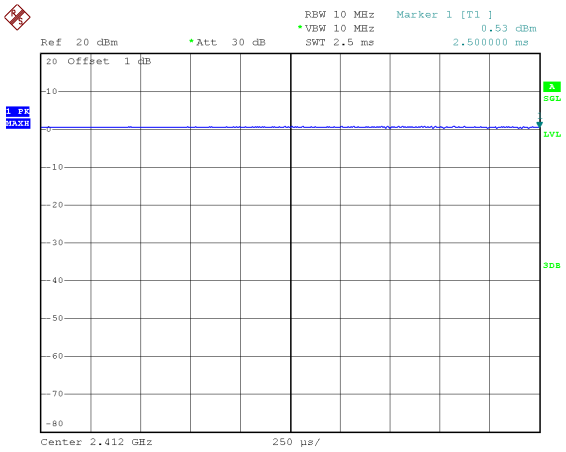
Beamforming

Test Software Version	DUI GUI		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n(HT20)	15	15	15
IEEE 802.11ax(HE20)	14.5	14.5	14.5
Frequency (MHz)	2422	2437	2452
IEEE 802.11n(HT40)	15	15	15
IEEE 802.11ax(HE40)	14.5	14.5	14.5

2.4 DUTY CYCLE

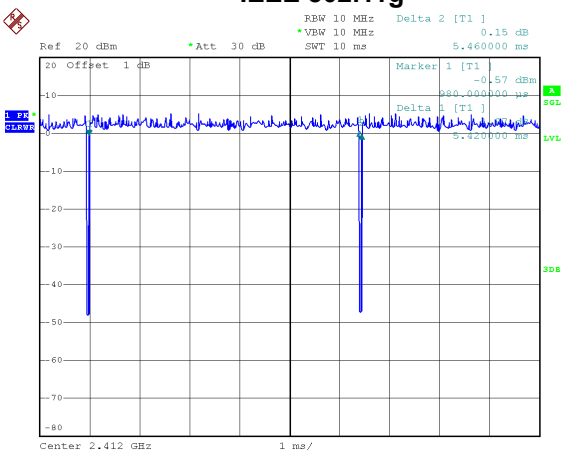
If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.
The output power = measured power + duty factor.

IEEE 802.11b



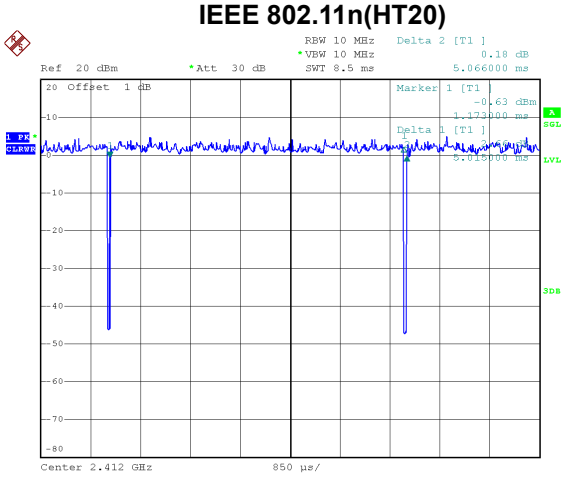
Duty cycle = 0.000 ms / 0.000 ms = 0.00%
Duty Factor = 10 log(1/Duty cycle) = 0.00

IEEE 802.11g



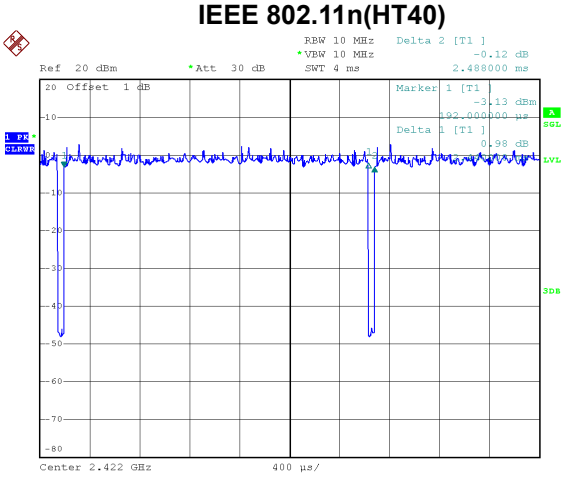
Duty cycle = 5.420 ms / 5.460 ms = 99.27%
Duty Factor = 10 log(1/Duty cycle) = 0.00

IEEE 802.11n(HT20)



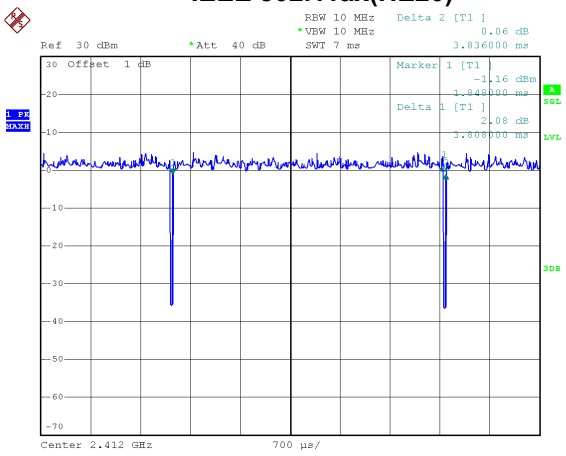
Duty cycle = 5.015 ms / 5.066 ms = 98.99%
Duty Factor = 10 log(1/Duty cycle) = 0.00

IEEE 802.11n(HT40)



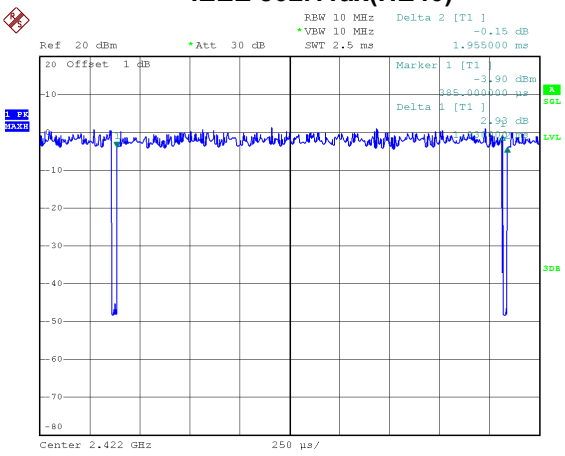
Duty cycle = 2.440 ms / 2.488 ms = 98.07%
Duty Factor = 10 log(1/Duty cycle) = 0.00

IEEE 802.11ax(HE20)



Duty cycle = 3.808 ms / 3.836 ms = 99.27%
Duty Factor = 10 log(1/Duty cycle) = 0.00

IEEE 802.11ax(HE40)



Duty cycle = 1.930 ms / 1.955 ms = 98.72%
Duty Factor = 10 log(1/Duty cycle) = 0.00

NOTE:
For IEEE 802.11b:
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz.

For IEEE 802.11g:
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz.

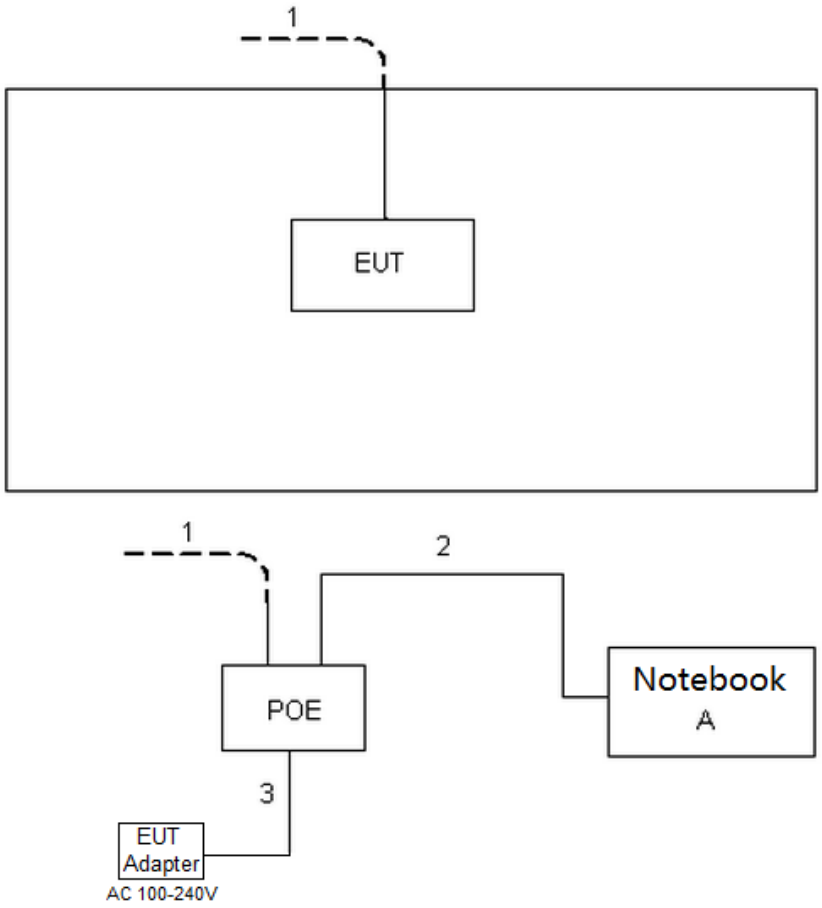
For IEEE 802.11n(HT20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz.

For IEEE 802.11n(HT40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz.

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 2 kHz.

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Dell	Inspiron 15-7559	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	RJ45 Cable	NO	NO	10m
2	Network Cable	NO	NO	1m
3	DC Cable	NO	NO	1.5m

3. AC POWER LINE CONDUCTED EMISSIONS

3.1 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.

3.2 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.

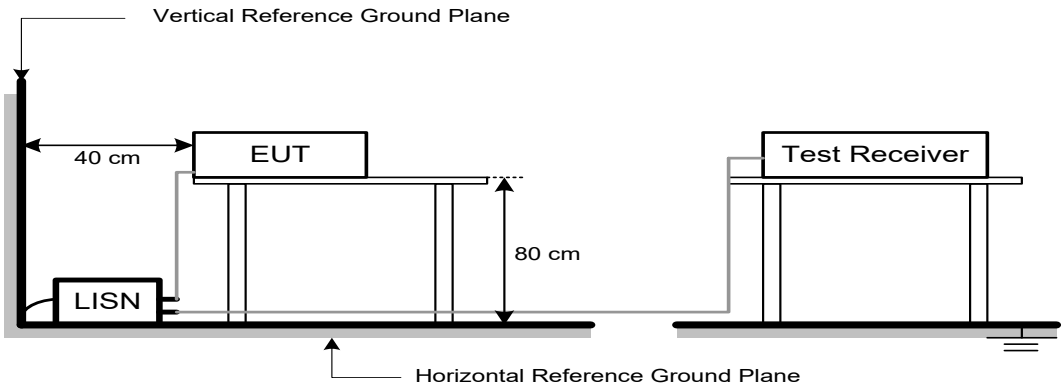
The following table is the setting of the receiver:

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).

4.2 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

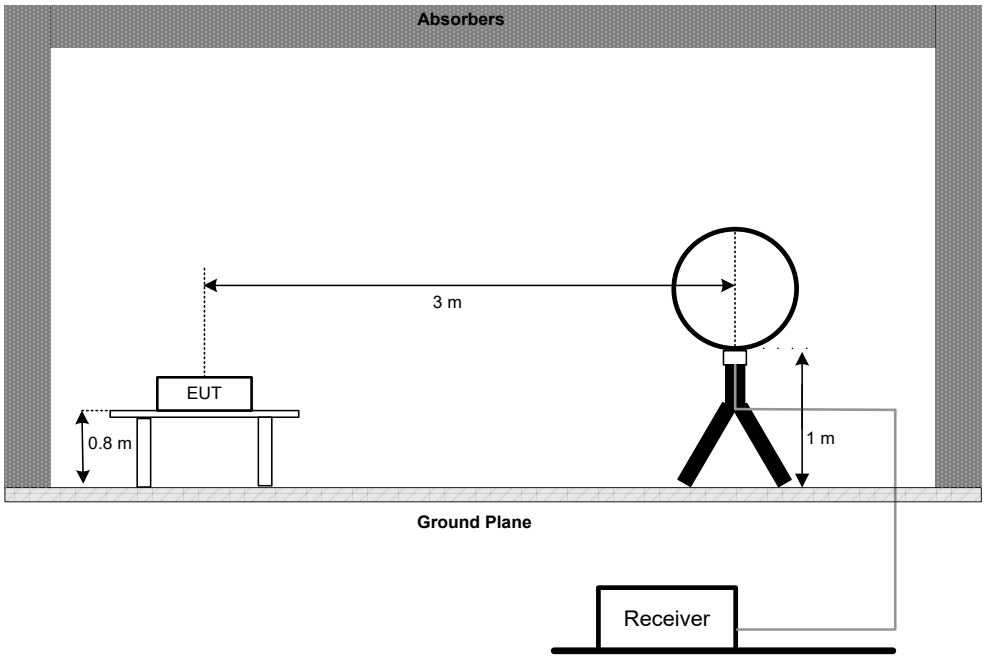
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector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

4.3 DEVIATION FROM TEST STANDARD

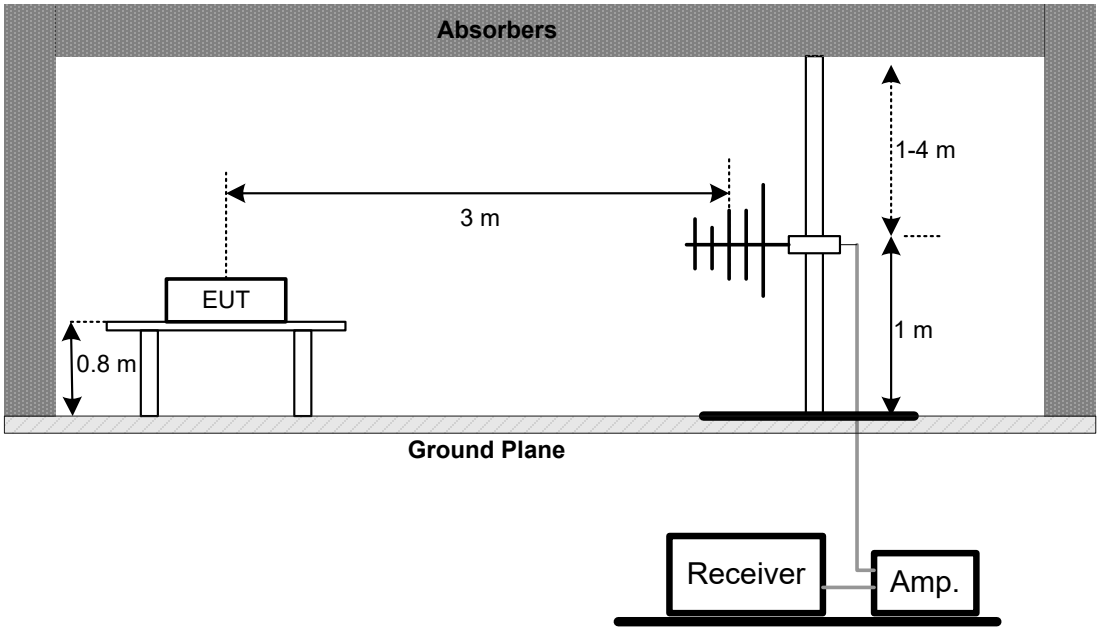
No deviation.

4.4 TEST SETUP

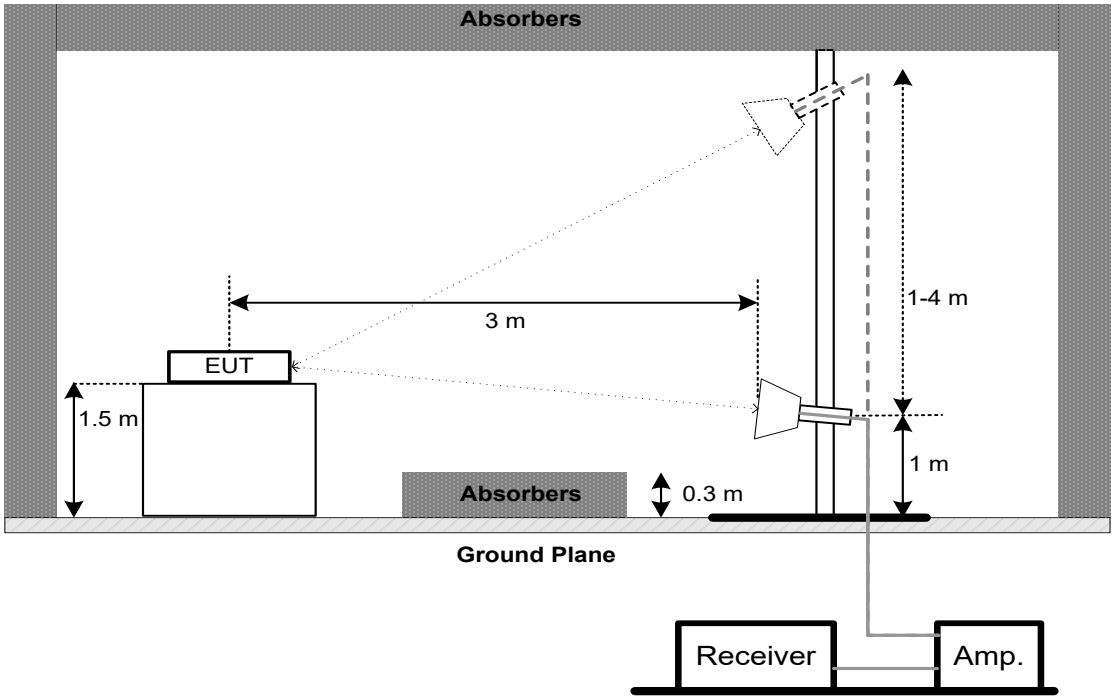
9 kHz to 30 MHz



30 MHz to 1 GHz



Above 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 (specific distance / 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

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 6 dB Bandwidth:

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

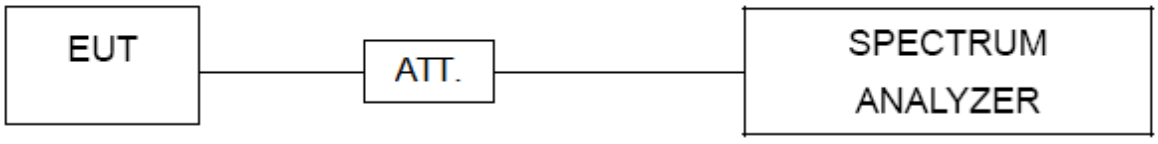
For 99% Emission Bandwidth:

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

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS

Please refer to the APPENDIX E.

6. MAXIMUM OUTPUT POWER

6.1 LIMIT

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

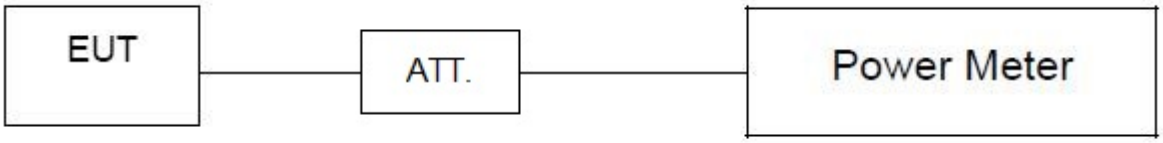
6.2 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
b. The maximum conducted output power was performed in accordance with method 11.9.1.3 and 11.9.2.3.1 of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. CONDUCTED SPURIOUS EMISSIONS

7.1 LIMIT

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

7.2 TEST PROCEDURE

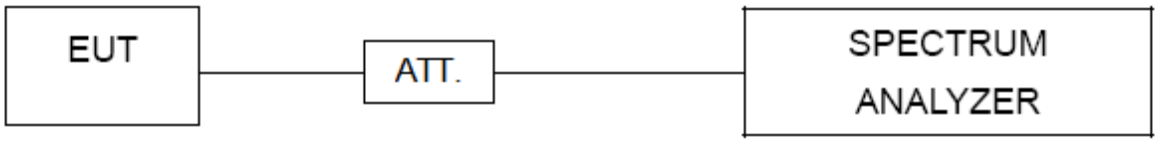
a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The following table is the setting of the spectrum analyzer:

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

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX G.

8. POWER SPECTRAL DENSITY

8.1 LIMIT

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

8.2 TEST PROCEDURE

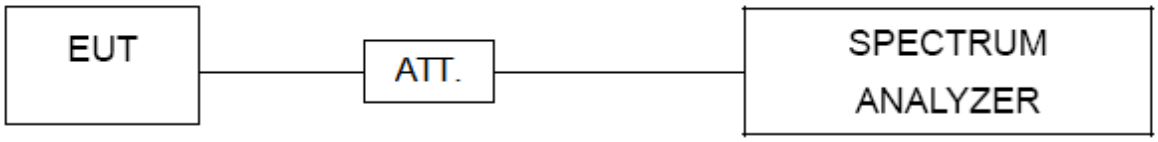
a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The following table is the setting of the spectrum analyzer:

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

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX H.

9. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Feb. 28, 2022
2	LISN	EMCO	3816/2	52765	Feb. 27, 2022
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 27, 2022
4	50Ω Terminator	SHX	TF5-3	15041305	Feb. 27, 2022
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 09, 2022
7	643 Shield Room	ETS	6*4*3m	N/A	N/A

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

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

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 10, 2022
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 30, 2022
3	Amplifier	Agilent	8449B	3008A02584	Jul. 25, 2021
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 28, 2022
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	N/A	EMC104-SM-SM-6 000	N/A	Oct. 16, 2021
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	Filter	STI	STI15-9912	N/A	Jul. 25, 2021
11	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

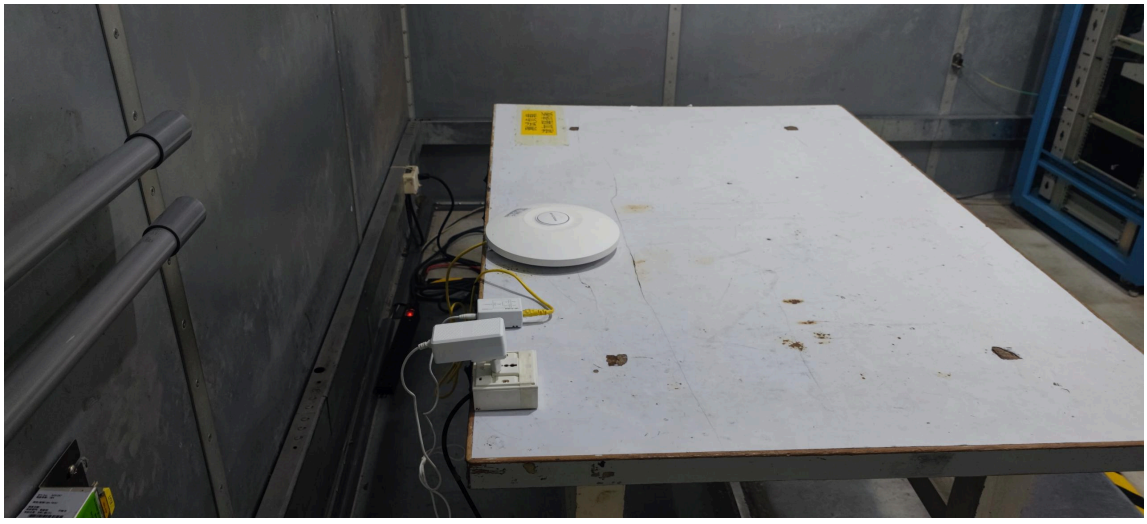
Bandwidth & Conducted Spurious Emissions & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021
2	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 07, 2022
3	RF Cable	Tongkaichuan	N/A	N/A	N/A
4	DC Block	Mini	N/A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

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

Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

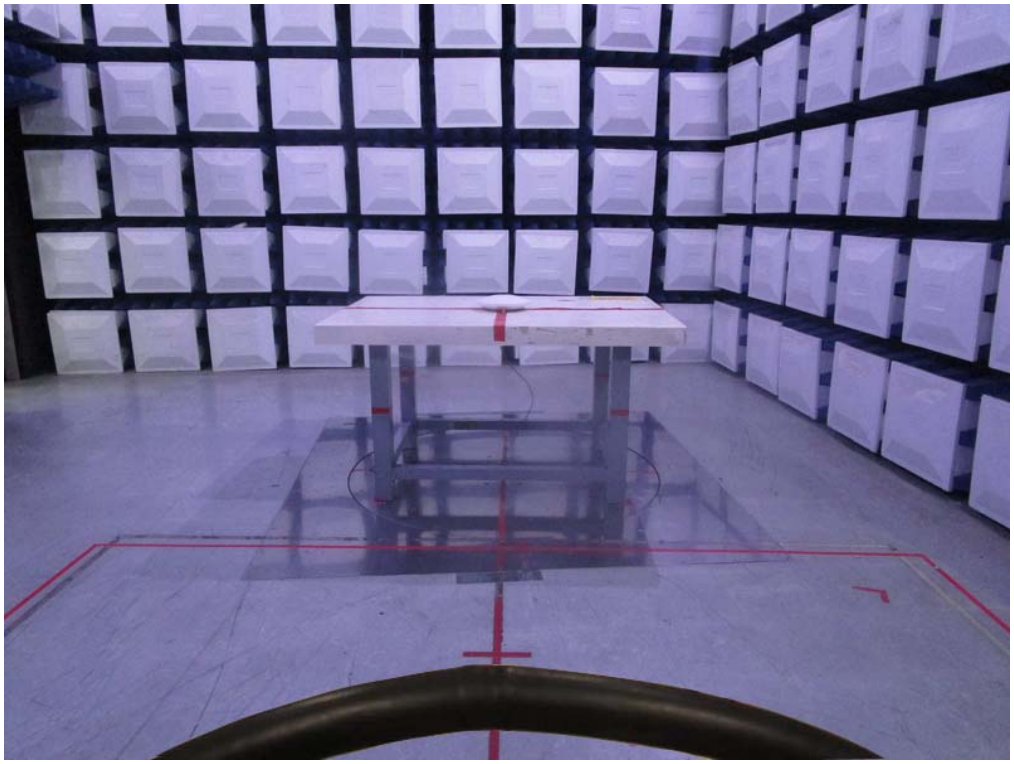
10. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos



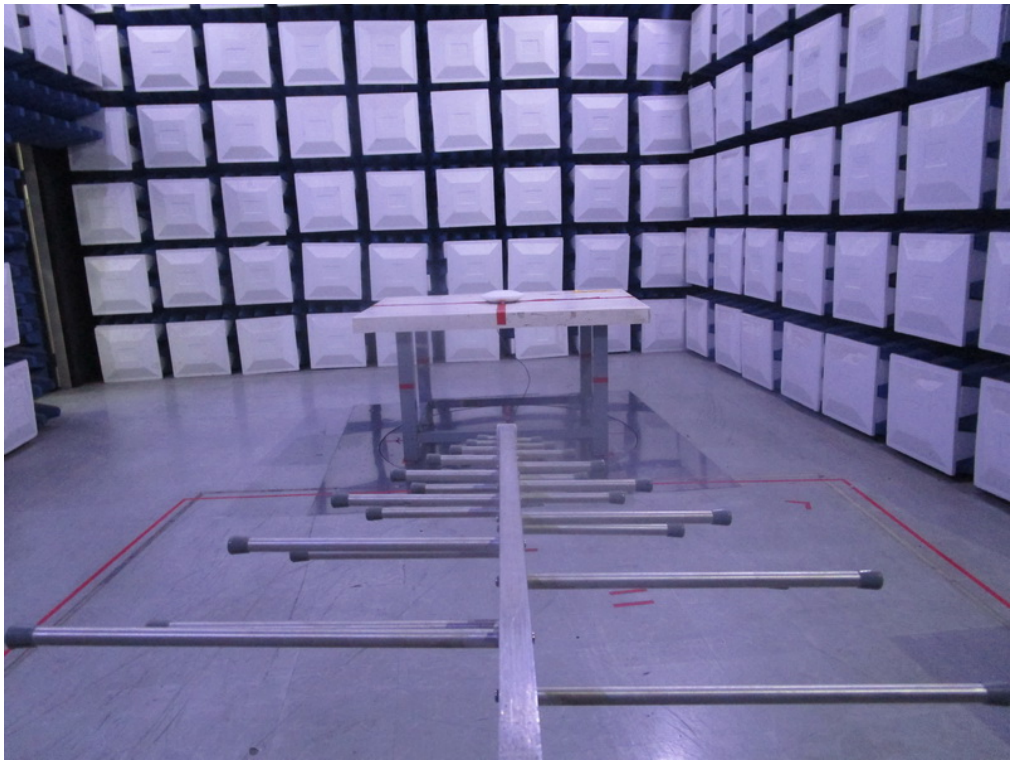
Radiated Emissions Test Photos

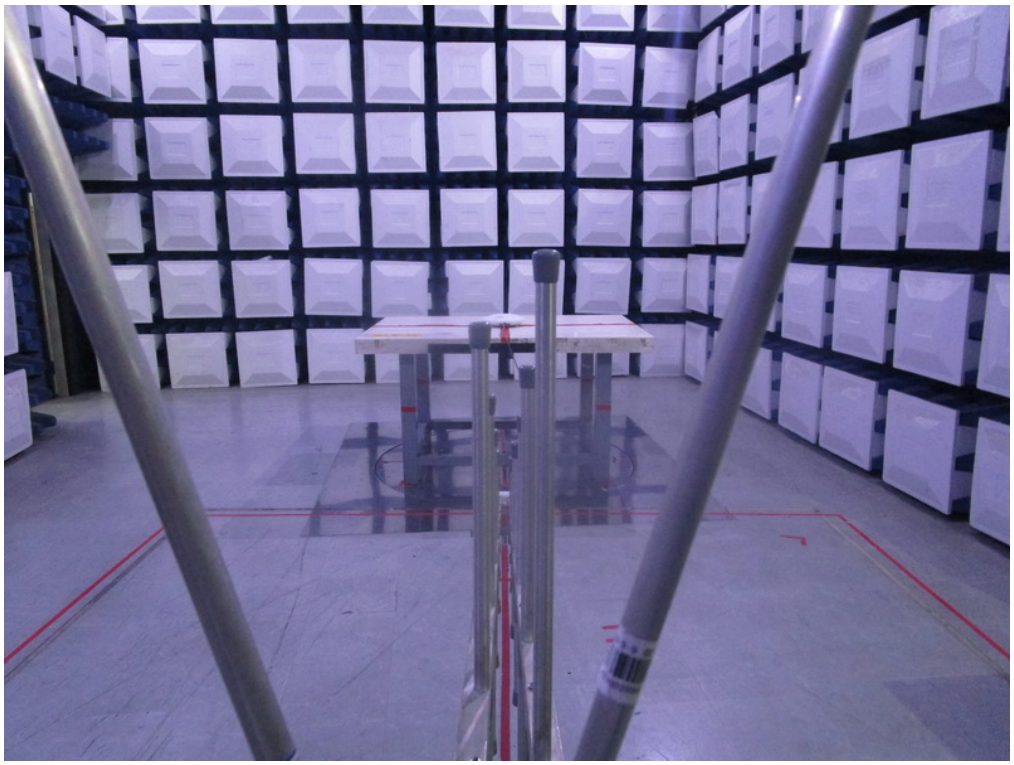
9 kHz to 30 MHz



Radiated Emissions Test Photos

30 MHz to 1 GHz

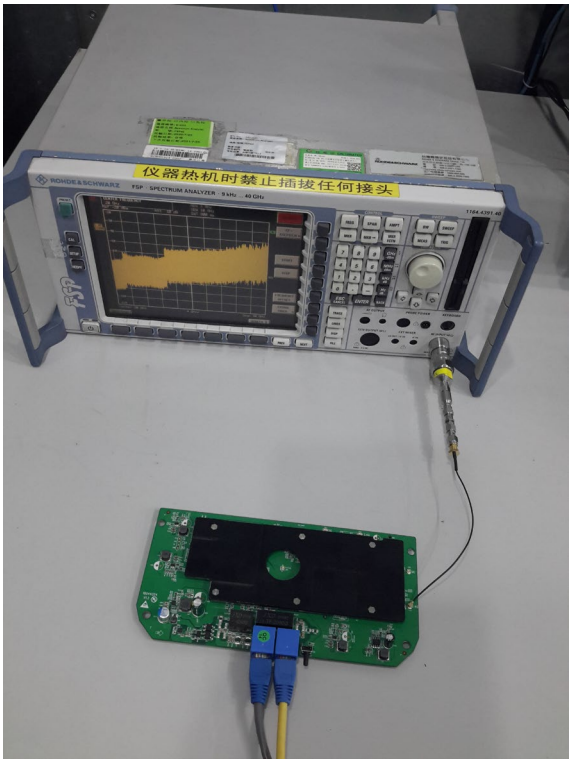




Radiated Emissions Test Photos

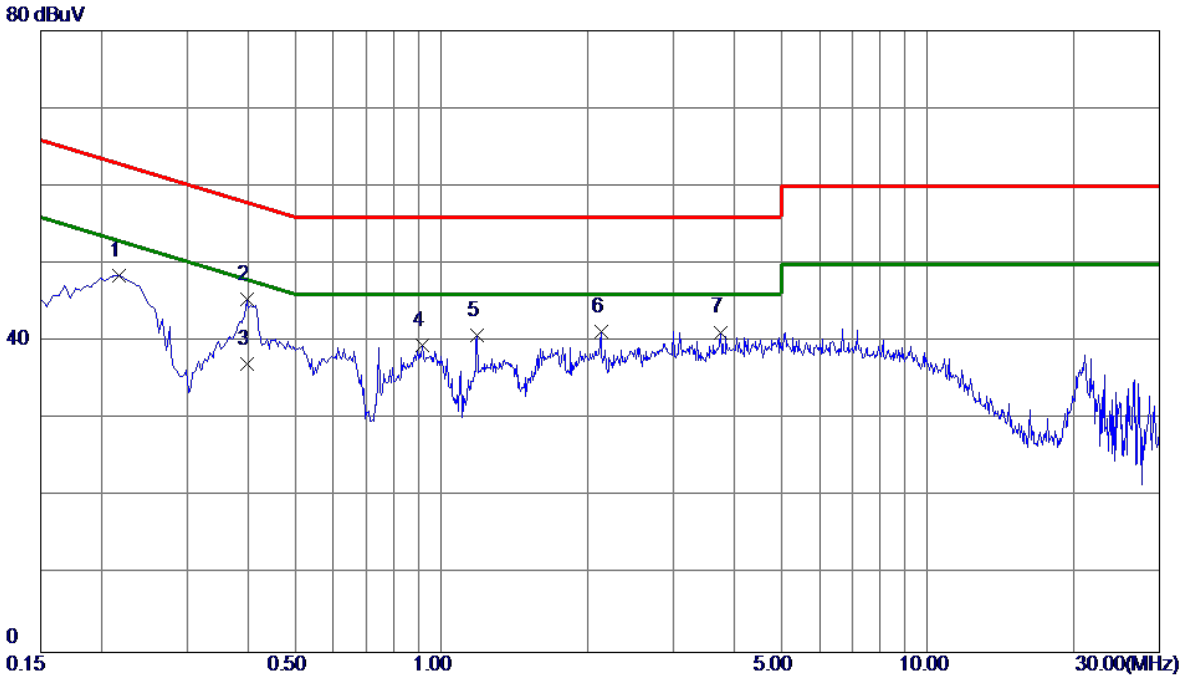
Above 1 GHz

Conducted Test Photos



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

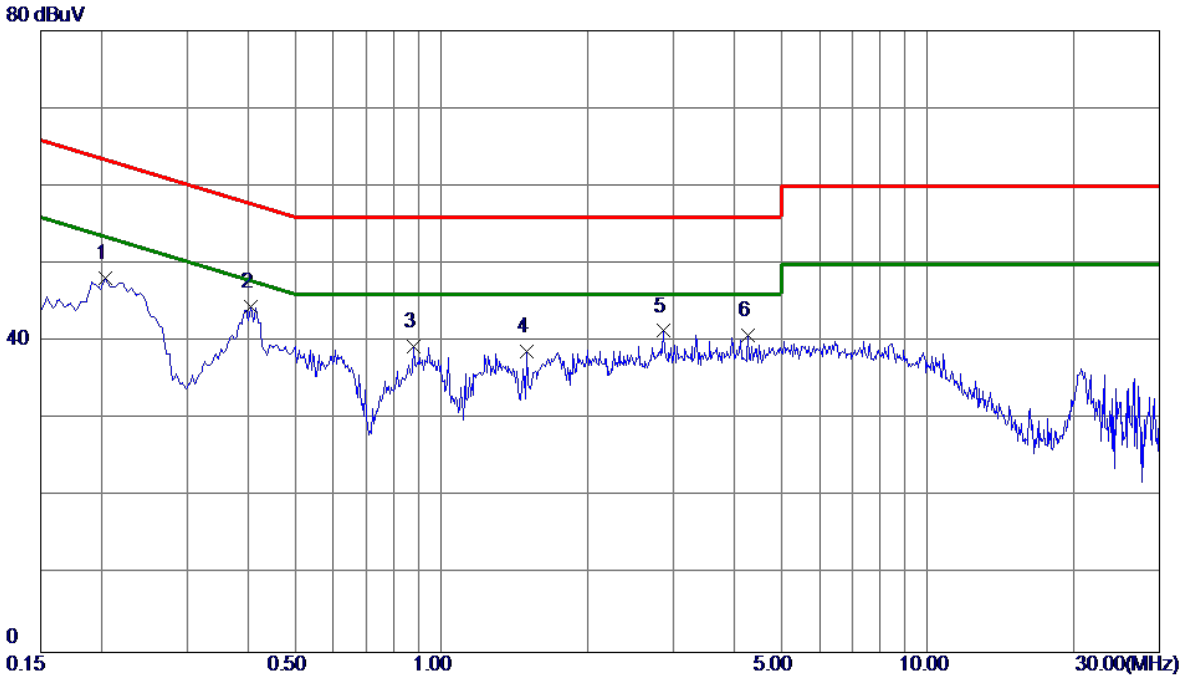
Test Voltage	AC 120V/60Hz		
Test Mode	TX AX(HE20) Mode Channel 11	Phase	Line



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2175	38.63	9.90	48.53	62.91	-14.38	Peak	
2	0.3975	35.51	9.90	45.41	57.91	-12.50	Peak	
3 *	0.3975	27.20	9.90	37.10	47.91	-10.81	AVG	
4	0.9150	29.61	9.97	39.58	56.00	-16.42	Peak	
5	1.1849	30.85	9.99	40.84	56.00	-15.16	Peak	
6	2.1300	31.21	10.06	41.27	56.00	-14.73	Peak	
7	3.7545	31.01	10.19	41.20	56.00	-14.80	Peak	

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

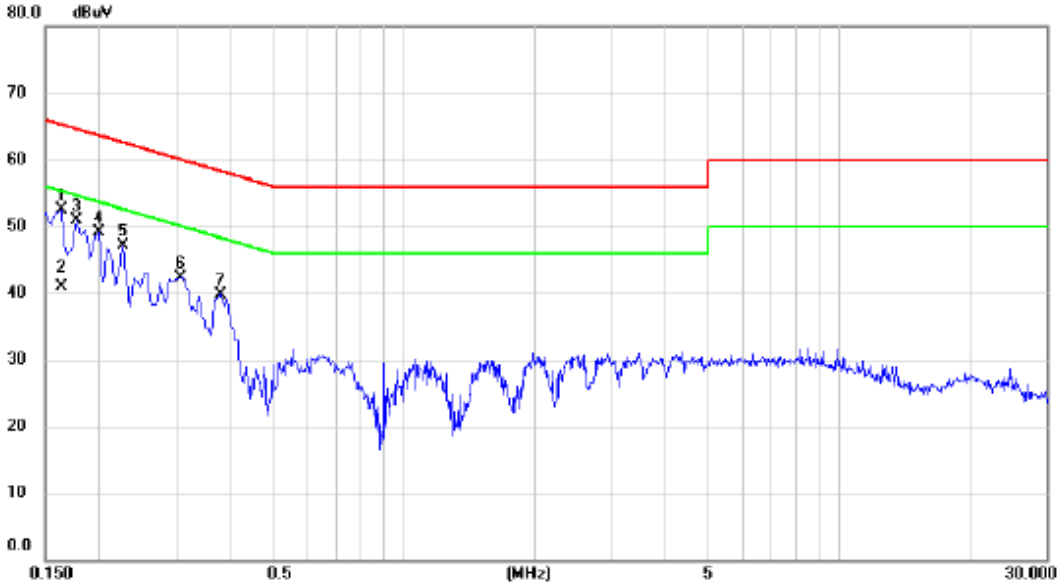
Test Voltage	AC 120V/60Hz		
Test Mode	TX AX(HE20) Mode Channel 11	Phase	Neutral



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2040	38.12	10.01	48.13	63.45	-15.32	Peak	
2 *	0.4065	34.40	10.07	44.47	57.72	-13.25	Peak	
3	0.8790	29.13	10.24	39.37	56.00	-16.63	Peak	
4	1.4955	28.34	10.33	38.67	56.00	-17.33	Peak	
5	2.8680	30.89	10.47	41.36	56.00	-14.64	Peak	
6	4.2720	30.28	10.56	40.84	56.00	-15.16	Peak	

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

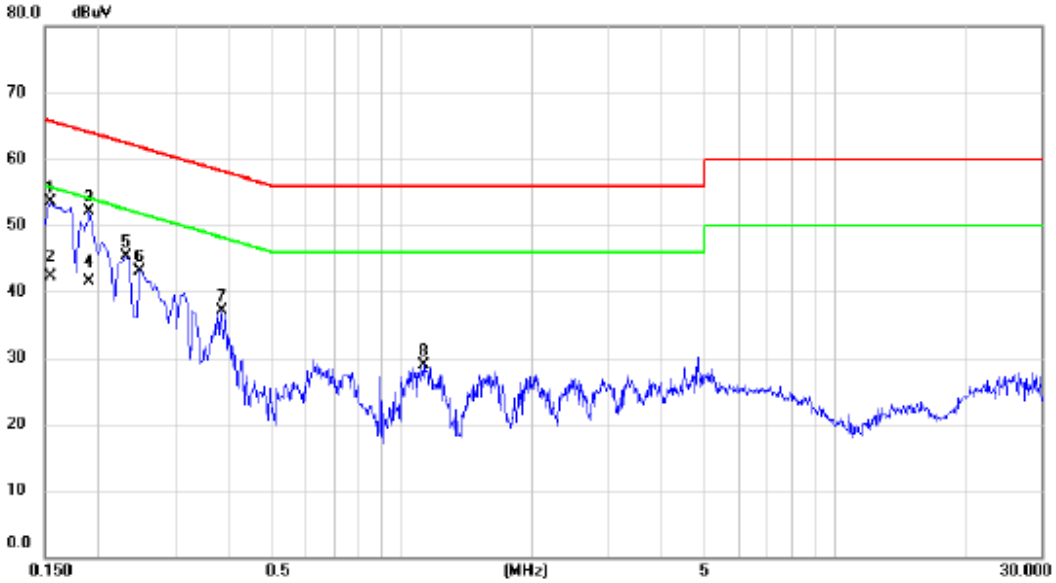
Test Voltage	AC 240V/50Hz		
Test Mode	TX AX(HE20) Mode Channel 11	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1635	42.69	9.77	52.46	65.28	-12.82	peak	
2		0.1635	31.20	9.77	40.97	55.28	-14.31	AVG	
3		0.1770	40.99	9.84	50.83	64.63	-13.80	peak	
4		0.1995	39.10	9.91	49.01	63.63	-14.62	peak	
5		0.2265	37.26	9.89	47.15	62.58	-15.43	peak	
6		0.3075	32.50	9.88	42.38	60.04	-17.66	peak	
7		0.3795	29.90	9.90	39.80	58.29	-18.49	peak	

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

Test Voltage	AC 240V/50Hz		
Test Mode	TX AX(HE20) Mode Channel 11	Phase	Neutral

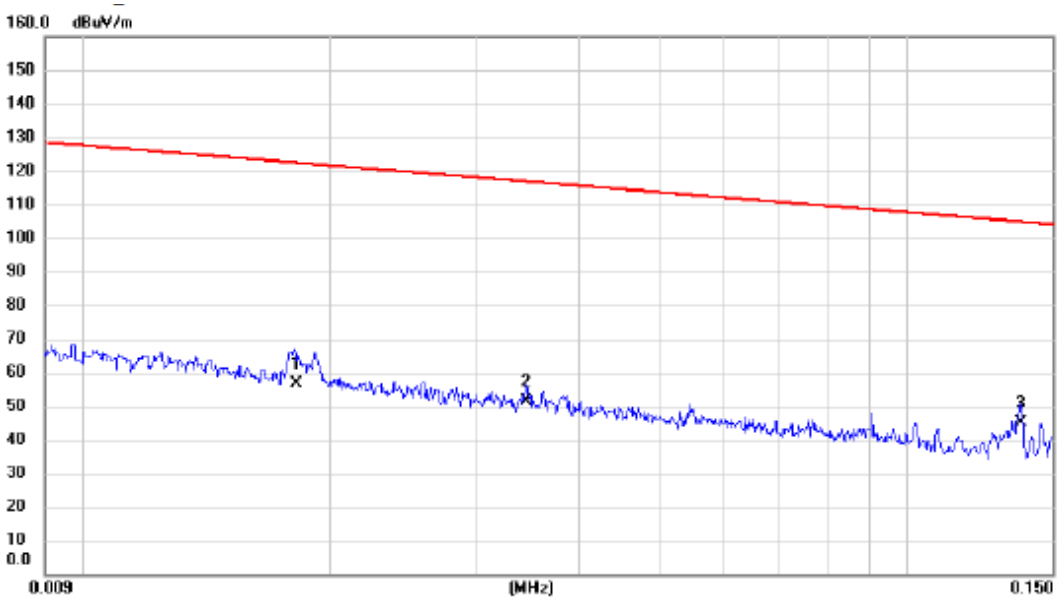


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1545	43.78	9.77	53.55	65.75	-12.20	peak	
2		0.1545	32.50	9.77	42.27	55.75	-13.48	AVG	
3	*	0.1905	42.07	9.98	52.05	64.01	-11.96	peak	
4		0.1905	31.50	9.98	41.48	54.01	-12.53	AVG	
5		0.2310	35.34	9.99	45.33	62.41	-17.08	peak	
6		0.2490	33.23	9.97	43.20	61.79	-18.59	peak	
7		0.3840	27.13	10.06	37.19	58.19	-21.00	peak	
8		1.1265	18.71	10.29	29.00	56.00	-27.00	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

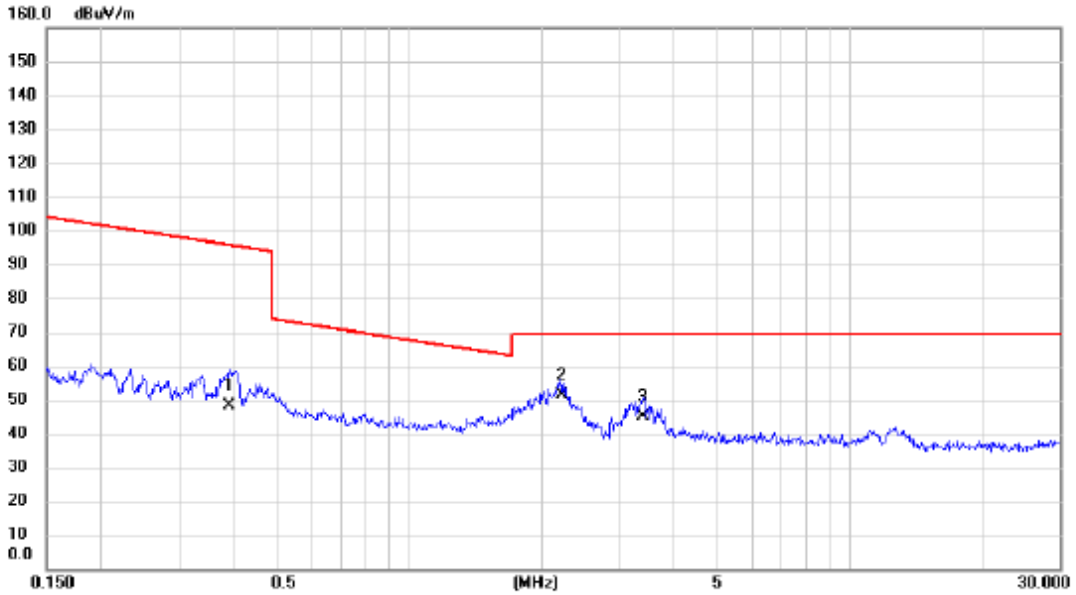
Test Mode	TX AX(HE20) Mode Channel 11	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0182	41.62	14.98	56.60	122.40	-65.80	AVG			
2		0.0346	37.16	14.07	51.23	116.82	-65.59	AVG			
3	*	0.1371	31.20	13.77	44.97	104.87	-59.90	AVG			

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

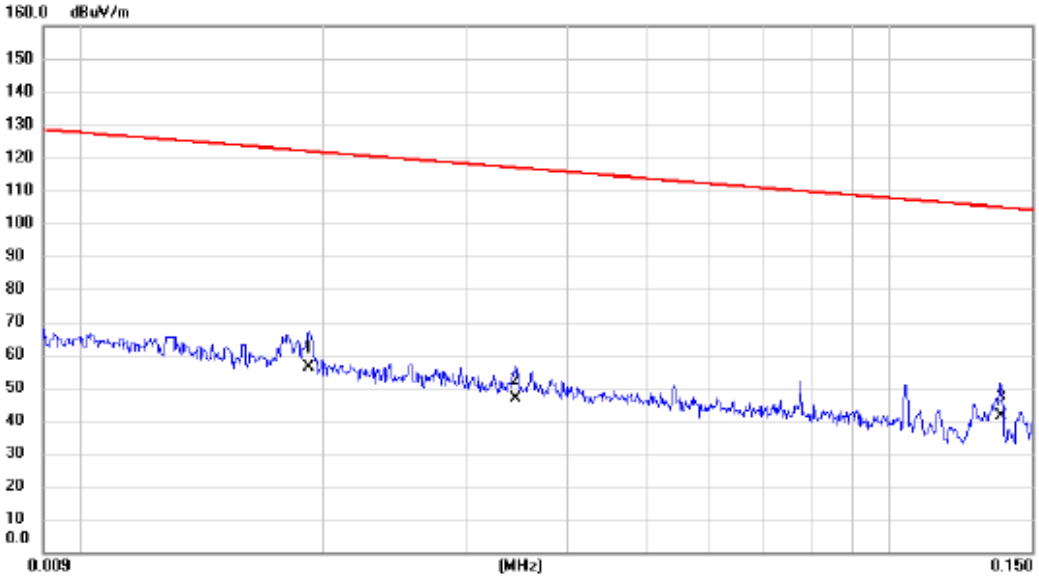
Test Mode	TX AX(HE20) Mode Channel 11	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.3914	34.60	13.64	48.24	95.75	-47.51	AVG			
2	*	2.2132	39.25	12.18	51.43	69.54	-18.11	QP			
3		3.3994	33.01	11.99	45.00	69.54	-24.54	QP			

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

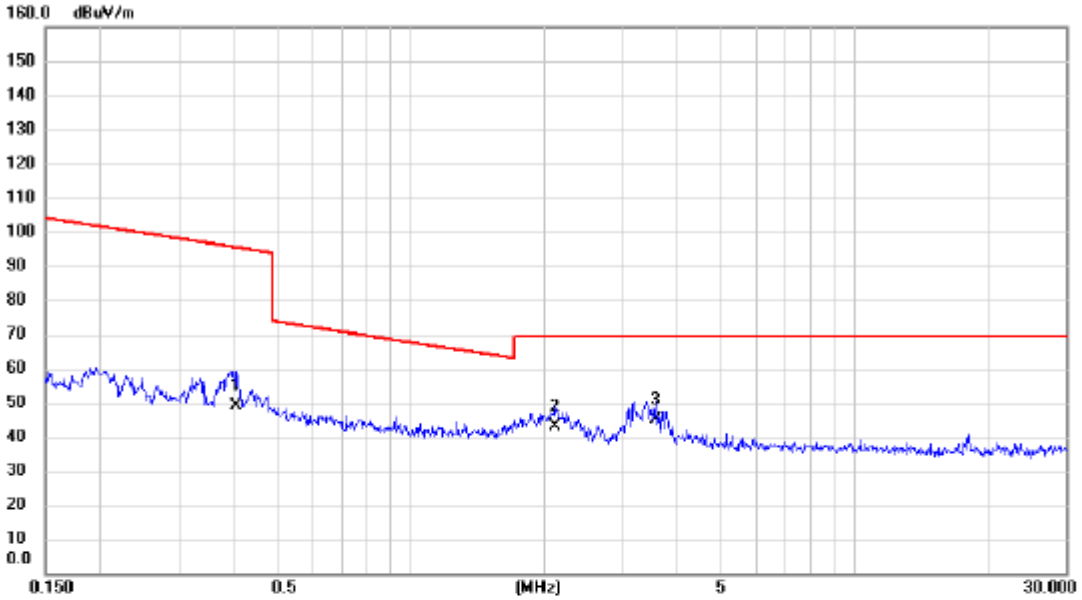
Test Mode	TX AX(HE20) Mode Channel 11	Polarization	Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0192	41.62	14.66	56.28	121.94	-65.66	AVG			
2		0.0346	32.58	14.07	46.65	116.82	-70.17	AVG			
3	*	0.1371	27.69	13.77	41.46	104.87	-63.41	AVG			

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

Test Mode	TX AX(HE20) Mode Channel 11	Polarization	Ant 90°

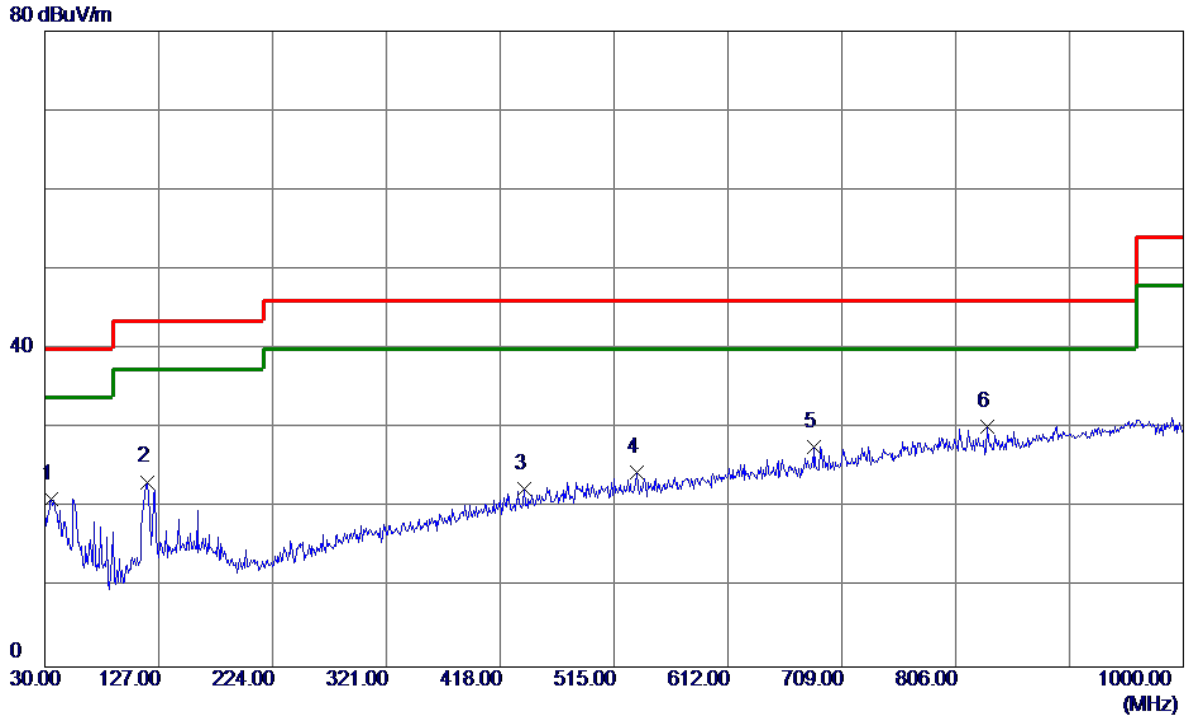


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.4061	35.52	13.63	49.15	95.43	-46.28	AVG			
2		2.1101	30.82	12.21	43.03	69.54	-26.51	QP			
3	*	3.5654	33.14	12.00	45.14	69.54	-24.40	QP			

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

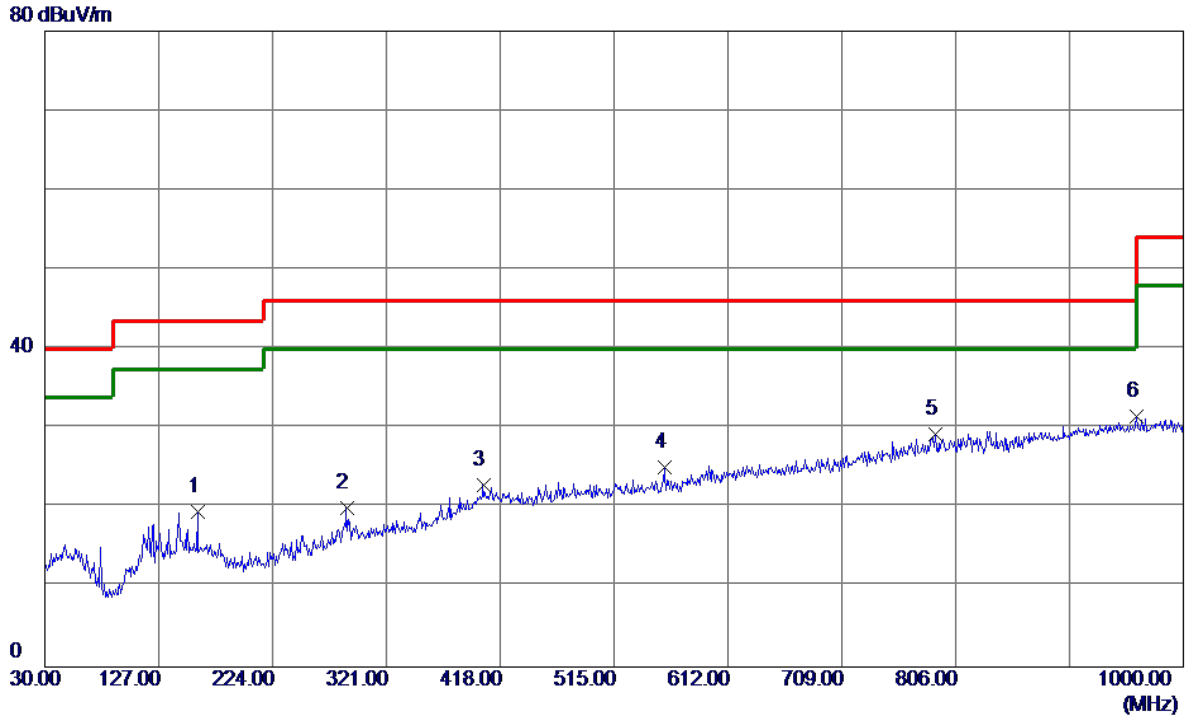
Test Mode	TX AX(HE20) Mode Channel 11	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	35.8200	36.07	-14.90	21.17	40.00	-18.83	Peak	
2	117.3000	37.68	-14.40	23.28	43.50	-20.22	Peak	
3	438.3700	30.17	-7.72	22.45	46.00	-23.55	Peak	
4	534.4000	30.56	-6.10	24.46	46.00	-21.54	Peak	
5	685.7199	31.01	-3.26	27.75	46.00	-18.25	Peak	
6 *	833.1599	30.96	-0.66	30.30	46.00	-15.70	Peak	

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

Test Mode	TX AX(HE20) Mode Channel 11	Polarization	Horizontal

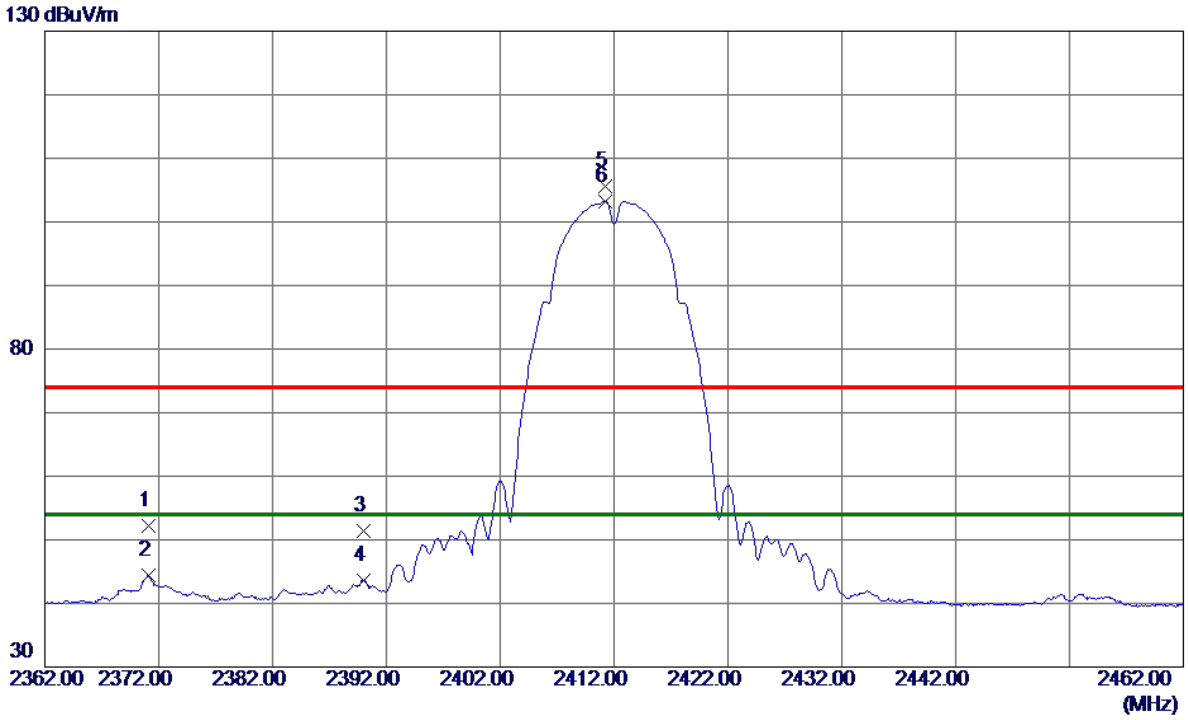


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	159.9800	31.95	-12.37	19.58	43.50	-23.92	Peak	
2	287.0500	31.38	-11.32	20.06	46.00	-25.94	Peak	
3	403.4500	31.56	-8.68	22.88	46.00	-23.12	Peak	
4	557.6800	30.87	-5.69	25.18	46.00	-20.82	Peak	
5 *	788.5400	30.32	-0.97	29.35	46.00	-16.65	Peak	
6	960.2300	29.64	1.81	31.45	54.00	-22.55	Peak	

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

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

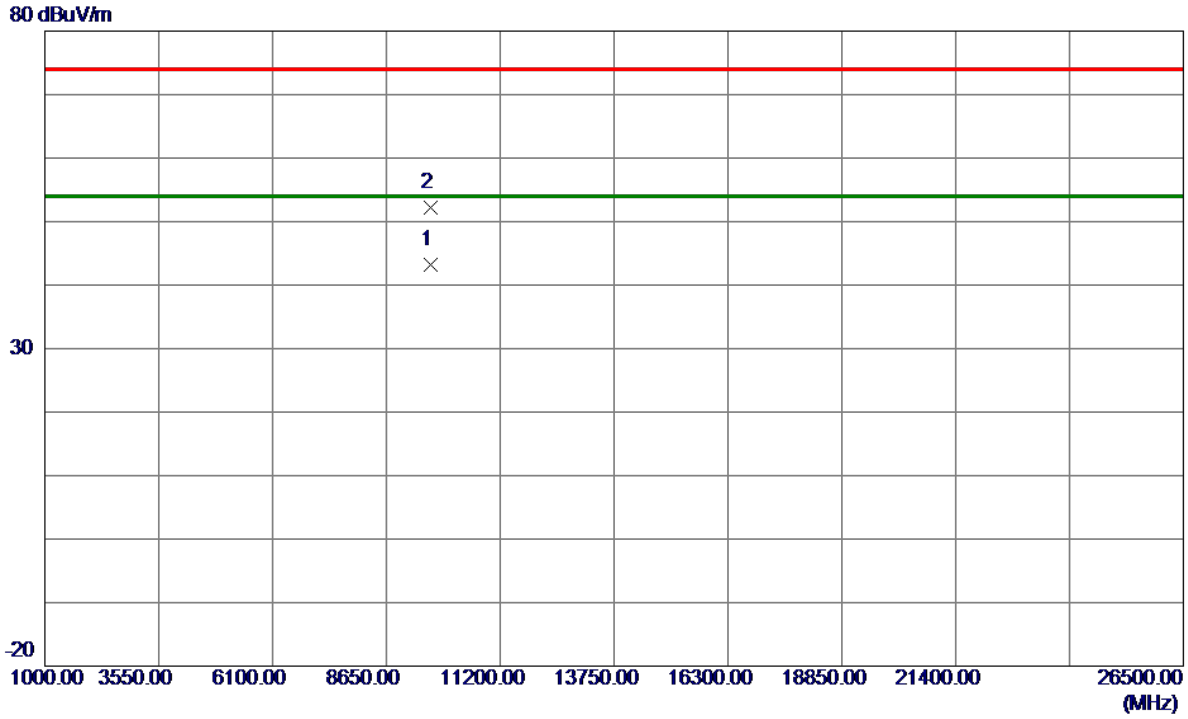
Test Mode	TX B Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2371.1000	43.85	8.28	52.13	74.00	-21.87	Peak	
2	2371.1000	36.14	8.28	44.42	54.00	-9.58	AVG	
3	2390.0000	43.13	8.31	51.44	74.00	-22.56	Peak	
4	2390.0000	35.29	8.31	43.60	54.00	-10.40	AVG	
5	2411.2000	97.22	8.33	105.55	74.00	31.55	Peak	No Limit
6 *	2411.2000	94.93	8.33	103.26	54.00	49.26	AVG	No Limit

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

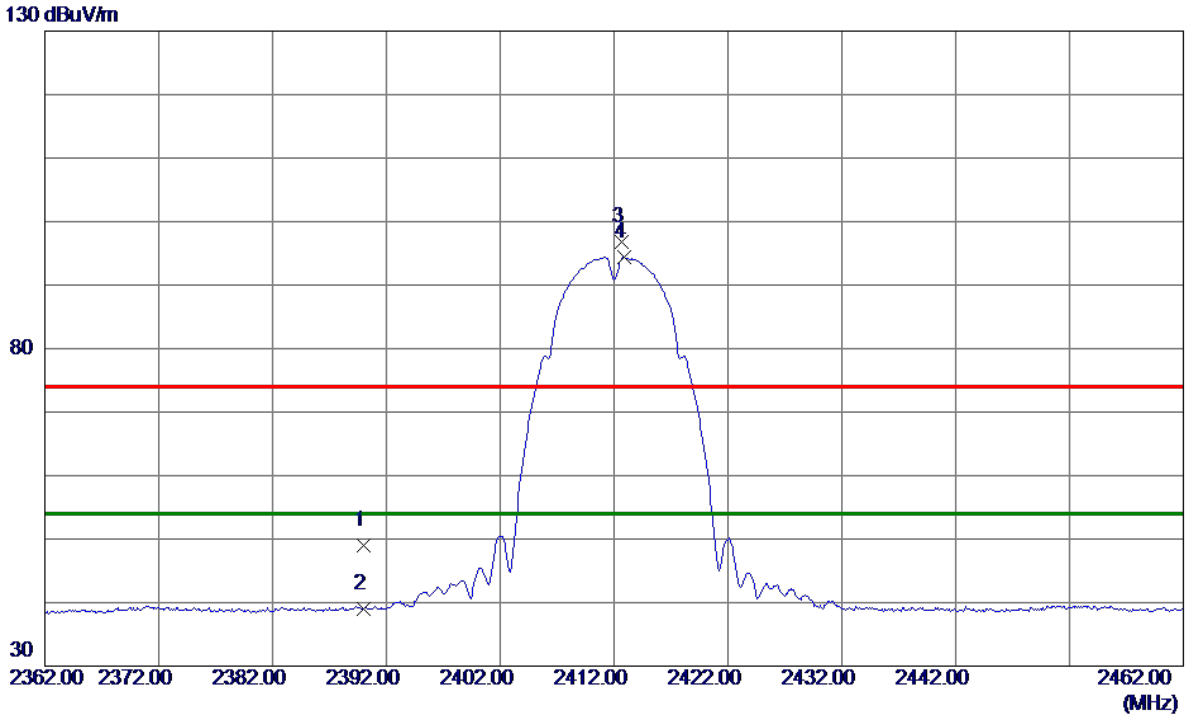
Test Mode	TX B Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9648.0359	30.76	12.42	43.18	54.00	-10.82	AVG	
2	9648.0720	39.82	12.42	52.24	74.00	-21.76	Peak	

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

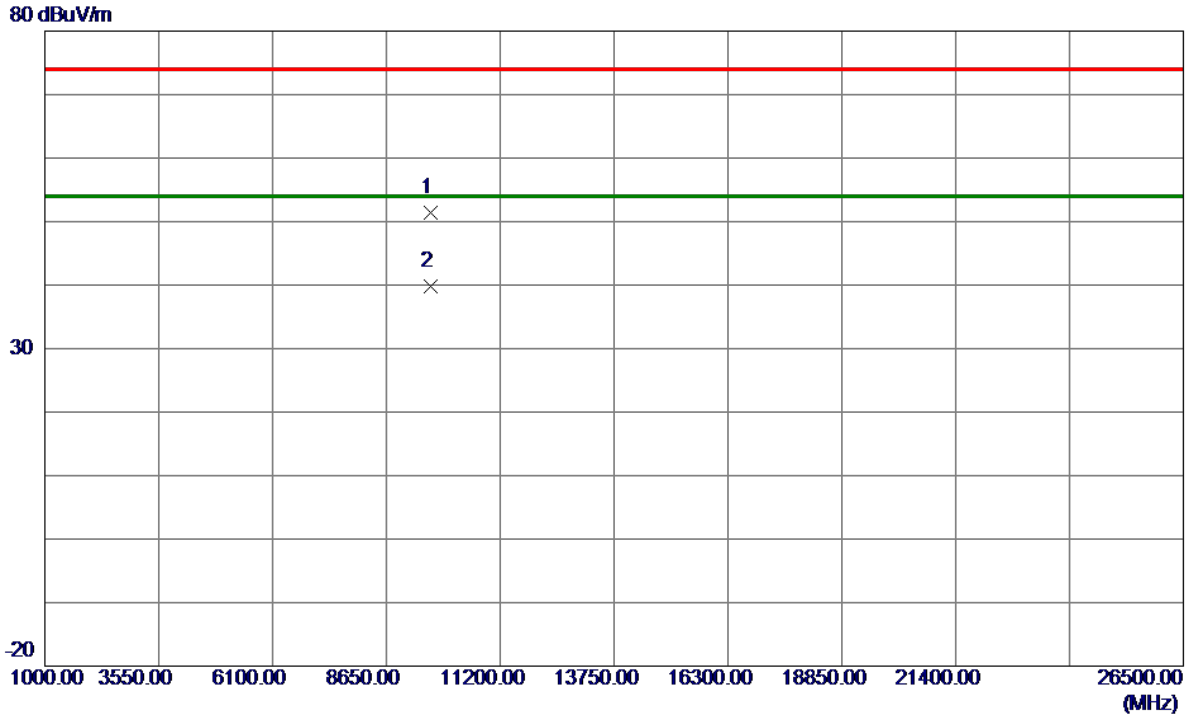
Test Mode	TX B Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	40.69	8.31	49.00	74.00	-25.00	Peak	
2	2390.0000	30.77	8.31	39.08	54.00	-14.92	AVG	
3	2412.7000	88.54	8.33	96.87	74.00	22.87	Peak	No Limit
4 *	2412.9000	86.07	8.33	94.40	54.00	40.40	AVG	No Limit

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

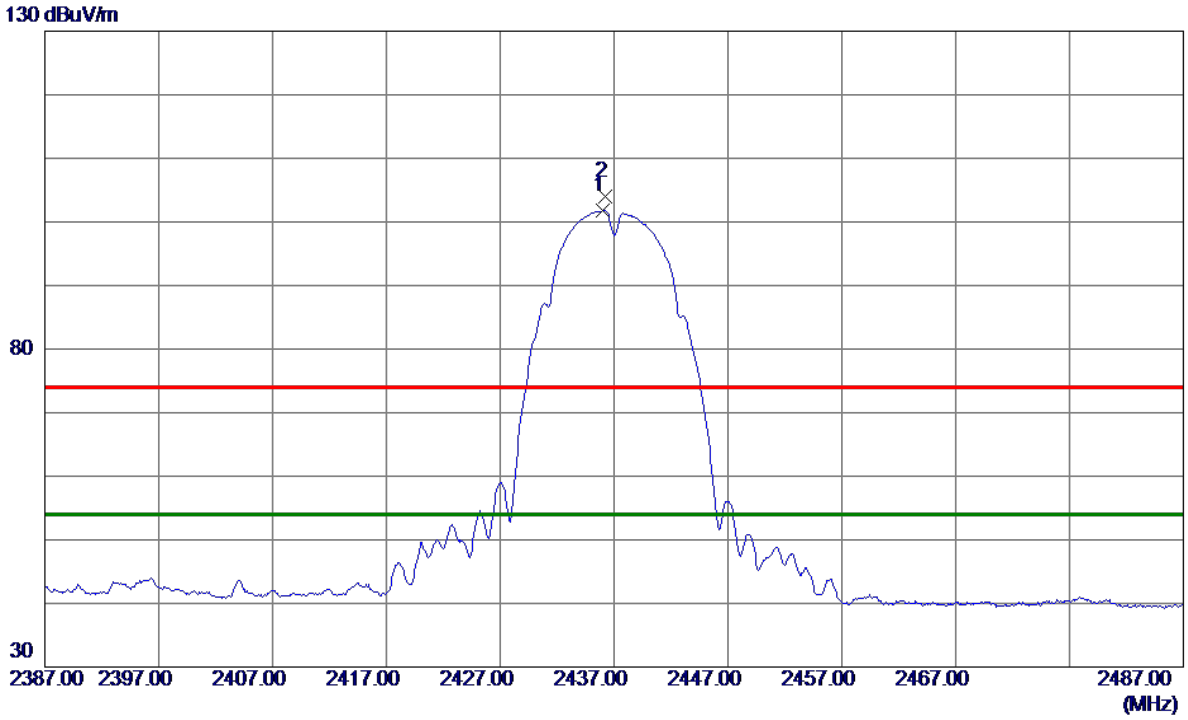
Test Mode	TX B Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.9820	39.02	12.42	51.44	74.00	-22.56	Peak	
2 *	9648.8090	27.34	12.43	39.77	54.00	-14.23	AVG	

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

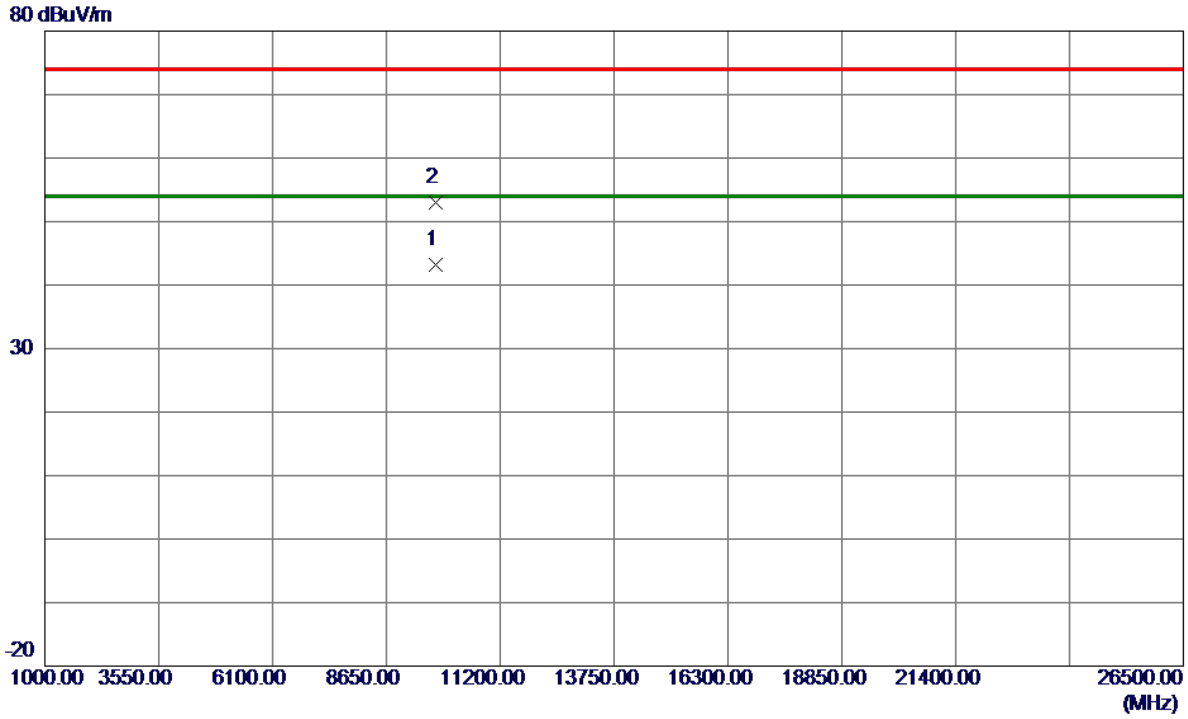
Test Mode	TX B Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2436.0000	93.44	8.36	101.80	54.00	47.80	AVG	No Limit
2	2436.2000	95.74	8.36	104.10	74.00	30.10	Peak	No Limit

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

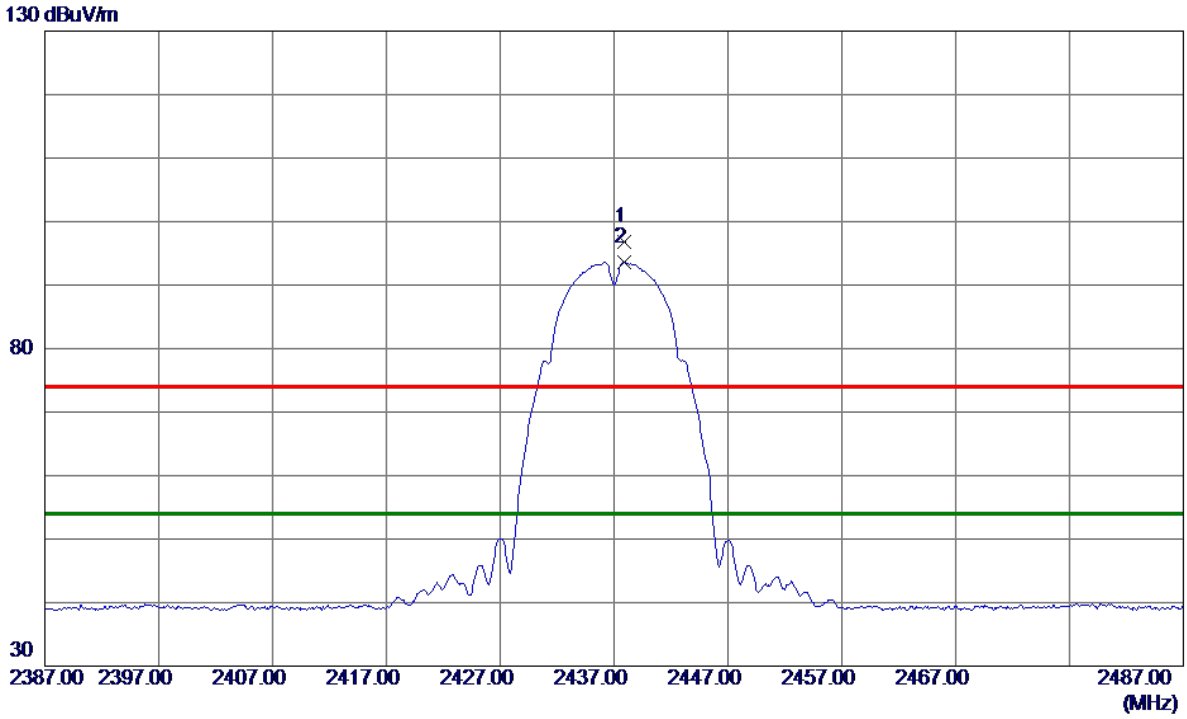
Test Mode	TX B Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9747.9990	30.54	12.63	43.17	54.00	-10.83	AVG	
2	9748.0540	40.43	12.63	53.06	74.00	-20.94	Peak	

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

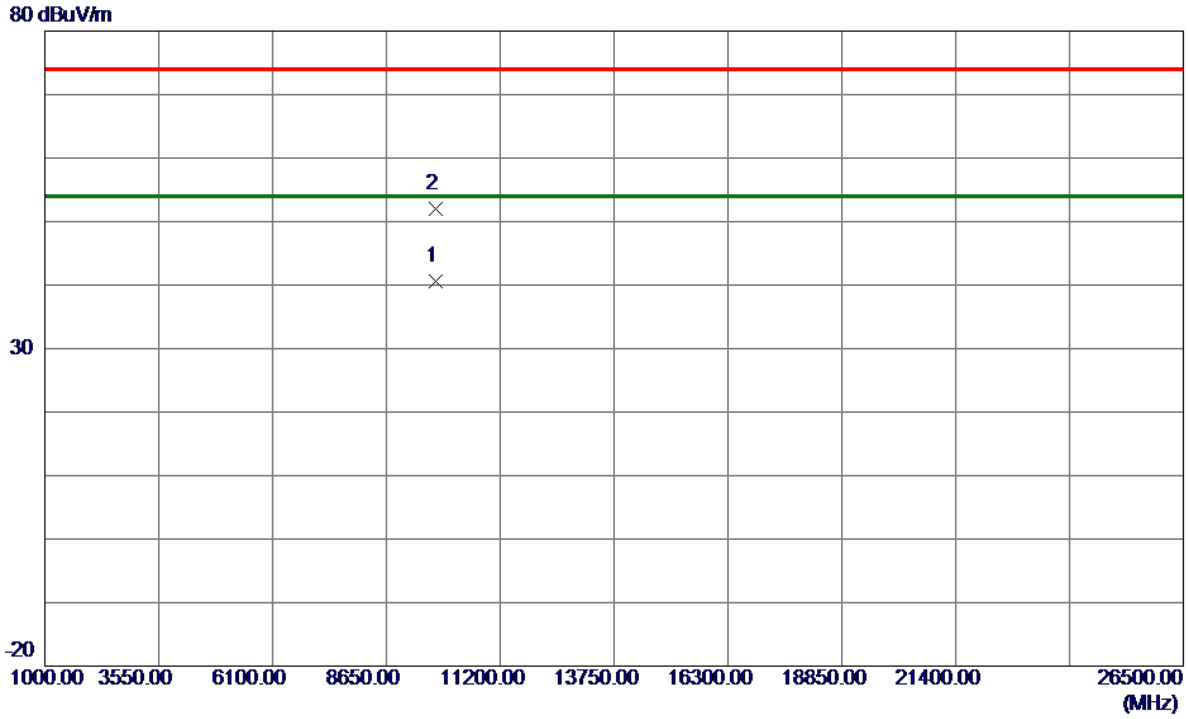
Test Mode	TX B Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2437.9000	88.35	8.37	96.72	74.00	22.72	Peak	No Limit
2 *	2437.9000	85.26	8.37	93.63	54.00	39.63	AVG	No Limit

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

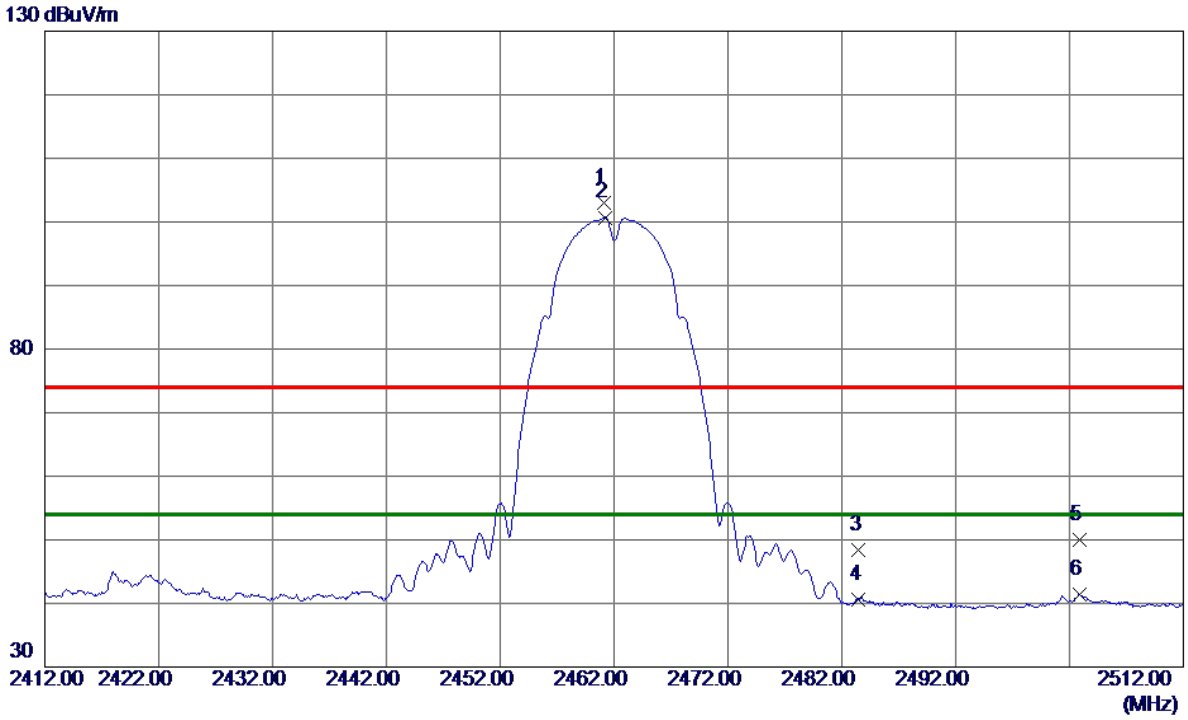
Test Mode	TX B Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9748.1200	27.90	12.63	40.53	54.00	-13.47	AVG	
2	9748.9509	39.43	12.64	52.07	74.00	-21.93	Peak	

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

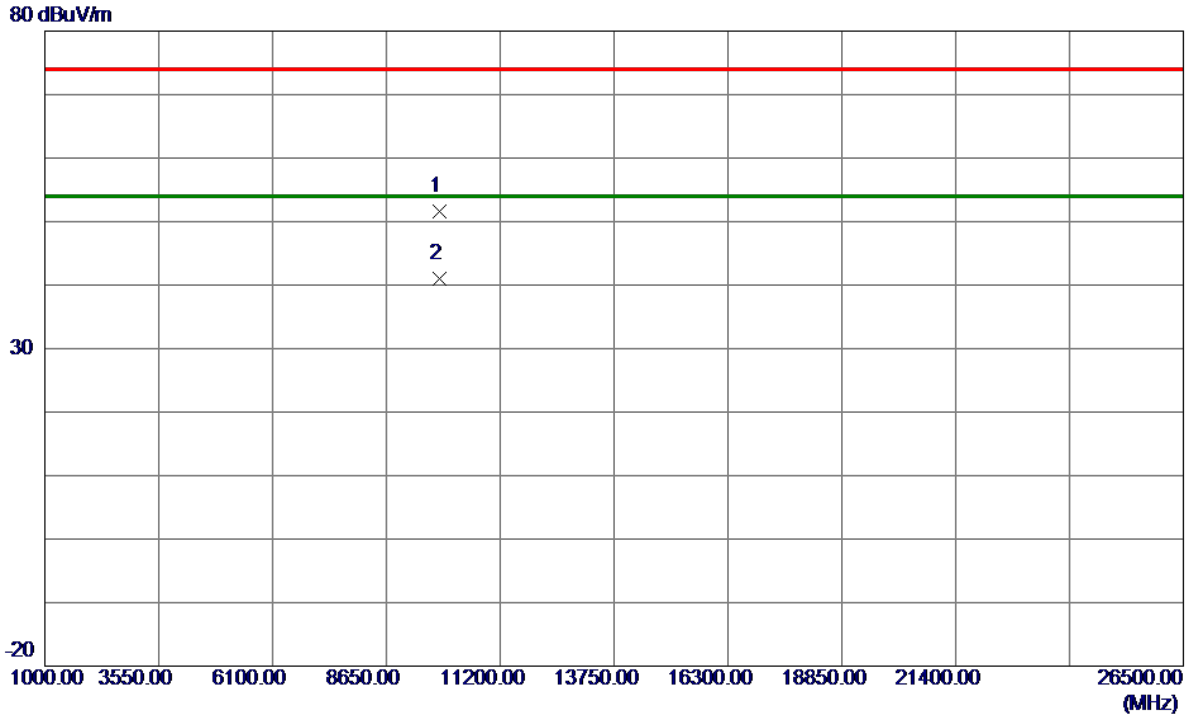
Test Mode	TX B Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2461.1000	94.56	8.40	102.96	74.00	28.96	Peak	No Limit
2 *	2461.2000	92.30	8.40	100.70	54.00	46.70	AVG	No Limit
3	2483.5000	40.03	8.42	48.45	74.00	-25.55	Peak	
4	2483.5000	32.25	8.42	40.67	54.00	-13.33	AVG	
5	2502.9000	41.53	8.46	49.99	74.00	-24.01	Peak	
6	2502.9000	33.02	8.46	41.48	54.00	-12.52	AVG	

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

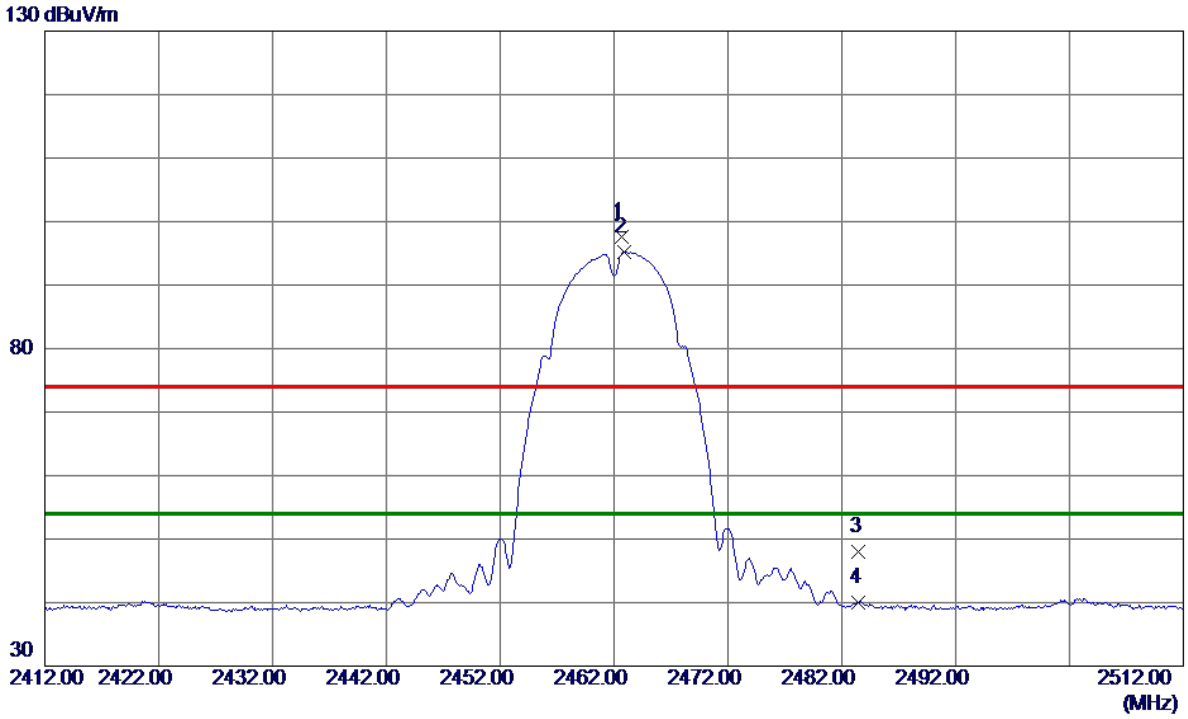
Test Mode	TX B Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9847.7800	38.75	12.84	51.59	74.00	-22.41	Peak	
2 *	9847.9550	28.24	12.84	41.08	54.00	-12.92	AVG	

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

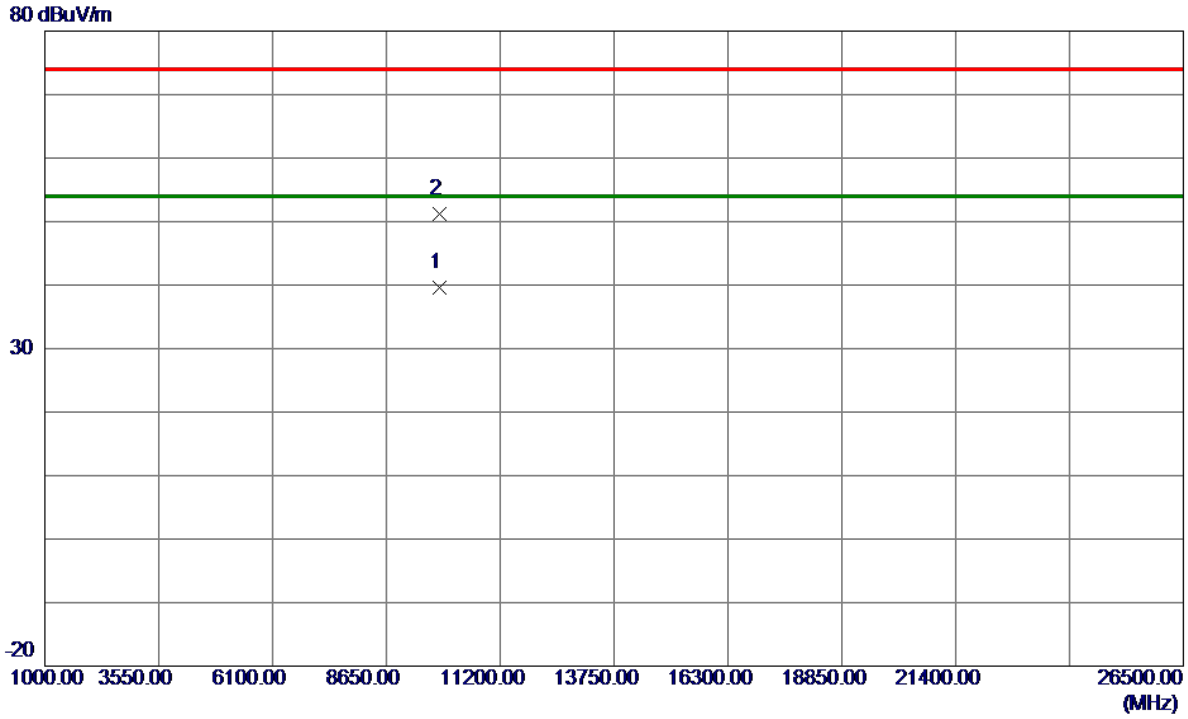
Test Mode	TX B Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2462.7000	89.19	8.40	97.59	74.00	23.59	Peak	No Limit
2 *	2462.9000	86.89	8.40	95.29	54.00	41.29	AVG	No Limit
3	2483.5000	39.52	8.42	47.94	74.00	-26.06	Peak	
4	2483.5000	31.53	8.42	39.95	54.00	-14.05	AVG	

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

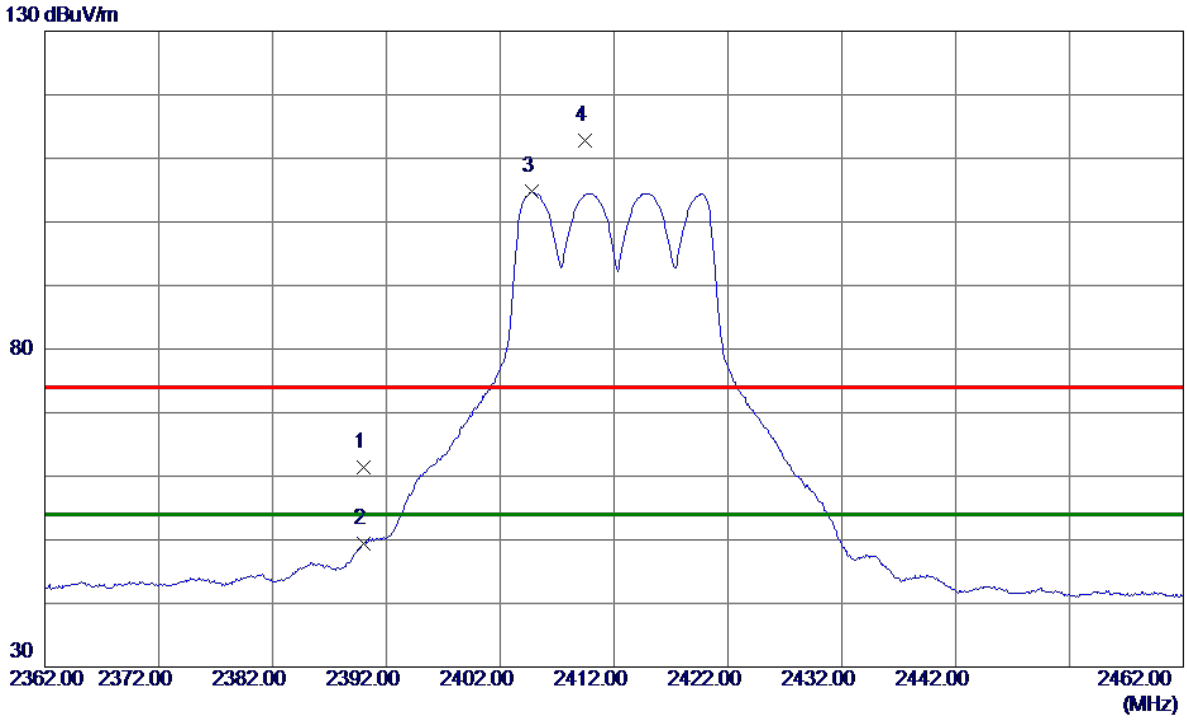
Test Mode	TX B Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848.3140	26.74	12.84	39.58	54.00	-14.42	AVG	
2	9848.4220	38.37	12.84	51.21	74.00	-22.79	Peak	

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

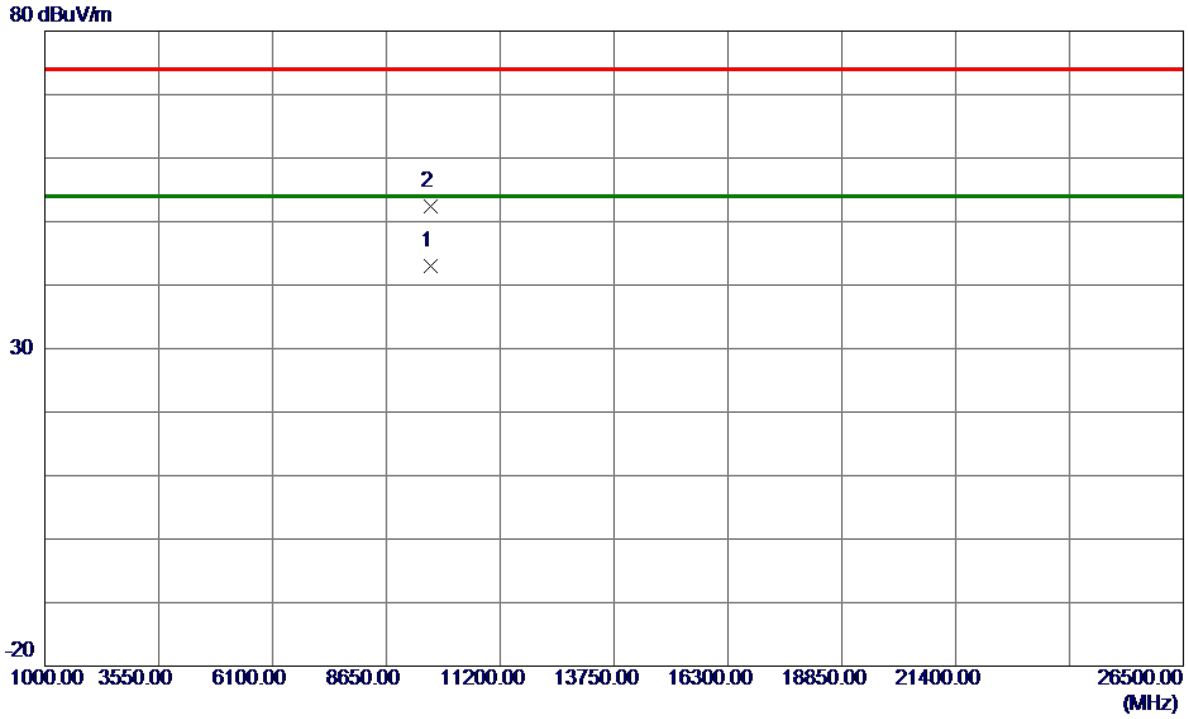
Test Mode	TX G Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	53.04	8.31	61.35	74.00	-12.65	Peak	
2	2390.0000	41.13	8.31	49.44	54.00	-4.56	AVG	
3 *	2404.8000	96.39	8.32	104.71	54.00	50.71	AVG	No Limit
4	2409.4000	104.39	8.33	112.72	74.00	38.72	Peak	No Limit

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

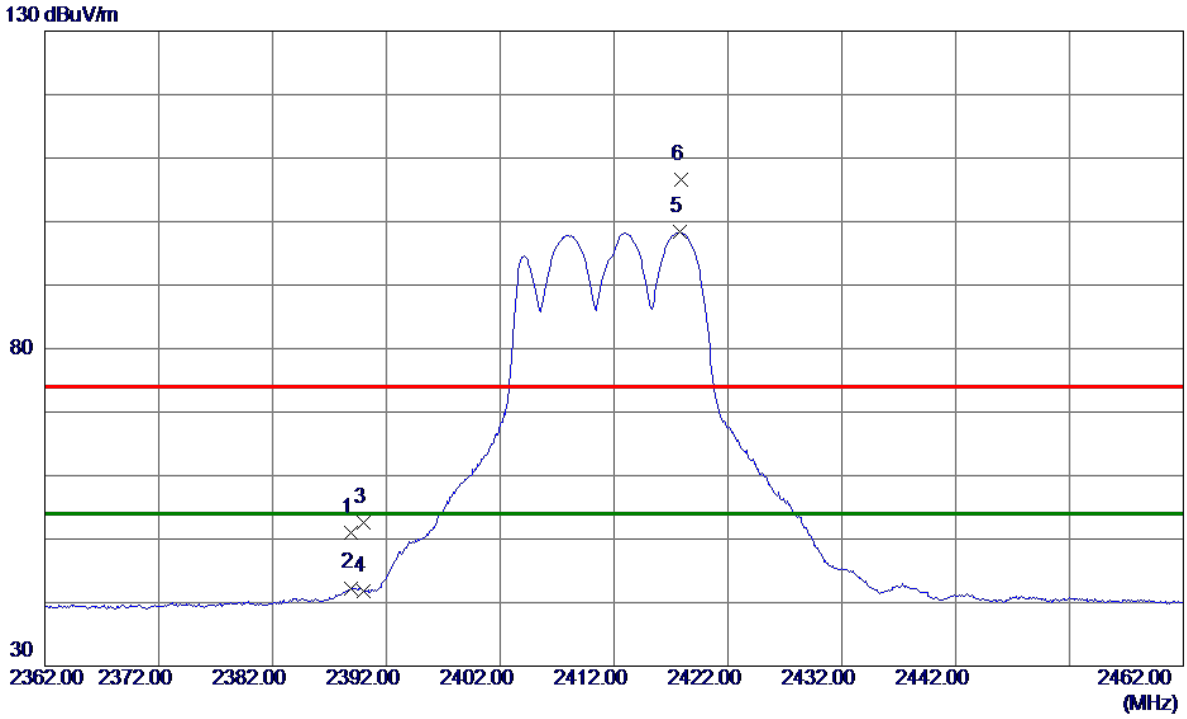
Test Mode	TX G Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9647.9540	30.49	12.42	42.91	54.00	-11.09	AVG	
2	9648.0810	40.01	12.42	52.43	74.00	-21.57	Peak	

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

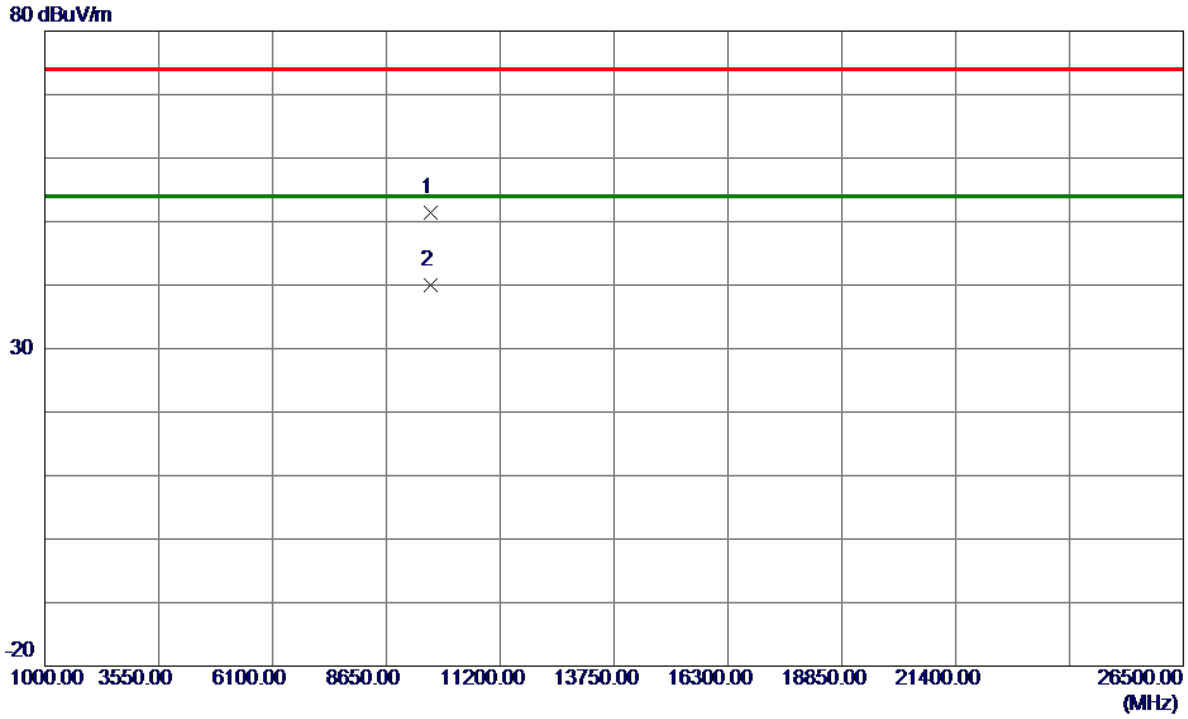
Test Mode	TX G Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388.9000	42.65	8.30	50.95	74.00	-23.05	Peak	
2	2388.9000	34.00	8.30	42.30	54.00	-11.70	AVG	
3	2390.0000	44.32	8.31	52.63	74.00	-21.37	Peak	
4	2390.0000	33.51	8.31	41.82	54.00	-12.18	AVG	
5 *	2417.8000	89.97	8.34	98.31	54.00	44.31	AVG	No Limit
6	2417.9000	98.22	8.34	106.56	74.00	32.56	Peak	No Limit

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

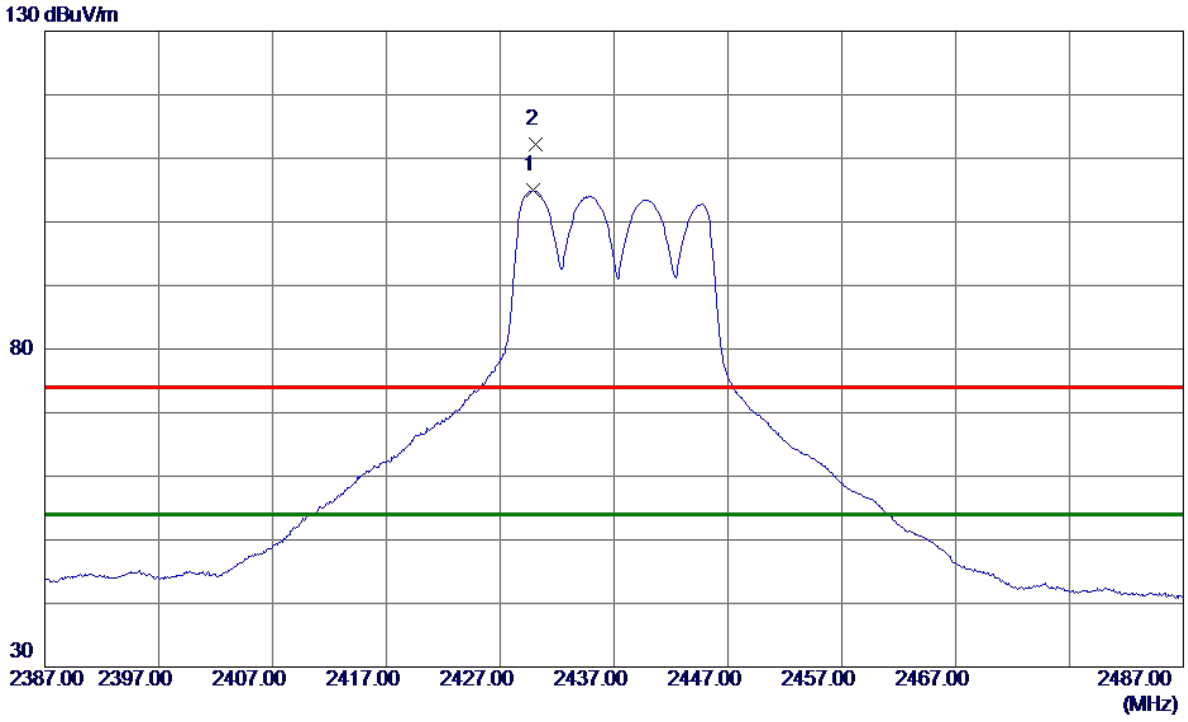
Test Mode	TX G Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.8930	38.93	12.42	51.35	74.00	-22.65	Peak	
2 *	9648.1849	27.57	12.42	39.99	54.00	-14.01	AVG	

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

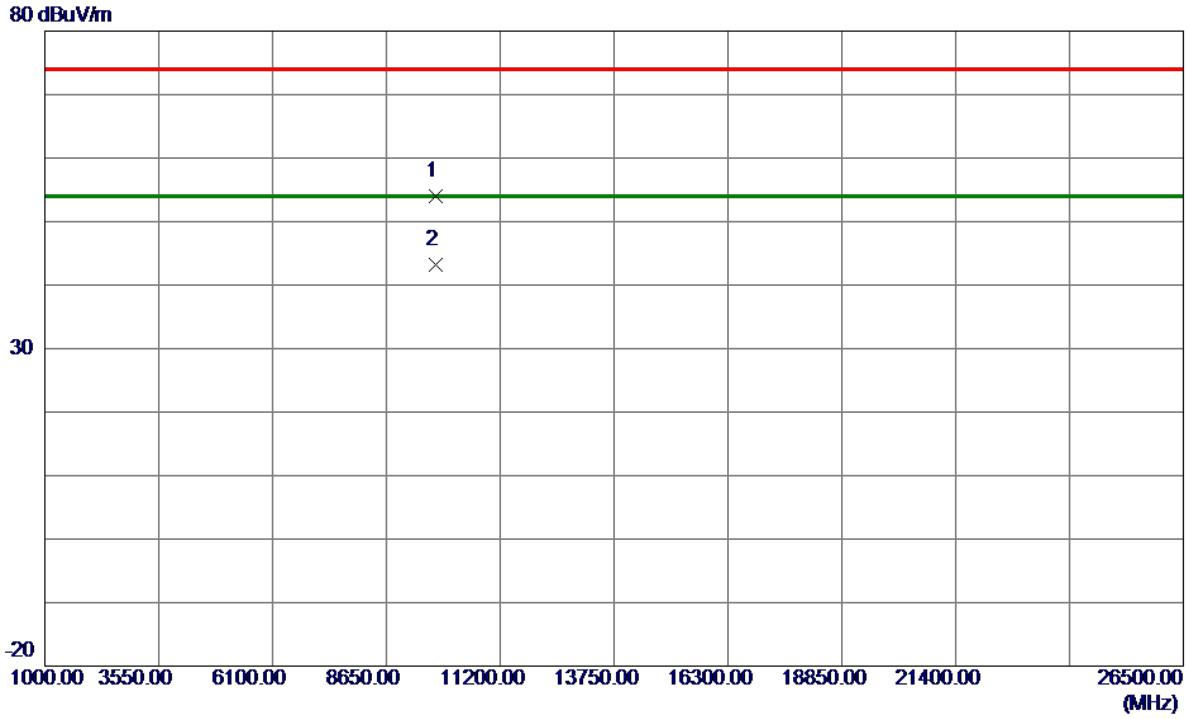
Test Mode	TX G Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2429.9000	96.64	8.36	105.00	54.00	51.00	AVG	No Limit
2	2430.1000	103.86	8.36	112.22	74.00	38.22	Peak	No Limit

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

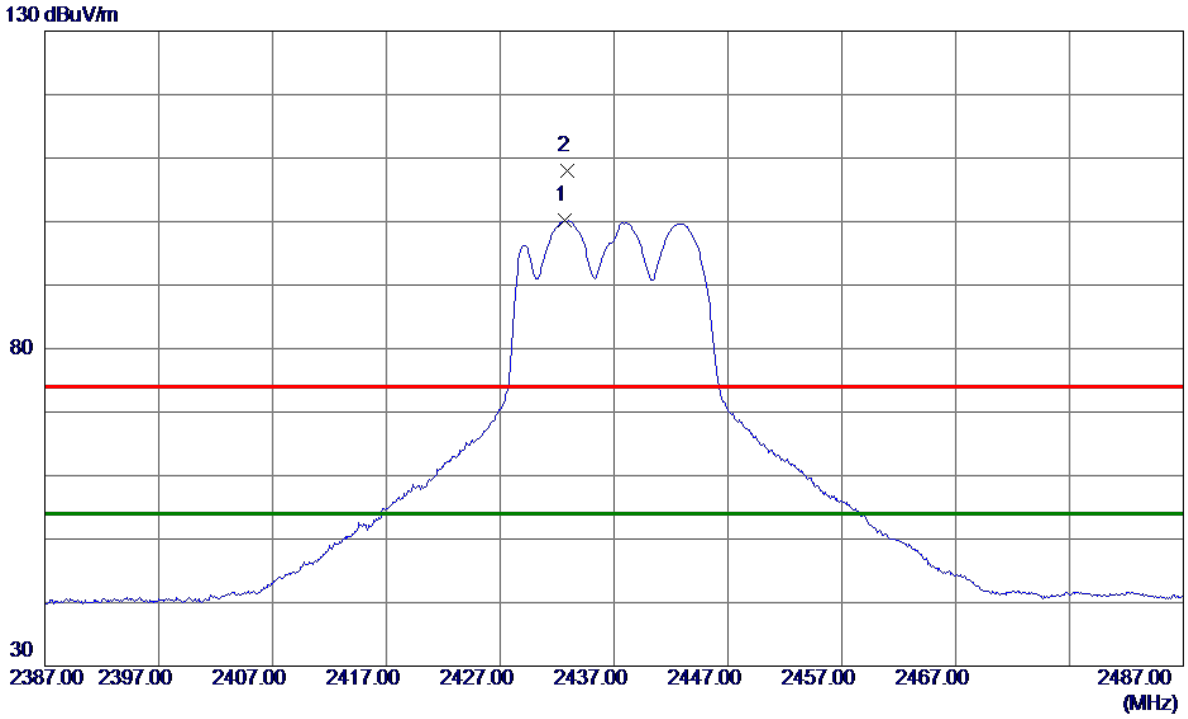
Test Mode	TX G Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.7490	41.32	12.63	53.95	74.00	-20.05	Peak	
2 *	9747.9540	30.53	12.63	43.16	54.00	-10.84	AVG	

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

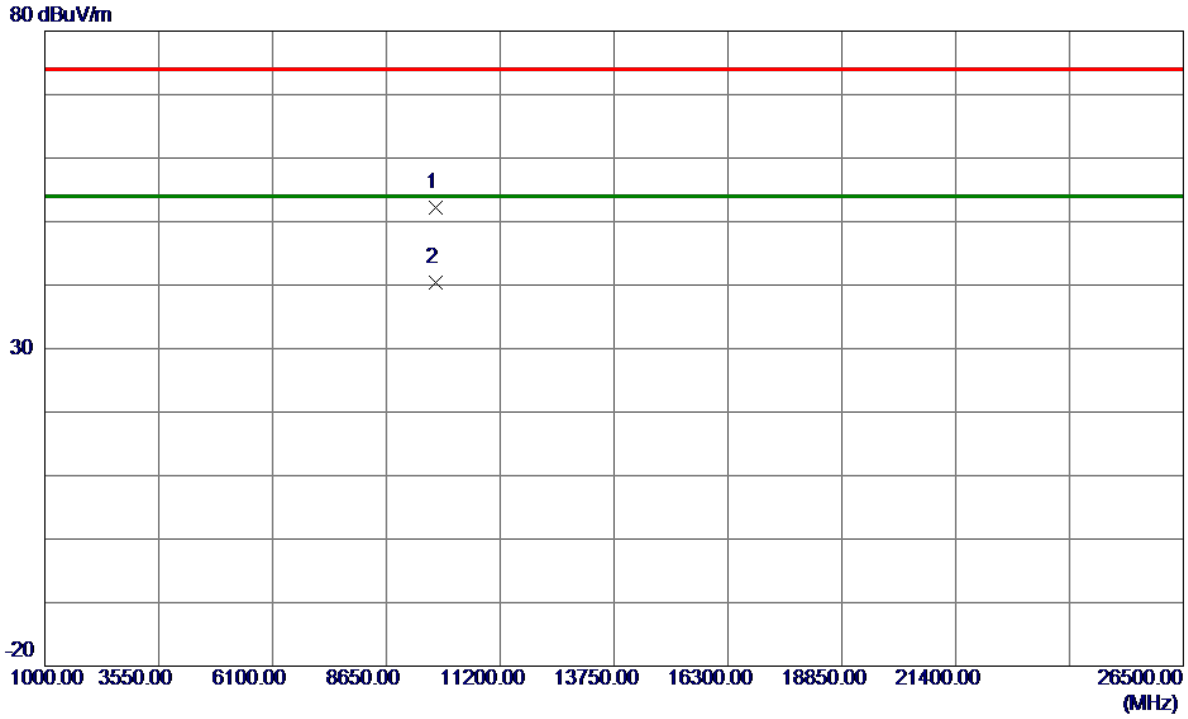
Test Mode	TX G Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2432.7000	91.84	8.36	100.20	54.00	46.20	AVG	No Limit
2	2432.9000	99.68	8.36	108.04	74.00	34.04	Peak	No Limit

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

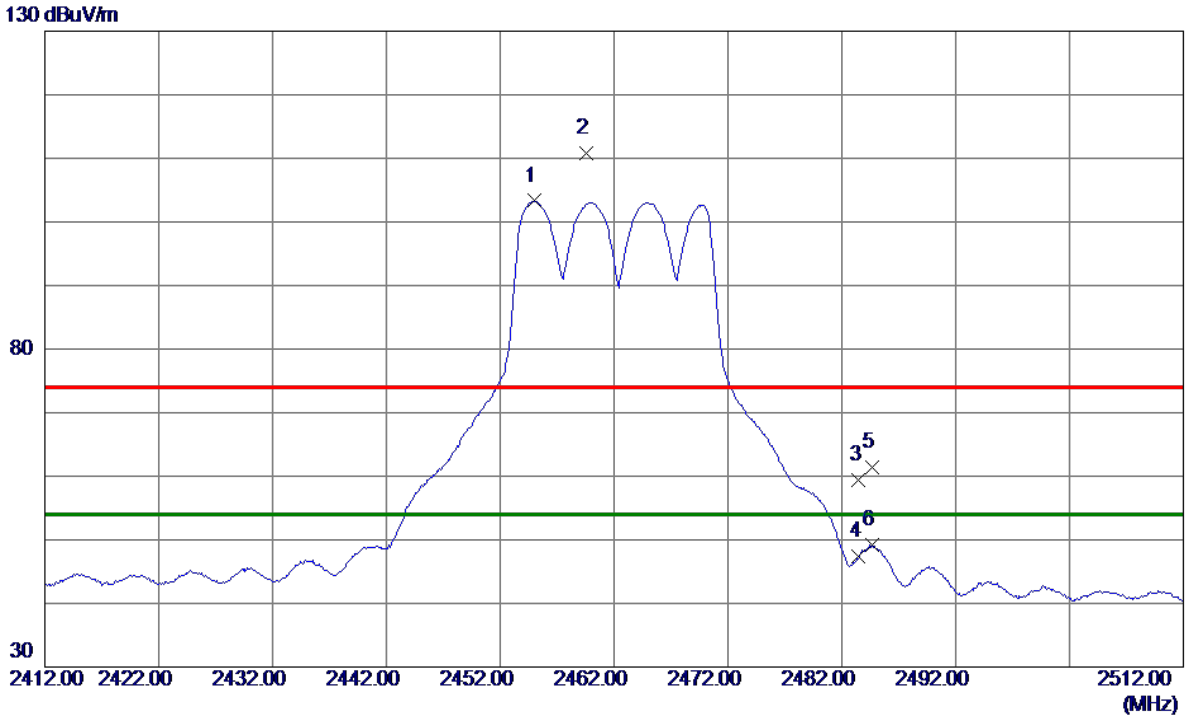
Test Mode	TX G Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.0810	39.57	12.63	52.20	74.00	-21.80	Peak	
2 *	9748.2060	27.71	12.63	40.34	54.00	-13.66	AVG	

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

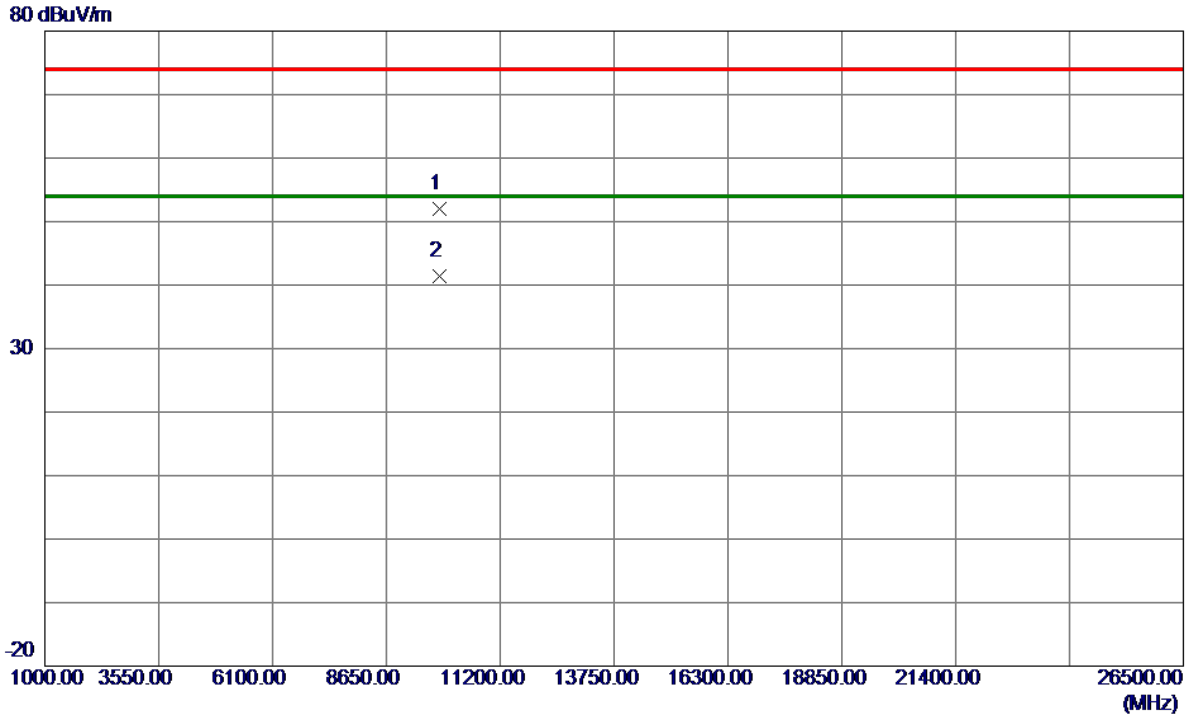
Test Mode	TX G Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2455.0000	94.91	8.39	103.30	54.00	49.30	AVG	No Limit
2	2459.6000	102.42	8.39	110.81	74.00	36.81	Peak	No Limit
3	2483.5000	50.96	8.42	59.38	74.00	-14.62	Peak	
4	2483.5000	39.02	8.42	47.44	54.00	-6.56	AVG	
5	2484.7000	52.93	8.43	61.36	74.00	-12.64	Peak	
6	2484.7000	40.80	8.43	49.23	54.00	-4.77	AVG	

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

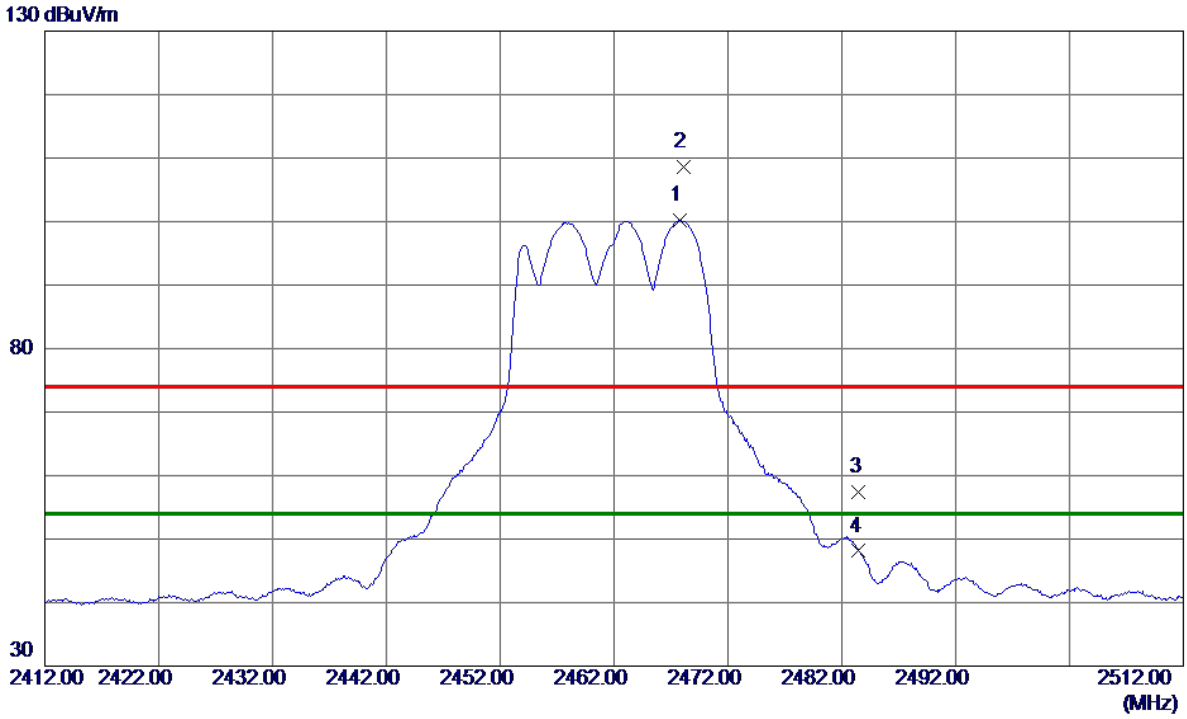
Test Mode	TX G Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9847.4189	39.18	12.84	52.02	74.00	-21.98	Peak	
2 *	9848.0250	28.57	12.84	41.41	54.00	-12.59	AVG	

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

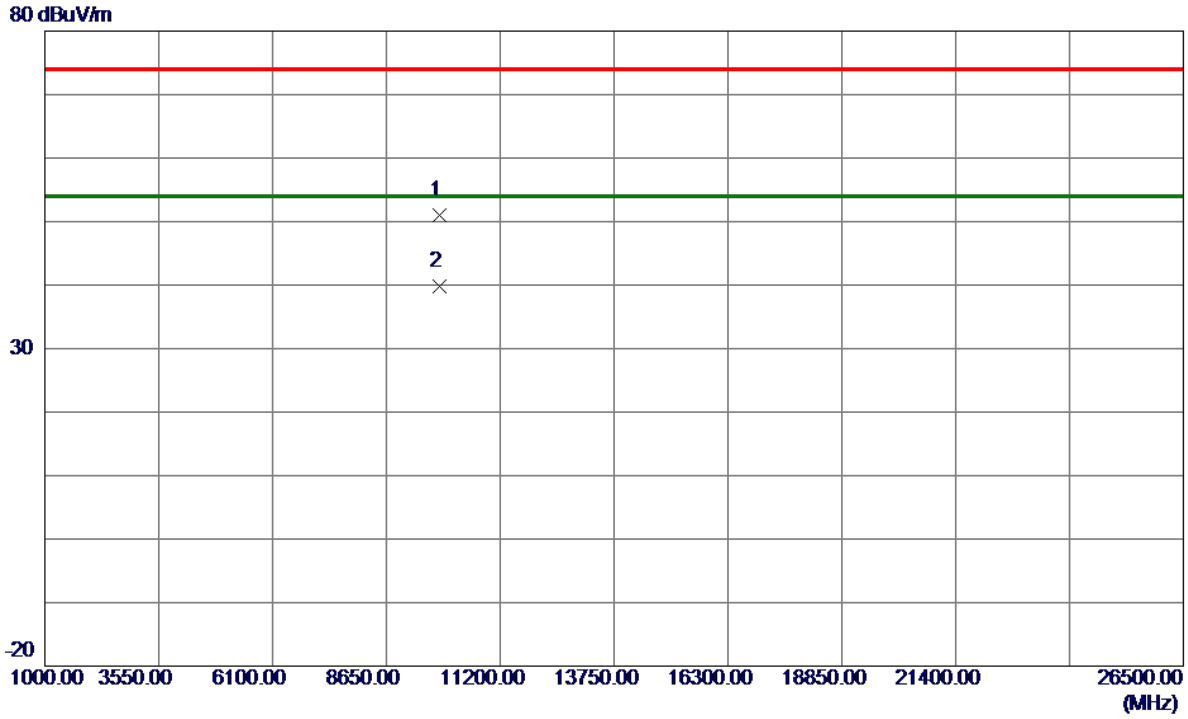
Test Mode	TX G Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2467.8000	91.78	8.40	100.18	54.00	46.18	AVG	No Limit
2	2468.1000	100.15	8.40	108.55	74.00	34.55	Peak	No Limit
3	2483.5000	49.00	8.42	57.42	74.00	-16.58	Peak	
4	2483.5000	39.68	8.42	48.10	54.00	-5.90	AVG	

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

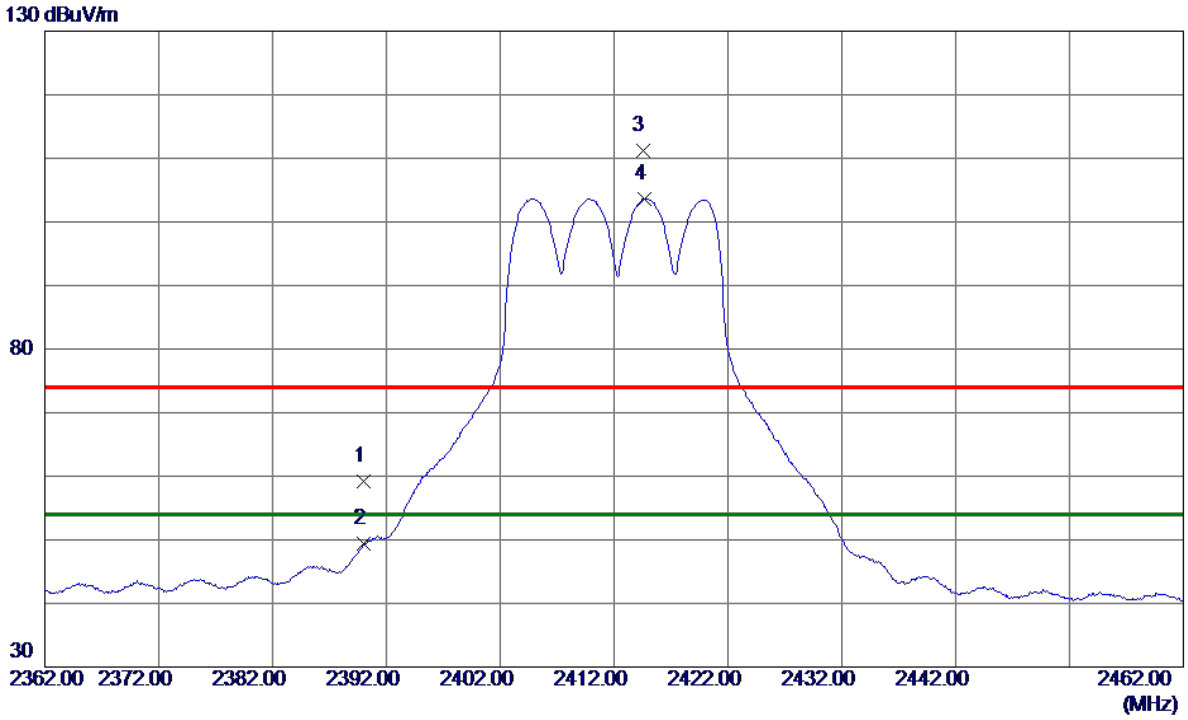
Test Mode	TX G Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9847.2110	38.18	12.84	51.02	74.00	-22.98	Peak	
2 *	9847.9840	26.96	12.84	39.80	54.00	-14.20	AVG	

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

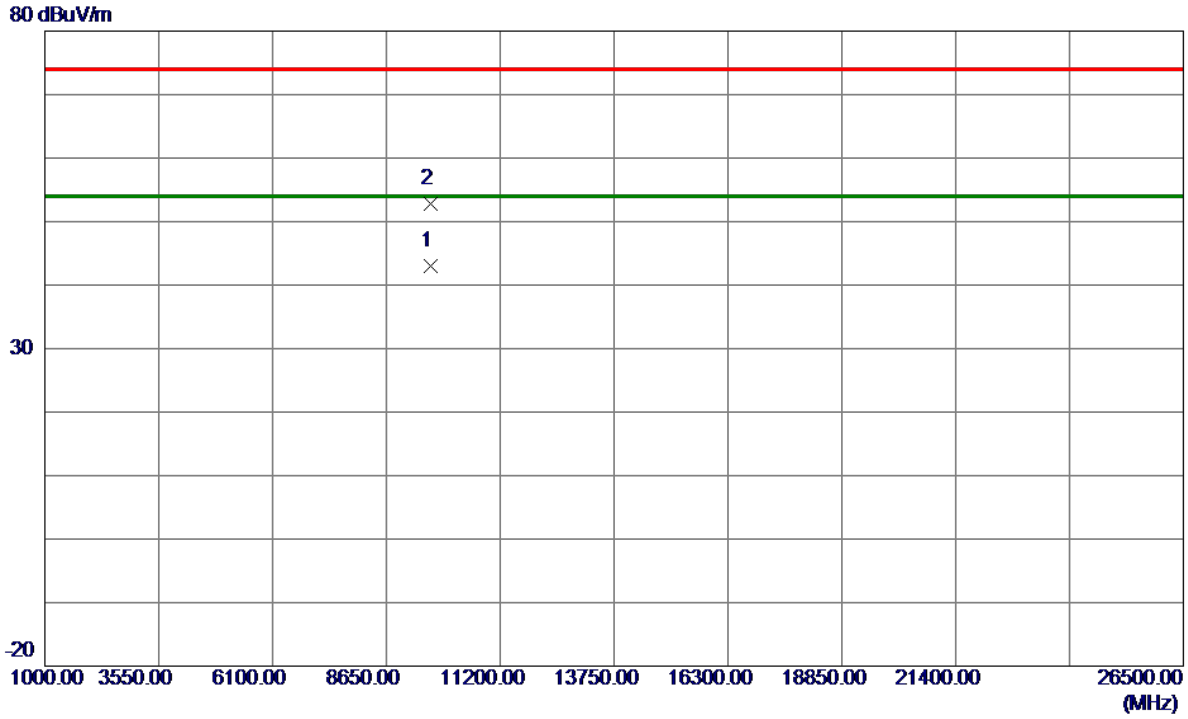
Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	50.96	8.31	59.27	74.00	-14.73	Peak	
2	2390.0000	41.03	8.31	49.34	54.00	-4.66	AVG	
3	2414.5000	102.86	8.34	111.20	74.00	37.20	Peak	No Limit
4 *	2414.7000	95.24	8.34	103.58	54.00	49.58	AVG	No Limit

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

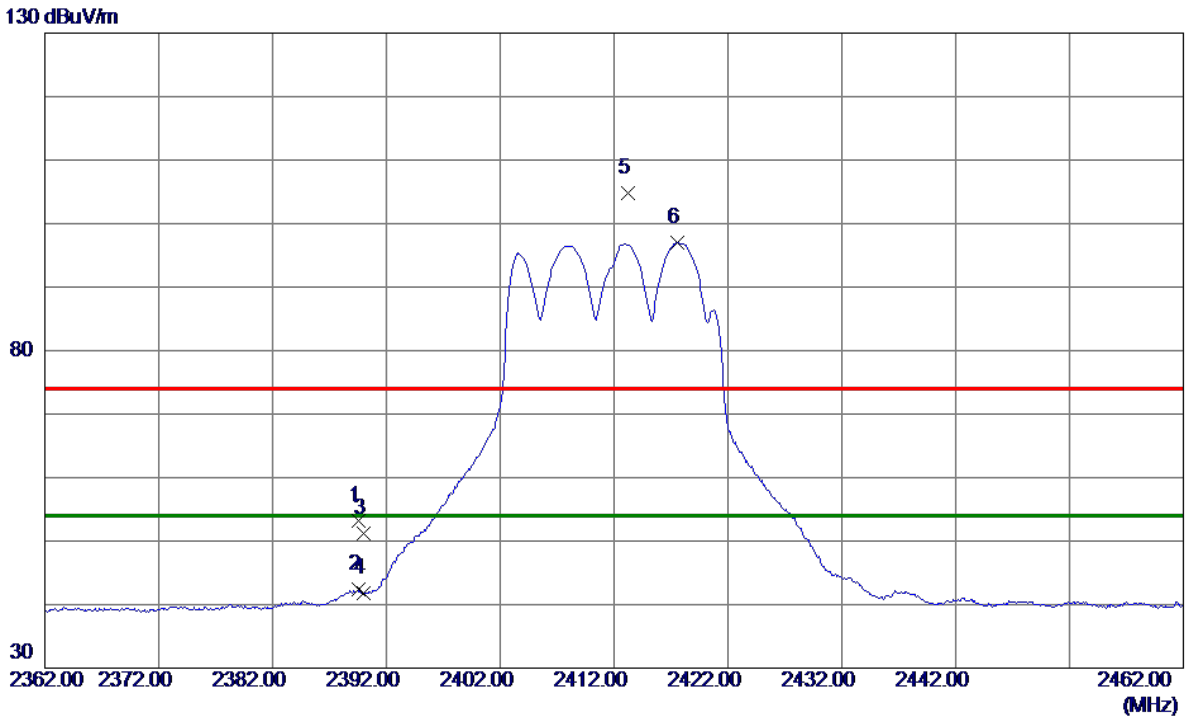
Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9647.9470	30.56	12.42	42.98	54.00	-11.02	AVG	
2	9648.0770	40.46	12.42	52.88	74.00	-21.12	Peak	

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

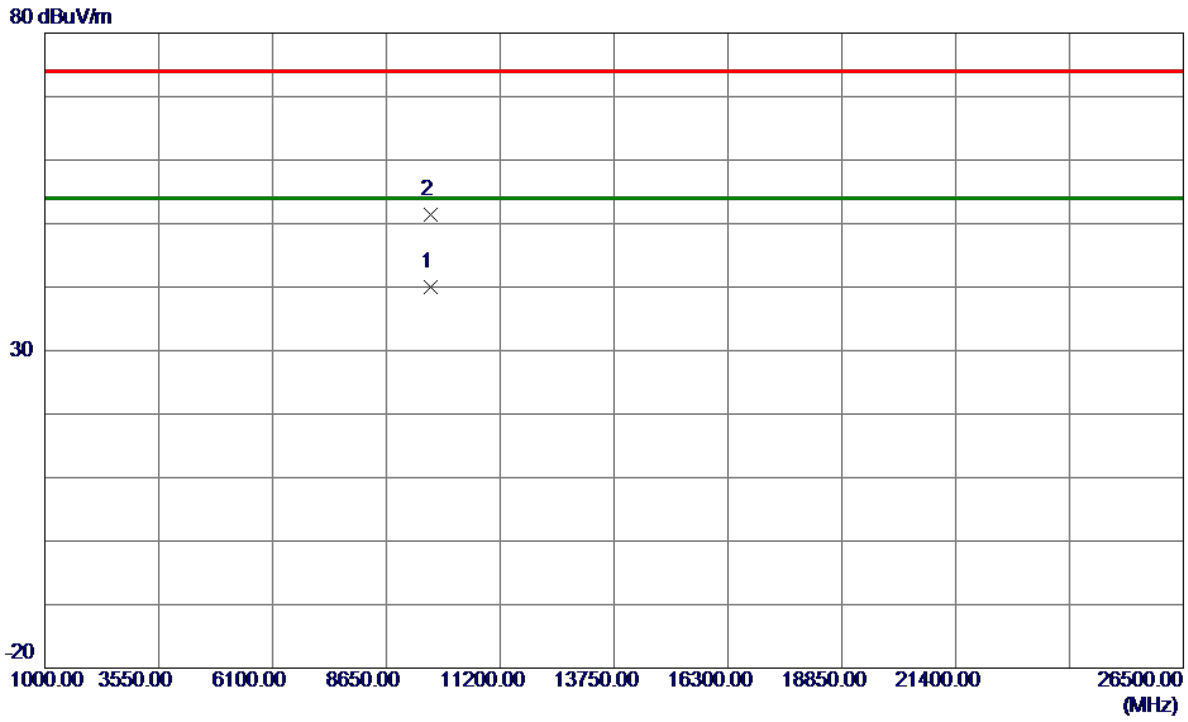
Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389.6000	44.91	8.30	53.21	74.00	-20.79	Peak	
2	2389.6000	34.05	8.30	42.35	54.00	-11.65	AVG	
3	2390.0000	42.88	8.31	51.19	74.00	-22.81	Peak	
4	2390.0000	33.55	8.31	41.86	54.00	-12.14	AVG	
5	2413.2000	96.56	8.33	104.89	74.00	30.89	Peak	No Limit
6 *	2417.6000	88.66	8.34	97.00	54.00	43.00	AVG	No Limit

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

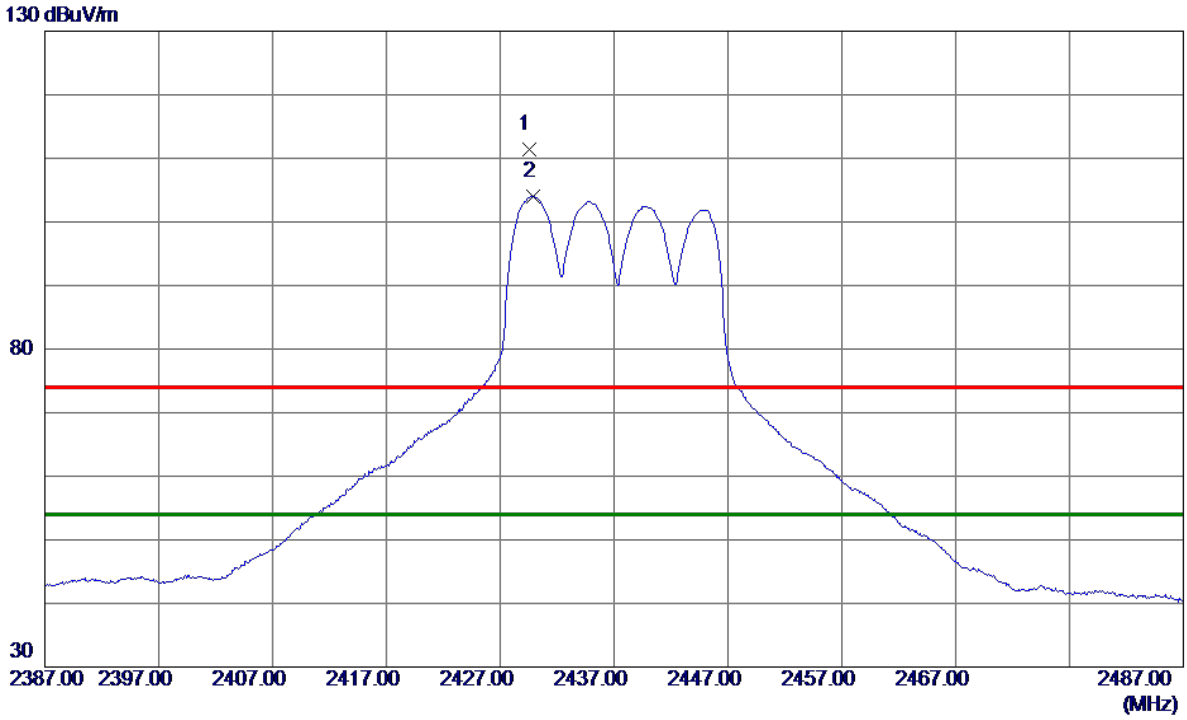
Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9648.1529	27.52	12.42	39.94	54.00	-14.06	AVG	
2	9648.3060	38.94	12.42	51.36	74.00	-22.64	Peak	

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

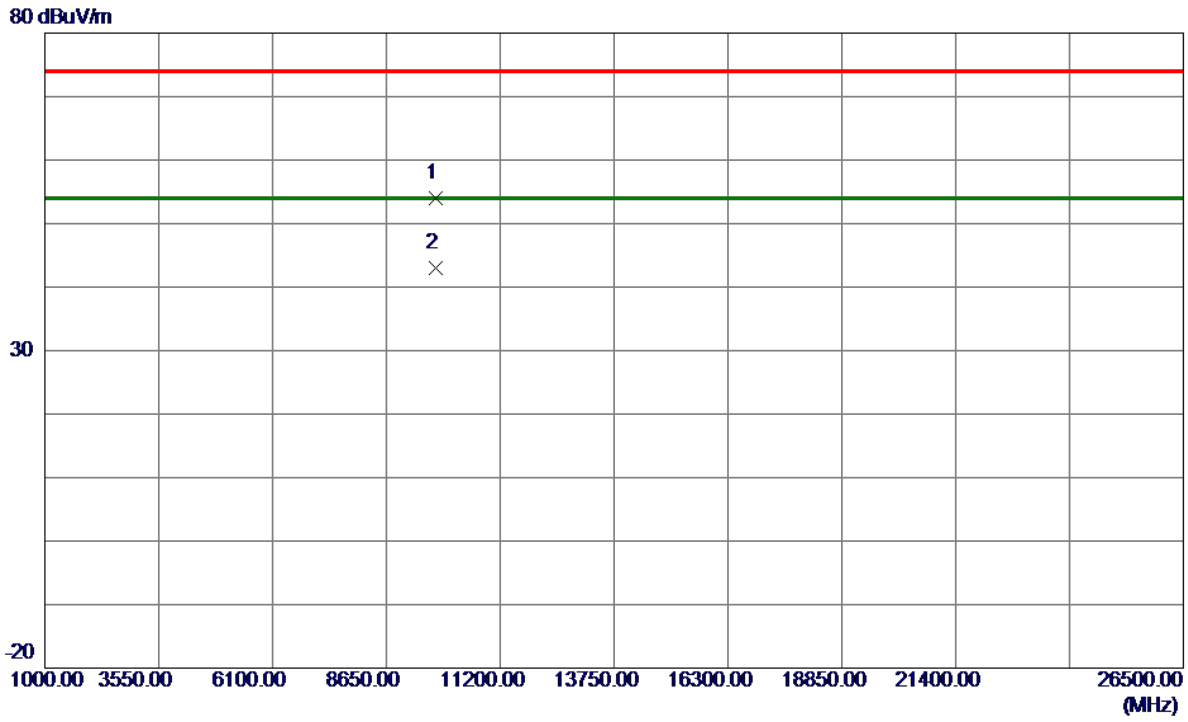
Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2429.5000	103.12	8.36	111.48	74.00	37.48	Peak	No Limit
2 *	2429.9000	95.61	8.36	103.97	54.00	49.97	AVG	No Limit

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

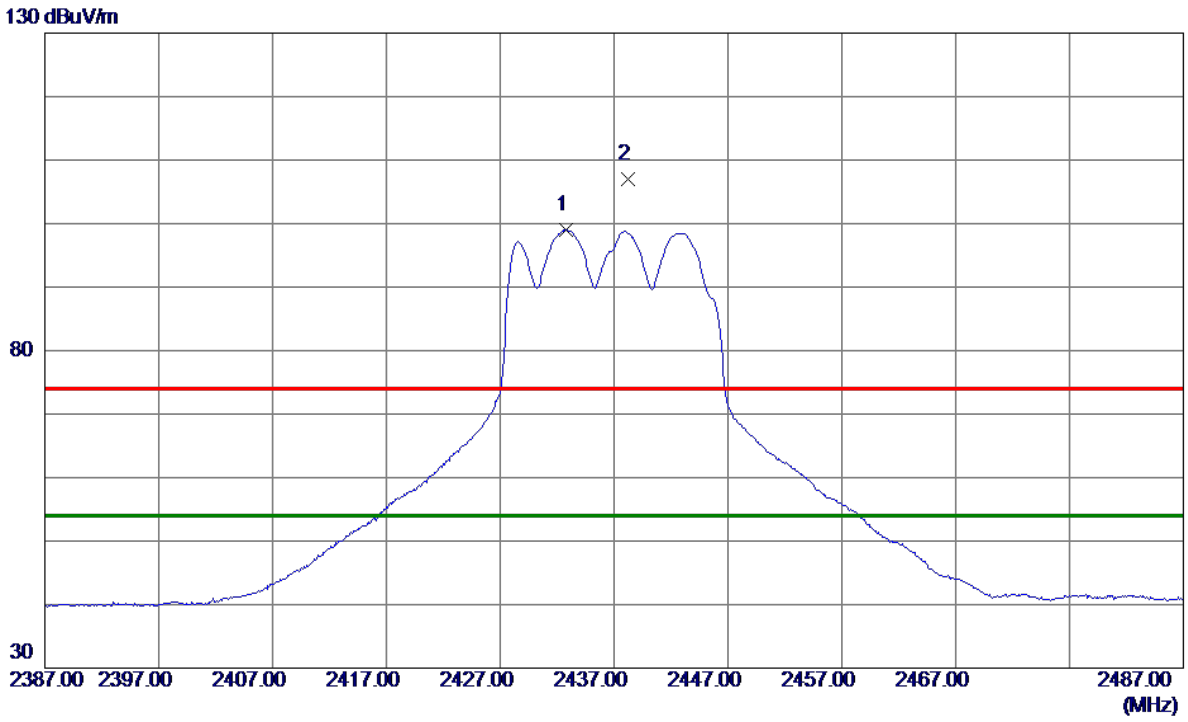
Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.6990	41.30	12.63	53.93	74.00	-20.07	Peak	
2 *	9748.0260	30.40	12.63	43.03	54.00	-10.97	AVG	

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

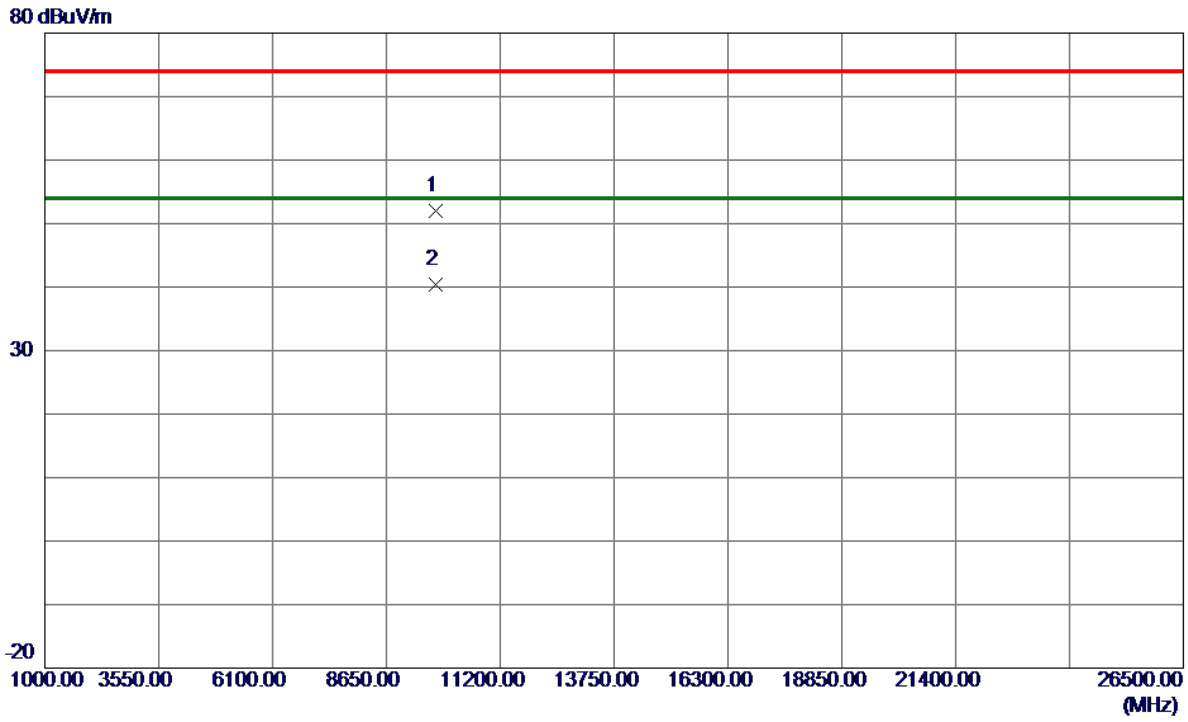
Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2432.8000	90.58	8.36	98.94	54.00	44.94	AVG	No Limit
2	2438.2000	98.63	8.37	107.00	74.00	33.00	Peak	No Limit

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

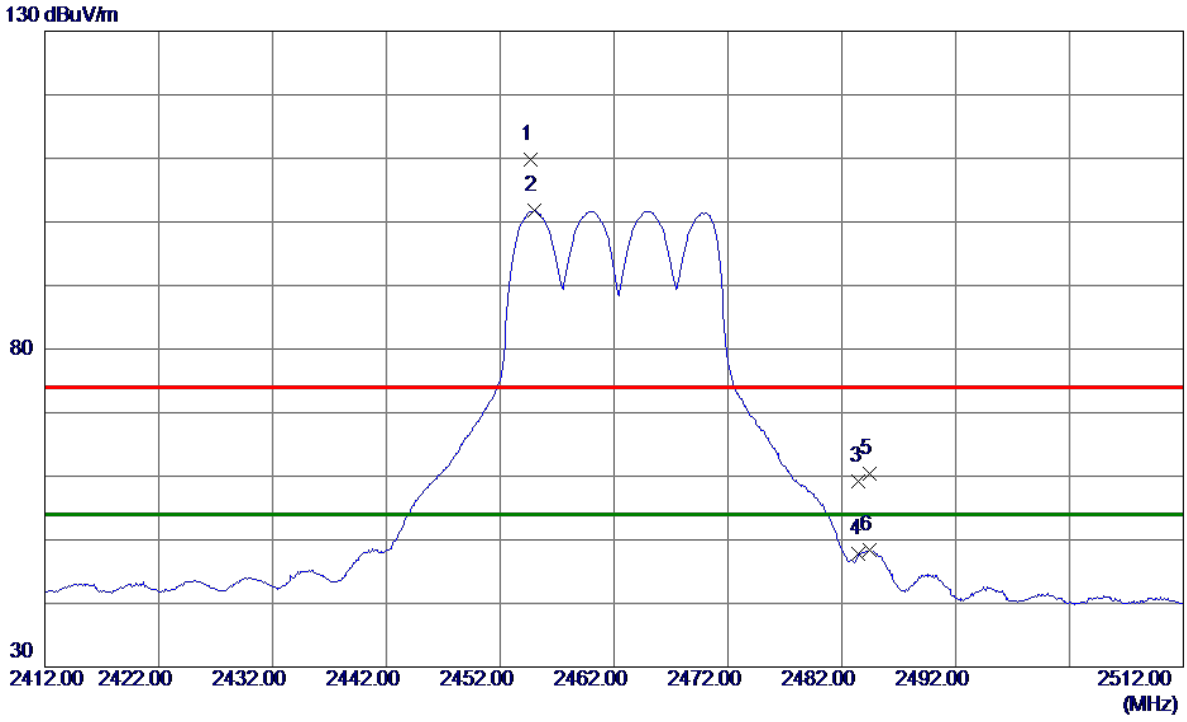
Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.0090	39.46	12.63	52.09	74.00	-21.91	Peak	
2 *	9747.7460	27.71	12.63	40.34	54.00	-13.66	AVG	

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

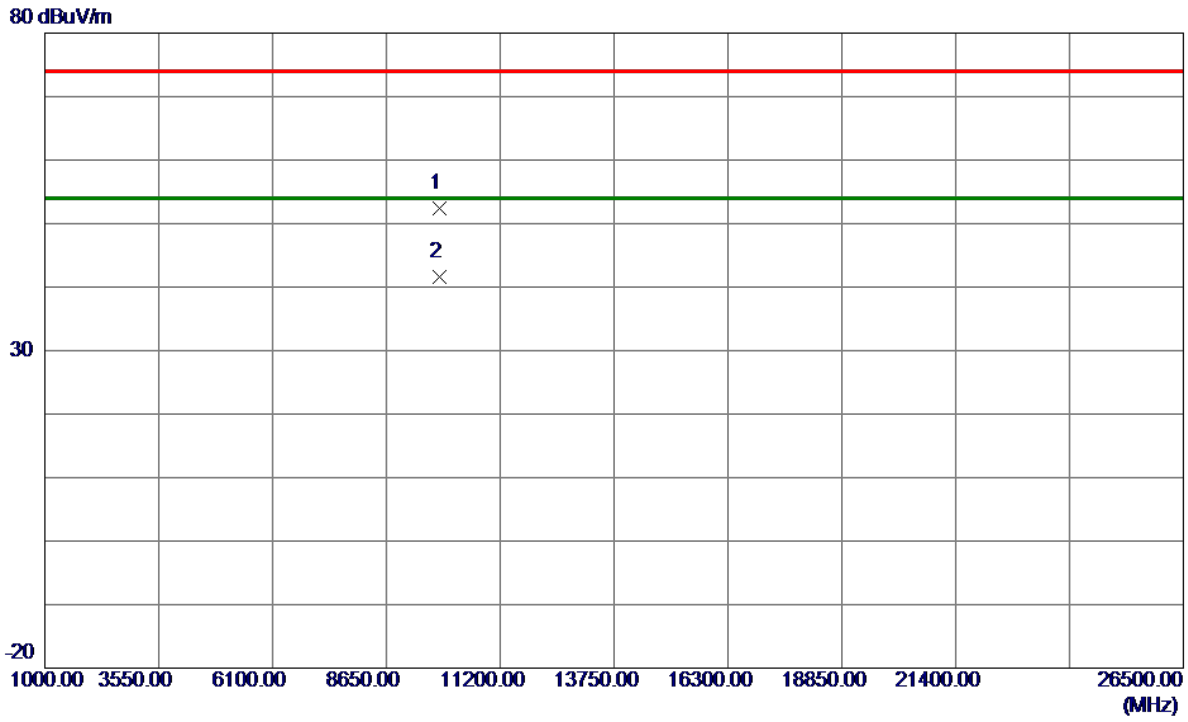
Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2454.7000	101.32	8.39	109.71	74.00	35.71	Peak	No Limit
2 *	2455.0000	93.34	8.39	101.73	54.00	47.73	AVG	No Limit
3	2483.5000	50.75	8.42	59.17	74.00	-14.83	Peak	
4	2483.5000	39.40	8.42	47.82	54.00	-6.18	AVG	
5	2484.4000	51.98	8.43	60.41	74.00	-13.59	Peak	
6	2484.4000	39.92	8.43	48.35	54.00	-5.65	AVG	

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

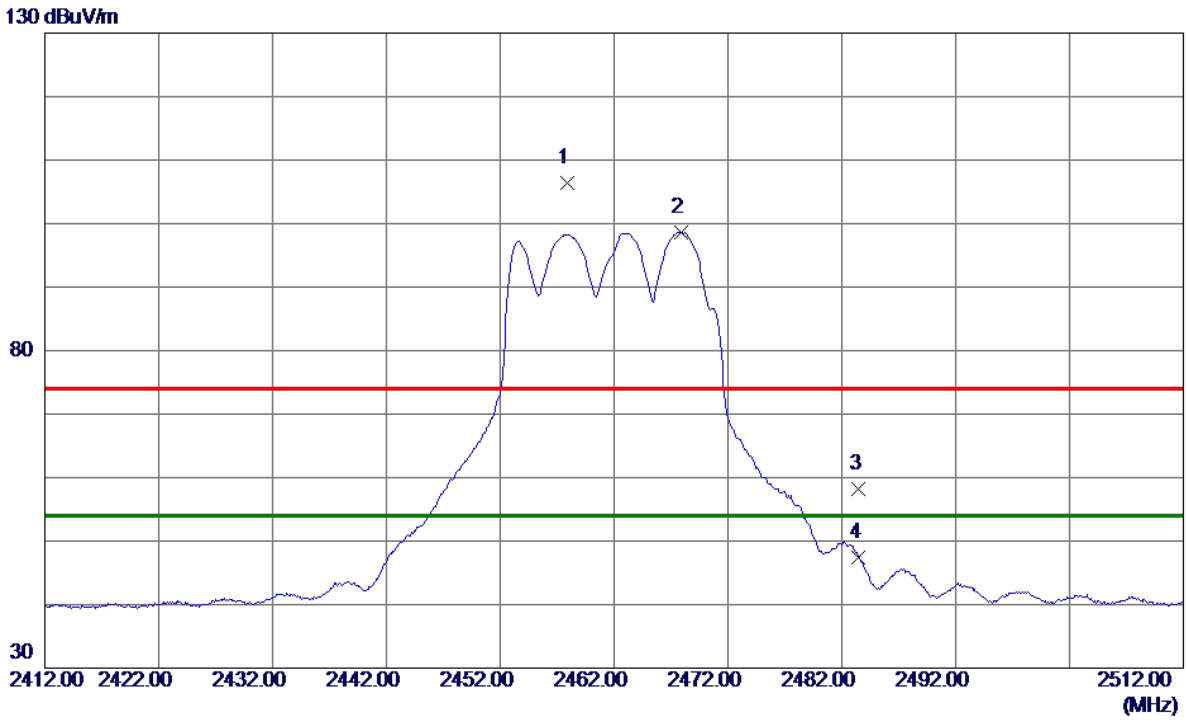
Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9848.0519	39.59	12.84	52.43	74.00	-21.57	Peak	
2 *	9848.0640	28.69	12.84	41.53	54.00	-12.47	AVG	

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

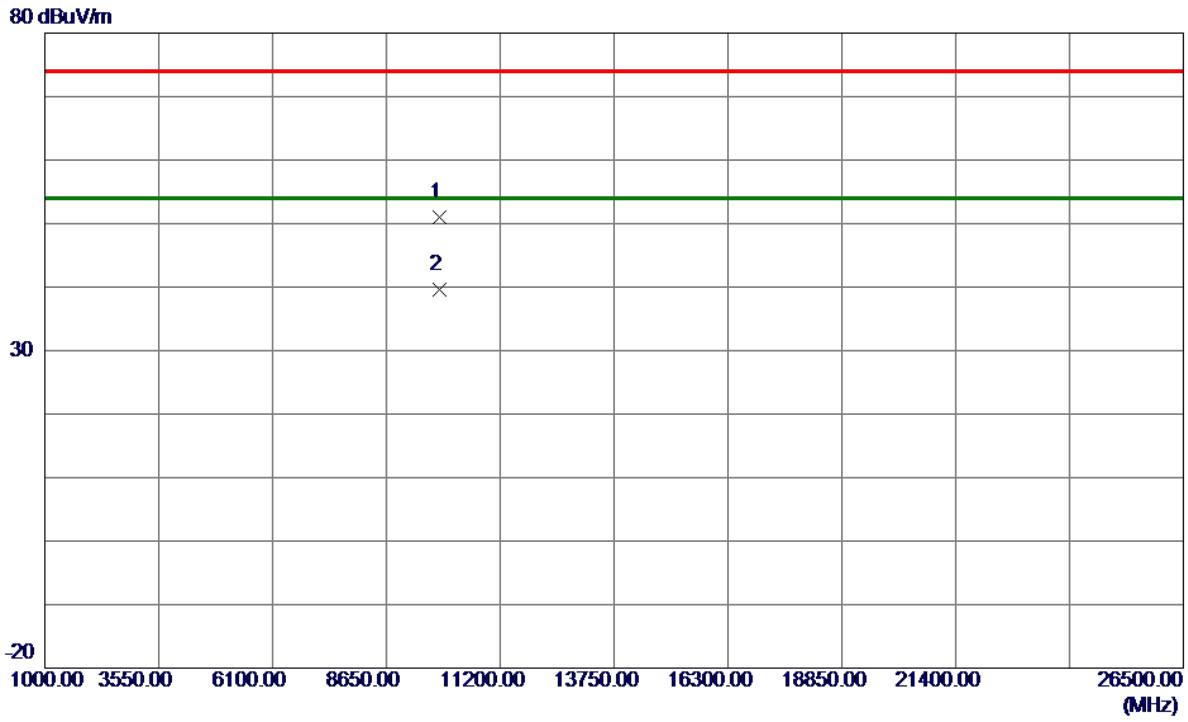
Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2457.9000	98.07	8.39	106.46	74.00	32.46	Peak	No Limit
2 *	2467.9000	90.26	8.40	98.66	54.00	44.66	AVG	No Limit
3	2483.5000	49.83	8.42	58.25	74.00	-15.75	Peak	
4	2483.5000	39.05	8.42	47.47	54.00	-6.53	AVG	

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

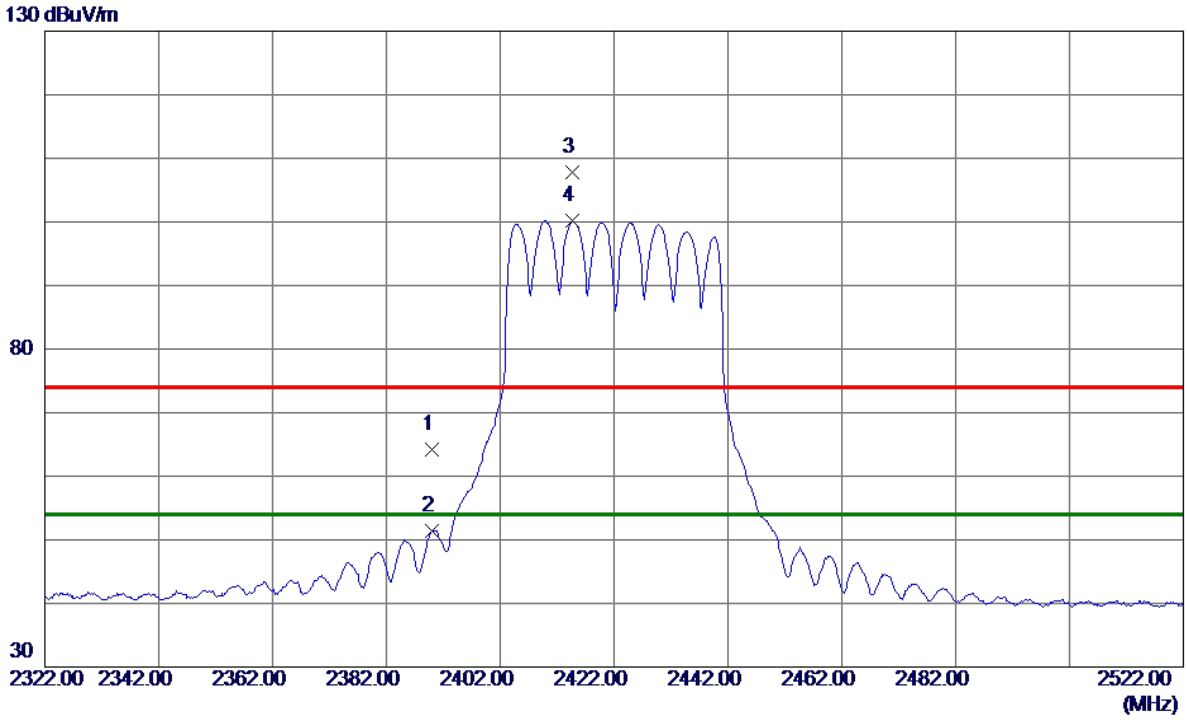
Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9847.0430	38.11	12.84	50.95	74.00	-23.05	Peak	
2 *	9848.1160	26.81	12.84	39.65	54.00	-14.35	AVG	

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

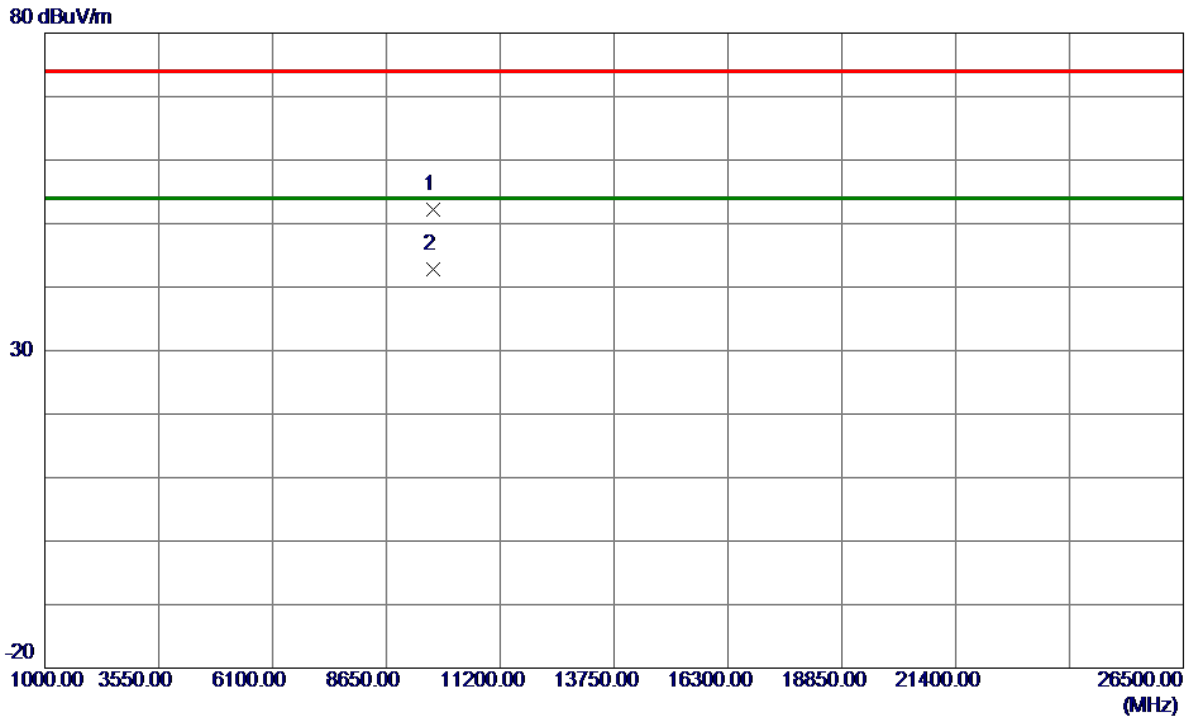
Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	55.88	8.31	64.19	74.00	-9.81	Peak	
2	2390.0000	43.07	8.31	51.38	54.00	-2.62	AVG	
3	2414.6000	99.42	8.34	107.76	74.00	33.76	Peak	No Limit
4 *	2414.6000	91.82	8.34	100.16	54.00	46.16	AVG	No Limit

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

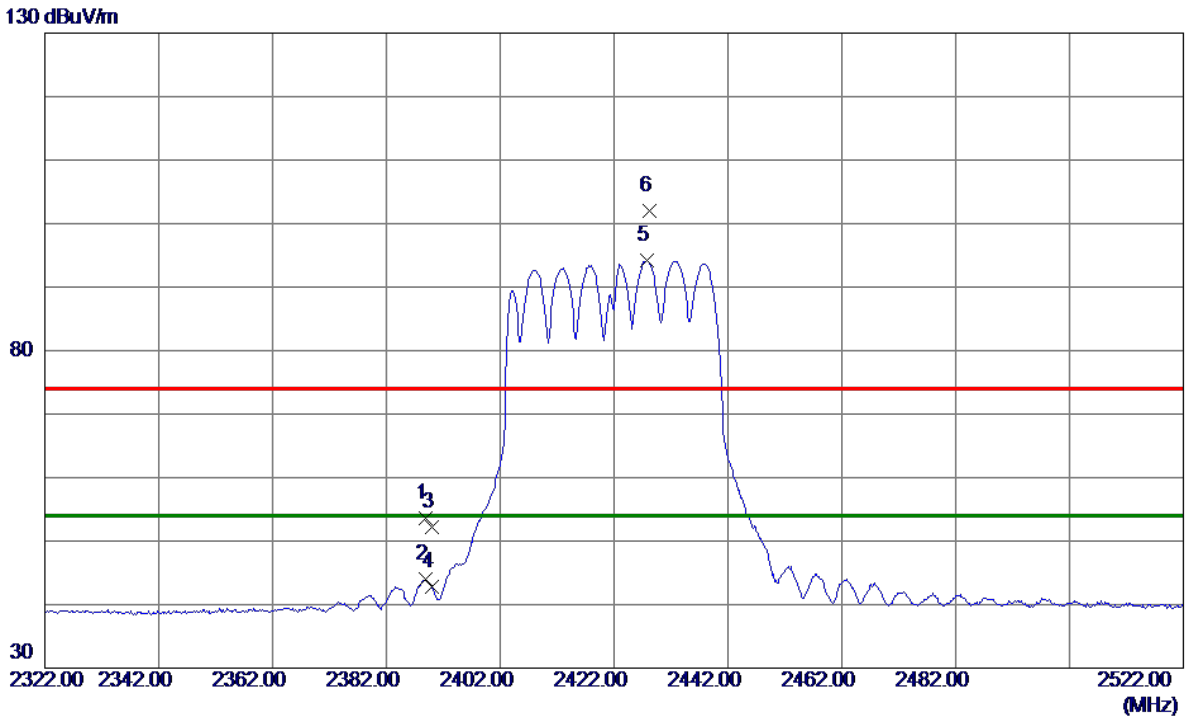
Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9687.8750	39.66	12.51	52.17	74.00	-21.83	Peak	
2 *	9688.1060	30.35	12.51	42.86	54.00	-11.14	AVG	

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

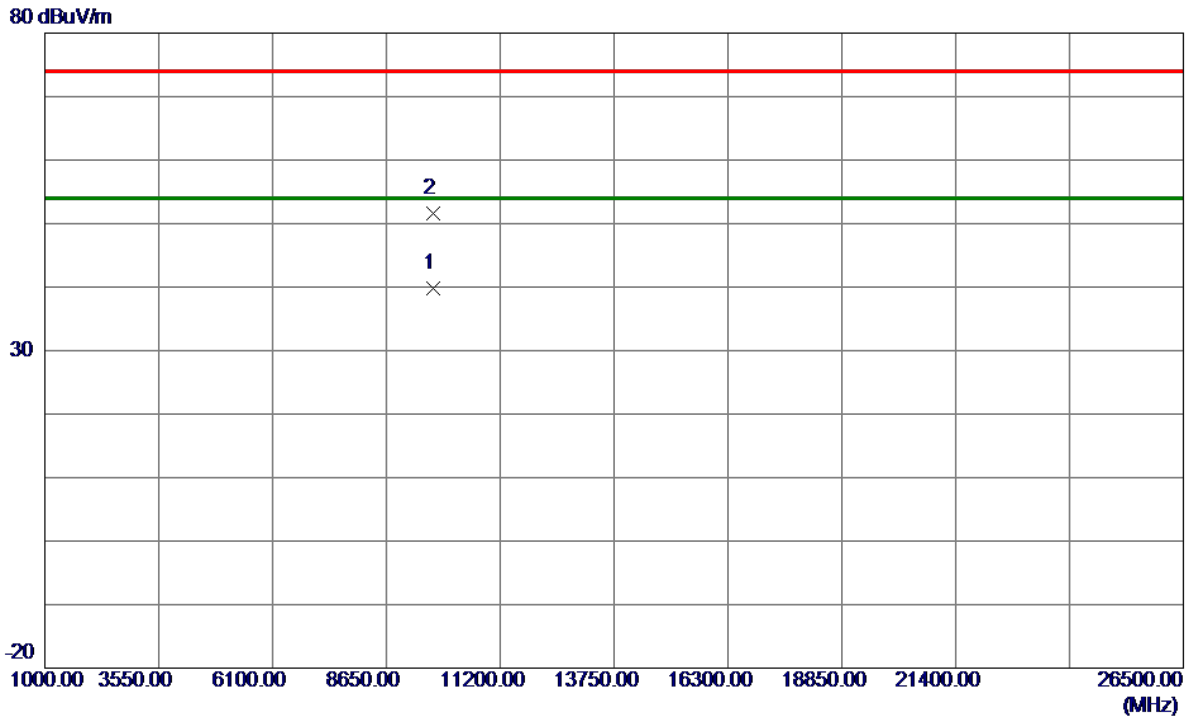
Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388.8000	45.29	8.30	53.59	74.00	-20.41	Peak	
2	2388.8000	35.71	8.30	44.01	54.00	-9.99	AVG	
3	2390.0000	43.92	8.31	52.23	74.00	-21.77	Peak	
4	2390.0000	34.48	8.31	42.79	54.00	-11.21	AVG	
5 *	2427.8000	85.76	8.35	94.11	54.00	40.11	AVG	No Limit
6	2428.2000	93.64	8.35	101.99	74.00	27.99	Peak	No Limit

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

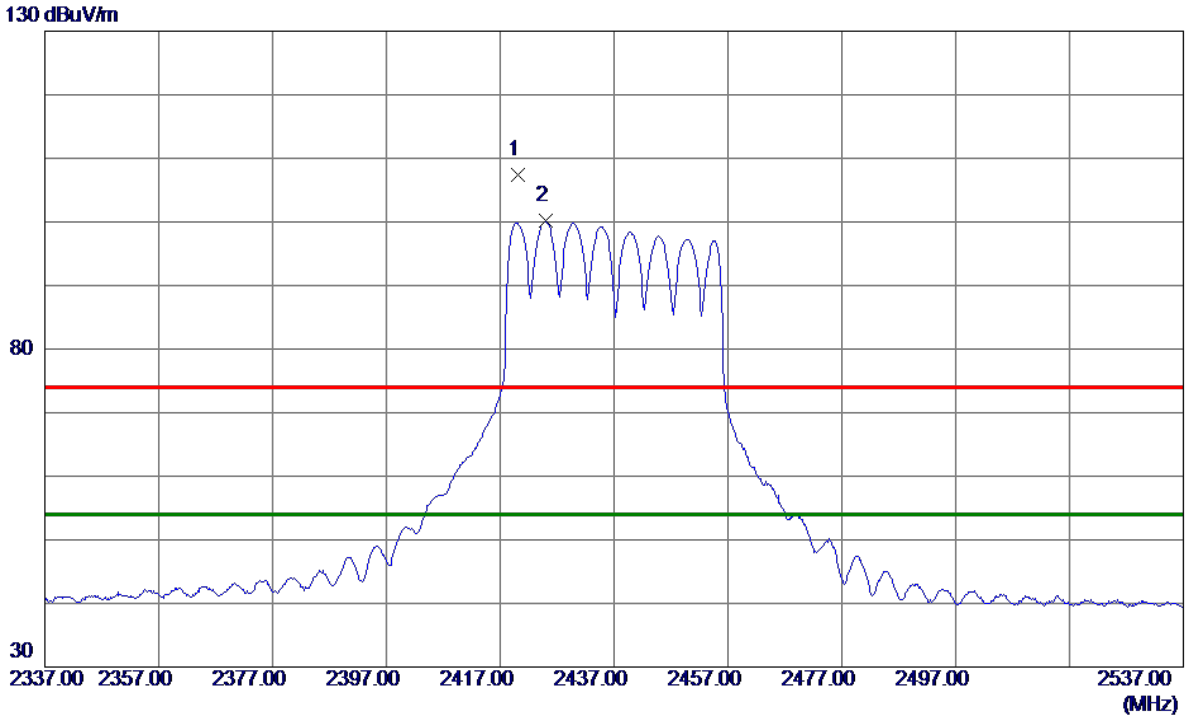
Test Mode	TX N(HT40) Mode 2422 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9688.0770	27.22	12.51	39.73	54.00	-14.27	AVG	
2	9688.1480	39.04	12.51	51.55	74.00	-22.45	Peak	

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

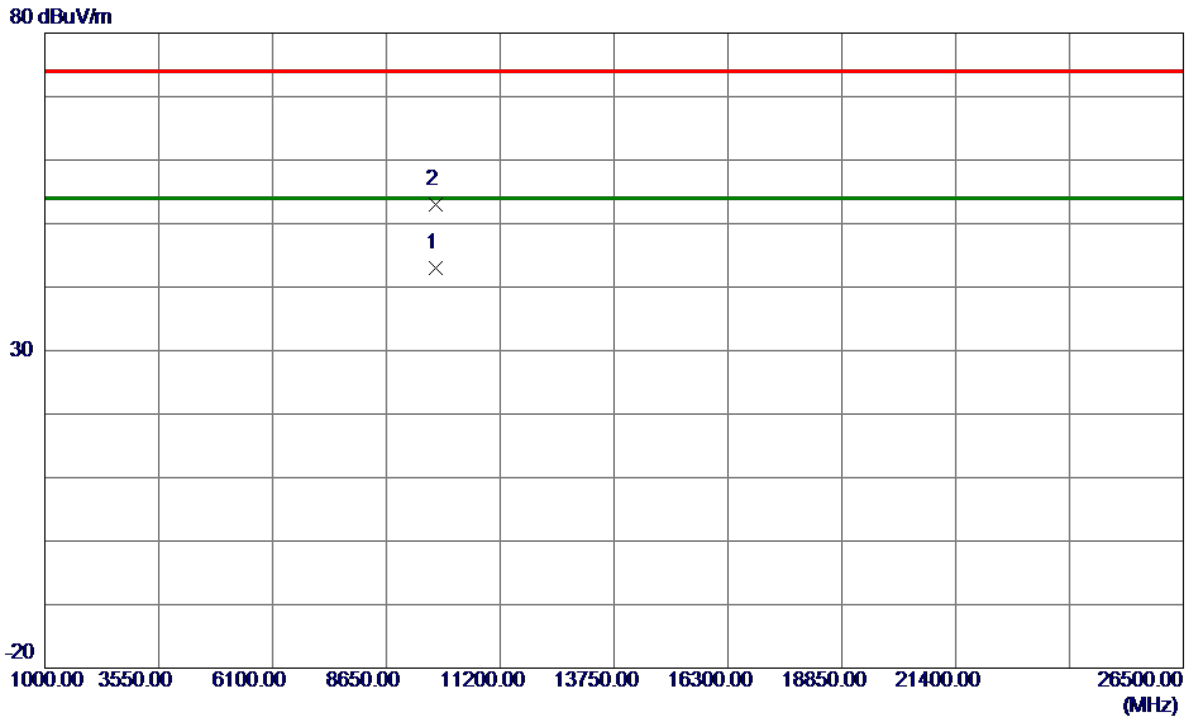
Test Mode	TX N(HT40) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2420.2000	99.15	8.34	107.49	74.00	33.49	Peak	No Limit
2 *	2425.0000	91.78	8.35	100.13	54.00	46.13	AVG	No Limit

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

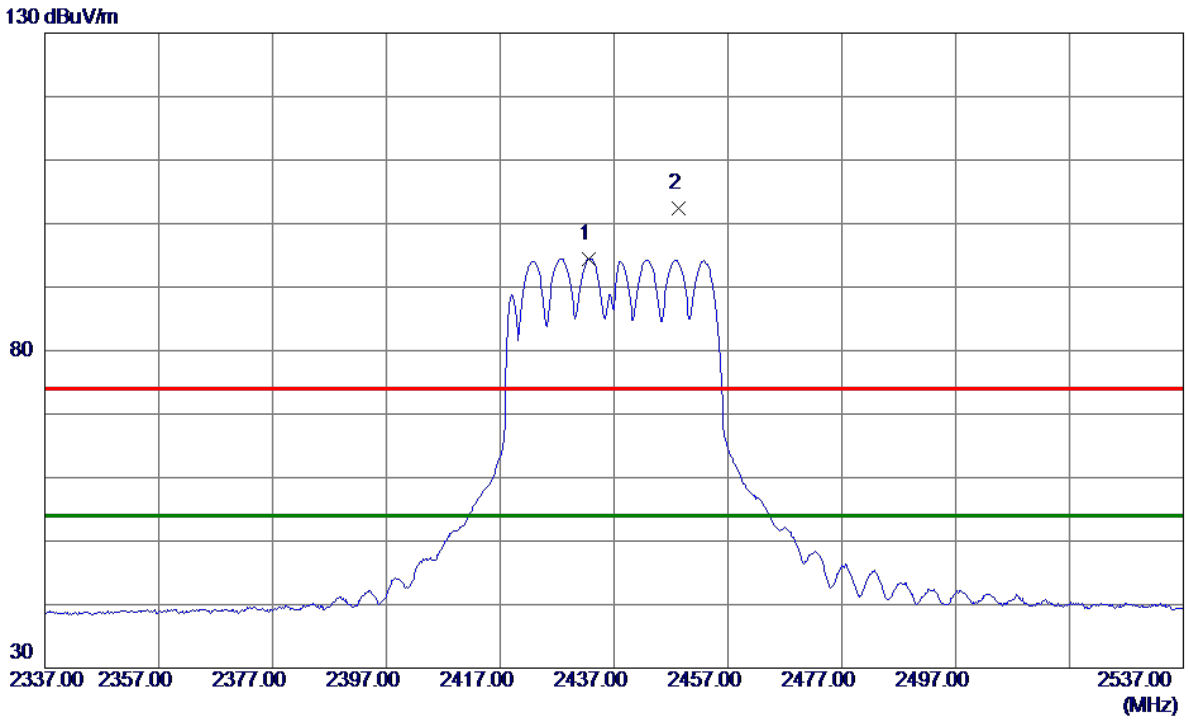
Test Mode	TX N(HT40) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9747.9269	30.43	12.63	43.06	54.00	-10.94	AVG	
2	9748.0770	40.35	12.63	52.98	74.00	-21.02	Peak	

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

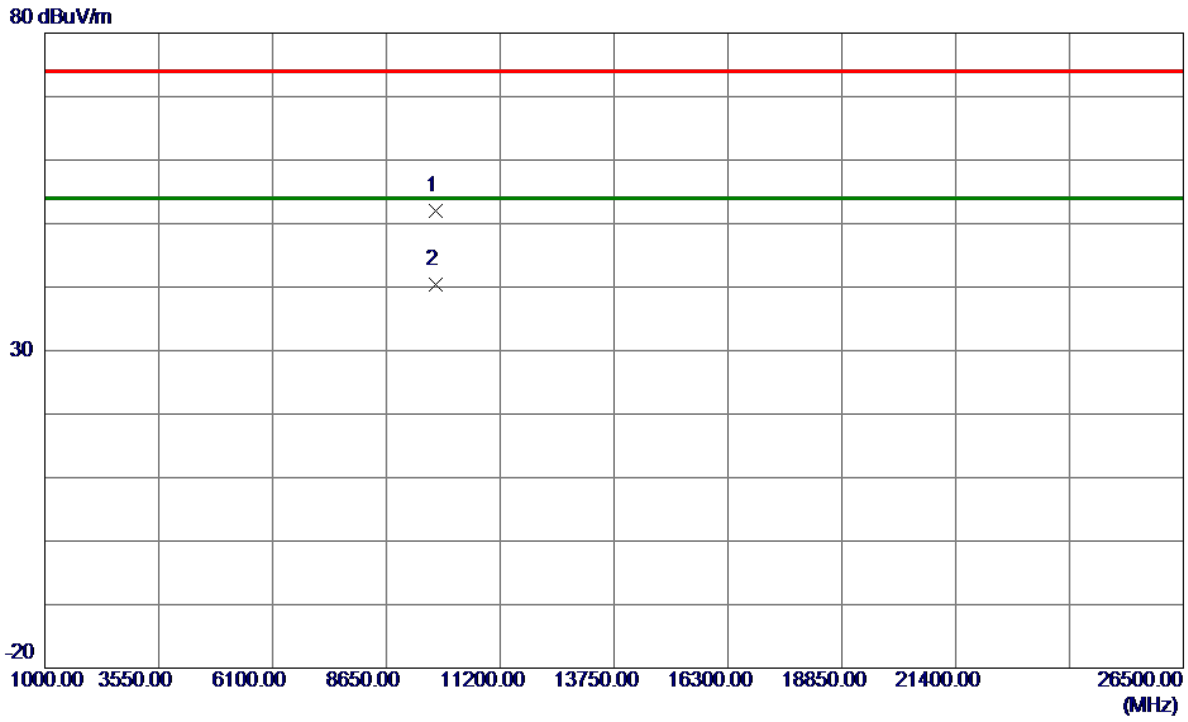
Test Mode	TX N(HT40) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2432.6000	86.12	8.36	94.48	54.00	40.48	AVG	No Limit
2	2448.4000	94.08	8.38	102.46	74.00	28.46	Peak	No Limit

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

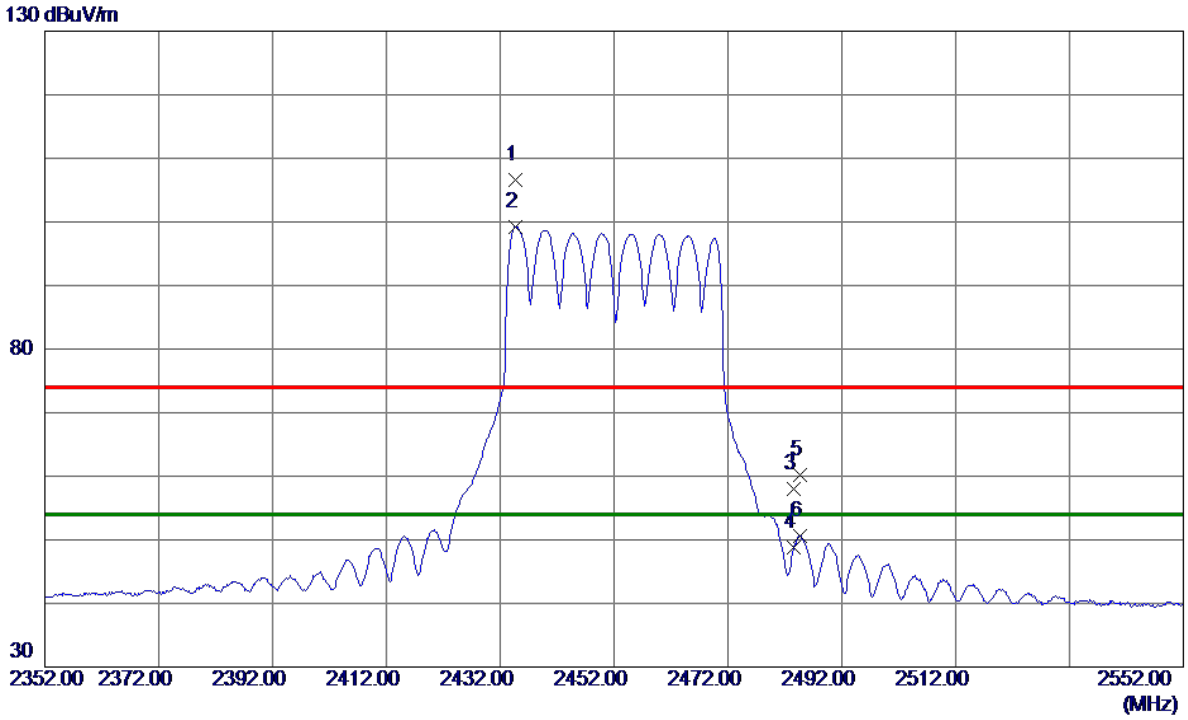
Test Mode	TX N(HT40) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.3420	39.34	12.63	51.97	74.00	-22.03	Peak	
2 *	9747.9640	27.77	12.63	40.40	54.00	-13.60	AVG	

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

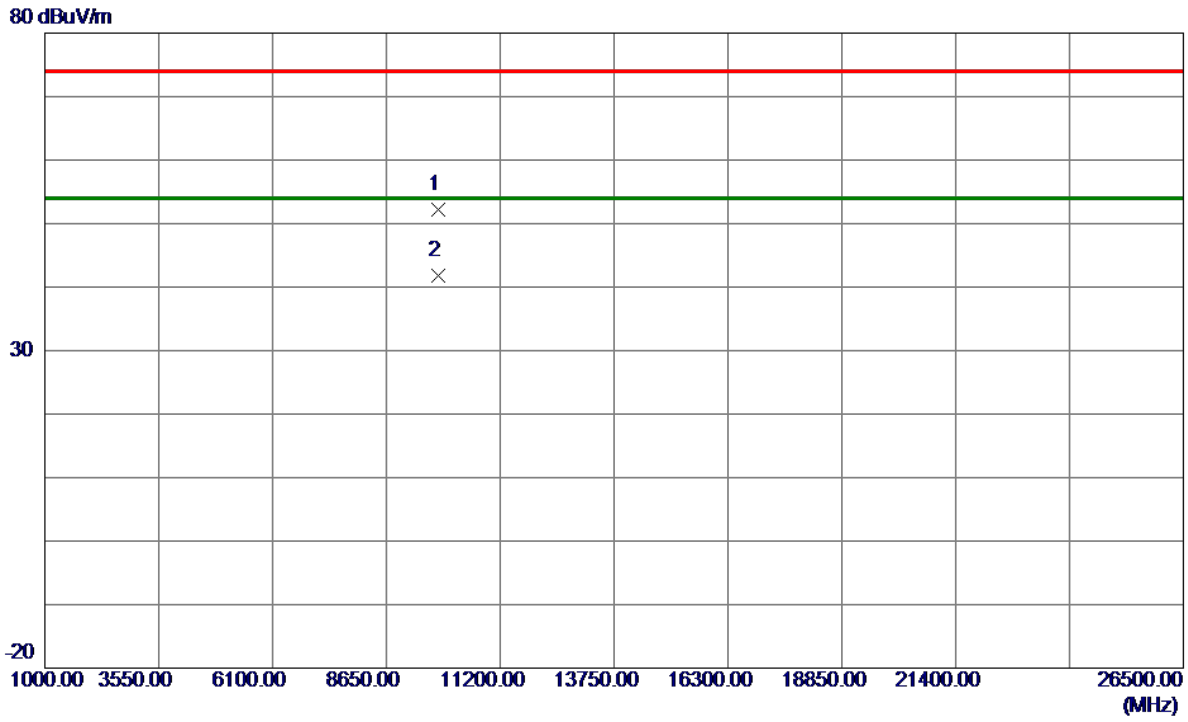
Test Mode	TX N(HT40) Mode 2452 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434.6000	98.23	8.36	106.59	74.00	32.59	Peak	No Limit
2 *	2434.6000	90.89	8.36	99.25	54.00	45.25	AVG	No Limit
3	2483.5000	49.50	8.42	57.92	74.00	-16.08	Peak	
4	2483.5000	40.33	8.42	48.75	54.00	-5.25	AVG	
5	2484.6000	51.75	8.43	60.18	74.00	-13.82	Peak	
6	2484.6000	42.26	8.43	50.69	54.00	-3.31	AVG	

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

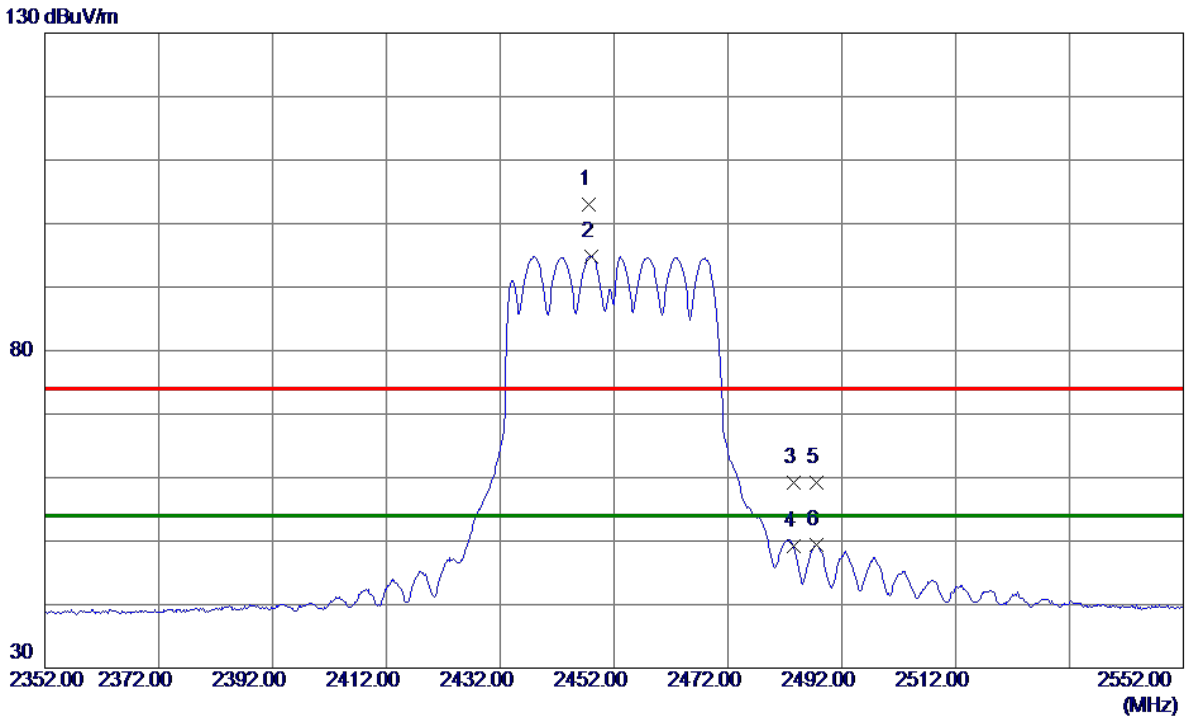
Test Mode	TX N(HT40) Mode 2452 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9807.6350	39.45	12.76	52.21	74.00	-21.79	Peak	
2 *	9808.0410	29.08	12.76	41.84	54.00	-12.16	AVG	

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

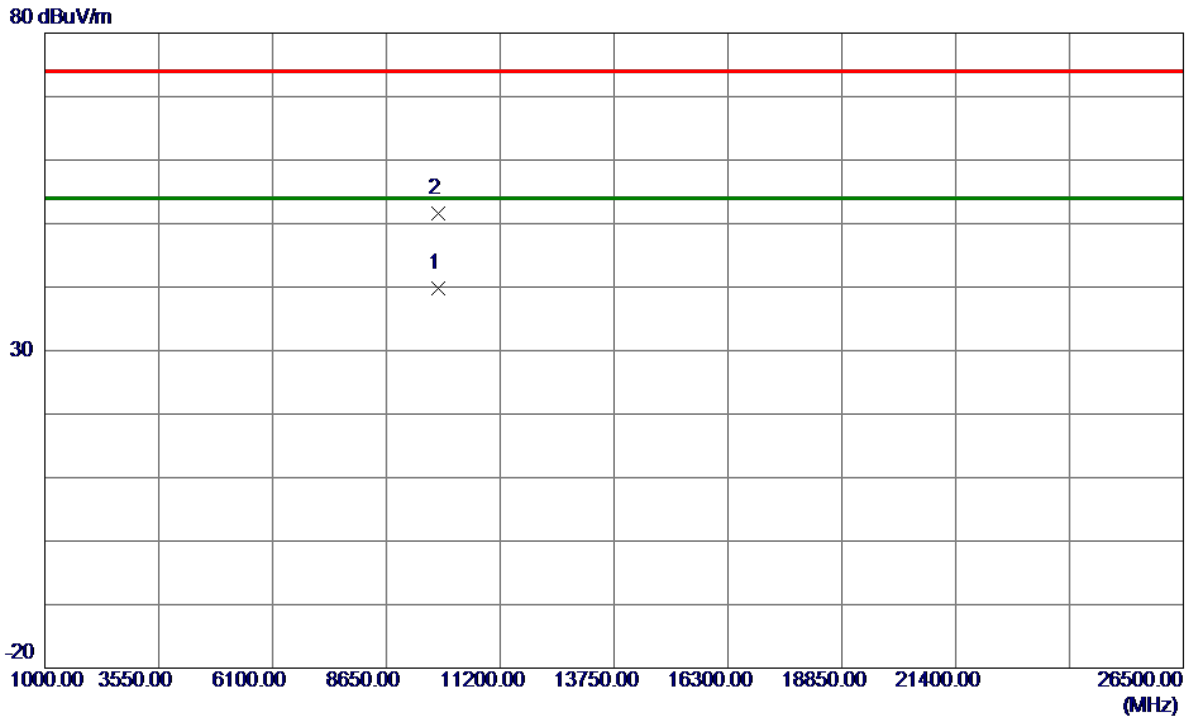
Test Mode	TX N(HT40) Mode 2452 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2447.6000	94.64	8.38	103.02	74.00	29.02	Peak	No Limit
2 *	2448.0000	86.47	8.38	94.85	54.00	40.85	AVG	No Limit
3	2483.5000	50.71	8.42	59.13	74.00	-14.87	Peak	
4	2483.5000	40.77	8.42	49.19	54.00	-4.81	AVG	
5	2487.6000	50.77	8.43	59.20	74.00	-14.80	Peak	
6	2487.6000	40.88	8.43	49.31	54.00	-4.69	AVG	

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

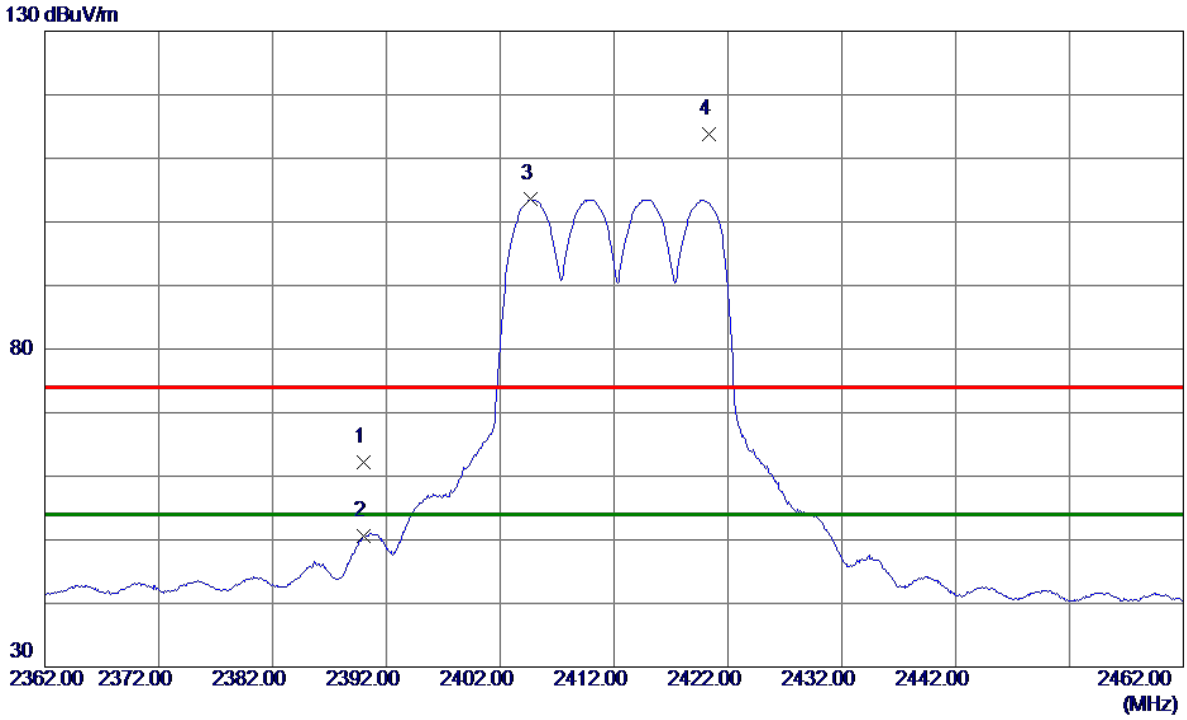
Test Mode	TX N(HT40) Mode 2452 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9808.1289	27.11	12.76	39.87	54.00	-14.13	AVG	
2	9808.6950	38.84	12.76	51.60	74.00	-22.40	Peak	

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

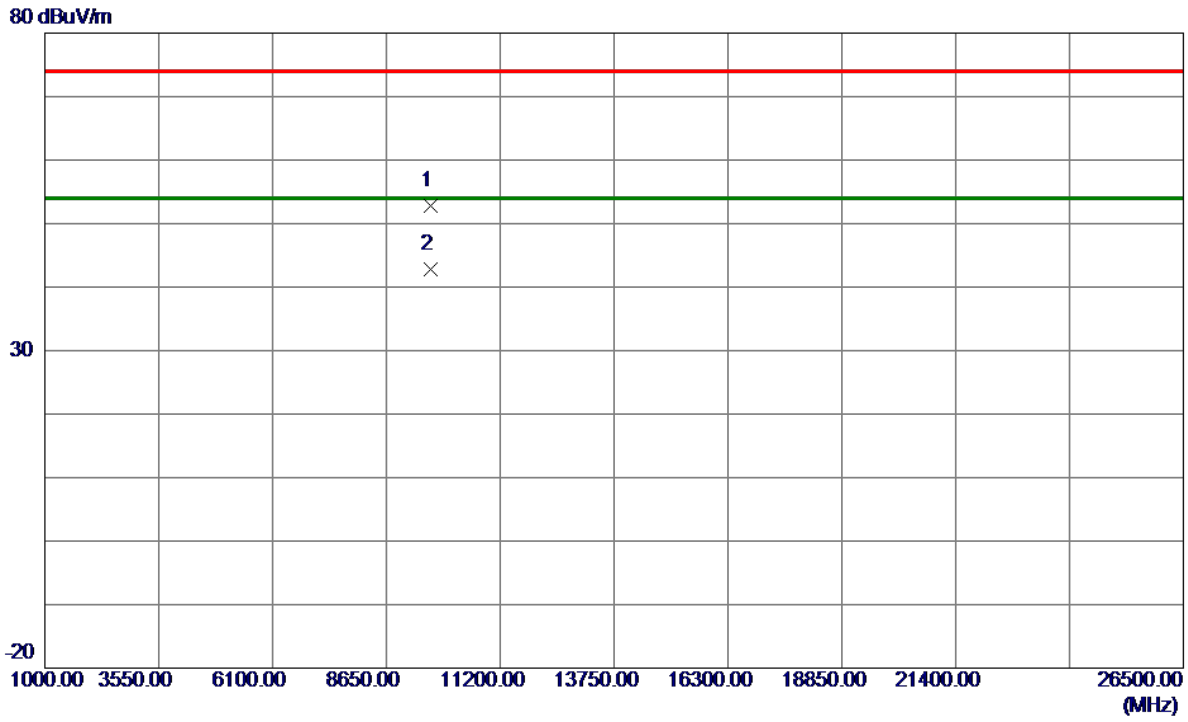
Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	53.89	8.31	62.20	74.00	-11.80	Peak	
2	2390.0000	42.22	8.31	50.53	54.00	-3.47	AVG	
3 *	2404.7000	95.20	8.32	103.52	54.00	49.52	AVG	No Limit
4	2420.3000	105.36	8.34	113.70	74.00	39.70	Peak	No Limit

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

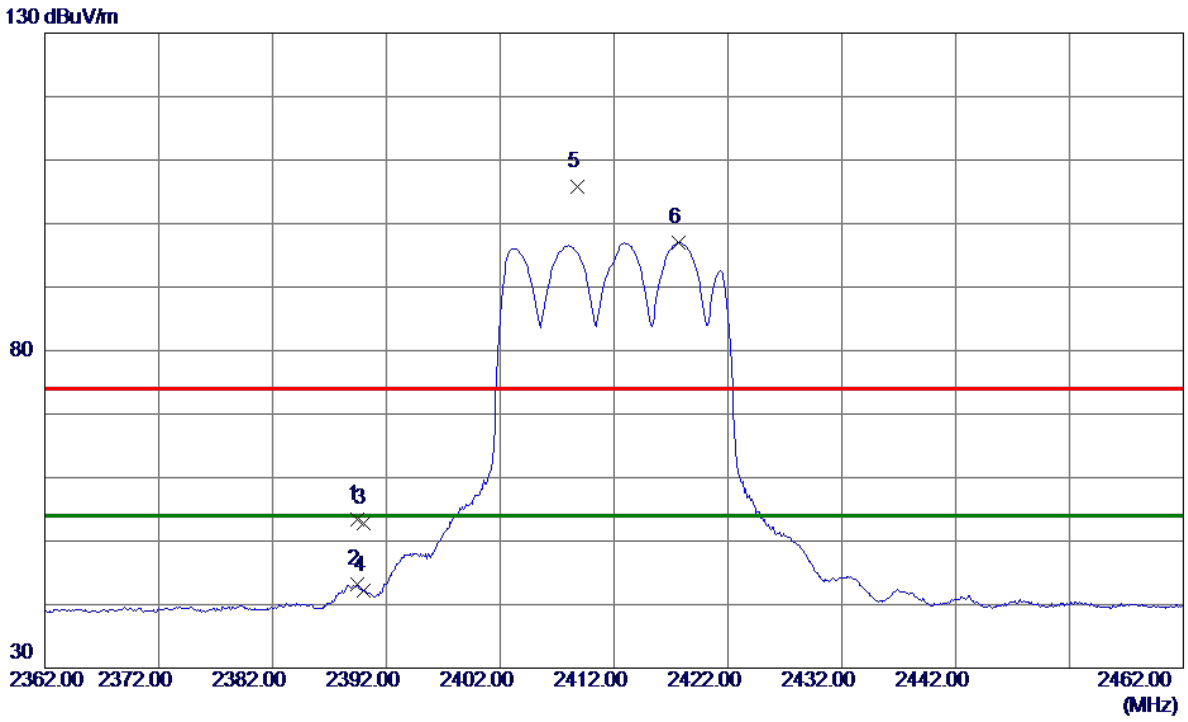
Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.8440	40.29	12.42	52.71	74.00	-21.29	Peak	
2 *	9647.9820	30.45	12.42	42.87	54.00	-11.13	AVG	

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

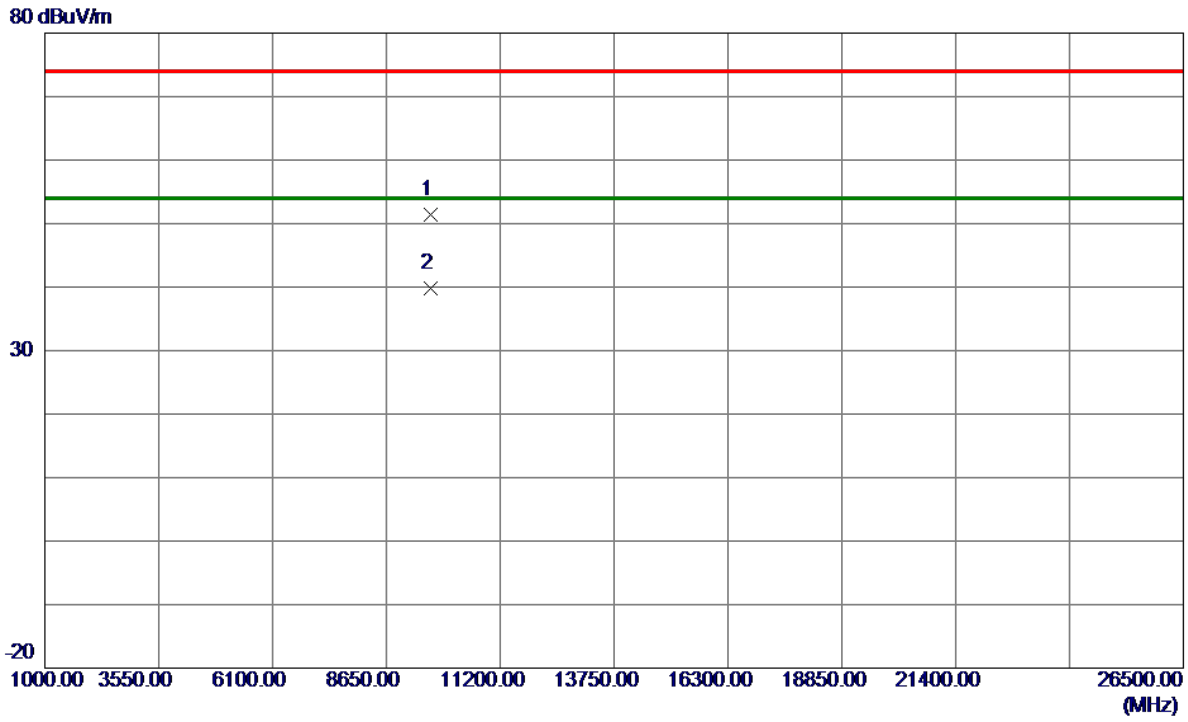
Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389.4000	45.05	8.30	53.35	74.00	-20.65	Peak	
2	2389.4000	34.83	8.30	43.13	54.00	-10.87	AVG	
3	2390.0000	44.58	8.31	52.89	74.00	-21.11	Peak	
4	2390.0000	33.96	8.31	42.27	54.00	-11.73	AVG	
5	2408.8000	97.43	8.33	105.76	74.00	31.76	Peak	No Limit
6 *	2417.7000	88.66	8.34	97.00	54.00	43.00	AVG	No Limit

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

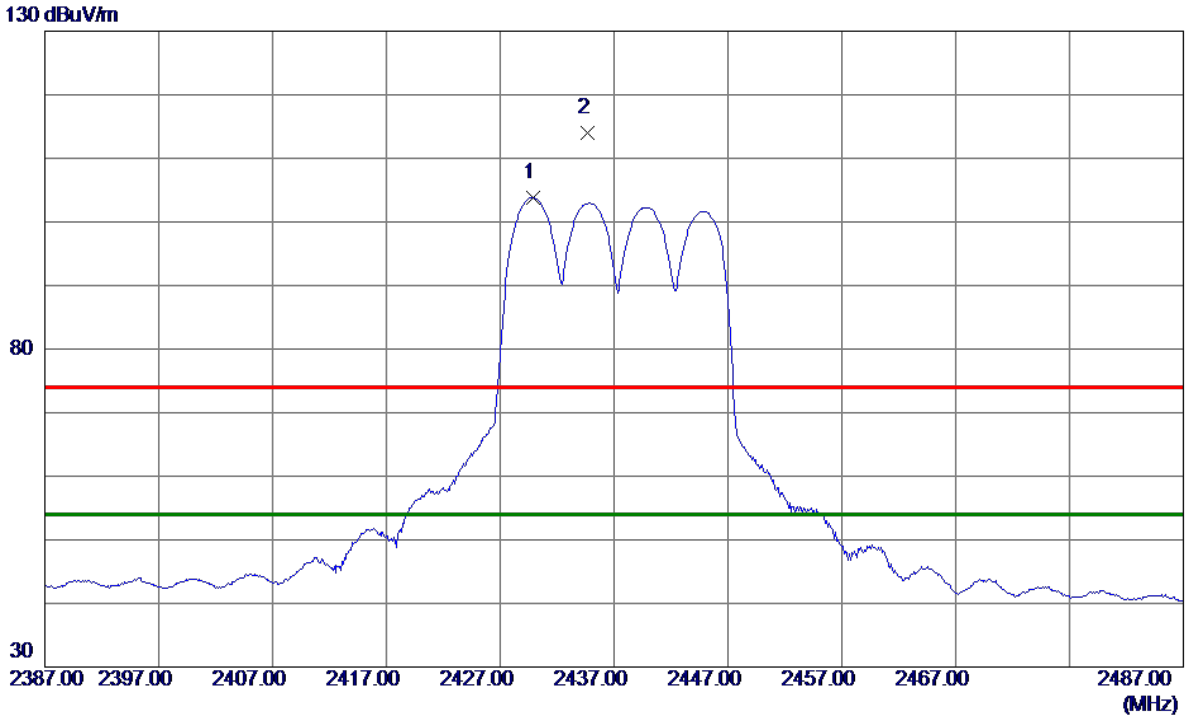
Test Mode	TX AX(HE20) Mode 2412 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.4500	39.03	12.42	51.45	74.00	-22.55	Peak	
2 *	9648.0599	27.47	12.42	39.89	54.00	-14.11	AVG	

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

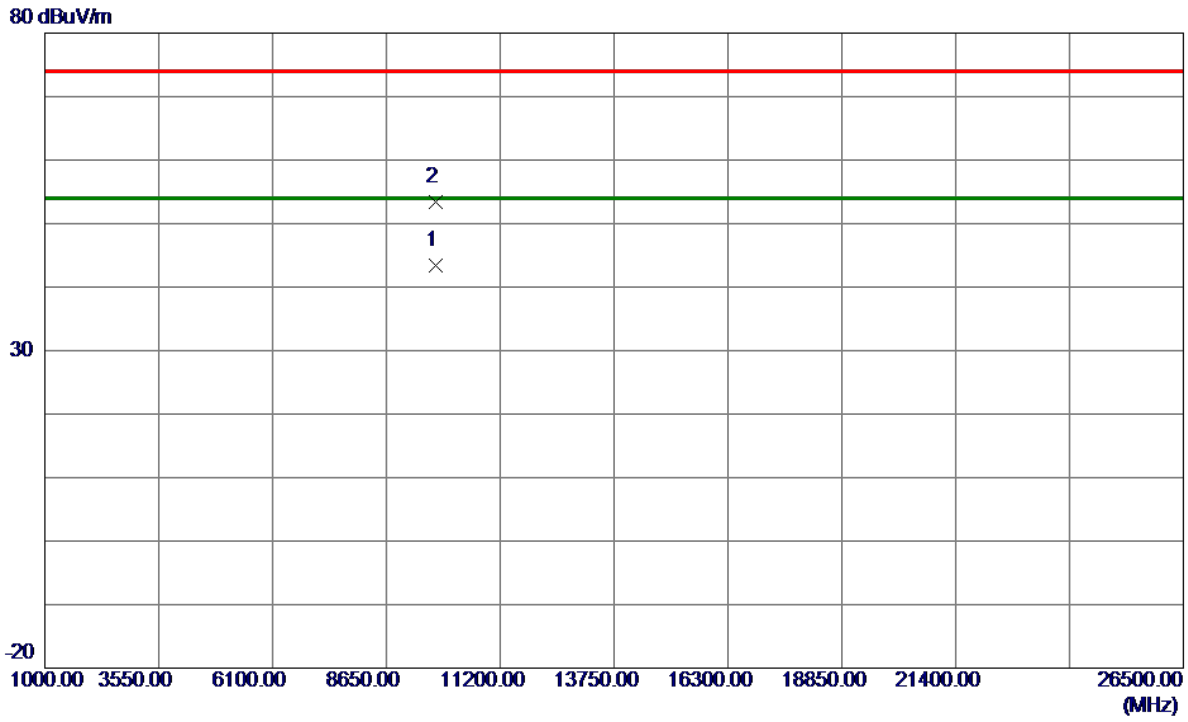
Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2429.9000	95.47	8.36	103.83	54.00	49.83	AVG	No Limit
2	2434.7000	105.57	8.36	113.93	74.00	39.93	Peak	No Limit

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

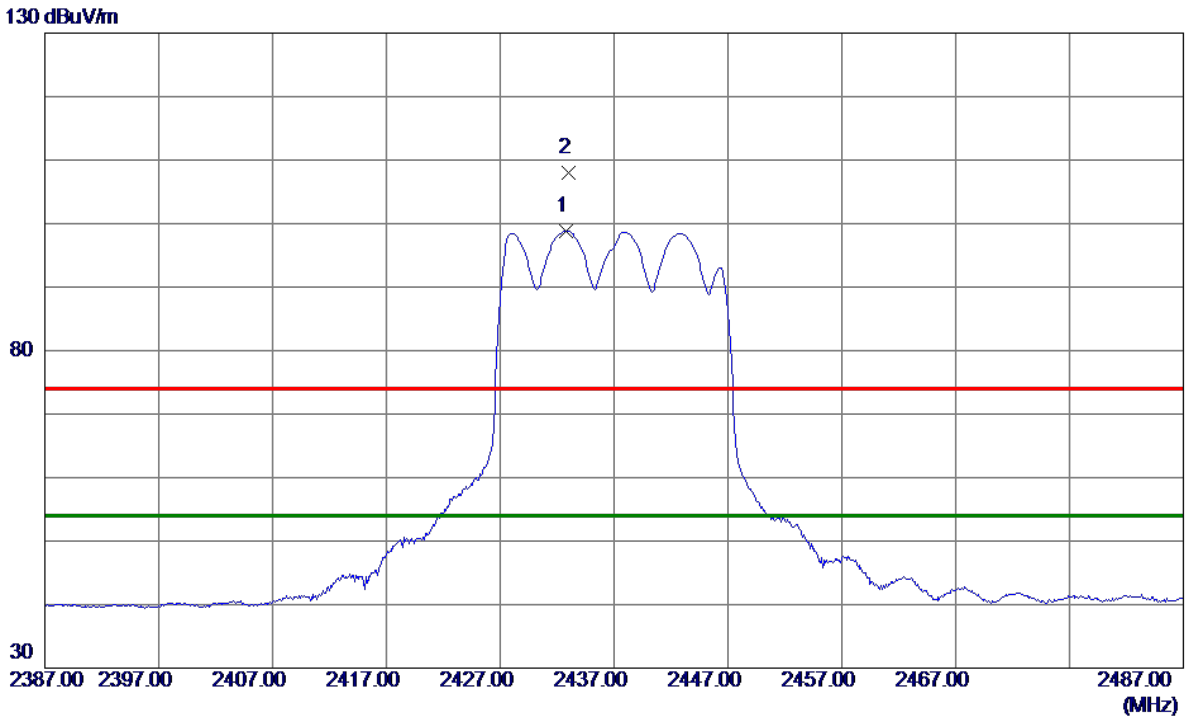
Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9748.0750	30.68	12.63	43.31	54.00	-10.69	AVG	
2	9748.0970	40.69	12.63	53.32	74.00	-20.68	Peak	

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

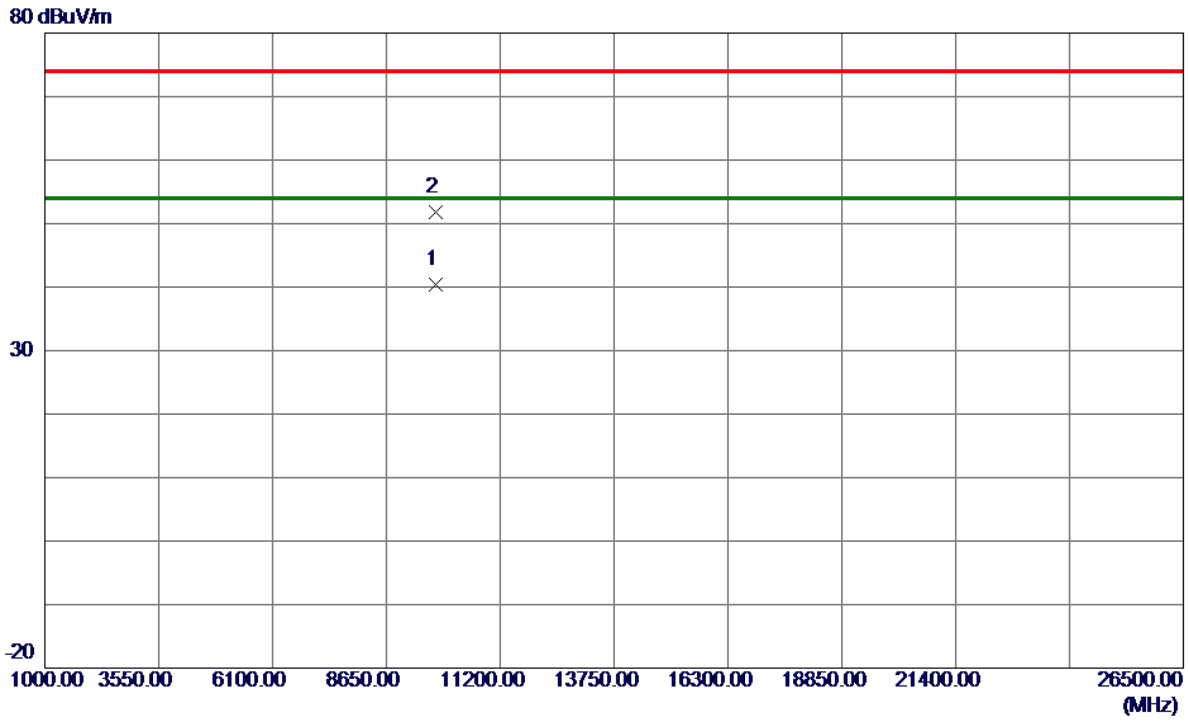
Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2432.8000	90.46	8.36	98.82	54.00	44.82	AVG	No Limit
2	2433.0000	99.61	8.36	107.97	74.00	33.97	Peak	No Limit

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

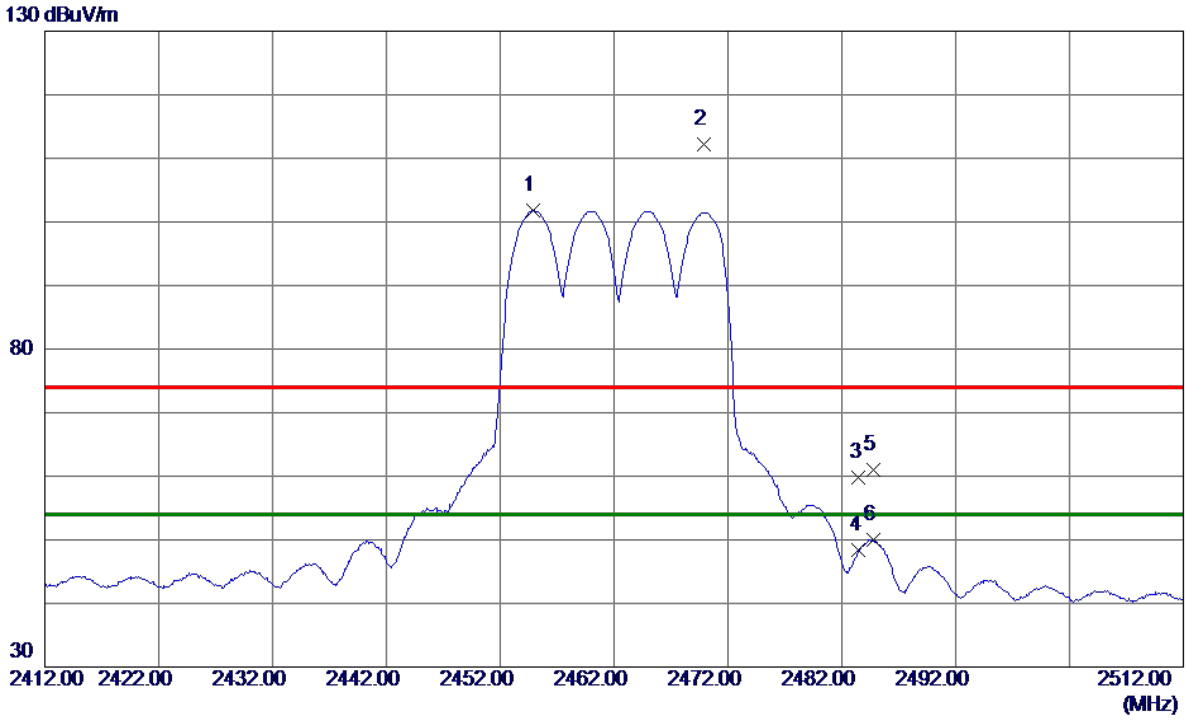
Test Mode	TX AX(HE20) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9747.3560	27.77	12.63	40.40	54.00	-13.60	AVG	
2	9747.9880	39.19	12.63	51.82	74.00	-22.18	Peak	

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

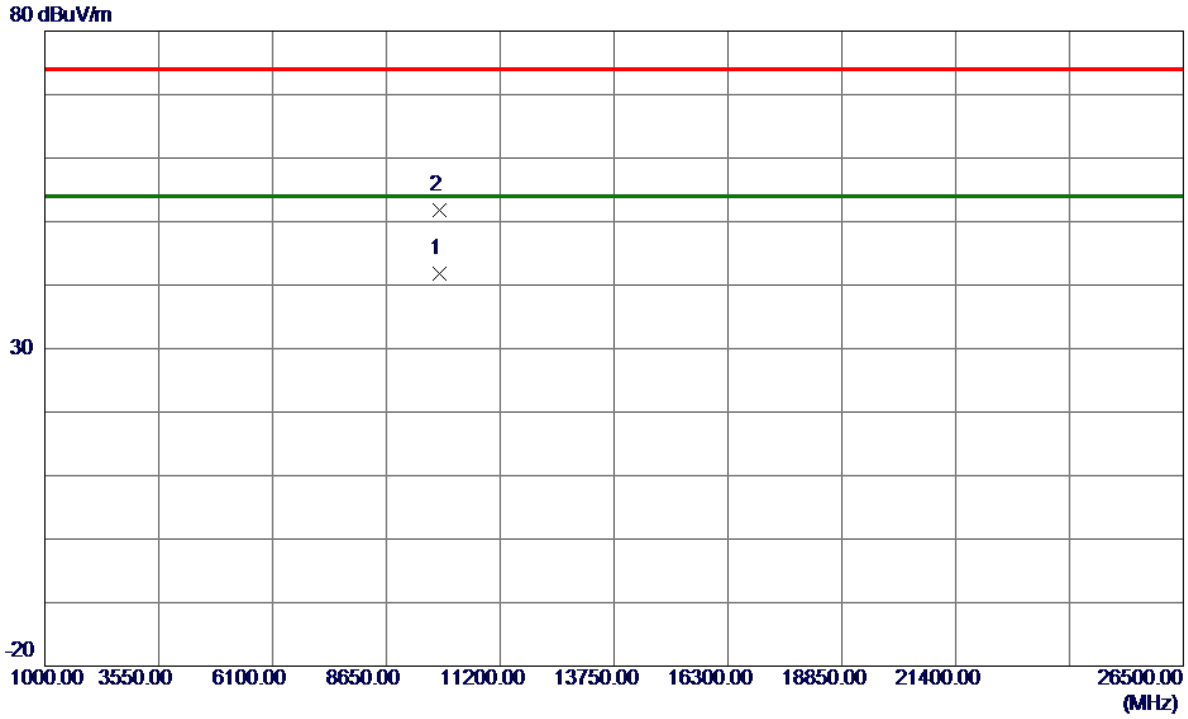
Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2454.9000	93.38	8.39	101.77	54.00	47.77	AVG	No Limit
2	2469.9000	103.70	8.41	112.11	74.00	38.11	Peak	No Limit
3	2483.5000	51.31	8.42	59.73	74.00	-14.27	Peak	
4	2483.5000	40.06	8.42	48.48	54.00	-5.52	AVG	
5	2484.8000	52.51	8.43	60.94	74.00	-13.06	Peak	
6	2484.8000	41.65	8.43	50.08	54.00	-3.92	AVG	

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

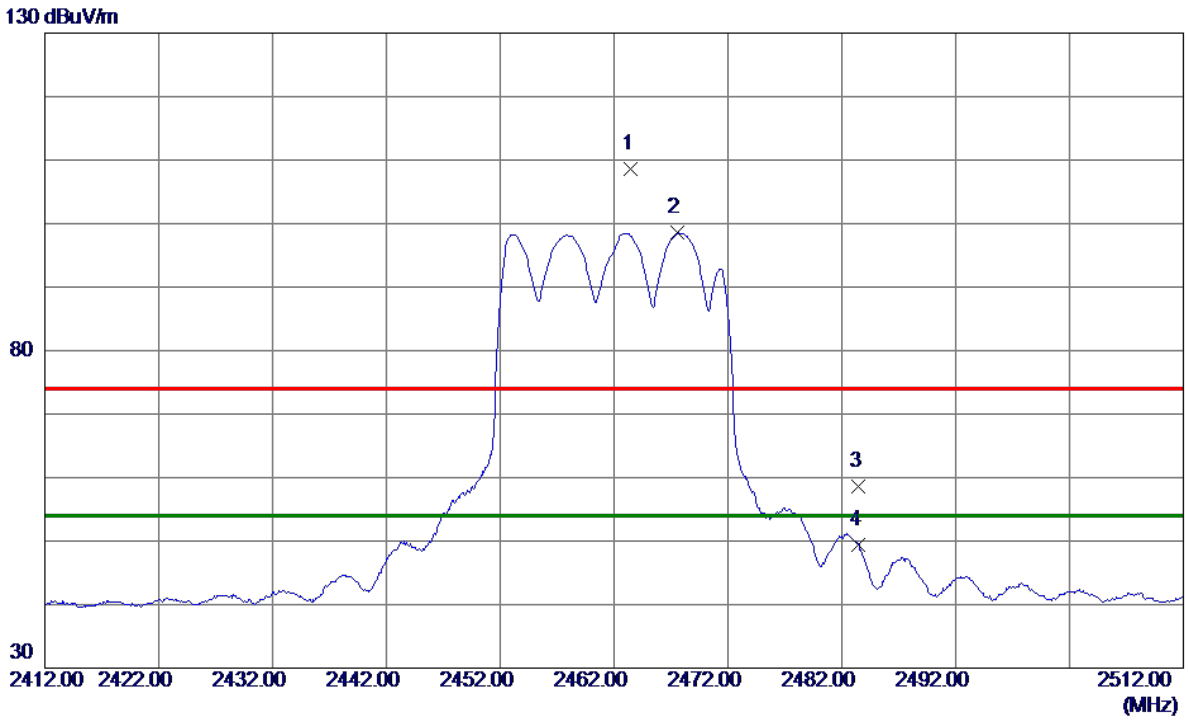
Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848.0210	28.88	12.84	41.72	54.00	-12.28	AVG	
2	9848.6090	38.91	12.84	51.75	74.00	-22.25	Peak	

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

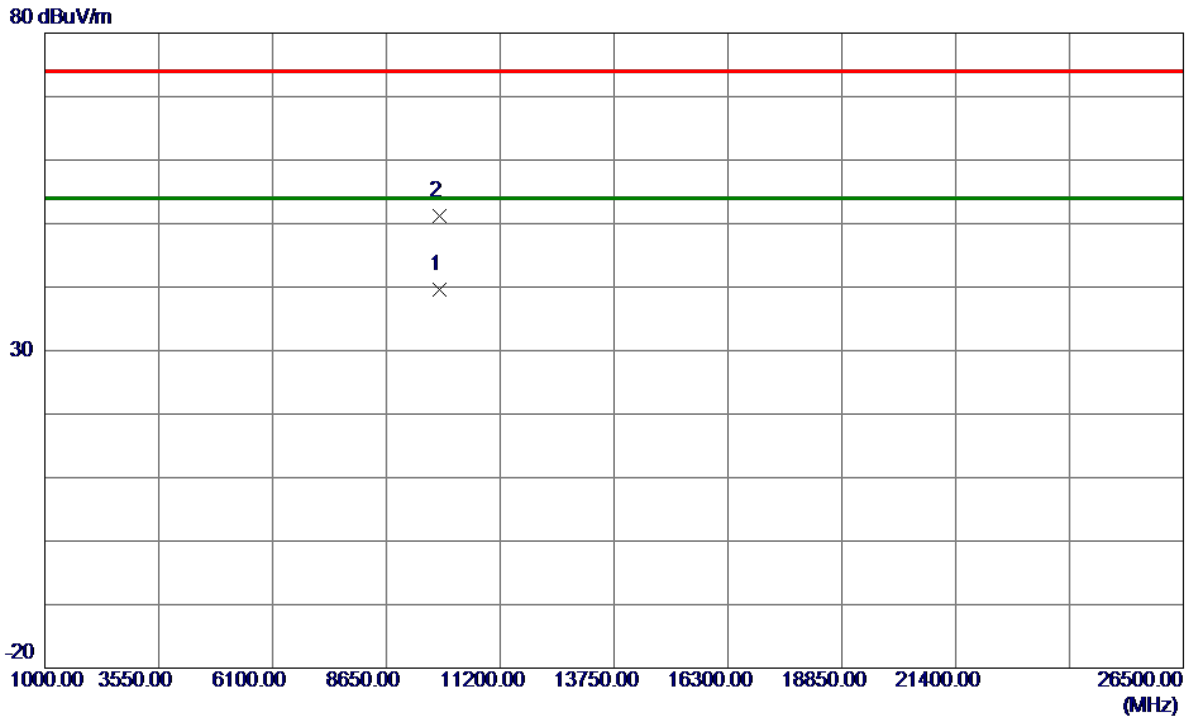
Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2463.5000	100.19	8.40	108.59	74.00	34.59	Peak	No Limit
2 *	2467.6000	90.21	8.40	98.61	54.00	44.61	AVG	No Limit
3	2483.5000	50.20	8.42	58.62	74.00	-15.38	Peak	
4	2483.5000	40.99	8.42	49.41	54.00	-4.59	AVG	

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

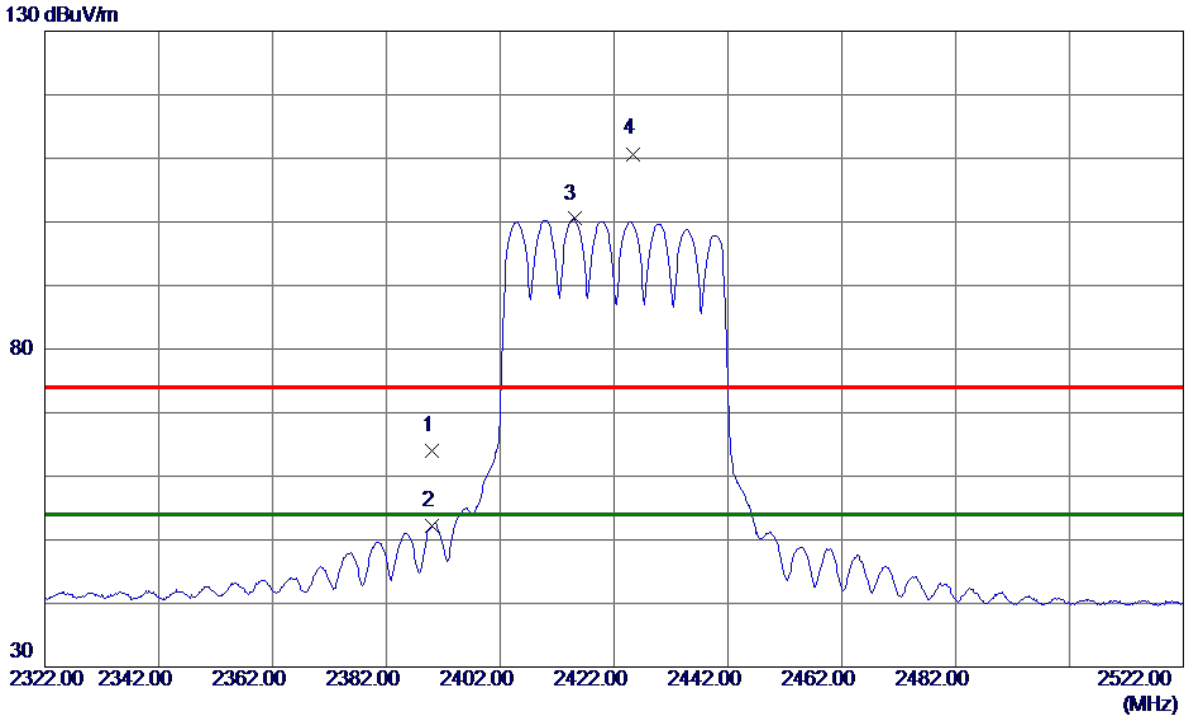
Test Mode	TX AX(HE20) Mode 2462 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848.0780	26.85	12.84	39.69	54.00	-14.31	AVG	
2	9848.7480	38.41	12.84	51.25	74.00	-22.75	Peak	

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

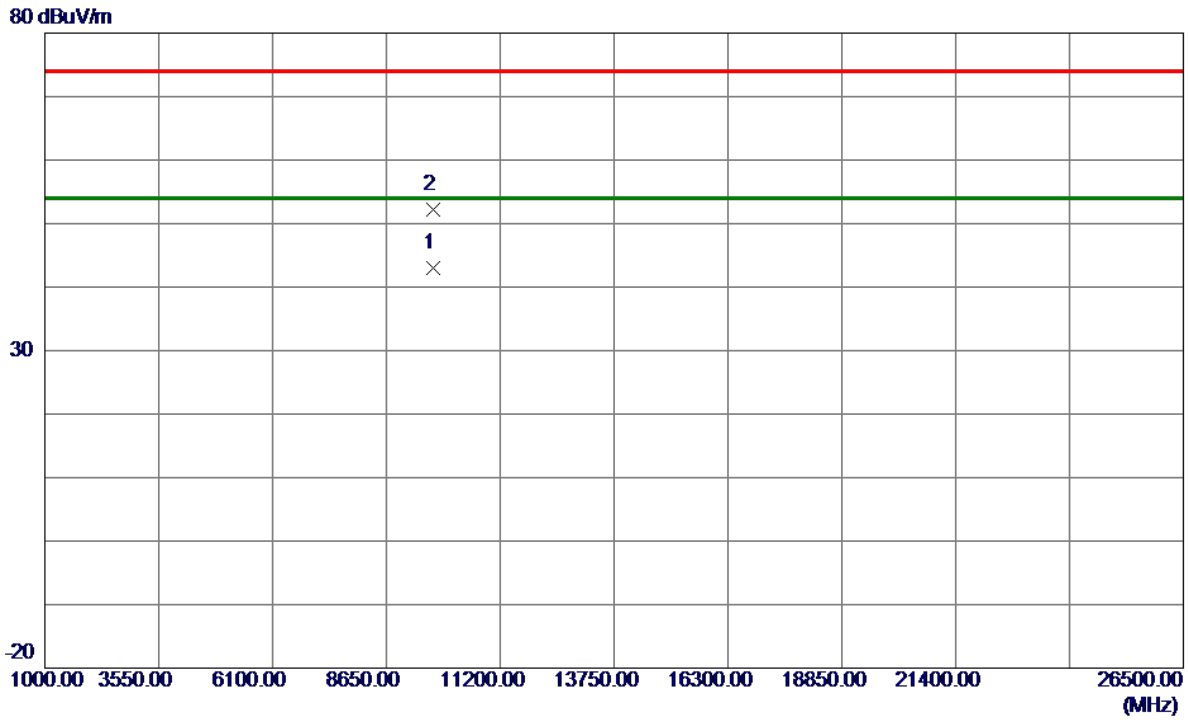
Test Mode	TX AX(HE40) Mode 2422 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	55.65	8.31	63.96	74.00	-10.04	Peak	
2	2390.0000	43.84	8.31	52.15	54.00	-1.85	AVG	
3 *	2415.0000	92.16	8.34	100.50	54.00	46.50	AVG	No Limit
4	2425.4000	102.35	8.35	110.70	74.00	36.70	Peak	No Limit

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

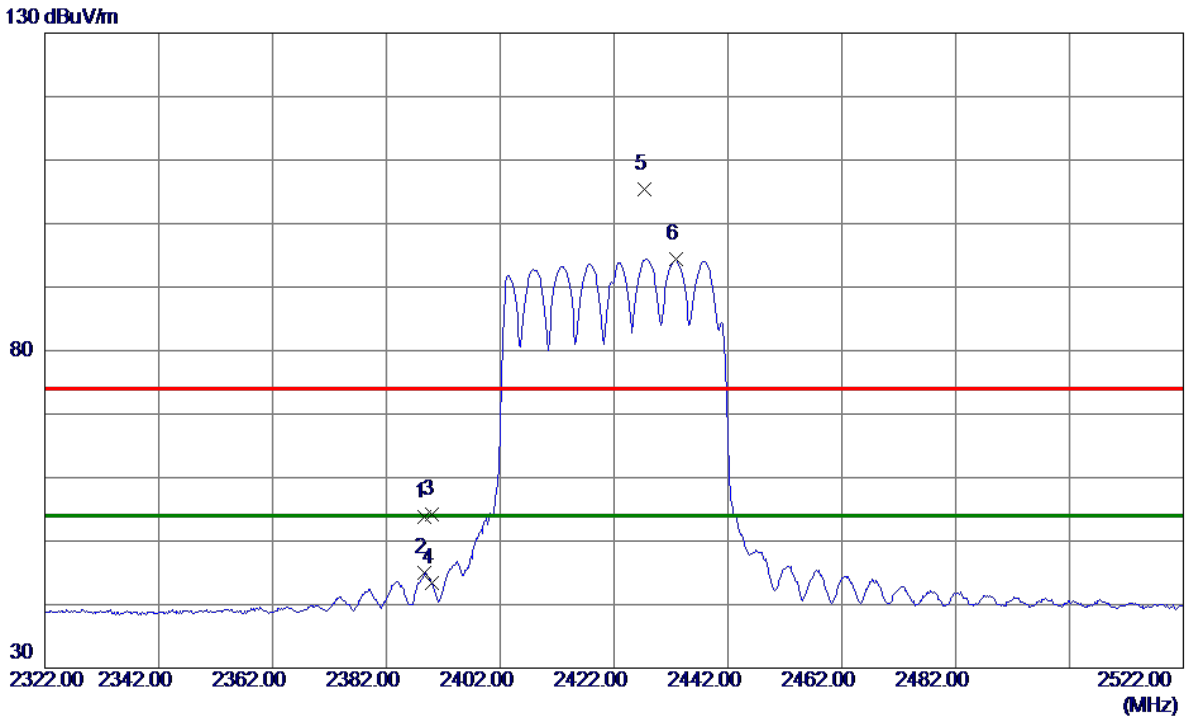
Test Mode	TX AX(HE40) Mode 2422 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9688.1040	30.52	12.51	43.03	54.00	-10.97	AVG	
2	9688.3380	39.74	12.51	52.25	74.00	-21.75	Peak	

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

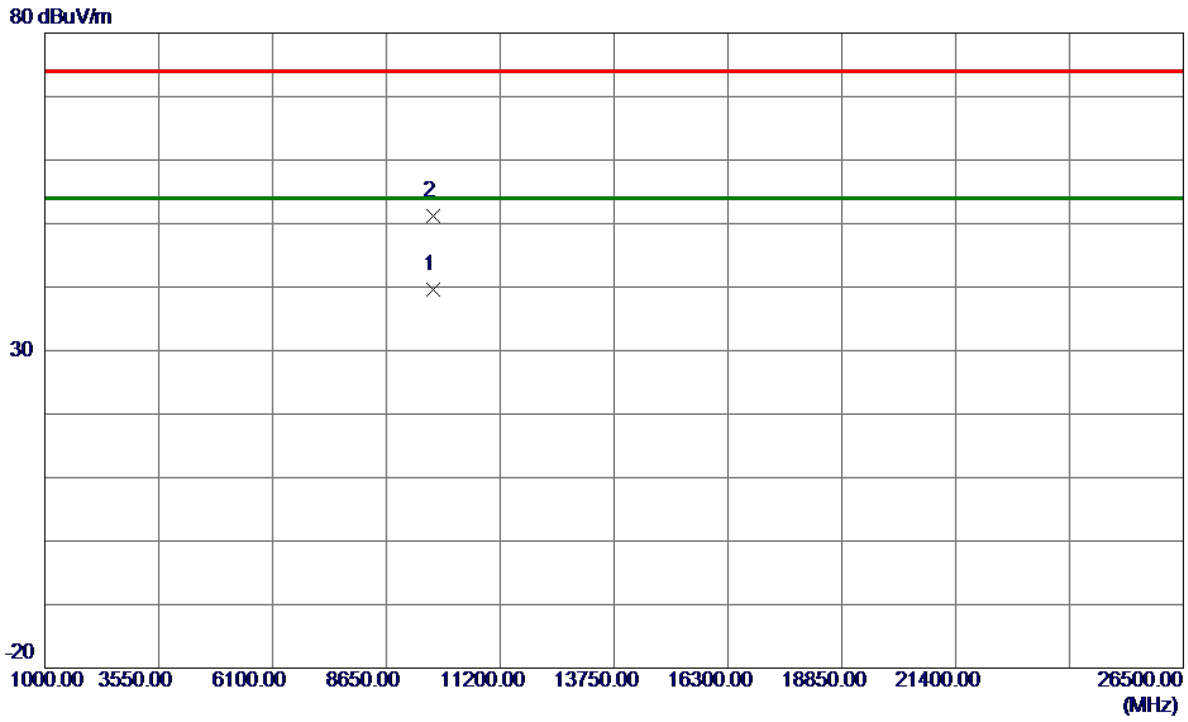
Test Mode	TX AX(HE40) Mode 2422 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388.6000	45.50	8.30	53.80	74.00	-20.20	Peak	
2	2388.6000	36.67	8.30	44.97	54.00	-9.03	AVG	
3	2390.0000	45.98	8.31	54.29	74.00	-19.71	Peak	
4	2390.0000	35.13	8.31	43.44	54.00	-10.56	AVG	
5	2427.4000	97.06	8.35	105.41	74.00	31.41	Peak	No Limit
6 *	2432.8000	86.03	8.36	94.39	54.00	40.39	AVG	No Limit

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

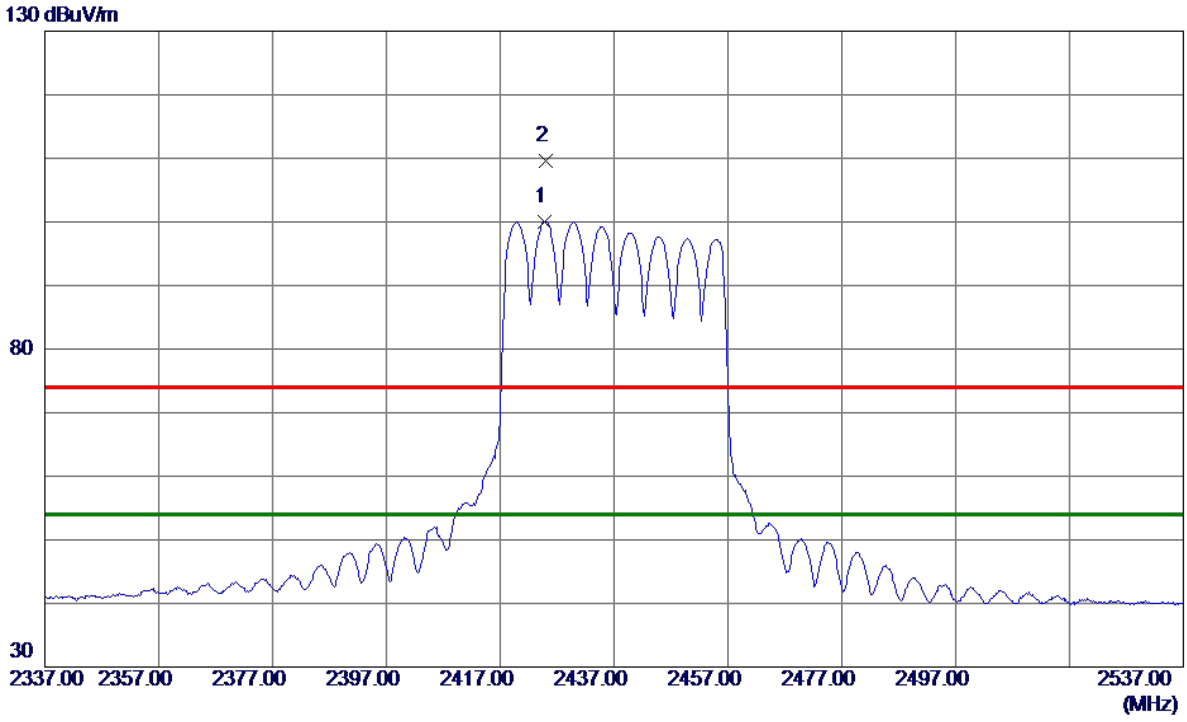
Test Mode	TX AX(HE40) Mode 2422 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9688.1529	27.15	12.51	39.66	54.00	-14.34	AVG	
2	9688.1910	38.73	12.51	51.24	74.00	-22.76	Peak	

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

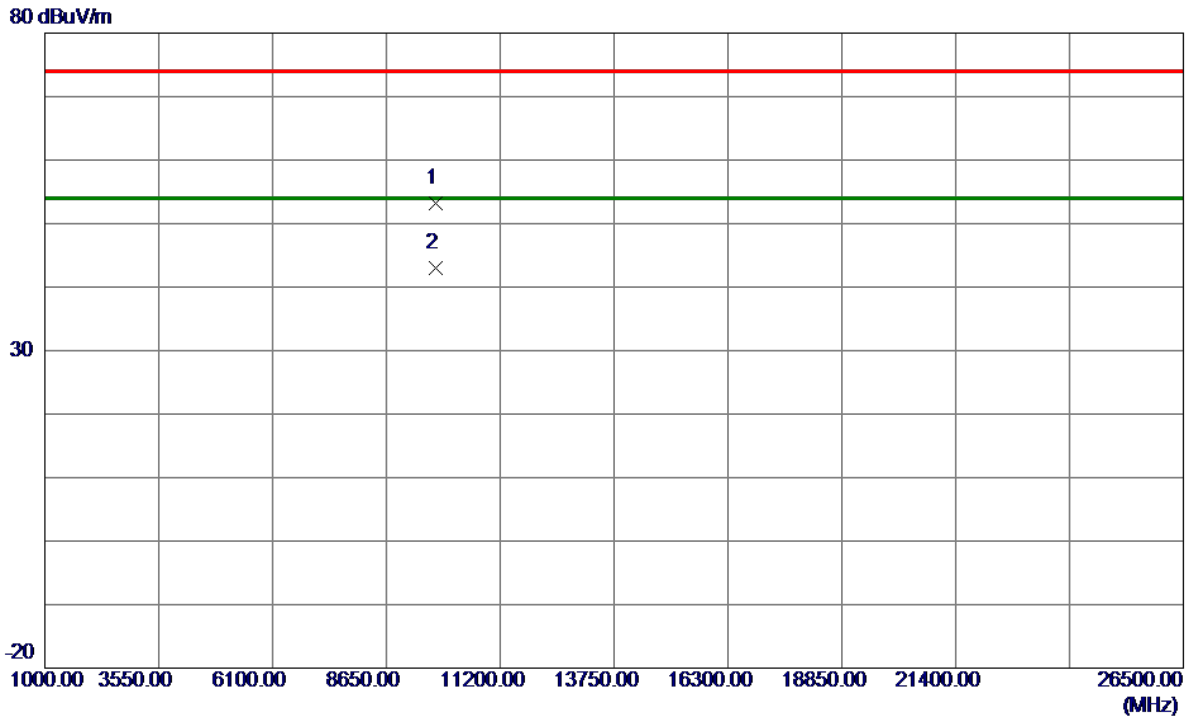
Test Mode	TX AX(HE40) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2424.8000	91.68	8.35	100.03	54.00	46.03	AVG	No Limit
2	2425.0000	101.23	8.35	109.58	74.00	35.58	Peak	No Limit

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

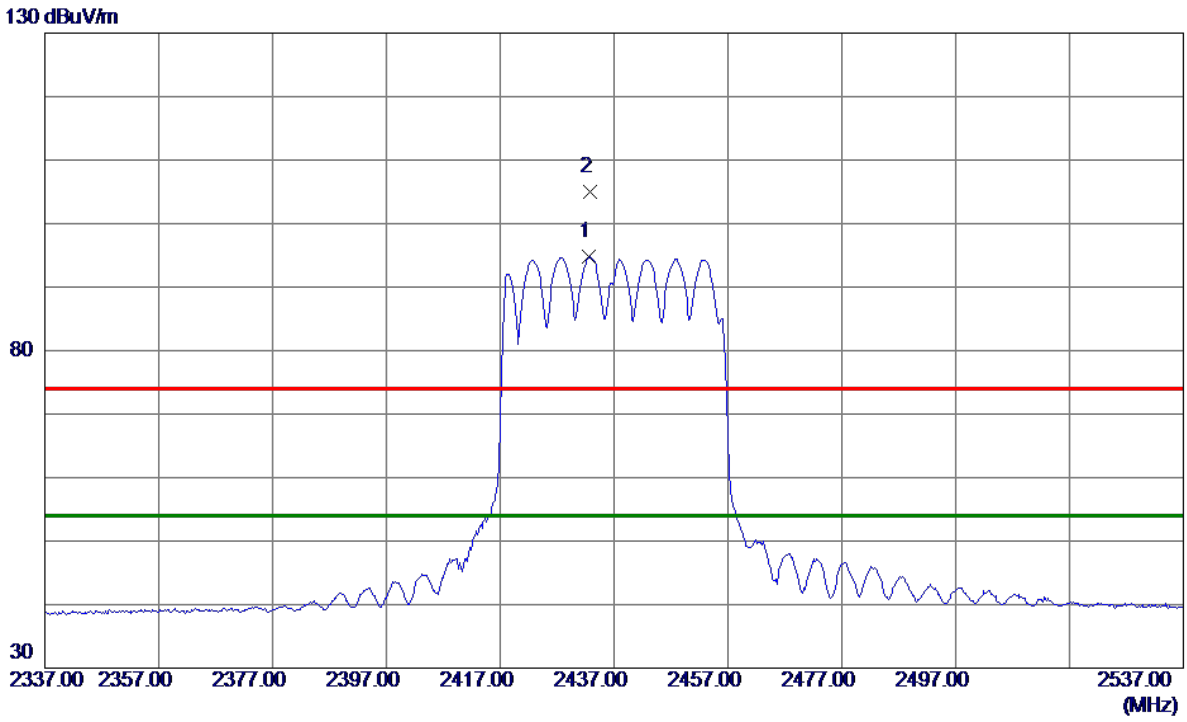
Test Mode	TX AX(HE40) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.4800	40.55	12.63	53.18	74.00	-20.82	Peak	
2 *	9748.0820	30.45	12.63	43.08	54.00	-10.92	AVG	

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

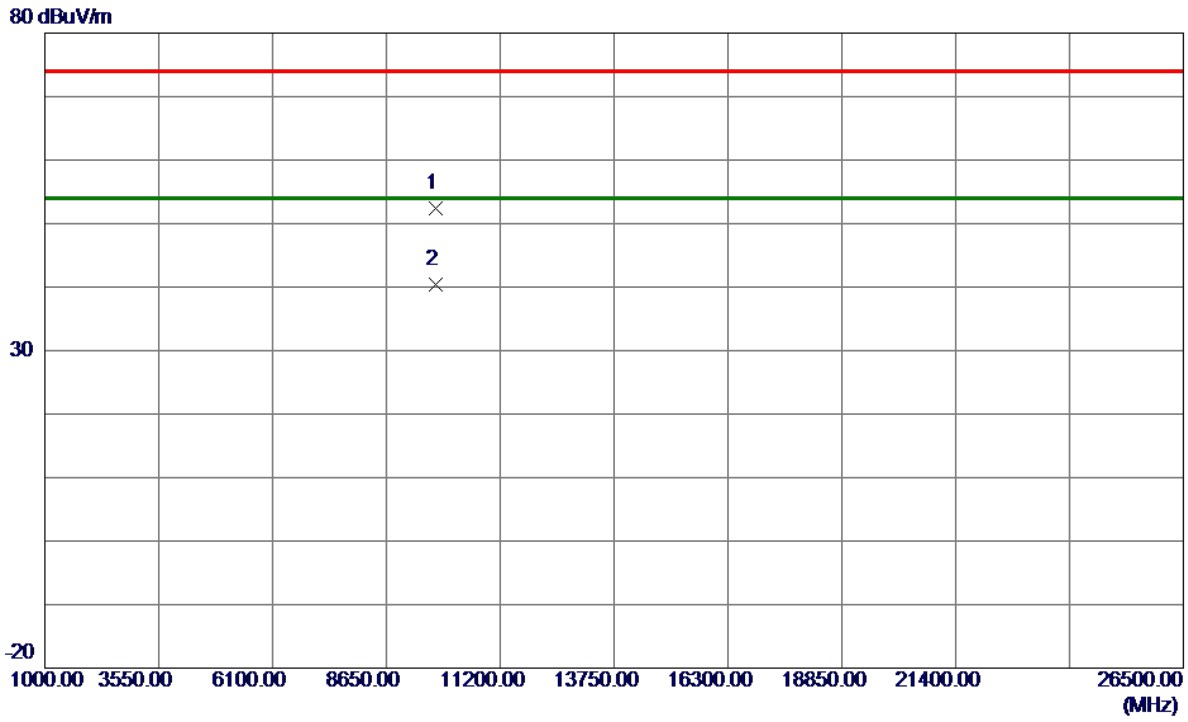
Test Mode	TX AX(HE40) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2432.6000	86.47	8.36	94.83	54.00	40.83	AVG	No Limit
2	2432.8000	96.73	8.36	105.09	74.00	31.09	Peak	No Limit

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

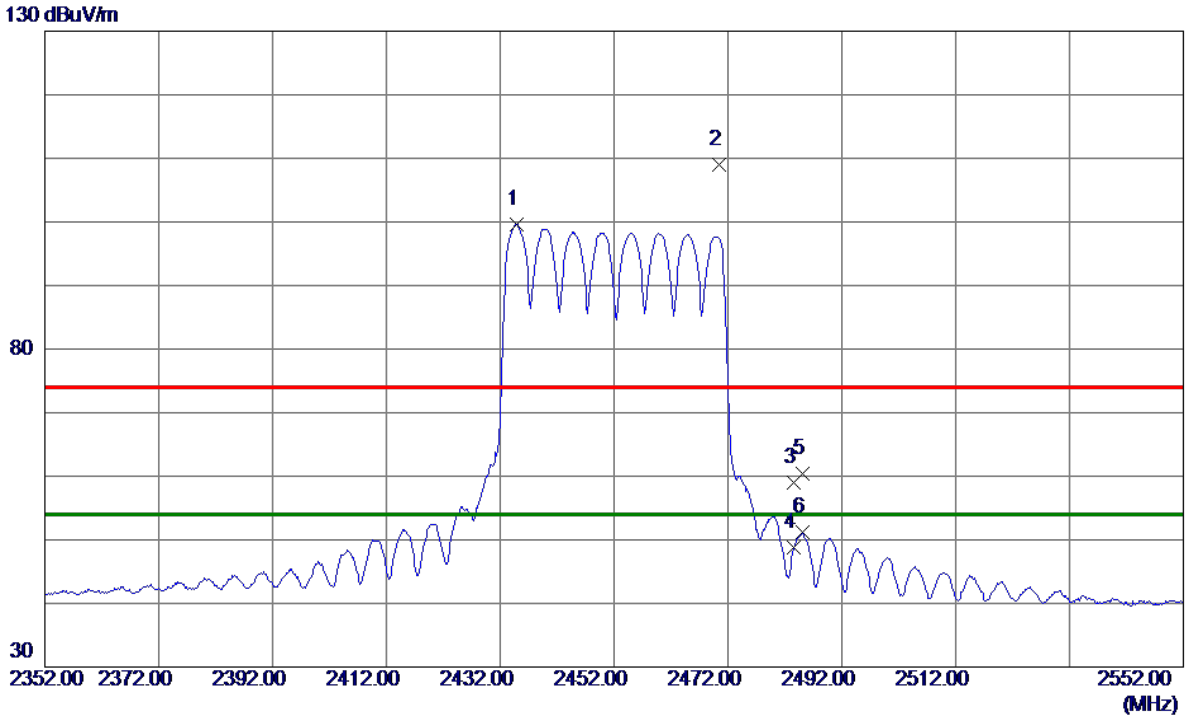
Test Mode	TX AX(HE40) Mode 2437 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.4630	39.80	12.63	52.43	74.00	-21.57	Peak	
2 *	9748.0020	27.76	12.63	40.39	54.00	-13.61	AVG	

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

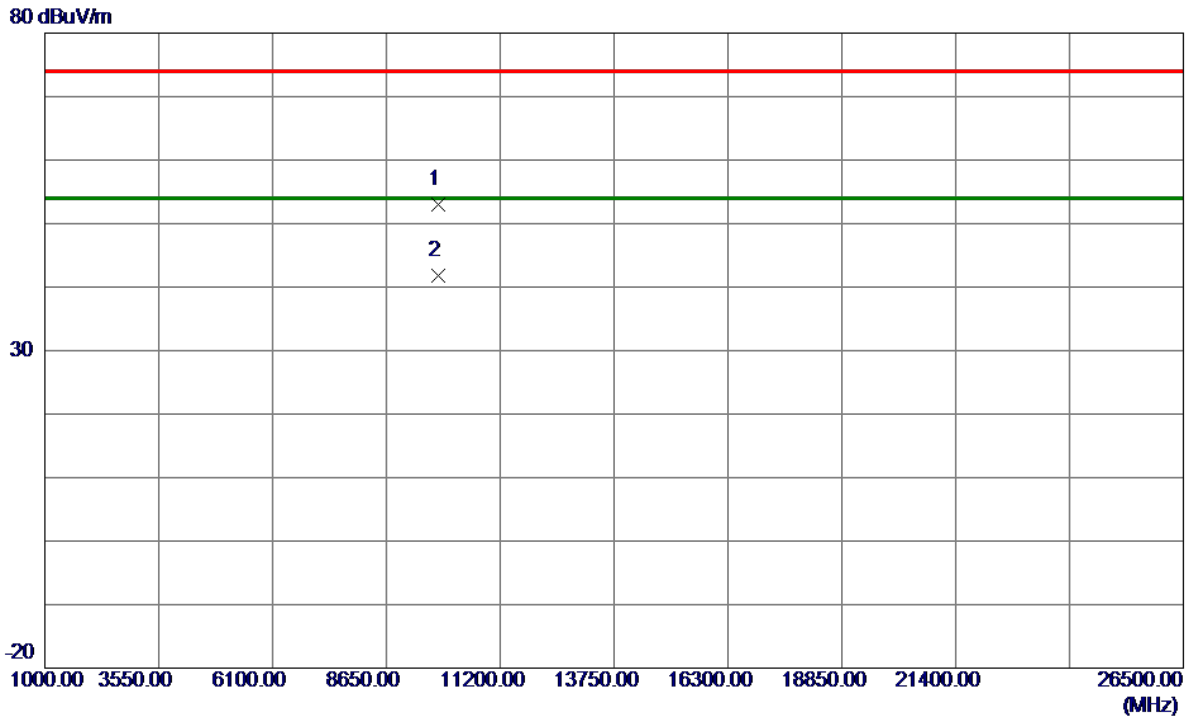
Test Mode	TX AX(HE40) Mode 2452 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2434.8000	91.26	8.36	99.62	54.00	45.62	AVG	No Limit
2	2470.4000	100.60	8.41	109.01	74.00	35.01	Peak	No Limit
3	2483.5000	50.58	8.42	59.00	74.00	-15.00	Peak	
4	2483.5000	40.44	8.42	48.86	54.00	-5.14	AVG	
5	2485.2000	51.98	8.43	60.41	74.00	-13.59	Peak	
6	2485.2000	42.78	8.43	51.21	54.00	-2.79	AVG	

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

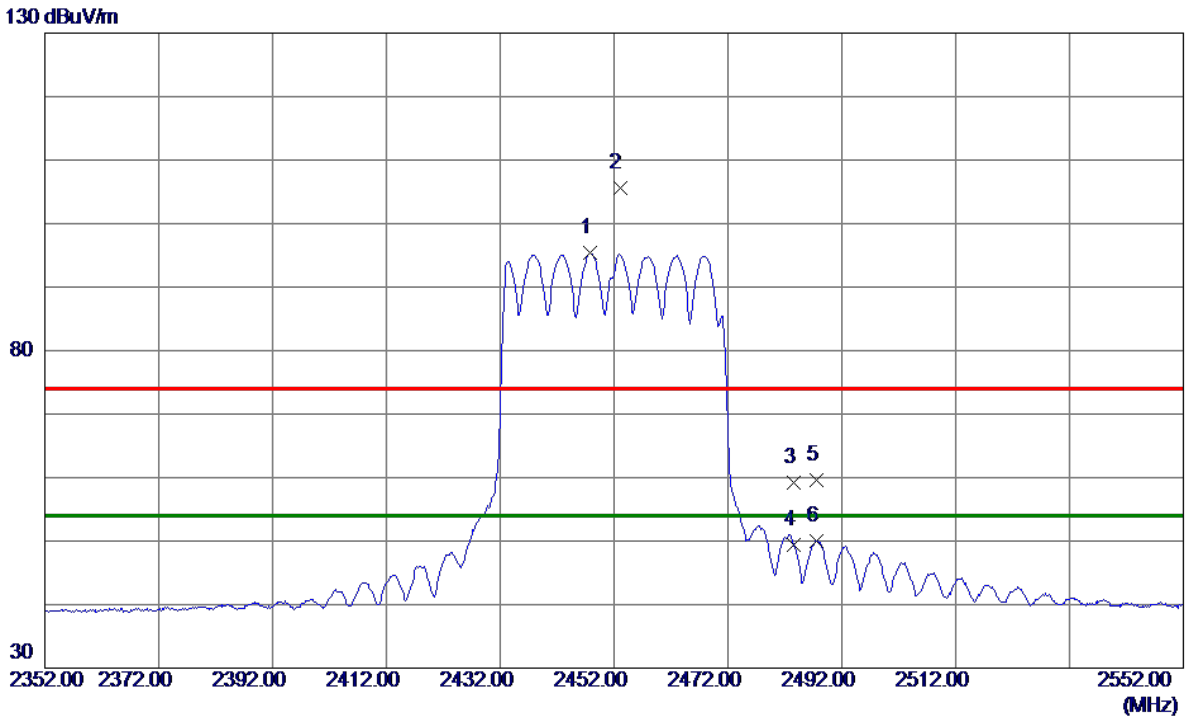
Test Mode	TX AX(HE40) Mode 2452 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9807.7670	40.20	12.76	52.96	74.00	-21.04	Peak	
2 *	9807.9100	29.05	12.76	41.81	54.00	-12.19	AVG	

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

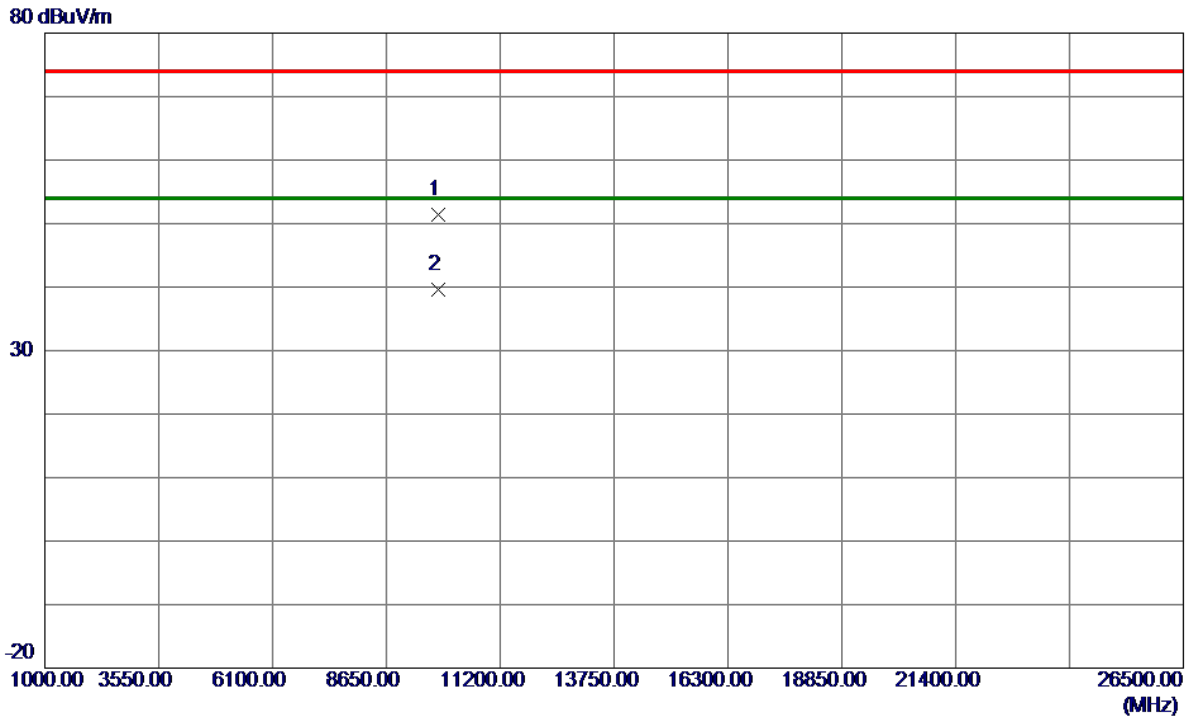
Test Mode	TX AX(HE40) Mode 2452 MHz	Polarization	Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2447.8000	86.94	8.38	95.32	54.00	41.32	AVG	No Limit
2	2453.0000	97.27	8.39	105.66	74.00	31.66	Peak	No Limit
3	2483.5000	50.77	8.42	59.19	74.00	-14.81	Peak	
4	2483.5000	41.00	8.42	49.42	54.00	-4.58	AVG	
5	2487.6000	51.08	8.43	59.51	74.00	-14.49	Peak	
6	2487.6000	41.58	8.43	50.01	54.00	-3.99	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	Horizontal

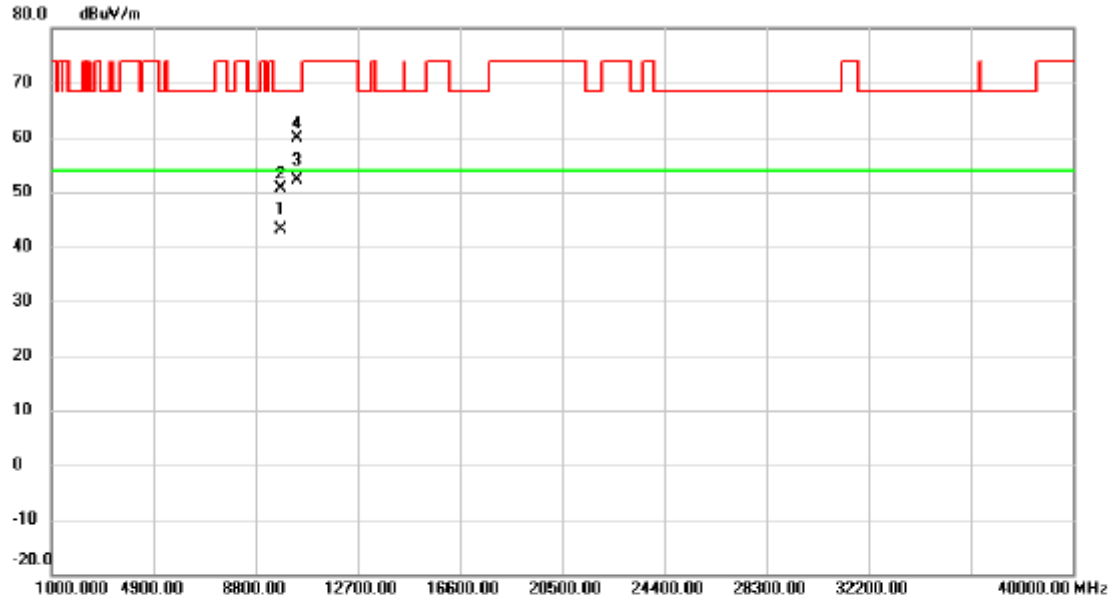


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9807.5350	38.56	12.76	51.32	74.00	-22.68	Peak	
2 *	9808.2220	26.92	12.76	39.68	54.00	-14.32	AVG	

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

The worst case of simultaneous transmission:

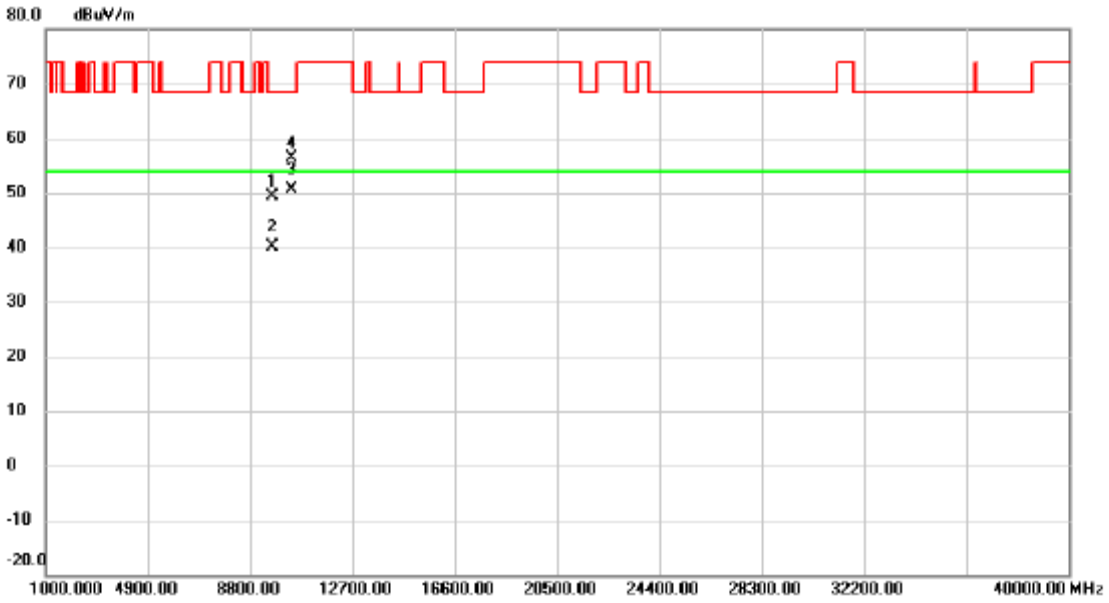
Test Mode	TX WLAN 2.4G AX20 Mode 2437MHz + WLAN 5G A Mode 5200MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		9747.385	31.47	11.63	43.10	54.00	-10.90	AVG	
2		9748.012	38.94	11.63	50.57	68.30	-17.73	peak	
3	*	10399.079	39.79	12.31	52.10	54.00	-1.90	AVG	
4		10400.431	47.45	12.31	59.76	68.30	-8.54	peak	

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

Test Mode	TX WLAN 2.4G AX20 Mode 2437MHz + WLAN 5G A Mode 5200MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		9647.245	37.81	11.47	49.28	68.30	-19.02	peak	
2		9648.357	28.67	11.47	40.14	54.00	-13.86	AVG	
3	*	10400.426	38.25	12.31	50.56	54.00	-3.44	AVG	
4		10401.375	43.97	12.31	56.28	68.30	-12.02	peak	

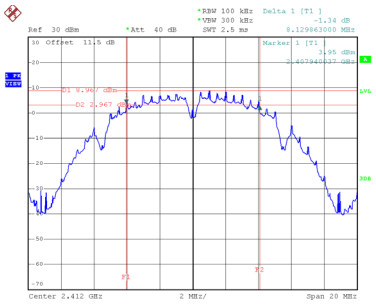
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	TX B Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	8.13	11.28	0.50	Complies
06	2437	8.10	11.44	0.50	Complies
11	2462	8.11	11.36	0.50	Complies

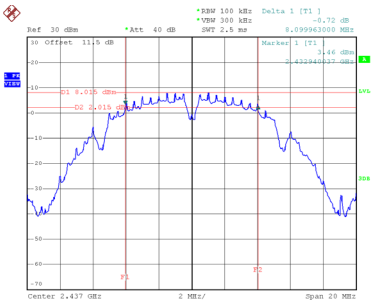
CH01



Date: 15.JUN.2021 14:53:32

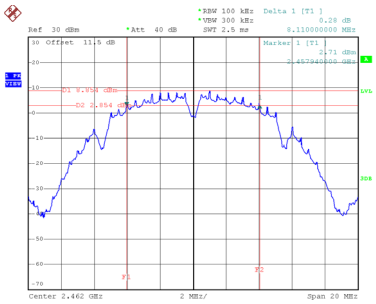
CH06

6 dB Bandwidth



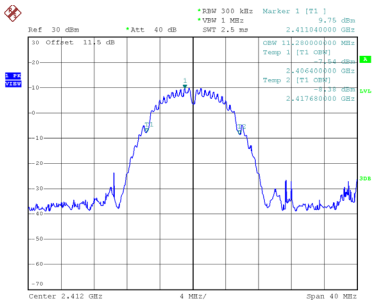
Date: 15.JUN.2021 14:56:54

CH11

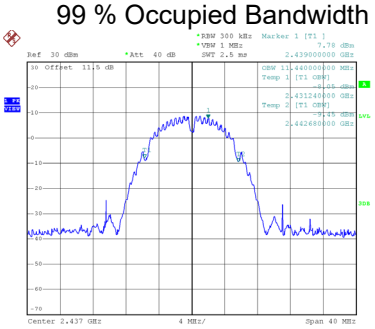


Date: 15.JUN.2021 14:59:37

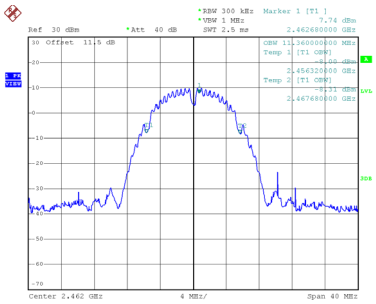
99 % Occupied Bandwidth



Date: 15.JUN.2021 14:55:53



Date: 15.JUN.2021 14:57:02

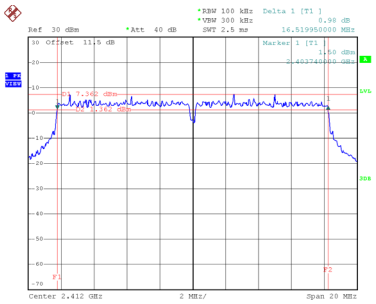


Date: 15.JUN.2021 14:59:45

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	16.52	17.12	0.50	Complies
06	2437	16.52	17.52	0.50	Complies
11	2462	16.52	17.04	0.50	Complies

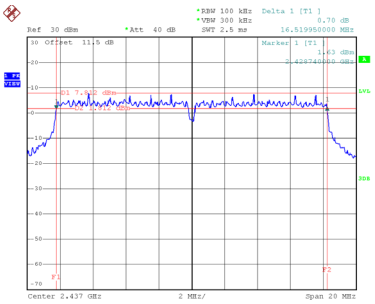
CH01



Date: 15.JUN.2021 14:46:36

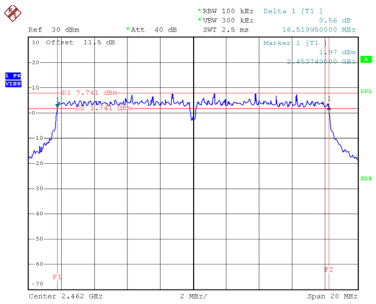
CH06

6 dB Bandwidth

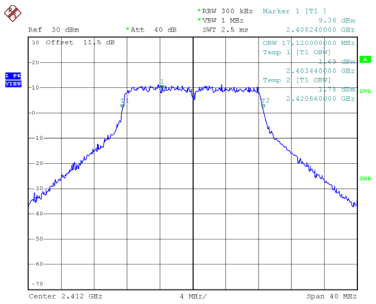


Date: 15.JUN.2021 14:48:23

CH11

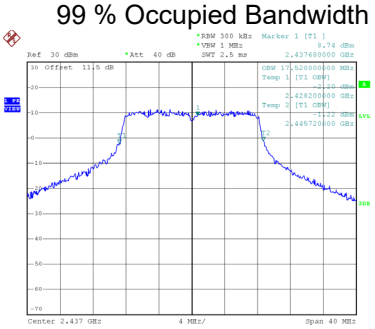


Date: 15.JUN.2021 14:50:55

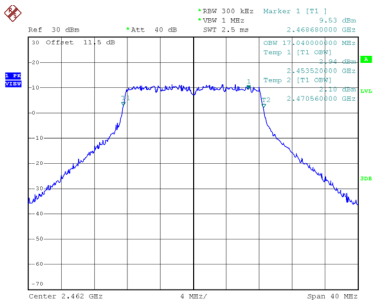


Date: 15.JUN.2021 14:46:44

99 % Occupied Bandwidth



Date: 15.JUN.2021 14:48:31

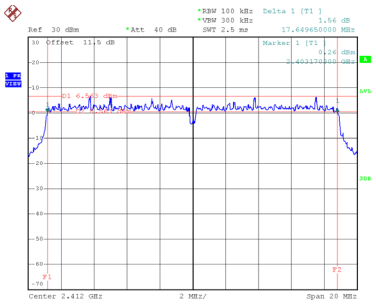


Date: 15.JUN.2021 14:51:03

Test Mode	TX N(HT20) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.65	18.24	0.50	Complies
06	2437	17.63	18.80	0.50	Complies
11	2462	17.69	18.24	0.50	Complies

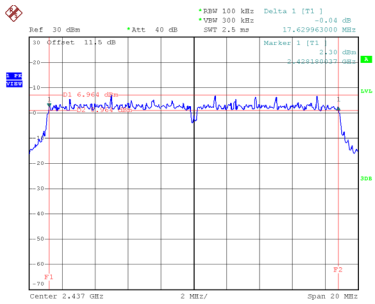
CH01



Date: 15.JUN.2021 14:40:11

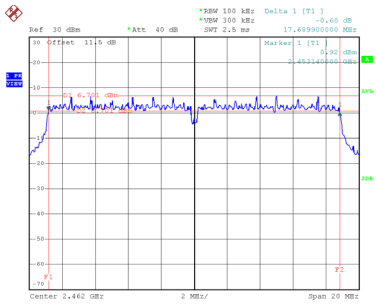
CH06

6 dB Bandwidth

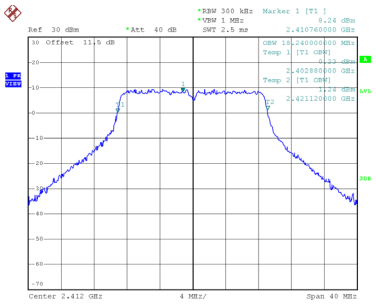


Date: 15.JUN.2021 14:41:37

CH11

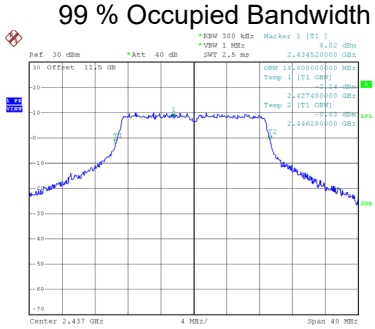


Date: 15.JUN.2021 14:43:19

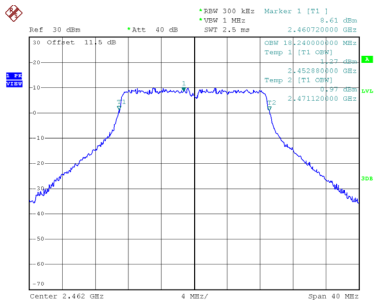


Date: 15.JUN.2021 14:40:19

99 % Occupied Bandwidth



Date: 15.JUN.2021 14:41:44

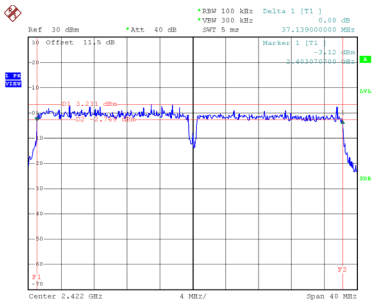


Date: 15.JUN.2021 14:43:26

Test Mode	TX N(HT40) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
03	2422	37.14	38.08	0.50	Complies
06	2437	36.52	38.88	0.50	Complies
09	2452	36.48	38.08	0.50	Complies

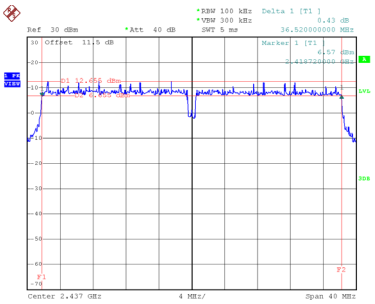
CH03



Date: 15.JUN.2021 15:06:37

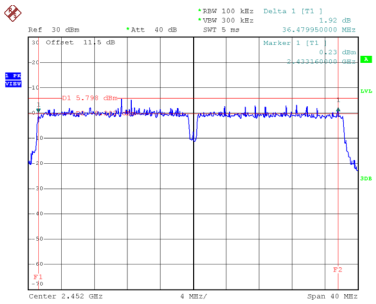
CH06

6 dB Bandwidth

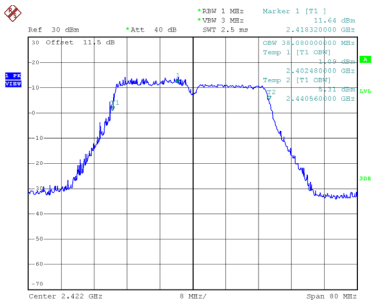


Date: 15.JUN.2021 15:04:01

CH09

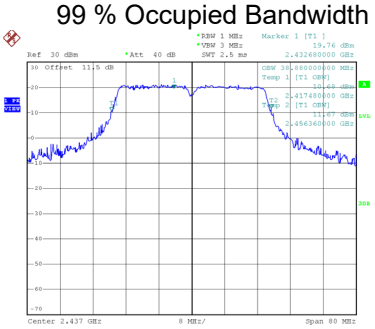


Date: 15.JUN.2021 15:09:15

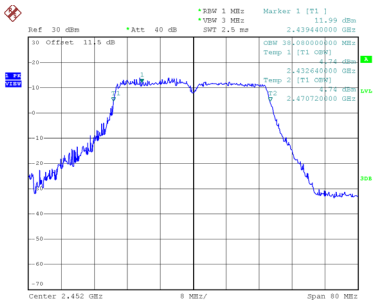


Date: 15.JUN.2021 15:06:46

99 % Occupied Bandwidth



Date: 15.JUN.2021 15:04:09

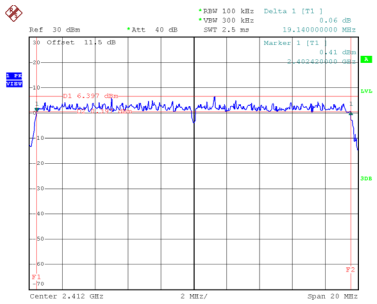


Date: 15.JUN.2021 15:09:23

Test Mode	TX AX(HE20) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	19.14	19.36	0.50	Complies
06	2437	19.10	19.44	0.50	Complies
11	2462	19.06	19.36	0.50	Complies

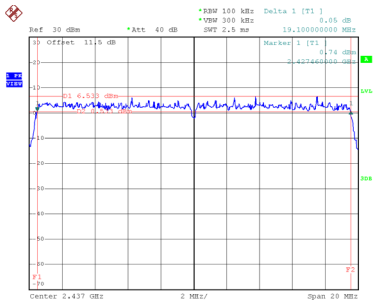
CH01



Date: 15.JUN.2021 15:11:35

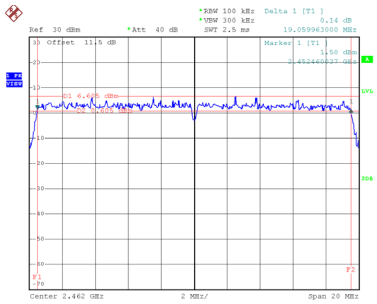
CH06

6 dB Bandwidth

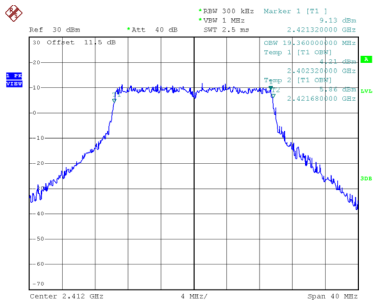


Date: 15.JUN.2021 15:12:56

CH11

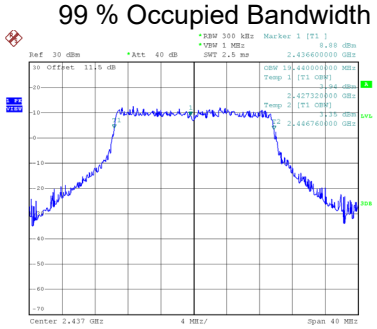


Date: 15.JUN.2021 15:14:25

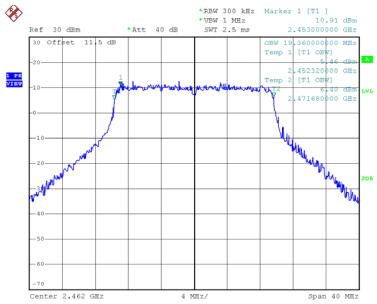


Date: 15.JUN.2021 15:11:43

99 % Occupied Bandwidth



Date: 15.JUN.2021 15:13:04



Date: 15.JUN.2021 15:14:32