Certificate #7130.01

FCC Radio Test Report

FCC ID: 2BH7FC236

This report concerns: Original Grant

Project No.	:	2504G022
Equipment	:	Indoor/Outdoor Pan/Tilt Security Wi-Fi Camera
Brand Name	:	tp-link
Test Model	:	Tapo C236
Series Model	:	N/A
Applicant	:	TP-Link Systems Inc.
Address	:	10 Mauchly, Irvine, CA 92618
Manufacturer	:	TP-Link Systems Inc.
Address	:	10 Mauchly, Irvine, CA 92618
Date of Receipt	:	Jun. 20, 2025
Date of Test	:	Jun. 24, 2025 ~ Jul. 02, 2025
Issued Date	:	Jul. 16, 2025
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG20250620122 for Radiated and AC Power Line Conducted Emissions, DG20250620120 for others.
Standard(s)	:	FCC CFR Title 47, Part 15, Subpart C

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

Prepared by : Chella Zheng

Chella Zheng

Approved by : Chay Cai

Chay Cai

No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.
Tel: +86-769-8318-3000 Web: www.newbtl.com Service mail: btl_qa@newbtl.com

Declaration

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

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

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

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

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

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

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

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.
Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

Table of Contents Page

REVISION HISTORY 6

1 . APPLICABLE STANDARDS 7

2 . SUMMARY OF TEST RESULTS 7

2.1 TEST FACILITY 8

2.2 MEASUREMENT UNCERTAINTY 8

2.3 TEST ENVIRONMENT CONDITIONS 9

3 . GENERAL INFORMATION 10

3.1 GENERAL DESCRIPTION OF EUT 10

3.2 DESCRIPTION OF TEST MODES 11

3.3 PARAMETERS OF TEST SOFTWARE 12

3.4 DUTY CYCLE 13

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED 14

3.6 SUPPORT UNITS 14

3.7 CUSTOMER INFORMATION DESCRIPTION 14

4 . AC POWER LINE CONDUCTED EMISSIONS 15

4.1 LIMIT 15

4.2 TEST PROCEDURE 15

4.3 DEVIATION FROM TEST STANDARD 15

4.4 TEST SETUP 16

4.5 EUT OPERATION CONDITIONS 16

4.6 TEST RESULTS 16

5 . RADIATED EMISSIONS 17

5.1 LIMIT 17

5.2 TEST PROCEDURE 18

5.3 DEVIATION FROM TEST STANDARD 19

5.4 TEST SETUP 19

5.5 EUT OPERATION CONDITIONS 21

5.6 TEST RESULTS - 9 KHZ TO 30 MHZ 21

5.7 TEST RESULTS - 30 MHZ TO 1000 MHZ 21

5.8 TEST RESULTS - ABOVE 1000 MHZ 21

6 . BANDWIDTH 22

6.1 LIMIT 22

6.2 TEST PROCEDURE 22

Table of Contents Page

6.3 DEVIATION FROM STANDARD 22
6.4 TEST SETUP 22
6.5 EUT OPERATION CONDITIONS 22
6.6 TEST RESULTS 22
7 . MAXIMUM OUTPUT POWER 23
7.1 LIMIT 23
7.2 TEST PROCEDURE 23
7.3 DEVIATION FROM STANDARD 23
7.4 TEST SETUP 23
7.5 EUT OPERATION CONDITIONS 23
7.6 TEST RESULTS 23
8 . CONDUCTED SPURIOUS EMISSIONS 24
8.1 LIMIT 24
8.2 TEST PROCEDURE 24
8.3 DEVIATION FROM STANDARD 25
8.4 TEST SETUP 25
8.5 EUT OPERATION CONDITIONS 25
8.6 TEST RESULTS 25
9 . POWER SPECTRAL DENSITY 26
9.1 LIMIT 26
9.2 TEST PROCEDURE 26
9.3 DEVIATION FROM STANDARD 26
9.4 TEST SETUP 26
9.5 EUT OPERATION CONDITIONS 26
9.6 TEST RESULTS 26
10 . MEASUREMENT INSTRUMENTS LIST 27
11 . EUT TEST PHOTO 29
APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS 35
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ 38
APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ 43
APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ 46
APPENDIX E - BANDWIDTH 79
FAPPENDIX F - MAXIMUM OUTPUT POWER 83

Table of Contents Page

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS **85**

APPENDIX H - POWER SPECTRAL DENSITY **89**

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2504G022	R00	Original Report.	Jul. 16, 2025	Valid

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:
ANSI C63.10-2013
The following reference test guidance is not within the scope of accreditation of A2LA:
KDB 558074 D01 15.247 Meas Guidance v05r02

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report :
For Radiated emissions test - Band edge & Harmonic(1 GHz to 18 GHz): Room 102 & 702, Building A3, No.9, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

For other test items: No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.
BTL's Registration Number for FCC: 747969
BTL's Designation Number for FCC: CN1377

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95.45% confidence level (based on a coverage factor (k=2))
The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.88

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-CB03	CISPR	9kHz ~ 30MHz	2.36

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

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-CB19 (3m)	CISPR	1GHz ~ 6GHz	4.56
		6GHz ~ 18GHz	4.12

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

C. Other Measurement:

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

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

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
AC Power Line Conducted Emissions	23°C	53%	AC 120V/60Hz	Hayden Chen	Jun. 27, 2025
Radiated Emissions -9kHz to 30 MHz	22°C	48%	AC 120V/60Hz	Hayden Chen	Jun. 27, 2025
Radiated Emissions -30MHz to 1000MHz	25°C	56%	AC 120V/60Hz	Calvin Wen	Jun. 27, 2025
Radiated Emissions -Above 1000MHz	29°C	55%	AC 120V/60Hz	Allen Tong	Jun. 27, 2025-Jun. 28, 2025
	23°C	54%	AC 120V/60Hz	Calvin Wen	Jul. 01, 2025
Bandwidth	23°C	54%	AC 120V/60Hz	Newnar Wang	Jun. 28, 2025
Maximum Output Power	24-25°C	56-60%	AC 120V/60Hz	Alex Yin	Jun. 26, 2025-Jun. 30, 2025
Conducted Spurious Emissions	23°C	54%	AC 120V/60Hz	Newnar Wang	Jun. 28, 2025
Power Spectral Density	23°C	54%	AC 120V/60Hz	Newnar Wang	Jun. 28, 2025

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Indoor/Outdoor Pan/Tilt Security Wi-Fi Camera
Brand Name	tp-link
Test Model	Tapo C236
Series Model	N/A
Model Difference(s)	N/A
Software Version	1.X
Hardware Version	1.0
Power Source	DC voltage supplied from AC adapter. Model: AD-D0930500100US01
Power Rating	INPUT: 100-240V~ 50/60Hz Max 0.2A OUTPUT: 5V⎓1A
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g/n: OFDM
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 72.2 Mbps
Maximum Output Power	IEEE 802.11b: 19.52 dBm (0.0895 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)							
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.	Manufacturer	P/N	Antenna Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	Tapo C216+ANT	IFA	N/A	0.5
2	TP-Link Systems Inc.	6035500234	PIFA	N/A	0.5

Note:

1) Two antennas can switch intelligently. Only one transmitter is transmitting at a time. Select ant1 for the test.

3.2 DESCRIPTION OF TEST MODES

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

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

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 4	TX B Mode Channel 01

Radiated emissions test - Below 1GHz & Above 18 GHz	
Final Test Mode	Description
Mode 4	TX B Mode Channel 01

Radiated emissions test - 1 GHz - 18 GHz	
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N(HT20) Mode Channel 01/02/06/10/11

Conducted test	
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N(HT20) Mode Channel 01/06/11

NOTE:
(1) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
(2) For AC power line conducted emissions and radiated emission below 1 GHz test, the IEEE 802.11b Mode Channel 01 is found to be the worst case and recorded.
(3) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
(4) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.
(5) For radiated emission above 1 GHz test, the polarization of Vertical and Horizontal are evaluated, the worst case is Vertical and recorded.

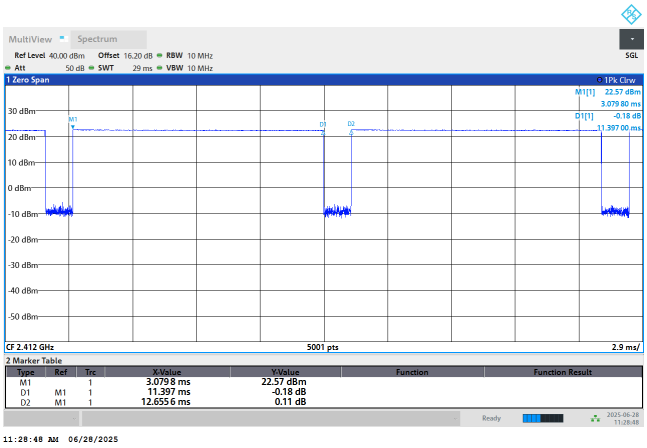
3.3 PARAMETERS OF TEST SOFTWARE

Test Software Version	altobeamWifi_ETF_V2.10.103		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	14.5	16	14.5
IEEE 802.11g	13	16	11
IEEE 802.11n(HT20)	13	16	12.5

3.4 DUTY CYCLE

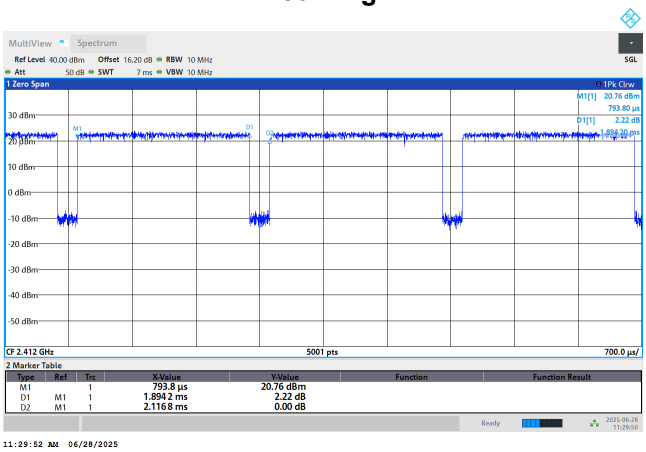
If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.
The output power = measured power + duty factor.

802.11b



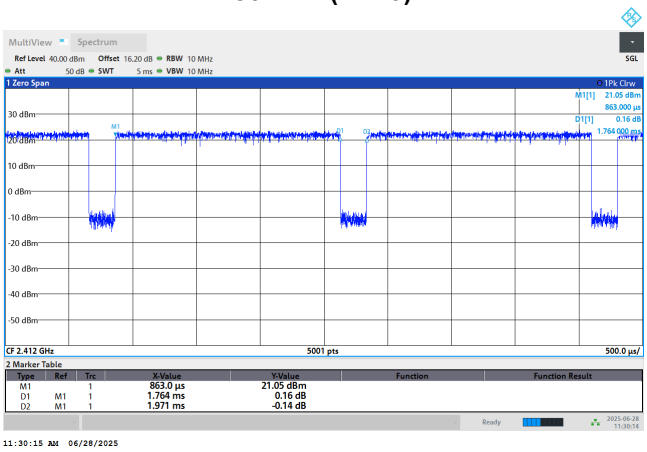
Duty cycle = 11.397 ms / 12.656 ms = 90.05%
Duty Factor = 10 log(1/Duty cycle) = 0.46 dB

802.11g



Duty cycle = 1.894 ms / 2.117 ms = 89.47%
Duty Factor = 10 log(1/Duty cycle) = 0.48 dB

802.11n(HT20)



Duty cycle = 1.764 ms / 1.971 ms = 89.50%
Duty Factor = 10 log(1/Duty cycle) = 0.48 dB

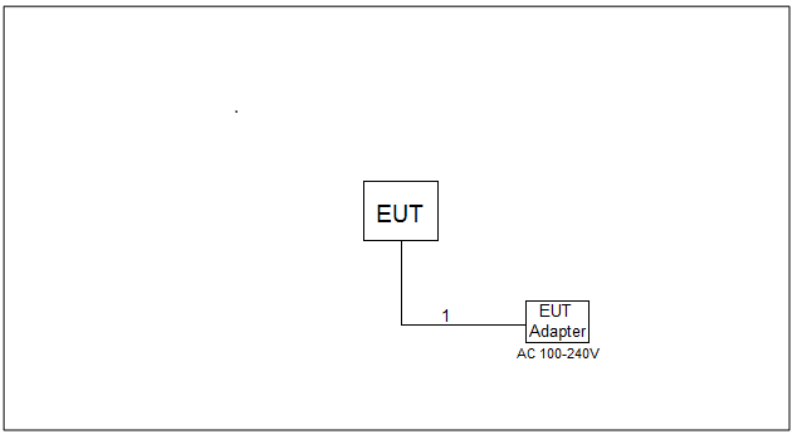
NOTE:
For IEEE 802.11b:
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 88 Hz.

For IEEE 802.11g:
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 528 Hz.

For IEEE 802.11n(HT20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 567 Hz.

(Remark: The video bandwidth of the spectrum analyzer was set to 1kHz during the test.)

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
-	-	-	-	-

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

3.7 CUSTOMER INFORMATION DESCRIPTION

1) The antenna gain is provided by the manufacturer.
2) Except for AC power line conducted emissions and radiated emissions, the results of all test items include cable losses. Part of the cable losses (0.5dB) are provided by the manufacturer, while the other parts of the cable losses are provided by the testing laboratory.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:
(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
Margin Level = Measurement Value - Limit Value

4.2 TEST PROCEDURE

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

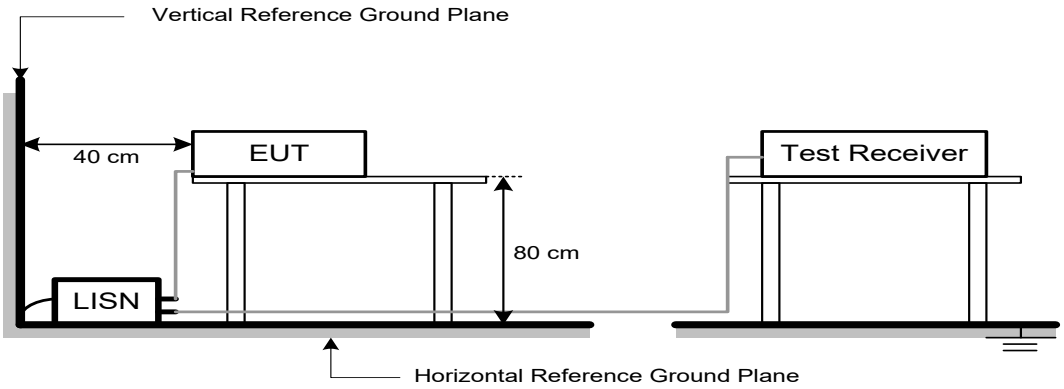
The following table is the setting of the receiver:

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

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS

Please refer to the APPENDIX A.

5. RADIATED EMISSIONS

5.1 LIMIT

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Band edge/ Harmonic at 3m (dBμV/m)		Harmonic at 1m (dBμV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	83.5 (Note 5)	63.5 (Note 5)

NOTE:

(1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

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

(5)

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

20log ($d_{limit}/d_{measure}$)=20log (3/1)=9.5 dB.
FS_{limit}: Harmonic at 3m Peak and Average limit.
FS_{max}: Harmonic at 1m Peak and Average Maximum value.
d_{limit}: Harmonic at 3m test distance.
$d_{measure}$: Harmonic Actual test distance.

5.2 TEST PROCEDURE

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 or 1m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
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

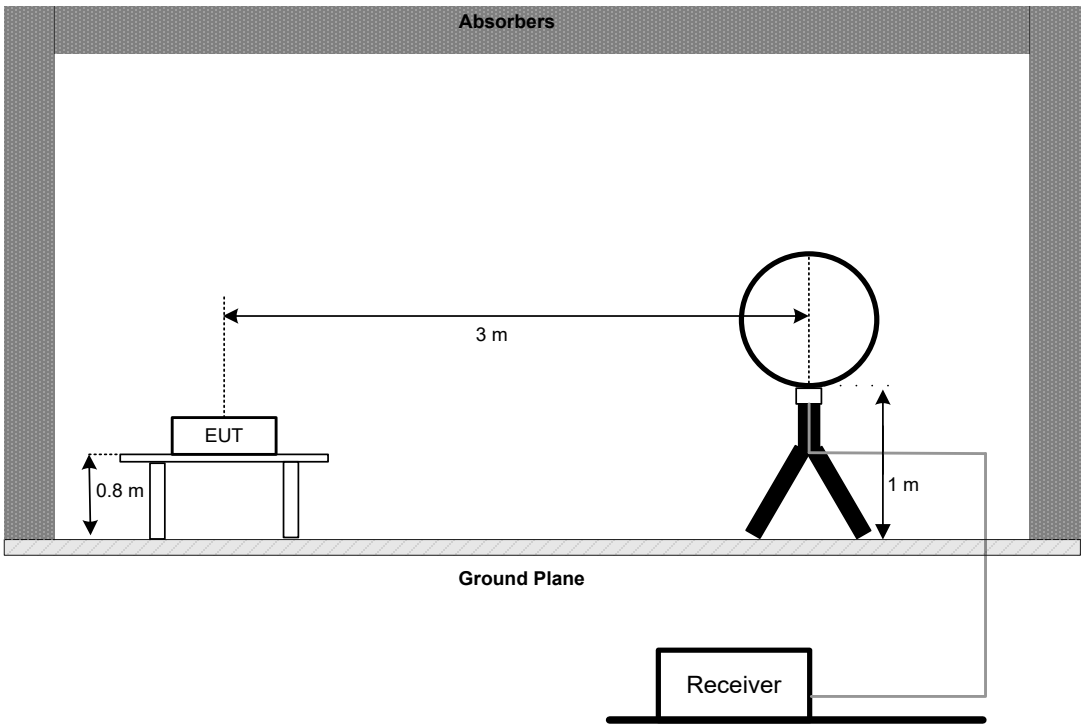
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector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

5.3 DEVIATION FROM TEST STANDARD

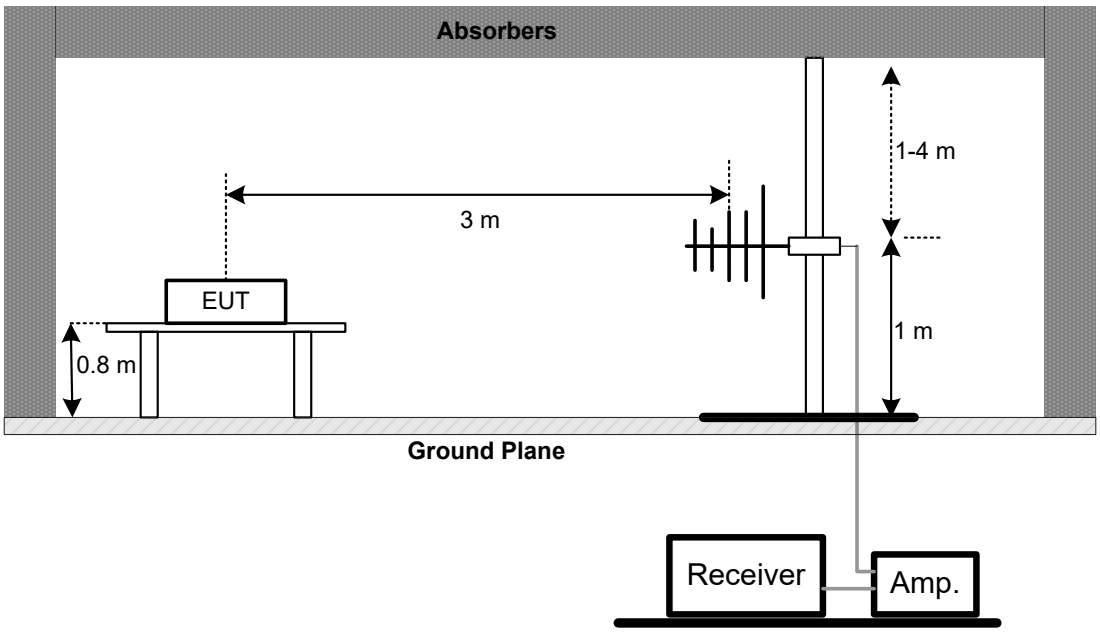
No deviation.

5.4 TEST SETUP

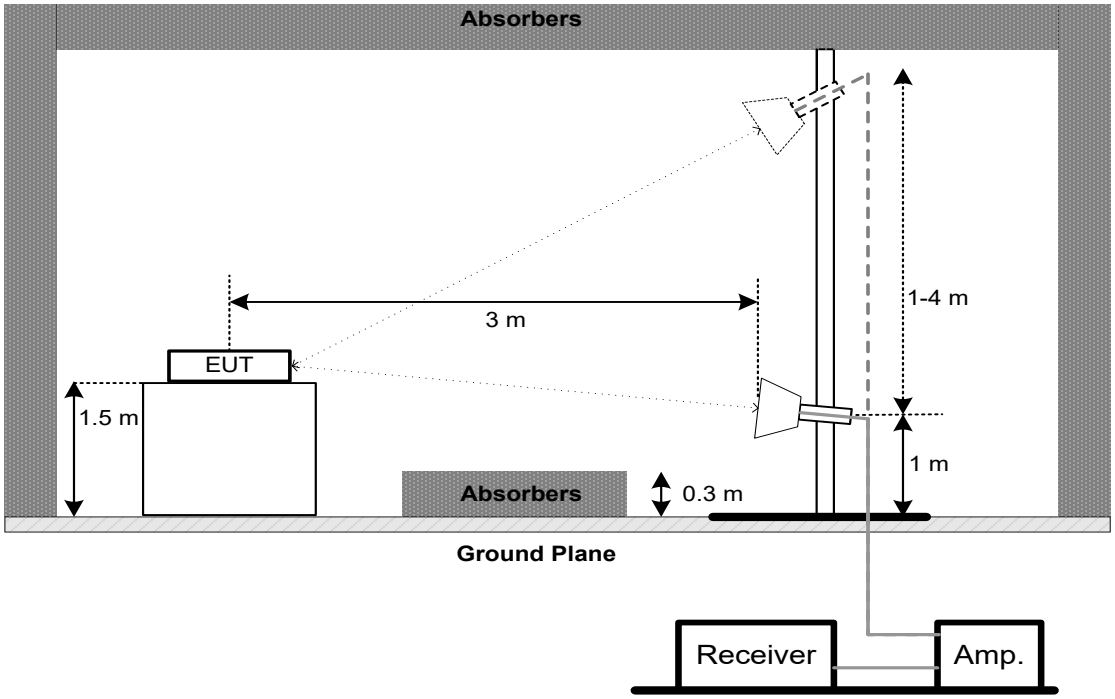
9 kHz to 30 MHz



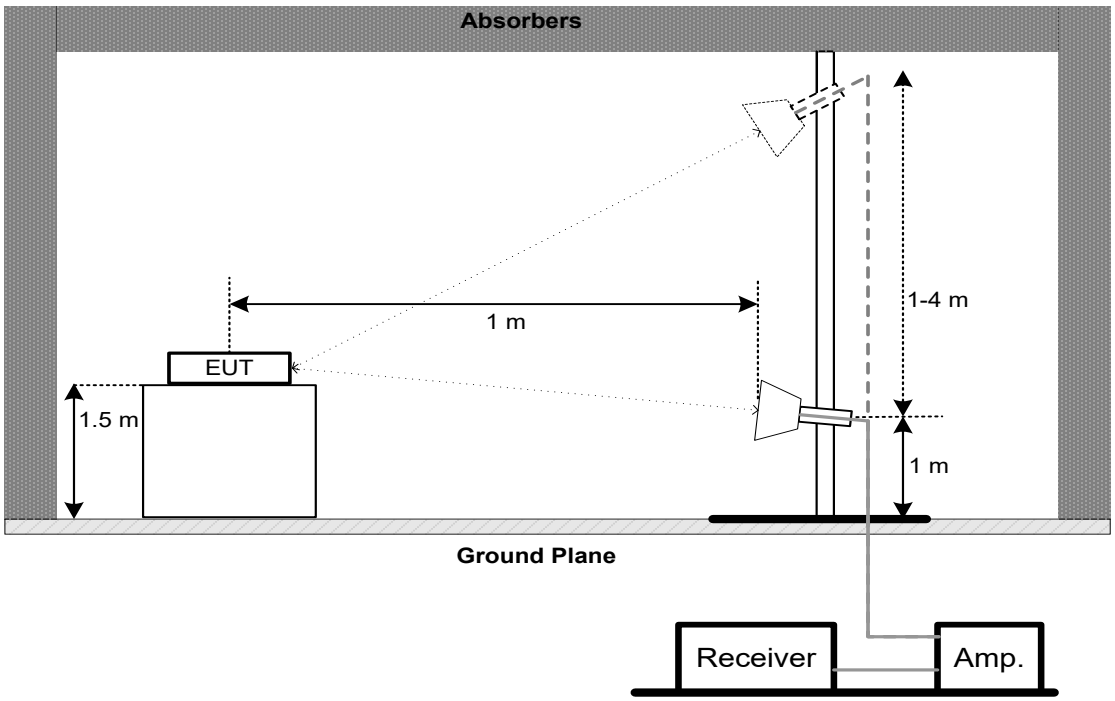
30 MHz to 1 GHz



Above 1 GHz
Band edge & Harmonic(1 GHz to 18 GHz)



Harmonic(18 GHz to 26.5 GHz)



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B.

Remark:

(1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
(2) Limit line = specific limits (dBuV) + distance extrapolation factor.

5.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

5.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

6. BANDWIDTH

6.1 LIMIT

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

6.2 TEST PROCEDURE

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	> Measurement Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

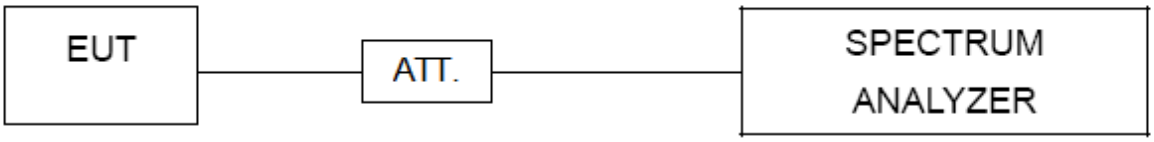
For 99% Emission Bandwidth:

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX E.

7. MAXIMUM OUTPUT POWER

7.1 LIMIT

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

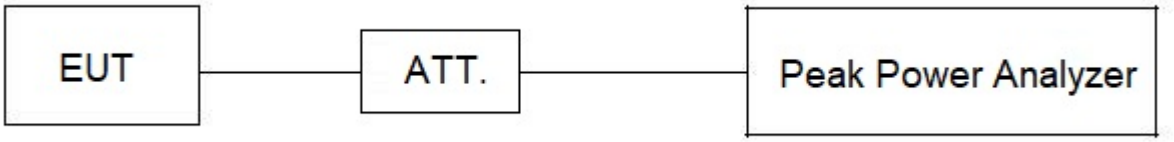
7.2 TEST PROCEDURE

a. The EUT was directly connected to the peak power analyzer and antenna output port as show in the block diagram below.
b. The maximum conducted output power was performed in accordance with method 11.9.2.3.1 (for AVG power) of ANSI C63.10-2013.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX F.

8. CONDUCTED SPURIOUS EMISSIONS

8.1 LIMIT

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

8.2 TEST PROCEDURE

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

For Reference Level:

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

For Emission Level - Band edge:

Spectrum Parameters	Setting
Start Frequency	2300 MHz
Stop Frequency	2690 MHz
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

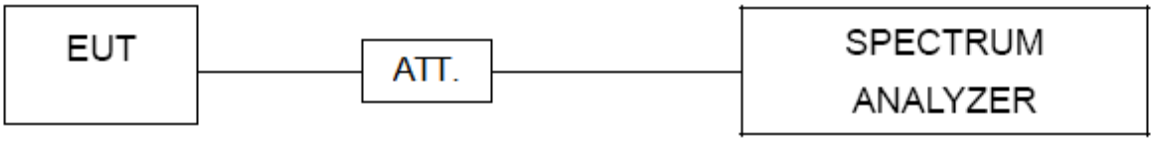
For Emission Level - Harmonic:

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

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX G.

9. POWER SPECTRAL DENSITY

9.1 LIMIT

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

9.2 TEST PROCEDURE

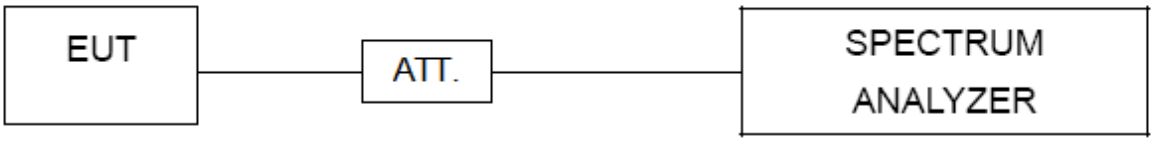
a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Span	1.5 times the DTS bandwidth
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6 TEST RESULTS

Please refer to the APPENDIX H.

10. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI TEST RECEIVER	R&S	ESCI	100382	Dec. 06, 2025
2	TWO-LINE V-NETWORK	R&S	ENV216	101447	Dec. 06, 2025
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
4	Cable	N/A	SFT205-NMNM-9M -001	9M	Nov. 11, 2025
5	643 Shield Room	ETS	6*4*3	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Active Loop Antenna	Schwarzbeck	FMZB 1513-60	00025	Mar. 01, 2026
2	Receiver	Agilent	N9038A	MY52130039	Jan. 10, 2026
3	Cable	RegalWay	LMR400-NMNM-6 m	N/A	Apr. 26, 2026
4	Cable	RegalWay	LMR400-NMRANM -3.5m	N/A	Apr. 26, 2026
5	966 Chamber room	CM	9*6*6	N/A	May 09, 2026

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01462	Dec. 14, 2025
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Dec. 14, 2025
3	Preamplifier	EMC INSTRUMENT	EMC001330	980998	May 17, 2026
4	Cable	RegalWay	LMR400-NMNM-12 .5m	N/A	Jun. 04, 2026
5	Cable	RegalWay	LMR400-NMNM-3 m	N/A	Jun. 04, 2026
6	Cable	RegalWay	LMR400-NMNM-0. 5m	N/A	Jun. 04, 2026
7	Receiver	Agilent	N9038A	MY52130039	Jan. 10, 2026
8	Positioning Controller	MF	MF-7802	N/A	N/A
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	966 Chamber room	CM	9*6*6	N/A	May 09, 2026

Radiated Emissions - 1 GHz - 18 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Positioning Controller	MF	MF-7802	N/A	N/A
2	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
3	MXA Signal Analyzer	KEYSIGHT	N9020B	MY63430227	Oct. 29, 2025
4	Cable	EMC INSTRUMENT	EMC104-SM-SM-10000	N/A	Jun. 12, 2026
5	Cable	EMC INSTRUMENT	EMC104-SM-SM-3000	N/A	Jun. 12, 2026
6	Cable	EMC INSTRUMENT	EMC104-SM-SM-1000	N/A	Jun. 12, 2026
7	966 Chamber room	Tai He	9*6*6（NSA&VSWR）	N/A	May 18, 2026
8	Double Ridged Horn Antenna	EMC INSTRUMENT	DRH18-E	210509A18ES	Aug. 28, 2025
9	Preamplifier	EMC INSTRUMENT	EMC118A45SE	981001	May 28, 2026
10	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
11	Filter	COM-MW	ZHPF6-M3000-18000-174	N/A	Oct. 29, 2025

Radiated Emissions - Above 18 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Preamplifier	EMC INSTRUMENT	EMC184045SE	980905	Oct. 29, 2025
2	Cable	RegalWay	RWLP50-2.6A-2.92M2.92M-1.1M	N/A	Jul. 25, 2025
3	Cable	Tonscend	HF160-KMKM-3M	N/A	Jul. 25, 2025
4	Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	1227	Oct. 20, 2025
5	Positioning Controller	MF	MF-7802	N/A	N/A
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	EXA Spectrum Analyzer	Keysight	N9010A	MY55150209	May 17, 2026
8	966 Chamber room	CM	9*6*6	N/A	May 15, 2026

Bandwidth & Conducted Spurious Emissions & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	FSV Signal & Spectrum Analyzer	R&S	FSV3044	101682	Oct. 17, 2025
2	CTA	BTL	CTA	N/A	N/A
3	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	May 17, 2026
2	Wideband power sensor	Keysight	N1923A	MY58310004	May 17, 2026
3	Isolation attenuator	Z-Link	ASMA-10-18-2W	N/A	N/A

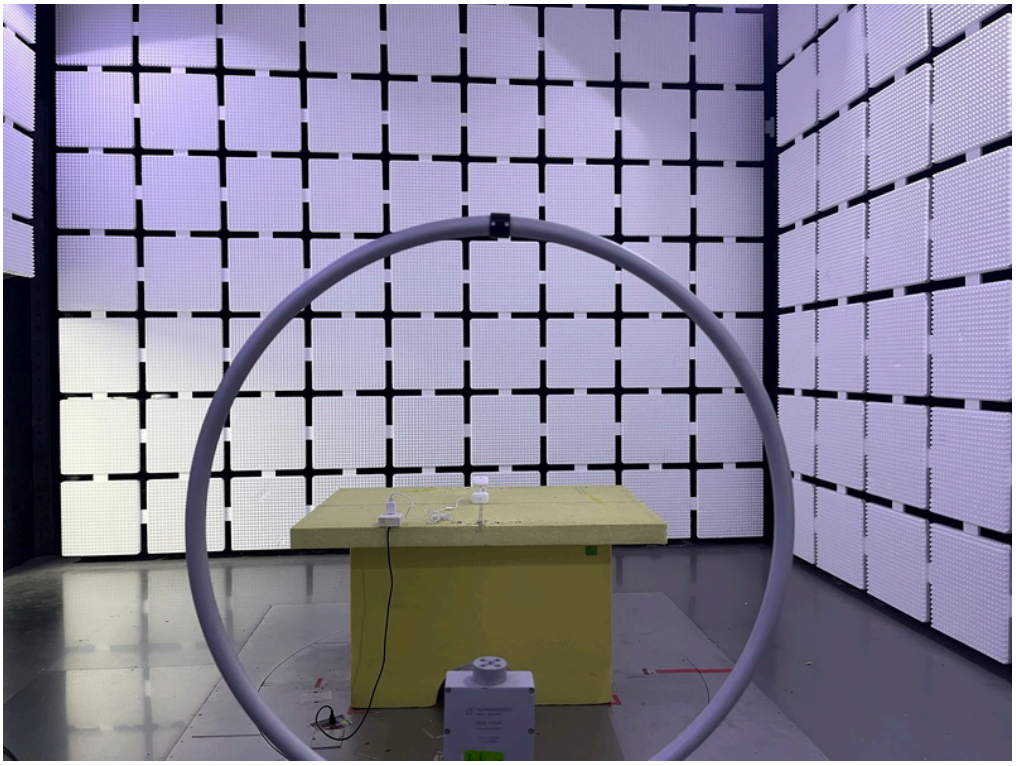
Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

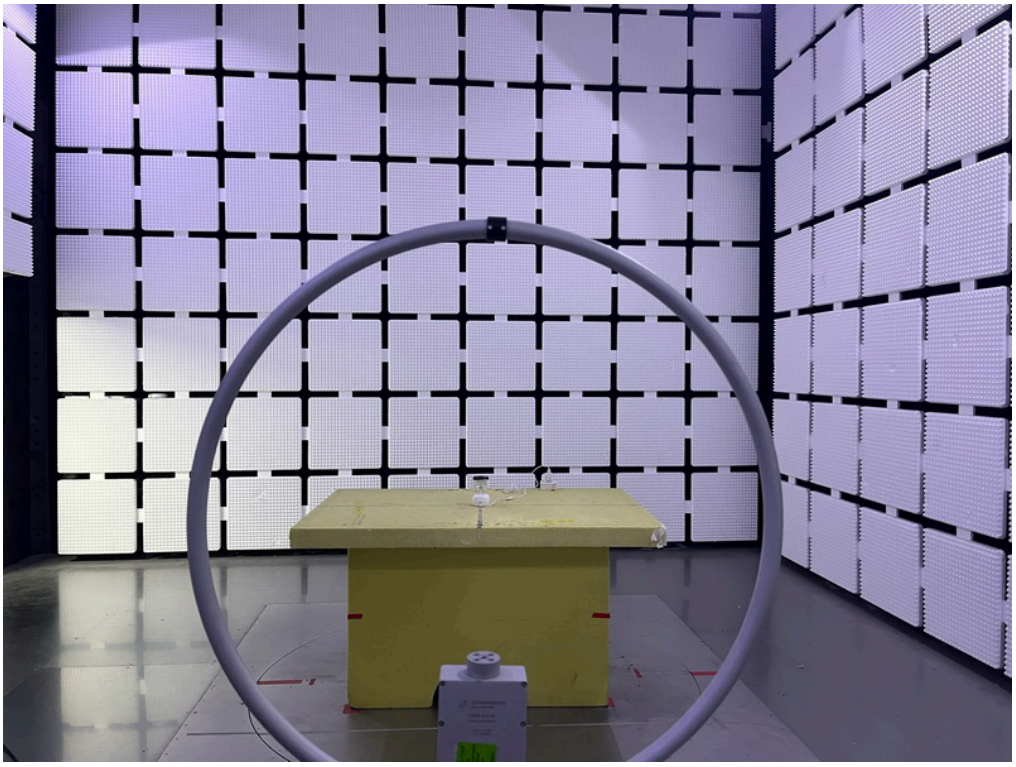
11. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos

Radiated Emissions Test Photos

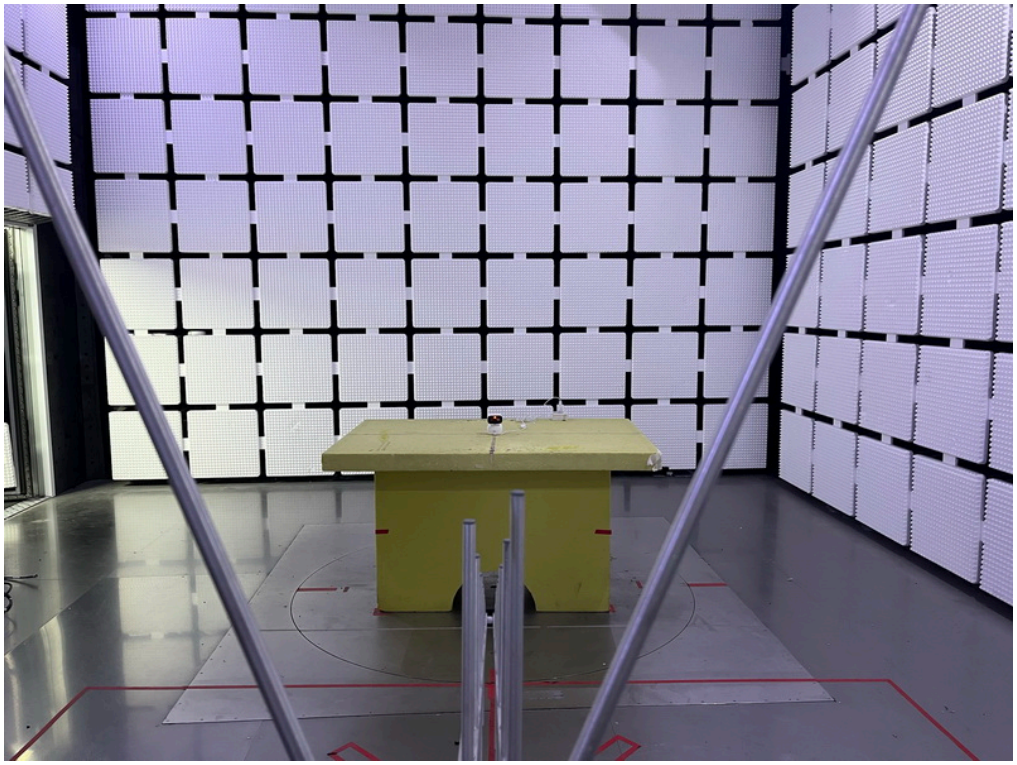
9 kHz to 30 MHz

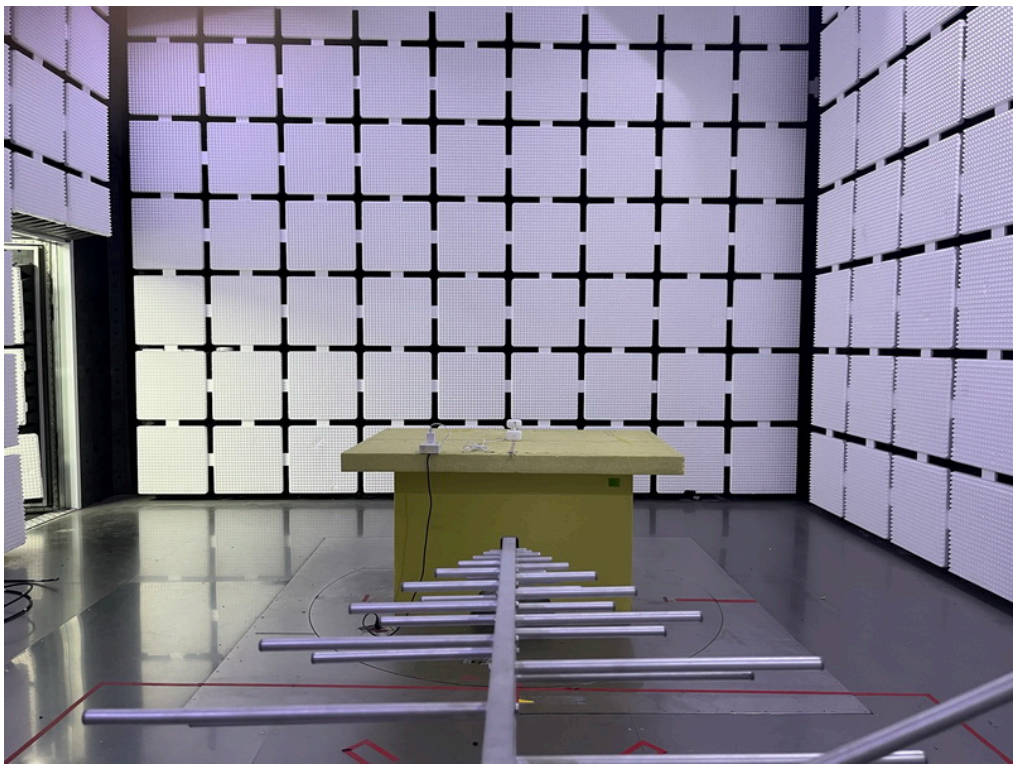




Radiated Emissions Test Photos

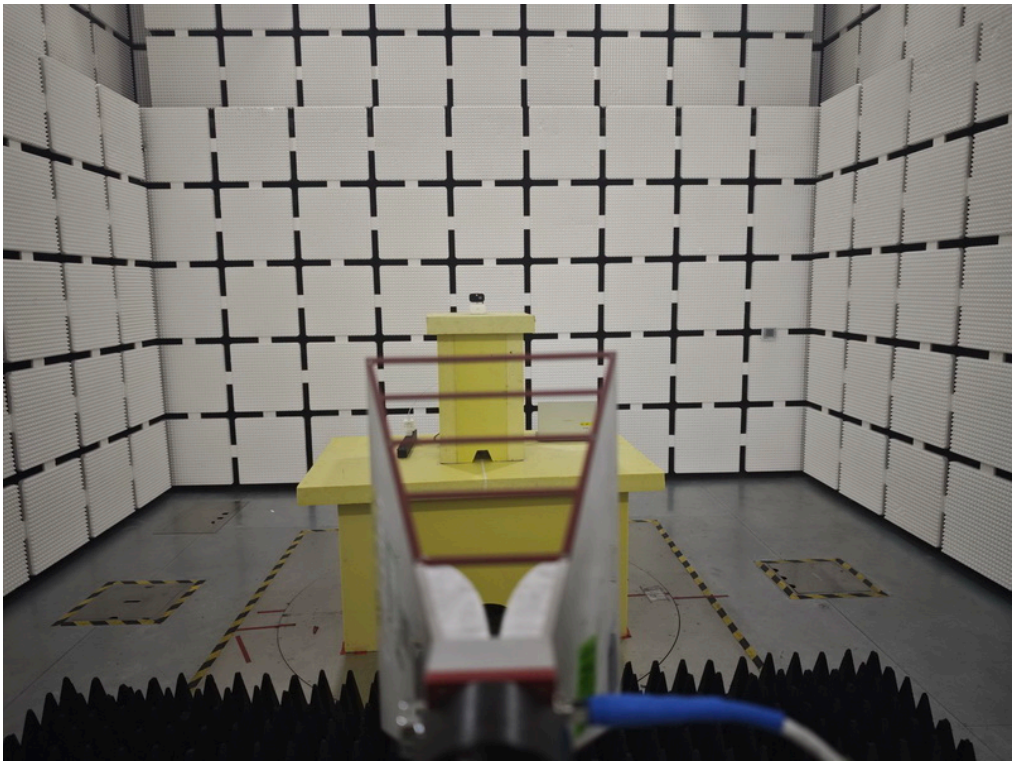
30 MHz to 1 GHz

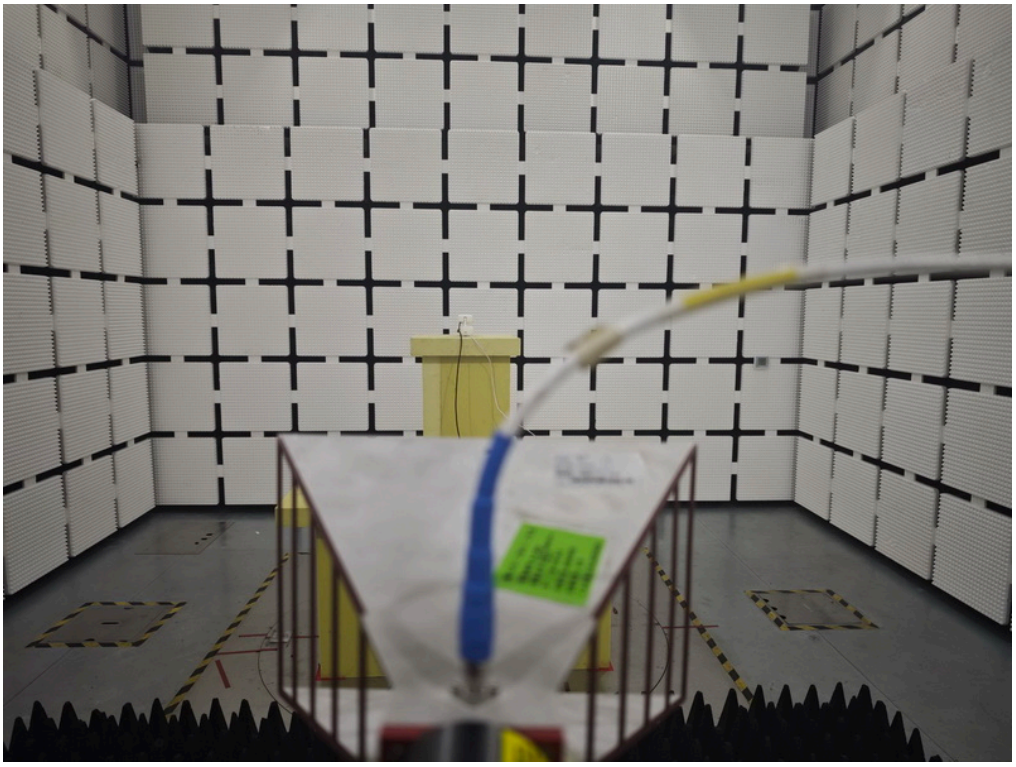




Radiated Emissions Test Photos

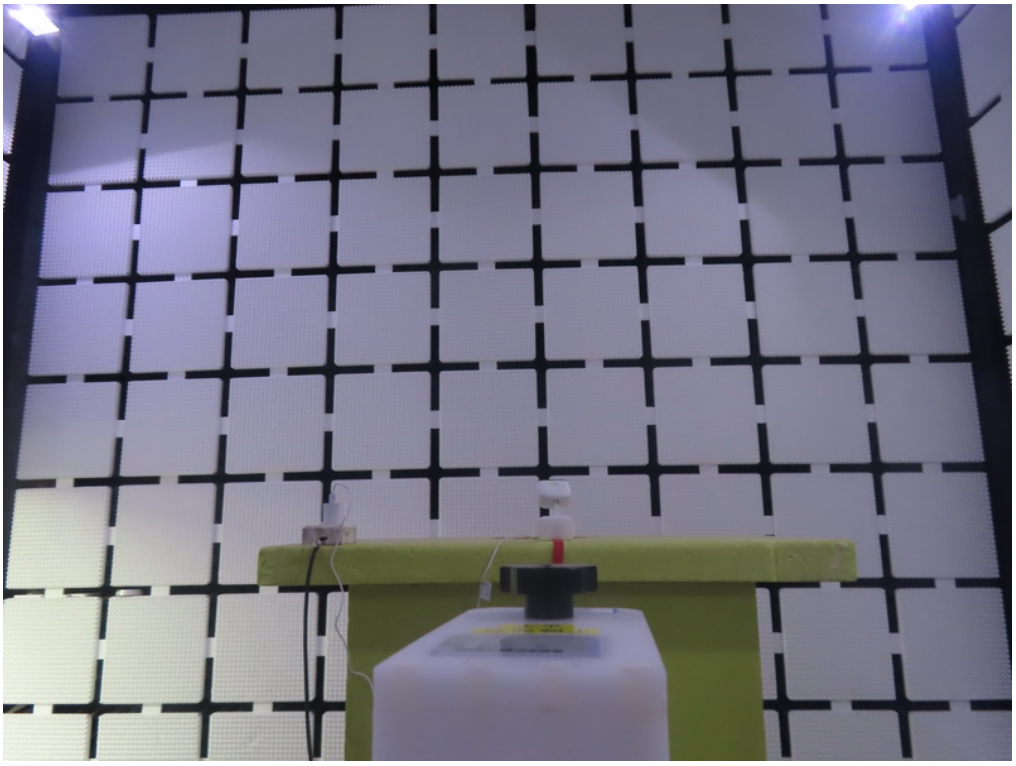
Band edge & Harmonic(1 GHz to 18 GHz)

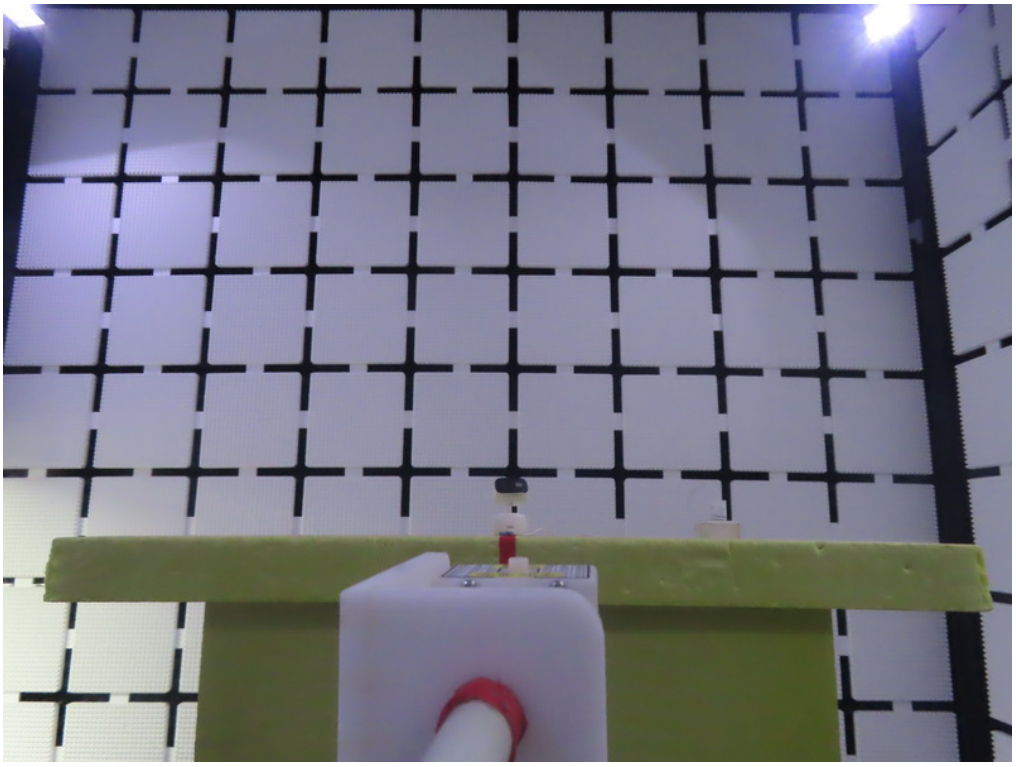




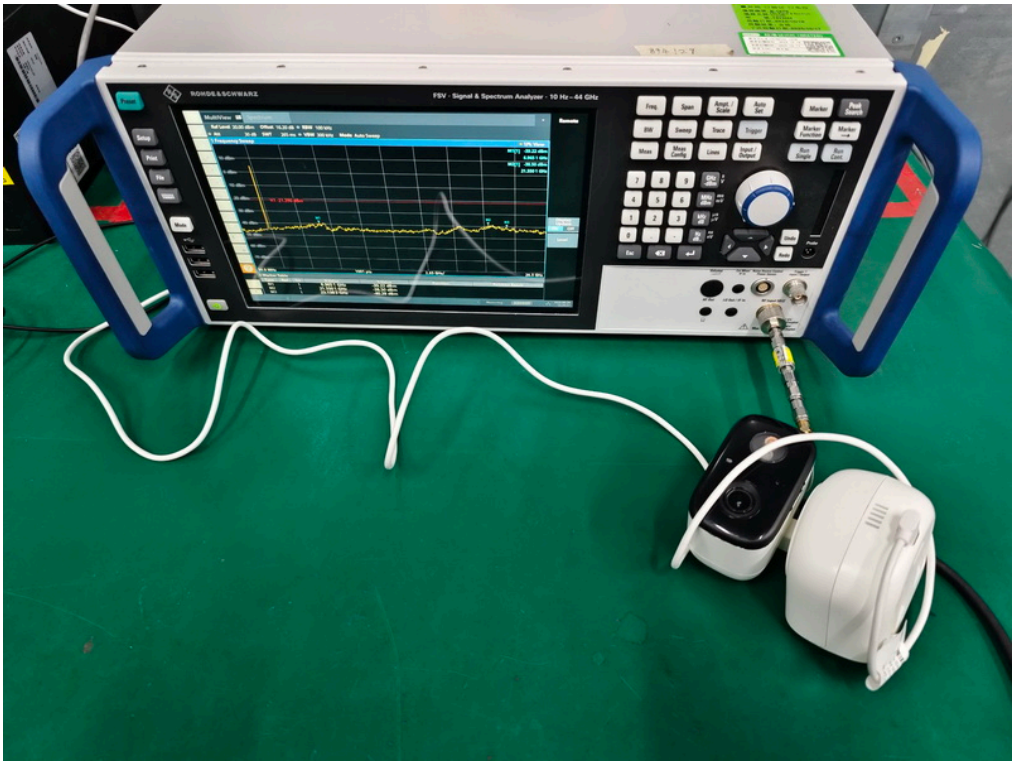
Radiated Emissions Test Photos

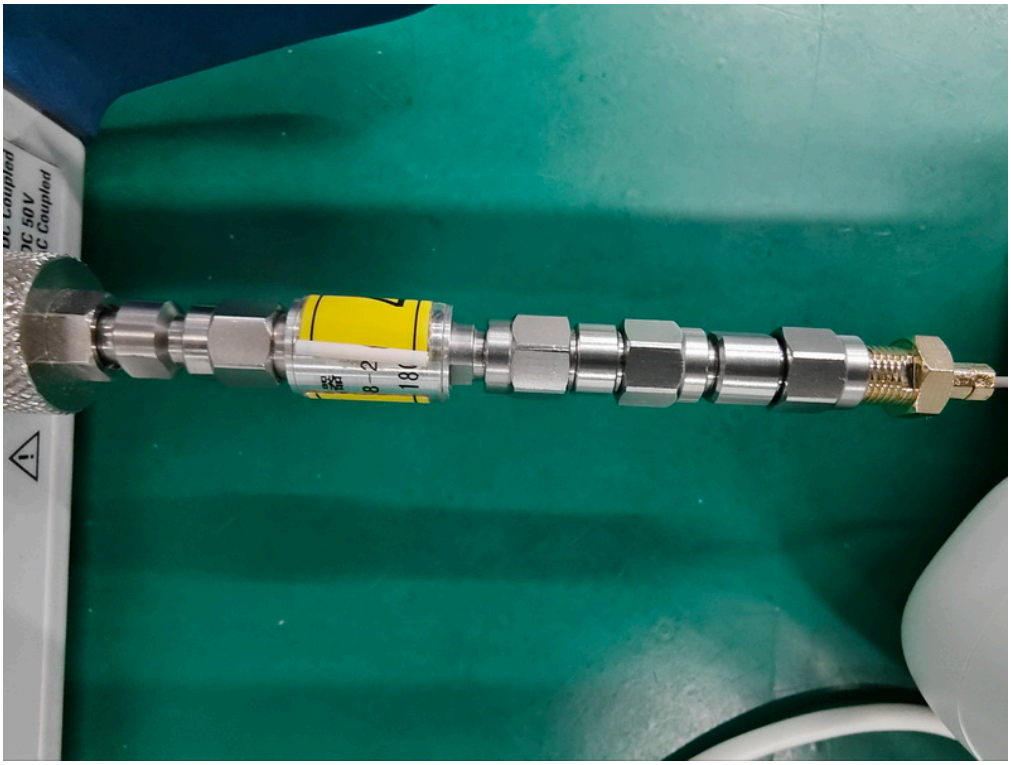
Harmonic(18 GHz to 26.5 GHz)





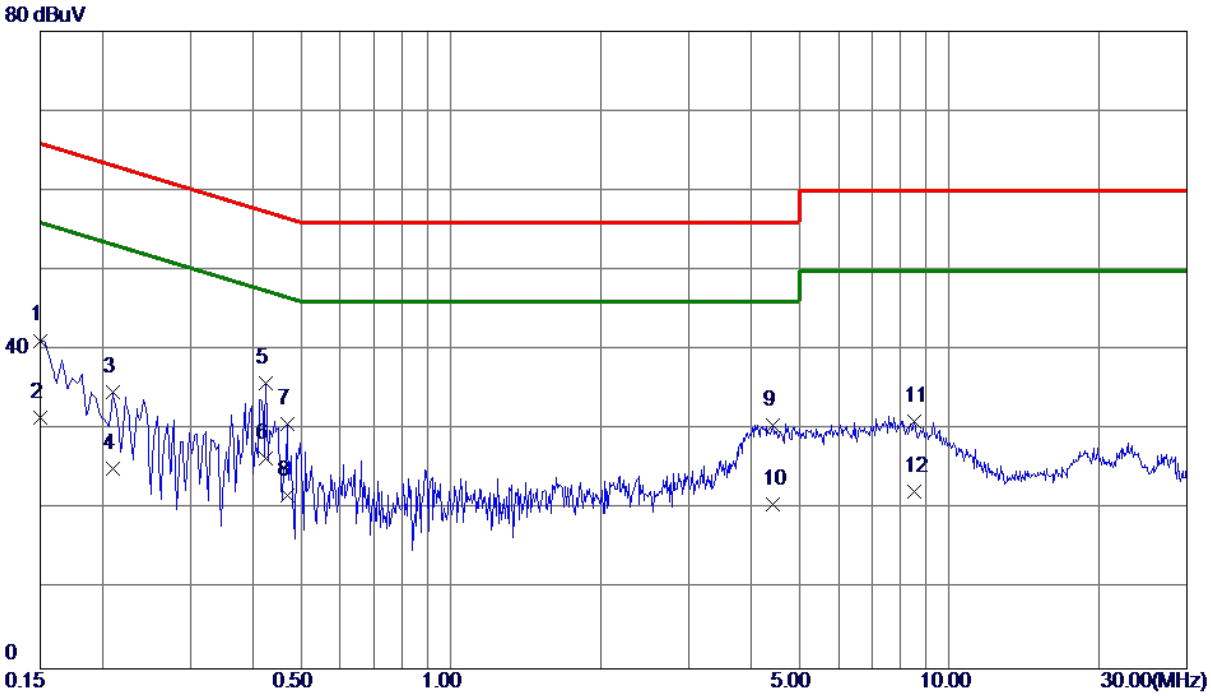
Conducted Test Photos





APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

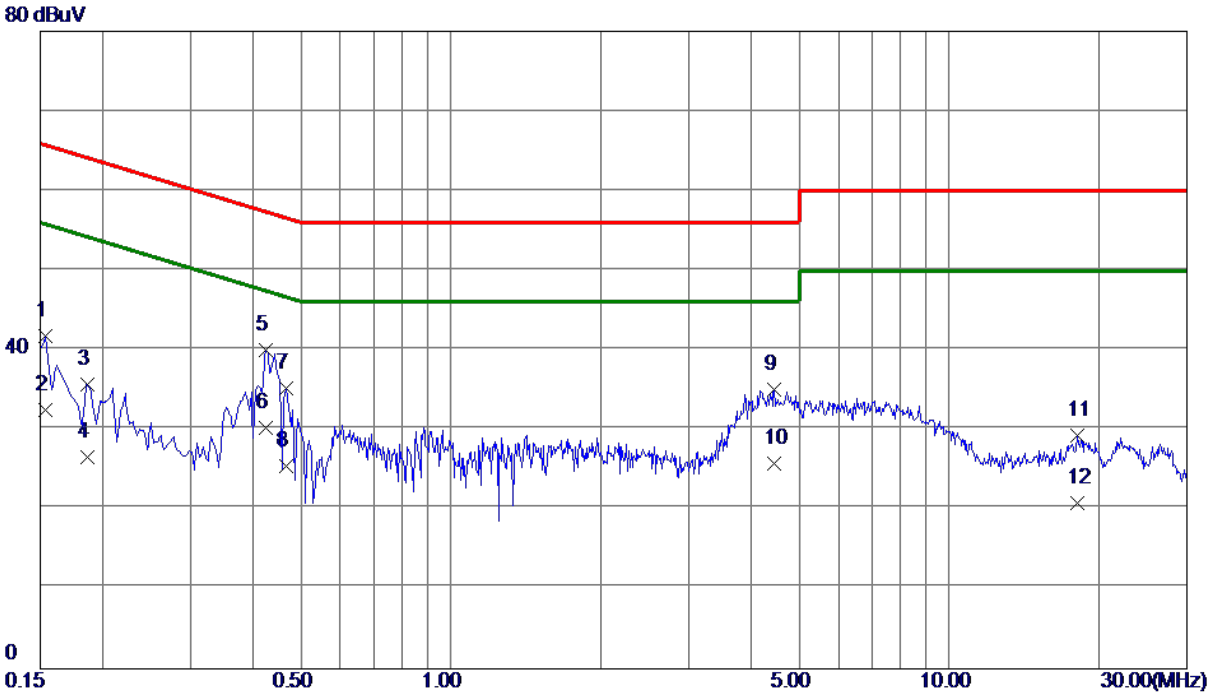
Test Mode	TX B Mode Channel 01	Phase	Line



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1500	31.62	9.58	41.20	66.00	-24.80	QP	
2	0.1500	21.90	9.58	31.48	56.00	-24.52	AVG	
3	0.2100	25.11	9.59	34.70	63.21	-28.51	QP	
4	0.2100	15.60	9.59	25.19	53.21	-28.02	AVG	
5	0.4260	26.25	9.61	35.86	57.33	-21.47	QP	
6 *	0.4260	16.80	9.61	26.41	47.33	-20.92	AVG	
7	0.4700	21.12	9.62	30.74	56.51	-25.77	QP	
8	0.4700	12.10	9.62	21.72	46.51	-24.79	AVG	
9	4.4340	20.74	9.87	30.61	56.00	-25.39	QP	
10	4.4340	10.79	9.87	20.66	46.00	-25.34	AVG	
11	8.5140	21.05	10.06	31.11	60.00	-28.89	QP	
12	8.5140	12.21	10.06	22.27	50.00	-27.73	AVG	

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

Test Mode	TX B Mode Channel 01	Phase	Neutral

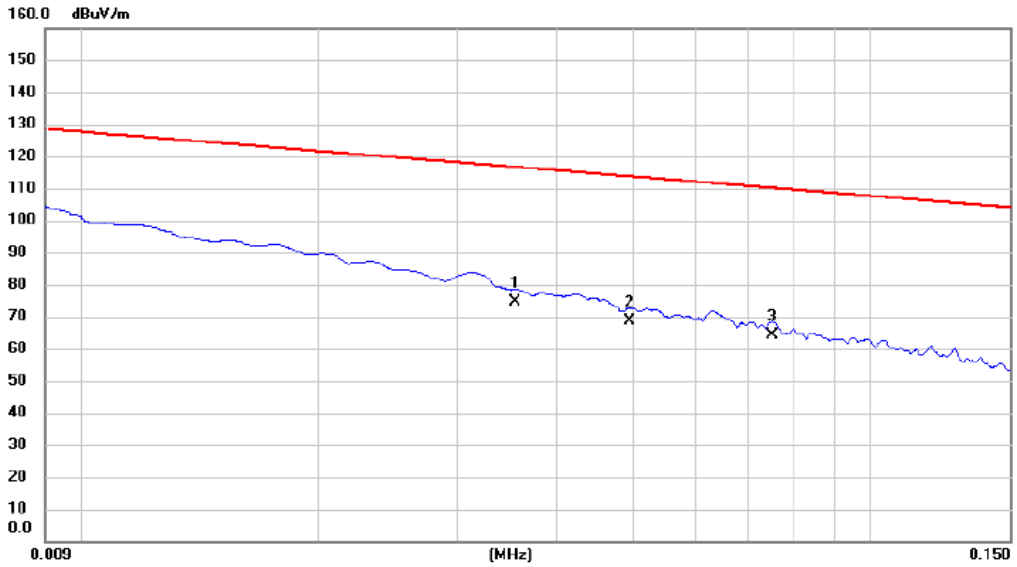


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1539	32. 14	9. 64	41. 78	65. 79	-24. 01	QP	
2	0. 1539	22. 80	9. 64	32. 44	55. 79	-23. 35	AVG	
3	0. 1860	26. 09	9. 65	35. 74	64. 21	-28. 47	QP	
4	0. 1860	16. 91	9. 65	26. 56	54. 21	-27. 65	AVG	
5	0. 4260	30. 34	9. 69	40. 03	57. 33	-17. 30	QP	
6 *	0. 4260	20. 60	9. 69	30. 29	47. 33	-17. 04	AVG	
7	0. 4660	25. 43	9. 70	35. 13	56. 58	-21. 45	QP	
8	0. 4660	15. 70	9. 70	25. 40	46. 58	-21. 18	AVG	
9	4. 4660	25. 15	9. 94	35. 09	56. 00	-20. 91	QP	
10	4. 4660	15. 79	9. 94	25. 73	46. 00	-20. 27	AVG	
11	18. 0820	18. 69	10. 53	29. 22	60. 00	-30. 78	QP	
12	18. 0820	10. 30	10. 53	20. 83	50. 00	-29. 17	AVG	

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

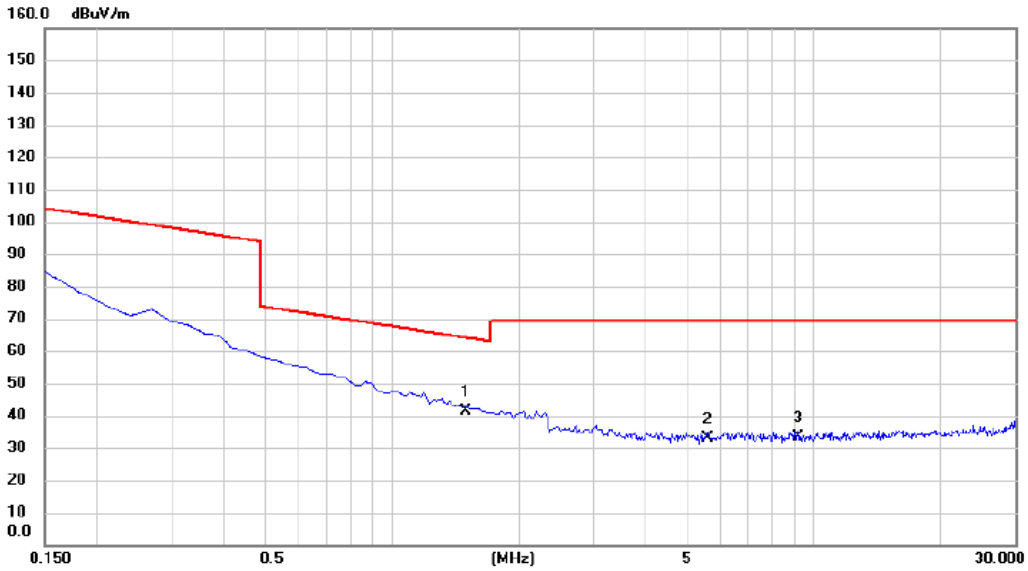
Test Mode	TX B Mode Channel 01	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.035	54.42	20.14	74.56	116.60	-42.04	AVG	
2		0.050	48.65	20.14	68.79	113.71	-44.92	AVG	
3		0.075	44.23	20.14	64.37	110.10	-45.73	AVG	

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

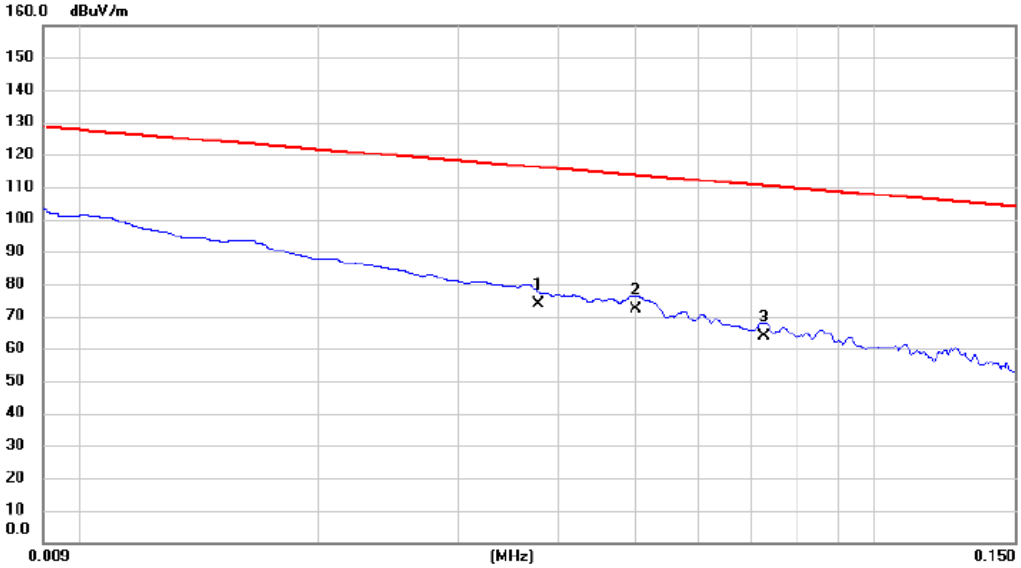
Test Mode	TX B Mode Channel 01	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	1.493	21.45	20.00	41.45	64.12	-22.67	QP	
2		5.612	12.63	20.24	32.87	69.54	-36.67	QP	
3		9.165	12.93	20.43	33.36	69.54	-36.18	QP	

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

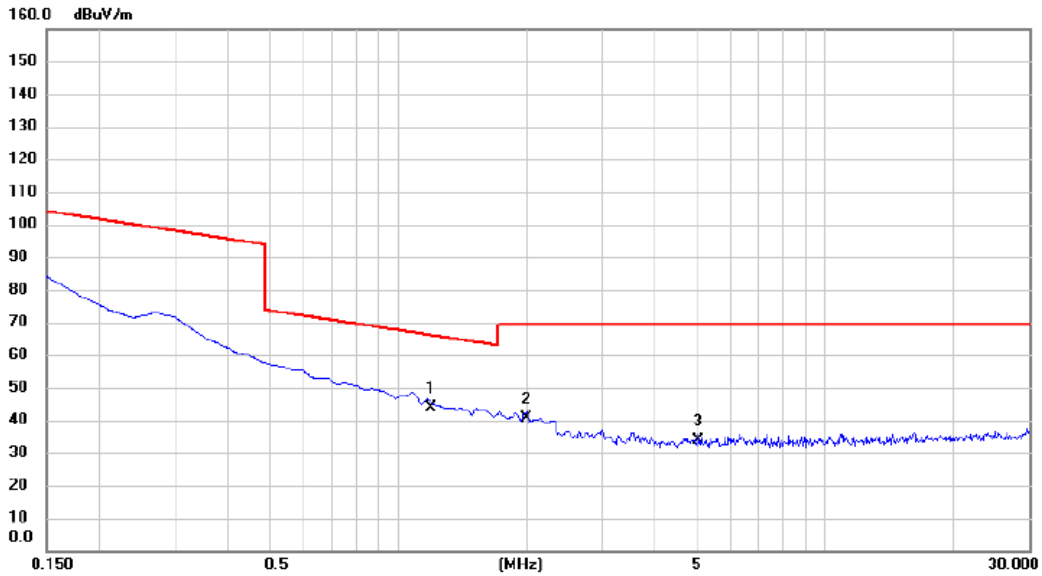
Test Mode	TX B Mode Channel 01	Polarization	Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.038	53.68	20.14	73.82	116.06	-42.24	AVG	
2	*	0.050	52.23	20.14	72.37	113.63	-41.26	AVG	
3		0.073	43.70	20.14	63.84	110.37	-46.53	AVG	

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

Test Mode	TX B Mode Channel 01	Polarization	Ant 90°

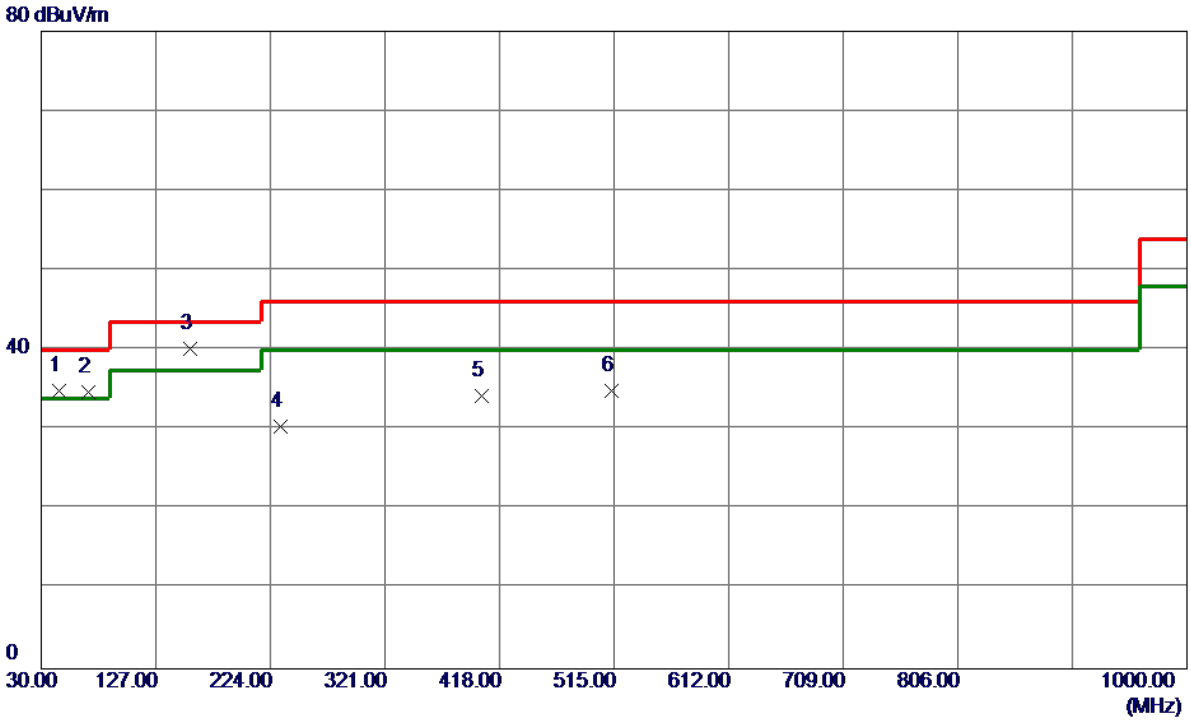


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	1.197	23.75	20.00	43.75	66.04	-22.29	QP	
2		2.001	20.58	20.01	40.59	69.54	-28.95	QP	
3		5.045	13.68	20.20	33.88	69.54	-35.66	QP	

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

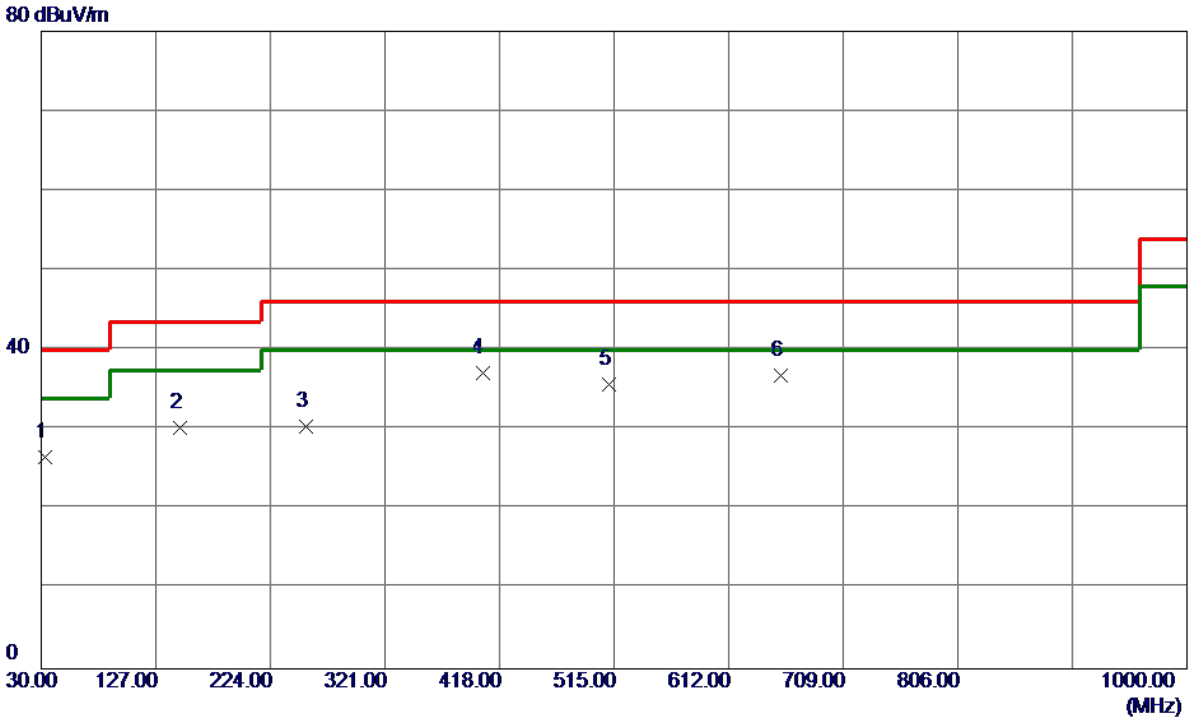
Test Mode	TX B Mode Channel 01	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	45.5200	46.03	-11.15	34.88	40.00	-5.12	Peak	
2	69.7699	47.72	-12.93	34.79	40.00	-5.21	Peak	
3 *	156.1000	50.71	-10.57	40.14	43.52	-3.38	Peak	
4	232.7300	43.04	-12.58	30.46	46.02	-15.56	Peak	
5	402.4800	41.56	-7.31	34.25	46.02	-11.77	Peak	
6	513.0600	39.91	-5.03	34.88	46.02	-11.14	Peak	

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

Test Mode	TX B Mode Channel 01	Polarization	Horizontal

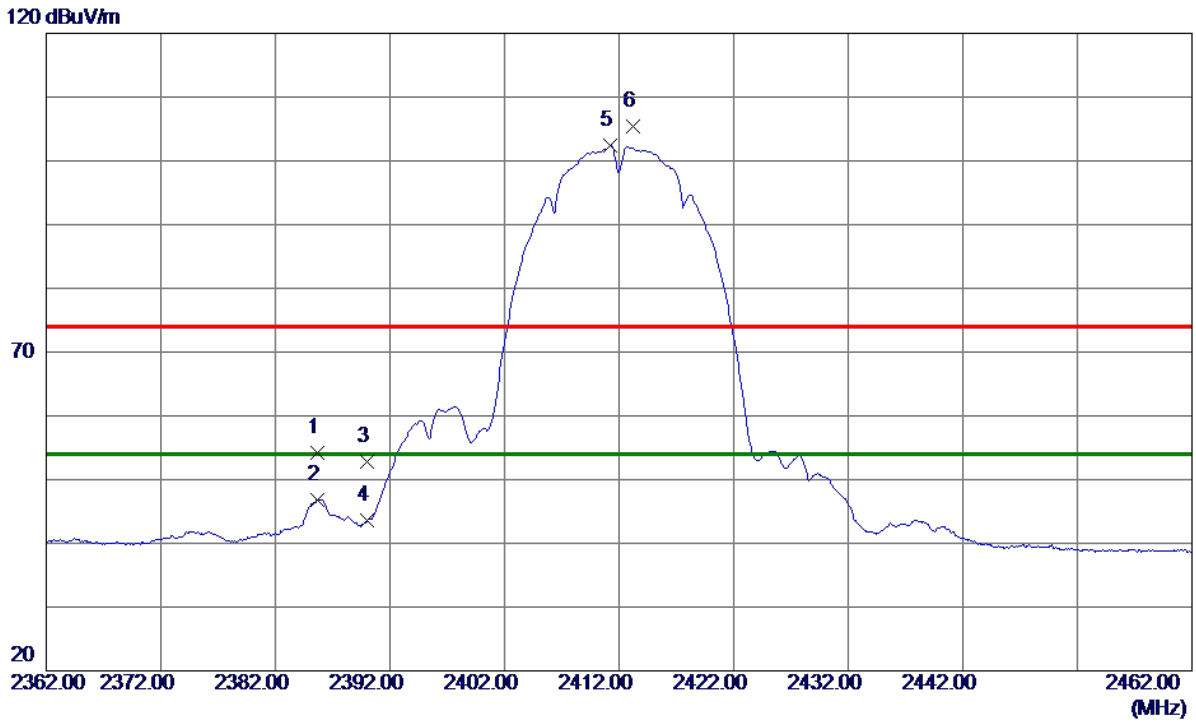


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	32.9100	39.07	-12.47	26.60	40.00	-13.40	Peak	
2	147.3700	41.01	-10.78	30.23	43.52	-13.29	Peak	
3	254.0700	41.72	-11.33	30.39	46.02	-15.63	Peak	
4 *	403.4500	44.44	-7.28	37.16	46.02	-8.86	Peak	
5	511.1200	40.73	-5.07	35.66	46.02	-10.36	Peak	
6	656.6200	39.04	-2.19	36.85	46.02	-9.17	Peak	

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

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

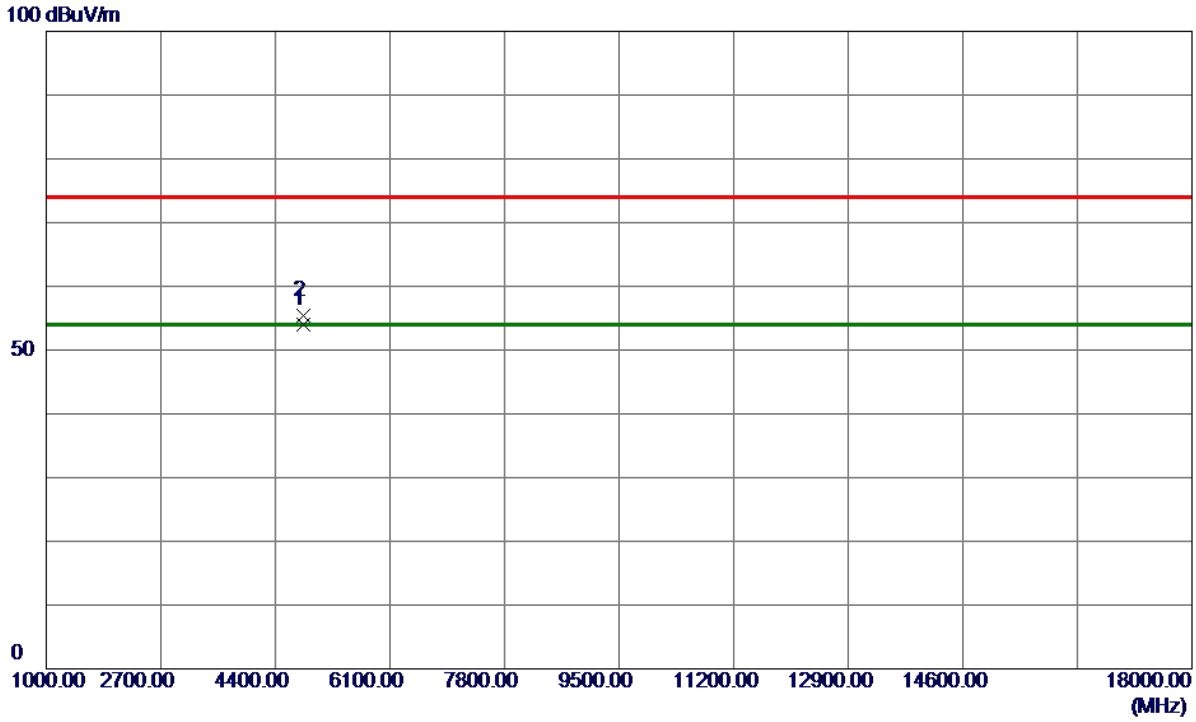
Test Mode	TX B Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2385.7000	44.89	9.25	54.14	74.00	-19.86	Peak	
2	2385.7000	37.62	9.25	46.87	54.00	-7.13	AVG	
3	2390.0000	43.45	9.26	52.71	74.00	-21.29	Peak	
4	2390.0000	34.31	9.26	43.57	54.00	-10.43	AVG	
5 *	2411.2000	93.02	9.31	102.33	54.00	48.33	AVG	No Limit
6	2413.2000	96.15	9.31	105.46	74.00	31.46	Peak	No Limit

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

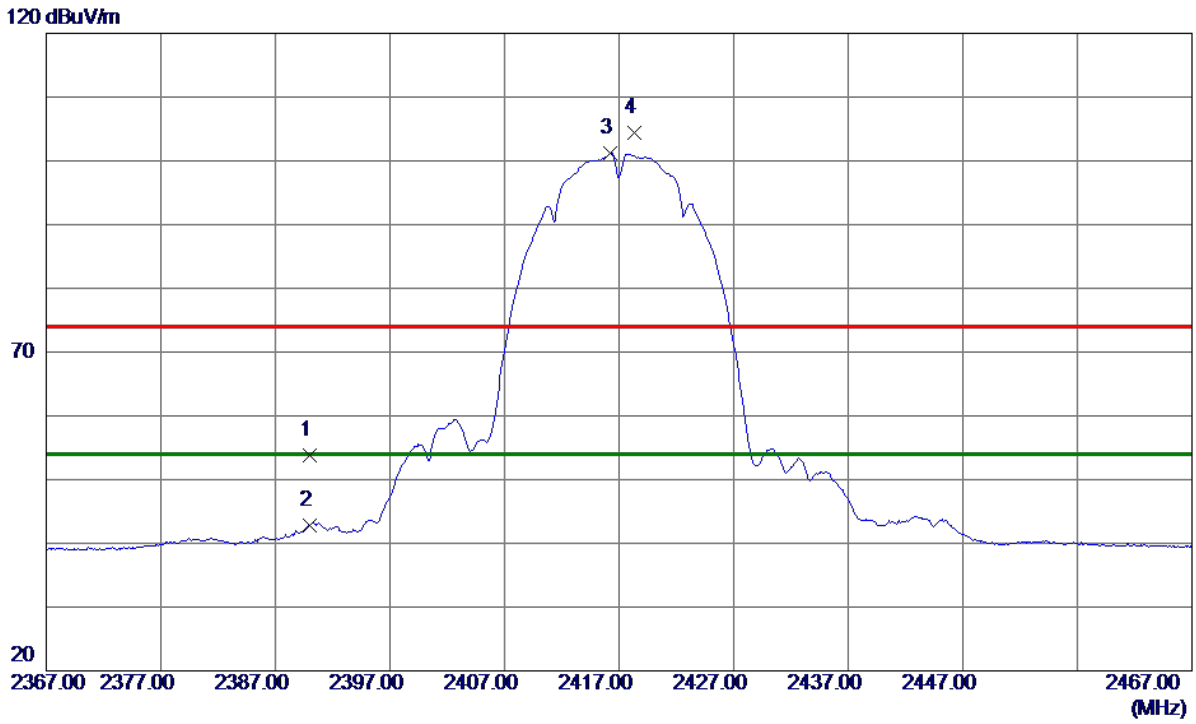
Test Mode	TX B Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824.0700	48.73	5.21	53.94	54.00	-0.06	AVG	
2	4824.1000	50.13	5.21	55.34	74.00	-18.66	Peak	

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

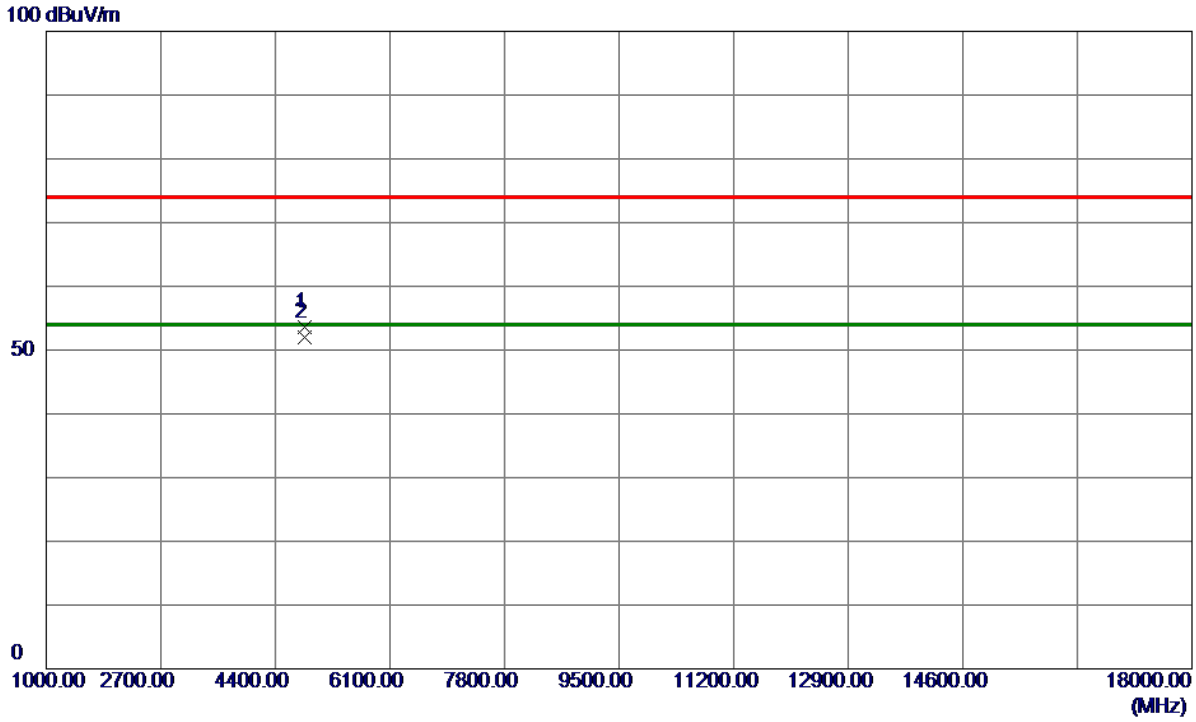
Test Mode	TX B Mode 2417 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	44.49	9.26	53.75	74.00	-20.25	Peak	
2	2390.0000	33.61	9.26	42.87	54.00	-11.13	AVG	
3 *	2416.2000	91.83	9.32	101.15	54.00	47.15	AVG	No Limit
4	2418.3000	95.11	9.32	104.43	74.00	30.43	Peak	No Limit

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

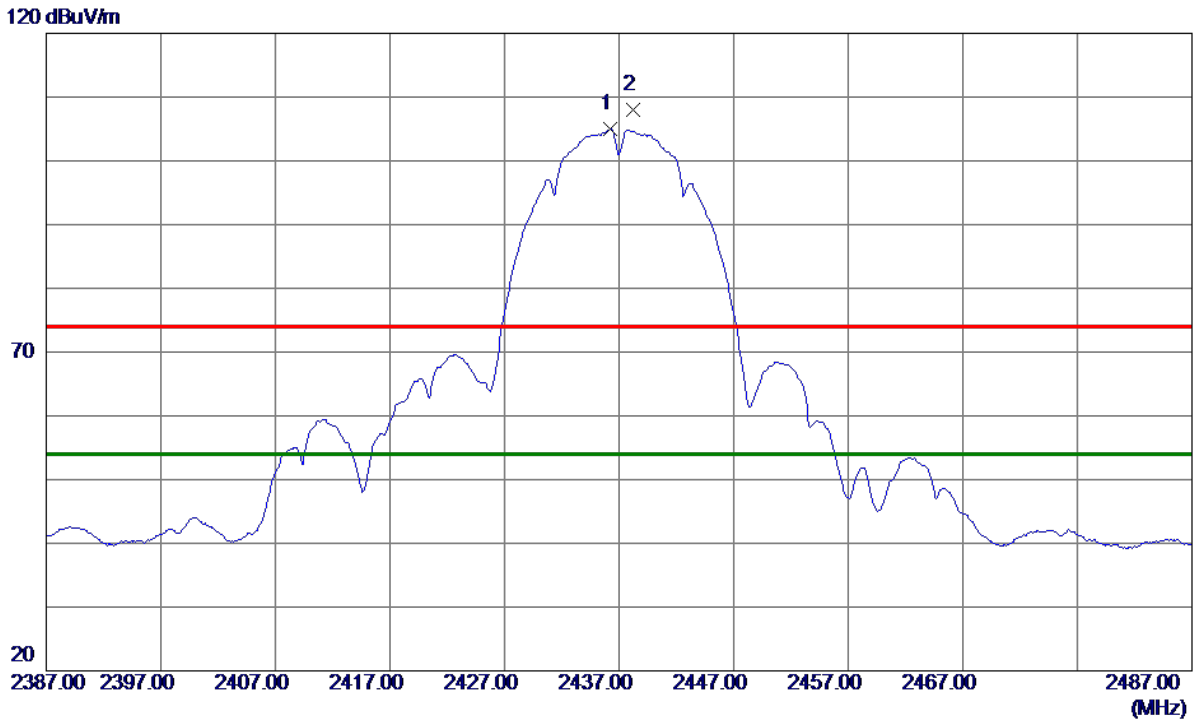
Test Mode	TX B Mode 2417 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4833.9800	48.38	5.23	53.61	74.00	-20.39	Peak	
2 *	4834.0200	46.77	5.23	52.00	54.00	-2.00	AVG	

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

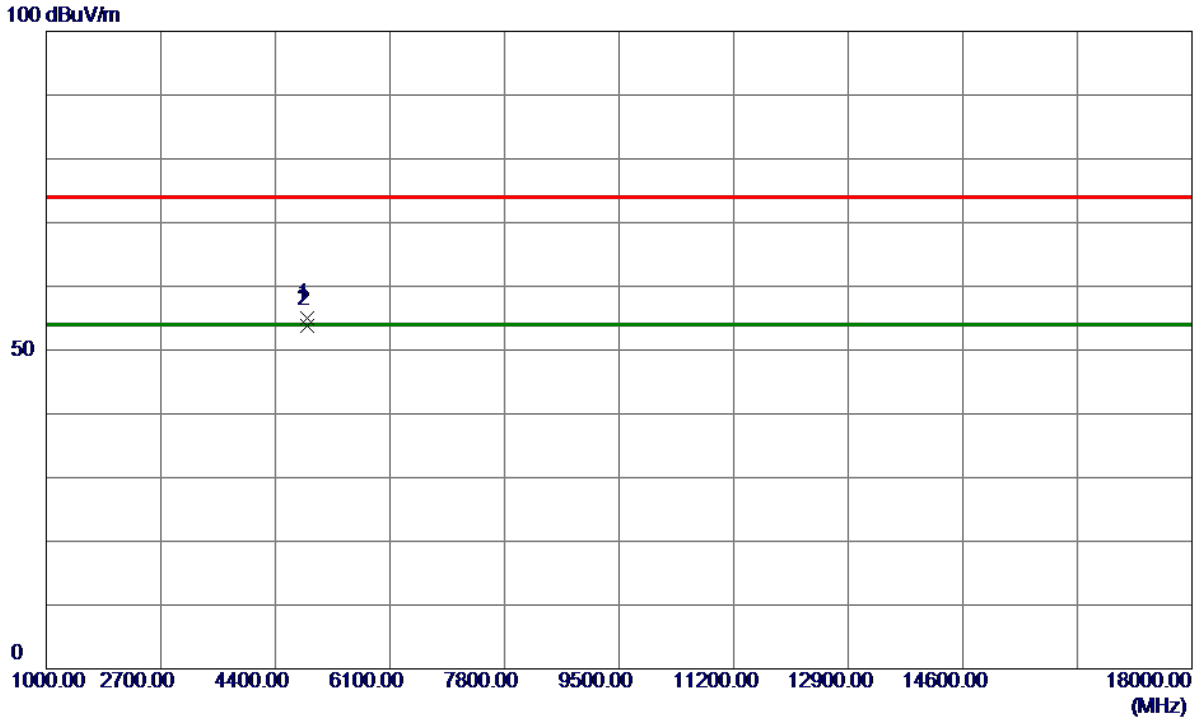
Test Mode	TX B Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2436.2000	95.62	9.37	104.99	54.00	50.99	AVG	No Limit
2	2438.2000	98.71	9.37	108.08	74.00	34.08	Peak	No Limit

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

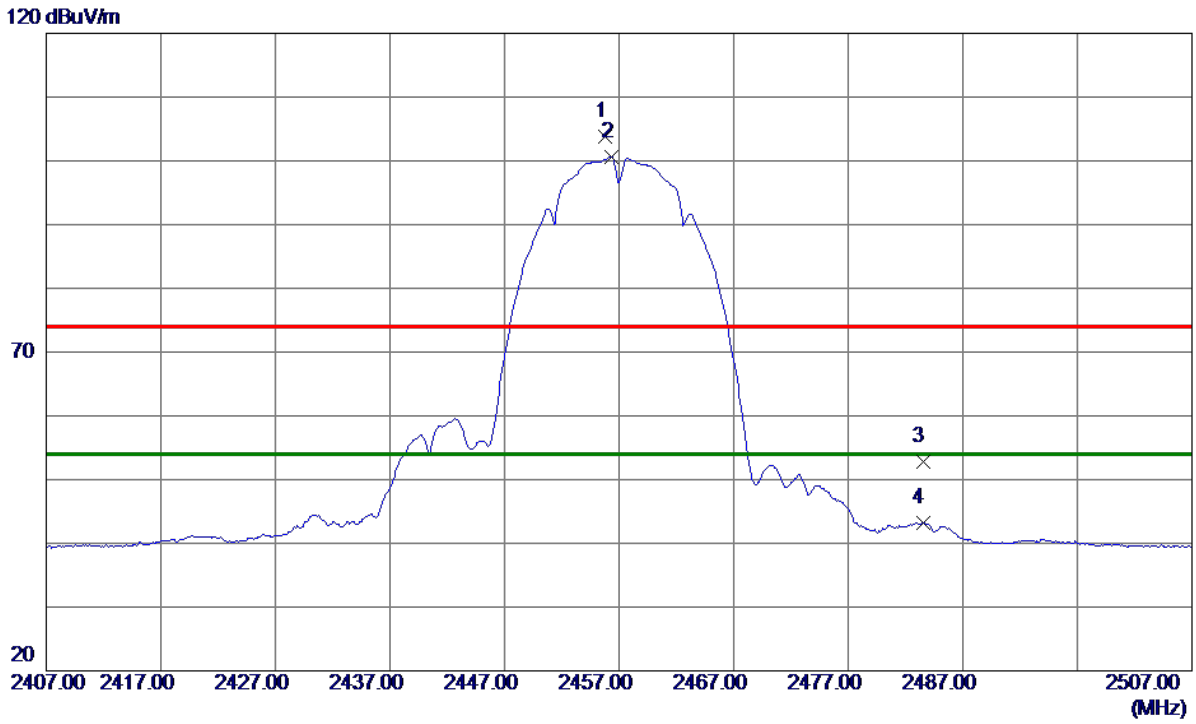
Test Mode	TX B Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874.0400	49.73	5.31	55.04	74.00	-18.96	Peak	
2 *	4874.0800	48.59	5.31	53.90	54.00	-0.10	AVG	

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

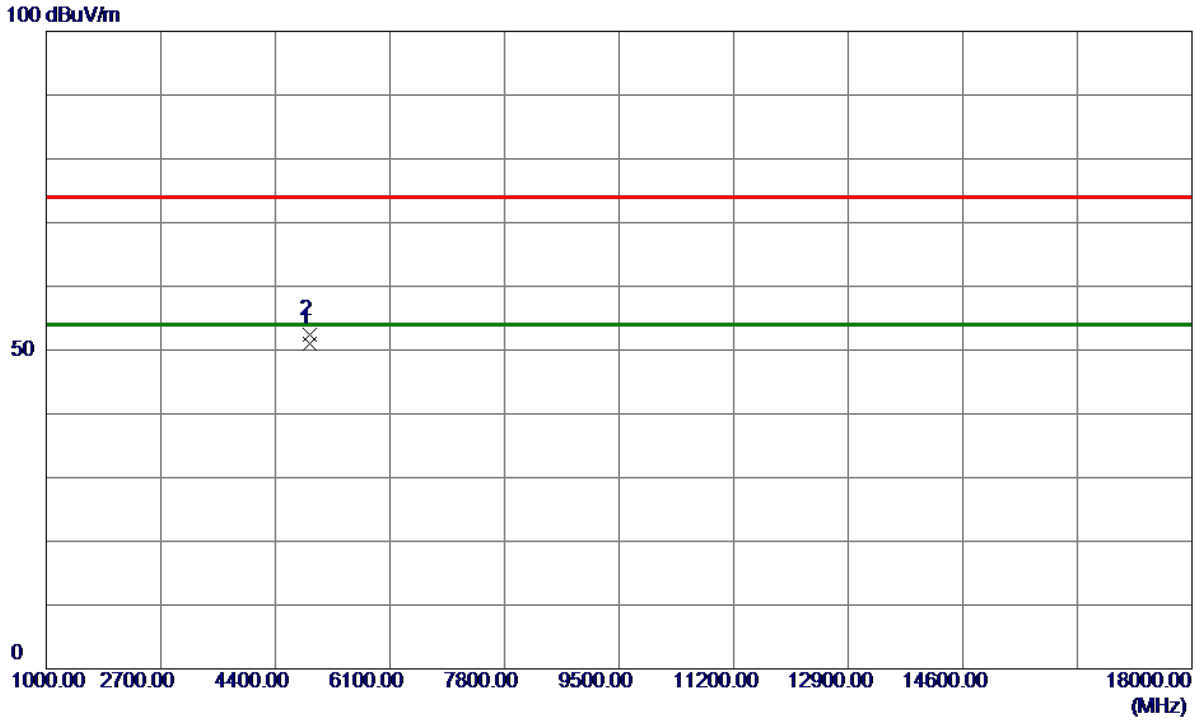
Test Mode	TX B Mode 2457 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2455.8000	94.34	9.41	103.75	74.00	29.75	Peak	No Limit
2 *	2456.3000	91.23	9.41	100.64	54.00	46.64	AVG	No Limit
3	2483.5000	43.34	9.48	52.82	74.00	-21.18	Peak	
4	2483.5000	33.69	9.48	43.17	54.00	-10.83	AVG	

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

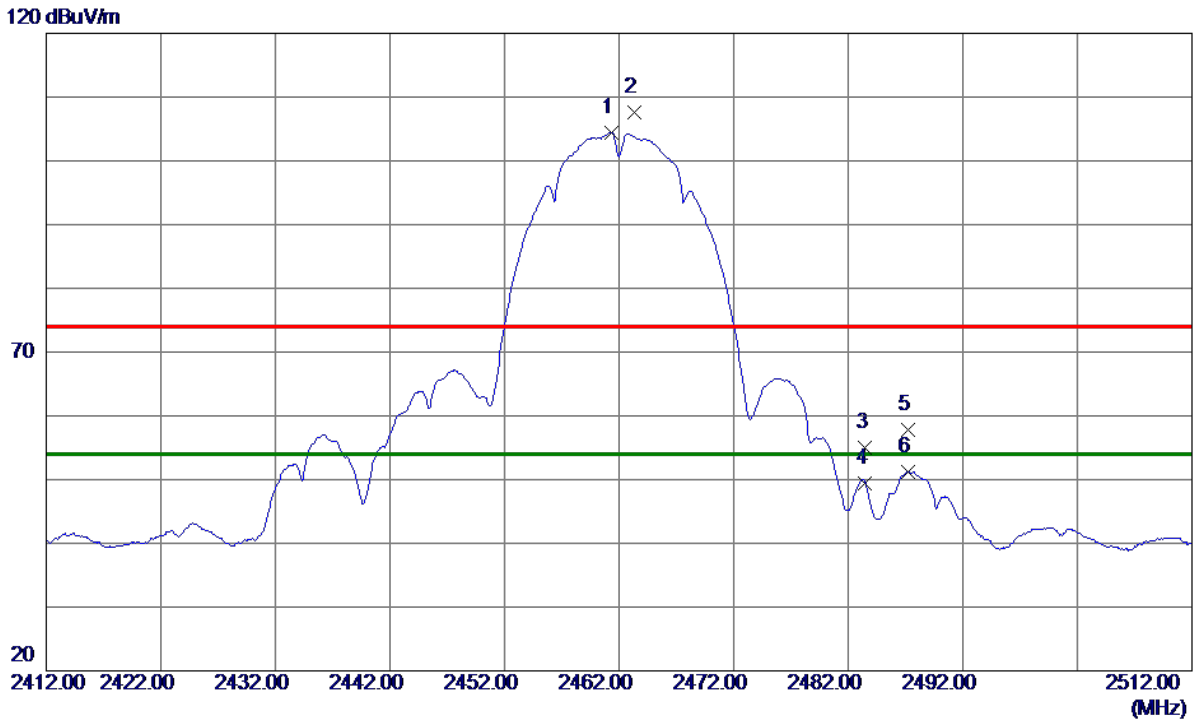
Test Mode	TX B Mode 2457 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4914.0000	45.59	5.39	50.98	54.00	-3.02	AVG	
2	4913.9000	47.01	5.39	52.40	74.00	-21.60	Peak	

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

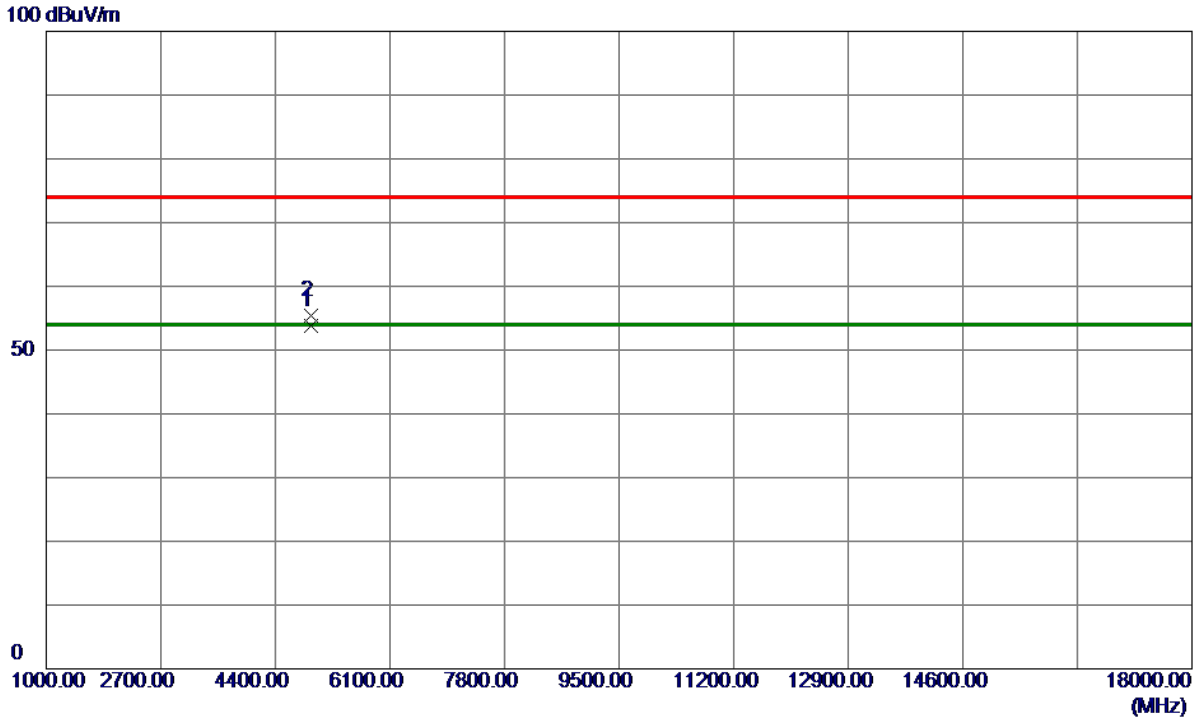
Test Mode	TX B Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2461.3000	95.07	9.42	104.49	54.00	50.49	AVG	No Limit
2	2463.3000	98.13	9.43	107.56	74.00	33.56	Peak	No Limit
3	2483.5000	45.55	9.48	55.03	74.00	-18.97	Peak	
4	2483.5000	39.98	9.48	49.46	54.00	-4.54	AVG	
5	2487.2000	48.35	9.48	57.83	74.00	-16.17	Peak	
6	2487.2000	41.69	9.48	51.17	54.00	-2.83	AVG	

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

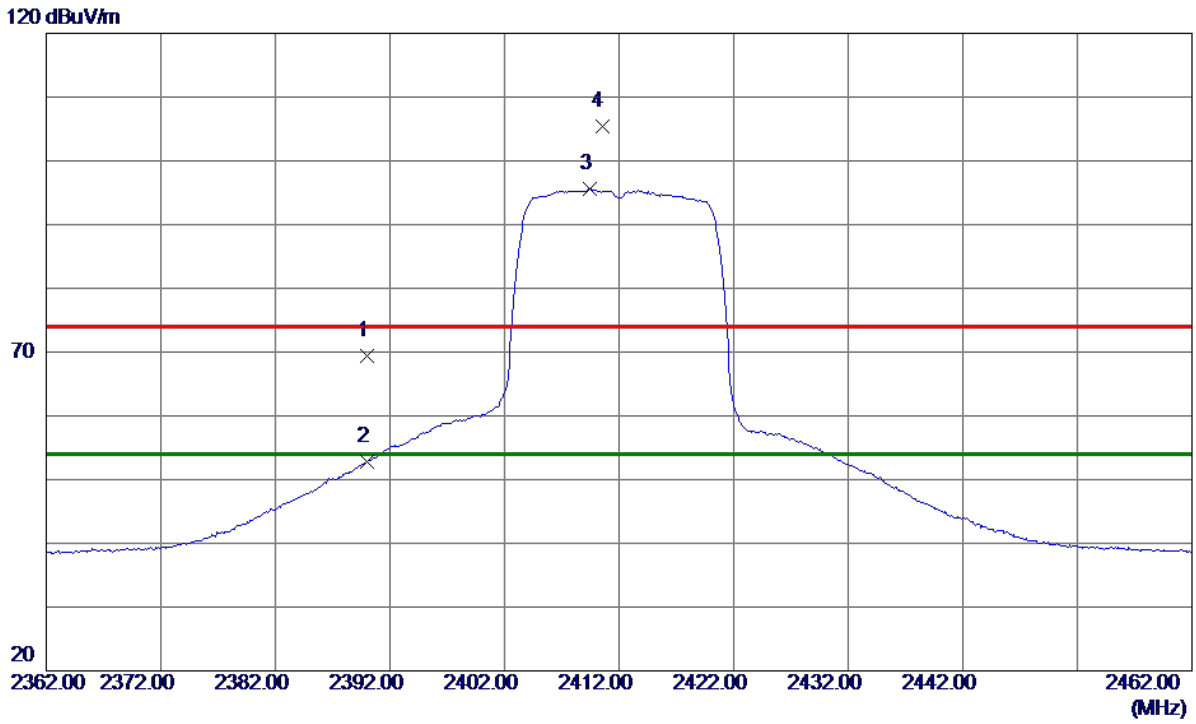
Test Mode	TX B Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.0200	48.45	5.41	53.86	54.00	-0.14	AVG	
2	4924.0800	49.99	5.41	55.40	74.00	-18.60	Peak	

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

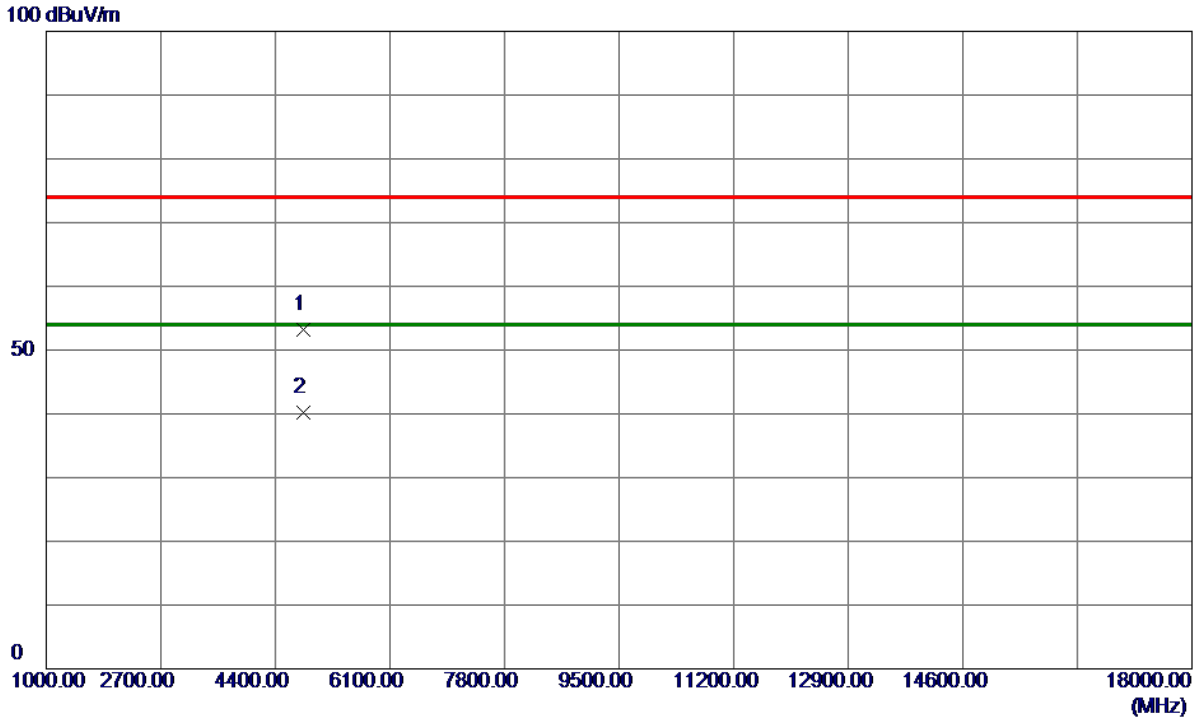
Test Mode	TX G Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	60.19	9.26	69.45	74.00	-4.55	Peak	
2	2390.0000	43.53	9.26	52.79	54.00	-1.21	AVG	
3 *	2409.4000	86.31	9.30	95.61	54.00	41.61	AVG	No Limit
4	2410.5000	96.03	9.30	105.33	74.00	31.33	Peak	No Limit

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

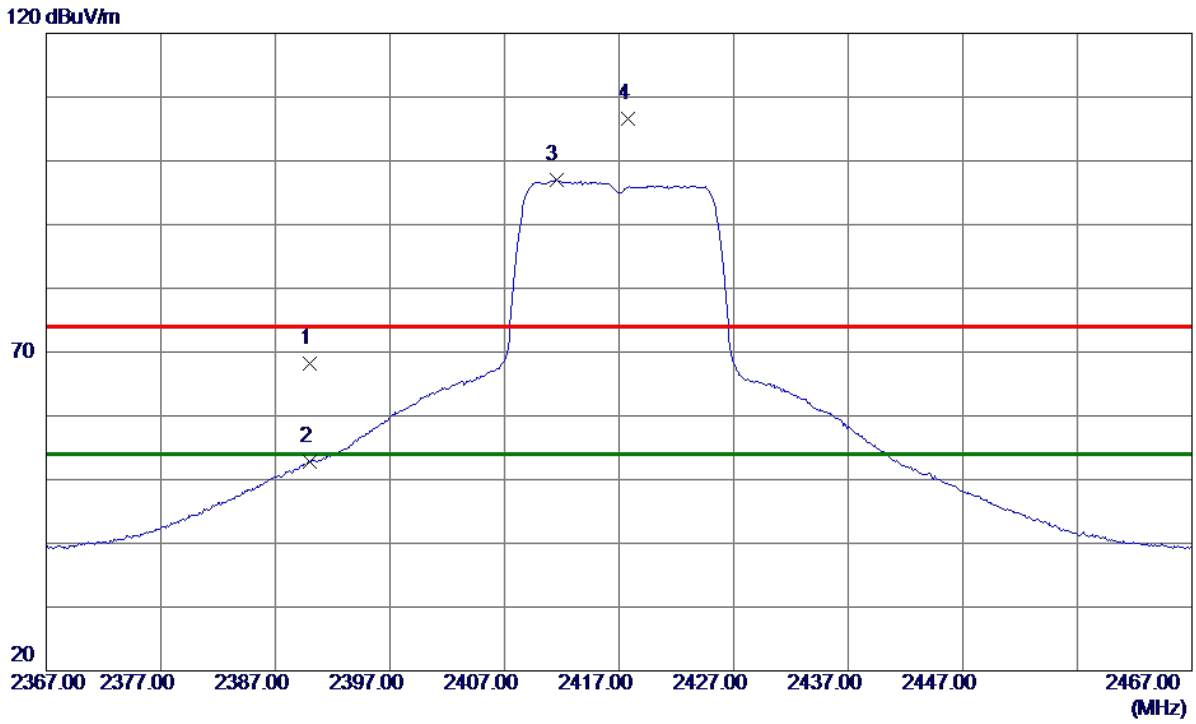
Test Mode	TX G Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4819.1000	48.03	5.20	53.23	74.00	-20.77	Peak	
2 *	4822.7000	35.03	5.21	40.24	54.00	-13.76	AVG	

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

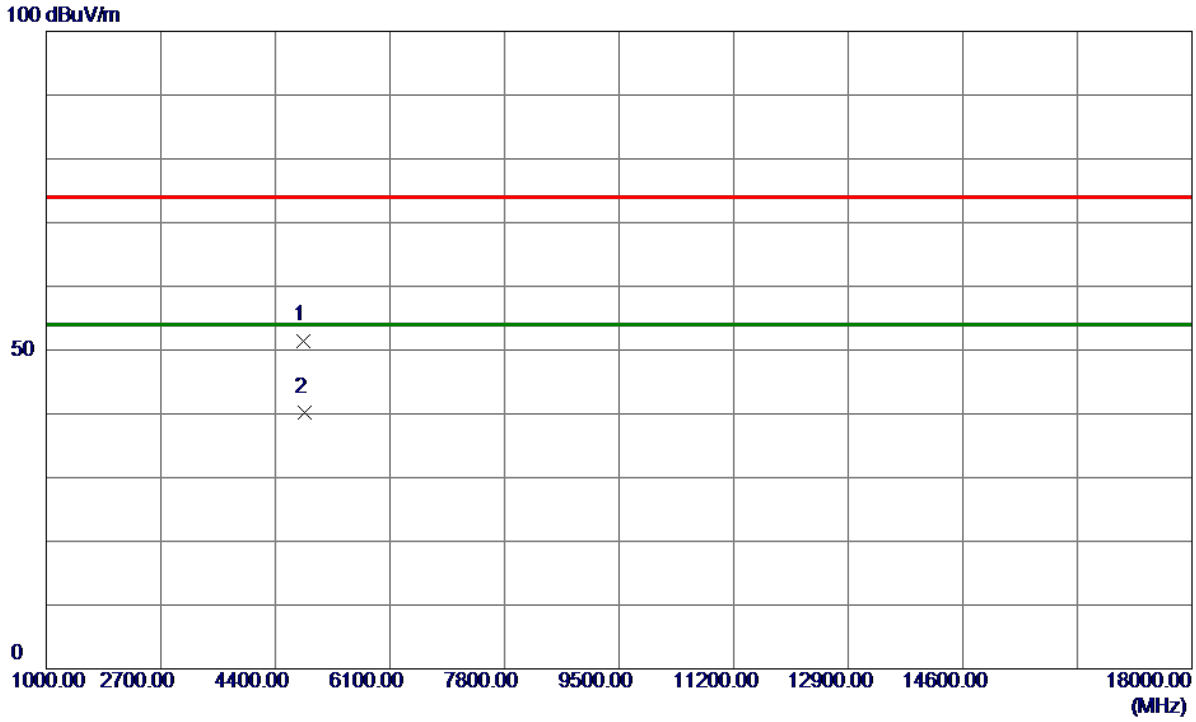
Test Mode	TX G Mode 2417 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	58.88	9.26	68.14	74.00	-5.86	Peak	
2	2390.0000	43.58	9.26	52.84	54.00	-1.16	AVG	
3 *	2411.5000	87.65	9.31	96.96	54.00	42.96	AVG	No Limit
4	2417.8000	97.19	9.32	106.51	74.00	32.51	Peak	No Limit

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

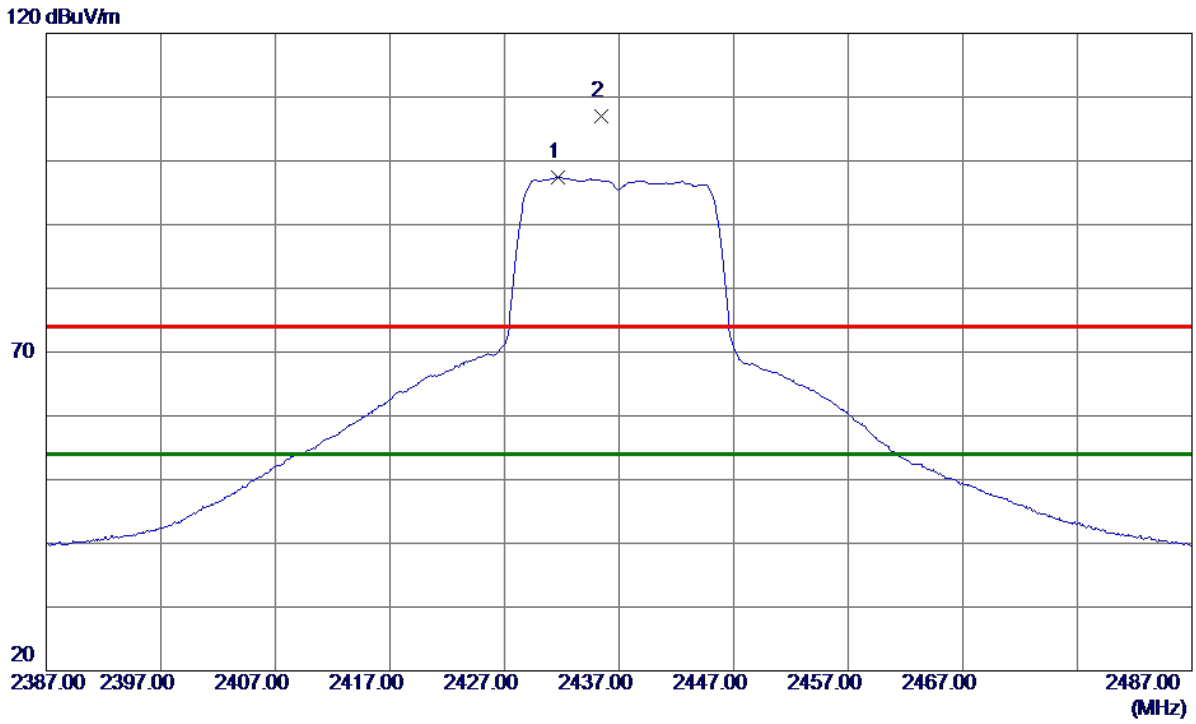
Test Mode	TX G Mode 2417 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4824.3000	46.29	5.21	51.50	74.00	-22.50	Peak	
2 *	4833.5000	34.96	5.23	40.19	54.00	-13.81	AVG	

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

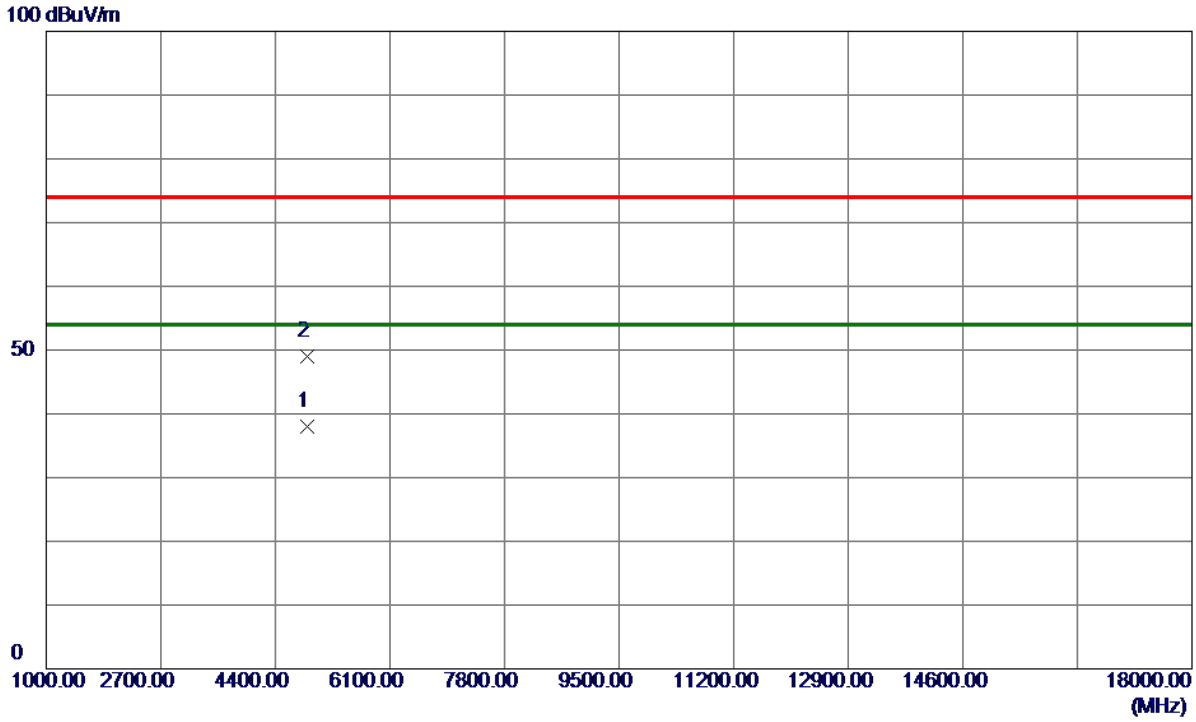
Test Mode	TX G Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2431.7000	88.14	9.35	97.49	54.00	43.49	AVG	No Limit
2	2435.4000	97.70	9.36	107.06	74.00	33.06	Peak	No Limit

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

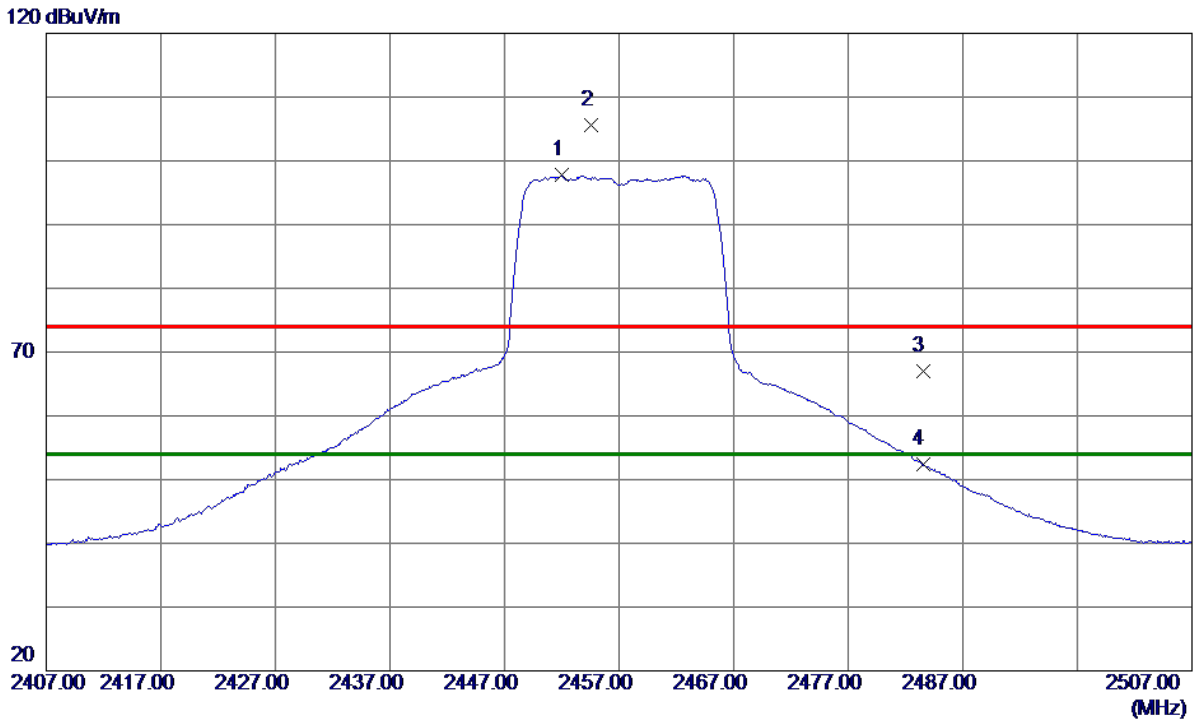
Test Mode	TX G Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4870.2000	32.76	5.30	38.06	54.00	-15.94	AVG	
2	4871.5000	43.62	5.31	48.93	74.00	-25.07	Peak	

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

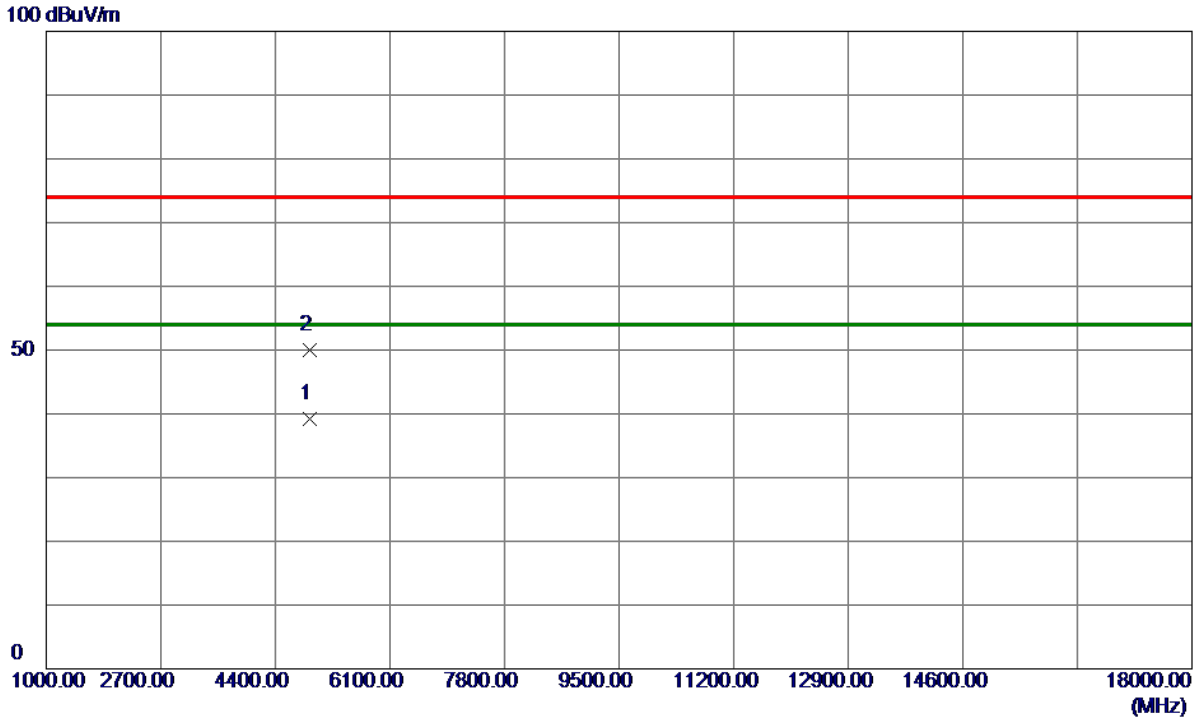
Test Mode	TX G Mode 2457 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2452.0000	88.37	9.40	97.77	54.00	43.77	AVG	No Limit
2	2454.6000	96.23	9.41	105.64	74.00	31.64	Peak	No Limit
3	2483.5000	57.52	9.48	67.00	74.00	-7.00	Peak	
4	2483.5000	42.84	9.48	52.32	54.00	-1.68	AVG	

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

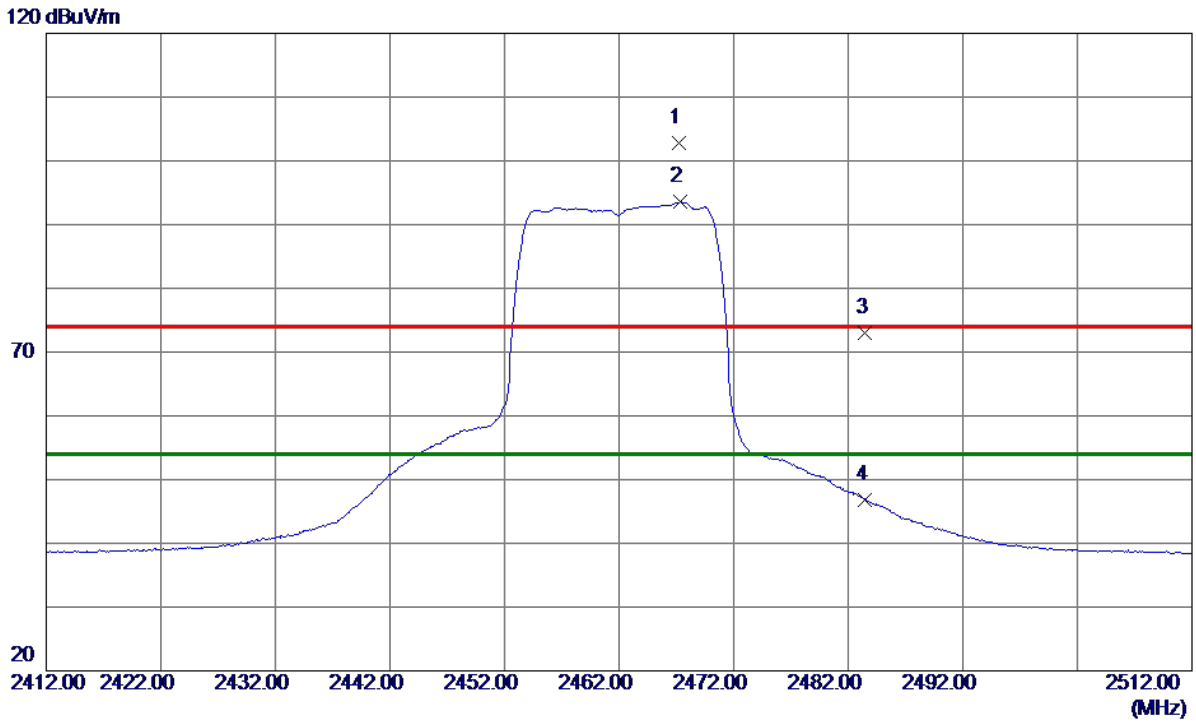
Test Mode	TX G Mode 2457 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4914.5000	33.84	5.39	39.23	54.00	-14.77	AVG	
2	4916.9000	44.66	5.40	50.06	74.00	-23.94	Peak	

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

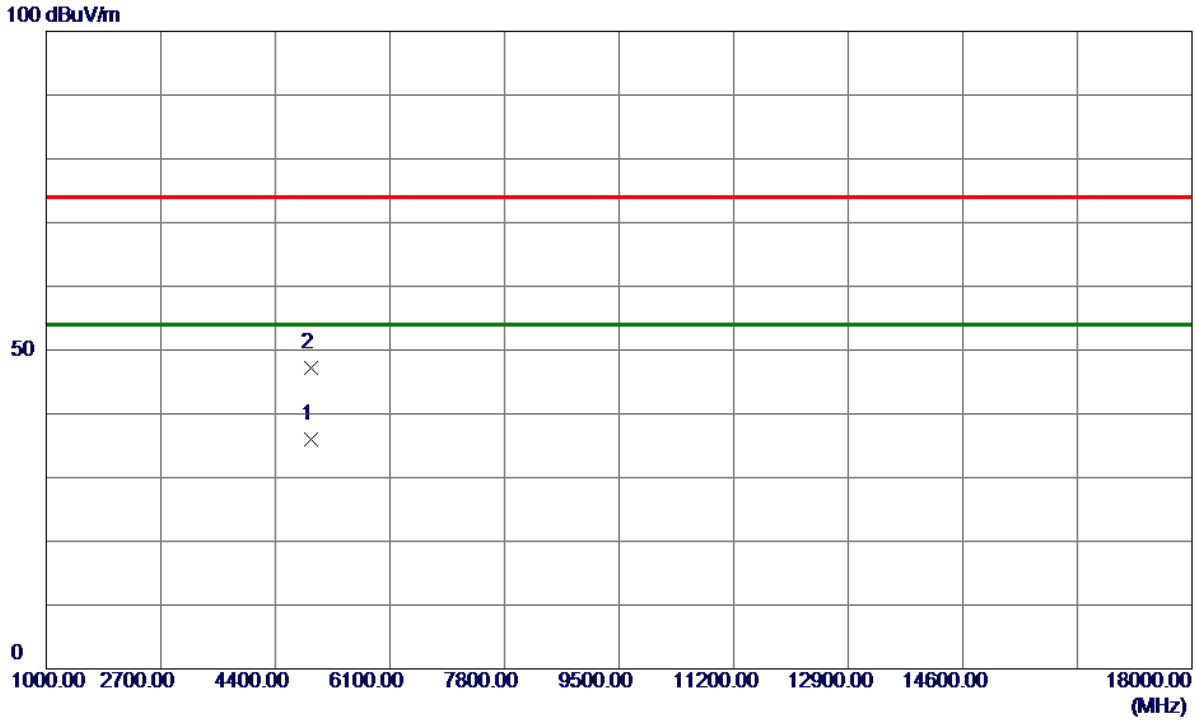
Test Mode	TX G Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2467.2000	93.42	9.44	102.86	74.00	28.86	Peak	No Limit
2 *	2467.3000	84.09	9.44	93.53	54.00	39.53	AVG	No Limit
3	2483.5000	63.54	9.48	73.02	74.00	-0.98	Peak	
4	2483.5000	37.23	9.48	46.71	54.00	-7.29	AVG	

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

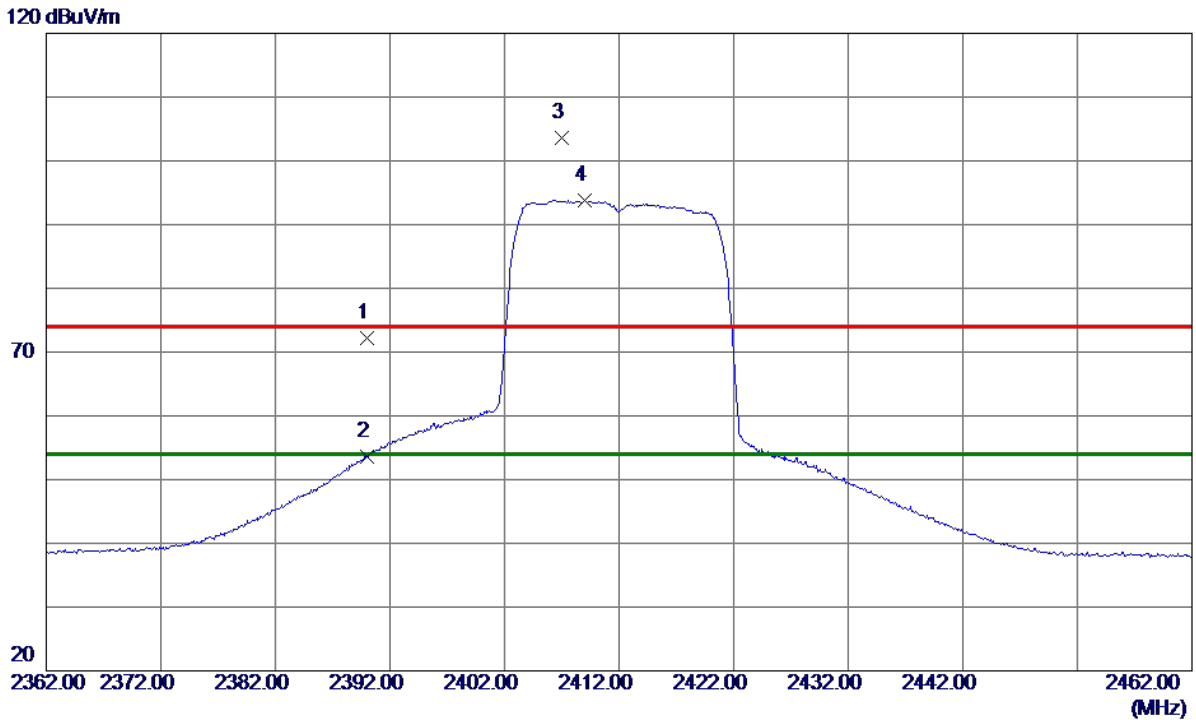
Test Mode	TX G Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.0000	30.61	5.41	36.02	54.00	-17.98	AVG	
2	4924.5000	41.81	5.41	47.22	74.00	-26.78	Peak	

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

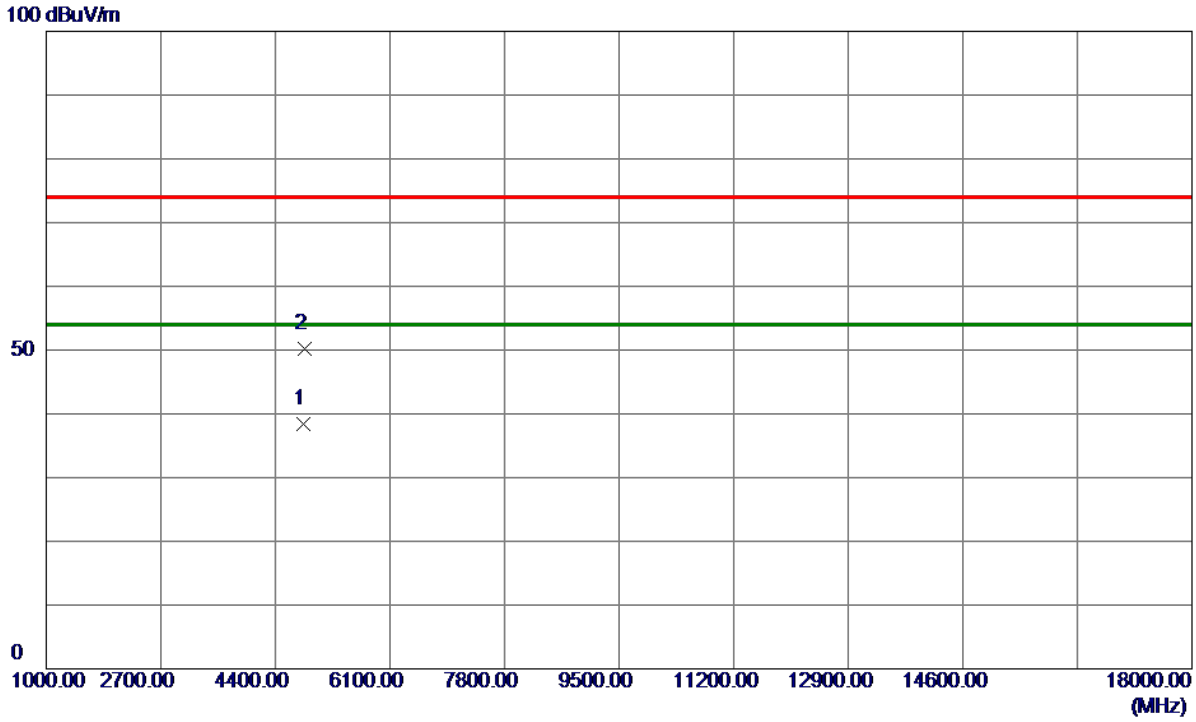
Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	62.96	9.26	72.22	74.00	-1.78	Peak	
2	2390.0000	44.37	9.26	53.63	54.00	-0.37	AVG	
3	2407.0000	94.32	9.30	103.62	74.00	29.62	Peak	No Limit
4 *	2409.0000	84.52	9.30	93.82	54.00	39.82	AVG	No Limit

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

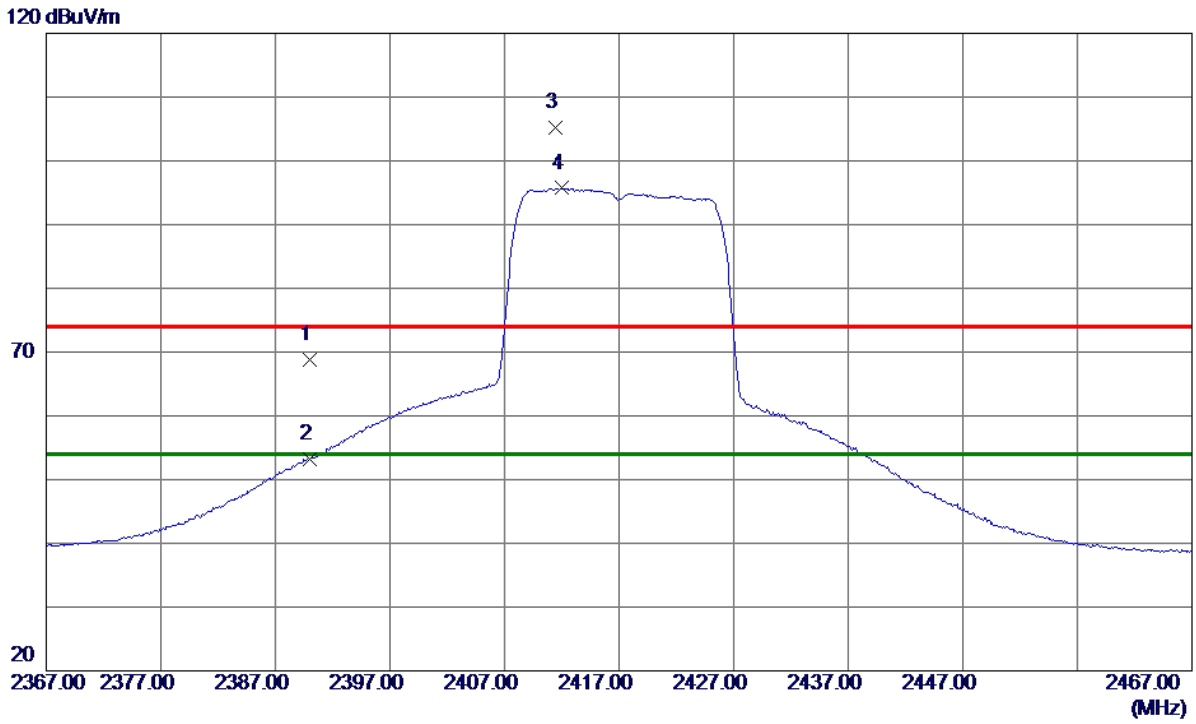
Test Mode	TX N(HT20) Mode 2412 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823.7000	33.19	5.21	38.40	54.00	-15.60	AVG	
2	4830.3000	45.07	5.22	50.29	74.00	-23.71	Peak	

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

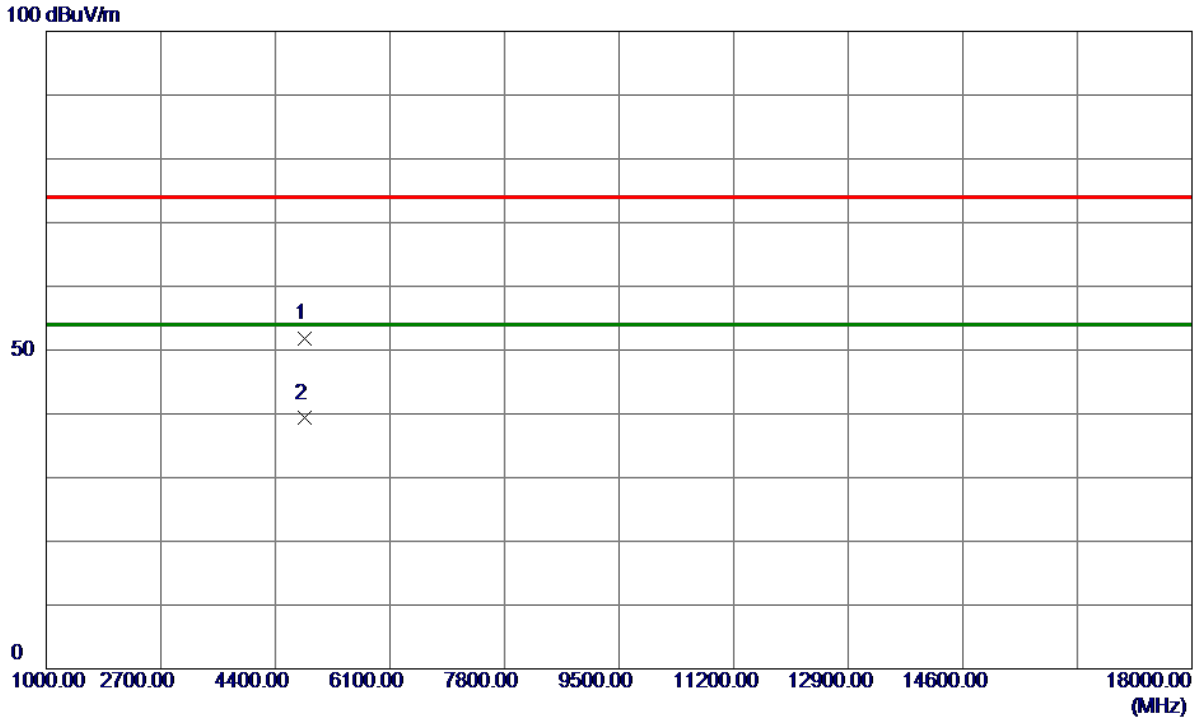
Test Mode	TX N(HT20) Mode 2417 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	59.62	9.26	68.88	74.00	-5.12	Peak	
2	2390.0000	43.97	9.26	53.23	54.00	-0.77	AVG	
3	2411.4000	95.85	9.31	105.16	74.00	31.16	Peak	No Limit
4 *	2412.0000	86.39	9.31	95.70	54.00	41.70	AVG	No Limit

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

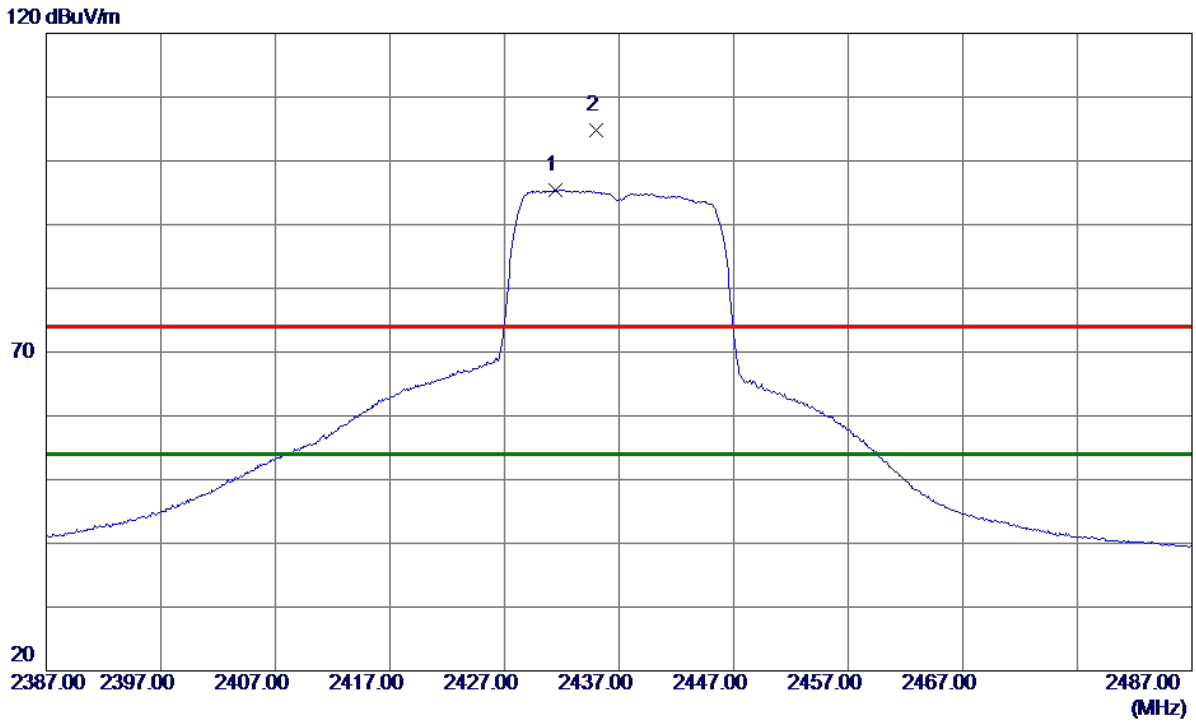
Test Mode	TX N(HT20) Mode 2417 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4826.0000	46.58	5.22	51.80	74.00	-22.20	Peak	
2 *	4832.3000	34.07	5.23	39.30	54.00	-14.70	AVG	

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

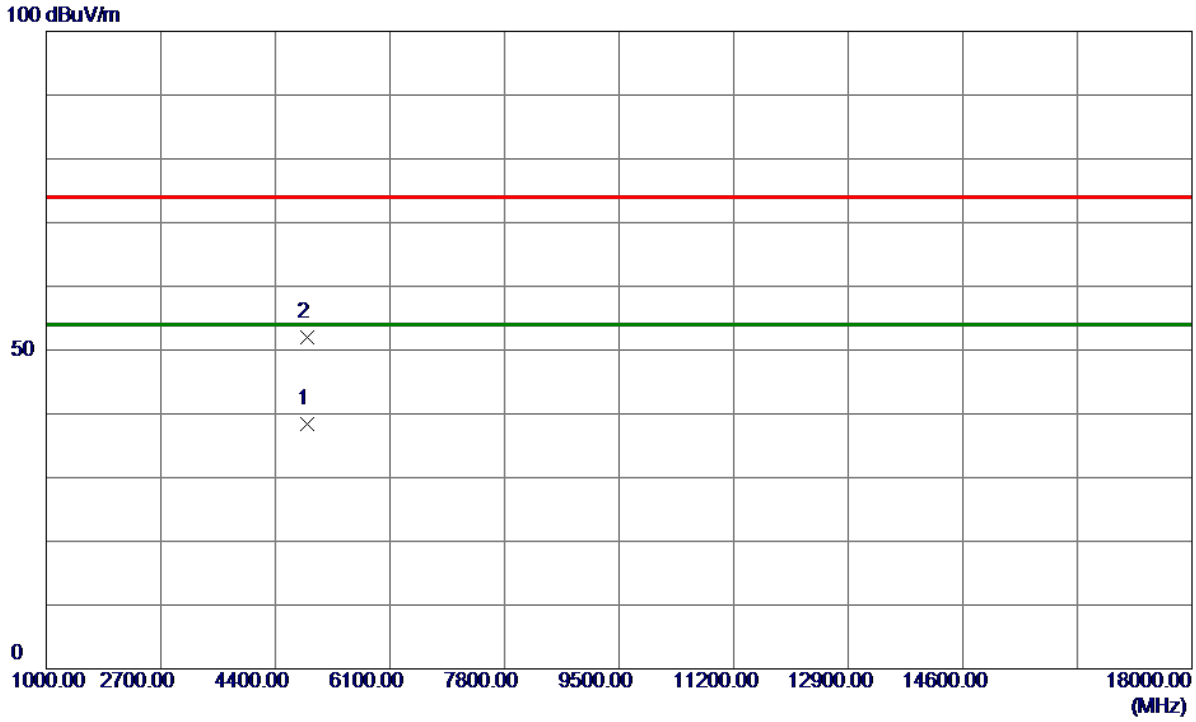
Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2431.4000	86.05	9.35	95.40	54.00	41.40	AVG	No Limit
2	2435.0000	95.49	9.36	104.85	74.00	30.85	Peak	No Limit

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

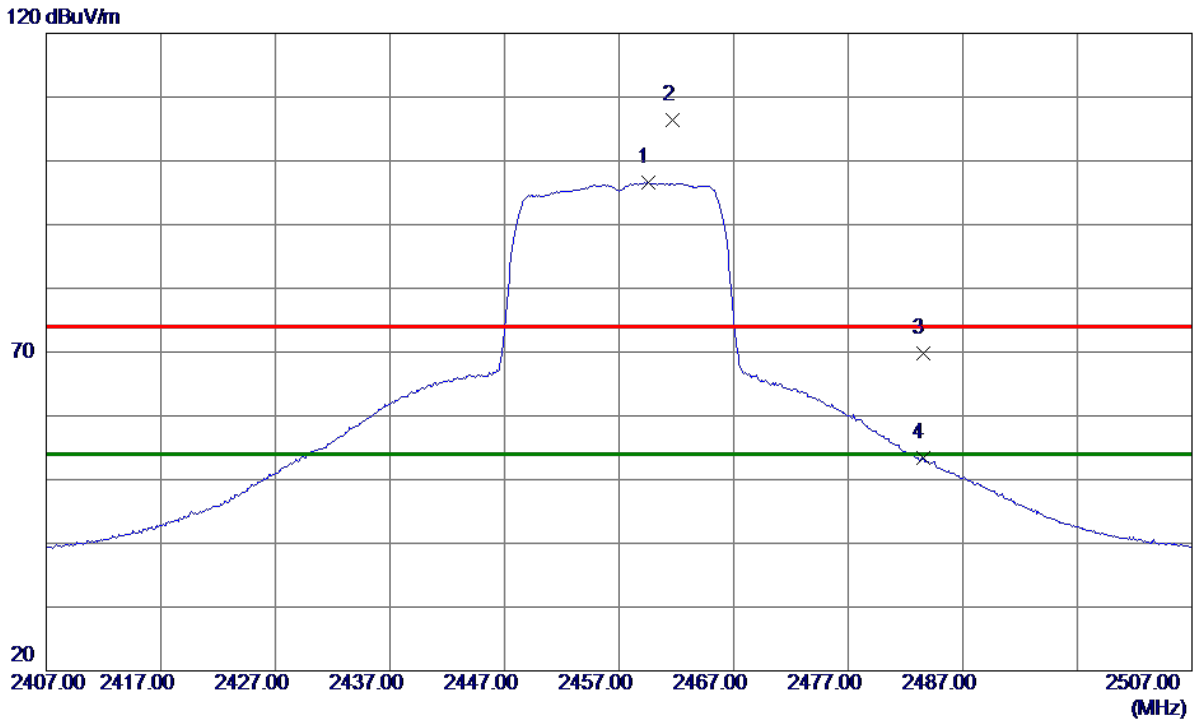
Test Mode	TX N(HT20) Mode 2437 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4870.9000	33.04	5.30	38.34	54.00	-15.66	AVG	
2	4873.2000	46.76	5.31	52.07	74.00	-21.93	Peak	

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

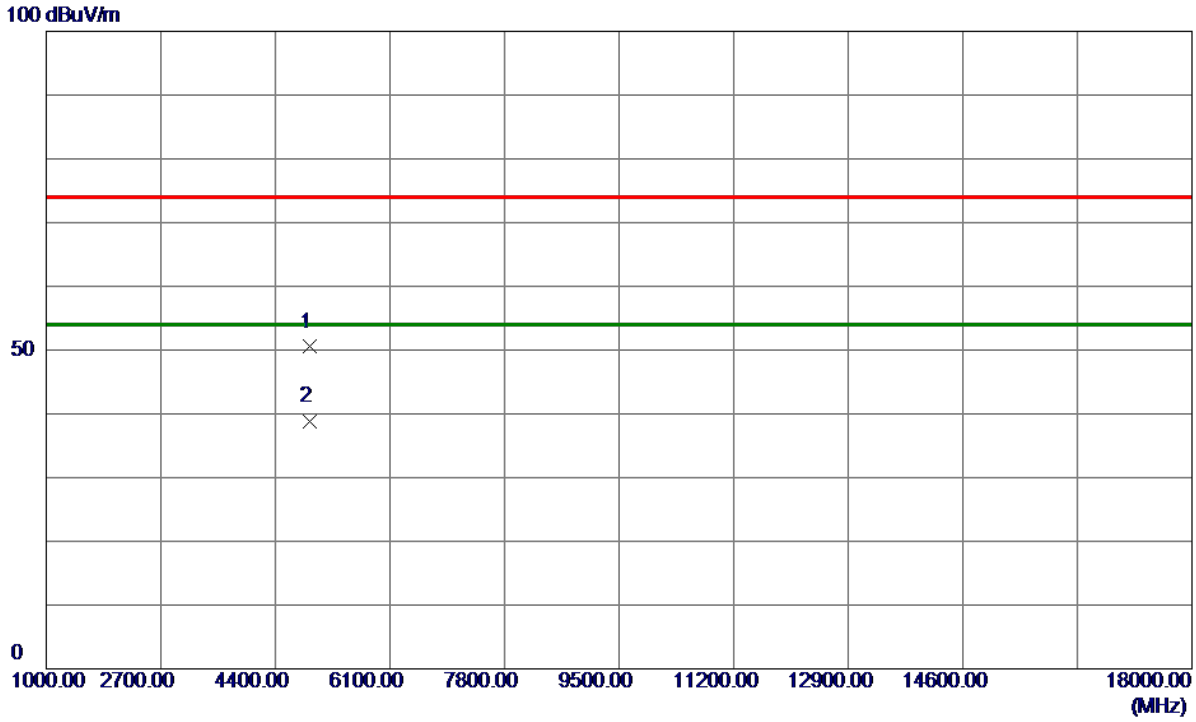
Test Mode	TX N(HT20) Mode 2457 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2459.5000	87.12	9.42	96.54	54.00	42.54	AVG	No Limit
2	2461.7000	97.03	9.42	106.45	74.00	32.45	Peak	No Limit
3	2483.5000	60.40	9.48	69.88	74.00	-4.12	Peak	
4	2483.5000	43.89	9.48	53.37	54.00	-0.63	AVG	

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

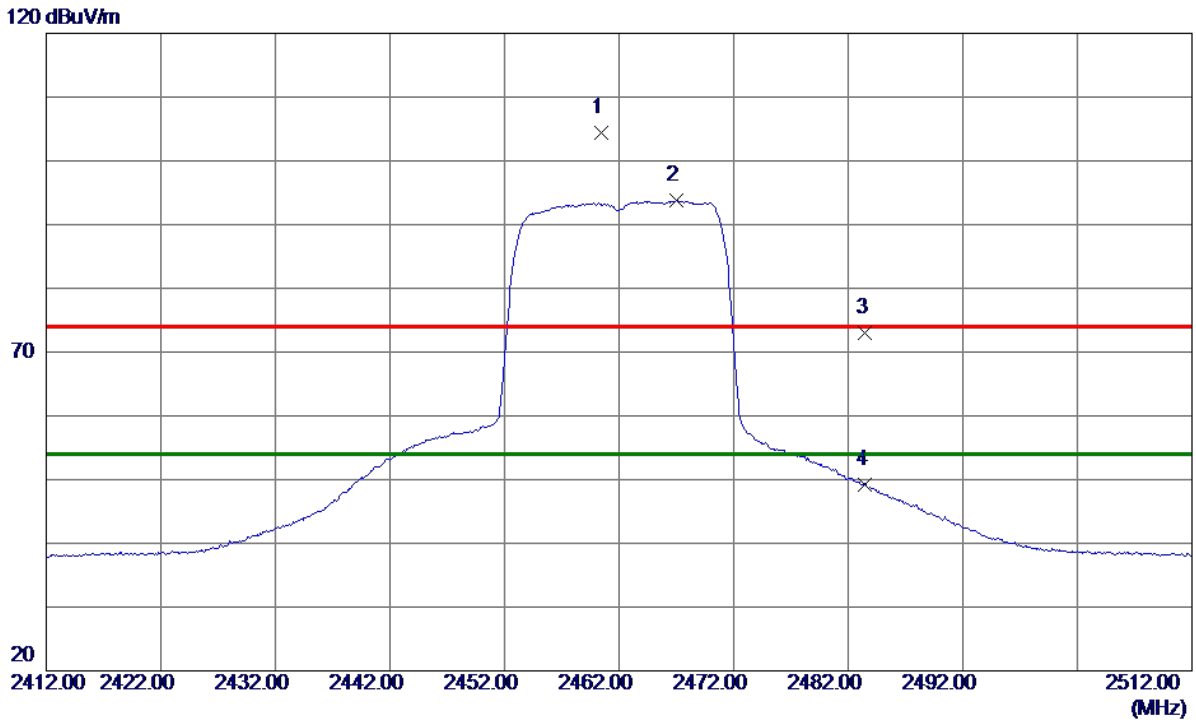
Test Mode	TX N(HT20) Mode 2457 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4912.6000	45.11	5.39	50.50	74.00	-23.50	Peak	
2 *	4913.1000	33.43	5.39	38.82	54.00	-15.18	AVG	

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

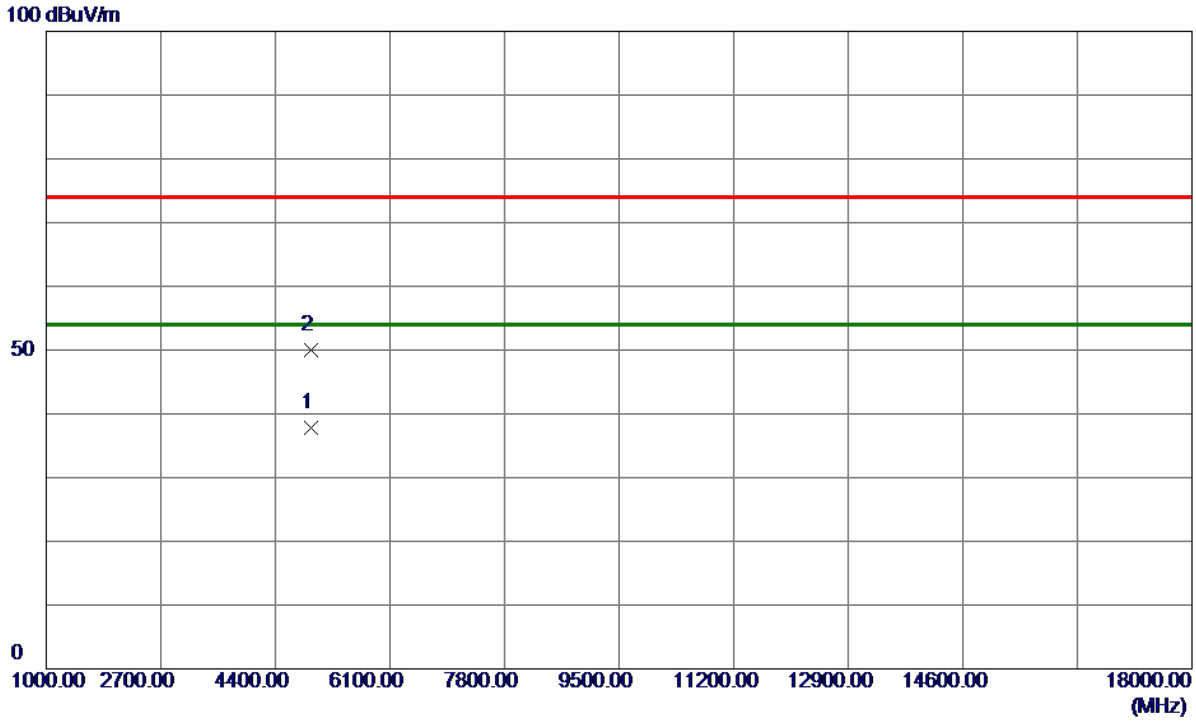
Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460.4000	94.94	9.42	104.36	74.00	30.36	Peak	No Limit
2 *	2467.0000	84.38	9.44	93.82	54.00	39.82	AVG	No Limit
3	2483.5000	63.54	9.48	73.02	74.00	-0.98	Peak	
4	2483.5000	39.71	9.48	49.19	54.00	-4.81	AVG	

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

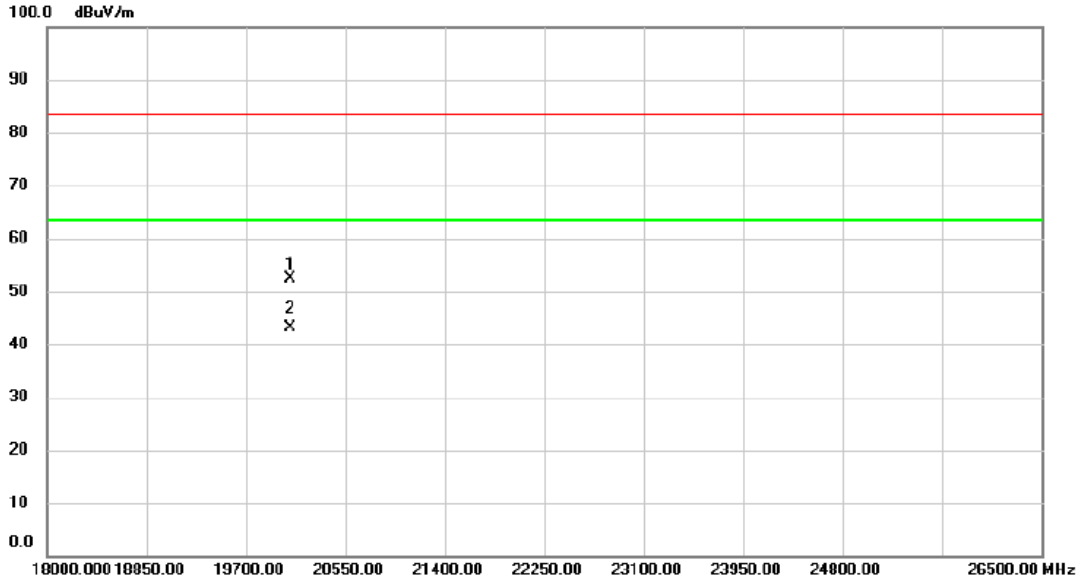
Test Mode	TX N(HT20) Mode 2462 MHz	Polarization	Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4922.3000	32.43	5.41	37.84	54.00	-16.16	AVG	
2	4931.1000	44.56	5.42	49.98	74.00	-24.02	Peak	

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

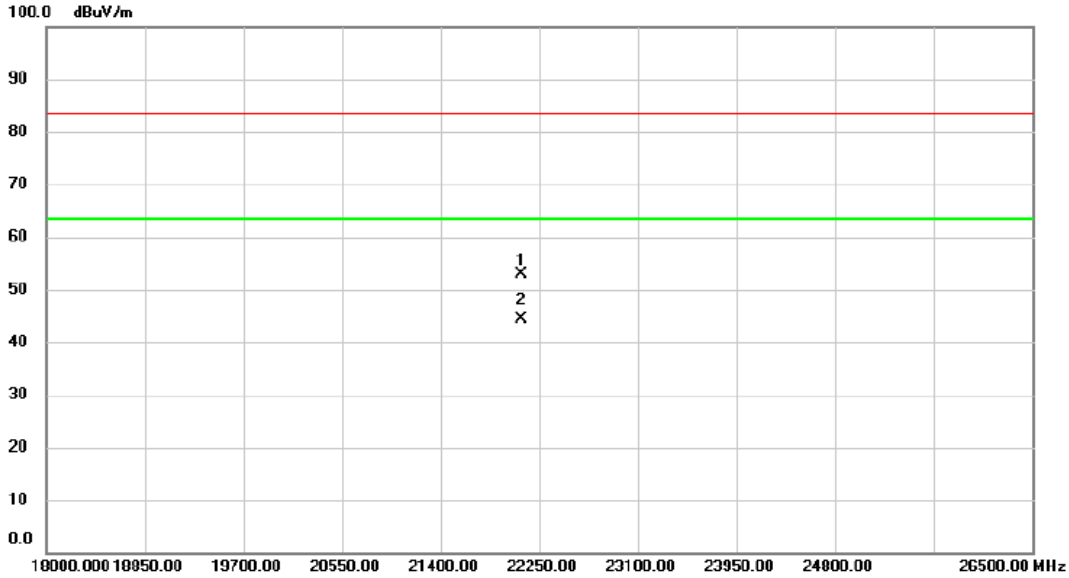
Test Mode	TX B Mode 2412 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		20082.500	52.77	-0.44	52.33	83.50	-31.17	peak	
2	*	20082.500	43.62	-0.44	43.18	63.50	-20.32	AVG	

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

Test Mode	TX B Mode 2412 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		22092.750	51.67	1.10	52.77	83.50	-30.73	peak	
2	*	22092.750	43.26	1.10	44.36	63.50	-19.14	AVG	

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

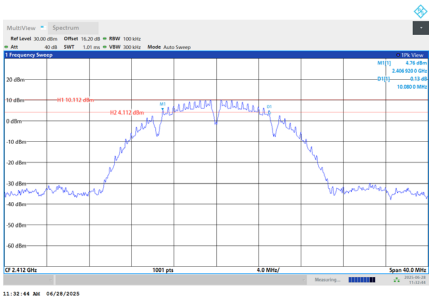
APPENDIX E - BANDWIDTH

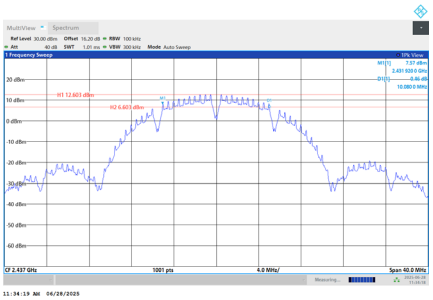
Test Mode	TX B Mode

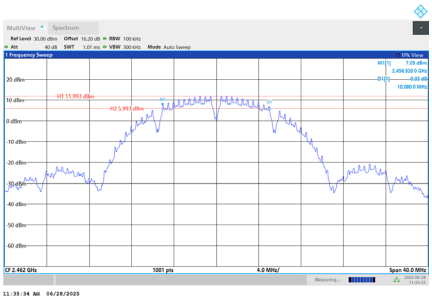
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	10.080	15.046	0.5	Pass
06	2437	10.080	15.475	0.5	Pass
11	2462	10.080	15.384	0.5	Pass

CH01 CH06 CH11

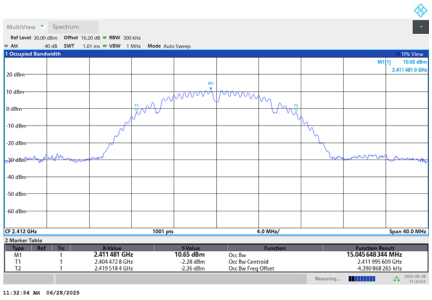
6 dB Bandwidth

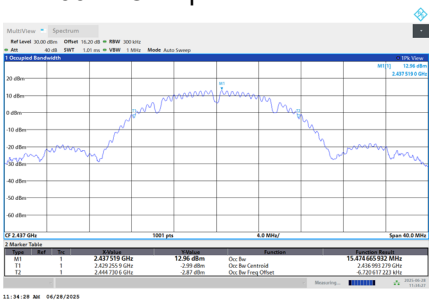


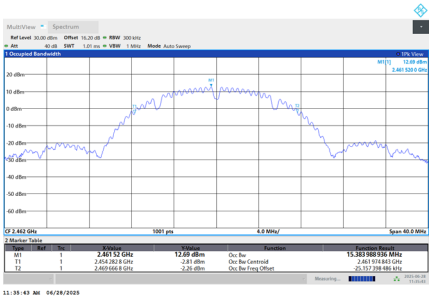




99 % Occupied Bandwidth





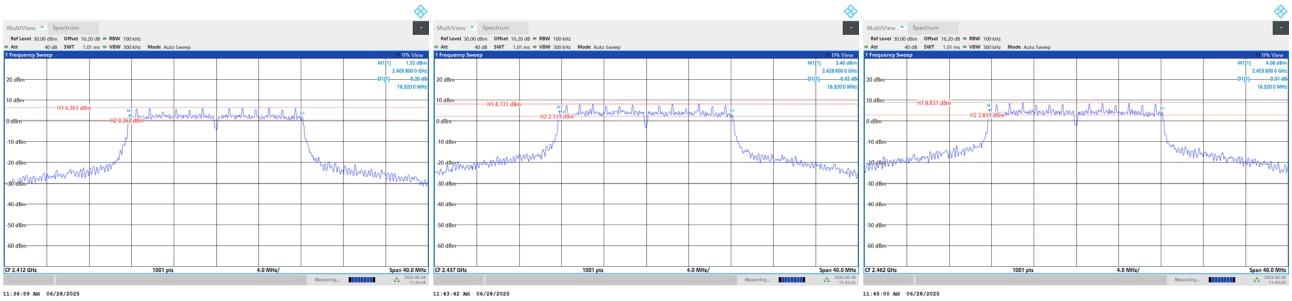


Test Mode	TX G Mode

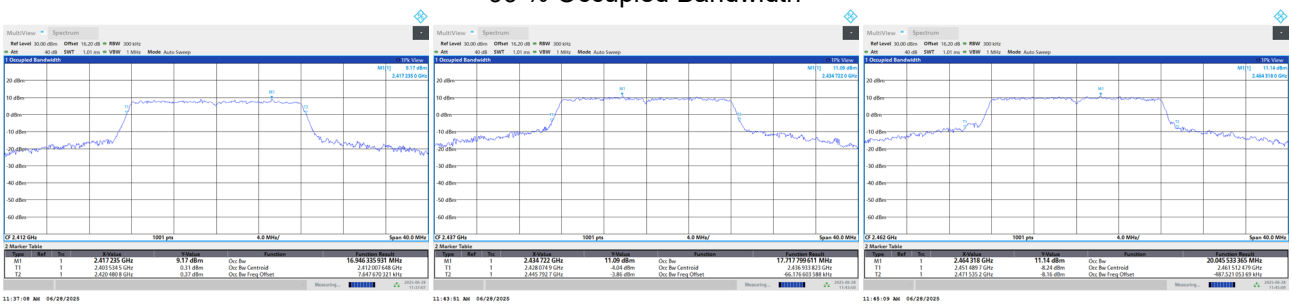
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.320	16.946	0.5	Pass
06	2437	16.320	17.718	0.5	Pass
11	2462	16.320	20.046	0.5	Pass

CH01 CH06 CH11

6 dB Bandwidth



99 % Occupied Bandwidth

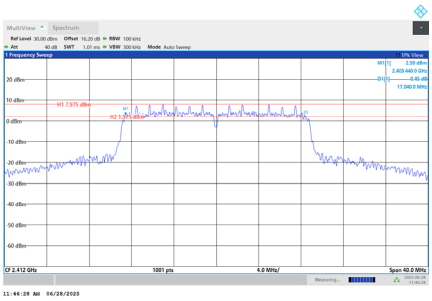


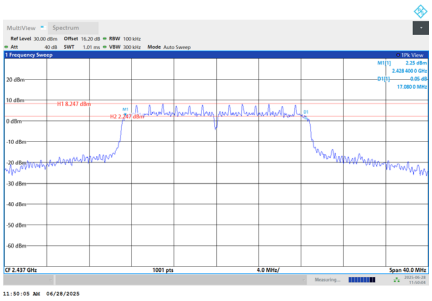
Test Mode	TX N(HT20) Mode

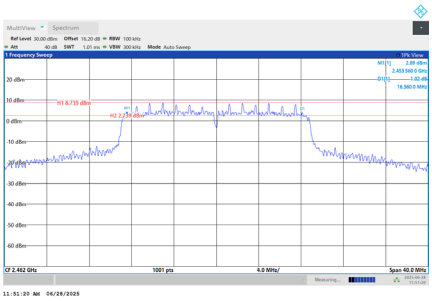
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	17.040	18.179	0.5	Pass
06	2437	17.080	18.442	0.5	Pass
11	2462	16.560	19.273	0.5	Pass

CH01 CH06 CH11

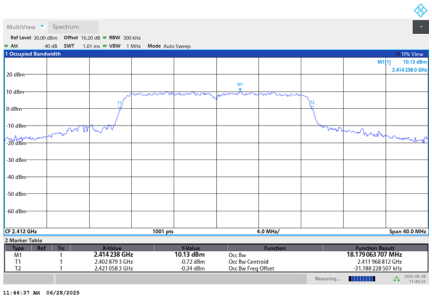
6 dB Bandwidth

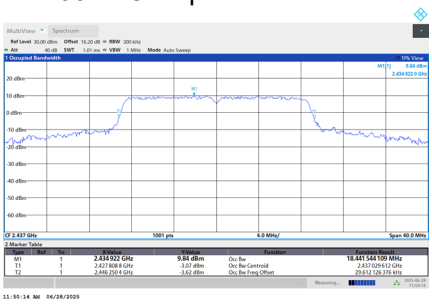


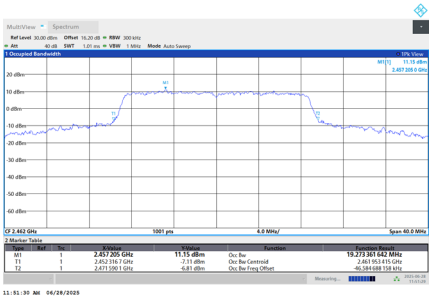




99 % Occupied Bandwidth







FAPPENDIX F - MAXIMUM OUTPUT POWER

Test Mode	TX B Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.06	0.46	19.52	30.00	1.0000	Pass
06	2437	18.37	0.46	18.83	30.00	1.0000	Pass
11	2462	15.66	0.46	16.12	30.00	1.0000	Pass

Test Mode	TX G Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.29	0.48	17.77	30.00	1.0000	Pass
06	2437	18.69	0.48	19.17	30.00	1.0000	Pass
11	2462	13.76	0.48	14.24	30.00	1.0000	Pass

Test Mode	TX N(HT20) Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.28	0.48	17.76	30.00	1.0000	Pass
06	2437	18.84	0.48	19.32	30.00	1.0000	Pass
11	2462	15.25	0.48	15.73	30.00	1.0000	Pass

Note: Output power = Measure result + Cable loss

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS