

FCC Radio Test Report

FCC ID: 2AXJ4X3600

This report concerns: Original Grant

Project No. : 2008C032
Equipment : AX3600 Whole Home Mesh Wi-Fi 6 System
Brand Name : tp-link
Test Model : Deco X68
Series Model : Deco X3600
Applicant : TP-Link Corporation Limited
Address : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong
Manufacturer : TP-Link Corporation Limited
Address : Room 901, 9/F. , New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui, Kowloon, Hong Kong
Date of Receipt : Aug. 20, 2020
Date of Test : Aug. 21, 2020 ~ Oct. 21, 2020
Issued Date : Nov. 16, 2020
Report Version : R00
Test Sample : Engineering Sample No.: DG2020082029
Standard(s) : FCC Part15, Subpart C (15.247)
 ANSI C63.10-2013
 FCC KDB 558074 D01 15.247 Meas Guidance v05r02

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



Prepared by : Simon Ling



Approved by : Ethan Ma



Certificate #5123.02

Add: No.3, Jinshagang 1st Road, Shixia, Dalang Town,Dongguan, Guangdong, China.

Tel: +86-769-8318-3000

Web: www.newbtl.com

Declaration

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

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

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

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

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

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

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

Limitation

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

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

Table of Contents	Page
REPORT ISSUED HISTORY	6
1 . SUMMARY OF TEST RESULTS	7
1.1 TEST FACILITY	8
1.2 MEASUREMENT UNCERTAINTY	8
1.3 TEST ENVIRONMENT CONDITIONS	9
2 . GENERAL INFORMATION	10
2.1 GENERAL DESCRIPTION OF EUT	10
2.2 DESCRIPTION OF TEST MODES	12
2.3 PARAMETERS OF TEST SOFTWARE	14
2.4 DUTY CYCLE	15
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	17
2.6 SUPPORT UNITS	17
3 . AC POWER LINE CONDUCTED EMISSIONS TEST	18
3.1 LIMIT	18
3.2 TEST PROCEDURE	18
3.3 DEVIATION FROM TEST STANDARD	18
3.4 TEST SETUP	19
3.5 EUT OPERATION CONDITIONS	19
3.6 TEST RESULTS	19
4 . RADIATED EMISSIONS TEST	20
4.1 LIMIT	20
4.2 TEST PROCEDURE	21
4.3 DEVIATION FROM TEST STANDARD	21
4.4 TEST SETUP	22
4.5 EUT OPERATION CONDITIONS	23
4.6 TEST RESULTS - 9 KHZ TO 30 MHZ	23
4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ	23
4.8 TEST RESULTS - ABOVE 1000 MHZ	23
5 . BANDWIDTH TEST	24
5.1 LIMIT	24
5.2 TEST PROCEDURE	24
5.3 DEVIATION FROM STANDARD	24
5.4 TEST SETUP	24

Table of Contents	Page
5.5 EUT OPERATION CONDITIONS	24
5.6 TEST RESULTS	24
6 . MAXIMUM AVERAGE OUTPUT POWER TEST	25
6.1 LIMIT	25
6.2 TEST PROCEDURE	25
6.3 DEVIATION FROM STANDARD	25
6.4 TEST SETUP	25
6.5 EUT OPERATION CONDITIONS	25
6.6 TEST RESULTS	25
7 . CONDUCTED SPURIOUS EMISSIONS	26
7.1 LIMIT	26
7.2 TEST PROCEDURE	26
7.3 DEVIATION FROM STANDARD	26
7.4 TEST SETUP	26
7.5 EUT OPERATION CONDITIONS	26
7.6 TEST RESULTS	26
8 . POWER SPECTRAL DENSITY TEST	27
8.1 LIMIT	27
8.2 TEST PROCEDURE	27
8.3 DEVIATION FROM STANDARD	27
8.4 TEST SETUP	27
8.5 EUT OPERATION CONDITIONS	27
8.6 TEST RESULTS	27
9 . MEASUREMENT INSTRUMENTS LIST	28
10 . EUT TEST PHOTO	30
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	107
APPENDIX F - MAXIMUM AVERGAE OUTPUT POWER	114
APPENDIX G - CONDUCTED SPURIOUS EMISSIONS	125

Table of Contents**Page****APPENDIX H - POWER SPECTRAL DENSITY****138**

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Nov. 16, 2020

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart C (15.247)				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	-----
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----
15.247(a)(2)	Bandwidth	APPENDIX E	PASS	-----
15.247(b)(3)	Maximum Average Output Power	APPENDIX F	PASS	-----
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS	-----
15.247(e)	Power Spectral Density	APPENDIX H	PASS	-----
15.203	Antenna Requirement	-----	PASS	Note(2)

Note:

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

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

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

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

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

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	4.26
		30MHz ~ 200MHz	H	3.38
		200MHz ~ 1,000MHz	V	3.98
		200MHz ~ 1,000MHz	H	3.94
		1GHz ~ 6GHz	-	3.96
		6GHz ~ 18GHz	-	5.24
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	4.00

C. Other Measurement:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Average Output Power	±0.95 dB
Conducted Spurious Emission	±2.71 dB
Power Spectral Density	±0.86 dB
Temperature	±0.08 °C
Time	±0.58 %
Supply voltages	±0.3 %

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	Sheldon Ou
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Sheldon Ou
Radiated Emissions-30 MHz to 1GHz	26°C	52%	AC 120V/60Hz	Sheldon Ou
Radiated Emissions-Above 1000 MHz	24°C	60%	AC 120V/60Hz	Sheldon Ou
Bandwidth	26°C	46%	AC 120V/60Hz	Hayden Chen
Maximum Average Output Power	26°C	46%	AC 120V/60Hz	Laughing Zhang
Conducted Spurious Emissions	26°C	46%	AC 120V/60Hz	Hayden Chen
Power Spectral Density	26°C	46%	AC 120V/60Hz	Hayden Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AX3600 Whole Home Mesh Wi-Fi 6 System
Brand Name	tp-link
Test Model	Deco X68
Series Model	Deco X3600
Model Difference(s)	Only differ in model name.
Power Source	DC Voltage supplied from AC adapter. Model: T120250-2B4
Power Rating	I/P: 100-240V~ 50/60Hz 0.8A O/P: 12V  2.5A
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 Average Output Power_Non-Beamforming	IEEE 802.11b: 29.28 dBm (0.8472 W) IEEE 802.11g: 28.85 dBm (0.7674 W) IEEE 802.11n (HT20): 28.77 dBm (0.7533 W) IEEE 802.11n (HT40): 23.59 dBm (0.2286 W) IEEE 802.11ax(HE20): 28.59 dBm (0.7228 W) IEEE 802.11ax(HE40): 24.37 dBm (0.2735 W)
Maximum Average Output Power_Beamforming	IEEE 802.11n (HT20): 28.51 dBm (0.7096 W) IEEE 802.11n (HT40): 23.28 dBm (0.2128 W) IEEE 802.11ax (HE20): 28.24 dBm (0.6668 W) IEEE 802.11ax (HE40): 24.09 dBm (0.2564 W)

Note:

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

2. Channel List:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n (HT20), IEEE 802.11ax (HE20)							
CH03 - CH09 for IEEE 802.11n (HT40), IEEE 802.11ax (HE40)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1		3101503310	Internal	IPEX	1.97
2		3101503311	Internal	IPEX	1.98

Note:

- 1) This EUT supports CDD, and all antenna gains are not equal, so Directional gain= $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N]$ dBi, that is Directional gain= $10\log[(10^{1.97/20} + 10^{1.98/20})^2 / 2]$ dBi=4.99.
- 2) Beamforming Gain: 3 dB. So the Directional gain=3+1.98=4.98.

4. Table for Antenna Configuration:

For Non-Beamforming:

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

For Beamforming:

Operating Mode	TX Mode	2TX
IEEE 802.11n(HT20)		V (Ant. 1 + Ant. 2)
IEEE 802.11n(HT40)		V (Ant. 1 + Ant. 2)
IEEE 802.11ax(HE20)		V (Ant. 1 + Ant. 2)
IEEE 802.11nax(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-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX AX-20 MHz Mode Channel 01/06/11
Mode 6	TX AX-40 MHz Mode Channel 03/06/09
Mode 7	TX B Mode Channel 06
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N-20 MHz Mode Channel 01/02/06/10/11
Mode 11	TX N-40 MHz Mode Channel 03//04/06/08/09
Mode 12	TX AX-20 MHz Mode Channel 01/02/06/10/11
Mode 13	TX AX-40 MHz Mode Channel 03/04/06/08/09

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

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

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

Radiated emissions test- Above 1GHz	
Final Test Mode	Description
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N-20 MHz Mode Channel 01/02/06/10/11
Mode 11	TX N-40 MHz Mode Channel 03//04/06/08/09
Mode 12	TX AX-20 MHz Mode Channel 01/02/06/10/11
Mode 13	TX AX-40 MHz Mode Channel 03/04/06/08/09

Conducted test	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX AX-20 MHz Mode Channel 01/06/11
Mode 6	TX AX-40 MHz Mode Channel 03/06/09

NOTE:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (3) For radiated emission below 1 GHz test, the IEEE 802.11b Channel 06 is found to be the worst case and recorded.
- (4) For radiated emission above 1 GHz test, 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.
- (5) The measurements for RF Output Power were tested, the Non Beamforming and Beamforming are recorded in the report. The worst case was Non Beamforming and only worst case were documented for other test items.
- (6) For Radiated emissions above 1GHz test, the vertical and horizontal polarities have tested, the worst case is vertical and recorded.

2.3 PARAMETERS OF TEST SOFTWARE

Non-Beamforming

Test Software	accessMTool V3.1.0.3		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	102	102	102
IEEE 802.11g	80	102	78
IEEE 802.11n (HT20)	84	102	79
IEEE 802.11ax (HEW20)	84	100	70
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	73	81	67
IEEE 802.11ax (HEW40)	73	83	70

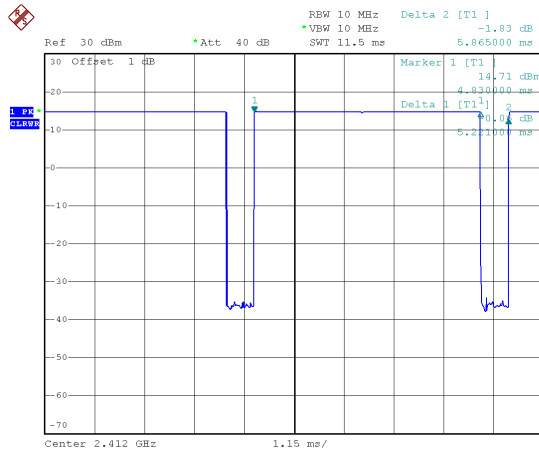
Beamforming

Test Software	accessMTool V3.1.0.3		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n (HT20)	83	101	78
IEEE 802.11ax (HEW20)	83	99	69
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	72	80	66
IEEE 802.11ax (HEW40)	72	82	69

2.4 DUTY CYCLE

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

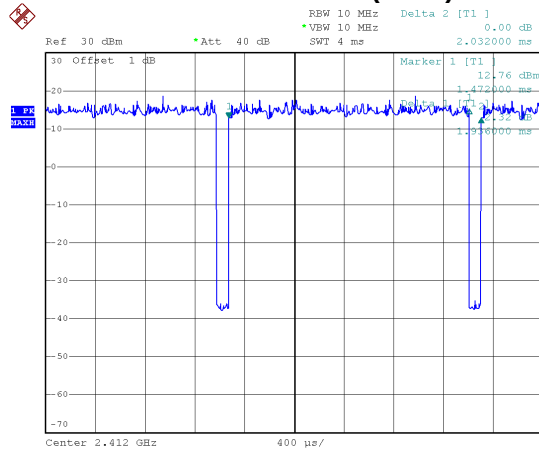
IEEE 802.11b



Date: 27.AUG.2020 14:05:48

Duty cycle = 5.221 ms / 5.865 ms = 89.02%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.51$

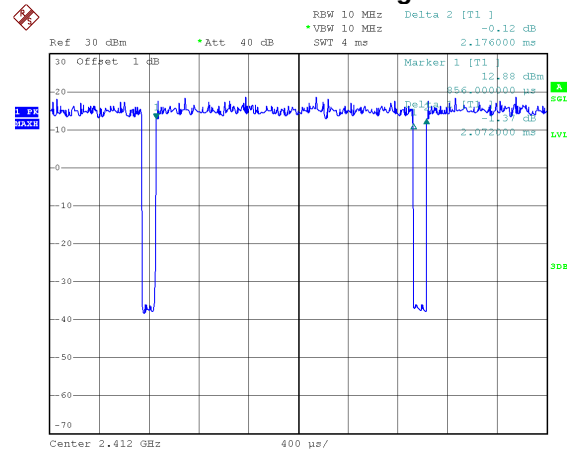
IEEE 802.11n (HT20)



Date: 27.AUG.2020 14:07:22

Duty cycle = 1.936 ms / 2.032 ms = 95.28%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.21$

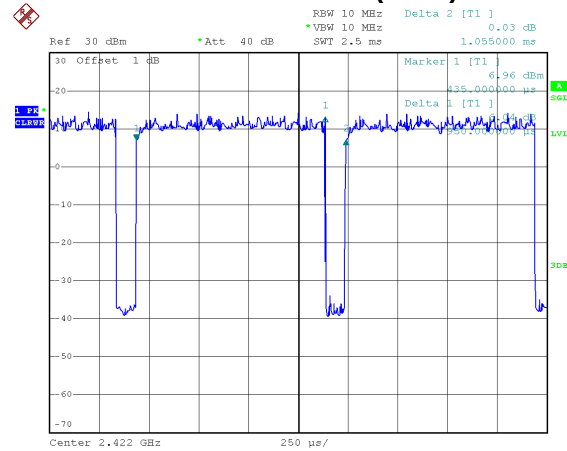
IEEE 802.11g



Date: 27.AUG.2020 14:06:39

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

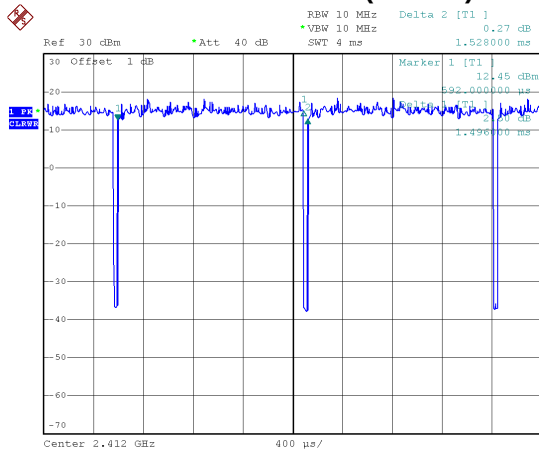
IEEE 802.11n (HT40)



Date: 27.AUG.2020 14:08:10

Duty cycle = 0.950 ms / 1.055 ms = 90.05%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.46$

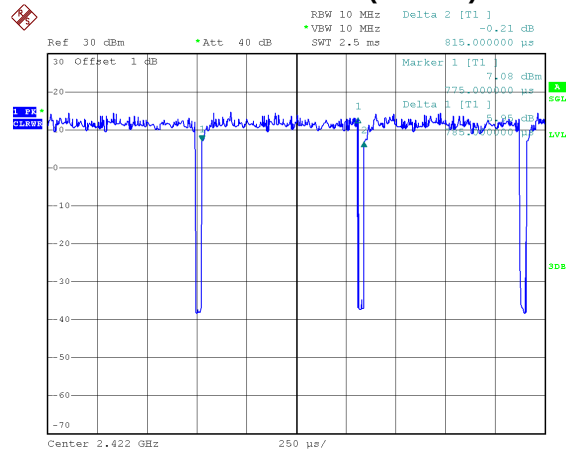
IEEE 802.11ax (HEW20)



Date: 27.AUG.2020 14:08:54

Duty cycle = 1.496 ms / 1.528 ms = 97.91%
Duty Factor = 10 log(1/Duty cycle) = 0.09

IEEE 802.11ax (HEW40)



Date: 27.AUG.2020 14:09:36

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

NOTE:

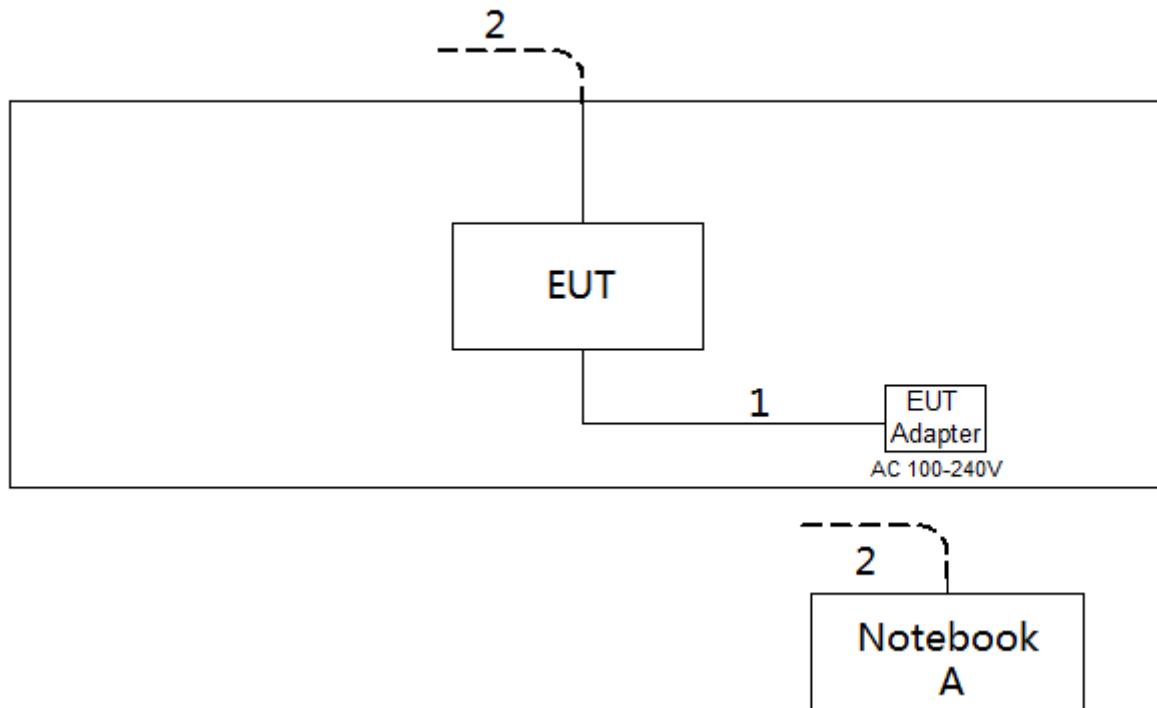
For IEEE 802.11b, IEEE 802.11g and IEEE 802.11n (HT20) and IEEE 802.11ax (HE20):

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 (Duty cycle < 98%).

For IEEE 802.11n (HT40) and 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 (Duty cycle < 98%).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

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

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

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency of Emission (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 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.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

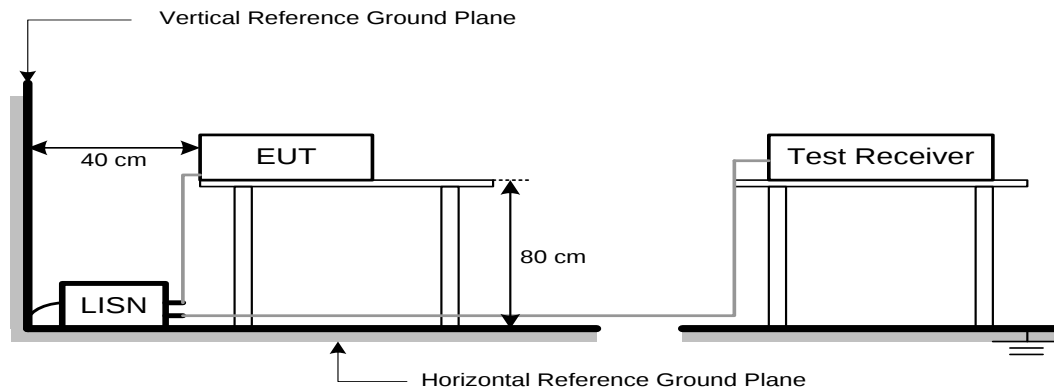
3.2 TEST PROCEDURE

- 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.

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 TEST

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 PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for Peak, 1 MHz / 1/T for Average

Receiver Parameter	Setting
Attenuation	Auto
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

4.2 TEST PROCEDURE

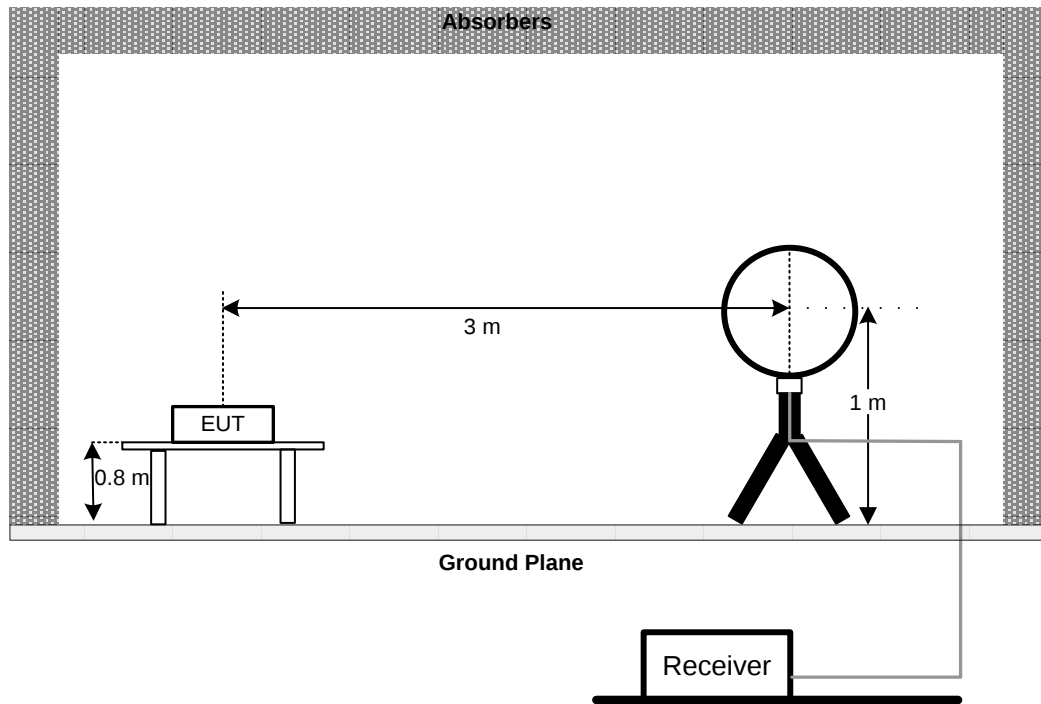
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance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

4.3 DEVIATION FROM TEST STANDARD

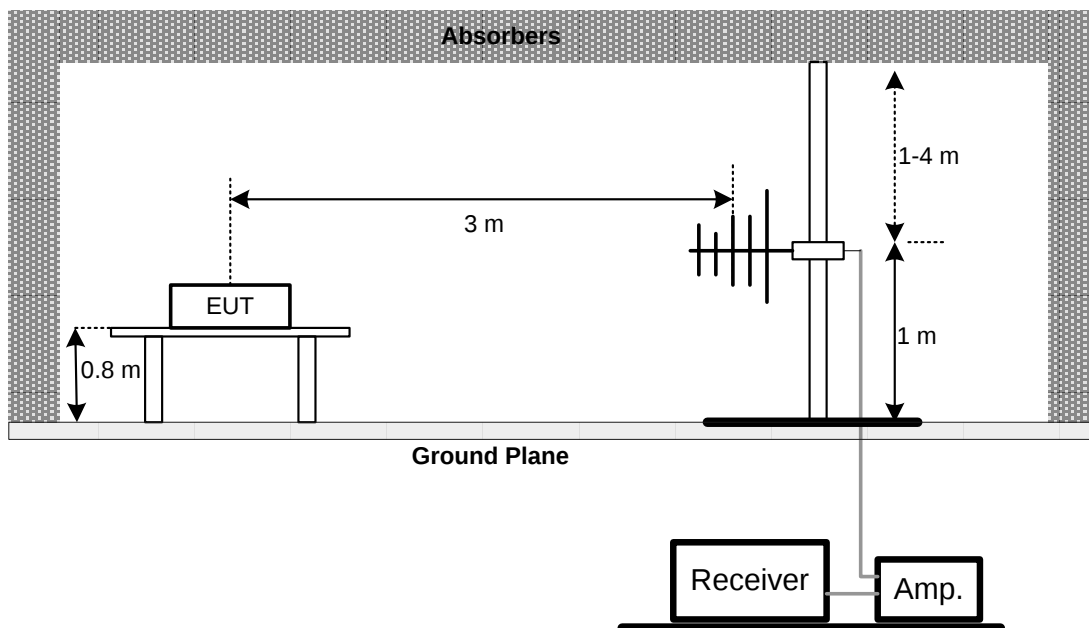
No deviation

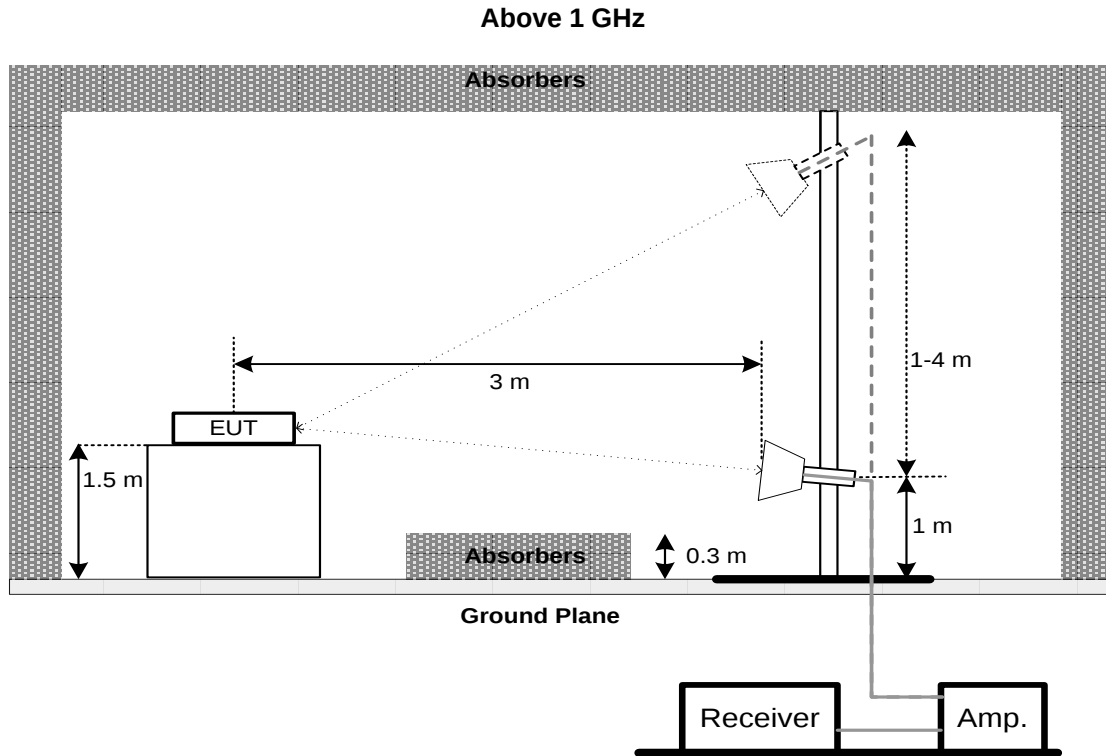
4.4 TEST SETUP

9 kHz-30 MHz



30 MHz to 1 GHz





4.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B

Remark:

- (1) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

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

5. BANDWIDTH TEST

5.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(a)(2)	6 dB Bandwidth	Minimum 500 kHz
	99% Emission Bandwidth	-

5.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:
 - For 6 dB Bandwidth : RBW= 100 kHz, VBW=300 kHz, Sweep time = auto.
 - For 99% Emission Bandwidth B/G/N-20 Mode: RBW= 300 KHz, VBW=1 MHz, Sweep time = 2.5 ms.
 - For 99% Emission Bandwidth N-40 Mode: RBW= 1 MHz, VBW=3 MHz, Sweep time = 2.5 ms.
- The bandwidth was performed in accordance with method 11.8.1 of ANSI C63.10-2013.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS

Please refer to the APPENDIX E.

6. MAXIMUM AVERAGE OUTPUT POWER TEST

6.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm

6.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. CONDUCTED SPURIOUS EMISSIONS

7.1 LIMIT

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

7.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, 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 TEST

8.1 LIMIT

FCC Part15, Subpart C (15.247)		
Section	Test Item	Limit
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)

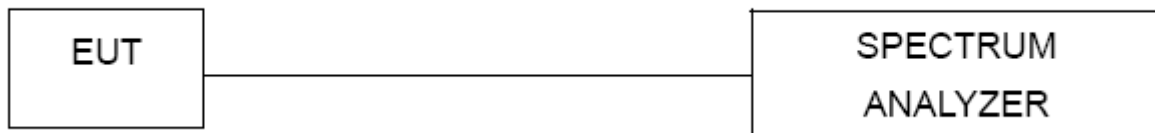
8.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting: RBW=3 kHz, VBW=10 kHz, Sweep time = Auto.
- The Power Spectral Density was performed in accordance with method 11.10.2 of ANSI C63.10-2013.

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, 2021
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 28, 2021
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 01, 2021
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 10, 2021
7	643 Shield Room	ETS	6*4*3m	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	N/A	May 29, 2021
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
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. 09, 2021
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 22, 2021
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 12, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021
3	Amplifier	Agilent	8449B	3008A02333	Mar. 01, 2021
4	Microwave Preampifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
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	May 09, 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 & Antenna Conducted Spurious Emissions & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021
2	RF Cable	Tongkaichuan	N/A	N/A	N/A
3	DC Block	Mini	N/A	N/A	N/A

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. 11, 2021
4	RF Cable	Tongkaichuan	N/A	N/A	N/A

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

"*" calibration period of equipment list is three year.

Except * item, all calibration period of equipment list is one year.

10. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos



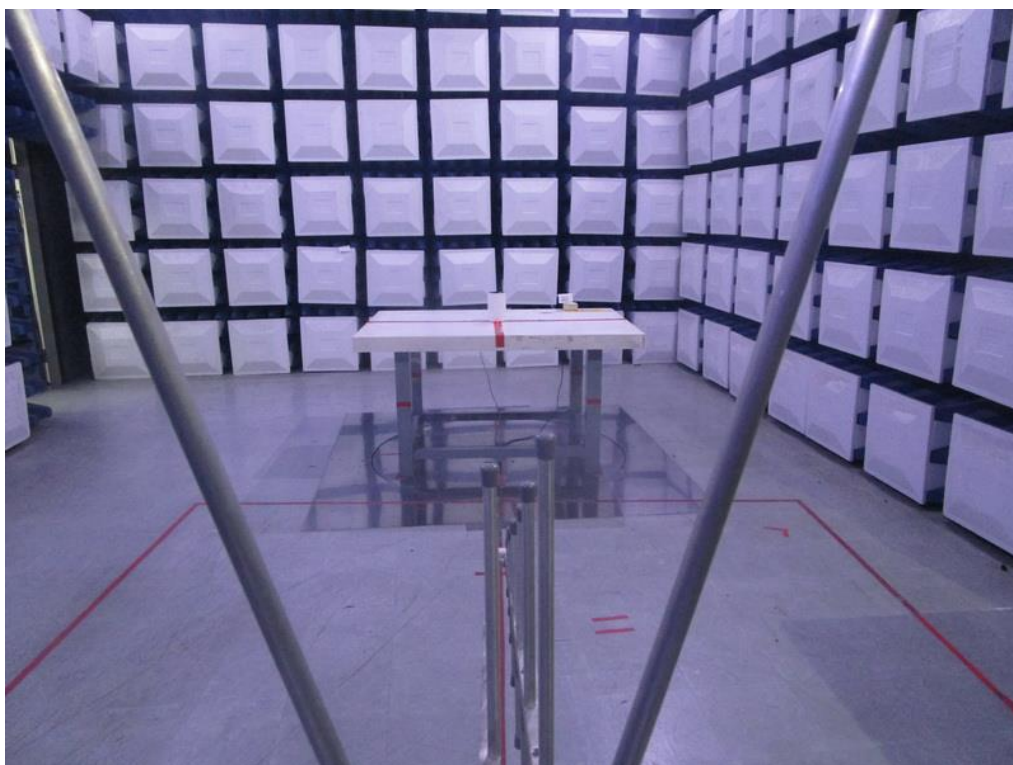
Radiated Emissions Test Photos

9 kHz to 30 MHz



Radiated Emissions Test Photos

30 MHz to 1 GHz

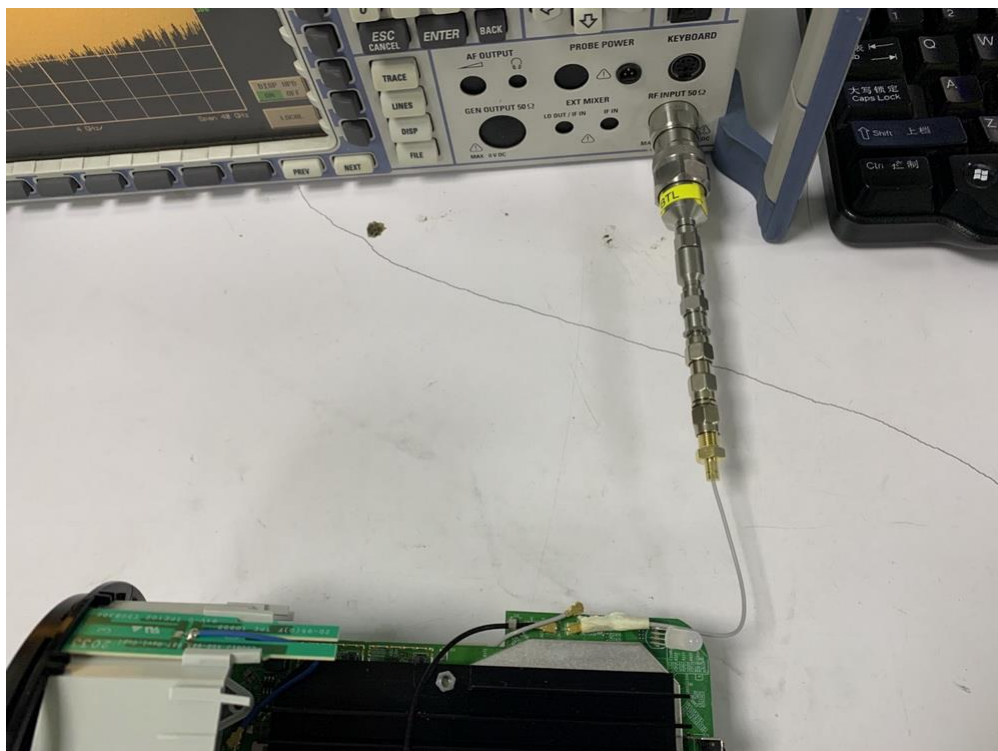
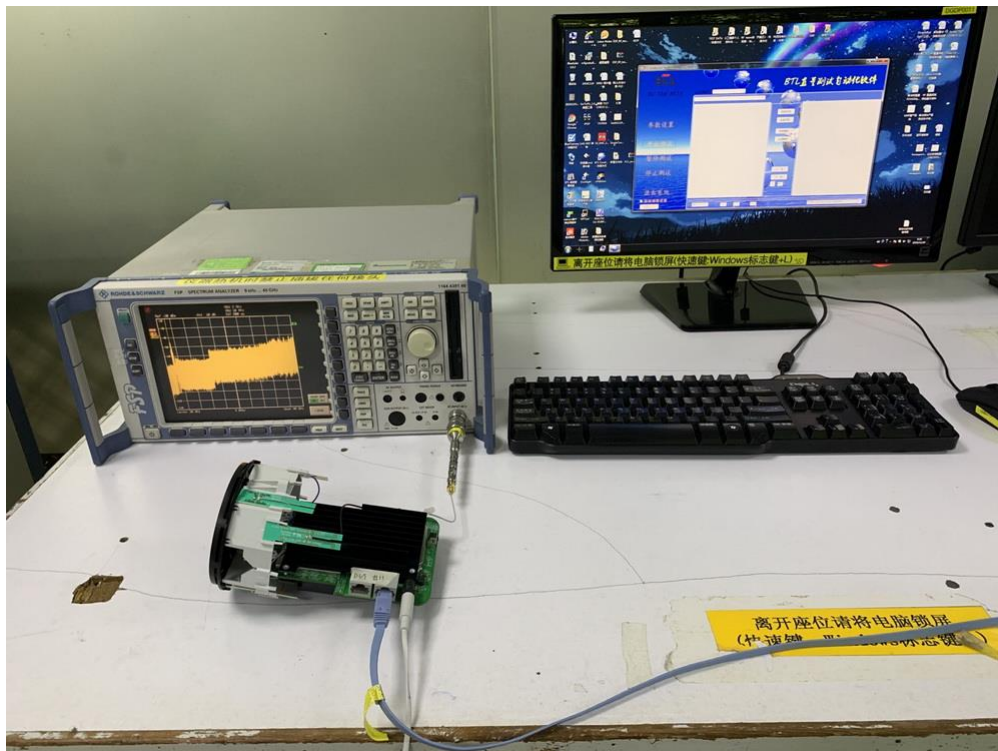


Radiated Emissions Test Photos

Above 1 GHz



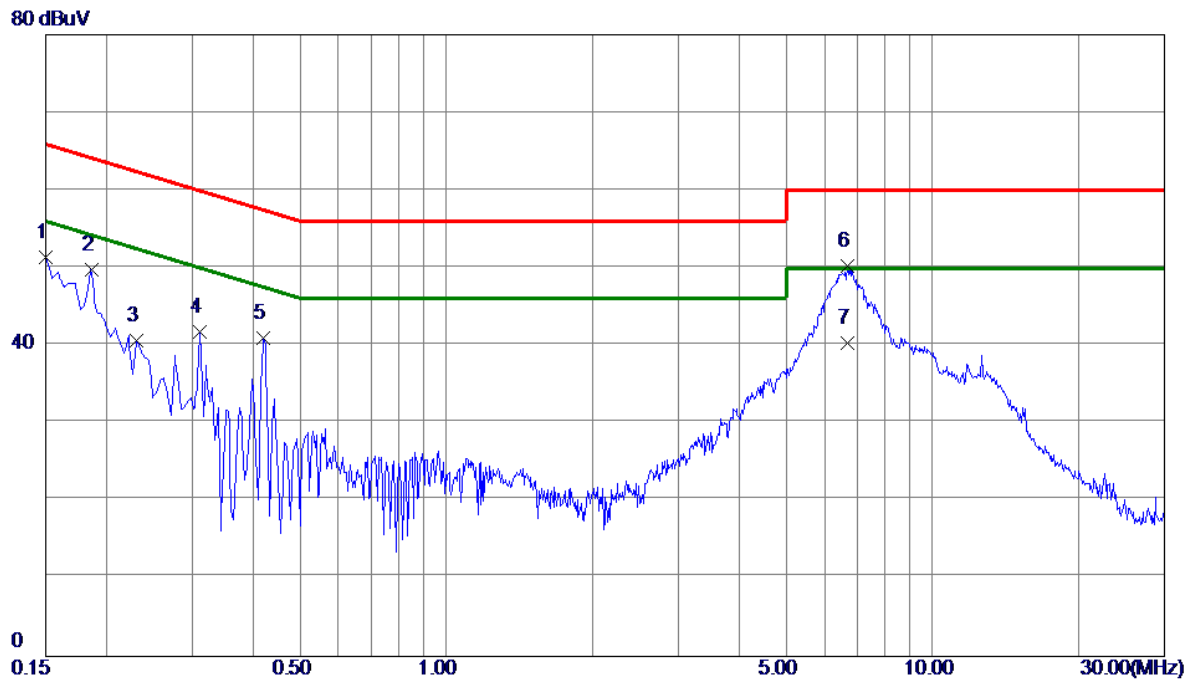
Conducted Test Photos



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX B Mode Channel 06

Line



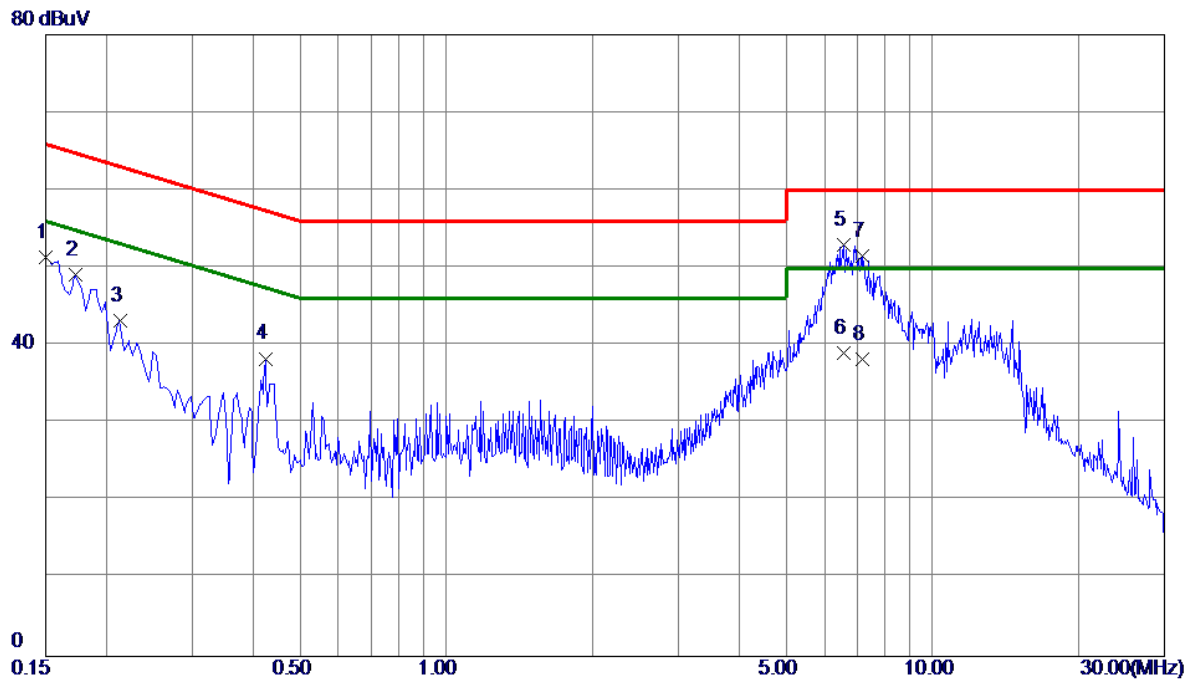
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1500	41.63	9.67	51.30	66.00	-14.70	Peak	
2	0.1860	39.90	9.87	49.77	64.21	-14.44	Peak	
3	0.2310	30.77	9.89	40.66	62.41	-21.75	Peak	
4	0.3120	31.93	9.89	41.82	59.92	-18.10	Peak	
5	0.4200	31.04	9.93	40.97	57.45	-16.48	Peak	
6	6.6750	39.76	10.45	50.21	60.00	-9.79	QP	
7 *	6.6750	29.81	10.45	40.26	50.00	-9.74	AVG	

REMARKS:

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

Test Mode: TX B Mode Channel 06

Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1500	41.61	9.74	51.35	66.00	-14.65	Peak	
2	0.1725	39.23	9.91	49.14	64.84	-15.70	Peak	
3	0.2130	33.23	10.00	43.23	63.09	-19.86	Peak	
4	0.4245	28.22	10.10	38.32	57.36	-19.04	Peak	
5 *	6.5760	42.13	10.79	52.92	60.00	-7.08	QP	
6	6.5760	28.29	10.79	39.08	50.00	-10.92	AVG	
7	7.1745	40.74	10.84	51.58	60.00	-8.42	QP	
8	7.1745	27.40	10.84	38.24	50.00	-11.76	AVG	

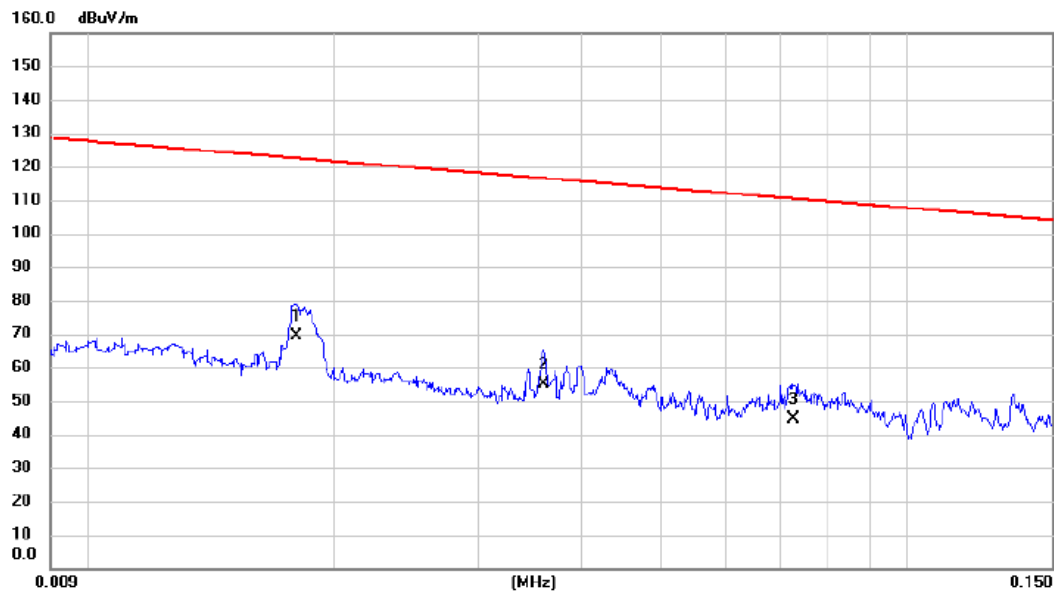
REMARKS:

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode: TX B Mode Channel 06

Ant 0°



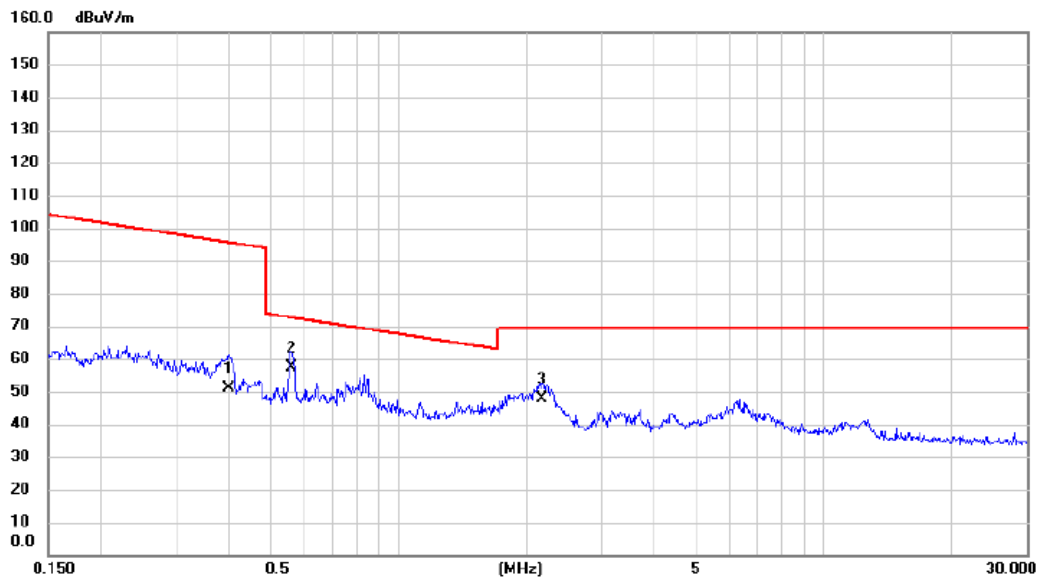
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	0.0180	55.56	13.84	69.40	122.50	-53.10	AVG	
2		0.0360	42.25	12.79	55.04	116.48	-61.44	AVG	
3		0.0726	32.15	12.56	44.71	110.39	-65.68	AVG	

REMARKS:

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

Test Mode: TX B Mode Channel 06

Ant 0°



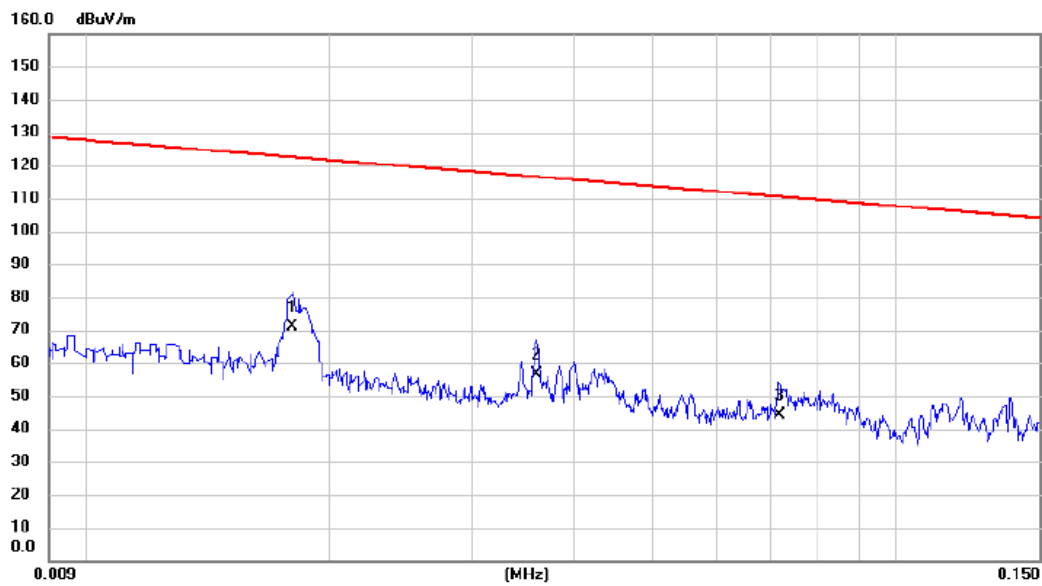
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.3997	38.86	12.26	51.12	95.57	-44.45	AVG	
2	*	0.5611	45.25	11.99	57.24	72.62	-15.38	QP	
3		2.1783	36.55	11.21	47.76	69.54	-21.78	QP	

REMARKS:

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

Test Mode: TX B Mode Channel 06

Ant 90°



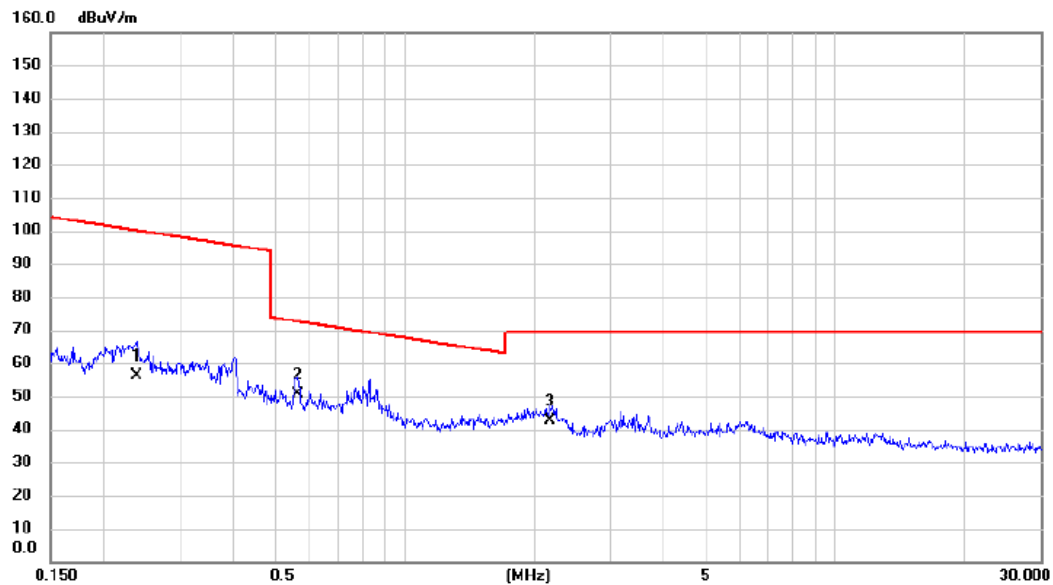
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0180	57.25	13.84	71.09	122.50	-51.41	AVG	
2		0.0360	43.89	12.79	56.68	116.48	-59.80	AVG	
3		0.0718	31.58	12.55	44.13	110.48	-66.35	AVG	

REMARKS:

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

Test Mode: TX B Mode Channel 06

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2378	43.56	12.67	56.23	100.08	-43.85	AVG	
2	*	0.5641	38.68	11.98	50.66	72.58	-21.92	QP	
3		2.1783	31.58	11.21	42.79	69.54	-26.75	QP	

REMARKS:

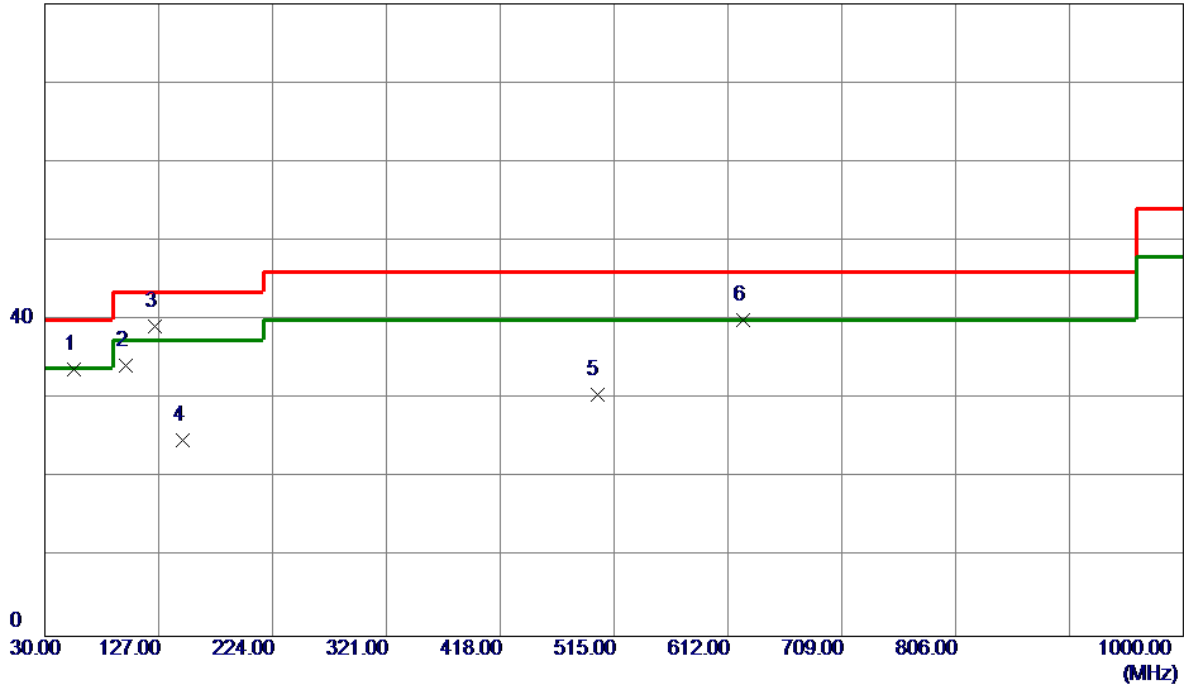
- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode: TX B Mode Channel 06

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	55.2200	47.46	-13.69	33.77	40.00	-6.23	Peak	
2	98.8700	49.24	-15.00	34.24	43.50	-9.26	Peak	
3 *	124.0900	51.91	-12.74	39.17	43.50	-4.33	Peak	
4	147.3700	36.87	-12.12	24.75	43.50	-18.75	Peak	
5	500.4500	37.76	-7.26	30.50	46.00	-15.50	Peak	
6	624.6100	44.81	-4.82	39.99	46.00	-6.01	Peak	

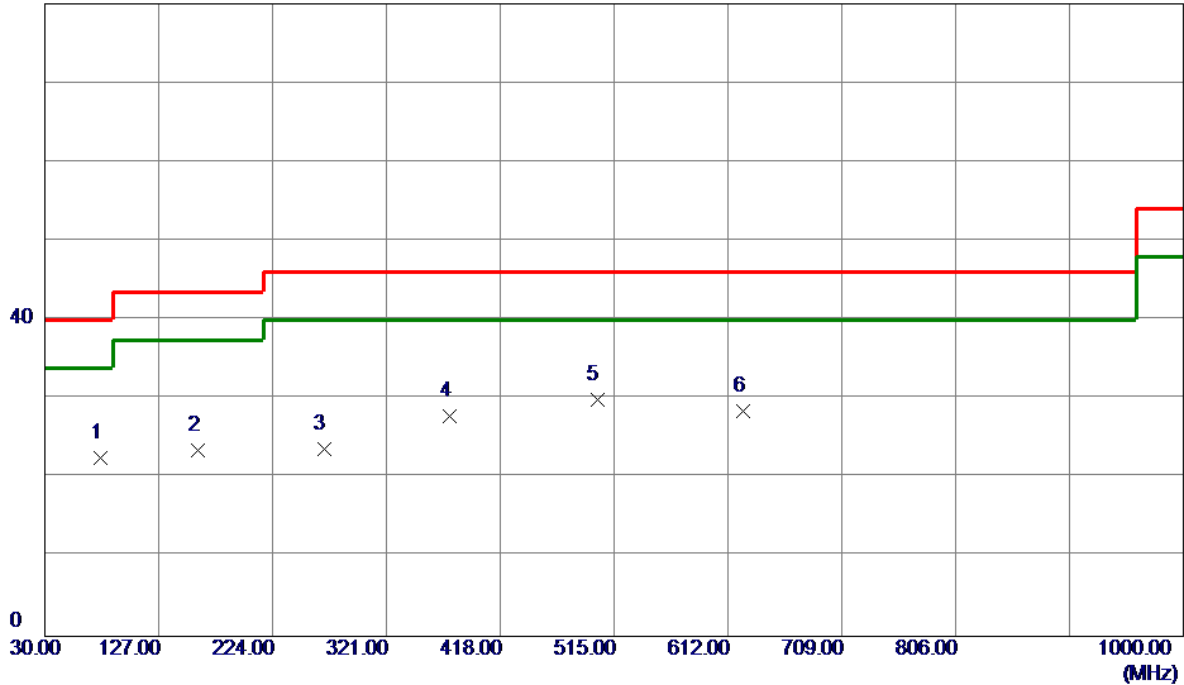
REMARKS:

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

Test Mode: TX B Mode Channel 06

Horizontal

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	77.5300	39.85	-17.28	22.57	40.00	-17.43	Peak	
2	159.9800	34.21	-10.67	23.54	43.50	-19.96	Peak	
3	267.6500	36.17	-12.54	23.63	46.00	-22.37	Peak	
4	375.3200	37.38	-9.60	27.78	46.00	-18.22	Peak	
5 *	500.4500	37.23	-7.26	29.97	46.00	-16.03	Peak	
6	624.6100	33.27	-4.82	28.45	46.00	-17.55	Peak	

REMARKS:

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

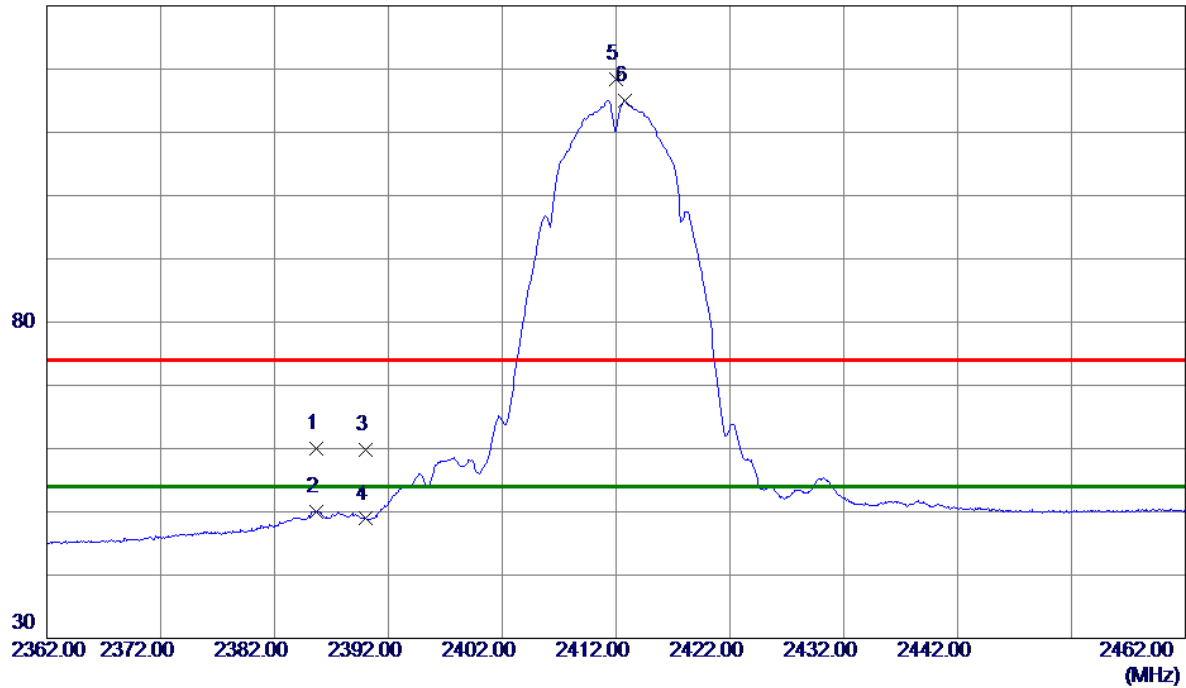
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Test Mode: TX B Mode 2412 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2385.6500	49.48	10.61	60.09	74.00	-13.91	Peak	
2	2385.6500	39.45	10.61	50.06	54.00	-3.94	AVG	
3	2390.0000	49.27	10.62	59.89	74.00	-14.11	Peak	
4	2390.0000	38.28	10.62	48.90	54.00	-5.10	AVG	
5	2412.0500	107.69	10.69	118.38	74.00	44.38	Peak	No Limit
6 *	2412.7500	104.29	10.69	114.98	54.00	60.98	AVG	No Limit

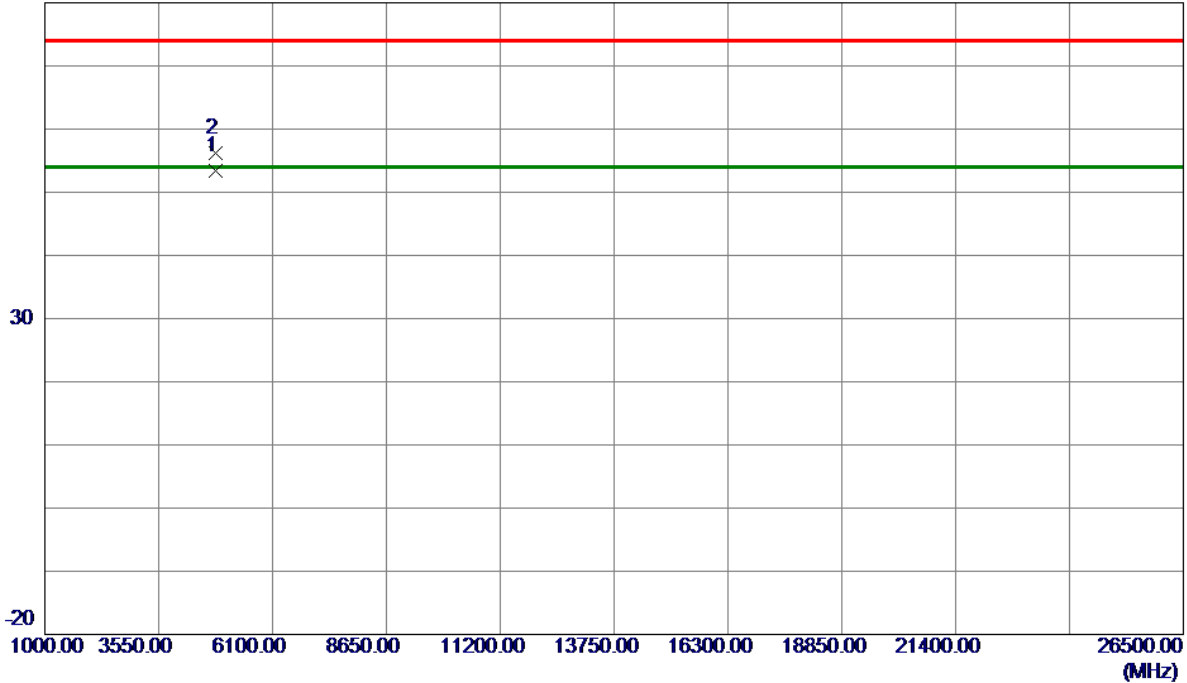
REMARKS:

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

Test Mode:	TX B Mode 2412 MHz
------------	--------------------

Vertical

80 dBuV/m



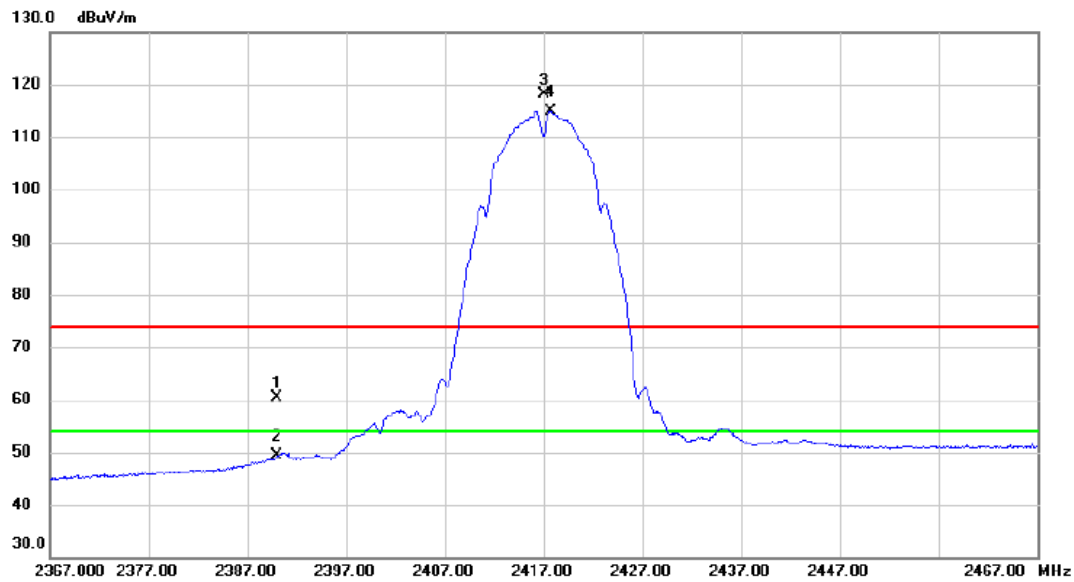
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9270	45.45	7.86	53.31	54.00	-0.69	AVG	
2	4824.0120	48.41	7.86	56.27	74.00	-17.73	Peak	

REMARKS:

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

Test Mode: TX B Mode 2417 MHz

Vertical



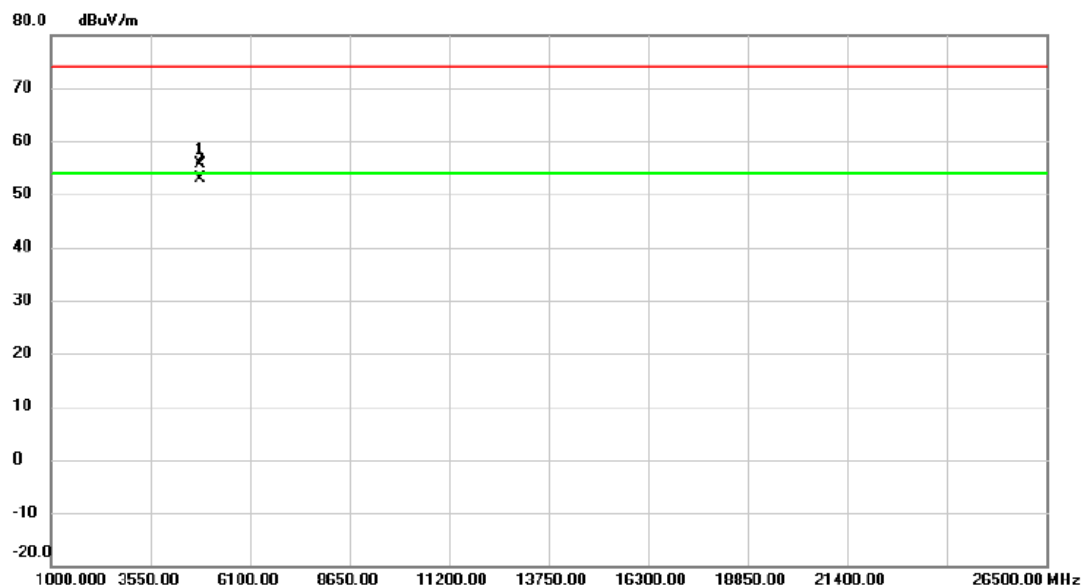
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	49.66	10.63	60.29	74.00	-13.71	peak	
2		2390.000	38.73	10.63	49.36	54.00	-4.64	AVG	
3	X	2417.100	107.34	10.70	118.04	74.00	44.04	peak	No Limit
4	*	2417.750	104.25	10.70	114.95	54.00	60.95	AVG	No Limit

REMARKS:

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

Test Mode: TX B Mode 2417 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4833.935	47.79	7.89	55.68	74.00	-18.32	peak	
2	*	4833.950	44.90	7.89	52.79	54.00	-1.21	AVG	

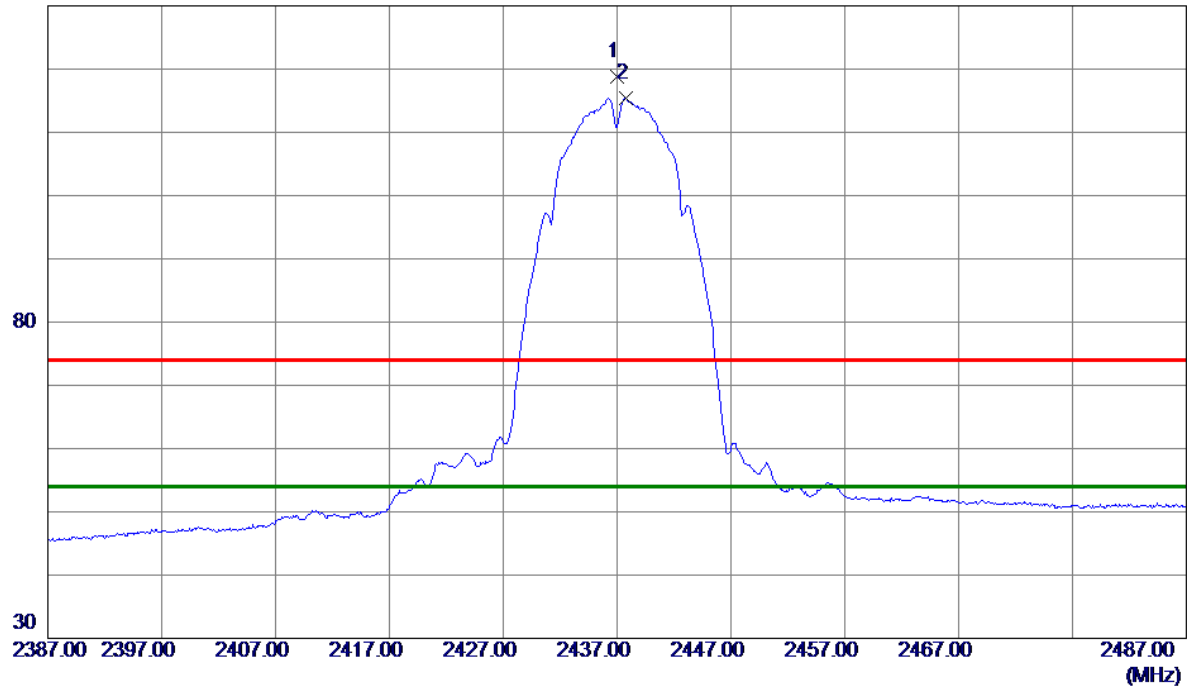
REMARKS:

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

Test Mode: TX B Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2437.0000	108.13	10.76	118.89	74.00	44.89	Peak	No Limit
2 *	2437.7500	104.71	10.76	115.47	54.00	61.47	AVG	No Limit

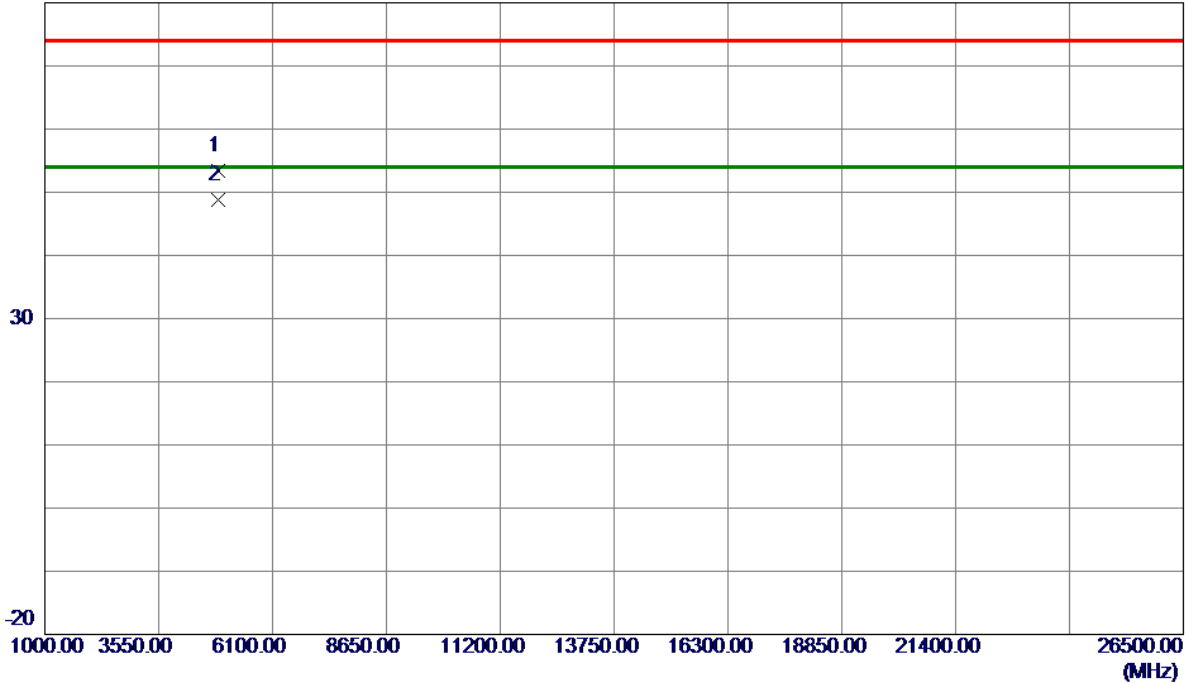
REMARKS:

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

Test Mode: TX B Mode 2437 MHz

Vertical

80 dBuV/m



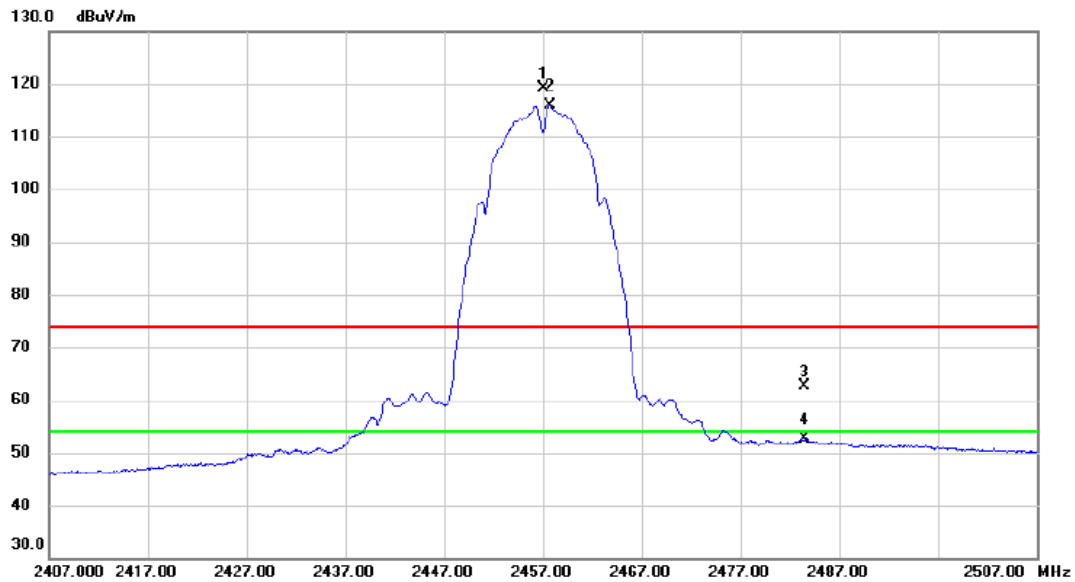
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.9550	45.26	8.06	53.32	74.00	-20.68	Peak	
2 *	4873.9720	40.79	8.06	48.85	54.00	-5.15	AVG	

REMARKS:

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

Test Mode: TX B Mode 2457 MHz

Vertical



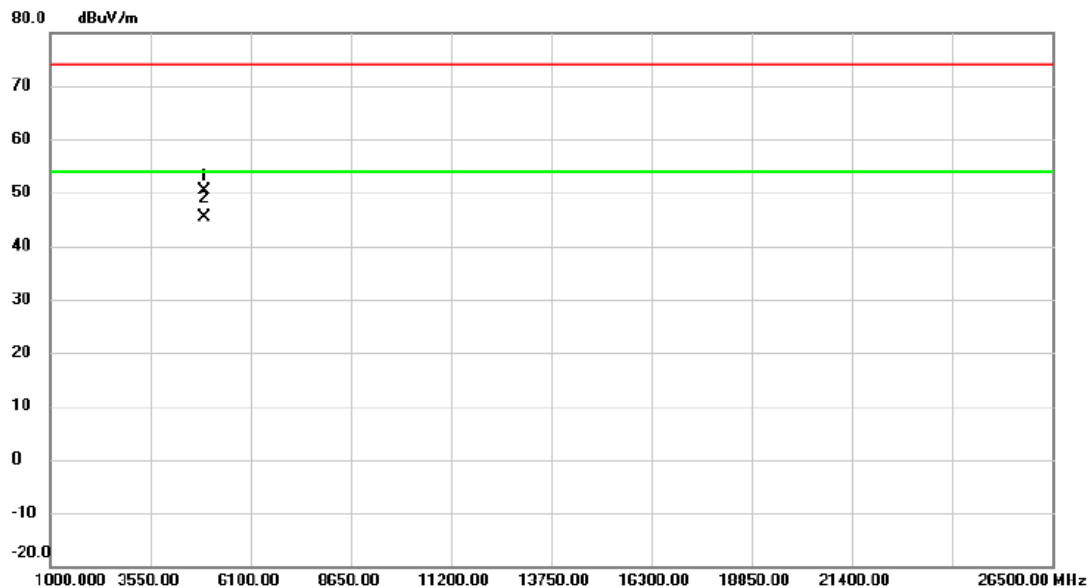
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2457.050	108.41	10.83	119.24	74.00	45.24	peak	No Limit
2	*	2457.750	104.94	10.83	115.77	54.00	61.77	AVG	No Limit
3		2483.500	51.77	10.90	62.67	74.00	-11.33	peak	
4		2483.500	41.74	10.90	52.64	54.00	-1.36	AVG	

REMARKS:

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

Test Mode: TX B Mode 2457 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4913.993	42.14	8.22	50.36	74.00	-23.64	peak	
2	*	4914.012	37.10	8.22	45.32	54.00	-8.68	AVG	

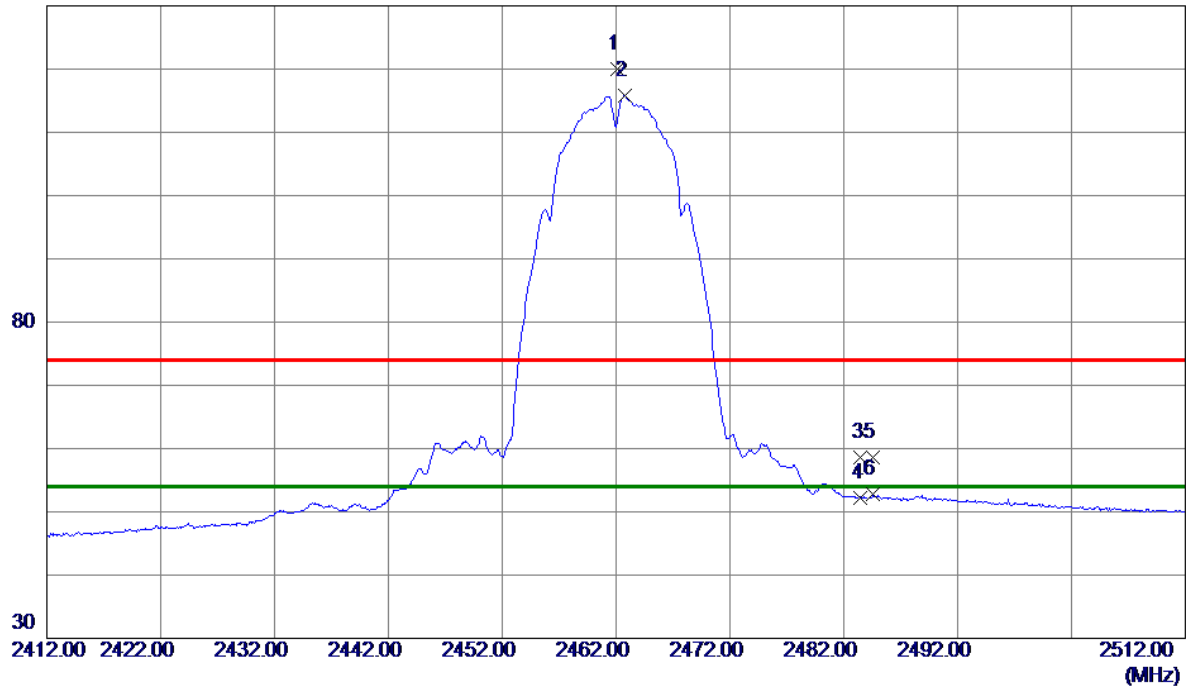
REMARKS:

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

Test Mode: TX B Mode 2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2462.1000	109.18	10.84	120.02	74.00	46.02	Peak	No Limit
2 *	2462.8000	104.91	10.84	115.75	54.00	61.75	AVG	No Limit
3	2483.5000	47.61	10.90	58.51	74.00	-15.49	Peak	
4	2483.5000	41.26	10.90	52.16	54.00	-1.84	AVG	
5	2484.6000	47.76	10.90	58.66	74.00	-15.34	Peak	
6	2484.6000	41.84	10.90	52.74	54.00	-1.26	AVG	

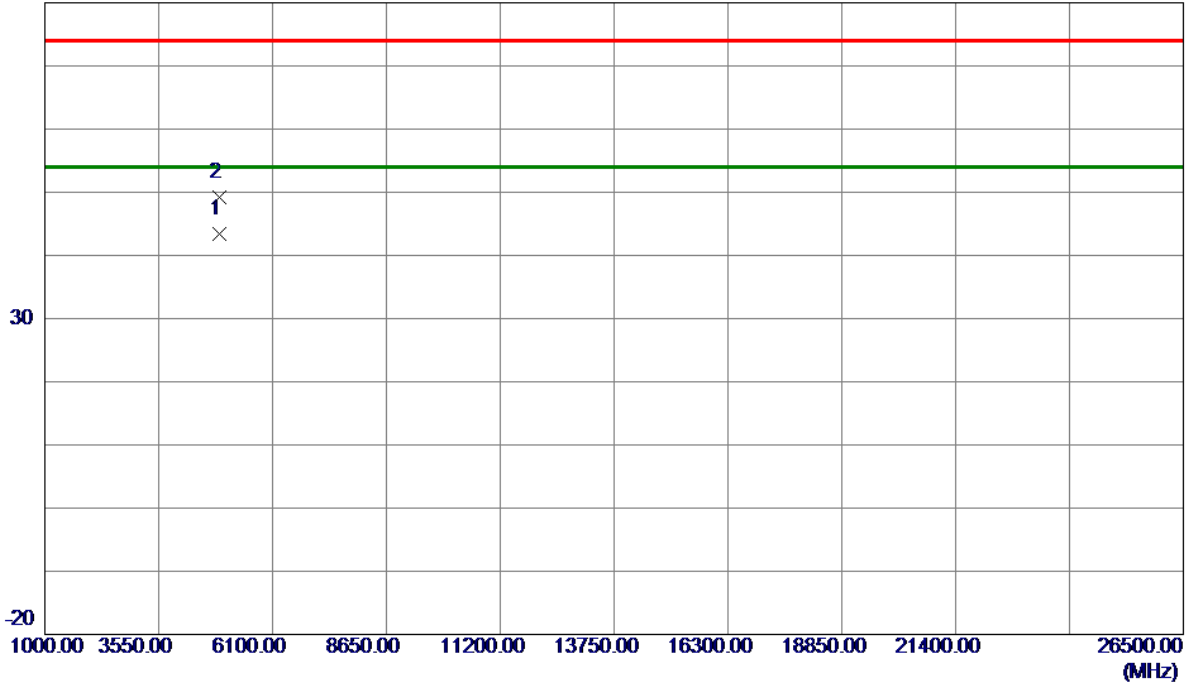
REMARKS:

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

Test Mode: TX B Mode 2462 MHz

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9320	35.14	8.26	43.40	54.00	-10.60	AVG	
2	4924.0299	41.00	8.26	49.26	74.00	-24.74	Peak	

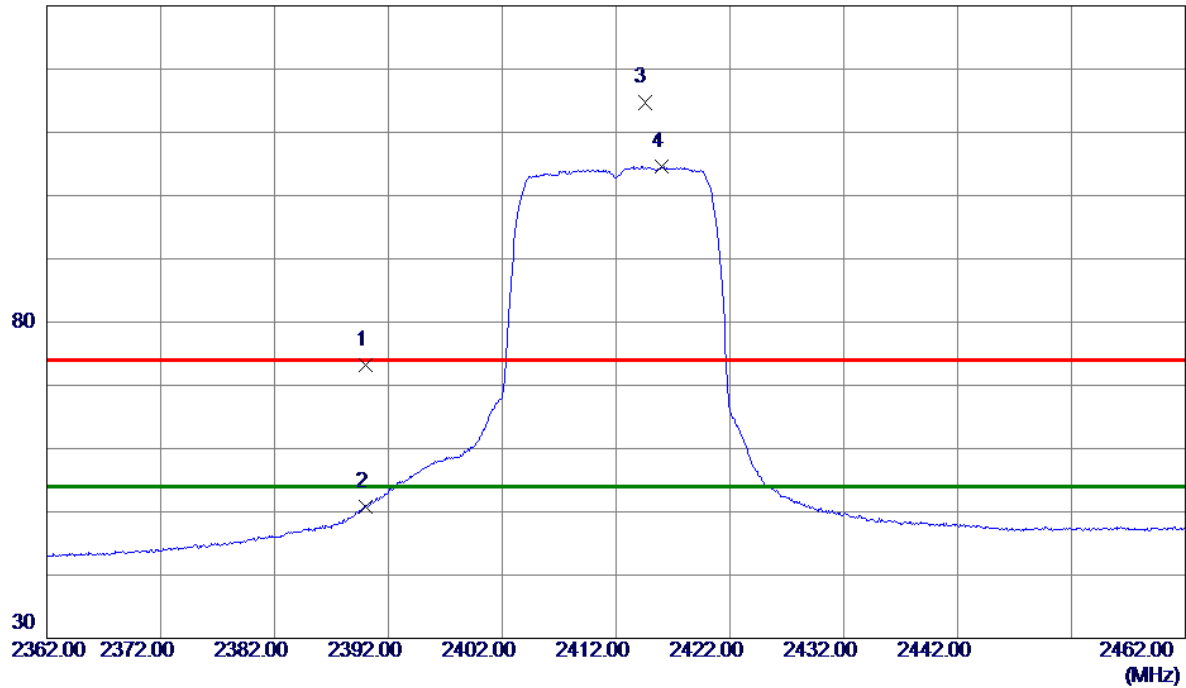
REMARKS:

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

Test Mode: TX G Mode 2412 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	62.65	10.62	73.27	74.00	-0.73	Peak	
2	2390.0000	40.13	10.62	50.75	54.00	-3.25	AVG	
3	2414.5000	104.00	10.70	114.70	74.00	40.70	Peak	No Limit
4 *	2416.0000	93.99	10.70	104.69	54.00	50.69	AVG	No Limit

REMARKS:

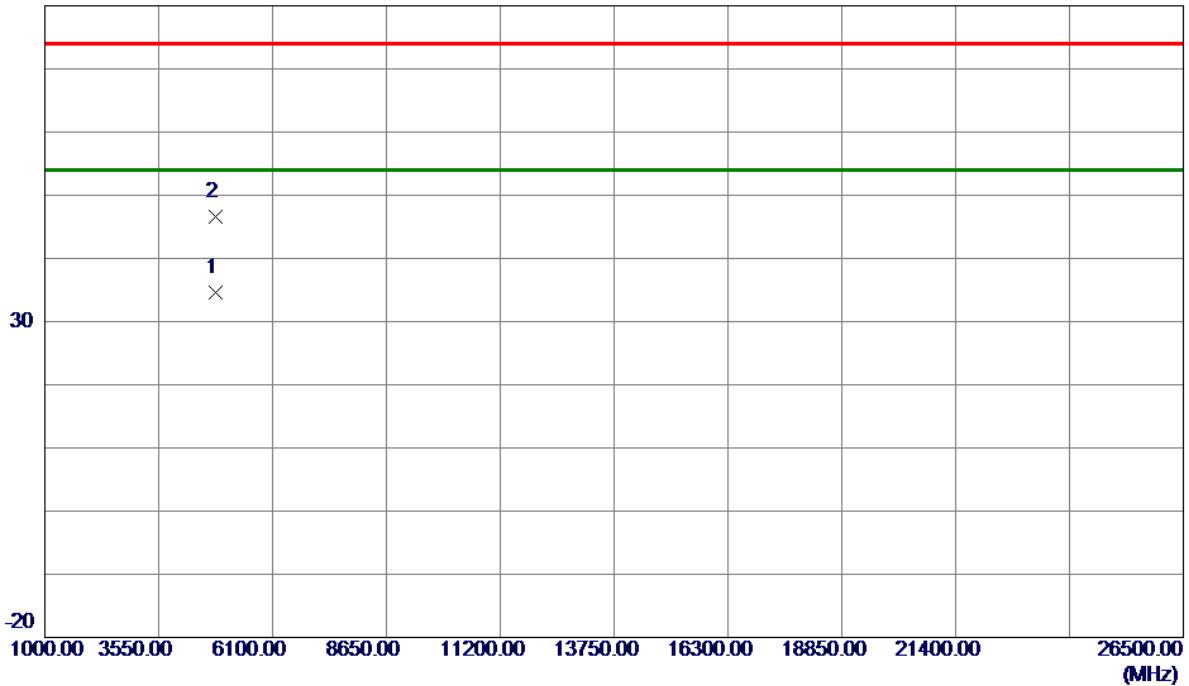
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX G Mode 2412 MHz

Vertical

80 dBuV/m



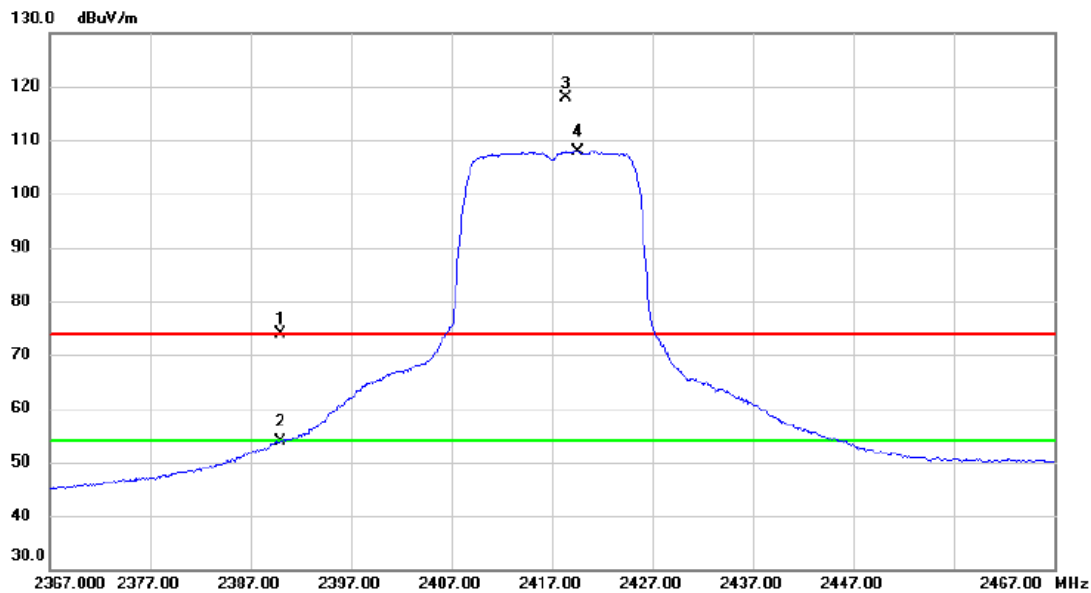
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.3800	26.81	7.86	34.67	54.00	-19.33	AVG	
2	4824.4000	38.78	7.86	46.64	74.00	-27.36	Peak	

REMARKS:

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

Test Mode: TX G Mode 2417 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	63.29	10.63	73.92	74.00	-0.08	peak	
2		2390.000	43.20	10.63	53.83	54.00	-0.17	AVG	
3	X	2418.450	107.08	10.71	117.79	74.00	43.79	peak	No Limit
4	*	2419.550	97.15	10.71	107.86	54.00	53.86	AVG	No Limit

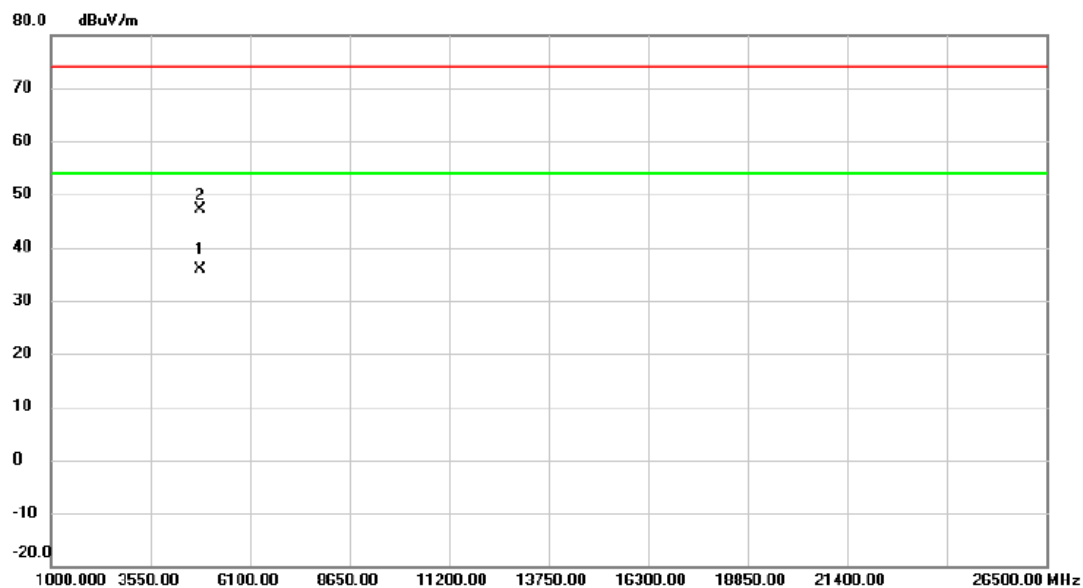
REMARKS:

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

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

Test Mode: TX G Mode 2417 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4834.380	27.90	7.90	35.80	54.00	-18.20	AVG	
2		4838.460	39.18	7.91	47.09	74.00	-26.91	peak	

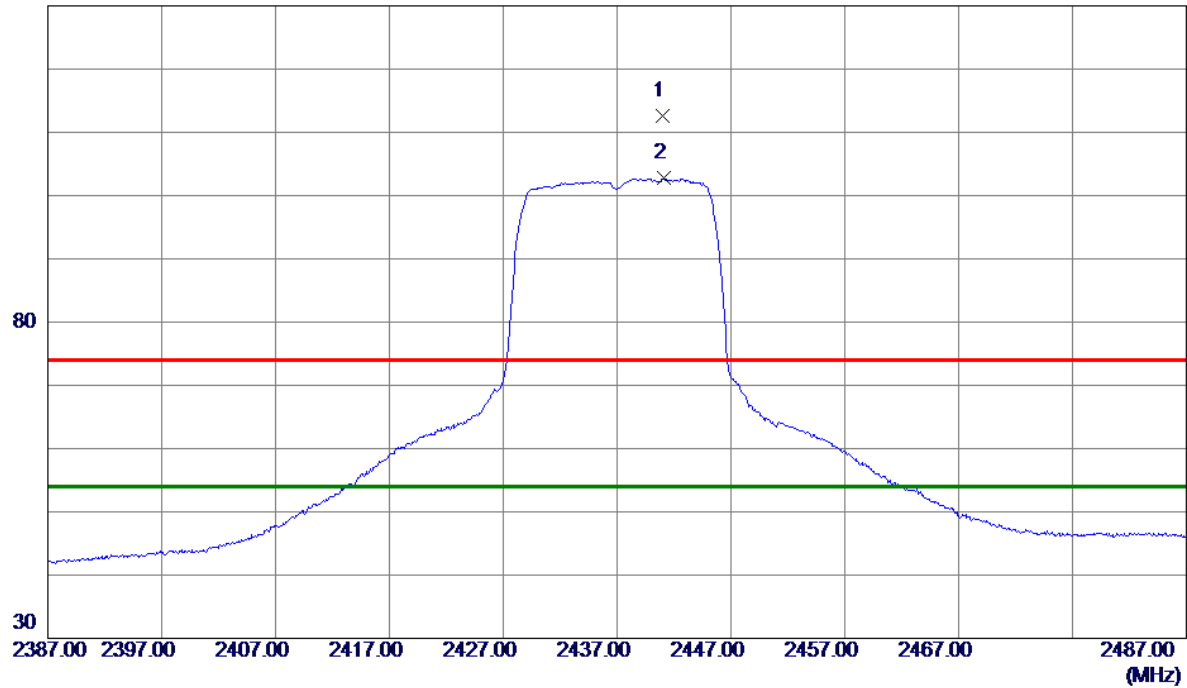
REMARKS:

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

Test Mode: TX G Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2441.0000	101.78	10.77	112.55	74.00	38.55	Peak	No Limit
2 *	2441.1000	92.03	10.77	102.80	54.00	48.80	AVG	No Limit

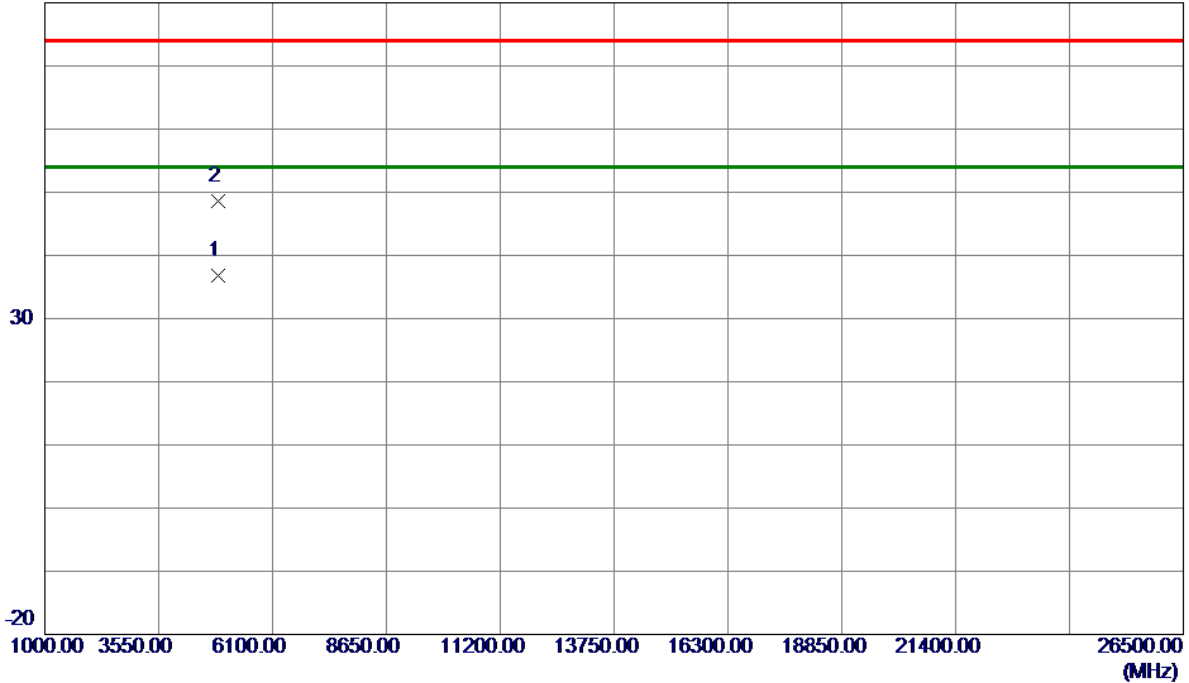
REMARKS:

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

Test Mode: TX G Mode 2437 MHz

Vertical

80 dBuV/m



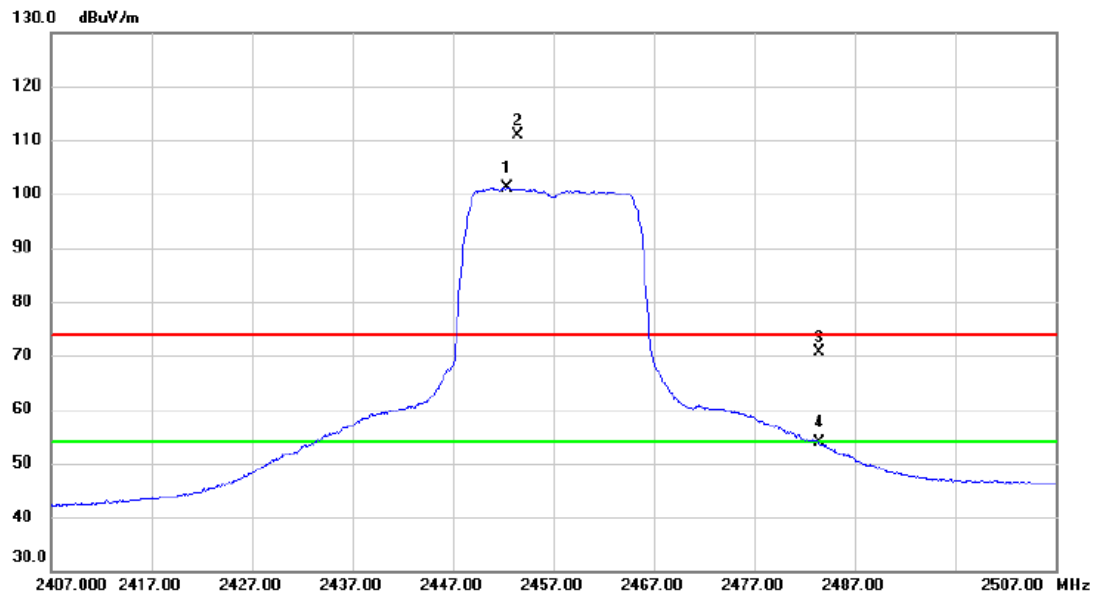
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.3300	28.73	8.06	36.79	54.00	-17.21	AVG	
2	4874.5800	40.55	8.06	48.61	74.00	-25.39	Peak	

REMARKS:

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

Test Mode: TX G Mode 2457 MHz

Vertical



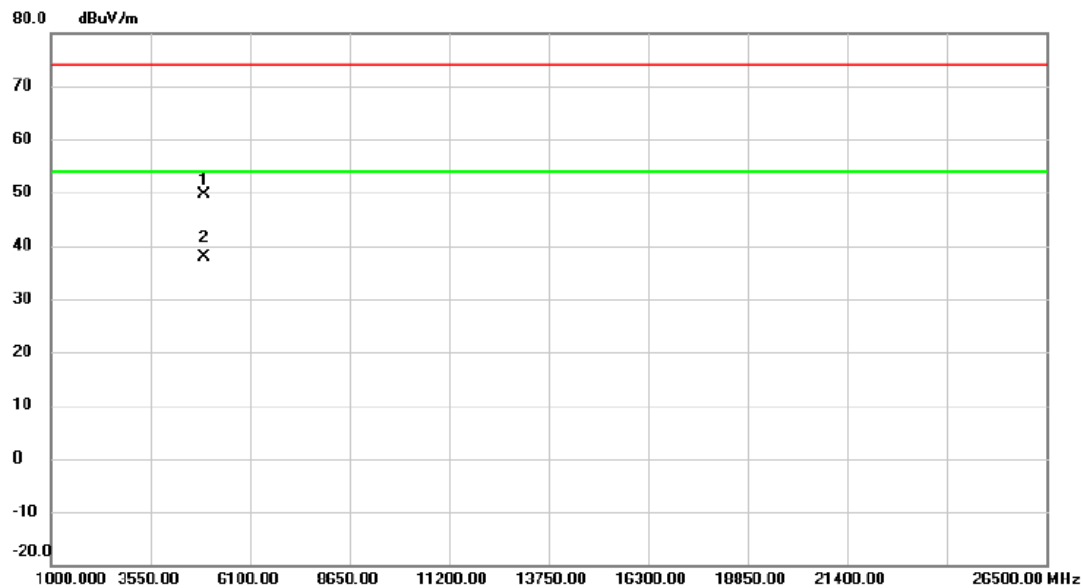
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2452.450	90.36	10.81	101.17	54.00	47.17	AVG	No Limit
2	X	2453.400	100.10	10.81	110.91	74.00	36.91	peak	No Limit
3		2483.500	59.84	10.90	70.74	74.00	-3.26	peak	
4		2483.500	42.99	10.90	53.89	54.00	-0.11	AVG	

REMARKS:

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

Test Mode: TX G Mode 2457 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4912.110	41.39	8.21	49.60	74.00	-24.40	peak	
2	*	4912.680	29.74	8.22	37.96	54.00	-16.04	AVG	

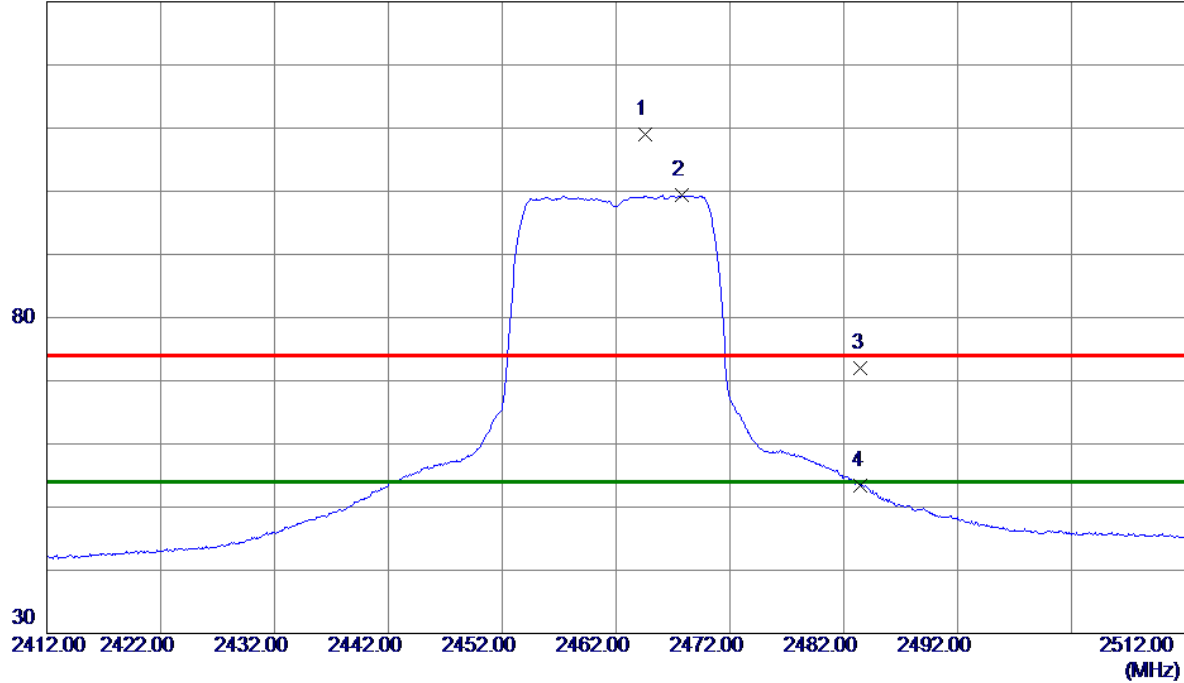
REMARKS:

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

Test Mode: TX G Mode 2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2464.5500	98.25	10.84	109.09	74.00	35.09	Peak	No Limit
2 *	2467.8000	88.49	10.85	99.34	54.00	45.34	AVG	No Limit
3	2483.5000	61.08	10.90	71.98	74.00	-2.02	Peak	
4	2483.5000	42.55	10.90	53.45	54.00	-0.55	AVG	

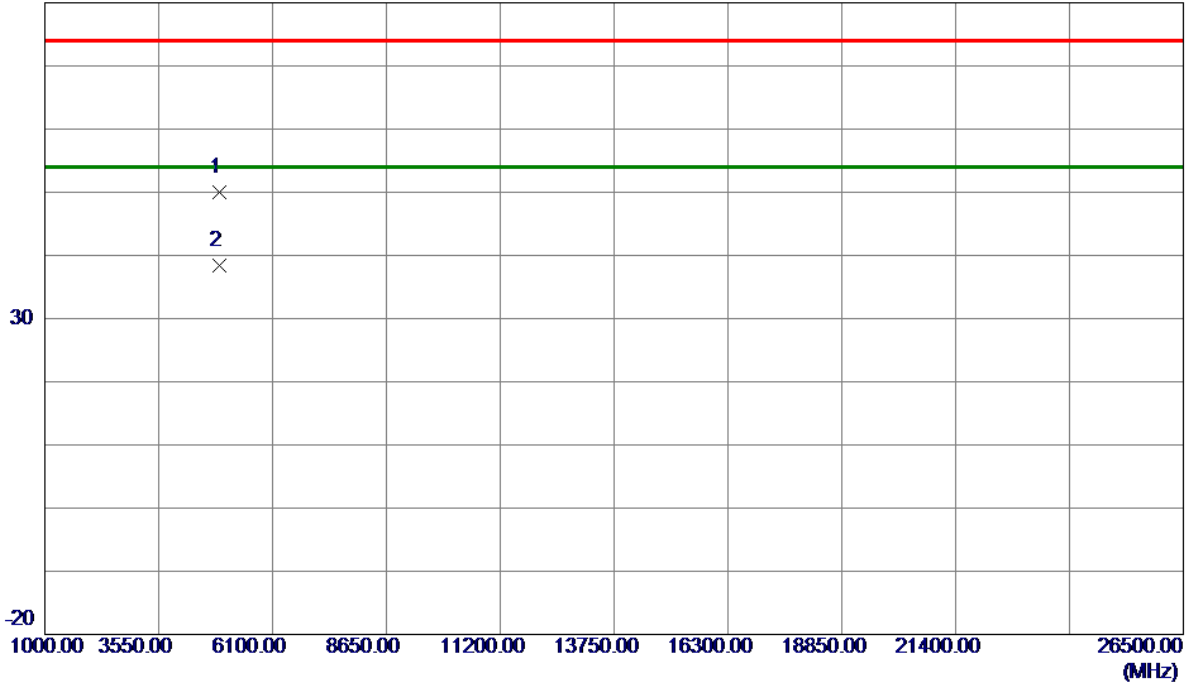
REMARKS:

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

Test Mode: TX G Mode 2462 MHz

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4922.0500	41.68	8.25	49.93	74.00	-24.07	Peak	
2 *	4922.9600	30.16	8.25	38.41	54.00	-15.59	AVG	

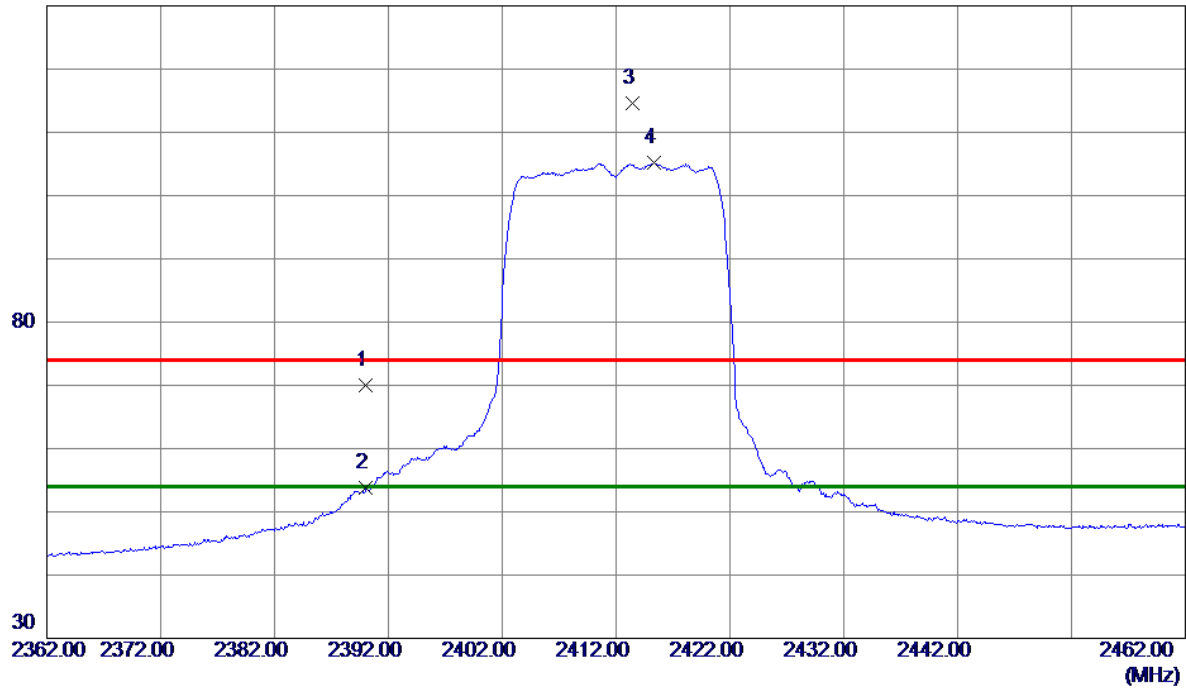
REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	59.45	10.62	70.07	74.00	-3.93	Peak	
2	2390.0000	43.13	10.62	53.75	54.00	-0.25	AVG	
3	2413.4500	103.93	10.69	114.62	74.00	40.62	Peak	No Limit
4 *	2415.3000	94.53	10.70	105.23	54.00	51.23	AVG	No Limit

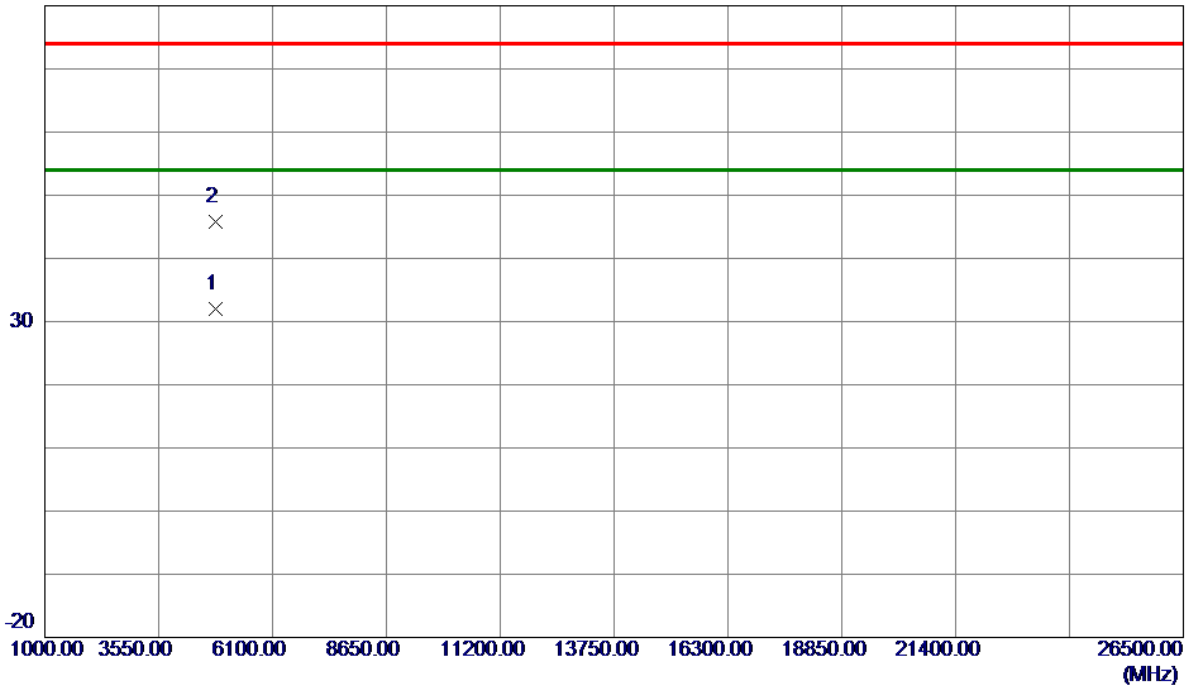
REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

Vertical

80 dBuV/m



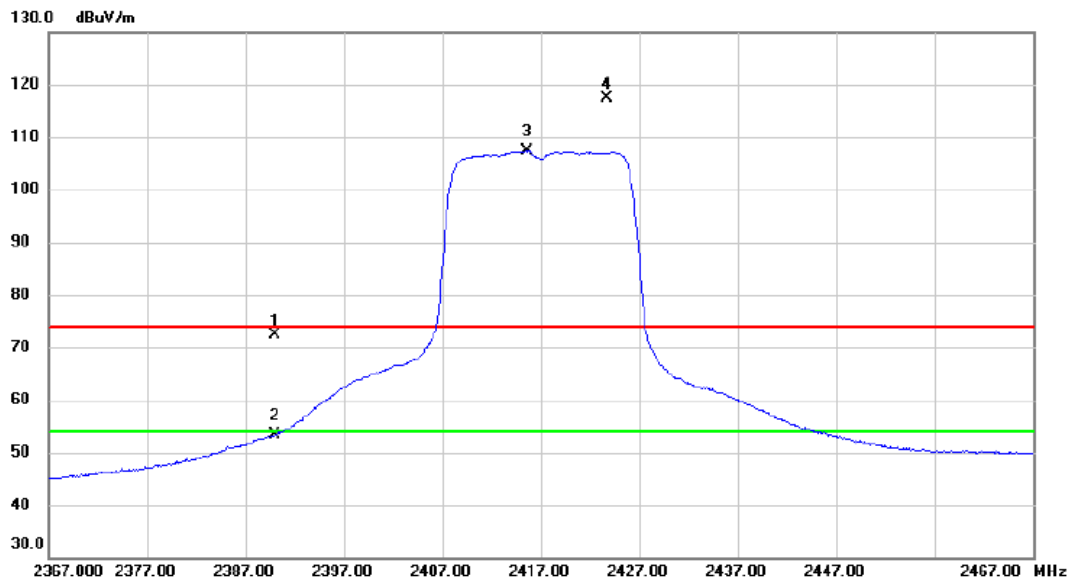
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4826.3100	24.13	7.87	32.00	54.00	-22.00	AVG	
2	4828.7599	37.88	7.88	45.76	74.00	-28.24	Peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2417 MHz

Vertical



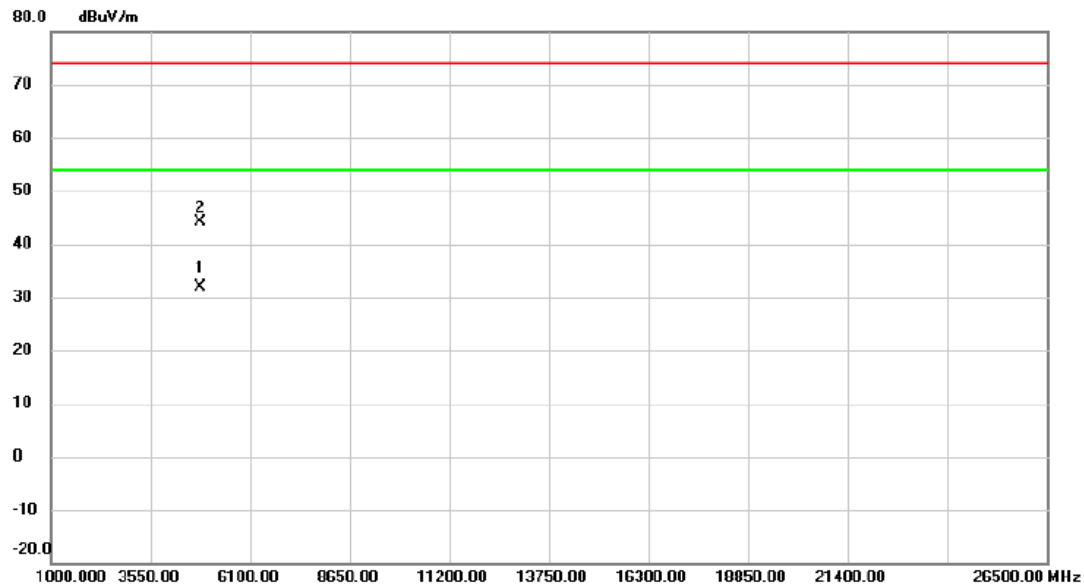
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	61.74	10.63	72.37	74.00	-1.63	peak	
2		2390.000	42.65	10.63	53.28	54.00	-0.72	AVG	
3	*	2415.550	96.71	10.69	107.40	54.00	53.40	AVG	No Limit
4	X	2423.700	106.75	10.72	117.47	74.00	43.47	peak	No Limit

REMARKS:

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

Test Mode: TX N-20M Mode 2417 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4828.260	24.03	7.88	31.91	54.00	-22.09	AVG	
2		4832.440	36.35	7.89	44.24	74.00	-29.76	peak	

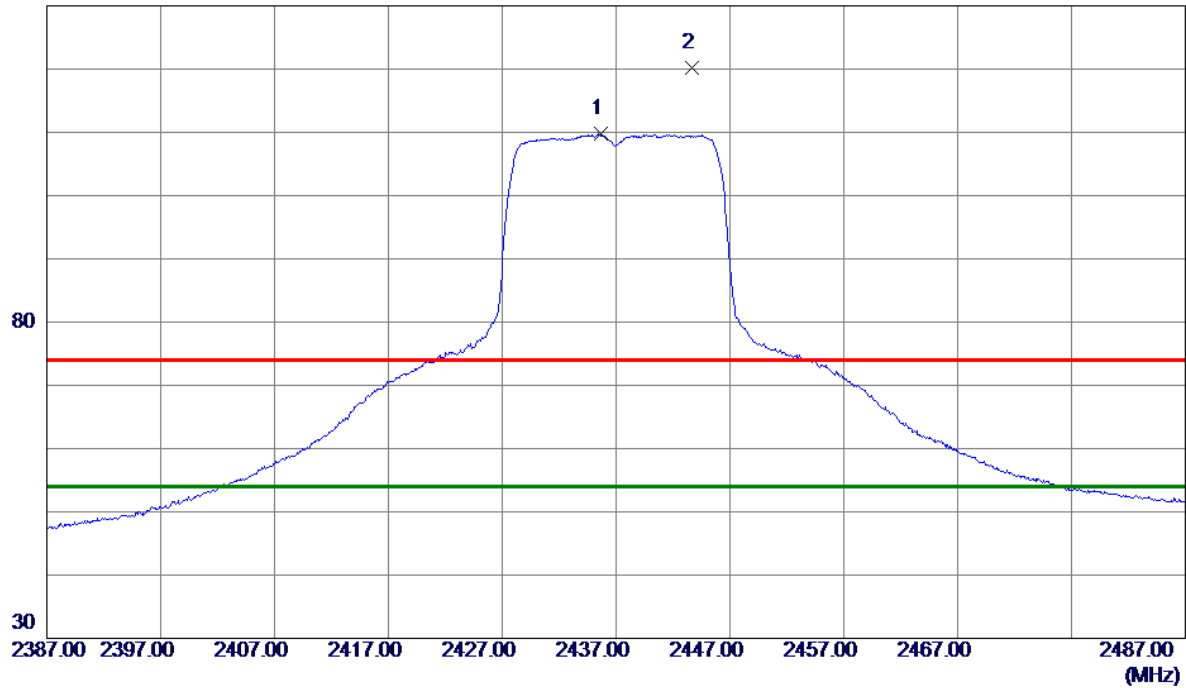
REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2435.7000	99.04	10.76	109.80	74.00	35.80	Peak	No Limit
2 *	2443.6500	109.45	10.78	120.23	74.00	46.23	Peak	No Limit

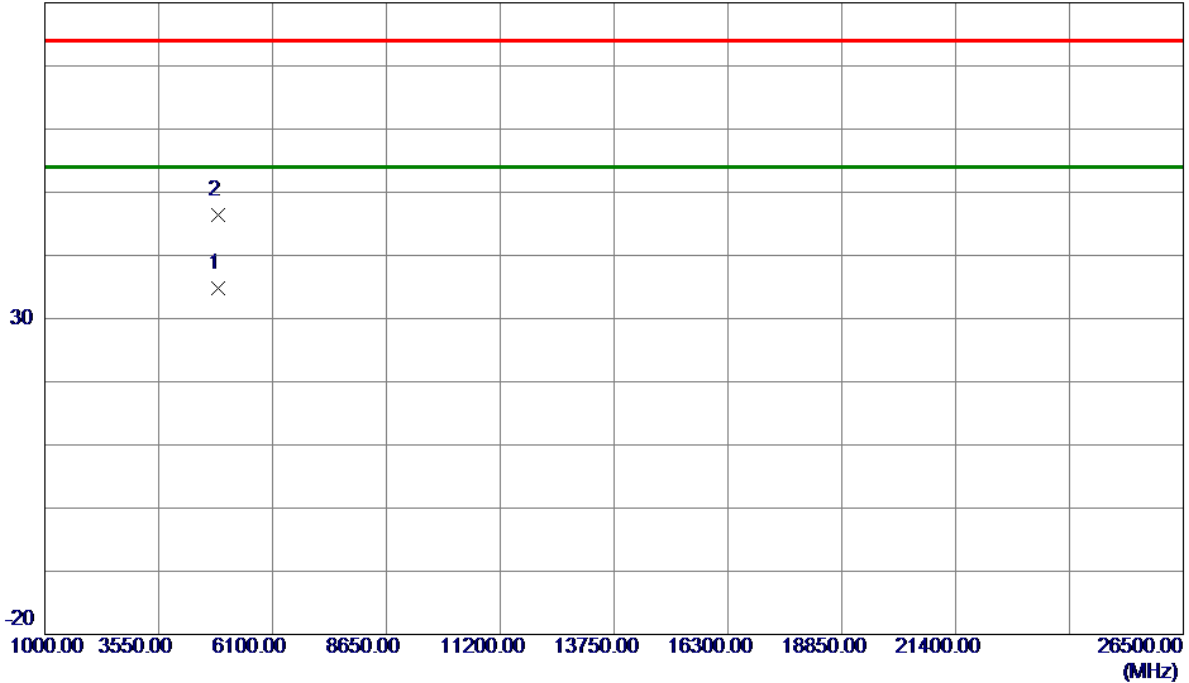
REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

Vertical

80 dBuV/m



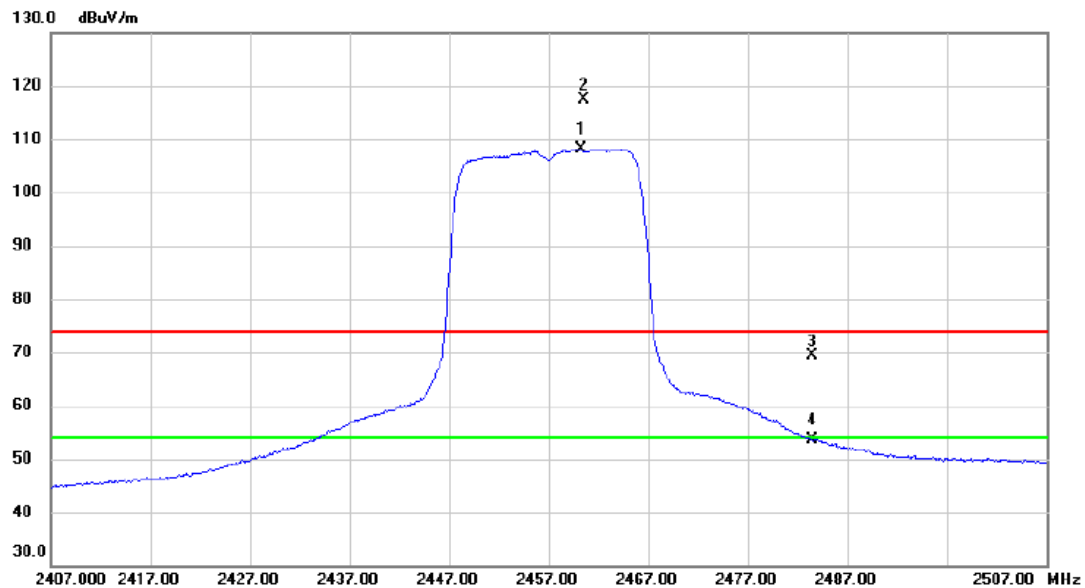
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.8600	26.66	8.06	34.72	54.00	-19.28	AVG	
2	4874.4700	38.28	8.06	46.34	74.00	-27.66	Peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2457 MHz

Vertical



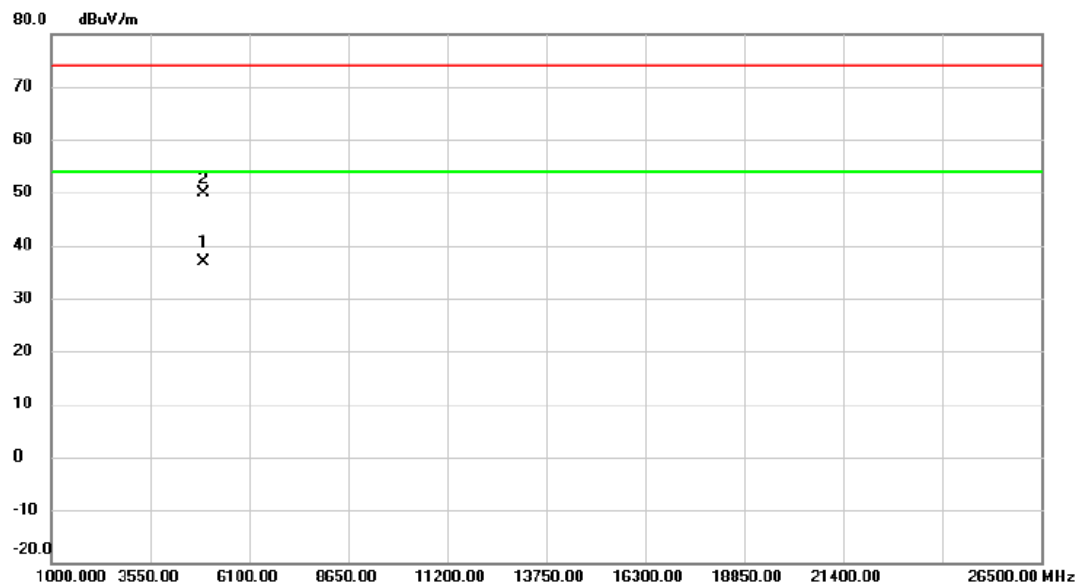
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2460.300	97.23	10.83	108.06	54.00	54.06	AVG	No Limit
2	X	2460.600	106.61	10.83	117.44	74.00	43.44	peak	No Limit
3		2483.500	58.58	10.90	69.48	74.00	-4.52	peak	
4		2483.500	42.70	10.90	53.60	54.00	-0.40	AVG	

REMARKS:

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

Test Mode: TX N-20M Mode 2457 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4914.050	28.69	8.22	36.91	54.00	-17.09	AVG	
2		4917.200	41.63	8.24	49.87	74.00	-24.13	peak	

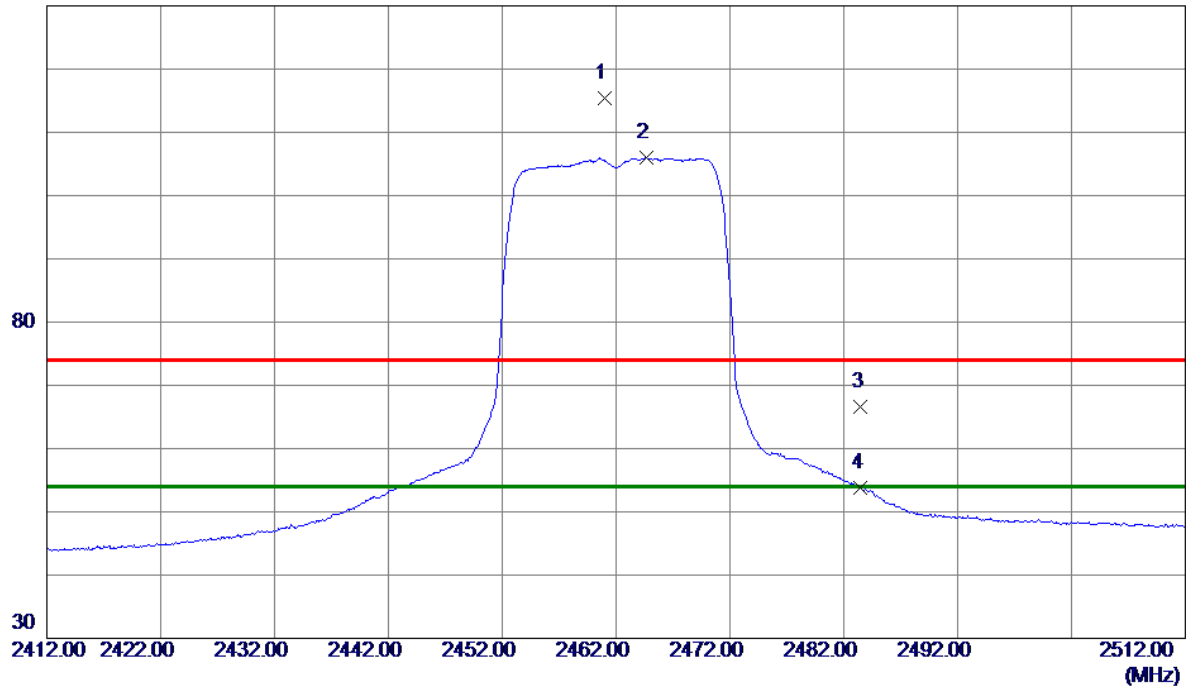
REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.9500	104.50	10.83	115.33	74.00	41.33	Peak	No Limit
2 *	2464.7000	95.07	10.84	105.91	54.00	51.91	AVG	No Limit
3	2483.5000	55.65	10.90	66.55	74.00	-7.45	Peak	
4	2483.5000	42.89	10.90	53.79	54.00	-0.21	AVG	

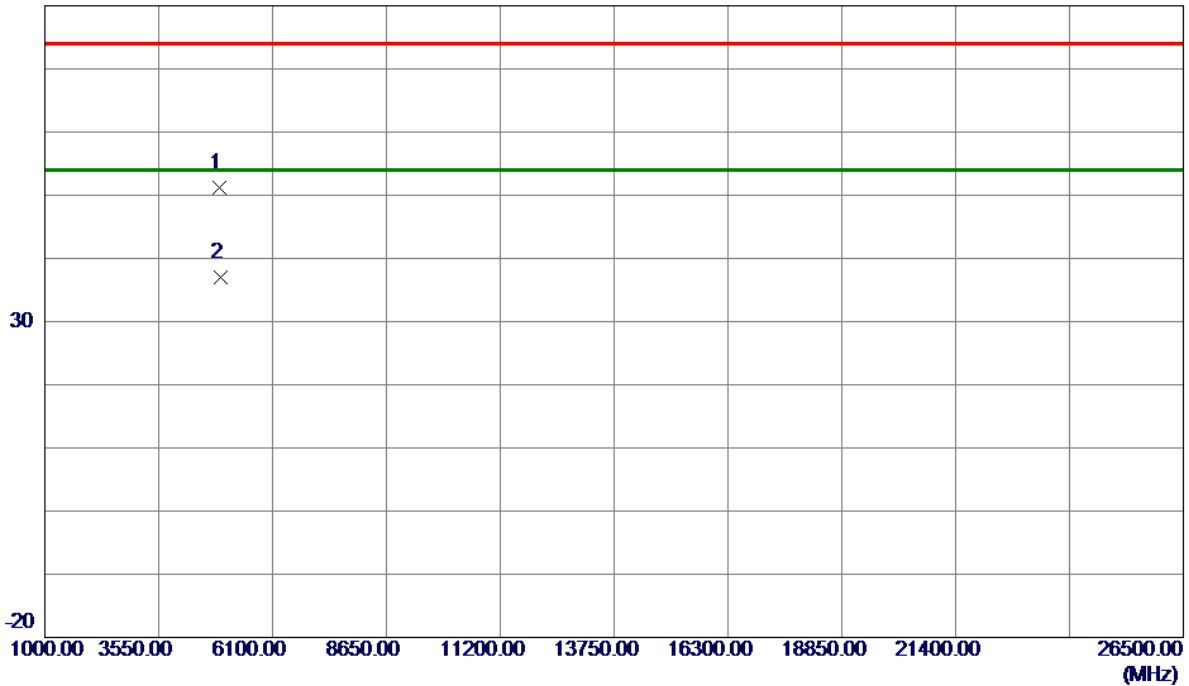
REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

Vertical

80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4922.7900	42.89	8.25	51.14	74.00	-22.86	Peak	
2 *	4925.5800	28.80	8.26	37.06	54.00	-16.94	AVG	

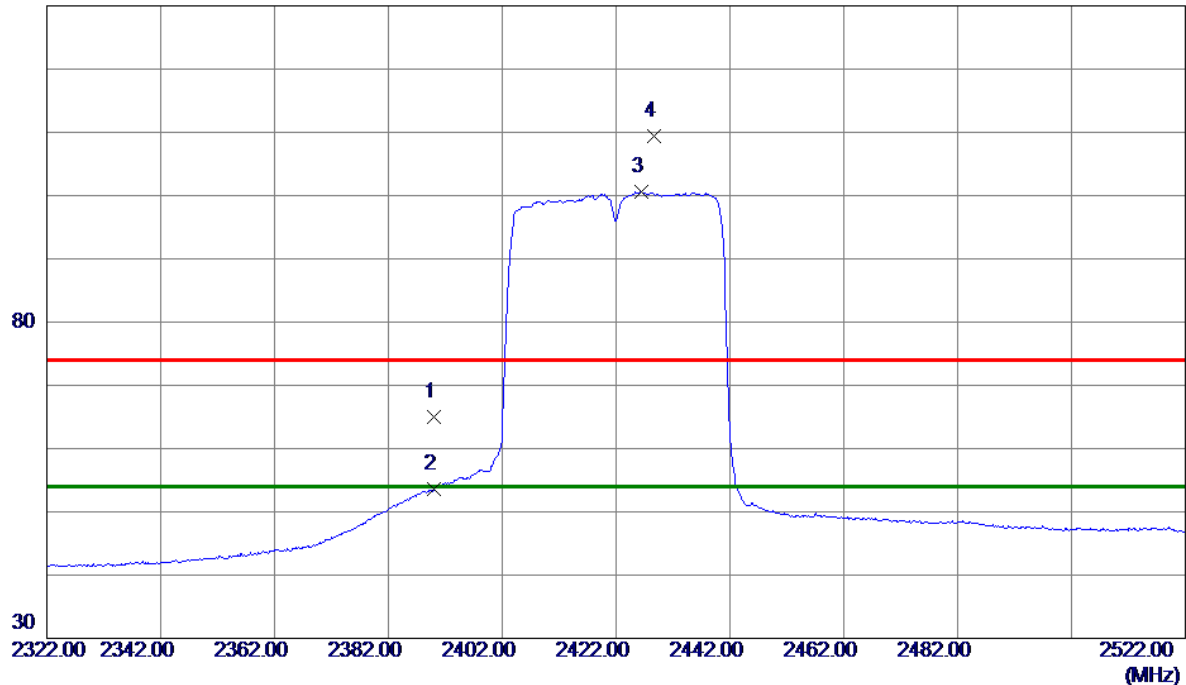
REMARKS:

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

Test Mode: TX N-40M Mode 2422MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	54.36	10.62	64.98	74.00	-9.02	Peak	
2	2390.0000	42.92	10.62	53.54	54.00	-0.46	AVG	
3 *	2426.4000	89.81	10.73	100.54	54.00	46.54	AVG	No Limit
4	2428.7000	98.59	10.74	109.33	74.00	35.33	Peak	No Limit

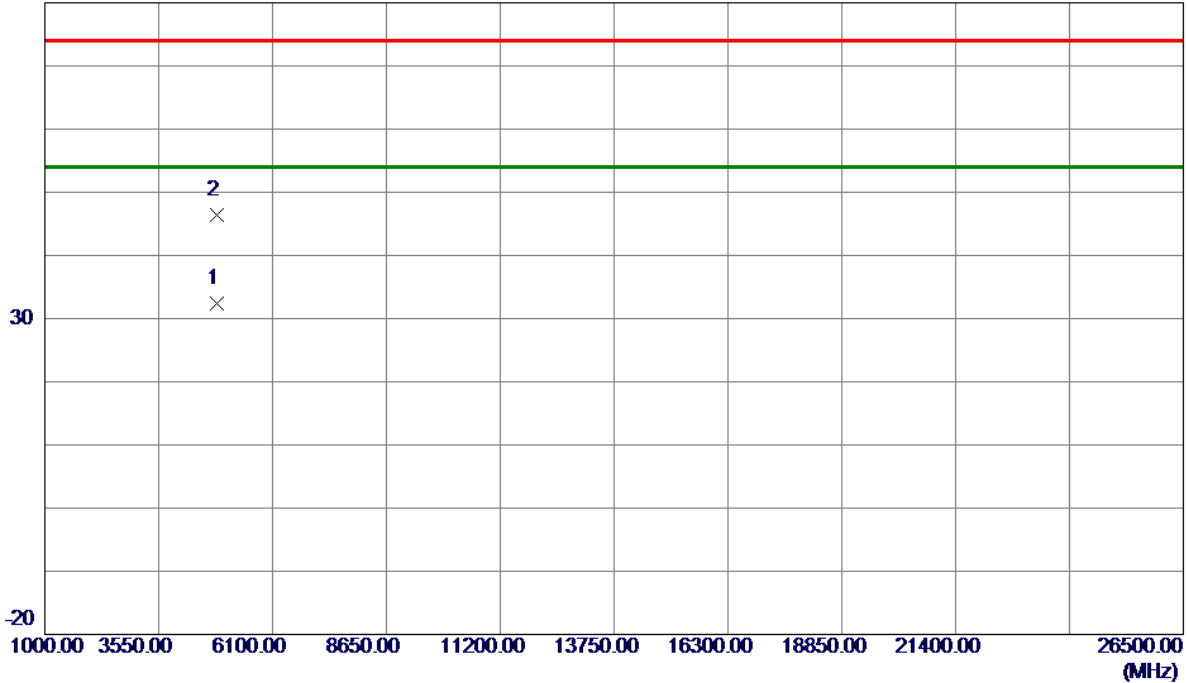
REMARKS:

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

Test Mode:	TX N-40M Mode 2422MHz
------------	-----------------------

Vertical

80 dBuV/m



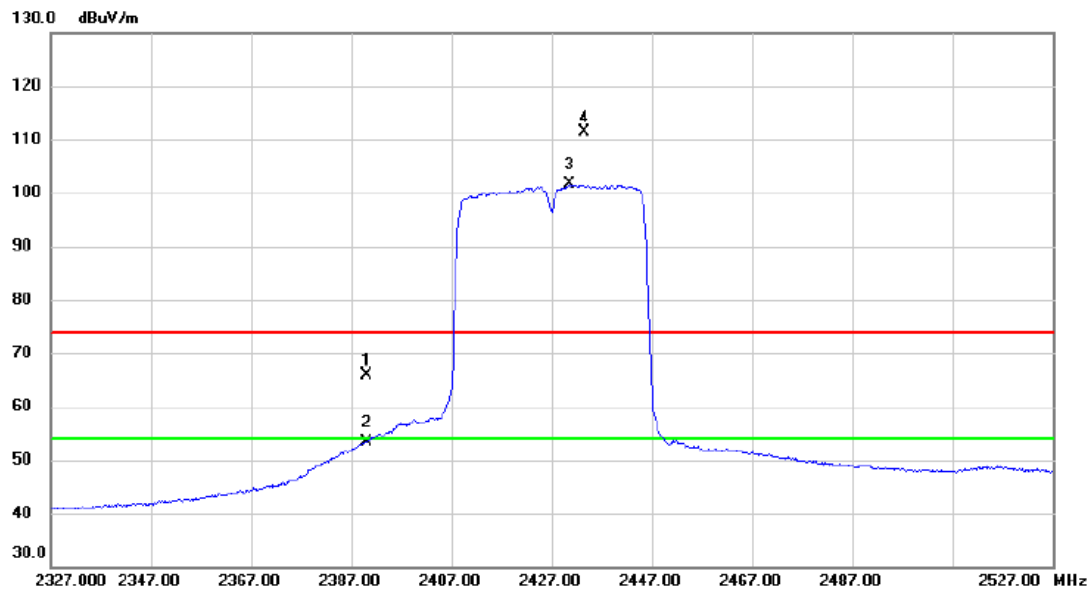
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4845.2330	24.39	7.94	32.33	54.00	-21.67	AVG	
2	4845.6250	38.44	7.94	46.38	74.00	-27.62	Peak	

REMARKS:

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

Test Mode: TX N-40M Mode 2427MHz

Vertical



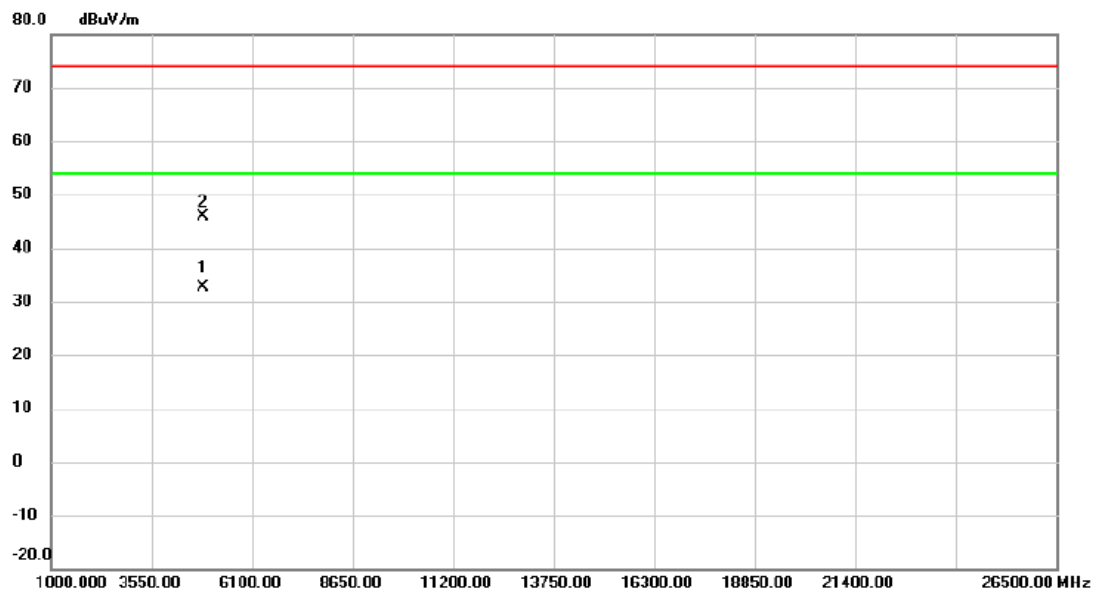
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	55.24	10.63	65.87	74.00	-8.13	peak	
2		2390.000	42.75	10.63	53.38	54.00	-0.62	AVG	
3	*	2430.500	90.78	10.74	101.52	54.00	47.52	AVG	No Limit
4	X	2433.500	100.52	10.74	111.26	74.00	37.26	peak	No Limit

REMARKS:

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

Test Mode: TX N-40M Mode 2427MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4851.523	24.65	7.96	32.61	54.00	-21.39	AVG	
2		4852.985	37.87	7.97	45.84	74.00	-28.16	peak	

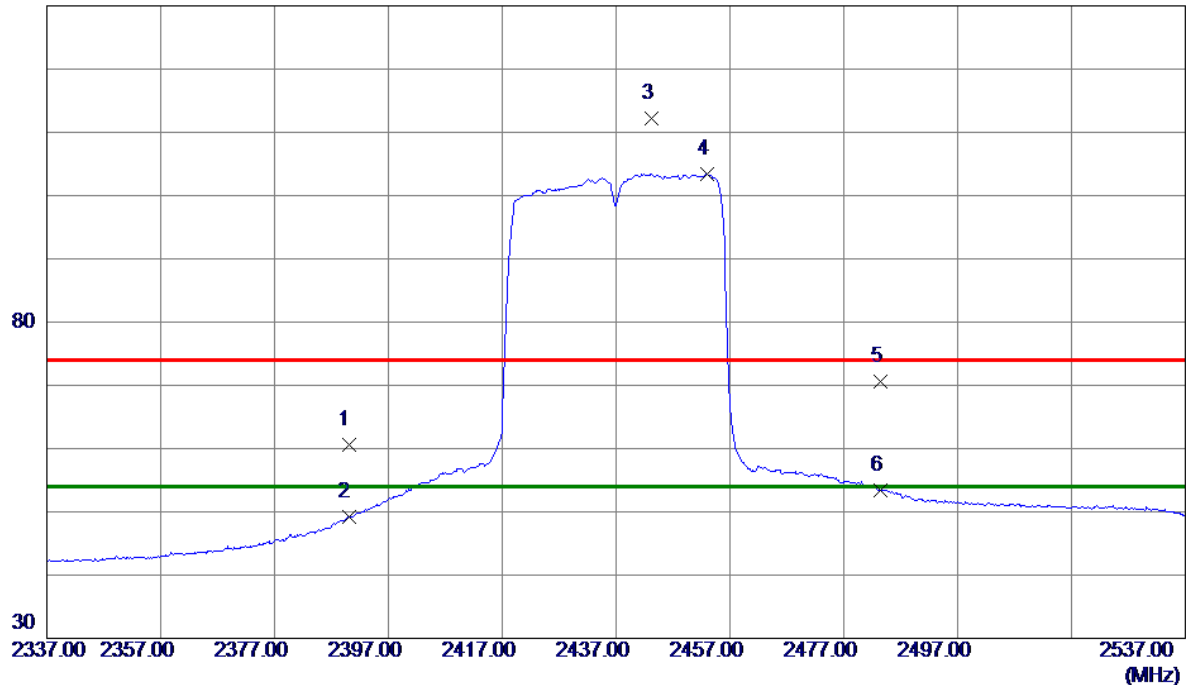
REMARKS:

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

Test Mode: TX N-40M Mode 2437 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	50.07	10.62	60.69	74.00	-13.31	Peak	
2	2390.0000	38.51	10.62	49.13	54.00	-4.87	AVG	
3	2443.2000	101.37	10.78	112.15	74.00	38.15	Peak	No Limit
4 *	2453.0000	92.59	10.81	103.40	54.00	49.40	AVG	No Limit
5	2483.5000	59.63	10.90	70.53	74.00	-3.47	Peak	
6	2483.5000	42.46	10.90	53.36	54.00	-0.64	AVG	

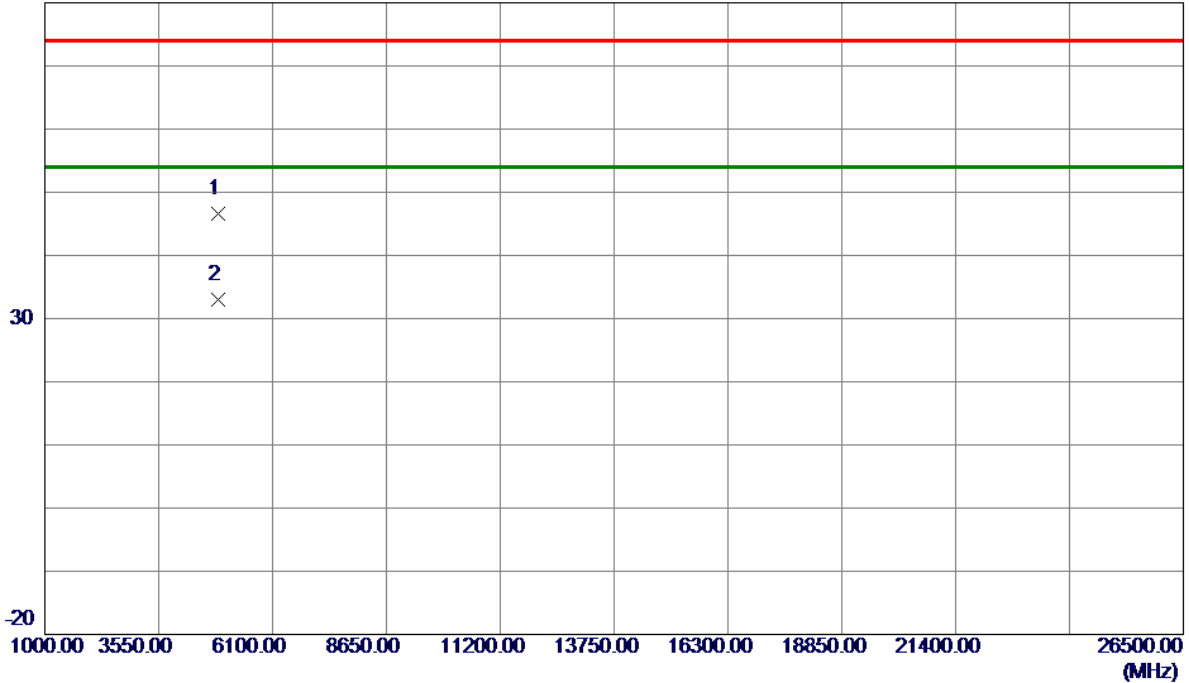
REMARKS:

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

Test Mode: TX N-40M Mode 2437 MHz

Vertical

80 dBuV/m



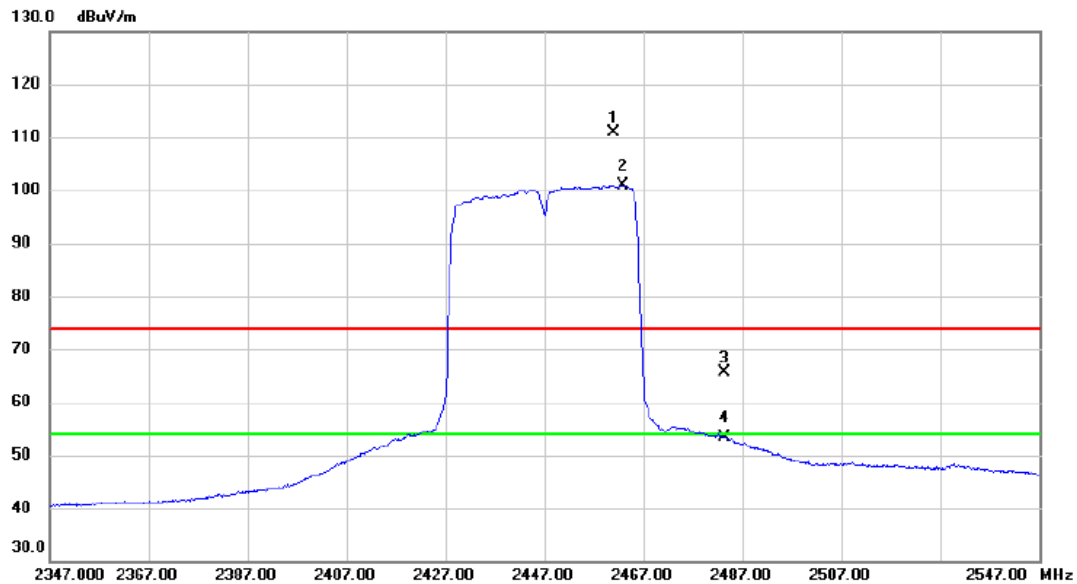
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.9480	38.50	8.06	46.56	74.00	-27.44	Peak	
2 *	4875.1880	24.95	8.06	33.01	54.00	-20.99	AVG	

REMARKS:

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

Test Mode: TX N-40M Mode 2447 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2460.900	99.98	10.83	110.81	74.00	36.81	peak	No Limit
2	*	2462.900	90.10	10.84	100.94	54.00	46.94	AVG	No Limit
3		2483.500	54.64	10.90	65.54	74.00	-8.46	peak	
4		2483.500	42.39	10.90	53.29	54.00	-0.71	AVG	

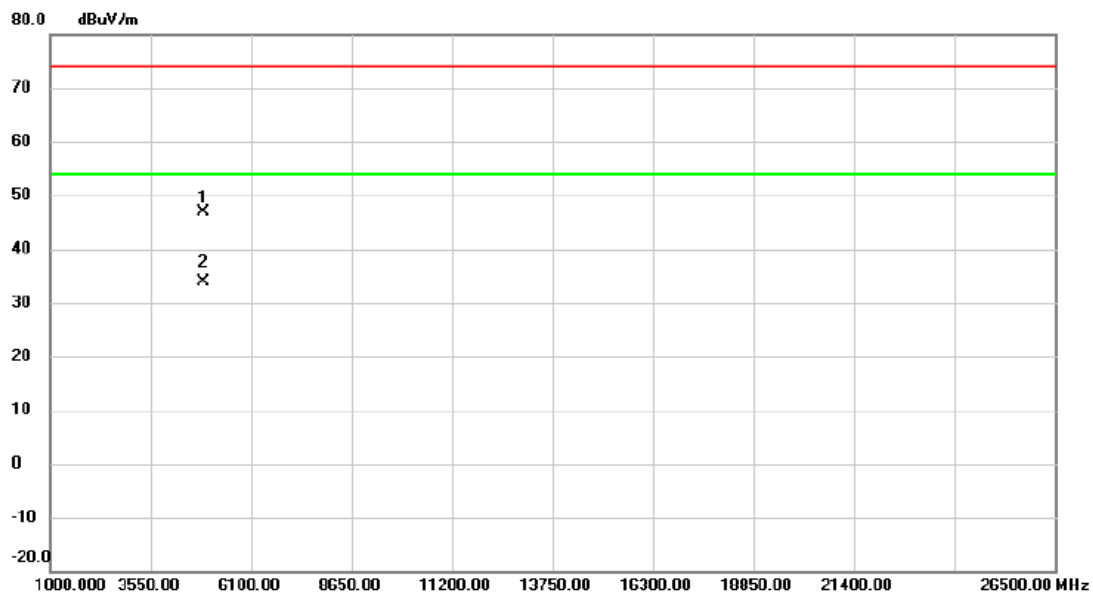
REMARKS:

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

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

Test Mode: TX N-40M Mode 2447 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4892.977	38.87	8.13	47.00	74.00	-27.00	peak	
2	*	4894.073	25.72	8.13	33.85	54.00	-20.15	AVG	

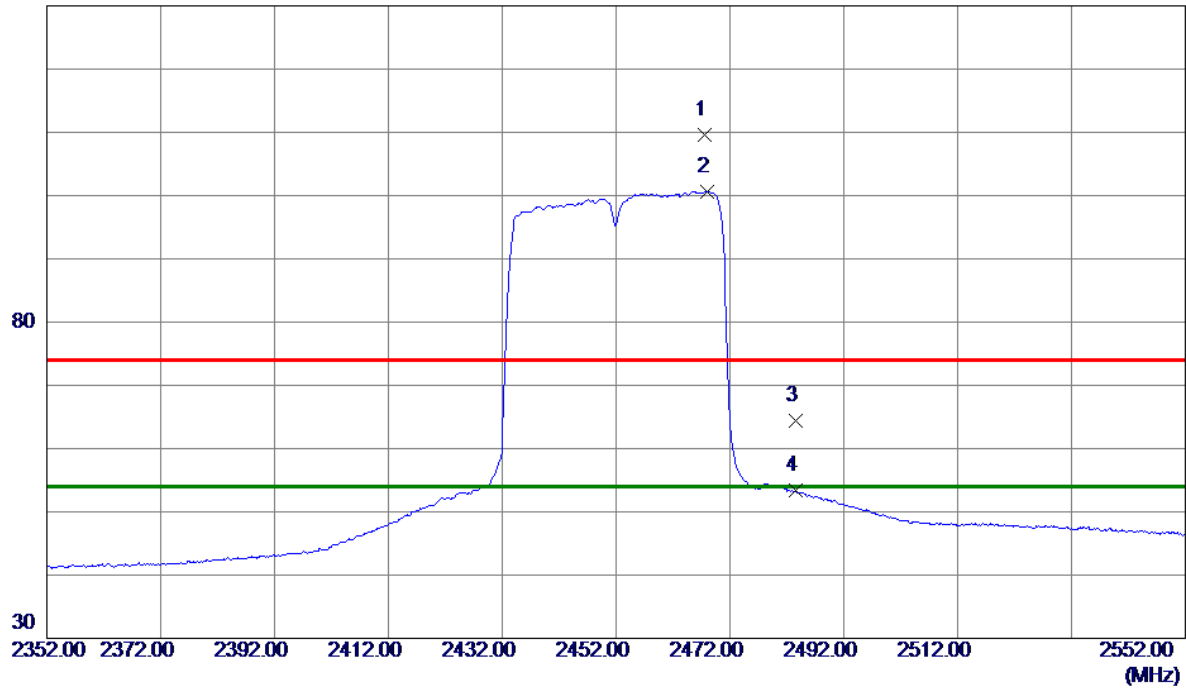
REMARKS:

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

Test Mode: TX N-40M Mode 2452 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2467.5000	98.80	10.85	109.65	74.00	35.65	Peak	No Limit
2 *	2468.0000	89.82	10.85	100.67	54.00	46.67	AVG	No Limit
3	2483.5000	53.49	10.90	64.39	74.00	-9.61	Peak	
4	2483.5000	42.46	10.90	53.36	54.00	-0.64	AVG	

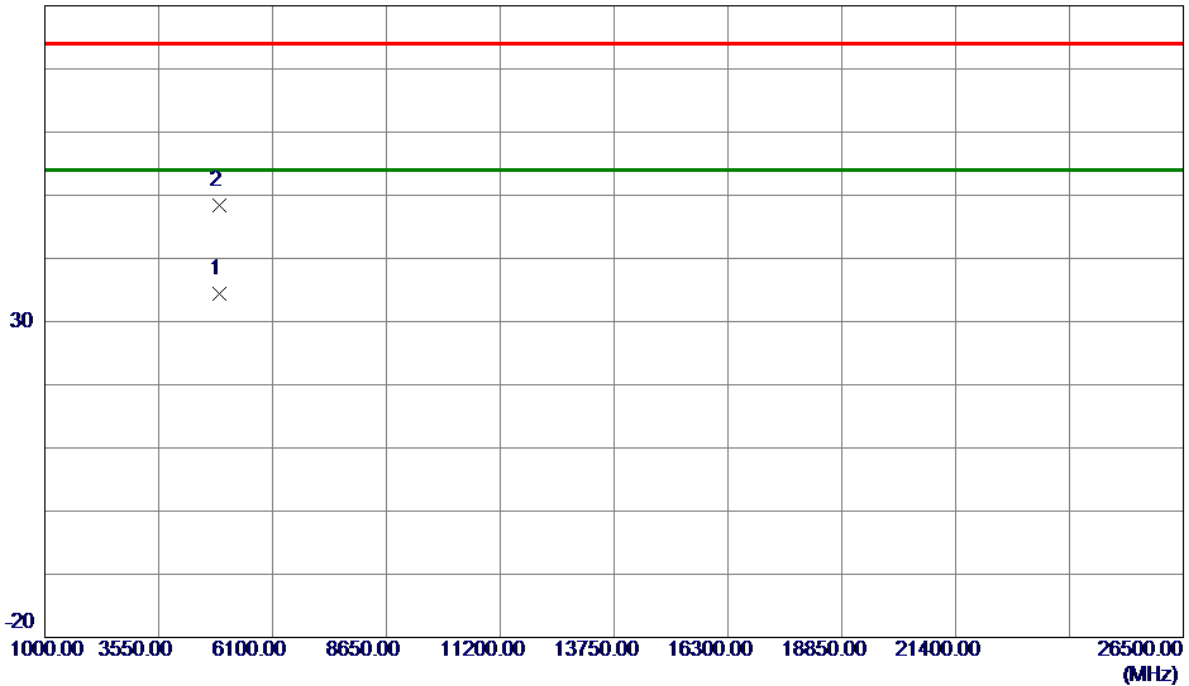
REMARKS:

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

Test Mode: TX N-40M Mode 2452 MHz

Vertical

80 dBuV/m



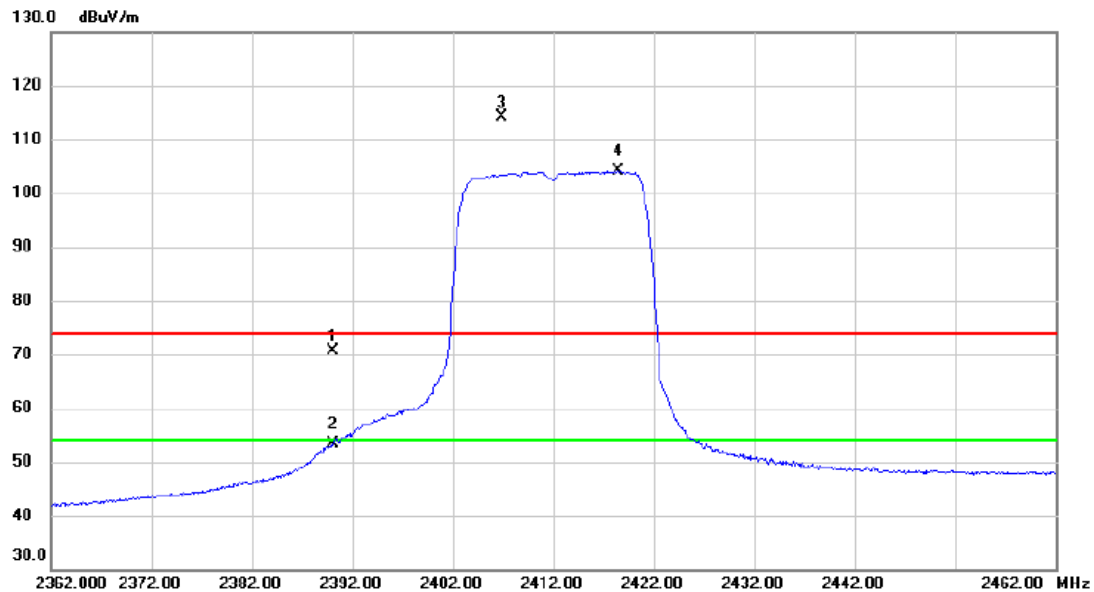
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4902.0150	26.27	8.17	34.44	54.00	-19.56	AVG	
2	4902.5230	40.27	8.17	48.44	74.00	-25.56	Peak	

REMARKS:

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

Test Mode: TX AX-20M Mode 2412 MHz

Vertical



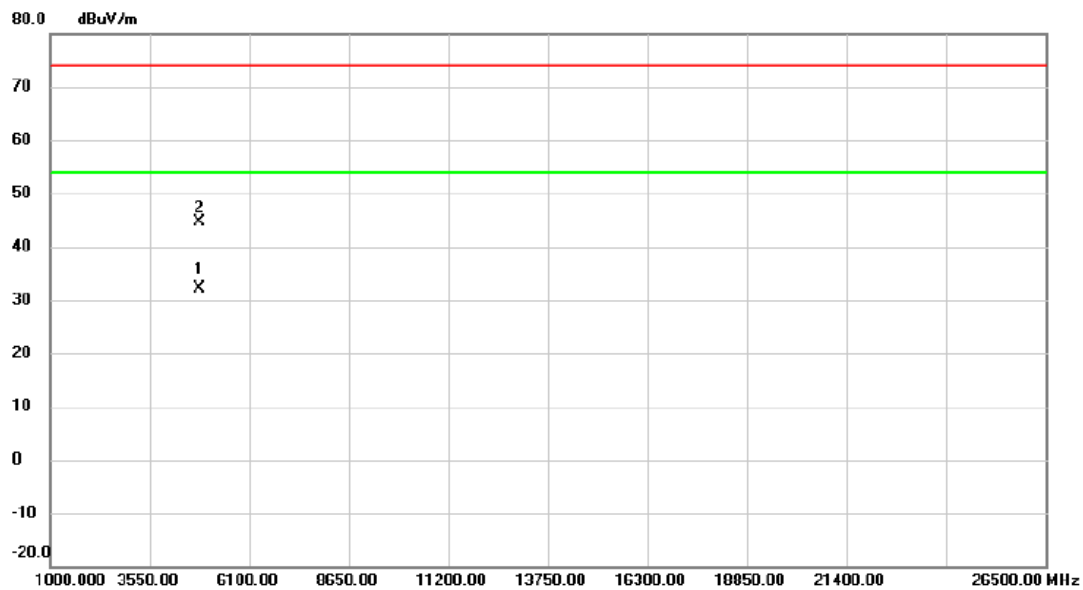
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	59.95	10.63	70.58	74.00	-3.42	peak	
2		2390.000	42.79	10.63	53.42	54.00	-0.58	AVG	
3	X	2406.900	103.45	10.68	114.13	74.00	40.13	peak	No Limit
4	*	2418.500	93.39	10.71	104.10	54.00	50.10	AVG	No Limit

REMARKS:

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

Test Mode: TX AX-20M Mode 2412 MHz

Vertical



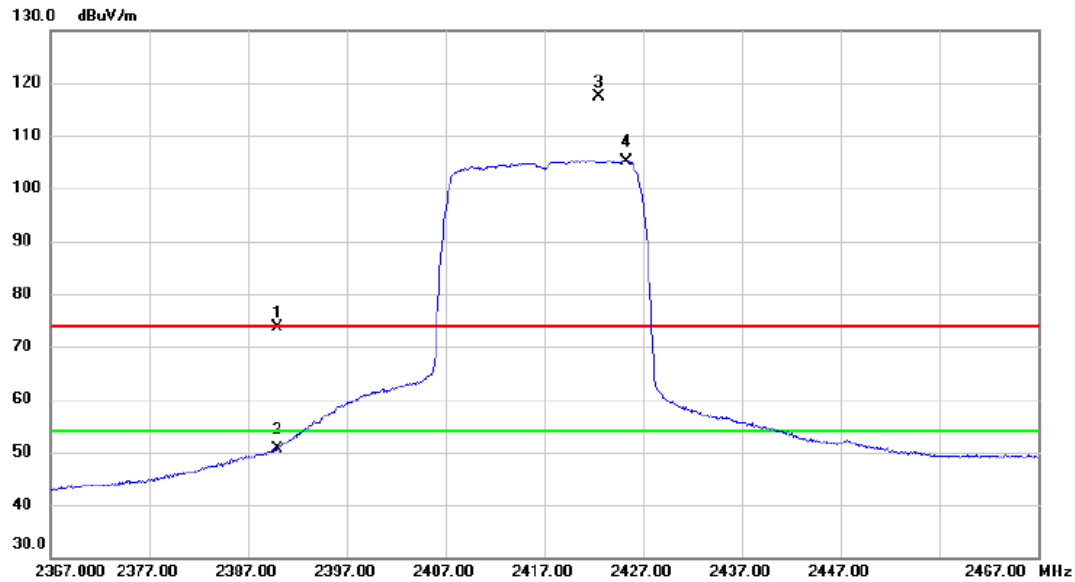
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4827.390	24.15	7.87	32.02	54.00	-21.98	AVG	
2		4833.630	36.67	7.89	44.56	74.00	-29.44	peak	

REMARKS:

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

Test Mode: TX AX-20M Mode 2417 MHz

Vertical



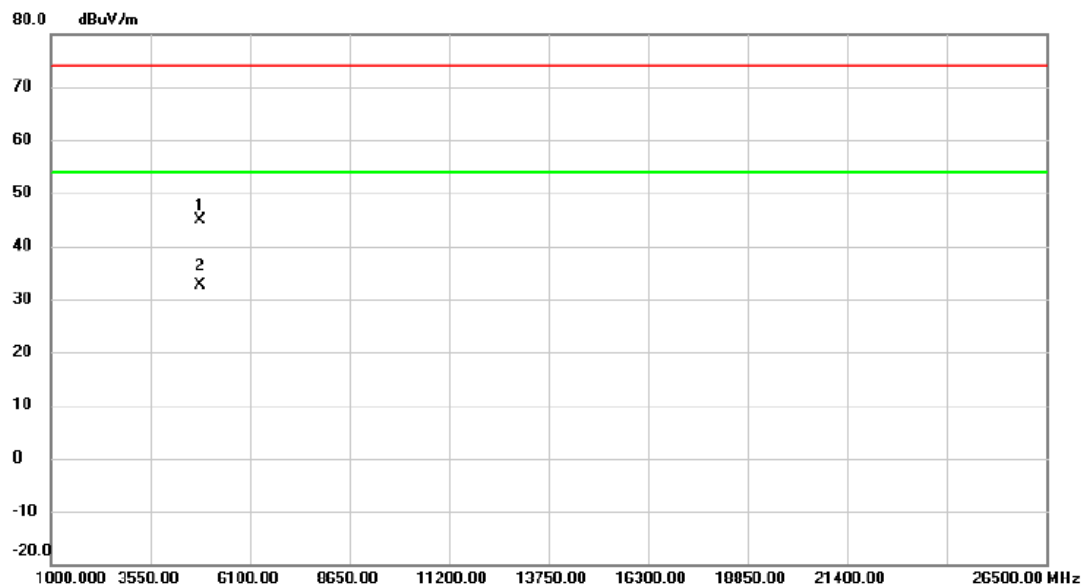
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	63.03	10.63	73.66	74.00	-0.34	peak	
2		2390.000	40.12	10.63	50.75	54.00	-3.25	AVG	
3	X	2422.500	106.73	10.72	117.45	74.00	43.45	peak	No Limit
4	*	2425.300	94.50	10.73	105.23	54.00	51.23	AVG	No Limit

REMARKS:

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

Test Mode: TX AX-20M Mode 2417 MHz

Vertical



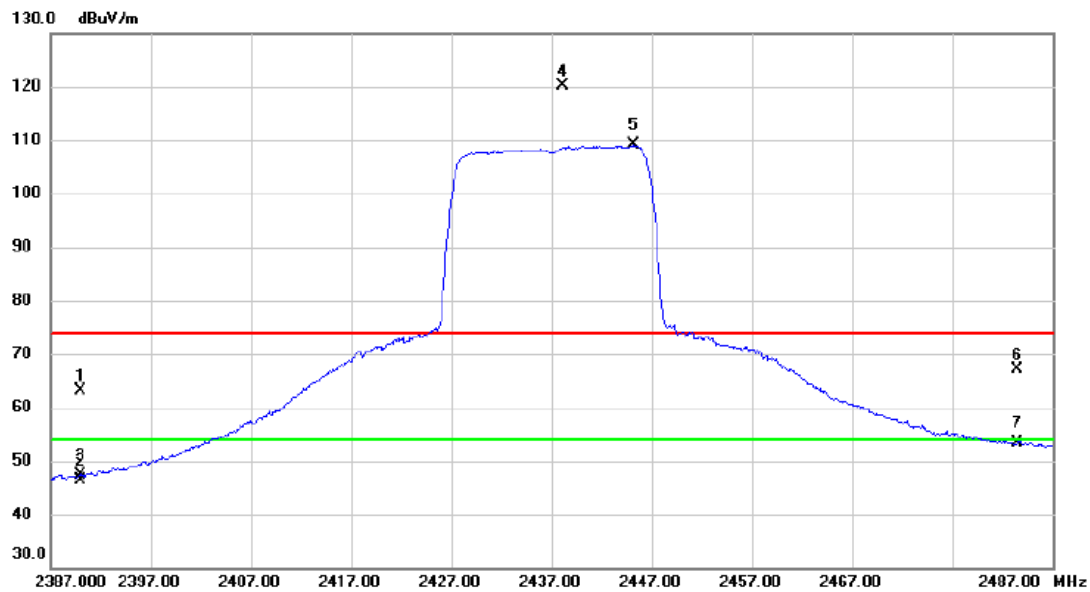
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4832.610	36.87	7.89	44.76	74.00	-29.24	peak	
2	*	4835.210	24.85	7.90	32.75	54.00	-21.25	AVG	

REMARKS:

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

Test Mode: TX AX-20M Mode 2437 MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.000	52.47	10.63	63.10	74.00	-10.90	peak	
2	2390.000	35.86	10.63	46.49	54.00	-7.51	AVG	
3	2390.000	36.80	10.63	47.43	54.00	-6.57	AVG	
4 X	2438.200	109.36	10.76	120.12	74.00	46.12	peak	No Limit
5 *	2445.150	98.22	10.79	109.01	54.00	55.01	AVG	No Limit
6	2483.500	56.35	10.90	67.25	74.00	-6.75	peak	
7	2483.500	42.49	10.90	53.39	54.00	-0.61	AVG	

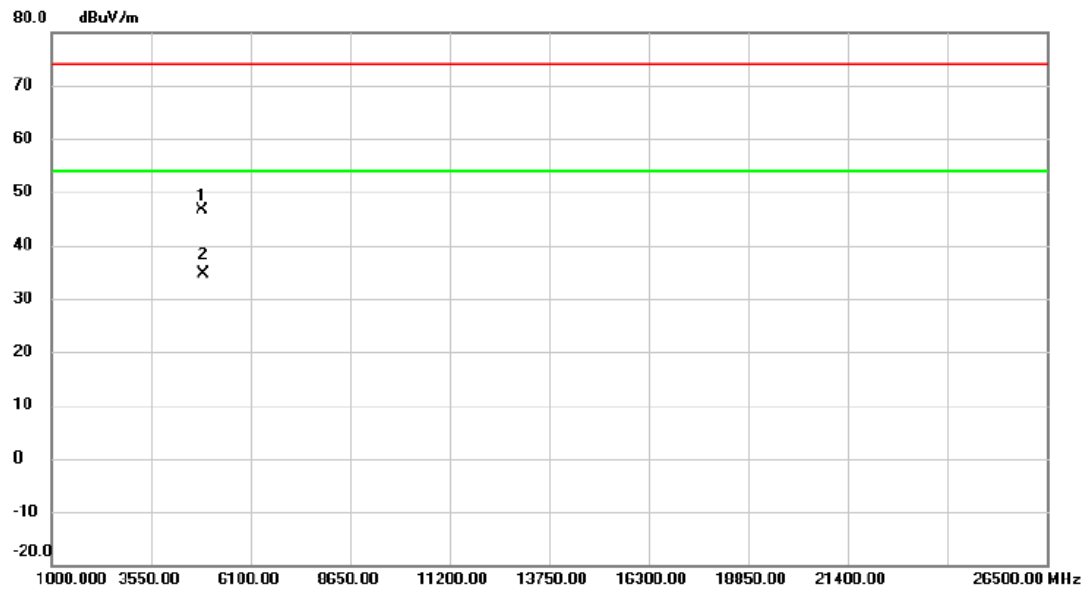
REMARKS:

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

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

Test Mode: TX AX-20M Mode 2437 MHz

Vertical



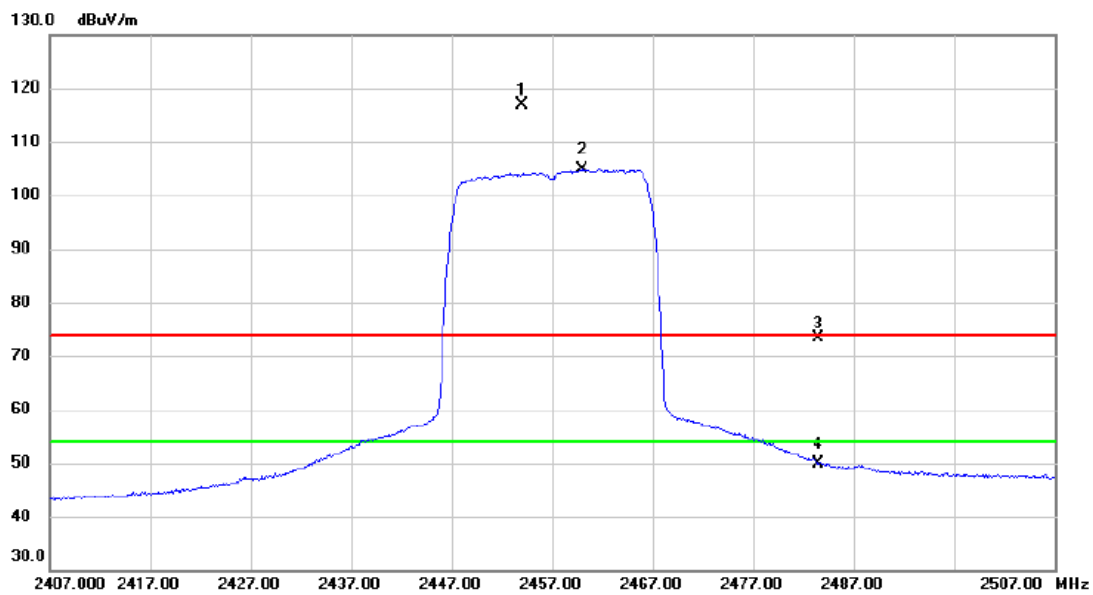
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874.460	38.59	8.06	46.65	74.00	-27.35	peak	
2 *	4877.610	26.64	8.06	34.70	54.00	-19.30	AVG	

REMARKS:

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

Test Mode: TX AX-20M Mode 2457 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2453.950	106.03	10.81	116.84	74.00	42.84	peak	No Limit
2	*	2460.000	93.96	10.83	104.79	54.00	50.79	AVG	No Limit
3		2483.500	62.38	10.90	73.28	74.00	-0.72	peak	
4		2483.500	39.01	10.90	49.91	54.00	-4.09	AVG	

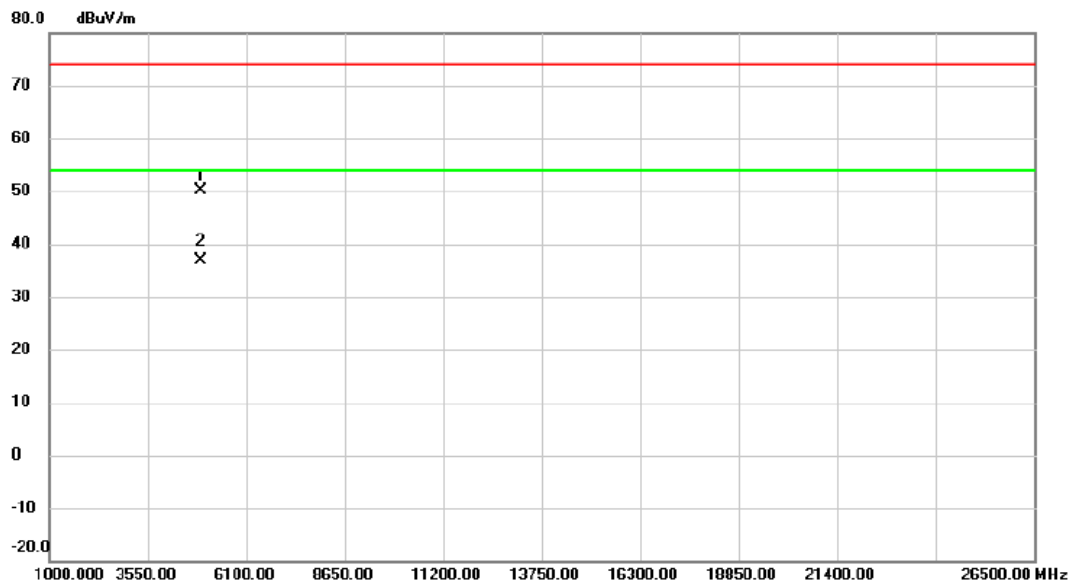
REMARKS:

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

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

Test Mode: TX AX-20M Mode 2457 MHz

Vertical



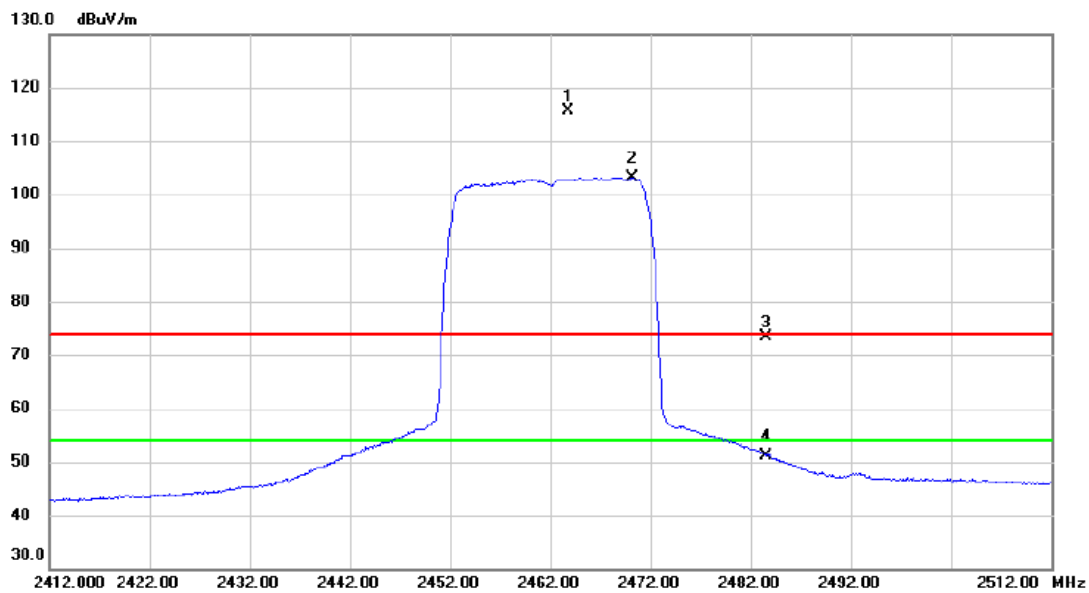
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4915.550	41.84	8.22	50.06	74.00	-23.94	peak	
2	*	4915.690	28.68	8.23	36.91	54.00	-17.09	AVG	

REMARKS:

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

Test Mode: TX AX-20M Mode 2462 MHz

Vertical



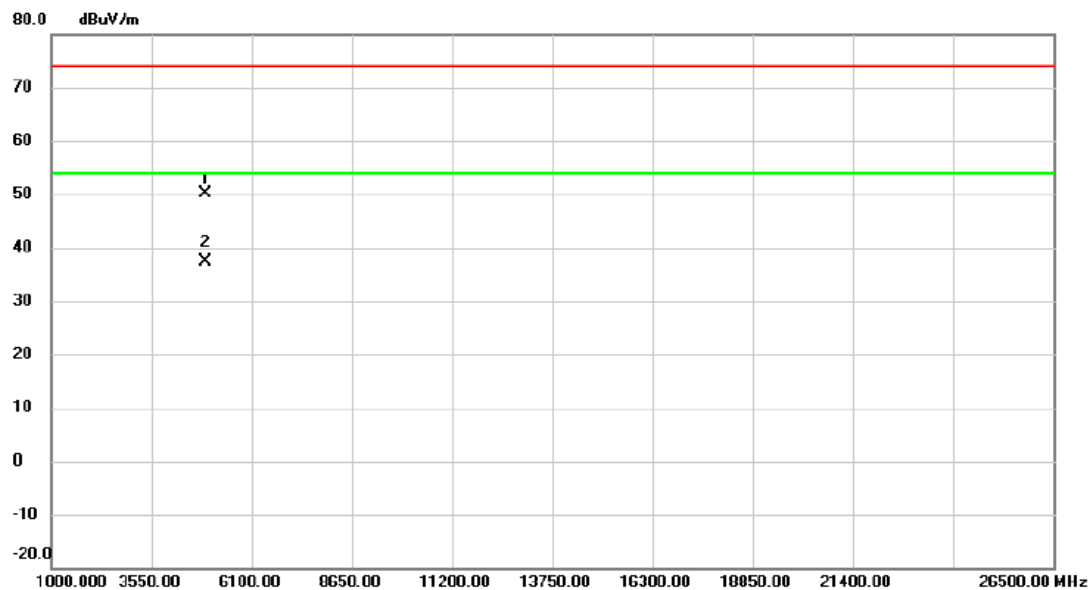
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.800	104.77	10.84	115.61	74.00	41.61	peak	No Limit
2	*	2470.250	92.39	10.85	103.24	54.00	49.24	AVG	No Limit
3		2483.500	62.59	10.90	73.49	74.00	-0.51	peak	
4		2483.500	40.33	10.90	51.23	54.00	-2.77	AVG	

REMARKS:

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

Test Mode: TX AX-20M Mode 2462 MHz

Vertical



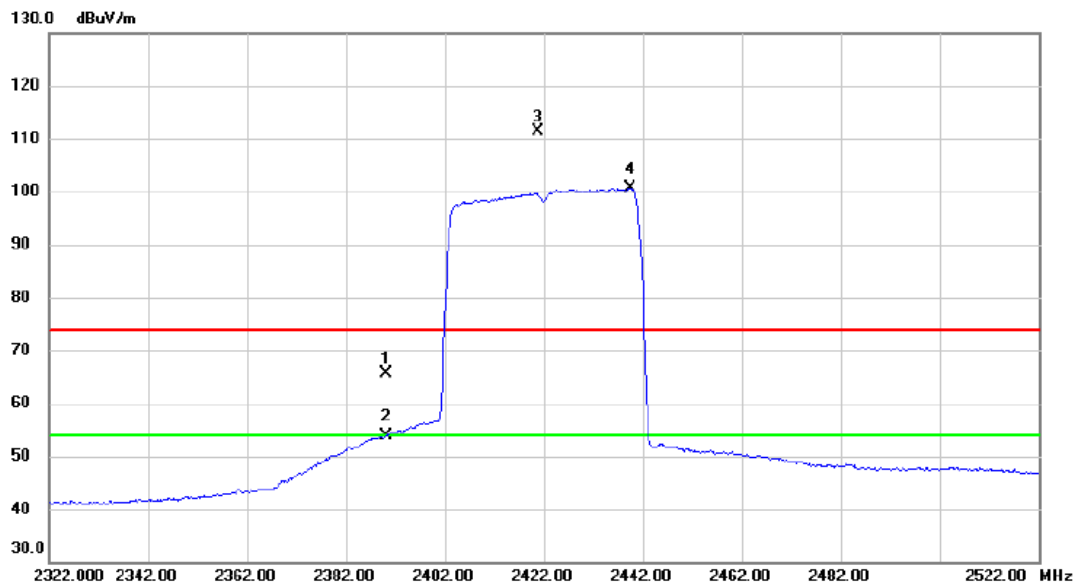
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4923.510	41.97	8.26	50.23	74.00	-23.77	peak	
2	*	4923.670	29.06	8.26	37.32	54.00	-16.68	AVG	

REMARKS:

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

Test Mode: TX AX-40M Mode 2422 MHz

Vertical



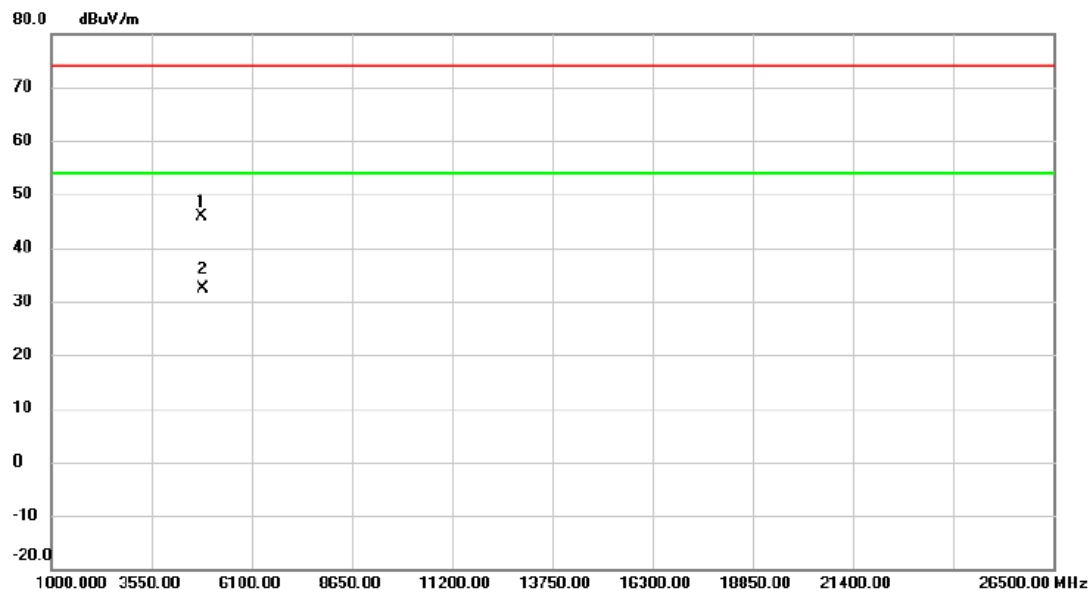
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	55.03	10.63	65.66	74.00	-8.34	peak	
2		2390.000	43.15	10.63	53.78	54.00	-0.22	AVG	
3	X	2420.800	100.76	10.72	111.48	74.00	37.48	peak	No Limit
4	*	2439.500	89.94	10.77	100.71	54.00	46.71	AVG	No Limit

REMARKS:

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

Test Mode:	TX AX-40M Mode 2422 MHz
------------	-------------------------

Vertical



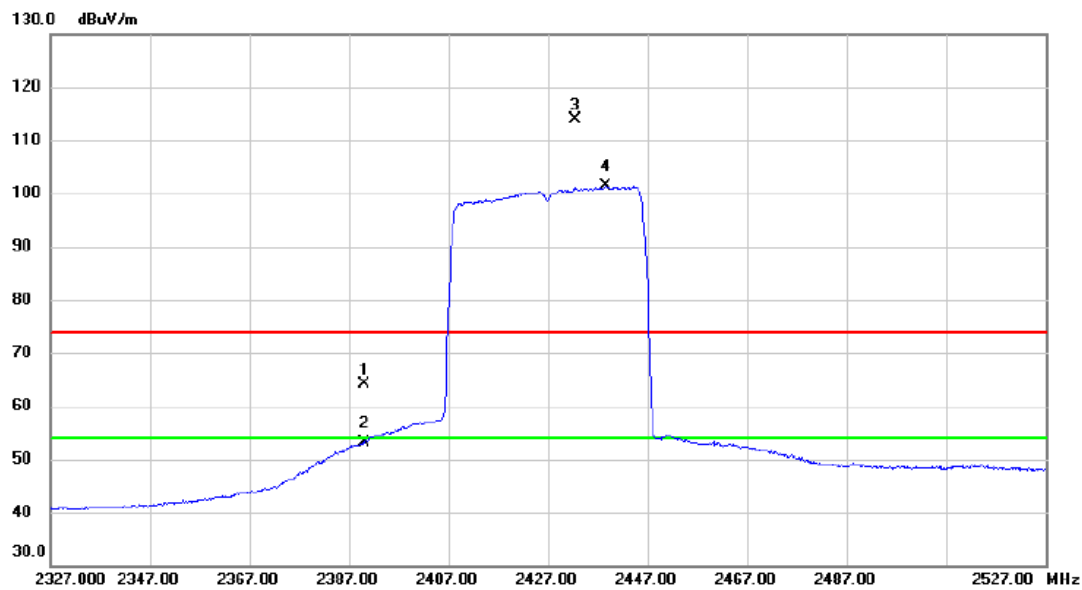
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4841.800	38.02	7.93	45.95	74.00	-28.05	peak	
2	*	4843.922	24.51	7.93	32.44	54.00	-21.56	AVG	

REMARKS:

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

Test Mode: TX AX-40M Mode 2427 MHz

Vertical



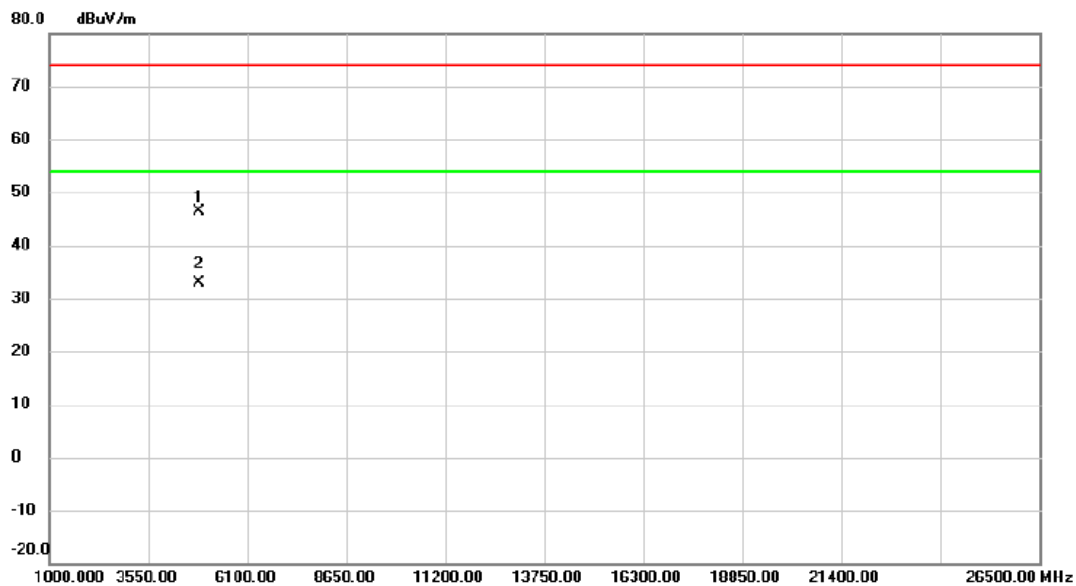
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	53.43	10.63	64.06	74.00	-9.94	peak	
2		2390.000	42.48	10.63	53.11	54.00	-0.89	AVG	
3	X	2432.600	103.14	10.74	113.88	74.00	39.88	peak	No Limit
4	*	2438.700	90.64	10.77	101.41	54.00	47.41	AVG	No Limit

REMARKS:

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

Test Mode: TX AX-40M Mode 2427 MHz

Vertical



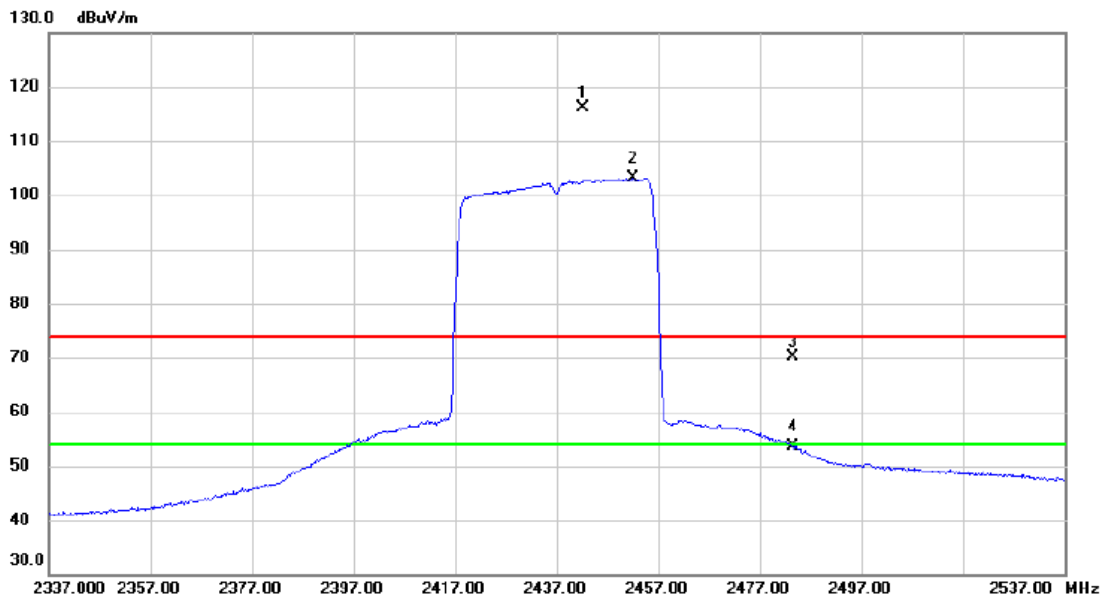
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4851.948	38.30	7.96	46.26	74.00	-27.74	peak	
2	*	4852.102	24.84	7.96	32.80	54.00	-21.20	AVG	

REMARKS:

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

Test Mode: TX AX-40M Mode 2437 MHz

Vertical



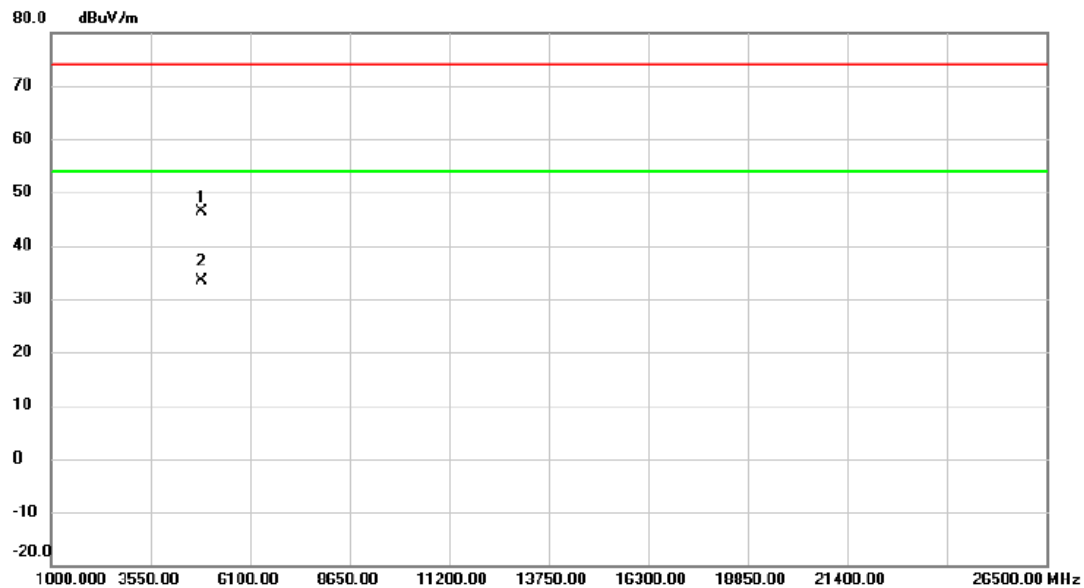
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2442.200	105.23	10.78	116.01	74.00	42.01	peak	No Limit
2	*	2452.000	92.40	10.80	103.20	54.00	49.20	AVG	No Limit
3		2483.500	59.34	10.90	70.24	74.00	-3.76	peak	
4		2483.500	42.79	10.90	53.69	54.00	-0.31	AVG	

REMARKS:

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

Test Mode: TX AX-40M Mode 2437 MHz

Vertical



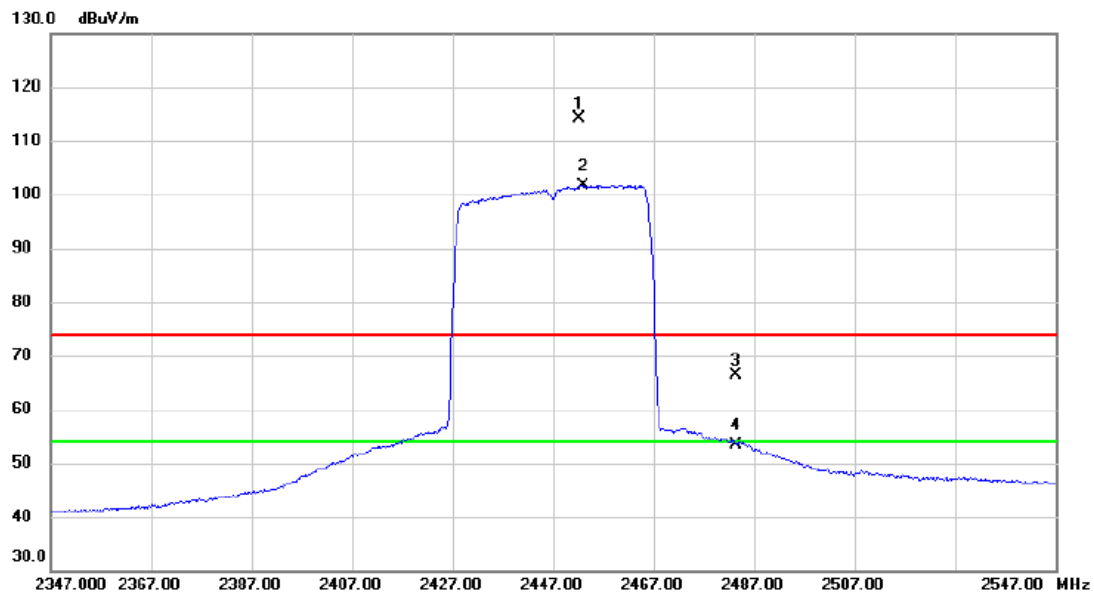
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.825	38.29	8.06	46.35	74.00	-27.65	peak	
2	*	4875.920	25.23	8.06	33.29	54.00	-20.71	AVG	

REMARKS:

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

Test Mode: TX AX-40M Mode 2447 MHz

Vertical



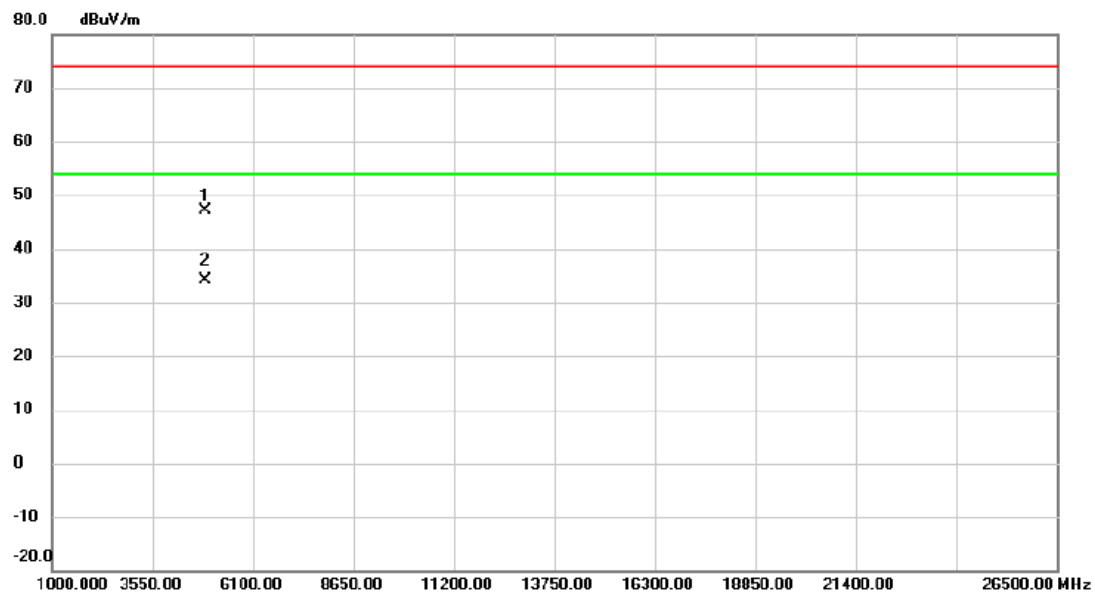
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2452.100	103.31	10.80	114.11	74.00	40.11	peak	No Limit
2	*	2452.900	90.90	10.81	101.71	54.00	47.71	AVG	No Limit
3		2483.500	55.41	10.90	66.31	74.00	-7.69	peak	
4		2483.500	42.49	10.90	53.39	54.00	-0.61	AVG	

REMARKS:

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

Test Mode: TX AX-40M Mode 2447 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4895.115	39.00	8.13	47.13	74.00	-26.87	peak	
2	*	4896.170	26.06	8.14	34.20	54.00	-19.80	AVG	

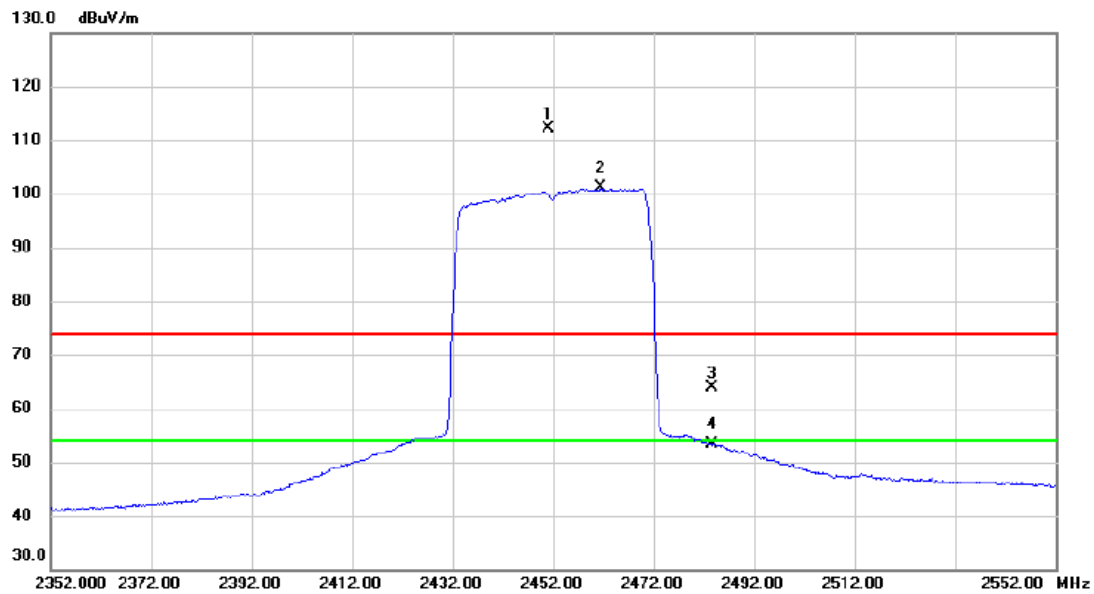
REMARKS:

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

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

Test Mode: TX AX-40M Mode 2452 MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2451.200	101.35	10.80	112.15	74.00	38.15	peak	No Limit
2	*	2461.500	90.21	10.84	101.05	54.00	47.05	AVG	No Limit
3		2483.500	52.93	10.90	63.83	74.00	-10.17	peak	
4		2483.500	42.46	10.90	53.36	54.00	-0.64	AVG	

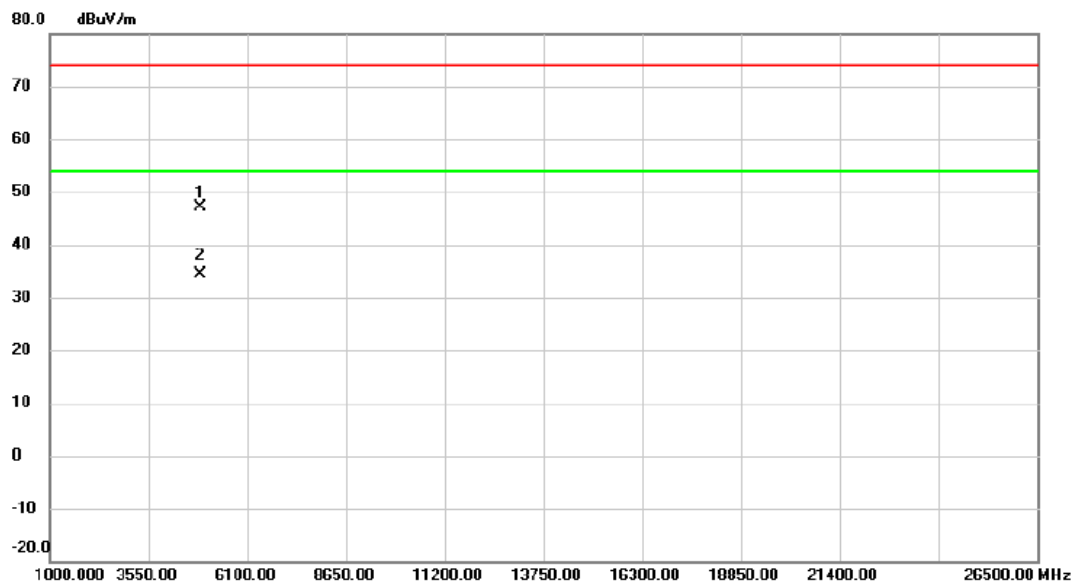
REMARKS:

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

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

Test Mode: TX AX-40M Mode 2452 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4901.667	38.94	8.17	47.11	74.00	-26.89	peak	
2	*	4902.797	26.25	8.17	34.42	54.00	-19.58	AVG	

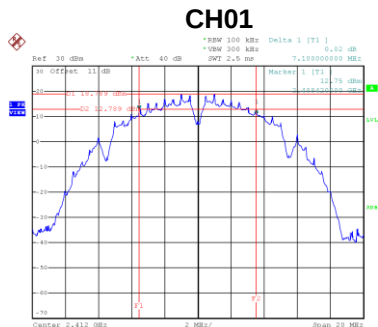
REMARKS:

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

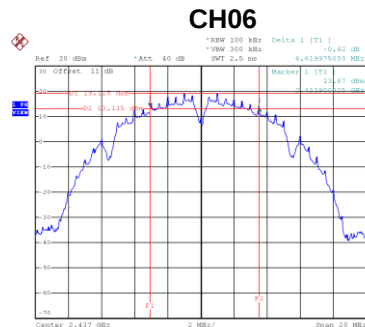
APPENDIX E - BANDWIDTH

Test Mode	TX B Mode
-----------	-----------

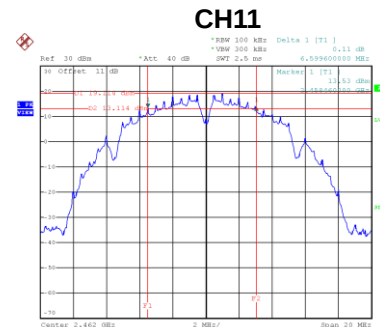
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	7.10	500	Complies
06	2437	6.62	500	Complies
11	2462	6.60	500	Complies



Date: 18.SEP.2020 00:44:48

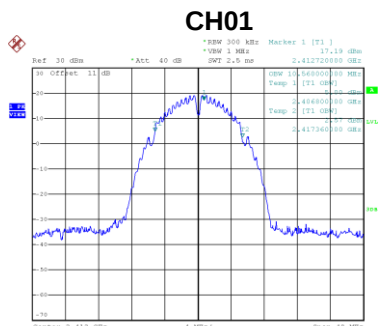


Date: 18.SEP.2020 00:50:42

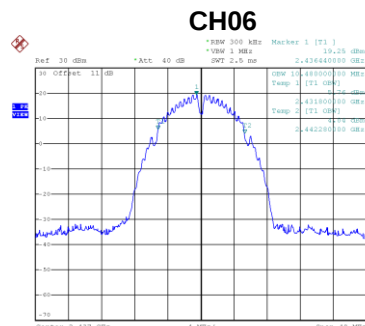


Date: 18.SEP.2020 00:52:16

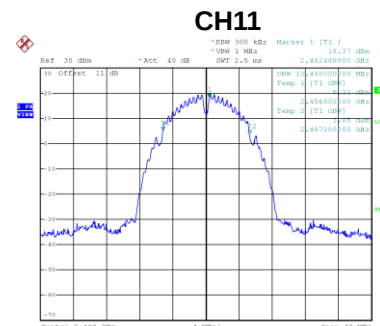
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	10.56	Complies
06	2437	10.48	Complies
11	2462	10.48	Complies



Date: 18.SEP.2020 00:44:55



Date: 18.SEP.2020 00:50:49



Date: 18.SEP.2020 00:52:23