

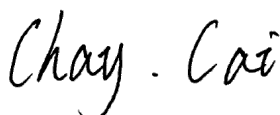
FCC Radio Test Report

FCC ID: 2AC23-WT22M

This report concerns: Original Grant

Project No. : 1902C106A
Equipment : WIFI+BT Module
Brand Name : GSD
Test Model : WT22M2600N
Series Model : N/A
Applicant : Hui Zhou Gaoshengda Technology Co., LTD
Address : NO.75 Zhongkai Development Area, Huizhou, Guangdong
Manufacturer : Hui Zhou Gaoshengda Technology Co., LTD
Address : NO.75 Zhongkai Development Area, Huizhou, Guangdong
Factory : Hui Zhou Gaoshengda Technology Co., LTD
Address : NO.75 Zhongkai Development Area, Huizhou, Guangdong
Date of Receipt : Feb. 28, 2019
Date of Test : Mar. 04, 2019 ~ Dec. 06, 2019
Issued Date : Dec. 10, 2019
Report Version : R00
Test Sample : Engineering Sample No.: DG20191128107
Standard(s) : FCC Part15, Subpart C (15.247)
 ANSI C63.10-2013
 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 : Chay Cai



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	8
2 . GENERAL INFORMATION	9
2.1 GENERAL DESCRIPTION OF EUT	9
2.2 DESCRIPTION OF TEST MODES	11
2.3 PARAMETERS OF TEST SOFTWARE	13
2.4 DUTY CYCLE	14
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	15
2.6 SUPPORT UNITS	15
3 . AC POWER LINE CONDUCTED EMISSIONS TEST	16
3.1 LIMIT	16
3.2 TEST PROCEDURE	16
3.3 DEVIATION FROM TEST STANDARD	16
3.4 TEST SETUP	17
3.5 EUT OPERATION CONDITIONS	17
3.6 TEST RESULTS	17
4 . RADIATED EMISSIONS TEST	18
4.1 LIMIT	18
4.2 TEST PROCEDURE	19
4.3 DEVIATION FROM TEST STANDARD	19
4.4 TEST SETUP	20
4.5 EUT OPERATION CONDITIONS	21
4.6 TEST RESULTS - 9 KHZ TO 30 MHZ	21
4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ	21
4.8 TEST RESULTS - ABOVE 1000 MHZ	21
5 . BANDWIDTH TEST	22
5.1 LIMIT	22
5.2 TEST PROCEDURE	22
5.3 DEVIATION FROM STANDARD	22

Table of Contents	Page
5.4 TEST SETUP	22
5.5 EUT OPERATION CONDITIONS	22
5.6 TEST RESULTS	22
6 . MAXIMUM OUTPUT POWER TEST	23
6.1 LIMIT	23
6.2 TEST PROCEDURE	23
6.3 DEVIATION FROM STANDARD	23
6.4 TEST SETUP	23
6.5 EUT OPERATION CONDITIONS	23
6.6 TEST RESULTS	23
7 . CONDUCTED SPURIOUS EMISSIONS	24
7.1 LIMIT	24
7.2 TEST PROCEDURE	24
7.3 DEVIATION FROM STANDARD	24
7.4 TEST SETUP	24
7.5 EUT OPERATION CONDITIONS	24
7.6 TEST RESULTS	24
8 . POWER SPECTRAL DENSITY TEST	25
8.1 LIMIT	25
8.2 TEST PROCEDURE	25
8.3 DEVIATION FROM STANDARD	25
8.4 TEST SETUP	25
8.5 EUT OPERATION CONDITIONS	25
8.6 TEST RESULTS	25
9 . MEASUREMENT INSTRUMENTS LIST	26
10 . EUT TEST PHOTO	28
APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS	33
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ	36
APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ	41
APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ	44
APPENDIX E - BANDWIDTH	93
APPENDIX F - MAXIMUM OUTPUT POWER	96

Table of Contents**Page****APPENDIX G - CONDUCTED SPURIOUS EMISSIONS****99****APPENDIX H - POWER SPECTRAL DENSITY****106**

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Dec. 10, 2019

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 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	2.60

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	4.88
		30MHz ~ 200MHz	H	4.14
		200MHz ~ 1,000MHz	V	4.62
		200MHz ~ 1,000MHz	H	4.80
		1GHz ~ 6GHz	-	4.58
		6GHz ~ 18GHz	-	5.18
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	4.00

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	Laughing Zhang
Radiated Emissions-9K-30MHz	25°C	60%	DC 3.3V	Laughing Zhang
Radiated Emissions-30 MHz to 1GHz	24°C	68%	DC 3.3V	Laughing Zhang
Radiated Emissions-Above 1000 MHz	24°C	68%	DC 3.3V	Laughing Zhang
Bandwidth	25°C	64%	DC 3.3V	Jonas Chen
Maximum output power	25°C	64%	DC 3.3V	Laughing Zhang
Conducted Spurious Emissions	25°C	64%	DC 3.3V	Jonas Chen
Power Spectral Density	25°C	64%	DC 3.3V	Jonas Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	WIFI+BT Module
Brand Name	GSD
Test Model	WT22M2600N
Series Model	N/A
Model Difference(s)	N/A
Software Version	V.0.0.4.33
Hardware Version	V1.0
Power Source	DC voltage supplied from external power supply.
Power Rating	DC 3.3V
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps
Maximum Output Power	IEEE 802.11b: 17.80 dBm (0.0603 W) IEEE 802.11g: 22.84 dBm (0.1923 W) IEEE 802.11n (HT20): 24.91 dBm (0.3097 W) IEEE 802.11n (HT40): 24.43 dBm (0.2773 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)							
CH03 - CH09 for IEEE 802.11n (HT40)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	3.10
2	N/A	N/A	PCB	N/A	3.10

(1) This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain $= 10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N] \text{dBi}$, that is Directional gain $= 10 \log[(10^{3.10/20} + 10^{3.10/20})^2 / 2] \text{dBi} = 6.11$. So, the output power limit is $30 - 6.11 + 6 = 29.89$, the power spectral density limit is $8 - 6.11 + 6 = 7.89$.

4. Table for Antenna Configuration:

Operating Mode TX Mode	1TX	2TX
IEEE 802.11b	V (Ant. 2)	-
IEEE 802.11g	V (Ant. 2)	-
IEEE 802.11n(20 MHz)	-	V (Ant. 1 + Ant. 2)
IEEE 802.11n(40 MHz)	-	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 N20 Mode Channel 06

Following mode(s) as (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 5	TX N20 Mode Channel 06

Radiated emissions test - Below 1GHz	
Final Test Mode:	Description
Mode 5	TX N20 Mode Channel 06

Radiated emissions test- Above 1GHz	
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

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

NOTE:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) For radiated emission below 1 GHz test, the IEEE 802.11n20 Channel 06 is found to be the worst case and recorded.
- (3) For radiated emission above 1 GHz test, 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) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.

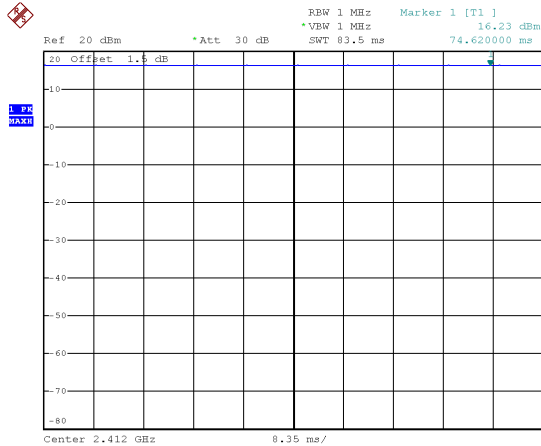
2.3 PARAMETERS OF TEST SOFTWARE

Test Software	QATool_Dbg v0.0.1.92		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	1B	1B	1B
IEEE 802.11g	1C	1D	1B
IEEE 802.11n (HT20)	17	16	17
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	14	1D	17

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.

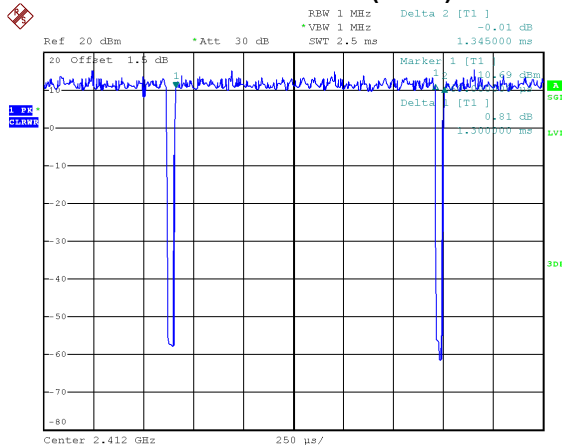
IEEE 802.11b



Date: 5.MAR.2019 15:43:32

Duty cycle = $83.500 \text{ ms} / 83.500 \text{ ms} = 100\%$
Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$

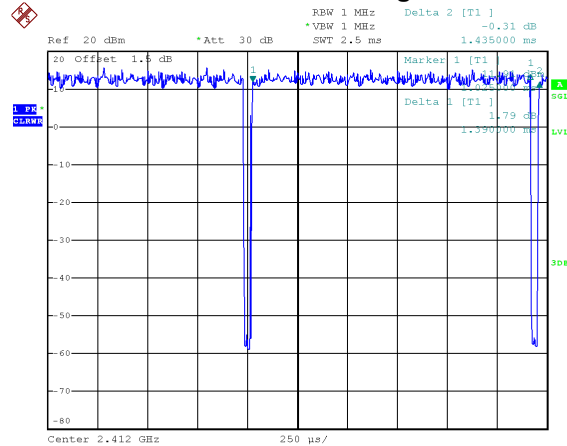
IEEE 802.11n (HT20)



Date: 5.MAR.2019 15:45:03

Duty cycle = $1.300 \text{ ms} / 1.345 \text{ ms} = 96.65\%$
Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.15$

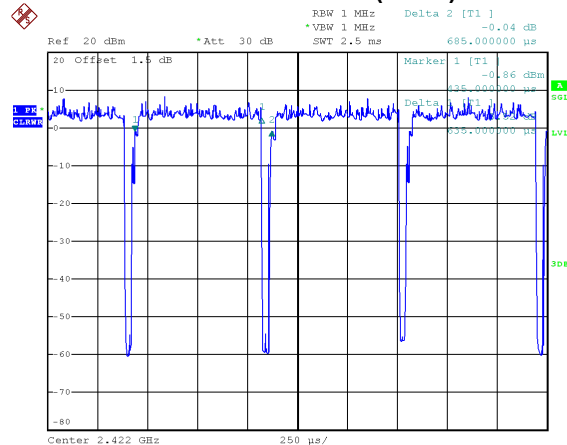
IEEE 802.11g



Date: 5.MAR.2019 15:44:13

Duty cycle = $1.390 \text{ ms} / 1.435 \text{ ms} = 96.86\%$
Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.14$

IEEE 802.11n (HT40)



Date: 5.MAR.2019 15:46:19

Duty cycle = $0.635 \text{ ms} / 0.685 \text{ ms} = 92.70\%$
Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.33$

NOTE:

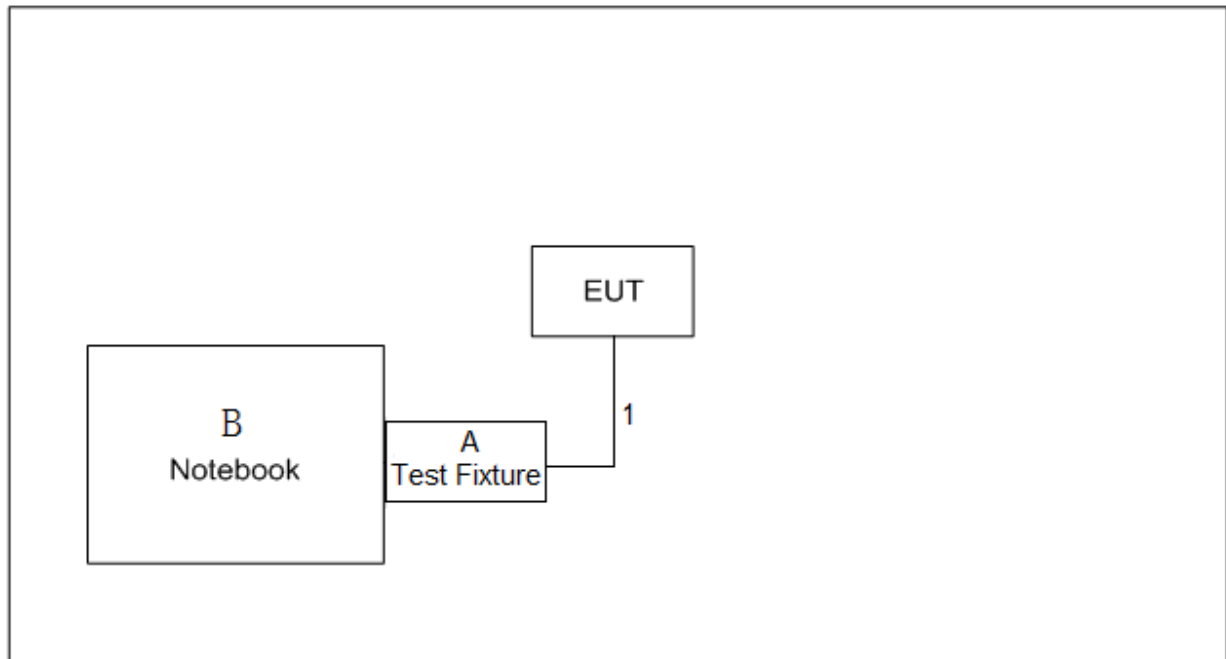
For IEEE 802.11g and IEEE 802.11n (HT20):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle $< 98\%$).

For IEEE 802.11n (HT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (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	Test Fixture	N/A	N/A	N/A
B	Notebook	Lenovo	V310-14ISK	LR07GZNB

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	Data Cable	NO	NO	0.2m

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

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

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

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

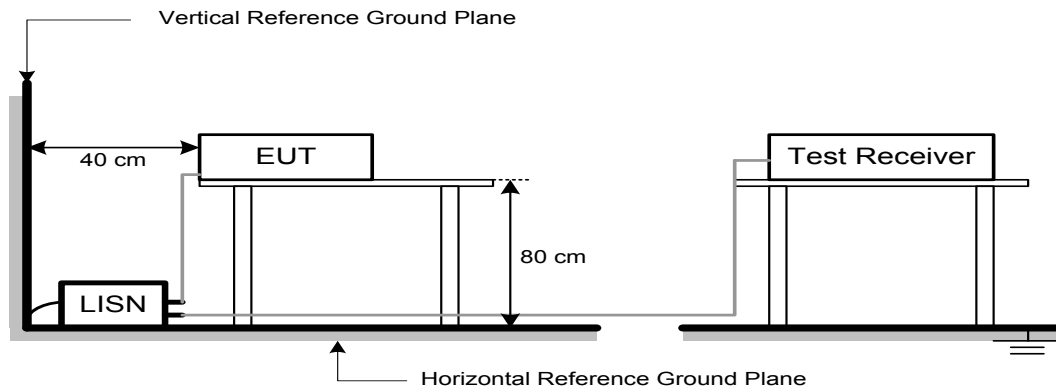
3.2 TEST PROCEDURE

- 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

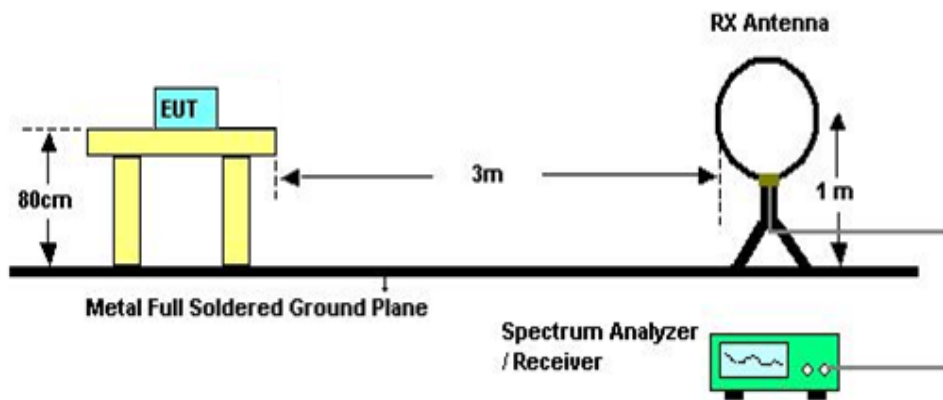
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance 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

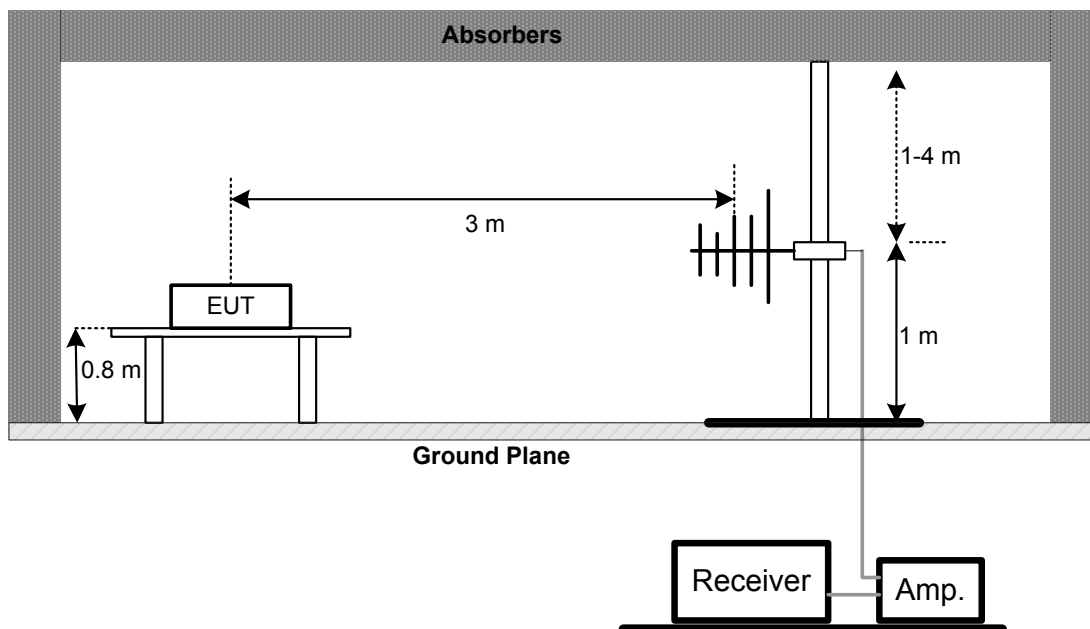
No deviation

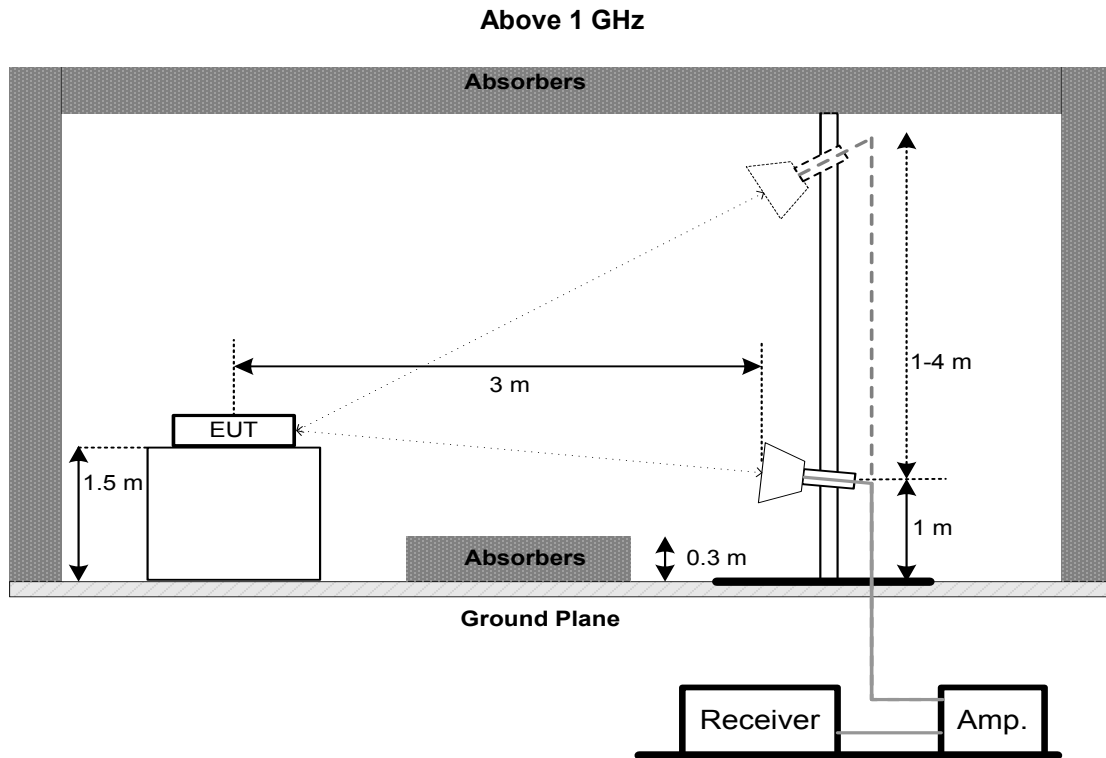
4.4 TEST SETUP

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	-

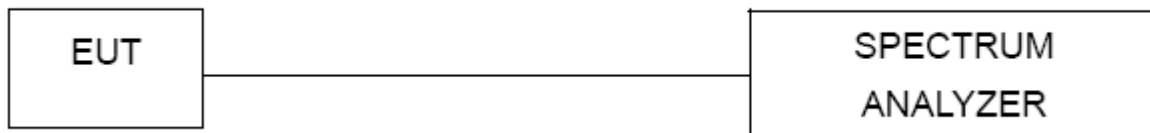
5.2 TEST PROCEDURE

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

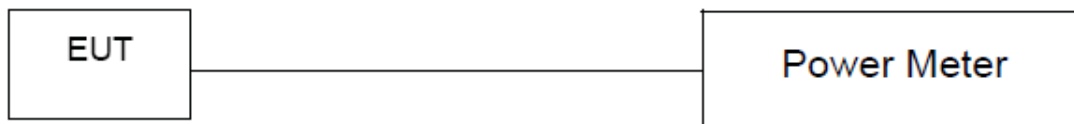
6.2 TEST PROCEDURE

- 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 11.9.1.3 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.

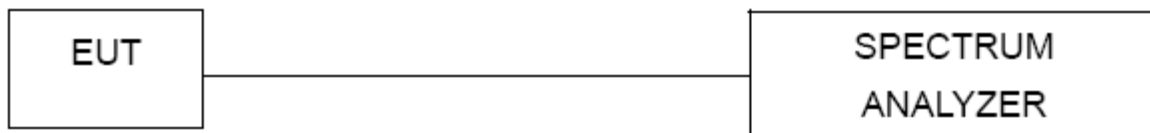
7.2 TEST PROCEDURE

- 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)

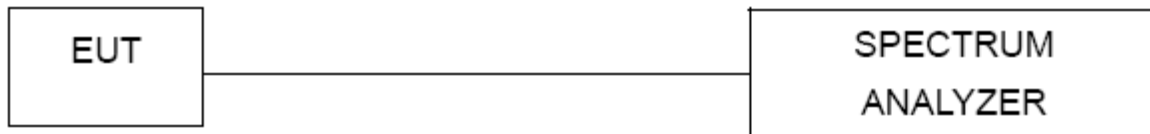
8.2 TEST PROCEDURE

- 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	Mar. 10, 2020
2	LISN	EMCO	3816/2	52765	Mar. 10, 2020
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	May 19, 2020
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 10, 2020
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 12, 2020

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Jan. 15, 2020
2	Cable	N/A	RG 213/U	C-102	May 31, 2020
3	EMI Test Receiver	R&S	ESCI	100895	Mar. 10, 2020
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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, 2020
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 24, 2020
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

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 09, 2020
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02333	Mar. 10, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 10, 2020
5	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	B10-01-01-12M	18072744	Jun. 29, 2020
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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	Aug. 03, 2020

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 03, 2020
2	Wideband power sensor	Keysight	N1923A	MY58310004	Aug. 03, 2020

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

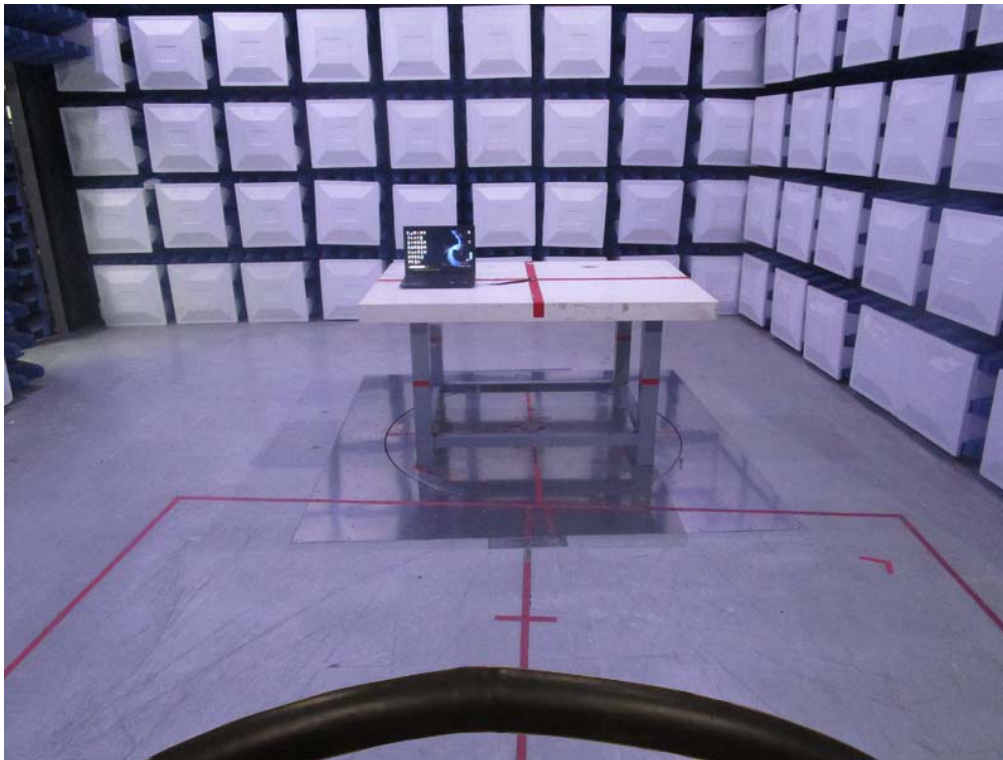
"*" calibration period of equipment list is three year.

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

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

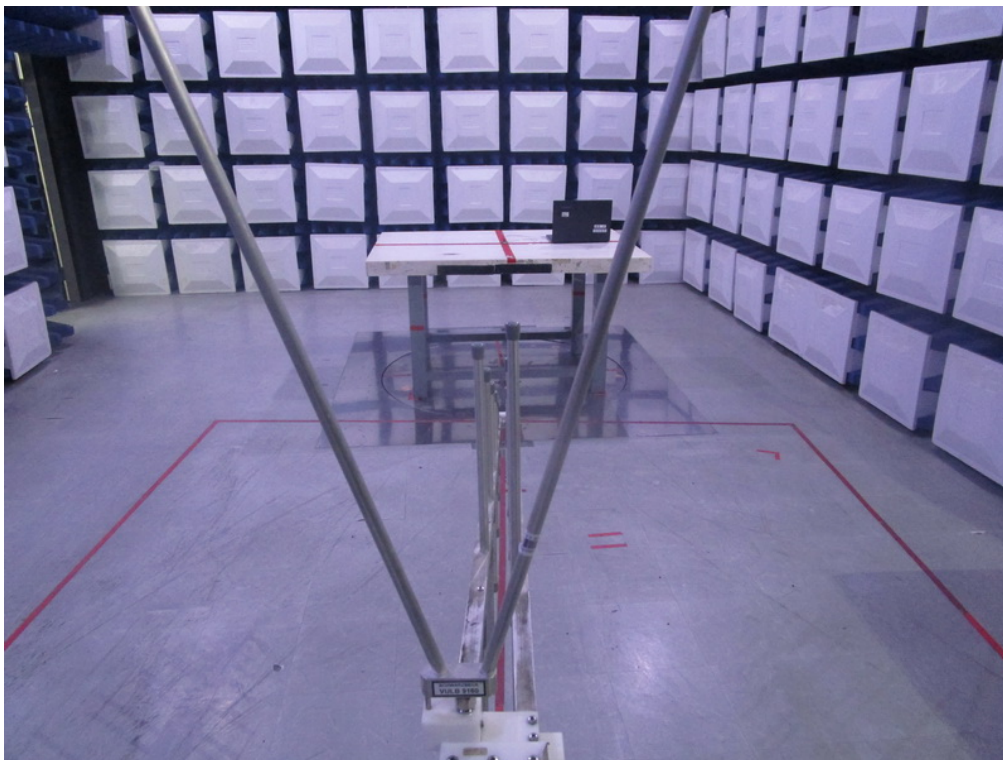
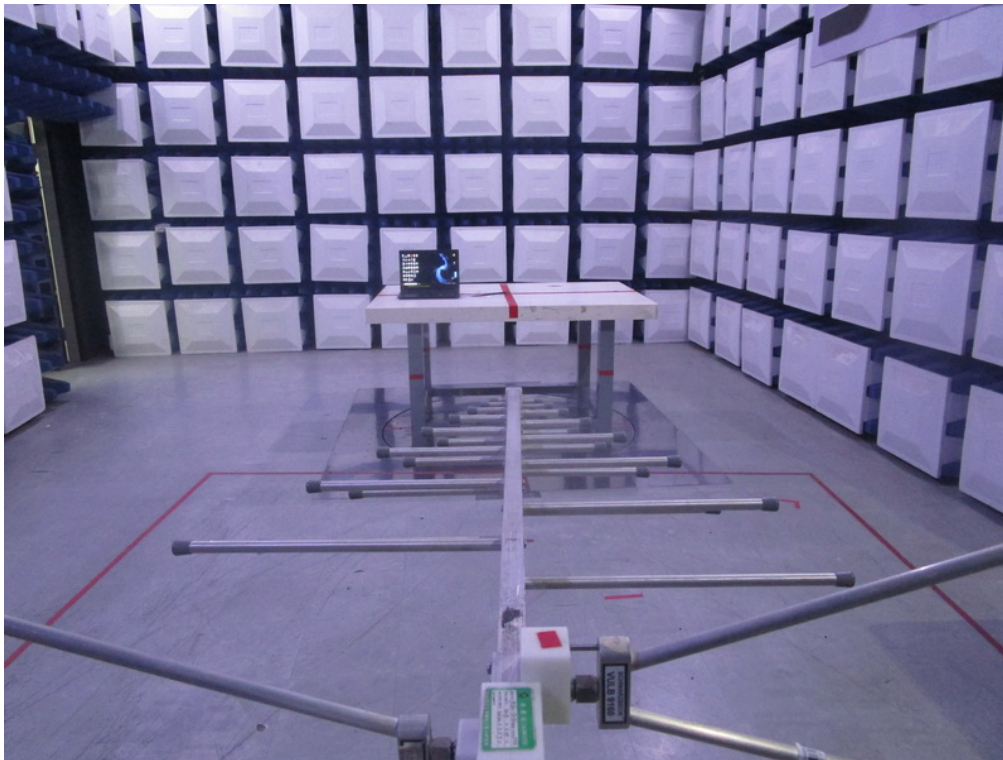
Radiated Emissions Test Photos

9 kHz to 30 MHz



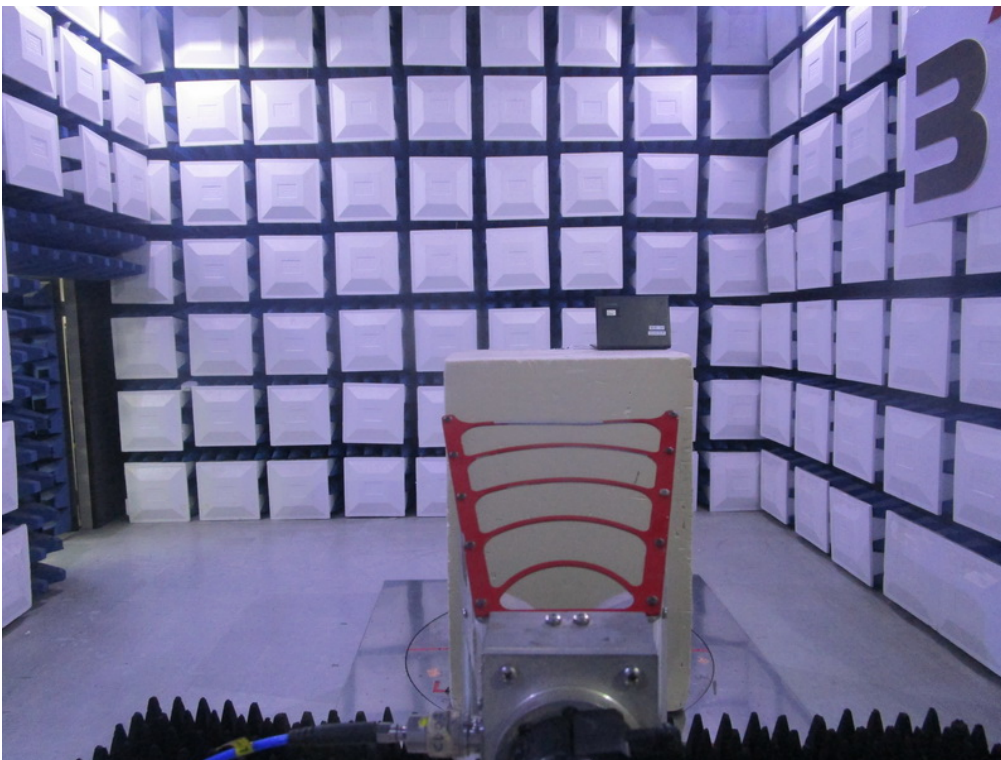
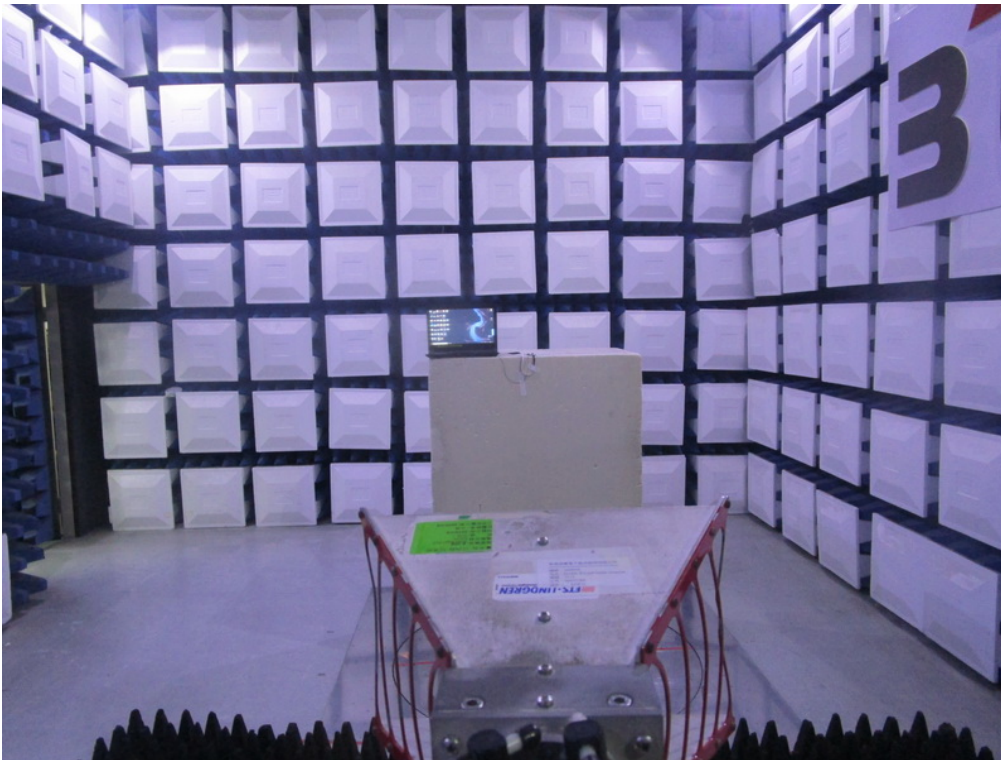
Radiated Emissions Test Photos

30 MHz to 1 GHz



Radiated Emissions Test Photos

Above 1 GHz

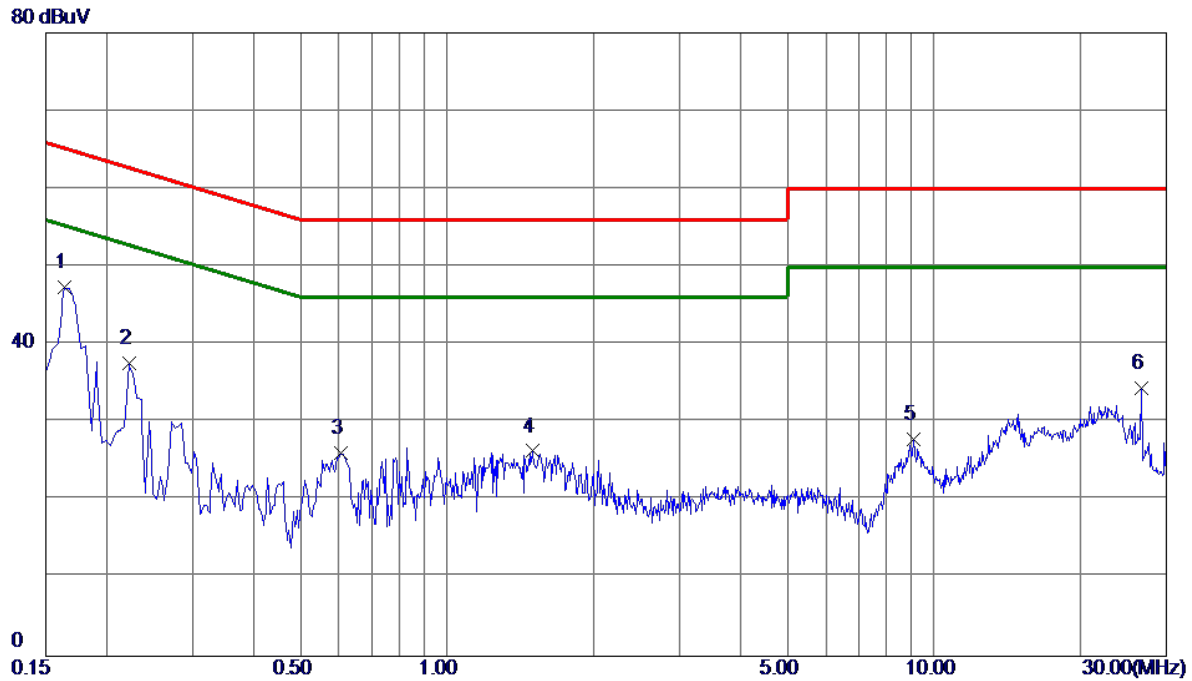




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX N20 Mode Channel 06

Line



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1635	37.54	9.82	47.36	65.28	-17.92	Peak	
2	0.2220	27.73	9.82	37.55	62.74	-25.19	Peak	
3	0.6045	16.26	9.89	26.15	56.00	-29.85	Peak	
4	1.5000	16.37	9.95	26.32	56.00	-29.68	Peak	
5	9.0735	17.43	10.44	27.87	60.00	-32.13	Peak	
6	26.6235	23.28	11.11	34.39	60.00	-25.61	Peak	

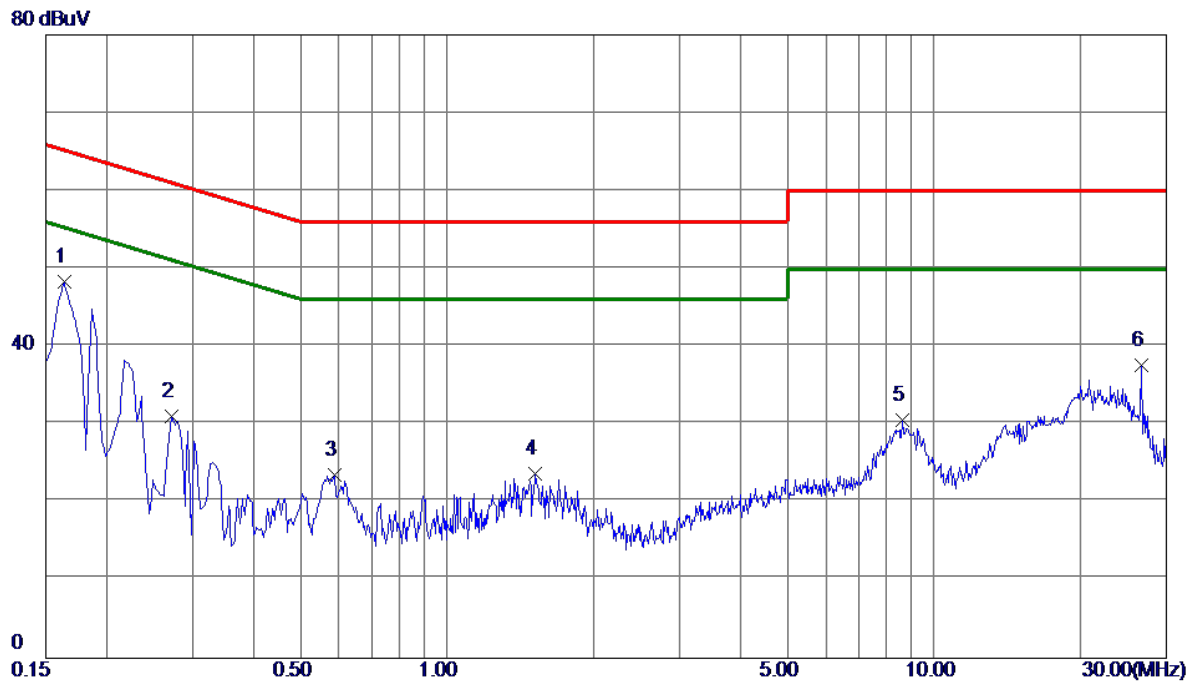
REMARKS:

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

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

Test Mode: TX N20 Mode Channel 06

Neutral



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1 *	0.1635	38.41	9.91	48.32	65.28	-16.96	Peak	
2	0.2714	21.17	9.94	31.11	61.07	-29.96	Peak	
3	0.5865	13.53	10.04	23.57	56.00	-32.43	Peak	
4	1.5180	13.47	10.16	23.63	56.00	-32.37	Peak	
5	8.5920	19.96	10.67	30.63	60.00	-29.37	Peak	
6	26.6235	26.08	11.49	37.57	60.00	-22.43	Peak	

REMARKS:

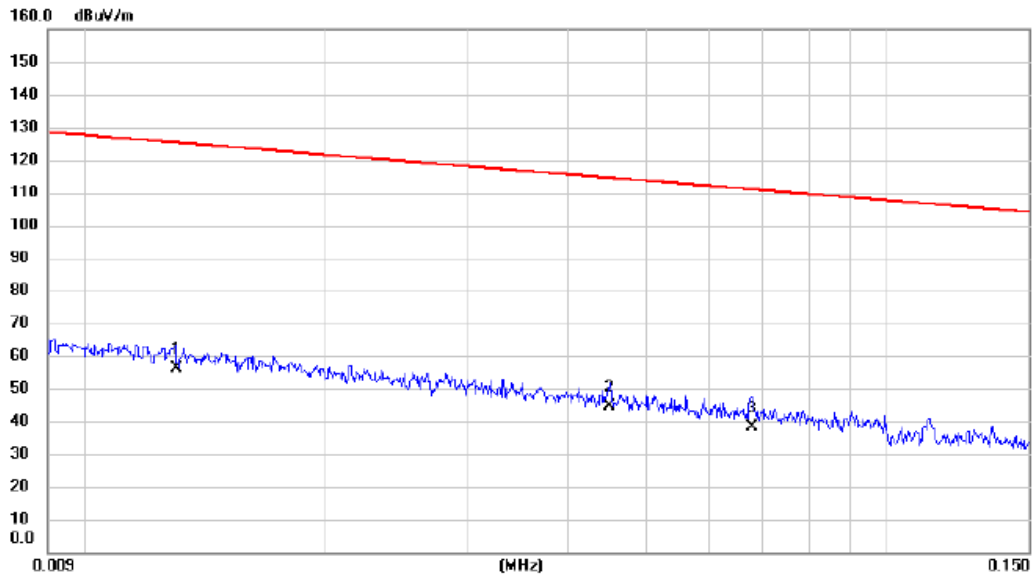
(1) Measurement Value = Reading Level + Correct Factor.

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode: TX N20 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	*	0.0130	40.29	15.92	56.21	125.33	-69.12	AVG	
2		0.0451	30.54	13.91	44.45	114.52	-70.07	AVG	
3		0.0678	24.65	13.65	38.30	110.98	-72.68	AVG	

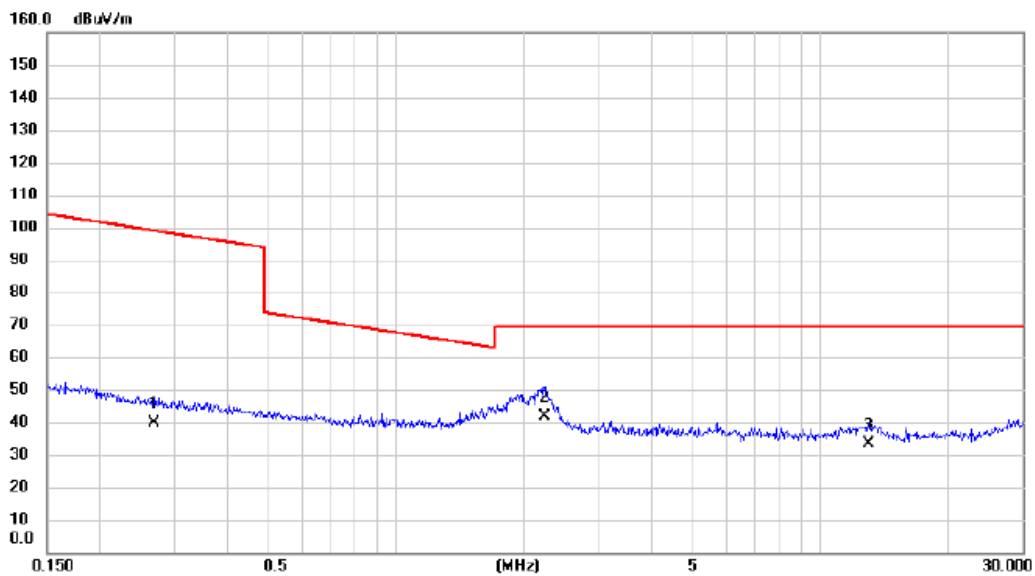
REMARKS:

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

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

Test Mode: TX N20 Mode Channel 06

Ant 0°



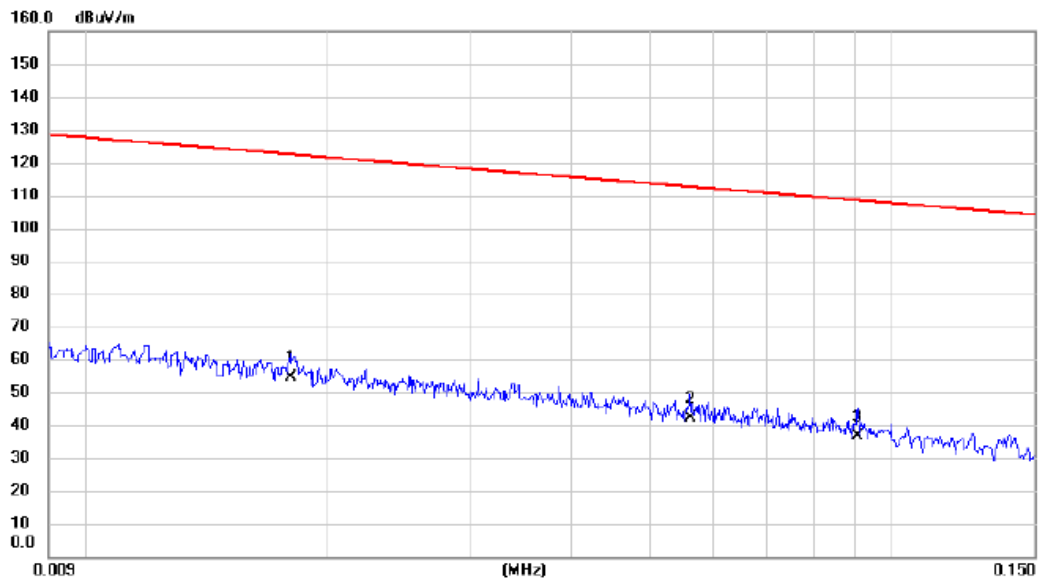
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.2686	26.14	13.62	39.76	99.02	-59.26	AVG	
2	*	2.2367	30.25	11.68	41.93	69.54	-27.61	QP	
3		12.9885	21.69	11.60	33.29	69.54	-36.25	QP	

REMARKS:

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

Test Mode: TX N20 Mode Channel 06

Ant 90°



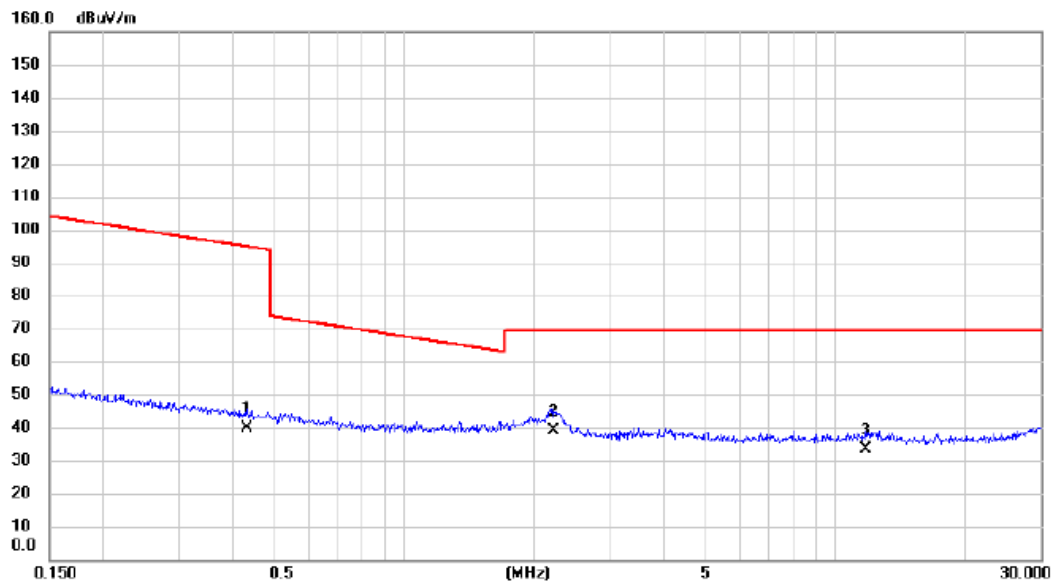
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0180	40.21	14.42	54.63	122.50	-67.87	AVG	
2		0.0562	28.46	13.83	42.29	112.61	-70.32	AVG	
3		0.0907	23.00	13.54	36.54	108.45	-71.91	QP	

REMARKS:

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

Test Mode: TX N20 Mode Channel 06

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.4305	26.42	13.23	39.65	94.92	-55.27	AVG	
2	*	2.2132	27.35	11.69	39.04	69.54	-30.50	QP	
3		11.7446	21.89	11.62	33.51	69.54	-36.03	QP	

REMARKS:

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

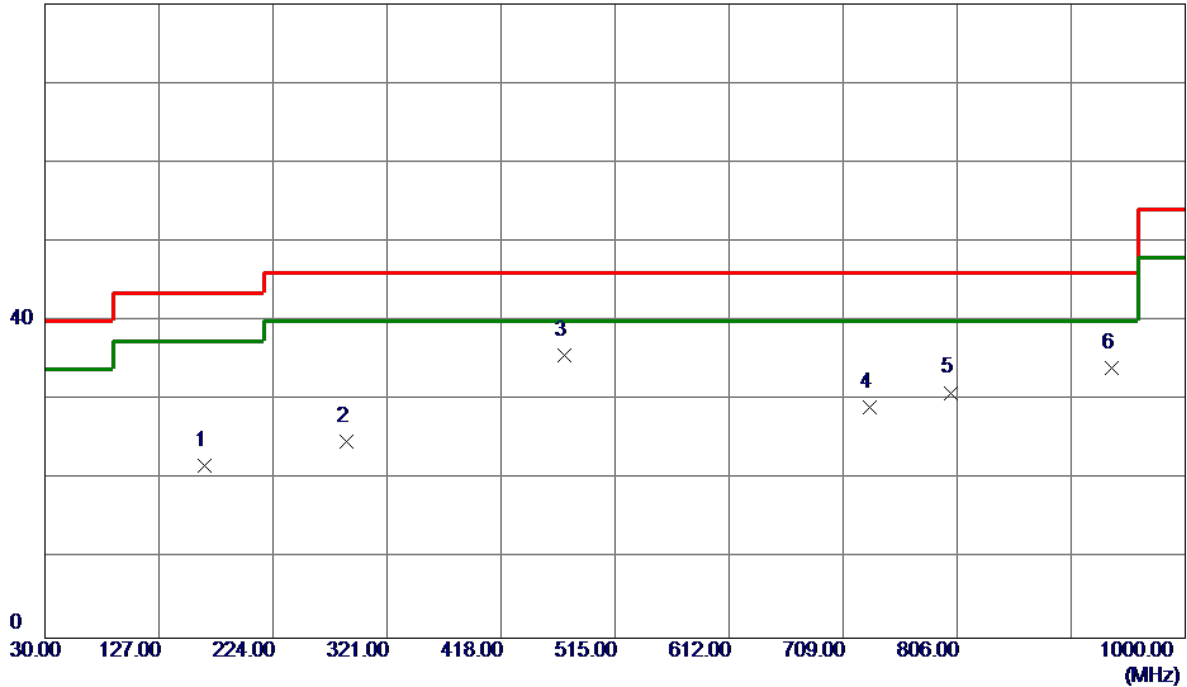
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode: TX N20 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	165.8000	33.57	-11.82	21.75	43.50	-21.75	Peak	
2	286.0799	36.96	-12.21	24.75	46.00	-21.25	Peak	
3 *	471.3500	43.55	-7.91	35.64	46.00	-10.36	Peak	
4	731.3100	32.97	-3.79	29.18	46.00	-16.82	Peak	
5	800.1800	33.96	-3.00	30.96	46.00	-15.04	Peak	
6	937.9200	35.13	-1.05	34.08	46.00	-11.92	Peak	

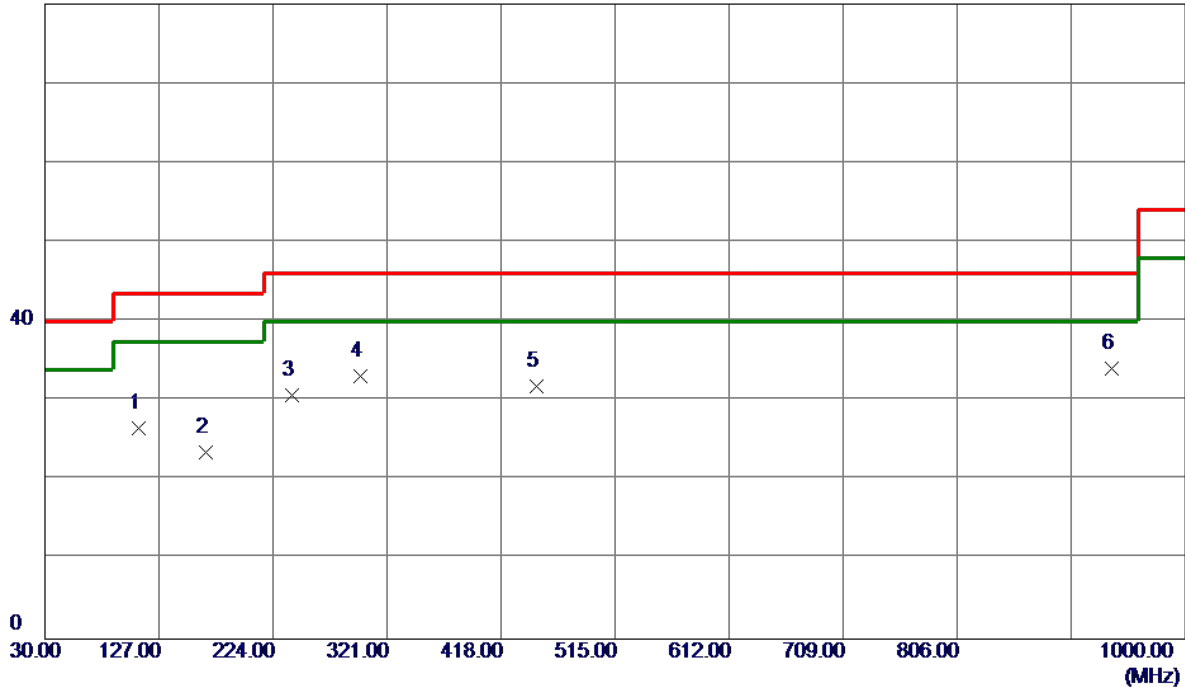
REMARKS:

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

Test Mode: TX N20 Mode Channel 06

Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin	Detector	Comment
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB		
1	109.5400	41.15	-14.56	26.59	43.50	-16.91	Peak	
2	166.7700	35.51	-11.96	23.55	43.50	-19.95	Peak	
3	240.4900	44.68	-13.99	30.69	46.00	-15.31	Peak	
4	298.6900	44.73	-11.54	33.19	46.00	-12.81	Peak	
5	448.0700	39.95	-8.13	31.82	46.00	-14.18	Peak	
6 *	937.9200	35.09	-1.05	34.04	46.00	-11.96	Peak	

REMARKS:

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

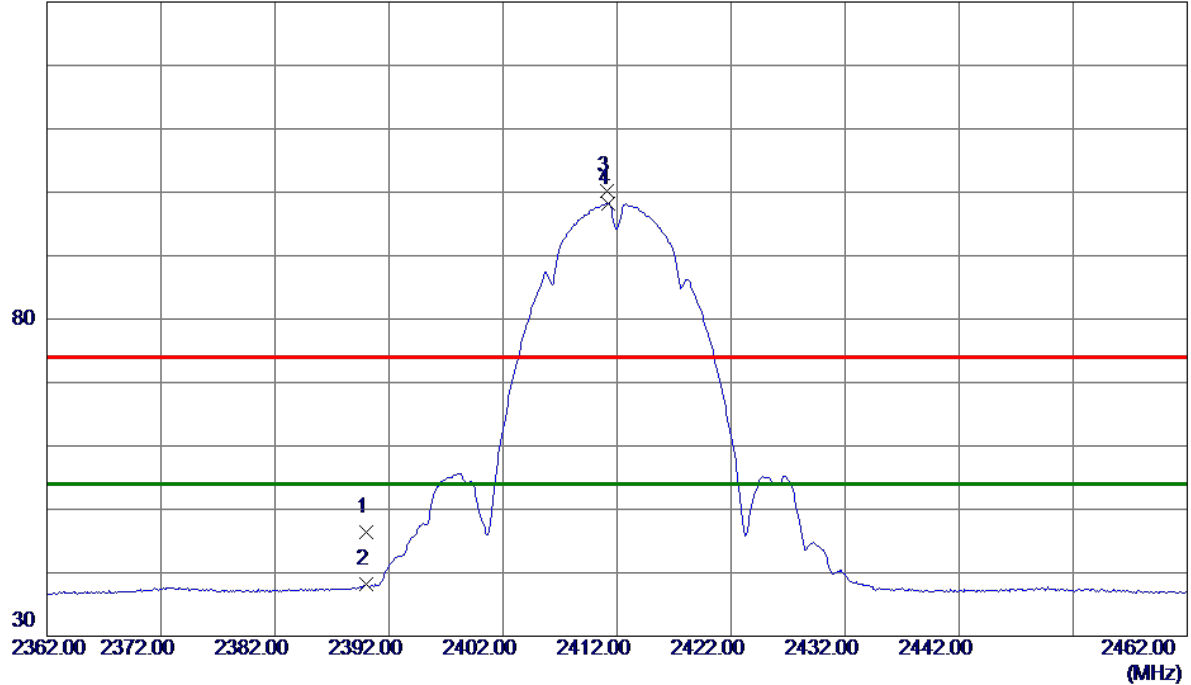
(2) Margin Level = Measurement Value - Limit Value.

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	2390.0000	39.94	6.53	46.47	74.00	-27.53	Peak	
2	2390.0000	31.58	6.53	38.11	54.00	-15.89	AVG	
3	2411.1500	93.70	6.51	100.21	74.00	26.21	Peak	No Limit
4 *	2411.2000	91.74	6.51	98.25	54.00	44.25	AVG	No Limit

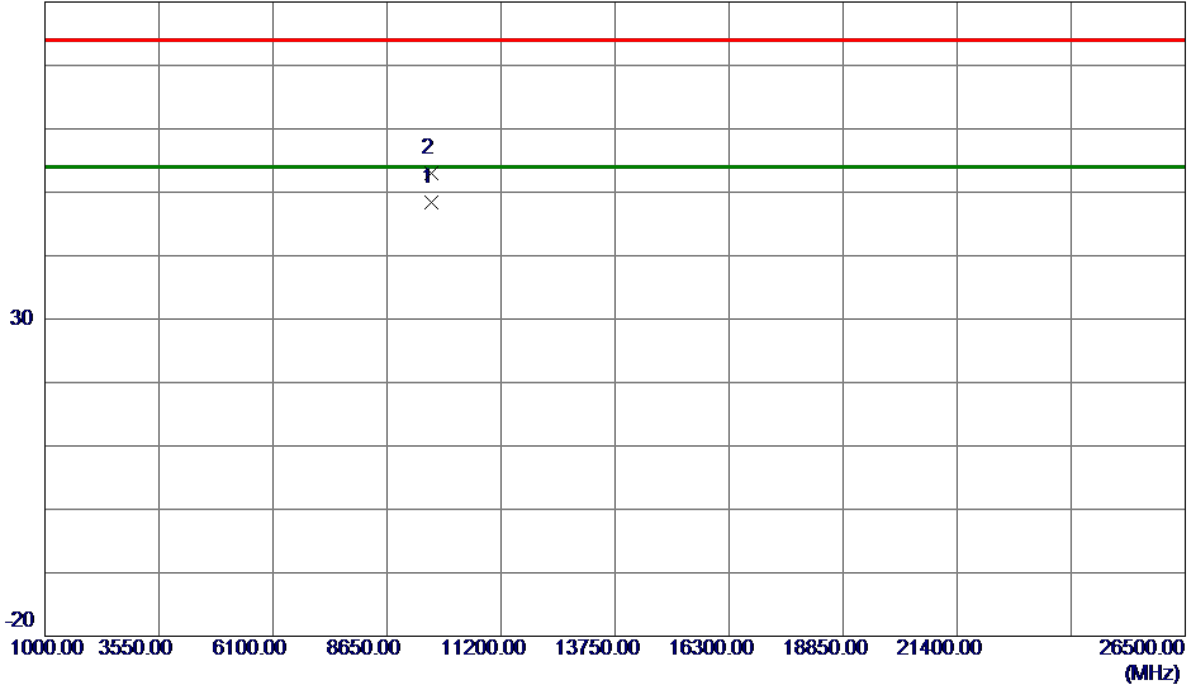
REMARKS:

- (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 *	9647.8710	37.62	10.70	48.32	54.00	-5.68	AVG	
2	9647.9850	42.38	10.70	53.08	74.00	-20.92	Peak	

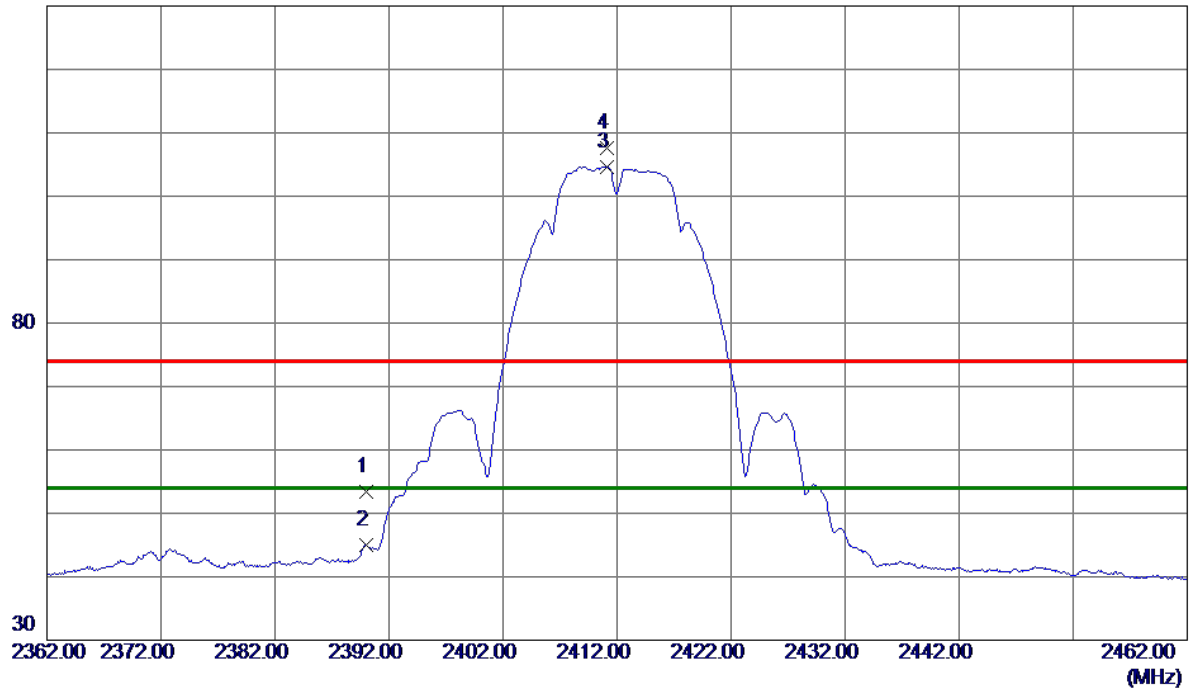
REMARKS:

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

Test Mode: TX B Mode 2412 MHz

Horizontal

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	46.79	6.53	53.32	74.00	-20.68	Peak	
2	2390.0000	38.54	6.53	45.07	54.00	-8.93	AVG	
3 *	2411.1000	98.13	6.51	104.64	54.00	50.64	AVG	No Limit
4	2411.1500	101.06	6.51	107.57	74.00	33.57	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

Horizontal

80 dBuV/m

30

-20

1000.00 3550.00 6100.00 8650.00 11200.00 13750.00 16300.00 18850.00 21400.00 26500.00 (MHz)

No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.8200	44.47	10.70	55.17	74.00	-18.83	Peak	
2 *	9647.9880	42.35	10.70	53.05	54.00	-0.95	AVG	

REMARKS:

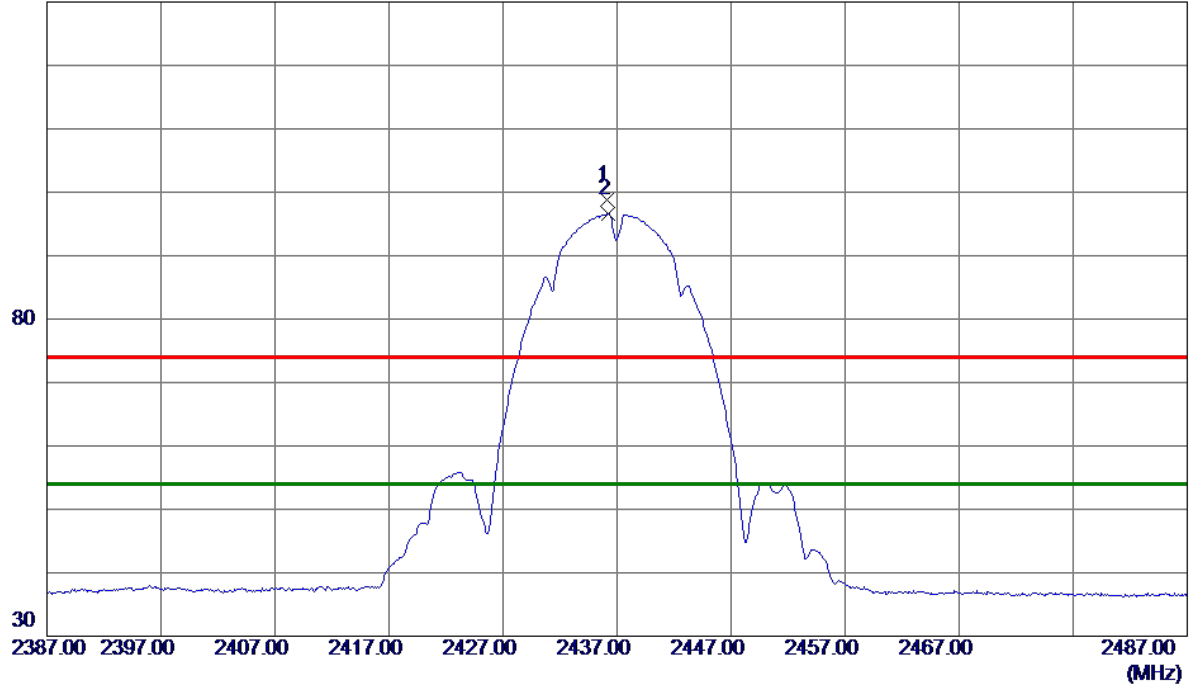
(1) Measurement Value = Reading Level + Correct Factor.

(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	2436.1500	92.27	6.48	98.75	74.00	24.75	Peak	No Limit
2 *	2436.2000	90.15	6.48	96.63	54.00	42.63	AVG	No Limit

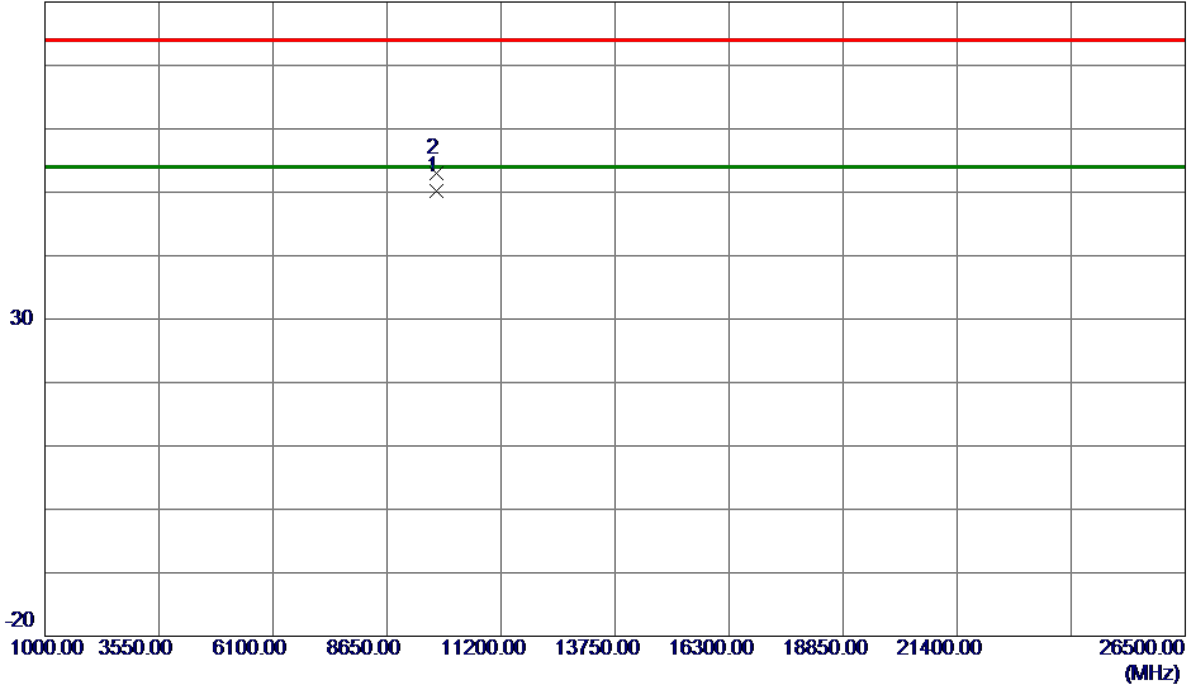
REMARKS:

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

Test Mode:	TX B Mode 2437 MHz
------------	--------------------

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 *	9747.8900	39.52	10.70	50.22	54.00	-3.78	AVG	
2	9747.9320	42.34	10.70	53.04	74.00	-20.96	Peak	

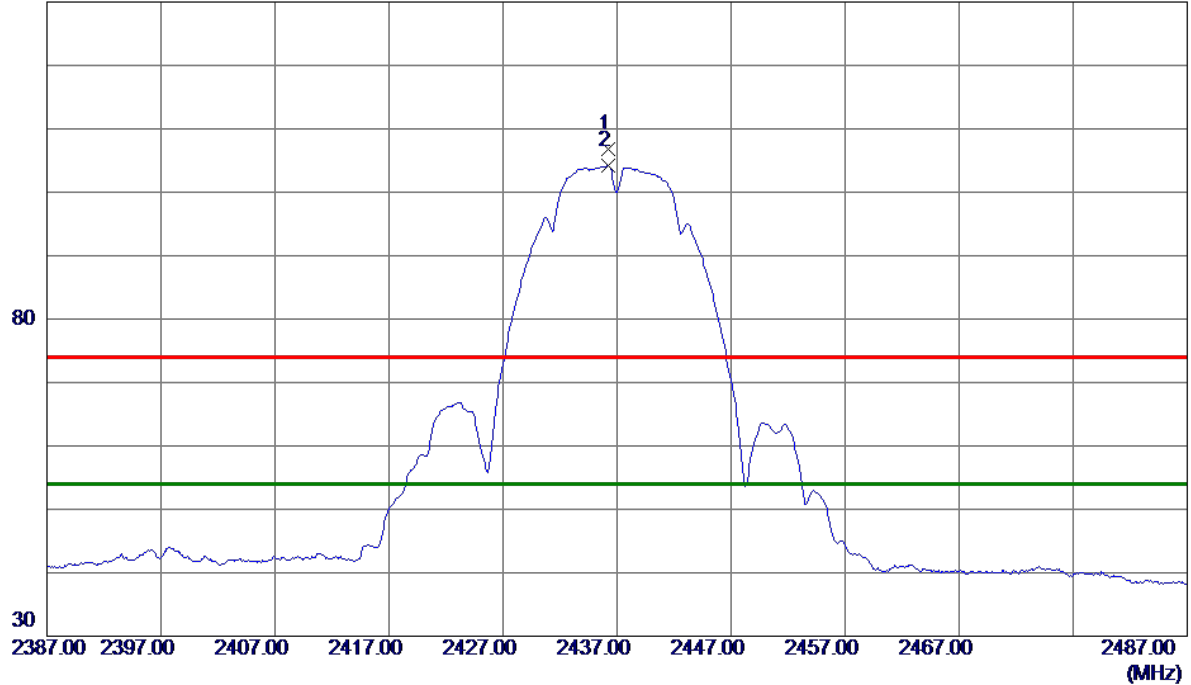
REMARKS:

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

Test Mode: TX B Mode 2437 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2436.2000	100.40	6.48	106.88	74.00	32.88	Peak	No Limit
2 *	2436.2000	97.74	6.48	104.22	54.00	50.22	AVG	No Limit

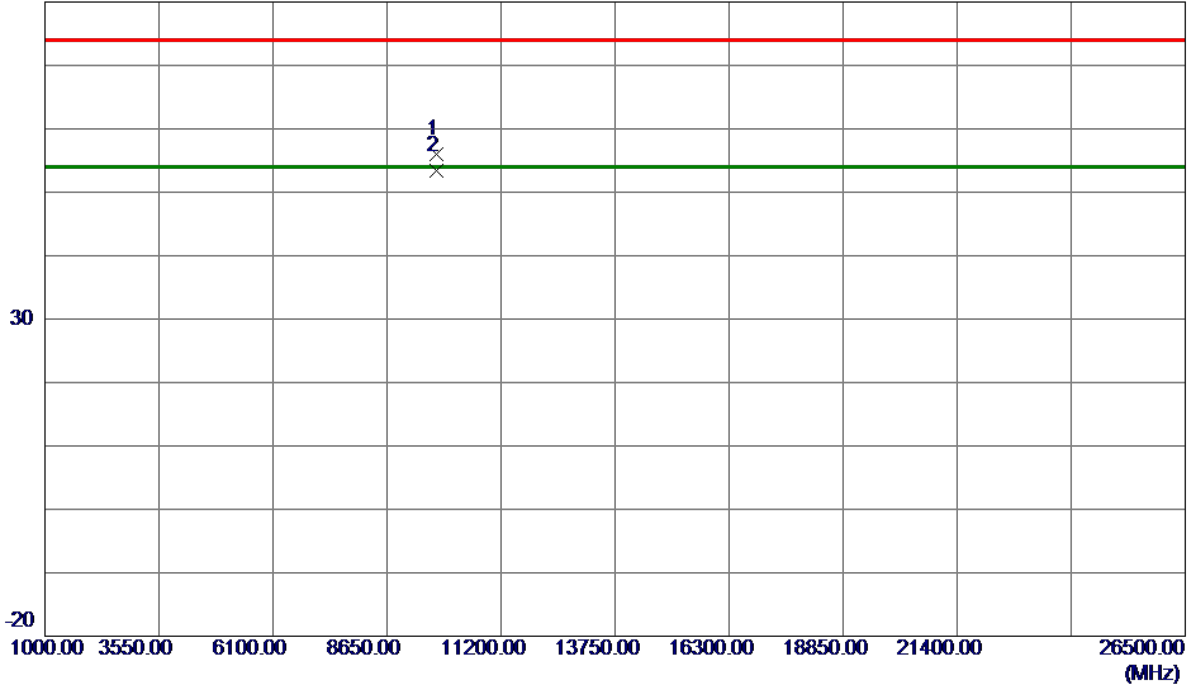
REMARKS:

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

Test Mode:	TX B Mode 2437 MHz
------------	--------------------

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	9747.7740	45.30	10.70	56.00	74.00	-18.00	Peak	
2 *	9747.8980	42.69	10.70	53.39	54.00	-0.61	AVG	

REMARKS:

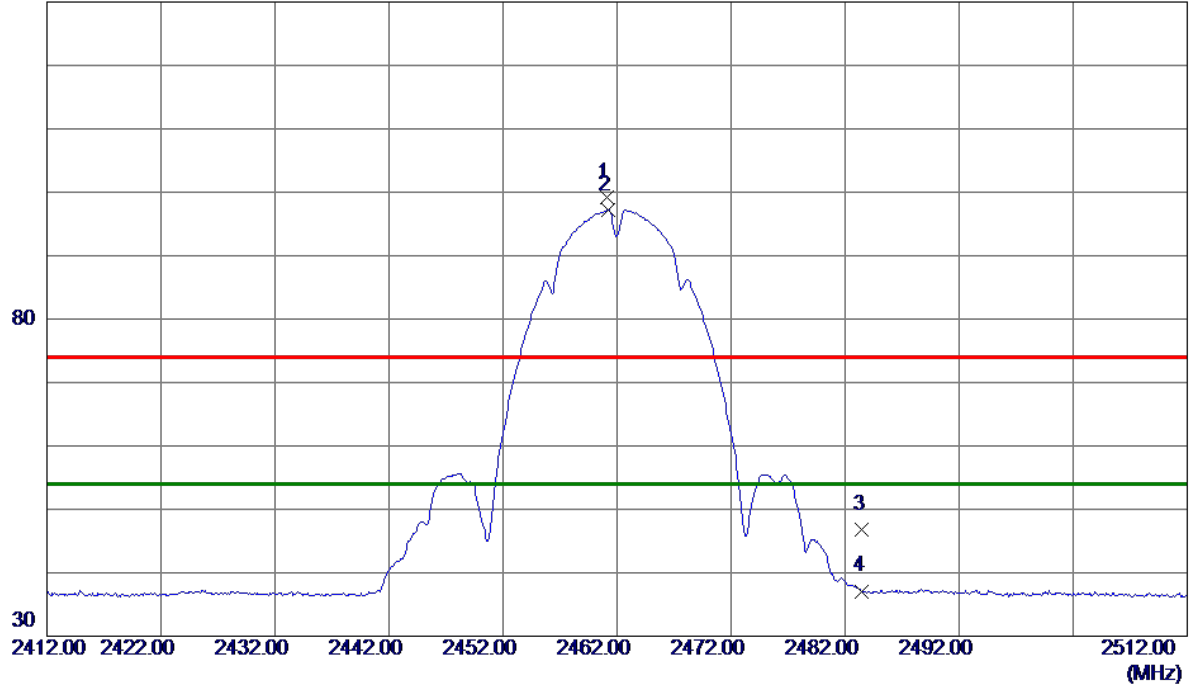
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX 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	2461.1500	92.79	6.45	99.24	74.00	25.24	Peak	No Limit
2 *	2461.2000	90.77	6.45	97.22	54.00	43.22	AVG	No Limit
3	2483.5000	40.39	6.42	46.81	74.00	-27.19	Peak	
4	2483.5000	30.68	6.42	37.10	54.00	-16.90	AVG	

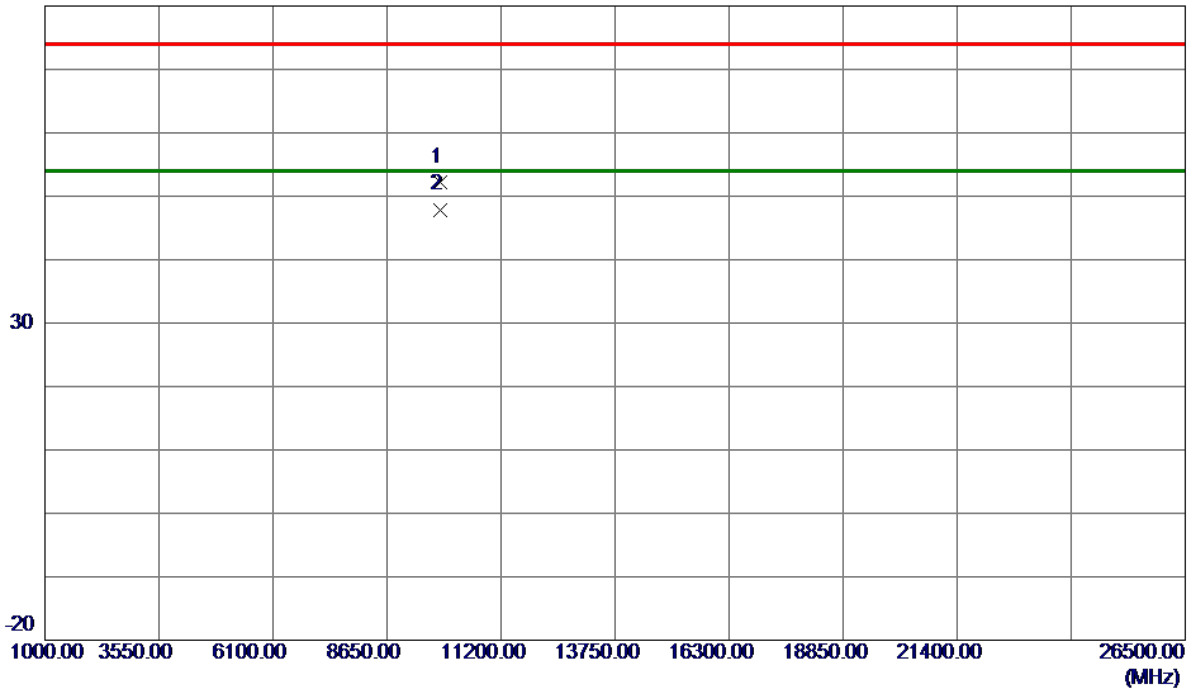
REMARKS:

- (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	9847.8750	41.56	10.69	52.25	74.00	-21.75	Peak	
2 *	9847.8890	37.21	10.69	47.90	54.00	-6.10	AVG	

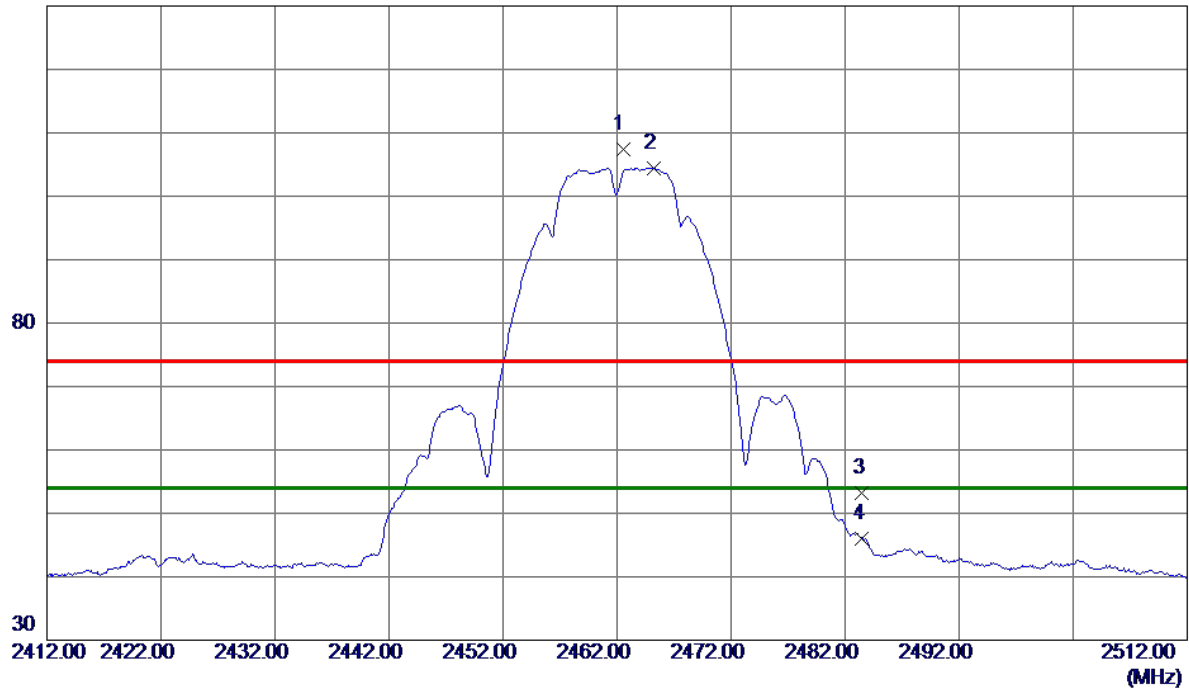
REMARKS:

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

Test Mode: TX B Mode 2462 MHz

Horizontal

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	2462.5000	100.92	6.45	107.37	74.00	33.37	Peak	No Limit
2 *	2465.2500	98.00	6.44	104.44	54.00	50.44	AVG	No Limit
3	2483.5000	46.75	6.42	53.17	74.00	-20.83	Peak	
4	2483.5000	39.64	6.42	46.06	54.00	-7.94	AVG	

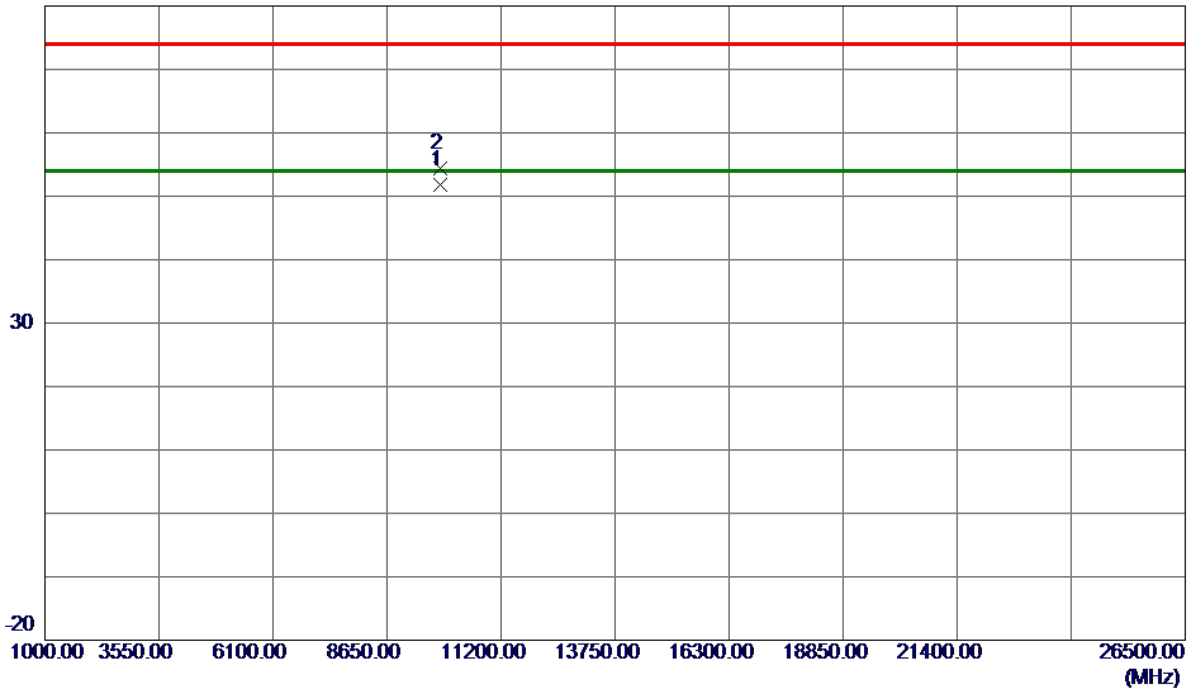
REMARKS:

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

Test Mode:	TX B Mode 2462 MHz
------------	--------------------

Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	9848.0470	41.04	10.69	51.73	54.00	-2.27	AVG	
2	9848.0519	43.68	10.69	54.37	74.00	-19.63	Peak	

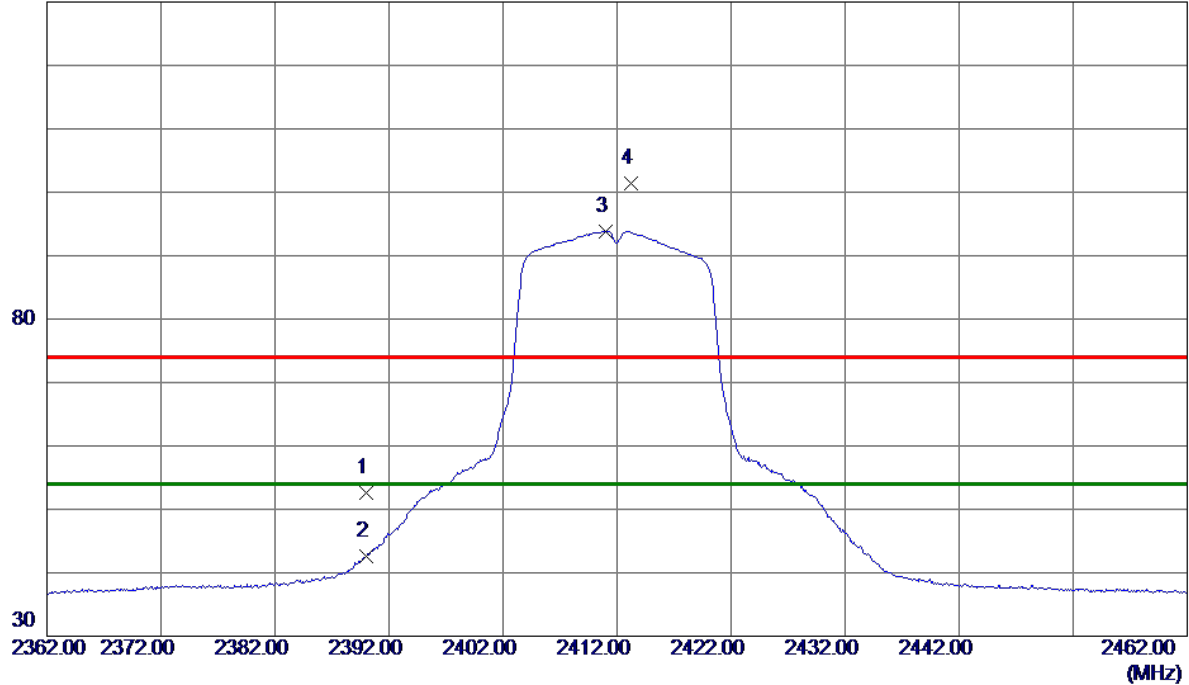
REMARKS:

- (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	46.10	6.53	52.63	74.00	-21.37	Peak	
2	2390.0000	36.07	6.53	42.60	54.00	-11.40	AVG	
3 *	2411.0500	87.30	6.51	93.81	54.00	39.81	AVG	No Limit
4	2413.2500	94.91	6.50	101.41	74.00	27.41	Peak	No Limit

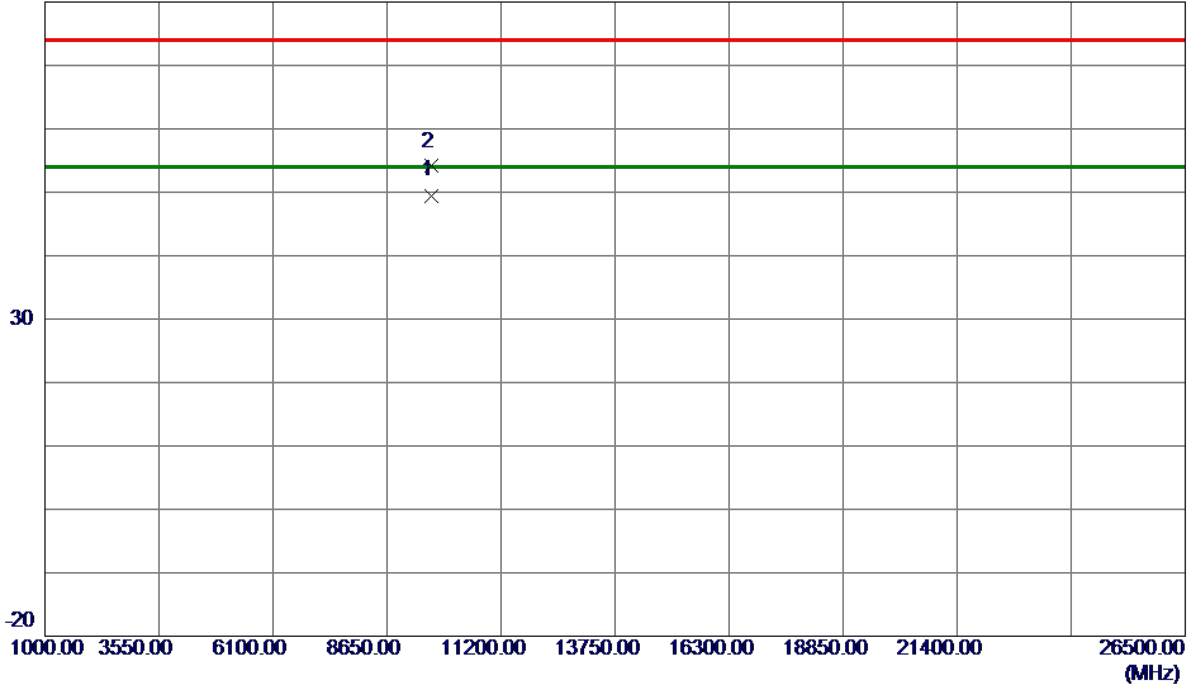
REMARKS:

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

Test Mode:	TX G Mode 2412 MHz
------------	--------------------

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 *	9647.8949	38.80	10.70	49.50	54.00	-4.50	AVG	
2	9647.9530	43.40	10.70	54.10	74.00	-19.90	Peak	

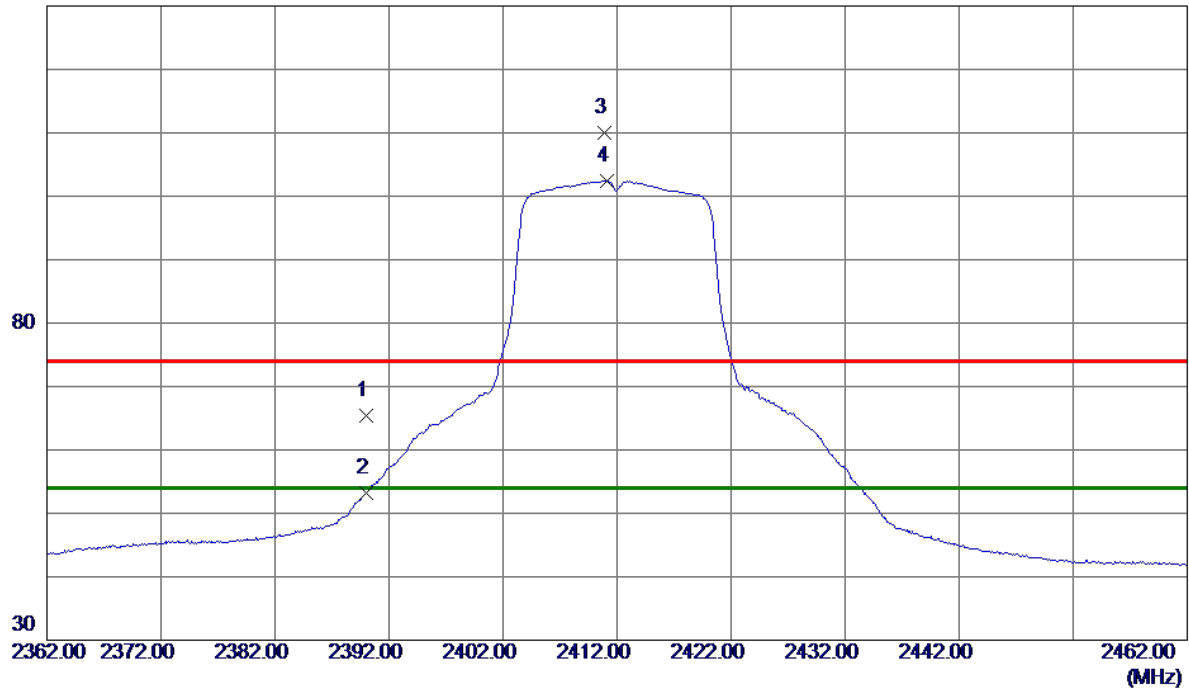
REMARKS:

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

Test Mode: TX G Mode 2412 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	58.89	6.53	65.42	74.00	-8.58	Peak	
2	2390.0000	46.72	6.53	53.25	54.00	-0.75	AVG	
3	2410.9000	103.50	6.51	110.01	74.00	36.01	Peak	No Limit
4 *	2411.1500	95.92	6.51	102.43	54.00	48.43	AVG	No Limit

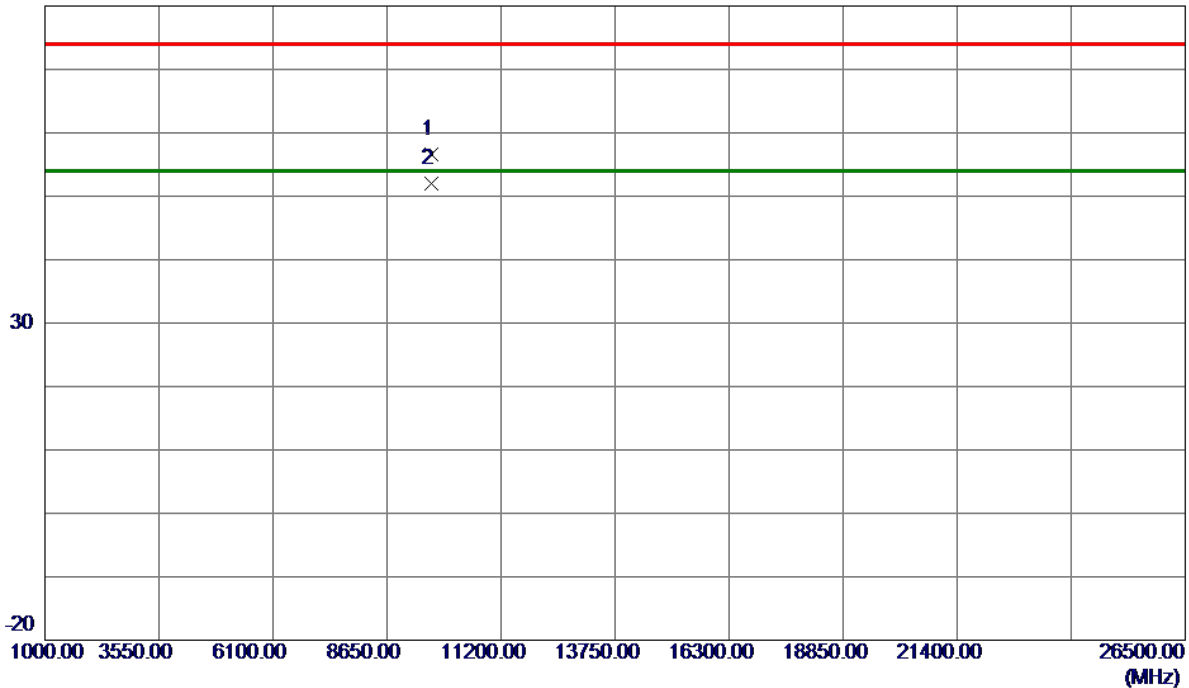
REMARKS:

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

Test Mode: TX G Mode 2412 MHz

Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.7340	45.81	10.70	56.51	74.00	-17.49	Peak	
2 *	9647.9130	41.32	10.70	52.02	54.00	-1.98	AVG	

REMARKS:

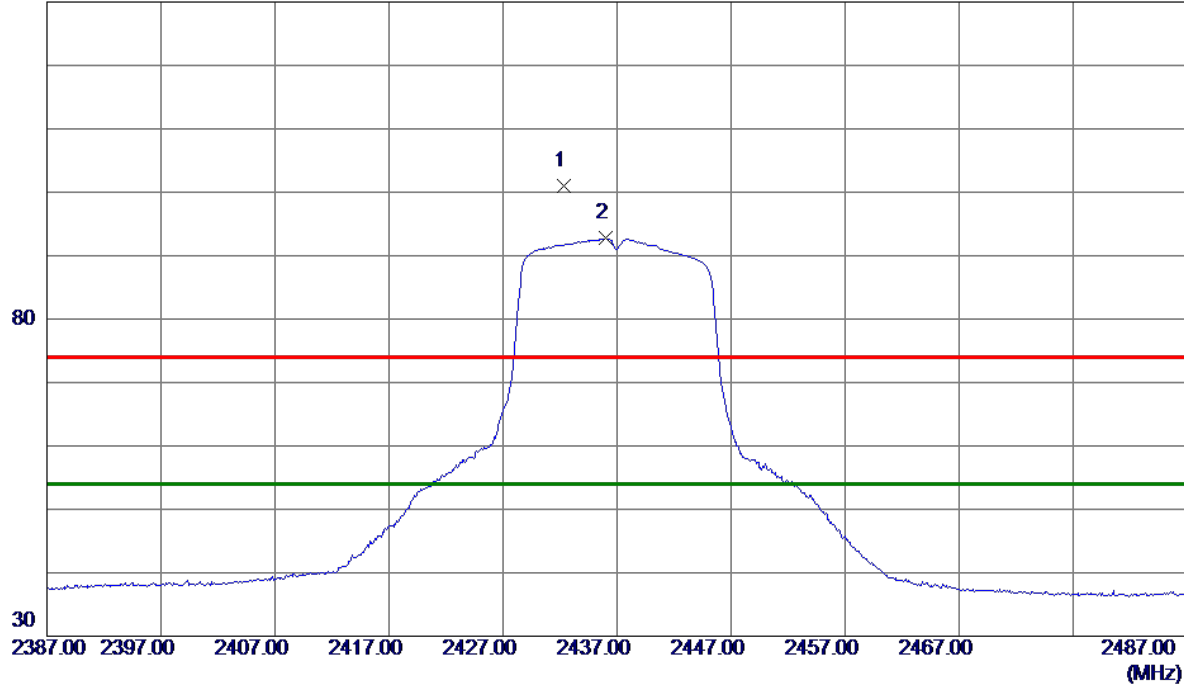
(1) Measurement Value = Reading Level + Correct Factor.

(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	2432.3000	94.60	6.48	101.08	74.00	27.08	Peak	No Limit
2 *	2436.0500	86.23	6.48	92.71	54.00	38.71	AVG	No Limit

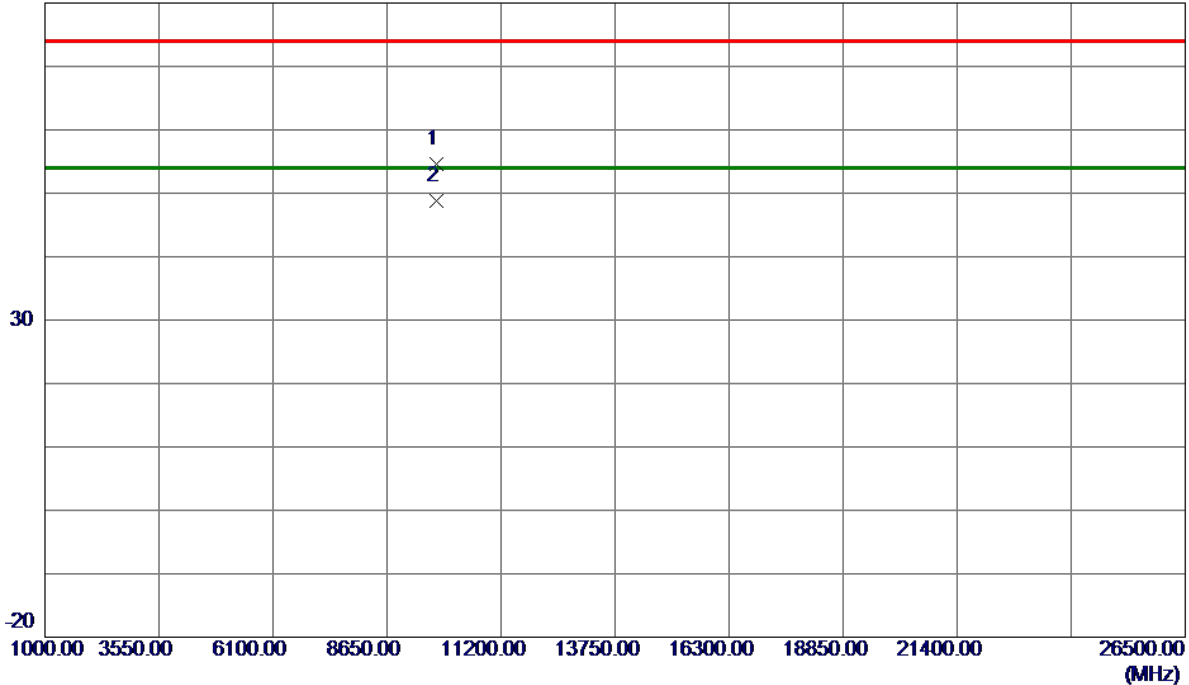
REMARKS:

- (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	9747.7490	43.92	10.70	54.62	74.00	-19.38	Peak	
2 *	9747.8660	38.02	10.70	48.72	54.00	-5.28	AVG	

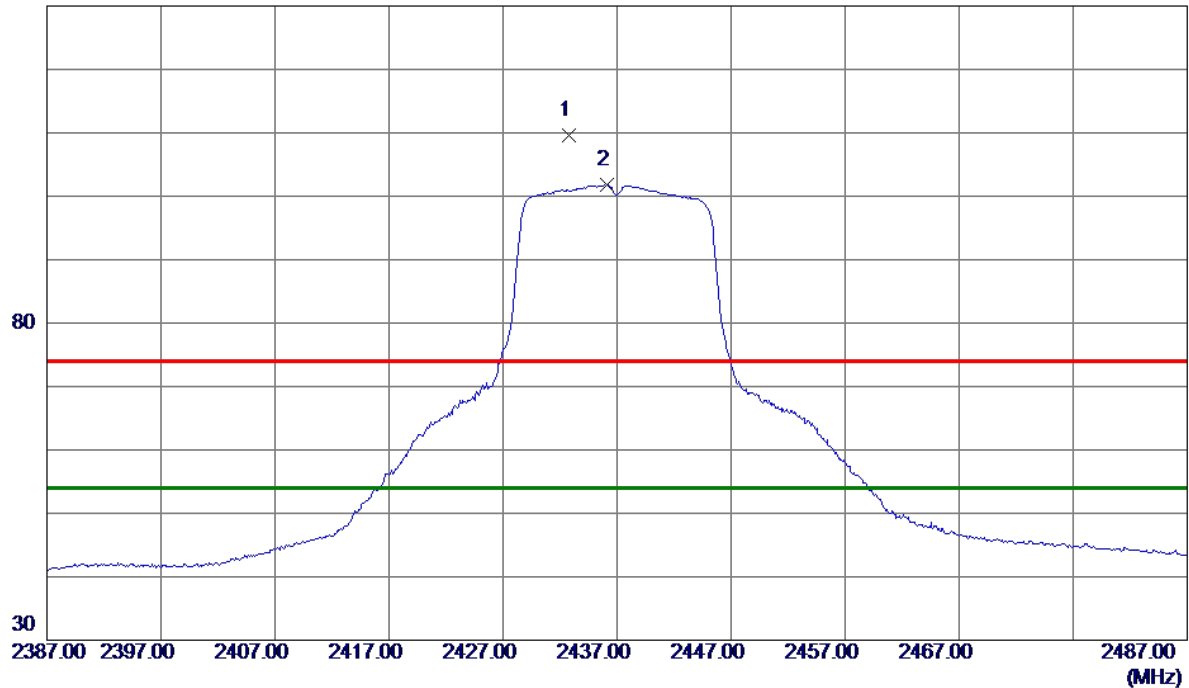
REMARKS:

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

Test Mode: TX G Mode 2437 MHz

Horizontal

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	2432.7500	103.20	6.48	109.68	74.00	35.68	Peak	No Limit
2 *	2436.1000	95.28	6.48	101.76	54.00	47.76	AVG	No Limit

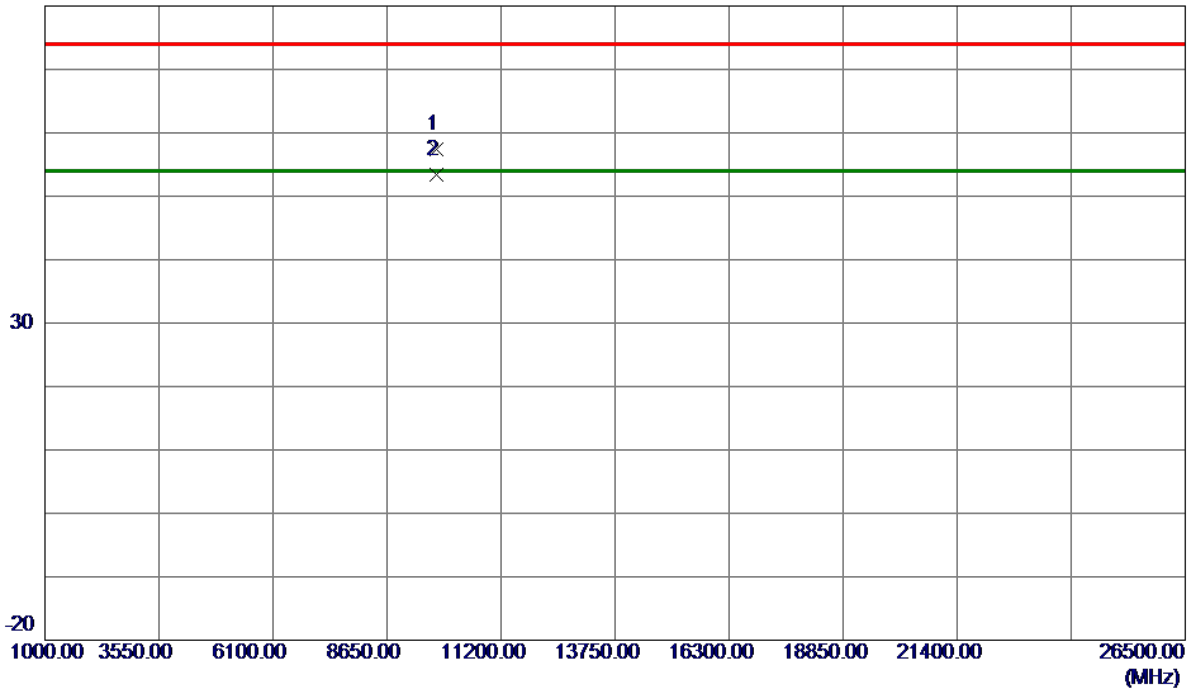
REMARKS:

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

Test Mode:	TX G Mode 2437 MHz
------------	--------------------

Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.5910	46.69	10.70	57.39	74.00	-16.61	Peak	
2 *	9747.9160	42.68	10.70	53.38	54.00	-0.62	AVG	

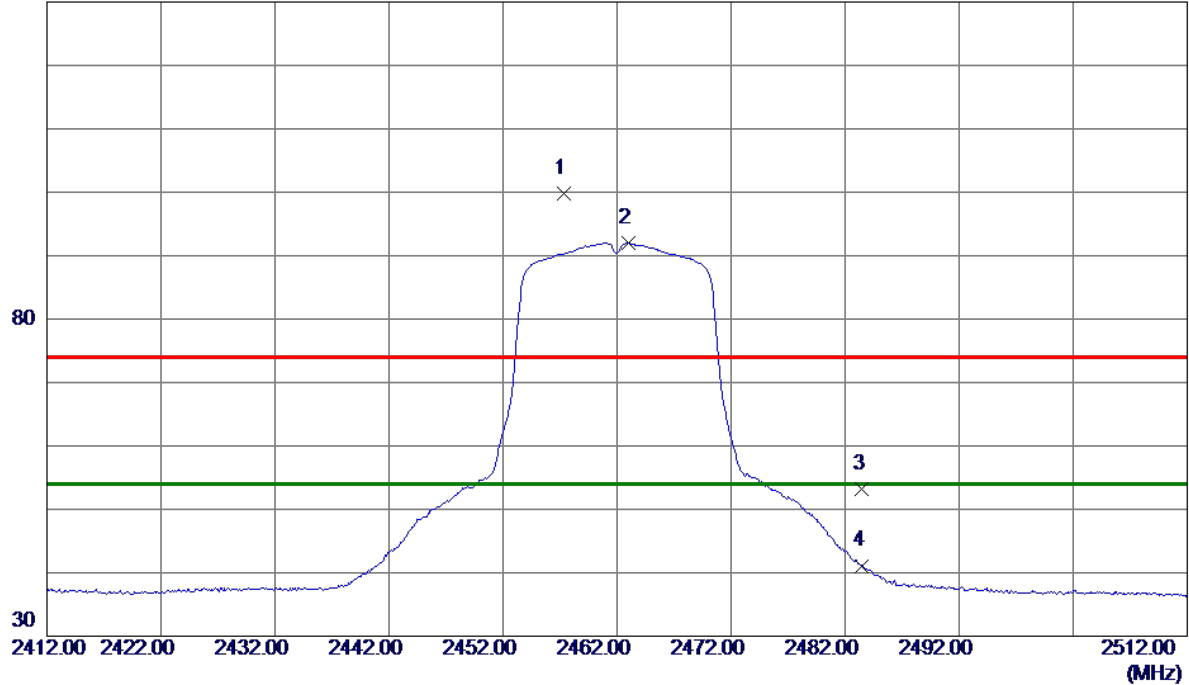
REMARKS:

- (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	2457.3000	93.27	6.45	99.72	74.00	25.72	Peak	No Limit
2 *	2463.0500	85.60	6.45	92.05	54.00	38.05	AVG	No Limit
3	2483.5000	46.86	6.42	53.28	74.00	-20.72	Peak	
4	2483.5000	34.68	6.42	41.10	54.00	-12.90	AVG	

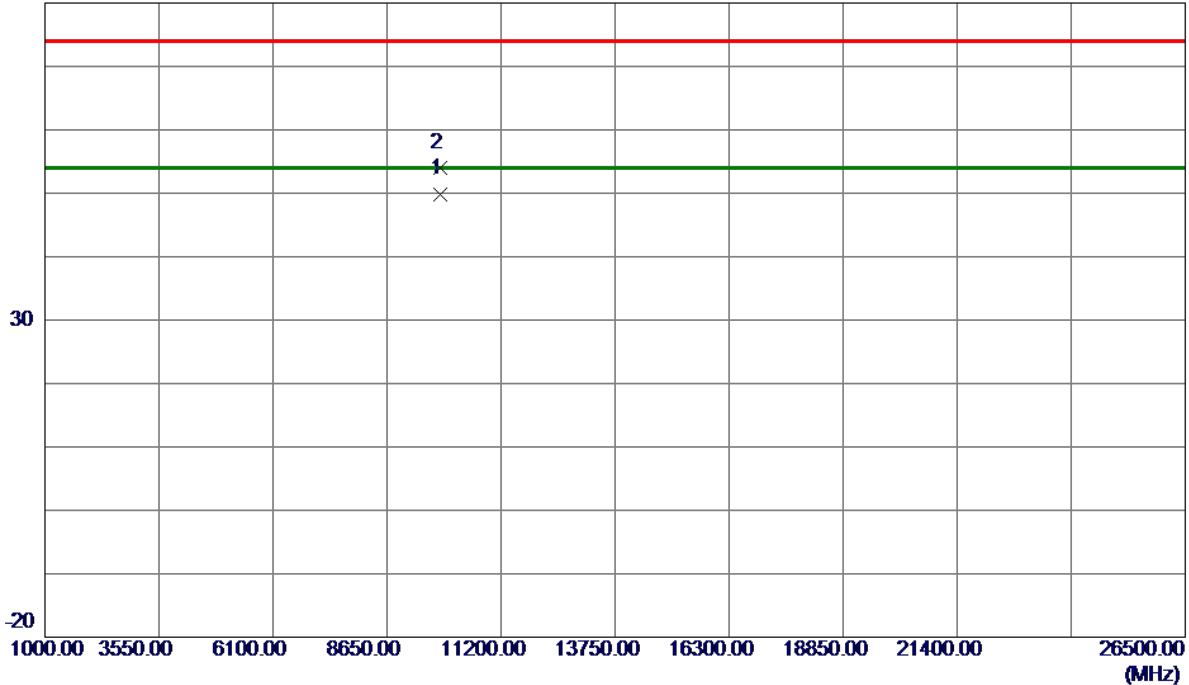
REMARKS:

- (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 *	9847.8330	39.21	10.69	49.90	54.00	-4.10	AVG	
2	9847.9450	43.40	10.69	54.09	74.00	-19.91	Peak	

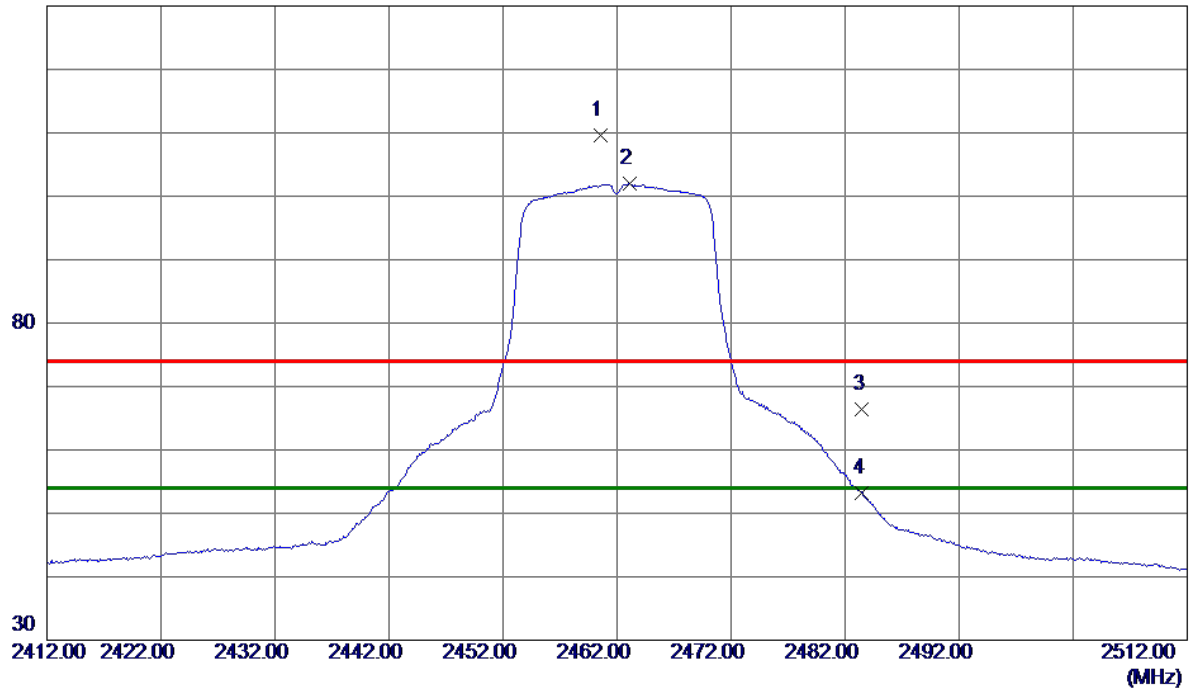
REMARKS:

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

Test Mode: TX G Mode 2462 MHz

Horizontal

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	2460.5500	103.11	6.45	109.56	74.00	35.56	Peak	No Limit
2 *	2463.1000	95.48	6.45	101.93	54.00	47.93	AVG	No Limit
3	2483.5000	60.00	6.42	66.42	74.00	-7.58	Peak	
4	2483.5000	46.83	6.42	53.25	54.00	-0.75	AVG	

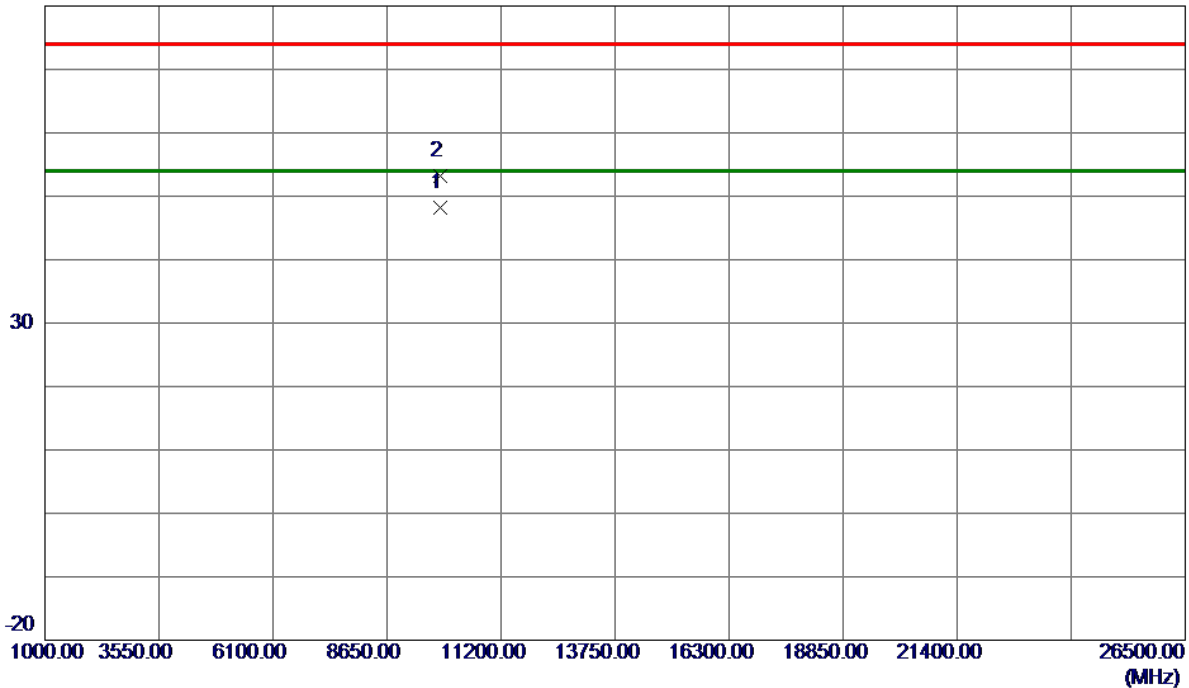
REMARKS:

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

Test Mode: TX G Mode 2462 MHz

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 *	9847.9910	37.50	10.69	48.19	54.00	-5.81	AVG	
2	9848.0510	42.46	10.69	53.15	74.00	-20.85	Peak	

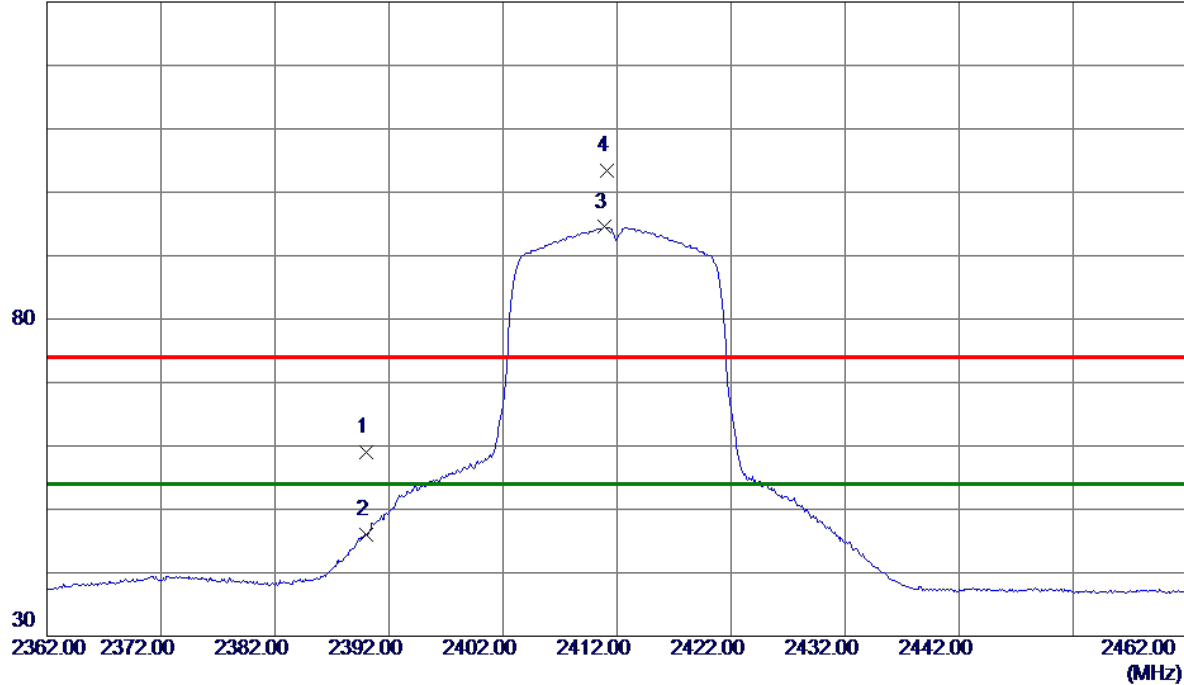
REMARKS:

- (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	52.51	6.53	59.04	74.00	-14.96	Peak	
2	2390.0000	39.54	6.53	46.07	54.00	-7.93	AVG	
3 *	2410.9000	87.99	6.51	94.50	54.00	40.50	AVG	No Limit
4	2411.1500	96.82	6.51	103.33	74.00	29.33	Peak	No Limit

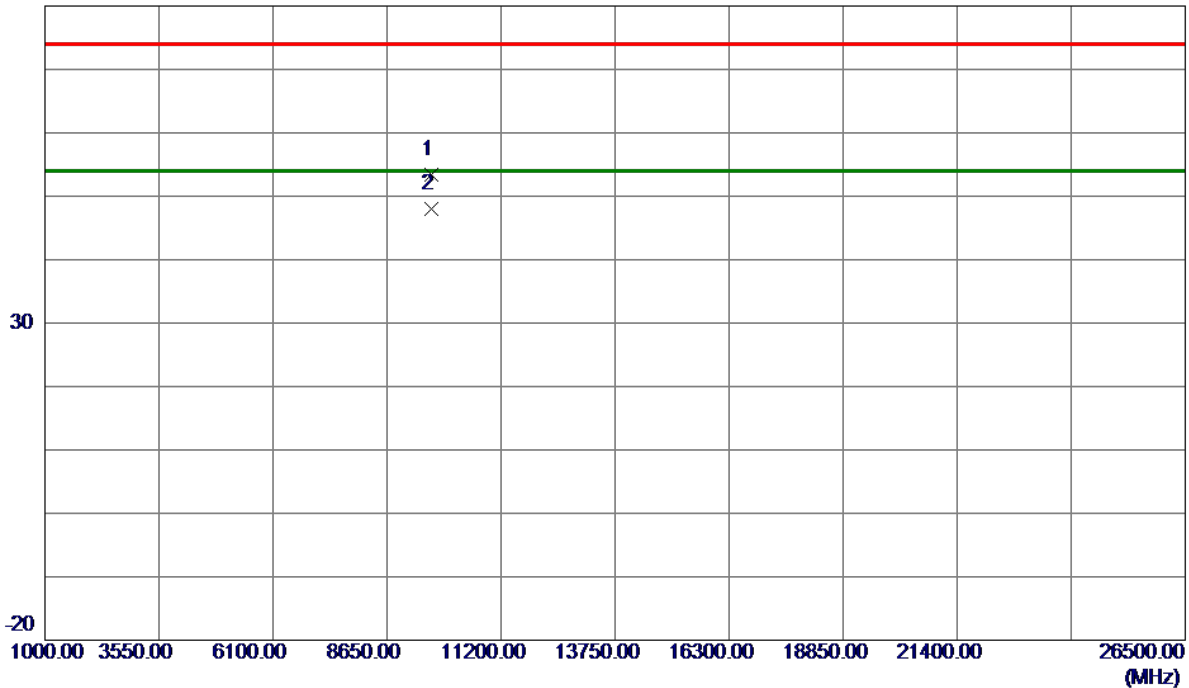
REMARKS:

- (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



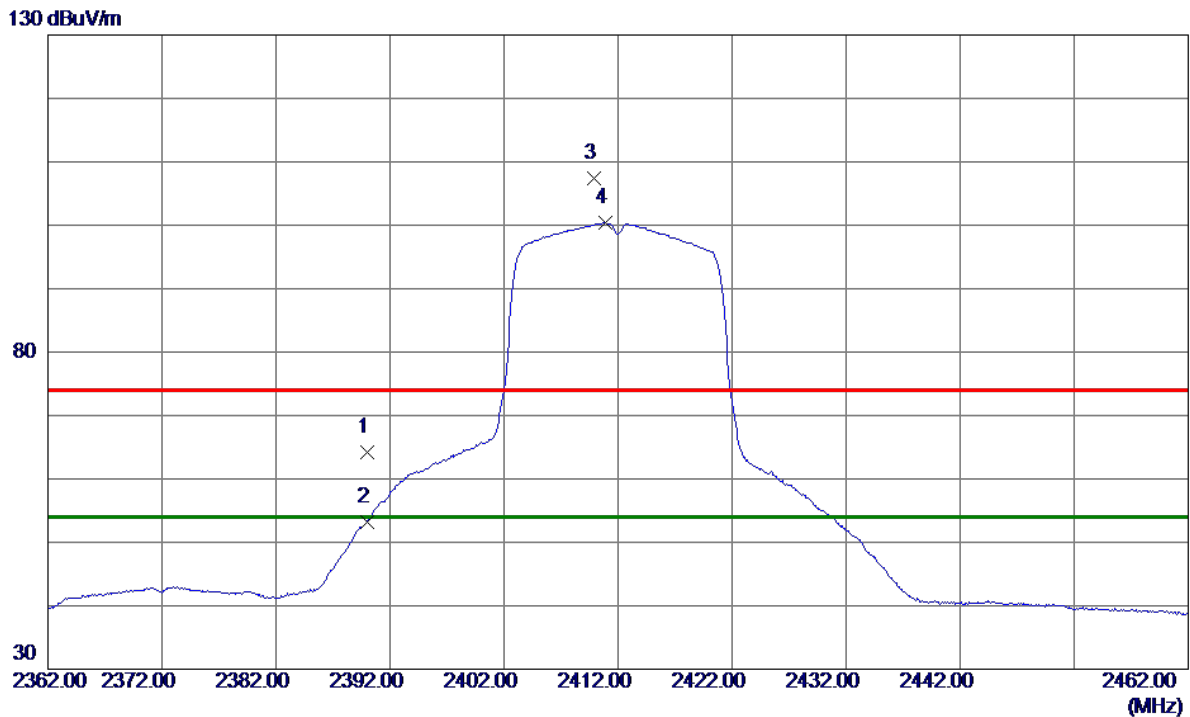
No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9647.8019	42.67	10.70	53.37	74.00	-20.63	Peak	
2 *	9647.8780	37.39	10.70	48.09	54.00	-5.91	AVG	

REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	57.60	6.53	64.13	74.00	-9.87	Peak	
2	2390.0000	46.66	6.53	53.19	54.00	-0.81	AVG	
3	2409.9000	100.91	6.51	107.42	74.00	33.42	Peak	No Limit
4 *	2410.8500	93.83	6.51	100.34	54.00	46.34	AVG	No Limit

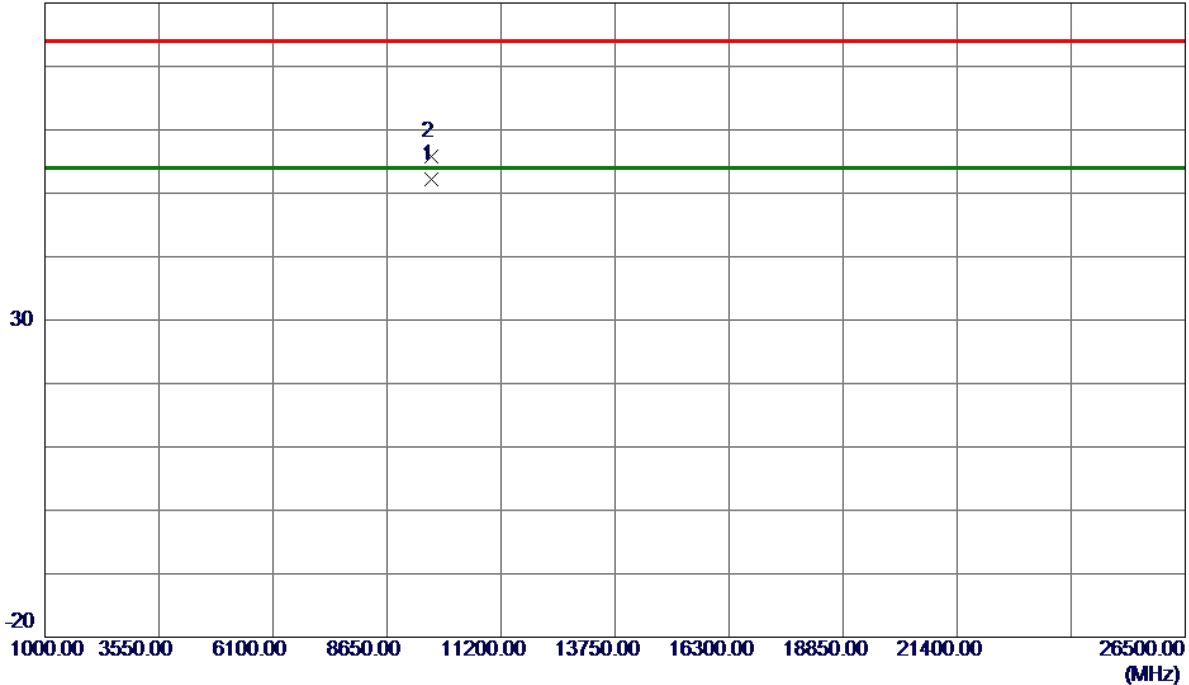
REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

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 *	9647.8850	41.49	10.70	52.19	54.00	-1.81	AVG	
2	9647.9370	45.05	10.70	55.75	74.00	-18.25	Peak	

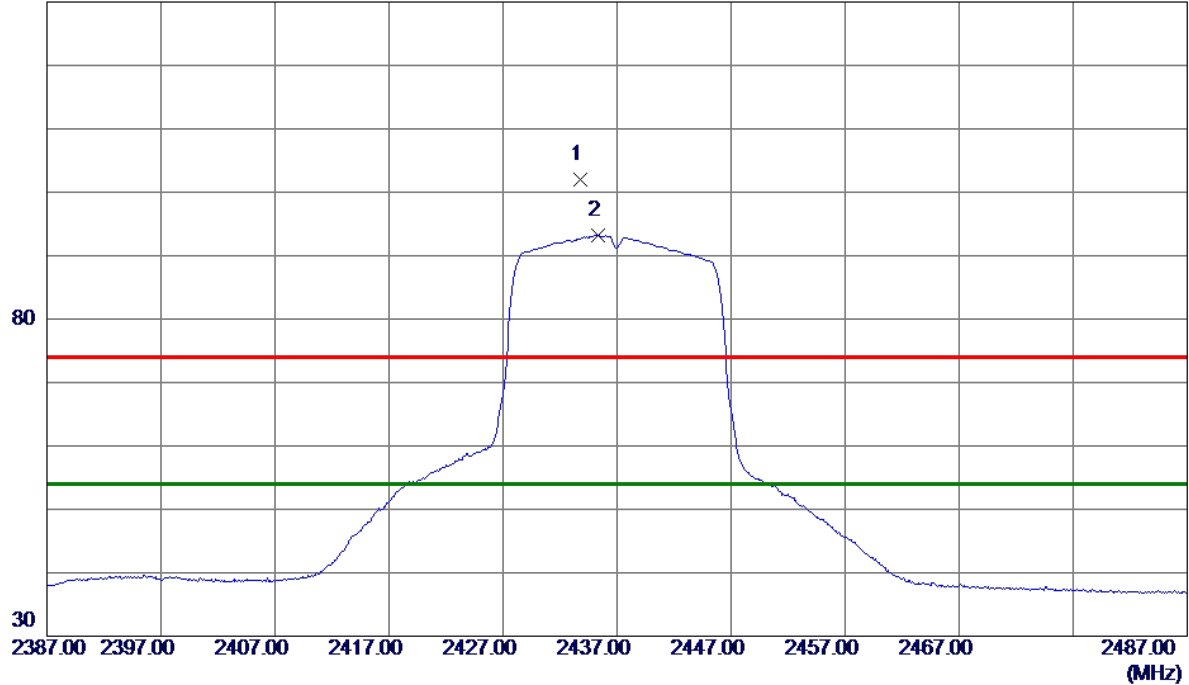
REMARKS:

- (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	2433.8000	95.48	6.48	101.96	74.00	27.96	Peak	No Limit
2 *	2435.3000	86.81	6.48	93.29	54.00	39.29	AVG	No Limit

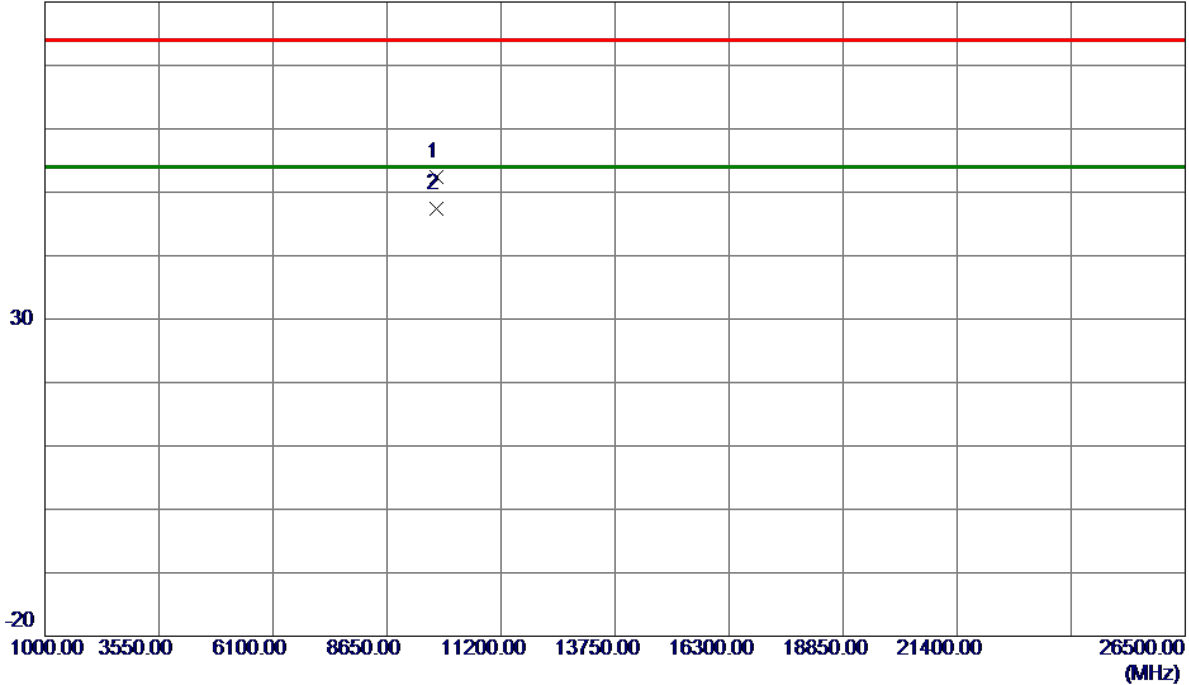
REMARKS:

- (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.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	9747.8510	41.61	10.70	52.31	74.00	-21.69	Peak	
2 *	9747.8880	36.69	10.70	47.39	54.00	-6.61	AVG	

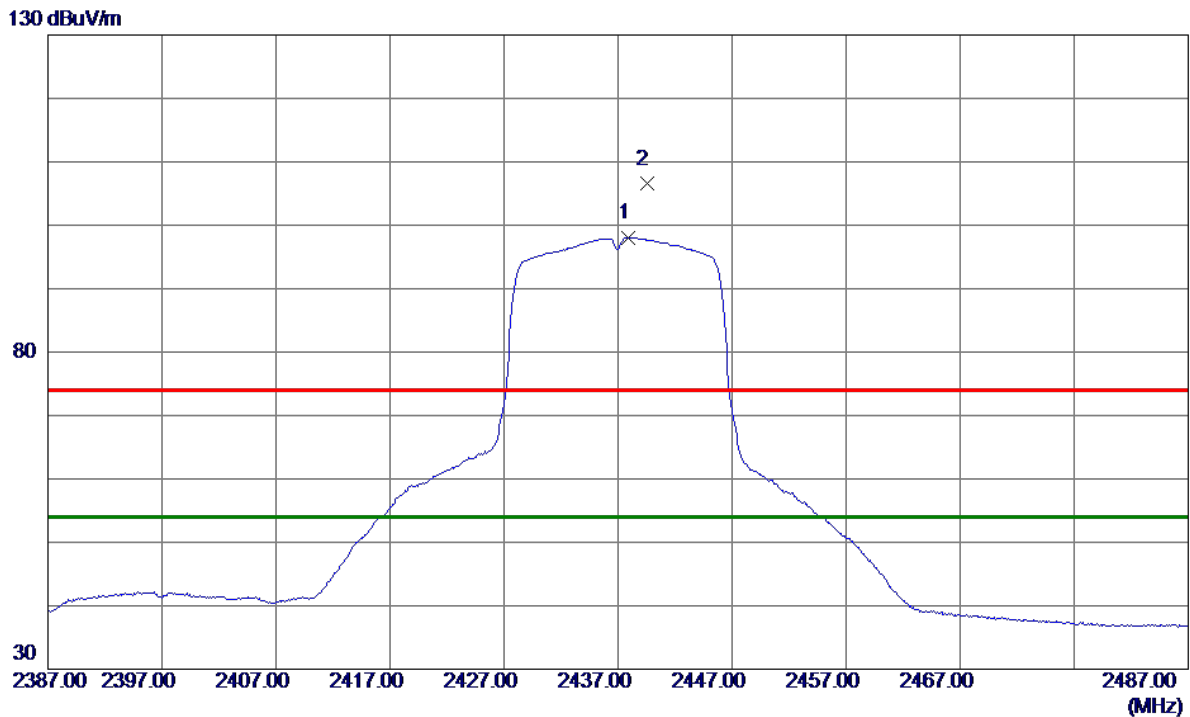
REMARKS:

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

(2) $\text{Margin Level} = \text{Measurement Value} - \text{Limit Value}.$

Test Mode: TX N-20M Mode 2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2437.9000	91.57	6.48	98.05	54.00	44.05	AVG	No Limit
2	2439.5000	100.03	6.47	106.50	74.00	32.50	Peak	No Limit

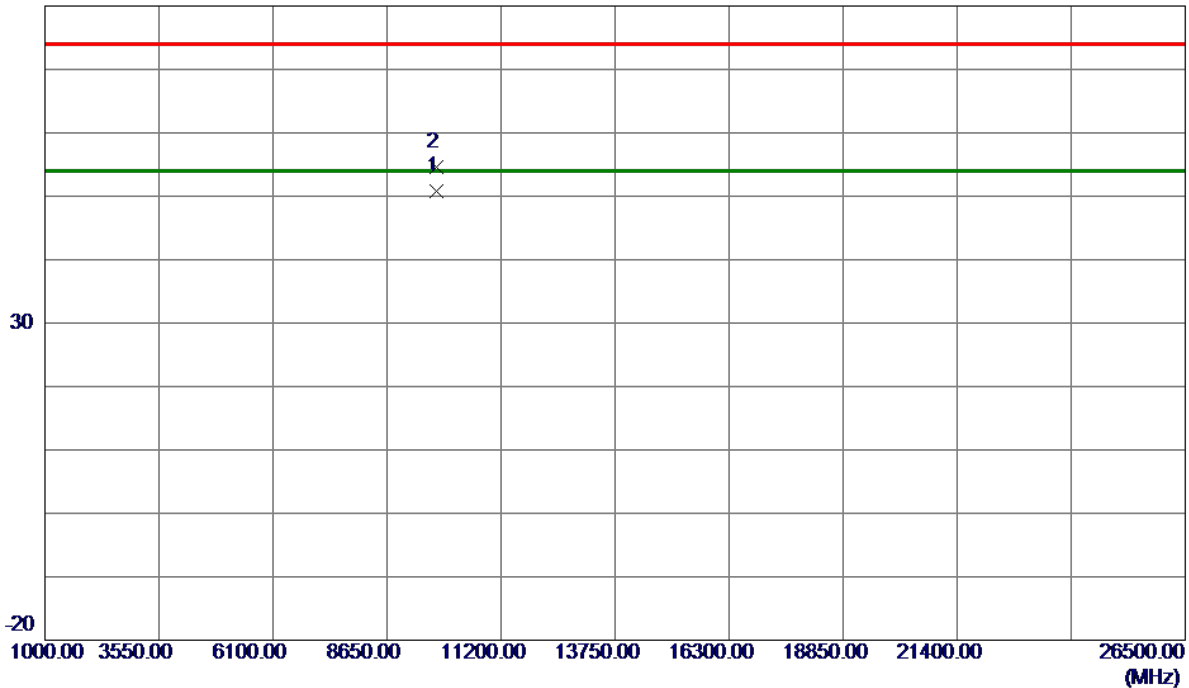
REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

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 *	9747.8500	40.03	10.70	50.73	54.00	-3.27	AVG	
2	9747.8540	43.82	10.70	54.52	74.00	-19.48	Peak	

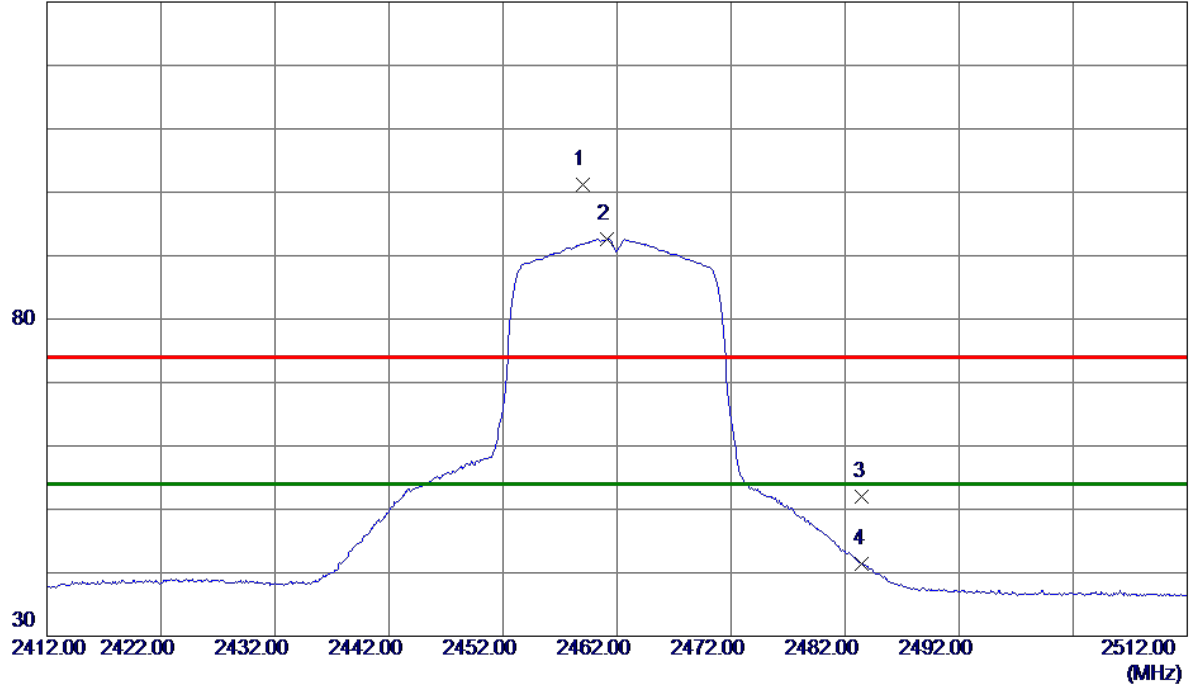
REMARKS:

- (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	2458.9500	94.84	6.45	101.29	74.00	27.29	Peak	No Limit
2 *	2461.1000	86.23	6.45	92.68	54.00	38.68	AVG	No Limit
3	2483.5000	45.55	6.42	51.97	74.00	-22.03	Peak	
4	2483.5000	34.92	6.42	41.34	54.00	-12.66	AVG	

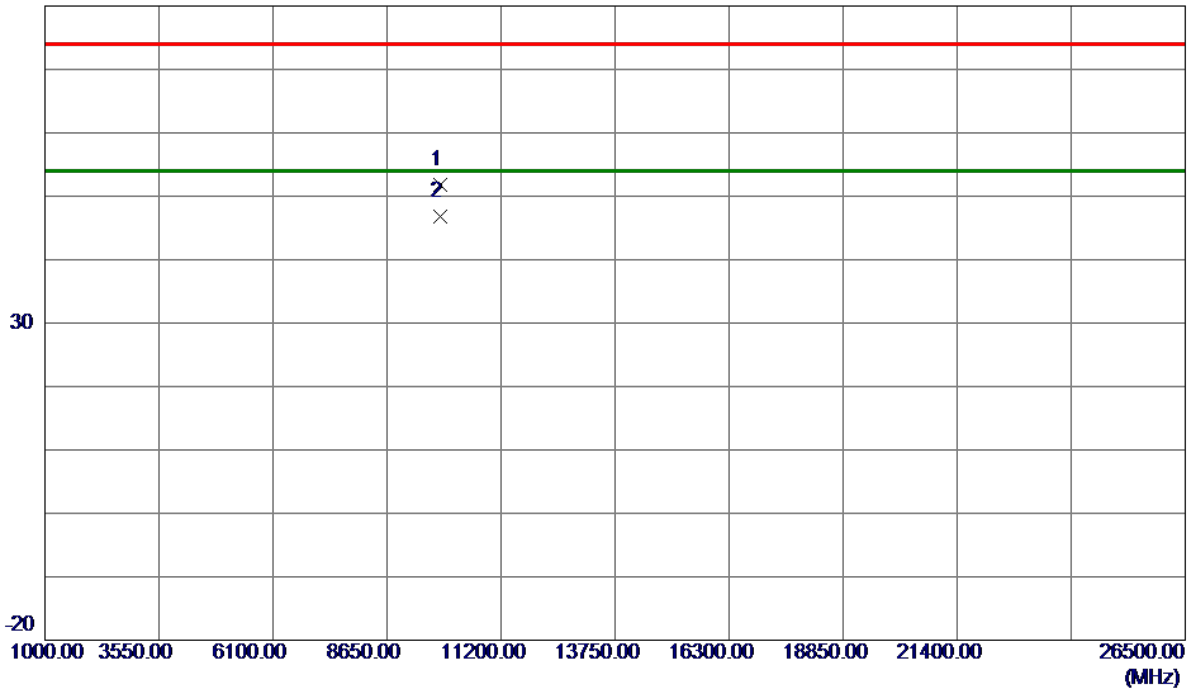
REMARKS:

- (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	9847.8019	41.07	10.69	51.76	74.00	-22.24	Peak	
2 *	9847.8710	36.13	10.69	46.82	54.00	-7.18	AVG	

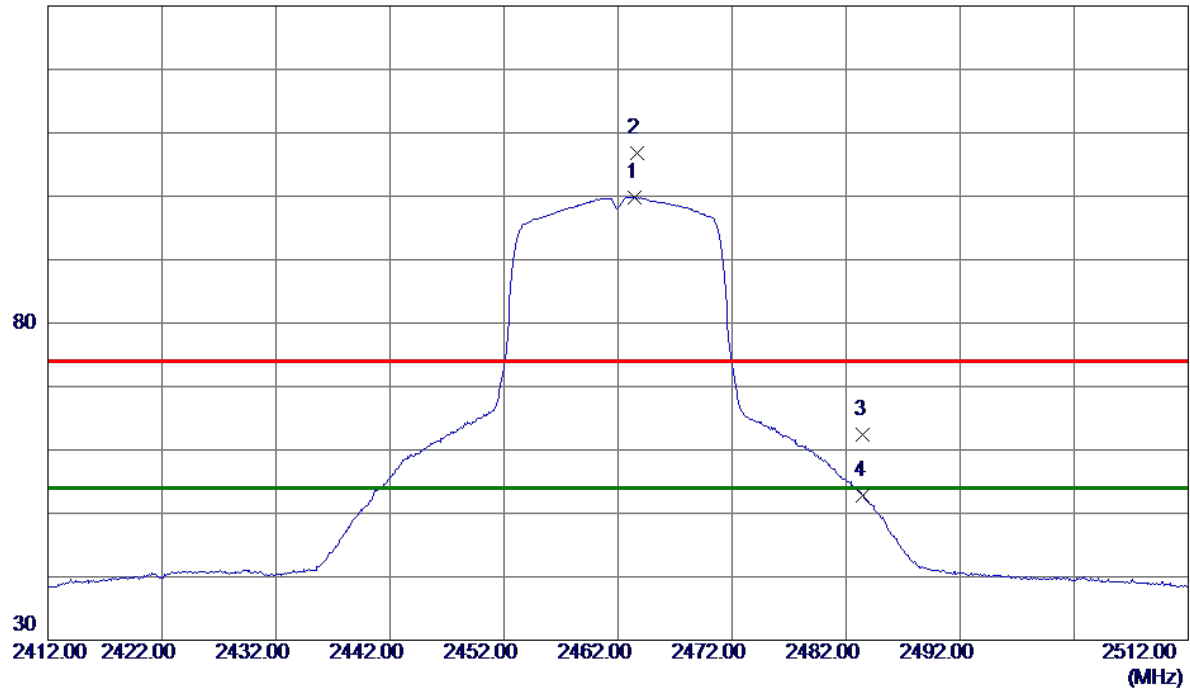
REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2463.5000	93.44	6.45	99.89	54.00	45.89	AVG	No Limit
2	2463.6500	100.27	6.45	106.72	74.00	32.72	Peak	No Limit
3	2483.5000	56.05	6.42	62.47	74.00	-11.53	Peak	
4	2483.5000	46.40	6.42	52.82	54.00	-1.18	AVG	

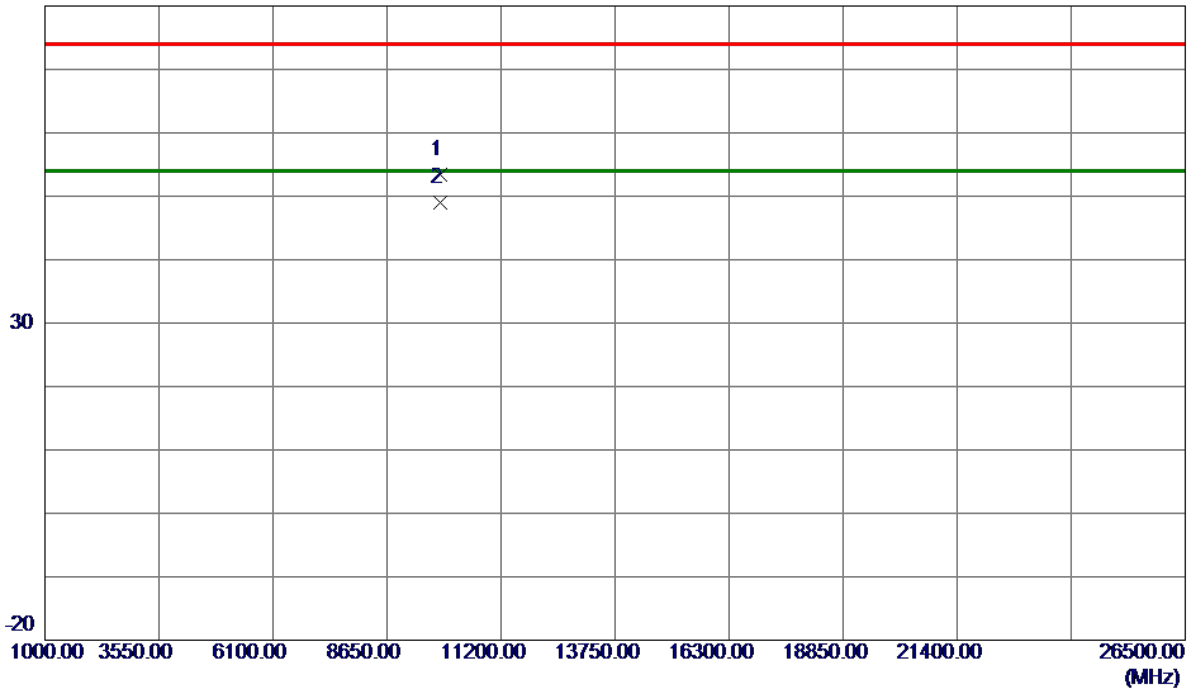
REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

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	9847.7950	42.68	10.69	53.37	74.00	-20.63	Peak	
2 *	9847.8600	38.32	10.69	49.01	54.00	-4.99	AVG	

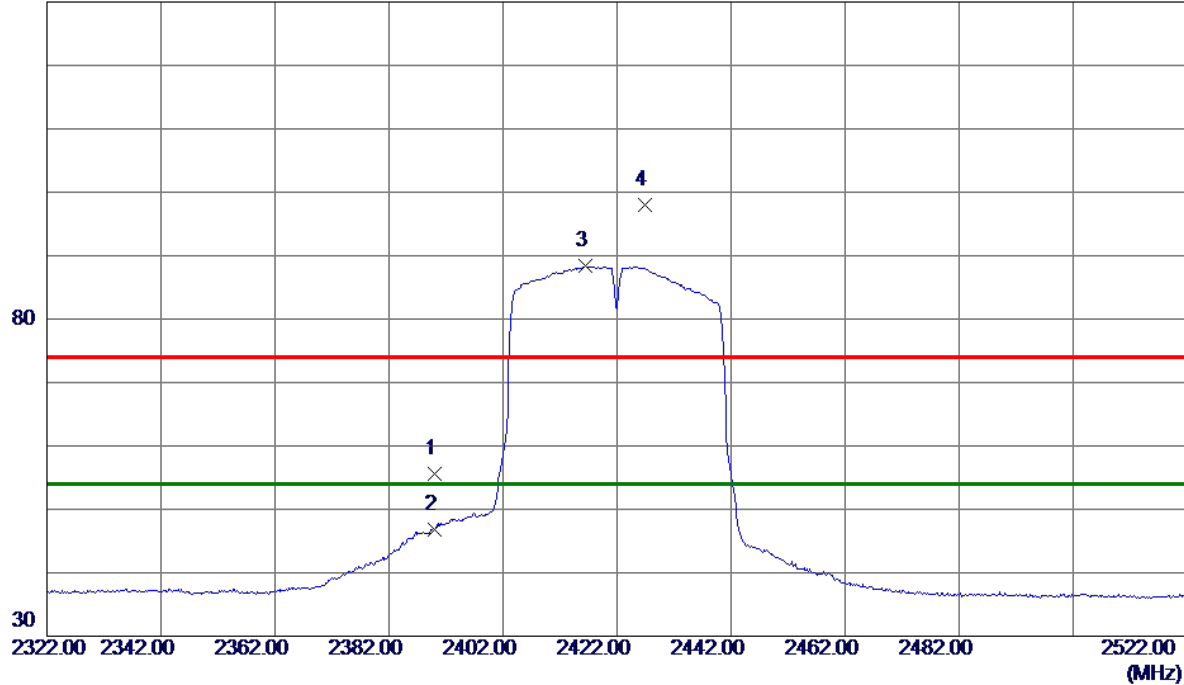
REMARKS:

- (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	48.98	6.53	55.51	74.00	-18.49	Peak	
2	2390.0000	40.33	6.53	46.86	54.00	-7.14	AVG	
3 *	2416.4000	81.83	6.50	88.33	54.00	34.33	AVG	No Limit
4	2426.8000	91.53	6.49	98.02	74.00	24.02	Peak	No Limit

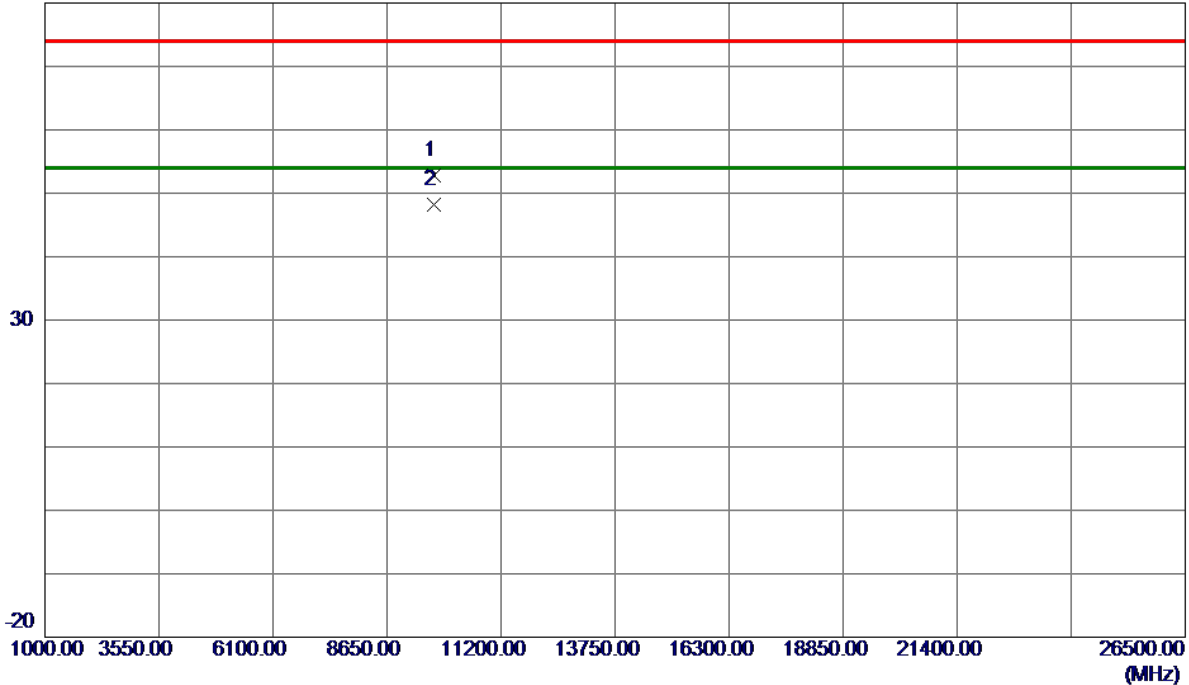
REMARKS:

- (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	9687.8270	42.14	10.70	52.84	74.00	-21.16	Peak	
2 *	9687.9490	37.56	10.70	48.26	54.00	-5.74	AVG	

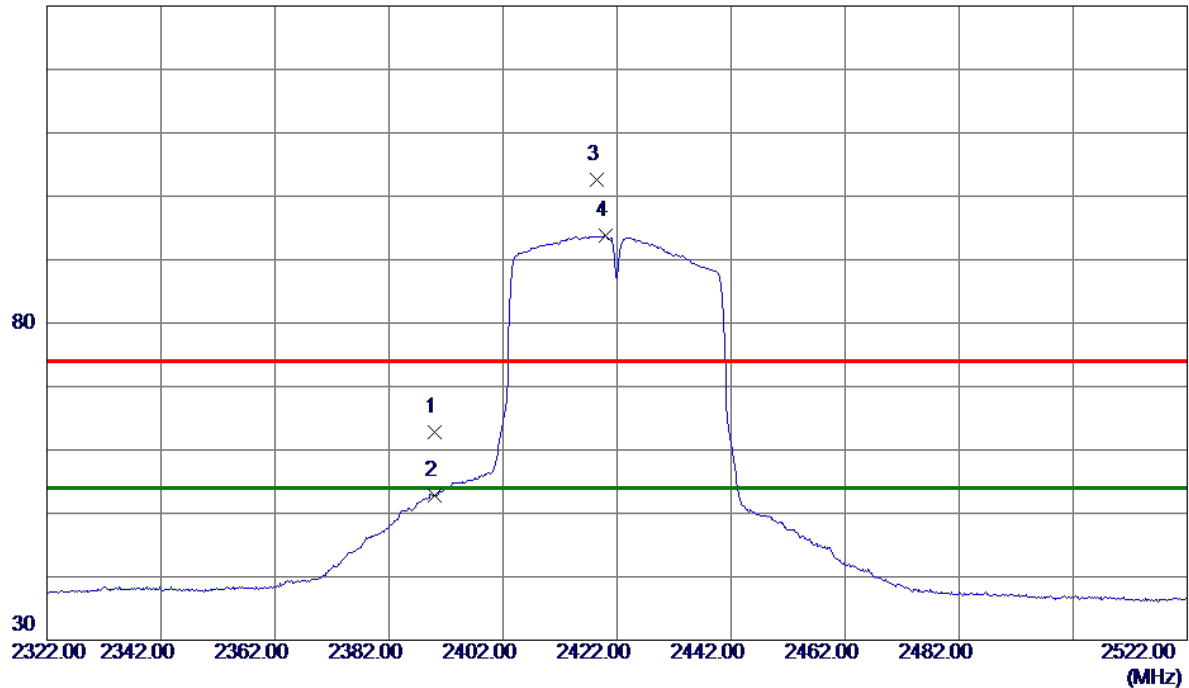
REMARKS:

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

Test Mode: TX N-40M Mode 2422MHz

Horizontal

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	56.31	6.53	62.84	74.00	-11.16	Peak	
2	2390.0000	46.22	6.53	52.75	54.00	-1.25	AVG	
3	2418.4000	96.17	6.50	102.67	74.00	28.67	Peak	No Limit
4 *	2420.0000	87.34	6.50	93.84	54.00	39.84	AVG	No Limit

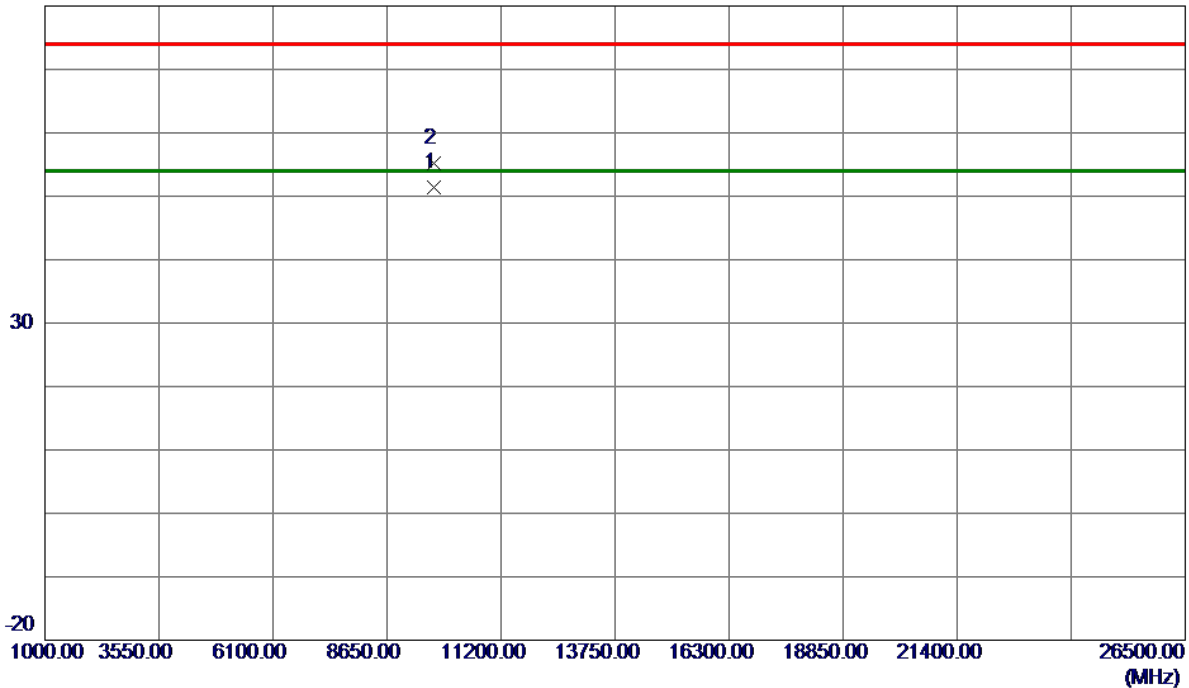
REMARKS:

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

Test Mode: TX N-40M Mode 2422MHz

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 *	9687.8900	40.72	10.70	51.42	54.00	-2.58	AVG	
2	9687.9460	44.59	10.70	55.29	74.00	-18.71	Peak	

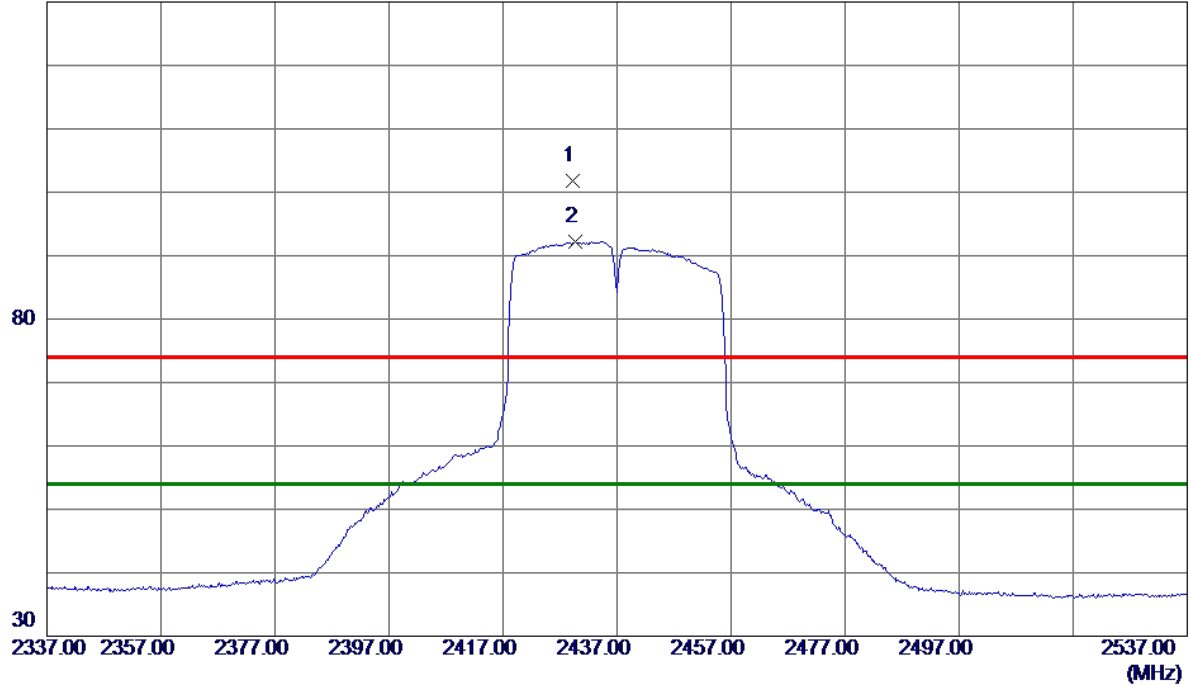
REMARKS:

- (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	2429.3000	95.26	6.49	101.75	74.00	27.75	Peak	No Limit
2 *	2429.6000	85.70	6.49	92.19	54.00	38.19	AVG	No Limit

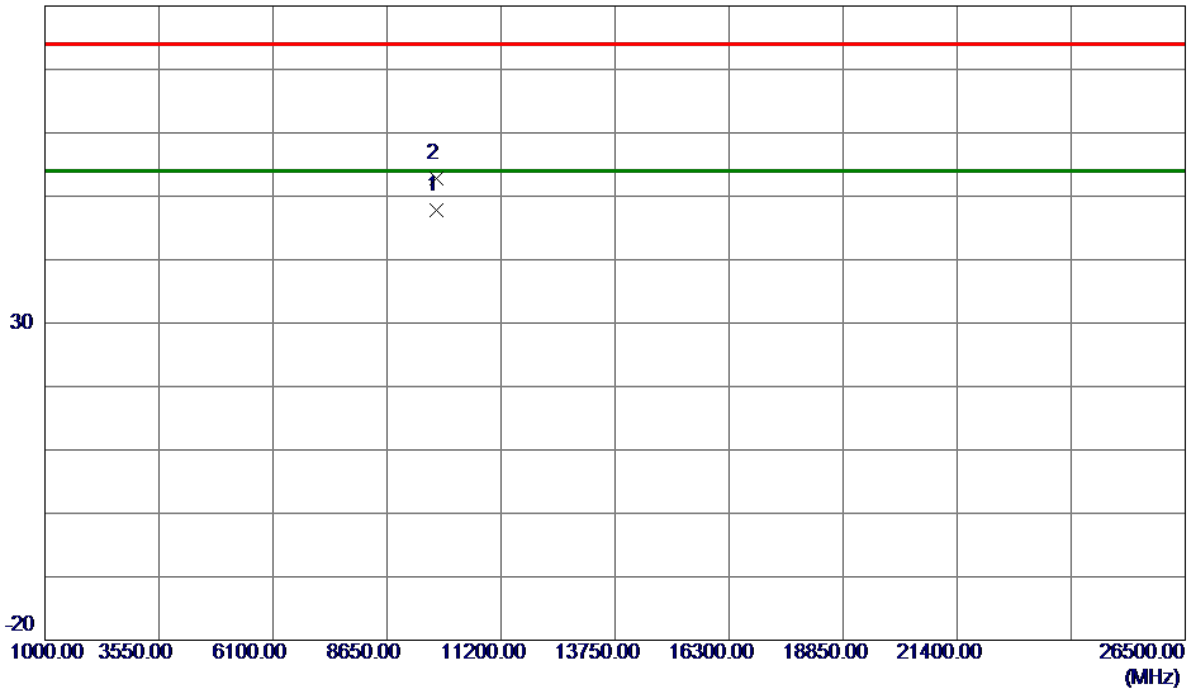
REMARKS:

- (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 *	9747.8880	37.19	10.70	47.89	54.00	-6.11	AVG	
2	9748.0320	42.15	10.70	52.85	74.00	-21.15	Peak	

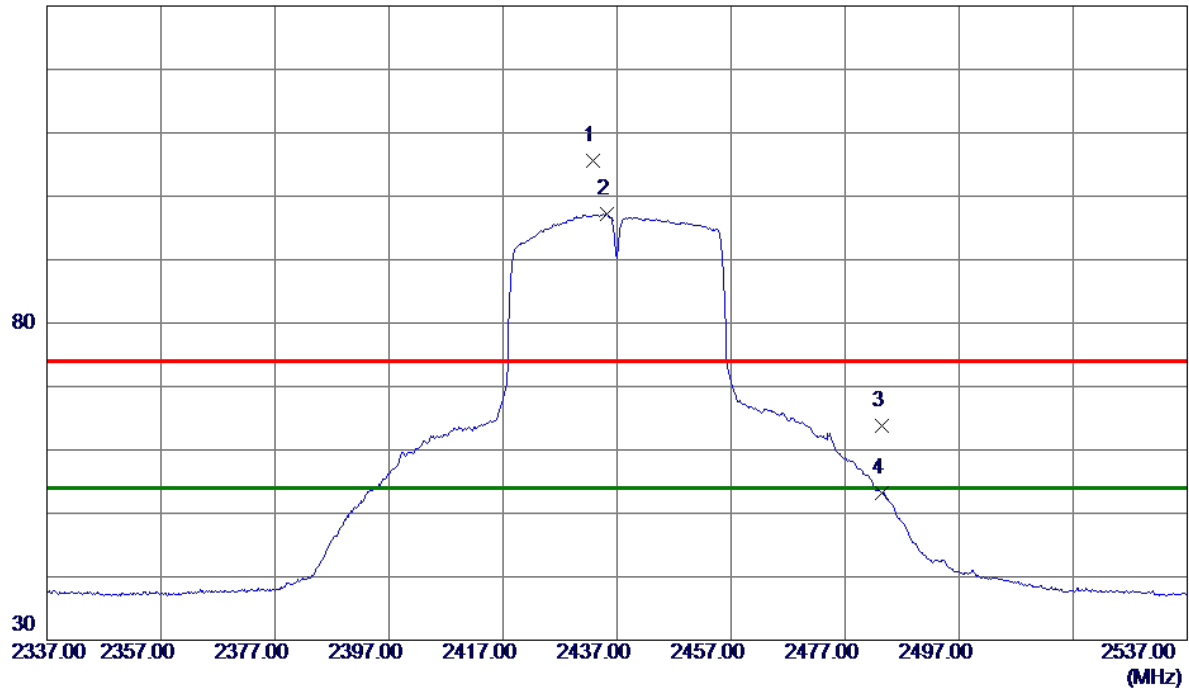
REMARKS:

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

Test Mode: TX N-40M Mode 2437 MHz

Horizontal

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	2432.7000	99.17	6.48	105.65	74.00	31.65	Peak	No Limit
2 *	2435.2000	90.70	6.48	97.18	54.00	43.18	AVG	No Limit
3	2483.5000	57.42	6.42	63.84	74.00	-10.16	Peak	
4	2483.5000	46.79	6.42	53.21	54.00	-0.79	AVG	

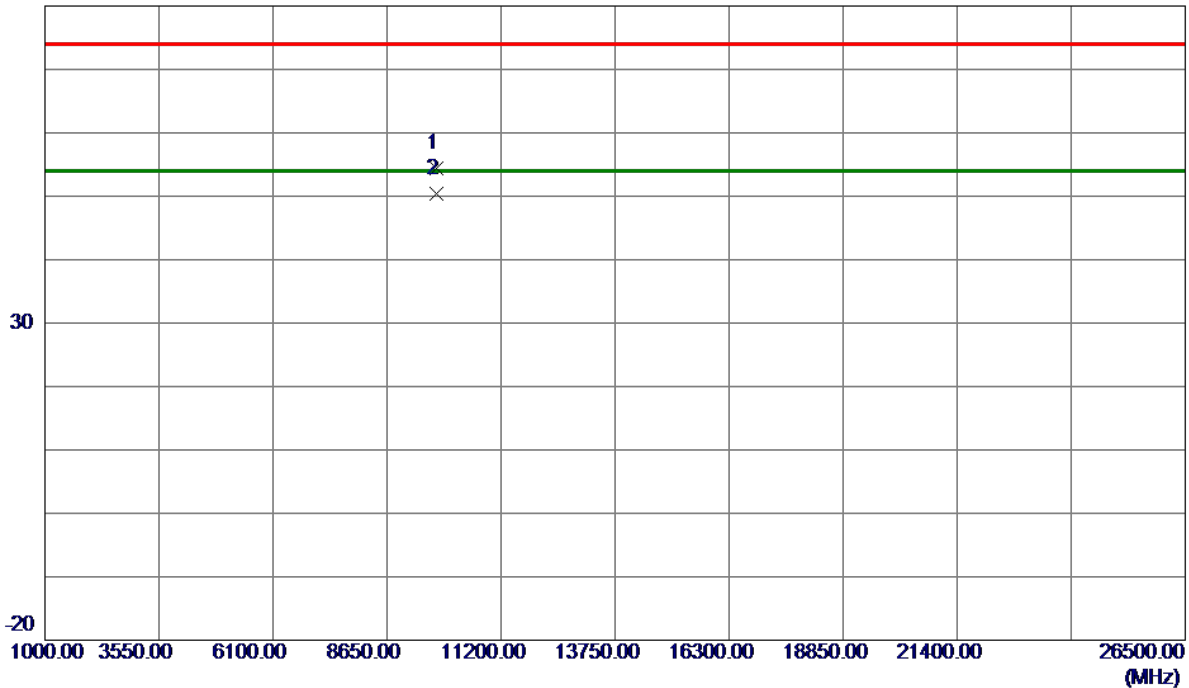
REMARKS:

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

Test Mode: TX N-40M Mode 2437 MHz

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	9747.8420	43.72	10.70	54.42	74.00	-19.58	Peak	
2 *	9747.8750	39.77	10.70	50.47	54.00	-3.53	AVG	

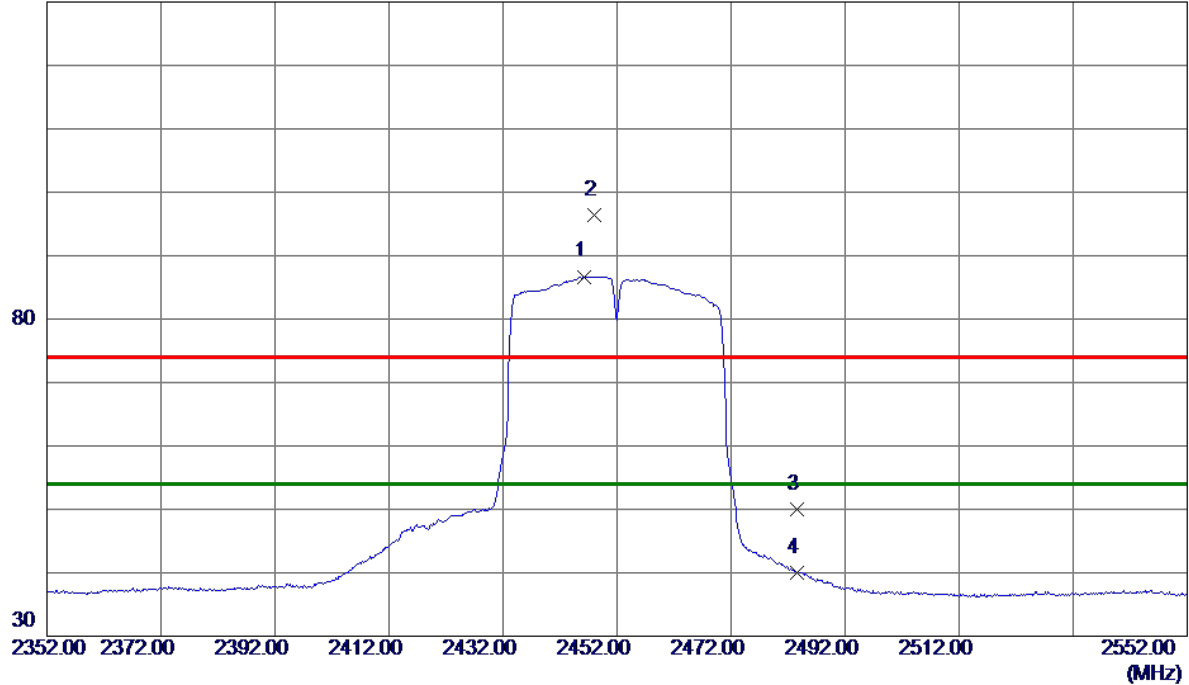
REMARKS:

- (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 *	2446.3000	80.23	6.47	86.70	54.00	32.70	AVG	No Limit
2	2447.9000	89.91	6.46	96.37	74.00	22.37	Peak	No Limit
3	2483.5000	43.50	6.42	49.92	74.00	-24.08	Peak	
4	2483.5000	33.59	6.42	40.01	54.00	-13.99	AVG	

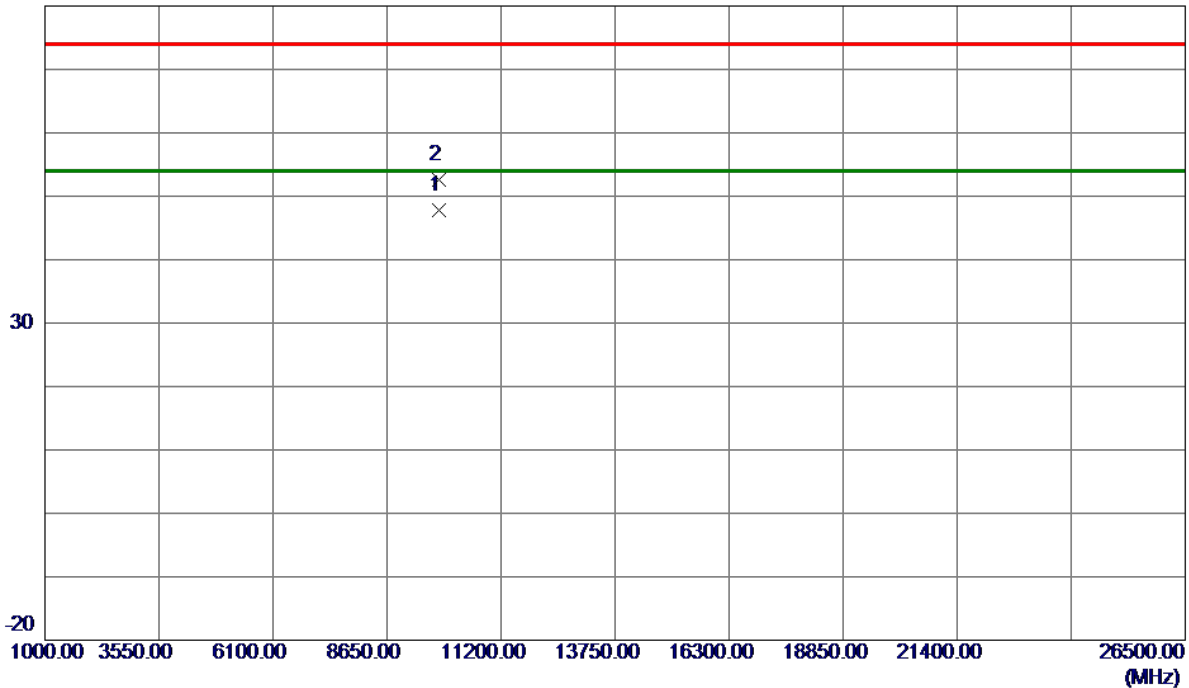
REMARKS:

- (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 *	9807.8370	37.17	10.70	47.87	54.00	-6.13	AVG	
2	9807.8860	41.83	10.70	52.53	74.00	-21.47	Peak	

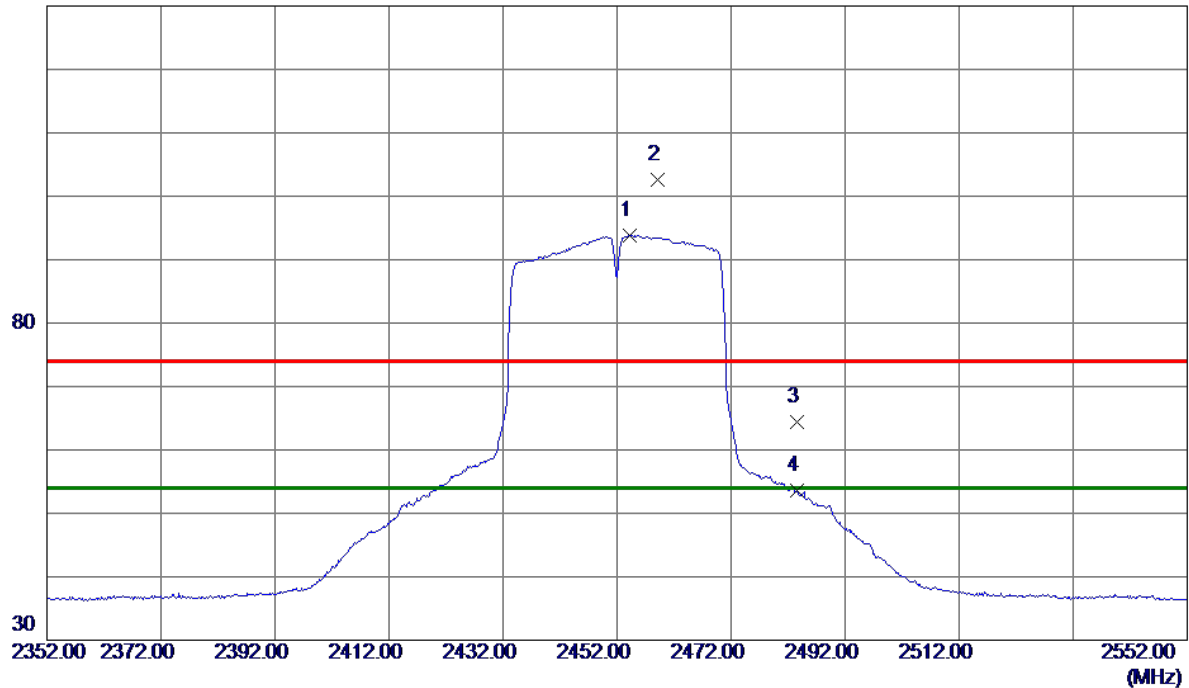
REMARKS:

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

Test Mode: TX N-40M Mode 2452 MHz

Horizontal

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 *	2454.3000	87.38	6.46	93.84	54.00	39.84	AVG	No Limit
2	2459.2000	96.16	6.45	102.61	74.00	28.61	Peak	No Limit
3	2483.5000	57.95	6.42	64.37	74.00	-9.63	Peak	
4	2483.5000	47.20	6.42	53.62	54.00	-0.38	AVG	

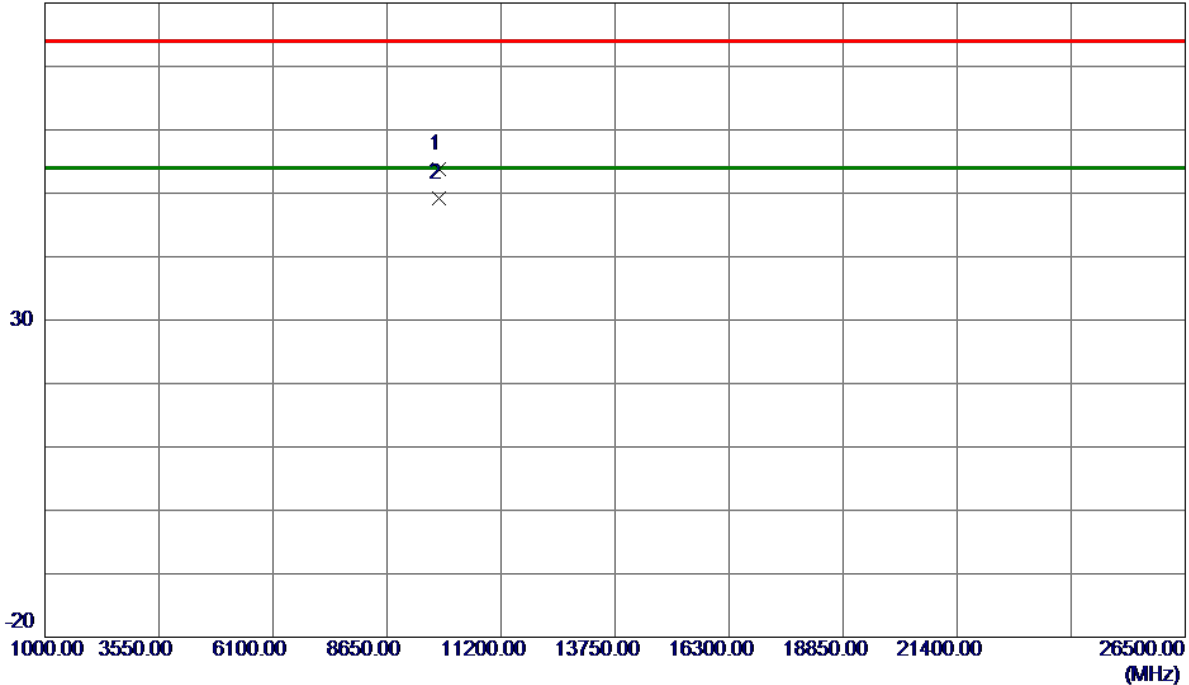
REMARKS:

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

Test Mode:	TX N-40M Mode 2452 MHz
------------	------------------------

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	9807.7820	43.05	10.70	53.75	74.00	-20.25	Peak	
2 *	9807.8220	38.57	10.70	49.27	54.00	-4.73	AVG	

REMARKS:

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

APPENDIX E - BANDWIDTH

APPENDIX F - MAXIMUM OUTPUT POWER

Test Mode	TX B Mode_Ant. 2
-----------	------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.57	0.0571	30.00	1.0000	Complies
06	2437	17.72	0.0592	30.00	1.0000	Complies
11	2462	17.80	0.0603	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 2
-----------	------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	22.73	0.1875	30.00	1.0000	Complies
06	2437	22.84	0.1923	30.00	1.0000	Complies
11	2462	22.16	0.1644	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 1
-----------	----------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.73	0.1489	29.89	0.97	Complies
06	2437	22.13	0.1633	29.89	0.97	Complies
11	2462	21.75	0.1496	29.89	0.97	Complies

Test Mode	TX N-20M Mode_Ant. 2
-----------	----------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.72	0.1486	29.89	0.97	Complies
06	2437	21.65	0.1462	29.89	0.97	Complies
11	2462	21.83	0.1524	29.89	0.97	Complies

Test Mode	TX N-20M Mode_Total
-----------	---------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	24.74	0.2979	29.89	0.97	Complies
06	2437	24.91	0.3097	29.89	0.97	Complies
11	2462	24.80	0.3020	29.89	0.97	Complies

Test Mode	TX N-40M Mode_Ant. 1
-----------	----------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	17.46	0.0557	29.89	0.97	Complies
06	2437	21.77	0.1503	29.89	0.97	Complies
09	2452	19.20	0.0832	29.89	0.97	Complies

Test Mode	TX N-40M Mode_Ant. 2
-----------	----------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	16.47	0.0444	29.89	0.97	Complies
06	2437	21.03	0.1268	29.89	0.97	Complies
09	2452	18.89	0.0774	29.89	0.97	Complies

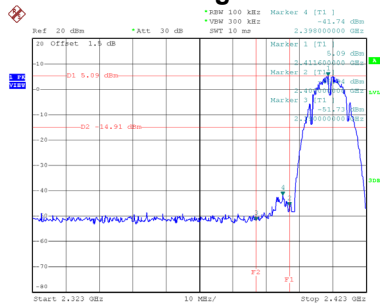
Test Mode	TX N-40M Mode_Total
-----------	---------------------

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	20.00	0.1000	29.89	0.97	Complies
06	2437	24.43	0.2773	29.89	0.97	Complies
09	2452	22.06	0.1607	29.89	0.97	Complies

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS

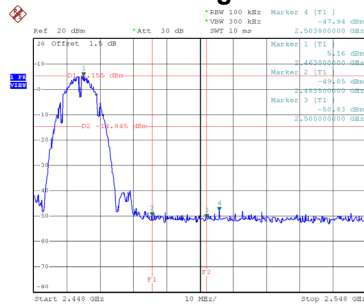
Test Mode TX B Mode_Ant. 2

Bandedge-CH01



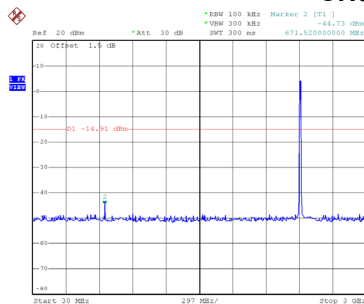
Date: 26.APR.2019 12:52:07

Bandedge-CH11

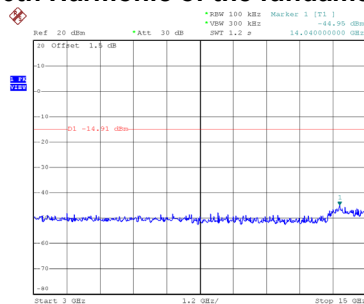


Date: 26.APR.2019 12:54:34

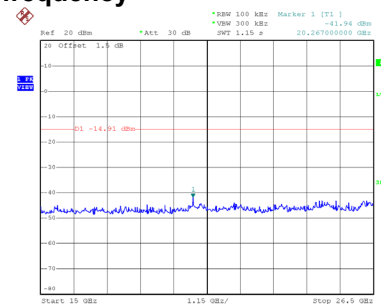
CH01 – 10th Harmonic of the fundamental frequency



Date: 26.APR.2019 12:52:21

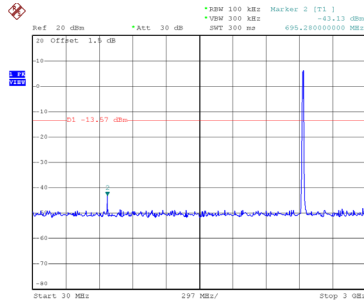


Date: 26.APR.2019 12:52:30

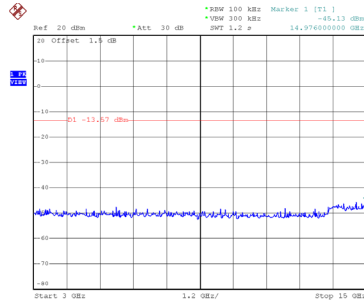


Date: 26.APR.2019 12:52:38

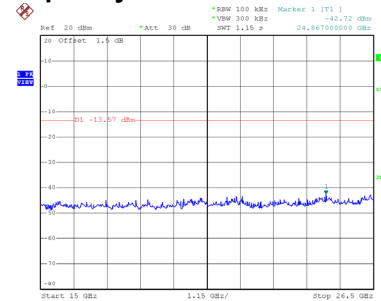
CH06 – 10th Harmonic of the fundamental frequency



Date: 25.APR.2019 11:47:01

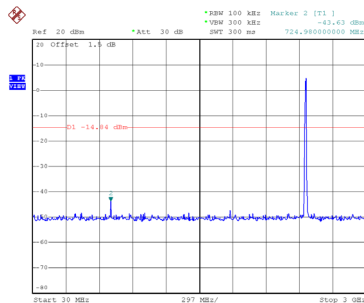


Date: 25.APR.2019 11:47:09

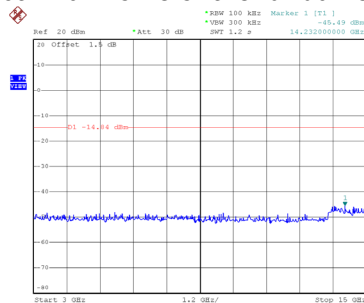


Date: 25.APR.2019 11:47:17

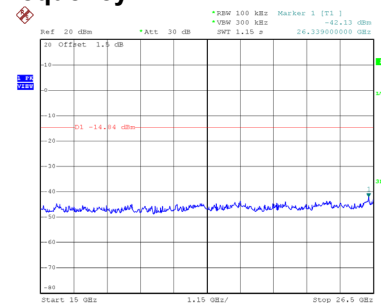
CH11 – 10th Harmonic of the fundamental frequency



Date: 26.APR.2019 12:54:51



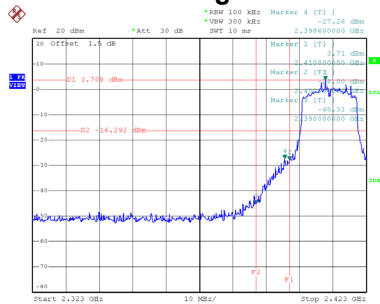
Date: 26.APR.2019 12:55:00



Date: 26.APR.2019 12:55:08

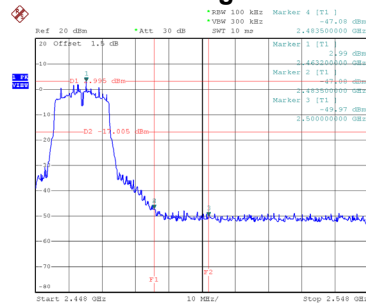
Test Mode TX G Mode_Ant. 2

Bandedge-CH01



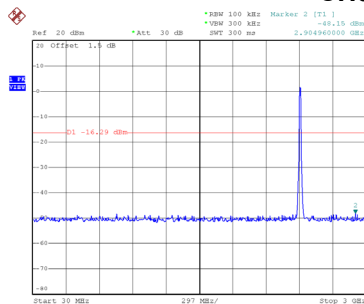
Date: 25.APR.2019 11:50:59

Bandedge-CH11

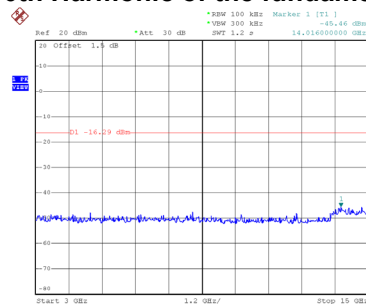


Date: 26.APR.2019 12:56:01

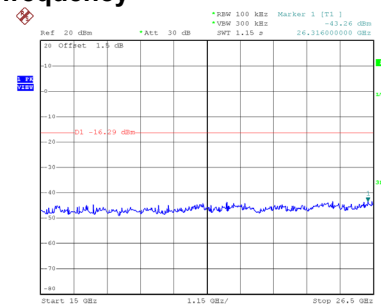
CH01 – 10th Harmonic of the fundamental frequency



Date: 25.APR.2019 11:51:36

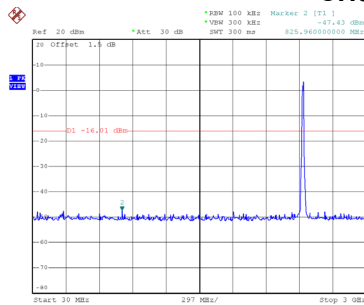


Date: 25.APR.2019 11:51:43

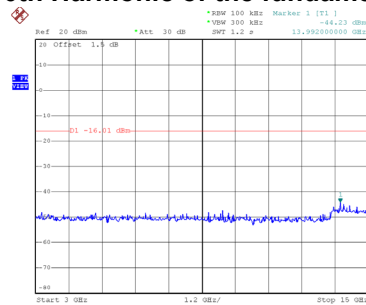


Date: 25.APR.2019 11:51:49

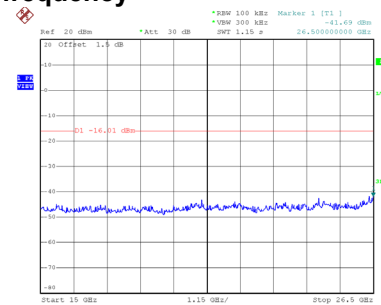
CH06 – 10th Harmonic of the fundamental frequency



Date: 25.APR.2019 11:53:05

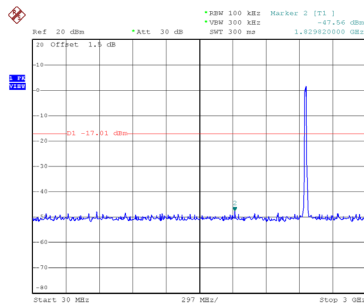


Date: 25.APR.2019 11:53:12

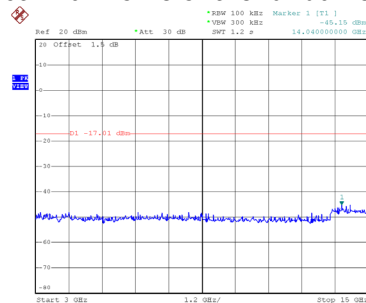


Date: 25.APR.2019 11:53:18

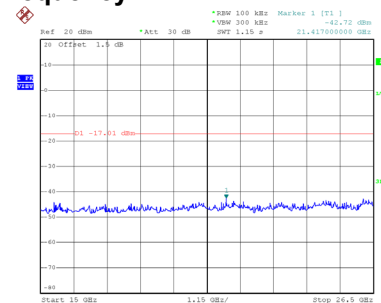
CH11 – 10th Harmonic of the fundamental frequency



Date: 26.APR.2019 12:56:15



Date: 26.APR.2019 12:56:24



Date: 26.APR.2019 12:56:32