

FCC Radio Test Report

FCC ID: TE7KP115

This report concerns: Original Grant

Project No. : 2005C176
Equipment : Kasa Smart Wi-Fi Plug Slim, Energy Monitoring
Brand Name : tp-link
Test Model : KP115
Series Model : N/A
Applicant : TP-Link Technologies Co., Ltd.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer : TP-Link Technologies Co., Ltd.
Address : Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Date of Receipt : May 27, 2020
Date of Test : May 29, 2020 ~ Jun. 22, 2020
Issued Date : Jul. 15, 2020
Report Version : R01
Test Sample : Engineering Sample No.: DG20200527292 for conducted, DDG20200527293 for radiated.
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	11
2.3 PARAMETERS OF TEST SOFTWARE	12
2.4 DUTY CYCLE	13
2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
2.6 SUPPORT UNITS	14
3 . AC POWER LINE CONDUCTED EMISSIONS TEST	15
3.1 LIMIT	15
3.2 TEST PROCEDURE	15
3.3 DEVIATION FROM TEST STANDARD	15
3.4 TEST SETUP	16
3.5 EUT OPERATION CONDITIONS	16
3.6 TEST RESULTS	16
4 . RADIATED EMISSIONS TEST	17
4.1 LIMIT	17
4.2 TEST PROCEDURE	18
4.3 DEVIATION FROM TEST STANDARD	18
4.4 TEST SETUP	19
4.5 EUT OPERATION CONDITIONS	20
4.6 TEST RESULTS - 9 KHZ TO 30 MHZ	20
4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ	20
4.8 TEST RESULTS - ABOVE 1000 MHZ	20
5 . BANDWIDTH TEST	21
5.1 LIMIT	21
5.2 TEST PROCEDURE	21
5.3 DEVIATION FROM STANDARD	21
5.4 TEST SETUP	21

Table of Contents	Page
5.5 EUT OPERATION CONDITIONS	21
5.6 TEST RESULTS	21
6 . MAXIMUM AVERAGE OUTPUT POWER TEST	22
6.1 LIMIT	22
6.2 TEST PROCEDURE	22
6.3 DEVIATION FROM STANDARD	22
6.4 TEST SETUP	22
6.5 EUT OPERATION CONDITIONS	22
6.6 TEST RESULTS	22
7 . CONDUCTED SPURIOUS EMISSIONS	23
7.1 LIMIT	23
7.2 TEST PROCEDURE	23
7.3 DEVIATION FROM STANDARD	23
7.4 TEST SETUP	23
7.5 EUT OPERATION CONDITIONS	23
7.6 TEST RESULTS	23
8 . POWER SPECTRAL DENSITY TEST	24
8.1 LIMIT	24
8.2 TEST PROCEDURE	24
8.3 DEVIATION FROM STANDARD	24
8.4 TEST SETUP	24
8.5 EUT OPERATION CONDITIONS	24
8.6 TEST RESULTS	24
9 . MEASUREMENT INSTRUMENTS LIST	25
10 . EUT TEST PHOTO	27
APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS	31
APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ	34
APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ	39
APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ	42
APPENDIX E - BANDWIDTH	103
APPENDIX F - MAXIMUM AVERAGE OUTPUT POWER	107
APPENDIX G - CONDUCTED SPURIOUS EMISSIONS	109

Table of Contents**Page****APPENDIX H - POWER SPECTRAL DENSITY****113**

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Jul. 02, 2020
R01	Added the description in section 2.2 note(5).	Jul. 15, 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€	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

C. Other Measurement:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Output Power	±0.95 dB
Conducted Spurious Emission	±2.71 dB
Power Spectral Density	±0.86 dB
Temperature	±0.08 °C
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	55%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-9K-30MHz	24°C	60%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	24°C	60%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	24°C	60%	AC 120V/60Hz	Kwok Guo
Bandwidth	25°C	62%	AC 120V/60Hz	Berton Luo
Maximum Average Output Power	25°C	62%	AC 120V/60Hz	Hayden Chen
Conducted Spurious Emissions	25°C	62%	AC 120V/60Hz	Berton Luo
Power Spectral Density	25°C	62%	AC 120V/60Hz	Berton Luo

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Kasa Smart Wi-Fi Plug Slim, Energy Monitoring
Brand Name	tp-link
Test Model	KP115
Series Model	N/A
Model Difference(s)	N/A
Power Source	AC Mains.
Power Rating	100-240V~ 50/60Hz
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 72.2 Mbps
Maximum Average Output Power	IEEE 802.11b: 19.04 dBm (0.0802 W) IEEE 802.11g: 18.18 dBm (0.0658 W) IEEE 802.11n (HT20): 18.25 dBm (0.0668 W)

Note:

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

2. Channel List:

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

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	tp-link	N/A	IFA	N/A	3.50

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 B Mode Channel 01
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N-20 MHz Mode Channel 01/02/06/10/11

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

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

Radiated emissions test – Below 1GHz	
Final Test Mode	Description
Mode 4	TX B Mode Channel 01

Radiated emissions test- Above 1GHz	
Final Test Mode	Description
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N-20 MHz Mode Channel 01/02/06/10/11

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

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 01 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) With load and No-load have been tested and No-load is found to be the worst case and recorded.

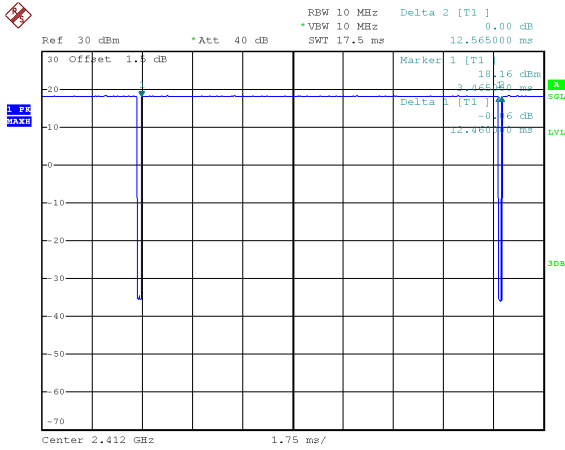
2.3 PARAMETERS OF TEST SOFTWARE

Test Software	UI_mptool V1.0.0.1		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	94	94	93
IEEE 802.11g	104	103	103
IEEE 802.11n (HT20)	104	104	101

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.

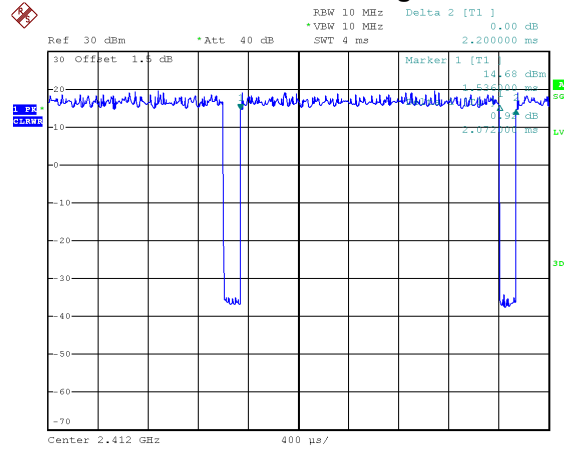
IEEE 802.11b



Date: 7.JUN.2020 20:24:16

Duty cycle = $12.460 \text{ ms} / 12.565 \text{ ms} = 99.16\%$
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.00$

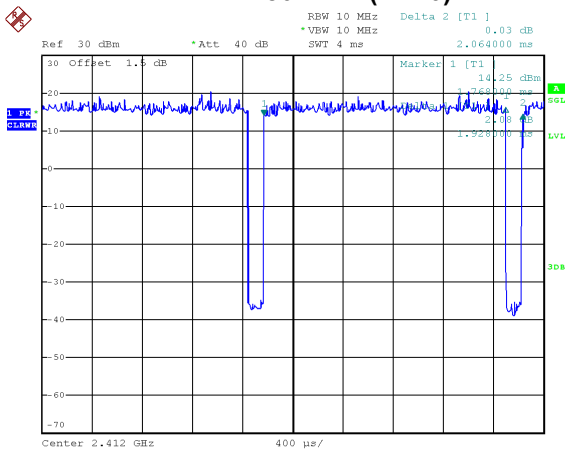
IEEE 802.11g



Date: 7.JUN.2020 20:24:32

Duty cycle = $2.072 \text{ ms} / 2.200 \text{ ms} = 94.18\%$
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.26$

IEEE 802.11n (HT20)



Date: 7.JUN.2020 20:25:21

Duty cycle = $1.928 \text{ ms} / 2.064 \text{ ms} = 93.41\%$
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.30$

NOTE:

For IEEE 802.11b, 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 $< 98\%$).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**2.6 SUPPORT UNITS**

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

Item	Cable Type	Shielded Type	Ferrite Core	Length
-	-	-	-	-

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

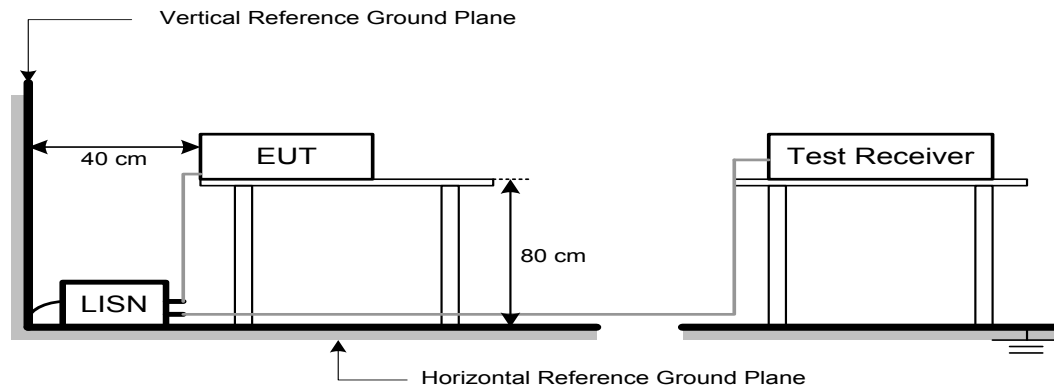
3.2 TEST PROCEDURE

- 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

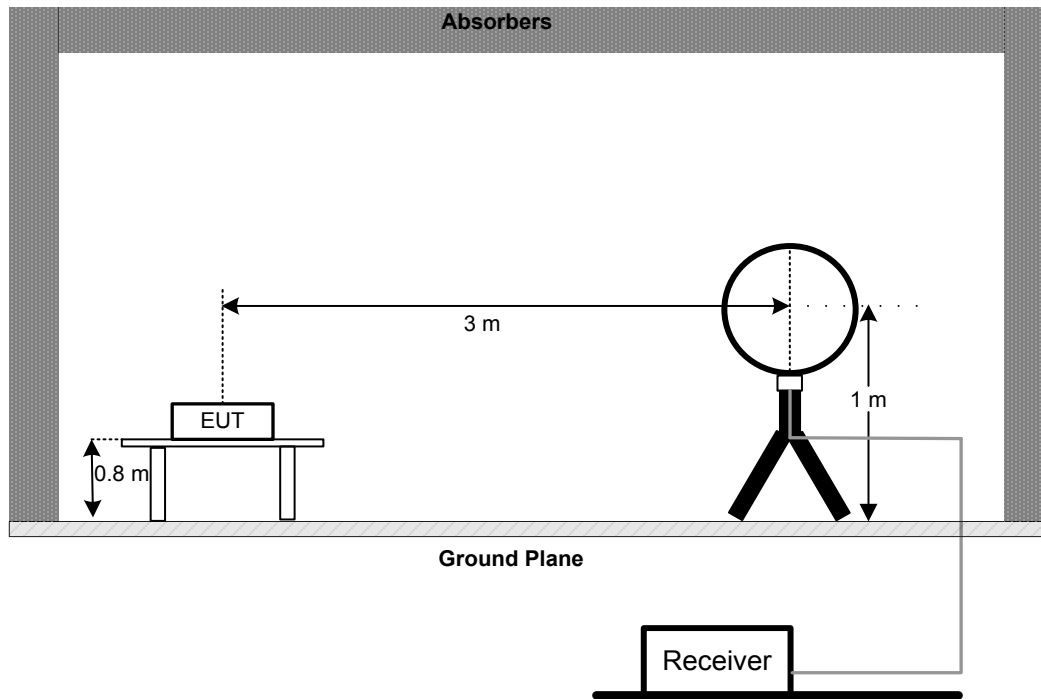
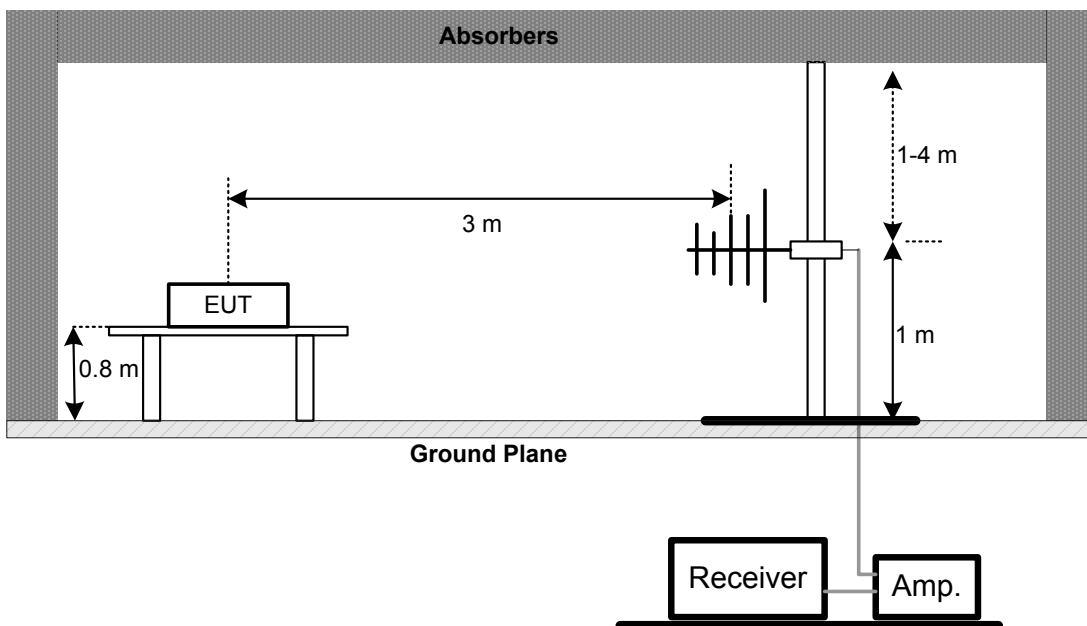
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector

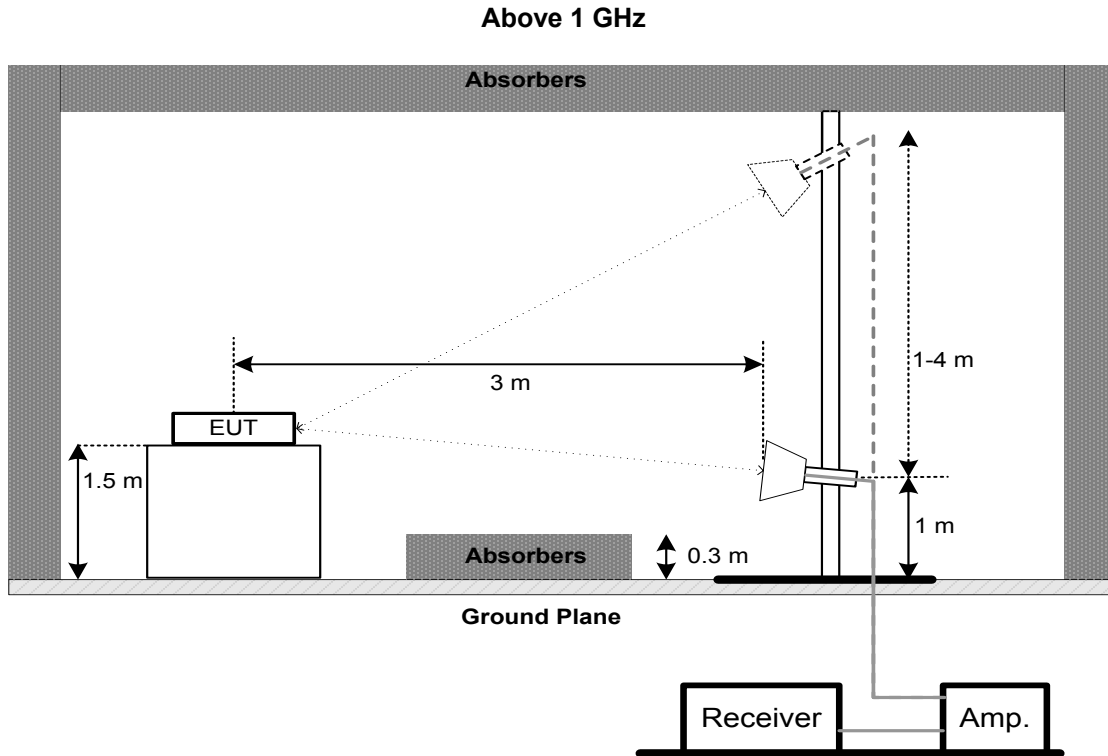
4.2 TEST PROCEDURE

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

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	-

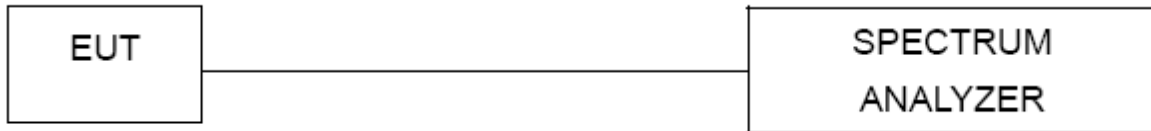
5.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. CONDUCTED SPURIOUS EMISSIONS

7.1 LIMIT

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

7.2 TEST PROCEDURE

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

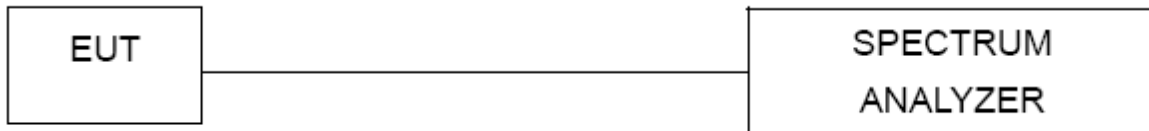
8.2 TEST PROCEDURE

- 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

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

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	Aug. 03, 2020
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

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	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02333	Mar. 01, 2021
4	Microwave Pre-amplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
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	N/A	EMC104-SM-SM-6000	N/A	May 09, 2021
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

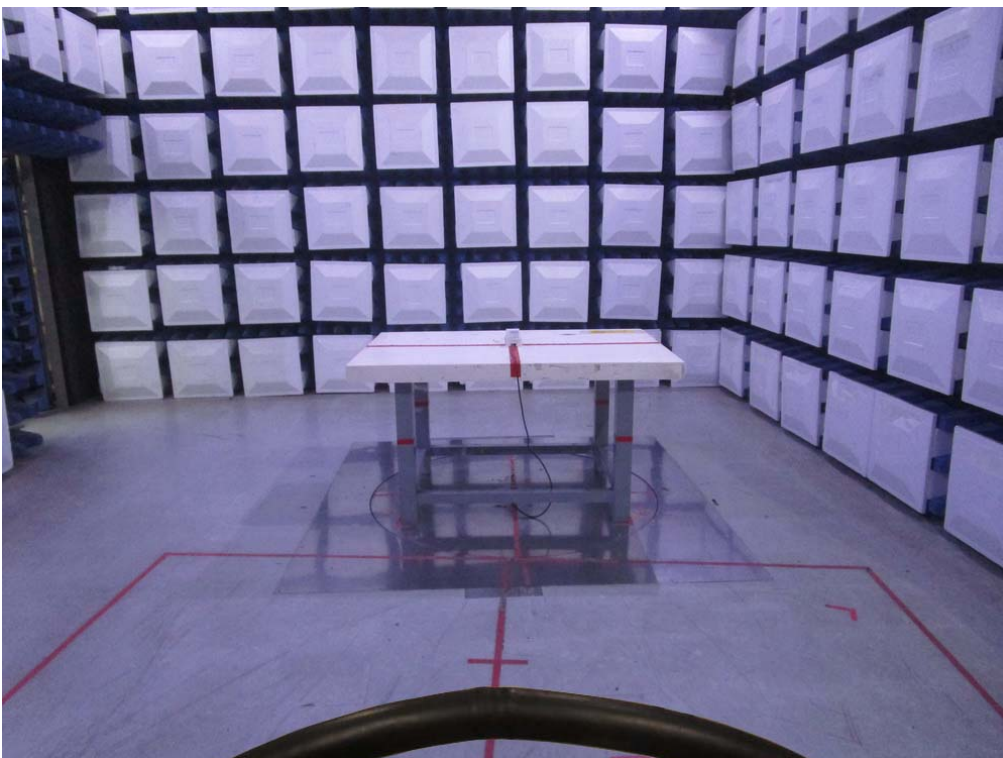
Maximum Average Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 03, 2020
2	Wideband power sensor	Keysight	N1923A	MY58310004	Aug. 03, 2020

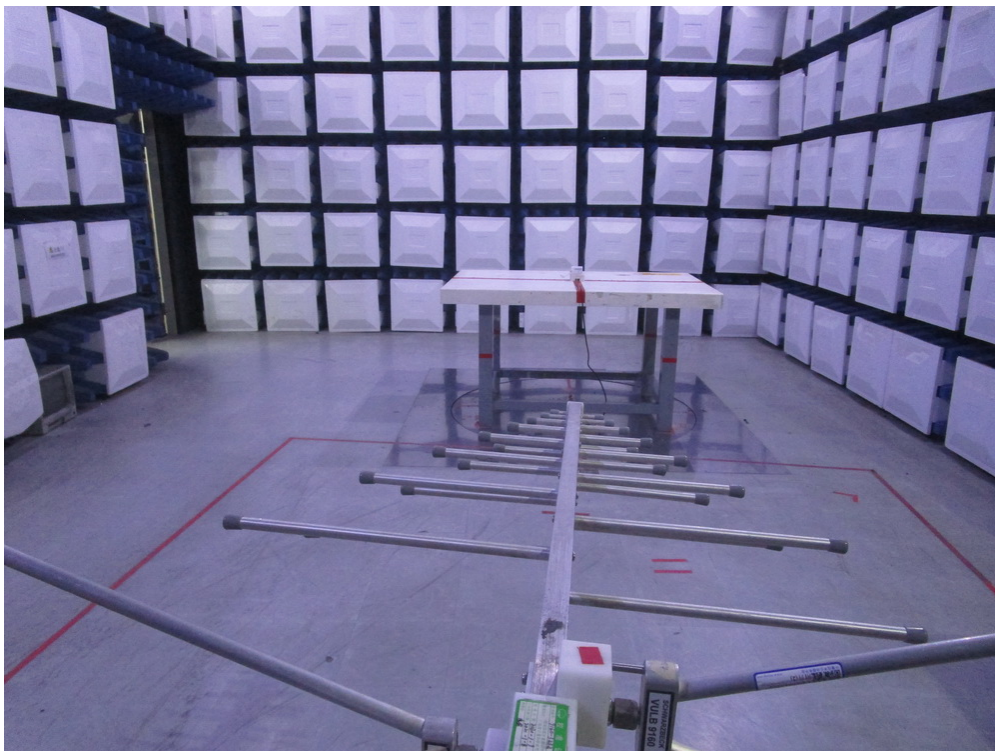
Remark: "N/A" denotes no model name, serial no. or calibration specified.

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

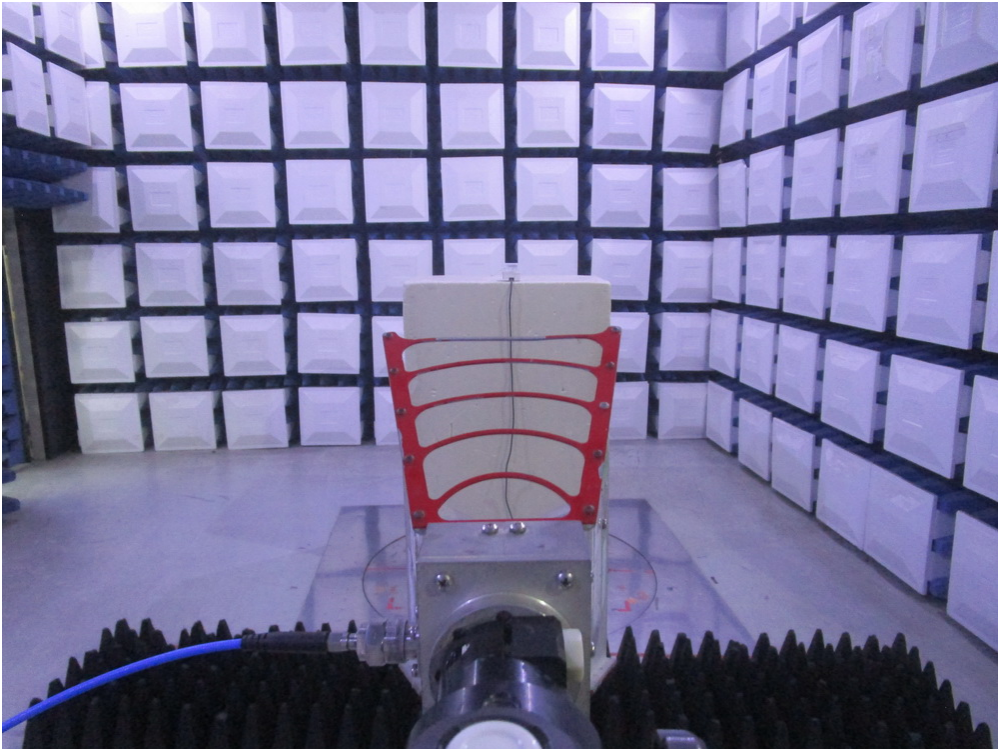
Except * item, all calibration period of equipment list is one year.

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**

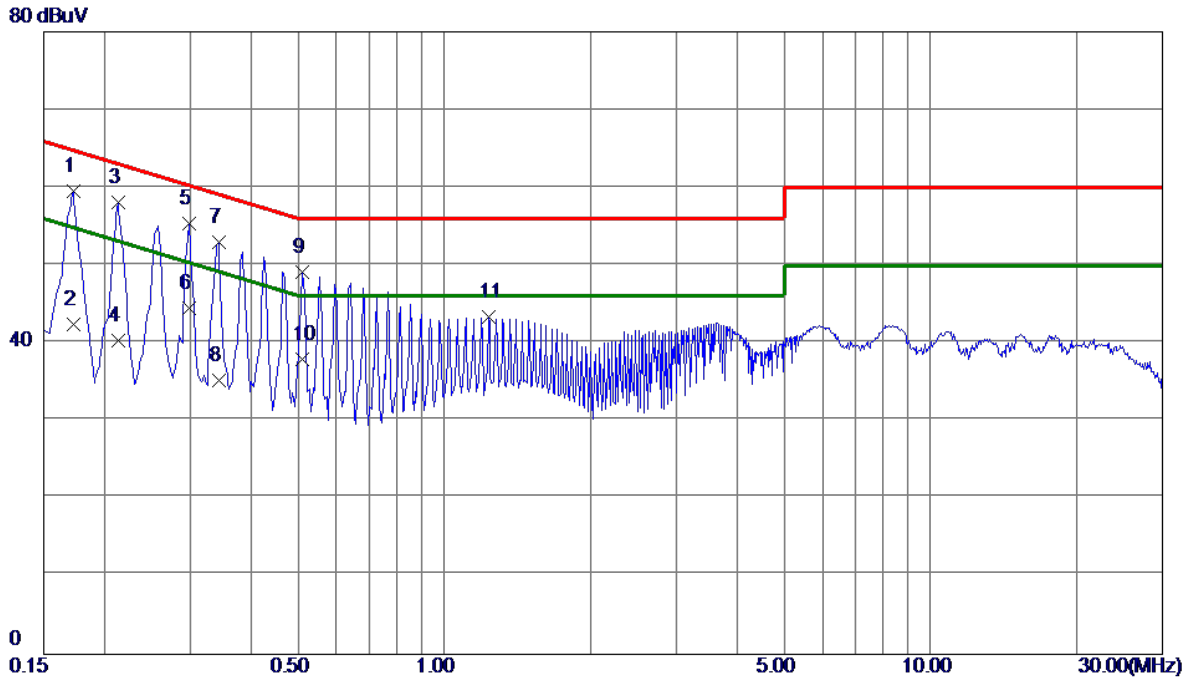
Radiated Emissions Test Photos
Above 1 GHz



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX B Mode Channel 01

Line



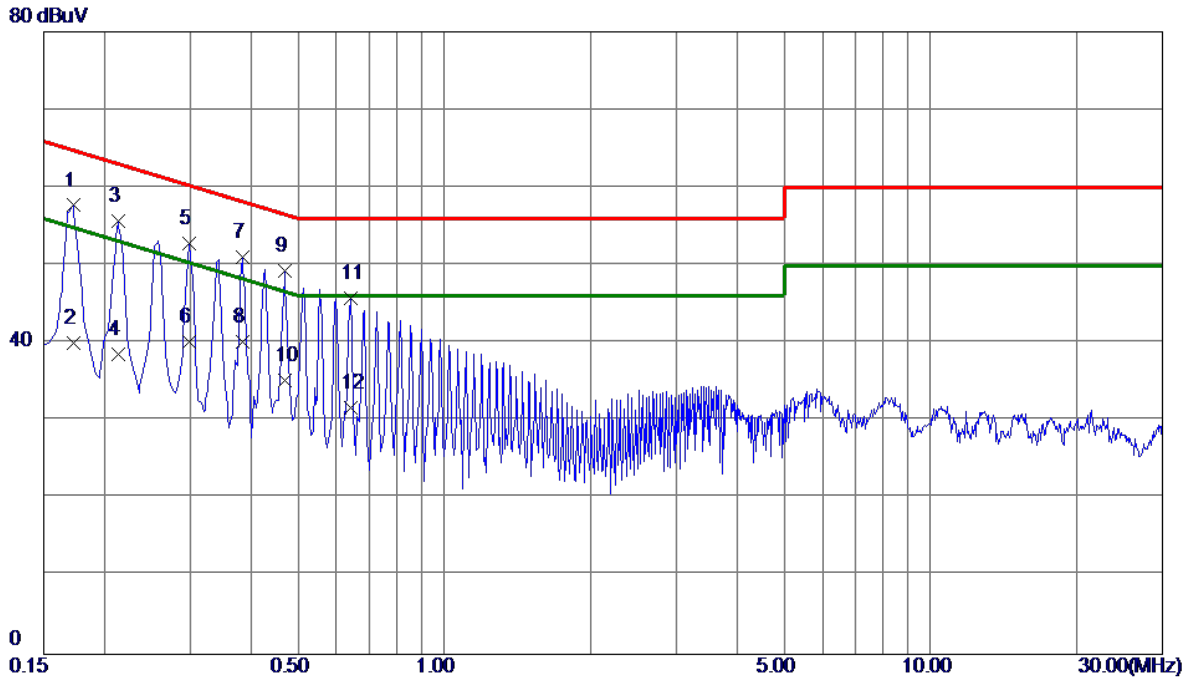
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1725	49.62	9.83	59.45	64.84	-5.39	Peak	
2	0.1725	32.60	9.83	42.43	54.84	-12.41	AVG	
3	0.2130	48.14	9.90	58.04	63.09	-5.05	Peak	
4	0.2130	30.40	9.90	40.30	53.09	-12.79	AVG	
5 *	0.2985	45.48	9.89	55.37	60.28	-4.91	Peak	
6	0.2985	34.60	9.89	44.49	50.28	-5.79	AVG	
7	0.3435	43.11	9.91	53.02	59.12	-6.10	Peak	
8	0.3435	25.30	9.91	35.21	49.12	-13.91	AVG	
9	0.5100	39.17	9.95	49.12	56.00	-6.88	Peak	
10	0.5100	28.00	9.95	37.95	46.00	-8.05	AVG	
11	1.2345	33.28	10.03	43.31	56.00	-12.69	Peak	

REMARKS:

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

Test Mode: TX B Mode Channel 01

Neutral



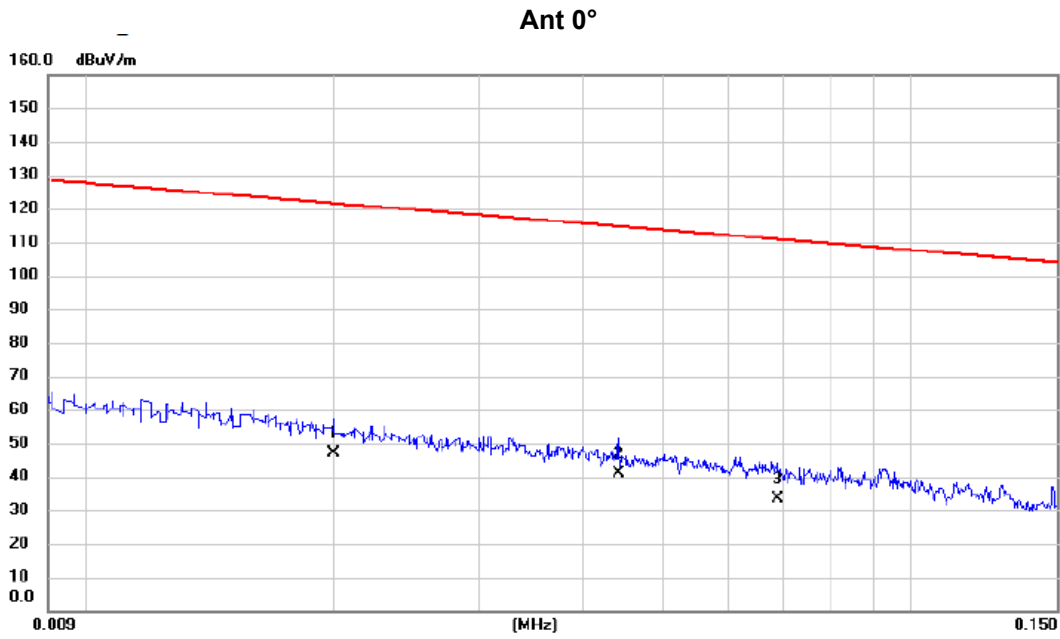
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1725	47.77	9.91	57.68	64.84	-7.16	Peak	
2	0.1725	30.10	9.91	40.01	54.84	-14.83	AVG	
3	0.2130	45.63	10.00	55.63	63.09	-7.46	Peak	
4	0.2130	28.60	10.00	38.60	53.09	-14.49	AVG	
5	0.2985	42.71	10.02	52.73	60.28	-7.55	Peak	
6	0.2985	30.10	10.02	40.12	50.28	-10.16	AVG	
7 *	0.3840	40.96	10.08	51.04	58.19	-7.15	Peak	
8	0.3840	30.10	10.08	40.18	48.19	-8.01	AVG	
9	0.4695	39.12	10.12	49.24	56.52	-7.28	Peak	
10	0.4695	25.11	10.12	35.23	46.52	-11.29	AVG	
11	0.6405	35.63	10.16	45.79	56.00	-10.21	Peak	
12	0.6405	21.59	10.16	31.75	46.00	-14.25	AVG	

REMARKS:

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode: TX B Mode Channel 01

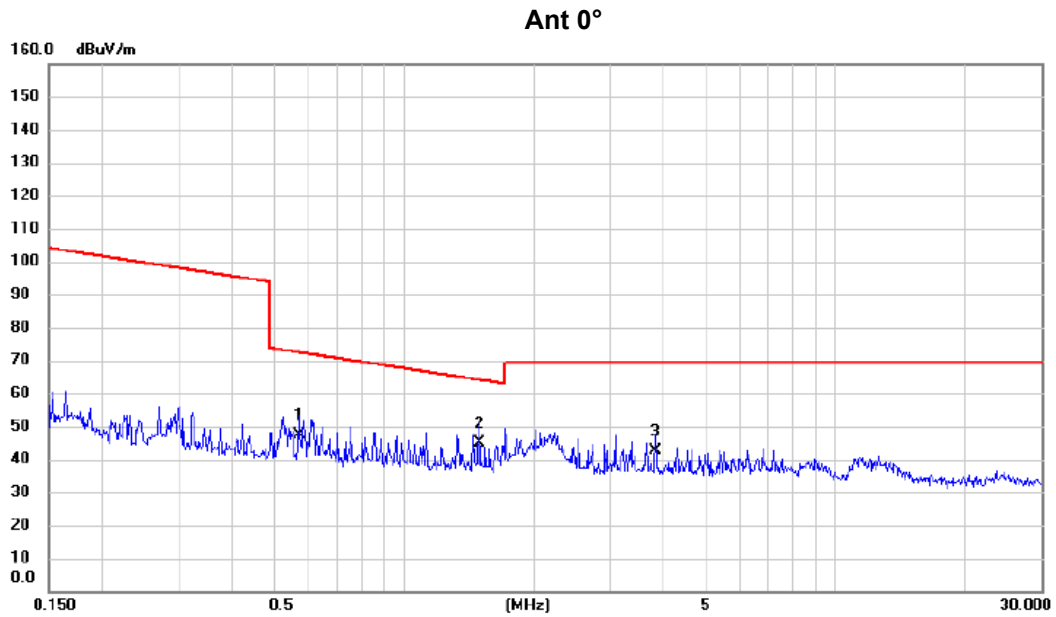


No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.020	33.87	13.12	46.99	121.58	-74.59	AVG	
2	*	0.044	28.53	12.48	41.01	114.70	-73.69	AVG	
3		0.069	20.94	12.44	33.38	110.83	-77.45	AVG	

REMARKS:

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

Test Mode: TX B Mode Channel 01



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.570	35.68	11.74	47.42	72.48	-25.06	QP	
2	*	1.495	33.74	11.31	45.05	64.11	-19.06	QP	
3		3.820	32.28	10.48	42.76	69.54	-26.78	QP	

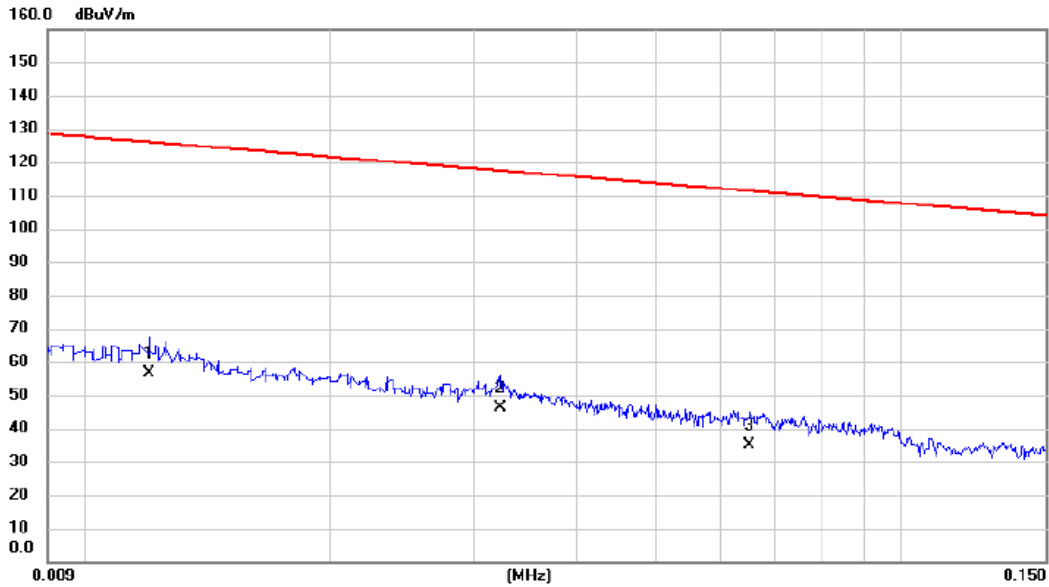
REMARKS:

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

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

Test Mode: TX B Mode Channel 01

Ant 90°



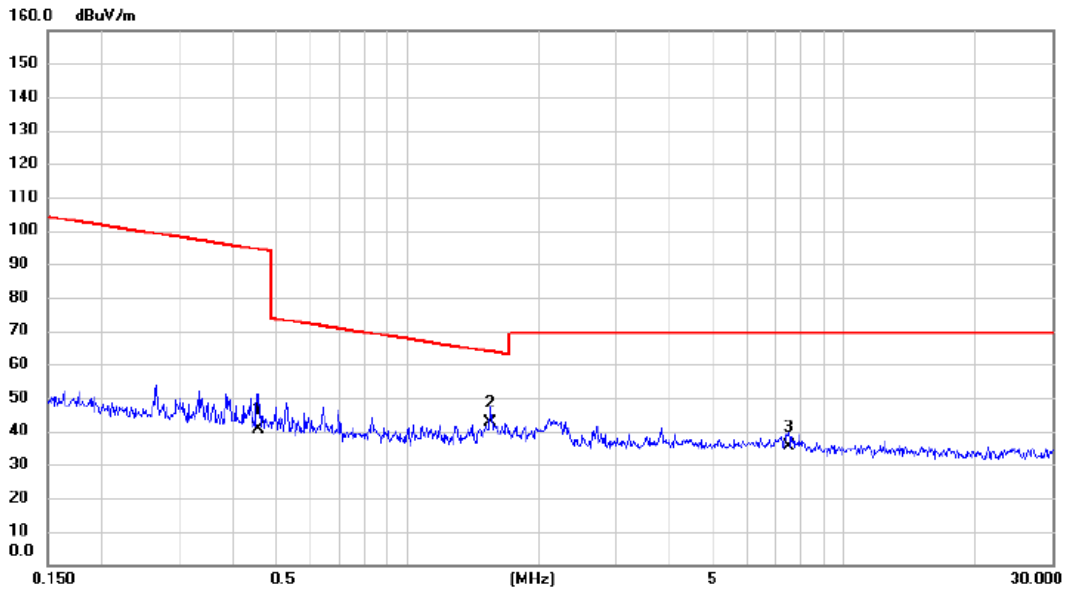
No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.012	40.84	15.60	56.44	126.02	-69.58	AVG	
2		0.032	33.39	12.80	46.19	117.42	-71.23	AVG	
3		0.065	22.67	12.42	35.09	111.33	-76.24	AVG	

REMARKS:

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

Test Mode: TX B Mode Channel 01

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.456	28.86	11.89	40.75	94.42	-53.67	AVG	
2	*	1.552	31.46	11.28	42.74	63.79	-21.05	QP	
3		7.486	24.59	10.68	35.27	69.54	-34.27	QP	

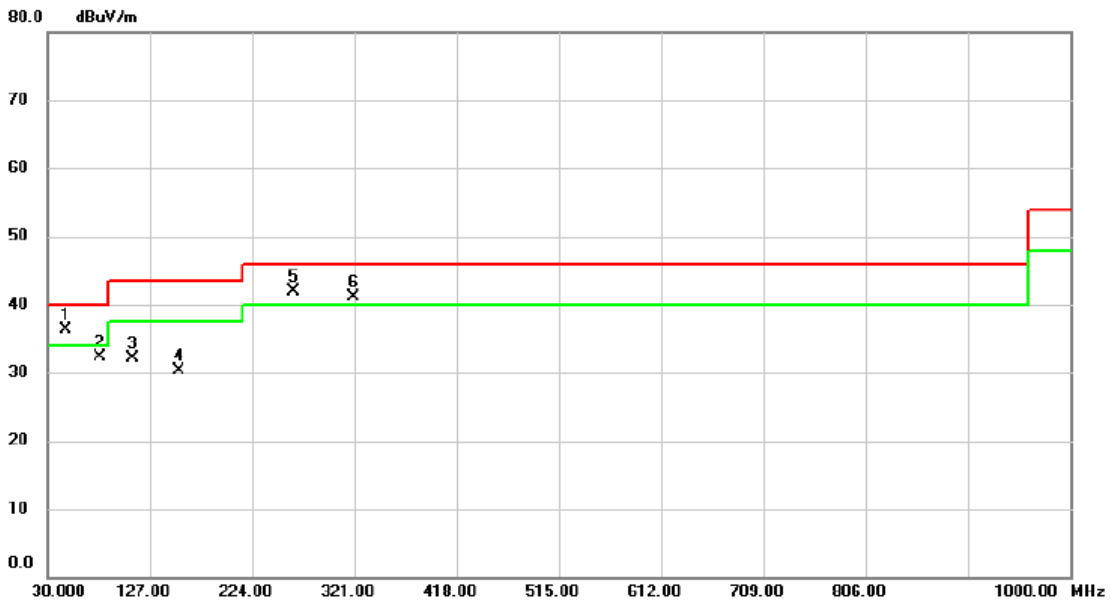
REMARKS:

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode: TX B Mode Channel 01

Vertical



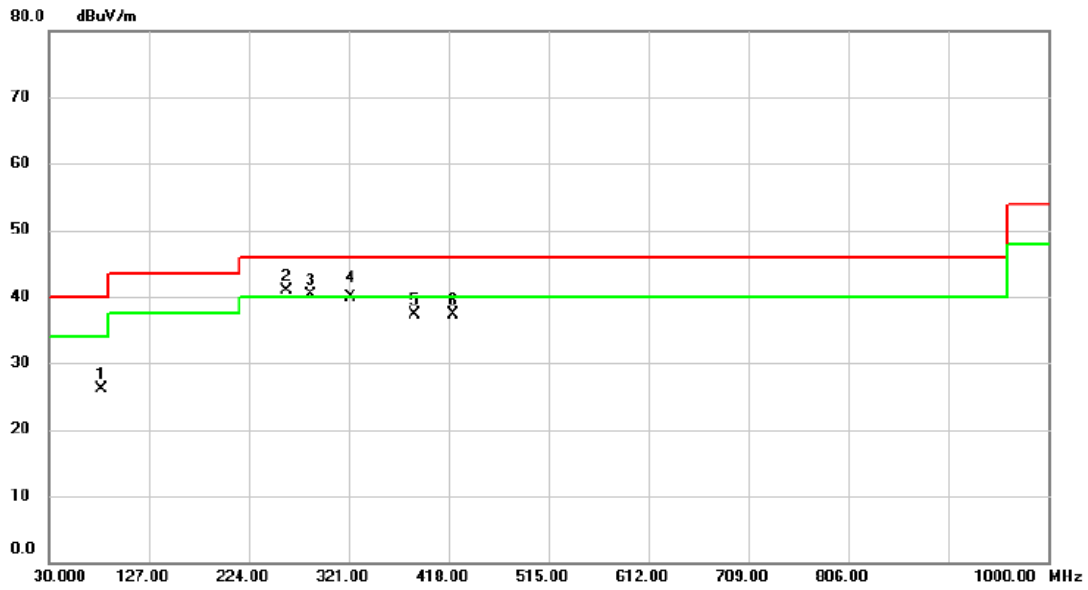
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	47.460	52.33	-16.12	36.21	40.00	-3.79	peak	
2		79.470	52.78	-20.47	32.31	40.00	-7.69	peak	
3		110.510	50.99	-18.89	32.10	43.50	-11.40	peak	
4		154.160	45.64	-15.34	30.30	43.50	-13.20	peak	
5	!	262.800	57.82	-15.83	41.99	46.00	-4.01	peak	
6	!	320.030	54.80	-13.77	41.03	46.00	-4.97	peak	

REMARKS:

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

Test Mode: TX B Mode Channel 01

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		80.440	46.75	-20.67	26.08	40.00	-13.92	peak	
2	*	260.375	56.78	-15.97	40.81	46.00	-5.19	peak	
3	!	284.625	55.05	-14.77	40.28	46.00	-5.72	peak	
4		323.425	53.59	-13.68	39.91	46.00	-6.09	QP	
5		385.020	49.46	-12.21	37.25	46.00	-8.75	peak	
6		422.850	48.75	-11.38	37.37	46.00	-8.63	peak	

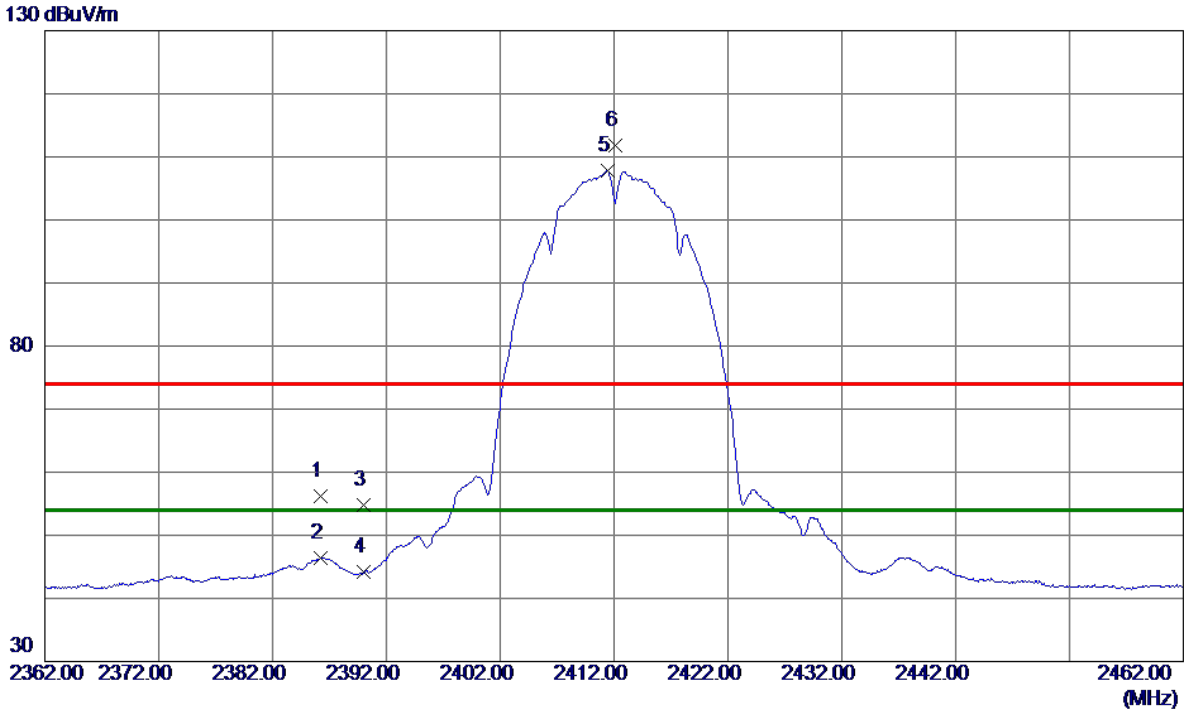
REMARKS:

- (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



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2386.2500	45.24	11.02	56.26	74.00	-17.74	Peak	
2	2386.2500	35.35	11.02	46.37	54.00	-7.63	AVG	
3	2390.0000	43.86	11.03	54.89	74.00	-19.11	Peak	
4	2390.0000	33.17	11.03	44.20	54.00	-9.80	AVG	
5 *	2411.4500	96.73	11.10	107.83	54.00	53.83	AVG	No Limit
6	2412.1500	100.67	11.11	111.78	74.00	37.78	Peak	No Limit

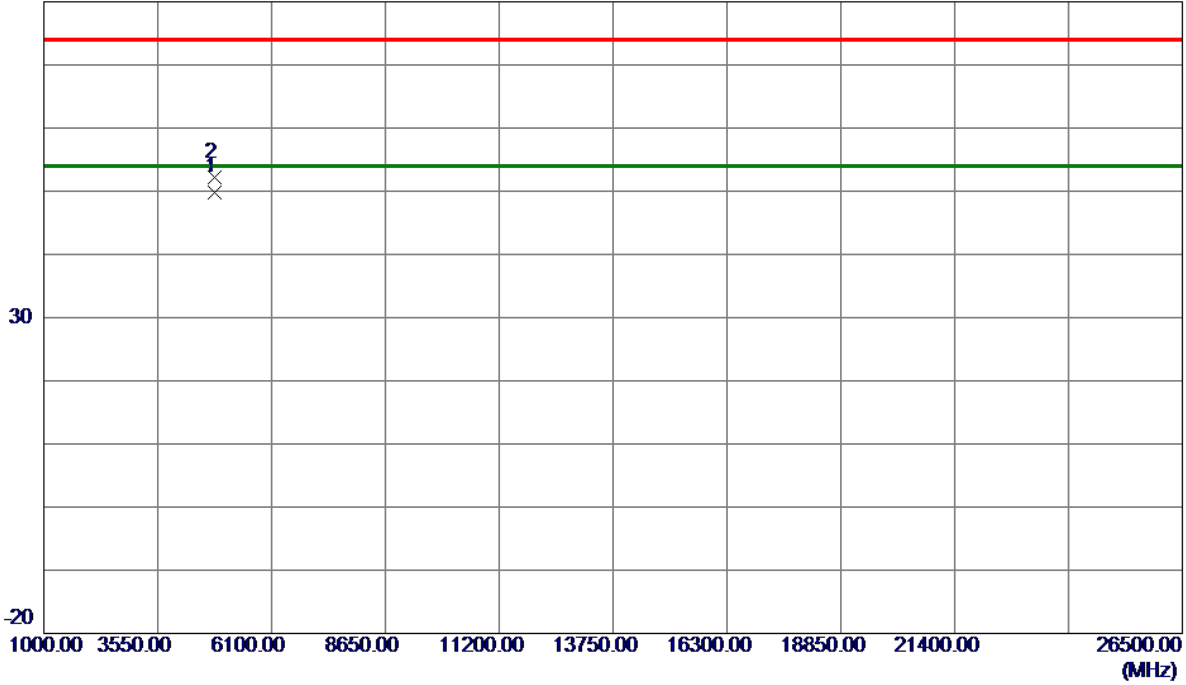
REMARKS:

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

Test Mode: TX B Mode 2412 MHz

Vertical

80 dBuV/m



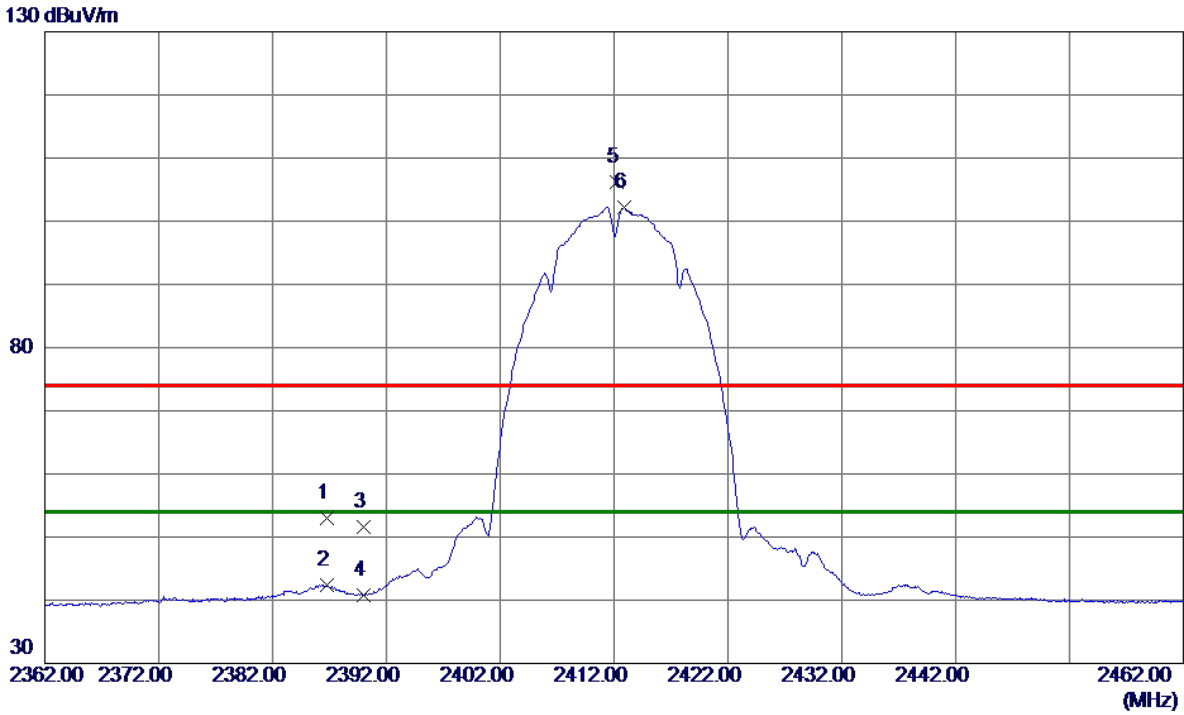
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.1580	43.88	6.02	49.90	54.00	-4.10	AVG	
2	4824.2330	46.26	6.02	52.28	74.00	-21.72	Peak	

REMARKS:

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

Test Mode: TX B 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	2386.7500	42.01	11.02	53.03	74.00	-20.97	Peak	
2	2386.7500	31.35	11.02	42.37	54.00	-11.63	AVG	
3	2390.0000	40.56	11.03	51.59	74.00	-22.41	Peak	
4	2390.0000	29.81	11.03	40.84	54.00	-13.16	AVG	
5	2412.2000	95.11	11.11	106.22	74.00	32.22	Peak	No Limit
6 *	2412.8500	91.03	11.11	102.14	54.00	48.14	AVG	No Limit

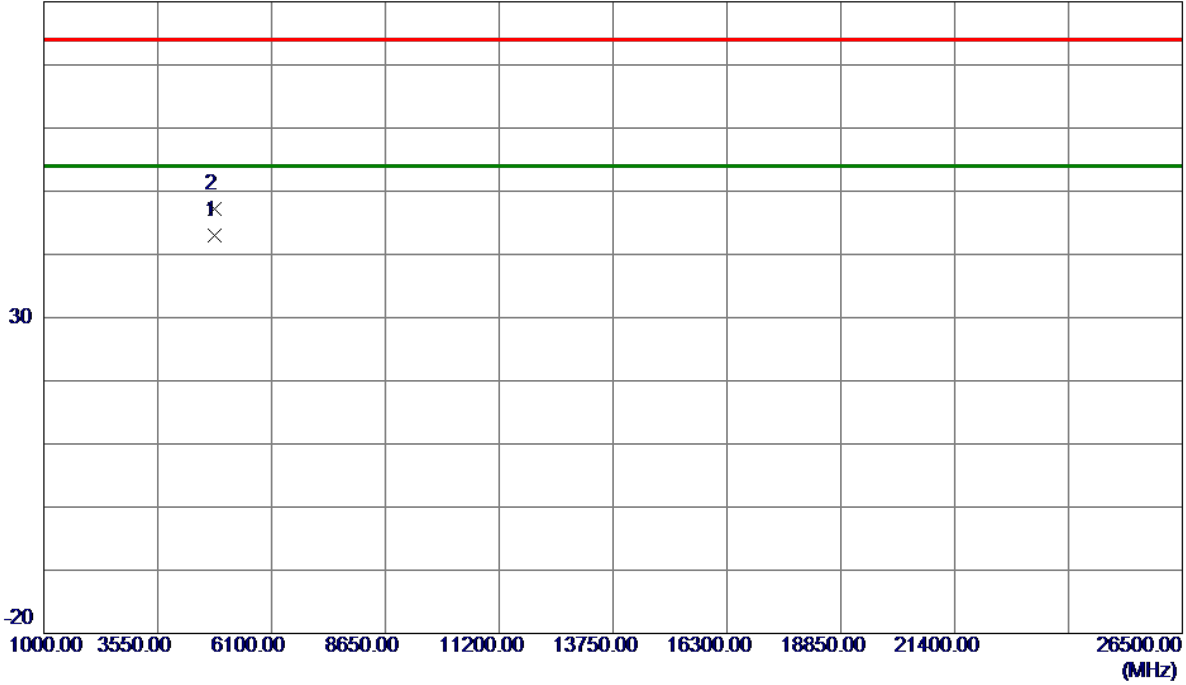
REMARKS:

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

Test Mode: TX B Mode 2412 MHz

Horizontal

80 dBuV/m



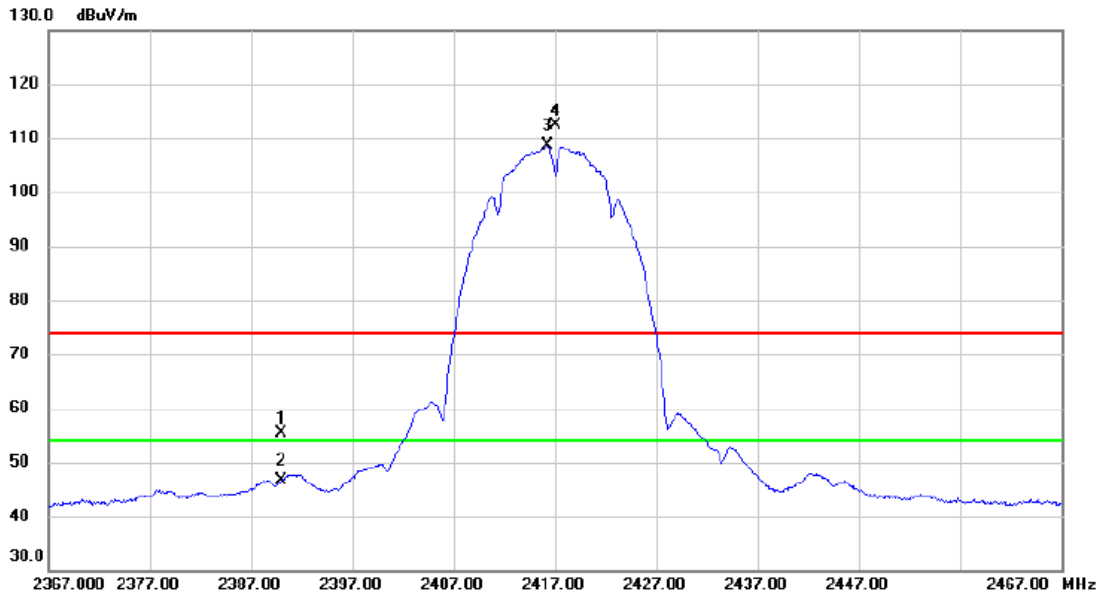
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.2100	36.96	6.02	42.98	54.00	-11.02	AVG	
2	4824.2650	41.24	6.02	47.26	74.00	-26.74	Peak	

REMARKS:

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

Test Mode: TX B Mode 2417 MHz

Vertical



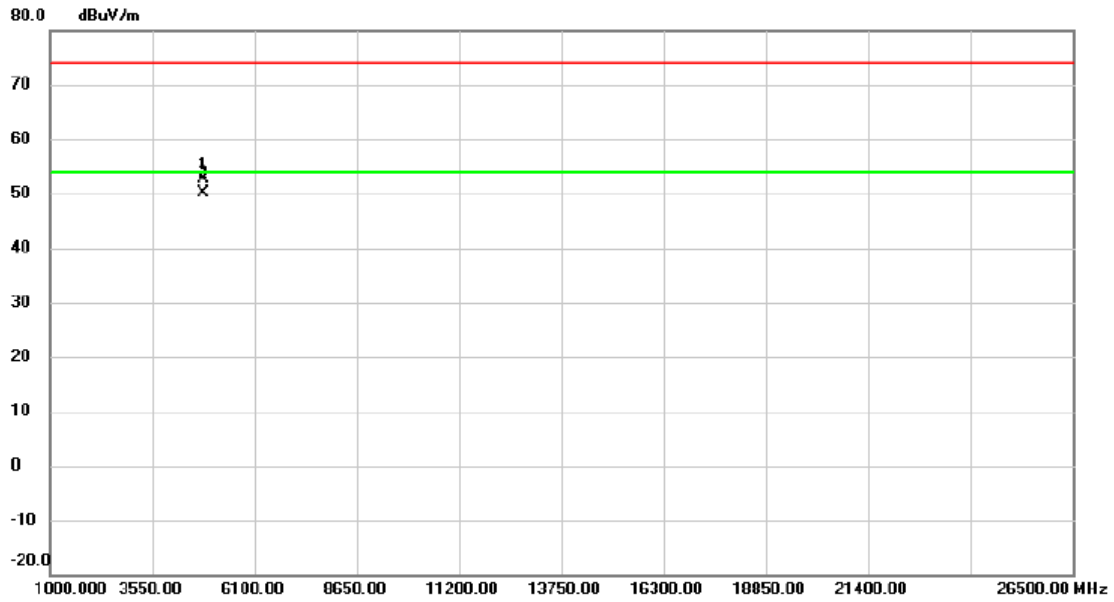
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	44.35	11.03	55.38	74.00	-18.62	peak	
2		2390.000	35.72	11.03	46.75	54.00	-7.25	AVG	
3	*	2416.300	97.54	11.12	108.66	54.00	54.66	AVG	No Limit
4	X	2417.000	101.22	11.12	112.34	74.00	38.34	peak	No Limit

REMARKS:

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

Test Mode: TX B Mode 2417 MHz

Vertical



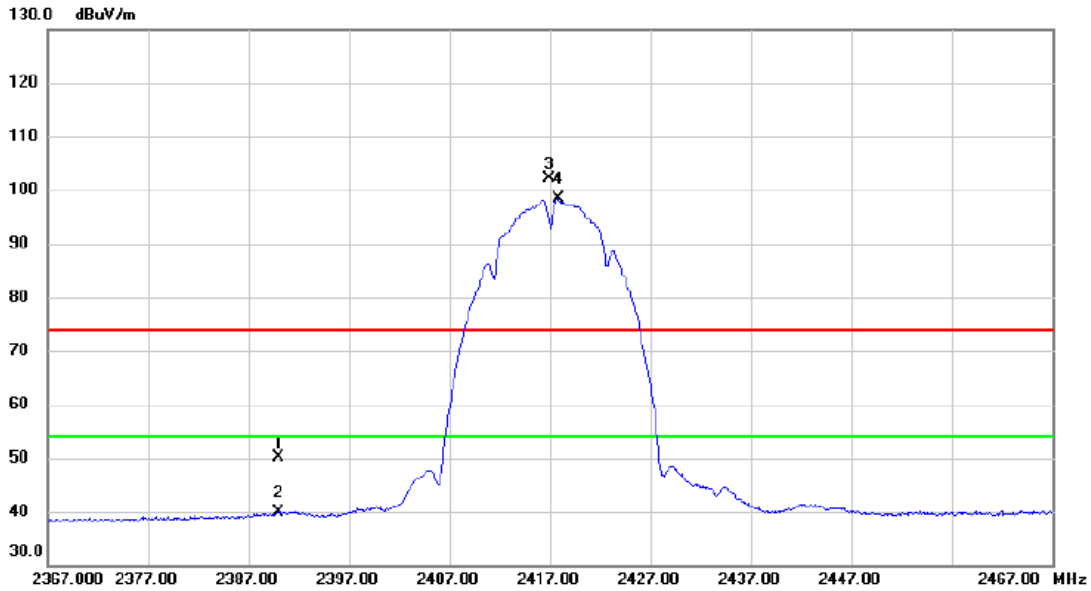
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4834.100	46.68	6.05	52.73	74.00	-21.27	peak	
2	*	4834.120	44.08	6.05	50.13	54.00	-3.87	AVG	

REMARKS:

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

Test Mode: TX B Mode 2417 MHz

Horizontal



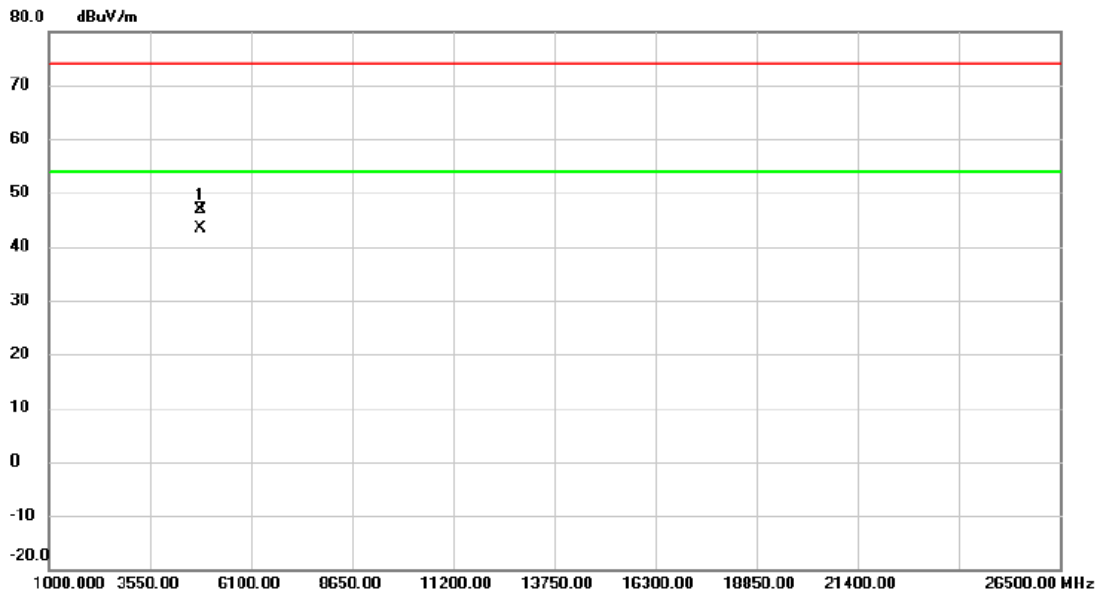
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	39.19	11.03	50.22	74.00	-23.78	peak	
2		2390.000	28.95	11.03	39.98	54.00	-14.02	AVG	
3	X	2416.950	90.99	11.12	102.11	74.00	28.11	peak	No Limit
4	*	2417.800	87.18	11.12	98.30	54.00	44.30	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

Horizontal



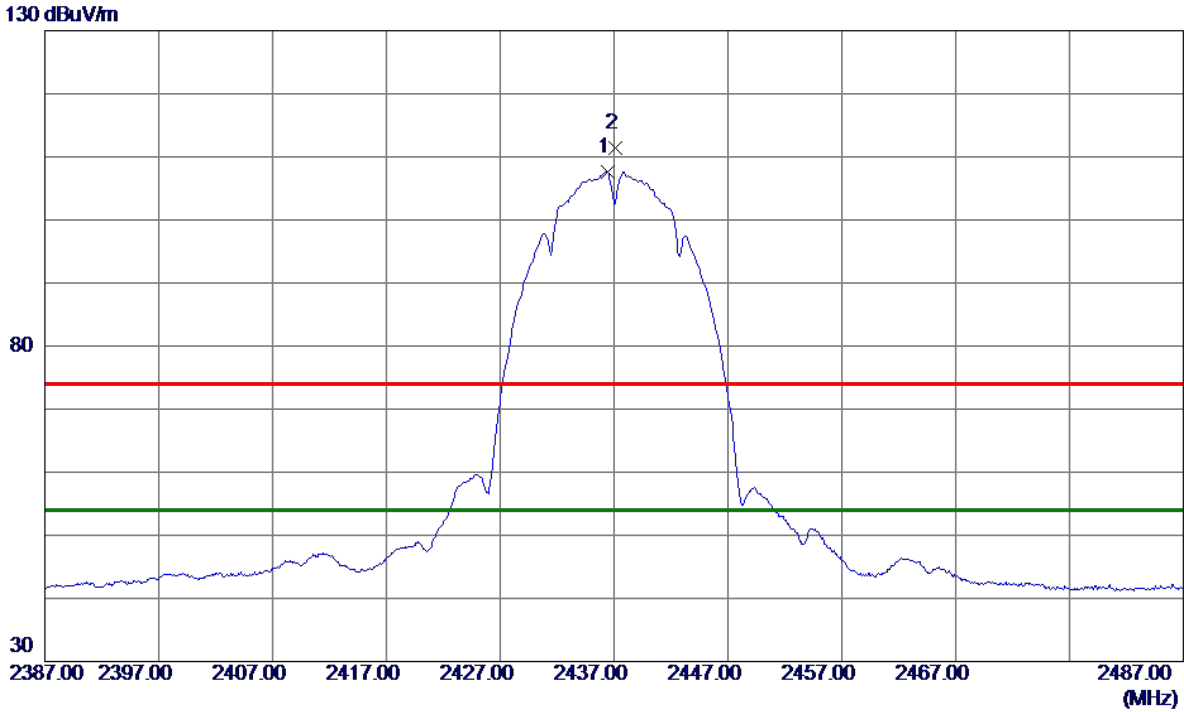
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4833.830	40.84	6.04	46.88	74.00	-27.12	peak	
2	*	4833.960	37.26	6.04	43.30	54.00	-10.70	AVG	

REMARKS:

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

Test Mode: TX B Mode 2437 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.4000	96.44	11.19	107.63	54.00	53.63	AVG	No Limit
2	2437.1000	100.26	11.19	111.45	74.00	37.45	Peak	No Limit

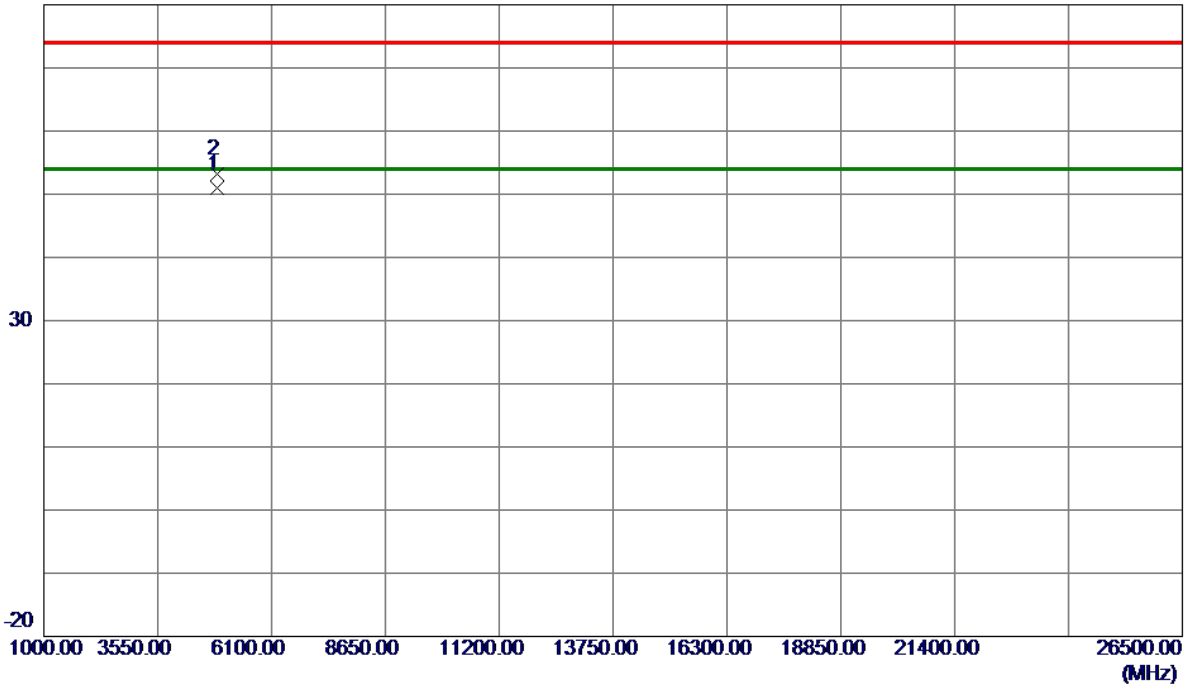
REMARKS:

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

Test Mode: TX B Mode 2437 MHz

Vertical

80 dBuV/m



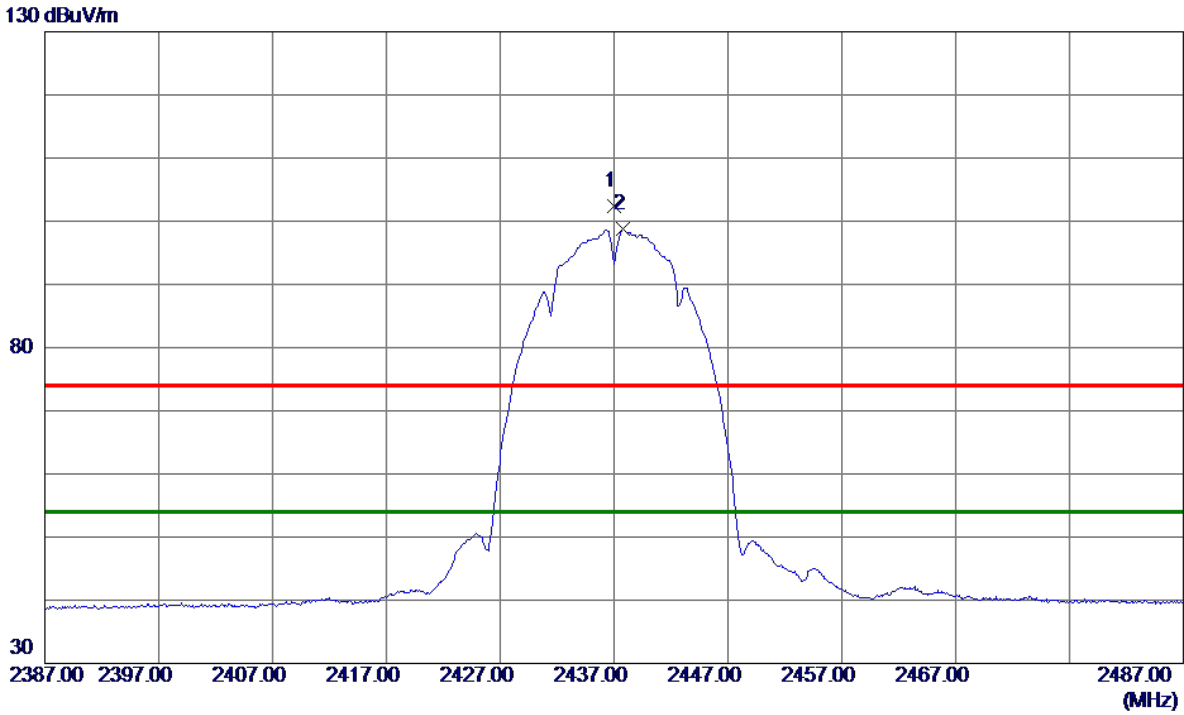
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0630	44.73	6.17	50.90	54.00	-3.10	AVG	
2	4874.1850	46.98	6.17	53.15	74.00	-20.85	Peak	

REMARKS:

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

Test Mode: TX B 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	2436.9500	91.25	11.19	102.44	74.00	28.44	Peak	No Limit
2 *	2437.8000	87.55	11.19	98.74	54.00	44.74	AVG	No Limit

REMARKS:

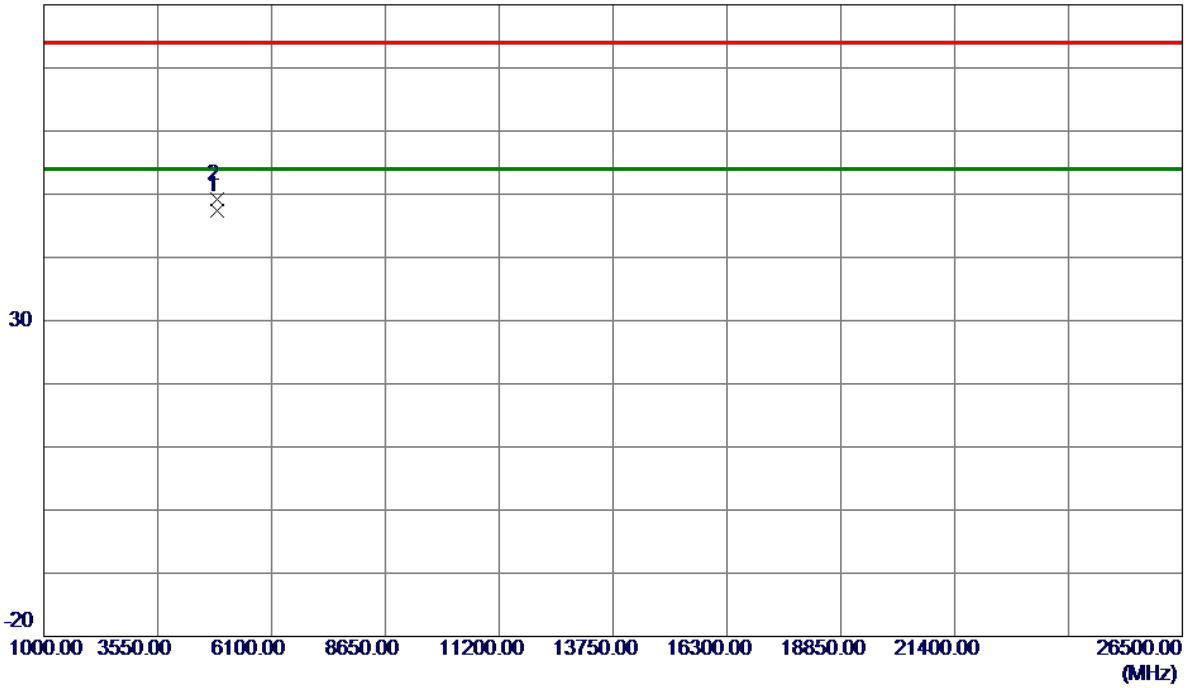
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX B Mode 2437 MHz

Horizontal

80 dBuV/m



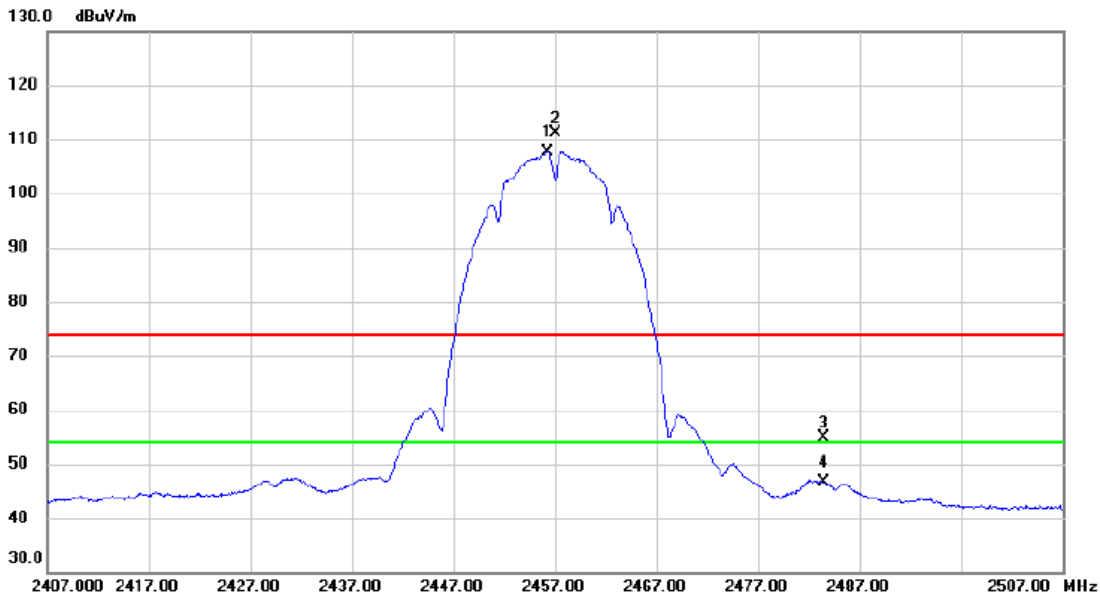
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.1000	41.30	6.17	47.47	54.00	-6.53	AVG	
2	4874.1300	42.99	6.17	49.16	74.00	-24.84	Peak	

REMARKS:

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

Test Mode: TX B Mode 2457 MHz

Vertical



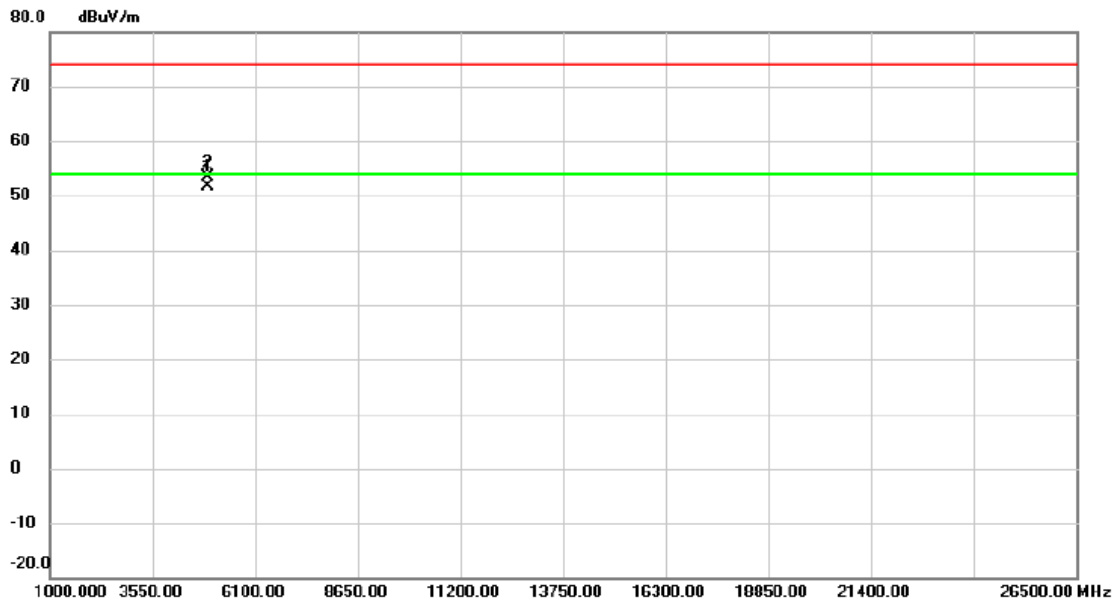
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2456.250	96.47	11.26	107.73	54.00	53.73	AVG	No Limit
2	X	2457.050	99.81	11.26	111.07	74.00	37.07	peak	No Limit
3		2483.500	43.46	11.35	54.81	74.00	-19.19	peak	
4		2483.500	35.27	11.35	46.62	54.00	-7.38	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	*	4913.967	45.29	6.30	51.59	54.00	-2.41	AVG	
2		4914.127	47.15	6.30	53.45	74.00	-20.55	peak	

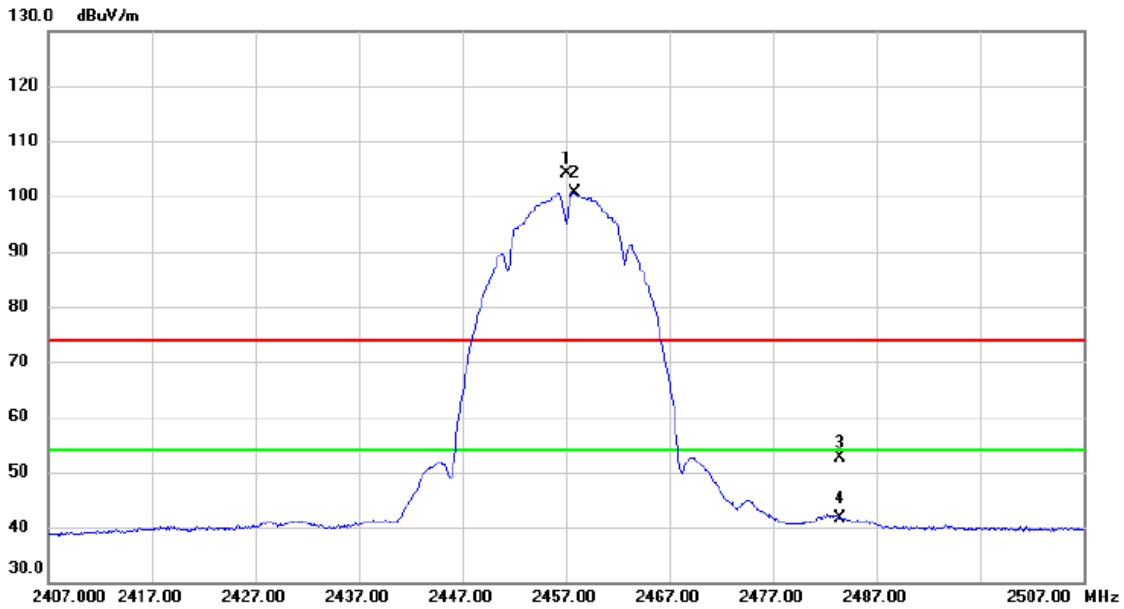
REMARKS:

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

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

Test Mode: TX B Mode 2457 MHz

Horizontal



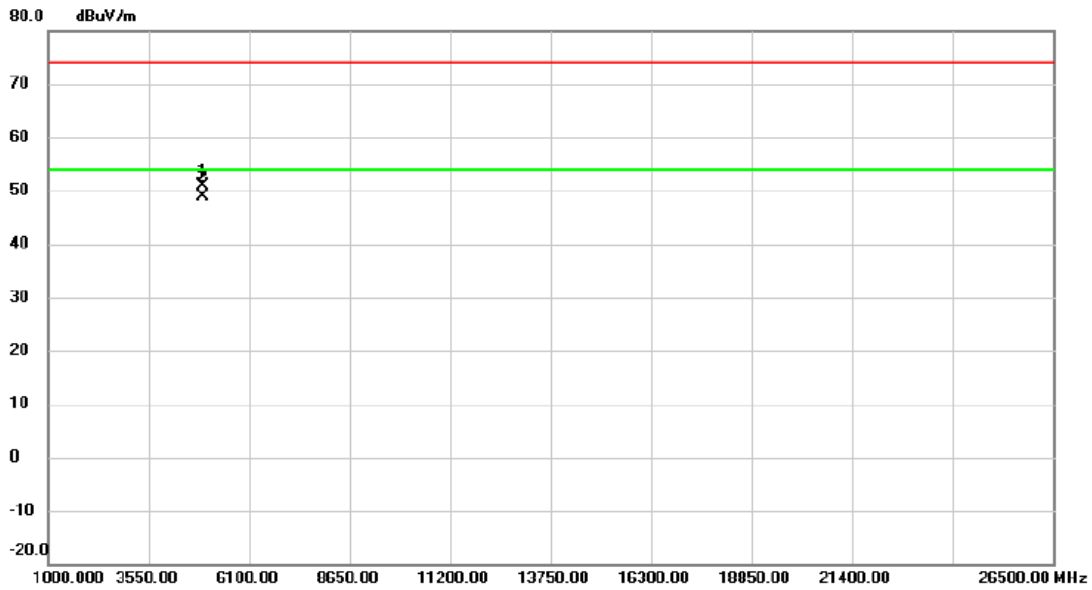
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2457.100	92.78	11.26	104.04	74.00	30.04	peak	No Limit
2	*	2457.800	89.44	11.26	100.70	54.00	46.70	AVG	No Limit
3		2483.500	41.16	11.35	52.51	74.00	-21.49	peak	
4		2483.500	30.31	11.35	41.66	54.00	-12.34	AVG	

REMARKS:

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

Test Mode: TX B Mode 2457 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4913.960	44.56	6.30	50.86	74.00	-23.14	peak	
2	*	4914.110	42.59	6.30	48.89	54.00	-5.11	AVG	

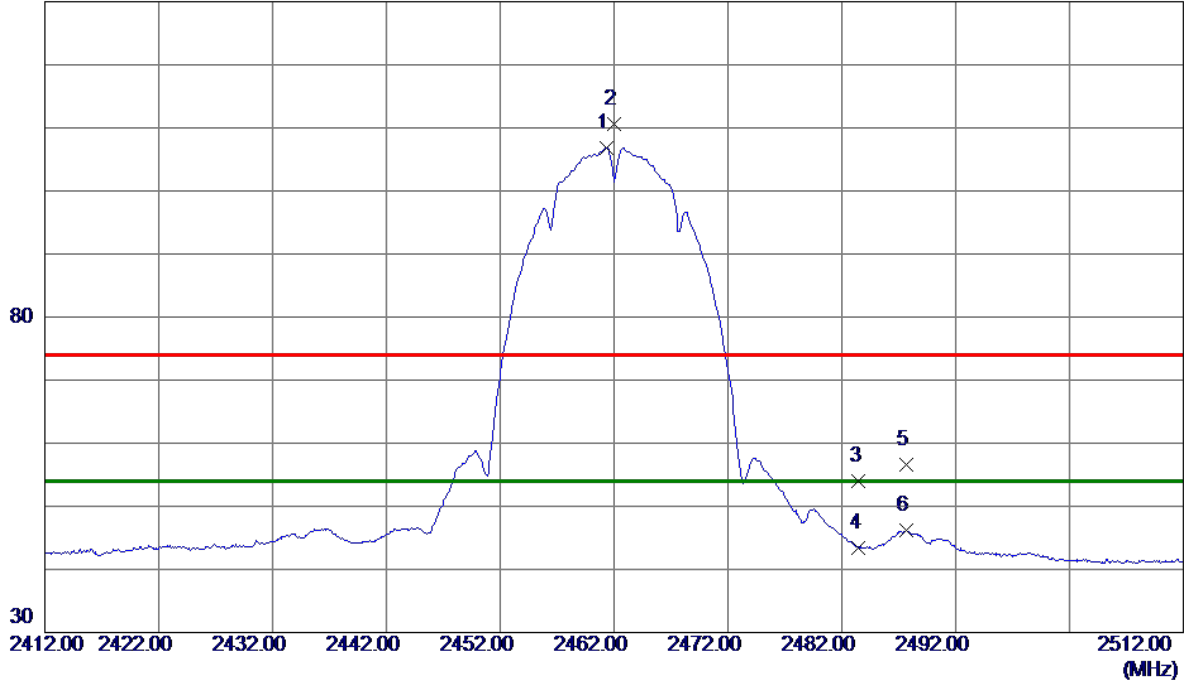
REMARKS:

- (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 *	2461.3500	95.61	11.28	106.89	54.00	52.89	AVG	No Limit
2	2462.0000	99.41	11.28	110.69	74.00	36.69	Peak	No Limit
3	2483.5000	42.68	11.35	54.03	74.00	-19.97	Peak	
4	2483.5000	31.97	11.35	43.32	54.00	-10.68	AVG	
5	2487.6500	45.16	11.37	56.53	74.00	-17.47	Peak	
6	2487.6500	34.85	11.37	46.22	54.00	-7.78	AVG	

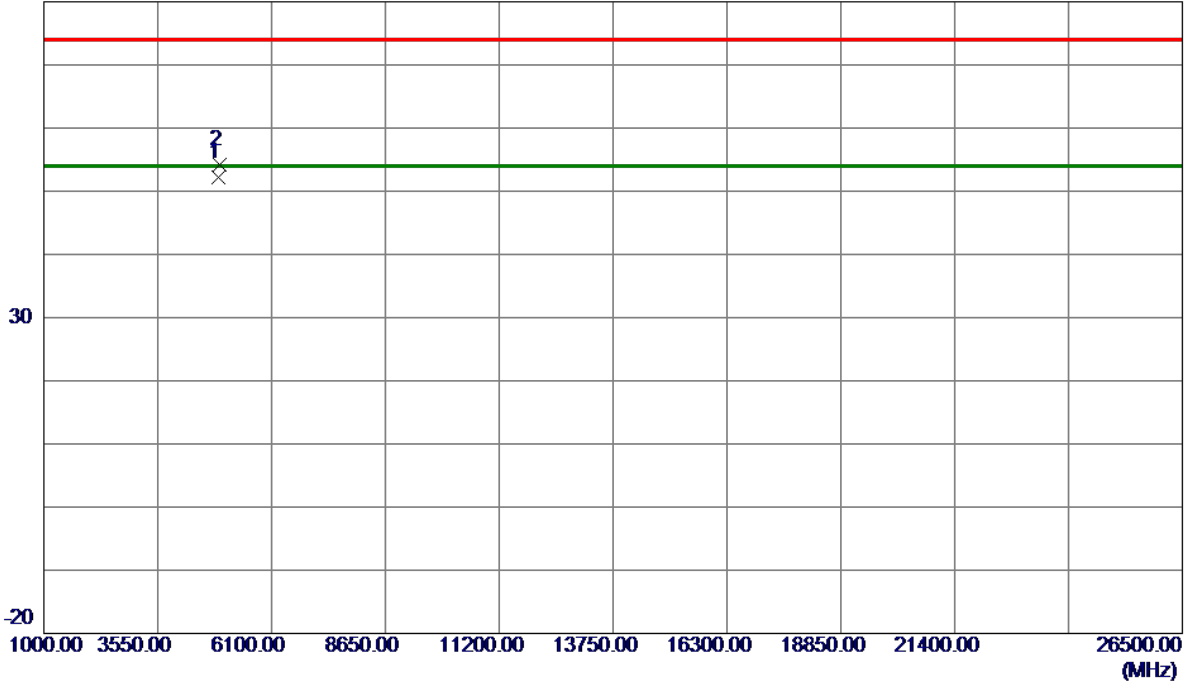
REMARKS:

- (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



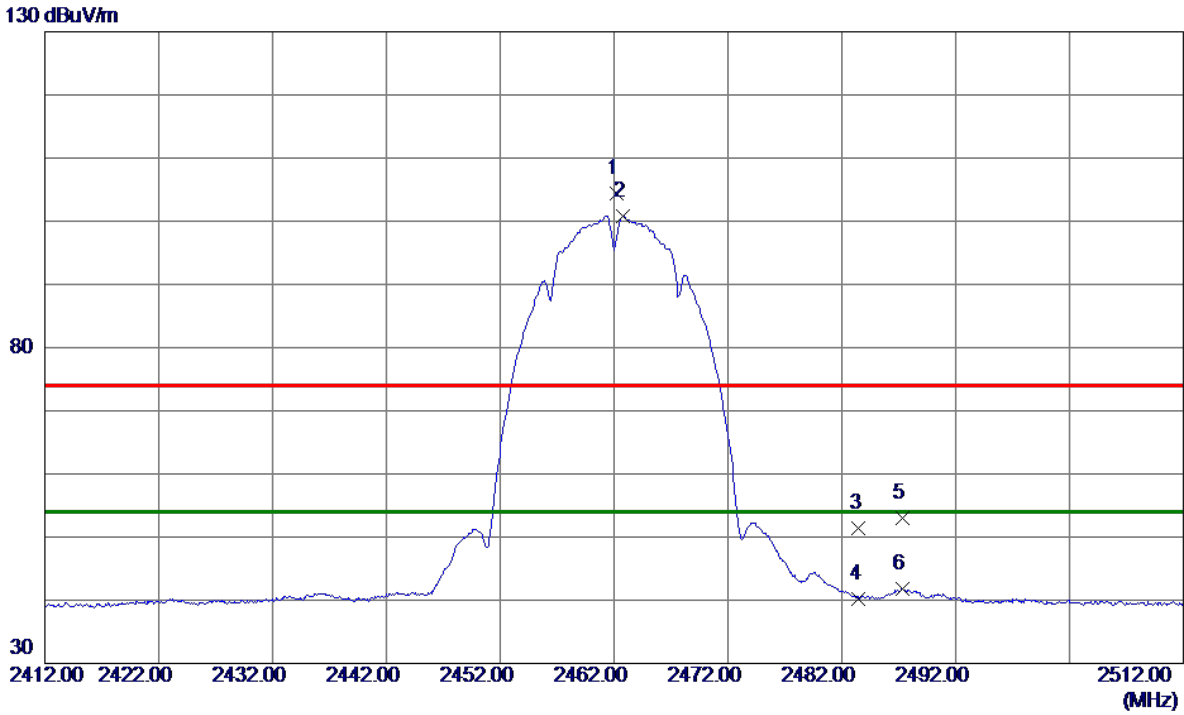
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.0550	45.79	6.33	52.12	54.00	-1.88	AVG	
2	4924.1930	47.83	6.33	54.16	74.00	-19.84	Peak	

REMARKS:

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

Test Mode: TX B Mode 2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2462.2500	93.12	11.28	104.40	74.00	30.40	Peak	No Limit
2 *	2462.8000	89.54	11.28	100.82	54.00	46.82	AVG	No Limit
3	2483.5000	40.08	11.35	51.43	74.00	-22.57	Peak	
4	2483.5000	28.94	11.35	40.29	54.00	-13.71	AVG	
5	2487.3000	41.63	11.37	53.00	74.00	-21.00	Peak	
6	2487.3000	30.51	11.37	41.88	54.00	-12.12	AVG	

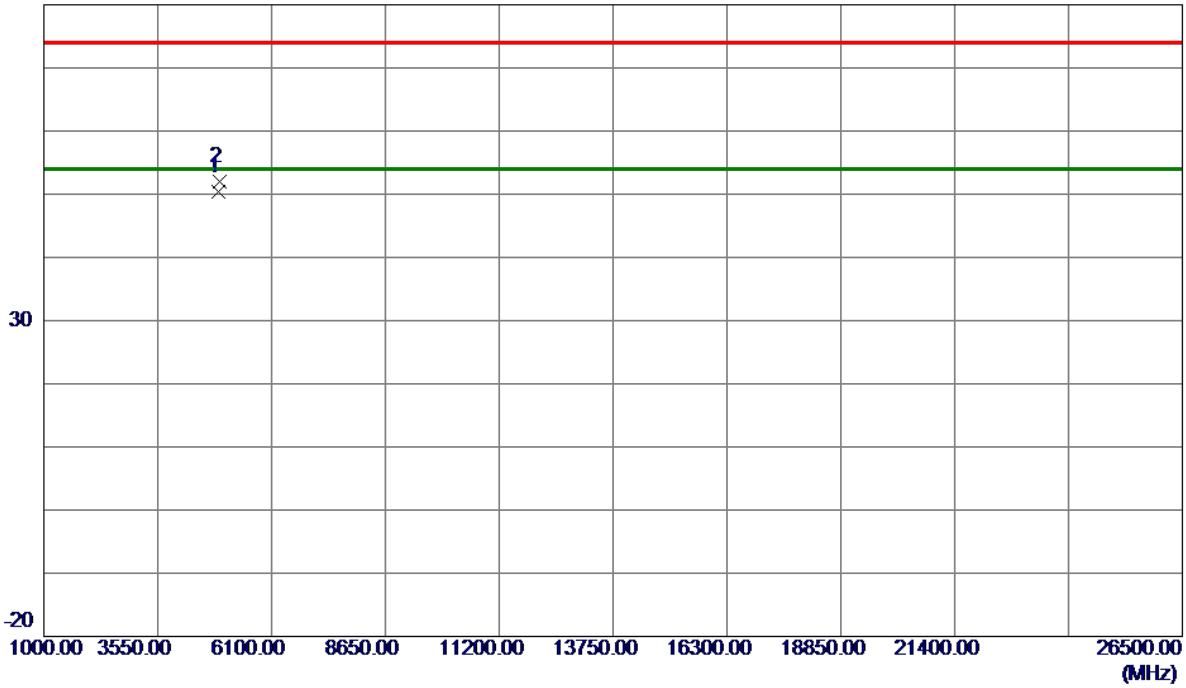
REMARKS:

- (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



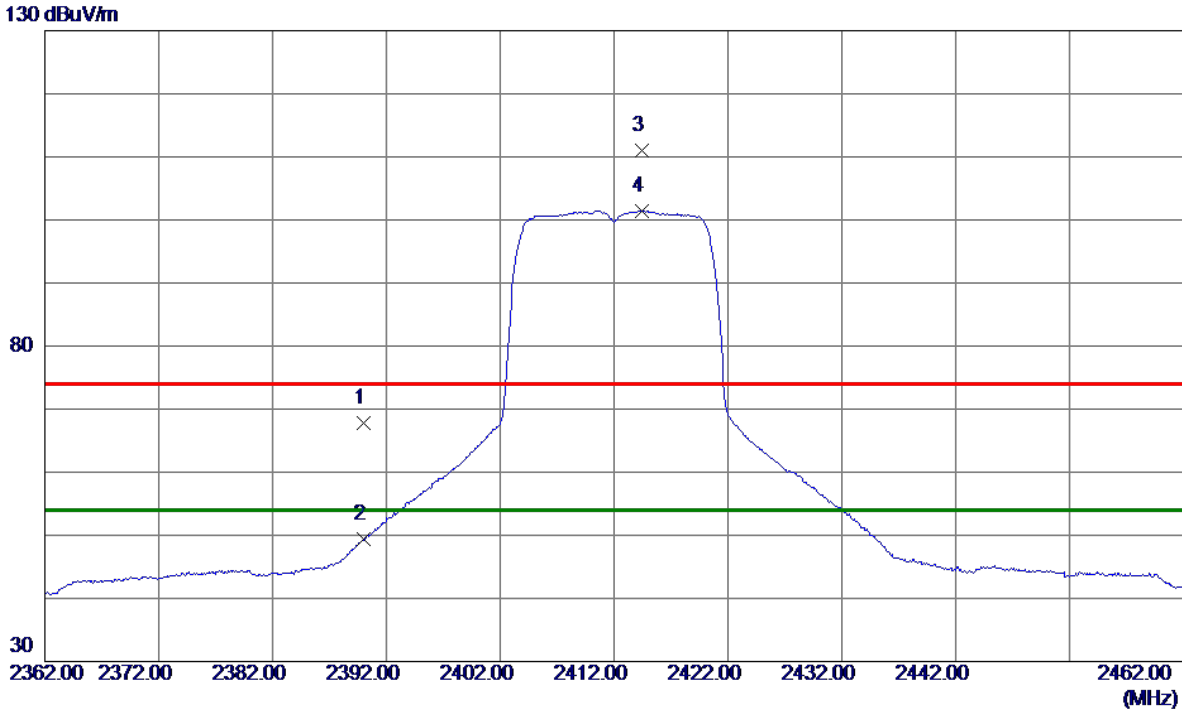
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4923.9300	44.07	6.33	50.40	54.00	-3.60	AVG	
2	4924.1900	45.72	6.33	52.05	74.00	-21.95	Peak	

REMARKS:

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

Test Mode: TX G Mode 2412 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	56.80	11.03	67.83	74.00	-6.17	Peak	
2	2390.0000	38.29	11.03	49.32	54.00	-4.68	AVG	
3	2414.4000	99.99	11.11	111.10	74.00	37.10	Peak	No Limit
4 *	2414.4500	90.35	11.11	101.46	54.00	47.46	AVG	No Limit

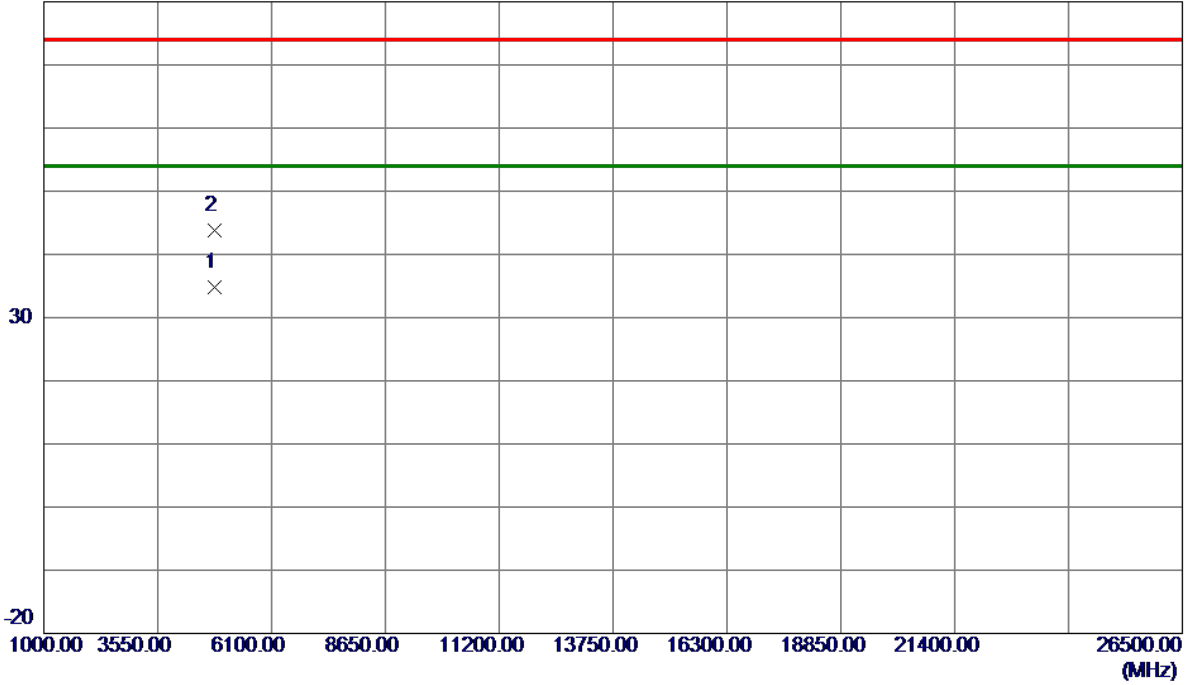
REMARKS:

- (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



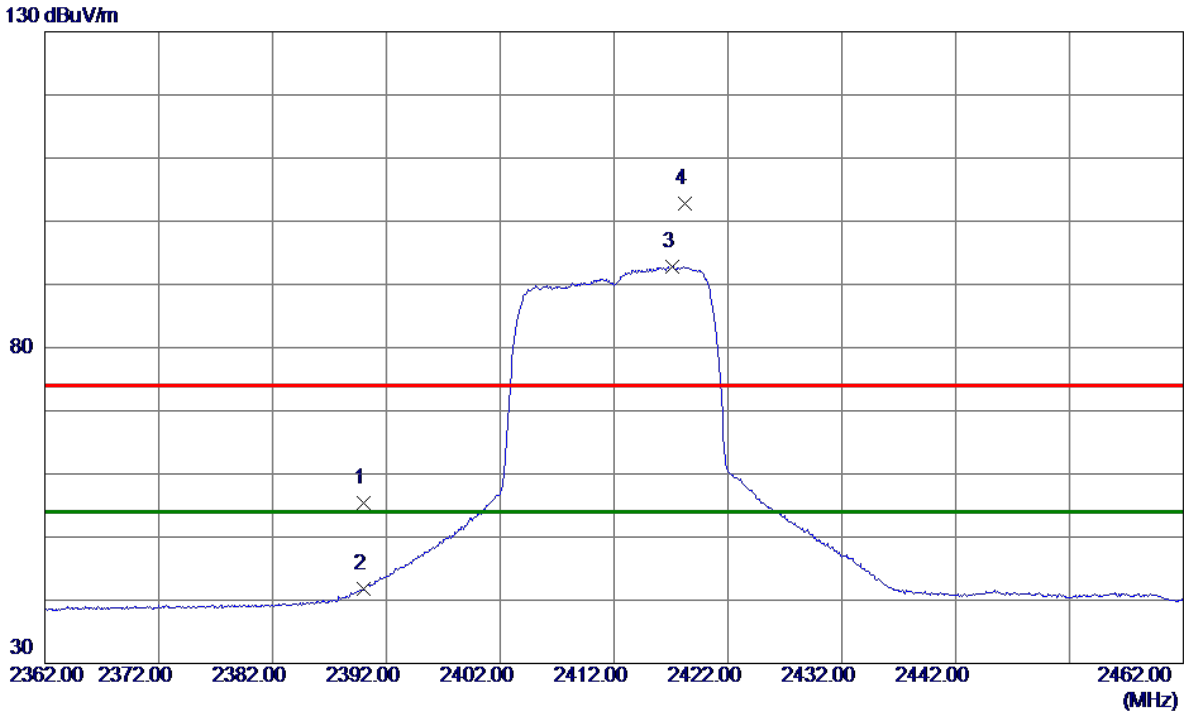
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.4800	28.83	6.02	34.85	54.00	-19.15	AVG	
2	4826.7500	37.72	6.03	43.75	74.00	-30.25	Peak	

REMARKS:

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

Test Mode: TX G 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	44.31	11.03	55.34	74.00	-18.66	Peak	
2	2390.0000	30.76	11.03	41.79	54.00	-12.21	AVG	
3 *	2417.1000	81.65	11.12	92.77	54.00	38.77	AVG	No Limit
4	2418.2500	91.63	11.13	102.76	74.00	28.76	Peak	No Limit

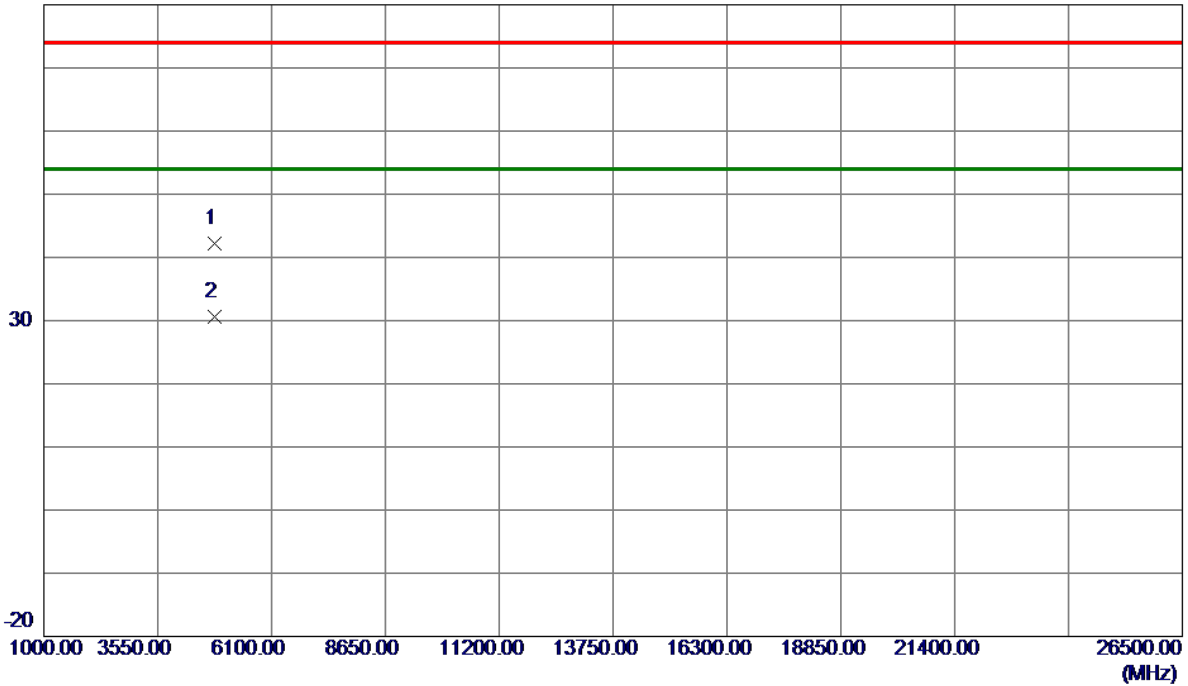
REMARKS:

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

Test Mode: TX G Mode 2412 MHz

Horizontal

80 dBuV/m



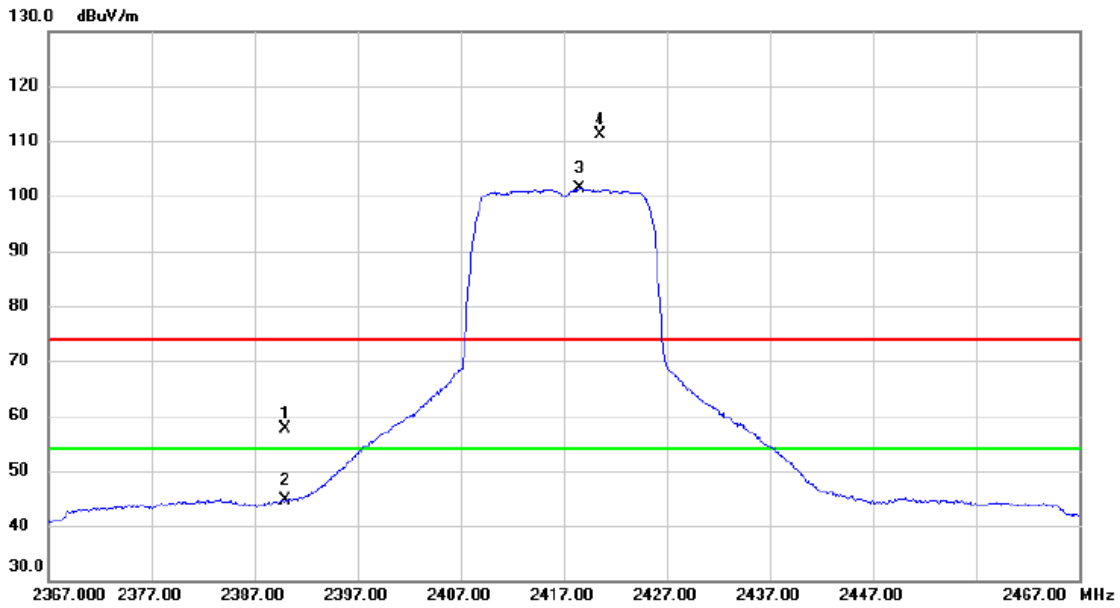
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4821.1700	36.16	6.01	42.17	74.00	-31.83	Peak	
2 *	4823.8900	24.51	6.02	30.53	54.00	-23.47	AVG	

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. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	46.53	11.03	57.56	74.00	-16.44	peak	
2		2390.000	33.57	11.03	44.60	54.00	-9.40	AVG	
3	*	2418.600	90.28	11.13	101.41	54.00	47.41	AVG	No Limit
4	X	2420.500	100.04	11.14	111.18	74.00	37.18	peak	No Limit

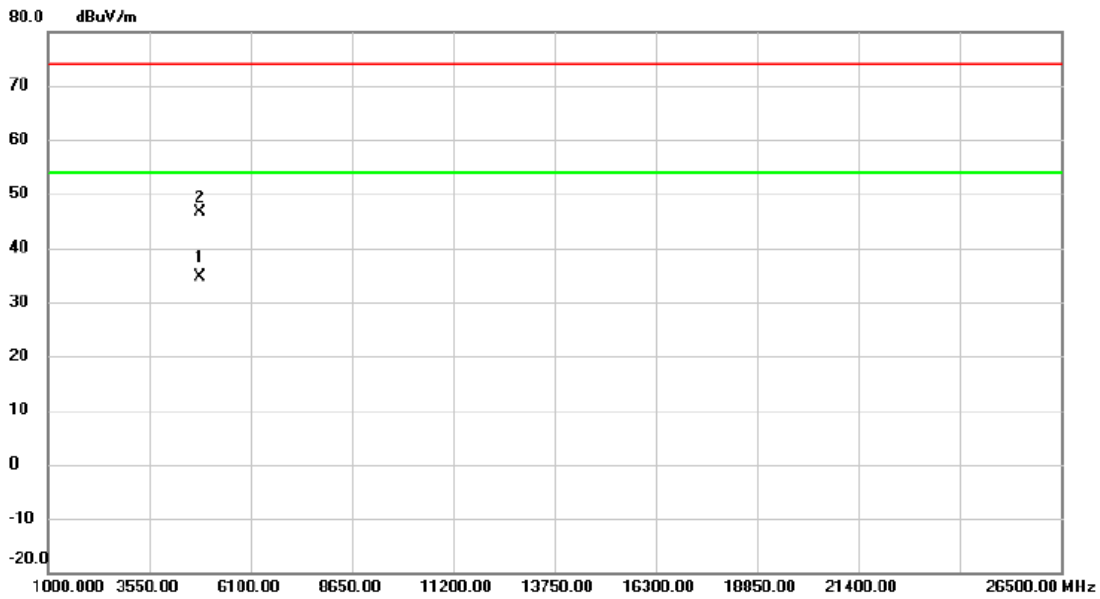
REMARKS:

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

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

Test Mode: TX G Mode 2417 MHz

Vertical



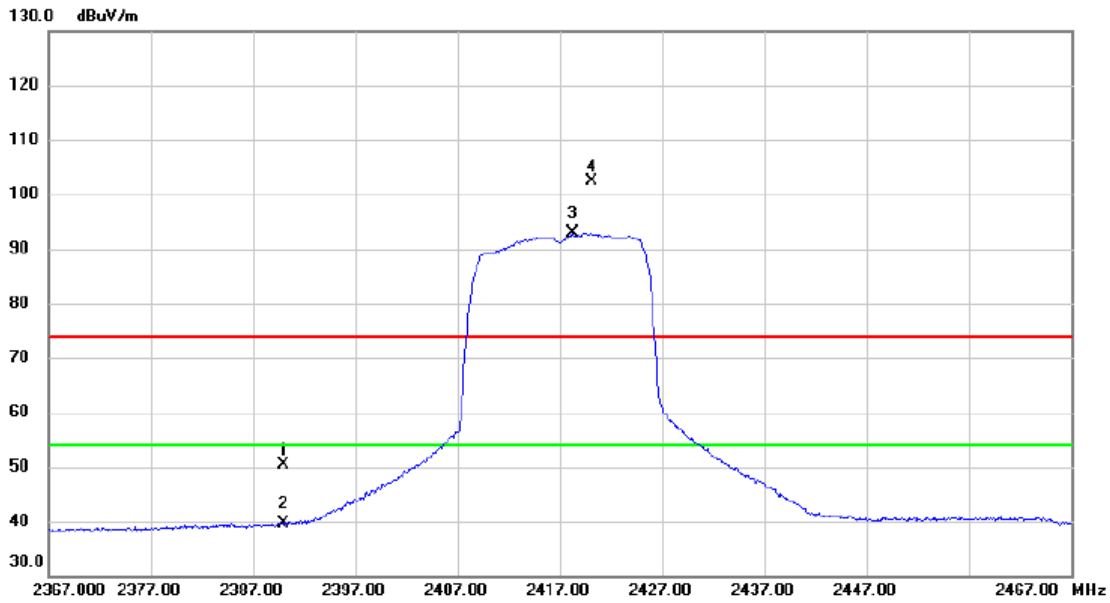
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4836.150	28.60	6.06	34.66	54.00	-19.34	AVG	
2		4837.150	40.48	6.06	46.54	74.00	-27.46	peak	

REMARKS:

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

Test Mode: TX G Mode 2417 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	39.26	11.03	50.29	74.00	-23.71	peak	
2		2390.000	28.52	11.03	39.55	54.00	-14.45	AVG	
3	*	2418.300	81.72	11.13	92.85	54.00	38.85	AVG	No Limit
4	X	2420.100	91.20	11.14	102.34	74.00	28.34	peak	No Limit

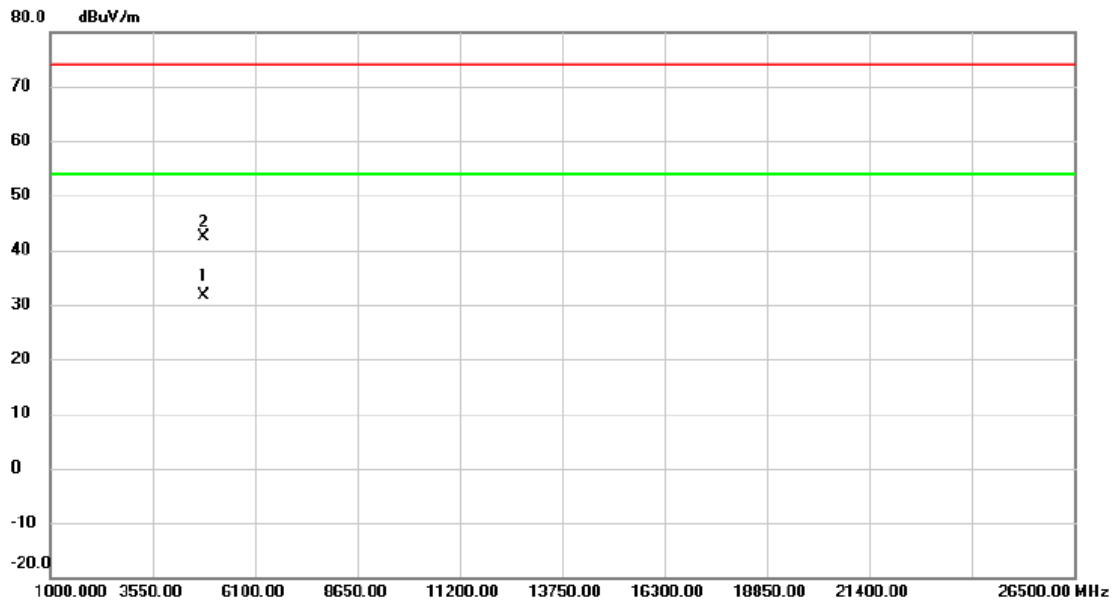
REMARKS:

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

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

Test Mode: TX G Mode 2417 MHz

Horizontal



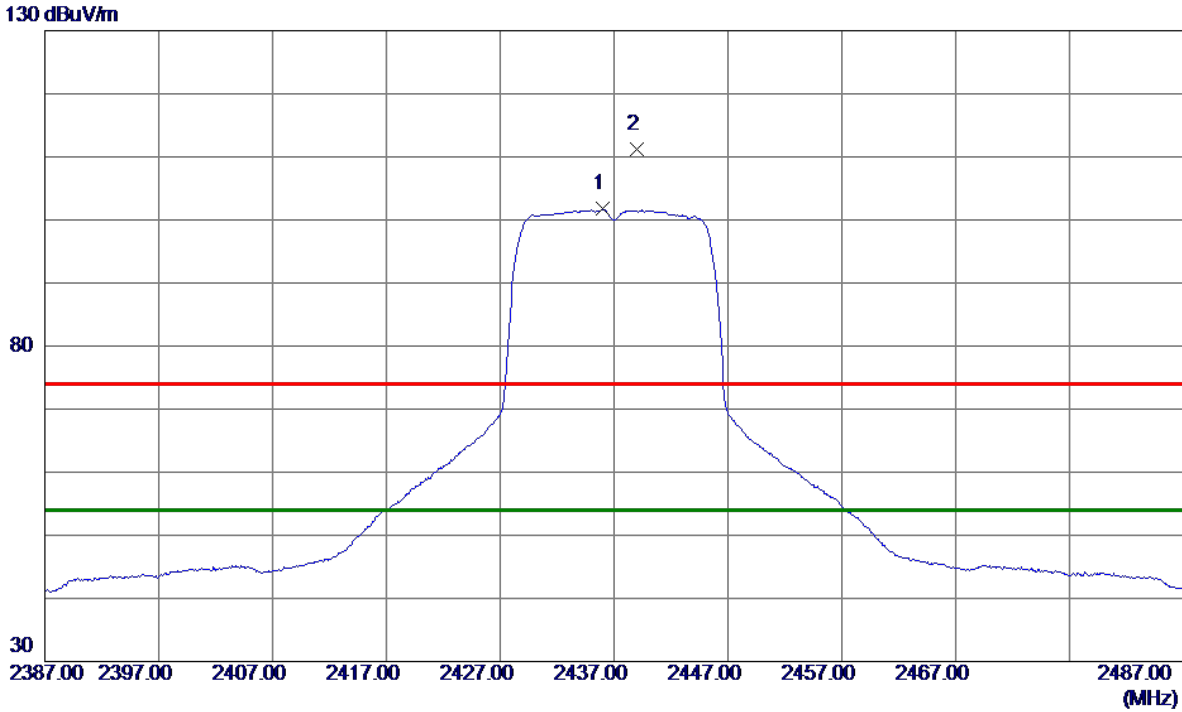
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4837.880	25.46	6.06	31.52	54.00	-22.48	AVG	
2		4840.950	36.39	6.07	42.46	74.00	-31.54	peak	

REMARKS:

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

Test Mode: TX G Mode 2437 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.0000	90.52	11.19	101.71	54.00	47.71	AVG	No Limit
2	2438.9500	100.08	11.20	111.28	74.00	37.28	Peak	No Limit

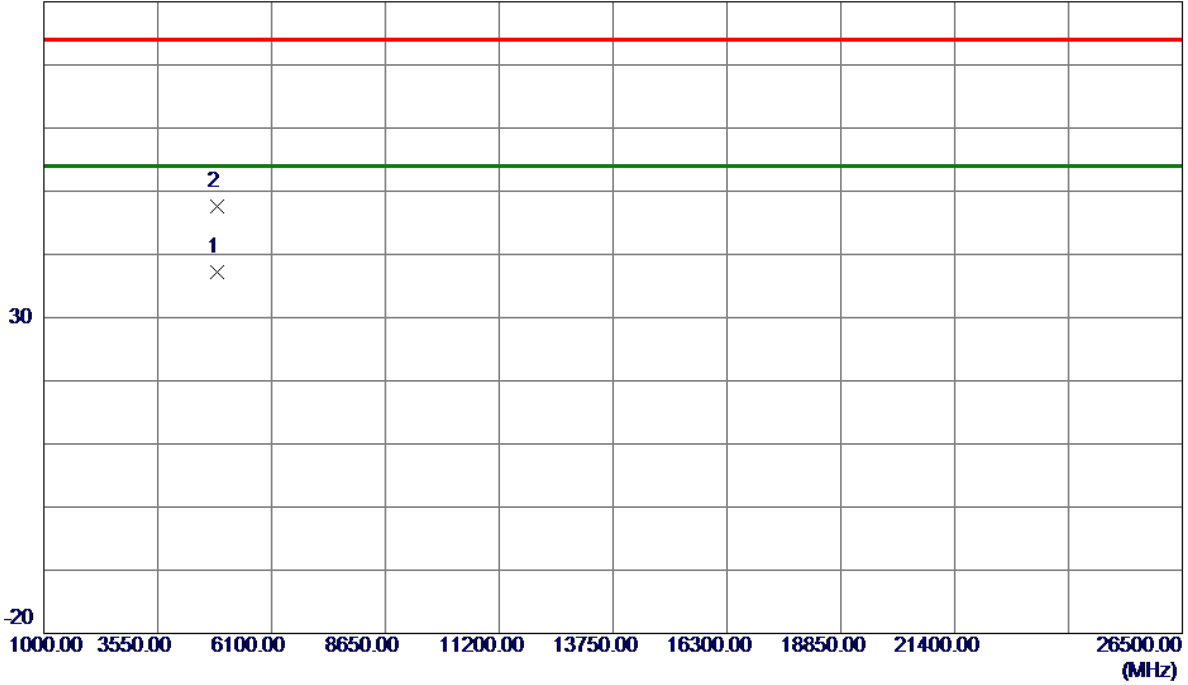
REMARKS:

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

Test Mode: TX G Mode 2437 MHz

Vertical

80 dBuV/m



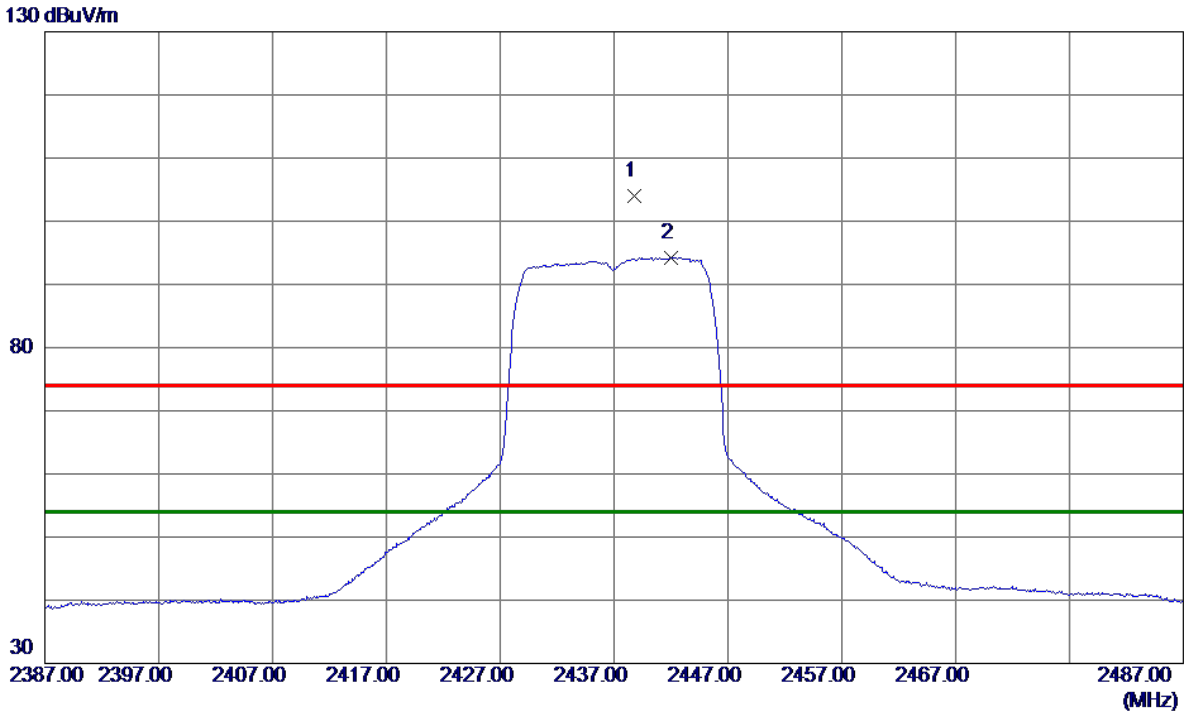
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4873.0500	30.94	6.17	37.11	54.00	-16.89	AVG	
2	4873.4500	41.48	6.17	47.65	74.00	-26.35	Peak	

REMARKS:

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

Test Mode: TX G 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	2438.8000	92.90	11.20	104.10	74.00	30.10	Peak	No Limit
2 *	2442.0500	83.03	11.21	94.24	54.00	40.24	AVG	No Limit

REMARKS:

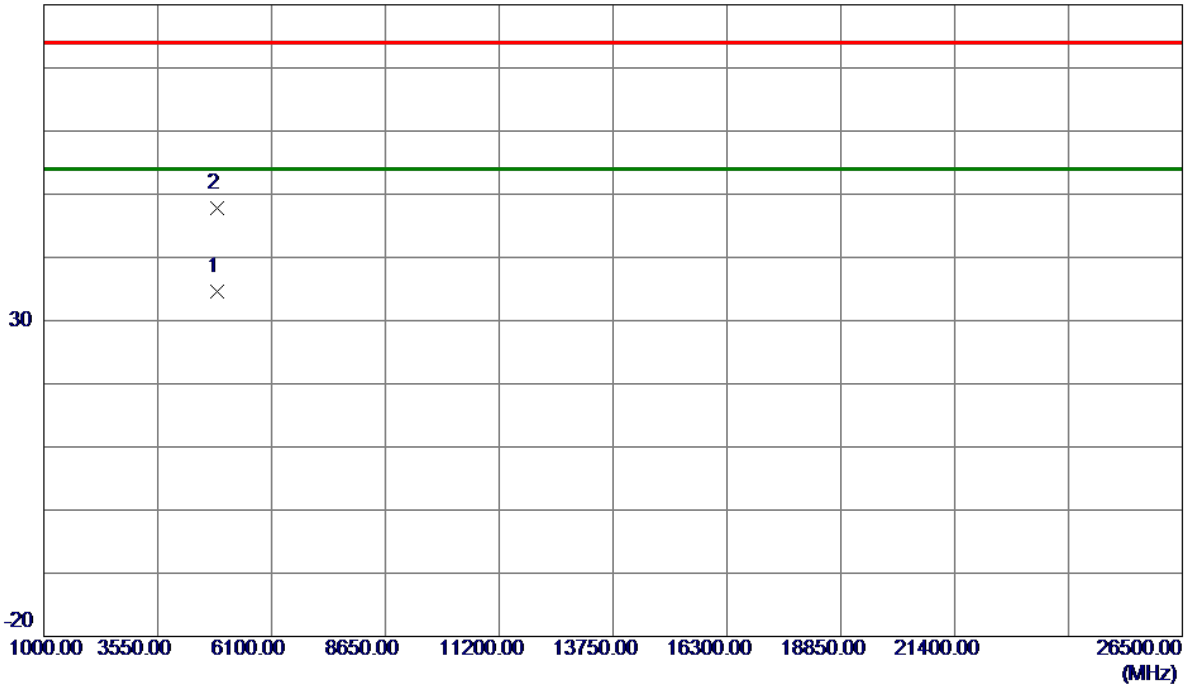
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX G Mode 2437 MHz

Horizontal

80 dBuV/m



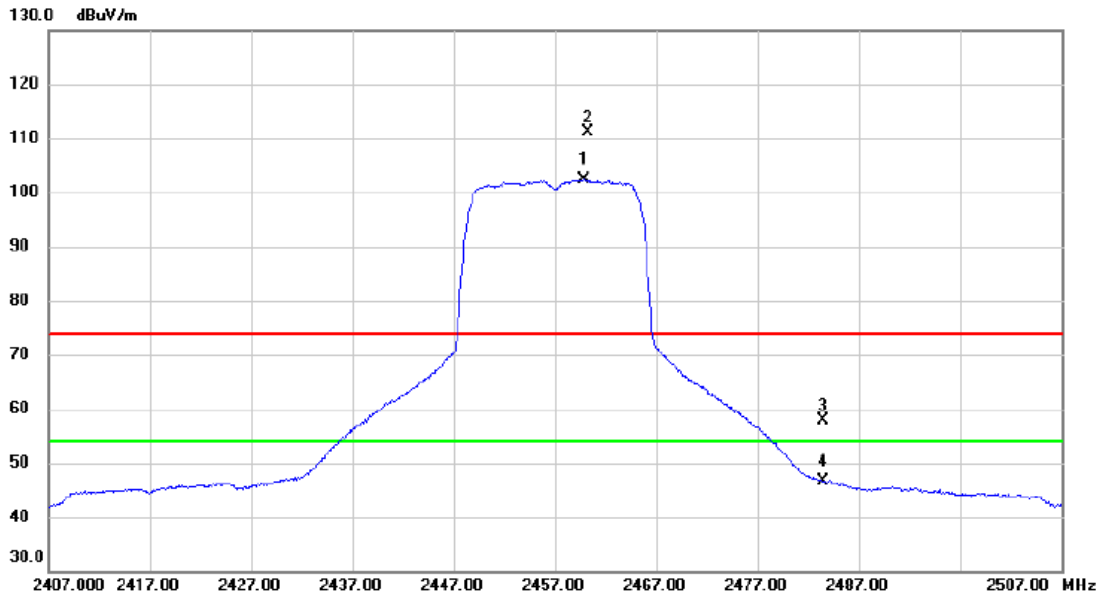
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4877.2400	28.34	6.18	34.52	54.00	-19.48	AVG	
2	4878.7200	41.68	6.19	47.87	74.00	-26.13	Peak	

REMARKS:

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

Test Mode: TX G Mode 2457 MHz

Vertical



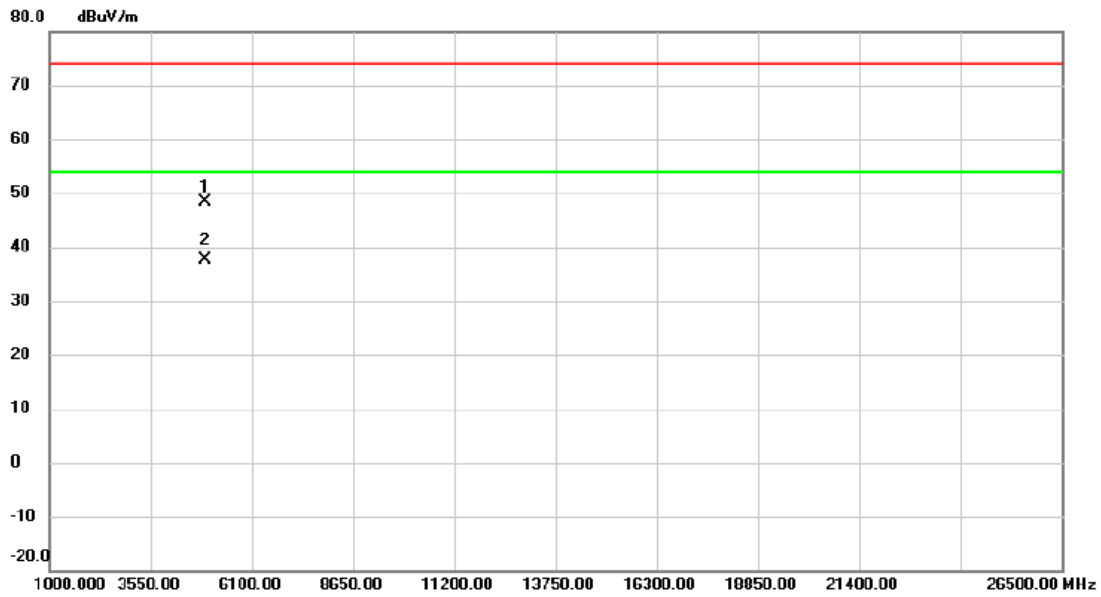
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2459.850	91.04	11.27	102.31	54.00	48.31	AVG	No Limit
2	X	2460.300	99.98	11.27	111.25	74.00	37.25	peak	No Limit
3		2483.500	46.59	11.35	57.94	74.00	-16.06	peak	
4		2483.500	35.21	11.35	46.56	54.00	-7.44	AVG	

REMARKS:

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

Test Mode: TX G Mode 2457 MHz

Vertical



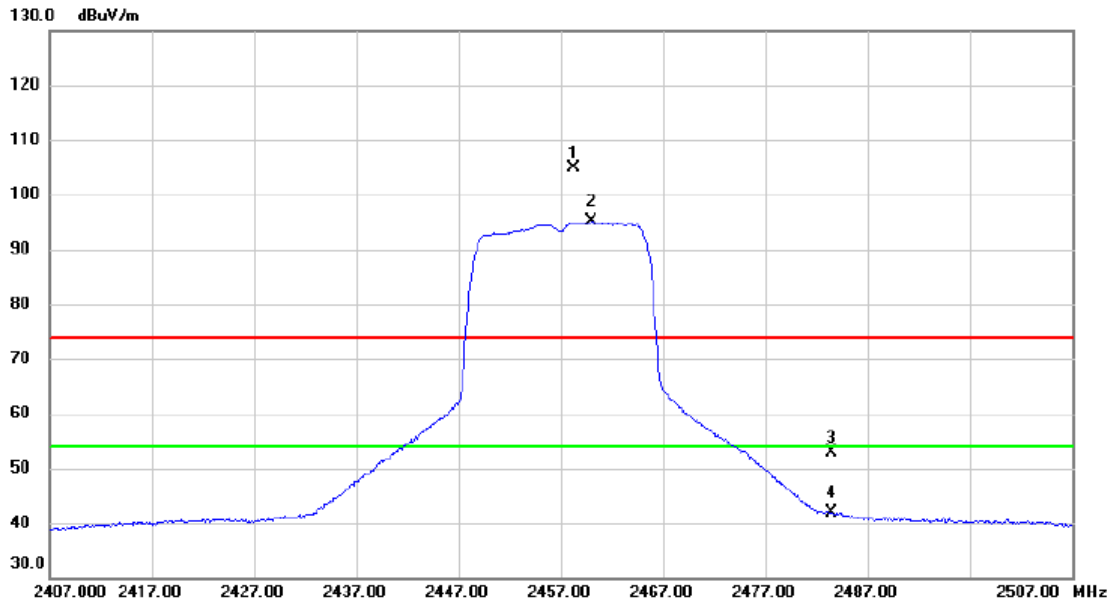
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4911.850	42.15	6.30	48.45	74.00	-25.55	peak	
2	*	4914.500	31.23	6.30	37.53	54.00	-16.47	AVG	

REMARKS:

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

Test Mode: TX G Mode 2457 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2458.250	93.54	11.26	104.80	74.00	30.80	peak	No Limit
2	*	2460.050	83.80	11.27	95.07	54.00	41.07	AVG	No Limit
3		2483.500	41.60	11.35	52.95	74.00	-21.05	peak	
4		2483.500	30.52	11.35	41.87	54.00	-12.13	AVG	

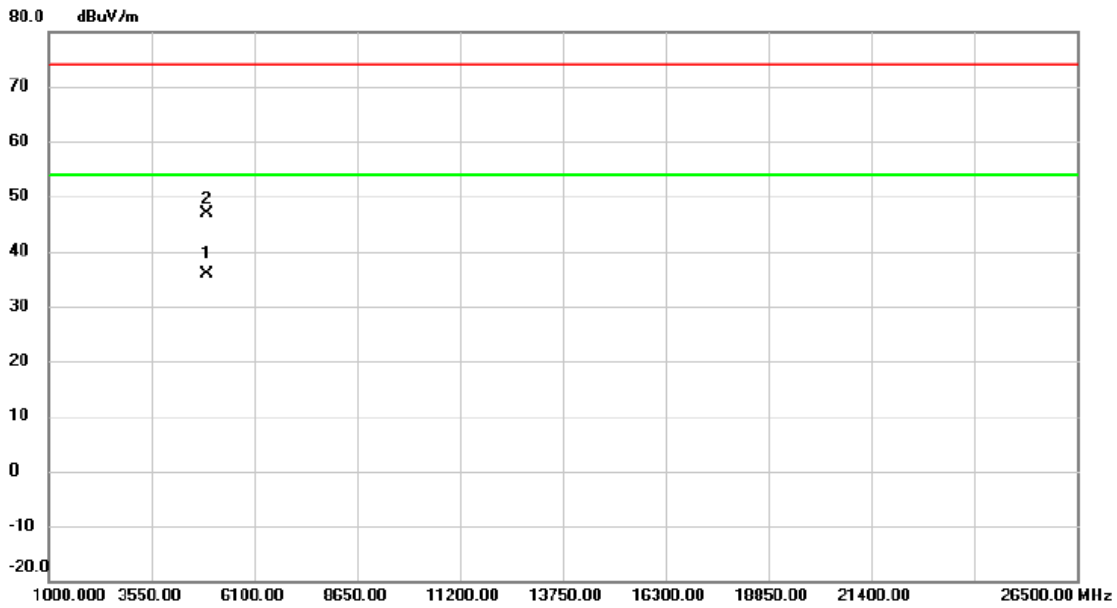
REMARKS:

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

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

Test Mode: TX G Mode 2457 MHz

Horizontal



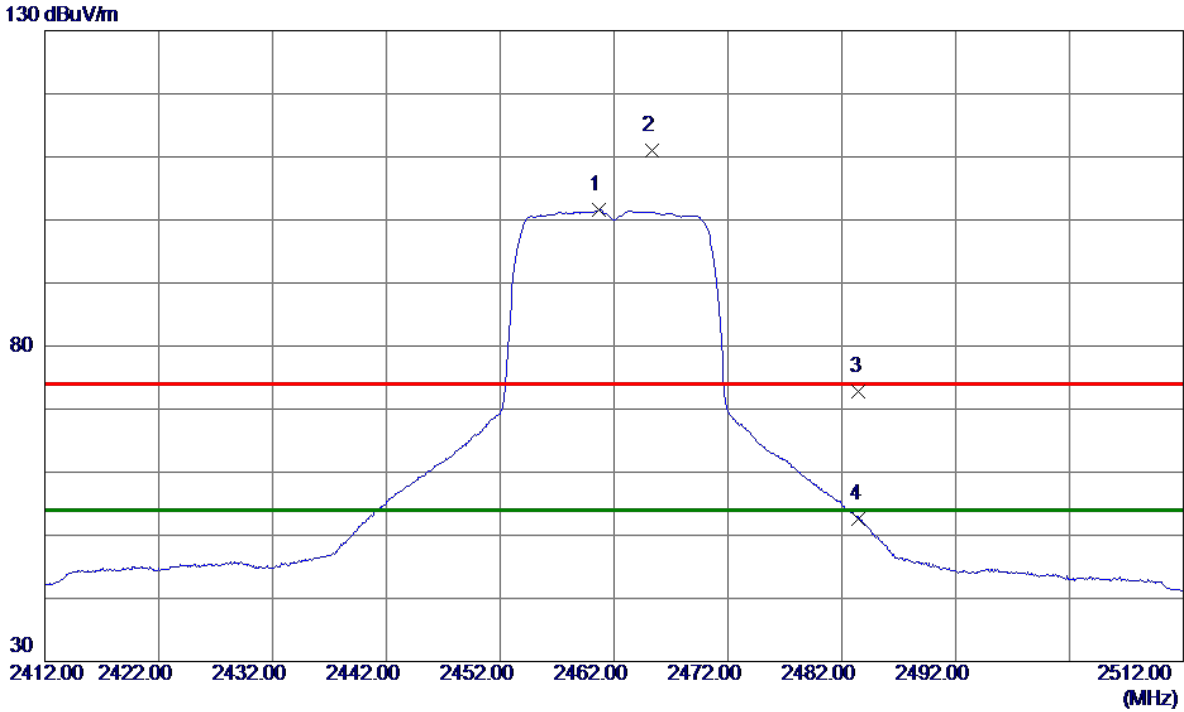
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4913.500	29.66	6.30	35.96	54.00	-18.04	AVG	
2		4915.740	40.63	6.30	46.93	74.00	-27.07	peak	

REMARKS:

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

Test Mode: TX G Mode 2462 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2460.7000	90.28	11.27	101.55	54.00	47.55	AVG	No Limit
2	2465.3000	99.67	11.29	110.96	74.00	36.96	Peak	No Limit
3	2483.5000	61.49	11.35	72.84	74.00	-1.16	Peak	
4	2483.5000	41.32	11.35	52.67	54.00	-1.33	AVG	

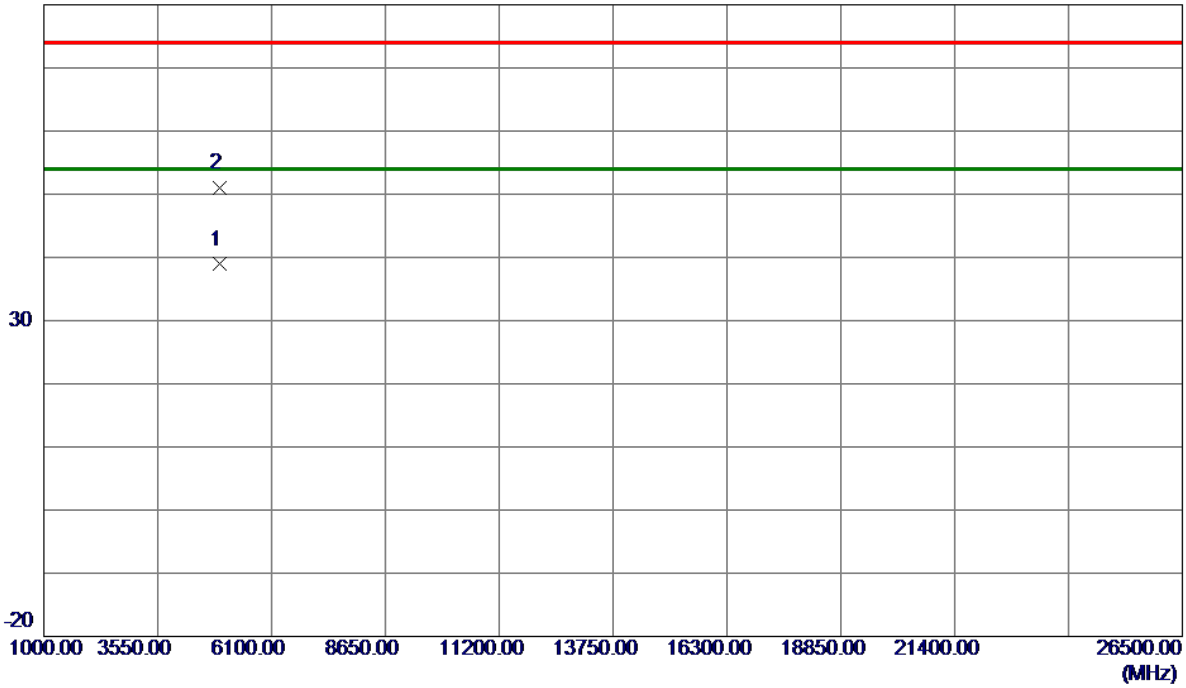
REMARKS:

- (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



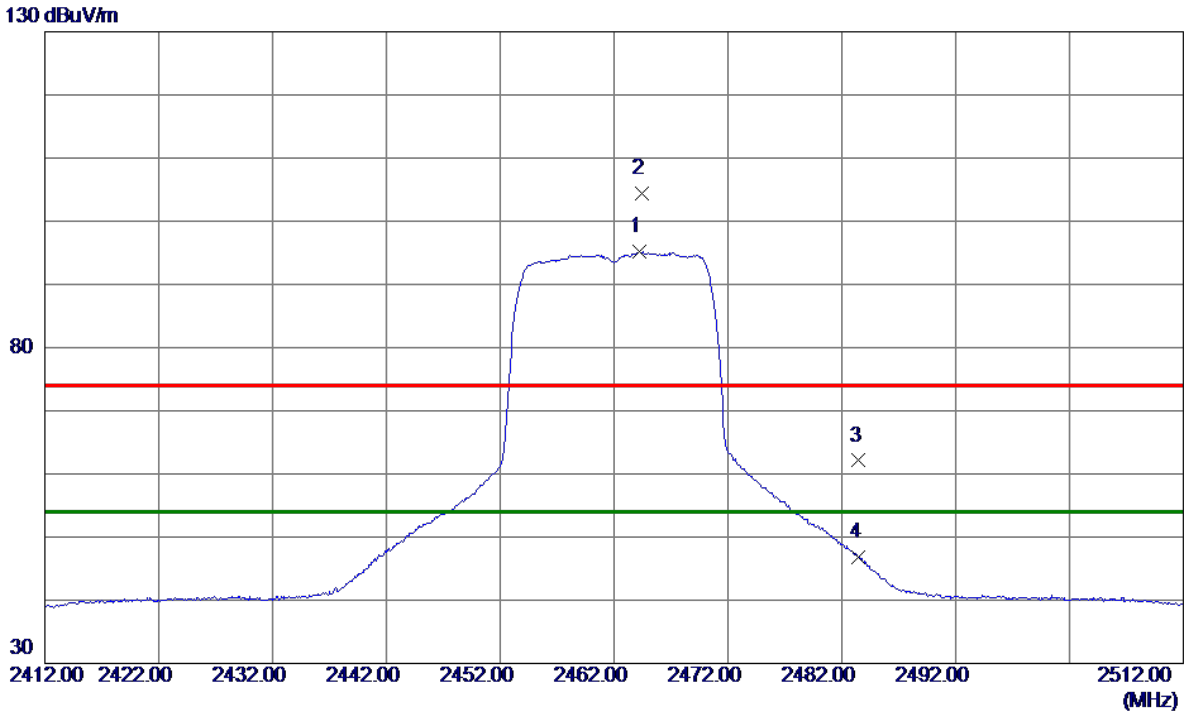
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4925.0600	32.57	6.33	38.90	54.00	-15.10	AVG	
2	4928.9100	44.73	6.34	51.07	74.00	-22.93	Peak	

REMARKS:

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

Test Mode: TX G Mode 2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2464.2500	83.86	11.29	95.15	54.00	41.15	AVG	No Limit
2	2464.4500	93.16	11.29	104.45	74.00	30.45	Peak	No Limit
3	2483.5000	50.75	11.35	62.10	74.00	-11.90	Peak	
4	2483.5000	35.40	11.35	46.75	54.00	-7.25	AVG	

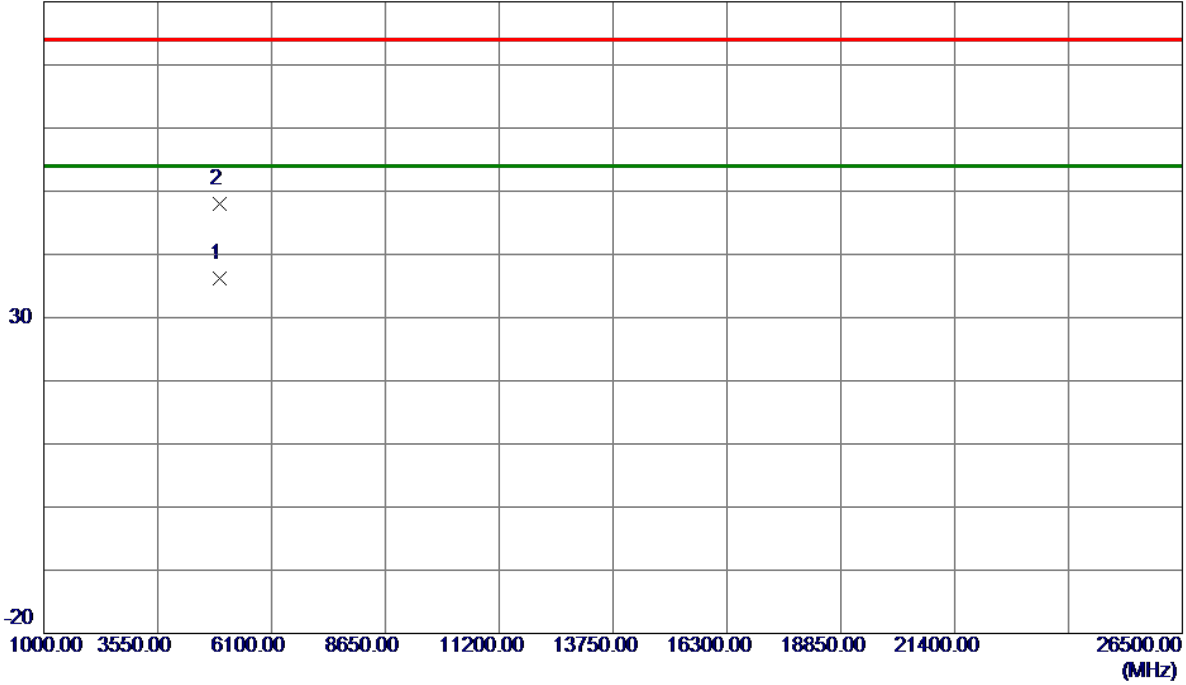
REMARKS:

- (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



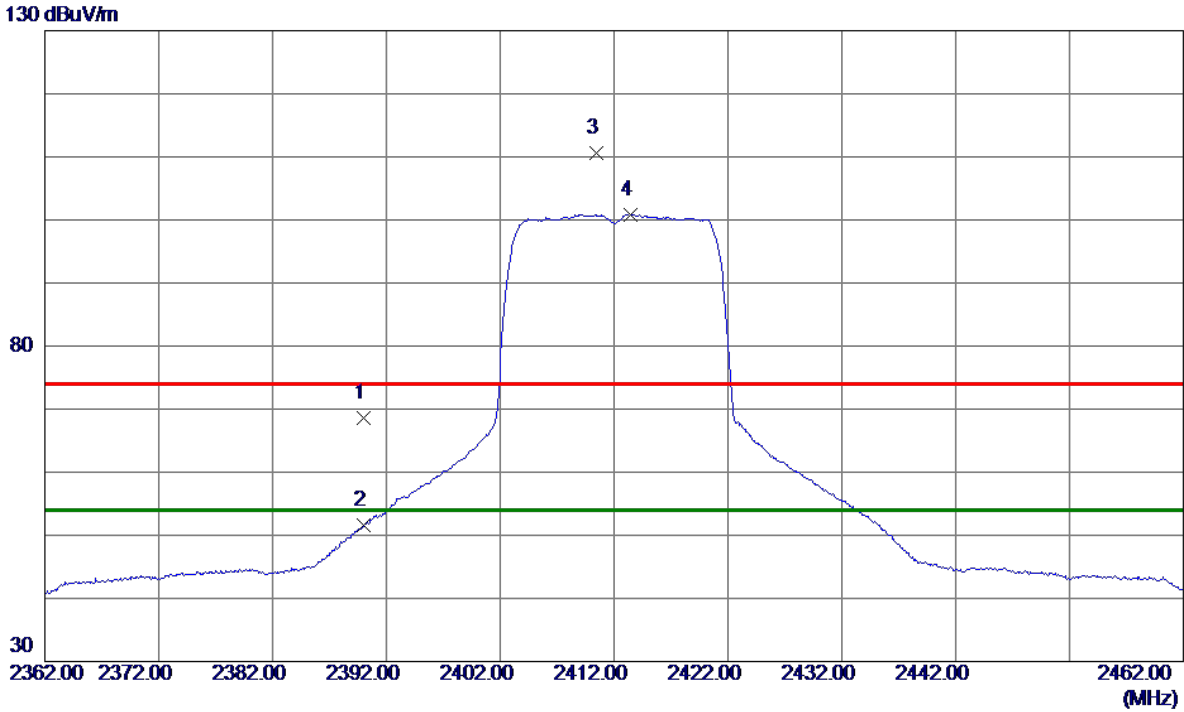
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4925.8200	29.94	6.33	36.27	54.00	-17.73	AVG	
2	4926.0800	41.75	6.33	48.08	74.00	-25.92	Peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	57.61	11.03	68.64	74.00	-5.36	Peak	
2	2390.0000	40.53	11.03	51.56	54.00	-2.44	AVG	
3	2410.4500	99.47	11.10	110.57	74.00	36.57	Peak	No Limit
4 *	2413.4500	89.73	11.11	100.84	54.00	46.84	AVG	No Limit

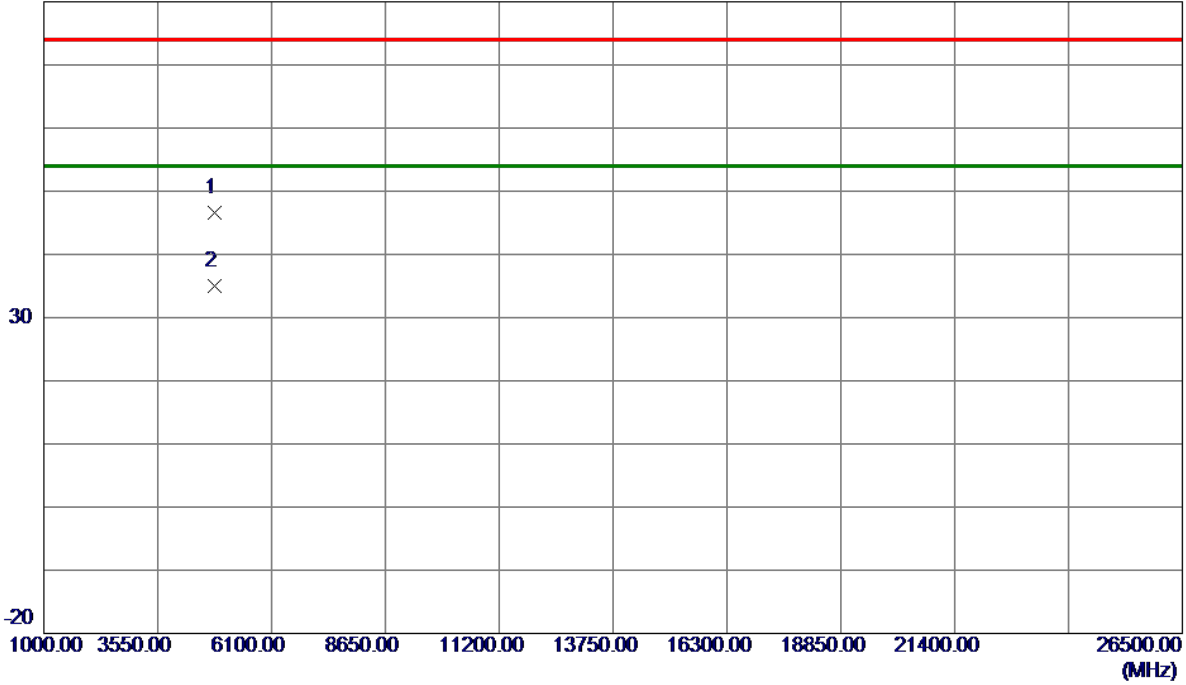
REMARKS:

- (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



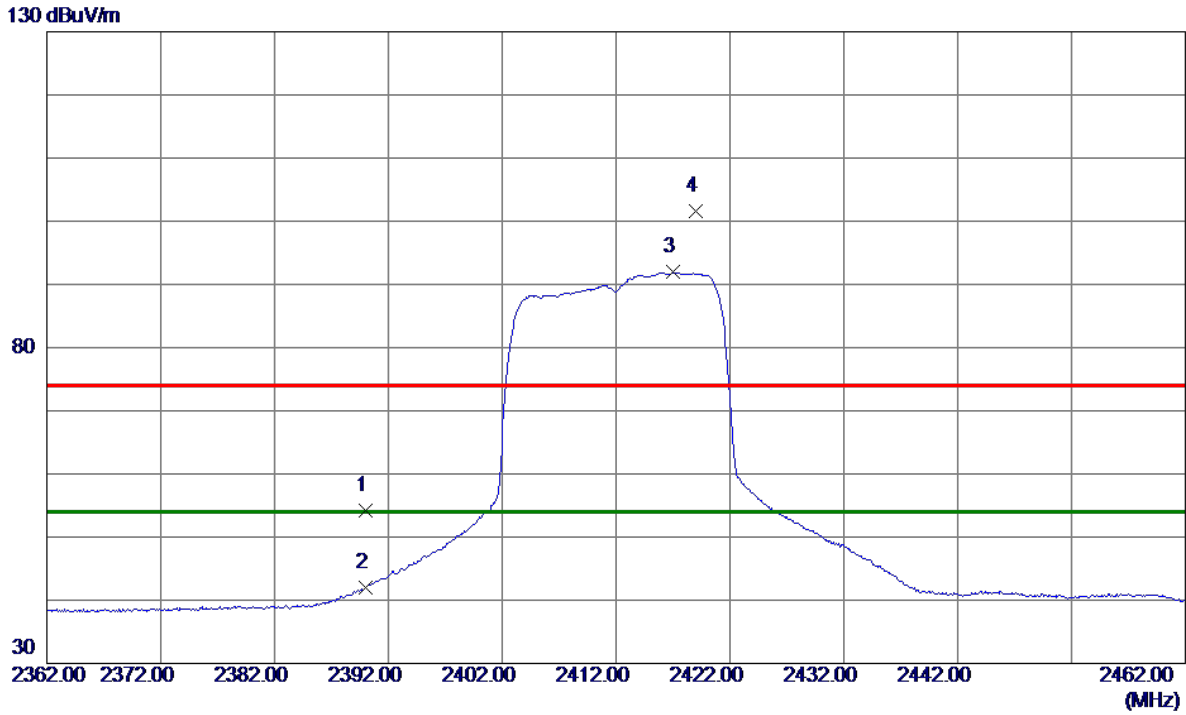
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4821.9500	40.52	6.01	46.53	74.00	-27.47	Peak	
2 *	4824.8200	29.07	6.02	35.09	54.00	-18.91	AVG	

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	43.09	11.03	54.12	74.00	-19.88	Peak	
2	2390.0000	30.98	11.03	42.01	54.00	-11.99	AVG	
3 *	2416.9500	80.78	11.12	91.90	54.00	37.90	AVG	No Limit
4	2419.0000	90.44	11.13	101.57	74.00	27.57	Peak	No Limit

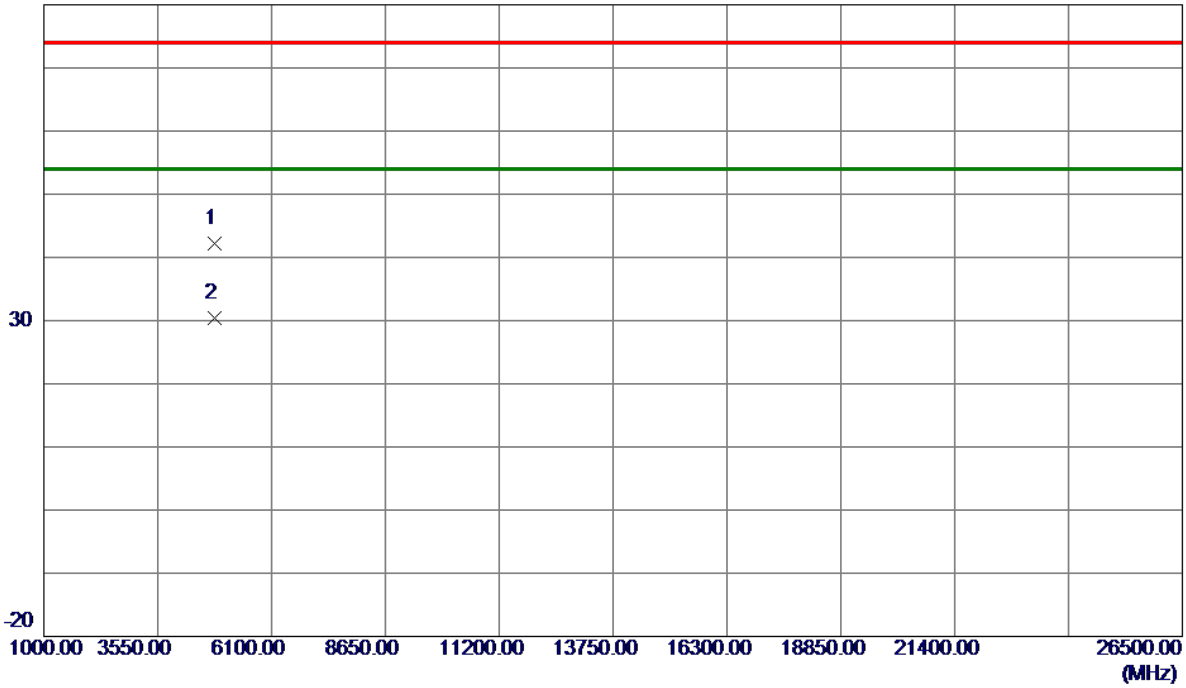
REMARKS:

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

Test Mode: TX N-20M Mode 2412 MHz

Horizontal

80 dBuV/m



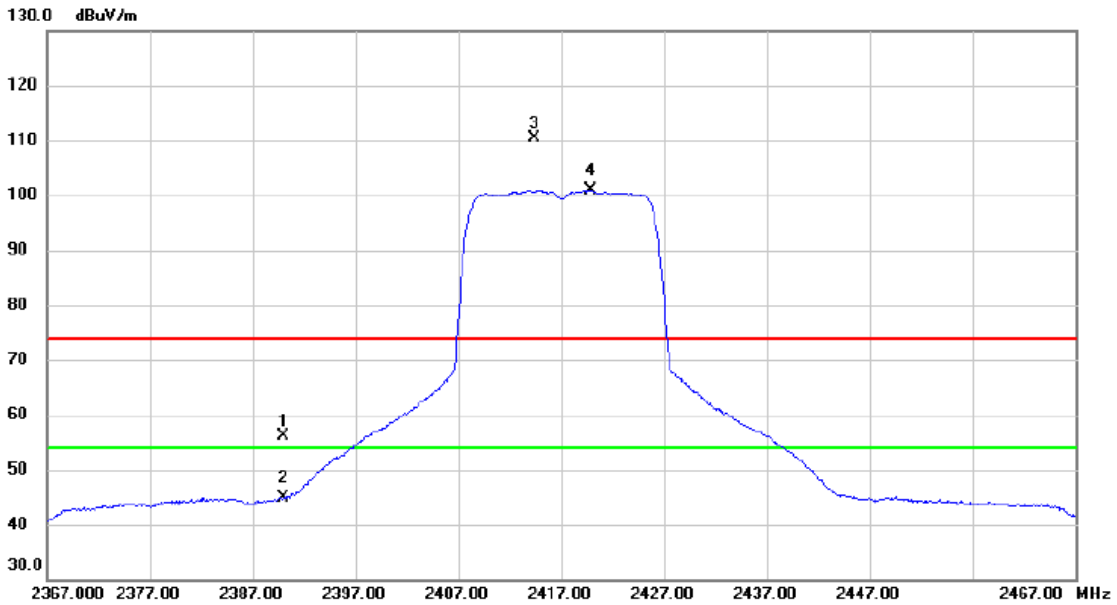
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4817.7599	36.26	6.00	42.26	74.00	-31.74	Peak	
2 *	4823.1100	24.35	6.02	30.37	54.00	-23.63	AVG	

REMARKS:

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

Test Mode: TX N-20M Mode 2417 MHz

Vertical



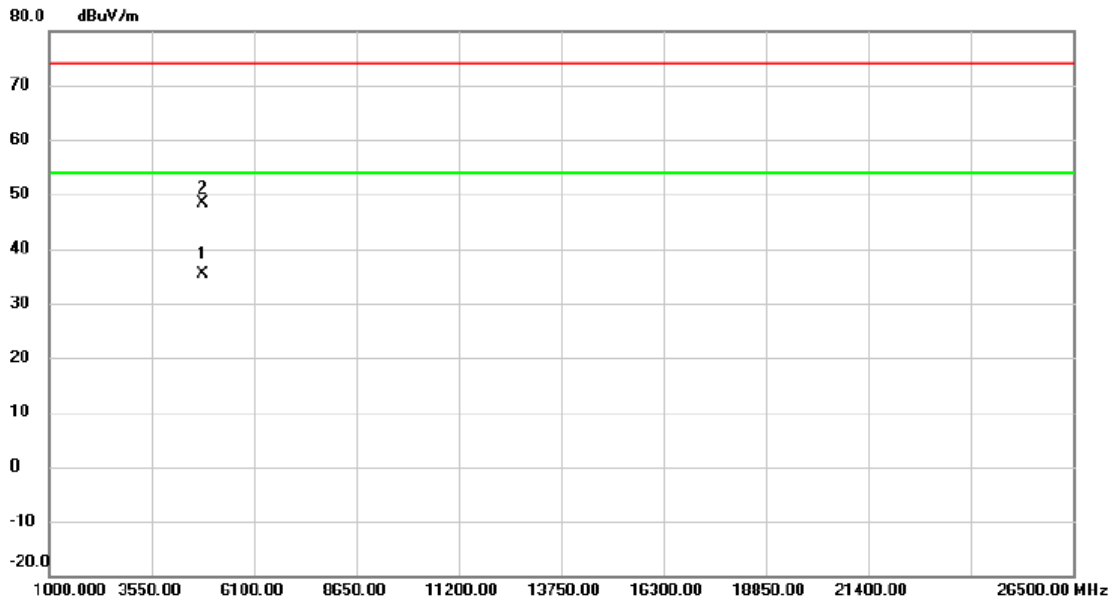
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	45.01	11.03	56.04	74.00	-17.96	peak	
2		2390.000	33.77	11.03	44.80	54.00	-9.20	AVG	
3	X	2414.400	99.37	11.11	110.48	74.00	36.48	peak	No Limit
4	*	2419.800	89.71	11.14	100.85	54.00	46.85	AVG	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. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4836.650	29.35	6.06	35.41	54.00	-18.59	AVG	
2		4840.300	42.19	6.07	48.26	74.00	-25.74	peak	

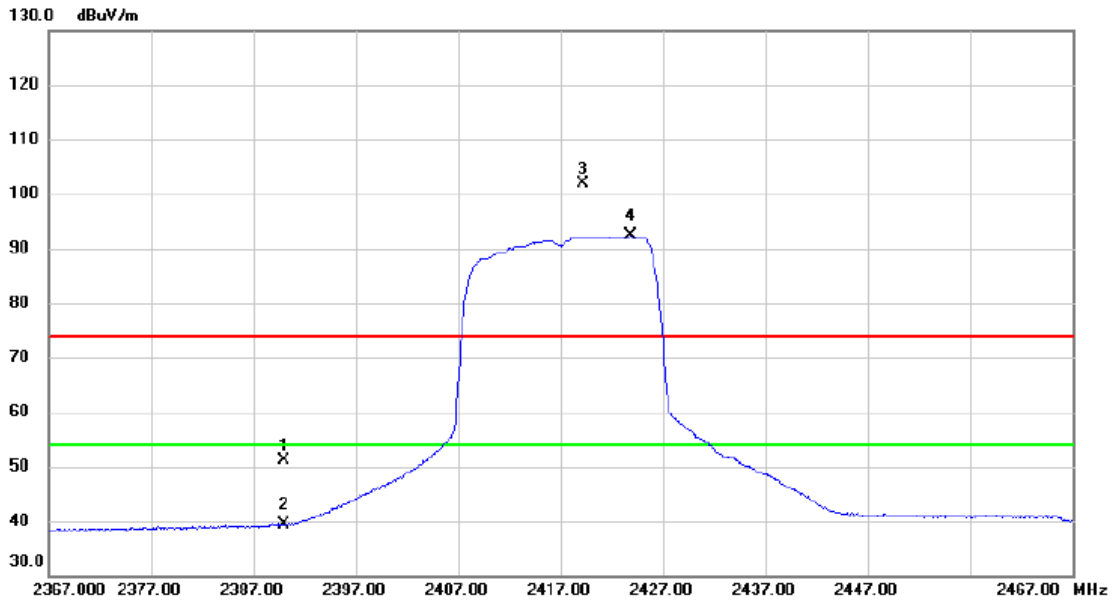
REMARKS:

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

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

Test Mode: TX N-20M Mode 2417 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	39.98	11.03	51.01	74.00	-22.99	peak	
2		2390.000	28.37	11.03	39.40	54.00	-14.60	AVG	
3	X	2419.250	90.85	11.13	101.98	74.00	27.98	peak	No Limit
4	*	2423.900	81.11	11.15	92.26	54.00	38.26	AVG	No Limit

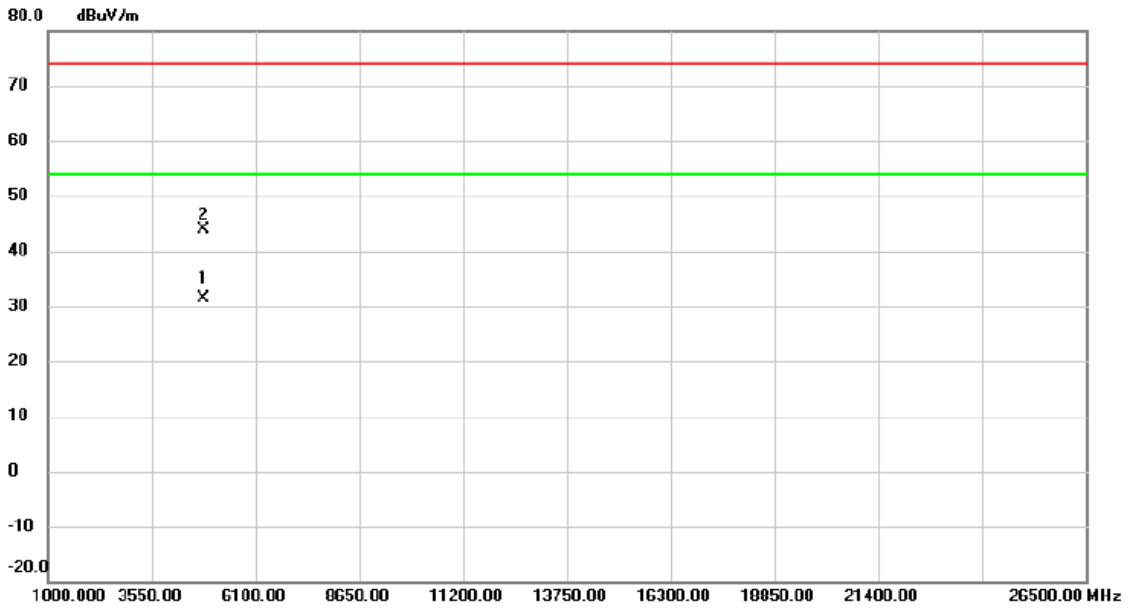
REMARKS:

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

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

Test Mode: TX N-20M Mode 2417 MHz

Horizontal



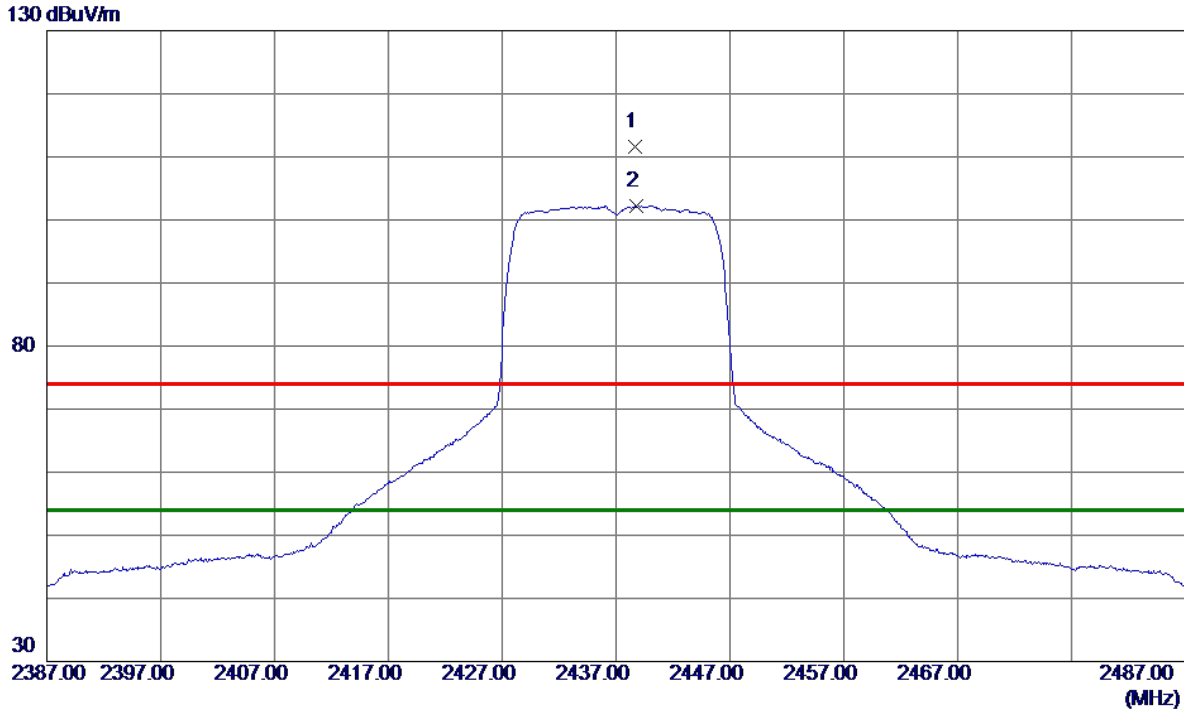
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4838.030	25.28	6.06	31.34	54.00	-22.66	AVG	
2	4838.960	37.83	6.07	43.90	74.00	-30.10	peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2438.7000	100.43	11.20	111.63	74.00	37.63	Peak	No Limit
2 *	2438.7500	91.03	11.20	102.23	54.00	48.23	AVG	No Limit

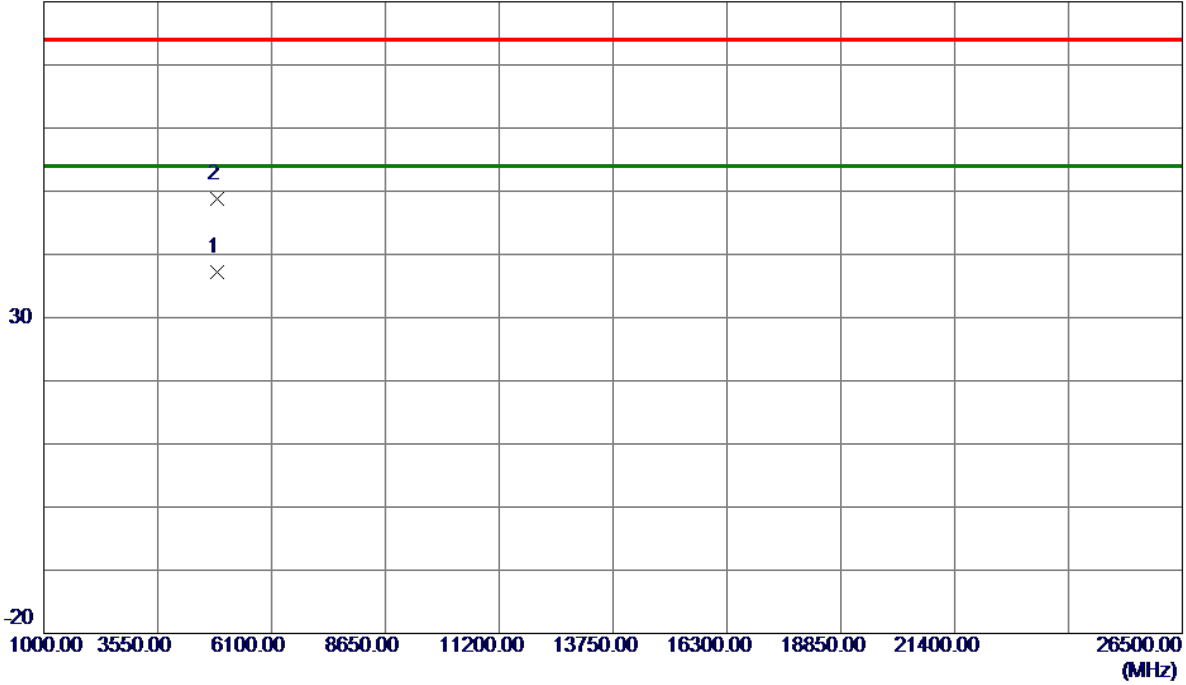
REMARKS:

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

Test Mode: TX N-20M Mode 2437 MHz

Vertical

80 dBuV/m



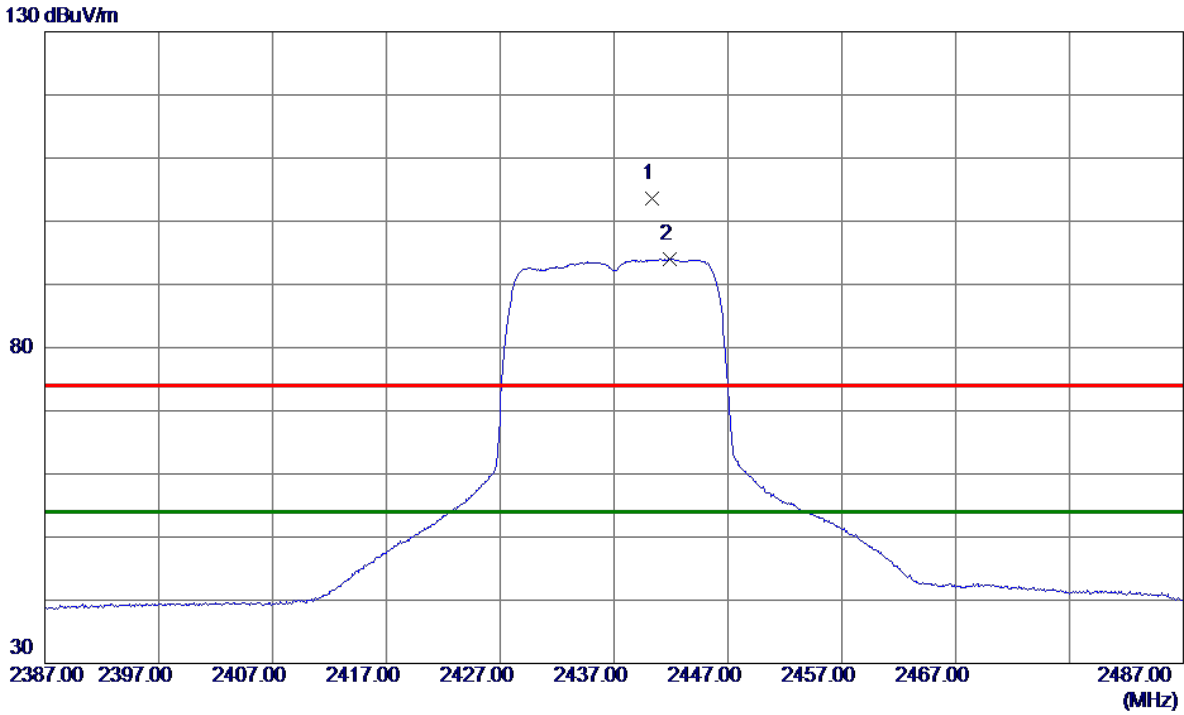
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4875.9500	31.02	6.18	37.20	54.00	-16.80	AVG	
2	4877.0000	42.53	6.18	48.71	74.00	-25.29	Peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - 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	2440.3000	92.46	11.20	103.66	74.00	29.66	Peak	No Limit
2 *	2441.9000	82.77	11.21	93.98	54.00	39.98	AVG	No Limit

REMARKS:

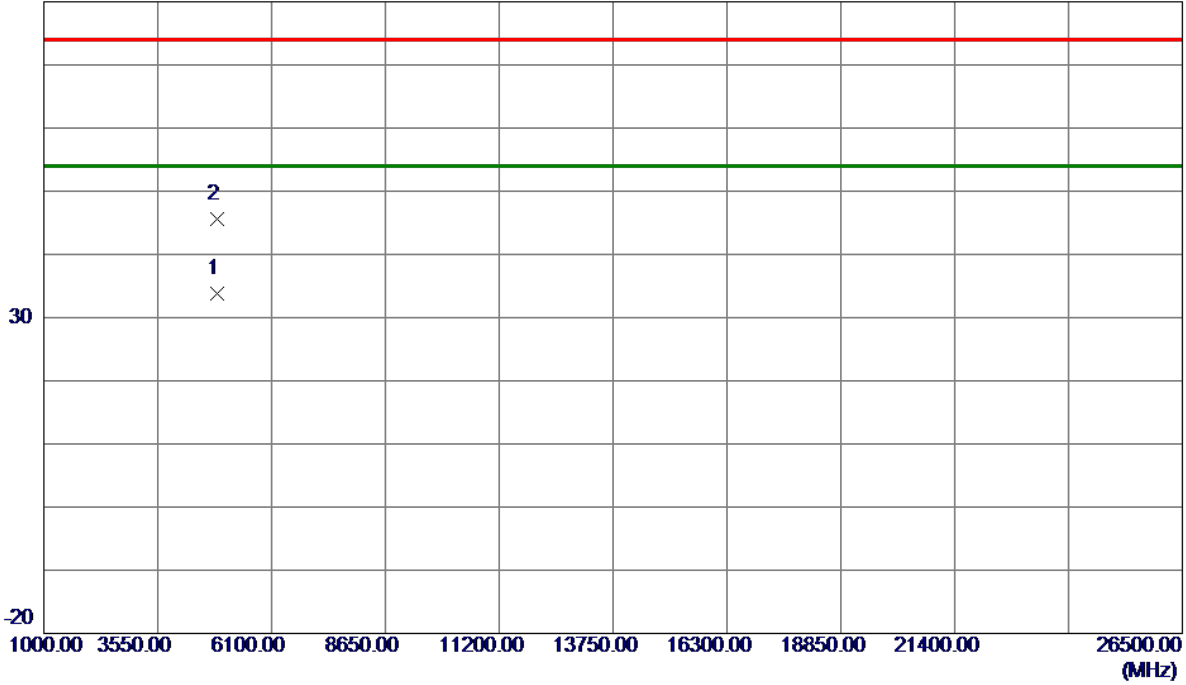
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX N-20M Mode 2437 MHz

Horizontal

80 dBuV/m



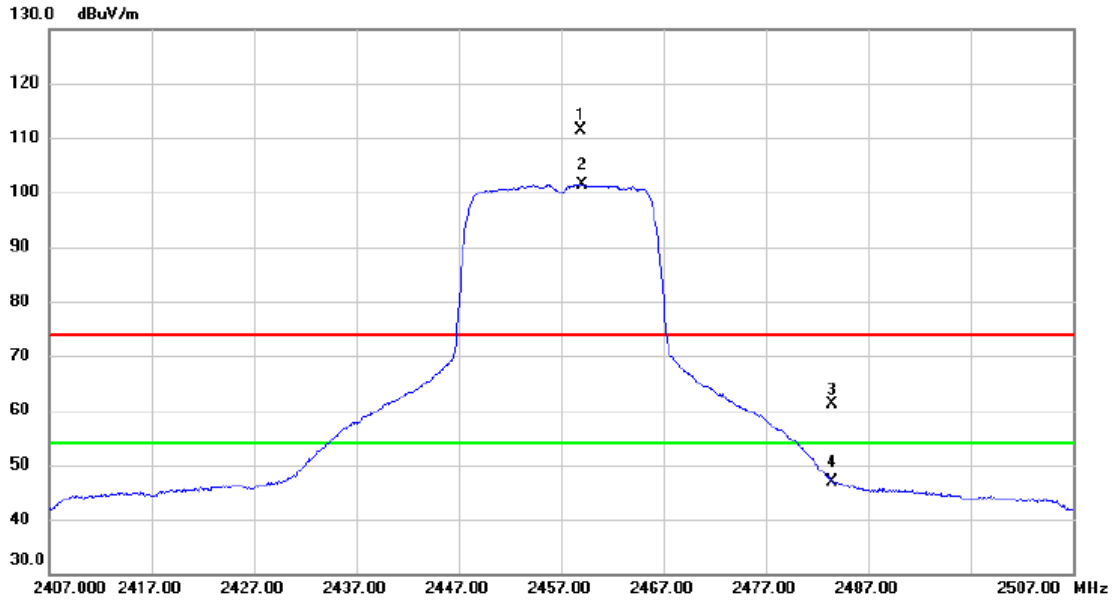
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.6000	27.68	6.18	33.86	54.00	-20.14	AVG	
2	4882.8200	39.37	6.20	45.57	74.00	-28.43	Peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2457 MHz

Vertical



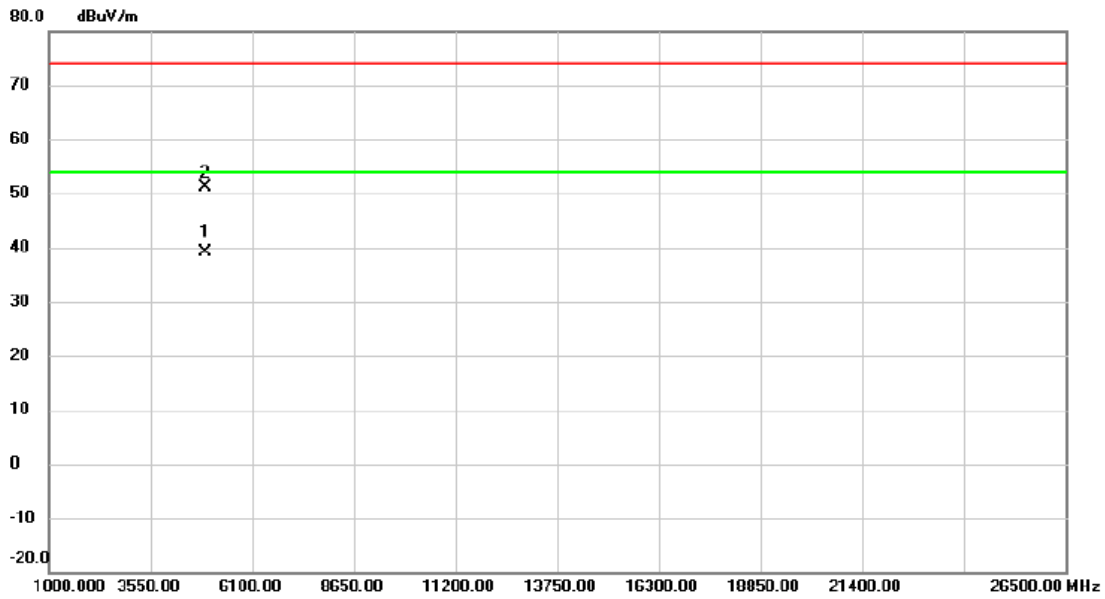
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2458.950	100.05	11.27	111.32	74.00	37.32	peak	No Limit
2	*	2459.050	90.15	11.27	101.42	54.00	47.42	AVG	No Limit
3		2483.500	49.75	11.35	61.10	74.00	-12.90	peak	
4		2483.500	35.61	11.35	46.96	54.00	-7.04	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



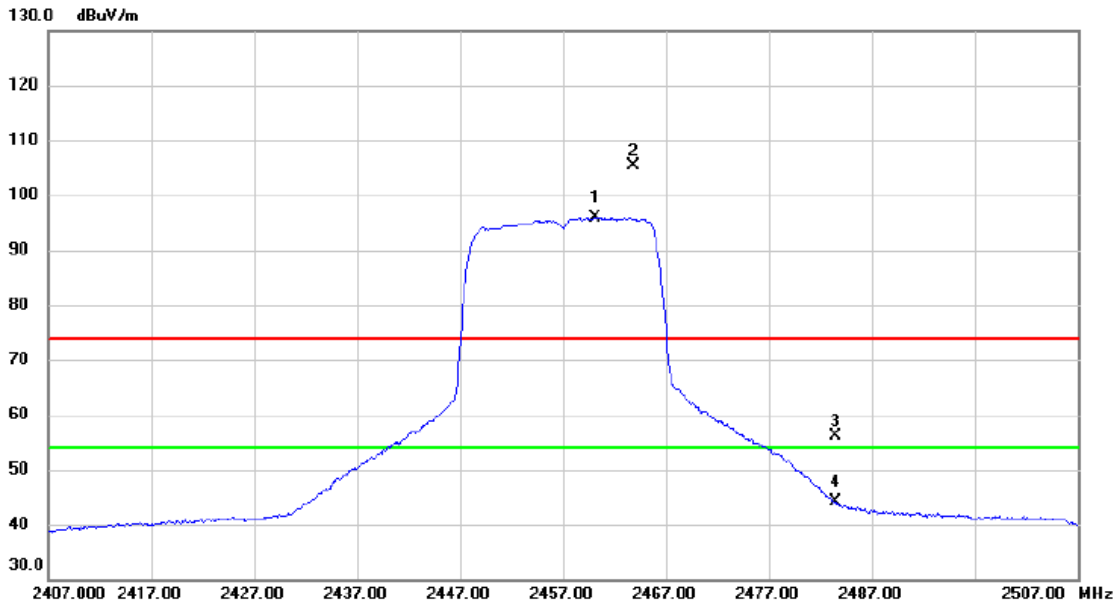
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4915.650	32.92	6.30	39.22	54.00	-14.78	AVG	
2		4919.100	44.74	6.31	51.05	74.00	-22.95	peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2457 MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2460.150	84.66	11.27	95.93	54.00	41.93	AVG	No Limit
2	X	2463.900	93.99	11.29	105.28	74.00	31.28	peak	No Limit
3		2483.500	44.89	11.35	56.24	74.00	-17.76	peak	
4		2483.500	32.66	11.35	44.01	54.00	-9.99	AVG	

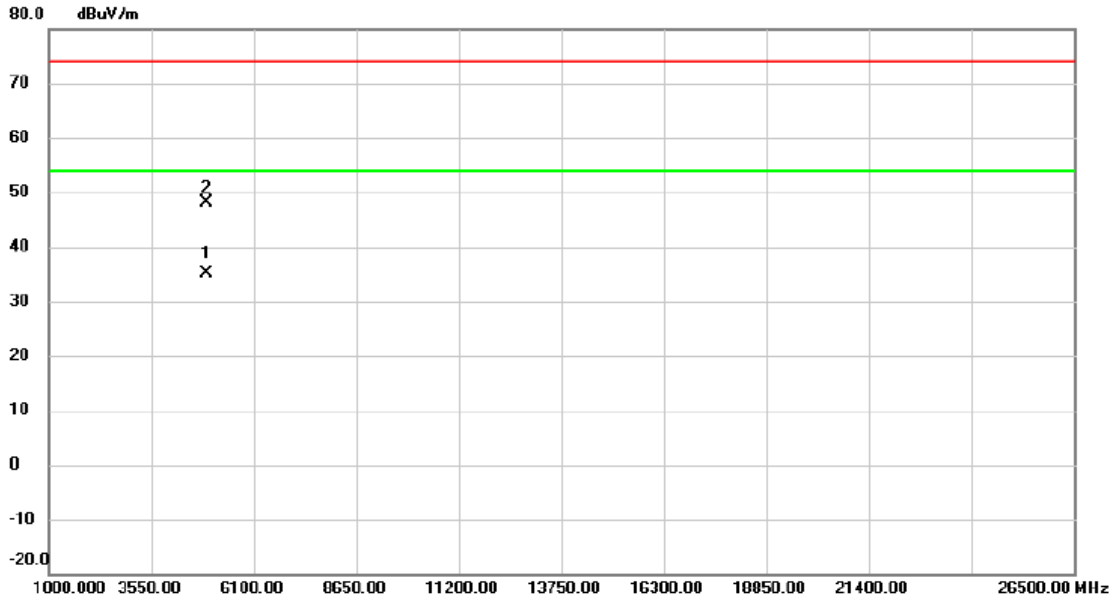
REMARKS:

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

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

Test Mode: TX N-20M Mode 2457 MHz

Horizontal



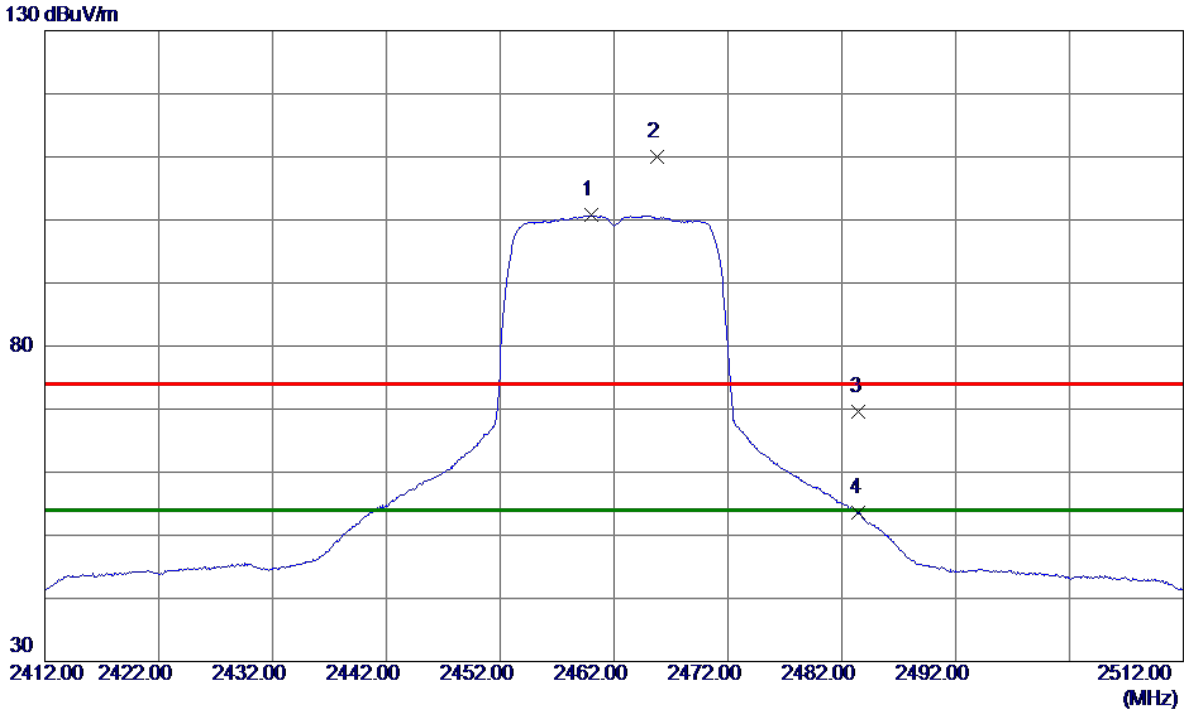
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4913.490	28.90	6.30	35.20	54.00	-18.80	AVG	
2		4914.740	41.89	6.30	48.19	74.00	-25.81	peak	

REMARKS:

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

Test Mode: TX N-20M Mode 2462 MHz

Vertical



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2459.9500	89.44	11.27	100.71	54.00	46.71	AVG	No Limit
2	2465.8000	98.66	11.29	109.95	74.00	35.95	Peak	No Limit
3	2483.5000	58.16	11.35	69.51	74.00	-4.49	Peak	
4	2483.5000	42.24	11.35	53.59	54.00	-0.41	AVG	

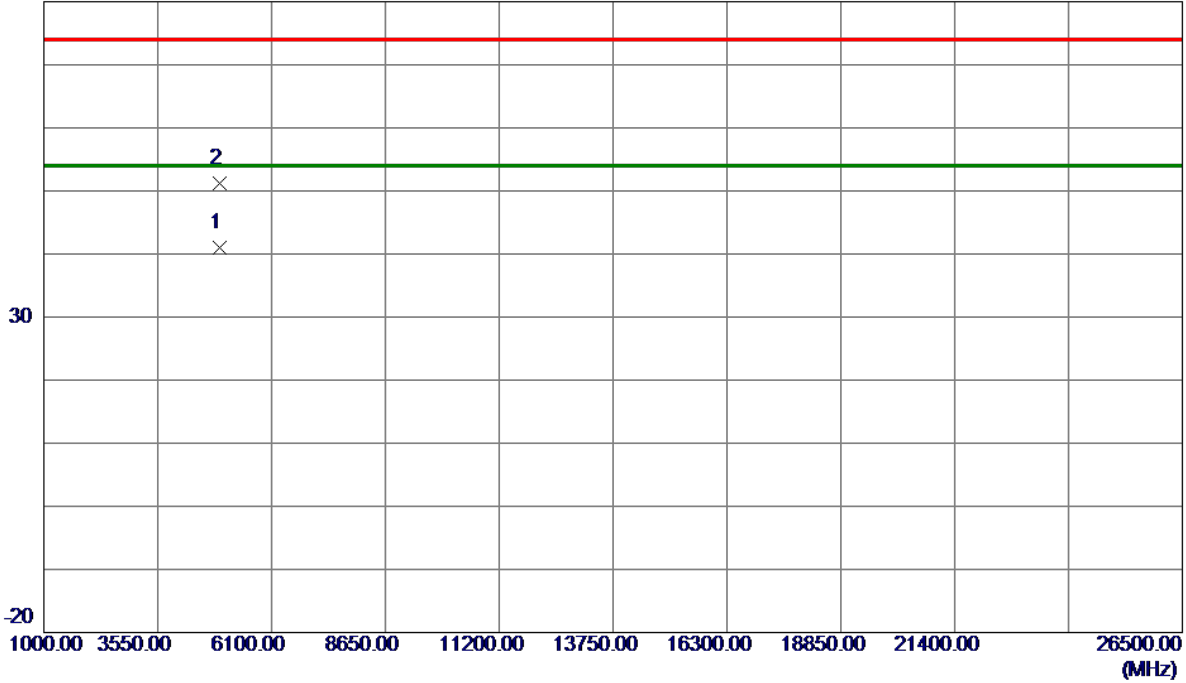
REMARKS:

- (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 *	4924.4500	34.64	6.33	40.97	54.00	-13.03	AVG	
2	4924.8000	44.92	6.33	51.25	74.00	-22.75	Peak	

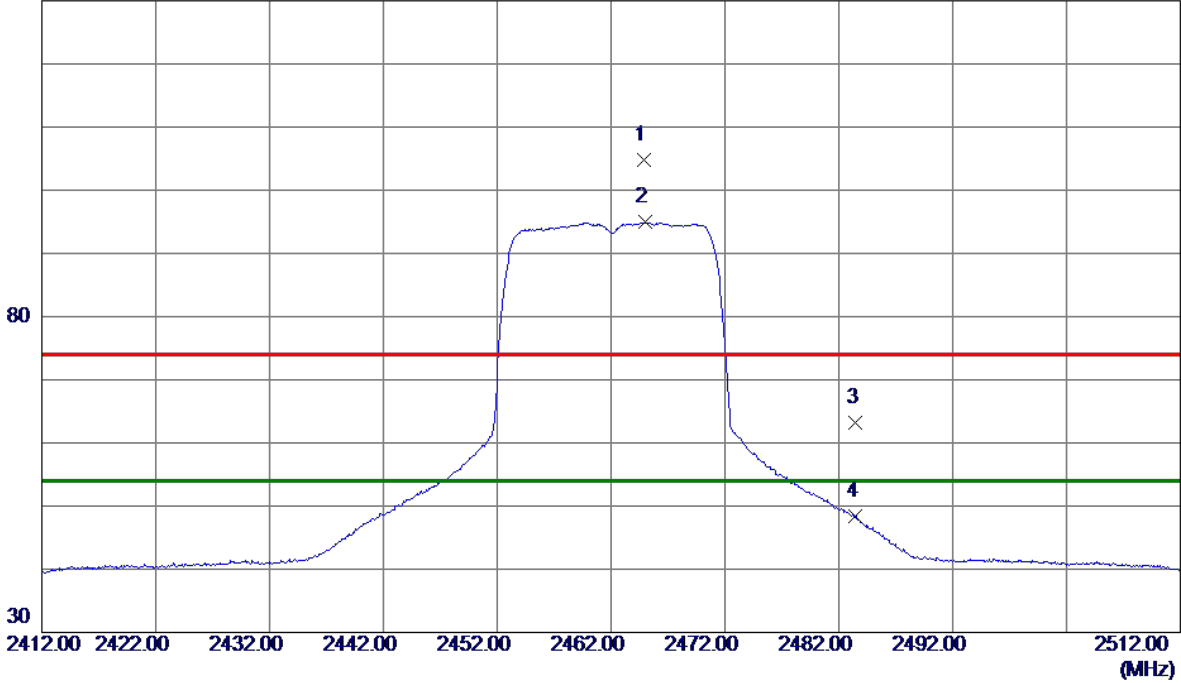
REMARKS:

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

Test Mode: TX 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	2464.8500	93.59	11.29	104.88	74.00	30.88	Peak	No Limit
2 *	2464.9500	83.61	11.29	94.90	54.00	40.90	AVG	No Limit
3	2483.5000	51.92	11.35	63.27	74.00	-10.73	Peak	
4	2483.5000	36.98	11.35	48.33	54.00	-5.67	AVG	

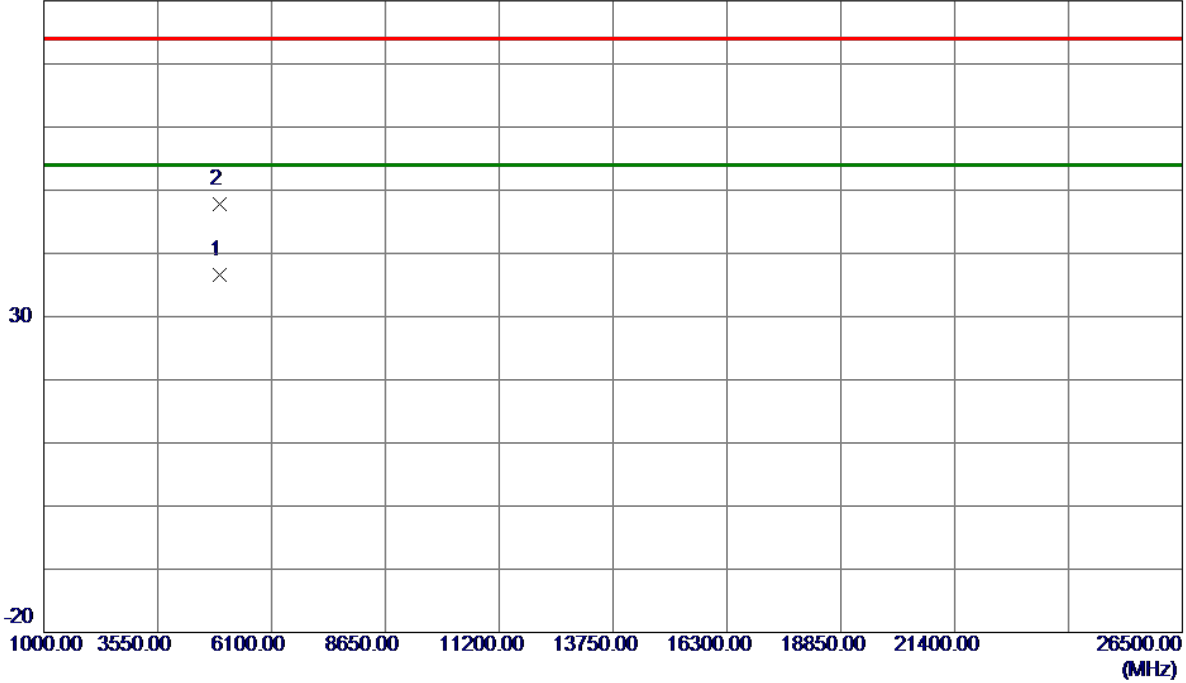
REMARKS:

- (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 *	4924.4100	30.23	6.33	36.56	54.00	-17.44	AVG	
2	4931.4500	41.51	6.35	47.86	74.00	-26.14	Peak	

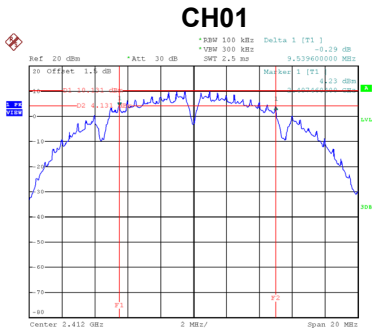
REMARKS:

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

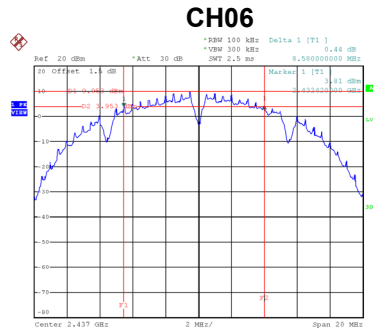
APPENDIX E - BANDWIDTH

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

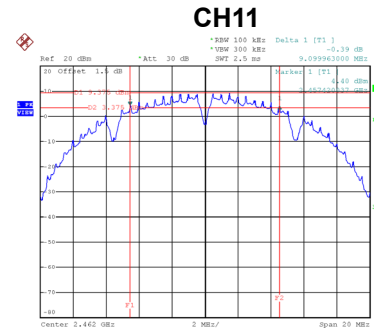
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	9.54	500	Complies
06	2437	8.58	500	Complies
11	2462	9.10	500	Complies



Date: 8 JUN 2020 10:08:57

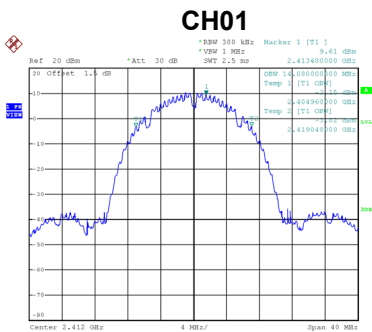


Date: 8 JUN 2020 10:10:28

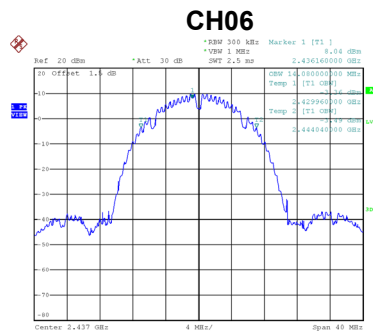


Date: 8 JUN 2020 10:12:11

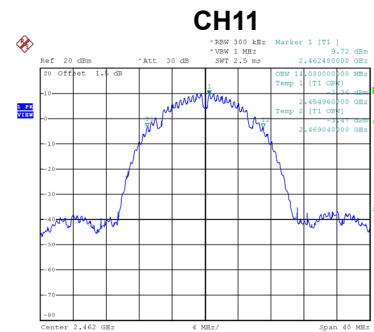
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	14.08	Complies
06	2437	14.08	Complies
11	2462	14.08	Complies



Date: 8 JUN 2020 10:09:05



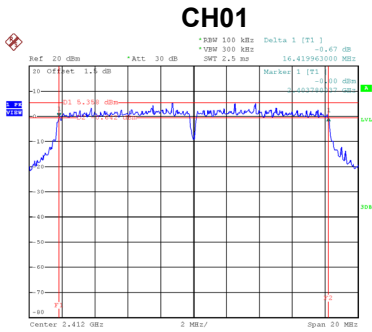
Date: 8 JUN 2020 10:10:35



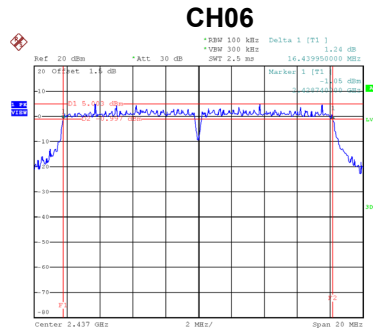
Date: 8 JUN 2020 10:12:18

Test Mode	TX G Mode
-----------	-----------

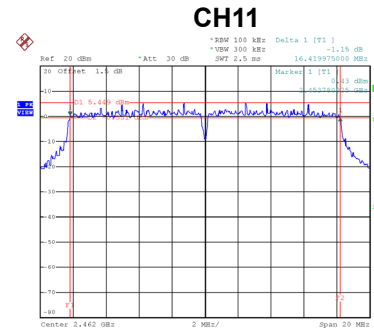
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	16.42	500	Complies
06	2437	16.44	500	Complies
11	2462	16.42	500	Complies



Date: 8 JUN 2020 10:13:42

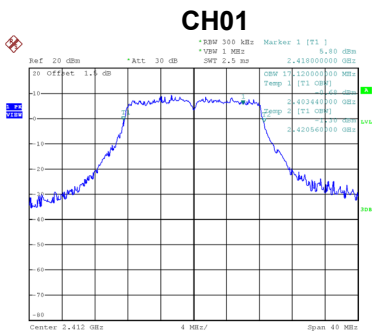


Date: 8 JUN 2020 10:15:01

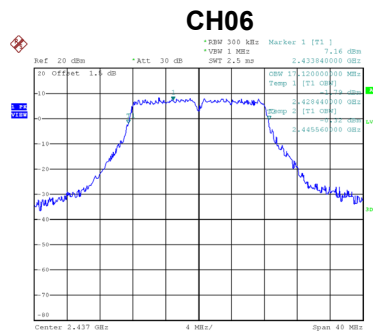


Date: 8 JUN 2020 10:16:29

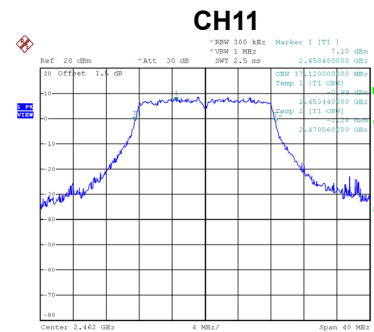
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.12	Complies
06	2437	17.12	Complies
11	2462	17.12	Complies



Date: 8 JUN 2020 10:13:49



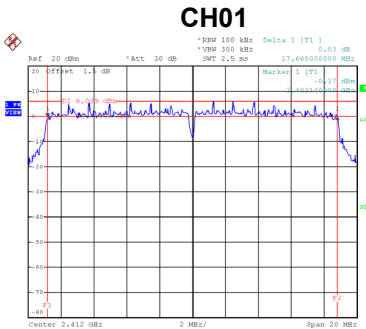
Date: 8 JUN 2020 10:15:08



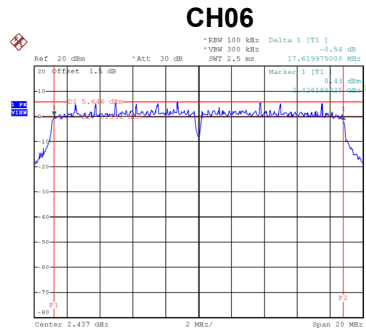
Date: 8 JUN 2020 10:16:36

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

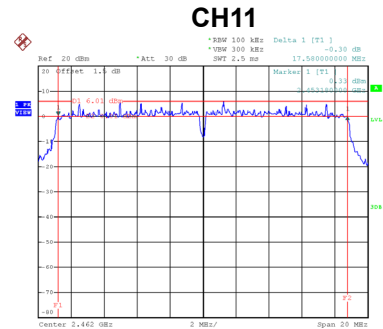
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	17.66	500	Complies
06	2437	17.62	500	Complies
11	2462	17.58	500	Complies



Date: 8.JUN.2020 10:18:07

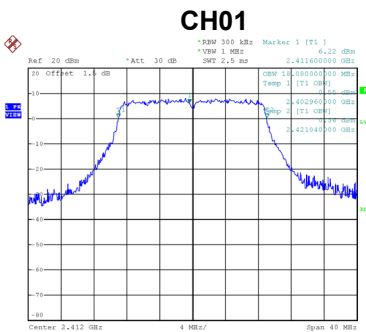


Date: 8.JUN.2020 10:20:58

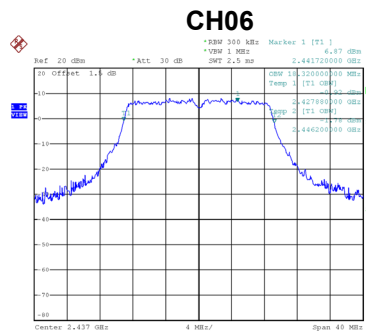


Date: 8.JUN.2020 10:22:26

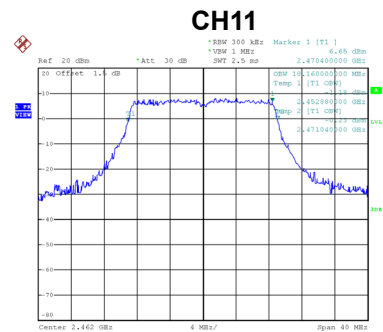
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	18.08	Complies
06	2437	18.32	Complies
11	2462	18.16	Complies



Date: 8.JUN.2020 10:18:15



Date: 8.JUN.2020 10:21:05



Date: 8.JUN.2020 10:22:33

APPENDIX F - MAXIMUM AVERAGE OUTPUT POWER

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

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.04	0.00	19.04	30.00	1.0000	Complies
06	2437	19.03	0.00	19.03	30.00	1.0000	Complies
11	2462	18.82	0.00	18.82	30.00	1.0000	Complies

Test Mode	TX G Mode
-----------	-----------

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.92	0.26	18.18	30.00	1.0000	Complies
06	2437	17.91	0.26	18.17	30.00	1.0000	Complies
11	2462	17.92	0.26	18.18	30.00	1.0000	Complies

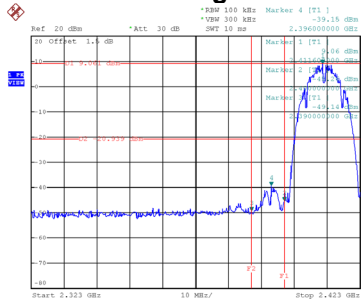
Test Mode	TX N-20M Mode
-----------	---------------

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.95	0.30	18.25	30.00	1.0000	Complies
06	2437	17.93	0.30	18.23	30.00	1.0000	Complies
11	2462	17.46	0.30	17.76	30.00	1.0000	Complies

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS

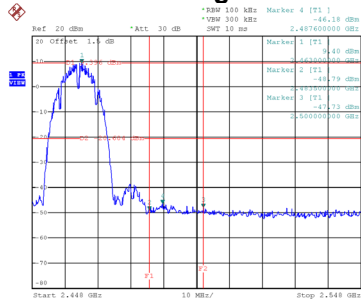
Test Mode TX B Mode

Bandedge-CH01



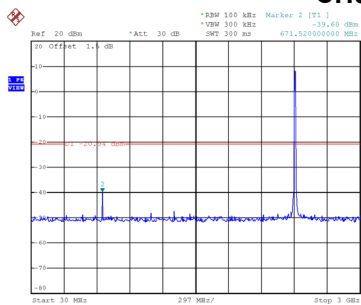
Date: 8.JUN.2020 10:09:12

Bandedge-CH11

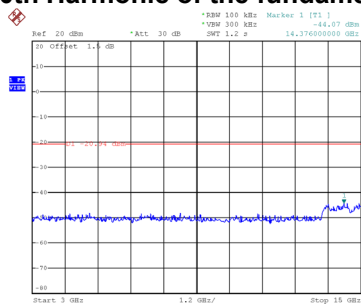


Date: 8.JUN.2020 10:12:26

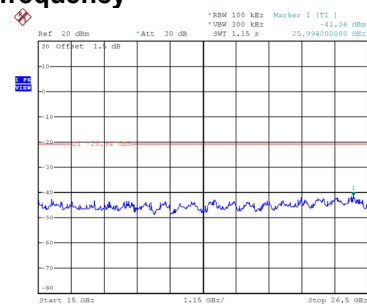
CH01 – 10th Harmonic of the fundamental frequency



Date: 8.JUN.2020 10:09:26

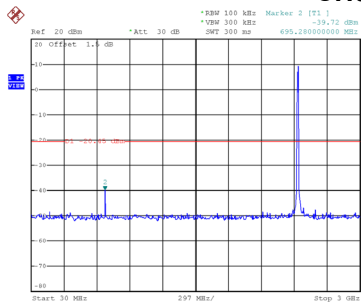


Date: 8.JUN.2020 10:09:34

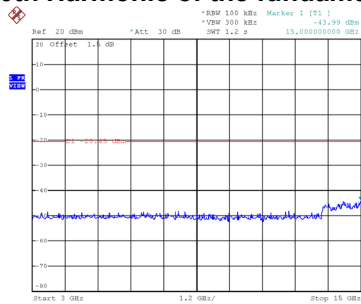


Date: 8.JUN.2020 10:09:41

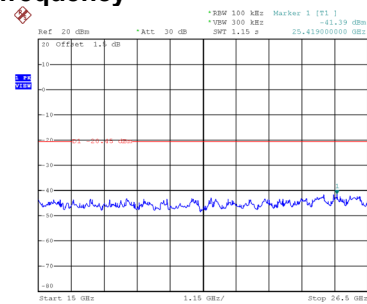
CH06 – 10th Harmonic of the fundamental frequency



Date: 8.JUN.2020 10:10:56

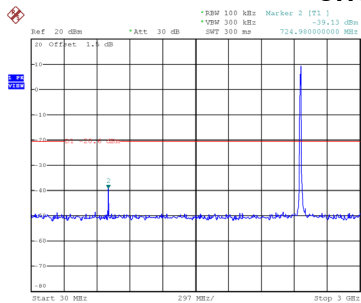


Date: 8.JUN.2020 10:11:04

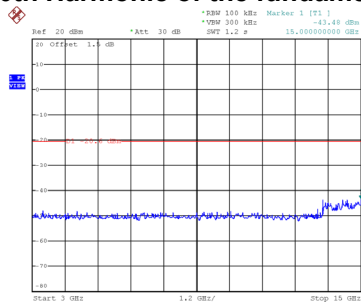


Date: 8.JUN.2020 10:11:12

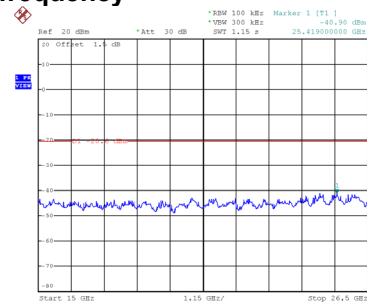
CH11 – 10th Harmonic of the fundamental frequency



Date: 8.JUN.2020 10:12:41



Date: 8.JUN.2020 10:12:50



Date: 8.JUN.2020 10:12:58