

FCC Radio Test Report

FCC ID:Q78-ZXHNF680V6

This report concerns:Original Grant

Project No. : 1904H001
Equipment : GPON ONT
Brand Name : ZTE
Test Model : ZXHN F680
Series Model : N/A
Applicant : ZTE Corporation
Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Manufacturer : ZTE Corporation
Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Date of Receipt : Apr. 10, 2019
Date of Test : Apr. 10, 2019~Aug. 24, 2019
Issued Date : Sep. 15, 2019
Report Version : R00
Test Sample : Engineering Sample No.:D190403600
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.

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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.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Sep. 15, 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	N/A	-----
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:

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

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 DesignationNumber 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	150 kHz~30MHz	2.32

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	-	3.80
		26.5GHz~ 40GHz	-	4.30

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	26°C	54.2%	DC 12V	Robin Zhang
Radiated Emissions-9K-30MHz	24°C	68%	AC 120V	Robin Zhang
Radiated Emissions-30 MHz to 1GHz	24°C	68%	AC 120V	Bert Xu
Radiated Emissions-Above 1000 MHz	24°C	68%	AC 120V	Sheldon Ou
Bandwidth	26°C	54.2%	DC 12V	Jonas Chen
Maximum output power& e.i.r.p.	26°C	54.2%	DC 12V	Jonas Chen
Conducted Spurious Emissions	26°C	54.2%	DC 12V	Jonas Chen
Power Spectral Density	26°C	54.2%	DC 12V	Jonas Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	GPON ONT
Brand Name	ZTE
Test Model	ZXHN F680
Series Model	N/A
Model Difference(s)	N/A
Software Version	V6.0.xx
Hardware Version	V6.0
Power Source	DC Voltage supplied from AC/DC adapter.
Power Rating	I/P: 100-240V ~ 50/60Hz 0.6A O/P: 12V ---1.5A
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 Non-Beamforming	IEEE 802.11b: 21.16dBm (0.1306 W) IEEE 802.11g: 21.88dBm (0.1543 W) IEEE 802.11n (HT20):22.81dBm (0.1910 W) IEEE 802.11n (HT40):18.78dBm (0.0755 W)

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- 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)	Note
1	N/A	N/A	Dipole	N/A	4.59	N/A
2	N/A	N/A	Dipole	N/A	4.01	N/A

Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=4.59.

4. Table for Antenna Configuration:

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

Radiated emissions test - Below 1GHz	
Final Test Mode:	Description
Mode 5	TX N-20 MHz 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) 802.11b mode: CCK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (13 Mbps)
802.11n HT40mode : BPSK (27 Mbps)
For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated emission below 1GHz test, the IEEE 802.11n20is found to be the worst case and recorded.
- (4) For radiated emission above 1GHz 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.

2.3PARAMETERS OF TEST SOFTWARE

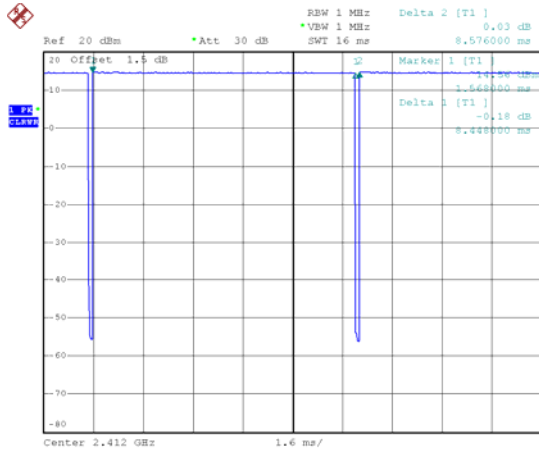
Non-Beamforming

Test Software	QATool_Dbg		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	1D	1B	1C
IEEE 802.11g	16	1F	16
IEEE 802.11n (HT20)	17	20	16
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	12	19	12

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

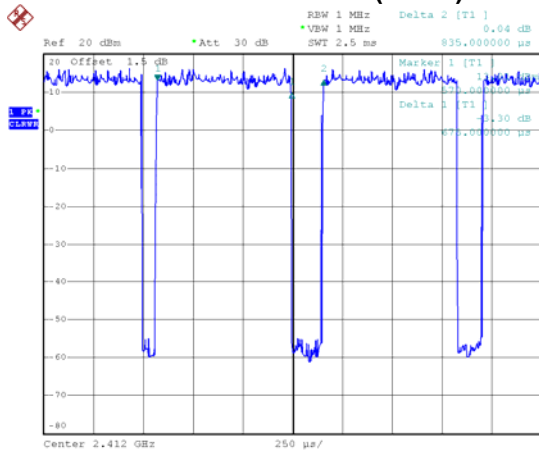


Date: 11.APR.2019 16:28:09

Duty cycle = $8.448 \text{ ms} / 8.576 \text{ ms} = 98.51\%$

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

IEEE 802.11n (HT20)

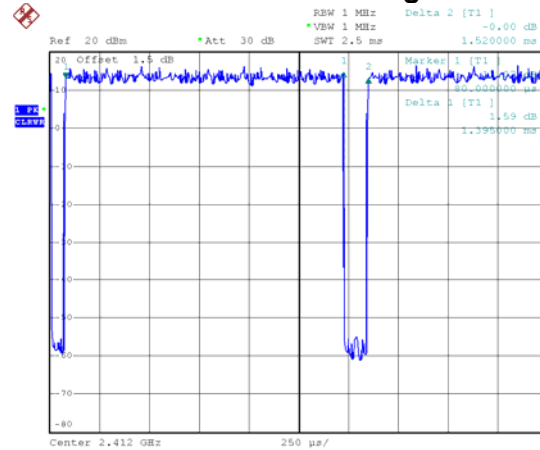


Date: 11.APR.2019 16:28:52

Duty cycle = $0.675 \text{ ms} / 0.835 \text{ ms} = 80.84\%$

Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.92,$

IEEE 802.11g

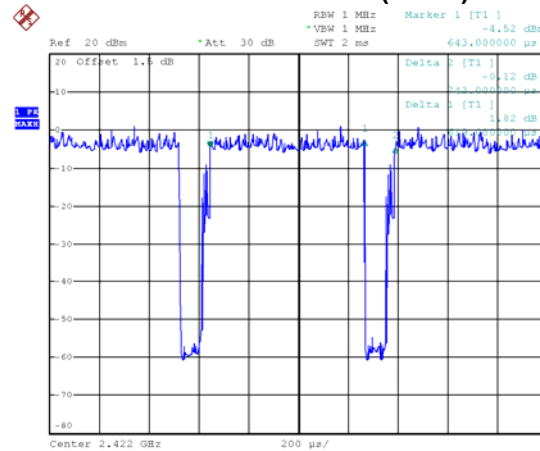


Date: 11.APR.2019 16:28:24

Duty cycle = $1.395 \text{ ms} / 1.520 \text{ ms} = 91.78\%$

Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.37$

IEEE 802.11n (HT40)

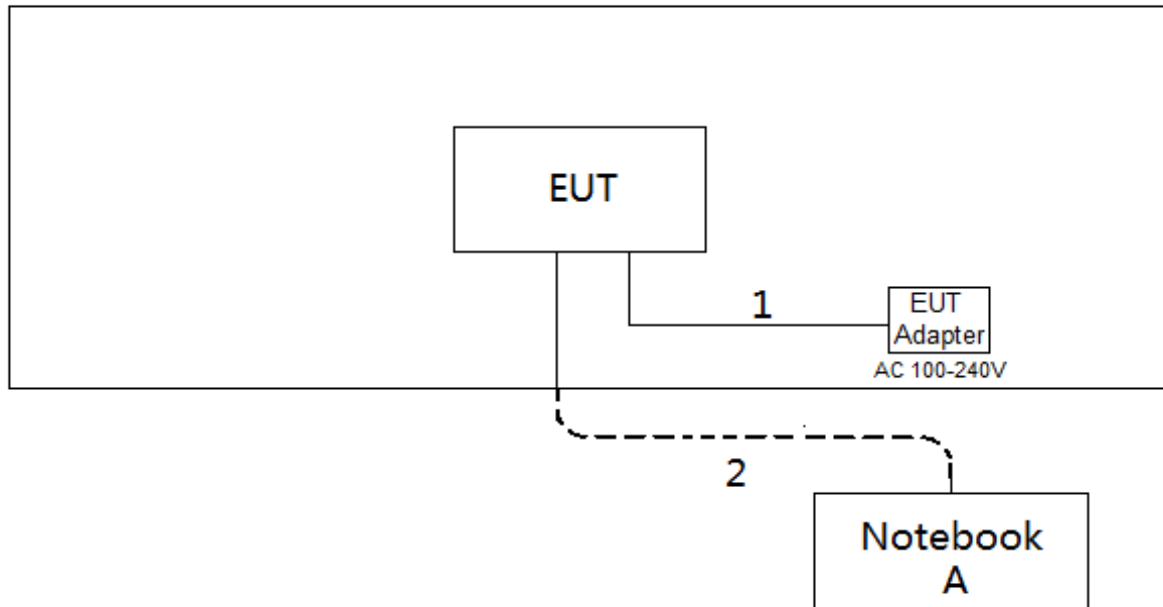


Date: 31.DEC.2002 23:28:40

Duty cycle = $0.619 \text{ ms} / 0.643 \text{ ms} = 96.27\%$

Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.17$

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

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

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

3.AC POWER LINE CONDUCTED EMISSIONS TEST

3.1LIMIT

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

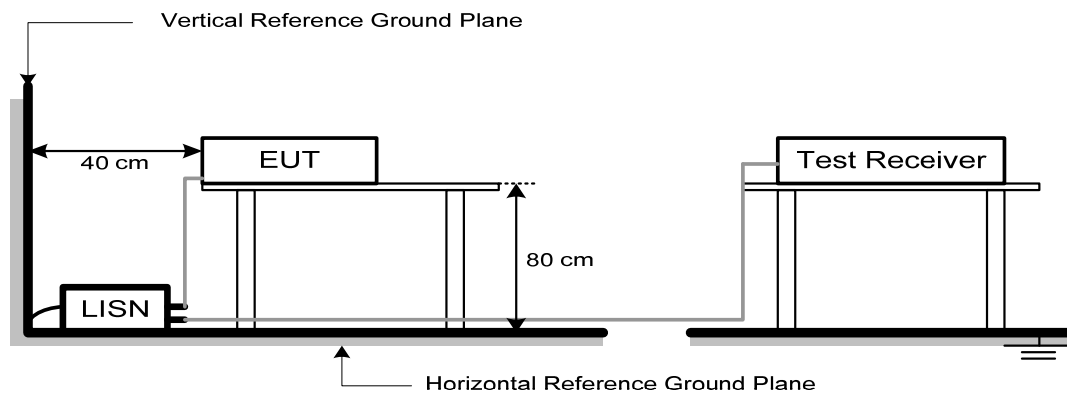
3.2TEST PROCEDURE

- 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 groundplane 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.

3.3DEVIATIONFROMTESTSTANDARD

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 EMISSION 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-1000MHz)

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 1000MHz)

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

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

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

4.2TEST PROCEDURE

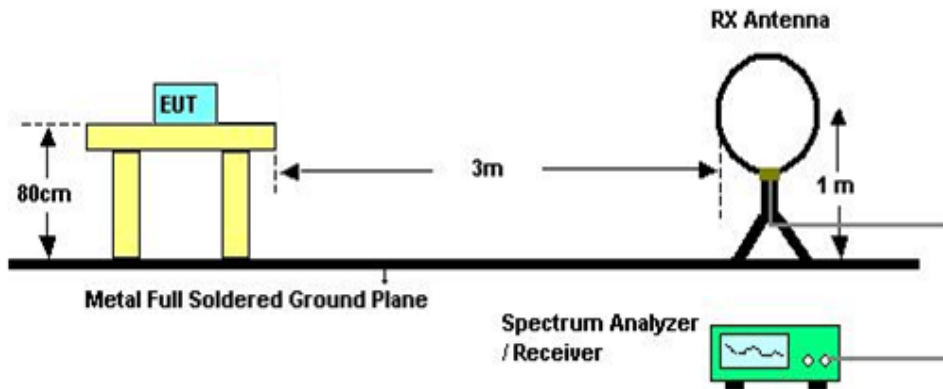
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 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 1GHz)
- 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 1GHz.
- 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 1GHz)
- 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 1GHz)
- For the actual test configuration, please refer to the related Item -EUT Test Photos.

4.3DEVIATIONFROMTESTSTANDARD

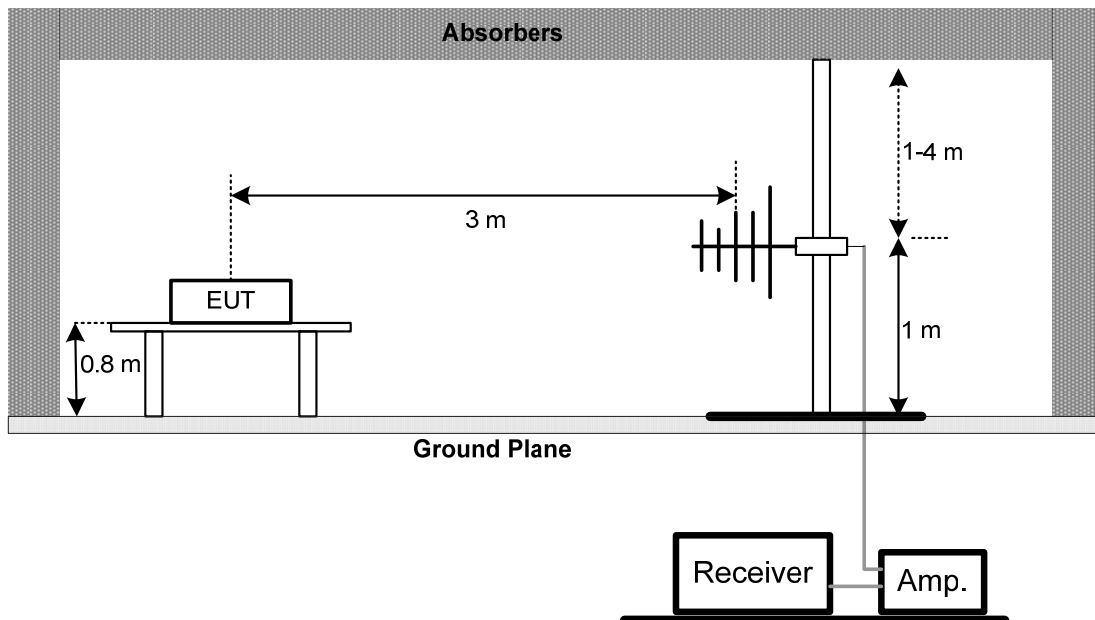
No deviation

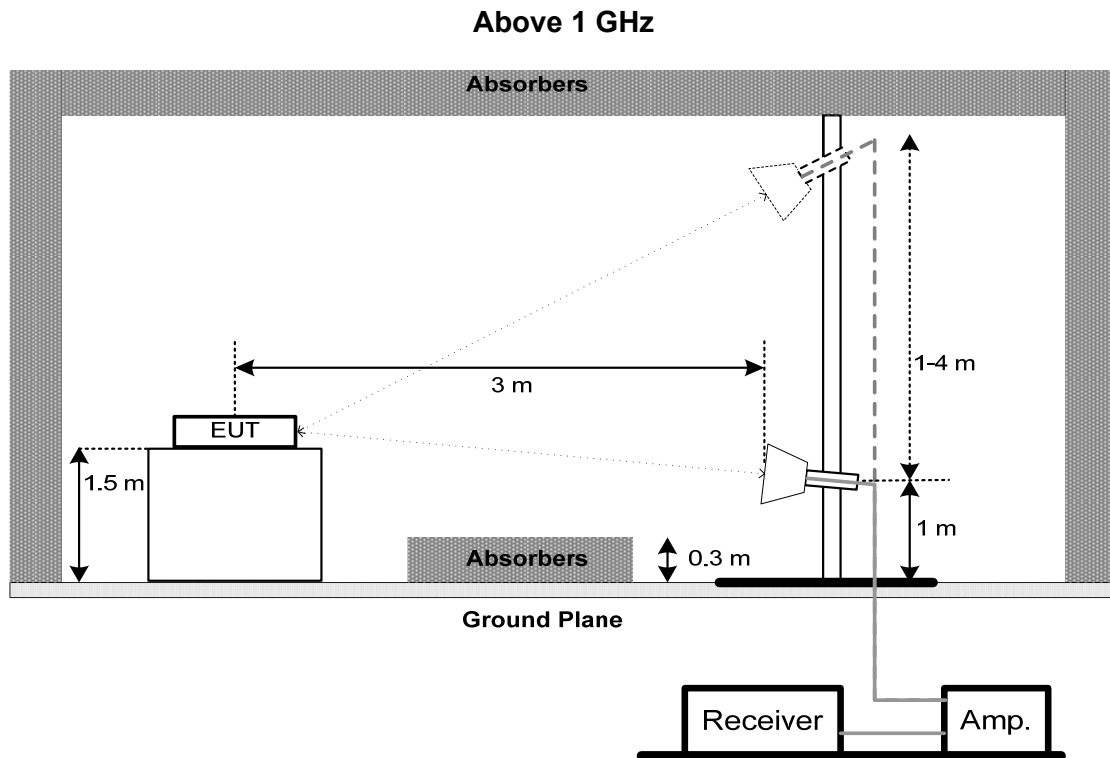
4.4 TEST SETUP

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 30MHZ

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 1000MHZ

Please refer to the APPENDIX C.

4.8 TEST RESULTS- ABOVE 1000MHZ

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

5.1LIMIT

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

5.2TEST 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.

5.3DEVIATION FROM STANDARD

No deviation.

5.4TEST SETUP



5.5EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6TESTRESULTS

Please refer to the APPENDIX E.

6.MAXIMUM OUTPUT POWER TEST

6.1LIMIT

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

6.2TEST 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(for peak power) or 11.9.2.3.1(for AVG power) of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

6.3DEVIATION FROM STANDARD

No deviation.

6.4TEST SETUP



6.5EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6TESTRESULTS

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. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

7.2TEST 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.

7.3DEVIATION FROM STANDARD

No deviation.

7.4TEST SETUP



7.5EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6TEST 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)

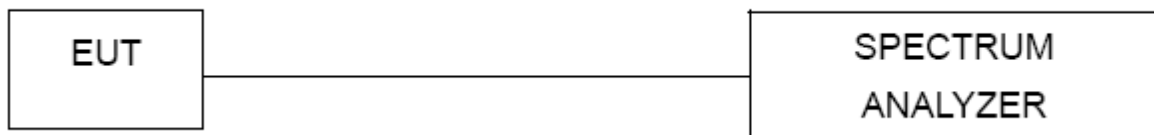
8.2 TEST PROCEDURE

- 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 method11.10.2 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	50ohm Terminator	SHX	TF5-3	15041305	Mar. 10, 2020
4	Artificial-Mains Network	Schwarzbeck	NSLK 8127	8127685	Mar. 10, 2020
5	TRANSIENT LIMITER	EM	EM-7600	772	Mar. 10, 2020
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	Cable	N/A	RG223	12m	Mar. 12, 2020

Radiated Emissions - 9 kHz to 30MHz					
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-1GHz)(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 1GHz					
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.

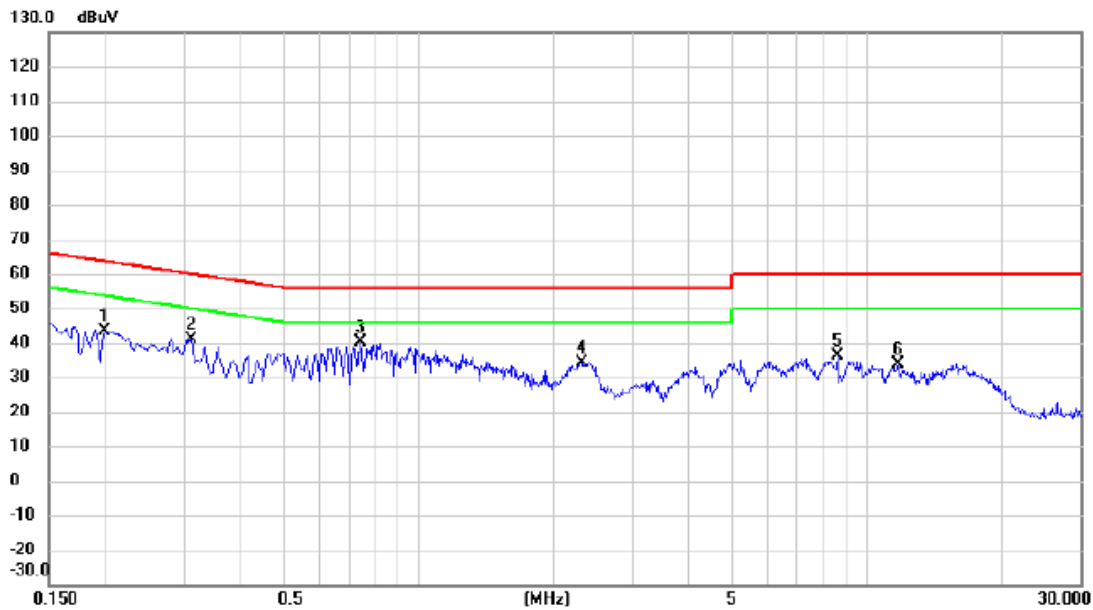
"*" calibration period of equipment list is three year.

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

APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode: TX N-20 MHz Mode Channel 06

Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1995	33.08	10.48	43.56	63.63	-20.07	peak	
2		0.3120	30.45	10.49	40.94	59.92	-18.98	peak	
3	*	0.7440	29.62	10.52	40.14	56.00	-15.86	peak	
4		2.3190	23.54	10.66	34.20	56.00	-21.80	peak	
5		8.6010	25.41	10.90	36.31	60.00	-23.69	peak	
6		11.7870	22.94	10.95	33.89	60.00	-26.11	peak	

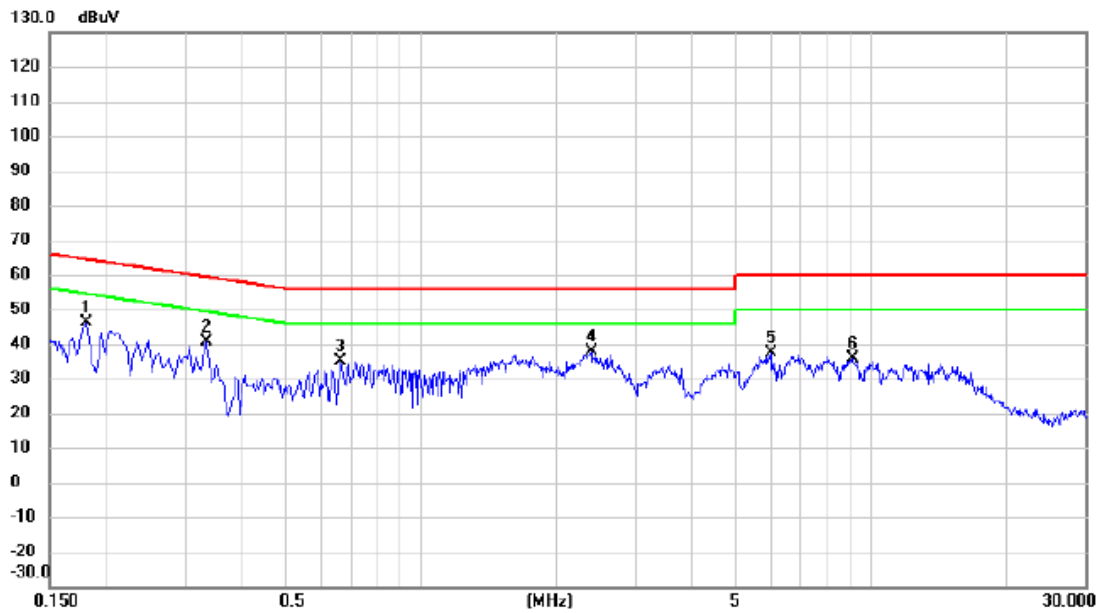
REMARKS:

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

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

Test Mode: TX N-20 MHz Mode Channel 06

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1815	35.83	10.44	46.27	64.42	-18.15	peak	
2		0.3345	30.29	10.46	40.75	59.34	-18.59	peak	
3		0.6630	24.61	10.50	35.11	56.00	-20.89	peak	
4		2.3955	27.00	10.63	37.63	56.00	-18.37	peak	
5		6.0045	26.49	10.77	37.26	60.00	-22.74	peak	
6		9.1095	24.87	10.87	35.74	60.00	-24.26	peak	

REMARKS:

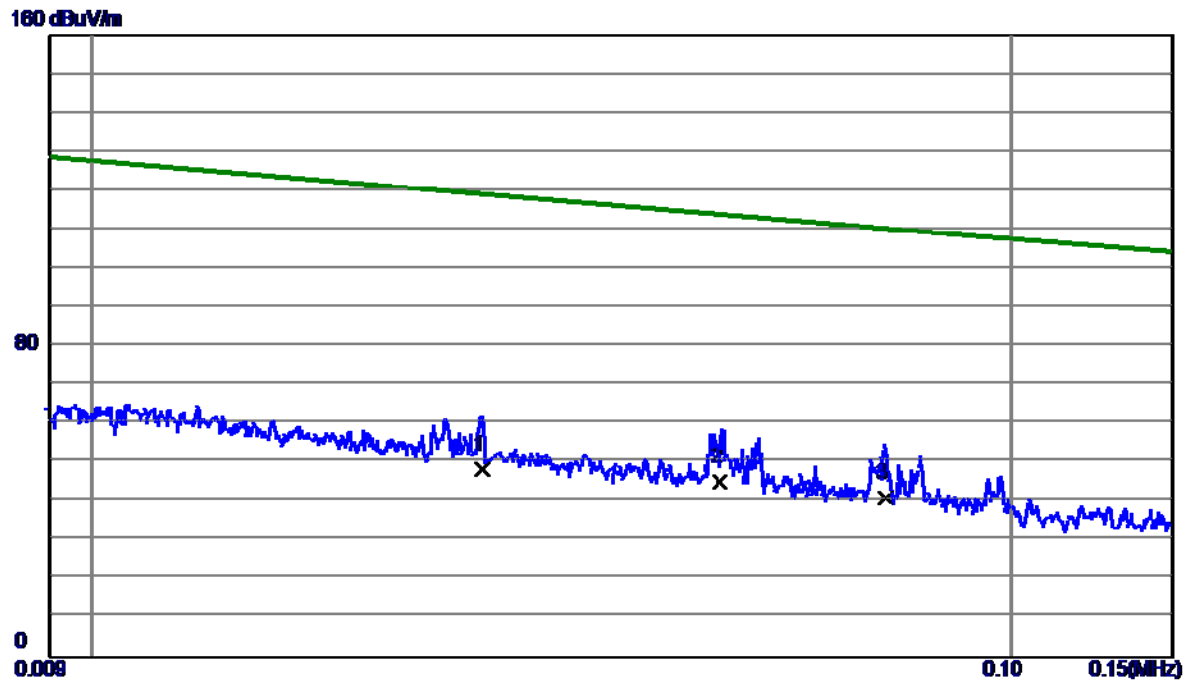
(1) Measurement Value = Reading Level + Correct Factor.

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode: TX N-20 MHz Mode Channel 06

Ant 0°



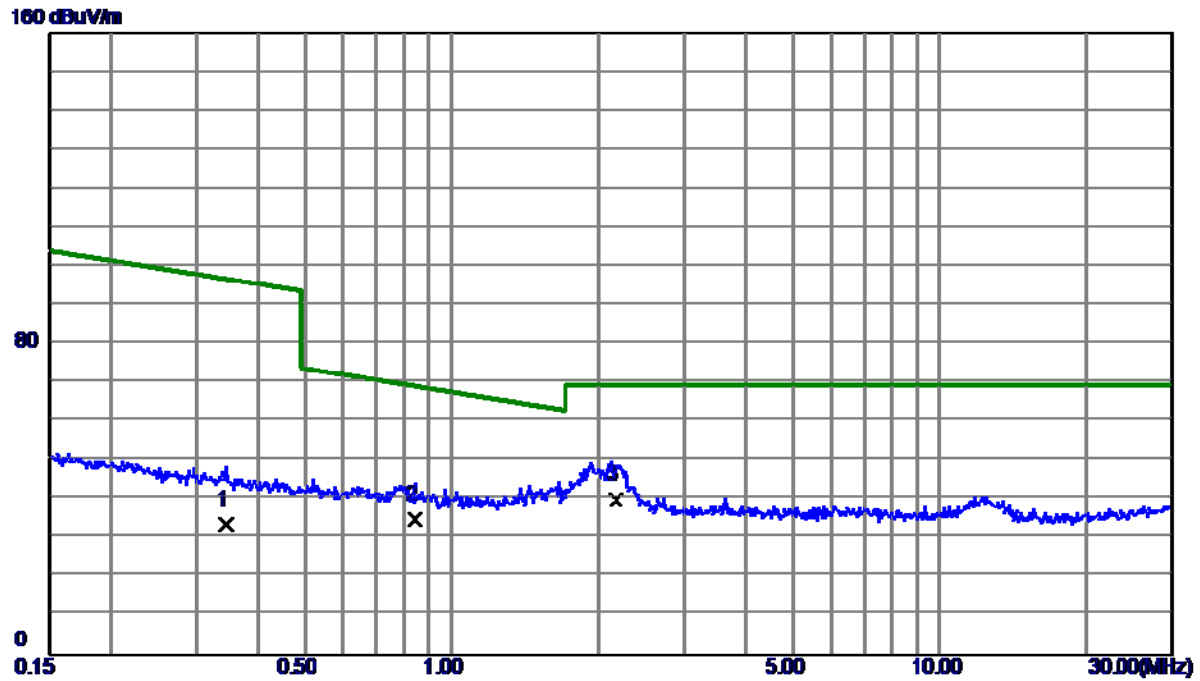
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.0266	34.49	13.85	48.34	124.15	75.81	AVG	
2	0.0483	31.10	13.92	45.02	118.79	-73.77	AVG	
3 *	0.0730	27.30	13.56	40.86	112.69	-71.83	AVG	

REMARKS:

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

Test Mode: TX N-20 MHz Mode Channel 06

Ant 0°



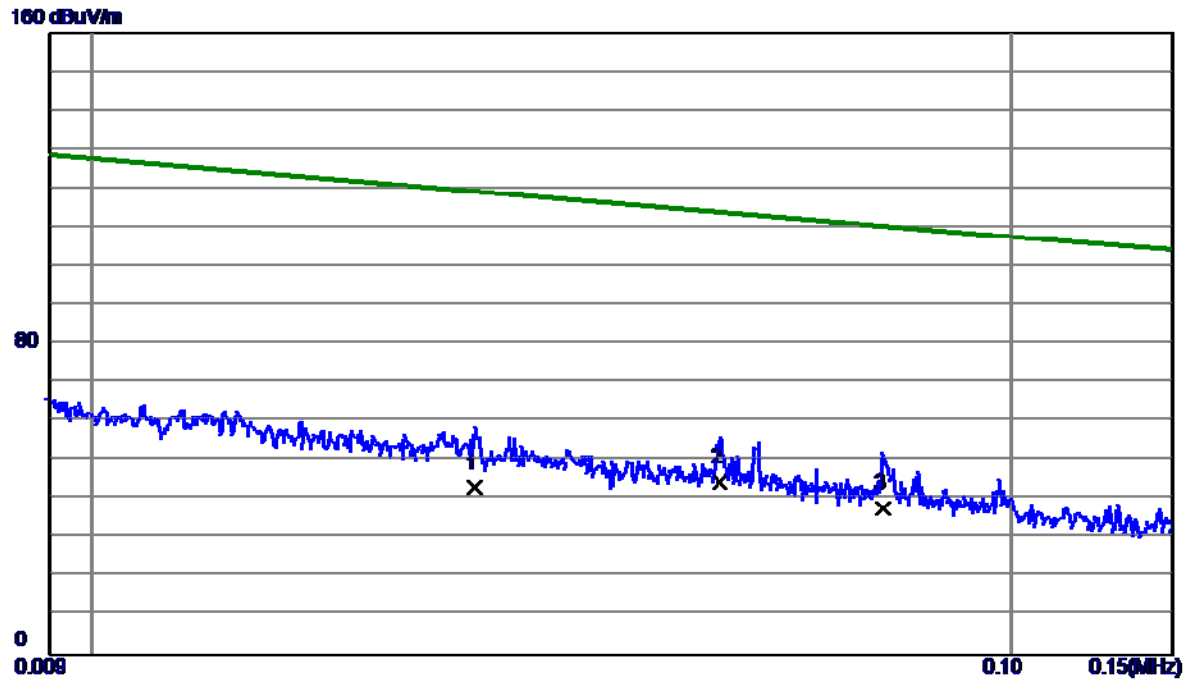
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.3465	20.30	13.43	33.73	98.70	-64.97	AVG	
2	0.8438	22.40	12.55	34.95	70.65	-35.70	QP	
3 *	2.1668	28.40	11.72	40.12	69.54	-29.42	QP	

REMARKS:

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

Test Mode: TX N-20 MHz Mode Channel 06

Ant 90°



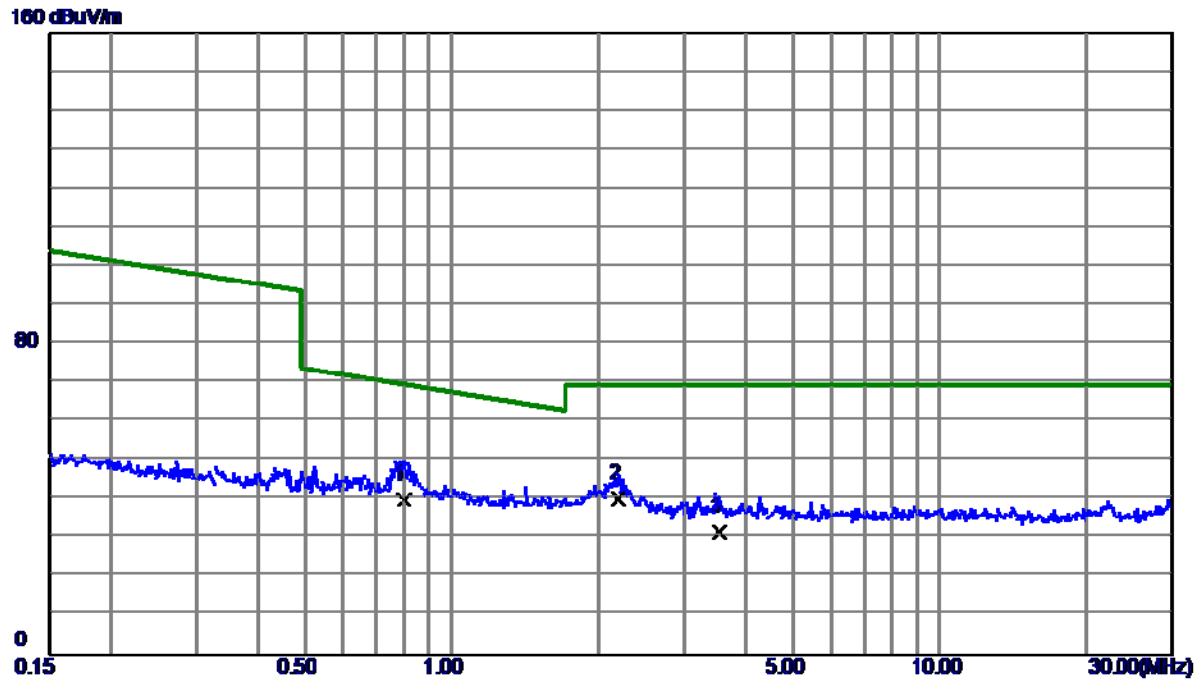
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.0261	29.20	13.84	43.04	124.27	-81.23	AVG	
2 *	0.0483	30.70	13.92	44.62	118.79	-74.17	AVG	
3	0.0726	24.10	13.57	37.67	112.79	-75.12	AVG	

REMARKS:

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

Test Mode:	TX N-20 MHz Mode Channel 06
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Ant 90°



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.8002	27.30	12.56	39.86	71.03	-31.17	QP	
2 *	2.2015	28.60	11.70	40.30	69.54	-29.24	QP	
3	3.5466	20.51	11.07	31.58	69.54	-37.96	QP	

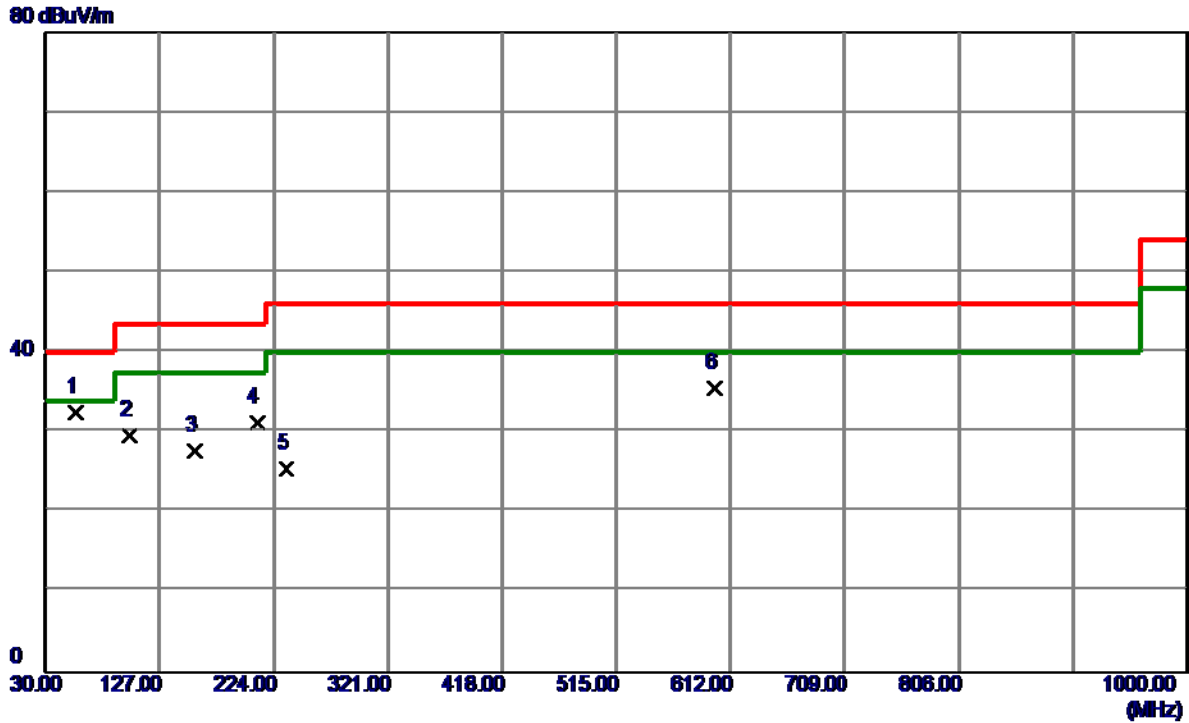
REMARKS:

- (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 N-20 MHz Mode Channel 06

Vertical



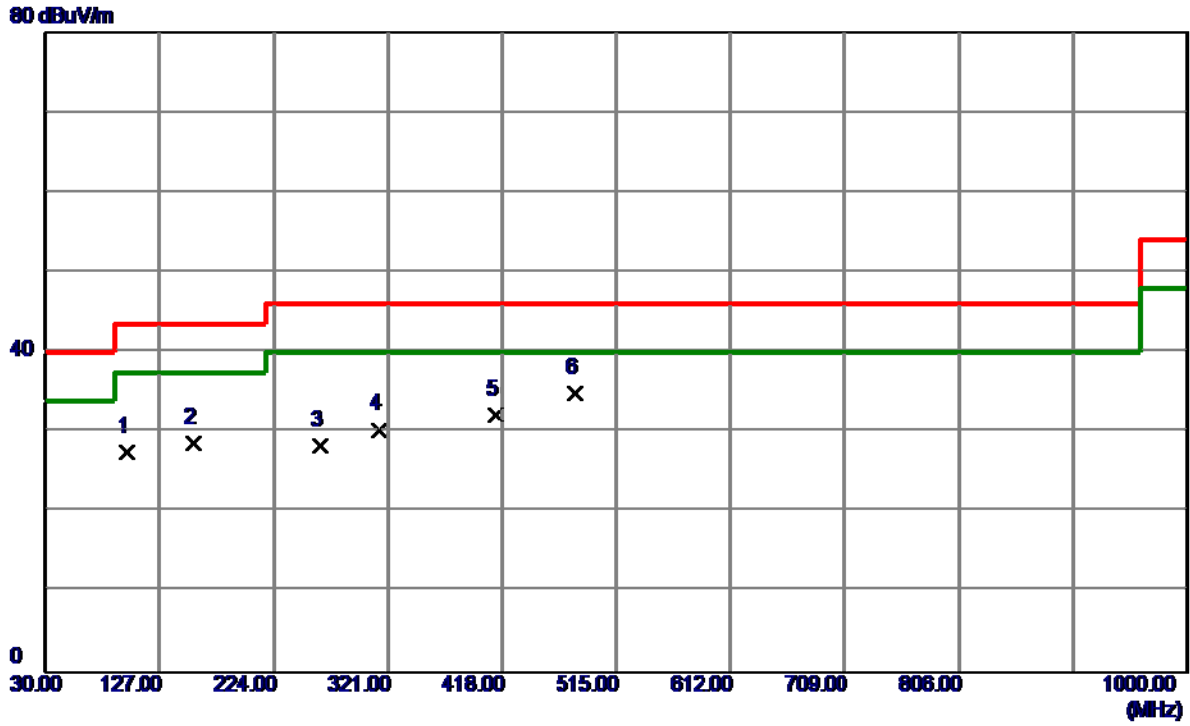
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	56.1900	47.51	-15.06	32.45	40.00	-7.55	Peak	
2	100.8100	47.79	-18.12	29.67	43.50	-13.83	Peak	
3	157.0700	38.61	-10.86	27.75	43.50	-15.75	Peak	
4	209.4500	46.37	-15.23	31.14	43.50	-12.36	Peak	
5	234.6700	40.23	-14.83	25.40	46.00	-20.60	Peak	
6	599.3900	41.77	-6.29	35.48	46.00	-10.52	Peak	

REMARKS:

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

Test Mode: TX N-20 MHz Mode Channel 06

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	98.8700	45.91	-18.45	27.46	43.50	-16.04	Peak	
2	156.1000	39.52	-10.95	28.57	43.50	-14.93	Peak	
3	263.7700	41.43	-13.14	28.29	46.00	-17.71	Peak	
4	313.2400	40.88	-10.56	30.32	46.00	-15.68	Peak	
5	412.1800	41.11	-8.90	32.21	46.00	-13.79	Peak	
6 *	480.0800	42.94	-8.08	34.86	46.00	-11.14	Peak	

REMARKS:

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

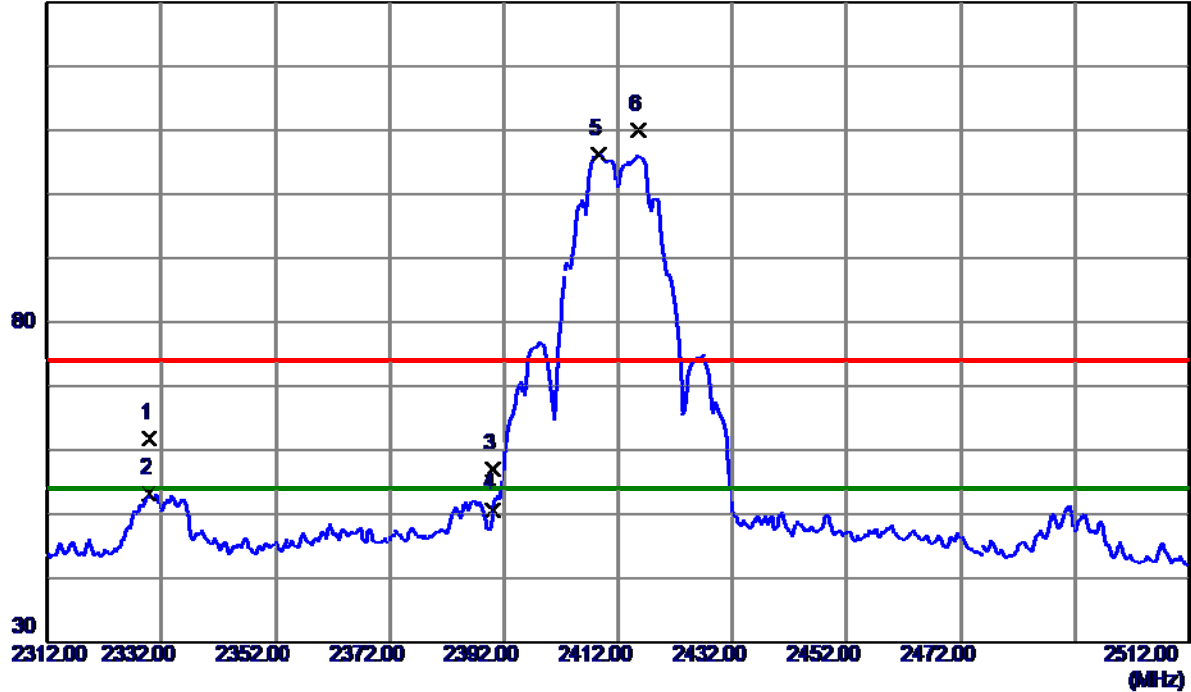
(2) Margin Level = Measurement Value - Limit Value.

APPENDIXD -RADIATED EMISSION- ABOVE 1000MHZ

Test Mode: TX B Mode2412 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	2329.7000	55.12	6.60	61.72	74.00	-12.28	Peak	
2	2329.7000	46.52	6.60	53.12	54.00	-0.88	AVG	
3	2390.0000	50.56	6.53	57.09	74.00	-16.91	Peak	
4	2390.0000	44.17	6.53	50.70	54.00	-3.30	AVG	
5 *	2408.7000	99.73	6.51	106.24	54.00	52.24	AVG	No Limit
6	2415.6000	103.56	6.50	110.06	74.00	36.06	Peak	No Limit

REMARKS:

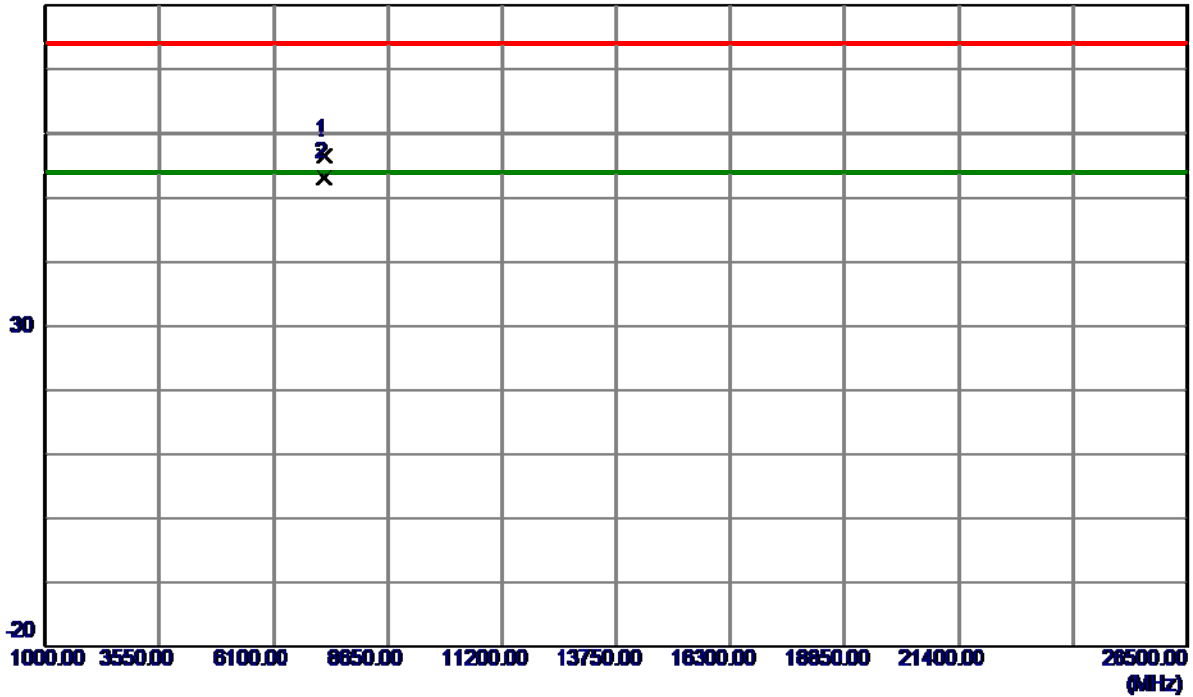
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX B Mode2412 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	7235.1300	47.48	9.12	56.60	74.00	-17.40	Peak	
2 *	7235.1900	44.04	9.12	53.16	54.00	-0.84	AVG	

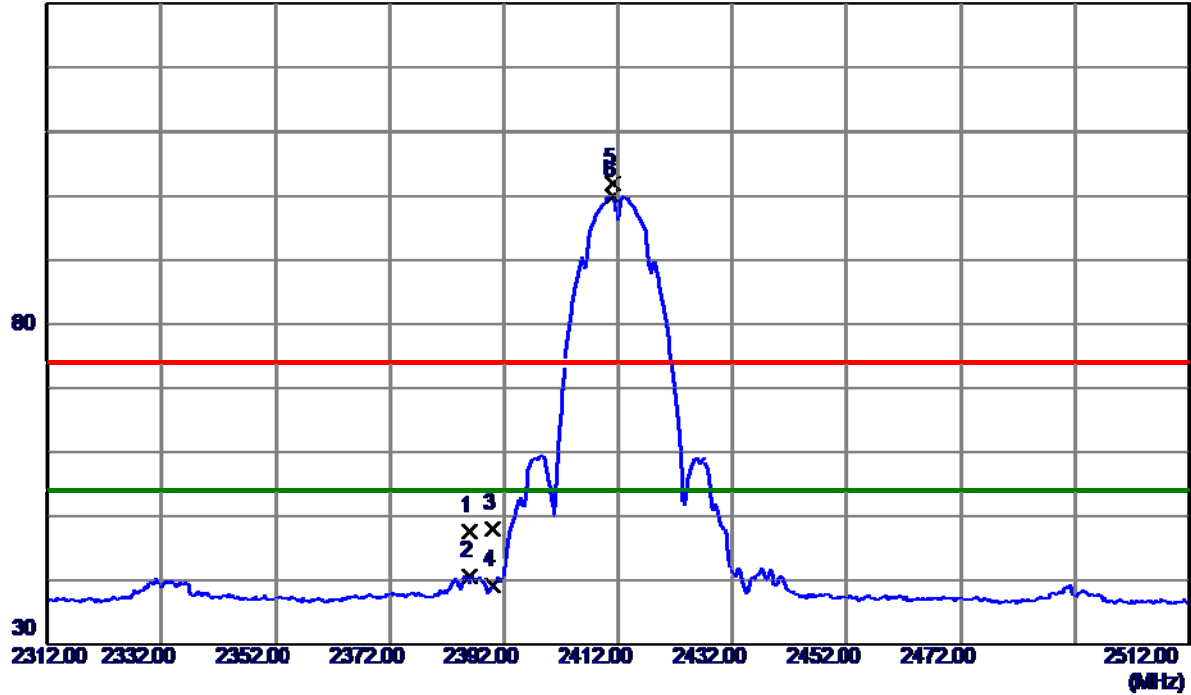
REMARKS:

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

Test Mode: TX B Mode2412 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	2386.1000	40.98	6.54	47.52	74.00	-26.48	Peak	
2	2386.1000	34.11	6.54	40.65	54.00	-13.35	AVG	
3	2390.0000	41.51	6.53	48.04	74.00	-25.96	Peak	
4	2390.0000	32.74	6.53	39.27	54.00	-14.73	AVG	
5	2411.2000	95.53	6.51	102.04	74.00	28.04	Peak	No Limit
6 *	2411.2000	93.56	6.51	100.07	54.00	46.07	AVG	No Limit

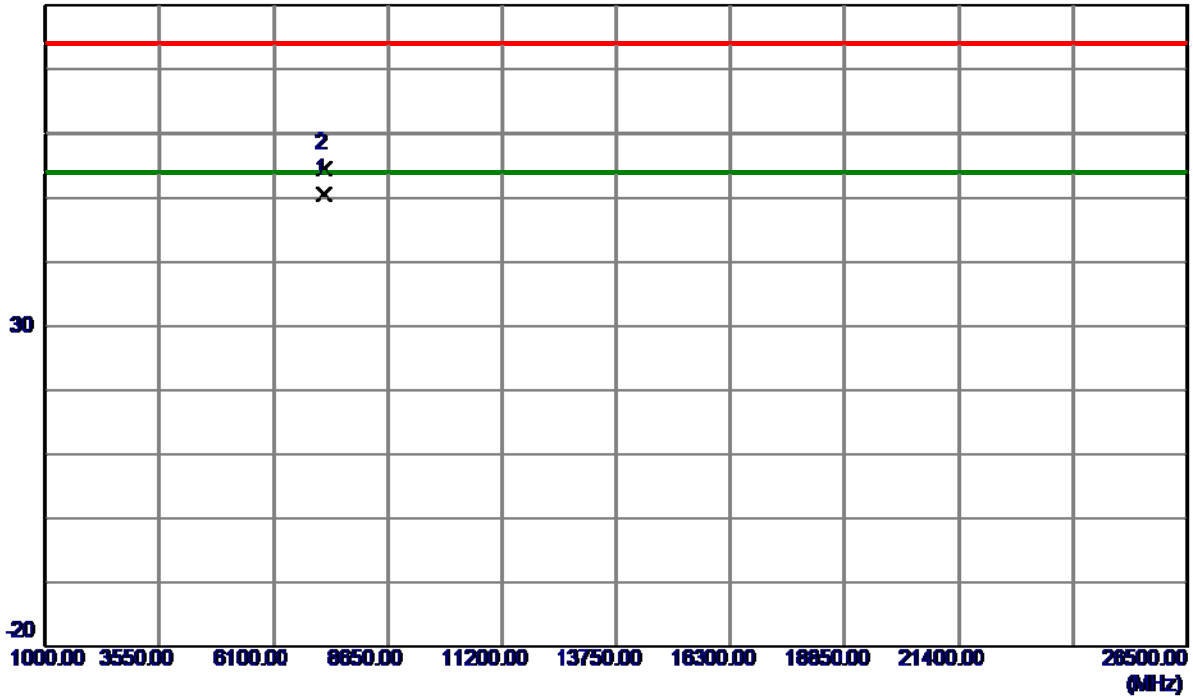
REMARKS:

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

Test Mode: TX B Mode2412 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 *	7235.2000	41.41	9.12	50.53	54.00	-3.47	AVG	
2	7236.2400	45.49	9.12	54.61	74.00	-19.39	Peak	

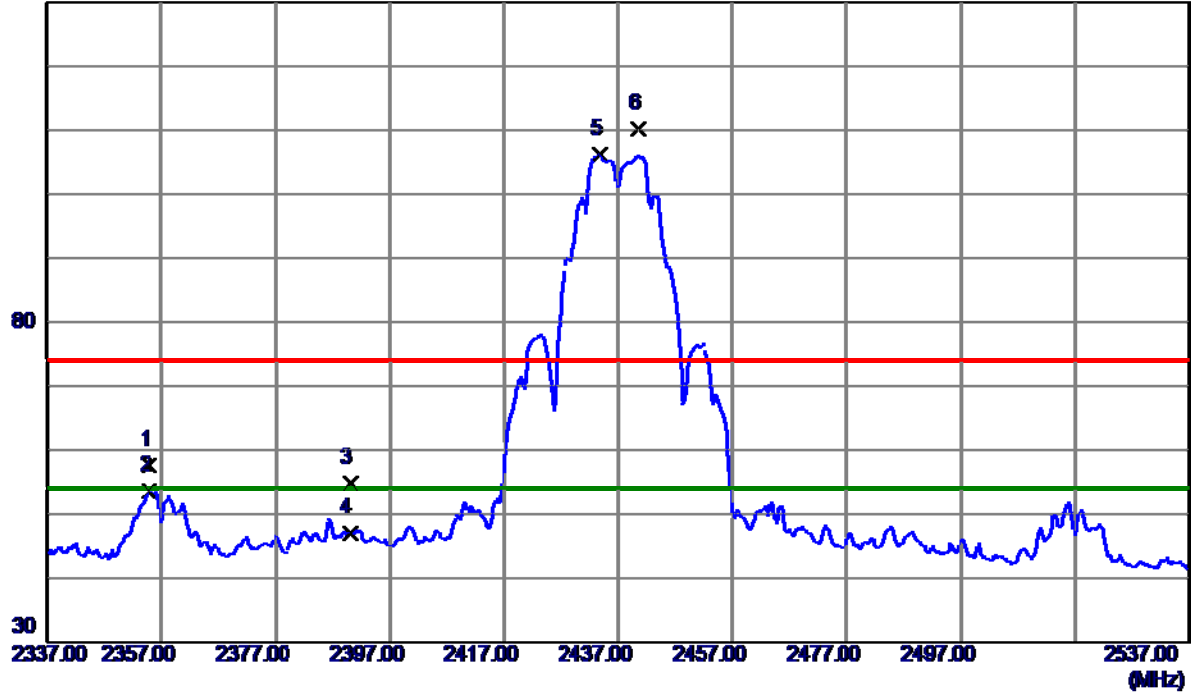
REMARKS:

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

Test Mode: TX B Mode2437 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	2354.8000	51.07	6.57	57.64	74.00	-16.36	Peak	
2	2354.8000	46.98	6.57	53.55	54.00	-0.45	AVG	
3	2390.0000	48.23	6.53	54.76	74.00	-19.24	Peak	
4	2390.0000	40.50	6.53	47.03	54.00	-6.97	AVG	
5 *	2433.8000	99.76	6.48	106.24	54.00	52.24	AVG	No Limit
6	2440.6000	103.68	6.47	110.15	74.00	36.15	Peak	No Limit

REMARKS:

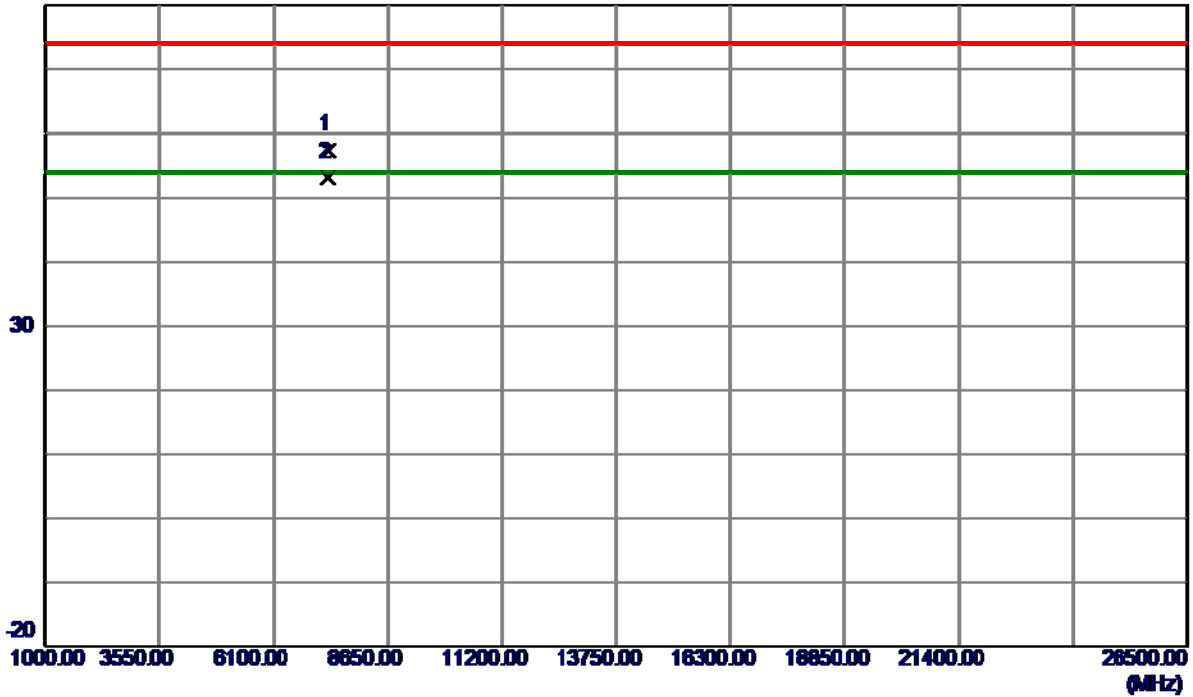
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX B Mode2437 MHz

Vertical

80 dBuV/m



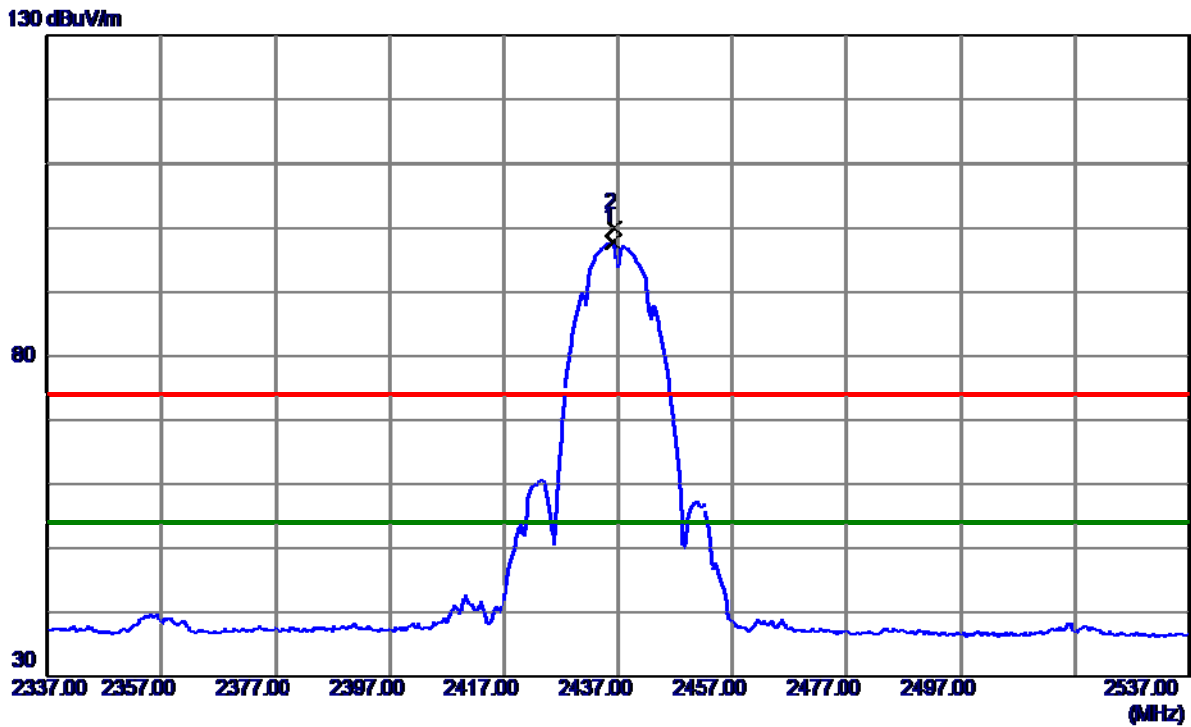
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7311.7600	48.10	9.23	57.33	74.00	-16.67	Peak	
2 *	7311.7800	43.93	9.23	53.16	54.00	-0.84	AVG	

REMARKS:

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

Test Mode: TX B Mode2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2436.2000	91.29	6.48	97.77	54.00	43.77	AVG	No Limit
2	2436.3000	93.46	6.48	99.94	74.00	25.94	Peak	No Limit

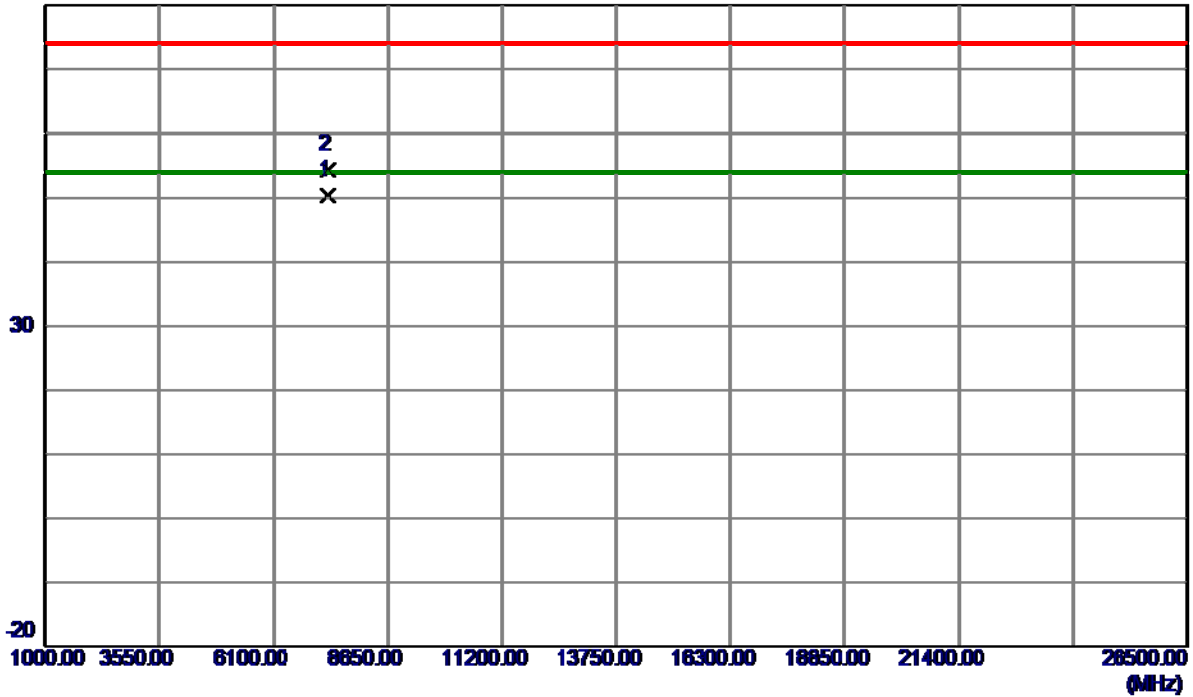
REMARKS:

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

Test Mode: TX B Mode2437 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 *	7311.7900	41.11	9.23	50.34	54.00	-3.66	AVG	
2	7311.9100	45.20	9.23	54.43	74.00	-19.57	Peak	

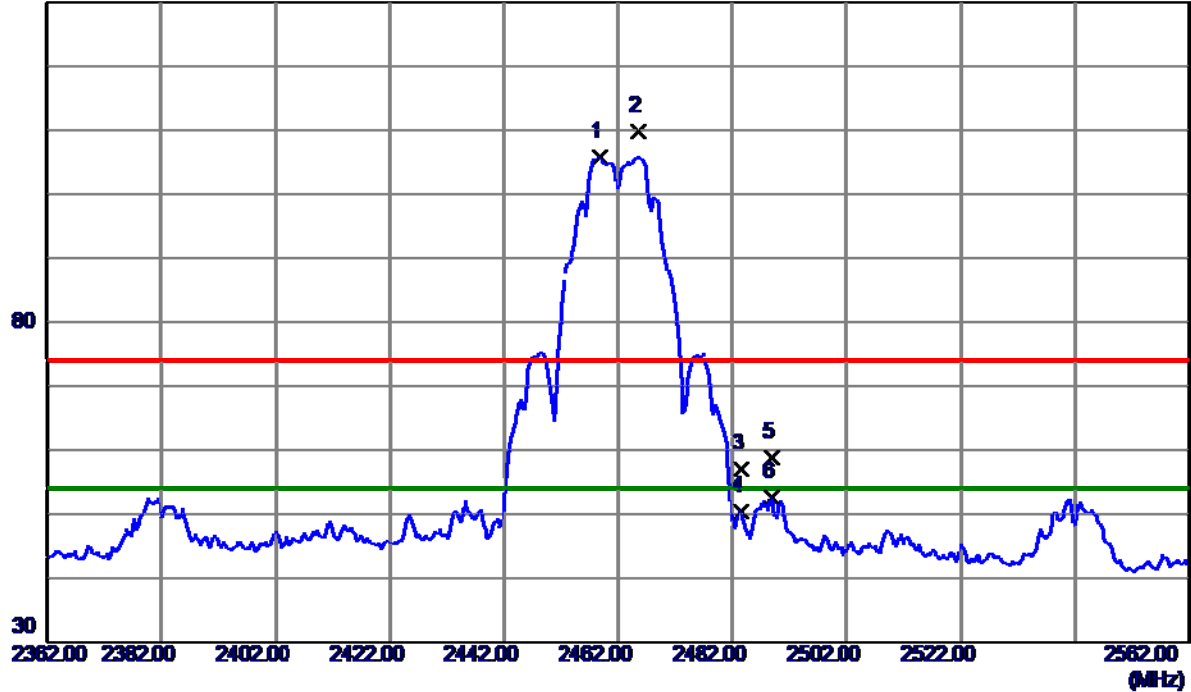
REMARKS:

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

Test Mode: TX B Mode2462 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 *	2458.8000	99.41	6.45	105.86	54.00	51.86	AVG	No Limit
2	2465.5000	103.27	6.44	109.71	74.00	35.71	Peak	No Limit
3	2483.5000	50.52	6.42	56.94	74.00	-17.06	Peak	
4	2483.5000	43.99	6.42	50.41	54.00	-3.59	AVG	
5	2488.9000	52.32	6.42	58.74	74.00	-15.26	Peak	
6	2488.9000	46.22	6.42	52.64	54.00	-1.36	AVG	

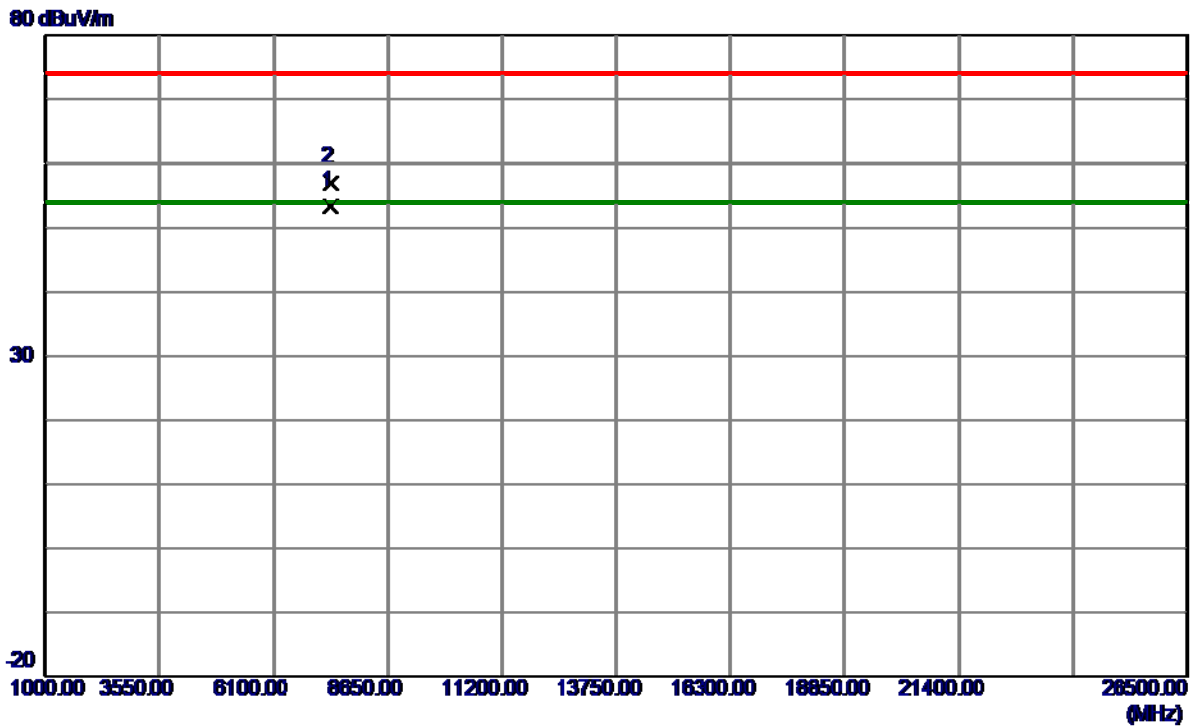
REMARKS:

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

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

Test Mode: TX B Mode2462 MHz

Vertical



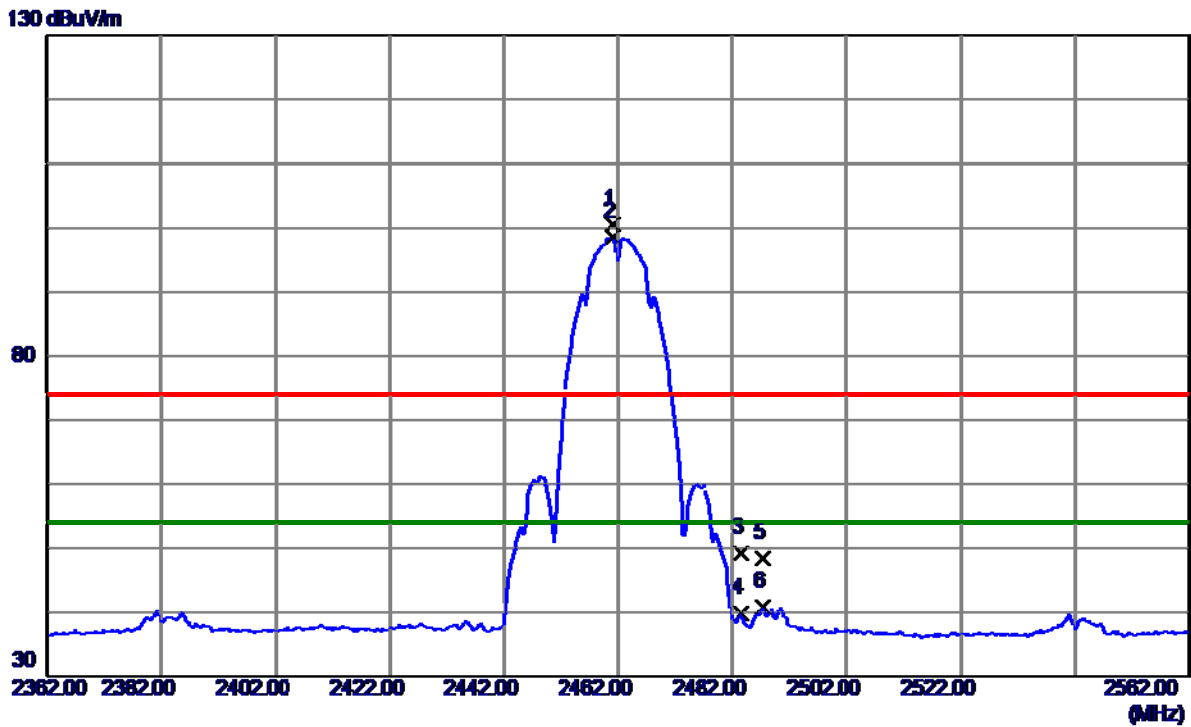
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7385.2600	44.00	9.34	53.34	54.00	-0.66	AVG	
2	7385.3100	47.63	9.34	56.97	74.00	-17.03	Peak	

REMARKS:

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

Test Mode: TX B Mode2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.2000	94.23	6.45	100.68	74.00	26.68	Peak	No Limit
2 *	2461.2000	92.19	6.45	98.64	54.00	44.64	AVG	No Limit
3	2483.5000	42.71	6.42	49.13	74.00	-24.87	Peak	
4	2483.5000	33.31	6.42	39.73	54.00	-14.27	AVG	
5	2487.4000	42.07	6.42	48.49	74.00	-25.51	Peak	
6	2487.4000	34.35	6.42	40.77	54.00	-13.23	AVG	

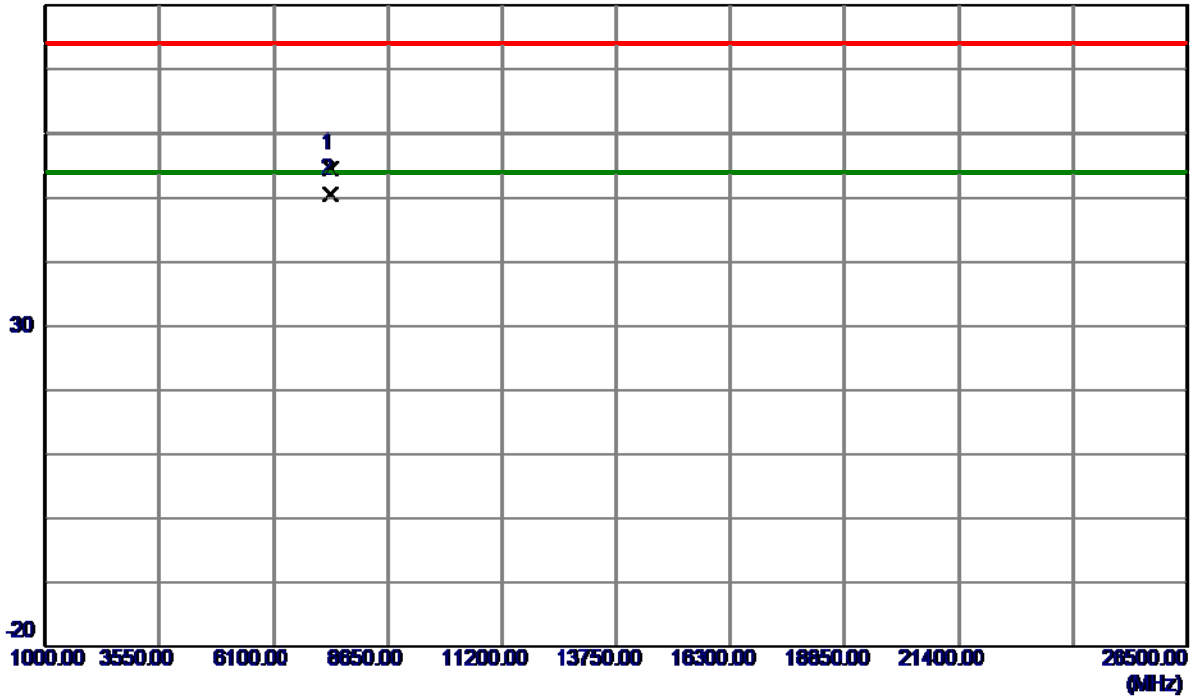
REMARKS:

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

Test Mode: TX B Mode2462 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	7385.0000	45.35	9.34	54.69	74.00	-19.31	Peak	
2 *	7385.1800	41.31	9.34	50.65	54.00	-3.35	AVG	

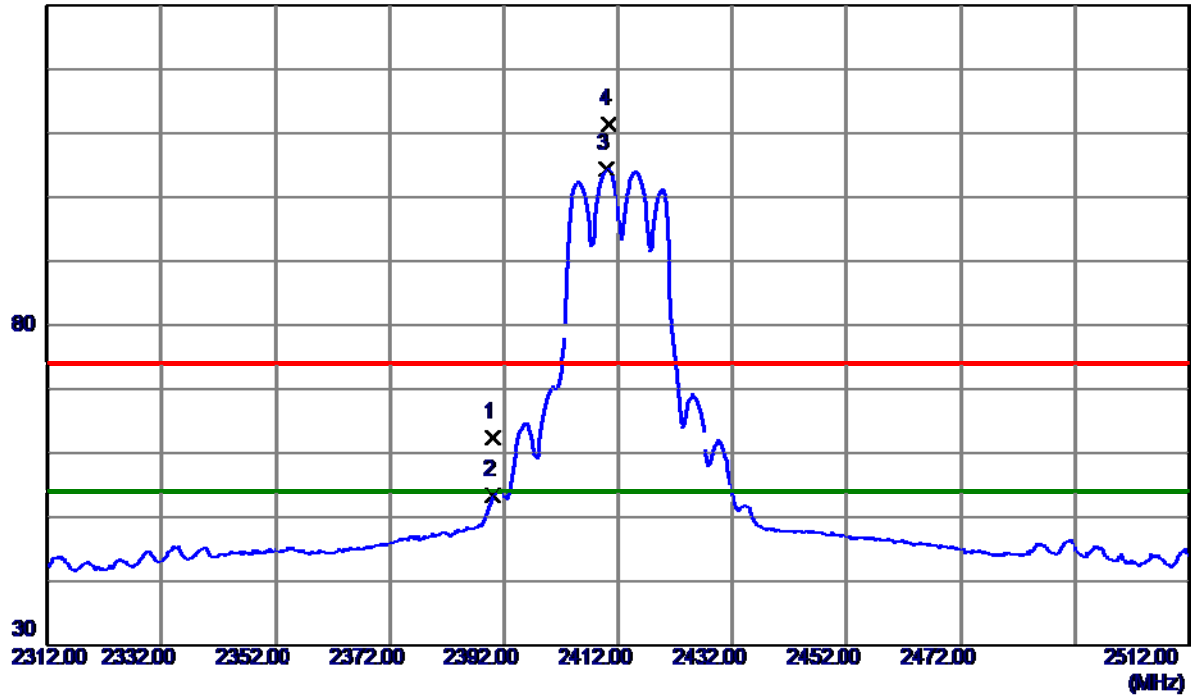
REMARKS:

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

Test Mode: TX G Mode2412 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	55.81	6.53	62.34	74.00	-11.66	Peak	
2	2390.0000	46.91	6.53	53.44	54.00	-0.56	AVG	
3 *	2410.1000	97.90	6.51	104.41	54.00	50.41	AVG	No Limit
4	2410.4000	104.81	6.51	111.32	74.00	37.32	Peak	No Limit

REMARKS:

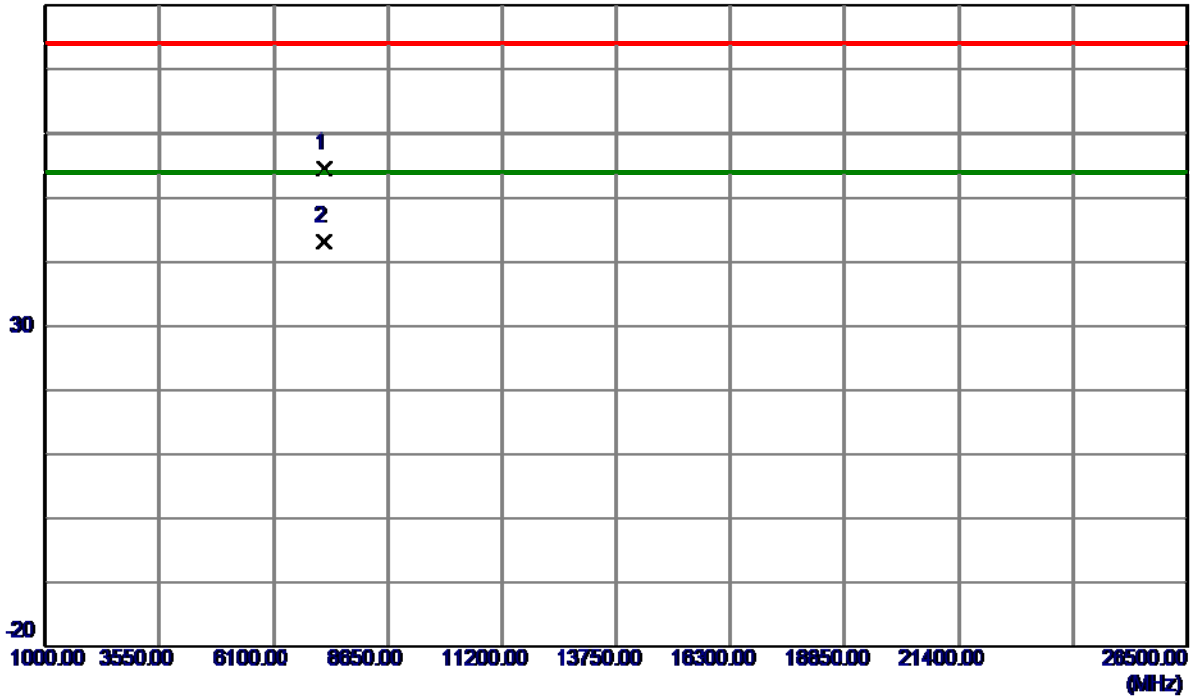
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX G Mode2412 MHz

Vertical

80 dBuV/m



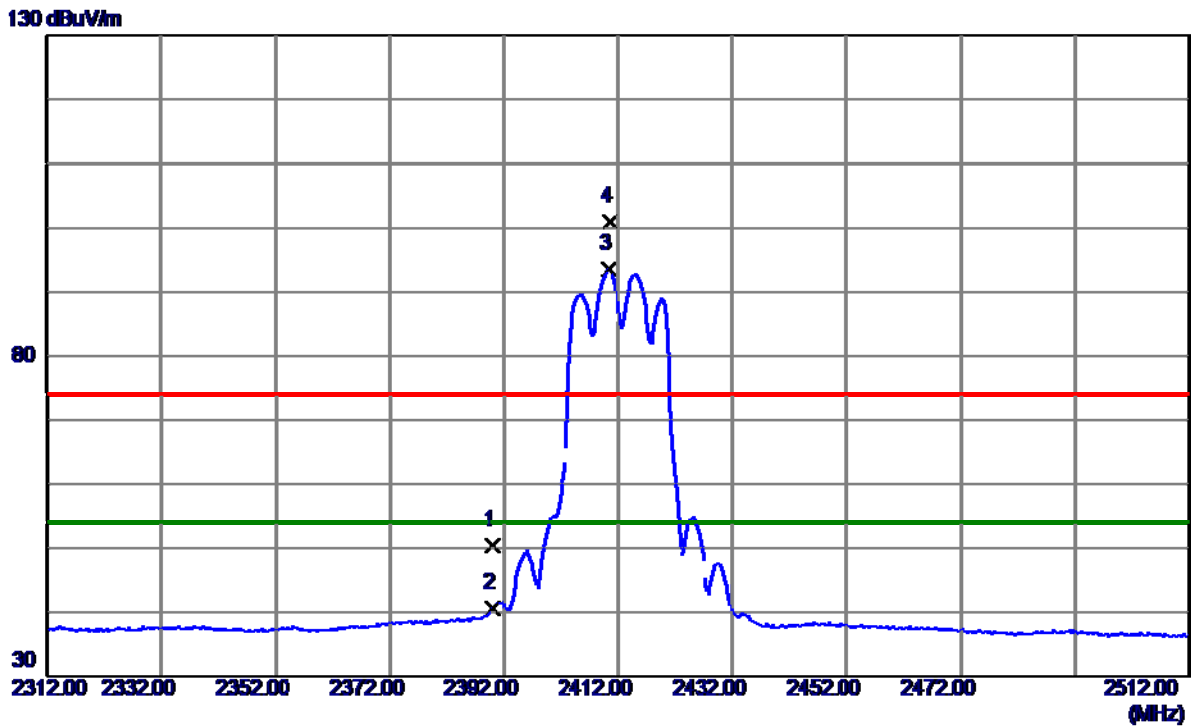
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7233.6500	45.44	9.12	54.56	74.00	-19.44	Peak	
2 *	7238.2250	34.17	9.12	43.29	54.00	-10.71	AVG	

REMARKS:

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

Test Mode: TX G Mode2412 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	43.89	6.53	50.42	74.00	-23.58	Peak	
2	2390.0000	34.08	6.53	40.61	54.00	-13.39	AVG	
3 *	2410.4000	87.05	6.51	93.56	54.00	39.56	AVG	No Limit
4	2410.6000	94.56	6.51	101.07	74.00	27.07	Peak	No Limit

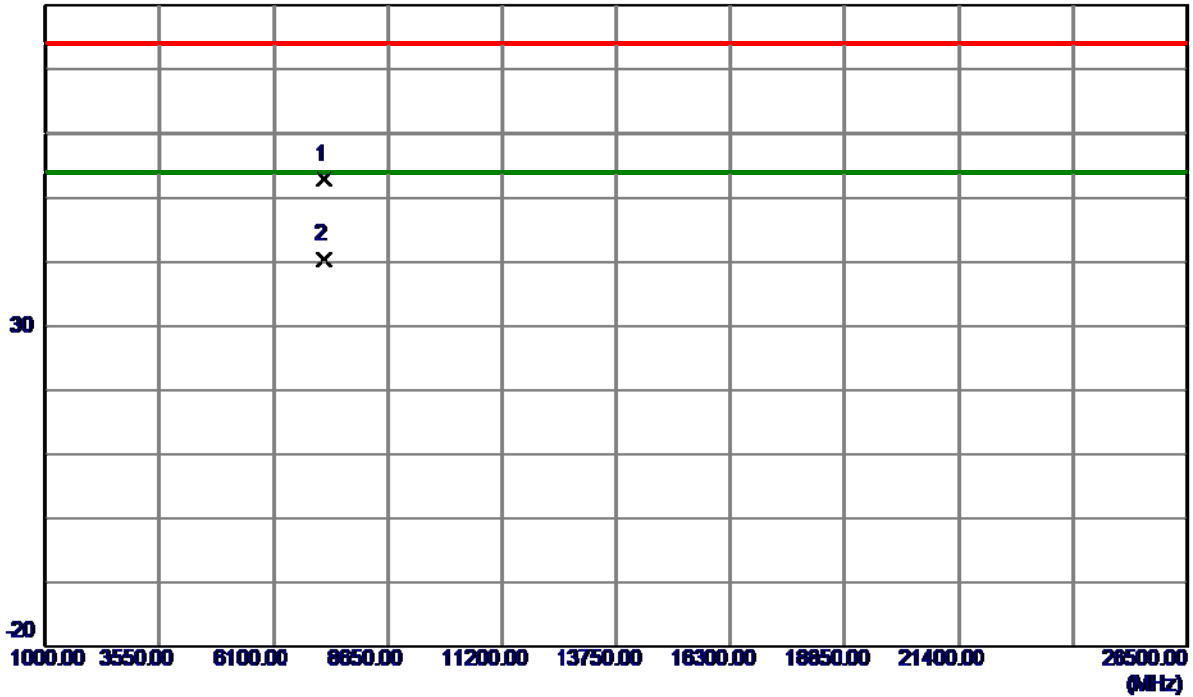
REMARKS:

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

Test Mode: TX G Mode2412 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	7233.3000	43.78	9.12	52.90	74.00	-21.10	Peak	
2 *	7238.6250	31.23	9.12	40.35	54.00	-13.65	AVG	

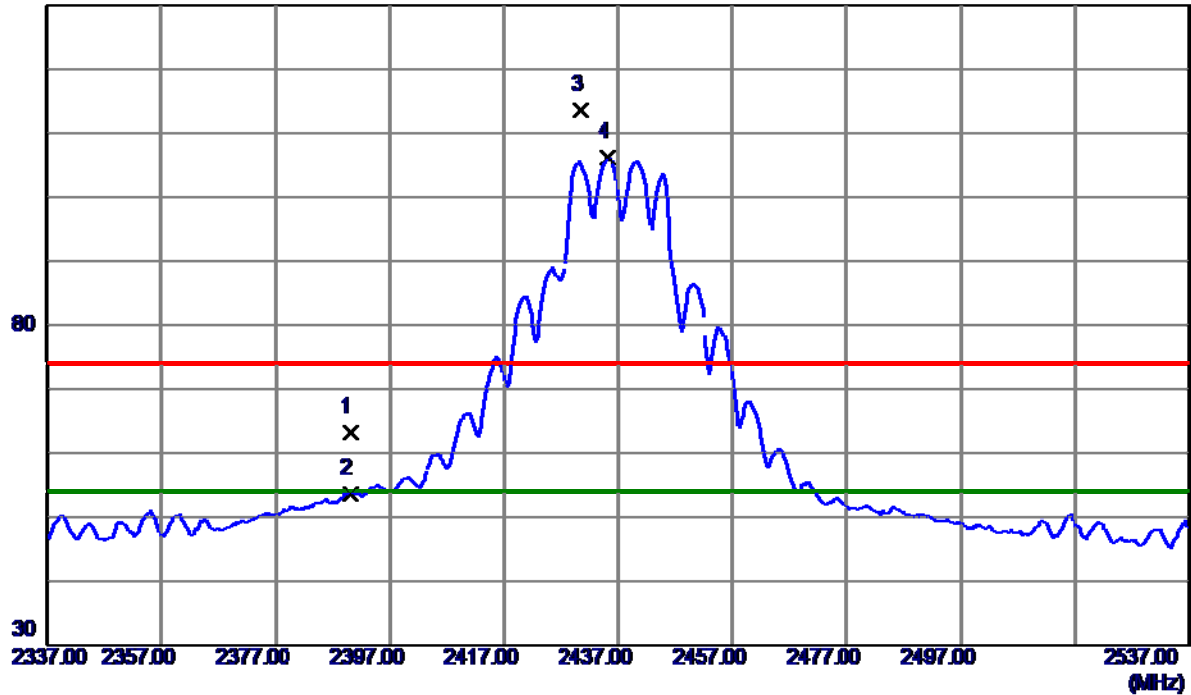
REMARKS:

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

Test Mode: TX G Mode2437 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	56.65	6.53	63.18	74.00	-10.82	Peak	
2	2390.0000	47.01	6.53	53.54	54.00	-0.46	AVG	
3	2430.5000	107.14	6.48	113.62	74.00	39.62	Peak	No Limit
4 *	2435.3000	99.66	6.48	106.14	54.00	52.14	AVG	No Limit

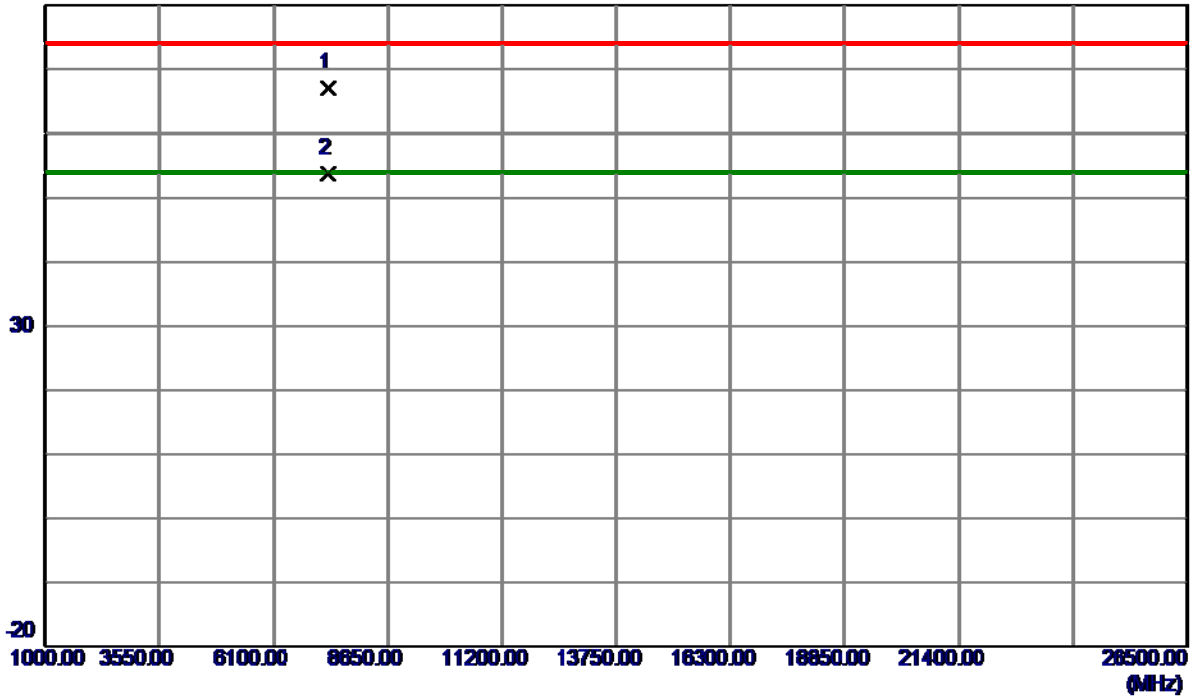
REMARKS:

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

Test Mode: TX G Mode2437 MHz

Vertical

80 dBuV/m



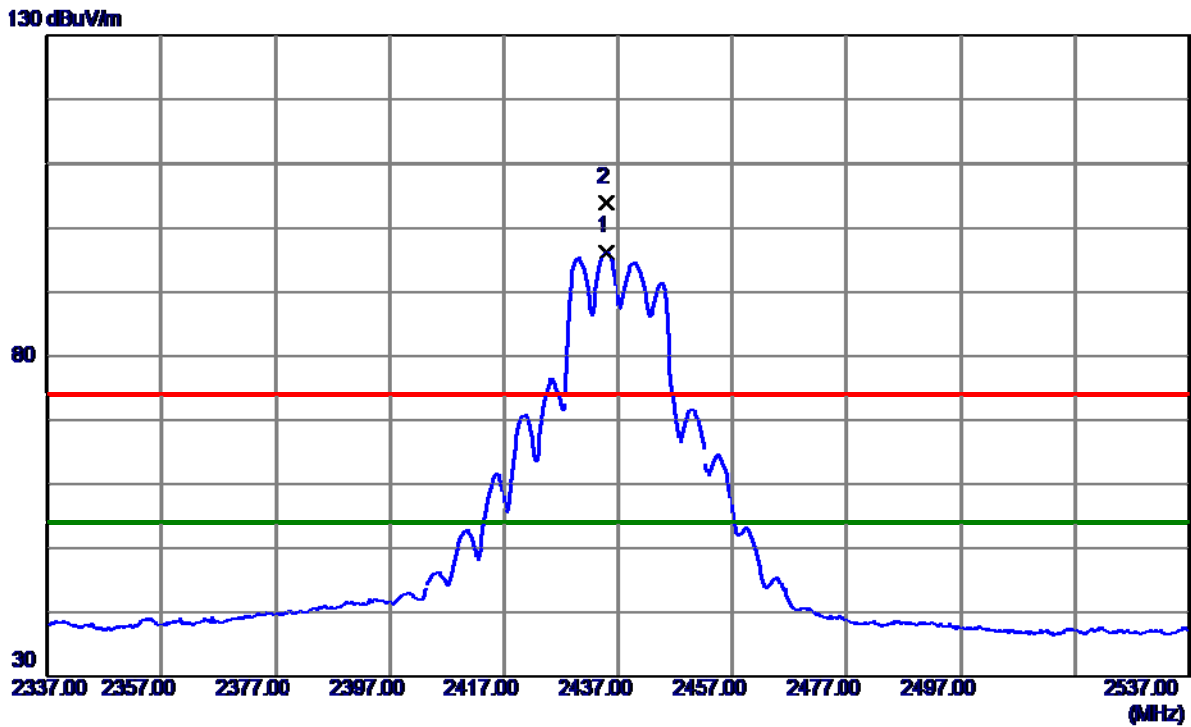
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7308.4250	57.85	9.23	67.08	74.00	-6.92	Peak	
2 *	7313.1250	44.52	9.23	53.75	54.00	-0.25	AVG	

REMARKS:

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

Test Mode: TX G Mode2437 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2434.9000	89.82	6.48	96.30	54.00	42.30	AVG	No Limit
2	2435.1000	97.59	6.48	104.07	74.00	30.07	Peak	No Limit

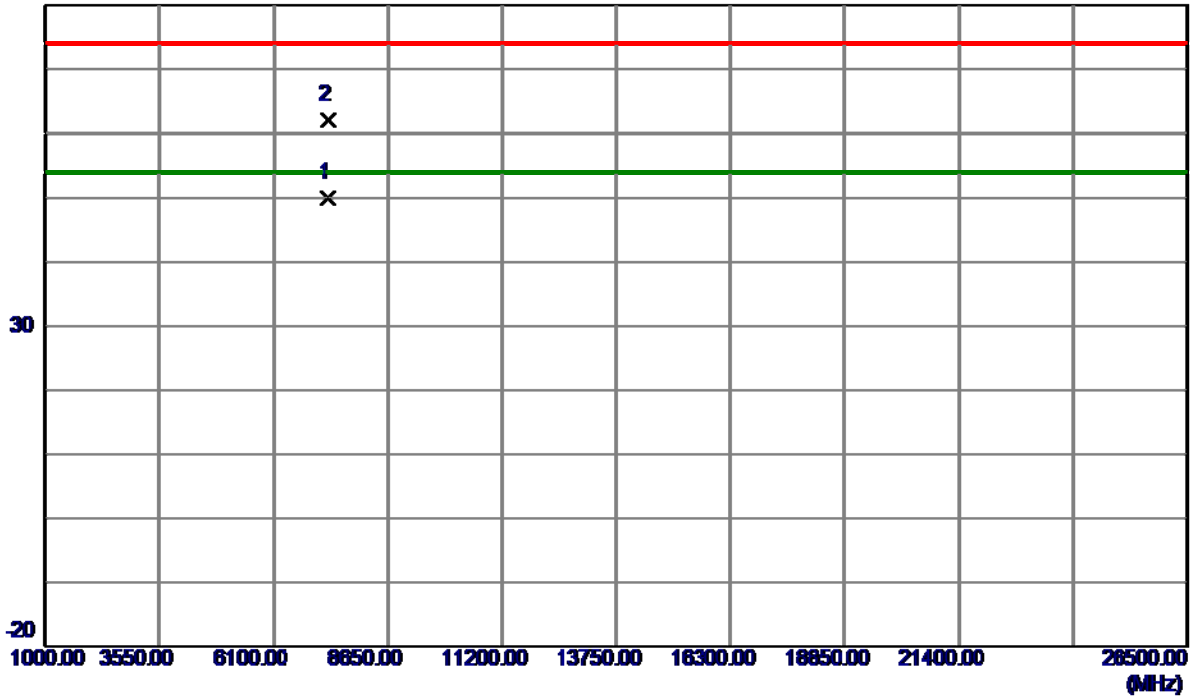
REMARKS:

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

Test Mode: TX G Mode2437 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 *	7308.7000	40.69	9.23	49.92	54.00	-4.08	AVG	
2	7313.2250	52.78	9.23	62.01	74.00	-11.99	Peak	

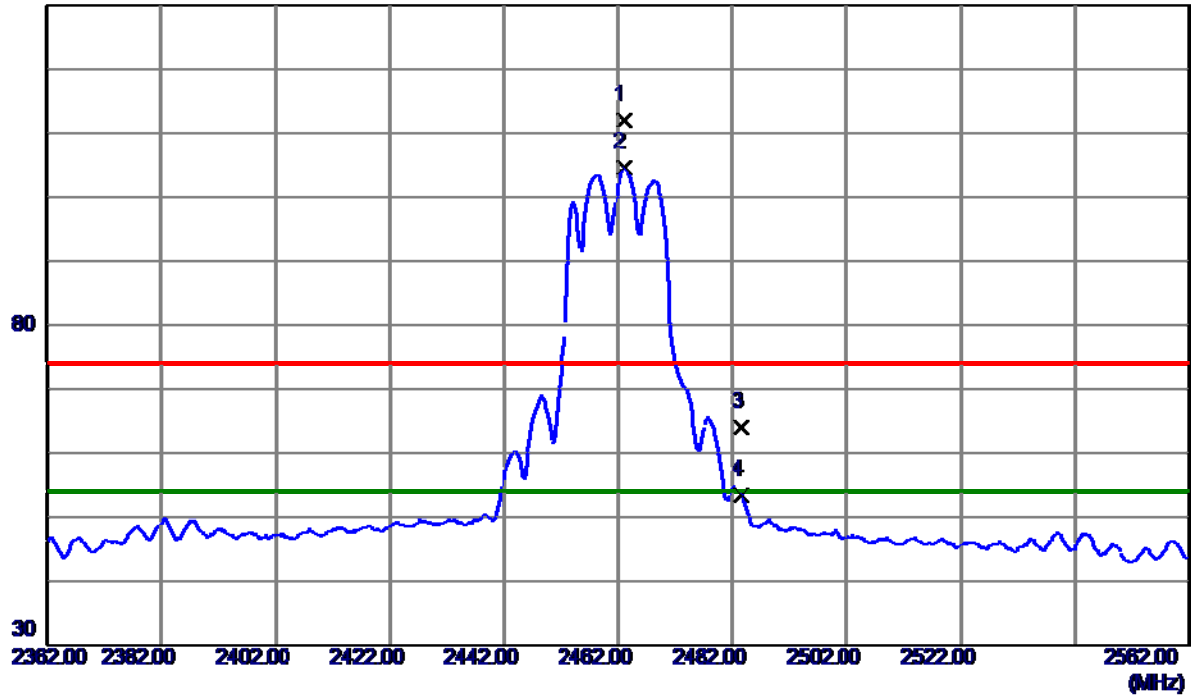
REMARKS:

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

Test Mode: TX G Mode2462 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	2463.0000	105.54	6.45	111.99	74.00	37.99	Peak	No Limit
2 *	2463.0000	98.06	6.45	104.51	54.00	50.51	AVG	No Limit
3	2483.5000	57.51	6.42	63.93	74.00	-10.07	Peak	
4	2483.5000	47.03	6.42	53.45	54.00	-0.55	AVG	

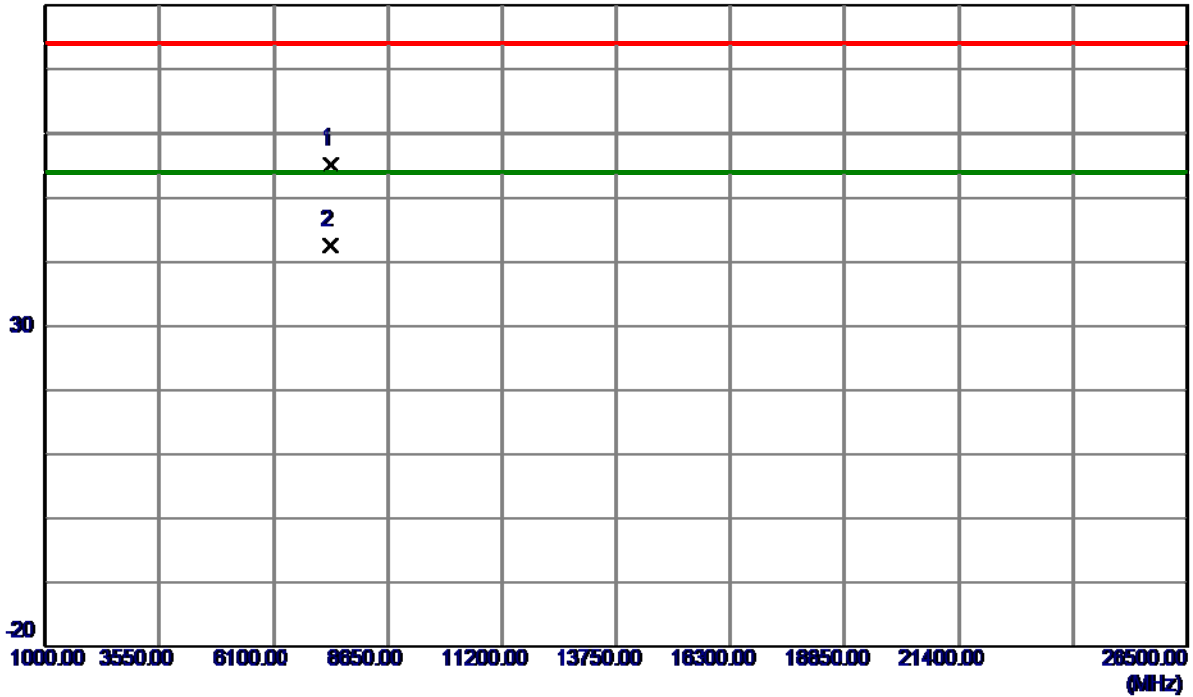
REMARKS:

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

Test Mode: TX G Mode2462 MHz

Vertical

80 dBuV/m



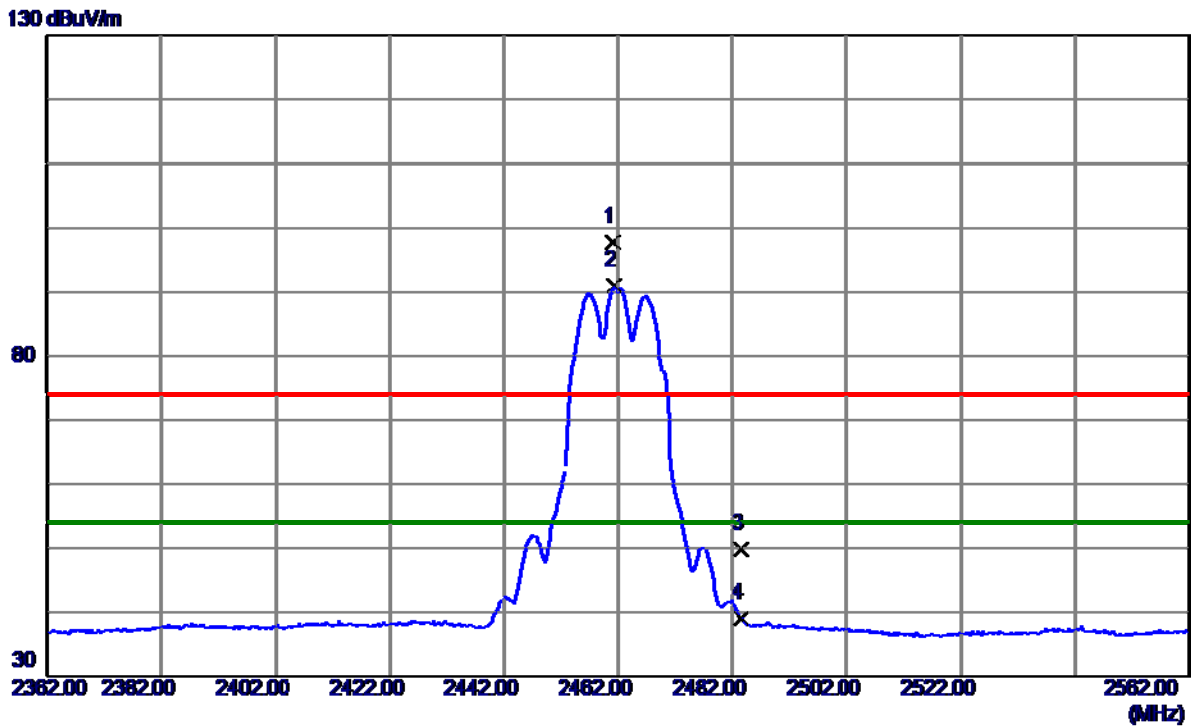
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7383.4500	45.82	9.34	55.16	74.00	-18.84	Peak	
2 *	7388.2500	33.21	9.34	42.55	54.00	-11.45	AVG	

REMARKS:

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

Test Mode: TX G Mode2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2461.2000	91.41	6.45	97.86	74.00	23.86	Peak	No Limit
2 *	2461.4000	84.50	6.45	90.95	54.00	36.95	AVG	No Limit
3	2483.5000	43.40	6.42	49.82	74.00	-24.18	Peak	
4	2483.5000	32.65	6.42	39.07	54.00	-14.93	AVG	

REMARKS:

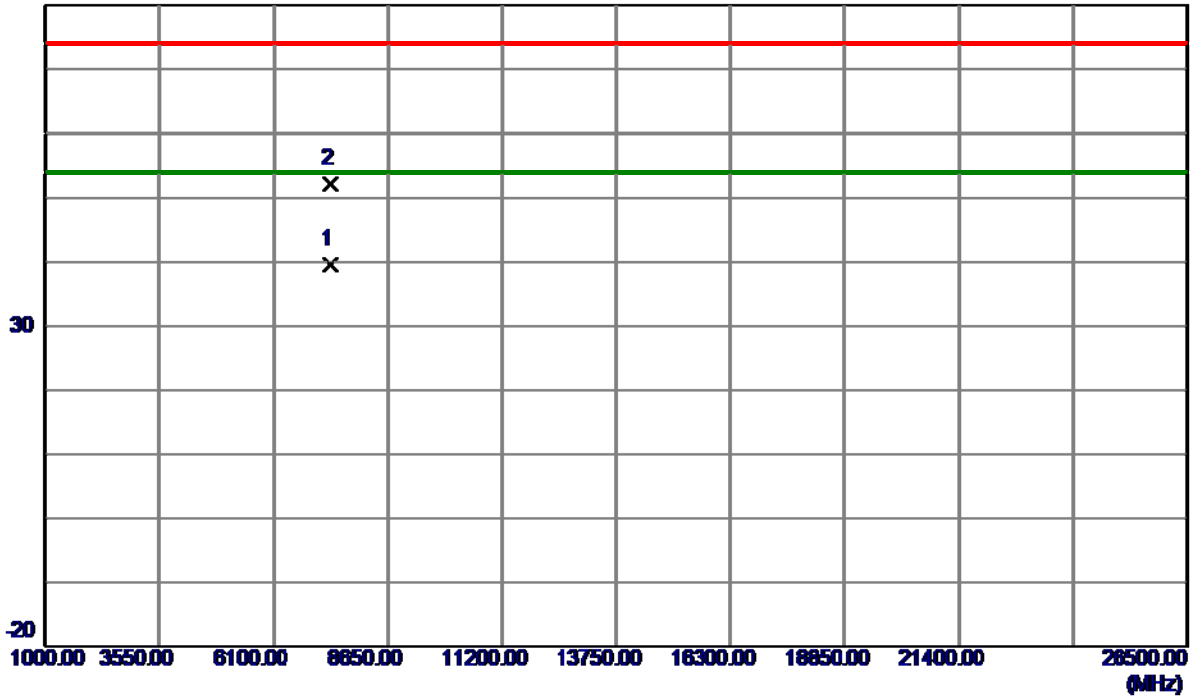
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX G Mode2462 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 *	7387.7500	30.33	9.34	39.67	54.00	-14.33	AVG	
2	7387.8500	42.78	9.34	52.12	74.00	-21.88	Peak	

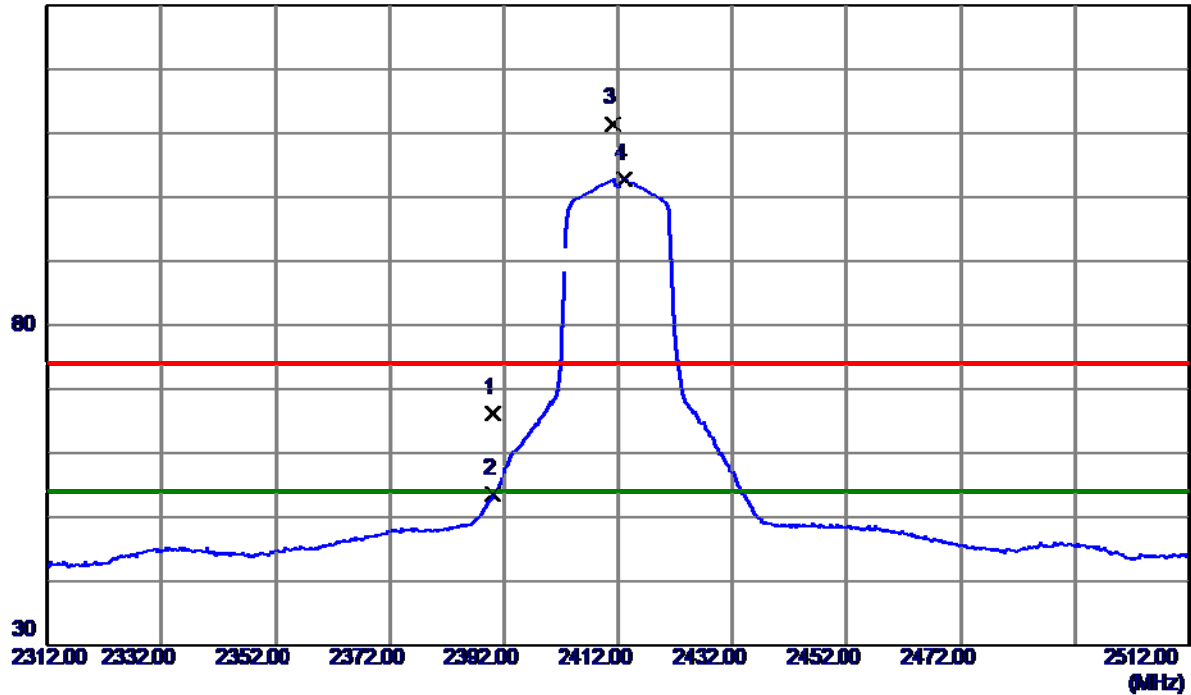
REMARKS:

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

Test Mode: TX N-20M Mode2412 MHz

Vertical

130 dBuV/m



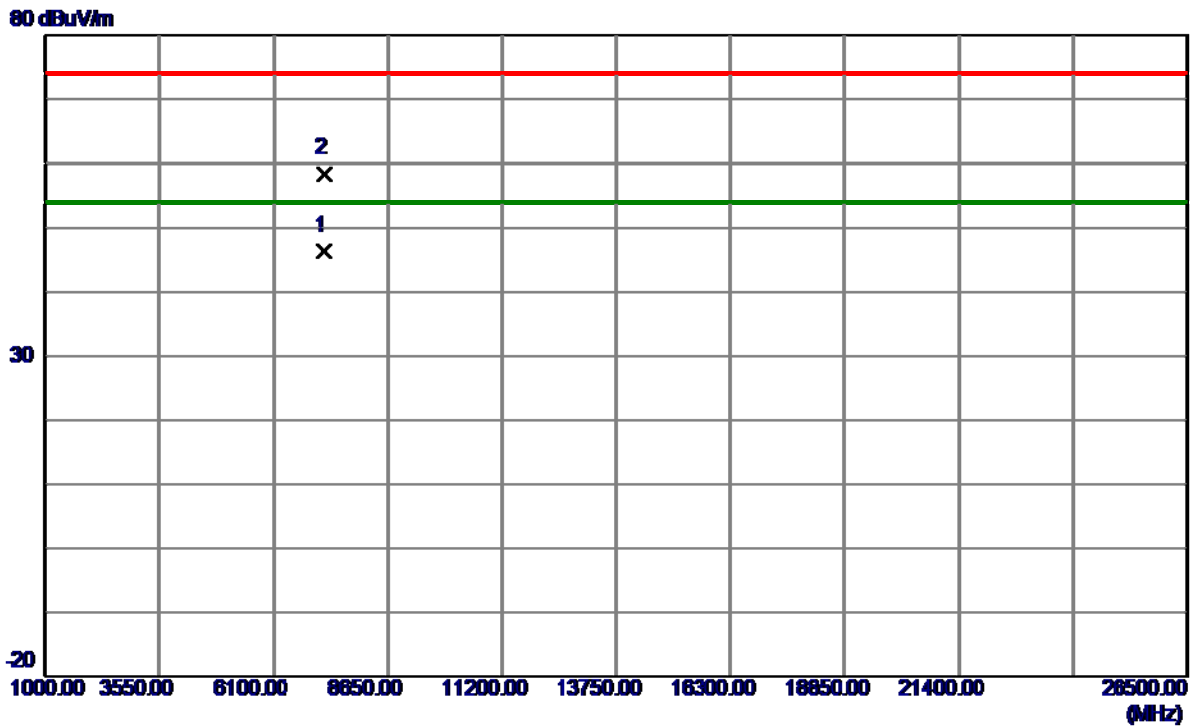
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	59.64	6.53	66.17	74.00	-7.83	Peak	
2	2390.0000	47.01	6.53	53.54	54.00	-0.46	AVG	
3	2411.2000	104.99	6.51	111.50	74.00	37.50	Peak	No Limit
4 *	2413.1000	96.34	6.50	102.84	54.00	48.84	AVG	No Limit

REMARKS:

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

Test Mode:	TX N-20M Mode2412 MHz
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Vertical



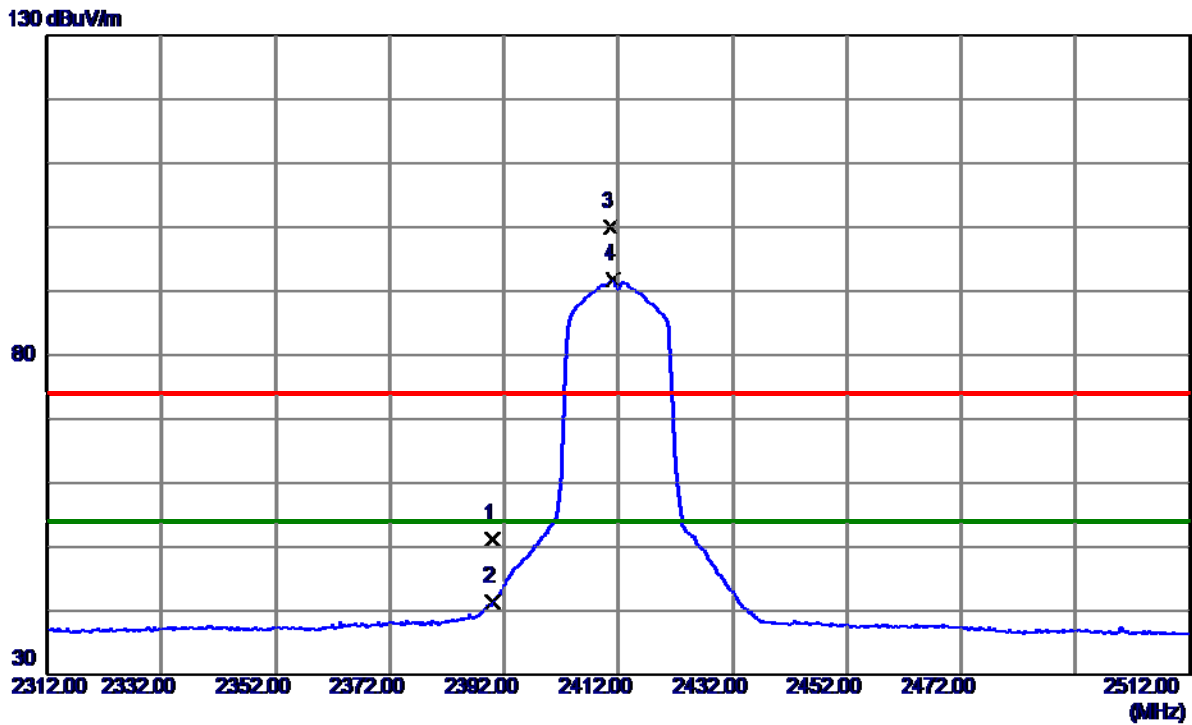
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7238.5750	37.34	9.12	46.46	54.00	-7.54	AVG	
2	7238.8000	49.23	9.12	58.35	74.00	-15.65	Peak	

REMARKS:

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

Test Mode: TX N-20M Mode2412 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	44.70	6.53	51.23	74.00	-22.77	Peak	
2	2390.0000	34.81	6.53	41.34	54.00	-12.66	AVG	
3	2410.6000	93.43	6.51	99.94	74.00	25.94	Peak	No Limit
4 *	2411.1000	85.24	6.51	91.75	54.00	37.75	AVG	No Limit

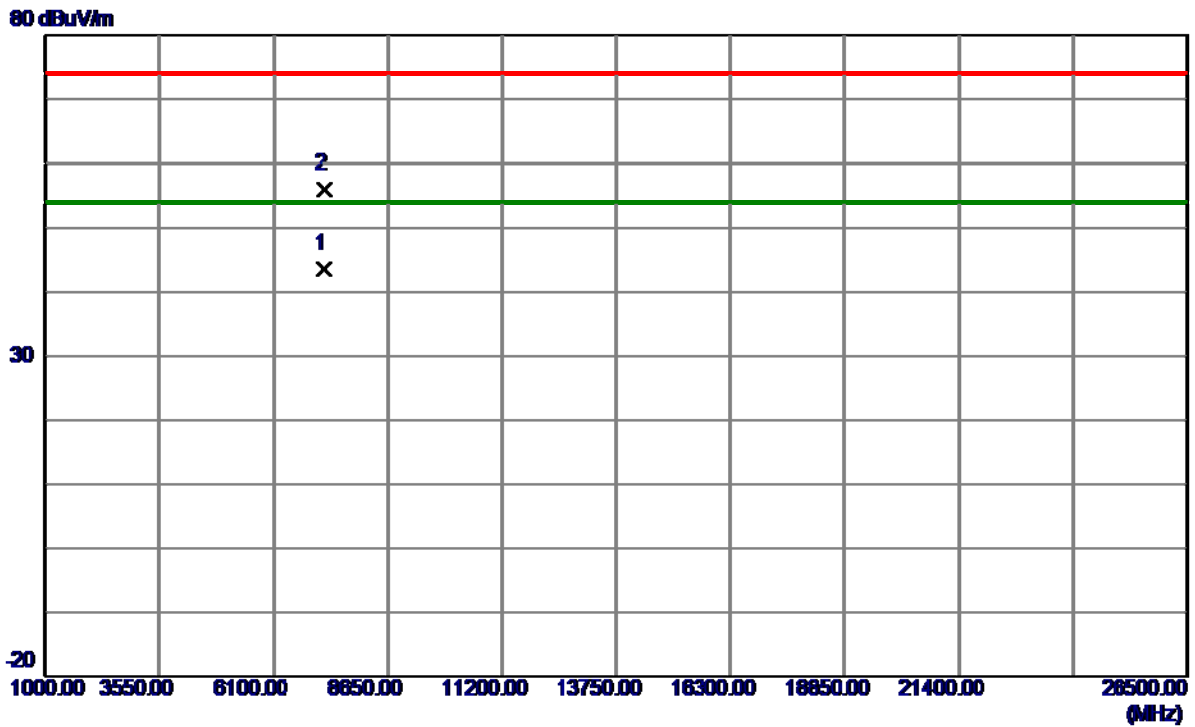
REMARKS:

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

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

Test Mode:	TX N-20M Mode2412 MHz
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Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7234.3500	34.49	9.12	43.61	54.00	-10.39	AVG	
2	7234.7000	46.86	9.12	55.98	74.00	-18.02	Peak	

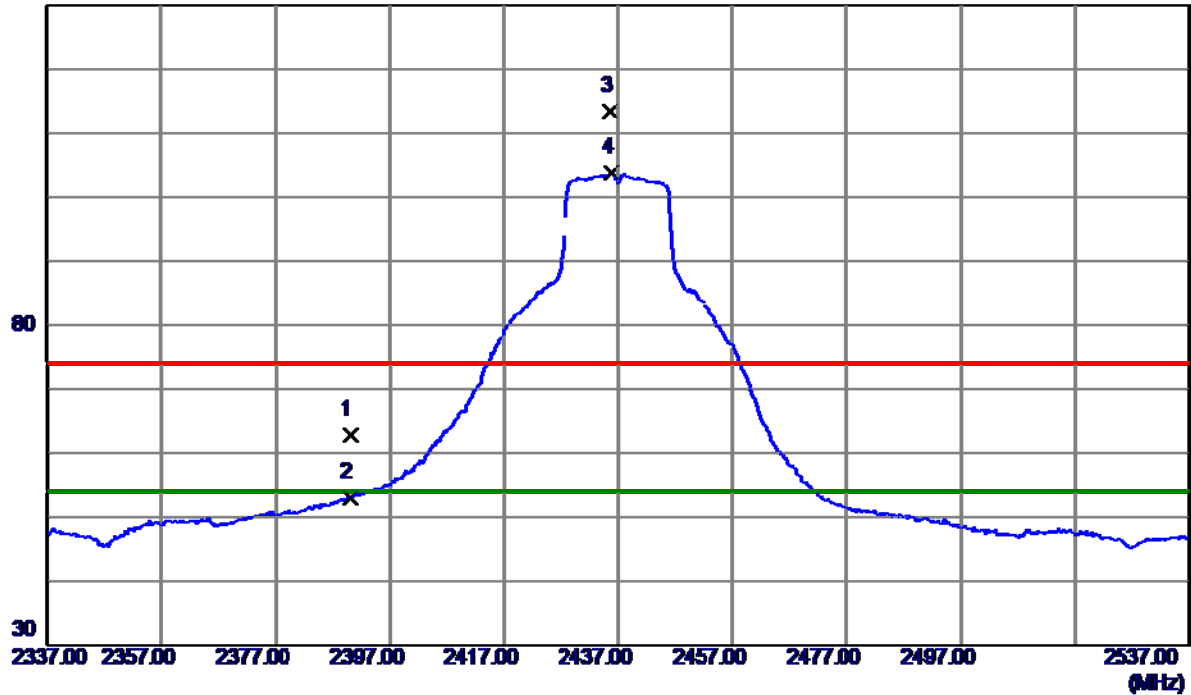
REMARKS:

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

Test Mode: TX N-20M Mode2437 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	56.31	6.53	62.84	74.00	-11.16	Peak	
2	2390.0000	46.52	6.53	53.05	54.00	-0.95	AVG	
3	2435.7000	106.86	6.48	113.34	74.00	39.34	Peak	No Limit
4 *	2435.8000	97.28	6.48	103.76	54.00	49.76	AVG	No Limit

REMARKS:

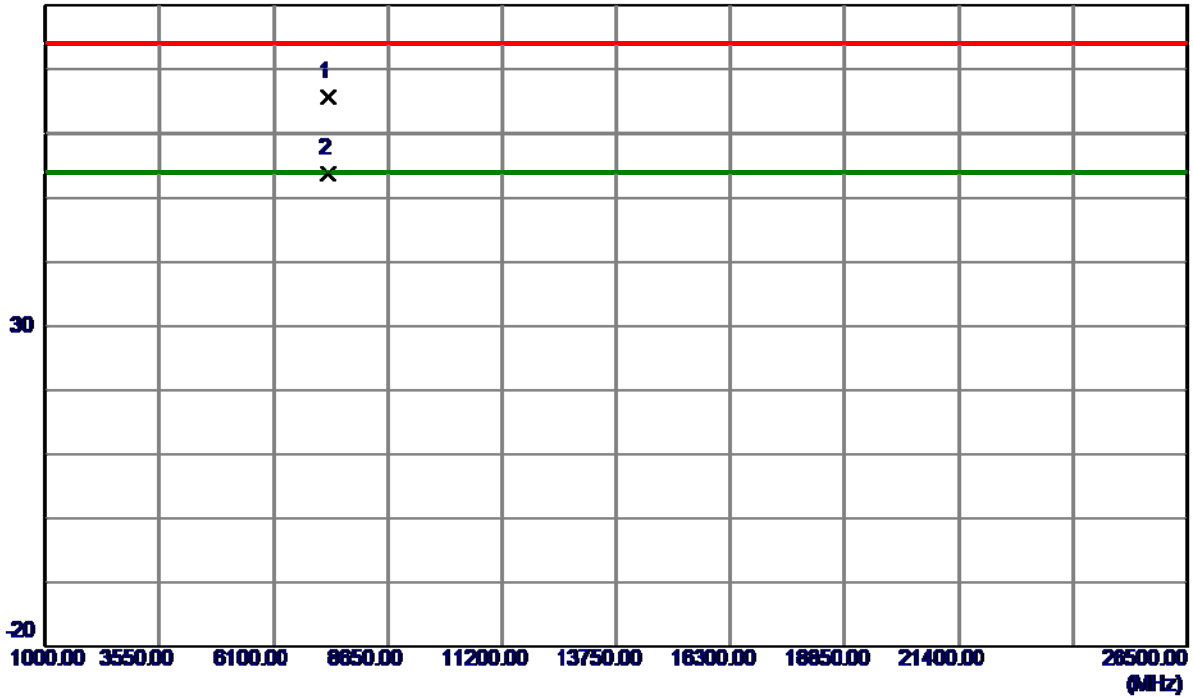
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX N-20M Mode2437 MHz

Vertical

80 dBuV/m



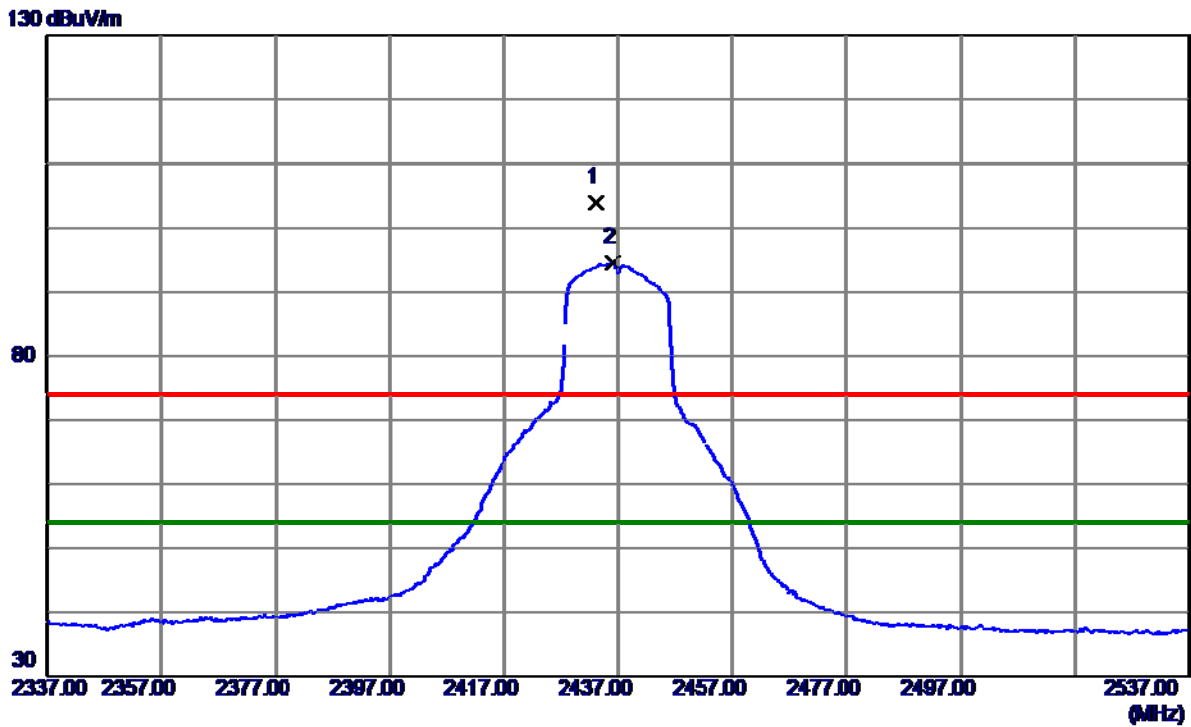
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7306.5750	56.35	9.22	65.57	74.00	-8.43	Peak	
2 *	7309.4500	44.50	9.23	53.73	54.00	-0.27	AVG	

REMARKS:

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

Test Mode: TX N-20M Mode2437 MHz

Horizontal



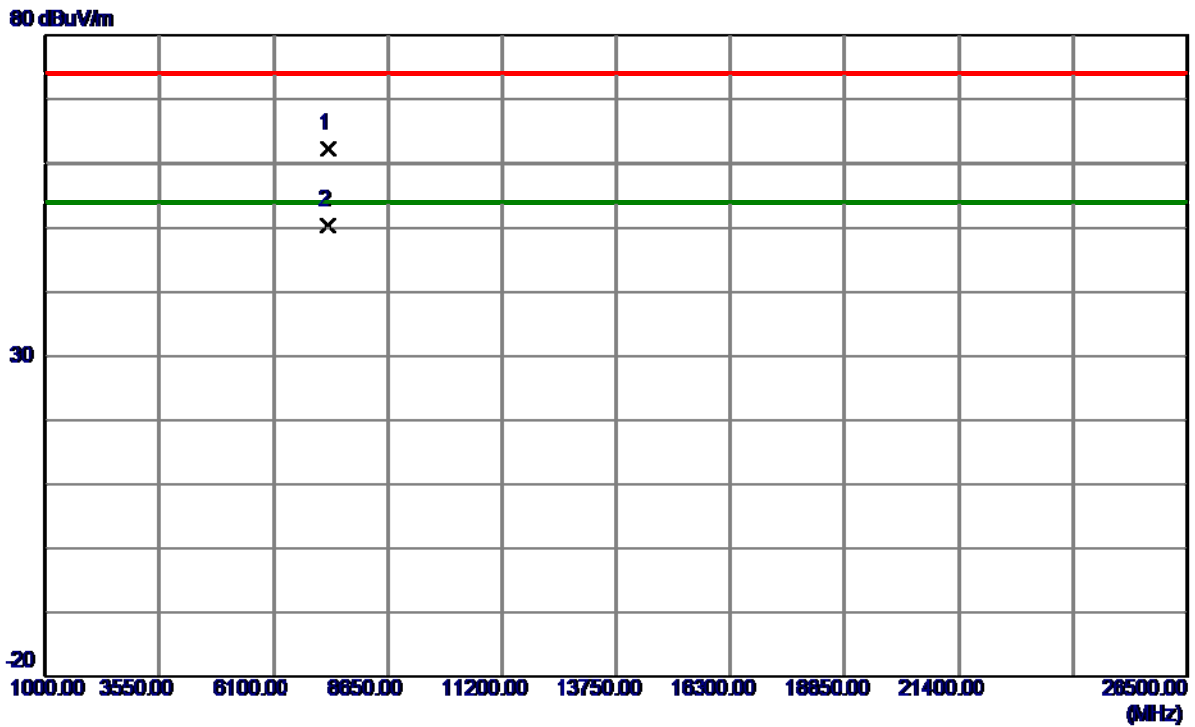
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2433.2000	97.42	6.48	103.90	74.00	29.90	Peak	No Limit
2 *	2436.2000	88.13	6.48	94.61	54.00	40.61	AVG	No Limit

REMARKS:

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

Test Mode:	TX N-20M Mode2437 MHz
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Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7309.0000	52.97	9.23	62.20	74.00	-11.80	Peak	
2 *	7309.7000	41.08	9.23	50.31	54.00	-3.69	AVG	

REMARKS:

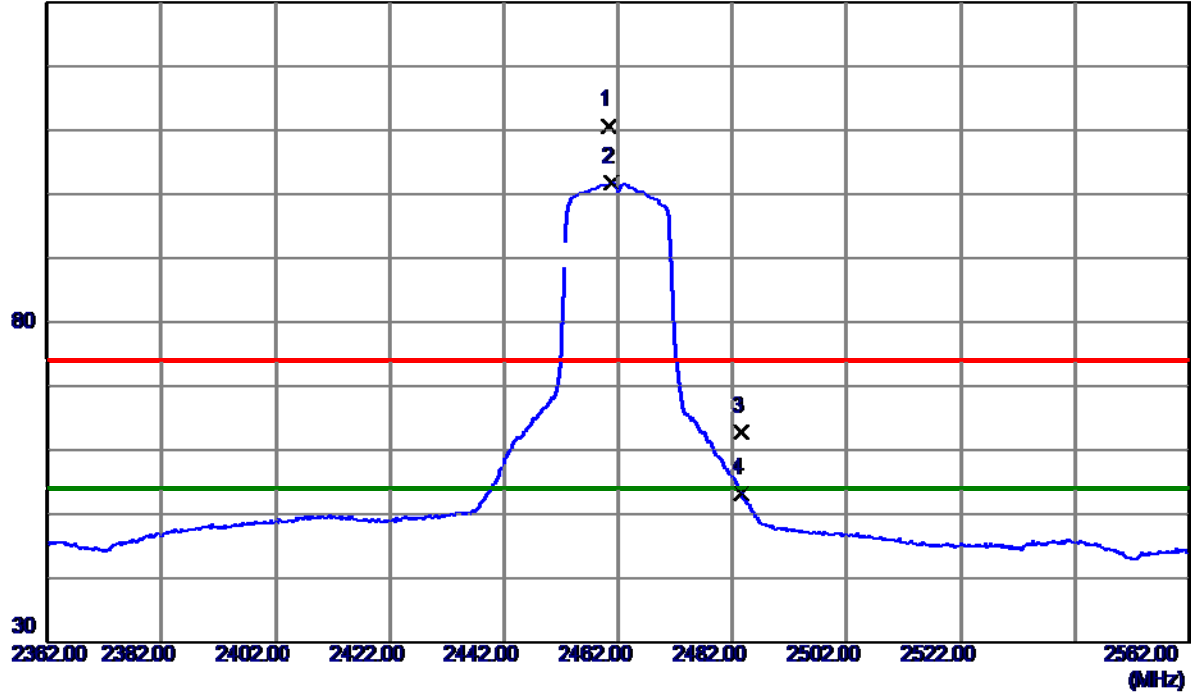
(1) Measurement Value = Reading Level + Correct Factor.

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

Test Mode: TX N-20M Mode2462 MHz

Vertical

130 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2460.4000	104.25	6.45	110.70	74.00	36.70	Peak	No Limit
2 *	2460.9000	95.39	6.45	101.84	54.00	47.84	AVG	No Limit
3	2483.5000	56.32	6.42	62.74	74.00	-11.26	Peak	
4	2483.5000	46.70	6.42	53.12	54.00	-0.88	AVG	

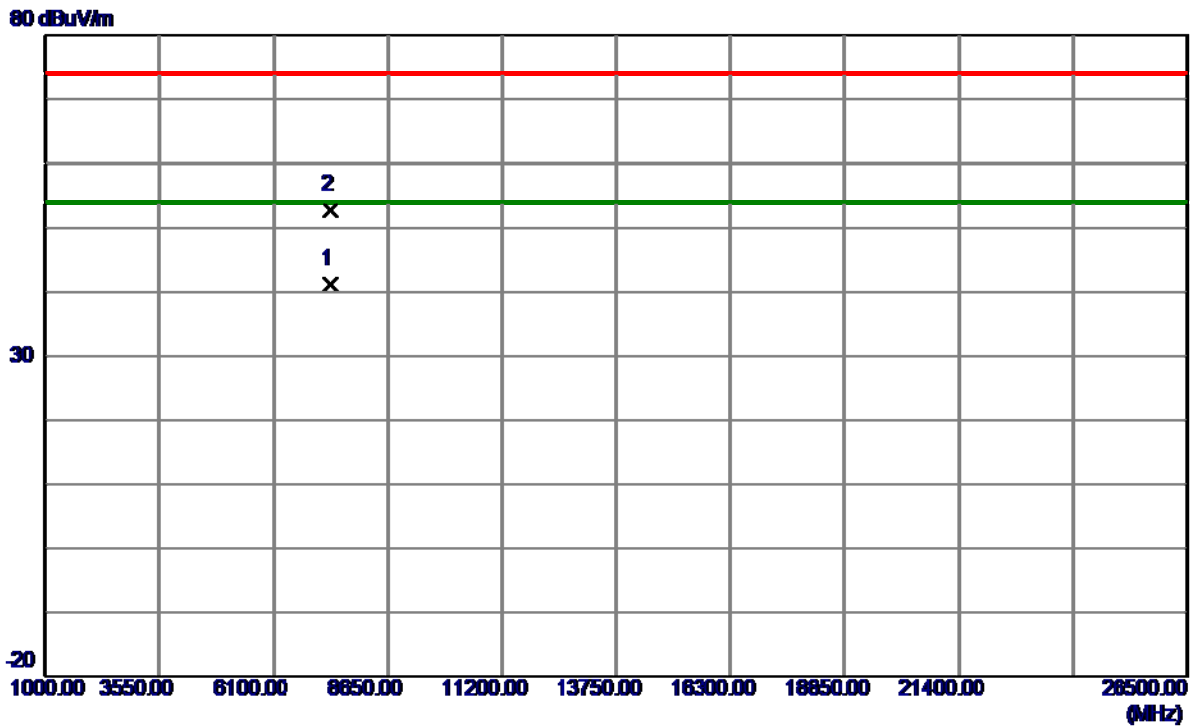
REMARKS:

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

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

Test Mode:	TX N-20M Mode2462 MHz
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Vertical



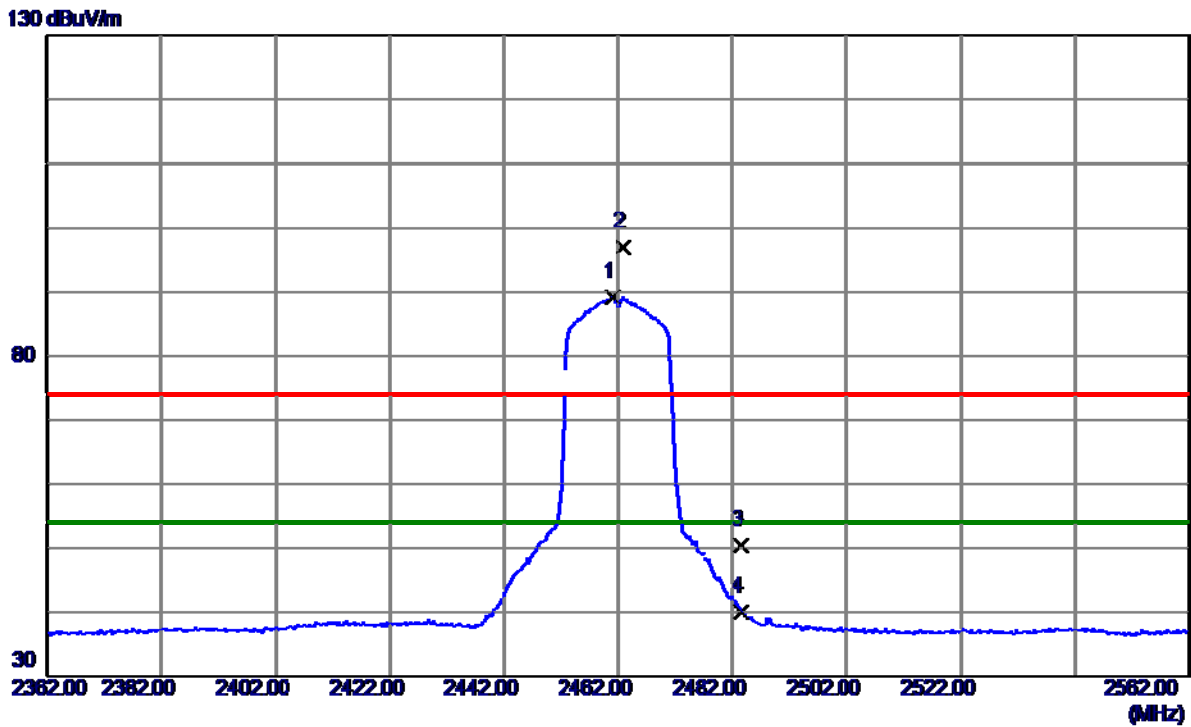
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7384.1250	31.91	9.34	41.25	54.00	-12.75	AVG	
2	7389.1000	43.47	9.35	52.82	74.00	-21.18	Peak	

REMARKS:

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

Test Mode: TX N-20M Mode2462 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2461.2000	82.81	6.45	89.26	54.00	35.26	AVG	No Limit
2	2462.8000	90.62	6.45	97.07	74.00	23.07	Peak	No Limit
3	2483.5000	44.04	6.42	50.46	74.00	-23.54	Peak	
4	2483.5000	33.62	6.42	40.04	54.00	-13.96	AVG	

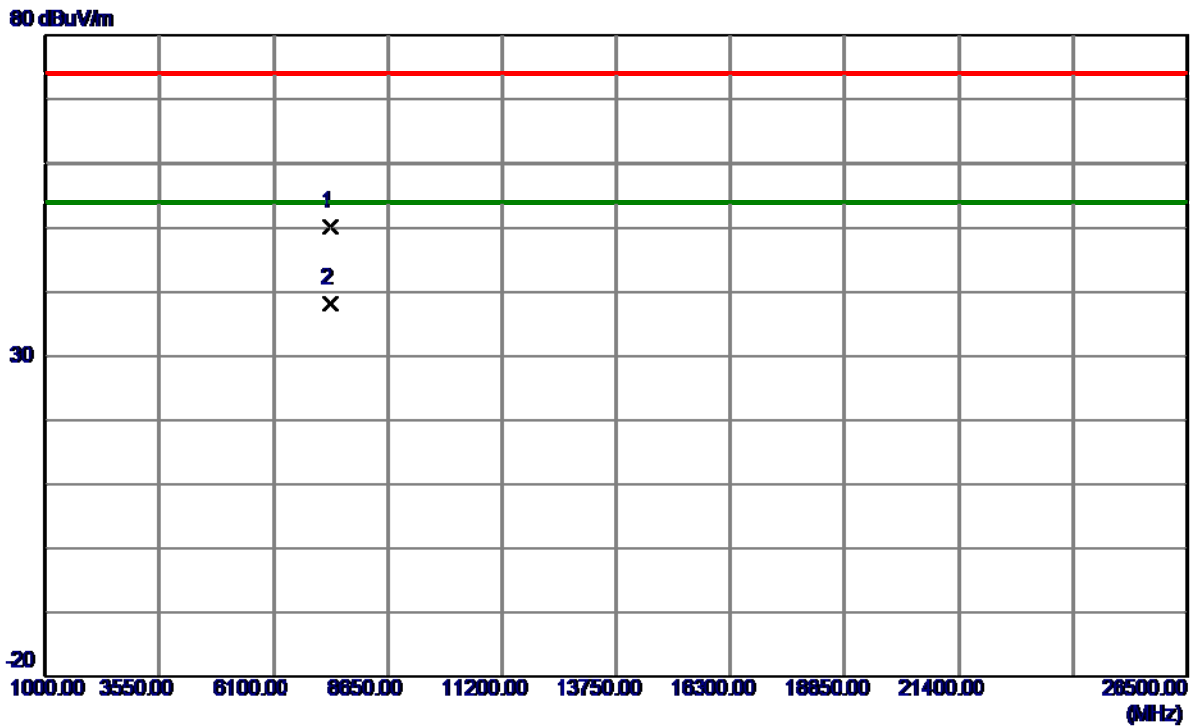
REMARKS:

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

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

Test Mode:	TX N-20M Mode2462 MHz
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Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7387.4750	40.89	9.34	50.23	74.00	-23.77	Peak	
2 *	7389.0250	28.84	9.35	38.19	54.00	-15.81	AVG	

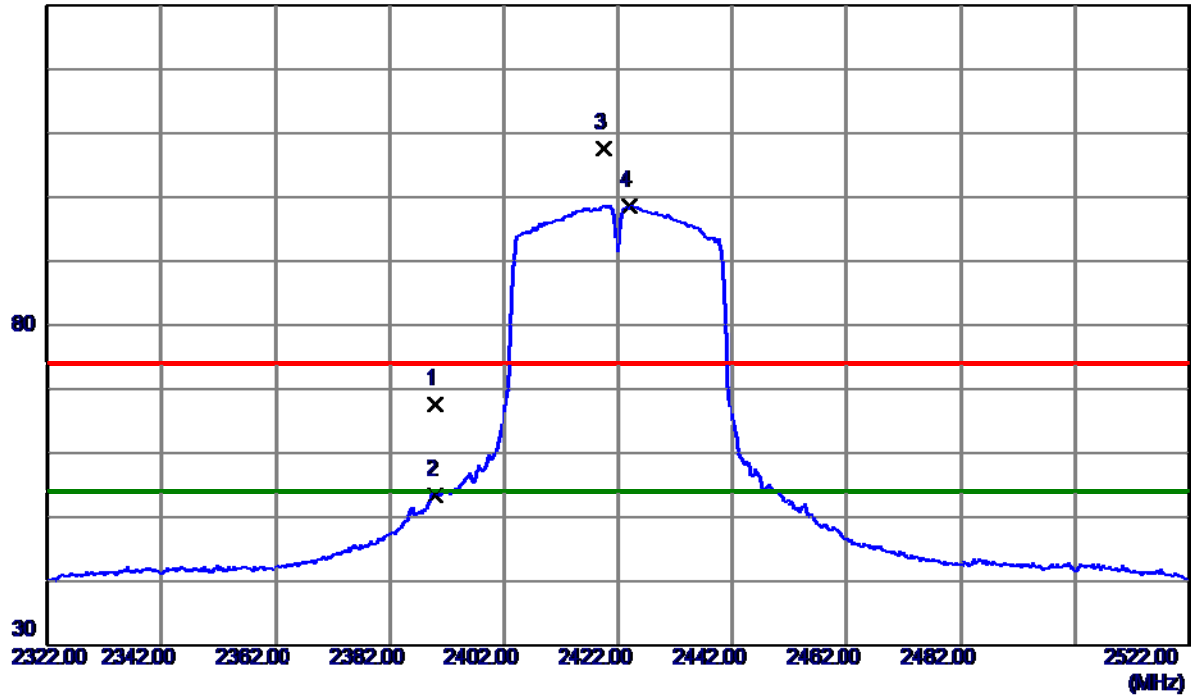
REMARKS:

- (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	60.98	6.53	67.51	74.00	-6.49	Peak	
2	2390.0000	46.78	6.53	53.31	54.00	-0.69	AVG	
3	2419.5000	101.04	6.50	107.54	74.00	33.54	Peak	No Limit
4 *	2424.1000	92.14	6.49	98.63	54.00	44.63	AVG	No Limit

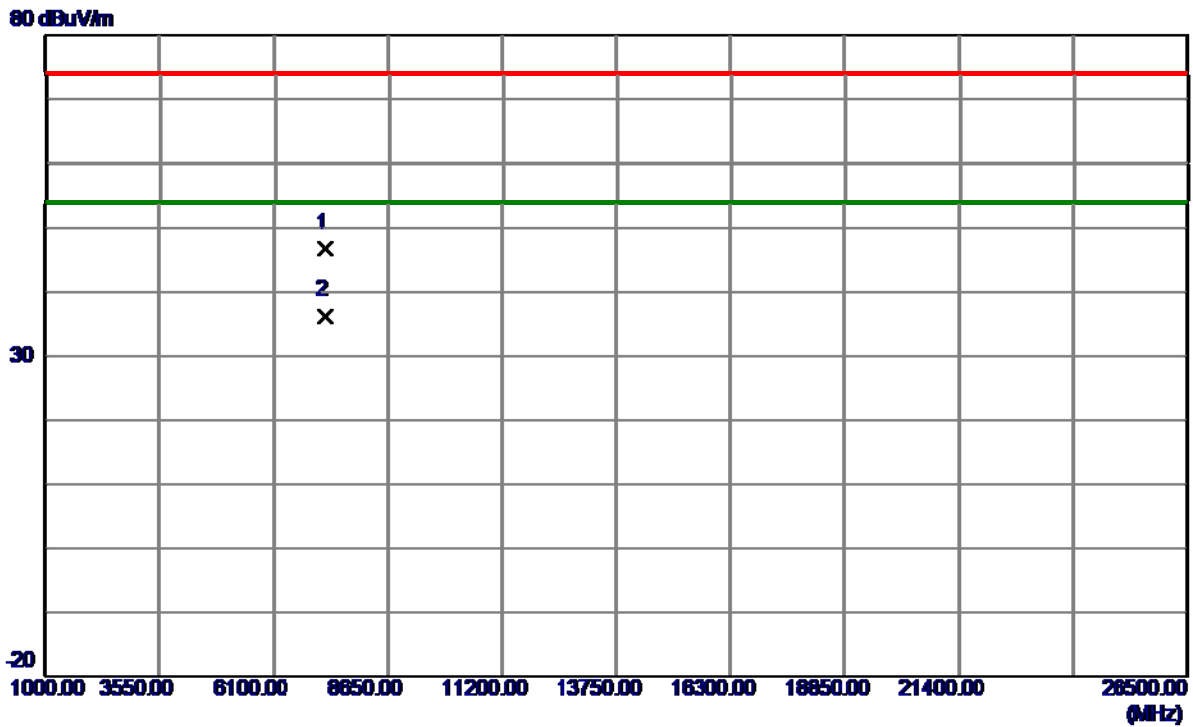
REMARKS:

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

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

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



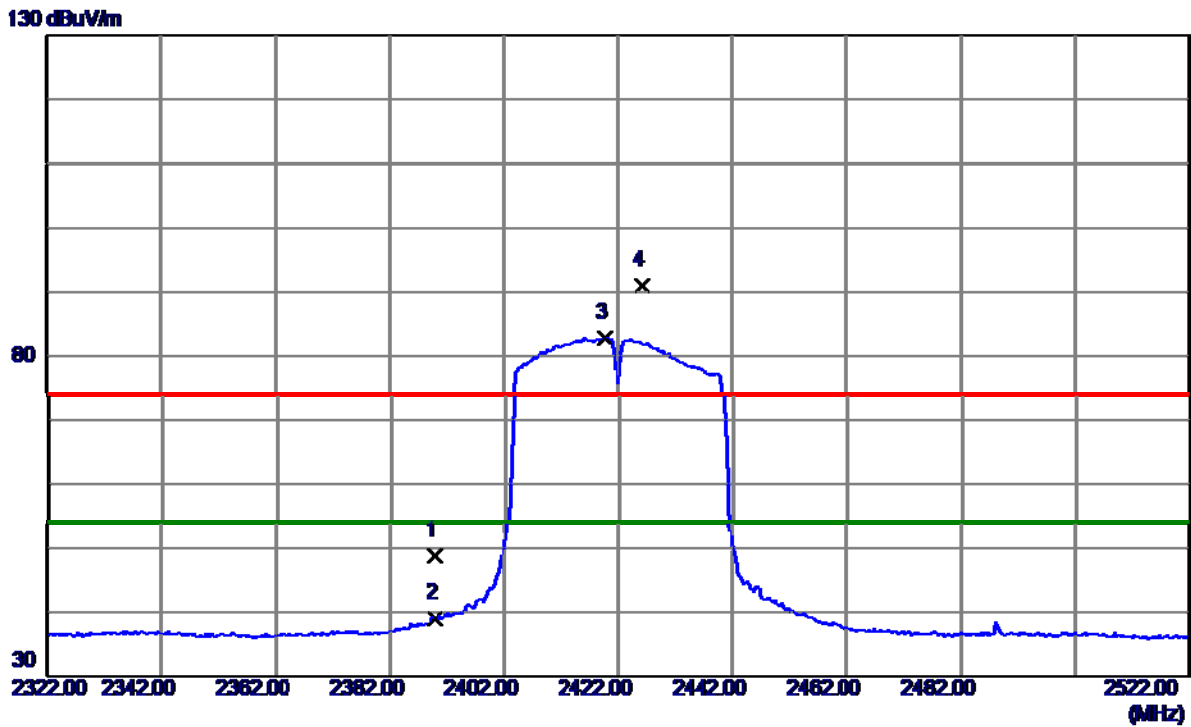
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7269.1500	37.64	9.17	46.81	74.00	-27.19	Peak	
2 *	7270.1500	27.13	9.17	36.30	54.00	-17.70	AVG	

REMARKS:

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

Test Mode: TX N-40M Mode 2422MHz

Horizontal



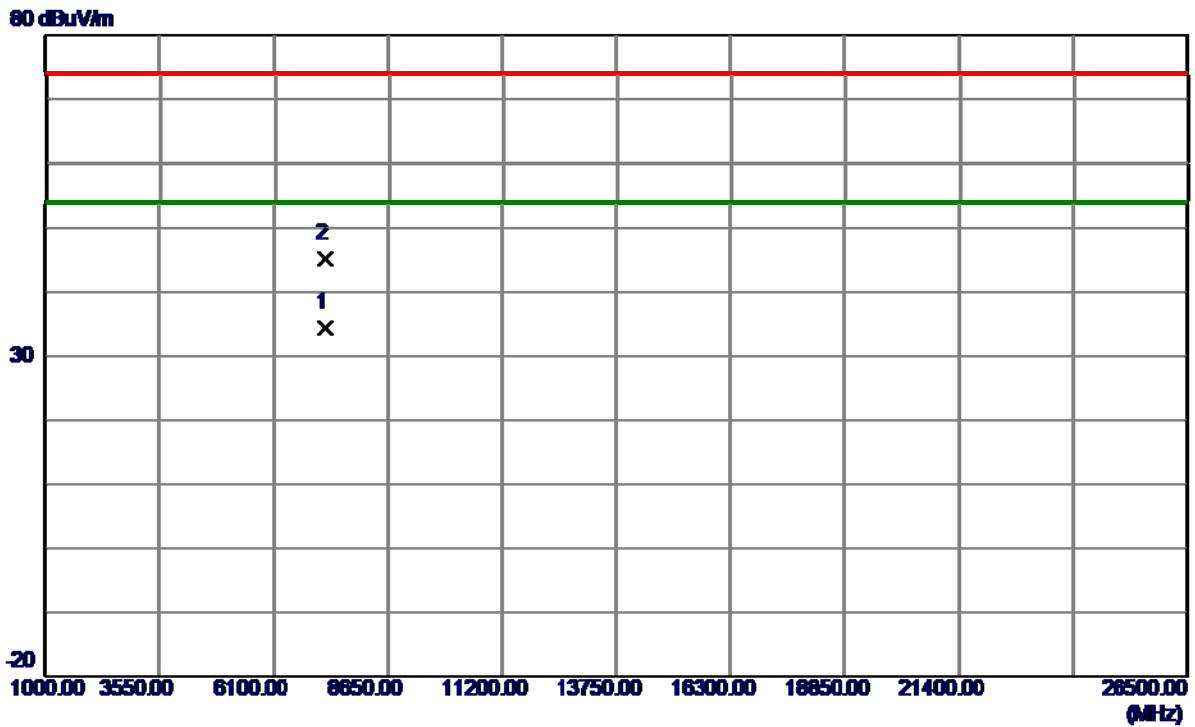
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	42.22	6.53	48.75	74.00	-25.25	Peak	
2	2390.0000	32.43	6.53	38.96	54.00	-15.04	AVG	
3 *	2419.7000	76.33	6.50	82.83	54.00	28.83	AVG	No Limit
4	2426.2000	84.50	6.49	90.99	74.00	16.99	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

Horizontal



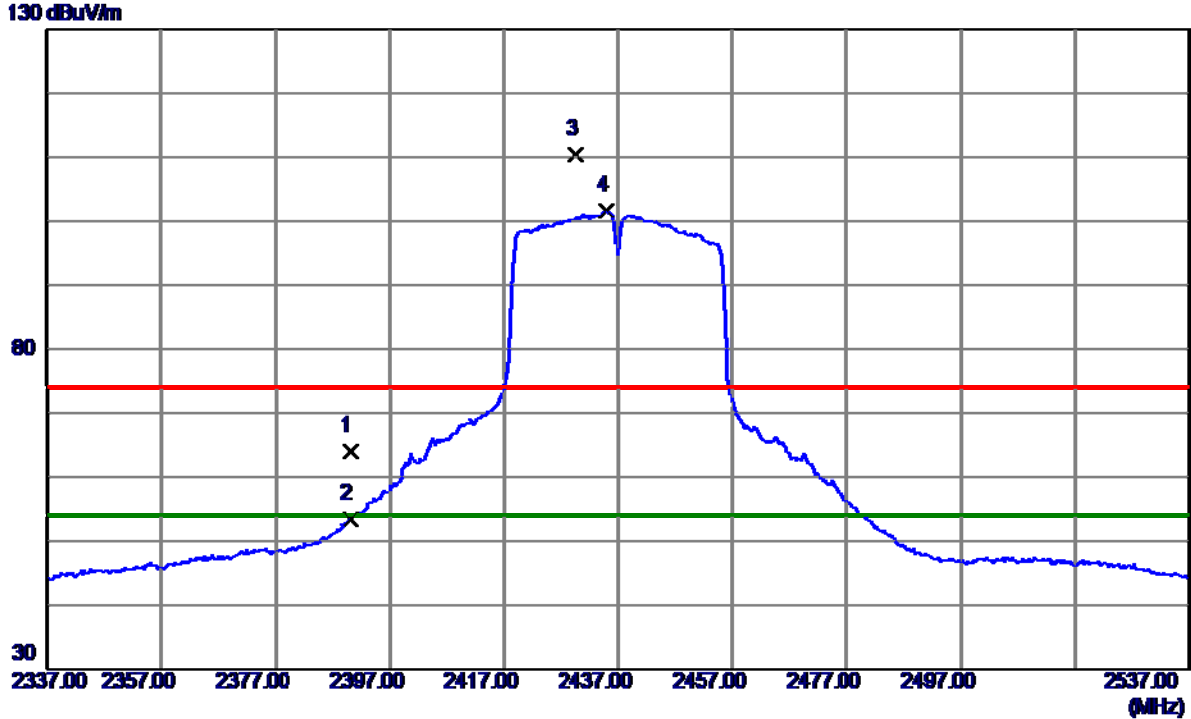
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7251.4000	25.22	9.14	34.36	54.00	-19.64	AVG	
2	7252.8500	36.10	9.14	45.24	74.00	-28.76	Peak	

REMARKS:

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

Test Mode: TX N-40M Mode2437 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	57.39	6.53	63.92	74.00	-10.08	Peak	
2	2390.0000	46.93	6.53	53.46	54.00	-0.54	AVG	
3	2429.6000	103.83	6.49	110.32	74.00	36.32	Peak	No Limit
4 *	2434.9000	95.05	6.48	101.53	54.00	47.53	AVG	No Limit

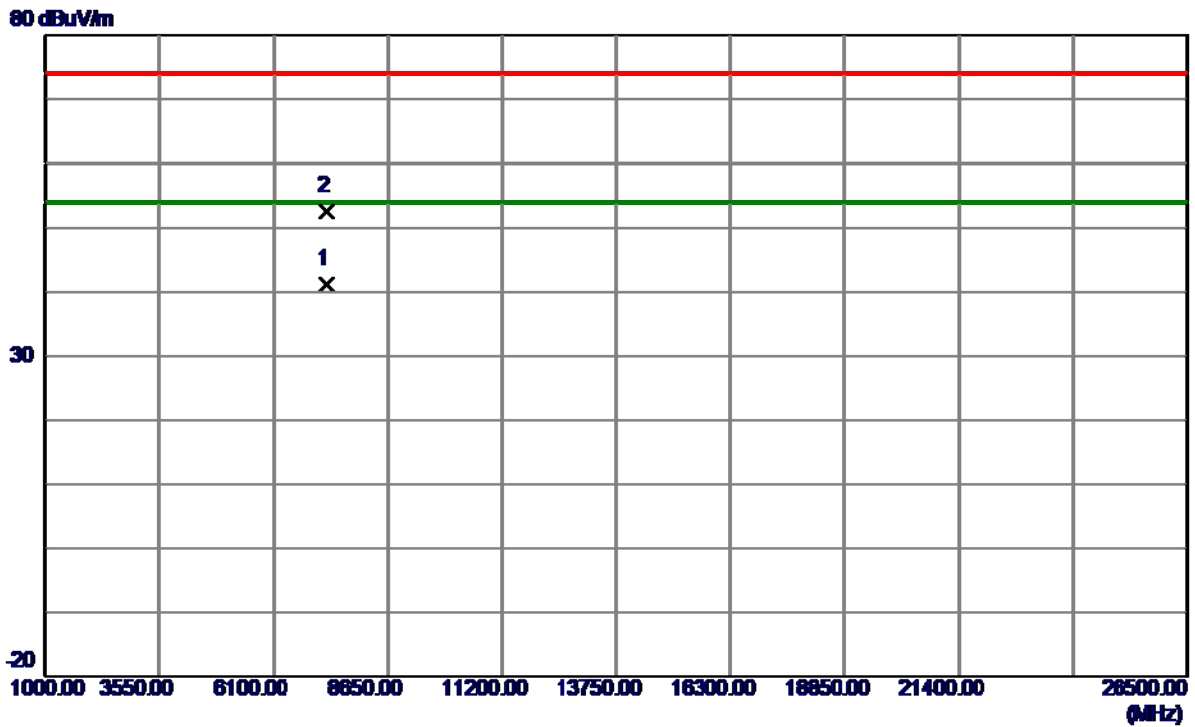
REMARKS:

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

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

Test Mode:	TX N-40M Mode2437 MHz
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Vertical



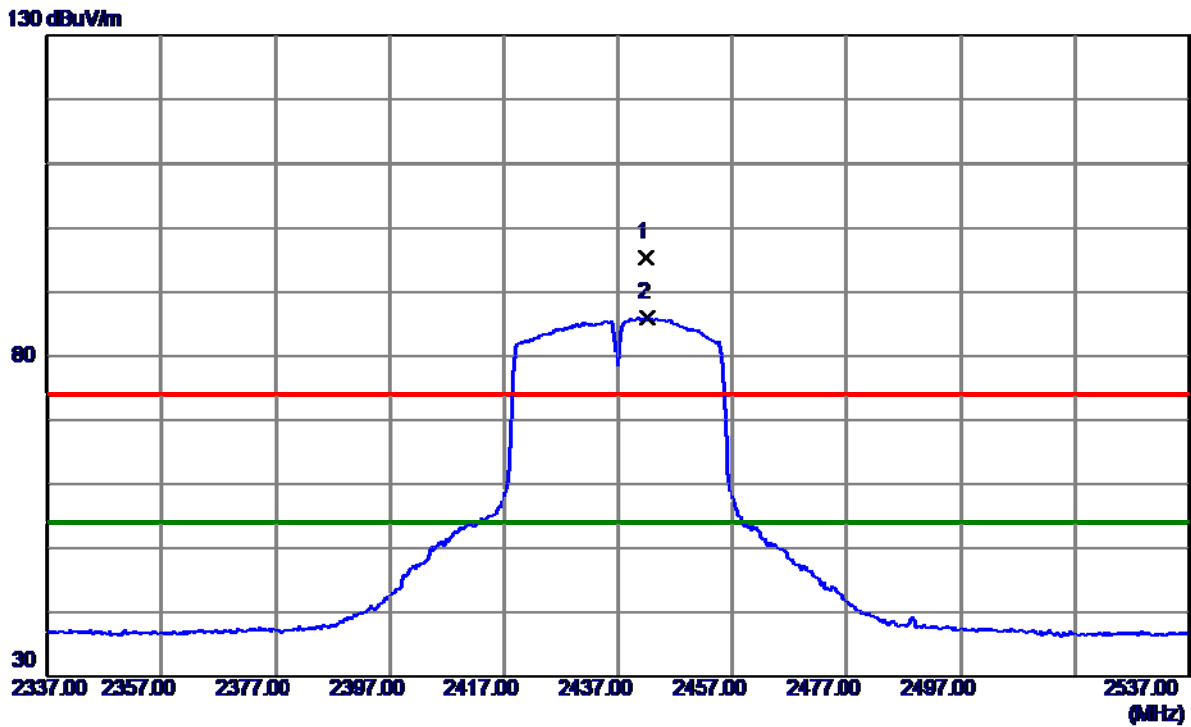
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7302.5500	31.92	9.22	41.14	54.00	-12.86	AVG	
2	7303.5000	43.43	9.22	52.65	74.00	-21.35	Peak	

REMARKS:

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

Test Mode: TX N-40M Mode2437 MHz

Horizontal



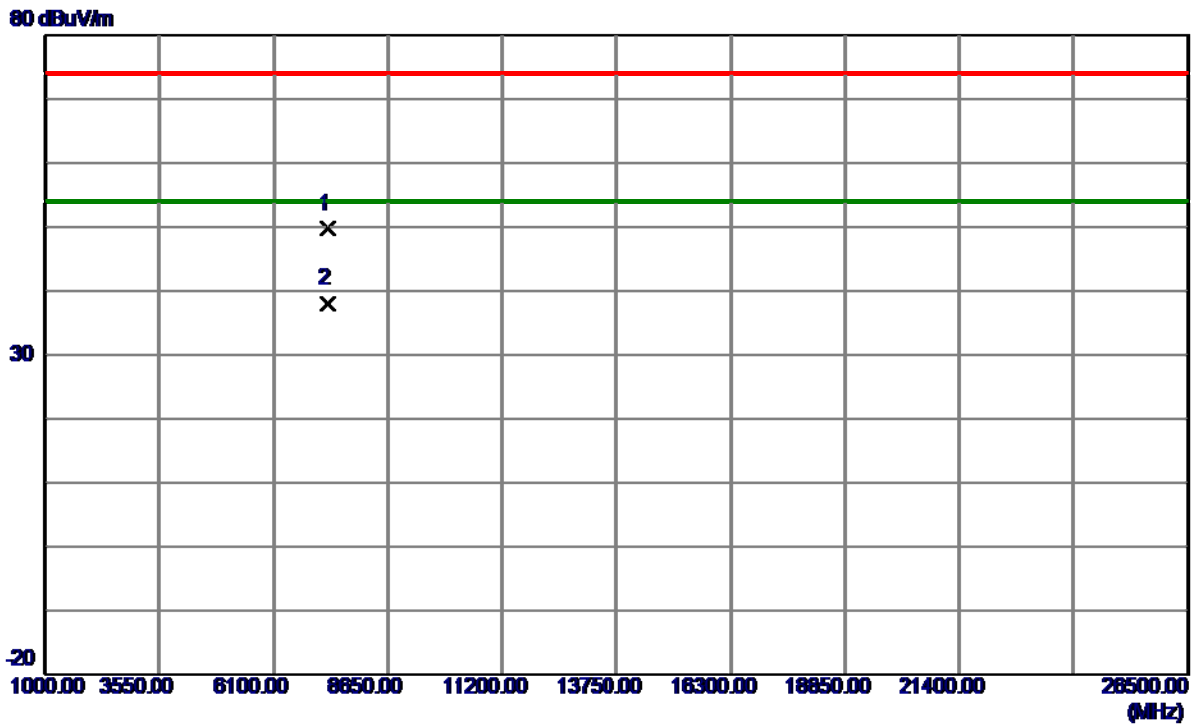
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2441.9000	88.96	6.47	95.43	74.00	21.43	Peak	No Limit
2 *	2442.1000	79.62	6.47	86.09	54.00	32.09	AVG	No Limit

REMARKS:

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

Test Mode:	TX N-40M Mode2437 MHz
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Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7313.0000	40.47	9.23	49.70	74.00	-24.30	Peak	
2 *	7319.9000	28.68	9.24	37.92	54.00	-16.08	AVG	

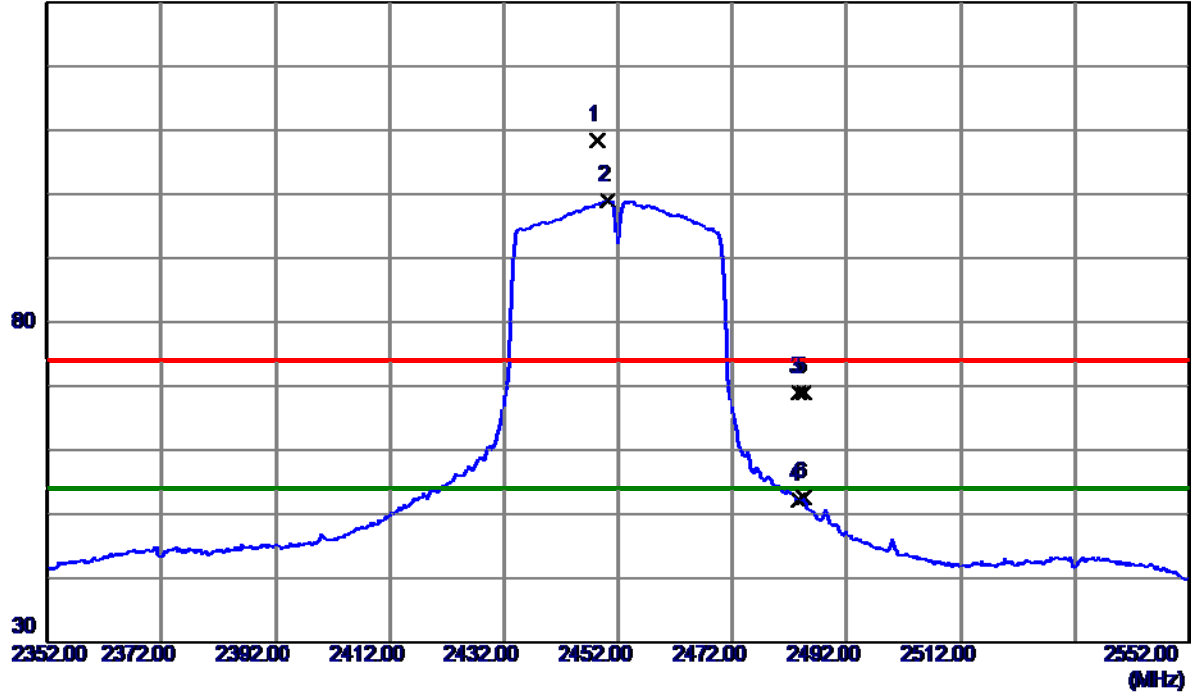
REMARKS:

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

Test Mode: TX N-40M Mode2452 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	2448.4000	101.92	6.46	108.38	74.00	34.38	Peak	No Limit
2 *	2450.2000	92.57	6.46	99.03	54.00	45.03	AVG	No Limit
3	2483.5000	62.50	6.42	68.92	74.00	-5.08	Peak	
4	2483.5000	45.71	6.42	52.13	54.00	-1.87	AVG	
5	2484.5000	62.63	6.42	69.05	74.00	-4.95	Peak	
6	2484.5000	46.20	6.42	52.62	54.00	-1.38	AVG	

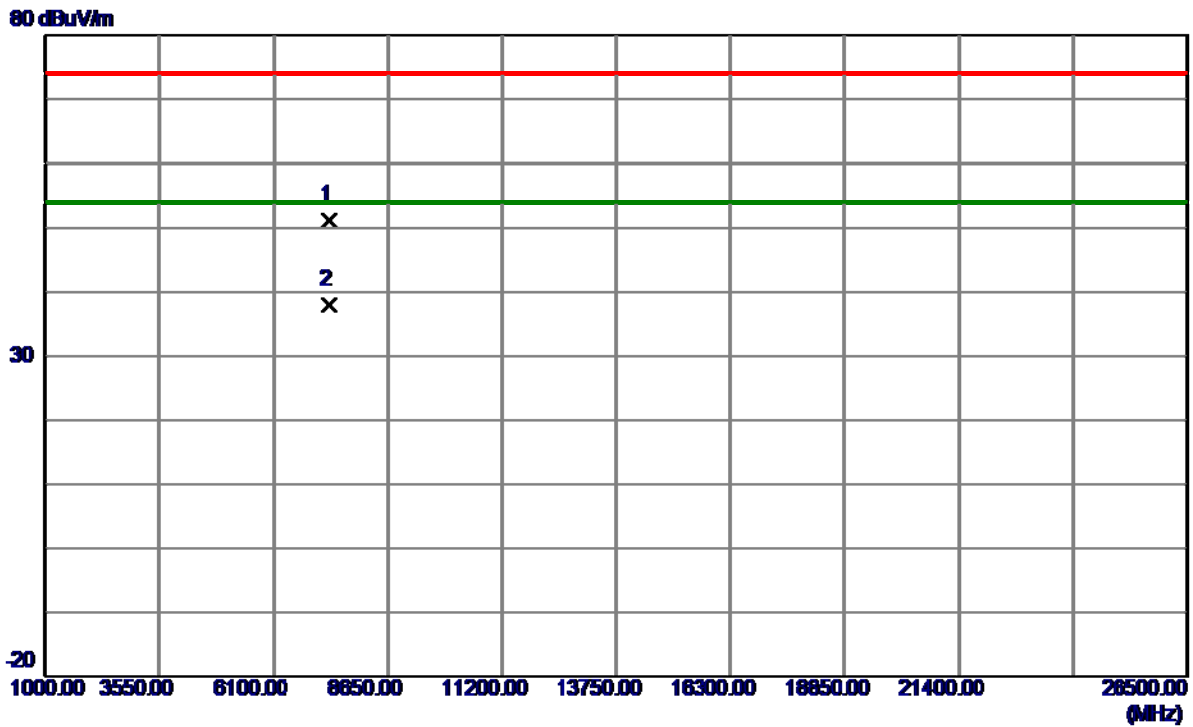
REMARKS:

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

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

Test Mode:	TX N-40M Mode2452 MHz
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Vertical



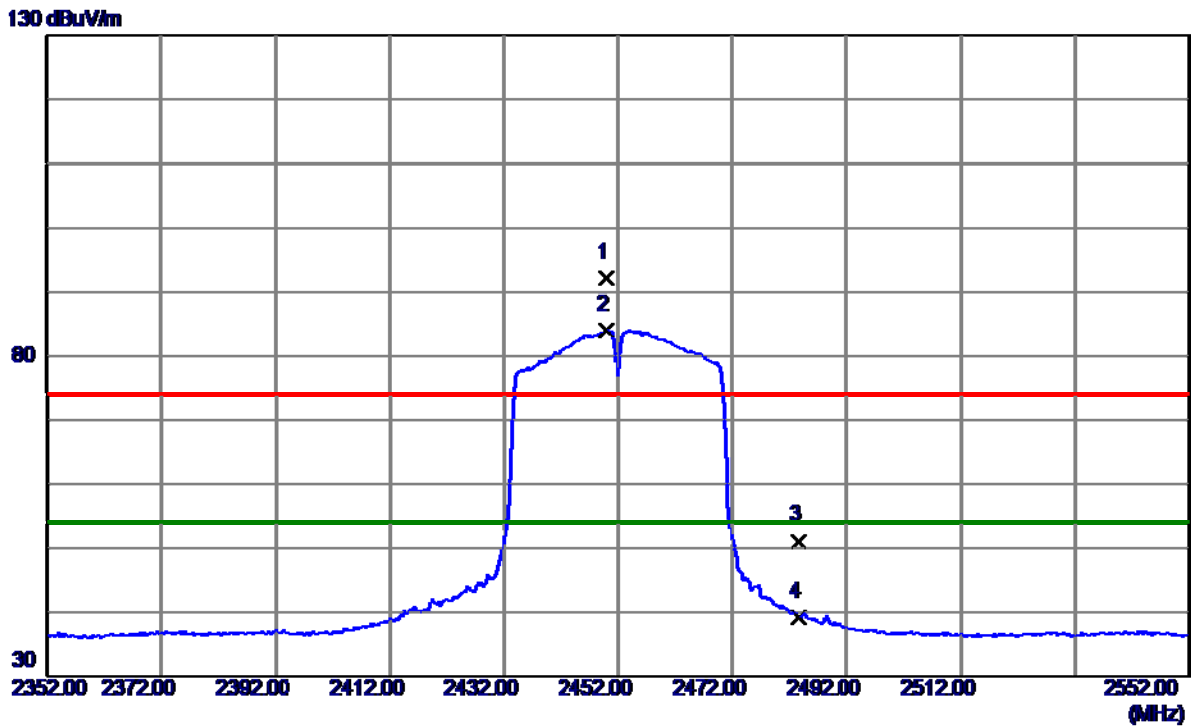
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7346.6000	41.85	9.28	51.13	74.00	-22.87	Peak	
2 *	7352.5000	28.77	9.29	38.06	54.00	-15.94	AVG	

REMARKS:

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

Test Mode: TX N-40M Mode2452 MHz

Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2450.1000	85.79	6.46	92.25	74.00	18.25	Peak	No Limit
2 *	2450.1000	77.55	6.46	84.01	54.00	30.01	AVG	No Limit
3	2483.5000	44.68	6.42	51.10	74.00	-22.90	Peak	
4	2483.5000	32.79	6.42	39.21	54.00	-14.79	AVG	

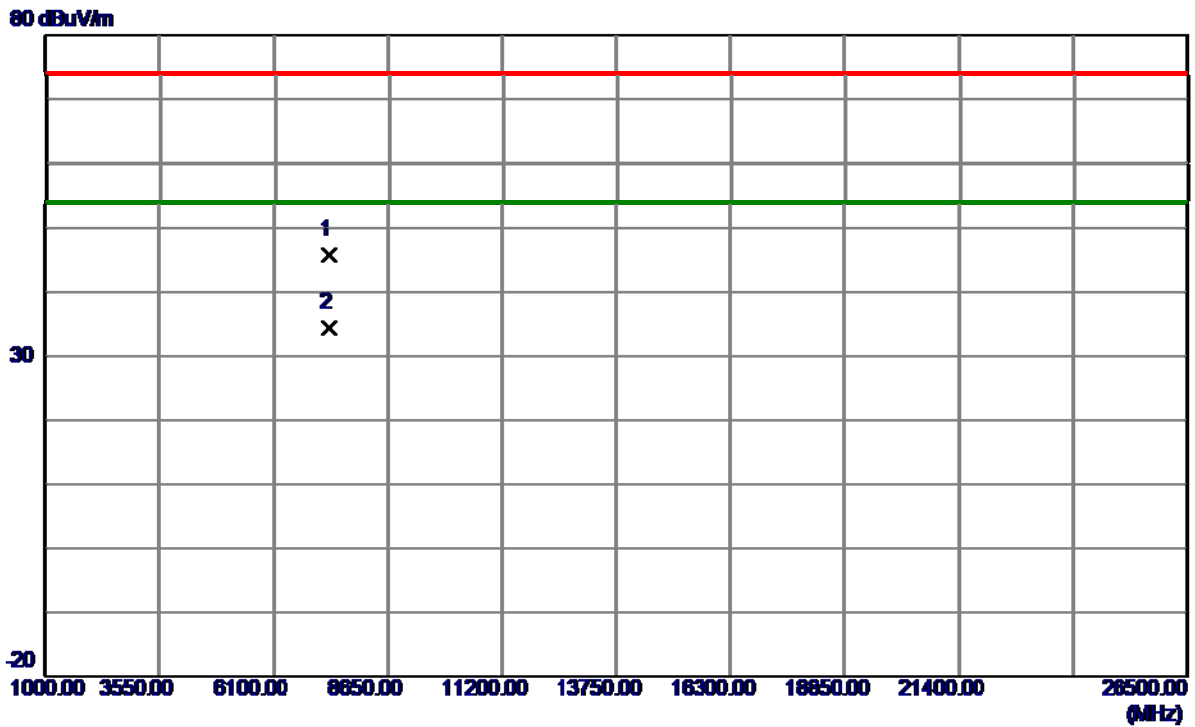
REMARKS:

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

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

Test Mode:	TX N-40M Mode2452 MHz
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Horizontal



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7356.6500	36.54	9.30	45.84	74.00	-28.16	Peak	
2 *	7356.7500	25.04	9.30	34.34	54.00	-19.66	AVG	

REMARKS:

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

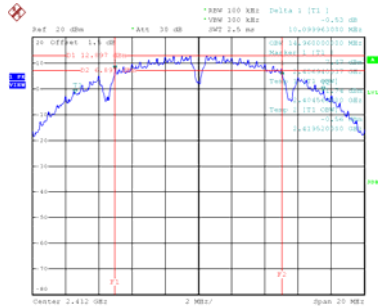
APPENDIXE - BANDWIDTH

Non-Beamforming

Test Mode	TX B Mode
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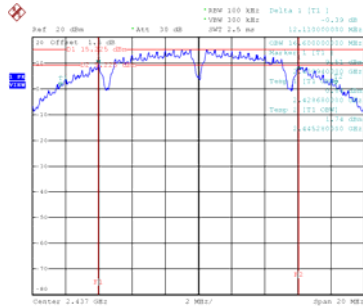
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	10.10	500	Complies
06	2437	12.11	500	Complies
11	2462	11.12	500	Complies

CH01



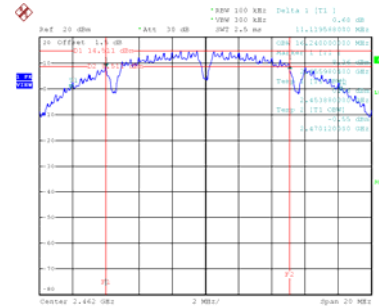
Date: 17-APR-2019 13:55:53

CH06



Date: 17-APR-2019 13:58:14

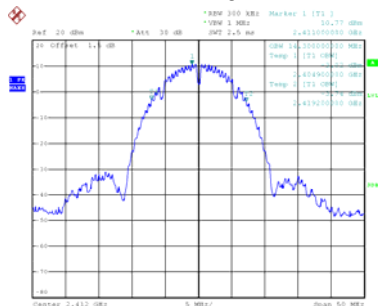
CH11



Date: 17-APR-2019 14:01:56

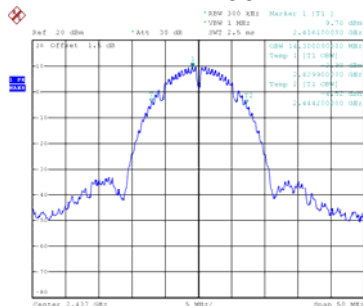
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	14.30	Complies
06	2437	14.30	Complies
11	2462	14.30	Complies

CH01



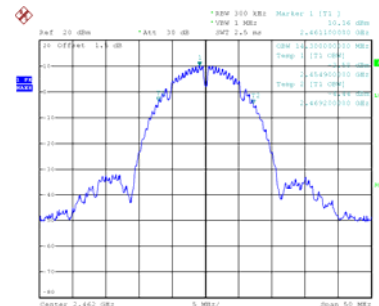
Date: 30-JUL-2019 16:56:33

CH06



Date: 30-JUL-2019 16:56:56

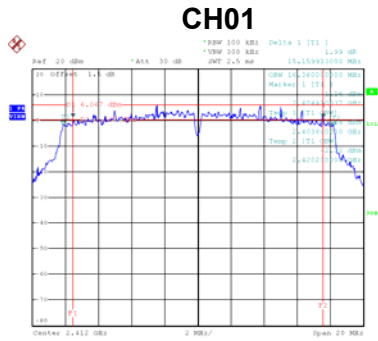
CH11



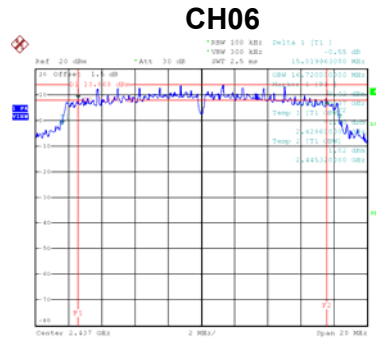
Date: 30-JUL-2019 16:57:16

Test Mode	TX G Mode
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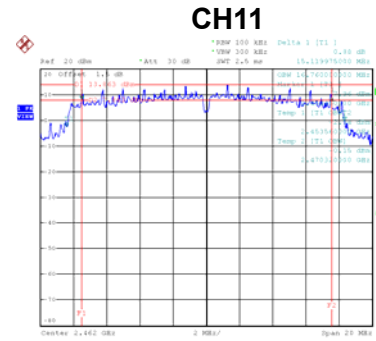
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.16	500	Complies
06	2437	15.02	500	Complies
11	2462	15.12	500	Complies



Date: 17.APR.2019 14:41:52

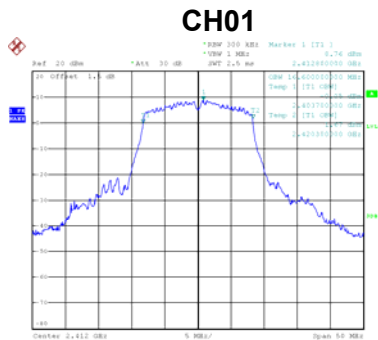


Date: 17.APR.2019 14:05:01

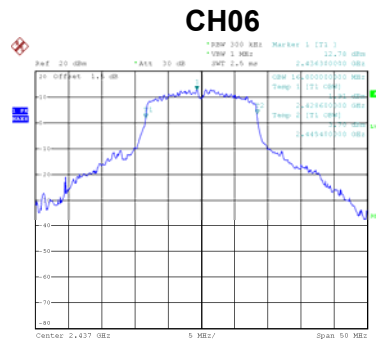


Date: 17.APR.2019 14:06:49

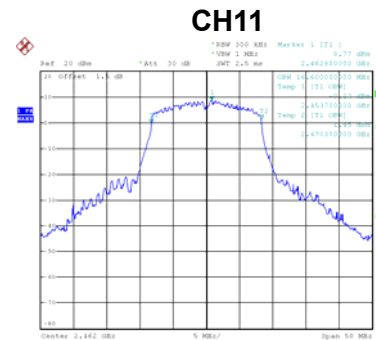
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	16.60	Complies
06	2437	16.80	Complies
11	2462	16.60	Complies



Date: 30.JUL.2019 16:55:11



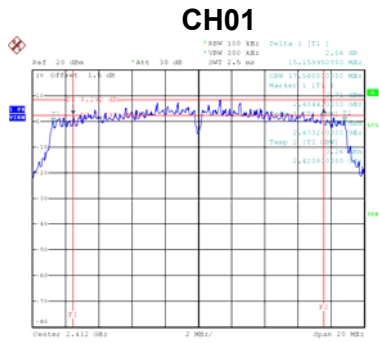
Date: 30.JUL.2019 16:54:03



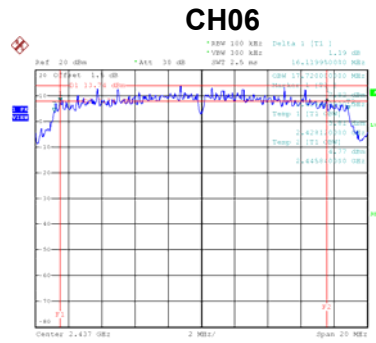
Date: 30.JUL.2019 16:52:51

Test Mode	TX N-20M Mode
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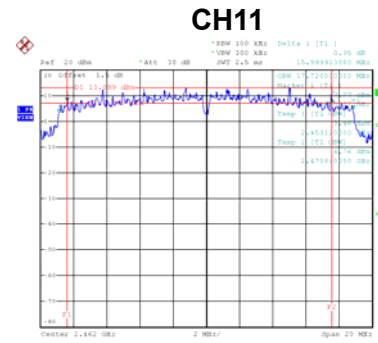
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.16	500	Complies
06	2437	16.12	500	Complies
11	2462	16.00	500	Complies



Date: 17.APR.2019 14:30:37

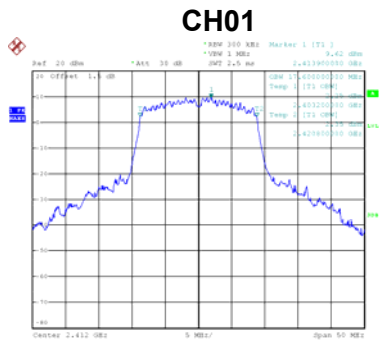


Date: 17.APR.2019 14:10:45

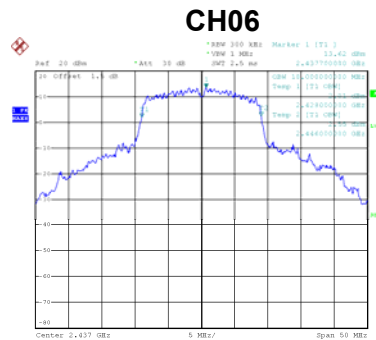


Date: 17.APR.2019 14:13:59

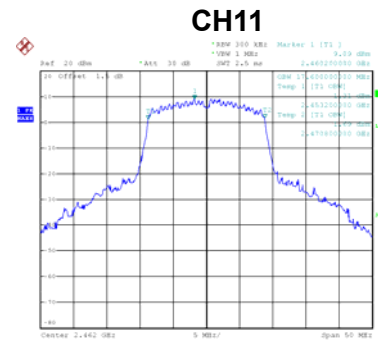
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.60	Complies
06	2437	18.00	Complies
11	2462	17.60	Complies



Date: 30.JUL.2019 16:49:14



Date: 30.JUL.2019 16:43:00



Date: 30.JUL.2019 16:50:39

APPENDIXF- MAXIMUMOUTPUT POWER

Non-Beamforming

Test Mode	TX B Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	17.98	0.0628	30.00	1.0000	Complies
06	2437	16.95	0.0495	30.00	1.0000	Complies
11	2462	17.47	0.0558	30.00	1.0000	Complies

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	18.31	0.0678	30.00	1.0000	Complies
06	2437	17.24	0.0530	30.00	1.0000	Complies
11	2462	17.63	0.0579	30.00	1.0000	Complies

Test Mode	TX B Mode_Total
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	21.16	0.1306	30.00	1.0000	Complies
06	2437	20.11	0.1025	30.00	1.0000	Complies
11	2462	20.56	0.1138	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	14.55	0.0285	30.00	1.0000	Complies
06	2437	18.74	0.0749	30.00	1.0000	Complies
11	2462	14.48	0.0281	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 2
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	14.81	0.0303	30.00	1.0000	Complies
06	2437	19.00	0.0795	30.00	1.0000	Complies
11	2462	14.75	0.0299	30.00	1.0000	Complies

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

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	17.69	0.0588	30.00	1.0000	Complies
06	2437	21.88	0.1543	30.00	1.0000	Complies
11	2462	17.63	0.0579	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	15.22	0.0333	30.00	1.0000	Complies
06	2437	19.58	0.0909	30.00	1.0000	Complies
11	2462	14.71	0.0296	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 2
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
01	2412	15.84	0.0384	30.00	1.0000	Complies
06	2437	20.00	0.1001	30.00	1.0000	Complies
11	2462	15.21	0.0332	30.00	1.0000	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	18.56	0.0717	30.00	1.0000	Complies
06	2437	22.81	0.1910	30.00	1.0000	Complies
11	2462	17.98	0.0628	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
03	2422	12.03	0.0159	30.00	1.0000	Complies
06	2437	15.59	0.0362	30.00	1.0000	Complies
09	2452	12.03	0.0159	30.00	1.0000	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	12.38	0.0173	30.00	1.0000	Complies
06	2437	15.95	0.0393	30.00	1.0000	Complies
09	2452	12.36	0.0172	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Total
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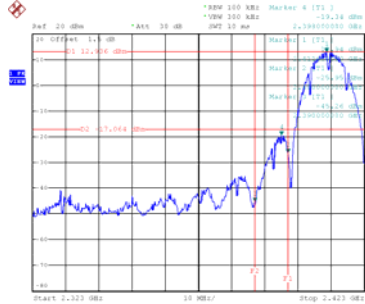
Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit(dBm)	Max. Limit (W)	Result
03	2422	15.21	0.0332	30.00	1.0000	Complies
06	2437	18.78	0.0755	30.00	1.0000	Complies
09	2452	15.20	0.0331	30.00	1.0000	Complies

APPENDIXG - CONDUCTED SPURIOUS EMISSIONS

Non-Beamforming

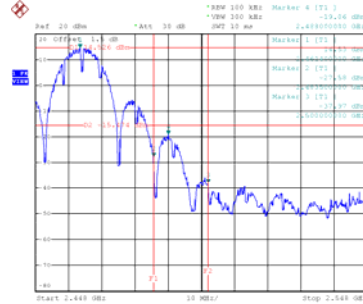
Test Mode TX B Mode_Ant. 1

Bandedge-CH01



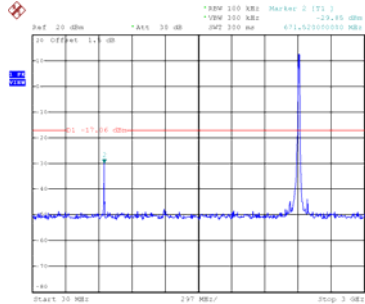
Date: 17.APR.2019 13:55:06

Bandedge-CH11

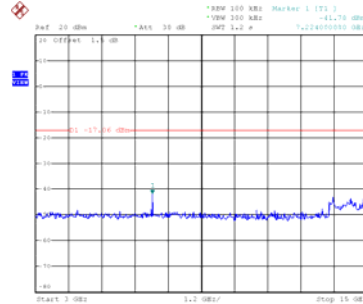


Date: 17.APR.2019 13:59:45

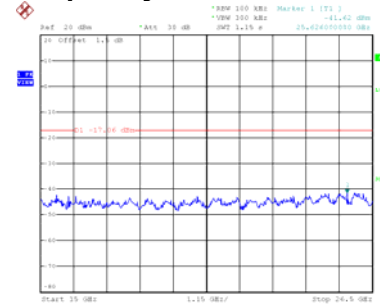
CH01 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:56:06

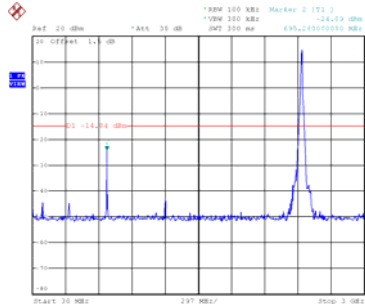


Date: 17.APR.2019 13:56:14

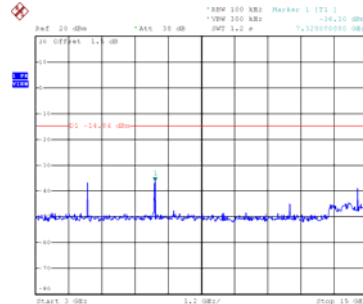


Date: 17.APR.2019 13:56:21

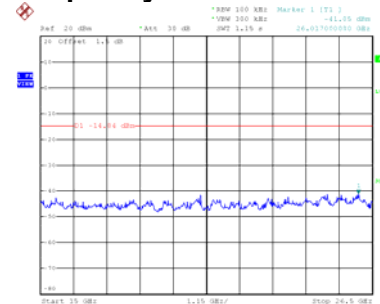
CH06 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:58:25

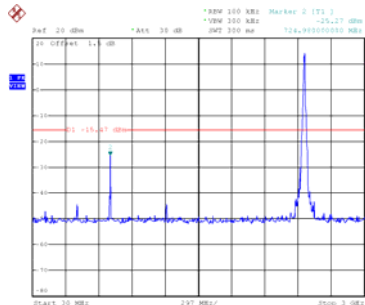


Date: 17.APR.2019 13:58:42

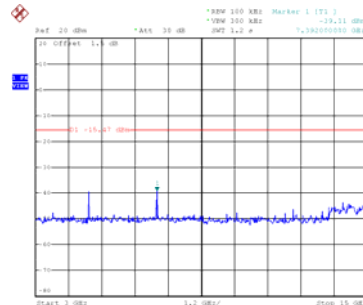


Date: 17.APR.2019 13:58:49

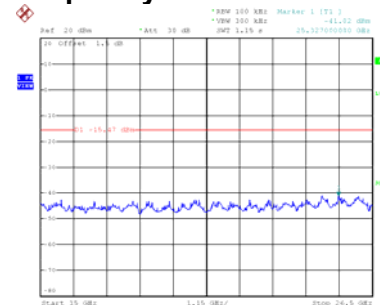
CH11 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 14:02:09



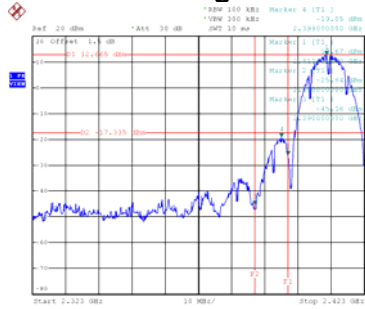
Date: 17.APR.2019 14:02:16



Date: 17.APR.2019 14:02:24

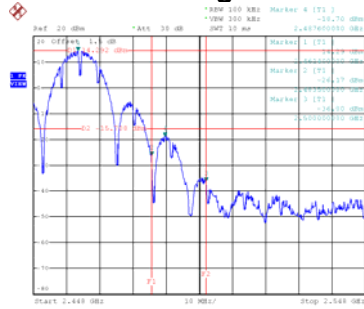
Test Mode TX B Mode_Ant. 2

Bandedge-CH01



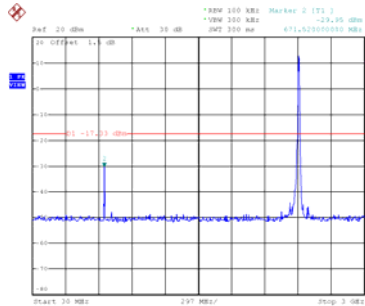
Date: 17_APP,2019 11:27:12

Bandedge-CH11

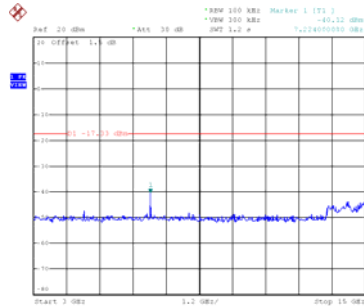


Date: 17_APP,2019 13:13:50

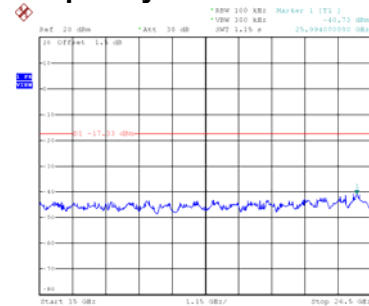
CH01 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 11:27:24

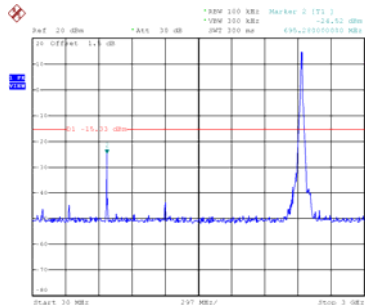


Date: 17_APP,2019 11:28:45

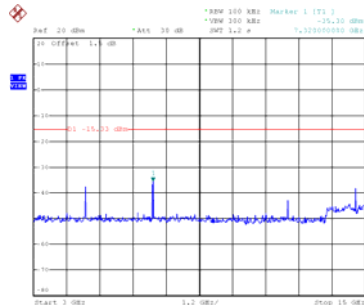


Date: 17_APP,2019 11:28:52

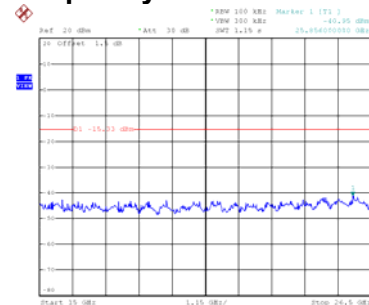
CH06 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 11:30:31

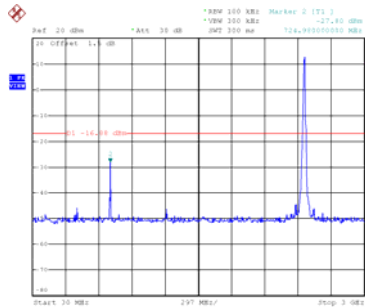


Date: 17_APP,2019 11:30:38

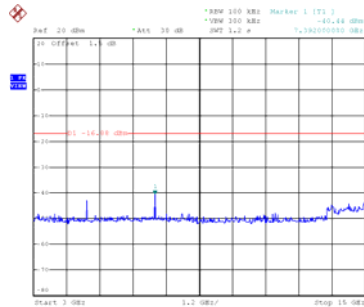


Date: 17_APP,2019 11:30:46

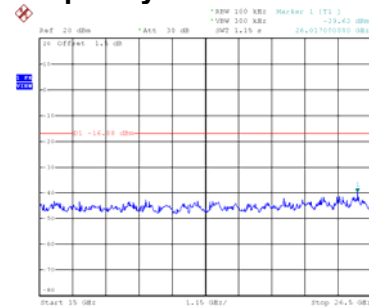
CH11 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 13:09:46



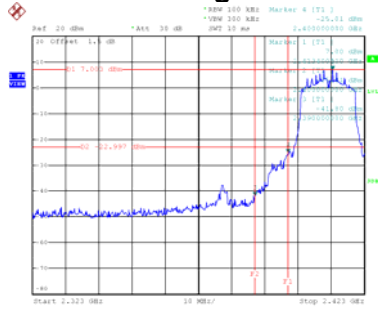
Date: 17_APP,2019 13:09:53



Date: 17_APP,2019 13:10:00

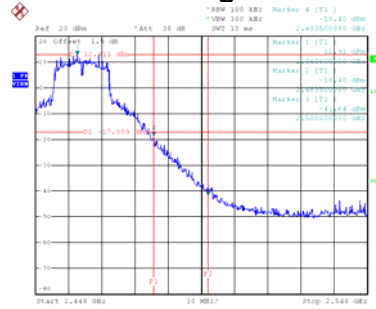
Test Mode TX G Mode_Ant. 1

Bandedge-CH01



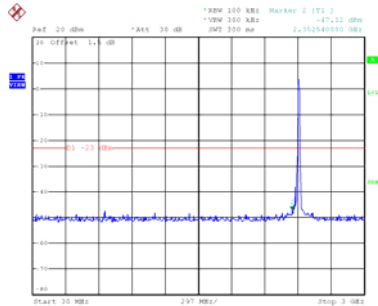
Date: 17_APP,2019 14:41:27

Bandedge-CH11

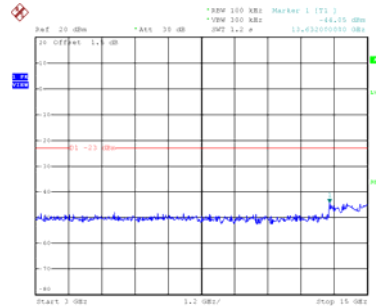


Date: 17_APP,2019 14:06:15

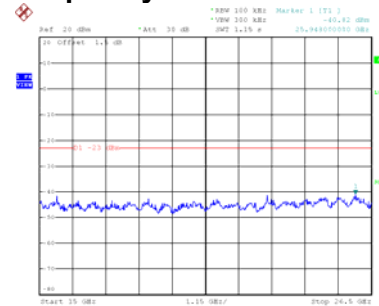
CH01 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 14:42:06

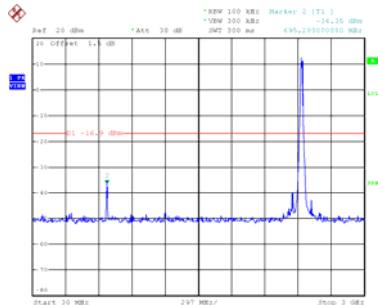


Date: 17_APP,2019 14:42:13

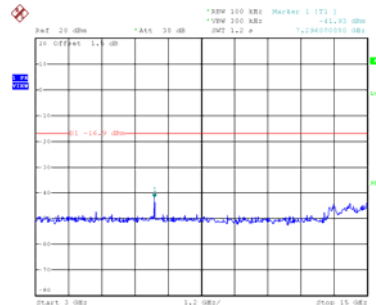


Date: 17_APP,2019 14:42:20

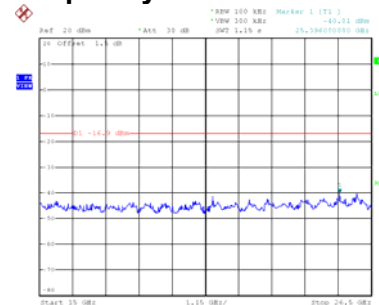
CH06 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 14:05:22

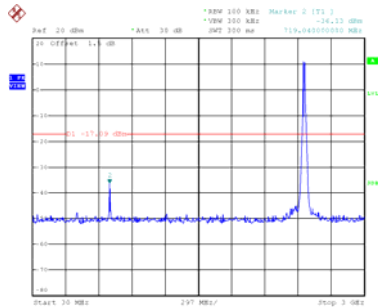


Date: 17_APP,2019 14:05:29

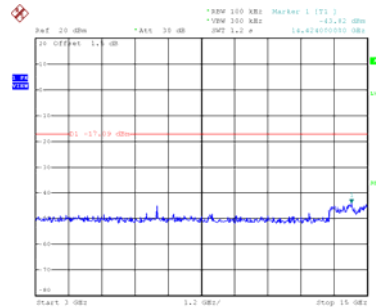


Date: 17_APP,2019 14:05:36

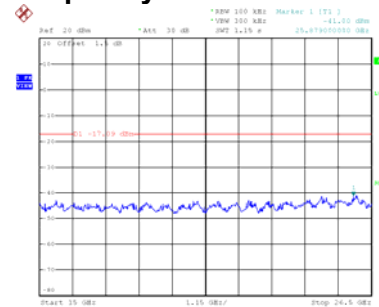
CH11 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 14:07:02



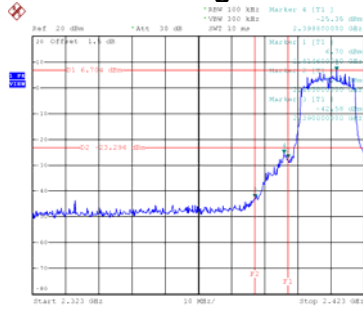
Date: 17_APP,2019 14:07:09



Date: 17_APP,2019 14:07:16

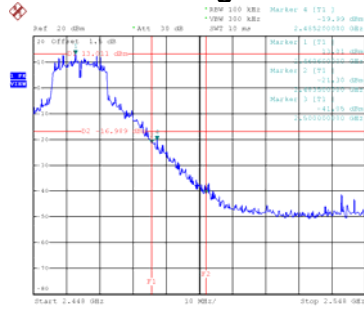
Test Mode TX G Mode_Ant. 2

Bandedge-CH01



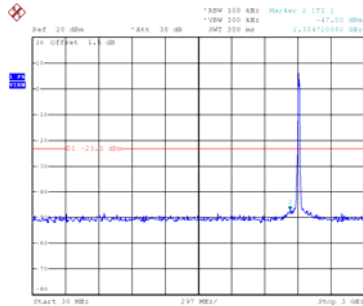
Date: 17.APR.2019 14:36:24

Bandedge-CH11

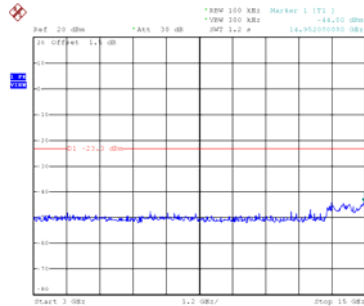


Date: 17.APR.2019 13:25:59

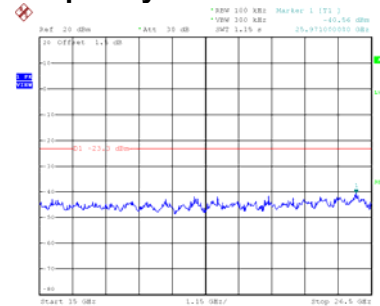
CH01 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 14:36:59

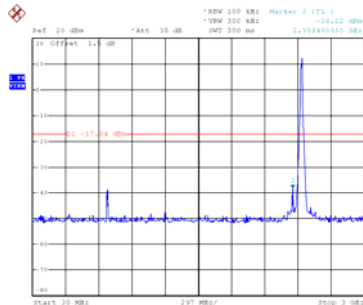


Date: 17.APR.2019 14:37:06

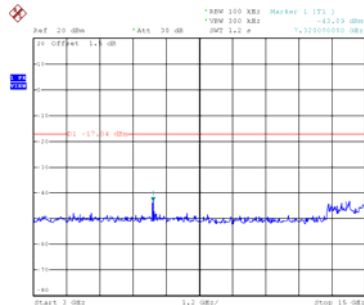


Date: 17.APR.2019 14:37:13

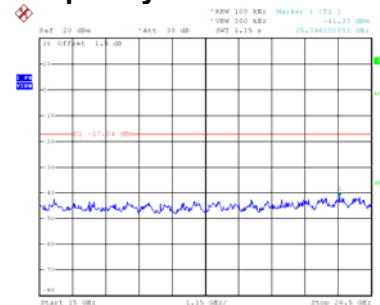
CH06 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:23:33

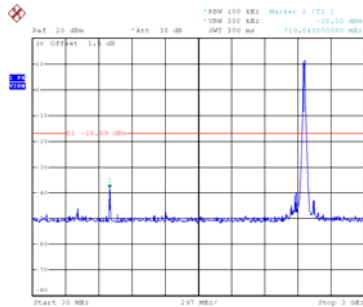


Date: 17.APR.2019 13:23:40

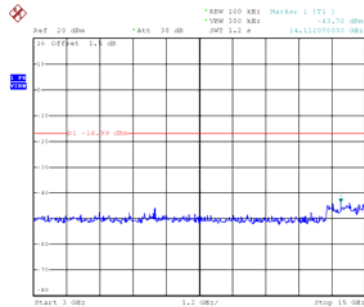


Date: 17.APR.2019 13:23:47

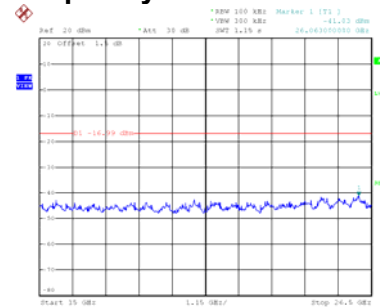
CH11 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:26:43



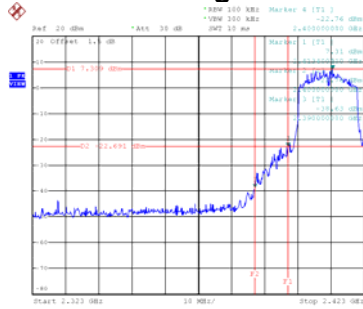
Date: 17.APR.2019 13:26:50



Date: 17.APR.2019 13:26:58

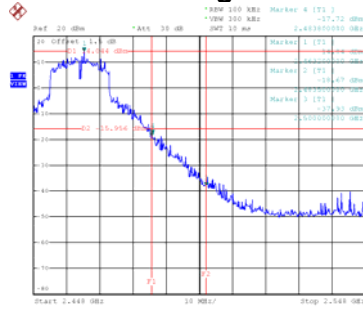
Test Mode TX N-20M Mode_Ant. 1

Bandedge-CH01



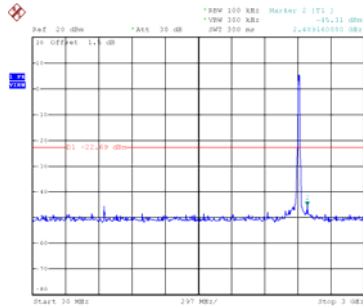
Date: 17.APR.2019 14:30:11

Bandedge-CH11

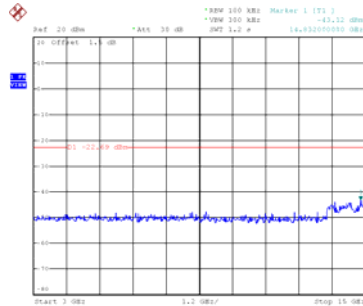


Date: 17.APR.2019 14:31:16

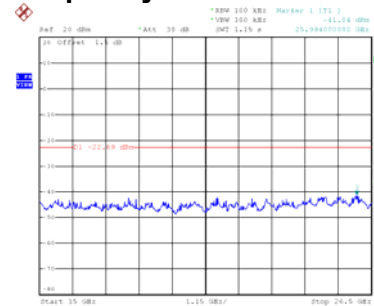
CH01 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 14:30:50

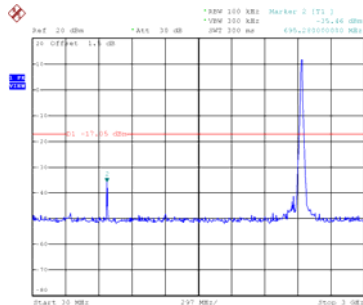


Date: 17.APR.2019 14:30:57

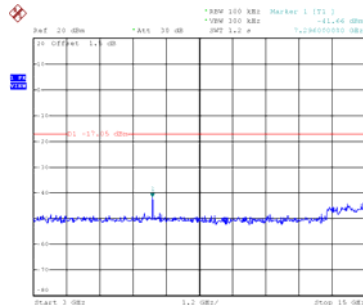


Date: 17.APR.2019 14:31:04

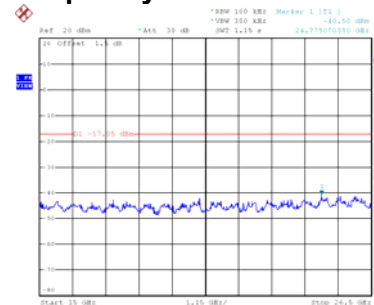
CH06 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 14:11:05

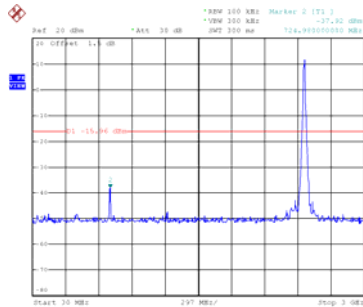


Date: 17.APR.2019 14:11:12

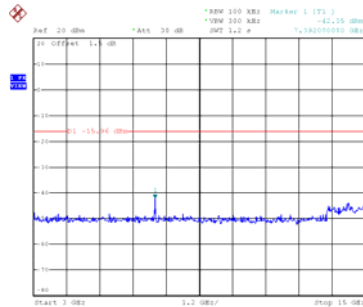


Date: 17.APR.2019 14:11:20

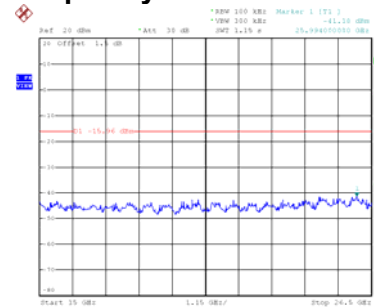
CH11 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 14:14:12



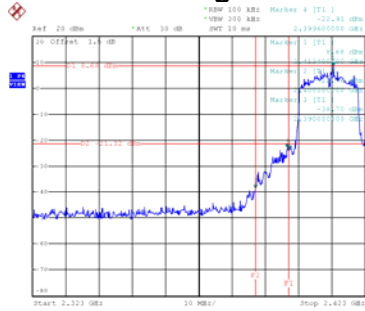
Date: 17.APR.2019 14:14:20



Date: 17.APR.2019 14:14:27

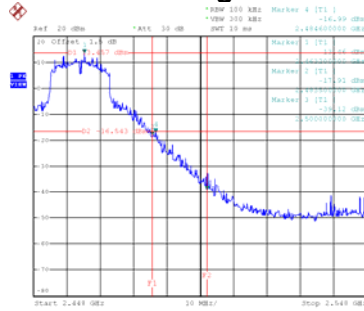
Test Mode TX N-20M Mode_Ant. 2

Bandedge-CH01



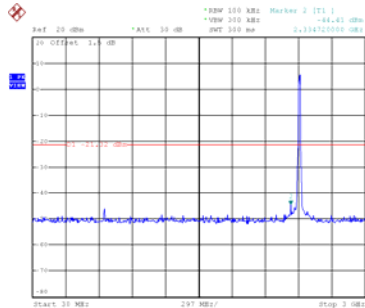
Date: 17.APR.2019 13:14:05

Bandedge-CH11

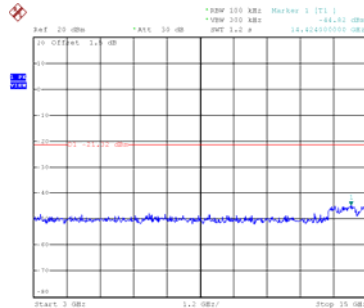


Date: 17.APR.2019 13:17:16

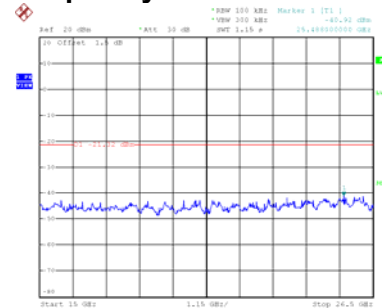
CH01 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:14:10

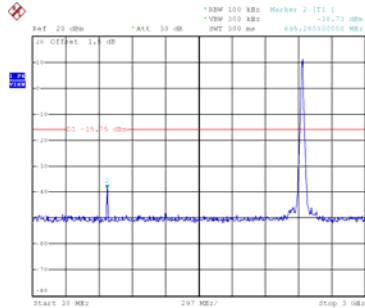


Date: 17.APR.2019 13:14:10

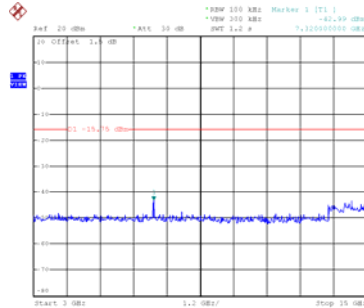


Date: 17.APR.2019 13:15:05

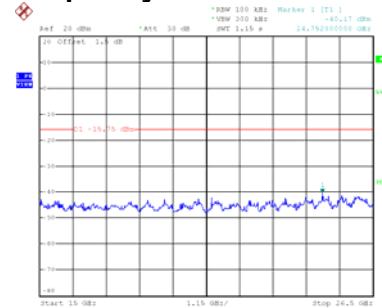
CH06 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:16:19

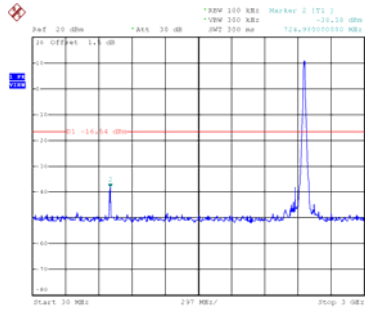


Date: 17.APR.2019 13:16:26

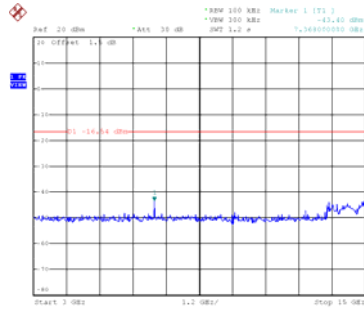


Date: 17.APR.2019 13:16:33

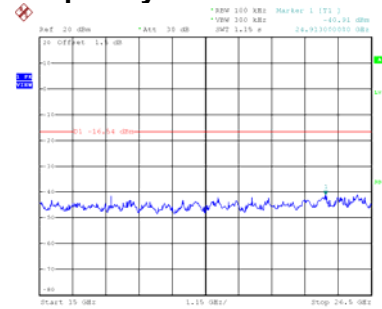
CH11 –10th Harmonic of the fundamental frequency



Date: 17.APR.2019 13:18:03



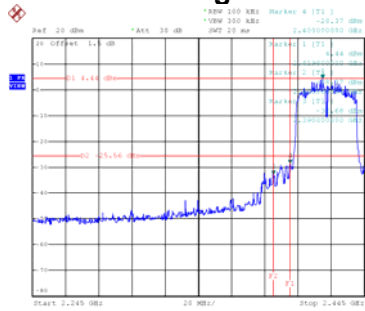
Date: 17.APR.2019 13:18:10



Date: 17.APR.2019 13:18:17

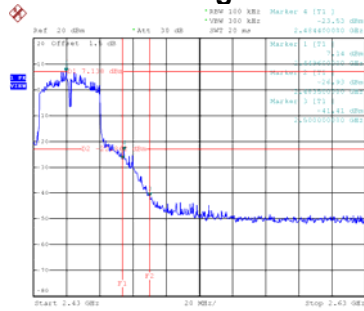
Test Mode TX N-40M Mode_Ant. 1

Bandedge-CH03



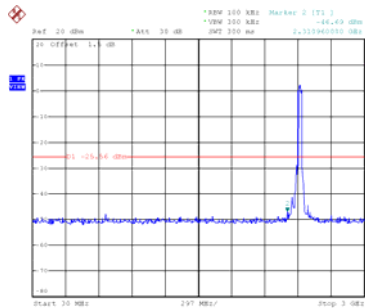
Date: 17_APP,2019 14:15:33

Bandedge-CH09

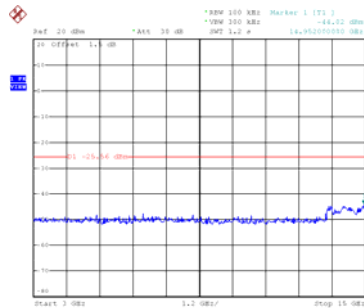


Date: 17_APP,2019 14:19:09

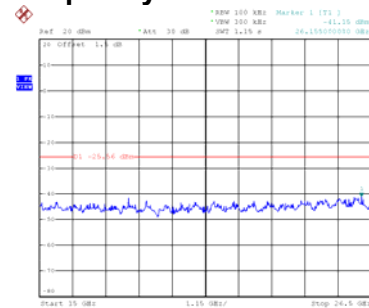
CH03 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 14:16:02

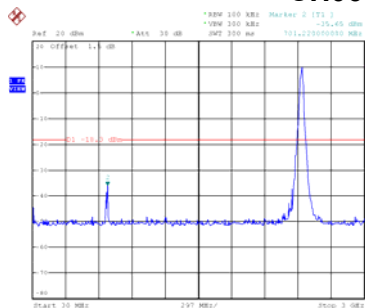


Date: 17_APP,2019 14:16:09

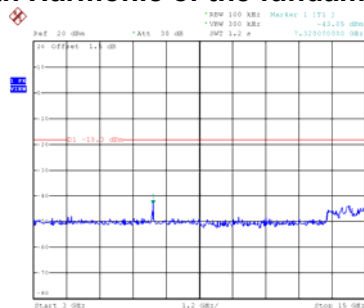


Date: 17_APP,2019 14:16:16

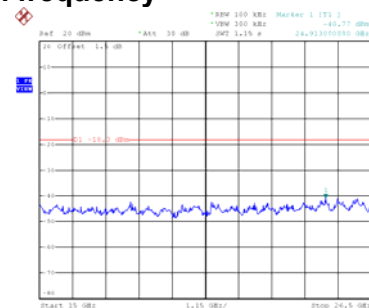
CH06 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 14:17:52

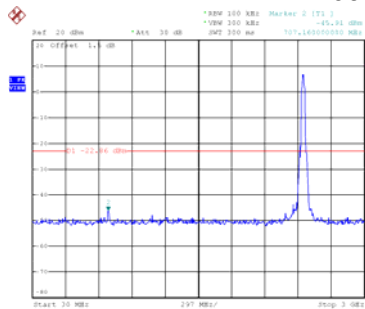


Date: 17_APP,2019 14:17:59

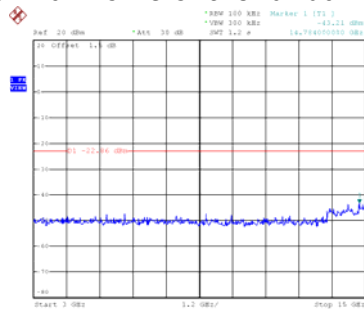


Date: 17_APP,2019 14:18:06

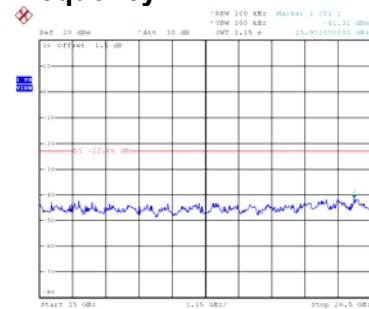
CH09 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 14:19:42



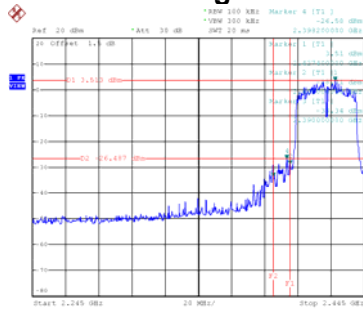
Date: 17_APP,2019 14:19:49



Date: 17_APP,2019 14:19:56

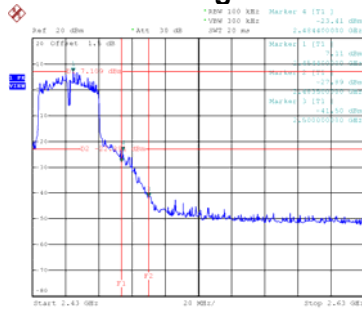
Test Mode TX N-40M Mode_Ant. 2

Bandedge-CH03



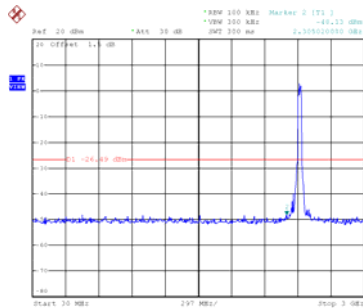
Date: 17_APP,2019 13:42:48

Bandedge-CH09

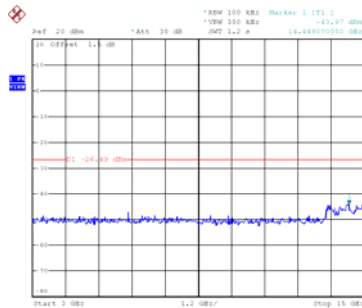


Date: 17_APP,2019 13:49:49

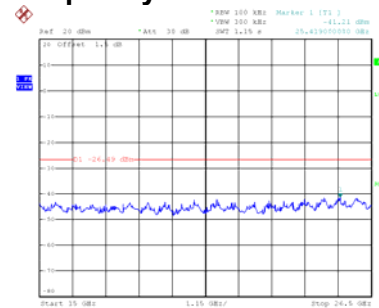
CH03 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 13:43:29

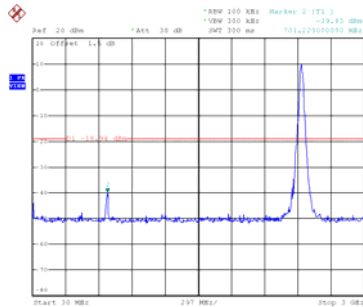


Date: 17_APP,2019 13:43:36

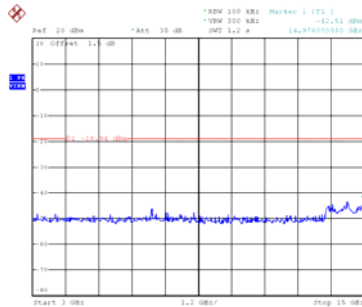


Date: 17_APP,2019 13:43:44

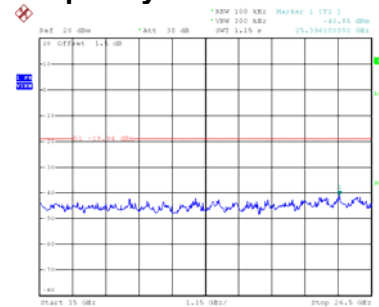
CH06 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 13:45:27

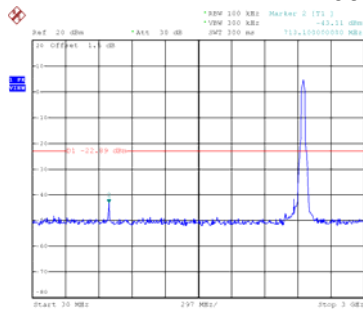


Date: 17_APP,2019 13:45:35

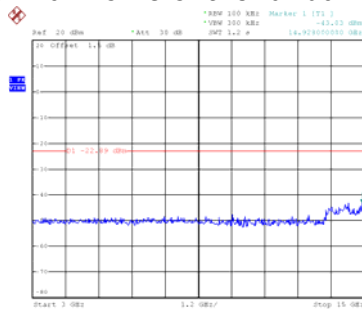


Date: 17_APP,2019 13:45:42

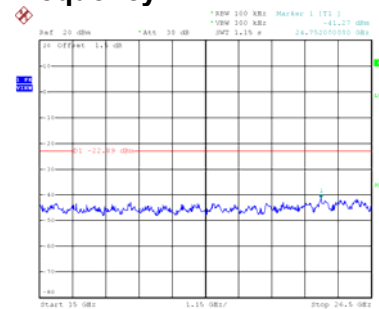
CH09 –10th Harmonic of the fundamental frequency



Date: 17_APP,2019 13:50:31



Date: 17_APP,2019 13:50:38



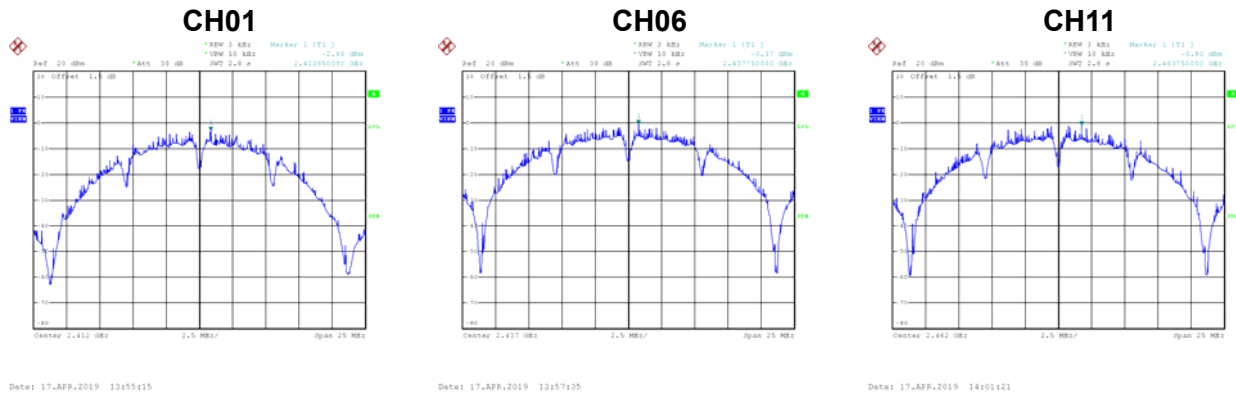
Date: 17_APP,2019 13:50:45

APPENDIXH - POWER SPECTRAL DENSITY

Non-Beamforming

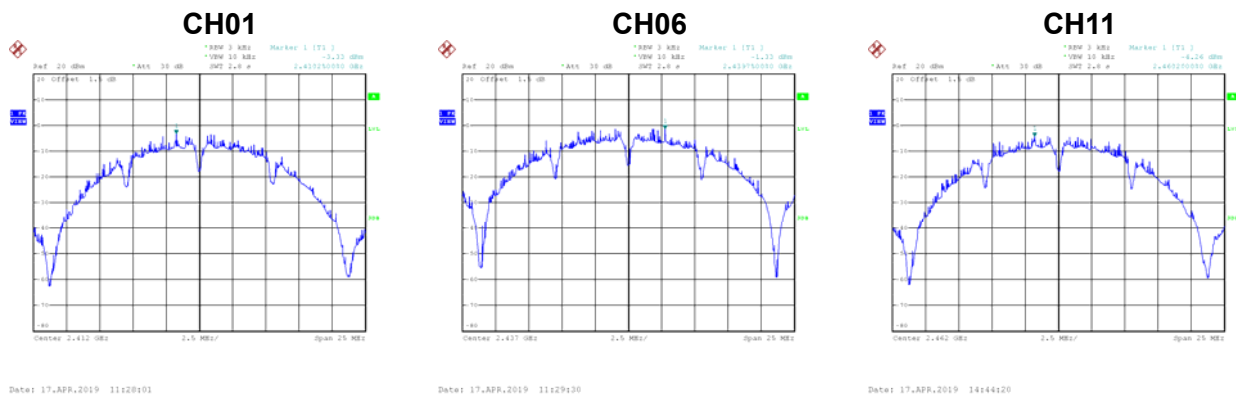
Test Mode	TX B Mode_Ant. 1
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Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-2.88	8	Complies
06	2437	-0.37	8	Complies
11	2462	-0.80	8	Complies



Test Mode	TX B Mode_Ant. 2
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Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-3.33	8	Complies
06	2437	-1.33	8	Complies
11	2462	-4.26	8	Complies

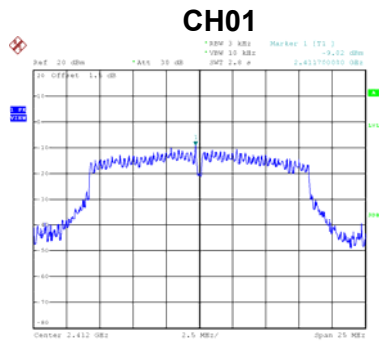


Test Mode	TX B Mode_Total
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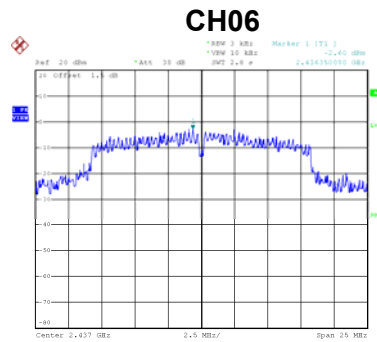
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-0.09	8	Complies
06	2437	2.19	8	Complies
11	2462	0.82	8	Complies

Test Mode	TX G Mode_Ant. 1
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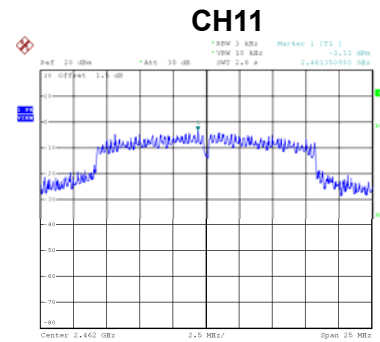
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-9.02	8	Complies
06	2437	-2.60	8	Complies
11	2462	-3.13	8	Complies



Date: 17.APR.2019 14:42:29



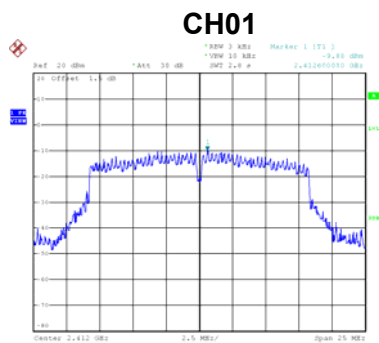
Date: 17.APR.2019 14:40:36



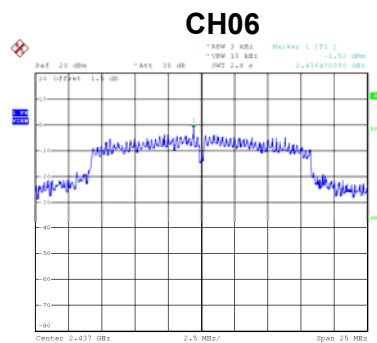
Date: 17.APR.2019 14:40:24

Test Mode	TX G Mode_Ant. 2
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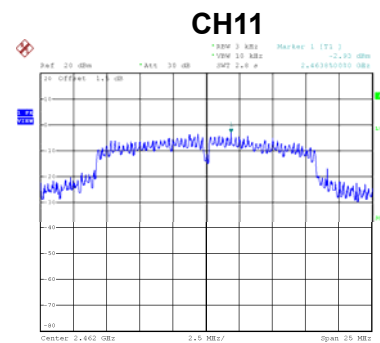
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-9.88	8	Complies
06	2437	-1.52	8	Complies
11	2462	-2.93	8	Complies



Date: 17.APR.2019 14:37:22



Date: 17.APR.2019 13:22:42



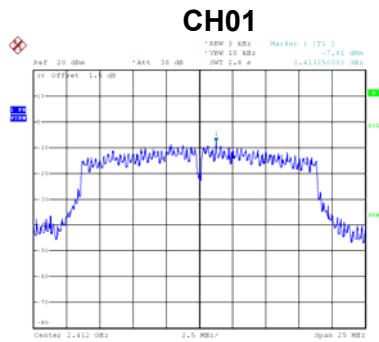
Date: 17.APR.2019 13:26:08

Test Mode	TX G Mode_Total
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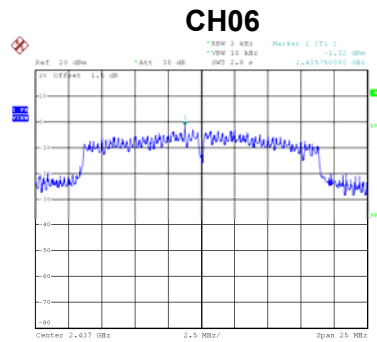
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-6.42	8	Complies
06	2437	0.98	8	Complies
11	2462	-0.02	8	Complies

Test Mode	TX N-20M Mode_Ant. 1
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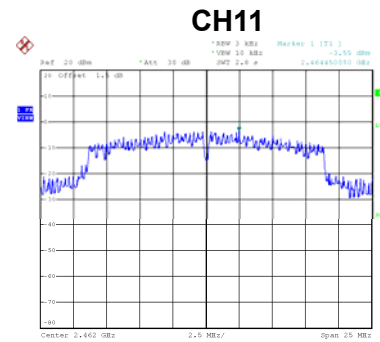
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-7.81	8	Complies
06	2437	-1.32	8	Complies
11	2462	-3.55	8	Complies



Date: 17.APR.2019 14:13:13



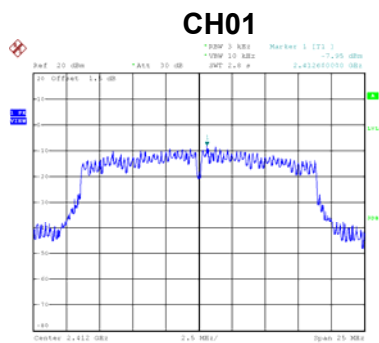
Date: 17.APR.2019 14:13:09



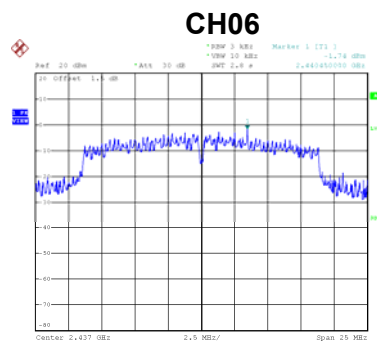
Date: 17.APR.2019 14:11:35

Test Mode	TX N-20M Mode_Ant. 2
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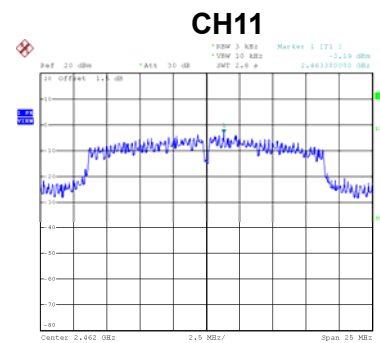
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-7.95	8	Complies
06	2437	-1.74	8	Complies
11	2462	-3.19	8	Complies



Date: 17.APR.2019 13:43:14



Date: 17.APR.2019 13:43:38



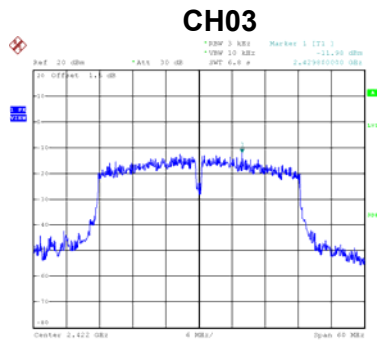
Date: 17.APR.2019 13:43:25

Test Mode	TX N-20M Mode_Total
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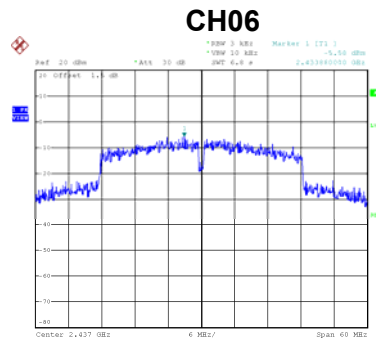
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-4.87	8	Complies
06	2437	1.49	8	Complies
11	2462	-0.36	8	Complies

Test Mode	TX N-40M Mode_Ant. 1
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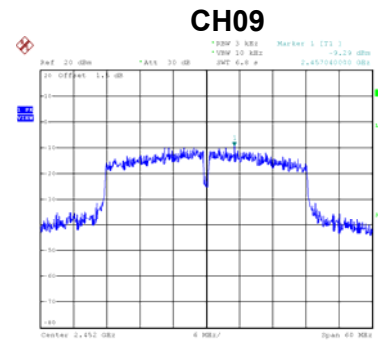
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
03	2422	-11.98	8	Complies
06	2437	-5.58	8	Complies
09	2452	-9.29	8	Complies



Date: 17.APR.2019 14:16:28



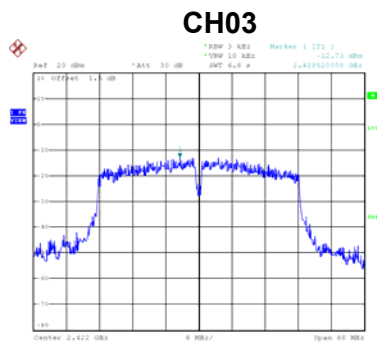
Date: 17.APR.2019 14:18:18



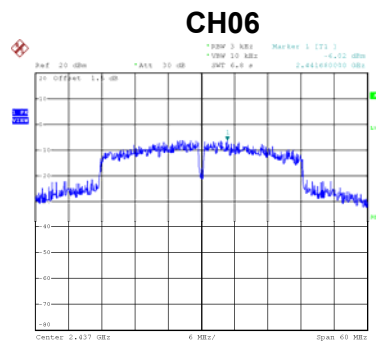
Date: 17.APR.2019 14:20:08

Test Mode	TX N-40M Mode_Ant. 2
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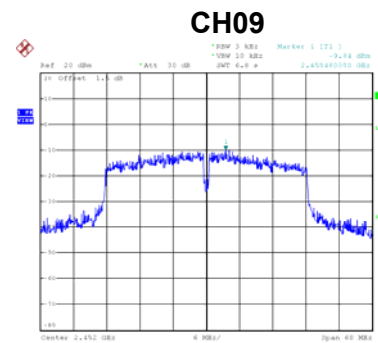
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
03	2422	-12.73	8	Complies
06	2437	-6.02	8	Complies
09	2452	-9.84	8	Complies



Date: 17.APR.2019 13:43:00



Date: 17.APR.2019 13:44:21



Date: 17.APR.2019 13:45:01

Test Mode	TX N-40M Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
03	2422	-9.33	8	Complies
06	2437	-2.78	8	Complies
09	2452	-6.55	8	Complies

End of Test Report