FCC Radio Test Report

FCC ID: 2AF5PMG8702

This report concerns: Original Grant

Project No.	:	1908C159
Equipment	:	DOCSIS 3.1 Cable Modem plus AC3200 Router
Brand Name	:	motorola
Test Model	:	MG8702XY
Series Model	:	N/A
Applicant	:	MTRLC LLC
Address	:	225 Franklin St. 26th Floor, Boston, MA 02110
Manufacturer	:	MTRLC LLC
Address	:	225 Franklin St. 26th Floor, Boston, MA 02110
Date of Receipt	:	Aug. 20, 2019
Date of Test	:	Aug. 26, 2019 ~ Oct. 24, 2019
Issued Date	:	Jan. 21, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG19082034 for conducted, DG19082033 for radiated
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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Approved by : Ethan Ma

Certificate #5123.02

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Declaration

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

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

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

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

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

Limitation

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

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Jan. 21, 2020

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

Note:

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

(2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.
BTL's Test Firm Registration Number for FCC: 357015
BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

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

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 kHz ~ 30 MHz	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	25°C	53%	AC 120V/60Hz	Robing Zhuang
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Robing Zhuang
Radiated Emissions-30 MHz to 1GHz	24°C	68%	AC 120V/60Hz	Sheldon Ou
Radiated Emissions-Above 1000 MHz	24°C	68%	AC 120V/60Hz	Sheldon Ou
Bandwidth	27°C	56%	AC 120V/60Hz	Jonas Chen
Maximum output powe	27°C	56%	AC 120V/60Hz	Jonas Chen
Conducted Spurious Emissions	27°C	56%	AC 120V/60Hz	Jonas Chen
Power Spectral Density	27°C	56%	AC 120V/60Hz	Jonas Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	DOCSIS 3.1 Cable Modem plus AC3200 Router
Brand Name	motorola
Test Model	MG8702XY
Series Model	N/A
Model Difference(s)	Where X can be A, B, C, D or blank, and Y can be A, B, C, D or blank. The optional suffixes X and Y are to be used for identical hardware models that differ for marketing/sales purposes only.
Power Source	DC Voltage supplied from AC/DC adapter. Model: S042-1A120350VU
Power Rating	I/P:100-240V~, 50/60Hz, 1.0A O/P:12.0V⎓3.5A
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 600 Mbps
Maximum Output Power for Non-Beamforming	IEEE 802.11b: 28.26 dBm (0.6699 W) IEEE 802.11g: 27.49 dBm (0.5610 W) IEEE 802.11n (HT20): 29.94 dBm (0.9863 W) IEEE 802.11n (HT40): 25.05 dBm (0.3199 W)
Maximum Output Power for Beamforming	IEEE 802.11n (HT20): 26.64 dBm (0.4613 W) IEEE 802.11n (HT40): 24.45 dBm (0.2786 W)

Note:

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

2. Channel List:

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

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Internal	N/A	3.00
2	N/A	N/A	Internal	N/A	3.00
3	N/A	N/A	Internal	N/A	3.00
4	N/A	N/A	Internal	N/A	3.00

Note:

(1) For Non Beamforming function:
This EUT supports CDD, and all antennas have the same gain,
Directional gain = G_{ANT}+Array Gain, where Array Gain is as follows:
For power spectral density measurements, N_{ANT} = 4, N_{SS} = 1.
So Directional gain = G_{ANT} + Array Gain =3.00+10 log (N_{ANT}/ N_{SS}) dB =3.00+10log(4/1)dBi =9.02. Then, the power spectral density limit is 8-9.02+6=4.98.
For power measurements, Array Gain = 0 dB (N_{ANT} ≤ 4), so the Directional gain=3.00.

(2) For Beamforming function, Beamforming Gain: 6.00 dB.
So Directional gain = 6.00+3.00=9.00. Then, output power limit is 30-9.00+6=27.00.

4. Table for Antenna Configuration:

For Non Beamforming:

Operating Mode / TX Mode	1TX	4TX
IEEE 802.11b	Ant. 1	-
IEEE 802.11g	Ant. 1	-
IEEE 802.11n (HT20)	-	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11n (HT40)	-	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)

For Beamforming:

Operating Mode / TX Mode	4TX
IEEE 802.11n (HT20)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)
IEEE 802.11n (HT40)	V (Ant. 1 + Ant. 2 + Ant. 3 + Ant. 4)

2.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX N20 Mode Channel 06

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

AC power line conducted emissions test	
Final Test Mode:	Description
Mode 5	TX N20 Mode Channel 06

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

Radiated emissions test- Above 1GHz	
Final Test Mode:	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Output Power test for Non Beamforming	
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

Output Power test for Beamforming	
Final Test Mode:	Description
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09

Others 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.

(3) For radiated emission below 1 GHz test, the IEEE 802.11n 20 Channel 06 is found to be the worst case and recorded.

(4) For radiated emission above 1 GHz test, 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.

(5) The measurements for Power were tested, the non Beamforming and beamforming are recorded in the report. The worst cases were Non Beamforming, and only the worst cases were documented for other test items.

2.3 PARAMETERS OF TEST SOFTWARE

Non Beamforming

Test Software	accessMTool_REL_3_0_0_4		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	98	110	96
IEEE 802.11g	81	104	82
IEEE 802.11n (HT20)	77	94	78
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	61	76	63

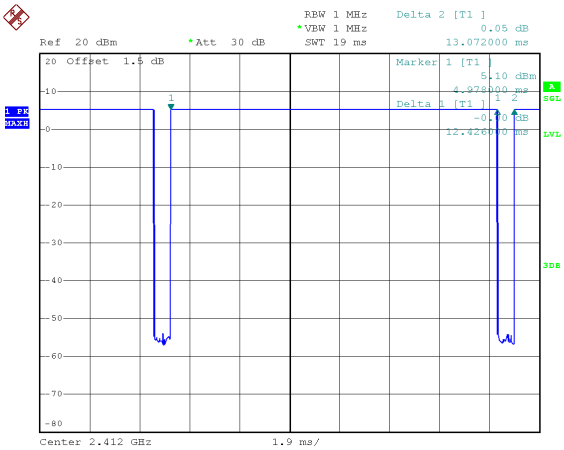
Beamforming

Test Software	accessMTool_REL_3_0_0_4		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n (HT20)	75	82	76
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	59	74	61

2.4 DUTY CYCLE

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

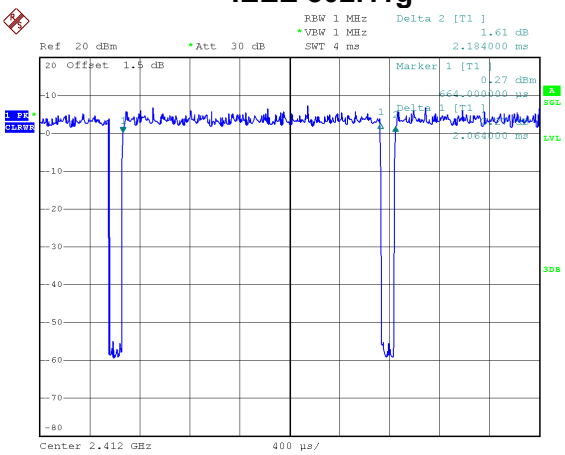
IEEE 802.11b



Date: 31.AUG.2019 10:31:46

Duty cycle = 12.441 ms / 13.079 ms = 95.12%
Duty Factor = 10 log(1/Duty cycle) = 0.22

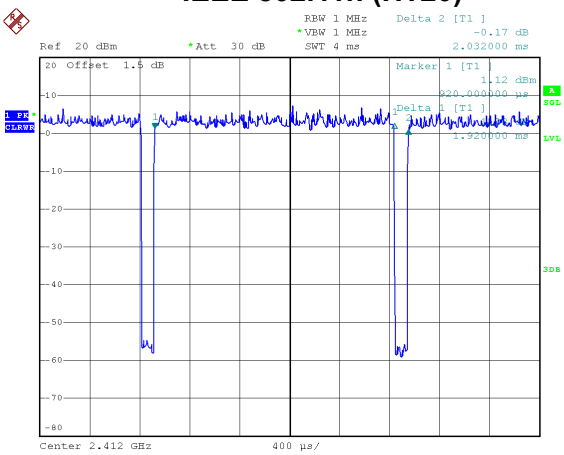
IEEE 802.11g



Date: 31.AUG.2019 10:32:48

Duty cycle = 2.064 ms / 2.184 ms = 94.51%
Duty Factor = 10 log(1/Duty cycle) = 0.25

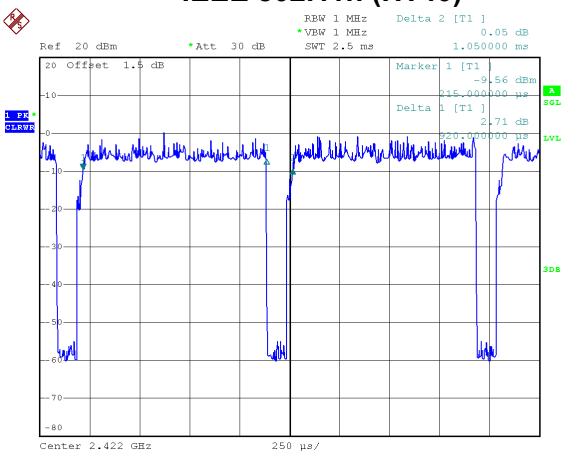
IEEE 802.11n (HT20)



Date: 31.AUG.2019 10:34:32

Duty cycle = 1.920 ms / 2.032 ms = 94.49%
Duty Factor = 10 log(1/Duty cycle) = 0.25

IEEE 802.11n (HT40)



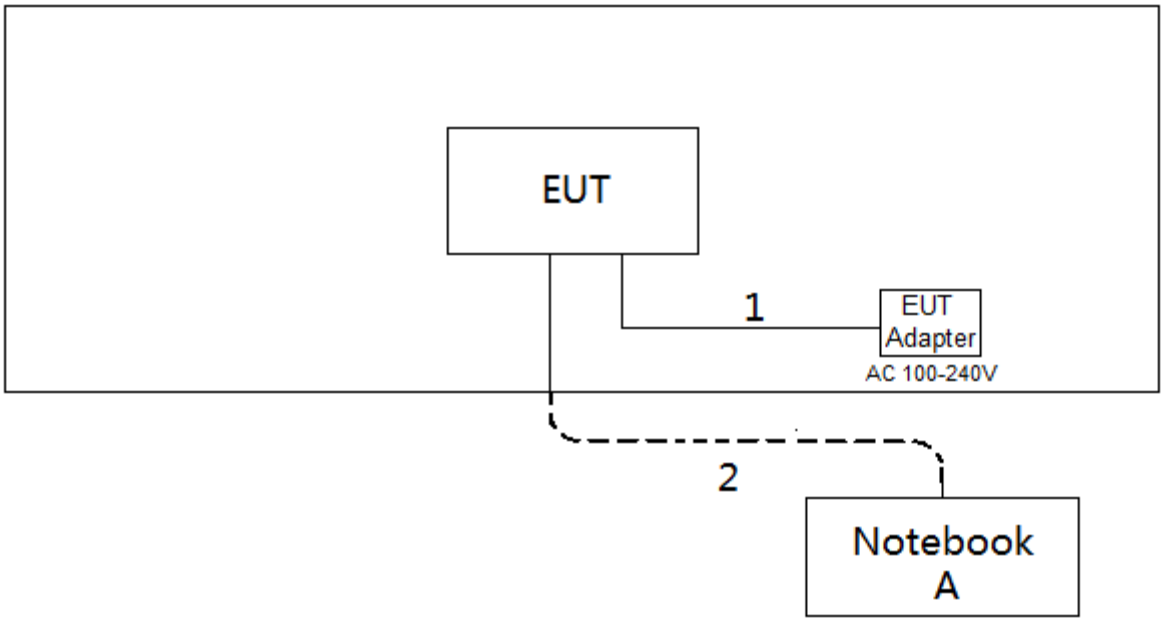
Date: 31.AUG.2019 10:34:52

Duty cycle = 0.920 ms / 1.050 ms = 87.62%
Duty Factor = 10 log(1/Duty cycle) = 0.57

NOTE:
For IEEE 802.11g and IEEE 802.11n (HT20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

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

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

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

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

The following table is the setting of the receiver

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

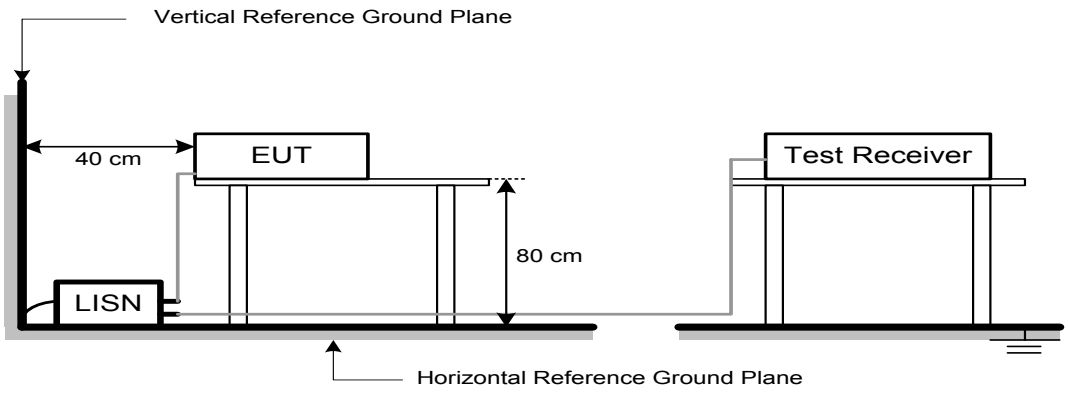
3.2 TEST PROCEDURE

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

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	(dBuV/m at 3 m)	
	Peak	Average
Above 1000	74	54

NOTE:
(1) The limit for radiated test was performed according to FCC PART 15C.
(2) The tighter limit applies at the band edges.
(3) Emission level (dBuV/m) = 20log Emission level (uV/m).

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

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

4.2 TEST PROCEDURE

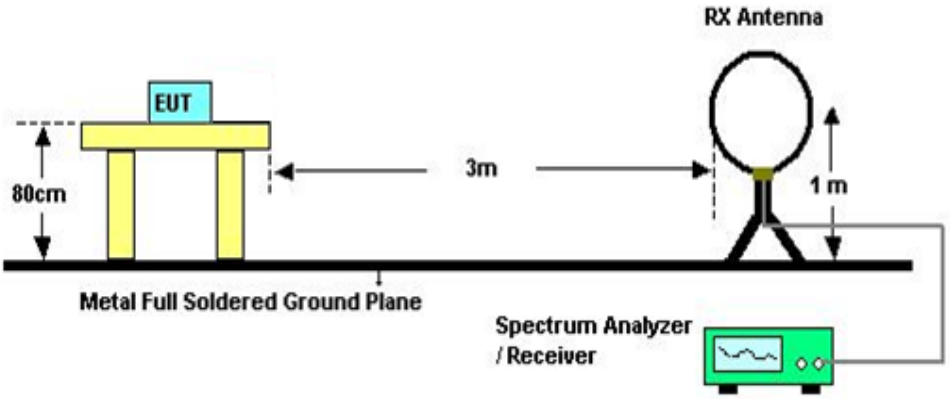
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1 GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1 GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1 GHz)
i. For the actual test configuration, please refer to the related Item -EUT Test Photos.

4.3 DEVIATION FROM TEST STANDARD

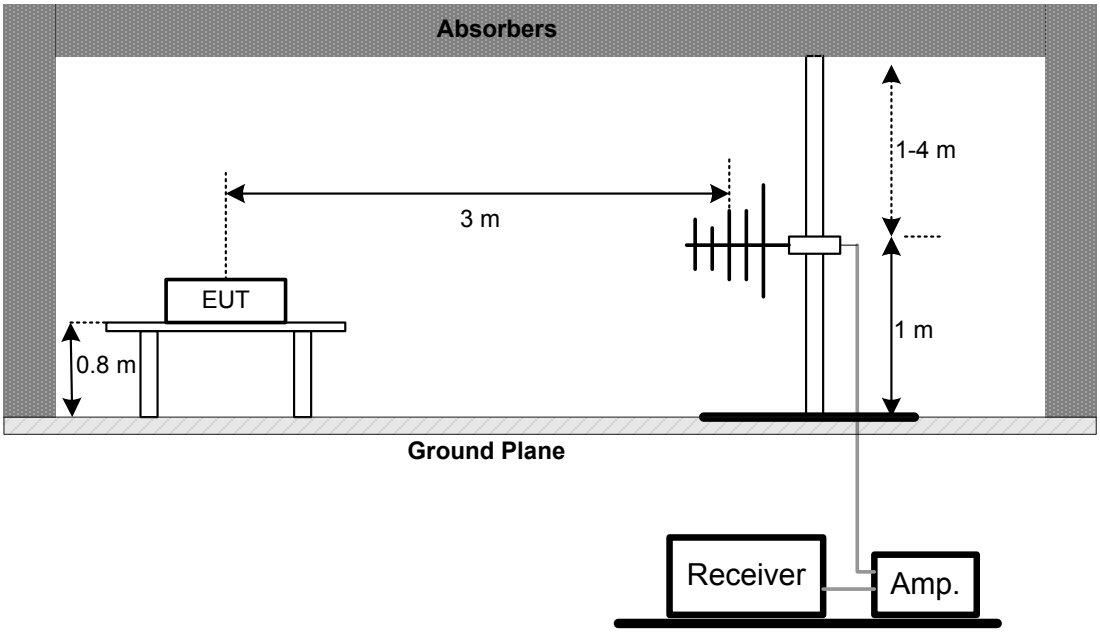
No deviation

4.4 TEST SETUP

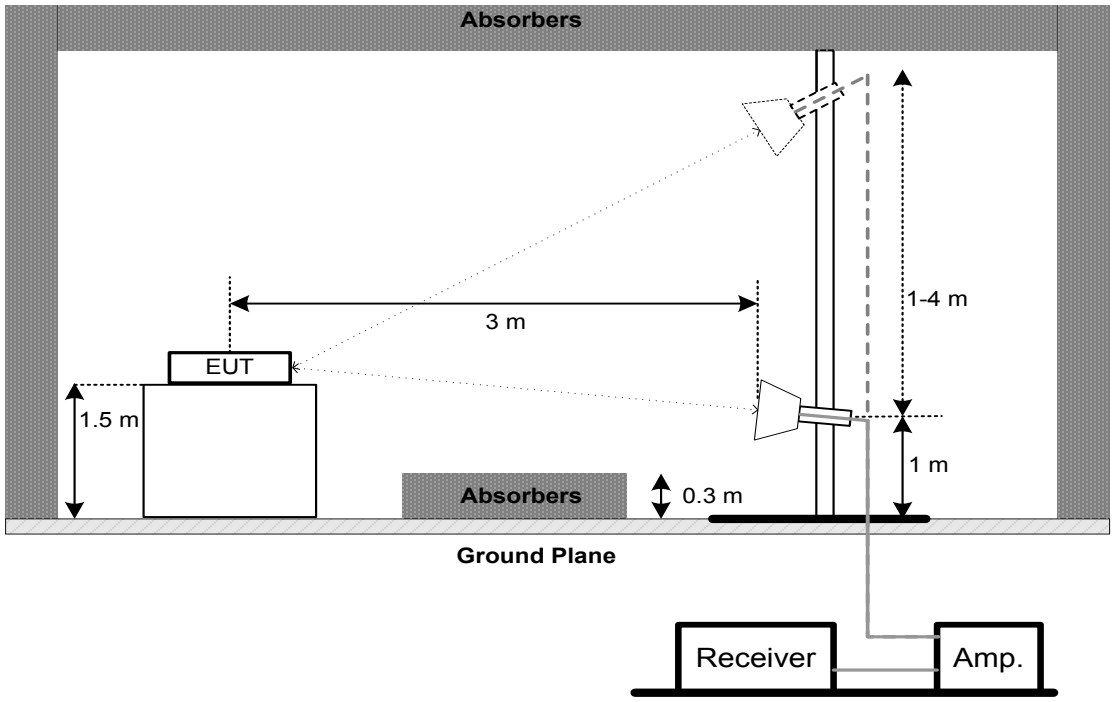
9 kHz-30 MHz



30 MHz to 1 GHz



Above 1 GHz



4.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B

Remark:

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

4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

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

5. BANDWIDTH TEST

5.1 LIMIT

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

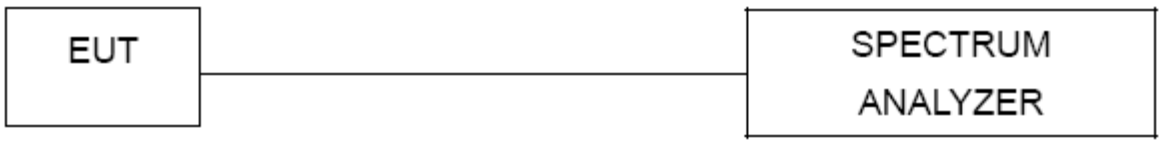
5.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. For 6dB Bandwidth Spectrum setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms. For 99% OBW Spectrum Setting: For B,G,N20 mode: RBW= 300KHz, VBW=1MHz, For N40 mode: RBW= 1MHz, VBW=3MHz, Sweep time = 2.5 ms.
c. The bandwidth was performed in accordance with method 11.8.1 of ANSI C63.10-2013.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS

Please refer to the APPENDIX E.

6. MAXIMUM OUTPUT POWER TEST

6.1 LIMIT

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

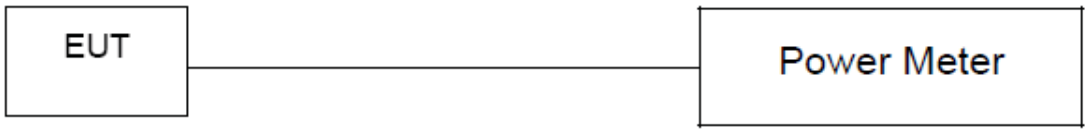
6.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.

7. CONDUCTED SPURIOUS EMISSIONS

7.1 LIMIT

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

7.2 TEST PROCEDURE

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

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP

7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX G.

8. POWER SPECTRAL DENSITY TEST

8.1 LIMIT

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

8.2 TEST PROCEDURE

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

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP

8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX H.

9. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100382	Mar. 10, 2020
2	LISN	EMCO	3816/2	52765	Mar. 10, 2020
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	May. 19, 2020
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 10, 2020
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 12, 2020

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

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2020
2*	Amplifier*	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-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 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 09, 2020
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02333	Mar. 10, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 10, 2020
5	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	B10-01-01-12M	18072744	Jun. 29, 2020
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth & Antenna Conducted Spurious Emissions & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 03, 2020

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

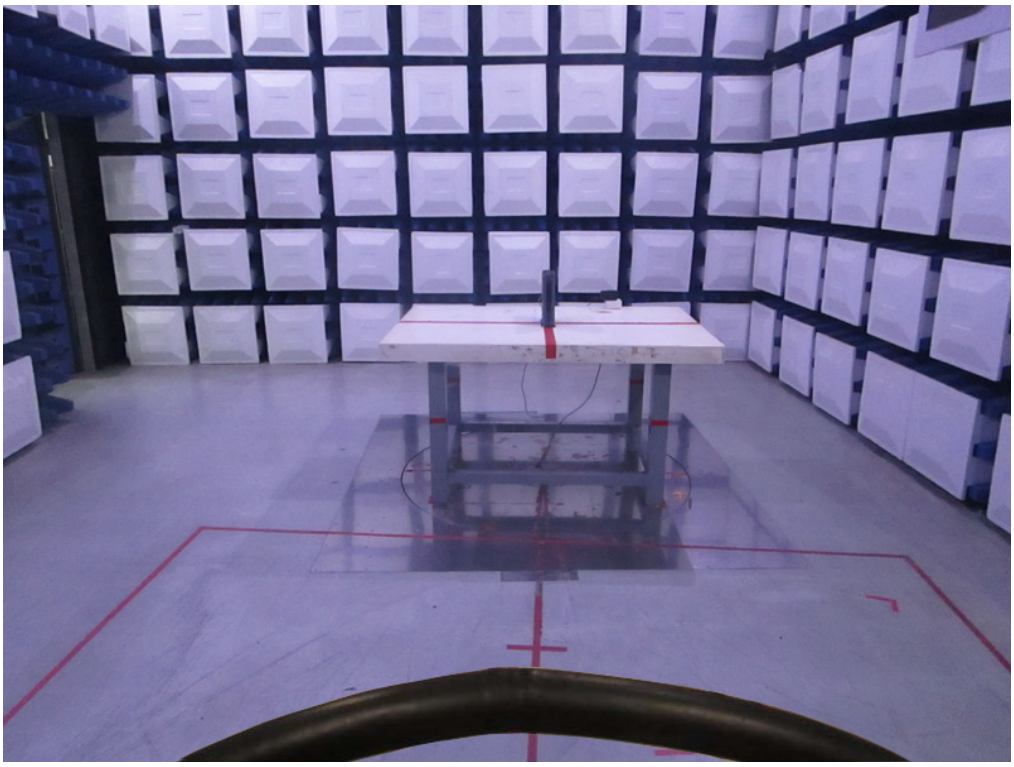
Remark: ”N/A” denotes no model name, serial no. or calibration specified.
“*” calibration period of equipment list is three year.
Except * item, all calibration period of equipment list is one year.

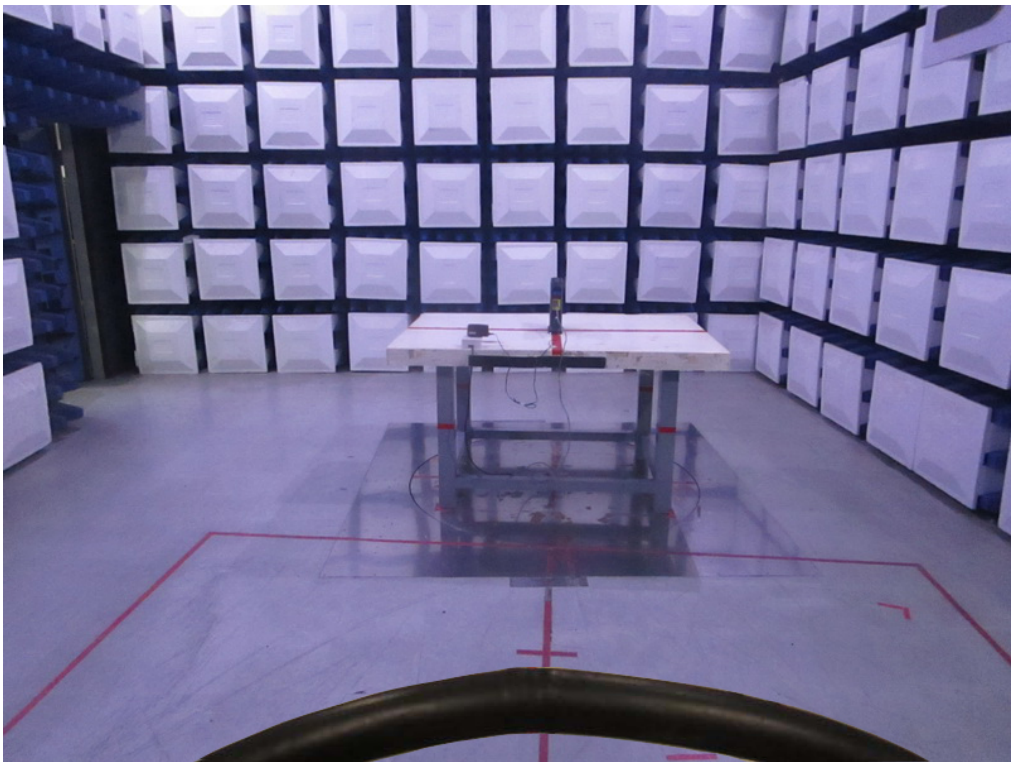
10. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos

Radiated Emissions Test Photos

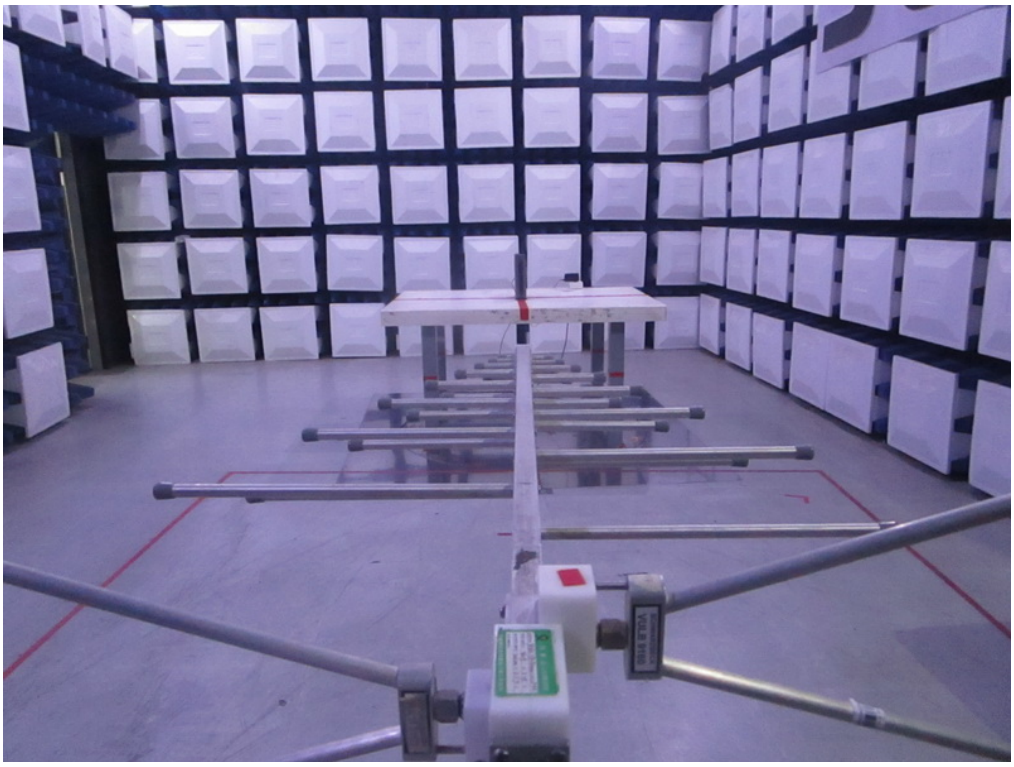
9 kHz to 30 MHz

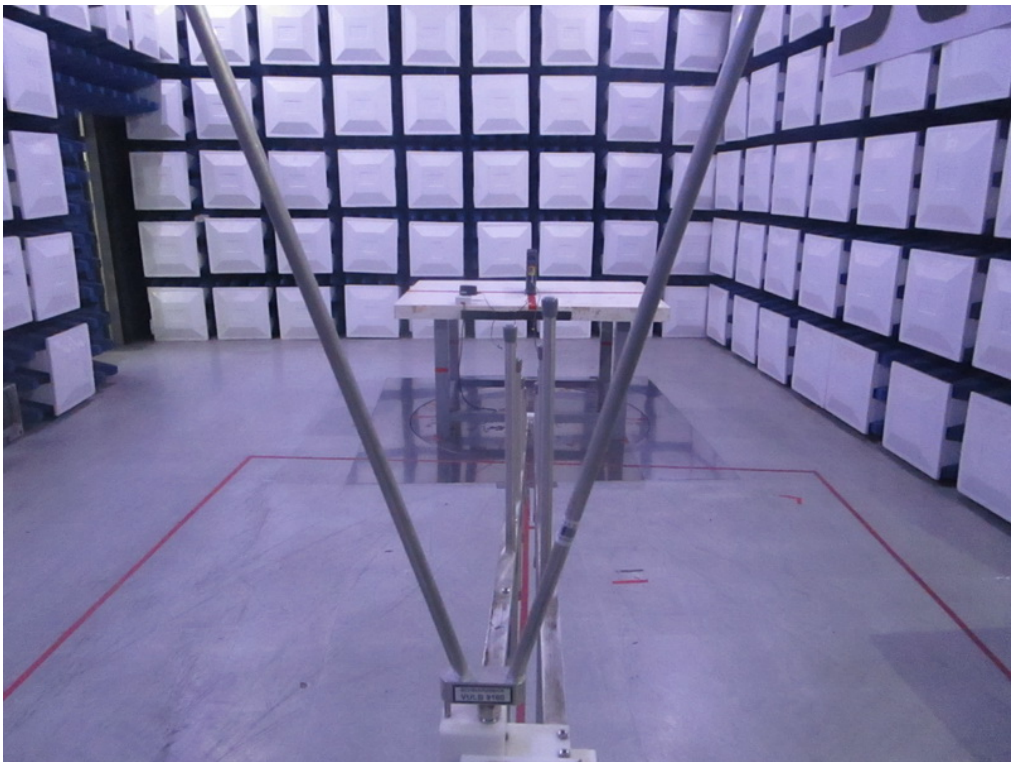




Radiated Emissions Test Photos

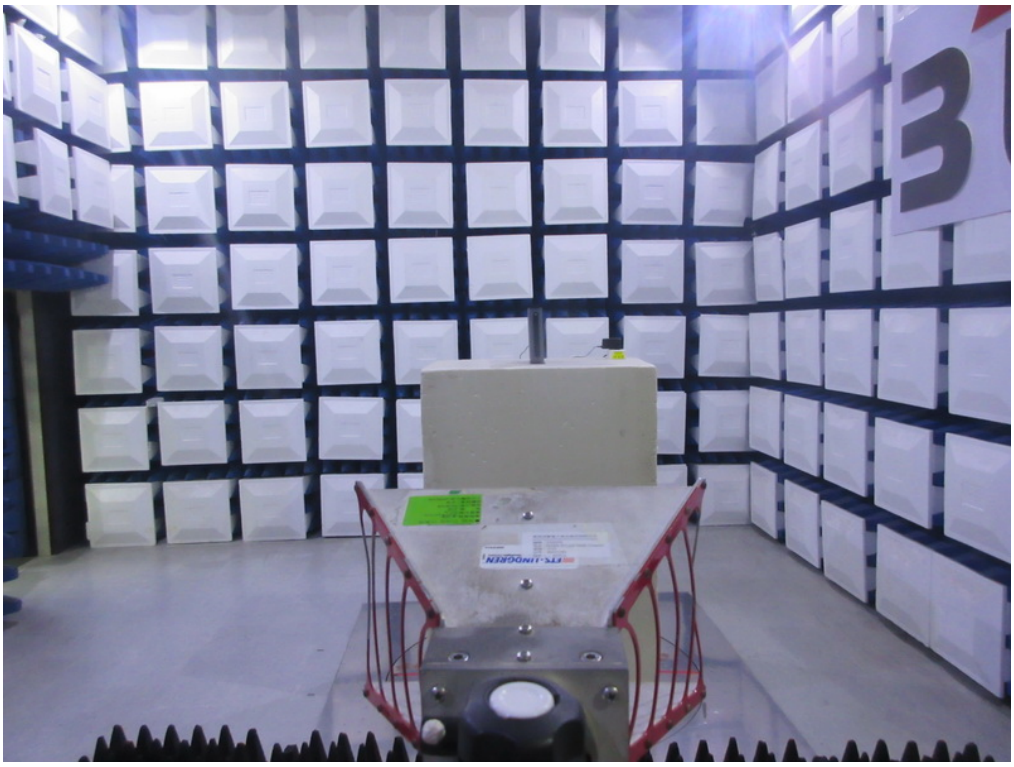
30 MHz to 1 GHz

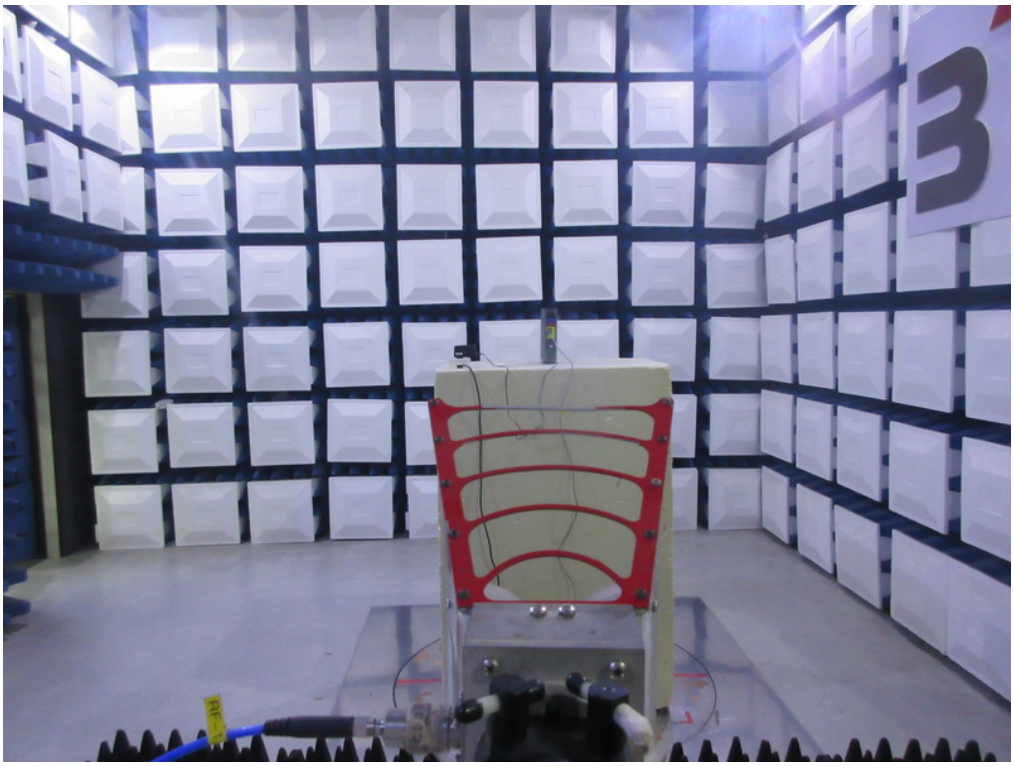




Radiated Emissions Test Photos

Above 1 GHz

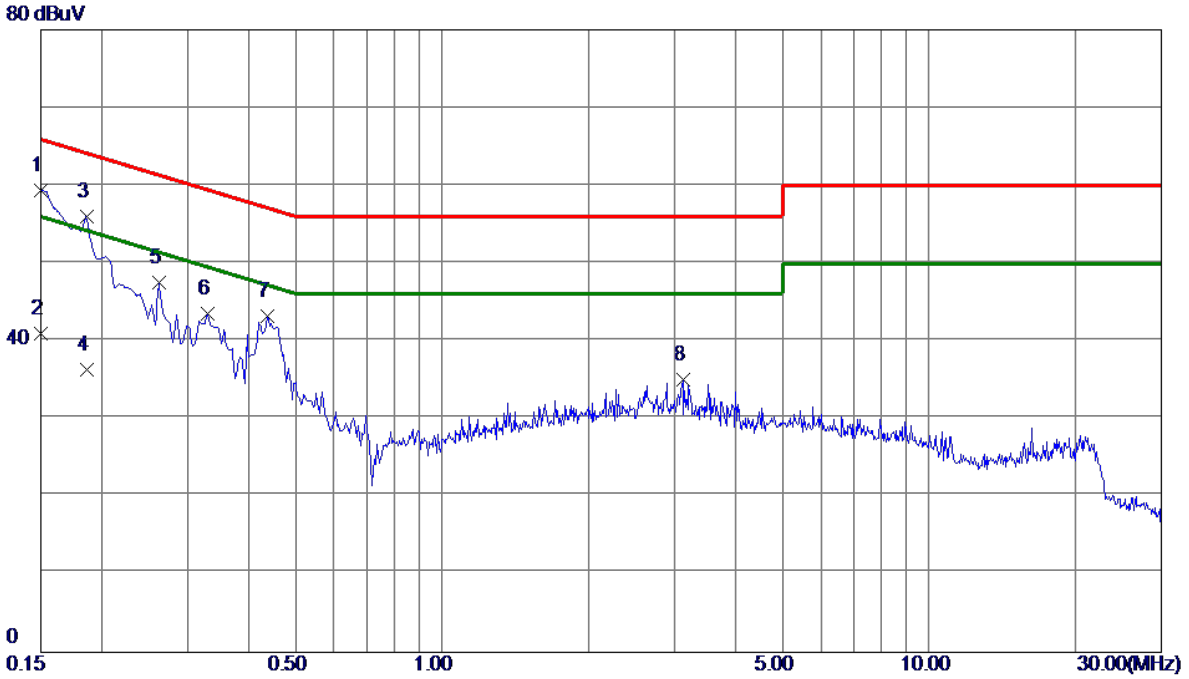




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	TX N20 Mode Channel 06

Line

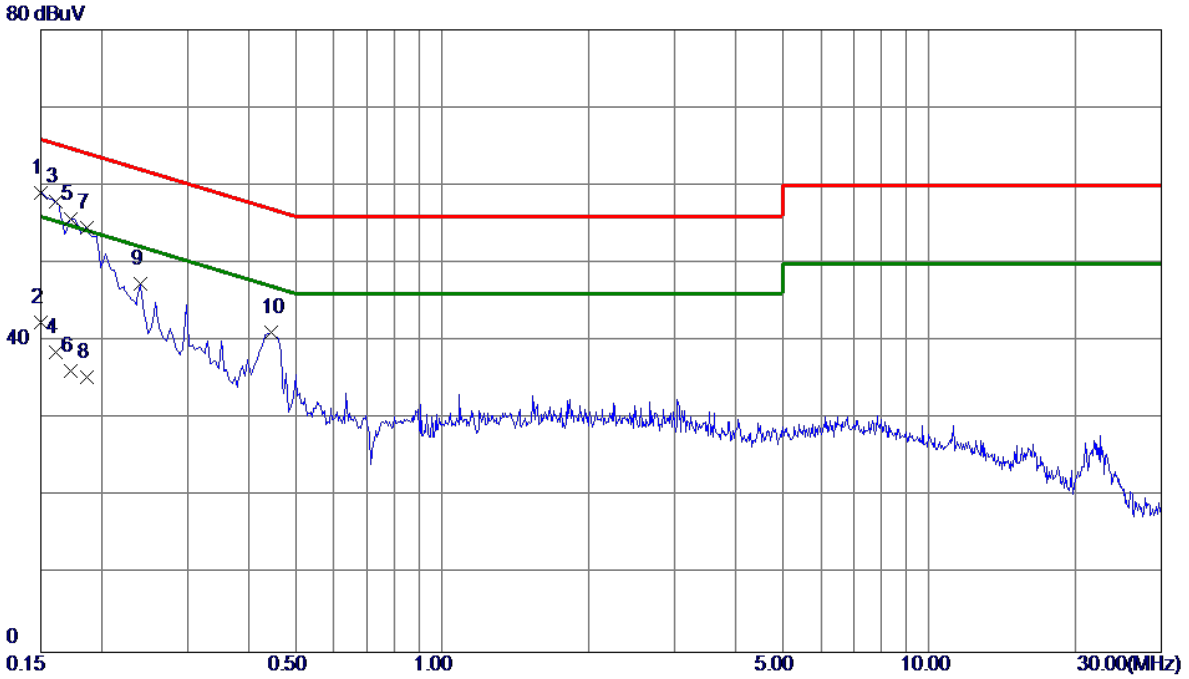


No.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1500	49.55	9.82	59.37	66.00	-6.63	Peak	
2	0.1500	31.20	9.82	41.02	56.00	-14.98	AVG	
3	0.1860	46.23	9.81	56.04	64.21	-8.17	Peak	
4	0.1860	26.50	9.81	36.31	54.21	-17.90	AVG	
5	0.2625	37.71	9.83	47.54	61.35	-13.81	Peak	
6	0.3300	33.70	9.85	43.55	59.45	-15.90	Peak	
7	0.4380	33.32	9.87	43.19	57.10	-13.91	Peak	
8	3.1199	25.00	10.07	35.07	56.00	-20.93	Peak	

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

Test Mode:	TX N20 Mode Channel 06

Neutral



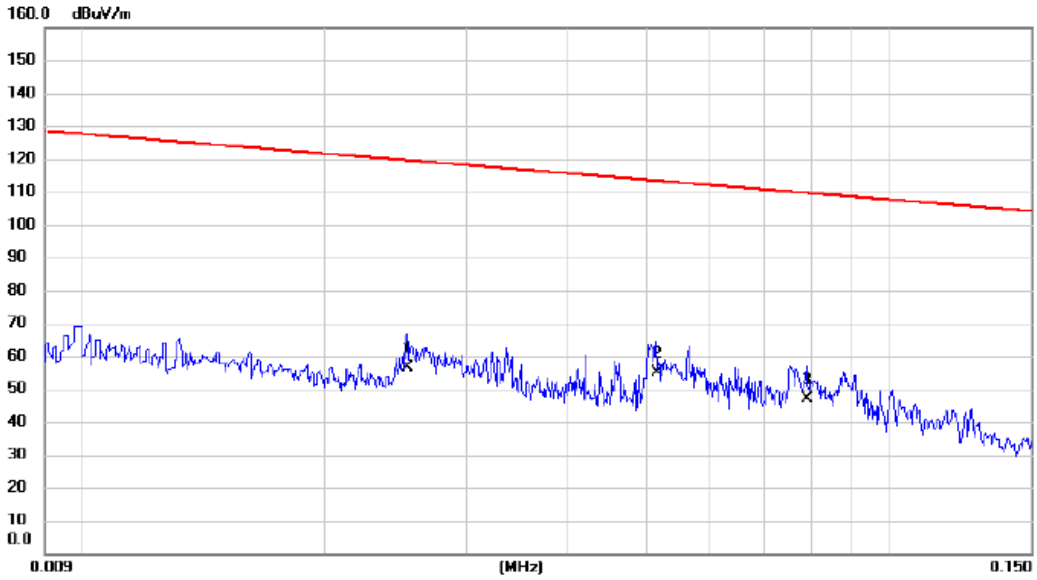
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1500	49.17	9.91	59.08	66.00	-6.92	Peak	
2	0.1500	32.50	9.91	42.41	56.00	-13.59	AVG	
3	0.1607	47.97	9.91	57.88	65.43	-7.55	Peak	
4	0.1607	28.70	9.91	38.61	55.43	-16.82	AVG	
5	0.1725	45.84	9.91	55.75	64.84	-9.09	Peak	
6	0.1725	26.30	9.91	36.21	54.84	-18.63	AVG	
7	0.1860	44.60	9.90	54.50	64.21	-9.71	Peak	
8	0.1860	25.50	9.90	35.40	54.21	-18.81	AVG	
9	0.2400	37.45	9.92	47.37	62.10	-14.73	Peak	
10	0.4470	31.05	10.02	41.07	56.93	-15.86	Peak	

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

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode:	TX N20 Mode Channel 06

Ant 0°

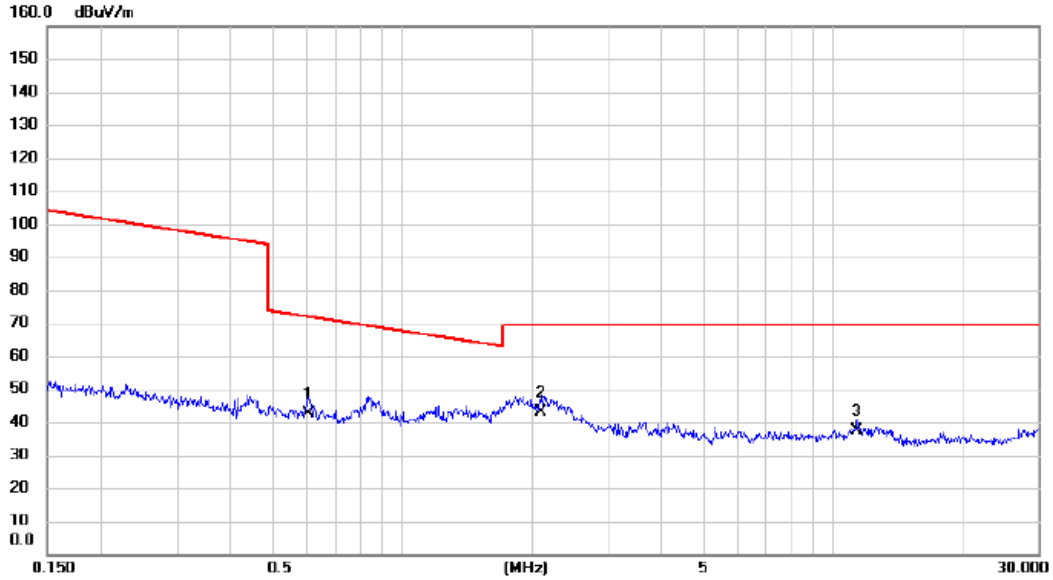


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0253	42.87	13.84	56.71	119.54	-62.83	AVG	
2	*	0.0515	41.18	13.91	55.09	113.37	-58.28	AVG	
3		0.0790	33.64	13.54	47.18	109.65	-62.47	AVG	

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

Test Mode:	TX N20 Mode Channel 06

Ant 0°

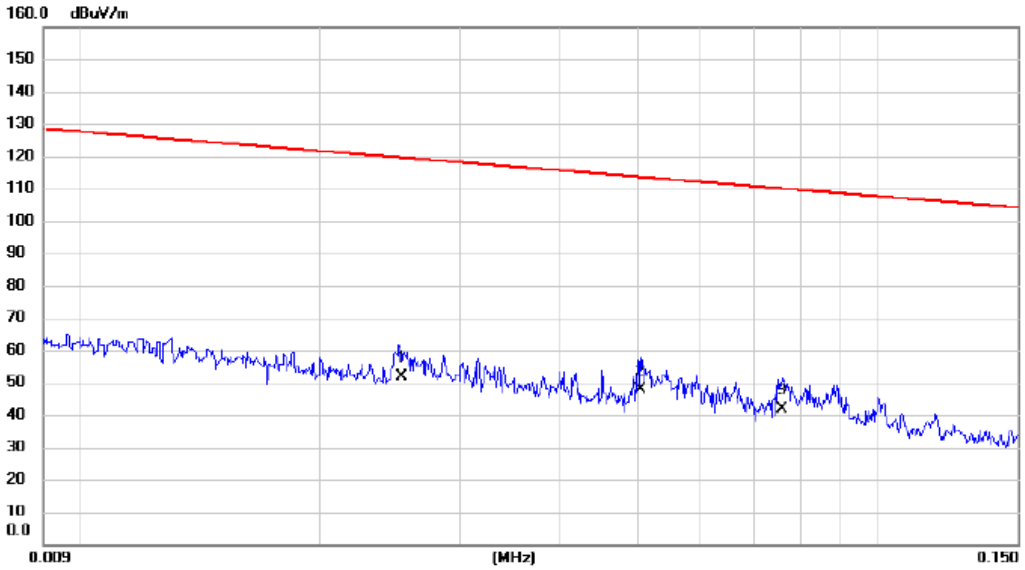


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.6075	29.89	12.86	42.75	71.93	-29.18	QP	
2	*	2.0990	31.27	11.76	43.03	69.54	-26.51	QP	
3		11.3771	25.64	11.61	37.25	69.54	-32.29	QP	

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

Test Mode:	TX N20 Mode Channel 06

Ant 90°

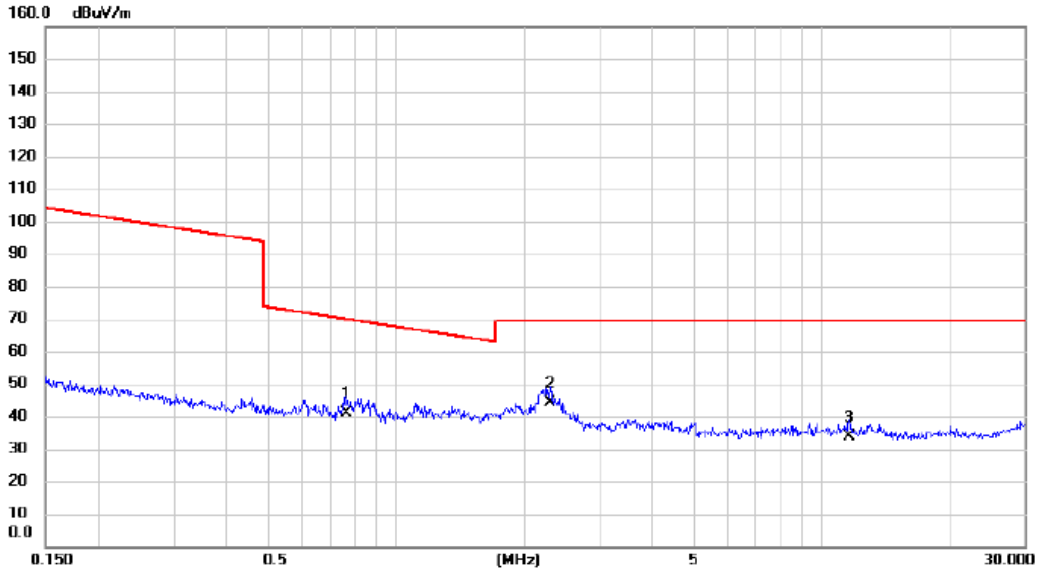


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0253	37.94	13.84	51.78	119.54	-67.76	AVG	
2	*	0.0505	33.79	13.92	47.71	113.54	-65.83	AVG	
3		0.0760	28.14	13.53	41.67	109.99	-68.32	AVG	

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

Test Mode:	TX N20 Mode Channel 06

Ant 90°



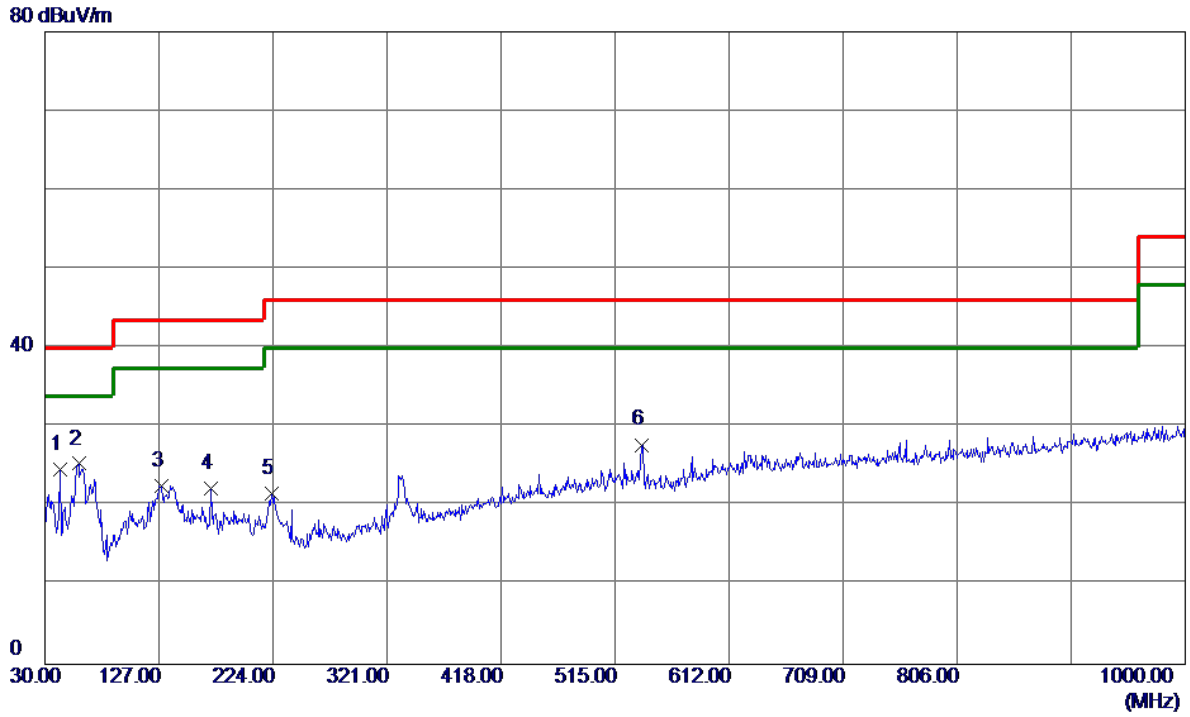
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.7670	28.61	12.57	41.18	69.91	-28.73	QP	
2	*	2.2968	32.57	11.64	44.21	69.54	-25.33	QP	
3		11.6208	22.27	11.61	33.88	69.54	-35.66	QP	

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode:	TX N20 Mode Channel 06

Vertical

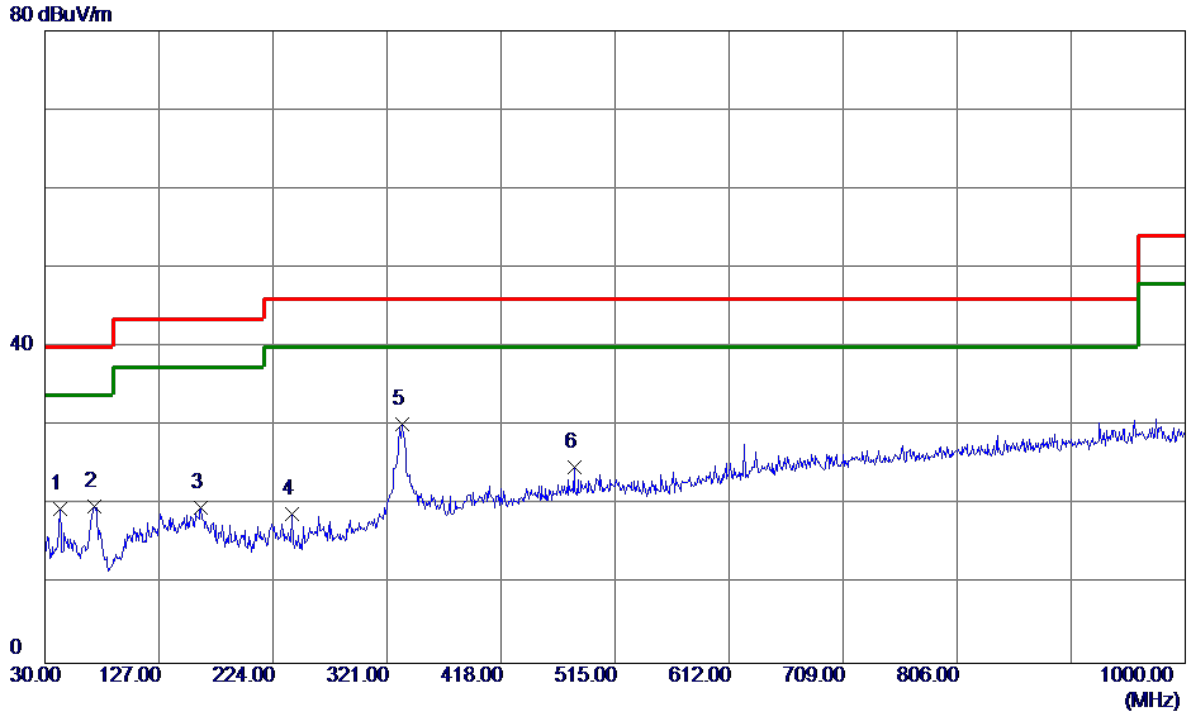


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	42.6100	39.12	-14.49	24.63	40.00	-15.37	Peak	
2 *	58.6150	40.07	-14.71	25.36	40.00	-14.64	Peak	
3	128.9400	35.67	-13.05	22.62	43.50	-20.88	Peak	
4	171.1350	34.78	-12.50	22.28	43.50	-21.22	Peak	
5	223.0300	36.15	-14.53	21.62	46.00	-24.38	Peak	
6	537.3100	35.09	-7.33	27.76	46.00	-18.24	Peak	

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

Test Mode:	TX N20 Mode Channel 06

Horizontal



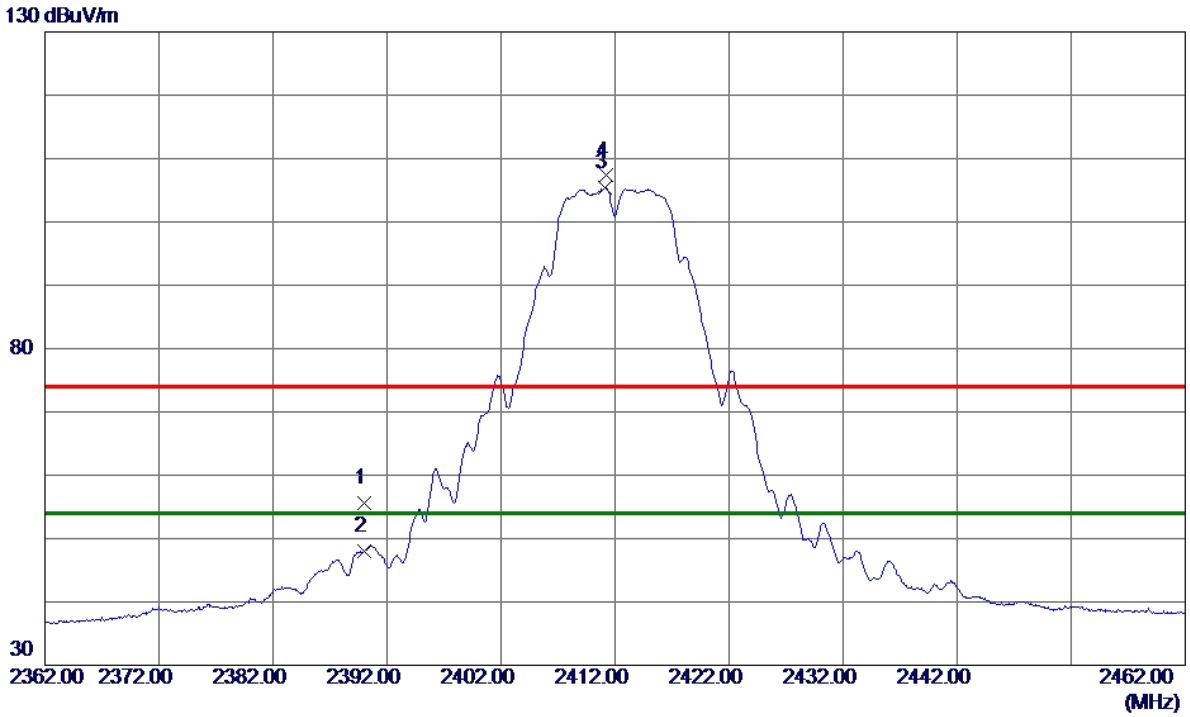
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	42.6100	33.95	-14.49	19.46	40.00	-20.54	Peak	
2	72.1950	36.41	-16.63	19.78	40.00	-20.22	Peak	
3	162.8900	31.06	-11.41	19.65	43.50	-23.85	Peak	
4	240.0050	32.88	-14.00	18.88	46.00	-27.12	Peak	
5 *	333.6099	41.11	-10.93	30.18	46.00	-15.82	Peak	
6	480.0800	32.70	-7.84	24.86	46.00	-21.14	Peak	

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

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Test Mode:	TX B Mode 2412 MHz

Vertical

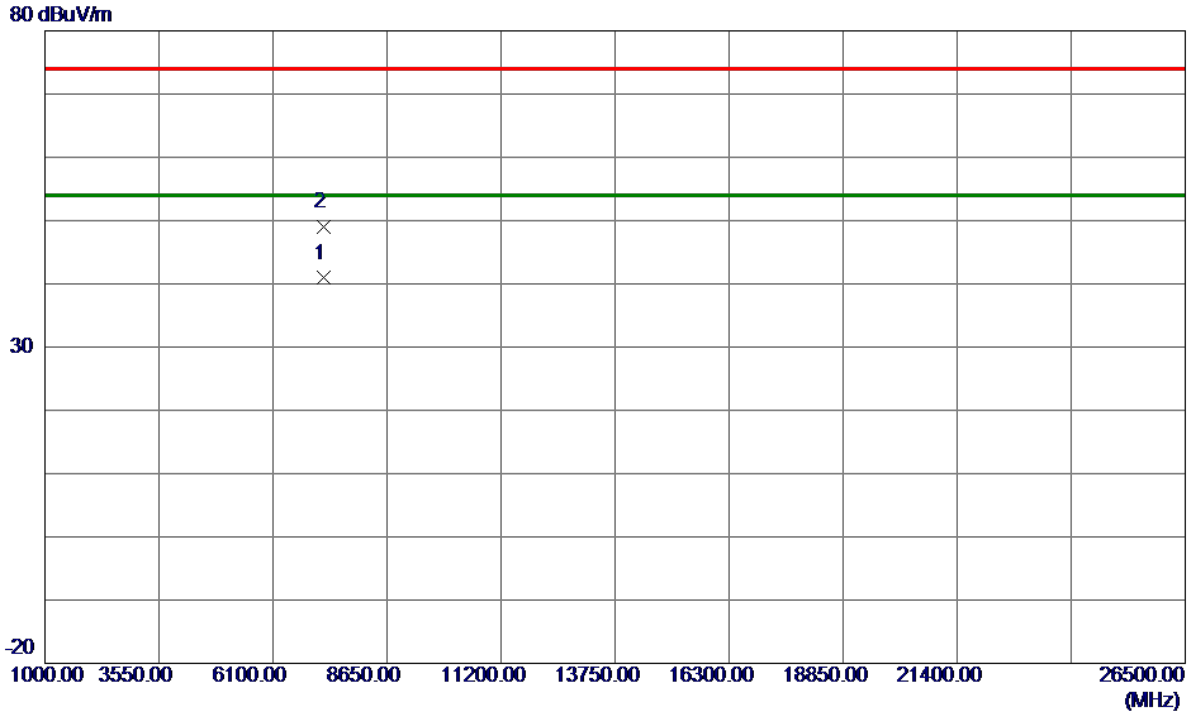


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	49.06	6.53	55.59	74.00	-18.41	Peak	
2	2390.0000	41.51	6.53	48.04	54.00	-5.96	AVG	
3 *	2411.1500	98.82	6.51	105.33	54.00	51.33	AVG	No Limit
4	2411.2000	100.79	6.51	107.30	74.00	33.30	Peak	No Limit

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

Test Mode:	TX B Mode 2412 MHz

Vertical

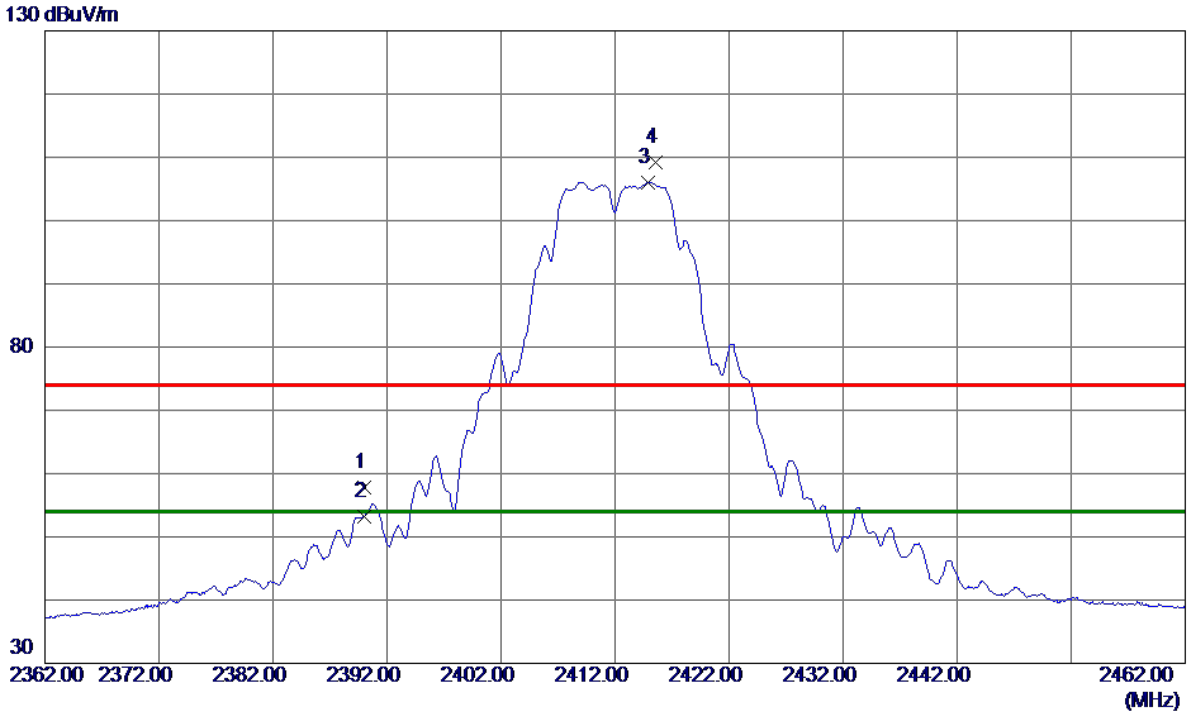


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7235.9350	32.54	8.36	40.90	54.00	-13.10	AVG	
2	7236.0900	40.73	8.36	49.09	74.00	-24.91	Peak	

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

Test Mode:	TX B Mode 2412 MHz

Horizontal

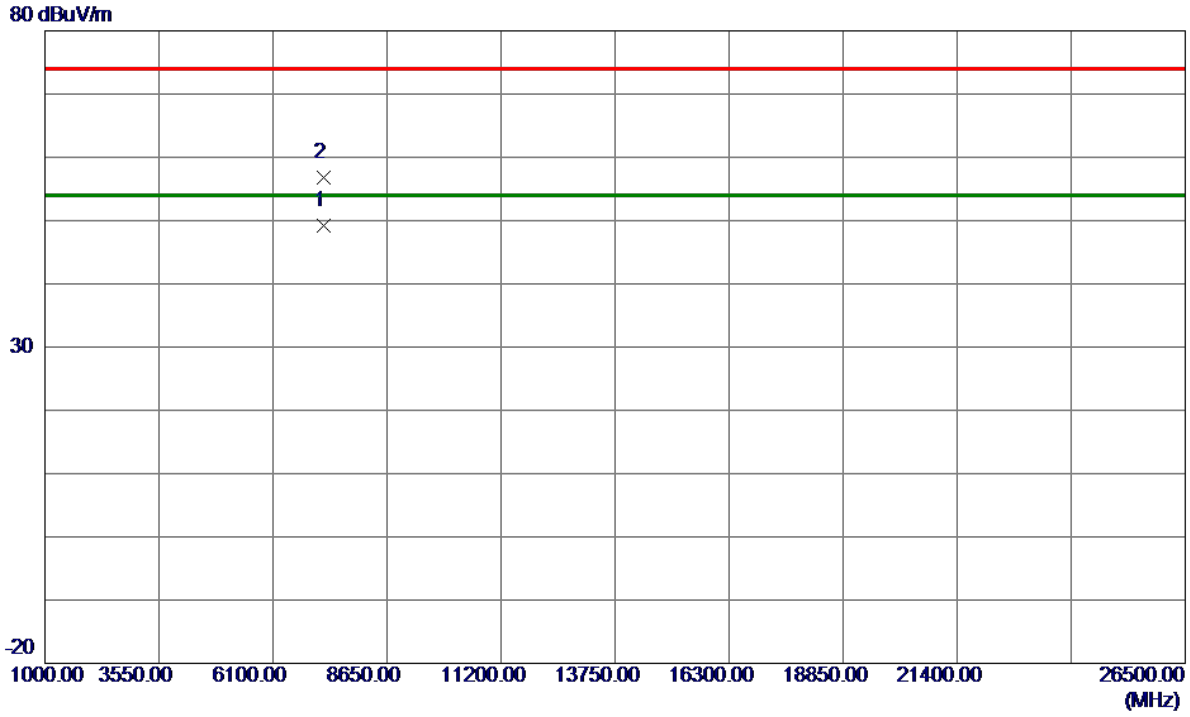


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	51.33	6.53	57.86	74.00	-16.14	Peak	
2	2390.0000	46.75	6.53	53.28	54.00	-0.72	AVG	
3 *	2414.8500	99.57	6.50	106.07	54.00	52.07	AVG	No Limit
4	2415.5500	102.66	6.50	109.16	74.00	35.16	Peak	No Limit

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

Test Mode:	TX B Mode 2412 MHz

Horizontal

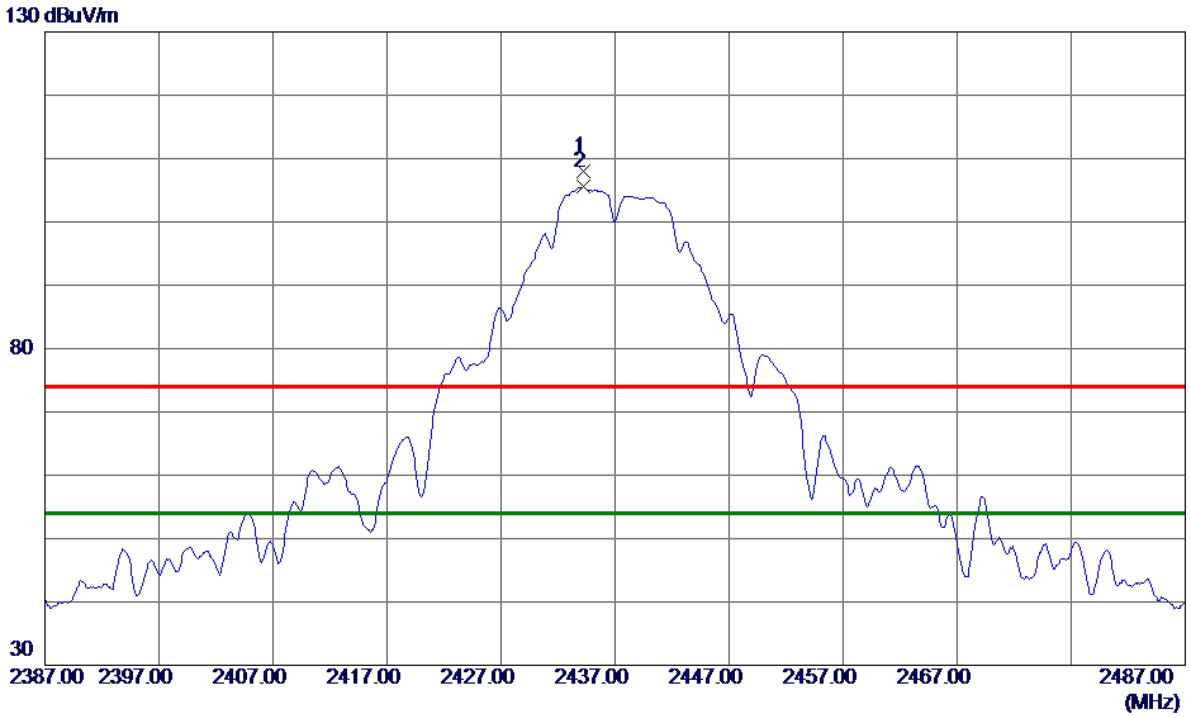


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7235.9100	40.90	8.36	49.26	54.00	-4.74	AVG	
2	7236.0250	48.41	8.36	56.77	74.00	-17.23	Peak	

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

Test Mode:	TX B Mode 2437 MHz

Vertical

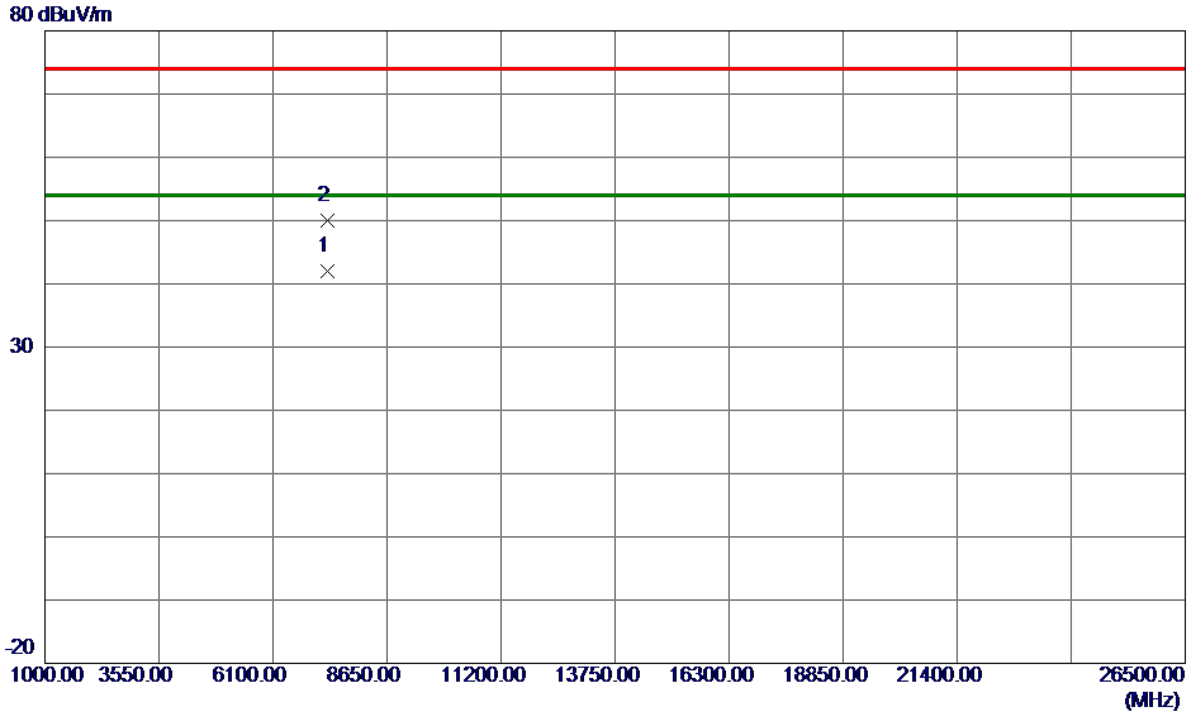


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434.2000	101.45	6.48	107.93	74.00	33.93	Peak	No Limit
2 *	2434.2500	99.03	6.48	105.51	54.00	51.51	AVG	No Limit

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

Test Mode:	TX B Mode 2437 MHz

Vertical

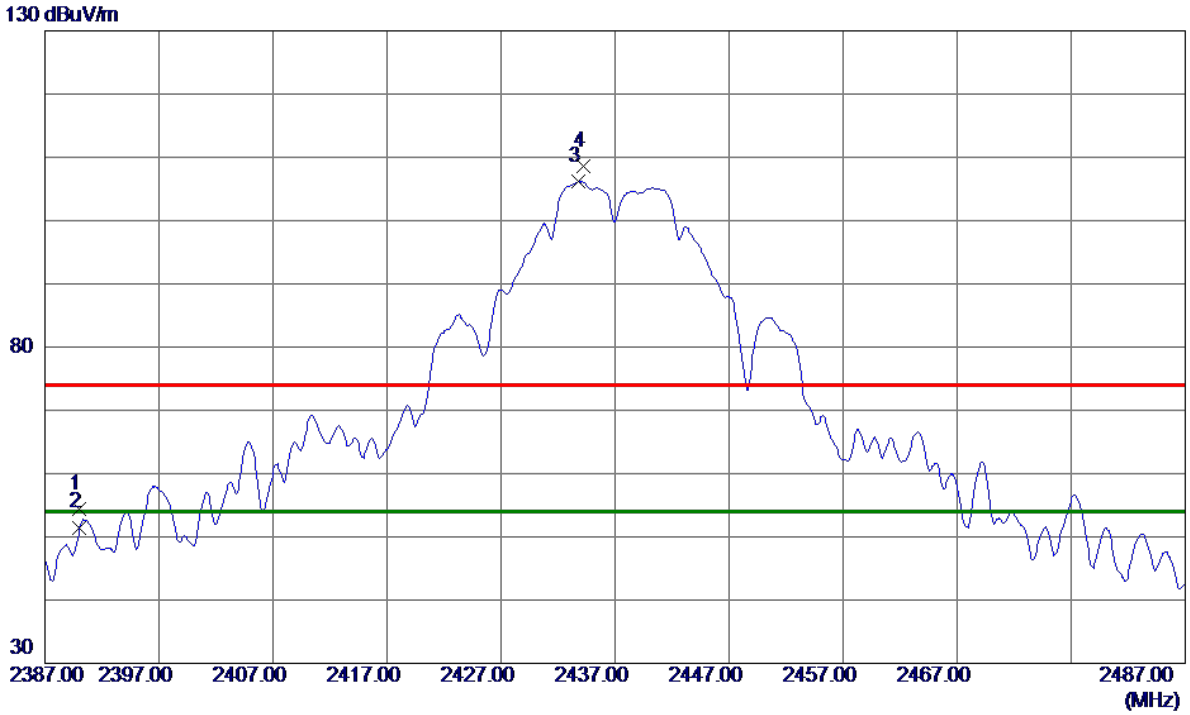


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7310.9620	33.47	8.46	41.93	54.00	-12.07	AVG	
2	7310.9980	41.49	8.46	49.95	74.00	-24.05	Peak	

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

Test Mode:	TX B Mode 2437 MHz

Horizontal

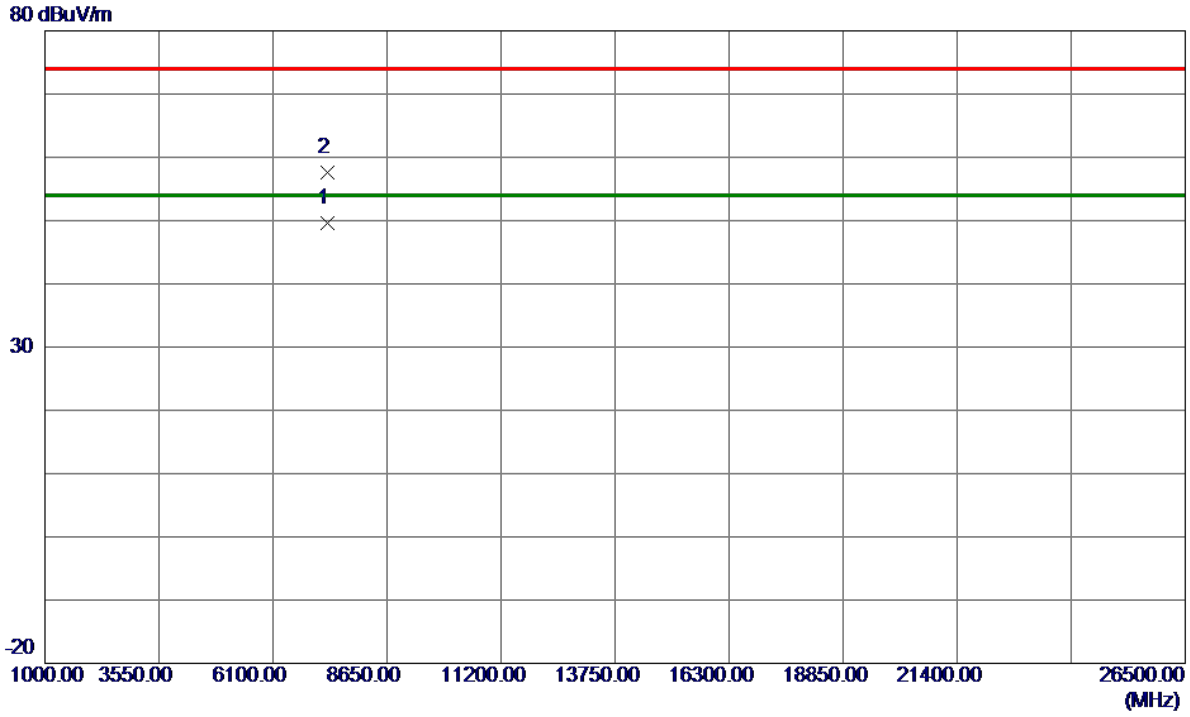


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	47.94	6.53	54.47	74.00	-19.53	Peak	
2	2390.0000	44.97	6.53	51.50	54.00	-2.50	AVG	
3 *	2433.7500	99.72	6.48	106.20	54.00	52.20	AVG	No Limit
4	2434.2000	102.09	6.48	108.57	74.00	34.57	Peak	No Limit

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

Test Mode:	TX B Mode 2437 MHz

Horizontal

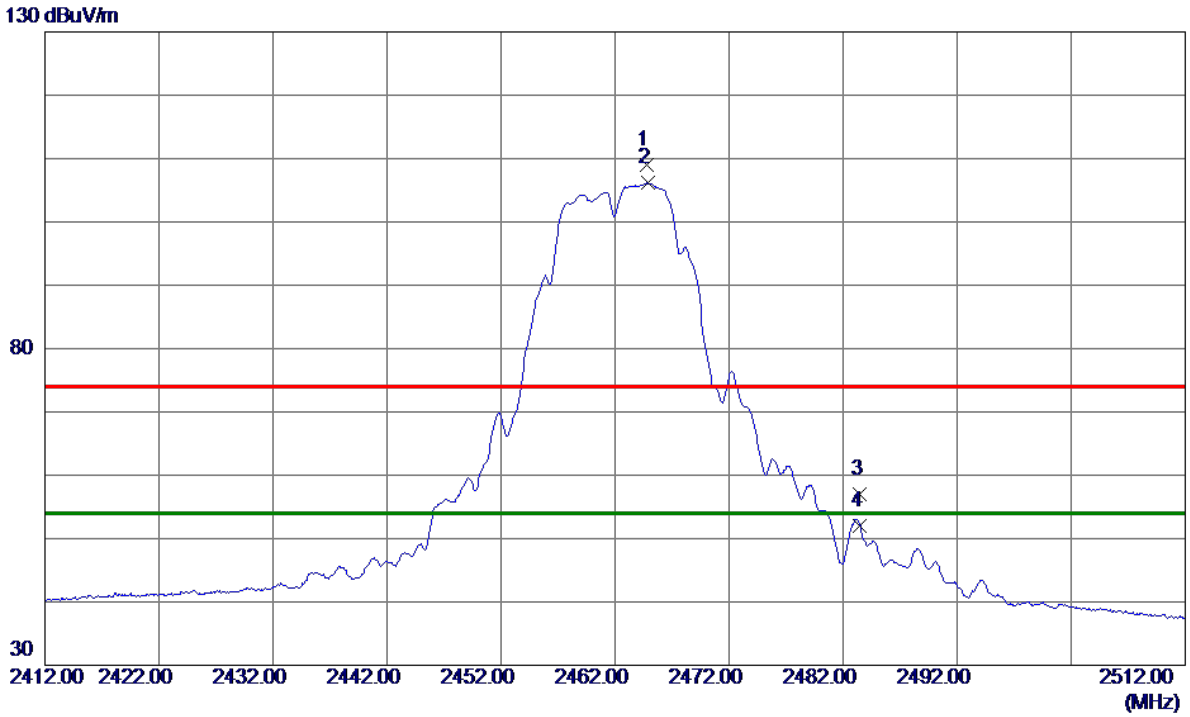


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7310.9770	41.20	8.46	49.66	54.00	-4.34	AVG	
2	7311.1080	49.15	8.46	57.61	74.00	-16.39	Peak	

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

Test Mode:	TX B Mode 2462 MHz

Vertical

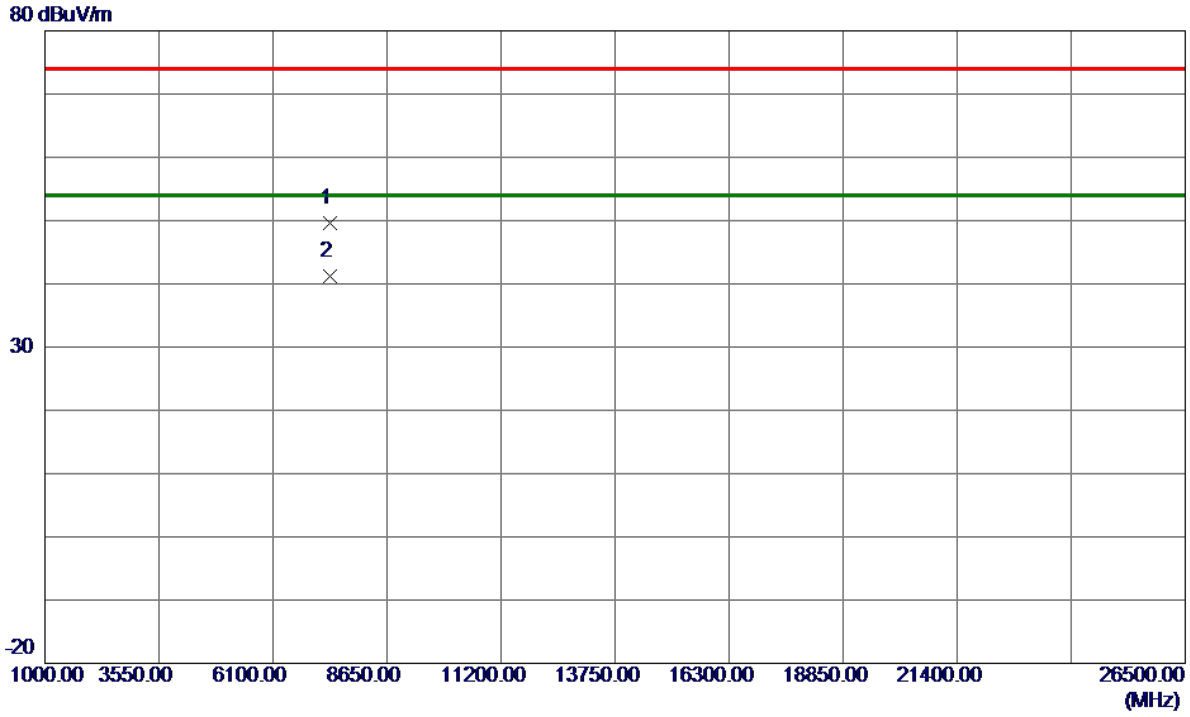


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2464.8000	102.45	6.45	108.90	74.00	34.90	Peak	No Limit
2 *	2464.8500	99.70	6.45	106.15	54.00	52.15	AVG	No Limit
3	2483.5000	50.57	6.42	56.99	74.00	-17.01	Peak	
4	2483.5000	45.59	6.42	52.01	54.00	-1.99	AVG	

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

Test Mode:	TX B Mode 2462 MHz

Vertical

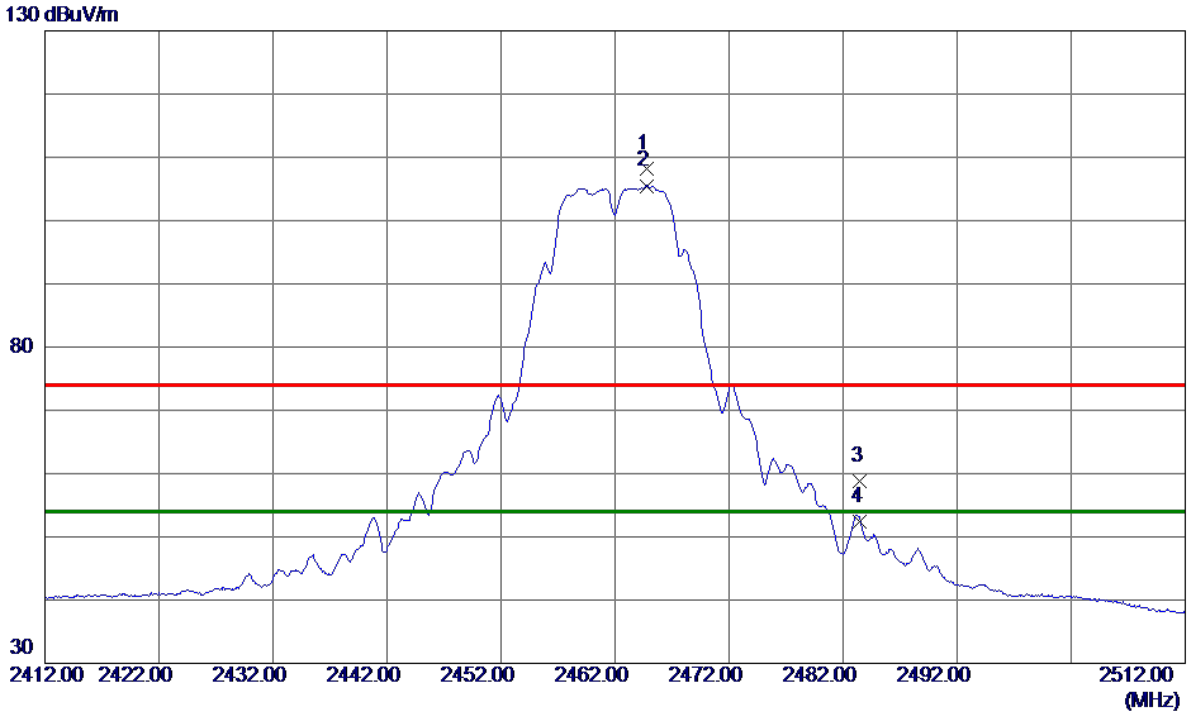


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7385.9030	40.94	8.57	49.51	74.00	-24.49	Peak	
2 *	7385.9530	32.64	8.57	41.21	54.00	-12.79	AVG	

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

Test Mode:	TX B Mode 2462 MHz

Horizontal

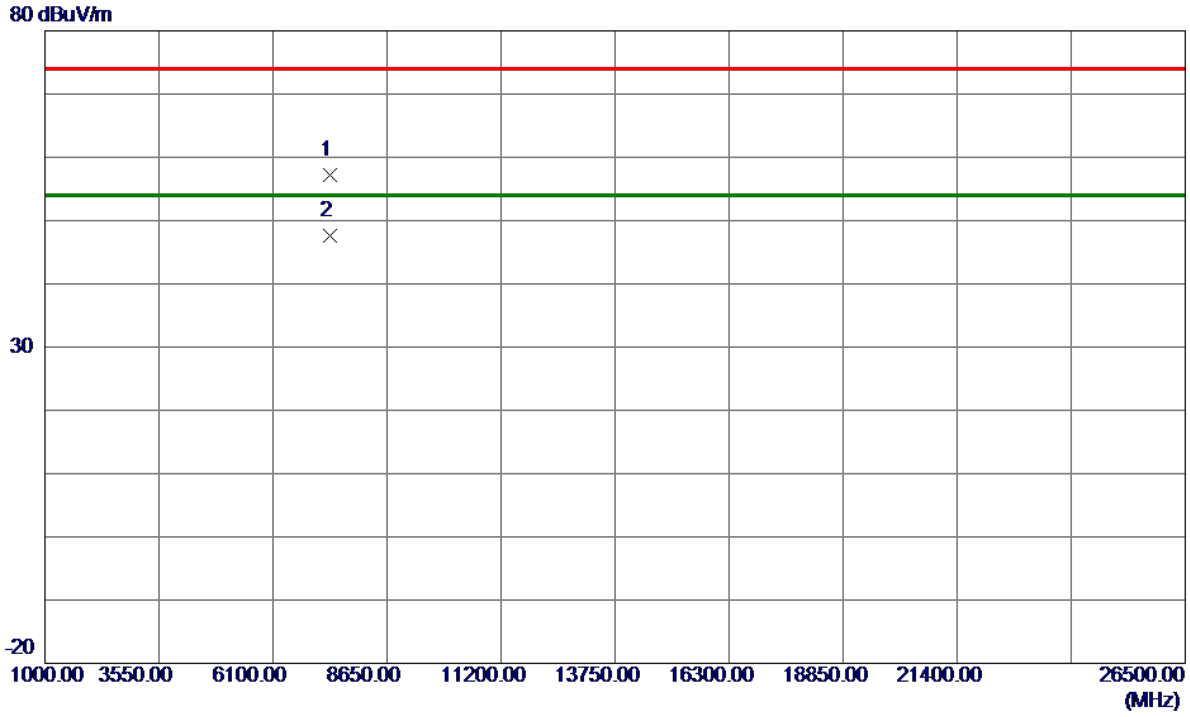


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2464.7500	101.67	6.45	108.12	74.00	34.12	Peak	No Limit
2 *	2464.8000	99.05	6.45	105.50	54.00	51.50	AVG	No Limit
3	2483.5000	52.38	6.42	58.80	74.00	-15.20	Peak	
4	2483.5000	45.91	6.42	52.33	54.00	-1.67	AVG	

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

Test Mode:	TX B Mode 2462 MHz

Horizontal

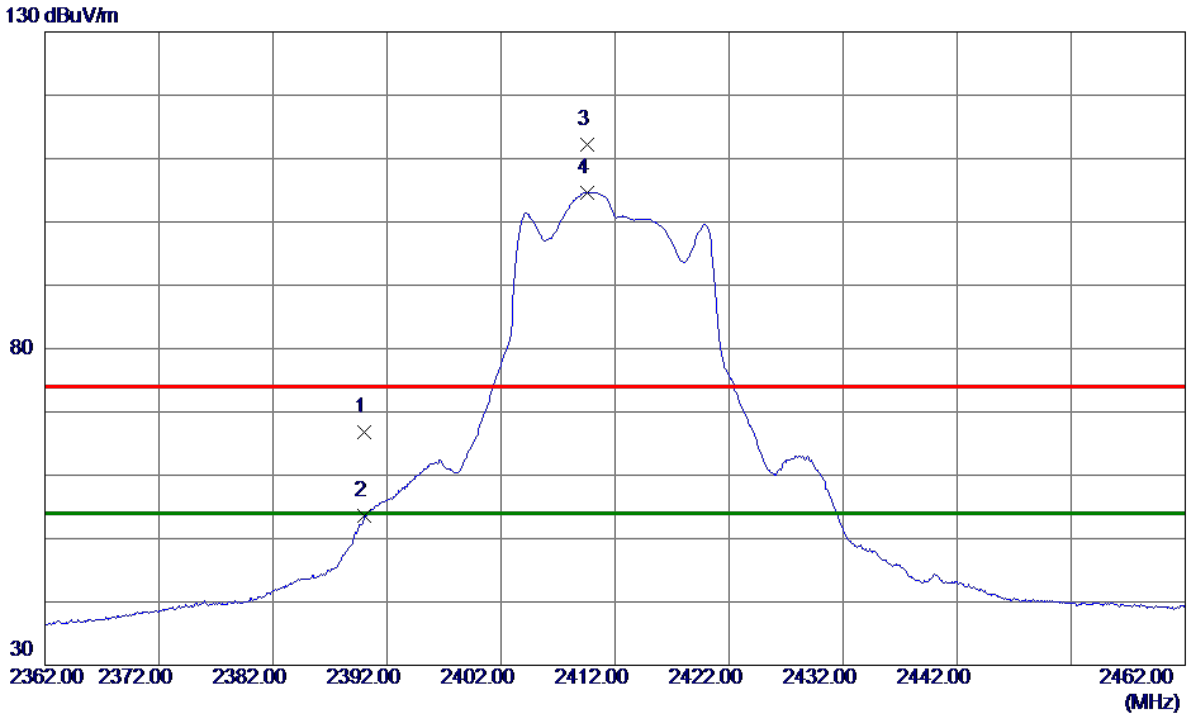


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7385.6820	48.58	8.57	57.15	74.00	-16.85	Peak	
2 *	7385.9930	38.98	8.57	47.55	54.00	-6.45	AVG	

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

Test Mode:	TX G Mode 2412 MHz

Vertical

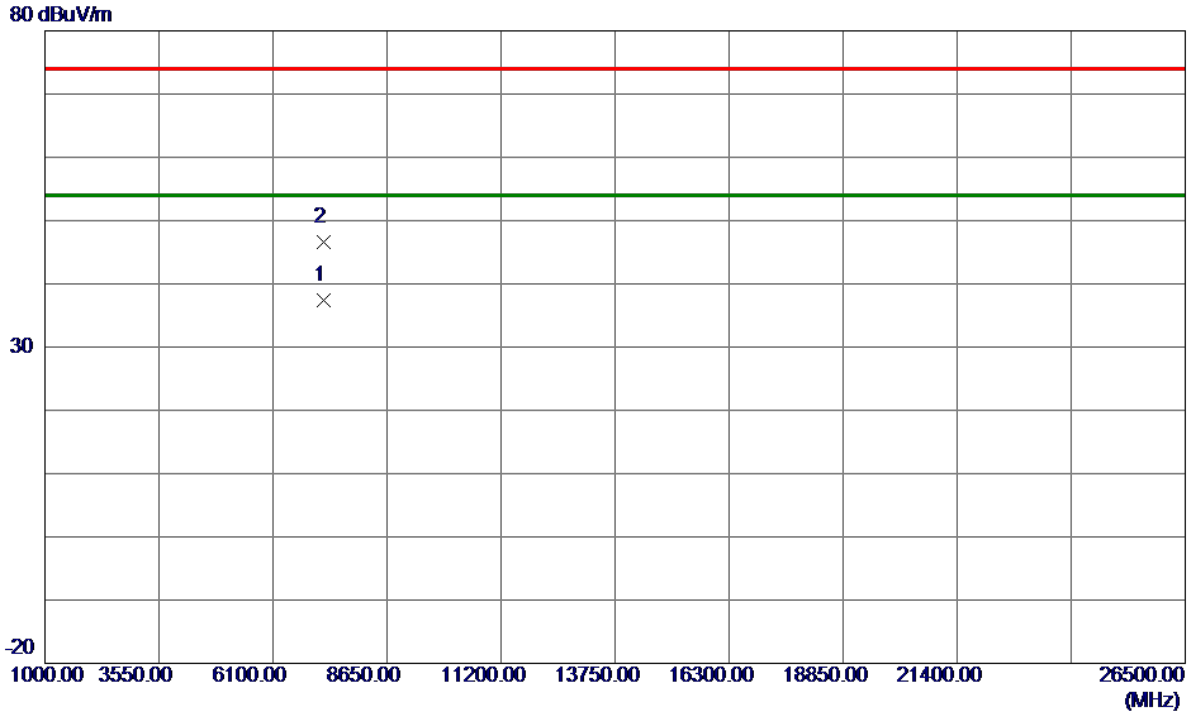


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	60.24	6.53	66.77	74.00	-7.23	Peak	
2	2390.0000	47.09	6.53	53.62	54.00	-0.38	AVG	
3	2409.5500	105.78	6.51	112.29	74.00	38.29	Peak	No Limit
4 *	2409.5500	98.18	6.51	104.69	54.00	50.69	AVG	No Limit

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

Test Mode:	TX G Mode 2412 MHz

Vertical

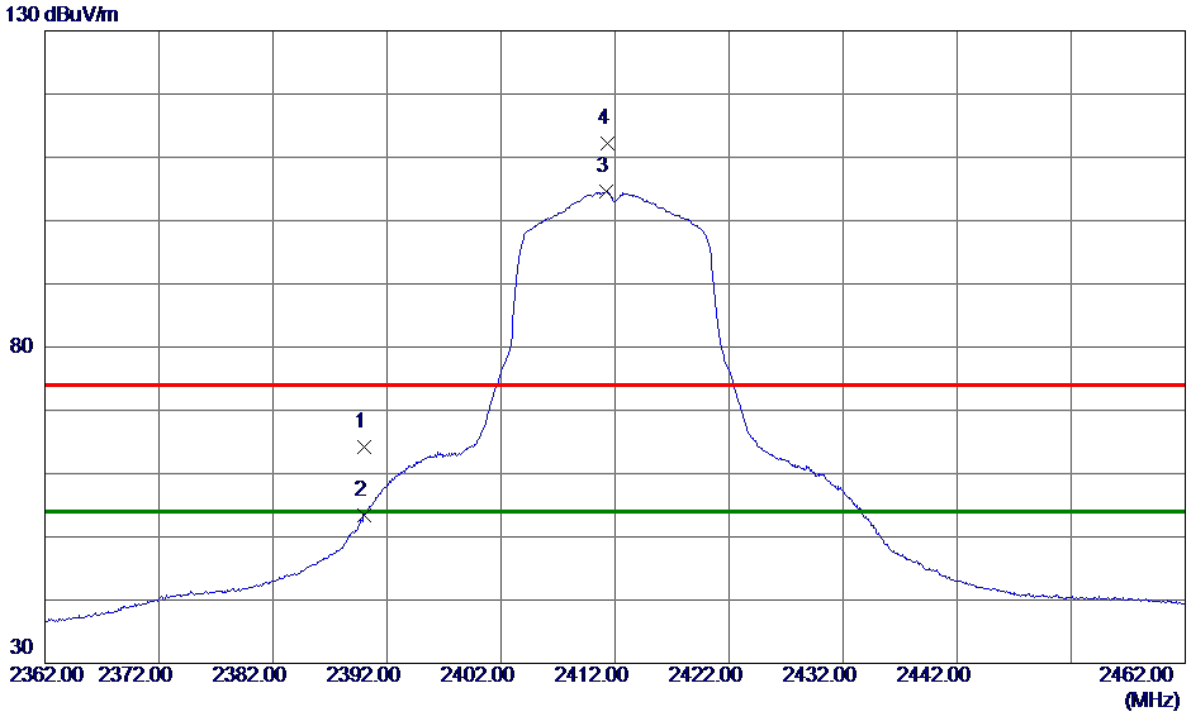


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7235.9200	29.03	8.36	37.39	54.00	-16.61	AVG	
2	7236.0850	38.22	8.36	46.58	74.00	-27.42	Peak	

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

Test Mode:	TX G Mode 2412 MHz

Horizontal

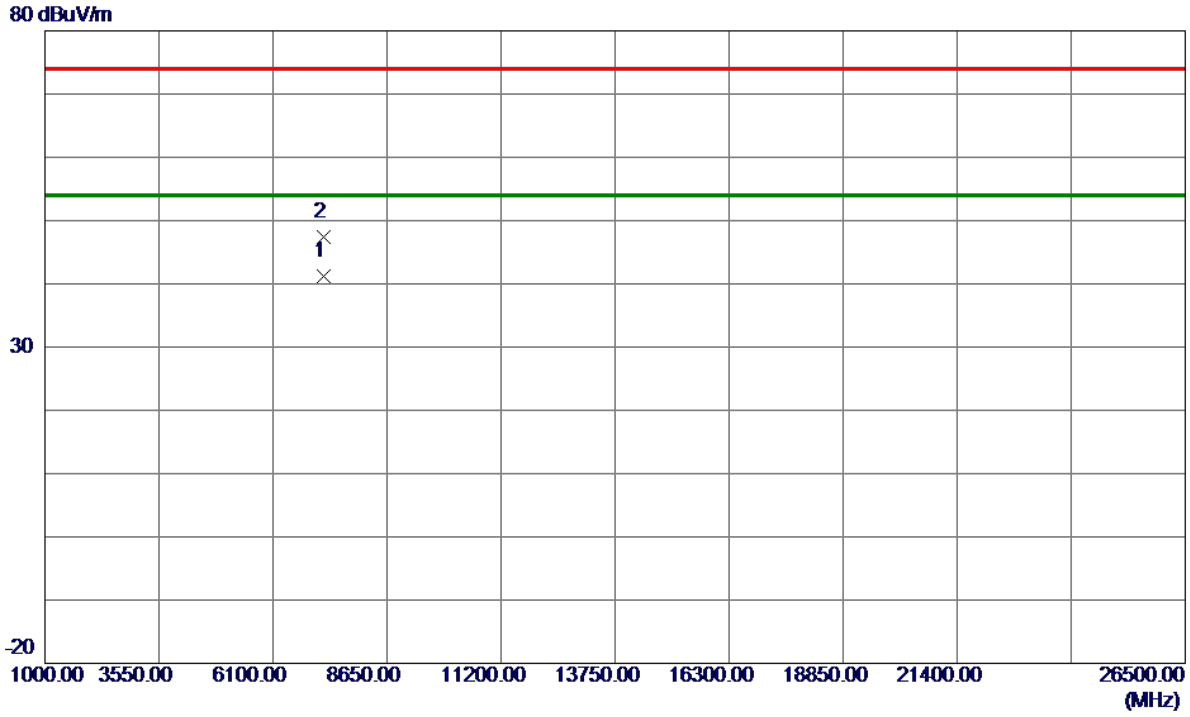


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	57.60	6.53	64.13	74.00	-9.87	Peak	
2	2390.0000	46.91	6.53	53.44	54.00	-0.56	AVG	
3 *	2411.2500	98.16	6.51	104.67	54.00	50.67	AVG	No Limit
4	2411.3000	105.63	6.51	112.14	74.00	38.14	Peak	No Limit

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

Test Mode:	TX G Mode 2412 MHz

Horizontal

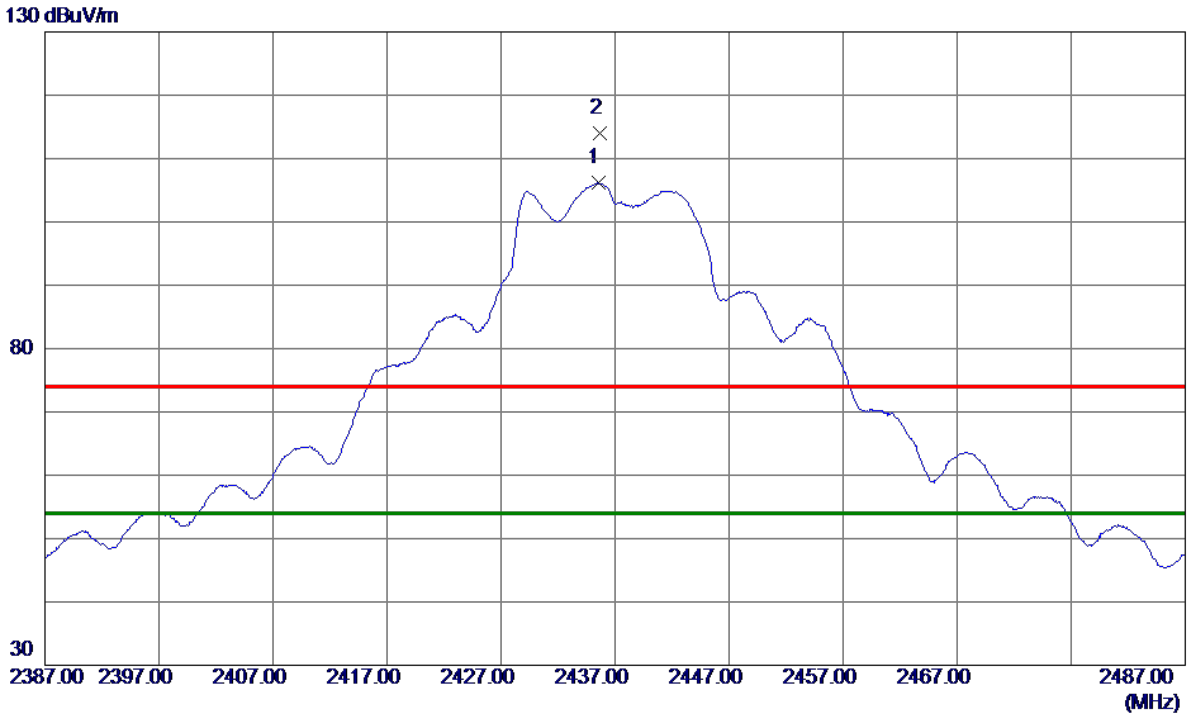


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7235.9620	32.92	8.36	41.28	54.00	-12.72	AVG	
2	7235.9830	38.96	8.36	47.32	74.00	-26.68	Peak	

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

Test Mode:	TX G Mode 2437 MHz

Vertical

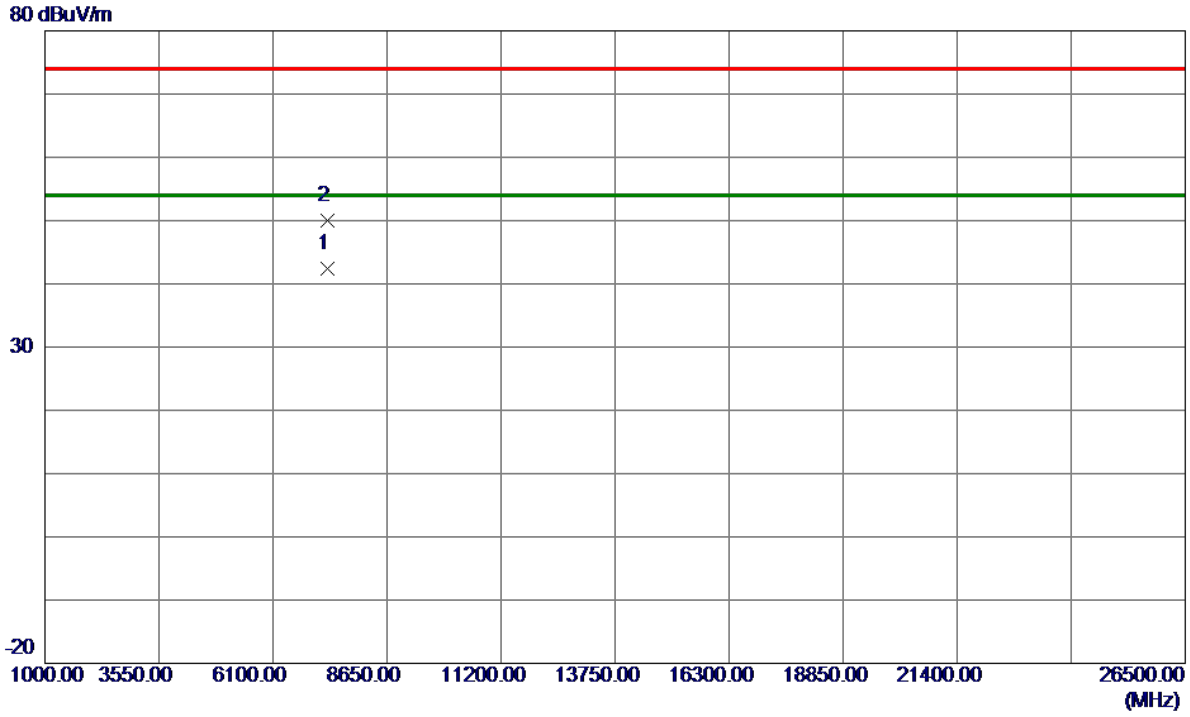


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2435.5000	99.66	6.48	106.14	54.00	52.14	AVG	No Limit
2	2435.6500	107.46	6.48	113.94	74.00	39.94	Peak	No Limit

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

Test Mode:	TX G Mode 2437 MHz

Vertical

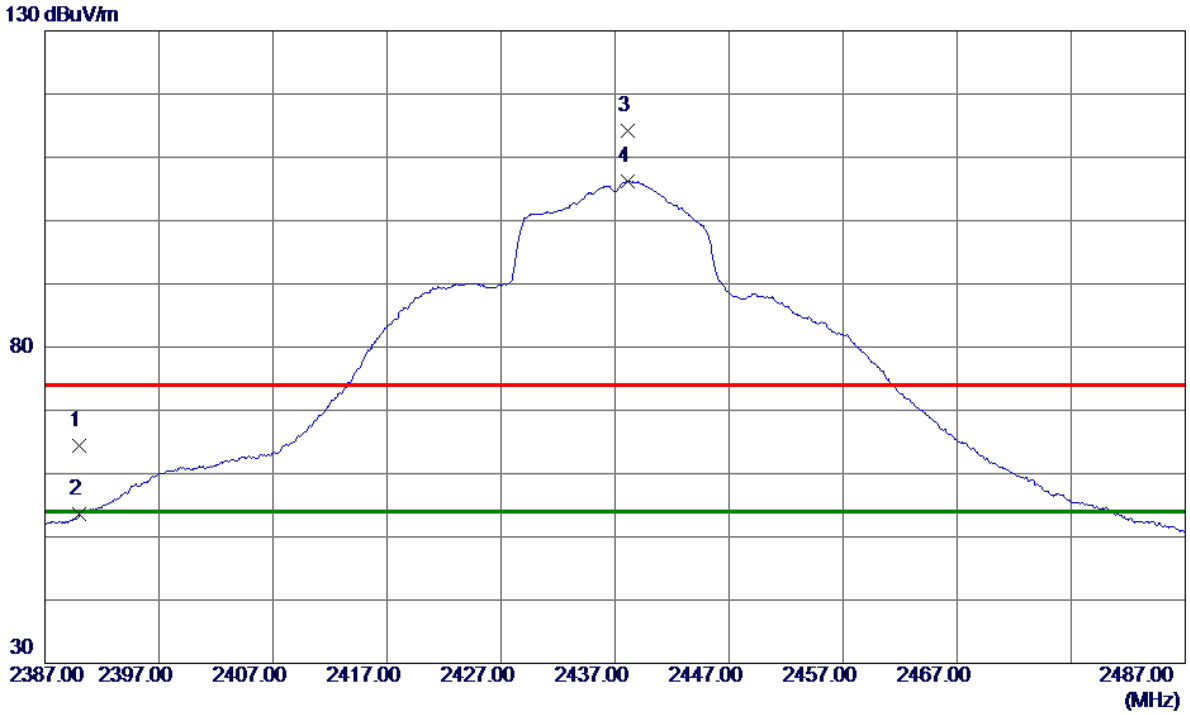


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7310.9130	33.95	8.46	42.41	54.00	-11.59	AVG	
2	7311.0800	41.50	8.46	49.96	74.00	-24.04	Peak	

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

Test Mode:	TX G Mode 2437 MHz

Horizontal

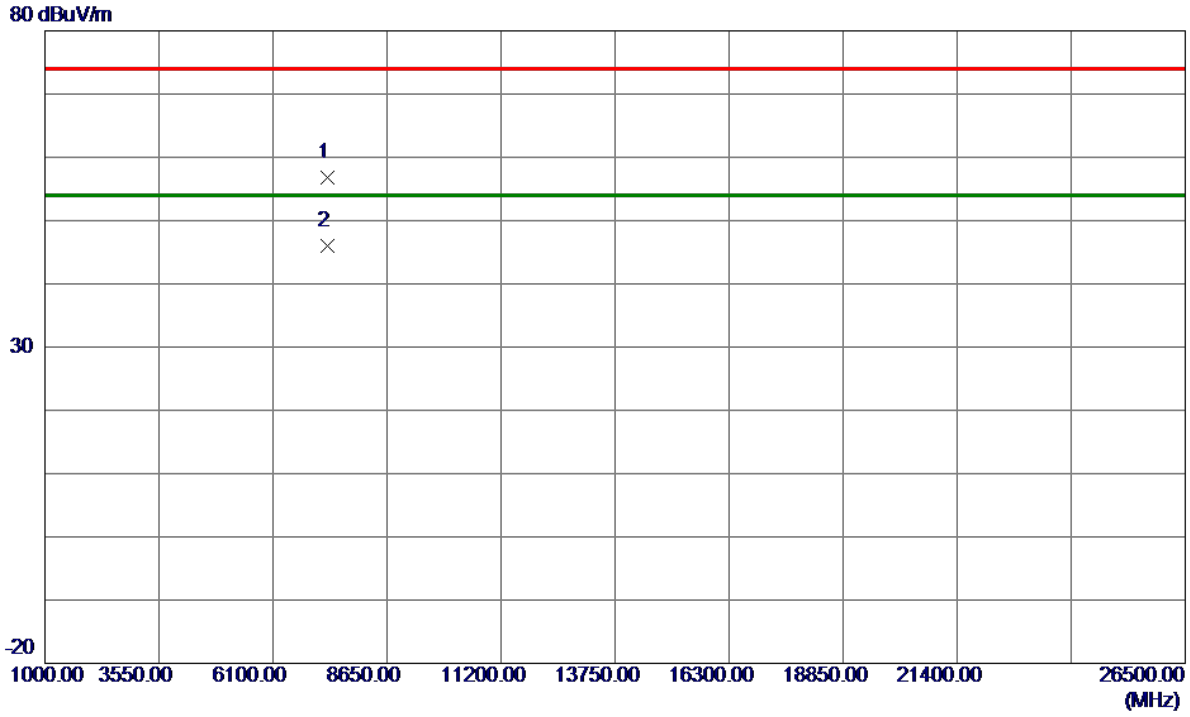


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	57.81	6.53	64.34	74.00	-9.66	Peak	
2	2390.0000	47.04	6.53	53.57	54.00	-0.43	AVG	
3	2438.1500	107.82	6.48	114.30	74.00	40.30	Peak	No Limit
4 *	2438.1500	99.78	6.48	106.26	54.00	52.26	AVG	No Limit

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

Test Mode:	TX G Mode 2437 MHz

Horizontal

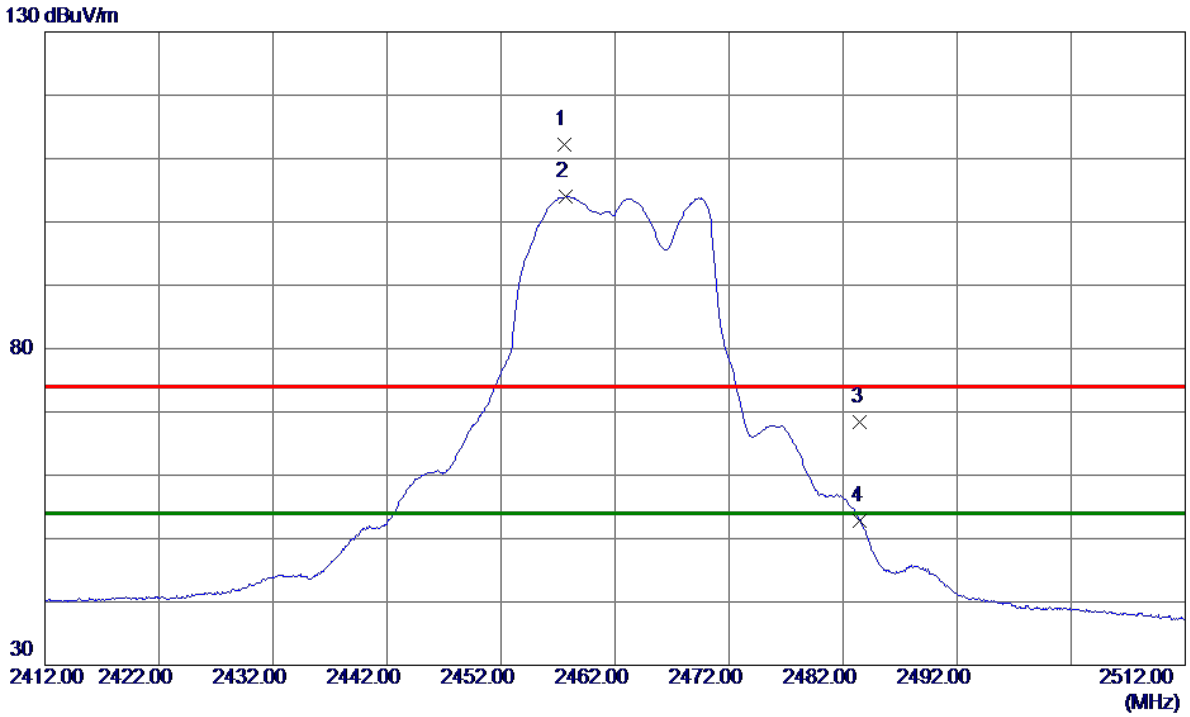


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7310.8650	48.40	8.46	56.86	74.00	-17.14	Peak	
2 *	7310.9430	37.49	8.46	45.95	54.00	-8.05	AVG	

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

Test Mode:	TX G Mode 2462 MHz

Vertical

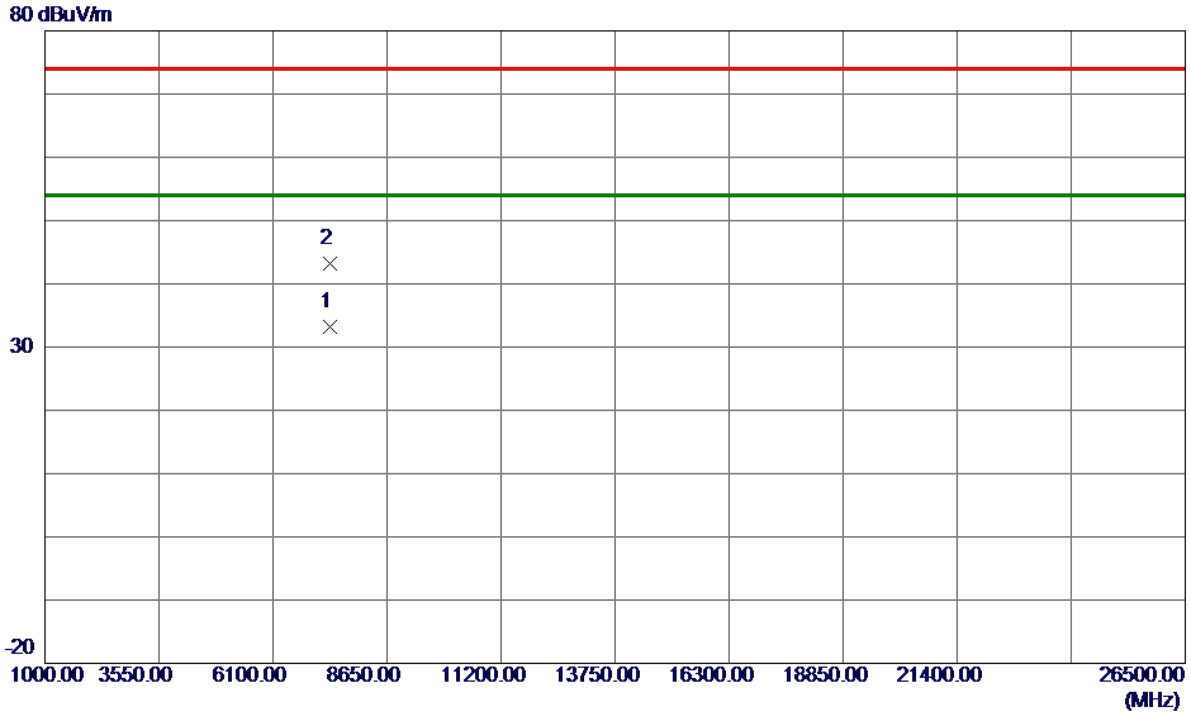


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2457.5500	105.77	6.45	112.22	74.00	38.22	Peak	No Limit
2 *	2457.7000	97.50	6.45	103.95	54.00	49.95	AVG	No Limit
3	2483.5000	61.94	6.42	68.36	74.00	-5.64	Peak	
4	2483.5000	46.29	6.42	52.71	54.00	-1.29	AVG	

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

Test Mode:	TX G Mode 2462 MHz

Vertical

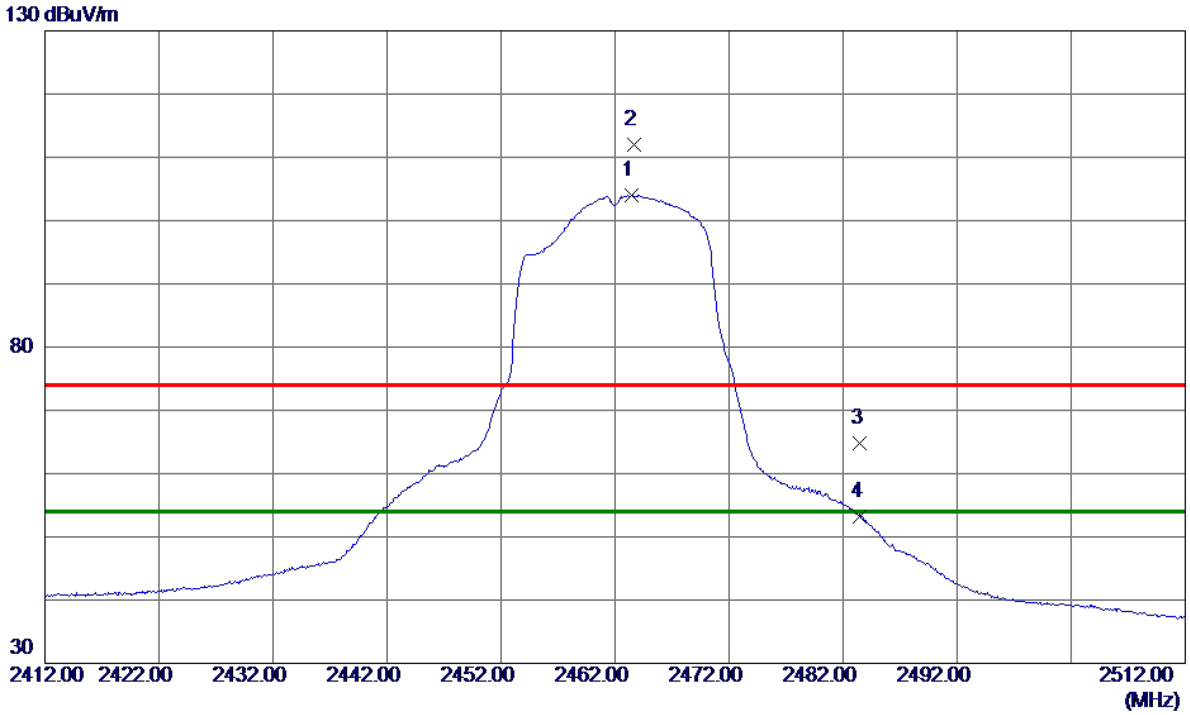


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7385.9720	24.64	8.57	33.21	54.00	-20.79	AVG	
2	7386.4130	34.69	8.57	43.26	74.00	-30.74	Peak	

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

Test Mode:	TX G Mode 2462 MHz

Horizontal

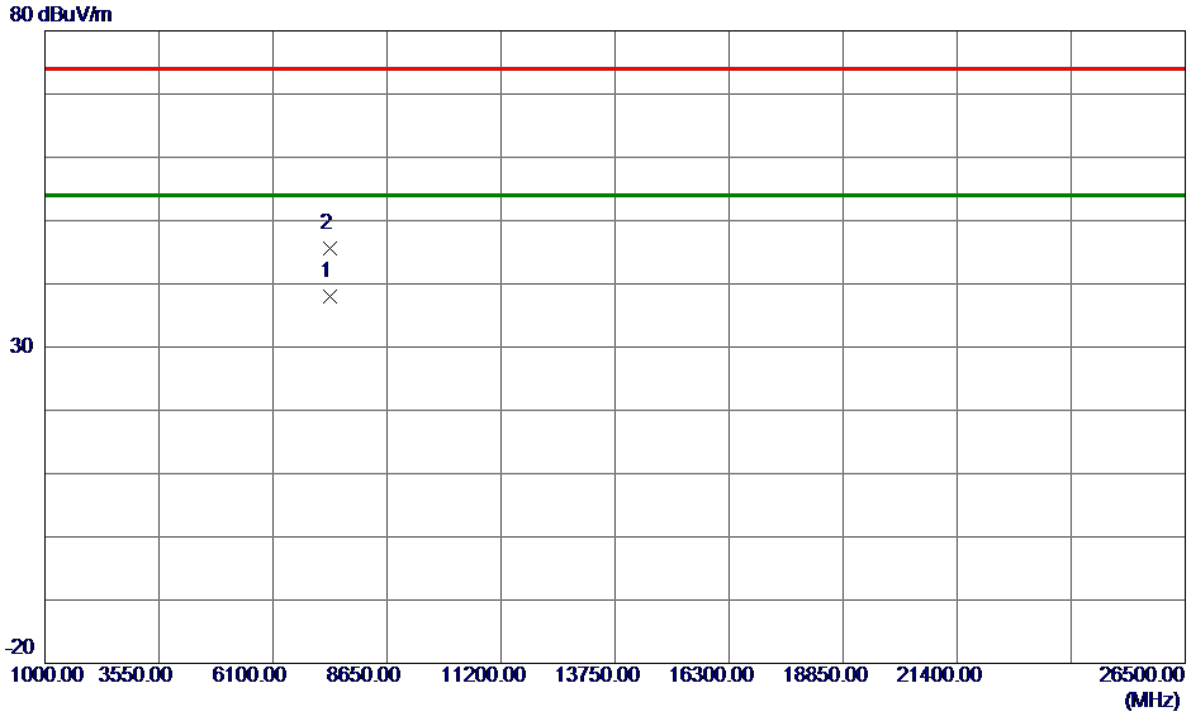


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2463.4000	97.48	6.45	103.93	54.00	49.93	AVG	No Limit
2	2463.6500	105.57	6.45	112.02	74.00	38.02	Peak	No Limit
3	2483.5000	58.39	6.42	64.81	74.00	-9.19	Peak	
4	2483.5000	46.75	6.42	53.17	54.00	-0.83	AVG	

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

Test Mode:	TX G Mode 2462 MHz

Horizontal

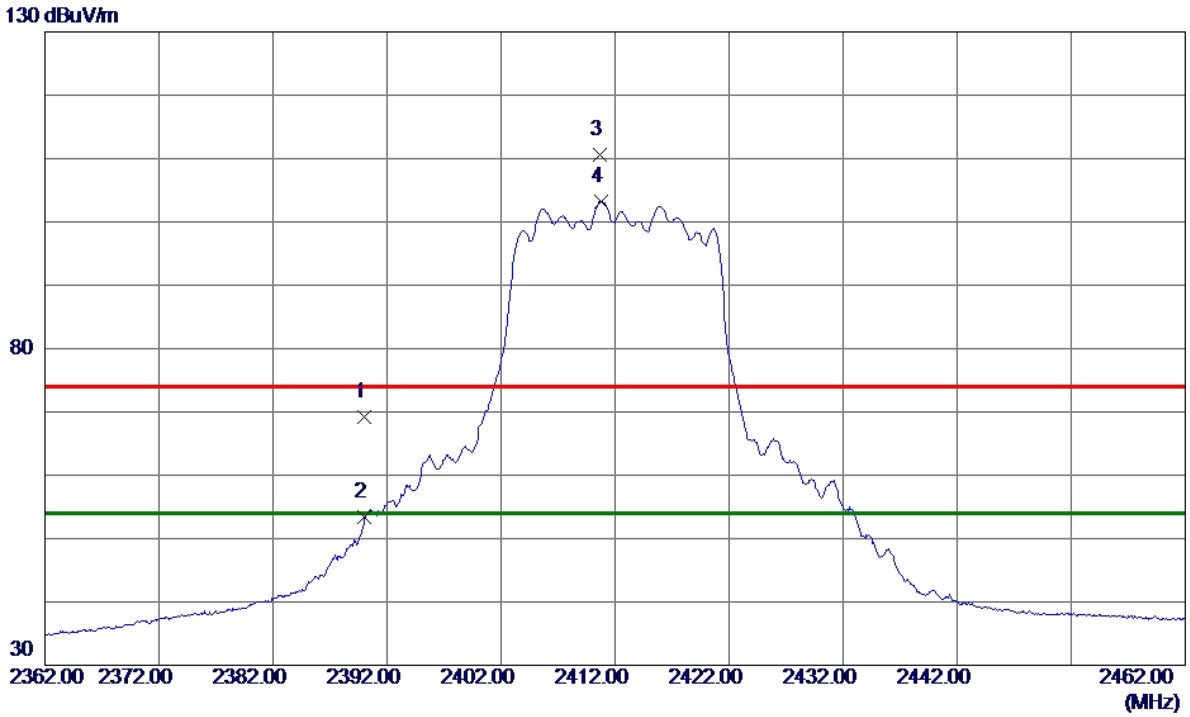


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7385.9250	29.43	8.57	38.00	54.00	-16.00	AVG	
2	7386.0420	37.08	8.57	45.65	74.00	-28.35	Peak	

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

Test Mode:	TX N-20M Mode 2412 MHz

Vertical

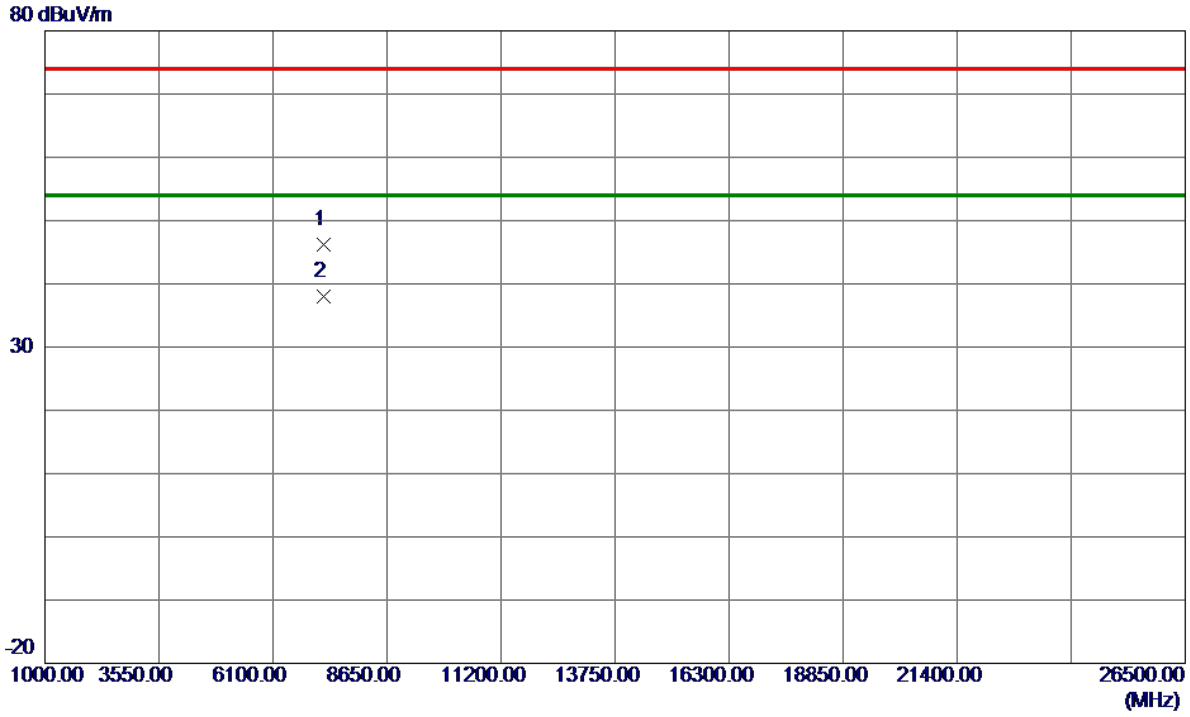


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	62.96	6.24	69.20	74.00	-4.80	Peak	
2	2390.0000	47.08	6.24	53.32	54.00	-0.68	AVG	
3	2410.7000	104.35	6.20	110.55	74.00	36.55	Peak	No Limit
4 *	2410.7500	97.04	6.20	103.24	54.00	49.24	AVG	No Limit

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

Test Mode:	TX N-20M Mode 2412 MHz

Vertical

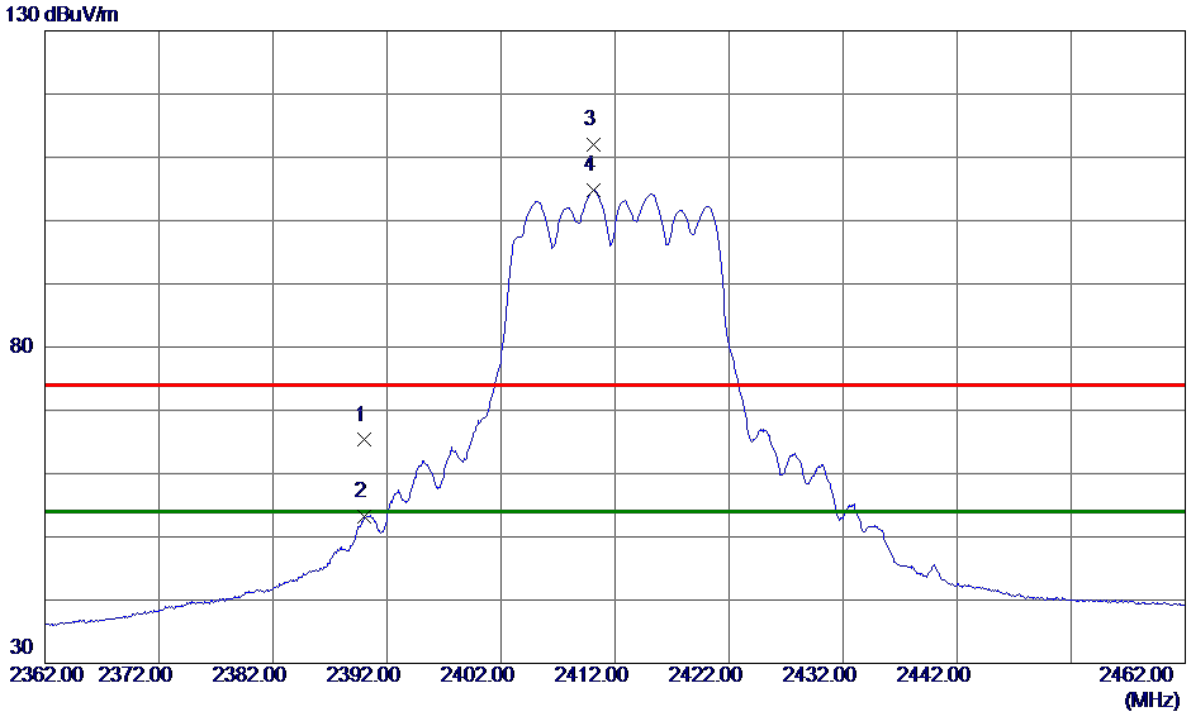


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7235.8470	37.91	8.36	46.27	74.00	-27.73	Peak	
2 *	7235.9080	29.57	8.36	37.93	54.00	-16.07	AVG	

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

Test Mode:	TX N-20M Mode 2412 MHz

Horizontal

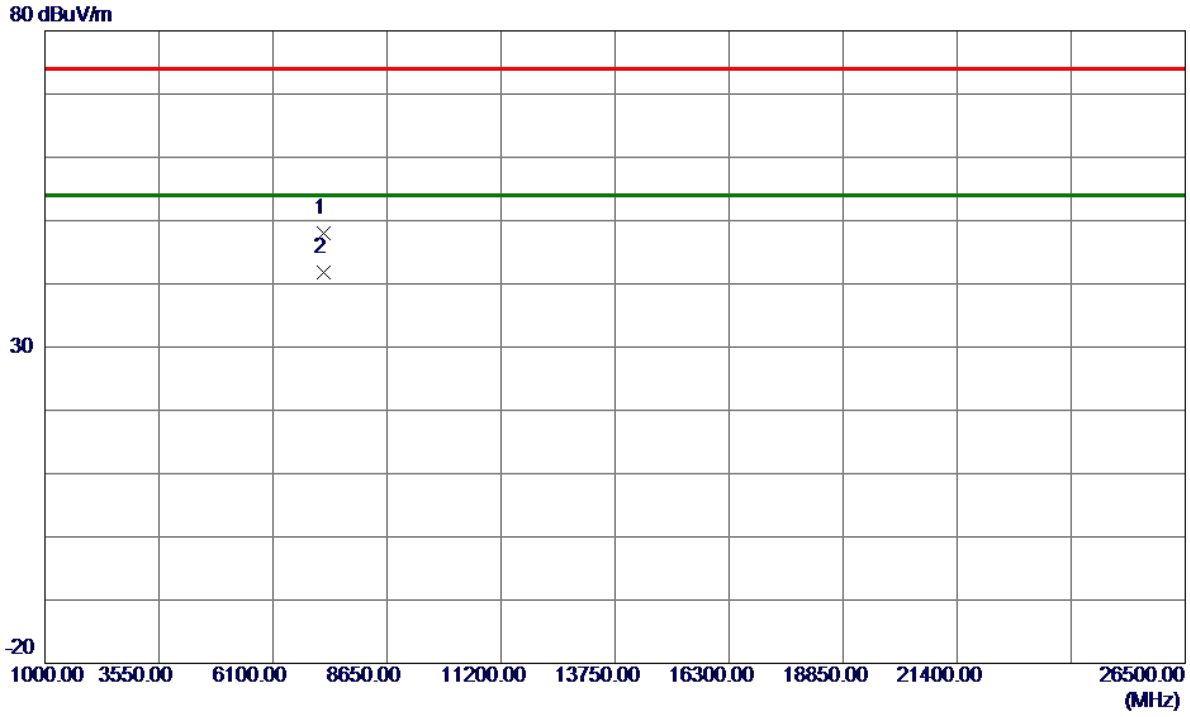


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	59.06	6.24	65.30	74.00	-8.70	Peak	
2	2390.0000	47.03	6.24	53.27	54.00	-0.73	AVG	
3	2410.1500	105.74	6.20	111.94	74.00	37.94	Peak	No Limit
4 *	2410.1500	98.53	6.20	104.73	54.00	50.73	AVG	No Limit

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

Test Mode:	TX N-20M Mode 2412 MHz

Horizontal

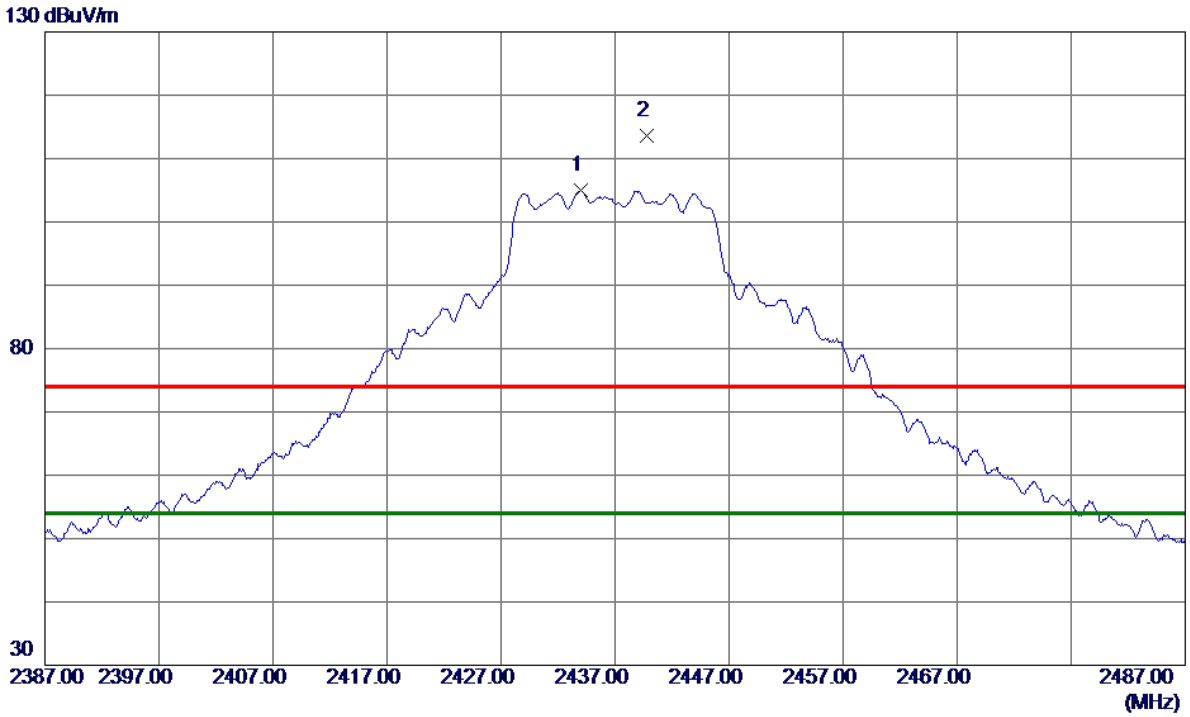


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7235.8650	39.58	8.36	47.94	74.00	-26.06	Peak	
2 *	7235.9720	33.37	8.36	41.73	54.00	-12.27	AVG	

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

Test Mode:	TX N-20M Mode 2437 MHz

Vertical

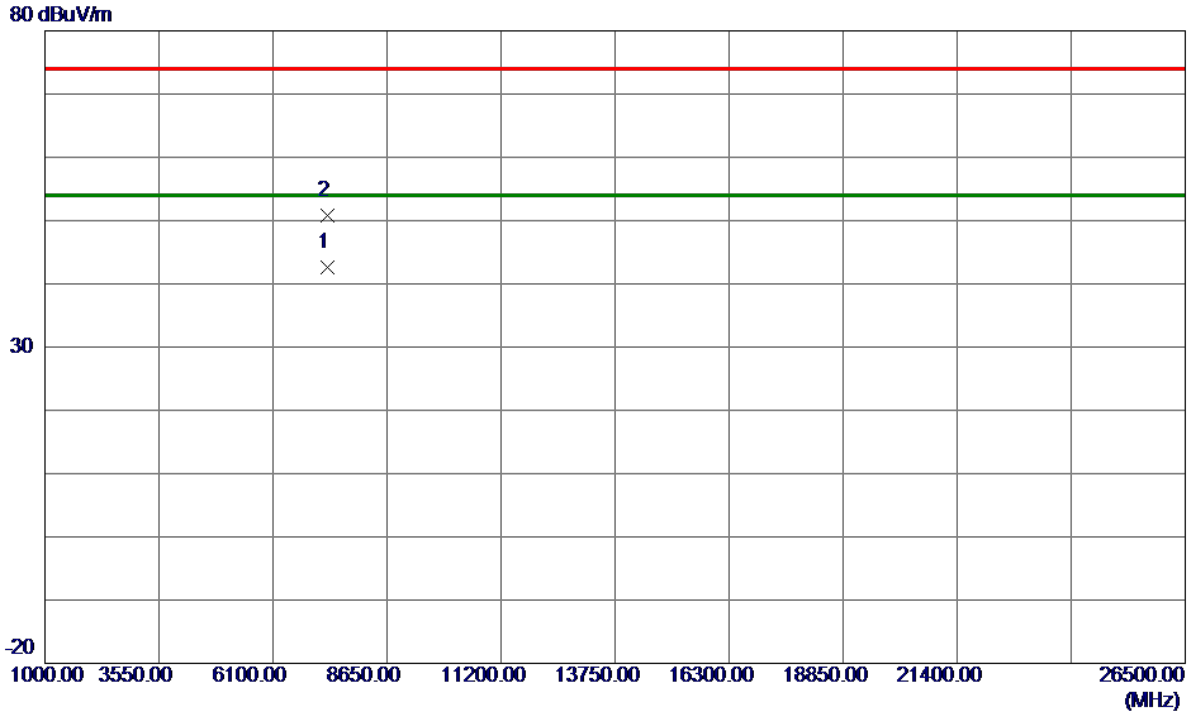


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2433.9500	98.53	6.48	105.01	54.00	51.01	AVG	No Limit
2	2439.7500	107.11	6.47	113.58	74.00	39.58	Peak	No Limit

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

Test Mode:	TX N-20M Mode 2437 MHz

Vertical

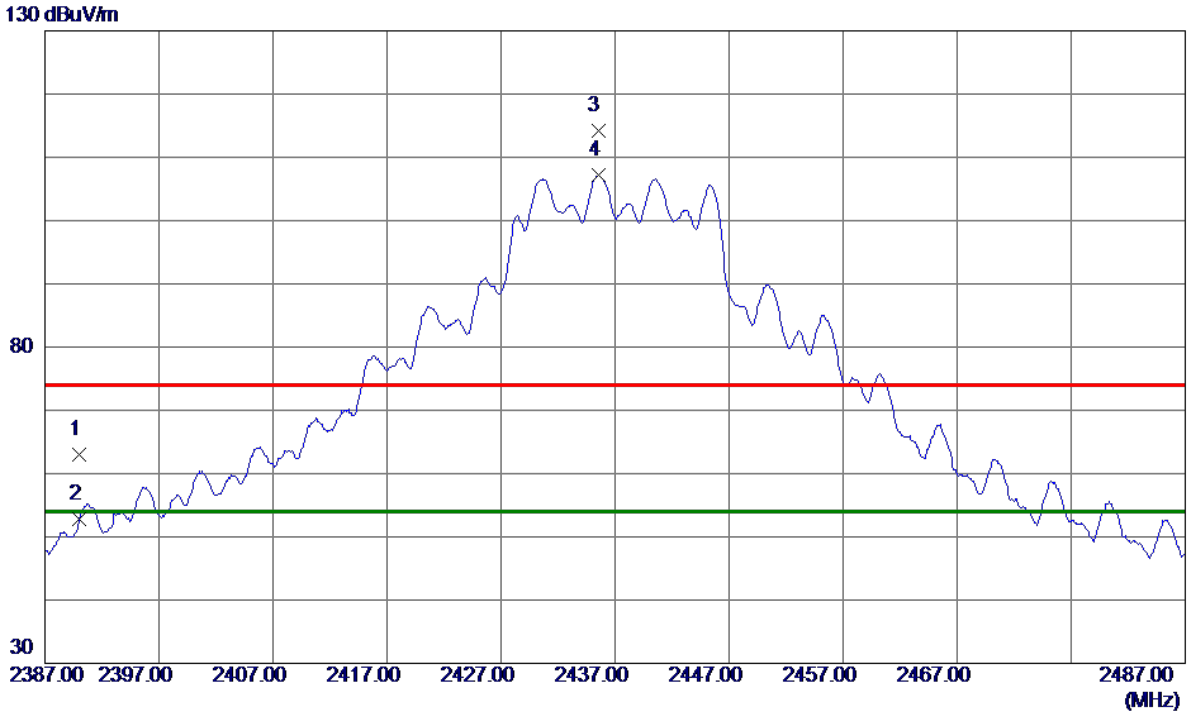


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7310.0600	33.35	9.23	42.58	54.00	-11.42	AVG	
2	7310.6450	41.62	9.23	50.85	74.00	-23.15	Peak	

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

Test Mode:	TX N-20M Mode 2437 MHz

Horizontal

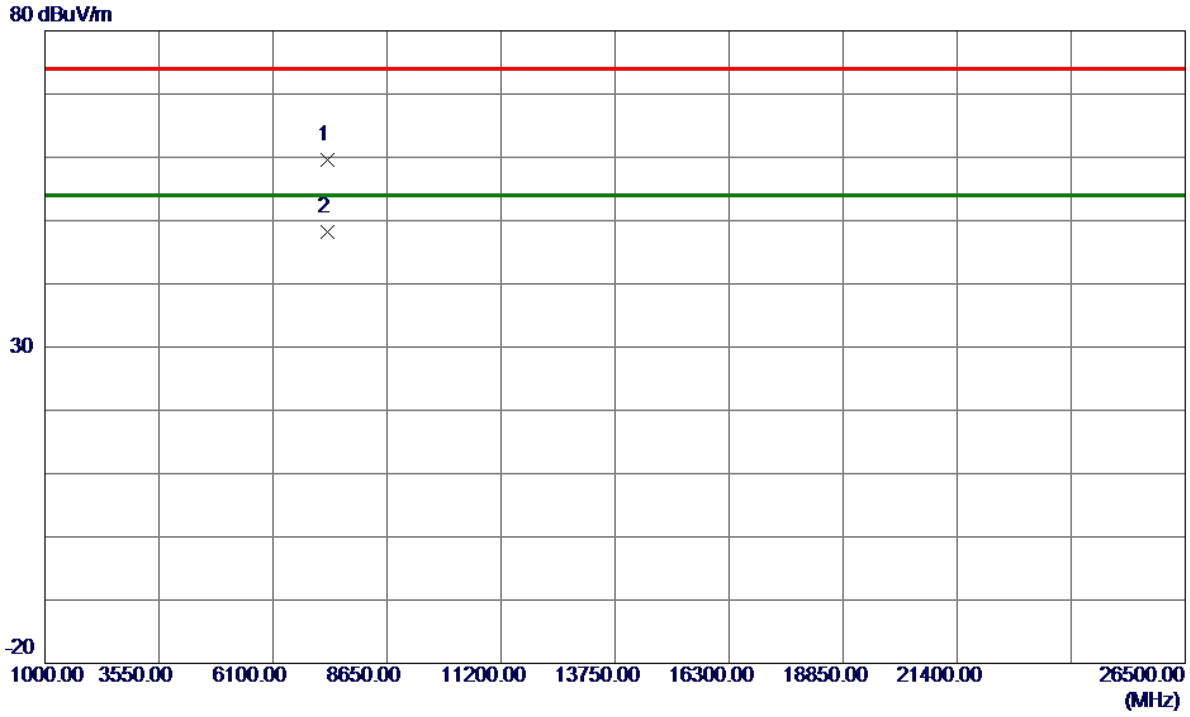


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	56.56	6.53	63.09	74.00	-10.91	Peak	
2	2390.0000	46.19	6.53	52.72	54.00	-1.28	AVG	
3	2435.5000	107.77	6.48	114.25	74.00	40.25	Peak	No Limit
4 *	2435.5500	100.76	6.48	107.24	54.00	53.24	AVG	No Limit

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

Test Mode:	TX N-20M Mode 2437 MHz

Horizontal

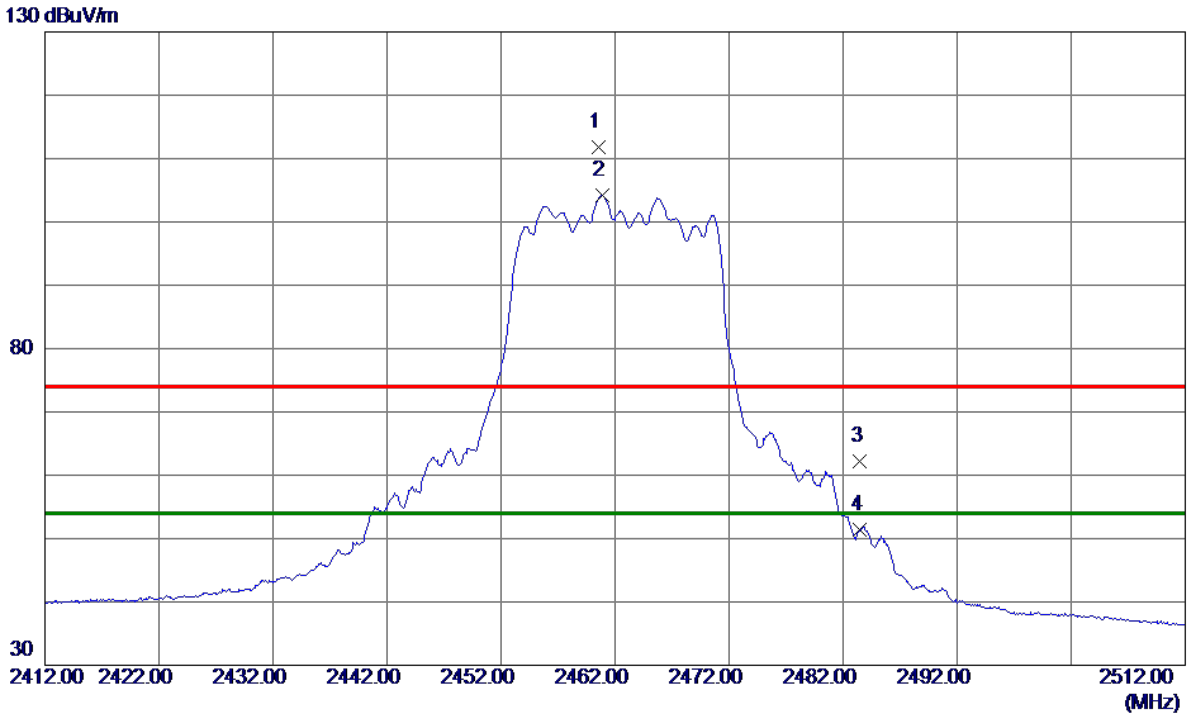


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7310.1200	50.39	9.23	59.62	74.00	-14.38	Peak	
2 *	7314.8850	38.96	9.24	48.20	54.00	-5.80	AVG	

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

Test Mode:	TX N-20M Mode 2462 MHz

Vertical

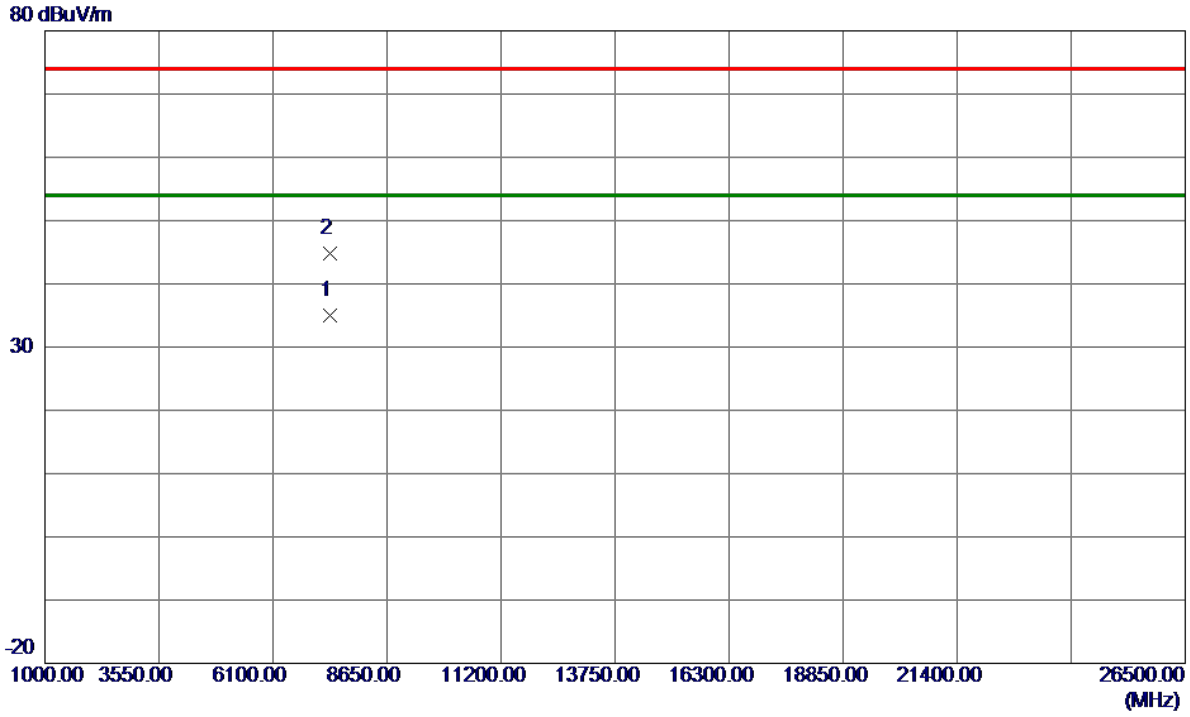


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460.6000	105.66	6.12	111.78	74.00	37.78	Peak	No Limit
2 *	2460.8500	98.15	6.12	104.27	54.00	50.27	AVG	No Limit
3	2483.5000	56.20	6.08	62.28	74.00	-11.72	Peak	
4	2483.5000	45.25	6.08	51.33	54.00	-2.67	AVG	

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

Test Mode:	TX N-20M Mode 2462 MHz

Vertical

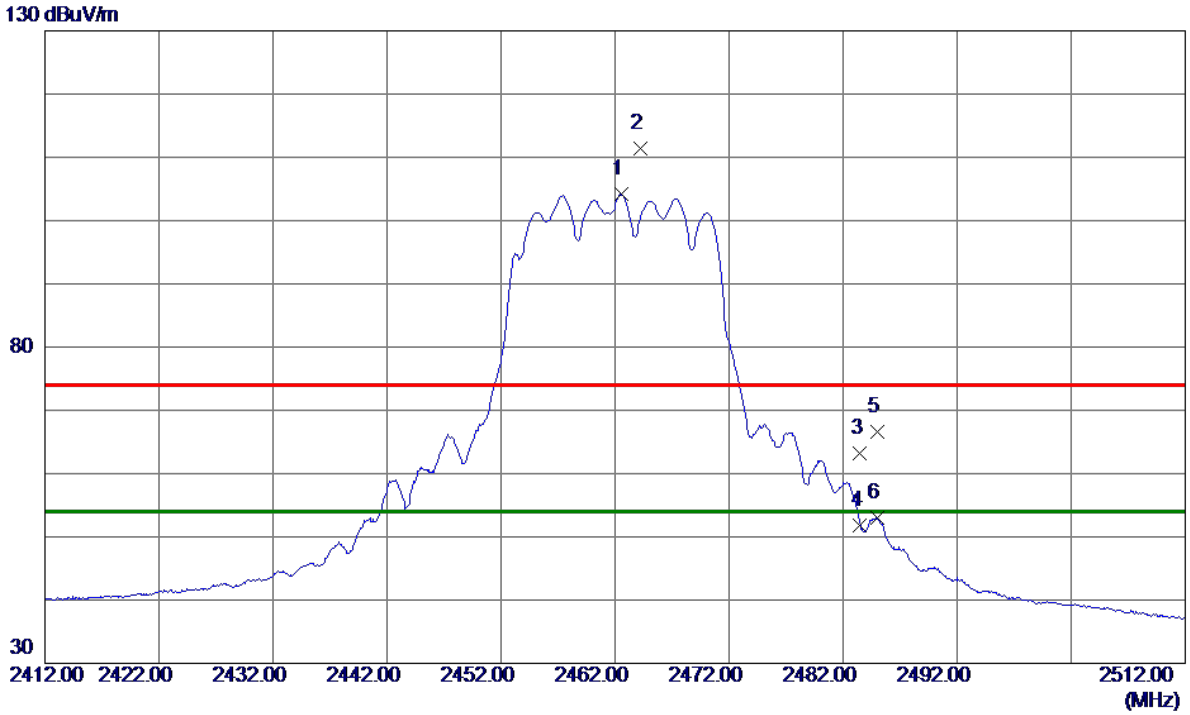


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7385.9000	26.39	8.57	34.96	54.00	-19.04	AVG	
2	7386.0420	36.14	8.57	44.71	74.00	-29.29	Peak	

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

Test Mode:	TX N-20M Mode 2462 MHz

Horizontal

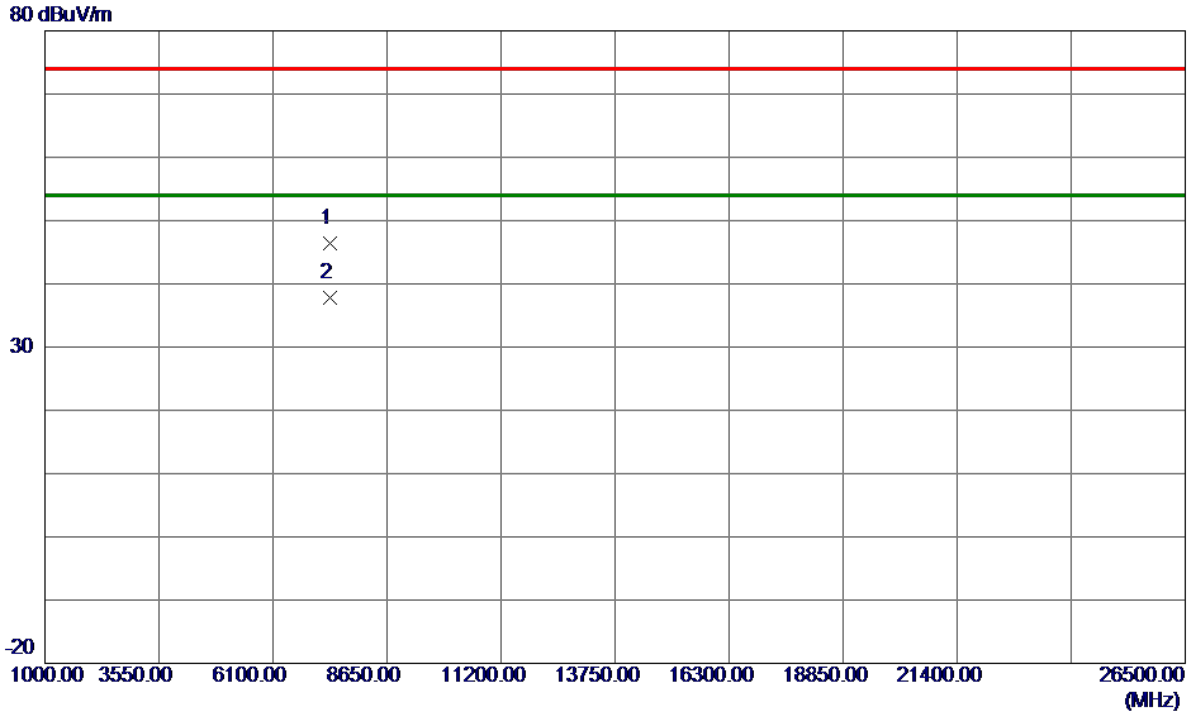


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2462.5500	98.03	6.12	104.15	54.00	50.15	AVG	No Limit
2	2464.2500	105.21	6.11	111.32	74.00	37.32	Peak	No Limit
3	2483.5000	57.17	6.08	63.25	74.00	-10.75	Peak	
4	2483.5000	45.67	6.08	51.75	54.00	-2.25	AVG	
5	2484.9500	60.61	6.08	66.69	74.00	-7.31	Peak	
6	2484.9500	46.92	6.08	53.00	54.00	-1.00	AVG	

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

Test Mode:	TX N-20M Mode 2462 MHz

Horizontal

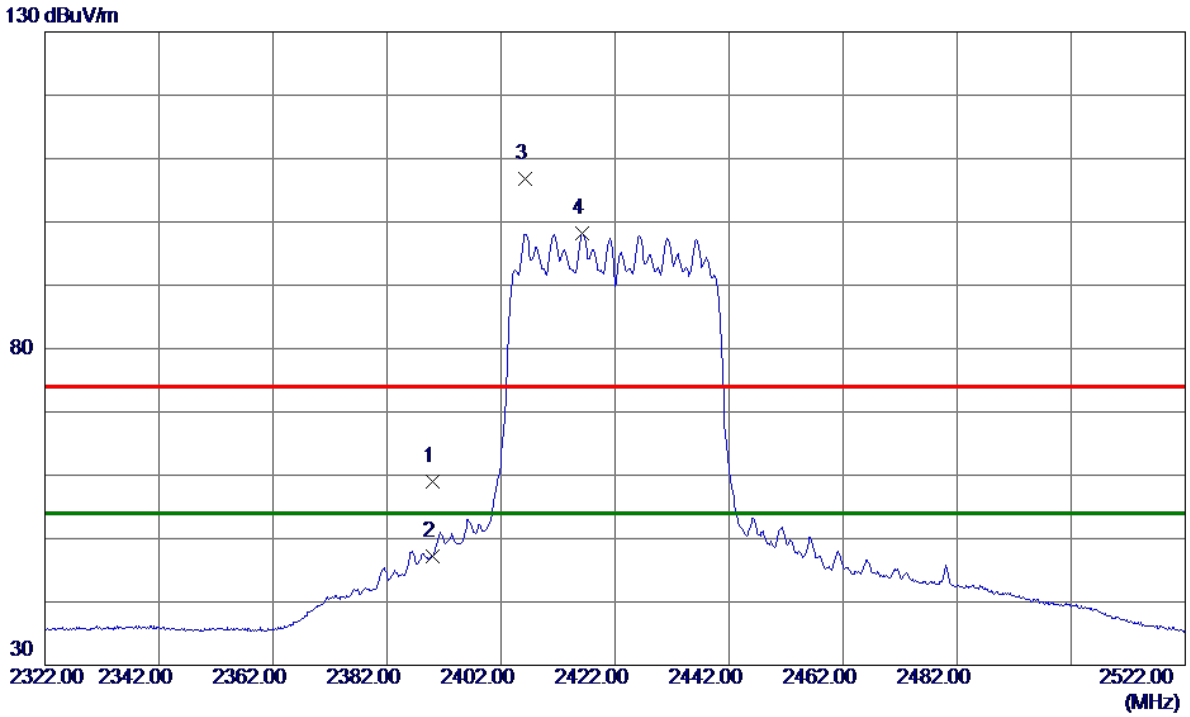


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7385.8520	37.86	8.57	46.43	74.00	-27.57	Peak	
2 *	7386.0020	29.20	8.57	37.77	54.00	-16.23	AVG	

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

Test Mode:	TX N-40M Mode 2422MHz

Vertical

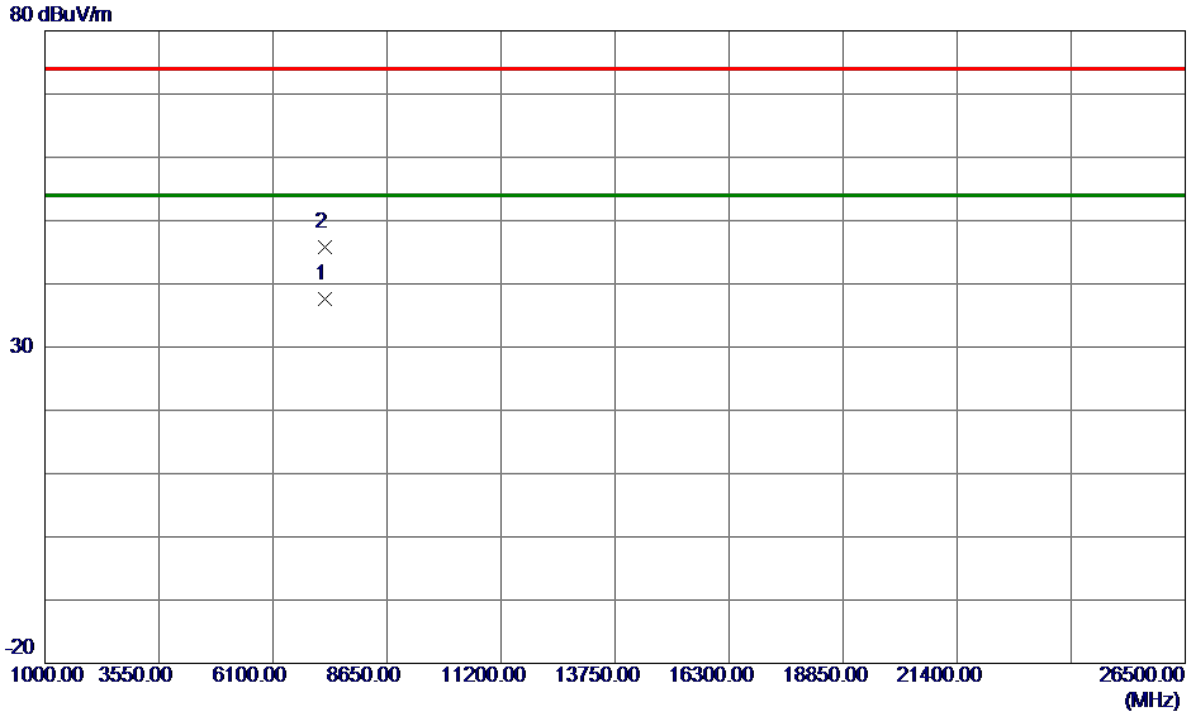


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	52.70	6.24	58.94	74.00	-15.06	Peak	
2	2390.0000	41.01	6.24	47.25	54.00	-6.75	AVG	
3	2406.2000	100.59	6.21	106.80	74.00	32.80	Peak	No Limit
4 *	2416.3000	92.09	6.19	98.28	54.00	44.28	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

Vertical

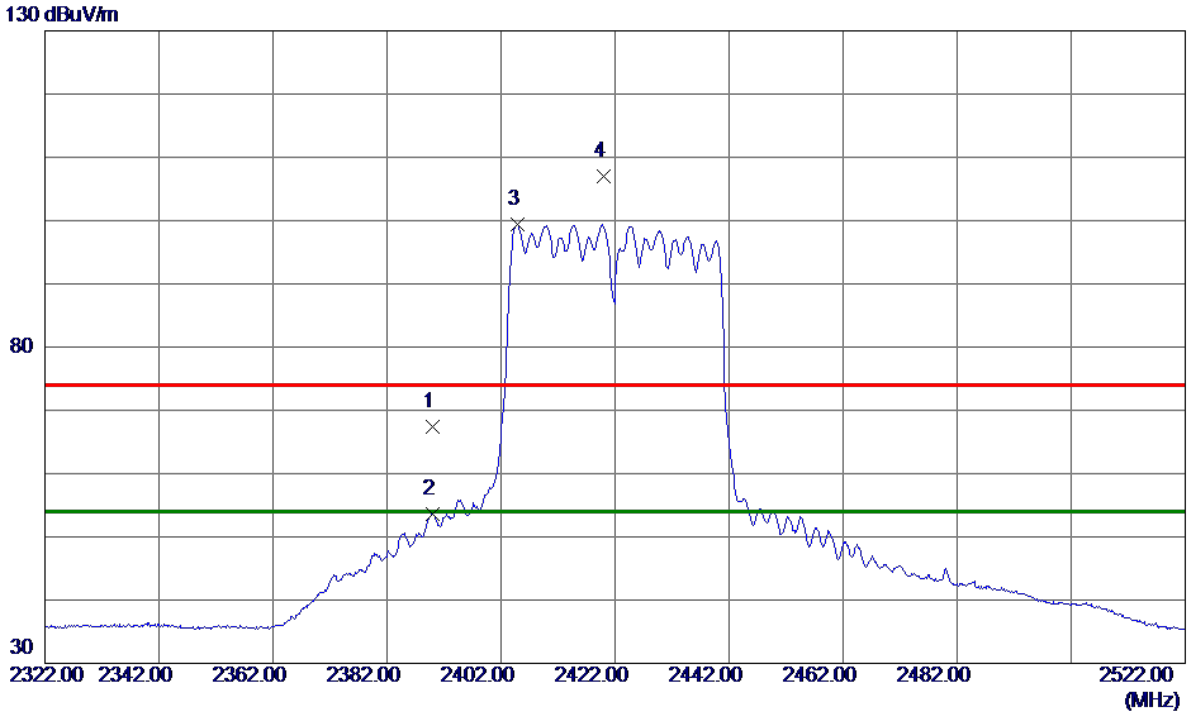


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7265.9350	29.19	8.40	37.59	54.00	-16.41	AVG	
2	7265.9580	37.43	8.40	45.83	74.00	-28.17	Peak	

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

Test Mode:	TX N-40M Mode 2422MHz

Horizontal

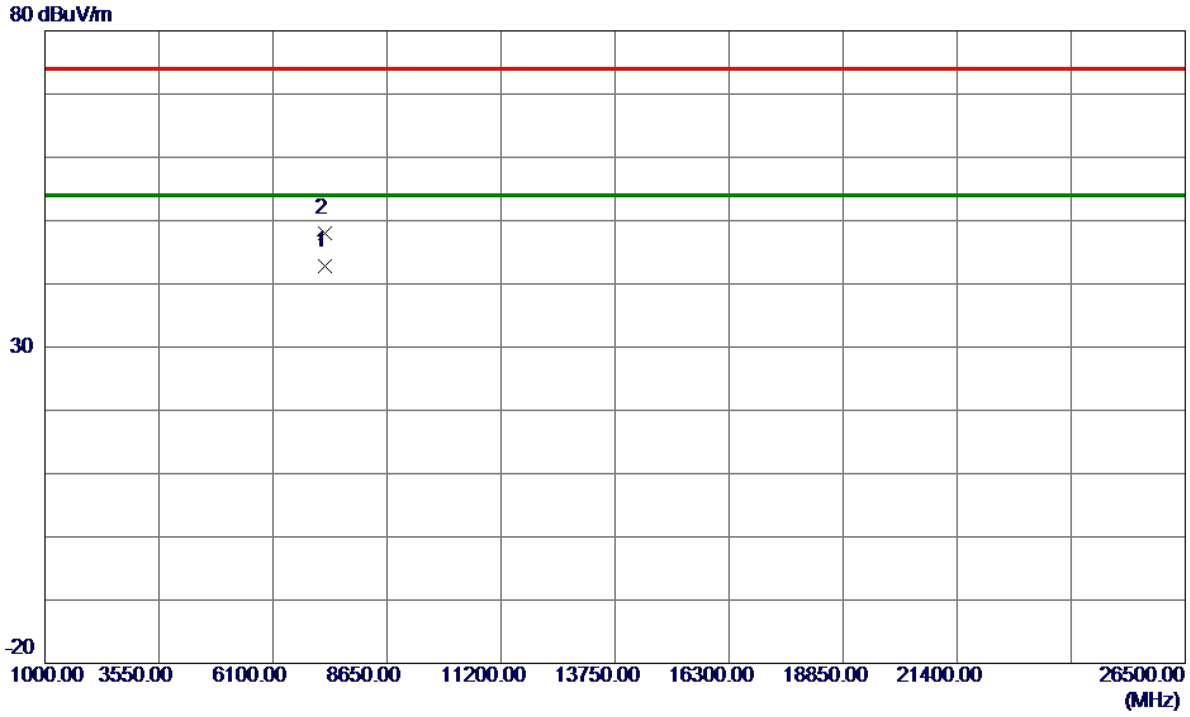


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	61.09	6.24	67.33	74.00	-6.67	Peak	
2	2390.0000	47.33	6.24	53.57	54.00	-0.43	AVG	
3 *	2404.8000	93.24	6.21	99.45	54.00	45.45	AVG	No Limit
4	2420.0000	100.86	6.19	107.05	74.00	33.05	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

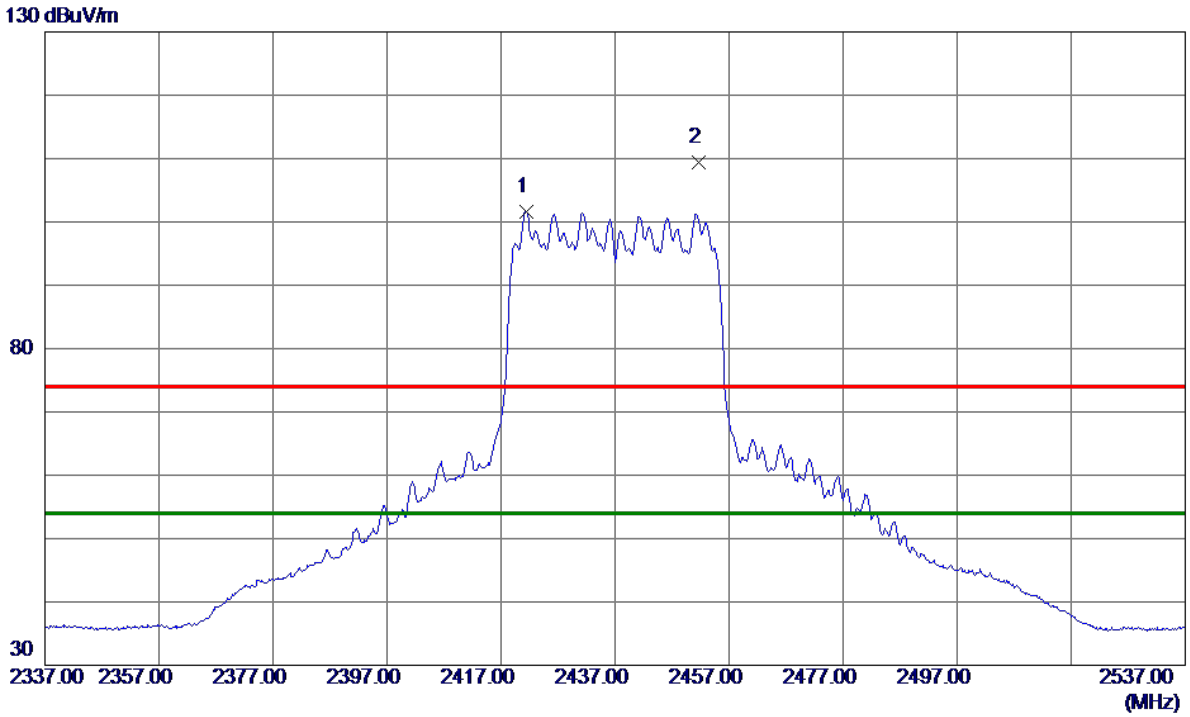


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7265.9380	34.47	8.40	42.87	54.00	-11.13	AVG	
2	7266.1200	39.57	8.40	47.97	74.00	-26.03	Peak	

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

Test Mode:	TX N-40M Mode 2437 MHz

Vertical

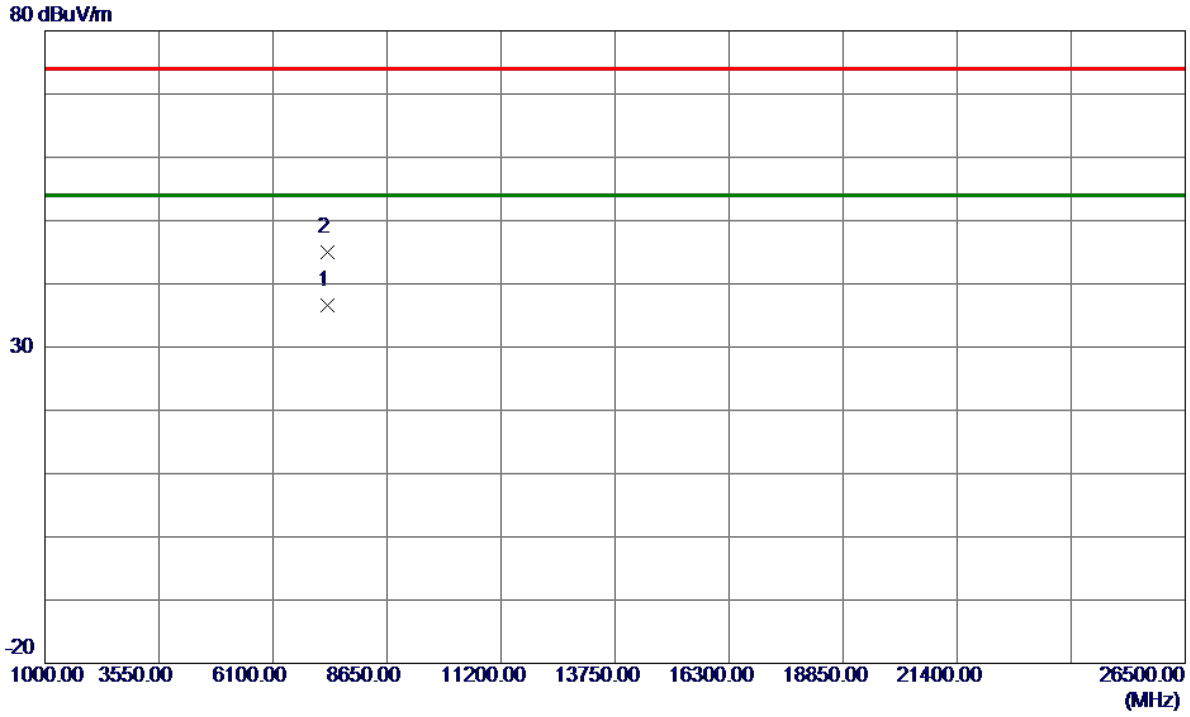


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2421.5000	95.41	6.18	101.59	54.00	47.59	AVG	No Limit
2	2451.6000	103.28	6.13	109.41	74.00	35.41	Peak	No Limit

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

Test Mode:	TX N-40M Mode 2437 MHz

Vertical

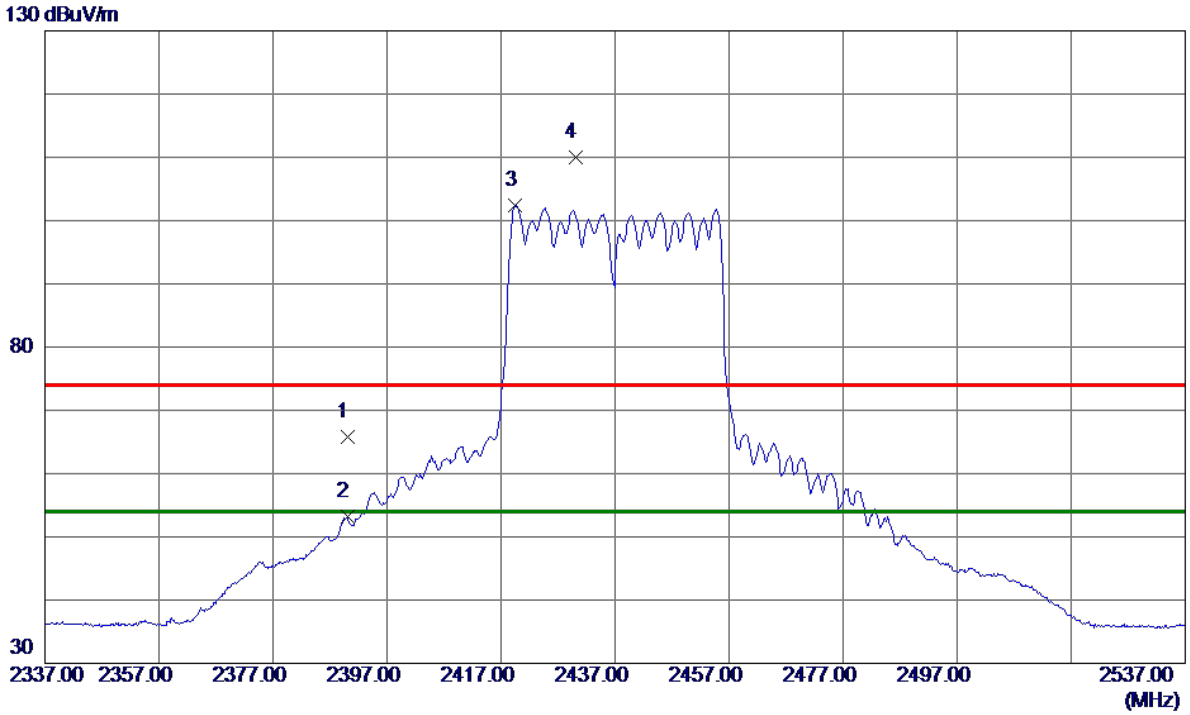


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7310.8820	28.20	8.46	36.66	54.00	-17.34	AVG	
2	7310.9620	36.63	8.46	45.09	74.00	-28.91	Peak	

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

Test Mode:	TX N-40M Mode 2437 MHz

Horizontal

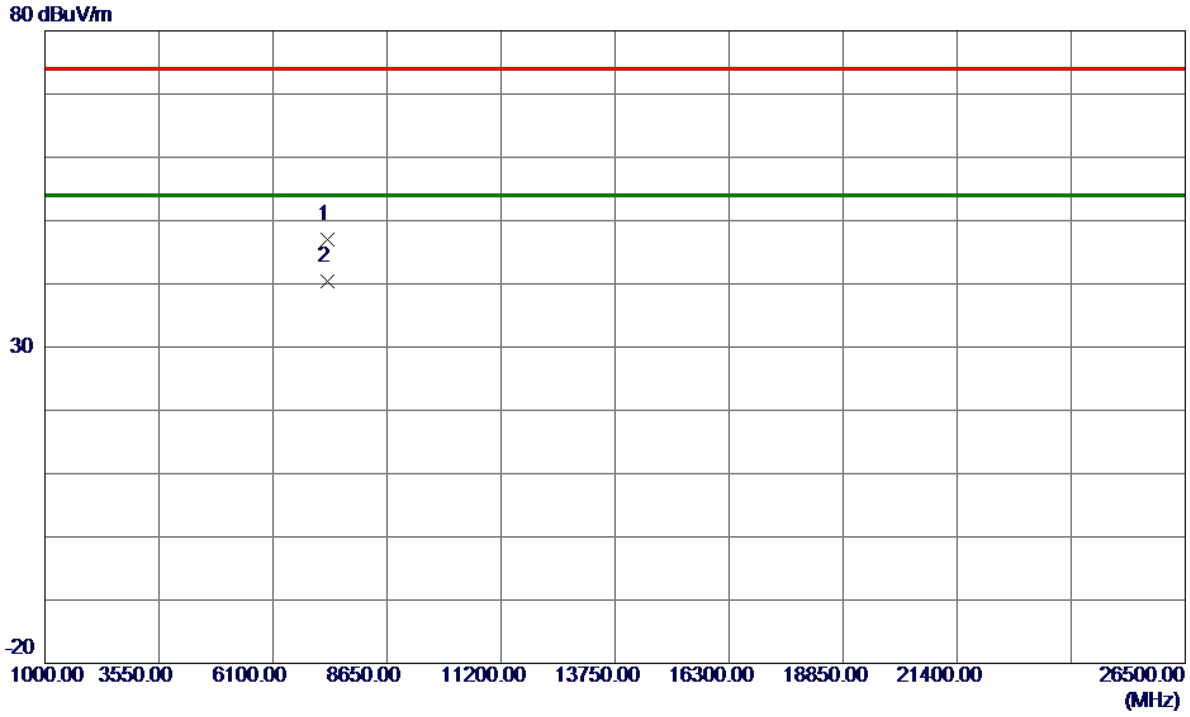


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	59.61	6.24	65.85	74.00	-8.15	Peak	
2	2390.0000	46.89	6.24	53.13	54.00	-0.87	AVG	
3 *	2419.4000	96.16	6.19	102.35	54.00	48.35	AVG	No Limit
4	2430.0000	103.83	6.17	110.00	74.00	36.00	Peak	No Limit

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

Test Mode:	TX N-40M Mode 2437 MHz

Horizontal

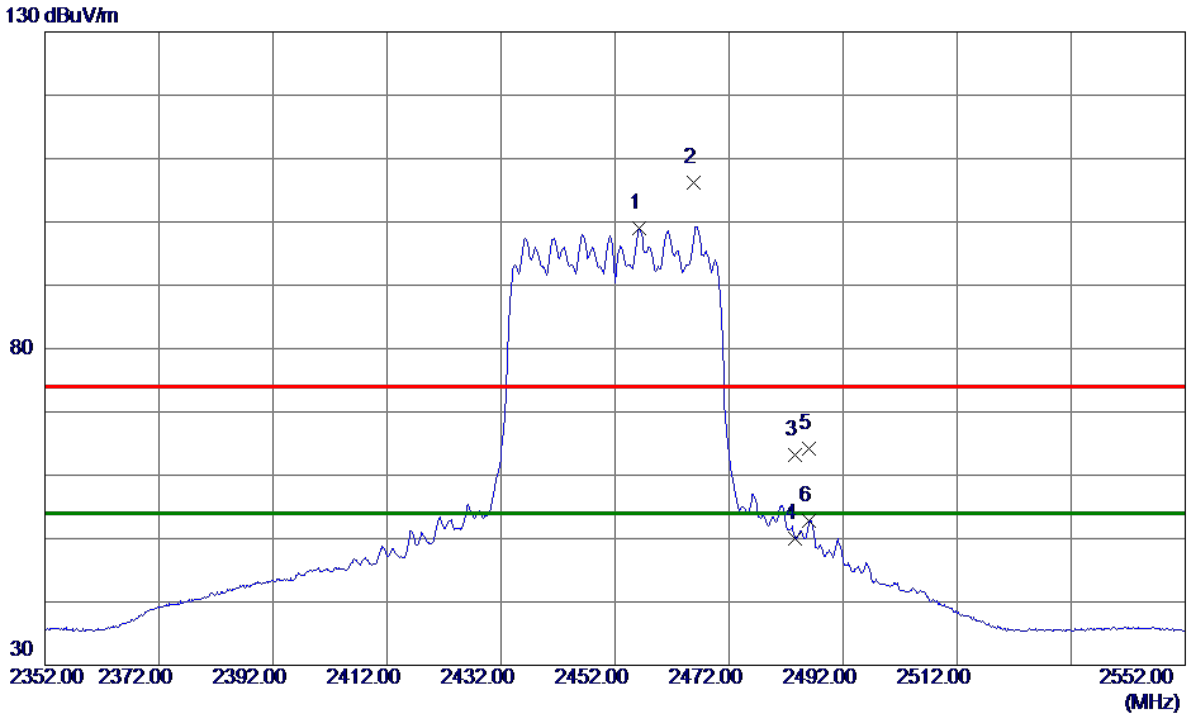


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	7310.9130	38.45	8.46	46.91	74.00	-27.09	Peak	
2 *	7310.9480	31.93	8.46	40.39	54.00	-13.61	AVG	

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

Test Mode:	TX N-40M Mode 2452 MHz

Vertical

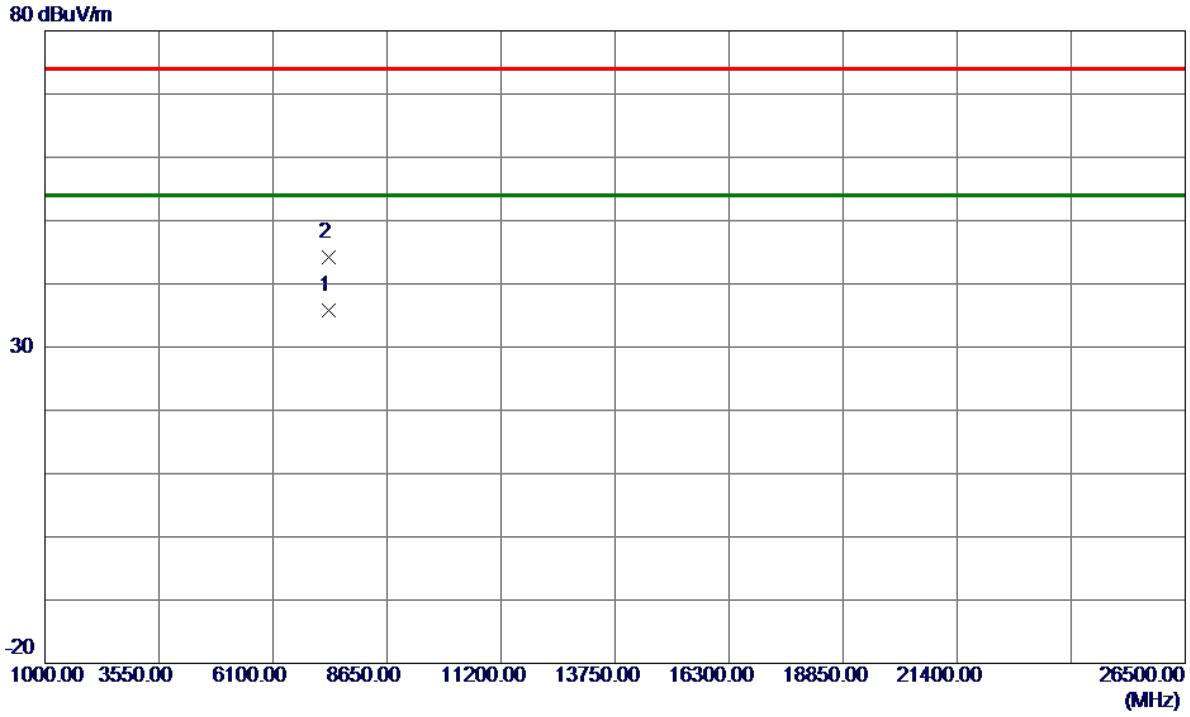


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2456.3000	92.77	6.13	98.90	54.00	44.90	AVG	No Limit
2	2465.8000	100.17	6.11	106.28	74.00	32.28	Peak	No Limit
3	2483.5000	57.07	6.08	63.15	74.00	-10.85	Peak	
4	2483.5000	43.89	6.08	49.97	54.00	-4.03	AVG	
5	2486.1000	58.06	6.08	64.14	74.00	-9.86	Peak	
6	2486.1000	46.71	6.08	52.79	54.00	-1.21	AVG	

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

Test Mode:	TX N-40M Mode 2452 MHz

Vertical

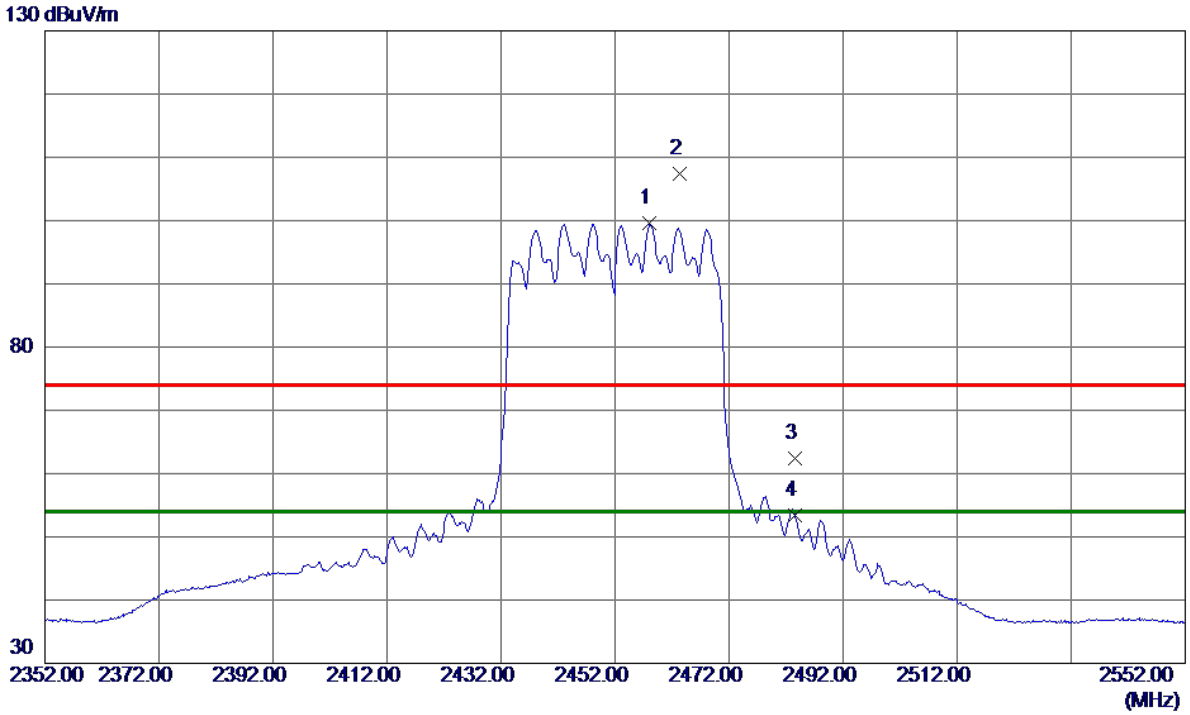


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7355.9900	27.29	8.53	35.82	54.00	-18.18	AVG	
2	7356.0650	35.76	8.53	44.29	74.00	-29.71	Peak	

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

Test Mode:	TX N-40M Mode 2452 MHz

Horizontal

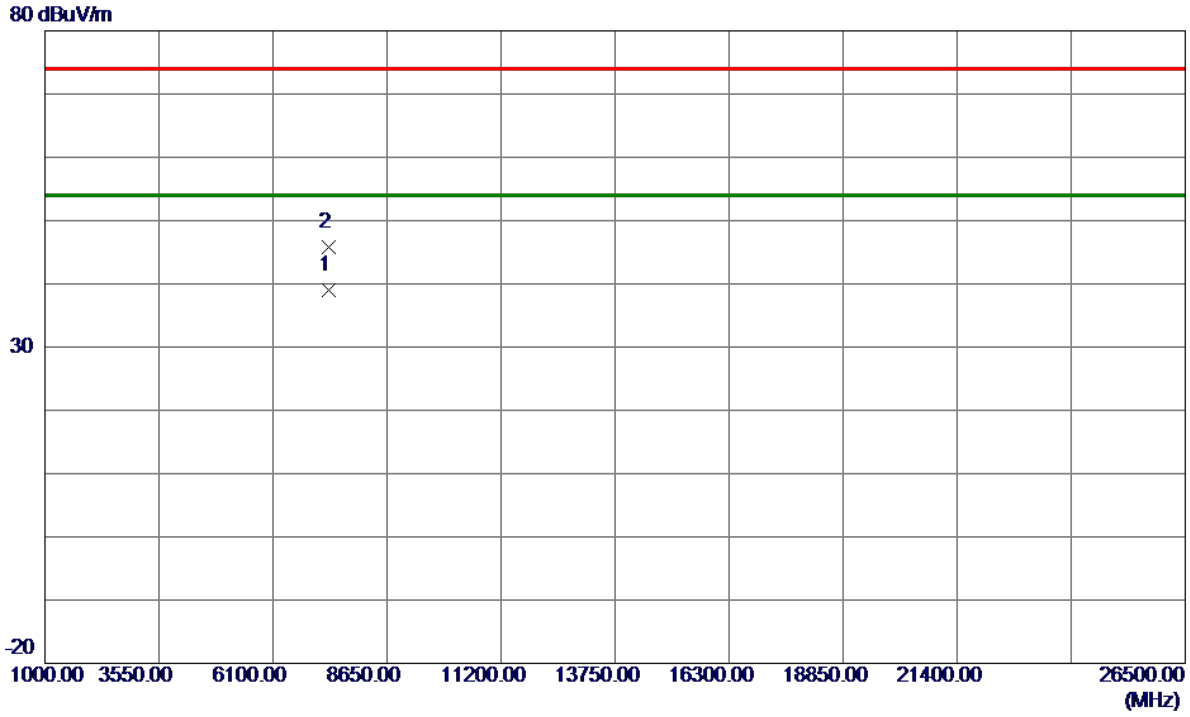


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2458.1000	93.39	6.12	99.51	54.00	45.51	AVG	No Limit
2	2463.3000	101.21	6.12	107.33	74.00	33.33	Peak	No Limit
3	2483.5000	56.37	6.08	62.45	74.00	-11.55	Peak	
4	2483.5000	47.30	6.08	53.38	54.00	-0.62	AVG	

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

Test Mode:	TX N-40M Mode 2452 MHz

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	7355.9150	30.42	8.53	38.95	54.00	-15.05	AVG	
2	7355.9620	37.32	8.53	45.85	74.00	-28.15	Peak	

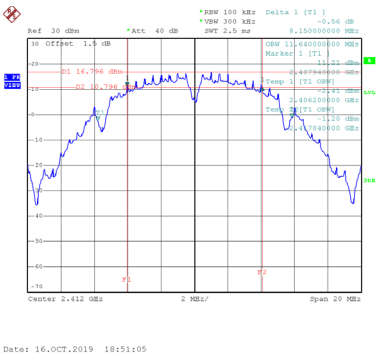
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

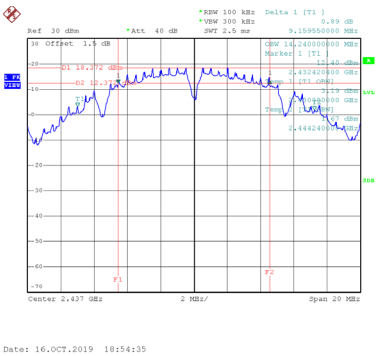
Test Mode	TX B Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	8.15	500	Complies
06	2437	9.16	500	Complies
11	2462	8.08	500	Complies

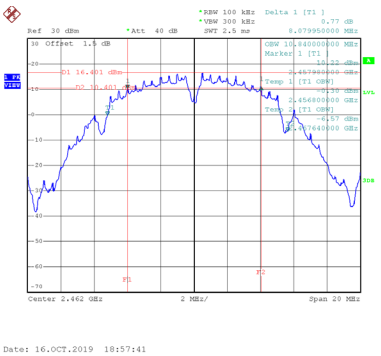
CH01



CH06

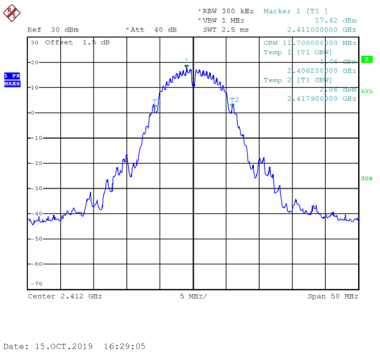


CH11

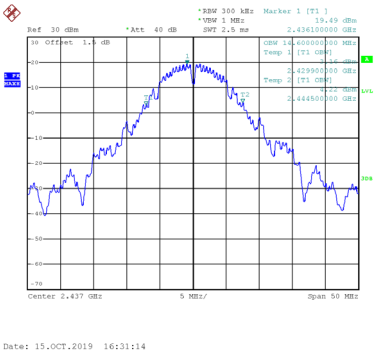


Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	11.70	Complies
06	2437	14.60	Complies
11	2462	11.20	Complies

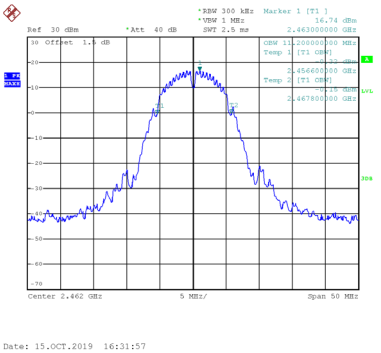
CH01



CH06



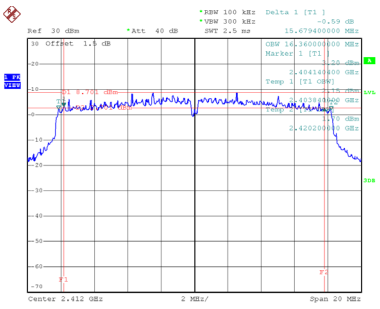
CH11



Test Mode	TX G Mode

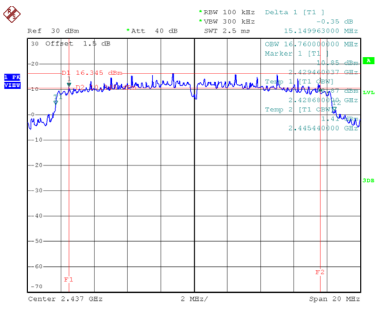
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.68	500	Complies
06	2437	15.15	500	Complies
11	2462	15.36	500	Complies

CH01



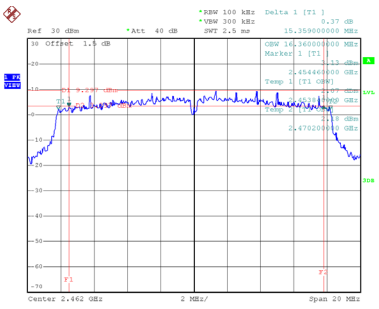
Date: 16.OCT.2019 19:01:51

CH06



Date: 16.OCT.2019 19:04:05

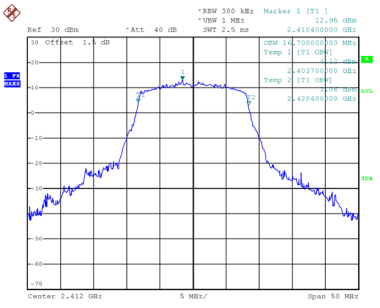
CH11



Date: 16.OCT.2019 19:06:19

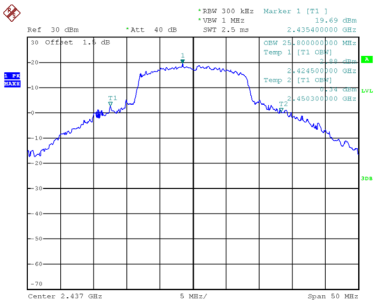
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	16.70	Complies
06	2437	25.80	Complies
11	2462	16.70	Complies

CH01



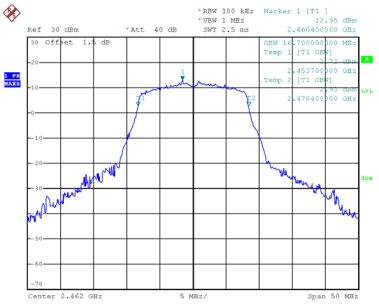
Date: 15.OCT.2019 16:33:00

CH06



Date: 15.OCT.2019 16:34:03

CH11

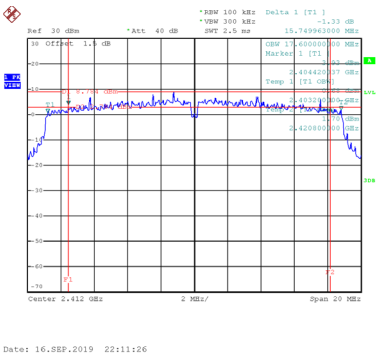


Date: 15.OCT.2019 16:34:49

Test Mode	TX N-20M Mode

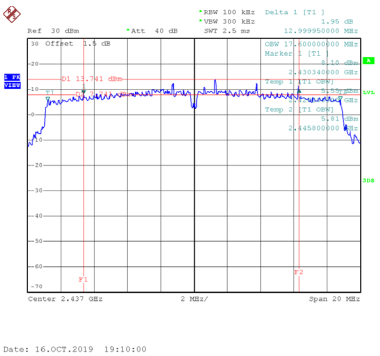
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.75	500	Complies
06	2437	13.00	500	Complies
11	2462	15.99	500	Complies

CH01



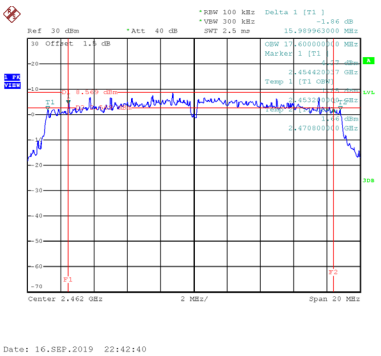
Date: 16.SEP.2019 22:11:26

CH06



Date: 16.OCT.2019 19:10:00

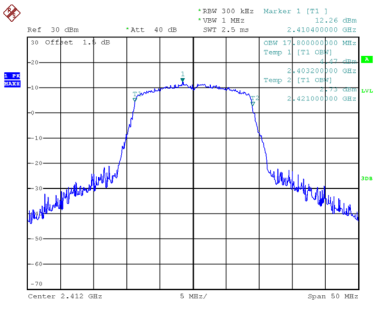
CH11



Date: 16.SEP.2019 22:42:40

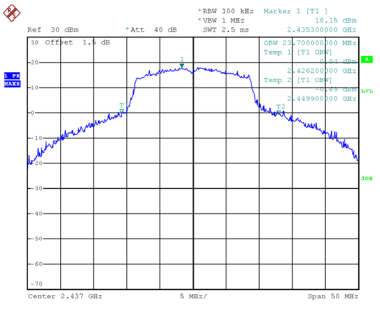
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.80	Complies
06	2437	23.70	Complies
11	2462	17.90	Complies

CH01



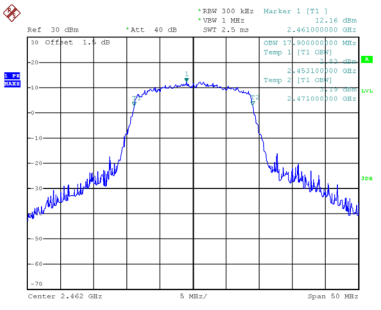
Date: 17.SEP.2019 10:46:02

CH06



Date: 15.OCT.2019 16:36:02

CH11

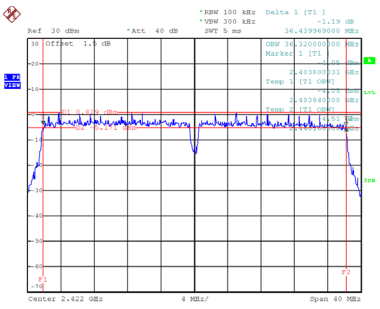


Date: 17.SEP.2019 10:47:04

Test Mode	TX N-40M Mode

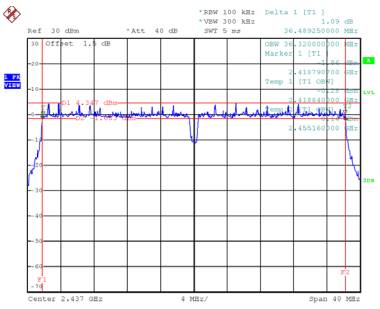
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	36.44	500	Complies
06	2437	36.49	500	Complies
09	2452	36.24	500	Complies

CH03



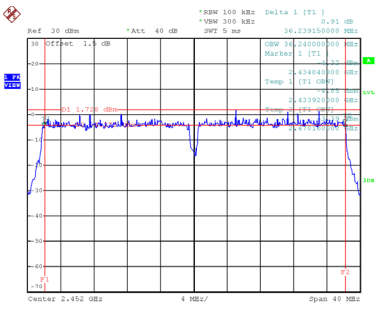
Date: 16.SEP.2019 23:00:19

CH06



Date: 16.SEP.2019 23:06:01

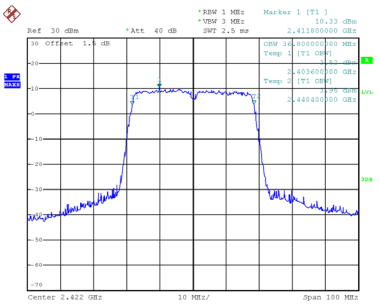
CH09



Date: 16.SEP.2019 23:17:05

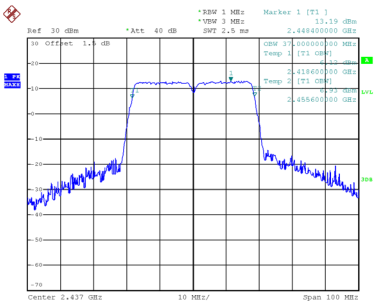
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
03	2422	36.80	Complies
06	2437	37.00	Complies
09	2452	36.80	Complies

CH03



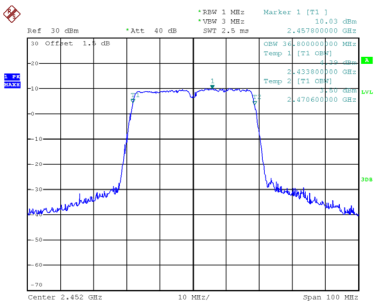
Date: 17.SEP.2019 10:47:57

CH06



Date: 17.SEP.2019 10:48:33

CH09



Date: 17.SEP.2019 10:49:13

APPENDIX F - MAXIMUM OUTPUT POWER

Non Beamforming

Test Mode	TX B Mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	25.85	0.3846	30.00	1.0000	Complies
06	2437	28.26	0.6699	30.00	1.0000	Complies
11	2462	25.34	0.3420	30.00	1.0000	Complies

Test Mode	TX G Mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	20.64	0.1159	30.00	1.0000	Complies
06	2437	27.49	0.5610	30.00	1.0000	Complies
11	2462	20.86	0.1219	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.51	0.0893	30.00	1.0000	Complies
06	2437	24.11	0.2576	30.00	1.0000	Complies
11	2462	19.66	0.0925	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.96	0.0787	30.00	1.0000	Complies
06	2437	23.48	0.2228	30.00	1.0000	Complies
11	2462	19.34	0.0859	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 3

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.43	0.0877	30.00	1.0000	Complies
06	2437	24.17	0.2612	30.00	1.0000	Complies
11	2462	19.67	0.0927	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 4

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.01	0.0796	30.00	1.0000	Complies
06	2437	23.88	0.2443	30.00	1.0000	Complies
11	2462	19.43	0.0877	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	25.25	0.3350	30.00	1.0000	Complies
06	2437	29.94	0.9863	30.00	1.0000	Complies
11	2462	25.54	0.3581	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	15.08	0.0322	30.00	1.0000	Complies
06	2437	18.65	0.0733	30.00	1.0000	Complies
09	2452	15.74	0.0375	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	15.03	0.0318	30.00	1.0000	Complies
06	2437	18.80	0.0759	30.00	1.0000	Complies
09	2452	15.55	0.0359	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 3

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	15.42	0.0348	30.00	1.0000	Complies
06	2437	19.44	0.0879	30.00	1.0000	Complies
09	2452	15.90	0.0389	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 4

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	15.14	0.0327	30.00	1.0000	Complies
06	2437	19.18	0.0828	30.00	1.0000	Complies
09	2452	15.47	0.0352	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	21.19	0.1315	30.00	1.0000	Complies
06	2437	25.05	0.3199	30.00	1.0000	Complies
09	2452	21.69	0.1476	30.00	1.0000	Complies

Beamforming

Test Mode	TX N-20M Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.96	0.0787	27.00	0.5000	Complies
06	2437	20.82	0.1208	27.00	0.5000	Complies
11	2462	19.44	0.0879	27.00	0.5000	Complies

Test Mode	TX N-20M Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.60	0.0724	27.00	0.5000	Complies
06	2437	20.27	0.1064	27.00	0.5000	Complies
11	2462	18.76	0.0752	27.00	0.5000	Complies

Test Mode	TX N-20M Mode_Ant. 3

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.94	0.0783	27.00	0.5000	Complies
06	2437	20.86	0.1219	27.00	0.5000	Complies
11	2462	19.19	0.0830	27.00	0.5000	Complies

Test Mode	TX N-20M Mode_Ant. 4

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.56	0.0718	27.00	0.5000	Complies
06	2437	20.52	0.1127	27.00	0.5000	Complies
11	2462	18.88	0.0773	27.00	0.5000	Complies

Test Mode	TX N-20M Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	24.79	0.3013	27.00	0.5000	Complies
06	2437	26.64	0.4613	27.00	0.5000	Complies
11	2462	25.09	0.3228	27.00	0.5000	Complies

Test Mode	TX N-40M Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	14.58	0.0287	27.00	0.5000	Complies
06	2437	18.44	0.0698	27.00	0.5000	Complies
09	2452	15.08	0.0322	27.00	0.5000	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	14.24	0.0265	27.00	0.5000	Complies
06	2437	18.28	0.0673	27.00	0.5000	Complies
09	2452	15.06	0.0321	27.00	0.5000	Complies

Test Mode	TX N-40M Mode_Ant. 3

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	14.91	0.0310	27.00	0.5000	Complies
06	2437	18.78	0.0755	27.00	0.5000	Complies
09	2452	15.45	0.0351	27.00	0.5000	Complies

Test Mode	TX N-40M Mode_Ant. 4

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	14.32	0.0270	27.00	0.5000	Complies
06	2437	18.19	0.0659	27.00	0.5000	Complies
09	2452	15.16	0.0328	27.00	0.5000	Complies

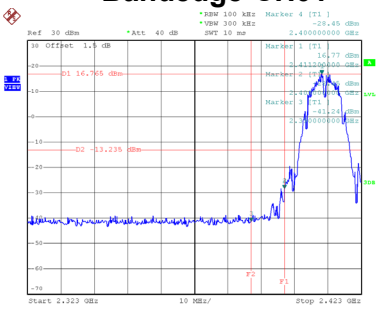
Test Mode	TX N-40M Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	20.55	0.1135	27.00	0.5000	Complies
06	2437	24.45	0.2786	27.00	0.5000	Complies
09	2452	21.21	0.1321	27.00	0.5000	Complies

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS

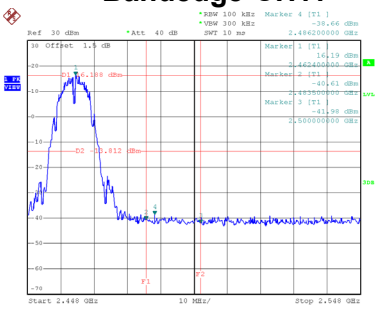
Test Mode	TX B Mode

Bandedge-CH01



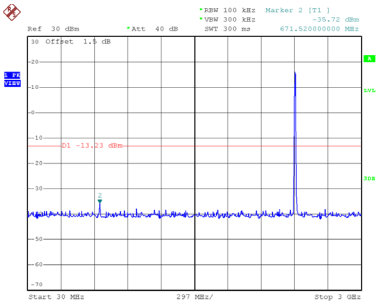
Date: 16.OCT.2019 18:51:32

Bandedge-CH11

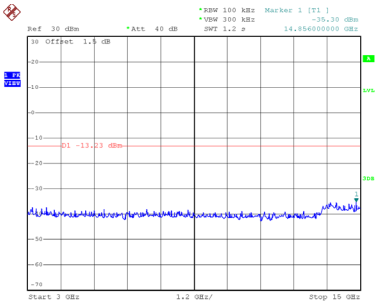


Date: 16.OCT.2019 18:59:23

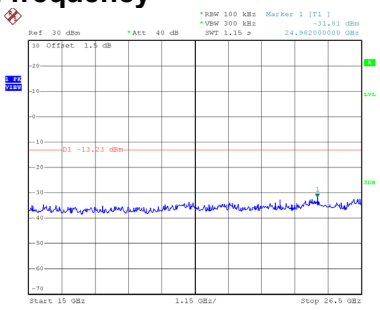
CH01 – 10th Harmonic of the fundamental frequency



Date: 16.OCT.2019 18:51:46

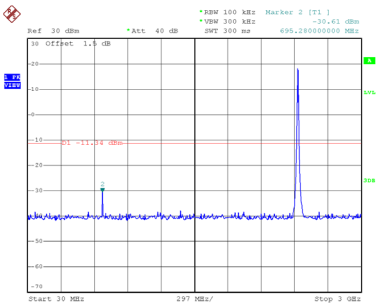


Date: 16.OCT.2019 18:51:55

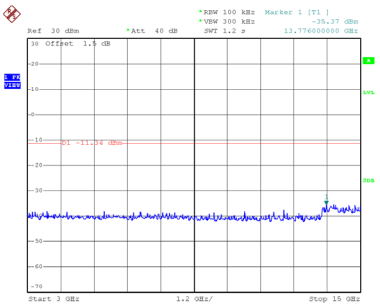


Date: 16.OCT.2019 18:52:05

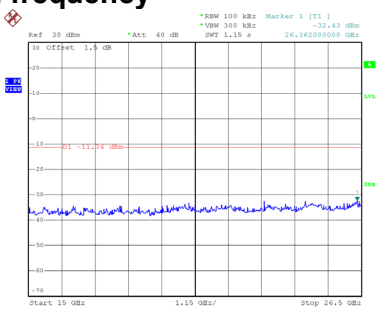
CH06 – 10th Harmonic of the fundamental frequency



Date: 16.OCT.2019 18:54:59

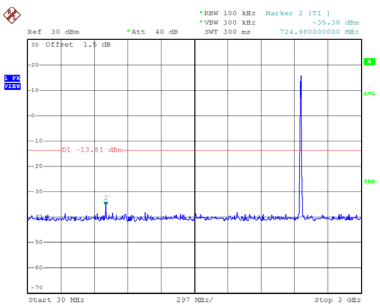


Date: 16.OCT.2019 18:55:09



Date: 16.OCT.2019 18:55:18

CH11 – 10th Harmonic of the fundamental frequency



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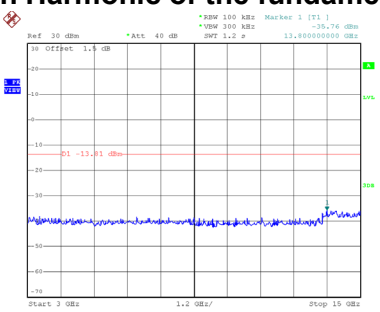
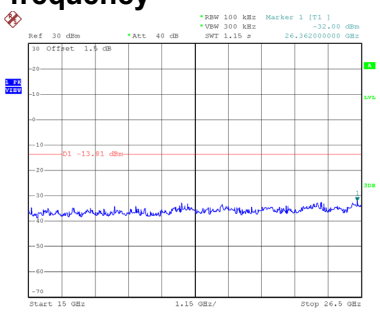


Date: 16.OCT.2019 18:59:47



Date: 16.OCT.2019 18:59:56