FCC Radio Test Report

FCC ID: V7T4G09

This report concerns: Original Grant

Project No.	:	2001C104
Equipment	:	AC1200 Dual-band Wi-Fi 4G+ LTE Router
Brand Name	:	Tenda
Test Model	:	4G09
Series Model	:	4G09A
Applicant	:	SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address	:	6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Manufacturer	:	SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address	:	6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Date of Receipt	:	Jan. 17, 2020
Date of Test	:	Jan. 19, 2020 ~ Apr. 29, 2020
Issued Date	:	May 11, 2020
Report Version	:	R01
Test Sample	:	Engineering Sample No.: DG20200402159
Standard(s)	:	FCC Part15, Subpart C (15.247) ANSI C63.10-2013 FCC KDB 558074 D01 15.247 Meas Guidance v05r02

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

Prepared by : Chay Cai

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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).

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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.	Apr. 29, 2020
R01	Modified the comments of TCB.	May 11, 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	150kHz ~ 30MHz	2.60

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	4.88
		30MHz ~ 200MHz	H	4.14
		200MHz ~ 1,000MHz	V	4.62
		200MHz ~ 1,000MHz	H	4.80
		1GHz ~ 6GHz	-	4.58
		6GHz ~ 18GHz	-	5.18
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	4.00

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	25°C	55%	AC 120V/60Hz AC 240V/60Hz	Kwok Guo
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	24°C	68%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	24°C	68%	AC 120V/60Hz	Kwok Guo
Bandwidth	26°C	63%	DC 12V	Hayden Chen
Maximum Output Power	26°C	63%	DC 12V	Hayden Chen
Conducted Spurious Emissions	26°C	63%	DC 12V	Hayden Chen
Power Spectral Density	26°C	63%	DC 12V	Hayden Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AC1200 Dual-band Wi-Fi 4G+ LTE Router
Brand Name	Tenda
Test Model	4G09
Series Model	4G09A
Model Difference(s)	Only differ in model name.
Power Source	DC voltage supplied from AC/DC adapter. Model: BN074-A18012U
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 Peak Output Power _Non Beamforming	IEEE 802.11b: 27.71 dBm (0.5902 W) IEEE 802.11g: 28.47 dBm (0.7031 W) IEEE 802.11n (HT20): 29.11 dBm (0.8147 W) IEEE 802.11n (HT40): 29.00 dBm (0.7943 W)
Maximum Peak Output Power _Beamforming	IEEE 802.11n (HT20): 28.65 dBm (0.7328 W) IEEE 802.11n (HT40): 28.55 dBm (0.7161 W)
Maximum Average Output Power _Non Beamforming	IEEE 802.11b: 25.91 dBm (0.3899 W) IEEE 802.11g: 20.09 dBm (0.1021 W) IEEE 802.11n (HT20): 20.73 dBm (0.1183 W) IEEE 802.11n (HT40): 22.22 dBm (0.1667 W)
Maximum Average Output Power _Beamforming	IEEE 802.11n (HT20): 18.08 dBm (0.0643 W) IEEE 802.11n (HT40): 19.74 dBm (0.0942 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	PCB	N/A	4.27
2	N/A	N/A	PCB	N/A	3.42

Note:
This EUT supports CDD, and antenna gains are not equal, then,

1) For Non Beamforming, Directional gain=10log $[(10^{G1/20}+10^{G2/20}+...10^{GN/20})^2/N]$dBi=6.87. So the output power limit is 30-(6.87-6)=29.13, the power spectral density limit is 8-(6.87-6)=7.13.
2) For Beamforming, Beamforming Gain=3 dB, so Directional gain= 3+4.27=7.27 dBi. Thus, the output power limit is 30-(7.27-6)=28.73.

4. Table for Antenna Configuration:

For Non Beamforming:

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

For Beamforming:

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

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 11

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

AC power line conducted emissions test	
Final Test Mode	Description
Mode 5	TX N-20 MHz Mode Channel 11

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 5	TX N-20 MHz Mode Channel 11

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

Maximum Output Power test_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

Maximum Output Power test_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

Other 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 (1 Mbps)
802.11g mode: OFDM (6 Mbps)
802.11n HT20 mode: BPSK (6.5 Mbps)
802.11n HT40 mode: BPSK (13.5 Mbps)
For radiated emission tests, the highest output powers were set for final test.

(3) For radiated emission below 1 GHz test, the IEEE 802.11n20 Channel 11 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 worst case was Non Beamforming, only worst case was documented for other test items.

(6) For radiated emissions, the TX WLAN 2.4G B Mode 2437MHz + WLAN 5G AC20 Mode 5240MHz + LTE Band 7(20MHz) 2510MHz was found the worst case of simultaneous transmission and recorded.

2.3 PARAMETERS OF TEST SOFTWARE

Non Beamforming

Test Software	MP_TEST		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	113	123	96
IEEE 802.11g	105	127	95
IEEE 802.11n (HT20)	95/95	90/90	95/95
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	99/99	103/103	90/90

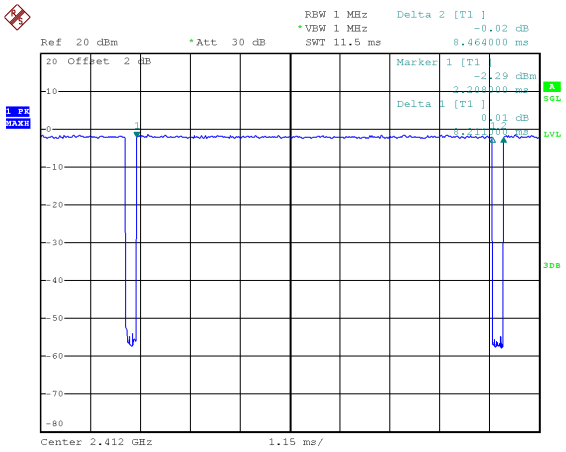
Beamforming

Test Software	MP_TEST		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n (HT20)	82/82	78/78	78/78
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	85/85	86/86	78/78

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.

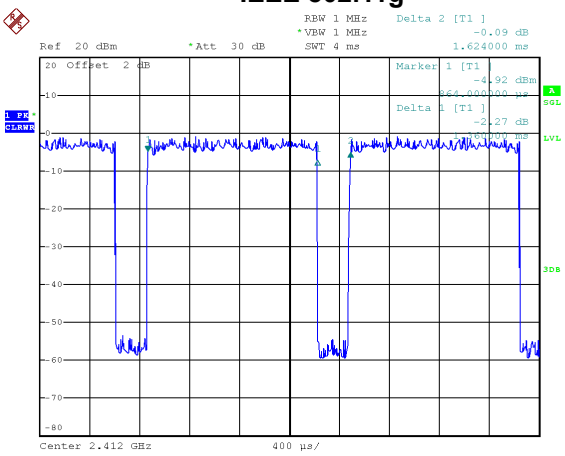
IEEE 802.11b



Date: 17.FEB.2020 18:50:54

Duty cycle = 8.211 ms / 8.464 ms = 97.01%
Duty Factor = 10 log(1/Duty cycle) = 0.13

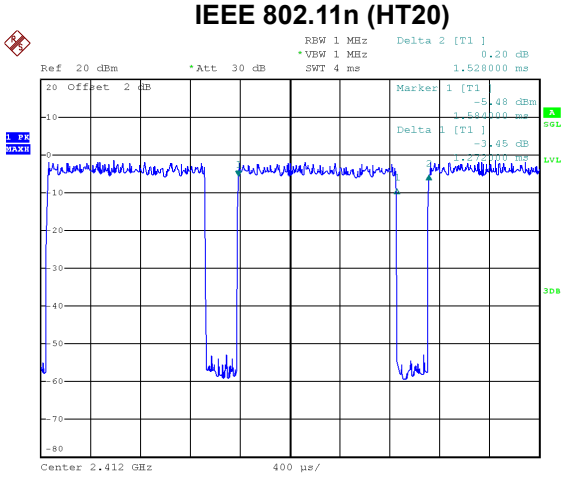
IEEE 802.11g



Date: 17.FEB.2020 18:52:52

Duty cycle = 1.360 ms / 1.624 ms = 83.74%
Duty Factor = 10 log(1/Duty cycle) = 0.77

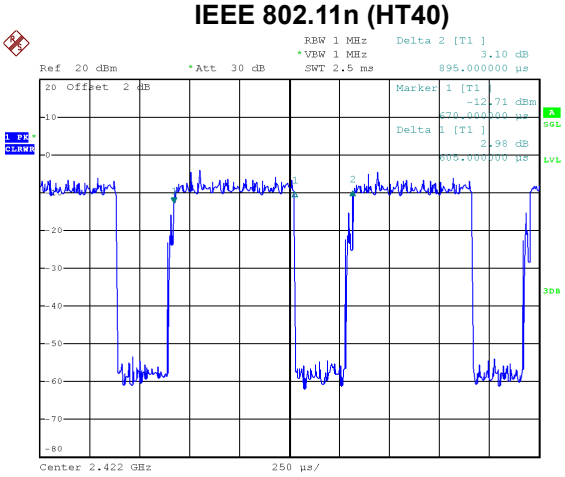
IEEE 802.11n (HT20)



Date: 17.FEB.2020 18:53:16

Duty cycle = 1.272 ms / 1.528 ms = 83.25%
Duty Factor = 10 log(1/Duty cycle) = 0.80

IEEE 802.11n (HT40)



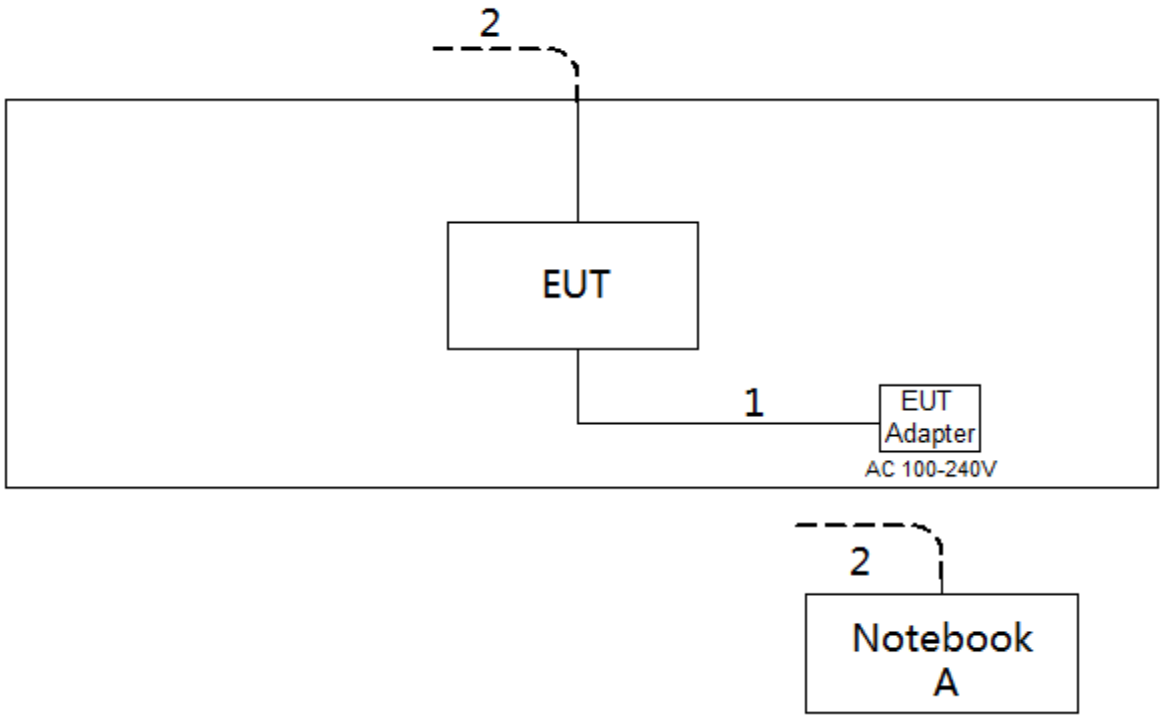
Date: 17.FEB.2020 18:53:33

Duty cycle = 0.605 ms / 0.895 ms = 67.60%
Duty Factor = 10 log(1/Duty cycle) = 1.70

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	1.2m
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

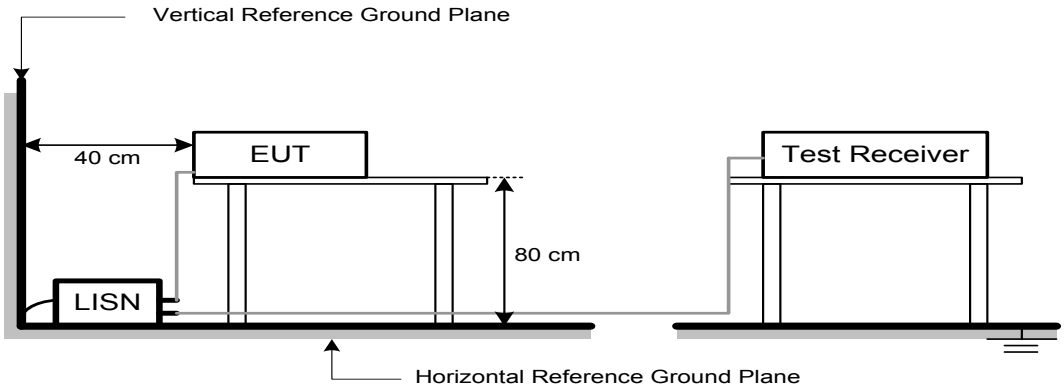
3.2 TEST PROCEDURE

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)

For WLAN 2.4GHz

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

For WLAN 5GHz:

Frequency (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3

For LTE:

Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
2500 - 2570	-13	82.25

NOTE:

(1) The limit for radiated test was performed according to FCC PART 15C, FCC PART 15E, FCC Part27(M)

(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

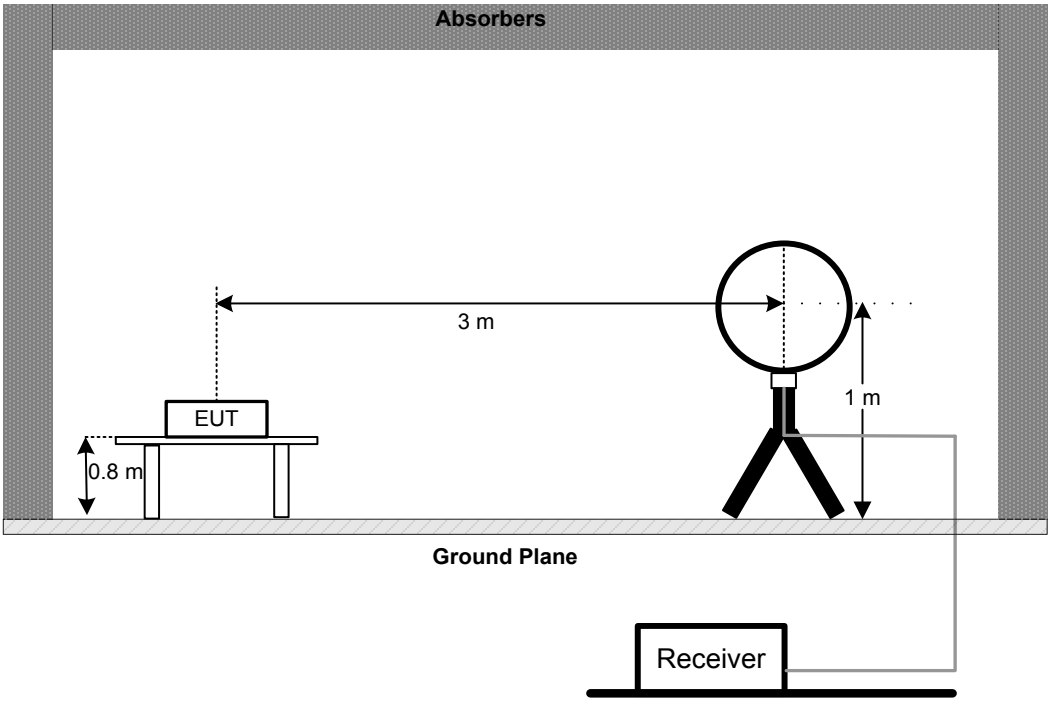
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The measuring distance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

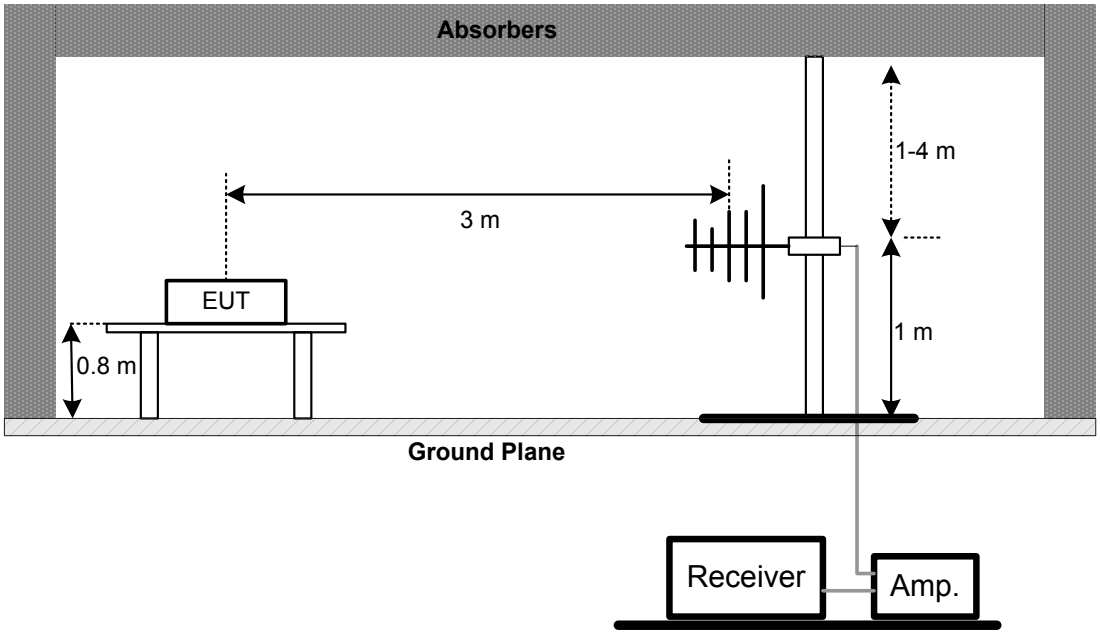
No deviation

4.4 TEST SETUP

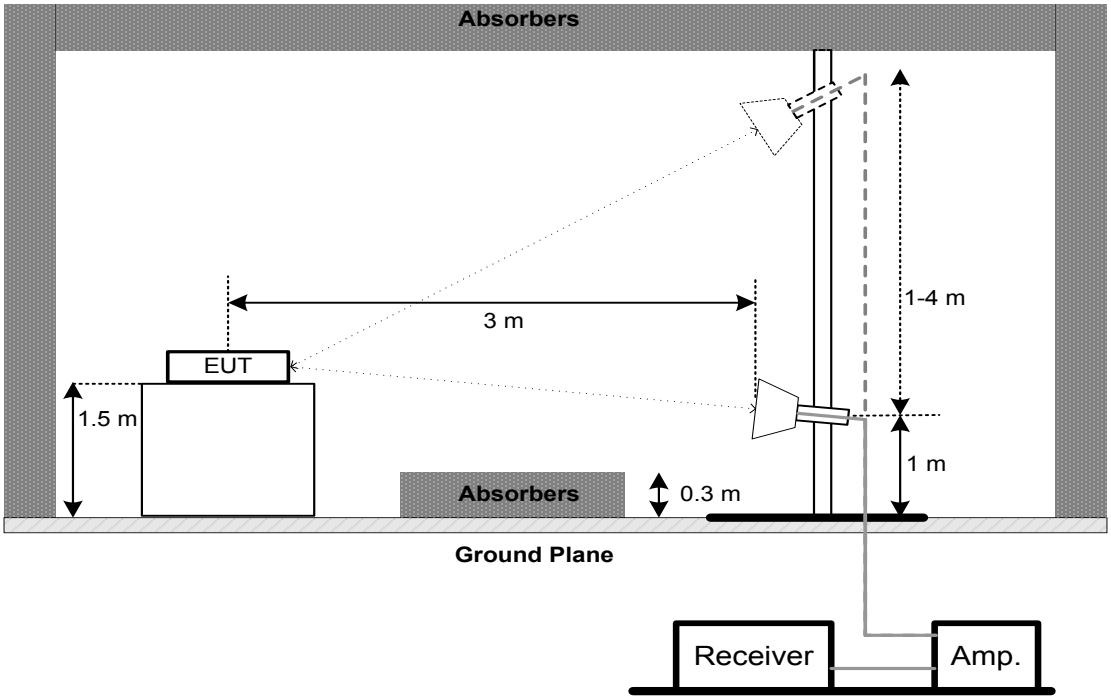
9 kHz-30 MHz



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	-

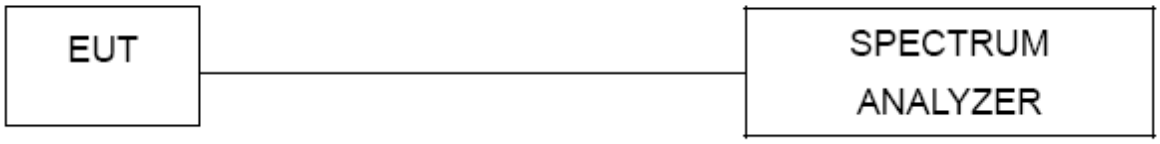
5.2 TEST PROCEDURE

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

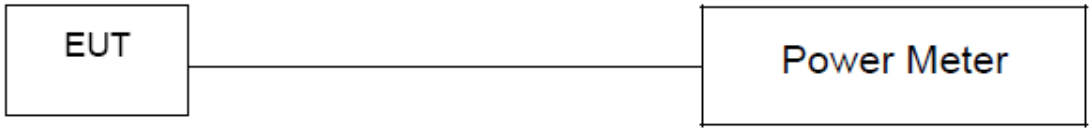
6.2 TEST PROCEDURE

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 11.9.1.3 and 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)

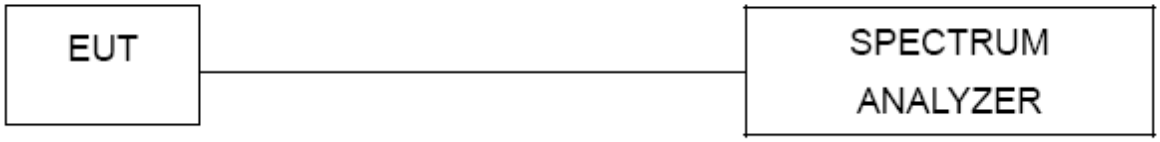
8.2 TEST PROCEDURE

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

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	N/A	May 31, 2020
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2021
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 25, 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	75846	Mar. 19, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02584	Aug. 03, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
5	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	RWLP50-4.0A-KJ-S MSM-12M	N/A	Nov. 25, 2020
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	wideband radio communication tester	R&S	CMW500	153083	Mar. 01, 2021
11	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 1710/1785-1690/1805-60/12SS	38	Feb. 28, 2021
12	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 824/849-810/863-60/9SS	7	Feb. 28, 2021
13	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 880/915-860/935-60/9SS	14	Feb. 28, 2021
14	Band Reject Filter	Wairrwright Instruments Gmbh	WRCG 1850/1910-1830/1930-60/10SS	17	Feb. 28, 2021

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

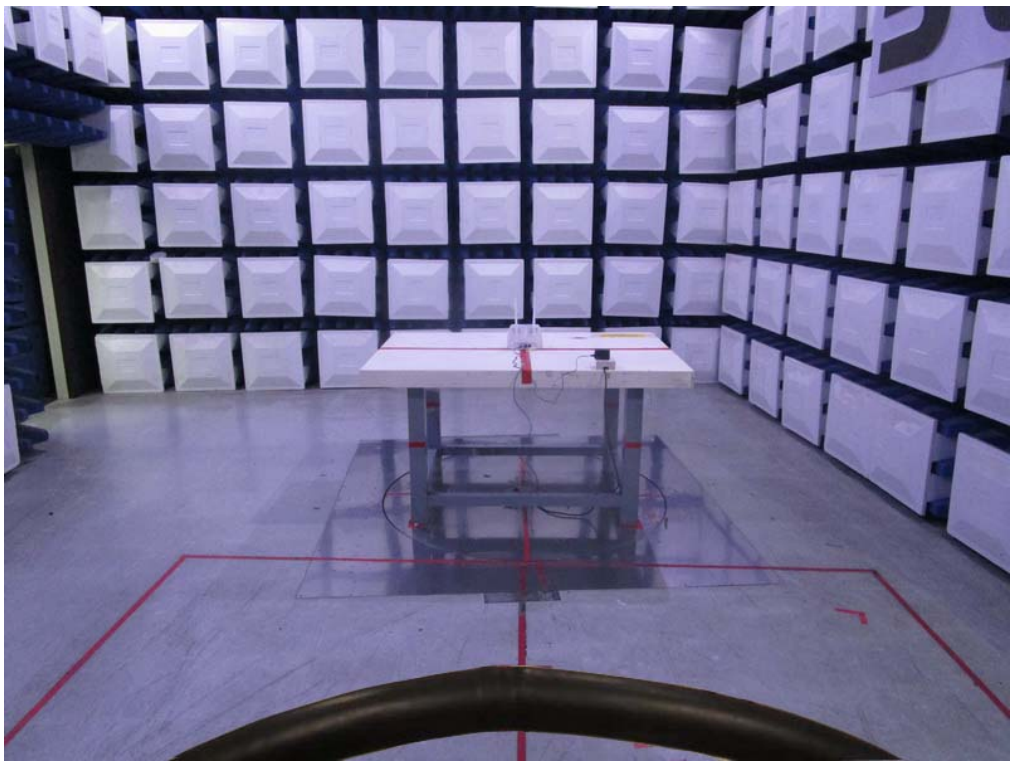
Except * item, all calibration period of equipment list is one year.

10. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos

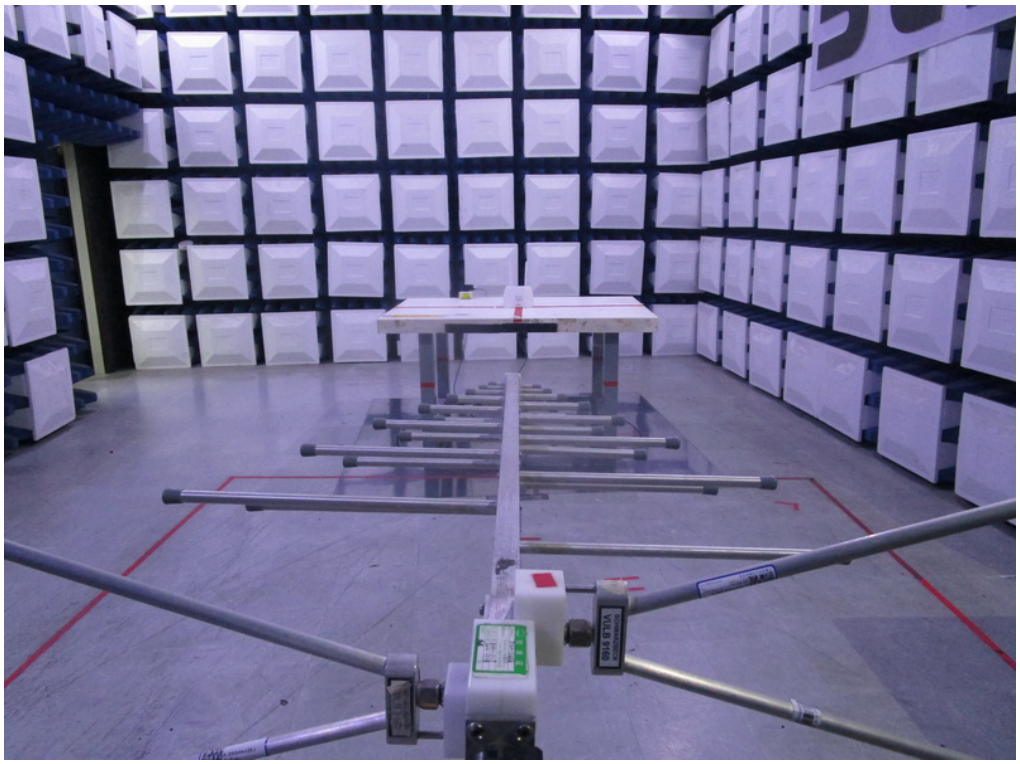
Radiated Emissions Test Photos

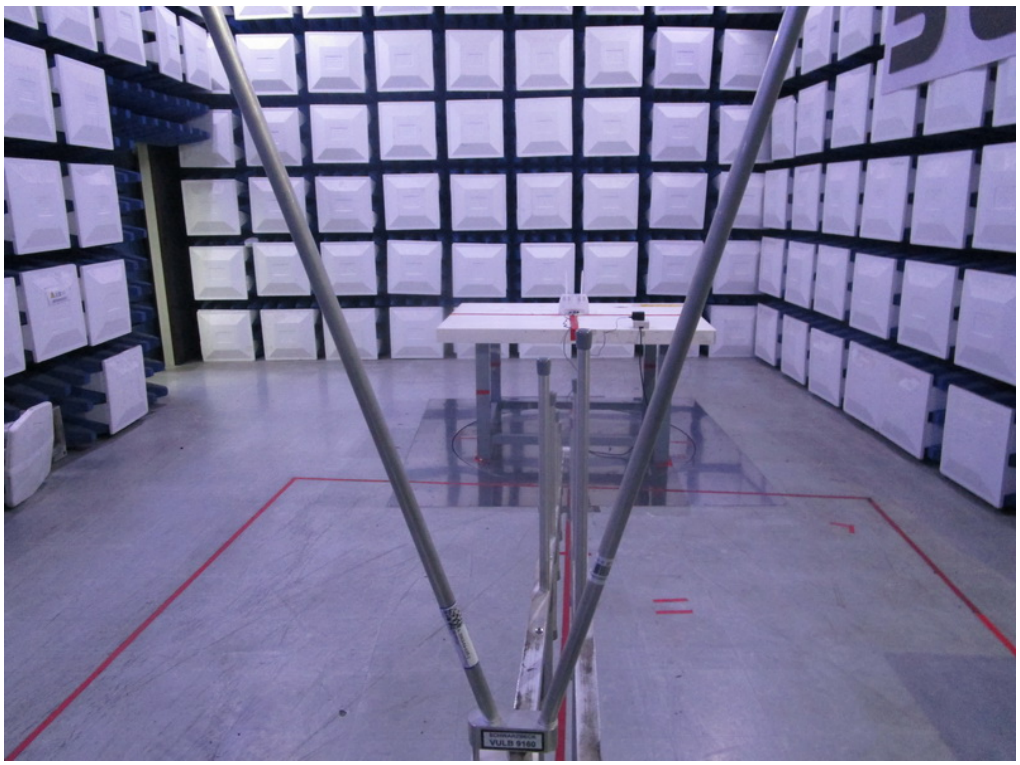
9 kHz to 30 MHz



Radiated Emissions Test Photos

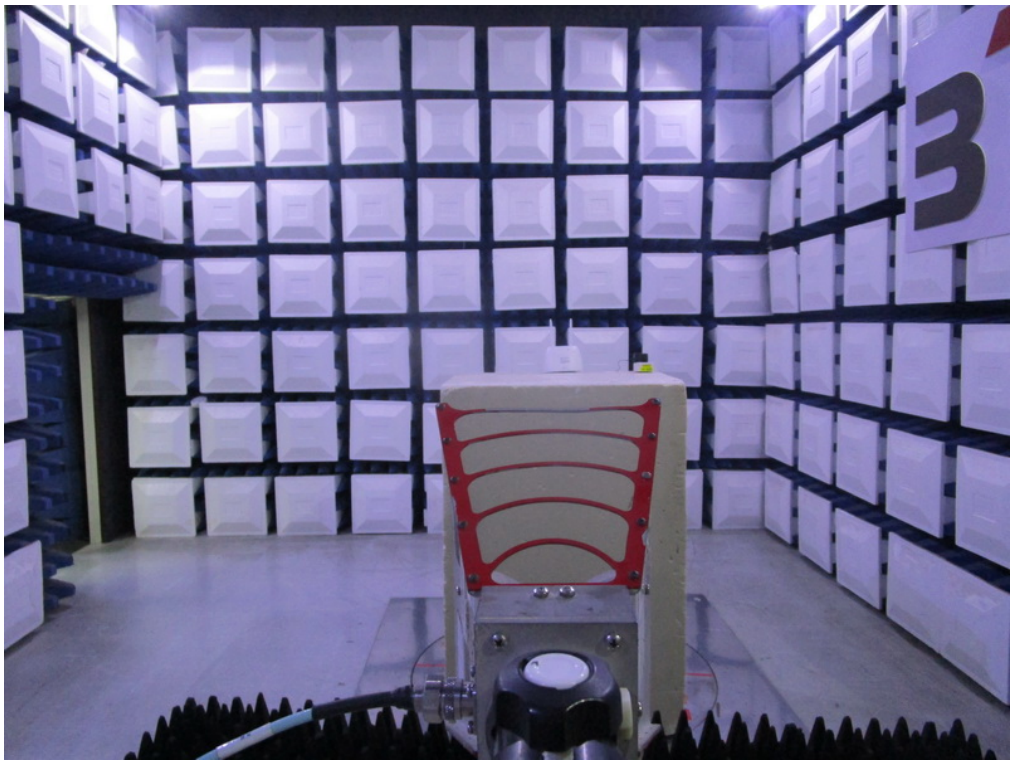
30 MHz to 1 GHz

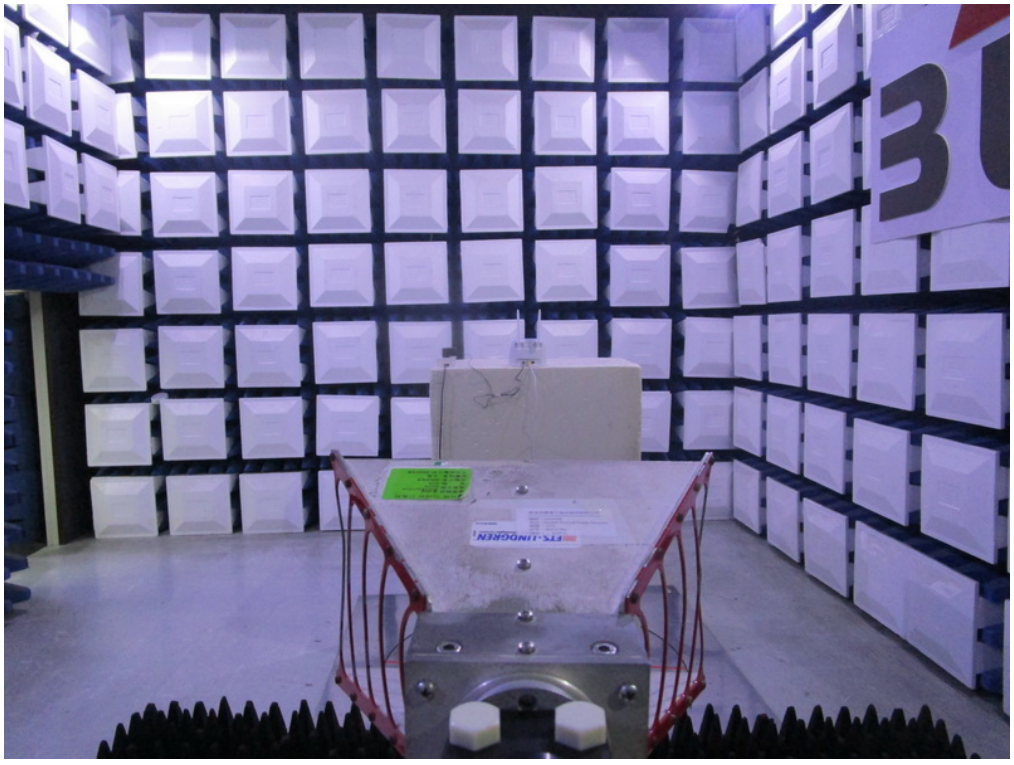




Radiated Emissions Test Photos

Above 1 GHz

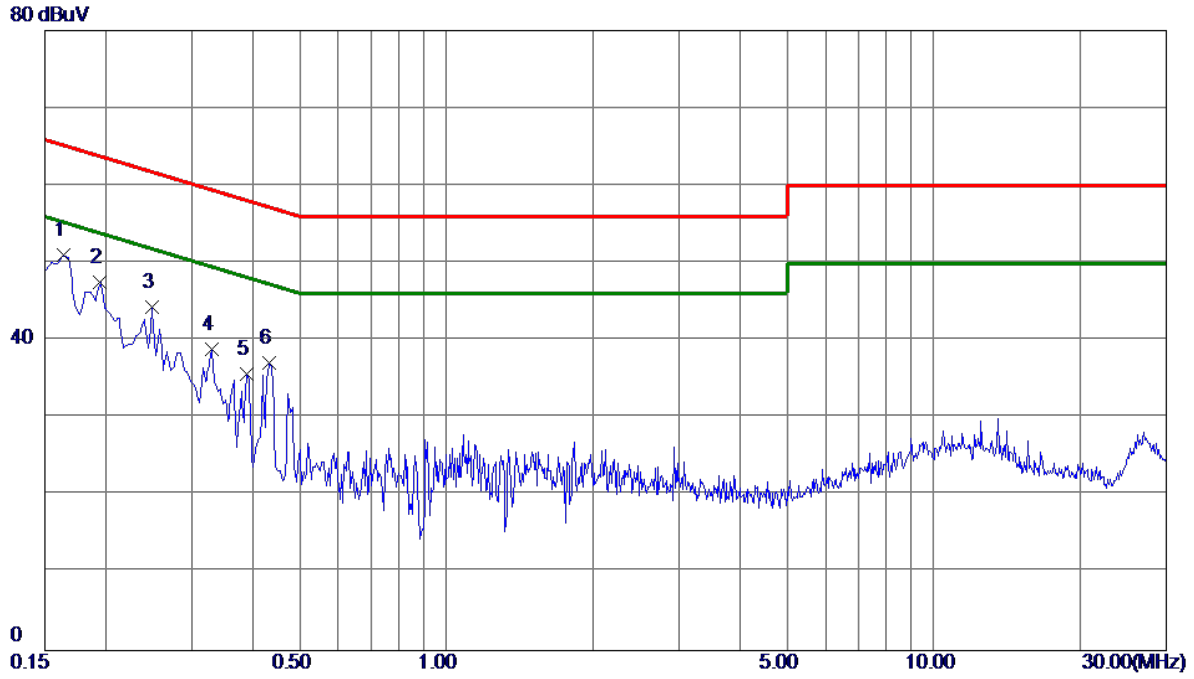




APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	TX N20 Mode Channel 11
Test Voltage:	AC 120V/60Hz

Line

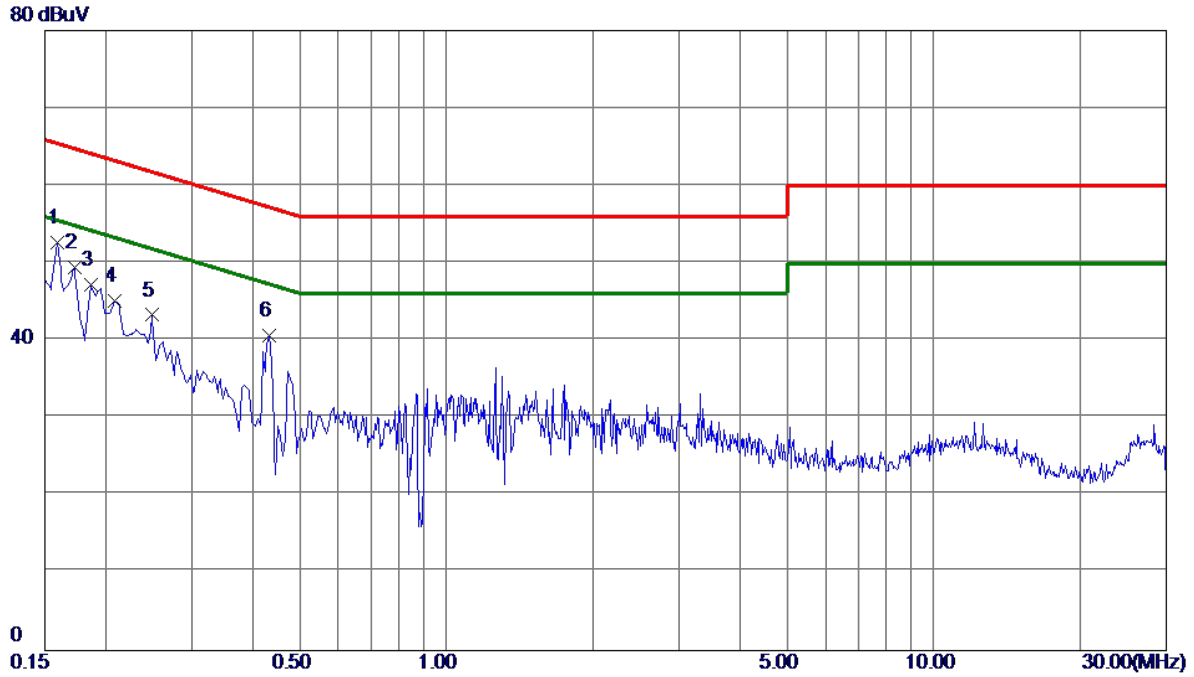


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1635	41.21	9.76	50.97	65.28	-14.31	Peak	
2	0.1949	37.82	9.77	47.59	63.83	-16.24	Peak	
3	0.2490	34.52	9.78	44.30	61.79	-17.49	Peak	
4	0.3300	29.02	9.80	38.82	59.45	-20.63	Peak	
5	0.3885	25.91	9.82	35.73	58.10	-22.37	Peak	
6	0.4335	27.27	9.82	37.09	57.19	-20.10	Peak	

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

Test Mode:	TX N20 Mode Channel 11
Test Voltage:	AC 120V/60Hz

Neutral

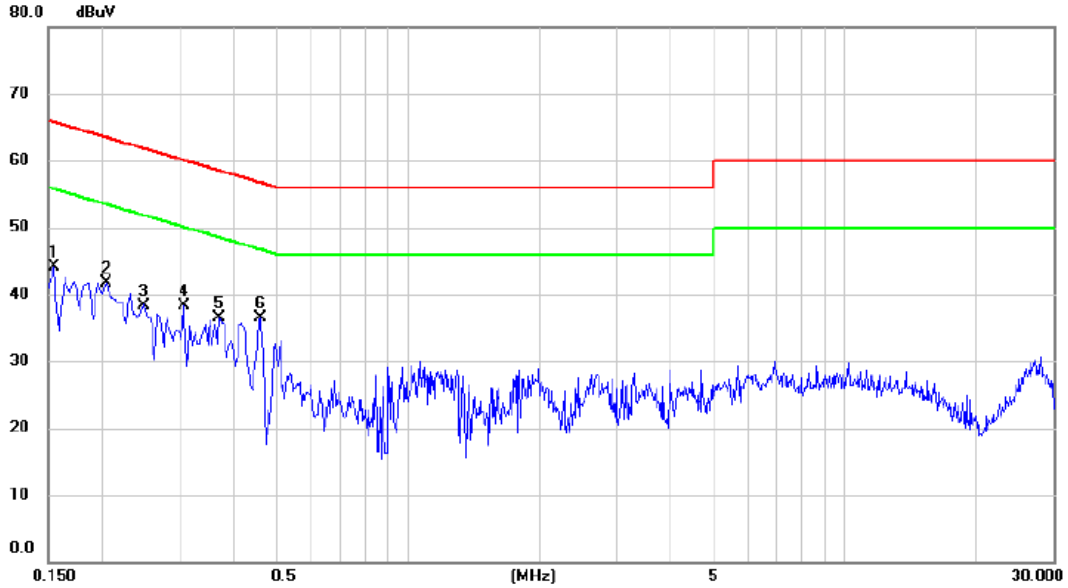


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1590	42.93	9.70	52.63	65.52	-12.89	Peak	
2	0.1725	39.79	9.71	49.50	64.84	-15.34	Peak	
3	0.1860	37.44	9.72	47.16	64.21	-17.05	Peak	
4	0.2085	35.38	9.73	45.11	63.26	-18.15	Peak	
5	0.2490	33.55	9.73	43.28	61.79	-18.51	Peak	
6	0.4335	30.82	9.78	40.60	57.19	-16.59	Peak	

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

Test Mode:	TX N20 Mode Channel 11
Test Voltage:	AC 240V/60Hz

Line

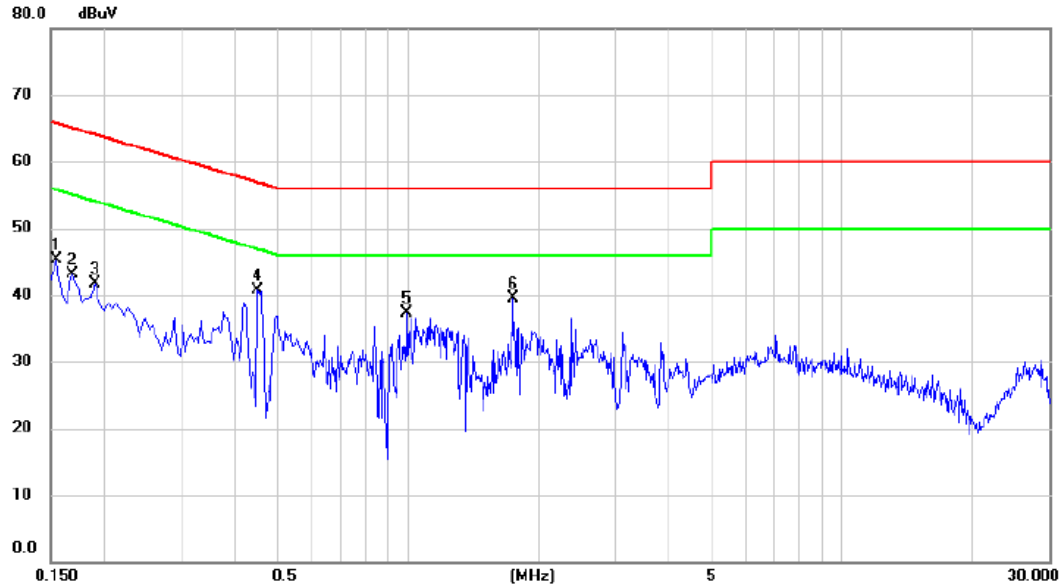


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1545	34.42	9.75	44.17	65.75	-21.58	peak	
2		0.2040	31.92	9.77	41.69	63.45	-21.76	peak	
3		0.2490	28.62	9.78	38.40	61.79	-23.39	peak	
4		0.3075	28.48	9.79	38.27	60.04	-21.77	peak	
5		0.3704	26.65	9.80	36.45	58.49	-22.04	peak	
6	*	0.4605	26.67	9.83	36.50	56.68	-20.18	peak	

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

Test Mode:	TX N20 Mode Channel 11
Test Voltage:	AC 240V/60Hz

Neutral



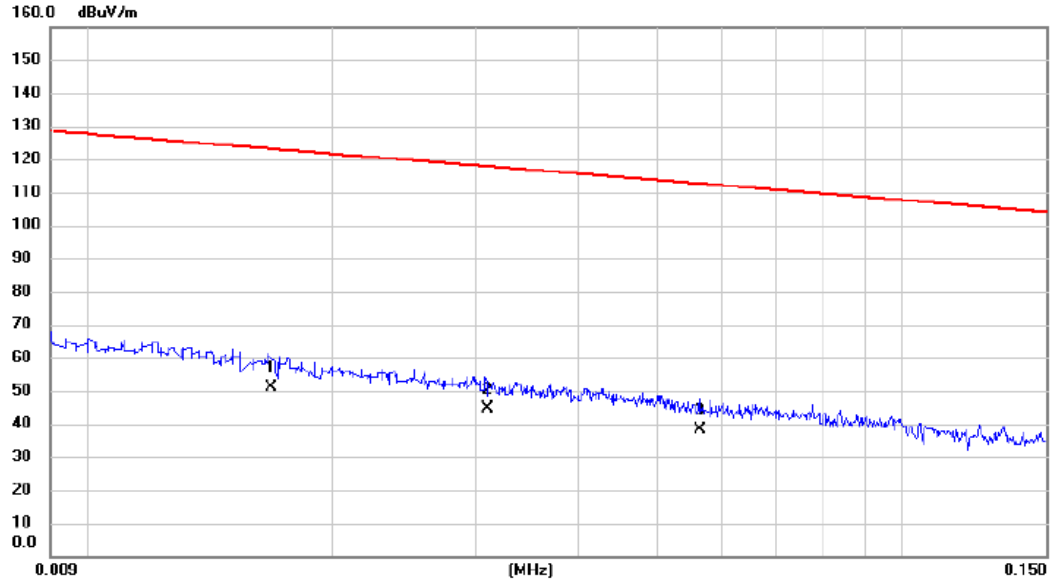
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1545	35.56	9.69	45.25	65.75	-20.50	peak	
2		0.1680	33.41	9.71	43.12	65.06	-21.94	peak	
3		0.1905	32.01	9.73	41.74	64.01	-22.27	peak	
4	*	0.4515	30.94	9.79	40.73	56.85	-16.12	peak	
5		0.9960	27.51	9.85	37.36	56.00	-18.64	peak	
6		1.7430	29.66	9.90	39.56	56.00	-16.44	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 11

Ant 0°

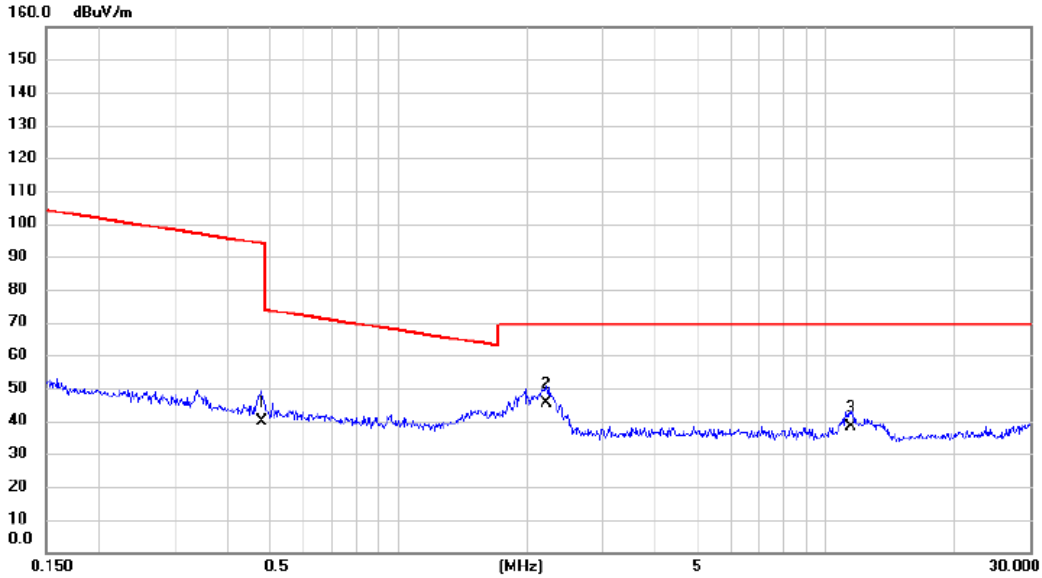


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.017	36.20	14.78	50.98	123.10	-72.12	AVG	
2		0.031	30.60	13.86	44.46	117.78	-73.32	AVG	
3		0.057	24.30	13.83	38.13	112.56	-74.43	AVG	

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

Test Mode:	TX N20 Mode Channel 11

Ant 0°

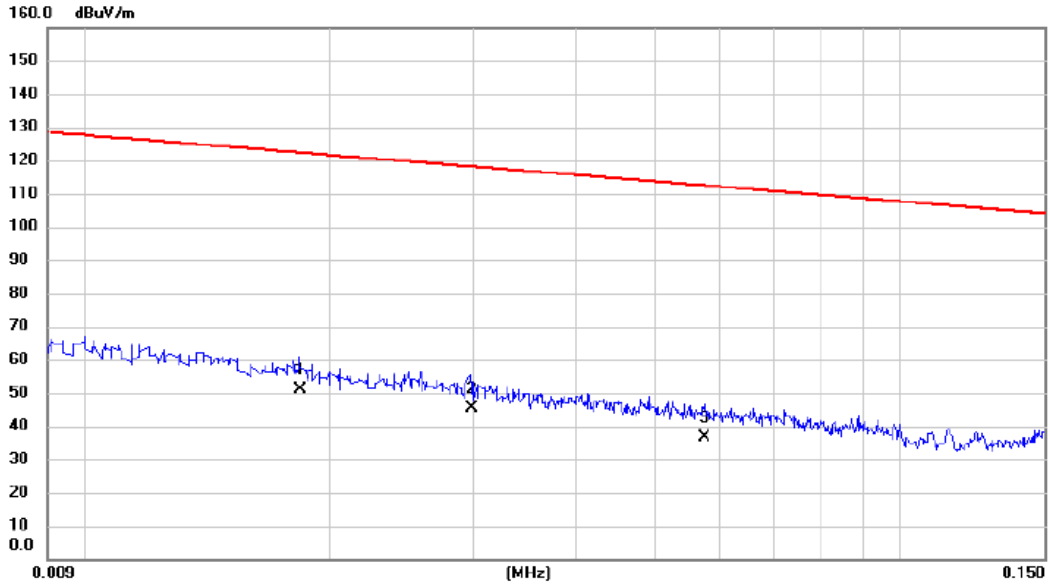


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.479	26.50	13.11	39.61	94.00	-54.39	AVG	
2	*	2.225	33.91	11.68	45.59	69.54	-23.95	QP	
3		11.438	26.70	11.61	38.31	69.54	-31.23	QP	

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

Test Mode:	TX N20 Mode Channel 11

Ant 90°

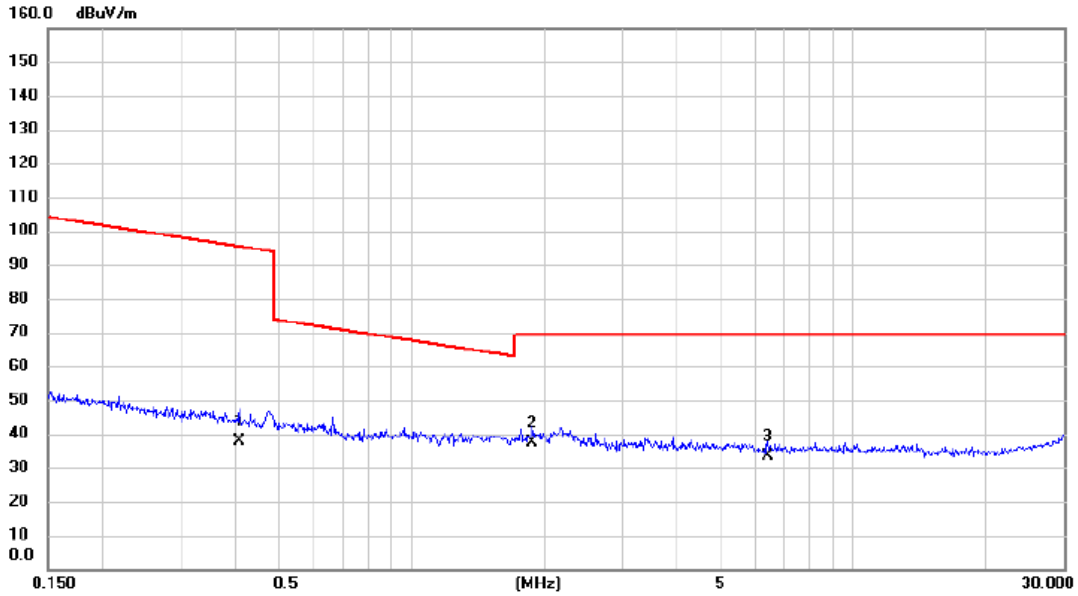


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.018	36.70	14.30	51.00	122.31	-71.31	AVG	
2		0.030	31.60	13.85	45.45	118.12	-72.67	AVG	
3		0.058	22.80	13.81	36.61	112.40	-75.79	AVG	

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

Test Mode:	TX N20 Mode Channel 11

Ant 90°



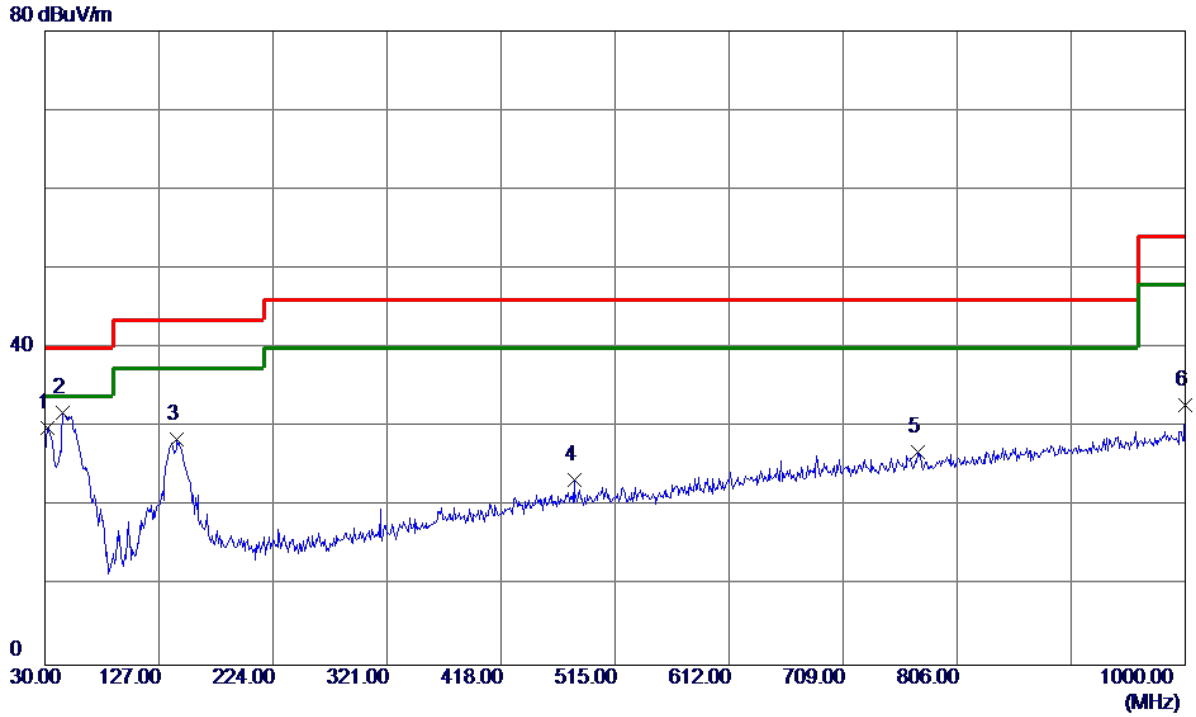
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.408	24.50	13.28	37.78	95.38	-57.60	AVG	
2	*	1.878	25.50	11.90	37.40	69.54	-32.14	QP	
3		6.420	22.30	11.08	33.38	69.54	-36.16	QP	

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 11

Vertical

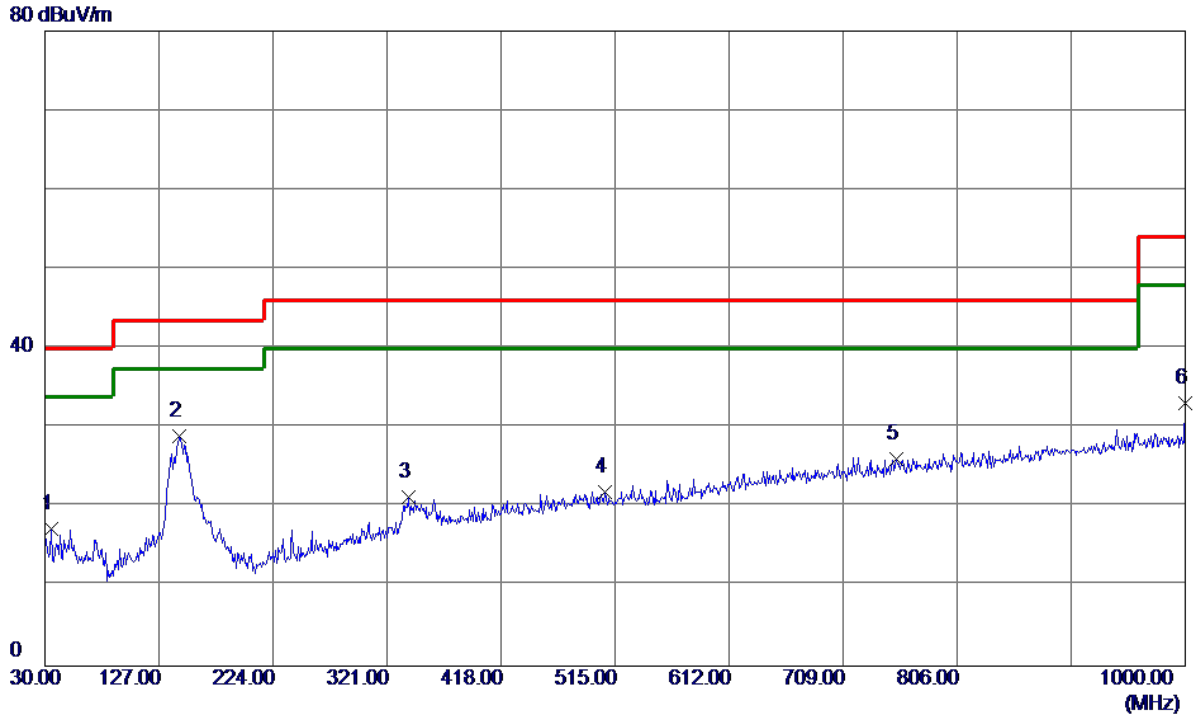


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	31.9400	44.45	-14.54	29.91	40.00	-10.09	Peak	
2 *	45.5200	45.99	-14.22	31.77	40.00	-8.23	Peak	
3	142.5200	41.31	-12.83	28.48	43.50	-15.02	Peak	
4	480.0800	31.52	-8.17	23.35	46.00	-22.65	Peak	
5	773.0200	30.68	-3.81	26.87	46.00	-19.13	Peak	
6	1000.0000	32.72	0.06	32.78	54.00	-21.22	Peak	

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

Test Mode:	TX N20 Mode Channel 11

Horizontal



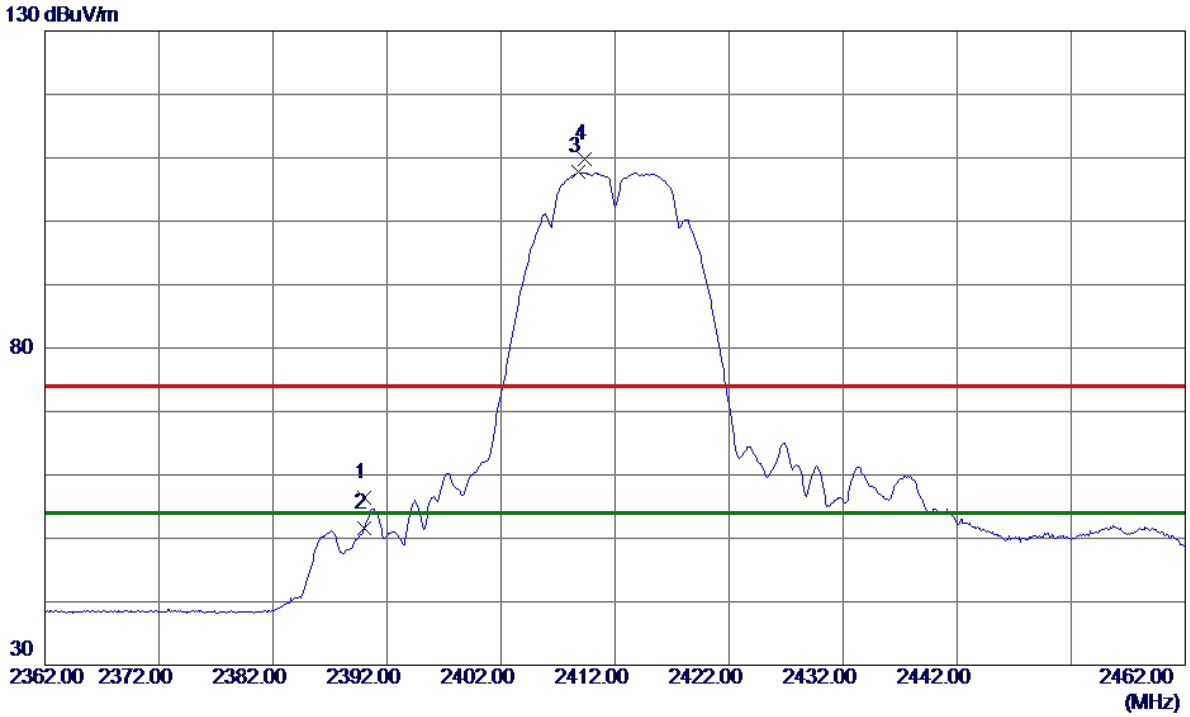
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	35.8200	31.72	-14.46	17.26	40.00	-22.74	Peak	
2 *	144.4600	41.61	-12.72	28.89	43.50	-14.61	Peak	
3	339.4300	32.24	-11.03	21.21	46.00	-24.79	Peak	
4	506.2700	29.92	-7.98	21.94	46.00	-24.06	Peak	
5	754.5900	30.09	-4.05	26.04	46.00	-19.96	Peak	
6	1000.0000	33.04	0.06	33.10	54.00	-20.90	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	49.46	6.89	56.35	74.00	-17.65	Peak	
2	2390.0000	44.71	6.89	51.60	54.00	-2.40	AVG	
3 *	2408.8000	100.85	6.87	107.72	54.00	53.72	AVG	No Limit
4	2409.3000	102.93	6.87	109.80	74.00	35.80	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

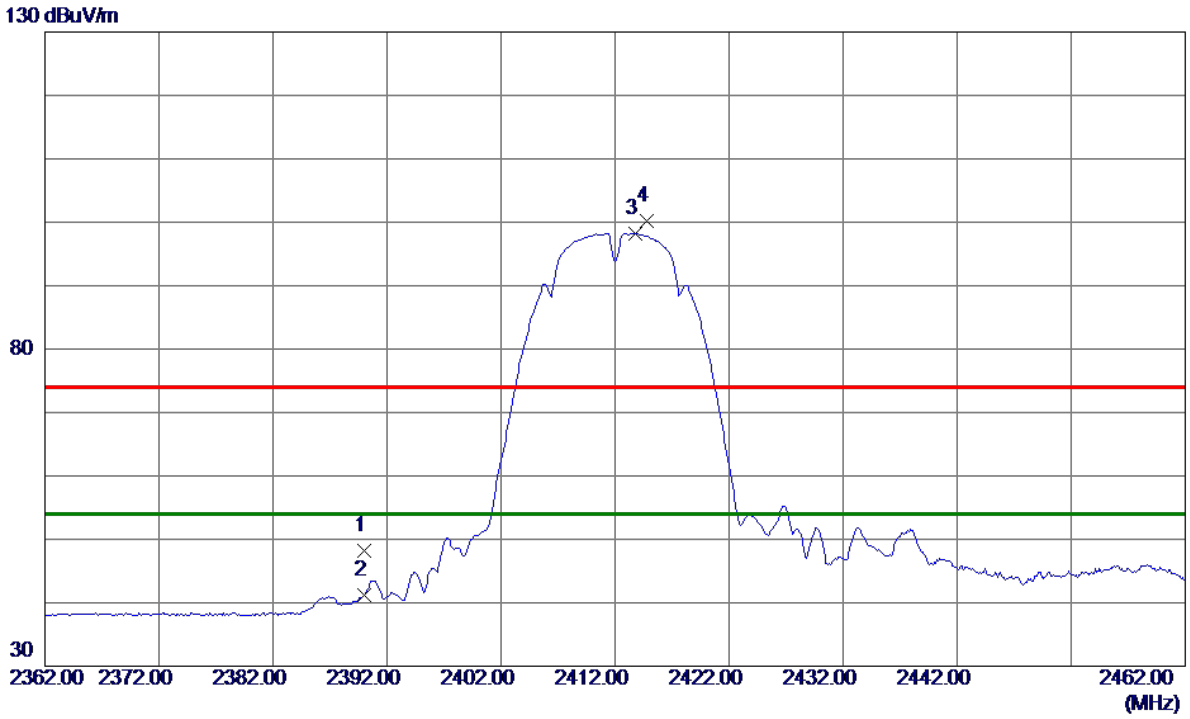
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824.0480	47.40	3.60	51.00	54.00	-3.00	AVG	
2	4824.0580	49.74	3.60	53.34	74.00	-20.66	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	41.38	6.89	48.27	74.00	-25.73	Peak	
2	2390.0000	34.29	6.89	41.18	54.00	-12.82	AVG	
3 *	2413.8000	91.40	6.87	98.27	54.00	44.27	AVG	No Limit
4	2414.8000	93.35	6.87	100.22	74.00	26.22	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

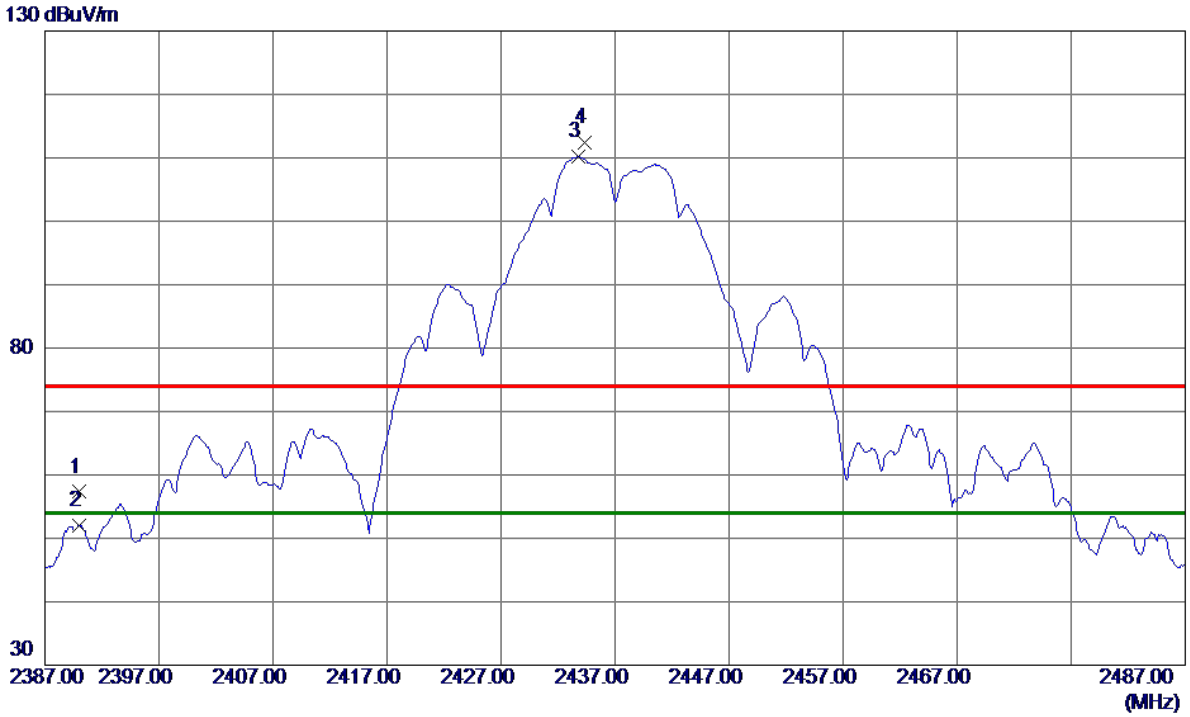
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824.0200	40.90	3.60	44.50	54.00	-9.50	AVG	
2	4824.0720	45.16	3.60	48.76	74.00	-25.24	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	2390.0000	50.41	6.89	57.30	74.00	-16.70	Peak	
2	2390.0000	45.05	6.89	51.94	54.00	-2.06	AVG	
3 *	2433.8000	103.33	6.85	110.18	54.00	56.18	AVG	No Limit
4	2434.3000	105.57	6.85	112.42	74.00	38.42	Peak	No Limit

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

Test Mode:	TX B Mode 2437 MHz

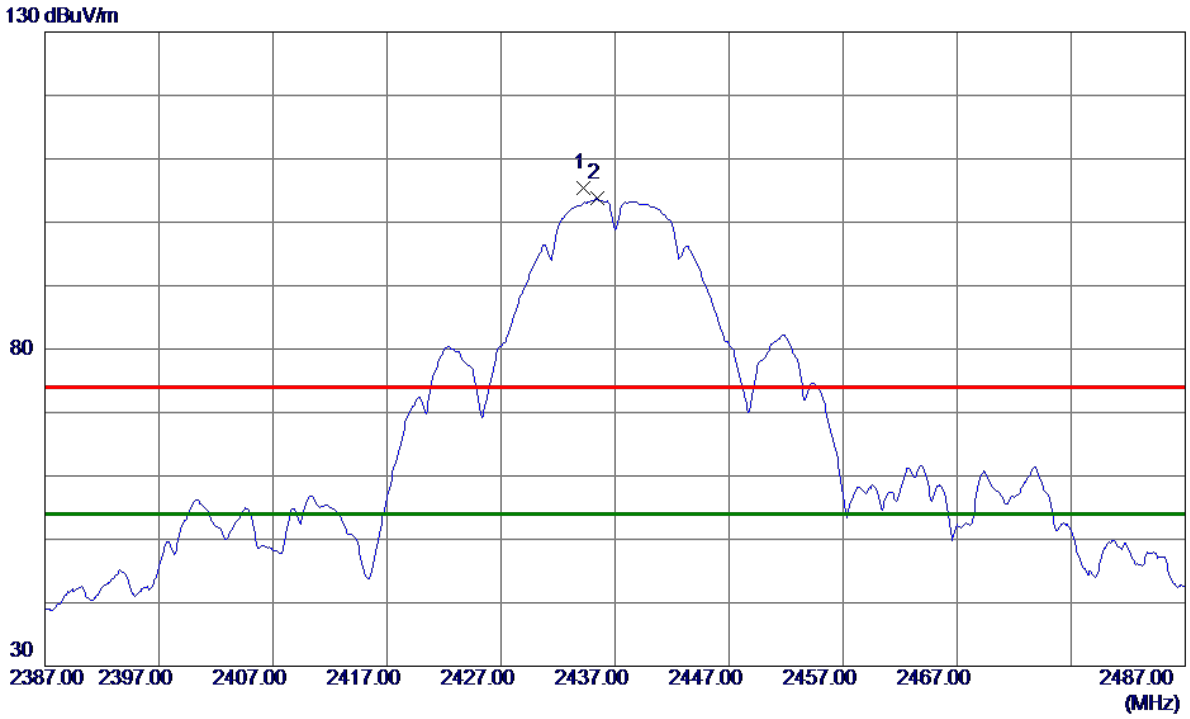
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0299	47.88	3.75	51.63	54.00	-2.37	AVG	
2	4874.0660	50.32	3.75	54.07	74.00	-19.93	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	2434.2000	98.47	6.85	105.32	74.00	31.32	Peak	No Limit
2 *	2435.4000	96.95	6.84	103.79	54.00	49.79	AVG	No Limit

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

Test Mode:	TX B Mode 2437 MHz

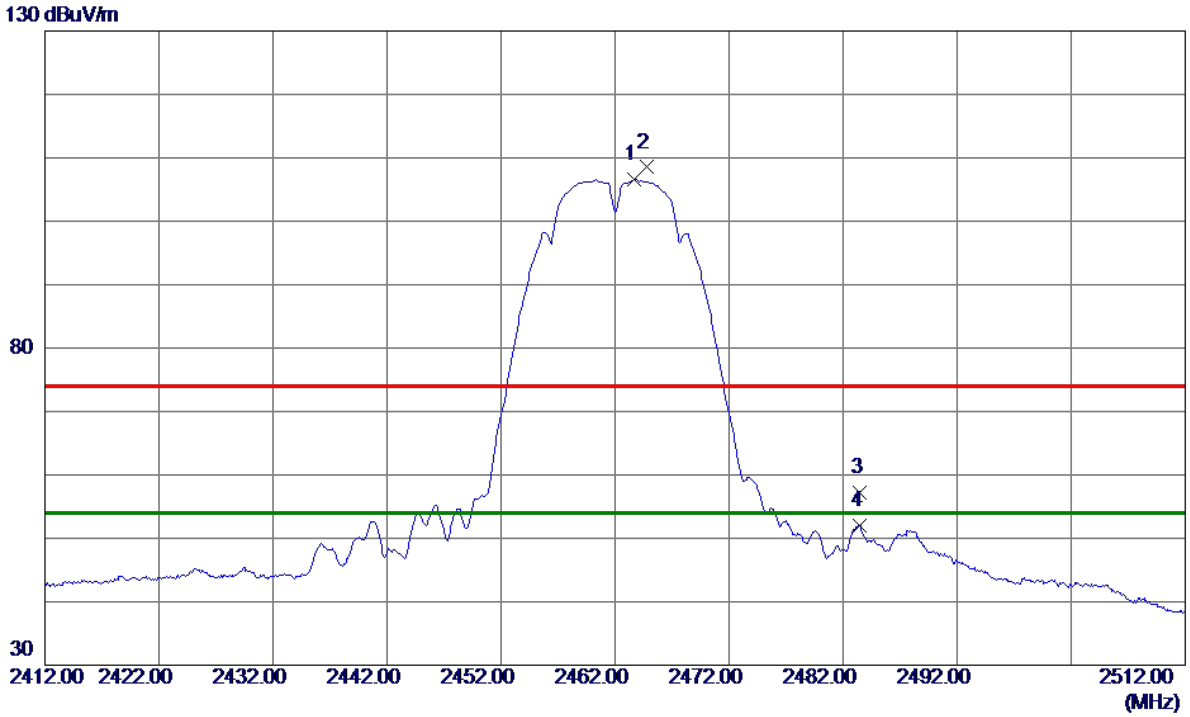
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.9700	46.28	3.75	50.03	74.00	-23.97	Peak	
2 *	4874.0120	41.97	3.75	45.72	54.00	-8.28	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 *	2463.7000	99.74	6.81	106.55	54.00	52.55	AVG	No Limit
2	2464.8000	101.69	6.81	108.50	74.00	34.50	Peak	No Limit
3	2483.5000	50.50	6.79	57.29	74.00	-16.71	Peak	
4	2483.5000	45.15	6.79	51.94	54.00	-2.06	AVG	

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

Test Mode:	TX B Mode 2462 MHz

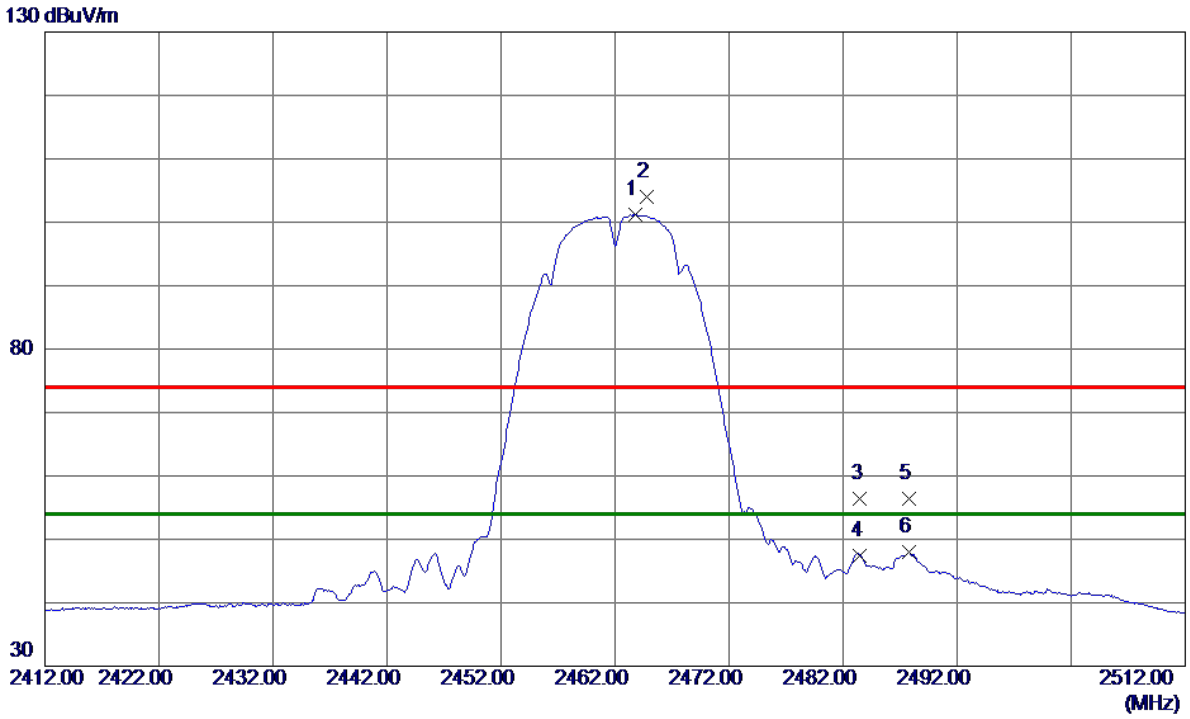
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4924.0500	46.16	3.90	50.06	74.00	-23.94	Peak	
2 *	4924.0600	41.67	3.90	45.57	54.00	-8.43	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 *	2463.8000	94.40	6.81	101.21	54.00	47.21	AVG	No Limit
2	2464.8000	97.13	6.81	103.94	74.00	29.94	Peak	No Limit
3	2483.5000	49.54	6.79	56.33	74.00	-17.67	Peak	
4	2483.5000	40.68	6.79	47.47	54.00	-6.53	AVG	
5	2487.8000	49.57	6.79	56.36	74.00	-17.64	Peak	
6	2487.8000	41.18	6.79	47.97	54.00	-6.03	AVG	

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

Test Mode:	TX B Mode 2462 MHz

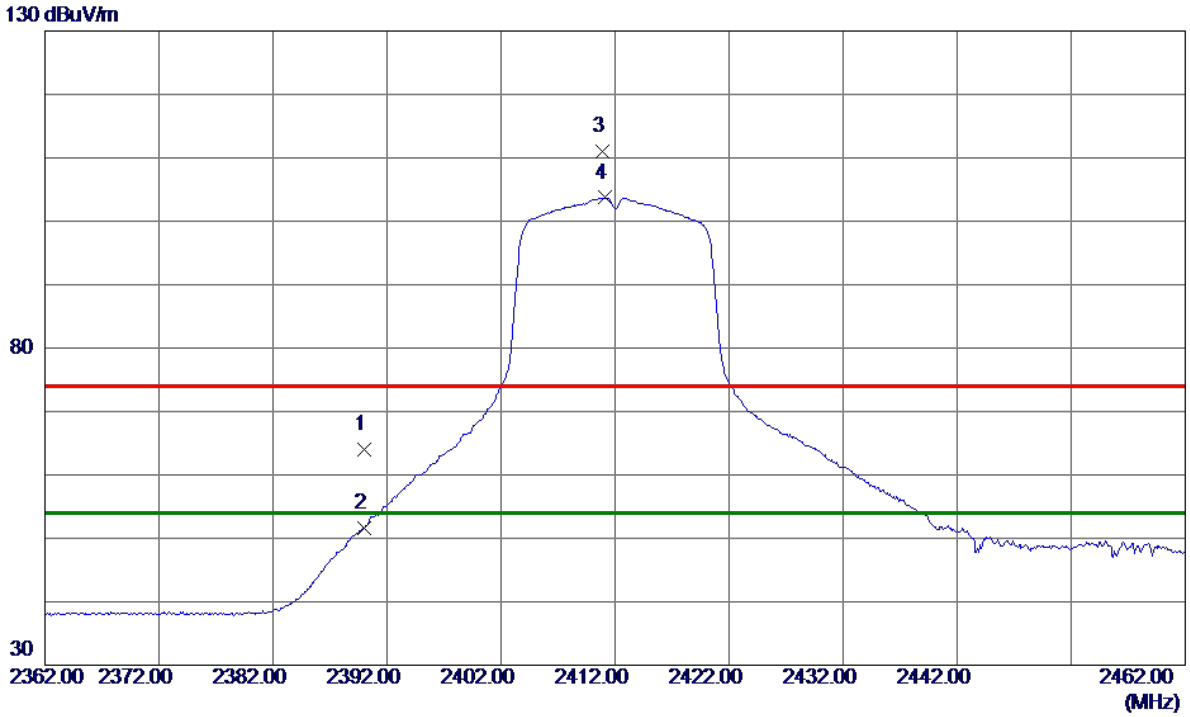
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.9860	42.63	3.90	46.53	74.00	-27.47	Peak	
2 *	4924.0080	35.71	3.90	39.61	54.00	-14.39	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	57.13	6.89	64.02	74.00	-9.98	Peak	
2	2390.0000	44.72	6.89	51.61	54.00	-2.39	AVG	
3	2410.9000	104.14	6.87	111.01	74.00	37.01	Peak	No Limit
4 *	2411.1000	96.83	6.87	103.70	54.00	49.70	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

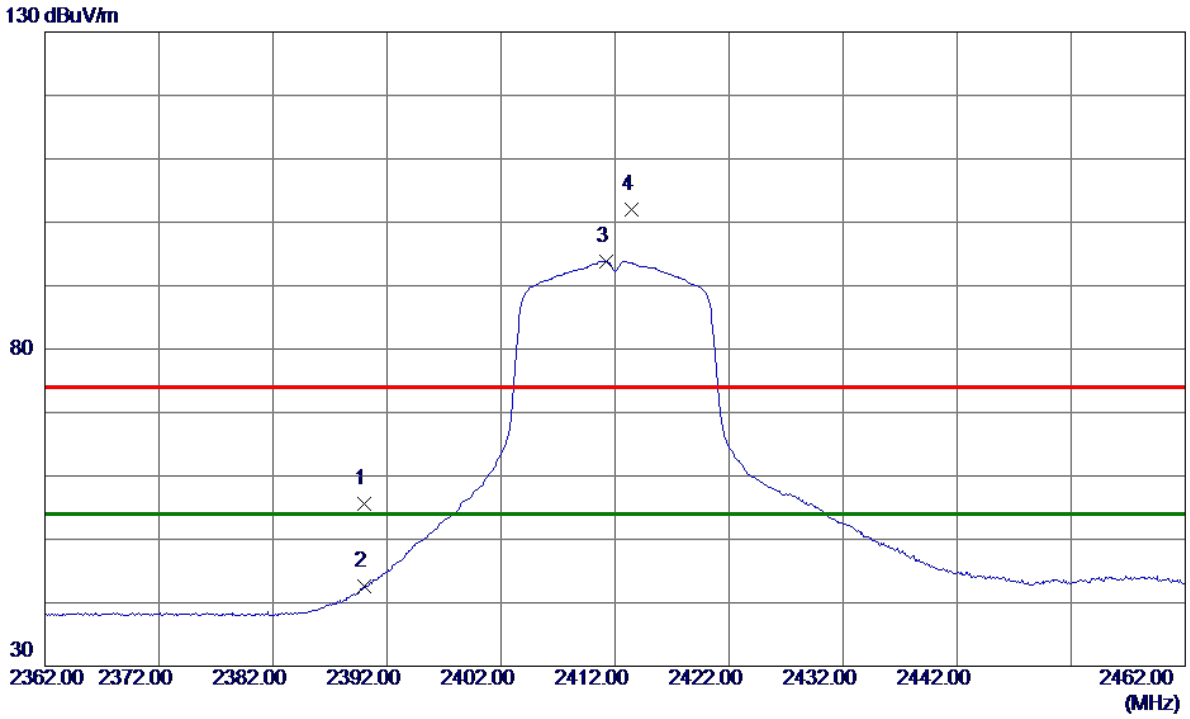
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.5050	45.24	3.60	48.84	74.00	-25.16	Peak	
2 *	4825.6100	32.84	3.61	36.45	54.00	-17.55	AVG	

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	48.66	6.89	55.55	74.00	-18.45	Peak	
2	2390.0000	35.66	6.89	42.55	54.00	-11.45	AVG	
3 *	2411.2000	87.02	6.87	93.89	54.00	39.89	AVG	No Limit
4	2413.4000	95.06	6.87	101.93	74.00	27.93	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

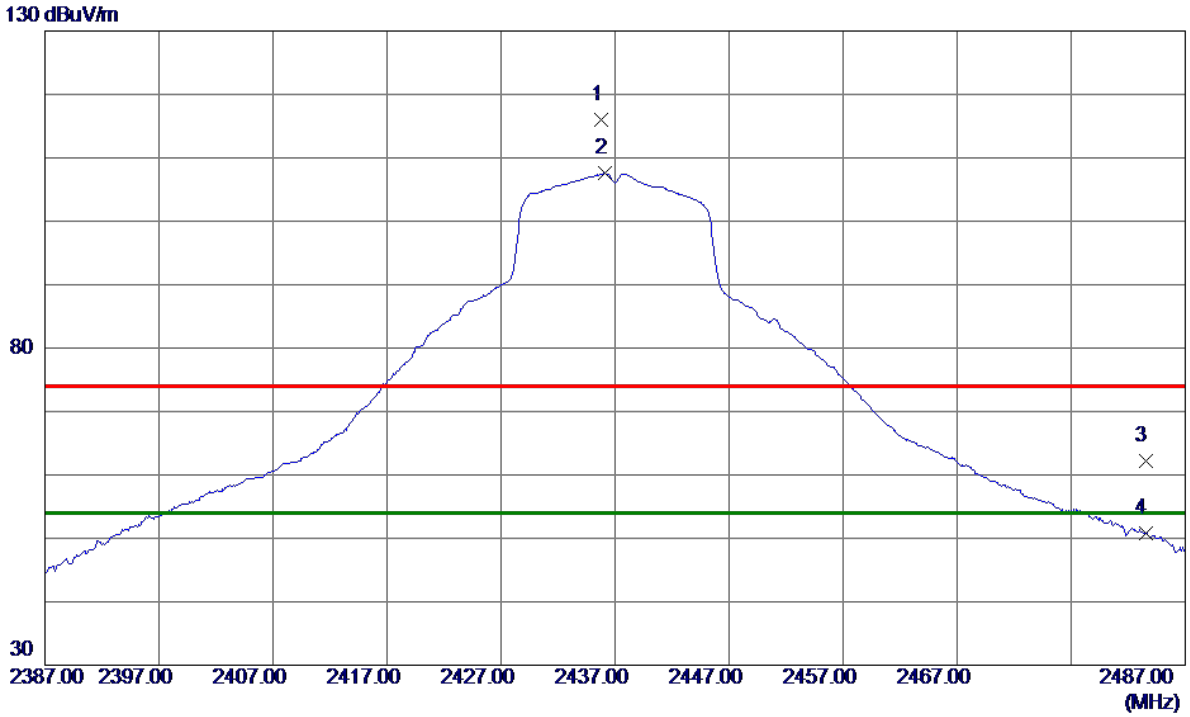
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.3700	40.98	3.60	44.58	74.00	-29.42	Peak	
2 *	4825.3500	29.99	3.60	33.59	54.00	-20.41	AVG	

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	2435.8000	109.17	6.84	116.01	74.00	42.01	Peak	No Limit
2 *	2436.1000	100.71	6.84	107.55	54.00	53.55	AVG	No Limit
3	2483.5000	55.35	6.79	62.14	74.00	-11.86	Peak	
4	2483.5000	44.01	6.79	50.80	54.00	-3.20	AVG	

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

Test Mode:	TX G Mode 2437 MHz

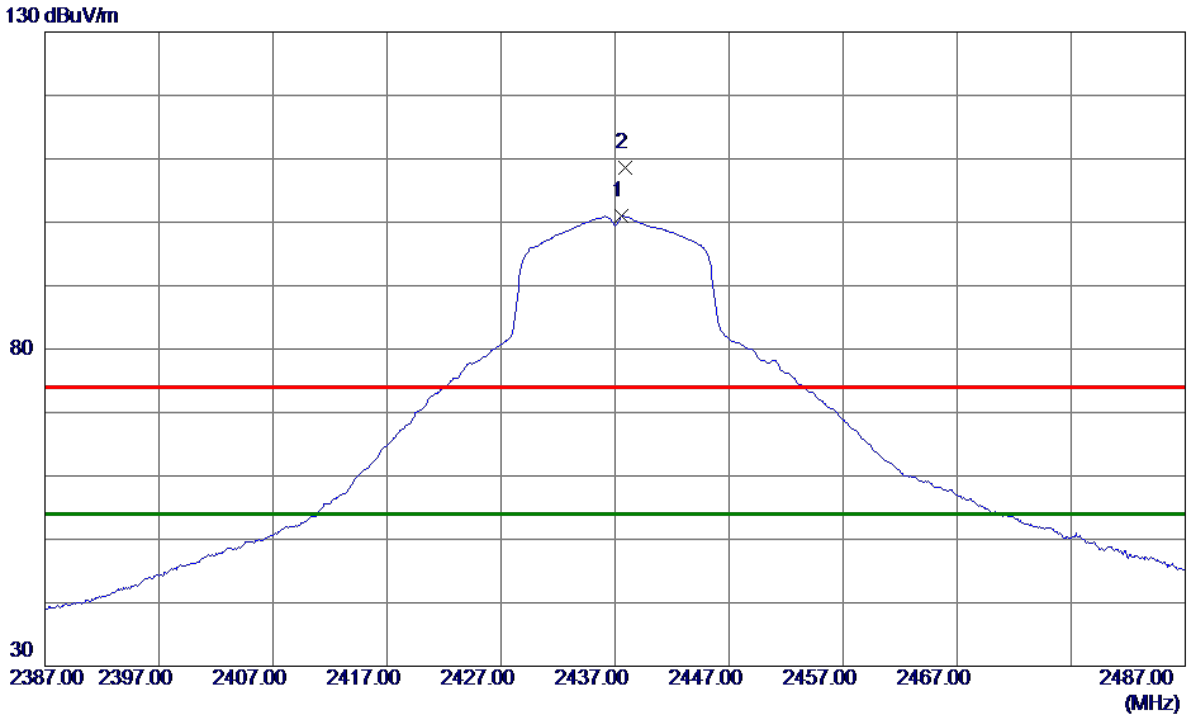
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.3750	46.73	3.75	50.48	74.00	-23.52	Peak	
2 *	4875.0450	35.26	3.75	39.01	54.00	-14.99	AVG	

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 *	2437.6000	94.09	6.84	100.93	54.00	46.93	AVG	No Limit
2	2437.9000	101.67	6.84	108.51	74.00	34.51	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

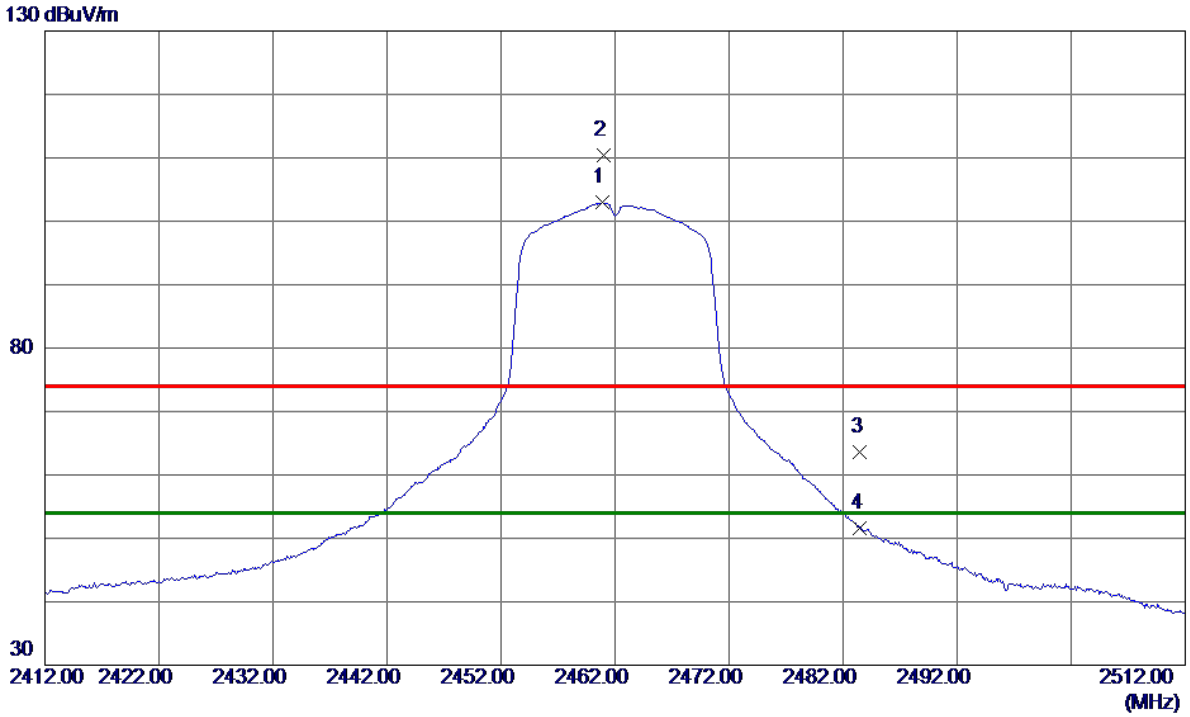
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.2950	43.62	3.75	47.37	74.00	-26.63	Peak	
2 *	4875.1900	31.96	3.75	35.71	54.00	-18.29	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 *	2460.9000	96.09	6.82	102.91	54.00	48.91	AVG	No Limit
2	2461.0000	103.63	6.82	110.45	74.00	36.45	Peak	No Limit
3	2483.5000	56.72	6.79	63.51	74.00	-10.49	Peak	
4	2483.5000	44.72	6.79	51.51	54.00	-2.49	AVG	

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

Test Mode:	TX G Mode 2462 MHz

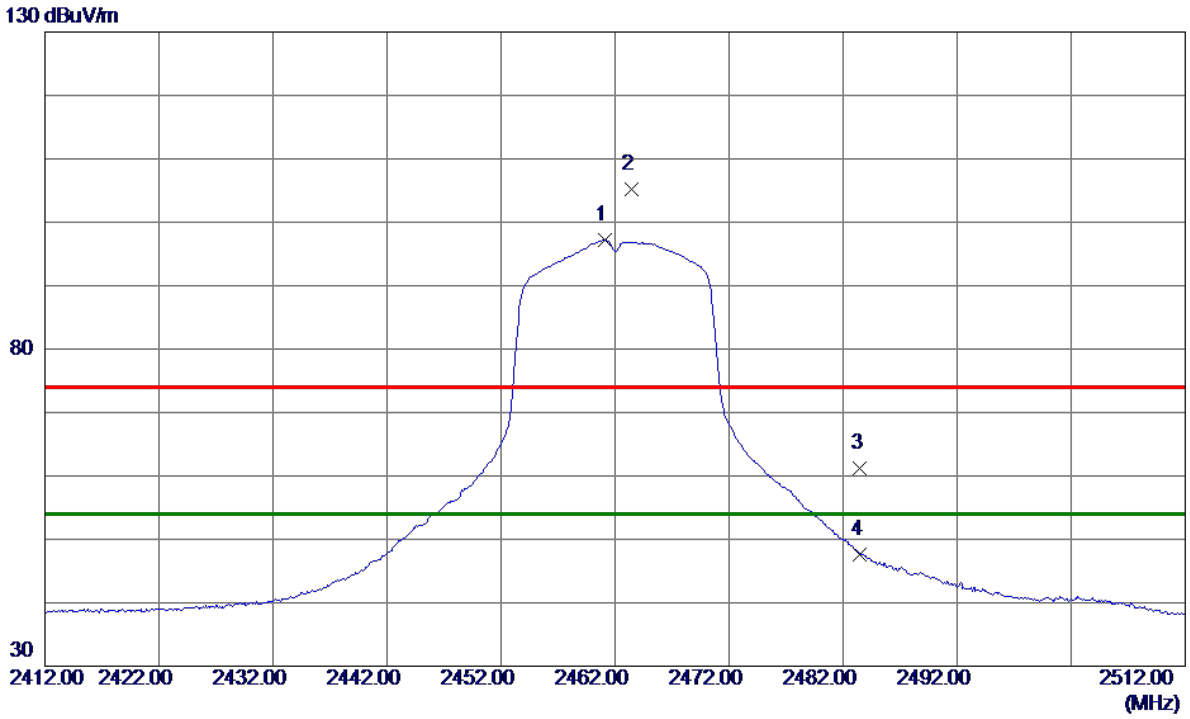
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.5700	42.64	3.90	46.54	74.00	-27.46	Peak	
2 *	4925.0500	30.88	3.90	34.78	54.00	-19.22	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 *	2461.1000	90.33	6.82	97.15	54.00	43.15	AVG	No Limit
2	2463.4000	98.36	6.81	105.17	74.00	31.17	Peak	No Limit
3	2483.5000	54.35	6.79	61.14	74.00	-12.86	Peak	
4	2483.5000	40.86	6.79	47.65	54.00	-6.35	AVG	

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

Test Mode:	TX G Mode 2462 MHz

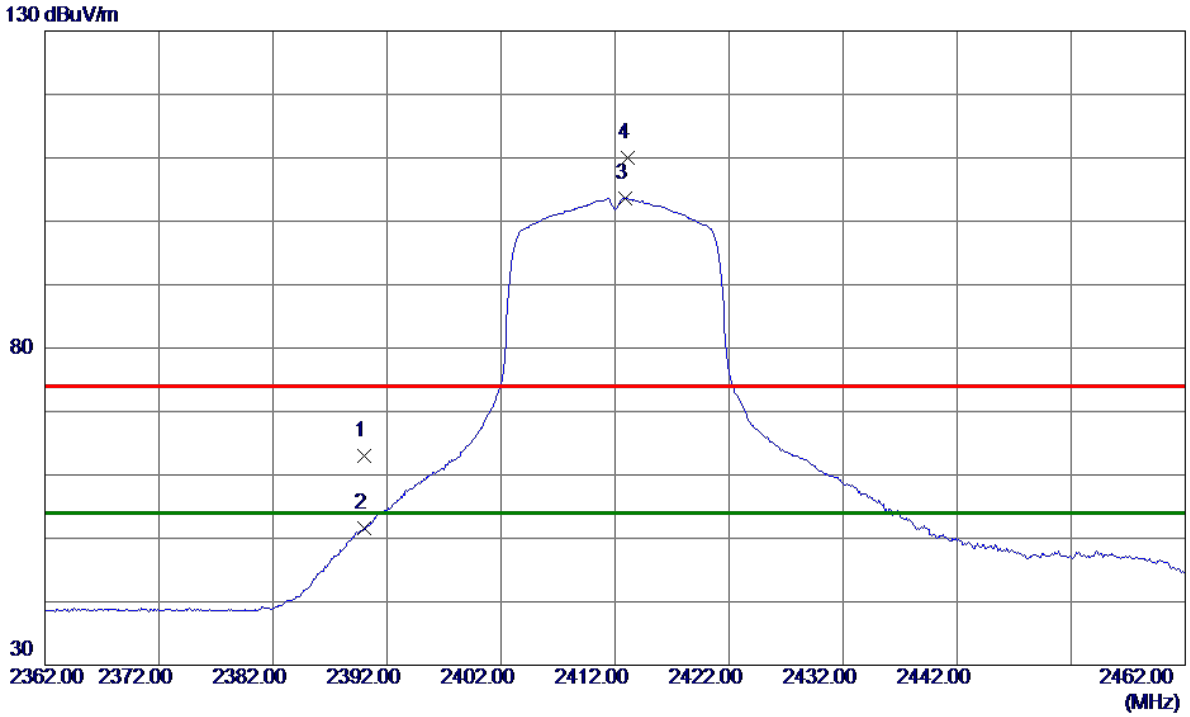
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.9550	40.07	3.90	43.97	74.00	-30.03	Peak	
2 *	4924.5250	29.03	3.90	32.93	54.00	-21.07	AVG	

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

Test Mode:	TX N-20M Mode 2412 MHz

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	56.16	6.89	63.05	74.00	-10.95	Peak	
2	2390.0000	44.66	6.89	51.55	54.00	-2.45	AVG	
3 *	2412.9000	96.75	6.87	103.62	54.00	49.62	AVG	No Limit
4	2413.1000	103.11	6.87	109.98	74.00	35.98	Peak	No Limit

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

Test Mode:	TX N-20M Mode 2412 MHz

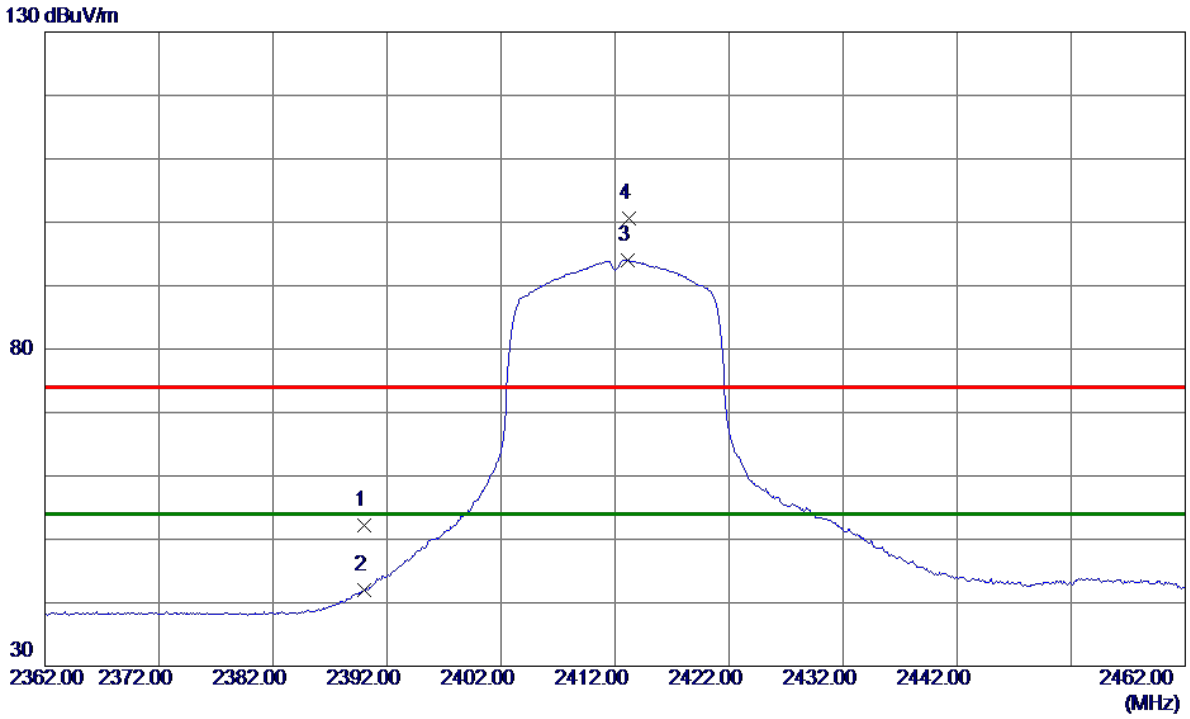
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4822.8300	33.50	3.60	37.10	54.00	-16.90	AVG	
2	4826.0750	46.01	3.61	49.62	74.00	-24.38	Peak	

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	45.35	6.89	52.24	74.00	-21.76	Peak	
2	2390.0000	35.05	6.89	41.94	54.00	-12.06	AVG	
3 *	2413.1000	87.18	6.87	94.05	54.00	40.05	AVG	No Limit
4	2413.2000	93.76	6.87	100.63	74.00	26.63	Peak	No Limit

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

Test Mode:	TX N-20M Mode 2412 MHz

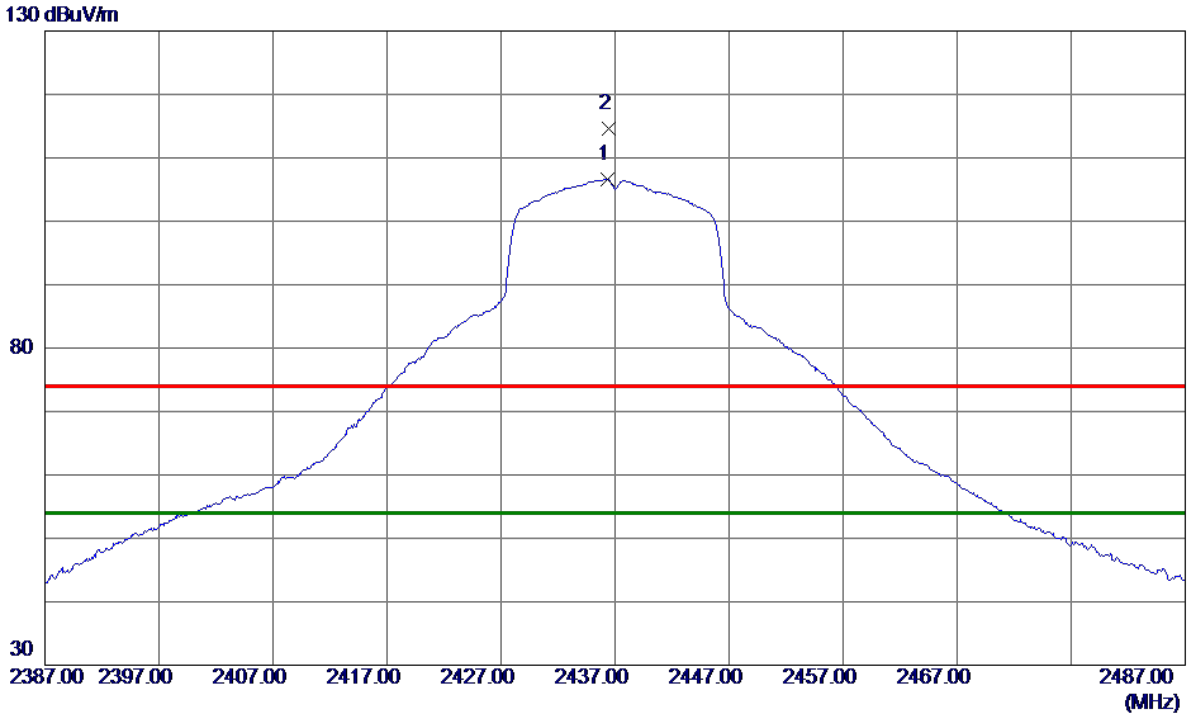
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824.3300	31.39	3.60	34.99	54.00	-19.01	AVG	
2	4825.4600	42.49	3.60	46.09	74.00	-27.91	Peak	

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

Test Mode:	TX N-20M Mode 2437 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2436.3000	99.74	6.84	106.58	54.00	52.58	AVG	No Limit
2	2436.4000	107.84	6.84	114.68	74.00	40.68	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

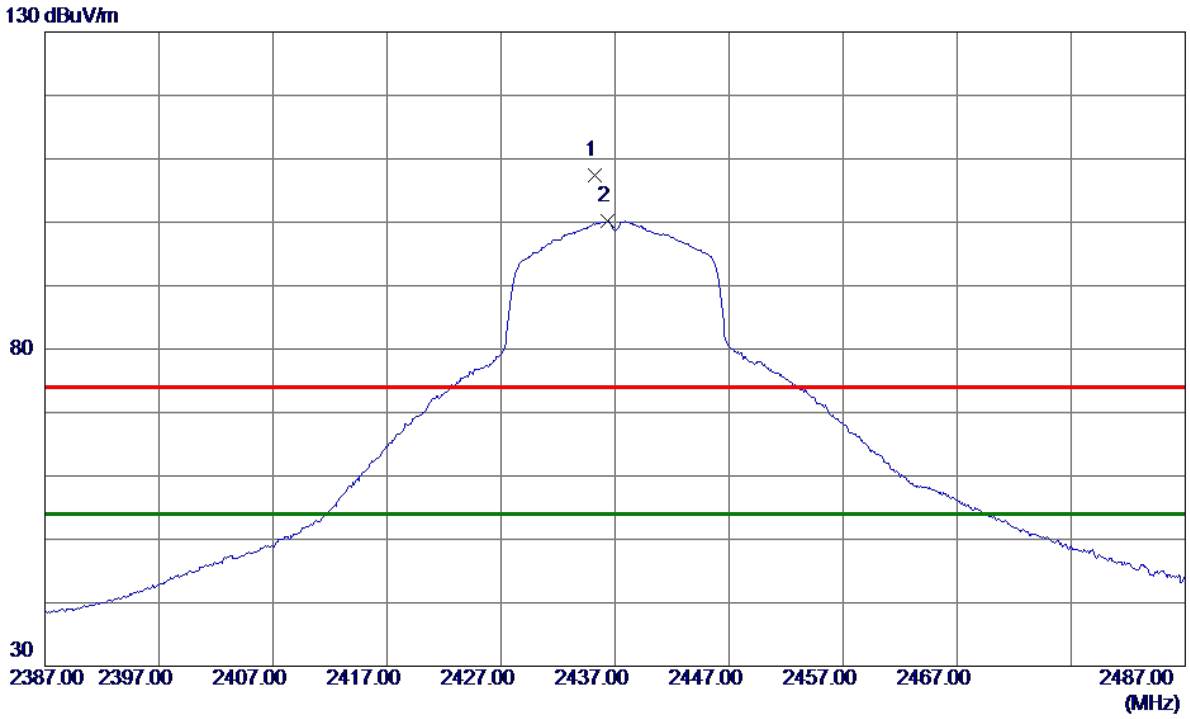
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.9700	35.44	3.75	39.19	54.00	-14.81	AVG	
2	4876.0200	47.01	3.76	50.77	74.00	-23.23	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	2435.2000	100.63	6.84	107.47	74.00	33.47	Peak	No Limit
2 *	2436.3000	93.32	6.84	100.16	54.00	46.16	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

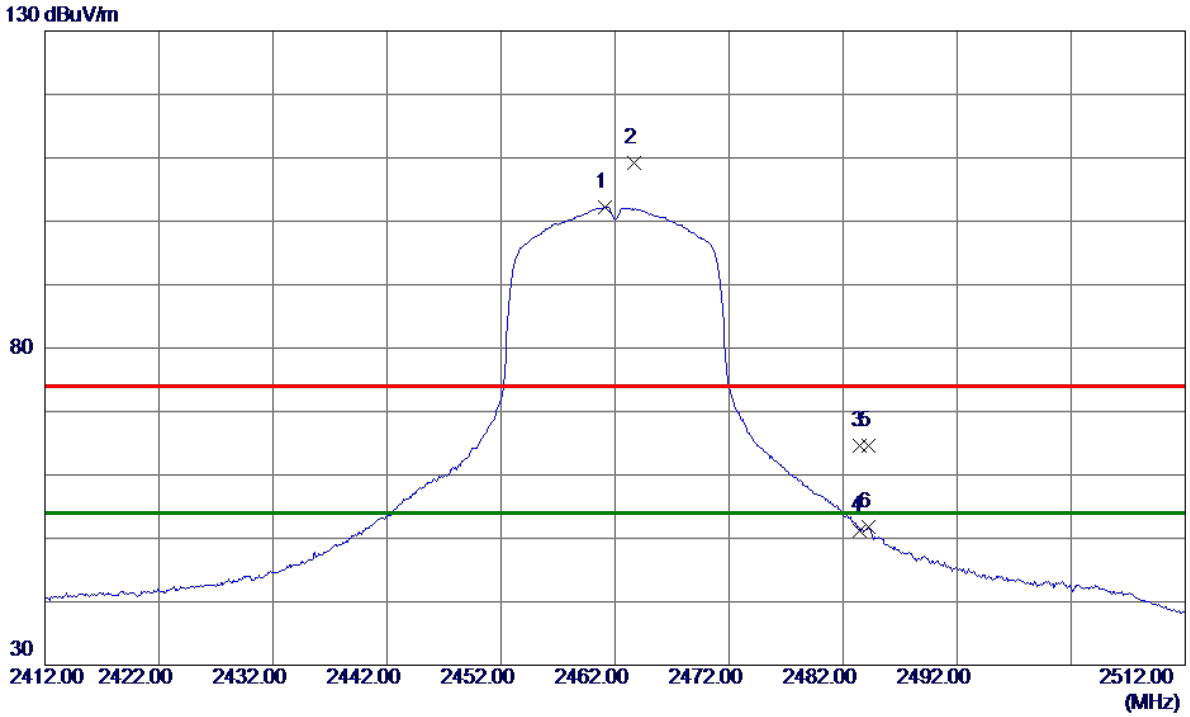
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4875.0299	33.34	3.75	37.09	54.00	-16.91	AVG	
2	4876.0250	44.27	3.76	48.03	74.00	-25.97	Peak	

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

Test Mode:	TX N-20M Mode 2462 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2461.1000	95.41	6.82	102.23	54.00	48.23	AVG	No Limit
2	2463.7000	102.34	6.81	109.15	74.00	35.15	Peak	No Limit
3	2483.5000	57.81	6.79	64.60	74.00	-9.40	Peak	
4	2483.5000	44.43	6.79	51.22	54.00	-2.78	AVG	
5	2484.2000	57.85	6.79	64.64	74.00	-9.36	Peak	
6	2484.2000	44.92	6.79	51.71	54.00	-2.29	AVG	

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

Test Mode:	TX N-20M Mode 2462 MHz

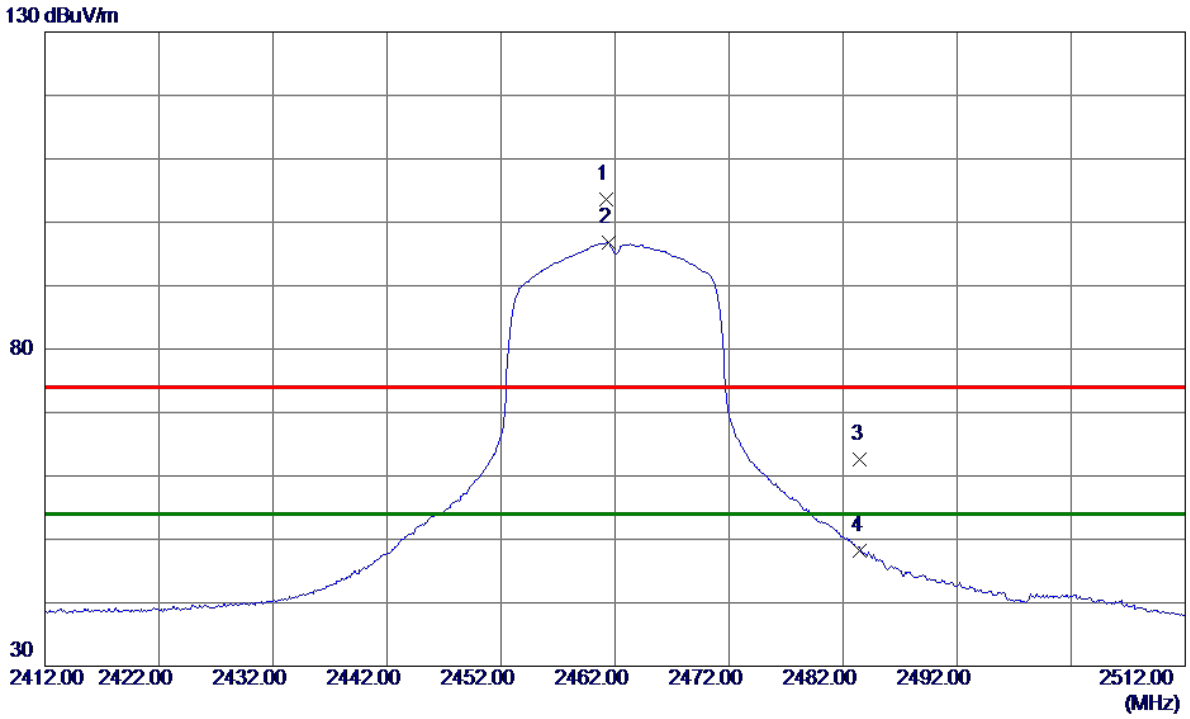
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4922.7799	31.99	3.90	35.89	54.00	-18.11	AVG	
2	4924.2900	43.04	3.90	46.94	74.00	-27.06	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	2461.2000	96.84	6.82	103.66	74.00	29.66	Peak	No Limit
2 *	2461.4000	89.97	6.82	96.79	54.00	42.79	AVG	No Limit
3	2483.5000	55.90	6.79	62.69	74.00	-11.31	Peak	
4	2483.5000	41.45	6.79	48.24	54.00	-5.76	AVG	

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

Test Mode:	TX N-20M Mode 2462 MHz

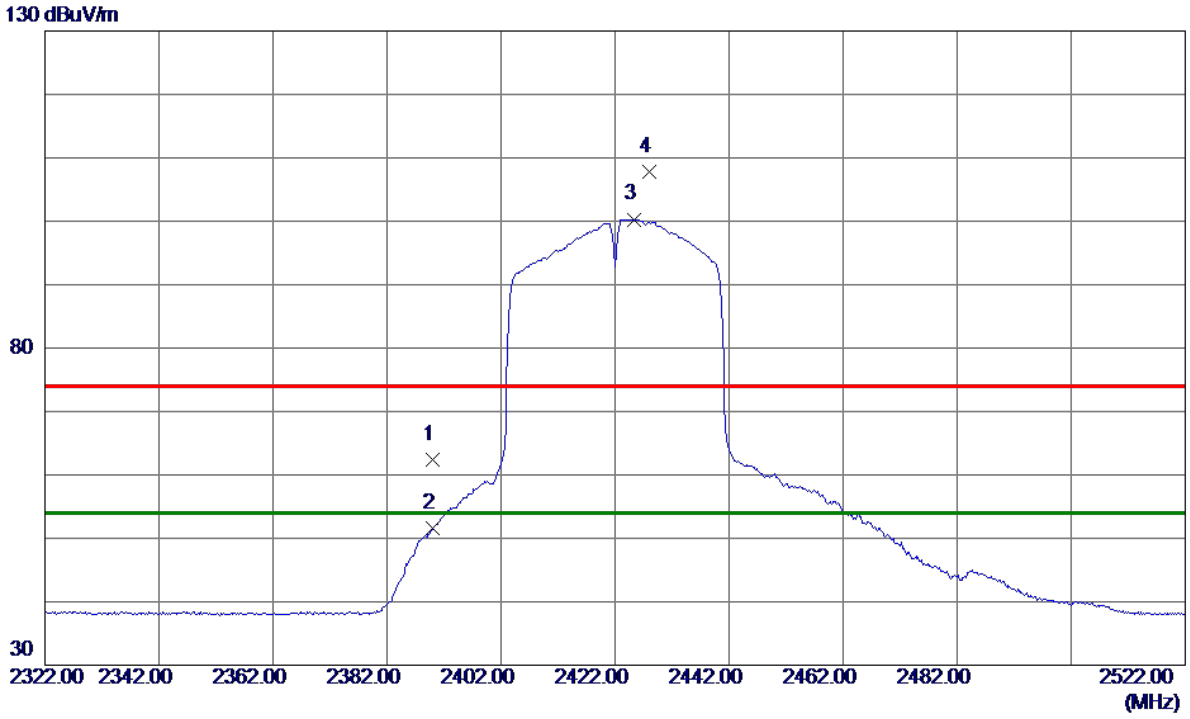
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.3950	30.12	3.90	34.02	54.00	-19.98	AVG	
2	4926.4450	40.74	3.91	44.65	74.00	-29.35	Peak	

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	55.53	6.89	62.42	74.00	-11.58	Peak	
2	2390.0000	44.73	6.89	51.62	54.00	-2.38	AVG	
3 *	2425.4000	93.45	6.85	100.30	54.00	46.30	AVG	No Limit
4	2428.0000	100.97	6.85	107.82	74.00	33.82	Peak	No Limit

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

Test Mode:	TX N-40M Mode 2422MHz

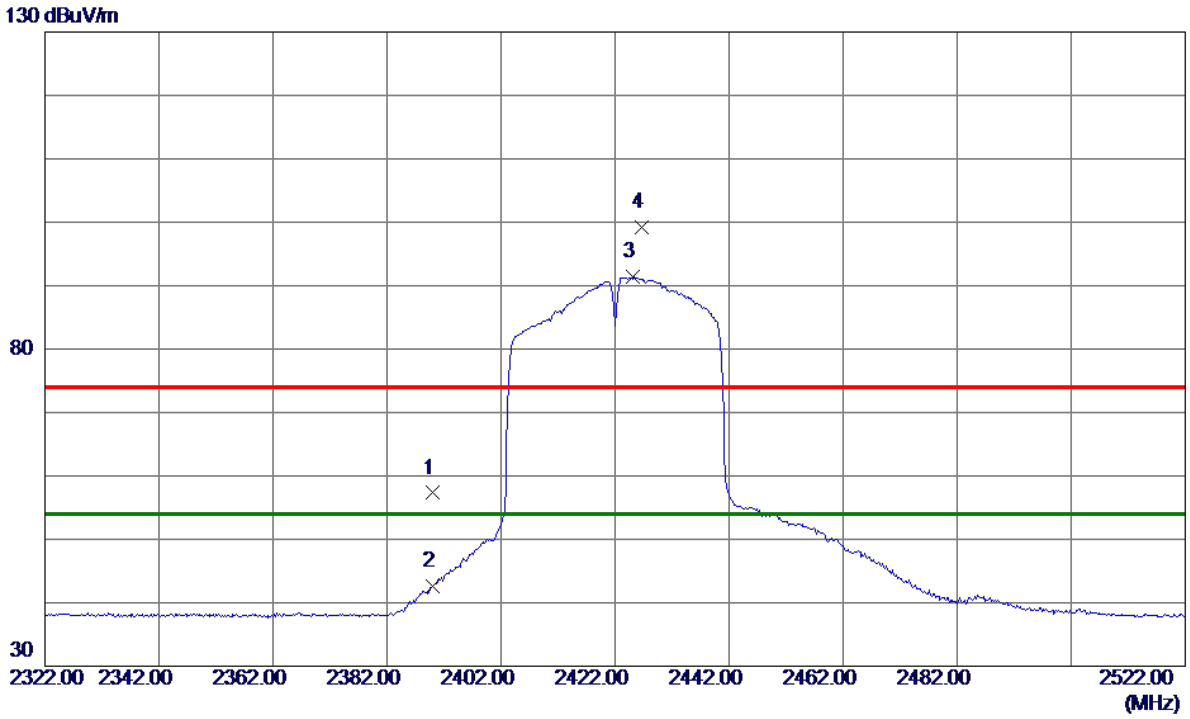
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4843.1600	39.31	3.66	42.97	74.00	-31.03	Peak	
2 *	4844.9600	28.44	3.66	32.10	54.00	-21.90	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.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	50.41	6.89	57.30	74.00	-16.70	Peak	
2	2390.0000	35.74	6.89	42.63	54.00	-11.37	AVG	
3 *	2425.2000	84.54	6.86	91.40	54.00	37.40	AVG	No Limit
4	2426.6000	92.33	6.85	99.18	74.00	25.18	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

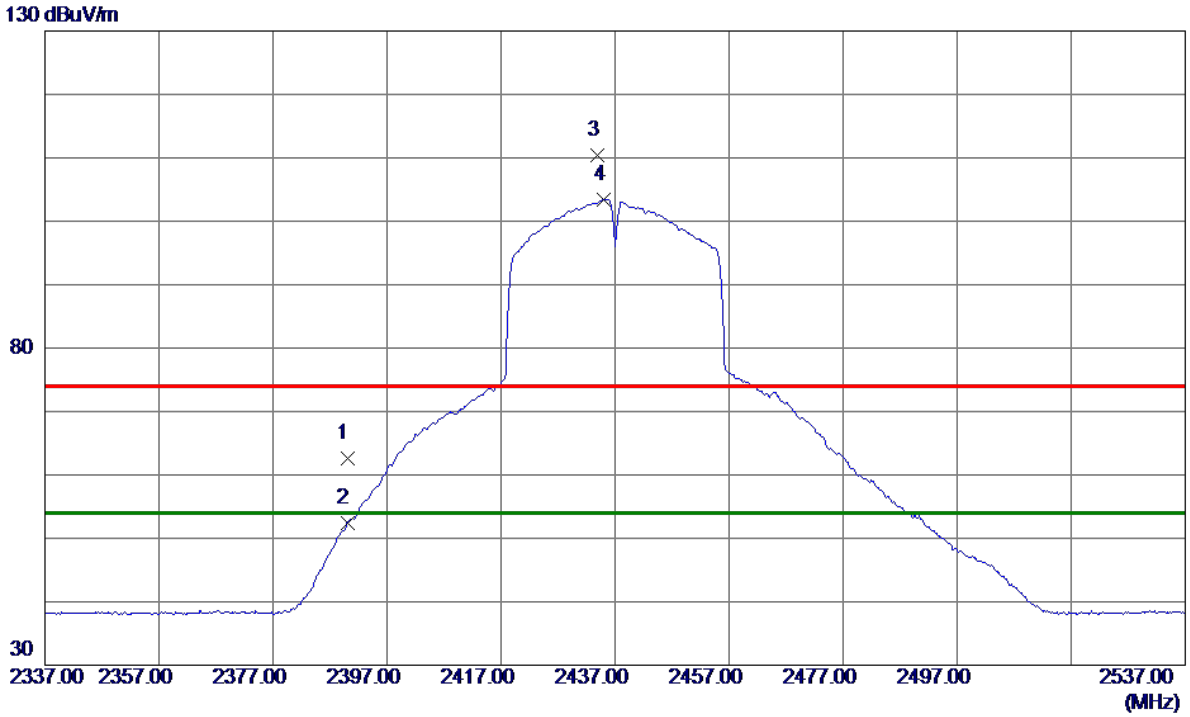
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4844.1600	39.43	3.66	43.09	74.00	-30.91	Peak	
2 *	4845.7250	28.36	3.67	32.03	54.00	-21.97	AVG	

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

Test Mode:	TX N-40M Mode 2437 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	55.77	6.89	62.66	74.00	-11.34	Peak	
2	2390.0000	45.42	6.89	52.31	54.00	-1.69	AVG	
3	2433.8000	103.48	6.85	110.33	74.00	36.33	Peak	No Limit
4 *	2435.0000	96.61	6.84	103.45	54.00	49.45	AVG	No Limit

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

Test Mode:	TX N-40M Mode 2437 MHz

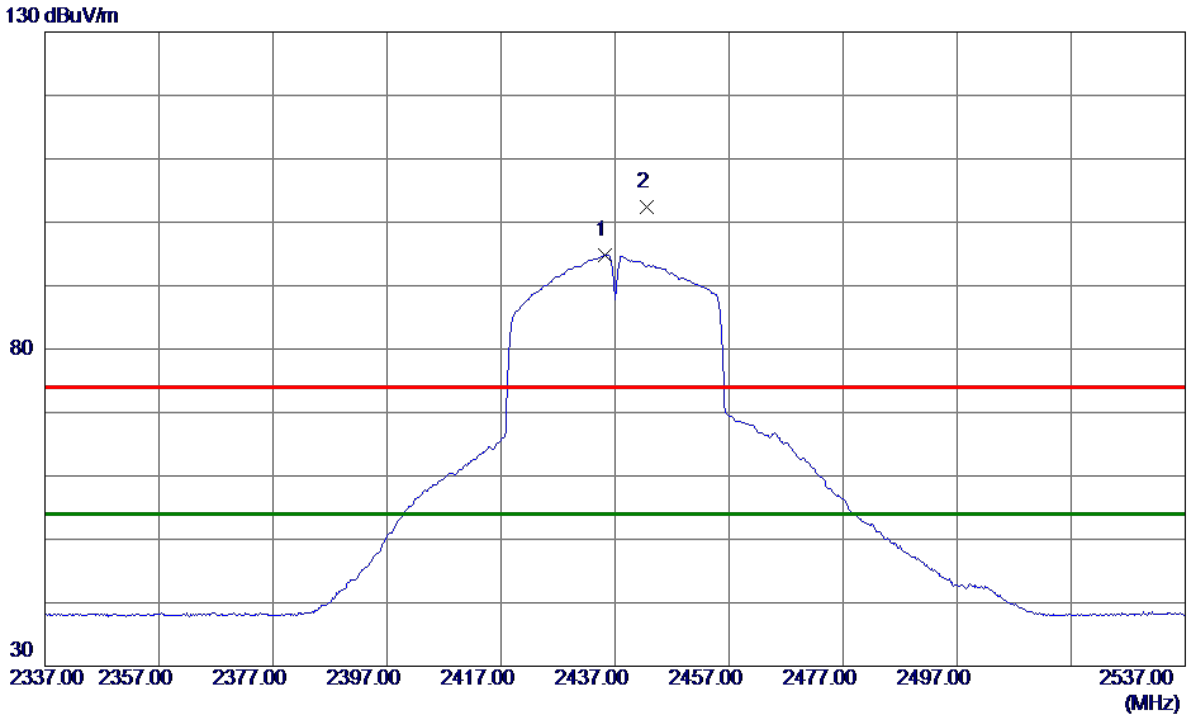
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.9550	30.07	3.75	33.82	54.00	-20.18	AVG	
2	4875.9800	40.33	3.76	44.09	74.00	-29.91	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 *	2435.2000	87.99	6.84	94.83	54.00	40.83	AVG	No Limit
2	2442.6000	95.56	6.84	102.40	74.00	28.40	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

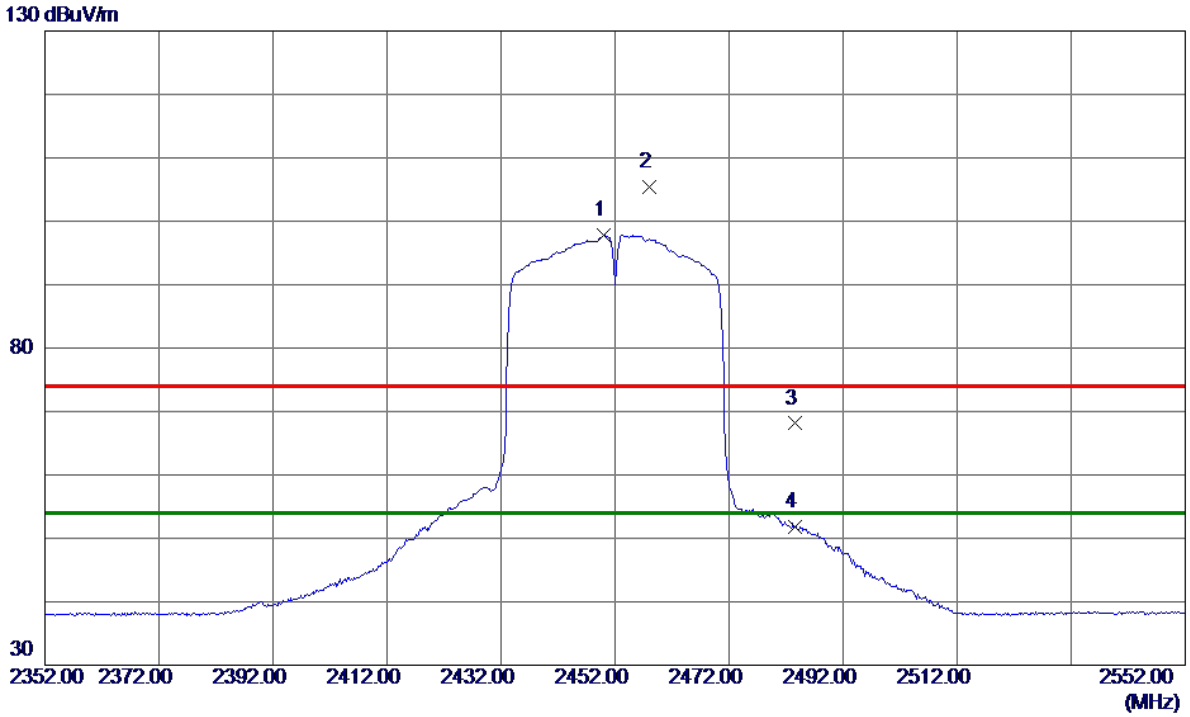
Horizontal

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874.1200	38.63	3.75	42.38	74.00	-31.62	Peak	
2 *	4874.9700	28.56	3.75	32.31	54.00	-21.69	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 *	2450.0000	90.91	6.83	97.74	54.00	43.74	AVG	No Limit
2	2458.0000	98.61	6.82	105.43	74.00	31.43	Peak	No Limit
3	2483.5000	61.31	6.79	68.10	74.00	-5.90	Peak	
4	2483.5000	44.95	6.79	51.74	54.00	-2.26	AVG	

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

Test Mode:	TX N-40M Mode 2452 MHz

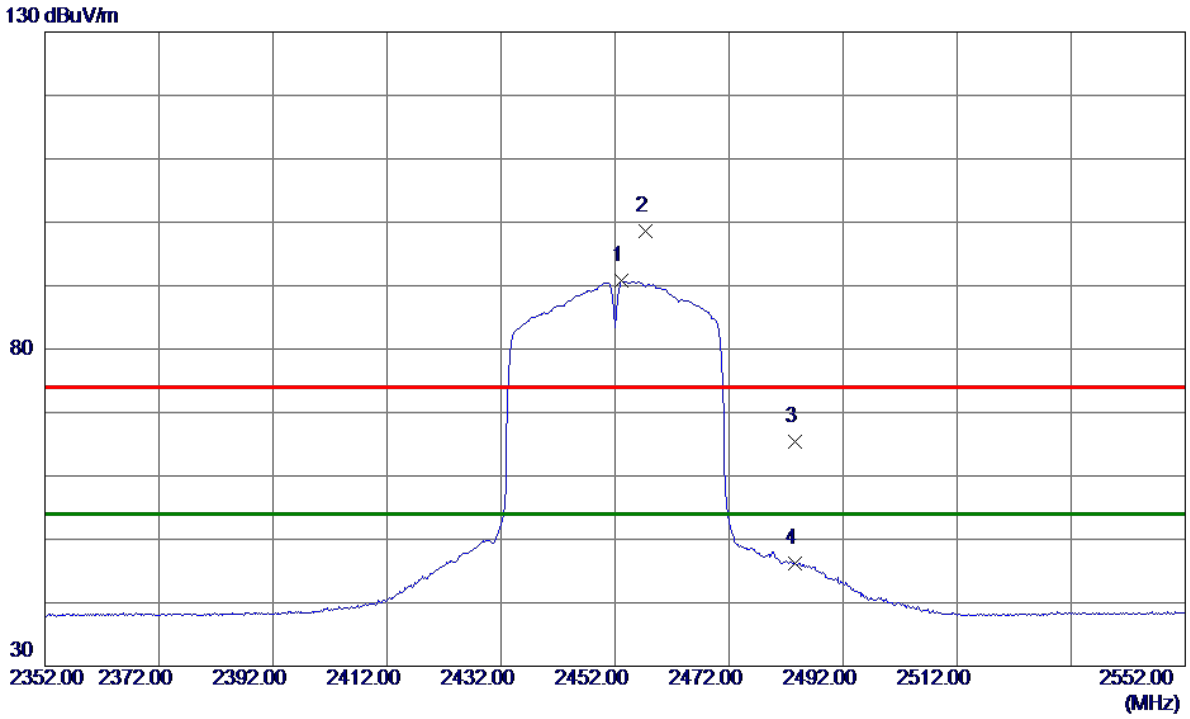
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4903.0200	41.52	3.84	45.36	74.00	-28.64	Peak	
2 *	4904.5650	29.64	3.84	33.48	54.00	-20.52	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 *	2453.2000	83.90	6.83	90.73	54.00	36.73	AVG	No Limit
2	2457.4000	91.77	6.82	98.59	74.00	24.59	Peak	No Limit
3	2483.5000	58.55	6.79	65.34	74.00	-8.66	Peak	
4	2483.5000	39.32	6.79	46.11	54.00	-7.89	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

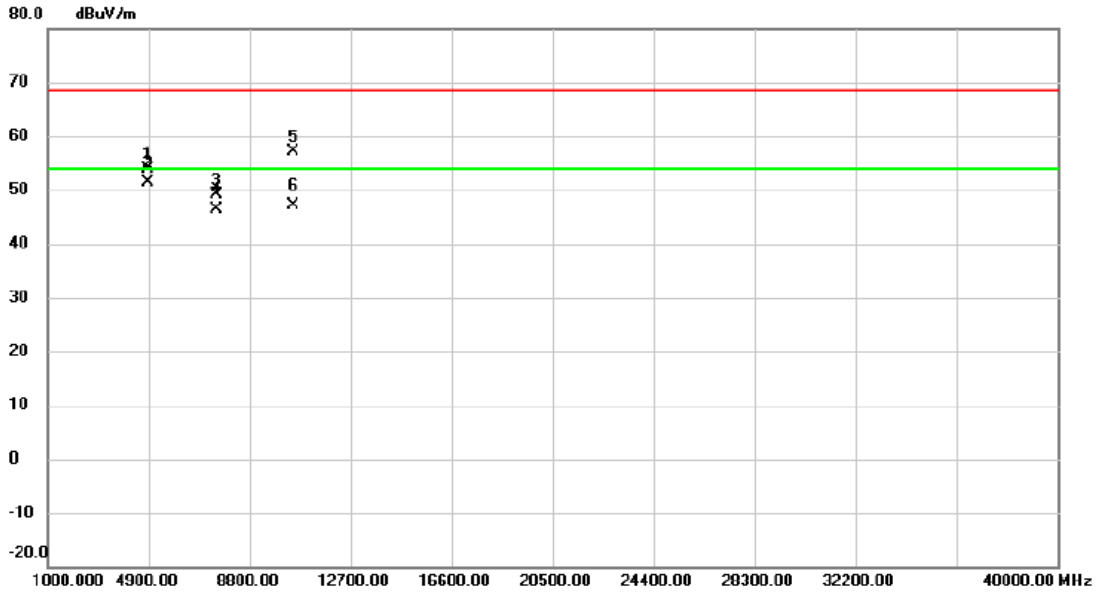
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4903.9650	39.37	3.84	43.21	74.00	-30.79	Peak	
2 *	4905.1000	28.02	3.84	31.86	54.00	-22.14	AVG	

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

The worst case of simultaneous transmission:

Test Mode:	TX WLAN 2.4G B Mode 2437MHz + WLAN 5G AC20 Mode 5240MHz + LTE Band 7 (20MHz) 2510MHz

Vertical

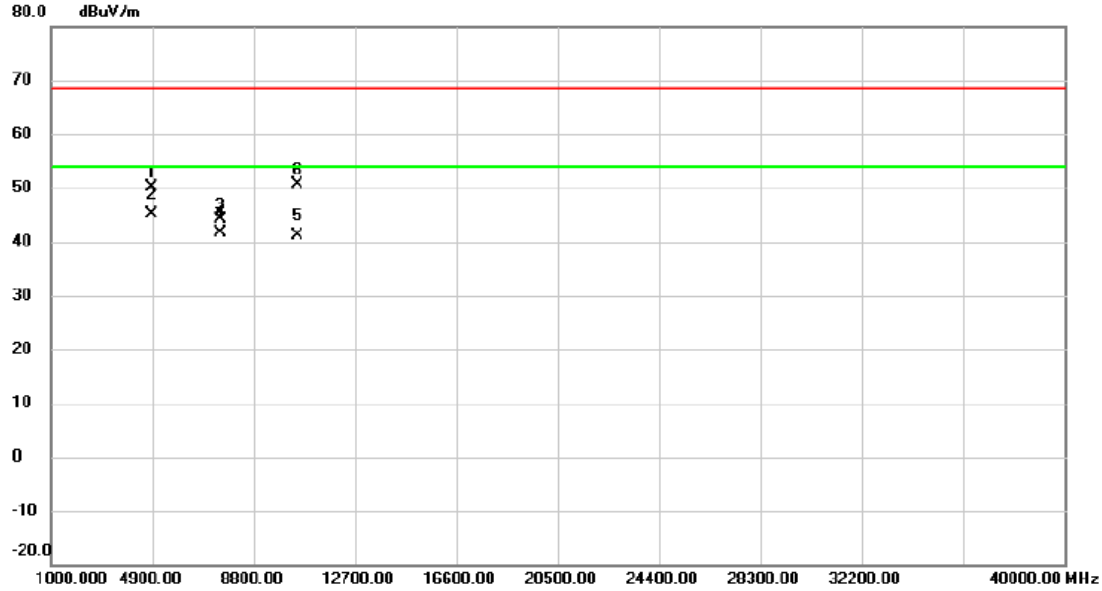


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.130	50.23	3.75	53.98	68.30	-14.32	peak	
2	*	4874.150	47.64	3.75	51.39	54.00	-2.61	AVG	
3		7503.300	39.58	9.58	49.16	68.30	-19.14	peak	
4		7503.400	36.81	9.58	46.39	54.00	-7.61	AVG	
5		10476.020	45.37	11.67	57.04	68.30	-11.26	peak	
6		10476.100	35.54	11.67	47.21	54.00	-6.79	AVG	

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

Test Mode:	TX WLAN 2.4G B Mode 2437MHz + WLAN 5G AC20 Mode 5240MHz + LTE Band 7 (20MHz) 2510MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4873.820	46.33	3.75	50.08	68.30	-18.22	peak	
2	*	4873.940	41.50	3.75	45.25	54.00	-8.75	AVG	
3		7503.300	34.61	9.58	44.19	68.30	-24.11	peak	
4		7503.400	31.93	9.58	41.51	54.00	-12.49	AVG	
5		10471.520	29.52	11.66	41.18	54.00	-12.82	AVG	
6		10471.580	38.89	11.66	50.55	68.30	-17.75	peak	

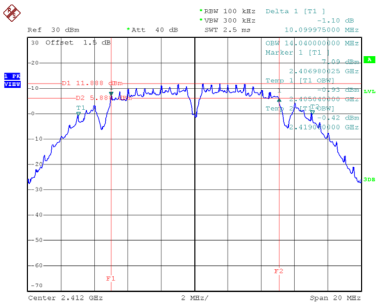
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	TX B Mode

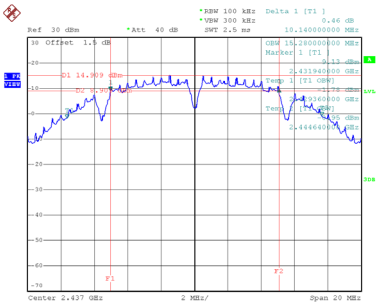
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	10.10	500	Complies
06	2437	10.14	500	Complies
11	2462	10.10	500	Complies

CH01



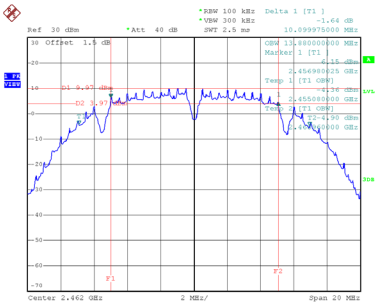
Date: 17.APR.2020 09:44:14

CH06



Date: 17.APR.2020 09:46:33

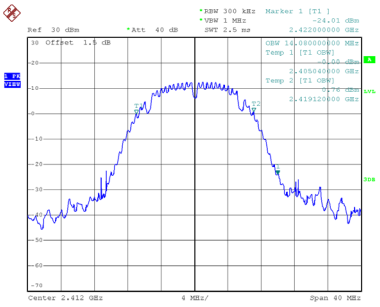
CH11



Date: 17.APR.2020 09:48:35

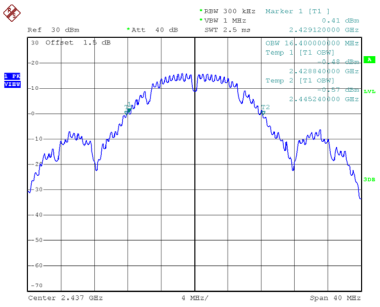
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	14.08	Complies
06	2437	16.40	Complies
11	2462	13.92	Complies

CH01



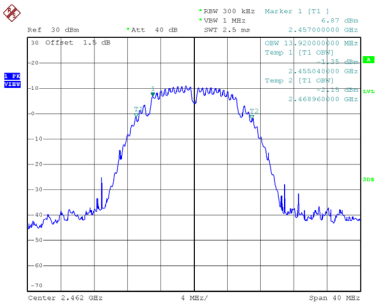
Date: 17.APR.2020 10:12:41

CH06



Date: 17.APR.2020 10:14:59

CH11

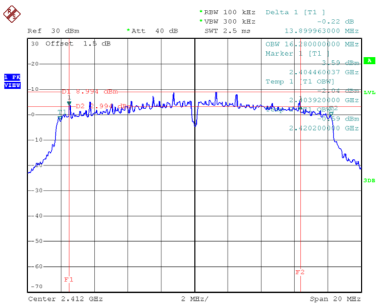


Date: 17.APR.2020 10:15:48

Test Mode	TX G Mode

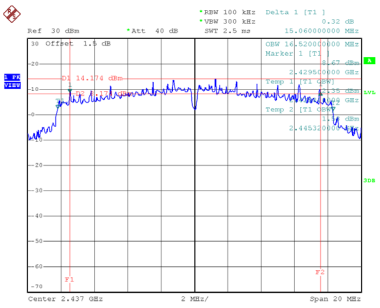
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	13.90	500	Complies
06	2437	15.06	500	Complies
11	2462	12.65	500	Complies

CH01



Date: 17.APR.2020 09:51:07

CH06



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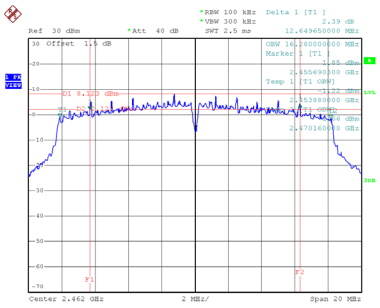
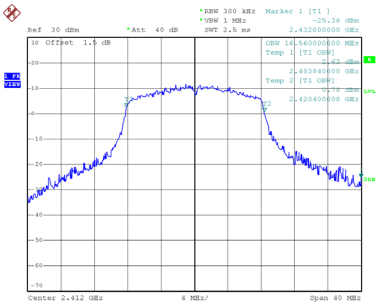
CH11



Date: 17.APR.2020 09:54:55

Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	16.56	Complies
06	2437	21.60	Complies
11	2462	16.48	Complies

CH01



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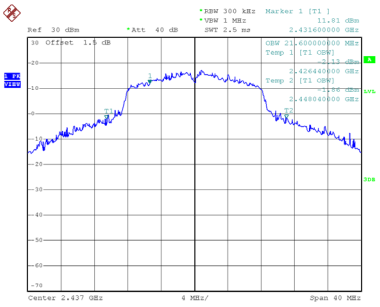
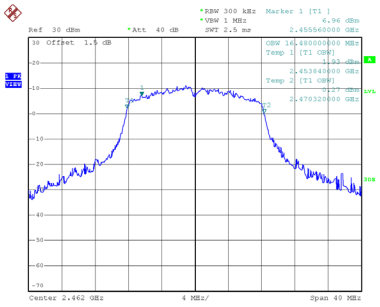
CH06



Date: 17.APR.2020 10:18:49

CH11

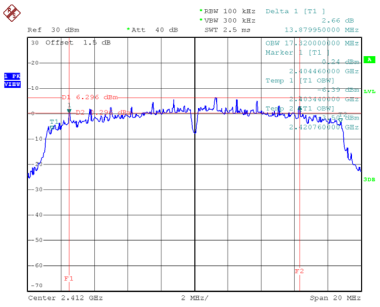


Date: 17.APR.2020 10:19:22

Test Mode	TX N-20M Mode

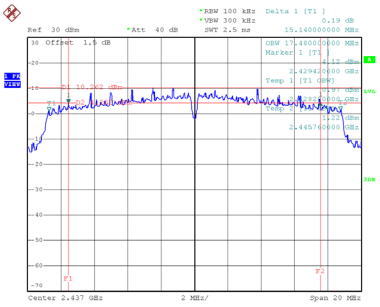
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	13.88	500	Complies
06	2437	15.14	500	Complies
11	2462	15.12	500	Complies

CH01



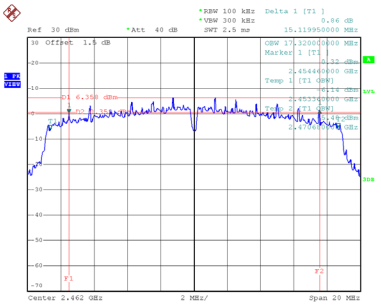
Date: 17.APR.2020 10:38:03

CH06



Date: 17.APR.2020 10:39:44

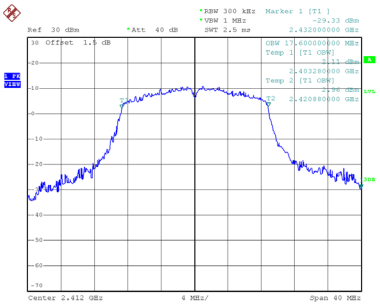
CH11



Date: 17.APR.2020 10:41:20

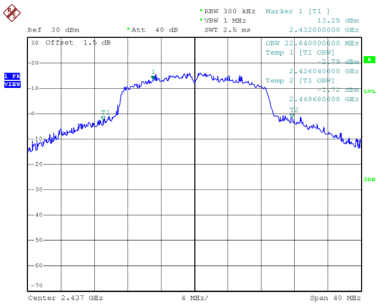
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.60	Complies
06	2437	22.64	Complies
11	2462	17.68	Complies

CH01



Date: 17.APR.2020 10:20:03

CH06



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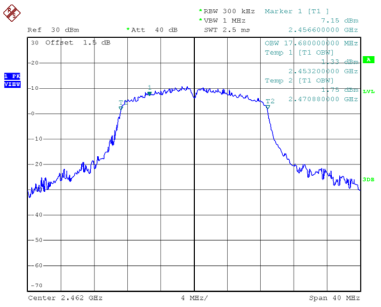
CH11

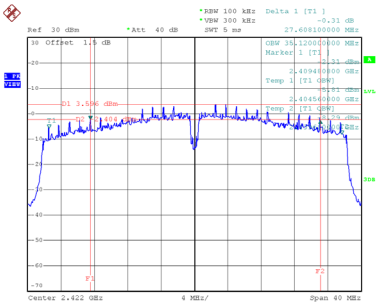


Date: 17.APR.2020 10:21:13

Test Mode	TX N-40M Mode

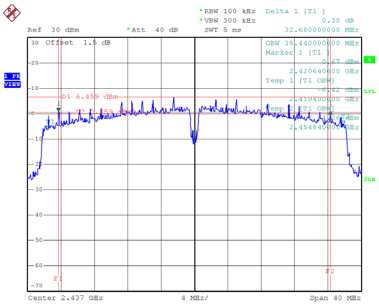
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	27.61	500	Complies
06	2437	32.68	500	Complies
09	2452	30.08	500	Complies

CH03



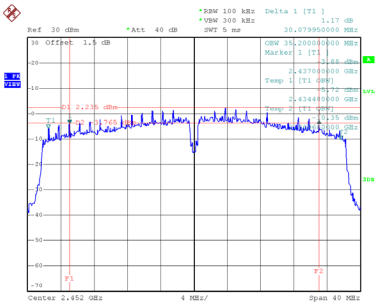
Date: 17.APR.2020 10:43:17

CH06



Date: 17.APR.2020 10:44:54

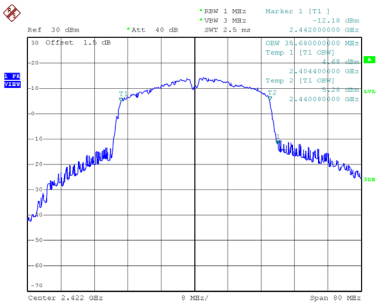
CH09



Date: 17.APR.2020 10:46:53

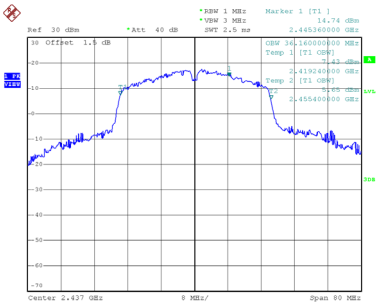
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
03	2422	35.68	Complies
06	2437	36.16	Complies
09	2452	35.52	Complies

CH03



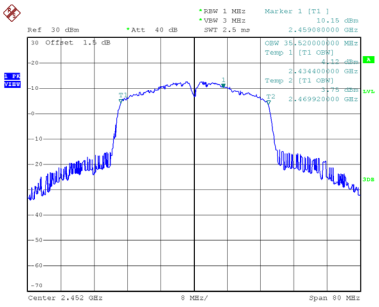
Date: 17.APR.2020 10:21:50

CH06



Date: 17.APR.2020 10:22:19

CH09



Date: 17.APR.2020 10:23:01

APPENDIX F - MAXIMUM OUTPUT POWER

Non Beamforming

Test Mode	TX B Mode_Ant. 2

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	25.08	30.00	1.0000	Complies
06	2437	27.71	30.00	1.0000	Complies
11	2462	23.83	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	22.51	30.00	1.0000	Complies
06	2437	25.91	30.00	1.0000	Complies
11	2462	21.10	30.00	1.0000	Complies

Test Mode	TX G Mode_Ant. 2

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	27.11	30.00	1.0000	Complies
06	2437	28.47	30.00	1.0000	Complies
11	2462	26.47	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.66	30.00	1.0000	Complies
06	2437	20.09	30.00	1.0000	Complies
11	2462	19.14	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 1

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	24.99	30.00	1.0000	Complies
06	2437	25.12	30.00	1.0000	Complies
11	2462	25.71	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.87	30.00	1.0000	Complies
06	2437	14.92	30.00	1.0000	Complies
11	2462	16.95	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 2

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	26.38	30.00	1.0000	Complies
06	2437	26.74	30.00	1.0000	Complies
11	2462	26.46	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	16.74	30.00	1.0000	Complies
06	2437	17.65	30.00	1.0000	Complies
11	2462	18.38	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Total

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	28.75	29.13	0.8185	Complies
06	2437	29.02	29.13	0.8185	Complies
11	2462	29.11	29.13	0.8185	Complies

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.91	30.00	1.0000	Complies
06	2437	19.50	30.00	1.0000	Complies
11	2462	20.73	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 1

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	24.73	30.00	1.0000	Complies
06	2437	25.16	30.00	1.0000	Complies
09	2452	24.09	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	17.22	30.00	1.0000	Complies
06	2437	17.88	30.00	1.0000	Complies
09	2452	15.91	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 2

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	26.48	30.00	1.0000	Complies
06	2437	26.68	30.00	1.0000	Complies
09	2452	25.23	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	19.09	30.00	1.0000	Complies
06	2437	20.23	30.00	1.0000	Complies
09	2452	17.88	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Total

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	28.70	29.13	0.8185	Complies
06	2437	29.00	29.13	0.8185	Complies
09	2452	27.71	29.13	0.8185	Complies

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	21.27	30.00	1.0000	Complies
06	2437	22.22	30.00	1.0000	Complies
09	2452	20.02	30.00	1.0000	Complies

Beamforming

Test Mode	TX N-20M Mode_Ant. 1

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	24.31	30.00	1.0000	Complies
06	2437	24.43	30.00	1.0000	Complies
11	2462	24.98	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	13.16	30.00	1.0000	Complies
06	2437	13.26	30.00	1.0000	Complies
11	2462	14.29	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Ant. 2

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	26.18	30.00	1.0000	Complies
06	2437	26.59	30.00	1.0000	Complies
11	2462	26.14	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	14.93	30.00	1.0000	Complies
06	2437	15.84	30.00	1.0000	Complies
11	2462	15.73	30.00	1.0000	Complies

Test Mode	TX N-20M Mode_Total

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	28.36	28.73	0.7464	Complies
06	2437	28.65	28.73	0.7464	Complies
11	2462	28.61	28.73	0.7464	Complies

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.14	30.00	1.0000	Complies
06	2437	17.75	30.00	1.0000	Complies
11	2462	18.08	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 1

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	24.23	30.00	1.0000	Complies
06	2437	24.71	30.00	1.0000	Complies
09	2452	23.73	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	14.86	30.00	1.0000	Complies
06	2437	15.44	30.00	1.0000	Complies
09	2452	14.17	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Ant. 2

Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	26.08	30.00	1.0000	Complies
06	2437	26.23	30.00	1.0000	Complies
09	2452	25.12	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	16.91	30.00	1.0000	Complies
06	2437	17.72	30.00	1.0000	Complies
09	2452	16.04	30.00	1.0000	Complies

Test Mode	TX N-40M Mode_Total

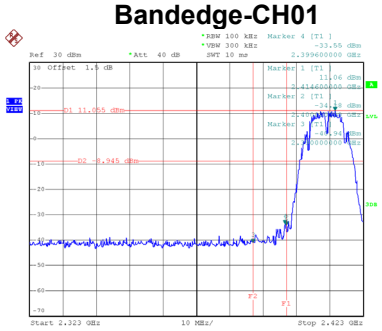
Channel	Frequency (MHz)	Peak Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	28.26	28.73	0.7464	Complies
06	2437	28.55	28.73	0.7464	Complies
09	2452	27.49	28.73	0.7464	Complies

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	19.02	30.00	1.0000	Complies
06	2437	19.74	30.00	1.0000	Complies
09	2452	18.22	30.00	1.0000	Complies

APPENDIX G - CONDUCTED SPURIOUS EMISSIONS

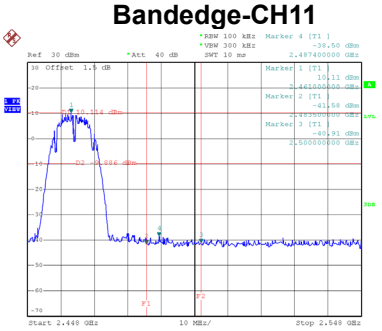
Test Mode	TX B Mode_Ant. 2

Bandedge-CH01



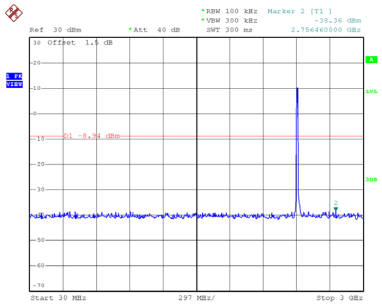
Date: 17.APR.2020 09:44:40

Bandedge-CH11

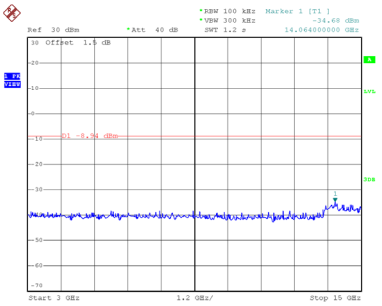


Date: 17.APR.2020 09:48:44

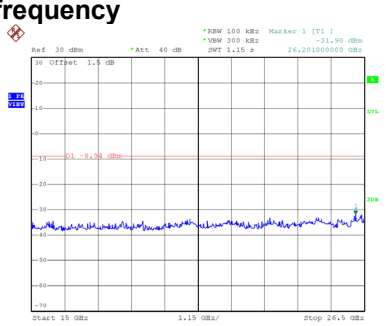
CH01 – 10th Harmonic of the fundamental frequency



Date: 17.APR.2020 09:44:54

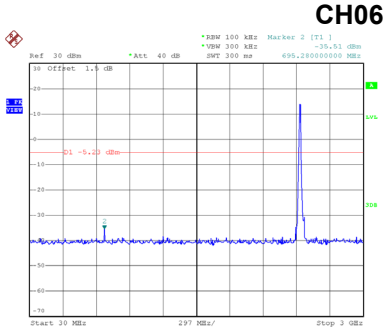


Date: 17.APR.2020 09:45:03

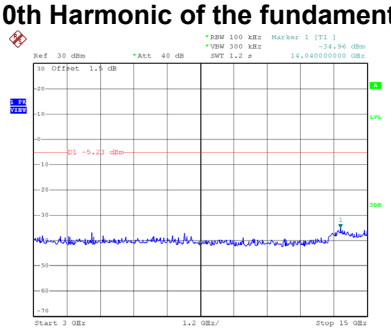


Date: 17.APR.2020 09:45:11

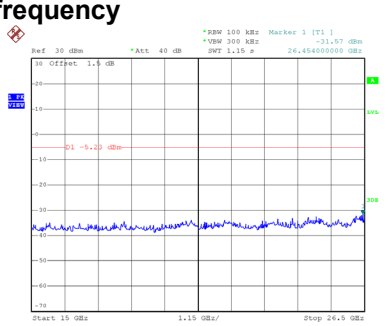
CH06 – 10th Harmonic of the fundamental frequency



Date: 17.APR.2020 09:46:55

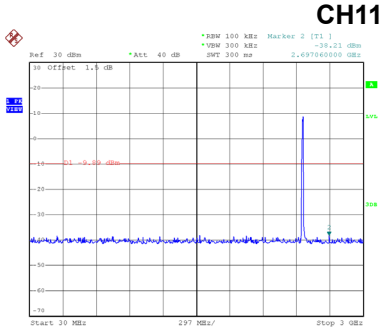


Date: 17.APR.2020 09:47:04

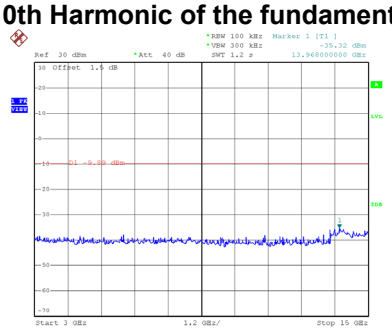


Date: 17.APR.2020 09:47:12

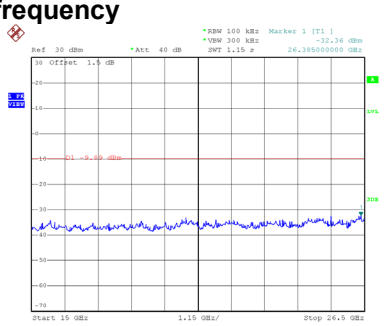
CH11 – 10th Harmonic of the fundamental frequency



Date: 17.APR.2020 09:48:58



Date: 17.APR.2020 09:49:06



Date: 17.APR.2020 09:49:15