FCC Radio Test Report

FCC ID: TE7EAP660HDV1

This report concerns: Original Grant

Project No.	:	2004C014
Equipment	:	AX3600 Wireless Dual-Band Multi-Gigabit Ceiling Mount Access Point
Brand Name	:	tp-link
Test Model	:	EAP660 HD
Series Model	:	N/A
Applicant	:	TP-Link Technologies Co., Ltd.
Address	:	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer	:	TP-Link Technologies Co., Ltd.
Address	:	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Date of Receipt	:	Jun. 08, 2020
Date of Test	:	Jun. 09, 2020 ~ Sep. 14, 2020
Issued Date	:	Oct. 16, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG2020060585 for conducted, DG2020060586 for radiated.
Standard(s)	:	FCC Part15, Subpart C (15.247) ANSI C63.10-2013 FCC KDB 558074 D01 15.247 Meas Guidance v05r02

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

Prepared by : Chella Zheng

Approved by : Ethan Ma

Certificate #5123.02

Add: No.3, Jinshagang 1st Road, Shixia, Dalang Town,Dongguan, Guangdong, China.
Tel: +86-769-8318-3000
Web: www.newbtl.com

Declaration

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

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

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

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

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

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

Limitation

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

Table of Contents Page

Table of Contents Page

Table of Contents Page

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Oct. 16, 2020

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart C (15.247)				
Standard(s) Section	**Test Item**	**Test Result**	**Judgment**	**Remark**
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.247(a)(2)	Bandwidth	APPENDIX E	PASS	------
15.247(b)(3)	Maximum Average Output Power	APPENDIX F	PASS	------
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS	------
15.247(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

C. Other Measurement:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Output Power	±0.95 dB
Conducted Spurious Emission	±2.71 dB
Power Spectral Density	±0.86 dB
Temperature	±0.08 °C
Time	±0.58 %
Supply voltages	±0.3 %

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

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	25°C	53%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	22°C	54%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	24℃	60%	AC 120V/60Hz	Kwok Guo
Bandwidth	24°C	57%	AC 120V/60Hz	Hayden Chen
Maximum Average output power	24°C	57%	AC 120V/60Hz	Laughing Zhang
Conducted Spurious Emissions	24°C	57%	AC 120V/60Hz	Hayden Chen
Power Spectral Density	24°C	57%	AC 120V/60Hz	Hayden Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AX3600 Wireless Dual-Band Multi-Gigabit Ceiling Mount Access Point
Brand Name	tp-link
Test Model	EAP660 HD
Series Model	N/A
Model Difference(s)	N/A
Power Source	1# Supplied from PoE adapter (Support Unit). 2# DC voltage supplied from AC adapter. Model: GQ24-120200-AU
Power Rating	1# DC 42.5-57V, 0.6A 2# I/P: 100-240V~50/60Hz 1.0A Max O/P: 12V ⎓ 2.0A
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM IEEE 802.11ax: OFDMA
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 IEEE 802.11ax: up to 1147.2 Mbps
Maximum Average Output Power_Non Beamforming	IEEE 802.11b: 27.99 dBm (0.6295 W) IEEE 802.11g: 27.98 dBm (0.6281 W) IEEE 802.11n(HT20): 27.99 dBm (0.6295 W) IEEE 802.11n(HT40): 27.09 dBm (0.5117 W) IEEE 802.11ax(HE20): 28.00 dBm (0.6310 W) IEEE 802.11ax(HE40): 26.70 dBm (0.4677 W)
Maximum Average Output Power_Beamforming	IEEE 802.11ax(HE20): 27.89 dBm (0.6152 W) IEEE 802.11ax(HE40): 26.65 dBm (0.4624 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), IEEE 802.11ax(HE20) CH03 - CH09 for IEEE 802.11n(HT40), IEEE 802.11ax(HE40)							
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. RU Configuration:

Operating Mode	Resource Unit	242 Tone(20M)
IEEE 802.11ax(HE20)	Specific Resource Unit	61
IEEE 802.11ax(HE40)	Resource Unit	484 Tone(40M)
	Specific Resource Unit	65

Remark: IEEE 802.11ax mode only supports the highest tone, so the highest tone was evaluated and measured inside report.

4. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	TP-LINK	N/A	Monopole	N/A	1.99
2	TP-LINK	N/A	Monopole	N/A	2.00
3	TP-LINK	N/A	Monopole	N/A	1.91
4	TP-LINK	N/A	Monopole	N/A	1.99

Note:

1) This EUT supports CDD, and all antenna gains are not equal, so Directional gain=10log[($10^{G1/20}$+$10^{G2/20}$+...$10^{GN/20}$)^2/N]dBi, that is Directional gain=10log[($10^{1.99/20}$+$10^{2.00/20}$+$10^{1.91/20}$+$10^{1.99/20}$)^2/4]dBi=7.99. So, the output power limit is 30-(7.99-6)=28.01, the power spectral density limit is 8-(7.99-6)=6.01.
2) Beamforming Gain: 6 dB. So the Directional gain=6+2=8. So, the output power limit is 30-(8-6)=28.00, the power spectral density limit is 8-(8-6)=6.00.

5. Table for Antenna Configuration:

For Non Beamforming:

Operating Mode / TX Mode	4TX
IEEE 802.11b	V (Ant. 1+Ant. 2+ Ant. 3+ Ant. 4)
IEEE 802.11g	V (Ant. 1+Ant. 2+ Ant. 3+ Ant. 4)
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)
IEEE 802.11ax(HE20)	V (Ant. 1+Ant. 2+ Ant. 3+ Ant. 4)
IEEE 802.11ax(HE40)	V (Ant. 1+Ant. 2+ Ant. 3+ Ant. 4)

For Beamforming:

Operating Mode / TX Mode	4TX
IEEE 802.11ax(HE20)	V (Ant. 1+Ant. 2+ Ant. 3+ Ant. 4)
IEEE 802.11ax(HE40)	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 AX-20 MHz Mode Channel 01/06/11
Mode 6	TX AX-40 MHz Mode Channel 03/06/09
Mode 7	TX AX-20 MHz Mode Channel 06
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N-20 MHz Mode Channel 01/02/06/10/11
Mode 11	TX N-40 MHz Mode Channel 03/04/06/08/09
Mode 12	TX AX-20 MHz Mode Channel 01/02/06/10/11
Mode 13	TX AX-40 MHz Mode Channel 03/04/06/08/09

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 7	TX AX-20 MHz Mode Channel 06

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 7	TX AX-20 MHz Mode Channel 06

Radiated emissions test- Above 1GHz_Non Beamforming	
Final Test Mode	Description
Mode 8	TX B Mode Channel 01/02/06/10/11
Mode 9	TX G Mode Channel 01/02/06/10/11
Mode 10	TX N-20 MHz Mode Channel 01/02/06/10/11
Mode 11	TX N-40 MHz Mode Channel 03/04/06/08/09
Mode 12	TX AX-20 MHz Mode Channel 01/02/06/10/11
Mode 13	TX AX-40 MHz Mode Channel 03/04/06/08/09

Radiated emissions test- Above 1GHz_Beamforming	
Final Test Mode	Description
Mode 12	TX AX-20 MHz Mode Channel 01/02/06/10/11
Mode 13	TX AX-40 MHz Mode Channel 03/04/06/08/09

Maximum Average Output Power & Power Spectral Density 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
Mode 5	TX AX-20 MHz Mode Channel 01/06/11
Mode 6	TX AX-40 MHz Mode Channel 03/06/09

Maximum Average Output Power & Power Spectral Density test_Beamforming	
Final Test Mode	Description
Mode 5	TX AX-20 MHz Mode Channel 01/06/11
Mode 6	TX AX-40 MHz Mode Channel 03/06/09

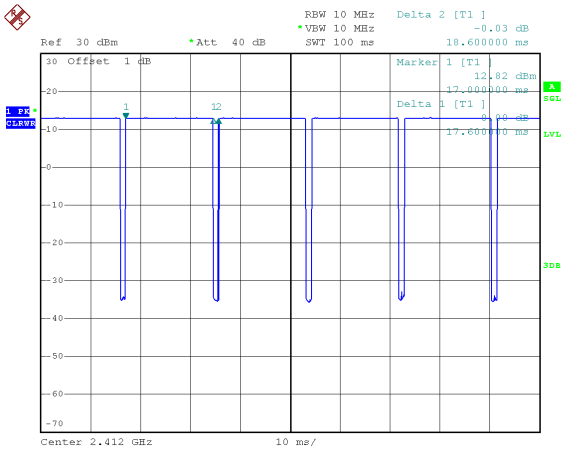
Other Conducted test_Non Beamforming	
Final Test Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX AX-20 MHz Mode Channel 01/06/11
Mode 6	TX AX-40 MHz Mode Channel 03/06/09

NOTE:
(1) The measurements are performed at the high, middle, low available channels.
(2) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
(3) For radiated emission below 1 GHz test, the IEEE 802.11ax20 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 RF Output Power were tested, the Non Beamforming and Beamforming are recorded in the report. The worst case was Non Beamforming and only worst case were documented for other test items except radiated emissions above 1GHz and power spectral density test.
(6) For Radiated emissions above 1GHz test, the vertical and horizontal polarities have tested, the worst case is vertical and recorded.

2.3 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.

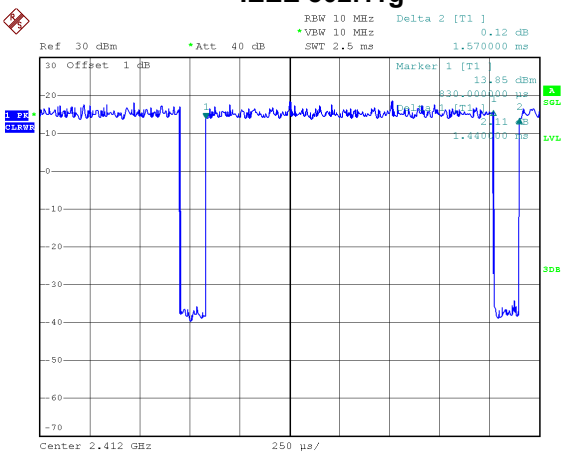
IEEE 802.11b



Date: 15.JUN.2020 20:21:34

Duty cycle = 17.600 ms / 18.600 ms = 94.62%
Duty Factor = 10 log(1/Duty cycle) = 0.24

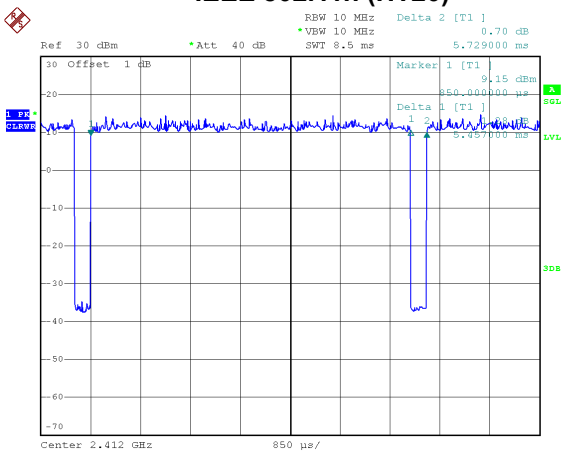
IEEE 802.11g



Date: 15.JUN.2020 20:09:26

Duty cycle = 1.440 ms / 1.570 ms = 91.72%
Duty Factor = 10 log(1/Duty cycle) = 0.38

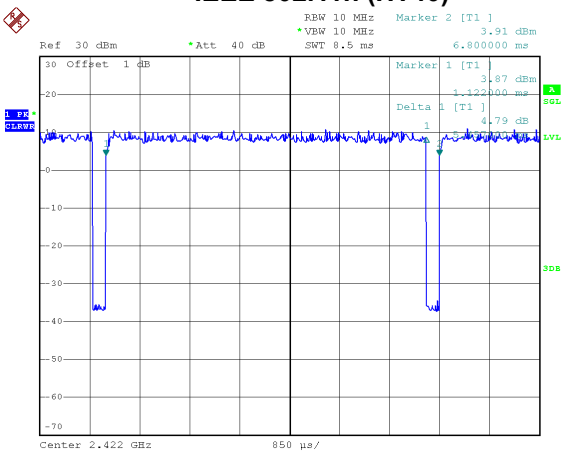
IEEE 802.11n (HT20)



Date: 15.JUN.2020 20:10:15

Duty cycle = 5.457 ms / 5.729 ms = 95.25%
Duty Factor = 10 log(1/Duty cycle) = 0.21

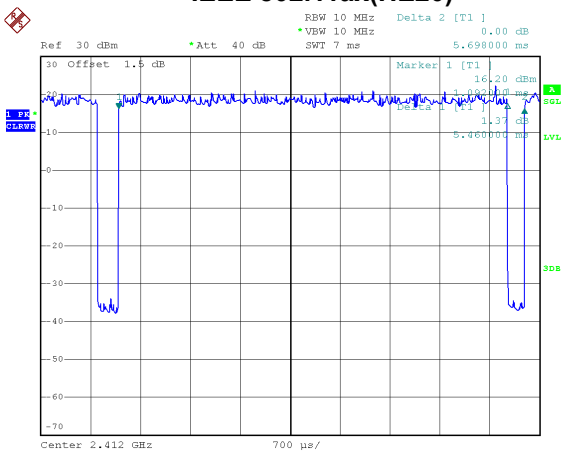
IEEE 802.11n (HT40)



Date: 15.JUN.2020 20:12:19

Duty cycle = 5.457 ms / 6.800 ms = 80.25%
Duty Factor = 10 log(1/Duty cycle) = 0.96

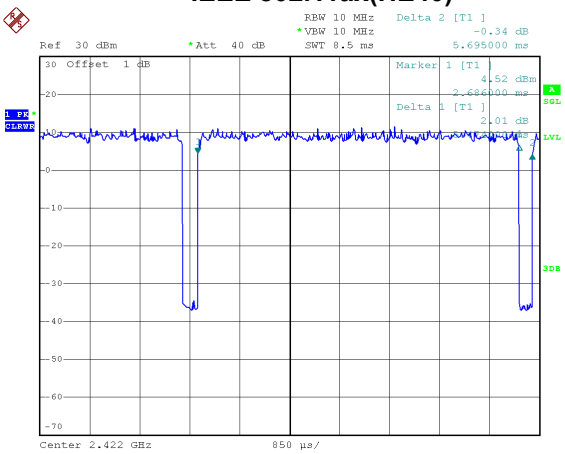
IEEE 802.11ax(HE20)



Date: 20.MAY.2020 17:42:14

Duty cycle = 5.460 ms / 5.698 ms = 95.82%
Duty Factor = 10 log(1/Duty cycle) = 0.19

IEEE 802.11ax(HE40)



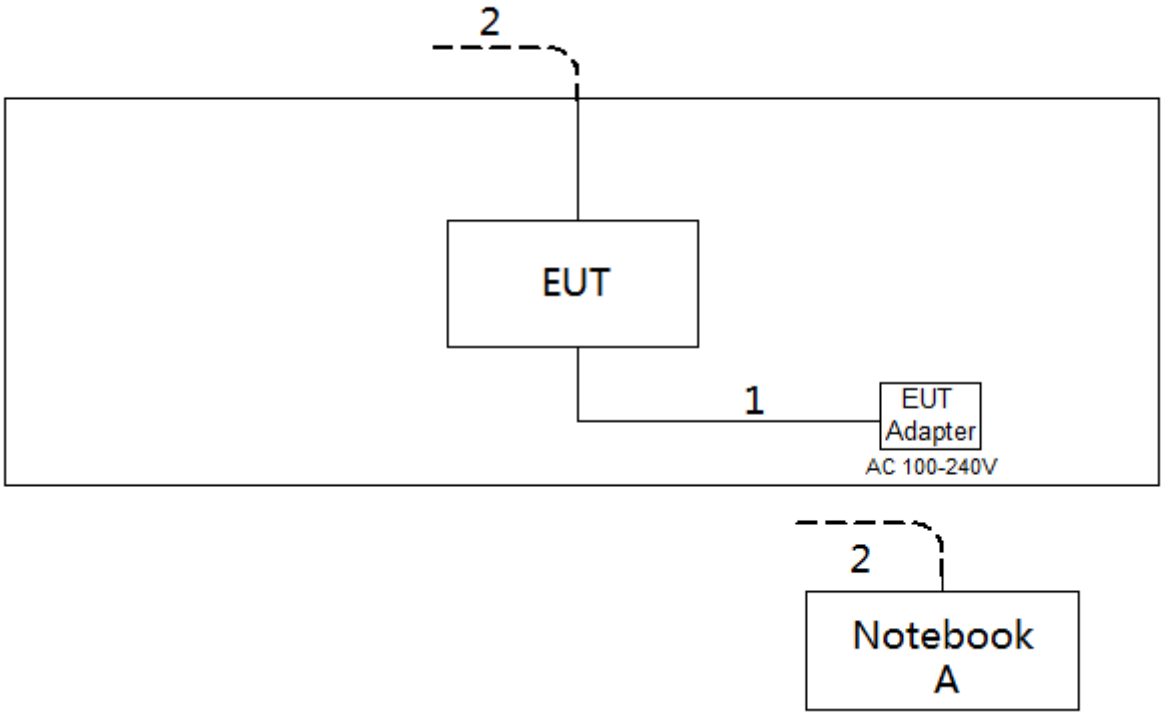
Date: 15.JUN.2020 20:14:43

Duty cycle = 5.474 ms / 5.695 ms = 96.12%
Duty Factor = 10 log(1/Duty cycle) = 0.17

NOTE:
For IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20) and IEEE 802.11ax(HE20):
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) and IEEE 802.11ax(HE40):
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%).

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.5 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 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

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

The following table is the setting of the receiver

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

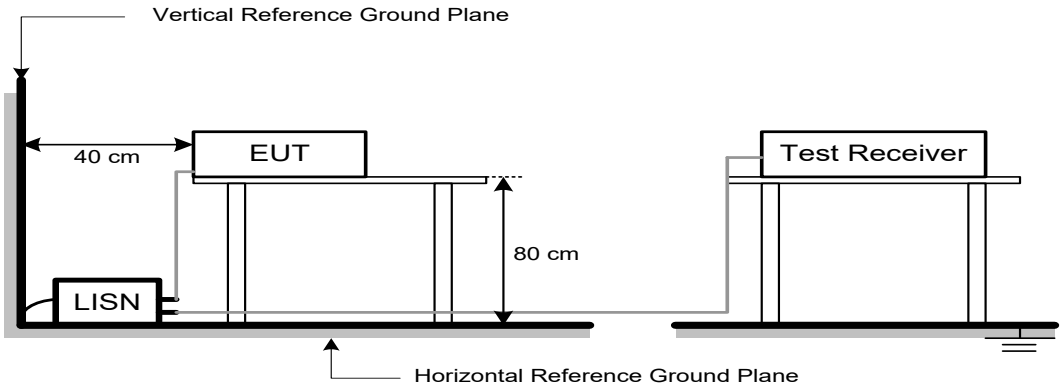
3.2 TEST PROCEDURE

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

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

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

NOTE:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

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

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

4.2 TEST PROCEDURE

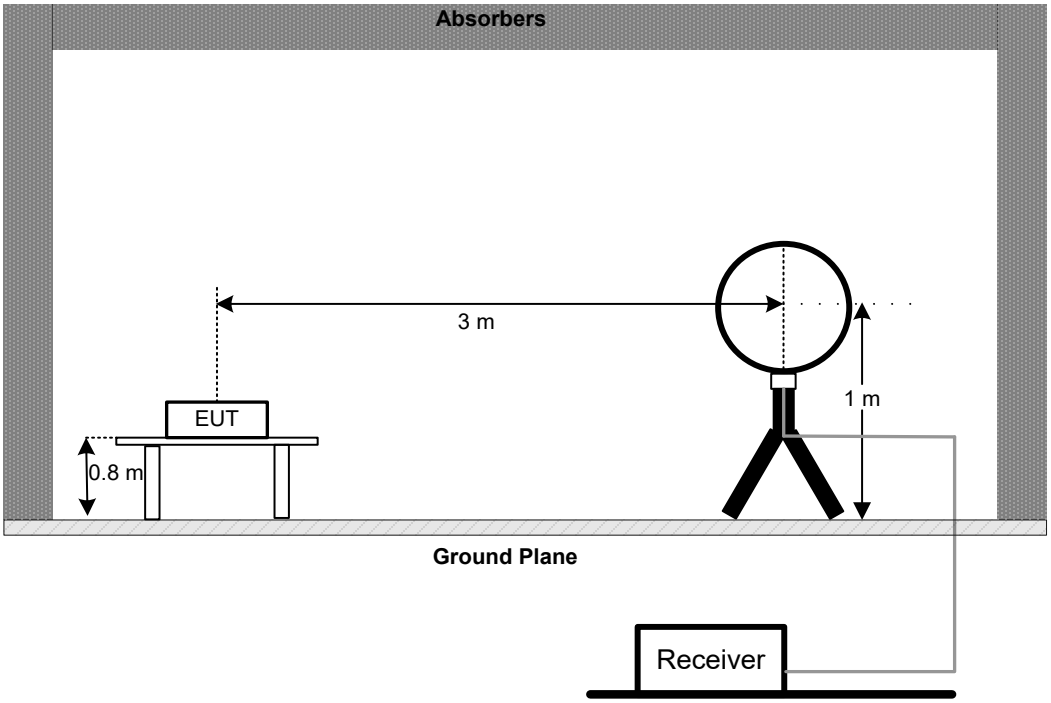
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The measuring distance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

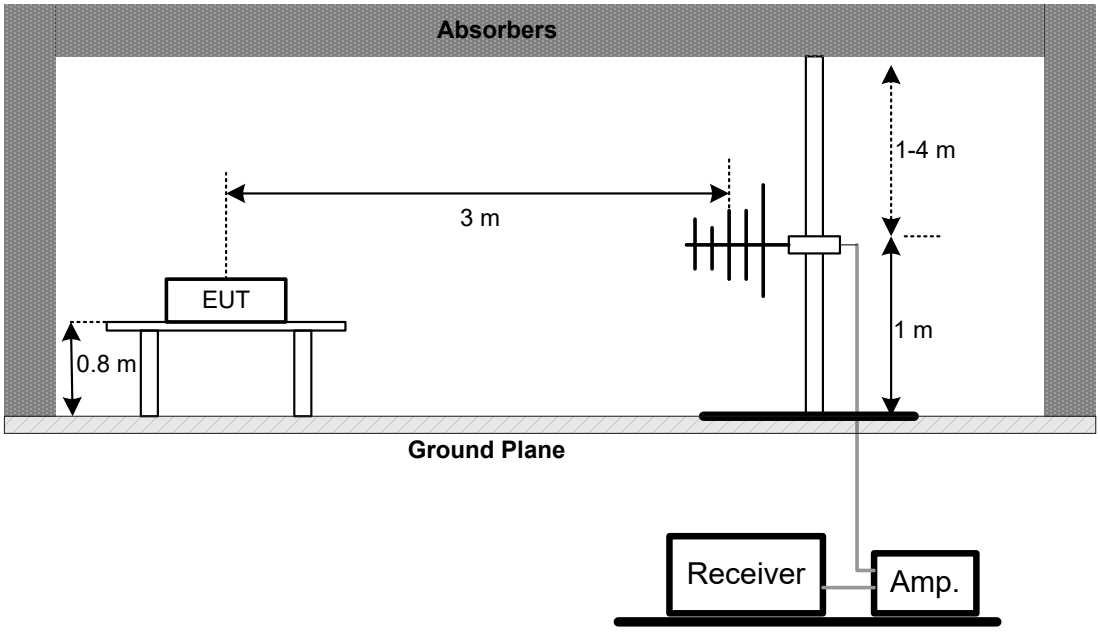
No deviation

4.4 TEST SETUP

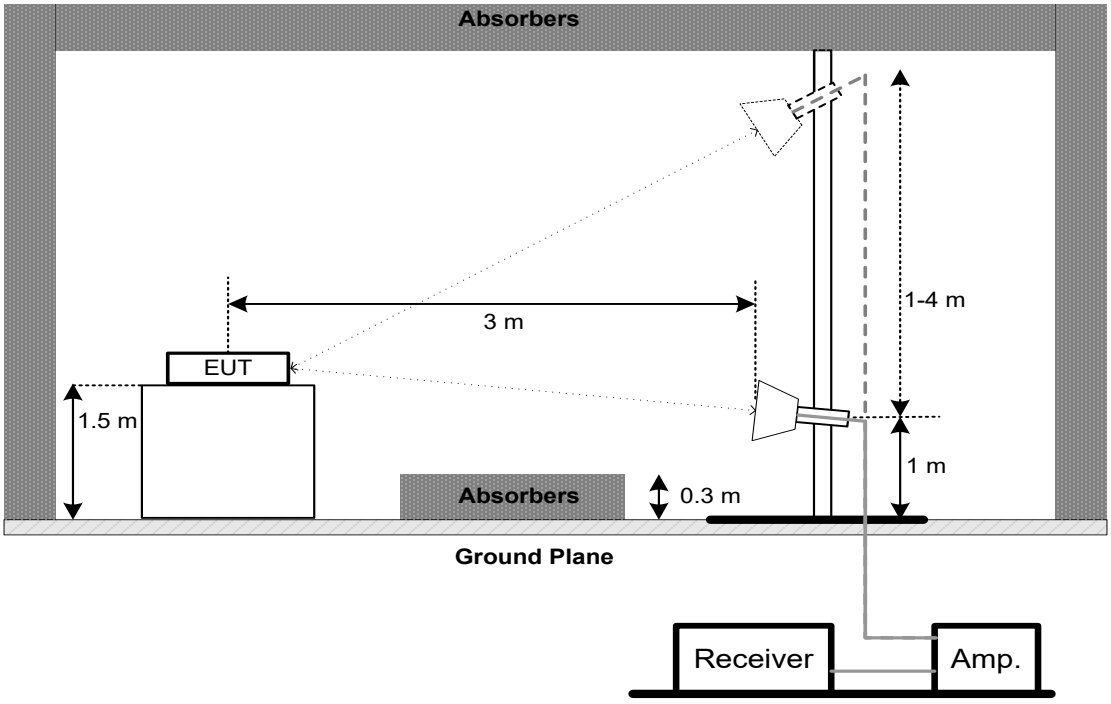
9 kHz-30 MHz



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/N20/AX20 Mode: RBW= 300 kHz, VBW=1 MHz, Sweep time = 2.5 ms.
For 99% Emission Bandwidth N40/AX40 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 AVERAGE OUTPUT POWER TEST

6.1 LIMIT

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

6.2 TEST PROCEDURE

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.

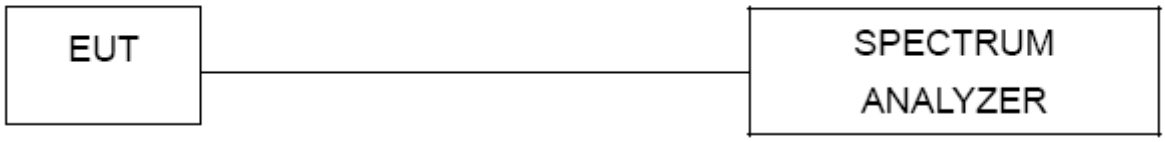
7.2 TEST PROCEDURE

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)

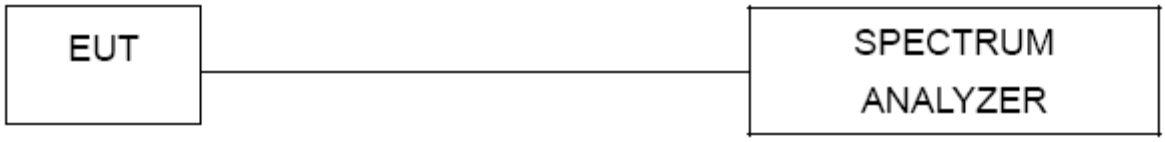
8.2 TEST PROCEDURE

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	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
7	643 Shield Room	ETS	6*4*3m	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG 213/U	N/A	May 29, 2021
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
5	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

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	Jul. 25, 2021
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 22, 2021
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75789	May 12, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021
3	Amplifier	Agilent	8449B	3008A02333	Mar. 01, 2021
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	N/A	EMC104-SM-SM-6 000	N/A	May 09, 2021
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	Filter	STI	STI15-9912	N/A	Jul. 25, 2021
11	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 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	Jul. 25, 2021
2	RF Cable	Tongkaichuan	N/A	N/A	N/A
3	DC Block	Mini	N/A	N/A	N/A

Maximum Average Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 07, 2021
2	Wideband power sensor	Keysight	N1923A	MY58310004	Jul. 25, 2021
3	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 11, 2021
4	RF Cable	Tongkaichuan	N/A	N/A	N/A

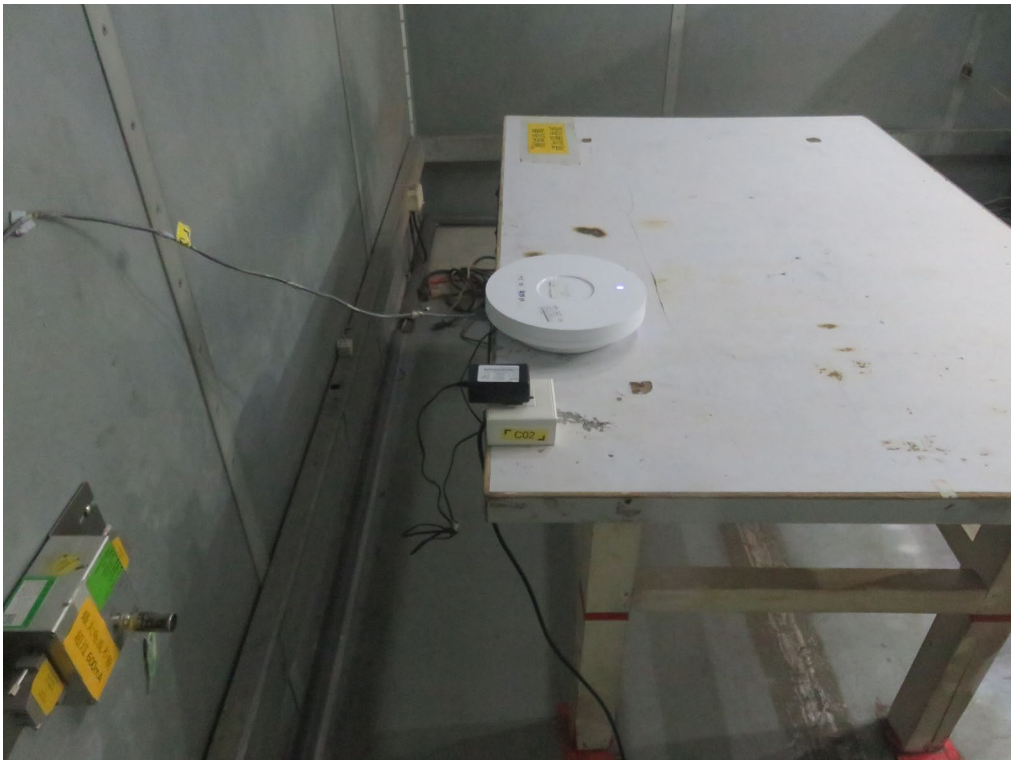
Remark: ”N/A” denotes no model name, serial no. or calibration specified.

“*” calibration period of equipment list is three year.

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

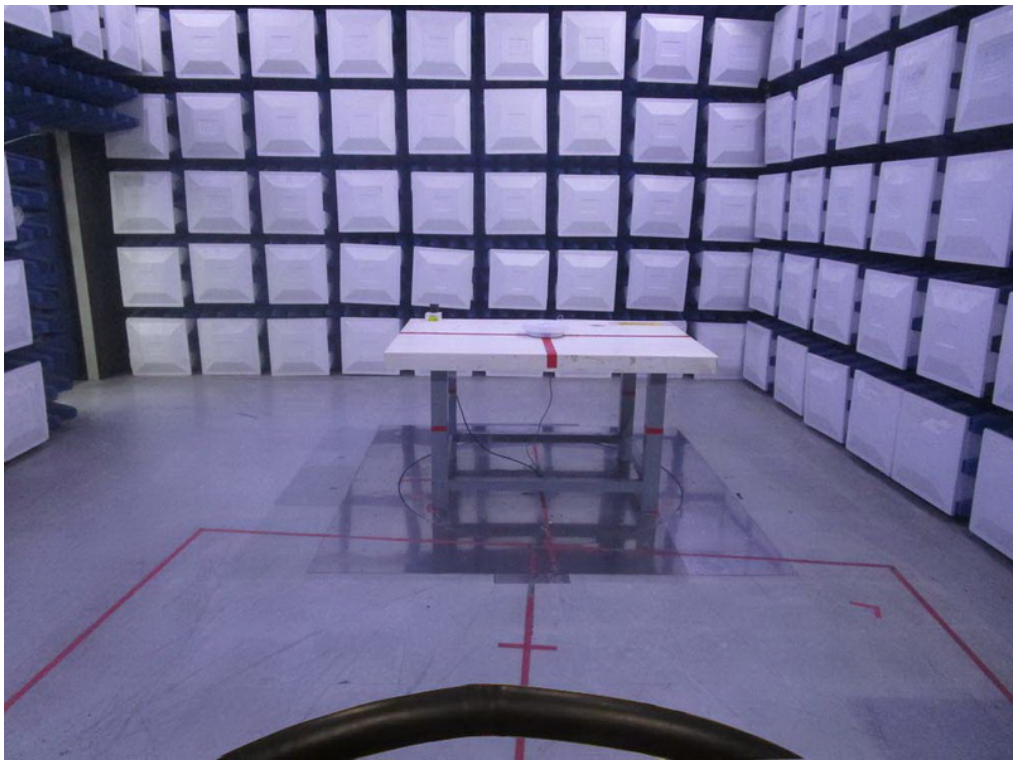
10. EUT TEST PHOTO

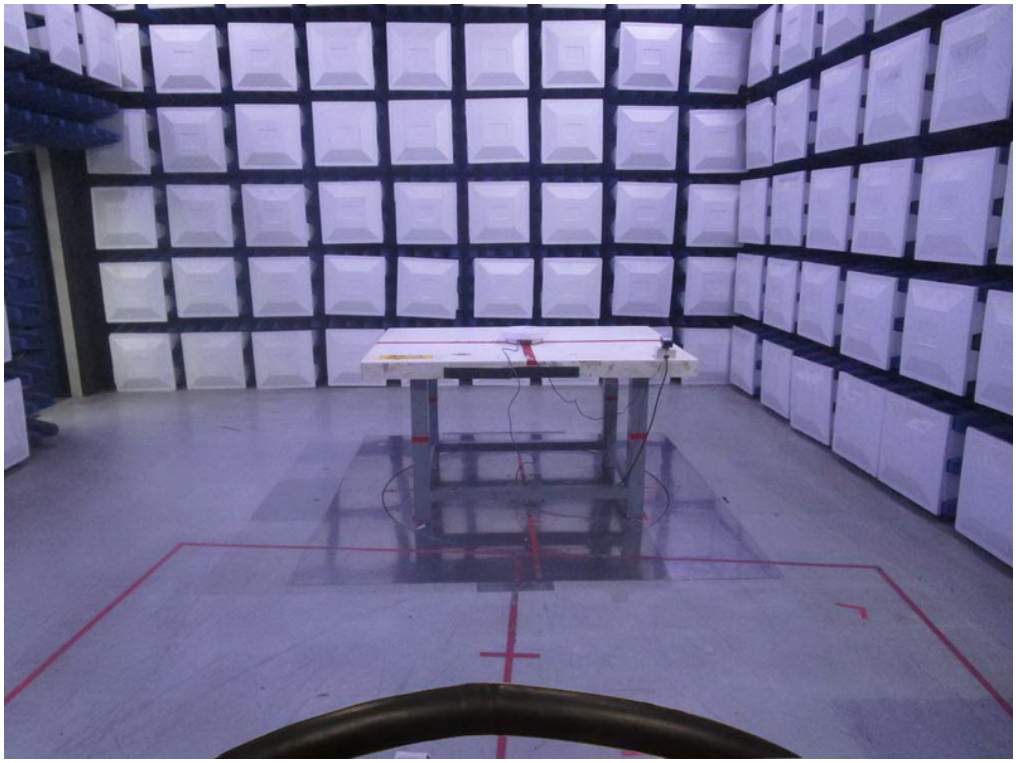
AC Power Line Conducted Emissions Test Photos



Radiated Emissions Test Photos

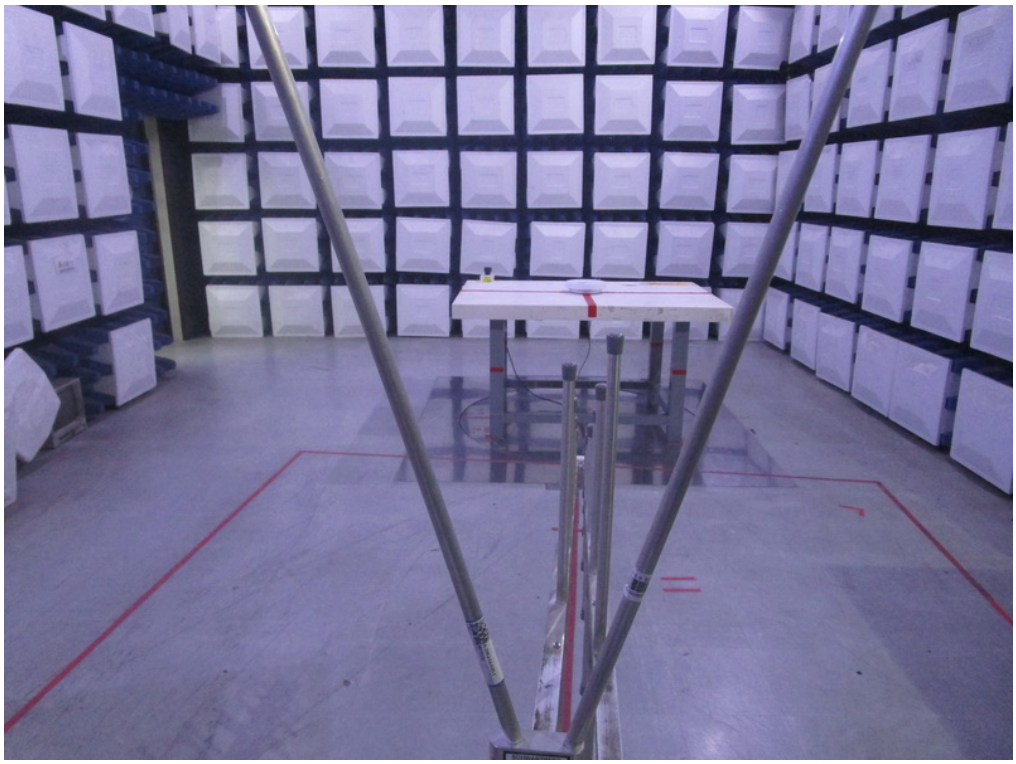
9 kHz to 30 MHz

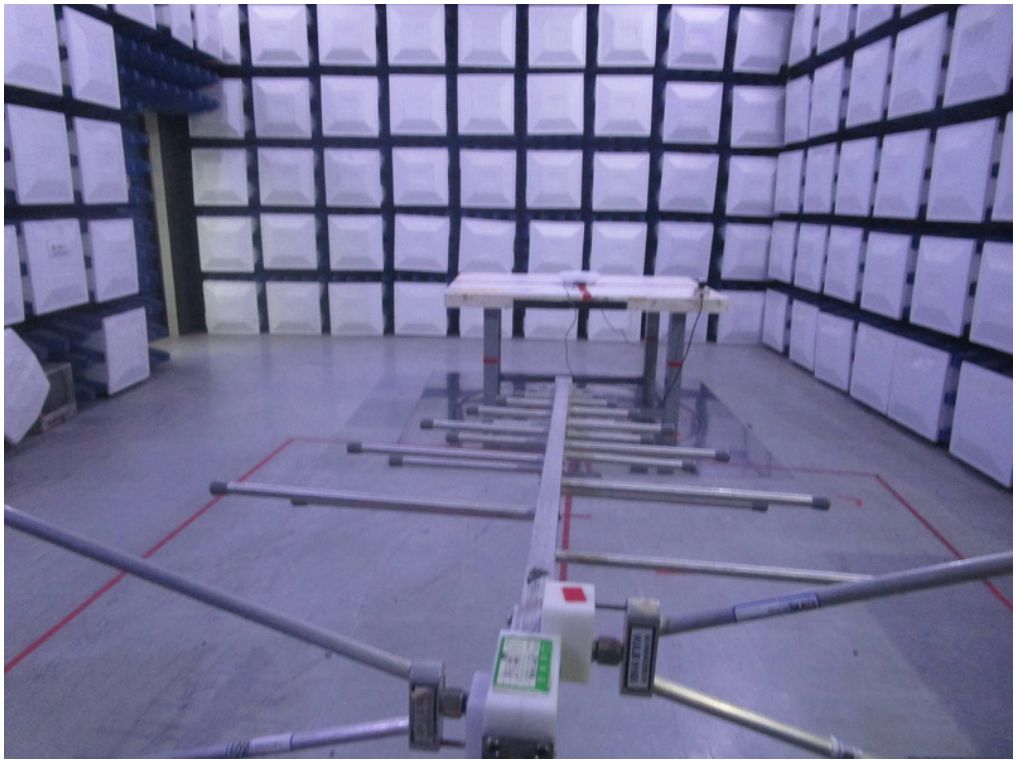




Radiated Emissions Test Photos

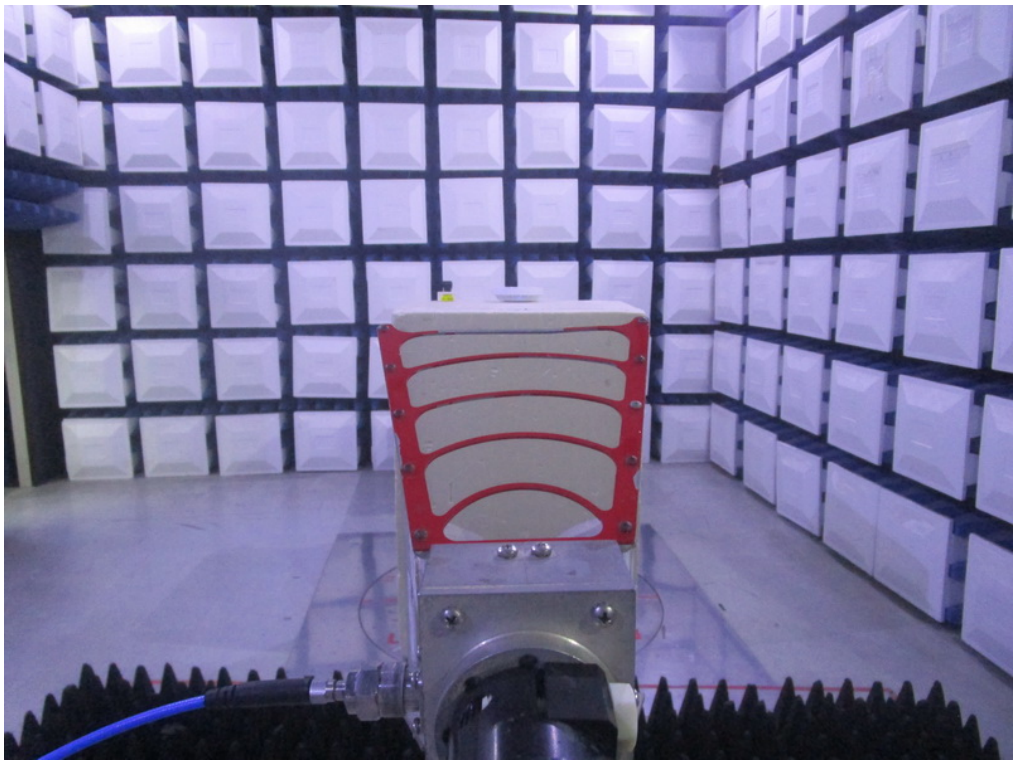
30 MHz to 1 GHz





Radiated Emissions Test Photos

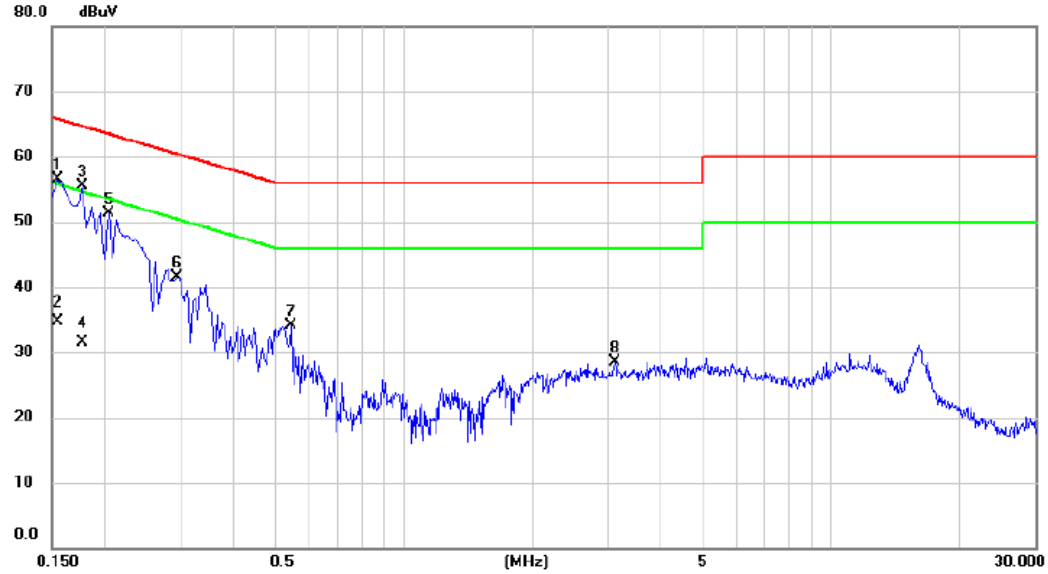
Above 1 GHz



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	TX AX20 Mode Channel 06

Line

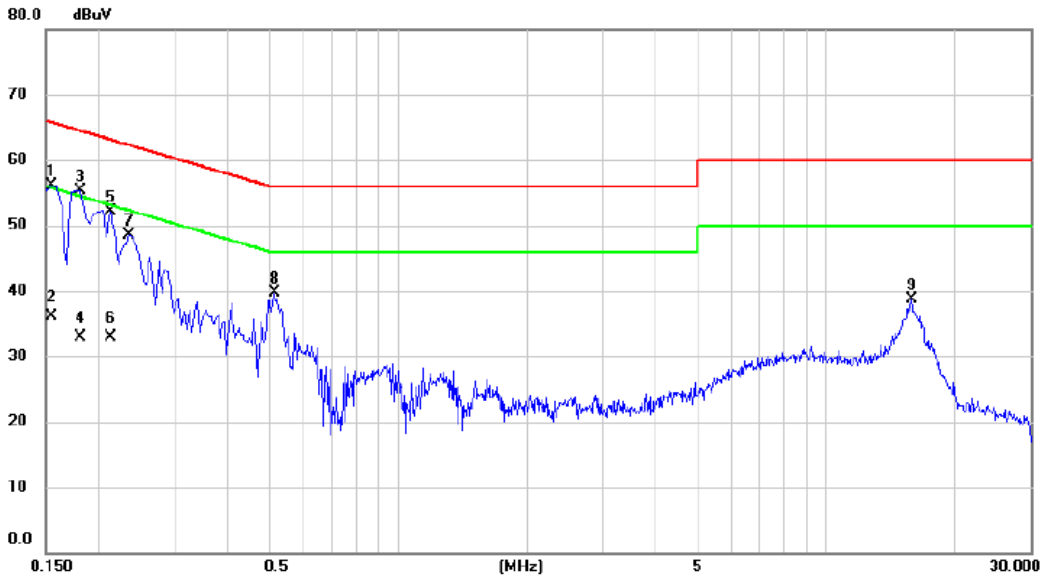


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1545	46.72	9.70	56.42	65.75	-9.33	peak	
2		0.1545	25.00	9.70	34.70	55.75	-21.05	AVG	
3	*	0.1770	45.64	9.84	55.48	64.63	-9.15	peak	
4		0.1770	21.70	9.84	31.54	54.63	-23.09	AVG	
5		0.2040	41.41	9.91	51.32	63.45	-12.13	peak	
6		0.2940	31.64	9.89	41.53	60.41	-18.88	peak	
7		0.5460	24.08	9.95	34.03	56.00	-21.97	peak	
8		3.1155	18.35	10.18	28.53	56.00	-27.47	peak	

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

Test Mode:	TX AX20 Mode Channel 06

Neutral



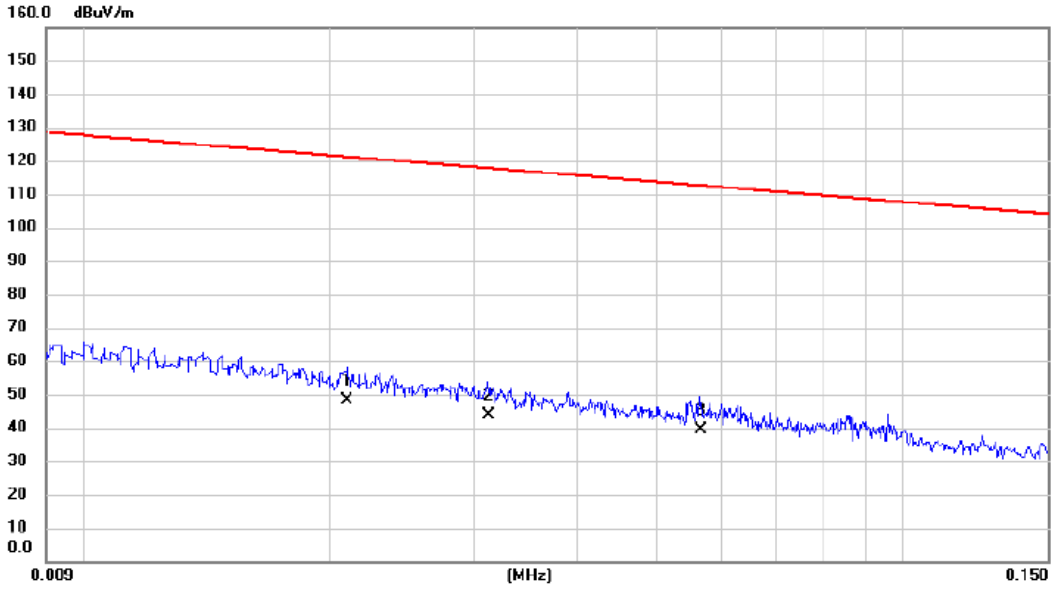
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1548	46.35	9.78	56.13	65.74	-9.61	peak	
2		0.1548	26.30	9.78	36.08	55.74	-19.66	AVG	
3	*	0.1815	45.35	9.94	55.29	64.42	-9.13	peak	
4		0.1815	23.00	9.94	32.94	54.42	-21.48	AVG	
5		0.2130	42.13	10.00	52.13	63.09	-10.96	peak	
6		0.2130	23.00	10.00	33.00	53.09	-20.09	AVG	
7		0.2355	38.52	9.98	48.50	62.25	-13.75	peak	
8		0.5144	29.49	10.15	39.64	56.00	-16.36	peak	
9		15.8550	27.66	11.12	38.78	60.00	-21.22	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 AX20 Mode Channel 06

Ant 0°

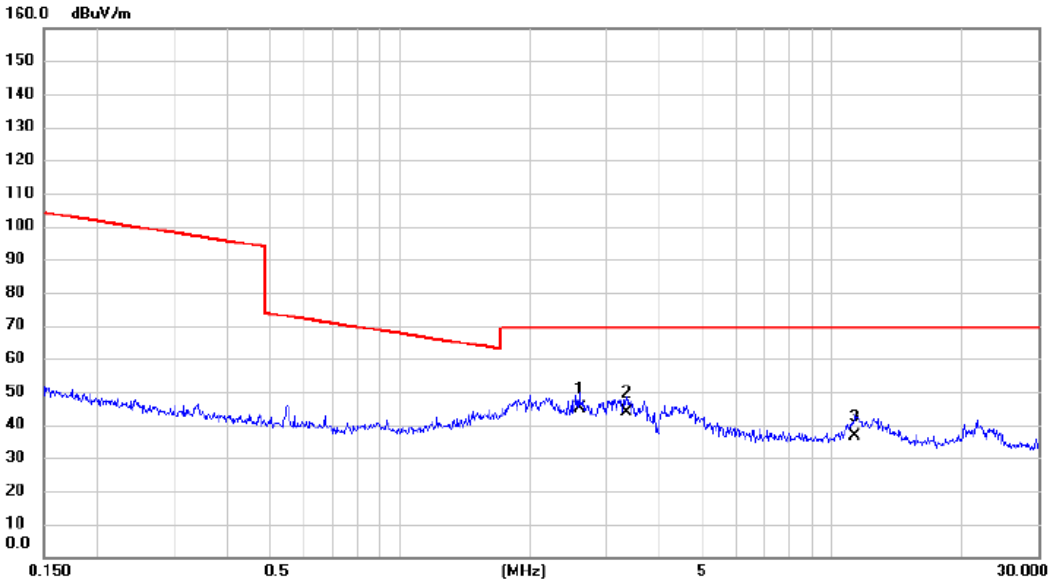


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	0.0210	35.23	13.10	48.33	121.16	-72.83	AVG			
2		0.0312	30.86	12.83	43.69	117.72	-74.03	AVG			
3		0.0567	26.95	12.38	39.33	112.53	-73.20	AVG			

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

Test Mode:	TX AX20 Mode Channel 06

Ant 0°

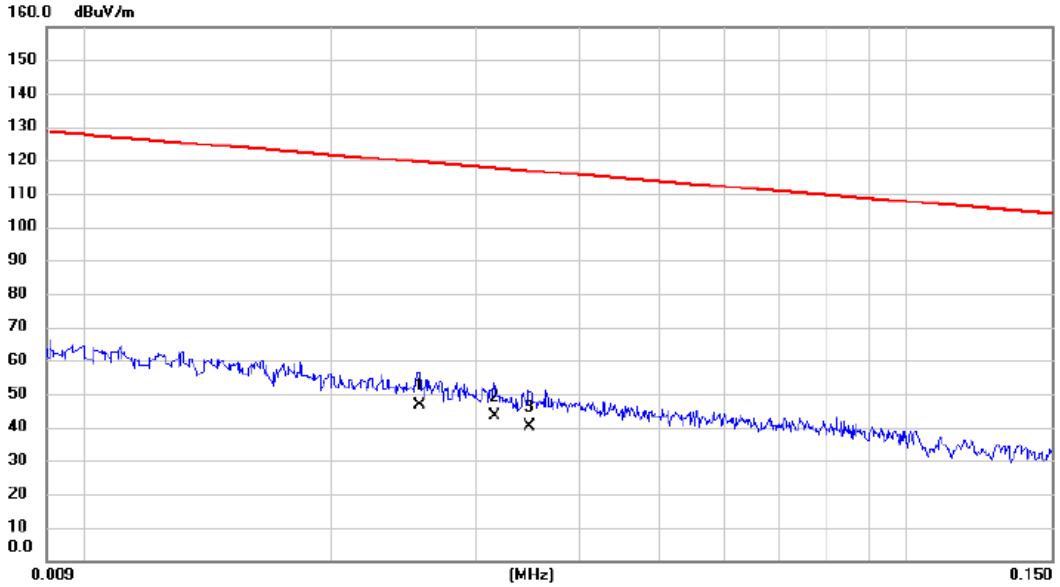


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2.6082	34.32	10.75	45.07	69.54	-24.47	QP			
2		3.3458	33.16	10.55	43.71	69.54	-25.83	QP			
3		11.3170	25.51	11.08	36.59	69.54	-32.95	QP			

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

Test Mode:	TX AX20 Mode Channel 06

Ant 90°

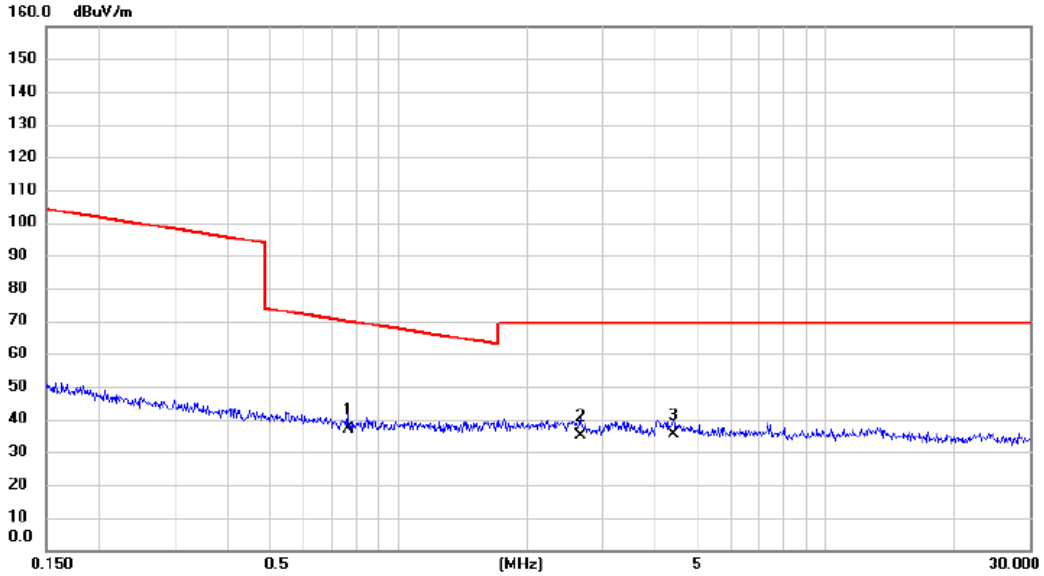


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	0.0256	33.52	12.98	46.50	119.44	-72.94	AVG			
2		0.0316	30.62	12.82	43.44	117.61	-74.17	AVG			
3		0.0348	27.36	12.75	40.11	116.77	-76.66	AVG			

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

Test Mode:	TX AX20 Mode Channel 06

Ant 90°



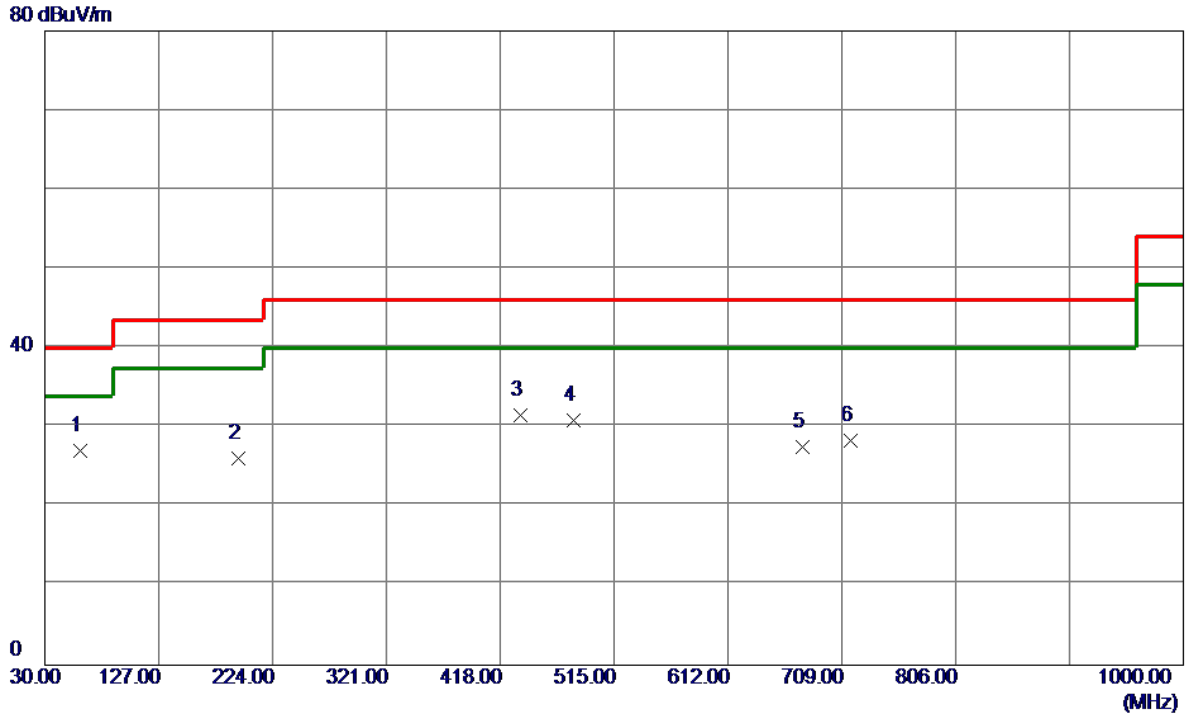
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	0.7630	25.32	11.71	37.03	69.95	-32.92	QP			
2		2.6641	24.32	10.71	35.03	69.54	-34.51	QP			
3		4.4071	24.92	10.64	35.56	69.54	-33.98	QP			

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 AX20 Mode Channel 06

Vertical

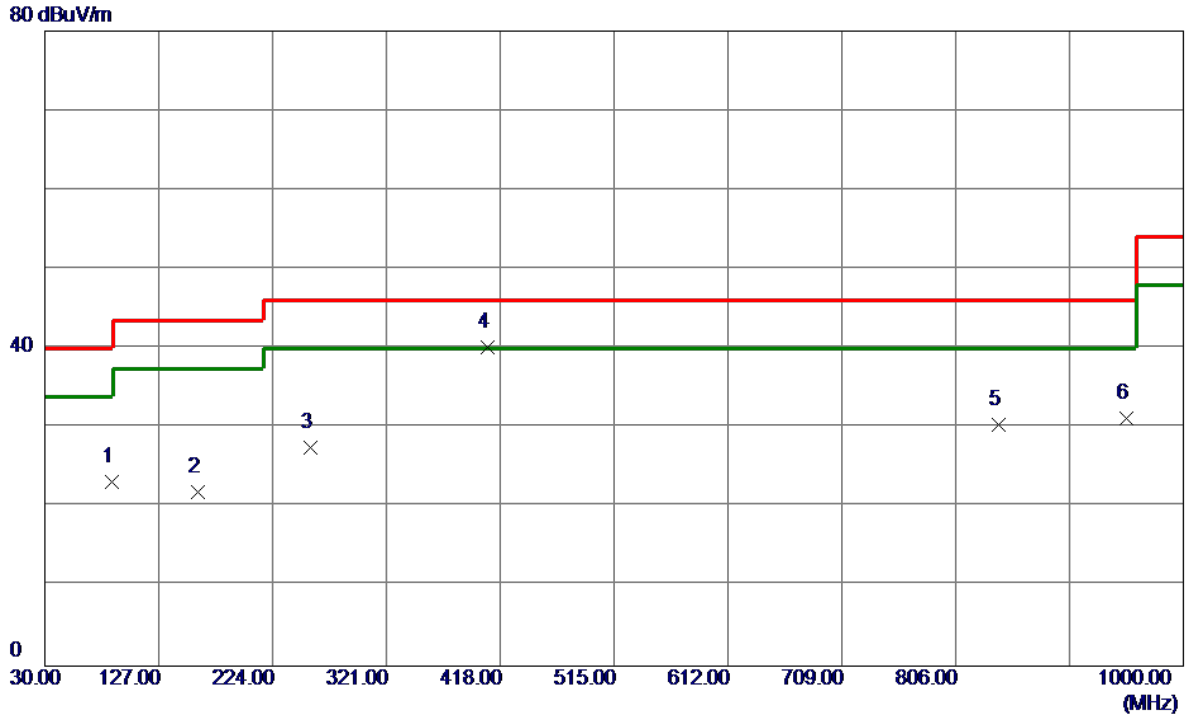


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	60.0700	41.59	-14.52	27.07	40.00	-12.93	Peak	
2	194.9000	40.45	-14.44	26.01	43.50	-17.49	Peak	
3	435.4600	39.61	-8.03	31.58	46.00	-14.42	Peak	
4	480.0800	38.35	-7.41	30.94	46.00	-15.06	Peak	
5	676.0200	31.46	-3.91	27.55	46.00	-18.45	Peak	
6	716.7600	31.75	-3.45	28.30	46.00	-17.70	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	87.2300	39.47	-16.29	23.18	40.00	-16.82	Peak	
2	159.9800	32.57	-10.67	21.90	43.50	-21.60	Peak	
3	256.0100	40.23	-12.65	27.58	46.00	-18.42	Peak	
4 *	407.3299	48.97	-8.81	40.16	46.00	-5.84	Peak	
5	842.8600	32.29	-1.86	30.43	46.00	-15.57	Peak	
6	951.5000	30.99	0.16	31.15	46.00	-14.85	Peak	

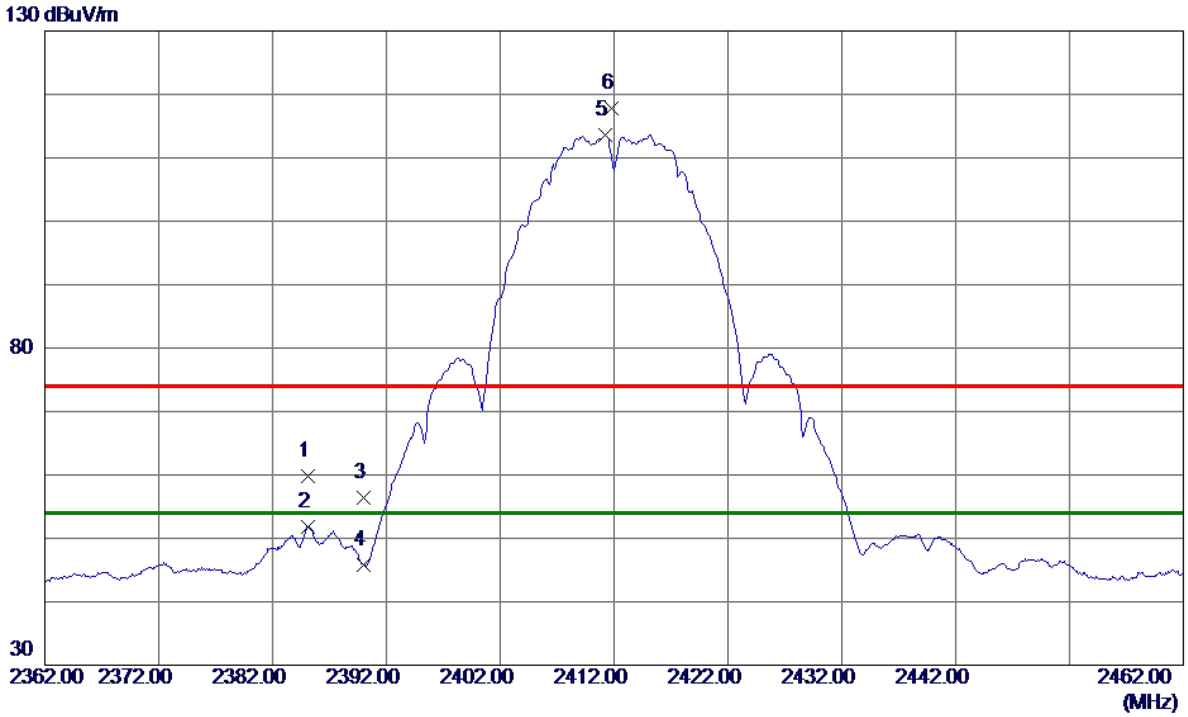
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ

Non Beamforming

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	2385.1000	49.32	10.48	59.80	74.00	-14.20	Peak	
2	2385.1000	41.34	10.48	51.82	54.00	-2.18	AVG	
3	2390.0000	45.82	10.50	56.32	74.00	-17.68	Peak	
4	2390.0000	35.26	10.50	45.76	54.00	-8.24	AVG	
5 *	2411.2000	103.05	10.56	113.61	54.00	59.61	AVG	No Limit
6	2411.8000	107.18	10.56	117.74	74.00	43.74	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

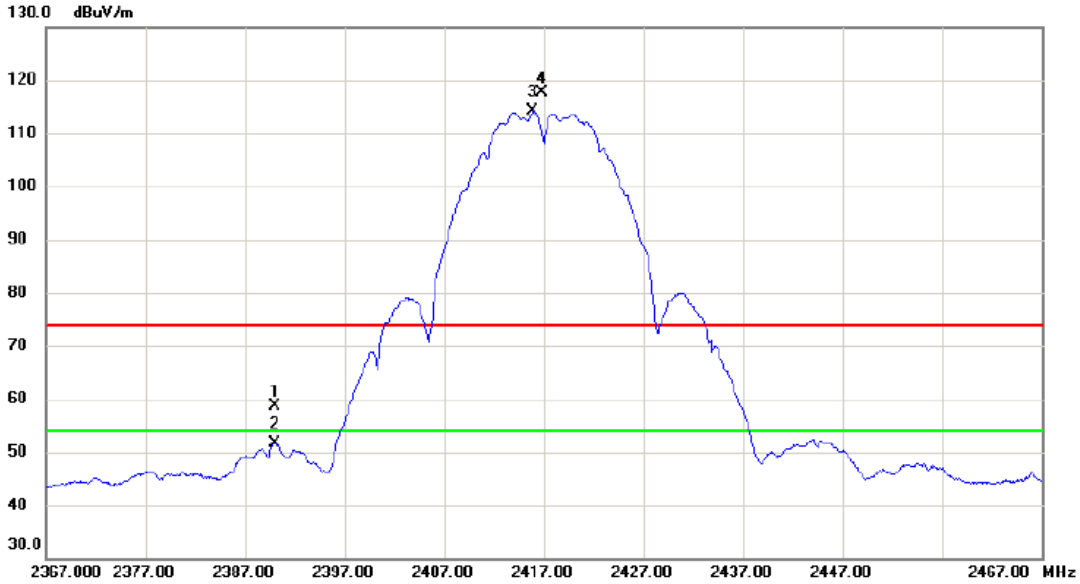
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.9450	45.31	6.53	51.84	74.00	-22.16	Peak	
2 *	4823.9750	40.35	6.53	46.88	54.00	-7.12	AVG	

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

Test Mode:	TX B Mode 2417 MHz

Vertical

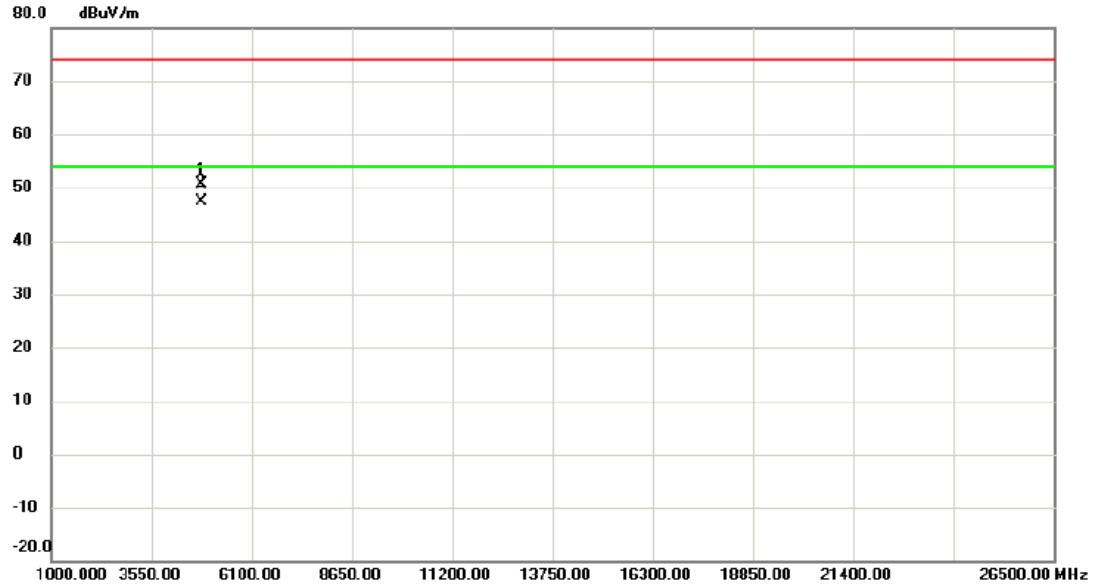


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	48.03	10.50	58.53	74.00	-15.47	peak	
2		2390.000	41.12	10.50	51.62	54.00	-2.38	AVG	
3	*	2415.900	103.69	10.56	114.25	54.00	60.25	AVG	No Limit
4	X	2416.800	107.11	10.57	117.68	74.00	43.68	peak	No Limit

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

Test Mode:	TX B Mode 2417 MHz

Vertical

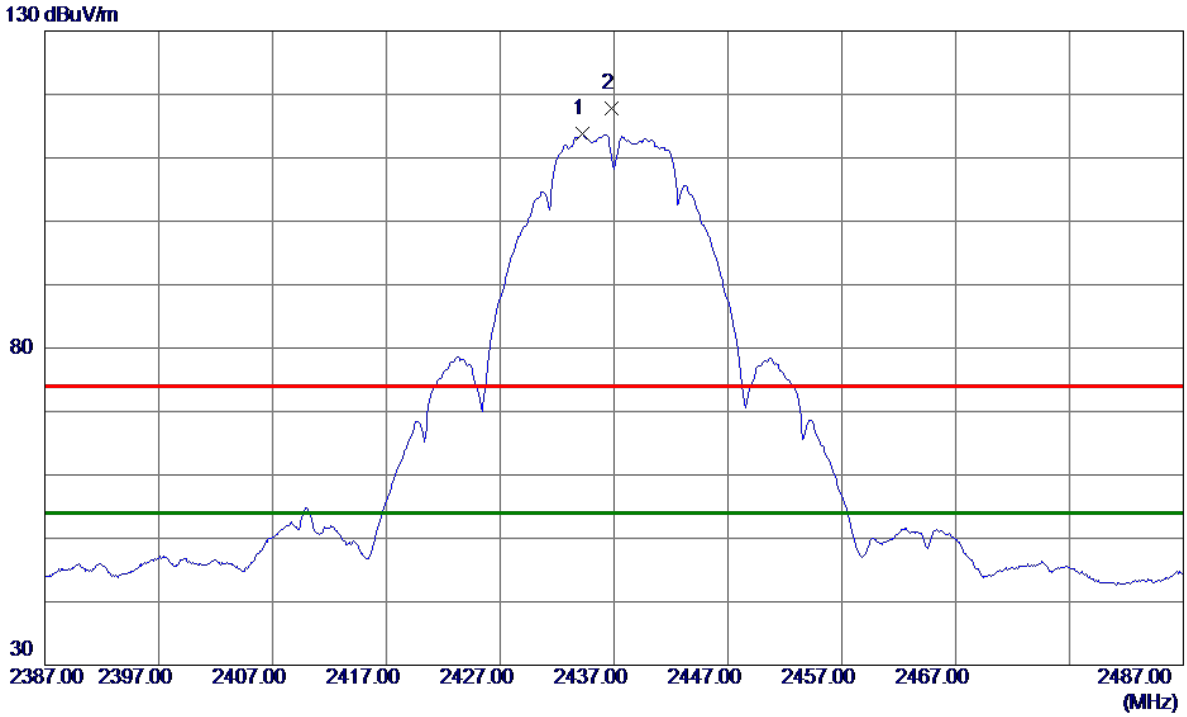


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4833.935	44.05	6.54	50.59	74.00	-23.41	peak	
2	*	4833.970	40.74	6.54	47.28	54.00	-6.72	AVG	

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

Test Mode:	TX B Mode 2437 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2434.2000	103.09	10.62	113.71	54.00	59.71	AVG	No Limit
2	2436.8000	107.24	10.63	117.87	74.00	43.87	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

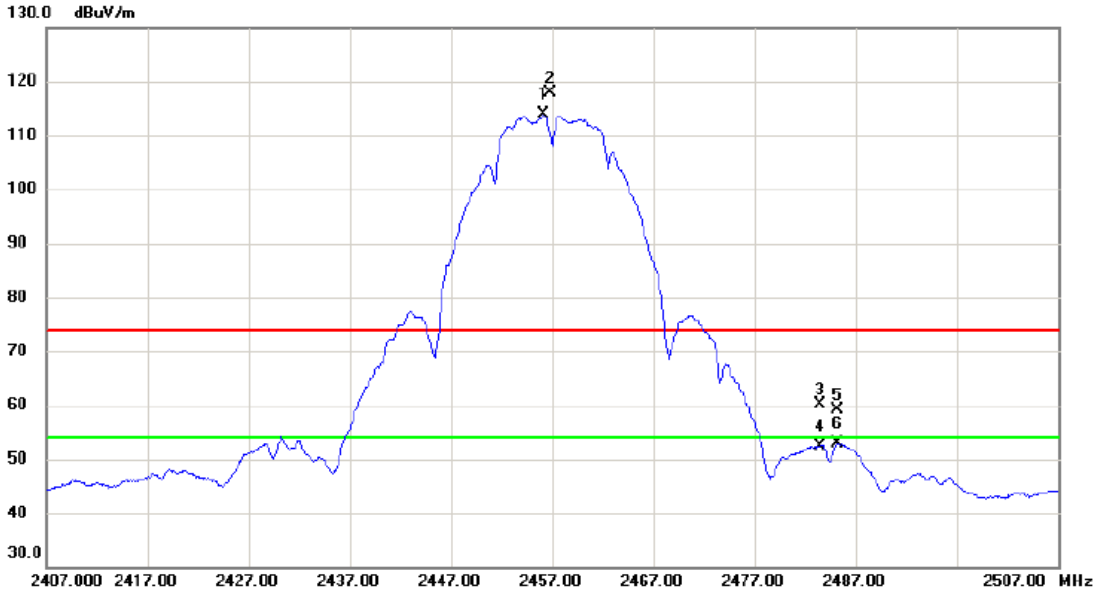
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.8500	44.94	6.65	51.59	74.00	-22.41	Peak	
2 *	4873.9450	40.76	6.65	47.41	54.00	-6.59	AVG	

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

Test Mode:	TX B Mode 2457 MHz

Vertical

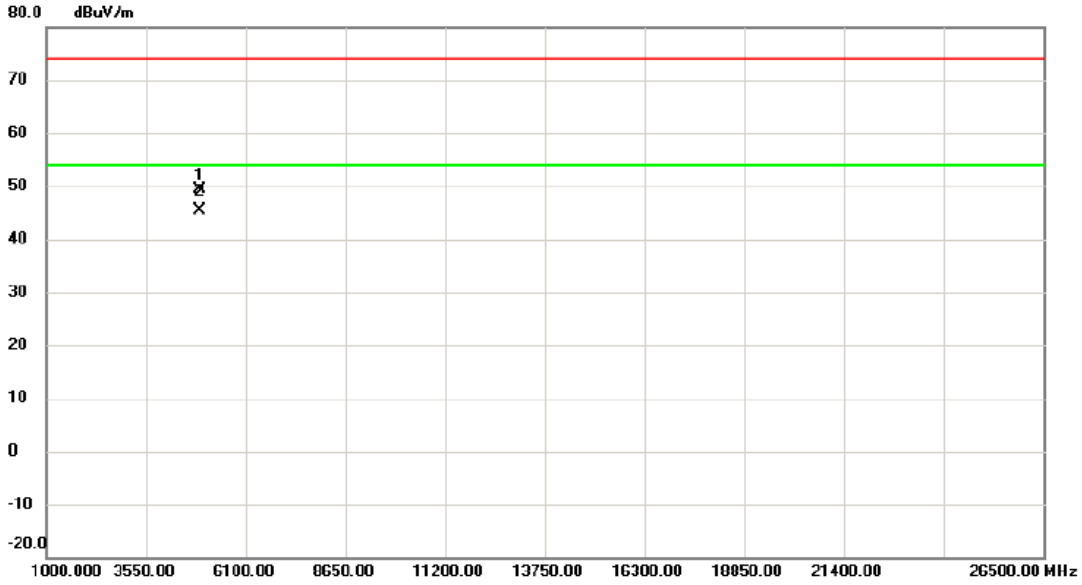


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2456.200	103.09	10.68	113.77	54.00	59.77	AVG	No Limit
2	X	2456.800	107.19	10.68	117.87	74.00	43.87	peak	No Limit
3		2483.500	49.40	10.76	60.16	74.00	-13.84	peak	
4		2483.500	41.63	10.76	52.39	54.00	-1.61	AVG	
5		2485.200	48.43	10.77	59.20	74.00	-14.80	peak	
6		2485.200	42.19	10.77	52.96	54.00	-1.04	AVG	

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

Test Mode:	TX B Mode 2457 MHz

Vertical

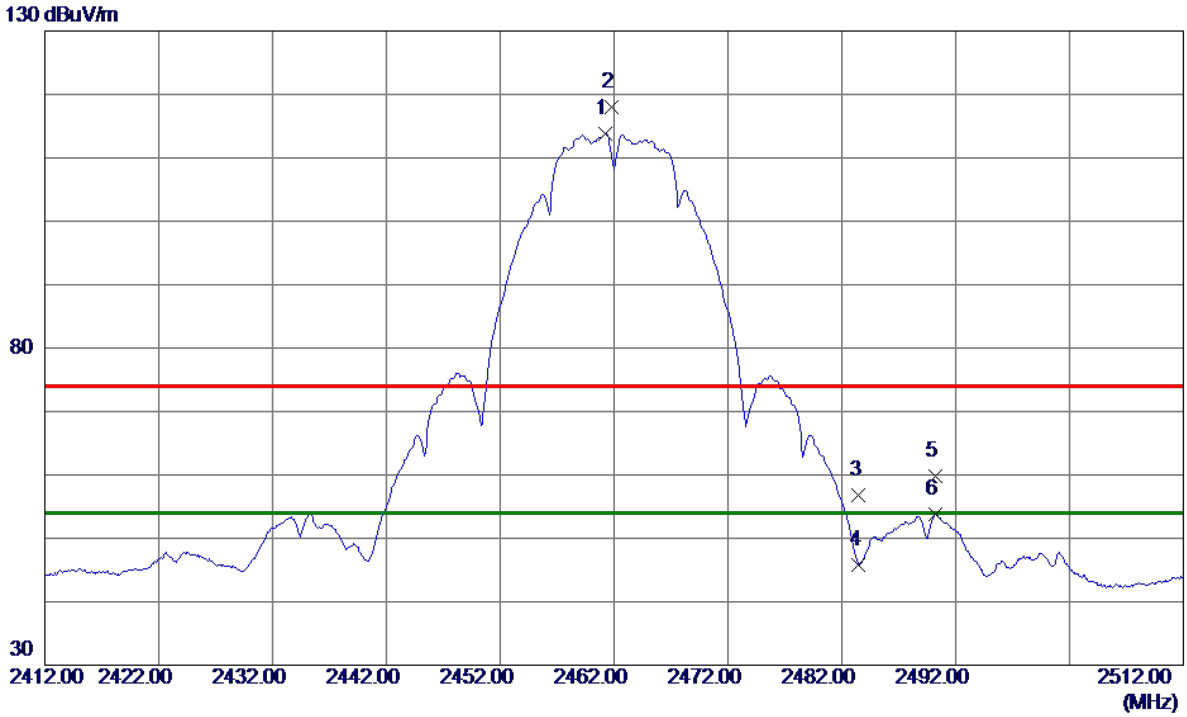


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4913.940	42.62	6.75	49.37	74.00	-24.63	peak	
2	*	4913.950	38.63	6.75	45.38	54.00	-8.62	AVG	

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 *	2461.2000	103.19	10.70	113.89	54.00	59.89	AVG	No Limit
2	2461.8000	107.27	10.70	117.97	74.00	43.97	Peak	No Limit
3	2483.5000	46.08	10.76	56.84	74.00	-17.16	Peak	
4	2483.5000	34.99	10.76	45.75	54.00	-8.25	AVG	
5	2490.2000	49.03	10.78	59.81	74.00	-14.19	Peak	
6	2490.2000	42.93	10.78	53.71	54.00	-0.29	AVG	

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

Test Mode:	TX B Mode 2462 MHz

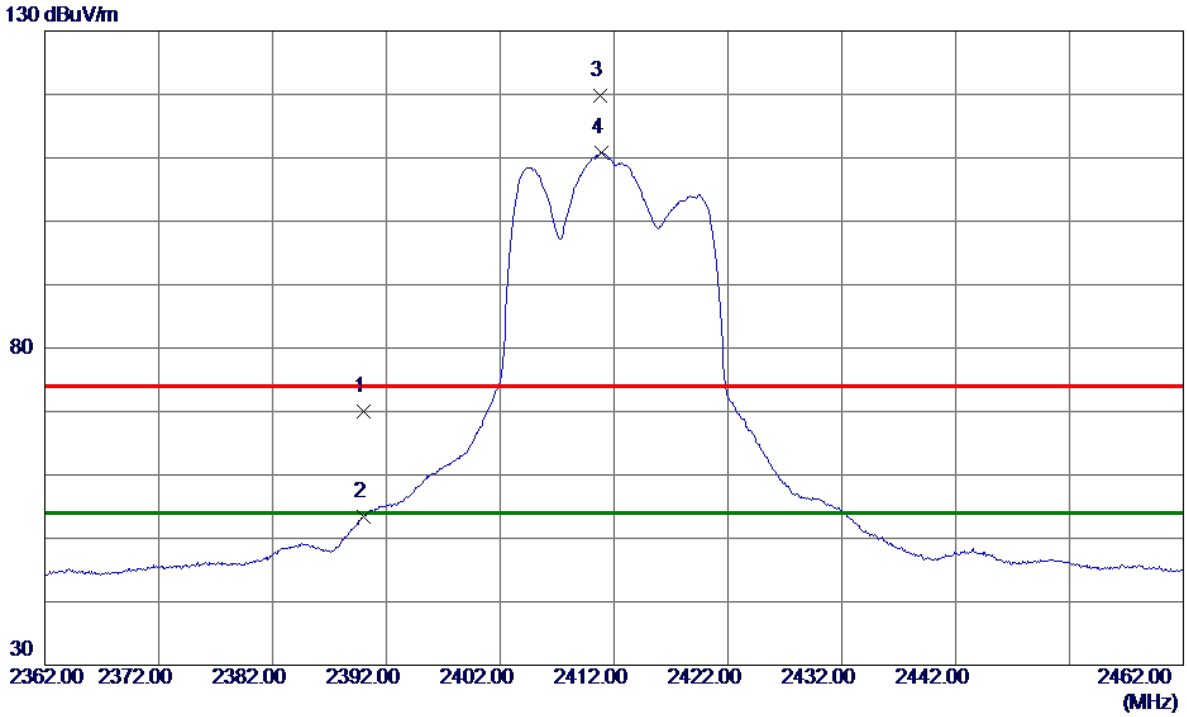
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4923.7599	43.38	6.77	50.15	74.00	-23.85	Peak	
2 *	4923.9500	39.05	6.77	45.82	54.00	-8.18	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	59.59	10.50	70.09	74.00	-3.91	Peak	
2	2390.0000	42.84	10.50	53.34	54.00	-0.66	AVG	
3	2410.8000	109.29	10.55	119.84	74.00	45.84	Peak	No Limit
4 *	2410.9000	100.23	10.56	110.79	54.00	56.79	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

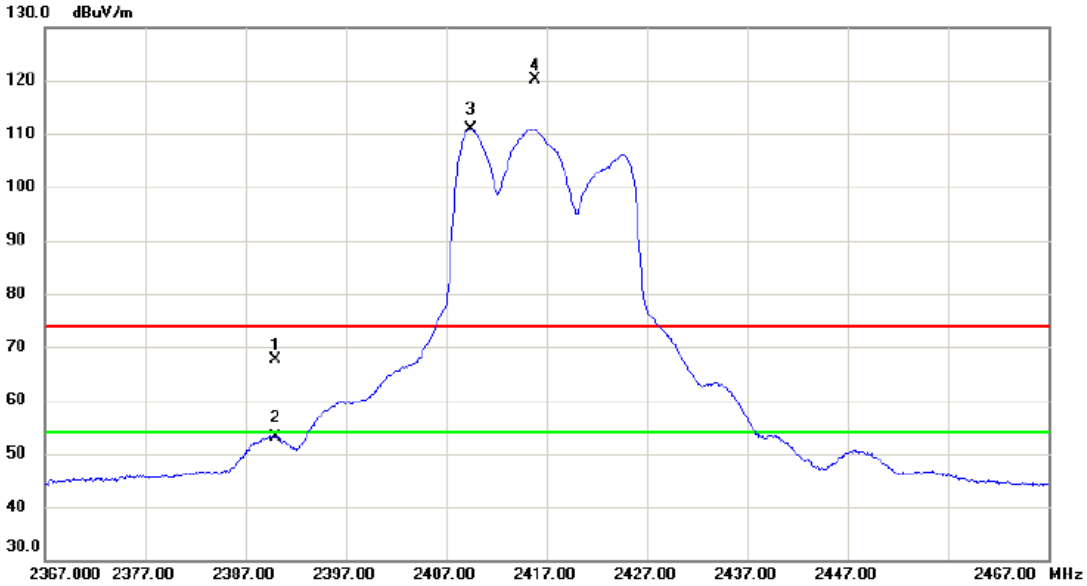
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4834.2799	36.45	6.55	43.00	74.00	-31.00	Peak	
2 *	4835.9400	25.01	6.55	31.56	54.00	-22.44	AVG	

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

Test Mode:	TX G Mode 2417 MHz

Vertical

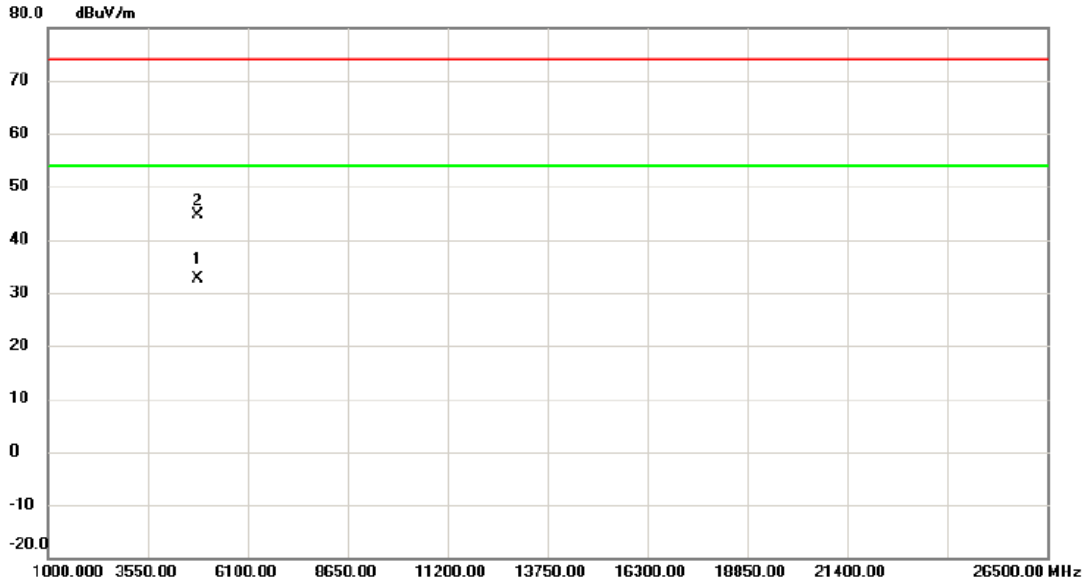


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	57.01	10.50	67.51	74.00	-6.49	peak	
2		2390.000	42.73	10.50	53.23	54.00	-0.77	AVG	
3	*	2409.400	100.31	10.55	110.86	54.00	56.86	AVG	No Limit
4	X	2415.800	109.54	10.56	120.10	74.00	46.10	peak	No Limit

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

Test Mode:	TX G Mode 2417 MHz

Vertical

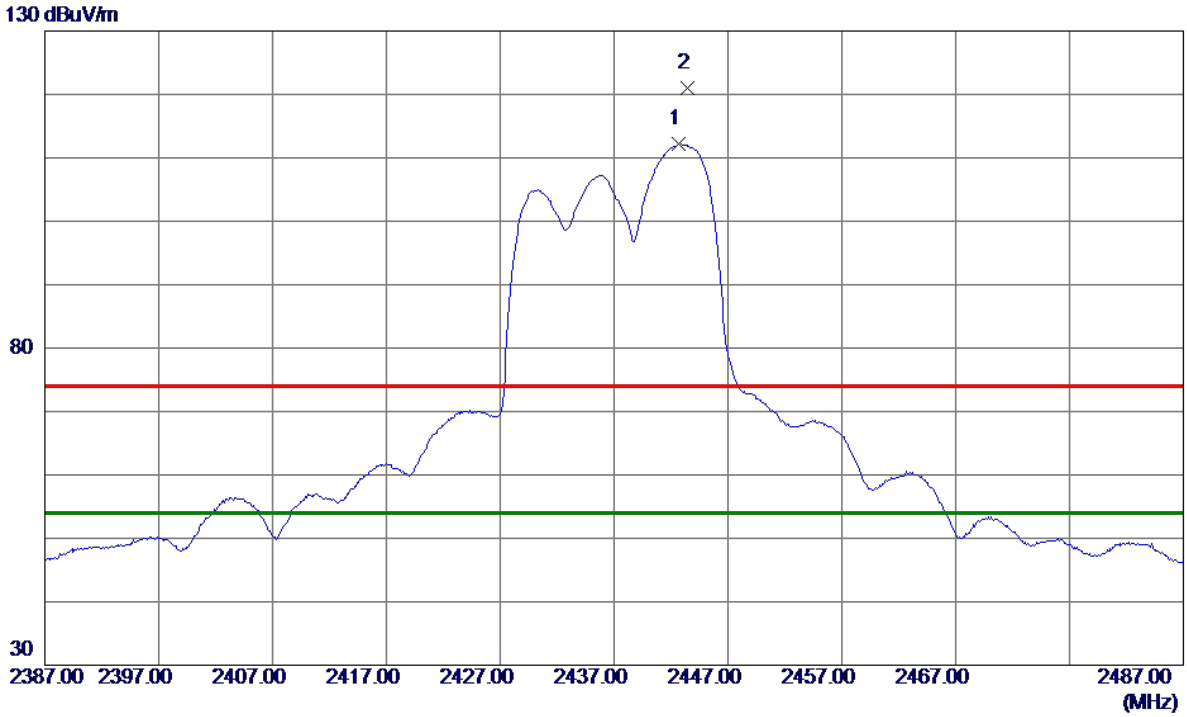


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4834.160	26.03	6.54	32.57	54.00	-21.43	AVG	
2		4837.420	38.08	6.56	44.64	74.00	-29.36	peak	

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 *	2442.7000	101.56	10.65	112.21	54.00	58.21	AVG	No Limit
2	2443.4000	110.44	10.65	121.09	74.00	47.09	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

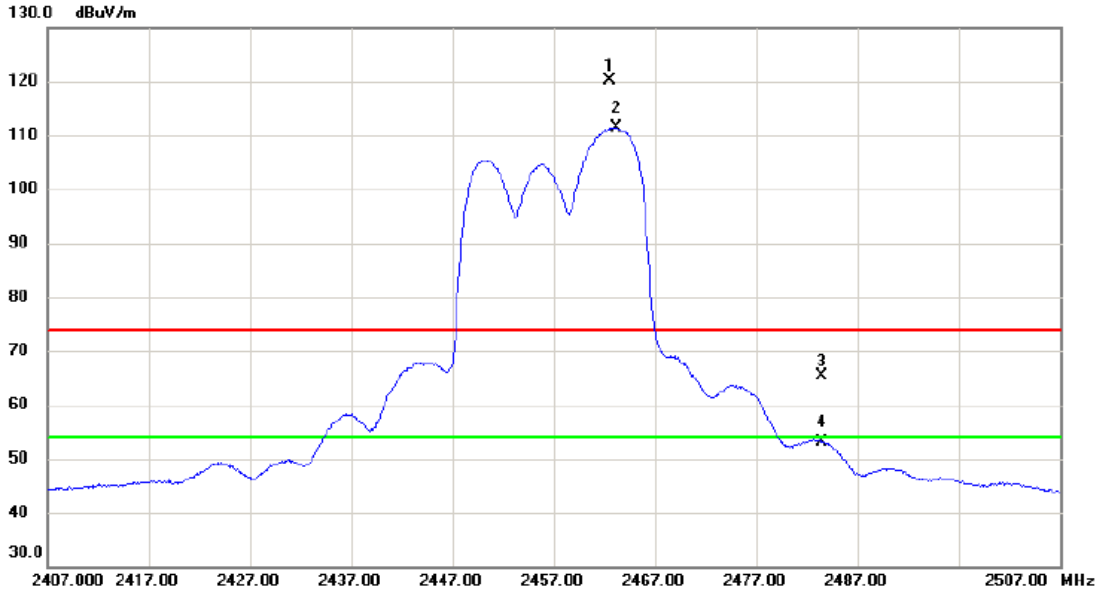
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4916.5000	26.69	6.75	33.44	54.00	-20.56	AVG	
2	4917.5800	38.05	6.76	44.81	74.00	-29.19	Peak	

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

Test Mode:	TX G Mode 2457 MHz

Vertical

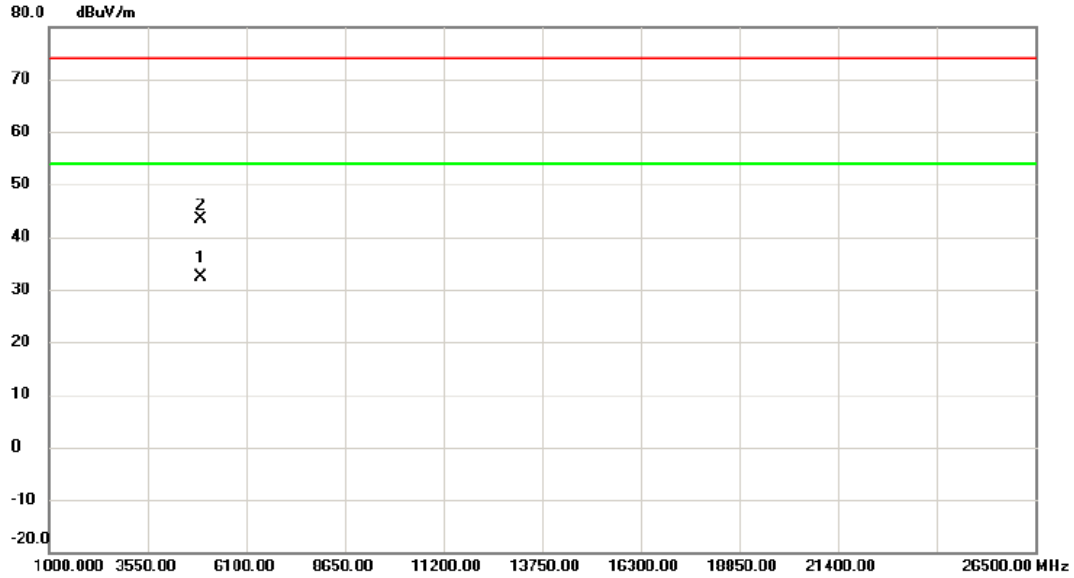


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2462.600	109.44	10.71	120.15	74.00	46.15	peak	No Limit
2	*	2463.200	100.72	10.71	111.43	54.00	57.43	AVG	No Limit
3		2483.500	54.60	10.76	65.36	74.00	-8.64	peak	
4		2483.500	42.45	10.76	53.21	54.00	-0.79	AVG	

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

Test Mode:	TX G Mode 2457 MHz

Vertical

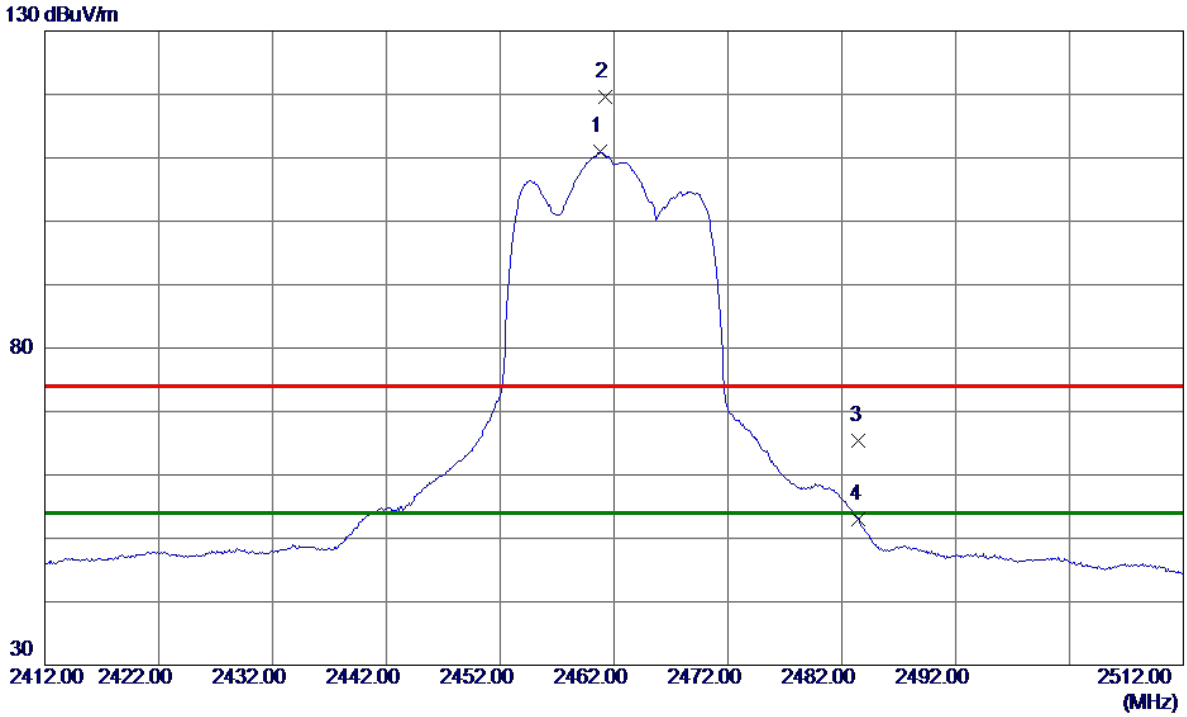


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4915.780	25.63	6.76	32.39	54.00	-21.61	AVG	
2		4916.220	36.64	6.76	43.40	74.00	-30.60	peak	

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

Test Mode:	TX G Mode 2462 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2460.8000	100.24	10.70	110.94	54.00	56.94	AVG	No Limit
2	2461.2000	108.87	10.70	119.57	74.00	45.57	Peak	No Limit
3	2483.5000	54.70	10.76	65.46	74.00	-8.54	Peak	
4	2483.5000	42.29	10.76	53.05	54.00	-0.95	AVG	

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

Test Mode:	TX G Mode 2462 MHz

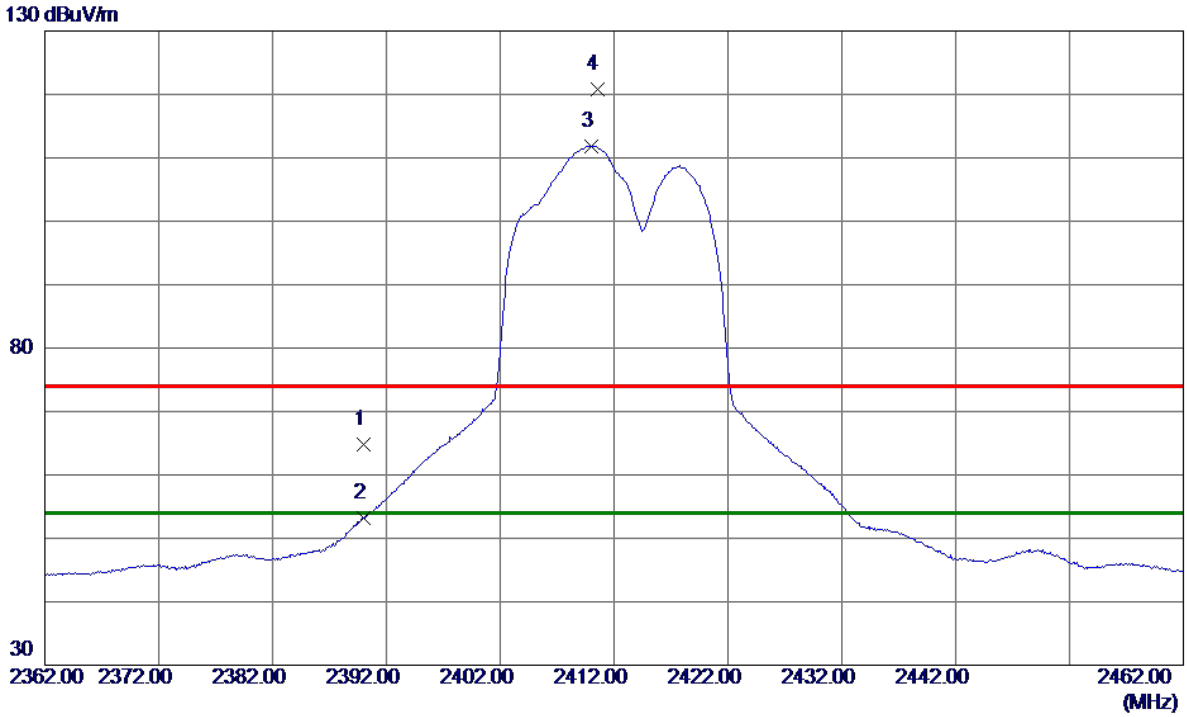
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.1200	25.07	6.77	31.84	54.00	-22.16	AVG	
2	4924.7599	37.09	6.77	43.86	74.00	-30.14	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	54.38	10.50	64.88	74.00	-9.12	Peak	
2	2390.0000	42.77	10.50	53.27	54.00	-0.73	AVG	
3 *	2410.0000	101.32	10.55	111.87	54.00	57.87	AVG	No Limit
4	2410.5000	110.30	10.55	120.85	74.00	46.85	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

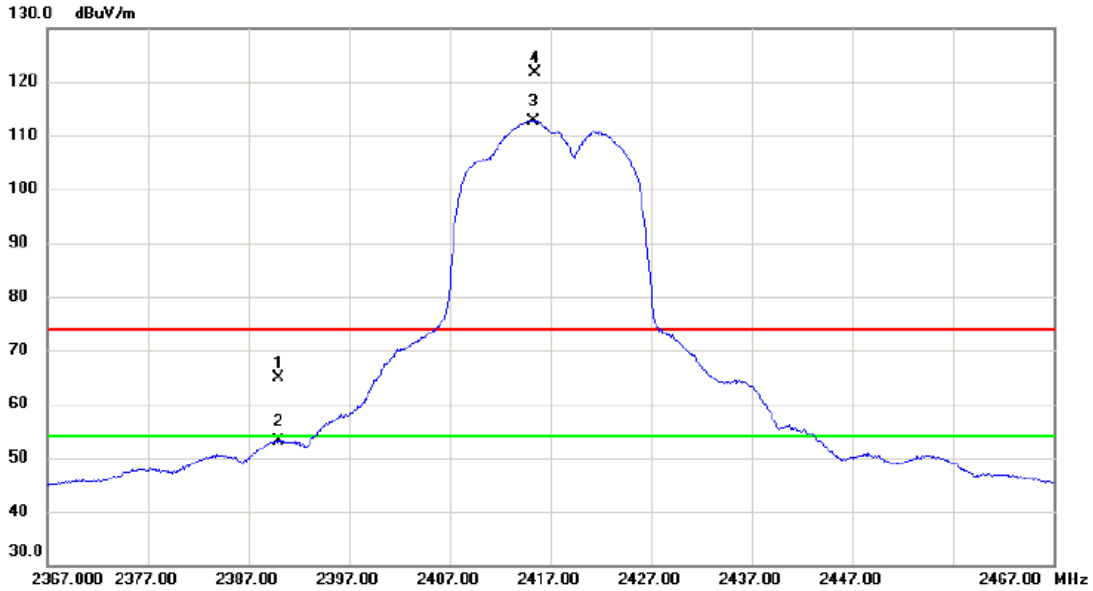
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823.2799	37.47	6.52	43.99	74.00	-30.01	Peak	
2 *	4823.5800	24.97	6.52	31.49	54.00	-22.51	AVG	

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

Test Mode:	TX N-20M Mode 2417 MHz

Vertical

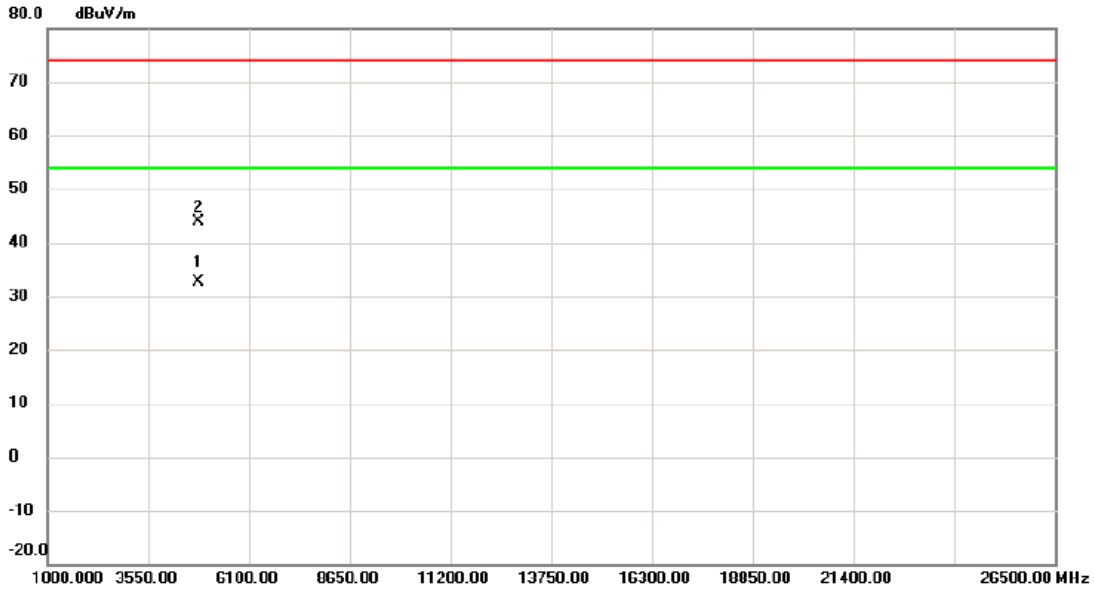


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	54.49	10.50	64.99	74.00	-9.01	peak	
2		2390.000	42.71	10.50	53.21	54.00	-0.79	AVG	
3	*	2415.300	102.16	10.56	112.72	54.00	58.72	AVG	No Limit
4	X	2415.500	111.05	10.56	121.61	74.00	47.61	peak	No Limit

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

Test Mode:	TX N-20M Mode 2417 MHz

Vertical

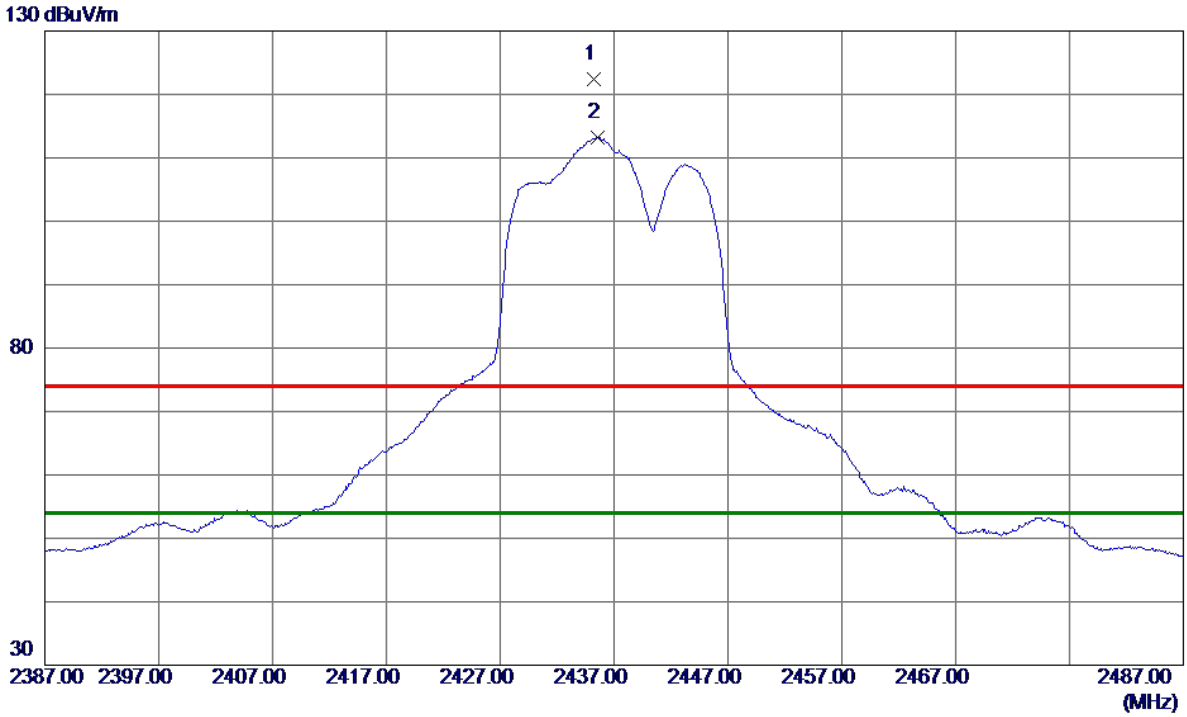


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4833.480	26.05	6.54	32.59	54.00	-21.41	AVG	
2		4833.580	37.23	6.54	43.77	74.00	-30.23	peak	

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

Test Mode:	TX N-20M Mode 2437 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2435.2000	111.81	10.62	122.43	74.00	48.43	Peak	No Limit
2 *	2435.6000	102.62	10.63	113.25	54.00	59.25	AVG	No Limit

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

Test Mode:	TX N-20M Mode 2437 MHz

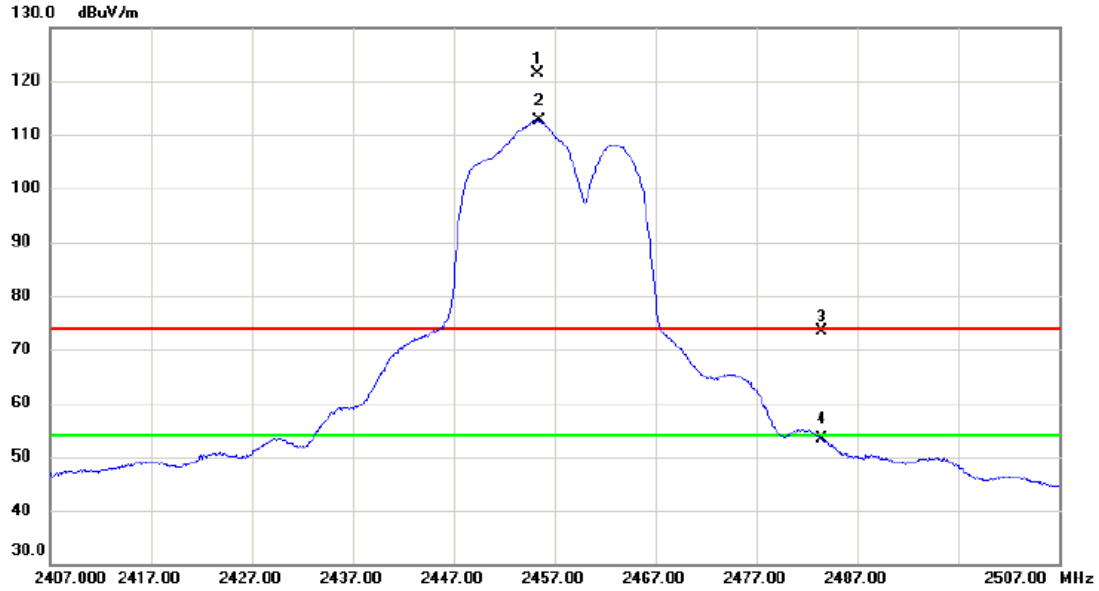
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873.4200	38.06	6.65	44.71	74.00	-29.29	Peak	
2 *	4874.9200	28.55	6.65	35.20	54.00	-18.80	AVG	

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

Test Mode:	TX N-20M Mode 2457 MHz

Vertical

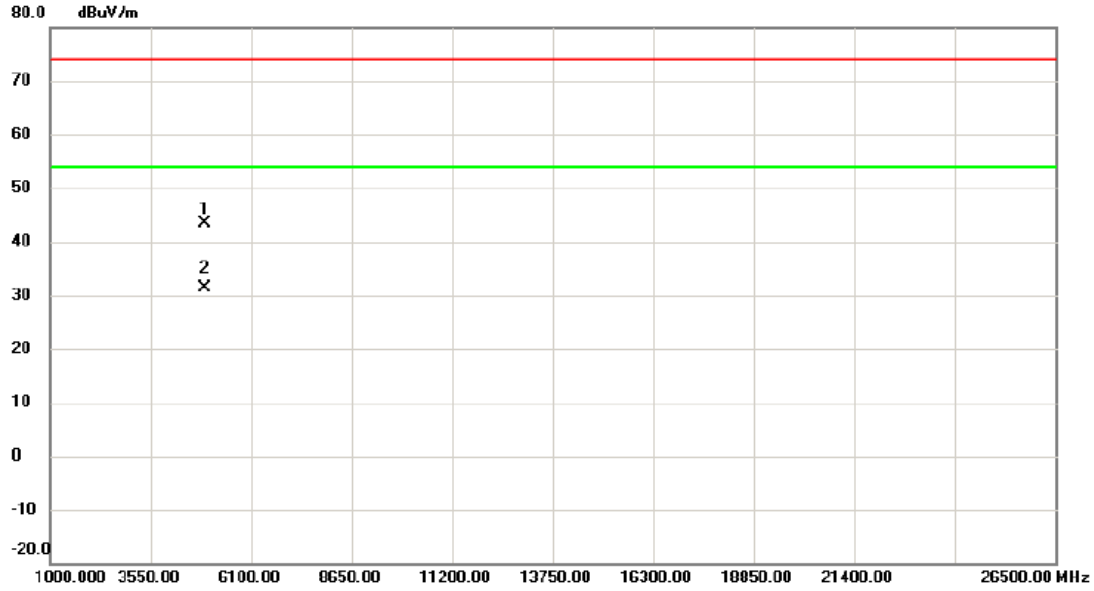


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2455.300	110.60	10.68	121.28	74.00	47.28	peak	No Limit
2	*	2455.400	101.88	10.68	112.56	54.00	58.56	AVG	No Limit
3		2483.500	62.69	10.76	73.45	74.00	-0.55	peak	
4		2483.500	42.69	10.76	53.45	54.00	-0.55	AVG	

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

Test Mode:	TX N-20M Mode 2457 MHz

Vertical

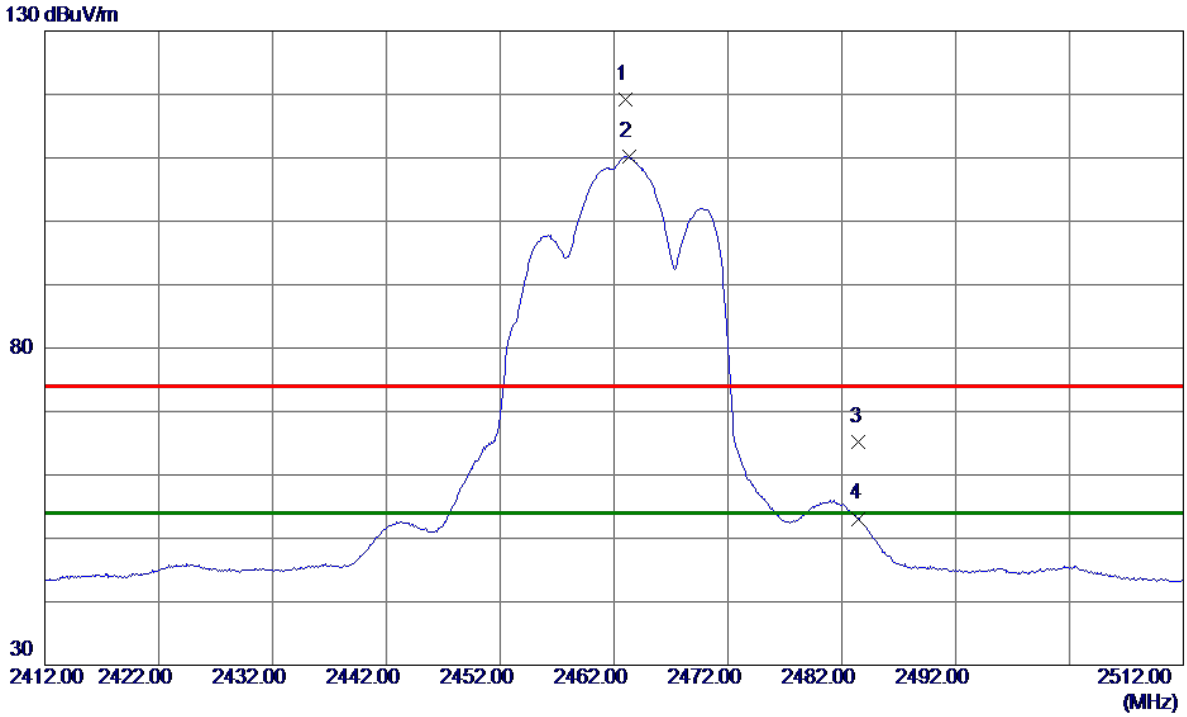


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4912.280	36.59	6.75	43.34	74.00	-30.66	peak	
2	*	4914.040	24.71	6.75	31.46	54.00	-22.54	AVG	

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	2463.0000	108.51	10.70	119.21	74.00	45.21	Peak	No Limit
2 *	2463.3000	99.59	10.70	110.29	54.00	56.29	AVG	No Limit
3	2483.5000	54.47	10.76	65.23	74.00	-8.77	Peak	
4	2483.5000	42.34	10.76	53.10	54.00	-0.90	AVG	

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

Test Mode:	TX N-20M Mode 2462 MHz

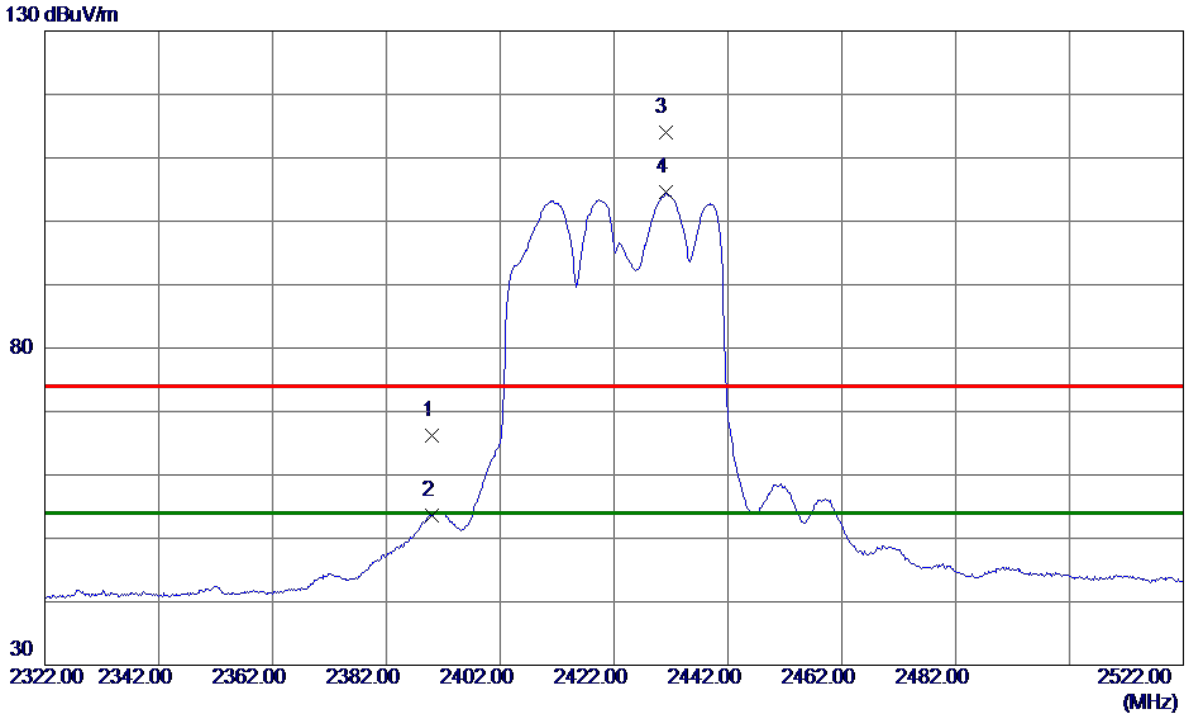
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.1200	25.55	6.77	32.32	54.00	-21.68	AVG	
2	4926.6200	37.24	6.78	44.02	74.00	-29.98	Peak	

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

Test Mode:	TX N-40M Mode 2422 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	55.75	10.50	66.25	74.00	-7.75	Peak	
2	2390.0000	43.02	10.50	53.52	54.00	-0.48	AVG	
3	2431.0000	103.41	10.61	114.02	74.00	40.02	Peak	No Limit
4 *	2431.2000	93.90	10.61	104.51	54.00	50.51	AVG	No Limit

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

Test Mode:	TX N-40M Mode 2422 MHz

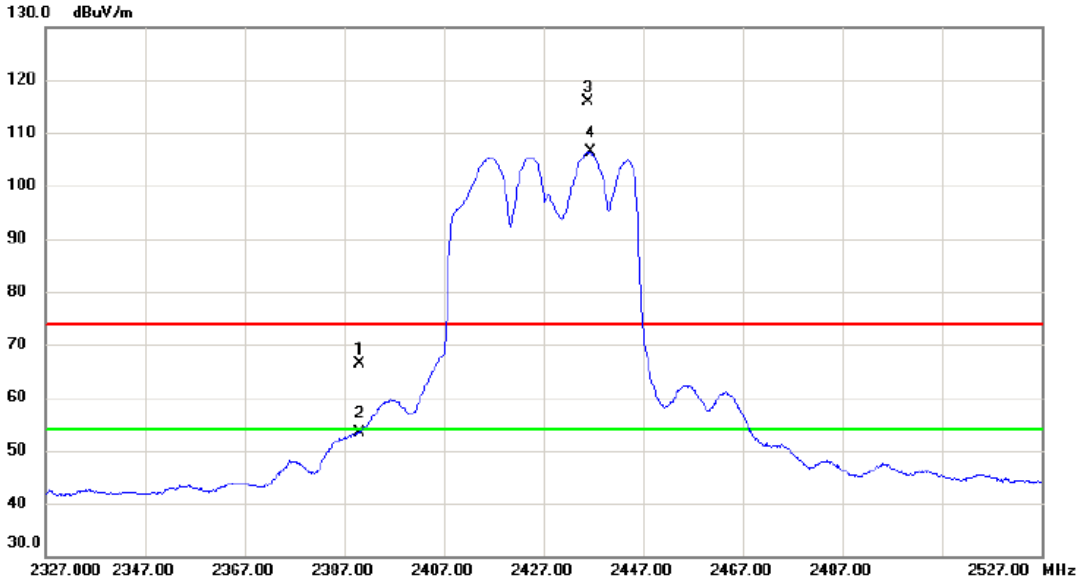
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4844.0600	38.06	6.57	44.63	74.00	-29.37	Peak	
2 *	4844.1400	25.72	6.58	32.30	54.00	-21.70	AVG	

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

Test Mode:	TX N-40M Mode 2427 MHz

Vertical

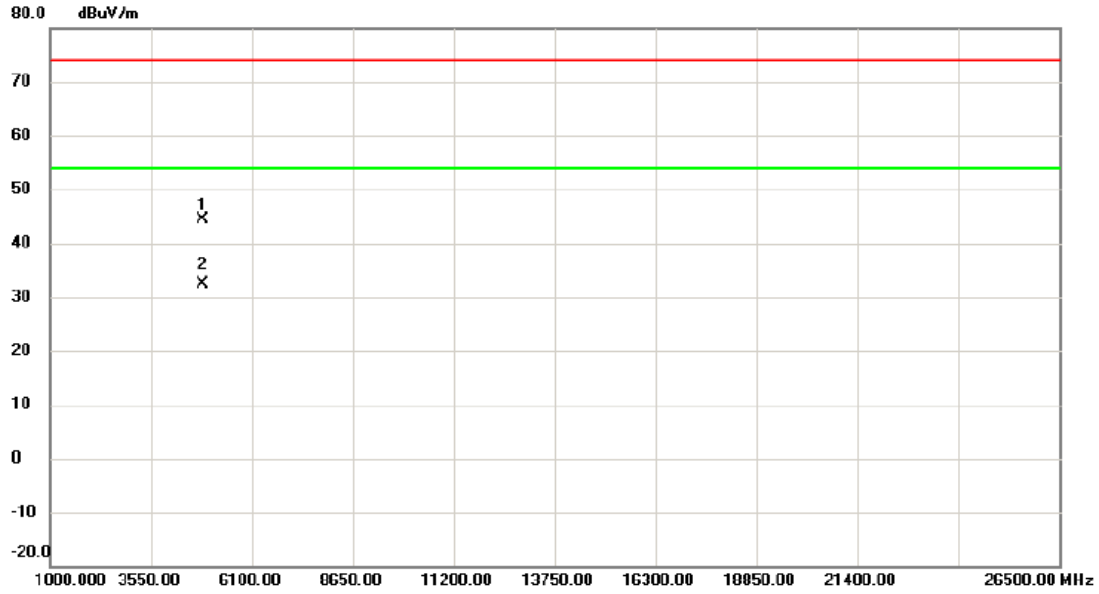


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	55.90	10.50	66.40	74.00	-7.60	peak	
2		2390.000	42.84	10.50	53.34	54.00	-0.66	AVG	
3	X	2435.800	105.16	10.63	115.79	74.00	41.79	peak	No Limit
4	*	2436.400	95.74	10.63	106.37	54.00	52.37	AVG	No Limit

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

Test Mode:	TX N-40M Mode 2427 MHz

Vertical

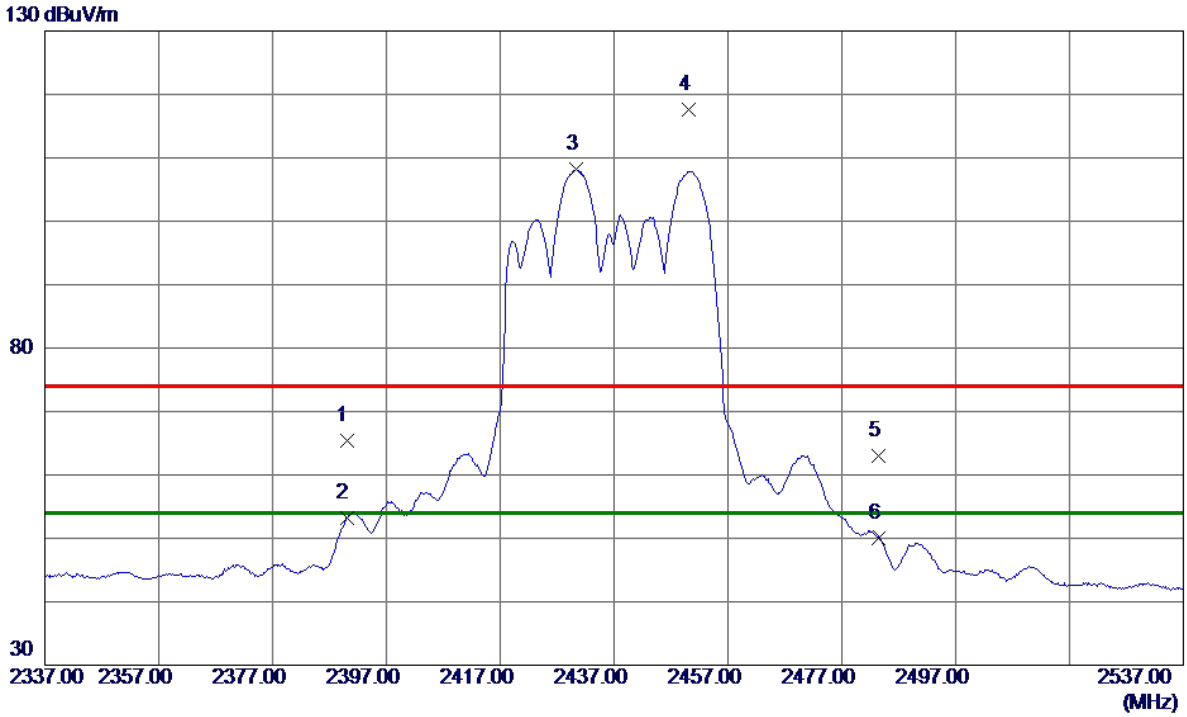


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4852.040	37.77	6.59	44.36	74.00	-29.64	peak	
2	*	4854.000	25.71	6.60	32.31	54.00	-21.69	AVG	

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

Test Mode:	TX N-40M Mode 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	54.92	10.50	65.42	74.00	-8.58	Peak	
2	2390.0000	42.67	10.50	53.17	54.00	-0.83	AVG	
3 *	2430.4000	97.51	10.61	108.12	54.00	54.12	AVG	No Limit
4	2450.2000	106.95	10.67	117.62	74.00	43.62	Peak	No Limit
5	2483.5000	52.17	10.76	62.93	74.00	-11.07	Peak	
6	2483.5000	39.33	10.76	50.09	54.00	-3.91	AVG	

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

Test Mode:	TX N-40M Mode 2437 MHz

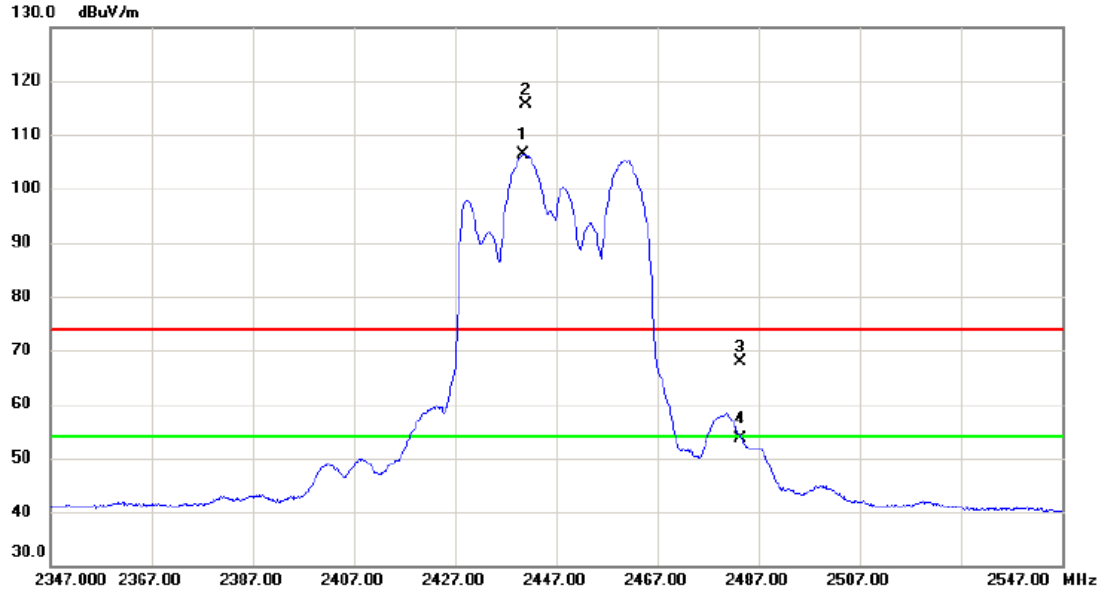
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874.9600	38.31	6.65	44.96	74.00	-29.04	Peak	
2 *	4875.0000	30.61	6.65	37.26	54.00	-16.74	AVG	

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

Test Mode:	TX N-40M Mode 2447 MHz

Vertical

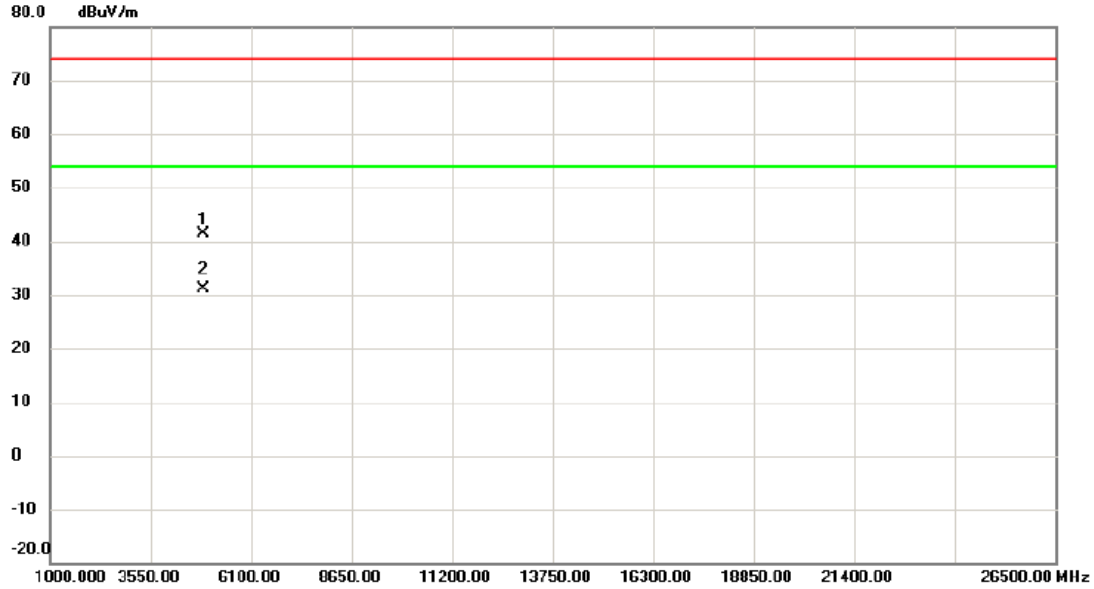


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2440.600	95.68	10.64	106.32	54.00	52.32	AVG	No Limit
2	X	2441.000	105.10	10.64	115.74	74.00	41.74	peak	No Limit
3		2483.500	57.14	10.76	67.90	74.00	-6.10	peak	
4		2483.500	42.93	10.76	53.69	54.00	-0.31	AVG	

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

Test Mode:	TX N-40M Mode 2447 MHz

Vertical

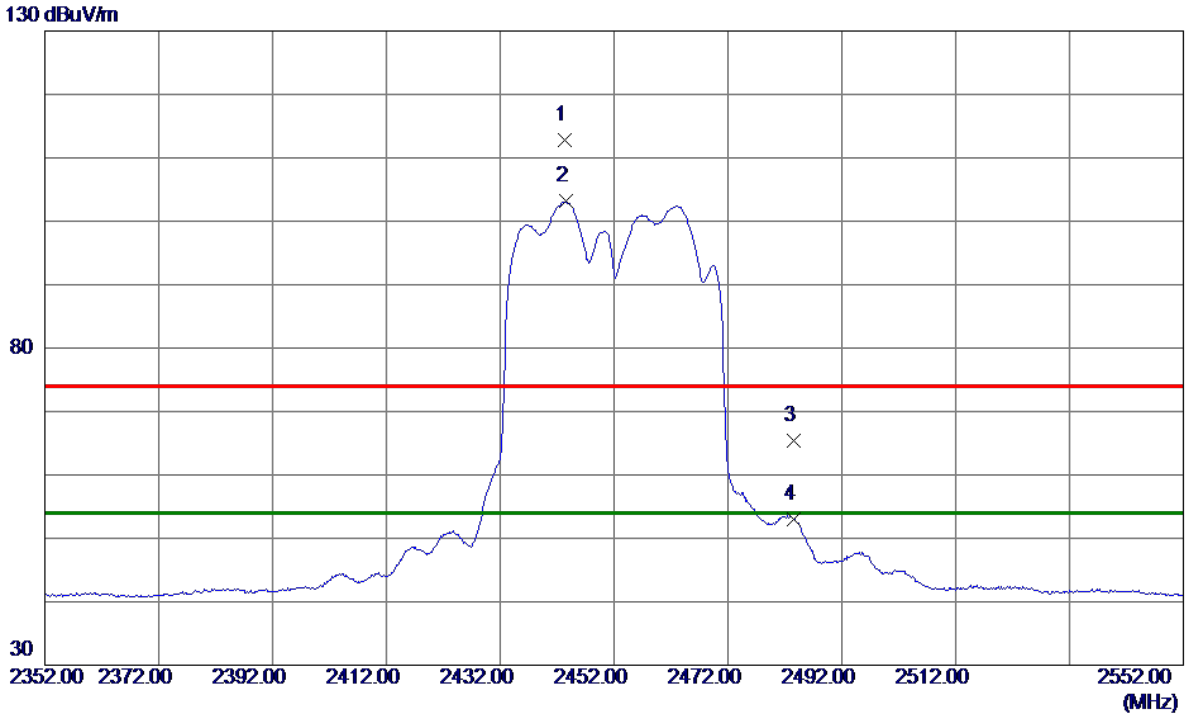


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4890.000	34.78	6.68	41.46	74.00	-32.54	peak	
2	*	4893.300	24.46	6.69	31.15	54.00	-22.85	AVG	

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	2443.4000	102.13	10.65	112.78	74.00	38.78	Peak	No Limit
2 *	2443.6000	92.46	10.65	103.11	54.00	49.11	AVG	No Limit
3	2483.5000	54.60	10.76	65.36	74.00	-8.64	Peak	
4	2483.5000	42.31	10.76	53.07	54.00	-0.93	AVG	

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

Test Mode:	TX N-40M Mode 2452 MHz

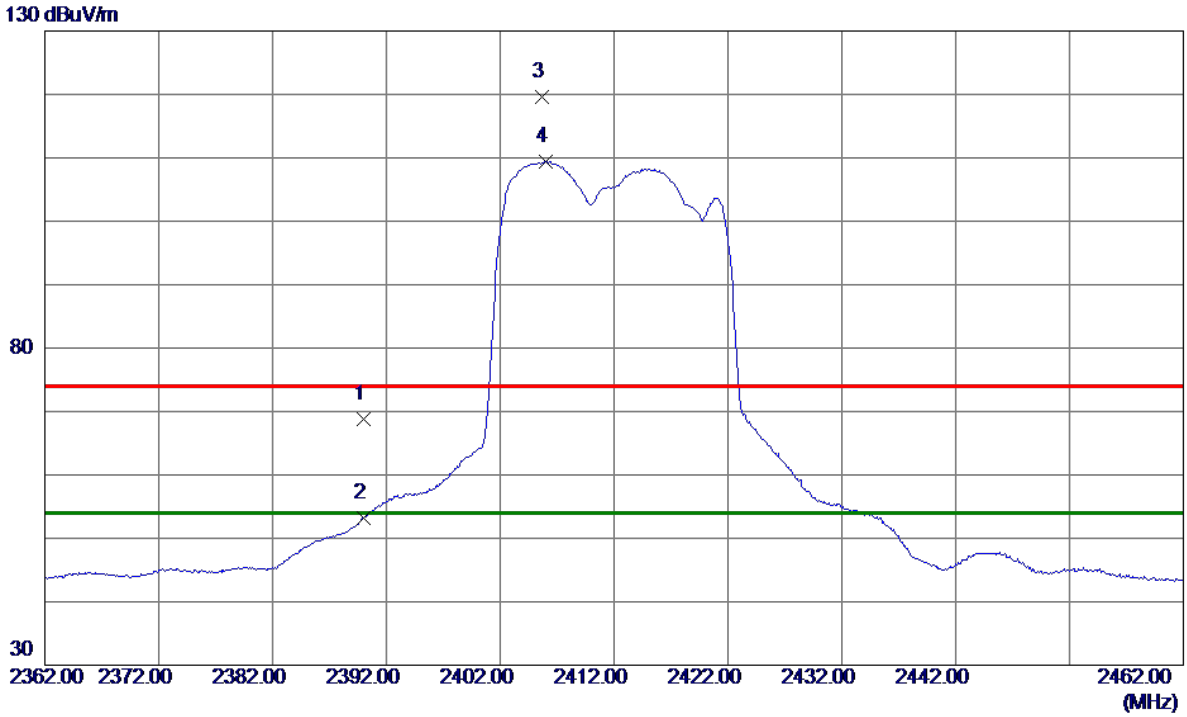
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4897.2400	34.34	6.71	41.05	74.00	-32.95	Peak	
2 *	4903.8600	22.74	6.72	29.46	54.00	-24.54	AVG	

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

Test Mode:	TX AX-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	58.37	10.50	68.87	74.00	-5.13	Peak	
2	2390.0000	42.78	10.50	53.28	54.00	-0.72	AVG	
3	2405.7000	109.12	10.54	119.66	74.00	45.66	Peak	No Limit
4 *	2406.0000	98.85	10.54	109.39	54.00	55.39	AVG	No Limit

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

Test Mode:	TX AX-20M Mode 2412 MHz

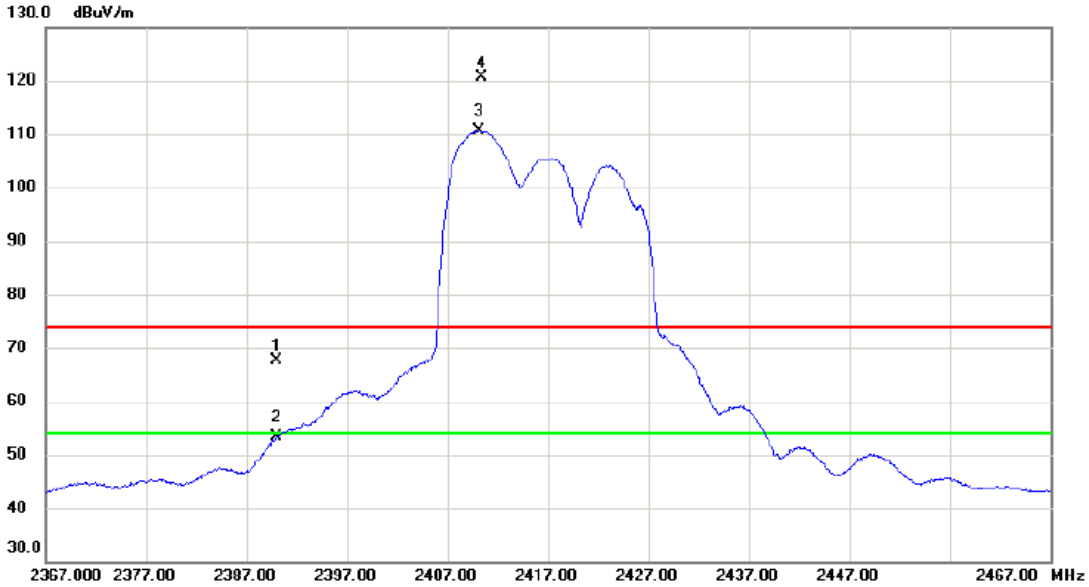
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4825.2799	24.54	6.53	31.07	54.00	-22.93	AVG	
2	4825.8200	36.13	6.53	42.66	74.00	-31.34	Peak	

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

Test Mode:	TX AX-20M Mode 2417 MHz

Vertical

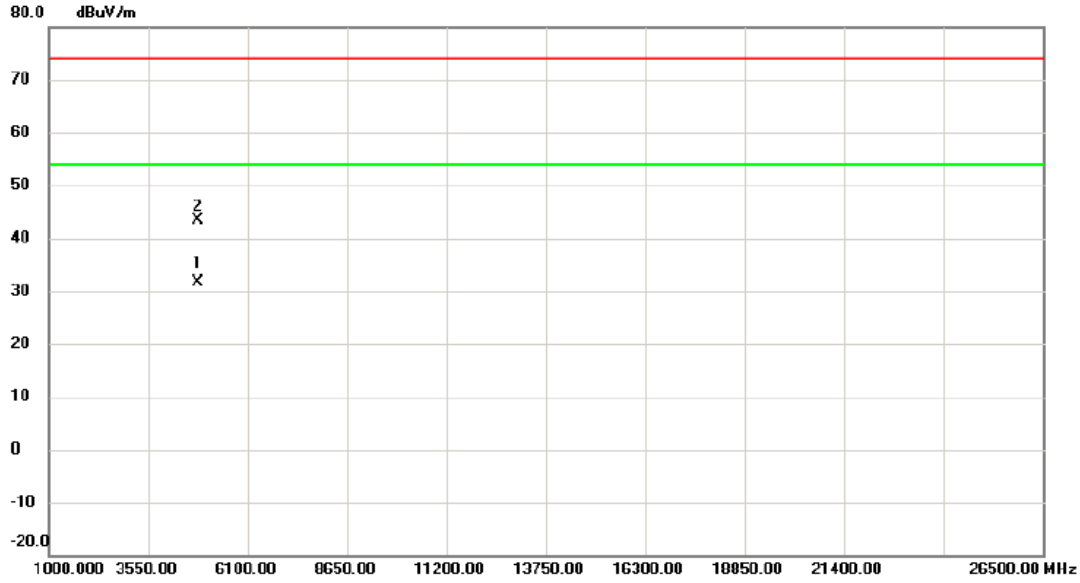


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	57.06	10.50	67.56	74.00	-6.44	peak	
2		2390.000	42.85	10.50	53.35	54.00	-0.65	AVG	
3	*	2410.200	100.05	10.55	110.60	54.00	56.60	AVG	No Limit
4	X	2410.400	110.01	10.55	120.56	74.00	46.56	peak	No Limit

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

Test Mode:	TX AX-20M Mode 2417 MHz

Vertical

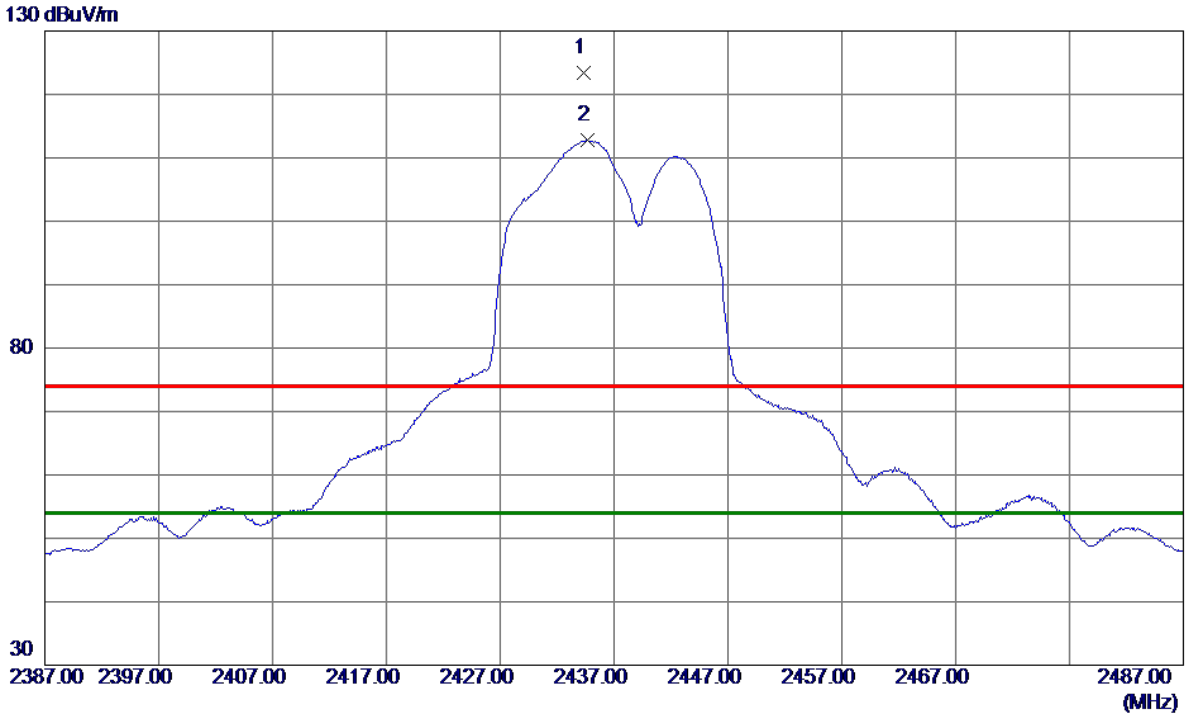


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4833.960	25.11	6.54	31.65	54.00	-22.35	AVG	
2		4837.200	36.76	6.56	43.32	74.00	-30.68	peak	

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

Test Mode:	TX AX-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	2434.3000	112.80	10.62	123.42	74.00	49.42	Peak	No Limit
2 *	2434.7000	102.21	10.62	112.83	54.00	58.83	AVG	No Limit

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

Test Mode:	TX AX-20M Mode 2437 MHz

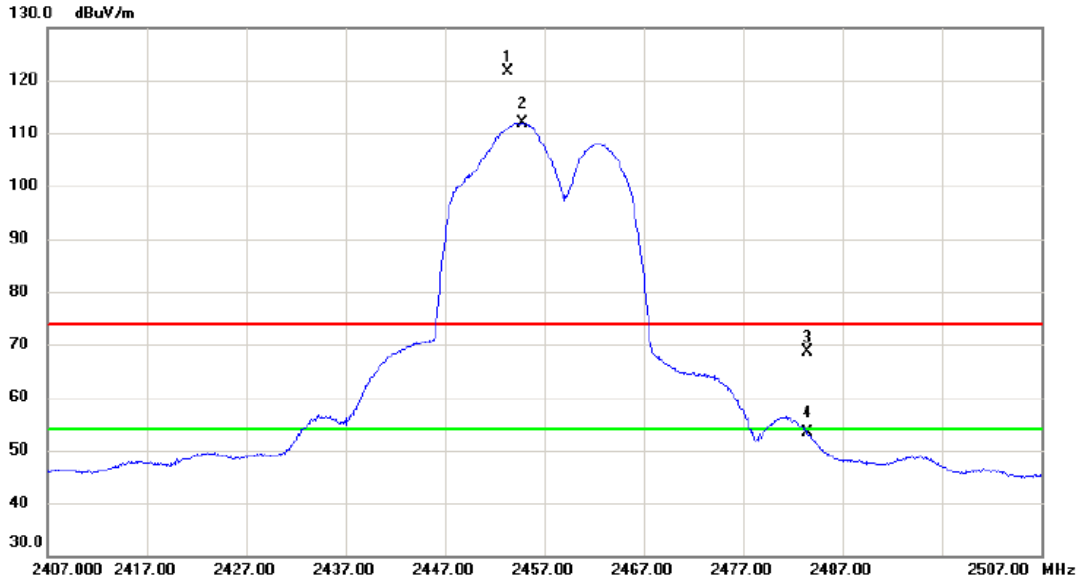
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4874.8800	38.91	6.65	45.56	74.00	-28.44	Peak	
2 *	4875.0600	28.88	6.65	35.53	54.00	-18.47	AVG	

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

Test Mode:	TX AX-20M Mode 2457 MHz

Vertical

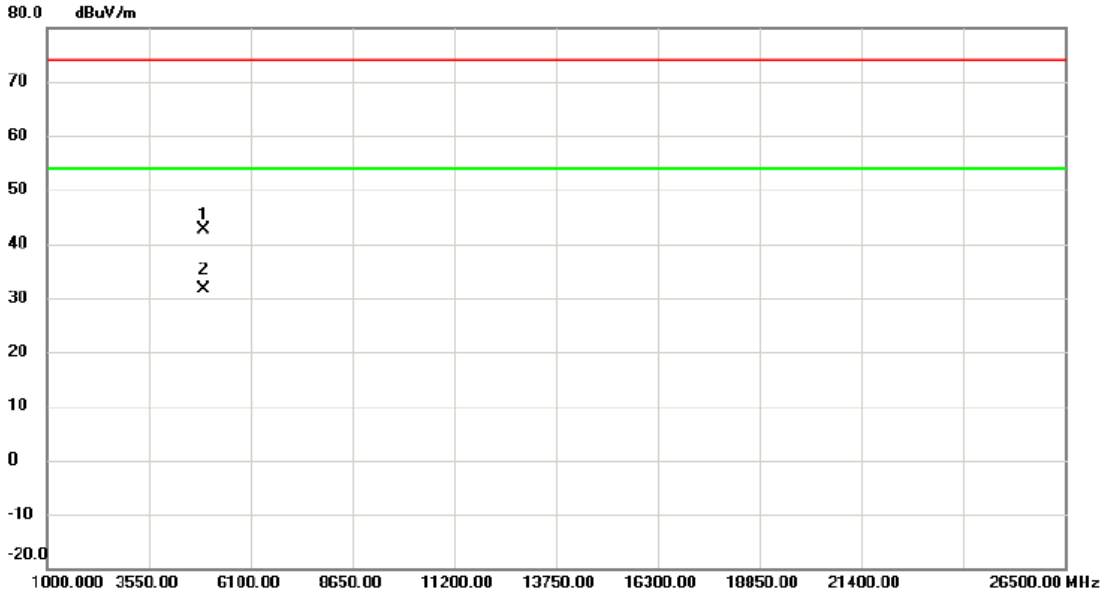


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2453.300	111.07	10.68	121.75	74.00	47.75	peak	No Limit
2	*	2454.800	101.19	10.68	111.87	54.00	57.87	AVG	No Limit
3		2483.500	57.80	10.76	68.56	74.00	-5.44	peak	
4		2483.500	42.53	10.76	53.29	54.00	-0.71	AVG	

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

Test Mode:	TX AX-20M Mode 2457 MHz

Vertical

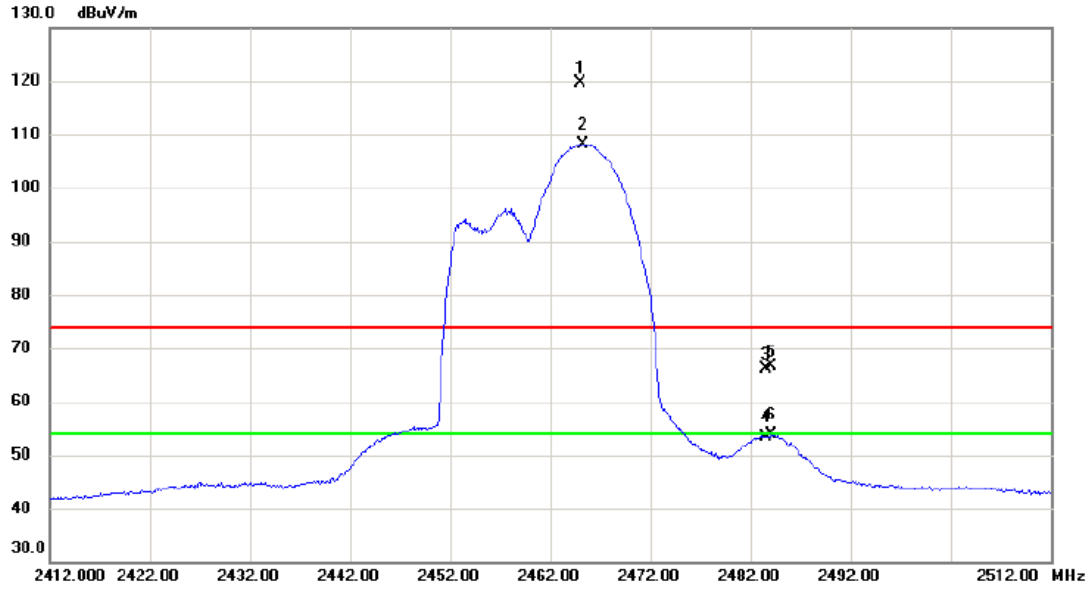


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4913.140	35.92	6.75	42.67	74.00	-31.33	peak	
2	*	4914.040	24.83	6.75	31.58	54.00	-22.42	AVG	

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

Test Mode:	TX AX-20M Mode 2462 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2465.000	108.86	10.71	119.57	74.00	45.57	peak	No Limit
2	*	2465.300	97.49	10.71	108.20	54.00	54.20	AVG	No Limit
3		2483.500	55.44	10.76	66.20	74.00	-7.80	peak	
4		2483.500	42.73	10.76	53.49	54.00	-0.51	AVG	
5		2484.100	55.83	10.77	66.60	74.00	-7.40	peak	
6		2484.100	43.07	10.77	53.84	54.00	-0.16	AVG	

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

Test Mode:	TX AX-20M Mode 2462 MHz

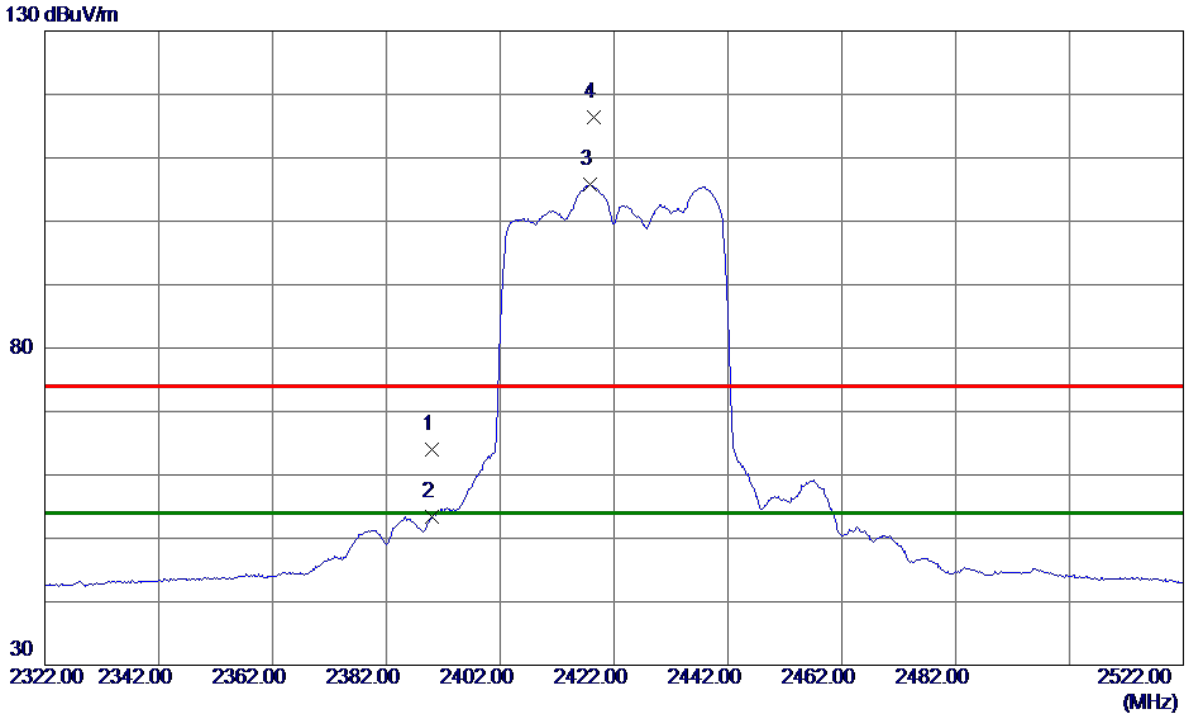
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923.7599	24.39	6.77	31.16	54.00	-22.84	AVG	
2	4925.1000	36.51	6.78	43.29	74.00	-30.71	Peak	

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

Test Mode:	TX AX-40M Mode 2422 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	53.48	10.50	63.98	74.00	-10.02	Peak	
2	2390.0000	42.84	10.50	53.34	54.00	-0.66	AVG	
3 *	2417.8000	95.18	10.57	105.75	54.00	51.75	AVG	No Limit
4	2418.4000	105.89	10.58	116.47	74.00	42.47	Peak	No Limit

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

Test Mode:	TX AX-40M Mode 2422 MHz

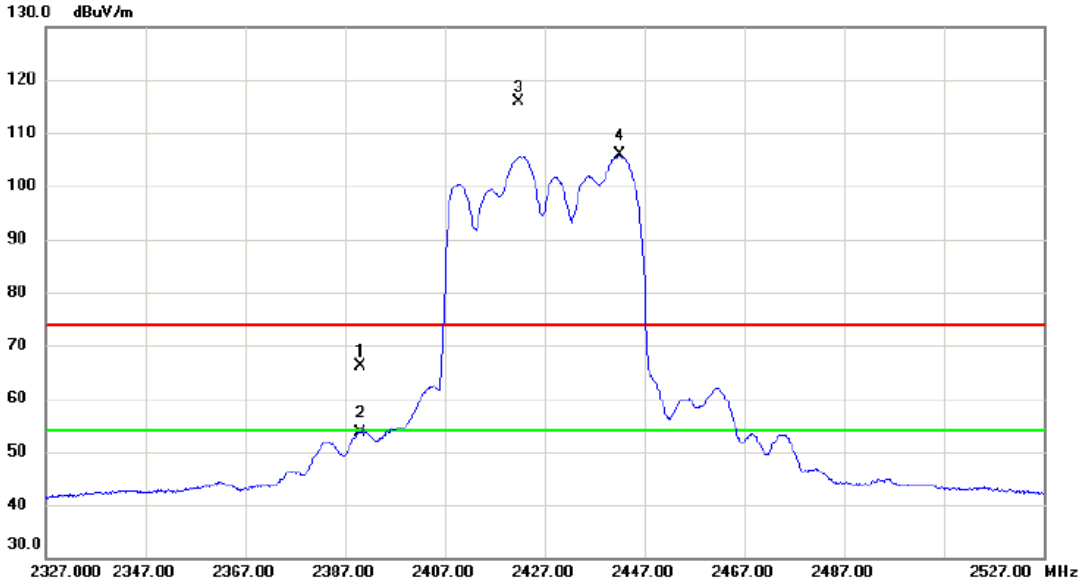
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4845.7599	36.21	6.58	42.79	74.00	-31.21	Peak	
2 *	4846.1000	24.47	6.58	31.05	54.00	-22.95	AVG	

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

Test Mode:	TX AX-40M Mode 2427 MHz

Vertical

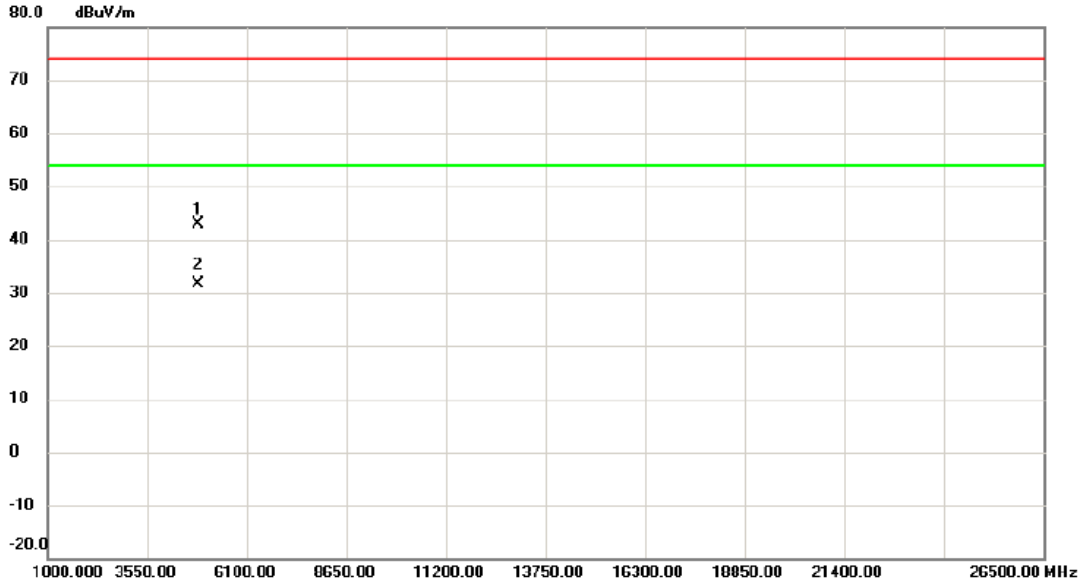


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	55.72	10.50	66.22	74.00	-7.78	peak	
2		2390.000	43.10	10.50	53.60	54.00	-0.40	AVG	
3	X	2421.800	105.17	10.59	115.76	74.00	41.76	peak	No Limit
4	*	2442.000	95.33	10.64	105.97	54.00	51.97	AVG	No Limit

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

Test Mode:	TX AX-40M Mode 2427 MHz

Vertical

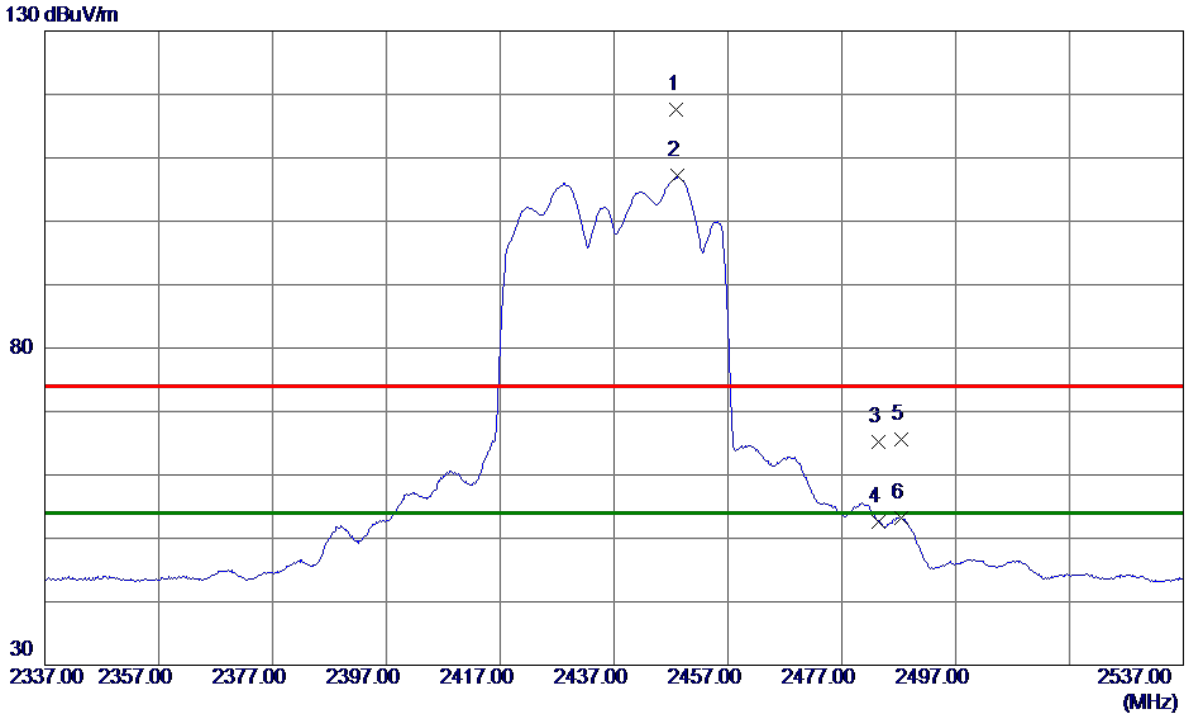


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4855.480	36.33	6.60	42.93	74.00	-31.07	peak	
2	*	4855.640	25.02	6.60	31.62	54.00	-22.38	AVG	

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

Test Mode:	TX AX-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	2448.0000	106.91	10.66	117.57	74.00	43.57	Peak	No Limit
2 *	2448.2000	96.45	10.66	107.11	54.00	53.11	AVG	No Limit
3	2483.5000	54.44	10.76	65.20	74.00	-8.80	Peak	
4	2483.5000	41.81	10.76	52.57	54.00	-1.43	AVG	
5	2487.4000	54.87	10.77	65.64	74.00	-8.36	Peak	
6	2487.4000	42.48	10.77	53.25	54.00	-0.75	AVG	

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

Test Mode:	TX AX-40M Mode 2437 MHz

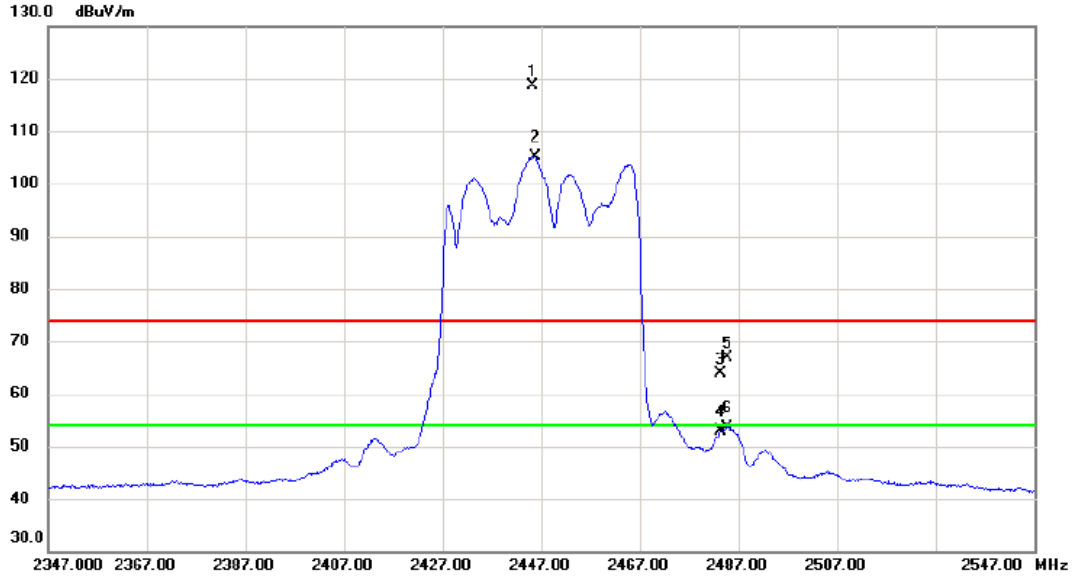
Vertical

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4875.0000	29.73	6.65	36.38	54.00	-17.62	AVG	
2	4875.1200	38.09	6.65	44.74	74.00	-29.26	Peak	

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

Test Mode:	TX AX-40M Mode 2447 MHz

Vertical

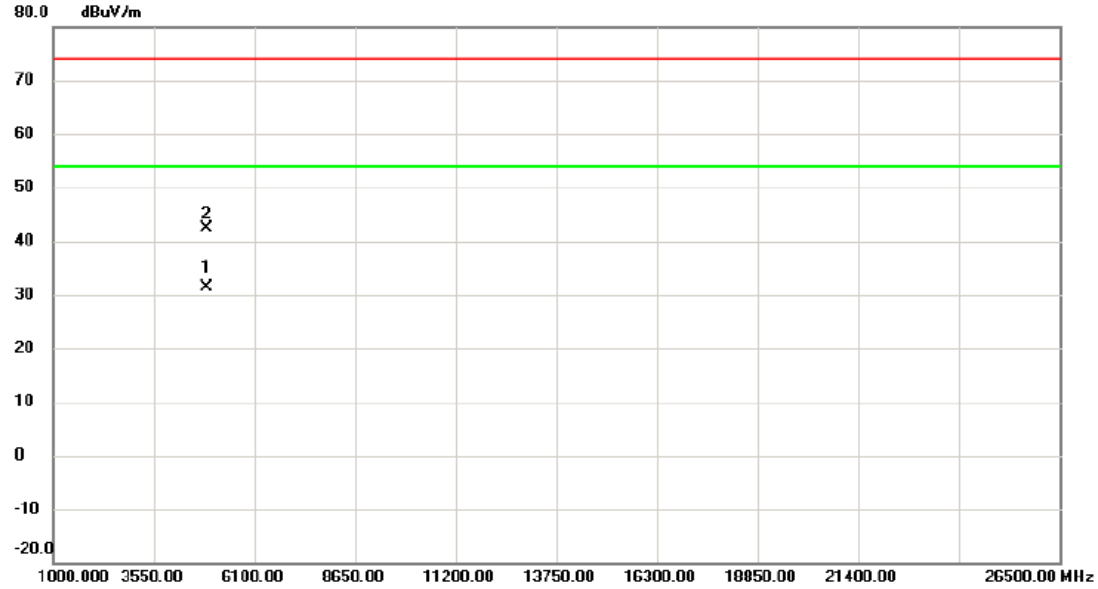


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2445.200	108.03	10.66	118.69	74.00	44.69	peak	No Limit
2	*	2445.800	94.44	10.66	105.10	54.00	51.10	AVG	No Limit
3		2483.500	53.15	10.76	63.91	74.00	-10.09	peak	
4		2483.500	42.04	10.76	52.80	54.00	-1.20	AVG	
5		2484.800	56.11	10.77	66.88	74.00	-7.12	peak	
6		2484.800	42.88	10.77	53.65	54.00	-0.35	AVG	

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

Test Mode:	TX AX-40M Mode 2447 MHz

Vertical

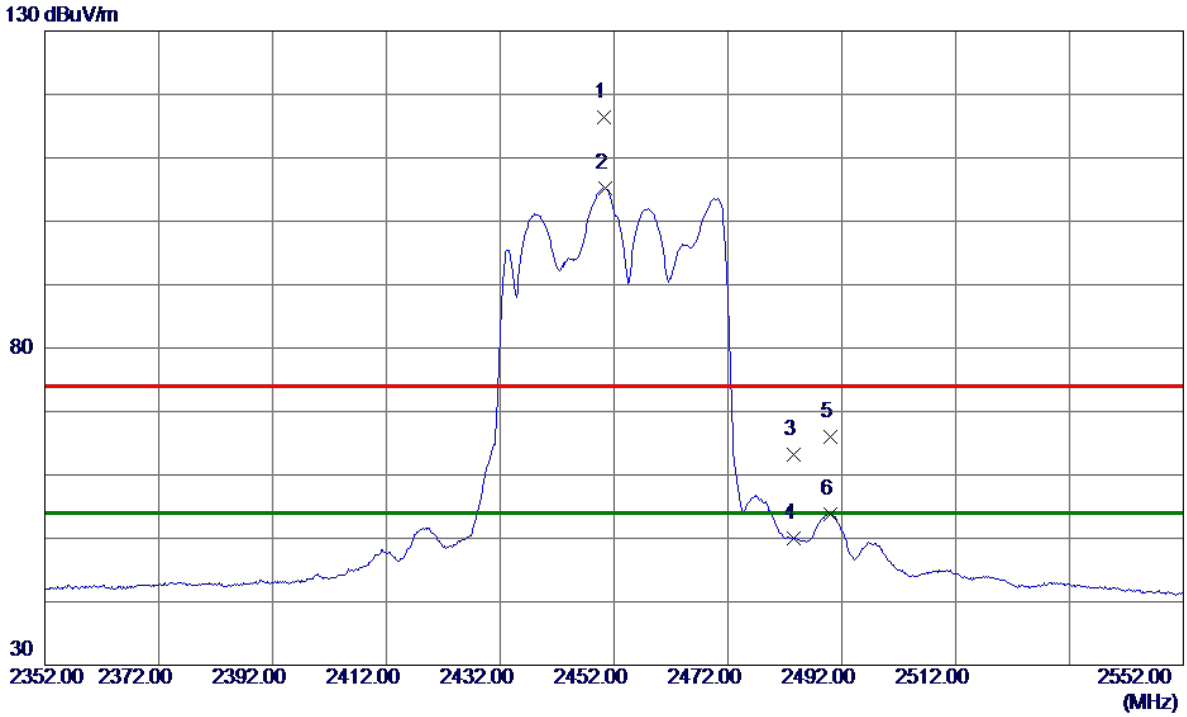


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4893.820	24.73	6.69	31.42	54.00	-22.58	AVG	
2		4894.040	35.73	6.69	42.42	74.00	-31.58	peak	

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

Test Mode:	TX AX-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	2450.2000	105.64	10.67	116.31	74.00	42.31	Peak	No Limit
2 *	2450.4000	94.52	10.67	105.19	54.00	51.19	AVG	No Limit
3	2483.5000	52.47	10.76	63.23	74.00	-10.77	Peak	
4	2483.5000	39.16	10.76	49.92	54.00	-4.08	AVG	
5	2490.0000	55.24	10.78	66.02	74.00	-7.98	Peak	
6	2490.0000	43.01	10.78	53.79	54.00	-0.21	AVG	

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

Test Mode:	TX AX-40M Mode 2452 MHz

Vertical

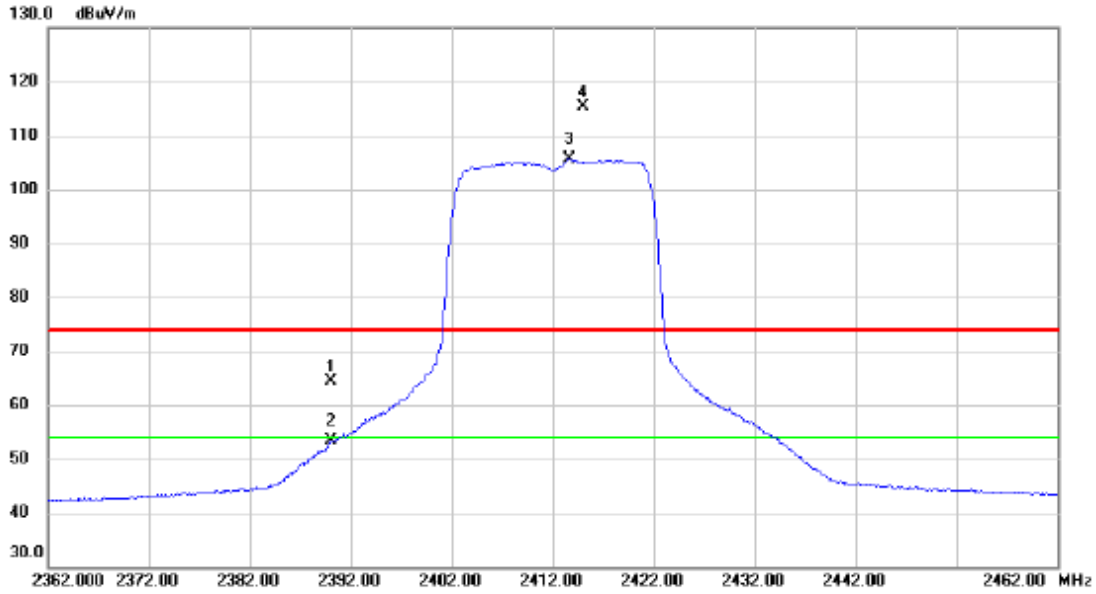
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4903.1600	24.65	6.72	31.37	54.00	-22.63	AVG	
2	4906.9800	36.56	6.73	43.29	74.00	-30.71	Peak	

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

Beamforming

Test Mode:	TX AX-20M Mode 2412 MHz

Vertical

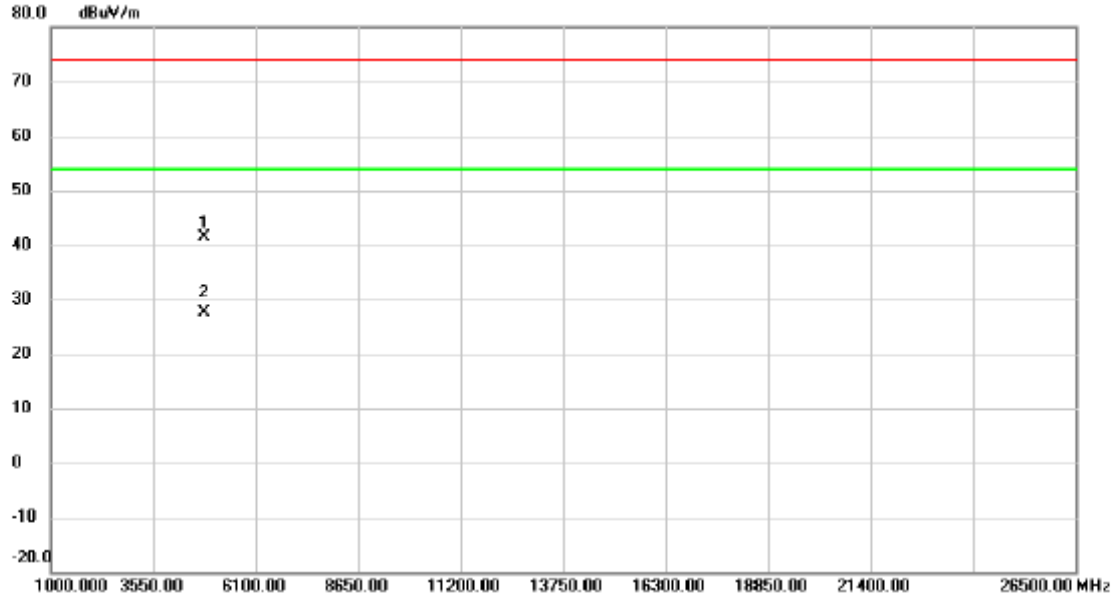


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	53.79	10.63	64.42	74.00	-9.58	peak	
2		2390.000	42.72	10.63	53.35	54.00	-0.65	AVG	
3	*	2413.700	95.04	10.69	105.73	54.00	51.73	AVG	No Limit
4	X	2415.000	104.68	10.69	115.37	74.00	41.37	peak	No Limit

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

Test Mode:	TX AX-20M Mode 2412 MHz

Vertical

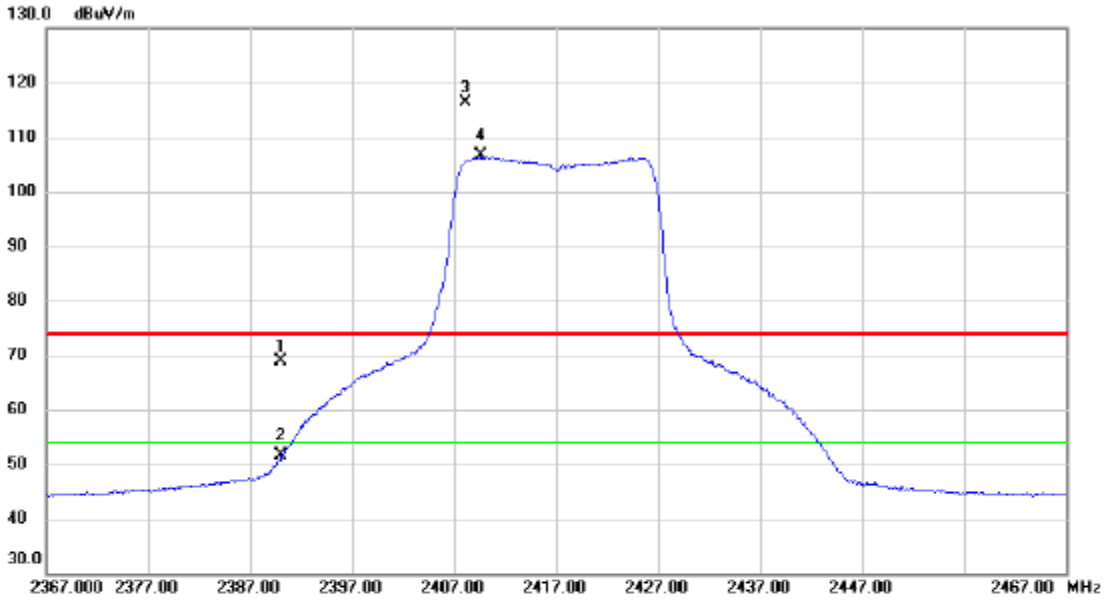


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.538	34.76	6.53	41.29	74.00	-32.71	peak	
2	*	4823.538	21.11	6.53	27.64	54.00	-26.36	AVG	

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

Test Mode:	TX AX-20M Mode 2417 MHz

Vertical

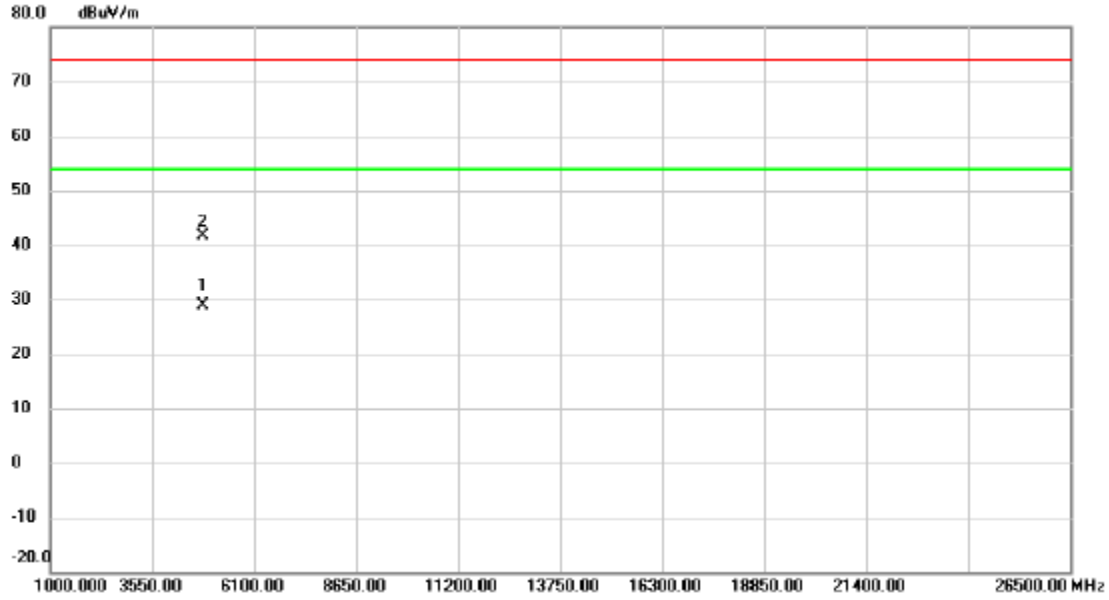


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	58.21	10.63	68.84	74.00	-5.16	peak	
2		2390.000	40.88	10.63	51.51	54.00	-2.49	AVG	
3	X	2408.200	105.73	10.68	116.41	74.00	42.41	peak	No Limit
4	*	2409.600	95.83	10.68	106.51	54.00	52.51	AVG	No Limit

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

Test Mode:	TX AX-20M Mode 2417 MHz

Vertical

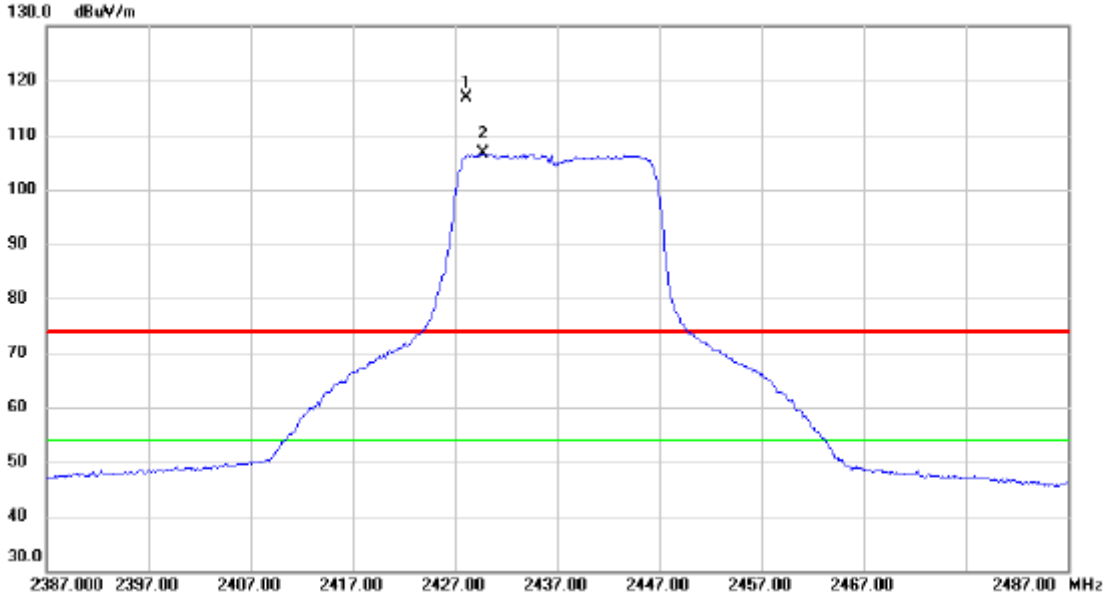


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4833.846	22.46	6.54	29.00	54.00	-25.00	AVG	
2		4834.264	35.21	6.54	41.75	74.00	-32.25	peak	

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

Test Mode:	TX AX-20M Mode 2437 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2428.100	106.14	10.74	116.88	74.00	42.88	peak	No Limit
2	*	2429.700	95.83	10.75	106.58	54.00	52.58	AVG	No Limit

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

Test Mode:	TX AX-20M Mode 2437 MHz

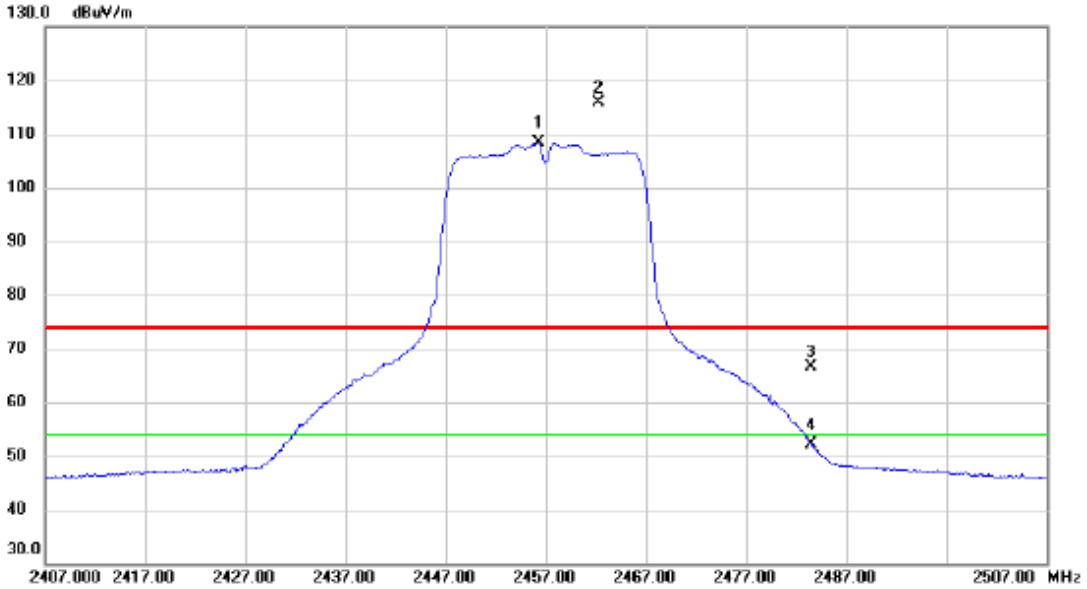
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.895	40.10	6.65	46.75	74.00	-27.25	peak	
2	*	4875.060	35.17	6.65	41.82	54.00	-12.18	AVG	

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

Test Mode:	TX AX-20M Mode 2457 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2456.250	97.58	10.81	108.39	54.00	54.39	AVG	No Limit
2	X	2462.250	105.07	10.84	115.91	74.00	41.91	peak	No Limit
3		2483.500	55.75	10.90	66.65	74.00	-7.35	peak	
4		2483.500	41.31	10.90	52.21	54.00	-1.79	AVG	

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

Test Mode:	TX AX-20M Mode 2457 MHz

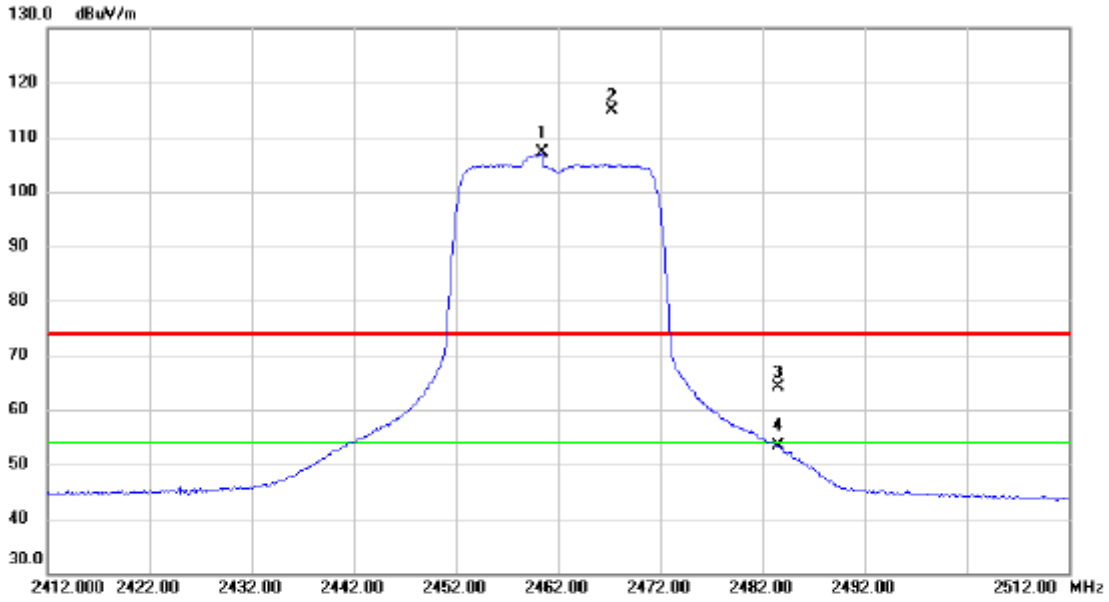
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4913.645	22.65	6.75	29.40	54.00	-24.60	AVG	
2		4916.175	35.50	6.76	42.26	74.00	-31.74	peak	

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

Test Mode:	TX AX-20M Mode 2462 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2460.450	96.27	10.83	107.10	54.00	53.10	AVG	No Limit
2	X	2467.250	104.03	10.86	114.89	74.00	40.89	peak	No Limit
3		2483.500	53.20	10.90	64.10	74.00	-9.90	peak	
4		2483.500	42.38	10.90	53.28	54.00	-0.72	AVG	

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

Test Mode:	TX AX-20M Mode 2462 MHz

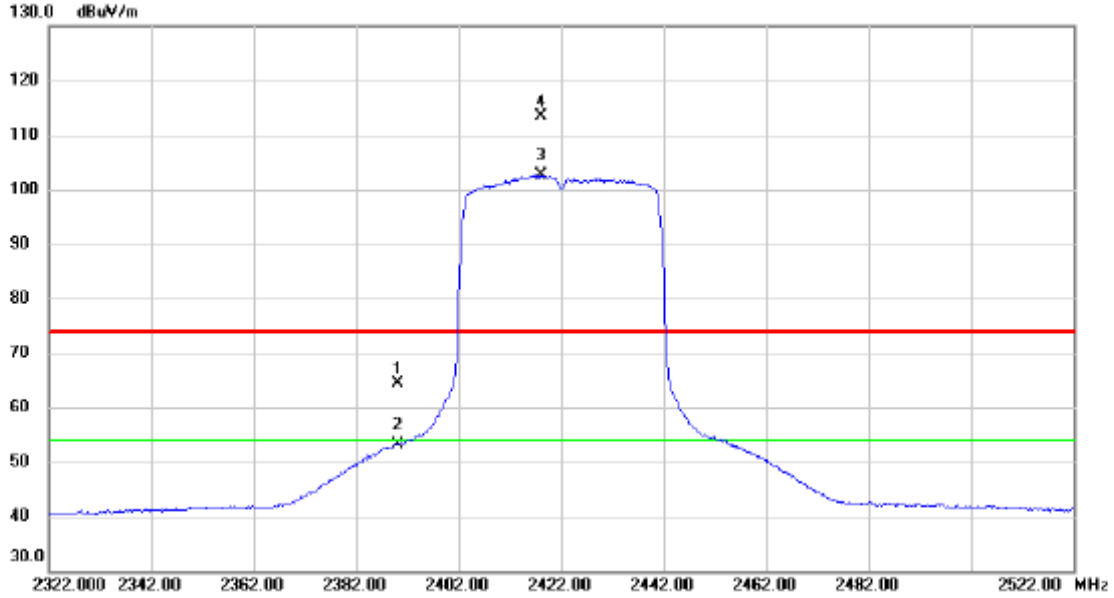
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4923.570	22.42	6.78	29.20	54.00	-24.80	AVG	
2		4924.085	35.20	6.78	41.98	74.00	-32.02	peak	

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

Test Mode:	TX AX-40M Mode 2422 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	53.82	10.63	64.45	74.00	-9.55	peak	
2		2390.000	42.56	10.63	53.19	54.00	-0.81	AVG	
3	*	2418.000	91.83	10.71	102.54	54.00	48.54	AVG	No Limit
4	X	2418.100	102.57	10.71	113.28	74.00	39.28	peak	No Limit

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

Test Mode:	TX AX-40M Mode 2422 MHz

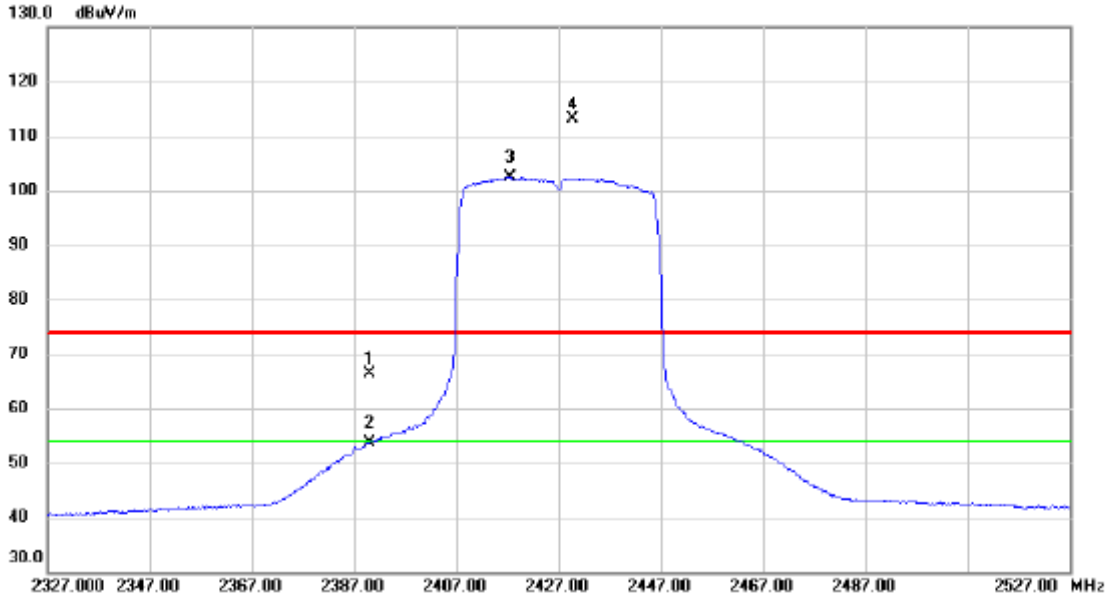
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4843.450	23.11	6.57	29.68	54.00	-24.32	AVG	
2		4844.536	36.33	6.57	42.90	74.00	-31.10	peak	

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

Test Mode:	TX AX-40M Mode 2427 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	55.81	10.63	66.44	74.00	-7.56	peak	
2		2390.000	43.11	10.63	53.74	54.00	-0.26	AVG	
3	*	2417.500	91.71	10.70	102.41	54.00	48.41	AVG	No Limit
4	X	2429.700	102.43	10.75	113.18	74.00	39.18	peak	No Limit

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

Test Mode:	TX AX-40M Mode 2427 MHz

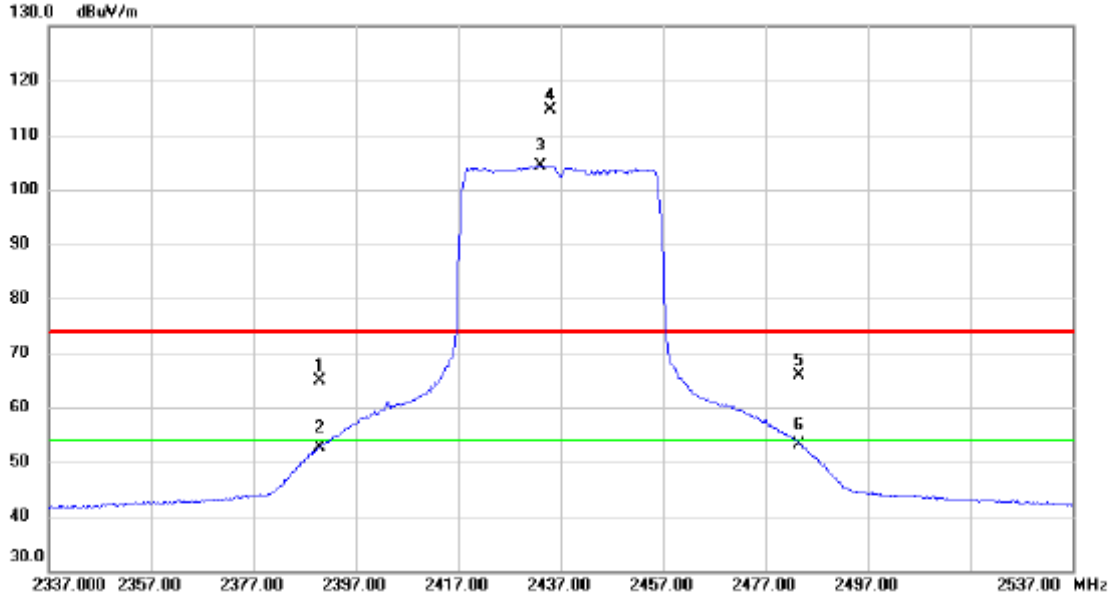
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4853.600	39.43	6.60	46.03	74.00	-27.97	peak	
2	*	4854.006	24.30	6.60	30.90	54.00	-23.10	AVG	

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

Test Mode:	TX AX-40M Mode 2437 MHz

Vertical

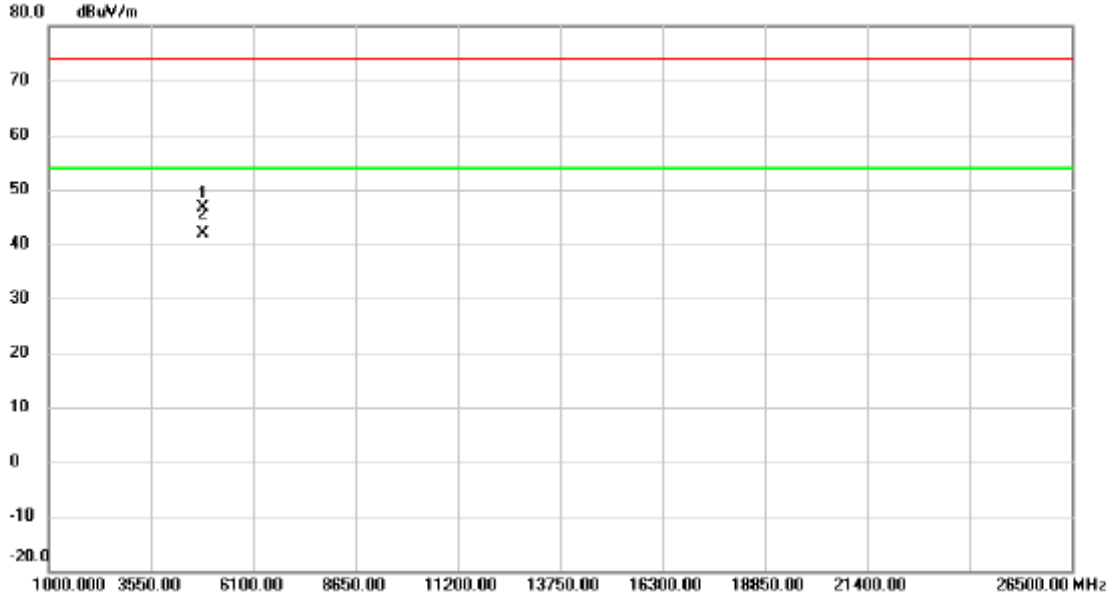


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	54.23	10.63	64.86	74.00	-9.14	peak	
2		2390.000	41.99	10.63	52.62	54.00	-1.38	AVG	
3	*	2433.100	93.63	10.74	104.37	54.00	50.37	AVG	No Limit
4	X	2434.900	103.94	10.76	114.70	74.00	40.70	peak	No Limit
5		2483.500	54.96	10.90	65.86	74.00	-8.14	peak	
6		2483.500	42.34	10.90	53.24	54.00	-0.76	AVG	

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

Test Mode:	TX AX-40M Mode 2437 MHz

Vertical

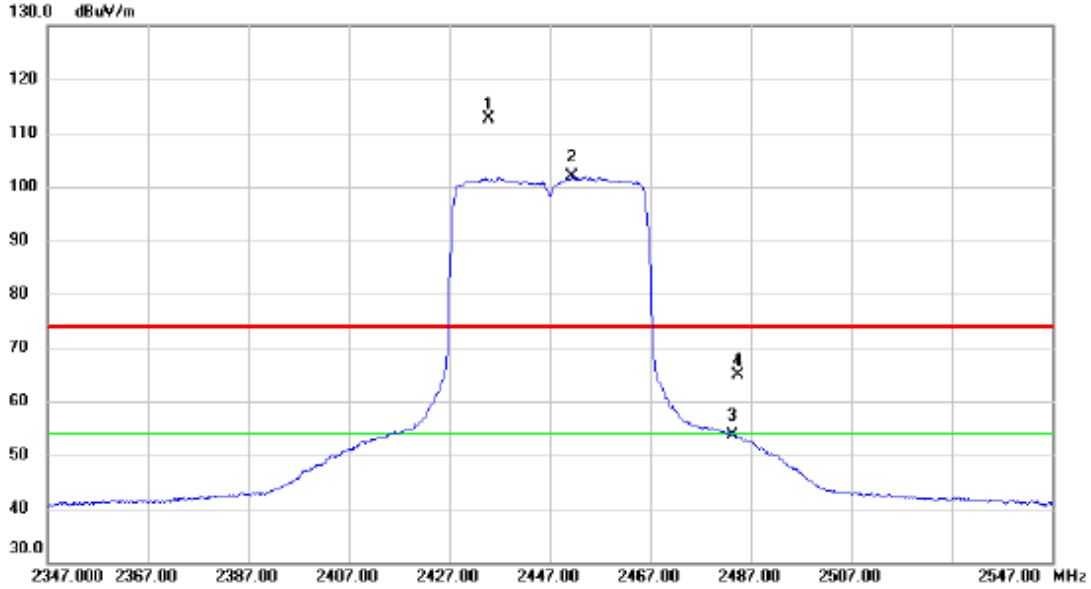


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.810	39.97	6.65	46.62	74.00	-27.38	peak	
2	*	4875.090	35.12	6.65	41.77	54.00	-12.23	AVG	

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

Test Mode:	TX AX-40M Mode 2447 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2434.900	101.88	10.76	112.64	74.00	38.64	peak	No Limit
2	*	2451.400	91.00	10.80	101.80	54.00	47.80	AVG	No Limit
3		2483.500	42.73	10.90	53.63	54.00	-0.37	AVG	
4		2484.600	53.90	10.91	64.81	74.00	-9.19	peak	

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

Test Mode:	TX AX-40M Mode 2447 MHz

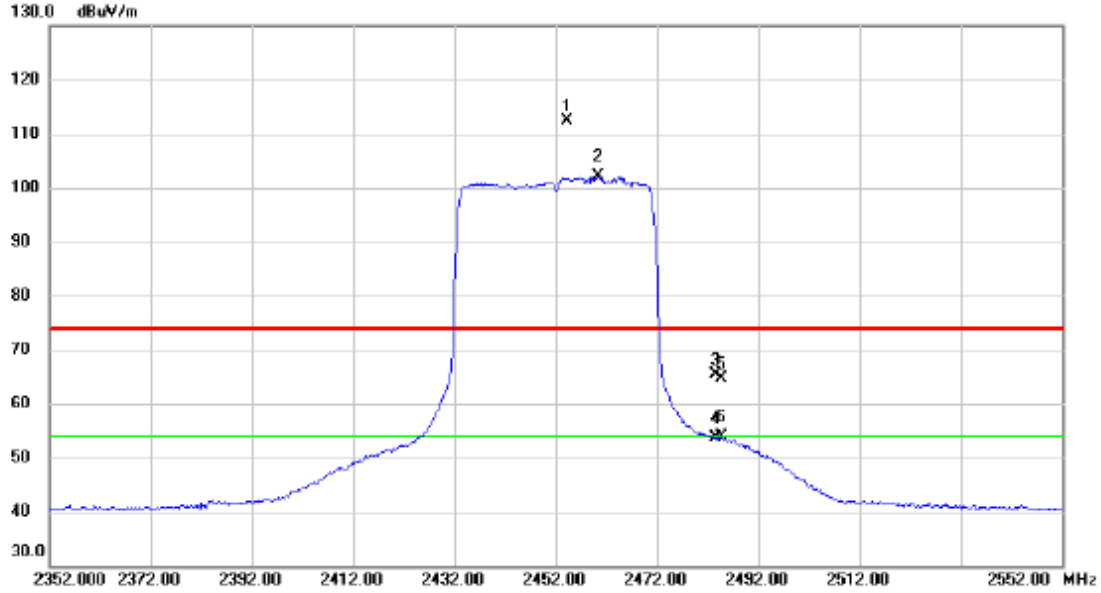
Vertical

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4893.460	31.33	6.69	38.02	54.00	-15.98	AVG	
2		4894.312	37.37	6.69	44.06	74.00	-29.94	peak	

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

Test Mode:	TX AX-40M Mode 2452 MHz

Vertical

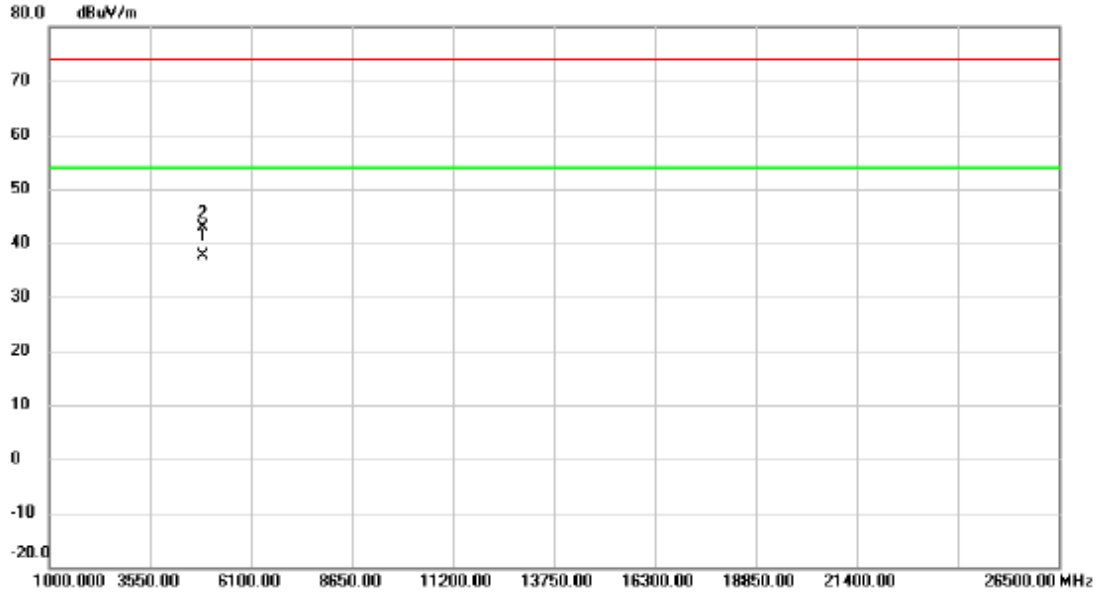


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2454.200	101.56	10.81	112.37	74.00	38.37	peak	No Limit
2	*	2460.500	91.23	10.83	102.06	54.00	48.06	AVG	No Limit
3		2483.500	54.37	10.90	65.27	74.00	-8.73	peak	
4		2483.500	42.76	10.90	53.66	54.00	-0.34	AVG	
5		2484.600	53.80	10.91	64.71	74.00	-9.29	peak	
6		2484.600	42.95	10.91	53.86	54.00	-0.14	AVG	

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

Test Mode:	TX AX-40M Mode 2452 MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	4904.760	31.00	6.73	37.73	54.00	-16.27	AVG	
2		4905.175	36.24	6.73	42.97	74.00	-31.03	peak	

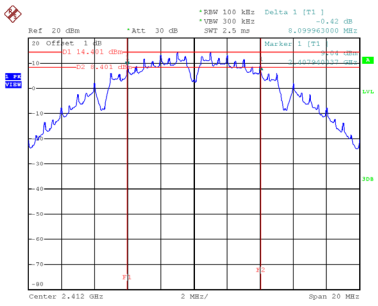
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	TX B Mode

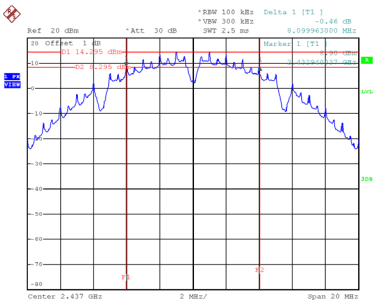
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	8.10	500	Complies
06	2437	8.10	500	Complies
11	2462	7.58	500	Complies

CH01



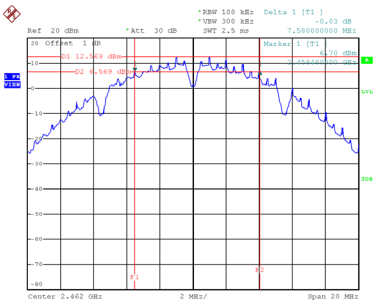
Date: 3.JUL.2020 17:22:47

CH06



Date: 3.JUL.2020 17:25:05

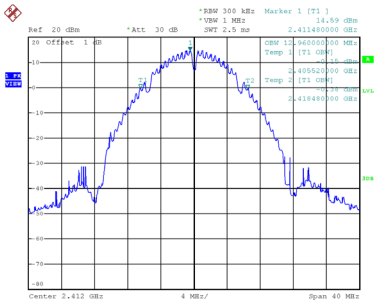
CH11



Date: 3.JUL.2020 17:29:24

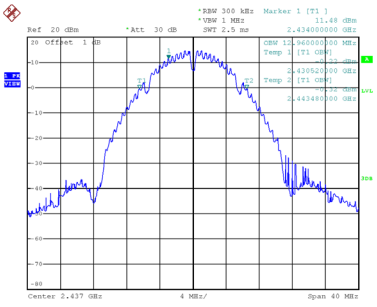
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	12.96	Complies
06	2437	12.96	Complies
11	2462	12.96	Complies

CH01



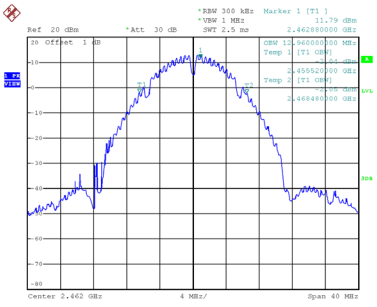
Date: 3.JUL.2020 17:22:53

CH06



Date: 3.JUL.2020 17:25:11

CH11

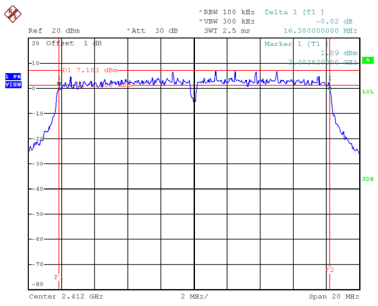


Date: 3.JUL.2020 17:29:31

Test Mode	TX G Mode

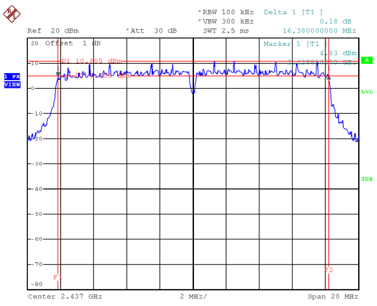
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	16.38	500	Complies
06	2437	16.38	500	Complies
11	2462	16.35	500	Complies

CH01



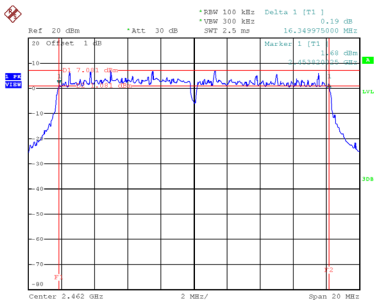
Date: 3.JUL.2020 17:30:53

CH06



Date: 3.JUL.2020 17:32:41

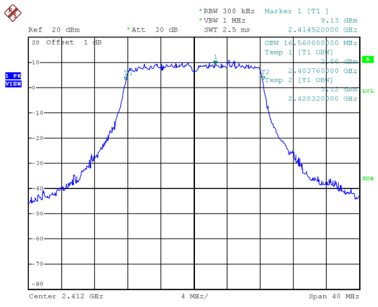
CH11



Date: 3.JUL.2020 17:34:16

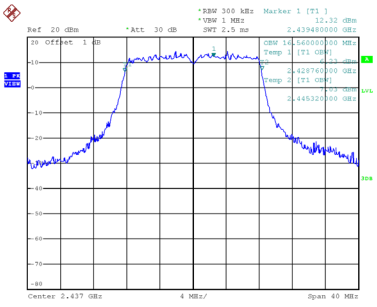
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	16.56	Complies
06	2437	16.56	Complies
11	2462	16.56	Complies

CH01



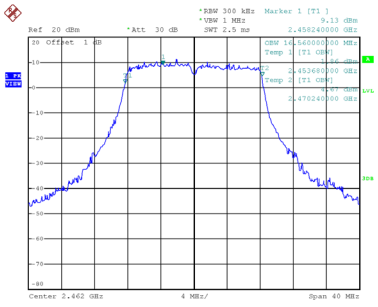
Date: 3.JUL.2020 17:31:00

CH06



Date: 3.JUL.2020 17:32:48

CH11

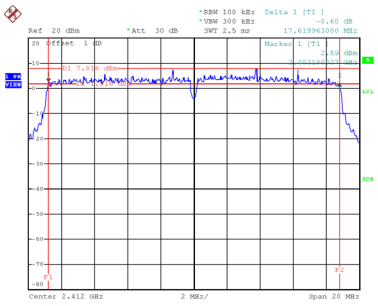


Date: 3.JUL.2020 17:34:22

Test Mode	TX N-20M Mode

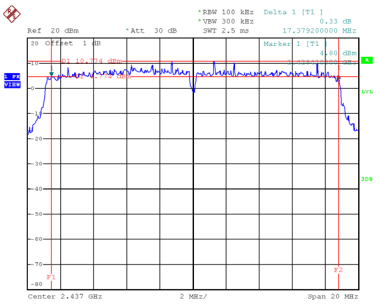
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	17.62	500	Complies
06	2437	17.38	500	Complies
11	2462	17.64	500	Complies

CH01



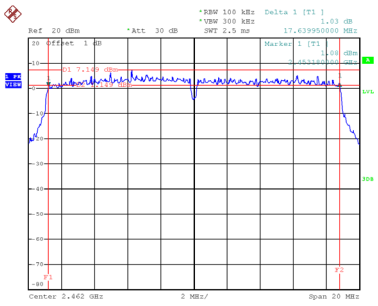
Date: 3.JUL.2020 17:43:17

CH06



Date: 3.JUL.2020 17:44:53

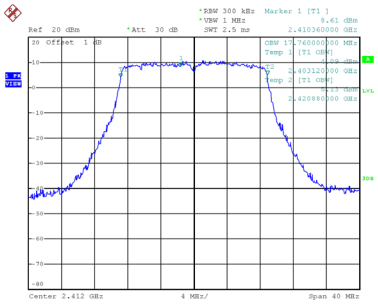
CH11



Date: 3.JUL.2020 17:46:25

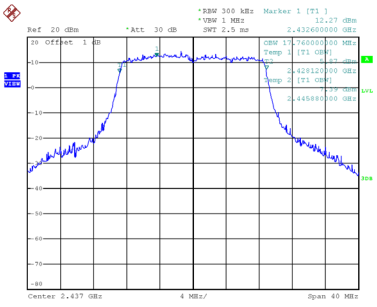
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.76	Complies
06	2437	17.76	Complies
11	2462	17.68	Complies

CH01



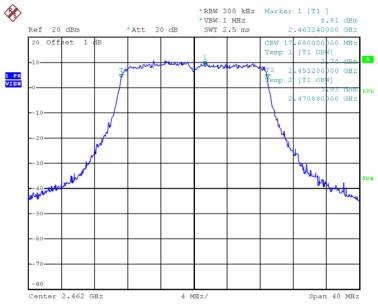
Date: 3.JUL.2020 17:43:24

CH06



Date: 3.JUL.2020 17:45:00

CH11

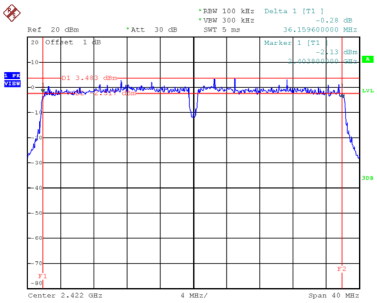


Date: 3.JUL.2020 17:46:31

Test Mode	TX N-40M Mode

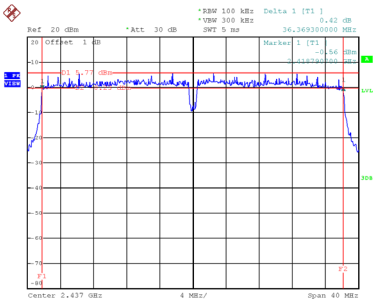
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	36.16	500	Complies
06	2437	36.37	500	Complies
09	2452	36.16	500	Complies

CH03



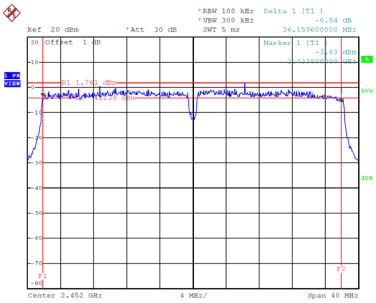
Date: 3.JUL.2020 17:48:33

CH06



Date: 16.JUL.2020 20:52:37

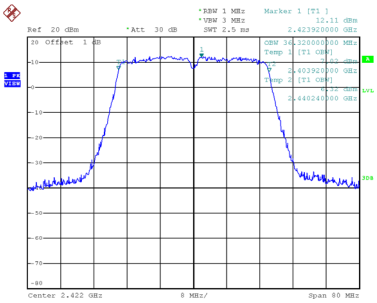
CH09



Date: 16.JUL.2020 20:54:37

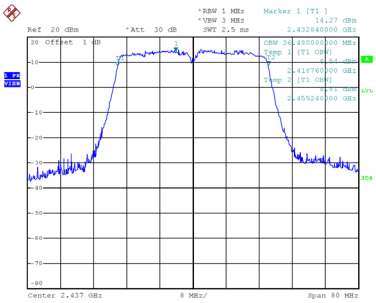
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
03	2422	36.32	Complies
06	2437	36.48	Complies
09	2452	36.48	Complies

CH03



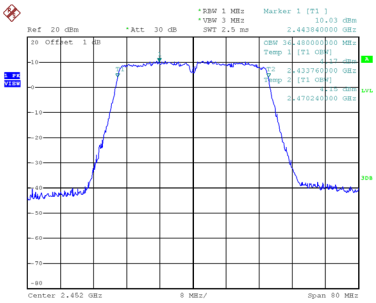
Date: 3.JUL.2020 17:48:40

CH06



Date: 16.JUL.2020 20:52:45

CH09

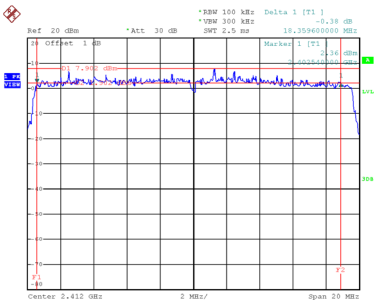


Date: 16.JUL.2020 20:54:43

Test Mode	TX AX-20M Mode

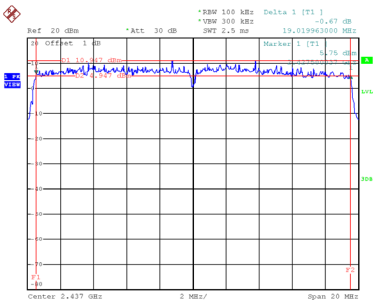
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	18.36	500	Complies
06	2437	19.02	500	Complies
11	2462	19.00	500	Complies

CH01



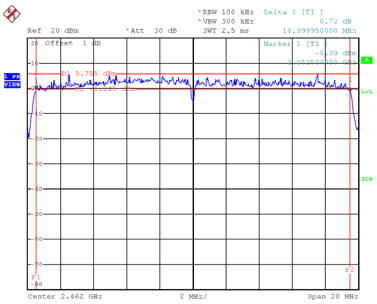
Date: 16.JUL.2020 20:56:25

CH06



Date: 16.JUL.2020 20:57:53

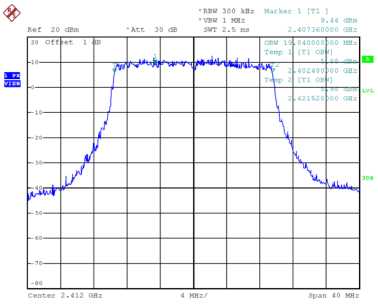
CH11



Date: 16.JUL.2020 20:59:18

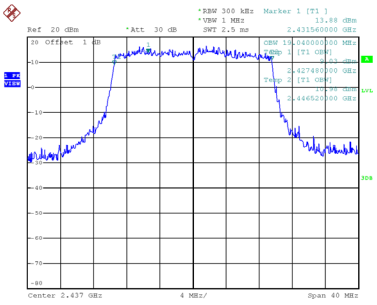
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	19.04	Complies
06	2437	19.04	Complies
11	2462	18.96	Complies

CH01



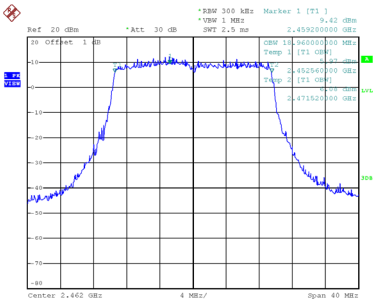
Date: 16.JUL.2020 20:56:32

CH06



Date: 16.JUL.2020 20:57:59

CH11



Date: 16.JUL.2020 20:59:25