

# FCC Radio Test Report FCC ID: KA2COVRX1860A1

This report concerns: Original Grant

**Project No.** : 2011H026

**Equipment** : 1) AX1800 Dual-Band Mesh Wi-Fi 6 Router

2) AX1800 Dual-Band Whole Home Mesh Wi-Fi 6 System

Brand Name : D-Link

Test Model : COVR-X1860

Series Model : COVR-X1862, COVR-X1863, COVR-X1864

**Applicant**: D-Link Corporation

Address : 17595 Mt. Herrmann, Fountain Valley, California United State 92708

**Manufacturer** : D-Link Corporation

Address : 17595 Mt. Herrmann, Fountain Valley, California United State 92708

Date of Receipt : Nov. 12, 2020

**Date of Test** : Nov. 12, 2020 ~ Jan. 03, 2021

**Issued Date** : Jan. 07, 2021

Report Version : R01

**Test Sample**: Engineering Sample No.: DG20201109112 for conducted,

DG202011192 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.

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

#### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.



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# **REPORT ISSUED HISTORY**

| Report Version | Description                   | Issued Date   |
|----------------|-------------------------------|---------------|
| R00            | Original Issue.               | Jan. 06, 2021 |
| R01            | Modified the comments of TCB. | Jan. 07, 2021 |



# 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)<br>15.205(a)<br>15.209(a) | Radiated Emissions                | APPENDIX B<br>APPENDIX C<br>APPENDIX D | PASS     |         |  |  |
| 15.247(a)(2)                        | Bandwidth                         | APPENDIX E                             | PASS     |         |  |  |
| 15.247(b)(3)                        | Maximum Output Power              | APPENDIX F                             | PASS     |         |  |  |
| 15.247(d)                           | Conducted Spurious Emissions      | APPENDIX G                             | PASS     |         |  |  |
| 15.247(e)                           | Power Spectral Density            | APPENDIX H                             | PASS     |         |  |  |
| 15.203                              | Antenna Requirement               |  | PASS     | Note(2) |  |  |

#### Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.



#### 1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

#### 1.2 MEASUREMENT UNCERTAINTY

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

The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

|   | Test Site | Method | Measurement Frequency Range | U, (dB) |
|---|-----------|--------|-----------------------------|---------|
| ĺ | DG-C02    | CISPR  | 150kHz ~ 30MHz              | 2.68    |

#### B. Radiated emissions test:

| Test Site     | Method            | Measurement Frequency Range | Ant.<br>H / V | U, (dB) |
|---------------|-------------------|-----------------------------|---------------|---------|
|               |                   | 9kHz ~ 30MHz                | -             | 3.02    |
|               |                   | 30MHz ~ 200MHz              | V             | 4.26    |
|               |                   | 30MHz ~ 200MHz              | Н             | 3.38    |
| DG-CB03 CISPR |                   | 200MHz ~ 1,000MHz           | V             | 3.98    |
|               | 200MHz ~ 1,000MHz | Н                           | 3.94          |         |
|               |                   | 1GHz ~ 6GHz                 | ı             | 3.96    |
|               |                   | 6GHz ~ 18GHz                | ı             | 5.24    |
|               |                   | 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    |
| Humidity                    | ±1.5%       |

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 | Hand Huang  |
| Radiated Emissions-9K-30MHz       | 25°C        | 60%      | AC 120V/60Hz | Kwok Guo    |
| Radiated Emissions-30 MHz to 1GHz | 26°C        | 52%      | AC 120V/60Hz | Kwok Guo    |
| Radiated Emissions-Above 1000 MHz | 26°C        | 52%      | AC 120V/60Hz | Kwok Guo    |
| Bandwidth                         | 25°C        | 52%      | DC 12V       | Hayden Chen |
| Maximum Output Power              | 25°C        | 52%      | DC 12V       | Hand Huang  |
| Conducted Spurious Emissions      | 25°C        | 52%      | DC 12V       | Hayden Chen |
| Power Spectral Density            | 25°C        | 52%      | DC 12V       | Hayden Chen |



# 2. GENERAL INFORMATION

# 2.1 GENERAL DESCRIPTION OF EUT

| Equipment   | 1) AX1800 Dual-Band Mesh Wi-Fi 6 Router   |  |  |  |  |
|---|---|--|--|--|--|
| • •   | 2) AX1800 Dual-Band Whole Home Mesh Wi-Fi 6 System  |  |  |  |  |
| Brand Name  | D-Link  |  |  |  |  |
| Test Model  | COVR-X1860  |  |  |  |  |
| Series Model  | COVR-X1862, COVR-X1863, COVR-X1864  |  |  |  |  |
| Model Difference(s)   | All versions of the Models are electrically equal except for model nam number of packages.  COVR-X1860: Single Pack  COVR-X1862: Double Pack  COVR-X1863: Three Pack  COVR-X1864: Four Pack |  |  |  |  |
| Power Source  | DC voltage supplied from AC adapter.  1# Manufacturer / Model: MNC / MAUS-1201001202  2# Manufacturer / Model: Gongjin / S12A12-120A100-CJ  |  |  |  |  |
| Power Rating  | 1# I/P: 100-240V~ 50/60Hz 0.35A O/P: 12V = 1.0A<br>2# I/P: 100-240V~ 50/60Hz 0.5A max O/P: 12V = _ = 1A   |  |  |  |  |
| Operation Frequency   | 2412 MHz ~ 2462 MHz   |  |  |  |  |
| Modulation Type    IEEE 802.11b: DSSS   IEEE 802.11g: OFDM   IEEE 802.11n: OFDM   IEEE 802.11ax: OFDMA  |   |  |  |  |  |
| IEEE 802.11ax: OFDMA<br>  IEEE 802.11b: 11/5.5/2/1 Mbps<br>  IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps<br>  IEEE 802.11n: up to 300 Mbps<br>  IEEE 802.11ax: up to 573.6 Mbps  |   |  |  |  |  |
| IEEE 802.11b: 23.06 dBm (0.2023 W)     IEEE 802.11g: 21.91 dBm (0.1552 W)     IEEE 802.11n(HT20): 24.64 dBm (0.2911 W)     IEEE 802.11n(HT40): 21.83 dBm (0.1524 W)     IEEE 802.11ax(HE20): 24.47 dBm (0.2799 W)     IEEE 802.11ax(HE40): 21.46 dBm (0.1400 W) |   |  |  |  |  |
| Maximum Output Power<br>_Beamforming  | IEEE 802.11n(HT20): 24.33 dBm (0.2710 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 -  | CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20), IEEE 802.11ax(HE20) |              |              |             |             |        |      |
|---|---|--------------|--------------|-------------|-------------|--------|------|
|   | CH03  | 3 - CH09 for | IEEE 802.11r | n(HT40), IE | EE 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         | 80          | 2447        | 11     | 2462 |
| 03  | 2422  | 06           | 2437         | 09          | 2452        |        |      |



3. RU Configuration:

| IEEE 802.11ax(HE20)   | Resource Unit          | 242 Tone(20M) |
|-----------------------|------------------------|---------------|
| ILLE 602.11ax(11L20)  | Specific Resource Unit | 61            |
| IEEE 000 44 av/LIE40) | Resource Unit          | 484 Tone(40M) |
| IEEE 802.11ax(HE40)   | 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  | P/N         | Antenna Type | Connector | Gain (dBi) |
|------|--------|-------------|--------------|-----------|------------|
| 1    | RFlink | RF11C00405A | Internal     | N/A       | 2          |
| 2    | RFlink | RF11C00406A | Internal     | N/A       | 2          |

#### Note:

- 1) This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain=G<sub>ANT</sub>+10log(N)dBi, that is Directional gain=2+10log(2)dBi=5.01.
- 2) Beamforming Gain: 3 dB. So Directional gain=3+2=5.
- 3) The antenna gain is provided by the manufacturer.

# 5. Table for Antenna Configuration:

For Non Beamforming:

| i Non Beamforming.     |            |                     |  |  |
|------------------------|------------|---------------------|--|--|
| Operating Mode TX Mode | 1TX        | 2TX                 |  |  |
| IEEE 802.11b           | V (Ant. 1) | -                   |  |  |
| IEEE 802.11g           | V (Ant. 1) | -                   |  |  |
| IEEE 802.11n(HT20)     | -          | V (Ant. 1 + Ant. 2) |  |  |
| IEEE 802.11n(HT40)     | -          | V (Ant. 1 + Ant. 2) |  |  |
| IEEE 802.11ax(HE20)    | -          | V (Ant. 1 + Ant. 2) |  |  |
| IEEE 802.11ax(HE40)    | -          | V (Ant. 1 + Ant. 2) |  |  |

# For Beamforming:

| Operating Mode TX Mode | 2TX                 |
|------------------------|---------------------|
| IEEE 802.11n(HT20)     | V (Ant. 1 + Ant. 2) |
| IEEE 802.11n(HT40)     | V (Ant. 1 + Ant. 2) |
| IEEE 802.11ax(HE20)    | V (Ant. 1 + Ant. 2) |
| IEEE 802.11ax(HE40)    | V (Ant. 1 + Ant. 2) |



# 2.2 DESCRIPTION OF TEST MODES

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

| Pretest Mode                             | Description                        |  |
|--|------------------------------------|--|
| Mode 1                                   | TX B Mode Channel 01/06/11         |  |
| Mode 2                                   | TX G Mode Channel 01/06/11         |  |
| Mode 3 TX N-20 MHz Mode Channel 01/06/11 |                                    |  |
| Mode 4                                   | TX N-40 MHz Mode Channel 03/06/09  |  |
| Mode 5                                   | TX AX-20 MHz Mode Channel 01/06/11 |  |
| Mode 6                                   | TX AX-40 MHz Mode Channel 03/06/09 |  |
| Mode 7                                   | TX N-20 MHz Mode Channel 06        |  |

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 N-20 MHz Mode Channel 06 |  |  |

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

| Radiated emissions test- Above 1GHz_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 Output Power_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 Output Power_Beamforming |                                    |  |  |
|----------------------------------|------------------------------------|--|--|
| Final Test Mode Description      |                                    |  |  |
| Mode 3                           | TX N-20 MHz Mode Channel 01/06/11  |  |  |
| Mode 4                           | TX N-40 MHz Mode Channel 03/06/09  |  |  |
| 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 802.11n20 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) For radiated spurious emissions below 1 GHz test, all adapters had been pre-tested and in this report only recorded the worst case.
- (6) The measurements for 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.

#### 2.3 PARAMETERS OF TEST SOFTWARE

#### Non Beamforming

| Test Software       | QATool |      |      |
|---------------------|--------|------|------|
| Frequency (MHz)     | 2412   | 2437 | 2462 |
| IEEE 802.11b        | 19     | 19   | 19   |
| IEEE 802.11g        | 18     | 20   | 18   |
| IEEE 802.11n(HT20)  | 17     | 20   | 17   |
| IEEE 802.11ax(HE20) | 17     | 20   | 17.5 |
| Frequency (MHz)     | 2422   | 2437 | 2452 |
| IEEE 802.11n(HT40)  | 15     | 18   | 16   |
| IEEE 802.11ax(HE40) | 16.5   | 17   | 16.5 |

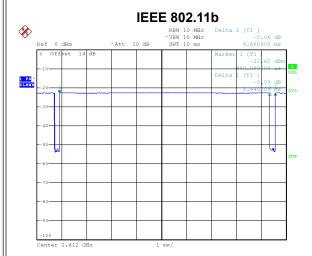
Beamforming

| Test Software       |      | QATool | QATool |  |
|---------------------|------|--------|--------|--|
| Frequency (MHz)     | 2412 | 2437   | 2462   |  |
| IEEE 802.11n(HT20)  | 16.5 | 19.5   | 16.5   |  |
| IEEE 802.11ax(HE20) | 16.5 | 19.5   | 17     |  |
| Frequency (MHz)     | 2422 | 2437   | 2452   |  |
| IEEE 802.11n(HT40)  | 14.5 | 17.5   | 15.5   |  |
| IEEE 802.11ax(HE40) | 16   | 16.5   | 16     |  |



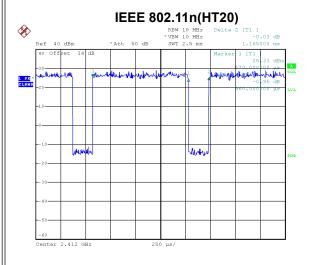
#### 2.4 DUTY CYCLE

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



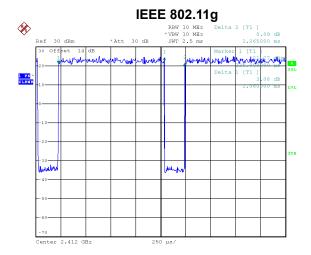
Date: 3.JAN.2021 21:34:03

Duty cycle = 0.844 ms / 0.866 ms = 97.46% Duty Factor = 10 log(1/Duty cycle) = 0.11



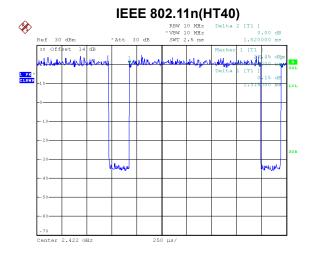
Date: 3.JAN.2021 21:53:35

Duty cycle = 0.960 ms / 1.165 ms = 82.40% Duty Factor = 10 log(1/Duty cycle) = 0.84



Date: 3.JAN.2021 21:44:53

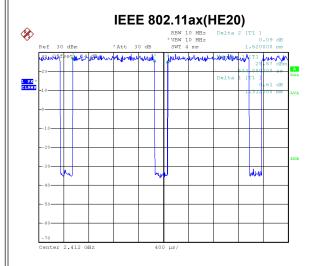
Duty cycle = 1.060 ms / 1.265 ms = 83.79% Duty Factor = 10 log(1/Duty cycle) = 0.77

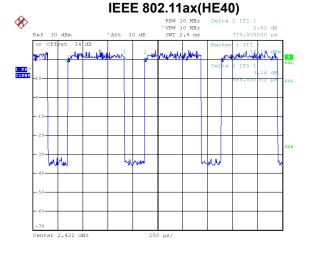


Date: 3.JAN.2021 21:46:31

Duty cycle = 1.315 ms / 1.520 ms = 86.51% Duty Factor = 10 log(1/Duty cycle) = 0.63







Date: 3.JAN.2021 21:46:39

Duty cycle = 1.312 ms / 1.520 ms = 86.32% Duty Factor = 10 log(1/Duty cycle) = 0.64 Duty cycle = 0.565 ms / 0.770 ms = 73.38% Duty Factor = 10 log(1/Duty cycle) = 1.34

Date: 3.JAN.2021 21:48:38

#### NOTE

For IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20) and IEEE 802.11ax(HE20):

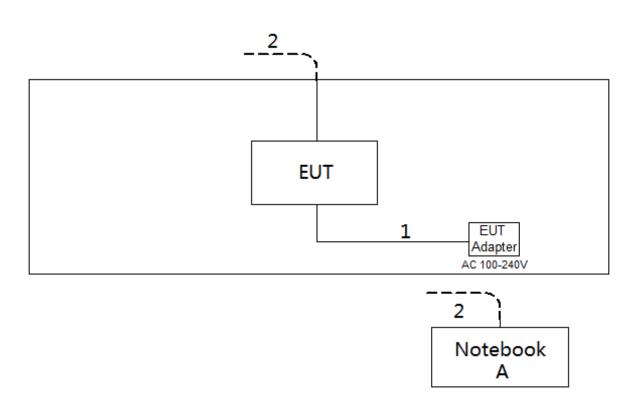
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

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%).



# 2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



# 2.6 SUPPORT UNITS

| Item | Equipment | Brand | Model No.        | Series No. |
|------|-----------|-------|------------------|------------|
| Α    | 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) |           |  |
|-----------------------------|--------------|-----------|--|
| Frequency of Emission (WHZ) | 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

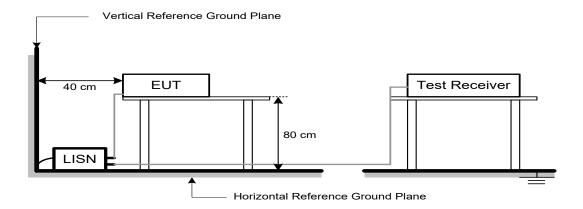
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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   | Field Strength     | Measurement Distance |
|-------------|--------------------|----------------------|
| (MHz)       | (microvolts/meter) | (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) |         |
|-------------------|-----------------|---------|
| Frequency (WITIZ) | 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                     | 1 MHz / 3 MHz for Peak, |
| (Emission in restricted band) | 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.

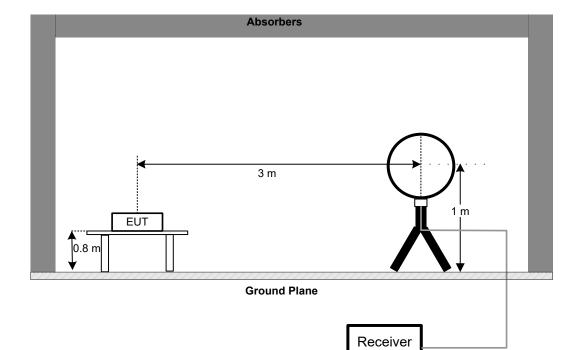
# 4.3 DEVIATION FROM TEST STANDARD

No deviation

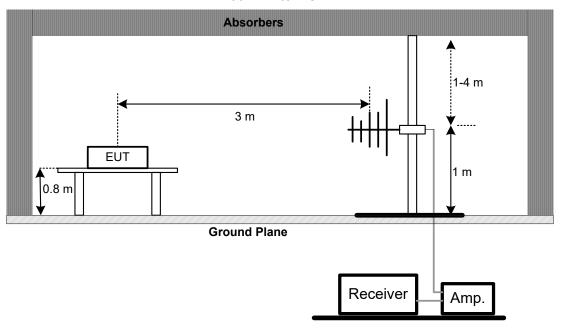


# 4.4 TEST SETUP

#### 9 kHz-30 MHz

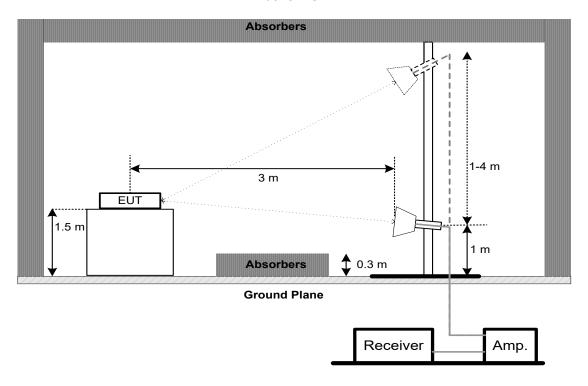


#### 30 MHz to 1 GHz





#### **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           |  |  |
| 45 247(-)(2)                   | 6 dB Bandwidth         | Minimum 500 kHz |  |  |
| 15.247(a)(2)                   | 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**

| EUT | SPECTRUM |
|-----|----------|
|     | ANALYZER |

#### 5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### **5.6 TEST RESULTS**

Please refer to the APPENDIX E.



# 6. MAXIMUM OUTPUT POWER TEST

# 6.1 LIMIT

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

#### **6.2 TEST PROCEDURE**

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

#### **6.3 DEVIATION FROM STANDARD**

No deviation.

#### **6.4 TEST SETUP**

| EUT | Power Meter   |
|-----|---------------|
|     | 1 OWEL WICKET |

#### **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

| EUT | SPECTRUM |
|-----|----------|
|     | ANALYZER |

#### 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<br>(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**

| EUT | SPECTRUM |
|-----|----------|
|     | ANALYZER |

#### 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<br>V-NETWORK             | R&S          | ENV216                   | 101447     | Feb. 28, 2021    |  |  |  |  |
| 4    | 50Ω Terminator                    | SHX          | TF5-3                    | 15041305   | Mar. 01, 2021    |  |  |  |  |
| 5    | Measurement<br>Software           | Farad        | EZ-EMC<br>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<br>Software              | Farad        | EZ-EMC<br>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<br>GHz)(8m+5m) | N/A         | May 22, 2021     |  |  |  |  |
| 5    | Controller                           | CT                    | SC100                          | N/A         | N/A              |  |  |  |  |
| 6    | Controller                           | Controller MF MF-7802 |                                | MF780208416 | N/A              |  |  |  |  |
| 7    | Measurement<br>Software              | ···   Farad           |                                | 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      |                          |               | Calibrated until |  |  |  |  |
| 1    | Double Ridged Guide<br>Antenna            | ETS               | 3115                     | 75789         | May 12, 2021     |  |  |  |  |
| 2    | Broad-Band Horn<br>Antenna                | Schwarzbeck       | BBHA 9170                | 9170319       | Jul. 07, 2021    |  |  |  |  |
| 3    | Amplifier                                 | Agilent           | 8449B                    | 3008A02333    | Mar. 01, 2021    |  |  |  |  |
| 4    | Microwave<br>Preamplifier With<br>Adaptor | EMC<br>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<br>000    | N/A           | May 09, 2021     |  |  |  |  |
| 9    | Measurement<br>Software                   | Farad             | EZ-EMC<br>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 & Conducted Spurious Emissions & Power Spectral Density |   |                           |         |           |               |  |  |
|---|---|---------------------------|---------|-----------|---------------|--|--|
| Item  | n Kind of Equipment Manufacturer Type No. Serial No. Calibrated u |                           |         |           |               |  |  |
| 1   | Spectrum Analyzer   | R&S                       | FSP40   | 100185    | Jul. 25, 2021 |  |  |
| 2   | 2 RF Cable Tongkaichuan N/A N/A N/A                               |                           |         |           |               |  |  |
| 3   | DC Block  | DC Block Mini N/A N/A N/A |         |           |               |  |  |
| 4   | Attenuator  | WOKEN                     | 6SM3502 | VAS1214NL | Feb. 11, 2021 |  |  |

|      | Maximum Output Power  |              |         |            |               |  |  |  |  |
|------|---|--------------|---------|------------|---------------|--|--|--|--|
| Item | Kind of Equipment Manufacturer Type No. Serial No. Calibrated |              |         |            |               |  |  |  |  |
| 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.

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

<sup>&</sup>quot;\*" calibration period of equipment list is three year.



# 10. EUT TEST PHOTO









# **Radiated Emissions Test Photos**

9 kHz to 30 MHz



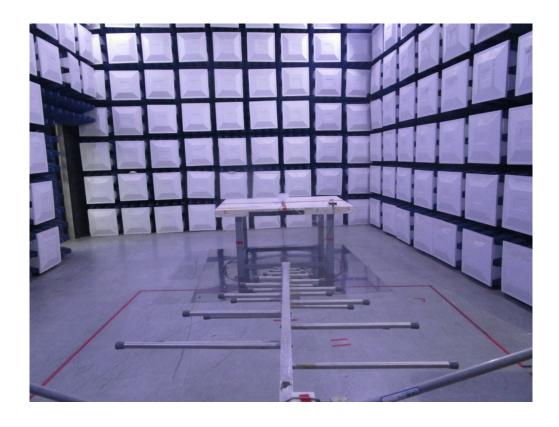




# **Radiated Emissions Test Photos**

30 MHz to 1 GHz



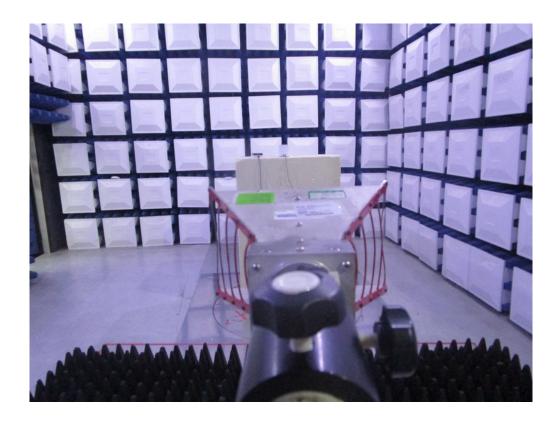




# **Radiated Emissions Test Photos**

# Above 1 GHz

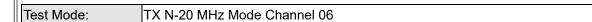


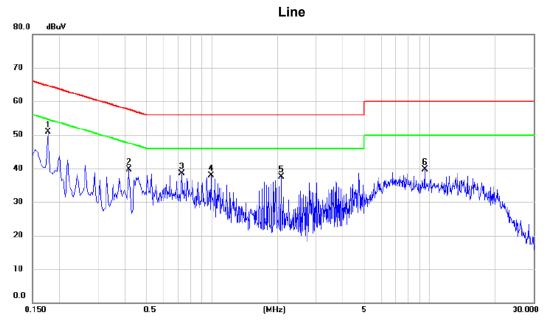




# **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**





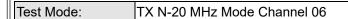


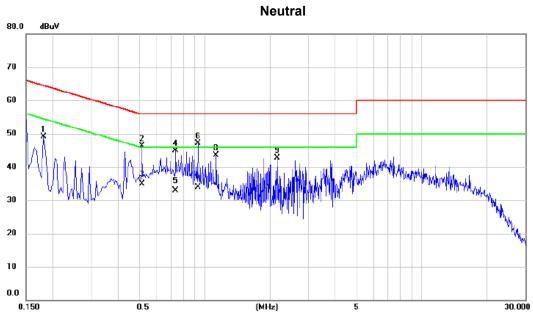
| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Margin |          |         |
|---------|--------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz    | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1 *     | 0.1770 | 41.01            | 9.84              | 50.85            | 64.63 | -13.78 | peak     |         |
| 2       | 0.4155 | 29.72            | 9.92              | 39.64            | 57.54 | -17.90 | peak     |         |
| 3       | 0.7260 | 28.59            | 9.90              | 38.49            | 56.00 | -17.51 | peak     |         |
| 4       | 0.9915 | 27.95            | 10.01             | 37.96            | 56.00 | -18.04 | peak     |         |
| 5       | 2.0805 | 27.43            | 10.10             | 37.53            | 56.00 | -18.47 | peak     |         |
| 6       | 9.5010 | 28.98            | 10.67             | 39.65            | 60.00 | -20.35 | peak     |         |

#### **REMARKS**:

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







| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Margin |          |         |
|---------|--------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz    | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1       | 0.1815 | 39.13            | 9.94              | 49.07            | 64.42 | -15.35 | peak     |         |
| 2       | 0.5144 | 36.22            | 10.15             | 46.37            | 56.00 | -9.63  | peak     |         |
| 3       | 0.5144 | 24.70            | 10.15             | 34.85            | 46.00 | -11.15 | AVG      |         |
| 4       | 0.7350 | 34.66            | 10.15             | 44.81            | 56.00 | -11.19 | peak     |         |
| 5       | 0.7350 | 22.80            | 10.15             | 32.95            | 46.00 | -13.05 | AVG      |         |
| 6 *     | 0.9330 | 36.87            | 10.28             | 47.15            | 56.00 | -8.85  | peak     |         |
| 7       | 0.9330 | 23.70            | 10.28             | 33.98            | 46.00 | -12.02 | AVG      |         |
| 8       | 1.1310 | 33.22            | 10.32             | 43.54            | 56.00 | -12.46 | peak     |         |
| 9       | 2.1525 | 32.30            | 10.43             | 42.73            | 56.00 | -13.27 | peak     |         |

#### **REMARKS**:

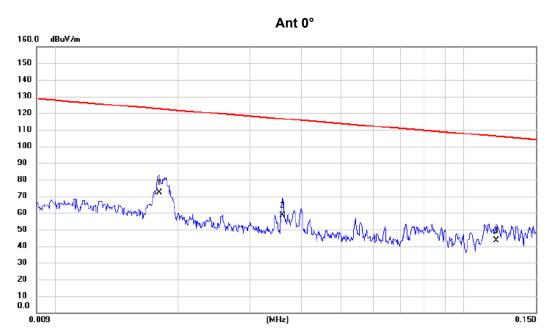
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



# **APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ**



Test Mode: TX N-20 MHz Mode Channel 06

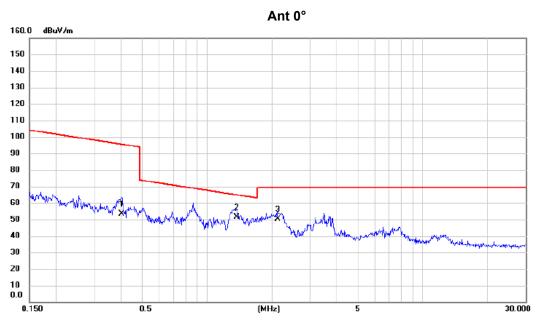


| No. Mk. | Freq.  |       |       | Measure-<br>ment |        | Margin |          |         |
|---------|--------|-------|-------|------------------|--------|--------|----------|---------|
|         | MHz    | dBuV  | dB    | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1 *     | 0.0180 | 58.33 | 13.84 | 72.17            | 122.50 | -50.33 | AVG      |         |
| 2       | 0.0360 | 45.74 | 12.79 | 58.53            | 116.48 | -57.95 | AVG      |         |
| 3       | 0.1201 | 30.81 | 12.73 | 43.54            | 106.02 | -62.48 | AVG      |         |

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



Test Mode: TX N-20 MHz Mode Channel 06

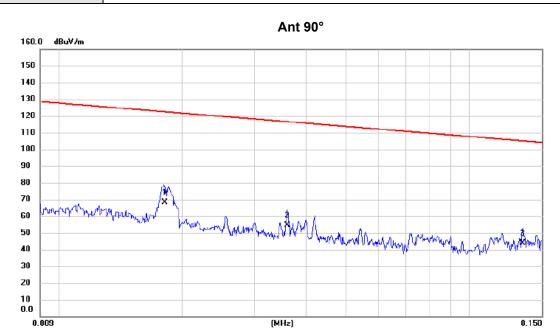


| No. Mk. | Freq.  | Reading<br>Level |       | Measure-<br>ment | Limit  | Margin |          |         |
|---------|--------|------------------|-------|------------------|--------|--------|----------|---------|
|         | MHz    | dBuV             | dB    | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1       | 0.4020 | 41.22            | 12.25 | 53.47            | 95.52  | -42.05 | AVG      |         |
| 2 *     | 1.3738 | 39.81            | 11.62 | 51.43            | 64.85  | -13.42 | QP       |         |
| 3       | 2.1326 | 38.77            | 11.24 | 50.01            | 69.54  | -19.53 | QP       |         |

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



Test Mode: TX N-20 MHz Mode Channel 06

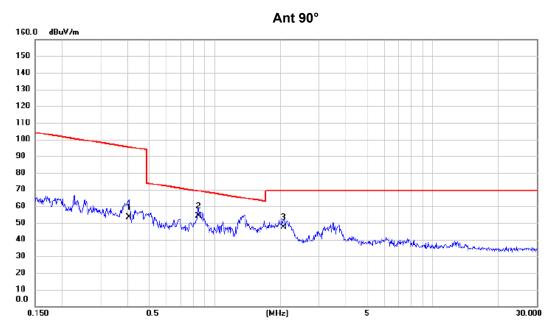


| No. Mk. | Freq.  | Reading<br>Level |       | Measure-<br>ment | Limit  | Margin |          |         |
|---------|--------|------------------|-------|------------------|--------|--------|----------|---------|
|         | MHz    | dBuV             | dB    | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1 *     | 0.0181 | 54.36            | 13.81 | 68.17            | 122.45 | -54.28 | AVG      |         |
| 2       | 0.0360 | 41.71            | 12.79 | 54.50            | 116.48 | -61.98 | AVG      |         |
| 3       | 0.1348 | 30.94            | 12.73 | 43.67            | 105.01 | -61.34 | AVG      |         |

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



Test Mode: TX N-20 MHz Mode Channel 06



| No. Mk. | Freq.  |       | Correct<br>Factor | Measure-<br>ment | Limit  | Margin |          |         |
|---------|--------|-------|-------------------|------------------|--------|--------|----------|---------|
|         | MHz    | dBuV  | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1       | 0.4040 | 41.20 | 12.25             | 53.45            | 95.48  | -42.03 | AVG      |         |
| 2 *     | 0.8438 | 42.29 | 11.86             | 54.15            | 69.08  | -14.93 | QP       |         |
| 3       | 2.0660 | 36.00 | 11.27             | 47.27            | 69.54  | -22.27 | QP       |         |

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

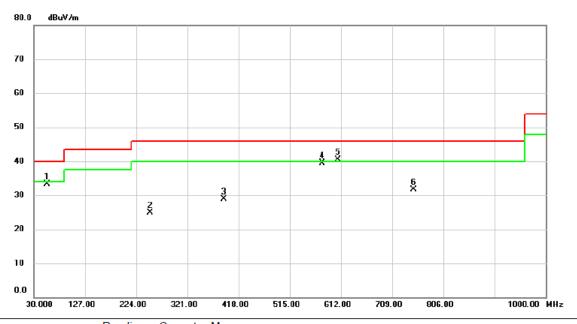


# **APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ**



Test Mode: TX N-20 MHz Mode Channel 06

# Vertical



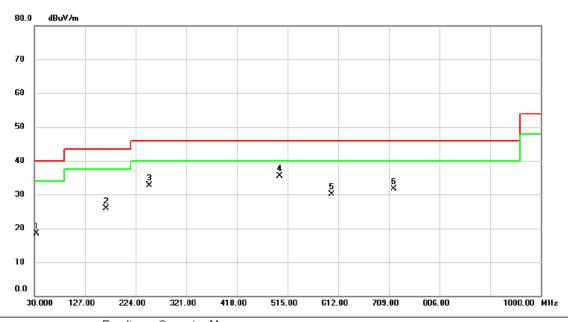
|   | No. M | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Margin |          |         |
|---|-------|----------|------------------|-------------------|------------------|--------|--------|----------|---------|
|   |       | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
|   | 1     | 55.705   | 47.10            | -13.73            | 33.37            | 40.00  | -6.63  | peak     |         |
| _ | 2     | 250.190  | 38.28            | -13.28            | 25.00            | 46.00  | -21.00 | peak     |         |
|   | 3     | 390.355  | 38.06            | -9.23             | 28.83            | 46.00  | -17.17 | peak     |         |
| - | 4     | 576.110  | 45.46            | -6.05             | 39.41            | 46.00  | -6.59  | peak     |         |
| - | 5 *   | 606.180  | 45.72            | -5.22             | 40.50            | 46.00  | -5.50  | peak     |         |
| _ | 6     | 750.225  | 34.97            | -3.20             | 31.77            | 46.00  | -14.23 | peak     |         |

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



Test Mode: TX N-20 MHz Mode Channel 06

# Horizontal



| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Margin |          |         |
|---------|---------|------------------|-------------------|------------------|--------|--------|----------|---------|
|         | MHz     | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1       | 33.880  | 33.34            | -14.80            | 18.54            | 40.00  | -21.46 | peak     |         |
| 2       | 167.255 | 37.60            | -11.69            | 25.91            | 43.50  | -17.59 | peak     |         |
| 3       | 250.190 | 45.95            | -13.28            | 32.67            | 46.00  | -13.33 | peak     |         |
| 4 *     | 499.965 | 42.84            | -7.26             | 35.58            | 46.00  | -10.42 | peak     |         |
| 5       | 599.875 | 35.41            | -5.35             | 30.06            | 46.00  | -15.94 | peak     |         |
| 6       | 719.185 | 35.18            | -3.43             | 31.75            | 46.00  | -14.25 | peak     |         |
|         |         |                  |                   |                  |        |        |          |         |

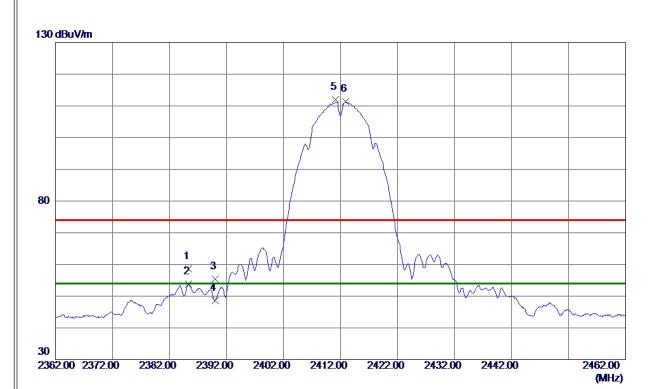
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



# **APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ**



# Vertical

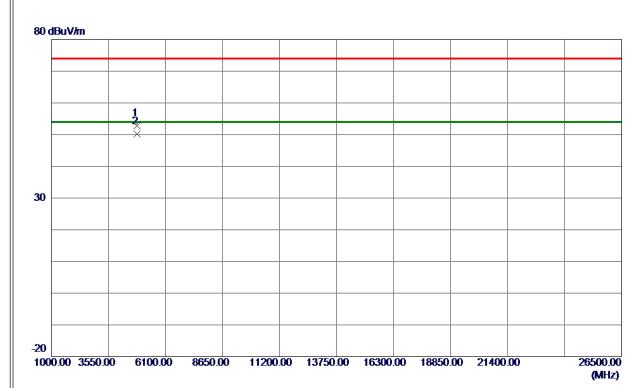


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2385. 3500 | 51. 27           | 7. 26             | 58. 53          | 74.00  | -15. 47 | Peak     |          |
| 2   | 2385. 3500 | 46. 48           | 7. 26             | 53. 74          | 54.00  | -0. 26  | AVG      |          |
| 3   | 2390. 0000 | 48. 19           | 7. 26             | 55. 45          | 74.00  | -18. 55 | Peak     |          |
| 4   | 2390. 0000 | 41. 28           | 7. 26             | 48. 54          | 54.00  | -5. 46  | AVG      |          |
| 5   | 2411. 1500 | 104. 81          | 7. 26             | 112. 07         | 74.00  | 38. 07  | Peak     | No Limit |
| 6 * | 2412. 8500 | 104. 14          | 7. 26             | 111. 40         | 54.00  | 57. 40  | AVG      | No Limit |
|     |            |                  |                   |                 |        |         |          |          |

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



# Vertical

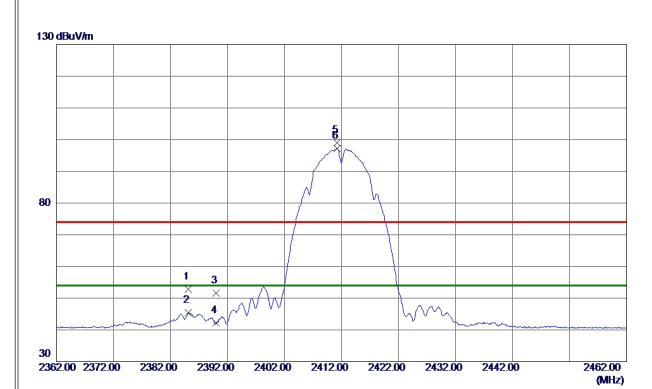


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4823. 8990 | 48. 33           | 4. 45             | 52. 78          | 74.00  | -21. 22 | Peak     |         |
| 2 * | 4823. 9570 | 45. 75           | 4. 45             | 50. 20          | 54. 00 | -3. 80  | AVG      |         |

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



# Horizontal

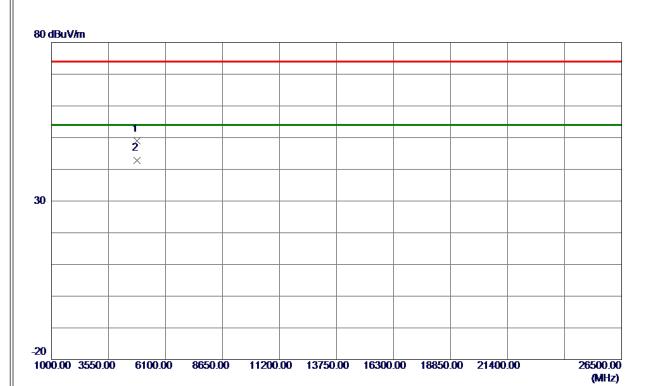


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2385. 1500 | 45. 54           | 7. 26             | 52. 80          | 74.00  | -21. 20 | Peak     |          |
| 2   | 2385. 1500 | 38. 14           | 7. 26             | 45. 40          | 54.00  | -8. 60  | AVG      |          |
| 3   | 2390. 0000 | 44. 28           | 7. 26             | 51. 54          | 74.00  | -22. 46 | Peak     |          |
| 4   | 2390. 0000 | 34. 89           | 7. 26             | 42. 15          | 54.00  | -11.85  | AVG      |          |
| 5   | 2411. 2000 | 91. 81           | 7. 26             | 99. 07          | 74.00  | 25. 07  | Peak     | No Limit |
| 6 * | 2411. 2500 | 89. 96           | 7. 26             | 97. 22          | 54.00  | 43. 22  | AVG      | No Limit |
|     |            |                  |                   |                 |        |         |          |          |

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



# Horizontal

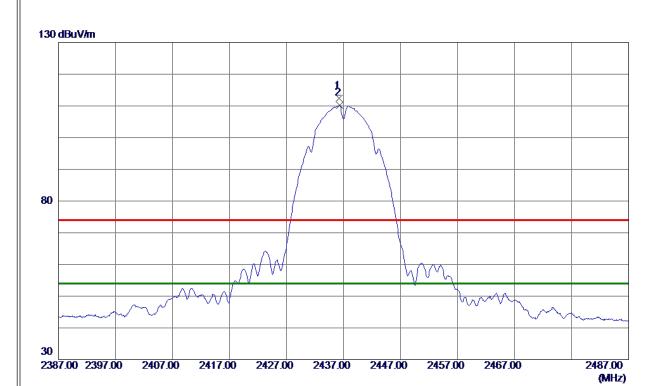


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4823. 9750 | 44. 45           | 4. 45             | 48. 90          | 74.00  | -25. 10 | Peak     |         |
| 2 * | 4824, 0150 | 38, 44           | 4. 45             | 42. 89          | 54.00  | -11, 11 | AVG      |         |

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



# Vertical

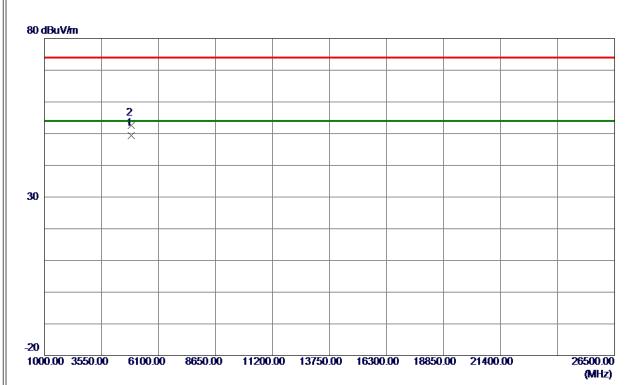


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1   | 2436. 2000 | 105. 16          | 7. 25             | 112. 41         | 74.00  | 38. 41 | Peak     | No Limit |
| 2 * | 2436. 3000 | 102. 92          | 7. 25             | 110. 17         | 54. 00 | 56. 17 | AVG      | No Limit |

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



# Vertical

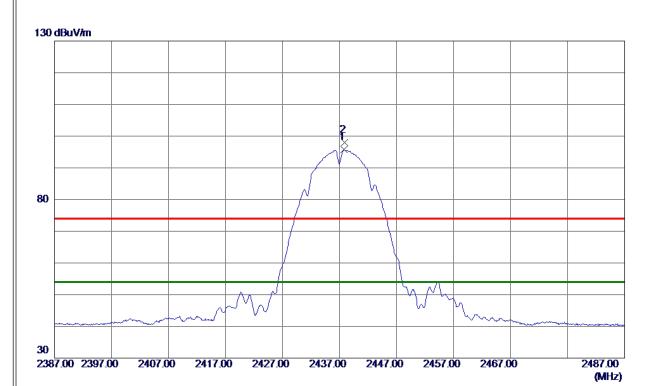


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin        |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB            | Detector | Comment |
| 1 * | 4873. 9670 | 44. 74           | 4. 58             | 49. 32          | 54.00  | <b>-4. 68</b> | AVG      |         |
| 2   | 4873, 9740 | 48. 02           | 4. 58             | 52, 60          | 74. 00 | -21, 40       | Peak     |         |

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



# Horizontal

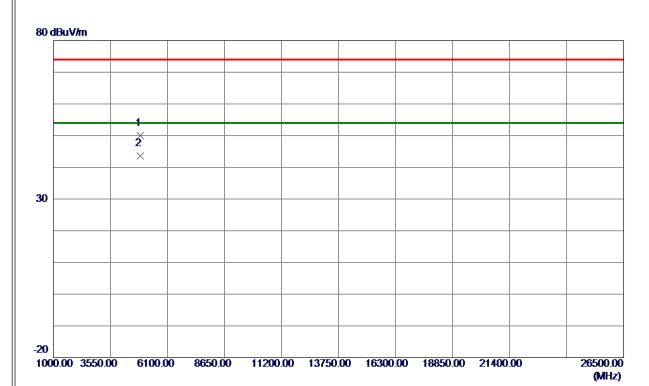


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2437. 8000 | 88. 48           | 7. 25             | 95. 73          | 54.00  | 41.73  | AVG      | No Limit |
| 2   | 2437. 9000 | 90. 66           | 7. 25             | 97. 91          | 74.00  | 23. 91 | Peak     | No Limit |

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



# Horizontal

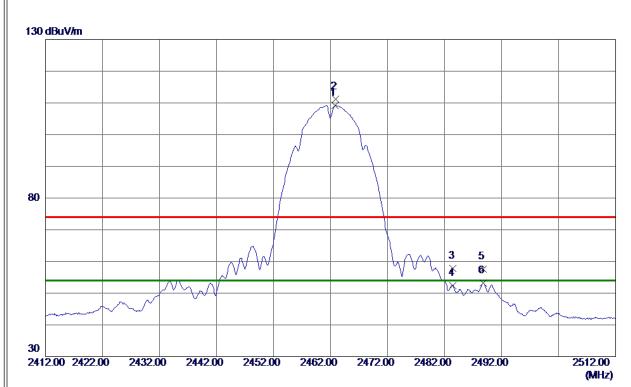


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4873. 7010 | 45. 39           | 4. 58             | 49. 97          | 74.00  | -24. 03 | Peak     |         |
| 2 * | 4873. 9630 | 39. 07           | 4. 58             | 43.65           | 54. 00 | -10. 35 | AVG      |         |

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



# Vertical

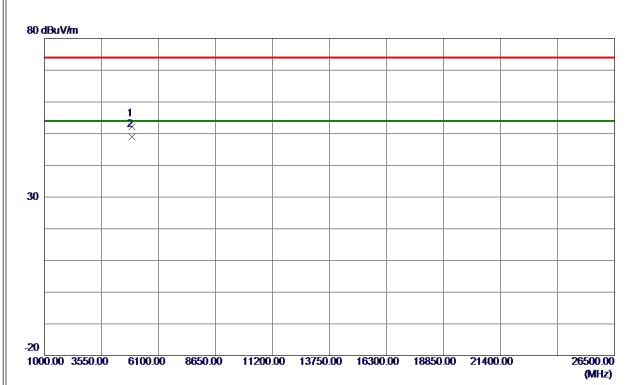


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1 * | 2462. 7500 | 102. 03          | 7. 25             | 109. 28         | 54.00  | 55. 28  | AVG      | No Limit |
| 2   | 2462. 9000 | 103. 90          | 7. 25             | 111. 15         | 74.00  | 37. 15  | Peak     | No Limit |
| 3   | 2483. 5000 | 50. 46           | 7. 25             | 57. 71          | 74.00  | -16. 29 | Peak     |          |
| 4   | 2483. 5000 | 45. 20           | 7. 25             | 52. 45          | 54.00  | -1. 55  | AVG      |          |
| 5   | 2488. 8000 | 50. 35           | 7. 25             | 57. 60          | 74.00  | -16. 40 | Peak     |          |
| 6   | 2488. 8000 | 46. 00           | 7. 25             | 53. 25          | 54. 00 | -0. 75  | AVG      |          |

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



# Vertical

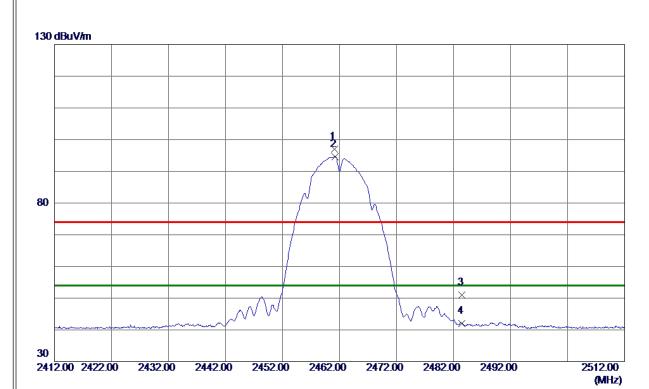


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4923. 9080 | 47. 58           | 4. 72             | 52. 30          | 74.00  | -21. 70 | Peak     |         |
| 2 * | 4923, 9570 | 44. 30           | 4. 72             | 49. 02          | 54, 00 | -4. 98  | AVG      |         |

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



# Horizontal

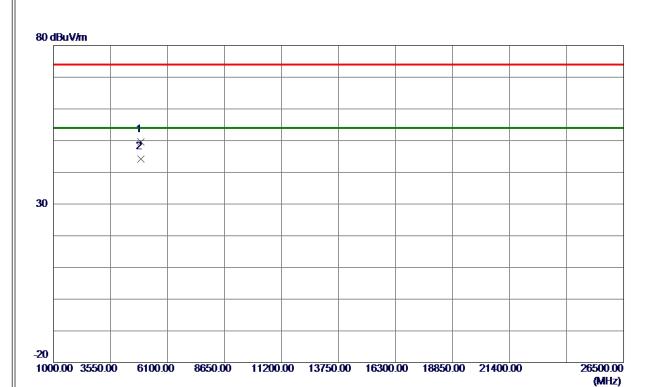


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment  |
| 1   | 2461. 1500 | 89. 66           | 7. 25             | 96. 91          | 74.00        | 22. 91  | Peak     | No Limit |
| 2 * | 2461. 2500 | 87. 41           | 7. 25             | 94. 66          | <b>54.00</b> | 40.66   | AVG      | No Limit |
| 3   | 2483. 5000 | 43. 71           | 7. 25             | 50. 96          | 74.00        | -23. 04 | Peak     |          |
| 4   | 2483. 5000 | 34. 81           | 7. 25             | 42.06           | 54.00        | -11. 94 | AVG      |          |
|     |            |                  |                   |                 |              |         |          |          |

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



# Horizontal

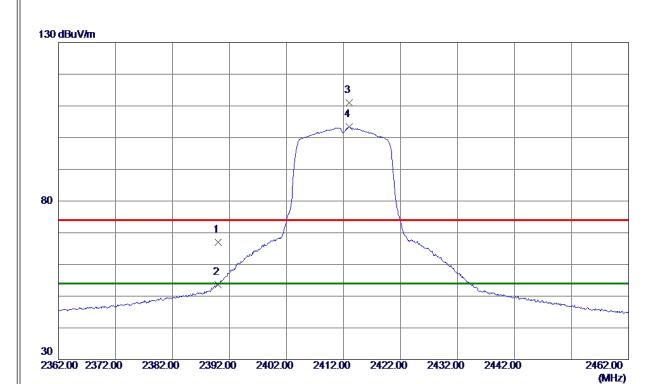


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4923. 8200 | 44. 97           | 4. 72             | 49. 69          | 74.00  | -24. 31 | Peak     |         |
| 2 * | 4923. 9870 | 39. 48           | 4. 72             | 44. 20          | 54. 00 | -9. 80  | AVG      |         |

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



# Vertical

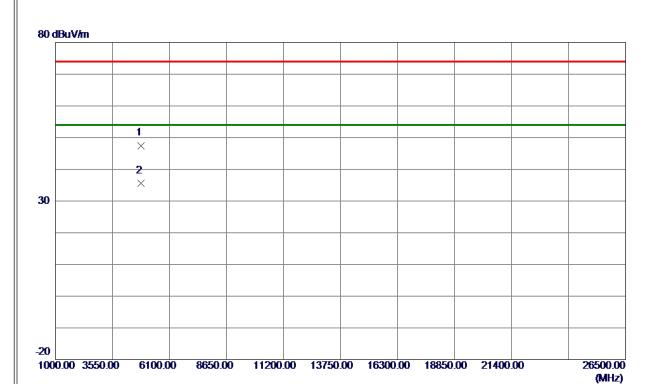


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin        |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB            | Detector | Comment  |
| 1   | 2390. 0000 | 59. 68           | 7. 26             | 66. 94          | 74.00  | <b>−7. 06</b> | Peak     |          |
| 2   | 2390. 0000 | 46. 37           | 7. 26             | 53. 63          | 54.00  | -0. 37        | AVG      |          |
| 3   | 2412. 9500 | 103. 76          | 7. 26             | 111. 02         | 74.00  | 37. 02        | Peak     | No Limit |
| 4 * | 2413. 0000 | 96. 07           | 7. 26             | 103. 33         | 54.00  | 49. 33        | AVG      | No Limit |

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



# Vertical

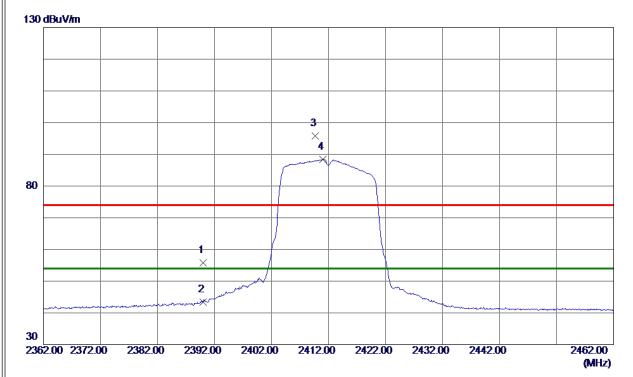


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4823. 2200 | 43. 05           | 4. 45             | 47. 50          | 74.00  | -26. 50 | Peak     |         |
| 2 * | 4823. 3480 | 31. 08           | 4. 45             | 35. 53          | 54.00  | -18. 47 | AVG      |         |

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



# Horizontal

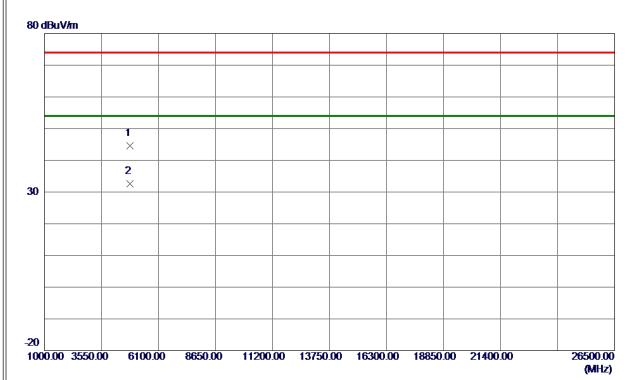


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2390. 0000 | 48. 52           | 7. 26             | 55. 78          | 74.00  | -18. 22 | Peak     |          |
| 2   | 2390. 0000 | 36. 22           | 7. 26             | 43. 48          | 54.00  | -10. 52 | AVG      |          |
| 3   | 2409.6500  | 88. 61           | 7. 26             | 95. 87          | 74.00  | 21.87   | Peak     | No Limit |
| 4 * | 2411.0500  | 81. 11           | 7. 26             | 88. 37          | 54.00  | 34. 37  | AVG      | No Limit |

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



# Horizontal

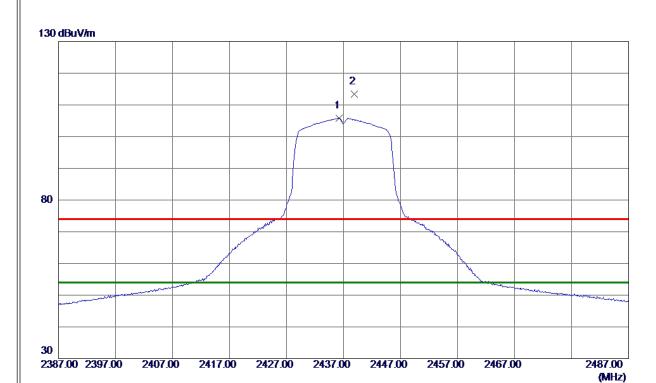


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4824. 3860 | 40. 14           | 4. 45             | 44. 59          | 74.00  | -29. 41 | Peak     |         |
| 2 * | 4824, 8889 | 28. 16           | 4. 45             | 32, 61          | 54. 00 | -21, 39 | AVG      |         |

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



# Vertical

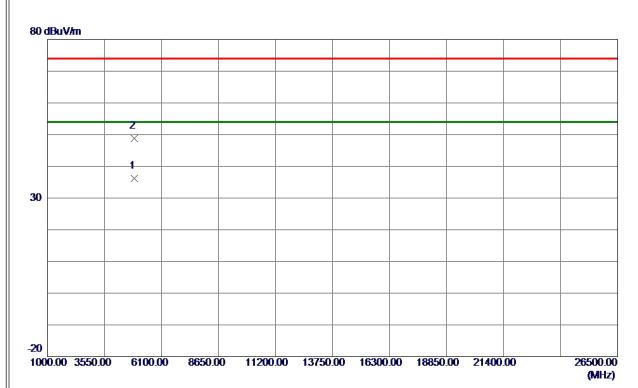


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB     | Detector | Comment  |
| 1 * | 2436. 2500 | 98. 58           | 7. 25             | 105. 83         | <b>54.00</b> | 51.83  | AVG      | No Limit |
| 2   | 2438. 9000 | 106. 22          | 7. 25             | 113. 47         | 74.00        | 39. 47 | Peak     | No Limit |

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



# Vertical

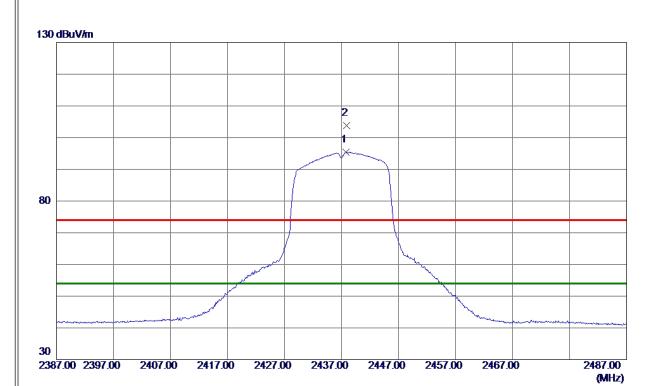


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4874. 0120 | 31. 65           | 4. 58             | 36. 23          | 54.00  | -17. 77 | AVG      |         |
| 2   | 4874. 4970 | 44. 17           | 4. 58             | 48. 75          | 74.00  | -25. 25 | Peak     |         |

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



# Horizontal

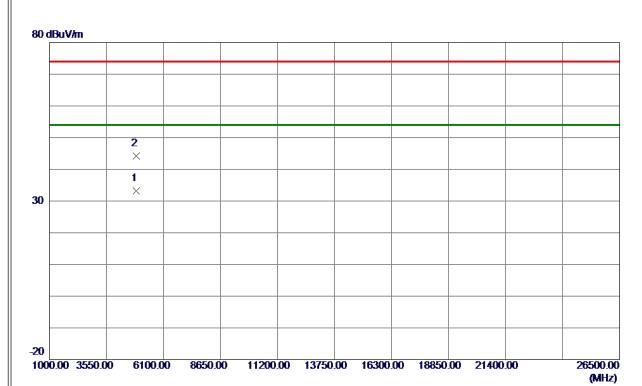


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2437. 7500 | 88. 15           | 7. 25             | 95. 40          | 54.00  | 41. 40 | AVG      | No Limit |
| 2   | 2437. 9000 | 96. 55           | 7. 25             | 103. 80         | 74. 00 | 29. 80 | Peak     | No Limit |

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



# Horizontal

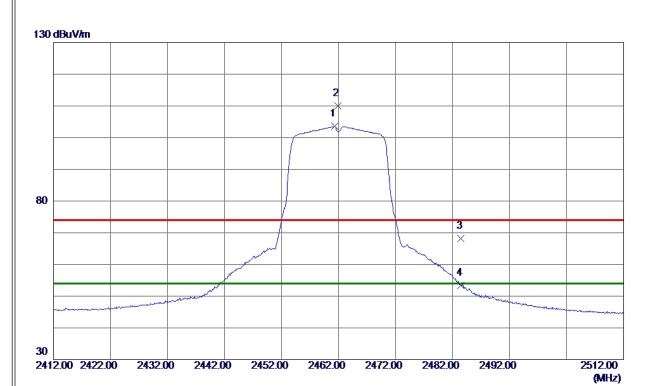


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4873. 0520 | 28. 62           | 4. 58             | 33. 20          | 54.00  | -20. 80 | AVG      |         |
| 2   | 4874, 7090 | 39. 68           | 4. 59             | 44. 27          | 74. 00 | -29, 73 | Peak     |         |

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



# Vertical

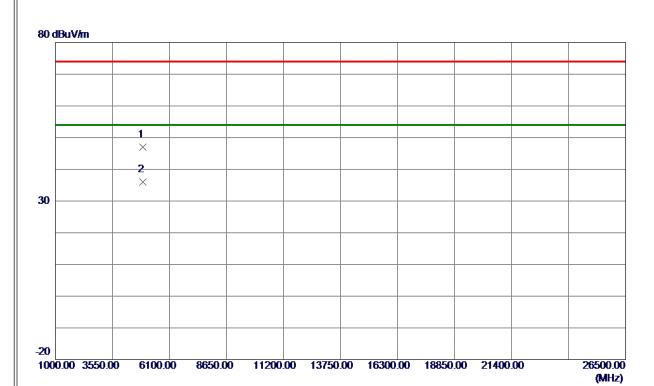


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2461. 3000 | 96. 28           | 7. 25             | 103. 53         | 54.00  | 49. 53 | AVG      | No Limit |
| 2   | 2461.8500  | 102. 70          | 7. 25             | 109. 95         | 74.00  | 35. 95 | Peak     | No Limit |
| 3   | 2483. 5000 | 60. 88           | 7. 25             | 68. 13          | 74.00  | -5. 87 | Peak     |          |
| 4   | 2483. 5000 | 46. 24           | 7. 25             | 53. 49          | 54.00  | -0. 51 | AVG      |          |

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



# Vertical



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4924. 0500 | 42. 24           | 4. 72             | 46. 96          | 74.00  | -27.04  | Peak     |         |
| 2 * | 4924. 1080 | 31. 21           | 4. 72             | 35. 93          | 54.00  | -18. 07 | AVG      |         |

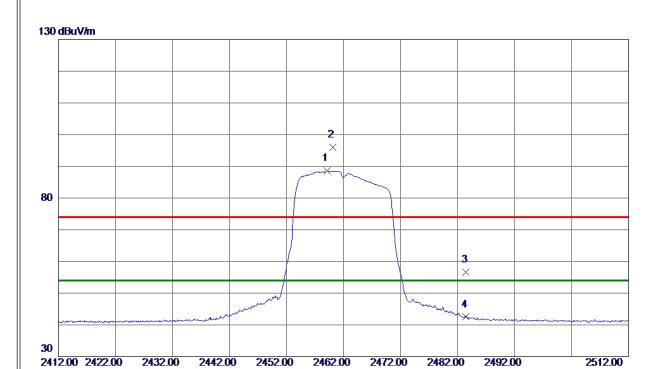
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

(MHz)



Test Mode: TX G Mode 2462 MHz

# Horizontal

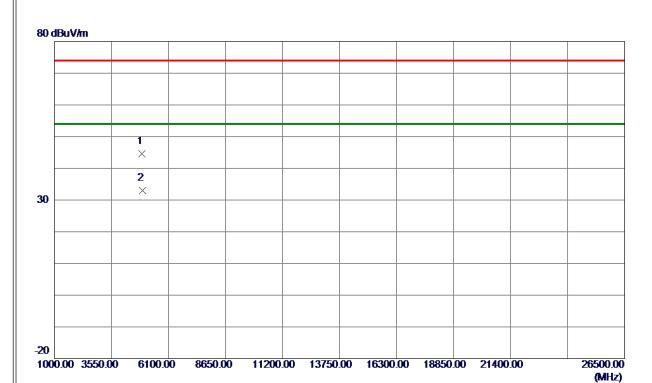


| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1 * | 2459. 1000 | 81. 27           | 7. 25             | 88. 52          | 54.00  | 34. 52  | AVG      | No Limit |
| 2   | 2460. 1500 | 88. 69           | 7. 25             | 95. 94          | 74.00  | 21.94   | Peak     | No Limit |
| 3   | 2483. 5000 | 49. 33           | 7. 25             | 56. 58          | 74.00  | -17. 42 | Peak     |          |
| 4   | 2483. 5000 | 35. 25           | 7. 25             | 42. 50          | 54.00  | -11. 50 | AVG      |          |

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



# Horizontal



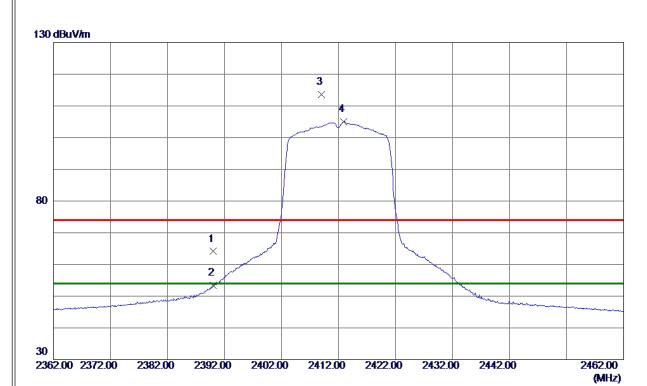
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4924. 0700 | 39. 79           | 4. 72             | 44. 51          | 74.00  | -29.49  | Peak     |         |
| 2 * | 4924. 5310 | 28. 37           | 4. 72             | 33. 09          | 54. 00 | -20. 91 | AVG      |         |

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



Test Mode: TX N-20M Mode 2412 MHz

# Vertical



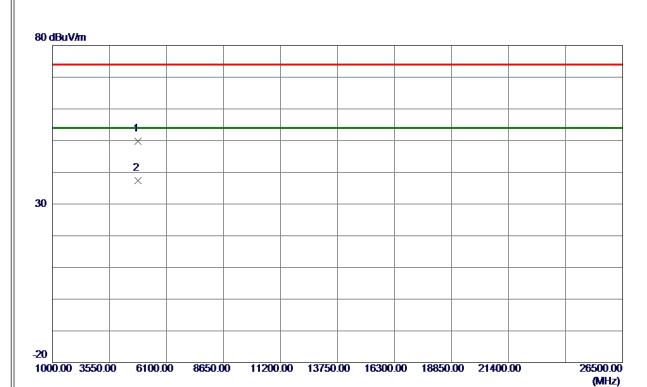
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin        |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|---------------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB            | Detector | Comment  |
| 1   | 2390. 0000 | 56. 84           | 7. 26             | 64. 10          | 74.00        | -9. 90        | Peak     |          |
| 2   | 2390. 0000 | 46. 16           | 7. 26             | 53. 42          | <b>54.00</b> | <b>-0.</b> 58 | AVG      |          |
| 3   | 2409. 0000 | 106. 33          | 7. 26             | 113. 59         | 74.00        | 39. 59        | Peak     | No Limit |
| 4 * | 2412. 9000 | 97. 79           | 7. 26             | 105. 05         | <b>54.00</b> | 51. 05        | AVG      | No Limit |

- (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<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4823. 1200 | 45. 26           | 4. 45             | 49.71           | 74.00  | -24. 29 | Peak     |         |
| 2 * | 4824. 4450 | 33. 00           | 4. 45             | 37. 45          | 54.00  | -16. 55 | AVG      |         |

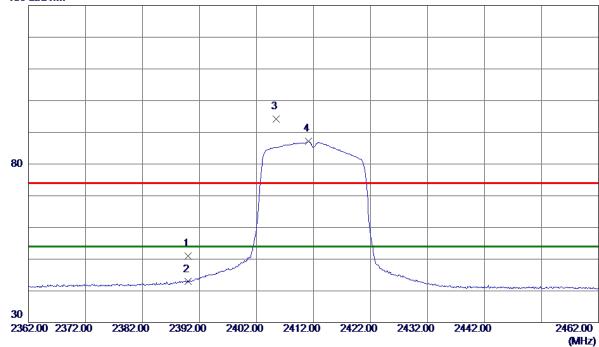
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-20M Mode 2412 MHz

# Horizontal





| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2390. 0000 | 43. 76           | 7. 26             | 51. 02          | 74.00  | -22. 98 | Peak     |          |
| 2   | 2390. 0000 | 35. 64           | 7. 26             | 42. 90          | 54.00  | -11. 10 | AVG      |          |
| 3   | 2405. 4500 | 86. 87           | 7. 26             | 94. 13          | 74.00  | 20. 13  | Peak     | No Limit |
| 4 * | 2411. 1000 | 79. 87           | 7. 26             | 87. 13          | 54.00  | 33. 13  | AVG      | No Limit |

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



Test Mode: TX N-20M Mode 2412 MHz

#### Horizontal



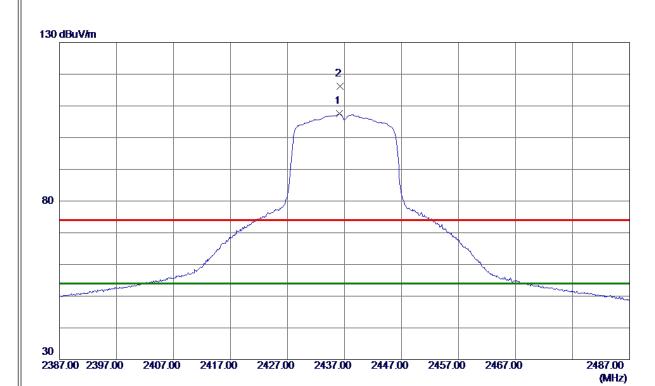
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4823. 2380 | 40. 48           | 4. 45             | 44. 93          | 74.00  | -29. 07 | Peak     |         |
| 2 * | 4824, 3060 | 27. 97           | 4. 45             | 32, 42          | 54. 00 | -21, 58 | AVG      |         |

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



Test Mode: TX N-20M Mode 2437 MHz

#### Vertical



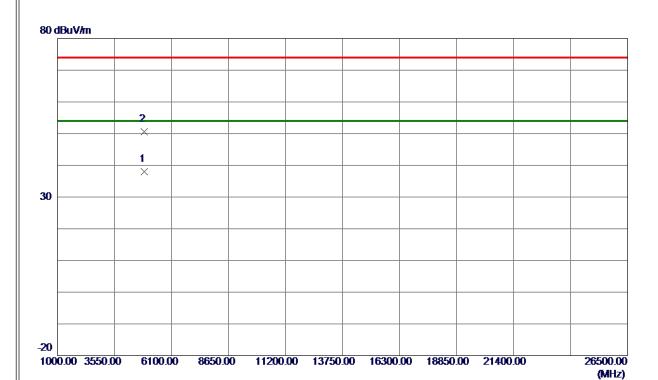
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2436. 1000 | 100. 26          | 7. 25             | 107. 51         | 54.00  | 53. 51 | AVG      | No Limit |
| 2   | 2436. 2500 | 108. 91          | 7. 25             | 116. 16         | 74.00  | 42. 16 | Peak     | No Limit |

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



Test Mode: TX N-20M Mode 2437 MHz

#### Vertical



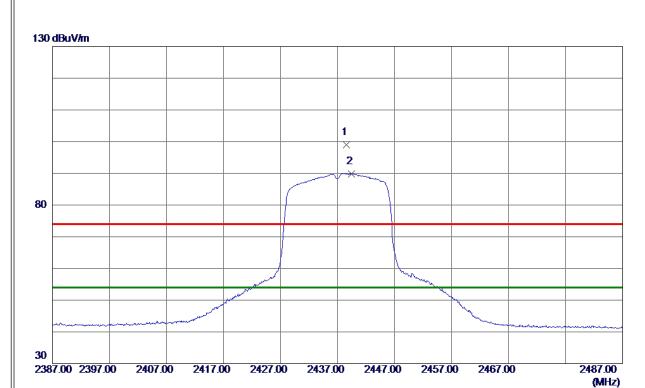
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment |
| 1 * | 4874. 4980 | 33. 39           | 4. 58             | 37. 97          | <b>54.00</b> | -16. 03 | AVG      |         |
| 2   | 4874. 6090 | 46. 05           | 4. 59             | 50. 64          | 74.00        | -23. 36 | Peak     |         |

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



Test Mode: TX N-20M Mode 2437 MHz

#### Horizontal



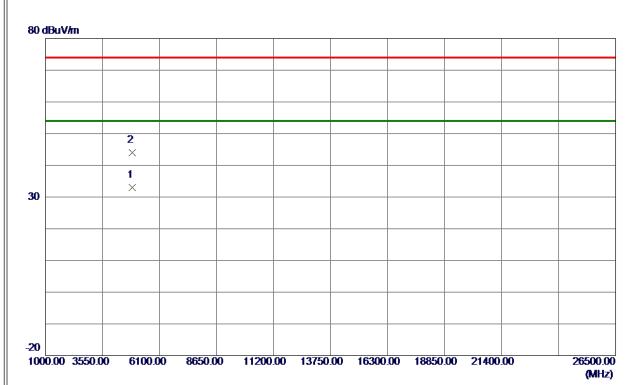
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB     | Detector | Comment  |
| 1   | 2438. 6000 | 91. 78           | 7. 25             | 99. 03          | 74.00        | 25. 03 | Peak     | No Limit |
| 2 * | 2439. 4000 | 82. 59           | 7. 25             | 89. 84          | <b>54.00</b> | 35. 84 | AVG      | No Limit |

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



Test Mode: TX N-20M Mode 2437 MHz

#### Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4874. 1990 | 28. 36           | 4. 58             | 32. 94          | 54.00  | -21. 06 | AVG      |         |
| 2   | 4874, 5460 | 39. 43           | 4. 59             | 44. 02          | 74. 00 | -29, 98 | Peak     |         |

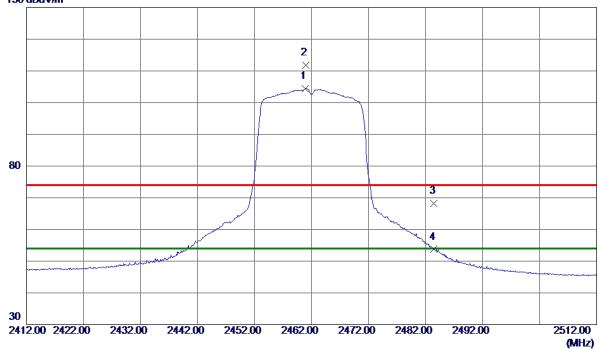
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-20M Mode 2462 MHz

#### Vertical





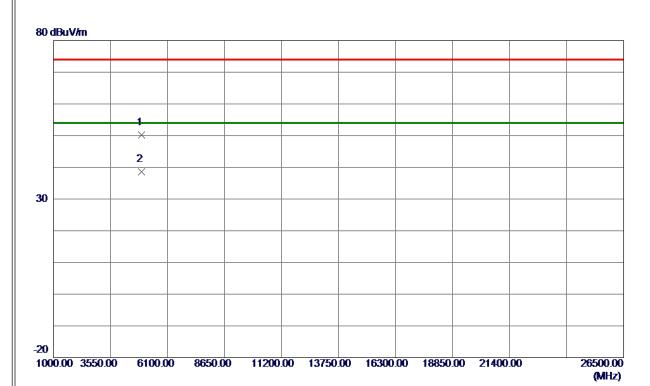
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB     | Detector | Comment  |
| 1 * | 2460. 9000 | 97. 15           | 7. 25             | 104. 40         | <b>54.00</b> | 50. 40 | AVG      | No Limit |
| 2   | 2461. 0000 | 104.62           | 7. 25             | 111. 87         | 74.00        | 37. 87 | Peak     | No Limit |
| 3   | 2483. 5000 | 60. 94           | 7. 25             | 68. 19          | 74.00        | -5. 81 | Peak     |          |
| 4   | 2483. 5000 | 46. 45           | 7. 25             | 53. 70          | <b>54.00</b> | -0. 30 | AVG      |          |

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



Test Mode: TX N-20M Mode 2462 MHz

#### Vertical



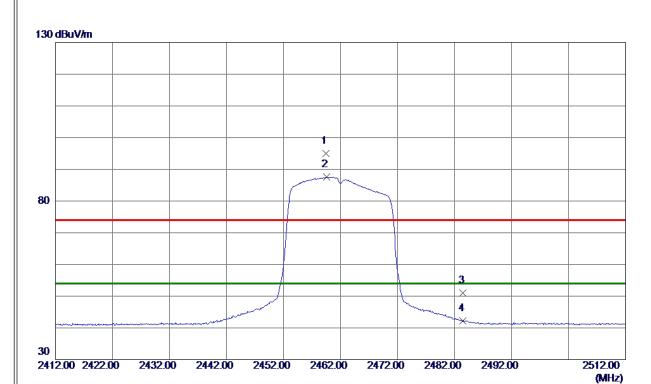
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment |
| 1   | 4924. 6080 | 45. 48           | 4. 72             | 50. 20          | 74.00        | -23.80  | Peak     |         |
| 2 * | 4924. 7320 | 33. 88           | 4. 72             | 38. 60          | <b>54.00</b> | -15. 40 | AVG      |         |

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



Test Mode: TX N-20M Mode 2462 MHz

#### Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin        |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB            | Detector | Comment  |
| 1   | 2459. 4000 | 87. 65           | 7. 25             | 94. 90          | 74.00  | 20. 90        | Peak     | No Limit |
| 2 * | 2459. 5500 | 80. 26           | 7. 25             | 87. 51          | 54.00  | 33. 51        | AVG      | No Limit |
| 3   | 2483. 5000 | 43. 77           | 7. 25             | 51. 02          | 74.00  | <b>-22.98</b> | Peak     |          |
| 4   | 2483. 5000 | 34. 97           | 7. 25             | 42. 22          | 54.00  | -11. 78       | AVG      |          |

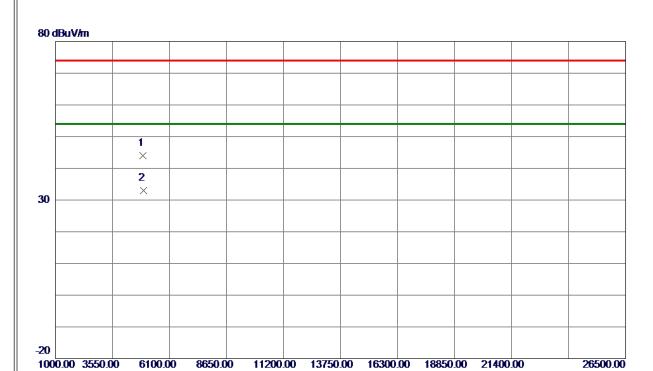
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

(MHz)



Test Mode: TX N-20M Mode 2462 MHz

#### Horizontal



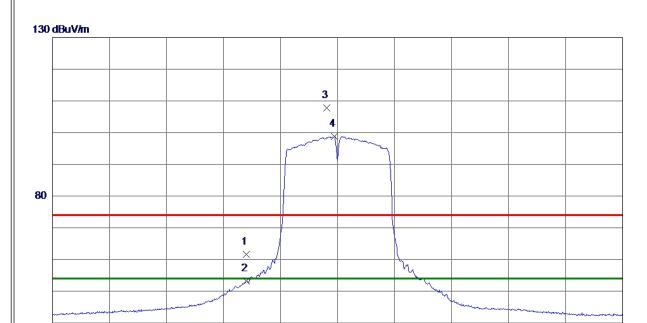
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4923. 5920 | 39. 27           | 4. 72             | 43. 99          | 74.00  | -30. 01 | Peak     |         |
| 2 * | 4924, 5270 | 28, 27           | 4. 72             | 32, 99          | 54, 00 | -21, 01 | AVG      |         |

- (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<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2390. 0000 | <b>54.</b> 32    | 7. 26             | 61. 58          | 74.00  | -12. 42 | Peak     |          |
| 2   | 2390.0000  | 45. 92           | 7. 26             | 53. 18          | 54.00  | -0.82   | AVG      |          |
| 3   | 2418. 2000 | 100.61           | 7. 26             | 107. 87         | 74.00  | 33. 87  | Peak     | No Limit |
| 4 * | 2420. 9000 | 91. 53           | 7. 26             | 98. 79          | 54.00  | 44. 79  | AVG      | No Limit |

2422.00

2442.00

2462.00

2482.00

2522.00 (MHz)

## **REMARKS**:

2322.00 2342.00

2362.00

2382.00

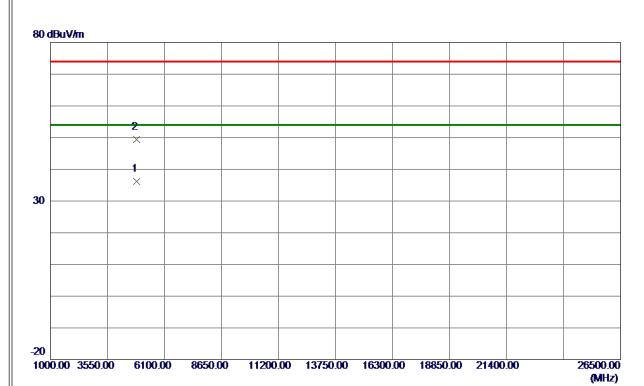
2402.00

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



Test Mode: TX N-40M Mode 2422 MHz

## Vertical



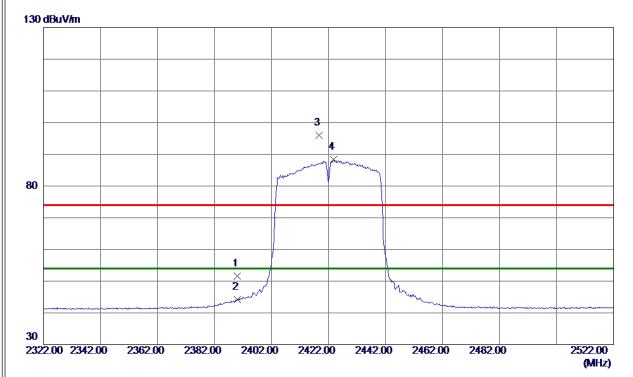
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment |
| 1 * | 4844. 6240 | 31. 76           | 4. 51             | 36. 27          | <b>54.00</b> | -17. 73 | AVG      |         |
| 2   | 4844, 6420 | 44. 80           | 4. 51             | 49. 31          | 74. 00       | -24, 69 | Peak     |         |

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



Test Mode: TX N-40M Mode 2422 MHz

#### Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2390. 0000 | 44. 34           | 7. 26             | 51. 60          | 74.00  | -22. 40 | Peak     |          |
| 2   | 2390. 0000 | 36. 86           | 7. 26             | 44. 12          | 54.00  | -9. 88  | AVG      |          |
| 3   | 2418. 7000 | 88. 66           | 7. 26             | 95. 92          | 74.00  | 21.92   | Peak     | No Limit |
| 4 * | 2423. 8000 | 81. 11           | 7. 25             | 88. 36          | 54.00  | 34. 36  | AVG      | No Limit |

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



Test Mode: TX N-40M Mode 2422 MHz

#### Horizontal



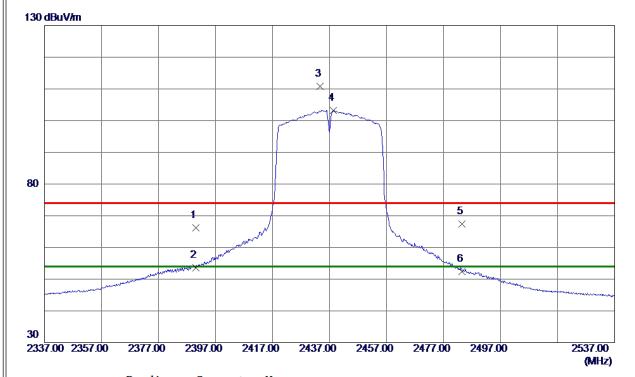
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4844. 4900 | 28. 98           | 4. 50             | 33. 48          | 54.00  | -20. 52 | AVG      |         |
| 2   | 4844. 5830 | 40.02            | 4. 51             | 44. 53          | 74.00  | -29. 47 | Peak     |         |

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



Test Mode: TX N-40M Mode 2437 MHz

#### Vertical



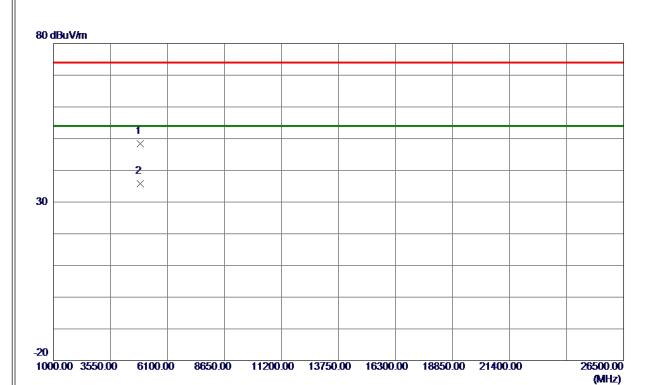
| 1 | No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|---|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|   |     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 | 1   | 2390.0000  | <b>59. 0</b> 2   | 7. 26             | 66. 28          | 74.00  | -7. 72 | Peak     |          |
| 2 | 2   | 2390.0000  | 46. 30           | 7. 26             | 53. 56          | 54.00  | -0. 44 | AVG      |          |
| 3 | 3   | 2433. 7000 | 103. 61          | 7. 25             | 110.86          | 74.00  | 36. 86 | Peak     | No Limit |
| 4 | 4 * | 2438. 4000 | 95. 92           | 7. 25             | 103. 17         | 54.00  | 49. 17 | AVG      | No Limit |
|   | 5   | 2483. 5000 | 60. 11           | 7. 25             | 67. 36          | 74.00  | -6. 64 | Peak     |          |
| ( | 6   | 2483. 5000 | 45. 16           | 7. 25             | 52. 41          | 54. 00 | -1. 59 | AVG      |          |
| 1 |     |            |                  |                   |                 |        |        |          |          |

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



Test Mode: TX N-40M Mode 2437 MHz

#### Vertical



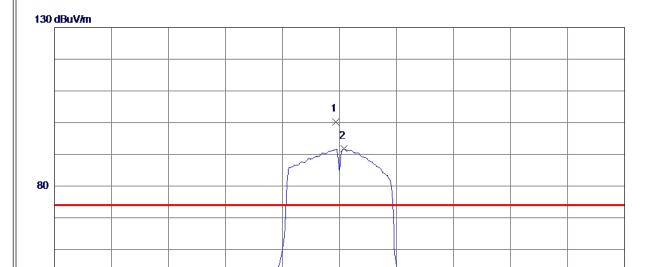
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4873. 1210 | 43. 91           | 4. 58             | 48. 49          | 74.00  | -25. 51 | Peak     |         |
| 2 * | 4873. 8849 | 31. 21           | 4. 58             | 35. 79          | 54.00  | -18. 21 | AVG      |         |

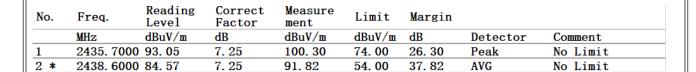
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-40M Mode 2437 MHz

#### Horizontal





2437.00

2417.00

2457.00

2477.00

2497.00

2537.00

(MHz)

#### **REMARKS**:

30

2337.00 2357.00

2377.00

2397.00

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



Test Mode: TX N-40M Mode 2437 MHz

#### Horizontal



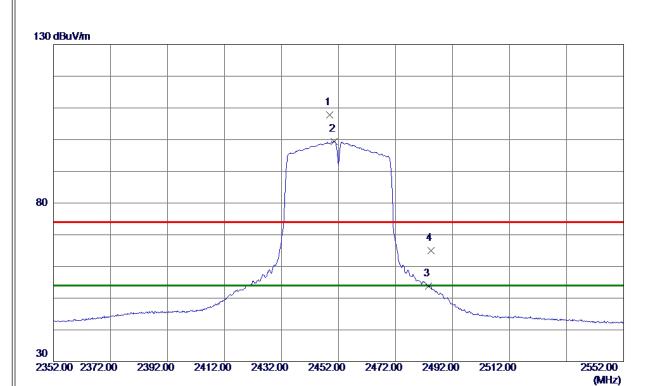
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4874. 5130 | 39. 34           | 4. 59             | 43. 93          | 74.00  | -30. 07 | Peak     |         |
| 2 * | 4874, 8090 | 28. 38           | 4. 59             | 32. 97          | 54, 00 | -21. 03 | AVG      |         |

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



Test Mode: TX N-40M Mode 2452 MHz

#### Vertical



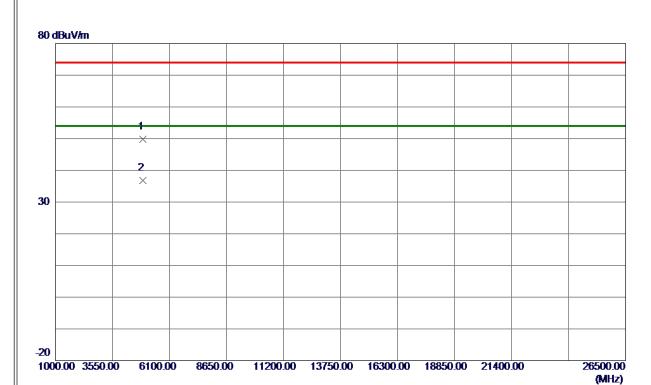
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin       |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|--------------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB           | Detector | Comment  |
| 1   | 2448. 8000 | 100. 47          | 7. 25             | 107. 72         | 74.00        | 33. 72       | Peak     | No Limit |
| 2 * | 2450. 5000 | 92. 16           | 7. 25             | 99. 41          | <b>54.00</b> | 45. 41       | AVG      | No Limit |
| 3   | 2483. 5000 | 46. 48           | 7. 25             | 53. 73          | <b>54.00</b> | -0. 27       | AVG      |          |
| 4   | 2484. 4000 | 57. 73           | 7. 25             | 64. 98          | 74.00        | <b>-9.02</b> | Peak     |          |

- (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<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4903. 0650 | 45. 12           | 4. 66             | 49. 78          | 74.00  | -24. 22 | Peak     |         |
| 2 * | 4904. 5930 | 32. 06           | 4. 67             | 36. 73          | 54. 00 | -17. 27 | AVG      |         |

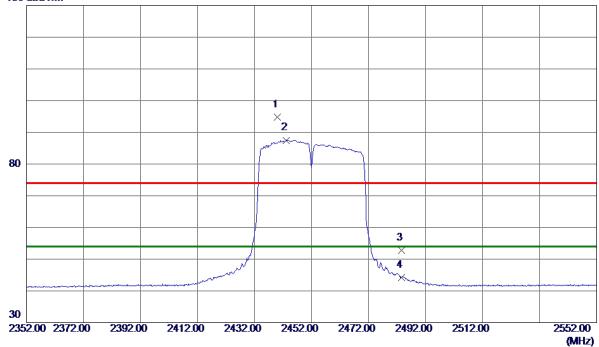
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-40M Mode 2452 MHz

#### Horizontal





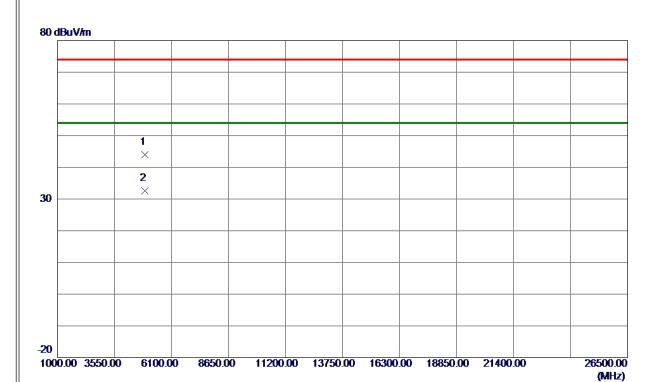
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment  |
| 1   | 2440. 1000 | 87. 62           | 7. 25             | 94. 87          | 74.00        | 20.87   | Peak     | No Limit |
| 2 * | 2443. 2000 | 80. 25           | 7. 25             | 87. 50          | <b>54.00</b> | 33. 50  | AVG      | No Limit |
| 3   | 2483. 5000 | 45. 59           | 7. 25             | 52. 84          | 74.00        | -21. 16 | Peak     |          |
| 4   | 2483. 5000 | 37. 02           | 7. 25             | 44. 27          | <b>54.00</b> | -9. 73  | AVG      |          |

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



Test Mode: TX N-40M Mode 2452 MHz

#### Horizontal



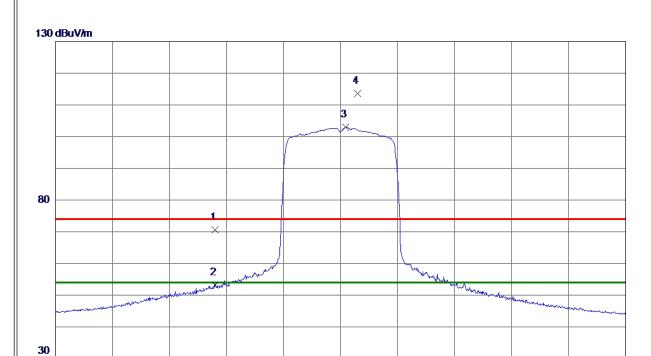
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4903. 0520 | 39. 30           | 4. 66             | 43. 96          | 74.00  | -30. 04 | Peak     |         |
| 2 * | 4903, 8670 | 28. 00           | 4. 66             | 32, 66          | 54. 00 | -21. 34 | AVG      |         |

- (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<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1   | 2390. 0000 | 63. 41           | 7. 26             | 70. 67          | 74.00  | -3. 33 | Peak     |          |
| 2   | 2390. 0000 | 46. 01           | 7. 26             | 53. 27          | 54.00  | -0. 73 | AVG      |          |
| 3 * | 2412. 9000 | 95. 65           | 7. 26             | 102. 91         | 54.00  | 48. 91 | AVG      | No Limit |
| 4   | 2414. 9500 | 106. 33          | 7. 26             | 113. 59         | 74.00  | 39. 59 | Peak     | No Limit |

2412.00

2422.00

2432.00

2442.00

2462.00 (MHz)

## **REMARKS**:

2362.00 2372.00

2382.00

2392.00

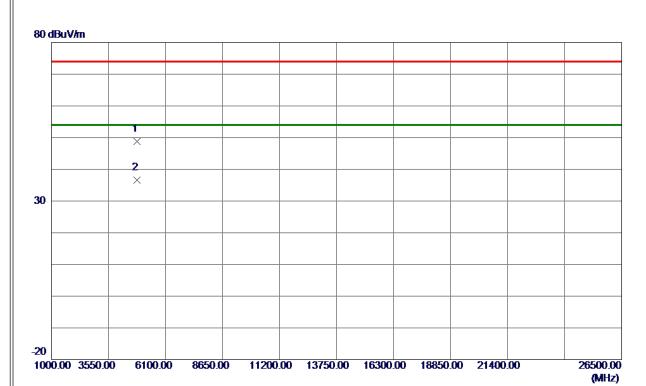
2402.00

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



Test Mode: TX AX-20M Mode 2412 MHz

## Vertical



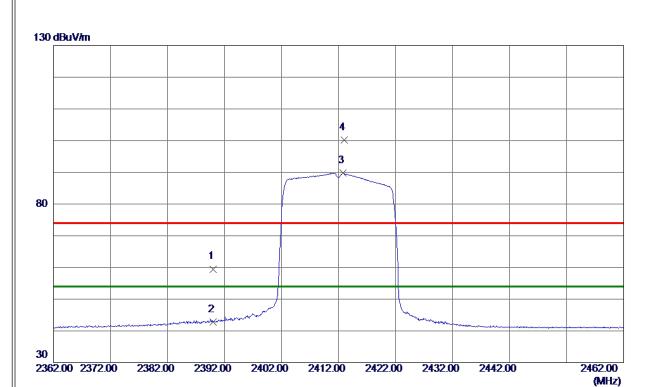
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4823. 2540 | 44. 33           | 4. 45             | 48. 78          | 74.00  | -25. 22 | Peak     |         |
| 2 * | 4823, 7759 | 32, 06           | 4. 45             | 36, 51          | 54, 00 | -17, 49 | AVG      |         |

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



Test Mode: TX AX-20M Mode 2412 MHz

## Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2390. 0000 | <b>52. 24</b>    | 7. 26             | 59. 50          | 74.00  | -14. 50 | Peak     |          |
| 2   | 2390. 0000 | 35. 62           | 7. 26             | 42.88           | 54.00  | -11. 12 | AVG      |          |
| 3 * | 2412. 8000 | 82. 47           | 7. 26             | 89. 73          | 54.00  | 35. 73  | AVG      | No Limit |
| 4   | 2413. 0000 | 92. 89           | 7. 26             | 100. 15         | 74.00  | 26. 15  | Peak     | No Limit |

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



Test Mode: TX AX-20M Mode 2412 MHz

#### Horizontal



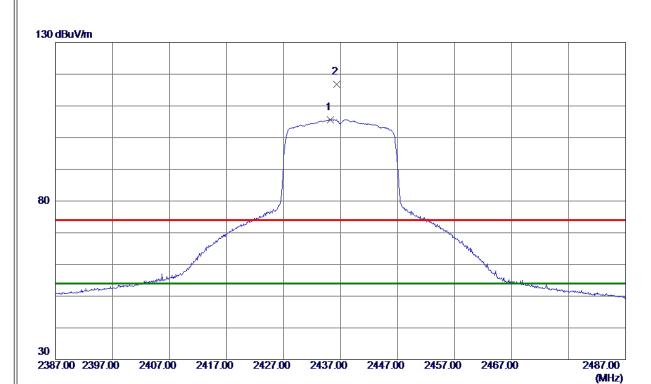
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment |
| 1 * | 4823. 7950 | 28. 00           | 4. 45             | 32. 45          | <b>54.00</b> | -21. 55 | AVG      |         |
| 2   | 4823. 9470 | 39. 11           | 4. 45             | 43. 56          | 74.00        | -30. 44 | Peak     |         |

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



Test Mode: TX AX-20M Mode 2437 MHz

#### Vertical



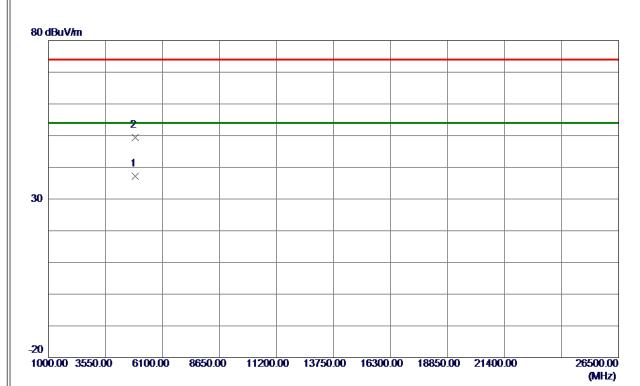
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2435. 2500 | 98. 44           | 7. 25             | 105. 69         | 54.00  | 51. 69 | AVG      | No Limit |
| 2   | 2436. 3000 | 109. 51          | 7. 25             | 116. 76         | 74.00  | 42. 76 | Peak     | No Limit |

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



Test Mode: TX AX-20M Mode 2437 MHz

#### Vertical



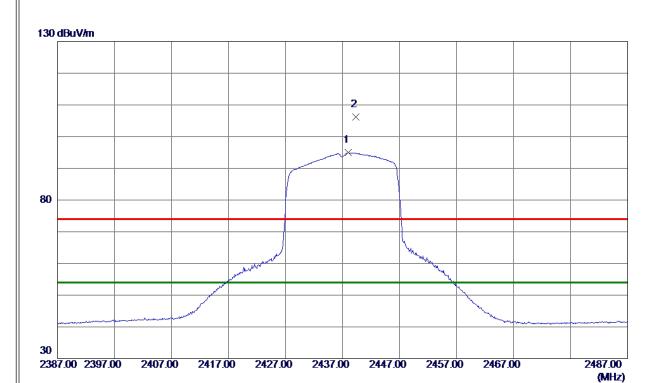
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4874. 2580 | 32. 69           | 4. 58             | 37. 27          | 54.00  | -16. 73 | AVG      |         |
| 2   | 4874, 7140 | 44. 75           | 4. 59             | 49. 34          | 74. 00 | -24, 66 | Peak     |         |

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



Test Mode: TX AX-20M Mode 2437 MHz

#### Horizontal



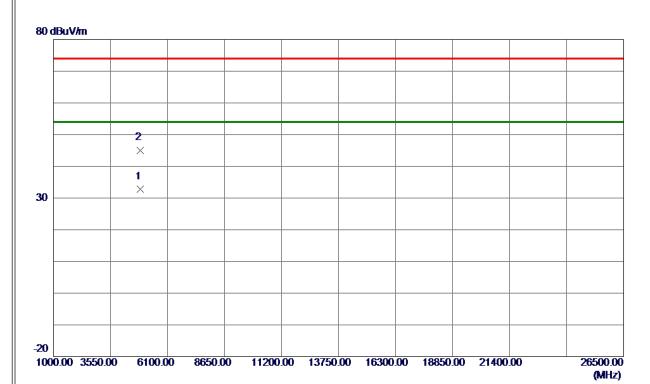
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2438. 0500 | 87. 65           | 7. 25             | 94. 90          | 54.00  | 40. 90 | AVG      | No Limit |
| 2   | 2439. 3000 | 99. 02           | 7. 25             | 106. 27         | 74.00  | 32. 27 | Peak     | No Limit |

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



Test Mode: TX AX-20M Mode 2437 MHz

## Horizontal



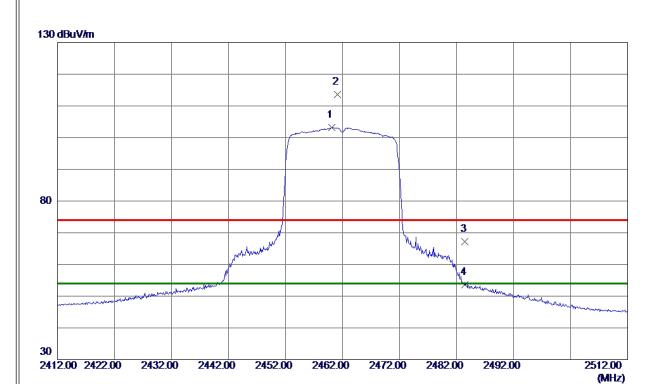
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4873. 8240 | 28. 30           | 4. 58             | 32. 88          | 54.00  | -21. 12 | AVG      |         |
| 2   | 4874. 5290 | 40. 51           | 4. 59             | 45. 10          | 74.00  | -28. 90 | Peak     |         |

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



Test Mode: TX AX-20M Mode 2462 MHz

## Vertical



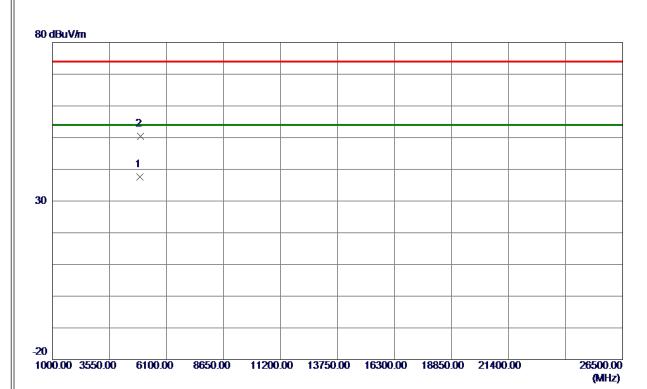
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2460. 1000 | 95. 99           | 7. 25             | 103. 24         | 54.00  | 49. 24 | AVG      | No Limit |
| 2   | 2461. 1000 | 106. 31          | 7. 25             | 113. 56         | 74.00  | 39. 56 | Peak     | No Limit |
| 3   | 2483. 5000 | 59. 91           | 7. 25             | 67. 16          | 74.00  | -6. 84 | Peak     |          |
| 4   | 2483. 5000 | 46. 29           | 7. 25             | 53. 54          | 54.00  | -0. 46 | AVG      |          |

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



Test Mode: TX AX-20M Mode 2462 MHz

#### Vertical



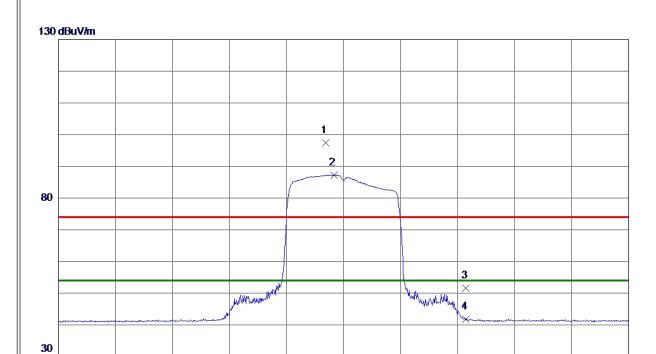
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment |
| 1 * | 4923. 7470 | 32. 87           | 4. 72             | 37. 59          | <b>54.00</b> | -16. 41 | AVG      |         |
| 2   | 4924. 4560 | 45. 73           | 4. 72             | 50. 45          | 74.00        | -23. 55 | Peak     |         |

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



Test Mode: TX AX-20M Mode 2462 MHz

#### Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment  |
| 1   | 2458. 9000 | 90. 16           | 7. 25             | 97. 41          | 74.00        | 23. 41  | Peak     | No Limit |
| 2 * | 2460. 3000 | 80. 00           | 7. 25             | 87. 25          | <b>54.00</b> | 33. 25  | AVG      | No Limit |
| 3   | 2483. 5000 | 44. 26           | 7. 25             | 51. 51          | 74.00        | -22. 49 | Peak     |          |
| 4   | 2483. 5000 | 34. 62           | 7. 25             | 41.87           | <b>54.00</b> | -12. 13 | AVG      |          |

2462.00

2472.00

2482.00

2492.00

2512.00 (MHz)

# **REMARKS**:

2412.00 2422.00

2432.00

2442.00

2452.00

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



Test Mode: TX AX-20M Mode 2462 MHz

#### Horizontal



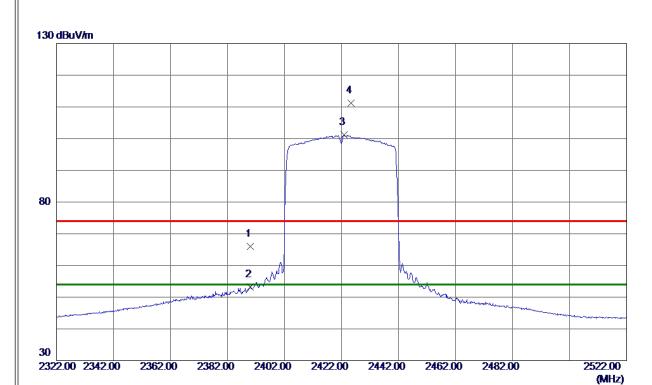
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4923. 1650 | 39. 61           | 4. 71             | 44. 32          | 74.00  | -29. 68 | Peak     |         |
| 2 * | 4923. 7150 | 28. 47           | 4. 72             | 33. 19          | 54.00  | -20. 81 | AVG      |         |

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



Test Mode: TX AX-40M Mode 2422 MHz

#### Vertical



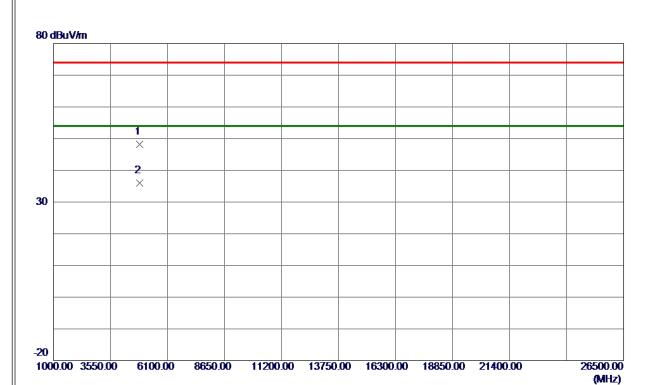
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1   | 2390. 0000 | 58. 70           | 7. 26             | 65. 96          | 74.00  | -8. 04 | Peak     |          |
| 2   | 2390. 0000 | 45. 95           | 7. 26             | 53. 21          | 54.00  | -0. 79 | AVG      |          |
| 3 * | 2422. 9000 | 93. 91           | 7. 26             | 101. 17         | 54.00  | 47. 17 | AVG      | No Limit |
| 4   | 2425. 3000 | 103. 87          | 7. 25             | 111. 12         | 74.00  | 37. 12 | Peak     | No Limit |

- (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<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4843. 3560 | 43. 69           | 4. 50             | 48. 19          | 74.00  | -25. 81 | Peak     |         |
| 2 * | 4844. 4260 | 31. 44           | 4. 50             | 35. 94          | 54.00  | -18. 06 | AVG      |         |

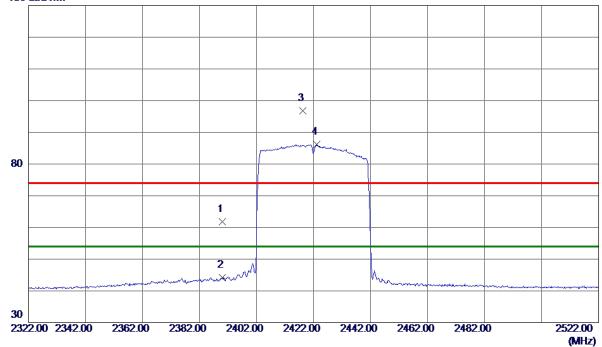
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX AX-40M Mode 2422 MHz

#### Horizontal





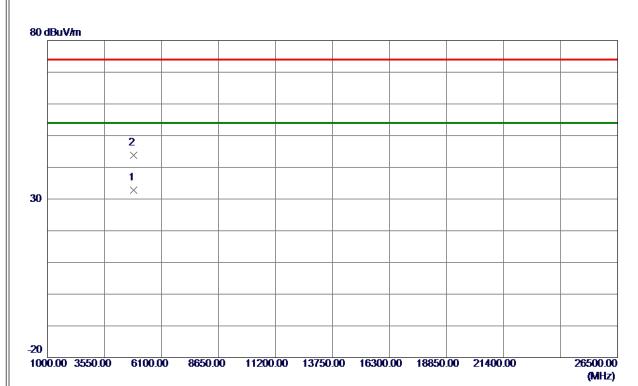
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1   | 2390. 0000 | 54. 50           | 7. 26             | 61. 76          | 74.00  | -12. 24 | Peak     |          |
| 2   | 2390. 0000 | 36. 85           | 7. 26             | 44. 11          | 54.00  | -9.89   | AVG      |          |
| 3   | 2418. 2000 | 89. 52           | 7. 26             | 96. 78          | 74.00  | 22. 78  | Peak     | No Limit |
| 4 * | 2423. 1000 | 79. 03           | 7. 26             | 86. 29          | 54.00  | 32. 29  | AVG      | No Limit |

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



Test Mode: TX AX-40M Mode 2422 MHz

## Horizontal



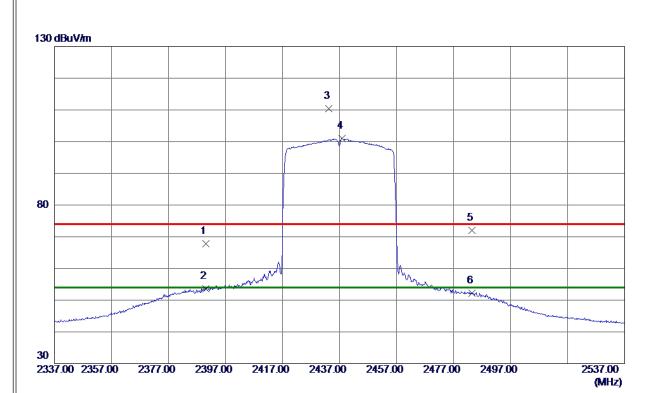
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4843. 9570 | 28. 21           | 4. 50             | 32. 71          | 54.00  | -21. 29 | AVG      |         |
| 2   | 4844, 0540 | 39, 22           | 4. 50             | 43. 72          | 74. 00 | -30, 28 | Peak     |         |

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



Test Mode: TX AX-40M Mode 2437 MHz

## Vertical



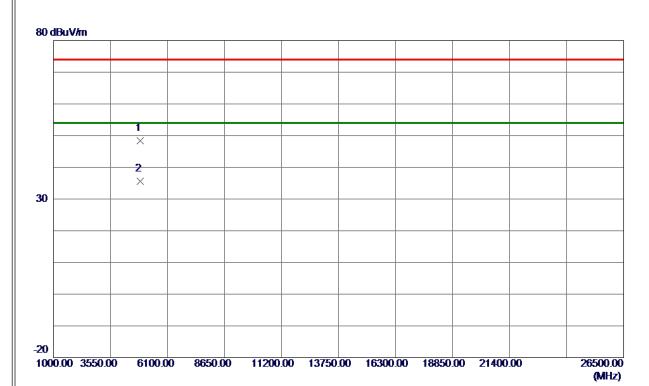
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin       |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB           | Detector | Comment  |
| 1   | 2390. 0000 | 60. 51           | 7. 26             | 67. 77          | 74.00  | -6. 23       | Peak     |          |
| 2   | 2390. 0000 | 46. 32           | 7. 26             | 53. 58          | 54.00  | <b>-0.42</b> | AVG      |          |
| 3   | 2433. 2000 | 103. 24          | 7. 25             | 110. 49         | 74.00  | 36. 49       | Peak     | No Limit |
| 4 * | 2437. 8000 | 93. 75           | 7. 25             | 101.00          | 54.00  | 47.00        | AVG      | No Limit |
| 5   | 2483. 5000 | 64. 67           | 7. 25             | 71. 92          | 74.00  | -2. 08       | Peak     |          |
| 6   | 2483. 5000 | 44. 94           | 7. 25             | 52. 19          | 54.00  | -1.81        | AVG      |          |
|     |            |                  |                   |                 |        |              |          |          |

- (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<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4873. 6200 | 43.81            | 4. 58             | 48. 39          | 74.00  | -25. 61 | Peak     |         |
| 2 * | 4873. 6990 | 30. 95           | 4. 58             | 35. 53          | 54. 00 | -18. 47 | AVG      |         |

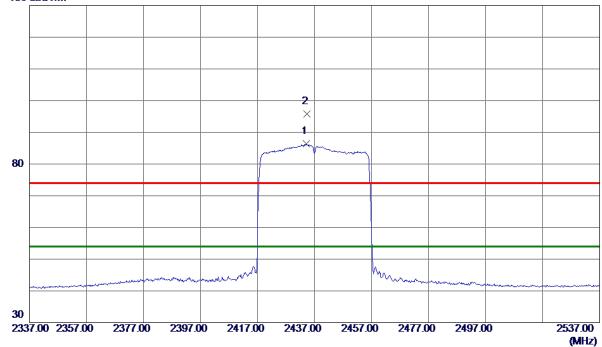
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX AX-40M Mode 2437 MHz

## Horizontal





| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2434. 2000 | 79. 11           | 7. 25             | 86. 36          | 54.00  | 32. 36 | AVG      | No Limit |
| 2   | 2434. 4000 | 88. 47           | 7. 25             | 95. 72          | 74.00  | 21. 72 | Peak     | No Limit |

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



Test Mode: TX AX-40M Mode 2437 MHz

## Horizontal



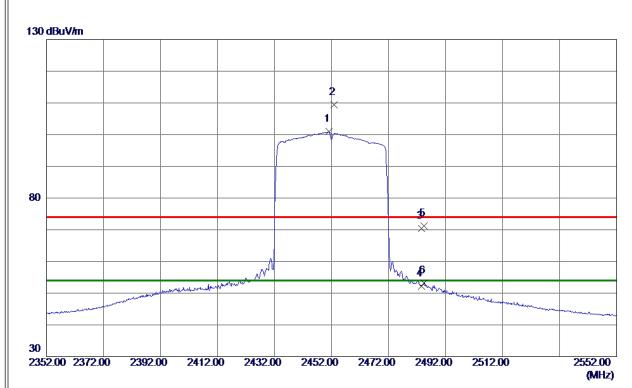
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit         | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|---------------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m        | dB      | Detector | Comment |
| 1   | 4873. 0450 | 40. 09           | 4. 58             | 44. 67          | 74.00         | -29. 33 | Peak     |         |
| 2 * | 4874. 0600 | 28. 41           | 4. 58             | 32. 99          | <b>54. 00</b> | -21. 01 | AVG      |         |

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



Test Mode: TX AX-40M Mode 2452 MHz

## Vertical



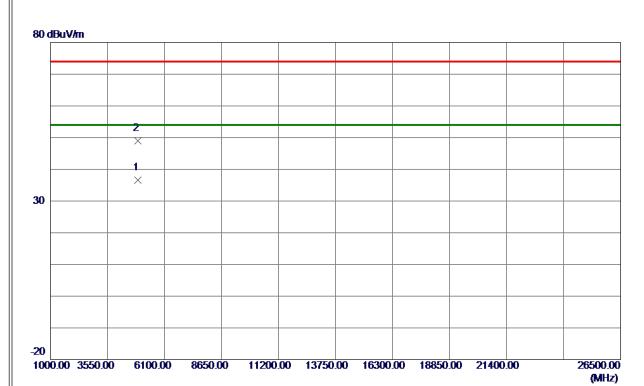
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment  |
| 1 * | 2451. 2000 | 93. 69           | 7. 25             | 100. 94         | 54.00  | 46. 94  | AVG      | No Limit |
| 2   | 2452. 9000 | 102. 17          | 7. 25             | 109. 42         | 74.00  | 35. 42  | Peak     | No Limit |
| 3   | 2483. 5000 | 63. 12           | 7. 25             | 70. 37          | 74.00  | -3. 63  | Peak     |          |
| 4   | 2483. 5000 | 45. 04           | 7. 25             | 52. 29          | 54.00  | -1.71   | AVG      |          |
| 5   | 2484. 4000 | 63. 98           | 7. 25             | 71. 23          | 74.00  | -2. 77  | Peak     |          |
| 6   | 2484. 4000 | 45. 94           | 7. 25             | 53. 19          | 74.00  | -20. 81 | Peak     |          |

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



Test Mode: TX AX-40M Mode 2452 MHz

## Vertical



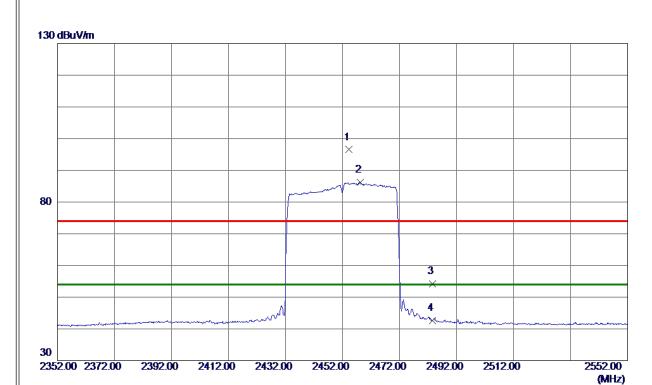
| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4903. 3490 | 32. 01           | 4. 66             | 36. 67          | 54.00  | -17. 33 | AVG      |         |
| 2   | 4904, 0880 | 44. 30           | 4. 66             | 48. 96          | 74. 00 | -25. 04 | Peak     |         |

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



Test Mode: TX AX-40M Mode 2452 MHz

## Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit        | Margin  |          |          |
|-----|------------|------------------|-------------------|-----------------|--------------|---------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m       | dB      | Detector | Comment  |
| 1   | 2454. 3000 | 89. 25           | 7. 25             | 96. 50          | 74.00        | 22. 50  | Peak     | No Limit |
| 2 * | 2458. 2000 | 79. 03           | 7. 25             | 86. 28          | <b>54.00</b> | 32. 28  | AVG      | No Limit |
| 3   | 2483. 5000 | 46. 90           | 7. 25             | 54. 15          | 74.00        | -19.85  | Peak     |          |
| 4   | 2483. 5000 | 35. 30           | 7. 25             | 42. 55          | <b>54.00</b> | -11. 45 | AVG      |          |

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



Test Mode: TX AX-40M Mode 2452 MHz

## Horizontal



| No. | Freq.      | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4904. 6269 | 39. 18           | 4. 67             | 43. 85          | 74.00  | -30. 15 | Peak     |         |
| 2 * | 4904, 9030 | 28. 03           | 4. 67             | 32, 70          | 54. 00 | -21, 30 | AVG      |         |

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

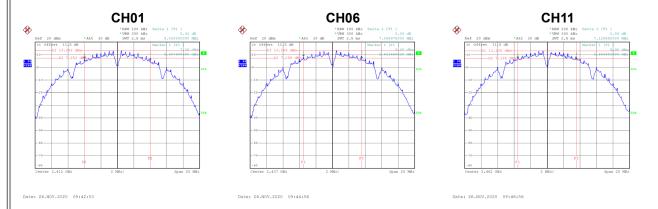


| APPENDIX E - BANDWIDTH |  |
|------------------------|--|
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |
|                        |  |



| 1 |           |           |
|---|-----------|-----------|
| l | Test Mode | TX B Mode |

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | 6 dB Bandwidth Min. Limit (kHz) | Result   |
|---------|--------------------|-------------------------|---------------------------------|----------|
| 01      | 2412               | 8.03                    | 500                             | Complies |
| 06      | 2437               | 7.10                    | 500                             | Complies |
| 11      | 2462               | 7.13                    | 500                             | Complies |



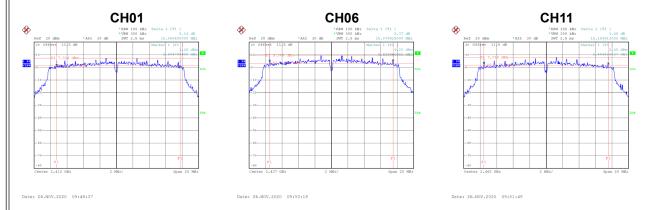
| Channel | Frequency<br>(MHz) | 99 % Emission Bandwidth (MHz) | Result   |
|---------|--------------------|-------------------------------|----------|
| 01      | 2412               | 12.56                         | Complies |
| 06      | 2437               | 12.56                         | Complies |
| 11      | 2462               | 12.56                         | Complies |



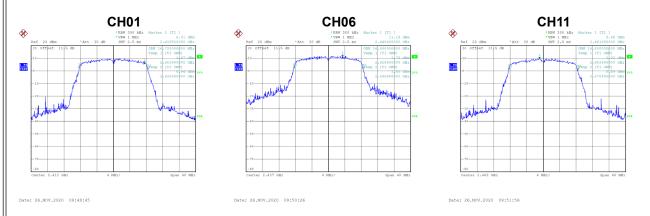


| Test Mode | TX G Mode |
|-----------|-----------|

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | 6 dB Bandwidth Min. Limit (kHz) | Result   |
|---------|--------------------|-------------------------|---------------------------------|----------|
| 01      | 2412               | 15.07                   | 500                             | Complies |
| 06      | 2437               | 15.08                   | 500                             | Complies |
| 11      | 2462               | 15.16                   | 500                             | Complies |



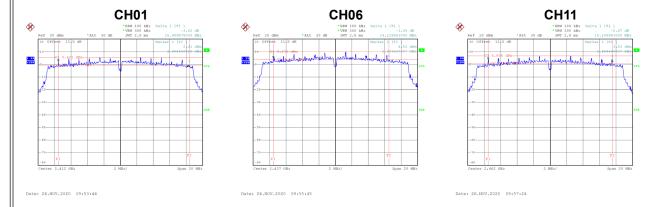
| Channel | Frequency<br>(MHz) | 99 % Emission Bandwidth (MHz) | Result   |
|---------|--------------------|-------------------------------|----------|
| 01      | 2412               | 16.72                         | Complies |
| 06      | 2437               | 16.88                         | Complies |
| 11      | 2462               | 16.80                         | Complies |



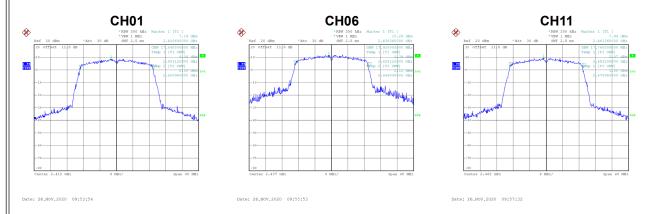


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|-----------|----------------------|
| Test Mode | TX N-20M Mode        |
| 100t Wood | I I A I I ZOWI WIOGO |

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | 6 dB Bandwidth Min. Limit (kHz) | Result   |
|---------|--------------------|-------------------------|---------------------------------|----------|
| 01      | 2412               | 15.99                   | 500                             | Complies |
| 06      | 2437               | 14.12                   | 500                             | Complies |
| 11      | 2462               | 15.11                   | 500                             | Complies |



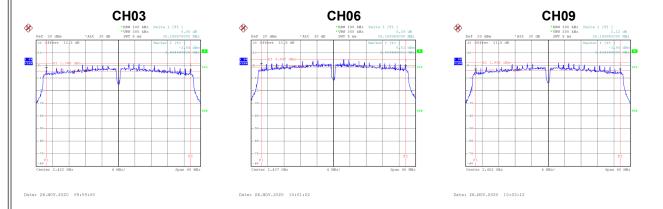
| Channel | Frequency<br>(MHz) | 99 % Emission Bandwidth (MHz) | Result   |
|---------|--------------------|-------------------------------|----------|
| 01      | 2412               | 17.84                         | Complies |
| 06      | 2437               | 17.92                         | Complies |
| 11      | 2462               | 17.76                         | Complies |



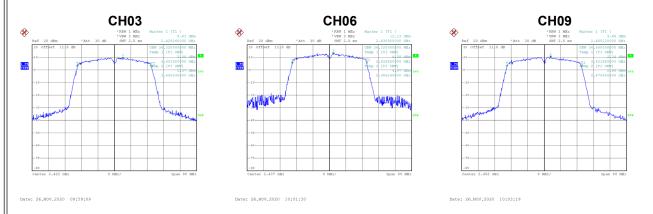


| н |               |                |
|---|---------------|----------------|
| ı | Test Mode     |                |
| ı | Toot Mode     | TX N-40M Mode  |
| ı | i test iviode | ITX N=4UM MODE |
|   |               |                |

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | 6 dB Bandwidth Min. Limit (kHz) | Result   |
|---------|--------------------|-------------------------|---------------------------------|----------|
| 03      | 2422               | 35.16                   | 500                             | Complies |
| 06      | 2437               | 35.16                   | 500                             | Complies |
| 09      | 2452               | 35.20                   | 500                             | Complies |



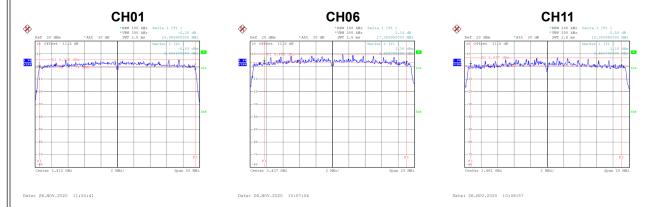
| Channel | Frequency<br>(MHz) | 99 % Emission Bandwidth (MHz) | Result   |
|---------|--------------------|-------------------------------|----------|
| 03      | 2422               | 36.32                         | Complies |
| 06      | 2437               | 36.32                         | Complies |
| 09      | 2452               | 36.48                         | Complies |



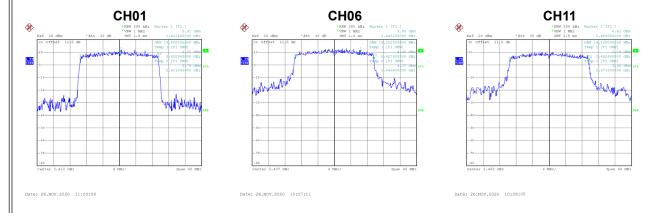


| Test Mode  | ITX AX-20M Mode |
|------------|-----------------|
| LIEST MORE |                 |

| Channel | Frequency<br>(MHz) | 6 dB Bandwidth<br>(MHz) | 6 dB Bandwidth Min. Limit (kHz) | Result   |
|---------|--------------------|-------------------------|---------------------------------|----------|
| 01      | 2412               | 18.97                   | 500                             | Complies |
| 06      | 2437               | 17.36                   | 500                             | Complies |
| 11      | 2462               | 18.36                   | 500                             | Complies |



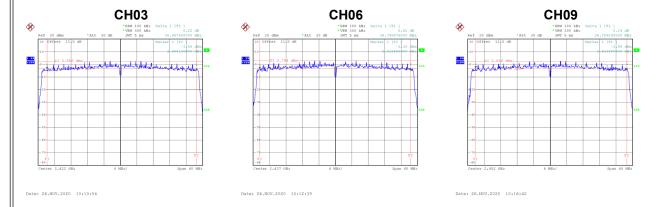
| Channel | Frequency<br>(MHz) | 99 % Emission Bandwidth (MHz) | Result   |
|---------|--------------------|-------------------------------|----------|
| 01      | 2412               | 18.88                         | Complies |
| 06      | 2437               | 19.20                         | Complies |
| 11      | 2462               | 19.12                         | Complies |



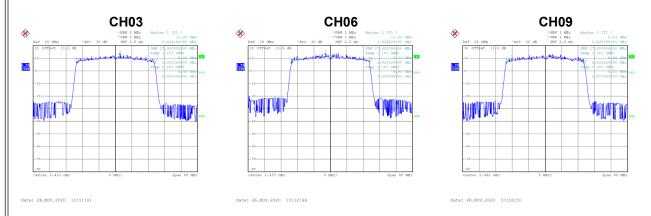


| Test Mode | TX AX-40M Mode |
|-----------|----------------|
|           |                |

| Channel | Frequency 6 dB Bandwidth 6 (MHz) (MHz) |       | 6 dB Bandwidth Min. Limit (kHz) | Result   |  |
|---------|--|-------|---------------------------------|----------|--|
| 03      | 2422                                   | 36.47 | 500                             | Complies |  |
| 06      | 2437                                   | 36.80 | 500                             | Complies |  |
| 09      | 2452                                   | 36.76 | 500                             | Complies |  |



| Channel | Frequency<br>(MHz) | 99 % Emission Bandwidth (MHz) | Result   |
|---------|--------------------|-------------------------------|----------|
| 03      | 2422               | 37.92                         | Complies |
| 06      | 2437               | 37.92                         | Complies |
| 09      | 2452               | 37.92                         | Complies |





# **APPENDIX F - MAXIMUM OUTPUT POWER**



## Non Beamforming

| -1 |           |           |  |
|----|-----------|-----------|--|
| -1 | Test Mode |           |  |
|    | Loot Modo | TX B Mode |  |
| -1 | TEST MODE |           |  |
| -1 | 100t Wodo | IX D Mode |  |

| Channel | Frequency<br>(MHz) | Average Output<br>Power<br>(dBm) | Duty | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|------|--|-------|-------------------|----------|
| 01      | 2412               | 22.91                            | 0.11 | 23.02                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 22.95                            | 0.11 | 23.06                                    | 30.00 | 1.0000            | Complies |
| 11      | 2462               | 22.08                            | 0.11 | 22.19                                    | 30.00 | 1.0000            | Complies |

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

| Channel | Frequency<br>(MHz) | Average Output<br>Power<br>(dBm) | Duty | Average<br>Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|------|---|---------------------|-------------------|----------|
| 01      | 2412               | 18.72                            | 0.77 | 19.49   | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 21.14                            | 0.77 | 21.91   | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 18.51                            | 0.77 | 19.28   | 30.00               | 1.0000            | Complies |



| Test Mode  | TX N-20M Mode  | Ant. 1    |
|------------|----------------|-----------|
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| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|-------|-------------------|----------|
| 01      | 2412               | 17.53                            | 0.84           | 18.37                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 21.17                            | 0.84           | 22.01                                    | 30.00 | 1.0000            | Complies |
| 11      | 2462               | 17.22                            | 0.84           | 18.06                                    | 30.00 | 1.0000            | Complies |

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|-------|-------------------|----------|
| 01      | 2412               | 17.95                            | 0.84           | 18.79                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 20.38                            | 0.84           | 21.22                                    | 30.00 | 1.0000            | Complies |
| 11      | 2462               | 18.32                            | 0.84           | 19.16                                    | 30.00 | 1.0000            | Complies |

| Test Mode | TX N-20M Mode Total |
|-----------|---------------------|
|           |                     |

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 01      | 2412               | 21.60                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 24.64                      | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 21.66                      | 30.00               | 1.0000            | Complies |



| Test Mode | TX N-40M Mode            | Ant. 1   |
|-----------|--------------------------|----------|
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| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|-------|-------------------|----------|
| 03      | 2422               | 14.65                            | 0.63           | 15.28                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 17.94                            | 0.63           | 18.57                                    | 30.00 | 1.0000            | Complies |
| 09      | 2452               | 15.85                            | 0.63           | 16.48                                    | 30.00 | 1.0000            | Complies |

| Test Mode TX N-40M Mode Ant |
|-----------------------------|
|-----------------------------|

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|-------|-------------------|----------|
| 03      | 2422               | 15.26                            | 0.63           | 15.89                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 18.43                            | 0.63           | 19.06                                    | 30.00 | 1.0000            | Complies |
| 09      | 2452               | 16.23                            | 0.63           | 16.86                                    | 30.00 | 1.0000            | Complies |

# Test Mode TX N-40M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 03      | 2422               | 18.61                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 21.83                      | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 19.68                      | 30.00               | 1.0000            | Complies |



| Test Mode | TX AX-20M Mode | Ant. | 1 |
|-----------|----------------|------|---|
|           |                |      |   |

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 01      | 2412               | 17.65                            | 0.64           | 18.29                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 21.21                            | 0.64           | 21.85                                  | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 19.05                            | 0.64           | 19.69                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-20M Mode\_Ant. 2

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 01      | 2412               | 17.89                            | 0.64           | 18.53                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 20.39                            | 0.64           | 21.03                                  | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 18.71                            | 0.64           | 19.35                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-20M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 01      | 2412               | 21.42                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 24.47                      | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 22.53                      | 30.00               | 1.0000            | Complies |



| Test Mode | TX AX-40M Mode | Ant. | 1 |
|-----------|----------------|------|---|
|           |                |      |   |

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 03      | 2422               | 16.33                            | 1.34           | 17.67                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 16.94                            | 1.34           | 18.28                                  | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 16.25                            | 1.34           | 17.59                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-40M Mode\_Ant. 2

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 03      | 2422               | 16.75                            | 1.34           | 18.09                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 17.26                            | 1.34           | 18.60                                  | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 16.86                            | 1.34           | 18.20                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-40M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 03      | 2422               | 20.90                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 21.46                      | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 20.92                      | 30.00               | 1.0000            | Complies |



## Beamforming

| Test Mode TX N-20M Mode Ant. 1 |
|--------------------------------|
|--------------------------------|

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|-------|-------------------|----------|
| 01      | 2412               | 17.35                            | 0.84           | 18.19                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 20.69                            | 0.84           | 21.53                                    | 30.00 | 1.0000            | Complies |
| 11      | 2462               | 17.10                            | 0.84           | 17.94                                    | 30.00 | 1.0000            | Complies |

# Test Mode TX N-20M Mode\_Ant. 2

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) |       | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|-------|-------------------|----------|
| 01      | 2412               | 17.84                            | 0.84           | 18.68                                    | 30.00 | 1.0000            | Complies |
| 06      | 2437               | 20.26                            | 0.84           | 21.10                                    | 30.00 | 1.0000            | Complies |
| 11      | 2462               | 17.86                            | 0.84           | 18.70                                    | 30.00 | 1.0000            | Complies |

# Test Mode TX N-20M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 01      | 2412               | 21.45                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 24.33                      | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 21.35                      | 30.00               | 1.0000            | Complies |



| Test Mode  | TX N-40M Mode          | Ant. 1 |
|------------|------------------------|--------|
| 1001111040 | 17 ( 1 ( 1011) 1110 40 | ,      |

| Channel | Frequency<br>(MHz) | Average Output<br>Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 03      | 2422               | 14.48                            | 0.63           | 15.11                                    | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 17.78                            | 0.63           | 18.41                                    | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 15.48                            | 0.63           | 16.11                                    | 30.00               | 1.0000            | Complies |

|   | Test Mode    | TX N-40M Mode Ar     | nt 2  |
|---|--------------|----------------------|-------|
| ı | I CSL IVIOUC | IIV IN-HOIM IMORE VI | II. Z |

| Channel | Frequency<br>(MHz) | Average Output<br>Power<br>(dBm) | Duty<br>Factor | Average Output Power + Duty Factor (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 03      | 2422               | 14.97                            | 0.63           | 15.60                                    | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 18.28                            | 0.63           | 18.91                                    | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 16.06                            | 0.63           | 16.69                                    | 30.00               | 1.0000            | Complies |

# Test Mode TX N-40M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 03      | 2422               | 18.37                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 21.68                      | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 19.42                      | 30.00               | 1.0000            | Complies |



| Test Mode | TX AX-20M Mode | Ant. | 1 |
|-----------|----------------|------|---|
|           |                |      |   |

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 01      | 2412               | 17.20                            | 0.64           | 17.84                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 20.88                            | 0.64           | 21.52                                  | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 18.83                            | 0.64           | 19.47                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-20M Mode\_Ant. 2

| Channel | Frequency<br>(MHz) | Average<br>Output Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 01      | 2412               | 17.51                            | 0.64           | 18.15                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 20.24                            | 0.64           | 20.88                                  | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 18.47                            | 0.64           | 19.11                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-20M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 01      | 2412               | 21.01                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 24.22                      | 30.00               | 1.0000            | Complies |
| 11      | 2462               | 22.30                      | 30.00               | 1.0000            | Complies |



| Test Mode | TX AX-40M Mode | Ant. | 1 |
|-----------|----------------|------|---|
|           |                |      |   |

| Channel | Frequency<br>(MHz) | Average Output<br>Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 03      | 2422               | 15.90                            | 1.34           | 17.24                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 16.74                            | 1.34           | 18.08                                  | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 16.15                            | 1.34           | 17.49                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-40M Mode\_Ant. 2

| Channel | Frequency<br>(MHz) | Average Output<br>Power<br>(dBm) | Duty<br>Factor | Output Power<br>+ Duty Factor<br>(dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------------|----------------|--|---------------------|-------------------|----------|
| 03      | 2422               | 16.35                            | 1.34           | 17.69                                  | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 17.06                            | 1.34           | 18.40                                  | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 16.41                            | 1.34           | 17.75                                  | 30.00               | 1.0000            | Complies |

# Test Mode TX AX-40M Mode\_Total

| Channel | Frequency<br>(MHz) | Average Output Power (dBm) | Max. Limit<br>(dBm) | Max. Limit<br>(W) | Result   |
|---------|--------------------|----------------------------|---------------------|-------------------|----------|
| 03      | 2422               | 20.49                      | 30.00               | 1.0000            | Complies |
| 06      | 2437               | 21.26                      | 30.00               | 1.0000            | Complies |
| 09      | 2452               | 20.64                      | 30.00               | 1.0000            | Complies |



# **APPENDIX G - CONDUCTED SPURIOUS EMISSIONS**