



# FCC Radio Test Report FCC ID:KA2IR819A1

| This report concerns (chec                                  | k one): ⊠Original Grant □Class I Change □Class II Change  |
|---|---|
| Project No. Equipment Model Name Applicant Address          | <ul> <li>: 1605C069A</li> <li>: Wireless AC750 Dual Band Router</li> <li>: DIR-819</li> <li>: D-LINK Corporation</li> <li>: 17595 Mt. Herrmann, Fountain Valley, California, United States</li> </ul> |
| Date of Receipt<br>Date of Test<br>Issued Date<br>Tested by | <ul> <li>May 10, 2016</li> <li>May 10, 2016 ~ Nov. 16, 2016</li> <li>Nov. 17, 2016</li> <li>BTL Inc.</li> </ul>   |
| Testing Engineer  | : Shawn Xioo<br>(Shawn Xiao)  |
| Technical Manage  | er : <u>Pavid Mao</u> (David Mao)   |
| Authorized Signa  | tory  |

# BTL INC.

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

(Steven Lu)

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

Report No.: BTL-FCCP-1-1605C069A Page 1 of 140





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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.

Report No.: BTL-FCCP-1-1605C069A Page 2 of 140





| Table of Contents   | Page     |
|---|----------|
| 1 . CERTIFICATION   | 6        |
| 2 . SUMMARY OF TEST RESULTS   | 7        |
| 2.1 TEST FACILITY   | 8        |
| 2.2 MEASUREMENT UNCERTAINTY   | 8        |
| 3. GENERAL INFORMATION  | 9        |
| 3.1 GENERAL DESCRIPTION OF EUT  | 9        |
| 3.2 DESCRIPTION OF TEST MODES   | 11       |
| 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING                          | 13       |
| 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TES                 | STED 13  |
| 3.5 DESCRIPTION OF SUPPORT UNITS  | 13       |
| 4 . EMC EMISSION TEST   | 14       |
| 4.1 CONDUCTED EMISSION MEASUREMENT  | 14       |
| 4.1.1 POWER LINE CONDUCTED EMISSION LIMITS 4.1.2 TEST PROCEDURE           | 14<br>14 |
| 4.1.2 TEST PROCEDURE  4.1.3 DEVIATION FROM TEST STANDARD                  | 14       |
| 4.1.4 TEST SETUP  | 15       |
| 4.1.5 EUT OPERATING CONDITIONS  | 15       |
| 4.1.6 EUT TEST CONDITIONS 4.1.7 TEST RESULTS                              | 15<br>15 |
| 4.2 RADIATED EMISSION MEASUREMENT   | 16       |
| 4.2.1 RADIATED EMISSION LIMITS  | 16       |
| 4.2.2 TEST PROCEDURE  | 17       |
| 4.2.3 DEVIATION FROM TEST STANDARD 4.2.4 TEST SETUP                       | 17<br>18 |
| 4.2.5 EUT OPERATING CONDITIONS  | 19       |
| 4.2.6 EUT TEST CONDITIONS   | 19       |
| 4.2.7 TEST RESULTS (9KHZ TO 30MHZ) 4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ) | 19<br>19 |
| 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)                                       | 19       |
| 5 . BANDWIDTH TEST  | 20       |
| 5.1 APPLIED PROCEDURES  | 20       |
| 5.1.1 TEST PROCEDURE  | 20       |
| 5.1.2 DEVIATION FROM STANDARD 5.1.3 TEST SETUP                            | 20<br>20 |
| 5.1.4 EUT OPERATION CONDITIONS  | 20<br>20 |
| 5.1.5 EUT TEST CONDITIONS   | 20       |
| 5.1.6 TEST RESULTS  | 20       |

Report No.: BTL-FCCP-1-1605C069A





| Table of Contents                                     | Page     |
|---|----------|
| 6 . MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST          | 21       |
| 6.1 APPLIED PROCEDURES / LIMIT                        | 21       |
| 6.1.1 TEST PROCEDURE                                  | 21       |
| 6.1.2 DEVIATION FROM STANDARD 6.1.3 TEST SETUP        | 21<br>21 |
| 6.1.4 EUT OPERATION CONDITIONS                        | 21       |
| 6.1.5 EUT TEST CONDITIONS                             | 21       |
| 6.1.6 TEST RESULTS                                    | 21       |
| 7 . ANTENNA CONDUCTED SPURIOUS EMISSION               | 22       |
| 7.1 APPLIED PROCEDURES / LIMIT                        | 22       |
| 7.1.1 TEST PROCEDURE 7.1.2 DEVIATION FROM STANDARD    | 22<br>22 |
| 7.1.2 DEVIATION FROM STANDARD 7.1.3 TEST SETUP        | 22       |
| 7.1.4 EUT OPERATION CONDITIONS                        | 22       |
| 7.1.5 EUT TEST CONDITIONS                             | 22       |
| 7.1.6 TEST RESULTS                                    | 22       |
| 8 . POWER SPECTRAL DENSITY TEST                       | 23       |
| 8.1 APPLIED PROCEDURES / LIMIT                        | 23       |
| 8.1.1 TEST PROCEDURE<br>8.1.2 DEVIATION FROM STANDARD | 23<br>23 |
| 8.1.3 TEST SETUP                                      | 23       |
| 8.1.4 EUT OPERATION CONDITIONS                        | 23       |
| 8.1.5 EUT TEST CONDITIONS<br>8.1.6 TEST RESULTS       | 23<br>23 |
| 9 . MEASUREMENT INSTRUMENTS LIST                      | 24       |
| 10 . EUT TEST PHOTO                                   | 26       |
| ATTACHMENT A - CONDUCTED EMISSION                     | 30       |
| ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)      | 33       |
| ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)   | 38       |
| ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)      | 45       |
| ATTACHMENT E - BANDWIDTH                              | 94       |
| ATTACHMENT F - MAXIMUM PEAK CONDUCTED OUTPUT POWER    | 103      |
| ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION    | 107      |
| ATTACHMENT H - POWER SPECTRAL DENSITY                 | 126      |

Report No.: BTL-FCCP-1-1605C069A





# **REPORT ISSUED HISTORY**

| Issued No.           | Description     | Issued Date   |
|----------------------|-----------------|---------------|
| BTL-FCCP-1-1605C069A | Original Issue. | Nov. 17, 2016 |

Report No.: BTL-FCCP-1-1605C069A Page 5 of 140





### 1. CERTIFICATION

Equipment : Wireless AC750 Dual Band Router

Brand Name: D-LINK Model Name: DIR-819

Applicant : D-LINK Corporation Manufacturer : D-LINK Corporation

Address : 17595 Mt. Herrmann, Fountain Valley, California, United States

Date of Test : May 10, 2016 ~ Nov. 16, 2016

Test Sample: Engineering Sample

Standard(s) : FCC Part15, Subpart C:(15.247) / ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1605C069A) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Report No.: BTL-FCCP-1-1605C069A Page 6 of 140





# 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| Applied Standard(s): FCC Part15 (15.247), Subpart C |                                     |          |        |  |  |
|---|-------------------------------------|----------|--------|--|--|
| Standard(s) Section                                 | Test Item                           | Judgment | Remark |  |  |
| 15.207  | Conducted Emission                  | PASS     |        |  |  |
| 15.247(d)   | Antenna conducted Spurious Emission | PASS     |        |  |  |
| 15.247(a)(2)  | 6dB Bandwidth                       | PASS     |        |  |  |
| 15.247(b)(3)  | Peak Output Power                   | PASS     |        |  |  |
| 15.247(e)   | Power Spectral Density              | PASS     |        |  |  |
| 15.203  | Antenna Requirement                 | PASS     |        |  |  |
| 15.209/15.205                                       | Transmitter Radiated Emissions      | PASS     |        |  |  |

### NOTE:

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

Report No.: BTL-FCCP-1-1605C069A Page 7 of 140





### 2.1 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 number for FCC: 319330

### 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U<sub>cispr</sub> requirement.

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

### A. Conducted Measurement:

| Test Site | Method | Measurement Frequency Range | U, (dB) |
|-----------|--------|-----------------------------|---------|
| DG-C02    | CISPR  | 150 KHz ~ 30MHz             | 2.32    |

### B. Radiated Measurement:

| Test Site | Method | Measurement Frequency<br>Range | Ant.<br>H / V | U, (dB) |
|-----------|--------|--------------------------------|---------------|---------|
|           |        | 9KHz~30MHz                     | V             | 3.79    |
|           |        | 9KHz~30MHz                     | Ι             | 3.57    |
|           |        | 30MHz ~ 200MHz                 | V             | 3.82    |
|           | CISPR  | 30MHz ~ 200MHz                 | Ι             | 3.78    |
| DG-CB03   |        | 200MHz ~ 1,000MHz              | V             | 4.10    |
| DG-CB03   |        | 200MHz ~ 1,000MHz              | Ι             | 4.06    |
|           |        | 1GHz~18GHz                     | V             | 3.12    |
|           |        | 1GHz~18GHz                     | Ι             | 3.68    |
|           |        | 18GHz~40GHz                    | V             | 4.15    |
|           |        | 18GHz~40GHz                    | Н             | 4.14    |

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

Report No.: BTL-FCCP-1-1605C069A





# 3. GENERAL INFORMATION

### 3.1 GENERAL DESCRIPTION OF EUT

| Equipment           | Wireless AC750 Dual Band Router                                   |  |  |
|---------------------|---|--|--|
| Brand Name          | D-LINK  |  |  |
| Model Name          | DIR-819   |  |  |
| Model Difference    | N/A   |  |  |
|                     | Operation Frequency   | 2412~2462 MHz  |  |
| Product Description | Modulation Technology   | 802.11b:DSSS<br>802.11g:OFDM<br>802.11n:OFDM   |  |
|                     | Bit Rate of Transmitter   | 802.11b: 11/5.5/2/1 Mbps<br>802.11g: 54/48/36/24/18/12/9/6 Mbps<br>802.11n up to 300 Mbps      |  |
|                     | Output Power (Max.)   | 802.11b: 23.62dBm<br>802.11g: 26.76dBm<br>802.11n(20MHz): 26.21dBm<br>802.11n(40MHz): 26.51dBm |  |
| Power Source        | DC voltage supplied from AC/DC adapter.  Model: S06A12-120A050-C4 |  |  |
| Power Rating        | I/P: 100-240V~50/60Hz max 0.3A O/P: 12V0.5A                       |  |  |

### Note:

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

### 2. Channel List:

|         | CH01 – CH11 for 802.11b, 802.11g, 802.11n(20MHz)<br>CH03 – CH09 for 802.11n(40MHz) |         |                    |         |                    |         |                    |
|---------|--|---------|--------------------|---------|--------------------|---------|--------------------|
| Channel | Frequency<br>(MHz)   | Channel | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) |
| 01      | 2412   | 04      | 2427               | 07      | 2442               | 10      | 2457               |
| 02      | 2417   | 05      | 2432               | 80      | 2447               | 11      | 2462               |
| 03      | 2422   | 06      | 2437               | 09      | 2452               |         |                    |

Report No.: BTL-FCCP-1-1605C069A Page 9 of 140





3. Table for Filed Antenna:

| Ant. | Brand   | Model Name  | Antenna Type | Connector | Gain<br>(dBi) | Length |
|------|---------|-------------|--------------|-----------|---------------|--------|
| 1    | RF link | RF21C00633A | Dipole       | N/A       | 5             | 150mm  |
| 2    | RF link | RF21C00640A | Dipole       | N/A       | 5             | 100mm  |

### Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R).

| 4. | Operating Mode | ,         |                   |
|----|----------------|-----------|-------------------|
|    | TX Mode        | 1TX       | 2TX               |
|    | 802.11b        | V (ANT 1) | -                 |
|    | 802.11g        | V (ANT 1) | -                 |
|    | 802.11n(20MHz) | -         | V (ANT 1 + ANT 2) |
|    | 802.11n(40MHz) | -         | V (ANT 1 + ANT 2) |

Note: ANT 1 for 1TX was found to be the worst case and recorded.

Report No.: BTL-FCCP-1-1605C069A Page 10 of 140





### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| 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-20MHZ MODE CHANNEL 01/06/11      |  |
| Mode 4       | le 4 TX N-40MHZ MODE CHANNEL 03/06/09 |  |
| Mode 5       | Normal Link                           |  |

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

| For Conducted Test |             |  |
|--------------------|-------------|--|
| Final Test Mode    | Description |  |
| Mode 5             | Normal Link |  |

| For Radiated Test |                                  |  |
|-------------------|----------------------------------|--|
| Final Test Mode   | Description                      |  |
| Mode 1            | TX B MODE CHANNEL 01/06/11       |  |
| Mode 2            | TX G MODE CHANNEL 01/06/11       |  |
| Mode 3            | TX N-20MHZ MODE CHANNEL 01/06/11 |  |
| Mode 4            | TX N-40MHZ MODE CHANNEL 03/06/09 |  |

| For Band Edge Test |                                  |  |
|--------------------|----------------------------------|--|
| Final Test Mode    | Description                      |  |
| Mode 1             | TX B MODE CHANNEL 01/06/11       |  |
| Mode 2             | TX G MODE CHANNEL 01/06/11       |  |
| Mode 3             | TX N-20MHZ MODE CHANNEL 01/06/11 |  |
| Mode 4             | TX N-40MHZ MODE CHANNEL 03/06/09 |  |

Report No.: BTL-FCCP-1-1605C069A Page 11 of 140





| 6dB Spectrum Bandwidth |                                  |  |
|------------------------|----------------------------------|--|
| 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-20MHZ MODE CHANNEL 01/06/11 |  |
| Mode 4                 | TX N-40MHZ MODE CHANNEL 03/06/09 |  |

| Maximum Conducted Output Power |                                  |  |
|--------------------------------|----------------------------------|--|
| 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-20MHZ MODE CHANNEL 01/06/11 |  |
| Mode 4                         | TX N-40MHZ MODE CHANNEL 03/06/09 |  |

| Power Spectral Density |                                  |  |
|------------------------|----------------------------------|--|
| 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-20MHZ MODE CHANNEL 01/06/11 |  |
| Mode 4                 | TX N-40MHZ MODE CHANNEL 03/06/09 |  |

### Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps) 802.11g mode: OFDM (6Mbps)

802.11n HT20 mode: BPSK (13Mbps)

802.11n HT40 mode: BPSK (27Mbps)

For radiated emission tests, the highest output powers were set for final test.

- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

Report No.: BTL-FCCP-1-1605C069A Page 12 of 140



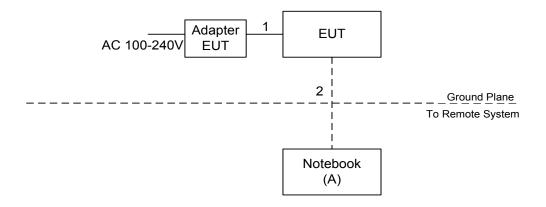


### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN

| Test software version | MT76xxE_AP.exe |      |      |
|-----------------------|----------------|------|------|
| Frequency (MHz)       | 2412           | 2437 | 2462 |
| 802.11b               | 12             | 14   | 14   |
| 802.11g               | 6              | 15   | 5    |
| 802.11n (20MHz)       | 6              | 0C   | 5    |
| Frequency (MHz)       | 2422           | 2437 | 2452 |
| 802.11n (40MHz)       | 0A             | 11   | 0A   |

### 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



### 3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | FCC ID | Series No. |
|------|-----------|-----------|----------------|--------|------------|
| Α    | Notebook  | DELL      | 745            | DOC    | G7K832X    |

| Item | Shielded Type | Ferrite Core | Length | Note        |
|------|---------------|--------------|--------|-------------|
| 1    | NO            | NO           | 1.5m   | DC Cable    |
| 2    | NO            | NO           | 10m    | RJ-45 Cable |

Report No.: BTL-FCCP-1-1605C069A Page 13 of 140





### 4. EMC EMISSION TEST

### 4.1 CONDUCTED EMISSION MEASUREMENT

### 4.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150KHz-30MHz)

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

### Note:

- (1) The limit of " \* " decreases with the logarithm of the frequency
- (2) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use) Margin Level = Measurement Value - Limit Value

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    |

### **4.1.2 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 equipments 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.

### 4.1.3 DEVIATION FROM TEST STANDARD

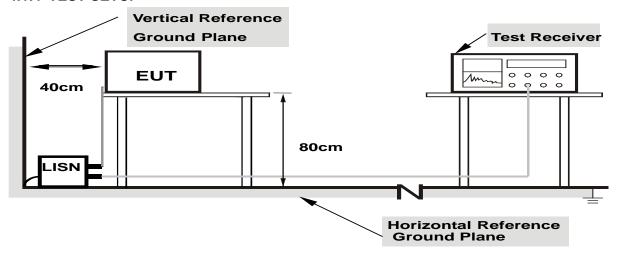
No deviation

Report No.: BTL-FCCP-1-1605C069A





### 4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

### 4.1.5 EUT OPERATING CONDITIONS

The EUT was placed on the test table and programmed in normal function.

### **4.1.6 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

### 4.1.7 TEST RESULTS

Please refer to the Attachment A.

Report No.: BTL-FCCP-1-1605C069A Page 15 of 140





### 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 RADIATED EMISSION LIMITS

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 (9KHz-1000MHz)

| 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                    |
| 960~1000    | 500                | 3                    |

### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| Frequency (MHz) | (dBuV/m) (at 3 meters) |         |  |
|-----------------|------------------------|---------|--|
|                 | PEAK                   | AVERAGE |  |
| Above 1000      | 74                     | 54      |  |

### Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use) Margin Level = Measurement Value - Limit Value

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

Report No.: BTL-FCCP-1-1605C069A Page 16 of 140





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

### **4.2.2 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 1GHz)
- 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 1GHz)
- 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 1GHz.
- 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 1GHz)
- 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 1GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

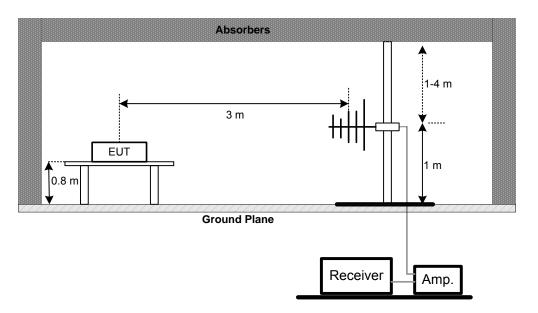
Report No.: BTL-FCCP-1-1605C069A Page 17 of 140



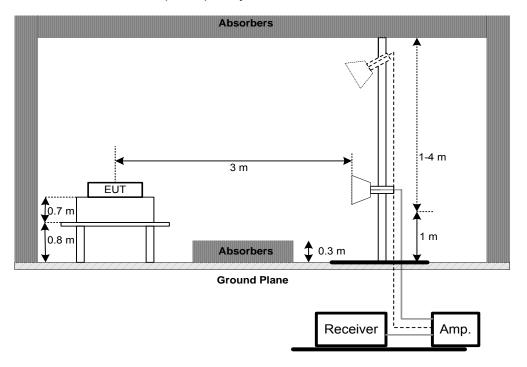


# 4.2.4 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz

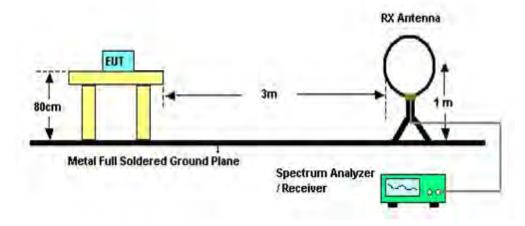


Report No.: BTL-FCCP-1-1605C069A Page 18 of 140





### (C) For Radiated Emissions Below 30MHz



### 4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 4.2.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

### 4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

### Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

### **4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)**

Please refer to the Attachment C.

### 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

### Remark:

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

Report No.: BTL-FCCP-1-1605C069A Page 19 of 140





### **5. BANDWIDTH TEST**

### **5.1 APPLIED PROCEDURES**

| FCC Part15 (15.247) , Subpart C                |   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| Section Test Item Frequency Range (MHz) Result |   |  |  |  |  |  |
| 15.247(a)(2)                                   | 15.247(a)(2) Bandwidth 2400-2483.5 PASS |  |  |  |  |  |

### **5.1.1 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= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

### **5.1.2 DEVIATION FROM STANDARD**

No deviation.

### 5.1.3 TEST SETUP



### **5.1.4 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

### **5.1.5 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

### **5.1.6 TEST RESULTS**

Please refer to the Attachment E.

Report No.: BTL-FCCP-1-1605C069A Page 20 of 140





### 6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

### 6.1 APPLIED PROCEDURES / LIMIT

| FCC Part15 (15.247) , Subpart C |                      |                 |                          |        |  |  |
|---------------------------------|----------------------|-----------------|--------------------------|--------|--|--|
| Section                         | Test Item            | Limit           | Frequency Range<br>(MHz) | Result |  |  |
| 15.247(b)(3)                    | Maximum Output Power | 1 Watt or 30dBm | 2400-2483.5              | PASS   |  |  |

### **6.1.1 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 peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance and FCC KDB 662911 D01 Multiple Transmitter Output.

### **6.1.2 DEVIATION FROM STANDARD**

No deviation.

### 6.1.3 TEST SETUP

| EUT | Power Meter    |
|-----|----------------|
|     | 1 5 WEI WICKET |

### **6.1.4 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

### **6.1.5 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

### 6.1.6 TEST RESULTS

Please refer to the Attachment F.

Report No.: BTL-FCCP-1-1605C069A Page 21 of 140





### 7. ANTENNA CONDUCTED SPURIOUS EMISSION

### 7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits.

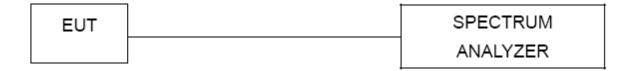
### 7.1.1 TEST PROCEDURE

- 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= 100KHz, VBW=300KHz, Sweep time = Auto.
- c. Offset=antenna gain+cable loss

### 7.1.2 DEVIATION FROM STANDARD

No deviation.

### 7.1.3 TEST SETUP



### 7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 7.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

### 7.1.6 TEST RESULTS

Please refer to the Attachment G.

Report No.: BTL-FCCP-1-1605C069A Page 22 of 140





### 8. POWER SPECTRAL DENSITY TEST

### 8.1 APPLIED PROCEDURES / LIMIT

| FCC Part15 (15.247) , Subpart C                      |                        |                        |             |      |  |
|--|------------------------|------------------------|-------------|------|--|
| Section Test Item Limit Frequency Range (MHz) Result |                        |                        |             |      |  |
| 15.247(e)  | Power Spectral Density | 8 dBm<br>(in any 3KHz) | 2400-2483.5 | PASS |  |

### **8.1.1 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=3KHz, VBW=10KHz, Sweep time = Auto.

### **8.1.2 DEVIATION FROM STANDARD**

No deviation.

### 8.1.3 TEST SETUP

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

### **8.1.4 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

### **8.1.5 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

### 8.1.6 TEST RESULTS

Please refer to the Attachment H.

Report No.: BTL-FCCP-1-1605C069A Page 23 of 140





# 9. MEASUREMENT INSTRUMENTS LIST

|      | Conducted Emission Measurement |              |                           |            |                  |  |  |
|------|--------------------------------|--------------|---------------------------|------------|------------------|--|--|
| Item | Kind of Equipment              | Manufacturer | Type No.                  | Serial No. | Calibrated until |  |  |
| 1    | EMI Test Receiver              | R&S          | ESCI                      | 100382     | Mar. 27, 2017    |  |  |
| 2    | LISN                           | EMCO         | 3816/2                    | 52765      | Mar. 27, 2017    |  |  |
| 3    | 50Ω Terminator                 | SHX          | TF2-3G-A                  | 8122901    | Mar. 27, 2017    |  |  |
| 4    | TWO-LINE<br>V-NETWORK          | R&S          | ENV216                    | 101447     | Mar. 27, 2017    |  |  |
| 5    | Cable                          | emci         | RG223(9KHz-30<br>MHz)(5m) | N/A        | Mar. 10, 2017    |  |  |
| 6    | Measurement<br>Software        | Farad        | EZ-EMC<br>Ver.NB-03A1-01  | N/A        | N/A              |  |  |

|      | Radiated Emission Measurement             |                   |  |               |                  |  |  |
|------|---|-------------------|--|---------------|------------------|--|--|
| Item | Kind of Equipment                         | Manufacturer      | Type No.                                 | Serial No.    | Calibrated until |  |  |
| 1    | Antenna                                   | Schwarbeck        | VULB9160                                 | 9160-3232     | Mar. 27, 2017    |  |  |
| 2    | Amplifier                                 | HP                | 8447D                                    | 2944A09673    | Oct. 20, 2017    |  |  |
| 3    | Receiver                                  | AGILENT           | N9038A                                   | MY52130039    | Sep. 04, 2017    |  |  |
| 4    | Test Cable                                | emci              | LMR-400(30MHz-<br>1GHz)                  | C-01          | Jun. 26, 2017    |  |  |
| 5    | Controller                                | CT                | SC100                                    | N/A           | N/A              |  |  |
| 6    | Position Control                          | MF                | MF-7802                                  | MF780208416   | N/A              |  |  |
| 7    | Measurement<br>Software                   | Farad             | EZ-EMC<br>Ver.NB-03A1-01                 | N/A           | N/A              |  |  |
| 8    | Antenna                                   | ETS               | 3115                                     | 00075789      | Mar. 27, 2017    |  |  |
| 9    | Amplifier                                 | Agilent           | 8449B                                    | 3008A02274    | Nov. 01, 2017    |  |  |
| 10   | Test Cable                                | emci              | EMC104-SM-SM-<br>10000(1GHz-26.5<br>GHz) | C-68          | Jun. 26, 2017    |  |  |
| 11   | Broad-Band Horn<br>Antenna                | Schwarzbeck       | BBHA 9170                                | 9170319       | Mar. 27, 2017    |  |  |
| 12   | Microwave<br>Preamplifier With<br>Adaptor | EMC<br>INSTRUMENT | EMC2654045                               | 980039 & HA01 | Mar. 27, 2017    |  |  |
| 13   | EMI Test Receiver                         | R&S               | ESCI                                     | 100895        | Mar. 27, 2017    |  |  |
| 14   | Active Loop<br>Antenna                    | R&S               | HFH2-Z2                                  | 830749/020    | Sep. 07, 2017    |  |  |

Report No.: BTL-FCCP-1-1605C069A Page 24 of 140





|      | 6dB Bandwidth Measurement |              |          |            |                  |  |  |
|------|---------------------------|--------------|----------|------------|------------------|--|--|
| Item | Kind of Equipment         | Manufacturer | Type No. | Serial No. | Calibrated until |  |  |
| 1    | Spectrum Analyzer         | R&S          | FSP40    | 100185     | Sep. 04, 2017    |  |  |

|      | Peak Output Power Measurement |              |          |            |                  |  |  |
|------|-------------------------------|--------------|----------|------------|------------------|--|--|
| Item | Kind of Equipment             | Manufacturer | Type No. | Serial No. | Calibrated until |  |  |
| 1    | Power Meter                   | ANRITSU      | ML2495A  | 1128009    | Apr. 26, 2017    |  |  |
| 2    | Pulse Power<br>Sensor         | ANRITSU      | MA 2411B | 1027500    | Apr. 26, 2017    |  |  |

|      | Antenna Conducted Spurious Emission Measurement |     |          |            |                  |  |  |  |  |  |
|------|---|-----|----------|------------|------------------|--|--|--|--|--|
| Item | Kind of Equipment Manufactur                    |     | Type No. | Serial No. | Calibrated until |  |  |  |  |  |
| 1    | Spectrum Analyzer                               | R&S | FSP40    | 100185     | Sep. 04, 2017    |  |  |  |  |  |

| Power Spectral Density Measurement |                   |              |          |            |                  |  |  |  |  |
|------------------------------------|-------------------|--------------|----------|------------|------------------|--|--|--|--|
| Item                               | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |  |  |  |  |
| 1                                  | Spectrum Analyzer | R&S          | FSP40    | 100185     | Sep. 04, 2017    |  |  |  |  |

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

All calibration period of equipment list is one year.

Report No.: BTL-FCCP-1-1605C069A Page 25 of 140





# **10. EUT TEST PHOTO**







Report No.: BTL-FCCP-1-1605C069A Page 26 of 140





# **Radiated Measurement Photos**

9KHz to 30MHz





Report No.: BTL-FCCP-1-1605C069A Page 27 of 140





# **Radiated Measurement Photos**

# 30MHz to 1000MHz





Report No.: BTL-FCCP-1-1605C069A Page 28 of 140

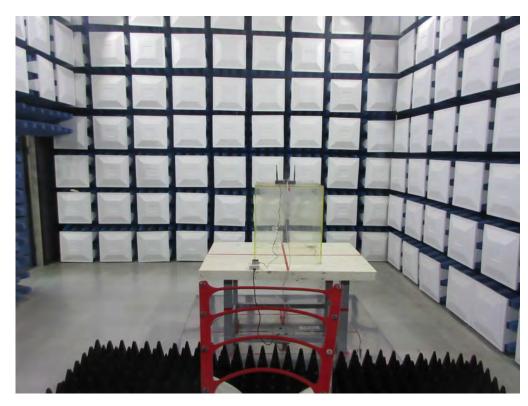




# **Radiated Measurement Photos**







Report No.: BTL-FCCP-1-1605C069A Page 29 of 140





| ATTACHMENT A - CONDUCTED EMISSION |
|-----------------------------------|
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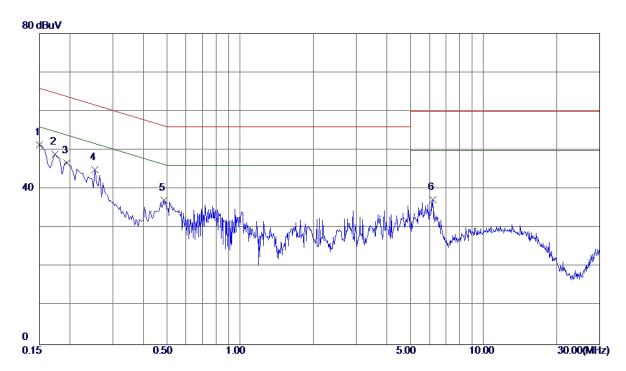
Report No.: BTL-FCCP-1-1605C069A Page 30 of 140





Test Mode : Normal Link

# Line



| No. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|---------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz     | dBuV             | dB                | dBuV            | dBuV   | dB      | Detector | Comment |
| 1 * | 0. 1500 | 41.81            | 9. 52             | 51. 33          | 66.00  | -14. 67 | Peak     |         |
| 2   | 0. 1740 | 39. 48           | 9. 52             | 49. 00          | 64. 77 | -15. 77 | Peak     |         |
| 3   | 0. 1945 | 37. 21           | 9. 53             | 46. 74          | 63.84  | -17. 10 | Peak     |         |
| 4   | 0. 2540 | 35. 46           | 9. 53             | 44. 99          | 61. 63 | -16. 64 | Peak     |         |
| 5   | 0. 4860 | 27. 49           | 9. 63             | 37. 12          | 56. 24 | -19. 12 | Peak     |         |
| 6   | 6. 1820 | 27. 15           | 10. 08            | 37. 23          | 60. 00 | -22. 77 | Peak     |         |
|     |         |                  |                   |                 |        |         |          |         |

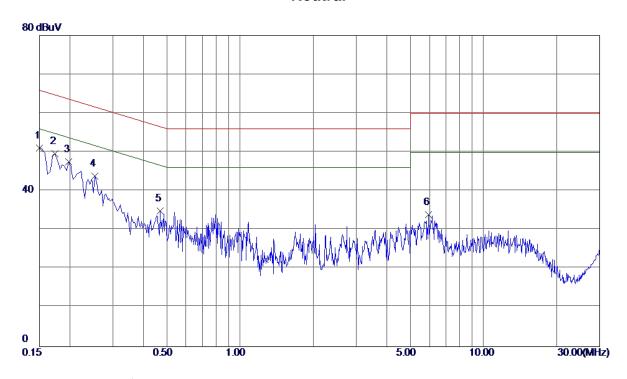
Report No.: BTL-FCCP-1-1605C069A Page 31 of 140





Test Mode : Normal Link

# Neutral



| No. | Freq.   | Reading<br>Level | Factor | measure<br>ment | Limit  | Margin  |          |         |
|-----|---------|------------------|--------|-----------------|--------|---------|----------|---------|
|     | MHz     | dBuV             | dB     | dBuV            | dBuV   | dB      | Detector | Comment |
| 1 * | 0. 1500 | 41. 53           | 9. 52  | <b>51. 05</b>   | 66.00  | -14. 95 | Peak     |         |
| 2   | 0. 1740 | 40. 14           | 9. 44  | 49. 58          | 64. 77 | -15. 19 | Peak     |         |
| 3   | 0. 1980 | 38. 05           | 9. 52  | 47. 57          | 63. 69 | -16. 12 | Peak     |         |
| 4   | 0. 2540 | 34. 27           | 9. 53  | 43. 80          | 61.63  | -17. 83 | Peak     |         |
| 5   | 0.4700  | 25. 38           | 9. 44  | 34. 82          | 56. 51 | -21. 69 | Peak     |         |
| 6   | 5. 9580 | 23. 99           | 9. 97  | 33. 96          | 60.00  | -26. 04 | Peak     |         |
|     |         |                  |        |                 |        |         |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 32 of 140





| ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ) |
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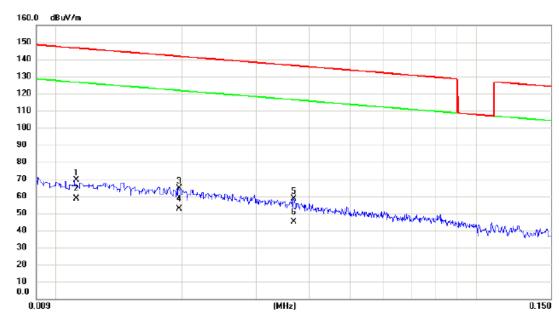
Report No.: BTL-FCCP-1-1605C069A Page 33 of 140





Test Mode: TX B MODE CHANNEL 01

Ant 0°



| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Margin |          |         |
|---------|--------|------------------|-------------------|------------------|--------|--------|----------|---------|
|         | MHz    | dBu∀             | dB                | dBuV/m           | dBuV/m | dB     | Detector | Comment |
| 1       | 0.0112 | 45.35            | 24.05             | 69.40            | 146.62 | -77.22 | peak     |         |
| 2 *     | 0.0112 | 34.50            | 24.05             | 58.55            | 126.62 | -68.07 | AVG      |         |
| 3       | 0.0197 | 41.18            | 23.54             | 64.72            | 141.72 | -77.00 | peak     |         |
| 4       | 0.0197 | 29.00            | 23.54             | 52.54            | 121.72 | -69.18 | AVG      |         |
| 5       | 0.0368 | 37.24            | 21.45             | 58.69            | 136.29 | -77.60 | peak     |         |
| 6       | 0.0368 | 23.50            | 21.45             | 44.95            | 116.29 | -71.34 | AVG      |         |

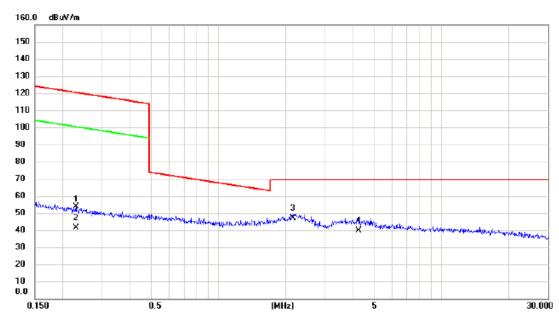
Report No.: BTL-FCCP-1-1605C069A Page 34 of 140





Test Mode: TX B MODE CHANNEL 01

Ant 0°



| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure<br>ment | -<br>Limit | Margin |          |         |
|---------|--------|------------------|-------------------|-----------------|------------|--------|----------|---------|
|         | MHz    | dBu∀             | dB                | dBuV/m          | dBuV/m     | dB     | Detector | Comment |
| 1       | 0.2304 | 35.24            | 18.67             | 53.91           | 120.36     | -66.45 | peak     |         |
| 2       | 0.2304 | 22.70            | 18.67             | 41.37           | 100.36     | -58.99 | AVG      |         |
| 3 *     | 2.1552 | 29.40            | 17.71             | 47.11           | 69.54      | -22.43 | QP       |         |
| 4       | 4.2466 | 21.40            | 18.24             | 39.64           | 69.54      | -29.90 | QP       |         |

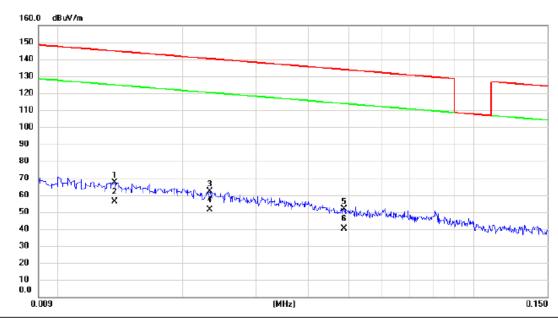
Report No.: BTL-FCCP-1-1605C069A Page 35 of 140





Test Mode: TX B MODE CHANNEL 01

### Ant 90°



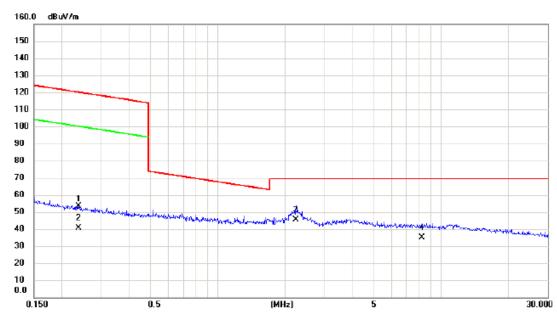
| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | -<br>Limit | Margin |          |         |
|---------|--------|------------------|-------------------|------------------|------------|--------|----------|---------|
|         | MHz    | dBu∀             | dB                | dBuV/m           | dBuV/m     | dB     | Detector | Comment |
| 1       | 0.0137 | 43.59            | 23.90             | 67.49            | 144.87     | -77.38 | peak     |         |
| 2 *     | 0.0137 | 32.50            | 23.90             | 56.40            | 124.87     | -68.47 | AVG      |         |
| 3       | 0.0232 | 39.23            | 23.13             | 62.36            | 140.30     | -77.94 | peak     |         |
| 4       | 0.0232 | 28.20            | 23.13             | 51.33            | 120.30     | -68.97 | AVG      |         |
| 5       | 0.0487 | 31.68            | 19.98             | 51.66            | 133.85     | -82.19 | peak     |         |
| 6       | 0.0487 | 20.10            | 19.98             | 40.08            | 113.85     | -73.77 | AVG      |         |

Report No.: BTL-FCCP-1-1605C069A Page 36 of 140





# Ant 90°



| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Margin |          |         |
|---------|--------|------------------|-------------------|------------------|--------|--------|----------|---------|
|         | MHz    | dBu∀             | dB                | dBuV/m           | dBu∀/m | dB     | Detector | Comment |
| 1       | 0.2391 | 34.70            | 18.66             | 53.36            | 120.03 | -66.67 | peak     |         |
| 2       | 0.2391 | 21.80            | 18.66             | 40.46            | 100.03 | -59.57 | AVG      |         |
| 3 *     | 2.2367 | 28.00            | 17.60             | 45.60            | 69.54  | -23.94 | QP       |         |
| 4       | 8.2351 | 19.00            | 16.15             | 35.15            | 69.54  | -34.39 | QP       |         |

Report No.: BTL-FCCP-1-1605C069A Page 37 of 140





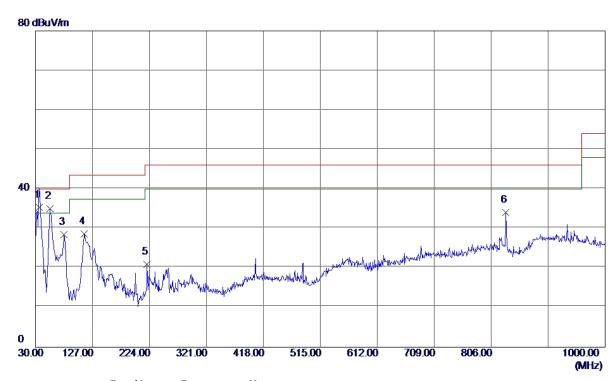
| ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ) |
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Report No.: BTL-FCCP-1-1605C069A Page 38 of 140





## Vertical



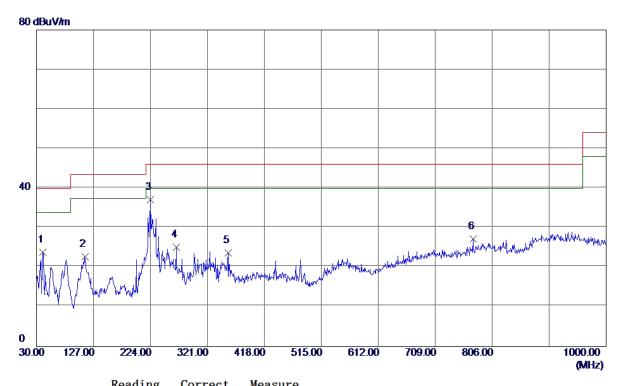
| No. | Freq.     | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin       |          |         |
|-----|-----------|------------------|-------------------|-----------------|--------|--------------|----------|---------|
|     | MHz       | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB           | Detector | Comment |
| 1 * | 36. 7900  | 49. 21           | -13. 85           | 35. 36          | 40.00  | -4. 64       | QP       |         |
| 2   | 54. 7350  | 48. 43           | -13. 41           | 35. 02          | 40.00  | <b>-4.98</b> | Peak     |         |
| 3   | 78. 9850  | 44. 51           | -16. 09           | 28. 42          | 40.00  | -11. 58      | Peak     |         |
| 4   | 113. 4200 | 42.88            | -14. 23           | 28. 65          | 43. 50 | -14. 85      | Peak     |         |
| 5   | 220. 1200 | 35. 35           | -14. 39           | 20. 96          | 46.00  | -25. 04      | Peak     |         |
| 6   | 831. 2199 | 35. 78           | -1. 71            | 34. 07          | 46. 00 | -11. 93      | Peak     |         |
|     |           |                  |                   |                 |        |              |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 39 of 140





# Horizontal



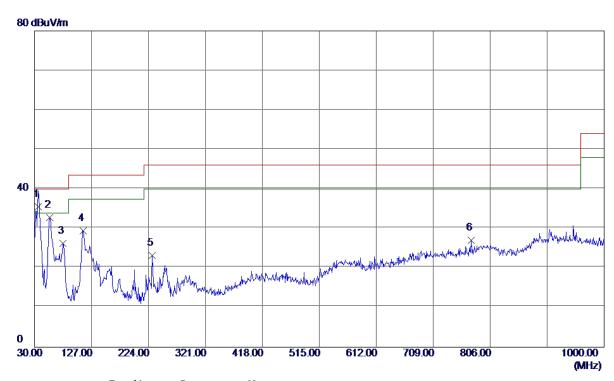
| No. | Freq.     | Leve1  | Factor         | measure<br>ment | Limit  | Margin  |          |         |
|-----|-----------|--------|----------------|-----------------|--------|---------|----------|---------|
|     | MHz       | dBuV/m | dB             | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 41. 1550  | 37. 49 | -13. 62        | 23. 87          | 40.00  | -16. 13 | Peak     |         |
| 2   | 112. 4500 | 37. 08 | <b>-14. 35</b> | 22. 73          | 43. 50 | -20. 77 | Peak     |         |
| 3 * | 224. 4850 | 51. 16 | <b>-14.01</b>  | 37. 15          | 46.00  | -8. 85  | Peak     |         |
| 4   | 268. 1350 | 38. 90 | -13. 81        | 25. 09          | 46.00  | -20. 91 | Peak     |         |
| 5   | 356. 4050 | 34. 89 | -11. 19        | 23. 70          | 46.00  | -22. 30 | Peak     |         |
| 6   | 773. 5050 | 29. 15 | -1. 90         | 27. 25          | 46.00  | -18. 75 | Peak     |         |
|     |           |        |                |                 |        |         |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 40 of 140





## Vertical



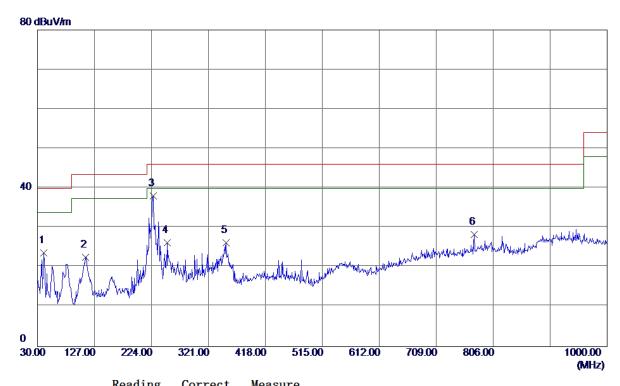
| No. | Freq.     | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin        |          |         |
|-----|-----------|------------------|-------------------|-----------------|--------|---------------|----------|---------|
|     | MHz       | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB            | Detector | Comment |
| 1 * | 36. 7900  | 49. 32           | -13. 85           | 35. 47          | 40.00  | <b>-4.</b> 53 | QP       |         |
| 2   | 56. 1900  | 46. 05           | -13. 26           | 32. 79          | 40.00  | -7. 21        | Peak     |         |
| 3   | 78. 5000  | 42. 45           | -16. 14           | 26. 31          | 40.00  | -13. 69       | Peak     |         |
| 4   | 113. 4200 | 43. 68           | -14. 23           | 29. 45          | 43. 50 | -14. 05       | Peak     |         |
| 5   | 230. 7900 | 36. 73           | -13. 57           | 23. 16          | 46.00  | -22.84        | Peak     |         |
| 6   | 773. 5050 | 28. 88           | -1. 90            | 26. 98          | 46. 00 | -19. 02       | Peak     |         |
|     |           |                  |                   |                 |        |               |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 41 of 140





# Horizontal



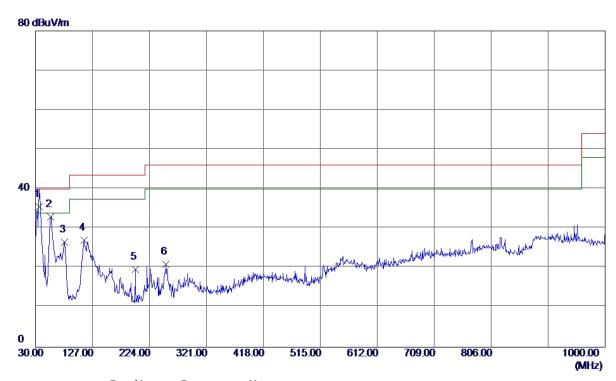
| No. | Freq.     | Leve1  | Factor  | measure<br>ment | Limit  | Margin        |          |         |
|-----|-----------|--------|---------|-----------------|--------|---------------|----------|---------|
|     | MHz       | dBuV/m | dB      | dBuV/m          | dBuV/m | dB            | Detector | Comment |
| 1   | 41. 1550  | 37. 28 | -13. 62 | 23. 66          | 40.00  | -16. 34       | Peak     |         |
| 2   | 111. 9650 | 37. 04 | -14. 41 | 22. 63          | 43. 50 | -20.87        | Peak     |         |
| 3 * | 226. 9100 | 51. 81 | -13. 80 | 38. 01          | 46.00  | <b>−7. 99</b> | Peak     |         |
| 4   | 251. 1600 | 40. 66 | -14. 40 | 26. 26          | 46.00  | -19. 74       | Peak     |         |
| 5   | 351. 5550 | 37. 82 | -11. 51 | 26. 31          | 46.00  | -19. 69       | Peak     |         |
| 6   | 773. 5050 | 30. 28 | -1. 90  | 28. 38          | 46.00  | -17. 62       | Peak     |         |
|     |           |        |         |                 |        |               |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 42 of 140





## Vertical



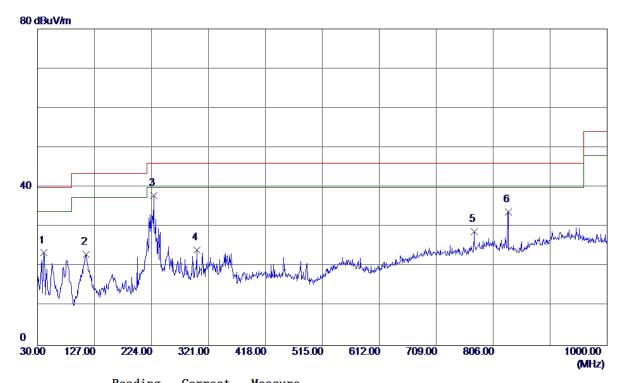
| No. | Freq.     | Reading<br>Level | Correct<br>Factor | Measure<br>ment | Limit  | Margin        |          |         |
|-----|-----------|------------------|-------------------|-----------------|--------|---------------|----------|---------|
|     | MHz       | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB            | Detector | Comment |
| 1 * | 36. 7900  | 49. 33           | -13. 85           | 35. 48          | 40.00  | <b>-4.</b> 52 | QP       |         |
| 2   | 55. 7050  | 46. 27           | -13. 26           | 33. 01          | 40.00  | -6. 99        | Peak     |         |
| 3   | 79. 4700  | 42.63            | -16. 04           | 26. 59          | 40.00  | -13. 41       | Peak     |         |
| 4   | 112. 9350 | 41. 33           | -14. 29           | 27. 04          | 43. 50 | -16. 46       | Peak     |         |
| 5   | 200. 2350 | 34. 21           | <b>-14.55</b>     | 19. 66          | 43. 50 | -23.84        | Peak     |         |
| 6   | 252. 1300 | 35. 31           | -14. 41           | 20. 90          | 46. 00 | -25. 10       | Peak     |         |
|     |           |                  |                   |                 |        |               |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 43 of 140





# Horizontal



| No. | Freq.     | keading<br>Level | Factor  | measure<br>ment | Limit  | Margin        |          |         |
|-----|-----------|------------------|---------|-----------------|--------|---------------|----------|---------|
|     | MHz       | dBuV/m           | dB      | dBuV/m          | dBuV/m | dB            | Detector | Comment |
| 1   | 41. 1550  | 37. 06           | -13. 62 | 23. 44          | 40.00  | -16. 56       | Peak     |         |
| 2   | 113. 4200 | 37. 28           | -14. 23 | 23. 05          | 43. 50 | <b>-20.45</b> | Peak     |         |
| 3 * | 227. 8800 | 51. 71           | -13. 72 | 37. 99          | 46.00  | -8. 01        | Peak     |         |
| 4   | 301. 1150 | 34. 72           | -10. 49 | 24. 23          | 46.00  | -21. 77       | Peak     |         |
| 5   | 773. 5050 | 30. 69           | -1. 90  | 28. 79          | 46.00  | -17. 21       | Peak     |         |
| 6   | 831. 7050 | 35. 53           | -1. 73  | 33. 80          | 46.00  | -12. 20       | Peak     |         |
|     |           |                  |         |                 |        |               |          |         |

Report No.: BTL-FCCP-1-1605C069A Page 44 of 140





| ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ) |
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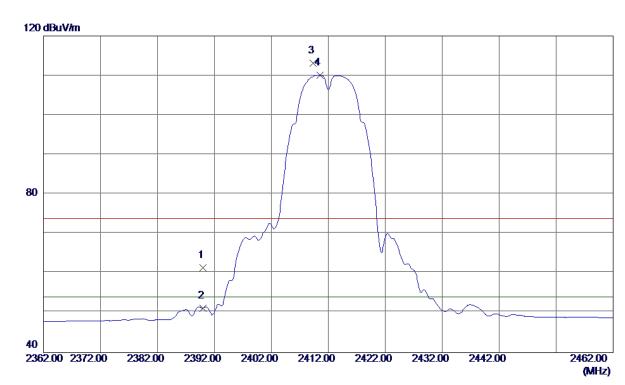
Report No.: BTL-FCCP-1-1605C069A Page 45 of 140





| Orthogonal Axis: | x                 |
|------------------|-------------------|
| Test Mode :      | TX B MODE 2412MHz |

# 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 | 27. 92           | 33. 51            | 61. 43          | 74.00  | -12. 57 | Peak     |          |
| 2   | 2390. 0000 | 17. 76           | 33. 51            | 51. 27          | 54.00  | -2. 73  | AVG      |          |
| 3   | 2409. 3000 | 79. 47           | 33. 62            | 113. 09         | 74.00  | 39. 09  | Peak     | No Limit |
| 4 * | 2410. 5000 | 76. 51           | 33. 63            | 110. 14         | 54.00  | 56. 14  | AVG      | No Limit |

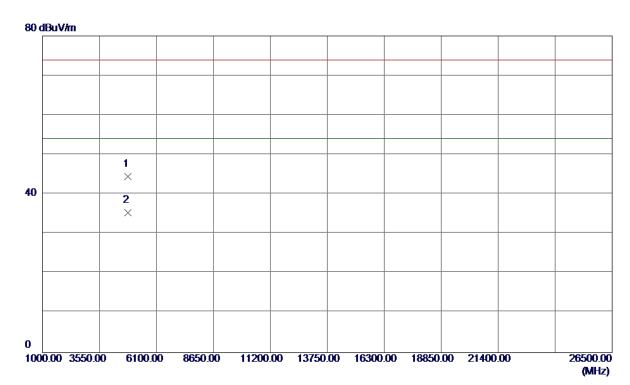
Report No.: BTL-FCCP-1-1605C069A Page 46 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2412MHz

## Vertical



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin         |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|----------------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB             | Detector | Comment |
| 1   | 4823. 9100 | 41. 52           | 3. 00             | 44. 52          | 74.00  | -29. 48        | Peak     |         |
| 2 * | 4823. 9800 | 32. 36           | 3. 00             | 35. 36          | 54.00  | <b>−18. 64</b> | AVG      |         |

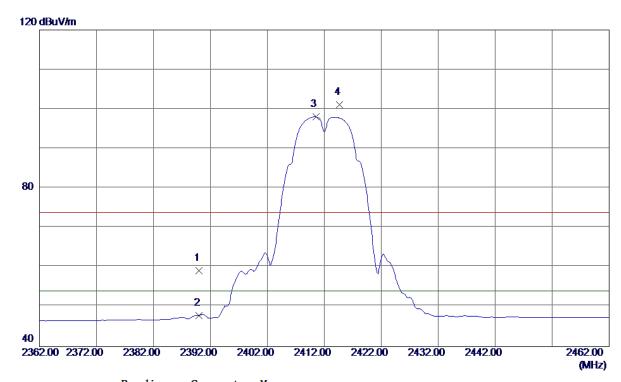
Report No.: BTL-FCCP-1-1605C069A Page 47 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2412MHz

## 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 | 25. 62           | 33. 51            | 59. 13          | 74.00  | -14. 87 | Peak     |          |
| 2   | 2390. 0000 | 14. 31           | 33. 51            | 47. 82          | 54.00  | -6. 18  | AVG      |          |
| 3 * | 2410. 5000 | 64. 40           | 33. 63            | 98. 03          | 54.00  | 44. 03  | AVG      | No Limit |
| 4   | 2414. 7000 | 67. 43           | 33. 65            | 101. 08         | 74. 00 | 27. 08  | Peak     | No Limit |
|     |            |                  |                   |                 |        |         |          |          |

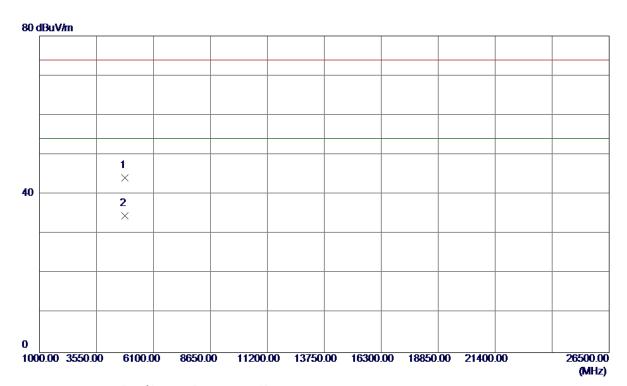
Report No.: BTL-FCCP-1-1605C069A Page 48 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2412MHz

## 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. 9100 | 41. 20           | 3. 00             | 44. 20          | 74.00  | -29. 80 | Peak     |         |
| 2 * | 4824. 0600 | 31. 59           | 3. 00             | 34. 59          | 54.00  | -19. 41 | AVG      |         |

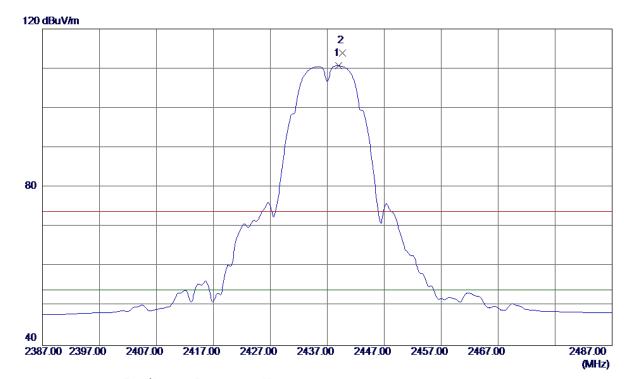
Report No.: BTL-FCCP-1-1605C069A Page 49 of 140





| Orthogonal Axis: | X                 |
|------------------|-------------------|
| Test Mode :      | TX B MODE 2437MHz |

# 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 * | 2439. 0000 | 76. 96           | 33. 78            | 110. 74         | 54.00  | 56. 74 | AVG      | No Limit |
| 2   | 2439. 7000 | 80. 06           | 33. 79            | 113. 85         | 74. 00 | 39. 85 | Peak     | No Limit |

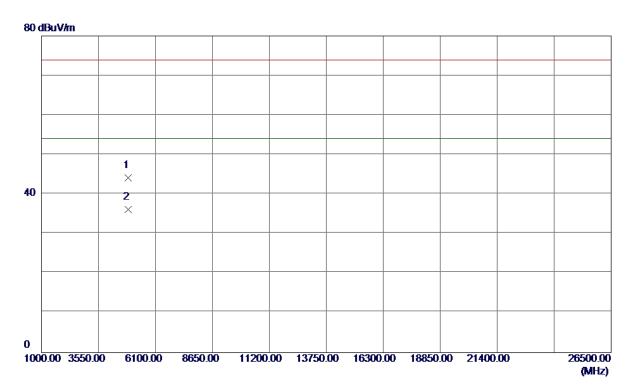
Report No.: BTL-FCCP-1-1605C069A Page 50 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2437MHz

## Vertical



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4873. 9200 | 41. 16           | 3. 03             | 44. 19          | 74.00  | -29.81  | Peak     |         |
| 2 * | 4873. 9800 | 33. 18           | 3. 03             | 36. 21          | 54.00  | -17. 79 | AVG      |         |

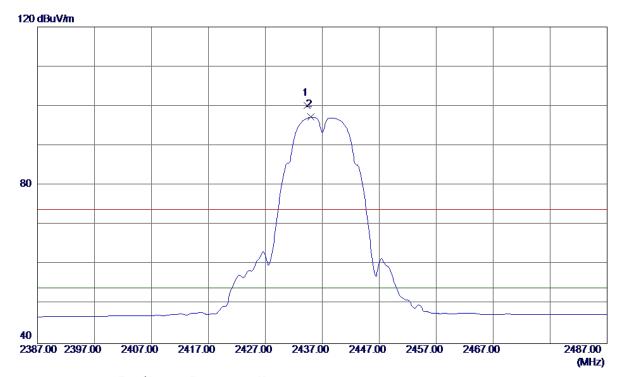
Report No.: BTL-FCCP-1-1605C069A Page 51 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2437MHz

## Horizontal



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1   | 2434. 3000 | 66. 37           | 33. 76            | 100. 13         | 74.00  | 26. 13 | Peak     | No Limit |
| 2 * | 2435. 0000 | 63. 45           | 33. 76            | 97. 21          | 54.00  | 43. 21 | AVG      | No Limit |

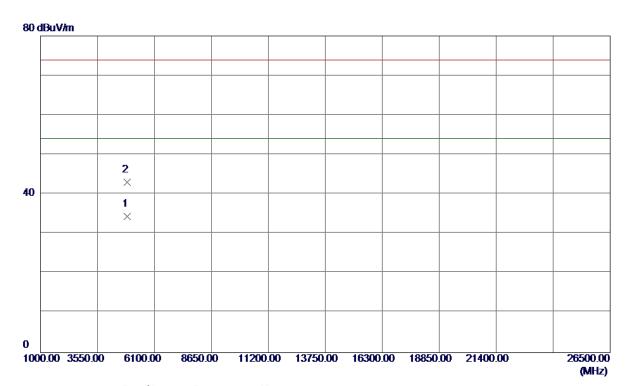
Report No.: BTL-FCCP-1-1605C069A Page 52 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2437MHz

## Horizontal



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4873. 9200 | 31. 36           | 3. 03             | 34. 39          | 54.00  | -19. 61 | AVG      |         |
| 2   | 4874. 0800 | 40. 08           | 3. 03             | 43. 11          | 74.00  | -30. 89 | Peak     |         |

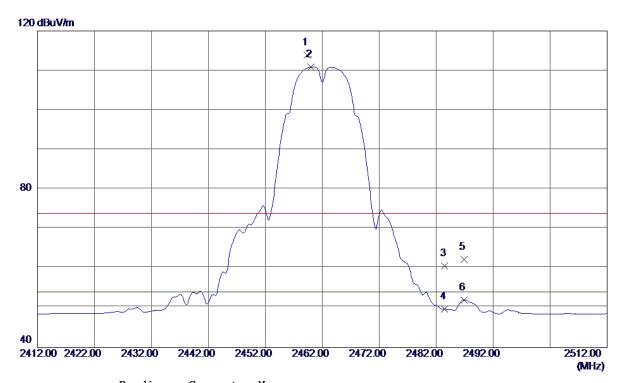
Report No.: BTL-FCCP-1-1605C069A Page 53 of 140





| Orthogonal Axis: | X                 |
|------------------|-------------------|
| Test Mode :      | TX B MODE 2462MHz |

# 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   | 2459. 3000 | 79. 98           | 33. 90            | 113.88          | 74.00  | 39. 88  | Peak     | No Limit |
| 2 * | 2460.0000  | 77. 01           | 33. 90            | 110. 91         | 54.00  | 56. 91  | AVG      | No Limit |
| 3   | 2483. 5000 | 26. 63           | 34. 03            | 60. 66          | 74.00  | -13. 34 | Peak     |          |
| 4   | 2483. 5000 | 15. 67           | 34. 03            | 49. 70          | 54.00  | -4. 30  | AVG      |          |
| 5   | 2486. 9000 | 28. 26           | 34. 05            | 62. 31          | 74. 00 | -11. 69 | Peak     |          |
| 6   | 2486. 9000 | 17. 99           | 34. 05            | 52. 04          | 54. 00 | -1. 96  | AVG      |          |
|     |            |                  |                   |                 |        |         |          |          |

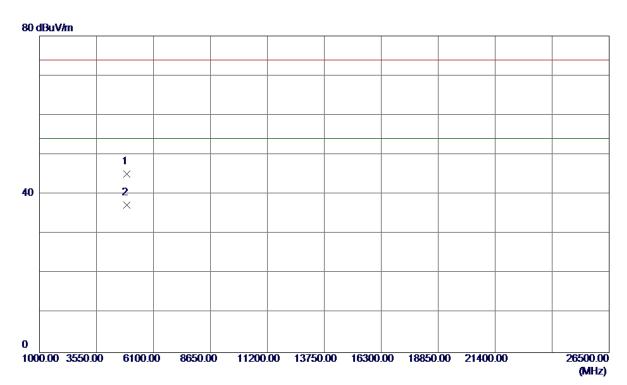
Report No.: BTL-FCCP-1-1605C069A Page 54 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2462MHz

## Vertical



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin         |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|----------------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB             | Detector | Comment |
| 1   | 4923. 9300 | 42. 12           | 3. 05             | 45. 17          | 74.00  | -28.83         | Peak     |         |
| 2 * | 4923. 9600 | 34. 25           | 3. 05             | 37. 30          | 54.00  | <b>-16. 70</b> | AVG      |         |

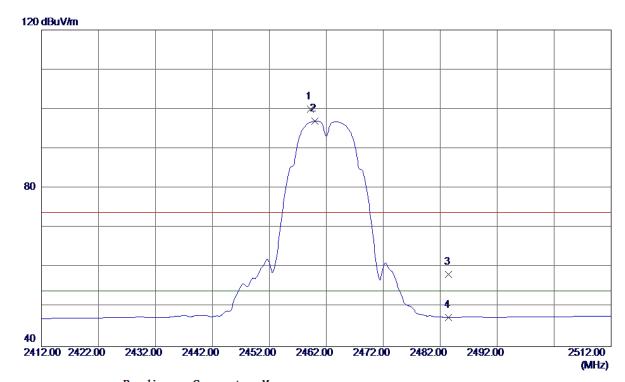
Report No.: BTL-FCCP-1-1605C069A Page 55 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2462MHz

## 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. 2000 | 66. 17           | 33. 89            | 100.06          | 74.00  | 26. 06  | Peak     | No Limit |
| 2 * | 2460.0000  | 63. 11           | 33. 90            | 97. 01          | 54.00  | 43. 01  | AVG      | No Limit |
| 3   | 2483. 5000 | 24. 21           | 34. 03            | 58. 24          | 74.00  | -15. 76 | Peak     |          |
| 4   | 2483. 5000 | 13. 37           | 34. 03            | 47. 40          | 54. 00 | -6. 60  | AVG      |          |

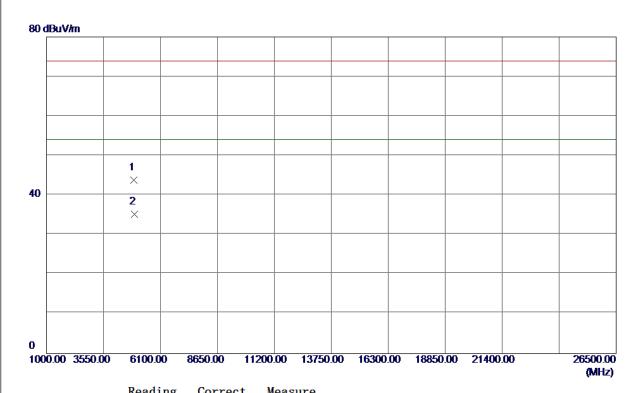
Report No.: BTL-FCCP-1-1605C069A Page 56 of 140





Orthogonal Axis: X
Test Mode: TX B MODE 2462MHz

## Horizontal



| No. | Freq.      | keading<br>Level | Factor | measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|--------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB     | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1   | 4923. 4000 | 40.87            | 3. 05  | 43. 92          | 74.00  | -30.08  | Peak     |         |
| 2 * | 4924. 5000 | 32. 19           | 3. 05  | 35. 24          | 54.00  | -18. 76 | AVG      |         |
|     |            |                  |        |                 |        |         |          |         |

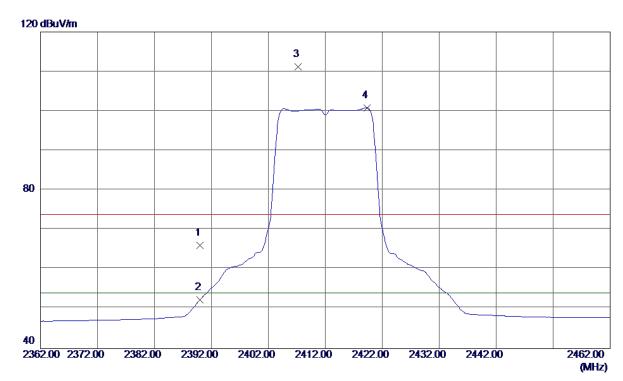
Report No.: BTL-FCCP-1-1605C069A Page 57 of 140





| Orthogonal Axis: | X                 |
|------------------|-------------------|
| Test Mode :      | TX G MODE 2412MHz |

# 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 | 32. 59           | 33. 51            | 66. 10          | 74.00  | -7. 90 | Peak     |          |
| 2   | 2390. 0000 | 18. 77           | 33. 51            | 52. 28          | 54.00  | -1.72  | AVG      |          |
| 3   | 2407. 2000 | 77. 53           | 33. 61            | 111. 14         | 74.00  | 37. 14 | Peak     | No Limit |
| 4 * | 2419. 3000 | 67. 20           | 33. 67            | 100. 87         | 54.00  | 46. 87 | AVG      | No Limit |

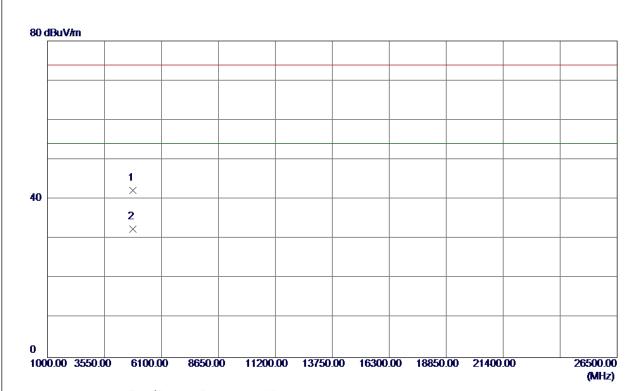
Report No.: BTL-FCCP-1-1605C069A Page 58 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

## Vertical



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin        |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB            | Detector | Comment |
| 1   | 4823. 9100 | 39. 24           | 3. 00             | 42. 24          | 74.00  | -31. 76       | Peak     |         |
| 2 * | 4823. 9800 | 29. 50           | 3. 00             | 32. 50          | 54.00  | <b>-21.50</b> | AVG      |         |

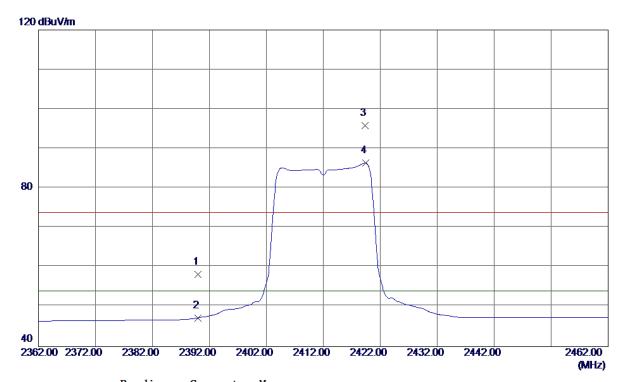
Report No.: BTL-FCCP-1-1605C069A Page 59 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

## 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 | 24. 73           | 33. 51            | 58. 24          | 74.00  | -15. 76 | Peak     |          |
| 2   | 2390. 0000 | 13. 75           | 33. 51            | 47. 26          | 54.00  | -6. 74  | AVG      |          |
| 3   | 2419. 3000 | 62. 18           | 33. 67            | 95. 85          | 74.00  | 21.85   | Peak     | No Limit |
| 4 * | 2419. 4000 | <b>52. 70</b>    | 33. 68            | 86. 38          | 54. 00 | 32. 38  | AVG      | No Limit |

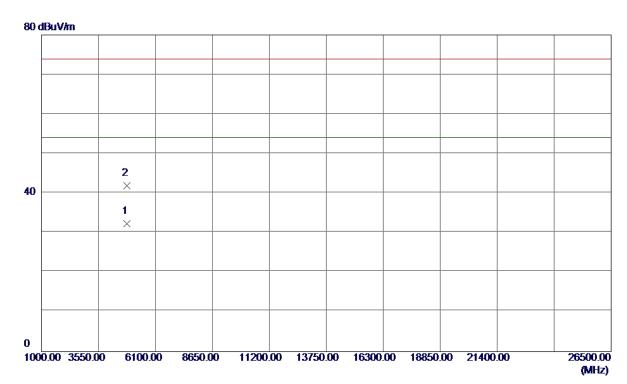
Report No.: BTL-FCCP-1-1605C069A Page 60 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2412MHz

## 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. 9600 | 29. 37           | 3. 00             | 32. 37          | 54.00  | -21.63  | AVG      |         |
| 2   | 4824. 0000 | 38. 87           | 3. 00             | 41.87           | 74.00  | -32. 13 | Peak     |         |

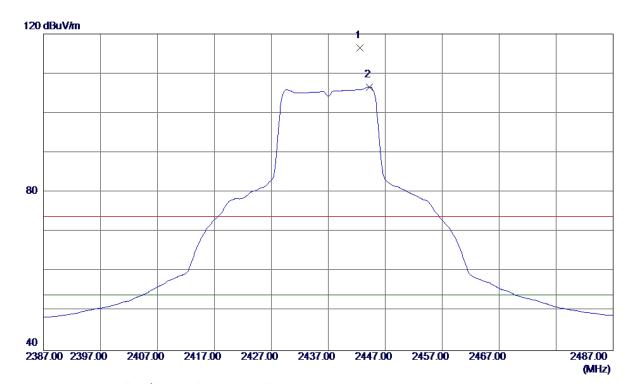
Report No.: BTL-FCCP-1-1605C069A Page 61 of 140





| Orthogonal Axis: | x                 |
|------------------|-------------------|
| Test Mode :      | TX G MODE 2437MHz |

# 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   | 2442. 6000 | 82. 75           | 33. 80            | 116. 55         | 74.00  | 42. 55 | Peak     | No Limit |
| 2 * | 2444. 2000 | 72. 79           | 33. 81            | 106. 60         | 54.00  | 52. 60 | AVG      | No Limit |

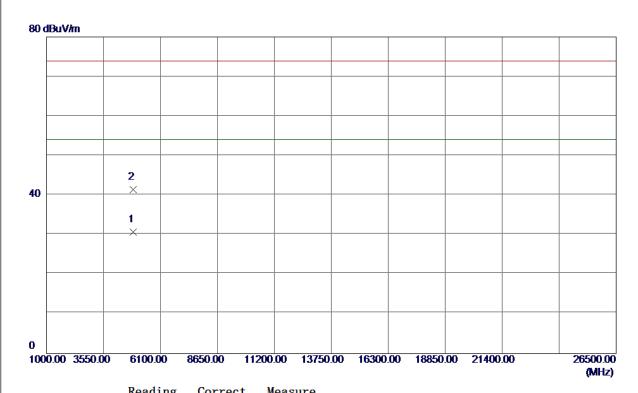
Report No.: BTL-FCCP-1-1605C069A Page 62 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2437MHz

## Vertical



| No. | Freq.        | keading<br>Level | Factor | measure<br>ment | Limit  | Margin  |          |         |
|-----|--------------|------------------|--------|-----------------|--------|---------|----------|---------|
|     | MHz          | dBuV/m           | dB     | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | k 4874. 1000 | 27. 64           | 3. 03  | 30. 67          | 54.00  | -23. 33 | AVG      |         |
| 2   | 4875. 2200   | 38. 40           | 3. 03  | 41. 43          | 74.00  | -32. 57 | Peak     |         |
|     |              |                  |        |                 |        |         |          |         |

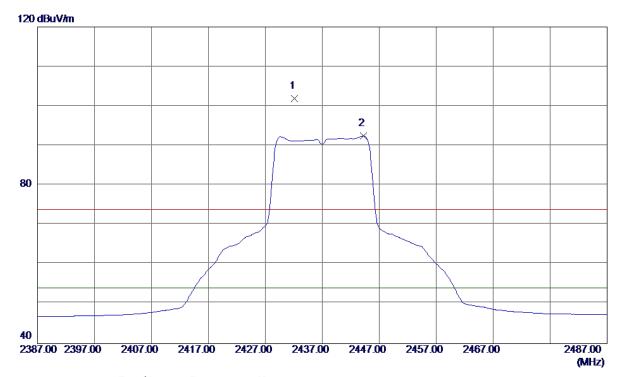
Report No.: BTL-FCCP-1-1605C069A Page 63 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2437MHz

## 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   | 2432. 1000 | 68. 15           | 33. 75            | 101. 90         | 74.00  | 27. 90 | Peak     | No Limit |
| 2 * | 2444. 2000 | 58. 60           | 33. 81            | 92. 41          | 54.00  | 38. 41 | AVG      | No Limit |

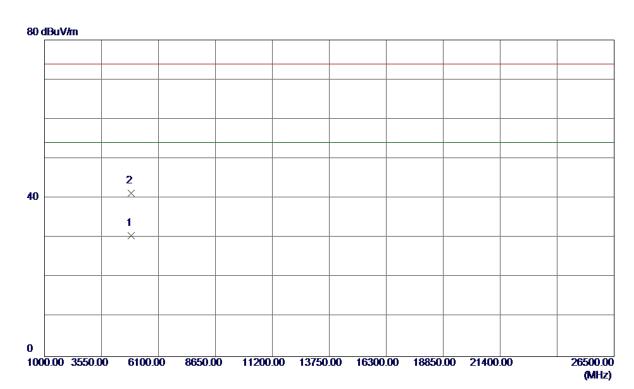
Report No.: BTL-FCCP-1-1605C069A Page 64 of 140





| Orthogonal Axis: | X                 |
|------------------|-------------------|
| Test Mode :      | TX G MODE 2437MHz |

## 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. 9600 | 27. 51           | 3. 03             | 30. 54          | 54.00  | -23. 46 | AVG      |         |
| 2   | 4874. 0800 | 38. 32           | 3. 03             | 41. 35          | 74.00  | -32.65  | Peak     |         |

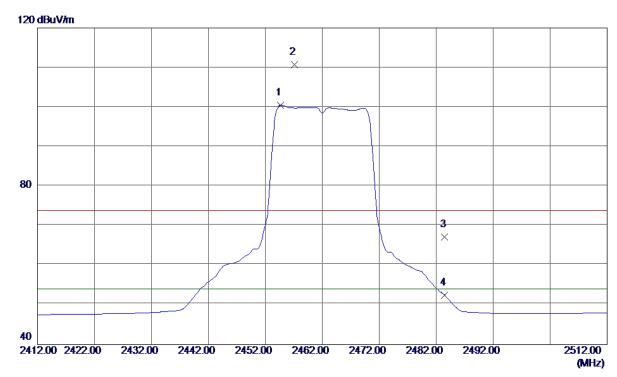
Report No.: BTL-FCCP-1-1605C069A Page 65 of 140





| Orthogonal Axis: | x                 |
|------------------|-------------------|
| Test Mode :      | TX G MODE 2462MHz |

# 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 * | 2454. 7000 | 66. 62           | 33. 87            | 100. 49         | 54.00  | 46. 49 | AVG      | No Limit |
| 2   | 2457. 1000 | 76. 92           | 33. 88            | 110.80          | 74.00  | 36. 80 | Peak     | No Limit |
| 3   | 2483. 5000 | 33. 14           | 34. 03            | 67. 17          | 74.00  | -6. 83 | Peak     |          |
| 4   | 2483. 5000 | 18. 40           | 34. 03            | 52. 43          | 54.00  | -1. 57 | AVG      |          |

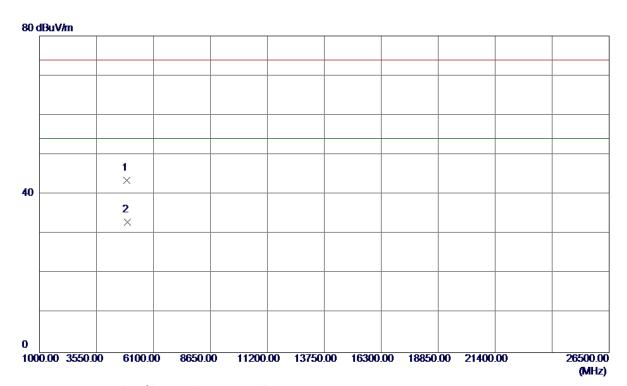
Report No.: BTL-FCCP-1-1605C069A Page 66 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2462MHz

## 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. 5000 | 40. 44           | 3. 05             | 43. 49          | 74.00  | -30. 51 | Peak     |         |
| 2 * | 4924. 5000 | 29. 98           | 3. 05             | 33. 03          | 54.00  | -20. 97 | AVG      |         |

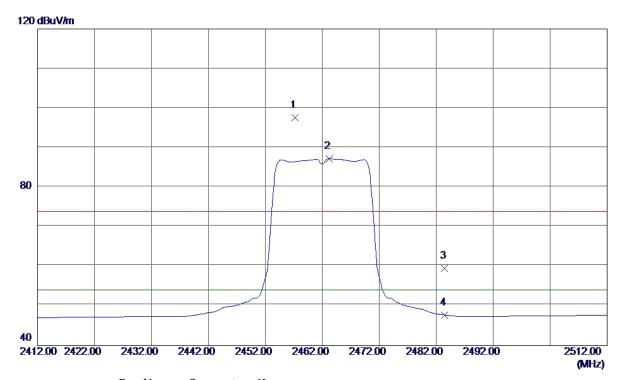
Report No.: BTL-FCCP-1-1605C069A Page 67 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2462MHz

## Horizontal



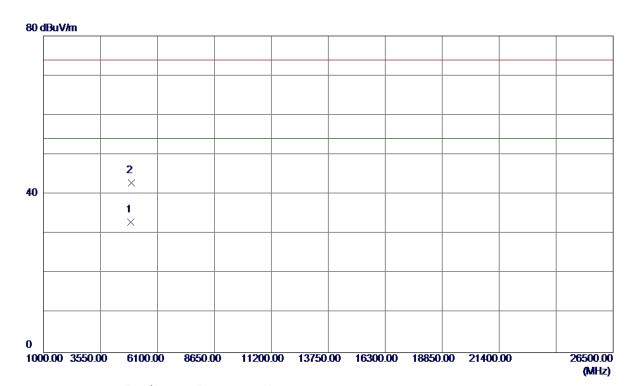
Report No.: BTL-FCCP-1-1605C069A Page 68 of 140





Orthogonal Axis: X
Test Mode: TX G MODE 2462MHz

## Horizontal



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin  |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|---------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1 * | 4923. 5000 | 29. 89           | 3. 05             | 32. 94          | 54.00  | -21. 06 | AVG      |         |
| 2   | 4924. 5000 | 39. 77           | 3. 05             | 42. 82          | 74.00  | -31. 18 | Peak     |         |

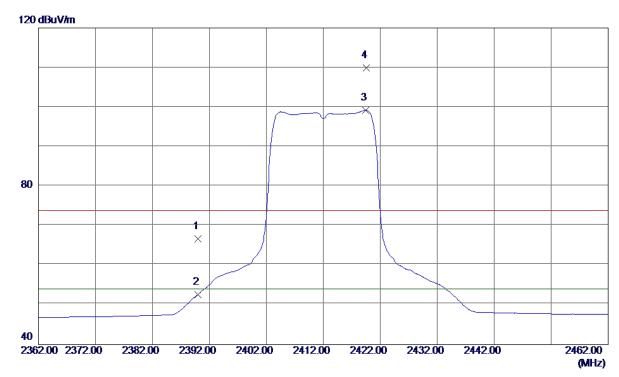
Report No.: BTL-FCCP-1-1605C069A Page 69 of 140





| Orthogonal Axis: | X                     |
|------------------|-----------------------|
| Test Mode :      | TX N-20M MODE 2412MHz |

# 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 | 33. 26           | 33. 51            | 66. 77          | 74.00  | -7. 23 | Peak     |          |
| 2   | 2390. 0000 | 19. 14           | 33. 51            | 52. 65          | 54.00  | -1. 35 | AVG      |          |
| 3 * | 2419. 4000 | 65. 52           | 33. 68            | 99. 20          | 54.00  | 45. 20 | AVG      | No Limit |
| 4   | 2419. 6000 | 76. 28           | 33. 68            | 109. 96         | 74. 00 | 35. 96 | Peak     | No Limit |

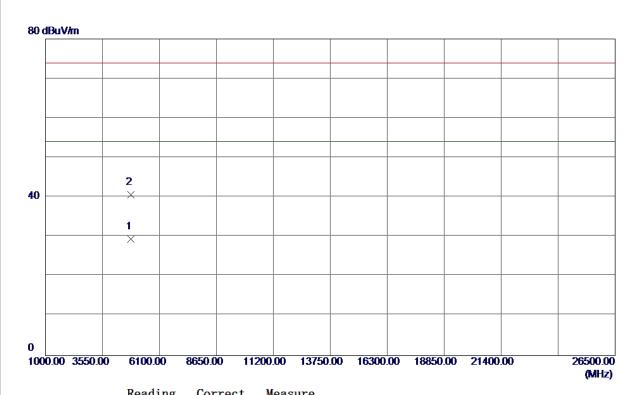
Report No.: BTL-FCCP-1-1605C069A Page 70 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2412MHz

### **Vertical**



|   | No. | Freq.      | Reading<br>Level | Factor | measure<br>ment | Limit  | Margin  |          |         |
|---|-----|------------|------------------|--------|-----------------|--------|---------|----------|---------|
|   |     | MHz        | dBuV/m           | dB     | dBuV/m          | dBuV/m | dB      | Detector | Comment |
|   | 1 * | 4823.8600  | 26. 40           | 3.00   | 29. 40          | 54.00  | -24. 60 | AVG      |         |
| - | 2   | 4824. 1000 | 37. 67           | 3. 00  | 40. 67          | 74. 00 | -33. 33 | Peak     |         |
|   |     |            |                  |        |                 |        |         |          |         |

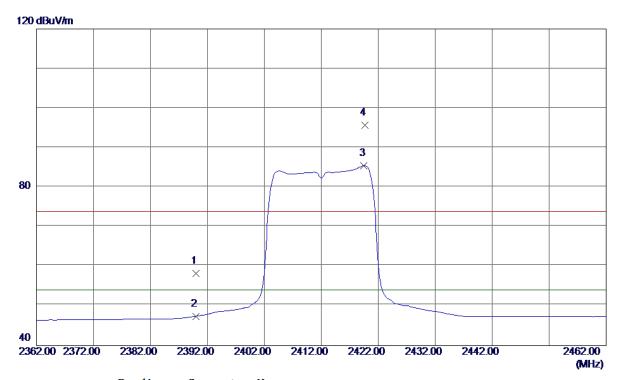
Report No.: BTL-FCCP-1-1605C069A Page 71 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2412MHz

## 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 | 24. 72           | 33. 51            | 58. 23          | 74.00  | -15. 77 | Peak     |          |
| 2   | 2390. 0000 | 13. 91           | 33. 51            | 47. 42          | 54.00  | -6. 58  | AVG      |          |
| 3 * | 2419. 5000 | 51. 78           | 33. 68            | 85. 46          | 54.00  | 31. 46  | AVG      | No Limit |
| 4   | 2419. 7000 | 61. 96           | 33. 68            | 95. 64          | 74. 00 | 21. 64  | Peak     | No Limit |
|     |            |                  |                   |                 |        |         |          |          |

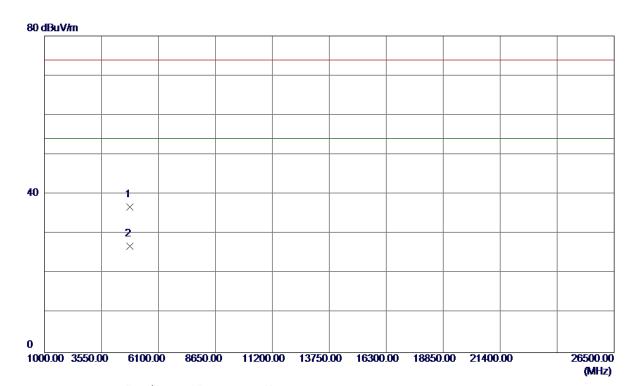
Report No.: BTL-FCCP-1-1605C069A Page 72 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2412MHz

## Horizontal



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin           |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|------------------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB               | Detector | Comment |
| 1   | 4823. 9200 | 33. 82           | 3. 00             | 36. 82          | 74.00  | -37. 18          | Peak     |         |
| 2 * | 4823. 9600 | 23. 92           | 3. 00             | 26. 92          | 54.00  | -27 <b>. 0</b> 8 | AVG      |         |

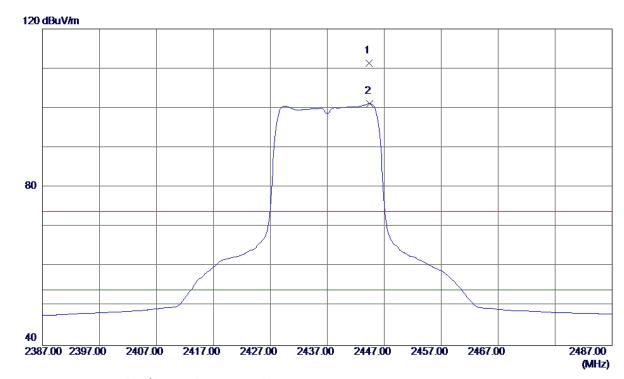
Report No.: BTL-FCCP-1-1605C069A Page 73 of 140





| Orthogonal Axis: | X                     |
|------------------|-----------------------|
| Test Mode :      | TX N-20M MODE 2437MHz |

# 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   | 2444. 3000 | 77. 48           | 33. 81            | 111. 29         | 74.00  | 37. 29 | Peak     | No Limit |
| 2 * | 2444. 4000 | 67. 33           | 33. 81            | 101. 14         | 54.00  | 47. 14 | AVG      | No Limit |

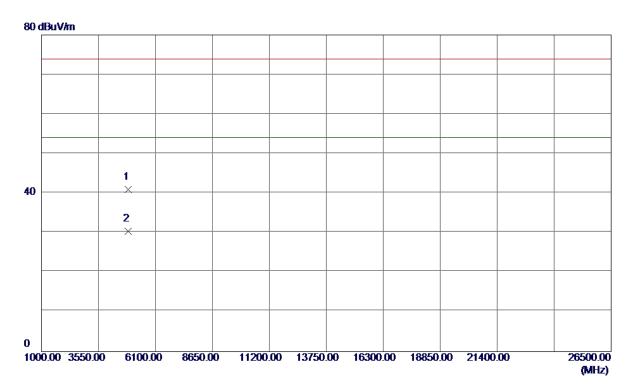
Report No.: BTL-FCCP-1-1605C069A Page 74 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2437MHz

## 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. 5800 | 37. 86           | 3. 03             | 40.89           | 74.00  | -33. 11 | Peak     |         |
| 2 * | 4873. 9200 | 27. 32           | 3. 03             | 30. 35          | 54.00  | -23.65  | AVG      |         |

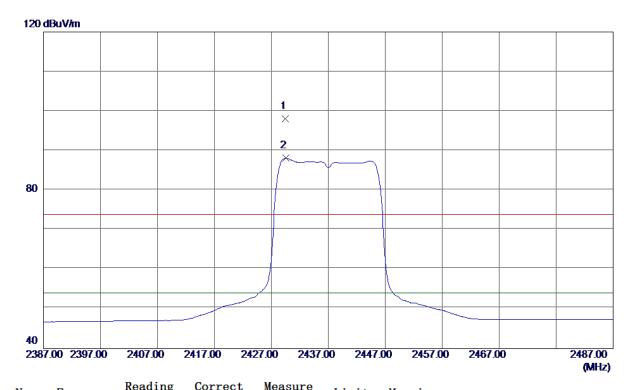
Report No.: BTL-FCCP-1-1605C069A Page 75 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2437MHz

## Horizontal



| No. | Freq.      | Leve1  | Factor | measure | Limit  | Margin |          |          |
|-----|------------|--------|--------|---------|--------|--------|----------|----------|
|     | MHz        | dBuV/m | dB     | dBuV/m  | dBuV/m | dB     | Detector | Comment  |
| 1   | 2429. 4000 | 64. 40 | 33. 73 | 98. 13  | 74.00  | 24. 13 | Peak     | No Limit |
| 2 * | 2429. 5000 | 54. 37 | 33. 73 | 88. 10  | 54.00  | 34. 10 | AVG      | No Limit |

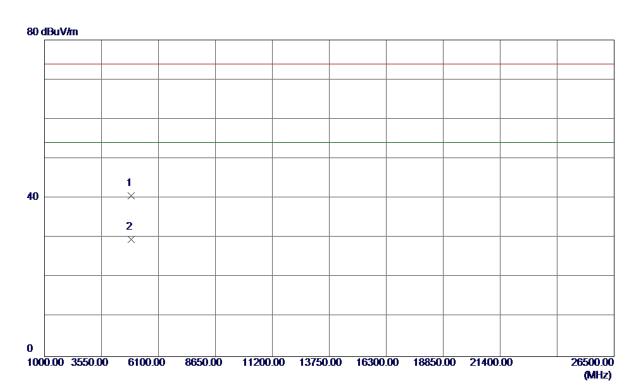
Report No.: BTL-FCCP-1-1605C069A Page 76 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2437MHz

## 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   | 4872. 9000 | 37. 68           | 3. 03             | 40. 71          | 74.00  | -33. 29 | Peak     |         |
| 2 * | 4873. 3000 | 26. 53           | 3. 03             | 29. 56          | 54.00  | -24. 44 | AVG      |         |

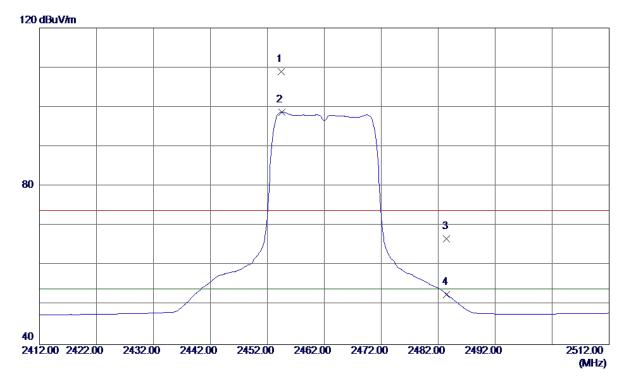
Report No.: BTL-FCCP-1-1605C069A Page 77 of 140





| Orthogonal Axis: | X                     |
|------------------|-----------------------|
| Test Mode :      | TX N-20M MODE 2462MHz |

# **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   | 2454. 4000 | 75. 07           | 33. 87            | 108. 94         | 74.00  | 34. 94 | Peak     | No Limit |
| 2 * | 2454. 5000 | 64. 91           | 33. 87            | 98. 78          | 54.00  | 44. 78 | AVG      | No Limit |
| 3   | 2483. 5000 | 32. 72           | 34. 03            | 66. 75          | 74.00  | -7. 25 | Peak     |          |
| 4   | 2483. 5000 | 18. 67           | 34. 03            | 52. 70          | 54.00  | -1. 30 | AVG      |          |

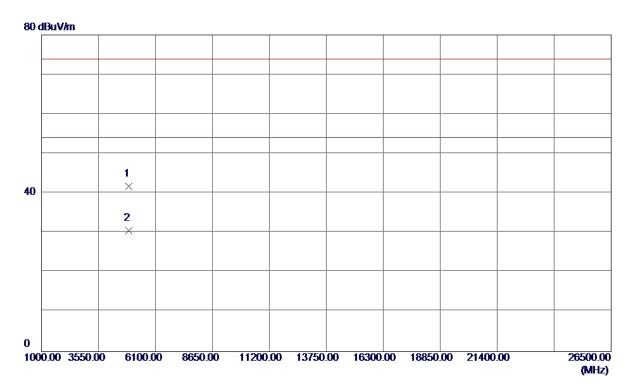
Report No.: BTL-FCCP-1-1605C069A Page 78 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2462MHz

## 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. 2000 | 38. 72           | 3. 05             | 41.77           | 74.00  | -32. 23 | Peak     |         |
| 2 * | 4923. 5000 | 27. 55           | 3. 05             | 30. 60          | 54.00  | -23. 40 | AVG      |         |

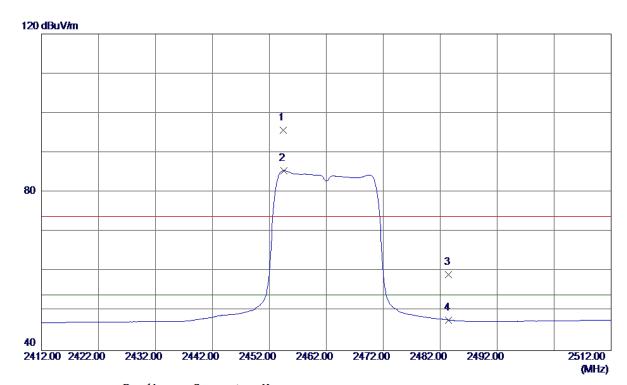
Report No.: BTL-FCCP-1-1605C069A Page 79 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2462MHz

## 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. 4000 | 61. 88           | 33. 87            | 95. 75          | 74.00  | 21. 75  | Peak     | No Limit |
| 2 * | 2454. 6000 | 51. 60           | 33. 87            | 85. 47          | 54.00  | 31. 47  | AVG      | No Limit |
| 3   | 2483. 5000 | 25. 13           | 34. 03            | 59. 16          | 74.00  | -14. 84 | Peak     |          |
| 4   | 2483. 5000 | 13. 69           | 34. 03            | 47. 72          | 54. 00 | -6. 28  | AVG      |          |
|     |            |                  |                   |                 |        |         |          |          |

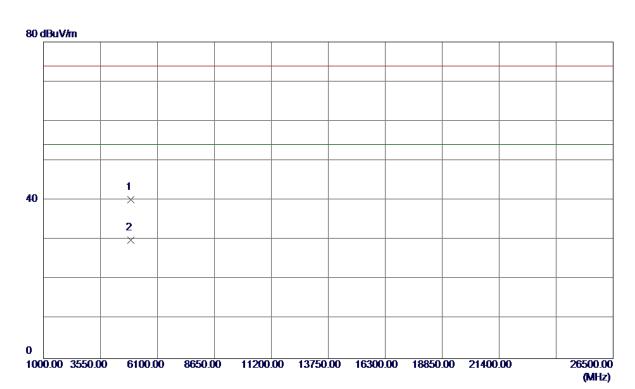
Report No.: BTL-FCCP-1-1605C069A Page 80 of 140





Orthogonal Axis: X
Test Mode: TX N-20M MODE 2462MHz

## Horizontal



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin         |          |         |
|-----|------------|------------------|-------------------|-----------------|--------|----------------|----------|---------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB             | Detector | Comment |
| 1   | 4923. 1000 | 37. 08           | 3. 05             | 40. 13          | 74.00  | -33.87         | Peak     |         |
| 2 * | 4923. 4900 | 26. 93           | 3. 05             | 29. 98          | 54.00  | <b>-24. 02</b> | AVG      |         |

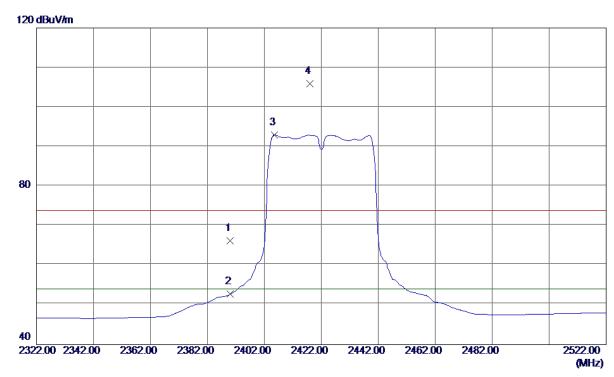
Report No.: BTL-FCCP-1-1605C069A Page 81 of 140





| Orthogonal Axis: | X                     |
|------------------|-----------------------|
| Test Mode :      | TX N-40M MODE 2422MHz |

# **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 | 32. 78           | 33. 51            | 66. 29          | 74.00  | -7. 71 | Peak     |          |
| 2   | 2390. 0000 | 19. 23           | 33. 51            | 52. 74          | 54.00  | -1. 26 | AVG      |          |
| 3 * | 2405. 6000 | 59. 33           | 33. 60            | 92. 93          | 54.00  | 38. 93 | AVG      | No Limit |
| 4   | 2418. 0000 | 72. 27           | 33. 67            | 105. 94         | 74.00  | 31. 94 | Peak     | No Limit |

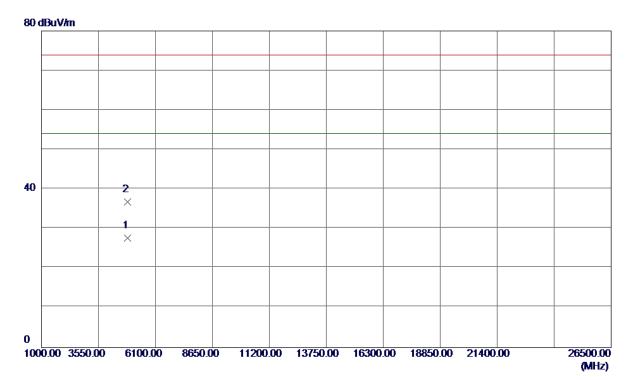
Report No.: BTL-FCCP-1-1605C069A Page 82 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2422MHz

#### **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. 5400 | 24. 69           | 3. 01             | 27. 70          | 54.00  | -26. 30 | AVG      |         |
| 2   | 4843. 9200 | 33. 85           | 3. 01             | 36. 86          | 74.00  | -37. 14 | Peak     |         |

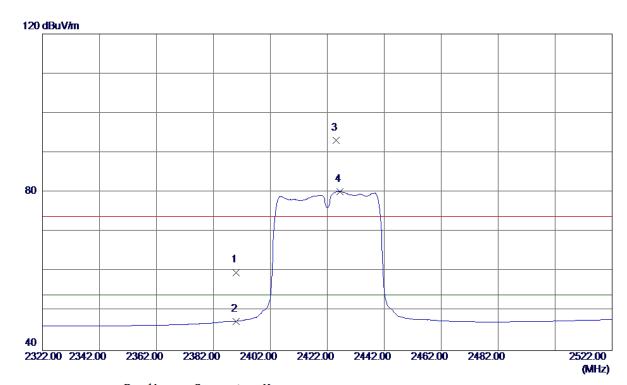
Report No.: BTL-FCCP-1-1605C069A Page 83 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2422MHz

## 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 | 26. 25           | 33. 51            | 59. 76          | 74.00  | -14. 24 | Peak     |          |
| 2   | 2390. 0000 | 13. 92           | 33. 51            | 47. 43          | 54.00  | -6. 57  | AVG      |          |
| 3   | 2425. 2000 | 59. 48           | 33. 71            | 93. 19          | 74.00  | 19. 19  | Peak     | No Limit |
| 4 * | 2426. 4000 | 46. 45           | 33. 71            | 80. 16          | 54.00  | 26. 16  | AVG      | No Limit |

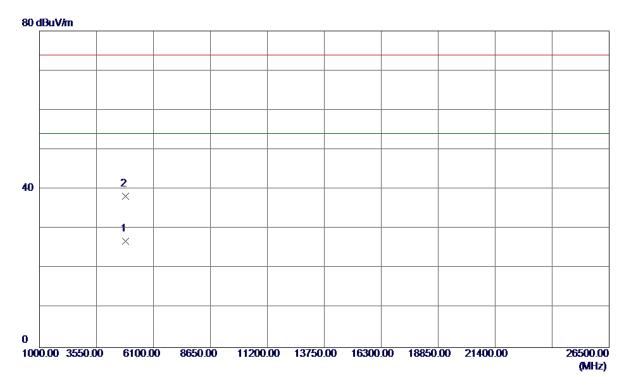
Report No.: BTL-FCCP-1-1605C069A Page 84 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2422MHz

## 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. 1000 | 23. 89           | 3. 01             | 26. 90          | 54.00  | -27. 10 | AVG      |         |
| 2   | 4844. 0000 | 35. 16           | 3. 01             | 38. 17          | 74.00  | -35. 83 | Peak     |         |

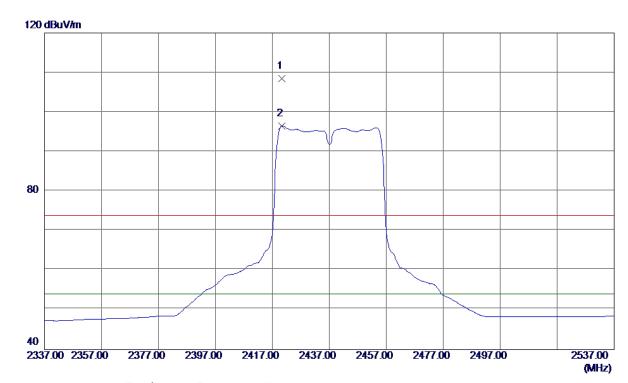
Report No.: BTL-FCCP-1-1605C069A Page 85 of 140





| Orthogonal Axis: | x                     |
|------------------|-----------------------|
| Test Mode :      | TX N-40M MODE 2437MHz |

# Vertical



| No. | Freq.      | Reading<br>Leve1 | Correct<br>Factor | Measure<br>ment | Limit  | Margin |          |          |
|-----|------------|------------------|-------------------|-----------------|--------|--------|----------|----------|
|     | MHz        | dBuV/m           | dB                | dBuV/m          | dBuV/m | dB     | Detector | Comment  |
| 1   | 2420. 4000 | 74. 75           | 33. 68            | 108. 43         | 74.00  | 34. 43 | Peak     | No Limit |
| 2 * | 2420. 4000 | 62. 85           | 33. 68            | 96. 53          | 54.00  | 42. 53 | AVG      | No Limit |

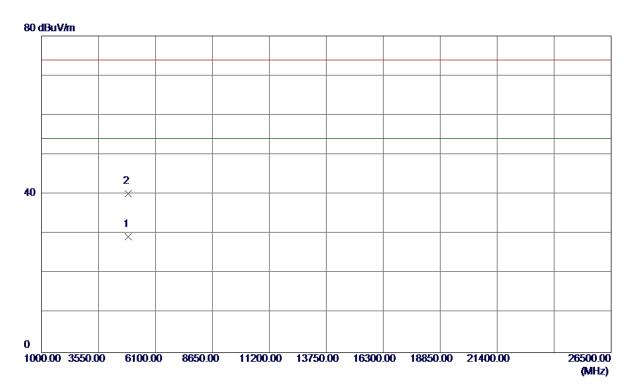
Report No.: BTL-FCCP-1-1605C069A Page 86 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2437MHz

## 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. 7599 | 26. 21           | 3. 03             | 29. 24          | 54.00  | -24. 76 | AVG      |         |
| 2   | 4873. 8300 | 37. 15           | 3. 03             | 40. 18          | 74.00  | -33.82  | Peak     |         |

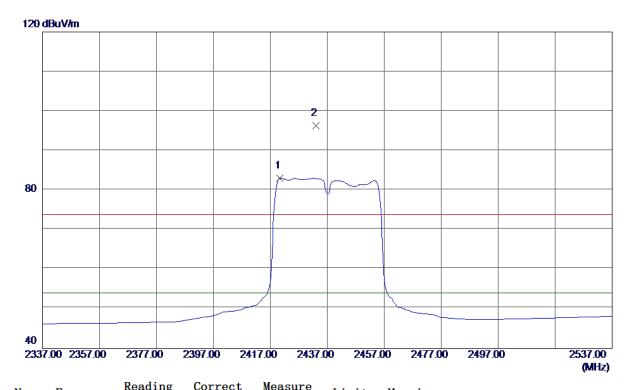
Report No.: BTL-FCCP-1-1605C069A Page 87 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2437MHz

## Horizontal



| No. | Freq.      | Leve1  | Factor | measure | Limit  | Margin |          |          |
|-----|------------|--------|--------|---------|--------|--------|----------|----------|
|     | MHz        | dBuV/m | dB     | dBuV/m  | dBuV/m | dB     | Detector | Comment  |
| 1 * | 2420. 4000 | 49. 43 | 33. 68 | 83. 11  | 54.00  | 29. 11 | AVG      | No Limit |
| 2   | 2433. 0000 | 62. 58 | 33. 75 | 96. 33  | 74.00  | 22. 33 | Peak     | No Limit |

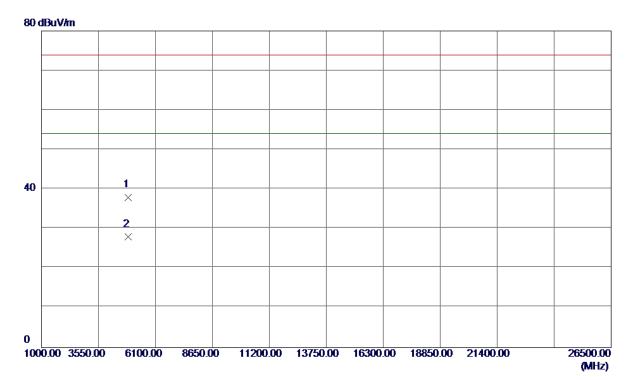
Report No.: BTL-FCCP-1-1605C069A Page 88 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2437MHz

## 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. 8300 | 34. 97           | 3. 03             | 38. 00          | 74.00  | -36.00  | Peak     |         |
| 2 * | 4873. 9000 | 25. 01           | 3. 03             | 28. 04          | 54.00  | -25. 96 | AVG      |         |

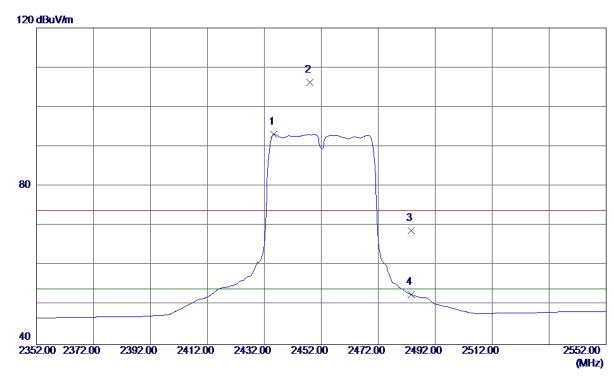
Report No.: BTL-FCCP-1-1605C069A Page 89 of 140





| Orthogonal Axis: | X                     |
|------------------|-----------------------|
| Test Mode :      | TX N-40M MODE 2452MHz |

# 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. 4000 | 59. 35           | 33. 76            | 93. 11          | 54.00  | 39. 11 | AVG      | No Limit |
| 2   | 2448. 0000 | 72. 41           | 33. 83            | 106. 24         | 74.00  | 32. 24 | Peak     | No Limit |
| 3   | 2483. 5000 | 34. 77           | 34. 03            | 68. 80          | 74.00  | -5. 20 | Peak     |          |
| 4   | 2483. 5000 | 18. 62           | 34. 03            | 52. 65          | 54.00  | -1. 35 | AVG      |          |

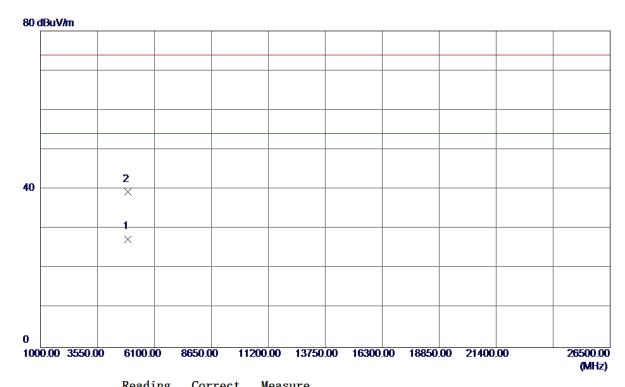
Report No.: BTL-FCCP-1-1605C069A Page 90 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2452MHz

#### **Vertical**



| No | 0. | Freq.      | keading<br>Level | Factor | measure<br>ment | Limit  | Margin  |          |         |
|----|----|------------|------------------|--------|-----------------|--------|---------|----------|---------|
|    |    | MHz        | dBuV/m           | dB     | dBuV/m          | dBuV/m | dB      | Detector | Comment |
| 1  | *  | 4903. 5000 | 24. 40           | 3. 04  | 27. 44          | 54.00  | -26. 56 | AVG      |         |
| 2  |    | 4904. 0000 | 36. 34           | 3. 04  | 39. 38          | 74.00  | -34. 62 | Peak     |         |
|    |    |            |                  |        |                 |        |         |          |         |

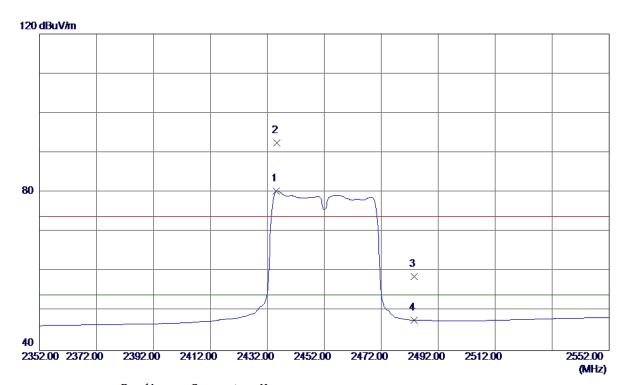
Report No.: BTL-FCCP-1-1605C069A Page 91 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2452MHz

## Horizontal



| N | 0. | 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. 2000 | 46. 62           | 33. 76            | 80. 38          | 54.00  | 26. 38  | AVG      | No Limit |
| 2 |    | 2435. 4000 | 58. 66           | 33. 76            | 92. 42          | 74.00  | 18. 42  | Peak     | No Limit |
| 3 |    | 2483. 5000 | 24. 70           | 34. 03            | 58. 73          | 74.00  | -15. 27 | Peak     |          |
| 4 |    | 2483. 5000 | 13. 64           | 34. 03            | 47. 67          | 54.00  | -6. 33  | AVG      |          |
|   |    |            |                  |                   |                 |        |         |          |          |

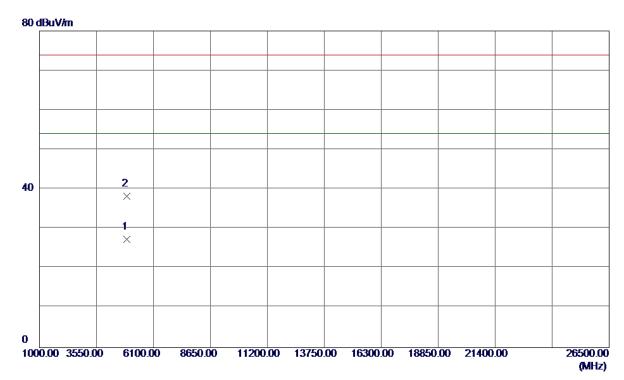
Report No.: BTL-FCCP-1-1605C069A Page 92 of 140





Orthogonal Axis: X
Test Mode: TX N-40M MODE 2452MHz

## 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 * | 4903.8100  | 24. 34           | 3. 04             | 27. 38          | 54.00  | -26. 62 | AVG      |         |
| 2   | 4903. 9400 | 35. 19           | 3. 04             | 38. 23          | 74.00  | -35. 77 | Peak     |         |

Report No.: BTL-FCCP-1-1605C069A Page 93 of 140





| ATTACHMENT E - BANDWIDTH |
|--------------------------|
|                          |
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Report No.: BTL-FCCP-1-1605C069A Page 94 of 140



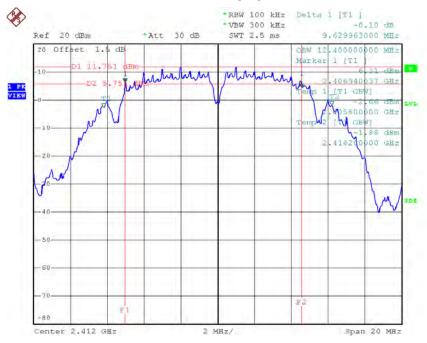


Page 95 of 140

## Test Mode: TX B Mode\_CH01/06/11

| Frequency<br>(MHz) | 6dB Bandwidth<br>(MHz) | 99% Occupied BW<br>(MHz) | Min. Limit<br>(kHz) | Test Result |
|--------------------|------------------------|--------------------------|---------------------|-------------|
| 2412               | 9.63                   | 12.40                    | 500                 | Complies    |
| 2437               | 9.79                   | 12.48                    | 500                 | Complies    |
| 2462               | 10.12                  | 12.56                    | 500                 | Complies    |

#### TX CH01

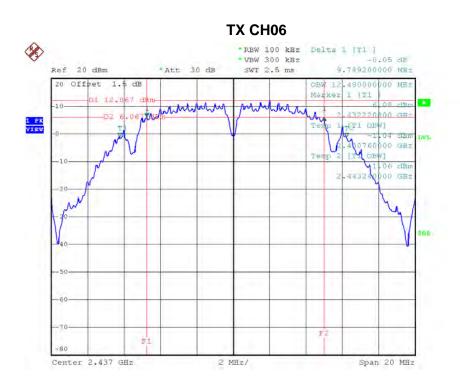


Date: 12.JUN.2016 15:12:36

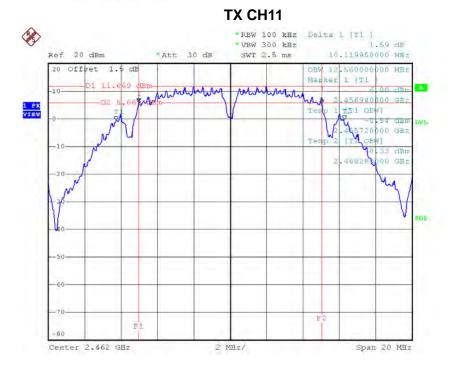
Report No.: BTL-FCCP-1-1605C069A







Date: 12.JUN.2016 15:13:58



Date: 12.JUN.2016 15:15:21

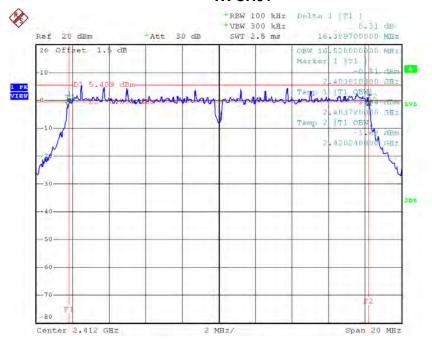




## Test Mode: TX G Mode\_CH01/06/11

| Frequency<br>(MHz) | 6dB Bandwidth<br>(MHz) | 99% Occupied BW<br>(MHz) | Min. Limit<br>(kHz) | Test Result |
|--------------------|------------------------|--------------------------|---------------------|-------------|
| 2412               | 16.39                  | 16.52                    | 500                 | Complies    |
| 2437               | 16.42                  | 16.56                    | 500                 | Complies    |
| 2462               | 16.44                  | 16.52                    | 500                 | Complies    |

## **TX CH01**

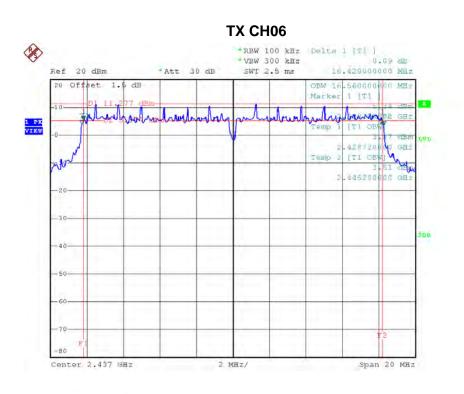


Date: 12.JUN.2016 15:17:29

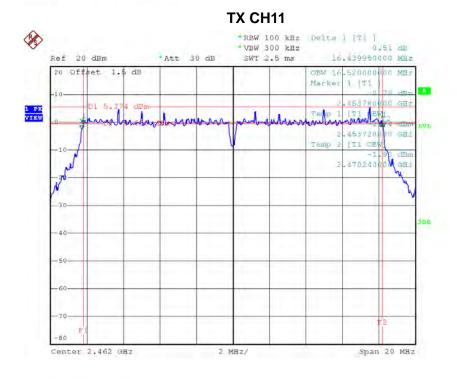
Report No.: BTL-FCCP-1-1605C069A







Date: 12.JUN.2016 15:18:54



Date: 12.JUN.2016 15:20:25

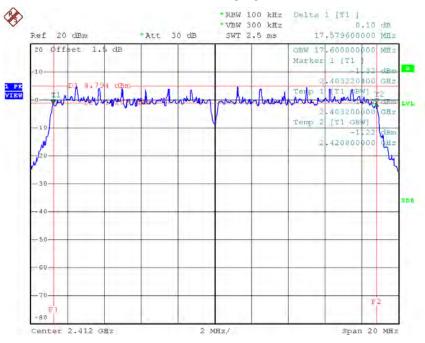




# Test Mode: TX N-20MHz Mode\_CH01/06/11

| Frequency<br>(MHz) | 6dB Bandwidth<br>(MHz) | 99% Occupied BW<br>(MHz) | Min. Limit<br>(kHz) | Test Result |
|--------------------|------------------------|--------------------------|---------------------|-------------|
| 2412               | 17.58                  | 17.60                    | 500                 | Complies    |
| 2437               | 17.62                  | 17.60                    | 500                 | Complies    |
| 2462               | 17.60                  | 17.60                    | 500                 | Complies    |

## TX CH01

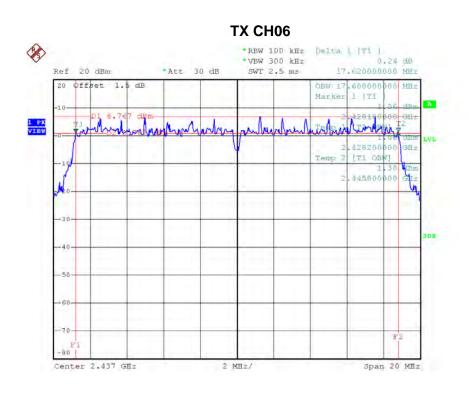


Date: 12.JUN.2016 15:22:14

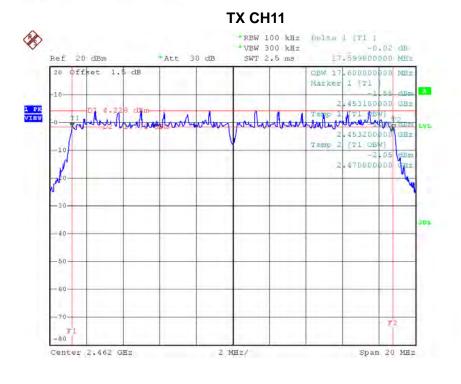
Report No.: BTL-FCCP-1-1605C069A Page 99 of 140







Date: 12.JUN.2016 15:24:02



Date: 12.JUN.2016 15:25:22

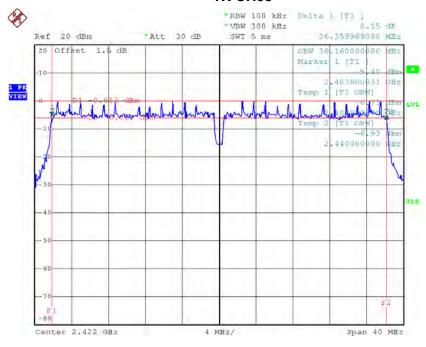




## Test Mode: TX N-40MHz Mode\_CH03/06/09

| Frequency<br>(MHz) | 6dB Bandwidth<br>(MHz) | 99% Occupied BW<br>(MHz) | Min. Limit<br>(kHz) | Test Result |
|--------------------|------------------------|--------------------------|---------------------|-------------|
| 2422               | 36.36                  | 36.16                    | 500                 | Complies    |
| 2437               | 36.40                  | 36.16                    | 500                 | Complies    |
| 2452               | 36.40                  | 36.24                    | 500                 | Complies    |

## **TX CH03**

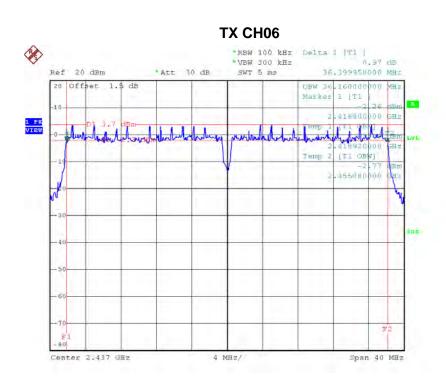


Date: 12.JUN.2016 15:40:26

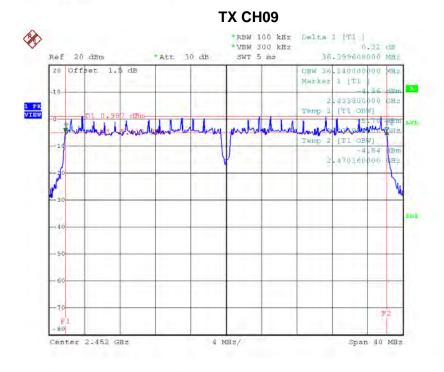
Report No.: BTL-FCCP-1-1605C069A Page 101 of 140







Date: 12.JUN.2016 15:41:41



Date: 12.JUN.2016 15:42:56





| ATTACHMENT F - MAXIMUM PEAK CONDUCTED OUTPUT POWER |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
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Report No.: BTL-FCCP-1-1605C069A Page 103 of 140





|           | Test Mode :TX B Mode_CH01/06/11_ANT 1 |           |            |            |          |  |  |  |  |
|-----------|---------------------------------------|-----------|------------|------------|----------|--|--|--|--|
| Frequency | Conducted                             | Conducted | Max. Limit | Max. Limit | Result   |  |  |  |  |
| (MHz)     | Power (dBm)                           | Power (W) | (dBm)      | (W)        | Result   |  |  |  |  |
| 2412      | 22.21                                 | 0.17      | 30.00      | 1.00       | Complies |  |  |  |  |
| 2437      | 23.62                                 | 0.23      | 30.00      | 1.00       | Complies |  |  |  |  |
| 2462      | 23.59                                 | 0.23      | 30.00      | 1.00       | Complies |  |  |  |  |

| Test Mode :TX G Mode_CH01/06/11_ANT 1 |             |           |            |            |          |  |  |  |
|---------------------------------------|-------------|-----------|------------|------------|----------|--|--|--|
| Frequency                             | Conducted   | Conducted | Max. Limit | Max. Limit | Result   |  |  |  |
| (MHz)                                 | Power (dBm) | Power (W) | (dBm)      | (W)        | Result   |  |  |  |
| 2412                                  | 22.84       | 0.19      | 30.00      | 1.00       | Complies |  |  |  |
| 2437                                  | 26.76       | 0.47      | 30.00      | 1.00       | Complies |  |  |  |
| 2462                                  | 22.92       | 0.20      | 30.00      | 1.00       | Complies |  |  |  |

Report No.: BTL-FCCP-1-1605C069A Page 104 of 140





|           | Test Mode :TX N20 Mode_CH01/06/11_ANT 1 |           |            |            |          |  |  |  |  |
|-----------|---|-----------|------------|------------|----------|--|--|--|--|
| Frequency | Conducted                               | Conducted | Max. Limit | Max. Limit | Result   |  |  |  |  |
| (MHz)     | Power (dBm)                             | Power (W) | (dBm)      | (W)        | Result   |  |  |  |  |
| 2412      | 22.04                                   | 0.16      | 30.00      | 1.00       | Complies |  |  |  |  |
| 2437      | 23.57                                   | 0.23      | 30.00      | 1.00       | Complies |  |  |  |  |
| 2462      | 22.26                                   | 0.17      | 30.00      | 1.00       | Complies |  |  |  |  |

| Test Mode :TX N20 Mode_CH01/06/11_ANT 2 |             |           |            |            |          |  |  |  |
|---|-------------|-----------|------------|------------|----------|--|--|--|
| Frequency                               | Conducted   | Conducted | Max. Limit | Max. Limit | Result   |  |  |  |
| (MHz)                                   | Power (dBm) | Power (W) | (dBm)      | (W)        | Result   |  |  |  |
| 2412                                    | 21.39       | 0.14      | 30.00      | 1.00       | Complies |  |  |  |
| 2437                                    | 22.80       | 0.19      | 30.00      | 1.00       | Complies |  |  |  |
| 2462                                    | 21.78       | 0.15      | 30.00      | 1.00       | Complies |  |  |  |

| Test Mode :TX N20 Mode_CH01/06/11_Total |             |           |            |            |          |
|---|-------------|-----------|------------|------------|----------|
| Frequency                               | Conducted   | Conducted | Max. Limit | Max. Limit | Result   |
| (MHz)                                   | Power (dBm) | Power (W) | (dBm)      | (W)        |          |
| 2412                                    | 24.74       | 0.30      | 30.00      | 1.00       | Complies |
| 2437                                    | 26.21       | 0.42      | 30.00      | 1.00       | Complies |
| 2462                                    | 25.04       | 0.32      | 30.00      | 1.00       | Complies |

Report No.: BTL-FCCP-1-1605C069A Page 105 of 140





| Test Mode :TX N40 Mode_CH03/06/09_ANT 1 |             |           |            |            |          |
|---|-------------|-----------|------------|------------|----------|
| Frequency                               | Conducted   | Conducted | Max. Limit | Max. Limit | Result   |
| (MHz)                                   | Power (dBm) | Power (W) | (dBm)      | (W)        |          |
| 2422                                    | 23.07       | 0.20      | 30.00      | 1.00       | Complies |
| 2437                                    | 23.88       | 0.24      | 30.00      | 1.00       | Complies |
| 2452                                    | 23.11       | 0.20      | 30.00      | 1.00       | Complies |

| Test Mode :TX N40 Mode_CH03/06/09_ANT 2 |             |           |            |            |          |
|---|-------------|-----------|------------|------------|----------|
| Frequency                               | Conducted   | Conducted | Max. Limit | Max. Limit | Result   |
| (MHz)                                   | Power (dBm) | Power (W) | (dBm)      | (W)        |          |
| 2422                                    | 23.39       | 0.22      | 30.00      | 1.00       | Complies |
| 2437                                    | 23.08       | 0.20      | 30.00      | 1.00       | Complies |
| 2452                                    | 23.32       | 0.21      | 30.00      | 1.00       | Complies |

| Test Mode :TX N40 Mode_CH03/06/09_Total |             |           |            |            |          |
|---|-------------|-----------|------------|------------|----------|
| Frequency                               | Conducted   | Conducted | Max. Limit | Max. Limit | Result   |
| (MHz)                                   | Power (dBm) | Power (W) | (dBm)      | (W)        |          |
| 2422                                    | 26.24       | 0.42      | 30.00      | 1.00       | Complies |
| 2437                                    | 26.51       | 0.45      | 30.00      | 1.00       | Complies |
| 2452                                    | 26.23       | 0.42      | 30.00      | 1.00       | Complies |

Report No.: BTL-FCCP-1-1605C069A Page 106 of 140





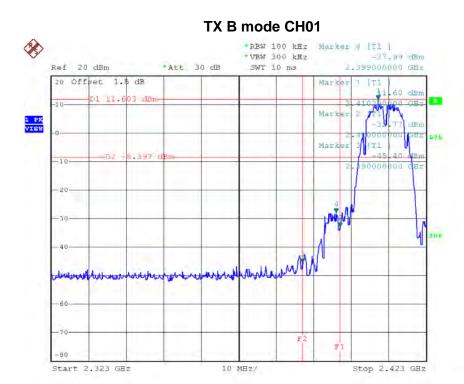
# ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

Report No.: BTL-FCCP-1-1605C069A Page 107 of 140

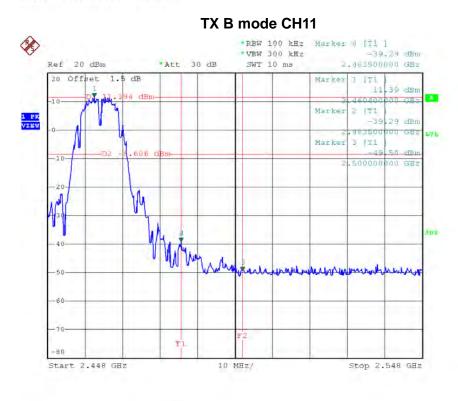




Test Mode: TX B Mode\_ANT 1



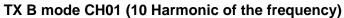
Date: 12.JUN.2016 15:12:58

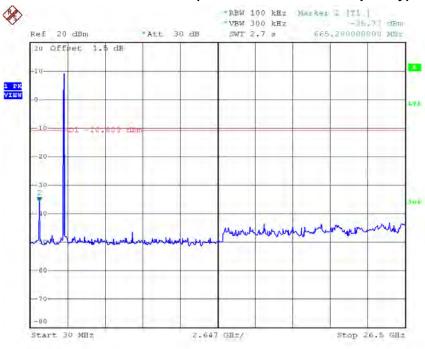


Date: 12.JUN.2016 15:15:43



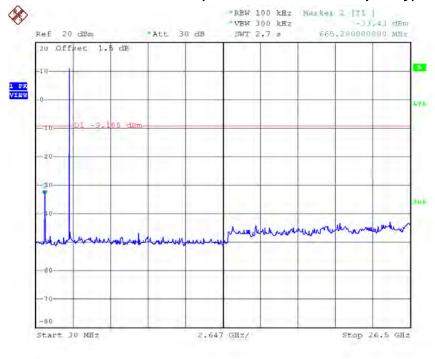






Date: 12.JUN.2016 15:12:50

#### TX B mode CH06 (10 Harmonic of the frequency)

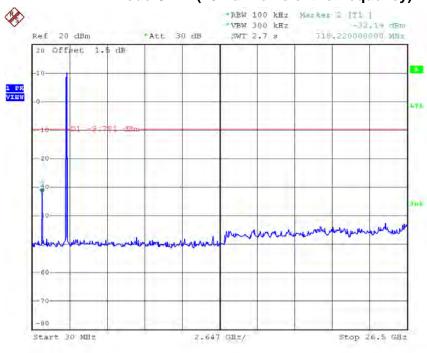


Date: 12.JUN.2016 15:14:12





# TX B mode CH11 (10 Harmonic of the frequency)



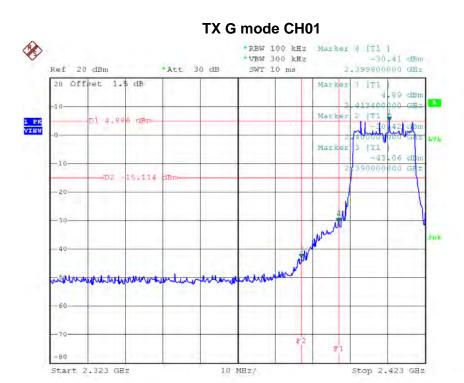
Date: 12.JUN.2016 15:15:35

Report No.: BTL-FCCP-1-1605C069A

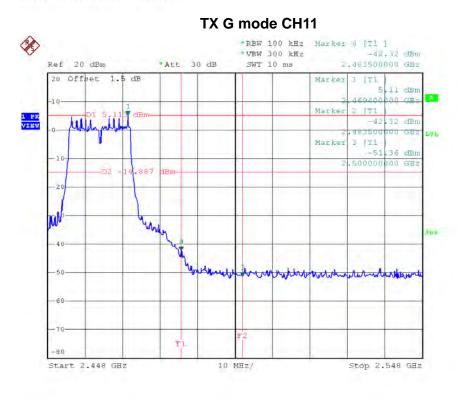




Test Mode: TX G Mode\_ANT 1



Date: 12.JUN.2016 15:17:51

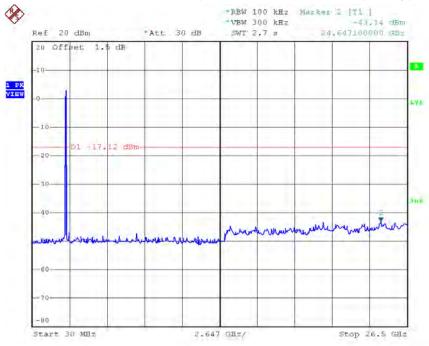


Date: 12.JUN.2016 15:20:47



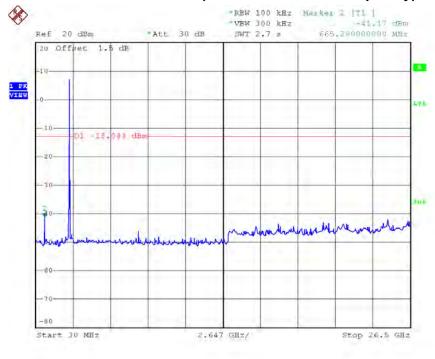






Date: 12,JUN.2016 15:17:43

#### TX G mode CH06 (10 Harmonic of the frequency)

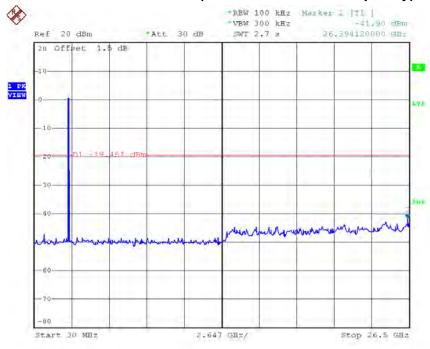


Date: 12.JUN.2016 15:19:08





# TX G mode CH11 (10 Harmonic of the frequency)

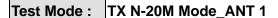


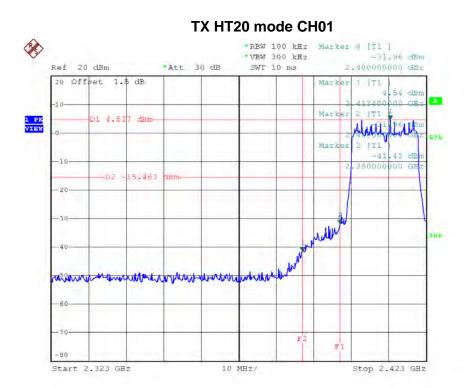
Date: 12,JUN.2016 15:20:39

Report No.: BTL-FCCP-1-1605C069A



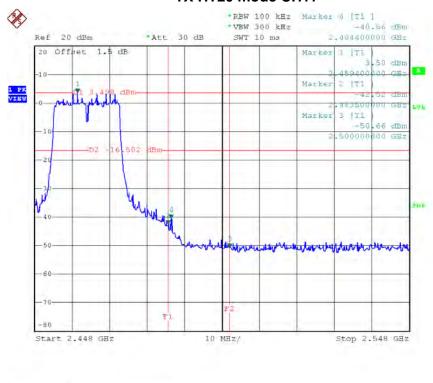






Date: 12.JUN.2016 15:22:36

#### TX HT20 mode CH11

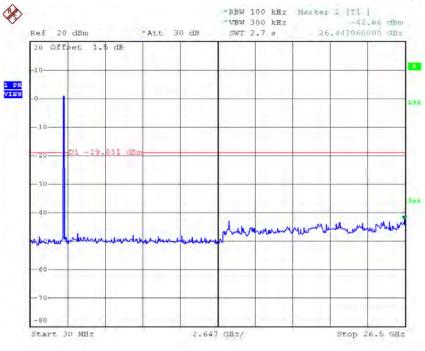


Date: 12.JUN.2016 15:25:44



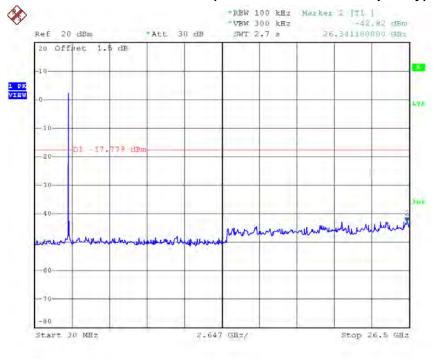






Date: 12,JUN.2016 15:22:28

#### TX HT20 mode CH06 (10 Harmonic of the frequency)

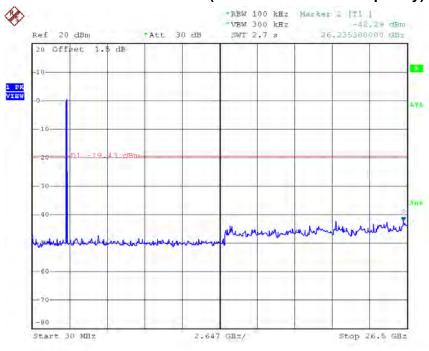


Date: 12,JUN.2016 15:24:16





# TX HT20 mode CH11 (10 Harmonic of the frequency)

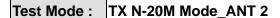


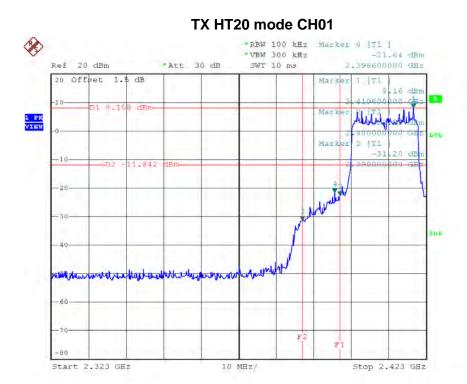
Date: 12.JUN.2016 15:25:36

Report No.: BTL-FCCP-1-1605C069A Page 116 of 140



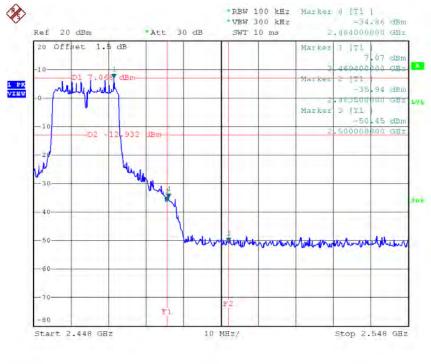






Date: 12.JUN.2016 15:27:43

#### TX HT20 mode CH11

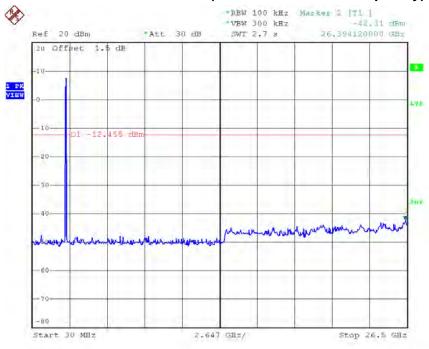


Date: 12.JUN.2016 15:38:23



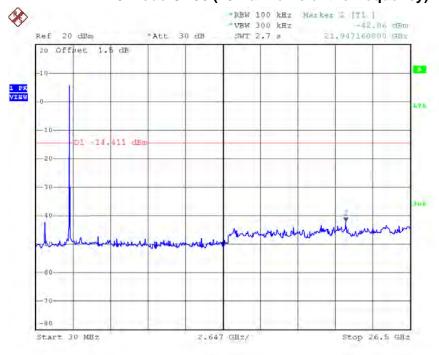






Date: 12.JUN.2016 15:27:35

#### TX HT20 mode CH06 (10 Harmonic of the frequency)

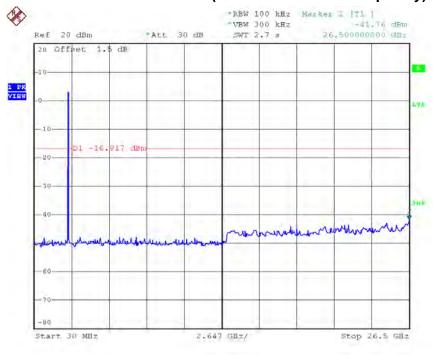


Date: 12.JUN.2016 15:37:12





# TX HT20 mode CH11 (10 Harmonic of the frequency)



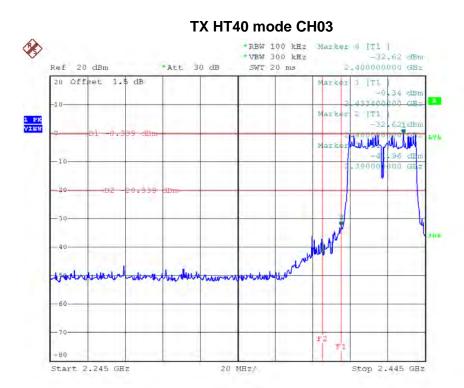
Date: 12,JUN.2016 15:38:16

Report No.: BTL-FCCP-1-1605C069A Page 119 of 140



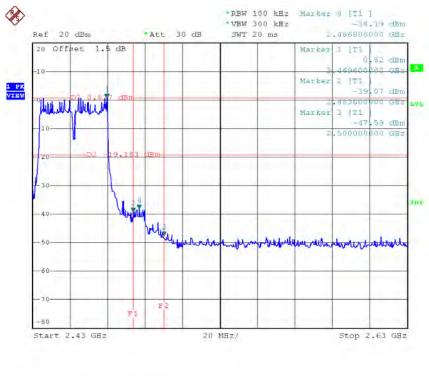






Date: 12.JUN.2016 15:40:47

#### TX HT40 mode CH09

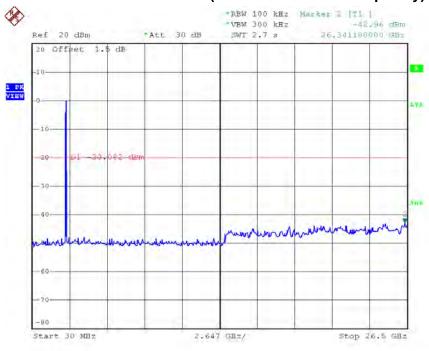


Date: 12.JUN.2016 15:43:18



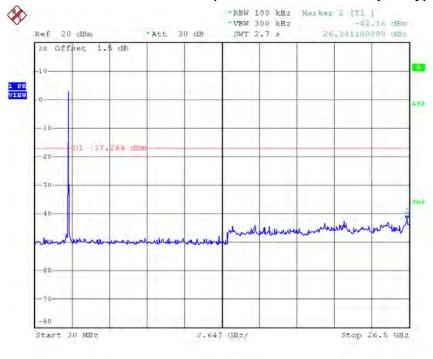






Date: 12.JUN.2016 15:40:40

#### TX HT40 mode CH06 (10 Harmonic of the frequency)

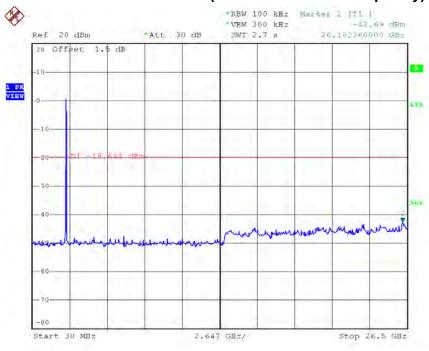


Date: 12,JUN.2016 15:41:55





# TX HT40 mode CH09 (10 Harmonic of the frequency)



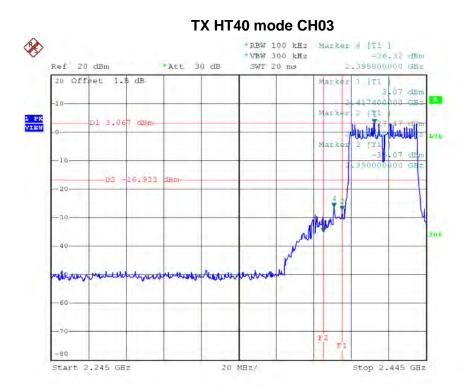
Date: 12.JUN.2016 15:43:10

Report No.: BTL-FCCP-1-1605C069A



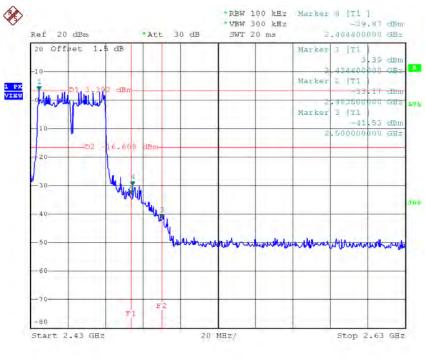






Date: 12.JUN.2016 15:47:14

#### TX HT40 mode CH09

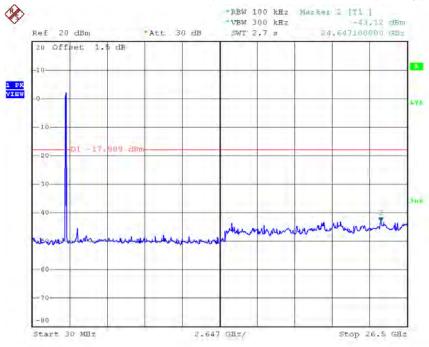


Date: 12.JUN.2016 15:49:35



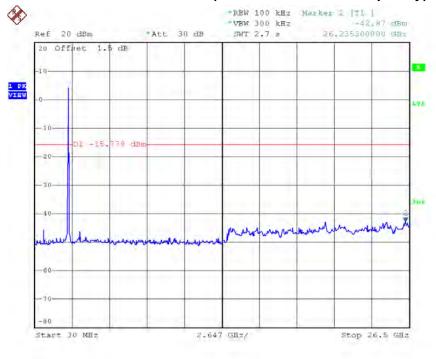






Date: 12.JUN.2016 15:47:06

#### TX HT40 mode CH06 (10 Harmonic of the frequency)

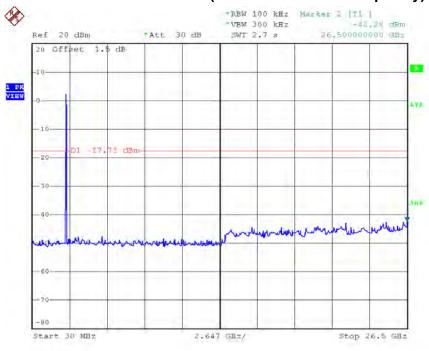


Date: 12.JUN.2016 15:48:22





# TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 12.JUN.2016 15:49:28

Report No.: BTL-FCCP-1-1605C069A





|                                       | Alle A |
|---------------------------------------|--------|
| ATTACHMENT H - POWER SPECTRAL DENSITY |        |
|                                       |        |
|                                       |        |
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|                                       |        |
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Report No.: BTL-FCCP-1-1605C069A

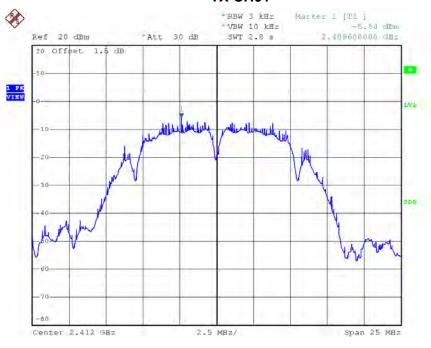




# Test Mode :TX B Mode\_CH01/06/11\_ANT 1

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2412               | -5.84                       | 0.2606                     | 8.00                     | Complies |
| 2437               | -5.06                       | 0.3119                     | 8.00                     | Complies |
| 2462               | -5.66                       | 0.2716                     | 8.00                     | Complies |

#### TX CH01

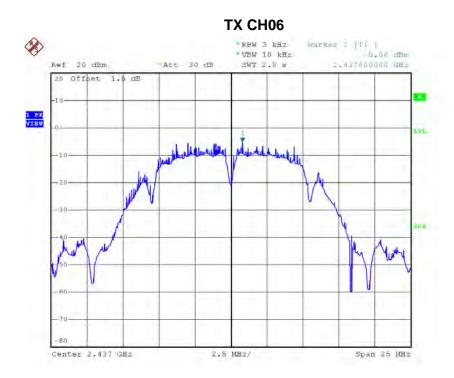


Date: 12.JUN.2016 15:13:07

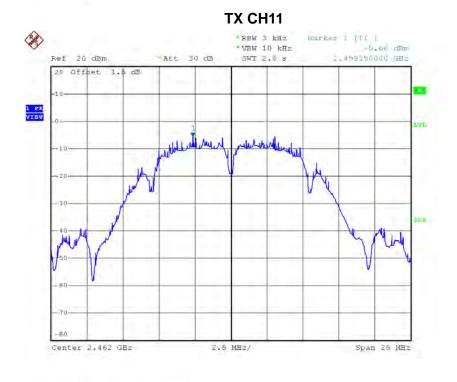
Report No.: BTL-FCCP-1-1605C069A Page 127 of 140







Date: 12.JUN.2016 15:14:21



Date: 12.JUN.2016 15:16:20

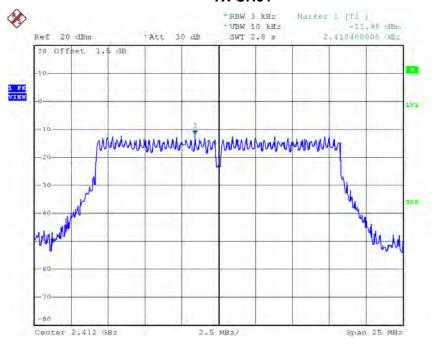




#### Test Mode :TX G Mode\_CH01/06/11\_ANT 1

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2412               | -11.98                      | 0.0634                     | 8.00                     | Complies |
| 2437               | -5.56                       | 0.2780                     | 8.00                     | Complies |
| 2462               | -11.98                      | 0.0634                     | 8.00                     | Complies |

#### TX CH01

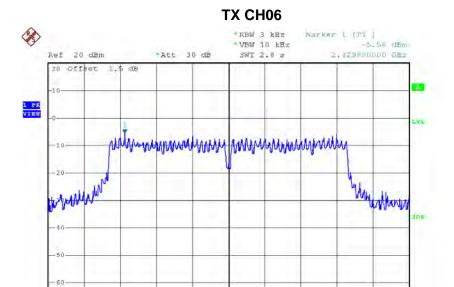


Date: 12.JUN,2016 15:18:00

Report No.: BTL-FCCP-1-1605C069A Page 129 of 140







2.5 MHz/

Span 25 MHz

Date: 12.JUN:2016 15:19:17

Center 2.437 GHz

# 

Date: 12.JUN.2016 15:20:56

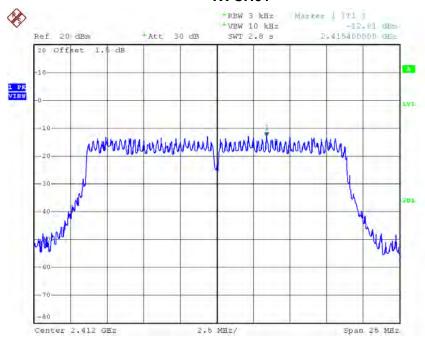




# Test Mode: TX N-20M Mode\_CH01/06/11\_ANT 1

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2412               | -12.81                      | 0.0524                     | 8.00                     | Complies |
| 2437               | -9.87                       | 0.1030                     | 8.00                     | Complies |
| 2462               | -11.35                      | 0.0733                     | 8.00                     | Complies |

#### TX CH01

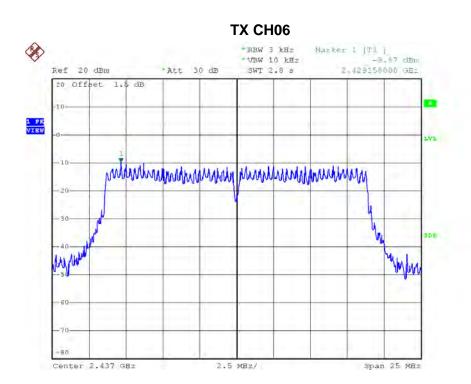


Date: 12.JUN.2016 15:22:45

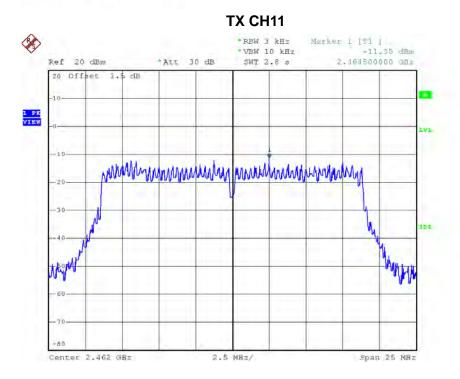
Report No.: BTL-FCCP-1-1605C069A Page 131 of 140







Date: 12.JUN.2016 15:24:25



Date: 12.JUN.2016 15:25:53

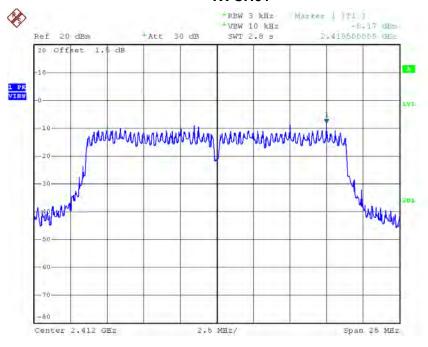




#### Test Mode: TX N-20M Mode\_CH01/06/11\_ANT 2

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2412               | -8.17                       | 0.1524                     | 8.00                     | Complies |
| 2437               | -7.12                       | 0.1941                     | 8.00                     | Complies |
| 2462               | -9.64                       | 0.1086                     | 8.00                     | Complies |

#### **TX CH01**

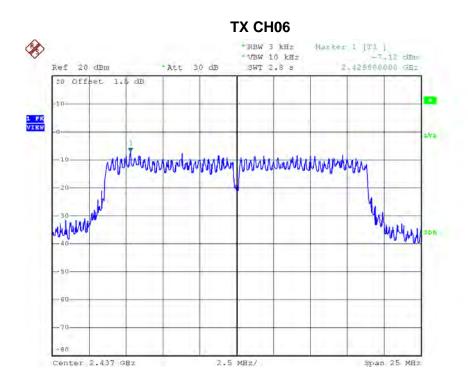


Date: 12.JUN.2016 15:27:52

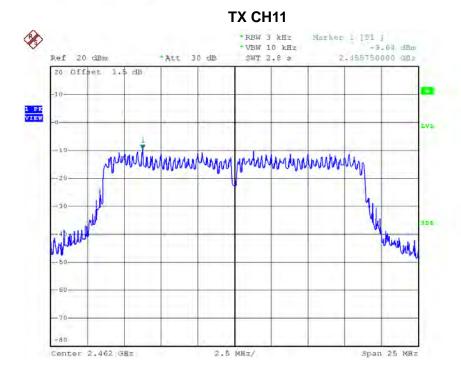
Report No.: BTL-FCCP-1-1605C069A







Date: 12.JUN.2016 15:37:21



Date: 12.JUN.2016 15:38:33





# Test Mode: TX N-20M Mode\_CH01/06/11\_Total

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2412               | -6.99                       | 0.2000                     | 8.00                     | Complies |
| 2437               | -5.38                       | 0.2900                     | 8.00                     | Complies |
| 2462               | -7.45                       | 0.1800                     | 8.00                     | Complies |

Report No.: BTL-FCCP-1-1605C069A Page 135 of 140

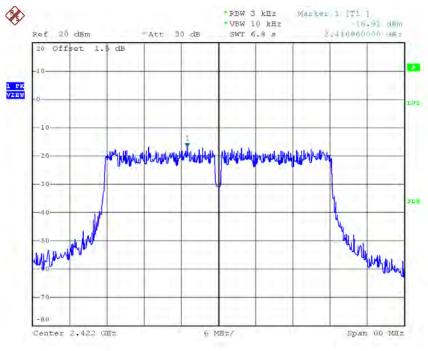




#### Test Mode: TX N-40M Mode\_CH03/06/09\_ANT 1

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2422               | -16.91                      | 0.0204                     | 8.00                     | Complies |
| 2437               | -12.98                      | 0.0504                     | 8.00                     | Complies |
| 2452               | -15.21                      | 0.0301                     | 8.00                     | Complies |

#### TX CH03

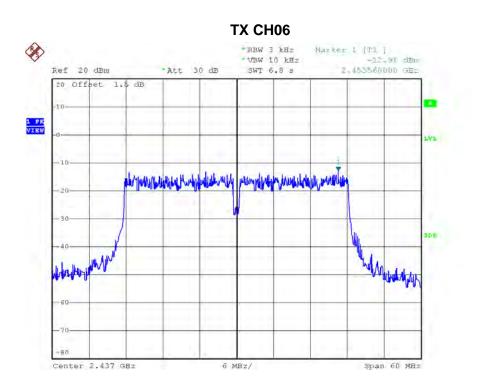


Date: 12.JUN.2016 15:41:00

Report No.: BTL-FCCP-1-1605C069A Page 136 of 140







Date: 12.JUN.2016 15:42:07

# TX CH09 \*REW 3 kHz | Nerker I [91] | \*VEW 10 kHz | -15.21 dBm | ZO Offset 1.5 dB | -10 | -20 | -30 | -40 | -30 | -40 | -50 | \*Center 2.452 GBz | 6 MHz/ Span 60 MHz

Date: 12.JUN.2016 15:43:30

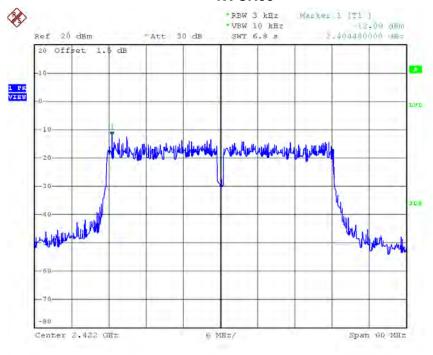




#### Test Mode: TX N-40M Mode\_CH03/06/09\_ANT 2

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2422               | -12.09                      | 0.0618                     | 8.00                     | Complies |
| 2437               | -8.87                       | 0.1297                     | 8.00                     | Complies |
| 2452               | -11.36                      | 0.0731                     | 8.00                     | Complies |

#### TX CH03

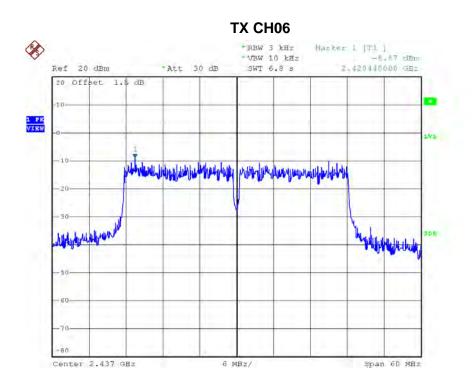


Date: 12.JUN.2016 15:47:26

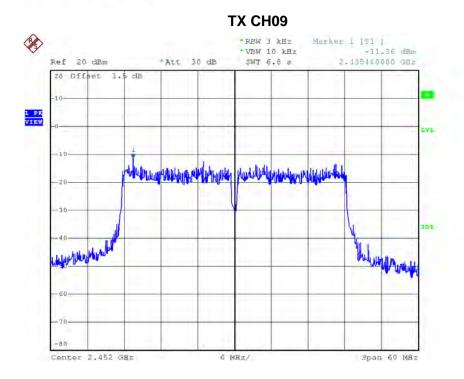
Report No.: BTL-FCCP-1-1605C069A Page 138 of 140







Date: 12.JUN.2016 15:48:34



Date: 12.JUN.2016 15:49:47





# Test Mode: TX N-40M Mode\_CH03/06/09\_Total

| Frequency<br>(MHz) | Power Density<br>(dBm/3kHz) | Power Density<br>(mW/3kHz) | Max. Limit<br>(dBm/3kHz) | Result   |
|--------------------|-----------------------------|----------------------------|--------------------------|----------|
| 2422               | -10.97                      | 0.0800                     | 8.00                     | Complies |
| 2437               | -7.45                       | 0.1800                     | 8.00                     | Complies |
| 2452               | -10.00                      | 0.1000                     | 8.00                     | Complies |

Report No.: BTL-FCCP-1-1605C069A Page 140 of 140